

| gene                | p_val     | avg_log2FC | pct.1 | pct.2 | p_val_adj | source         |
|---------------------|-----------|------------|-------|-------|-----------|----------------|
| RPS21               | 2.99E-227 | 1.27277939 | 0.985 | 0.989 | 1.06E-222 | CD4_Naive_lung |
| ENSMMUG000000062350 | 4.76E-198 | 0.98976107 | 0.995 | 0.996 | 1.69E-193 | CD4_Naive_lung |
| BTG1                | 1.85E-162 | 1.61504422 | 0.892 | 0.886 | 6.56E-158 | CD4_Naive_lung |
| ENSMMUG000000013257 | 3.82E-155 | 1.42131503 | 0.912 | 0.928 | 1.35E-150 | CD4_Naive_lung |
| ATP5F1E             | 5.00E-134 | 1.18593719 | 0.93  | 0.967 | 1.77E-129 | CD4_Naive_lung |
| RPL36               | 1.02E-132 | 1.14354644 | 0.912 | 0.947 | 3.62E-128 | CD4_Naive_lung |
| SATB1               | 1.37E-123 | 1.78171565 | 0.855 | 0.811 | 4.86E-119 | CD4_Naive_lung |
| SYTL2               | 9.22E-98  | 2.61319808 | 0.591 | 0.351 | 3.27E-93  | CD4_Naive_lung |
| SLC2A3              | 9.04E-86  | 2.02888534 | 0.665 | 0.511 | 3.20E-81  | CD4_Naive_lung |
| ENSMMUG000000005593 | 4.54E-85  | 0.72174877 | 0.985 | 0.994 | 1.61E-80  | CD4_Naive_lung |
| CREM                | 1.05E-82  | 2.90041943 | 0.455 | 0.219 | 3.73E-78  | CD4_Naive_lung |
| GPR65               | 1.29E-80  | 3.43426493 | 0.302 | 0.097 | 4.56E-76  | CD4_Naive_lung |
| ZC3H10              | 3.38E-77  | 1.1515626  | 0.789 | 0.882 | 1.20E-72  | CD4_Naive_lung |
| RPL39               | 7.42E-60  | 0.60679166 | 0.962 | 0.99  | 2.63E-55  | CD4_Naive_lung |
| RPS28               | 5.95E-58  | 0.45255532 | 0.992 | 0.997 | 2.11E-53  | CD4_Naive_lung |
| TMSB10              | 2.46E-56  | 0.69817498 | 0.986 | 0.991 | 8.71E-52  | CD4_Naive_lung |
| ENSMMUG000000064224 | 3.08E-50  | 0.87577555 | 0.827 | 0.916 | 1.09E-45  | CD4_Naive_lung |
| BACH2               | 1.08E-46  | 1.2332434  | 0.782 | 0.855 | 3.83E-42  | CD4_Naive_lung |
| GPR171              | 3.58E-46  | 2.94493771 | 0.292 | 0.131 | 1.27E-41  | CD4_Naive_lung |
| P2RY8               | 2.91E-44  | 2.45441054 | 0.436 | 0.289 | 1.03E-39  | CD4_Naive_lung |
| ENSMMUG000000060377 | 7.95E-44  | 1.21383073 | 0.679 | 0.763 | 2.82E-39  | CD4_Naive_lung |
| PTPRC               | 1.04E-41  | 0.63971418 | 0.926 | 0.98  | 3.67E-37  | CD4_Naive_lung |
| ETS1                | 4.65E-39  | 0.97364889 | 0.758 | 0.836 | 1.65E-34  | CD4_Naive_lung |
| IKZF1               | 3.56E-32  | 1.23522817 | 0.668 | 0.733 | 1.26E-27  | CD4_Naive_lung |
| RPS12               | 1.48E-31  | 0.36410467 | 0.989 | 0.997 | 5.26E-27  | CD4_Naive_lung |
| RPL22L1             | 1.97E-30  | 0.63663758 | 0.845 | 0.949 | 6.97E-26  | CD4_Naive_lung |
| PPP2R5C             | 7.29E-30  | 1.21868414 | 0.686 | 0.773 | 2.58E-25  | CD4_Naive_lung |
| MAMU-E              | 1.05E-29  | 0.68972359 | 0.805 | 0.913 | 3.72E-25  | CD4_Naive_lung |
| ENSMMUG000000004545 | 2.00E-28  | 0.81143408 | 0.712 | 0.815 | 7.07E-24  | CD4_Naive_lung |
| RPS26               | 6.48E-27  | 0.42271488 | 0.982 | 0.994 | 2.30E-22  | CD4_Naive_lung |
| RPL34               | 6.77E-27  | 0.29092385 | 0.992 | 0.997 | 2.40E-22  | CD4_Naive_lung |
| IFI16               | 1.12E-25  | 1.62636235 | 0.482 | 0.438 | 3.95E-21  | CD4_Naive_lung |

|                    |          |            |       |       |          |                |
|--------------------|----------|------------|-------|-------|----------|----------------|
| RPL12              | 2.37E-25 | 0.386785   | 0.979 | 0.992 | 8.39E-21 | CD4_Naive_lung |
| ENSMMUG00000015563 | 1.50E-24 | 0.33730171 | 0.983 | 0.995 | 5.33E-20 | CD4_Naive_lung |
| CEMIP2             | 1.70E-24 | 1.85344255 | 0.432 | 0.355 | 6.04E-20 | CD4_Naive_lung |
| RPL32              | 6.73E-22 | 0.26943508 | 0.995 | 0.997 | 2.39E-17 | CD4_Naive_lung |
| PECAM1             | 1.37E-20 | 1.2185686  | 0.589 | 0.668 | 4.85E-16 | CD4_Naive_lung |
| SOX4               | 2.84E-20 | 1.26080836 | 0.623 | 0.723 | 1.01E-15 | CD4_Naive_lung |
| SYTL3              | 5.71E-20 | 1.63521401 | 0.476 | 0.448 | 2.02E-15 | CD4_Naive_lung |
| CNOT6L             | 6.40E-20 | 1.31365828 | 0.582 | 0.659 | 2.27E-15 | CD4_Naive_lung |
| DENND4A            | 1.05E-19 | 0.83977283 | 0.755 | 0.86  | 3.72E-15 | CD4_Naive_lung |
| ENSMMUG00000022428 | 2.13E-19 | 1.75735499 | 0.417 | 0.374 | 7.56E-15 | CD4_Naive_lung |
| FAU                | 3.56E-19 | 0.31720896 | 0.961 | 0.991 | 1.26E-14 | CD4_Naive_lung |
| HIF1A              | 3.97E-19 | 0.11020319 | 0.203 | 0.458 | 1.41E-14 | CD4_Naive_lung |
| GMFG               | 4.47E-19 | 0.57036798 | 0.744 | 0.902 | 1.58E-14 | CD4_Naive_lung |
| ICOS               | 9.46E-19 | 1.00169346 | 0.559 | 0.531 | 3.35E-14 | CD4_Naive_lung |
| PPP1R16B           | 9.89E-19 | 1.66926109 | 0.423 | 0.372 | 3.50E-14 | CD4_Naive_lung |
| FKBP5              | 1.01E-18 | 1.40660693 | 0.553 | 0.595 | 3.56E-14 | CD4_Naive_lung |
| ATF4               | 1.02E-18 | 0.11376625 | 0.206 | 0.464 | 3.60E-14 | CD4_Naive_lung |
| RPS9               | 1.06E-18 | 0.32294418 | 0.968 | 0.992 | 3.74E-14 | CD4_Naive_lung |
| FBXL17             | 1.33E-18 | 0.1327611  | 0.223 | 0.488 | 4.73E-14 | CD4_Naive_lung |
| ENSMMUG00000056354 | 7.05E-18 | 0.60178398 | 0.77  | 0.92  | 2.50E-13 | CD4_Naive_lung |
| PRPF31             | 7.75E-18 | 1.52418616 | 0.461 | 0.464 | 2.75E-13 | CD4_Naive_lung |
| STAT4              | 2.42E-17 | 1.84190214 | 0.458 | 0.435 | 8.56E-13 | CD4_Naive_lung |
| EP300              | 8.39E-17 | 0.13108865 | 0.233 | 0.494 | 2.97E-12 | CD4_Naive_lung |
| XPO6               | 9.67E-17 | 0.20621758 | 0.208 | 0.456 | 3.43E-12 | CD4_Naive_lung |
| RBM26              | 1.32E-16 | 0.1754196  | 0.194 | 0.431 | 4.68E-12 | CD4_Naive_lung |
| CHST11             | 1.67E-16 | 0.13840519 | 0.218 | 0.461 | 5.93E-12 | CD4_Naive_lung |
| SYNCRIP            | 2.01E-16 | 0.10897957 | 0.189 | 0.42  | 7.13E-12 | CD4_Naive_lung |
| FAM107B            | 2.36E-16 | 0.11033032 | 0.202 | 0.439 | 8.35E-12 | CD4_Naive_lung |
| ANKIB1             | 2.46E-16 | 0.11700671 | 0.185 | 0.41  | 8.72E-12 | CD4_Naive_lung |
| CCR7               | 3.20E-16 | 1.86956196 | 0.382 | 0.333 | 1.14E-11 | CD4_Naive_lung |
| TCF25              | 4.31E-16 | 0.18543073 | 0.167 | 0.38  | 1.53E-11 | CD4_Naive_lung |
| ENSMMUG00000004539 | 4.85E-16 | 0.10733635 | 0.147 | 0.346 | 1.72E-11 | CD4_Naive_lung |
| PARK7              | 8.17E-16 | 0.12420056 | 0.129 | 0.31  | 2.89E-11 | CD4_Naive_lung |

|                   |          |            |       |       |          |                |
|-------------------|----------|------------|-------|-------|----------|----------------|
| PPP1CC            | 8.44E-16 | 0.1425642  | 0.183 | 0.408 | 2.99E-11 | CD4_Naive_lung |
| FAM214A           | 8.83E-16 | 0.16496977 | 0.197 | 0.428 | 3.13E-11 | CD4_Naive_lung |
| AKNA              | 9.26E-16 | 0.12017728 | 0.165 | 0.373 | 3.28E-11 | CD4_Naive_lung |
| ADNP              | 1.06E-15 | 0.11007874 | 0.188 | 0.408 | 3.75E-11 | CD4_Naive_lung |
| ZNF706            | 1.06E-15 | 0.12343627 | 0.18  | 0.401 | 3.77E-11 | CD4_Naive_lung |
| EIF3D             | 1.12E-15 | 0.10442326 | 0.198 | 0.435 | 3.96E-11 | CD4_Naive_lung |
| WDR74             | 1.18E-15 | 0.20272496 | 0.092 | 0.251 | 4.16E-11 | CD4_Naive_lung |
| TAF9              | 1.29E-15 | 0.18829604 | 0.147 | 0.342 | 4.56E-11 | CD4_Naive_lung |
| OCIAD1            | 1.46E-15 | 0.21394625 | 0.161 | 0.365 | 5.16E-11 | CD4_Naive_lung |
| TMEM50A           | 1.48E-15 | 0.10186473 | 0.212 | 0.45  | 5.23E-11 | CD4_Naive_lung |
| CD226             | 1.51E-15 | 0.12992944 | 0.106 | 0.271 | 5.34E-11 | CD4_Naive_lung |
| CYB5A             | 2.09E-15 | 0.11969911 | 0.198 | 0.428 | 7.42E-11 | CD4_Naive_lung |
| DCAF8             | 2.22E-15 | 0.10013347 | 0.155 | 0.353 | 7.86E-11 | CD4_Naive_lung |
| ZNF331            | 2.26E-15 | 2.30863536 | 0.25  | 0.168 | 7.99E-11 | CD4_Naive_lung |
| TRPS1             | 2.37E-15 | 0.18628157 | 0.235 | 0.488 | 8.41E-11 | CD4_Naive_lung |
| RBL2              | 2.78E-15 | 0.12232119 | 0.177 | 0.393 | 9.86E-11 | CD4_Naive_lung |
| ENSMUG00000064139 | 3.30E-15 | 0.72393149 | 0.691 | 0.842 | 1.17E-10 | CD4_Naive_lung |
| STK26             | 3.32E-15 | 0.11995738 | 0.138 | 0.322 | 1.18E-10 | CD4_Naive_lung |
| RELCH             | 4.04E-15 | 0.1505408  | 0.176 | 0.386 | 1.43E-10 | CD4_Naive_lung |
| MED23             | 4.10E-15 | 0.10167907 | 0.161 | 0.362 | 1.45E-10 | CD4_Naive_lung |
| RPS29             | 4.10E-15 | 0.33210019 | 0.98  | 0.996 | 1.45E-10 | CD4_Naive_lung |
| TOB1              | 4.32E-15 | 0.14463769 | 0.203 | 0.429 | 1.53E-10 | CD4_Naive_lung |
| TPP2              | 4.55E-15 | 0.15085468 | 0.123 | 0.296 | 1.61E-10 | CD4_Naive_lung |
| NR2C2             | 4.57E-15 | 0.11181578 | 0.102 | 0.261 | 1.62E-10 | CD4_Naive_lung |
| FRYL              | 5.15E-15 | 0.17762068 | 0.189 | 0.41  | 1.83E-10 | CD4_Naive_lung |
| RPS27L            | 5.18E-15 | 0.15372425 | 0.214 | 0.45  | 1.84E-10 | CD4_Naive_lung |
| MYDGF             | 6.31E-15 | 0.15639114 | 0.127 | 0.305 | 2.23E-10 | CD4_Naive_lung |
| ZC3H13            | 6.62E-15 | 0.13151921 | 0.168 | 0.371 | 2.35E-10 | CD4_Naive_lung |
| SETD5             | 6.69E-15 | 0.14860995 | 0.164 | 0.362 | 2.37E-10 | CD4_Naive_lung |
| SIPA1L2           | 9.62E-15 | 2.13834558 | 0.3   | 0.226 | 3.41E-10 | CD4_Naive_lung |
| CYFIP2            | 1.05E-14 | 0.19592487 | 0.22  | 0.455 | 3.73E-10 | CD4_Naive_lung |
| TRANK1            | 1.07E-14 | 0.13274412 | 0.124 | 0.296 | 3.78E-10 | CD4_Naive_lung |
| SLC44A2           | 1.09E-14 | 0.15598898 | 0.155 | 0.349 | 3.85E-10 | CD4_Naive_lung |

|                    |          |            |       |       |          |                |
|--------------------|----------|------------|-------|-------|----------|----------------|
| TALDO1             | 1.09E-14 | 0.20496941 | 0.212 | 0.447 | 3.85E-10 | CD4_Naive_lung |
| RPIA               | 1.17E-14 | 0.14257923 | 0.182 | 0.388 | 4.15E-10 | CD4_Naive_lung |
| YAF2               | 1.22E-14 | 0.17059094 | 0.244 | 0.5   | 4.32E-10 | CD4_Naive_lung |
| MNAT1              | 1.48E-14 | 0.14880155 | 0.203 | 0.425 | 5.24E-10 | CD4_Naive_lung |
| MGAT4A             | 1.66E-14 | 0.11730521 | 0.208 | 0.433 | 5.87E-10 | CD4_Naive_lung |
| PPP6R3             | 1.89E-14 | 0.13316155 | 0.267 | 0.535 | 6.69E-10 | CD4_Naive_lung |
| SPEN               | 1.96E-14 | 0.12995929 | 0.17  | 0.371 | 6.95E-10 | CD4_Naive_lung |
| HDAC1              | 2.45E-14 | 0.18110375 | 0.18  | 0.388 | 8.69E-10 | CD4_Naive_lung |
| CD164              | 2.48E-14 | 0.14753155 | 0.242 | 0.491 | 8.79E-10 | CD4_Naive_lung |
| TAOK1              | 2.66E-14 | 0.12045645 | 0.176 | 0.379 | 9.43E-10 | CD4_Naive_lung |
| WASF2              | 2.76E-14 | 0.18937847 | 0.286 | 0.567 | 9.79E-10 | CD4_Naive_lung |
| ZNF44              | 2.85E-14 | 0.16825641 | 0.114 | 0.275 | 1.01E-09 | CD4_Naive_lung |
| AFF4               | 3.04E-14 | 0.172582   | 0.156 | 0.347 | 1.08E-09 | CD4_Naive_lung |
| WAS                | 3.41E-14 | 0.20164598 | 0.173 | 0.374 | 1.21E-09 | CD4_Naive_lung |
| TAB2               | 4.31E-14 | 0.10193741 | 0.205 | 0.423 | 1.53E-09 | CD4_Naive_lung |
| HUWE1              | 5.40E-14 | 0.20102125 | 0.241 | 0.491 | 1.91E-09 | CD4_Naive_lung |
| DEK                | 5.74E-14 | 0.1361963  | 0.129 | 0.3   | 2.04E-09 | CD4_Naive_lung |
| RNF7               | 5.93E-14 | 0.13336789 | 0.13  | 0.3   | 2.10E-09 | CD4_Naive_lung |
| PAFAH1B2           | 6.36E-14 | 0.10718142 | 0.121 | 0.286 | 2.25E-09 | CD4_Naive_lung |
| KLHL28             | 7.66E-14 | 0.16956334 | 0.189 | 0.399 | 2.71E-09 | CD4_Naive_lung |
| CEP295             | 7.95E-14 | 0.12588428 | 0.118 | 0.279 | 2.82E-09 | CD4_Naive_lung |
| FNTB               | 8.68E-14 | 0.15307618 | 0.232 | 0.472 | 3.07E-09 | CD4_Naive_lung |
| TMEM219            | 9.10E-14 | 0.14016995 | 0.123 | 0.287 | 3.22E-09 | CD4_Naive_lung |
| RCOR3              | 9.92E-14 | 0.12236689 | 0.115 | 0.275 | 3.51E-09 | CD4_Naive_lung |
| REV3L              | 1.11E-13 | 0.15571732 | 0.242 | 0.479 | 3.94E-09 | CD4_Naive_lung |
| KHDRBS1            | 1.15E-13 | 0.16566687 | 0.136 | 0.308 | 4.08E-09 | CD4_Naive_lung |
| DMXL1              | 1.16E-13 | 0.12368182 | 0.106 | 0.259 | 4.11E-09 | CD4_Naive_lung |
| ENSMMUG00000044585 | 1.19E-13 | 1.17975034 | 0.511 | 0.589 | 4.22E-09 | CD4_Naive_lung |
| PHIP               | 1.36E-13 | 0.22611092 | 0.256 | 0.505 | 4.83E-09 | CD4_Naive_lung |
| EIF4EBP3           | 1.37E-13 | 0.17777984 | 0.239 | 0.483 | 4.86E-09 | CD4_Naive_lung |
| PAFAH1B1           | 1.46E-13 | 0.13594614 | 0.303 | 0.591 | 5.19E-09 | CD4_Naive_lung |
| NUP50              | 1.48E-13 | 0.10510652 | 0.152 | 0.335 | 5.24E-09 | CD4_Naive_lung |
| UBR5               | 1.54E-13 | 0.1472813  | 0.294 | 0.574 | 5.44E-09 | CD4_Naive_lung |



|                     |          |            |       |       |          |                |
|---------------------|----------|------------|-------|-------|----------|----------------|
| PTPRJ               | 1.87E-13 | 0.12554702 | 0.117 | 0.272 | 6.63E-09 | CD4_Naive_lung |
| TBC1D10B            | 2.03E-13 | 0.21210156 | 0.141 | 0.317 | 7.19E-09 | CD4_Naive_lung |
| ENSMMUG00000006608  | 2.20E-13 | 0.17973191 | 0.32  | 0.628 | 7.80E-09 | CD4_Naive_lung |
| LPP                 | 2.22E-13 | 0.17397604 | 0.17  | 0.356 | 7.86E-09 | CD4_Naive_lung |
| XRCC6               | 2.47E-13 | 0.1031513  | 0.314 | 0.61  | 8.74E-09 | CD4_Naive_lung |
| QARS1               | 2.66E-13 | 0.22021567 | 0.145 | 0.324 | 9.44E-09 | CD4_Naive_lung |
| TANC1               | 2.87E-13 | 0.12210266 | 0.309 | 0.573 | 1.02E-08 | CD4_Naive_lung |
| UBR1                | 3.06E-13 | 0.17581687 | 0.276 | 0.538 | 1.08E-08 | CD4_Naive_lung |
| PSMA2               | 3.13E-13 | 0.10990732 | 0.232 | 0.463 | 1.11E-08 | CD4_Naive_lung |
| UBE3C               | 3.32E-13 | 0.3116214  | 0.2   | 0.41  | 1.18E-08 | CD4_Naive_lung |
| DSTN                | 3.70E-13 | 0.1967808  | 0.165 | 0.35  | 1.31E-08 | CD4_Naive_lung |
| NDUFS4              | 4.00E-13 | 0.12644928 | 0.17  | 0.354 | 1.42E-08 | CD4_Naive_lung |
| GTF3C6              | 4.03E-13 | 0.12881364 | 0.12  | 0.276 | 1.43E-08 | CD4_Naive_lung |
| EXT1                | 4.15E-13 | 0.18490816 | 0.148 | 0.319 | 1.47E-08 | CD4_Naive_lung |
| SRSF7               | 4.22E-13 | 0.15947725 | 0.283 | 0.55  | 1.50E-08 | CD4_Naive_lung |
| CLK1                | 4.27E-13 | 0.1730716  | 0.256 | 0.503 | 1.51E-08 | CD4_Naive_lung |
| TRDMT1              | 4.39E-13 | 0.35137045 | 0.114 | 0.269 | 1.56E-08 | CD4_Naive_lung |
| OGA                 | 4.68E-13 | 0.17035433 | 0.273 | 0.538 | 1.66E-08 | CD4_Naive_lung |
| SUGP2               | 4.85E-13 | 0.19829875 | 0.115 | 0.27  | 1.72E-08 | CD4_Naive_lung |
| AGPS                | 4.88E-13 | 0.18087041 | 0.141 | 0.312 | 1.73E-08 | CD4_Naive_lung |
| SSR3                | 4.90E-13 | 0.19685009 | 0.109 | 0.259 | 1.74E-08 | CD4_Naive_lung |
| CD63                | 5.40E-13 | 0.11800034 | 0.106 | 0.254 | 1.91E-08 | CD4_Naive_lung |
| DCAF6               | 5.92E-13 | 0.16979958 | 0.168 | 0.355 | 2.10E-08 | CD4_Naive_lung |
| LCOR                | 6.00E-13 | 0.2114937  | 0.288 | 0.55  | 2.12E-08 | CD4_Naive_lung |
| HMGB2               | 6.26E-13 | 0.24457896 | 0.174 | 0.364 | 2.22E-08 | CD4_Naive_lung |
| HDAC7               | 7.72E-13 | 0.28708953 | 0.12  | 0.277 | 2.74E-08 | CD4_Naive_lung |
| ENSMMUG000000057449 | 7.79E-13 | 0.18617321 | 0.161 | 0.343 | 2.76E-08 | CD4_Naive_lung |
| GALNT7              | 8.39E-13 | 0.28734469 | 0.121 | 0.277 | 2.97E-08 | CD4_Naive_lung |
| ZC3H11A             | 8.92E-13 | 0.19657379 | 0.253 | 0.496 | 3.16E-08 | CD4_Naive_lung |
| TSG101              | 9.08E-13 | 0.12744103 | 0.124 | 0.282 | 3.22E-08 | CD4_Naive_lung |
| SNRPD3              | 9.57E-13 | 0.24339891 | 0.252 | 0.503 | 3.39E-08 | CD4_Naive_lung |
| RPL19               | 9.64E-13 | 0.37922824 | 0.909 | 0.976 | 3.42E-08 | CD4_Naive_lung |
| SUZ12               | 1.02E-12 | 0.23517179 | 0.153 | 0.33  | 3.63E-08 | CD4_Naive_lung |

|                    |          |            |       |       |          |                |
|--------------------|----------|------------|-------|-------|----------|----------------|
| UBAP2              | 1.03E-12 | 0.14098182 | 0.141 | 0.306 | 3.66E-08 | CD4_Naive_lung |
| AZIN1              | 1.07E-12 | 0.14220515 | 0.111 | 0.259 | 3.78E-08 | CD4_Naive_lung |
| ATXN7              | 1.07E-12 | 0.31547101 | 0.291 | 0.561 | 3.80E-08 | CD4_Naive_lung |
| DBI                | 1.29E-12 | 0.19629265 | 0.2   | 0.407 | 4.59E-08 | CD4_Naive_lung |
| TCF7               | 1.39E-12 | 0.14776488 | 0.123 | 0.278 | 4.91E-08 | CD4_Naive_lung |
| MAP4K3             | 1.40E-12 | 0.11868202 | 0.109 | 0.256 | 4.98E-08 | CD4_Naive_lung |
| RBIS               | 1.44E-12 | 0.15487228 | 0.256 | 0.507 | 5.09E-08 | CD4_Naive_lung |
| MKLN1              | 1.45E-12 | 0.16151226 | 0.314 | 0.595 | 5.13E-08 | CD4_Naive_lung |
| DNAJC15            | 1.47E-12 | 0.20313823 | 0.129 | 0.288 | 5.22E-08 | CD4_Naive_lung |
| ENSMMUG00000016959 | 1.53E-12 | 0.25176291 | 0.195 | 0.399 | 5.43E-08 | CD4_Naive_lung |
| GIGYF2             | 1.76E-12 | 0.20284128 | 0.218 | 0.439 | 6.23E-08 | CD4_Naive_lung |
| RBFA               | 1.78E-12 | 0.24664252 | 0.186 | 0.382 | 6.32E-08 | CD4_Naive_lung |
| TRAM1              | 1.79E-12 | 0.13799774 | 0.158 | 0.334 | 6.34E-08 | CD4_Naive_lung |
| RC3H1              | 2.13E-12 | 0.23678605 | 0.108 | 0.253 | 7.55E-08 | CD4_Naive_lung |
| ENSMMUG00000018687 | 2.21E-12 | 0.182867   | 0.15  | 0.322 | 7.82E-08 | CD4_Naive_lung |
| ENSMMUG00000016009 | 2.30E-12 | 0.10520016 | 0.308 | 0.589 | 8.15E-08 | CD4_Naive_lung |
| ENSMMUG00000018557 | 2.31E-12 | 0.20617361 | 0.162 | 0.338 | 8.19E-08 | CD4_Naive_lung |
| ENTPD4             | 2.34E-12 | 0.15115065 | 0.118 | 0.27  | 8.27E-08 | CD4_Naive_lung |
| CARMIL1            | 2.38E-12 | 0.19262148 | 0.191 | 0.382 | 8.44E-08 | CD4_Naive_lung |
| FARS2              | 2.41E-12 | 0.24096109 | 0.248 | 0.482 | 8.54E-08 | CD4_Naive_lung |
| MFNG               | 2.61E-12 | 0.28886638 | 0.189 | 0.39  | 9.23E-08 | CD4_Naive_lung |
| RPS4Y2             | 2.68E-12 | 0.14634697 | 0.202 | 0.401 | 9.49E-08 | CD4_Naive_lung |
| NDUFS2             | 2.79E-12 | 0.2458607  | 0.108 | 0.252 | 9.89E-08 | CD4_Naive_lung |
| HERC3              | 2.87E-12 | 0.13910346 | 0.244 | 0.477 | 1.02E-07 | CD4_Naive_lung |
| DGKZ               | 2.87E-12 | 0.21176781 | 0.123 | 0.277 | 1.02E-07 | CD4_Naive_lung |
| NR3C1              | 3.02E-12 | 0.18320308 | 0.403 | 0.728 | 1.07E-07 | CD4_Naive_lung |
| MORF4L2            | 3.02E-12 | 0.21022642 | 0.127 | 0.282 | 1.07E-07 | CD4_Naive_lung |
| TNPO3              | 3.34E-12 | 0.1935596  | 0.129 | 0.286 | 1.19E-07 | CD4_Naive_lung |
| ENSMMUG00000060545 | 3.49E-12 | 0.19621183 | 0.292 | 0.563 | 1.24E-07 | CD4_Naive_lung |
| MSH3               | 3.87E-12 | 0.10241959 | 0.135 | 0.291 | 1.37E-07 | CD4_Naive_lung |
| OSBPL2             | 4.11E-12 | 0.17845541 | 0.121 | 0.273 | 1.46E-07 | CD4_Naive_lung |
| ETFB               | 4.16E-12 | 0.1424039  | 0.167 | 0.347 | 1.47E-07 | CD4_Naive_lung |
| LCLAT1             | 4.31E-12 | 0.18700026 | 0.124 | 0.277 | 1.53E-07 | CD4_Naive_lung |

|                    |          |            |       |       |          |                |
|--------------------|----------|------------|-------|-------|----------|----------------|
| OS9                | 4.48E-12 | 0.30669542 | 0.111 | 0.255 | 1.59E-07 | CD4_Naive_lung |
| TXN                | 4.63E-12 | 0.13771533 | 0.205 | 0.405 | 1.64E-07 | CD4_Naive_lung |
| BTN2A2             | 4.65E-12 | 0.28643592 | 0.241 | 0.478 | 1.65E-07 | CD4_Naive_lung |
| ARHGAP4            | 4.75E-12 | 0.24101147 | 0.159 | 0.336 | 1.68E-07 | CD4_Naive_lung |
| UBE2V1             | 4.91E-12 | 0.17688673 | 0.203 | 0.406 | 1.74E-07 | CD4_Naive_lung |
| CRTC3              | 5.02E-12 | 0.15145533 | 0.332 | 0.621 | 1.78E-07 | CD4_Naive_lung |
| XRN2               | 5.02E-12 | 0.11195147 | 0.312 | 0.59  | 1.78E-07 | CD4_Naive_lung |
| KDM2B              | 5.17E-12 | 0.22627979 | 0.117 | 0.263 | 1.83E-07 | CD4_Naive_lung |
| FKBP1A             | 5.18E-12 | 0.19191446 | 0.141 | 0.305 | 1.83E-07 | CD4_Naive_lung |
| ENSMMUG00000016898 | 5.59E-12 | 0.12689639 | 0.13  | 0.286 | 1.98E-07 | CD4_Naive_lung |
| KIAA1109           | 6.21E-12 | 0.22123909 | 0.218 | 0.429 | 2.20E-07 | CD4_Naive_lung |
| ATP5PF             | 6.44E-12 | 0.1840868  | 0.308 | 0.587 | 2.28E-07 | CD4_Naive_lung |
| SNRPB2             | 6.45E-12 | 0.11699055 | 0.206 | 0.41  | 2.28E-07 | CD4_Naive_lung |
| FBL                | 6.57E-12 | 0.13093399 | 0.133 | 0.29  | 2.33E-07 | CD4_Naive_lung |
| TRIP12             | 6.77E-12 | 0.24145209 | 0.283 | 0.541 | 2.40E-07 | CD4_Naive_lung |
| GTF2I              | 7.23E-12 | 0.25537428 | 0.271 | 0.522 | 2.56E-07 | CD4_Naive_lung |
| BUD23              | 7.60E-12 | 0.2258087  | 0.217 | 0.431 | 2.69E-07 | CD4_Naive_lung |
| RAB10              | 7.81E-12 | 0.2087198  | 0.186 | 0.377 | 2.77E-07 | CD4_Naive_lung |
| METAP2             | 8.03E-12 | 0.21305759 | 0.182 | 0.369 | 2.84E-07 | CD4_Naive_lung |
| PRR13              | 8.03E-12 | 0.22661826 | 0.156 | 0.327 | 2.84E-07 | CD4_Naive_lung |
| ITGAE              | 8.13E-12 | 0.16066688 | 0.109 | 0.251 | 2.88E-07 | CD4_Naive_lung |
| CLTC               | 8.57E-12 | 0.24416964 | 0.126 | 0.278 | 3.04E-07 | CD4_Naive_lung |
| ZDHHC20            | 8.85E-12 | 0.13870625 | 0.174 | 0.352 | 3.14E-07 | CD4_Naive_lung |
| ATP5IF1            | 9.04E-12 | 0.19648395 | 0.28  | 0.533 | 3.20E-07 | CD4_Naive_lung |
| SENP6              | 9.20E-12 | 0.10647484 | 0.33  | 0.621 | 3.26E-07 | CD4_Naive_lung |
| ENSMMUG00000063877 | 1.02E-11 | 0.1668575  | 0.167 | 0.343 | 3.62E-07 | CD4_Naive_lung |
| SSBP3              | 1.09E-11 | 0.32500375 | 0.168 | 0.346 | 3.86E-07 | CD4_Naive_lung |
| CDC25B             | 1.10E-11 | 0.26796899 | 0.115 | 0.258 | 3.90E-07 | CD4_Naive_lung |
| ITFG2              | 1.12E-11 | 0.14216123 | 0.148 | 0.314 | 3.98E-07 | CD4_Naive_lung |
| SEC63              | 1.13E-11 | 0.22835514 | 0.292 | 0.56  | 4.01E-07 | CD4_Naive_lung |
| PSMA5              | 1.15E-11 | 0.16067435 | 0.129 | 0.282 | 4.06E-07 | CD4_Naive_lung |
| PYHIN1             | 1.16E-11 | 0.10839062 | 0.135 | 0.289 | 4.09E-07 | CD4_Naive_lung |
| PUM2               | 1.30E-11 | 0.1822922  | 0.356 | 0.664 | 4.60E-07 | CD4_Naive_lung |

|                    |          |            |       |       |          |                |
|--------------------|----------|------------|-------|-------|----------|----------------|
| SEC61B             | 1.36E-11 | 0.27045055 | 0.306 | 0.587 | 4.83E-07 | CD4_Naive_lung |
| WSB1               | 1.42E-11 | 0.18370679 | 0.265 | 0.503 | 5.03E-07 | CD4_Naive_lung |
| RTN3               | 1.45E-11 | 0.3635065  | 0.18  | 0.366 | 5.12E-07 | CD4_Naive_lung |
| BICDL1             | 1.49E-11 | 1.36614038 | 0.502 | 0.567 | 5.30E-07 | CD4_Naive_lung |
| PPA1               | 1.52E-11 | 0.18292564 | 0.161 | 0.331 | 5.38E-07 | CD4_Naive_lung |
| PTAR1              | 1.62E-11 | 0.27538141 | 0.148 | 0.313 | 5.75E-07 | CD4_Naive_lung |
| CCDC82             | 1.77E-11 | 0.21084426 | 0.144 | 0.307 | 6.26E-07 | CD4_Naive_lung |
| IPO5               | 1.83E-11 | 0.3830464  | 0.121 | 0.267 | 6.48E-07 | CD4_Naive_lung |
| UBE2R2             | 1.83E-11 | 0.16585795 | 0.168 | 0.34  | 6.50E-07 | CD4_Naive_lung |
| DARS1              | 1.92E-11 | 0.24412848 | 0.114 | 0.254 | 6.81E-07 | CD4_Naive_lung |
| LARP4B             | 2.02E-11 | 0.11143043 | 0.156 | 0.324 | 7.14E-07 | CD4_Naive_lung |
| CLNS1A             | 2.07E-11 | 0.20592497 | 0.133 | 0.286 | 7.33E-07 | CD4_Naive_lung |
| COPS6              | 2.19E-11 | 0.33461933 | 0.171 | 0.35  | 7.77E-07 | CD4_Naive_lung |
| GRAP2              | 2.20E-11 | 0.2557343  | 0.156 | 0.32  | 7.78E-07 | CD4_Naive_lung |
| AGTPBP1            | 2.37E-11 | 0.20904902 | 0.285 | 0.536 | 8.38E-07 | CD4_Naive_lung |
| ENSMMUG00000019238 | 2.49E-11 | 0.3476665  | 0.158 | 0.329 | 8.81E-07 | CD4_Naive_lung |
| ELK3               | 2.49E-11 | 0.16038058 | 0.259 | 0.497 | 8.84E-07 | CD4_Naive_lung |
| NDUFB8             | 2.53E-11 | 0.26725522 | 0.209 | 0.414 | 8.97E-07 | CD4_Naive_lung |
| FGD3               | 2.53E-11 | 0.27503288 | 0.253 | 0.488 | 8.98E-07 | CD4_Naive_lung |
| SMNDC1             | 2.56E-11 | 0.22125205 | 0.205 | 0.398 | 9.06E-07 | CD4_Naive_lung |
| DYNC1H1            | 2.59E-11 | 0.30502379 | 0.127 | 0.277 | 9.19E-07 | CD4_Naive_lung |
| SUPT16H            | 2.64E-11 | 0.14058434 | 0.148 | 0.308 | 9.35E-07 | CD4_Naive_lung |
| PSMC5              | 2.70E-11 | 0.21648558 | 0.148 | 0.31  | 9.58E-07 | CD4_Naive_lung |
| MRPL51             | 2.73E-11 | 0.26850869 | 0.214 | 0.418 | 9.69E-07 | CD4_Naive_lung |
| PABPC1             | 3.03E-11 | 0.45557491 | 0.765 | 0.928 | 1.07E-06 | CD4_Naive_lung |
| INPP5D             | 3.04E-11 | 0.38040877 | 0.182 | 0.364 | 1.08E-06 | CD4_Naive_lung |
| SEMA4D             | 3.27E-11 | 0.18057735 | 0.273 | 0.515 | 1.16E-06 | CD4_Naive_lung |
| CALCOCO2           | 3.45E-11 | 0.29351586 | 0.167 | 0.338 | 1.22E-06 | CD4_Naive_lung |
| MTR                | 3.48E-11 | 0.31538205 | 0.152 | 0.312 | 1.23E-06 | CD4_Naive_lung |
| COX16              | 3.51E-11 | 0.11575055 | 0.345 | 0.639 | 1.24E-06 | CD4_Naive_lung |
| IL2RG              | 3.52E-11 | 0.26497325 | 0.268 | 0.514 | 1.25E-06 | CD4_Naive_lung |
| GPR183             | 3.53E-11 | 1.4209533  | 0.455 | 0.471 | 1.25E-06 | CD4_Naive_lung |
| DHX8               | 3.53E-11 | 0.21402754 | 0.129 | 0.275 | 1.25E-06 | CD4_Naive_lung |

|                   |          |            |       |       |          |                |
|-------------------|----------|------------|-------|-------|----------|----------------|
| UBR2              | 3.55E-11 | 0.11388511 | 0.165 | 0.333 | 1.26E-06 | CD4_Naive_lung |
| USP37             | 3.89E-11 | 0.23231069 | 0.13  | 0.277 | 1.38E-06 | CD4_Naive_lung |
| ATP5F1C           | 3.98E-11 | 0.25874624 | 0.245 | 0.477 | 1.41E-06 | CD4_Naive_lung |
| NOSIP             | 4.64E-11 | 0.19364142 | 0.145 | 0.301 | 1.64E-06 | CD4_Naive_lung |
| BMP2K             | 4.76E-11 | 1.93884246 | 0.342 | 0.306 | 1.69E-06 | CD4_Naive_lung |
| ICAM3             | 5.18E-11 | 0.28595336 | 0.148 | 0.31  | 1.84E-06 | CD4_Naive_lung |
| UQCRC2            | 5.63E-11 | 0.26988328 | 0.139 | 0.295 | 2.00E-06 | CD4_Naive_lung |
| SLIRP             | 5.83E-11 | 0.10702046 | 0.356 | 0.654 | 2.06E-06 | CD4_Naive_lung |
| TINF2             | 6.33E-11 | 0.23359543 | 0.259 | 0.498 | 2.24E-06 | CD4_Naive_lung |
| RBBP4             | 6.38E-11 | 0.21368998 | 0.18  | 0.36  | 2.26E-06 | CD4_Naive_lung |
| CDC37             | 6.49E-11 | 0.27350666 | 0.138 | 0.287 | 2.30E-06 | CD4_Naive_lung |
| CDKN1B            | 6.50E-11 | 0.28106342 | 0.17  | 0.341 | 2.30E-06 | CD4_Naive_lung |
| LRCH3             | 6.56E-11 | 0.27193931 | 0.252 | 0.474 | 2.32E-06 | CD4_Naive_lung |
| TMEM245           | 6.81E-11 | 0.36932872 | 0.141 | 0.295 | 2.41E-06 | CD4_Naive_lung |
| SENP7             | 7.15E-11 | 0.23197387 | 0.262 | 0.489 | 2.53E-06 | CD4_Naive_lung |
| DDX3Y             | 7.21E-11 | 0.1204749  | 0.285 | 0.519 | 2.55E-06 | CD4_Naive_lung |
| BRWD1             | 7.79E-11 | 0.19280746 | 0.245 | 0.468 | 2.76E-06 | CD4_Naive_lung |
| RESF1             | 7.79E-11 | 0.37778451 | 0.126 | 0.272 | 2.76E-06 | CD4_Naive_lung |
| TMEM59            | 8.20E-11 | 0.26331008 | 0.247 | 0.472 | 2.90E-06 | CD4_Naive_lung |
| ERC1              | 8.52E-11 | 0.29699452 | 0.205 | 0.393 | 3.02E-06 | CD4_Naive_lung |
| CD38              | 8.63E-11 | 0.15651298 | 0.258 | 0.482 | 3.06E-06 | CD4_Naive_lung |
| XYLT1             | 9.10E-11 | 0.31334157 | 0.291 | 0.538 | 3.22E-06 | CD4_Naive_lung |
| FYTTD1            | 9.65E-11 | 0.25699578 | 0.153 | 0.313 | 3.42E-06 | CD4_Naive_lung |
| ZNF407            | 9.70E-11 | 0.28336791 | 0.276 | 0.509 | 3.44E-06 | CD4_Naive_lung |
| CHD3              | 9.74E-11 | 0.31327232 | 0.208 | 0.404 | 3.45E-06 | CD4_Naive_lung |
| CMSS1             | 9.90E-11 | 0.15590261 | 0.127 | 0.267 | 3.51E-06 | CD4_Naive_lung |
| ENSMUG00000055825 | 1.03E-10 | 0.26743244 | 0.126 | 0.268 | 3.64E-06 | CD4_Naive_lung |
| MIB1              | 1.05E-10 | 0.2444882  | 0.142 | 0.294 | 3.71E-06 | CD4_Naive_lung |
| BRD4              | 1.07E-10 | 0.32283611 | 0.133 | 0.282 | 3.79E-06 | CD4_Naive_lung |
| OSTC              | 1.10E-10 | 0.18650731 | 0.183 | 0.362 | 3.88E-06 | CD4_Naive_lung |
| WAPL              | 1.11E-10 | 0.37444526 | 0.194 | 0.382 | 3.94E-06 | CD4_Naive_lung |
| POLR2F            | 1.12E-10 | 0.13967354 | 0.115 | 0.252 | 3.98E-06 | CD4_Naive_lung |
| TNRC6C            | 1.16E-10 | 0.22979831 | 0.15  | 0.308 | 4.12E-06 | CD4_Naive_lung |

|                   |          |            |       |       |          |                |
|-------------------|----------|------------|-------|-------|----------|----------------|
| PSMB1             | 1.20E-10 | 0.2303054  | 0.282 | 0.537 | 4.26E-06 | CD4_Naive_lung |
| LDHB              | 1.21E-10 | 0.14016942 | 0.124 | 0.263 | 4.29E-06 | CD4_Naive_lung |
| S1PR1             | 1.23E-10 | 0.21784301 | 0.189 | 0.367 | 4.34E-06 | CD4_Naive_lung |
| HERC2             | 1.28E-10 | 0.21985065 | 0.221 | 0.425 | 4.55E-06 | CD4_Naive_lung |
| EXOC2             | 1.34E-10 | 0.33436676 | 0.121 | 0.261 | 4.75E-06 | CD4_Naive_lung |
| ELL2              | 1.39E-10 | 0.36782119 | 0.145 | 0.297 | 4.93E-06 | CD4_Naive_lung |
| CRY1              | 1.43E-10 | 0.12884081 | 0.171 | 0.337 | 5.06E-06 | CD4_Naive_lung |
| ACTN1             | 1.51E-10 | 0.28284475 | 0.118 | 0.255 | 5.36E-06 | CD4_Naive_lung |
| VPS13C            | 1.56E-10 | 0.2669474  | 0.121 | 0.259 | 5.52E-06 | CD4_Naive_lung |
| RGCC              | 1.70E-10 | 0.23706307 | 0.195 | 0.379 | 6.02E-06 | CD4_Naive_lung |
| RAC2              | 1.70E-10 | 0.36987816 | 0.195 | 0.38  | 6.02E-06 | CD4_Naive_lung |
| MIC1              | 1.72E-10 | 0.19573764 | 0.318 | 0.589 | 6.10E-06 | CD4_Naive_lung |
| TIA1              | 1.73E-10 | 0.15308862 | 0.186 | 0.364 | 6.13E-06 | CD4_Naive_lung |
| ENSMUG00000065089 | 1.82E-10 | 0.22978675 | 0.13  | 0.273 | 6.46E-06 | CD4_Naive_lung |
| UQCRC1            | 1.92E-10 | 0.35636741 | 0.12  | 0.257 | 6.81E-06 | CD4_Naive_lung |
| SNRPB             | 2.26E-10 | 0.31503021 | 0.23  | 0.44  | 8.01E-06 | CD4_Naive_lung |
| HSPE1             | 2.28E-10 | 0.15140804 | 0.353 | 0.654 | 8.07E-06 | CD4_Naive_lung |
| LMBR1             | 2.36E-10 | 0.32137361 | 0.247 | 0.46  | 8.37E-06 | CD4_Naive_lung |
| EIF3I             | 2.41E-10 | 0.24802435 | 0.173 | 0.344 | 8.53E-06 | CD4_Naive_lung |
| WAC               | 2.43E-10 | 0.22643902 | 0.352 | 0.643 | 8.62E-06 | CD4_Naive_lung |
| CD3D              | 2.58E-10 | 0.79180986 | 0.602 | 0.774 | 9.14E-06 | CD4_Naive_lung |
| AKAP17A           | 2.62E-10 | 0.2106067  | 0.118 | 0.253 | 9.29E-06 | CD4_Naive_lung |
| PDCD4             | 2.62E-10 | 0.126623   | 0.292 | 0.54  | 9.29E-06 | CD4_Naive_lung |
| HDAC4             | 2.68E-10 | 0.20363587 | 0.138 | 0.284 | 9.49E-06 | CD4_Naive_lung |
| REEP5             | 2.99E-10 | 0.29225381 | 0.152 | 0.304 | 1.06E-05 | CD4_Naive_lung |
| DIAPH1            | 3.10E-10 | 0.24163606 | 0.294 | 0.541 | 1.10E-05 | CD4_Naive_lung |
| STAG2             | 3.18E-10 | 0.13082936 | 0.373 | 0.666 | 1.13E-05 | CD4_Naive_lung |
| MAP1LC3B          | 3.27E-10 | 0.23862761 | 0.164 | 0.325 | 1.16E-05 | CD4_Naive_lung |
| CRIP1             | 3.49E-10 | 1.17352771 | 0.508 | 0.575 | 1.24E-05 | CD4_Naive_lung |
| ERN1              | 3.51E-10 | 0.31509299 | 0.17  | 0.335 | 1.24E-05 | CD4_Naive_lung |
| HIPK3             | 3.73E-10 | 0.28552908 | 0.126 | 0.263 | 1.32E-05 | CD4_Naive_lung |
| HMOX2             | 3.77E-10 | 0.30038083 | 0.188 | 0.362 | 1.34E-05 | CD4_Naive_lung |
| CGGBP1            | 3.90E-10 | 0.30259284 | 0.123 | 0.259 | 1.38E-05 | CD4_Naive_lung |

|                    |          |            |       |       |          |                |
|--------------------|----------|------------|-------|-------|----------|----------------|
| ARHGAP45           | 4.00E-10 | 0.39892352 | 0.233 | 0.449 | 1.42E-05 | CD4_Naive_lung |
| VMP1               | 4.09E-10 | 0.21537633 | 0.159 | 0.316 | 1.45E-05 | CD4_Naive_lung |
| ENSMMUG00000006343 | 4.20E-10 | 0.40998483 | 0.139 | 0.287 | 1.49E-05 | CD4_Naive_lung |
| LAMTOR4            | 4.22E-10 | 0.34101837 | 0.214 | 0.415 | 1.50E-05 | CD4_Naive_lung |
| AP2M1              | 4.24E-10 | 0.25365031 | 0.133 | 0.276 | 1.50E-05 | CD4_Naive_lung |
| ROMO1              | 4.52E-10 | 1.25459883 | 0.482 | 0.574 | 1.60E-05 | CD4_Naive_lung |
| SMARCA2            | 4.56E-10 | 0.33495485 | 0.212 | 0.404 | 1.62E-05 | CD4_Naive_lung |
| CCNH               | 4.82E-10 | 0.33671784 | 0.133 | 0.276 | 1.71E-05 | CD4_Naive_lung |
| LSM5               | 4.84E-10 | 0.18955434 | 0.164 | 0.324 | 1.71E-05 | CD4_Naive_lung |
| ITGA6              | 5.02E-10 | 1.03253705 | 0.582 | 0.727 | 1.78E-05 | CD4_Naive_lung |
| HNRNPH1            | 5.80E-10 | 0.93011142 | 0.535 | 0.649 | 2.05E-05 | CD4_Naive_lung |
| ATP5PD             | 6.02E-10 | 0.2904801  | 0.127 | 0.266 | 2.13E-05 | CD4_Naive_lung |
| CUL4A              | 6.44E-10 | 0.4225898  | 0.164 | 0.323 | 2.28E-05 | CD4_Naive_lung |
| NCBP2              | 6.51E-10 | 0.24668071 | 0.221 | 0.417 | 2.31E-05 | CD4_Naive_lung |
| AVL9               | 6.56E-10 | 0.32891634 | 0.129 | 0.264 | 2.32E-05 | CD4_Naive_lung |
| SPIDR              | 7.00E-10 | 0.20918751 | 0.161 | 0.314 | 2.48E-05 | CD4_Naive_lung |
| DGKA               | 7.37E-10 | 0.24375411 | 0.315 | 0.579 | 2.61E-05 | CD4_Naive_lung |
| ENSMMUG00000038348 | 7.50E-10 | 0.19632103 | 0.414 | 0.674 | 2.66E-05 | CD4_Naive_lung |
| PITPNM2            | 7.62E-10 | 0.17465462 | 0.13  | 0.266 | 2.70E-05 | CD4_Naive_lung |
| PSMD13             | 7.66E-10 | 0.36171481 | 0.174 | 0.342 | 2.71E-05 | CD4_Naive_lung |
| ARHGAP30           | 8.26E-10 | 0.4118357  | 0.167 | 0.33  | 2.93E-05 | CD4_Naive_lung |
| OXSRI              | 8.43E-10 | 0.27457162 | 0.155 | 0.306 | 2.99E-05 | CD4_Naive_lung |
| RCSD1              | 9.00E-10 | 0.28925576 | 0.186 | 0.359 | 3.19E-05 | CD4_Naive_lung |
| CCDC66             | 9.10E-10 | 0.25333543 | 0.165 | 0.322 | 3.22E-05 | CD4_Naive_lung |
| GMDS               | 9.70E-10 | 0.32087169 | 0.261 | 0.479 | 3.44E-05 | CD4_Naive_lung |
| TRIB2              | 1.00E-09 | 0.29701689 | 0.242 | 0.452 | 3.55E-05 | CD4_Naive_lung |
| NDUFB7             | 1.09E-09 | 0.18802725 | 0.142 | 0.286 | 3.88E-05 | CD4_Naive_lung |
| PPM1B              | 1.15E-09 | 0.31696262 | 0.145 | 0.291 | 4.07E-05 | CD4_Naive_lung |
| PBXIP1             | 1.16E-09 | 0.41745145 | 0.203 | 0.389 | 4.11E-05 | CD4_Naive_lung |
| RASGRF2            | 1.28E-09 | 0.2414559  | 0.211 | 0.383 | 4.53E-05 | CD4_Naive_lung |
| VDAC1              | 1.32E-09 | 0.3782107  | 0.126 | 0.259 | 4.67E-05 | CD4_Naive_lung |
| ENSMMUG00000061756 | 1.36E-09 | 0.33209814 | 0.141 | 0.283 | 4.81E-05 | CD4_Naive_lung |
| DOCK11             | 1.37E-09 | 0.19026765 | 0.355 | 0.63  | 4.86E-05 | CD4_Naive_lung |

|             |          |            |       |       |            |                |
|-------------|----------|------------|-------|-------|------------|----------------|
| HSD17B11    | 1.41E-09 | 0.17935616 | 0.132 | 0.266 | 5.00E-05   | CD4_Naive_lung |
| KAT6A       | 1.42E-09 | 1.00354533 | 0.548 | 0.672 | 5.03E-05   | CD4_Naive_lung |
| ANXA1       | 1.59E-09 | 0.15416246 | 0.311 | 0.54  | 5.65E-05   | CD4_Naive_lung |
| UIMC1       | 1.61E-09 | 0.38367711 | 0.155 | 0.307 | 5.71E-05   | CD4_Naive_lung |
| KPNA4       | 1.62E-09 | 0.36720054 | 0.147 | 0.291 | 5.76E-05   | CD4_Naive_lung |
| ZFAND3      | 1.63E-09 | 0.23128374 | 0.383 | 0.68  | 5.79E-05   | CD4_Naive_lung |
| TEC         | 1.79E-09 | 0.34563811 | 0.323 | 0.565 | 6.34E-05   | CD4_Naive_lung |
| G3BP1       | 1.91E-09 | 0.27395248 | 0.332 | 0.598 | 6.75E-05   | CD4_Naive_lung |
| SEPTIN9     | 2.08E-09 | 0.34827498 | 0.341 | 0.628 | 7.36E-05   | CD4_Naive_lung |
| NRDC        | 2.16E-09 | 0.21823122 | 0.152 | 0.296 | 7.66E-05   | CD4_Naive_lung |
| DDX18       | 2.23E-09 | 0.34145949 | 0.267 | 0.497 | 7.92E-05   | CD4_Naive_lung |
| PHF20       | 2.40E-09 | 0.22674371 | 0.245 | 0.454 | 8.50E-05   | CD4_Naive_lung |
| PSMB9       | 2.60E-09 | 0.35878952 | 0.173 | 0.333 | 9.21E-05   | CD4_Naive_lung |
| C14H11orf58 | 2.76E-09 | 0.31697818 | 0.162 | 0.316 | 9.77E-05   | CD4_Naive_lung |
| ELF2        | 3.02E-09 | 0.30939324 | 0.208 | 0.384 | 0.00010698 | CD4_Naive_lung |
| SMC3        | 3.16E-09 | 0.35160037 | 0.185 | 0.349 | 0.00011202 | CD4_Naive_lung |
| NPTN        | 3.20E-09 | 0.37312798 | 0.135 | 0.268 | 0.00011352 | CD4_Naive_lung |
| SMAD4       | 3.21E-09 | 0.5573863  | 0.138 | 0.276 | 0.00011387 | CD4_Naive_lung |
| RPLP1       | 3.23E-09 | 0.20156653 | 0.983 | 0.996 | 0.00011461 | CD4_Naive_lung |
| DAD1        | 3.28E-09 | 0.27870515 | 0.262 | 0.485 | 0.00011608 | CD4_Naive_lung |
| ADD1        | 3.32E-09 | 0.3312067  | 0.229 | 0.428 | 0.00011771 | CD4_Naive_lung |
| ST6GAL1     | 3.34E-09 | 0.22684504 | 0.333 | 0.605 | 0.00011851 | CD4_Naive_lung |
| ISCA1       | 3.59E-09 | 0.22685041 | 0.159 | 0.309 | 0.00012717 | CD4_Naive_lung |
| ILF2        | 3.81E-09 | 0.29391835 | 0.153 | 0.301 | 0.00013508 | CD4_Naive_lung |
| TWF2        | 3.88E-09 | 0.28605181 | 0.13  | 0.262 | 0.0001376  | CD4_Naive_lung |
| IL7R        | 4.00E-09 | 0.47299653 | 0.779 | 0.923 | 0.00014157 | CD4_Naive_lung |
| ND4L        | 4.56E-09 | 1.76086601 | 0.348 | 0.336 | 0.0001614  | CD4_Naive_lung |
| ARID5B      | 4.66E-09 | 1.12447944 | 0.52  | 0.613 | 0.00016496 | CD4_Naive_lung |
| IP6K1       | 4.91E-09 | 0.33763405 | 0.138 | 0.272 | 0.00017415 | CD4_Naive_lung |
| DDX50       | 5.07E-09 | 0.41511715 | 0.191 | 0.362 | 0.00017979 | CD4_Naive_lung |
| PRKD3       | 5.38E-09 | 0.3060237  | 0.274 | 0.497 | 0.00019057 | CD4_Naive_lung |
| PAOX        | 5.49E-09 | 0.42651912 | 0.171 | 0.327 | 0.00019459 | CD4_Naive_lung |
| PDCD10      | 5.76E-09 | 0.28613848 | 0.195 | 0.363 | 0.00020416 | CD4_Naive_lung |



|                    |          |            |       |       |            |                |
|--------------------|----------|------------|-------|-------|------------|----------------|
| HS2ST1             | 5.93E-09 | 0.29793128 | 0.135 | 0.265 | 0.00021009 | CD4_Naive_lung |
| ENSMMUG00000058919 | 5.95E-09 | 0.35855646 | 0.139 | 0.276 | 0.0002107  | CD4_Naive_lung |
| ATXN7L1            | 6.13E-09 | 0.21870977 | 0.161 | 0.306 | 0.00021727 | CD4_Naive_lung |
| PDK1               | 6.45E-09 | 0.44891188 | 0.288 | 0.531 | 0.00022848 | CD4_Naive_lung |
| MRPL23             | 6.97E-09 | 0.27541558 | 0.244 | 0.448 | 0.00024679 | CD4_Naive_lung |
| DCTN3              | 7.04E-09 | 0.33642526 | 0.159 | 0.307 | 0.00024962 | CD4_Naive_lung |
| UBE2D1             | 7.42E-09 | 0.31856409 | 0.138 | 0.271 | 0.00026274 | CD4_Naive_lung |
| ENSMMUG00000053392 | 8.07E-09 | 0.27453798 | 0.206 | 0.383 | 0.0002859  | CD4_Naive_lung |
| PRMT1              | 8.09E-09 | 0.29548885 | 0.15  | 0.29  | 0.00028667 | CD4_Naive_lung |
| UPF2               | 8.19E-09 | 0.38104692 | 0.22  | 0.404 | 0.00029028 | CD4_Naive_lung |
| PTPN11             | 8.28E-09 | 0.41452063 | 0.133 | 0.262 | 0.00029343 | CD4_Naive_lung |
| YY1                | 8.61E-09 | 0.3094051  | 0.15  | 0.292 | 0.00030512 | CD4_Naive_lung |
| DENND2D            | 1.04E-08 | 0.33774651 | 0.161 | 0.306 | 0.00036994 | CD4_Naive_lung |
| EIF3J              | 1.05E-08 | 0.37218075 | 0.221 | 0.406 | 0.00037083 | CD4_Naive_lung |
| ITGA4              | 1.05E-08 | 0.23592364 | 0.208 | 0.377 | 0.00037265 | CD4_Naive_lung |
| TGFB1              | 1.06E-08 | 0.24032225 | 0.28  | 0.49  | 0.00037464 | CD4_Naive_lung |
| SEC62              | 1.15E-08 | 1.04155628 | 0.467 | 0.53  | 0.00040835 | CD4_Naive_lung |
| SFPQ               | 1.20E-08 | 0.29862436 | 0.318 | 0.572 | 0.00042626 | CD4_Naive_lung |
| NSRP1              | 1.24E-08 | 0.30807205 | 0.179 | 0.332 | 0.00044103 | CD4_Naive_lung |
| NDUFA6             | 1.29E-08 | 0.37240794 | 0.211 | 0.391 | 0.00045811 | CD4_Naive_lung |
| SSR2               | 1.36E-08 | 0.19789147 | 0.321 | 0.581 | 0.00048021 | CD4_Naive_lung |
| ZNF827             | 1.36E-08 | 0.25704311 | 0.309 | 0.547 | 0.00048039 | CD4_Naive_lung |
| AKAP9              | 1.39E-08 | 0.18818636 | 0.376 | 0.651 | 0.00049171 | CD4_Naive_lung |
| LLPH               | 1.52E-08 | 0.465943   | 0.176 | 0.331 | 0.00053702 | CD4_Naive_lung |
| RPL36AL            | 1.52E-08 | 0.44661687 | 0.706 | 0.89  | 0.00054012 | CD4_Naive_lung |
| ANKRD13C           | 1.58E-08 | 0.54820788 | 0.145 | 0.281 | 0.00055984 | CD4_Naive_lung |
| SLC38A2            | 1.62E-08 | 1.6689306  | 0.336 | 0.321 | 0.00057467 | CD4_Naive_lung |
| EEF1A1             | 1.73E-08 | 0.22493045 | 0.942 | 0.985 | 0.00061271 | CD4_Naive_lung |
| TAPBP              | 1.79E-08 | 0.40182909 | 0.185 | 0.348 | 0.00063407 | CD4_Naive_lung |
| RPN1               | 1.82E-08 | 0.56175945 | 0.159 | 0.302 | 0.00064532 | CD4_Naive_lung |
| KTN1               | 1.85E-08 | 0.37477103 | 0.153 | 0.295 | 0.00065448 | CD4_Naive_lung |
| SH3BGRL            | 2.07E-08 | 0.33957109 | 0.168 | 0.318 | 0.00073215 | CD4_Naive_lung |
| ENSMMUG00000063859 | 2.08E-08 | 1.90952255 | 0.279 | 0.241 | 0.0007375  | CD4_Naive_lung |

|                    |          |            |       |       |            |                |
|--------------------|----------|------------|-------|-------|------------|----------------|
| REXO2              | 2.09E-08 | 0.3372017  | 0.226 | 0.41  | 0.00074046 | CD4_Naive_lung |
| ZMYM2              | 2.10E-08 | 0.40243626 | 0.276 | 0.498 | 0.00074487 | CD4_Naive_lung |
| ATP6AP2            | 2.17E-08 | 0.29146524 | 0.127 | 0.25  | 0.00076745 | CD4_Naive_lung |
| EIF4E2             | 2.26E-08 | 0.40218928 | 0.155 | 0.295 | 0.00080012 | CD4_Naive_lung |
| RALGAPB            | 2.44E-08 | 0.42764372 | 0.148 | 0.285 | 0.00086439 | CD4_Naive_lung |
| TAF4B              | 2.47E-08 | 1.53439102 | 0.37  | 0.367 | 0.00087427 | CD4_Naive_lung |
| HDLBP              | 3.03E-08 | 0.47036499 | 0.162 | 0.308 | 0.00107329 | CD4_Naive_lung |
| ENSMMUG00000030408 | 3.39E-08 | 1.02591554 | 0.471 | 0.561 | 0.00120129 | CD4_Naive_lung |
| TDG                | 3.44E-08 | 0.39701679 | 0.189 | 0.348 | 0.00121907 | CD4_Naive_lung |
| MPZL1              | 3.66E-08 | 0.42518246 | 0.233 | 0.425 | 0.0012976  | CD4_Naive_lung |
| SNRPD1             | 3.89E-08 | 0.30129715 | 0.152 | 0.285 | 0.00137929 | CD4_Naive_lung |
| PDCD5              | 4.30E-08 | 0.31509044 | 0.18  | 0.331 | 0.00152387 | CD4_Naive_lung |
| ENSMMUG00000000983 | 4.32E-08 | 0.48295765 | 0.217 | 0.399 | 0.00152965 | CD4_Naive_lung |
| PCNX2              | 4.46E-08 | 0.29876238 | 0.141 | 0.267 | 0.00157872 | CD4_Naive_lung |
| THYN1              | 4.47E-08 | 0.31890342 | 0.145 | 0.279 | 0.00158291 | CD4_Naive_lung |
| MGMT               | 4.61E-08 | 0.24636806 | 0.238 | 0.418 | 0.00163405 | CD4_Naive_lung |
| CLEC2D             | 5.24E-08 | 1.50186087 | 0.415 | 0.452 | 0.00185521 | CD4_Naive_lung |
| ADAM10             | 5.50E-08 | 0.26362158 | 0.226 | 0.401 | 0.00194861 | CD4_Naive_lung |
| GNB1               | 5.52E-08 | 0.40321947 | 0.233 | 0.409 | 0.0019574  | CD4_Naive_lung |
| DPP4               | 5.56E-08 | 0.27227438 | 0.153 | 0.286 | 0.00196846 | CD4_Naive_lung |
| ASXL1              | 6.03E-08 | 0.35822842 | 0.162 | 0.301 | 0.00213545 | CD4_Naive_lung |
| TMBIM6             | 6.55E-08 | 0.50351919 | 0.247 | 0.443 | 0.00231907 | CD4_Naive_lung |
| ERCC6L2            | 6.65E-08 | 0.38577813 | 0.183 | 0.334 | 0.00235447 | CD4_Naive_lung |
| C4H6orf62          | 7.01E-08 | 0.5820897  | 0.185 | 0.342 | 0.00248387 | CD4_Naive_lung |
| SPTAN1             | 7.19E-08 | 0.30477643 | 0.15  | 0.284 | 0.00254847 | CD4_Naive_lung |
| STX16              | 7.24E-08 | 0.59866551 | 0.13  | 0.253 | 0.00256496 | CD4_Naive_lung |
| C11H12orf57        | 8.12E-08 | 0.24134653 | 0.358 | 0.622 | 0.00287856 | CD4_Naive_lung |
| AHI1               | 8.41E-08 | 0.41424784 | 0.309 | 0.533 | 0.00298122 | CD4_Naive_lung |
| EIF5B              | 8.60E-08 | 0.33499896 | 0.197 | 0.351 | 0.0030484  | CD4_Naive_lung |
| LCK                | 8.61E-08 | 0.30571018 | 0.32  | 0.568 | 0.00304973 | CD4_Naive_lung |
| ENSMMUG00000006499 | 8.72E-08 | 0.41154993 | 0.212 | 0.383 | 0.00308933 | CD4_Naive_lung |
| RBM8A              | 8.83E-08 | 0.48288629 | 0.203 | 0.372 | 0.00312989 | CD4_Naive_lung |
| SSH2               | 9.51E-08 | 0.63412908 | 0.748 | 0.919 | 0.00336898 | CD4_Naive_lung |

|                    |          |            |       |       |            |                |
|--------------------|----------|------------|-------|-------|------------|----------------|
| WIPF1              | 9.91E-08 | 0.17594816 | 0.37  | 0.637 | 0.00351267 | CD4_Naive_lung |
| MGST3              | 1.02E-07 | 0.41509757 | 0.186 | 0.341 | 0.00360186 | CD4_Naive_lung |
| ATP5MC3            | 1.10E-07 | 0.24365456 | 0.327 | 0.584 | 0.0039151  | CD4_Naive_lung |
| IMMP2L             | 1.19E-07 | 0.20478246 | 0.391 | 0.627 | 0.00423385 | CD4_Naive_lung |
| PTBP3              | 1.24E-07 | 0.31202448 | 0.338 | 0.592 | 0.00439715 | CD4_Naive_lung |
| S100A10            | 1.29E-07 | 0.21883428 | 0.356 | 0.607 | 0.00456978 | CD4_Naive_lung |
| NAA50              | 1.30E-07 | 0.50778604 | 0.159 | 0.293 | 0.00462096 | CD4_Naive_lung |
| ZNF280D            | 1.44E-07 | 0.54191721 | 0.2   | 0.361 | 0.00511378 | CD4_Naive_lung |
| NDUFS6             | 1.45E-07 | 0.45403612 | 0.197 | 0.359 | 0.00513361 | CD4_Naive_lung |
| USP25              | 1.49E-07 | 0.43618086 | 0.188 | 0.335 | 0.00527526 | CD4_Naive_lung |
| ADSS2              | 1.56E-07 | 0.4127208  | 0.133 | 0.251 | 0.00552543 | CD4_Naive_lung |
| RERE               | 1.56E-07 | 0.83066767 | 0.6   | 0.751 | 0.00554427 | CD4_Naive_lung |
| MAP2K4             | 1.57E-07 | 0.54031948 | 0.156 | 0.291 | 0.005553   | CD4_Naive_lung |
| SNRPN              | 1.65E-07 | 0.50616581 | 0.168 | 0.312 | 0.0058568  | CD4_Naive_lung |
| PPIB               | 1.66E-07 | 0.23490439 | 0.333 | 0.586 | 0.00588457 | CD4_Naive_lung |
| ENSMMUG00000012419 | 2.01E-07 | 0.33254187 | 0.345 | 0.618 | 0.00713872 | CD4_Naive_lung |
| SMAD2              | 2.06E-07 | 0.4973454  | 0.144 | 0.27  | 0.00728608 | CD4_Naive_lung |
| ABCF1              | 2.21E-07 | 0.34555469 | 0.152 | 0.277 | 0.00782306 | CD4_Naive_lung |
| ANKH               | 2.33E-07 | 0.34290527 | 0.248 | 0.433 | 0.0082569  | CD4_Naive_lung |
| DNAJC19            | 2.37E-07 | 0.31902222 | 0.142 | 0.263 | 0.00839484 | CD4_Naive_lung |
| DAZAP1             | 2.43E-07 | 0.23773405 | 0.406 | 0.714 | 0.00861133 | CD4_Naive_lung |
| GDI2               | 2.46E-07 | 0.41803483 | 0.198 | 0.358 | 0.00870195 | CD4_Naive_lung |
| GCC2               | 2.52E-07 | 0.40902404 | 0.239 | 0.419 | 0.0089245  | CD4_Naive_lung |
| LSM6               | 2.63E-07 | 0.36686723 | 0.258 | 0.458 | 0.00931075 | CD4_Naive_lung |
| PRKCQ              | 2.90E-07 | 0.23957966 | 0.371 | 0.637 | 0.01027223 | CD4_Naive_lung |
| CD4                | 3.07E-07 | 0.51232542 | 0.171 | 0.313 | 0.01087601 | CD4_Naive_lung |
| ZMYND11            | 3.09E-07 | 0.38875324 | 0.247 | 0.435 | 0.01095836 | CD4_Naive_lung |
| DHX15              | 3.17E-07 | 0.5609209  | 0.168 | 0.307 | 0.01122421 | CD4_Naive_lung |
| ATAD1              | 3.40E-07 | 0.43771908 | 0.155 | 0.282 | 0.01203319 | CD4_Naive_lung |
| POMP               | 3.49E-07 | 0.56141985 | 0.176 | 0.316 | 0.01238101 | CD4_Naive_lung |
| DYRK1A             | 3.56E-07 | 0.46870202 | 0.236 | 0.418 | 0.01262812 | CD4_Naive_lung |
| RASGRP2            | 3.73E-07 | 0.50993493 | 0.217 | 0.386 | 0.01321386 | CD4_Naive_lung |
| HECTD1             | 3.90E-07 | 0.46191068 | 0.174 | 0.315 | 0.01381315 | CD4_Naive_lung |

|                    |          |            |       |       |            |                |
|--------------------|----------|------------|-------|-------|------------|----------------|
| TBL1XR1            | 4.21E-07 | 0.28308657 | 0.43  | 0.729 | 0.01491852 | CD4_Naive_lung |
| STAR               | 4.88E-07 | 0.38727016 | 0.142 | 0.261 | 0.01730169 | CD4_Naive_lung |
| UBE2K              | 4.96E-07 | 0.35791872 | 0.261 | 0.451 | 0.01756391 | CD4_Naive_lung |
| ZHX2               | 5.79E-07 | 1.66902799 | 0.285 | 0.258 | 0.02050845 | CD4_Naive_lung |
| CEP350             | 5.94E-07 | 0.47513063 | 0.208 | 0.37  | 0.02103199 | CD4_Naive_lung |
| EIF4A1             | 5.98E-07 | 0.31387257 | 0.232 | 0.404 | 0.0211897  | CD4_Naive_lung |
| ENSMMUG00000043332 | 6.05E-07 | 0.45494325 | 0.195 | 0.345 | 0.02144303 | CD4_Naive_lung |
| DENND6A            | 6.38E-07 | 0.42181086 | 0.168 | 0.298 | 0.02259412 | CD4_Naive_lung |
| ESYT2              | 6.80E-07 | 0.12817023 | 0.471 | 0.761 | 0.02408816 | CD4_Naive_lung |
| HNRNPA1            | 7.11E-07 | 0.19495741 | 0.42  | 0.714 | 0.02517926 | CD4_Naive_lung |
| LBR                | 7.15E-07 | 0.45577737 | 0.223 | 0.391 | 0.02533749 | CD4_Naive_lung |
| STXBP3             | 7.59E-07 | 0.53410796 | 0.135 | 0.25  | 0.0268893  | CD4_Naive_lung |
| CCT7               | 7.74E-07 | 0.46083937 | 0.147 | 0.268 | 0.02742849 | CD4_Naive_lung |
| WWP1               | 9.66E-07 | 0.42423016 | 0.148 | 0.268 | 0.03422881 | CD4_Naive_lung |
| PITPNC1            | 9.82E-07 | 0.57009961 | 0.783 | 0.929 | 0.03479858 | CD4_Naive_lung |
| MBD3               | 9.96E-07 | 0.98325656 | 0.495 | 0.624 | 0.03528302 | CD4_Naive_lung |
| KIF2A              | 9.99E-07 | 0.47159432 | 0.215 | 0.372 | 0.03540687 | CD4_Naive_lung |
| IPCEF1             | 1.03E-06 | 0.45973263 | 0.214 | 0.371 | 0.03638613 | CD4_Naive_lung |
| CEP120             | 1.11E-06 | 0.4983154  | 0.142 | 0.259 | 0.03927659 | CD4_Naive_lung |
| DYNLL1             | 1.21E-06 | 0.49565106 | 0.165 | 0.292 | 0.04272131 | CD4_Naive_lung |
| PAG1               | 1.23E-06 | 0.23410559 | 0.47  | 0.771 | 0.04375225 | CD4_Naive_lung |
| S100A6             | 1.41E-06 | 0.36922411 | 0.285 | 0.478 | 0.05010913 | CD4_Naive_lung |
| RPL35A             | 1.46E-06 | 0.15868823 | 0.977 | 0.994 | 0.0518837  | CD4_Naive_lung |
| SERBP1             | 1.69E-06 | 0.22082706 | 0.358 | 0.616 | 0.05985251 | CD4_Naive_lung |
| ST8SIA4            | 2.01E-06 | 0.51300635 | 0.194 | 0.335 | 0.0711408  | CD4_Naive_lung |
| NUMA1              | 2.08E-06 | 0.52486801 | 0.139 | 0.25  | 0.07371896 | CD4_Naive_lung |
| TMEM14B            | 2.16E-06 | 0.38012747 | 0.332 | 0.578 | 0.07640395 | CD4_Naive_lung |
| YWHAE              | 2.19E-06 | 0.39426475 | 0.292 | 0.508 | 0.07773611 | CD4_Naive_lung |
| ANP32A             | 2.21E-06 | 0.43000632 | 0.2   | 0.349 | 0.07846243 | CD4_Naive_lung |
| ERH                | 2.49E-06 | 0.34478151 | 0.233 | 0.398 | 0.08821156 | CD4_Naive_lung |
| ARPC3              | 2.64E-06 | 0.19794867 | 0.453 | 0.76  | 0.09340886 | CD4_Naive_lung |
| OXR1               | 2.82E-06 | 0.37773135 | 0.202 | 0.34  | 0.09997357 | CD4_Naive_lung |
| TMBIM4             | 2.95E-06 | 0.55175219 | 0.202 | 0.347 | 0.10441041 | CD4_Naive_lung |

|          |          |            |       |       |            |                |
|----------|----------|------------|-------|-------|------------|----------------|
| RABAC1   | 3.06E-06 | 0.5006535  | 0.191 | 0.33  | 0.10859845 | CD4_Naive_lung |
| MAGOH    | 3.27E-06 | 0.4737344  | 0.212 | 0.365 | 0.11570329 | CD4_Naive_lung |
| TMA7     | 3.37E-06 | 0.69152952 | 0.564 | 0.766 | 0.11952858 | CD4_Naive_lung |
| RASSF1   | 3.40E-06 | 0.51292489 | 0.198 | 0.344 | 0.12043511 | CD4_Naive_lung |
| PRDX1    | 3.48E-06 | 0.48092103 | 0.171 | 0.297 | 0.1234628  | CD4_Naive_lung |
| UBE3A    | 3.57E-06 | 0.66374902 | 0.2   | 0.348 | 0.12639356 | CD4_Naive_lung |
| TBL1X    | 3.61E-06 | 0.40858428 | 0.226 | 0.378 | 0.12797162 | CD4_Naive_lung |
| CARHSP1  | 3.66E-06 | 0.50581997 | 0.186 | 0.324 | 0.12967991 | CD4_Naive_lung |
| HNRNPUL1 | 3.81E-06 | 0.50840676 | 0.27  | 0.459 | 0.13504576 | CD4_Naive_lung |
| FAM120A  | 4.10E-06 | 0.58116392 | 0.195 | 0.341 | 0.14522765 | CD4_Naive_lung |
| RPL8     | 4.33E-06 | 0.17339887 | 0.958 | 0.994 | 0.15357746 | CD4_Naive_lung |
| TTF1     | 4.44E-06 | 0.58340538 | 0.164 | 0.282 | 0.15732904 | CD4_Naive_lung |
| NMT1     | 4.51E-06 | 0.51875255 | 0.147 | 0.258 | 0.15979106 | CD4_Naive_lung |
| ETNK1    | 4.79E-06 | 0.63732043 | 0.206 | 0.353 | 0.16987799 | CD4_Naive_lung |
| HSP90B1  | 4.84E-06 | 0.59940143 | 0.256 | 0.438 | 0.17137461 | CD4_Naive_lung |
| SPCS2    | 5.32E-06 | 0.49894368 | 0.191 | 0.328 | 0.18836861 | CD4_Naive_lung |
| CORO1A   | 6.08E-06 | 0.65061392 | 0.573 | 0.761 | 0.21557791 | CD4_Naive_lung |
| PPIL4    | 7.60E-06 | 0.38061064 | 0.345 | 0.581 | 0.26914188 | CD4_Naive_lung |
| SHISA5   | 8.20E-06 | 0.69520151 | 0.239 | 0.41  | 0.29054827 | CD4_Naive_lung |
| ZC3HAV1  | 8.22E-06 | 0.60385396 | 0.605 | 0.764 | 0.29132188 | CD4_Naive_lung |
| AIMP1    | 8.44E-06 | 0.52604443 | 0.274 | 0.467 | 0.29892113 | CD4_Naive_lung |
| CALR     | 9.16E-06 | 0.56537802 | 0.23  | 0.389 | 0.32468267 | CD4_Naive_lung |
| NUDT3    | 1.01E-05 | 0.15994881 | 0.982 | 0.996 | 0.35860223 | CD4_Naive_lung |
| EVL      | 1.05E-05 | 0.27746536 | 0.391 | 0.657 | 0.37053022 | CD4_Naive_lung |
| ITGB2    | 1.05E-05 | 0.59265601 | 0.153 | 0.266 | 0.37104039 | CD4_Naive_lung |
| SRP14    | 1.05E-05 | 0.5708871  | 0.623 | 0.841 | 0.37310024 | CD4_Naive_lung |
| PSME2    | 1.06E-05 | 0.50125352 | 0.155 | 0.267 | 0.37647288 | CD4_Naive_lung |
| ELOA     | 1.09E-05 | 0.14695343 | 0.976 | 0.996 | 0.38678307 | CD4_Naive_lung |
| TPI1     | 1.16E-05 | 0.4800662  | 0.202 | 0.339 | 0.41189988 | CD4_Naive_lung |
| FGFR1OP2 | 1.20E-05 | 0.60227673 | 0.23  | 0.393 | 0.4235496  | CD4_Naive_lung |
| NHP2     | 1.21E-05 | 0.51713567 | 0.211 | 0.356 | 0.43015768 | CD4_Naive_lung |
| CCNI     | 1.27E-05 | 0.36000779 | 0.332 | 0.565 | 0.44940504 | CD4_Naive_lung |
| NDUFA12  | 1.28E-05 | 0.43878253 | 0.164 | 0.279 | 0.45479011 | CD4_Naive_lung |

|                   |          |            |       |       |            |                |
|-------------------|----------|------------|-------|-------|------------|----------------|
| NDST3             | 1.37E-05 | 0.20753595 | 0.229 | 0.355 | 0.48426931 | CD4_Naive_lung |
| RPL18             | 1.46E-05 | 0.14994937 | 0.995 | 0.997 | 0.51560903 | CD4_Naive_lung |
| TANC2             | 1.60E-05 | 0.41215977 | 0.177 | 0.295 | 0.56741588 | CD4_Naive_lung |
| AIP               | 1.67E-05 | 0.55770003 | 0.197 | 0.333 | 0.59250527 | CD4_Naive_lung |
| CRLF3             | 1.73E-05 | 0.62373191 | 0.17  | 0.289 | 0.61464461 | CD4_Naive_lung |
| SMDT1             | 1.80E-05 | 0.16505393 | 0.453 | 0.759 | 0.63882523 | CD4_Naive_lung |
| CD58              | 1.81E-05 | 0.55448854 | 0.158 | 0.266 | 0.64000715 | CD4_Naive_lung |
| C16H17orf49       | 1.93E-05 | 0.60510711 | 0.288 | 0.489 | 0.68532988 | CD4_Naive_lung |
| ARHGEF1           | 1.96E-05 | 0.4038119  | 0.345 | 0.58  | 0.69417876 | CD4_Naive_lung |
| WWOX              | 1.98E-05 | 0.38274372 | 0.252 | 0.39  | 0.70106478 | CD4_Naive_lung |
| CCDC91            | 2.11E-05 | 0.34696278 | 0.427 | 0.699 | 0.74675096 | CD4_Naive_lung |
| DMTF1             | 2.12E-05 | 0.64363182 | 0.206 | 0.346 | 0.75067904 | CD4_Naive_lung |
| ENSMUG00000063637 | 2.25E-05 | 0.27338736 | 0.827 | 0.941 | 0.79657047 | CD4_Naive_lung |
| DDX3X             | 2.29E-05 | 0.21895989 | 0.395 | 0.664 | 0.80993106 | CD4_Naive_lung |
| LDHA              | 2.51E-05 | 1.46335297 | 0.321 | 0.332 | 0.88848371 | CD4_Naive_lung |
| NDUFC2            | 2.55E-05 | 0.60586967 | 0.271 | 0.458 | 0.90528268 | CD4_Naive_lung |
| DIPK1A            | 2.56E-05 | 0.3955025  | 0.158 | 0.262 | 0.90851108 | CD4_Naive_lung |
| HNRNP             | 2.66E-05 | 0.39826084 | 0.277 | 0.457 | 0.94088161 | CD4_Naive_lung |
| ABCG2             | 2.86E-05 | 0.46812852 | 0.165 | 0.275 | 1          | CD4_Naive_lung |
| ATF7IP            | 2.89E-05 | 0.29983127 | 0.427 | 0.691 | 1          | CD4_Naive_lung |
| SNX14             | 3.05E-05 | 0.55529637 | 0.167 | 0.28  | 1          | CD4_Naive_lung |
| GNG5              | 3.53E-05 | 0.43667611 | 0.329 | 0.552 | 1          | CD4_Naive_lung |
| CTSH              | 3.77E-05 | 0.62451102 | 0.161 | 0.269 | 1          | CD4_Naive_lung |
| RUBCN             | 3.91E-05 | 0.48794763 | 0.183 | 0.304 | 1          | CD4_Naive_lung |
| KRTCAP2           | 4.52E-05 | 0.14628104 | 0.433 | 0.715 | 1          | CD4_Naive_lung |
| TESPA1            | 4.72E-05 | 0.68196859 | 0.192 | 0.32  | 1          | CD4_Naive_lung |
| AFF3              | 5.07E-05 | 0.70386346 | 0.62  | 0.795 | 1          | CD4_Naive_lung |
| RPL24             | 5.20E-05 | 0.1557658  | 0.952 | 0.992 | 1          | CD4_Naive_lung |
| RAPGEF2           | 5.20E-05 | 0.68016856 | 0.174 | 0.286 | 1          | CD4_Naive_lung |
| MRPS6             | 5.39E-05 | 1.32490482 | 0.358 | 0.391 | 1          | CD4_Naive_lung |
| PSMB8             | 5.60E-05 | 0.4403493  | 0.309 | 0.519 | 1          | CD4_Naive_lung |
| RIPOR2            | 5.76E-05 | 0.36914304 | 0.811 | 0.962 | 1          | CD4_Naive_lung |
| SEC61G            | 6.28E-05 | 0.3736269  | 0.341 | 0.573 | 1          | CD4_Naive_lung |

|                    |            |            |       |       |                  |
|--------------------|------------|------------|-------|-------|------------------|
| GIMAP7             | 6.39E-05   | 0.98231826 | 0.461 | 0.574 | 1 CD4_Naive_lung |
| ELOB               | 6.65E-05   | 0.89656218 | 0.506 | 0.669 | 1 CD4_Naive_lung |
| HNRNPC             | 6.89E-05   | 0.24505723 | 0.465 | 0.754 | 1 CD4_Naive_lung |
| AMD1               | 7.36E-05   | 0.57712321 | 0.242 | 0.397 | 1 CD4_Naive_lung |
| STMN3              | 7.38E-05   | 0.74568717 | 0.148 | 0.25  | 1 CD4_Naive_lung |
| EZR                | 8.53E-05   | 0.46267417 | 0.394 | 0.634 | 1 CD4_Naive_lung |
| FAM13B             | 8.66E-05   | 0.63977619 | 0.185 | 0.306 | 1 CD4_Naive_lung |
| SACM1L             | 8.88E-05   | 0.6723757  | 0.155 | 0.258 | 1 CD4_Naive_lung |
| NAP1L4             | 9.93E-05   | 0.31304878 | 0.405 | 0.669 | 1 CD4_Naive_lung |
| WASHC4             | 9.97E-05   | 0.62575473 | 0.167 | 0.274 | 1 CD4_Naive_lung |
| ANKFY1             | 0.00010736 | 0.69030825 | 0.164 | 0.268 | 1 CD4_Naive_lung |
| UBA52              | 0.00010743 | 0.15930379 | 0.961 | 0.991 | 1 CD4_Naive_lung |
| ITPR2              | 0.00010813 | 0.44065283 | 0.415 | 0.683 | 1 CD4_Naive_lung |
| YWHAB              | 0.00011259 | 0.42203808 | 0.361 | 0.607 | 1 CD4_Naive_lung |
| ZCCHC7             | 0.00011776 | 0.28020938 | 0.427 | 0.672 | 1 CD4_Naive_lung |
| TRAPPC9            | 0.00012119 | 0.74598338 | 0.176 | 0.287 | 1 CD4_Naive_lung |
| RAN                | 0.00012198 | 0.55516299 | 0.295 | 0.49  | 1 CD4_Naive_lung |
| ASXL2              | 0.00012863 | 0.63379139 | 0.186 | 0.304 | 1 CD4_Naive_lung |
| SPOCK2             | 0.00014068 | 1.16469674 | 0.433 | 0.535 | 1 CD4_Naive_lung |
| SPCS3              | 0.0001419  | 0.56111045 | 0.242 | 0.396 | 1 CD4_Naive_lung |
| RDH5               | 0.00014391 | 0.56948859 | 0.267 | 0.439 | 1 CD4_Naive_lung |
| MICOS13            | 0.00014528 | 0.64363584 | 0.217 | 0.351 | 1 CD4_Naive_lung |
| ENSMMUG00000064120 | 0.00014616 | 0.51632047 | 0.176 | 0.284 | 1 CD4_Naive_lung |
| LEPROTL1           | 0.00014855 | 0.57009574 | 0.212 | 0.345 | 1 CD4_Naive_lung |
| TMEM63A            | 0.00015233 | 0.76988638 | 0.188 | 0.303 | 1 CD4_Naive_lung |
| HNRNPK             | 0.0001526  | 0.16336375 | 0.476 | 0.784 | 1 CD4_Naive_lung |
| EDF1               | 0.00015577 | 0.51426635 | 0.258 | 0.423 | 1 CD4_Naive_lung |
| COPE               | 0.00018016 | 0.607691   | 0.205 | 0.334 | 1 CD4_Naive_lung |
| PAK2               | 0.00019543 | 0.34181466 | 0.383 | 0.627 | 1 CD4_Naive_lung |
| RGS1               | 0.00022524 | 0.59984001 | 0.23  | 0.367 | 1 CD4_Naive_lung |
| ICAM2              | 0.0002304  | 0.62156259 | 0.17  | 0.274 | 1 CD4_Naive_lung |
| N4BP2L2            | 0.00027424 | 1.23192032 | 0.376 | 0.426 | 1 CD4_Naive_lung |
| CFL1               | 0.00027457 | 0.11814625 | 0.535 | 0.82  | 1 CD4_Naive_lung |

|                   |            |            |       |       |                  |
|-------------------|------------|------------|-------|-------|------------------|
| NDUFB9            | 0.00027888 | 0.48715637 | 0.277 | 0.452 | 1 CD4_Naive_lung |
| TRAC              | 0.00028409 | 0.5080354  | 0.691 | 0.859 | 1 CD4_Naive_lung |
| ARHGDIA           | 0.00032119 | 0.79961151 | 0.155 | 0.252 | 1 CD4_Naive_lung |
| USP36             | 0.00032269 | 0.5997178  | 0.276 | 0.444 | 1 CD4_Naive_lung |
| PTP4A1            | 0.0003235  | 1.43595218 | 0.318 | 0.337 | 1 CD4_Naive_lung |
| SRSF2             | 0.00032757 | 0.69538492 | 0.18  | 0.289 | 1 CD4_Naive_lung |
| ITGA1             | 0.00036645 | 0.51207676 | 0.173 | 0.269 | 1 CD4_Naive_lung |
| CDK17             | 0.00036656 | 0.5245759  | 0.365 | 0.588 | 1 CD4_Naive_lung |
| CD2               | 0.00037189 | 1.25298407 | 0.361 | 0.403 | 1 CD4_Naive_lung |
| SRSF6             | 0.00040032 | 0.74892515 | 0.233 | 0.378 | 1 CD4_Naive_lung |
| YJEFN3            | 0.00043788 | 0.57446447 | 0.261 | 0.426 | 1 CD4_Naive_lung |
| SMC4              | 0.00045929 | 0.24705921 | 0.452 | 0.708 | 1 CD4_Naive_lung |
| RORA              | 0.00048317 | 0.79011356 | 0.159 | 0.254 | 1 CD4_Naive_lung |
| STRN3             | 0.00049123 | 0.74928526 | 0.229 | 0.365 | 1 CD4_Naive_lung |
| THRAP3            | 0.00052788 | 0.52704712 | 0.33  | 0.542 | 1 CD4_Naive_lung |
| PICALM            | 0.00055253 | 0.50563332 | 0.394 | 0.649 | 1 CD4_Naive_lung |
| VAMP8             | 0.00057813 | 0.54593997 | 0.211 | 0.334 | 1 CD4_Naive_lung |
| LIMD2             | 0.00058201 | 0.27889879 | 0.412 | 0.671 | 1 CD4_Naive_lung |
| CHN2              | 0.00068204 | 0.51451925 | 0.282 | 0.432 | 1 CD4_Naive_lung |
| KPNA1             | 0.00073225 | 0.6907851  | 0.188 | 0.295 | 1 CD4_Naive_lung |
| HYPK              | 0.00087799 | 0.70834414 | 0.218 | 0.343 | 1 CD4_Naive_lung |
| RPL38             | 0.00095967 | 0.16639136 | 0.959 | 0.992 | 1 CD4_Naive_lung |
| DDX24             | 0.00096877 | 0.51859629 | 0.335 | 0.537 | 1 CD4_Naive_lung |
| JARID2            | 0.00102401 | 0.82449955 | 0.539 | 0.703 | 1 CD4_Naive_lung |
| RSBN1L            | 0.00103925 | 0.75477905 | 0.176 | 0.272 | 1 CD4_Naive_lung |
| ATP6V0E1          | 0.00105614 | 0.60600279 | 0.223 | 0.347 | 1 CD4_Naive_lung |
| SNX25             | 0.00107129 | 0.89076088 | 0.173 | 0.268 | 1 CD4_Naive_lung |
| CD3G              | 0.0010713  | 0.69502672 | 0.23  | 0.359 | 1 CD4_Naive_lung |
| KLF3              | 0.00108918 | 0.58505354 | 0.28  | 0.44  | 1 CD4_Naive_lung |
| MRPL34            | 0.00112413 | 0.80938585 | 0.173 | 0.272 | 1 CD4_Naive_lung |
| NDUFB10           | 0.00113915 | 0.5725403  | 0.244 | 0.388 | 1 CD4_Naive_lung |
| PDE4B             | 0.00117725 | 0.42161973 | 0.335 | 0.519 | 1 CD4_Naive_lung |
| ENSMUG00000038373 | 0.00118173 | 0.55299706 | 0.311 | 0.501 | 1 CD4_Naive_lung |



|                    |            |            |       |       |                  |
|--------------------|------------|------------|-------|-------|------------------|
| MTF2               | 0.00120304 | 0.73785895 | 0.164 | 0.255 | 1 CD4_Naive_lung |
| FLNA               | 0.00125904 | 0.64014622 | 0.241 | 0.379 | 1 CD4_Naive_lung |
| UBL5               | 0.00127168 | 1.036473   | 0.409 | 0.509 | 1 CD4_Naive_lung |
| MYG1               | 0.00152824 | 0.78132719 | 0.198 | 0.313 | 1 CD4_Naive_lung |
| CAB39              | 0.00159424 | 0.52163755 | 0.37  | 0.599 | 1 CD4_Naive_lung |
| ENSMMUG00000063635 | 0.0016379  | 1.31832577 | 0.279 | 0.281 | 1 CD4_Naive_lung |
| NDUFB4             | 0.00164035 | 0.48743813 | 0.338 | 0.547 | 1 CD4_Naive_lung |
| STMN1              | 0.00175542 | 1.01517039 | 0.395 | 0.473 | 1 CD4_Naive_lung |
| BIRC2              | 0.00180713 | 0.64093315 | 0.221 | 0.342 | 1 CD4_Naive_lung |
| CHD1               | 0.00188819 | 0.66903401 | 0.259 | 0.407 | 1 CD4_Naive_lung |
| PREX1              | 0.00191905 | 0.64901046 | 0.292 | 0.455 | 1 CD4_Naive_lung |
| SLC25A43           | 0.0019592  | 0.40360981 | 0.403 | 0.654 | 1 CD4_Naive_lung |
| CSPP1              | 0.00197044 | 0.63739344 | 0.189 | 0.288 | 1 CD4_Naive_lung |
| LBH                | 0.00210976 | 0.5721951  | 0.305 | 0.484 | 1 CD4_Naive_lung |
| ENSMMUG00000058325 | 0.00217995 | 0.32243623 | 0.745 | 0.918 | 1 CD4_Naive_lung |
| NCOA7              | 0.00218852 | 0.67394818 | 0.291 | 0.452 | 1 CD4_Naive_lung |
| CTSS               | 0.00227924 | 0.73150054 | 0.215 | 0.33  | 1 CD4_Naive_lung |
| ZNHIT1             | 0.00236309 | 0.6743585  | 0.229 | 0.356 | 1 CD4_Naive_lung |
| VIM                | 0.00238588 | 0.51650203 | 0.256 | 0.388 | 1 CD4_Naive_lung |
| SEPTIN2            | 0.00239111 | 0.74903466 | 0.182 | 0.277 | 1 CD4_Naive_lung |
| TOP2B              | 0.00244558 | 0.71336626 | 0.267 | 0.415 | 1 CD4_Naive_lung |
| AKT3               | 0.00250746 | 0.32536836 | 0.524 | 0.807 | 1 CD4_Naive_lung |
| ENSMMUG00000052127 | 0.00254492 | 0.20233528 | 0.805 | 0.988 | 1 CD4_Naive_lung |
| PIP4K2A            | 0.00262671 | 0.3884499  | 0.435 | 0.697 | 1 CD4_Naive_lung |
| HACE1              | 0.00284397 | 0.79294715 | 0.233 | 0.361 | 1 CD4_Naive_lung |
| RASA1              | 0.00306826 | 0.86774182 | 0.192 | 0.292 | 1 CD4_Naive_lung |
| ENSMMUG00000004441 | 0.00322535 | 1.05641252 | 0.417 | 0.516 | 1 CD4_Naive_lung |
| PDE4D              | 0.00328497 | 1.11764844 | 0.364 | 0.428 | 1 CD4_Naive_lung |
| BCL11B             | 0.00340477 | 0.64832122 | 0.57  | 0.742 | 1 CD4_Naive_lung |
| ANXA2              | 0.00347946 | 0.65034077 | 0.236 | 0.358 | 1 CD4_Naive_lung |
| ENSMMUG00000058581 | 0.00365322 | 0.72980831 | 0.264 | 0.392 | 1 CD4_Naive_lung |
| LSP1               | 0.00397864 | 0.42275161 | 0.38  | 0.606 | 1 CD4_Naive_lung |
| NCK2               | 0.00408271 | 1.55855752 | 0.259 | 0.265 | 1 CD4_Naive_lung |

|                     |            |            |       |       |                  |
|---------------------|------------|------------|-------|-------|------------------|
| CUTA                | 0.00431495 | 0.63957145 | 0.312 | 0.494 | 1 CD4_Naive_lung |
| CBLB                | 0.00471058 | 0.35544121 | 0.544 | 0.847 | 1 CD4_Naive_lung |
| ENSMMUG00000012140  | 0.00511627 | 0.17747413 | 0.918 | 0.988 | 1 CD4_Naive_lung |
| LAPTM5              | 0.00533411 | 0.66258392 | 0.541 | 0.737 | 1 CD4_Naive_lung |
| NDUFA2              | 0.00560422 | 0.62993181 | 0.279 | 0.431 | 1 CD4_Naive_lung |
| MBP                 | 0.00560554 | 0.63311912 | 0.373 | 0.588 | 1 CD4_Naive_lung |
| TRAT1               | 0.00590578 | 0.86377171 | 0.223 | 0.336 | 1 CD4_Naive_lung |
| CAPZB               | 0.00594155 | 0.41696957 | 0.371 | 0.589 | 1 CD4_Naive_lung |
| TENT5C              | 0.00596056 | 1.15639487 | 0.344 | 0.388 | 1 CD4_Naive_lung |
| NDUFA1              | 0.00617607 | 0.50330305 | 0.374 | 0.599 | 1 CD4_Naive_lung |
| RNF181              | 0.00631199 | 0.50537008 | 0.306 | 0.48  | 1 CD4_Naive_lung |
| ZEB1                | 0.00645692 | 0.57999234 | 0.621 | 0.816 | 1 CD4_Naive_lung |
| PSMB6               | 0.00658122 | 0.69420069 | 0.23  | 0.35  | 1 CD4_Naive_lung |
| CD7                 | 0.00670489 | 1.09806643 | 0.406 | 0.511 | 1 CD4_Naive_lung |
| BAZ1A               | 0.00680329 | 1.17390426 | 0.389 | 0.478 | 1 CD4_Naive_lung |
| GABARAPL2           | 0.00692259 | 0.69908797 | 0.25  | 0.38  | 1 CD4_Naive_lung |
| NDUFS8              | 0.0075705  | 0.7677826  | 0.224 | 0.34  | 1 CD4_Naive_lung |
| NFATC1              | 0.00795789 | 1.4593999  | 0.259 | 0.269 | 1 CD4_Naive_lung |
| APBB1IP             | 0.00870898 | 0.18279024 | 0.656 | 0.92  | 1 CD4_Naive_lung |
| FBXO25              | 0.00884755 | 0.87065516 | 0.195 | 0.29  | 1 CD4_Naive_lung |
| EML4                | 0.00914091 | 0.62515074 | 0.632 | 0.862 | 1 CD4_Naive_lung |
| PDE3B               | 0.00923721 | 0.7380811  | 0.532 | 0.686 | 1 CD4_Naive_lung |
| PPFIBP1             | 0.00926505 | 0.76651834 | 0.203 | 0.3   | 1 CD4_Naive_lung |
| NABP1               | 0.00989386 | 0.62134515 | 0.261 | 0.387 | 1 CD4_Naive_lung |
| ENSMMUG000000053735 | 0.00991286 | 0.55052887 | 0.348 | 0.549 | 1 CD4_Naive_lung |
| ENSMMUG000000047481 | 0.0101337  | 0.55740892 | 0.335 | 0.522 | 1 CD4_Naive_lung |
| NR4A2               | 0.01133274 | 0.90307727 | 0.174 | 0.254 | 1 CD4_Naive_lung |
| RILPL2              | 0.01226028 | 0.86975875 | 0.174 | 0.256 | 1 CD4_Naive_lung |
| TUBB                | 0.0128534  | 0.64119664 | 0.291 | 0.443 | 1 CD4_Naive_lung |
| H2AFZ               | 0.0129533  | 1.15763929 | 0.364 | 0.449 | 1 CD4_Naive_lung |
| GNAI2.1             | 0.0130877  | 0.85477195 | 0.212 | 0.316 | 1 CD4_Naive_lung |
| ENSMMUG000000016305 | 0.01351665 | 0.60446825 | 0.523 | 0.726 | 1 CD4_Naive_lung |
| RPS27A              | 0.01384971 | 0.34761925 | 0.642 | 0.856 | 1 CD4_Naive_lung |

|                    |            |            |       |       |                  |
|--------------------|------------|------------|-------|-------|------------------|
| ENSMMUG00000053817 | 0.0147302  | 0.77937847 | 0.239 | 0.359 | 1 CD4_Naive_lung |
| NXPE3              | 0.01593045 | 0.70519506 | 0.265 | 0.396 | 1 CD4_Naive_lung |
| BIRC3              | 0.01646791 | 0.78621155 | 0.276 | 0.41  | 1 CD4_Naive_lung |
| FTH1               | 0.01686782 | 0.34717015 | 0.5   | 0.763 | 1 CD4_Naive_lung |
| TAPBPL             | 0.01718071 | 1.42699682 | 0.255 | 0.271 | 1 CD4_Naive_lung |
| PLEKHG1            | 0.01794561 | 0.77802081 | 0.239 | 0.352 | 1 CD4_Naive_lung |
| ANKRD12            | 0.01818296 | 0.82754289 | 0.482 | 0.636 | 1 CD4_Naive_lung |
| GPSM3              | 0.01824459 | 0.48881084 | 0.359 | 0.556 | 1 CD4_Naive_lung |
| CD47               | 0.01944385 | 1.1251045  | 0.376 | 0.466 | 1 CD4_Naive_lung |
| MRPL14             | 0.02178977 | 0.93133789 | 0.186 | 0.27  | 1 CD4_Naive_lung |
| UQCRH              | 0.02186197 | 0.54258583 | 0.348 | 0.542 | 1 CD4_Naive_lung |
| ATOX1              | 0.02234436 | 0.71871716 | 0.218 | 0.321 | 1 CD4_Naive_lung |
| COX7B              | 0.02299087 | 0.4747458  | 0.371 | 0.584 | 1 CD4_Naive_lung |
| ENSMMUG00000052424 | 0.02478545 | 0.51470705 | 0.567 | 0.766 | 1 CD4_Naive_lung |
| ATP10A             | 0.02561734 | 0.50861854 | 0.444 | 0.684 | 1 CD4_Naive_lung |
| ATP2B1             | 0.02888722 | 0.90679686 | 0.191 | 0.272 | 1 CD4_Naive_lung |
| CCNY               | 0.03136678 | 0.86841474 | 0.267 | 0.394 | 1 CD4_Naive_lung |
| ADD3               | 0.03140969 | 0.31624594 | 0.512 | 0.784 | 1 CD4_Naive_lung |
| ENSMMUG00000001458 | 0.03186434 | 0.2597878  | 0.488 | 0.76  | 1 CD4_Naive_lung |
| HMGB1              | 0.03641777 | 0.2692726  | 0.52  | 0.807 | 1 CD4_Naive_lung |
| STK17A             | 0.03658441 | 0.38675356 | 0.424 | 0.637 | 1 CD4_Naive_lung |
| DIP2C              | 0.03939588 | 1.42931404 | 0.267 | 0.292 | 1 CD4_Naive_lung |
| ZSWIM6             | 0.03984634 | 0.98712614 | 0.18  | 0.253 | 1 CD4_Naive_lung |
| RPS6KA3            | 0.0402583  | 0.89515659 | 0.218 | 0.313 | 1 CD4_Naive_lung |
| ENSMMUG00000016894 | 0.04038803 | 0.42900282 | 0.417 | 0.672 | 1 CD4_Naive_lung |
| MAP4K4             | 0.04227668 | 0.5062301  | 0.489 | 0.759 | 1 CD4_Naive_lung |
| COX20              | 0.04366381 | 0.74733434 | 0.18  | 0.251 | 1 CD4_Naive_lung |
| NSD3               | 0.04531148 | 1.01636069 | 0.397 | 0.505 | 1 CD4_Naive_lung |
| CD28               | 0.04575841 | 0.51932039 | 0.388 | 0.585 | 1 CD4_Naive_lung |
| ATP5MPL            | 0.04804005 | 0.59580279 | 0.511 | 0.712 | 1 CD4_Naive_lung |
| NSA2               | 0.05002563 | 0.66153271 | 0.521 | 0.745 | 1 CD4_Naive_lung |
| HNRNPDL            | 0.05098262 | 0.25811307 | 0.52  | 0.793 | 1 CD4_Naive_lung |
| ENSMMUG00000056793 | 0.05208739 | 0.54671515 | 0.526 | 0.757 | 1 CD4_Naive_lung |

|                    |            |            |       |       |                  |
|--------------------|------------|------------|-------|-------|------------------|
| PTGER4             | 0.0550096  | 1.19133437 | 0.277 | 0.309 | 1 CD4_Naive_lung |
| ATP8A1             | 0.05797277 | 0.77152178 | 0.521 | 0.709 | 1 CD4_Naive_lung |
| COX2               | 0.0582095  | 0.16892685 | 0.911 | 0.988 | 1 CD4_Naive_lung |
| CD53               | 0.05847703 | 0.71585402 | 0.324 | 0.488 | 1 CD4_Naive_lung |
| BTBD11             | 0.06100988 | 0.96299075 | 0.461 | 0.606 | 1 CD4_Naive_lung |
| FCMR               | 0.06641682 | 0.73044678 | 0.329 | 0.492 | 1 CD4_Naive_lung |
| RNMT               | 0.0698136  | 0.66759032 | 0.512 | 0.722 | 1 CD4_Naive_lung |
| RPL22              | 0.07196539 | 0.10965809 | 0.935 | 0.99  | 1 CD4_Naive_lung |
| USP44              | 0.07320338 | 0.8918952  | 0.189 | 0.261 | 1 CD4_Naive_lung |
| ZNF638             | 0.07485915 | 0.58431363 | 0.359 | 0.538 | 1 CD4_Naive_lung |
| SEM1               | 0.07529693 | 0.62700477 | 0.265 | 0.382 | 1 CD4_Naive_lung |
| SEC14L1            | 0.07933125 | 0.83152148 | 0.227 | 0.318 | 1 CD4_Naive_lung |
| TMEM71             | 0.08183912 | 0.85407814 | 0.239 | 0.339 | 1 CD4_Naive_lung |
| SH2D1A             | 0.08526477 | 0.93834455 | 0.189 | 0.262 | 1 CD4_Naive_lung |
| TMEM123            | 0.08884629 | 0.44253041 | 0.633 | 0.861 | 1 CD4_Naive_lung |
| NDUFB11            | 0.09403643 | 1.28560546 | 0.259 | 0.295 | 1 CD4_Naive_lung |
| PPP1CB             | 0.0951548  | 0.42245176 | 0.448 | 0.677 | 1 CD4_Naive_lung |
| TGFBR2             | 0.09696665 | 0.94442292 | 0.414 | 0.546 | 1 CD4_Naive_lung |
| TAGLN2             | 0.09713603 | 0.44781138 | 0.456 | 0.682 | 1 CD4_Naive_lung |
| CD3E               | 0.09753738 | 0.59553402 | 0.394 | 0.601 | 1 CD4_Naive_lung |
| ISG20              | 0.10662978 | 0.89700843 | 0.194 | 0.266 | 1 CD4_Naive_lung |
| ENSMMUG00000058389 | 0.11018585 | 0.81602356 | 0.236 | 0.333 | 1 CD4_Naive_lung |
| GLS                | 0.11031787 | 0.91229517 | 0.253 | 0.359 | 1 CD4_Naive_lung |
| MAMU-A             | 0.11262648 | 0.32964011 | 0.53  | 0.788 | 1 CD4_Naive_lung |
| OAZ1               | 0.11404158 | 0.93928081 | 0.191 | 0.262 | 1 CD4_Naive_lung |
| NCLN               | 0.11451722 | 1.01844822 | 0.212 | 0.295 | 1 CD4_Naive_lung |
| ATP6V1G1           | 0.11482304 | 0.37210067 | 0.494 | 0.772 | 1 CD4_Naive_lung |
| MYL12B             | 0.12375736 | 0.41627446 | 0.464 | 0.705 | 1 CD4_Naive_lung |
| PRPF4B             | 0.12435088 | 0.33610277 | 0.497 | 0.751 | 1 CD4_Naive_lung |
| CBX3               | 0.13080281 | 0.74641904 | 0.317 | 0.463 | 1 CD4_Naive_lung |
| CFDP1              | 0.13130834 | 0.64073049 | 0.352 | 0.523 | 1 CD4_Naive_lung |
| ENSMMUG00000049722 | 0.13451342 | 1.22979246 | 0.264 | 0.306 | 1 CD4_Naive_lung |
| EDEM1              | 0.13512779 | 0.9674235  | 0.215 | 0.295 | 1 CD4_Naive_lung |

|                    |            |            |       |       |                  |
|--------------------|------------|------------|-------|-------|------------------|
| MYL6               | 0.13683539 | 0.48335797 | 0.424 | 0.651 | 1 CD4_Naive_lung |
| ARID1B             | 0.14239607 | 0.56373042 | 0.556 | 0.778 | 1 CD4_Naive_lung |
| JPT1               | 0.14552502 | 0.49917819 | 0.521 | 0.739 | 1 CD4_Naive_lung |
| MALT1              | 0.14860789 | 1.02548671 | 0.291 | 0.417 | 1 CD4_Naive_lung |
| GSTP1              | 0.15261669 | 0.59787021 | 0.385 | 0.584 | 1 CD4_Naive_lung |
| HNRNPH2            | 0.15899762 | 0.12988529 | 0.917 | 0.987 | 1 CD4_Naive_lung |
| PGK1               | 0.15972579 | 0.68210677 | 0.311 | 0.448 | 1 CD4_Naive_lung |
| BCL2               | 0.16617734 | 0.81757527 | 0.415 | 0.486 | 1 CD4_Naive_lung |
| TIGAR              | 0.17141984 | 0.46495497 | 0.442 | 0.668 | 1 CD4_Naive_lung |
| DOCK10             | 0.17302739 | 0.47464971 | 0.611 | 0.842 | 1 CD4_Naive_lung |
| SSR4               | 0.18314095 | 0.52703704 | 0.432 | 0.673 | 1 CD4_Naive_lung |
| WNK1               | 0.18827808 | 0.77764375 | 0.468 | 0.648 | 1 CD4_Naive_lung |
| AOPEP              | 0.19072161 | 0.78875678 | 0.379 | 0.554 | 1 CD4_Naive_lung |
| ARHGAP15           | 0.1913048  | 0.26590902 | 0.856 | 0.983 | 1 CD4_Naive_lung |
| TMEM258            | 0.19243869 | 0.84992443 | 0.38  | 0.51  | 1 CD4_Naive_lung |
| ENSMMUG00000022489 | 0.19404849 | 0.46181962 | 0.567 | 0.816 | 1 CD4_Naive_lung |
| SKAP1              | 0.19518448 | 0.15475009 | 0.708 | 0.945 | 1 CD4_Naive_lung |
| FTL                | 0.21453972 | 0.28315292 | 0.652 | 0.892 | 1 CD4_Naive_lung |
| ADSL               | 0.21480777 | 1.26736047 | 0.235 | 0.264 | 1 CD4_Naive_lung |
| ENSMMUG00000017466 | 0.22477944 | 0.98523049 | 0.335 | 0.425 | 1 CD4_Naive_lung |
| MECP2              | 0.23671616 | 0.84491905 | 0.271 | 0.379 | 1 CD4_Naive_lung |
| CPNE1              | 0.23771765 | 0.86548661 | 0.256 | 0.355 | 1 CD4_Naive_lung |
| STK38              | 0.25095178 | 0.28086846 | 0.538 | 0.787 | 1 CD4_Naive_lung |
| MPP7               | 0.25163317 | 0.49172517 | 0.548 | 0.791 | 1 CD4_Naive_lung |
| ENO1               | 0.25779503 | 0.56390883 | 0.43  | 0.654 | 1 CD4_Naive_lung |
| ESF1               | 0.25863287 | 0.91771593 | 0.28  | 0.389 | 1 CD4_Naive_lung |
| UCP2               | 0.25924192 | 0.97326462 | 0.273 | 0.379 | 1 CD4_Naive_lung |
| GPCPD1             | 0.26073885 | 0.87061161 | 0.421 | 0.581 | 1 CD4_Naive_lung |
| NCL                | 0.2708419  | 0.40095321 | 0.502 | 0.751 | 1 CD4_Naive_lung |
| DUSP16             | 0.27297571 | 1.30994893 | 0.265 | 0.309 | 1 CD4_Naive_lung |
| SETX               | 0.28935873 | 0.87293448 | 0.295 | 0.411 | 1 CD4_Naive_lung |
| RETREG1            | 0.29554202 | 1.01790111 | 0.371 | 0.49  | 1 CD4_Naive_lung |
| KIFBP              | 0.2978842  | 0.58878836 | 0.491 | 0.679 | 1 CD4_Naive_lung |

|                     |            |            |       |       |                  |
|---------------------|------------|------------|-------|-------|------------------|
| COX8A               | 0.29951055 | 0.69960486 | 0.326 | 0.471 | 1 CD4_Naive_lung |
| IL4R                | 0.31071672 | 1.04453021 | 0.214 | 0.283 | 1 CD4_Naive_lung |
| NRIP1               | 0.31076302 | 0.86973503 | 0.473 | 0.646 | 1 CD4_Naive_lung |
| COX1                | 0.31749089 | 0.30639932 | 0.827 | 0.969 | 1 CD4_Naive_lung |
| ENSMMUG00000006165  | 0.3281636  | 0.3476541  | 0.648 | 0.906 | 1 CD4_Naive_lung |
| UQCRQ               | 0.33053589 | 0.63801031 | 0.395 | 0.591 | 1 CD4_Naive_lung |
| GAPDH               | 0.33111025 | 0.51017469 | 0.5   | 0.707 | 1 CD4_Naive_lung |
| MAN1A1              | 0.34600325 | 0.89727656 | 0.297 | 0.407 | 1 CD4_Naive_lung |
| HSPD1               | 0.34776227 | 0.8925965  | 0.206 | 0.267 | 1 CD4_Naive_lung |
| LDLRAD4             | 0.34869084 | 0.66754733 | 0.423 | 0.605 | 1 CD4_Naive_lung |
| CD46                | 0.35964898 | 0.73341314 | 0.35  | 0.508 | 1 CD4_Naive_lung |
| SELENOK             | 0.36292988 | 1.20839987 | 0.235 | 0.273 | 1 CD4_Naive_lung |
| PFDN5               | 0.369518   | 0.87766275 | 0.258 | 0.35  | 1 CD4_Naive_lung |
| LSM7                | 0.37200466 | 0.81408223 | 0.311 | 0.446 | 1 CD4_Naive_lung |
| ITK                 | 0.37428264 | 0.41131657 | 0.514 | 0.741 | 1 CD4_Naive_lung |
| NME2                | 0.37928742 | 0.13591866 | 0.792 | 0.962 | 1 CD4_Naive_lung |
| RBMX                | 0.39452046 | 0.59495253 | 0.383 | 0.549 | 1 CD4_Naive_lung |
| ENSMMUG00000016665  | 0.43214739 | 0.67798523 | 0.355 | 0.514 | 1 CD4_Naive_lung |
| ENSMMUG00000019505  | 0.44851317 | 0.4612226  | 0.461 | 0.705 | 1 CD4_Naive_lung |
| COMMD6              | 0.46209316 | 0.21063478 | 0.586 | 0.838 | 1 CD4_Naive_lung |
| COX5B               | 0.48465644 | 0.87181264 | 0.315 | 0.447 | 1 CD4_Naive_lung |
| ENSMMUG000000050829 | 0.48934858 | 0.66062926 | 0.406 | 0.597 | 1 CD4_Naive_lung |
| OST4                | 0.49549627 | 0.66475371 | 0.423 | 0.598 | 1 CD4_Naive_lung |
| ATP5MG              | 0.50976436 | 0.26837419 | 0.589 | 0.857 | 1 CD4_Naive_lung |
| SNRK                | 0.51107315 | 0.7475674  | 0.389 | 0.518 | 1 CD4_Naive_lung |
| HINT1               | 0.51199307 | 0.20418563 | 0.673 | 0.914 | 1 CD4_Naive_lung |
| SELL                | 0.52622665 | 0.48807085 | 0.476 | 0.706 | 1 CD4_Naive_lung |
| ROBO2               | 0.53060715 | 0.16881547 | 0.617 | 0.848 | 1 CD4_Naive_lung |
| SON                 | 0.53530879 | 0.35518414 | 0.591 | 0.841 | 1 CD4_Naive_lung |
| CYLD                | 0.54356808 | 0.50232095 | 0.458 | 0.673 | 1 CD4_Naive_lung |
| TCP11L2             | 0.5707154  | 0.99708569 | 0.285 | 0.386 | 1 CD4_Naive_lung |
| ZZEF1               | 0.5707757  | 0.97095255 | 0.282 | 0.381 | 1 CD4_Naive_lung |
| FLI1                | 0.5968068  | 1.16465392 | 0.262 | 0.322 | 1 CD4_Naive_lung |

|                     |            |            |       |       |                  |
|---------------------|------------|------------|-------|-------|------------------|
| ENSMMUG00000065362  | 0.61450395 | 0.26635778 | 0.988 | 1     | 1 CD4_Naive_lung |
| ENSMMUG00000010266  | 0.61861138 | 0.54122914 | 0.489 | 0.721 | 1 CD4_Naive_lung |
| ND3                 | 0.62801124 | 0.53711466 | 0.491 | 0.734 | 1 CD4_Naive_lung |
| HCST                | 0.6417621  | 1.10208488 | 0.28  | 0.351 | 1 CD4_Naive_lung |
| COX6C               | 0.65720048 | 0.4113457  | 0.556 | 0.814 | 1 CD4_Naive_lung |
| NDUFA4              | 0.66124394 | 0.60233014 | 0.462 | 0.668 | 1 CD4_Naive_lung |
| NDUFB2              | 0.68219152 | 0.57936406 | 0.423 | 0.632 | 1 CD4_Naive_lung |
| IL6ST               | 0.68230117 | 0.67496502 | 0.403 | 0.566 | 1 CD4_Naive_lung |
| RAP1A               | 0.68533069 | 0.72554907 | 0.397 | 0.569 | 1 CD4_Naive_lung |
| MRI1                | 0.69672092 | 0.59050859 | 0.408 | 0.601 | 1 CD4_Naive_lung |
| ATP5MC2             | 0.70798342 | 0.5672176  | 0.432 | 0.64  | 1 CD4_Naive_lung |
| ITM2A               | 0.70799553 | 1.09521943 | 0.227 | 0.29  | 1 CD4_Naive_lung |
| TNIK                | 0.71606166 | 0.35537759 | 0.655 | 0.89  | 1 CD4_Naive_lung |
| SRGN                | 0.74417785 | 0.71041004 | 0.42  | 0.571 | 1 CD4_Naive_lung |
| ND4                 | 0.75205858 | 0.21255398 | 0.856 | 0.978 | 1 CD4_Naive_lung |
| RBX1                | 0.75839817 | 0.978568   | 0.308 | 0.405 | 1 CD4_Naive_lung |
| RAP1B               | 0.77310563 | 0.28288324 | 0.6   | 0.842 | 1 CD4_Naive_lung |
| NDUFV2              | 0.78602126 | 0.99222889 | 0.297 | 0.401 | 1 CD4_Naive_lung |
| ENSMMUG00000007657  | 0.79663103 | 0.5162187  | 0.467 | 0.701 | 1 CD4_Naive_lung |
| STAT5B              | 0.82077967 | 0.86876056 | 0.338 | 0.447 | 1 CD4_Naive_lung |
| H2AFJ               | 0.82194476 | 1.19277949 | 0.239 | 0.297 | 1 CD4_Naive_lung |
| DHX36               | 0.83382848 | 1.11318444 | 0.32  | 0.421 | 1 CD4_Naive_lung |
| ENSMMUG000000052747 | 0.85398236 | 0.36875769 | 0.527 | 0.776 | 1 CD4_Naive_lung |
| IFI27L2             | 0.8697481  | 0.60446978 | 0.412 | 0.587 | 1 CD4_Naive_lung |
| CTDP1               | 0.8883371  | 1.0943157  | 0.25  | 0.319 | 1 CD4_Naive_lung |
| ENSMMUG000000053146 | 0.90730345 | 0.98370621 | 0.317 | 0.43  | 1 CD4_Naive_lung |
| ENSMMUG000000054038 | 0.91420901 | 0.64622184 | 0.417 | 0.606 | 1 CD4_Naive_lung |
| CLEC2B              | 0.94061879 | 1.21255381 | 0.238 | 0.295 | 1 CD4_Naive_lung |
| CD6                 | 0.94452329 | 0.8478039  | 0.383 | 0.533 | 1 CD4_Naive_lung |
| EEF1D               | 0.95371778 | 0.15032463 | 0.656 | 0.901 | 1 CD4_Naive_lung |
| SUB1                | 0.95887257 | 0.36690316 | 0.561 | 0.818 | 1 CD4_Naive_lung |
| MGAT5               | 0.95933981 | 0.82137899 | 0.426 | 0.617 | 1 CD4_Naive_lung |
| TNRC6B              | 0.97028413 | 0.28853189 | 0.674 | 0.915 | 1 CD4_Naive_lung |

|                   |            |            |       |       |           |                 |
|-------------------|------------|------------|-------|-------|-----------|-----------------|
| WDR83OS           | 0.98182424 | 0.3913734  | 0.486 | 0.724 | 1         | CD4_Naive_lung  |
| HBE1              | 0          | 2.07378418 | 0.649 | 0.156 | 0         | CD4_Naive_UCBMC |
| HBA               | 0          | 1.99755223 | 0.635 | 0.149 | 0         | CD4_Naive_UCBMC |
| ENSMUG00000047632 | 0          | 1.71281867 | 0.657 | 0.289 | 0         | CD4_Naive_UCBMC |
| ENSMUG00000056654 | 0          | 1.20341243 | 0.915 | 0.755 | 0         | CD4_Naive_UCBMC |
| ENSMUG00000049151 | 0          | 0.81227003 | 0.969 | 0.882 | 0         | CD4_Naive_UCBMC |
| RPS14             | 0          | 0.42355032 | 0.998 | 0.987 | 0         | CD4_Naive_UCBMC |
| COX3              | 1.40E-270  | 0.48891997 | 0.997 | 0.943 | 4.97E-266 | CD4_Naive_UCBMC |
| TPT1              | 6.55E-258  | 0.34142053 | 0.998 | 0.993 | 2.32E-253 | CD4_Naive_UCBMC |
| OSBPL9            | 3.09E-254  | 0.92159956 | 0.822 | 0.608 | 1.09E-249 | CD4_Naive_UCBMC |
| RPS16             | 5.65E-234  | 0.3272383  | 0.997 | 0.989 | 2.00E-229 | CD4_Naive_UCBMC |
| ENSMUG00000015270 | 7.01E-225  | 0.3088533  | 0.999 | 0.995 | 2.48E-220 | CD4_Naive_UCBMC |
| CASP3             | 2.21E-223  | 1.2343403  | 0.624 | 0.353 | 7.83E-219 | CD4_Naive_UCBMC |
| HIVEP1            | 1.94E-217  | 0.97959665 | 0.726 | 0.483 | 6.88E-213 | CD4_Naive_UCBMC |
| ENSMUG00000006463 | 1.76E-208  | 0.65377182 | 0.9   | 0.805 | 6.25E-204 | CD4_Naive_UCBMC |
| ENSMUG00000014862 | 2.67E-208  | 0.96540586 | 0.732 | 0.55  | 9.45E-204 | CD4_Naive_UCBMC |
| EIF2AK3           | 2.68E-204  | 1.22086135 | 0.604 | 0.349 | 9.49E-200 | CD4_Naive_UCBMC |
| FBXO33            | 5.80E-200  | 1.05152119 | 0.664 | 0.417 | 2.05E-195 | CD4_Naive_UCBMC |
| MBTD1             | 4.13E-196  | 1.09305414 | 0.632 | 0.382 | 1.46E-191 | CD4_Naive_UCBMC |
| USP3              | 8.94E-193  | 0.83323337 | 0.769 | 0.564 | 3.17E-188 | CD4_Naive_UCBMC |
| PNISR             | 2.43E-191  | 0.62948348 | 0.902 | 0.767 | 8.60E-187 | CD4_Naive_UCBMC |
| RPL13A            | 6.91E-187  | 0.33197009 | 0.996 | 0.978 | 2.45E-182 | CD4_Naive_UCBMC |
| RPL5              | 4.37E-186  | 0.31057373 | 0.997 | 0.981 | 1.55E-181 | CD4_Naive_UCBMC |
| ENSMUG00000003412 | 2.25E-182  | 0.32812912 | 0.997 | 0.977 | 7.98E-178 | CD4_Naive_UCBMC |
| PDGFRA            | 4.35E-181  | 0.57597396 | 0.917 | 0.815 | 1.54E-176 | CD4_Naive_UCBMC |
| SPPL3             | 1.06E-180  | 0.87966456 | 0.722 | 0.531 | 3.75E-176 | CD4_Naive_UCBMC |
| ZNF483            | 5.63E-178  | 0.68749907 | 0.835 | 0.712 | 1.99E-173 | CD4_Naive_UCBMC |
| CPEB1             | 1.35E-175  | 0.36386245 | 0.995 | 0.956 | 4.79E-171 | CD4_Naive_UCBMC |
| RPL7              | 1.21E-170  | 0.39962139 | 0.981 | 0.919 | 4.28E-166 | CD4_Naive_UCBMC |
| EPC1              | 6.88E-169  | 0.63334225 | 0.858 | 0.717 | 2.44E-164 | CD4_Naive_UCBMC |
| ARID4B            | 2.47E-158  | 0.61391921 | 0.891 | 0.761 | 8.74E-154 | CD4_Naive_UCBMC |
| FAM117B           | 1.03E-155  | 0.88537238 | 0.67  | 0.461 | 3.64E-151 | CD4_Naive_UCBMC |
| CDC42SE2          | 3.81E-155  | 0.46334997 | 0.958 | 0.898 | 1.35E-150 | CD4_Naive_UCBMC |



|                    |           |            |       |       |           |                 |
|--------------------|-----------|------------|-------|-------|-----------|-----------------|
| STAG1              | 1.25E-151 | 0.5887879  | 0.891 | 0.764 | 4.44E-147 | CD4_Naive_UCBMC |
| EPB41              | 2.15E-151 | 0.5743938  | 0.875 | 0.74  | 7.60E-147 | CD4_Naive_UCBMC |
| LMBRD1             | 3.27E-148 | 0.99828227 | 0.585 | 0.374 | 1.16E-143 | CD4_Naive_UCBMC |
| ENSMMUG00000030448 | 6.10E-147 | 0.94898257 | 0.636 | 0.472 | 2.16E-142 | CD4_Naive_UCBMC |
| RICTOR             | 1.36E-145 | 0.71060591 | 0.749 | 0.575 | 4.83E-141 | CD4_Naive_UCBMC |
| NCOA3              | 9.21E-143 | 0.52425936 | 0.919 | 0.815 | 3.26E-138 | CD4_Naive_UCBMC |
| ENSMMUG00000059742 | 9.27E-141 | 1.10246428 | 0.546 | 0.364 | 3.28E-136 | CD4_Naive_UCBMC |
| ENSMMUG00000055457 | 3.88E-140 | 0.93975277 | 0.608 | 0.432 | 1.37E-135 | CD4_Naive_UCBMC |
| CAMK4              | 9.19E-140 | 0.42193949 | 0.976 | 0.928 | 3.26E-135 | CD4_Naive_UCBMC |
| TM9SF3             | 2.00E-139 | 0.73205983 | 0.746 | 0.59  | 7.10E-135 | CD4_Naive_UCBMC |
| ATG13              | 2.70E-139 | 1.10896626 | 0.509 | 0.305 | 9.57E-135 | CD4_Naive_UCBMC |
| CCSER2             | 1.89E-137 | 0.9463697  | 0.576 | 0.374 | 6.69E-133 | CD4_Naive_UCBMC |
| ENSMMUG00000065175 | 2.40E-137 | 0.88035239 | 0.652 | 0.498 | 8.51E-133 | CD4_Naive_UCBMC |
| GOLGA4             | 1.71E-131 | 0.70107124 | 0.715 | 0.54  | 6.05E-127 | CD4_Naive_UCBMC |
| MTMR14             | 2.09E-129 | 1.43971007 | 0.386 | 0.184 | 7.40E-125 | CD4_Naive_UCBMC |
| CREBRF             | 1.12E-127 | 0.73437267 | 0.682 | 0.498 | 3.98E-123 | CD4_Naive_UCBMC |
| CTDSPL2            | 4.27E-127 | 0.89749572 | 0.571 | 0.379 | 1.51E-122 | CD4_Naive_UCBMC |
| RPL4               | 6.49E-126 | 0.36214315 | 0.972 | 0.916 | 2.30E-121 | CD4_Naive_UCBMC |
| ATG14              | 2.23E-125 | 1.45602828 | 0.349 | 0.146 | 7.92E-121 | CD4_Naive_UCBMC |
| ENSMMUG00000031367 | 5.63E-125 | 1.11893745 | 0.502 | 0.322 | 1.99E-120 | CD4_Naive_UCBMC |
| ENSMMUG00000029973 | 6.24E-125 | 0.75921937 | 0.656 | 0.493 | 2.21E-120 | CD4_Naive_UCBMC |
| YIPF5              | 3.39E-123 | 1.49562478 | 0.37  | 0.173 | 1.20E-118 | CD4_Naive_UCBMC |
| ENSMMUG00000014648 | 4.82E-123 | 0.56599672 | 0.853 | 0.761 | 1.71E-118 | CD4_Naive_UCBMC |
| ZNF292             | 5.70E-121 | 0.62555401 | 0.756 | 0.6   | 2.02E-116 | CD4_Naive_UCBMC |
| ATF2               | 6.15E-121 | 0.8707018  | 0.565 | 0.382 | 2.18E-116 | CD4_Naive_UCBMC |
| KMT2E              | 1.02E-120 | 0.61186931 | 0.762 | 0.622 | 3.63E-116 | CD4_Naive_UCBMC |
| PTBP2              | 2.60E-120 | 0.72717027 | 0.675 | 0.494 | 9.21E-116 | CD4_Naive_UCBMC |
| PIK3CA             | 6.42E-118 | 0.94147532 | 0.55  | 0.355 | 2.28E-113 | CD4_Naive_UCBMC |
| TFDP2              | 3.83E-117 | 0.80936605 | 0.624 | 0.454 | 1.36E-112 | CD4_Naive_UCBMC |
| DCP1A              | 4.14E-117 | 1.04169651 | 0.484 | 0.294 | 1.47E-112 | CD4_Naive_UCBMC |
| NKIRAS1            | 4.98E-115 | 1.07026668 | 0.451 | 0.256 | 1.77E-110 | CD4_Naive_UCBMC |
| NRIP1              | 9.23E-113 | 0.46619314 | 0.678 | 0.487 | 3.27E-108 | CD4_Naive_UCBMC |
| RAB2A              | 3.65E-110 | 0.65692453 | 0.71  | 0.572 | 1.29E-105 | CD4_Naive_UCBMC |

|                     |           |            |       |       |           |                 |
|---------------------|-----------|------------|-------|-------|-----------|-----------------|
| MARCHF6             | 7.79E-110 | 0.71440757 | 0.642 | 0.474 | 2.76E-105 | CD4_Naive_UCBMC |
| BIN3                | 8.66E-110 | 1.0324702  | 0.502 | 0.332 | 3.07E-105 | CD4_Naive_UCBMC |
| ATP8A1              | 2.30E-109 | 0.45232553 | 0.736 | 0.566 | 8.16E-105 | CD4_Naive_UCBMC |
| RCC1                | 1.33E-108 | 0.92100209 | 0.512 | 0.343 | 4.70E-104 | CD4_Naive_UCBMC |
| BSDC1               | 1.45E-107 | 1.17095507 | 0.41  | 0.224 | 5.14E-103 | CD4_Naive_UCBMC |
| DDX6                | 1.98E-107 | 0.55210551 | 0.761 | 0.625 | 7.03E-103 | CD4_Naive_UCBMC |
| ENSMMUG00000006778  | 2.51E-107 | 0.79562117 | 0.578 | 0.417 | 8.90E-103 | CD4_Naive_UCBMC |
| RACK1               | 6.52E-106 | 0.24904389 | 0.994 | 0.976 | 2.31E-101 | CD4_Naive_UCBMC |
| ELL2                | 1.17E-105 | 1.02338423 | 0.33  | 0.139 | 4.15E-101 | CD4_Naive_UCBMC |
| EIF2AK2             | 5.99E-105 | 1.12710087 | 0.398 | 0.214 | 2.12E-100 | CD4_Naive_UCBMC |
| ENSMMUG000000029026 | 1.69E-104 | 0.6553714  | 0.66  | 0.526 | 5.98E-100 | CD4_Naive_UCBMC |
| RPL27               | 3.89E-104 | 0.23219489 | 0.995 | 0.983 | 1.38E-99  | CD4_Naive_UCBMC |
| RPLP2               | 1.94E-103 | 0.24500466 | 0.995 | 0.974 | 6.88E-99  | CD4_Naive_UCBMC |
| BRAF                | 3.03E-102 | 0.56321426 | 0.744 | 0.605 | 1.07E-97  | CD4_Naive_UCBMC |
| CUL3                | 6.17E-102 | 0.63991982 | 0.696 | 0.542 | 2.19E-97  | CD4_Naive_UCBMC |
| MXI1                | 4.16E-101 | 0.85047966 | 0.523 | 0.343 | 1.47E-96  | CD4_Naive_UCBMC |
| SIK3                | 5.57E-101 | 0.44259413 | 0.86  | 0.75  | 1.97E-96  | CD4_Naive_UCBMC |
| ENSMMUG000000002320 | 7.08E-101 | 0.42535921 | 0.896 | 0.807 | 2.51E-96  | CD4_Naive_UCBMC |
| RPL15               | 9.05E-100 | 0.27529196 | 0.987 | 0.95  | 3.21E-95  | CD4_Naive_UCBMC |
| RANBP9              | 1.56E-99  | 0.7115578  | 0.621 | 0.46  | 5.51E-95  | CD4_Naive_UCBMC |
| ENSMMUG000000030465 | 5.56E-99  | 0.67062992 | 0.662 | 0.537 | 1.97E-94  | CD4_Naive_UCBMC |
| WRN                 | 2.38E-97  | 0.60803299 | 0.691 | 0.541 | 8.42E-93  | CD4_Naive_UCBMC |
| SENP5               | 5.39E-97  | 0.84950641 | 0.524 | 0.353 | 1.91E-92  | CD4_Naive_UCBMC |
| SLC35A3             | 9.62E-97  | 0.7270525  | 0.601 | 0.442 | 3.41E-92  | CD4_Naive_UCBMC |
| USP15               | 1.28E-96  | 0.40628439 | 0.906 | 0.814 | 4.52E-92  | CD4_Naive_UCBMC |
| ZFC3H1              | 1.51E-96  | 0.68498461 | 0.6   | 0.435 | 5.34E-92  | CD4_Naive_UCBMC |
| RPS3                | 1.90E-95  | 0.25390063 | 0.994 | 0.969 | 6.74E-91  | CD4_Naive_UCBMC |
| ESYT2               | 1.23E-94  | 0.48494847 | 0.776 | 0.645 | 4.35E-90  | CD4_Naive_UCBMC |
| NUP54               | 7.77E-94  | 1.09612332 | 0.388 | 0.218 | 2.75E-89  | CD4_Naive_UCBMC |
| RPS27A              | 1.04E-92  | 0.39866551 | 0.859 | 0.803 | 3.68E-88  | CD4_Naive_UCBMC |
| HERC1               | 4.83E-92  | 0.68020256 | 0.605 | 0.453 | 1.71E-87  | CD4_Naive_UCBMC |
| RPL23A              | 1.36E-91  | 0.25513697 | 0.996 | 0.976 | 4.81E-87  | CD4_Naive_UCBMC |
| MARCHF3             | 4.41E-91  | 0.64778095 | 0.623 | 0.454 | 1.56E-86  | CD4_Naive_UCBMC |

|                     |          |            |       |       |          |                 |
|---------------------|----------|------------|-------|-------|----------|-----------------|
| JAK1                | 9.01E-91 | 0.4217229  | 0.894 | 0.807 | 3.19E-86 | CD4_Naive_UCBMC |
| RB1CC1              | 1.21E-90 | 0.84972864 | 0.461 | 0.293 | 4.30E-86 | CD4_Naive_UCBMC |
| UBE2E1              | 2.55E-90 | 0.84611292 | 0.456 | 0.285 | 9.03E-86 | CD4_Naive_UCBMC |
| FAM241A             | 1.33E-89 | 1.0365524  | 0.434 | 0.264 | 4.71E-85 | CD4_Naive_UCBMC |
| ENSMMUG000000011580 | 4.58E-89 | 0.56792276 | 0.718 | 0.595 | 1.62E-84 | CD4_Naive_UCBMC |
| ZEB1                | 4.59E-89 | 0.40929812 | 0.829 | 0.725 | 1.63E-84 | CD4_Naive_UCBMC |
| PIK3R5              | 5.51E-89 | 0.73836272 | 0.544 | 0.377 | 1.95E-84 | CD4_Naive_UCBMC |
| MAPK8               | 1.03E-87 | 0.74602826 | 0.522 | 0.355 | 3.64E-83 | CD4_Naive_UCBMC |
| TSN                 | 1.64E-87 | 1.11761187 | 0.357 | 0.196 | 5.82E-83 | CD4_Naive_UCBMC |
| CERT1               | 5.97E-87 | 0.65851045 | 0.589 | 0.436 | 2.11E-82 | CD4_Naive_UCBMC |
| POC5                | 2.40E-86 | 0.76055159 | 0.548 | 0.409 | 8.49E-82 | CD4_Naive_UCBMC |
| ENSMMUG000000003073 | 6.75E-86 | 0.22336144 | 0.993 | 0.974 | 2.39E-81 | CD4_Naive_UCBMC |
| ECD                 | 1.00E-85 | 0.97653795 | 0.428 | 0.266 | 3.55E-81 | CD4_Naive_UCBMC |
| ENSMMUG000000059977 | 2.70E-85 | 1.32389254 | 0.328 | 0.176 | 9.55E-81 | CD4_Naive_UCBMC |
| PIAS1               | 5.61E-85 | 0.51292623 | 0.724 | 0.594 | 1.99E-80 | CD4_Naive_UCBMC |
| RPS3A               | 7.76E-85 | 0.20415716 | 0.997 | 0.987 | 2.75E-80 | CD4_Naive_UCBMC |
| SLC12A6             | 1.25E-84 | 0.6021237  | 0.624 | 0.475 | 4.41E-80 | CD4_Naive_UCBMC |
| RPS4X               | 5.59E-84 | 0.22123225 | 0.996 | 0.987 | 1.98E-79 | CD4_Naive_UCBMC |
| RPLP1               | 5.83E-84 | 0.17022154 | 0.997 | 0.989 | 2.06E-79 | CD4_Naive_UCBMC |
| ENSMMUG000000003867 | 6.33E-84 | 0.18270751 | 0.999 | 0.996 | 2.24E-79 | CD4_Naive_UCBMC |
| UTRN                | 6.75E-84 | 0.32917307 | 0.945 | 0.881 | 2.39E-79 | CD4_Naive_UCBMC |
| EDRF1               | 1.11E-83 | 1.19449423 | 0.329 | 0.171 | 3.94E-79 | CD4_Naive_UCBMC |
| ENSMMUG000000002324 | 9.53E-83 | 0.56488994 | 0.661 | 0.549 | 3.38E-78 | CD4_Naive_UCBMC |
| INO80D              | 4.27E-82 | 0.8067609  | 0.481 | 0.326 | 1.51E-77 | CD4_Naive_UCBMC |
| G3BP2               | 5.47E-82 | 0.53221571 | 0.791 | 0.691 | 1.94E-77 | CD4_Naive_UCBMC |
| ENSMMUG000000063979 | 1.52E-81 | 0.84209418 | 0.477 | 0.325 | 5.38E-77 | CD4_Naive_UCBMC |
| CENPC               | 4.60E-81 | 0.83489368 | 0.48  | 0.329 | 1.63E-76 | CD4_Naive_UCBMC |
| RPS6KB1             | 1.34E-80 | 0.67774592 | 0.592 | 0.457 | 4.76E-76 | CD4_Naive_UCBMC |
| CWC15               | 2.27E-80 | 0.68692966 | 0.55  | 0.404 | 8.05E-76 | CD4_Naive_UCBMC |
| CAMTA1              | 7.69E-80 | 0.7240594  | 0.522 | 0.372 | 2.72E-75 | CD4_Naive_UCBMC |
| BBX                 | 9.23E-80 | 0.68004673 | 0.576 | 0.432 | 3.27E-75 | CD4_Naive_UCBMC |
| ATG5                | 1.06E-79 | 0.72799747 | 0.501 | 0.348 | 3.76E-75 | CD4_Naive_UCBMC |
| TAX1BP1             | 3.62E-79 | 0.55101494 | 0.678 | 0.547 | 1.28E-74 | CD4_Naive_UCBMC |

|                    |          |            |       |       |          |                 |
|--------------------|----------|------------|-------|-------|----------|-----------------|
| ENSMMUG00000065104 | 4.77E-79 | 0.58150162 | 0.669 | 0.554 | 1.69E-74 | CD4_Naive_UCBMC |
| UBE2G1             | 7.03E-79 | 0.72376266 | 0.571 | 0.433 | 2.49E-74 | CD4_Naive_UCBMC |
| SCFD1              | 7.46E-78 | 0.72378827 | 0.516 | 0.371 | 2.64E-73 | CD4_Naive_UCBMC |
| ENSMMUG00000016305 | 1.43E-77 | 0.41534268 | 0.739 | 0.633 | 5.07E-73 | CD4_Naive_UCBMC |
| COG5               | 5.12E-77 | 0.48439476 | 0.758 | 0.637 | 1.81E-72 | CD4_Naive_UCBMC |
| KDM6A              | 9.05E-77 | 0.45805141 | 0.782 | 0.663 | 3.21E-72 | CD4_Naive_UCBMC |
| DAZAP1             | 1.11E-76 | 0.42663305 | 0.724 | 0.614 | 3.92E-72 | CD4_Naive_UCBMC |
| MPP7               | 1.44E-76 | 0.34435124 | 0.805 | 0.687 | 5.09E-72 | CD4_Naive_UCBMC |
| CIR1               | 1.95E-76 | 0.80706105 | 0.453 | 0.299 | 6.90E-72 | CD4_Naive_UCBMC |
| TXNDC11            | 3.99E-76 | 0.92552431 | 0.363 | 0.208 | 1.41E-71 | CD4_Naive_UCBMC |
| RPL3               | 9.97E-76 | 0.20298187 | 0.996 | 0.981 | 3.53E-71 | CD4_Naive_UCBMC |
| WDR48              | 2.50E-75 | 0.95925955 | 0.357 | 0.205 | 8.87E-71 | CD4_Naive_UCBMC |
| N4BP1              | 2.68E-74 | 0.80196284 | 0.405 | 0.25  | 9.51E-70 | CD4_Naive_UCBMC |
| TIMM23             | 4.80E-74 | 0.82624756 | 0.45  | 0.306 | 1.70E-69 | CD4_Naive_UCBMC |
| MARCHF7            | 2.27E-73 | 0.56147932 | 0.635 | 0.509 | 8.03E-69 | CD4_Naive_UCBMC |
| VTA1               | 5.11E-73 | 0.92763681 | 0.418 | 0.277 | 1.81E-68 | CD4_Naive_UCBMC |
| MRPS35             | 6.84E-73 | 0.80298533 | 0.441 | 0.293 | 2.42E-68 | CD4_Naive_UCBMC |
| TGFB1              | 7.69E-73 | 0.66799955 | 0.512 | 0.364 | 2.73E-68 | CD4_Naive_UCBMC |
| TRPM7              | 3.63E-72 | 0.43434858 | 0.752 | 0.645 | 1.29E-67 | CD4_Naive_UCBMC |
| ENSMMUG00000058755 | 3.89E-72 | 0.21517259 | 0.996 | 0.971 | 1.38E-67 | CD4_Naive_UCBMC |
| TBC1D15            | 6.69E-72 | 0.69831948 | 0.496 | 0.352 | 2.37E-67 | CD4_Naive_UCBMC |
| YME1L1             | 1.08E-71 | 0.63091707 | 0.53  | 0.394 | 3.84E-67 | CD4_Naive_UCBMC |
| RBM5               | 3.74E-71 | 0.55507837 | 0.584 | 0.445 | 1.32E-66 | CD4_Naive_UCBMC |
| ENSMMUG00000032031 | 3.87E-71 | 0.92615605 | 0.347 | 0.203 | 1.37E-66 | CD4_Naive_UCBMC |
| CELF1              | 9.44E-71 | 0.50363523 | 0.707 | 0.594 | 3.34E-66 | CD4_Naive_UCBMC |
| UBXN7              | 9.61E-71 | 0.73170752 | 0.462 | 0.317 | 3.40E-66 | CD4_Naive_UCBMC |
| RFX3               | 3.22E-70 | 0.47038464 | 0.717 | 0.594 | 1.14E-65 | CD4_Naive_UCBMC |
| EPC2               | 3.47E-70 | 0.61206566 | 0.572 | 0.434 | 1.23E-65 | CD4_Naive_UCBMC |
| RBM39              | 3.85E-70 | 0.34956826 | 0.917 | 0.825 | 1.36E-65 | CD4_Naive_UCBMC |
| RPL12              | 7.24E-70 | 0.14782511 | 0.994 | 0.981 | 2.57E-65 | CD4_Naive_UCBMC |
| WASHC5             | 1.32E-69 | 1.25769719 | 0.269 | 0.134 | 4.68E-65 | CD4_Naive_UCBMC |
| AGO3               | 1.75E-69 | 0.52656629 | 0.628 | 0.498 | 6.19E-65 | CD4_Naive_UCBMC |
| TLE4               | 2.14E-69 | 0.68502699 | 0.478 | 0.332 | 7.57E-65 | CD4_Naive_UCBMC |

|                    |          |            |       |       |          |                 |
|--------------------|----------|------------|-------|-------|----------|-----------------|
| ENSMMUG00000056012 | 2.77E-69 | 0.6513555  | 0.555 | 0.44  | 9.80E-65 | CD4_Naive_UCBMC |
| CDC14A             | 6.95E-69 | 0.35664745 | 0.792 | 0.678 | 2.46E-64 | CD4_Naive_UCBMC |
| ENSMMUG00000006165 | 9.49E-69 | 0.27362208 | 0.909 | 0.843 | 3.36E-64 | CD4_Naive_UCBMC |
| PDZD8              | 9.51E-69 | 0.81893006 | 0.4   | 0.252 | 3.37E-64 | CD4_Naive_UCBMC |
| ENSMMUG00000007536 | 1.06E-68 | 0.58376216 | 0.555 | 0.435 | 3.76E-64 | CD4_Naive_UCBMC |
| PI4K2B             | 1.87E-68 | 0.44581955 | 0.744 | 0.65  | 6.64E-64 | CD4_Naive_UCBMC |
| ENSMMUG00000012525 | 4.73E-68 | 0.52907649 | 0.623 | 0.517 | 1.68E-63 | CD4_Naive_UCBMC |
| MYLIP              | 6.44E-68 | 0.543435   | 0.552 | 0.398 | 2.28E-63 | CD4_Naive_UCBMC |
| GIT2               | 6.91E-68 | 0.67924405 | 0.53  | 0.397 | 2.45E-63 | CD4_Naive_UCBMC |
| MTMR10             | 7.39E-68 | 1.0596684  | 0.314 | 0.173 | 2.62E-63 | CD4_Naive_UCBMC |
| RAB5A              | 8.63E-68 | 0.6441676  | 0.5   | 0.359 | 3.06E-63 | CD4_Naive_UCBMC |
| RFC1               | 1.90E-67 | 0.65388029 | 0.545 | 0.416 | 6.75E-63 | CD4_Naive_UCBMC |
| QKI                | 2.65E-67 | 0.57753742 | 0.551 | 0.409 | 9.37E-63 | CD4_Naive_UCBMC |
| SRSF11             | 3.49E-67 | 0.32309633 | 0.903 | 0.837 | 1.24E-62 | CD4_Naive_UCBMC |
| SYF2               | 6.14E-67 | 0.57413527 | 0.574 | 0.449 | 2.17E-62 | CD4_Naive_UCBMC |
| ENSMMUG00000045362 | 7.92E-67 | 1.36715378 | 0.272 | 0.145 | 2.81E-62 | CD4_Naive_UCBMC |
| FBXL20             | 1.80E-66 | 0.55118832 | 0.592 | 0.462 | 6.39E-62 | CD4_Naive_UCBMC |
| TNRC6A             | 4.64E-66 | 0.517108   | 0.639 | 0.514 | 1.64E-61 | CD4_Naive_UCBMC |
| FTL                | 6.34E-66 | 0.28358471 | 0.897 | 0.828 | 2.25E-61 | CD4_Naive_UCBMC |
| SECISBP2L          | 2.62E-65 | 0.93151282 | 0.353 | 0.214 | 9.27E-61 | CD4_Naive_UCBMC |
| NR3C1              | 3.15E-65 | 0.39277798 | 0.736 | 0.635 | 1.12E-60 | CD4_Naive_UCBMC |
| RPS4Y1             | 5.77E-65 | 0.40142326 | 0.762 | 0.672 | 2.04E-60 | CD4_Naive_UCBMC |
| VEZT               | 2.23E-64 | 0.88740894 | 0.367 | 0.227 | 7.91E-60 | CD4_Naive_UCBMC |
| TMEM87A            | 2.32E-64 | 0.58298106 | 0.548 | 0.418 | 8.23E-60 | CD4_Naive_UCBMC |
| LUC7L3             | 2.40E-64 | 0.47527049 | 0.719 | 0.612 | 8.49E-60 | CD4_Naive_UCBMC |
| SAP30BP            | 4.39E-64 | 0.84455836 | 0.384 | 0.252 | 1.56E-59 | CD4_Naive_UCBMC |
| RAB8B              | 8.15E-64 | 0.443542   | 0.771 | 0.669 | 2.89E-59 | CD4_Naive_UCBMC |
| RSF1               | 9.69E-64 | 0.52318657 | 0.66  | 0.556 | 3.43E-59 | CD4_Naive_UCBMC |
| CNOT4              | 2.20E-63 | 0.54464264 | 0.61  | 0.489 | 7.80E-59 | CD4_Naive_UCBMC |
| MAX                | 7.61E-63 | 0.6142104  | 0.544 | 0.423 | 2.70E-58 | CD4_Naive_UCBMC |
| PPP1R12A           | 1.30E-62 | 0.45983518 | 0.726 | 0.634 | 4.59E-58 | CD4_Naive_UCBMC |
| KLF12              | 1.77E-62 | 0.32770679 | 0.891 | 0.809 | 6.26E-58 | CD4_Naive_UCBMC |
| RPL7A              | 6.97E-62 | 0.17597831 | 0.995 | 0.983 | 2.47E-57 | CD4_Naive_UCBMC |

|                    |          |            |       |       |          |                 |
|--------------------|----------|------------|-------|-------|----------|-----------------|
| RAB7A              | 3.31E-61 | 0.50010008 | 0.66  | 0.545 | 1.17E-56 | CD4_Naive_UCBMC |
| IREB2              | 3.32E-61 | 0.76553419 | 0.423 | 0.294 | 1.18E-56 | CD4_Naive_UCBMC |
| STK38L             | 3.72E-61 | 0.90790959 | 0.292 | 0.159 | 1.32E-56 | CD4_Naive_UCBMC |
| PAIP2              | 4.56E-61 | 0.40212487 | 0.776 | 0.678 | 1.61E-56 | CD4_Naive_UCBMC |
| PTPN1              | 7.61E-61 | 0.56808252 | 0.54  | 0.416 | 2.70E-56 | CD4_Naive_UCBMC |
| CSDE1              | 1.13E-60 | 0.45687853 | 0.668 | 0.563 | 4.01E-56 | CD4_Naive_UCBMC |
| RAB1A              | 1.48E-60 | 0.52669001 | 0.611 | 0.494 | 5.26E-56 | CD4_Naive_UCBMC |
| GCN1               | 3.19E-60 | 0.18937773 | 0.991 | 0.978 | 1.13E-55 | CD4_Naive_UCBMC |
| DENND5A            | 4.54E-60 | 0.72563278 | 0.442 | 0.308 | 1.61E-55 | CD4_Naive_UCBMC |
| RPL10              | 9.19E-60 | 0.15003461 | 0.998 | 0.992 | 3.26E-55 | CD4_Naive_UCBMC |
| RAB18              | 1.45E-58 | 0.73491805 | 0.392 | 0.261 | 5.13E-54 | CD4_Naive_UCBMC |
| RPRD1A             | 1.53E-58 | 0.7330177  | 0.433 | 0.307 | 5.44E-54 | CD4_Naive_UCBMC |
| BNIP3L             | 2.76E-58 | 0.582465   | 0.516 | 0.393 | 9.79E-54 | CD4_Naive_UCBMC |
| RSRP1              | 4.09E-58 | 0.34127749 | 0.878 | 0.764 | 1.45E-53 | CD4_Naive_UCBMC |
| RPS11              | 1.25E-57 | 0.17578773 | 0.996 | 0.981 | 4.41E-53 | CD4_Naive_UCBMC |
| PPM1A              | 8.89E-57 | 0.85095873 | 0.384 | 0.259 | 3.15E-52 | CD4_Naive_UCBMC |
| S1PR1              | 1.82E-56 | 0.6481357  | 0.387 | 0.252 | 6.44E-52 | CD4_Naive_UCBMC |
| ABLIM1             | 2.66E-56 | 0.32757067 | 0.854 | 0.789 | 9.42E-52 | CD4_Naive_UCBMC |
| SUCLG2             | 3.48E-56 | 0.42851233 | 0.687 | 0.586 | 1.23E-51 | CD4_Naive_UCBMC |
| SFSWAP             | 5.12E-56 | 0.64891531 | 0.472 | 0.355 | 1.81E-51 | CD4_Naive_UCBMC |
| ENSMUG00000008346  | 5.98E-56 | 0.55778767 | 0.526 | 0.404 | 2.12E-51 | CD4_Naive_UCBMC |
| KLF7               | 7.19E-56 | 0.72634683 | 0.399 | 0.27  | 2.55E-51 | CD4_Naive_UCBMC |
| ZNF644             | 7.60E-56 | 0.43319349 | 0.699 | 0.602 | 2.69E-51 | CD4_Naive_UCBMC |
| YEATS2             | 9.56E-56 | 0.46217159 | 0.646 | 0.537 | 3.39E-51 | CD4_Naive_UCBMC |
| SCAPER             | 2.10E-55 | 0.46157447 | 0.641 | 0.52  | 7.42E-51 | CD4_Naive_UCBMC |
| TET2               | 2.62E-55 | 0.74031488 | 0.387 | 0.254 | 9.29E-51 | CD4_Naive_UCBMC |
| WDR13              | 3.40E-55 | 0.43213495 | 0.663 | 0.567 | 1.20E-50 | CD4_Naive_UCBMC |
| CCM2               | 3.92E-55 | 0.53642436 | 0.607 | 0.499 | 1.39E-50 | CD4_Naive_UCBMC |
| ENSMUG000000031947 | 4.33E-55 | 0.33749537 | 0.82  | 0.749 | 1.53E-50 | CD4_Naive_UCBMC |
| ZFAND6             | 6.35E-55 | 0.41860306 | 0.742 | 0.652 | 2.25E-50 | CD4_Naive_UCBMC |
| SLC35D1            | 7.63E-55 | 0.91350481 | 0.281 | 0.158 | 2.70E-50 | CD4_Naive_UCBMC |
| SMCHD1             | 1.41E-53 | 0.3343774  | 0.822 | 0.729 | 4.99E-49 | CD4_Naive_UCBMC |
| TMEM131            | 1.53E-53 | 0.49855611 | 0.571 | 0.455 | 5.41E-49 | CD4_Naive_UCBMC |

|                    |          |            |       |       |          |                 |
|--------------------|----------|------------|-------|-------|----------|-----------------|
| CUL5               | 4.05E-53 | 0.43657806 | 0.652 | 0.554 | 1.43E-48 | CD4_Naive_UCBMC |
| NDUFA9             | 1.38E-52 | 0.82059997 | 0.352 | 0.233 | 4.88E-48 | CD4_Naive_UCBMC |
| RALA               | 1.66E-52 | 0.71972048 | 0.375 | 0.252 | 5.89E-48 | CD4_Naive_UCBMC |
| ZNF93              | 2.88E-52 | 0.71904553 | 0.389 | 0.268 | 1.02E-47 | CD4_Naive_UCBMC |
| RNF38              | 3.05E-52 | 0.46690673 | 0.636 | 0.539 | 1.08E-47 | CD4_Naive_UCBMC |
| FOXP1              | 3.34E-52 | 0.35009077 | 0.811 | 0.722 | 1.18E-47 | CD4_Naive_UCBMC |
| FBXO3              | 4.81E-52 | 1.09997542 | 0.262 | 0.149 | 1.70E-47 | CD4_Naive_UCBMC |
| GMCL1              | 1.39E-51 | 0.61202043 | 0.432 | 0.305 | 4.94E-47 | CD4_Naive_UCBMC |
| ENSMMUG00000061038 | 1.41E-51 | 0.48723125 | 0.601 | 0.488 | 5.01E-47 | CD4_Naive_UCBMC |
| RPL18              | 1.74E-51 | 0.1344831  | 0.998 | 0.994 | 6.16E-47 | CD4_Naive_UCBMC |
| COPB1              | 1.81E-51 | 0.66284993 | 0.403 | 0.286 | 6.42E-47 | CD4_Naive_UCBMC |
| SREK1IP1           | 3.18E-51 | 0.77619301 | 0.37  | 0.253 | 1.13E-46 | CD4_Naive_UCBMC |
| RPL10A             | 3.65E-51 | 0.17668253 | 0.994 | 0.979 | 1.29E-46 | CD4_Naive_UCBMC |
| CNOT1              | 6.88E-51 | 0.50064987 | 0.564 | 0.459 | 2.44E-46 | CD4_Naive_UCBMC |
| TXNIP              | 7.14E-51 | 0.37422571 | 0.729 | 0.636 | 2.53E-46 | CD4_Naive_UCBMC |
| LMBR1              | 7.85E-51 | 0.51164755 | 0.477 | 0.351 | 2.78E-46 | CD4_Naive_UCBMC |
| ENSMMUG00000041517 | 8.59E-51 | 0.87013398 | 0.32  | 0.207 | 3.05E-46 | CD4_Naive_UCBMC |
| ZFR                | 1.04E-50 | 0.52871503 | 0.49  | 0.374 | 3.68E-46 | CD4_Naive_UCBMC |
| ARIH2              | 1.14E-50 | 0.62744997 | 0.449 | 0.341 | 4.04E-46 | CD4_Naive_UCBMC |
| RALGPS2            | 3.91E-50 | 0.66615941 | 0.4   | 0.278 | 1.38E-45 | CD4_Naive_UCBMC |
| RPSA               | 4.77E-50 | 0.17705388 | 0.994 | 0.976 | 1.69E-45 | CD4_Naive_UCBMC |
| HINT1              | 9.37E-50 | 0.23481906 | 0.918 | 0.851 | 3.32E-45 | CD4_Naive_UCBMC |
| NIPSNAP2           | 1.96E-49 | 0.76253709 | 0.376 | 0.261 | 6.96E-45 | CD4_Naive_UCBMC |
| SELENOS            | 2.19E-49 | 0.4638202  | 0.602 | 0.499 | 7.76E-45 | CD4_Naive_UCBMC |
| ENSMMUG00000014947 | 2.22E-49 | 0.64961582 | 0.453 | 0.34  | 7.86E-45 | CD4_Naive_UCBMC |
| PLAA               | 2.73E-49 | 0.94285612 | 0.292 | 0.178 | 9.68E-45 | CD4_Naive_UCBMC |
| GPR107             | 4.45E-49 | 0.67842807 | 0.42  | 0.307 | 1.58E-44 | CD4_Naive_UCBMC |
| MINDY3             | 5.88E-49 | 0.62729036 | 0.425 | 0.31  | 2.08E-44 | CD4_Naive_UCBMC |
| BTBD11             | 8.66E-49 | 0.2511176  | 0.626 | 0.5   | 3.07E-44 | CD4_Naive_UCBMC |
| EMC3               | 1.23E-48 | 0.85262898 | 0.299 | 0.183 | 4.36E-44 | CD4_Naive_UCBMC |
| THUMPD2            | 1.25E-48 | 0.61721202 | 0.415 | 0.296 | 4.44E-44 | CD4_Naive_UCBMC |
| RPS5               | 1.94E-48 | 0.16485575 | 0.994 | 0.979 | 6.87E-44 | CD4_Naive_UCBMC |
| PPP3CC             | 2.06E-48 | 0.44041291 | 0.606 | 0.499 | 7.30E-44 | CD4_Naive_UCBMC |

|                     |          |            |       |       |          |                 |
|---------------------|----------|------------|-------|-------|----------|-----------------|
| ENSMMUG000000001210 | 3.21E-48 | 0.29199228 | 0.935 | 0.901 | 1.14E-43 | CD4_Naive_UCBMC |
| LANCL2              | 3.44E-48 | 0.98434064 | 0.291 | 0.18  | 1.22E-43 | CD4_Naive_UCBMC |
| SENP2               | 3.93E-48 | 0.66907996 | 0.421 | 0.303 | 1.39E-43 | CD4_Naive_UCBMC |
| CUL2                | 7.73E-48 | 0.68479896 | 0.378 | 0.263 | 2.74E-43 | CD4_Naive_UCBMC |
| RPS7                | 8.96E-48 | 0.12712125 | 0.998 | 0.993 | 3.18E-43 | CD4_Naive_UCBMC |
| WDFY2               | 2.31E-47 | 0.56799487 | 0.524 | 0.415 | 8.17E-43 | CD4_Naive_UCBMC |
| RIOK3               | 2.37E-47 | 0.66356802 | 0.438 | 0.33  | 8.40E-43 | CD4_Naive_UCBMC |
| UHRF1BP1L           | 2.40E-47 | 0.65509049 | 0.433 | 0.317 | 8.50E-43 | CD4_Naive_UCBMC |
| HSD17B4             | 5.04E-47 | 0.44824582 | 0.709 | 0.626 | 1.79E-42 | CD4_Naive_UCBMC |
| RAMAC               | 6.61E-47 | 0.78531793 | 0.331 | 0.221 | 2.34E-42 | CD4_Naive_UCBMC |
| EAPP                | 1.20E-46 | 0.82689368 | 0.31  | 0.2   | 4.24E-42 | CD4_Naive_UCBMC |
| POU2F1              | 1.46E-46 | 0.5934749  | 0.473 | 0.354 | 5.16E-42 | CD4_Naive_UCBMC |
| CHD6                | 2.23E-46 | 0.45687936 | 0.533 | 0.424 | 7.89E-42 | CD4_Naive_UCBMC |
| COPA                | 5.70E-46 | 0.55702152 | 0.453 | 0.343 | 2.02E-41 | CD4_Naive_UCBMC |
| PHC3                | 6.16E-46 | 0.52729554 | 0.511 | 0.407 | 2.18E-41 | CD4_Naive_UCBMC |
| PPTC7               | 6.28E-46 | 0.81651196 | 0.329 | 0.217 | 2.23E-41 | CD4_Naive_UCBMC |
| CNOT2               | 9.70E-46 | 0.34715722 | 0.687 | 0.587 | 3.44E-41 | CD4_Naive_UCBMC |
| PUM1                | 1.06E-45 | 0.31705908 | 0.803 | 0.719 | 3.76E-41 | CD4_Naive_UCBMC |
| VPS39               | 1.45E-45 | 0.66791524 | 0.344 | 0.233 | 5.15E-41 | CD4_Naive_UCBMC |
| CSNK1A1             | 8.31E-45 | 0.34122437 | 0.737 | 0.659 | 2.94E-40 | CD4_Naive_UCBMC |
| U2SURP              | 1.15E-44 | 0.45855608 | 0.6   | 0.508 | 4.09E-40 | CD4_Naive_UCBMC |
| METTL16             | 1.20E-44 | 0.77512296 | 0.346 | 0.237 | 4.24E-40 | CD4_Naive_UCBMC |
| RNF13               | 1.72E-44 | 0.54774538 | 0.513 | 0.411 | 6.09E-40 | CD4_Naive_UCBMC |
| DHX9                | 1.87E-44 | 0.40266691 | 0.605 | 0.511 | 6.64E-40 | CD4_Naive_UCBMC |
| PDZRN3              | 1.99E-44 | 0.47962825 | 0.486 | 0.352 | 7.05E-40 | CD4_Naive_UCBMC |
| ATP11B              | 3.01E-44 | 0.45010003 | 0.541 | 0.433 | 1.06E-39 | CD4_Naive_UCBMC |
| CHMP7               | 5.38E-44 | 0.32837946 | 0.641 | 0.523 | 1.91E-39 | CD4_Naive_UCBMC |
| SCMH1               | 1.08E-43 | 0.74843646 | 0.326 | 0.211 | 3.81E-39 | CD4_Naive_UCBMC |
| ENSMMUG000000002075 | 1.24E-43 | 0.83968542 | 0.267 | 0.161 | 4.39E-39 | CD4_Naive_UCBMC |
| CPSF3               | 1.26E-43 | 0.72864438 | 0.353 | 0.245 | 4.48E-39 | CD4_Naive_UCBMC |
| ITCH                | 1.92E-43 | 0.37795224 | 0.714 | 0.636 | 6.81E-39 | CD4_Naive_UCBMC |
| DAZAP2              | 5.00E-43 | 0.44927323 | 0.586 | 0.496 | 1.77E-38 | CD4_Naive_UCBMC |
| CAPN7               | 7.38E-43 | 0.65914564 | 0.351 | 0.241 | 2.62E-38 | CD4_Naive_UCBMC |



|                    |          |            |       |       |          |                 |
|--------------------|----------|------------|-------|-------|----------|-----------------|
| SNX4               | 9.08E-43 | 0.5475445  | 0.471 | 0.364 | 3.22E-38 | CD4_Naive_UCBMC |
| DHX40              | 1.21E-42 | 0.79252554 | 0.315 | 0.207 | 4.27E-38 | CD4_Naive_UCBMC |
| KPNA3              | 1.25E-42 | 0.52535031 | 0.46  | 0.352 | 4.43E-38 | CD4_Naive_UCBMC |
| SETD2              | 1.27E-42 | 0.36598008 | 0.706 | 0.625 | 4.50E-38 | CD4_Naive_UCBMC |
| ESCO1              | 2.13E-42 | 0.46274723 | 0.561 | 0.463 | 7.55E-38 | CD4_Naive_UCBMC |
| TNKS               | 2.28E-42 | 0.49501613 | 0.52  | 0.419 | 8.06E-38 | CD4_Naive_UCBMC |
| CEP295             | 4.22E-42 | 0.68230783 | 0.294 | 0.186 | 1.50E-37 | CD4_Naive_UCBMC |
| MANBA              | 4.58E-42 | 0.50640437 | 0.461 | 0.352 | 1.62E-37 | CD4_Naive_UCBMC |
| KIAA1143           | 1.18E-41 | 0.75775664 | 0.343 | 0.241 | 4.18E-37 | CD4_Naive_UCBMC |
| EXOC6B             | 1.19E-41 | 0.53668121 | 0.501 | 0.392 | 4.23E-37 | CD4_Naive_UCBMC |
| ENSMMUG00000061630 | 1.26E-41 | 0.51748147 | 0.493 | 0.4   | 4.46E-37 | CD4_Naive_UCBMC |
| CD247              | 1.29E-41 | 0.28166641 | 0.814 | 0.724 | 4.59E-37 | CD4_Naive_UCBMC |
| RASA2              | 1.54E-41 | 0.26936832 | 0.853 | 0.783 | 5.47E-37 | CD4_Naive_UCBMC |
| ENSMMUG00000013429 | 3.04E-41 | 0.11900723 | 0.998 | 0.995 | 1.08E-36 | CD4_Naive_UCBMC |
| EZH2               | 8.02E-41 | 0.53317406 | 0.464 | 0.36  | 2.84E-36 | CD4_Naive_UCBMC |
| GTF2B              | 9.76E-41 | 0.34219577 | 0.666 | 0.577 | 3.46E-36 | CD4_Naive_UCBMC |
| CLINT1             | 1.33E-40 | 0.44625139 | 0.589 | 0.495 | 4.71E-36 | CD4_Naive_UCBMC |
| RNF4               | 3.03E-40 | 0.75674631 | 0.334 | 0.233 | 1.07E-35 | CD4_Naive_UCBMC |
| DNAJC2             | 4.05E-40 | 0.50300231 | 0.524 | 0.432 | 1.44E-35 | CD4_Naive_UCBMC |
| SNED1              | 5.04E-40 | 0.67985667 | 0.354 | 0.245 | 1.78E-35 | CD4_Naive_UCBMC |
| C20H16orf87        | 6.16E-40 | 0.82229915 | 0.315 | 0.213 | 2.18E-35 | CD4_Naive_UCBMC |
| XRN1               | 8.67E-40 | 0.54623276 | 0.471 | 0.374 | 3.07E-35 | CD4_Naive_UCBMC |
| ATP5PO             | 9.70E-40 | 0.32387686 | 0.748 | 0.68  | 3.44E-35 | CD4_Naive_UCBMC |
| OSBPL8             | 9.98E-40 | 0.33827784 | 0.752 | 0.676 | 3.54E-35 | CD4_Naive_UCBMC |
| SERINC1            | 1.00E-39 | 0.36583865 | 0.562 | 0.465 | 3.55E-35 | CD4_Naive_UCBMC |
| SETD7              | 1.11E-39 | 0.60796397 | 0.386 | 0.284 | 3.94E-35 | CD4_Naive_UCBMC |
| ENSMMUG00000016009 | 1.16E-39 | 0.3848942  | 0.596 | 0.509 | 4.12E-35 | CD4_Naive_UCBMC |
| WDR26              | 1.25E-39 | 0.663178   | 0.362 | 0.259 | 4.44E-35 | CD4_Naive_UCBMC |
| ZNF43              | 1.34E-39 | 0.67179668 | 0.389 | 0.291 | 4.74E-35 | CD4_Naive_UCBMC |
| ARMC8              | 1.35E-39 | 0.57853936 | 0.439 | 0.34  | 4.77E-35 | CD4_Naive_UCBMC |
| ATP9B              | 1.63E-39 | 0.43710293 | 0.527 | 0.429 | 5.78E-35 | CD4_Naive_UCBMC |
| NIPBL              | 1.71E-39 | 0.33549531 | 0.652 | 0.565 | 6.05E-35 | CD4_Naive_UCBMC |
| RFWD3              | 1.78E-39 | 0.92688326 | 0.252 | 0.156 | 6.31E-35 | CD4_Naive_UCBMC |

|          |          |            |       |       |          |                 |
|----------|----------|------------|-------|-------|----------|-----------------|
| PTPRA    | 2.26E-39 | 0.42105296 | 0.572 | 0.474 | 8.01E-35 | CD4_Naive_UCBMC |
| CDK13    | 4.34E-39 | 0.3533662  | 0.642 | 0.549 | 1.54E-34 | CD4_Naive_UCBMC |
| ZNF92    | 4.88E-39 | 0.64627114 | 0.369 | 0.268 | 1.73E-34 | CD4_Naive_UCBMC |
| TBC1D23  | 4.92E-39 | 0.60091493 | 0.38  | 0.282 | 1.74E-34 | CD4_Naive_UCBMC |
| FBXL5    | 5.64E-39 | 0.73591245 | 0.328 | 0.229 | 2.00E-34 | CD4_Naive_UCBMC |
| TUT4     | 9.32E-39 | 0.31972445 | 0.771 | 0.7   | 3.30E-34 | CD4_Naive_UCBMC |
| AP3B1    | 1.08E-38 | 0.36639505 | 0.587 | 0.488 | 3.84E-34 | CD4_Naive_UCBMC |
| GOLGA1   | 1.44E-38 | 0.34727262 | 0.827 | 0.76  | 5.10E-34 | CD4_Naive_UCBMC |
| GABPB1   | 1.50E-38 | 0.64464838 | 0.445 | 0.348 | 5.31E-34 | CD4_Naive_UCBMC |
| WDR33    | 1.90E-38 | 0.51733106 | 0.479 | 0.388 | 6.74E-34 | CD4_Naive_UCBMC |
| LSM14A   | 2.02E-38 | 0.35130965 | 0.669 | 0.594 | 7.17E-34 | CD4_Naive_UCBMC |
| ZMYM5    | 3.04E-38 | 0.76101727 | 0.328 | 0.231 | 1.08E-33 | CD4_Naive_UCBMC |
| RPS23    | 3.88E-38 | 0.11939106 | 0.997 | 0.989 | 1.38E-33 | CD4_Naive_UCBMC |
| ARHGAP32 | 5.55E-38 | 0.87319148 | 0.254 | 0.161 | 1.96E-33 | CD4_Naive_UCBMC |
| SS18     | 5.84E-38 | 0.46110799 | 0.517 | 0.424 | 2.07E-33 | CD4_Naive_UCBMC |
| RLF      | 8.08E-38 | 0.44659263 | 0.535 | 0.448 | 2.86E-33 | CD4_Naive_UCBMC |
| RBM33    | 9.50E-38 | 0.36279226 | 0.585 | 0.506 | 3.37E-33 | CD4_Naive_UCBMC |
| PCED1B   | 1.14E-37 | 0.5349131  | 0.397 | 0.292 | 4.03E-33 | CD4_Naive_UCBMC |
| TRAF3    | 1.21E-37 | 0.54073361 | 0.45  | 0.347 | 4.29E-33 | CD4_Naive_UCBMC |
| TGS1     | 1.29E-37 | 0.56776659 | 0.43  | 0.332 | 4.56E-33 | CD4_Naive_UCBMC |
| HNRNPUL1 | 1.47E-37 | 0.35478846 | 0.472 | 0.372 | 5.22E-33 | CD4_Naive_UCBMC |
| LYST     | 1.77E-37 | 0.57518749 | 0.364 | 0.258 | 6.26E-33 | CD4_Naive_UCBMC |
| FOXJ3    | 2.05E-37 | 0.45672347 | 0.545 | 0.454 | 7.27E-33 | CD4_Naive_UCBMC |
| BIRC6    | 2.29E-37 | 0.27273226 | 0.835 | 0.759 | 8.12E-33 | CD4_Naive_UCBMC |
| SRRM1    | 2.30E-37 | 0.35214324 | 0.649 | 0.566 | 8.16E-33 | CD4_Naive_UCBMC |
| SEC23A   | 3.01E-37 | 0.67090826 | 0.332 | 0.232 | 1.07E-32 | CD4_Naive_UCBMC |
| STAU1    | 3.98E-37 | 0.40606086 | 0.518 | 0.423 | 1.41E-32 | CD4_Naive_UCBMC |
| HBP1     | 4.18E-37 | 0.48514842 | 0.469 | 0.373 | 1.48E-32 | CD4_Naive_UCBMC |
| CWC25    | 5.33E-37 | 0.73609996 | 0.287 | 0.191 | 1.89E-32 | CD4_Naive_UCBMC |
| RAPGEF1  | 7.25E-37 | 0.49564954 | 0.441 | 0.345 | 2.57E-32 | CD4_Naive_UCBMC |
| DUSP16   | 8.27E-37 | 0.26069658 | 0.33  | 0.219 | 2.93E-32 | CD4_Naive_UCBMC |
| EMP3     | 8.38E-37 | 0.14920996 | 0.446 | 0.292 | 2.97E-32 | CD4_Naive_UCBMC |
| BTBD10   | 9.36E-37 | 0.73577414 | 0.31  | 0.213 | 3.32E-32 | CD4_Naive_UCBMC |

|                   |          |            |       |       |          |                 |
|-------------------|----------|------------|-------|-------|----------|-----------------|
| PIP5K1A           | 1.05E-36 | 0.54692545 | 0.419 | 0.323 | 3.72E-32 | CD4_Naive_UCBMC |
| EIF3A             | 1.06E-36 | 0.34175287 | 0.639 | 0.551 | 3.74E-32 | CD4_Naive_UCBMC |
| SEC31A            | 1.06E-36 | 0.34592648 | 0.615 | 0.538 | 3.77E-32 | CD4_Naive_UCBMC |
| CD83              | 1.21E-36 | 0.46595694 | 0.401 | 0.287 | 4.28E-32 | CD4_Naive_UCBMC |
| ENSMUG00000055026 | 1.26E-36 | 0.53706566 | 0.418 | 0.322 | 4.47E-32 | CD4_Naive_UCBMC |
| SIAH1             | 1.31E-36 | 0.84361836 | 0.267 | 0.172 | 4.66E-32 | CD4_Naive_UCBMC |
| TUBB2B            | 1.78E-36 | 0.78301743 | 0.342 | 0.248 | 6.32E-32 | CD4_Naive_UCBMC |
| ZNF654            | 1.93E-36 | 0.55971746 | 0.401 | 0.299 | 6.84E-32 | CD4_Naive_UCBMC |
| AQR               | 2.86E-36 | 0.55217549 | 0.425 | 0.332 | 1.01E-31 | CD4_Naive_UCBMC |
| MIER1             | 4.29E-36 | 0.36503579 | 0.583 | 0.504 | 1.52E-31 | CD4_Naive_UCBMC |
| LONP2             | 5.46E-36 | 0.46119562 | 0.503 | 0.413 | 1.93E-31 | CD4_Naive_UCBMC |
| PLCL1             | 5.54E-36 | 0.31890227 | 0.716 | 0.611 | 1.96E-31 | CD4_Naive_UCBMC |
| ENSMUG00000052747 | 5.59E-36 | 0.25501896 | 0.777 | 0.725 | 1.98E-31 | CD4_Naive_UCBMC |
| PCM1              | 6.09E-36 | 0.465454   | 0.498 | 0.411 | 2.16E-31 | CD4_Naive_UCBMC |
| HEXA              | 9.49E-36 | 0.77776616 | 0.265 | 0.17  | 3.36E-31 | CD4_Naive_UCBMC |
| DIP2B             | 9.52E-36 | 0.29700029 | 0.776 | 0.709 | 3.37E-31 | CD4_Naive_UCBMC |
| ANAPC10           | 3.09E-35 | 0.60041544 | 0.394 | 0.301 | 1.10E-30 | CD4_Naive_UCBMC |
| KIZ               | 3.28E-35 | 0.65395343 | 0.308 | 0.212 | 1.16E-30 | CD4_Naive_UCBMC |
| USP47             | 3.29E-35 | 0.33627689 | 0.662 | 0.583 | 1.17E-30 | CD4_Naive_UCBMC |
| MPHOSPH8          | 3.30E-35 | 0.45669802 | 0.498 | 0.413 | 1.17E-30 | CD4_Naive_UCBMC |
| C15H9orf78        | 4.95E-35 | 0.40569828 | 0.546 | 0.467 | 1.75E-30 | CD4_Naive_UCBMC |
| VPS37B            | 5.38E-35 | 0.42222913 | 0.449 | 0.357 | 1.91E-30 | CD4_Naive_UCBMC |
| GSTT1             | 6.06E-35 | 0.58640798 | 0.309 | 0.206 | 2.15E-30 | CD4_Naive_UCBMC |
| MACO1             | 7.52E-35 | 0.55106568 | 0.415 | 0.325 | 2.66E-30 | CD4_Naive_UCBMC |
| TNPO1             | 7.95E-35 | 0.6201976  | 0.34  | 0.245 | 2.82E-30 | CD4_Naive_UCBMC |
| UBAP1             | 9.99E-35 | 0.47767738 | 0.468 | 0.377 | 3.54E-30 | CD4_Naive_UCBMC |
| THUMPD1           | 1.09E-34 | 0.68938439 | 0.32  | 0.227 | 3.85E-30 | CD4_Naive_UCBMC |
| MRTFA             | 1.13E-34 | 0.46248074 | 0.519 | 0.43  | 4.01E-30 | CD4_Naive_UCBMC |
| BTAF1             | 1.30E-34 | 0.4268781  | 0.538 | 0.46  | 4.62E-30 | CD4_Naive_UCBMC |
| MORC3             | 1.38E-34 | 0.52939555 | 0.411 | 0.321 | 4.90E-30 | CD4_Naive_UCBMC |
| RPL30             | 1.55E-34 | 0.10943712 | 0.998 | 0.99  | 5.50E-30 | CD4_Naive_UCBMC |
| RAB3GAP1          | 1.87E-34 | 0.48096735 | 0.422 | 0.331 | 6.61E-30 | CD4_Naive_UCBMC |
| G2E3              | 2.03E-34 | 0.65020743 | 0.327 | 0.233 | 7.20E-30 | CD4_Naive_UCBMC |

|          |          |            |       |       |          |                 |
|----------|----------|------------|-------|-------|----------|-----------------|
| MTREX    | 2.13E-34 | 0.27637497 | 0.722 | 0.648 | 7.56E-30 | CD4_Naive_UCBMC |
| TRMT10C  | 3.32E-34 | 0.55168048 | 0.388 | 0.292 | 1.18E-29 | CD4_Naive_UCBMC |
| FAM172A  | 4.48E-34 | 0.26817336 | 0.74  | 0.661 | 1.59E-29 | CD4_Naive_UCBMC |
| CDKAL1   | 4.52E-34 | 0.30309011 | 0.713 | 0.631 | 1.60E-29 | CD4_Naive_UCBMC |
| TCERG1   | 6.42E-34 | 0.4431365  | 0.502 | 0.418 | 2.28E-29 | CD4_Naive_UCBMC |
| PNN      | 7.84E-34 | 0.36652289 | 0.657 | 0.582 | 2.78E-29 | CD4_Naive_UCBMC |
| NUP133   | 9.00E-34 | 0.71089099 | 0.293 | 0.202 | 3.19E-29 | CD4_Naive_UCBMC |
| MBNL2    | 9.51E-34 | 0.40512676 | 0.531 | 0.44  | 3.37E-29 | CD4_Naive_UCBMC |
| PAPOLG   | 9.78E-34 | 0.70583866 | 0.274 | 0.184 | 3.47E-29 | CD4_Naive_UCBMC |
| PSEN1    | 1.40E-33 | 0.56334207 | 0.377 | 0.285 | 4.97E-29 | CD4_Naive_UCBMC |
| ARF1     | 1.56E-33 | 0.35023    | 0.586 | 0.511 | 5.51E-29 | CD4_Naive_UCBMC |
| DDX52    | 1.61E-33 | 0.62157922 | 0.38  | 0.291 | 5.72E-29 | CD4_Naive_UCBMC |
| PRPF40A  | 1.76E-33 | 0.34190292 | 0.688 | 0.617 | 6.25E-29 | CD4_Naive_UCBMC |
| WASL     | 3.33E-33 | 0.46482298 | 0.466 | 0.377 | 1.18E-28 | CD4_Naive_UCBMC |
| GINM1    | 7.38E-33 | 0.4672192  | 0.407 | 0.308 | 2.61E-28 | CD4_Naive_UCBMC |
| USP33    | 9.15E-33 | 0.52537975 | 0.368 | 0.273 | 3.24E-28 | CD4_Naive_UCBMC |
| DIS3L2   | 9.86E-33 | 0.42330809 | 0.537 | 0.46  | 3.49E-28 | CD4_Naive_UCBMC |
| CYLD     | 1.08E-32 | 0.25687138 | 0.68  | 0.604 | 3.83E-28 | CD4_Naive_UCBMC |
| SLC25A26 | 1.15E-32 | 0.46960416 | 0.412 | 0.325 | 4.07E-28 | CD4_Naive_UCBMC |
| RPL27A   | 1.27E-32 | 0.17663361 | 0.994 | 0.954 | 4.52E-28 | CD4_Naive_UCBMC |
| RPS20    | 1.59E-32 | 0.19911931 | 0.995 | 0.935 | 5.64E-28 | CD4_Naive_UCBMC |
| RRAS2    | 1.75E-32 | 0.6085754  | 0.325 | 0.231 | 6.21E-28 | CD4_Naive_UCBMC |
| RPL23    | 1.80E-32 | 0.1697195  | 0.993 | 0.948 | 6.37E-28 | CD4_Naive_UCBMC |
| DHRS3    | 1.99E-32 | 0.62842059 | 0.296 | 0.205 | 7.05E-28 | CD4_Naive_UCBMC |
| GOLPH3   | 2.92E-32 | 0.4340445  | 0.491 | 0.406 | 1.04E-27 | CD4_Naive_UCBMC |
| SEC22A   | 4.26E-32 | 0.6577908  | 0.304 | 0.21  | 1.51E-27 | CD4_Naive_UCBMC |
| CFLAR    | 4.94E-32 | 0.45667521 | 0.502 | 0.423 | 1.75E-27 | CD4_Naive_UCBMC |
| XPO4     | 5.07E-32 | 0.56634164 | 0.307 | 0.214 | 1.80E-27 | CD4_Naive_UCBMC |
| LIMK2    | 1.02E-31 | 0.7104041  | 0.288 | 0.2   | 3.61E-27 | CD4_Naive_UCBMC |
| NAE1     | 1.16E-31 | 0.61231799 | 0.324 | 0.235 | 4.13E-27 | CD4_Naive_UCBMC |
| GTPBP10  | 1.17E-31 | 0.57541021 | 0.365 | 0.272 | 4.15E-27 | CD4_Naive_UCBMC |
| FBXO28   | 1.43E-31 | 0.73246122 | 0.261 | 0.171 | 5.05E-27 | CD4_Naive_UCBMC |
| ATP2C1   | 1.47E-31 | 0.48777361 | 0.347 | 0.25  | 5.21E-27 | CD4_Naive_UCBMC |

|                   |          |            |       |       |          |                 |
|-------------------|----------|------------|-------|-------|----------|-----------------|
| SEC24B            | 1.54E-31 | 0.403831   | 0.491 | 0.408 | 5.45E-27 | CD4_Naive_UCBMC |
| ACTR2             | 1.56E-31 | 0.26469133 | 0.83  | 0.774 | 5.51E-27 | CD4_Naive_UCBMC |
| APPL2             | 1.90E-31 | 0.69021938 | 0.273 | 0.185 | 6.73E-27 | CD4_Naive_UCBMC |
| DNTTIP2           | 3.26E-31 | 0.54965015 | 0.382 | 0.294 | 1.16E-26 | CD4_Naive_UCBMC |
| ABCG1             | 3.37E-31 | 0.56133756 | 0.404 | 0.321 | 1.19E-26 | CD4_Naive_UCBMC |
| COX4I1            | 5.01E-31 | 0.22046113 | 0.916 | 0.853 | 1.78E-26 | CD4_Naive_UCBMC |
| KDM3A             | 5.08E-31 | 0.55611785 | 0.322 | 0.229 | 1.80E-26 | CD4_Naive_UCBMC |
| NRAS              | 6.68E-31 | 0.74869887 | 0.266 | 0.182 | 2.37E-26 | CD4_Naive_UCBMC |
| TNRC6B            | 7.62E-31 | 0.16032741 | 0.915 | 0.866 | 2.70E-26 | CD4_Naive_UCBMC |
| CTNNB1            | 7.68E-31 | 0.34524088 | 0.622 | 0.546 | 2.72E-26 | CD4_Naive_UCBMC |
| RELB              | 8.05E-31 | 0.66577786 | 0.291 | 0.203 | 2.85E-26 | CD4_Naive_UCBMC |
| TAB2              | 8.97E-31 | 0.44056873 | 0.432 | 0.344 | 3.18E-26 | CD4_Naive_UCBMC |
| RPL8              | 1.34E-30 | 0.10478669 | 0.995 | 0.983 | 4.75E-26 | CD4_Naive_UCBMC |
| TNKS2             | 1.42E-30 | 0.47652841 | 0.411 | 0.324 | 5.05E-26 | CD4_Naive_UCBMC |
| CMTR1             | 1.49E-30 | 0.5635024  | 0.349 | 0.262 | 5.28E-26 | CD4_Naive_UCBMC |
| HACD2             | 2.82E-30 | 0.75505938 | 0.257 | 0.172 | 9.98E-26 | CD4_Naive_UCBMC |
| C18H18orf32       | 2.92E-30 | 0.16366605 | 0.988 | 0.96  | 1.04E-25 | CD4_Naive_UCBMC |
| UBE2H             | 3.05E-30 | 0.30913471 | 0.663 | 0.588 | 1.08E-25 | CD4_Naive_UCBMC |
| VPS54             | 4.04E-30 | 0.50058826 | 0.371 | 0.28  | 1.43E-25 | CD4_Naive_UCBMC |
| EIF3L             | 5.40E-30 | 0.315949   | 0.642 | 0.579 | 1.91E-25 | CD4_Naive_UCBMC |
| TOMM7             | 6.77E-30 | 0.17185024 | 0.957 | 0.91  | 2.40E-25 | CD4_Naive_UCBMC |
| CSNK2A1           | 7.45E-30 | 0.41529193 | 0.519 | 0.444 | 2.64E-25 | CD4_Naive_UCBMC |
| KCMF1             | 7.81E-30 | 0.53177464 | 0.362 | 0.273 | 2.77E-25 | CD4_Naive_UCBMC |
| DPM1              | 1.14E-29 | 0.71548352 | 0.267 | 0.184 | 4.03E-25 | CD4_Naive_UCBMC |
| RPS6KA5           | 1.30E-29 | 0.39587383 | 0.515 | 0.427 | 4.62E-25 | CD4_Naive_UCBMC |
| MED21             | 1.44E-29 | 0.43983308 | 0.361 | 0.272 | 5.09E-25 | CD4_Naive_UCBMC |
| BCL7B             | 1.48E-29 | 0.65531243 | 0.299 | 0.215 | 5.23E-25 | CD4_Naive_UCBMC |
| PLEKHM1           | 3.02E-29 | 0.61290176 | 0.253 | 0.17  | 1.07E-24 | CD4_Naive_UCBMC |
| RYBP              | 3.07E-29 | 0.46212093 | 0.385 | 0.301 | 1.09E-24 | CD4_Naive_UCBMC |
| CLASP2            | 3.18E-29 | 0.36107677 | 0.569 | 0.492 | 1.13E-24 | CD4_Naive_UCBMC |
| TSC22D3           | 4.40E-29 | 0.2796677  | 0.722 | 0.648 | 1.56E-24 | CD4_Naive_UCBMC |
| ENSMUG00000006293 | 6.39E-29 | 0.4354176  | 0.544 | 0.474 | 2.27E-24 | CD4_Naive_UCBMC |
| MYO5A             | 6.46E-29 | 0.51325783 | 0.313 | 0.225 | 2.29E-24 | CD4_Naive_UCBMC |

|                   |          |            |       |       |          |                 |
|-------------------|----------|------------|-------|-------|----------|-----------------|
| UTY               | 9.66E-29 | 0.3335567  | 0.487 | 0.382 | 3.42E-24 | CD4_Naive_UCBMC |
| EIF3G             | 9.71E-29 | 0.36698126 | 0.545 | 0.472 | 3.44E-24 | CD4_Naive_UCBMC |
| RWDD1             | 1.07E-28 | 0.36992322 | 0.596 | 0.521 | 3.81E-24 | CD4_Naive_UCBMC |
| MON2              | 1.18E-28 | 0.42791776 | 0.447 | 0.37  | 4.16E-24 | CD4_Naive_UCBMC |
| HACD3             | 1.22E-28 | 0.70991135 | 0.29  | 0.209 | 4.32E-24 | CD4_Naive_UCBMC |
| LATS1             | 1.24E-28 | 0.70067894 | 0.273 | 0.192 | 4.40E-24 | CD4_Naive_UCBMC |
| ILKAP             | 1.28E-28 | 0.45491263 | 0.497 | 0.427 | 4.55E-24 | CD4_Naive_UCBMC |
| SDF2              | 1.84E-28 | 0.6464042  | 0.281 | 0.2   | 6.53E-24 | CD4_Naive_UCBMC |
| TRA2A             | 2.27E-28 | 0.23144224 | 0.839 | 0.77  | 8.04E-24 | CD4_Naive_UCBMC |
| MORF4L1           | 2.83E-28 | 0.24718107 | 0.763 | 0.698 | 1.00E-23 | CD4_Naive_UCBMC |
| EEF2              | 3.38E-28 | 0.20736035 | 0.886 | 0.822 | 1.20E-23 | CD4_Naive_UCBMC |
| COX7C             | 3.46E-28 | 0.22042758 | 0.852 | 0.789 | 1.23E-23 | CD4_Naive_UCBMC |
| RNF103            | 4.03E-28 | 0.55603266 | 0.372 | 0.294 | 1.43E-23 | CD4_Naive_UCBMC |
| MAN2A1            | 6.27E-28 | 0.24589453 | 0.765 | 0.696 | 2.22E-23 | CD4_Naive_UCBMC |
| KDM7A             | 7.00E-28 | 0.49425282 | 0.383 | 0.302 | 2.48E-23 | CD4_Naive_UCBMC |
| TBC1D22B          | 9.43E-28 | 0.59547602 | 0.294 | 0.211 | 3.34E-23 | CD4_Naive_UCBMC |
| USP16             | 9.54E-28 | 0.46567752 | 0.42  | 0.344 | 3.38E-23 | CD4_Naive_UCBMC |
| CTSH              | 9.92E-28 | 0.4472072  | 0.282 | 0.196 | 3.51E-23 | CD4_Naive_UCBMC |
| RNMT              | 1.12E-27 | 0.16418398 | 0.726 | 0.666 | 3.96E-23 | CD4_Naive_UCBMC |
| FAM214A           | 1.19E-27 | 0.35899242 | 0.437 | 0.348 | 4.22E-23 | CD4_Naive_UCBMC |
| CREBBP            | 1.27E-27 | 0.29262426 | 0.64  | 0.572 | 4.51E-23 | CD4_Naive_UCBMC |
| LCOR              | 1.42E-27 | 0.26713453 | 0.556 | 0.476 | 5.02E-23 | CD4_Naive_UCBMC |
| DHX29             | 1.97E-27 | 0.51805573 | 0.329 | 0.245 | 6.98E-23 | CD4_Naive_UCBMC |
| DLG1              | 2.63E-27 | 0.26566587 | 0.712 | 0.639 | 9.33E-23 | CD4_Naive_UCBMC |
| ZNF207            | 3.54E-27 | 0.39370001 | 0.51  | 0.439 | 1.25E-22 | CD4_Naive_UCBMC |
| OSER1             | 3.54E-27 | 0.52351879 | 0.334 | 0.25  | 1.26E-22 | CD4_Naive_UCBMC |
| YTHDF3            | 3.56E-27 | 0.40337122 | 0.448 | 0.367 | 1.26E-22 | CD4_Naive_UCBMC |
| THOC1             | 3.76E-27 | 0.62030886 | 0.321 | 0.242 | 1.33E-22 | CD4_Naive_UCBMC |
| TAGLN2            | 4.69E-27 | 0.19647484 | 0.689 | 0.608 | 1.66E-22 | CD4_Naive_UCBMC |
| CERS6             | 4.74E-27 | 0.22442266 | 0.773 | 0.706 | 1.68E-22 | CD4_Naive_UCBMC |
| MTMR3             | 4.77E-27 | 0.44779856 | 0.372 | 0.291 | 1.69E-22 | CD4_Naive_UCBMC |
| ENSMUG00000060545 | 5.13E-27 | 0.26385515 | 0.568 | 0.49  | 1.82E-22 | CD4_Naive_UCBMC |
| SCAF8             | 5.45E-27 | 0.32574085 | 0.595 | 0.529 | 1.93E-22 | CD4_Naive_UCBMC |

|                    |          |            |       |       |          |                 |
|--------------------|----------|------------|-------|-------|----------|-----------------|
| EIF3H              | 1.18E-26 | 0.23842641 | 0.83  | 0.768 | 4.17E-22 | CD4_Naive_UCBMC |
| CDC73              | 1.45E-26 | 0.40856582 | 0.479 | 0.402 | 5.14E-22 | CD4_Naive_UCBMC |
| CLDND1             | 1.77E-26 | 0.54304803 | 0.312 | 0.231 | 6.27E-22 | CD4_Naive_UCBMC |
| MED15              | 1.77E-26 | 0.62528169 | 0.306 | 0.229 | 6.28E-22 | CD4_Naive_UCBMC |
| NFYC               | 2.05E-26 | 0.56854235 | 0.363 | 0.287 | 7.27E-22 | CD4_Naive_UCBMC |
| ENSMMUG00000012537 | 2.29E-26 | 0.41463012 | 0.527 | 0.462 | 8.13E-22 | CD4_Naive_UCBMC |
| AFF4               | 3.37E-26 | 0.41119544 | 0.356 | 0.273 | 1.19E-21 | CD4_Naive_UCBMC |
| ARHGEF3            | 3.38E-26 | 0.30888929 | 0.576 | 0.494 | 1.20E-21 | CD4_Naive_UCBMC |
| FAM133B            | 3.45E-26 | 0.38556376 | 0.47  | 0.393 | 1.22E-21 | CD4_Naive_UCBMC |
| GALNT1             | 3.85E-26 | 0.56160581 | 0.291 | 0.209 | 1.36E-21 | CD4_Naive_UCBMC |
| ITGA4              | 3.89E-26 | 0.3738728  | 0.389 | 0.297 | 1.38E-21 | CD4_Naive_UCBMC |
| PRKCI              | 4.60E-26 | 0.66499601 | 0.257 | 0.18  | 1.63E-21 | CD4_Naive_UCBMC |
| CPSF6              | 4.76E-26 | 0.42465647 | 0.451 | 0.38  | 1.69E-21 | CD4_Naive_UCBMC |
| KDM1A              | 5.21E-26 | 0.56536047 | 0.328 | 0.247 | 1.85E-21 | CD4_Naive_UCBMC |
| GALNT11            | 5.69E-26 | 0.4774894  | 0.332 | 0.249 | 2.02E-21 | CD4_Naive_UCBMC |
| TOGARAM1           | 6.02E-26 | 0.60710616 | 0.256 | 0.176 | 2.13E-21 | CD4_Naive_UCBMC |
| TTC7A              | 6.26E-26 | 0.79652831 | 0.254 | 0.179 | 2.22E-21 | CD4_Naive_UCBMC |
| PAFAH1B2           | 6.37E-26 | 0.5475873  | 0.296 | 0.217 | 2.26E-21 | CD4_Naive_UCBMC |
| SNX29              | 8.33E-26 | 0.27264286 | 0.58  | 0.509 | 2.95E-21 | CD4_Naive_UCBMC |
| CCDC91             | 8.48E-26 | 0.20469988 | 0.702 | 0.633 | 3.00E-21 | CD4_Naive_UCBMC |
| ENSMMUG00000020751 | 8.73E-26 | 0.57792443 | 0.35  | 0.275 | 3.09E-21 | CD4_Naive_UCBMC |
| DCTN6              | 1.01E-25 | 0.65633564 | 0.267 | 0.188 | 3.59E-21 | CD4_Naive_UCBMC |
| WIPI2              | 1.21E-25 | 0.45901842 | 0.398 | 0.326 | 4.28E-21 | CD4_Naive_UCBMC |
| PPHLN1             | 1.70E-25 | 0.34356733 | 0.564 | 0.496 | 6.04E-21 | CD4_Naive_UCBMC |
| TUT7               | 1.96E-25 | 0.36745895 | 0.47  | 0.395 | 6.94E-21 | CD4_Naive_UCBMC |
| RTRAF              | 2.06E-25 | 0.31570119 | 0.589 | 0.532 | 7.29E-21 | CD4_Naive_UCBMC |
| SDHB               | 2.20E-25 | 0.63991558 | 0.315 | 0.244 | 7.81E-21 | CD4_Naive_UCBMC |
| TRPS1              | 2.26E-25 | 0.28164287 | 0.496 | 0.408 | 8.01E-21 | CD4_Naive_UCBMC |
| CBLL1              | 2.33E-25 | 0.58152091 | 0.302 | 0.226 | 8.27E-21 | CD4_Naive_UCBMC |
| CCNT2              | 2.42E-25 | 0.45108569 | 0.409 | 0.333 | 8.59E-21 | CD4_Naive_UCBMC |
| PRKX               | 3.69E-25 | 0.28265029 | 0.604 | 0.531 | 1.31E-20 | CD4_Naive_UCBMC |
| SIN3A              | 4.09E-25 | 0.50952799 | 0.385 | 0.31  | 1.45E-20 | CD4_Naive_UCBMC |
| SLC22A18           | 4.73E-25 | 0.31823606 | 0.556 | 0.482 | 1.68E-20 | CD4_Naive_UCBMC |

|                    |          |            |       |       |          |                 |
|--------------------|----------|------------|-------|-------|----------|-----------------|
| ZNF410             | 5.53E-25 | 0.65614969 | 0.262 | 0.186 | 1.96E-20 | CD4_Naive_UCBMC |
| AMBRA1             | 6.45E-25 | 0.4363251  | 0.428 | 0.354 | 2.28E-20 | CD4_Naive_UCBMC |
| RRM1               | 7.06E-25 | 0.54766586 | 0.295 | 0.219 | 2.50E-20 | CD4_Naive_UCBMC |
| EFR3A              | 1.18E-24 | 0.40127446 | 0.401 | 0.321 | 4.18E-20 | CD4_Naive_UCBMC |
| WDR43              | 1.20E-24 | 0.34080782 | 0.503 | 0.427 | 4.24E-20 | CD4_Naive_UCBMC |
| RPRD2              | 1.63E-24 | 0.34650841 | 0.519 | 0.444 | 5.79E-20 | CD4_Naive_UCBMC |
| TEC                | 1.64E-24 | 0.22462635 | 0.573 | 0.488 | 5.83E-20 | CD4_Naive_UCBMC |
| TRAPPC10           | 1.66E-24 | 0.3697971  | 0.418 | 0.341 | 5.90E-20 | CD4_Naive_UCBMC |
| SNX9               | 1.87E-24 | 0.4607384  | 0.341 | 0.26  | 6.62E-20 | CD4_Naive_UCBMC |
| ATP6V1H            | 1.89E-24 | 0.58649009 | 0.304 | 0.229 | 6.71E-20 | CD4_Naive_UCBMC |
| RSL1D1             | 2.09E-24 | 0.36052429 | 0.475 | 0.411 | 7.41E-20 | CD4_Naive_UCBMC |
| UXS1               | 3.24E-24 | 0.2927812  | 0.565 | 0.497 | 1.15E-19 | CD4_Naive_UCBMC |
| NME2               | 3.46E-24 | 0.13129623 | 0.962 | 0.926 | 1.23E-19 | CD4_Naive_UCBMC |
| PHF3               | 4.18E-24 | 0.26777447 | 0.579 | 0.508 | 1.48E-19 | CD4_Naive_UCBMC |
| TMEM50A            | 4.23E-24 | 0.3493184  | 0.454 | 0.386 | 1.50E-19 | CD4_Naive_UCBMC |
| DAAM1              | 6.54E-24 | 0.55592159 | 0.28  | 0.203 | 2.32E-19 | CD4_Naive_UCBMC |
| MICU2              | 6.90E-24 | 0.46100602 | 0.426 | 0.355 | 2.45E-19 | CD4_Naive_UCBMC |
| INPP4B             | 1.11E-23 | 0.30083724 | 0.612 | 0.53  | 3.92E-19 | CD4_Naive_UCBMC |
| DNAJC7             | 1.12E-23 | 0.49840584 | 0.393 | 0.328 | 3.97E-19 | CD4_Naive_UCBMC |
| PPIG               | 1.23E-23 | 0.29842106 | 0.564 | 0.491 | 4.35E-19 | CD4_Naive_UCBMC |
| HELZ               | 1.25E-23 | 0.27928605 | 0.602 | 0.535 | 4.45E-19 | CD4_Naive_UCBMC |
| WDR44              | 1.67E-23 | 0.57019487 | 0.269 | 0.195 | 5.91E-19 | CD4_Naive_UCBMC |
| NCAPD3             | 1.83E-23 | 0.45618954 | 0.353 | 0.281 | 6.50E-19 | CD4_Naive_UCBMC |
| ENSMMUG00000046264 | 2.07E-23 | 0.44209988 | 0.457 | 0.383 | 7.35E-19 | CD4_Naive_UCBMC |
| ARID2              | 2.72E-23 | 0.2414272  | 0.674 | 0.603 | 9.65E-19 | CD4_Naive_UCBMC |
| RSBN1              | 3.76E-23 | 0.60167639 | 0.291 | 0.22  | 1.33E-18 | CD4_Naive_UCBMC |
| RHOH               | 4.71E-23 | 0.20403284 | 0.782 | 0.711 | 1.67E-18 | CD4_Naive_UCBMC |
| MED23              | 4.77E-23 | 0.42094192 | 0.368 | 0.297 | 1.69E-18 | CD4_Naive_UCBMC |
| CCDC59             | 5.38E-23 | 0.48295366 | 0.349 | 0.278 | 1.90E-18 | CD4_Naive_UCBMC |
| GPATCH8            | 5.67E-23 | 0.29145711 | 0.571 | 0.515 | 2.01E-18 | CD4_Naive_UCBMC |
| RELL1              | 7.56E-23 | 0.36571542 | 0.47  | 0.394 | 2.68E-18 | CD4_Naive_UCBMC |
| CEBPZ              | 1.14E-22 | 0.35574352 | 0.442 | 0.376 | 4.02E-18 | CD4_Naive_UCBMC |
| ZC3H7A             | 1.21E-22 | 0.48687069 | 0.348 | 0.277 | 4.30E-18 | CD4_Naive_UCBMC |



|                   |          |            |       |       |          |                 |
|-------------------|----------|------------|-------|-------|----------|-----------------|
| ZNF451            | 1.23E-22 | 0.33522178 | 0.487 | 0.42  | 4.35E-18 | CD4_Naive_UCBMC |
| ASB3              | 1.66E-22 | 0.44998441 | 0.355 | 0.283 | 5.87E-18 | CD4_Naive_UCBMC |
| MCM9              | 1.74E-22 | 0.46453555 | 0.34  | 0.265 | 6.16E-18 | CD4_Naive_UCBMC |
| ZNRF2             | 1.85E-22 | 0.56171414 | 0.25  | 0.177 | 6.57E-18 | CD4_Naive_UCBMC |
| UBE4A             | 2.62E-22 | 0.45579397 | 0.32  | 0.247 | 9.27E-18 | CD4_Naive_UCBMC |
| ACIN1             | 2.66E-22 | 0.30722423 | 0.585 | 0.526 | 9.43E-18 | CD4_Naive_UCBMC |
| GPR89A            | 3.77E-22 | 0.55356706 | 0.291 | 0.222 | 1.33E-17 | CD4_Naive_UCBMC |
| FRS2              | 4.18E-22 | 0.48188226 | 0.312 | 0.235 | 1.48E-17 | CD4_Naive_UCBMC |
| PREP              | 4.20E-22 | 0.43619161 | 0.396 | 0.324 | 1.49E-17 | CD4_Naive_UCBMC |
| ARHGAP12          | 4.65E-22 | 0.33525967 | 0.46  | 0.389 | 1.65E-17 | CD4_Naive_UCBMC |
| PHF11             | 5.68E-22 | 0.48175036 | 0.381 | 0.313 | 2.01E-17 | CD4_Naive_UCBMC |
| USP10             | 6.53E-22 | 0.24766176 | 0.561 | 0.498 | 2.31E-17 | CD4_Naive_UCBMC |
| KMT2C             | 7.62E-22 | 0.18383038 | 0.857 | 0.798 | 2.70E-17 | CD4_Naive_UCBMC |
| OGT               | 9.25E-22 | 0.24704588 | 0.632 | 0.568 | 3.28E-17 | CD4_Naive_UCBMC |
| DCAF10            | 9.51E-22 | 0.60572662 | 0.285 | 0.215 | 3.37E-17 | CD4_Naive_UCBMC |
| LEMD3             | 9.92E-22 | 0.34622095 | 0.43  | 0.363 | 3.52E-17 | CD4_Naive_UCBMC |
| TCEA1             | 1.21E-21 | 0.34356357 | 0.553 | 0.495 | 4.27E-17 | CD4_Naive_UCBMC |
| CCNK              | 1.48E-21 | 0.37683375 | 0.487 | 0.428 | 5.26E-17 | CD4_Naive_UCBMC |
| ENSMUG00000053384 | 1.70E-21 | 0.59083467 | 0.3   | 0.232 | 6.01E-17 | CD4_Naive_UCBMC |
| ZNF506            | 1.91E-21 | 0.42819333 | 0.364 | 0.295 | 6.76E-17 | CD4_Naive_UCBMC |
| JMY               | 2.14E-21 | 0.20002753 | 0.588 | 0.506 | 7.59E-17 | CD4_Naive_UCBMC |
| LRRC8C            | 2.19E-21 | 0.57554845 | 0.259 | 0.186 | 7.75E-17 | CD4_Naive_UCBMC |
| TMEM106B          | 2.37E-21 | 0.59182382 | 0.289 | 0.222 | 8.40E-17 | CD4_Naive_UCBMC |
| SEC22B            | 2.71E-21 | 0.58098315 | 0.283 | 0.216 | 9.60E-17 | CD4_Naive_UCBMC |
| NT5C2             | 2.99E-21 | 0.2681921  | 0.549 | 0.484 | 1.06E-16 | CD4_Naive_UCBMC |
| MED27             | 3.05E-21 | 0.38709925 | 0.388 | 0.319 | 1.08E-16 | CD4_Naive_UCBMC |
| JAML              | 4.02E-21 | 0.3717979  | 0.402 | 0.327 | 1.42E-16 | CD4_Naive_UCBMC |
| KRAS              | 4.03E-21 | 0.42041378 | 0.415 | 0.355 | 1.43E-16 | CD4_Naive_UCBMC |
| SLMAP             | 4.82E-21 | 0.28266619 | 0.582 | 0.521 | 1.71E-16 | CD4_Naive_UCBMC |
| APC               | 4.87E-21 | 0.44545465 | 0.357 | 0.287 | 1.72E-16 | CD4_Naive_UCBMC |
| TCP11L2           | 4.94E-21 | 0.17434445 | 0.398 | 0.319 | 1.75E-16 | CD4_Naive_UCBMC |
| SNX13             | 5.54E-21 | 0.38785171 | 0.38  | 0.315 | 1.96E-16 | CD4_Naive_UCBMC |
| TBC1D24           | 5.75E-21 | 0.33217342 | 0.486 | 0.434 | 2.04E-16 | CD4_Naive_UCBMC |

|                    |          |            |       |       |          |                 |
|--------------------|----------|------------|-------|-------|----------|-----------------|
| SDHAF4             | 6.31E-21 | 0.28931118 | 0.563 | 0.507 | 2.23E-16 | CD4_Naive_UCBMC |
| ENSMMUG00000051957 | 6.42E-21 | 0.5534236  | 0.326 | 0.255 | 2.27E-16 | CD4_Naive_UCBMC |
| ERO1B              | 9.12E-21 | 0.33214095 | 0.53  | 0.463 | 3.23E-16 | CD4_Naive_UCBMC |
| FBXO25             | 1.19E-20 | 0.27890902 | 0.302 | 0.227 | 4.23E-16 | CD4_Naive_UCBMC |
| ENSMMUG00000062716 | 1.23E-20 | 0.56940299 | 0.32  | 0.245 | 4.37E-16 | CD4_Naive_UCBMC |
| SHOC2              | 1.24E-20 | 0.28737855 | 0.529 | 0.465 | 4.38E-16 | CD4_Naive_UCBMC |
| WARS2              | 1.60E-20 | 0.57143671 | 0.285 | 0.217 | 5.66E-16 | CD4_Naive_UCBMC |
| MRPS9              | 1.61E-20 | 0.53026237 | 0.321 | 0.257 | 5.71E-16 | CD4_Naive_UCBMC |
| HECA               | 1.67E-20 | 0.26274968 | 0.46  | 0.388 | 5.90E-16 | CD4_Naive_UCBMC |
| RBM23              | 2.01E-20 | 0.60242    | 0.255 | 0.189 | 7.11E-16 | CD4_Naive_UCBMC |
| APOOL              | 2.24E-20 | 0.57213627 | 0.256 | 0.189 | 7.94E-16 | CD4_Naive_UCBMC |
| MTR                | 2.42E-20 | 0.37953851 | 0.32  | 0.249 | 8.58E-16 | CD4_Naive_UCBMC |
| ENSMMUG00000022769 | 2.65E-20 | 0.22840947 | 0.623 | 0.57  | 9.40E-16 | CD4_Naive_UCBMC |
| C1GALT1            | 3.07E-20 | 0.3701242  | 0.42  | 0.355 | 1.09E-15 | CD4_Naive_UCBMC |
| SAFB               | 3.16E-20 | 0.16474338 | 0.907 | 0.852 | 1.12E-15 | CD4_Naive_UCBMC |
| NOL10              | 3.41E-20 | 0.52795549 | 0.336 | 0.271 | 1.21E-15 | CD4_Naive_UCBMC |
| KAT7               | 3.66E-20 | 0.36068881 | 0.44  | 0.379 | 1.30E-15 | CD4_Naive_UCBMC |
| RTF2               | 3.99E-20 | 0.52576181 | 0.302 | 0.237 | 1.42E-15 | CD4_Naive_UCBMC |
| RBM27              | 4.01E-20 | 0.31234156 | 0.528 | 0.468 | 1.42E-15 | CD4_Naive_UCBMC |
| ARIH1              | 4.07E-20 | 0.15978639 | 0.72  | 0.659 | 1.44E-15 | CD4_Naive_UCBMC |
| RNPC3              | 4.40E-20 | 0.64147237 | 0.254 | 0.191 | 1.56E-15 | CD4_Naive_UCBMC |
| APBB1IP            | 4.63E-20 | 0.12912253 | 0.917 | 0.88  | 1.64E-15 | CD4_Naive_UCBMC |
| HBS1L              | 4.93E-20 | 0.26898129 | 0.575 | 0.522 | 1.75E-15 | CD4_Naive_UCBMC |
| MED13              | 5.42E-20 | 0.3431394  | 0.411 | 0.347 | 1.92E-15 | CD4_Naive_UCBMC |
| ATP6V1E1           | 6.01E-20 | 0.45806674 | 0.322 | 0.257 | 2.13E-15 | CD4_Naive_UCBMC |
| KLHL2              | 7.02E-20 | 0.47445502 | 0.291 | 0.222 | 2.49E-15 | CD4_Naive_UCBMC |
| TAF2               | 7.75E-20 | 0.52346346 | 0.277 | 0.21  | 2.74E-15 | CD4_Naive_UCBMC |
| NUP98              | 1.00E-19 | 0.27120915 | 0.569 | 0.519 | 3.56E-15 | CD4_Naive_UCBMC |
| CDC42              | 1.01E-19 | 0.15063918 | 0.937 | 0.882 | 3.59E-15 | CD4_Naive_UCBMC |
| PRKD3              | 1.03E-19 | 0.25319705 | 0.503 | 0.434 | 3.66E-15 | CD4_Naive_UCBMC |
| NBR1               | 1.13E-19 | 0.32583729 | 0.452 | 0.389 | 4.01E-15 | CD4_Naive_UCBMC |
| RBM25              | 1.27E-19 | 0.24698435 | 0.578 | 0.519 | 4.50E-15 | CD4_Naive_UCBMC |
| QRICH1             | 1.28E-19 | 0.41645874 | 0.378 | 0.314 | 4.54E-15 | CD4_Naive_UCBMC |

|                   |          |            |       |       |          |                 |
|-------------------|----------|------------|-------|-------|----------|-----------------|
| ELF2              | 1.29E-19 | 0.33982698 | 0.391 | 0.323 | 4.58E-15 | CD4_Naive_UCBMC |
| EIF3K             | 1.61E-19 | 0.12889038 | 0.926 | 0.873 | 5.70E-15 | CD4_Naive_UCBMC |
| TTC17             | 1.67E-19 | 0.28216889 | 0.516 | 0.454 | 5.92E-15 | CD4_Naive_UCBMC |
| DNAJC3            | 1.68E-19 | 0.28110685 | 0.511 | 0.45  | 5.95E-15 | CD4_Naive_UCBMC |
| SEPTIN7           | 1.97E-19 | 0.17454109 | 0.832 | 0.788 | 6.97E-15 | CD4_Naive_UCBMC |
| TENT5C            | 2.56E-19 | 0.13184374 | 0.402 | 0.322 | 9.07E-15 | CD4_Naive_UCBMC |
| CHD7              | 2.61E-19 | 0.27540807 | 0.577 | 0.518 | 9.26E-15 | CD4_Naive_UCBMC |
| DCK               | 3.15E-19 | 0.4592232  | 0.286 | 0.219 | 1.12E-14 | CD4_Naive_UCBMC |
| NFKB1             | 3.22E-19 | 0.19091829 | 0.575 | 0.503 | 1.14E-14 | CD4_Naive_UCBMC |
| UBR5              | 3.50E-19 | 0.25306687 | 0.573 | 0.526 | 1.24E-14 | CD4_Naive_UCBMC |
| C18H18orf25       | 4.37E-19 | 0.39300079 | 0.382 | 0.32  | 1.55E-14 | CD4_Naive_UCBMC |
| AHCTF1            | 4.43E-19 | 0.39029347 | 0.422 | 0.364 | 1.57E-14 | CD4_Naive_UCBMC |
| SECISBP2          | 4.46E-19 | 0.4119572  | 0.402 | 0.343 | 1.58E-14 | CD4_Naive_UCBMC |
| FYN               | 5.73E-19 | 0.18777167 | 0.789 | 0.72  | 2.03E-14 | CD4_Naive_UCBMC |
| SCLT1             | 6.46E-19 | 0.36683138 | 0.412 | 0.343 | 2.29E-14 | CD4_Naive_UCBMC |
| SAP18             | 7.53E-19 | 0.30284593 | 0.515 | 0.467 | 2.67E-14 | CD4_Naive_UCBMC |
| PRKCH             | 7.85E-19 | 0.13472981 | 0.853 | 0.805 | 2.78E-14 | CD4_Naive_UCBMC |
| ATXN7             | 7.86E-19 | 0.19272228 | 0.561 | 0.508 | 2.78E-14 | CD4_Naive_UCBMC |
| NUP214            | 9.65E-19 | 0.38125706 | 0.415 | 0.356 | 3.42E-14 | CD4_Naive_UCBMC |
| XPO7              | 1.07E-18 | 0.45734075 | 0.3   | 0.237 | 3.80E-14 | CD4_Naive_UCBMC |
| RAF1              | 1.15E-18 | 0.35792625 | 0.442 | 0.386 | 4.09E-14 | CD4_Naive_UCBMC |
| PIK3C2A           | 1.28E-18 | 0.4191912  | 0.31  | 0.244 | 4.52E-14 | CD4_Naive_UCBMC |
| GRAP              | 1.57E-18 | 0.36563665 | 0.389 | 0.327 | 5.55E-14 | CD4_Naive_UCBMC |
| OPA1              | 1.84E-18 | 0.43754768 | 0.348 | 0.285 | 6.51E-14 | CD4_Naive_UCBMC |
| RAPGEF2           | 1.98E-18 | 0.25769518 | 0.296 | 0.224 | 7.02E-14 | CD4_Naive_UCBMC |
| ADNP              | 2.32E-18 | 0.29781402 | 0.413 | 0.347 | 8.21E-14 | CD4_Naive_UCBMC |
| MBTPS1            | 2.76E-18 | 0.27082139 | 0.468 | 0.408 | 9.80E-14 | CD4_Naive_UCBMC |
| RSL24D1           | 3.07E-18 | 0.19934122 | 0.677 | 0.627 | 1.09E-13 | CD4_Naive_UCBMC |
| MSI2              | 3.21E-18 | 0.20767072 | 0.69  | 0.626 | 1.14E-13 | CD4_Naive_UCBMC |
| ACSL3             | 3.31E-18 | 0.4430478  | 0.29  | 0.227 | 1.17E-13 | CD4_Naive_UCBMC |
| ENSMUG00000045959 | 4.18E-18 | 0.45592153 | 0.31  | 0.25  | 1.48E-13 | CD4_Naive_UCBMC |
| MEF2A             | 4.68E-18 | 0.31262707 | 0.466 | 0.407 | 1.66E-13 | CD4_Naive_UCBMC |
| ITSN2             | 5.23E-18 | 0.24386346 | 0.618 | 0.562 | 1.85E-13 | CD4_Naive_UCBMC |

|                    |          |            |       |       |          |                 |
|--------------------|----------|------------|-------|-------|----------|-----------------|
| APPBP2             | 5.24E-18 | 0.35097018 | 0.351 | 0.289 | 1.86E-13 | CD4_Naive_UCBMC |
| GLYR1              | 5.53E-18 | 0.4827573  | 0.29  | 0.229 | 1.96E-13 | CD4_Naive_UCBMC |
| SUMO1              | 5.91E-18 | 0.2568168  | 0.587 | 0.541 | 2.09E-13 | CD4_Naive_UCBMC |
| KPNA6              | 5.92E-18 | 0.4923745  | 0.28  | 0.217 | 2.10E-13 | CD4_Naive_UCBMC |
| AFTPH              | 6.10E-18 | 0.33163225 | 0.409 | 0.352 | 2.16E-13 | CD4_Naive_UCBMC |
| TM9SF2             | 6.52E-18 | 0.34770775 | 0.352 | 0.286 | 2.31E-13 | CD4_Naive_UCBMC |
| SF3B2              | 6.60E-18 | 0.37205383 | 0.407 | 0.356 | 2.34E-13 | CD4_Naive_UCBMC |
| ENSMMUG00000056331 | 6.65E-18 | 0.25924184 | 0.361 | 0.282 | 2.36E-13 | CD4_Naive_UCBMC |
| TP53BP1            | 7.61E-18 | 0.36070994 | 0.411 | 0.353 | 2.70E-13 | CD4_Naive_UCBMC |
| DYRK2              | 7.73E-18 | 0.26531109 | 0.463 | 0.402 | 2.74E-13 | CD4_Naive_UCBMC |
| LEPROTL1           | 8.51E-18 | 0.29158549 | 0.352 | 0.292 | 3.02E-13 | CD4_Naive_UCBMC |
| AFF1               | 8.65E-18 | 0.15267439 | 0.635 | 0.568 | 3.06E-13 | CD4_Naive_UCBMC |
| RNGTT              | 9.31E-18 | 0.24454331 | 0.509 | 0.448 | 3.30E-13 | CD4_Naive_UCBMC |
| VPS4B              | 9.48E-18 | 0.36671908 | 0.378 | 0.319 | 3.36E-13 | CD4_Naive_UCBMC |
| TAPT1              | 9.58E-18 | 0.4584393  | 0.279 | 0.218 | 3.39E-13 | CD4_Naive_UCBMC |
| ZNF827             | 9.70E-18 | 0.21230992 | 0.55  | 0.488 | 3.44E-13 | CD4_Naive_UCBMC |
| SP100              | 1.06E-17 | 0.24202563 | 0.593 | 0.537 | 3.76E-13 | CD4_Naive_UCBMC |
| FBXO34             | 1.22E-17 | 0.17692161 | 0.683 | 0.621 | 4.33E-13 | CD4_Naive_UCBMC |
| NPM3               | 1.28E-17 | 0.34628919 | 0.467 | 0.413 | 4.53E-13 | CD4_Naive_UCBMC |
| SFMBT1             | 1.47E-17 | 0.35458515 | 0.349 | 0.283 | 5.21E-13 | CD4_Naive_UCBMC |
| FAM168A            | 1.53E-17 | 0.36300199 | 0.394 | 0.331 | 5.41E-13 | CD4_Naive_UCBMC |
| NAA25              | 1.61E-17 | 0.38149676 | 0.346 | 0.283 | 5.70E-13 | CD4_Naive_UCBMC |
| DNM1L              | 1.83E-17 | 0.35366736 | 0.367 | 0.307 | 6.49E-13 | CD4_Naive_UCBMC |
| SRSF5              | 1.97E-17 | 0.18713021 | 0.863 | 0.804 | 6.98E-13 | CD4_Naive_UCBMC |
| PRRC2C             | 3.11E-17 | 0.19545727 | 0.784 | 0.736 | 1.10E-12 | CD4_Naive_UCBMC |
| FBXO11             | 3.84E-17 | 0.26188295 | 0.532 | 0.475 | 1.36E-12 | CD4_Naive_UCBMC |
| MTPN               | 5.56E-17 | 0.37255574 | 0.445 | 0.4   | 1.97E-12 | CD4_Naive_UCBMC |
| ALMS1              | 7.20E-17 | 0.45363672 | 0.269 | 0.208 | 2.55E-12 | CD4_Naive_UCBMC |
| ICE1               | 8.12E-17 | 0.44522152 | 0.319 | 0.261 | 2.88E-12 | CD4_Naive_UCBMC |
| CSNK1G3            | 8.42E-17 | 0.34217909 | 0.411 | 0.352 | 2.98E-12 | CD4_Naive_UCBMC |
| HSPA5              | 9.61E-17 | 0.22217815 | 0.588 | 0.538 | 3.41E-12 | CD4_Naive_UCBMC |
| KIDINS220          | 1.12E-16 | 0.3584148  | 0.389 | 0.335 | 3.98E-12 | CD4_Naive_UCBMC |
| UBR1               | 1.15E-16 | 0.19579812 | 0.54  | 0.478 | 4.09E-12 | CD4_Naive_UCBMC |

|                     |          |            |       |       |          |                 |
|---------------------|----------|------------|-------|-------|----------|-----------------|
| RPS27L              | 1.51E-16 | 0.26067389 | 0.452 | 0.4   | 5.36E-12 | CD4_Naive_UCBMC |
| EIF2S3              | 1.77E-16 | 0.38767392 | 0.399 | 0.351 | 6.29E-12 | CD4_Naive_UCBMC |
| ENSMMUG000000001894 | 1.95E-16 | 0.37431403 | 0.406 | 0.356 | 6.92E-12 | CD4_Naive_UCBMC |
| BIRC2               | 2.06E-16 | 0.26109251 | 0.35  | 0.286 | 7.30E-12 | CD4_Naive_UCBMC |
| PJA2                | 2.17E-16 | 0.3652863  | 0.407 | 0.352 | 7.68E-12 | CD4_Naive_UCBMC |
| TRIM72              | 2.24E-16 | 0.16771561 | 0.718 | 0.664 | 7.95E-12 | CD4_Naive_UCBMC |
| PXK                 | 2.33E-16 | 0.47803768 | 0.289 | 0.233 | 8.26E-12 | CD4_Naive_UCBMC |
| WDR20               | 2.42E-16 | 0.4981801  | 0.28  | 0.22  | 8.56E-12 | CD4_Naive_UCBMC |
| ABCB7               | 2.42E-16 | 0.54733769 | 0.283 | 0.227 | 8.58E-12 | CD4_Naive_UCBMC |
| ENSMMUG000000055627 | 3.04E-16 | 0.16981388 | 0.832 | 0.78  | 1.08E-11 | CD4_Naive_UCBMC |
| PLEKHB2             | 3.22E-16 | 0.40971652 | 0.318 | 0.259 | 1.14E-11 | CD4_Naive_UCBMC |
| SREK1               | 3.53E-16 | 0.19469476 | 0.675 | 0.636 | 1.25E-11 | CD4_Naive_UCBMC |
| SMU1                | 4.11E-16 | 0.41585032 | 0.338 | 0.283 | 1.46E-11 | CD4_Naive_UCBMC |
| DIDO1               | 4.44E-16 | 0.3844406  | 0.325 | 0.267 | 1.57E-11 | CD4_Naive_UCBMC |
| RHEB                | 4.64E-16 | 0.33346607 | 0.437 | 0.392 | 1.65E-11 | CD4_Naive_UCBMC |
| EEF1D               | 5.04E-16 | 0.1263671  | 0.899 | 0.859 | 1.79E-11 | CD4_Naive_UCBMC |
| GAPVD1              | 5.30E-16 | 0.33342681 | 0.396 | 0.341 | 1.88E-11 | CD4_Naive_UCBMC |
| PTPN2               | 5.37E-16 | 0.35913178 | 0.437 | 0.388 | 1.90E-11 | CD4_Naive_UCBMC |
| TANC1               | 5.59E-16 | 0.13866369 | 0.577 | 0.507 | 1.98E-11 | CD4_Naive_UCBMC |
| CHIC2               | 7.05E-16 | 0.31558783 | 0.387 | 0.327 | 2.50E-11 | CD4_Naive_UCBMC |
| CAPZA2              | 7.76E-16 | 0.21347827 | 0.57  | 0.518 | 2.75E-11 | CD4_Naive_UCBMC |
| FOXO3               | 8.32E-16 | 0.3910015  | 0.273 | 0.212 | 2.95E-11 | CD4_Naive_UCBMC |
| CDC27               | 9.77E-16 | 0.34171265 | 0.382 | 0.329 | 3.46E-11 | CD4_Naive_UCBMC |
| CD2AP               | 1.01E-15 | 0.34733336 | 0.345 | 0.286 | 3.59E-11 | CD4_Naive_UCBMC |
| GGNBP2              | 1.09E-15 | 0.32443537 | 0.404 | 0.35  | 3.86E-11 | CD4_Naive_UCBMC |
| ARFGAP3             | 1.14E-15 | 0.33026854 | 0.431 | 0.379 | 4.03E-11 | CD4_Naive_UCBMC |
| BDP1                | 1.14E-15 | 0.28957507 | 0.467 | 0.417 | 4.04E-11 | CD4_Naive_UCBMC |
| SOS1                | 1.32E-15 | 0.21923695 | 0.565 | 0.515 | 4.68E-11 | CD4_Naive_UCBMC |
| ATP10A              | 1.36E-15 | 0.12362018 | 0.686 | 0.627 | 4.81E-11 | CD4_Naive_UCBMC |
| NFKBIA              | 1.53E-15 | 0.10243496 | 0.486 | 0.4   | 5.42E-11 | CD4_Naive_UCBMC |
| LAMTOR3             | 1.54E-15 | 0.5193885  | 0.266 | 0.213 | 5.44E-11 | CD4_Naive_UCBMC |
| RAB3GAP2            | 1.57E-15 | 0.37221696 | 0.341 | 0.283 | 5.58E-11 | CD4_Naive_UCBMC |
| CD96                | 1.75E-15 | 0.39474361 | 0.403 | 0.346 | 6.18E-11 | CD4_Naive_UCBMC |

|                    |          |            |       |       |          |                 |
|--------------------|----------|------------|-------|-------|----------|-----------------|
| SNIP1              | 2.01E-15 | 0.55866234 | 0.263 | 0.21  | 7.13E-11 | CD4_Naive_UCBMC |
| ACE                | 2.14E-15 | 0.46733572 | 0.287 | 0.233 | 7.59E-11 | CD4_Naive_UCBMC |
| MAPK1              | 2.60E-15 | 0.30115328 | 0.396 | 0.339 | 9.20E-11 | CD4_Naive_UCBMC |
| REPS1              | 2.75E-15 | 0.41515619 | 0.335 | 0.28  | 9.73E-11 | CD4_Naive_UCBMC |
| UHRF2              | 2.80E-15 | 0.30877472 | 0.395 | 0.341 | 9.92E-11 | CD4_Naive_UCBMC |
| CDC40              | 3.06E-15 | 0.44969731 | 0.313 | 0.26  | 1.09E-10 | CD4_Naive_UCBMC |
| FAF1               | 3.39E-15 | 0.22982949 | 0.602 | 0.555 | 1.20E-10 | CD4_Naive_UCBMC |
| SPCS1              | 3.87E-15 | 0.25417086 | 0.458 | 0.412 | 1.37E-10 | CD4_Naive_UCBMC |
| USP8               | 3.91E-15 | 0.4023542  | 0.304 | 0.249 | 1.39E-10 | CD4_Naive_UCBMC |
| APLP2              | 3.99E-15 | 0.37886521 | 0.303 | 0.245 | 1.41E-10 | CD4_Naive_UCBMC |
| CWC22              | 4.72E-15 | 0.47247305 | 0.267 | 0.212 | 1.67E-10 | CD4_Naive_UCBMC |
| PDXDC1             | 4.97E-15 | 0.37645027 | 0.298 | 0.244 | 1.76E-10 | CD4_Naive_UCBMC |
| TAF3               | 5.12E-15 | 0.24693733 | 0.488 | 0.434 | 1.82E-10 | CD4_Naive_UCBMC |
| AKT3               | 5.88E-15 | 0.11914127 | 0.806 | 0.755 | 2.08E-10 | CD4_Naive_UCBMC |
| TOR1AIP1           | 5.92E-15 | 0.4883823  | 0.266 | 0.212 | 2.10E-10 | CD4_Naive_UCBMC |
| MED4               | 6.18E-15 | 0.4404449  | 0.301 | 0.25  | 2.19E-10 | CD4_Naive_UCBMC |
| AP1G1              | 6.28E-15 | 0.30645983 | 0.367 | 0.311 | 2.23E-10 | CD4_Naive_UCBMC |
| ENSMMUG00000055687 | 6.86E-15 | 0.27157442 | 0.477 | 0.42  | 2.43E-10 | CD4_Naive_UCBMC |
| RPS4Y2             | 7.00E-15 | 0.23058633 | 0.408 | 0.335 | 2.48E-10 | CD4_Naive_UCBMC |
| SELENOT            | 7.42E-15 | 0.4505464  | 0.299 | 0.245 | 2.63E-10 | CD4_Naive_UCBMC |
| ZNF326             | 7.91E-15 | 0.34101824 | 0.391 | 0.337 | 2.80E-10 | CD4_Naive_UCBMC |
| WAC                | 8.12E-15 | 0.1621499  | 0.64  | 0.599 | 2.88E-10 | CD4_Naive_UCBMC |
| RNF34              | 9.44E-15 | 0.44708153 | 0.289 | 0.236 | 3.34E-10 | CD4_Naive_UCBMC |
| FOXO1              | 1.07E-14 | 0.14086907 | 0.758 | 0.699 | 3.78E-10 | CD4_Naive_UCBMC |
| PRDM2              | 1.23E-14 | 0.29590827 | 0.404 | 0.352 | 4.34E-10 | CD4_Naive_UCBMC |
| SLC30A9            | 1.25E-14 | 0.32739644 | 0.413 | 0.366 | 4.45E-10 | CD4_Naive_UCBMC |
| RBPJ               | 1.27E-14 | 0.27084969 | 0.437 | 0.383 | 4.50E-10 | CD4_Naive_UCBMC |
| LRBA               | 1.51E-14 | 0.14777857 | 0.792 | 0.736 | 5.33E-10 | CD4_Naive_UCBMC |
| GTF2H1             | 1.91E-14 | 0.46864249 | 0.268 | 0.215 | 6.76E-10 | CD4_Naive_UCBMC |
| SCAF11             | 2.24E-14 | 0.16197495 | 0.666 | 0.628 | 7.94E-10 | CD4_Naive_UCBMC |
| CRY1               | 2.24E-14 | 0.32316864 | 0.343 | 0.281 | 7.94E-10 | CD4_Naive_UCBMC |
| KAT6B              | 2.86E-14 | 0.19691321 | 0.65  | 0.606 | 1.01E-09 | CD4_Naive_UCBMC |
| CDC5L              | 3.47E-14 | 0.39599988 | 0.348 | 0.301 | 1.23E-09 | CD4_Naive_UCBMC |

|                   |          |            |       |       |          |                 |
|-------------------|----------|------------|-------|-------|----------|-----------------|
| PEX14             | 3.65E-14 | 0.41251656 | 0.362 | 0.311 | 1.29E-09 | CD4_Naive_UCBMC |
| NUP153            | 3.84E-14 | 0.25873401 | 0.428 | 0.372 | 1.36E-09 | CD4_Naive_UCBMC |
| ERLEC1            | 4.18E-14 | 0.40781494 | 0.295 | 0.242 | 1.48E-09 | CD4_Naive_UCBMC |
| UBR4              | 4.30E-14 | 0.36445685 | 0.355 | 0.305 | 1.52E-09 | CD4_Naive_UCBMC |
| CRNKL1            | 4.84E-14 | 0.47001935 | 0.278 | 0.229 | 1.72E-09 | CD4_Naive_UCBMC |
| WDR7              | 5.20E-14 | 0.21649064 | 0.573 | 0.522 | 1.84E-09 | CD4_Naive_UCBMC |
| PFDN1             | 5.31E-14 | 0.29339358 | 0.406 | 0.355 | 1.88E-09 | CD4_Naive_UCBMC |
| CHN2              | 5.83E-14 | 0.20282591 | 0.439 | 0.378 | 2.06E-09 | CD4_Naive_UCBMC |
| KLHL23            | 5.84E-14 | 0.16726029 | 0.772 | 0.727 | 2.07E-09 | CD4_Naive_UCBMC |
| TSG101            | 5.99E-14 | 0.39667078 | 0.286 | 0.235 | 2.12E-09 | CD4_Naive_UCBMC |
| CAST              | 8.48E-14 | 0.24146033 | 0.453 | 0.404 | 3.01E-09 | CD4_Naive_UCBMC |
| GABARAP           | 9.90E-14 | 0.19615159 | 0.591 | 0.552 | 3.51E-09 | CD4_Naive_UCBMC |
| NAA15             | 1.08E-13 | 0.30244463 | 0.402 | 0.353 | 3.82E-09 | CD4_Naive_UCBMC |
| PSMA3             | 1.29E-13 | 0.26439917 | 0.458 | 0.413 | 4.59E-09 | CD4_Naive_UCBMC |
| ENSMUG00000060229 | 1.49E-13 | 0.28354754 | 0.475 | 0.434 | 5.27E-09 | CD4_Naive_UCBMC |
| PSMA6             | 1.62E-13 | 0.37424104 | 0.335 | 0.289 | 5.73E-09 | CD4_Naive_UCBMC |
| SDHC              | 1.67E-13 | 0.45236212 | 0.278 | 0.229 | 5.92E-09 | CD4_Naive_UCBMC |
| RPL9              | 1.74E-13 | 0.12380851 | 0.989 | 0.959 | 6.15E-09 | CD4_Naive_UCBMC |
| SNW1              | 2.48E-13 | 0.29453901 | 0.445 | 0.408 | 8.79E-09 | CD4_Naive_UCBMC |
| SLC38A1           | 2.53E-13 | 0.14864975 | 0.728 | 0.679 | 8.98E-09 | CD4_Naive_UCBMC |
| VRK1              | 2.62E-13 | 0.35347785 | 0.31  | 0.258 | 9.29E-09 | CD4_Naive_UCBMC |
| RNF145            | 2.71E-13 | 0.17972938 | 0.588 | 0.535 | 9.59E-09 | CD4_Naive_UCBMC |
| CCNC              | 3.40E-13 | 0.35851166 | 0.308 | 0.256 | 1.20E-08 | CD4_Naive_UCBMC |
| SUCO              | 3.55E-13 | 0.27313679 | 0.469 | 0.427 | 1.26E-08 | CD4_Naive_UCBMC |
| KDM5A             | 4.31E-13 | 0.285458   | 0.432 | 0.388 | 1.53E-08 | CD4_Naive_UCBMC |
| KLHL28            | 4.56E-13 | 0.21808733 | 0.402 | 0.35  | 1.61E-08 | CD4_Naive_UCBMC |
| ATL2              | 4.61E-13 | 0.34849892 | 0.353 | 0.305 | 1.63E-08 | CD4_Naive_UCBMC |
| ARL8B             | 4.76E-13 | 0.33403875 | 0.342 | 0.294 | 1.69E-08 | CD4_Naive_UCBMC |
| AGTPBP1           | 5.01E-13 | 0.13509554 | 0.537 | 0.484 | 1.78E-08 | CD4_Naive_UCBMC |
| ZC3H18            | 5.33E-13 | 0.41143969 | 0.339 | 0.294 | 1.89E-08 | CD4_Naive_UCBMC |
| DNAJB6            | 5.50E-13 | 0.12781443 | 0.658 | 0.614 | 1.95E-08 | CD4_Naive_UCBMC |
| RLIM              | 6.60E-13 | 0.39354836 | 0.336 | 0.294 | 2.34E-08 | CD4_Naive_UCBMC |
| PCMTD1            | 7.17E-13 | 0.23791203 | 0.484 | 0.443 | 2.54E-08 | CD4_Naive_UCBMC |

|            |          |            |       |       |          |                 |
|------------|----------|------------|-------|-------|----------|-----------------|
| ASH1L      | 7.85E-13 | 0.12531918 | 0.787 | 0.742 | 2.78E-08 | CD4_Naive_UCBMC |
| PPP1R15A   | 8.02E-13 | 0.25561489 | 0.558 | 0.51  | 2.84E-08 | CD4_Naive_UCBMC |
| NAA16      | 8.37E-13 | 0.41007074 | 0.268 | 0.219 | 2.97E-08 | CD4_Naive_UCBMC |
| REXO2      | 9.50E-13 | 0.21478373 | 0.413 | 0.364 | 3.37E-08 | CD4_Naive_UCBMC |
| CSGALNACT2 | 1.02E-12 | 0.1741186  | 0.514 | 0.47  | 3.63E-08 | CD4_Naive_UCBMC |
| RPTOR      | 1.36E-12 | 0.30223222 | 0.39  | 0.345 | 4.82E-08 | CD4_Naive_UCBMC |
| PITPNB     | 1.38E-12 | 0.26007441 | 0.401 | 0.353 | 4.87E-08 | CD4_Naive_UCBMC |
| GNA13      | 1.40E-12 | 0.32005217 | 0.333 | 0.285 | 4.94E-08 | CD4_Naive_UCBMC |
| WDR70      | 1.52E-12 | 0.21830726 | 0.584 | 0.541 | 5.38E-08 | CD4_Naive_UCBMC |
| PCNP       | 1.54E-12 | 0.27805172 | 0.43  | 0.39  | 5.44E-08 | CD4_Naive_UCBMC |
| RNF19A     | 1.62E-12 | 0.21157517 | 0.406 | 0.352 | 5.73E-08 | CD4_Naive_UCBMC |
| C1D        | 1.70E-12 | 0.3173319  | 0.328 | 0.281 | 6.04E-08 | CD4_Naive_UCBMC |
| ATP2A2     | 1.87E-12 | 0.29909027 | 0.367 | 0.317 | 6.63E-08 | CD4_Naive_UCBMC |
| FUBP1      | 1.90E-12 | 0.18483035 | 0.571 | 0.529 | 6.74E-08 | CD4_Naive_UCBMC |
| RIC1       | 1.96E-12 | 0.309448   | 0.368 | 0.32  | 6.95E-08 | CD4_Naive_UCBMC |
| HNRNPR     | 1.98E-12 | 0.23598802 | 0.519 | 0.482 | 7.00E-08 | CD4_Naive_UCBMC |
| ZRANB2     | 2.02E-12 | 0.21632322 | 0.561 | 0.527 | 7.14E-08 | CD4_Naive_UCBMC |
| CLIP1      | 2.40E-12 | 0.3609988  | 0.308 | 0.261 | 8.50E-08 | CD4_Naive_UCBMC |
| IWS1       | 2.44E-12 | 0.35666283 | 0.315 | 0.267 | 8.63E-08 | CD4_Naive_UCBMC |
| SYNE1      | 2.44E-12 | 0.30000769 | 0.363 | 0.316 | 8.65E-08 | CD4_Naive_UCBMC |
| BTBD9      | 3.02E-12 | 0.19025235 | 0.471 | 0.416 | 1.07E-07 | CD4_Naive_UCBMC |
| TFG        | 4.98E-12 | 0.35966232 | 0.323 | 0.279 | 1.76E-07 | CD4_Naive_UCBMC |
| PLAG1      | 5.53E-12 | 0.32231881 | 0.254 | 0.204 | 1.96E-07 | CD4_Naive_UCBMC |
| SREBF2     | 5.82E-12 | 0.3620288  | 0.281 | 0.232 | 2.06E-07 | CD4_Naive_UCBMC |
| MRTFB      | 6.64E-12 | 0.36380861 | 0.352 | 0.307 | 2.35E-07 | CD4_Naive_UCBMC |
| KANSL1     | 6.67E-12 | 0.14962522 | 0.727 | 0.685 | 2.36E-07 | CD4_Naive_UCBMC |
| STAG2      | 6.90E-12 | 0.14433691 | 0.663 | 0.62  | 2.44E-07 | CD4_Naive_UCBMC |
| TRIM33     | 7.55E-12 | 0.23278704 | 0.471 | 0.43  | 2.68E-07 | CD4_Naive_UCBMC |
| PAN3       | 8.66E-12 | 0.12254545 | 0.754 | 0.711 | 3.07E-07 | CD4_Naive_UCBMC |
| VAPA       | 9.18E-12 | 0.23199081 | 0.549 | 0.518 | 3.25E-07 | CD4_Naive_UCBMC |
| PSMB7      | 1.04E-11 | 0.16781351 | 0.637 | 0.603 | 3.70E-07 | CD4_Naive_UCBMC |
| DOP1B      | 1.06E-11 | 0.37470268 | 0.358 | 0.316 | 3.76E-07 | CD4_Naive_UCBMC |
| HECTD4     | 1.14E-11 | 0.3112785  | 0.359 | 0.315 | 4.04E-07 | CD4_Naive_UCBMC |



|                    |          |            |       |       |          |                 |
|--------------------|----------|------------|-------|-------|----------|-----------------|
| PRIM2              | 1.30E-11 | 0.42193889 | 0.295 | 0.248 | 4.60E-07 | CD4_Naive_UCBMC |
| PCCA               | 1.39E-11 | 0.20937609 | 0.517 | 0.475 | 4.92E-07 | CD4_Naive_UCBMC |
| PDS5B              | 1.55E-11 | 0.22331516 | 0.473 | 0.432 | 5.49E-07 | CD4_Naive_UCBMC |
| GCC2               | 1.77E-11 | 0.19261481 | 0.423 | 0.371 | 6.27E-07 | CD4_Naive_UCBMC |
| WDFY1              | 1.77E-11 | 0.33672397 | 0.327 | 0.28  | 6.29E-07 | CD4_Naive_UCBMC |
| GSK3B              | 1.89E-11 | 0.1570417  | 0.724 | 0.681 | 6.71E-07 | CD4_Naive_UCBMC |
| ENSMMUG00000021425 | 1.97E-11 | 0.4047011  | 0.279 | 0.232 | 6.97E-07 | CD4_Naive_UCBMC |
| NAMPT              | 2.27E-11 | 0.34778414 | 0.271 | 0.223 | 8.04E-07 | CD4_Naive_UCBMC |
| GPBP1              | 2.35E-11 | 0.10952944 | 0.711 | 0.664 | 8.33E-07 | CD4_Naive_UCBMC |
| CCNT1              | 2.58E-11 | 0.36923979 | 0.318 | 0.274 | 9.13E-07 | CD4_Naive_UCBMC |
| CARMIL1            | 2.72E-11 | 0.21202783 | 0.385 | 0.334 | 9.65E-07 | CD4_Naive_UCBMC |
| ZDHHC17            | 2.86E-11 | 0.39853073 | 0.26  | 0.214 | 1.01E-06 | CD4_Naive_UCBMC |
| NDUFB9             | 2.97E-11 | 0.16451979 | 0.453 | 0.413 | 1.05E-06 | CD4_Naive_UCBMC |
| CTDP1              | 3.05E-11 | 0.12333436 | 0.326 | 0.275 | 1.08E-06 | CD4_Naive_UCBMC |
| RAB14              | 3.18E-11 | 0.27251881 | 0.39  | 0.35  | 1.13E-06 | CD4_Naive_UCBMC |
| SLU7               | 3.30E-11 | 0.36579534 | 0.333 | 0.29  | 1.17E-06 | CD4_Naive_UCBMC |
| PNRC2              | 3.31E-11 | 0.20280016 | 0.49  | 0.457 | 1.17E-06 | CD4_Naive_UCBMC |
| COPS8              | 3.34E-11 | 0.4406635  | 0.267 | 0.224 | 1.18E-06 | CD4_Naive_UCBMC |
| CNST               | 3.89E-11 | 0.2631165  | 0.39  | 0.347 | 1.38E-06 | CD4_Naive_UCBMC |
| ADAMTS6            | 4.12E-11 | 0.26310739 | 0.398 | 0.345 | 1.46E-06 | CD4_Naive_UCBMC |
| PHIP               | 4.83E-11 | 0.16636112 | 0.505 | 0.456 | 1.71E-06 | CD4_Naive_UCBMC |
| PSPC1              | 5.40E-11 | 0.1207186  | 0.541 | 0.499 | 1.91E-06 | CD4_Naive_UCBMC |
| PNPLA8             | 5.43E-11 | 0.22113551 | 0.388 | 0.343 | 1.92E-06 | CD4_Naive_UCBMC |
| DOP1A              | 5.64E-11 | 0.39719395 | 0.251 | 0.206 | 2.00E-06 | CD4_Naive_UCBMC |
| PFDN4              | 5.67E-11 | 0.39500522 | 0.28  | 0.238 | 2.01E-06 | CD4_Naive_UCBMC |
| STK39              | 5.78E-11 | 0.2514664  | 0.434 | 0.392 | 2.05E-06 | CD4_Naive_UCBMC |
| TXLNG              | 6.41E-11 | 0.35121007 | 0.318 | 0.276 | 2.27E-06 | CD4_Naive_UCBMC |
| TMCC1              | 7.62E-11 | 0.24752701 | 0.447 | 0.397 | 2.70E-06 | CD4_Naive_UCBMC |
| PSMD14             | 8.97E-11 | 0.22882898 | 0.437 | 0.396 | 3.18E-06 | CD4_Naive_UCBMC |
| GORASP2            | 9.08E-11 | 0.33212178 | 0.291 | 0.248 | 3.22E-06 | CD4_Naive_UCBMC |
| DDT                | 9.57E-11 | 0.25330941 | 0.374 | 0.336 | 3.39E-06 | CD4_Naive_UCBMC |
| ACO2               | 1.03E-10 | 0.30646327 | 0.281 | 0.237 | 3.65E-06 | CD4_Naive_UCBMC |
| MRPL11             | 1.14E-10 | 0.28052809 | 0.378 | 0.343 | 4.05E-06 | CD4_Naive_UCBMC |

|                    |          |            |       |       |          |                 |
|--------------------|----------|------------|-------|-------|----------|-----------------|
| ENSA               | 1.15E-10 | 0.21951707 | 0.455 | 0.414 | 4.06E-06 | CD4_Naive_UCBMC |
| HERPUD2            | 1.17E-10 | 0.27216251 | 0.354 | 0.31  | 4.14E-06 | CD4_Naive_UCBMC |
| ZCRB1              | 1.17E-10 | 0.41975818 | 0.288 | 0.246 | 4.16E-06 | CD4_Naive_UCBMC |
| CNOT7              | 1.63E-10 | 0.36848617 | 0.282 | 0.245 | 5.79E-06 | CD4_Naive_UCBMC |
| ANKIB1             | 1.72E-10 | 0.22389607 | 0.41  | 0.368 | 6.10E-06 | CD4_Naive_UCBMC |
| ENSMUG00000006803  | 1.75E-10 | 0.23180502 | 0.48  | 0.445 | 6.20E-06 | CD4_Naive_UCBMC |
| SLC4A7             | 1.82E-10 | 0.23967871 | 0.386 | 0.345 | 6.44E-06 | CD4_Naive_UCBMC |
| IGBP1              | 1.94E-10 | 0.27687949 | 0.372 | 0.336 | 6.87E-06 | CD4_Naive_UCBMC |
| TRA2B              | 2.03E-10 | 0.10744254 | 0.924 | 0.854 | 7.21E-06 | CD4_Naive_UCBMC |
| ROBO2              | 2.27E-10 | 0.1520408  | 0.842 | 0.824 | 8.05E-06 | CD4_Naive_UCBMC |
| LTN1               | 2.39E-10 | 0.35127843 | 0.298 | 0.257 | 8.47E-06 | CD4_Naive_UCBMC |
| TMX3               | 2.75E-10 | 0.38310124 | 0.273 | 0.231 | 9.76E-06 | CD4_Naive_UCBMC |
| VPS13D             | 2.79E-10 | 0.31563644 | 0.304 | 0.261 | 9.88E-06 | CD4_Naive_UCBMC |
| ENSMUG000000028699 | 3.03E-10 | 0.13913172 | 0.559 | 0.519 | 1.07E-05 | CD4_Naive_UCBMC |
| CAND1              | 3.06E-10 | 0.24655362 | 0.438 | 0.405 | 1.09E-05 | CD4_Naive_UCBMC |
| SRSF4              | 3.43E-10 | 0.17380614 | 0.552 | 0.519 | 1.21E-05 | CD4_Naive_UCBMC |
| MAN1A2             | 3.90E-10 | 0.18232411 | 0.436 | 0.394 | 1.38E-05 | CD4_Naive_UCBMC |
| TLK2               | 4.20E-10 | 0.20722926 | 0.417 | 0.377 | 1.49E-05 | CD4_Naive_UCBMC |
| COPS2              | 4.68E-10 | 0.30424202 | 0.359 | 0.321 | 1.66E-05 | CD4_Naive_UCBMC |
| TRIM25             | 5.09E-10 | 0.3505909  | 0.256 | 0.214 | 1.80E-05 | CD4_Naive_UCBMC |
| ATXN10             | 5.85E-10 | 0.19378089 | 0.567 | 0.54  | 2.07E-05 | CD4_Naive_UCBMC |
| ELK3               | 6.55E-10 | 0.14376961 | 0.496 | 0.453 | 2.32E-05 | CD4_Naive_UCBMC |
| FAM168B            | 6.58E-10 | 0.31388359 | 0.299 | 0.259 | 2.33E-05 | CD4_Naive_UCBMC |
| SMG6               | 7.44E-10 | 0.15211137 | 0.591 | 0.557 | 2.63E-05 | CD4_Naive_UCBMC |
| EIF4B              | 7.74E-10 | 0.16856889 | 0.529 | 0.497 | 2.74E-05 | CD4_Naive_UCBMC |
| MRPS15             | 8.87E-10 | 0.35996167 | 0.313 | 0.279 | 3.14E-05 | CD4_Naive_UCBMC |
| WBP11              | 9.99E-10 | 0.25217483 | 0.383 | 0.346 | 3.54E-05 | CD4_Naive_UCBMC |
| PWP1               | 1.00E-09 | 0.35226418 | 0.299 | 0.261 | 3.55E-05 | CD4_Naive_UCBMC |
| BNIP2              | 1.02E-09 | 0.28161697 | 0.267 | 0.226 | 3.61E-05 | CD4_Naive_UCBMC |
| HNRNPM             | 1.20E-09 | 0.1717708  | 0.552 | 0.526 | 4.27E-05 | CD4_Naive_UCBMC |
| ENSMUG000000015583 | 1.26E-09 | 0.11679477 | 0.865 | 0.807 | 4.45E-05 | CD4_Naive_UCBMC |
| TCF25              | 1.26E-09 | 0.1950253  | 0.379 | 0.342 | 4.46E-05 | CD4_Naive_UCBMC |
| PLEKHM3            | 1.26E-09 | 0.32936036 | 0.256 | 0.214 | 4.46E-05 | CD4_Naive_UCBMC |

|          |          |            |       |       |            |                 |
|----------|----------|------------|-------|-------|------------|-----------------|
| FXR1     | 1.29E-09 | 0.17286667 | 0.591 | 0.557 | 4.57E-05   | CD4_Naive_UCBMC |
| IRF1     | 1.31E-09 | 0.14335106 | 0.332 | 0.282 | 4.65E-05   | CD4_Naive_UCBMC |
| PSMA1    | 1.39E-09 | 0.19060177 | 0.499 | 0.465 | 4.94E-05   | CD4_Naive_UCBMC |
| KRR1     | 1.43E-09 | 0.44708339 | 0.252 | 0.216 | 5.08E-05   | CD4_Naive_UCBMC |
| USP9X    | 1.53E-09 | 0.10678728 | 0.559 | 0.511 | 5.42E-05   | CD4_Naive_UCBMC |
| NARS1    | 1.61E-09 | 0.20408686 | 0.443 | 0.406 | 5.69E-05   | CD4_Naive_UCBMC |
| BZW1     | 1.66E-09 | 0.146766   | 0.595 | 0.563 | 5.88E-05   | CD4_Naive_UCBMC |
| CRBN     | 1.71E-09 | 0.38774578 | 0.269 | 0.231 | 6.06E-05   | CD4_Naive_UCBMC |
| FAR1     | 1.80E-09 | 0.21767933 | 0.389 | 0.349 | 6.37E-05   | CD4_Naive_UCBMC |
| JUND     | 2.07E-09 | 0.11170392 | 0.65  | 0.616 | 7.35E-05   | CD4_Naive_UCBMC |
| COP1     | 2.34E-09 | 0.17816281 | 0.554 | 0.52  | 8.30E-05   | CD4_Naive_UCBMC |
| UBE2L3   | 2.39E-09 | 0.23704615 | 0.391 | 0.359 | 8.48E-05   | CD4_Naive_UCBMC |
| USP37    | 2.42E-09 | 0.23879159 | 0.281 | 0.236 | 8.57E-05   | CD4_Naive_UCBMC |
| ACTR10   | 2.54E-09 | 0.32763847 | 0.304 | 0.269 | 9.01E-05   | CD4_Naive_UCBMC |
| MDH2     | 2.68E-09 | 0.24791894 | 0.335 | 0.302 | 9.50E-05   | CD4_Naive_UCBMC |
| RHOA     | 3.43E-09 | 0.13773337 | 0.718 | 0.697 | 0.0001214  | CD4_Naive_UCBMC |
| KANSL2   | 3.47E-09 | 0.22211984 | 0.376 | 0.34  | 0.00012283 | CD4_Naive_UCBMC |
| UBR3     | 3.80E-09 | 0.23294914 | 0.439 | 0.406 | 0.0001345  | CD4_Naive_UCBMC |
| NAPG     | 3.96E-09 | 0.21812378 | 0.313 | 0.273 | 0.00014017 | CD4_Naive_UCBMC |
| TMEM219  | 4.02E-09 | 0.29133586 | 0.288 | 0.254 | 0.00014253 | CD4_Naive_UCBMC |
| XRCC5    | 4.16E-09 | 0.12083465 | 0.614 | 0.586 | 0.00014745 | CD4_Naive_UCBMC |
| DHX8     | 4.26E-09 | 0.29718103 | 0.277 | 0.239 | 0.00015108 | CD4_Naive_UCBMC |
| ERN1     | 4.74E-09 | 0.13630619 | 0.338 | 0.292 | 0.00016789 | CD4_Naive_UCBMC |
| FNDC3A   | 4.74E-09 | 0.1625919  | 0.572 | 0.54  | 0.00016807 | CD4_Naive_UCBMC |
| RORA     | 4.75E-09 | 0.19262509 | 0.259 | 0.215 | 0.00016833 | CD4_Naive_UCBMC |
| PSME1    | 5.90E-09 | 0.13623179 | 0.666 | 0.635 | 0.00020892 | CD4_Naive_UCBMC |
| TANK     | 6.20E-09 | 0.31420466 | 0.364 | 0.327 | 0.00021985 | CD4_Naive_UCBMC |
| UBE2E3   | 6.40E-09 | 0.33068321 | 0.306 | 0.268 | 0.00022669 | CD4_Naive_UCBMC |
| GRAMD1B  | 6.49E-09 | 0.3276024  | 0.31  | 0.272 | 0.00023003 | CD4_Naive_UCBMC |
| ANKRD13C | 7.64E-09 | 0.1442478  | 0.284 | 0.241 | 0.00027061 | CD4_Naive_UCBMC |
| RAD21    | 9.81E-09 | 0.14646506 | 0.54  | 0.514 | 0.00034767 | CD4_Naive_UCBMC |
| CEP120   | 1.07E-08 | 0.2314385  | 0.262 | 0.222 | 0.00037806 | CD4_Naive_UCBMC |
| TFAM     | 1.15E-08 | 0.25278939 | 0.391 | 0.358 | 0.00040593 | CD4_Naive_UCBMC |

|                    |          |            |       |       |            |                 |
|--------------------|----------|------------|-------|-------|------------|-----------------|
| VPS36              | 1.20E-08 | 0.34536924 | 0.27  | 0.235 | 0.00042652 | CD4_Naive_UCBMC |
| CWF19L2            | 1.21E-08 | 0.21757054 | 0.415 | 0.377 | 0.00042729 | CD4_Naive_UCBMC |
| EIF4H              | 1.23E-08 | 0.16393024 | 0.435 | 0.403 | 0.00043543 | CD4_Naive_UCBMC |
| SPAG9              | 1.27E-08 | 0.12202921 | 0.532 | 0.497 | 0.00045152 | CD4_Naive_UCBMC |
| UFC1               | 1.45E-08 | 0.27867926 | 0.369 | 0.341 | 0.00051301 | CD4_Naive_UCBMC |
| ENSMMUG00000022610 | 1.45E-08 | 0.15333968 | 0.482 | 0.448 | 0.00051527 | CD4_Naive_UCBMC |
| HIPK3              | 1.47E-08 | 0.27524837 | 0.266 | 0.228 | 0.00052158 | CD4_Naive_UCBMC |
| PPP2R2A            | 1.50E-08 | 0.16140135 | 0.518 | 0.495 | 0.000532   | CD4_Naive_UCBMC |
| PTAR1              | 1.58E-08 | 0.19448607 | 0.314 | 0.276 | 0.00055887 | CD4_Naive_UCBMC |
| CEP57              | 1.67E-08 | 0.29256862 | 0.274 | 0.238 | 0.00059204 | CD4_Naive_UCBMC |
| DYM                | 1.71E-08 | 0.18923981 | 0.434 | 0.399 | 0.00060546 | CD4_Naive_UCBMC |
| ZNF749             | 1.92E-08 | 0.33300027 | 0.258 | 0.224 | 0.00068128 | CD4_Naive_UCBMC |
| GPBP1L1            | 2.10E-08 | 0.15426864 | 0.502 | 0.475 | 0.00074379 | CD4_Naive_UCBMC |
| TOMM20             | 2.12E-08 | 0.12786533 | 0.732 | 0.693 | 0.000751   | CD4_Naive_UCBMC |
| RBM34              | 2.23E-08 | 0.33066254 | 0.25  | 0.214 | 0.00079076 | CD4_Naive_UCBMC |
| TEX10              | 2.41E-08 | 0.35031998 | 0.257 | 0.221 | 0.00085413 | CD4_Naive_UCBMC |
| NCOA2              | 2.70E-08 | 0.17048842 | 0.507 | 0.476 | 0.00095752 | CD4_Naive_UCBMC |
| SNX25              | 2.70E-08 | 0.15769936 | 0.272 | 0.234 | 0.00095823 | CD4_Naive_UCBMC |
| OCIAD1             | 2.78E-08 | 0.17824867 | 0.364 | 0.329 | 0.00098408 | CD4_Naive_UCBMC |
| ENSMMUG00000063877 | 3.12E-08 | 0.21381251 | 0.344 | 0.306 | 0.00110385 | CD4_Naive_UCBMC |
| ARRB2              | 3.15E-08 | 0.20918756 | 0.35  | 0.317 | 0.00111643 | CD4_Naive_UCBMC |
| CLSTN1             | 3.58E-08 | 0.26297358 | 0.278 | 0.241 | 0.00126914 | CD4_Naive_UCBMC |
| ATXN7L3B           | 3.72E-08 | 0.25667541 | 0.348 | 0.314 | 0.00131931 | CD4_Naive_UCBMC |
| KCTD20             | 4.17E-08 | 0.3168176  | 0.353 | 0.329 | 0.00147835 | CD4_Naive_UCBMC |
| TRRAP              | 4.31E-08 | 0.28062212 | 0.26  | 0.225 | 0.0015286  | CD4_Naive_UCBMC |
| RTF1               | 5.76E-08 | 0.28257135 | 0.348 | 0.318 | 0.0020402  | CD4_Naive_UCBMC |
| ANKH               | 6.11E-08 | 0.15231851 | 0.433 | 0.395 | 0.00216597 | CD4_Naive_UCBMC |
| ERBB3              | 6.57E-08 | 0.16768749 | 0.478 | 0.452 | 0.00232789 | CD4_Naive_UCBMC |
| HOOK3              | 6.97E-08 | 0.12499311 | 0.599 | 0.573 | 0.00246855 | CD4_Naive_UCBMC |
| BRD7               | 7.16E-08 | 0.2486887  | 0.361 | 0.333 | 0.00253568 | CD4_Naive_UCBMC |
| TMEM183A           | 8.00E-08 | 0.32778857 | 0.275 | 0.242 | 0.0028356  | CD4_Naive_UCBMC |
| ERP44              | 8.76E-08 | 0.16900447 | 0.417 | 0.387 | 0.0031031  | CD4_Naive_UCBMC |
| EIF3M              | 9.71E-08 | 0.14327442 | 0.615 | 0.582 | 0.00343919 | CD4_Naive_UCBMC |

|                   |          |            |       |       |            |                 |
|-------------------|----------|------------|-------|-------|------------|-----------------|
| ZNF160            | 9.84E-08 | 0.31433099 | 0.254 | 0.22  | 0.00348778 | CD4_Naive_UCBMC |
| RPAP2             | 1.12E-07 | 0.25758577 | 0.313 | 0.278 | 0.00396759 | CD4_Naive_UCBMC |
| HSD17B11          | 1.19E-07 | 0.29822337 | 0.268 | 0.234 | 0.00421262 | CD4_Naive_UCBMC |
| ATP5PB            | 1.19E-07 | 0.23022654 | 0.443 | 0.425 | 0.00422626 | CD4_Naive_UCBMC |
| MED30             | 1.20E-07 | 0.38666346 | 0.301 | 0.274 | 0.00426439 | CD4_Naive_UCBMC |
| EIF4E             | 1.23E-07 | 0.29610575 | 0.298 | 0.266 | 0.00436503 | CD4_Naive_UCBMC |
| MXD1              | 1.26E-07 | 0.2058306  | 0.32  | 0.284 | 0.00446272 | CD4_Naive_UCBMC |
| EXOC6             | 1.26E-07 | 0.12058432 | 0.644 | 0.604 | 0.00448117 | CD4_Naive_UCBMC |
| YAF2              | 1.35E-07 | 0.1177363  | 0.497 | 0.465 | 0.00476611 | CD4_Naive_UCBMC |
| GATAD2B           | 1.39E-07 | 0.12925606 | 0.534 | 0.504 | 0.00492472 | CD4_Naive_UCBMC |
| ARID4A            | 1.48E-07 | 0.26838971 | 0.296 | 0.263 | 0.00526035 | CD4_Naive_UCBMC |
| COX16             | 1.49E-07 | 0.1016644  | 0.633 | 0.606 | 0.00526181 | CD4_Naive_UCBMC |
| LRCH3             | 1.52E-07 | 0.1173719  | 0.472 | 0.442 | 0.00536867 | CD4_Naive_UCBMC |
| PITPNM2           | 2.02E-07 | 0.22542082 | 0.268 | 0.232 | 0.0071701  | CD4_Naive_UCBMC |
| ETF1              | 2.32E-07 | 0.21478122 | 0.403 | 0.373 | 0.00820485 | CD4_Naive_UCBMC |
| ARF4              | 2.62E-07 | 0.12777252 | 0.521 | 0.5   | 0.00927956 | CD4_Naive_UCBMC |
| SMARCE1           | 2.62E-07 | 0.23411949 | 0.358 | 0.332 | 0.00929596 | CD4_Naive_UCBMC |
| RSRC2             | 2.77E-07 | 0.10461984 | 0.639 | 0.602 | 0.00983155 | CD4_Naive_UCBMC |
| POLR1H            | 2.82E-07 | 0.21121169 | 0.357 | 0.331 | 0.00999473 | CD4_Naive_UCBMC |
| UBA3              | 2.85E-07 | 0.30459834 | 0.269 | 0.237 | 0.01009466 | CD4_Naive_UCBMC |
| OLA1              | 3.22E-07 | 0.14197493 | 0.467 | 0.441 | 0.01142053 | CD4_Naive_UCBMC |
| ARHGAP26          | 3.47E-07 | 0.21516327 | 0.325 | 0.292 | 0.01229931 | CD4_Naive_UCBMC |
| KDM2B             | 3.50E-07 | 0.21898073 | 0.264 | 0.231 | 0.01240461 | CD4_Naive_UCBMC |
| DDB1              | 3.73E-07 | 0.28005186 | 0.255 | 0.222 | 0.01321135 | CD4_Naive_UCBMC |
| ABCE1             | 4.02E-07 | 0.23489496 | 0.408 | 0.387 | 0.01424144 | CD4_Naive_UCBMC |
| RABGEF1           | 4.28E-07 | 0.26961514 | 0.315 | 0.286 | 0.01516581 | CD4_Naive_UCBMC |
| MDM4              | 4.32E-07 | 0.20062137 | 0.439 | 0.412 | 0.01531722 | CD4_Naive_UCBMC |
| RNF125            | 4.99E-07 | 0.22246815 | 0.278 | 0.243 | 0.01767002 | CD4_Naive_UCBMC |
| IQGAP2            | 5.79E-07 | 0.14663359 | 0.499 | 0.468 | 0.02050735 | CD4_Naive_UCBMC |
| NCK1              | 6.35E-07 | 0.21605839 | 0.395 | 0.372 | 0.02249333 | CD4_Naive_UCBMC |
| SP3               | 6.82E-07 | 0.15942867 | 0.389 | 0.364 | 0.02417137 | CD4_Naive_UCBMC |
| ELMOD3            | 7.72E-07 | 0.17894794 | 0.374 | 0.344 | 0.02735409 | CD4_Naive_UCBMC |
| ENSMUG00000059017 | 8.07E-07 | 0.13215901 | 0.571 | 0.545 | 0.02860326 | CD4_Naive_UCBMC |

|                    |          |            |       |       |            |                 |
|--------------------|----------|------------|-------|-------|------------|-----------------|
| LMTK2              | 1.04E-06 | 0.20008331 | 0.397 | 0.374 | 0.03671003 | CD4_Naive_UCBMC |
| XPR1               | 1.13E-06 | 0.16087145 | 0.418 | 0.391 | 0.03995526 | CD4_Naive_UCBMC |
| LRRFIP2            | 1.14E-06 | 0.27239979 | 0.301 | 0.271 | 0.04041276 | CD4_Naive_UCBMC |
| DENND1B            | 1.15E-06 | 0.2839155  | 0.292 | 0.261 | 0.04065569 | CD4_Naive_UCBMC |
| SAR1A              | 1.15E-06 | 0.28126129 | 0.314 | 0.287 | 0.04066277 | CD4_Naive_UCBMC |
| ENSMMUG00000061458 | 1.20E-06 | 0.19024846 | 0.315 | 0.286 | 0.04237999 | CD4_Naive_UCBMC |
| FMC1-LUC7L2        | 1.29E-06 | 0.11043129 | 0.702 | 0.685 | 0.04566003 | CD4_Naive_UCBMC |
| SH3GLB1            | 1.31E-06 | 0.37649338 | 0.253 | 0.224 | 0.04632543 | CD4_Naive_UCBMC |
| RMND5A             | 1.33E-06 | 0.21502381 | 0.329 | 0.297 | 0.04700893 | CD4_Naive_UCBMC |
| NFKBIB             | 1.38E-06 | 0.2845587  | 0.306 | 0.282 | 0.04880959 | CD4_Naive_UCBMC |
| TNFSF8             | 1.46E-06 | 0.17975182 | 0.286 | 0.252 | 0.05166231 | CD4_Naive_UCBMC |
| REL                | 1.46E-06 | 0.1290459  | 0.498 | 0.477 | 0.05170039 | CD4_Naive_UCBMC |
| HTT                | 1.49E-06 | 0.21272302 | 0.394 | 0.374 | 0.05278932 | CD4_Naive_UCBMC |
| CITED1             | 1.50E-06 | 0.3003659  | 0.264 | 0.232 | 0.05311139 | CD4_Naive_UCBMC |
| SCFD2              | 1.59E-06 | 0.14468905 | 0.458 | 0.425 | 0.05640452 | CD4_Naive_UCBMC |
| DDX46              | 1.62E-06 | 0.13737143 | 0.568 | 0.548 | 0.05733726 | CD4_Naive_UCBMC |
| TMOD3              | 1.66E-06 | 0.20183171 | 0.44  | 0.421 | 0.05882588 | CD4_Naive_UCBMC |
| SLC23A2            | 1.71E-06 | 0.20662028 | 0.279 | 0.248 | 0.06049891 | CD4_Naive_UCBMC |
| SUGT1              | 1.74E-06 | 0.18339463 | 0.399 | 0.378 | 0.06161139 | CD4_Naive_UCBMC |
| NBEA               | 2.39E-06 | 0.20763585 | 0.405 | 0.379 | 0.08456847 | CD4_Naive_UCBMC |
| FKBP3              | 2.94E-06 | 0.2170491  | 0.376 | 0.352 | 0.10417346 | CD4_Naive_UCBMC |
| FBXO21             | 2.99E-06 | 0.27421562 | 0.267 | 0.24  | 0.10595527 | CD4_Naive_UCBMC |
| STRAP              | 3.04E-06 | 0.16236244 | 0.433 | 0.414 | 0.10760801 | CD4_Naive_UCBMC |
| TBCC               | 3.06E-06 | 0.23235182 | 0.315 | 0.29  | 0.10843495 | CD4_Naive_UCBMC |
| KIAA1328           | 3.37E-06 | 0.24366006 | 0.349 | 0.317 | 0.11935849 | CD4_Naive_UCBMC |
| ADK                | 3.66E-06 | 0.13633485 | 0.463 | 0.428 | 0.12975513 | CD4_Naive_UCBMC |
| KDM2A              | 3.93E-06 | 0.1144191  | 0.571 | 0.559 | 0.13927799 | CD4_Naive_UCBMC |
| PAK1IP1            | 4.14E-06 | 0.30671709 | 0.306 | 0.281 | 0.1468153  | CD4_Naive_UCBMC |
| PPP1R12B           | 4.27E-06 | 0.28662972 | 0.271 | 0.243 | 0.1513365  | CD4_Naive_UCBMC |
| AP2A2              | 4.63E-06 | 0.29065814 | 0.271 | 0.245 | 0.16406228 | CD4_Naive_UCBMC |
| TOMM22             | 4.83E-06 | 0.24154887 | 0.308 | 0.287 | 0.17122477 | CD4_Naive_UCBMC |
| FAM118A            | 4.95E-06 | 0.14963271 | 0.42  | 0.399 | 0.17553584 | CD4_Naive_UCBMC |
| ISCA1              | 5.71E-06 | 0.19284444 | 0.309 | 0.281 | 0.20219455 | CD4_Naive_UCBMC |

|                   |          |            |       |       |            |                 |
|-------------------|----------|------------|-------|-------|------------|-----------------|
| TMED2             | 5.91E-06 | 0.23462449 | 0.307 | 0.282 | 0.20951856 | CD4_Naive_UCBMC |
| KDM3B             | 5.98E-06 | 0.15247316 | 0.424 | 0.401 | 0.21203266 | CD4_Naive_UCBMC |
| AP2B1             | 6.52E-06 | 0.22051358 | 0.343 | 0.32  | 0.23104684 | CD4_Naive_UCBMC |
| TMEM245           | 7.03E-06 | 0.14746922 | 0.295 | 0.266 | 0.24911898 | CD4_Naive_UCBMC |
| IP6K2             | 7.99E-06 | 0.22327485 | 0.347 | 0.328 | 0.28326137 | CD4_Naive_UCBMC |
| ASCC3             | 8.54E-06 | 0.11554519 | 0.49  | 0.466 | 0.30249264 | CD4_Naive_UCBMC |
| BTF3L4            | 8.59E-06 | 0.13380469 | 0.48  | 0.465 | 0.30436702 | CD4_Naive_UCBMC |
| MLXIP             | 9.01E-06 | 0.2170165  | 0.292 | 0.267 | 0.31906818 | CD4_Naive_UCBMC |
| ATP6V1FNB         | 9.49E-06 | 0.16467434 | 0.346 | 0.324 | 0.3362728  | CD4_Naive_UCBMC |
| TXN               | 9.94E-06 | 0.12255225 | 0.402 | 0.379 | 0.35218434 | CD4_Naive_UCBMC |
| NRF1              | 1.14E-05 | 0.13980526 | 0.38  | 0.357 | 0.40484543 | CD4_Naive_UCBMC |
| ARHGEF6           | 1.14E-05 | 0.15928304 | 0.401 | 0.378 | 0.40492986 | CD4_Naive_UCBMC |
| RABAC1            | 1.17E-05 | 0.11505664 | 0.329 | 0.304 | 0.41576443 | CD4_Naive_UCBMC |
| TOX4              | 1.26E-05 | 0.27668884 | 0.341 | 0.322 | 0.44779257 | CD4_Naive_UCBMC |
| PSMD7             | 1.32E-05 | 0.24934097 | 0.311 | 0.29  | 0.46664752 | CD4_Naive_UCBMC |
| EPRS1             | 1.52E-05 | 0.21591511 | 0.33  | 0.307 | 0.53782444 | CD4_Naive_UCBMC |
| TRPC4AP           | 1.87E-05 | 0.2015016  | 0.344 | 0.325 | 0.66101538 | CD4_Naive_UCBMC |
| PRRC2B            | 2.00E-05 | 0.10634914 | 0.519 | 0.504 | 0.70924521 | CD4_Naive_UCBMC |
| MAPRE1            | 2.07E-05 | 0.21317311 | 0.395 | 0.379 | 0.73257382 | CD4_Naive_UCBMC |
| COX10             | 2.19E-05 | 0.23358819 | 0.251 | 0.223 | 0.77551808 | CD4_Naive_UCBMC |
| KPNA4             | 2.29E-05 | 0.15106642 | 0.291 | 0.263 | 0.81034982 | CD4_Naive_UCBMC |
| RTN4              | 2.34E-05 | 0.14274529 | 0.343 | 0.314 | 0.828312   | CD4_Naive_UCBMC |
| CS                | 2.46E-05 | 0.15737293 | 0.494 | 0.483 | 0.87043896 | CD4_Naive_UCBMC |
| USP14             | 2.80E-05 | 0.23726268 | 0.305 | 0.284 | 0.99129629 | CD4_Naive_UCBMC |
| FNBP4             | 3.08E-05 | 0.15113718 | 0.422 | 0.406 | 1          | CD4_Naive_UCBMC |
| RBBP6             | 3.18E-05 | 0.18448848 | 0.334 | 0.315 | 1          | CD4_Naive_UCBMC |
| ENSMUG00000049010 | 3.25E-05 | 0.24863792 | 0.292 | 0.273 | 1          | CD4_Naive_UCBMC |
| TTC14             | 3.54E-05 | 0.16884092 | 0.328 | 0.305 | 1          | CD4_Naive_UCBMC |
| USP7              | 3.70E-05 | 0.23015623 | 0.297 | 0.276 | 1          | CD4_Naive_UCBMC |
| YLPM1             | 3.96E-05 | 0.19780388 | 0.302 | 0.277 | 1          | CD4_Naive_UCBMC |
| EIF2A             | 4.04E-05 | 0.17499781 | 0.36  | 0.343 | 1          | CD4_Naive_UCBMC |
| BRWD1             | 4.08E-05 | 0.11900535 | 0.463 | 0.444 | 1          | CD4_Naive_UCBMC |
| BCCIP             | 4.19E-05 | 0.25333914 | 0.305 | 0.287 | 1          | CD4_Naive_UCBMC |

|                    |            |            |       |       |                   |
|--------------------|------------|------------|-------|-------|-------------------|
| SIPA1L1            | 4.69E-05   | 0.11322619 | 0.593 | 0.574 | 1 CD4_Naive_UCBMC |
| IST1               | 4.84E-05   | 0.15780444 | 0.339 | 0.317 | 1 CD4_Naive_UCBMC |
| MDH1               | 5.15E-05   | 0.15289091 | 0.409 | 0.395 | 1 CD4_Naive_UCBMC |
| PPP4R3A            | 5.35E-05   | 0.1660628  | 0.34  | 0.318 | 1 CD4_Naive_UCBMC |
| SORL1              | 5.66E-05   | 0.1431898  | 0.565 | 0.558 | 1 CD4_Naive_UCBMC |
| EPS15              | 5.99E-05   | 0.11378412 | 0.414 | 0.39  | 1 CD4_Naive_UCBMC |
| ENSMMUG00000047277 | 6.30E-05   | 0.18301635 | 0.701 | 0.705 | 1 CD4_Naive_UCBMC |
| FHIT               | 6.91E-05   | 0.15033323 | 0.262 | 0.23  | 1 CD4_Naive_UCBMC |
| NSF                | 6.92E-05   | 0.13916467 | 0.484 | 0.466 | 1 CD4_Naive_UCBMC |
| DCAF1              | 7.08E-05   | 0.2851442  | 0.273 | 0.252 | 1 CD4_Naive_UCBMC |
| DNAJA2             | 7.27E-05   | 0.22675544 | 0.304 | 0.287 | 1 CD4_Naive_UCBMC |
| TMEM135            | 7.64E-05   | 0.17384725 | 0.329 | 0.306 | 1 CD4_Naive_UCBMC |
| ENSMMUG00000064120 | 7.85E-05   | 0.12207036 | 0.285 | 0.259 | 1 CD4_Naive_UCBMC |
| ENSMMUG00000012690 | 7.85E-05   | 0.20491001 | 0.286 | 0.263 | 1 CD4_Naive_UCBMC |
| CASP12             | 9.36E-05   | 0.16189528 | 0.423 | 0.409 | 1 CD4_Naive_UCBMC |
| ASXL1              | 9.60E-05   | 0.12175855 | 0.301 | 0.274 | 1 CD4_Naive_UCBMC |
| INPP5A             | 9.89E-05   | 0.14508448 | 0.427 | 0.412 | 1 CD4_Naive_UCBMC |
| SMC3               | 0.00011246 | 0.12463964 | 0.346 | 0.328 | 1 CD4_Naive_UCBMC |
| ENSMMUG00000020316 | 0.00011813 | 0.20529879 | 0.325 | 0.309 | 1 CD4_Naive_UCBMC |
| ZNF44              | 0.0001186  | 0.11039682 | 0.274 | 0.251 | 1 CD4_Naive_UCBMC |
| CEP85L             | 0.00012056 | 0.11288147 | 0.494 | 0.474 | 1 CD4_Naive_UCBMC |
| HM13               | 0.00012575 | 0.23443505 | 0.266 | 0.246 | 1 CD4_Naive_UCBMC |
| NPAT               | 0.00012983 | 0.12227453 | 0.466 | 0.451 | 1 CD4_Naive_UCBMC |
| POGZ               | 0.00013608 | 0.11636184 | 0.371 | 0.355 | 1 CD4_Naive_UCBMC |
| SSR1               | 0.00014447 | 0.18513708 | 0.307 | 0.289 | 1 CD4_Naive_UCBMC |
| PRPF8              | 0.00014662 | 0.17460515 | 0.356 | 0.342 | 1 CD4_Naive_UCBMC |
| PIK3IP1            | 0.00014802 | 0.21083966 | 0.258 | 0.236 | 1 CD4_Naive_UCBMC |
| NCOA1              | 0.00017003 | 0.16000724 | 0.37  | 0.351 | 1 CD4_Naive_UCBMC |
| WWP2               | 0.00017454 | 0.26186864 | 0.271 | 0.252 | 1 CD4_Naive_UCBMC |
| LUC7L              | 0.00018578 | 0.16077706 | 0.339 | 0.322 | 1 CD4_Naive_UCBMC |
| NECAP2             | 0.00019378 | 0.20482013 | 0.295 | 0.278 | 1 CD4_Naive_UCBMC |
| SLC44A2            | 0.00021991 | 0.12727116 | 0.344 | 0.329 | 1 CD4_Naive_UCBMC |
| PTP4A2             | 0.00022344 | 0.11109242 | 0.391 | 0.375 | 1 CD4_Naive_UCBMC |



|                    |            |            |       |       |                   |
|--------------------|------------|------------|-------|-------|-------------------|
| IPO5               | 0.00022564 | 0.15974466 | 0.265 | 0.246 | 1 CD4_Naive_UCBMC |
| BMPR1B             | 0.00023671 | 0.13750229 | 0.297 | 0.268 | 1 CD4_Naive_UCBMC |
| AGO2               | 0.00031106 | 0.17253316 | 0.268 | 0.247 | 1 CD4_Naive_UCBMC |
| LARP4              | 0.00031578 | 0.11855391 | 0.372 | 0.353 | 1 CD4_Naive_UCBMC |
| CLK4               | 0.00033952 | 0.19842373 | 0.312 | 0.298 | 1 CD4_Naive_UCBMC |
| NBAS               | 0.00034826 | 0.15549055 | 0.307 | 0.286 | 1 CD4_Naive_UCBMC |
| ENSMMUG00000040181 | 0.00036618 | 0.23698276 | 0.271 | 0.255 | 1 CD4_Naive_UCBMC |
| DCAF8              | 0.00037914 | 0.11468345 | 0.348 | 0.332 | 1 CD4_Naive_UCBMC |
| MAP2K5             | 0.00041803 | 0.13623147 | 0.322 | 0.302 | 1 CD4_Naive_UCBMC |
| FAM222B            | 0.00042924 | 0.11982706 | 0.318 | 0.299 | 1 CD4_Naive_UCBMC |
| ETFB               | 0.00043992 | 0.12346624 | 0.343 | 0.327 | 1 CD4_Naive_UCBMC |
| PCNX2              | 0.00047524 | 0.14452138 | 0.266 | 0.244 | 1 CD4_Naive_UCBMC |
| BOD1L1             | 0.00065446 | 0.20499267 | 0.277 | 0.261 | 1 CD4_Naive_UCBMC |
| BCAS2              | 0.00068294 | 0.1371655  | 0.372 | 0.361 | 1 CD4_Naive_UCBMC |
| CD58               | 0.00072361 | 0.12846215 | 0.265 | 0.249 | 1 CD4_Naive_UCBMC |
| PFDN2              | 0.00082488 | 0.12148226 | 0.447 | 0.445 | 1 CD4_Naive_UCBMC |
| ZBTB11             | 0.00088732 | 0.17824185 | 0.259 | 0.241 | 1 CD4_Naive_UCBMC |
| WDPCP              | 0.00098686 | 0.26701954 | 0.257 | 0.237 | 1 CD4_Naive_UCBMC |
| VPS53              | 0.00099345 | 0.20537926 | 0.274 | 0.258 | 1 CD4_Naive_UCBMC |
| RBBP4              | 0.00105349 | 0.11774971 | 0.355 | 0.343 | 1 CD4_Naive_UCBMC |
| LDHB               | 0.00111735 | 0.20604256 | 0.261 | 0.247 | 1 CD4_Naive_UCBMC |
| MFF                | 0.00127153 | 0.16713692 | 0.346 | 0.336 | 1 CD4_Naive_UCBMC |
| SP4                | 0.00132308 | 0.21798017 | 0.251 | 0.235 | 1 CD4_Naive_UCBMC |
| ENSMMUG00000015208 | 0.00133605 | 0.15364034 | 0.355 | 0.344 | 1 CD4_Naive_UCBMC |
| IMPDH2             | 0.00134683 | 0.20140949 | 0.329 | 0.322 | 1 CD4_Naive_UCBMC |
| NR2C2              | 0.00159544 | 0.14691715 | 0.258 | 0.242 | 1 CD4_Naive_UCBMC |
| SUPT5H             | 0.00160727 | 0.18527871 | 0.26  | 0.246 | 1 CD4_Naive_UCBMC |
| TPP2               | 0.00178835 | 0.1373148  | 0.292 | 0.28  | 1 CD4_Naive_UCBMC |
| ABCG2              | 0.00196126 | 0.11315786 | 0.274 | 0.256 | 1 CD4_Naive_UCBMC |
| TRANK1             | 0.00199638 | 0.13257533 | 0.292 | 0.279 | 1 CD4_Naive_UCBMC |
| CASC3              | 0.00242626 | 0.14738155 | 0.364 | 0.357 | 1 CD4_Naive_UCBMC |
| PPP2R5A            | 0.00255354 | 0.11001885 | 0.43  | 0.423 | 1 CD4_Naive_UCBMC |
| ILF3               | 0.0026955  | 0.11810903 | 0.438 | 0.435 | 1 CD4_Naive_UCBMC |

|                   |            |            |       |       |                   |
|-------------------|------------|------------|-------|-------|-------------------|
| AATF              | 0.00282631 | 0.17193694 | 0.294 | 0.283 | 1 CD4_Naive_UCBMC |
| CDK12             | 0.00284973 | 0.12911662 | 0.335 | 0.323 | 1 CD4_Naive_UCBMC |
| SMG7              | 0.00332212 | 0.1287595  | 0.383 | 0.37  | 1 CD4_Naive_UCBMC |
| SNX2              | 0.00338908 | 0.12779894 | 0.286 | 0.272 | 1 CD4_Naive_UCBMC |
| ATG3              | 0.00356175 | 0.13819889 | 0.36  | 0.354 | 1 CD4_Naive_UCBMC |
| STRN              | 0.00363481 | 0.22886941 | 0.251 | 0.236 | 1 CD4_Naive_UCBMC |
| RAP1GDS1          | 0.003672   | 0.11125399 | 0.331 | 0.318 | 1 CD4_Naive_UCBMC |
| IARS1             | 0.00371629 | 0.20306967 | 0.259 | 0.246 | 1 CD4_Naive_UCBMC |
| CAMLG             | 0.00390686 | 0.11832798 | 0.363 | 0.355 | 1 CD4_Naive_UCBMC |
| EIF5              | 0.00442963 | 0.1004839  | 0.47  | 0.468 | 1 CD4_Naive_UCBMC |
| MED25             | 0.00652544 | 0.10705566 | 0.281 | 0.27  | 1 CD4_Naive_UCBMC |
| SZRD1             | 0.00682124 | 0.16653471 | 0.274 | 0.264 | 1 CD4_Naive_UCBMC |
| TNFRSF10A         | 0.00689244 | 0.17133905 | 0.334 | 0.326 | 1 CD4_Naive_UCBMC |
| LYSMD3            | 0.00782876 | 0.11239747 | 0.251 | 0.237 | 1 CD4_Naive_UCBMC |
| ARFGEF2           | 0.00810243 | 0.12556565 | 0.305 | 0.293 | 1 CD4_Naive_UCBMC |
| MAP2K6            | 0.00815702 | 0.17313043 | 0.261 | 0.247 | 1 CD4_Naive_UCBMC |
| PLCD4             | 0.00853948 | 0.16452031 | 0.258 | 0.248 | 1 CD4_Naive_UCBMC |
| PIAS2             | 0.0093547  | 0.14211322 | 0.284 | 0.275 | 1 CD4_Naive_UCBMC |
| COMMD3            | 0.00986664 | 0.14638378 | 0.266 | 0.256 | 1 CD4_Naive_UCBMC |
| ENSMUG00000045425 | 0.01183812 | 0.16449806 | 0.262 | 0.256 | 1 CD4_Naive_UCBMC |
| FTO               | 0.01360784 | 0.11445011 | 0.393 | 0.391 | 1 CD4_Naive_UCBMC |
| NUBPL             | 0.01387702 | 0.21646284 | 0.251 | 0.24  | 1 CD4_Naive_UCBMC |
| MTIF2             | 0.01514476 | 0.16204769 | 0.262 | 0.255 | 1 CD4_Naive_UCBMC |
| ATP6V0D1          | 0.01527992 | 0.18205346 | 0.305 | 0.301 | 1 CD4_Naive_UCBMC |
| CMAH              | 0.01639212 | 0.12601275 | 0.359 | 0.35  | 1 CD4_Naive_UCBMC |
| SGMS1             | 0.02171314 | 0.1384188  | 0.28  | 0.271 | 1 CD4_Naive_UCBMC |
| NLRC5             | 0.02185106 | 0.13993291 | 0.258 | 0.249 | 1 CD4_Naive_UCBMC |
| GGPS1             | 0.0268857  | 0.1779799  | 0.252 | 0.246 | 1 CD4_Naive_UCBMC |
| ENSMUG00000055376 | 0.03026028 | 0.10836342 | 0.321 | 0.318 | 1 CD4_Naive_UCBMC |
| FAM204A           | 0.03394648 | 0.16906417 | 0.257 | 0.255 | 1 CD4_Naive_UCBMC |
| UVRAG             | 0.04085193 | 0.10649039 | 0.485 | 0.493 | 1 CD4_Naive_UCBMC |
| TP53BP2           | 0.0487338  | 0.10829967 | 0.264 | 0.258 | 1 CD4_Naive_UCBMC |
| VPS13A            | 0.0537748  | 0.11255017 | 0.271 | 0.265 | 1 CD4_Naive_UCBMC |

|                     |            |            |       |       |                    |
|---------------------|------------|------------|-------|-------|--------------------|
| ATR                 | 0.06632524 | 0.15948033 | 0.262 | 0.256 | 1 CD4_Naive_UCBMC  |
| TMEM230             | 0.07341701 | 0.10525785 | 0.309 | 0.309 | 1 CD4_Naive_UCBMC  |
| GTF2E2              | 0.08664058 | 0.12871099 | 0.331 | 0.334 | 1 CD4_Naive_UCBMC  |
| RAB6A               | 0.09126841 | 0.10692357 | 0.271 | 0.267 | 1 CD4_Naive_UCBMC  |
| ENSMMUG000000003130 | 0.09643799 | 0.11728499 | 0.267 | 0.264 | 1 CD4_Naive_UCBMC  |
| EID1                | 0.10094955 | 0.13174659 | 0.32  | 0.324 | 1 CD4_Naive_UCBMC  |
| CCDC69              | 0.10216126 | 0.13798598 | 0.287 | 0.289 | 1 CD4_Naive_UCBMC  |
| PPP1R8              | 0.11992561 | 0.15087525 | 0.259 | 0.256 | 1 CD4_Naive_UCBMC  |
| UBASH3B             | 0.12160291 | 0.10234811 | 0.322 | 0.323 | 1 CD4_Naive_UCBMC  |
| ANAPC16             | 0.15220165 | 0.11416409 | 0.293 | 0.299 | 1 CD4_Naive_UCBMC  |
| TRNT1               | 0.28222076 | 0.10171547 | 0.251 | 0.254 | 1 CD4_Naive_UCBMC  |
| CHP1                | 0.42860909 | 0.1154353  | 0.289 | 0.301 | 1 CD4_Naive_UCBMC  |
| SSBP1               | 0.489998   | 0.11747433 | 0.256 | 0.264 | 1 CD4_Naive_UCBMC  |
| LTB                 | 0          | 2.45084141 | 0.932 | 0.421 | 0 CD4_Naive_spleen |
| JUN                 | 0          | 2.291612   | 0.874 | 0.406 | 0 CD4_Naive_spleen |
| NOP53               | 0          | 1.8147509  | 0.707 | 0.245 | 0 CD4_Naive_spleen |
| C1QBP               | 0          | 2.74845703 | 0.515 | 0.081 | 0 CD4_Naive_spleen |
| ATP5F1D             | 0          | 1.99968888 | 0.537 | 0.135 | 0 CD4_Naive_spleen |
| HIST1H2AC           | 0          | 2.42009934 | 0.549 | 0.164 | 0 CD4_Naive_spleen |
| HSPD1               | 0          | 1.80266483 | 0.581 | 0.204 | 0 CD4_Naive_spleen |
| NABP1               | 0          | 1.43656721 | 0.696 | 0.321 | 0 CD4_Naive_spleen |
| HSPH1               | 0          | 2.1259114  | 0.73  | 0.356 | 0 CD4_Naive_spleen |
| SRSF2               | 0          | 1.49853251 | 0.594 | 0.225 | 0 CD4_Naive_spleen |
| PM20D2              | 0          | 1.35556065 | 0.864 | 0.504 | 0 CD4_Naive_spleen |
| COX5A               | 0          | 1.50663217 | 0.587 | 0.23  | 0 CD4_Naive_spleen |
| ENSMMUG000000040065 | 0          | 2.4669341  | 0.432 | 0.076 | 0 CD4_Naive_spleen |
| TRAPPC5             | 0          | 3.18890059 | 0.385 | 0.039 | 0 CD4_Naive_spleen |
| FOSB                | 0          | 1.80155999 | 0.565 | 0.22  | 0 CD4_Naive_spleen |
| MZT2B               | 0          | 1.75103517 | 0.467 | 0.14  | 0 CD4_Naive_spleen |
| COTL1               | 0          | 1.20138042 | 0.813 | 0.501 | 0 CD4_Naive_spleen |
| ENSMMUG000000008417 | 0          | 2.16974269 | 0.375 | 0.08  | 0 CD4_Naive_spleen |
| DNAJB1              | 0          | 3.16233004 | 0.353 | 0.07  | 0 CD4_Naive_spleen |
| NT5C                | 0          | 2.44789764 | 0.335 | 0.054 | 0 CD4_Naive_spleen |

|                    |           |            |       |       |           |                  |
|--------------------|-----------|------------|-------|-------|-----------|------------------|
| TXNL4A             | 0         | 1.79111729 | 0.374 | 0.094 | 0         | CD4_Naive_spleen |
| ID3                | 0         | 2.68291876 | 0.337 | 0.06  | 0         | CD4_Naive_spleen |
| H1FX               | 0         | 2.41707798 | 0.297 | 0.054 | 0         | CD4_Naive_spleen |
| FOS                | 0         | 1.23038633 | 0.96  | 0.739 | 0         | CD4_Naive_spleen |
| PFN1               | 0         | 1.12400587 | 0.958 | 0.804 | 0         | CD4_Naive_spleen |
| BTG1               | 0         | 0.78402675 | 0.975 | 0.869 | 0         | CD4_Naive_spleen |
| RPS2               | 0         | 1.11885631 | 0.968 | 0.883 | 0         | CD4_Naive_spleen |
| RPL13              | 0         | 1.84106041 | 0.996 | 0.958 | 0         | CD4_Naive_spleen |
| HNRNPAB            | 5.24E-297 | 1.72545972 | 0.413 | 0.123 | 1.86E-292 | CD4_Naive_spleen |
| DUSP1              | 2.65E-286 | 1.41559678 | 0.675 | 0.332 | 9.38E-282 | CD4_Naive_spleen |
| TRIR               | 1.15E-280 | 1.20688836 | 0.674 | 0.316 | 4.08E-276 | CD4_Naive_spleen |
| GADD45GIP1         | 1.26E-280 | 1.8947256  | 0.322 | 0.078 | 4.48E-276 | CD4_Naive_spleen |
| H4C15              | 1.19E-277 | 1.69968898 | 0.422 | 0.134 | 4.20E-273 | CD4_Naive_spleen |
| ENSMMUG00000054358 | 2.06E-276 | 1.23412984 | 0.984 | 0.903 | 7.29E-272 | CD4_Naive_spleen |
| DENND2D            | 2.04E-273 | 1.36115796 | 0.579 | 0.247 | 7.24E-269 | CD4_Naive_spleen |
| CD40LG             | 2.96E-262 | 1.84396441 | 0.326 | 0.085 | 1.05E-257 | CD4_Naive_spleen |
| DNAJA1             | 5.82E-254 | 1.39740126 | 0.651 | 0.322 | 2.06E-249 | CD4_Naive_spleen |
| TMEM160            | 1.73E-252 | 1.7444948  | 0.325 | 0.086 | 6.11E-248 | CD4_Naive_spleen |
| HSPA8              | 1.31E-251 | 0.953621   | 0.865 | 0.593 | 4.64E-247 | CD4_Naive_spleen |
| EEF1A1             | 1.29E-250 | 0.44751851 | 0.986 | 0.983 | 4.58E-246 | CD4_Naive_spleen |
| TESC               | 5.79E-236 | 1.29298087 | 0.595 | 0.284 | 2.05E-231 | CD4_Naive_spleen |
| ENSMMUG00000053918 | 2.16E-235 | 1.64121765 | 0.378 | 0.123 | 7.66E-231 | CD4_Naive_spleen |
| BCL11B             | 3.42E-235 | 0.88039214 | 0.912 | 0.701 | 1.21E-230 | CD4_Naive_spleen |
| ACTG1              | 1.48E-227 | 0.78828469 | 0.952 | 0.878 | 5.25E-223 | CD4_Naive_spleen |
| TRAC               | 1.61E-225 | 0.69843148 | 0.969 | 0.829 | 5.72E-221 | CD4_Naive_spleen |
| HSBP1L1            | 2.98E-220 | 1.8360054  | 0.269 | 0.068 | 1.06E-215 | CD4_Naive_spleen |
| PPIA               | 9.70E-220 | 1.40338789 | 0.438 | 0.164 | 3.44E-215 | CD4_Naive_spleen |
| ITGA1              | 9.51E-218 | 1.56856684 | 0.496 | 0.221 | 3.37E-213 | CD4_Naive_spleen |
| PPP1R10            | 7.16E-214 | 1.18767364 | 0.621 | 0.315 | 2.54E-209 | CD4_Naive_spleen |
| IL27RA             | 2.98E-212 | 1.52907091 | 0.377 | 0.13  | 1.06E-207 | CD4_Naive_spleen |
| CD3G               | 1.34E-208 | 1.0982545  | 0.611 | 0.304 | 4.76E-204 | CD4_Naive_spleen |
| ACTB               | 6.03E-207 | 0.56554996 | 0.99  | 0.977 | 2.14E-202 | CD4_Naive_spleen |
| HNRNP              | 9.74E-196 | 0.98109463 | 0.703 | 0.402 | 3.45E-191 | CD4_Naive_spleen |

|                    |           |            |       |       |           |                  |
|--------------------|-----------|------------|-------|-------|-----------|------------------|
| IL17RA             | 6.91E-191 | 1.49066612 | 0.334 | 0.111 | 2.45E-186 | CD4_Naive_spleen |
| SRRM2              | 3.20E-190 | 0.90798036 | 0.744 | 0.458 | 1.14E-185 | CD4_Naive_spleen |
| ANP32B             | 3.09E-189 | 0.83237328 | 0.805 | 0.538 | 1.09E-184 | CD4_Naive_spleen |
| ARF6               | 2.28E-188 | 1.2842622  | 0.372 | 0.134 | 8.07E-184 | CD4_Naive_spleen |
| LCP1               | 9.56E-188 | 0.88075143 | 0.799 | 0.544 | 3.39E-183 | CD4_Naive_spleen |
| IL6ST              | 4.96E-183 | 1.00858228 | 0.768 | 0.52  | 1.76E-178 | CD4_Naive_spleen |
| PTPRC              | 6.17E-182 | 0.45718906 | 0.997 | 0.975 | 2.19E-177 | CD4_Naive_spleen |
| ITM2B              | 8.15E-181 | 0.67407058 | 0.911 | 0.738 | 2.89E-176 | CD4_Naive_spleen |
| GIMAP4             | 1.53E-178 | 1.59286952 | 0.25  | 0.069 | 5.42E-174 | CD4_Naive_spleen |
| PLAC8              | 1.11E-177 | 1.19901426 | 0.628 | 0.368 | 3.93E-173 | CD4_Naive_spleen |
| SIRPG              | 1.21E-177 | 1.23713134 | 0.425 | 0.176 | 4.30E-173 | CD4_Naive_spleen |
| ZC3HAV1            | 2.90E-176 | 0.81404978 | 0.904 | 0.73  | 1.03E-171 | CD4_Naive_spleen |
| UBE2S              | 5.77E-176 | 1.64114693 | 0.255 | 0.073 | 2.05E-171 | CD4_Naive_spleen |
| SLFN5              | 1.05E-175 | 1.23635583 | 0.403 | 0.159 | 3.72E-171 | CD4_Naive_spleen |
| LSM4               | 5.65E-175 | 1.06162648 | 0.503 | 0.23  | 2.00E-170 | CD4_Naive_spleen |
| CYC1               | 1.69E-174 | 1.27811629 | 0.34  | 0.119 | 5.99E-170 | CD4_Naive_spleen |
| PAK2               | 2.11E-174 | 0.75446175 | 0.83  | 0.577 | 7.47E-170 | CD4_Naive_spleen |
| ENSMMUG00000053392 | 9.64E-173 | 0.98980296 | 0.619 | 0.329 | 3.42E-168 | CD4_Naive_spleen |
| ITPKB              | 7.01E-169 | 1.0222926  | 0.575 | 0.295 | 2.48E-164 | CD4_Naive_spleen |
| RASSF1             | 5.51E-168 | 1.03909444 | 0.571 | 0.293 | 1.95E-163 | CD4_Naive_spleen |
| RANBP1             | 9.97E-168 | 1.27272706 | 0.37  | 0.142 | 3.53E-163 | CD4_Naive_spleen |
| ZFP36              | 2.29E-164 | 0.8998679  | 0.792 | 0.548 | 8.12E-160 | CD4_Naive_spleen |
| BRD9               | 7.53E-163 | 1.19991244 | 0.398 | 0.162 | 2.67E-158 | CD4_Naive_spleen |
| CD38               | 2.55E-160 | 0.93445827 | 0.694 | 0.43  | 9.04E-156 | CD4_Naive_spleen |
| CLTA               | 7.02E-157 | 1.07181193 | 0.443 | 0.195 | 2.49E-152 | CD4_Naive_spleen |
| RPL19              | 1.63E-156 | 0.3941185  | 0.975 | 0.973 | 5.76E-152 | CD4_Naive_spleen |
| GPR171             | 3.94E-155 | 1.14801819 | 0.302 | 0.106 | 1.40E-150 | CD4_Naive_spleen |
| MYC                | 7.71E-154 | 1.4001848  | 0.31  | 0.113 | 2.73E-149 | CD4_Naive_spleen |
| ENSMMUG00000020050 | 1.20E-153 | 1.56676561 | 0.272 | 0.091 | 4.23E-149 | CD4_Naive_spleen |
| PIK3R1             | 3.85E-152 | 1.0466656  | 0.459 | 0.212 | 1.36E-147 | CD4_Naive_spleen |
| DGKD               | 6.70E-152 | 1.23685091 | 0.387 | 0.162 | 2.37E-147 | CD4_Naive_spleen |
| ENSMMUG00000051343 | 5.17E-151 | 1.22360539 | 0.331 | 0.125 | 1.83E-146 | CD4_Naive_spleen |
| AUTS2              | 7.38E-151 | 1.04350376 | 0.567 | 0.303 | 2.62E-146 | CD4_Naive_spleen |

|                     |           |            |       |       |           |                  |
|---------------------|-----------|------------|-------|-------|-----------|------------------|
| C10H20orf24         | 4.56E-149 | 0.94539054 | 0.498 | 0.239 | 1.62E-144 | CD4_Naive_spleen |
| TRAF3IP3            | 2.80E-148 | 0.84323006 | 0.701 | 0.423 | 9.94E-144 | CD4_Naive_spleen |
| ENSMMUG000000051300 | 2.69E-147 | 0.37436532 | 0.991 | 0.948 | 9.52E-143 | CD4_Naive_spleen |
| NME3                | 1.17E-146 | 0.90046573 | 0.586 | 0.314 | 4.14E-142 | CD4_Naive_spleen |
| STK17B              | 8.59E-146 | 0.60128296 | 0.967 | 0.871 | 3.04E-141 | CD4_Naive_spleen |
| KLF6                | 4.24E-145 | 0.7396759  | 0.888 | 0.706 | 1.50E-140 | CD4_Naive_spleen |
| SEMA4D              | 7.66E-145 | 0.80774386 | 0.724 | 0.463 | 2.71E-140 | CD4_Naive_spleen |
| DYNLL1              | 1.18E-142 | 1.06662951 | 0.489 | 0.248 | 4.17E-138 | CD4_Naive_spleen |
| MARCKSL1            | 1.31E-142 | 1.33538004 | 0.271 | 0.094 | 4.63E-138 | CD4_Naive_spleen |
| THEMIS              | 1.96E-142 | 0.7700385  | 0.822 | 0.599 | 6.95E-138 | CD4_Naive_spleen |
| RGCC                | 2.95E-142 | 1.0351095  | 0.584 | 0.331 | 1.05E-137 | CD4_Naive_spleen |
| FAM102A             | 6.27E-142 | 1.15243948 | 0.385 | 0.164 | 2.22E-137 | CD4_Naive_spleen |
| PPM1G               | 5.52E-140 | 1.02617215 | 0.418 | 0.188 | 1.96E-135 | CD4_Naive_spleen |
| ARRDC3              | 6.84E-139 | 1.18123333 | 0.433 | 0.207 | 2.42E-134 | CD4_Naive_spleen |
| HSP90AA1            | 1.60E-138 | 0.75515115 | 0.885 | 0.724 | 5.68E-134 | CD4_Naive_spleen |
| RAC2                | 3.22E-137 | 0.85705686 | 0.59  | 0.331 | 1.14E-132 | CD4_Naive_spleen |
| CLIC1               | 3.56E-137 | 1.15483357 | 0.362 | 0.153 | 1.26E-132 | CD4_Naive_spleen |
| NOL4L               | 1.38E-136 | 1.40237484 | 0.269 | 0.095 | 4.88E-132 | CD4_Naive_spleen |
| ZFAND5              | 7.73E-135 | 1.14335768 | 0.34  | 0.138 | 2.74E-130 | CD4_Naive_spleen |
| SRSF7               | 4.14E-134 | 0.72597511 | 0.761 | 0.497 | 1.47E-129 | CD4_Naive_spleen |
| GTF2I               | 2.41E-133 | 0.73598512 | 0.724 | 0.471 | 8.55E-129 | CD4_Naive_spleen |
| SLC2A3              | 1.07E-131 | 0.88312118 | 0.705 | 0.481 | 3.78E-127 | CD4_Naive_spleen |
| SLC9A3R1            | 9.87E-130 | 1.12711878 | 0.355 | 0.152 | 3.50E-125 | CD4_Naive_spleen |
| VIM                 | 1.12E-128 | 0.93187932 | 0.583 | 0.344 | 3.97E-124 | CD4_Naive_spleen |
| AKIRIN1             | 1.93E-127 | 0.94412988 | 0.428 | 0.201 | 6.84E-123 | CD4_Naive_spleen |
| HSP90AB1            | 1.50E-126 | 0.50984246 | 0.947 | 0.872 | 5.30E-122 | CD4_Naive_spleen |
| CREM                | 1.83E-126 | 0.78710799 | 0.412 | 0.192 | 6.48E-122 | CD4_Naive_spleen |
| EIF3B               | 5.69E-126 | 0.99700338 | 0.36  | 0.153 | 2.01E-121 | CD4_Naive_spleen |
| ENSMMUG000000061128 | 9.84E-126 | 0.78891039 | 0.643 | 0.387 | 3.49E-121 | CD4_Naive_spleen |
| ITGB2               | 1.50E-125 | 0.90226509 | 0.456 | 0.224 | 5.30E-121 | CD4_Naive_spleen |
| RPS26               | 8.58E-125 | 0.30945112 | 0.99  | 0.994 | 3.04E-120 | CD4_Naive_spleen |
| TERF2IP             | 1.87E-124 | 0.94524506 | 0.428 | 0.203 | 6.63E-120 | CD4_Naive_spleen |
| ITGAL               | 2.71E-124 | 1.1003667  | 0.341 | 0.146 | 9.60E-120 | CD4_Naive_spleen |

|                    |           |            |       |       |           |                  |
|--------------------|-----------|------------|-------|-------|-----------|------------------|
| MCL1               | 1.43E-122 | 0.84174349 | 0.647 | 0.404 | 5.06E-118 | CD4_Naive_spleen |
| ZHX2               | 9.19E-121 | 0.8601854  | 0.449 | 0.223 | 3.26E-116 | CD4_Naive_spleen |
| CD3D               | 1.45E-120 | 0.51878546 | 0.891 | 0.744 | 5.14E-116 | CD4_Naive_spleen |
| COX17              | 1.45E-120 | 0.98414586 | 0.356 | 0.156 | 5.15E-116 | CD4_Naive_spleen |
| MANF               | 2.26E-119 | 1.13269804 | 0.31  | 0.128 | 8.01E-115 | CD4_Naive_spleen |
| CD2                | 7.92E-118 | 0.77015186 | 0.606 | 0.361 | 2.81E-113 | CD4_Naive_spleen |
| ACAP2              | 1.25E-117 | 0.59029158 | 0.85  | 0.635 | 4.41E-113 | CD4_Naive_spleen |
| MAP2K1             | 1.90E-116 | 0.94155127 | 0.372 | 0.169 | 6.72E-112 | CD4_Naive_spleen |
| TMEM59L            | 3.13E-116 | 0.97400673 | 0.374 | 0.17  | 1.11E-111 | CD4_Naive_spleen |
| ENSMMUG00000061244 | 3.71E-115 | 1.08084974 | 0.366 | 0.17  | 1.31E-110 | CD4_Naive_spleen |
| VGLL4              | 4.30E-115 | 0.9783664  | 0.412 | 0.2   | 1.52E-110 | CD4_Naive_spleen |
| NFATC2             | 1.19E-114 | 0.91029848 | 0.457 | 0.235 | 4.23E-110 | CD4_Naive_spleen |
| ETS1               | 2.71E-114 | 0.49878611 | 0.926 | 0.815 | 9.59E-110 | CD4_Naive_spleen |
| PDIA6              | 2.82E-114 | 1.11684467 | 0.308 | 0.129 | 1.00E-109 | CD4_Naive_spleen |
| EIF3F              | 6.14E-114 | 0.57289033 | 0.819 | 0.623 | 2.17E-109 | CD4_Naive_spleen |
| IKZF1              | 2.74E-113 | 0.52821244 | 0.884 | 0.701 | 9.72E-109 | CD4_Naive_spleen |
| SPINT2             | 8.48E-113 | 1.11802868 | 0.274 | 0.107 | 3.01E-108 | CD4_Naive_spleen |
| ARGLU1             | 3.27E-112 | 0.54813709 | 0.862 | 0.676 | 1.16E-107 | CD4_Naive_spleen |
| GRAP2              | 6.13E-112 | 0.87058752 | 0.501 | 0.278 | 2.17E-107 | CD4_Naive_spleen |
| H2AZ2              | 2.16E-111 | 0.60168882 | 0.794 | 0.559 | 7.66E-107 | CD4_Naive_spleen |
| CARD11             | 3.62E-111 | 0.95412324 | 0.482 | 0.264 | 1.28E-106 | CD4_Naive_spleen |
| STK17A             | 9.69E-110 | 0.59192061 | 0.808 | 0.594 | 3.43E-105 | CD4_Naive_spleen |
| UBE2D2             | 1.47E-109 | 0.86359174 | 0.439 | 0.221 | 5.20E-105 | CD4_Naive_spleen |
| ENSMMUG00000063637 | 7.79E-109 | 0.4568779  | 0.963 | 0.931 | 2.76E-104 | CD4_Naive_spleen |
| ATP6V0E1           | 9.86E-109 | 0.74747365 | 0.542 | 0.304 | 3.49E-104 | CD4_Naive_spleen |
| BTG2               | 1.01E-107 | 0.76040036 | 0.778 | 0.596 | 3.60E-103 | CD4_Naive_spleen |
| PDCD6-AHRR         | 1.26E-107 | 1.02248639 | 0.28  | 0.113 | 4.45E-103 | CD4_Naive_spleen |
| PTPN22             | 1.63E-104 | 0.99817266 | 0.371 | 0.18  | 5.77E-100 | CD4_Naive_spleen |
| AHSA1              | 6.96E-103 | 1.04600682 | 0.282 | 0.117 | 2.47E-98  | CD4_Naive_spleen |
| RALBP1             | 8.00E-103 | 0.88909515 | 0.377 | 0.182 | 2.83E-98  | CD4_Naive_spleen |
| KTN1               | 1.61E-102 | 0.8514846  | 0.468 | 0.254 | 5.71E-98  | CD4_Naive_spleen |
| TPM4               | 9.18E-102 | 1.08129457 | 0.255 | 0.102 | 3.25E-97  | CD4_Naive_spleen |
| SASH3              | 1.70E-100 | 1.10480794 | 0.256 | 0.103 | 6.02E-96  | CD4_Naive_spleen |

|                     |           |            |       |       |          |                  |
|---------------------|-----------|------------|-------|-------|----------|------------------|
| ENSMMUG00000008604  | 4.07E-100 | 1.09058932 | 0.257 | 0.104 | 1.44E-95 | CD4_Naive_spleen |
| ENSMMUG00000004545  | 5.57E-100 | 0.41033536 | 0.912 | 0.792 | 1.97E-95 | CD4_Naive_spleen |
| CD47                | 1.08E-99  | 0.63963152 | 0.659 | 0.425 | 3.82E-95 | CD4_Naive_spleen |
| PTGES3              | 1.57E-99  | 0.60960205 | 0.816 | 0.635 | 5.55E-95 | CD4_Naive_spleen |
| HNRNPU              | 6.20E-99  | 0.56588663 | 0.815 | 0.624 | 2.20E-94 | CD4_Naive_spleen |
| STIP1               | 8.30E-99  | 0.93822541 | 0.348 | 0.165 | 2.94E-94 | CD4_Naive_spleen |
| PDE7A               | 1.11E-98  | 0.63395623 | 0.797 | 0.595 | 3.95E-94 | CD4_Naive_spleen |
| ENSMMUG000000065373 | 1.15E-98  | 0.50375633 | 0.972 | 0.983 | 4.06E-94 | CD4_Naive_spleen |
| RABEP1              | 3.70E-98  | 0.85621078 | 0.346 | 0.162 | 1.31E-93 | CD4_Naive_spleen |
| TOB1                | 5.53E-98  | 0.74506154 | 0.608 | 0.384 | 1.96E-93 | CD4_Naive_spleen |
| CSK                 | 1.93E-97  | 0.86844269 | 0.385 | 0.192 | 6.82E-93 | CD4_Naive_spleen |
| SEM1                | 2.27E-97  | 0.68404629 | 0.57  | 0.341 | 8.03E-93 | CD4_Naive_spleen |
| HPCAL1              | 2.79E-97  | 0.66556232 | 0.594 | 0.354 | 9.88E-93 | CD4_Naive_spleen |
| RGS10               | 7.13E-97  | 0.67718278 | 0.701 | 0.493 | 2.52E-92 | CD4_Naive_spleen |
| TCP1                | 8.80E-97  | 0.82951093 | 0.44  | 0.232 | 3.12E-92 | CD4_Naive_spleen |
| ENSMMUG000000060287 | 8.88E-97  | 0.36501704 | 0.968 | 0.89  | 3.15E-92 | CD4_Naive_spleen |
| VAV1                | 2.20E-95  | 0.83981042 | 0.394 | 0.2   | 7.79E-91 | CD4_Naive_spleen |
| ZFP36L1             | 2.91E-95  | 0.6932656  | 0.686 | 0.476 | 1.03E-90 | CD4_Naive_spleen |
| VAV3                | 5.84E-95  | 0.94655371 | 0.436 | 0.242 | 2.07E-90 | CD4_Naive_spleen |
| METTL26             | 9.52E-95  | 0.93580336 | 0.337 | 0.159 | 3.37E-90 | CD4_Naive_spleen |
| LCK                 | 6.58E-94  | 0.57836186 | 0.746 | 0.522 | 2.33E-89 | CD4_Naive_spleen |
| ENSMMUG000000062086 | 1.16E-93  | 1.00053094 | 0.289 | 0.128 | 4.12E-89 | CD4_Naive_spleen |
| TBC1D10C            | 1.40E-93  | 0.7447595  | 0.477 | 0.263 | 4.97E-89 | CD4_Naive_spleen |
| RGS19               | 2.74E-93  | 0.92326429 | 0.326 | 0.152 | 9.69E-89 | CD4_Naive_spleen |
| EIF4A1              | 4.26E-93  | 0.66804211 | 0.587 | 0.36  | 1.51E-88 | CD4_Naive_spleen |
| ZNF831              | 4.73E-93  | 0.99343323 | 0.314 | 0.146 | 1.68E-88 | CD4_Naive_spleen |
| ALKBH7              | 6.63E-93  | 0.85626072 | 0.363 | 0.177 | 2.35E-88 | CD4_Naive_spleen |
| CAP1                | 1.23E-92  | 0.71465883 | 0.545 | 0.325 | 4.35E-88 | CD4_Naive_spleen |
| ENSMMUG000000059988 | 1.30E-91  | 0.9656223  | 0.265 | 0.112 | 4.60E-87 | CD4_Naive_spleen |
| SGK1                | 1.98E-90  | 0.94431221 | 0.329 | 0.159 | 7.00E-86 | CD4_Naive_spleen |
| DNMT3A              | 4.33E-90  | 0.82041463 | 0.393 | 0.203 | 1.53E-85 | CD4_Naive_spleen |
| CCND3               | 6.04E-90  | 0.50222436 | 0.905 | 0.741 | 2.14E-85 | CD4_Naive_spleen |
| SRP9                | 1.08E-89  | 0.87879307 | 0.314 | 0.145 | 3.81E-85 | CD4_Naive_spleen |



|           |          |            |       |       |          |                  |
|-----------|----------|------------|-------|-------|----------|------------------|
| SFMBT2    | 1.48E-89 | 0.82425134 | 0.477 | 0.274 | 5.24E-85 | CD4_Naive_spleen |
| TLN1      | 1.48E-88 | 0.70131622 | 0.546 | 0.33  | 5.24E-84 | CD4_Naive_spleen |
| DNAJB4    | 3.40E-88 | 1.07523131 | 0.267 | 0.118 | 1.21E-83 | CD4_Naive_spleen |
| KIF2A     | 3.61E-88 | 0.66057784 | 0.548 | 0.331 | 1.28E-83 | CD4_Naive_spleen |
| PYHIN1    | 2.69E-87 | 0.71441169 | 0.453 | 0.25  | 9.53E-83 | CD4_Naive_spleen |
| NDFIP1    | 5.33E-87 | 0.52265667 | 0.84  | 0.663 | 1.89E-82 | CD4_Naive_spleen |
| CMPK1     | 1.70E-86 | 0.82442123 | 0.308 | 0.143 | 6.03E-82 | CD4_Naive_spleen |
| CHORDC1   | 7.43E-86 | 0.73621287 | 0.594 | 0.385 | 2.63E-81 | CD4_Naive_spleen |
| SLC38A2   | 2.85E-85 | 0.71666708 | 0.489 | 0.29  | 1.01E-80 | CD4_Naive_spleen |
| CD4       | 4.63E-85 | 0.72568311 | 0.478 | 0.274 | 1.64E-80 | CD4_Naive_spleen |
| MRPL33    | 1.57E-83 | 0.74235249 | 0.331 | 0.16  | 5.55E-79 | CD4_Naive_spleen |
| TET3      | 1.78E-83 | 0.80941382 | 0.413 | 0.228 | 6.31E-79 | CD4_Naive_spleen |
| CBX3      | 2.20E-83 | 0.56731627 | 0.645 | 0.421 | 7.80E-79 | CD4_Naive_spleen |
| TCF7      | 4.81E-83 | 0.75888367 | 0.435 | 0.241 | 1.70E-78 | CD4_Naive_spleen |
| PTK2B     | 8.18E-83 | 1.05955406 | 0.279 | 0.13  | 2.90E-78 | CD4_Naive_spleen |
| FAM107B   | 1.08E-82 | 0.67099994 | 0.604 | 0.397 | 3.82E-78 | CD4_Naive_spleen |
| MAF1      | 4.46E-82 | 0.84913618 | 0.306 | 0.146 | 1.58E-77 | CD4_Naive_spleen |
| ATF1      | 6.58E-81 | 0.91945751 | 0.312 | 0.153 | 2.33E-76 | CD4_Naive_spleen |
| USP44     | 1.91E-80 | 0.74770252 | 0.415 | 0.228 | 6.78E-76 | CD4_Naive_spleen |
| HYPK      | 6.54E-80 | 0.65665019 | 0.512 | 0.304 | 2.32E-75 | CD4_Naive_spleen |
| DEK       | 1.22E-79 | 0.69779156 | 0.455 | 0.262 | 4.32E-75 | CD4_Naive_spleen |
| SLC39A10  | 1.24E-79 | 0.79472419 | 0.286 | 0.134 | 4.40E-75 | CD4_Naive_spleen |
| VCP       | 1.47E-79 | 0.72431909 | 0.374 | 0.195 | 5.20E-75 | CD4_Naive_spleen |
| CLK1      | 3.66E-79 | 0.56974701 | 0.678 | 0.458 | 1.30E-74 | CD4_Naive_spleen |
| PPP1CC    | 6.47E-79 | 0.58812374 | 0.58  | 0.364 | 2.29E-74 | CD4_Naive_spleen |
| PLEKHG3   | 8.78E-79 | 0.93092557 | 0.256 | 0.115 | 3.11E-74 | CD4_Naive_spleen |
| CD164     | 1.42E-78 | 0.5702739  | 0.656 | 0.448 | 5.02E-74 | CD4_Naive_spleen |
| HNRNPA2B1 | 3.48E-78 | 0.3270775  | 0.976 | 0.921 | 1.23E-73 | CD4_Naive_spleen |
| GLS       | 3.61E-78 | 0.68305477 | 0.525 | 0.322 | 1.28E-73 | CD4_Naive_spleen |
| CCT2      | 1.62E-77 | 0.59180592 | 0.642 | 0.425 | 5.73E-73 | CD4_Naive_spleen |
| RCSD1     | 1.75E-77 | 0.62507237 | 0.523 | 0.319 | 6.20E-73 | CD4_Naive_spleen |
| TMEM87B   | 2.64E-77 | 0.83238926 | 0.29  | 0.139 | 9.36E-73 | CD4_Naive_spleen |
| ADAM10    | 3.21E-77 | 0.58982663 | 0.571 | 0.36  | 1.14E-72 | CD4_Naive_spleen |

|                    |          |            |       |       |          |                  |
|--------------------|----------|------------|-------|-------|----------|------------------|
| ACTN1              | 3.32E-77 | 0.67076229 | 0.405 | 0.22  | 1.18E-72 | CD4_Naive_spleen |
| AKR7A2             | 3.37E-77 | 0.77071189 | 0.276 | 0.127 | 1.19E-72 | CD4_Naive_spleen |
| ENO2               | 3.95E-77 | 0.85428401 | 0.263 | 0.12  | 1.40E-72 | CD4_Naive_spleen |
| MIC1               | 4.96E-77 | 0.52671828 | 0.746 | 0.547 | 1.76E-72 | CD4_Naive_spleen |
| ENSMMUG00000016898 | 4.65E-76 | 0.66959101 | 0.44  | 0.249 | 1.65E-71 | CD4_Naive_spleen |
| NXPE3              | 5.45E-76 | 0.73879676 | 0.551 | 0.36  | 1.93E-71 | CD4_Naive_spleen |
| METTL9             | 1.03E-75 | 0.64913021 | 0.46  | 0.266 | 3.64E-71 | CD4_Naive_spleen |
| CALR               | 1.07E-75 | 0.60477293 | 0.555 | 0.35  | 3.81E-71 | CD4_Naive_spleen |
| CHCHD1             | 2.39E-75 | 0.7383357  | 0.298 | 0.143 | 8.47E-71 | CD4_Naive_spleen |
| TFRC               | 3.53E-75 | 0.89841933 | 0.278 | 0.132 | 1.25E-70 | CD4_Naive_spleen |
| EIF4A2             | 7.93E-75 | 0.47351534 | 0.79  | 0.609 | 2.81E-70 | CD4_Naive_spleen |
| PGK1               | 1.06E-74 | 0.58897592 | 0.618 | 0.409 | 3.76E-70 | CD4_Naive_spleen |
| HMGA1              | 1.64E-74 | 0.60994234 | 0.563 | 0.362 | 5.79E-70 | CD4_Naive_spleen |
| RETREG1            | 3.10E-74 | 0.53840058 | 0.661 | 0.452 | 1.10E-69 | CD4_Naive_spleen |
| TGFBR1             | 8.73E-74 | 0.88611263 | 0.257 | 0.119 | 3.09E-69 | CD4_Naive_spleen |
| IRF2               | 2.10E-73 | 0.71939738 | 0.417 | 0.236 | 7.45E-69 | CD4_Naive_spleen |
| DECR2              | 3.82E-73 | 0.81774591 | 0.281 | 0.135 | 1.35E-68 | CD4_Naive_spleen |
| ZNF217             | 9.55E-73 | 0.73102645 | 0.322 | 0.162 | 3.39E-68 | CD4_Naive_spleen |
| AKAP17A            | 1.81E-72 | 0.70471356 | 0.395 | 0.22  | 6.41E-68 | CD4_Naive_spleen |
| ZMYND8             | 5.84E-72 | 0.53931441 | 0.665 | 0.457 | 2.07E-67 | CD4_Naive_spleen |
| STIM1              | 5.47E-71 | 0.52233671 | 0.665 | 0.46  | 1.94E-66 | CD4_Naive_spleen |
| HNRNPD             | 2.43E-70 | 0.46648036 | 0.752 | 0.559 | 8.60E-66 | CD4_Naive_spleen |
| ZNF146             | 2.78E-70 | 0.72360602 | 0.306 | 0.153 | 9.86E-66 | CD4_Naive_spleen |
| NSD1               | 3.78E-70 | 0.53621385 | 0.684 | 0.478 | 1.34E-65 | CD4_Naive_spleen |
| GTF3A              | 4.82E-70 | 0.86773613 | 0.252 | 0.117 | 1.71E-65 | CD4_Naive_spleen |
| ENSMMUG00000011711 | 7.94E-70 | 0.66789802 | 0.368 | 0.201 | 2.81E-65 | CD4_Naive_spleen |
| NOL7               | 1.03E-69 | 0.64694995 | 0.432 | 0.249 | 3.66E-65 | CD4_Naive_spleen |
| EDEM3              | 1.05E-69 | 0.75746823 | 0.339 | 0.181 | 3.72E-65 | CD4_Naive_spleen |
| ARL14EP            | 1.11E-69 | 0.83956207 | 0.259 | 0.123 | 3.93E-65 | CD4_Naive_spleen |
| SMC4               | 2.51E-69 | 0.57277155 | 0.823 | 0.674 | 8.90E-65 | CD4_Naive_spleen |
| TMC8               | 2.85E-69 | 0.77373791 | 0.313 | 0.16  | 1.01E-64 | CD4_Naive_spleen |
| STT3B              | 3.84E-69 | 0.55793519 | 0.658 | 0.464 | 1.36E-64 | CD4_Naive_spleen |
| FBNP1              | 4.07E-69 | 0.36036605 | 0.935 | 0.823 | 1.44E-64 | CD4_Naive_spleen |

|          |          |            |       |       |          |                  |
|----------|----------|------------|-------|-------|----------|------------------|
| CHI3L2   | 6.04E-69 | 0.90765065 | 0.295 | 0.151 | 2.14E-64 | CD4_Naive_spleen |
| SSBP3    | 6.11E-69 | 0.64755179 | 0.502 | 0.308 | 2.16E-64 | CD4_Naive_spleen |
| TTC13    | 7.67E-69 | 0.69304734 | 0.399 | 0.225 | 2.72E-64 | CD4_Naive_spleen |
| ANP32A   | 1.31E-68 | 0.58289534 | 0.506 | 0.311 | 4.63E-64 | CD4_Naive_spleen |
| FLI1     | 1.59E-68 | 0.59339973 | 0.478 | 0.289 | 5.63E-64 | CD4_Naive_spleen |
| ADARB2   | 2.86E-68 | 0.71457584 | 0.308 | 0.156 | 1.01E-63 | CD4_Naive_spleen |
| MRPL14   | 3.90E-68 | 0.55800465 | 0.422 | 0.237 | 1.38E-63 | CD4_Naive_spleen |
| MYL12B   | 1.15E-67 | 0.4392704  | 0.821 | 0.671 | 4.06E-63 | CD4_Naive_spleen |
| RASA1    | 1.44E-67 | 0.67118855 | 0.435 | 0.26  | 5.11E-63 | CD4_Naive_spleen |
| COMT     | 4.27E-67 | 0.70928766 | 0.337 | 0.179 | 1.51E-62 | CD4_Naive_spleen |
| IFRD1    | 4.75E-67 | 0.68321056 | 0.585 | 0.4   | 1.68E-62 | CD4_Naive_spleen |
| IL2RG    | 5.22E-67 | 0.51646945 | 0.675 | 0.471 | 1.85E-62 | CD4_Naive_spleen |
| RAP1A    | 5.29E-67 | 0.51343532 | 0.722 | 0.532 | 1.88E-62 | CD4_Naive_spleen |
| TBC1D10B | 6.54E-67 | 0.57900331 | 0.467 | 0.279 | 2.32E-62 | CD4_Naive_spleen |
| CD53     | 7.08E-67 | 0.49939273 | 0.653 | 0.449 | 2.51E-62 | CD4_Naive_spleen |
| LRRFIP1  | 1.37E-66 | 0.60657541 | 0.576 | 0.39  | 4.85E-62 | CD4_Naive_spleen |
| TGFBR2   | 2.68E-66 | 0.50757514 | 0.698 | 0.51  | 9.49E-62 | CD4_Naive_spleen |
| TAGAP    | 5.74E-66 | 0.75479247 | 0.603 | 0.43  | 2.03E-61 | CD4_Naive_spleen |
| TFCP2    | 6.61E-66 | 0.75142761 | 0.289 | 0.148 | 2.34E-61 | CD4_Naive_spleen |
| ACTR3    | 1.76E-65 | 0.46974735 | 0.747 | 0.544 | 6.23E-61 | CD4_Naive_spleen |
| TMPO     | 1.80E-65 | 0.66821722 | 0.339 | 0.182 | 6.39E-61 | CD4_Naive_spleen |
| PRDX3    | 1.98E-65 | 0.71282504 | 0.288 | 0.145 | 7.00E-61 | CD4_Naive_spleen |
| VPS4A    | 2.07E-65 | 0.83223431 | 0.277 | 0.14  | 7.34E-61 | CD4_Naive_spleen |
| SRGN     | 7.54E-65 | 0.53817571 | 0.713 | 0.537 | 2.67E-60 | CD4_Naive_spleen |
| EEF1G    | 8.84E-65 | 0.30765039 | 0.935 | 0.861 | 3.13E-60 | CD4_Naive_spleen |
| RASGEF1B | 1.35E-64 | 0.96324842 | 0.304 | 0.162 | 4.78E-60 | CD4_Naive_spleen |
| TTC39C   | 2.14E-64 | 0.75424702 | 0.341 | 0.19  | 7.57E-60 | CD4_Naive_spleen |
| STMN1    | 2.36E-64 | 0.53788741 | 0.627 | 0.44  | 8.37E-60 | CD4_Naive_spleen |
| ARHGAP30 | 1.04E-63 | 0.52748815 | 0.481 | 0.293 | 3.69E-59 | CD4_Naive_spleen |
| GPR174   | 1.63E-63 | 0.64028122 | 0.372 | 0.21  | 5.79E-59 | CD4_Naive_spleen |
| CYBA     | 2.23E-63 | 0.54507739 | 0.545 | 0.355 | 7.89E-59 | CD4_Naive_spleen |
| CACYBP   | 2.64E-63 | 0.55854767 | 0.629 | 0.439 | 9.34E-59 | CD4_Naive_spleen |
| PARK7    | 2.64E-63 | 0.58317595 | 0.457 | 0.274 | 9.37E-59 | CD4_Naive_spleen |

|         |          |            |       |       |          |                  |
|---------|----------|------------|-------|-------|----------|------------------|
| LCP2    | 2.78E-63 | 0.6621343  | 0.342 | 0.186 | 9.85E-59 | CD4_Naive_spleen |
| TESPA1  | 3.21E-63 | 0.59265879 | 0.467 | 0.286 | 1.14E-58 | CD4_Naive_spleen |
| MAT2B   | 4.50E-63 | 0.71406383 | 0.282 | 0.142 | 1.59E-58 | CD4_Naive_spleen |
| CFL1    | 6.76E-63 | 0.36538766 | 0.893 | 0.792 | 2.39E-58 | CD4_Naive_spleen |
| RBM26   | 1.14E-62 | 0.5128218  | 0.586 | 0.39  | 4.06E-58 | CD4_Naive_spleen |
| STMN3   | 1.17E-62 | 0.58199613 | 0.386 | 0.219 | 4.13E-58 | CD4_Naive_spleen |
| CCT5    | 1.47E-62 | 0.52931778 | 0.581 | 0.382 | 5.22E-58 | CD4_Naive_spleen |
| NOLC1   | 1.61E-62 | 0.76594462 | 0.274 | 0.138 | 5.70E-58 | CD4_Naive_spleen |
| PHF20L1 | 1.67E-62 | 0.69910002 | 0.327 | 0.177 | 5.93E-58 | CD4_Naive_spleen |
| UBE2D1  | 3.40E-62 | 0.6151076  | 0.407 | 0.239 | 1.21E-57 | CD4_Naive_spleen |
| ERO1A   | 1.30E-61 | 0.67006262 | 0.283 | 0.145 | 4.60E-57 | CD4_Naive_spleen |
| YWHAG   | 1.48E-61 | 0.7752297  | 0.296 | 0.156 | 5.23E-57 | CD4_Naive_spleen |
| LDLR    | 1.79E-61 | 0.7959776  | 0.355 | 0.203 | 6.32E-57 | CD4_Naive_spleen |
| CFAP97  | 1.90E-61 | 0.70094751 | 0.279 | 0.142 | 6.72E-57 | CD4_Naive_spleen |
| DAD1    | 4.58E-61 | 0.47887969 | 0.644 | 0.443 | 1.62E-56 | CD4_Naive_spleen |
| CRLF3   | 5.61E-61 | 0.5571851  | 0.433 | 0.256 | 1.99E-56 | CD4_Naive_spleen |
| TUBA4A  | 6.26E-61 | 0.67244495 | 0.349 | 0.195 | 2.22E-56 | CD4_Naive_spleen |
| PRPF38B | 1.12E-60 | 0.52450855 | 0.555 | 0.363 | 3.97E-56 | CD4_Naive_spleen |
| PDIA3   | 1.35E-60 | 0.74133067 | 0.269 | 0.136 | 4.80E-56 | CD4_Naive_spleen |
| SLC16A7 | 1.76E-60 | 0.78529637 | 0.323 | 0.179 | 6.24E-56 | CD4_Naive_spleen |
| YWHAH   | 1.77E-60 | 0.64767096 | 0.301 | 0.158 | 6.26E-56 | CD4_Naive_spleen |
| RUNX1   | 2.28E-60 | 0.42665195 | 0.845 | 0.695 | 8.06E-56 | CD4_Naive_spleen |
| AKNA    | 3.05E-60 | 0.52611659 | 0.525 | 0.334 | 1.08E-55 | CD4_Naive_spleen |
| MOB3A   | 6.33E-60 | 0.67050717 | 0.372 | 0.214 | 2.24E-55 | CD4_Naive_spleen |
| CPNE1   | 1.08E-59 | 0.52465906 | 0.506 | 0.321 | 3.82E-55 | CD4_Naive_spleen |
| DEF6    | 1.25E-59 | 0.71638643 | 0.261 | 0.13  | 4.42E-55 | CD4_Naive_spleen |
| SDF2L1  | 1.85E-59 | 0.6653932  | 0.293 | 0.153 | 6.55E-55 | CD4_Naive_spleen |
| AKAP10  | 2.44E-59 | 0.6795371  | 0.327 | 0.18  | 8.66E-55 | CD4_Naive_spleen |
| APBA2   | 2.73E-59 | 0.73041249 | 0.413 | 0.251 | 9.66E-55 | CD4_Naive_spleen |
| KRIT1   | 7.33E-59 | 0.68582206 | 0.335 | 0.185 | 2.60E-54 | CD4_Naive_spleen |
| SURF4   | 1.05E-58 | 0.71041884 | 0.282 | 0.146 | 3.72E-54 | CD4_Naive_spleen |
| MARK2   | 1.22E-58 | 0.57617795 | 0.37  | 0.211 | 4.31E-54 | CD4_Naive_spleen |
| GRK6    | 1.28E-58 | 0.68778759 | 0.252 | 0.125 | 4.55E-54 | CD4_Naive_spleen |

|                    |          |            |       |       |          |                  |
|--------------------|----------|------------|-------|-------|----------|------------------|
| GLCE               | 2.38E-58 | 0.62688047 | 0.47  | 0.302 | 8.43E-54 | CD4_Naive_spleen |
| SETX               | 2.60E-58 | 0.49533761 | 0.559 | 0.377 | 9.21E-54 | CD4_Naive_spleen |
| ENSMMUG00000052802 | 7.88E-58 | 0.60439533 | 0.365 | 0.211 | 2.79E-53 | CD4_Naive_spleen |
| XPO1               | 1.06E-57 | 0.59806125 | 0.44  | 0.269 | 3.76E-53 | CD4_Naive_spleen |
| IL16               | 1.44E-57 | 0.72038569 | 0.271 | 0.141 | 5.10E-53 | CD4_Naive_spleen |
| TSC22D1            | 1.61E-57 | 0.70432154 | 0.342 | 0.198 | 5.70E-53 | CD4_Naive_spleen |
| GRB2               | 2.12E-57 | 0.57181163 | 0.498 | 0.322 | 7.51E-53 | CD4_Naive_spleen |
| ATP5MC2            | 2.74E-57 | 0.39966135 | 0.773 | 0.604 | 9.70E-53 | CD4_Naive_spleen |
| IFI16              | 6.00E-57 | 0.44326855 | 0.595 | 0.41  | 2.12E-52 | CD4_Naive_spleen |
| UQCRH              | 1.47E-56 | 0.39439704 | 0.7   | 0.503 | 5.21E-52 | CD4_Naive_spleen |
| TMSB4X             | 3.03E-56 | 0.18807227 | 0.998 | 0.997 | 1.07E-51 | CD4_Naive_spleen |
| ASXL2              | 5.34E-56 | 0.55498833 | 0.439 | 0.272 | 1.89E-51 | CD4_Naive_spleen |
| ENSMMUG00000016894 | 7.94E-56 | 0.37896305 | 0.799 | 0.636 | 2.81E-51 | CD4_Naive_spleen |
| ULK2               | 9.54E-56 | 0.74987643 | 0.294 | 0.161 | 3.38E-51 | CD4_Naive_spleen |
| MTO1               | 1.17E-55 | 0.86504124 | 0.266 | 0.14  | 4.16E-51 | CD4_Naive_spleen |
| SUPT4H1            | 1.20E-55 | 0.67780673 | 0.273 | 0.143 | 4.24E-51 | CD4_Naive_spleen |
| NPEPPS             | 2.00E-55 | 0.54905336 | 0.375 | 0.219 | 7.09E-51 | CD4_Naive_spleen |
| RIN3               | 3.53E-55 | 0.62445898 | 0.337 | 0.192 | 1.25E-50 | CD4_Naive_spleen |
| CHM                | 4.37E-55 | 0.60836754 | 0.353 | 0.204 | 1.55E-50 | CD4_Naive_spleen |
| TES                | 5.15E-55 | 0.66164256 | 0.308 | 0.169 | 1.82E-50 | CD4_Naive_spleen |
| UBE2R2             | 6.11E-55 | 0.47966144 | 0.483 | 0.304 | 2.16E-50 | CD4_Naive_spleen |
| WDR1               | 6.70E-55 | 0.64439478 | 0.293 | 0.157 | 2.37E-50 | CD4_Naive_spleen |
| PUM3               | 6.93E-55 | 0.61372768 | 0.274 | 0.143 | 2.45E-50 | CD4_Naive_spleen |
| MRPS21             | 1.13E-54 | 0.65280323 | 0.275 | 0.144 | 4.02E-50 | CD4_Naive_spleen |
| SLC20A1            | 1.16E-54 | 0.5500937  | 0.358 | 0.206 | 4.12E-50 | CD4_Naive_spleen |
| NDUFB5             | 1.26E-54 | 0.55356589 | 0.334 | 0.186 | 4.48E-50 | CD4_Naive_spleen |
| EFCAB2             | 2.09E-54 | 0.57852535 | 0.485 | 0.316 | 7.40E-50 | CD4_Naive_spleen |
| SEPTIN11           | 2.59E-54 | 0.75159384 | 0.277 | 0.148 | 9.18E-50 | CD4_Naive_spleen |
| H1-2               | 3.35E-54 | 0.55633903 | 0.517 | 0.345 | 1.19E-49 | CD4_Naive_spleen |
| TASOR              | 4.63E-54 | 0.58675092 | 0.343 | 0.196 | 1.64E-49 | CD4_Naive_spleen |
| FYB1               | 4.88E-54 | 0.32681825 | 0.913 | 0.804 | 1.73E-49 | CD4_Naive_spleen |
| ENSMMUG00000063859 | 6.49E-54 | 0.45222063 | 0.374 | 0.217 | 2.30E-49 | CD4_Naive_spleen |
| PRDX1              | 6.72E-54 | 0.54579175 | 0.43  | 0.265 | 2.38E-49 | CD4_Naive_spleen |

|                    |          |            |       |       |          |                  |
|--------------------|----------|------------|-------|-------|----------|------------------|
| GLUD1              | 7.45E-54 | 0.70855989 | 0.352 | 0.206 | 2.64E-49 | CD4_Naive_spleen |
| CCT7               | 7.94E-54 | 0.53580575 | 0.398 | 0.237 | 2.81E-49 | CD4_Naive_spleen |
| CD69               | 9.48E-54 | 0.35887399 | 0.957 | 0.874 | 3.36E-49 | CD4_Naive_spleen |
| VAMP8              | 1.59E-53 | 0.47599846 | 0.477 | 0.301 | 5.63E-49 | CD4_Naive_spleen |
| RNASE6             | 2.37E-53 | 0.67352808 | 0.253 | 0.13  | 8.40E-49 | CD4_Naive_spleen |
| HERC4              | 2.49E-53 | 0.50425795 | 0.51  | 0.336 | 8.81E-49 | CD4_Naive_spleen |
| GIMAP6             | 3.03E-53 | 0.61818019 | 0.267 | 0.14  | 1.08E-48 | CD4_Naive_spleen |
| USP48              | 3.18E-53 | 0.60104673 | 0.33  | 0.188 | 1.13E-48 | CD4_Naive_spleen |
| TMEM134            | 3.36E-53 | 0.68430285 | 0.261 | 0.136 | 1.19E-48 | CD4_Naive_spleen |
| TAOK1              | 5.24E-53 | 0.45548122 | 0.524 | 0.341 | 1.86E-48 | CD4_Naive_spleen |
| WDR82              | 5.48E-53 | 0.5550299  | 0.354 | 0.204 | 1.94E-48 | CD4_Naive_spleen |
| PHF5A              | 5.84E-53 | 0.62697226 | 0.309 | 0.171 | 2.07E-48 | CD4_Naive_spleen |
| CGGBP1             | 6.86E-53 | 0.55234284 | 0.383 | 0.228 | 2.43E-48 | CD4_Naive_spleen |
| YPEL3              | 1.62E-52 | 0.60142954 | 0.316 | 0.177 | 5.74E-48 | CD4_Naive_spleen |
| DNAJB9             | 2.02E-52 | 0.75762045 | 0.275 | 0.149 | 7.15E-48 | CD4_Naive_spleen |
| RPL39              | 2.16E-52 | 0.15010195 | 0.986 | 0.99  | 7.64E-48 | CD4_Naive_spleen |
| XPO6               | 4.10E-52 | 0.46354526 | 0.598 | 0.417 | 1.45E-47 | CD4_Naive_spleen |
| BMT2               | 4.59E-52 | 1.28390722 | 0.313 | 0.189 | 1.63E-47 | CD4_Naive_spleen |
| PSMA5              | 5.56E-52 | 0.51688252 | 0.411 | 0.25  | 1.97E-47 | CD4_Naive_spleen |
| ECHDC1             | 7.25E-52 | 0.51979269 | 0.515 | 0.338 | 2.57E-47 | CD4_Naive_spleen |
| PARP1              | 9.79E-52 | 0.67306015 | 0.253 | 0.132 | 3.47E-47 | CD4_Naive_spleen |
| MRPL13             | 1.09E-51 | 0.6199061  | 0.276 | 0.148 | 3.87E-47 | CD4_Naive_spleen |
| RPL38              | 1.75E-51 | 0.16195595 | 0.99  | 0.99  | 6.18E-47 | CD4_Naive_spleen |
| ENSMMUG00000060923 | 2.26E-51 | 0.41510505 | 0.743 | 0.571 | 7.99E-47 | CD4_Naive_spleen |
| ENSMMUG00000049833 | 2.87E-51 | 0.78958349 | 0.314 | 0.18  | 1.02E-46 | CD4_Naive_spleen |
| SMURF2             | 3.02E-51 | 0.60870234 | 0.339 | 0.199 | 1.07E-46 | CD4_Naive_spleen |
| PTP4A1             | 3.05E-51 | 0.49212001 | 0.475 | 0.31  | 1.08E-46 | CD4_Naive_spleen |
| BTF3               | 3.47E-51 | 0.37036023 | 0.887 | 0.775 | 1.23E-46 | CD4_Naive_spleen |
| BANP               | 4.17E-51 | 0.63993592 | 0.279 | 0.151 | 1.48E-46 | CD4_Naive_spleen |
| ENSMMUG00000052127 | 4.31E-51 | 0.19574702 | 0.993 | 0.978 | 1.53E-46 | CD4_Naive_spleen |
| COX1               | 4.49E-51 | 0.31189394 | 0.943 | 0.968 | 1.59E-46 | CD4_Naive_spleen |
| PIP4K2A            | 6.84E-51 | 0.38344129 | 0.824 | 0.661 | 2.43E-46 | CD4_Naive_spleen |
| CCDC107            | 7.74E-51 | 0.62219078 | 0.303 | 0.169 | 2.74E-46 | CD4_Naive_spleen |

|                    |          |            |       |       |          |                  |
|--------------------|----------|------------|-------|-------|----------|------------------|
| ARL5A              | 8.07E-51 | 0.56650738 | 0.303 | 0.168 | 2.86E-46 | CD4_Naive_spleen |
| MALT1              | 8.80E-51 | 0.39594093 | 0.569 | 0.382 | 3.12E-46 | CD4_Naive_spleen |
| GRK5               | 1.13E-50 | 0.50898598 | 0.472 | 0.306 | 4.02E-46 | CD4_Naive_spleen |
| GNB2               | 1.92E-50 | 0.58834149 | 0.364 | 0.216 | 6.80E-46 | CD4_Naive_spleen |
| ENSMMUG00000049722 | 2.94E-50 | 0.48443225 | 0.441 | 0.278 | 1.04E-45 | CD4_Naive_spleen |
| DYNC1I2            | 3.30E-50 | 0.64346896 | 0.288 | 0.16  | 1.17E-45 | CD4_Naive_spleen |
| FOXN2              | 3.75E-50 | 0.65682309 | 0.354 | 0.213 | 1.33E-45 | CD4_Naive_spleen |
| YY1                | 5.41E-50 | 0.50928116 | 0.419 | 0.261 | 1.92E-45 | CD4_Naive_spleen |
| PHF14              | 5.42E-50 | 0.43734547 | 0.635 | 0.451 | 1.92E-45 | CD4_Naive_spleen |
| GNB1               | 6.87E-50 | 0.4709039  | 0.549 | 0.374 | 2.44E-45 | CD4_Naive_spleen |
| PAOX               | 8.25E-50 | 0.4932232  | 0.461 | 0.294 | 2.92E-45 | CD4_Naive_spleen |
| LARS1              | 8.71E-50 | 0.61334907 | 0.306 | 0.174 | 3.09E-45 | CD4_Naive_spleen |
| PAG1               | 8.89E-50 | 0.34456652 | 0.872 | 0.737 | 3.15E-45 | CD4_Naive_spleen |
| EIF4G3             | 9.12E-50 | 0.60500496 | 0.428 | 0.273 | 3.23E-45 | CD4_Naive_spleen |
| NDUFAB1            | 1.17E-49 | 0.53318767 | 0.362 | 0.214 | 4.15E-45 | CD4_Naive_spleen |
| PFDN5              | 1.70E-49 | 0.40448941 | 0.496 | 0.318 | 6.02E-45 | CD4_Naive_spleen |
| ARHGAP9            | 1.83E-49 | 0.68652711 | 0.276 | 0.15  | 6.49E-45 | CD4_Naive_spleen |
| TAPBPL             | 2.29E-49 | 0.46889282 | 0.402 | 0.245 | 8.11E-45 | CD4_Naive_spleen |
| ENSMMUG00000061756 | 2.94E-49 | 0.54333943 | 0.407 | 0.253 | 1.04E-44 | CD4_Naive_spleen |
| ITGB7              | 3.17E-49 | 0.55254956 | 0.291 | 0.162 | 1.12E-44 | CD4_Naive_spleen |
| RPL26              | 4.74E-49 | 0.19023534 | 0.977 | 0.968 | 1.68E-44 | CD4_Naive_spleen |
| STK10              | 5.81E-49 | 0.47033158 | 0.58  | 0.401 | 2.06E-44 | CD4_Naive_spleen |
| RPS21              | 1.27E-48 | 0.12068633 | 0.989 | 0.989 | 4.50E-44 | CD4_Naive_spleen |
| SPCS2              | 2.53E-48 | 0.41935759 | 0.467 | 0.295 | 8.95E-44 | CD4_Naive_spleen |
| HSPE1              | 3.60E-48 | 0.40815153 | 0.777 | 0.616 | 1.28E-43 | CD4_Naive_spleen |
| GIMAP7             | 4.94E-48 | 0.44048425 | 0.688 | 0.547 | 1.75E-43 | CD4_Naive_spleen |
| CHST11             | 5.24E-48 | 0.44517299 | 0.595 | 0.424 | 1.86E-43 | CD4_Naive_spleen |
| BICRAL             | 9.07E-48 | 0.57307997 | 0.283 | 0.158 | 3.21E-43 | CD4_Naive_spleen |
| ENSMMUG00000022428 | 9.42E-48 | 0.35750204 | 0.526 | 0.347 | 3.34E-43 | CD4_Naive_spleen |
| ITM2A              | 1.85E-47 | 0.56426205 | 0.415 | 0.264 | 6.55E-43 | CD4_Naive_spleen |
| ENSMMUG00000061125 | 2.29E-47 | 0.46284608 | 0.806 | 0.68  | 8.11E-43 | CD4_Naive_spleen |
| RPS19BP1           | 3.88E-47 | 0.54885937 | 0.307 | 0.175 | 1.38E-42 | CD4_Naive_spleen |
| SQSTM1             | 7.54E-47 | 0.75475943 | 0.28  | 0.16  | 2.67E-42 | CD4_Naive_spleen |

|             |          |            |       |       |          |                  |
|-------------|----------|------------|-------|-------|----------|------------------|
| CAPRIN1     | 7.66E-47 | 0.45130325 | 0.441 | 0.279 | 2.71E-42 | CD4_Naive_spleen |
| TUBB        | 9.96E-47 | 0.45194318 | 0.578 | 0.409 | 3.53E-42 | CD4_Naive_spleen |
| HMGN4       | 1.12E-46 | 0.55113685 | 0.317 | 0.182 | 3.96E-42 | CD4_Naive_spleen |
| OST4        | 1.25E-46 | 0.350198   | 0.737 | 0.563 | 4.42E-42 | CD4_Naive_spleen |
| SUPT20H     | 1.44E-46 | 0.58011235 | 0.326 | 0.192 | 5.09E-42 | CD4_Naive_spleen |
| SATB1       | 1.57E-46 | 0.30661275 | 0.896 | 0.797 | 5.58E-42 | CD4_Naive_spleen |
| BRD2        | 1.61E-46 | 0.47801379 | 0.506 | 0.339 | 5.72E-42 | CD4_Naive_spleen |
| RPS9        | 1.76E-46 | 0.16568622 | 0.989 | 0.992 | 6.25E-42 | CD4_Naive_spleen |
| GNAI2.1     | 2.74E-46 | 0.42709837 | 0.445 | 0.286 | 9.72E-42 | CD4_Naive_spleen |
| ST6GALNAC3  | 2.98E-46 | 0.80359408 | 0.297 | 0.178 | 1.06E-41 | CD4_Naive_spleen |
| ID2         | 5.17E-46 | 0.58497202 | 0.589 | 0.442 | 1.83E-41 | CD4_Naive_spleen |
| C11H12orf57 | 7.48E-46 | 0.38587061 | 0.747 | 0.586 | 2.65E-41 | CD4_Naive_spleen |
| TMCO1       | 9.20E-46 | 0.48140614 | 0.332 | 0.194 | 3.26E-41 | CD4_Naive_spleen |
| B3GNT2      | 1.08E-45 | 0.58528231 | 0.265 | 0.146 | 3.83E-41 | CD4_Naive_spleen |
| RNASEH2B    | 1.19E-45 | 0.61386577 | 0.252 | 0.136 | 4.20E-41 | CD4_Naive_spleen |
| FAM120A     | 1.24E-45 | 0.43965948 | 0.475 | 0.308 | 4.38E-41 | CD4_Naive_spleen |
| WWOX        | 1.72E-45 | 0.52909946 | 0.513 | 0.36  | 6.10E-41 | CD4_Naive_spleen |
| MRPL57      | 2.33E-45 | 0.49348117 | 0.348 | 0.208 | 8.25E-41 | CD4_Naive_spleen |
| JTB         | 3.31E-45 | 0.49161407 | 0.407 | 0.254 | 1.17E-40 | CD4_Naive_spleen |
| RASSF5      | 4.30E-45 | 0.54844846 | 0.337 | 0.203 | 1.52E-40 | CD4_Naive_spleen |
| COX6B1      | 4.82E-45 | 0.51005762 | 0.347 | 0.208 | 1.71E-40 | CD4_Naive_spleen |
| CD226       | 5.86E-45 | 0.51190426 | 0.386 | 0.241 | 2.08E-40 | CD4_Naive_spleen |
| STAT5B      | 9.33E-45 | 0.40692652 | 0.586 | 0.415 | 3.30E-40 | CD4_Naive_spleen |
| MAML2       | 1.29E-44 | 0.3971682  | 0.944 | 0.883 | 4.58E-40 | CD4_Naive_spleen |
| SYTL3       | 1.34E-44 | 0.5263255  | 0.578 | 0.425 | 4.74E-40 | CD4_Naive_spleen |
| MITD1       | 1.54E-44 | 0.55842253 | 0.278 | 0.156 | 5.47E-40 | CD4_Naive_spleen |
| CCR7        | 1.83E-44 | 0.37721036 | 0.47  | 0.309 | 6.47E-40 | CD4_Naive_spleen |
| ATP5F1B     | 1.93E-44 | 0.50313725 | 0.36  | 0.219 | 6.84E-40 | CD4_Naive_spleen |
| NEDD9       | 2.29E-44 | 0.44161935 | 0.591 | 0.422 | 8.11E-40 | CD4_Naive_spleen |
| MYH9        | 5.24E-44 | 0.40273805 | 0.754 | 0.598 | 1.86E-39 | CD4_Naive_spleen |
| CEP112      | 5.98E-44 | 0.56935835 | 0.3   | 0.175 | 2.12E-39 | CD4_Naive_spleen |
| MGA         | 6.91E-44 | 0.56373276 | 0.36  | 0.222 | 2.45E-39 | CD4_Naive_spleen |
| ADCY7       | 7.09E-44 | 0.58783027 | 0.255 | 0.141 | 2.51E-39 | CD4_Naive_spleen |



|                    |          |            |       |       |          |                  |
|--------------------|----------|------------|-------|-------|----------|------------------|
| TNIK               | 1.26E-43 | 0.2902087  | 0.948 | 0.868 | 4.46E-39 | CD4_Naive_spleen |
| DARS1              | 5.05E-43 | 0.49403436 | 0.366 | 0.226 | 1.79E-38 | CD4_Naive_spleen |
| AARS1              | 5.18E-43 | 0.43705262 | 0.598 | 0.432 | 1.83E-38 | CD4_Naive_spleen |
| USO1               | 5.20E-43 | 0.5839931  | 0.28  | 0.16  | 1.84E-38 | CD4_Naive_spleen |
| LDHA               | 5.25E-43 | 0.4221594  | 0.462 | 0.306 | 1.86E-38 | CD4_Naive_spleen |
| RNF167             | 6.09E-43 | 0.5628204  | 0.328 | 0.198 | 2.16E-38 | CD4_Naive_spleen |
| SNRPD3             | 1.21E-42 | 0.34894635 | 0.646 | 0.464 | 4.28E-38 | CD4_Naive_spleen |
| RSBN1L             | 1.33E-42 | 0.45621957 | 0.39  | 0.245 | 4.70E-38 | CD4_Naive_spleen |
| BAZ1A              | 1.72E-42 | 0.39020516 | 0.618 | 0.447 | 6.11E-38 | CD4_Naive_spleen |
| SMARCA5            | 1.76E-42 | 0.42672108 | 0.522 | 0.352 | 6.22E-38 | CD4_Naive_spleen |
| EEA1               | 2.13E-42 | 0.42779099 | 0.5   | 0.34  | 7.56E-38 | CD4_Naive_spleen |
| DPH6               | 2.33E-42 | 0.47220248 | 0.388 | 0.245 | 8.26E-38 | CD4_Naive_spleen |
| TMEM131L           | 3.34E-42 | 0.39218616 | 0.738 | 0.569 | 1.18E-37 | CD4_Naive_spleen |
| RILPL2             | 5.31E-42 | 0.48461897 | 0.368 | 0.23  | 1.88E-37 | CD4_Naive_spleen |
| PCDHGB5            | 6.79E-42 | 0.5006219  | 0.288 | 0.168 | 2.41E-37 | CD4_Naive_spleen |
| KDM6B              | 6.85E-42 | 0.69526112 | 0.275 | 0.16  | 2.43E-37 | CD4_Naive_spleen |
| ENSMUG00000006206  | 1.11E-41 | 0.41294466 | 0.553 | 0.39  | 3.94E-37 | CD4_Naive_spleen |
| CIAO2B             | 2.79E-41 | 0.51002882 | 0.313 | 0.186 | 9.87E-37 | CD4_Naive_spleen |
| RBM17              | 5.96E-41 | 0.41049411 | 0.46  | 0.304 | 2.11E-36 | CD4_Naive_spleen |
| KLHL6              | 6.97E-41 | 0.50076123 | 0.364 | 0.23  | 2.47E-36 | CD4_Naive_spleen |
| UBE2F              | 9.11E-41 | 0.51447636 | 0.4   | 0.26  | 3.23E-36 | CD4_Naive_spleen |
| ASCC1              | 1.22E-40 | 0.52076964 | 0.355 | 0.222 | 4.34E-36 | CD4_Naive_spleen |
| DIAPH1             | 1.24E-40 | 0.37436242 | 0.666 | 0.505 | 4.40E-36 | CD4_Naive_spleen |
| NR4A2              | 1.26E-40 | 0.54957373 | 0.36  | 0.23  | 4.45E-36 | CD4_Naive_spleen |
| SPTAN1             | 1.31E-40 | 0.50576145 | 0.397 | 0.256 | 4.63E-36 | CD4_Naive_spleen |
| ENSMUG000000030317 | 1.38E-40 | 0.49239587 | 0.272 | 0.156 | 4.88E-36 | CD4_Naive_spleen |
| BOLA2B             | 1.76E-40 | 0.55426476 | 0.269 | 0.155 | 6.24E-36 | CD4_Naive_spleen |
| GBF1               | 2.24E-40 | 0.4762111  | 0.327 | 0.2   | 7.92E-36 | CD4_Naive_spleen |
| HSPA9              | 2.39E-40 | 0.42874847 | 0.545 | 0.384 | 8.48E-36 | CD4_Naive_spleen |
| WDR74              | 2.84E-40 | 0.51161572 | 0.357 | 0.224 | 1.01E-35 | CD4_Naive_spleen |
| GSTP1              | 3.45E-40 | 0.35320898 | 0.708 | 0.551 | 1.22E-35 | CD4_Naive_spleen |
| KIAA1671           | 3.47E-40 | 0.66388636 | 0.269 | 0.158 | 1.23E-35 | CD4_Naive_spleen |
| WNK1               | 4.48E-40 | 0.35176592 | 0.771 | 0.616 | 1.59E-35 | CD4_Naive_spleen |

|                   |          |            |       |       |          |                  |
|-------------------|----------|------------|-------|-------|----------|------------------|
| ZMAT2             | 6.15E-40 | 0.4966288  | 0.298 | 0.176 | 2.18E-35 | CD4_Naive_spleen |
| ENSMUG00000058919 | 1.09E-39 | 0.50045586 | 0.385 | 0.248 | 3.87E-35 | CD4_Naive_spleen |
| NCOR1             | 1.19E-39 | 0.36136002 | 0.688 | 0.52  | 4.21E-35 | CD4_Naive_spleen |
| UBE2I             | 1.20E-39 | 0.38179331 | 0.516 | 0.349 | 4.24E-35 | CD4_Naive_spleen |
| RER1              | 1.34E-39 | 0.45490984 | 0.36  | 0.222 | 4.75E-35 | CD4_Naive_spleen |
| ATXN2             | 1.86E-39 | 0.41131368 | 0.493 | 0.336 | 6.58E-35 | CD4_Naive_spleen |
| RNASEH2C          | 2.09E-39 | 0.50003809 | 0.339 | 0.209 | 7.39E-35 | CD4_Naive_spleen |
| MGRN1             | 2.40E-39 | 0.53767804 | 0.259 | 0.148 | 8.49E-35 | CD4_Naive_spleen |
| OAZ1              | 3.08E-39 | 0.40981684 | 0.378 | 0.236 | 1.09E-34 | CD4_Naive_spleen |
| HNRNPH1           | 5.37E-39 | 0.2811631  | 0.784 | 0.618 | 1.90E-34 | CD4_Naive_spleen |
| ME2               | 6.42E-39 | 0.36352013 | 0.623 | 0.452 | 2.27E-34 | CD4_Naive_spleen |
| DGKA              | 7.10E-39 | 0.35692029 | 0.703 | 0.543 | 2.52E-34 | CD4_Naive_spleen |
| CRIP1             | 8.12E-39 | 0.37571531 | 0.704 | 0.547 | 2.88E-34 | CD4_Naive_spleen |
| ORC4              | 1.02E-38 | 0.55942916 | 0.296 | 0.178 | 3.61E-34 | CD4_Naive_spleen |
| DNAJC19           | 1.54E-38 | 0.40933912 | 0.377 | 0.235 | 5.45E-34 | CD4_Naive_spleen |
| ALG13             | 1.82E-38 | 0.56222804 | 0.253 | 0.145 | 6.45E-34 | CD4_Naive_spleen |
| IFNAR2            | 2.08E-38 | 0.48510034 | 0.336 | 0.21  | 7.39E-34 | CD4_Naive_spleen |
| TRERF1            | 2.21E-38 | 0.3857563  | 0.561 | 0.399 | 7.83E-34 | CD4_Naive_spleen |
| P4HB              | 7.57E-38 | 0.51859421 | 0.252 | 0.144 | 2.68E-33 | CD4_Naive_spleen |
| HUWE1             | 7.58E-38 | 0.37573873 | 0.622 | 0.454 | 2.69E-33 | CD4_Naive_spleen |
| MIA2              | 1.25E-37 | 0.39803401 | 0.555 | 0.394 | 4.43E-33 | CD4_Naive_spleen |
| FNBP1L            | 1.25E-37 | 0.42305277 | 0.351 | 0.22  | 4.44E-33 | CD4_Naive_spleen |
| MYCBP2            | 1.29E-37 | 0.31516546 | 0.816 | 0.673 | 4.58E-33 | CD4_Naive_spleen |
| ADSS2             | 1.31E-37 | 0.43770333 | 0.355 | 0.226 | 4.64E-33 | CD4_Naive_spleen |
| CCNI              | 1.31E-37 | 0.35861764 | 0.687 | 0.53  | 4.65E-33 | CD4_Naive_spleen |
| SMARCA2           | 1.36E-37 | 0.37226339 | 0.528 | 0.371 | 4.82E-33 | CD4_Naive_spleen |
| GTF2A2            | 1.63E-37 | 0.41507399 | 0.319 | 0.193 | 5.77E-33 | CD4_Naive_spleen |
| ADGRE5            | 1.66E-37 | 0.77342706 | 0.517 | 0.39  | 5.90E-33 | CD4_Naive_spleen |
| SNRPD1            | 2.22E-37 | 0.39153632 | 0.399 | 0.257 | 7.86E-33 | CD4_Naive_spleen |
| PFDN6             | 2.52E-37 | 0.49936337 | 0.305 | 0.186 | 8.91E-33 | CD4_Naive_spleen |
| HNRNPK            | 4.22E-37 | 0.26068024 | 0.881 | 0.751 | 1.50E-32 | CD4_Naive_spleen |
| CORO1A            | 4.53E-37 | 0.28647526 | 0.852 | 0.734 | 1.61E-32 | CD4_Naive_spleen |
| LRCH1             | 4.74E-37 | 0.49116429 | 0.364 | 0.237 | 1.68E-32 | CD4_Naive_spleen |

|                    |          |            |       |       |          |                  |
|--------------------|----------|------------|-------|-------|----------|------------------|
| ENSMMUG00000063609 | 5.34E-37 | 0.44093603 | 0.254 | 0.145 | 1.89E-32 | CD4_Naive_spleen |
| PER1               | 5.35E-37 | 0.423373   | 0.533 | 0.375 | 1.90E-32 | CD4_Naive_spleen |
| IFT80              | 7.19E-37 | 0.4030682  | 0.629 | 0.476 | 2.55E-32 | CD4_Naive_spleen |
| GLG1               | 7.24E-37 | 0.31867683 | 0.764 | 0.606 | 2.57E-32 | CD4_Naive_spleen |
| CTSS               | 1.13E-36 | 0.44418191 | 0.445 | 0.302 | 4.02E-32 | CD4_Naive_spleen |
| RPL36              | 1.23E-36 | 0.15088617 | 0.955 | 0.944 | 4.37E-32 | CD4_Naive_spleen |
| RPS29              | 1.57E-36 | 0.10272515 | 0.992 | 0.996 | 5.57E-32 | CD4_Naive_spleen |
| LARP1              | 1.63E-36 | 0.50056414 | 0.288 | 0.172 | 5.76E-32 | CD4_Naive_spleen |
| TMEM14B            | 2.21E-36 | 0.30603492 | 0.7   | 0.543 | 7.84E-32 | CD4_Naive_spleen |
| YWHAB              | 2.27E-36 | 0.31104057 | 0.726 | 0.572 | 8.04E-32 | CD4_Naive_spleen |
| SARS1              | 2.45E-36 | 0.42306273 | 0.316 | 0.192 | 8.68E-32 | CD4_Naive_spleen |
| HNRNPC             | 2.62E-36 | 0.27241087 | 0.849 | 0.722 | 9.28E-32 | CD4_Naive_spleen |
| MRPL42             | 3.13E-36 | 0.42835088 | 0.334 | 0.208 | 1.11E-31 | CD4_Naive_spleen |
| ERBIN              | 5.20E-36 | 0.3133524  | 0.8   | 0.654 | 1.84E-31 | CD4_Naive_spleen |
| OXR1               | 7.69E-36 | 0.43850725 | 0.449 | 0.312 | 2.73E-31 | CD4_Naive_spleen |
| ENSMMUG00000064531 | 8.52E-36 | 0.48533638 | 0.292 | 0.175 | 3.02E-31 | CD4_Naive_spleen |
| BAZ1B              | 1.18E-35 | 0.38084348 | 0.342 | 0.214 | 4.19E-31 | CD4_Naive_spleen |
| DCTPP1             | 1.24E-35 | 0.45676712 | 0.271 | 0.16  | 4.38E-31 | CD4_Naive_spleen |
| EVL                | 1.24E-35 | 0.31213357 | 0.769 | 0.623 | 4.38E-31 | CD4_Naive_spleen |
| PDLIM2             | 1.55E-35 | 0.44705173 | 0.38  | 0.247 | 5.50E-31 | CD4_Naive_spleen |
| NOP56              | 1.67E-35 | 0.4550821  | 0.293 | 0.178 | 5.91E-31 | CD4_Naive_spleen |
| SRSF6              | 1.88E-35 | 0.3386234  | 0.503 | 0.347 | 6.64E-31 | CD4_Naive_spleen |
| BUB3               | 2.10E-35 | 0.45615124 | 0.279 | 0.167 | 7.43E-31 | CD4_Naive_spleen |
| ST3GAL1            | 2.18E-35 | 0.34979998 | 0.503 | 0.346 | 7.71E-31 | CD4_Naive_spleen |
| RAD23B             | 3.05E-35 | 0.38907642 | 0.405 | 0.267 | 1.08E-30 | CD4_Naive_spleen |
| VDAC3              | 3.22E-35 | 0.4046437  | 0.308 | 0.187 | 1.14E-30 | CD4_Naive_spleen |
| CDK8               | 3.51E-35 | 0.48164033 | 0.318 | 0.198 | 1.24E-30 | CD4_Naive_spleen |
| AMD1               | 4.34E-35 | 0.41574895 | 0.518 | 0.367 | 1.54E-30 | CD4_Naive_spleen |
| KIF5B              | 4.72E-35 | 0.34596446 | 0.565 | 0.405 | 1.67E-30 | CD4_Naive_spleen |
| ANXA6              | 4.84E-35 | 0.51252454 | 0.303 | 0.188 | 1.71E-30 | CD4_Naive_spleen |
| OSTC               | 6.61E-35 | 0.37179121 | 0.482 | 0.33  | 2.34E-30 | CD4_Naive_spleen |
| NFATC1             | 6.97E-35 | 0.46002599 | 0.375 | 0.248 | 2.47E-30 | CD4_Naive_spleen |
| TOX                | 1.27E-34 | 0.32874392 | 0.876 | 0.771 | 4.49E-30 | CD4_Naive_spleen |

|                    |          |            |       |       |          |                  |
|--------------------|----------|------------|-------|-------|----------|------------------|
| UBE2B              | 1.42E-34 | 0.31998729 | 0.702 | 0.524 | 5.03E-30 | CD4_Naive_spleen |
| DDX3X              | 2.27E-34 | 0.33854212 | 0.762 | 0.632 | 8.05E-30 | CD4_Naive_spleen |
| TNFAIP3            | 2.39E-34 | 0.50707597 | 0.779 | 0.675 | 8.46E-30 | CD4_Naive_spleen |
| DGKZ               | 2.67E-34 | 0.42778423 | 0.381 | 0.25  | 9.46E-30 | CD4_Naive_spleen |
| MRPS33             | 3.15E-34 | 0.38671152 | 0.332 | 0.207 | 1.12E-29 | CD4_Naive_spleen |
| ENSMMUG00000038373 | 3.85E-34 | 0.32003074 | 0.627 | 0.468 | 1.36E-29 | CD4_Naive_spleen |
| NDEL1              | 5.11E-34 | 0.45105573 | 0.489 | 0.35  | 1.81E-29 | CD4_Naive_spleen |
| SERPINB9           | 7.78E-34 | 0.51718238 | 0.296 | 0.183 | 2.76E-29 | CD4_Naive_spleen |
| LMAN2              | 1.28E-33 | 0.40837898 | 0.323 | 0.202 | 4.53E-29 | CD4_Naive_spleen |
| ENSMMUG00000053817 | 1.45E-33 | 0.32432577 | 0.479 | 0.33  | 5.14E-29 | CD4_Naive_spleen |
| MAP3K4             | 1.87E-33 | 0.44034969 | 0.297 | 0.184 | 6.63E-29 | CD4_Naive_spleen |
| NXF1               | 2.02E-33 | 0.50465187 | 0.257 | 0.154 | 7.16E-29 | CD4_Naive_spleen |
| UBL5               | 2.87E-33 | 0.30999894 | 0.639 | 0.48  | 1.02E-28 | CD4_Naive_spleen |
| PKN1               | 2.99E-33 | 0.46133825 | 0.252 | 0.149 | 1.06E-28 | CD4_Naive_spleen |
| RPL31              | 3.31E-33 | 0.25393425 | 0.888 | 0.809 | 1.17E-28 | CD4_Naive_spleen |
| SYNCRIP            | 3.65E-33 | 0.30272539 | 0.543 | 0.386 | 1.29E-28 | CD4_Naive_spleen |
| CSKMT              | 4.90E-33 | 0.47634534 | 0.274 | 0.167 | 1.73E-28 | CD4_Naive_spleen |
| SEC14L2            | 5.29E-33 | 0.45024673 | 0.262 | 0.156 | 1.87E-28 | CD4_Naive_spleen |
| NRDC               | 5.35E-33 | 0.35974076 | 0.404 | 0.269 | 1.90E-28 | CD4_Naive_spleen |
| ENSMMUG00000011714 | 5.36E-33 | 0.41658559 | 0.331 | 0.214 | 1.90E-28 | CD4_Naive_spleen |
| ABCF1              | 6.50E-33 | 0.39914851 | 0.383 | 0.251 | 2.30E-28 | CD4_Naive_spleen |
| SYNRG              | 6.50E-33 | 0.44403166 | 0.335 | 0.216 | 2.30E-28 | CD4_Naive_spleen |
| H2AC20             | 7.62E-33 | 0.50760373 | 0.286 | 0.177 | 2.70E-28 | CD4_Naive_spleen |
| GON4L              | 1.06E-32 | 0.38998189 | 0.4   | 0.264 | 3.74E-28 | CD4_Naive_spleen |
| ROS1               | 1.13E-32 | 0.4424086  | 0.255 | 0.152 | 4.00E-28 | CD4_Naive_spleen |
| ENSMMUG00000056126 | 1.22E-32 | 0.35972947 | 0.279 | 0.17  | 4.33E-28 | CD4_Naive_spleen |
| CD48               | 1.45E-32 | 0.48738909 | 0.294 | 0.184 | 5.15E-28 | CD4_Naive_spleen |
| NUP210             | 1.59E-32 | 0.46193554 | 0.305 | 0.193 | 5.62E-28 | CD4_Naive_spleen |
| ANKFY1             | 1.68E-32 | 0.40067551 | 0.371 | 0.244 | 5.96E-28 | CD4_Naive_spleen |
| ZNF33A             | 1.73E-32 | 0.4879199  | 0.257 | 0.154 | 6.12E-28 | CD4_Naive_spleen |
| ZMYM2              | 2.46E-32 | 0.33444127 | 0.619 | 0.464 | 8.72E-28 | CD4_Naive_spleen |
| R3HDM4             | 2.65E-32 | 0.40863526 | 0.28  | 0.171 | 9.38E-28 | CD4_Naive_spleen |
| SMAD3              | 3.41E-32 | 0.43074879 | 0.381 | 0.256 | 1.21E-27 | CD4_Naive_spleen |

|                    |          |            |       |       |          |                  |
|--------------------|----------|------------|-------|-------|----------|------------------|
| RPS6KA1            | 5.85E-32 | 0.51281354 | 0.273 | 0.17  | 2.07E-27 | CD4_Naive_spleen |
| MYDGF              | 5.90E-32 | 0.35802449 | 0.412 | 0.276 | 2.09E-27 | CD4_Naive_spleen |
| LRIG1              | 6.54E-32 | 0.45594867 | 0.303 | 0.193 | 2.32E-27 | CD4_Naive_spleen |
| CUL4A              | 7.56E-32 | 0.41187238 | 0.431 | 0.295 | 2.68E-27 | CD4_Naive_spleen |
| SKP1               | 8.06E-32 | 0.25915347 | 0.865 | 0.744 | 2.86E-27 | CD4_Naive_spleen |
| TMBIM4             | 9.79E-32 | 0.3179932  | 0.463 | 0.318 | 3.47E-27 | CD4_Naive_spleen |
| ESD                | 1.04E-31 | 0.39927867 | 0.265 | 0.159 | 3.68E-27 | CD4_Naive_spleen |
| ARHGAP35           | 1.16E-31 | 0.5125578  | 0.272 | 0.17  | 4.11E-27 | CD4_Naive_spleen |
| LSM2               | 1.33E-31 | 0.4572986  | 0.291 | 0.181 | 4.72E-27 | CD4_Naive_spleen |
| HMGB1              | 1.33E-31 | 0.24621442 | 0.881 | 0.779 | 4.72E-27 | CD4_Naive_spleen |
| NCL                | 1.64E-31 | 0.26525029 | 0.834 | 0.724 | 5.80E-27 | CD4_Naive_spleen |
| ENSMMUG00000056354 | 2.17E-31 | 0.17981818 | 0.944 | 0.909 | 7.68E-27 | CD4_Naive_spleen |
| CANX               | 2.33E-31 | 0.52876986 | 0.257 | 0.157 | 8.24E-27 | CD4_Naive_spleen |
| MTX2               | 2.48E-31 | 0.39246823 | 0.306 | 0.192 | 8.78E-27 | CD4_Naive_spleen |
| PLEKHA1            | 2.70E-31 | 0.40200108 | 0.379 | 0.254 | 9.56E-27 | CD4_Naive_spleen |
| MAPK14             | 2.79E-31 | 0.44018908 | 0.27  | 0.167 | 9.89E-27 | CD4_Naive_spleen |
| KIAA2026           | 5.53E-31 | 0.42651441 | 0.287 | 0.18  | 1.96E-26 | CD4_Naive_spleen |
| INTS6L             | 5.91E-31 | 0.39805762 | 0.341 | 0.223 | 2.09E-26 | CD4_Naive_spleen |
| ENSMMUG00000008199 | 6.80E-31 | 0.46250694 | 0.317 | 0.205 | 2.41E-26 | CD4_Naive_spleen |
| NOP58              | 7.26E-31 | 0.34680297 | 0.59  | 0.44  | 2.57E-26 | CD4_Naive_spleen |
| CEP350             | 1.49E-30 | 0.31506516 | 0.482 | 0.34  | 5.29E-26 | CD4_Naive_spleen |
| C11H12orf45        | 1.67E-30 | 0.34694835 | 0.437 | 0.301 | 5.91E-26 | CD4_Naive_spleen |
| IPCEF1             | 1.75E-30 | 0.40590223 | 0.474 | 0.343 | 6.19E-26 | CD4_Naive_spleen |
| COX5B              | 2.00E-30 | 0.28152927 | 0.572 | 0.417 | 7.08E-26 | CD4_Naive_spleen |
| TTC1               | 2.35E-30 | 0.42118269 | 0.257 | 0.155 | 8.32E-26 | CD4_Naive_spleen |
| ENSMMUG00000011798 | 2.61E-30 | 0.36564373 | 0.414 | 0.282 | 9.25E-26 | CD4_Naive_spleen |
| TTC27              | 2.72E-30 | 0.42073388 | 0.317 | 0.205 | 9.62E-26 | CD4_Naive_spleen |
| CYRIB              | 3.99E-30 | 0.29154613 | 0.785 | 0.649 | 1.41E-25 | CD4_Naive_spleen |
| DICER1             | 4.08E-30 | 0.37732054 | 0.286 | 0.179 | 1.44E-25 | CD4_Naive_spleen |
| RESF1              | 4.14E-30 | 0.38241822 | 0.37  | 0.246 | 1.47E-25 | CD4_Naive_spleen |
| TRIM44             | 4.77E-30 | 0.37656819 | 0.373 | 0.25  | 1.69E-25 | CD4_Naive_spleen |
| TTC37              | 5.63E-30 | 0.32331303 | 0.326 | 0.21  | 2.00E-25 | CD4_Naive_spleen |
| TMEM258            | 6.73E-30 | 0.26434997 | 0.639 | 0.479 | 2.39E-25 | CD4_Naive_spleen |

|                    |          |            |       |       |          |                  |
|--------------------|----------|------------|-------|-------|----------|------------------|
| TMEM147            | 6.74E-30 | 0.3436148  | 0.368 | 0.241 | 2.39E-25 | CD4_Naive_spleen |
| TRMT112            | 7.64E-30 | 0.31429599 | 0.581 | 0.43  | 2.71E-25 | CD4_Naive_spleen |
| STRN3              | 8.67E-30 | 0.26061176 | 0.48  | 0.336 | 3.07E-25 | CD4_Naive_spleen |
| N4BP2L2            | 9.70E-30 | 0.24230548 | 0.556 | 0.399 | 3.44E-25 | CD4_Naive_spleen |
| SEPTIN2            | 9.84E-30 | 0.33008147 | 0.38  | 0.253 | 3.49E-25 | CD4_Naive_spleen |
| RASGRP1            | 1.05E-29 | 0.37062131 | 0.473 | 0.335 | 3.70E-25 | CD4_Naive_spleen |
| UBL3               | 1.10E-29 | 0.33804489 | 0.464 | 0.327 | 3.90E-25 | CD4_Naive_spleen |
| UBTF               | 1.14E-29 | 0.36932637 | 0.296 | 0.186 | 4.04E-25 | CD4_Naive_spleen |
| ENSMMUG00000052424 | 1.29E-29 | 0.2720875  | 0.85  | 0.74  | 4.57E-25 | CD4_Naive_spleen |
| PTBP3              | 1.56E-29 | 0.25073478 | 0.716 | 0.556 | 5.52E-25 | CD4_Naive_spleen |
| ARID1A             | 2.86E-29 | 0.30968892 | 0.604 | 0.454 | 1.01E-24 | CD4_Naive_spleen |
| NARS2              | 3.06E-29 | 0.41701957 | 0.267 | 0.167 | 1.09E-24 | CD4_Naive_spleen |
| MAP3K1             | 3.81E-29 | 0.39228894 | 0.449 | 0.321 | 1.35E-24 | CD4_Naive_spleen |
| ENSMMUG00000053146 | 5.36E-29 | 0.2780663  | 0.549 | 0.402 | 1.90E-24 | CD4_Naive_spleen |
| RAC1               | 5.78E-29 | 0.35047078 | 0.269 | 0.166 | 2.05E-24 | CD4_Naive_spleen |
| SNX1               | 6.48E-29 | 0.38157943 | 0.308 | 0.198 | 2.29E-24 | CD4_Naive_spleen |
| SLC35B1            | 1.12E-28 | 0.34737718 | 0.481 | 0.346 | 3.97E-24 | CD4_Naive_spleen |
| TAOK3              | 1.50E-28 | 0.26969372 | 0.614 | 0.463 | 5.31E-24 | CD4_Naive_spleen |
| GTF2H5             | 1.57E-28 | 0.28144632 | 0.584 | 0.436 | 5.56E-24 | CD4_Naive_spleen |
| RASGRP2            | 1.70E-28 | 0.30466998 | 0.5   | 0.356 | 6.03E-24 | CD4_Naive_spleen |
| RNF138             | 2.06E-28 | 0.41611338 | 0.418 | 0.293 | 7.29E-24 | CD4_Naive_spleen |
| RSU1               | 2.18E-28 | 0.33642972 | 0.502 | 0.361 | 7.74E-24 | CD4_Naive_spleen |
| MBP                | 2.39E-28 | 0.24747737 | 0.709 | 0.555 | 8.48E-24 | CD4_Naive_spleen |
| IP6K1              | 2.67E-28 | 0.3657678  | 0.365 | 0.248 | 9.46E-24 | CD4_Naive_spleen |
| UBE2J1             | 3.00E-28 | 0.47488805 | 0.288 | 0.186 | 1.06E-23 | CD4_Naive_spleen |
| MSN                | 3.30E-28 | 0.27346476 | 0.822 | 0.698 | 1.17E-23 | CD4_Naive_spleen |
| ENSMMUG00000019882 | 3.34E-28 | 0.36399128 | 0.389 | 0.267 | 1.18E-23 | CD4_Naive_spleen |
| PTPN9              | 4.08E-28 | 0.42958049 | 0.26  | 0.164 | 1.45E-23 | CD4_Naive_spleen |
| OSTF1              | 4.79E-28 | 0.33893516 | 0.304 | 0.195 | 1.70E-23 | CD4_Naive_spleen |
| B2M                | 6.64E-28 | 0.11777257 | 0.999 | 0.998 | 2.35E-23 | CD4_Naive_spleen |
| CFDP1              | 8.46E-28 | 0.28398165 | 0.638 | 0.492 | 3.00E-23 | CD4_Naive_spleen |
| IGF2BP3            | 1.04E-27 | 0.3648888  | 0.531 | 0.395 | 3.69E-23 | CD4_Naive_spleen |
| PLEKHG1            | 1.20E-27 | 0.33963592 | 0.458 | 0.327 | 4.23E-23 | CD4_Naive_spleen |

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|--------------------|----------|------------|-------|-------|----------|------------------|
| MARS1              | 1.20E-27 | 0.45731482 | 0.253 | 0.158 | 4.25E-23 | CD4_Naive_spleen |
| ENSMMUG00000018740 | 1.32E-27 | 0.33009483 | 0.315 | 0.205 | 4.66E-23 | CD4_Naive_spleen |
| KHDRBS1            | 1.95E-27 | 0.30009287 | 0.409 | 0.281 | 6.92E-23 | CD4_Naive_spleen |
| ATP2B4             | 1.96E-27 | 0.28991564 | 0.553 | 0.409 | 6.95E-23 | CD4_Naive_spleen |
| NCK2               | 2.41E-27 | 0.21791562 | 0.366 | 0.246 | 8.52E-23 | CD4_Naive_spleen |
| XRCC4              | 3.15E-27 | 0.36723129 | 0.288 | 0.186 | 1.12E-22 | CD4_Naive_spleen |
| ENSMMUG00000043332 | 3.31E-27 | 0.3109633  | 0.454 | 0.317 | 1.17E-22 | CD4_Naive_spleen |
| ANKRD10            | 3.36E-27 | 0.28467558 | 0.461 | 0.323 | 1.19E-22 | CD4_Naive_spleen |
| ENSMMUG00000001458 | 3.96E-27 | 0.2415839  | 0.843 | 0.731 | 1.40E-22 | CD4_Naive_spleen |
| GNL3               | 4.08E-27 | 0.39561916 | 0.329 | 0.22  | 1.45E-22 | CD4_Naive_spleen |
| TIA1               | 4.38E-27 | 0.30114539 | 0.474 | 0.334 | 1.55E-22 | CD4_Naive_spleen |
| BST2               | 5.40E-27 | 0.37449195 | 0.304 | 0.198 | 1.91E-22 | CD4_Naive_spleen |
| NAA50              | 6.84E-27 | 0.31309825 | 0.392 | 0.268 | 2.42E-22 | CD4_Naive_spleen |
| CREB1              | 7.61E-27 | 0.32671019 | 0.483 | 0.349 | 2.69E-22 | CD4_Naive_spleen |
| WWP1               | 7.62E-27 | 0.35128111 | 0.359 | 0.245 | 2.70E-22 | CD4_Naive_spleen |
| MRPL52             | 8.10E-27 | 0.29474885 | 0.294 | 0.187 | 2.87E-22 | CD4_Naive_spleen |
| VASP               | 8.68E-27 | 0.38190036 | 0.317 | 0.208 | 3.07E-22 | CD4_Naive_spleen |
| ZNF609             | 9.10E-27 | 0.25675629 | 0.694 | 0.549 | 3.23E-22 | CD4_Naive_spleen |
| TMEM117            | 9.63E-27 | 0.39625858 | 0.344 | 0.235 | 3.41E-22 | CD4_Naive_spleen |
| SRSF10             | 9.84E-27 | 0.29376039 | 0.615 | 0.468 | 3.49E-22 | CD4_Naive_spleen |
| MTDH               | 1.16E-26 | 0.24938994 | 0.542 | 0.397 | 4.12E-22 | CD4_Naive_spleen |
| MRPL32             | 1.25E-26 | 0.35103476 | 0.288 | 0.184 | 4.43E-22 | CD4_Naive_spleen |
| PDCD10             | 1.32E-26 | 0.27981717 | 0.473 | 0.334 | 4.66E-22 | CD4_Naive_spleen |
| RHOG               | 1.35E-26 | 0.35071322 | 0.283 | 0.181 | 4.77E-22 | CD4_Naive_spleen |
| ENSMMUG00000062026 | 1.42E-26 | 0.24364481 | 0.314 | 0.201 | 5.05E-22 | CD4_Naive_spleen |
| ZMYM4              | 1.59E-26 | 0.36193628 | 0.463 | 0.336 | 5.63E-22 | CD4_Naive_spleen |
| XPC                | 1.69E-26 | 0.34773744 | 0.441 | 0.312 | 5.98E-22 | CD4_Naive_spleen |
| CD3E               | 1.76E-26 | 0.24349885 | 0.708 | 0.571 | 6.24E-22 | CD4_Naive_spleen |
| P4HA1              | 1.98E-26 | 0.39047778 | 0.282 | 0.182 | 7.02E-22 | CD4_Naive_spleen |
| ENSMMUG00000056190 | 2.00E-26 | 0.30737517 | 0.534 | 0.391 | 7.09E-22 | CD4_Naive_spleen |
| RPS6KA3            | 2.39E-26 | 0.28898252 | 0.411 | 0.289 | 8.48E-22 | CD4_Naive_spleen |
| RBMX               | 2.67E-26 | 0.27915624 | 0.665 | 0.519 | 9.45E-22 | CD4_Naive_spleen |
| SNRPE              | 2.90E-26 | 0.28462549 | 0.57  | 0.424 | 1.03E-21 | CD4_Naive_spleen |

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|---------------------|----------|------------|-------|-------|----------|------------------|
| SETD5               | 4.10E-26 | 0.34606096 | 0.458 | 0.334 | 1.45E-21 | CD4_Naive_spleen |
| TCF20               | 4.66E-26 | 0.32440657 | 0.514 | 0.384 | 1.65E-21 | CD4_Naive_spleen |
| ND2                 | 4.79E-26 | 0.25438509 | 0.973 | 0.941 | 1.70E-21 | CD4_Naive_spleen |
| CAPZB               | 5.20E-26 | 0.25720797 | 0.713 | 0.555 | 1.84E-21 | CD4_Naive_spleen |
| ENSMMUG000000063316 | 5.58E-26 | 0.29986711 | 0.749 | 0.63  | 1.98E-21 | CD4_Naive_spleen |
| EEF1E1              | 7.27E-26 | 0.31189578 | 0.373 | 0.254 | 2.57E-21 | CD4_Naive_spleen |
| EIF2AK4             | 7.41E-26 | 0.38199769 | 0.334 | 0.223 | 2.63E-21 | CD4_Naive_spleen |
| H1-4                | 8.10E-26 | 0.35433038 | 0.399 | 0.28  | 2.87E-21 | CD4_Naive_spleen |
| ZMYND11             | 8.12E-26 | 0.28461636 | 0.548 | 0.404 | 2.88E-21 | CD4_Naive_spleen |
| DPY30               | 9.53E-26 | 0.34684863 | 0.301 | 0.196 | 3.38E-21 | CD4_Naive_spleen |
| ENSMMUG000000000249 | 9.95E-26 | 0.33612171 | 0.252 | 0.158 | 3.52E-21 | CD4_Naive_spleen |
| CD63                | 1.04E-25 | 0.37356448 | 0.34  | 0.231 | 3.69E-21 | CD4_Naive_spleen |
| CAB39               | 1.10E-25 | 0.27478321 | 0.707 | 0.568 | 3.90E-21 | CD4_Naive_spleen |
| SP140               | 1.14E-25 | 0.34484937 | 0.355 | 0.242 | 4.04E-21 | CD4_Naive_spleen |
| ENSMMUG000000062103 | 1.19E-25 | 0.30485946 | 0.599 | 0.461 | 4.22E-21 | CD4_Naive_spleen |
| ENSMMUG000000058325 | 1.62E-25 | 0.2222291  | 0.953 | 0.903 | 5.74E-21 | CD4_Naive_spleen |
| POLR2A              | 2.54E-25 | 0.29738807 | 0.523 | 0.386 | 9.02E-21 | CD4_Naive_spleen |
| EIF4E2              | 2.76E-25 | 0.28583199 | 0.391 | 0.269 | 9.77E-21 | CD4_Naive_spleen |
| YWHAZ               | 2.81E-25 | 0.24427081 | 0.883 | 0.787 | 9.97E-21 | CD4_Naive_spleen |
| ELF1                | 3.10E-25 | 0.25286187 | 0.91  | 0.819 | 1.10E-20 | CD4_Naive_spleen |
| DDX42               | 3.24E-25 | 0.33698504 | 0.314 | 0.209 | 1.15E-20 | CD4_Naive_spleen |
| SENP7               | 3.59E-25 | 0.28740772 | 0.602 | 0.457 | 1.27E-20 | CD4_Naive_spleen |
| LBR                 | 3.60E-25 | 0.27413157 | 0.498 | 0.362 | 1.28E-20 | CD4_Naive_spleen |
| NELFCD              | 4.33E-25 | 0.39655044 | 0.262 | 0.167 | 1.53E-20 | CD4_Naive_spleen |
| FOCAD               | 4.47E-25 | 0.36649207 | 0.316 | 0.212 | 1.58E-20 | CD4_Naive_spleen |
| MORF4L2             | 5.21E-25 | 0.31408523 | 0.374 | 0.257 | 1.85E-20 | CD4_Naive_spleen |
| R3HDM2              | 5.41E-25 | 0.35503277 | 0.462 | 0.338 | 1.92E-20 | CD4_Naive_spleen |
| ST8SIA4             | 5.47E-25 | 0.32713969 | 0.431 | 0.31  | 1.94E-20 | CD4_Naive_spleen |
| PIK3CD              | 6.08E-25 | 0.30472622 | 0.538 | 0.403 | 2.15E-20 | CD4_Naive_spleen |
| RBM6                | 6.87E-25 | 0.25459418 | 0.518 | 0.377 | 2.43E-20 | CD4_Naive_spleen |
| ZNF638              | 8.00E-25 | 0.27940965 | 0.653 | 0.508 | 2.84E-20 | CD4_Naive_spleen |
| CHD3                | 8.30E-25 | 0.30897072 | 0.51  | 0.374 | 2.94E-20 | CD4_Naive_spleen |
| FBXO9               | 9.76E-25 | 0.32013016 | 0.293 | 0.193 | 3.46E-20 | CD4_Naive_spleen |



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| AHCYL2             | 1.27E-24 | 0.37464317 | 0.319 | 0.217 | 4.50E-20 | CD4_Naive_spleen |
| MBD5               | 1.34E-24 | 0.26949296 | 0.61  | 0.476 | 4.73E-20 | CD4_Naive_spleen |
| CTCF               | 1.36E-24 | 0.31648284 | 0.495 | 0.364 | 4.83E-20 | CD4_Naive_spleen |
| FAM53C             | 1.52E-24 | 0.35008545 | 0.275 | 0.179 | 5.40E-20 | CD4_Naive_spleen |
| GATA3              | 1.53E-24 | 0.39287517 | 0.281 | 0.185 | 5.41E-20 | CD4_Naive_spleen |
| FARS2              | 1.55E-24 | 0.29905824 | 0.583 | 0.452 | 5.48E-20 | CD4_Naive_spleen |
| NDUFB11            | 1.59E-24 | 0.22574637 | 0.4   | 0.273 | 5.63E-20 | CD4_Naive_spleen |
| SLTM               | 1.68E-24 | 0.26648122 | 0.626 | 0.484 | 5.97E-20 | CD4_Naive_spleen |
| NCOA7              | 1.99E-24 | 0.24935501 | 0.562 | 0.423 | 7.06E-20 | CD4_Naive_spleen |
| EIF4A3             | 2.74E-24 | 0.31548721 | 0.355 | 0.24  | 9.72E-20 | CD4_Naive_spleen |
| PTBP1              | 2.80E-24 | 0.2744216  | 0.306 | 0.201 | 9.92E-20 | CD4_Naive_spleen |
| SF3B3              | 2.87E-24 | 0.29526742 | 0.314 | 0.209 | 1.02E-19 | CD4_Naive_spleen |
| EIF5B              | 3.20E-24 | 0.25930318 | 0.447 | 0.325 | 1.13E-19 | CD4_Naive_spleen |
| HADHB              | 3.69E-24 | 0.34128395 | 0.276 | 0.179 | 1.31E-19 | CD4_Naive_spleen |
| PIGY               | 4.27E-24 | 0.305859   | 0.403 | 0.28  | 1.51E-19 | CD4_Naive_spleen |
| ENSMMUG00000017466 | 4.39E-24 | 0.23401694 | 0.539 | 0.398 | 1.55E-19 | CD4_Naive_spleen |
| BCAP31             | 4.40E-24 | 0.35693743 | 0.274 | 0.18  | 1.56E-19 | CD4_Naive_spleen |
| BCL2L13            | 5.41E-24 | 0.36863275 | 0.282 | 0.187 | 1.92E-19 | CD4_Naive_spleen |
| PACS1              | 6.55E-24 | 0.23821872 | 0.625 | 0.485 | 2.32E-19 | CD4_Naive_spleen |
| DDX50              | 6.86E-24 | 0.24822306 | 0.466 | 0.334 | 2.43E-19 | CD4_Naive_spleen |
| LBH                | 7.04E-24 | 0.24827418 | 0.595 | 0.455 | 2.49E-19 | CD4_Naive_spleen |
| MAGOH              | 8.13E-24 | 0.22646179 | 0.474 | 0.336 | 2.88E-19 | CD4_Naive_spleen |
| PSMA4              | 8.38E-24 | 0.26827315 | 0.453 | 0.322 | 2.97E-19 | CD4_Naive_spleen |
| ATM                | 8.45E-24 | 0.31458243 | 0.57  | 0.437 | 3.00E-19 | CD4_Naive_spleen |
| PNKP               | 9.11E-24 | 0.34618877 | 0.276 | 0.18  | 3.23E-19 | CD4_Naive_spleen |
| MCTS1              | 9.20E-24 | 0.35613983 | 0.27  | 0.175 | 3.26E-19 | CD4_Naive_spleen |
| PRMT1              | 9.71E-24 | 0.31884341 | 0.382 | 0.266 | 3.44E-19 | CD4_Naive_spleen |
| RBMS1              | 1.02E-23 | 0.29541316 | 0.623 | 0.492 | 3.62E-19 | CD4_Naive_spleen |
| SNX14              | 1.05E-23 | 0.32501423 | 0.368 | 0.258 | 3.72E-19 | CD4_Naive_spleen |
| BIN2               | 1.21E-23 | 0.2509513  | 0.756 | 0.614 | 4.30E-19 | CD4_Naive_spleen |
| CCNL1              | 1.27E-23 | 0.24538605 | 0.885 | 0.775 | 4.48E-19 | CD4_Naive_spleen |
| ATP5PD             | 1.39E-23 | 0.28640058 | 0.356 | 0.243 | 4.93E-19 | CD4_Naive_spleen |
| ZNF652             | 1.68E-23 | 0.33089415 | 0.305 | 0.206 | 5.95E-19 | CD4_Naive_spleen |

|         |          |            |       |       |          |                  |
|---------|----------|------------|-------|-------|----------|------------------|
| ANTXR2  | 2.00E-23 | 0.36123662 | 0.329 | 0.228 | 7.10E-19 | CD4_Naive_spleen |
| PIBF1   | 2.16E-23 | 0.29755526 | 0.369 | 0.257 | 7.66E-19 | CD4_Naive_spleen |
| IKZF2   | 2.33E-23 | 0.54013729 | 0.359 | 0.259 | 8.24E-19 | CD4_Naive_spleen |
| PHF20   | 2.33E-23 | 0.28732962 | 0.557 | 0.424 | 8.26E-19 | CD4_Naive_spleen |
| GLCC11  | 2.61E-23 | 0.40394207 | 0.299 | 0.204 | 9.24E-19 | CD4_Naive_spleen |
| LPXN    | 2.93E-23 | 0.29469304 | 0.256 | 0.167 | 1.04E-18 | CD4_Naive_spleen |
| ZNF268  | 3.34E-23 | 0.36327923 | 0.324 | 0.223 | 1.19E-18 | CD4_Naive_spleen |
| NFAT5   | 3.79E-23 | 0.28854005 | 0.496 | 0.367 | 1.34E-18 | CD4_Naive_spleen |
| TMEM243 | 4.05E-23 | 0.27210888 | 0.523 | 0.39  | 1.43E-18 | CD4_Naive_spleen |
| IQGAP1  | 4.26E-23 | 0.2740879  | 0.713 | 0.584 | 1.51E-18 | CD4_Naive_spleen |
| HMOX2   | 4.45E-23 | 0.2991082  | 0.46  | 0.335 | 1.58E-18 | CD4_Naive_spleen |
| CEP170  | 4.59E-23 | 0.29178541 | 0.412 | 0.294 | 1.63E-18 | CD4_Naive_spleen |
| ZBTB10  | 5.01E-23 | 0.43144064 | 0.291 | 0.197 | 1.78E-18 | CD4_Naive_spleen |
| RNF113A | 5.75E-23 | 0.39605972 | 0.252 | 0.163 | 2.04E-18 | CD4_Naive_spleen |
| PSME4   | 6.22E-23 | 0.3003747  | 0.53  | 0.399 | 2.21E-18 | CD4_Naive_spleen |
| SPATA5  | 7.47E-23 | 0.2715926  | 0.483 | 0.359 | 2.65E-18 | CD4_Naive_spleen |
| UBE2K   | 1.04E-22 | 0.20789624 | 0.562 | 0.42  | 3.68E-18 | CD4_Naive_spleen |
| CBFB    | 1.08E-22 | 0.35074472 | 0.282 | 0.187 | 3.82E-18 | CD4_Naive_spleen |
| PSMA7   | 1.16E-22 | 0.2327791  | 0.811 | 0.71  | 4.12E-18 | CD4_Naive_spleen |
| RPS27   | 1.22E-22 | 0.11801725 | 0.99  | 0.988 | 4.31E-18 | CD4_Naive_spleen |
| AIP     | 1.23E-22 | 0.24252794 | 0.433 | 0.308 | 4.36E-18 | CD4_Naive_spleen |
| HADH    | 1.35E-22 | 0.33158537 | 0.259 | 0.169 | 4.79E-18 | CD4_Naive_spleen |
| AMDHD1  | 1.37E-22 | 0.24882334 | 0.538 | 0.403 | 4.85E-18 | CD4_Naive_spleen |
| PDRG1   | 1.53E-22 | 0.29760784 | 0.284 | 0.189 | 5.42E-18 | CD4_Naive_spleen |
| PRKCA   | 1.94E-22 | 0.3067646  | 0.504 | 0.383 | 6.86E-18 | CD4_Naive_spleen |
| SESN1   | 1.98E-22 | 0.43336588 | 0.328 | 0.232 | 7.00E-18 | CD4_Naive_spleen |
| COMMD10 | 2.31E-22 | 0.26385126 | 0.478 | 0.359 | 8.18E-18 | CD4_Naive_spleen |
| WTAP    | 2.48E-22 | 0.2528951  | 0.731 | 0.588 | 8.80E-18 | CD4_Naive_spleen |
| PPA1    | 2.59E-22 | 0.29236552 | 0.424 | 0.305 | 9.17E-18 | CD4_Naive_spleen |
| KDELRL2 | 2.99E-22 | 0.29691289 | 0.283 | 0.188 | 1.06E-17 | CD4_Naive_spleen |
| DEAF1   | 3.15E-22 | 0.24937524 | 0.256 | 0.165 | 1.12E-17 | CD4_Naive_spleen |
| EIF2B3  | 3.91E-22 | 0.2724038  | 0.423 | 0.304 | 1.39E-17 | CD4_Naive_spleen |
| CSTF3   | 4.05E-22 | 0.3601797  | 0.257 | 0.169 | 1.43E-17 | CD4_Naive_spleen |

|                     |          |            |       |       |          |                  |
|---------------------|----------|------------|-------|-------|----------|------------------|
| ENSMMUG000000061824 | 4.10E-22 | 0.27483648 | 0.961 | 0.909 | 1.45E-17 | CD4_Naive_spleen |
| ENSMMUG000000055584 | 5.60E-22 | 0.17606312 | 0.918 | 0.851 | 1.98E-17 | CD4_Naive_spleen |
| BTN2A2              | 6.62E-22 | 0.24046406 | 0.584 | 0.446 | 2.35E-17 | CD4_Naive_spleen |
| NSD3                | 6.66E-22 | 0.2379261  | 0.609 | 0.48  | 2.36E-17 | CD4_Naive_spleen |
| SNRNP70             | 7.23E-22 | 0.24586039 | 0.552 | 0.413 | 2.56E-17 | CD4_Naive_spleen |
| TMBIM6              | 8.27E-22 | 0.2416104  | 0.551 | 0.413 | 2.93E-17 | CD4_Naive_spleen |
| STX16               | 9.51E-22 | 0.23844953 | 0.337 | 0.231 | 3.37E-17 | CD4_Naive_spleen |
| NCBP2               | 1.12E-21 | 0.24774844 | 0.522 | 0.388 | 3.96E-17 | CD4_Naive_spleen |
| STRBP               | 1.17E-21 | 0.23193212 | 0.355 | 0.247 | 4.15E-17 | CD4_Naive_spleen |
| EIPR1               | 1.23E-21 | 0.26529873 | 0.353 | 0.246 | 4.35E-17 | CD4_Naive_spleen |
| GDI2                | 1.96E-21 | 0.23250538 | 0.459 | 0.332 | 6.95E-17 | CD4_Naive_spleen |
| WBP1L               | 2.22E-21 | 0.26092907 | 0.368 | 0.257 | 7.85E-17 | CD4_Naive_spleen |
| IRAK2               | 4.68E-21 | 0.35720854 | 0.538 | 0.417 | 1.66E-16 | CD4_Naive_spleen |
| NDUFA2              | 4.83E-21 | 0.23039581 | 0.536 | 0.404 | 1.71E-16 | CD4_Naive_spleen |
| FCMR                | 5.72E-21 | 0.23769029 | 0.598 | 0.464 | 2.03E-16 | CD4_Naive_spleen |
| ST3GAL3             | 7.16E-21 | 0.30542775 | 0.288 | 0.196 | 2.54E-16 | CD4_Naive_spleen |
| JAK3                | 7.41E-21 | 0.31174656 | 0.289 | 0.196 | 2.63E-16 | CD4_Naive_spleen |
| COX20               | 7.46E-21 | 0.29488592 | 0.333 | 0.232 | 2.64E-16 | CD4_Naive_spleen |
| PTPMT1              | 8.02E-21 | 0.32559114 | 0.365 | 0.259 | 2.84E-16 | CD4_Naive_spleen |
| ANKRD17             | 8.48E-21 | 0.22866253 | 0.694 | 0.555 | 3.01E-16 | CD4_Naive_spleen |
| ECHS1               | 8.56E-21 | 0.26854555 | 0.304 | 0.206 | 3.03E-16 | CD4_Naive_spleen |
| RMDN1               | 8.67E-21 | 0.31741847 | 0.404 | 0.296 | 3.07E-16 | CD4_Naive_spleen |
| HDAC7               | 1.10E-20 | 0.29092145 | 0.359 | 0.254 | 3.90E-16 | CD4_Naive_spleen |
| TMEM167A            | 1.15E-20 | 0.25831407 | 0.31  | 0.211 | 4.08E-16 | CD4_Naive_spleen |
| FLII                | 1.18E-20 | 0.31458432 | 0.253 | 0.168 | 4.18E-16 | CD4_Naive_spleen |
| IL6R                | 1.40E-20 | 0.25089177 | 0.278 | 0.187 | 4.94E-16 | CD4_Naive_spleen |
| CHMP5               | 2.05E-20 | 0.26012331 | 0.261 | 0.173 | 7.25E-16 | CD4_Naive_spleen |
| CCNH                | 2.09E-20 | 0.2585426  | 0.36  | 0.253 | 7.41E-16 | CD4_Naive_spleen |
| SLC30A7             | 2.23E-20 | 0.24697859 | 0.696 | 0.565 | 7.88E-16 | CD4_Naive_spleen |
| HDAC4               | 2.23E-20 | 0.26394525 | 0.367 | 0.261 | 7.89E-16 | CD4_Naive_spleen |
| HIPK2               | 2.36E-20 | 0.2852442  | 0.329 | 0.232 | 8.35E-16 | CD4_Naive_spleen |
| MRPS6               | 2.37E-20 | 0.19893215 | 0.497 | 0.369 | 8.38E-16 | CD4_Naive_spleen |
| ND4L                | 2.44E-20 | 0.22295044 | 0.431 | 0.319 | 8.65E-16 | CD4_Naive_spleen |

|                     |          |            |       |       |          |                  |
|---------------------|----------|------------|-------|-------|----------|------------------|
| SEPTIN9             | 2.63E-20 | 0.23326962 | 0.73  | 0.595 | 9.31E-16 | CD4_Naive_spleen |
| SERBP1              | 2.82E-20 | 0.23561185 | 0.712 | 0.585 | 1.00E-15 | CD4_Naive_spleen |
| GSTK1               | 3.06E-20 | 0.27228183 | 0.285 | 0.192 | 1.08E-15 | CD4_Naive_spleen |
| CALM3               | 3.18E-20 | 0.30675579 | 0.261 | 0.175 | 1.13E-15 | CD4_Naive_spleen |
| ENSMMUG000000017890 | 3.53E-20 | 0.26379914 | 0.263 | 0.175 | 1.25E-15 | CD4_Naive_spleen |
| HNRNPL              | 3.95E-20 | 0.22679652 | 0.562 | 0.43  | 1.40E-15 | CD4_Naive_spleen |
| RASGRF2             | 3.98E-20 | 0.29183965 | 0.468 | 0.358 | 1.41E-15 | CD4_Naive_spleen |
| GMDS                | 4.02E-20 | 0.22689435 | 0.579 | 0.45  | 1.42E-15 | CD4_Naive_spleen |
| POLR2G              | 4.60E-20 | 0.33303979 | 0.25  | 0.166 | 1.63E-15 | CD4_Naive_spleen |
| VMP1                | 5.14E-20 | 0.25103762 | 0.405 | 0.292 | 1.82E-15 | CD4_Naive_spleen |
| THRAP3              | 5.52E-20 | 0.19501817 | 0.648 | 0.512 | 1.96E-15 | CD4_Naive_spleen |
| NASP                | 5.54E-20 | 0.22100321 | 0.555 | 0.424 | 1.96E-15 | CD4_Naive_spleen |
| SERTAD2             | 5.61E-20 | 0.3579652  | 0.352 | 0.252 | 1.99E-15 | CD4_Naive_spleen |
| VDAC1               | 6.00E-20 | 0.23253163 | 0.34  | 0.237 | 2.13E-15 | CD4_Naive_spleen |
| TSNAX               | 6.33E-20 | 0.27465343 | 0.306 | 0.211 | 2.24E-15 | CD4_Naive_spleen |
| TNRC6C              | 7.33E-20 | 0.25908741 | 0.394 | 0.284 | 2.60E-15 | CD4_Naive_spleen |
| CHD9                | 7.72E-20 | 0.41417319 | 0.256 | 0.175 | 2.73E-15 | CD4_Naive_spleen |
| COX7A2              | 8.25E-20 | 0.25438826 | 0.327 | 0.227 | 2.92E-15 | CD4_Naive_spleen |
| EXT1                | 8.80E-20 | 0.35647611 | 0.396 | 0.297 | 3.12E-15 | CD4_Naive_spleen |
| CCAR1               | 9.03E-20 | 0.2550179  | 0.354 | 0.25  | 3.20E-15 | CD4_Naive_spleen |
| UQCRC2              | 1.09E-19 | 0.23496204 | 0.38  | 0.271 | 3.86E-15 | CD4_Naive_spleen |
| RAP1B               | 1.23E-19 | 0.20970295 | 0.905 | 0.819 | 4.37E-15 | CD4_Naive_spleen |
| DDX5                | 1.48E-19 | 0.13164791 | 0.995 | 0.973 | 5.23E-15 | CD4_Naive_spleen |
| CWC27               | 1.50E-19 | 0.27051142 | 0.444 | 0.335 | 5.33E-15 | CD4_Naive_spleen |
| ATP5MC3             | 1.53E-19 | 0.23344059 | 0.678 | 0.555 | 5.41E-15 | CD4_Naive_spleen |
| TAF1                | 1.53E-19 | 0.2765662  | 0.308 | 0.216 | 5.43E-15 | CD4_Naive_spleen |
| HDLBP               | 1.81E-19 | 0.24470996 | 0.395 | 0.284 | 6.41E-15 | CD4_Naive_spleen |
| NVL                 | 2.26E-19 | 0.33571479 | 0.252 | 0.17  | 8.01E-15 | CD4_Naive_spleen |
| TRAPPC9             | 2.27E-19 | 0.20261755 | 0.372 | 0.266 | 8.04E-15 | CD4_Naive_spleen |
| ENSMMUG000000004441 | 2.30E-19 | 0.24117842 | 0.605 | 0.494 | 8.16E-15 | CD4_Naive_spleen |
| DCTN3               | 2.32E-19 | 0.22332735 | 0.396 | 0.283 | 8.22E-15 | CD4_Naive_spleen |
| ENSMMUG000000006343 | 3.16E-19 | 0.26371532 | 0.368 | 0.265 | 1.12E-14 | CD4_Naive_spleen |
| ACAP1               | 3.22E-19 | 0.25842572 | 0.293 | 0.201 | 1.14E-14 | CD4_Naive_spleen |

|                    |          |            |       |       |          |                  |
|--------------------|----------|------------|-------|-------|----------|------------------|
| PPP2R5C            | 3.53E-19 | 0.1554341  | 0.852 | 0.754 | 1.25E-14 | CD4_Naive_spleen |
| ADAR               | 3.54E-19 | 0.21616528 | 0.432 | 0.315 | 1.26E-14 | CD4_Naive_spleen |
| POMP               | 4.05E-19 | 0.21368208 | 0.405 | 0.292 | 1.44E-14 | CD4_Naive_spleen |
| VDAC2              | 4.21E-19 | 0.24285157 | 0.557 | 0.429 | 1.49E-14 | CD4_Naive_spleen |
| ENSMMUG00000054462 | 4.39E-19 | 0.33665471 | 0.265 | 0.181 | 1.56E-14 | CD4_Naive_spleen |
| ENSMMUG00000047481 | 4.83E-19 | 0.20819418 | 0.625 | 0.493 | 1.71E-14 | CD4_Naive_spleen |
| TAF7               | 5.08E-19 | 0.2330252  | 0.401 | 0.289 | 1.80E-14 | CD4_Naive_spleen |
| SMARCC1            | 5.13E-19 | 0.19721182 | 0.639 | 0.508 | 1.82E-14 | CD4_Naive_spleen |
| FCHSD2             | 6.11E-19 | 0.27335429 | 0.544 | 0.424 | 2.16E-14 | CD4_Naive_spleen |
| PCBP1              | 6.26E-19 | 0.24424857 | 0.587 | 0.46  | 2.22E-14 | CD4_Naive_spleen |
| DGKB               | 7.51E-19 | 0.27441193 | 0.337 | 0.237 | 2.66E-14 | CD4_Naive_spleen |
| ZNF493             | 7.54E-19 | 0.32539061 | 0.27  | 0.185 | 2.67E-14 | CD4_Naive_spleen |
| EIF2S2             | 7.72E-19 | 0.23270389 | 0.602 | 0.478 | 2.73E-14 | CD4_Naive_spleen |
| ZNF514             | 7.75E-19 | 0.21733985 | 0.434 | 0.317 | 2.74E-14 | CD4_Naive_spleen |
| RRP1B              | 7.96E-19 | 0.24644504 | 0.332 | 0.233 | 2.82E-14 | CD4_Naive_spleen |
| RAB10              | 9.98E-19 | 0.19861211 | 0.473 | 0.35  | 3.54E-14 | CD4_Naive_spleen |
| TOP1               | 1.18E-18 | 0.21623032 | 0.806 | 0.699 | 4.18E-14 | CD4_Naive_spleen |
| MRPL47             | 1.45E-18 | 0.23563985 | 0.25  | 0.167 | 5.14E-14 | CD4_Naive_spleen |
| DCAF5              | 1.62E-18 | 0.24022462 | 0.451 | 0.339 | 5.73E-14 | CD4_Naive_spleen |
| NADSYN1            | 1.64E-18 | 0.26623202 | 0.337 | 0.239 | 5.81E-14 | CD4_Naive_spleen |
| UBE2V2             | 1.68E-18 | 0.24768372 | 0.275 | 0.187 | 5.95E-14 | CD4_Naive_spleen |
| EIF1AX             | 1.77E-18 | 0.18600589 | 0.489 | 0.363 | 6.27E-14 | CD4_Naive_spleen |
| ENSMMUG00000054038 | 1.80E-18 | 0.22717443 | 0.711 | 0.577 | 6.38E-14 | CD4_Naive_spleen |
| SPTBN1             | 2.02E-18 | 0.19904006 | 0.714 | 0.581 | 7.17E-14 | CD4_Naive_spleen |
| AKR1A1             | 2.19E-18 | 0.23303238 | 0.297 | 0.204 | 7.77E-14 | CD4_Naive_spleen |
| GLIPR2             | 2.48E-18 | 0.25442085 | 0.36  | 0.259 | 8.78E-14 | CD4_Naive_spleen |
| SUPT16H            | 2.68E-18 | 0.17889164 | 0.396 | 0.284 | 9.49E-14 | CD4_Naive_spleen |
| LASP1              | 2.76E-18 | 0.3247586  | 0.265 | 0.182 | 9.79E-14 | CD4_Naive_spleen |
| CMIP               | 2.91E-18 | 0.23712478 | 0.313 | 0.221 | 1.03E-13 | CD4_Naive_spleen |
| ISG20              | 3.17E-18 | 0.25582201 | 0.344 | 0.248 | 1.12E-13 | CD4_Naive_spleen |
| CDC37              | 3.57E-18 | 0.24878288 | 0.368 | 0.265 | 1.27E-13 | CD4_Naive_spleen |
| TRIM28             | 3.66E-18 | 0.2122346  | 0.258 | 0.175 | 1.30E-13 | CD4_Naive_spleen |
| PSMA2              | 3.76E-18 | 0.18729129 | 0.573 | 0.432 | 1.33E-13 | CD4_Naive_spleen |

|                    |          |            |       |       |          |                  |
|--------------------|----------|------------|-------|-------|----------|------------------|
| ENSMMUG00000049718 | 4.11E-18 | 0.2860459  | 0.265 | 0.18  | 1.46E-13 | CD4_Naive_spleen |
| STIM2              | 5.40E-18 | 0.24087507 | 0.467 | 0.356 | 1.91E-13 | CD4_Naive_spleen |
| CD28               | 6.70E-18 | 0.25539844 | 0.673 | 0.558 | 2.37E-13 | CD4_Naive_spleen |
| CNIH1              | 6.96E-18 | 0.24178919 | 0.261 | 0.176 | 2.47E-13 | CD4_Naive_spleen |
| CLEC2B             | 6.99E-18 | 0.31345498 | 0.375 | 0.277 | 2.48E-13 | CD4_Naive_spleen |
| OXSRI              | 7.34E-18 | 0.2588091  | 0.387 | 0.283 | 2.60E-13 | CD4_Naive_spleen |
| IKZF3              | 9.36E-18 | 0.27909632 | 0.402 | 0.299 | 3.32E-13 | CD4_Naive_spleen |
| DOCK11             | 9.83E-18 | 0.17941487 | 0.728 | 0.598 | 3.48E-13 | CD4_Naive_spleen |
| PPM1B              | 9.93E-18 | 0.21796206 | 0.372 | 0.269 | 3.52E-13 | CD4_Naive_spleen |
| SH3KBP1            | 1.06E-17 | 0.16098372 | 0.932 | 0.861 | 3.75E-13 | CD4_Naive_spleen |
| UBQLN1             | 1.26E-17 | 0.25604266 | 0.462 | 0.345 | 4.47E-13 | CD4_Naive_spleen |
| CCT8               | 1.35E-17 | 0.20467563 | 0.505 | 0.38  | 4.78E-13 | CD4_Naive_spleen |
| DBNL               | 1.75E-17 | 0.2900667  | 0.262 | 0.181 | 6.21E-13 | CD4_Naive_spleen |
| PSIP1              | 1.80E-17 | 0.16930467 | 0.58  | 0.452 | 6.38E-13 | CD4_Naive_spleen |
| CCDC88C            | 1.87E-17 | 0.26726888 | 0.372 | 0.273 | 6.63E-13 | CD4_Naive_spleen |
| DUSP10             | 2.54E-17 | 0.36697996 | 0.32  | 0.233 | 9.01E-13 | CD4_Naive_spleen |
| TMED10             | 2.57E-17 | 0.21030167 | 0.56  | 0.429 | 9.12E-13 | CD4_Naive_spleen |
| UIMC1              | 2.64E-17 | 0.18355385 | 0.389 | 0.284 | 9.37E-13 | CD4_Naive_spleen |
| TAPBP              | 2.71E-17 | 0.19397982 | 0.436 | 0.324 | 9.60E-13 | CD4_Naive_spleen |
| MARK3              | 3.24E-17 | 0.19882964 | 0.524 | 0.402 | 1.15E-12 | CD4_Naive_spleen |
| ENSMMUG00000057691 | 3.33E-17 | 0.25855535 | 0.323 | 0.233 | 1.18E-12 | CD4_Naive_spleen |
| SPOP               | 3.37E-17 | 0.21551511 | 0.459 | 0.347 | 1.20E-12 | CD4_Naive_spleen |
| RGS1               | 3.65E-17 | 0.33552298 | 0.446 | 0.346 | 1.29E-12 | CD4_Naive_spleen |
| PARP6              | 3.80E-17 | 0.16560052 | 0.291 | 0.201 | 1.35E-12 | CD4_Naive_spleen |
| INPP4A             | 4.31E-17 | 0.22237818 | 0.46  | 0.348 | 1.53E-12 | CD4_Naive_spleen |
| ENSMMUG00000016959 | 4.41E-17 | 0.19360742 | 0.489 | 0.372 | 1.56E-12 | CD4_Naive_spleen |
| ENSMMUG00000000350 | 4.50E-17 | 0.24563887 | 0.256 | 0.176 | 1.59E-12 | CD4_Naive_spleen |
| HK1                | 4.51E-17 | 0.26406874 | 0.285 | 0.2   | 1.60E-12 | CD4_Naive_spleen |
| PHB                | 4.87E-17 | 0.25080694 | 0.267 | 0.185 | 1.73E-12 | CD4_Naive_spleen |
| IQSEC1             | 5.24E-17 | 0.19501038 | 0.318 | 0.225 | 1.86E-12 | CD4_Naive_spleen |
| TPI1               | 6.29E-17 | 0.21372573 | 0.424 | 0.316 | 2.23E-12 | CD4_Naive_spleen |
| CCNY               | 7.74E-17 | 0.18407344 | 0.486 | 0.37  | 2.74E-12 | CD4_Naive_spleen |
| RANBP2             | 8.68E-17 | 0.21313435 | 0.673 | 0.545 | 3.08E-12 | CD4_Naive_spleen |

|                    |          |            |       |       |          |                  |
|--------------------|----------|------------|-------|-------|----------|------------------|
| EHMT1              | 9.23E-17 | 0.24708263 | 0.486 | 0.374 | 3.27E-12 | CD4_Naive_spleen |
| MAGT1              | 9.44E-17 | 0.19100582 | 0.255 | 0.175 | 3.34E-12 | CD4_Naive_spleen |
| RCAN3              | 1.20E-16 | 0.19095613 | 0.574 | 0.452 | 4.26E-12 | CD4_Naive_spleen |
| CCT4               | 1.50E-16 | 0.19962081 | 0.58  | 0.455 | 5.32E-12 | CD4_Naive_spleen |
| UPF2               | 1.50E-16 | 0.19656679 | 0.494 | 0.378 | 5.33E-12 | CD4_Naive_spleen |
| NDUFAF2            | 1.52E-16 | 0.25533616 | 0.301 | 0.215 | 5.40E-12 | CD4_Naive_spleen |
| PSMD4              | 1.54E-16 | 0.22998659 | 0.305 | 0.215 | 5.44E-12 | CD4_Naive_spleen |
| UBA2               | 1.80E-16 | 0.21619715 | 0.422 | 0.314 | 6.38E-12 | CD4_Naive_spleen |
| EPS15L1            | 2.04E-16 | 0.30957739 | 0.268 | 0.189 | 7.23E-12 | CD4_Naive_spleen |
| MCUB               | 2.06E-16 | 0.15423762 | 0.662 | 0.531 | 7.29E-12 | CD4_Naive_spleen |
| LSP1               | 2.09E-16 | 0.19398469 | 0.701 | 0.577 | 7.41E-12 | CD4_Naive_spleen |
| ENSMMUG00000007657 | 2.44E-16 | 0.16399401 | 0.784 | 0.674 | 8.66E-12 | CD4_Naive_spleen |
| ENSMMUG00000032231 | 2.88E-16 | 0.29377863 | 0.253 | 0.176 | 1.02E-11 | CD4_Naive_spleen |
| TPM3               | 2.97E-16 | 0.1652156  | 0.828 | 0.741 | 1.05E-11 | CD4_Naive_spleen |
| H1-3               | 3.04E-16 | 0.26882987 | 0.382 | 0.287 | 1.08E-11 | CD4_Naive_spleen |
| MIB1               | 3.38E-16 | 0.24507773 | 0.366 | 0.273 | 1.20E-11 | CD4_Naive_spleen |
| REST               | 3.63E-16 | 0.24077289 | 0.317 | 0.227 | 1.29E-11 | CD4_Naive_spleen |
| JAZF1              | 4.33E-16 | 0.31097914 | 0.341 | 0.256 | 1.54E-11 | CD4_Naive_spleen |
| ENSMMUG00000004539 | 4.40E-16 | 0.18035578 | 0.433 | 0.32  | 1.56E-11 | CD4_Naive_spleen |
| NRROS              | 4.60E-16 | 0.20051594 | 0.433 | 0.328 | 1.63E-11 | CD4_Naive_spleen |
| UBE2D3             | 4.68E-16 | 0.17110746 | 0.92  | 0.844 | 1.66E-11 | CD4_Naive_spleen |
| SOD1               | 4.74E-16 | 0.19558249 | 0.539 | 0.417 | 1.68E-11 | CD4_Naive_spleen |
| ENSMMUG00000052035 | 5.32E-16 | 0.19258872 | 0.259 | 0.179 | 1.88E-11 | CD4_Naive_spleen |
| ENSMMUG00000044345 | 5.34E-16 | 0.24423266 | 0.272 | 0.191 | 1.89E-11 | CD4_Naive_spleen |
| WIPF1              | 5.41E-16 | 0.20275757 | 0.73  | 0.606 | 1.92E-11 | CD4_Naive_spleen |
| RAN                | 5.63E-16 | 0.18717753 | 0.586 | 0.463 | 2.00E-11 | CD4_Naive_spleen |
| PRKAR1A            | 5.78E-16 | 0.21259944 | 0.288 | 0.204 | 2.05E-11 | CD4_Naive_spleen |
| DDX39A             | 5.87E-16 | 0.22993393 | 0.529 | 0.407 | 2.08E-11 | CD4_Naive_spleen |
| SRSF1              | 6.03E-16 | 0.22538589 | 0.43  | 0.323 | 2.14E-11 | CD4_Naive_spleen |
| HNRNPA1            | 6.16E-16 | 0.15192814 | 0.802 | 0.683 | 2.18E-11 | CD4_Naive_spleen |
| KCNAB2             | 6.34E-16 | 0.22643911 | 0.375 | 0.28  | 2.25E-11 | CD4_Naive_spleen |
| PPP6R1             | 7.16E-16 | 0.21771643 | 0.313 | 0.224 | 2.54E-11 | CD4_Naive_spleen |
| HCLS1              | 7.47E-16 | 0.21046898 | 0.359 | 0.262 | 2.65E-11 | CD4_Naive_spleen |

|                    |          |            |       |       |          |                  |
|--------------------|----------|------------|-------|-------|----------|------------------|
| ENSMMUG00000059289 | 7.94E-16 | 0.18932305 | 0.284 | 0.202 | 2.81E-11 | CD4_Naive_spleen |
| MALSU1             | 8.67E-16 | 0.20947118 | 0.262 | 0.183 | 3.07E-11 | CD4_Naive_spleen |
| CEPT1              | 1.06E-15 | 0.16801435 | 0.256 | 0.178 | 3.76E-11 | CD4_Naive_spleen |
| ERP29              | 1.09E-15 | 0.21230333 | 0.27  | 0.189 | 3.87E-11 | CD4_Naive_spleen |
| HIKESHI            | 1.13E-15 | 0.18839078 | 0.374 | 0.272 | 3.99E-11 | CD4_Naive_spleen |
| NOSIP              | 1.17E-15 | 0.15360082 | 0.381 | 0.279 | 4.14E-11 | CD4_Naive_spleen |
| LSM8               | 1.20E-15 | 0.19337996 | 0.293 | 0.208 | 4.26E-11 | CD4_Naive_spleen |
| CLCN3              | 1.29E-15 | 0.29401366 | 0.258 | 0.182 | 4.56E-11 | CD4_Naive_spleen |
| MTRR               | 1.34E-15 | 0.22003022 | 0.294 | 0.211 | 4.76E-11 | CD4_Naive_spleen |
| ADI1               | 1.54E-15 | 0.18666618 | 0.318 | 0.228 | 5.47E-11 | CD4_Naive_spleen |
| H2AFY              | 1.62E-15 | 0.19390772 | 0.551 | 0.432 | 5.73E-11 | CD4_Naive_spleen |
| NSRP1              | 1.77E-15 | 0.26558378 | 0.404 | 0.311 | 6.26E-11 | CD4_Naive_spleen |
| CCDC6              | 1.86E-15 | 0.27868509 | 0.278 | 0.199 | 6.58E-11 | CD4_Naive_spleen |
| SAE1               | 1.92E-15 | 0.27523248 | 0.288 | 0.206 | 6.79E-11 | CD4_Naive_spleen |
| UQCRB              | 2.10E-15 | 0.19130672 | 0.423 | 0.318 | 7.44E-11 | CD4_Naive_spleen |
| KLHDC2             | 2.20E-15 | 0.17595869 | 0.263 | 0.184 | 7.81E-11 | CD4_Naive_spleen |
| MRFAP1             | 2.38E-15 | 0.18195629 | 0.306 | 0.218 | 8.42E-11 | CD4_Naive_spleen |
| TSPAN14            | 3.06E-15 | 0.17880766 | 0.274 | 0.193 | 1.08E-10 | CD4_Naive_spleen |
| CMTM6              | 3.09E-15 | 0.24437626 | 0.339 | 0.251 | 1.10E-10 | CD4_Naive_spleen |
| CDC42SE1           | 3.18E-15 | 0.17819202 | 0.308 | 0.22  | 1.13E-10 | CD4_Naive_spleen |
| EIF2S1             | 3.29E-15 | 0.20977921 | 0.267 | 0.187 | 1.17E-10 | CD4_Naive_spleen |
| ENSMMUG00000064139 | 3.35E-15 | 0.14357742 | 0.905 | 0.823 | 1.19E-10 | CD4_Naive_spleen |
| ATF4               | 3.46E-15 | 0.17353352 | 0.558 | 0.434 | 1.23E-10 | CD4_Naive_spleen |
| BUD31              | 3.48E-15 | 0.20233103 | 0.31  | 0.223 | 1.23E-10 | CD4_Naive_spleen |
| CLEC2D             | 3.63E-15 | 0.18461758 | 0.548 | 0.432 | 1.29E-10 | CD4_Naive_spleen |
| PDE4B              | 4.07E-15 | 0.31470878 | 0.595 | 0.495 | 1.44E-10 | CD4_Naive_spleen |
| SBF2               | 4.36E-15 | 0.20524256 | 0.435 | 0.335 | 1.54E-10 | CD4_Naive_spleen |
| MSL2               | 4.46E-15 | 0.19544465 | 0.363 | 0.271 | 1.58E-10 | CD4_Naive_spleen |
| CCT6A              | 4.47E-15 | 0.19097089 | 0.613 | 0.488 | 1.58E-10 | CD4_Naive_spleen |
| PSMB4              | 4.50E-15 | 0.16856756 | 0.447 | 0.336 | 1.59E-10 | CD4_Naive_spleen |
| PSMB8              | 4.98E-15 | 0.15503569 | 0.617 | 0.49  | 1.77E-10 | CD4_Naive_spleen |
| EIF3I              | 5.34E-15 | 0.17852147 | 0.427 | 0.32  | 1.89E-10 | CD4_Naive_spleen |
| DHX15              | 6.91E-15 | 0.17440222 | 0.385 | 0.286 | 2.45E-10 | CD4_Naive_spleen |



|                   |          |            |       |       |          |                  |
|-------------------|----------|------------|-------|-------|----------|------------------|
| UCP2              | 7.50E-15 | 0.14943136 | 0.466 | 0.357 | 2.66E-10 | CD4_Naive_spleen |
| ARHGAP45          | 8.22E-15 | 0.19246412 | 0.542 | 0.422 | 2.91E-10 | CD4_Naive_spleen |
| SLIRP             | 8.56E-15 | 0.15892586 | 0.738 | 0.624 | 3.03E-10 | CD4_Naive_spleen |
| WAPL              | 1.05E-14 | 0.14494382 | 0.47  | 0.356 | 3.72E-10 | CD4_Naive_spleen |
| RALY              | 1.08E-14 | 0.12351351 | 0.511 | 0.388 | 3.82E-10 | CD4_Naive_spleen |
| SFPQ              | 1.10E-14 | 0.19951663 | 0.661 | 0.543 | 3.91E-10 | CD4_Naive_spleen |
| EIF3J             | 1.23E-14 | 0.15183941 | 0.497 | 0.38  | 4.37E-10 | CD4_Naive_spleen |
| DDX24             | 1.26E-14 | 0.14767652 | 0.632 | 0.509 | 4.46E-10 | CD4_Naive_spleen |
| UBE2L6            | 1.26E-14 | 0.25426311 | 0.252 | 0.177 | 4.46E-10 | CD4_Naive_spleen |
| PRMT2             | 1.34E-14 | 0.23965285 | 0.304 | 0.221 | 4.74E-10 | CD4_Naive_spleen |
| PDCD4             | 1.35E-14 | 0.18885934 | 0.629 | 0.512 | 4.78E-10 | CD4_Naive_spleen |
| KLF13             | 1.38E-14 | 0.20797085 | 0.288 | 0.208 | 4.90E-10 | CD4_Naive_spleen |
| DPYD              | 1.52E-14 | 0.26156263 | 0.356 | 0.272 | 5.39E-10 | CD4_Naive_spleen |
| MIF               | 1.60E-14 | 0.1980856  | 0.592 | 0.473 | 5.67E-10 | CD4_Naive_spleen |
| BMP2K             | 1.76E-14 | 0.13835557 | 0.387 | 0.292 | 6.22E-10 | CD4_Naive_spleen |
| LARP4B            | 1.96E-14 | 0.18859713 | 0.397 | 0.302 | 6.93E-10 | CD4_Naive_spleen |
| STK26             | 1.97E-14 | 0.19926883 | 0.396 | 0.3   | 6.99E-10 | CD4_Naive_spleen |
| KDM5B             | 2.00E-14 | 0.28457298 | 0.258 | 0.186 | 7.10E-10 | CD4_Naive_spleen |
| SUZ12             | 2.07E-14 | 0.14613634 | 0.408 | 0.307 | 7.33E-10 | CD4_Naive_spleen |
| TRIM22            | 2.07E-14 | 0.21460597 | 0.494 | 0.384 | 7.33E-10 | CD4_Naive_spleen |
| DYRK1A            | 2.41E-14 | 0.16077565 | 0.509 | 0.392 | 8.52E-10 | CD4_Naive_spleen |
| IPO11             | 2.45E-14 | 0.2290867  | 0.288 | 0.209 | 8.67E-10 | CD4_Naive_spleen |
| PPFIBP2           | 2.58E-14 | 0.21405737 | 0.308 | 0.224 | 9.13E-10 | CD4_Naive_spleen |
| PPDPF             | 2.87E-14 | 0.22501935 | 0.316 | 0.23  | 1.02E-09 | CD4_Naive_spleen |
| COMMD7            | 2.88E-14 | 0.17892305 | 0.49  | 0.378 | 1.02E-09 | CD4_Naive_spleen |
| APPL1             | 3.27E-14 | 0.20209327 | 0.289 | 0.208 | 1.16E-09 | CD4_Naive_spleen |
| CAMK1D            | 3.32E-14 | 0.22664983 | 0.752 | 0.651 | 1.18E-09 | CD4_Naive_spleen |
| BPTF              | 3.58E-14 | 0.14006083 | 0.68  | 0.557 | 1.27E-09 | CD4_Naive_spleen |
| ENSMUG00000006965 | 3.62E-14 | 0.16876219 | 0.512 | 0.4   | 1.28E-09 | CD4_Naive_spleen |
| SPECC1L           | 3.76E-14 | 0.14970715 | 0.486 | 0.371 | 1.33E-09 | CD4_Naive_spleen |
| ZCCHC7            | 4.08E-14 | 0.14018235 | 0.757 | 0.644 | 1.45E-09 | CD4_Naive_spleen |
| BTBD7             | 4.17E-14 | 0.13774433 | 0.252 | 0.179 | 1.48E-09 | CD4_Naive_spleen |
| DENND6A           | 4.23E-14 | 0.18222411 | 0.369 | 0.279 | 1.50E-09 | CD4_Naive_spleen |

|                    |          |            |       |       |          |                  |
|--------------------|----------|------------|-------|-------|----------|------------------|
| PPP2R2D            | 5.64E-14 | 0.17175545 | 0.4   | 0.303 | 2.00E-09 | CD4_Naive_spleen |
| MRPL51             | 6.89E-14 | 0.11339525 | 0.51  | 0.391 | 2.44E-09 | CD4_Naive_spleen |
| DDX10              | 7.09E-14 | 0.2101998  | 0.404 | 0.307 | 2.51E-09 | CD4_Naive_spleen |
| SKAP1              | 7.33E-14 | 0.11884797 | 0.973 | 0.928 | 2.60E-09 | CD4_Naive_spleen |
| MED28              | 8.00E-14 | 0.18359452 | 0.295 | 0.213 | 2.84E-09 | CD4_Naive_spleen |
| FBL                | 8.02E-14 | 0.15941156 | 0.363 | 0.269 | 2.84E-09 | CD4_Naive_spleen |
| TIAL1              | 8.48E-14 | 0.14883568 | 0.403 | 0.3   | 3.00E-09 | CD4_Naive_spleen |
| DIPK1A             | 8.65E-14 | 0.23958158 | 0.326 | 0.245 | 3.07E-09 | CD4_Naive_spleen |
| LSM7               | 9.64E-14 | 0.15015493 | 0.536 | 0.422 | 3.42E-09 | CD4_Naive_spleen |
| TMC6               | 9.72E-14 | 0.14099264 | 0.284 | 0.204 | 3.45E-09 | CD4_Naive_spleen |
| ANXA7              | 1.09E-13 | 0.17319767 | 0.288 | 0.207 | 3.87E-09 | CD4_Naive_spleen |
| MDN1               | 1.45E-13 | 0.2211932  | 0.375 | 0.284 | 5.14E-09 | CD4_Naive_spleen |
| ETFA               | 1.50E-13 | 0.20089106 | 0.321 | 0.236 | 5.32E-09 | CD4_Naive_spleen |
| LRPPRC             | 1.55E-13 | 0.16475172 | 0.502 | 0.389 | 5.48E-09 | CD4_Naive_spleen |
| ENSMMUG00000039874 | 1.59E-13 | 0.21123489 | 0.266 | 0.193 | 5.64E-09 | CD4_Naive_spleen |
| ZSWIM6             | 1.68E-13 | 0.17278109 | 0.318 | 0.237 | 5.95E-09 | CD4_Naive_spleen |
| MAP2K4             | 1.71E-13 | 0.1222044  | 0.363 | 0.271 | 6.05E-09 | CD4_Naive_spleen |
| TIGAR              | 1.71E-13 | 0.14949308 | 0.75  | 0.642 | 6.08E-09 | CD4_Naive_spleen |
| ENSMMUG00000049295 | 1.75E-13 | 0.17778204 | 0.305 | 0.224 | 6.21E-09 | CD4_Naive_spleen |
| REEP5              | 1.87E-13 | 0.1242259  | 0.379 | 0.283 | 6.64E-09 | CD4_Naive_spleen |
| MLLT10             | 1.91E-13 | 0.18714846 | 0.574 | 0.458 | 6.78E-09 | CD4_Naive_spleen |
| FOKK1              | 2.77E-13 | 0.16350936 | 0.302 | 0.223 | 9.83E-09 | CD4_Naive_spleen |
| ZBED1              | 3.08E-13 | 0.19998285 | 0.311 | 0.231 | 1.09E-08 | CD4_Naive_spleen |
| PPIH               | 3.19E-13 | 0.18995533 | 0.275 | 0.198 | 1.13E-08 | CD4_Naive_spleen |
| UBR2               | 3.22E-13 | 0.13149712 | 0.41  | 0.31  | 1.14E-08 | CD4_Naive_spleen |
| ENSMMUG00000006499 | 3.24E-13 | 0.12725034 | 0.47  | 0.358 | 1.15E-08 | CD4_Naive_spleen |
| POLR3GL            | 3.61E-13 | 0.21336669 | 0.395 | 0.3   | 1.28E-08 | CD4_Naive_spleen |
| ENSMMUG00000028906 | 3.71E-13 | 0.17558789 | 0.766 | 0.662 | 1.31E-08 | CD4_Naive_spleen |
| PLAAT4             | 4.48E-13 | 0.21594418 | 0.296 | 0.22  | 1.59E-08 | CD4_Naive_spleen |
| TOP2B              | 4.48E-13 | 0.14802457 | 0.497 | 0.392 | 1.59E-08 | CD4_Naive_spleen |
| HECTD1             | 4.87E-13 | 0.1384236  | 0.387 | 0.294 | 1.73E-08 | CD4_Naive_spleen |
| CCDC66             | 5.04E-13 | 0.15512232 | 0.397 | 0.3   | 1.79E-08 | CD4_Naive_spleen |
| PCNX1              | 6.32E-13 | 0.12893905 | 0.404 | 0.306 | 2.24E-08 | CD4_Naive_spleen |

|                   |          |            |       |       |          |                  |
|-------------------|----------|------------|-------|-------|----------|------------------|
| VPS8              | 6.98E-13 | 0.17437192 | 0.351 | 0.266 | 2.47E-08 | CD4_Naive_spleen |
| BZW2              | 8.77E-13 | 0.18405821 | 0.465 | 0.359 | 3.11E-08 | CD4_Naive_spleen |
| KCNQ5             | 9.13E-13 | 0.1987839  | 0.682 | 0.594 | 3.24E-08 | CD4_Naive_spleen |
| NCLN              | 1.19E-12 | 0.14295112 | 0.366 | 0.277 | 4.22E-08 | CD4_Naive_spleen |
| TIAM1             | 1.25E-12 | 0.21570859 | 0.302 | 0.226 | 4.43E-08 | CD4_Naive_spleen |
| RBL2              | 1.32E-12 | 0.16902174 | 0.469 | 0.368 | 4.67E-08 | CD4_Naive_spleen |
| AASDHPPT          | 1.38E-12 | 0.166289   | 0.293 | 0.215 | 4.89E-08 | CD4_Naive_spleen |
| PPP6R3            | 1.41E-12 | 0.1344227  | 0.625 | 0.505 | 4.98E-08 | CD4_Naive_spleen |
| ADD3              | 1.46E-12 | 0.13706727 | 0.855 | 0.758 | 5.18E-08 | CD4_Naive_spleen |
| PTEN              | 1.49E-12 | 0.17361931 | 0.539 | 0.434 | 5.30E-08 | CD4_Naive_spleen |
| CAMKMT            | 1.50E-12 | 0.16931218 | 0.533 | 0.439 | 5.30E-08 | CD4_Naive_spleen |
| TWF2              | 1.52E-12 | 0.15127425 | 0.329 | 0.243 | 5.39E-08 | CD4_Naive_spleen |
| ENSMUG00000054948 | 1.70E-12 | 0.29665521 | 0.262 | 0.195 | 6.01E-08 | CD4_Naive_spleen |
| DYNC1H1           | 1.83E-12 | 0.10205206 | 0.346 | 0.257 | 6.48E-08 | CD4_Naive_spleen |
| NUMB              | 1.87E-12 | 0.16130286 | 0.429 | 0.333 | 6.64E-08 | CD4_Naive_spleen |
| ARF5              | 2.01E-12 | 0.11102339 | 0.482 | 0.368 | 7.13E-08 | CD4_Naive_spleen |
| SLC25A4           | 2.04E-12 | 0.13368337 | 0.322 | 0.237 | 7.21E-08 | CD4_Naive_spleen |
| ATXN7L1           | 2.11E-12 | 0.15088518 | 0.371 | 0.286 | 7.46E-08 | CD4_Naive_spleen |
| RBX1              | 2.16E-12 | 0.12571615 | 0.493 | 0.384 | 7.67E-08 | CD4_Naive_spleen |
| LPIN2             | 2.33E-12 | 0.14832156 | 0.395 | 0.302 | 8.27E-08 | CD4_Naive_spleen |
| DNM2              | 2.46E-12 | 0.1220275  | 0.427 | 0.327 | 8.73E-08 | CD4_Naive_spleen |
| SNX3              | 2.79E-12 | 0.12293835 | 0.321 | 0.236 | 9.88E-08 | CD4_Naive_spleen |
| LYAR              | 2.99E-12 | 0.18975818 | 0.256 | 0.187 | 1.06E-07 | CD4_Naive_spleen |
| PRMT3             | 3.13E-12 | 0.19800747 | 0.25  | 0.181 | 1.11E-07 | CD4_Naive_spleen |
| HMBOX1            | 3.21E-12 | 0.12487321 | 0.373 | 0.285 | 1.14E-07 | CD4_Naive_spleen |
| UBE3A             | 3.43E-12 | 0.10012387 | 0.425 | 0.326 | 1.22E-07 | CD4_Naive_spleen |
| ST13              | 3.49E-12 | 0.151695   | 0.599 | 0.485 | 1.24E-07 | CD4_Naive_spleen |
| RNF11             | 3.65E-12 | 0.24317483 | 0.281 | 0.209 | 1.29E-07 | CD4_Naive_spleen |
| CD37              | 3.71E-12 | 0.15368294 | 0.729 | 0.611 | 1.31E-07 | CD4_Naive_spleen |
| M6PR              | 3.77E-12 | 0.2049588  | 0.263 | 0.193 | 1.34E-07 | CD4_Naive_spleen |
| EXOC3             | 4.01E-12 | 0.20361931 | 0.256 | 0.187 | 1.42E-07 | CD4_Naive_spleen |
| CDK6              | 4.19E-12 | 0.12207049 | 0.354 | 0.27  | 1.49E-07 | CD4_Naive_spleen |
| PSMD1             | 4.26E-12 | 0.17933111 | 0.272 | 0.2   | 1.51E-07 | CD4_Naive_spleen |

|                    |          |            |       |       |          |                  |
|--------------------|----------|------------|-------|-------|----------|------------------|
| ENSMMUG00000058818 | 4.45E-12 | 0.10194235 | 0.302 | 0.224 | 1.58E-07 | CD4_Naive_spleen |
| KATNBL1            | 4.67E-12 | 0.14101969 | 0.338 | 0.254 | 1.66E-07 | CD4_Naive_spleen |
| TXNL1              | 4.92E-12 | 0.16657743 | 0.317 | 0.238 | 1.74E-07 | CD4_Naive_spleen |
| BABAM2             | 4.96E-12 | 0.11103336 | 0.517 | 0.409 | 1.76E-07 | CD4_Naive_spleen |
| PMPCB              | 5.10E-12 | 0.12817905 | 0.336 | 0.25  | 1.81E-07 | CD4_Naive_spleen |
| CNTRL              | 5.24E-12 | 0.14097172 | 0.335 | 0.252 | 1.86E-07 | CD4_Naive_spleen |
| SSR4               | 6.00E-12 | 0.11702139 | 0.758 | 0.645 | 2.13E-07 | CD4_Naive_spleen |
| NT5C3A             | 6.85E-12 | 0.23563003 | 0.259 | 0.193 | 2.43E-07 | CD4_Naive_spleen |
| JAK2               | 6.97E-12 | 0.19952772 | 0.287 | 0.215 | 2.47E-07 | CD4_Naive_spleen |
| FBXW11             | 7.54E-12 | 0.1829805  | 0.276 | 0.204 | 2.67E-07 | CD4_Naive_spleen |
| DGUOK              | 7.65E-12 | 0.20639805 | 0.306 | 0.23  | 2.71E-07 | CD4_Naive_spleen |
| RPN2               | 8.40E-12 | 0.14319587 | 0.303 | 0.224 | 2.98E-07 | CD4_Naive_spleen |
| HIF1A              | 8.45E-12 | 0.26078193 | 0.525 | 0.433 | 2.99E-07 | CD4_Naive_spleen |
| PRKDC              | 9.30E-12 | 0.15824803 | 0.605 | 0.489 | 3.29E-07 | CD4_Naive_spleen |
| SF1                | 1.03E-11 | 0.14312765 | 0.709 | 0.582 | 3.63E-07 | CD4_Naive_spleen |
| ATF7               | 1.04E-11 | 0.13505301 | 0.39  | 0.3   | 3.69E-07 | CD4_Naive_spleen |
| ANAPC13            | 1.28E-11 | 0.13334936 | 0.299 | 0.221 | 4.53E-07 | CD4_Naive_spleen |
| ENSMMUG00000019238 | 1.32E-11 | 0.13342252 | 0.401 | 0.307 | 4.67E-07 | CD4_Naive_spleen |
| GTF3C6             | 1.38E-11 | 0.14172791 | 0.341 | 0.256 | 4.87E-07 | CD4_Naive_spleen |
| TNPO3              | 1.40E-11 | 0.12637129 | 0.351 | 0.266 | 4.97E-07 | CD4_Naive_spleen |
| NIPA2              | 1.43E-11 | 0.10294947 | 0.255 | 0.185 | 5.08E-07 | CD4_Naive_spleen |
| INTS6              | 1.52E-11 | 0.15328752 | 0.499 | 0.397 | 5.38E-07 | CD4_Naive_spleen |
| NPM1               | 1.70E-11 | 0.1182576  | 0.936 | 0.891 | 6.04E-07 | CD4_Naive_spleen |
| NFATC3             | 1.84E-11 | 0.16198046 | 0.627 | 0.517 | 6.52E-07 | CD4_Naive_spleen |
| MGAT4A             | 1.87E-11 | 0.181919   | 0.509 | 0.408 | 6.63E-07 | CD4_Naive_spleen |
| ARHGAP25           | 1.90E-11 | 0.12048571 | 0.347 | 0.264 | 6.74E-07 | CD4_Naive_spleen |
| HNRNPH3            | 1.94E-11 | 0.13256875 | 0.692 | 0.573 | 6.89E-07 | CD4_Naive_spleen |
| CTSD               | 2.14E-11 | 0.17274553 | 0.253 | 0.185 | 7.58E-07 | CD4_Naive_spleen |
| ABI1               | 2.30E-11 | 0.22472554 | 0.763 | 0.663 | 8.16E-07 | CD4_Naive_spleen |
| HERC3              | 2.73E-11 | 0.15974437 | 0.555 | 0.451 | 9.66E-07 | CD4_Naive_spleen |
| DAP3               | 2.75E-11 | 0.14113643 | 0.334 | 0.255 | 9.73E-07 | CD4_Naive_spleen |
| EFL1               | 2.94E-11 | 0.22654634 | 0.368 | 0.289 | 1.04E-06 | CD4_Naive_spleen |
| FNTB               | 3.14E-11 | 0.12209516 | 0.556 | 0.444 | 1.11E-06 | CD4_Naive_spleen |

|                    |          |            |       |       |          |                  |
|--------------------|----------|------------|-------|-------|----------|------------------|
| UHMK1              | 3.30E-11 | 0.14573232 | 0.345 | 0.263 | 1.17E-06 | CD4_Naive_spleen |
| STX8               | 3.47E-11 | 0.16424314 | 0.401 | 0.315 | 1.23E-06 | CD4_Naive_spleen |
| CHMP2A             | 3.48E-11 | 0.10846927 | 0.293 | 0.217 | 1.23E-06 | CD4_Naive_spleen |
| TDRD3              | 3.52E-11 | 0.11350962 | 0.394 | 0.305 | 1.25E-06 | CD4_Naive_spleen |
| ZNF131             | 3.58E-11 | 0.14552214 | 0.451 | 0.354 | 1.27E-06 | CD4_Naive_spleen |
| SLC22A23           | 3.62E-11 | 0.15342923 | 0.334 | 0.256 | 1.28E-06 | CD4_Naive_spleen |
| SENP6              | 3.66E-11 | 0.11430459 | 0.717 | 0.589 | 1.30E-06 | CD4_Naive_spleen |
| RAD23A             | 4.67E-11 | 0.11942634 | 0.269 | 0.198 | 1.65E-06 | CD4_Naive_spleen |
| MAPKAP1            | 4.69E-11 | 0.11573084 | 0.435 | 0.341 | 1.66E-06 | CD4_Naive_spleen |
| UBXN4              | 4.86E-11 | 0.10658518 | 0.506 | 0.401 | 1.72E-06 | CD4_Naive_spleen |
| HCST               | 5.24E-11 | 0.12085487 | 0.424 | 0.334 | 1.86E-06 | CD4_Naive_spleen |
| CBFA2T2            | 5.51E-11 | 0.19742496 | 0.25  | 0.186 | 1.95E-06 | CD4_Naive_spleen |
| MTF2               | 5.53E-11 | 0.1615916  | 0.313 | 0.239 | 1.96E-06 | CD4_Naive_spleen |
| PSMD2              | 5.97E-11 | 0.17370643 | 0.269 | 0.201 | 2.12E-06 | CD4_Naive_spleen |
| TRAM1              | 6.04E-11 | 0.13336255 | 0.405 | 0.312 | 2.14E-06 | CD4_Naive_spleen |
| MAPRE2             | 6.55E-11 | 0.23448379 | 0.478 | 0.386 | 2.32E-06 | CD4_Naive_spleen |
| NF1                | 7.04E-11 | 0.15699481 | 0.347 | 0.269 | 2.50E-06 | CD4_Naive_spleen |
| ENSMMUG00000016278 | 7.15E-11 | 0.12539434 | 0.461 | 0.362 | 2.53E-06 | CD4_Naive_spleen |
| KIAA0040           | 7.68E-11 | 0.15884878 | 0.318 | 0.243 | 2.72E-06 | CD4_Naive_spleen |
| ZC3H15             | 7.97E-11 | 0.11957105 | 0.487 | 0.385 | 2.82E-06 | CD4_Naive_spleen |
| TACC1              | 8.50E-11 | 0.13290912 | 0.418 | 0.325 | 3.01E-06 | CD4_Naive_spleen |
| ENSMMUG00000059843 | 8.76E-11 | 0.11480633 | 0.272 | 0.202 | 3.10E-06 | CD4_Naive_spleen |
| RFX7               | 9.66E-11 | 0.13075243 | 0.369 | 0.287 | 3.42E-06 | CD4_Naive_spleen |
| YJEFN3             | 9.81E-11 | 0.11645963 | 0.51  | 0.402 | 3.48E-06 | CD4_Naive_spleen |
| CHD1               | 1.05E-10 | 0.10194857 | 0.486 | 0.384 | 3.71E-06 | CD4_Naive_spleen |
| NONO               | 1.14E-10 | 0.17694625 | 0.59  | 0.484 | 4.04E-06 | CD4_Naive_spleen |
| UBE2N              | 1.15E-10 | 0.16360141 | 0.454 | 0.36  | 4.08E-06 | CD4_Naive_spleen |
| EIF1B              | 1.25E-10 | 0.12722984 | 0.421 | 0.326 | 4.44E-06 | CD4_Naive_spleen |
| NPTN               | 1.34E-10 | 0.14018165 | 0.328 | 0.25  | 4.74E-06 | CD4_Naive_spleen |
| KPNA1              | 1.35E-10 | 0.12035947 | 0.36  | 0.278 | 4.79E-06 | CD4_Naive_spleen |
| TUBA1A             | 1.39E-10 | 0.18788802 | 0.715 | 0.614 | 4.91E-06 | CD4_Naive_spleen |
| DOCK2              | 1.48E-10 | 0.15691551 | 0.802 | 0.705 | 5.24E-06 | CD4_Naive_spleen |
| PIH1D1             | 1.50E-10 | 0.1048627  | 0.257 | 0.189 | 5.33E-06 | CD4_Naive_spleen |

|                     |          |            |       |       |          |                  |
|---------------------|----------|------------|-------|-------|----------|------------------|
| HDAC1               | 1.58E-10 | 0.11563004 | 0.462 | 0.364 | 5.59E-06 | CD4_Naive_spleen |
| FUT8                | 1.58E-10 | 0.10281934 | 0.375 | 0.294 | 5.61E-06 | CD4_Naive_spleen |
| CHCHD3              | 1.68E-10 | 0.120345   | 0.447 | 0.35  | 5.97E-06 | CD4_Naive_spleen |
| JPT1                | 1.71E-10 | 0.10525869 | 0.809 | 0.715 | 6.07E-06 | CD4_Naive_spleen |
| PRR14L              | 1.73E-10 | 0.22019286 | 0.254 | 0.19  | 6.13E-06 | CD4_Naive_spleen |
| CUL1                | 1.75E-10 | 0.13077811 | 0.382 | 0.297 | 6.19E-06 | CD4_Naive_spleen |
| EIF4G2              | 2.06E-10 | 0.14007809 | 0.754 | 0.648 | 7.30E-06 | CD4_Naive_spleen |
| NUCKS1              | 2.21E-10 | 0.14199594 | 0.558 | 0.455 | 7.85E-06 | CD4_Naive_spleen |
| ENSMMUG00000009264  | 2.22E-10 | 0.14788171 | 0.289 | 0.219 | 7.88E-06 | CD4_Naive_spleen |
| PDSS2               | 2.59E-10 | 0.13948956 | 0.327 | 0.252 | 9.18E-06 | CD4_Naive_spleen |
| TBC1D22A            | 2.85E-10 | 0.15677061 | 0.371 | 0.288 | 1.01E-05 | CD4_Naive_spleen |
| C3H7orf50           | 3.02E-10 | 0.12484518 | 0.631 | 0.522 | 1.07E-05 | CD4_Naive_spleen |
| ST6GALNAC5          | 3.16E-10 | 0.20954428 | 0.389 | 0.315 | 1.12E-05 | CD4_Naive_spleen |
| ARHGEF1             | 3.32E-10 | 0.14432054 | 0.665 | 0.552 | 1.18E-05 | CD4_Naive_spleen |
| IPO7                | 3.58E-10 | 0.1315418  | 0.349 | 0.269 | 1.27E-05 | CD4_Naive_spleen |
| RCOR1               | 3.58E-10 | 0.12854687 | 0.292 | 0.221 | 1.27E-05 | CD4_Naive_spleen |
| ARL15               | 3.62E-10 | 0.16057043 | 0.635 | 0.535 | 1.28E-05 | CD4_Naive_spleen |
| NSMCE1              | 3.78E-10 | 0.11748357 | 0.384 | 0.297 | 1.34E-05 | CD4_Naive_spleen |
| SPEN                | 4.16E-10 | 0.11093039 | 0.44  | 0.348 | 1.47E-05 | CD4_Naive_spleen |
| ENSMMUG000000065362 | 4.80E-10 | 0.24658329 | 0.999 | 0.999 | 1.70E-05 | CD4_Naive_spleen |
| SLC7A6              | 4.90E-10 | 0.11931834 | 0.366 | 0.283 | 1.74E-05 | CD4_Naive_spleen |
| NDUFB10             | 5.25E-10 | 0.11159392 | 0.467 | 0.366 | 1.86E-05 | CD4_Naive_spleen |
| CAPG                | 5.43E-10 | 0.11369171 | 0.614 | 0.501 | 1.93E-05 | CD4_Naive_spleen |
| IMMP2L              | 5.61E-10 | 0.13805424 | 0.695 | 0.603 | 1.99E-05 | CD4_Naive_spleen |
| ZNF148              | 8.47E-10 | 0.10720014 | 0.587 | 0.481 | 3.00E-05 | CD4_Naive_spleen |
| HP1BP3              | 1.14E-09 | 0.11180524 | 0.574 | 0.466 | 4.03E-05 | CD4_Naive_spleen |
| TOPBP1              | 1.21E-09 | 0.11990828 | 0.258 | 0.193 | 4.27E-05 | CD4_Naive_spleen |
| INPP5D              | 1.22E-09 | 0.12963863 | 0.429 | 0.343 | 4.34E-05 | CD4_Naive_spleen |
| SHISA5              | 1.40E-09 | 0.10322527 | 0.487 | 0.387 | 4.95E-05 | CD4_Naive_spleen |
| NDUFA1              | 1.48E-09 | 0.12419419 | 0.682 | 0.572 | 5.25E-05 | CD4_Naive_spleen |
| HS2ST1              | 1.54E-09 | 0.1650218  | 0.317 | 0.249 | 5.46E-05 | CD4_Naive_spleen |
| CHCHD2              | 1.57E-09 | 0.11038471 | 0.816 | 0.725 | 5.55E-05 | CD4_Naive_spleen |
| PTGER4              | 1.64E-09 | 0.15189078 | 0.371 | 0.295 | 5.82E-05 | CD4_Naive_spleen |

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|--------------------|----------|------------|-------|-------|------------|------------------|
| WASF2              | 1.75E-09 | 0.10811006 | 0.652 | 0.538 | 6.19E-05   | CD4_Naive_spleen |
| WAS                | 1.78E-09 | 0.10226812 | 0.446 | 0.35  | 6.31E-05   | CD4_Naive_spleen |
| ENSMMUG00000030374 | 1.81E-09 | 0.1602248  | 0.338 | 0.265 | 6.40E-05   | CD4_Naive_spleen |
| ATP5IF1            | 1.81E-09 | 0.12385406 | 0.615 | 0.505 | 6.43E-05   | CD4_Naive_spleen |
| ARMH3              | 1.88E-09 | 0.12591915 | 0.292 | 0.226 | 6.65E-05   | CD4_Naive_spleen |
| PNO1               | 2.02E-09 | 0.1287143  | 0.255 | 0.191 | 7.15E-05   | CD4_Naive_spleen |
| COA1               | 2.50E-09 | 0.10788632 | 0.453 | 0.357 | 8.85E-05   | CD4_Naive_spleen |
| SACM1L             | 2.60E-09 | 0.14774334 | 0.311 | 0.243 | 9.20E-05   | CD4_Naive_spleen |
| NOC3L              | 2.61E-09 | 0.10587603 | 0.302 | 0.23  | 9.26E-05   | CD4_Naive_spleen |
| SUFU               | 2.64E-09 | 0.11416383 | 0.301 | 0.233 | 9.35E-05   | CD4_Naive_spleen |
| SUPT3H             | 3.40E-09 | 0.131987   | 0.358 | 0.284 | 0.00012037 | CD4_Naive_spleen |
| KMT5B              | 3.81E-09 | 0.13262529 | 0.391 | 0.307 | 0.00013483 | CD4_Naive_spleen |
| MLLT3              | 3.85E-09 | 0.14604787 | 0.799 | 0.716 | 0.00013632 | CD4_Naive_spleen |
| DNAJB14            | 4.00E-09 | 0.13974971 | 0.321 | 0.251 | 0.00014179 | CD4_Naive_spleen |
| SLAIN2             | 4.42E-09 | 0.17708891 | 0.354 | 0.278 | 0.00015654 | CD4_Naive_spleen |
| GTF2F2             | 4.79E-09 | 0.10211129 | 0.356 | 0.279 | 0.0001696  | CD4_Naive_spleen |
| CSNK1G1            | 5.65E-09 | 0.11494652 | 0.473 | 0.382 | 0.00020033 | CD4_Naive_spleen |
| ENSMMUG00000017113 | 6.13E-09 | 0.1060001  | 0.379 | 0.301 | 0.00021723 | CD4_Naive_spleen |
| ANAPC5             | 1.04E-08 | 0.10760113 | 0.291 | 0.224 | 0.00036773 | CD4_Naive_spleen |
| SINHCAF            | 1.12E-08 | 0.12769439 | 0.516 | 0.42  | 0.00039548 | CD4_Naive_spleen |
| FBXW4              | 1.21E-08 | 0.11930281 | 0.261 | 0.199 | 0.00043004 | CD4_Naive_spleen |
| TAF1D              | 1.35E-08 | 0.11221125 | 0.361 | 0.282 | 0.0004773  | CD4_Naive_spleen |
| PRKCB              | 1.36E-08 | 0.10660154 | 0.646 | 0.551 | 0.00048102 | CD4_Naive_spleen |
| PPP1CB             | 1.39E-08 | 0.22457508 | 0.74  | 0.654 | 0.00049229 | CD4_Naive_spleen |
| MYL6               | 1.40E-08 | 0.10270411 | 0.726 | 0.627 | 0.00049728 | CD4_Naive_spleen |
| CYCS               | 1.41E-08 | 0.1078161  | 0.438 | 0.348 | 0.00049847 | CD4_Naive_spleen |
| ITFG2              | 1.67E-08 | 0.11169744 | 0.374 | 0.294 | 0.00059161 | CD4_Naive_spleen |
| TEX264             | 1.67E-08 | 0.13461433 | 0.285 | 0.221 | 0.00059219 | CD4_Naive_spleen |
| JMJD1C             | 1.83E-08 | 0.16462238 | 0.94  | 0.888 | 0.00064673 | CD4_Naive_spleen |
| DENND1A            | 2.05E-08 | 0.1114892  | 0.416 | 0.331 | 0.00072757 | CD4_Naive_spleen |
| ENSMMUG00000053142 | 2.07E-08 | 0.11904793 | 0.261 | 0.199 | 0.00073219 | CD4_Naive_spleen |
| YTHDC1             | 2.16E-08 | 0.11655965 | 0.65  | 0.542 | 0.00076456 | CD4_Naive_spleen |
| PPP1R2             | 2.44E-08 | 0.14518848 | 0.616 | 0.519 | 0.00086517 | CD4_Naive_spleen |

|                    |            |            |       |       |            |                  |
|--------------------|------------|------------|-------|-------|------------|------------------|
| SND1               | 2.64E-08   | 0.10498351 | 0.53  | 0.433 | 0.00093426 | CD4_Naive_spleen |
| ANXA1              | 2.94E-08   | 0.34972675 | 0.574 | 0.523 | 0.00104214 | CD4_Naive_spleen |
| VPS26A             | 3.21E-08   | 0.10828205 | 0.327 | 0.256 | 0.00113621 | CD4_Naive_spleen |
| PARG               | 5.03E-08   | 0.1224992  | 0.252 | 0.196 | 0.00178077 | CD4_Naive_spleen |
| S100A6             | 5.15E-08   | 0.11963101 | 0.544 | 0.457 | 0.00182432 | CD4_Naive_spleen |
| PAPOLA             | 5.35E-08   | 0.1051527  | 0.69  | 0.584 | 0.00189683 | CD4_Naive_spleen |
| ARHGAP4            | 6.25E-08   | 0.10281711 | 0.398 | 0.316 | 0.00221562 | CD4_Naive_spleen |
| PARN               | 1.08E-07   | 0.10389823 | 0.319 | 0.253 | 0.00381727 | CD4_Naive_spleen |
| SEC14L1            | 1.41E-07   | 0.10461381 | 0.373 | 0.303 | 0.00498374 | CD4_Naive_spleen |
| PPP1CA             | 1.50E-07   | 0.10081389 | 0.465 | 0.377 | 0.00533108 | CD4_Naive_spleen |
| ASAP1              | 1.63E-07   | 0.10858828 | 0.676 | 0.578 | 0.00576315 | CD4_Naive_spleen |
| MAP4K4             | 1.77E-07   | 0.12234743 | 0.816 | 0.736 | 0.00628625 | CD4_Naive_spleen |
| MRPS31             | 2.46E-07   | 0.10041927 | 0.413 | 0.336 | 0.00870858 | CD4_Naive_spleen |
| RBM14              | 2.60E-07   | 0.13417451 | 0.765 | 0.66  | 0.00920976 | CD4_Naive_spleen |
| CAT                | 6.06E-07   | 0.10071918 | 0.293 | 0.231 | 0.02146476 | CD4_Naive_spleen |
| YPEL5              | 7.77E-07   | 0.14139645 | 0.621 | 0.534 | 0.02753208 | CD4_Naive_spleen |
| SMYD3              | 1.38E-06   | 0.11583092 | 0.66  | 0.572 | 0.04893314 | CD4_Naive_spleen |
| CUX1               | 1.44E-06   | 0.10510852 | 0.639 | 0.541 | 0.05118911 | CD4_Naive_spleen |
| MACF1              | 1.86E-06   | 0.10249443 | 0.729 | 0.623 | 0.06584643 | CD4_Naive_spleen |
| DDX3Y              | 2.18E-06   | 0.22961375 | 0.54  | 0.504 | 0.0770652  | CD4_Naive_spleen |
| PSMD12             | 1.44E-05   | 0.10240889 | 0.784 | 0.708 | 0.50971284 | CD4_Naive_spleen |
| USP9Y              | 1.50E-05   | 0.14001266 | 0.26  | 0.216 | 0.53204494 | CD4_Naive_spleen |
| NUFIP2             | 2.21E-05   | 0.11807204 | 0.548 | 0.466 | 0.78405777 | CD4_Naive_spleen |
| RASSF3             | 0.00014999 | 0.16926788 | 0.726 | 0.66  | 1          | CD4_Naive_spleen |
| ARHGEF7            | 0.00029552 | 0.17113382 | 0.768 | 0.703 | 1          | CD4_Naive_spleen |
| BIRC3              | 0.00032016 | 0.11834884 | 0.452 | 0.396 | 1          | CD4_Naive_spleen |
| SMAD7              | 0.00067946 | 0.1363687  | 0.256 | 0.217 | 1          | CD4_Naive_spleen |
| PELI1              | 0.00199145 | 0.1664194  | 0.733 | 0.679 | 1          | CD4_Naive_spleen |
| ITK                | 0.02160098 | 0.10237702 | 0.771 | 0.724 | 1          | CD4_Naive_spleen |
| ENSMMUG00000064692 | 0.06300506 | 0.13176638 | 0.821 | 0.804 | 1          | CD4_Naive_spleen |
| NFKBIA             | 0.14429193 | 0.19278545 | 0.481 | 0.467 | 1          | CD4_Naive_spleen |
| GPR65              | 0          | 3.68477925 | 0.366 | 0.071 | 0          | CD4_CM_lung      |
| ENSMMUG00000022428 | 0          | 2.04405784 | 0.595 | 0.334 | 0          | CD4_CM_lung      |



|                     |   |            |       |       |               |
|---------------------|---|------------|-------|-------|---------------|
| BTG1                | 0 | 1.78843954 | 0.896 | 0.778 | 0 CD4_CM_lung |
| ENSMMUG000000060377 | 0 | 1.42399358 | 0.867 | 0.772 | 0 CD4_CM_lung |
| ENSMMUG000000004545 | 0 | 1.15797506 | 0.892 | 0.836 | 0 CD4_CM_lung |
| ZC3H10              | 0 | 1.3154355  | 0.946 | 0.898 | 0 CD4_CM_lung |
| ENSMMUG000000013257 | 0 | 1.51949412 | 0.97  | 0.922 | 0 CD4_CM_lung |
| RPL36               | 0 | 1.37976675 | 0.984 | 0.956 | 0 CD4_CM_lung |
| ATP5F1E             | 0 | 1.40334006 | 0.988 | 0.972 | 0 CD4_CM_lung |
| ENSMMUG000000056354 | 0 | 0.95348878 | 0.933 | 0.922 | 0 CD4_CM_lung |
| RPS21               | 0 | 1.51100973 | 0.999 | 0.99  | 0 CD4_CM_lung |
| RPL19               | 0 | 0.69753768 | 0.974 | 0.98  | 0 CD4_CM_lung |
| ENSMMUG000000064224 | 0 | 0.95455622 | 0.93  | 0.925 | 0 CD4_CM_lung |
| RPL39               | 0 | 0.92874692 | 0.996 | 0.992 | 0 CD4_CM_lung |
| RPL12               | 0 | 0.68519238 | 0.998 | 0.994 | 0 CD4_CM_lung |
| ENSMMUG000000015563 | 0 | 0.66330284 | 0.999 | 0.995 | 0 CD4_CM_lung |
| RPL35A              | 0 | 0.55519096 | 0.999 | 0.996 | 0 CD4_CM_lung |
| ENSMMUG000000062350 | 0 | 1.26402282 | 1     | 0.997 | 0 CD4_CM_lung |
| RPLP1               | 0 | 0.51463912 | 1     | 0.997 | 0 CD4_CM_lung |
| RPS13               | 0 | 0.45747968 | 0.999 | 0.996 | 0 CD4_CM_lung |
| ENSMMUG000000005593 | 0 | 1.08995795 | 0.999 | 0.996 | 0 CD4_CM_lung |
| ELOA                | 0 | 0.40106054 | 0.998 | 0.996 | 0 CD4_CM_lung |
| RPL34               | 0 | 0.55354715 | 1     | 0.998 | 0 CD4_CM_lung |
| NUDT3               | 0 | 0.54105968 | 0.999 | 0.997 | 0 CD4_CM_lung |
| RPS26               | 0 | 0.67358107 | 0.998 | 0.996 | 0 CD4_CM_lung |
| TMSB10              | 0 | 0.78965841 | 0.993 | 0.991 | 0 CD4_CM_lung |
| ENSMMUG000000013429 | 0 | 0.34813361 | 1     | 0.998 | 0 CD4_CM_lung |
| RPL18               | 0 | 0.47297592 | 0.999 | 0.997 | 0 CD4_CM_lung |
| RPL22L1             | 0 | 0.89404371 | 0.955 | 0.956 | 0 CD4_CM_lung |
| RPL32               | 0 | 0.53240097 | 0.999 | 0.998 | 0 CD4_CM_lung |
| RPL24               | 0 | 0.50372667 | 0.994 | 0.995 | 0 CD4_CM_lung |
| RPS23               | 0 | 0.41018871 | 0.999 | 0.998 | 0 CD4_CM_lung |
| RPS12               | 0 | 0.6921192  | 0.999 | 0.998 | 0 CD4_CM_lung |
| RPS29               | 0 | 0.56175504 | 0.999 | 0.998 | 0 CD4_CM_lung |
| RPL10               | 0 | 0.48455097 | 1     | 0.999 | 0 CD4_CM_lung |

|                   |           |            |       |       |           |             |
|-------------------|-----------|------------|-------|-------|-----------|-------------|
| RPL30             | 0         | 0.33432435 | 0.999 | 0.998 | 0         | CD4_CM_lung |
| FAU               | 0         | 0.58386069 | 0.995 | 0.994 | 0         | CD4_CM_lung |
| RPS7              | 0         | 0.39135562 | 0.999 | 0.998 | 0         | CD4_CM_lung |
| RPS28             | 0         | 0.76795502 | 1     | 0.999 | 0         | CD4_CM_lung |
| RPS9              | 0         | 0.58899677 | 0.994 | 0.994 | 0         | CD4_CM_lung |
| RPL7A             | 3.71E-293 | 0.37503348 | 0.998 | 0.996 | 1.32E-288 | CD4_CM_lung |
| RPL8              | 1.97E-282 | 0.42320826 | 0.998 | 0.996 | 6.99E-278 | CD4_CM_lung |
| UBA52             | 9.90E-280 | 0.43035531 | 0.996 | 0.994 | 3.51E-275 | CD4_CM_lung |
| RPS24             | 4.89E-271 | 0.31616769 | 0.999 | 0.998 | 1.73E-266 | CD4_CM_lung |
| RPS5              | 6.12E-268 | 0.37364763 | 0.996 | 0.994 | 2.17E-263 | CD4_CM_lung |
| PRPF31            | 1.43E-240 | 1.64245385 | 0.608 | 0.436 | 5.05E-236 | CD4_CM_lung |
| ENSMUG00000012140 | 1.19E-237 | 0.54156595 | 0.98  | 0.985 | 4.22E-233 | CD4_CM_lung |
| RPL28             | 1.67E-220 | 0.34049339 | 0.999 | 0.997 | 5.91E-216 | CD4_CM_lung |
| GMFG              | 1.79E-209 | 0.75057438 | 0.885 | 0.909 | 6.35E-205 | CD4_CM_lung |
| FTL               | 1.26E-201 | 0.72208821 | 0.896 | 0.921 | 4.45E-197 | CD4_CM_lung |
| ROMO1             | 8.62E-196 | 1.32052792 | 0.654 | 0.553 | 3.05E-191 | CD4_CM_lung |
| ENSMUG00000044585 | 2.11E-195 | 1.31298795 | 0.65  | 0.548 | 7.46E-191 | CD4_CM_lung |
| CD3D              | 5.39E-189 | 0.94822228 | 0.785 | 0.756 | 1.91E-184 | CD4_CM_lung |
| RPL36AL           | 2.11E-183 | 0.71228614 | 0.87  | 0.898 | 7.48E-179 | CD4_CM_lung |
| ENSMUG00000016305 | 5.42E-180 | 0.95111997 | 0.766 | 0.737 | 1.92E-175 | CD4_CM_lung |
| ENSMUG00000030408 | 6.76E-174 | 1.27285687 | 0.625 | 0.53  | 2.40E-169 | CD4_CM_lung |
| ELOB              | 8.25E-171 | 1.04269473 | 0.707 | 0.666 | 2.92E-166 | CD4_CM_lung |
| RPL22             | 1.05E-167 | 0.35770902 | 0.988 | 0.991 | 3.73E-163 | CD4_CM_lung |
| ENSMUG00000056126 | 1.91E-167 | 2.22417329 | 0.347 | 0.154 | 6.76E-163 | CD4_CM_lung |
| UBL5              | 4.40E-166 | 1.30160752 | 0.602 | 0.495 | 1.56E-161 | CD4_CM_lung |
| TMA7              | 4.22E-164 | 0.89033255 | 0.759 | 0.763 | 1.49E-159 | CD4_CM_lung |
| MBD3              | 2.29E-159 | 1.11653882 | 0.668 | 0.615 | 8.11E-155 | CD4_CM_lung |
| ATP5MPL           | 1.36E-154 | 0.93454856 | 0.721 | 0.702 | 4.80E-150 | CD4_CM_lung |
| HNRNPH2           | 7.27E-154 | 0.40597891 | 0.987 | 0.988 | 2.58E-149 | CD4_CM_lung |
| CRIP1             | 1.17E-152 | 1.39440481 | 0.645 | 0.555 | 4.14E-148 | CD4_CM_lung |
| EEF1A1            | 7.63E-149 | 0.42333983 | 0.974 | 0.983 | 2.70E-144 | CD4_CM_lung |
| CREM              | 1.11E-143 | 2.28579696 | 0.337 | 0.16  | 3.94E-139 | CD4_CM_lung |
| GIMAP7            | 1.68E-143 | 1.41926444 | 0.571 | 0.456 | 5.96E-139 | CD4_CM_lung |

|                     |           |            |       |       |           |             |
|---------------------|-----------|------------|-------|-------|-----------|-------------|
| STMN1               | 7.92E-142 | 1.49583851 | 0.538 | 0.407 | 2.80E-137 | CD4_CM_lung |
| SRP14               | 6.80E-141 | 0.73346845 | 0.812 | 0.844 | 2.41E-136 | CD4_CM_lung |
| ENSMMUG000000063637 | 7.13E-138 | 0.56820625 | 0.936 | 0.929 | 2.53E-133 | CD4_CM_lung |
| LDHA                | 1.04E-137 | 1.75427316 | 0.443 | 0.29  | 3.67E-133 | CD4_CM_lung |
| RPSA                | 2.26E-135 | 0.31069413 | 0.995 | 0.994 | 8.01E-131 | CD4_CM_lung |
| ENSMMUG000000003867 | 2.41E-134 | 0.20676021 | 1     | 0.999 | 8.54E-130 | CD4_CM_lung |
| ENSMMUG000000004441 | 6.64E-133 | 1.3700785  | 0.594 | 0.505 | 2.35E-128 | CD4_CM_lung |
| HINT1               | 5.43E-130 | 0.54397896 | 0.891 | 0.928 | 1.92E-125 | CD4_CM_lung |
| ENSMMUG000000016894 | 2.29E-127 | 0.94234715 | 0.675 | 0.648 | 8.11E-123 | CD4_CM_lung |
| RPL38               | 2.29E-127 | 0.35039761 | 0.991 | 0.994 | 8.12E-123 | CD4_CM_lung |
| ATP5MG              | 3.70E-124 | 0.66047309 | 0.827 | 0.867 | 1.31E-119 | CD4_CM_lung |
| COX6C               | 2.90E-122 | 0.75291836 | 0.767 | 0.79  | 1.03E-117 | CD4_CM_lung |
| CCR7                | 7.20E-120 | 1.85186219 | 0.4   | 0.252 | 2.55E-115 | CD4_CM_lung |
| NME2                | 9.02E-120 | 0.42888573 | 0.944 | 0.971 | 3.20E-115 | CD4_CM_lung |
| RPS4X               | 1.40E-119 | 0.27518158 | 0.997 | 0.996 | 4.98E-115 | CD4_CM_lung |
| ENSMMUG000000019505 | 1.44E-115 | 0.87148769 | 0.711 | 0.717 | 5.10E-111 | CD4_CM_lung |
| JPT1                | 3.21E-115 | 0.87187192 | 0.693 | 0.703 | 1.14E-110 | CD4_CM_lung |
| ENSMMUG000000022489 | 1.12E-113 | 0.72649131 | 0.769 | 0.813 | 3.95E-109 | CD4_CM_lung |
| RPS27A              | 4.04E-109 | 0.57290181 | 0.838 | 0.877 | 1.43E-104 | CD4_CM_lung |
| H2AFZ               | 1.32E-108 | 1.35125951 | 0.521 | 0.426 | 4.68E-104 | CD4_CM_lung |
| PET100              | 1.69E-106 | 2.03679829 | 0.294 | 0.148 | 5.98E-102 | CD4_CM_lung |
| ENSMMUG000000007657 | 3.71E-106 | 0.84012353 | 0.681 | 0.683 | 1.32E-101 | CD4_CM_lung |
| ROBO2               | 1.12E-101 | 0.56852964 | 0.831 | 0.853 | 3.96E-97  | CD4_CM_lung |
| COX5B               | 1.30E-99  | 1.22363737 | 0.513 | 0.431 | 4.61E-95  | CD4_CM_lung |
| OST4                | 2.23E-97  | 0.984526   | 0.602 | 0.574 | 7.91E-93  | CD4_CM_lung |
| ENSMMUG000000064139 | 1.09E-96  | 0.71960905 | 0.775 | 0.804 | 3.88E-92  | CD4_CM_lung |
| SUB1                | 1.71E-91  | 0.77971984 | 0.703 | 0.735 | 6.06E-87  | CD4_CM_lung |
| RPL5                | 6.42E-91  | 0.2210168  | 0.996 | 0.995 | 2.27E-86  | CD4_CM_lung |
| MYL12B              | 1.62E-90  | 0.86069005 | 0.669 | 0.675 | 5.73E-86  | CD4_CM_lung |
| RAB11A              | 2.52E-90  | 2.03571502 | 0.282 | 0.151 | 8.93E-86  | CD4_CM_lung |
| ENSMMUG000000052747 | 1.28E-89  | 0.668512   | 0.741 | 0.787 | 4.55E-85  | CD4_CM_lung |
| ENSMMUG000000049722 | 1.55E-89  | 1.54664146 | 0.385 | 0.266 | 5.48E-85  | CD4_CM_lung |
| GPR183              | 2.13E-86  | 1.53823099 | 0.46  | 0.362 | 7.55E-82  | CD4_CM_lung |

|                    |          |            |       |       |          |             |
|--------------------|----------|------------|-------|-------|----------|-------------|
| TAGLN2             | 3.45E-80 | 0.84814105 | 0.683 | 0.682 | 1.22E-75 | CD4_CM_lung |
| TMEM258            | 2.80E-78 | 1.05394118 | 0.528 | 0.481 | 9.91E-74 | CD4_CM_lung |
| IFI16              | 5.06E-78 | 1.39522549 | 0.429 | 0.334 | 1.79E-73 | CD4_CM_lung |
| ND4L               | 6.27E-77 | 1.70784654 | 0.357 | 0.248 | 2.22E-72 | CD4_CM_lung |
| ENSMMUG00000056793 | 7.68E-75 | 0.66950406 | 0.704 | 0.754 | 2.72E-70 | CD4_CM_lung |
| SOX4               | 3.69E-73 | 1.06875663 | 0.637 | 0.644 | 1.31E-68 | CD4_CM_lung |
| EIF3K              | 1.61E-72 | 0.4062496  | 0.884 | 0.94  | 5.71E-68 | CD4_CM_lung |
| MYL6               | 9.06E-72 | 0.82181287 | 0.632 | 0.638 | 3.21E-67 | CD4_CM_lung |
| GAPDH              | 9.30E-71 | 0.77218561 | 0.663 | 0.703 | 3.29E-66 | CD4_CM_lung |
| ATP5MC2            | 2.44E-70 | 0.81514999 | 0.613 | 0.63  | 8.64E-66 | CD4_CM_lung |
| ATP6V1G1           | 2.28E-69 | 0.64816974 | 0.708 | 0.772 | 8.07E-65 | CD4_CM_lung |
| GCN1               | 2.99E-68 | 0.22257861 | 0.99  | 0.991 | 1.06E-63 | CD4_CM_lung |
| NDUFA4             | 8.13E-67 | 0.76252759 | 0.637 | 0.663 | 2.88E-62 | CD4_CM_lung |
| MAMU-E             | 6.56E-66 | 0.5250775  | 0.823 | 0.883 | 2.33E-61 | CD4_CM_lung |
| NDUFA1             | 8.49E-65 | 0.90370847 | 0.569 | 0.567 | 3.01E-60 | CD4_CM_lung |
| MRI1               | 1.13E-64 | 0.81940606 | 0.58  | 0.575 | 4.00E-60 | CD4_CM_lung |
| SMDT1              | 1.64E-64 | 0.61586297 | 0.709 | 0.776 | 5.81E-60 | CD4_CM_lung |
| GSTP1              | 2.00E-64 | 0.9133158  | 0.572 | 0.566 | 7.10E-60 | CD4_CM_lung |
| NDUFB11            | 6.27E-64 | 1.34728054 | 0.374 | 0.284 | 2.22E-59 | CD4_CM_lung |
| RPL27              | 2.44E-62 | 0.17530842 | 0.997 | 0.995 | 8.63E-58 | CD4_CM_lung |
| PFDN5              | 4.15E-61 | 1.16913358 | 0.419 | 0.346 | 1.47E-56 | CD4_CM_lung |
| ENSMMUG00000053146 | 1.30E-59 | 1.15864931 | 0.45  | 0.399 | 4.59E-55 | CD4_CM_lung |
| COMMD6             | 1.02E-58 | 0.4923079  | 0.786 | 0.857 | 3.61E-54 | CD4_CM_lung |
| WDR83OS            | 1.63E-57 | 0.68017818 | 0.659 | 0.713 | 5.77E-53 | CD4_CM_lung |
| NDUFV2             | 5.52E-54 | 1.34591877 | 0.378 | 0.305 | 1.96E-49 | CD4_CM_lung |
| UQCRQ              | 4.44E-52 | 0.81489317 | 0.563 | 0.572 | 1.57E-47 | CD4_CM_lung |
| RPL6               | 7.98E-49 | 0.16108374 | 0.995 | 0.995 | 2.83E-44 | CD4_CM_lung |
| COX7C              | 1.22E-48 | 0.45246586 | 0.79  | 0.849 | 4.32E-44 | CD4_CM_lung |
| ENSMMUG00000047481 | 2.03E-48 | 0.89575127 | 0.51  | 0.509 | 7.20E-44 | CD4_CM_lung |
| NSA2               | 2.97E-48 | 0.70681535 | 0.653 | 0.719 | 1.05E-43 | CD4_CM_lung |
| OAZ1               | 7.02E-48 | 1.37295111 | 0.317 | 0.236 | 2.49E-43 | CD4_CM_lung |
| ENSMMUG00000006283 | 3.76E-45 | 1.42641023 | 0.278 | 0.196 | 1.33E-40 | CD4_CM_lung |
| SLC2A3             | 6.43E-45 | 1.23381586 | 0.407 | 0.354 | 2.28E-40 | CD4_CM_lung |

|                     |          |            |       |       |          |             |
|---------------------|----------|------------|-------|-------|----------|-------------|
| MYG1                | 2.16E-44 | 1.13226178 | 0.375 | 0.315 | 7.64E-40 | CD4_CM_lung |
| SLC38A2             | 2.39E-44 | 1.42734334 | 0.32  | 0.246 | 8.47E-40 | CD4_CM_lung |
| ENSMMUG000000017466 | 2.91E-43 | 1.11007472 | 0.394 | 0.343 | 1.03E-38 | CD4_CM_lung |
| ENSMMUG000000003073 | 4.64E-42 | 0.15596982 | 0.989 | 0.994 | 1.65E-37 | CD4_CM_lung |
| UQCRH               | 3.23E-41 | 0.85250349 | 0.488 | 0.489 | 1.14E-36 | CD4_CM_lung |
| COX7A2              | 6.19E-41 | 1.38159435 | 0.269 | 0.192 | 2.19E-36 | CD4_CM_lung |
| COX6B1              | 5.27E-40 | 1.35108038 | 0.284 | 0.212 | 1.87E-35 | CD4_CM_lung |
| HCST                | 5.73E-40 | 1.17232365 | 0.388 | 0.334 | 2.03E-35 | CD4_CM_lung |
| IFI27L2             | 9.95E-40 | 0.7422824  | 0.548 | 0.574 | 3.53E-35 | CD4_CM_lung |
| SELENOK             | 4.33E-38 | 1.21347875 | 0.31  | 0.241 | 1.53E-33 | CD4_CM_lung |
| RPL35               | 9.68E-38 | 0.21016153 | 0.979 | 0.989 | 3.43E-33 | CD4_CM_lung |
| NDUFB2              | 1.13E-37 | 0.73313085 | 0.554 | 0.594 | 4.01E-33 | CD4_CM_lung |
| SLC25A43            | 1.35E-37 | 0.69988747 | 0.585 | 0.64  | 4.77E-33 | CD4_CM_lung |
| NCL                 | 2.35E-36 | 0.73374272 | 0.579 | 0.622 | 8.33E-32 | CD4_CM_lung |
| ENSMMUG000000001210 | 8.63E-36 | 0.28082628 | 0.91  | 0.944 | 3.06E-31 | CD4_CM_lung |
| ENSMMUG000000001458 | 1.61E-35 | 0.57828477 | 0.649 | 0.725 | 5.69E-31 | CD4_CM_lung |
| ENSMMUG000000053735 | 6.80E-34 | 0.81219138 | 0.496 | 0.51  | 2.41E-29 | CD4_CM_lung |
| ENSMMUG000000016665 | 8.12E-34 | 0.79417849 | 0.487 | 0.5   | 2.88E-29 | CD4_CM_lung |
| EEF1D               | 8.75E-34 | 0.33784167 | 0.821 | 0.912 | 3.10E-29 | CD4_CM_lung |
| LSM6                | 2.80E-33 | 0.98147284 | 0.413 | 0.391 | 9.93E-29 | CD4_CM_lung |
| BTF3                | 7.24E-33 | 0.35764022 | 0.795 | 0.801 | 2.56E-28 | CD4_CM_lung |
| COX7B               | 7.91E-33 | 0.75767839 | 0.527 | 0.561 | 2.80E-28 | CD4_CM_lung |
| CD2                 | 1.67E-32 | 1.15600575 | 0.355 | 0.308 | 5.93E-28 | CD4_CM_lung |
| ATP5MC3             | 2.86E-32 | 0.72996608 | 0.524 | 0.553 | 1.01E-27 | CD4_CM_lung |
| LSM7                | 3.04E-32 | 0.89717733 | 0.436 | 0.429 | 1.08E-27 | CD4_CM_lung |
| IL7R                | 1.92E-31 | 0.43383639 | 0.788 | 0.863 | 6.82E-27 | CD4_CM_lung |
| NDUFB4              | 1.97E-31 | 0.75458905 | 0.497 | 0.521 | 6.98E-27 | CD4_CM_lung |
| RBX1                | 1.39E-30 | 1.03219518 | 0.369 | 0.337 | 4.91E-26 | CD4_CM_lung |
| ENSMMUG000000062026 | 1.71E-29 | 1.31383244 | 0.26  | 0.201 | 6.07E-25 | CD4_CM_lung |
| CD7                 | 2.82E-28 | 0.82956663 | 0.486 | 0.514 | 9.99E-24 | CD4_CM_lung |
| SEC61G              | 1.01E-27 | 0.68760571 | 0.515 | 0.559 | 3.57E-23 | CD4_CM_lung |
| CORO1A              | 4.04E-27 | 0.50806141 | 0.657 | 0.747 | 1.43E-22 | CD4_CM_lung |
| ARPC3               | 9.34E-27 | 0.49665923 | 0.645 | 0.748 | 3.31E-22 | CD4_CM_lung |

|                     |          |            |       |       |          |             |
|---------------------|----------|------------|-------|-------|----------|-------------|
| CBX3                | 1.21E-26 | 0.98480902 | 0.395 | 0.381 | 4.30E-22 | CD4_CM_lung |
| HNRNPDL             | 7.67E-26 | 0.52191794 | 0.642 | 0.729 | 2.72E-21 | CD4_CM_lung |
| ERH                 | 4.65E-25 | 0.99649769 | 0.351 | 0.325 | 1.65E-20 | CD4_CM_lung |
| ENSMMUG00000012419  | 1.49E-24 | 0.60686349 | 0.551 | 0.622 | 5.27E-20 | CD4_CM_lung |
| ENSMMUG000000058389 | 1.72E-24 | 1.083682   | 0.317 | 0.28  | 6.09E-20 | CD4_CM_lung |
| ANXA1               | 4.75E-24 | 0.82633663 | 0.489 | 0.499 | 1.68E-19 | CD4_CM_lung |
| ENSMMUG000000006463 | 1.64E-22 | 0.26618189 | 0.838 | 0.916 | 5.82E-18 | CD4_CM_lung |
| CFL1                | 1.66E-22 | 0.39676765 | 0.713 | 0.808 | 5.88E-18 | CD4_CM_lung |
| NDUFB10             | 3.27E-22 | 0.88852138 | 0.382 | 0.378 | 1.16E-17 | CD4_CM_lung |
| MRPL14              | 5.43E-22 | 1.15300414 | 0.271 | 0.229 | 1.92E-17 | CD4_CM_lung |
| COX8A               | 5.62E-22 | 0.85382575 | 0.418 | 0.434 | 1.99E-17 | CD4_CM_lung |
| KIFBP               | 8.34E-22 | 0.76201156 | 0.469 | 0.489 | 2.95E-17 | CD4_CM_lung |
| CUTA                | 7.71E-21 | 0.72928275 | 0.458 | 0.489 | 2.73E-16 | CD4_CM_lung |
| ENSMMUG000000053817 | 1.33E-20 | 1.07167214 | 0.319 | 0.292 | 4.70E-16 | CD4_CM_lung |
| SEM1                | 5.11E-20 | 0.92687424 | 0.351 | 0.335 | 1.81E-15 | CD4_CM_lung |
| SSR4                | 1.35E-19 | 0.53020505 | 0.573 | 0.666 | 4.80E-15 | CD4_CM_lung |
| RAN                 | 1.53E-19 | 0.71286598 | 0.446 | 0.473 | 5.41E-15 | CD4_CM_lung |
| GABARAPL2           | 2.14E-19 | 0.89812702 | 0.361 | 0.354 | 7.58E-15 | CD4_CM_lung |
| PGK1                | 2.90E-19 | 0.84830457 | 0.398 | 0.407 | 1.03E-14 | CD4_CM_lung |
| NDUFA2              | 8.21E-19 | 0.80703309 | 0.404 | 0.416 | 2.91E-14 | CD4_CM_lung |
| SEC61B              | 1.70E-18 | 0.56591217 | 0.512 | 0.568 | 6.02E-14 | CD4_CM_lung |
| ENSMMUG000000058581 | 1.96E-18 | 1.0741178  | 0.384 | 0.374 | 6.96E-14 | CD4_CM_lung |
| HMGB1               | 2.96E-18 | 0.44900485 | 0.632 | 0.725 | 1.05E-13 | CD4_CM_lung |
| SRGN                | 5.79E-18 | 0.75977537 | 0.457 | 0.487 | 2.05E-13 | CD4_CM_lung |
| RDH5                | 5.81E-18 | 0.79969594 | 0.408 | 0.425 | 2.06E-13 | CD4_CM_lung |
| PSMB6               | 1.00E-17 | 0.90875301 | 0.343 | 0.339 | 3.55E-13 | CD4_CM_lung |
| NPM1                | 2.83E-17 | 0.27247089 | 0.797 | 0.902 | 1.00E-12 | CD4_CM_lung |
| CSNK2B              | 7.30E-17 | 0.11524376 | 0.194 | 0.316 | 2.59E-12 | CD4_CM_lung |
| ICOS                | 7.48E-17 | 0.53445971 | 0.423 | 0.403 | 2.65E-12 | CD4_CM_lung |
| MAGOH               | 1.10E-16 | 0.94648435 | 0.313 | 0.297 | 3.90E-12 | CD4_CM_lung |
| ITM2A               | 1.22E-16 | 1.11455085 | 0.254 | 0.221 | 4.33E-12 | CD4_CM_lung |
| H2AFJ               | 1.23E-16 | 1.07416499 | 0.301 | 0.282 | 4.35E-12 | CD4_CM_lung |
| CFDP1               | 8.64E-16 | 0.77054158 | 0.385 | 0.39  | 3.06E-11 | CD4_CM_lung |

|                    |          |            |       |       |          |             |
|--------------------|----------|------------|-------|-------|----------|-------------|
| MICOS13            | 9.50E-16 | 0.86625396 | 0.344 | 0.342 | 3.37E-11 | CD4_CM_lung |
| SNRPD3             | 1.17E-15 | 0.70728335 | 0.424 | 0.456 | 4.16E-11 | CD4_CM_lung |
| WAS                | 2.14E-15 | 0.13278289 | 0.187 | 0.299 | 7.60E-11 | CD4_CM_lung |
| ENSMMUG00000054038 | 2.82E-15 | 0.64694671 | 0.495 | 0.56  | 1.00E-10 | CD4_CM_lung |
| ICAM3              | 6.07E-15 | 0.12558909 | 0.176 | 0.281 | 2.15E-10 | CD4_CM_lung |
| HSPE1              | 8.57E-15 | 0.63959451 | 0.471 | 0.526 | 3.04E-10 | CD4_CM_lung |
| NSMCE1             | 9.45E-15 | 0.14713608 | 0.16  | 0.257 | 3.35E-10 | CD4_CM_lung |
| MRPL34             | 9.79E-15 | 1.04157259 | 0.273 | 0.252 | 3.47E-10 | CD4_CM_lung |
| TMEM14B            | 9.89E-15 | 0.62118275 | 0.47  | 0.518 | 3.51E-10 | CD4_CM_lung |
| ENSMMUG00000045959 | 1.77E-14 | 0.12135744 | 0.184 | 0.293 | 6.26E-10 | CD4_CM_lung |
| EDF1               | 1.87E-14 | 0.76985478 | 0.385 | 0.405 | 6.64E-10 | CD4_CM_lung |
| HSP90B1            | 2.19E-14 | 0.12404236 | 0.216 | 0.333 | 7.77E-10 | CD4_CM_lung |
| ENSMMUG00000038373 | 2.37E-14 | 0.16646576 | 0.246 | 0.378 | 8.41E-10 | CD4_CM_lung |
| PDAP1              | 2.62E-14 | 0.13209773 | 0.157 | 0.251 | 9.29E-10 | CD4_CM_lung |
| MIC1               | 6.65E-14 | 0.56335587 | 0.492 | 0.544 | 2.35E-09 | CD4_CM_lung |
| SEC62              | 6.75E-14 | 0.75949934 | 0.398 | 0.419 | 2.39E-09 | CD4_CM_lung |
| PSMD13             | 8.58E-14 | 0.10469637 | 0.164 | 0.259 | 3.04E-09 | CD4_CM_lung |
| ENSMMUG00000053392 | 1.00E-13 | 0.82252258 | 0.354 | 0.357 | 3.56E-09 | CD4_CM_lung |
| HYPK               | 1.13E-13 | 0.88652899 | 0.329 | 0.328 | 4.02E-09 | CD4_CM_lung |
| ATOX1              | 1.27E-13 | 0.92161901 | 0.314 | 0.306 | 4.49E-09 | CD4_CM_lung |
| PSMA1              | 1.85E-13 | 0.10002445 | 0.258 | 0.391 | 6.55E-09 | CD4_CM_lung |
| CHCHD2             | 2.33E-13 | 0.38913935 | 0.644 | 0.765 | 8.26E-09 | CD4_CM_lung |
| RPS4Y1             | 2.38E-13 | 0.19876942 | 0.759 | 0.757 | 8.43E-09 | CD4_CM_lung |
| CCT8               | 3.07E-13 | 0.10660093 | 0.227 | 0.346 | 1.09E-08 | CD4_CM_lung |
| TAF9               | 7.65E-13 | 0.14601927 | 0.198 | 0.306 | 2.71E-08 | CD4_CM_lung |
| SPCS2              | 8.83E-13 | 1.02485804 | 0.261 | 0.241 | 3.13E-08 | CD4_CM_lung |
| LCP1               | 1.56E-12 | 0.11176822 | 0.291 | 0.432 | 5.51E-08 | CD4_CM_lung |
| PRPF4B             | 2.44E-12 | 0.1353767  | 0.351 | 0.523 | 8.64E-08 | CD4_CM_lung |
| PSMA2              | 2.77E-12 | 0.71243359 | 0.386 | 0.418 | 9.80E-08 | CD4_CM_lung |
| TUBA1A             | 3.59E-12 | 0.10196526 | 0.419 | 0.612 | 1.27E-07 | CD4_CM_lung |
| PPIB               | 4.07E-12 | 0.58142198 | 0.474 | 0.54  | 1.44E-07 | CD4_CM_lung |
| ATP6V0E1           | 4.11E-12 | 0.89861824 | 0.296 | 0.287 | 1.46E-07 | CD4_CM_lung |
| DDX24              | 6.21E-12 | 0.14830277 | 0.229 | 0.346 | 2.20E-07 | CD4_CM_lung |

|                    |          |            |       |       |            |             |
|--------------------|----------|------------|-------|-------|------------|-------------|
| POMP               | 7.10E-12 | 0.93588288 | 0.284 | 0.274 | 2.52E-07   | CD4_CM_lung |
| HIGD2A             | 1.16E-11 | 0.19672604 | 0.167 | 0.258 | 4.12E-07   | CD4_CM_lung |
| NDUFS8             | 2.75E-11 | 0.84224541 | 0.313 | 0.315 | 9.75E-07   | CD4_CM_lung |
| RBM8A              | 4.28E-11 | 0.81981834 | 0.344 | 0.361 | 1.52E-06   | CD4_CM_lung |
| UBE2N              | 5.33E-11 | 0.18177755 | 0.191 | 0.289 | 1.89E-06   | CD4_CM_lung |
| NDUFB9             | 6.18E-11 | 0.77662471 | 0.377 | 0.409 | 2.19E-06   | CD4_CM_lung |
| POLR1H             | 6.35E-11 | 0.15944134 | 0.229 | 0.345 | 2.25E-06   | CD4_CM_lung |
| MDH1               | 7.64E-11 | 0.13554266 | 0.227 | 0.339 | 2.71E-06   | CD4_CM_lung |
| ENSMMUG00000055026 | 8.88E-11 | 0.10775645 | 0.272 | 0.397 | 3.15E-06   | CD4_CM_lung |
| NCBP2              | 1.41E-10 | 0.81574007 | 0.353 | 0.375 | 5.00E-06   | CD4_CM_lung |
| ENSMMUG00000012019 | 3.00E-10 | 0.17895644 | 0.267 | 0.4   | 1.06E-05   | CD4_CM_lung |
| MRPL11             | 3.01E-10 | 0.15402683 | 0.256 | 0.382 | 1.07E-05   | CD4_CM_lung |
| DAD1               | 3.39E-10 | 0.68702152 | 0.399 | 0.438 | 1.20E-05   | CD4_CM_lung |
| DDX18              | 3.59E-10 | 0.22338691 | 0.233 | 0.348 | 1.27E-05   | CD4_CM_lung |
| VAMP8              | 4.25E-10 | 0.80743152 | 0.311 | 0.315 | 1.51E-05   | CD4_CM_lung |
| ARPC2              | 4.76E-10 | 0.14144544 | 0.288 | 0.424 | 1.69E-05   | CD4_CM_lung |
| PAOX               | 5.37E-10 | 0.19222777 | 0.177 | 0.263 | 1.90E-05   | CD4_CM_lung |
| ENSMMUG00000006206 | 8.85E-10 | 0.30014584 | 0.255 | 0.381 | 3.14E-05   | CD4_CM_lung |
| TWF2               | 1.19E-09 | 0.22373297 | 0.174 | 0.26  | 4.21E-05   | CD4_CM_lung |
| ATG12              | 2.15E-09 | 0.21403188 | 0.311 | 0.458 | 7.62E-05   | CD4_CM_lung |
| SAFB               | 2.23E-09 | 0.22397414 | 0.774 | 0.893 | 7.91E-05   | CD4_CM_lung |
| ENSMMUG00000002075 | 2.26E-09 | 0.21842507 | 0.179 | 0.266 | 8.00E-05   | CD4_CM_lung |
| PDCD4              | 2.90E-09 | 0.20547396 | 0.254 | 0.371 | 0.00010284 | CD4_CM_lung |
| ENSMMUG00000029987 | 3.99E-09 | 0.2664336  | 0.207 | 0.307 | 0.00014139 | CD4_CM_lung |
| GLIPR2             | 4.00E-09 | 0.34863906 | 0.172 | 0.256 | 0.00014163 | CD4_CM_lung |
| HNRNPH1            | 4.58E-09 | 0.22158959 | 0.32  | 0.469 | 0.00016223 | CD4_CM_lung |
| PFDN1              | 5.98E-09 | 0.18160324 | 0.204 | 0.297 | 0.00021189 | CD4_CM_lung |
| ENSMMUG00000055376 | 2.15E-08 | 0.23556788 | 0.201 | 0.291 | 0.00076046 | CD4_CM_lung |
| PRDX6              | 2.73E-08 | 0.39717245 | 0.204 | 0.298 | 0.00096579 | CD4_CM_lung |
| YWHAE              | 3.53E-08 | 0.22577088 | 0.212 | 0.306 | 0.00125139 | CD4_CM_lung |
| DYNLL1             | 3.75E-08 | 0.93487399 | 0.268 | 0.263 | 0.00132779 | CD4_CM_lung |
| HMOX2              | 5.20E-08 | 0.22868234 | 0.176 | 0.253 | 0.00184368 | CD4_CM_lung |
| RNF181             | 6.35E-08 | 0.61122812 | 0.406 | 0.459 | 0.00224837 | CD4_CM_lung |



|                     |          |            |       |       |            |             |
|---------------------|----------|------------|-------|-------|------------|-------------|
| BRK1                | 7.23E-08 | 0.25804225 | 0.233 | 0.337 | 0.00256226 | CD4_CM_lung |
| CCT5                | 7.98E-08 | 0.2525603  | 0.237 | 0.341 | 0.00282685 | CD4_CM_lung |
| RGS1                | 9.04E-08 | 0.32635144 | 0.215 | 0.307 | 0.00320439 | CD4_CM_lung |
| PRKACB              | 9.68E-08 | 0.16264591 | 0.245 | 0.347 | 0.0034283  | CD4_CM_lung |
| ENSMMUG00000006499  | 1.02E-07 | 0.27406531 | 0.202 | 0.291 | 0.00361279 | CD4_CM_lung |
| ENSMMUG00000007536  | 1.65E-07 | 0.1301566  | 0.388 | 0.553 | 0.00584468 | CD4_CM_lung |
| NDUFC2              | 1.66E-07 | 0.66334897 | 0.386 | 0.434 | 0.00589689 | CD4_CM_lung |
| HMGB2               | 1.68E-07 | 0.24135506 | 0.213 | 0.3   | 0.00596443 | CD4_CM_lung |
| MFNG                | 2.05E-07 | 0.26043717 | 0.251 | 0.361 | 0.00728095 | CD4_CM_lung |
| COX16               | 2.54E-07 | 0.17951813 | 0.389 | 0.556 | 0.00900683 | CD4_CM_lung |
| ILF2                | 2.71E-07 | 0.33226105 | 0.173 | 0.25  | 0.009589   | CD4_CM_lung |
| C16H17orf49         | 2.79E-07 | 0.55751063 | 0.413 | 0.472 | 0.00988317 | CD4_CM_lung |
| TMEM50A             | 3.62E-07 | 0.21099523 | 0.237 | 0.338 | 0.01281415 | CD4_CM_lung |
| SNRBP2              | 4.24E-07 | 0.21722684 | 0.262 | 0.373 | 0.01501294 | CD4_CM_lung |
| FKBP1A              | 4.88E-07 | 0.31905638 | 0.184 | 0.263 | 0.01727394 | CD4_CM_lung |
| MGMT                | 1.06E-06 | 0.20548952 | 0.203 | 0.284 | 0.03752795 | CD4_CM_lung |
| SAP18               | 1.15E-06 | 0.16257056 | 0.356 | 0.508 | 0.04071703 | CD4_CM_lung |
| PSMA6               | 1.23E-06 | 0.2280438  | 0.183 | 0.257 | 0.04346872 | CD4_CM_lung |
| VIM                 | 1.32E-06 | 0.26792727 | 0.223 | 0.307 | 0.04673794 | CD4_CM_lung |
| YJEFN3              | 1.90E-06 | 0.70195063 | 0.348 | 0.389 | 0.06749006 | CD4_CM_lung |
| SERBP1              | 1.96E-06 | 0.17770138 | 0.354 | 0.499 | 0.06939737 | CD4_CM_lung |
| ZNHIT1              | 2.47E-06 | 0.78775648 | 0.32  | 0.349 | 0.08752347 | CD4_CM_lung |
| GPSM3               | 3.32E-06 | 0.49776863 | 0.461 | 0.548 | 0.1174727  | CD4_CM_lung |
| ENSMMUG000000051392 | 3.37E-06 | 0.20488147 | 0.356 | 0.503 | 0.11938793 | CD4_CM_lung |
| ATP5PF              | 4.21E-06 | 0.46066257 | 0.483 | 0.585 | 0.14900483 | CD4_CM_lung |
| GNG5                | 4.31E-06 | 0.5228274  | 0.451 | 0.533 | 0.15266032 | CD4_CM_lung |
| DSTN                | 4.78E-06 | 0.31051221 | 0.192 | 0.266 | 0.16928002 | CD4_CM_lung |
| MRPS6               | 4.82E-06 | 0.87160629 | 0.267 | 0.273 | 0.1708347  | CD4_CM_lung |
| PSMB1               | 5.24E-06 | 0.55456236 | 0.429 | 0.51  | 0.18574144 | CD4_CM_lung |
| SHISA5              | 5.58E-06 | 0.27220332 | 0.284 | 0.403 | 0.19756426 | CD4_CM_lung |
| HNRNPK              | 7.10E-06 | 0.12094491 | 0.473 | 0.658 | 0.25143407 | CD4_CM_lung |
| ENSMMUG000000018687 | 7.79E-06 | 0.26452174 | 0.198 | 0.274 | 0.27592441 | CD4_CM_lung |
| FGFR10P2            | 8.39E-06 | 0.41107607 | 0.201 | 0.279 | 0.29741302 | CD4_CM_lung |

|                   |            |            |       |       |            |             |
|-------------------|------------|------------|-------|-------|------------|-------------|
| OSTC              | 9.27E-06   | 0.74290479 | 0.301 | 0.323 | 0.32838346 | CD4_CM_lung |
| TMEM219           | 1.11E-05   | 0.36423832 | 0.191 | 0.268 | 0.39227595 | CD4_CM_lung |
| TMEM59            | 1.43E-05   | 0.27504859 | 0.288 | 0.405 | 0.50726113 | CD4_CM_lung |
| IL2RG             | 2.08E-05   | 0.25056769 | 0.306 | 0.424 | 0.73546379 | CD4_CM_lung |
| LAMTOR1           | 2.15E-05   | 0.30545904 | 0.193 | 0.266 | 0.76316952 | CD4_CM_lung |
| ATP5F1C           | 2.76E-05   | 0.59591194 | 0.383 | 0.445 | 0.97849452 | CD4_CM_lung |
| PRR13             | 2.85E-05   | 0.28418702 | 0.217 | 0.298 | 1          | CD4_CM_lung |
| UBE2I             | 3.08E-05   | 0.30619606 | 0.217 | 0.298 | 1          | CD4_CM_lung |
| ENSMUG00000038348 | 3.24E-05   | 0.56194772 | 0.616 | 0.686 | 1          | CD4_CM_lung |
| DRAP1             | 3.66E-05   | 0.30880018 | 0.193 | 0.265 | 1          | CD4_CM_lung |
| TOMM22            | 3.74E-05   | 0.26426526 | 0.21  | 0.288 | 1          | CD4_CM_lung |
| C14H11orf58       | 4.99E-05   | 0.31197083 | 0.212 | 0.291 | 1          | CD4_CM_lung |
| MOB2              | 6.92E-05   | 0.3009551  | 0.185 | 0.252 | 1          | CD4_CM_lung |
| SATB1             | 7.00E-05   | 0.58271122 | 0.462 | 0.549 | 1          | CD4_CM_lung |
| PDCD5             | 9.46E-05   | 0.78370099 | 0.27  | 0.285 | 1          | CD4_CM_lung |
| ENSMUG00000016278 | 0.00010675 | 0.33005363 | 0.26  | 0.359 | 1          | CD4_CM_lung |
| C3H7orf50         | 0.00016199 | 0.2220133  | 0.328 | 0.449 | 1          | CD4_CM_lung |
| GTF2H5            | 0.00016504 | 0.57982735 | 0.367 | 0.417 | 1          | CD4_CM_lung |
| ANXA2             | 0.00016683 | 0.34608389 | 0.204 | 0.274 | 1          | CD4_CM_lung |
| SYTL3             | 0.00016751 | 0.79713038 | 0.281 | 0.293 | 1          | CD4_CM_lung |
| LSM5              | 0.00017786 | 0.76440963 | 0.284 | 0.307 | 1          | CD4_CM_lung |
| MRPL51            | 0.00020718 | 0.59133091 | 0.347 | 0.393 | 1          | CD4_CM_lung |
| MIF               | 0.0002131  | 0.26215991 | 0.356 | 0.497 | 1          | CD4_CM_lung |
| RAC2              | 0.00023504 | 0.67659472 | 0.305 | 0.335 | 1          | CD4_CM_lung |
| C11H12orf45       | 0.00025897 | 0.37496652 | 0.193 | 0.258 | 1          | CD4_CM_lung |
| HSPA8             | 0.00039673 | 0.15204026 | 0.45  | 0.606 | 1          | CD4_CM_lung |
| GHITM             | 0.00039927 | 0.38461606 | 0.22  | 0.298 | 1          | CD4_CM_lung |
| ENO1              | 0.00042505 | 0.41606875 | 0.502 | 0.609 | 1          | CD4_CM_lung |
| CAPG              | 0.00043773 | 0.52218559 | 0.42  | 0.496 | 1          | CD4_CM_lung |
| HIKESHI           | 0.00052359 | 0.37158171 | 0.199 | 0.269 | 1          | CD4_CM_lung |
| PDCD10            | 0.00056517 | 0.7504247  | 0.26  | 0.275 | 1          | CD4_CM_lung |
| TUBB              | 0.00057248 | 0.57882722 | 0.35  | 0.396 | 1          | CD4_CM_lung |
| RNMT              | 0.00057987 | 0.23831411 | 0.393 | 0.54  | 1          | CD4_CM_lung |

|                    |            |            |       |       |               |
|--------------------|------------|------------|-------|-------|---------------|
| CD3E               | 0.00059442 | 0.62762063 | 0.367 | 0.43  | 1 CD4_CM_lung |
| SPOCK2             | 0.000668   | 0.35104017 | 0.298 | 0.407 | 1 CD4_CM_lung |
| RASGRP2            | 0.00084931 | 0.32886572 | 0.244 | 0.325 | 1 CD4_CM_lung |
| NDUFB7             | 0.00106706 | 0.4476602  | 0.206 | 0.277 | 1 CD4_CM_lung |
| COPS6              | 0.00106722 | 0.41660855 | 0.227 | 0.307 | 1 CD4_CM_lung |
| AIMP1              | 0.00118844 | 0.5936875  | 0.356 | 0.409 | 1 CD4_CM_lung |
| ENSMMUG00000000983 | 0.00124901 | 0.63517757 | 0.348 | 0.404 | 1 CD4_CM_lung |
| MGST3              | 0.00136745 | 0.72208514 | 0.283 | 0.312 | 1 CD4_CM_lung |
| ENSMMUG00000029026 | 0.00137571 | 0.12447862 | 0.486 | 0.656 | 1 CD4_CM_lung |
| RPS27L             | 0.00142494 | 0.64899659 | 0.336 | 0.385 | 1 CD4_CM_lung |
| ENSMMUG00000043332 | 0.00143675 | 0.76802034 | 0.258 | 0.277 | 1 CD4_CM_lung |
| COPE               | 0.00154817 | 0.74064805 | 0.272 | 0.299 | 1 CD4_CM_lung |
| SELL               | 0.00161238 | 0.3911444  | 0.504 | 0.603 | 1 CD4_CM_lung |
| LEPROTL1           | 0.00166558 | 0.68874918 | 0.283 | 0.31  | 1 CD4_CM_lung |
| BUD23              | 0.00166576 | 0.31543692 | 0.287 | 0.389 | 1 CD4_CM_lung |
| PRDX5              | 0.0017627  | 0.32565323 | 0.252 | 0.337 | 1 CD4_CM_lung |
| TIGAR              | 0.00202862 | 0.34124608 | 0.349 | 0.477 | 1 CD4_CM_lung |
| ENSMMUG00000022769 | 0.00207212 | 0.26539398 | 0.351 | 0.48  | 1 CD4_CM_lung |
| TALDO1             | 0.00228321 | 0.32007426 | 0.3   | 0.412 | 1 CD4_CM_lung |
| EIF3J              | 0.0023017  | 0.44981257 | 0.225 | 0.297 | 1 CD4_CM_lung |
| MAP1LC3B           | 0.00243615 | 0.37173246 | 0.218 | 0.286 | 1 CD4_CM_lung |
| SRSF7              | 0.00247488 | 0.28077974 | 0.33  | 0.448 | 1 CD4_CM_lung |
| NHP2               | 0.00269751 | 0.71021747 | 0.302 | 0.341 | 1 CD4_CM_lung |
| PSMA4              | 0.00426343 | 0.44315878 | 0.224 | 0.296 | 1 CD4_CM_lung |
| TOPORS             | 0.0042931  | 0.31377414 | 0.282 | 0.378 | 1 CD4_CM_lung |
| AMDHD1             | 0.00544778 | 0.36513999 | 0.267 | 0.353 | 1 CD4_CM_lung |
| THYN1              | 0.00568685 | 0.48952887 | 0.201 | 0.264 | 1 CD4_CM_lung |
| ST13               | 0.00711149 | 0.32917761 | 0.319 | 0.427 | 1 CD4_CM_lung |
| ISCA1              | 0.00726385 | 0.42296903 | 0.203 | 0.264 | 1 CD4_CM_lung |
| PDGFRA             | 0.00728342 | 0.19971578 | 0.742 | 0.856 | 1 CD4_CM_lung |
| SPCS1              | 0.00780359 | 0.31112058 | 0.334 | 0.453 | 1 CD4_CM_lung |
| S100A6             | 0.00822042 | 0.76001115 | 0.376 | 0.435 | 1 CD4_CM_lung |
| ATP6V1FNB          | 0.010309   | 0.40380178 | 0.262 | 0.35  | 1 CD4_CM_lung |

|                     |            |            |       |       |               |
|---------------------|------------|------------|-------|-------|---------------|
| PPA1                | 0.01161909 | 0.36834577 | 0.231 | 0.299 | 1 CD4_CM_lung |
| ENSMMUG00000064120  | 0.01310763 | 0.69407226 | 0.239 | 0.255 | 1 CD4_CM_lung |
| ZNF706              | 0.01360284 | 0.37652643 | 0.27  | 0.355 | 1 CD4_CM_lung |
| SNRPN               | 0.01457143 | 0.7294361  | 0.264 | 0.292 | 1 CD4_CM_lung |
| SKP1                | 0.01846432 | 0.14049451 | 0.483 | 0.648 | 1 CD4_CM_lung |
| CAPZB               | 0.01850382 | 0.55394653 | 0.371 | 0.445 | 1 CD4_CM_lung |
| AMD1                | 0.02486683 | 0.45144887 | 0.213 | 0.273 | 1 CD4_CM_lung |
| PSMB9               | 0.02668978 | 0.48758021 | 0.25  | 0.327 | 1 CD4_CM_lung |
| CYB5A               | 0.03442312 | 0.36210376 | 0.304 | 0.401 | 1 CD4_CM_lung |
| CD53                | 0.03989429 | 0.38092424 | 0.291 | 0.379 | 1 CD4_CM_lung |
| RTRAF               | 0.0443028  | 0.23866387 | 0.415 | 0.556 | 1 CD4_CM_lung |
| SOD1                | 0.04912262 | 0.42601264 | 0.267 | 0.345 | 1 CD4_CM_lung |
| HNRNPA1             | 0.05000687 | 0.31517284 | 0.487 | 0.605 | 1 CD4_CM_lung |
| SSR2                | 0.05173222 | 0.37850952 | 0.46  | 0.578 | 1 CD4_CM_lung |
| SLIRP               | 0.05374783 | 0.2102143  | 0.458 | 0.616 | 1 CD4_CM_lung |
| N4BP2L2             | 0.0544455  | 0.48739065 | 0.213 | 0.267 | 1 CD4_CM_lung |
| EIF2S2              | 0.06228808 | 0.34001206 | 0.338 | 0.437 | 1 CD4_CM_lung |
| SNRPB               | 0.07710987 | 0.52042572 | 0.353 | 0.429 | 1 CD4_CM_lung |
| PSME2               | 0.07713944 | 0.72398769 | 0.229 | 0.252 | 1 CD4_CM_lung |
| KRTCAP2             | 0.07782101 | 0.26487974 | 0.564 | 0.717 | 1 CD4_CM_lung |
| ENSMMUG000000031947 | 0.08945034 | 0.17381614 | 0.68  | 0.827 | 1 CD4_CM_lung |
| RABAC1              | 0.09041858 | 0.60994424 | 0.284 | 0.326 | 1 CD4_CM_lung |
| PSMB7               | 0.09290609 | 0.35450793 | 0.453 | 0.568 | 1 CD4_CM_lung |
| PRDX1               | 0.1010205  | 0.70970456 | 0.231 | 0.257 | 1 CD4_CM_lung |
| ENSMMUG000000002324 | 0.10280029 | 0.20654725 | 0.487 | 0.643 | 1 CD4_CM_lung |
| TMBIM6              | 0.10367484 | 0.45680923 | 0.262 | 0.338 | 1 CD4_CM_lung |
| ENY2                | 0.11411795 | 0.39909518 | 0.291 | 0.374 | 1 CD4_CM_lung |
| DDT                 | 0.12742107 | 0.3915728  | 0.295 | 0.378 | 1 CD4_CM_lung |
| NDUFA6              | 0.12819521 | 0.4202839  | 0.269 | 0.344 | 1 CD4_CM_lung |
| NDUFS6              | 0.13251397 | 0.65058655 | 0.252 | 0.287 | 1 CD4_CM_lung |
| FTH1                | 0.13871489 | 0.34368541 | 0.581 | 0.772 | 1 CD4_CM_lung |
| ENSMMUG000000057449 | 0.14512026 | 0.47046462 | 0.246 | 0.311 | 1 CD4_CM_lung |
| EIF4A1              | 0.15033926 | 0.40146687 | 0.281 | 0.359 | 1 CD4_CM_lung |

|                    |            |            |       |       |               |
|--------------------|------------|------------|-------|-------|---------------|
| NDUFB8             | 0.1558406  | 0.55066084 | 0.314 | 0.377 | 1 CD4_CM_lung |
| UBXN1              | 0.15626021 | 0.48516945 | 0.358 | 0.439 | 1 CD4_CM_lung |
| DCTN3              | 0.15889835 | 0.49689363 | 0.239 | 0.303 | 1 CD4_CM_lung |
| DAZAP1             | 0.16656901 | 0.27101522 | 0.534 | 0.677 | 1 CD4_CM_lung |
| REXO2              | 0.16708343 | 0.41100772 | 0.283 | 0.36  | 1 CD4_CM_lung |
| ND3                | 0.1856506  | 0.28268705 | 0.46  | 0.604 | 1 CD4_CM_lung |
| LSP1               | 0.19111206 | 0.31683378 | 0.405 | 0.536 | 1 CD4_CM_lung |
| PSMB3              | 0.19591873 | 0.51052349 | 0.219 | 0.273 | 1 CD4_CM_lung |
| EIF1B              | 0.19602885 | 0.4745243  | 0.237 | 0.293 | 1 CD4_CM_lung |
| SPCS3              | 0.22066348 | 0.60608855 | 0.262 | 0.302 | 1 CD4_CM_lung |
| MPC2               | 0.246517   | 0.49174947 | 0.239 | 0.298 | 1 CD4_CM_lung |
| LIMD2              | 0.2554963  | 0.35526118 | 0.504 | 0.652 | 1 CD4_CM_lung |
| ESF1               | 0.25772852 | 0.58970796 | 0.231 | 0.284 | 1 CD4_CM_lung |
| TPI1               | 0.26262275 | 0.62373496 | 0.283 | 0.332 | 1 CD4_CM_lung |
| DBI                | 0.28635469 | 0.4870485  | 0.326 | 0.395 | 1 CD4_CM_lung |
| CD3G               | 0.30927781 | 0.60777176 | 0.235 | 0.266 | 1 CD4_CM_lung |
| TXN                | 0.35088749 | 0.44772844 | 0.306 | 0.386 | 1 CD4_CM_lung |
| S100A10            | 0.37533074 | 0.39691113 | 0.486 | 0.608 | 1 CD4_CM_lung |
| CD320              | 0.39523155 | 0.43174788 | 0.302 | 0.383 | 1 CD4_CM_lung |
| PARK7              | 0.40523706 | 0.6153483  | 0.241 | 0.28  | 1 CD4_CM_lung |
| C11H12orf57        | 0.41688803 | 0.3225046  | 0.479 | 0.604 | 1 CD4_CM_lung |
| PRMT1              | 0.45540977 | 0.54221172 | 0.224 | 0.274 | 1 CD4_CM_lung |
| ENSMMUG00000061128 | 0.46070665 | 0.44788114 | 0.278 | 0.344 | 1 CD4_CM_lung |
| SUMO1              | 0.47137585 | 0.35980489 | 0.402 | 0.508 | 1 CD4_CM_lung |
| LAMTOR4            | 0.48103153 | 0.41152831 | 0.317 | 0.404 | 1 CD4_CM_lung |
| PSMC5              | 0.50019171 | 0.54878766 | 0.234 | 0.288 | 1 CD4_CM_lung |
| ENSMMUG00000055584 | 0.50477706 | 0.10966439 | 0.684 | 0.837 | 1 CD4_CM_lung |
| VDAC2              | 0.5437752  | 0.46339588 | 0.323 | 0.398 | 1 CD4_CM_lung |
| PSME1              | 0.57529551 | 0.21783837 | 0.51  | 0.66  | 1 CD4_CM_lung |
| SH3BGRL            | 0.57953359 | 0.55333243 | 0.238 | 0.29  | 1 CD4_CM_lung |
| SARAF              | 0.63470293 | 0.2868956  | 0.527 | 0.68  | 1 CD4_CM_lung |
| PSMB8              | 0.64438972 | 0.39652545 | 0.391 | 0.493 | 1 CD4_CM_lung |
| AIP                | 0.64997564 | 0.55128952 | 0.245 | 0.301 | 1 CD4_CM_lung |

|                    |            |            |       |       |                |
|--------------------|------------|------------|-------|-------|----------------|
| PPP1CB             | 0.65303291 | 0.39385677 | 0.355 | 0.45  | 1 CD4_CM_lung  |
| HNRNPF             | 0.66730059 | 0.47933474 | 0.31  | 0.375 | 1 CD4_CM_lung  |
| MRPL23             | 0.68283662 | 0.44159709 | 0.346 | 0.433 | 1 CD4_CM_lung  |
| FNTB               | 0.69561851 | 0.46958882 | 0.312 | 0.391 | 1 CD4_CM_lung  |
| ATP5IF1            | 0.69723643 | 0.40145378 | 0.393 | 0.504 | 1 CD4_CM_lung  |
| CARHSP1            | 0.72535066 | 0.5796747  | 0.237 | 0.278 | 1 CD4_CM_lung  |
| ETFB               | 0.72998553 | 0.52176155 | 0.274 | 0.329 | 1 CD4_CM_lung  |
| RPS4Y2             | 0.73419716 | 0.46006745 | 0.313 | 0.376 | 1 CD4_CM_lung  |
| ENSMMUG00000050829 | 0.73842427 | 0.39668472 | 0.42  | 0.534 | 1 CD4_CM_lung  |
| TINF2              | 0.81030832 | 0.39162286 | 0.377 | 0.481 | 1 CD4_CM_lung  |
| TENT5C             | 0.83580988 | 0.53097735 | 0.254 | 0.297 | 1 CD4_CM_lung  |
| NCOA7              | 0.8684792  | 0.54252156 | 0.252 | 0.3   | 1 CD4_CM_lung  |
| RBMX               | 0.88453965 | 0.43114132 | 0.33  | 0.41  | 1 CD4_CM_lung  |
| RBIS               | 0.90060595 | 0.35746707 | 0.383 | 0.49  | 1 CD4_CM_lung  |
| SMNDC1             | 0.90533938 | 0.67445239 | 0.226 | 0.264 | 1 CD4_CM_lung  |
| ANP32A             | 0.91990458 | 0.51231692 | 0.22  | 0.258 | 1 CD4_CM_lung  |
| LLPH               | 0.9356689  | 0.57410067 | 0.256 | 0.306 | 1 CD4_CM_lung  |
| YWHAB              | 0.93647842 | 0.40264978 | 0.383 | 0.492 | 1 CD4_CM_lung  |
| TRMT112            | 0.94228101 | 0.41342169 | 0.365 | 0.463 | 1 CD4_CM_lung  |
| EIF3I              | 0.97913997 | 0.5038802  | 0.269 | 0.329 | 1 CD4_CM_lung  |
| SF3B6              | 0.99320114 | 0.39723787 | 0.362 | 0.455 | 1 CD4_CM_lung  |
| UCP2               | 0.99876536 | 0.54137531 | 0.265 | 0.318 | 1 CD4_CM_lung  |
| HBE1               | 0          | 3.80154381 | 0.591 | 0.045 | 0 CD4_CM_UCBMC |
| HBA                | 0          | 3.87724701 | 0.557 | 0.04  | 0 CD4_CM_UCBMC |
| PNISR              | 0          | 1.6286335  | 0.795 | 0.326 | 0 CD4_CM_UCBMC |
| RSRP1              | 0          | 1.64489566 | 0.753 | 0.297 | 0 CD4_CM_UCBMC |
| ENSMMUG00000051300 | 0          | 1.07784741 | 0.945 | 0.491 | 0 CD4_CM_UCBMC |
| EPC1               | 0          | 1.5972643  | 0.738 | 0.296 | 0 CD4_CM_UCBMC |
| ENSMMUG00000065175 | 0          | 1.82750663 | 0.617 | 0.211 | 0 CD4_CM_UCBMC |
| FOXN3              | 0          | 1.18352631 | 0.775 | 0.374 | 0 CD4_CM_UCBMC |
| NCOA3              | 0          | 1.3024727  | 0.721 | 0.334 | 0 CD4_CM_UCBMC |
| STAG1              | 0          | 1.45349085 | 0.659 | 0.279 | 0 CD4_CM_UCBMC |
| ENSMMUG00000030448 | 0          | 1.61629697 | 0.598 | 0.22  | 0 CD4_CM_UCBMC |

|                    |           |            |       |       |           |              |
|--------------------|-----------|------------|-------|-------|-----------|--------------|
| ARID4B             | 0         | 1.42668354 | 0.668 | 0.293 | 0         | CD4_CM_UCBMC |
| DDX5               | 0         | 0.96489439 | 0.947 | 0.622 | 0         | CD4_CM_UCBMC |
| ENSMMUG00000056654 | 0         | 1.11983446 | 0.934 | 0.676 | 0         | CD4_CM_UCBMC |
| RPS20              | 0         | 1.24442583 | 0.995 | 0.789 | 0         | CD4_CM_UCBMC |
| ENSMMUG00000049151 | 0         | 0.85974661 | 0.971 | 0.831 | 0         | CD4_CM_UCBMC |
| RPL26              | 0         | 0.63992527 | 0.982 | 0.845 | 0         | CD4_CM_UCBMC |
| RPL7               | 0         | 0.73558659 | 0.984 | 0.883 | 0         | CD4_CM_UCBMC |
| RPL27A             | 0         | 0.95698327 | 0.993 | 0.903 | 0         | CD4_CM_UCBMC |
| COX3               | 0         | 1.0477275  | 0.992 | 0.905 | 0         | CD4_CM_UCBMC |
| RPL23              | 0         | 0.723768   | 0.993 | 0.91  | 0         | CD4_CM_UCBMC |
| CPEB1              | 0         | 0.89054828 | 0.994 | 0.913 | 0         | CD4_CM_UCBMC |
| RPS3               | 0         | 0.66217203 | 0.994 | 0.969 | 0         | CD4_CM_UCBMC |
| RPL13A             | 0         | 0.89480164 | 0.997 | 0.975 | 0         | CD4_CM_UCBMC |
| ENSMMUG00000058755 | 0         | 0.51864845 | 0.994 | 0.977 | 0         | CD4_CM_UCBMC |
| RPL23A             | 0         | 0.8616149  | 0.998 | 0.982 | 0         | CD4_CM_UCBMC |
| ENSMMUG00000003412 | 0         | 0.49997579 | 0.997 | 0.988 | 0         | CD4_CM_UCBMC |
| RPS11              | 0         | 0.37924092 | 0.998 | 0.993 | 0         | CD4_CM_UCBMC |
| RPS14              | 0         | 0.51616237 | 0.998 | 0.995 | 0         | CD4_CM_UCBMC |
| TPT1               | 0         | 0.43296676 | 0.999 | 0.998 | 0         | CD4_CM_UCBMC |
| CAMK4              | 2.30E-301 | 1.03328098 | 0.847 | 0.513 | 8.14E-297 | CD4_CM_UCBMC |
| OSBPL9             | 8.44E-296 | 1.69866513 | 0.542 | 0.185 | 2.99E-291 | CD4_CM_UCBMC |
| SIK3               | 6.60E-292 | 1.49300443 | 0.598 | 0.237 | 2.34E-287 | CD4_CM_UCBMC |
| RPS16              | 2.33E-288 | 0.29329981 | 0.997 | 0.997 | 8.24E-284 | CD4_CM_UCBMC |
| KLF6               | 2.76E-280 | 1.16154973 | 0.655 | 0.267 | 9.77E-276 | CD4_CM_UCBMC |
| RPL4               | 2.56E-276 | 0.58462166 | 0.971 | 0.855 | 9.09E-272 | CD4_CM_UCBMC |
| RPS15              | 1.63E-267 | 0.36335649 | 0.998 | 0.996 | 5.77E-263 | CD4_CM_UCBMC |
| ENSMMUG00000052127 | 1.99E-266 | 0.69795227 | 0.974 | 0.754 | 7.06E-262 | CD4_CM_UCBMC |
| RBM39              | 2.02E-263 | 1.01819154 | 0.784 | 0.429 | 7.14E-259 | CD4_CM_UCBMC |
| UTRN               | 1.93E-258 | 1.16933601 | 0.694 | 0.337 | 6.83E-254 | CD4_CM_UCBMC |
| G3BP2              | 2.56E-258 | 1.23738881 | 0.663 | 0.324 | 9.08E-254 | CD4_CM_UCBMC |
| GOLGA4             | 1.33E-256 | 1.76591551 | 0.451 | 0.135 | 4.71E-252 | CD4_CM_UCBMC |
| EPB41              | 1.11E-252 | 1.25918606 | 0.62  | 0.277 | 3.94E-248 | CD4_CM_UCBMC |
| KLF12              | 3.89E-249 | 1.27558289 | 0.63  | 0.287 | 1.38E-244 | CD4_CM_UCBMC |

|                    |           |            |       |       |           |              |
|--------------------|-----------|------------|-------|-------|-----------|--------------|
| CREBRF             | 6.33E-249 | 1.77205901 | 0.442 | 0.132 | 2.24E-244 | CD4_CM_UCBMC |
| RPS3A              | 3.41E-246 | 0.29195472 | 0.999 | 0.998 | 1.21E-241 | CD4_CM_UCBMC |
| DDX6               | 4.67E-245 | 1.20107644 | 0.621 | 0.278 | 1.65E-240 | CD4_CM_UCBMC |
| RCC1               | 7.54E-235 | 1.53457836 | 0.474 | 0.163 | 2.67E-230 | CD4_CM_UCBMC |
| RICTOR             | 4.93E-234 | 1.61738552 | 0.453 | 0.151 | 1.75E-229 | CD4_CM_UCBMC |
| SPPL3              | 5.58E-234 | 1.8328346  | 0.421 | 0.127 | 1.98E-229 | CD4_CM_UCBMC |
| USP15              | 1.65E-233 | 1.02735858 | 0.71  | 0.377 | 5.86E-229 | CD4_CM_UCBMC |
| ENSMMUG00000065373 | 4.03E-232 | 0.47033536 | 0.984 | 0.858 | 1.43E-227 | CD4_CM_UCBMC |
| TM9SF3             | 3.89E-228 | 1.70049384 | 0.443 | 0.149 | 1.38E-223 | CD4_CM_UCBMC |
| ABLIM1             | 6.28E-227 | 1.0120049  | 0.71  | 0.38  | 2.23E-222 | CD4_CM_UCBMC |
| EIF2AK3            | 1.89E-226 | 2.32700643 | 0.337 | 0.072 | 6.71E-222 | CD4_CM_UCBMC |
| ANKRD44            | 3.12E-225 | 1.03178098 | 0.693 | 0.357 | 1.11E-220 | CD4_CM_UCBMC |
| RPLP2              | 1.20E-223 | 0.33425583 | 0.994 | 0.984 | 4.24E-219 | CD4_CM_UCBMC |
| CD247              | 5.53E-223 | 1.40607851 | 0.509 | 0.202 | 1.96E-218 | CD4_CM_UCBMC |
| CELF2              | 1.22E-221 | 0.89761804 | 0.769 | 0.419 | 4.33E-217 | CD4_CM_UCBMC |
| KDM6A              | 1.12E-220 | 1.56349066 | 0.472 | 0.174 | 3.96E-216 | CD4_CM_UCBMC |
| KMT2E              | 6.97E-219 | 1.2300303  | 0.554 | 0.234 | 2.47E-214 | CD4_CM_UCBMC |
| COG5               | 6.67E-218 | 1.55113451 | 0.461 | 0.166 | 2.36E-213 | CD4_CM_UCBMC |
| FAM117B            | 1.12E-216 | 2.03792574 | 0.375 | 0.104 | 3.98E-212 | CD4_CM_UCBMC |
| MYLIP              | 1.96E-216 | 1.78182159 | 0.379 | 0.105 | 6.94E-212 | CD4_CM_UCBMC |
| PUM1               | 9.28E-213 | 1.27259512 | 0.534 | 0.227 | 3.29E-208 | CD4_CM_UCBMC |
| JAK1               | 6.85E-210 | 1.01224375 | 0.65  | 0.323 | 2.43E-205 | CD4_CM_UCBMC |
| CDC14A             | 6.12E-209 | 1.1730524  | 0.56  | 0.247 | 2.17E-204 | CD4_CM_UCBMC |
| RACK1              | 3.80E-208 | 0.31577576 | 0.994 | 0.987 | 1.35E-203 | CD4_CM_UCBMC |
| MBTD1              | 8.94E-208 | 1.88980106 | 0.363 | 0.097 | 3.17E-203 | CD4_CM_UCBMC |
| KMT2C              | 1.14E-205 | 1.16091831 | 0.586 | 0.275 | 4.04E-201 | CD4_CM_UCBMC |
| ENSMMUG00000031367 | 1.52E-205 | 1.60533736 | 0.42  | 0.142 | 5.39E-201 | CD4_CM_UCBMC |
| CDC42SE2           | 2.36E-203 | 0.81422189 | 0.825 | 0.541 | 8.35E-199 | CD4_CM_UCBMC |
| CCNL1              | 5.35E-203 | 1.07529456 | 0.602 | 0.288 | 1.89E-198 | CD4_CM_UCBMC |
| FOXP1              | 1.77E-201 | 1.26236481 | 0.527 | 0.228 | 6.26E-197 | CD4_CM_UCBMC |
| ZNF292             | 2.23E-201 | 1.3964899  | 0.47  | 0.183 | 7.90E-197 | CD4_CM_UCBMC |
| PPP1R15A           | 1.12E-200 | 1.42876769 | 0.466 | 0.18  | 3.96E-196 | CD4_CM_UCBMC |
| SSH2               | 1.51E-199 | 0.86770282 | 0.705 | 0.377 | 5.36E-195 | CD4_CM_UCBMC |



|                   |           |            |       |       |           |              |
|-------------------|-----------|------------|-------|-------|-----------|--------------|
| BIN3              | 2.21E-198 | 1.45211887 | 0.438 | 0.164 | 7.84E-194 | CD4_CM_UCBMC |
| VPS13B            | 5.25E-198 | 1.01643222 | 0.608 | 0.292 | 1.86E-193 | CD4_CM_UCBMC |
| ELMO1             | 7.66E-196 | 1.17173885 | 0.544 | 0.246 | 2.71E-191 | CD4_CM_UCBMC |
| ENSMUG00000014862 | 6.06E-195 | 0.85322522 | 0.753 | 0.47  | 2.15E-190 | CD4_CM_UCBMC |
| BRAF              | 8.71E-194 | 1.40879142 | 0.447 | 0.167 | 3.09E-189 | CD4_CM_UCBMC |
| FBXO33            | 9.17E-194 | 1.67001865 | 0.387 | 0.121 | 3.25E-189 | CD4_CM_UCBMC |
| CASP3             | 9.48E-194 | 1.44120195 | 0.428 | 0.15  | 3.36E-189 | CD4_CM_UCBMC |
| JMJD1C            | 1.19E-192 | 0.93720021 | 0.686 | 0.37  | 4.23E-188 | CD4_CM_UCBMC |
| HIVEP1            | 2.68E-188 | 1.45186205 | 0.422 | 0.152 | 9.50E-184 | CD4_CM_UCBMC |
| RASA2             | 7.51E-188 | 1.15451636 | 0.559 | 0.266 | 2.66E-183 | CD4_CM_UCBMC |
| LMBRD1            | 3.89E-187 | 1.68001889 | 0.369 | 0.114 | 1.38E-182 | CD4_CM_UCBMC |
| RANBP9            | 1.24E-186 | 1.71352074 | 0.366 | 0.114 | 4.40E-182 | CD4_CM_UCBMC |
| USP3              | 1.89E-186 | 1.33987394 | 0.473 | 0.194 | 6.70E-182 | CD4_CM_UCBMC |
| LUC7L3            | 3.45E-186 | 1.33534822 | 0.467 | 0.192 | 1.22E-181 | CD4_CM_UCBMC |
| ARHGAP15          | 2.06E-183 | 0.69607864 | 0.873 | 0.597 | 7.31E-179 | CD4_CM_UCBMC |
| PRKCH             | 2.20E-182 | 1.04661835 | 0.58  | 0.283 | 7.81E-178 | CD4_CM_UCBMC |
| PTBP2             | 9.49E-182 | 1.66480866 | 0.374 | 0.122 | 3.36E-177 | CD4_CM_UCBMC |
| SRSF11            | 4.33E-181 | 0.77113253 | 0.775 | 0.475 | 1.54E-176 | CD4_CM_UCBMC |
| PELI1             | 1.03E-179 | 1.24339613 | 0.47  | 0.196 | 3.66E-175 | CD4_CM_UCBMC |
| CDKAL1            | 1.73E-179 | 1.44821421 | 0.421 | 0.16  | 6.14E-175 | CD4_CM_UCBMC |
| BIRC6             | 1.47E-178 | 1.10383816 | 0.54  | 0.254 | 5.22E-174 | CD4_CM_UCBMC |
| ESYT2             | 9.10E-178 | 1.22514781 | 0.473 | 0.199 | 3.23E-173 | CD4_CM_UCBMC |
| CUL3              | 1.28E-177 | 1.52398534 | 0.399 | 0.145 | 4.54E-173 | CD4_CM_UCBMC |
| ATF2              | 1.52E-177 | 1.70359321 | 0.355 | 0.11  | 5.38E-173 | CD4_CM_UCBMC |
| SMCHD1            | 4.35E-177 | 1.20464314 | 0.507 | 0.23  | 1.54E-172 | CD4_CM_UCBMC |
| PIAS1             | 1.29E-175 | 1.07220419 | 0.496 | 0.212 | 4.56E-171 | CD4_CM_UCBMC |
| MARCHF6           | 7.10E-175 | 1.60312808 | 0.367 | 0.123 | 2.52E-170 | CD4_CM_UCBMC |
| TRPM7             | 2.18E-173 | 1.17730267 | 0.478 | 0.204 | 7.71E-169 | CD4_CM_UCBMC |
| TRA2A             | 6.07E-173 | 0.88371419 | 0.651 | 0.35  | 2.15E-168 | CD4_CM_UCBMC |
| DAZAP2            | 1.75E-172 | 1.16747204 | 0.478 | 0.206 | 6.20E-168 | CD4_CM_UCBMC |
| SEPTIN6           | 2.48E-172 | 0.75786829 | 0.748 | 0.442 | 8.79E-168 | CD4_CM_UCBMC |
| OSBPL8            | 4.50E-172 | 1.31777014 | 0.454 | 0.192 | 1.59E-167 | CD4_CM_UCBMC |
| MAN2A1            | 5.45E-172 | 1.29260441 | 0.451 | 0.188 | 1.93E-167 | CD4_CM_UCBMC |

|                     |           |            |       |       |           |              |
|---------------------|-----------|------------|-------|-------|-----------|--------------|
| ENSMMUG00000047632  | 1.44E-171 | 0.87803825 | 0.669 | 0.391 | 5.09E-167 | CD4_CM_UCBMC |
| RPS6KB1             | 1.51E-171 | 1.73612475 | 0.351 | 0.114 | 5.34E-167 | CD4_CM_UCBMC |
| DLG1                | 7.01E-171 | 1.41438905 | 0.426 | 0.168 | 2.48E-166 | CD4_CM_UCBMC |
| MPP7                | 8.10E-171 | 1.09059397 | 0.522 | 0.244 | 2.87E-166 | CD4_CM_UCBMC |
| ARIH1               | 2.08E-170 | 1.30493966 | 0.437 | 0.177 | 7.36E-166 | CD4_CM_UCBMC |
| PAN3                | 4.82E-170 | 1.23112748 | 0.461 | 0.195 | 1.71E-165 | CD4_CM_UCBMC |
| CERS6               | 5.56E-170 | 1.30959809 | 0.452 | 0.19  | 1.97E-165 | CD4_CM_UCBMC |
| TCF12               | 3.64E-169 | 1.00069773 | 0.609 | 0.317 | 1.29E-164 | CD4_CM_UCBMC |
| ENSMMUG00000006165  | 4.14E-168 | 0.79964959 | 0.66  | 0.362 | 1.47E-163 | CD4_CM_UCBMC |
| PNN                 | 1.06E-167 | 1.15828466 | 0.493 | 0.225 | 3.77E-163 | CD4_CM_UCBMC |
| KANSL1              | 9.68E-167 | 1.3855914  | 0.412 | 0.162 | 3.43E-162 | CD4_CM_UCBMC |
| YEATS2              | 1.66E-166 | 1.28126942 | 0.407 | 0.154 | 5.88E-162 | CD4_CM_UCBMC |
| DENND4A             | 1.67E-166 | 0.78361647 | 0.728 | 0.432 | 5.92E-162 | CD4_CM_UCBMC |
| RPL15               | 1.71E-166 | 0.31949609 | 0.991 | 0.97  | 6.06E-162 | CD4_CM_UCBMC |
| RFX3                | 1.93E-166 | 1.29653347 | 0.432 | 0.175 | 6.85E-162 | CD4_CM_UCBMC |
| ENSMMUG00000011580  | 2.22E-166 | 1.08402098 | 0.516 | 0.241 | 7.87E-162 | CD4_CM_UCBMC |
| DIP2B               | 7.70E-166 | 1.16558542 | 0.47  | 0.203 | 2.73E-161 | CD4_CM_UCBMC |
| MTREX               | 2.02E-164 | 1.06921564 | 0.511 | 0.237 | 7.15E-160 | CD4_CM_UCBMC |
| CELF1               | 9.14E-164 | 1.35501484 | 0.407 | 0.158 | 3.24E-159 | CD4_CM_UCBMC |
| ENSMMUG000000063979 | 1.62E-163 | 1.46582121 | 0.363 | 0.124 | 5.73E-159 | CD4_CM_UCBMC |
| AGO3                | 1.62E-163 | 1.48885017 | 0.369 | 0.13  | 5.74E-159 | CD4_CM_UCBMC |
| FOXO1               | 2.85E-163 | 1.25476781 | 0.431 | 0.177 | 1.01E-158 | CD4_CM_UCBMC |
| SETD2               | 1.33E-162 | 1.43274102 | 0.401 | 0.156 | 4.70E-158 | CD4_CM_UCBMC |
| SLC35A3             | 1.74E-162 | 1.51698328 | 0.362 | 0.126 | 6.16E-158 | CD4_CM_UCBMC |
| EMP3                | 6.88E-162 | 1.10642955 | 0.429 | 0.158 | 2.44E-157 | CD4_CM_UCBMC |
| GOLGA1              | 9.26E-162 | 0.72812758 | 0.818 | 0.592 | 3.28E-157 | CD4_CM_UCBMC |
| ITCH                | 2.91E-161 | 1.27307794 | 0.434 | 0.182 | 1.03E-156 | CD4_CM_UCBMC |
| MBNL1               | 1.77E-160 | 0.57624767 | 0.942 | 0.742 | 6.27E-156 | CD4_CM_UCBMC |
| DCP1A               | 1.48E-158 | 2.05284337 | 0.272 | 0.067 | 5.25E-154 | CD4_CM_UCBMC |
| ZFC3H1              | 2.02E-158 | 1.56408555 | 0.346 | 0.116 | 7.16E-154 | CD4_CM_UCBMC |
| FYN                 | 1.79E-157 | 1.12887809 | 0.482 | 0.221 | 6.34E-153 | CD4_CM_UCBMC |
| ENSMMUG000000055457 | 1.94E-157 | 0.87201443 | 0.596 | 0.313 | 6.88E-153 | CD4_CM_UCBMC |
| WRN                 | 2.38E-157 | 1.19308981 | 0.42  | 0.169 | 8.42E-153 | CD4_CM_UCBMC |

|                    |           |            |       |       |           |              |
|--------------------|-----------|------------|-------|-------|-----------|--------------|
| RAB1A              | 3.14E-157 | 1.49286702 | 0.372 | 0.139 | 1.11E-152 | CD4_CM_UCBMC |
| ENSMMUG00000059742 | 6.14E-157 | 0.92975166 | 0.55  | 0.277 | 2.17E-152 | CD4_CM_UCBMC |
| PIK3CA             | 1.51E-156 | 1.95266633 | 0.284 | 0.075 | 5.35E-152 | CD4_CM_UCBMC |
| ZEB1               | 1.89E-156 | 0.98356021 | 0.536 | 0.266 | 6.69E-152 | CD4_CM_UCBMC |
| HSPA5              | 4.45E-155 | 0.98096041 | 0.519 | 0.249 | 1.58E-150 | CD4_CM_UCBMC |
| CTDSPL2            | 1.67E-153 | 1.52954927 | 0.335 | 0.109 | 5.93E-149 | CD4_CM_UCBMC |
| SLC12A6            | 4.95E-153 | 1.43735165 | 0.357 | 0.127 | 1.75E-148 | CD4_CM_UCBMC |
| ENSMMUG00000015270 | 6.51E-152 | 0.1950442  | 0.999 | 0.999 | 2.31E-147 | CD4_CM_UCBMC |
| MARCHF7            | 8.11E-152 | 1.35049206 | 0.388 | 0.152 | 2.87E-147 | CD4_CM_UCBMC |
| FBXO34             | 1.14E-151 | 1.26591613 | 0.413 | 0.172 | 4.05E-147 | CD4_CM_UCBMC |
| ENSMMUG00000047277 | 2.50E-151 | 0.90053986 | 0.676 | 0.425 | 8.87E-147 | CD4_CM_UCBMC |
| EEF2               | 3.03E-151 | 0.58743764 | 0.854 | 0.578 | 1.07E-146 | CD4_CM_UCBMC |
| GNG2               | 8.09E-151 | 0.88893504 | 0.6   | 0.322 | 2.87E-146 | CD4_CM_UCBMC |
| CERT1              | 1.45E-149 | 1.54029363 | 0.317 | 0.102 | 5.13E-145 | CD4_CM_UCBMC |
| TLK1               | 2.19E-149 | 1.09349446 | 0.467 | 0.215 | 7.74E-145 | CD4_CM_UCBMC |
| RHOH               | 2.27E-149 | 0.98471776 | 0.554 | 0.29  | 8.03E-145 | CD4_CM_UCBMC |
| NR3C1              | 2.62E-149 | 1.08454496 | 0.466 | 0.213 | 9.29E-145 | CD4_CM_UCBMC |
| RAB2A              | 3.22E-149 | 1.16820688 | 0.445 | 0.197 | 1.14E-144 | CD4_CM_UCBMC |
| CCSER2             | 3.71E-149 | 1.66049273 | 0.305 | 0.093 | 1.31E-144 | CD4_CM_UCBMC |
| UBE2D3             | 6.11E-149 | 0.67882386 | 0.766 | 0.477 | 2.17E-144 | CD4_CM_UCBMC |
| CCM2               | 7.22E-149 | 1.24798345 | 0.415 | 0.174 | 2.56E-144 | CD4_CM_UCBMC |
| MARCHF3            | 1.28E-148 | 1.39835977 | 0.371 | 0.14  | 4.53E-144 | CD4_CM_UCBMC |
| LRBA               | 1.81E-148 | 1.09000026 | 0.487 | 0.234 | 6.40E-144 | CD4_CM_UCBMC |
| TUT4               | 3.96E-148 | 1.0297989  | 0.496 | 0.238 | 1.40E-143 | CD4_CM_UCBMC |
| TSN                | 1.63E-147 | 1.62045504 | 0.295 | 0.085 | 5.79E-143 | CD4_CM_UCBMC |
| CDK13              | 3.08E-147 | 1.44765382 | 0.357 | 0.132 | 1.09E-142 | CD4_CM_UCBMC |
| YIPF5              | 9.29E-147 | 1.68701093 | 0.291 | 0.084 | 3.29E-142 | CD4_CM_UCBMC |
| TBC1D5             | 2.95E-146 | 1.01165242 | 0.53  | 0.267 | 1.04E-141 | CD4_CM_UCBMC |
| FBXL20             | 6.17E-145 | 1.63213321 | 0.318 | 0.107 | 2.19E-140 | CD4_CM_UCBMC |
| CHD2               | 1.51E-144 | 0.89160018 | 0.523 | 0.26  | 5.35E-140 | CD4_CM_UCBMC |
| GSK3B              | 2.10E-144 | 1.27906723 | 0.403 | 0.171 | 7.45E-140 | CD4_CM_UCBMC |
| ASH1L              | 2.79E-144 | 0.95698315 | 0.516 | 0.257 | 9.87E-140 | CD4_CM_UCBMC |
| RNF38              | 1.32E-143 | 1.37141796 | 0.37  | 0.145 | 4.67E-139 | CD4_CM_UCBMC |

|                    |           |            |       |       |           |              |
|--------------------|-----------|------------|-------|-------|-----------|--------------|
| MSI2               | 5.19E-143 | 1.33403381 | 0.377 | 0.152 | 1.84E-138 | CD4_CM_UCBMC |
| ENSMMUG00000061038 | 2.67E-142 | 1.38071305 | 0.363 | 0.142 | 9.46E-138 | CD4_CM_UCBMC |
| MAML2              | 2.24E-141 | 0.72121563 | 0.68  | 0.392 | 7.95E-137 | CD4_CM_UCBMC |
| ENSMMUG00000012537 | 3.62E-141 | 1.00587843 | 0.496 | 0.246 | 1.28E-136 | CD4_CM_UCBMC |
| PPP1R12A           | 3.67E-141 | 1.04804598 | 0.459 | 0.214 | 1.30E-136 | CD4_CM_UCBMC |
| CREBBP             | 4.22E-140 | 1.43773733 | 0.351 | 0.133 | 1.50E-135 | CD4_CM_UCBMC |
| TFDP2              | 6.66E-140 | 1.30245264 | 0.378 | 0.154 | 2.36E-135 | CD4_CM_UCBMC |
| CBLB               | 2.12E-139 | 0.77750752 | 0.59  | 0.316 | 7.52E-135 | CD4_CM_UCBMC |
| ATG13              | 3.15E-139 | 1.82983102 | 0.272 | 0.078 | 1.12E-134 | CD4_CM_UCBMC |
| EPC2               | 3.92E-139 | 1.63931811 | 0.302 | 0.099 | 1.39E-134 | CD4_CM_UCBMC |
| CYTH1              | 4.92E-139 | 1.03785463 | 0.459 | 0.215 | 1.74E-134 | CD4_CM_UCBMC |
| CSNK1A1            | 7.08E-139 | 1.03264472 | 0.475 | 0.229 | 2.51E-134 | CD4_CM_UCBMC |
| TSC22D3            | 5.61E-138 | 0.69012585 | 0.724 | 0.453 | 1.99E-133 | CD4_CM_UCBMC |
| TNRC6A             | 5.21E-137 | 1.11161909 | 0.406 | 0.173 | 1.85E-132 | CD4_CM_UCBMC |
| ARID2              | 1.51E-136 | 1.22685306 | 0.387 | 0.162 | 5.36E-132 | CD4_CM_UCBMC |
| PRPF40A            | 2.51E-136 | 0.99437737 | 0.472 | 0.227 | 8.88E-132 | CD4_CM_UCBMC |
| KAT6B              | 6.74E-136 | 1.23883063 | 0.379 | 0.157 | 2.39E-131 | CD4_CM_UCBMC |
| MED13L             | 7.29E-136 | 0.90395172 | 0.517 | 0.26  | 2.58E-131 | CD4_CM_UCBMC |
| VPS37B             | 1.45E-135 | 1.30138341 | 0.338 | 0.122 | 5.15E-131 | CD4_CM_UCBMC |
| PDZRN3             | 1.95E-135 | 1.50148846 | 0.328 | 0.118 | 6.91E-131 | CD4_CM_UCBMC |
| RASSF3             | 3.71E-135 | 0.99797811 | 0.418 | 0.183 | 1.31E-130 | CD4_CM_UCBMC |
| UBAP1              | 6.18E-135 | 1.58332929 | 0.296 | 0.097 | 2.19E-130 | CD4_CM_UCBMC |
| AKT3               | 3.24E-134 | 0.94409382 | 0.492 | 0.239 | 1.15E-129 | CD4_CM_UCBMC |
| ERO1B              | 6.30E-134 | 1.51404046 | 0.305 | 0.105 | 2.23E-129 | CD4_CM_UCBMC |
| TNRC6B             | 1.64E-133 | 0.67309187 | 0.698 | 0.425 | 5.82E-129 | CD4_CM_UCBMC |
| PITPNC1            | 2.16E-133 | 0.72983457 | 0.693 | 0.422 | 7.64E-129 | CD4_CM_UCBMC |
| ARID1B             | 2.33E-133 | 1.02118533 | 0.461 | 0.221 | 8.26E-129 | CD4_CM_UCBMC |
| NFKBIA             | 3.22E-133 | 1.05219171 | 0.383 | 0.157 | 1.14E-128 | CD4_CM_UCBMC |
| NKIRAS1            | 9.19E-133 | 1.86078302 | 0.254 | 0.068 | 3.26E-128 | CD4_CM_UCBMC |
| SLC22A18           | 1.24E-132 | 1.19668856 | 0.383 | 0.162 | 4.40E-128 | CD4_CM_UCBMC |
| DOCK10             | 2.82E-132 | 0.8606174  | 0.553 | 0.298 | 9.98E-128 | CD4_CM_UCBMC |
| SENP2              | 4.57E-132 | 1.90949487 | 0.256 | 0.072 | 1.62E-127 | CD4_CM_UCBMC |
| ZNF644             | 9.31E-132 | 1.02595214 | 0.433 | 0.198 | 3.30E-127 | CD4_CM_UCBMC |

|                   |           |            |       |       |           |              |
|-------------------|-----------|------------|-------|-------|-----------|--------------|
| INO80D            | 9.90E-132 | 1.84519868 | 0.256 | 0.072 | 3.51E-127 | CD4_CM_UCBMC |
| BNIP3L            | 1.09E-131 | 1.14760715 | 0.383 | 0.159 | 3.88E-127 | CD4_CM_UCBMC |
| RPS6KA5           | 1.79E-131 | 1.68486707 | 0.297 | 0.101 | 6.35E-127 | CD4_CM_UCBMC |
| TRA2B             | 2.50E-131 | 0.59146745 | 0.821 | 0.562 | 8.87E-127 | CD4_CM_UCBMC |
| TNIK              | 4.36E-131 | 0.76642981 | 0.611 | 0.343 | 1.54E-126 | CD4_CM_UCBMC |
| QKI               | 6.54E-131 | 1.54908859 | 0.289 | 0.095 | 2.32E-126 | CD4_CM_UCBMC |
| ZFAND3            | 1.27E-130 | 1.16163189 | 0.398 | 0.174 | 4.49E-126 | CD4_CM_UCBMC |
| RABGAP1L          | 2.68E-130 | 0.81957986 | 0.596 | 0.34  | 9.49E-126 | CD4_CM_UCBMC |
| RAB8B             | 6.82E-130 | 0.85851447 | 0.543 | 0.29  | 2.42E-125 | CD4_CM_UCBMC |
| ATP6              | 1.19E-129 | 0.41042532 | 0.941 | 0.771 | 4.23E-125 | CD4_CM_UCBMC |
| CNOT2             | 3.15E-129 | 1.06048411 | 0.408 | 0.18  | 1.12E-124 | CD4_CM_UCBMC |
| TNFAIP3           | 7.08E-129 | 0.78375596 | 0.572 | 0.308 | 2.51E-124 | CD4_CM_UCBMC |
| AKAP13            | 4.75E-128 | 0.7488112  | 0.641 | 0.375 | 1.68E-123 | CD4_CM_UCBMC |
| PTPN1             | 9.38E-128 | 1.40329559 | 0.317 | 0.116 | 3.32E-123 | CD4_CM_UCBMC |
| RAB5A             | 2.63E-127 | 1.06909158 | 0.392 | 0.165 | 9.30E-123 | CD4_CM_UCBMC |
| ATP8A1            | 3.29E-127 | 0.95952774 | 0.432 | 0.195 | 1.17E-122 | CD4_CM_UCBMC |
| ACTR2             | 1.03E-126 | 0.73955743 | 0.63  | 0.363 | 3.65E-122 | CD4_CM_UCBMC |
| MRTFA             | 2.70E-126 | 1.54368444 | 0.297 | 0.105 | 9.56E-122 | CD4_CM_UCBMC |
| RSF1              | 4.59E-126 | 1.0394507  | 0.397 | 0.172 | 1.63E-121 | CD4_CM_UCBMC |
| CD69              | 6.70E-126 | 0.5211213  | 0.868 | 0.632 | 2.37E-121 | CD4_CM_UCBMC |
| PIK3R5            | 7.59E-126 | 1.61382715 | 0.279 | 0.09  | 2.69E-121 | CD4_CM_UCBMC |
| PPP3CC            | 2.47E-125 | 1.25373663 | 0.357 | 0.147 | 8.76E-121 | CD4_CM_UCBMC |
| SLC38A1           | 4.45E-125 | 0.94507641 | 0.461 | 0.225 | 1.58E-120 | CD4_CM_UCBMC |
| PLCL1             | 7.12E-125 | 1.21934205 | 0.389 | 0.173 | 2.52E-120 | CD4_CM_UCBMC |
| SENP5             | 7.41E-125 | 1.76315122 | 0.266 | 0.084 | 2.63E-120 | CD4_CM_UCBMC |
| MXI1              | 1.57E-124 | 1.39737188 | 0.29  | 0.097 | 5.56E-120 | CD4_CM_UCBMC |
| ENSMUG00000059977 | 8.08E-124 | 1.36245312 | 0.303 | 0.106 | 2.86E-119 | CD4_CM_UCBMC |
| TMEM131           | 1.03E-123 | 1.47583636 | 0.286 | 0.097 | 3.66E-119 | CD4_CM_UCBMC |
| UBE2H             | 1.94E-123 | 1.24474263 | 0.36  | 0.154 | 6.88E-119 | CD4_CM_UCBMC |
| EIF3A             | 2.63E-123 | 0.95128117 | 0.424 | 0.195 | 9.30E-119 | CD4_CM_UCBMC |
| HERC1             | 2.89E-123 | 1.31098226 | 0.322 | 0.122 | 1.03E-118 | CD4_CM_UCBMC |
| SCAPER            | 8.08E-123 | 1.30457413 | 0.347 | 0.141 | 2.86E-118 | CD4_CM_UCBMC |
| AFF1              | 9.30E-123 | 1.31298649 | 0.34  | 0.137 | 3.29E-118 | CD4_CM_UCBMC |

|                    |           |            |       |       |           |              |
|--------------------|-----------|------------|-------|-------|-----------|--------------|
| RBM5               | 4.50E-122 | 1.11862658 | 0.368 | 0.156 | 1.59E-117 | CD4_CM_UCBMC |
| SRSF5              | 4.51E-122 | 0.58342196 | 0.799 | 0.545 | 1.60E-117 | CD4_CM_UCBMC |
| TOX                | 1.28E-121 | 0.90513933 | 0.501 | 0.264 | 4.53E-117 | CD4_CM_UCBMC |
| JMY                | 1.29E-121 | 1.20885871 | 0.343 | 0.138 | 4.57E-117 | CD4_CM_UCBMC |
| FAF1               | 2.48E-121 | 1.38968906 | 0.323 | 0.128 | 8.80E-117 | CD4_CM_UCBMC |
| FNBP1              | 5.67E-121 | 0.70765133 | 0.618 | 0.351 | 2.01E-116 | CD4_CM_UCBMC |
| SUCLG2             | 6.43E-121 | 0.95184685 | 0.462 | 0.233 | 2.28E-116 | CD4_CM_UCBMC |
| ARHGEF3            | 8.13E-121 | 1.24492875 | 0.351 | 0.144 | 2.88E-116 | CD4_CM_UCBMC |
| SNX29              | 1.03E-120 | 1.30910472 | 0.314 | 0.118 | 3.65E-116 | CD4_CM_UCBMC |
| SCAF8              | 1.51E-120 | 1.16484176 | 0.352 | 0.147 | 5.35E-116 | CD4_CM_UCBMC |
| CCDC91             | 1.99E-120 | 0.96324416 | 0.434 | 0.21  | 7.04E-116 | CD4_CM_UCBMC |
| FOXJ3              | 4.66E-120 | 1.57482084 | 0.284 | 0.101 | 1.65E-115 | CD4_CM_UCBMC |
| RBM33              | 1.24E-119 | 1.29459842 | 0.336 | 0.138 | 4.39E-115 | CD4_CM_UCBMC |
| TAX1BP1            | 2.09E-119 | 0.8645746  | 0.47  | 0.235 | 7.39E-115 | CD4_CM_UCBMC |
| LONP2              | 1.69E-118 | 1.43281482 | 0.292 | 0.105 | 6.00E-114 | CD4_CM_UCBMC |
| CNOT4              | 3.48E-118 | 1.17313726 | 0.36  | 0.155 | 1.23E-113 | CD4_CM_UCBMC |
| EML4               | 5.22E-118 | 0.6945995  | 0.606 | 0.353 | 1.85E-113 | CD4_CM_UCBMC |
| BTAF1              | 3.18E-117 | 1.37698694 | 0.289 | 0.104 | 1.13E-112 | CD4_CM_UCBMC |
| OGT                | 6.19E-116 | 1.03995925 | 0.384 | 0.175 | 2.19E-111 | CD4_CM_UCBMC |
| NUP98              | 7.22E-116 | 1.3010494  | 0.319 | 0.126 | 2.56E-111 | CD4_CM_UCBMC |
| RIPOR2             | 1.43E-115 | 0.50277566 | 0.851 | 0.612 | 5.07E-111 | CD4_CM_UCBMC |
| ARHGEF7            | 2.52E-115 | 0.95269257 | 0.425 | 0.205 | 8.93E-111 | CD4_CM_UCBMC |
| BBX                | 5.48E-115 | 1.22878379 | 0.324 | 0.128 | 1.94E-110 | CD4_CM_UCBMC |
| ENSMMUG00000060229 | 5.77E-115 | 0.99255228 | 0.394 | 0.183 | 2.04E-110 | CD4_CM_UCBMC |
| SLMAP              | 1.16E-114 | 1.32624263 | 0.31  | 0.122 | 4.11E-110 | CD4_CM_UCBMC |
| HSD17B4            | 1.79E-114 | 0.81476051 | 0.552 | 0.315 | 6.32E-110 | CD4_CM_UCBMC |
| SEC31A             | 2.96E-114 | 1.01122615 | 0.386 | 0.177 | 1.05E-109 | CD4_CM_UCBMC |
| ABI1               | 5.76E-114 | 0.97356165 | 0.415 | 0.197 | 2.04E-109 | CD4_CM_UCBMC |
| ENSMMUG00000008587 | 8.72E-114 | 0.87639382 | 0.459 | 0.232 | 3.09E-109 | CD4_CM_UCBMC |
| APBB1IP            | 1.26E-113 | 0.59864615 | 0.742 | 0.479 | 4.47E-109 | CD4_CM_UCBMC |
| LSM14A             | 1.86E-113 | 0.90886521 | 0.437 | 0.217 | 6.60E-109 | CD4_CM_UCBMC |
| RLF                | 1.98E-113 | 1.30534894 | 0.3   | 0.114 | 7.03E-109 | CD4_CM_UCBMC |
| NRIP1              | 7.25E-112 | 0.94134133 | 0.386 | 0.173 | 2.57E-107 | CD4_CM_UCBMC |

|         |           |            |       |       |           |              |
|---------|-----------|------------|-------|-------|-----------|--------------|
| ATP5PB  | 1.13E-111 | 1.06697255 | 0.391 | 0.186 | 3.99E-107 | CD4_CM_UCBMC |
| MLLT3   | 1.25E-111 | 0.92568696 | 0.436 | 0.217 | 4.42E-107 | CD4_CM_UCBMC |
| SSBP2   | 2.14E-111 | 0.75563848 | 0.591 | 0.351 | 7.57E-107 | CD4_CM_UCBMC |
| CUL5    | 1.05E-110 | 0.91920166 | 0.44  | 0.223 | 3.73E-106 | CD4_CM_UCBMC |
| CAMK1D  | 1.99E-110 | 1.07677855 | 0.369 | 0.169 | 7.05E-106 | CD4_CM_UCBMC |
| TGFB1   | 2.17E-110 | 1.20123801 | 0.304 | 0.116 | 7.70E-106 | CD4_CM_UCBMC |
| EXOC4   | 2.15E-109 | 1.02093371 | 0.387 | 0.18  | 7.60E-105 | CD4_CM_UCBMC |
| CTNNB1  | 3.65E-109 | 1.02467173 | 0.372 | 0.172 | 1.29E-104 | CD4_CM_UCBMC |
| AAK1    | 4.15E-109 | 1.0214552  | 0.376 | 0.175 | 1.47E-104 | CD4_CM_UCBMC |
| FAM172A | 7.57E-109 | 0.94268013 | 0.445 | 0.23  | 2.68E-104 | CD4_CM_UCBMC |
| MAML3   | 1.39E-108 | 1.02588559 | 0.375 | 0.174 | 4.92E-104 | CD4_CM_UCBMC |
| UBE2G1  | 4.11E-108 | 1.39152135 | 0.295 | 0.117 | 1.46E-103 | CD4_CM_UCBMC |
| NIPBL   | 4.30E-108 | 0.94892528 | 0.406 | 0.196 | 1.52E-103 | CD4_CM_UCBMC |
| GIT2    | 4.48E-108 | 1.27145026 | 0.307 | 0.123 | 1.59E-103 | CD4_CM_UCBMC |
| EXOC6   | 6.36E-108 | 1.05300707 | 0.381 | 0.179 | 2.25E-103 | CD4_CM_UCBMC |
| ARMC8   | 1.03E-107 | 1.49479015 | 0.259 | 0.089 | 3.64E-103 | CD4_CM_UCBMC |
| DNAJC2  | 1.07E-107 | 1.07891758 | 0.358 | 0.16  | 3.78E-103 | CD4_CM_UCBMC |
| AP3B1   | 3.05E-107 | 1.08445099 | 0.337 | 0.144 | 1.08E-102 | CD4_CM_UCBMC |
| UTY     | 3.33E-107 | 1.24568365 | 0.296 | 0.113 | 1.18E-102 | CD4_CM_UCBMC |
| CHD6    | 5.91E-107 | 1.0375805  | 0.326 | 0.133 | 2.09E-102 | CD4_CM_UCBMC |
| TUBB2B  | 6.72E-107 | 1.29270094 | 0.304 | 0.12  | 2.38E-102 | CD4_CM_UCBMC |
| WAC     | 1.23E-106 | 0.9518676  | 0.391 | 0.188 | 4.37E-102 | CD4_CM_UCBMC |
| HBS1L   | 1.64E-106 | 1.02190977 | 0.378 | 0.18  | 5.82E-102 | CD4_CM_UCBMC |
| YTHDF3  | 2.67E-106 | 1.48416413 | 0.264 | 0.094 | 9.47E-102 | CD4_CM_UCBMC |
| ATP9B   | 4.16E-106 | 1.45340851 | 0.268 | 0.096 | 1.47E-101 | CD4_CM_UCBMC |
| ZFAND6  | 1.72E-105 | 0.86110539 | 0.464 | 0.247 | 6.10E-101 | CD4_CM_UCBMC |
| REL     | 2.03E-105 | 1.11110935 | 0.338 | 0.148 | 7.19E-101 | CD4_CM_UCBMC |
| HELZ    | 2.14E-105 | 1.06487063 | 0.343 | 0.152 | 7.57E-101 | CD4_CM_UCBMC |
| RELL1   | 4.71E-105 | 1.08764362 | 0.348 | 0.153 | 1.67E-100 | CD4_CM_UCBMC |
| MBNL2   | 7.77E-105 | 1.35429892 | 0.287 | 0.112 | 2.75E-100 | CD4_CM_UCBMC |
| TRIM72  | 9.09E-105 | 0.7707395  | 0.497 | 0.274 | 3.22E-100 | CD4_CM_UCBMC |
| CLINT1  | 9.51E-105 | 1.06831386 | 0.36  | 0.166 | 3.37E-100 | CD4_CM_UCBMC |
| CNOT1   | 1.05E-103 | 1.07874542 | 0.323 | 0.137 | 3.73E-99  | CD4_CM_UCBMC |

|                   |           |            |       |       |          |              |
|-------------------|-----------|------------|-------|-------|----------|--------------|
| USP47             | 2.23E-103 | 1.0314342  | 0.362 | 0.167 | 7.91E-99 | CD4_CM_UCBMC |
| GPATCH8           | 5.04E-103 | 1.10743525 | 0.334 | 0.149 | 1.78E-98 | CD4_CM_UCBMC |
| ITSN2             | 5.34E-103 | 1.07851859 | 0.355 | 0.163 | 1.89E-98 | CD4_CM_UCBMC |
| ZBTB20            | 2.02E-102 | 0.80181583 | 0.464 | 0.247 | 7.15E-98 | CD4_CM_UCBMC |
| CCNK              | 2.47E-101 | 1.23058682 | 0.307 | 0.129 | 8.75E-97 | CD4_CM_UCBMC |
| PTPRA             | 2.92E-101 | 1.2131526  | 0.292 | 0.12  | 1.04E-96 | CD4_CM_UCBMC |
| TNKS              | 3.68E-101 | 1.46939055 | 0.252 | 0.089 | 1.30E-96 | CD4_CM_UCBMC |
| BCLAF1            | 7.68E-101 | 0.66616291 | 0.571 | 0.336 | 2.72E-96 | CD4_CM_UCBMC |
| JAML              | 1.18E-100 | 1.35948515 | 0.272 | 0.104 | 4.19E-96 | CD4_CM_UCBMC |
| NFKB1             | 1.88E-100 | 1.12518156 | 0.313 | 0.132 | 6.66E-96 | CD4_CM_UCBMC |
| BTBD11            | 2.20E-100 | 1.03425646 | 0.329 | 0.143 | 7.79E-96 | CD4_CM_UCBMC |
| PICALM            | 8.88E-100 | 0.86098405 | 0.382 | 0.185 | 3.14E-95 | CD4_CM_UCBMC |
| CHD7              | 1.33E-99  | 1.23489817 | 0.297 | 0.123 | 4.71E-95 | CD4_CM_UCBMC |
| SCFD1             | 1.56E-99  | 1.20890798 | 0.284 | 0.111 | 5.53E-95 | CD4_CM_UCBMC |
| CHMP7             | 2.53E-99  | 0.72302415 | 0.447 | 0.23  | 8.95E-95 | CD4_CM_UCBMC |
| GOLPH3            | 2.88E-99  | 1.44556562 | 0.27  | 0.105 | 1.02E-94 | CD4_CM_UCBMC |
| PPP3CA            | 7.41E-99  | 0.89604624 | 0.413 | 0.212 | 2.63E-94 | CD4_CM_UCBMC |
| PRKX              | 1.90E-98  | 1.12092054 | 0.32  | 0.14  | 6.72E-94 | CD4_CM_UCBMC |
| ENSMUG00000055687 | 2.25E-98  | 1.13904197 | 0.306 | 0.129 | 7.99E-94 | CD4_CM_UCBMC |
| VTI1A             | 6.45E-98  | 1.05243101 | 0.346 | 0.16  | 2.28E-93 | CD4_CM_UCBMC |
| CD83              | 7.27E-98  | 1.11167107 | 0.276 | 0.105 | 2.57E-93 | CD4_CM_UCBMC |
| SH3KBP1           | 9.05E-98  | 0.58014919 | 0.655 | 0.402 | 3.21E-93 | CD4_CM_UCBMC |
| YME1L1            | 1.03E-97  | 1.01947051 | 0.316 | 0.136 | 3.65E-93 | CD4_CM_UCBMC |
| ATP10A            | 9.90E-97  | 0.88735973 | 0.389 | 0.191 | 3.51E-92 | CD4_CM_UCBMC |
| USP34             | 1.36E-96  | 0.76168948 | 0.458 | 0.246 | 4.82E-92 | CD4_CM_UCBMC |
| ESCO1             | 4.28E-96  | 1.19150504 | 0.302 | 0.13  | 1.51E-91 | CD4_CM_UCBMC |
| RAB7A             | 6.59E-96  | 0.89135682 | 0.396 | 0.199 | 2.34E-91 | CD4_CM_UCBMC |
| TMEM87A           | 8.96E-96  | 0.94210021 | 0.332 | 0.147 | 3.18E-91 | CD4_CM_UCBMC |
| ENSMUG00000028906 | 1.03E-94  | 0.88414659 | 0.411 | 0.212 | 3.65E-90 | CD4_CM_UCBMC |
| DIS3L2            | 1.10E-94  | 1.20798352 | 0.286 | 0.118 | 3.88E-90 | CD4_CM_UCBMC |
| PPP1R2            | 3.43E-94  | 0.89323847 | 0.392 | 0.198 | 1.22E-89 | CD4_CM_UCBMC |
| PUM2              | 5.73E-94  | 0.86267595 | 0.378 | 0.186 | 2.03E-89 | CD4_CM_UCBMC |
| SKAP1             | 9.44E-94  | 0.4988881  | 0.79  | 0.542 | 3.34E-89 | CD4_CM_UCBMC |



|                    |          |            |       |       |          |              |
|--------------------|----------|------------|-------|-------|----------|--------------|
| KLHL23             | 9.66E-94 | 0.54803961 | 0.698 | 0.456 | 3.42E-89 | CD4_CM_UCBMC |
| EXOC6B             | 1.75E-93 | 1.41394267 | 0.253 | 0.095 | 6.19E-89 | CD4_CM_UCBMC |
| CDC73              | 2.95E-93 | 1.34575636 | 0.26  | 0.102 | 1.05E-88 | CD4_CM_UCBMC |
| MRPS35             | 5.56E-93 | 1.09705262 | 0.304 | 0.13  | 1.97E-88 | CD4_CM_UCBMC |
| COP1               | 5.89E-93 | 1.28731598 | 0.278 | 0.115 | 2.09E-88 | CD4_CM_UCBMC |
| GPHN               | 1.14E-92 | 1.06898849 | 0.338 | 0.16  | 4.05E-88 | CD4_CM_UCBMC |
| JUND               | 1.29E-92 | 0.56788447 | 0.608 | 0.378 | 4.57E-88 | CD4_CM_UCBMC |
| PSPC1              | 1.34E-92 | 1.22858774 | 0.275 | 0.113 | 4.74E-88 | CD4_CM_UCBMC |
| ATP11B             | 1.60E-92 | 1.26678624 | 0.257 | 0.1   | 5.67E-88 | CD4_CM_UCBMC |
| WDFY2              | 1.79E-92 | 1.13980306 | 0.292 | 0.124 | 6.36E-88 | CD4_CM_UCBMC |
| ZFR                | 2.29E-92 | 1.24688465 | 0.274 | 0.111 | 8.12E-88 | CD4_CM_UCBMC |
| TCERG1             | 5.01E-92 | 1.31577856 | 0.251 | 0.095 | 1.78E-87 | CD4_CM_UCBMC |
| ENSMMUG00000008346 | 7.15E-92 | 1.1098374  | 0.288 | 0.121 | 2.53E-87 | CD4_CM_UCBMC |
| KIAA1143           | 1.31E-91 | 1.17335646 | 0.28  | 0.114 | 4.65E-87 | CD4_CM_UCBMC |
| KDM4C              | 2.99E-91 | 1.03141266 | 0.326 | 0.151 | 1.06E-86 | CD4_CM_UCBMC |
| DHX9               | 1.03E-90 | 0.88374273 | 0.36  | 0.173 | 3.65E-86 | CD4_CM_UCBMC |
| SMG6               | 1.28E-90 | 0.9790855  | 0.333 | 0.157 | 4.53E-86 | CD4_CM_UCBMC |
| ZRANB2             | 4.97E-90 | 0.94210428 | 0.351 | 0.172 | 1.76E-85 | CD4_CM_UCBMC |
| DNM3               | 9.43E-90 | 0.97615598 | 0.358 | 0.178 | 3.34E-85 | CD4_CM_UCBMC |
| SIPA1L1            | 1.06E-89 | 1.07373804 | 0.323 | 0.15  | 3.77E-85 | CD4_CM_UCBMC |
| HOOK3              | 3.94E-89 | 0.97813206 | 0.359 | 0.18  | 1.40E-84 | CD4_CM_UCBMC |
| SRPK2              | 9.01E-89 | 0.98491137 | 0.339 | 0.164 | 3.19E-84 | CD4_CM_UCBMC |
| YPEL5              | 1.46E-88 | 0.83798606 | 0.385 | 0.196 | 5.16E-84 | CD4_CM_UCBMC |
| GTPBP10            | 2.82E-88 | 1.24502549 | 0.266 | 0.109 | 1.00E-83 | CD4_CM_UCBMC |
| MAP4K4             | 2.93E-88 | 0.71833485 | 0.429 | 0.228 | 1.04E-83 | CD4_CM_UCBMC |
| WDR7               | 5.06E-88 | 1.25497664 | 0.27  | 0.113 | 1.79E-83 | CD4_CM_UCBMC |
| TTC17              | 6.14E-88 | 1.05629839 | 0.291 | 0.126 | 2.18E-83 | CD4_CM_UCBMC |
| RBM14              | 9.80E-88 | 0.70062022 | 0.488 | 0.277 | 3.47E-83 | CD4_CM_UCBMC |
| NCOA2              | 1.23E-87 | 1.19750702 | 0.265 | 0.109 | 4.34E-83 | CD4_CM_UCBMC |
| TAF3               | 8.10E-87 | 1.13153446 | 0.274 | 0.115 | 2.87E-82 | CD4_CM_UCBMC |
| LCOR               | 9.05E-87 | 1.1322751  | 0.275 | 0.116 | 3.21E-82 | CD4_CM_UCBMC |
| SPAG9              | 1.04E-86 | 1.26640212 | 0.261 | 0.108 | 3.68E-82 | CD4_CM_UCBMC |
| FNDC3A             | 1.28E-86 | 0.94025892 | 0.328 | 0.155 | 4.54E-82 | CD4_CM_UCBMC |

|                   |          |            |       |       |          |              |
|-------------------|----------|------------|-------|-------|----------|--------------|
| STAU1             | 3.07E-86 | 1.17398608 | 0.268 | 0.111 | 1.09E-81 | CD4_CM_UCBMC |
| ATG5              | 3.15E-86 | 0.96505367 | 0.296 | 0.128 | 1.12E-81 | CD4_CM_UCBMC |
| RUNX1             | 1.43E-85 | 0.82144387 | 0.406 | 0.219 | 5.06E-81 | CD4_CM_UCBMC |
| TOP1              | 1.48E-85 | 0.77349198 | 0.453 | 0.255 | 5.24E-81 | CD4_CM_UCBMC |
| SNX4              | 2.04E-85 | 1.1678097  | 0.252 | 0.1   | 7.24E-81 | CD4_CM_UCBMC |
| PCCA              | 2.07E-85 | 1.21144379 | 0.273 | 0.116 | 7.34E-81 | CD4_CM_UCBMC |
| FBXO11            | 2.87E-85 | 1.149857   | 0.283 | 0.124 | 1.02E-80 | CD4_CM_UCBMC |
| RAB18             | 3.29E-85 | 1.03901933 | 0.252 | 0.096 | 1.16E-80 | CD4_CM_UCBMC |
| PHC3              | 3.45E-85 | 1.04869548 | 0.294 | 0.13  | 1.22E-80 | CD4_CM_UCBMC |
| ENSMUG00000006778 | 4.30E-85 | 0.57361048 | 0.54  | 0.319 | 1.52E-80 | CD4_CM_UCBMC |
| RAD21             | 6.79E-85 | 0.82090258 | 0.361 | 0.18  | 2.41E-80 | CD4_CM_UCBMC |
| ARIH2             | 2.16E-84 | 1.16588114 | 0.254 | 0.102 | 7.65E-80 | CD4_CM_UCBMC |
| RNF145            | 2.98E-84 | 0.99076937 | 0.334 | 0.164 | 1.06E-79 | CD4_CM_UCBMC |
| RFC1              | 9.51E-84 | 0.88934737 | 0.324 | 0.153 | 3.37E-79 | CD4_CM_UCBMC |
| USP10             | 1.17E-83 | 0.84043935 | 0.361 | 0.183 | 4.14E-79 | CD4_CM_UCBMC |
| SEC24B            | 2.15E-83 | 1.19001876 | 0.251 | 0.101 | 7.61E-79 | CD4_CM_UCBMC |
| ASAP1             | 3.09E-83 | 1.1274609  | 0.301 | 0.142 | 1.09E-78 | CD4_CM_UCBMC |
| COPA              | 5.88E-83 | 1.15387194 | 0.259 | 0.108 | 2.08E-78 | CD4_CM_UCBMC |
| UBXN7             | 1.49E-82 | 0.93815891 | 0.293 | 0.126 | 5.28E-78 | CD4_CM_UCBMC |
| CSDE1             | 3.47E-82 | 0.62888509 | 0.475 | 0.271 | 1.23E-77 | CD4_CM_UCBMC |
| MACF1             | 7.82E-82 | 0.82878484 | 0.368 | 0.191 | 2.77E-77 | CD4_CM_UCBMC |
| RAB3GAP1          | 1.07E-81 | 0.8668082  | 0.308 | 0.14  | 3.78E-77 | CD4_CM_UCBMC |
| RIOK3             | 1.44E-81 | 0.96335756 | 0.297 | 0.134 | 5.10E-77 | CD4_CM_UCBMC |
| RNGTT             | 2.33E-81 | 1.15804333 | 0.258 | 0.107 | 8.26E-77 | CD4_CM_UCBMC |
| ILKAP             | 3.29E-81 | 1.23693114 | 0.266 | 0.117 | 1.16E-76 | CD4_CM_UCBMC |
| DNAJC3            | 5.06E-81 | 0.95120414 | 0.31  | 0.147 | 1.79E-76 | CD4_CM_UCBMC |
| ITPR2             | 6.70E-81 | 0.77534616 | 0.366 | 0.187 | 2.38E-76 | CD4_CM_UCBMC |
| RNF13             | 8.08E-81 | 0.9801266  | 0.294 | 0.135 | 2.86E-76 | CD4_CM_UCBMC |
| STK17B            | 2.16E-80 | 0.43080669 | 0.734 | 0.48  | 7.64E-76 | CD4_CM_UCBMC |
| UBR5              | 2.75E-80 | 1.00364793 | 0.287 | 0.131 | 9.75E-76 | CD4_CM_UCBMC |
| RPRD2             | 3.05E-80 | 1.12377729 | 0.268 | 0.117 | 1.08E-75 | CD4_CM_UCBMC |
| ZNF93             | 4.54E-80 | 0.83800611 | 0.283 | 0.121 | 1.61E-75 | CD4_CM_UCBMC |
| SS18              | 5.36E-80 | 0.98595922 | 0.288 | 0.129 | 1.90E-75 | CD4_CM_UCBMC |

|          |          |            |       |       |          |              |
|----------|----------|------------|-------|-------|----------|--------------|
| SERINC1  | 6.43E-80 | 0.7466563  | 0.366 | 0.185 | 2.28E-75 | CD4_CM_UCBMC |
| NT5C2    | 7.87E-80 | 0.8731305  | 0.331 | 0.162 | 2.79E-75 | CD4_CM_UCBMC |
| UXS1     | 9.45E-80 | 0.91442659 | 0.318 | 0.154 | 3.35E-75 | CD4_CM_UCBMC |
| SOS1     | 1.17E-79 | 0.97771526 | 0.304 | 0.143 | 4.13E-75 | CD4_CM_UCBMC |
| NBR1     | 1.52E-79 | 0.98187989 | 0.282 | 0.126 | 5.38E-75 | CD4_CM_UCBMC |
| TBC1D15  | 1.54E-79 | 1.07063524 | 0.264 | 0.111 | 5.45E-75 | CD4_CM_UCBMC |
| SRSF4    | 1.56E-79 | 0.94466509 | 0.31  | 0.152 | 5.52E-75 | CD4_CM_UCBMC |
| TMEM131L | 2.20E-79 | 0.92255128 | 0.346 | 0.179 | 7.80E-75 | CD4_CM_UCBMC |
| CLASP2   | 2.57E-79 | 0.97089423 | 0.3   | 0.14  | 9.10E-75 | CD4_CM_UCBMC |
| SCML4    | 3.07E-79 | 0.59302091 | 0.553 | 0.341 | 1.09E-74 | CD4_CM_UCBMC |
| ROCK1    | 6.31E-79 | 0.69199168 | 0.415 | 0.231 | 2.24E-74 | CD4_CM_UCBMC |
| WDR13    | 7.30E-79 | 0.49859268 | 0.635 | 0.412 | 2.59E-74 | CD4_CM_UCBMC |
| PAG1     | 1.41E-78 | 0.64080065 | 0.445 | 0.25  | 5.00E-74 | CD4_CM_UCBMC |
| DNTTIP2  | 2.69E-78 | 0.92670765 | 0.278 | 0.122 | 9.53E-74 | CD4_CM_UCBMC |
| PCM1     | 5.03E-78 | 1.05377724 | 0.274 | 0.122 | 1.78E-73 | CD4_CM_UCBMC |
| KCNQ5    | 5.15E-78 | 0.95122857 | 0.35  | 0.182 | 1.82E-73 | CD4_CM_UCBMC |
| ACIN1    | 6.13E-78 | 0.77602807 | 0.364 | 0.191 | 2.17E-73 | CD4_CM_UCBMC |
| MAX      | 6.31E-78 | 0.83264976 | 0.34  | 0.17  | 2.24E-73 | CD4_CM_UCBMC |
| CAMTA1   | 6.85E-78 | 0.87808534 | 0.318 | 0.151 | 2.43E-73 | CD4_CM_UCBMC |
| SORL1    | 7.63E-78 | 0.90945459 | 0.311 | 0.152 | 2.70E-73 | CD4_CM_UCBMC |
| TANC1    | 1.56E-77 | 0.90768177 | 0.298 | 0.139 | 5.53E-73 | CD4_CM_UCBMC |
| UVRAG    | 3.66E-77 | 1.2873438  | 0.259 | 0.116 | 1.30E-72 | CD4_CM_UCBMC |
| IMMP2L   | 4.03E-77 | 0.86740948 | 0.375 | 0.203 | 1.43E-72 | CD4_CM_UCBMC |
| DOCK8    | 5.53E-77 | 0.6593294  | 0.453 | 0.261 | 1.96E-72 | CD4_CM_UCBMC |
| BCAS3    | 1.27E-76 | 1.08668462 | 0.291 | 0.137 | 4.52E-72 | CD4_CM_UCBMC |
| ELOVL5   | 1.41E-76 | 1.02003429 | 0.281 | 0.129 | 4.99E-72 | CD4_CM_UCBMC |
| DYRK2    | 1.72E-76 | 0.8891784  | 0.286 | 0.13  | 6.09E-72 | CD4_CM_UCBMC |
| USP9X    | 3.27E-76 | 0.97898869 | 0.285 | 0.133 | 1.16E-71 | CD4_CM_UCBMC |
| MPHOSPH8 | 1.17E-75 | 0.73368077 | 0.367 | 0.191 | 4.14E-71 | CD4_CM_UCBMC |
| CAND1    | 1.57E-75 | 1.03717869 | 0.265 | 0.119 | 5.56E-71 | CD4_CM_UCBMC |
| INPP4B   | 1.85E-75 | 0.85720137 | 0.357 | 0.187 | 6.55E-71 | CD4_CM_UCBMC |
| TGS1     | 1.87E-75 | 1.13421135 | 0.252 | 0.109 | 6.63E-71 | CD4_CM_UCBMC |
| FBXW7    | 4.42E-75 | 1.01811281 | 0.281 | 0.131 | 1.57E-70 | CD4_CM_UCBMC |

|                    |          |            |       |       |          |              |
|--------------------|----------|------------|-------|-------|----------|--------------|
| ZNF609             | 6.01E-75 | 0.99157074 | 0.301 | 0.148 | 2.13E-70 | CD4_CM_UCBMC |
| NONO               | 2.46E-74 | 0.80984701 | 0.344 | 0.179 | 8.71E-70 | CD4_CM_UCBMC |
| NSMCE2             | 2.61E-74 | 1.00884316 | 0.281 | 0.131 | 9.26E-70 | CD4_CM_UCBMC |
| TBL1XR1            | 3.86E-74 | 0.66132031 | 0.418 | 0.237 | 1.37E-69 | CD4_CM_UCBMC |
| CRTC3              | 4.18E-74 | 0.74236223 | 0.341 | 0.174 | 1.48E-69 | CD4_CM_UCBMC |
| CFLAR              | 6.85E-74 | 0.79858659 | 0.316 | 0.154 | 2.43E-69 | CD4_CM_UCBMC |
| GTF2B              | 7.69E-74 | 0.59402272 | 0.483 | 0.288 | 2.72E-69 | CD4_CM_UCBMC |
| RPL10A             | 7.84E-74 | 0.16580908 | 0.996 | 0.991 | 2.78E-69 | CD4_CM_UCBMC |
| USP16              | 9.97E-74 | 1.04936826 | 0.259 | 0.116 | 3.53E-69 | CD4_CM_UCBMC |
| MTPN               | 1.62E-73 | 0.91537385 | 0.304 | 0.151 | 5.76E-69 | CD4_CM_UCBMC |
| TAF15              | 1.77E-73 | 0.73525997 | 0.364 | 0.193 | 6.27E-69 | CD4_CM_UCBMC |
| PI4K2B             | 2.22E-73 | 0.45951896 | 0.681 | 0.467 | 7.87E-69 | CD4_CM_UCBMC |
| ANKRD11            | 3.20E-73 | 0.71462977 | 0.342 | 0.177 | 1.13E-68 | CD4_CM_UCBMC |
| ARL15              | 4.12E-73 | 1.010954   | 0.294 | 0.143 | 1.46E-68 | CD4_CM_UCBMC |
| EIF4G2             | 1.15E-72 | 0.53309247 | 0.512 | 0.313 | 4.06E-68 | CD4_CM_UCBMC |
| ANKRD17            | 1.79E-72 | 0.94499636 | 0.302 | 0.151 | 6.35E-68 | CD4_CM_UCBMC |
| GGNBP2             | 2.11E-72 | 1.02554492 | 0.268 | 0.123 | 7.47E-68 | CD4_CM_UCBMC |
| EP300              | 4.14E-72 | 0.9308474  | 0.265 | 0.122 | 1.47E-67 | CD4_CM_UCBMC |
| LEF1               | 1.81E-71 | 0.48898153 | 0.683 | 0.467 | 6.41E-67 | CD4_CM_UCBMC |
| PPHLN1             | 2.84E-71 | 0.80343743 | 0.353 | 0.189 | 1.01E-66 | CD4_CM_UCBMC |
| ATF7IP             | 3.32E-71 | 0.57242898 | 0.45  | 0.261 | 1.18E-66 | CD4_CM_UCBMC |
| YTHDC1             | 3.34E-71 | 0.85028462 | 0.306 | 0.153 | 1.19E-66 | CD4_CM_UCBMC |
| RBM27              | 5.48E-71 | 0.81532949 | 0.304 | 0.152 | 1.94E-66 | CD4_CM_UCBMC |
| IQGAP2             | 6.26E-71 | 1.01463193 | 0.259 | 0.117 | 2.22E-66 | CD4_CM_UCBMC |
| ENSMMUG00000015583 | 2.12E-70 | 0.39163644 | 0.755 | 0.528 | 7.50E-66 | CD4_CM_UCBMC |
| ZZZ3               | 2.83E-70 | 1.00287852 | 0.257 | 0.116 | 1.00E-65 | CD4_CM_UCBMC |
| PPIG               | 3.37E-70 | 0.72824326 | 0.371 | 0.202 | 1.19E-65 | CD4_CM_UCBMC |
| PRRC2B             | 4.18E-70 | 1.0425216  | 0.257 | 0.119 | 1.48E-65 | CD4_CM_UCBMC |
| ENSMMUG00000014947 | 1.03E-69 | 0.56123228 | 0.431 | 0.245 | 3.64E-65 | CD4_CM_UCBMC |
| ZNF451             | 1.16E-69 | 0.89679724 | 0.277 | 0.129 | 4.13E-65 | CD4_CM_UCBMC |
| PRKCQ              | 2.14E-69 | 0.78739319 | 0.349 | 0.189 | 7.59E-65 | CD4_CM_UCBMC |
| MORF4L1            | 3.47E-69 | 0.49763323 | 0.58  | 0.376 | 1.23E-64 | CD4_CM_UCBMC |
| SEC63              | 3.47E-69 | 0.85326168 | 0.312 | 0.16  | 1.23E-64 | CD4_CM_UCBMC |

|                   |          |            |       |       |          |              |
|-------------------|----------|------------|-------|-------|----------|--------------|
| TUT7              | 4.41E-69 | 0.83003402 | 0.263 | 0.12  | 1.56E-64 | CD4_CM_UCBMC |
| MAPRE2            | 5.23E-69 | 0.87525751 | 0.301 | 0.152 | 1.85E-64 | CD4_CM_UCBMC |
| SDHAF4            | 7.16E-69 | 0.83402918 | 0.324 | 0.172 | 2.54E-64 | CD4_CM_UCBMC |
| RCAN3             | 1.28E-68 | 0.93894781 | 0.296 | 0.15  | 4.55E-64 | CD4_CM_UCBMC |
| MSN               | 1.51E-68 | 0.48062926 | 0.562 | 0.358 | 5.35E-64 | CD4_CM_UCBMC |
| UBAC2             | 1.61E-68 | 0.54913557 | 0.528 | 0.332 | 5.72E-64 | CD4_CM_UCBMC |
| PCMTD1            | 3.46E-68 | 0.84419471 | 0.294 | 0.145 | 1.22E-63 | CD4_CM_UCBMC |
| CWC15             | 6.74E-68 | 0.49245566 | 0.495 | 0.296 | 2.39E-63 | CD4_CM_UCBMC |
| WDR70             | 6.77E-68 | 0.8030166  | 0.335 | 0.178 | 2.40E-63 | CD4_CM_UCBMC |
| TMEM123           | 1.30E-67 | 0.40397356 | 0.687 | 0.471 | 4.61E-63 | CD4_CM_UCBMC |
| SREK1             | 1.43E-67 | 0.60122632 | 0.419 | 0.24  | 5.05E-63 | CD4_CM_UCBMC |
| GATAD2B           | 1.64E-67 | 0.95358272 | 0.267 | 0.128 | 5.82E-63 | CD4_CM_UCBMC |
| DOCK2             | 2.00E-67 | 0.63364065 | 0.435 | 0.257 | 7.08E-63 | CD4_CM_UCBMC |
| CEP85L            | 2.24E-67 | 0.90736318 | 0.285 | 0.141 | 7.94E-63 | CD4_CM_UCBMC |
| PHF3              | 2.84E-67 | 0.74177097 | 0.313 | 0.157 | 1.00E-62 | CD4_CM_UCBMC |
| SP100             | 5.29E-67 | 0.62971278 | 0.379 | 0.212 | 1.87E-62 | CD4_CM_UCBMC |
| MKLN1             | 7.10E-67 | 0.77588521 | 0.319 | 0.168 | 2.52E-62 | CD4_CM_UCBMC |
| ENSMUG00000056012 | 9.61E-67 | 0.47446939 | 0.554 | 0.352 | 3.40E-62 | CD4_CM_UCBMC |
| DIAPH2            | 1.46E-66 | 0.90037693 | 0.296 | 0.151 | 5.19E-62 | CD4_CM_UCBMC |
| NUFIP2            | 3.58E-66 | 0.83849554 | 0.281 | 0.137 | 1.27E-61 | CD4_CM_UCBMC |
| NFATC3            | 3.71E-66 | 0.87933398 | 0.295 | 0.151 | 1.32E-61 | CD4_CM_UCBMC |
| TBC1D1            | 9.90E-66 | 0.96529442 | 0.254 | 0.12  | 3.51E-61 | CD4_CM_UCBMC |
| S1PR1             | 1.71E-65 | 0.72024174 | 0.255 | 0.113 | 6.06E-61 | CD4_CM_UCBMC |
| ATXN7             | 1.85E-65 | 0.73929366 | 0.298 | 0.15  | 6.56E-61 | CD4_CM_UCBMC |
| CSGALNACT2        | 1.91E-65 | 0.75611605 | 0.292 | 0.145 | 6.78E-61 | CD4_CM_UCBMC |
| SCAF11            | 3.80E-65 | 0.55141954 | 0.434 | 0.256 | 1.35E-60 | CD4_CM_UCBMC |
| CDK17             | 4.23E-65 | 0.82521307 | 0.294 | 0.149 | 1.50E-60 | CD4_CM_UCBMC |
| ILF3              | 7.28E-65 | 0.91183611 | 0.276 | 0.138 | 2.58E-60 | CD4_CM_UCBMC |
| FAM118A           | 8.69E-65 | 0.89976444 | 0.278 | 0.136 | 3.08E-60 | CD4_CM_UCBMC |
| AGTPBP1           | 9.15E-65 | 0.9551834  | 0.273 | 0.137 | 3.24E-60 | CD4_CM_UCBMC |
| ENSMUG00000054358 | 1.75E-64 | 0.13787307 | 0.838 | 0.577 | 6.21E-60 | CD4_CM_UCBMC |
| RPL31             | 2.26E-64 | 0.39026872 | 0.759 | 0.53  | 8.01E-60 | CD4_CM_UCBMC |
| AFF3              | 2.35E-64 | 0.54572157 | 0.488 | 0.303 | 8.34E-60 | CD4_CM_UCBMC |

|                   |          |            |       |       |          |              |
|-------------------|----------|------------|-------|-------|----------|--------------|
| PPP2R2A           | 2.81E-64 | 0.83621947 | 0.279 | 0.139 | 9.96E-60 | CD4_CM_UCBMC |
| ATP5PO            | 2.84E-64 | 0.38086152 | 0.733 | 0.52  | 1.01E-59 | CD4_CM_UCBMC |
| WDR43             | 4.28E-64 | 0.71129513 | 0.298 | 0.15  | 1.52E-59 | CD4_CM_UCBMC |
| PHIP              | 7.11E-64 | 0.79352714 | 0.27  | 0.129 | 2.52E-59 | CD4_CM_UCBMC |
| MCUB              | 1.78E-63 | 0.76686389 | 0.361 | 0.204 | 6.30E-59 | CD4_CM_UCBMC |
| WASF2             | 2.19E-63 | 0.67892329 | 0.36  | 0.201 | 7.76E-59 | CD4_CM_UCBMC |
| RPL9              | 2.27E-63 | 0.24153784 | 0.99  | 0.967 | 8.04E-59 | CD4_CM_UCBMC |
| BICDL1            | 3.14E-63 | 0.628012   | 0.362 | 0.2   | 1.11E-58 | CD4_CM_UCBMC |
| CUX1              | 4.28E-63 | 0.78056279 | 0.301 | 0.157 | 1.52E-58 | CD4_CM_UCBMC |
| ENSMUG00000060545 | 7.75E-63 | 0.54133843 | 0.399 | 0.227 | 2.75E-58 | CD4_CM_UCBMC |
| BIN2              | 9.40E-63 | 0.48908045 | 0.514 | 0.325 | 3.33E-58 | CD4_CM_UCBMC |
| PRKCB             | 9.93E-63 | 0.81778585 | 0.299 | 0.156 | 3.52E-58 | CD4_CM_UCBMC |
| SF1               | 2.09E-62 | 0.59506362 | 0.402 | 0.236 | 7.42E-58 | CD4_CM_UCBMC |
| IP6K2             | 2.45E-62 | 0.81244005 | 0.264 | 0.127 | 8.70E-58 | CD4_CM_UCBMC |
| MANBA             | 2.62E-62 | 0.85569738 | 0.258 | 0.123 | 9.27E-58 | CD4_CM_UCBMC |
| BDP1              | 2.88E-62 | 0.84375014 | 0.263 | 0.127 | 1.02E-57 | CD4_CM_UCBMC |
| HNRNPUL1          | 5.58E-62 | 0.72365387 | 0.278 | 0.137 | 1.98E-57 | CD4_CM_UCBMC |
| SMYD3             | 6.27E-62 | 0.87038174 | 0.302 | 0.16  | 2.22E-57 | CD4_CM_UCBMC |
| U2SURP            | 1.41E-61 | 0.52532362 | 0.387 | 0.224 | 5.01E-57 | CD4_CM_UCBMC |
| HNRNPA2B1         | 2.35E-61 | 0.34774541 | 0.846 | 0.627 | 8.32E-57 | CD4_CM_UCBMC |
| CPSF6             | 4.18E-61 | 0.74955622 | 0.256 | 0.122 | 1.48E-56 | CD4_CM_UCBMC |
| RBM25             | 6.56E-61 | 0.6490827  | 0.363 | 0.206 | 2.32E-56 | CD4_CM_UCBMC |
| KDM2A             | 9.03E-61 | 0.7583315  | 0.316 | 0.171 | 3.20E-56 | CD4_CM_UCBMC |
| PKN2              | 1.08E-60 | 0.84355268 | 0.295 | 0.156 | 3.84E-56 | CD4_CM_UCBMC |
| PDE7A             | 1.11E-60 | 0.7063073  | 0.333 | 0.185 | 3.92E-56 | CD4_CM_UCBMC |
| PDE3B             | 1.18E-60 | 0.58581509 | 0.376 | 0.216 | 4.20E-56 | CD4_CM_UCBMC |
| PRRC2C            | 1.88E-60 | 0.43906476 | 0.561 | 0.365 | 6.67E-56 | CD4_CM_UCBMC |
| MGAT5             | 2.51E-60 | 0.75307096 | 0.305 | 0.164 | 8.91E-56 | CD4_CM_UCBMC |
| PCED1B            | 3.24E-60 | 0.80583966 | 0.25  | 0.117 | 1.15E-55 | CD4_CM_UCBMC |
| FXR1              | 3.40E-60 | 0.54344014 | 0.41  | 0.242 | 1.21E-55 | CD4_CM_UCBMC |
| HNRNPA0           | 4.25E-60 | 0.59607612 | 0.414 | 0.251 | 1.51E-55 | CD4_CM_UCBMC |
| EIF3H             | 4.27E-60 | 0.36917027 | 0.783 | 0.583 | 1.51E-55 | CD4_CM_UCBMC |
| LNPEP             | 4.52E-60 | 0.7133114  | 0.293 | 0.154 | 1.60E-55 | CD4_CM_UCBMC |

|                    |          |            |       |       |          |              |
|--------------------|----------|------------|-------|-------|----------|--------------|
| CAPZA1             | 8.60E-60 | 0.53766702 | 0.417 | 0.246 | 3.05E-55 | CD4_CM_UCBMC |
| XRN1               | 1.53E-59 | 0.81020596 | 0.253 | 0.121 | 5.43E-55 | CD4_CM_UCBMC |
| AKAP9              | 1.61E-59 | 0.49080366 | 0.423 | 0.251 | 5.71E-55 | CD4_CM_UCBMC |
| MIER1              | 3.44E-59 | 0.57940301 | 0.374 | 0.215 | 1.22E-54 | CD4_CM_UCBMC |
| ZNF207             | 4.10E-59 | 0.64333794 | 0.323 | 0.175 | 1.45E-54 | CD4_CM_UCBMC |
| FUBP1              | 5.28E-59 | 0.76405553 | 0.316 | 0.173 | 1.87E-54 | CD4_CM_UCBMC |
| ENSMMUG00000022610 | 1.02E-58 | 0.82467361 | 0.269 | 0.137 | 3.63E-54 | CD4_CM_UCBMC |
| ADD3               | 1.24E-58 | 0.41829928 | 0.532 | 0.337 | 4.40E-54 | CD4_CM_UCBMC |
| DDX17              | 1.80E-58 | 0.55443345 | 0.42  | 0.253 | 6.39E-54 | CD4_CM_UCBMC |
| SELENOS            | 2.13E-58 | 0.43680257 | 0.503 | 0.316 | 7.55E-54 | CD4_CM_UCBMC |
| ENSMMUG00000060287 | 2.46E-58 | 0.34828152 | 0.87  | 0.654 | 8.71E-54 | CD4_CM_UCBMC |
| UBR1               | 5.99E-58 | 0.77469229 | 0.277 | 0.143 | 2.12E-53 | CD4_CM_UCBMC |
| SPTBN1             | 8.99E-58 | 0.70560054 | 0.312 | 0.173 | 3.19E-53 | CD4_CM_UCBMC |
| IFRD1              | 9.01E-58 | 0.85329651 | 0.277 | 0.146 | 3.19E-53 | CD4_CM_UCBMC |
| TXNIP              | 1.59E-57 | 0.35991789 | 0.621 | 0.426 | 5.63E-53 | CD4_CM_UCBMC |
| GPBP1L1            | 1.95E-57 | 0.68566206 | 0.292 | 0.153 | 6.90E-53 | CD4_CM_UCBMC |
| TEC                | 5.47E-57 | 0.54150137 | 0.357 | 0.204 | 1.94E-52 | CD4_CM_UCBMC |
| MATR3              | 7.35E-57 | 0.39769434 | 0.594 | 0.398 | 2.60E-52 | CD4_CM_UCBMC |
| ITK                | 1.04E-56 | 0.44724539 | 0.483 | 0.303 | 3.67E-52 | CD4_CM_UCBMC |
| CASP8              | 1.31E-56 | 0.50245736 | 0.396 | 0.234 | 4.63E-52 | CD4_CM_UCBMC |
| EIF2S3             | 1.48E-56 | 0.72876295 | 0.288 | 0.154 | 5.23E-52 | CD4_CM_UCBMC |
| SMARCC1            | 1.80E-56 | 0.71681978 | 0.293 | 0.157 | 6.36E-52 | CD4_CM_UCBMC |
| JARID2             | 1.92E-56 | 0.49252951 | 0.404 | 0.241 | 6.81E-52 | CD4_CM_UCBMC |
| PPP1CA             | 2.41E-56 | 0.5328582  | 0.361 | 0.208 | 8.54E-52 | CD4_CM_UCBMC |
| ERBIN              | 4.87E-56 | 0.58763195 | 0.386 | 0.228 | 1.72E-51 | CD4_CM_UCBMC |
| ADGRE5             | 6.05E-56 | 0.76587991 | 0.282 | 0.149 | 2.14E-51 | CD4_CM_UCBMC |
| SENP6              | 6.57E-56 | 0.61847118 | 0.329 | 0.186 | 2.33E-51 | CD4_CM_UCBMC |
| NSF                | 1.02E-55 | 0.85231416 | 0.264 | 0.138 | 3.63E-51 | CD4_CM_UCBMC |
| ATRX               | 1.22E-55 | 0.47888642 | 0.423 | 0.258 | 4.32E-51 | CD4_CM_UCBMC |
| WDR33              | 1.64E-55 | 0.74538849 | 0.295 | 0.158 | 5.82E-51 | CD4_CM_UCBMC |
| RNF216             | 2.24E-55 | 0.77540812 | 0.268 | 0.139 | 7.93E-51 | CD4_CM_UCBMC |
| TRIP12             | 3.26E-55 | 0.82771667 | 0.28  | 0.151 | 1.15E-50 | CD4_CM_UCBMC |
| AHI1               | 4.75E-55 | 0.62287692 | 0.318 | 0.174 | 1.68E-50 | CD4_CM_UCBMC |

|         |          |            |       |       |          |              |
|---------|----------|------------|-------|-------|----------|--------------|
| ASCC3   | 7.28E-55 | 0.83294738 | 0.254 | 0.129 | 2.58E-50 | CD4_CM_UCBMC |
| PNRC2   | 1.03E-54 | 0.50214323 | 0.389 | 0.233 | 3.64E-50 | CD4_CM_UCBMC |
| CAPZA2  | 1.71E-54 | 0.5305261  | 0.389 | 0.233 | 6.06E-50 | CD4_CM_UCBMC |
| EIF3M   | 2.81E-54 | 0.41787896 | 0.539 | 0.35  | 9.95E-50 | CD4_CM_UCBMC |
| MYCBP2  | 3.31E-54 | 0.48704942 | 0.401 | 0.243 | 1.17E-49 | CD4_CM_UCBMC |
| ATXN10  | 5.47E-54 | 0.63052889 | 0.362 | 0.214 | 1.94E-49 | CD4_CM_UCBMC |
| DOCK11  | 8.24E-54 | 0.59914783 | 0.331 | 0.191 | 2.92E-49 | CD4_CM_UCBMC |
| ZC3H11A | 8.87E-54 | 0.6803544  | 0.282 | 0.15  | 3.14E-49 | CD4_CM_UCBMC |
| RANBP2  | 1.03E-53 | 0.62360954 | 0.338 | 0.194 | 3.63E-49 | CD4_CM_UCBMC |
| ELF1    | 1.20E-53 | 0.3658998  | 0.653 | 0.452 | 4.26E-49 | CD4_CM_UCBMC |
| EIF4A2  | 2.11E-53 | 0.41017028 | 0.534 | 0.343 | 7.46E-49 | CD4_CM_UCBMC |
| EIF3F   | 2.38E-53 | 0.36177037 | 0.626 | 0.408 | 8.45E-49 | CD4_CM_UCBMC |
| EIF4H   | 3.55E-53 | 0.67049397 | 0.303 | 0.166 | 1.26E-48 | CD4_CM_UCBMC |
| ST6GAL1 | 4.20E-53 | 0.55943605 | 0.366 | 0.219 | 1.49E-48 | CD4_CM_UCBMC |
| LDLRAD4 | 6.83E-53 | 0.59485337 | 0.323 | 0.184 | 2.42E-48 | CD4_CM_UCBMC |
| IQGAP1  | 1.01E-52 | 0.54512244 | 0.366 | 0.218 | 3.58E-48 | CD4_CM_UCBMC |
| SP110   | 1.77E-52 | 0.59684332 | 0.339 | 0.198 | 6.26E-48 | CD4_CM_UCBMC |
| DTNBP1  | 1.83E-52 | 0.58355053 | 0.344 | 0.2   | 6.49E-48 | CD4_CM_UCBMC |
| GPBP1   | 1.93E-52 | 0.48303134 | 0.45  | 0.284 | 6.82E-48 | CD4_CM_UCBMC |
| SYF2    | 2.21E-52 | 0.38301185 | 0.505 | 0.325 | 7.83E-48 | CD4_CM_UCBMC |
| OGA     | 2.48E-52 | 0.6573613  | 0.284 | 0.153 | 8.79E-48 | CD4_CM_UCBMC |
| EWSR1   | 3.26E-52 | 0.74419983 | 0.257 | 0.134 | 1.15E-47 | CD4_CM_UCBMC |
| RAMAC   | 5.91E-52 | 0.5469091  | 0.308 | 0.167 | 2.09E-47 | CD4_CM_UCBMC |
| TRMT10C | 8.40E-52 | 0.57032393 | 0.309 | 0.171 | 2.98E-47 | CD4_CM_UCBMC |
| STK38   | 1.77E-51 | 0.37469225 | 0.542 | 0.359 | 6.26E-47 | CD4_CM_UCBMC |
| POC5    | 2.07E-51 | 0.35796711 | 0.548 | 0.358 | 7.34E-47 | CD4_CM_UCBMC |
| PRKD3   | 5.04E-51 | 0.57868538 | 0.288 | 0.156 | 1.79E-46 | CD4_CM_UCBMC |
| NCOR1   | 5.99E-51 | 0.77789668 | 0.281 | 0.157 | 2.12E-46 | CD4_CM_UCBMC |
| SF3B2   | 7.41E-51 | 0.63683699 | 0.294 | 0.163 | 2.63E-46 | CD4_CM_UCBMC |
| ARID1A  | 1.30E-50 | 0.8479169  | 0.254 | 0.136 | 4.59E-46 | CD4_CM_UCBMC |
| KAT6A   | 1.61E-50 | 0.4273245  | 0.385 | 0.229 | 5.69E-46 | CD4_CM_UCBMC |
| ADK     | 2.05E-50 | 0.81000493 | 0.25  | 0.132 | 7.25E-46 | CD4_CM_UCBMC |
| ZNF827  | 2.45E-50 | 0.64425396 | 0.296 | 0.165 | 8.67E-46 | CD4_CM_UCBMC |



|                     |          |            |       |       |          |              |
|---------------------|----------|------------|-------|-------|----------|--------------|
| MED21               | 3.40E-50 | 0.57448143 | 0.25  | 0.126 | 1.20E-45 | CD4_CM_UCBMC |
| ENSMMUG00000006293  | 3.42E-50 | 0.52617295 | 0.378 | 0.228 | 1.21E-45 | CD4_CM_UCBMC |
| GLG1                | 5.42E-50 | 0.57381747 | 0.345 | 0.206 | 1.92E-45 | CD4_CM_UCBMC |
| DNAJC7              | 7.36E-50 | 0.73162515 | 0.255 | 0.133 | 2.61E-45 | CD4_CM_UCBMC |
| WBP11               | 4.28E-49 | 0.70479488 | 0.257 | 0.135 | 1.52E-44 | CD4_CM_UCBMC |
| CYTIP               | 5.88E-49 | 0.54003375 | 0.371 | 0.225 | 2.08E-44 | CD4_CM_UCBMC |
| EIF5                | 9.32E-49 | 0.52320819 | 0.341 | 0.201 | 3.30E-44 | CD4_CM_UCBMC |
| PIP4K2A             | 1.05E-48 | 0.51734866 | 0.399 | 0.253 | 3.72E-44 | CD4_CM_UCBMC |
| ENSMMUG000000052424 | 3.37E-48 | 0.41018425 | 0.422 | 0.266 | 1.19E-43 | CD4_CM_UCBMC |
| DGKA                | 7.40E-48 | 0.50920131 | 0.365 | 0.224 | 2.62E-43 | CD4_CM_UCBMC |
| ENSMMUG000000032031 | 1.05E-47 | 0.38010473 | 0.349 | 0.2   | 3.74E-43 | CD4_CM_UCBMC |
| ENSMMUG000000028699 | 1.41E-47 | 0.40929506 | 0.431 | 0.272 | 4.99E-43 | CD4_CM_UCBMC |
| CCND3               | 1.67E-47 | 0.42442187 | 0.542 | 0.367 | 5.93E-43 | CD4_CM_UCBMC |
| ENSMMUG000000061630 | 2.69E-47 | 0.37798852 | 0.493 | 0.324 | 9.52E-43 | CD4_CM_UCBMC |
| SHOC2               | 7.42E-47 | 0.52366686 | 0.302 | 0.171 | 2.63E-42 | CD4_CM_UCBMC |
| RSL1D1              | 7.78E-47 | 0.46629317 | 0.383 | 0.235 | 2.76E-42 | CD4_CM_UCBMC |
| CDC42               | 9.64E-47 | 0.27062235 | 0.89  | 0.728 | 3.41E-42 | CD4_CM_UCBMC |
| HNRNPC              | 1.02E-46 | 0.35054785 | 0.584 | 0.398 | 3.62E-42 | CD4_CM_UCBMC |
| EIF2A               | 1.37E-46 | 0.66531815 | 0.256 | 0.138 | 4.84E-42 | CD4_CM_UCBMC |
| PTPN4               | 3.67E-46 | 0.72986527 | 0.263 | 0.147 | 1.30E-41 | CD4_CM_UCBMC |
| SINHCAF             | 5.07E-46 | 0.59646395 | 0.273 | 0.151 | 1.80E-41 | CD4_CM_UCBMC |
| BPTF                | 5.32E-46 | 0.46037203 | 0.339 | 0.203 | 1.88E-41 | CD4_CM_UCBMC |
| DNAJB6              | 5.83E-46 | 0.40552179 | 0.517 | 0.347 | 2.07E-41 | CD4_CM_UCBMC |
| TCEA1               | 1.06E-45 | 0.45095307 | 0.387 | 0.243 | 3.76E-41 | CD4_CM_UCBMC |
| ENSMMUG000000063316 | 1.25E-45 | 0.46890717 | 0.417 | 0.264 | 4.43E-41 | CD4_CM_UCBMC |
| HNRNPR              | 2.17E-45 | 0.51447642 | 0.356 | 0.219 | 7.71E-41 | CD4_CM_UCBMC |
| NUCKS1              | 6.78E-45 | 0.5184804  | 0.357 | 0.218 | 2.40E-40 | CD4_CM_UCBMC |
| ENSMMUG000000006803 | 8.45E-45 | 0.60423486 | 0.279 | 0.157 | 2.99E-40 | CD4_CM_UCBMC |
| ACAP2               | 9.46E-45 | 0.54628635 | 0.374 | 0.236 | 3.35E-40 | CD4_CM_UCBMC |
| BCL2                | 2.69E-44 | 0.50538675 | 0.295 | 0.169 | 9.51E-40 | CD4_CM_UCBMC |
| CAB39               | 9.54E-44 | 0.48596989 | 0.328 | 0.198 | 3.38E-39 | CD4_CM_UCBMC |
| RBMS1               | 1.39E-43 | 0.70196439 | 0.26  | 0.146 | 4.91E-39 | CD4_CM_UCBMC |
| G3BP1               | 1.58E-43 | 0.4457419  | 0.394 | 0.251 | 5.60E-39 | CD4_CM_UCBMC |

|                   |          |            |       |       |          |              |
|-------------------|----------|------------|-------|-------|----------|--------------|
| ZCCHC7            | 1.94E-43 | 0.44915268 | 0.407 | 0.262 | 6.86E-39 | CD4_CM_UCBMC |
| IFT80             | 4.51E-43 | 0.60526222 | 0.287 | 0.169 | 1.60E-38 | CD4_CM_UCBMC |
| ATF7IP2           | 9.94E-43 | 0.58933022 | 0.288 | 0.166 | 3.52E-38 | CD4_CM_UCBMC |
| STAG2             | 2.30E-42 | 0.42838266 | 0.413 | 0.269 | 8.14E-38 | CD4_CM_UCBMC |
| PDK1              | 4.23E-42 | 0.53446198 | 0.282 | 0.165 | 1.50E-37 | CD4_CM_UCBMC |
| CYFIP2            | 4.74E-42 | 0.52046617 | 0.283 | 0.163 | 1.68E-37 | CD4_CM_UCBMC |
| THOC2             | 6.40E-42 | 0.61800433 | 0.263 | 0.15  | 2.27E-37 | CD4_CM_UCBMC |
| NEDD9             | 8.07E-42 | 0.64796724 | 0.258 | 0.146 | 2.86E-37 | CD4_CM_UCBMC |
| PTPN2             | 1.46E-41 | 0.73195134 | 0.256 | 0.146 | 5.19E-37 | CD4_CM_UCBMC |
| ZFP36L1           | 2.35E-41 | 0.41882307 | 0.4   | 0.256 | 8.33E-37 | CD4_CM_UCBMC |
| PAFAH1B1          | 2.41E-41 | 0.57036887 | 0.334 | 0.209 | 8.55E-37 | CD4_CM_UCBMC |
| NARS1             | 3.80E-41 | 0.55241368 | 0.298 | 0.178 | 1.35E-36 | CD4_CM_UCBMC |
| C15H9orf78        | 4.42E-41 | 0.33739271 | 0.473 | 0.313 | 1.56E-36 | CD4_CM_UCBMC |
| CSNK2A1           | 6.56E-41 | 0.46147033 | 0.328 | 0.198 | 2.33E-36 | CD4_CM_UCBMC |
| ERP44             | 3.93E-40 | 0.46590485 | 0.276 | 0.16  | 1.39E-35 | CD4_CM_UCBMC |
| SMAP2             | 3.99E-40 | 0.54231317 | 0.313 | 0.193 | 1.41E-35 | CD4_CM_UCBMC |
| RSRC2             | 5.04E-40 | 0.3411999  | 0.458 | 0.302 | 1.78E-35 | CD4_CM_UCBMC |
| EIF3E             | 8.18E-40 | 0.26276537 | 0.834 | 0.653 | 2.90E-35 | CD4_CM_UCBMC |
| ARHGAP45          | 9.15E-40 | 0.41198958 | 0.338 | 0.211 | 3.24E-35 | CD4_CM_UCBMC |
| CD52              | 1.57E-39 | 0.18947273 | 0.976 | 0.924 | 5.56E-35 | CD4_CM_UCBMC |
| YAF2              | 2.28E-39 | 0.54506987 | 0.267 | 0.154 | 8.08E-35 | CD4_CM_UCBMC |
| TRIB2             | 2.35E-39 | 0.48447268 | 0.308 | 0.188 | 8.34E-35 | CD4_CM_UCBMC |
| OLA1              | 3.18E-39 | 0.53971455 | 0.301 | 0.183 | 1.13E-34 | CD4_CM_UCBMC |
| RAB14             | 3.74E-39 | 0.5777997  | 0.257 | 0.148 | 1.33E-34 | CD4_CM_UCBMC |
| BACH2             | 3.86E-39 | 0.25181515 | 0.576 | 0.404 | 1.37E-34 | CD4_CM_UCBMC |
| RERE              | 6.85E-39 | 0.4207971  | 0.421 | 0.283 | 2.43E-34 | CD4_CM_UCBMC |
| EIF3G             | 8.51E-39 | 0.32219154 | 0.54  | 0.379 | 3.02E-34 | CD4_CM_UCBMC |
| TBC1D24           | 9.26E-39 | 0.29106009 | 0.445 | 0.294 | 3.28E-34 | CD4_CM_UCBMC |
| CAMLG             | 1.28E-38 | 0.52266645 | 0.287 | 0.171 | 4.55E-34 | CD4_CM_UCBMC |
| TMED2             | 2.02E-38 | 0.51268782 | 0.255 | 0.146 | 7.15E-34 | CD4_CM_UCBMC |
| GPCPD1            | 7.09E-38 | 0.32051326 | 0.347 | 0.217 | 2.51E-33 | CD4_CM_UCBMC |
| ENSMUG00000002320 | 9.04E-38 | 0.16608801 | 0.914 | 0.781 | 3.20E-33 | CD4_CM_UCBMC |
| ELMOD3            | 1.22E-37 | 0.57174093 | 0.259 | 0.15  | 4.32E-33 | CD4_CM_UCBMC |

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|--------------------|----------|------------|-------|-------|----------|--------------|
| ENSMMUG00000030465 | 1.29E-37 | 0.25467467 | 0.675 | 0.502 | 4.56E-33 | CD4_CM_UCBMC |
| ANKRD12            | 1.50E-37 | 0.29353404 | 0.419 | 0.277 | 5.30E-33 | CD4_CM_UCBMC |
| RSRC1              | 1.81E-37 | 0.59570488 | 0.251 | 0.147 | 6.43E-33 | CD4_CM_UCBMC |
| ENSMMUG00000041517 | 2.20E-37 | 0.35212123 | 0.316 | 0.19  | 7.79E-33 | CD4_CM_UCBMC |
| THEMIS             | 2.39E-37 | 0.4884747  | 0.333 | 0.211 | 8.47E-33 | CD4_CM_UCBMC |
| TMOD3              | 4.49E-37 | 0.50564254 | 0.28  | 0.17  | 1.59E-32 | CD4_CM_UCBMC |
| FMC1-LUC7L2        | 6.10E-37 | 0.3345975  | 0.481 | 0.328 | 2.16E-32 | CD4_CM_UCBMC |
| CD44               | 6.58E-37 | 0.30284676 | 0.443 | 0.298 | 2.33E-32 | CD4_CM_UCBMC |
| PER1               | 6.63E-37 | 0.49584391 | 0.277 | 0.168 | 2.35E-32 | CD4_CM_UCBMC |
| UBB                | 1.72E-36 | 0.21889861 | 0.91  | 0.77  | 6.10E-32 | CD4_CM_UCBMC |
| ENSMMUG00000029973 | 3.73E-36 | 0.2187659  | 0.657 | 0.484 | 1.32E-31 | CD4_CM_UCBMC |
| WTAP               | 7.16E-36 | 0.31867763 | 0.394 | 0.26  | 2.54E-31 | CD4_CM_UCBMC |
| STK4               | 8.73E-36 | 0.25805684 | 0.579 | 0.41  | 3.09E-31 | CD4_CM_UCBMC |
| ADD1               | 1.39E-35 | 0.48689727 | 0.253 | 0.148 | 4.92E-31 | CD4_CM_UCBMC |
| EIF4B              | 2.21E-35 | 0.29588207 | 0.401 | 0.267 | 7.83E-31 | CD4_CM_UCBMC |
| USP36              | 2.28E-35 | 0.57263791 | 0.251 | 0.148 | 8.06E-31 | CD4_CM_UCBMC |
| PPP6R3             | 9.94E-35 | 0.4395422  | 0.258 | 0.155 | 3.52E-30 | CD4_CM_UCBMC |
| PCNP               | 1.11E-34 | 0.36124473 | 0.308 | 0.192 | 3.92E-30 | CD4_CM_UCBMC |
| FYB1               | 2.37E-34 | 0.26094022 | 0.622 | 0.447 | 8.39E-30 | CD4_CM_UCBMC |
| ITGA6              | 2.55E-34 | 0.26139843 | 0.413 | 0.274 | 9.04E-30 | CD4_CM_UCBMC |
| MBTPS1             | 2.57E-34 | 0.43958716 | 0.251 | 0.147 | 9.11E-30 | CD4_CM_UCBMC |
| DDX39B             | 2.61E-34 | 0.50819746 | 0.255 | 0.152 | 9.24E-30 | CD4_CM_UCBMC |
| PAPOLA             | 3.58E-34 | 0.30530632 | 0.441 | 0.299 | 1.27E-29 | CD4_CM_UCBMC |
| ME2                | 7.06E-34 | 0.57836444 | 0.259 | 0.159 | 2.50E-29 | CD4_CM_UCBMC |
| SMC4               | 1.08E-33 | 0.21651261 | 0.529 | 0.367 | 3.84E-29 | CD4_CM_UCBMC |
| IMPDH2             | 1.17E-33 | 0.38380027 | 0.319 | 0.202 | 4.16E-29 | CD4_CM_UCBMC |
| H2AFY              | 1.94E-33 | 0.46601163 | 0.308 | 0.199 | 6.89E-29 | CD4_CM_UCBMC |
| HP1BP3             | 2.55E-33 | 0.44285373 | 0.301 | 0.191 | 9.03E-29 | CD4_CM_UCBMC |
| PHF14              | 3.66E-33 | 0.50585791 | 0.268 | 0.167 | 1.30E-28 | CD4_CM_UCBMC |
| C18H18orf32        | 6.62E-33 | 0.13021075 | 0.99  | 0.975 | 2.35E-28 | CD4_CM_UCBMC |
| AOPEP              | 1.24E-32 | 0.3455738  | 0.28  | 0.173 | 4.41E-28 | CD4_CM_UCBMC |
| RWDD1              | 2.69E-32 | 0.25745433 | 0.562 | 0.404 | 9.54E-28 | CD4_CM_UCBMC |
| ENSMMUG00000061125 | 4.00E-32 | 0.18477527 | 0.54  | 0.374 | 1.42E-27 | CD4_CM_UCBMC |

|                   |          |            |       |       |          |              |
|-------------------|----------|------------|-------|-------|----------|--------------|
| PPIL4             | 7.72E-32 | 0.26162203 | 0.396 | 0.265 | 2.74E-27 | CD4_CM_UCBMC |
| RSL24D1           | 1.16E-31 | 0.23934722 | 0.64  | 0.474 | 4.12E-27 | CD4_CM_UCBMC |
| EIF3D             | 1.58E-31 | 0.32156627 | 0.356 | 0.235 | 5.61E-27 | CD4_CM_UCBMC |
| SNRK              | 1.68E-31 | 0.32775938 | 0.285 | 0.177 | 5.95E-27 | CD4_CM_UCBMC |
| ZMYND8            | 2.82E-31 | 0.49325854 | 0.259 | 0.161 | 9.98E-27 | CD4_CM_UCBMC |
| ARHGEF1           | 3.56E-31 | 0.25148654 | 0.425 | 0.291 | 1.26E-26 | CD4_CM_UCBMC |
| CCDC59            | 4.39E-31 | 0.30974986 | 0.284 | 0.175 | 1.56E-26 | CD4_CM_UCBMC |
| MYH9              | 6.49E-31 | 0.26500189 | 0.419 | 0.288 | 2.30E-26 | CD4_CM_UCBMC |
| SNW1              | 7.00E-31 | 0.34406646 | 0.302 | 0.192 | 2.48E-26 | CD4_CM_UCBMC |
| ELK3              | 7.05E-31 | 0.28679713 | 0.295 | 0.184 | 2.50E-26 | CD4_CM_UCBMC |
| COMMD7            | 7.42E-31 | 0.37448723 | 0.305 | 0.197 | 2.63E-26 | CD4_CM_UCBMC |
| ENSMUG00000065104 | 8.54E-31 | 0.19615314 | 0.687 | 0.521 | 3.03E-26 | CD4_CM_UCBMC |
| PHF11             | 1.01E-30 | 0.42352333 | 0.255 | 0.155 | 3.58E-26 | CD4_CM_UCBMC |
| HUWE1             | 1.01E-30 | 0.50730799 | 0.266 | 0.167 | 3.59E-26 | CD4_CM_UCBMC |
| ZC3HAV1           | 1.09E-30 | 0.22274279 | 0.493 | 0.341 | 3.87E-26 | CD4_CM_UCBMC |
| WNK1              | 1.45E-30 | 0.3101437  | 0.359 | 0.242 | 5.13E-26 | CD4_CM_UCBMC |
| PSMD14            | 1.51E-30 | 0.39703296 | 0.289 | 0.182 | 5.36E-26 | CD4_CM_UCBMC |
| NSD1              | 1.92E-30 | 0.47549703 | 0.267 | 0.17  | 6.80E-26 | CD4_CM_UCBMC |
| SEPTIN9           | 1.03E-29 | 0.23752566 | 0.472 | 0.332 | 3.63E-25 | CD4_CM_UCBMC |
| SLC30A7           | 1.26E-29 | 0.30921901 | 0.398 | 0.275 | 4.45E-25 | CD4_CM_UCBMC |
| FKBP3             | 2.08E-29 | 0.38882359 | 0.286 | 0.183 | 7.37E-25 | CD4_CM_UCBMC |
| WSB1              | 3.50E-29 | 0.31217647 | 0.32  | 0.209 | 1.24E-24 | CD4_CM_UCBMC |
| WIPF1             | 4.97E-29 | 0.28123873 | 0.415 | 0.289 | 1.76E-24 | CD4_CM_UCBMC |
| FAM133B           | 5.06E-29 | 0.25418541 | 0.308 | 0.199 | 1.79E-24 | CD4_CM_UCBMC |
| SLTM              | 5.24E-29 | 0.4115597  | 0.328 | 0.22  | 1.86E-24 | CD4_CM_UCBMC |
| ARRB2             | 5.85E-29 | 0.2818699  | 0.3   | 0.193 | 2.07E-24 | CD4_CM_UCBMC |
| HBP1              | 1.14E-28 | 0.30898635 | 0.266 | 0.166 | 4.05E-24 | CD4_CM_UCBMC |
| TOMM20            | 1.61E-28 | 0.22670358 | 0.67  | 0.507 | 5.72E-24 | CD4_CM_UCBMC |
| TPR               | 1.62E-28 | 0.32544729 | 0.316 | 0.209 | 5.75E-24 | CD4_CM_UCBMC |
| TFAM              | 1.73E-28 | 0.40054071 | 0.283 | 0.182 | 6.12E-24 | CD4_CM_UCBMC |
| ARF4              | 3.18E-28 | 0.30651461 | 0.387 | 0.264 | 1.13E-23 | CD4_CM_UCBMC |
| SRSF10            | 7.17E-28 | 0.31560776 | 0.313 | 0.209 | 2.54E-23 | CD4_CM_UCBMC |
| SRRM1             | 1.08E-27 | 0.19568835 | 0.491 | 0.351 | 3.83E-23 | CD4_CM_UCBMC |

|                    |          |            |       |       |          |              |
|--------------------|----------|------------|-------|-------|----------|--------------|
| SF3B1              | 2.73E-27 | 0.20364884 | 0.517 | 0.374 | 9.69E-23 | CD4_CM_UCBMC |
| DDX3Y              | 5.73E-27 | 0.25425254 | 0.361 | 0.245 | 2.03E-22 | CD4_CM_UCBMC |
| HSPA9              | 1.68E-26 | 0.35743319 | 0.256 | 0.166 | 5.96E-22 | CD4_CM_UCBMC |
| UBXN4              | 2.43E-26 | 0.39943635 | 0.28  | 0.185 | 8.61E-22 | CD4_CM_UCBMC |
| DDX39A             | 2.63E-26 | 0.34360171 | 0.318 | 0.214 | 9.30E-22 | CD4_CM_UCBMC |
| ENSMMUG00000055026 | 2.82E-26 | 0.17849141 | 0.41  | 0.281 | 9.99E-22 | CD4_CM_UCBMC |
| TCF25              | 7.43E-26 | 0.30117952 | 0.255 | 0.161 | 2.63E-21 | CD4_CM_UCBMC |
| CIR1               | 1.10E-25 | 0.27351813 | 0.271 | 0.172 | 3.88E-21 | CD4_CM_UCBMC |
| CCT6A              | 1.57E-25 | 0.22553151 | 0.42  | 0.294 | 5.57E-21 | CD4_CM_UCBMC |
| FGD3               | 1.66E-25 | 0.32683092 | 0.282 | 0.183 | 5.89E-21 | CD4_CM_UCBMC |
| HNRNPD             | 2.28E-25 | 0.25045649 | 0.354 | 0.244 | 8.07E-21 | CD4_CM_UCBMC |
| HNRNPA3            | 2.57E-25 | 0.17820286 | 0.586 | 0.429 | 9.12E-21 | CD4_CM_UCBMC |
| ZNF638             | 3.03E-25 | 0.38777112 | 0.26  | 0.171 | 1.07E-20 | CD4_CM_UCBMC |
| XRCC5              | 3.29E-25 | 0.22447533 | 0.422 | 0.3   | 1.16E-20 | CD4_CM_UCBMC |
| VAPA               | 4.29E-25 | 0.32440464 | 0.356 | 0.249 | 1.52E-20 | CD4_CM_UCBMC |
| ANP32B             | 6.45E-25 | 0.21667023 | 0.482 | 0.34  | 2.28E-20 | CD4_CM_UCBMC |
| UFC1               | 7.47E-25 | 0.24640732 | 0.345 | 0.235 | 2.65E-20 | CD4_CM_UCBMC |
| HNRNPU             | 8.31E-25 | 0.21342976 | 0.409 | 0.289 | 2.94E-20 | CD4_CM_UCBMC |
| CYLD               | 1.14E-24 | 0.16888333 | 0.418 | 0.296 | 4.04E-20 | CD4_CM_UCBMC |
| ENSMMUG00000064692 | 1.69E-24 | 0.11235848 | 0.832 | 0.67  | 5.99E-20 | CD4_CM_UCBMC |
| ARGLU1             | 3.33E-24 | 0.13607045 | 0.49  | 0.352 | 1.18E-19 | CD4_CM_UCBMC |
| ARF1               | 5.58E-24 | 0.15652079 | 0.515 | 0.376 | 1.98E-19 | CD4_CM_UCBMC |
| MGAT4A             | 6.47E-24 | 0.20892214 | 0.334 | 0.227 | 2.29E-19 | CD4_CM_UCBMC |
| PDGFRA             | 6.51E-24 | 0.10103922 | 0.875 | 0.738 | 2.31E-19 | CD4_CM_UCBMC |
| ZNF483             | 7.51E-24 | 0.15751193 | 0.851 | 0.738 | 2.66E-19 | CD4_CM_UCBMC |
| TAGAP              | 8.42E-24 | 0.24325301 | 0.348 | 0.239 | 2.98E-19 | CD4_CM_UCBMC |
| ENSMMUG00000014648 | 8.80E-24 | 0.18848838 | 0.875 | 0.77  | 3.12E-19 | CD4_CM_UCBMC |
| ENSMMUG00000002075 | 1.14E-23 | 0.12281349 | 0.28  | 0.177 | 4.03E-19 | CD4_CM_UCBMC |
| ENSMMUG00000016009 | 1.18E-23 | 0.16190389 | 0.619 | 0.465 | 4.20E-19 | CD4_CM_UCBMC |
| MBP                | 1.80E-23 | 0.22790199 | 0.33  | 0.228 | 6.37E-19 | CD4_CM_UCBMC |
| XRN2               | 1.89E-23 | 0.19635346 | 0.369 | 0.259 | 6.70E-19 | CD4_CM_UCBMC |
| PSMD12             | 1.91E-23 | 0.20240542 | 0.459 | 0.333 | 6.76E-19 | CD4_CM_UCBMC |
| ENSMMUG00000007536 | 2.37E-23 | 0.11909485 | 0.561 | 0.414 | 8.41E-19 | CD4_CM_UCBMC |

|                    |          |            |       |       |          |              |
|--------------------|----------|------------|-------|-------|----------|--------------|
| BTN2A2             | 2.42E-23 | 0.34107807 | 0.292 | 0.199 | 8.58E-19 | CD4_CM_UCBMC |
| CS                 | 2.43E-23 | 0.23598657 | 0.336 | 0.234 | 8.60E-19 | CD4_CM_UCBMC |
| PIK3CD             | 3.19E-23 | 0.38589934 | 0.254 | 0.169 | 1.13E-18 | CD4_CM_UCBMC |
| CNOT6L             | 2.68E-22 | 0.15742286 | 0.349 | 0.243 | 9.51E-18 | CD4_CM_UCBMC |
| YWHAZ              | 3.11E-22 | 0.14873345 | 0.633 | 0.482 | 1.10E-17 | CD4_CM_UCBMC |
| RNF213             | 7.17E-22 | 0.26903796 | 0.257 | 0.171 | 2.54E-17 | CD4_CM_UCBMC |
| KLF3               | 8.19E-22 | 0.24009559 | 0.266 | 0.177 | 2.90E-17 | CD4_CM_UCBMC |
| DDX3X              | 8.93E-22 | 0.15412233 | 0.443 | 0.318 | 3.16E-17 | CD4_CM_UCBMC |
| COX4I1             | 9.60E-22 | 0.14918307 | 0.921 | 0.81  | 3.40E-17 | CD4_CM_UCBMC |
| ENSMMUG00000029026 | 2.03E-21 | 0.11941068 | 0.664 | 0.516 | 7.20E-17 | CD4_CM_UCBMC |
| ENSMMUG00000045425 | 2.84E-21 | 0.2689385  | 0.254 | 0.171 | 1.01E-16 | CD4_CM_UCBMC |
| NPM3               | 4.29E-21 | 0.18567201 | 0.445 | 0.326 | 1.52E-16 | CD4_CM_UCBMC |
| PFDN4              | 4.53E-21 | 0.19471717 | 0.266 | 0.177 | 1.61E-16 | CD4_CM_UCBMC |
| EIF3L              | 4.56E-21 | 0.16004989 | 0.581 | 0.438 | 1.61E-16 | CD4_CM_UCBMC |
| BZW2               | 4.85E-21 | 0.31011896 | 0.274 | 0.188 | 1.72E-16 | CD4_CM_UCBMC |
| CEBPZ              | 8.25E-21 | 0.22724639 | 0.258 | 0.173 | 2.92E-16 | CD4_CM_UCBMC |
| CYRIB              | 9.15E-21 | 0.22459002 | 0.425 | 0.312 | 3.24E-16 | CD4_CM_UCBMC |
| PAIP2              | 9.84E-21 | 0.15253052 | 0.639 | 0.491 | 3.49E-16 | CD4_CM_UCBMC |
| GABARAP            | 2.02E-20 | 0.11524963 | 0.573 | 0.425 | 7.14E-16 | CD4_CM_UCBMC |
| DDX46              | 2.58E-20 | 0.134188   | 0.455 | 0.332 | 9.13E-16 | CD4_CM_UCBMC |
| DDOST              | 3.09E-20 | 0.15367503 | 0.307 | 0.212 | 1.10E-15 | CD4_CM_UCBMC |
| SEPTIN7            | 3.29E-20 | 0.14827829 | 0.678 | 0.528 | 1.17E-15 | CD4_CM_UCBMC |
| ENSMMUG00000012525 | 4.11E-20 | 0.13052956 | 0.628 | 0.488 | 1.46E-15 | CD4_CM_UCBMC |
| ENSMMUG00000059017 | 9.99E-20 | 0.14370349 | 0.546 | 0.406 | 3.54E-15 | CD4_CM_UCBMC |
| ENSMMUG00000061913 | 1.94E-19 | 0.10847315 | 0.617 | 0.466 | 6.87E-15 | CD4_CM_UCBMC |
| MRPL10             | 2.42E-19 | 0.24966303 | 0.254 | 0.172 | 8.57E-15 | CD4_CM_UCBMC |
| QARS1              | 2.46E-19 | 0.21148862 | 0.3   | 0.209 | 8.70E-15 | CD4_CM_UCBMC |
| NDFIP1             | 5.24E-19 | 0.1787326  | 0.458 | 0.335 | 1.86E-14 | CD4_CM_UCBMC |
| SMARCE1            | 7.99E-19 | 0.19146966 | 0.253 | 0.172 | 2.83E-14 | CD4_CM_UCBMC |
| IGBP1              | 8.31E-19 | 0.14336831 | 0.327 | 0.232 | 2.94E-14 | CD4_CM_UCBMC |
| BCL11B             | 9.11E-19 | 0.1438604  | 0.39  | 0.282 | 3.23E-14 | CD4_CM_UCBMC |
| FKBP5              | 1.04E-18 | 0.19400029 | 0.337 | 0.242 | 3.68E-14 | CD4_CM_UCBMC |
| EVL                | 4.36E-18 | 0.12785424 | 0.542 | 0.406 | 1.54E-13 | CD4_CM_UCBMC |

|                    |          |            |       |       |          |               |
|--------------------|----------|------------|-------|-------|----------|---------------|
| HNRNPM             | 6.24E-18 | 0.15291484 | 0.327 | 0.233 | 2.21E-13 | CD4_CM_UCBMC  |
| TBCC               | 7.78E-18 | 0.12406727 | 0.315 | 0.223 | 2.76E-13 | CD4_CM_UCBMC  |
| MAMU-A             | 9.91E-18 | 0.11120608 | 0.729 | 0.585 | 3.51E-13 | CD4_CM_UCBMC  |
| MRPS15             | 1.29E-17 | 0.19626265 | 0.28  | 0.197 | 4.58E-13 | CD4_CM_UCBMC  |
| SEC11A             | 2.00E-17 | 0.17165678 | 0.314 | 0.225 | 7.08E-13 | CD4_CM_UCBMC  |
| DIAPH1             | 3.53E-17 | 0.22205629 | 0.293 | 0.212 | 1.25E-12 | CD4_CM_UCBMC  |
| ENSMMUG00000061824 | 4.03E-17 | 0.142531   | 0.906 | 0.794 | 1.43E-12 | CD4_CM_UCBMC  |
| ACTB               | 4.49E-17 | 0.10926801 | 0.979 | 0.906 | 1.59E-12 | CD4_CM_UCBMC  |
| PDE4B              | 5.89E-17 | 0.14490522 | 0.353 | 0.258 | 2.09E-12 | CD4_CM_UCBMC  |
| UBE2L3             | 5.90E-17 | 0.17527798 | 0.301 | 0.216 | 2.09E-12 | CD4_CM_UCBMC  |
| ENSMMUG00000060923 | 6.64E-17 | 0.15853217 | 0.454 | 0.339 | 2.35E-12 | CD4_CM_UCBMC  |
| PTBP3              | 6.90E-17 | 0.18091144 | 0.336 | 0.247 | 2.44E-12 | CD4_CM_UCBMC  |
| ATG3               | 9.42E-17 | 0.23372744 | 0.261 | 0.184 | 3.34E-12 | CD4_CM_UCBMC  |
| HMGA1              | 1.01E-16 | 0.17710707 | 0.307 | 0.224 | 3.57E-12 | CD4_CM_UCBMC  |
| DUSP1              | 1.17E-16 | 0.10176432 | 0.295 | 0.211 | 4.14E-12 | CD4_CM_UCBMC  |
| NSD3               | 1.65E-16 | 0.18387623 | 0.285 | 0.206 | 5.83E-12 | CD4_CM_UCBMC  |
| CD28               | 2.31E-16 | 0.15483113 | 0.323 | 0.234 | 8.18E-12 | CD4_CM_UCBMC  |
| ATF4               | 2.43E-16 | 0.10408651 | 0.409 | 0.305 | 8.60E-12 | CD4_CM_UCBMC  |
| TAOK3              | 3.50E-16 | 0.26573202 | 0.258 | 0.184 | 1.24E-11 | CD4_CM_UCBMC  |
| CD6                | 4.77E-16 | 0.10463373 | 0.299 | 0.218 | 1.69E-11 | CD4_CM_UCBMC  |
| PIGY               | 6.43E-15 | 0.26317104 | 0.279 | 0.206 | 2.28E-10 | CD4_CM_UCBMC  |
| ENSMMUG00000004539 | 9.89E-15 | 0.14905367 | 0.279 | 0.203 | 3.51E-10 | CD4_CM_UCBMC  |
| BTF3L4             | 3.43E-14 | 0.11105548 | 0.356 | 0.266 | 1.21E-09 | CD4_CM_UCBMC  |
| PSMA3              | 3.94E-14 | 0.11937017 | 0.322 | 0.239 | 1.40E-09 | CD4_CM_UCBMC  |
| BCAS2              | 4.97E-14 | 0.15761138 | 0.298 | 0.22  | 1.76E-09 | CD4_CM_UCBMC  |
| PPP1CC             | 5.16E-14 | 0.11060281 | 0.283 | 0.21  | 1.83E-09 | CD4_CM_UCBMC  |
| SYNCRIP            | 7.66E-13 | 0.17249483 | 0.253 | 0.187 | 2.71E-08 | CD4_CM_UCBMC  |
| NOP58              | 1.54E-12 | 0.16394319 | 0.273 | 0.204 | 5.45E-08 | CD4_CM_UCBMC  |
| RAP1B              | 6.08E-12 | 0.10297457 | 0.583 | 0.461 | 2.15E-07 | CD4_CM_UCBMC  |
| COA1               | 1.68E-11 | 0.10998409 | 0.28  | 0.212 | 5.95E-07 | CD4_CM_UCBMC  |
| ATM                | 2.02E-11 | 0.141276   | 0.251 | 0.188 | 7.15E-07 | CD4_CM_UCBMC  |
| GTF2I              | 1.42E-09 | 0.12007072 | 0.27  | 0.211 | 5.03E-05 | CD4_CM_UCBMC  |
| LTB                | 0        | 2.64163821 | 0.947 | 0.34  | 0        | CD4_CM_spleen |

|                     |           |            |       |       |           |               |
|---------------------|-----------|------------|-------|-------|-----------|---------------|
| JUN                 | 0         | 2.72453453 | 0.842 | 0.261 | 0         | CD4_CM_spleen |
| NOP53               | 0         | 2.21986978 | 0.732 | 0.162 | 0         | CD4_CM_spleen |
| ATP5F1D             | 0         | 2.41677808 | 0.583 | 0.098 | 0         | CD4_CM_spleen |
| C1QBP               | 0         | 3.19318891 | 0.525 | 0.049 | 0         | CD4_CM_spleen |
| ENSMMUG000000040065 | 0         | 2.57886367 | 0.41  | 0.058 | 0         | CD4_CM_spleen |
| TRAPPC5             | 0         | 3.44610225 | 0.371 | 0.026 | 0         | CD4_CM_spleen |
| RPS2                | 0         | 1.49783777 | 0.981 | 0.778 | 0         | CD4_CM_spleen |
| RPL13               | 0         | 2.23134021 | 0.999 | 0.891 | 0         | CD4_CM_spleen |
| NT5C                | 6.74E-277 | 2.73033411 | 0.333 | 0.041 | 2.39E-272 | CD4_CM_spleen |
| ENSMMUG000000008417 | 4.47E-258 | 2.51561538 | 0.352 | 0.05  | 1.58E-253 | CD4_CM_spleen |
| PFN1                | 1.50E-247 | 1.28151744 | 0.969 | 0.718 | 5.31E-243 | CD4_CM_spleen |
| PM20D2              | 2.85E-247 | 1.69933698 | 0.785 | 0.289 | 1.01E-242 | CD4_CM_spleen |
| MZT2B               | 1.04E-240 | 2.0348041  | 0.497 | 0.11  | 3.69E-236 | CD4_CM_spleen |
| TXNL4A              | 9.28E-227 | 2.32275424 | 0.322 | 0.047 | 3.29E-222 | CD4_CM_spleen |
| COX5A               | 5.71E-223 | 1.82437557 | 0.589 | 0.165 | 2.02E-218 | CD4_CM_spleen |
| TRIR                | 4.53E-215 | 1.62115273 | 0.673 | 0.218 | 1.60E-210 | CD4_CM_spleen |
| HSPH1               | 6.48E-209 | 2.14850917 | 0.588 | 0.182 | 2.30E-204 | CD4_CM_spleen |
| ID3                 | 1.36E-199 | 2.130877   | 0.333 | 0.059 | 4.81E-195 | CD4_CM_spleen |
| COTL1               | 3.54E-196 | 1.53491828 | 0.772 | 0.335 | 1.25E-191 | CD4_CM_spleen |
| IL27RA              | 6.65E-196 | 2.05813624 | 0.366 | 0.072 | 2.35E-191 | CD4_CM_spleen |
| DNAJB1              | 1.94E-195 | 2.59947613 | 0.321 | 0.058 | 6.86E-191 | CD4_CM_spleen |
| FOS                 | 2.57E-194 | 1.33761523 | 0.951 | 0.679 | 9.12E-190 | CD4_CM_spleen |
| DUSP1               | 3.92E-190 | 1.69595335 | 0.644 | 0.226 | 1.39E-185 | CD4_CM_spleen |
| TMEM160             | 1.38E-185 | 2.16619856 | 0.321 | 0.058 | 4.88E-181 | CD4_CM_spleen |
| HNRNPAB             | 1.47E-171 | 1.97828718 | 0.342 | 0.071 | 5.21E-167 | CD4_CM_spleen |
| SRSF2               | 4.50E-171 | 1.54682046 | 0.521 | 0.152 | 1.59E-166 | CD4_CM_spleen |
| ENSMMUG000000051300 | 1.16E-167 | 0.8460814  | 0.993 | 0.758 | 4.12E-163 | CD4_CM_spleen |
| ITM2B               | 2.10E-166 | 1.14562738 | 0.894 | 0.521 | 7.44E-162 | CD4_CM_spleen |
| FOSB                | 2.22E-165 | 1.78995759 | 0.485 | 0.143 | 7.87E-161 | CD4_CM_spleen |
| ANP32B              | 1.57E-157 | 1.18001574 | 0.811 | 0.392 | 5.57E-153 | CD4_CM_spleen |
| C10H20orf24         | 2.33E-157 | 1.55856053 | 0.453 | 0.125 | 8.25E-153 | CD4_CM_spleen |
| SRRM2               | 1.53E-148 | 1.48472296 | 0.544 | 0.185 | 5.40E-144 | CD4_CM_spleen |
| HIST1H2AC           | 2.84E-146 | 1.83341767 | 0.396 | 0.107 | 1.01E-141 | CD4_CM_spleen |



|                    |           |            |       |       |           |               |
|--------------------|-----------|------------|-------|-------|-----------|---------------|
| HSBP1L1            | 2.31E-144 | 2.06472234 | 0.265 | 0.051 | 8.19E-140 | CD4_CM_spleen |
| TESC               | 1.23E-136 | 1.46124125 | 0.533 | 0.187 | 4.37E-132 | CD4_CM_spleen |
| HPCAL1             | 2.12E-136 | 1.45603075 | 0.456 | 0.139 | 7.50E-132 | CD4_CM_spleen |
| EIF3F              | 4.53E-136 | 0.99970341 | 0.873 | 0.514 | 1.60E-131 | CD4_CM_spleen |
| RANBP1             | 1.66E-135 | 1.5724574  | 0.389 | 0.106 | 5.90E-131 | CD4_CM_spleen |
| CLTA               | 3.79E-135 | 1.46670295 | 0.426 | 0.123 | 1.34E-130 | CD4_CM_spleen |
| ACTB               | 5.66E-133 | 0.7239091  | 0.993 | 0.948 | 2.01E-128 | CD4_CM_spleen |
| GADD45GIP1         | 3.84E-132 | 1.7827929  | 0.292 | 0.065 | 1.36E-127 | CD4_CM_spleen |
| BCL11B             | 1.03E-131 | 1.24743449 | 0.696 | 0.316 | 3.64E-127 | CD4_CM_spleen |
| STK17A             | 1.67E-131 | 1.17384147 | 0.677 | 0.29  | 5.91E-127 | CD4_CM_spleen |
| ENSMMUG00000054358 | 8.33E-131 | 1.30233414 | 0.95  | 0.722 | 2.95E-126 | CD4_CM_spleen |
| ARF6               | 1.99E-130 | 1.38157405 | 0.351 | 0.089 | 7.05E-126 | CD4_CM_spleen |
| LSM4               | 2.36E-127 | 1.37536197 | 0.519 | 0.183 | 8.36E-123 | CD4_CM_spleen |
| CYC1               | 2.00E-126 | 1.56110674 | 0.341 | 0.088 | 7.09E-122 | CD4_CM_spleen |
| DENND2D            | 1.24E-121 | 1.30777652 | 0.497 | 0.175 | 4.38E-117 | CD4_CM_spleen |
| RPS20              | 4.21E-118 | 0.54768392 | 0.997 | 0.912 | 1.49E-113 | CD4_CM_spleen |
| HSPD1              | 1.96E-117 | 1.20988278 | 0.46  | 0.155 | 6.95E-113 | CD4_CM_spleen |
| ENSMMUG00000051343 | 9.36E-114 | 1.64556626 | 0.327 | 0.09  | 3.31E-109 | CD4_CM_spleen |
| TERF2IP            | 1.55E-113 | 1.53368865 | 0.321 | 0.085 | 5.51E-109 | CD4_CM_spleen |
| H4C15              | 2.12E-113 | 1.45853419 | 0.391 | 0.121 | 7.53E-109 | CD4_CM_spleen |
| PPM1G              | 2.16E-112 | 1.50825462 | 0.334 | 0.092 | 7.67E-108 | CD4_CM_spleen |
| MARCKSL1           | 8.04E-112 | 1.6543386  | 0.275 | 0.066 | 2.85E-107 | CD4_CM_spleen |
| UBE2D2             | 2.19E-106 | 1.18533607 | 0.491 | 0.178 | 7.76E-102 | CD4_CM_spleen |
| KLF6               | 3.58E-104 | 1.00045784 | 0.823 | 0.482 | 1.27E-99  | CD4_CM_spleen |
| HSPA8              | 4.93E-104 | 0.87785055 | 0.87  | 0.533 | 1.75E-99  | CD4_CM_spleen |
| AKIRIN1            | 2.17E-103 | 1.43626795 | 0.32  | 0.09  | 7.69E-99  | CD4_CM_spleen |
| NABP1              | 3.94E-103 | 1.27345085 | 0.488 | 0.187 | 1.40E-98  | CD4_CM_spleen |
| ITGA1              | 1.13E-102 | 1.52361856 | 0.326 | 0.096 | 3.99E-98  | CD4_CM_spleen |
| ACTG1              | 2.15E-99  | 0.76232555 | 0.959 | 0.851 | 7.60E-95  | CD4_CM_spleen |
| PPIA               | 1.61E-96  | 1.20985926 | 0.342 | 0.104 | 5.71E-92  | CD4_CM_spleen |
| H2AZ2              | 1.76E-93  | 0.88956375 | 0.739 | 0.373 | 6.25E-89  | CD4_CM_spleen |
| METTL9             | 1.28E-92  | 1.29640627 | 0.381 | 0.129 | 4.52E-88  | CD4_CM_spleen |
| SLC9A3R1           | 1.11E-91  | 1.3573266  | 0.332 | 0.104 | 3.94E-87  | CD4_CM_spleen |

|                    |          |            |       |       |          |               |
|--------------------|----------|------------|-------|-------|----------|---------------|
| PPP1R10            | 6.49E-91 | 1.13470325 | 0.495 | 0.203 | 2.30E-86 | CD4_CM_spleen |
| PDCD6-AHRR         | 5.58E-89 | 1.37501041 | 0.269 | 0.074 | 1.98E-84 | CD4_CM_spleen |
| DNAJA1             | 1.08E-88 | 1.18973431 | 0.53  | 0.229 | 3.83E-84 | CD4_CM_spleen |
| MYC                | 7.97E-88 | 1.5442192  | 0.261 | 0.072 | 2.82E-83 | CD4_CM_spleen |
| IL6ST              | 4.10E-86 | 1.03025953 | 0.587 | 0.27  | 1.45E-81 | CD4_CM_spleen |
| PAK2               | 1.43E-85 | 0.94449478 | 0.653 | 0.323 | 5.05E-81 | CD4_CM_spleen |
| ALKBH7             | 1.75E-85 | 1.16876245 | 0.398 | 0.143 | 6.19E-81 | CD4_CM_spleen |
| DECR2              | 2.26E-85 | 1.28264526 | 0.319 | 0.1   | 8.01E-81 | CD4_CM_spleen |
| EEF1A1             | 2.76E-85 | 0.36938082 | 0.985 | 0.98  | 9.79E-81 | CD4_CM_spleen |
| CSK                | 2.38E-84 | 1.14559691 | 0.378 | 0.133 | 8.42E-80 | CD4_CM_spleen |
| LCP1               | 5.11E-84 | 0.89942544 | 0.697 | 0.363 | 1.81E-79 | CD4_CM_spleen |
| MAF1               | 1.28E-83 | 1.1665224  | 0.321 | 0.103 | 4.52E-79 | CD4_CM_spleen |
| STK17B             | 1.35E-83 | 0.76255078 | 0.9   | 0.615 | 4.77E-79 | CD4_CM_spleen |
| EIF3B              | 6.05E-83 | 1.3436249  | 0.254 | 0.071 | 2.14E-78 | CD4_CM_spleen |
| ZFP36              | 6.87E-83 | 0.99107478 | 0.731 | 0.432 | 2.43E-78 | CD4_CM_spleen |
| ENSMMUG00000053918 | 2.48E-82 | 1.46829874 | 0.28  | 0.085 | 8.80E-78 | CD4_CM_spleen |
| PIK3R1             | 5.16E-82 | 1.2705479  | 0.307 | 0.098 | 1.83E-77 | CD4_CM_spleen |
| NDFIP1             | 4.47E-81 | 0.88359048 | 0.705 | 0.384 | 1.58E-76 | CD4_CM_spleen |
| RASSF1             | 5.09E-81 | 1.04175421 | 0.474 | 0.195 | 1.80E-76 | CD4_CM_spleen |
| NME3               | 1.08E-80 | 0.9617369  | 0.571 | 0.262 | 3.82E-76 | CD4_CM_spleen |
| RGCC               | 2.42E-80 | 1.12559601 | 0.421 | 0.164 | 8.57E-76 | CD4_CM_spleen |
| CLIC1              | 3.43E-80 | 1.06554165 | 0.41  | 0.157 | 1.22E-75 | CD4_CM_spleen |
| NFATC2             | 8.62E-80 | 1.4647179  | 0.277 | 0.085 | 3.05E-75 | CD4_CM_spleen |
| RPS15              | 1.53E-78 | 0.27735749 | 0.997 | 0.998 | 5.41E-74 | CD4_CM_spleen |
| RPL27A             | 7.75E-78 | 0.39571297 | 0.993 | 0.957 | 2.75E-73 | CD4_CM_spleen |
| RALBP1             | 1.07E-77 | 1.22040014 | 0.298 | 0.096 | 3.78E-73 | CD4_CM_spleen |
| BRD9               | 1.10E-77 | 1.32634424 | 0.278 | 0.086 | 3.91E-73 | CD4_CM_spleen |
| AUTS2              | 3.88E-77 | 1.36481024 | 0.303 | 0.101 | 1.38E-72 | CD4_CM_spleen |
| HSP90AB1           | 6.99E-76 | 0.61246799 | 0.957 | 0.777 | 2.48E-71 | CD4_CM_spleen |
| TRAC               | 1.53E-75 | 0.64228029 | 0.929 | 0.714 | 5.42E-71 | CD4_CM_spleen |
| ACAP2              | 9.95E-75 | 0.85841969 | 0.604 | 0.295 | 3.52E-70 | CD4_CM_spleen |
| SEMA4D             | 1.88E-73 | 0.88748836 | 0.478 | 0.203 | 6.67E-69 | CD4_CM_spleen |
| MCL1               | 3.62E-73 | 0.95934278 | 0.515 | 0.233 | 1.28E-68 | CD4_CM_spleen |

|                    |          |            |       |       |          |               |
|--------------------|----------|------------|-------|-------|----------|---------------|
| PLAC8              | 1.93E-72 | 0.97915729 | 0.619 | 0.327 | 6.85E-68 | CD4_CM_spleen |
| ACTR3              | 6.31E-72 | 0.83014978 | 0.615 | 0.302 | 2.24E-67 | CD4_CM_spleen |
| TRAF3IP3           | 8.14E-72 | 0.87535482 | 0.614 | 0.311 | 2.88E-67 | CD4_CM_spleen |
| STT3B              | 1.26E-71 | 0.97181506 | 0.44  | 0.185 | 4.48E-67 | CD4_CM_spleen |
| ENSMMUG00000052127 | 2.73E-71 | 0.57383088 | 0.987 | 0.885 | 9.67E-67 | CD4_CM_spleen |
| METTL26            | 1.15E-70 | 1.07751628 | 0.355 | 0.132 | 4.09E-66 | CD4_CM_spleen |
| NOL7               | 3.60E-70 | 1.05712324 | 0.367 | 0.139 | 1.28E-65 | CD4_CM_spleen |
| GTF3A              | 1.11E-69 | 1.27806629 | 0.257 | 0.08  | 3.92E-65 | CD4_CM_spleen |
| ITGB2              | 1.27E-69 | 0.94319843 | 0.392 | 0.155 | 4.51E-65 | CD4_CM_spleen |
| VCP                | 2.22E-69 | 1.12864673 | 0.294 | 0.1   | 7.88E-65 | CD4_CM_spleen |
| TLN1               | 2.86E-69 | 0.98198799 | 0.436 | 0.185 | 1.01E-64 | CD4_CM_spleen |
| ITPKB              | 8.66E-69 | 1.09175912 | 0.334 | 0.122 | 3.07E-64 | CD4_CM_spleen |
| AKAP17A            | 2.34E-68 | 1.264932   | 0.291 | 0.101 | 8.29E-64 | CD4_CM_spleen |
| RPL26              | 3.47E-68 | 0.38719238 | 0.989 | 0.927 | 1.23E-63 | CD4_CM_spleen |
| HNRNPF             | 6.39E-68 | 0.75562287 | 0.644 | 0.329 | 2.27E-63 | CD4_CM_spleen |
| ENSMMUG00000062086 | 3.60E-66 | 1.10811732 | 0.308 | 0.11  | 1.27E-61 | CD4_CM_spleen |
| CD3G               | 1.30E-65 | 0.78121275 | 0.512 | 0.232 | 4.61E-61 | CD4_CM_spleen |
| CD47               | 2.28E-65 | 0.8562441  | 0.5   | 0.227 | 8.07E-61 | CD4_CM_spleen |
| TBC1D10C           | 5.91E-65 | 0.86319105 | 0.476 | 0.213 | 2.10E-60 | CD4_CM_spleen |
| HMGA1              | 9.20E-65 | 0.85662668 | 0.528 | 0.252 | 3.26E-60 | CD4_CM_spleen |
| EIF4A2             | 1.02E-64 | 0.69757254 | 0.746 | 0.436 | 3.61E-60 | CD4_CM_spleen |
| ENSMMUG00000060287 | 9.66E-64 | 0.50534528 | 0.954 | 0.775 | 3.42E-59 | CD4_CM_spleen |
| ENSMMUG00000053392 | 1.35E-63 | 0.70522275 | 0.634 | 0.328 | 4.78E-59 | CD4_CM_spleen |
| TMEM59L            | 7.37E-63 | 0.89863306 | 0.374 | 0.149 | 2.61E-58 | CD4_CM_spleen |
| RBM17              | 1.46E-62 | 0.9942701  | 0.345 | 0.135 | 5.18E-58 | CD4_CM_spleen |
| PPP1CC             | 2.10E-62 | 0.78992009 | 0.5   | 0.232 | 7.44E-58 | CD4_CM_spleen |
| VIM                | 2.30E-62 | 0.84666776 | 0.526 | 0.259 | 8.14E-58 | CD4_CM_spleen |
| THEMIS             | 2.42E-62 | 0.83986343 | 0.53  | 0.264 | 8.59E-58 | CD4_CM_spleen |
| PSIP1              | 2.58E-62 | 0.87894165 | 0.425 | 0.185 | 9.15E-58 | CD4_CM_spleen |
| DEK                | 3.21E-62 | 0.88177179 | 0.367 | 0.147 | 1.14E-57 | CD4_CM_spleen |
| GNB2               | 3.40E-62 | 0.90236425 | 0.353 | 0.138 | 1.21E-57 | CD4_CM_spleen |
| RGS19              | 6.44E-62 | 1.02062694 | 0.331 | 0.126 | 2.28E-57 | CD4_CM_spleen |
| KTN1               | 3.67E-61 | 1.04278943 | 0.311 | 0.118 | 1.30E-56 | CD4_CM_spleen |

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|--------------------|----------|------------|-------|-------|----------|---------------|
| TOB1               | 6.20E-60 | 0.83302263 | 0.518 | 0.253 | 2.20E-55 | CD4_CM_spleen |
| HNRNPD             | 6.55E-60 | 0.75409832 | 0.571 | 0.288 | 2.32E-55 | CD4_CM_spleen |
| RASSF5             | 2.17E-58 | 0.9915774  | 0.299 | 0.112 | 7.68E-54 | CD4_CM_spleen |
| STMN3              | 2.63E-58 | 0.8412547  | 0.346 | 0.137 | 9.33E-54 | CD4_CM_spleen |
| ENSMMUG00000059988 | 4.24E-58 | 0.86649852 | 0.287 | 0.103 | 1.50E-53 | CD4_CM_spleen |
| CMPK1              | 6.25E-58 | 1.0553829  | 0.263 | 0.092 | 2.22E-53 | CD4_CM_spleen |
| ARRDC3             | 1.54E-57 | 1.10949634 | 0.336 | 0.138 | 5.47E-53 | CD4_CM_spleen |
| ZC3HAV1            | 2.67E-57 | 0.75830721 | 0.697 | 0.411 | 9.46E-53 | CD4_CM_spleen |
| IKZF1              | 9.53E-57 | 0.68119758 | 0.676 | 0.386 | 3.38E-52 | CD4_CM_spleen |
| YPEL3              | 1.95E-56 | 0.96400641 | 0.282 | 0.105 | 6.89E-52 | CD4_CM_spleen |
| ZFP36L1            | 4.90E-56 | 0.79156236 | 0.593 | 0.323 | 1.74E-51 | CD4_CM_spleen |
| ENSMMUG00000061128 | 5.36E-56 | 0.72734475 | 0.578 | 0.301 | 1.90E-51 | CD4_CM_spleen |
| GTF2I              | 1.34E-55 | 0.74344333 | 0.475 | 0.226 | 4.76E-51 | CD4_CM_spleen |
| DYNLL1             | 1.69E-55 | 0.73553145 | 0.496 | 0.241 | 6.00E-51 | CD4_CM_spleen |
| PTPN22             | 7.62E-55 | 0.97509186 | 0.276 | 0.102 | 2.70E-50 | CD4_CM_spleen |
| WTAP               | 9.23E-55 | 0.7597304  | 0.6   | 0.319 | 3.27E-50 | CD4_CM_spleen |
| ENSMMUG00000063637 | 1.69E-54 | 0.43712387 | 0.98  | 0.926 | 5.99E-50 | CD4_CM_spleen |
| LRRFIP1            | 4.29E-54 | 0.9049885  | 0.378 | 0.164 | 1.52E-49 | CD4_CM_spleen |
| ACTN1              | 4.61E-54 | 1.01315431 | 0.28  | 0.106 | 1.63E-49 | CD4_CM_spleen |
| GLUD1              | 1.63E-53 | 1.10992711 | 0.26  | 0.095 | 5.79E-49 | CD4_CM_spleen |
| TMSB4X             | 2.39E-53 | 0.2563461  | 0.996 | 0.998 | 8.48E-49 | CD4_CM_spleen |
| CD38               | 2.74E-53 | 0.73877361 | 0.487 | 0.241 | 9.69E-49 | CD4_CM_spleen |
| SIRPG              | 5.89E-53 | 0.77227707 | 0.346 | 0.143 | 2.09E-48 | CD4_CM_spleen |
| PRPF38B            | 1.57E-51 | 0.85996162 | 0.41  | 0.188 | 5.55E-47 | CD4_CM_spleen |
| TGFBR2             | 1.66E-51 | 0.71839845 | 0.462 | 0.224 | 5.89E-47 | CD4_CM_spleen |
| ENSMMUG00000016898 | 4.03E-51 | 0.73308945 | 0.408 | 0.183 | 1.43E-46 | CD4_CM_spleen |
| BTG2               | 1.42E-50 | 0.74791417 | 0.675 | 0.416 | 5.04E-46 | CD4_CM_spleen |
| HNRNPU             | 1.74E-50 | 0.67155887 | 0.619 | 0.339 | 6.18E-46 | CD4_CM_spleen |
| MBP                | 2.10E-50 | 0.68763587 | 0.521 | 0.27  | 7.45E-46 | CD4_CM_spleen |
| RAD23B             | 3.25E-50 | 1.06940053 | 0.269 | 0.104 | 1.15E-45 | CD4_CM_spleen |
| TMC8               | 5.56E-50 | 1.12624916 | 0.262 | 0.101 | 1.97E-45 | CD4_CM_spleen |
| ENSMMUG00000061244 | 8.29E-50 | 1.08086136 | 0.278 | 0.11  | 2.94E-45 | CD4_CM_spleen |
| RETREG1            | 9.33E-50 | 0.7087393  | 0.38  | 0.17  | 3.31E-45 | CD4_CM_spleen |

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|----------|----------|------------|-------|-------|----------|---------------|
| TUBA4A   | 1.26E-49 | 0.77777884 | 0.35  | 0.15  | 4.45E-45 | CD4_CM_spleen |
| CCT2     | 3.60E-49 | 0.66917108 | 0.563 | 0.3   | 1.28E-44 | CD4_CM_spleen |
| HSP90AA1 | 7.20E-49 | 0.62611516 | 0.842 | 0.602 | 2.55E-44 | CD4_CM_spleen |
| PDE7A    | 1.13E-48 | 0.78906875 | 0.497 | 0.257 | 3.99E-44 | CD4_CM_spleen |
| CARD11   | 1.50E-48 | 1.04199242 | 0.266 | 0.104 | 5.33E-44 | CD4_CM_spleen |
| CD69     | 4.40E-48 | 0.57456969 | 0.933 | 0.766 | 1.56E-43 | CD4_CM_spleen |
| ATP6V0E1 | 6.53E-48 | 0.58432818 | 0.523 | 0.266 | 2.31E-43 | CD4_CM_spleen |
| PTPRC    | 7.48E-48 | 0.41212033 | 0.957 | 0.837 | 2.65E-43 | CD4_CM_spleen |
| CHORDC1  | 1.06E-47 | 0.79451515 | 0.392 | 0.181 | 3.75E-43 | CD4_CM_spleen |
| JTB      | 1.52E-47 | 0.66263068 | 0.439 | 0.207 | 5.38E-43 | CD4_CM_spleen |
| SFMBT2   | 1.88E-47 | 0.96477564 | 0.255 | 0.098 | 6.66E-43 | CD4_CM_spleen |
| UBE2R2   | 9.83E-47 | 0.80859105 | 0.307 | 0.129 | 3.48E-42 | CD4_CM_spleen |
| MCUB     | 9.92E-47 | 0.67878274 | 0.525 | 0.281 | 3.51E-42 | CD4_CM_spleen |
| CAP1     | 1.07E-46 | 0.69043654 | 0.461 | 0.229 | 3.80E-42 | CD4_CM_spleen |
| RCSD1    | 2.74E-46 | 0.69682431 | 0.371 | 0.167 | 9.70E-42 | CD4_CM_spleen |
| BTF3     | 4.61E-46 | 0.4420572  | 0.943 | 0.785 | 1.63E-41 | CD4_CM_spleen |
| RPS26    | 5.33E-46 | 0.18076796 | 0.994 | 0.997 | 1.89E-41 | CD4_CM_spleen |
| MANF     | 6.92E-46 | 0.81555388 | 0.268 | 0.106 | 2.45E-41 | CD4_CM_spleen |
| DDX17    | 1.08E-45 | 0.64034578 | 0.597 | 0.335 | 3.82E-41 | CD4_CM_spleen |
| CHST11   | 1.27E-45 | 0.80285963 | 0.332 | 0.146 | 4.50E-41 | CD4_CM_spleen |
| FNBP1L   | 1.55E-45 | 0.87318136 | 0.253 | 0.098 | 5.50E-41 | CD4_CM_spleen |
| YY1      | 1.72E-45 | 0.81496132 | 0.281 | 0.114 | 6.09E-41 | CD4_CM_spleen |
| PSMA5    | 2.27E-45 | 0.69351787 | 0.372 | 0.169 | 8.03E-41 | CD4_CM_spleen |
| CD4      | 2.69E-45 | 0.75405775 | 0.346 | 0.153 | 9.52E-41 | CD4_CM_spleen |
| EEF1G    | 3.82E-45 | 0.38122554 | 0.96  | 0.828 | 1.35E-40 | CD4_CM_spleen |
| GLS      | 4.69E-45 | 0.75182788 | 0.313 | 0.134 | 1.66E-40 | CD4_CM_spleen |
| DDX5     | 9.28E-45 | 0.40229666 | 0.97  | 0.815 | 3.29E-40 | CD4_CM_spleen |
| SEM1     | 1.01E-44 | 0.49189331 | 0.595 | 0.314 | 3.57E-40 | CD4_CM_spleen |
| LCK      | 1.27E-44 | 0.58979531 | 0.661 | 0.391 | 4.51E-40 | CD4_CM_spleen |
| KIF2A    | 1.64E-44 | 0.65208886 | 0.396 | 0.186 | 5.79E-40 | CD4_CM_spleen |
| CALR     | 1.64E-44 | 0.65447759 | 0.525 | 0.279 | 5.80E-40 | CD4_CM_spleen |
| EFCAB2   | 1.89E-44 | 0.72183094 | 0.381 | 0.18  | 6.68E-40 | CD4_CM_spleen |
| RAC2     | 7.31E-44 | 0.56418212 | 0.562 | 0.303 | 2.59E-39 | CD4_CM_spleen |

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| NCOR1    | 1.20E-43 | 0.71910624 | 0.434 | 0.216 | 4.26E-39 | CD4_CM_spleen |
| RGS10    | 2.27E-43 | 0.57372544 | 0.688 | 0.426 | 8.05E-39 | CD4_CM_spleen |
| FAM107B  | 5.94E-43 | 0.70450891 | 0.446 | 0.227 | 2.10E-38 | CD4_CM_spleen |
| RUNX1    | 9.46E-43 | 0.58787583 | 0.57  | 0.314 | 3.35E-38 | CD4_CM_spleen |
| ARGLU1   | 9.97E-43 | 0.53108511 | 0.692 | 0.415 | 3.53E-38 | CD4_CM_spleen |
| UBE2B    | 1.27E-42 | 0.5942995  | 0.539 | 0.29  | 4.52E-38 | CD4_CM_spleen |
| RPL19    | 1.45E-42 | 0.22213449 | 0.989 | 0.977 | 5.14E-38 | CD4_CM_spleen |
| DIAPH1   | 1.72E-42 | 0.59933677 | 0.472 | 0.242 | 6.10E-38 | CD4_CM_spleen |
| TOP1     | 2.73E-42 | 0.60375022 | 0.615 | 0.358 | 9.68E-38 | CD4_CM_spleen |
| GRB2     | 3.43E-42 | 0.73946143 | 0.35  | 0.161 | 1.22E-37 | CD4_CM_spleen |
| STK10    | 3.51E-41 | 0.62347354 | 0.366 | 0.17  | 1.24E-36 | CD4_CM_spleen |
| H1-2     | 9.22E-41 | 0.67741788 | 0.418 | 0.211 | 3.27E-36 | CD4_CM_spleen |
| TCP1     | 9.83E-41 | 0.74655118 | 0.306 | 0.134 | 3.48E-36 | CD4_CM_spleen |
| CUL4A    | 1.23E-40 | 0.79682599 | 0.274 | 0.116 | 4.34E-36 | CD4_CM_spleen |
| CYBA     | 1.27E-40 | 0.57774934 | 0.542 | 0.295 | 4.49E-36 | CD4_CM_spleen |
| GRK5     | 3.53E-40 | 0.78049184 | 0.276 | 0.119 | 1.25E-35 | CD4_CM_spleen |
| ADAM10   | 4.06E-40 | 0.65762723 | 0.35  | 0.164 | 1.44E-35 | CD4_CM_spleen |
| BTG1     | 5.51E-40 | 0.16314419 | 0.943 | 0.796 | 1.95E-35 | CD4_CM_spleen |
| CAPRIN1  | 5.53E-40 | 0.67446414 | 0.29  | 0.125 | 1.96E-35 | CD4_CM_spleen |
| NXPE3    | 1.32E-39 | 0.75489431 | 0.366 | 0.18  | 4.67E-35 | CD4_CM_spleen |
| CCT7     | 1.73E-39 | 0.52333577 | 0.396 | 0.191 | 6.12E-35 | CD4_CM_spleen |
| RNASEH2C | 1.84E-39 | 0.68237961 | 0.358 | 0.169 | 6.52E-35 | CD4_CM_spleen |
| MTDH     | 2.11E-39 | 0.62519092 | 0.352 | 0.165 | 7.48E-35 | CD4_CM_spleen |
| STIM1    | 2.20E-39 | 0.7112422  | 0.38  | 0.184 | 7.80E-35 | CD4_CM_spleen |
| RASA1    | 2.59E-39 | 0.73071718 | 0.256 | 0.106 | 9.17E-35 | CD4_CM_spleen |
| ME2      | 3.85E-39 | 0.67693775 | 0.405 | 0.204 | 1.36E-34 | CD4_CM_spleen |
| RPL23    | 4.55E-39 | 0.27353095 | 0.996 | 0.959 | 1.61E-34 | CD4_CM_spleen |
| SRSF7    | 1.94E-38 | 0.55902144 | 0.647 | 0.392 | 6.87E-34 | CD4_CM_spleen |
| MAML2    | 5.85E-38 | 0.53843279 | 0.794 | 0.553 | 2.07E-33 | CD4_CM_spleen |
| SNRNP70  | 6.55E-38 | 0.68589855 | 0.387 | 0.193 | 2.32E-33 | CD4_CM_spleen |
| FYB1     | 9.40E-38 | 0.45793679 | 0.795 | 0.535 | 3.33E-33 | CD4_CM_spleen |
| MYH9     | 1.03E-37 | 0.52352323 | 0.606 | 0.347 | 3.66E-33 | CD4_CM_spleen |
| CACYBP   | 1.14E-37 | 0.55546351 | 0.59  | 0.338 | 4.02E-33 | CD4_CM_spleen |

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|----------|----------|------------|-------|-------|----------|---------------|
| PIP4K2A  | 1.38E-37 | 0.50445696 | 0.574 | 0.322 | 4.90E-33 | CD4_CM_spleen |
| CYRIB    | 1.96E-37 | 0.52943332 | 0.611 | 0.361 | 6.94E-33 | CD4_CM_spleen |
| SMARCA5  | 7.83E-37 | 0.73675075 | 0.346 | 0.169 | 2.77E-32 | CD4_CM_spleen |
| STIP1    | 9.55E-37 | 0.83182493 | 0.266 | 0.116 | 3.39E-32 | CD4_CM_spleen |
| MALT1    | 2.16E-36 | 0.63675046 | 0.337 | 0.161 | 7.64E-32 | CD4_CM_spleen |
| NSD1     | 2.94E-36 | 0.566603   | 0.414 | 0.213 | 1.04E-31 | CD4_CM_spleen |
| AKNA     | 3.70E-36 | 0.62169749 | 0.343 | 0.167 | 1.31E-31 | CD4_CM_spleen |
| CD164    | 5.83E-36 | 0.54097439 | 0.506 | 0.277 | 2.07E-31 | CD4_CM_spleen |
| TMCO1    | 6.38E-36 | 0.66376867 | 0.27  | 0.119 | 2.26E-31 | CD4_CM_spleen |
| SPTAN1   | 6.75E-36 | 0.79282889 | 0.268 | 0.119 | 2.39E-31 | CD4_CM_spleen |
| UBE2D1   | 9.57E-36 | 0.62340231 | 0.355 | 0.174 | 3.39E-31 | CD4_CM_spleen |
| PYHIN1   | 1.17E-35 | 0.48751186 | 0.379 | 0.187 | 4.13E-31 | CD4_CM_spleen |
| RPS19BP1 | 1.38E-35 | 0.59957399 | 0.302 | 0.139 | 4.88E-31 | CD4_CM_spleen |
| RAP1A    | 2.18E-35 | 0.51340621 | 0.547 | 0.312 | 7.73E-31 | CD4_CM_spleen |
| RBM26    | 3.64E-35 | 0.67029091 | 0.328 | 0.158 | 1.29E-30 | CD4_CM_spleen |
| RANBP2   | 7.41E-35 | 0.54926692 | 0.479 | 0.266 | 2.63E-30 | CD4_CM_spleen |
| CCNI     | 8.54E-35 | 0.47171674 | 0.652 | 0.398 | 3.03E-30 | CD4_CM_spleen |
| UBL3     | 1.36E-34 | 0.68451763 | 0.282 | 0.128 | 4.82E-30 | CD4_CM_spleen |
| RPL23A   | 2.11E-34 | 0.24022365 | 0.995 | 0.992 | 7.47E-30 | CD4_CM_spleen |
| B2M      | 2.49E-34 | 0.1906922  | 0.997 | 0.997 | 8.81E-30 | CD4_CM_spleen |
| GNB1     | 3.08E-34 | 0.69163949 | 0.297 | 0.14  | 1.09E-29 | CD4_CM_spleen |
| ARHGAP30 | 5.52E-34 | 0.59346229 | 0.347 | 0.173 | 1.96E-29 | CD4_CM_spleen |
| GTF2A2   | 7.44E-34 | 0.61507165 | 0.308 | 0.146 | 2.63E-29 | CD4_CM_spleen |
| CD2      | 9.08E-34 | 0.40501741 | 0.532 | 0.299 | 3.22E-29 | CD4_CM_spleen |
| MRPS21   | 9.23E-34 | 0.49103544 | 0.292 | 0.134 | 3.27E-29 | CD4_CM_spleen |
| TNFAIP3  | 1.37E-33 | 0.63086739 | 0.667 | 0.456 | 4.86E-29 | CD4_CM_spleen |
| FBL      | 2.31E-33 | 0.61982244 | 0.35  | 0.174 | 8.18E-29 | CD4_CM_spleen |
| PIGY     | 3.13E-33 | 0.53279761 | 0.441 | 0.233 | 1.11E-28 | CD4_CM_spleen |
| SLC35B1  | 3.27E-33 | 0.63462742 | 0.362 | 0.183 | 1.16E-28 | CD4_CM_spleen |
| TOX      | 4.56E-33 | 0.49688973 | 0.637 | 0.392 | 1.61E-28 | CD4_CM_spleen |
| NEDD9    | 4.91E-33 | 0.66016326 | 0.381 | 0.2   | 1.74E-28 | CD4_CM_spleen |
| ABCF1    | 6.95E-33 | 0.58691589 | 0.304 | 0.145 | 2.46E-28 | CD4_CM_spleen |
| BRD2     | 1.46E-32 | 0.56488404 | 0.392 | 0.203 | 5.18E-28 | CD4_CM_spleen |

|                    |          |            |       |       |          |               |
|--------------------|----------|------------|-------|-------|----------|---------------|
| MYDGF              | 2.17E-32 | 0.57192801 | 0.408 | 0.215 | 7.68E-28 | CD4_CM_spleen |
| SMC4               | 2.67E-32 | 0.56316729 | 0.679 | 0.449 | 9.47E-28 | CD4_CM_spleen |
| NFKBIA             | 3.00E-32 | 0.87326528 | 0.472 | 0.283 | 1.06E-27 | CD4_CM_spleen |
| FLI1               | 3.65E-32 | 0.69286689 | 0.271 | 0.126 | 1.29E-27 | CD4_CM_spleen |
| BAZ1A              | 3.68E-32 | 0.52139478 | 0.419 | 0.224 | 1.30E-27 | CD4_CM_spleen |
| SRSF10             | 3.71E-32 | 0.56449042 | 0.466 | 0.256 | 1.32E-27 | CD4_CM_spleen |
| PFDN6              | 3.98E-32 | 0.46969602 | 0.338 | 0.165 | 1.41E-27 | CD4_CM_spleen |
| SH3KBP1            | 4.67E-32 | 0.41761716 | 0.781 | 0.541 | 1.65E-27 | CD4_CM_spleen |
| ID2                | 6.24E-32 | 0.55286034 | 0.552 | 0.347 | 2.21E-27 | CD4_CM_spleen |
| RNF5               | 6.58E-32 | 0.5983703  | 0.262 | 0.119 | 2.33E-27 | CD4_CM_spleen |
| CHCHD1             | 2.07E-31 | 0.42928718 | 0.302 | 0.143 | 7.35E-27 | CD4_CM_spleen |
| HNRNPA2B1          | 2.64E-31 | 0.36767776 | 0.926 | 0.75  | 9.34E-27 | CD4_CM_spleen |
| ENSMMUG00000058325 | 3.54E-31 | 0.35405771 | 0.963 | 0.859 | 1.25E-26 | CD4_CM_spleen |
| EIF4A1             | 3.69E-31 | 0.42020233 | 0.548 | 0.316 | 1.31E-26 | CD4_CM_spleen |
| IFNAR2             | 3.87E-31 | 0.59140186 | 0.273 | 0.128 | 1.37E-26 | CD4_CM_spleen |
| SETX               | 4.49E-31 | 0.58300902 | 0.335 | 0.168 | 1.59E-26 | CD4_CM_spleen |
| TAGAP              | 5.24E-31 | 0.60849768 | 0.487 | 0.29  | 1.86E-26 | CD4_CM_spleen |
| MSN                | 6.59E-31 | 0.43335482 | 0.723 | 0.464 | 2.33E-26 | CD4_CM_spleen |
| TNIK               | 7.11E-31 | 0.4314003  | 0.739 | 0.491 | 2.52E-26 | CD4_CM_spleen |
| SUZ12              | 9.99E-31 | 0.71751952 | 0.269 | 0.128 | 3.54E-26 | CD4_CM_spleen |
| KCNQ5              | 1.11E-30 | 0.498482   | 0.469 | 0.271 | 3.92E-26 | CD4_CM_spleen |
| IGF2BP3            | 1.20E-30 | 0.53904407 | 0.315 | 0.155 | 4.24E-26 | CD4_CM_spleen |
| CTCF               | 1.59E-30 | 0.70900516 | 0.295 | 0.145 | 5.65E-26 | CD4_CM_spleen |
| ATP5F1B            | 1.76E-30 | 0.53168879 | 0.306 | 0.148 | 6.25E-26 | CD4_CM_spleen |
| PAG1               | 1.97E-30 | 0.47353239 | 0.576 | 0.354 | 6.97E-26 | CD4_CM_spleen |
| ENSMMUG00000038373 | 3.10E-30 | 0.39292318 | 0.55  | 0.321 | 1.10E-25 | CD4_CM_spleen |
| IRF2               | 3.16E-30 | 0.61486628 | 0.318 | 0.159 | 1.12E-25 | CD4_CM_spleen |
| UBA2               | 3.46E-30 | 0.50612539 | 0.334 | 0.168 | 1.22E-25 | CD4_CM_spleen |
| ADGRE5             | 3.87E-30 | 0.71572697 | 0.391 | 0.218 | 1.37E-25 | CD4_CM_spleen |
| NSD3               | 4.42E-30 | 0.41360644 | 0.437 | 0.238 | 1.57E-25 | CD4_CM_spleen |
| GLG1               | 4.56E-30 | 0.46483973 | 0.482 | 0.276 | 1.62E-25 | CD4_CM_spleen |
| HYPK               | 5.39E-30 | 0.41048492 | 0.528 | 0.308 | 1.91E-25 | CD4_CM_spleen |
| RALY               | 5.69E-30 | 0.63273538 | 0.319 | 0.161 | 2.02E-25 | CD4_CM_spleen |



|                    |          |            |       |       |          |               |
|--------------------|----------|------------|-------|-------|----------|---------------|
| IFT80              | 9.78E-30 | 0.4936569  | 0.413 | 0.227 | 3.47E-25 | CD4_CM_spleen |
| CCDC107            | 1.26E-29 | 0.58065396 | 0.303 | 0.149 | 4.46E-25 | CD4_CM_spleen |
| ANKRD10            | 1.27E-29 | 0.57193748 | 0.291 | 0.141 | 4.51E-25 | CD4_CM_spleen |
| CCT5               | 1.76E-29 | 0.46857331 | 0.503 | 0.294 | 6.23E-25 | CD4_CM_spleen |
| ZMYND8             | 2.03E-29 | 0.58921211 | 0.383 | 0.207 | 7.19E-25 | CD4_CM_spleen |
| SUPT4H1            | 2.47E-29 | 0.53414103 | 0.261 | 0.122 | 8.74E-25 | CD4_CM_spleen |
| FNBP1              | 7.83E-29 | 0.40396246 | 0.736 | 0.499 | 2.77E-24 | CD4_CM_spleen |
| AARS1              | 9.05E-29 | 0.42243336 | 0.434 | 0.239 | 3.21E-24 | CD4_CM_spleen |
| TCF7               | 1.40E-28 | 0.54288267 | 0.275 | 0.132 | 4.96E-24 | CD4_CM_spleen |
| ENSMMUG00000060923 | 1.81E-28 | 0.45068052 | 0.617 | 0.391 | 6.41E-24 | CD4_CM_spleen |
| CGGBP1             | 1.81E-28 | 0.50515153 | 0.288 | 0.141 | 6.41E-24 | CD4_CM_spleen |
| CHD3               | 4.03E-28 | 0.57246174 | 0.343 | 0.18  | 1.43E-23 | CD4_CM_spleen |
| GNAI2.1            | 4.40E-28 | 0.44862983 | 0.368 | 0.195 | 1.56E-23 | CD4_CM_spleen |
| PHF14              | 4.96E-28 | 0.53095731 | 0.394 | 0.215 | 1.76E-23 | CD4_CM_spleen |
| IQGAP1             | 6.04E-28 | 0.45044041 | 0.5   | 0.293 | 2.14E-23 | CD4_CM_spleen |
| XPO6               | 6.62E-28 | 0.55627153 | 0.366 | 0.198 | 2.35E-23 | CD4_CM_spleen |
| FOXN3              | 8.22E-28 | 0.38332434 | 0.848 | 0.607 | 2.91E-23 | CD4_CM_spleen |
| ECHDC1             | 8.70E-28 | 0.5253356  | 0.39  | 0.215 | 3.08E-23 | CD4_CM_spleen |
| STIM2              | 1.25E-27 | 0.6558002  | 0.268 | 0.132 | 4.42E-23 | CD4_CM_spleen |
| ENSMMUG00000065373 | 1.26E-27 | 0.49197379 | 0.955 | 0.937 | 4.45E-23 | CD4_CM_spleen |
| MRPL57             | 1.33E-27 | 0.38894169 | 0.375 | 0.2   | 4.71E-23 | CD4_CM_spleen |
| PLEKHA1            | 1.46E-27 | 0.63561057 | 0.262 | 0.128 | 5.17E-23 | CD4_CM_spleen |
| MYCBP2             | 1.47E-27 | 0.41665209 | 0.539 | 0.324 | 5.20E-23 | CD4_CM_spleen |
| NDUFAB1            | 1.54E-27 | 0.44896401 | 0.371 | 0.195 | 5.45E-23 | CD4_CM_spleen |
| ENSMMUG00000047277 | 1.71E-27 | 0.25291233 | 0.842 | 0.558 | 6.05E-23 | CD4_CM_spleen |
| NOP58              | 1.76E-27 | 0.48698055 | 0.413 | 0.231 | 6.25E-23 | CD4_CM_spleen |
| RPL31              | 2.35E-27 | 0.35669009 | 0.863 | 0.657 | 8.33E-23 | CD4_CM_spleen |
| ZNF609             | 2.49E-27 | 0.49231726 | 0.408 | 0.229 | 8.82E-23 | CD4_CM_spleen |
| EIF5B              | 3.15E-27 | 0.41121742 | 0.371 | 0.198 | 1.11E-22 | CD4_CM_spleen |
| HNRNPL             | 4.08E-27 | 0.43029669 | 0.442 | 0.248 | 1.44E-22 | CD4_CM_spleen |
| ENSMMUG00000052424 | 4.39E-27 | 0.45687845 | 0.562 | 0.346 | 1.56E-22 | CD4_CM_spleen |
| WASF2              | 4.93E-27 | 0.46594328 | 0.482 | 0.284 | 1.75E-22 | CD4_CM_spleen |
| ZNF638             | 5.16E-27 | 0.41420924 | 0.389 | 0.212 | 1.83E-22 | CD4_CM_spleen |

|          |          |            |       |       |          |               |
|----------|----------|------------|-------|-------|----------|---------------|
| CCT6A    | 7.93E-27 | 0.45844179 | 0.566 | 0.355 | 2.81E-22 | CD4_CM_spleen |
| SLC30A7  | 8.05E-27 | 0.44100376 | 0.55  | 0.333 | 2.85E-22 | CD4_CM_spleen |
| COMT     | 8.45E-27 | 0.53131515 | 0.255 | 0.122 | 2.99E-22 | CD4_CM_spleen |
| PGK1     | 9.14E-27 | 0.36219632 | 0.613 | 0.383 | 3.24E-22 | CD4_CM_spleen |
| XPC      | 9.23E-27 | 0.54885988 | 0.324 | 0.171 | 3.27E-22 | CD4_CM_spleen |
| RCAN3    | 9.83E-27 | 0.49237399 | 0.404 | 0.226 | 3.48E-22 | CD4_CM_spleen |
| ETS1     | 1.04E-26 | 0.39334285 | 0.804 | 0.589 | 3.69E-22 | CD4_CM_spleen |
| ARID1A   | 1.13E-26 | 0.51269345 | 0.363 | 0.196 | 4.00E-22 | CD4_CM_spleen |
| PDLIM2   | 1.44E-26 | 0.54206261 | 0.381 | 0.208 | 5.10E-22 | CD4_CM_spleen |
| TMEM131L | 1.85E-26 | 0.49473878 | 0.459 | 0.268 | 6.55E-22 | CD4_CM_spleen |
| CCND3    | 2.27E-26 | 0.42507707 | 0.69  | 0.457 | 8.03E-22 | CD4_CM_spleen |
| LRPPRC   | 2.63E-26 | 0.48145487 | 0.328 | 0.172 | 9.31E-22 | CD4_CM_spleen |
| EEF1E1   | 2.99E-26 | 0.5287627  | 0.322 | 0.168 | 1.06E-21 | CD4_CM_spleen |
| IRAK2    | 3.24E-26 | 0.52461462 | 0.336 | 0.18  | 1.15E-21 | CD4_CM_spleen |
| PAOX     | 3.80E-26 | 0.37598282 | 0.408 | 0.223 | 1.35E-21 | CD4_CM_spleen |
| XPO1     | 3.92E-26 | 0.57272283 | 0.259 | 0.127 | 1.39E-21 | CD4_CM_spleen |
| SEC14L2  | 4.56E-26 | 0.36293063 | 0.292 | 0.146 | 1.62E-21 | CD4_CM_spleen |
| PTPMT1   | 4.71E-26 | 0.51404618 | 0.357 | 0.193 | 1.67E-21 | CD4_CM_spleen |
| HERC4    | 5.16E-26 | 0.56904545 | 0.276 | 0.14  | 1.83E-21 | CD4_CM_spleen |
| IFRD1    | 7.19E-26 | 0.52250498 | 0.382 | 0.214 | 2.55E-21 | CD4_CM_spleen |
| SMARCA2  | 9.48E-26 | 0.50013627 | 0.334 | 0.179 | 3.36E-21 | CD4_CM_spleen |
| H2AFY    | 1.24E-25 | 0.43364629 | 0.444 | 0.251 | 4.38E-21 | CD4_CM_spleen |
| RHOG     | 1.52E-25 | 0.48087447 | 0.281 | 0.142 | 5.39E-21 | CD4_CM_spleen |
| SENP6    | 1.59E-25 | 0.47075951 | 0.445 | 0.26  | 5.63E-21 | CD4_CM_spleen |
| PARK7    | 1.88E-25 | 0.4066047  | 0.44  | 0.252 | 6.67E-21 | CD4_CM_spleen |
| PLEKHG1  | 2.09E-25 | 0.57268404 | 0.263 | 0.132 | 7.42E-21 | CD4_CM_spleen |
| MRPL42   | 2.87E-25 | 0.38092176 | 0.292 | 0.148 | 1.02E-20 | CD4_CM_spleen |
| LMAN2    | 2.97E-25 | 0.45164166 | 0.308 | 0.16  | 1.05E-20 | CD4_CM_spleen |
| ATM      | 3.00E-25 | 0.51880779 | 0.377 | 0.213 | 1.06E-20 | CD4_CM_spleen |
| ZMYM2    | 4.44E-25 | 0.43826232 | 0.365 | 0.198 | 1.57E-20 | CD4_CM_spleen |
| TMEM147  | 4.47E-25 | 0.45731953 | 0.366 | 0.201 | 1.58E-20 | CD4_CM_spleen |
| SPTBN1   | 4.94E-25 | 0.41227618 | 0.427 | 0.245 | 1.75E-20 | CD4_CM_spleen |
| CLK1     | 6.84E-25 | 0.39426296 | 0.476 | 0.28  | 2.42E-20 | CD4_CM_spleen |

|                    |          |            |       |       |          |               |
|--------------------|----------|------------|-------|-------|----------|---------------|
| IL2RG              | 6.89E-25 | 0.37270149 | 0.59  | 0.372 | 2.44E-20 | CD4_CM_spleen |
| ANP32A             | 7.02E-25 | 0.38078913 | 0.411 | 0.231 | 2.49E-20 | CD4_CM_spleen |
| VAMP8              | 8.92E-25 | 0.39060045 | 0.494 | 0.296 | 3.16E-20 | CD4_CM_spleen |
| ENSMMUG00000058919 | 9.83E-25 | 0.4385285  | 0.354 | 0.192 | 3.48E-20 | CD4_CM_spleen |
| SRP9               | 1.02E-24 | 0.37546652 | 0.276 | 0.138 | 3.62E-20 | CD4_CM_spleen |
| PRKDC              | 1.14E-24 | 0.4037311  | 0.439 | 0.254 | 4.05E-20 | CD4_CM_spleen |
| TWF2               | 1.32E-24 | 0.35128983 | 0.398 | 0.22  | 4.68E-20 | CD4_CM_spleen |
| GLCE               | 1.35E-24 | 0.61434604 | 0.261 | 0.132 | 4.79E-20 | CD4_CM_spleen |
| DAD1               | 1.65E-24 | 0.32528557 | 0.636 | 0.407 | 5.83E-20 | CD4_CM_spleen |
| CPNE1              | 2.18E-24 | 0.32714994 | 0.393 | 0.215 | 7.73E-20 | CD4_CM_spleen |
| DBNL               | 2.83E-24 | 0.47156299 | 0.252 | 0.124 | 1.00E-19 | CD4_CM_spleen |
| SPECC1L            | 4.85E-24 | 0.55335696 | 0.312 | 0.168 | 1.72E-19 | CD4_CM_spleen |
| SPOP               | 4.91E-24 | 0.45866125 | 0.316 | 0.168 | 1.74E-19 | CD4_CM_spleen |
| HSPA9              | 5.04E-24 | 0.45512002 | 0.375 | 0.208 | 1.79E-19 | CD4_CM_spleen |
| PCBP1              | 5.23E-24 | 0.4274558  | 0.522 | 0.32  | 1.85E-19 | CD4_CM_spleen |
| TAOK1              | 5.28E-24 | 0.53554941 | 0.251 | 0.125 | 1.87E-19 | CD4_CM_spleen |
| ENSMMUG00000061125 | 5.41E-24 | 0.49239722 | 0.66  | 0.462 | 1.92E-19 | CD4_CM_spleen |
| PER1               | 7.58E-24 | 0.51606855 | 0.391 | 0.222 | 2.69E-19 | CD4_CM_spleen |
| SYNCRIP            | 8.92E-24 | 0.46220458 | 0.379 | 0.214 | 3.16E-19 | CD4_CM_spleen |
| PTBP3              | 1.23E-23 | 0.3691626  | 0.481 | 0.286 | 4.35E-19 | CD4_CM_spleen |
| TAOK3              | 1.33E-23 | 0.45818336 | 0.38  | 0.216 | 4.73E-19 | CD4_CM_spleen |
| TUFM               | 1.37E-23 | 0.41906334 | 0.291 | 0.152 | 4.86E-19 | CD4_CM_spleen |
| PRDX1              | 1.44E-23 | 0.3547911  | 0.41  | 0.234 | 5.10E-19 | CD4_CM_spleen |
| DDX50              | 2.26E-23 | 0.39831206 | 0.34  | 0.186 | 7.99E-19 | CD4_CM_spleen |
| SPCS2              | 2.29E-23 | 0.2170928  | 0.415 | 0.229 | 8.13E-19 | CD4_CM_spleen |
| NDUFB5             | 2.30E-23 | 0.30195873 | 0.326 | 0.173 | 8.14E-19 | CD4_CM_spleen |
| RER1               | 2.56E-23 | 0.37844379 | 0.334 | 0.179 | 9.08E-19 | CD4_CM_spleen |
| MRPL32             | 3.29E-23 | 0.40490157 | 0.277 | 0.143 | 1.17E-18 | CD4_CM_spleen |
| FARS2              | 3.61E-23 | 0.44118296 | 0.329 | 0.18  | 1.28E-18 | CD4_CM_spleen |
| CD53               | 3.66E-23 | 0.27916296 | 0.548 | 0.335 | 1.30E-18 | CD4_CM_spleen |
| CCNL1              | 6.99E-23 | 0.40534258 | 0.693 | 0.467 | 2.48E-18 | CD4_CM_spleen |
| DGKZ               | 7.91E-23 | 0.55503313 | 0.267 | 0.14  | 2.80E-18 | CD4_CM_spleen |
| GMDS               | 8.56E-23 | 0.51286203 | 0.295 | 0.16  | 3.03E-18 | CD4_CM_spleen |

|                    |          |            |       |       |          |               |
|--------------------|----------|------------|-------|-------|----------|---------------|
| EEA1               | 8.80E-23 | 0.40042478 | 0.304 | 0.162 | 3.12E-18 | CD4_CM_spleen |
| KHDRBS1            | 1.04E-22 | 0.50027302 | 0.261 | 0.134 | 3.70E-18 | CD4_CM_spleen |
| PSMA7              | 1.05E-22 | 0.35838648 | 0.837 | 0.649 | 3.71E-18 | CD4_CM_spleen |
| WWOX               | 1.06E-22 | 0.55578649 | 0.289 | 0.157 | 3.75E-18 | CD4_CM_spleen |
| ERBIN              | 1.77E-22 | 0.43008817 | 0.498 | 0.312 | 6.27E-18 | CD4_CM_spleen |
| CAMK1D             | 2.71E-22 | 0.43998135 | 0.458 | 0.28  | 9.60E-18 | CD4_CM_spleen |
| DOCK11             | 2.80E-22 | 0.34038034 | 0.445 | 0.264 | 9.93E-18 | CD4_CM_spleen |
| WNK1               | 2.93E-22 | 0.3050654  | 0.495 | 0.298 | 1.04E-17 | CD4_CM_spleen |
| HERC3              | 3.36E-22 | 0.38092914 | 0.328 | 0.18  | 1.19E-17 | CD4_CM_spleen |
| RPS3               | 3.69E-22 | 0.17757147 | 0.993 | 0.984 | 1.31E-17 | CD4_CM_spleen |
| PTGES3             | 3.92E-22 | 0.37340569 | 0.732 | 0.512 | 1.39E-17 | CD4_CM_spleen |
| MRPL14             | 5.08E-22 | 0.25030742 | 0.398 | 0.225 | 1.80E-17 | CD4_CM_spleen |
| DOCK2              | 5.33E-22 | 0.41463796 | 0.555 | 0.352 | 1.89E-17 | CD4_CM_spleen |
| RSU1               | 7.12E-22 | 0.41612069 | 0.345 | 0.193 | 2.52E-17 | CD4_CM_spleen |
| PTEN               | 8.23E-22 | 0.45400427 | 0.291 | 0.157 | 2.91E-17 | CD4_CM_spleen |
| POLR2A             | 1.01E-21 | 0.44057051 | 0.341 | 0.194 | 3.57E-17 | CD4_CM_spleen |
| HP1BP3             | 1.06E-21 | 0.34508782 | 0.417 | 0.246 | 3.77E-17 | CD4_CM_spleen |
| TBC1D10B           | 1.24E-21 | 0.36357574 | 0.355 | 0.199 | 4.41E-17 | CD4_CM_spleen |
| CHD1               | 1.33E-21 | 0.3473274  | 0.306 | 0.166 | 4.71E-17 | CD4_CM_spleen |
| WIPF1              | 1.37E-21 | 0.33912062 | 0.559 | 0.35  | 4.87E-17 | CD4_CM_spleen |
| ARF5               | 1.69E-21 | 0.29610292 | 0.532 | 0.32  | 5.99E-17 | CD4_CM_spleen |
| DPH6               | 1.71E-21 | 0.40973439 | 0.252 | 0.13  | 6.06E-17 | CD4_CM_spleen |
| ENSMMUG00000038348 | 1.96E-21 | 0.12503628 | 0.847 | 0.648 | 6.93E-17 | CD4_CM_spleen |
| COX17              | 2.00E-21 | 0.20613138 | 0.321 | 0.174 | 7.08E-17 | CD4_CM_spleen |
| LSM2               | 2.46E-21 | 0.3403496  | 0.307 | 0.166 | 8.73E-17 | CD4_CM_spleen |
| HMOX2              | 2.56E-21 | 0.40114722 | 0.376 | 0.218 | 9.07E-17 | CD4_CM_spleen |
| SRSF6              | 2.79E-21 | 0.37658246 | 0.372 | 0.213 | 9.88E-17 | CD4_CM_spleen |
| SMARCC1            | 2.81E-21 | 0.44270194 | 0.388 | 0.229 | 9.95E-17 | CD4_CM_spleen |
| RBMS1              | 2.88E-21 | 0.42188043 | 0.355 | 0.205 | 1.02E-16 | CD4_CM_spleen |
| TMED10             | 3.82E-21 | 0.38729416 | 0.438 | 0.259 | 1.35E-16 | CD4_CM_spleen |
| HSPE1              | 4.46E-21 | 0.26726483 | 0.714 | 0.491 | 1.58E-16 | CD4_CM_spleen |
| NRDC               | 5.09E-21 | 0.43045931 | 0.261 | 0.137 | 1.80E-16 | CD4_CM_spleen |
| MIC1               | 5.35E-21 | 0.30176694 | 0.725 | 0.51  | 1.90E-16 | CD4_CM_spleen |

|             |          |            |       |       |          |               |
|-------------|----------|------------|-------|-------|----------|---------------|
| RHEB        | 5.79E-21 | 0.39913034 | 0.335 | 0.186 | 2.05E-16 | CD4_CM_spleen |
| C11H12orf57 | 6.12E-21 | 0.32537426 | 0.751 | 0.551 | 2.17E-16 | CD4_CM_spleen |
| HNRNPA0     | 7.76E-21 | 0.3261359  | 0.54  | 0.336 | 2.75E-16 | CD4_CM_spleen |
| SF1         | 8.21E-21 | 0.36194058 | 0.517 | 0.324 | 2.91E-16 | CD4_CM_spleen |
| MIA2        | 1.02E-20 | 0.28444153 | 0.375 | 0.214 | 3.62E-16 | CD4_CM_spleen |
| DNAJC8      | 1.06E-20 | 0.3680944  | 0.396 | 0.232 | 3.74E-16 | CD4_CM_spleen |
| CAB39       | 1.23E-20 | 0.33924772 | 0.437 | 0.265 | 4.36E-16 | CD4_CM_spleen |
| MRPL33      | 1.34E-20 | 0.18169035 | 0.301 | 0.161 | 4.75E-16 | CD4_CM_spleen |
| CRLF3       | 1.35E-20 | 0.45093842 | 0.273 | 0.147 | 4.79E-16 | CD4_CM_spleen |
| TMEM167A    | 1.53E-20 | 0.33237431 | 0.297 | 0.16  | 5.43E-16 | CD4_CM_spleen |
| WDR74       | 1.78E-20 | 0.53737612 | 0.294 | 0.163 | 6.30E-16 | CD4_CM_spleen |
| XYLT1       | 1.97E-20 | 0.42772548 | 0.335 | 0.191 | 6.97E-16 | CD4_CM_spleen |
| PHF5A       | 1.98E-20 | 0.27270491 | 0.314 | 0.171 | 7.00E-16 | CD4_CM_spleen |
| SRSF4       | 2.09E-20 | 0.31425462 | 0.406 | 0.237 | 7.41E-16 | CD4_CM_spleen |
| TAF7        | 2.53E-20 | 0.35571676 | 0.35  | 0.2   | 8.97E-16 | CD4_CM_spleen |
| PRKCA       | 2.66E-20 | 0.47707457 | 0.255 | 0.136 | 9.44E-16 | CD4_CM_spleen |
| YWHAB       | 3.21E-20 | 0.29739349 | 0.652 | 0.444 | 1.14E-15 | CD4_CM_spleen |
| UBQLN1      | 3.33E-20 | 0.45613078 | 0.286 | 0.158 | 1.18E-15 | CD4_CM_spleen |
| UBB         | 3.40E-20 | 0.269956   | 0.957 | 0.849 | 1.20E-15 | CD4_CM_spleen |
| SNRPE       | 4.61E-20 | 0.32939379 | 0.53  | 0.332 | 1.63E-15 | CD4_CM_spleen |
| LBR         | 5.70E-20 | 0.36161224 | 0.326 | 0.184 | 2.02E-15 | CD4_CM_spleen |
| CAST        | 7.00E-20 | 0.40825836 | 0.311 | 0.176 | 2.48E-15 | CD4_CM_spleen |
| STAT5B      | 7.11E-20 | 0.40535985 | 0.362 | 0.212 | 2.52E-15 | CD4_CM_spleen |
| VASP        | 7.63E-20 | 0.46324942 | 0.277 | 0.152 | 2.70E-15 | CD4_CM_spleen |
| HUWE1       | 8.87E-20 | 0.37925389 | 0.367 | 0.216 | 3.14E-15 | CD4_CM_spleen |
| HOOK3       | 9.62E-20 | 0.35019062 | 0.453 | 0.277 | 3.41E-15 | CD4_CM_spleen |
| PRMT2       | 1.15E-19 | 0.27158483 | 0.287 | 0.156 | 4.06E-15 | CD4_CM_spleen |
| CEP350      | 1.26E-19 | 0.34732799 | 0.262 | 0.14  | 4.47E-15 | CD4_CM_spleen |
| SNRPD3      | 1.51E-19 | 0.25467998 | 0.659 | 0.426 | 5.35E-15 | CD4_CM_spleen |
| TRERF1      | 1.51E-19 | 0.42495388 | 0.294 | 0.165 | 5.36E-15 | CD4_CM_spleen |
| NSRP1       | 1.60E-19 | 0.40108268 | 0.318 | 0.179 | 5.68E-15 | CD4_CM_spleen |
| GTF2E2      | 1.87E-19 | 0.39268629 | 0.254 | 0.136 | 6.64E-15 | CD4_CM_spleen |
| CCT4        | 2.65E-19 | 0.34187239 | 0.493 | 0.308 | 9.38E-15 | CD4_CM_spleen |

|                    |          |            |       |       |          |               |
|--------------------|----------|------------|-------|-------|----------|---------------|
| PACS1              | 2.66E-19 | 0.398839   | 0.322 | 0.184 | 9.43E-15 | CD4_CM_spleen |
| AIP                | 2.83E-19 | 0.26564427 | 0.448 | 0.27  | 1.00E-14 | CD4_CM_spleen |
| ZNF514             | 2.94E-19 | 0.36444442 | 0.336 | 0.194 | 1.04E-14 | CD4_CM_spleen |
| RPL13A             | 3.46E-19 | 0.18934435 | 0.993 | 0.988 | 1.23E-14 | CD4_CM_spleen |
| TESPA1             | 3.63E-19 | 0.31849331 | 0.291 | 0.16  | 1.29E-14 | CD4_CM_spleen |
| UBE2L6             | 3.85E-19 | 0.4500634  | 0.251 | 0.134 | 1.37E-14 | CD4_CM_spleen |
| ENSMMUG00000016959 | 4.41E-19 | 0.35172714 | 0.316 | 0.178 | 1.56E-14 | CD4_CM_spleen |
| UBE2F              | 4.70E-19 | 0.39577915 | 0.282 | 0.157 | 1.67E-14 | CD4_CM_spleen |
| TRIP12             | 5.15E-19 | 0.27638842 | 0.373 | 0.219 | 1.83E-14 | CD4_CM_spleen |
| MCTS1              | 5.23E-19 | 0.34678305 | 0.27  | 0.146 | 1.85E-14 | CD4_CM_spleen |
| CWC27              | 5.45E-19 | 0.4930597  | 0.279 | 0.157 | 1.93E-14 | CD4_CM_spleen |
| CFL1               | 6.68E-19 | 0.2552716  | 0.894 | 0.771 | 2.37E-14 | CD4_CM_spleen |
| MRPS33             | 6.98E-19 | 0.27158343 | 0.321 | 0.181 | 2.47E-14 | CD4_CM_spleen |
| KIF5B              | 7.11E-19 | 0.34809363 | 0.33  | 0.189 | 2.52E-14 | CD4_CM_spleen |
| ST3GAL1            | 7.46E-19 | 0.42255212 | 0.286 | 0.16  | 2.64E-14 | CD4_CM_spleen |
| IMMP2L             | 8.79E-19 | 0.29753799 | 0.469 | 0.296 | 3.11E-14 | CD4_CM_spleen |
| IPCEF1             | 9.27E-19 | 0.38756282 | 0.318 | 0.182 | 3.29E-14 | CD4_CM_spleen |
| ENSMMUG00000006206 | 9.32E-19 | 0.26779671 | 0.516 | 0.329 | 3.30E-14 | CD4_CM_spleen |
| MLLT10             | 9.61E-19 | 0.28485064 | 0.318 | 0.182 | 3.41E-14 | CD4_CM_spleen |
| PDK1               | 9.93E-19 | 0.41143465 | 0.377 | 0.226 | 3.52E-14 | CD4_CM_spleen |
| ANKRD17            | 1.04E-18 | 0.30454138 | 0.39  | 0.233 | 3.70E-14 | CD4_CM_spleen |
| SMAP2              | 1.82E-18 | 0.32070584 | 0.419 | 0.254 | 6.45E-14 | CD4_CM_spleen |
| PPP2R5C            | 1.85E-18 | 0.29751868 | 0.665 | 0.457 | 6.54E-14 | CD4_CM_spleen |
| UVRAG              | 1.85E-18 | 0.28946469 | 0.336 | 0.194 | 6.57E-14 | CD4_CM_spleen |
| HIKESHI            | 1.94E-18 | 0.21384339 | 0.402 | 0.234 | 6.88E-14 | CD4_CM_spleen |
| ADAR               | 2.09E-18 | 0.47016398 | 0.264 | 0.146 | 7.41E-14 | CD4_CM_spleen |
| ASAP1              | 2.12E-18 | 0.27988506 | 0.382 | 0.229 | 7.51E-14 | CD4_CM_spleen |
| BOLA2B             | 2.15E-18 | 0.24412003 | 0.279 | 0.153 | 7.62E-14 | CD4_CM_spleen |
| MARK3              | 2.34E-18 | 0.368341   | 0.288 | 0.162 | 8.28E-14 | CD4_CM_spleen |
| UBE2I              | 2.74E-18 | 0.21422035 | 0.438 | 0.26  | 9.72E-14 | CD4_CM_spleen |
| YTHDC1             | 2.91E-18 | 0.33769522 | 0.388 | 0.236 | 1.03E-13 | CD4_CM_spleen |
| PRKCB              | 3.02E-18 | 0.35748167 | 0.385 | 0.233 | 1.07E-13 | CD4_CM_spleen |
| GTF2F2             | 3.08E-18 | 0.40509429 | 0.258 | 0.141 | 1.09E-13 | CD4_CM_spleen |

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|--------------------|----------|------------|-------|-------|----------|---------------|
| HCLS1              | 3.55E-18 | 0.37176216 | 0.279 | 0.155 | 1.26E-13 | CD4_CM_spleen |
| RBL2               | 3.64E-18 | 0.42396395 | 0.291 | 0.165 | 1.29E-13 | CD4_CM_spleen |
| ZC3H15             | 3.69E-18 | 0.27588445 | 0.421 | 0.255 | 1.31E-13 | CD4_CM_spleen |
| RAP1B              | 3.83E-18 | 0.26980907 | 0.739 | 0.518 | 1.36E-13 | CD4_CM_spleen |
| ENSMMUG00000006965 | 4.14E-18 | 0.28656373 | 0.461 | 0.284 | 1.47E-13 | CD4_CM_spleen |
| ANKRD44            | 4.37E-18 | 0.2400408  | 0.781 | 0.549 | 1.55E-13 | CD4_CM_spleen |
| PDCD4              | 4.74E-18 | 0.27317205 | 0.501 | 0.322 | 1.68E-13 | CD4_CM_spleen |
| FOXO1              | 5.18E-18 | 0.33832541 | 0.5   | 0.323 | 1.84E-13 | CD4_CM_spleen |
| ENSMMUG00000058755 | 5.28E-18 | 0.1416422  | 0.992 | 0.988 | 1.87E-13 | CD4_CM_spleen |
| SORL1              | 5.57E-18 | 0.3256652  | 0.396 | 0.239 | 1.98E-13 | CD4_CM_spleen |
| ROCK1              | 5.73E-18 | 0.28546963 | 0.518 | 0.331 | 2.03E-13 | CD4_CM_spleen |
| BST2               | 6.76E-18 | 0.35877599 | 0.311 | 0.179 | 2.40E-13 | CD4_CM_spleen |
| AMDHD1             | 7.51E-18 | 0.25853733 | 0.496 | 0.313 | 2.66E-13 | CD4_CM_spleen |
| DCAF5              | 8.68E-18 | 0.35546733 | 0.275 | 0.154 | 3.08E-13 | CD4_CM_spleen |
| ATP2B4             | 9.51E-18 | 0.32705063 | 0.337 | 0.198 | 3.37E-13 | CD4_CM_spleen |
| NDUFA8             | 1.11E-17 | 0.30501382 | 0.253 | 0.137 | 3.95E-13 | CD4_CM_spleen |
| RERE               | 1.11E-17 | 0.24373206 | 0.545 | 0.353 | 3.95E-13 | CD4_CM_spleen |
| RNF167             | 1.19E-17 | 0.28768758 | 0.285 | 0.16  | 4.22E-13 | CD4_CM_spleen |
| UQCRC2             | 1.23E-17 | 0.2721496  | 0.336 | 0.196 | 4.35E-13 | CD4_CM_spleen |
| ATG3               | 1.24E-17 | 0.35563864 | 0.367 | 0.219 | 4.39E-13 | CD4_CM_spleen |
| COX20              | 1.28E-17 | 0.12776217 | 0.358 | 0.209 | 4.53E-13 | CD4_CM_spleen |
| SRSF1              | 1.31E-17 | 0.3634675  | 0.298 | 0.171 | 4.64E-13 | CD4_CM_spleen |
| PHF20              | 1.40E-17 | 0.29598277 | 0.336 | 0.197 | 4.95E-13 | CD4_CM_spleen |
| PDCD10             | 1.40E-17 | 0.23550644 | 0.422 | 0.256 | 4.96E-13 | CD4_CM_spleen |
| UBXN4              | 1.40E-17 | 0.31006271 | 0.384 | 0.231 | 4.97E-13 | CD4_CM_spleen |
| UBAP2L             | 1.56E-17 | 0.43548551 | 0.281 | 0.161 | 5.53E-13 | CD4_CM_spleen |
| ENSMMUG00000062103 | 1.59E-17 | 0.44912276 | 0.321 | 0.193 | 5.63E-13 | CD4_CM_spleen |
| SLTM               | 1.69E-17 | 0.27169147 | 0.44  | 0.273 | 5.99E-13 | CD4_CM_spleen |
| PAFAH1B1           | 1.73E-17 | 0.23994445 | 0.443 | 0.273 | 6.14E-13 | CD4_CM_spleen |
| PMPCB              | 1.88E-17 | 0.2923256  | 0.268 | 0.149 | 6.67E-13 | CD4_CM_spleen |
| EIF4EBP3           | 2.10E-17 | 0.34718086 | 0.327 | 0.193 | 7.43E-13 | CD4_CM_spleen |
| CBX3               | 2.10E-17 | 0.19946428 | 0.561 | 0.367 | 7.45E-13 | CD4_CM_spleen |
| RAD23A             | 2.14E-17 | 0.27124452 | 0.281 | 0.158 | 7.58E-13 | CD4_CM_spleen |

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|--------------------|----------|------------|-------|-------|----------|---------------|
| ZNF528             | 2.15E-17 | 0.31416757 | 0.326 | 0.191 | 7.63E-13 | CD4_CM_spleen |
| KPNB1              | 2.30E-17 | 0.3272939  | 0.27  | 0.152 | 8.16E-13 | CD4_CM_spleen |
| NCLN               | 2.37E-17 | 0.33453836 | 0.317 | 0.185 | 8.39E-13 | CD4_CM_spleen |
| NASP               | 2.60E-17 | 0.29092216 | 0.451 | 0.283 | 9.22E-13 | CD4_CM_spleen |
| KARS1              | 2.91E-17 | 0.4303039  | 0.25  | 0.138 | 1.03E-12 | CD4_CM_spleen |
| ZMYND11            | 2.92E-17 | 0.29234617 | 0.301 | 0.174 | 1.03E-12 | CD4_CM_spleen |
| CCNY               | 3.69E-17 | 0.39561515 | 0.25  | 0.14  | 1.31E-12 | CD4_CM_spleen |
| WAPL               | 3.70E-17 | 0.32386511 | 0.258 | 0.143 | 1.31E-12 | CD4_CM_spleen |
| DOCK8              | 3.77E-17 | 0.26387079 | 0.555 | 0.365 | 1.33E-12 | CD4_CM_spleen |
| ATP5MC2            | 4.14E-17 | 0.21451681 | 0.799 | 0.608 | 1.47E-12 | CD4_CM_spleen |
| NFATC3             | 4.42E-17 | 0.30341158 | 0.377 | 0.229 | 1.57E-12 | CD4_CM_spleen |
| SUPT16H            | 4.72E-17 | 0.25535826 | 0.3   | 0.171 | 1.67E-12 | CD4_CM_spleen |
| PRKCQ              | 4.79E-17 | 0.32421779 | 0.436 | 0.276 | 1.70E-12 | CD4_CM_spleen |
| PSME4              | 5.86E-17 | 0.36381677 | 0.272 | 0.155 | 2.08E-12 | CD4_CM_spleen |
| ATP1B3             | 5.86E-17 | 0.36393605 | 0.261 | 0.146 | 2.08E-12 | CD4_CM_spleen |
| ENSMMUG00000010266 | 7.92E-17 | 0.2262267  | 0.674 | 0.455 | 2.81E-12 | CD4_CM_spleen |
| NDEL1              | 8.30E-17 | 0.38879282 | 0.294 | 0.173 | 2.94E-12 | CD4_CM_spleen |
| COMMD10            | 9.43E-17 | 0.25223859 | 0.264 | 0.148 | 3.34E-12 | CD4_CM_spleen |
| CD63               | 1.15E-16 | 0.30819182 | 0.333 | 0.199 | 4.06E-12 | CD4_CM_spleen |
| MBD5               | 1.16E-16 | 0.39487239 | 0.31  | 0.185 | 4.10E-12 | CD4_CM_spleen |
| ZRANB2             | 1.18E-16 | 0.28837275 | 0.435 | 0.271 | 4.19E-12 | CD4_CM_spleen |
| VAPA               | 1.38E-16 | 0.22784789 | 0.478 | 0.3   | 4.90E-12 | CD4_CM_spleen |
| MRPS31             | 1.44E-16 | 0.32717993 | 0.312 | 0.185 | 5.12E-12 | CD4_CM_spleen |
| ENSMMUG00000016278 | 1.45E-16 | 0.21074632 | 0.503 | 0.315 | 5.15E-12 | CD4_CM_spleen |
| PTPN4              | 1.49E-16 | 0.24152398 | 0.348 | 0.208 | 5.29E-12 | CD4_CM_spleen |
| ST8SIA4            | 1.70E-16 | 0.40440666 | 0.276 | 0.158 | 6.02E-12 | CD4_CM_spleen |
| FLNA               | 1.86E-16 | 0.19799782 | 0.381 | 0.231 | 6.60E-12 | CD4_CM_spleen |
| SLC25A4            | 2.02E-16 | 0.33737972 | 0.281 | 0.161 | 7.17E-12 | CD4_CM_spleen |
| DDX39A             | 2.24E-16 | 0.29453008 | 0.423 | 0.266 | 7.94E-12 | CD4_CM_spleen |
| CD3D               | 2.92E-16 | 0.15788308 | 0.908 | 0.749 | 1.04E-11 | CD4_CM_spleen |
| HNRNPK             | 3.18E-16 | 0.26428792 | 0.785 | 0.59  | 1.13E-11 | CD4_CM_spleen |
| CCDC12             | 3.72E-16 | 0.306512   | 0.259 | 0.145 | 1.32E-11 | CD4_CM_spleen |
| RILPL2             | 3.98E-16 | 0.21469554 | 0.314 | 0.184 | 1.41E-11 | CD4_CM_spleen |



|                    |          |            |       |       |          |               |
|--------------------|----------|------------|-------|-------|----------|---------------|
| HMGN4              | 4.34E-16 | 0.21538312 | 0.281 | 0.159 | 1.54E-11 | CD4_CM_spleen |
| SLC2A3             | 5.42E-16 | 0.24390752 | 0.525 | 0.352 | 1.92E-11 | CD4_CM_spleen |
| RNF138             | 5.97E-16 | 0.32631386 | 0.264 | 0.15  | 2.11E-11 | CD4_CM_spleen |
| ABI1               | 5.97E-16 | 0.29906738 | 0.482 | 0.321 | 2.12E-11 | CD4_CM_spleen |
| ATP5PB             | 6.03E-16 | 0.27956817 | 0.472 | 0.3   | 2.14E-11 | CD4_CM_spleen |
| EHMT1              | 6.81E-16 | 0.45499275 | 0.251 | 0.144 | 2.41E-11 | CD4_CM_spleen |
| CLNS1A             | 6.94E-16 | 0.1992538  | 0.321 | 0.188 | 2.46E-11 | CD4_CM_spleen |
| ENSMMUG00000056190 | 7.25E-16 | 0.30431671 | 0.319 | 0.192 | 2.57E-11 | CD4_CM_spleen |
| TAF4B              | 8.11E-16 | 0.33821675 | 0.259 | 0.148 | 2.87E-11 | CD4_CM_spleen |
| TNFRSF10A          | 8.57E-16 | 0.45139972 | 0.252 | 0.145 | 3.04E-11 | CD4_CM_spleen |
| NRROS              | 1.12E-15 | 0.41080836 | 0.267 | 0.157 | 3.98E-11 | CD4_CM_spleen |
| ARL15              | 1.18E-15 | 0.26670724 | 0.363 | 0.226 | 4.16E-11 | CD4_CM_spleen |
| SNRPD1             | 1.18E-15 | 0.20512196 | 0.354 | 0.211 | 4.19E-11 | CD4_CM_spleen |
| FUBP1              | 1.21E-15 | 0.22783789 | 0.401 | 0.25  | 4.29E-11 | CD4_CM_spleen |
| MAP4K4             | 1.33E-15 | 0.30694603 | 0.507 | 0.341 | 4.72E-11 | CD4_CM_spleen |
| DNAJC19            | 1.40E-15 | 0.16739299 | 0.351 | 0.208 | 4.95E-11 | CD4_CM_spleen |
| JMJD1C             | 1.48E-15 | 0.26121169 | 0.755 | 0.553 | 5.23E-11 | CD4_CM_spleen |
| RPS27              | 1.50E-15 | 0.1180225  | 0.993 | 0.989 | 5.32E-11 | CD4_CM_spleen |
| COMMD1             | 2.03E-15 | 0.23522548 | 0.323 | 0.192 | 7.20E-11 | CD4_CM_spleen |
| HNRNPH3            | 2.10E-15 | 0.22453622 | 0.547 | 0.365 | 7.42E-11 | CD4_CM_spleen |
| MLLT3              | 2.46E-15 | 0.30353124 | 0.51  | 0.341 | 8.71E-11 | CD4_CM_spleen |
| MNAT1              | 2.49E-15 | 0.29856984 | 0.278 | 0.163 | 8.82E-11 | CD4_CM_spleen |
| GSTP1              | 2.67E-15 | 0.17172655 | 0.76  | 0.548 | 9.47E-11 | CD4_CM_spleen |
| OSTC               | 3.05E-15 | 0.11899908 | 0.483 | 0.3   | 1.08E-10 | CD4_CM_spleen |
| PSMA4              | 3.16E-15 | 0.18874123 | 0.419 | 0.262 | 1.12E-10 | CD4_CM_spleen |
| DYRK1A             | 3.23E-15 | 0.34156149 | 0.259 | 0.149 | 1.14E-10 | CD4_CM_spleen |
| ADD3               | 3.42E-15 | 0.26706726 | 0.621 | 0.445 | 1.21E-10 | CD4_CM_spleen |
| FMC1-LUC7L2        | 3.61E-15 | 0.22767109 | 0.604 | 0.407 | 1.28E-10 | CD4_CM_spleen |
| SYTL3              | 3.65E-15 | 0.23149289 | 0.425 | 0.276 | 1.29E-10 | CD4_CM_spleen |
| TOP2B              | 4.13E-15 | 0.24458775 | 0.289 | 0.169 | 1.46E-10 | CD4_CM_spleen |
| CEP192             | 4.86E-15 | 0.29734916 | 0.251 | 0.144 | 1.72E-10 | CD4_CM_spleen |
| DGKA               | 4.88E-15 | 0.23482511 | 0.469 | 0.298 | 1.73E-10 | CD4_CM_spleen |
| ARHGEF1            | 5.14E-15 | 0.26702922 | 0.546 | 0.359 | 1.82E-10 | CD4_CM_spleen |

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|--------------------|----------|------------|-------|-------|----------|---------------|
| STK26              | 5.77E-15 | 0.32313628 | 0.263 | 0.153 | 2.04E-10 | CD4_CM_spleen |
| CREB1              | 6.00E-15 | 0.34507155 | 0.283 | 0.168 | 2.13E-10 | CD4_CM_spleen |
| ZCCHC7             | 6.39E-15 | 0.21087398 | 0.511 | 0.339 | 2.27E-10 | CD4_CM_spleen |
| CAMKMT             | 6.43E-15 | 0.38920619 | 0.294 | 0.181 | 2.28E-10 | CD4_CM_spleen |
| MAML3              | 7.32E-15 | 0.35525209 | 0.438 | 0.288 | 2.59E-10 | CD4_CM_spleen |
| ENSMMUG00000011798 | 8.16E-15 | 0.32279404 | 0.327 | 0.202 | 2.89E-10 | CD4_CM_spleen |
| APP                | 8.19E-15 | 0.31601381 | 0.256 | 0.15  | 2.90E-10 | CD4_CM_spleen |
| TPI1               | 8.60E-15 | 0.16786554 | 0.475 | 0.303 | 3.05E-10 | CD4_CM_spleen |
| WAS                | 9.95E-15 | 0.17663007 | 0.411 | 0.254 | 3.53E-10 | CD4_CM_spleen |
| PIH1D1             | 1.07E-14 | 0.27315214 | 0.266 | 0.155 | 3.80E-10 | CD4_CM_spleen |
| NFKBIB             | 1.27E-14 | 0.4140631  | 0.288 | 0.174 | 4.51E-10 | CD4_CM_spleen |
| ARL6IP5            | 1.31E-14 | 0.23155679 | 0.467 | 0.301 | 4.65E-10 | CD4_CM_spleen |
| SDHAF4             | 1.37E-14 | 0.2275597  | 0.407 | 0.254 | 4.87E-10 | CD4_CM_spleen |
| SFPQ               | 1.45E-14 | 0.20414378 | 0.425 | 0.269 | 5.15E-10 | CD4_CM_spleen |
| TMBIM6             | 1.47E-14 | 0.22309424 | 0.469 | 0.302 | 5.22E-10 | CD4_CM_spleen |
| AAK1               | 1.51E-14 | 0.2446246  | 0.446 | 0.288 | 5.34E-10 | CD4_CM_spleen |
| PPA1               | 1.62E-14 | 0.2264175  | 0.418 | 0.266 | 5.72E-10 | CD4_CM_spleen |
| BCAP31             | 2.10E-14 | 0.25588739 | 0.261 | 0.151 | 7.44E-10 | CD4_CM_spleen |
| DDX3Y              | 2.22E-14 | 0.36474182 | 0.449 | 0.306 | 7.85E-10 | CD4_CM_spleen |
| ENSMMUG00000063316 | 2.44E-14 | 0.33900226 | 0.504 | 0.347 | 8.66E-10 | CD4_CM_spleen |
| VDAC3              | 2.59E-14 | 0.15898098 | 0.256 | 0.146 | 9.16E-10 | CD4_CM_spleen |
| FCMR               | 2.87E-14 | 0.22300826 | 0.436 | 0.282 | 1.02E-09 | CD4_CM_spleen |
| NUCKS1             | 3.68E-14 | 0.23623822 | 0.447 | 0.292 | 1.30E-09 | CD4_CM_spleen |
| ENSMMUG00000001894 | 3.93E-14 | 0.29966877 | 0.297 | 0.18  | 1.39E-09 | CD4_CM_spleen |
| C11H12orf45        | 4.04E-14 | 0.22517014 | 0.366 | 0.228 | 1.43E-09 | CD4_CM_spleen |
| C20H16orf72        | 4.19E-14 | 0.24842798 | 0.283 | 0.169 | 1.48E-09 | CD4_CM_spleen |
| PPDPF              | 4.28E-14 | 0.18046533 | 0.343 | 0.207 | 1.52E-09 | CD4_CM_spleen |
| DENR               | 4.30E-14 | 0.28400555 | 0.289 | 0.173 | 1.53E-09 | CD4_CM_spleen |
| GOLM2              | 4.76E-14 | 0.24405612 | 0.314 | 0.191 | 1.69E-09 | CD4_CM_spleen |
| RBM6               | 4.92E-14 | 0.39507    | 0.252 | 0.148 | 1.74E-09 | CD4_CM_spleen |
| GPRIN3             | 5.34E-14 | 0.28827244 | 0.252 | 0.149 | 1.89E-09 | CD4_CM_spleen |
| ENSMMUG00000064531 | 5.46E-14 | 0.27870369 | 0.269 | 0.16  | 1.93E-09 | CD4_CM_spleen |
| H1-4               | 6.05E-14 | 0.36869896 | 0.262 | 0.157 | 2.14E-09 | CD4_CM_spleen |

|                    |          |            |       |       |          |               |
|--------------------|----------|------------|-------|-------|----------|---------------|
| HNRNPC             | 6.14E-14 | 0.21552105 | 0.697 | 0.498 | 2.17E-09 | CD4_CM_spleen |
| PPP4C              | 7.15E-14 | 0.1603179  | 0.318 | 0.191 | 2.53E-09 | CD4_CM_spleen |
| TPM3               | 7.20E-14 | 0.21601563 | 0.766 | 0.567 | 2.55E-09 | CD4_CM_spleen |
| RASSF3             | 7.83E-14 | 0.3809707  | 0.466 | 0.319 | 2.77E-09 | CD4_CM_spleen |
| PRMT1              | 8.22E-14 | 0.21537286 | 0.392 | 0.247 | 2.91E-09 | CD4_CM_spleen |
| PKN2               | 8.51E-14 | 0.20135961 | 0.37  | 0.232 | 3.01E-09 | CD4_CM_spleen |
| BPTF               | 9.08E-14 | 0.23805752 | 0.425 | 0.276 | 3.22E-09 | CD4_CM_spleen |
| SCP2               | 9.23E-14 | 0.22787338 | 0.348 | 0.215 | 3.27E-09 | CD4_CM_spleen |
| ATRX               | 9.33E-14 | 0.20995855 | 0.517 | 0.348 | 3.30E-09 | CD4_CM_spleen |
| SMYD3              | 1.03E-13 | 0.27617238 | 0.372 | 0.238 | 3.66E-09 | CD4_CM_spleen |
| RAB10              | 1.06E-13 | 0.28518068 | 0.268 | 0.16  | 3.75E-09 | CD4_CM_spleen |
| DDX24              | 1.08E-13 | 0.23291218 | 0.455 | 0.3   | 3.83E-09 | CD4_CM_spleen |
| ENSMMUG00000059289 | 1.09E-13 | 0.17123947 | 0.27  | 0.16  | 3.87E-09 | CD4_CM_spleen |
| CHD4               | 1.11E-13 | 0.28685829 | 0.292 | 0.178 | 3.94E-09 | CD4_CM_spleen |
| LNPEP              | 1.28E-13 | 0.21442233 | 0.363 | 0.23  | 4.53E-09 | CD4_CM_spleen |
| TBC1D5             | 1.56E-13 | 0.14876456 | 0.605 | 0.417 | 5.52E-09 | CD4_CM_spleen |
| USP34              | 1.57E-13 | 0.2068039  | 0.539 | 0.365 | 5.56E-09 | CD4_CM_spleen |
| ARHGAP45           | 1.67E-13 | 0.3271941  | 0.427 | 0.278 | 5.93E-09 | CD4_CM_spleen |
| HDAC1              | 1.96E-13 | 0.28106593 | 0.406 | 0.262 | 6.95E-09 | CD4_CM_spleen |
| FBXW7              | 1.97E-13 | 0.27509744 | 0.336 | 0.215 | 7.00E-09 | CD4_CM_spleen |
| MAPRE2             | 2.33E-13 | 0.29428899 | 0.367 | 0.234 | 8.25E-09 | CD4_CM_spleen |
| ENSMMUG00000019882 | 2.45E-13 | 0.16431757 | 0.281 | 0.168 | 8.67E-09 | CD4_CM_spleen |
| PBRM1              | 2.52E-13 | 0.28531665 | 0.266 | 0.161 | 8.93E-09 | CD4_CM_spleen |
| PHF21A             | 2.64E-13 | 0.30394167 | 0.257 | 0.153 | 9.35E-09 | CD4_CM_spleen |
| UQCRH              | 2.65E-13 | 0.15555541 | 0.678 | 0.47  | 9.41E-09 | CD4_CM_spleen |
| MIF                | 2.79E-13 | 0.1892833  | 0.636 | 0.441 | 9.87E-09 | CD4_CM_spleen |
| RGS1               | 2.82E-13 | 0.279511   | 0.411 | 0.269 | 9.98E-09 | CD4_CM_spleen |
| ADK                | 2.85E-13 | 0.25935422 | 0.315 | 0.196 | 1.01E-08 | CD4_CM_spleen |
| CEP85L             | 3.06E-13 | 0.3057523  | 0.348 | 0.221 | 1.08E-08 | CD4_CM_spleen |
| SOD1               | 3.18E-13 | 0.15732845 | 0.473 | 0.309 | 1.13E-08 | CD4_CM_spleen |
| CRTC3              | 3.21E-13 | 0.34001668 | 0.405 | 0.268 | 1.14E-08 | CD4_CM_spleen |
| PPP2R5A            | 3.57E-13 | 0.21603173 | 0.276 | 0.166 | 1.27E-08 | CD4_CM_spleen |
| TRIM22             | 3.77E-13 | 0.22446632 | 0.305 | 0.189 | 1.34E-08 | CD4_CM_spleen |

|                     |          |            |       |       |          |               |
|---------------------|----------|------------|-------|-------|----------|---------------|
| BIN2                | 3.96E-13 | 0.20837106 | 0.619 | 0.428 | 1.40E-08 | CD4_CM_spleen |
| DNAJC15             | 4.11E-13 | 0.20768978 | 0.272 | 0.163 | 1.46E-08 | CD4_CM_spleen |
| GOLGA1              | 4.20E-13 | 0.17924885 | 0.868 | 0.723 | 1.49E-08 | CD4_CM_spleen |
| PPP1CA              | 5.10E-13 | 0.25125257 | 0.441 | 0.291 | 1.81E-08 | CD4_CM_spleen |
| LDLRAD4             | 5.26E-13 | 0.18538416 | 0.398 | 0.26  | 1.86E-08 | CD4_CM_spleen |
| ENSMMUG00000004539  | 5.50E-13 | 0.16728681 | 0.377 | 0.238 | 1.95E-08 | CD4_CM_spleen |
| POLR2F              | 6.15E-13 | 0.26326316 | 0.31  | 0.192 | 2.18E-08 | CD4_CM_spleen |
| ATF4                | 6.37E-13 | 0.19399479 | 0.529 | 0.355 | 2.26E-08 | CD4_CM_spleen |
| EIF4G2              | 6.50E-13 | 0.21349362 | 0.613 | 0.422 | 2.30E-08 | CD4_CM_spleen |
| TIAL1               | 6.71E-13 | 0.16723102 | 0.3   | 0.182 | 2.38E-08 | CD4_CM_spleen |
| ENSMMUG000000019238 | 7.28E-13 | 0.18498923 | 0.335 | 0.208 | 2.58E-08 | CD4_CM_spleen |
| ISG20               | 8.21E-13 | 0.11692816 | 0.347 | 0.218 | 2.91E-08 | CD4_CM_spleen |
| HIF1A               | 8.58E-13 | 0.23566604 | 0.31  | 0.194 | 3.04E-08 | CD4_CM_spleen |
| RABGAP1L            | 8.60E-13 | 0.16099857 | 0.689 | 0.484 | 3.05E-08 | CD4_CM_spleen |
| GIGYF2              | 8.90E-13 | 0.23133336 | 0.271 | 0.166 | 3.16E-08 | CD4_CM_spleen |
| MYL12B              | 9.05E-13 | 0.16548876 | 0.818 | 0.659 | 3.21E-08 | CD4_CM_spleen |
| CSNK1G1             | 9.50E-13 | 0.28917883 | 0.251 | 0.152 | 3.37E-08 | CD4_CM_spleen |
| SND1                | 9.91E-13 | 0.20939679 | 0.32  | 0.198 | 3.51E-08 | CD4_CM_spleen |
| CTSS                | 1.07E-12 | 0.11947566 | 0.362 | 0.226 | 3.79E-08 | CD4_CM_spleen |
| PPP6R3              | 1.09E-12 | 0.26023052 | 0.332 | 0.209 | 3.87E-08 | CD4_CM_spleen |
| BTN2A2              | 1.11E-12 | 0.18717337 | 0.382 | 0.246 | 3.94E-08 | CD4_CM_spleen |
| KDM2A               | 1.12E-12 | 0.23252113 | 0.388 | 0.251 | 3.99E-08 | CD4_CM_spleen |
| NUDC                | 1.13E-12 | 0.15870189 | 0.405 | 0.258 | 4.01E-08 | CD4_CM_spleen |
| PSMB4               | 1.15E-12 | 0.21295544 | 0.41  | 0.266 | 4.08E-08 | CD4_CM_spleen |
| TAF15               | 1.18E-12 | 0.23480229 | 0.433 | 0.289 | 4.18E-08 | CD4_CM_spleen |
| BRWD1               | 1.19E-12 | 0.19100323 | 0.306 | 0.188 | 4.20E-08 | CD4_CM_spleen |
| SERBP1              | 1.23E-12 | 0.17387295 | 0.631 | 0.442 | 4.37E-08 | CD4_CM_spleen |
| NARS1               | 1.48E-12 | 0.18744192 | 0.376 | 0.242 | 5.26E-08 | CD4_CM_spleen |
| CELF2               | 1.57E-12 | 0.21389356 | 0.803 | 0.625 | 5.57E-08 | CD4_CM_spleen |
| AEBP2               | 1.64E-12 | 0.22365139 | 0.267 | 0.163 | 5.83E-08 | CD4_CM_spleen |
| ACTR2               | 1.66E-12 | 0.18029419 | 0.709 | 0.515 | 5.89E-08 | CD4_CM_spleen |
| TMEM14B             | 1.67E-12 | 0.14519632 | 0.683 | 0.487 | 5.91E-08 | CD4_CM_spleen |
| CIAO2B              | 1.73E-12 | 0.10874681 | 0.297 | 0.182 | 6.13E-08 | CD4_CM_spleen |

|                    |          |            |       |       |          |               |
|--------------------|----------|------------|-------|-------|----------|---------------|
| KLF3               | 1.90E-12 | 0.35355314 | 0.342 | 0.223 | 6.71E-08 | CD4_CM_spleen |
| ZNF131             | 1.92E-12 | 0.22963164 | 0.253 | 0.151 | 6.81E-08 | CD4_CM_spleen |
| HNRNPH1            | 2.24E-12 | 0.15752701 | 0.59  | 0.413 | 7.93E-08 | CD4_CM_spleen |
| FCHSD2             | 2.25E-12 | 0.25329282 | 0.275 | 0.169 | 7.98E-08 | CD4_CM_spleen |
| RPN1               | 2.45E-12 | 0.17488335 | 0.307 | 0.191 | 8.66E-08 | CD4_CM_spleen |
| INTS6              | 2.78E-12 | 0.18023502 | 0.304 | 0.187 | 9.87E-08 | CD4_CM_spleen |
| CCT3               | 2.88E-12 | 0.20385372 | 0.653 | 0.457 | 1.02E-07 | CD4_CM_spleen |
| GTF2H5             | 2.93E-12 | 0.13600091 | 0.562 | 0.387 | 1.04E-07 | CD4_CM_spleen |
| ILF2               | 3.06E-12 | 0.10847168 | 0.346 | 0.217 | 1.08E-07 | CD4_CM_spleen |
| NUCB2              | 3.09E-12 | 0.13918457 | 0.336 | 0.212 | 1.09E-07 | CD4_CM_spleen |
| COA1               | 3.11E-12 | 0.16757102 | 0.379 | 0.242 | 1.10E-07 | CD4_CM_spleen |
| BABAM2             | 3.16E-12 | 0.26322809 | 0.288 | 0.18  | 1.12E-07 | CD4_CM_spleen |
| RNF7               | 3.88E-12 | 0.14881312 | 0.348 | 0.219 | 1.37E-07 | CD4_CM_spleen |
| EIF1AX             | 3.95E-12 | 0.10956222 | 0.392 | 0.251 | 1.40E-07 | CD4_CM_spleen |
| ILF3               | 4.22E-12 | 0.2486219  | 0.338 | 0.214 | 1.50E-07 | CD4_CM_spleen |
| RNF216             | 4.45E-12 | 0.25374768 | 0.329 | 0.21  | 1.58E-07 | CD4_CM_spleen |
| TPR                | 4.75E-12 | 0.23241608 | 0.404 | 0.264 | 1.68E-07 | CD4_CM_spleen |
| AKR1A1             | 5.14E-12 | 0.17014777 | 0.291 | 0.18  | 1.82E-07 | CD4_CM_spleen |
| METAP2             | 5.25E-12 | 0.15587973 | 0.335 | 0.213 | 1.86E-07 | CD4_CM_spleen |
| PITPNC1            | 5.28E-12 | 0.12981579 | 0.769 | 0.577 | 1.87E-07 | CD4_CM_spleen |
| TBL1XR1            | 6.66E-12 | 0.1458519  | 0.502 | 0.337 | 2.36E-07 | CD4_CM_spleen |
| RBM14              | 6.81E-12 | 0.1986563  | 0.568 | 0.396 | 2.41E-07 | CD4_CM_spleen |
| MED13L             | 8.51E-12 | 0.17235211 | 0.576 | 0.408 | 3.02E-07 | CD4_CM_spleen |
| CNBP               | 8.61E-12 | 0.16236528 | 0.681 | 0.482 | 3.05E-07 | CD4_CM_spleen |
| LBH                | 8.88E-12 | 0.18424604 | 0.472 | 0.317 | 3.14E-07 | CD4_CM_spleen |
| HDLBP              | 9.27E-12 | 0.2516123  | 0.252 | 0.153 | 3.29E-07 | CD4_CM_spleen |
| EIF3I              | 9.70E-12 | 0.14086844 | 0.455 | 0.298 | 3.44E-07 | CD4_CM_spleen |
| RSRC1              | 1.13E-11 | 0.18400625 | 0.321 | 0.202 | 4.00E-07 | CD4_CM_spleen |
| SEC63              | 1.15E-11 | 0.24598594 | 0.374 | 0.245 | 4.07E-07 | CD4_CM_spleen |
| DCTN3              | 1.18E-11 | 0.12277607 | 0.424 | 0.271 | 4.18E-07 | CD4_CM_spleen |
| ELOVL5             | 1.31E-11 | 0.28094112 | 0.331 | 0.215 | 4.63E-07 | CD4_CM_spleen |
| ENSMMUG00000044345 | 1.36E-11 | 0.18861151 | 0.266 | 0.166 | 4.82E-07 | CD4_CM_spleen |
| GTF3C6             | 1.45E-11 | 0.14549991 | 0.344 | 0.221 | 5.15E-07 | CD4_CM_spleen |

|                    |          |            |       |       |          |               |
|--------------------|----------|------------|-------|-------|----------|---------------|
| UBE2K              | 1.47E-11 | 0.17697397 | 0.322 | 0.205 | 5.21E-07 | CD4_CM_spleen |
| DNM3               | 1.63E-11 | 0.13852544 | 0.419 | 0.279 | 5.78E-07 | CD4_CM_spleen |
| ENSMMUG00000054038 | 1.94E-11 | 0.14070501 | 0.716 | 0.525 | 6.88E-07 | CD4_CM_spleen |
| CDC37              | 1.96E-11 | 0.17897859 | 0.321 | 0.204 | 6.93E-07 | CD4_CM_spleen |
| THADA              | 2.59E-11 | 0.18630328 | 0.301 | 0.191 | 9.18E-07 | CD4_CM_spleen |
| FBXL17             | 2.69E-11 | 0.35006763 | 0.263 | 0.167 | 9.54E-07 | CD4_CM_spleen |
| XRN2               | 2.72E-11 | 0.16744096 | 0.466 | 0.315 | 9.65E-07 | CD4_CM_spleen |
| FYN                | 2.82E-11 | 0.17670213 | 0.536 | 0.372 | 1.00E-06 | CD4_CM_spleen |
| ELF1               | 2.98E-11 | 0.20253774 | 0.754 | 0.562 | 1.05E-06 | CD4_CM_spleen |
| GNAI3              | 3.02E-11 | 0.14555415 | 0.287 | 0.18  | 1.07E-06 | CD4_CM_spleen |
| RSRP1              | 3.32E-11 | 0.13347882 | 0.787 | 0.567 | 1.18E-06 | CD4_CM_spleen |
| COPS5              | 3.45E-11 | 0.15045693 | 0.261 | 0.159 | 1.22E-06 | CD4_CM_spleen |
| CUX1               | 3.48E-11 | 0.17425328 | 0.363 | 0.238 | 1.23E-06 | CD4_CM_spleen |
| HERPUD2            | 3.57E-11 | 0.23753275 | 0.262 | 0.165 | 1.26E-06 | CD4_CM_spleen |
| ITFG1              | 3.74E-11 | 0.1981816  | 0.264 | 0.166 | 1.32E-06 | CD4_CM_spleen |
| GLIPR1L2           | 4.02E-11 | 0.11010411 | 0.396 | 0.257 | 1.42E-06 | CD4_CM_spleen |
| LSP1               | 4.02E-11 | 0.15785594 | 0.676 | 0.483 | 1.43E-06 | CD4_CM_spleen |
| TBC1D1             | 4.25E-11 | 0.18187497 | 0.305 | 0.195 | 1.51E-06 | CD4_CM_spleen |
| N4BP2L2            | 4.30E-11 | 0.12758568 | 0.367 | 0.241 | 1.52E-06 | CD4_CM_spleen |
| GOLPH3             | 4.54E-11 | 0.1520893  | 0.31  | 0.2   | 1.61E-06 | CD4_CM_spleen |
| MGAT5              | 4.58E-11 | 0.14480807 | 0.369 | 0.242 | 1.62E-06 | CD4_CM_spleen |
| ZC3H13             | 5.27E-11 | 0.15961367 | 0.283 | 0.179 | 1.87E-06 | CD4_CM_spleen |
| PIK3CD             | 5.37E-11 | 0.10637412 | 0.33  | 0.212 | 1.90E-06 | CD4_CM_spleen |
| VDAC1              | 5.45E-11 | 0.17980055 | 0.297 | 0.188 | 1.93E-06 | CD4_CM_spleen |
| EXOC6              | 5.67E-11 | 0.17439063 | 0.433 | 0.295 | 2.01E-06 | CD4_CM_spleen |
| CAPZB              | 5.73E-11 | 0.11907723 | 0.588 | 0.409 | 2.03E-06 | CD4_CM_spleen |
| SSBP2              | 5.96E-11 | 0.14535432 | 0.669 | 0.487 | 2.11E-06 | CD4_CM_spleen |
| PPP4R3B            | 6.64E-11 | 0.20058681 | 0.294 | 0.187 | 2.35E-06 | CD4_CM_spleen |
| DIAPH2             | 6.76E-11 | 0.19381449 | 0.351 | 0.232 | 2.40E-06 | CD4_CM_spleen |
| EMC6               | 7.57E-11 | 0.1713044  | 0.285 | 0.179 | 2.68E-06 | CD4_CM_spleen |
| SP110              | 7.71E-11 | 0.14131385 | 0.416 | 0.275 | 2.73E-06 | CD4_CM_spleen |
| ZNF148             | 7.75E-11 | 0.25899798 | 0.288 | 0.184 | 2.75E-06 | CD4_CM_spleen |
| SPAG9              | 7.84E-11 | 0.25071432 | 0.304 | 0.195 | 2.78E-06 | CD4_CM_spleen |

|                    |          |            |       |       |          |               |
|--------------------|----------|------------|-------|-------|----------|---------------|
| TRAM1              | 9.08E-11 | 0.16238335 | 0.299 | 0.189 | 3.22E-06 | CD4_CM_spleen |
| PLCL2              | 9.85E-11 | 0.23452405 | 0.253 | 0.158 | 3.49E-06 | CD4_CM_spleen |
| NCL                | 1.07E-10 | 0.15395253 | 0.764 | 0.595 | 3.78E-06 | CD4_CM_spleen |
| CORO1A             | 1.12E-10 | 0.1765518  | 0.862 | 0.709 | 3.98E-06 | CD4_CM_spleen |
| RBFA               | 1.17E-10 | 0.13515294 | 0.415 | 0.275 | 4.13E-06 | CD4_CM_spleen |
| CD6                | 1.18E-10 | 0.10120158 | 0.391 | 0.257 | 4.18E-06 | CD4_CM_spleen |
| MICU2              | 1.19E-10 | 0.13164875 | 0.255 | 0.159 | 4.23E-06 | CD4_CM_spleen |
| URI1               | 1.19E-10 | 0.16992112 | 0.301 | 0.193 | 4.23E-06 | CD4_CM_spleen |
| SNX6               | 1.21E-10 | 0.12313048 | 0.412 | 0.274 | 4.28E-06 | CD4_CM_spleen |
| EIF2S2             | 1.29E-10 | 0.18715686 | 0.558 | 0.395 | 4.58E-06 | CD4_CM_spleen |
| BAX                | 1.33E-10 | 0.12406382 | 0.301 | 0.19  | 4.73E-06 | CD4_CM_spleen |
| ATAD2B             | 1.35E-10 | 0.13800772 | 0.287 | 0.182 | 4.77E-06 | CD4_CM_spleen |
| TMEM243            | 1.40E-10 | 0.15404383 | 0.443 | 0.295 | 4.96E-06 | CD4_CM_spleen |
| EIF3M              | 1.50E-10 | 0.14761921 | 0.63  | 0.454 | 5.33E-06 | CD4_CM_spleen |
| HNRNPR             | 1.59E-10 | 0.15514306 | 0.436 | 0.293 | 5.64E-06 | CD4_CM_spleen |
| DHX36              | 1.62E-10 | 0.13610914 | 0.329 | 0.213 | 5.75E-06 | CD4_CM_spleen |
| PDS5A              | 1.75E-10 | 0.13499888 | 0.27  | 0.171 | 6.20E-06 | CD4_CM_spleen |
| TMOD3              | 1.92E-10 | 0.14990668 | 0.351 | 0.229 | 6.79E-06 | CD4_CM_spleen |
| CCT8               | 1.99E-10 | 0.1535169  | 0.443 | 0.301 | 7.04E-06 | CD4_CM_spleen |
| ENSMMUG00000028906 | 2.12E-10 | 0.21766221 | 0.467 | 0.326 | 7.50E-06 | CD4_CM_spleen |
| TMBIM4             | 2.12E-10 | 0.104477   | 0.335 | 0.218 | 7.50E-06 | CD4_CM_spleen |
| EWSR1              | 2.41E-10 | 0.18445046 | 0.312 | 0.202 | 8.53E-06 | CD4_CM_spleen |
| SKAP1              | 2.96E-10 | 0.17073065 | 0.856 | 0.684 | 1.05E-05 | CD4_CM_spleen |
| ANKRD11            | 3.04E-10 | 0.14656911 | 0.399 | 0.27  | 1.08E-05 | CD4_CM_spleen |
| CASP8              | 3.11E-10 | 0.22529534 | 0.465 | 0.324 | 1.10E-05 | CD4_CM_spleen |
| PSMB8              | 3.27E-10 | 0.11682582 | 0.638 | 0.448 | 1.16E-05 | CD4_CM_spleen |
| KANSL1             | 3.42E-10 | 0.13831163 | 0.448 | 0.308 | 1.21E-05 | CD4_CM_spleen |
| MACF1              | 3.52E-10 | 0.11009438 | 0.429 | 0.291 | 1.25E-05 | CD4_CM_spleen |
| PRKCH              | 4.34E-10 | 0.1277805  | 0.633 | 0.456 | 1.54E-05 | CD4_CM_spleen |
| NPAT               | 5.03E-10 | 0.20694934 | 0.285 | 0.185 | 1.78E-05 | CD4_CM_spleen |
| HDAC2              | 5.40E-10 | 0.18976723 | 0.281 | 0.181 | 1.91E-05 | CD4_CM_spleen |
| DRAP1              | 6.36E-10 | 0.10197344 | 0.355 | 0.234 | 2.25E-05 | CD4_CM_spleen |
| NDUFS4             | 7.95E-10 | 0.17510801 | 0.298 | 0.194 | 2.82E-05 | CD4_CM_spleen |

|                    |          |            |       |       |            |               |
|--------------------|----------|------------|-------|-------|------------|---------------|
| UBAC2              | 7.97E-10 | 0.12969482 | 0.617 | 0.44  | 2.82E-05   | CD4_CM_spleen |
| PTP4A2             | 8.57E-10 | 0.16577847 | 0.3   | 0.195 | 3.04E-05   | CD4_CM_spleen |
| KLHL23             | 9.10E-10 | 0.1839461  | 0.779 | 0.593 | 3.22E-05   | CD4_CM_spleen |
| KDM4C              | 9.25E-10 | 0.16130624 | 0.371 | 0.251 | 3.28E-05   | CD4_CM_spleen |
| ICAM3              | 9.76E-10 | 0.11205966 | 0.363 | 0.241 | 3.46E-05   | CD4_CM_spleen |
| ADI1               | 9.88E-10 | 0.1136954  | 0.298 | 0.193 | 3.50E-05   | CD4_CM_spleen |
| NONO               | 1.07E-09 | 0.13522337 | 0.401 | 0.272 | 3.78E-05   | CD4_CM_spleen |
| TIA1               | 1.12E-09 | 0.12472242 | 0.269 | 0.172 | 3.96E-05   | CD4_CM_spleen |
| COMMD7             | 1.21E-09 | 0.11079425 | 0.381 | 0.254 | 4.28E-05   | CD4_CM_spleen |
| FBXO34             | 1.28E-09 | 0.17064209 | 0.45  | 0.312 | 4.53E-05   | CD4_CM_spleen |
| GLRX3              | 1.39E-09 | 0.15869714 | 0.275 | 0.176 | 4.94E-05   | CD4_CM_spleen |
| ENSMMUG00000060229 | 1.43E-09 | 0.15535445 | 0.445 | 0.305 | 5.08E-05   | CD4_CM_spleen |
| EIF3D              | 1.44E-09 | 0.11361572 | 0.441 | 0.299 | 5.12E-05   | CD4_CM_spleen |
| CYCS               | 1.46E-09 | 0.1726774  | 0.41  | 0.279 | 5.18E-05   | CD4_CM_spleen |
| RTF1               | 1.55E-09 | 0.17895028 | 0.286 | 0.187 | 5.49E-05   | CD4_CM_spleen |
| TXNL1              | 1.65E-09 | 0.14783034 | 0.269 | 0.172 | 5.83E-05   | CD4_CM_spleen |
| ILKAP              | 1.77E-09 | 0.14953007 | 0.308 | 0.202 | 6.28E-05   | CD4_CM_spleen |
| DDX39B             | 1.84E-09 | 0.16006044 | 0.314 | 0.208 | 6.51E-05   | CD4_CM_spleen |
| ARHGEF7            | 2.22E-09 | 0.19371636 | 0.467 | 0.333 | 7.85E-05   | CD4_CM_spleen |
| NSMCE1             | 2.56E-09 | 0.12595939 | 0.33  | 0.22  | 9.09E-05   | CD4_CM_spleen |
| JAK1               | 2.76E-09 | 0.11590653 | 0.707 | 0.513 | 9.77E-05   | CD4_CM_spleen |
| KRAS               | 2.93E-09 | 0.11809574 | 0.273 | 0.176 | 0.00010395 | CD4_CM_spleen |
| ND2                | 3.10E-09 | 0.24707262 | 0.915 | 0.819 | 0.0001099  | CD4_CM_spleen |
| RNF149             | 3.46E-09 | 0.13382943 | 0.256 | 0.165 | 0.00012275 | CD4_CM_spleen |
| TASOR2             | 3.72E-09 | 0.21694084 | 0.257 | 0.169 | 0.00013169 | CD4_CM_spleen |
| EIF5               | 5.36E-09 | 0.1233953  | 0.404 | 0.279 | 0.00018975 | CD4_CM_spleen |
| GSK3B              | 5.53E-09 | 0.1168075  | 0.44  | 0.307 | 0.00019608 | CD4_CM_spleen |
| DNAJC24            | 5.74E-09 | 0.20524138 | 0.276 | 0.182 | 0.00020337 | CD4_CM_spleen |
| SKP1               | 5.83E-09 | 0.13980368 | 0.765 | 0.587 | 0.0002066  | CD4_CM_spleen |
| ACIN1              | 6.21E-09 | 0.12976454 | 0.423 | 0.289 | 0.00021987 | CD4_CM_spleen |
| ATF7               | 6.45E-09 | 0.11290934 | 0.25  | 0.16  | 0.00022856 | CD4_CM_spleen |
| ENSMMUG00000008587 | 6.92E-09 | 0.15333561 | 0.5   | 0.364 | 0.00024506 | CD4_CM_spleen |
| PAPOLA             | 8.31E-09 | 0.12392111 | 0.535 | 0.375 | 0.00029435 | CD4_CM_spleen |



|                    |          |            |       |       |            |               |
|--------------------|----------|------------|-------|-------|------------|---------------|
| BZW2               | 8.56E-09 | 0.10007294 | 0.349 | 0.232 | 0.00030332 | CD4_CM_spleen |
| NAP1L4             | 8.61E-09 | 0.11894291 | 0.568 | 0.399 | 0.00030496 | CD4_CM_spleen |
| RSRC2              | 9.67E-09 | 0.13922019 | 0.533 | 0.388 | 0.00034269 | CD4_CM_spleen |
| ATP5IF1            | 9.82E-09 | 0.12245377 | 0.628 | 0.458 | 0.00034782 | CD4_CM_spleen |
| PPP1R7             | 9.86E-09 | 0.19964388 | 0.256 | 0.166 | 0.00034944 | CD4_CM_spleen |
| PSMD4              | 1.10E-08 | 0.10021175 | 0.27  | 0.176 | 0.00038972 | CD4_CM_spleen |
| MBNL2              | 1.17E-08 | 0.20236907 | 0.313 | 0.215 | 0.00041597 | CD4_CM_spleen |
| ABCE1              | 1.18E-08 | 0.10599529 | 0.296 | 0.198 | 0.00041762 | CD4_CM_spleen |
| EXOC4              | 1.30E-08 | 0.1610431  | 0.421 | 0.301 | 0.00045888 | CD4_CM_spleen |
| GABPB1             | 1.45E-08 | 0.16428329 | 0.266 | 0.177 | 0.00051206 | CD4_CM_spleen |
| HNRNPA3            | 1.52E-08 | 0.15469779 | 0.685 | 0.513 | 0.00053762 | CD4_CM_spleen |
| ZZZ3               | 1.60E-08 | 0.18918152 | 0.291 | 0.197 | 0.00056772 | CD4_CM_spleen |
| H1-3               | 1.71E-08 | 0.20141879 | 0.282 | 0.192 | 0.00060628 | CD4_CM_spleen |
| YWHAZ              | 2.19E-08 | 0.1404572  | 0.744 | 0.561 | 0.00077469 | CD4_CM_spleen |
| ZBTB20             | 2.43E-08 | 0.14333546 | 0.512 | 0.373 | 0.00085925 | CD4_CM_spleen |
| HERC2              | 2.47E-08 | 0.1166793  | 0.25  | 0.164 | 0.00087633 | CD4_CM_spleen |
| NEMF               | 3.00E-08 | 0.12382503 | 0.258 | 0.17  | 0.00106223 | CD4_CM_spleen |
| ENSMMUG00000061824 | 3.40E-08 | 0.20523261 | 0.945 | 0.858 | 0.0012046  | CD4_CM_spleen |
| MFF                | 3.57E-08 | 0.14071317 | 0.285 | 0.191 | 0.00126376 | CD4_CM_spleen |
| EP300              | 4.04E-08 | 0.19385478 | 0.302 | 0.204 | 0.00143045 | CD4_CM_spleen |
| MRPL10             | 4.27E-08 | 0.18014766 | 0.316 | 0.215 | 0.00151191 | CD4_CM_spleen |
| FBXO11             | 4.53E-08 | 0.11458909 | 0.314 | 0.216 | 0.00160573 | CD4_CM_spleen |
| COP1               | 4.83E-08 | 0.12861848 | 0.307 | 0.209 | 0.00171269 | CD4_CM_spleen |
| PLAAT4             | 4.88E-08 | 0.12567091 | 0.309 | 0.215 | 0.00173013 | CD4_CM_spleen |
| ERO1B              | 6.51E-08 | 0.24643412 | 0.32  | 0.223 | 0.00230587 | CD4_CM_spleen |
| ARHGAP4            | 6.73E-08 | 0.11926198 | 0.291 | 0.198 | 0.00238511 | CD4_CM_spleen |
| EVL                | 6.73E-08 | 0.11662628 | 0.646 | 0.477 | 0.00238535 | CD4_CM_spleen |
| FNBP4              | 7.64E-08 | 0.12641921 | 0.261 | 0.175 | 0.00270714 | CD4_CM_spleen |
| PPP1R2             | 8.65E-08 | 0.12417833 | 0.436 | 0.31  | 0.00306449 | CD4_CM_spleen |
| CCDC66             | 1.19E-07 | 0.14902398 | 0.261 | 0.177 | 0.00419915 | CD4_CM_spleen |
| VPS13B             | 1.24E-07 | 0.13343651 | 0.639 | 0.478 | 0.00439074 | CD4_CM_spleen |
| SIPA1L1            | 1.33E-07 | 0.10957752 | 0.355 | 0.25  | 0.00471255 | CD4_CM_spleen |
| SF3B1              | 1.50E-07 | 0.11097195 | 0.618 | 0.45  | 0.00532972 | CD4_CM_spleen |

|                    |           |            |       |       |            |                |
|--------------------|-----------|------------|-------|-------|------------|----------------|
| SEC14L1            | 1.76E-07  | 0.10114839 | 0.255 | 0.17  | 0.00622264 | CD4_CM_spleen  |
| CHD2               | 2.35E-07  | 0.16464558 | 0.564 | 0.414 | 0.00831144 | CD4_CM_spleen  |
| PTPRA              | 2.48E-07  | 0.11423496 | 0.322 | 0.22  | 0.00879316 | CD4_CM_spleen  |
| COX1               | 5.90E-07  | 0.20534735 | 0.918 | 0.908 | 0.02090141 | CD4_CM_spleen  |
| CDC5L              | 8.03E-07  | 0.11347476 | 0.252 | 0.173 | 0.02845352 | CD4_CM_spleen  |
| CD52               | 9.88E-07  | 0.1084743  | 0.978 | 0.955 | 0.03500471 | CD4_CM_spleen  |
| ARHGAP15           | 1.25E-06  | 0.1062241  | 0.901 | 0.759 | 0.04426495 | CD4_CM_spleen  |
| PELI1              | 1.34E-06  | 0.14625787 | 0.485 | 0.359 | 0.04745013 | CD4_CM_spleen  |
| REL                | 1.54E-06  | 0.11597049 | 0.36  | 0.26  | 0.05448401 | CD4_CM_spleen  |
| UBE2D3             | 1.72E-06  | 0.12552503 | 0.814 | 0.645 | 0.06079036 | CD4_CM_spleen  |
| JAML               | 3.14E-06  | 0.13981846 | 0.284 | 0.203 | 0.11117598 | CD4_CM_spleen  |
| SEPTIN6            | 5.02E-06  | 0.10118095 | 0.791 | 0.621 | 0.17802165 | CD4_CM_spleen  |
| SRSF5              | 5.53E-06  | 0.10061705 | 0.857 | 0.691 | 0.19591346 | CD4_CM_spleen  |
| PDE4B              | 6.16E-06  | 0.21937376 | 0.41  | 0.309 | 0.21815517 | CD4_CM_spleen  |
| EEF2               | 6.98E-06  | 0.11299366 | 0.886 | 0.74  | 0.2474095  | CD4_CM_spleen  |
| ENSMMUG00000055584 | 2.63E-05  | 0.10338914 | 0.906 | 0.784 | 0.93277966 | CD4_CM_spleen  |
| SYTL2              | 7.38E-169 | 3.00897716 | 0.849 | 0.489 | 2.61E-164  | CD4_CAMK4_lung |
| SATB1              | 4.41E-144 | 1.83931929 | 0.948 | 0.903 | 1.56E-139  | CD4_CAMK4_lung |
| PPP2R5C            | 4.11E-136 | 1.62667506 | 0.939 | 0.857 | 1.46E-131  | CD4_CAMK4_lung |
| BACH2              | 1.85E-129 | 1.44008879 | 0.98  | 0.935 | 6.57E-125  | CD4_CAMK4_lung |
| DENND4A            | 1.55E-94  | 1.41361305 | 0.919 | 0.871 | 5.49E-90   | CD4_CAMK4_lung |
| ETS1               | 2.25E-86  | 1.30148195 | 0.878 | 0.84  | 7.99E-82   | CD4_CAMK4_lung |
| BICDL1             | 1.61E-85  | 1.96102553 | 0.784 | 0.656 | 5.72E-81   | CD4_CAMK4_lung |
| CNOT6L             | 1.55E-82  | 1.37074377 | 0.871 | 0.811 | 5.51E-78   | CD4_CAMK4_lung |
| CREM               | 2.03E-80  | 3.1014323  | 0.485 | 0.192 | 7.20E-76   | CD4_CAMK4_lung |
| IKZF1              | 3.17E-76  | 1.27233207 | 0.9   | 0.868 | 1.12E-71   | CD4_CAMK4_lung |
| PPP1R16B           | 1.61E-67  | 1.99418836 | 0.699 | 0.526 | 5.72E-63   | CD4_CAMK4_lung |
| STAT4              | 1.50E-66  | 2.28439107 | 0.69  | 0.522 | 5.32E-62   | CD4_CAMK4_lung |
| CEMIP2             | 1.85E-66  | 2.17673874 | 0.633 | 0.406 | 6.55E-62   | CD4_CAMK4_lung |
| SSH2               | 8.08E-65  | 0.93226304 | 0.961 | 0.965 | 2.86E-60   | CD4_CAMK4_lung |
| ZHX2               | 4.33E-63  | 1.92344223 | 0.664 | 0.445 | 1.54E-58   | CD4_CAMK4_lung |
| P2RY8              | 4.45E-57  | 2.26376619 | 0.594 | 0.395 | 1.58E-52   | CD4_CAMK4_lung |
| TLE1               | 2.91E-53  | 2.58825161 | 0.4   | 0.163 | 1.03E-48   | CD4_CAMK4_lung |

|         |          |            |       |       |          |                |
|---------|----------|------------|-------|-------|----------|----------------|
| PDE4D   | 4.49E-52 | 1.6626734  | 0.675 | 0.542 | 1.59E-47 | CD4_CAMK4_lung |
| ZEB1    | 5.70E-52 | 0.99403146 | 0.895 | 0.914 | 2.02E-47 | CD4_CAMK4_lung |
| KAT6A   | 5.35E-51 | 1.16404701 | 0.814 | 0.804 | 1.89E-46 | CD4_CAMK4_lung |
| FKBP5   | 1.83E-50 | 1.53141125 | 0.758 | 0.688 | 6.47E-46 | CD4_CAMK4_lung |
| TAF4B   | 4.32E-45 | 1.85617183 | 0.627 | 0.483 | 1.53E-40 | CD4_CAMK4_lung |
| BTBD11  | 4.66E-42 | 1.25235788 | 0.806 | 0.8   | 1.65E-37 | CD4_CAMK4_lung |
| PECAM1  | 1.03E-40 | 1.42534674 | 0.718 | 0.69  | 3.65E-36 | CD4_CAMK4_lung |
| RERE    | 6.16E-40 | 0.83043108 | 0.878 | 0.901 | 2.18E-35 | CD4_CAMK4_lung |
| PITPNC1 | 5.36E-38 | 0.63696001 | 0.969 | 0.981 | 1.90E-33 | CD4_CAMK4_lung |
| SLC2A3  | 2.12E-37 | 1.63691976 | 0.629 | 0.522 | 7.50E-33 | CD4_CAMK4_lung |
| SIPA1L2 | 1.81E-36 | 2.21152328 | 0.531 | 0.362 | 6.42E-32 | CD4_CAMK4_lung |
| SYTL3   | 1.47E-35 | 1.90906259 | 0.552 | 0.413 | 5.21E-31 | CD4_CAMK4_lung |
| NCK2    | 2.01E-35 | 1.55157334 | 0.624 | 0.524 | 7.14E-31 | CD4_CAMK4_lung |
| MPP7    | 2.62E-34 | 0.838703   | 0.867 | 0.874 | 9.29E-30 | CD4_CAMK4_lung |
| WNK1    | 7.11E-34 | 1.17905887 | 0.734 | 0.744 | 2.52E-29 | CD4_CAMK4_lung |
| BMP2K   | 2.54E-33 | 1.94123864 | 0.587 | 0.484 | 9.01E-29 | CD4_CAMK4_lung |
| TGFBR2  | 4.49E-33 | 1.27447554 | 0.705 | 0.687 | 1.59E-28 | CD4_CAMK4_lung |
| ARID5B  | 1.27E-32 | 1.35480143 | 0.694 | 0.676 | 4.49E-28 | CD4_CAMK4_lung |
| AFF3    | 1.19E-31 | 0.79172183 | 0.895 | 0.924 | 4.21E-27 | CD4_CAMK4_lung |
| ATP8A1  | 2.24E-31 | 0.97745939 | 0.806 | 0.859 | 7.93E-27 | CD4_CAMK4_lung |
| ZNF331  | 7.77E-31 | 2.71348886 | 0.352 | 0.186 | 2.75E-26 | CD4_CAMK4_lung |
| GPCPD1  | 1.74E-30 | 1.22663792 | 0.677 | 0.671 | 6.18E-26 | CD4_CAMK4_lung |
| PTPRC   | 5.52E-29 | 0.47543884 | 0.967 | 0.981 | 1.96E-24 | CD4_CAMK4_lung |
| ITGA6   | 3.16E-28 | 0.82485458 | 0.81  | 0.854 | 1.12E-23 | CD4_CAMK4_lung |
| RIPOR2  | 1.08E-25 | 0.60702689 | 0.926 | 0.966 | 3.81E-21 | CD4_CAMK4_lung |
| PDE3B   | 6.39E-24 | 0.84449737 | 0.81  | 0.836 | 2.26E-19 | CD4_CAMK4_lung |
| JARID2  | 8.56E-24 | 0.88165872 | 0.803 | 0.843 | 3.03E-19 | CD4_CAMK4_lung |
| RETREG1 | 1.33E-22 | 0.93940045 | 0.705 | 0.721 | 4.70E-18 | CD4_CAMK4_lung |
| MGAT5   | 1.04E-21 | 0.87670181 | 0.762 | 0.828 | 3.69E-17 | CD4_CAMK4_lung |
| AKT3    | 1.25E-21 | 0.58741307 | 0.876 | 0.909 | 4.43E-17 | CD4_CAMK4_lung |
| NRIP1   | 1.59E-21 | 0.81343222 | 0.762 | 0.817 | 5.62E-17 | CD4_CAMK4_lung |
| ICOS    | 1.91E-19 | 1.05645916 | 0.55  | 0.469 | 6.78E-15 | CD4_CAMK4_lung |
| EML4    | 2.50E-19 | 0.68781306 | 0.854 | 0.934 | 8.85E-15 | CD4_CAMK4_lung |

|                     |          |            |       |       |          |                |
|---------------------|----------|------------|-------|-------|----------|----------------|
| ARHGAP15            | 4.80E-19 | 0.34808166 | 0.987 | 0.994 | 1.70E-14 | CD4_CAMK4_lung |
| NSD3                | 6.64E-19 | 1.12069057 | 0.609 | 0.622 | 2.35E-14 | CD4_CAMK4_lung |
| ADD3                | 1.30E-18 | 0.63235083 | 0.808 | 0.86  | 4.60E-14 | CD4_CAMK4_lung |
| BTG1                | 2.34E-17 | 1.01434352 | 0.666 | 0.76  | 8.30E-13 | CD4_CAMK4_lung |
| ENSMMUG00000006165  | 2.34E-17 | 0.54164362 | 0.906 | 0.956 | 8.31E-13 | CD4_CAMK4_lung |
| DOCK10              | 2.50E-17 | 0.53256877 | 0.871 | 0.931 | 8.87E-13 | CD4_CAMK4_lung |
| TNIK                | 3.33E-17 | 0.49435185 | 0.906 | 0.96  | 1.18E-12 | CD4_CAMK4_lung |
| FBXW8               | 4.49E-17 | 1.48123427 | 0.48  | 0.41  | 1.59E-12 | CD4_CAMK4_lung |
| RPS21               | 9.46E-17 | 0.96261306 | 0.677 | 0.674 | 3.35E-12 | CD4_CAMK4_lung |
| CD6                 | 1.59E-16 | 1.02098182 | 0.633 | 0.659 | 5.64E-12 | CD4_CAMK4_lung |
| GIMAP8              | 2.47E-16 | 1.99243609 | 0.306 | 0.195 | 8.76E-12 | CD4_CAMK4_lung |
| CLEC2D              | 2.50E-16 | 1.29731534 | 0.52  | 0.477 | 8.86E-12 | CD4_CAMK4_lung |
| PRMT9               | 1.79E-15 | 2.00887144 | 0.371 | 0.279 | 6.33E-11 | CD4_CAMK4_lung |
| BCL11B              | 3.31E-15 | 0.44945268 | 0.86  | 0.911 | 1.17E-10 | CD4_CAMK4_lung |
| ITPR2               | 8.19E-15 | 0.6648965  | 0.755 | 0.832 | 2.90E-10 | CD4_CAMK4_lung |
| ZC3HAV1             | 4.90E-14 | 0.55579512 | 0.755 | 0.858 | 1.74E-09 | CD4_CAMK4_lung |
| LDLRAD4             | 5.09E-14 | 0.80045497 | 0.707 | 0.736 | 1.80E-09 | CD4_CAMK4_lung |
| GNG2                | 5.14E-14 | 0.64426483 | 0.788 | 0.846 | 1.82E-09 | CD4_CAMK4_lung |
| CTDP1               | 1.46E-13 | 1.2951024  | 0.52  | 0.501 | 5.16E-09 | CD4_CAMK4_lung |
| ANKRD12             | 1.60E-13 | 1.11233759 | 0.64  | 0.71  | 5.66E-09 | CD4_CAMK4_lung |
| FLI1                | 3.03E-13 | 1.30913167 | 0.509 | 0.47  | 1.07E-08 | CD4_CAMK4_lung |
| RAP1A               | 2.16E-12 | 1.05356603 | 0.594 | 0.636 | 7.66E-08 | CD4_CAMK4_lung |
| ATP5F1E             | 1.67E-11 | 0.91023797 | 0.6   | 0.616 | 5.91E-07 | CD4_CAMK4_lung |
| MALT1               | 2.03E-11 | 1.2125285  | 0.561 | 0.594 | 7.19E-07 | CD4_CAMK4_lung |
| ENSMMUG000000062350 | 4.08E-11 | 0.70414985 | 0.769 | 0.791 | 1.44E-06 | CD4_CAMK4_lung |
| MAN1A1              | 4.96E-11 | 1.09879207 | 0.55  | 0.572 | 1.76E-06 | CD4_CAMK4_lung |
| SCML4               | 6.49E-11 | 0.72929771 | 0.707 | 0.8   | 2.30E-06 | CD4_CAMK4_lung |
| MAP4K4              | 7.53E-11 | 0.66883466 | 0.799 | 0.901 | 2.67E-06 | CD4_CAMK4_lung |
| ARID1B              | 8.26E-11 | 0.41824735 | 0.867 | 0.933 | 2.93E-06 | CD4_CAMK4_lung |
| TMEM123             | 9.69E-11 | 0.49296102 | 0.806 | 0.881 | 3.43E-06 | CD4_CAMK4_lung |
| ENSMMUG000000063635 | 1.27E-10 | 1.47465049 | 0.419 | 0.367 | 4.52E-06 | CD4_CAMK4_lung |
| CBLB                | 1.58E-10 | 0.42551107 | 0.847 | 0.931 | 5.59E-06 | CD4_CAMK4_lung |
| CRYBG1              | 2.54E-10 | 1.9727518  | 0.271 | 0.191 | 8.99E-06 | CD4_CAMK4_lung |

|                    |          |            |       |       |            |                |
|--------------------|----------|------------|-------|-------|------------|----------------|
| STAT5B             | 3.26E-10 | 1.13370088 | 0.533 | 0.57  | 1.16E-05   | CD4_CAMK4_lung |
| DHX36              | 4.71E-10 | 1.37813911 | 0.48  | 0.491 | 1.67E-05   | CD4_CAMK4_lung |
| APBB1IP            | 5.02E-10 | 0.51539413 | 0.873 | 0.949 | 1.78E-05   | CD4_CAMK4_lung |
| C11H12orf57        | 9.29E-10 | 0.12187612 | 0.111 | 0.264 | 3.29E-05   | CD4_CAMK4_lung |
| LPXN               | 1.03E-09 | 1.71174855 | 0.275 | 0.197 | 3.67E-05   | CD4_CAMK4_lung |
| NFATC1             | 1.07E-09 | 1.2952348  | 0.43  | 0.396 | 3.79E-05   | CD4_CAMK4_lung |
| FBXO25             | 1.79E-09 | 1.63109268 | 0.404 | 0.379 | 6.33E-05   | CD4_CAMK4_lung |
| HNRNPC             | 2.18E-09 | 0.70534676 | 0.646 | 0.742 | 7.72E-05   | CD4_CAMK4_lung |
| ITK                | 2.83E-09 | 0.64157792 | 0.71  | 0.812 | 0.00010019 | CD4_CAMK4_lung |
| UBE2F              | 2.91E-09 | 0.1519864  | 0.148 | 0.316 | 0.00010312 | CD4_CAMK4_lung |
| YTHDF2             | 3.03E-09 | 0.15538626 | 0.164 | 0.34  | 0.00010729 | CD4_CAMK4_lung |
| AOPEP              | 8.60E-09 | 0.82048468 | 0.648 | 0.739 | 0.00030457 | CD4_CAMK4_lung |
| SKAP1              | 8.94E-09 | 0.38920625 | 0.915 | 0.971 | 0.00031686 | CD4_CAMK4_lung |
| DHX29              | 1.61E-08 | 0.14698475 | 0.192 | 0.376 | 0.00057185 | CD4_CAMK4_lung |
| MTA3               | 1.67E-08 | 0.13644859 | 0.172 | 0.343 | 0.00059112 | CD4_CAMK4_lung |
| VAPB               | 1.84E-08 | 1.77193502 | 0.295 | 0.23  | 0.00065102 | CD4_CAMK4_lung |
| STK24              | 1.98E-08 | 0.17974207 | 0.323 | 0.568 | 0.00070295 | CD4_CAMK4_lung |
| ERP44              | 2.03E-08 | 0.10287435 | 0.258 | 0.474 | 0.00071794 | CD4_CAMK4_lung |
| ATP10A             | 2.19E-08 | 0.45081007 | 0.771 | 0.857 | 0.00077552 | CD4_CAMK4_lung |
| ZZEF1              | 3.31E-08 | 1.1321225  | 0.522 | 0.577 | 0.0011726  | CD4_CAMK4_lung |
| CCT3               | 3.42E-08 | 0.16561779 | 0.153 | 0.311 | 0.00121019 | CD4_CAMK4_lung |
| UBXN1              | 3.52E-08 | 0.14076832 | 0.124 | 0.268 | 0.00124812 | CD4_CAMK4_lung |
| BCL2               | 3.53E-08 | 0.88264309 | 0.607 | 0.617 | 0.00125003 | CD4_CAMK4_lung |
| ETV6               | 3.64E-08 | 1.30922915 | 0.402 | 0.367 | 0.00128892 | CD4_CAMK4_lung |
| MRPS6              | 5.43E-08 | 1.13052824 | 0.459 | 0.457 | 0.0019257  | CD4_CAMK4_lung |
| ENSMMUG00000057691 | 6.73E-08 | 0.2347986  | 0.175 | 0.337 | 0.00238454 | CD4_CAMK4_lung |
| FYTDD1             | 7.23E-08 | 0.1926033  | 0.172 | 0.34  | 0.00256095 | CD4_CAMK4_lung |
| PRPF38B            | 7.43E-08 | 0.13610405 | 0.255 | 0.461 | 0.0026328  | CD4_CAMK4_lung |
| FAM184A            | 7.69E-08 | 1.58554328 | 0.279 | 0.215 | 0.00272422 | CD4_CAMK4_lung |
| ENSMMUG00000043332 | 7.88E-08 | 0.16408202 | 0.116 | 0.25  | 0.00279322 | CD4_CAMK4_lung |
| TBL1XR1            | 9.18E-08 | 0.40982068 | 0.784 | 0.886 | 0.00325361 | CD4_CAMK4_lung |
| ENSMMUG00000051928 | 9.22E-08 | 0.12206811 | 0.135 | 0.278 | 0.00326822 | CD4_CAMK4_lung |
| RPL36              | 9.52E-08 | 0.90340172 | 0.528 | 0.557 | 0.00337344 | CD4_CAMK4_lung |

|                   |          |            |       |       |            |                |
|-------------------|----------|------------|-------|-------|------------|----------------|
| PARN              | 1.03E-07 | 0.12345045 | 0.199 | 0.371 | 0.00364567 | CD4_CAMK4_lung |
| MBP               | 1.05E-07 | 0.76499371 | 0.642 | 0.739 | 0.00372457 | CD4_CAMK4_lung |
| ABCF1             | 1.08E-07 | 0.18261616 | 0.124 | 0.261 | 0.00383151 | CD4_CAMK4_lung |
| RALGAPB           | 1.14E-07 | 0.11332948 | 0.231 | 0.423 | 0.0040392  | CD4_CAMK4_lung |
| TRIB2             | 1.16E-07 | 0.1788248  | 0.225 | 0.414 | 0.0041035  | CD4_CAMK4_lung |
| ARAP2             | 1.22E-07 | 0.20350797 | 0.194 | 0.365 | 0.0043256  | CD4_CAMK4_lung |
| LRIG1             | 1.24E-07 | 0.187796   | 0.218 | 0.402 | 0.00440336 | CD4_CAMK4_lung |
| KLHDC2            | 1.32E-07 | 0.13717159 | 0.12  | 0.254 | 0.00469067 | CD4_CAMK4_lung |
| RSBN1             | 1.55E-07 | 0.13051087 | 0.133 | 0.272 | 0.00550411 | CD4_CAMK4_lung |
| RPN2              | 1.58E-07 | 0.31863246 | 0.133 | 0.274 | 0.00558842 | CD4_CAMK4_lung |
| CCT6A             | 1.62E-07 | 0.23048822 | 0.146 | 0.296 | 0.00574968 | CD4_CAMK4_lung |
| RAB5A             | 1.62E-07 | 0.13361336 | 0.234 | 0.428 | 0.00575234 | CD4_CAMK4_lung |
| ENSMUG00000013257 | 1.64E-07 | 0.93041787 | 0.526 | 0.551 | 0.00580932 | CD4_CAMK4_lung |
| CMSS1             | 1.71E-07 | 0.21132363 | 0.21  | 0.382 | 0.00604311 | CD4_CAMK4_lung |
| ADAR              | 1.87E-07 | 0.12951293 | 0.197 | 0.369 | 0.00661622 | CD4_CAMK4_lung |
| AMD1              | 2.06E-07 | 0.13533183 | 0.207 | 0.387 | 0.00731548 | CD4_CAMK4_lung |
| SERINC3           | 2.19E-07 | 0.10356694 | 0.155 | 0.304 | 0.00774802 | CD4_CAMK4_lung |
| TNRC6B            | 2.41E-07 | 0.31742645 | 0.9   | 0.967 | 0.00854324 | CD4_CAMK4_lung |
| RAP1B             | 2.47E-07 | 0.34424302 | 0.821 | 0.908 | 0.00874215 | CD4_CAMK4_lung |
| PCMTD2            | 2.66E-07 | 0.20478935 | 0.172 | 0.334 | 0.00943554 | CD4_CAMK4_lung |
| IFNGR1            | 2.74E-07 | 0.13110757 | 0.127 | 0.256 | 0.009709   | CD4_CAMK4_lung |
| MAP3K3            | 2.74E-07 | 0.15164365 | 0.199 | 0.371 | 0.00971524 | CD4_CAMK4_lung |
| TENT5C            | 2.97E-07 | 1.29721711 | 0.389 | 0.366 | 0.01054075 | CD4_CAMK4_lung |
| USP20             | 3.13E-07 | 0.11918409 | 0.138 | 0.273 | 0.01108839 | CD4_CAMK4_lung |
| CLIP1             | 3.21E-07 | 0.10003567 | 0.247 | 0.441 | 0.01136331 | CD4_CAMK4_lung |
| MDN1              | 3.29E-07 | 0.11437657 | 0.258 | 0.461 | 0.01164715 | CD4_CAMK4_lung |
| INTS6L            | 3.31E-07 | 0.19964815 | 0.207 | 0.379 | 0.01174144 | CD4_CAMK4_lung |
| NDUFA1            | 3.42E-07 | 0.19815321 | 0.138 | 0.277 | 0.01210221 | CD4_CAMK4_lung |
| EIF3B             | 3.43E-07 | 0.10918298 | 0.129 | 0.26  | 0.01216282 | CD4_CAMK4_lung |
| USP36             | 3.51E-07 | 1.10251361 | 0.5   | 0.547 | 0.01244373 | CD4_CAMK4_lung |
| IL2RG             | 3.52E-07 | 0.18045867 | 0.172 | 0.328 | 0.01246684 | CD4_CAMK4_lung |
| KRTCAP2           | 3.54E-07 | 0.14590063 | 0.166 | 0.319 | 0.01254148 | CD4_CAMK4_lung |
| CCAR1             | 3.97E-07 | 0.26696552 | 0.212 | 0.388 | 0.01406433 | CD4_CAMK4_lung |

|          |          |            |       |       |            |                |
|----------|----------|------------|-------|-------|------------|----------------|
| IFT80    | 4.10E-07 | 0.10646393 | 0.334 | 0.573 | 0.01454338 | CD4_CAMK4_lung |
| ZNF107   | 4.30E-07 | 0.14262336 | 0.148 | 0.289 | 0.01525122 | CD4_CAMK4_lung |
| NRDC     | 5.06E-07 | 0.18376613 | 0.157 | 0.303 | 0.01792778 | CD4_CAMK4_lung |
| PSMB1    | 5.38E-07 | 0.18626682 | 0.144 | 0.284 | 0.01905437 | CD4_CAMK4_lung |
| CD3D     | 5.79E-07 | 0.13894388 | 0.199 | 0.367 | 0.02049874 | CD4_CAMK4_lung |
| RASSF1   | 6.11E-07 | 0.11476955 | 0.225 | 0.406 | 0.02164905 | CD4_CAMK4_lung |
| PARP12   | 6.21E-07 | 0.13140834 | 0.14  | 0.272 | 0.02201045 | CD4_CAMK4_lung |
| ITFG2    | 6.32E-07 | 0.15830395 | 0.183 | 0.344 | 0.02237966 | CD4_CAMK4_lung |
| DYNC1H1  | 6.38E-07 | 0.16128633 | 0.223 | 0.405 | 0.022621   | CD4_CAMK4_lung |
| GALNT7   | 6.52E-07 | 0.15384129 | 0.238 | 0.417 | 0.0230948  | CD4_CAMK4_lung |
| UHRF2    | 6.71E-07 | 0.17610256 | 0.284 | 0.499 | 0.02376258 | CD4_CAMK4_lung |
| BICRAL   | 7.26E-07 | 0.10979715 | 0.133 | 0.263 | 0.0257196  | CD4_CAMK4_lung |
| CHD3     | 7.32E-07 | 0.11988465 | 0.26  | 0.464 | 0.02592853 | CD4_CAMK4_lung |
| SUPT5H   | 7.47E-07 | 0.21670776 | 0.135 | 0.268 | 0.02646606 | CD4_CAMK4_lung |
| ATRNL    | 7.54E-07 | 0.10331394 | 0.234 | 0.414 | 0.02670088 | CD4_CAMK4_lung |
| PPP1CC   | 7.58E-07 | 0.17019499 | 0.192 | 0.355 | 0.02687185 | CD4_CAMK4_lung |
| SEC61A2  | 7.59E-07 | 0.21388226 | 0.247 | 0.442 | 0.02688766 | CD4_CAMK4_lung |
| NCAPD3   | 9.05E-07 | 0.26169189 | 0.216 | 0.393 | 0.03208105 | CD4_CAMK4_lung |
| CCDC91   | 9.30E-07 | 0.49879215 | 0.716 | 0.829 | 0.03294152 | CD4_CAMK4_lung |
| TBC1D10B | 9.40E-07 | 0.20955213 | 0.131 | 0.259 | 0.03329803 | CD4_CAMK4_lung |
| WDR83OS  | 9.45E-07 | 0.12171325 | 0.203 | 0.371 | 0.0334842  | CD4_CAMK4_lung |
| GTF3C1   | 9.95E-07 | 0.12661687 | 0.157 | 0.298 | 0.03526723 | CD4_CAMK4_lung |
| RCSD1    | 9.97E-07 | 0.29750582 | 0.258 | 0.457 | 0.03531646 | CD4_CAMK4_lung |
| GSPT1    | 1.03E-06 | 0.17239889 | 0.255 | 0.45  | 0.03648244 | CD4_CAMK4_lung |
| CBX3     | 1.27E-06 | 0.18115145 | 0.146 | 0.282 | 0.04508957 | CD4_CAMK4_lung |
| ANKRD10  | 1.34E-06 | 0.18904558 | 0.284 | 0.496 | 0.0475884  | CD4_CAMK4_lung |
| RYBP     | 1.36E-06 | 0.13963227 | 0.321 | 0.552 | 0.04834555 | CD4_CAMK4_lung |
| INPP5D   | 1.40E-06 | 0.30488645 | 0.284 | 0.496 | 0.04965515 | CD4_CAMK4_lung |
| YY1      | 1.42E-06 | 0.18975442 | 0.203 | 0.368 | 0.05044046 | CD4_CAMK4_lung |
| SGMS1    | 1.56E-06 | 0.13240685 | 0.249 | 0.431 | 0.05531493 | CD4_CAMK4_lung |
| VPS13C   | 1.59E-06 | 0.21154917 | 0.21  | 0.373 | 0.05632802 | CD4_CAMK4_lung |
| S100A6   | 1.66E-06 | 0.32901426 | 0.129 | 0.251 | 0.05875174 | CD4_CAMK4_lung |
| PHF12    | 1.67E-06 | 0.16714589 | 0.162 | 0.303 | 0.05900269 | CD4_CAMK4_lung |

|                     |          |            |       |       |            |                |
|---------------------|----------|------------|-------|-------|------------|----------------|
| GNL3                | 1.75E-06 | 0.16389481 | 0.135 | 0.262 | 0.06184945 | CD4_CAMK4_lung |
| AKAP8L              | 1.75E-06 | 0.15946164 | 0.135 | 0.262 | 0.0621019  | CD4_CAMK4_lung |
| ENSMMUG000000011714 | 1.82E-06 | 0.26884161 | 0.186 | 0.34  | 0.06433272 | CD4_CAMK4_lung |
| NUP205              | 1.82E-06 | 0.20540728 | 0.144 | 0.276 | 0.06452782 | CD4_CAMK4_lung |
| TNRC18              | 1.88E-06 | 0.21859912 | 0.131 | 0.255 | 0.06651178 | CD4_CAMK4_lung |
| SNX9                | 1.89E-06 | 0.11849445 | 0.253 | 0.43  | 0.06690334 | CD4_CAMK4_lung |
| HK1                 | 1.93E-06 | 0.17753822 | 0.153 | 0.288 | 0.06852484 | CD4_CAMK4_lung |
| LAPTM5              | 2.02E-06 | 0.73134108 | 0.563 | 0.657 | 0.07159153 | CD4_CAMK4_lung |
| DDHD2               | 2.03E-06 | 0.2209965  | 0.183 | 0.337 | 0.07191858 | CD4_CAMK4_lung |
| FNDC3B              | 2.17E-06 | 0.1652116  | 0.151 | 0.28  | 0.07704831 | CD4_CAMK4_lung |
| TBL1X               | 2.22E-06 | 0.79366273 | 0.557 | 0.596 | 0.07861426 | CD4_CAMK4_lung |
| ATG2B               | 2.38E-06 | 0.33918528 | 0.129 | 0.251 | 0.0844789  | CD4_CAMK4_lung |
| AKAP17A             | 2.42E-06 | 0.15749085 | 0.157 | 0.293 | 0.085812   | CD4_CAMK4_lung |
| ZNF700              | 2.45E-06 | 0.28024017 | 0.17  | 0.315 | 0.08684479 | CD4_CAMK4_lung |
| SRSF6               | 2.55E-06 | 0.22209234 | 0.221 | 0.395 | 0.09025153 | CD4_CAMK4_lung |
| PDE4B               | 2.67E-06 | 0.79380382 | 0.513 | 0.528 | 0.09475353 | CD4_CAMK4_lung |
| WIPF2               | 2.80E-06 | 0.23936141 | 0.201 | 0.355 | 0.09935149 | CD4_CAMK4_lung |
| DLG5                | 2.92E-06 | 1.63792323 | 0.262 | 0.211 | 0.10335292 | CD4_CAMK4_lung |
| EIF3D               | 3.03E-06 | 0.17664945 | 0.188 | 0.34  | 0.1075037  | CD4_CAMK4_lung |
| ZNF217              | 3.13E-06 | 0.2064092  | 0.131 | 0.253 | 0.11090204 | CD4_CAMK4_lung |
| UPF2                | 3.24E-06 | 0.19872538 | 0.258 | 0.449 | 0.11473182 | CD4_CAMK4_lung |
| AHCYL2              | 3.26E-06 | 0.11412653 | 0.225 | 0.382 | 0.11539599 | CD4_CAMK4_lung |
| CEP170              | 3.34E-06 | 0.2208439  | 0.262 | 0.457 | 0.11846168 | CD4_CAMK4_lung |
| SYNRG               | 3.69E-06 | 0.1453556  | 0.19  | 0.34  | 0.13079769 | CD4_CAMK4_lung |
| LMBR1L              | 3.87E-06 | 0.24463951 | 0.146 | 0.276 | 0.13720027 | CD4_CAMK4_lung |
| TCF7                | 4.21E-06 | 0.17070753 | 0.218 | 0.382 | 0.14932555 | CD4_CAMK4_lung |
| RNF169              | 4.26E-06 | 0.10127882 | 0.138 | 0.259 | 0.15106885 | CD4_CAMK4_lung |
| FLNA                | 4.38E-06 | 0.24127865 | 0.172 | 0.315 | 0.15524877 | CD4_CAMK4_lung |
| BRD2                | 4.42E-06 | 0.22614142 | 0.199 | 0.358 | 0.15671034 | CD4_CAMK4_lung |
| ENSMMUG000000062941 | 4.47E-06 | 0.32180769 | 0.155 | 0.287 | 0.15854286 | CD4_CAMK4_lung |
| HDLBP               | 4.53E-06 | 0.22048865 | 0.188 | 0.336 | 0.16061046 | CD4_CAMK4_lung |
| DPH6                | 5.00E-06 | 0.10850709 | 0.199 | 0.342 | 0.17719146 | CD4_CAMK4_lung |
| ERCC6L2             | 5.15E-06 | 0.20830387 | 0.26  | 0.446 | 0.18240378 | CD4_CAMK4_lung |



|          |          |            |       |       |            |                |
|----------|----------|------------|-------|-------|------------|----------------|
| FRS2     | 5.20E-06 | 0.10811468 | 0.236 | 0.402 | 0.18411731 | CD4_CAMK4_lung |
| AP3S1    | 5.27E-06 | 0.18222834 | 0.153 | 0.28  | 0.18665822 | CD4_CAMK4_lung |
| DHX15    | 5.56E-06 | 0.13685476 | 0.284 | 0.477 | 0.19710357 | CD4_CAMK4_lung |
| TRPC4AP  | 5.68E-06 | 0.16828537 | 0.279 | 0.475 | 0.20108984 | CD4_CAMK4_lung |
| CHM      | 5.68E-06 | 0.21177435 | 0.183 | 0.326 | 0.20112084 | CD4_CAMK4_lung |
| PJA2     | 5.73E-06 | 0.17095303 | 0.284 | 0.479 | 0.20306853 | CD4_CAMK4_lung |
| MAPKAPK2 | 7.11E-06 | 0.17086178 | 0.179 | 0.319 | 0.2519501  | CD4_CAMK4_lung |
| RUBCN    | 7.29E-06 | 1.10805    | 0.426 | 0.445 | 0.25841051 | CD4_CAMK4_lung |
| WWP1     | 7.44E-06 | 0.20620869 | 0.262 | 0.448 | 0.26352454 | CD4_CAMK4_lung |
| GDI2     | 7.45E-06 | 0.24943627 | 0.162 | 0.296 | 0.2641436  | CD4_CAMK4_lung |
| RALGAPA1 | 7.62E-06 | 0.15688021 | 0.24  | 0.41  | 0.27015593 | CD4_CAMK4_lung |
| IPO8     | 7.76E-06 | 0.26939723 | 0.138 | 0.26  | 0.2749986  | CD4_CAMK4_lung |
| NF1      | 7.77E-06 | 0.20311432 | 0.192 | 0.332 | 0.27540605 | CD4_CAMK4_lung |
| TOGARAM1 | 8.00E-06 | 0.1617727  | 0.197 | 0.342 | 0.28355328 | CD4_CAMK4_lung |
| IRF2     | 8.60E-06 | 0.21169369 | 0.135 | 0.25  | 0.30468087 | CD4_CAMK4_lung |
| SERBP1   | 9.38E-06 | 0.15707276 | 0.275 | 0.463 | 0.33229103 | CD4_CAMK4_lung |
| PPP4R1   | 9.73E-06 | 0.20496879 | 0.172 | 0.308 | 0.3445766  | CD4_CAMK4_lung |
| GRAP2    | 9.81E-06 | 0.1386741  | 0.29  | 0.478 | 0.34770271 | CD4_CAMK4_lung |
| DDX39B   | 9.86E-06 | 0.15796978 | 0.293 | 0.496 | 0.34927675 | CD4_CAMK4_lung |
| TAB2     | 9.89E-06 | 0.15113274 | 0.321 | 0.528 | 0.35037472 | CD4_CAMK4_lung |
| GALNT11  | 1.00E-05 | 0.16300871 | 0.255 | 0.427 | 0.35470903 | CD4_CAMK4_lung |
| DSTYK    | 1.04E-05 | 0.35647435 | 0.142 | 0.264 | 0.36746302 | CD4_CAMK4_lung |
| MYL12B   | 1.06E-05 | 0.28189118 | 0.175 | 0.316 | 0.37438301 | CD4_CAMK4_lung |
| UBP1     | 1.12E-05 | 0.26173186 | 0.21  | 0.367 | 0.39790663 | CD4_CAMK4_lung |
| N4BP2    | 1.19E-05 | 0.10482845 | 0.138 | 0.251 | 0.42029724 | CD4_CAMK4_lung |
| TCP11L2  | 1.20E-05 | 1.10308941 | 0.443 | 0.487 | 0.42392968 | CD4_CAMK4_lung |
| STK26    | 1.20E-05 | 0.20080653 | 0.223 | 0.384 | 0.42511282 | CD4_CAMK4_lung |
| MTX2     | 1.21E-05 | 0.13904003 | 0.144 | 0.262 | 0.43040099 | CD4_CAMK4_lung |
| SMNDC1   | 1.23E-05 | 0.11905194 | 0.212 | 0.364 | 0.43747252 | CD4_CAMK4_lung |
| PLEKHA1  | 1.30E-05 | 0.4347901  | 0.179 | 0.316 | 0.4598029  | CD4_CAMK4_lung |
| MAPK14   | 1.50E-05 | 0.21186501 | 0.197 | 0.337 | 0.53155173 | CD4_CAMK4_lung |
| PAG1     | 1.53E-05 | 0.37929974 | 0.803 | 0.908 | 0.54342631 | CD4_CAMK4_lung |
| TBC1D22B | 1.54E-05 | 0.12795068 | 0.225 | 0.383 | 0.54649881 | CD4_CAMK4_lung |

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|--------------------|----------|------------|-------|-------|------------|----------------|
| KIAA1109           | 1.57E-05 | 0.18378638 | 0.358 | 0.585 | 0.55480051 | CD4_CAMK4_lung |
| DYM                | 1.57E-05 | 0.17456365 | 0.393 | 0.629 | 0.5579434  | CD4_CAMK4_lung |
| DENND6A            | 1.73E-05 | 0.13943868 | 0.271 | 0.45  | 0.61367906 | CD4_CAMK4_lung |
| OTUD5              | 1.75E-05 | 0.26191316 | 0.138 | 0.251 | 0.62125419 | CD4_CAMK4_lung |
| ANP32A             | 1.78E-05 | 0.29950638 | 0.162 | 0.29  | 0.62935086 | CD4_CAMK4_lung |
| ENSMMUG00000054743 | 1.78E-05 | 0.25422548 | 0.17  | 0.301 | 0.63068502 | CD4_CAMK4_lung |
| DNAJC1             | 1.80E-05 | 0.10623534 | 0.186 | 0.315 | 0.63797498 | CD4_CAMK4_lung |
| CEP57              | 1.80E-05 | 0.23219594 | 0.179 | 0.312 | 0.63801058 | CD4_CAMK4_lung |
| CD5                | 1.81E-05 | 0.44627505 | 0.153 | 0.277 | 0.64099897 | CD4_CAMK4_lung |
| ARRB2              | 1.82E-05 | 0.35211133 | 0.144 | 0.265 | 0.64389863 | CD4_CAMK4_lung |
| OGDH               | 1.92E-05 | 0.25444069 | 0.162 | 0.287 | 0.68070275 | CD4_CAMK4_lung |
| JAK2               | 1.97E-05 | 0.25798071 | 0.221 | 0.375 | 0.6973309  | CD4_CAMK4_lung |
| SUZ12              | 2.06E-05 | 0.12925673 | 0.264 | 0.444 | 0.73077983 | CD4_CAMK4_lung |
| MAPRE2             | 2.08E-05 | 0.21041507 | 0.238 | 0.4   | 0.73800352 | CD4_CAMK4_lung |
| LCORL              | 2.15E-05 | 0.22183511 | 0.303 | 0.493 | 0.7612178  | CD4_CAMK4_lung |
| RASGRP2            | 2.15E-05 | 0.45400366 | 0.186 | 0.33  | 0.76230003 | CD4_CAMK4_lung |
| ENSMMUG00000058818 | 2.16E-05 | 0.40730276 | 0.199 | 0.343 | 0.76505168 | CD4_CAMK4_lung |
| FBXW11             | 2.28E-05 | 0.2449391  | 0.221 | 0.37  | 0.80877099 | CD4_CAMK4_lung |
| HMOX2              | 2.31E-05 | 0.20313094 | 0.221 | 0.376 | 0.81989758 | CD4_CAMK4_lung |
| TMA7               | 2.33E-05 | 0.32863869 | 0.218 | 0.382 | 0.82725628 | CD4_CAMK4_lung |
| DIP2C              | 2.37E-05 | 1.29003143 | 0.419 | 0.442 | 0.83863568 | CD4_CAMK4_lung |
| BAZ1A              | 2.42E-05 | 1.01356147 | 0.52  | 0.601 | 0.85834991 | CD4_CAMK4_lung |
| ENSMMUG00000061458 | 2.59E-05 | 0.23968239 | 0.223 | 0.381 | 0.91874267 | CD4_CAMK4_lung |
| TNPO3              | 2.72E-05 | 0.21098577 | 0.238 | 0.396 | 0.96475689 | CD4_CAMK4_lung |
| KANSL3             | 2.75E-05 | 0.33559833 | 0.214 | 0.367 | 0.97518716 | CD4_CAMK4_lung |
| HSPA8              | 2.76E-05 | 0.21773093 | 0.225 | 0.382 | 0.97733873 | CD4_CAMK4_lung |
| VPS54              | 2.77E-05 | 0.14803494 | 0.303 | 0.482 | 0.98200432 | CD4_CAMK4_lung |
| PICALM             | 2.78E-05 | 0.59154636 | 0.666 | 0.805 | 0.9837267  | CD4_CAMK4_lung |
| RPIA               | 2.79E-05 | 0.17527778 | 0.264 | 0.437 | 0.99021632 | CD4_CAMK4_lung |
| SCAMP1             | 3.07E-05 | 0.21046746 | 0.142 | 0.254 | 1          | CD4_CAMK4_lung |
| DUSP16             | 3.13E-05 | 1.21860042 | 0.437 | 0.453 | 1          | CD4_CAMK4_lung |
| CHN2               | 3.17E-05 | 0.95447288 | 0.493 | 0.511 | 1          | CD4_CAMK4_lung |
| TOB1               | 3.28E-05 | 0.32368746 | 0.157 | 0.278 | 1          | CD4_CAMK4_lung |

|                    |          |            |       |       |                  |
|--------------------|----------|------------|-------|-------|------------------|
| ZSWIM6             | 3.29E-05 | 1.15364741 | 0.408 | 0.412 | 1 CD4_CAMK4_lung |
| ND4L               | 3.37E-05 | 1.77190579 | 0.306 | 0.283 | 1 CD4_CAMK4_lung |
| EEA1               | 3.42E-05 | 0.17380578 | 0.273 | 0.446 | 1 CD4_CAMK4_lung |
| ENSMMUG00000038373 | 3.52E-05 | 0.30459012 | 0.199 | 0.342 | 1 CD4_CAMK4_lung |
| ZFX                | 3.67E-05 | 0.11633165 | 0.247 | 0.407 | 1 CD4_CAMK4_lung |
| SLC25A3            | 3.92E-05 | 0.44867413 | 0.177 | 0.313 | 1 CD4_CAMK4_lung |
| TRIM44             | 3.95E-05 | 0.24124426 | 0.214 | 0.364 | 1 CD4_CAMK4_lung |
| LIMS1              | 3.95E-05 | 0.23593453 | 0.24  | 0.396 | 1 CD4_CAMK4_lung |
| BOD1L1             | 4.00E-05 | 0.26707725 | 0.24  | 0.404 | 1 CD4_CAMK4_lung |
| GIMAP7             | 4.35E-05 | 0.13860206 | 0.218 | 0.367 | 1 CD4_CAMK4_lung |
| ZNRF2              | 4.73E-05 | 0.11670007 | 0.236 | 0.387 | 1 CD4_CAMK4_lung |
| USP48              | 4.81E-05 | 0.37275022 | 0.205 | 0.349 | 1 CD4_CAMK4_lung |
| SESN3              | 5.03E-05 | 0.67038141 | 0.155 | 0.27  | 1 CD4_CAMK4_lung |
| GSTP1              | 5.44E-05 | 0.38074554 | 0.142 | 0.255 | 1 CD4_CAMK4_lung |
| EIF5B              | 5.78E-05 | 0.20903735 | 0.197 | 0.333 | 1 CD4_CAMK4_lung |
| ENSMMUG00000005482 | 5.80E-05 | 0.27645376 | 0.338 | 0.552 | 1 CD4_CAMK4_lung |
| KIF2A              | 5.92E-05 | 0.23885314 | 0.238 | 0.399 | 1 CD4_CAMK4_lung |
| DNAJB14            | 6.17E-05 | 0.31264426 | 0.192 | 0.327 | 1 CD4_CAMK4_lung |
| ENSMMUG00000004539 | 6.21E-05 | 0.32855011 | 0.151 | 0.266 | 1 CD4_CAMK4_lung |
| GNAQ               | 6.37E-05 | 0.1354468  | 0.175 | 0.289 | 1 CD4_CAMK4_lung |
| SPOP               | 6.39E-05 | 0.11962154 | 0.284 | 0.458 | 1 CD4_CAMK4_lung |
| MAP4K3             | 6.46E-05 | 0.1559998  | 0.236 | 0.377 | 1 CD4_CAMK4_lung |
| SNX1               | 6.46E-05 | 0.3206471  | 0.144 | 0.254 | 1 CD4_CAMK4_lung |
| LCLAT1             | 6.50E-05 | 0.23847999 | 0.269 | 0.436 | 1 CD4_CAMK4_lung |
| ENSMMUG00000007657 | 6.75E-05 | 0.39432123 | 0.166 | 0.29  | 1 CD4_CAMK4_lung |
| LSP1               | 7.07E-05 | 0.28478389 | 0.221 | 0.371 | 1 CD4_CAMK4_lung |
| SPAST              | 7.25E-05 | 0.35883595 | 0.153 | 0.265 | 1 CD4_CAMK4_lung |
| ENSMMUG00000017297 | 7.72E-05 | 0.26853665 | 0.172 | 0.292 | 1 CD4_CAMK4_lung |
| SLC38A9            | 7.80E-05 | 0.20935956 | 0.201 | 0.333 | 1 CD4_CAMK4_lung |
| ENSMMUG00000050829 | 7.81E-05 | 0.30840197 | 0.26  | 0.427 | 1 CD4_CAMK4_lung |
| TMEM87B            | 8.02E-05 | 0.46733201 | 0.146 | 0.256 | 1 CD4_CAMK4_lung |
| RSRC1              | 8.05E-05 | 0.12270208 | 0.38  | 0.59  | 1 CD4_CAMK4_lung |
| ATF7IP2            | 8.05E-05 | 0.3708261  | 0.247 | 0.408 | 1 CD4_CAMK4_lung |

|                    |            |            |       |       |                  |
|--------------------|------------|------------|-------|-------|------------------|
| ENSMMUG00000056793 | 8.21E-05   | 0.26898444 | 0.192 | 0.326 | 1 CD4_CAMK4_lung |
| UBE2W              | 8.29E-05   | 0.38906649 | 0.17  | 0.292 | 1 CD4_CAMK4_lung |
| SUFU               | 8.63E-05   | 0.17588564 | 0.223 | 0.362 | 1 CD4_CAMK4_lung |
| ESF1               | 8.80E-05   | 0.30934102 | 0.205 | 0.34  | 1 CD4_CAMK4_lung |
| KATNBL1            | 9.37E-05   | 0.40117034 | 0.183 | 0.309 | 1 CD4_CAMK4_lung |
| SNX14              | 9.41E-05   | 0.23639513 | 0.251 | 0.412 | 1 CD4_CAMK4_lung |
| C10H20orf24        | 9.64E-05   | 0.30330658 | 0.192 | 0.328 | 1 CD4_CAMK4_lung |
| ENSMMUG00000052424 | 0.00010222 | 0.24893387 | 0.871 | 0.944 | 1 CD4_CAMK4_lung |
| LIMD2              | 0.00010236 | 0.21484838 | 0.251 | 0.412 | 1 CD4_CAMK4_lung |
| ITPR1              | 0.00010711 | 0.25978732 | 0.166 | 0.281 | 1 CD4_CAMK4_lung |
| SEC14L1            | 0.00011019 | 1.1786842  | 0.358 | 0.353 | 1 CD4_CAMK4_lung |
| KRIT1              | 0.00011058 | 0.36486068 | 0.146 | 0.253 | 1 CD4_CAMK4_lung |
| PTAR1              | 0.00011245 | 0.33336447 | 0.201 | 0.335 | 1 CD4_CAMK4_lung |
| CD47               | 0.00011412 | 0.9113872  | 0.487 | 0.558 | 1 CD4_CAMK4_lung |
| OXSRI              | 0.00011637 | 0.33777921 | 0.264 | 0.432 | 1 CD4_CAMK4_lung |
| N4BP2L2            | 0.00011751 | 0.99480415 | 0.443 | 0.484 | 1 CD4_CAMK4_lung |
| DENND1A            | 0.00011801 | 0.12454686 | 0.369 | 0.568 | 1 CD4_CAMK4_lung |
| ATP11A             | 0.00011893 | 0.31068383 | 0.199 | 0.325 | 1 CD4_CAMK4_lung |
| TRIM37             | 0.0001242  | 0.2451479  | 0.162 | 0.273 | 1 CD4_CAMK4_lung |
| CCDC66             | 0.00012588 | 0.3842577  | 0.177 | 0.298 | 1 CD4_CAMK4_lung |
| NKTR               | 0.00012904 | 0.16199317 | 0.341 | 0.542 | 1 CD4_CAMK4_lung |
| CCDC82             | 0.00013616 | 0.37495799 | 0.177 | 0.299 | 1 CD4_CAMK4_lung |
| NSRP1              | 0.00014271 | 0.24099294 | 0.227 | 0.373 | 1 CD4_CAMK4_lung |
| WDR82              | 0.00014503 | 0.35870033 | 0.172 | 0.292 | 1 CD4_CAMK4_lung |
| SAP130             | 0.00015024 | 0.299608   | 0.157 | 0.268 | 1 CD4_CAMK4_lung |
| SEC22A             | 0.00015223 | 0.30415789 | 0.192 | 0.316 | 1 CD4_CAMK4_lung |
| ZBTB1              | 0.00015318 | 0.21926942 | 0.29  | 0.468 | 1 CD4_CAMK4_lung |
| RELCH              | 0.00015532 | 0.21617079 | 0.321 | 0.515 | 1 CD4_CAMK4_lung |
| ENSMMUG00000006965 | 0.00016279 | 0.4282323  | 0.192 | 0.323 | 1 CD4_CAMK4_lung |
| PRKAG2             | 0.00016342 | 0.24631029 | 0.245 | 0.399 | 1 CD4_CAMK4_lung |
| SNRK               | 0.00016763 | 0.57321693 | 0.587 | 0.703 | 1 CD4_CAMK4_lung |
| EFL1               | 0.00016905 | 0.29542284 | 0.255 | 0.414 | 1 CD4_CAMK4_lung |
| ENSMMUG00000022489 | 0.00017201 | 0.2143644  | 0.221 | 0.367 | 1 CD4_CAMK4_lung |

|                    |            |            |       |       |                  |
|--------------------|------------|------------|-------|-------|------------------|
| MRI1               | 0.00017365 | 0.42921066 | 0.183 | 0.313 | 1 CD4_CAMK4_lung |
| ANXA2              | 0.000179   | 0.26544988 | 0.203 | 0.329 | 1 CD4_CAMK4_lung |
| NLRC5              | 0.00018674 | 0.30692007 | 0.242 | 0.394 | 1 CD4_CAMK4_lung |
| IL4R               | 0.00018771 | 1.27171627 | 0.347 | 0.341 | 1 CD4_CAMK4_lung |
| ENSMMUG00000052747 | 0.00018843 | 0.18885206 | 0.212 | 0.349 | 1 CD4_CAMK4_lung |
| DCTN4              | 0.00019293 | 0.30515309 | 0.162 | 0.268 | 1 CD4_CAMK4_lung |
| DGCR2              | 0.00019568 | 0.19222581 | 0.225 | 0.363 | 1 CD4_CAMK4_lung |
| ST13               | 0.0001964  | 0.5737882  | 0.172 | 0.293 | 1 CD4_CAMK4_lung |
| YWHAB              | 0.00020435 | 0.15849479 | 0.277 | 0.453 | 1 CD4_CAMK4_lung |
| TBCK               | 0.00021272 | 0.18440241 | 0.17  | 0.278 | 1 CD4_CAMK4_lung |
| ENSMMUG00000054038 | 0.00021457 | 0.31542869 | 0.264 | 0.435 | 1 CD4_CAMK4_lung |
| RTN3               | 0.00021833 | 0.3773992  | 0.245 | 0.399 | 1 CD4_CAMK4_lung |
| WDR59              | 0.00021954 | 0.31364242 | 0.148 | 0.251 | 1 CD4_CAMK4_lung |
| NCL                | 0.00022387 | 0.11714612 | 0.354 | 0.559 | 1 CD4_CAMK4_lung |
| UQCRH              | 0.00023062 | 0.29416683 | 0.203 | 0.339 | 1 CD4_CAMK4_lung |
| NR3C1              | 0.00023441 | 0.53209761 | 0.683 | 0.831 | 1 CD4_CAMK4_lung |
| FUT8               | 0.00023522 | 0.14625233 | 0.297 | 0.462 | 1 CD4_CAMK4_lung |
| PREX1              | 0.00024625 | 0.64085293 | 0.568 | 0.688 | 1 CD4_CAMK4_lung |
| TMEM245            | 0.00024893 | 0.15348386 | 0.303 | 0.48  | 1 CD4_CAMK4_lung |
| SUN2               | 0.00026173 | 0.43009285 | 0.157 | 0.268 | 1 CD4_CAMK4_lung |
| SP4                | 0.00026299 | 0.37875352 | 0.21  | 0.343 | 1 CD4_CAMK4_lung |
| SLC9A9             | 0.00026746 | 0.28452027 | 0.183 | 0.296 | 1 CD4_CAMK4_lung |
| GBF1               | 0.00026999 | 0.32055915 | 0.221 | 0.357 | 1 CD4_CAMK4_lung |
| TMC6               | 0.00027848 | 0.48379897 | 0.177 | 0.297 | 1 CD4_CAMK4_lung |
| ANKS1A             | 0.00028178 | 0.16341504 | 0.166 | 0.269 | 1 CD4_CAMK4_lung |
| GPR174             | 0.00030867 | 1.3706526  | 0.317 | 0.307 | 1 CD4_CAMK4_lung |
| ENSMMUG00000018557 | 0.00030955 | 0.30008287 | 0.249 | 0.402 | 1 CD4_CAMK4_lung |
| TMBIM6             | 0.00031729 | 0.20309589 | 0.225 | 0.362 | 1 CD4_CAMK4_lung |
| ZBTB44             | 0.00032258 | 0.43285726 | 0.201 | 0.329 | 1 CD4_CAMK4_lung |
| RPL36AL            | 0.00032291 | 0.13698529 | 0.275 | 0.433 | 1 CD4_CAMK4_lung |
| BMT2               | 0.00032726 | 0.15880835 | 0.201 | 0.316 | 1 CD4_CAMK4_lung |
| SIRT1              | 0.00033162 | 0.43235757 | 0.168 | 0.277 | 1 CD4_CAMK4_lung |
| APPBP2             | 0.0003363  | 0.31251658 | 0.277 | 0.444 | 1 CD4_CAMK4_lung |

|                    |            |            |       |       |                  |
|--------------------|------------|------------|-------|-------|------------------|
| PIAS2              | 0.00034953 | 0.2773893  | 0.286 | 0.454 | 1 CD4_CAMK4_lung |
| CDC27              | 0.00036274 | 0.273671   | 0.293 | 0.461 | 1 CD4_CAMK4_lung |
| MIB1               | 0.00037474 | 0.25894566 | 0.29  | 0.452 | 1 CD4_CAMK4_lung |
| SMARCA2            | 0.00037846 | 0.25774654 | 0.328 | 0.521 | 1 CD4_CAMK4_lung |
| BRAF               | 0.00038587 | 0.32351399 | 0.731 | 0.845 | 1 CD4_CAMK4_lung |
| TMTC2              | 0.00040714 | 0.18839927 | 0.183 | 0.29  | 1 CD4_CAMK4_lung |
| NPTN               | 0.00041208 | 0.2597631  | 0.247 | 0.39  | 1 CD4_CAMK4_lung |
| TM9SF2             | 0.00042115 | 0.16670629 | 0.295 | 0.464 | 1 CD4_CAMK4_lung |
| PELI2              | 0.00042176 | 0.2078292  | 0.201 | 0.316 | 1 CD4_CAMK4_lung |
| ST8SIA4            | 0.00042671 | 0.39430194 | 0.271 | 0.423 | 1 CD4_CAMK4_lung |
| ENSMMUG00000005880 | 0.00042977 | 0.3990801  | 0.153 | 0.257 | 1 CD4_CAMK4_lung |
| ZC3H13             | 0.00044812 | 0.37363486 | 0.269 | 0.43  | 1 CD4_CAMK4_lung |
| CD7                | 0.00044987 | 1.45089717 | 0.321 | 0.319 | 1 CD4_CAMK4_lung |
| ZNF280D            | 0.00045272 | 0.30364444 | 0.275 | 0.436 | 1 CD4_CAMK4_lung |
| C4H6orf62          | 0.00051072 | 0.30213348 | 0.262 | 0.418 | 1 CD4_CAMK4_lung |
| NFX1               | 0.00054428 | 0.48093213 | 0.151 | 0.25  | 1 CD4_CAMK4_lung |
| ZFP30              | 0.00054788 | 0.35672501 | 0.151 | 0.25  | 1 CD4_CAMK4_lung |
| CDK17              | 0.00057428 | 0.5867991  | 0.64  | 0.767 | 1 CD4_CAMK4_lung |
| TULP4              | 0.00057894 | 0.34812248 | 0.234 | 0.362 | 1 CD4_CAMK4_lung |
| PPFIA1             | 0.00059814 | 0.40182207 | 0.172 | 0.278 | 1 CD4_CAMK4_lung |
| WSB1               | 0.00060337 | 0.21552846 | 0.321 | 0.505 | 1 CD4_CAMK4_lung |
| TNFSF8             | 0.0006211  | 0.2385641  | 0.212 | 0.335 | 1 CD4_CAMK4_lung |
| ATXN2              | 0.00062673 | 0.10905277 | 0.352 | 0.535 | 1 CD4_CAMK4_lung |
| ITGA1              | 0.00064077 | 0.37377757 | 0.201 | 0.321 | 1 CD4_CAMK4_lung |
| FBXL17             | 0.00064173 | 0.1261669  | 0.465 | 0.669 | 1 CD4_CAMK4_lung |
| RESF1              | 0.00065037 | 0.46652337 | 0.197 | 0.314 | 1 CD4_CAMK4_lung |
| ENSMMUG00000016959 | 0.00066429 | 0.2542328  | 0.306 | 0.482 | 1 CD4_CAMK4_lung |
| RHBDD1             | 0.00067109 | 0.27144761 | 0.157 | 0.254 | 1 CD4_CAMK4_lung |
| LCK                | 0.00069214 | 0.279075   | 0.332 | 0.514 | 1 CD4_CAMK4_lung |
| BRWD1              | 0.00070629 | 0.11353585 | 0.461 | 0.693 | 1 CD4_CAMK4_lung |
| TSG101             | 0.00074163 | 0.3478753  | 0.218 | 0.351 | 1 CD4_CAMK4_lung |
| IFI27L2            | 0.00074719 | 0.49821935 | 0.153 | 0.253 | 1 CD4_CAMK4_lung |
| ARHGEF1            | 0.00076088 | 0.29816346 | 0.376 | 0.601 | 1 CD4_CAMK4_lung |

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|---------------------|------------|------------|-------|-------|------------------|
| ETNK1               | 0.0007673  | 0.83550448 | 0.445 | 0.493 | 1 CD4_CAMK4_lung |
| ENSMMUG00000016009  | 0.00078882 | 0.41709574 | 0.17  | 0.278 | 1 CD4_CAMK4_lung |
| CHD6                | 0.00080277 | 0.1953583  | 0.417 | 0.653 | 1 CD4_CAMK4_lung |
| PSMB8               | 0.00086312 | 0.589768   | 0.164 | 0.271 | 1 CD4_CAMK4_lung |
| DIS3L2              | 0.0008632  | 0.10575967 | 0.459 | 0.688 | 1 CD4_CAMK4_lung |
| ENSMMUG00000010266  | 0.00088779 | 0.55828728 | 0.603 | 0.733 | 1 CD4_CAMK4_lung |
| SKI                 | 0.00088985 | 0.33750258 | 0.199 | 0.313 | 1 CD4_CAMK4_lung |
| EPS15               | 0.0009254  | 0.25470224 | 0.325 | 0.511 | 1 CD4_CAMK4_lung |
| ATF7IP              | 0.00094149 | 0.51629114 | 0.655 | 0.793 | 1 CD4_CAMK4_lung |
| POC1B               | 0.00094157 | 0.41773555 | 0.199 | 0.314 | 1 CD4_CAMK4_lung |
| DCAF8               | 0.00094474 | 0.30830287 | 0.288 | 0.452 | 1 CD4_CAMK4_lung |
| GAPDH               | 0.00095524 | 0.27766158 | 0.216 | 0.339 | 1 CD4_CAMK4_lung |
| ENSMMUG000000031947 | 0.00095705 | 0.32232492 | 0.269 | 0.417 | 1 CD4_CAMK4_lung |
| MNAT1               | 0.00102108 | 0.12427949 | 0.395 | 0.594 | 1 CD4_CAMK4_lung |
| R3HDM1              | 0.0010477  | 0.25774045 | 0.282 | 0.429 | 1 CD4_CAMK4_lung |
| GLS                 | 0.00104928 | 0.84341389 | 0.474 | 0.547 | 1 CD4_CAMK4_lung |
| ORC4                | 0.00107996 | 0.38773305 | 0.175 | 0.277 | 1 CD4_CAMK4_lung |
| TRDMT1              | 0.00108533 | 0.42490197 | 0.194 | 0.307 | 1 CD4_CAMK4_lung |
| PDXDC1              | 0.00112466 | 0.46218506 | 0.24  | 0.384 | 1 CD4_CAMK4_lung |
| SMAD2               | 0.00116874 | 0.32646934 | 0.258 | 0.399 | 1 CD4_CAMK4_lung |
| ENSMMUG000000064224 | 0.00121731 | 0.72332926 | 0.463 | 0.494 | 1 CD4_CAMK4_lung |
| YTHDC2              | 0.00127998 | 0.40738562 | 0.197 | 0.309 | 1 CD4_CAMK4_lung |
| DPP4                | 0.00128392 | 0.33949017 | 0.218 | 0.337 | 1 CD4_CAMK4_lung |
| TMCC1               | 0.00130128 | 0.10044763 | 0.424 | 0.615 | 1 CD4_CAMK4_lung |
| ZNF277              | 0.00135745 | 0.18223785 | 0.168 | 0.265 | 1 CD4_CAMK4_lung |
| MCU                 | 0.00136203 | 0.33205212 | 0.247 | 0.374 | 1 CD4_CAMK4_lung |
| CUL4A               | 0.00136889 | 0.3524182  | 0.293 | 0.461 | 1 CD4_CAMK4_lung |
| IL6ST               | 0.00138663 | 0.68026899 | 0.548 | 0.656 | 1 CD4_CAMK4_lung |
| BIRC3               | 0.00146967 | 0.58076418 | 0.218 | 0.345 | 1 CD4_CAMK4_lung |
| PCDHGB5             | 0.0015021  | 0.1952215  | 0.179 | 0.278 | 1 CD4_CAMK4_lung |
| KTN1                | 0.00150252 | 0.43365102 | 0.231 | 0.364 | 1 CD4_CAMK4_lung |
| HIRA                | 0.00158814 | 0.36628156 | 0.207 | 0.319 | 1 CD4_CAMK4_lung |
| EDEM3               | 0.00160643 | 0.39562444 | 0.214 | 0.335 | 1 CD4_CAMK4_lung |

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|---------------------|------------|------------|-------|-------|------------------|
| KPNA4               | 0.00161221 | 0.35035527 | 0.247 | 0.388 | 1 CD4_CAMK4_lung |
| EEF1G               | 0.00164618 | 0.15849032 | 0.325 | 0.493 | 1 CD4_CAMK4_lung |
| SYNE3               | 0.00166033 | 0.41676612 | 0.192 | 0.301 | 1 CD4_CAMK4_lung |
| ENSMMUG00000006343  | 0.00168751 | 0.46864262 | 0.247 | 0.389 | 1 CD4_CAMK4_lung |
| IPO7                | 0.00171957 | 0.34283968 | 0.255 | 0.394 | 1 CD4_CAMK4_lung |
| UBE2E2              | 0.00172257 | 0.30611181 | 0.376 | 0.559 | 1 CD4_CAMK4_lung |
| USP9Y               | 0.00173102 | 0.30876899 | 0.205 | 0.316 | 1 CD4_CAMK4_lung |
| PRKCI               | 0.00189677 | 0.39456425 | 0.205 | 0.319 | 1 CD4_CAMK4_lung |
| ATF6                | 0.00193226 | 0.36556049 | 0.218 | 0.341 | 1 CD4_CAMK4_lung |
| NAA50               | 0.00195373 | 0.47692689 | 0.221 | 0.347 | 1 CD4_CAMK4_lung |
| ENSMMUG000000061756 | 0.00210639 | 0.38534809 | 0.218 | 0.339 | 1 CD4_CAMK4_lung |
| TRANK1              | 0.00210827 | 0.33158179 | 0.24  | 0.369 | 1 CD4_CAMK4_lung |
| TSC22D2             | 0.00210973 | 0.4555998  | 0.236 | 0.365 | 1 CD4_CAMK4_lung |
| CEP192              | 0.00211362 | 0.38608257 | 0.308 | 0.482 | 1 CD4_CAMK4_lung |
| CAPZB               | 0.00211497 | 0.16636855 | 0.4   | 0.628 | 1 CD4_CAMK4_lung |
| TMSB10              | 0.00221547 | 0.44776193 | 0.688 | 0.755 | 1 CD4_CAMK4_lung |
| HERC3               | 0.00223245 | 0.24702321 | 0.415 | 0.622 | 1 CD4_CAMK4_lung |
| ARHGAP26            | 0.00226791 | 0.19209409 | 0.33  | 0.49  | 1 CD4_CAMK4_lung |
| ENSMMUG00000004545  | 0.0023044  | 0.35258624 | 0.234 | 0.36  | 1 CD4_CAMK4_lung |
| RFX7                | 0.00230867 | 0.22591618 | 0.317 | 0.462 | 1 CD4_CAMK4_lung |
| RCOR3               | 0.00260396 | 0.38784994 | 0.221 | 0.337 | 1 CD4_CAMK4_lung |
| CNOT10              | 0.00262771 | 0.3449838  | 0.207 | 0.317 | 1 CD4_CAMK4_lung |
| SLC38A2             | 0.00277786 | 1.25728371 | 0.306 | 0.31  | 1 CD4_CAMK4_lung |
| ENSMMUG000000017400 | 0.00279756 | 0.45871971 | 0.205 | 0.32  | 1 CD4_CAMK4_lung |
| CLEC2B              | 0.00303    | 0.43679999 | 0.19  | 0.294 | 1 CD4_CAMK4_lung |
| CHKA                | 0.00304411 | 0.36770706 | 0.231 | 0.35  | 1 CD4_CAMK4_lung |
| SMC4                | 0.0030963  | 0.13397961 | 0.463 | 0.683 | 1 CD4_CAMK4_lung |
| EXT1                | 0.00311881 | 0.47055224 | 0.323 | 0.488 | 1 CD4_CAMK4_lung |
| UBR3                | 0.0032046  | 0.10210475 | 0.43  | 0.636 | 1 CD4_CAMK4_lung |
| GNA12               | 0.00334484 | 0.53042984 | 0.177 | 0.275 | 1 CD4_CAMK4_lung |
| CAB39               | 0.00338027 | 0.48397338 | 0.622 | 0.758 | 1 CD4_CAMK4_lung |
| NPEPPS              | 0.00350711 | 0.34750709 | 0.255 | 0.39  | 1 CD4_CAMK4_lung |
| CCR7                | 0.00352242 | 1.31883124 | 0.275 | 0.27  | 1 CD4_CAMK4_lung |



|                    |            |            |       |       |                  |
|--------------------|------------|------------|-------|-------|------------------|
| RPS6KA3            | 0.00355509 | 0.92293655 | 0.402 | 0.442 | 1 CD4_CAMK4_lung |
| AVL9               | 0.0036645  | 0.4305645  | 0.275 | 0.423 | 1 CD4_CAMK4_lung |
| TMEM135            | 0.00368177 | 0.2560451  | 0.314 | 0.465 | 1 CD4_CAMK4_lung |
| ENSMMUG00000064139 | 0.00374234 | 0.18423041 | 0.404 | 0.597 | 1 CD4_CAMK4_lung |
| MPZL1              | 0.00378831 | 0.31144652 | 0.378 | 0.576 | 1 CD4_CAMK4_lung |
| IFI16              | 0.003844   | 1.2568159  | 0.321 | 0.341 | 1 CD4_CAMK4_lung |
| TANC2              | 0.00394499 | 0.78206718 | 0.426 | 0.459 | 1 CD4_CAMK4_lung |
| STK17A             | 0.00397151 | 0.38494541 | 0.646 | 0.752 | 1 CD4_CAMK4_lung |
| TGFB1              | 0.00402016 | 0.66174833 | 0.526 | 0.609 | 1 CD4_CAMK4_lung |
| RNMT               | 0.00416201 | 0.28044327 | 0.448 | 0.684 | 1 CD4_CAMK4_lung |
| EIF2S2             | 0.00420353 | 0.51509565 | 0.188 | 0.291 | 1 CD4_CAMK4_lung |
| ATXN7              | 0.00420482 | 0.58935162 | 0.592 | 0.727 | 1 CD4_CAMK4_lung |
| PBRM1              | 0.00426553 | 0.24117532 | 0.378 | 0.568 | 1 CD4_CAMK4_lung |
| ARHGAP12           | 0.00450747 | 0.13134851 | 0.421 | 0.631 | 1 CD4_CAMK4_lung |
| ZNF267             | 0.00495381 | 0.67973718 | 0.175 | 0.271 | 1 CD4_CAMK4_lung |
| ZNF638             | 0.00501432 | 0.49802217 | 0.574 | 0.696 | 1 CD4_CAMK4_lung |
| DDX3X              | 0.0050892  | 0.11180098 | 0.478 | 0.704 | 1 CD4_CAMK4_lung |
| SLC20A1            | 0.00510458 | 0.42403751 | 0.225 | 0.34  | 1 CD4_CAMK4_lung |
| TAF15              | 0.00540645 | 0.17158129 | 0.448 | 0.658 | 1 CD4_CAMK4_lung |
| PDZRN3             | 0.00593368 | 0.17188011 | 0.434 | 0.594 | 1 CD4_CAMK4_lung |
| ATP5F1A            | 0.00593884 | 0.36686038 | 0.255 | 0.392 | 1 CD4_CAMK4_lung |
| IP6K1              | 0.00599864 | 0.3613803  | 0.279 | 0.423 | 1 CD4_CAMK4_lung |
| TAOK3              | 0.00607443 | 0.25810972 | 0.415 | 0.617 | 1 CD4_CAMK4_lung |
| TASOR              | 0.00614355 | 0.43160775 | 0.231 | 0.347 | 1 CD4_CAMK4_lung |
| PITPNM2            | 0.00642008 | 0.21783378 | 0.319 | 0.458 | 1 CD4_CAMK4_lung |
| FTH1               | 0.00643021 | 0.36348562 | 0.258 | 0.392 | 1 CD4_CAMK4_lung |
| BORCS5             | 0.00648592 | 0.54824923 | 0.194 | 0.292 | 1 CD4_CAMK4_lung |
| SIK3               | 0.00663673 | 0.21638283 | 0.841 | 0.928 | 1 CD4_CAMK4_lung |
| SAE1               | 0.00679189 | 0.56223465 | 0.17  | 0.259 | 1 CD4_CAMK4_lung |
| IPO9               | 0.00732033 | 0.41827968 | 0.194 | 0.292 | 1 CD4_CAMK4_lung |
| TNRC6C             | 0.00795451 | 0.35621426 | 0.297 | 0.442 | 1 CD4_CAMK4_lung |
| STXBP3             | 0.00809643 | 0.58581684 | 0.197 | 0.296 | 1 CD4_CAMK4_lung |
| ENSMMUG00000030408 | 0.00812753 | 0.59396593 | 0.172 | 0.264 | 1 CD4_CAMK4_lung |

|                   |            |            |       |       |                  |
|-------------------|------------|------------|-------|-------|------------------|
| RGCC              | 0.00853487 | 0.24454141 | 0.247 | 0.359 | 1 CD4_CAMK4_lung |
| ERC1              | 0.00853845 | 0.29131712 | 0.389 | 0.571 | 1 CD4_CAMK4_lung |
| SCYL2             | 0.00870563 | 0.50859983 | 0.166 | 0.25  | 1 CD4_CAMK4_lung |
| HDAC4             | 0.00876978 | 0.38504505 | 0.312 | 0.468 | 1 CD4_CAMK4_lung |
| RSU1              | 0.00877303 | 0.35129441 | 0.328 | 0.476 | 1 CD4_CAMK4_lung |
| CDKN1B            | 0.00881006 | 0.5014743  | 0.192 | 0.289 | 1 CD4_CAMK4_lung |
| PDS5B             | 0.00952542 | 0.13540389 | 0.454 | 0.651 | 1 CD4_CAMK4_lung |
| ANKH              | 0.00966863 | 0.13194617 | 0.439 | 0.616 | 1 CD4_CAMK4_lung |
| MTF2              | 0.00974052 | 1.24845034 | 0.295 | 0.305 | 1 CD4_CAMK4_lung |
| DIAPH2            | 0.00974988 | 0.11882614 | 0.528 | 0.721 | 1 CD4_CAMK4_lung |
| ZNF407            | 0.0103531  | 0.13062494 | 0.5   | 0.715 | 1 CD4_CAMK4_lung |
| EHBP1             | 0.0107669  | 0.26902109 | 0.362 | 0.526 | 1 CD4_CAMK4_lung |
| FAM120B           | 0.01079434 | 0.41477685 | 0.179 | 0.264 | 1 CD4_CAMK4_lung |
| PHIP              | 0.01085836 | 0.14683611 | 0.487 | 0.683 | 1 CD4_CAMK4_lung |
| PRKD3             | 0.01087796 | 0.29945676 | 0.4   | 0.589 | 1 CD4_CAMK4_lung |
| PHF3              | 0.01139575 | 0.11693766 | 0.496 | 0.732 | 1 CD4_CAMK4_lung |
| CRLF3             | 0.01177261 | 0.50700007 | 0.212 | 0.315 | 1 CD4_CAMK4_lung |
| DOCK11            | 0.01191298 | 0.46450678 | 0.666 | 0.802 | 1 CD4_CAMK4_lung |
| PBXIP1            | 0.01197268 | 0.60348323 | 0.249 | 0.376 | 1 CD4_CAMK4_lung |
| SNX25             | 0.01197336 | 1.0078185  | 0.371 | 0.404 | 1 CD4_CAMK4_lung |
| ABCG2             | 0.01208788 | 0.37048119 | 0.269 | 0.392 | 1 CD4_CAMK4_lung |
| VCP               | 0.0121497  | 0.58149747 | 0.186 | 0.278 | 1 CD4_CAMK4_lung |
| TAGLN2            | 0.01222156 | 0.40946233 | 0.24  | 0.353 | 1 CD4_CAMK4_lung |
| TENT2             | 0.01240889 | 0.28400589 | 0.325 | 0.48  | 1 CD4_CAMK4_lung |
| UBAP2             | 0.01266113 | 0.41310602 | 0.284 | 0.419 | 1 CD4_CAMK4_lung |
| TIA1              | 0.01282288 | 0.43206236 | 0.288 | 0.432 | 1 CD4_CAMK4_lung |
| ABLIM1            | 0.01317413 | 0.26556452 | 0.738 | 0.866 | 1 CD4_CAMK4_lung |
| RB1CC1            | 0.01329283 | 0.29724918 | 0.371 | 0.549 | 1 CD4_CAMK4_lung |
| VGLL4             | 0.01339436 | 0.5372494  | 0.223 | 0.33  | 1 CD4_CAMK4_lung |
| VAV1              | 0.01339501 | 1.28132194 | 0.338 | 0.372 | 1 CD4_CAMK4_lung |
| TRAPPC8           | 0.01463492 | 0.55319626 | 0.175 | 0.259 | 1 CD4_CAMK4_lung |
| BRD4              | 0.01467286 | 0.67766524 | 0.199 | 0.296 | 1 CD4_CAMK4_lung |
| ENSMUG00000053817 | 0.01481787 | 0.54363008 | 0.192 | 0.284 | 1 CD4_CAMK4_lung |

|                   |            |            |       |       |                  |
|-------------------|------------|------------|-------|-------|------------------|
| PRKCQ             | 0.01490212 | 0.42654265 | 0.633 | 0.793 | 1 CD4_CAMK4_lung |
| EEF1A1            | 0.0151216  | 0.29621057 | 0.642 | 0.729 | 1 CD4_CAMK4_lung |
| AFF4              | 0.01613903 | 0.32951876 | 0.323 | 0.478 | 1 CD4_CAMK4_lung |
| ASPH              | 0.0163407  | 0.58766993 | 0.188 | 0.275 | 1 CD4_CAMK4_lung |
| NLK               | 0.01674286 | 0.33966918 | 0.227 | 0.325 | 1 CD4_CAMK4_lung |
| SUSD6             | 0.01679033 | 0.41471209 | 0.299 | 0.444 | 1 CD4_CAMK4_lung |
| IGF2BP3           | 0.01716018 | 0.15950389 | 0.413 | 0.586 | 1 CD4_CAMK4_lung |
| TMEM63A           | 0.01725345 | 0.46682806 | 0.277 | 0.413 | 1 CD4_CAMK4_lung |
| GMDS              | 0.01775358 | 0.47460305 | 0.566 | 0.666 | 1 CD4_CAMK4_lung |
| SLC16A10          | 0.0181117  | 1.38824556 | 0.251 | 0.246 | 1 CD4_CAMK4_lung |
| CEP120            | 0.01831933 | 0.95471469 | 0.341 | 0.366 | 1 CD4_CAMK4_lung |
| LDLR              | 0.01834787 | 0.52802279 | 0.188 | 0.27  | 1 CD4_CAMK4_lung |
| ROMO1             | 0.01871704 | 0.72801286 | 0.177 | 0.265 | 1 CD4_CAMK4_lung |
| PTPN11            | 0.0188044  | 0.4827639  | 0.247 | 0.359 | 1 CD4_CAMK4_lung |
| PIP4K2A           | 0.01917965 | 0.2928936  | 0.712 | 0.856 | 1 CD4_CAMK4_lung |
| SCAF11            | 0.01948987 | 0.12173144 | 0.5   | 0.714 | 1 CD4_CAMK4_lung |
| PDCD10            | 0.01969217 | 0.55374256 | 0.227 | 0.331 | 1 CD4_CAMK4_lung |
| CARMIL1           | 0.0198114  | 0.61699342 | 0.31  | 0.458 | 1 CD4_CAMK4_lung |
| ARHGAP30          | 0.02018889 | 0.64396141 | 0.199 | 0.293 | 1 CD4_CAMK4_lung |
| NDST3             | 0.02027367 | 0.26866531 | 0.277 | 0.374 | 1 CD4_CAMK4_lung |
| UCP2              | 0.02097539 | 0.635927   | 0.199 | 0.293 | 1 CD4_CAMK4_lung |
| GTF2I             | 0.0213394  | 0.19515851 | 0.452 | 0.649 | 1 CD4_CAMK4_lung |
| ENSMUG00000063877 | 0.02154798 | 0.34560312 | 0.349 | 0.513 | 1 CD4_CAMK4_lung |
| LMBR1             | 0.02227341 | 0.56080785 | 0.533 | 0.645 | 1 CD4_CAMK4_lung |
| TTC37             | 0.02239702 | 0.62302653 | 0.192 | 0.278 | 1 CD4_CAMK4_lung |
| INPP4B            | 0.02321474 | 0.12340398 | 0.491 | 0.654 | 1 CD4_CAMK4_lung |
| IQGAP2            | 0.0234211  | 0.1785289  | 0.485 | 0.674 | 1 CD4_CAMK4_lung |
| AHI1              | 0.02343966 | 0.91413424 | 0.45  | 0.533 | 1 CD4_CAMK4_lung |
| CTSS              | 0.02437727 | 0.48807169 | 0.175 | 0.254 | 1 CD4_CAMK4_lung |
| PTGER4            | 0.02453537 | 1.21227638 | 0.264 | 0.267 | 1 CD4_CAMK4_lung |
| RASA1             | 0.02551876 | 0.4075228  | 0.306 | 0.435 | 1 CD4_CAMK4_lung |
| CCNY              | 0.025656   | 0.62977459 | 0.498 | 0.604 | 1 CD4_CAMK4_lung |
| LCOR              | 0.02633243 | 0.16760981 | 0.517 | 0.734 | 1 CD4_CAMK4_lung |

|                    |            |            |       |       |                  |
|--------------------|------------|------------|-------|-------|------------------|
| SMAP2              | 0.02697754 | 0.27228908 | 0.408 | 0.597 | 1 CD4_CAMK4_lung |
| TRIP12             | 0.0274894  | 0.19111792 | 0.498 | 0.717 | 1 CD4_CAMK4_lung |
| MGA                | 0.02755659 | 0.50724968 | 0.269 | 0.389 | 1 CD4_CAMK4_lung |
| SF3B3              | 0.02777329 | 0.46829623 | 0.207 | 0.299 | 1 CD4_CAMK4_lung |
| FAM120A            | 0.02787732 | 0.34123474 | 0.345 | 0.507 | 1 CD4_CAMK4_lung |
| DYRK1A             | 0.02802238 | 0.28128426 | 0.439 | 0.639 | 1 CD4_CAMK4_lung |
| HNRNPD             | 0.0286516  | 0.24828224 | 0.45  | 0.666 | 1 CD4_CAMK4_lung |
| TEC                | 0.02881146 | 0.35396618 | 0.45  | 0.656 | 1 CD4_CAMK4_lung |
| ADNP               | 0.02959342 | 0.16681223 | 0.419 | 0.6   | 1 CD4_CAMK4_lung |
| BTBD7              | 0.03204465 | 0.49092406 | 0.216 | 0.31  | 1 CD4_CAMK4_lung |
| SACM1L             | 0.03280744 | 0.46460522 | 0.242 | 0.345 | 1 CD4_CAMK4_lung |
| NUMA1              | 0.03303731 | 0.56067417 | 0.21  | 0.301 | 1 CD4_CAMK4_lung |
| KCNQ5              | 0.03372321 | 0.11842417 | 0.611 | 0.782 | 1 CD4_CAMK4_lung |
| TRPS1              | 0.03400831 | 0.34136167 | 0.467 | 0.67  | 1 CD4_CAMK4_lung |
| CMIP               | 0.03403432 | 0.39498311 | 0.341 | 0.49  | 1 CD4_CAMK4_lung |
| ZNF462             | 0.03442091 | 1.1586512  | 0.26  | 0.26  | 1 CD4_CAMK4_lung |
| DCAF6              | 0.03500326 | 0.35950101 | 0.36  | 0.516 | 1 CD4_CAMK4_lung |
| DPEP2              | 0.03642283 | 0.59062851 | 0.19  | 0.272 | 1 CD4_CAMK4_lung |
| WAPL               | 0.03669739 | 0.37242834 | 0.36  | 0.52  | 1 CD4_CAMK4_lung |
| XPO6               | 0.0368569  | 0.45982428 | 0.391 | 0.574 | 1 CD4_CAMK4_lung |
| RC3H1              | 0.03821329 | 0.59861267 | 0.262 | 0.388 | 1 CD4_CAMK4_lung |
| SRGN               | 0.04009331 | 0.34732656 | 0.293 | 0.416 | 1 CD4_CAMK4_lung |
| SERINC5            | 0.04014361 | 0.36838595 | 0.225 | 0.311 | 1 CD4_CAMK4_lung |
| DICER1             | 0.04364136 | 0.49999053 | 0.231 | 0.328 | 1 CD4_CAMK4_lung |
| NAP1L4             | 0.04383015 | 0.14657861 | 0.524 | 0.745 | 1 CD4_CAMK4_lung |
| NAA35              | 0.04555578 | 1.11411686 | 0.286 | 0.303 | 1 CD4_CAMK4_lung |
| DDX42              | 0.04659867 | 0.66195475 | 0.205 | 0.293 | 1 CD4_CAMK4_lung |
| LRCH1              | 0.0467706  | 0.36674998 | 0.286 | 0.403 | 1 CD4_CAMK4_lung |
| ENSMMUG00000056354 | 0.04678317 | 0.31438111 | 0.33  | 0.465 | 1 CD4_CAMK4_lung |
| SMC3               | 0.04871229 | 0.55681171 | 0.253 | 0.366 | 1 CD4_CAMK4_lung |
| ENSMMUG00000017466 | 0.04938029 | 0.66444886 | 0.218 | 0.316 | 1 CD4_CAMK4_lung |
| SOX4               | 0.0505414  | 0.42989605 | 0.373 | 0.532 | 1 CD4_CAMK4_lung |
| SMG1               | 0.05094829 | 0.3123299  | 0.402 | 0.594 | 1 CD4_CAMK4_lung |

|                    |            |            |       |       |                  |
|--------------------|------------|------------|-------|-------|------------------|
| GPR89A             | 0.0515491  | 0.4031112  | 0.262 | 0.37  | 1 CD4_CAMK4_lung |
| LARGE1             | 0.05216599 | 0.53896203 | 0.212 | 0.289 | 1 CD4_CAMK4_lung |
| ENSMMUG00000039874 | 0.05232563 | 0.62076469 | 0.207 | 0.295 | 1 CD4_CAMK4_lung |
| SEC63              | 0.05232928 | 0.18986405 | 0.48  | 0.688 | 1 CD4_CAMK4_lung |
| MYL6               | 0.05352985 | 0.76260565 | 0.214 | 0.309 | 1 CD4_CAMK4_lung |
| SND1               | 0.05478609 | 0.30566907 | 0.428 | 0.622 | 1 CD4_CAMK4_lung |
| HGSNAT             | 0.05506915 | 0.66698328 | 0.218 | 0.311 | 1 CD4_CAMK4_lung |
| ATP11C             | 0.05655729 | 0.56779433 | 0.183 | 0.254 | 1 CD4_CAMK4_lung |
| LRCH3              | 0.05801462 | 0.2459042  | 0.437 | 0.63  | 1 CD4_CAMK4_lung |
| CORO1A             | 0.05946756 | 0.47868441 | 0.319 | 0.468 | 1 CD4_CAMK4_lung |
| PTBP3              | 0.06034216 | 0.20178164 | 0.478 | 0.678 | 1 CD4_CAMK4_lung |
| HIPK3              | 0.06158796 | 0.54886022 | 0.253 | 0.356 | 1 CD4_CAMK4_lung |
| DTNBP1             | 0.06233785 | 0.23955321 | 0.452 | 0.629 | 1 CD4_CAMK4_lung |
| VIM                | 0.06258457 | 0.58809396 | 0.19  | 0.266 | 1 CD4_CAMK4_lung |
| DNM3               | 0.06261383 | 0.12671266 | 0.62  | 0.821 | 1 CD4_CAMK4_lung |
| IMMP2L             | 0.0641711  | 0.37264839 | 0.638 | 0.764 | 1 CD4_CAMK4_lung |
| RAB21              | 0.06423877 | 0.72089584 | 0.19  | 0.266 | 1 CD4_CAMK4_lung |
| CDK8               | 0.06445649 | 0.48107021 | 0.24  | 0.326 | 1 CD4_CAMK4_lung |
| LBH                | 0.06529194 | 0.54444389 | 0.279 | 0.404 | 1 CD4_CAMK4_lung |
| ASXL1              | 0.06675533 | 0.38203954 | 0.319 | 0.445 | 1 CD4_CAMK4_lung |
| PPM1B              | 0.0703485  | 0.38421261 | 0.321 | 0.449 | 1 CD4_CAMK4_lung |
| MAMU-E             | 0.07109541 | 0.38819015 | 0.568 | 0.69  | 1 CD4_CAMK4_lung |
| VPS37B             | 0.0729645  | 0.49372276 | 0.341 | 0.498 | 1 CD4_CAMK4_lung |
| UBE2R2             | 0.07425452 | 0.2617883  | 0.349 | 0.475 | 1 CD4_CAMK4_lung |
| MAN1C1             | 0.07649512 | 0.50008912 | 0.19  | 0.258 | 1 CD4_CAMK4_lung |
| GNAI2.1            | 0.07956113 | 0.78887665 | 0.199 | 0.282 | 1 CD4_CAMK4_lung |
| ERGIC2             | 0.07978011 | 0.64254969 | 0.199 | 0.278 | 1 CD4_CAMK4_lung |
| HUWE1              | 0.08124349 | 0.31818816 | 0.456 | 0.657 | 1 CD4_CAMK4_lung |
| CRIP1              | 0.08302636 | 0.69345124 | 0.183 | 0.255 | 1 CD4_CAMK4_lung |
| SBF2               | 0.08873674 | 0.44552412 | 0.38  | 0.522 | 1 CD4_CAMK4_lung |
| GMFG               | 0.09061158 | 0.37101955 | 0.376 | 0.526 | 1 CD4_CAMK4_lung |
| NBEAL1             | 0.09581047 | 0.62729741 | 0.242 | 0.328 | 1 CD4_CAMK4_lung |
| STAU1              | 0.09583474 | 0.18611891 | 0.491 | 0.689 | 1 CD4_CAMK4_lung |

|                   |            |            |       |       |                  |
|-------------------|------------|------------|-------|-------|------------------|
| ACSL4             | 0.09706123 | 0.68173753 | 0.194 | 0.263 | 1 CD4_CAMK4_lung |
| ZCCHC7            | 0.09818105 | 0.11817351 | 0.614 | 0.808 | 1 CD4_CAMK4_lung |
| PHF20L1           | 0.09853112 | 0.66294709 | 0.236 | 0.328 | 1 CD4_CAMK4_lung |
| ANKRD44           | 0.10026628 | 0.1203854  | 0.945 | 0.985 | 1 CD4_CAMK4_lung |
| OTUD4             | 0.10032265 | 0.66433754 | 0.186 | 0.254 | 1 CD4_CAMK4_lung |
| ENSMUG00000017113 | 0.10108446 | 0.37452038 | 0.343 | 0.467 | 1 CD4_CAMK4_lung |
| RABGAP1           | 0.10334792 | 0.61390689 | 0.269 | 0.373 | 1 CD4_CAMK4_lung |
| VPS13B            | 0.1036482  | 0.155213   | 0.856 | 0.956 | 1 CD4_CAMK4_lung |
| YAF2              | 0.10522226 | 0.25272194 | 0.448 | 0.632 | 1 CD4_CAMK4_lung |
| NOP53             | 0.10559285 | 0.78709203 | 0.186 | 0.256 | 1 CD4_CAMK4_lung |
| GPR155            | 0.11121294 | 0.63684948 | 0.19  | 0.255 | 1 CD4_CAMK4_lung |
| TACC1             | 0.11487932 | 0.5657371  | 0.308 | 0.435 | 1 CD4_CAMK4_lung |
| ANKIB1            | 0.11527767 | 0.51111823 | 0.391 | 0.565 | 1 CD4_CAMK4_lung |
| USP37             | 0.11705267 | 0.52409135 | 0.273 | 0.375 | 1 CD4_CAMK4_lung |
| CEP350            | 0.11755659 | 0.49749589 | 0.36  | 0.526 | 1 CD4_CAMK4_lung |
| HNRNPUL1          | 0.11758904 | 0.28505811 | 0.4   | 0.568 | 1 CD4_CAMK4_lung |
| RCOR1             | 0.1185179  | 0.57506995 | 0.288 | 0.402 | 1 CD4_CAMK4_lung |
| FCMR              | 0.12101925 | 0.54059719 | 0.319 | 0.452 | 1 CD4_CAMK4_lung |
| HMBOX1            | 0.12114122 | 0.44048049 | 0.336 | 0.462 | 1 CD4_CAMK4_lung |
| HACE1             | 0.12169487 | 0.68385671 | 0.445 | 0.55  | 1 CD4_CAMK4_lung |
| ELL2              | 0.12542957 | 0.72782622 | 0.293 | 0.409 | 1 CD4_CAMK4_lung |
| ARHGAP4           | 0.12684387 | 0.65493497 | 0.275 | 0.384 | 1 CD4_CAMK4_lung |
| TAOK1             | 0.13064111 | 0.39506913 | 0.415 | 0.587 | 1 CD4_CAMK4_lung |
| RAPGEF2           | 0.13349303 | 0.94284489 | 0.376 | 0.437 | 1 CD4_CAMK4_lung |
| MBD3              | 0.13351915 | 0.78068188 | 0.212 | 0.291 | 1 CD4_CAMK4_lung |
| FHIT              | 0.13553576 | 0.1717317  | 0.306 | 0.375 | 1 CD4_CAMK4_lung |
| SH2D1A            | 0.13800132 | 0.96809428 | 0.33  | 0.388 | 1 CD4_CAMK4_lung |
| SMYD3             | 0.13873566 | 0.3325029  | 0.64  | 0.767 | 1 CD4_CAMK4_lung |
| DPYD              | 0.14066987 | 0.53081673 | 0.251 | 0.325 | 1 CD4_CAMK4_lung |
| LARP1             | 0.14375708 | 0.70225593 | 0.216 | 0.291 | 1 CD4_CAMK4_lung |
| ENO1              | 0.14451247 | 0.98083783 | 0.338 | 0.402 | 1 CD4_CAMK4_lung |
| RAB10             | 0.15318389 | 0.42753778 | 0.349 | 0.486 | 1 CD4_CAMK4_lung |
| IQSEC1            | 0.1537894  | 0.5848334  | 0.266 | 0.369 | 1 CD4_CAMK4_lung |

|          |            |            |       |       |                  |
|----------|------------|------------|-------|-------|------------------|
| RAI1     | 0.15498967 | 0.87898934 | 0.199 | 0.269 | 1 CD4_CAMK4_lung |
| UBR1     | 0.15693816 | 0.54521463 | 0.533 | 0.69  | 1 CD4_CAMK4_lung |
| ZMYM2    | 0.15697392 | 0.46726501 | 0.528 | 0.675 | 1 CD4_CAMK4_lung |
| UTY      | 0.16240613 | 0.40859483 | 0.38  | 0.509 | 1 CD4_CAMK4_lung |
| MAN1A2   | 0.16530272 | 0.34379038 | 0.41  | 0.577 | 1 CD4_CAMK4_lung |
| DMTF1    | 0.16636442 | 0.83715291 | 0.371 | 0.448 | 1 CD4_CAMK4_lung |
| STAT1    | 0.16722314 | 0.90188301 | 0.194 | 0.261 | 1 CD4_CAMK4_lung |
| B3GALNT2 | 0.17143556 | 0.63735628 | 0.249 | 0.333 | 1 CD4_CAMK4_lung |
| SOCS5    | 0.17301797 | 0.50496058 | 0.205 | 0.268 | 1 CD4_CAMK4_lung |
| EVL      | 0.17316281 | 0.27896567 | 0.443 | 0.632 | 1 CD4_CAMK4_lung |
| UBE3A    | 0.17345634 | 0.71108133 | 0.421 | 0.522 | 1 CD4_CAMK4_lung |
| TOP2B    | 0.1743527  | 0.43328407 | 0.406 | 0.591 | 1 CD4_CAMK4_lung |
| ARFGEF2  | 0.18408453 | 0.52533727 | 0.336 | 0.471 | 1 CD4_CAMK4_lung |
| PLEKHG1  | 0.18740719 | 0.74077546 | 0.424 | 0.517 | 1 CD4_CAMK4_lung |
| LPP      | 0.18772575 | 0.35245586 | 0.378 | 0.506 | 1 CD4_CAMK4_lung |
| PPIL4    | 0.19524048 | 0.3327025  | 0.406 | 0.57  | 1 CD4_CAMK4_lung |
| CHD1     | 0.19627957 | 0.61284007 | 0.443 | 0.551 | 1 CD4_CAMK4_lung |
| CD44     | 0.20348618 | 0.5644337  | 0.485 | 0.593 | 1 CD4_CAMK4_lung |
| FAM214A  | 0.20911096 | 0.36152712 | 0.41  | 0.572 | 1 CD4_CAMK4_lung |
| DAZAP1   | 0.20944846 | 0.47095884 | 0.373 | 0.533 | 1 CD4_CAMK4_lung |
| ESYT2    | 0.2147128  | 0.2179013  | 0.745 | 0.896 | 1 CD4_CAMK4_lung |
| OXR1     | 0.21741537 | 0.80227231 | 0.386 | 0.453 | 1 CD4_CAMK4_lung |
| HERC2    | 0.22063544 | 0.41068965 | 0.404 | 0.566 | 1 CD4_CAMK4_lung |
| SOS1     | 0.22067495 | 0.41269445 | 0.576 | 0.737 | 1 CD4_CAMK4_lung |
| TRIO     | 0.22157957 | 0.58501203 | 0.242 | 0.314 | 1 CD4_CAMK4_lung |
| CRY1     | 0.22599133 | 0.50700166 | 0.31  | 0.415 | 1 CD4_CAMK4_lung |
| KIAA2026 | 0.22632637 | 0.64557993 | 0.24  | 0.316 | 1 CD4_CAMK4_lung |
| GNB1     | 0.22648194 | 0.51967782 | 0.5   | 0.631 | 1 CD4_CAMK4_lung |
| MAPK8    | 0.2306788  | 0.21268935 | 0.502 | 0.664 | 1 CD4_CAMK4_lung |
| MKLN1    | 0.23356859 | 0.21412389 | 0.552 | 0.742 | 1 CD4_CAMK4_lung |
| MARK2    | 0.24016999 | 0.67165599 | 0.293 | 0.398 | 1 CD4_CAMK4_lung |
| MADD     | 0.24410364 | 0.64067928 | 0.26  | 0.35  | 1 CD4_CAMK4_lung |
| CD2      | 0.24417315 | 0.98024924 | 0.203 | 0.275 | 1 CD4_CAMK4_lung |

|                    |            |            |       |       |                  |
|--------------------|------------|------------|-------|-------|------------------|
| ANTXR2             | 0.24872768 | 0.66079263 | 0.264 | 0.35  | 1 CD4_CAMK4_lung |
| RASGRF2            | 0.25119886 | 0.76573515 | 0.419 | 0.494 | 1 CD4_CAMK4_lung |
| HNRNPH1            | 0.25314811 | 0.19312552 | 0.544 | 0.749 | 1 CD4_CAMK4_lung |
| SEC62              | 0.25387898 | 0.4626859  | 0.338 | 0.469 | 1 CD4_CAMK4_lung |
| HNRNPF             | 0.2546672  | 0.76808295 | 0.238 | 0.323 | 1 CD4_CAMK4_lung |
| MSN                | 0.25491672 | 0.36155806 | 0.463 | 0.655 | 1 CD4_CAMK4_lung |
| PCNX2              | 0.25576401 | 0.86750749 | 0.336 | 0.396 | 1 CD4_CAMK4_lung |
| XRCC5              | 0.25679555 | 0.32194755 | 0.465 | 0.658 | 1 CD4_CAMK4_lung |
| SFXN1              | 0.26261392 | 0.631246   | 0.201 | 0.262 | 1 CD4_CAMK4_lung |
| PHF20              | 0.26368201 | 0.35987723 | 0.432 | 0.6   | 1 CD4_CAMK4_lung |
| PABPC1             | 0.26736697 | 0.17157236 | 0.686 | 0.852 | 1 CD4_CAMK4_lung |
| PPM1L              | 0.27354464 | 0.5860522  | 0.21  | 0.265 | 1 CD4_CAMK4_lung |
| EDEM1              | 0.27403918 | 0.76282688 | 0.349 | 0.417 | 1 CD4_CAMK4_lung |
| RABGAP1L           | 0.27578223 | 0.11224001 | 0.808 | 0.922 | 1 CD4_CAMK4_lung |
| NABP1              | 0.27887564 | 0.4138695  | 0.328 | 0.432 | 1 CD4_CAMK4_lung |
| CAMKMT             | 0.28191384 | 0.20449862 | 0.474 | 0.602 | 1 CD4_CAMK4_lung |
| SLC25A36           | 0.28333111 | 1.11244271 | 0.245 | 0.268 | 1 CD4_CAMK4_lung |
| MAML3              | 0.28561548 | 0.1442818  | 0.666 | 0.83  | 1 CD4_CAMK4_lung |
| SMURF2             | 0.29185707 | 0.81006508 | 0.328 | 0.378 | 1 CD4_CAMK4_lung |
| SH3KBP1            | 0.29255584 | 0.21664231 | 0.83  | 0.939 | 1 CD4_CAMK4_lung |
| MAP3K5             | 0.29458226 | 0.52395495 | 0.229 | 0.289 | 1 CD4_CAMK4_lung |
| USP44              | 0.29549941 | 0.62565146 | 0.301 | 0.409 | 1 CD4_CAMK4_lung |
| CYLD               | 0.29655836 | 0.38054984 | 0.559 | 0.742 | 1 CD4_CAMK4_lung |
| ENSMMUG00000063859 | 0.29855891 | 1.1564075  | 0.255 | 0.288 | 1 CD4_CAMK4_lung |
| ENSMMUG00000044585 | 0.30138096 | 1.1238993  | 0.271 | 0.314 | 1 CD4_CAMK4_lung |
| POGZ               | 0.30501072 | 0.45340894 | 0.365 | 0.498 | 1 CD4_CAMK4_lung |
| PACS1              | 0.30975988 | 0.34912926 | 0.52  | 0.706 | 1 CD4_CAMK4_lung |
| FAM13B             | 0.31118486 | 0.76141944 | 0.389 | 0.484 | 1 CD4_CAMK4_lung |
| ZC3H10             | 0.31296713 | 0.49261139 | 0.312 | 0.416 | 1 CD4_CAMK4_lung |
| RABEP1             | 0.31872916 | 0.93524262 | 0.271 | 0.308 | 1 CD4_CAMK4_lung |
| WASHC4             | 0.32195462 | 0.5965706  | 0.282 | 0.371 | 1 CD4_CAMK4_lung |
| AGTPBP1            | 0.32545863 | 0.31142354 | 0.5   | 0.683 | 1 CD4_CAMK4_lung |
| CD4                | 0.33469751 | 0.71701037 | 0.199 | 0.258 | 1 CD4_CAMK4_lung |



|                   |            |            |       |       |                  |
|-------------------|------------|------------|-------|-------|------------------|
| ADSL              | 0.34294872 | 1.01316878 | 0.264 | 0.299 | 1 CD4_CAMK4_lung |
| DEK               | 0.34853029 | 0.94951783 | 0.214 | 0.282 | 1 CD4_CAMK4_lung |
| UBR5              | 0.35122574 | 0.17681064 | 0.57  | 0.762 | 1 CD4_CAMK4_lung |
| TGFBR1            | 0.35325822 | 0.7836673  | 0.203 | 0.258 | 1 CD4_CAMK4_lung |
| SEPTIN2           | 0.35383728 | 1.08472943 | 0.242 | 0.271 | 1 CD4_CAMK4_lung |
| PAK2              | 0.35744963 | 0.25883158 | 0.5   | 0.69  | 1 CD4_CAMK4_lung |
| MMD               | 0.35767284 | 0.80014541 | 0.221 | 0.285 | 1 CD4_CAMK4_lung |
| HNRNPDL           | 0.36415893 | 0.40487066 | 0.397 | 0.557 | 1 CD4_CAMK4_lung |
| FGFR10P2          | 0.3855545  | 1.27969482 | 0.269 | 0.315 | 1 CD4_CAMK4_lung |
| KPNA1             | 0.39110437 | 0.80351278 | 0.347 | 0.421 | 1 CD4_CAMK4_lung |
| SMAD4             | 0.39589606 | 0.60636234 | 0.328 | 0.441 | 1 CD4_CAMK4_lung |
| TMEM181           | 0.39878099 | 1.01022371 | 0.301 | 0.359 | 1 CD4_CAMK4_lung |
| RPL19             | 0.40091745 | 0.19567999 | 0.491 | 0.628 | 1 CD4_CAMK4_lung |
| MECP2             | 0.40847062 | 0.57125785 | 0.373 | 0.51  | 1 CD4_CAMK4_lung |
| NDUFV2            | 0.41848442 | 0.78535758 | 0.258 | 0.338 | 1 CD4_CAMK4_lung |
| N4BP2L1           | 0.4231571  | 0.73916587 | 0.245 | 0.314 | 1 CD4_CAMK4_lung |
| ENSMUG00000060377 | 0.42691528 | 0.95359298 | 0.277 | 0.326 | 1 CD4_CAMK4_lung |
| TSHZ1             | 0.42704682 | 0.61515269 | 0.201 | 0.25  | 1 CD4_CAMK4_lung |
| TIGAR             | 0.43523353 | 0.54482611 | 0.493 | 0.657 | 1 CD4_CAMK4_lung |
| UXS1              | 0.43756472 | 0.39939433 | 0.557 | 0.703 | 1 CD4_CAMK4_lung |
| BTBD9             | 0.43879831 | 0.3086005  | 0.472 | 0.61  | 1 CD4_CAMK4_lung |
| ATP2B1            | 0.44631529 | 0.60751728 | 0.319 | 0.415 | 1 CD4_CAMK4_lung |
| PAOX              | 0.4521492  | 1.03583332 | 0.245 | 0.282 | 1 CD4_CAMK4_lung |
| CDC14A            | 0.47204964 | 0.33109425 | 0.664 | 0.863 | 1 CD4_CAMK4_lung |
| SENP6             | 0.47378141 | 0.20651117 | 0.566 | 0.762 | 1 CD4_CAMK4_lung |
| ENSMUG00000001210 | 0.47390203 | 0.276299   | 0.487 | 0.574 | 1 CD4_CAMK4_lung |
| SNX29             | 0.47511984 | 0.45620845 | 0.55  | 0.748 | 1 CD4_CAMK4_lung |
| SUCLG2            | 0.47866117 | 0.14627145 | 0.614 | 0.778 | 1 CD4_CAMK4_lung |
| SFMBT2            | 0.48858006 | 0.36104694 | 0.4   | 0.522 | 1 CD4_CAMK4_lung |
| NCOA7             | 0.49008839 | 0.61916594 | 0.393 | 0.494 | 1 CD4_CAMK4_lung |
| THRAP3            | 0.51306618 | 0.753035   | 0.395 | 0.511 | 1 CD4_CAMK4_lung |
| HECTD1            | 0.53905297 | 0.53698714 | 0.362 | 0.484 | 1 CD4_CAMK4_lung |
| ST6GAL1           | 0.54184435 | 0.43484583 | 0.522 | 0.67  | 1 CD4_CAMK4_lung |

|                    |            |            |       |       |                  |
|--------------------|------------|------------|-------|-------|------------------|
| RPL39              | 0.54956291 | 0.22304035 | 0.563 | 0.688 | 1 CD4_CAMK4_lung |
| DDX50              | 0.56523091 | 0.85927721 | 0.295 | 0.353 | 1 CD4_CAMK4_lung |
| SPOCK2             | 0.57211347 | 0.69258856 | 0.413 | 0.551 | 1 CD4_CAMK4_lung |
| ENSMMUG00000056331 | 0.58048885 | 0.55042503 | 0.352 | 0.447 | 1 CD4_CAMK4_lung |
| SS18               | 0.58225471 | 0.33347083 | 0.461 | 0.626 | 1 CD4_CAMK4_lung |
| MTREX              | 0.58229094 | 0.36494031 | 0.574 | 0.741 | 1 CD4_CAMK4_lung |
| NCLN               | 0.58429792 | 0.80442574 | 0.216 | 0.273 | 1 CD4_CAMK4_lung |
| PARP8              | 0.58535577 | 0.93377026 | 0.269 | 0.312 | 1 CD4_CAMK4_lung |
| SETX               | 0.60172723 | 0.52771301 | 0.397 | 0.537 | 1 CD4_CAMK4_lung |
| ASXL2              | 0.6025306  | 0.47158507 | 0.352 | 0.448 | 1 CD4_CAMK4_lung |
| GPRIN3             | 0.61244818 | 0.66965247 | 0.417 | 0.527 | 1 CD4_CAMK4_lung |
| BID                | 0.61452109 | 0.81805653 | 0.203 | 0.251 | 1 CD4_CAMK4_lung |
| PPP1CB             | 0.62014314 | 0.1897653  | 0.592 | 0.744 | 1 CD4_CAMK4_lung |
| ANKFY1             | 0.62066018 | 0.77921155 | 0.262 | 0.334 | 1 CD4_CAMK4_lung |
| MAP2K4             | 0.62926163 | 0.59834806 | 0.362 | 0.472 | 1 CD4_CAMK4_lung |
| HS2ST1             | 0.63325463 | 0.52618873 | 0.314 | 0.389 | 1 CD4_CAMK4_lung |
| DIPK1A             | 0.64867066 | 0.84688004 | 0.308 | 0.37  | 1 CD4_CAMK4_lung |
| RORA               | 0.66652902 | 0.80538004 | 0.306 | 0.395 | 1 CD4_CAMK4_lung |
| ENSMMUG00000065362 | 0.66778077 | 0.2640848  | 0.978 | 0.997 | 1 CD4_CAMK4_lung |
| DIAPH1             | 0.67159835 | 0.416422   | 0.52  | 0.687 | 1 CD4_CAMK4_lung |
| TESPA1             | 0.68333737 | 0.85427137 | 0.251 | 0.312 | 1 CD4_CAMK4_lung |
| IGF1R              | 0.69220622 | 0.62736351 | 0.308 | 0.377 | 1 CD4_CAMK4_lung |
| PPP6R3             | 0.70057736 | 0.33127443 | 0.559 | 0.741 | 1 CD4_CAMK4_lung |
| ZBTB20             | 0.70391174 | 0.13701164 | 0.738 | 0.879 | 1 CD4_CAMK4_lung |
| STX16              | 0.70408025 | 0.89498406 | 0.284 | 0.346 | 1 CD4_CAMK4_lung |
| CPNE1              | 0.70521294 | 0.70787251 | 0.266 | 0.34  | 1 CD4_CAMK4_lung |
| RSBN1L             | 0.71085093 | 0.54123917 | 0.277 | 0.346 | 1 CD4_CAMK4_lung |
| ELF2               | 0.71086679 | 0.57978944 | 0.354 | 0.466 | 1 CD4_CAMK4_lung |
| TRAT1              | 0.7169999  | 0.75306793 | 0.295 | 0.381 | 1 CD4_CAMK4_lung |
| ENSMMUG00000058325 | 0.73290552 | 0.31892699 | 0.487 | 0.632 | 1 CD4_CAMK4_lung |
| UBE3C              | 0.74550901 | 0.42161139 | 0.454 | 0.632 | 1 CD4_CAMK4_lung |
| ENSMMUG00000052802 | 0.74821682 | 0.62167112 | 0.293 | 0.363 | 1 CD4_CAMK4_lung |
| RPS26              | 0.75939922 | 0.10606948 | 0.692 | 0.773 | 1 CD4_CAMK4_lung |

|          |            |            |       |       |                  |
|----------|------------|------------|-------|-------|------------------|
| EXOC4    | 0.76021299 | 0.15774019 | 0.655 | 0.837 | 1 CD4_CAMK4_lung |
| EEF1D    | 0.76708553 | 0.54951589 | 0.391 | 0.529 | 1 CD4_CAMK4_lung |
| CSPP1    | 0.76908509 | 0.78513593 | 0.321 | 0.391 | 1 CD4_CAMK4_lung |
| IL7R     | 0.77242141 | 0.28356905 | 0.592 | 0.74  | 1 CD4_CAMK4_lung |
| ERN1     | 0.78164884 | 0.89052566 | 0.356 | 0.456 | 1 CD4_CAMK4_lung |
| UBE2K    | 0.78406281 | 0.48091959 | 0.45  | 0.592 | 1 CD4_CAMK4_lung |
| XYLT1    | 0.79732926 | 0.27380029 | 0.592 | 0.755 | 1 CD4_CAMK4_lung |
| CD53     | 0.80055963 | 0.63060951 | 0.352 | 0.459 | 1 CD4_CAMK4_lung |
| VTI1A    | 0.80847241 | 0.22918164 | 0.592 | 0.775 | 1 CD4_CAMK4_lung |
| GPR183   | 0.81604948 | 1.0079267  | 0.282 | 0.341 | 1 CD4_CAMK4_lung |
| USP25    | 0.82321346 | 0.55911028 | 0.397 | 0.522 | 1 CD4_CAMK4_lung |
| STRN3    | 0.82555875 | 0.52833719 | 0.443 | 0.587 | 1 CD4_CAMK4_lung |
| NXPE3    | 0.82810881 | 0.55601109 | 0.408 | 0.533 | 1 CD4_CAMK4_lung |
| GPBP1    | 0.82830985 | 0.22384929 | 0.594 | 0.783 | 1 CD4_CAMK4_lung |
| PPFIBP1  | 0.83155229 | 0.69503517 | 0.319 | 0.4   | 1 CD4_CAMK4_lung |
| SON      | 0.83375275 | 0.34417662 | 0.537 | 0.725 | 1 CD4_CAMK4_lung |
| CLASP2   | 0.84271937 | 0.23325969 | 0.544 | 0.702 | 1 CD4_CAMK4_lung |
| RPL22L1  | 0.85432958 | 0.3677405  | 0.439 | 0.539 | 1 CD4_CAMK4_lung |
| PDK1     | 0.85982259 | 0.31904118 | 0.539 | 0.72  | 1 CD4_CAMK4_lung |
| TMEM71   | 0.86279358 | 0.68685932 | 0.299 | 0.377 | 1 CD4_CAMK4_lung |
| RPL35    | 0.87227086 | 0.17371558 | 0.635 | 0.738 | 1 CD4_CAMK4_lung |
| EZR      | 0.87835998 | 0.28871108 | 0.531 | 0.677 | 1 CD4_CAMK4_lung |
| CCNI     | 0.88077287 | 0.86553416 | 0.277 | 0.352 | 1 CD4_CAMK4_lung |
| TRAPPC9  | 0.88264706 | 0.6253196  | 0.356 | 0.455 | 1 CD4_CAMK4_lung |
| TANGO6   | 0.88342552 | 0.45703156 | 0.393 | 0.506 | 1 CD4_CAMK4_lung |
| PRKCH    | 0.88508801 | 0.17245248 | 0.808 | 0.942 | 1 CD4_CAMK4_lung |
| MTR      | 0.88570796 | 0.74627116 | 0.362 | 0.472 | 1 CD4_CAMK4_lung |
| ZMYND11  | 0.89715421 | 0.36818065 | 0.454 | 0.591 | 1 CD4_CAMK4_lung |
| CRTC3    | 0.89955573 | 0.22544417 | 0.583 | 0.775 | 1 CD4_CAMK4_lung |
| ELOB     | 0.90033112 | 0.99945824 | 0.247 | 0.303 | 1 CD4_CAMK4_lung |
| RBM26    | 0.90480344 | 0.49099252 | 0.448 | 0.586 | 1 CD4_CAMK4_lung |
| WWOX     | 0.91720853 | 0.52917355 | 0.428 | 0.513 | 1 CD4_CAMK4_lung |
| ANKRD13C | 0.92311639 | 0.95046221 | 0.29  | 0.369 | 1 CD4_CAMK4_lung |

|                     |            |            |       |       |           |                 |
|---------------------|------------|------------|-------|-------|-----------|-----------------|
| MGAT4A              | 0.92370399 | 0.7227806  | 0.334 | 0.429 | 1         | CD4_CAMK4_lung  |
| KLF3                | 0.92608817 | 0.52037127 | 0.393 | 0.511 | 1         | CD4_CAMK4_lung  |
| THOC2               | 0.93332378 | 0.56989212 | 0.432 | 0.578 | 1         | CD4_CAMK4_lung  |
| CEPT1               | 0.93779205 | 0.84885462 | 0.227 | 0.272 | 1         | CD4_CAMK4_lung  |
| PTP4A1              | 0.9393071  | 0.83301309 | 0.282 | 0.352 | 1         | CD4_CAMK4_lung  |
| CD46                | 0.9494166  | 0.65257882 | 0.406 | 0.551 | 1         | CD4_CAMK4_lung  |
| ENSMMUG000000011711 | 0.96878574 | 1.01557791 | 0.238 | 0.291 | 1         | CD4_CAMK4_lung  |
| GCC2                | 0.9745108  | 0.70863175 | 0.343 | 0.433 | 1         | CD4_CAMK4_lung  |
| MSI2                | 0.97630219 | 0.15159403 | 0.712 | 0.885 | 1         | CD4_CAMK4_lung  |
| WASF2               | 0.98417687 | 0.42173018 | 0.476 | 0.632 | 1         | CD4_CAMK4_lung  |
| PPARD               | 0.98805182 | 0.72258777 | 0.231 | 0.271 | 1         | CD4_CAMK4_lung  |
| TRAC                | 0.98877163 | 0.12918162 | 0.631 | 0.8   | 1         | CD4_CAMK4_lung  |
| HBA                 | 0          | 1.74832974 | 0.604 | 0.132 | 0         | CD4_CAMK4_UCBMC |
| HBE1                | 0          | 1.45951386 | 0.635 | 0.174 | 0         | CD4_CAMK4_UCBMC |
| MTMR14              | 2.15E-131  | 1.3372146  | 0.58  | 0.306 | 7.63E-127 | CD4_CAMK4_UCBMC |
| ENSMMUG000000056654 | 1.36E-126  | 1.81895051 | 0.489 | 0.245 | 4.82E-122 | CD4_CAMK4_UCBMC |
| EPB41               | 2.29E-117  | 0.57255296 | 0.944 | 0.81  | 8.10E-113 | CD4_CAMK4_UCBMC |
| COX3                | 5.73E-114  | 0.50544572 | 0.976 | 0.87  | 2.03E-109 | CD4_CAMK4_UCBMC |
| ENSMMUG000000015270 | 1.17E-110  | 0.88353029 | 0.91  | 0.836 | 4.13E-106 | CD4_CAMK4_UCBMC |
| RPS14               | 1.38E-107  | 0.93821566 | 0.868 | 0.792 | 4.90E-103 | CD4_CAMK4_UCBMC |
| TPT1                | 2.10E-105  | 0.94439291 | 0.897 | 0.832 | 7.43E-101 | CD4_CAMK4_UCBMC |
| MBTD1               | 4.03E-103  | 0.83963023 | 0.751 | 0.546 | 1.43E-98  | CD4_CAMK4_UCBMC |
| ENSMMUG000000003412 | 1.15E-100  | 0.85983165 | 0.838 | 0.748 | 4.08E-96  | CD4_CAMK4_UCBMC |
| ATG13               | 1.40E-95   | 0.98991453 | 0.635 | 0.416 | 4.96E-91  | CD4_CAMK4_UCBMC |
| ENSMMUG000000047632 | 3.73E-95   | 2.19785303 | 0.326 | 0.113 | 1.32E-90  | CD4_CAMK4_UCBMC |
| RPS16               | 5.88E-92   | 0.9206283  | 0.83  | 0.733 | 2.08E-87  | CD4_CAMK4_UCBMC |
| HIVEP1              | 2.34E-91   | 0.67603054 | 0.836 | 0.673 | 8.29E-87  | CD4_CAMK4_UCBMC |
| FAM241A             | 3.27E-91   | 0.99863346 | 0.549 | 0.301 | 1.16E-86  | CD4_CAMK4_UCBMC |
| EIF2AK3             | 1.84E-90   | 0.7760956  | 0.741 | 0.531 | 6.51E-86  | CD4_CAMK4_UCBMC |
| ATG14               | 7.85E-90   | 1.31694184 | 0.438 | 0.206 | 2.78E-85  | CD4_CAMK4_UCBMC |
| RPL5                | 1.39E-89   | 0.77720616 | 0.863 | 0.801 | 4.93E-85  | CD4_CAMK4_UCBMC |
| RPL23A              | 1.40E-88   | 0.89874014 | 0.829 | 0.764 | 4.97E-84  | CD4_CAMK4_UCBMC |
| ENSMMUG000000003073 | 4.52E-86   | 0.84871953 | 0.755 | 0.644 | 1.60E-81  | CD4_CAMK4_UCBMC |

|                    |          |            |       |       |          |                 |
|--------------------|----------|------------|-------|-------|----------|-----------------|
| MAX                | 1.96E-85 | 0.97433219 | 0.583 | 0.364 | 6.96E-81 | CD4_CAMK4_UCBMC |
| OSBPL9             | 2.30E-85 | 0.54534421 | 0.896 | 0.758 | 8.16E-81 | CD4_CAMK4_UCBMC |
| RPL30              | 2.37E-85 | 0.85035935 | 0.848 | 0.755 | 8.41E-81 | CD4_CAMK4_UCBMC |
| PDGFRA             | 3.51E-85 | 0.64620631 | 0.778 | 0.635 | 1.24E-80 | CD4_CAMK4_UCBMC |
| RPS20              | 2.91E-83 | 0.84800615 | 0.78  | 0.672 | 1.03E-78 | CD4_CAMK4_UCBMC |
| CPEB1              | 5.99E-83 | 0.83867803 | 0.771 | 0.669 | 2.12E-78 | CD4_CAMK4_UCBMC |
| TFDP2              | 2.07E-82 | 0.74335753 | 0.71  | 0.506 | 7.35E-78 | CD4_CAMK4_UCBMC |
| RPL13A             | 5.48E-82 | 0.74218708 | 0.847 | 0.79  | 1.94E-77 | CD4_CAMK4_UCBMC |
| RPLP2              | 6.08E-82 | 0.77156939 | 0.788 | 0.699 | 2.15E-77 | CD4_CAMK4_UCBMC |
| CCSER2             | 2.96E-81 | 0.71999623 | 0.726 | 0.517 | 1.05E-76 | CD4_CAMK4_UCBMC |
| CTDSPL2            | 4.13E-81 | 0.81359474 | 0.684 | 0.492 | 1.46E-76 | CD4_CAMK4_UCBMC |
| CREBRF             | 2.56E-80 | 0.60844967 | 0.805 | 0.612 | 9.05E-76 | CD4_CAMK4_UCBMC |
| BSDC1              | 3.24E-80 | 1.03541928 | 0.529 | 0.31  | 1.15E-75 | CD4_CAMK4_UCBMC |
| RPS3A              | 6.69E-79 | 0.7664787  | 0.854 | 0.786 | 2.37E-74 | CD4_CAMK4_UCBMC |
| NUP54              | 7.09E-79 | 1.10880022 | 0.457 | 0.241 | 2.51E-74 | CD4_CAMK4_UCBMC |
| EIF2AK2            | 9.00E-79 | 1.09499355 | 0.495 | 0.28  | 3.19E-74 | CD4_CAMK4_UCBMC |
| RPL7A              | 9.21E-78 | 0.87026983 | 0.778 | 0.682 | 3.26E-73 | CD4_CAMK4_UCBMC |
| ZNF292             | 1.24E-77 | 0.54768889 | 0.856 | 0.712 | 4.38E-73 | CD4_CAMK4_UCBMC |
| RPS4X              | 3.30E-77 | 0.79972768 | 0.819 | 0.743 | 1.17E-72 | CD4_CAMK4_UCBMC |
| JAK1               | 3.59E-77 | 0.45248327 | 0.96  | 0.889 | 1.27E-72 | CD4_CAMK4_UCBMC |
| RPL18              | 1.23E-76 | 0.73928448 | 0.815 | 0.722 | 4.36E-72 | CD4_CAMK4_UCBMC |
| RPS7               | 1.88E-76 | 0.74846915 | 0.839 | 0.772 | 6.67E-72 | CD4_CAMK4_UCBMC |
| ENSMMUG00000006463 | 3.09E-76 | 1.30619848 | 0.452 | 0.267 | 1.09E-71 | CD4_CAMK4_UCBMC |
| RPL3               | 1.69E-75 | 0.68928393 | 0.839 | 0.778 | 5.98E-71 | CD4_CAMK4_UCBMC |
| RPS5               | 8.84E-75 | 0.87386216 | 0.754 | 0.646 | 3.13E-70 | CD4_CAMK4_UCBMC |
| SPPL3              | 9.28E-75 | 0.56688587 | 0.871 | 0.731 | 3.29E-70 | CD4_CAMK4_UCBMC |
| MXI1               | 3.69E-74 | 0.72473481 | 0.652 | 0.43  | 1.31E-69 | CD4_CAMK4_UCBMC |
| ENSMMUG00000003867 | 5.60E-74 | 0.75520898 | 0.902 | 0.849 | 1.98E-69 | CD4_CAMK4_UCBMC |
| RPL32              | 1.02E-72 | 0.61399999 | 0.878 | 0.816 | 3.62E-68 | CD4_CAMK4_UCBMC |
| RPL23              | 2.45E-72 | 0.73890567 | 0.773 | 0.683 | 8.68E-68 | CD4_CAMK4_UCBMC |
| RPS3               | 7.52E-72 | 0.77885597 | 0.774 | 0.695 | 2.66E-67 | CD4_CAMK4_UCBMC |
| RAB2A              | 1.84E-71 | 0.55983784 | 0.821 | 0.67  | 6.53E-67 | CD4_CAMK4_UCBMC |
| RPL10              | 7.51E-71 | 0.86375998 | 0.849 | 0.789 | 2.66E-66 | CD4_CAMK4_UCBMC |

|                   |          |            |       |       |          |                 |
|-------------------|----------|------------|-------|-------|----------|-----------------|
| RACK1             | 1.40E-70 | 0.75224908 | 0.78  | 0.704 | 4.95E-66 | CD4_CAMK4_UCBMC |
| RPS11             | 5.08E-70 | 0.64047147 | 0.84  | 0.784 | 1.80E-65 | CD4_CAMK4_UCBMC |
| RICTOR            | 7.94E-70 | 0.51845651 | 0.876 | 0.761 | 2.82E-65 | CD4_CAMK4_UCBMC |
| RPS23             | 1.02E-69 | 0.73503205 | 0.829 | 0.747 | 3.60E-65 | CD4_CAMK4_UCBMC |
| CAMK4             | 2.38E-68 | 0.33796155 | 0.991 | 0.963 | 8.45E-64 | CD4_CAMK4_UCBMC |
| RPL15             | 3.92E-67 | 0.88463475 | 0.675 | 0.563 | 1.39E-62 | CD4_CAMK4_UCBMC |
| FBXO33            | 1.85E-66 | 0.60965507 | 0.734 | 0.55  | 6.54E-62 | CD4_CAMK4_UCBMC |
| RPL35A            | 1.27E-65 | 0.78312342 | 0.79  | 0.723 | 4.51E-61 | CD4_CAMK4_UCBMC |
| RPL10A            | 1.34E-65 | 0.80806215 | 0.761 | 0.684 | 4.74E-61 | CD4_CAMK4_UCBMC |
| FAM117B           | 1.84E-65 | 0.56990044 | 0.789 | 0.625 | 6.52E-61 | CD4_CAMK4_UCBMC |
| RPLP1             | 2.08E-65 | 0.70590929 | 0.82  | 0.749 | 7.37E-61 | CD4_CAMK4_UCBMC |
| RPL7              | 3.98E-65 | 0.86066469 | 0.644 | 0.519 | 1.41E-60 | CD4_CAMK4_UCBMC |
| RPS24             | 6.83E-65 | 0.59900395 | 0.873 | 0.819 | 2.42E-60 | CD4_CAMK4_UCBMC |
| THUMPD2           | 1.48E-64 | 0.92212264 | 0.494 | 0.302 | 5.23E-60 | CD4_CAMK4_UCBMC |
| SECISBP2L         | 1.86E-64 | 0.889918   | 0.49  | 0.289 | 6.59E-60 | CD4_CAMK4_UCBMC |
| ENSMUG00000013429 | 2.21E-64 | 0.66860681 | 0.889 | 0.837 | 7.83E-60 | CD4_CAMK4_UCBMC |
| ENSMUG00000058755 | 3.86E-64 | 0.61193518 | 0.846 | 0.787 | 1.37E-59 | CD4_CAMK4_UCBMC |
| RPL27             | 2.02E-63 | 0.76895632 | 0.779 | 0.698 | 7.15E-59 | CD4_CAMK4_UCBMC |
| RPL37A            | 9.53E-63 | 0.64954127 | 0.804 | 0.736 | 3.38E-58 | CD4_CAMK4_UCBMC |
| RPL12             | 2.09E-62 | 0.70262344 | 0.773 | 0.69  | 7.39E-58 | CD4_CAMK4_UCBMC |
| RPS15             | 2.92E-62 | 0.59756666 | 0.85  | 0.788 | 1.03E-57 | CD4_CAMK4_UCBMC |
| SLC12A6           | 5.77E-62 | 0.53323679 | 0.78  | 0.614 | 2.04E-57 | CD4_CAMK4_UCBMC |
| KIF20B            | 7.50E-62 | 1.52916633 | 0.281 | 0.111 | 2.66E-57 | CD4_CAMK4_UCBMC |
| CIR1              | 8.24E-62 | 0.85416194 | 0.497 | 0.302 | 2.92E-57 | CD4_CAMK4_UCBMC |
| USP3              | 4.32E-61 | 0.4656513  | 0.867 | 0.731 | 1.53E-56 | CD4_CAMK4_UCBMC |
| PSMB7             | 5.20E-61 | 0.73901762 | 0.561 | 0.375 | 1.84E-56 | CD4_CAMK4_UCBMC |
| CHMP7             | 1.61E-60 | 0.61986924 | 0.627 | 0.43  | 5.69E-56 | CD4_CAMK4_UCBMC |
| CDC42SE2          | 4.27E-60 | 0.32819311 | 0.974 | 0.935 | 1.51E-55 | CD4_CAMK4_UCBMC |
| ZNF483            | 1.17E-59 | 1.10876176 | 0.405 | 0.235 | 4.14E-55 | CD4_CAMK4_UCBMC |
| UBE2E1            | 1.22E-59 | 0.67674344 | 0.645 | 0.452 | 4.32E-55 | CD4_CAMK4_UCBMC |
| ENSMUG00000014862 | 2.31E-59 | 1.42020719 | 0.308 | 0.143 | 8.20E-55 | CD4_CAMK4_UCBMC |
| DCP1A             | 3.33E-59 | 0.70953652 | 0.607 | 0.428 | 1.18E-54 | CD4_CAMK4_UCBMC |
| RPS28             | 4.23E-59 | 0.65114216 | 0.84  | 0.779 | 1.50E-54 | CD4_CAMK4_UCBMC |

|                   |          |            |       |       |          |                 |
|-------------------|----------|------------|-------|-------|----------|-----------------|
| RPS27A            | 1.65E-58 | 1.03436152 | 0.426 | 0.256 | 5.83E-54 | CD4_CAMK4_UCBMC |
| CASP3             | 2.11E-58 | 0.72403306 | 0.599 | 0.417 | 7.48E-54 | CD4_CAMK4_UCBMC |
| EAPP              | 6.35E-58 | 1.32231299 | 0.304 | 0.134 | 2.25E-53 | CD4_CAMK4_UCBMC |
| RPS13             | 6.41E-58 | 0.732992   | 0.783 | 0.701 | 2.27E-53 | CD4_CAMK4_UCBMC |
| TOMM7             | 1.23E-57 | 0.84584345 | 0.543 | 0.394 | 4.36E-53 | CD4_CAMK4_UCBMC |
| EDRF1             | 2.01E-57 | 1.04933539 | 0.395 | 0.216 | 7.13E-53 | CD4_CAMK4_UCBMC |
| IREB2             | 3.02E-57 | 0.81238081 | 0.533 | 0.352 | 1.07E-52 | CD4_CAMK4_UCBMC |
| ENSMUG00000065175 | 1.06E-56 | 1.43676164 | 0.281 | 0.12  | 3.75E-52 | CD4_CAMK4_UCBMC |
| ENSMUG00000029026 | 1.32E-56 | 1.23404556 | 0.316 | 0.149 | 4.67E-52 | CD4_CAMK4_UCBMC |
| TIMM23            | 3.54E-56 | 0.81040581 | 0.52  | 0.336 | 1.25E-51 | CD4_CAMK4_UCBMC |
| GOLGA1            | 5.26E-55 | 1.02162634 | 0.475 | 0.323 | 1.86E-50 | CD4_CAMK4_UCBMC |
| RPL6              | 1.73E-54 | 0.56993213 | 0.812 | 0.756 | 6.14E-50 | CD4_CAMK4_UCBMC |
| RFC1              | 1.84E-54 | 0.67727139 | 0.627 | 0.458 | 6.51E-50 | CD4_CAMK4_UCBMC |
| GOLGA4            | 2.76E-54 | 0.4832733  | 0.82  | 0.689 | 9.76E-50 | CD4_CAMK4_UCBMC |
| VTA1              | 4.01E-54 | 0.8030498  | 0.501 | 0.321 | 1.42E-49 | CD4_CAMK4_UCBMC |
| SRSF11            | 5.84E-54 | 0.38386223 | 0.896 | 0.816 | 2.07E-49 | CD4_CAMK4_UCBMC |
| ENSMUG00000016305 | 2.98E-53 | 1.21644227 | 0.307 | 0.149 | 1.05E-48 | CD4_CAMK4_UCBMC |
| RPL22             | 3.79E-53 | 0.58222505 | 0.74  | 0.662 | 1.34E-48 | CD4_CAMK4_UCBMC |
| SREK1IP1          | 4.33E-53 | 1.00102279 | 0.404 | 0.229 | 1.54E-48 | CD4_CAMK4_UCBMC |
| RPL34             | 9.70E-53 | 0.59270006 | 0.848 | 0.788 | 3.44E-48 | CD4_CAMK4_UCBMC |
| RPL4              | 1.13E-52 | 0.67312105 | 0.678 | 0.583 | 3.99E-48 | CD4_CAMK4_UCBMC |
| ENSMUG00000055457 | 1.35E-52 | 1.35266096 | 0.276 | 0.123 | 4.80E-48 | CD4_CAMK4_UCBMC |
| RPS4Y1            | 1.60E-52 | 0.89280968 | 0.538 | 0.388 | 5.68E-48 | CD4_CAMK4_UCBMC |
| TAX1BP1           | 3.66E-52 | 0.56791017 | 0.705 | 0.555 | 1.30E-47 | CD4_CAMK4_UCBMC |
| WASHC5            | 4.22E-52 | 1.13205787 | 0.338 | 0.172 | 1.49E-47 | CD4_CAMK4_UCBMC |
| WDR48             | 2.09E-51 | 0.81999483 | 0.49  | 0.319 | 7.42E-47 | CD4_CAMK4_UCBMC |
| ENSMUG00000011580 | 3.31E-51 | 0.55681167 | 0.732 | 0.579 | 1.17E-46 | CD4_CAMK4_UCBMC |
| INO80D            | 4.22E-51 | 0.60733895 | 0.629 | 0.454 | 1.50E-46 | CD4_CAMK4_UCBMC |
| GCN1              | 4.76E-51 | 0.64908737 | 0.776 | 0.727 | 1.69E-46 | CD4_CAMK4_UCBMC |
| RPL27A            | 1.15E-50 | 0.63469139 | 0.781 | 0.725 | 4.08E-46 | CD4_CAMK4_UCBMC |
| DENND5A           | 1.98E-50 | 0.53558503 | 0.668 | 0.481 | 7.02E-46 | CD4_CAMK4_UCBMC |
| PNISR             | 2.49E-50 | 0.40361265 | 0.876 | 0.774 | 8.84E-46 | CD4_CAMK4_UCBMC |
| NUDT3             | 3.16E-50 | 0.53109504 | 0.876 | 0.842 | 1.12E-45 | CD4_CAMK4_UCBMC |

|                    |          |            |       |       |          |                 |
|--------------------|----------|------------|-------|-------|----------|-----------------|
| NCOA3              | 6.20E-50 | 0.31847291 | 0.966 | 0.908 | 2.20E-45 | CD4_CAMK4_UCBMC |
| UBE2G1             | 1.10E-49 | 0.52388223 | 0.752 | 0.597 | 3.89E-45 | CD4_CAMK4_UCBMC |
| ATF2               | 1.59E-49 | 0.55822066 | 0.678 | 0.522 | 5.64E-45 | CD4_CAMK4_UCBMC |
| ENSMMUG00000030448 | 2.51E-49 | 1.22770803 | 0.276 | 0.127 | 8.89E-45 | CD4_CAMK4_UCBMC |
| RPL8               | 3.03E-49 | 0.59474433 | 0.772 | 0.714 | 1.07E-44 | CD4_CAMK4_UCBMC |
| SAP30BP            | 5.27E-49 | 0.73465818 | 0.516 | 0.341 | 1.87E-44 | CD4_CAMK4_UCBMC |
| TM9SF3             | 6.75E-49 | 0.41050907 | 0.855 | 0.74  | 2.39E-44 | CD4_CAMK4_UCBMC |
| ENSMMUG00000014648 | 1.19E-48 | 0.97394476 | 0.42  | 0.272 | 4.21E-44 | CD4_CAMK4_UCBMC |
| ENSMMUG00000015563 | 1.68E-48 | 0.55396331 | 0.795 | 0.731 | 5.95E-44 | CD4_CAMK4_UCBMC |
| UBA52              | 2.18E-48 | 0.59216302 | 0.731 | 0.64  | 7.73E-44 | CD4_CAMK4_UCBMC |
| RPL24              | 2.95E-48 | 0.57292817 | 0.782 | 0.717 | 1.05E-43 | CD4_CAMK4_UCBMC |
| LMBRD1             | 3.03E-48 | 0.59373052 | 0.645 | 0.486 | 1.07E-43 | CD4_CAMK4_UCBMC |
| SFSWAP             | 4.41E-48 | 0.5701308  | 0.638 | 0.479 | 1.56E-43 | CD4_CAMK4_UCBMC |
| RPS6KB1            | 7.61E-48 | 0.5055897  | 0.723 | 0.569 | 2.70E-43 | CD4_CAMK4_UCBMC |
| MRPS35             | 8.75E-48 | 0.7972119  | 0.454 | 0.283 | 3.10E-43 | CD4_CAMK4_UCBMC |
| RPL9               | 1.10E-47 | 0.64907793 | 0.748 | 0.685 | 3.88E-43 | CD4_CAMK4_UCBMC |
| C18H18orf32        | 1.44E-47 | 0.62460265 | 0.699 | 0.603 | 5.11E-43 | CD4_CAMK4_UCBMC |
| RBBP5              | 2.02E-47 | 1.10265793 | 0.309 | 0.155 | 7.15E-43 | CD4_CAMK4_UCBMC |
| SLC35A3            | 2.02E-47 | 0.50819135 | 0.724 | 0.57  | 7.16E-43 | CD4_CAMK4_UCBMC |
| PIK3CA             | 3.56E-47 | 0.61689377 | 0.673 | 0.515 | 1.26E-42 | CD4_CAMK4_UCBMC |
| PDZD8              | 4.61E-47 | 0.63842086 | 0.562 | 0.39  | 1.63E-42 | CD4_CAMK4_UCBMC |
| EZH2               | 5.58E-47 | 0.54389242 | 0.662 | 0.5   | 1.98E-42 | CD4_CAMK4_UCBMC |
| SENP5              | 6.26E-47 | 0.5785242  | 0.659 | 0.508 | 2.22E-42 | CD4_CAMK4_UCBMC |
| ENSMMUG00000049151 | 8.51E-47 | 0.58305131 | 0.715 | 0.62  | 3.02E-42 | CD4_CAMK4_UCBMC |
| COX4I1             | 1.36E-46 | 0.80503336 | 0.495 | 0.354 | 4.81E-42 | CD4_CAMK4_UCBMC |
| ENSMMUG00000029973 | 1.68E-46 | 1.16263491 | 0.277 | 0.132 | 5.95E-42 | CD4_CAMK4_UCBMC |
| FTL                | 3.16E-46 | 0.83670287 | 0.439 | 0.291 | 1.12E-41 | CD4_CAMK4_UCBMC |
| MTMR10             | 5.32E-46 | 0.81748694 | 0.45  | 0.289 | 1.89E-41 | CD4_CAMK4_UCBMC |
| MARCHF7            | 8.33E-46 | 0.48342625 | 0.765 | 0.624 | 2.95E-41 | CD4_CAMK4_UCBMC |
| FBXL5              | 1.02E-45 | 0.76215439 | 0.464 | 0.301 | 3.62E-41 | CD4_CAMK4_UCBMC |
| DHX40              | 1.16E-45 | 0.84532977 | 0.406 | 0.24  | 4.10E-41 | CD4_CAMK4_UCBMC |
| CCM2               | 2.19E-45 | 0.5688542  | 0.696 | 0.556 | 7.75E-41 | CD4_CAMK4_UCBMC |
| PIK3R5             | 4.64E-45 | 0.50236747 | 0.694 | 0.542 | 1.64E-40 | CD4_CAMK4_UCBMC |



|                    |          |            |       |       |          |                 |
|--------------------|----------|------------|-------|-------|----------|-----------------|
| ENSMMUG00000030465 | 8.67E-45 | 1.06082081 | 0.293 | 0.147 | 3.07E-40 | CD4_CAMK4_UCBMC |
| ECD                | 2.02E-44 | 0.77251599 | 0.493 | 0.336 | 7.17E-40 | CD4_CAMK4_UCBMC |
| VPS39              | 2.28E-44 | 0.76705291 | 0.483 | 0.324 | 8.08E-40 | CD4_CAMK4_UCBMC |
| COPB1              | 4.57E-44 | 0.74427577 | 0.479 | 0.319 | 1.62E-39 | CD4_CAMK4_UCBMC |
| HINT1              | 1.70E-43 | 0.81945476 | 0.482 | 0.353 | 6.01E-39 | CD4_CAMK4_UCBMC |
| GMCL1              | 2.09E-43 | 0.52595939 | 0.57  | 0.398 | 7.41E-39 | CD4_CAMK4_UCBMC |
| ARID4B             | 2.81E-43 | 0.3519714  | 0.933 | 0.873 | 9.96E-39 | CD4_CAMK4_UCBMC |
| TRPM7              | 4.11E-43 | 0.40167457 | 0.861 | 0.773 | 1.46E-38 | CD4_CAMK4_UCBMC |
| STK38L             | 4.51E-43 | 0.73217994 | 0.39  | 0.229 | 1.60E-38 | CD4_CAMK4_UCBMC |
| CPSF3              | 6.19E-43 | 0.84192798 | 0.416 | 0.259 | 2.19E-38 | CD4_CAMK4_UCBMC |
| YME1L1             | 1.45E-42 | 0.56549    | 0.624 | 0.475 | 5.13E-38 | CD4_CAMK4_UCBMC |
| RPS12              | 1.75E-42 | 0.58700774 | 0.83  | 0.79  | 6.20E-38 | CD4_CAMK4_UCBMC |
| FAU                | 1.91E-42 | 0.62982932 | 0.698 | 0.63  | 6.77E-38 | CD4_CAMK4_UCBMC |
| MARCHF6            | 3.09E-42 | 0.46548455 | 0.787 | 0.659 | 1.09E-37 | CD4_CAMK4_UCBMC |
| CAPN7              | 4.03E-42 | 0.72494915 | 0.467 | 0.312 | 1.43E-37 | CD4_CAMK4_UCBMC |
| ENSMMUG00000012525 | 7.77E-42 | 1.1189347  | 0.283 | 0.145 | 2.75E-37 | CD4_CAMK4_UCBMC |
| LANCL2             | 8.51E-42 | 0.78888508 | 0.418 | 0.261 | 3.01E-37 | CD4_CAMK4_UCBMC |
| HEXA               | 1.03E-41 | 0.8594804  | 0.368 | 0.217 | 3.65E-37 | CD4_CAMK4_UCBMC |
| NDUFA9             | 1.12E-41 | 0.89516698 | 0.36  | 0.208 | 3.97E-37 | CD4_CAMK4_UCBMC |
| ZFC3H1             | 1.13E-41 | 0.46052873 | 0.714 | 0.574 | 4.00E-37 | CD4_CAMK4_UCBMC |
| TMEM50A            | 1.22E-41 | 0.79401179 | 0.406 | 0.253 | 4.31E-37 | CD4_CAMK4_UCBMC |
| TGS1               | 1.39E-41 | 0.72635506 | 0.499 | 0.345 | 4.93E-37 | CD4_CAMK4_UCBMC |
| SDHB               | 1.85E-41 | 1.02030295 | 0.326 | 0.181 | 6.56E-37 | CD4_CAMK4_UCBMC |
| DHX9               | 1.87E-41 | 0.48572409 | 0.74  | 0.605 | 6.61E-37 | CD4_CAMK4_UCBMC |
| ZNF618             | 2.63E-41 | 0.90867553 | 0.328 | 0.176 | 9.32E-37 | CD4_CAMK4_UCBMC |
| RPL28              | 2.75E-41 | 0.47690903 | 0.844 | 0.806 | 9.76E-37 | CD4_CAMK4_UCBMC |
| NKIRAS1            | 4.98E-41 | 0.80287142 | 0.345 | 0.197 | 1.76E-36 | CD4_CAMK4_UCBMC |
| PSMA6              | 5.31E-41 | 1.00066838 | 0.324 | 0.181 | 1.88E-36 | CD4_CAMK4_UCBMC |
| WIPI2              | 5.76E-41 | 0.64462081 | 0.568 | 0.419 | 2.04E-36 | CD4_CAMK4_UCBMC |
| ENSMMUG00000065104 | 6.69E-41 | 1.08421573 | 0.297 | 0.162 | 2.37E-36 | CD4_CAMK4_UCBMC |
| EMC3               | 9.13E-41 | 0.98036626 | 0.311 | 0.167 | 3.23E-36 | CD4_CAMK4_UCBMC |
| ENSMMUG00000005593 | 1.02E-40 | 0.52388034 | 0.799 | 0.729 | 3.62E-36 | CD4_CAMK4_UCBMC |
| ENSMMUG00000002324 | 1.26E-40 | 0.88440658 | 0.314 | 0.172 | 4.47E-36 | CD4_CAMK4_UCBMC |

|                    |          |            |       |       |          |                 |
|--------------------|----------|------------|-------|-------|----------|-----------------|
| CSDE1              | 2.01E-40 | 0.47549909 | 0.697 | 0.562 | 7.14E-36 | CD4_CAMK4_UCBMC |
| ELOA               | 2.37E-40 | 0.50095898 | 0.804 | 0.758 | 8.41E-36 | CD4_CAMK4_UCBMC |
| PPTC7              | 2.46E-40 | 0.68972234 | 0.484 | 0.329 | 8.71E-36 | CD4_CAMK4_UCBMC |
| PPM1A              | 2.50E-40 | 0.57703289 | 0.588 | 0.435 | 8.86E-36 | CD4_CAMK4_UCBMC |
| RPS29              | 3.29E-40 | 0.51048136 | 0.811 | 0.759 | 1.17E-35 | CD4_CAMK4_UCBMC |
| PAPOLG             | 3.82E-40 | 0.70699995 | 0.381 | 0.225 | 1.35E-35 | CD4_CAMK4_UCBMC |
| NME2               | 6.32E-40 | 0.67450002 | 0.575 | 0.473 | 2.24E-35 | CD4_CAMK4_UCBMC |
| ENSMUG00000001210  | 8.67E-40 | 0.65006116 | 0.595 | 0.483 | 3.07E-35 | CD4_CAMK4_UCBMC |
| LUC7L3             | 9.55E-40 | 0.40313495 | 0.815 | 0.69  | 3.38E-35 | CD4_CAMK4_UCBMC |
| SNW1               | 1.37E-39 | 0.77794764 | 0.452 | 0.309 | 4.86E-35 | CD4_CAMK4_UCBMC |
| C1GALT1            | 1.44E-39 | 0.54282691 | 0.621 | 0.47  | 5.12E-35 | CD4_CAMK4_UCBMC |
| CAMTA1             | 3.60E-39 | 0.45475925 | 0.655 | 0.502 | 1.28E-34 | CD4_CAMK4_UCBMC |
| ELL2               | 3.87E-39 | 0.39484229 | 0.442 | 0.271 | 1.37E-34 | CD4_CAMK4_UCBMC |
| SIAH1              | 3.92E-39 | 0.74404516 | 0.442 | 0.289 | 1.39E-34 | CD4_CAMK4_UCBMC |
| ATP8A1             | 4.92E-39 | 0.19756181 | 0.883 | 0.763 | 1.74E-34 | CD4_CAMK4_UCBMC |
| CELF1              | 6.31E-39 | 0.394723   | 0.861 | 0.777 | 2.23E-34 | CD4_CAMK4_UCBMC |
| U2SURP             | 6.42E-39 | 0.53215004 | 0.682 | 0.555 | 2.27E-34 | CD4_CAMK4_UCBMC |
| GIT2               | 7.78E-39 | 0.49025122 | 0.645 | 0.502 | 2.76E-34 | CD4_CAMK4_UCBMC |
| RPSA               | 7.89E-39 | 0.5939176  | 0.76  | 0.729 | 2.80E-34 | CD4_CAMK4_UCBMC |
| TCEA1              | 1.05E-38 | 0.60070301 | 0.535 | 0.388 | 3.70E-34 | CD4_CAMK4_UCBMC |
| YIPF5              | 1.34E-38 | 1.1080796  | 0.296 | 0.159 | 4.76E-34 | CD4_CAMK4_UCBMC |
| RNF103             | 2.00E-38 | 0.70655475 | 0.429 | 0.278 | 7.10E-34 | CD4_CAMK4_UCBMC |
| PAIP1              | 5.72E-38 | 0.87940031 | 0.34  | 0.198 | 2.03E-33 | CD4_CAMK4_UCBMC |
| ENSMUG000000055627 | 3.11E-37 | 0.85414031 | 0.382 | 0.252 | 1.10E-32 | CD4_CAMK4_UCBMC |
| RALA               | 3.31E-37 | 0.57080929 | 0.463 | 0.299 | 1.17E-32 | CD4_CAMK4_UCBMC |
| ACTR2              | 5.76E-37 | 0.39338183 | 0.814 | 0.718 | 2.04E-32 | CD4_CAMK4_UCBMC |
| ACIN1              | 7.17E-37 | 0.46715899 | 0.672 | 0.539 | 2.54E-32 | CD4_CAMK4_UCBMC |
| RIOK3              | 8.35E-37 | 0.69069735 | 0.414 | 0.268 | 2.96E-32 | CD4_CAMK4_UCBMC |
| VEZT               | 1.11E-36 | 0.65520599 | 0.468 | 0.319 | 3.93E-32 | CD4_CAMK4_UCBMC |
| ENSMUG000000052747 | 2.05E-36 | 0.79127656 | 0.372 | 0.24  | 7.27E-32 | CD4_CAMK4_UCBMC |
| MTPN               | 2.81E-36 | 0.7127009  | 0.443 | 0.298 | 9.97E-32 | CD4_CAMK4_UCBMC |
| SCFD1              | 3.38E-36 | 0.51375325 | 0.626 | 0.488 | 1.20E-31 | CD4_CAMK4_UCBMC |
| PNN                | 3.49E-36 | 0.59098738 | 0.571 | 0.436 | 1.24E-31 | CD4_CAMK4_UCBMC |

|                    |          |            |       |       |          |                 |
|--------------------|----------|------------|-------|-------|----------|-----------------|
| WRN                | 4.25E-36 | 0.39299115 | 0.791 | 0.674 | 1.51E-31 | CD4_CAMK4_UCBMC |
| MAPK8              | 4.26E-36 | 0.44981956 | 0.687 | 0.551 | 1.51E-31 | CD4_CAMK4_UCBMC |
| RBMS2              | 5.40E-36 | 1.06990426 | 0.257 | 0.13  | 1.91E-31 | CD4_CAMK4_UCBMC |
| RYK                | 6.48E-36 | 0.70803474 | 0.421 | 0.273 | 2.30E-31 | CD4_CAMK4_UCBMC |
| RPL26              | 7.12E-36 | 0.5555342  | 0.658 | 0.571 | 2.52E-31 | CD4_CAMK4_UCBMC |
| KRAS               | 8.04E-36 | 0.58335346 | 0.54  | 0.394 | 2.85E-31 | CD4_CAMK4_UCBMC |
| EIF3L              | 9.29E-36 | 0.54414579 | 0.533 | 0.396 | 3.29E-31 | CD4_CAMK4_UCBMC |
| CD52               | 1.22E-35 | 0.56288237 | 0.628 | 0.529 | 4.32E-31 | CD4_CAMK4_UCBMC |
| HACD3              | 3.60E-35 | 0.73678551 | 0.394 | 0.251 | 1.28E-30 | CD4_CAMK4_UCBMC |
| RPS27              | 4.06E-35 | 0.52057406 | 0.739 | 0.687 | 1.44E-30 | CD4_CAMK4_UCBMC |
| EIF3K              | 4.25E-35 | 0.60686783 | 0.523 | 0.406 | 1.51E-30 | CD4_CAMK4_UCBMC |
| PI4K2B             | 4.90E-35 | 0.50011041 | 0.617 | 0.486 | 1.74E-30 | CD4_CAMK4_UCBMC |
| FBXO3              | 5.05E-35 | 0.78277843 | 0.374 | 0.232 | 1.79E-30 | CD4_CAMK4_UCBMC |
| ENSMMUG00000031947 | 8.50E-35 | 0.62599972 | 0.439 | 0.312 | 3.01E-30 | CD4_CAMK4_UCBMC |
| EEF1B2             | 9.90E-35 | 0.69910091 | 0.58  | 0.496 | 3.51E-30 | CD4_CAMK4_UCBMC |
| RWDD1              | 1.45E-34 | 0.86823525 | 0.316 | 0.185 | 5.14E-30 | CD4_CAMK4_UCBMC |
| G2E3               | 3.82E-34 | 0.69331299 | 0.442 | 0.304 | 1.35E-29 | CD4_CAMK4_UCBMC |
| MARCHF3            | 5.85E-34 | 0.35225725 | 0.762 | 0.62  | 2.07E-29 | CD4_CAMK4_UCBMC |
| CLINT1             | 1.00E-33 | 0.45162722 | 0.688 | 0.56  | 3.55E-29 | CD4_CAMK4_UCBMC |
| RINT1              | 1.03E-33 | 0.84191245 | 0.33  | 0.197 | 3.63E-29 | CD4_CAMK4_UCBMC |
| COPA               | 1.06E-33 | 0.52535772 | 0.529 | 0.389 | 3.75E-29 | CD4_CAMK4_UCBMC |
| NIPSNAP2           | 1.08E-33 | 0.6469749  | 0.455 | 0.319 | 3.83E-29 | CD4_CAMK4_UCBMC |
| CRNKL1             | 1.72E-33 | 0.91830869 | 0.281 | 0.154 | 6.11E-29 | CD4_CAMK4_UCBMC |
| ABCG1              | 1.95E-33 | 0.5371011  | 0.551 | 0.408 | 6.90E-29 | CD4_CAMK4_UCBMC |
| ROBO2              | 2.62E-33 | 0.78888279 | 0.436 | 0.316 | 9.28E-29 | CD4_CAMK4_UCBMC |
| ENSMMUG00000063979 | 2.75E-33 | 0.78018751 | 0.328 | 0.194 | 9.76E-29 | CD4_CAMK4_UCBMC |
| FBXL20             | 2.77E-33 | 0.402292   | 0.768 | 0.648 | 9.82E-29 | CD4_CAMK4_UCBMC |
| S1PR1              | 3.16E-33 | 0.71147325 | 0.361 | 0.227 | 1.12E-28 | CD4_CAMK4_UCBMC |
| TCP11L2            | 3.95E-33 | 0.30932779 | 0.521 | 0.361 | 1.40E-28 | CD4_CAMK4_UCBMC |
| NUP133             | 4.91E-33 | 0.70314027 | 0.429 | 0.296 | 1.74E-28 | CD4_CAMK4_UCBMC |
| PTBP2              | 5.04E-33 | 0.39963735 | 0.796 | 0.69  | 1.79E-28 | CD4_CAMK4_UCBMC |
| TXNDC11            | 7.58E-33 | 0.51390892 | 0.544 | 0.403 | 2.69E-28 | CD4_CAMK4_UCBMC |
| DHRS3              | 1.09E-32 | 0.69284168 | 0.394 | 0.253 | 3.88E-28 | CD4_CAMK4_UCBMC |

|                    |          |            |       |       |          |                 |
|--------------------|----------|------------|-------|-------|----------|-----------------|
| COMMD6             | 1.39E-32 | 0.63528938 | 0.403 | 0.275 | 4.91E-28 | CD4_CAMK4_UCBMC |
| TNKS2              | 1.58E-32 | 0.5065071  | 0.574 | 0.437 | 5.61E-28 | CD4_CAMK4_UCBMC |
| RPL35              | 3.19E-32 | 0.39540095 | 0.746 | 0.689 | 1.13E-27 | CD4_CAMK4_UCBMC |
| COX7C              | 3.44E-32 | 0.71412663 | 0.435 | 0.315 | 1.22E-27 | CD4_CAMK4_UCBMC |
| EPC1               | 4.15E-32 | 0.30880792 | 0.829 | 0.743 | 1.47E-27 | CD4_CAMK4_UCBMC |
| BTBD10             | 5.07E-32 | 0.54338837 | 0.406 | 0.262 | 1.80E-27 | CD4_CAMK4_UCBMC |
| PPP3CC             | 5.99E-32 | 0.37877709 | 0.762 | 0.633 | 2.12E-27 | CD4_CAMK4_UCBMC |
| C12orf65           | 6.30E-32 | 0.82436292 | 0.325 | 0.197 | 2.23E-27 | CD4_CAMK4_UCBMC |
| DDX52              | 6.68E-32 | 0.60660223 | 0.46  | 0.327 | 2.37E-27 | CD4_CAMK4_UCBMC |
| CBLL1              | 6.72E-32 | 0.80187223 | 0.326 | 0.199 | 2.38E-27 | CD4_CAMK4_UCBMC |
| SRRM1              | 1.02E-31 | 0.47990421 | 0.585 | 0.454 | 3.61E-27 | CD4_CAMK4_UCBMC |
| ENSMMUG00000060545 | 1.15E-31 | 0.51149717 | 0.508 | 0.372 | 4.09E-27 | CD4_CAMK4_UCBMC |
| STK38              | 1.78E-31 | 0.30801361 | 0.875 | 0.791 | 6.32E-27 | CD4_CAMK4_UCBMC |
| HERC1              | 1.89E-31 | 0.38823475 | 0.748 | 0.642 | 6.69E-27 | CD4_CAMK4_UCBMC |
| ATP6V1G1           | 2.40E-31 | 0.61713038 | 0.42  | 0.291 | 8.51E-27 | CD4_CAMK4_UCBMC |
| ARL6IP5            | 2.90E-31 | 0.70583315 | 0.397 | 0.269 | 1.03E-26 | CD4_CAMK4_UCBMC |
| KLF7               | 3.02E-31 | 0.46305456 | 0.563 | 0.417 | 1.07E-26 | CD4_CAMK4_UCBMC |
| RB1CC1             | 3.64E-31 | 0.47823121 | 0.571 | 0.438 | 1.29E-26 | CD4_CAMK4_UCBMC |
| CMTR1              | 4.34E-31 | 0.55782822 | 0.464 | 0.326 | 1.54E-26 | CD4_CAMK4_UCBMC |
| ATG5               | 5.63E-31 | 0.49845725 | 0.595 | 0.462 | 2.00E-26 | CD4_CAMK4_UCBMC |
| SAFB               | 6.16E-31 | 0.37329028 | 0.712 | 0.635 | 2.18E-26 | CD4_CAMK4_UCBMC |
| GSTT1              | 6.44E-31 | 0.74058685 | 0.291 | 0.164 | 2.28E-26 | CD4_CAMK4_UCBMC |
| C15H9orf78         | 8.05E-31 | 0.67194368 | 0.357 | 0.228 | 2.85E-26 | CD4_CAMK4_UCBMC |
| GOLPH3             | 9.35E-31 | 0.47627026 | 0.637 | 0.505 | 3.31E-26 | CD4_CAMK4_UCBMC |
| HNRNPH2            | 9.58E-31 | 0.4678523  | 0.696 | 0.622 | 3.39E-26 | CD4_CAMK4_UCBMC |
| TSN                | 1.11E-30 | 0.7905782  | 0.292 | 0.167 | 3.92E-26 | CD4_CAMK4_UCBMC |
| BIN3               | 1.39E-30 | 0.66466092 | 0.349 | 0.222 | 4.94E-26 | CD4_CAMK4_UCBMC |
| SNED1              | 1.47E-30 | 0.59221711 | 0.481 | 0.341 | 5.20E-26 | CD4_CAMK4_UCBMC |
| DNAJC8             | 1.49E-30 | 0.79948388 | 0.301 | 0.178 | 5.27E-26 | CD4_CAMK4_UCBMC |
| MORC3              | 1.88E-30 | 0.55347641 | 0.493 | 0.36  | 6.65E-26 | CD4_CAMK4_UCBMC |
| ENSMMUG00000006293 | 2.36E-30 | 0.48918477 | 0.61  | 0.483 | 8.35E-26 | CD4_CAMK4_UCBMC |
| DAZAP2             | 3.02E-30 | 0.66316113 | 0.443 | 0.316 | 1.07E-25 | CD4_CAMK4_UCBMC |
| NSA2               | 3.19E-30 | 0.57802986 | 0.421 | 0.293 | 1.13E-25 | CD4_CAMK4_UCBMC |

|                   |          |            |       |       |          |                 |
|-------------------|----------|------------|-------|-------|----------|-----------------|
| LSM14A            | 3.86E-30 | 0.38451245 | 0.74  | 0.632 | 1.37E-25 | CD4_CAMK4_UCBMC |
| CWF19L2           | 5.53E-30 | 0.54293329 | 0.507 | 0.375 | 1.96E-25 | CD4_CAMK4_UCBMC |
| UBXN7             | 8.24E-30 | 0.4770136  | 0.549 | 0.417 | 2.92E-25 | CD4_CAMK4_UCBMC |
| USP42             | 8.38E-30 | 0.72927068 | 0.379 | 0.253 | 2.97E-25 | CD4_CAMK4_UCBMC |
| DDX47             | 9.18E-30 | 1.00949212 | 0.274 | 0.159 | 3.25E-25 | CD4_CAMK4_UCBMC |
| RBM34             | 9.43E-30 | 0.92849709 | 0.274 | 0.157 | 3.34E-25 | CD4_CAMK4_UCBMC |
| CDC40             | 1.01E-29 | 0.70417183 | 0.357 | 0.228 | 3.56E-25 | CD4_CAMK4_UCBMC |
| MCM9              | 1.04E-29 | 0.53711754 | 0.485 | 0.344 | 3.69E-25 | CD4_CAMK4_UCBMC |
| COX16             | 1.45E-29 | 0.52907186 | 0.512 | 0.383 | 5.14E-25 | CD4_CAMK4_UCBMC |
| RPL31             | 2.01E-29 | 0.64040788 | 0.442 | 0.327 | 7.13E-25 | CD4_CAMK4_UCBMC |
| TYW5              | 2.03E-29 | 0.94957736 | 0.268 | 0.153 | 7.19E-25 | CD4_CAMK4_UCBMC |
| RNPC3             | 2.51E-29 | 0.79861234 | 0.308 | 0.188 | 8.88E-25 | CD4_CAMK4_UCBMC |
| ZNF92             | 3.28E-29 | 0.66270927 | 0.399 | 0.273 | 1.16E-24 | CD4_CAMK4_UCBMC |
| ENSMUG00000062716 | 4.59E-29 | 0.69085292 | 0.338 | 0.211 | 1.62E-24 | CD4_CAMK4_UCBMC |
| CWC15             | 4.89E-29 | 0.65524427 | 0.354 | 0.232 | 1.73E-24 | CD4_CAMK4_UCBMC |
| TNRC6A            | 5.45E-29 | 0.38406913 | 0.766 | 0.645 | 1.93E-24 | CD4_CAMK4_UCBMC |
| KDM1A             | 6.36E-29 | 0.49204407 | 0.478 | 0.341 | 2.25E-24 | CD4_CAMK4_UCBMC |
| EXOSC10           | 1.07E-28 | 0.81306141 | 0.305 | 0.188 | 3.78E-24 | CD4_CAMK4_UCBMC |
| ASH2L             | 1.13E-28 | 0.79917774 | 0.28  | 0.163 | 4.01E-24 | CD4_CAMK4_UCBMC |
| SELENOS           | 1.40E-28 | 0.51221627 | 0.539 | 0.416 | 4.95E-24 | CD4_CAMK4_UCBMC |
| CEP95             | 1.76E-28 | 0.82330418 | 0.285 | 0.167 | 6.24E-24 | CD4_CAMK4_UCBMC |
| EIF3M             | 1.86E-28 | 0.58852943 | 0.428 | 0.307 | 6.59E-24 | CD4_CAMK4_UCBMC |
| GINM1             | 3.20E-28 | 0.49942998 | 0.509 | 0.38  | 1.14E-23 | CD4_CAMK4_UCBMC |
| NDUFS6            | 3.33E-28 | 0.85641327 | 0.268 | 0.156 | 1.18E-23 | CD4_CAMK4_UCBMC |
| N4BP1             | 4.13E-28 | 0.46429157 | 0.55  | 0.417 | 1.46E-23 | CD4_CAMK4_UCBMC |
| ITGA4             | 4.23E-28 | 0.3443344  | 0.518 | 0.37  | 1.50E-23 | CD4_CAMK4_UCBMC |
| ERBB3             | 5.14E-28 | 0.67083041 | 0.331 | 0.212 | 1.82E-23 | CD4_CAMK4_UCBMC |
| SERINC1           | 5.92E-28 | 0.46702956 | 0.6   | 0.476 | 2.10E-23 | CD4_CAMK4_UCBMC |
| DBF4              | 8.05E-28 | 0.6880598  | 0.301 | 0.181 | 2.85E-23 | CD4_CAMK4_UCBMC |
| RELB              | 8.17E-28 | 0.50518888 | 0.437 | 0.303 | 2.90E-23 | CD4_CAMK4_UCBMC |
| PSIP1             | 8.76E-28 | 0.46340755 | 0.638 | 0.524 | 3.11E-23 | CD4_CAMK4_UCBMC |
| ZNF395            | 9.69E-28 | 0.6177683  | 0.367 | 0.243 | 3.43E-23 | CD4_CAMK4_UCBMC |
| LRR8C             | 1.01E-27 | 0.50974576 | 0.424 | 0.286 | 3.57E-23 | CD4_CAMK4_UCBMC |

|                    |          |            |       |       |          |                 |
|--------------------|----------|------------|-------|-------|----------|-----------------|
| SRP14              | 1.26E-27 | 0.5458026  | 0.453 | 0.339 | 4.45E-23 | CD4_CAMK4_UCBMC |
| CUL5               | 1.31E-27 | 0.39879156 | 0.718 | 0.608 | 4.65E-23 | CD4_CAMK4_UCBMC |
| RHOH               | 1.33E-27 | 0.29706371 | 0.877 | 0.788 | 4.70E-23 | CD4_CAMK4_UCBMC |
| TFAM               | 1.54E-27 | 0.69813729 | 0.346 | 0.227 | 5.46E-23 | CD4_CAMK4_UCBMC |
| STAG1              | 1.65E-27 | 0.26903527 | 0.95  | 0.894 | 5.84E-23 | CD4_CAMK4_UCBMC |
| HNRNPR             | 1.82E-27 | 0.51539843 | 0.517 | 0.4   | 6.43E-23 | CD4_CAMK4_UCBMC |
| KMT2E              | 2.58E-27 | 0.27646304 | 0.803 | 0.708 | 9.14E-23 | CD4_CAMK4_UCBMC |
| APIP               | 3.05E-27 | 0.84112593 | 0.298 | 0.186 | 1.08E-22 | CD4_CAMK4_UCBMC |
| SF3B2              | 3.14E-27 | 0.77439614 | 0.328 | 0.212 | 1.11E-22 | CD4_CAMK4_UCBMC |
| RPS27L             | 3.50E-27 | 0.73269133 | 0.274 | 0.16  | 1.24E-22 | CD4_CAMK4_UCBMC |
| FAM133B            | 3.69E-27 | 0.50101668 | 0.491 | 0.36  | 1.31E-22 | CD4_CAMK4_UCBMC |
| MED23              | 3.92E-27 | 0.55833209 | 0.477 | 0.357 | 1.39E-22 | CD4_CAMK4_UCBMC |
| ATP5PF             | 4.12E-27 | 0.74742378 | 0.259 | 0.148 | 1.46E-22 | CD4_CAMK4_UCBMC |
| NELFA              | 4.36E-27 | 0.95248156 | 0.254 | 0.147 | 1.54E-22 | CD4_CAMK4_UCBMC |
| RBM5               | 5.10E-27 | 0.39339731 | 0.679 | 0.564 | 1.81E-22 | CD4_CAMK4_UCBMC |
| SMDT1              | 5.30E-27 | 0.69771973 | 0.308 | 0.195 | 1.88E-22 | CD4_CAMK4_UCBMC |
| PHF11              | 5.47E-27 | 0.68138935 | 0.358 | 0.241 | 1.94E-22 | CD4_CAMK4_UCBMC |
| RSF1               | 6.02E-27 | 0.32160492 | 0.811 | 0.717 | 2.13E-22 | CD4_CAMK4_UCBMC |
| SNX4               | 6.18E-27 | 0.43051432 | 0.613 | 0.491 | 2.19E-22 | CD4_CAMK4_UCBMC |
| CENPC              | 6.26E-27 | 0.44361308 | 0.582 | 0.456 | 2.22E-22 | CD4_CAMK4_UCBMC |
| CUL3               | 6.63E-27 | 0.32370426 | 0.841 | 0.746 | 2.35E-22 | CD4_CAMK4_UCBMC |
| BBX                | 7.39E-27 | 0.38077545 | 0.73  | 0.611 | 2.62E-22 | CD4_CAMK4_UCBMC |
| UHRF1BP1L          | 8.28E-27 | 0.45086283 | 0.578 | 0.444 | 2.93E-22 | CD4_CAMK4_UCBMC |
| CYLD               | 1.17E-26 | 0.27643375 | 0.758 | 0.651 | 4.15E-22 | CD4_CAMK4_UCBMC |
| TSPAN3             | 1.23E-26 | 0.77202469 | 0.304 | 0.19  | 4.35E-22 | CD4_CAMK4_UCBMC |
| ENSMMUG00000022769 | 1.34E-26 | 0.45254871 | 0.631 | 0.521 | 4.74E-22 | CD4_CAMK4_UCBMC |
| NFKBIA             | 1.59E-26 | 0.4878109  | 0.406 | 0.277 | 5.64E-22 | CD4_CAMK4_UCBMC |
| HACD2              | 2.02E-26 | 0.62455266 | 0.371 | 0.25  | 7.15E-22 | CD4_CAMK4_UCBMC |
| APC                | 2.03E-26 | 0.49412984 | 0.48  | 0.35  | 7.18E-22 | CD4_CAMK4_UCBMC |
| ICE1               | 2.34E-26 | 0.53704014 | 0.489 | 0.366 | 8.29E-22 | CD4_CAMK4_UCBMC |
| CERT1              | 2.63E-26 | 0.35033262 | 0.725 | 0.603 | 9.32E-22 | CD4_CAMK4_UCBMC |
| DDB1               | 3.53E-26 | 0.60216709 | 0.349 | 0.229 | 1.25E-21 | CD4_CAMK4_UCBMC |
| METTL16            | 3.88E-26 | 0.58096089 | 0.435 | 0.313 | 1.37E-21 | CD4_CAMK4_UCBMC |

|                     |          |            |       |       |          |                 |
|---------------------|----------|------------|-------|-------|----------|-----------------|
| ENSMMUG00000016009  | 4.13E-26 | 0.62367087 | 0.299 | 0.185 | 1.46E-21 | CD4_CAMK4_UCBMC |
| TMSB10              | 4.95E-26 | 0.32548165 | 0.765 | 0.708 | 1.75E-21 | CD4_CAMK4_UCBMC |
| ENSMMUG000000062350 | 5.17E-26 | 0.31006717 | 0.799 | 0.761 | 1.83E-21 | CD4_CAMK4_UCBMC |
| NDUFA6              | 5.52E-26 | 0.75090138 | 0.28  | 0.17  | 1.96E-21 | CD4_CAMK4_UCBMC |
| ATP5MG              | 5.65E-26 | 0.51815533 | 0.431 | 0.317 | 2.00E-21 | CD4_CAMK4_UCBMC |
| ZC3H7A              | 7.44E-26 | 0.48293122 | 0.488 | 0.363 | 2.64E-21 | CD4_CAMK4_UCBMC |
| CDC37L1             | 9.10E-26 | 0.81298152 | 0.255 | 0.148 | 3.22E-21 | CD4_CAMK4_UCBMC |
| RPL38               | 9.67E-26 | 0.33415986 | 0.786 | 0.739 | 3.43E-21 | CD4_CAMK4_UCBMC |
| TUT7                | 1.00E-25 | 0.49137433 | 0.549 | 0.431 | 3.56E-21 | CD4_CAMK4_UCBMC |
| CYP20A1             | 1.19E-25 | 0.69595987 | 0.3   | 0.188 | 4.22E-21 | CD4_CAMK4_UCBMC |
| LSM6                | 2.29E-25 | 0.63062926 | 0.314 | 0.2   | 8.10E-21 | CD4_CAMK4_UCBMC |
| ATP6V1E1            | 2.47E-25 | 0.64575141 | 0.353 | 0.24  | 8.74E-21 | CD4_CAMK4_UCBMC |
| ANAPC10             | 3.03E-25 | 0.50762018 | 0.526 | 0.402 | 1.07E-20 | CD4_CAMK4_UCBMC |
| WDR33               | 3.06E-25 | 0.40411062 | 0.634 | 0.519 | 1.09E-20 | CD4_CAMK4_UCBMC |
| AMFR                | 3.11E-25 | 0.73075803 | 0.279 | 0.168 | 1.10E-20 | CD4_CAMK4_UCBMC |
| B2M                 | 3.16E-25 | 0.24906418 | 0.932 | 0.903 | 1.12E-20 | CD4_CAMK4_UCBMC |
| SDHC                | 3.50E-25 | 0.6900349  | 0.327 | 0.214 | 1.24E-20 | CD4_CAMK4_UCBMC |
| TXNIP               | 4.02E-25 | 0.32383583 | 0.606 | 0.483 | 1.42E-20 | CD4_CAMK4_UCBMC |
| NUP88               | 4.63E-25 | 0.94946255 | 0.255 | 0.152 | 1.64E-20 | CD4_CAMK4_UCBMC |
| NDUFAF5             | 4.71E-25 | 0.66548224 | 0.304 | 0.192 | 1.67E-20 | CD4_CAMK4_UCBMC |
| ENSMMUG000000021539 | 4.87E-25 | 0.65397648 | 0.284 | 0.173 | 1.73E-20 | CD4_CAMK4_UCBMC |
| BCL7B               | 5.68E-25 | 0.60850017 | 0.389 | 0.273 | 2.01E-20 | CD4_CAMK4_UCBMC |
| PRPF40A             | 6.69E-25 | 0.32535271 | 0.76  | 0.665 | 2.37E-20 | CD4_CAMK4_UCBMC |
| INPP5K              | 7.23E-25 | 0.72228852 | 0.281 | 0.173 | 2.56E-20 | CD4_CAMK4_UCBMC |
| HBP1                | 7.96E-25 | 0.42389235 | 0.606 | 0.491 | 2.82E-20 | CD4_CAMK4_UCBMC |
| ALG5                | 8.96E-25 | 0.75849304 | 0.253 | 0.148 | 3.18E-20 | CD4_CAMK4_UCBMC |
| ATP5PO              | 9.46E-25 | 0.56909833 | 0.396 | 0.281 | 3.35E-20 | CD4_CAMK4_UCBMC |
| EIF3E               | 9.62E-25 | 0.38662787 | 0.663 | 0.574 | 3.41E-20 | CD4_CAMK4_UCBMC |
| WASL                | 9.95E-25 | 0.38043317 | 0.64  | 0.522 | 3.53E-20 | CD4_CAMK4_UCBMC |
| KDM3A               | 1.07E-24 | 0.40919769 | 0.522 | 0.394 | 3.80E-20 | CD4_CAMK4_UCBMC |
| NAE1                | 1.10E-24 | 0.75338561 | 0.317 | 0.208 | 3.89E-20 | CD4_CAMK4_UCBMC |
| LAMP1               | 1.25E-24 | 0.67917145 | 0.308 | 0.199 | 4.41E-20 | CD4_CAMK4_UCBMC |
| CAST                | 1.39E-24 | 0.43902345 | 0.558 | 0.436 | 4.92E-20 | CD4_CAMK4_UCBMC |

|                    |          |            |       |       |          |                 |
|--------------------|----------|------------|-------|-------|----------|-----------------|
| ENSMMUG00000061038 | 1.44E-24 | 0.404437   | 0.472 | 0.35  | 5.11E-20 | CD4_CAMK4_UCBMC |
| TLE4               | 1.54E-24 | 0.34074062 | 0.674 | 0.542 | 5.45E-20 | CD4_CAMK4_UCBMC |
| C20H16orf87        | 1.78E-24 | 0.6752773  | 0.321 | 0.208 | 6.31E-20 | CD4_CAMK4_UCBMC |
| ATP5MPL            | 1.79E-24 | 0.53182664 | 0.345 | 0.231 | 6.33E-20 | CD4_CAMK4_UCBMC |
| KPNA3              | 1.91E-24 | 0.39315744 | 0.602 | 0.472 | 6.75E-20 | CD4_CAMK4_UCBMC |
| SH3GLB1            | 1.97E-24 | 0.6657684  | 0.341 | 0.228 | 6.98E-20 | CD4_CAMK4_UCBMC |
| KDM5A              | 2.33E-24 | 0.41146461 | 0.57  | 0.449 | 8.25E-20 | CD4_CAMK4_UCBMC |
| MBTPS1             | 2.48E-24 | 0.43477529 | 0.558 | 0.443 | 8.78E-20 | CD4_CAMK4_UCBMC |
| ENSMMUG00000022874 | 2.84E-24 | 0.79791823 | 0.257 | 0.155 | 1.01E-19 | CD4_CAMK4_UCBMC |
| MICU2              | 3.88E-24 | 0.44775245 | 0.57  | 0.452 | 1.37E-19 | CD4_CAMK4_UCBMC |
| SUPV3L1            | 4.41E-24 | 0.66942204 | 0.324 | 0.214 | 1.56E-19 | CD4_CAMK4_UCBMC |
| SENP2              | 4.48E-24 | 0.46728546 | 0.517 | 0.391 | 1.59E-19 | CD4_CAMK4_UCBMC |
| MRPS9              | 4.48E-24 | 0.56831477 | 0.33  | 0.214 | 1.59E-19 | CD4_CAMK4_UCBMC |
| SDHAF4             | 4.57E-24 | 0.34362846 | 0.71  | 0.593 | 1.62E-19 | CD4_CAMK4_UCBMC |
| STRIP1             | 4.67E-24 | 0.72277983 | 0.295 | 0.188 | 1.65E-19 | CD4_CAMK4_UCBMC |
| GABARAP            | 5.84E-24 | 0.61600342 | 0.259 | 0.153 | 2.07E-19 | CD4_CAMK4_UCBMC |
| ESYT2              | 7.63E-24 | 0.22636779 | 0.905 | 0.835 | 2.70E-19 | CD4_CAMK4_UCBMC |
| ENSMMUG00000064068 | 7.81E-24 | 0.85515708 | 0.283 | 0.181 | 2.77E-19 | CD4_CAMK4_UCBMC |
| VPS4B              | 8.84E-24 | 0.54541973 | 0.392 | 0.276 | 3.13E-19 | CD4_CAMK4_UCBMC |
| PCED1B             | 1.07E-23 | 0.3975169  | 0.508 | 0.388 | 3.81E-19 | CD4_CAMK4_UCBMC |
| PTPN1              | 1.13E-23 | 0.317533   | 0.664 | 0.54  | 4.01E-19 | CD4_CAMK4_UCBMC |
| ENSMMUG00000006778 | 1.16E-23 | 0.60375135 | 0.375 | 0.267 | 4.10E-19 | CD4_CAMK4_UCBMC |
| RFWD3              | 1.56E-23 | 0.68448585 | 0.337 | 0.227 | 5.53E-19 | CD4_CAMK4_UCBMC |
| GPR137B            | 2.09E-23 | 0.68734074 | 0.299 | 0.193 | 7.42E-19 | CD4_CAMK4_UCBMC |
| ARIH2              | 2.12E-23 | 0.35115249 | 0.6   | 0.482 | 7.51E-19 | CD4_CAMK4_UCBMC |
| RAB18              | 2.15E-23 | 0.50758861 | 0.441 | 0.328 | 7.60E-19 | CD4_CAMK4_UCBMC |
| TEC                | 3.08E-23 | 0.25466937 | 0.677 | 0.541 | 1.09E-18 | CD4_CAMK4_UCBMC |
| RIF1               | 3.59E-23 | 0.57408256 | 0.369 | 0.253 | 1.27E-18 | CD4_CAMK4_UCBMC |
| RPRD1B             | 4.32E-23 | 0.63198298 | 0.34  | 0.231 | 1.53E-18 | CD4_CAMK4_UCBMC |
| TMEM87A            | 4.37E-23 | 0.36903946 | 0.618 | 0.509 | 1.55E-18 | CD4_CAMK4_UCBMC |
| UQCRQ              | 5.49E-23 | 0.70794924 | 0.284 | 0.181 | 1.94E-18 | CD4_CAMK4_UCBMC |
| RBM27              | 5.63E-23 | 0.36842814 | 0.631 | 0.515 | 2.00E-18 | CD4_CAMK4_UCBMC |
| ENSMMUG00000020751 | 6.98E-23 | 0.45450479 | 0.421 | 0.306 | 2.47E-18 | CD4_CAMK4_UCBMC |



|                    |          |            |       |       |          |                 |
|--------------------|----------|------------|-------|-------|----------|-----------------|
| EEF2               | 7.91E-23 | 0.44735091 | 0.571 | 0.496 | 2.80E-18 | CD4_CAMK4_UCBMC |
| REXO2              | 9.94E-23 | 0.58953345 | 0.286 | 0.18  | 3.52E-18 | CD4_CAMK4_UCBMC |
| SLC35D1            | 1.02E-22 | 0.49065569 | 0.399 | 0.282 | 3.62E-18 | CD4_CAMK4_UCBMC |
| GTPBP10            | 1.08E-22 | 0.64182389 | 0.363 | 0.254 | 3.83E-18 | CD4_CAMK4_UCBMC |
| TBC1D15            | 1.09E-22 | 0.38835344 | 0.622 | 0.514 | 3.87E-18 | CD4_CAMK4_UCBMC |
| APPL2              | 1.10E-22 | 0.51921853 | 0.421 | 0.307 | 3.90E-18 | CD4_CAMK4_UCBMC |
| RANBP9             | 1.14E-22 | 0.28056571 | 0.754 | 0.656 | 4.05E-18 | CD4_CAMK4_UCBMC |
| RTF2               | 1.17E-22 | 0.63063243 | 0.358 | 0.249 | 4.15E-18 | CD4_CAMK4_UCBMC |
| ARMC8              | 1.38E-22 | 0.46409888 | 0.553 | 0.444 | 4.91E-18 | CD4_CAMK4_UCBMC |
| YEATS2             | 1.61E-22 | 0.28939221 | 0.768 | 0.671 | 5.70E-18 | CD4_CAMK4_UCBMC |
| PRPF18             | 2.08E-22 | 0.66953267 | 0.291 | 0.187 | 7.37E-18 | CD4_CAMK4_UCBMC |
| ENSMMUG00000056793 | 2.23E-22 | 0.51475665 | 0.344 | 0.238 | 7.91E-18 | CD4_CAMK4_UCBMC |
| S100A10            | 2.83E-22 | 0.530428   | 0.289 | 0.184 | 1.00E-17 | CD4_CAMK4_UCBMC |
| ECSIT              | 3.00E-22 | 0.71538856 | 0.273 | 0.172 | 1.06E-17 | CD4_CAMK4_UCBMC |
| SETD7              | 3.21E-22 | 0.41708283 | 0.509 | 0.389 | 1.14E-17 | CD4_CAMK4_UCBMC |
| PAFAH1B2           | 3.32E-22 | 0.47082087 | 0.428 | 0.312 | 1.17E-17 | CD4_CAMK4_UCBMC |
| TAPT1              | 3.49E-22 | 0.44095325 | 0.468 | 0.35  | 1.24E-17 | CD4_CAMK4_UCBMC |
| ZFR                | 3.87E-22 | 0.39727971 | 0.636 | 0.532 | 1.37E-17 | CD4_CAMK4_UCBMC |
| TFG                | 4.30E-22 | 0.49506939 | 0.46  | 0.35  | 1.52E-17 | CD4_CAMK4_UCBMC |
| GLYR1              | 4.50E-22 | 0.52800015 | 0.402 | 0.289 | 1.60E-17 | CD4_CAMK4_UCBMC |
| GPR107             | 5.05E-22 | 0.39948952 | 0.571 | 0.458 | 1.79E-17 | CD4_CAMK4_UCBMC |
| PRRC2C             | 5.31E-22 | 0.26888293 | 0.811 | 0.746 | 1.88E-17 | CD4_CAMK4_UCBMC |
| SCMH1              | 5.56E-22 | 0.45559973 | 0.417 | 0.296 | 1.97E-17 | CD4_CAMK4_UCBMC |
| ZNF93              | 6.21E-22 | 0.54232238 | 0.333 | 0.226 | 2.20E-17 | CD4_CAMK4_UCBMC |
| CNOT4              | 6.28E-22 | 0.31126403 | 0.729 | 0.637 | 2.23E-17 | CD4_CAMK4_UCBMC |
| RNF4               | 6.51E-22 | 0.53739551 | 0.431 | 0.324 | 2.31E-17 | CD4_CAMK4_UCBMC |
| RRM1               | 6.61E-22 | 0.46359163 | 0.376 | 0.261 | 2.34E-17 | CD4_CAMK4_UCBMC |
| TMEM106B           | 7.50E-22 | 0.5961788  | 0.353 | 0.244 | 2.66E-17 | CD4_CAMK4_UCBMC |
| ZNF410             | 7.68E-22 | 0.56770473 | 0.354 | 0.245 | 2.72E-17 | CD4_CAMK4_UCBMC |
| RO60               | 9.06E-22 | 0.67695576 | 0.25  | 0.153 | 3.21E-17 | CD4_CAMK4_UCBMC |
| CCNC               | 1.05E-21 | 0.50757864 | 0.371 | 0.258 | 3.71E-17 | CD4_CAMK4_UCBMC |
| EIF3A              | 1.38E-21 | 0.3333001  | 0.699 | 0.604 | 4.87E-17 | CD4_CAMK4_UCBMC |
| CUL2               | 1.60E-21 | 0.43446509 | 0.507 | 0.394 | 5.65E-17 | CD4_CAMK4_UCBMC |

|                     |          |            |       |       |          |                 |
|---------------------|----------|------------|-------|-------|----------|-----------------|
| RPS9                | 1.64E-21 | 0.35895418 | 0.764 | 0.727 | 5.82E-17 | CD4_CAMK4_UCBMC |
| ZNF644              | 1.66E-21 | 0.30250392 | 0.803 | 0.721 | 5.90E-17 | CD4_CAMK4_UCBMC |
| ENSMMUG000000064692 | 2.06E-21 | 0.44646662 | 0.431 | 0.319 | 7.28E-17 | CD4_CAMK4_UCBMC |
| RNF34               | 2.40E-21 | 0.61015963 | 0.344 | 0.237 | 8.50E-17 | CD4_CAMK4_UCBMC |
| LATS1               | 2.53E-21 | 0.420976   | 0.386 | 0.272 | 8.95E-17 | CD4_CAMK4_UCBMC |
| RPL22L1             | 2.62E-21 | 0.44326429 | 0.551 | 0.476 | 9.27E-17 | CD4_CAMK4_UCBMC |
| SEC22B              | 3.19E-21 | 0.61339011 | 0.306 | 0.202 | 1.13E-16 | CD4_CAMK4_UCBMC |
| EFTUD2              | 3.83E-21 | 0.69485523 | 0.275 | 0.176 | 1.36E-16 | CD4_CAMK4_UCBMC |
| MCUB                | 3.87E-21 | 0.3006088  | 0.657 | 0.531 | 1.37E-16 | CD4_CAMK4_UCBMC |
| SYF2                | 6.62E-21 | 0.51147205 | 0.392 | 0.289 | 2.35E-16 | CD4_CAMK4_UCBMC |
| TPR                 | 6.70E-21 | 0.41607329 | 0.527 | 0.424 | 2.37E-16 | CD4_CAMK4_UCBMC |
| RPRD1A              | 7.00E-21 | 0.440807   | 0.526 | 0.416 | 2.48E-16 | CD4_CAMK4_UCBMC |
| ENSMMUG000000001894 | 7.36E-21 | 0.48865832 | 0.462 | 0.361 | 2.61E-16 | CD4_CAMK4_UCBMC |
| ZFAND6              | 8.31E-21 | 0.26783695 | 0.846 | 0.766 | 2.94E-16 | CD4_CAMK4_UCBMC |
| RTF1                | 8.33E-21 | 0.5333828  | 0.369 | 0.265 | 2.95E-16 | CD4_CAMK4_UCBMC |
| DNAJB12             | 8.75E-21 | 0.63062911 | 0.31  | 0.21  | 3.10E-16 | CD4_CAMK4_UCBMC |
| SNRPD2              | 8.81E-21 | 0.58157904 | 0.302 | 0.201 | 3.12E-16 | CD4_CAMK4_UCBMC |
| ARL8B               | 9.38E-21 | 0.47467264 | 0.472 | 0.365 | 3.32E-16 | CD4_CAMK4_UCBMC |
| RNF38               | 9.77E-21 | 0.32188077 | 0.772 | 0.683 | 3.46E-16 | CD4_CAMK4_UCBMC |
| CWC25               | 1.19E-20 | 0.62179371 | 0.361 | 0.259 | 4.22E-16 | CD4_CAMK4_UCBMC |
| ENSMMUG000000047277 | 1.25E-20 | 0.66339095 | 0.353 | 0.262 | 4.44E-16 | CD4_CAMK4_UCBMC |
| DOP1B               | 1.40E-20 | 0.45117434 | 0.503 | 0.39  | 4.95E-16 | CD4_CAMK4_UCBMC |
| AIMP1               | 1.42E-20 | 0.54868821 | 0.326 | 0.223 | 5.02E-16 | CD4_CAMK4_UCBMC |
| DDX5                | 1.50E-20 | 0.20536712 | 0.927 | 0.87  | 5.32E-16 | CD4_CAMK4_UCBMC |
| NRIP1               | 2.01E-20 | 0.14857675 | 0.838 | 0.735 | 7.13E-16 | CD4_CAMK4_UCBMC |
| RAB7A               | 2.50E-20 | 0.29418838 | 0.784 | 0.685 | 8.84E-16 | CD4_CAMK4_UCBMC |
| GALNT1              | 2.58E-20 | 0.44779002 | 0.442 | 0.331 | 9.15E-16 | CD4_CAMK4_UCBMC |
| MBNL2               | 2.62E-20 | 0.33111534 | 0.645 | 0.538 | 9.29E-16 | CD4_CAMK4_UCBMC |
| TRAF3               | 2.78E-20 | 0.24275209 | 0.645 | 0.519 | 9.86E-16 | CD4_CAMK4_UCBMC |
| CWC22               | 3.06E-20 | 0.56388866 | 0.346 | 0.241 | 1.09E-15 | CD4_CAMK4_UCBMC |
| SIN3A               | 3.23E-20 | 0.46183375 | 0.511 | 0.411 | 1.14E-15 | CD4_CAMK4_UCBMC |
| RPL39               | 3.31E-20 | 0.33715109 | 0.694 | 0.641 | 1.17E-15 | CD4_CAMK4_UCBMC |
| RNF13               | 3.99E-20 | 0.39328563 | 0.638 | 0.541 | 1.41E-15 | CD4_CAMK4_UCBMC |

|                   |          |            |       |       |          |                 |
|-------------------|----------|------------|-------|-------|----------|-----------------|
| HDAC5             | 5.85E-20 | 0.63884099 | 0.333 | 0.237 | 2.07E-15 | CD4_CAMK4_UCBMC |
| EIF3G             | 5.91E-20 | 0.65733534 | 0.261 | 0.168 | 2.09E-15 | CD4_CAMK4_UCBMC |
| BTBD1             | 6.14E-20 | 0.53146388 | 0.32  | 0.218 | 2.17E-15 | CD4_CAMK4_UCBMC |
| EFR3A             | 6.56E-20 | 0.33783994 | 0.586 | 0.472 | 2.32E-15 | CD4_CAMK4_UCBMC |
| DNAJC2            | 7.57E-20 | 0.3421107  | 0.524 | 0.412 | 2.68E-15 | CD4_CAMK4_UCBMC |
| PIK3IP1           | 8.00E-20 | 0.60637365 | 0.308 | 0.21  | 2.83E-15 | CD4_CAMK4_UCBMC |
| ATG3              | 8.53E-20 | 0.47830163 | 0.388 | 0.284 | 3.02E-15 | CD4_CAMK4_UCBMC |
| EIF4E             | 9.33E-20 | 0.45404273 | 0.427 | 0.319 | 3.30E-15 | CD4_CAMK4_UCBMC |
| UBB               | 9.34E-20 | 0.46818175 | 0.483 | 0.399 | 3.31E-15 | CD4_CAMK4_UCBMC |
| KIZ               | 9.41E-20 | 0.39241282 | 0.405 | 0.292 | 3.33E-15 | CD4_CAMK4_UCBMC |
| RAB1A             | 1.15E-19 | 0.28952739 | 0.741 | 0.637 | 4.07E-15 | CD4_CAMK4_UCBMC |
| ACTR10            | 1.67E-19 | 0.62701689 | 0.293 | 0.197 | 5.91E-15 | CD4_CAMK4_UCBMC |
| MACO1             | 1.73E-19 | 0.37174597 | 0.575 | 0.458 | 6.12E-15 | CD4_CAMK4_UCBMC |
| DCK               | 1.79E-19 | 0.47345033 | 0.416 | 0.308 | 6.35E-15 | CD4_CAMK4_UCBMC |
| SMCHD1            | 2.17E-19 | 0.23476491 | 0.932 | 0.878 | 7.70E-15 | CD4_CAMK4_UCBMC |
| MYLIP             | 2.88E-19 | 0.25947853 | 0.593 | 0.47  | 1.02E-14 | CD4_CAMK4_UCBMC |
| TNPO1             | 2.92E-19 | 0.45201336 | 0.48  | 0.377 | 1.03E-14 | CD4_CAMK4_UCBMC |
| POU2F1            | 3.12E-19 | 0.27353931 | 0.642 | 0.521 | 1.11E-14 | CD4_CAMK4_UCBMC |
| RRAS2             | 3.27E-19 | 0.34004592 | 0.51  | 0.393 | 1.16E-14 | CD4_CAMK4_UCBMC |
| PPP6C             | 3.30E-19 | 0.56384834 | 0.314 | 0.217 | 1.17E-14 | CD4_CAMK4_UCBMC |
| NPAT              | 3.41E-19 | 0.34964693 | 0.526 | 0.422 | 1.21E-14 | CD4_CAMK4_UCBMC |
| SMC3              | 3.41E-19 | 0.36211965 | 0.385 | 0.275 | 1.21E-14 | CD4_CAMK4_UCBMC |
| FAM160B1          | 3.78E-19 | 0.67911622 | 0.303 | 0.21  | 1.34E-14 | CD4_CAMK4_UCBMC |
| ATP5F1E           | 3.91E-19 | 0.22901243 | 0.632 | 0.557 | 1.38E-14 | CD4_CAMK4_UCBMC |
| RPL36AL           | 3.95E-19 | 0.39346011 | 0.448 | 0.348 | 1.40E-14 | CD4_CAMK4_UCBMC |
| POC5              | 4.46E-19 | 0.64013016 | 0.275 | 0.184 | 1.58E-14 | CD4_CAMK4_UCBMC |
| ZNF654            | 4.89E-19 | 0.38158662 | 0.51  | 0.4   | 1.73E-14 | CD4_CAMK4_UCBMC |
| TMSB4X            | 5.50E-19 | 0.33411659 | 0.894 | 0.901 | 1.95E-14 | CD4_CAMK4_UCBMC |
| SMARCE1           | 5.95E-19 | 0.58736183 | 0.298 | 0.203 | 2.11E-14 | CD4_CAMK4_UCBMC |
| PUM1              | 7.36E-19 | 0.2335659  | 0.913 | 0.854 | 2.61E-14 | CD4_CAMK4_UCBMC |
| USP33             | 7.66E-19 | 0.42920639 | 0.476 | 0.372 | 2.71E-14 | CD4_CAMK4_UCBMC |
| ENSMUG00000019505 | 9.94E-19 | 0.52309596 | 0.285 | 0.192 | 3.52E-14 | CD4_CAMK4_UCBMC |
| LYST              | 1.04E-18 | 0.33564212 | 0.505 | 0.392 | 3.68E-14 | CD4_CAMK4_UCBMC |

|          |          |            |       |       |          |                 |
|----------|----------|------------|-------|-------|----------|-----------------|
| USP10    | 1.05E-18 | 0.29705419 | 0.692 | 0.592 | 3.71E-14 | CD4_CAMK4_UCBMC |
| PSMA1    | 1.53E-18 | 0.33072548 | 0.486 | 0.376 | 5.42E-14 | CD4_CAMK4_UCBMC |
| NDUFB9   | 1.65E-18 | 0.53780319 | 0.27  | 0.177 | 5.84E-14 | CD4_CAMK4_UCBMC |
| XRN1     | 1.88E-18 | 0.35562435 | 0.574 | 0.466 | 6.66E-14 | CD4_CAMK4_UCBMC |
| RBBP4    | 1.90E-18 | 0.50707374 | 0.409 | 0.312 | 6.74E-14 | CD4_CAMK4_UCBMC |
| TCERG1   | 2.05E-18 | 0.34878749 | 0.661 | 0.569 | 7.25E-14 | CD4_CAMK4_UCBMC |
| AQR      | 2.28E-18 | 0.38594322 | 0.543 | 0.44  | 8.08E-14 | CD4_CAMK4_UCBMC |
| CSNK2A1  | 2.31E-18 | 0.3472906  | 0.584 | 0.484 | 8.18E-14 | CD4_CAMK4_UCBMC |
| ZNFX1    | 2.85E-18 | 0.5443908  | 0.334 | 0.238 | 1.01E-13 | CD4_CAMK4_UCBMC |
| IFI27L2  | 3.04E-18 | 0.41991673 | 0.27  | 0.177 | 1.08E-13 | CD4_CAMK4_UCBMC |
| MINDY3   | 3.38E-18 | 0.36678495 | 0.591 | 0.488 | 1.20E-13 | CD4_CAMK4_UCBMC |
| PLAA     | 3.43E-18 | 0.50643066 | 0.331 | 0.234 | 1.22E-13 | CD4_CAMK4_UCBMC |
| RNMT     | 3.66E-18 | 0.23856573 | 0.695 | 0.599 | 1.30E-13 | CD4_CAMK4_UCBMC |
| SECISBP2 | 3.83E-18 | 0.43423647 | 0.452 | 0.353 | 1.36E-13 | CD4_CAMK4_UCBMC |
| NBR1     | 3.85E-18 | 0.33102798 | 0.525 | 0.419 | 1.37E-13 | CD4_CAMK4_UCBMC |
| KDM6A    | 4.18E-18 | 0.25589577 | 0.911 | 0.85  | 1.48E-13 | CD4_CAMK4_UCBMC |
| DDX17    | 4.36E-18 | 0.2487687  | 0.839 | 0.755 | 1.55E-13 | CD4_CAMK4_UCBMC |
| DNAJC7   | 4.39E-18 | 0.46886901 | 0.461 | 0.363 | 1.56E-13 | CD4_CAMK4_UCBMC |
| UTRN     | 4.44E-18 | 0.16236453 | 0.986 | 0.97  | 1.57E-13 | CD4_CAMK4_UCBMC |
| MDH1     | 4.91E-18 | 0.48320629 | 0.313 | 0.215 | 1.74E-13 | CD4_CAMK4_UCBMC |
| C1D      | 5.06E-18 | 0.53323601 | 0.277 | 0.184 | 1.79E-13 | CD4_CAMK4_UCBMC |
| TGFB1    | 6.01E-18 | 0.166459   | 0.632 | 0.513 | 2.13E-13 | CD4_CAMK4_UCBMC |
| CNOT1    | 8.34E-18 | 0.31349219 | 0.708 | 0.631 | 2.96E-13 | CD4_CAMK4_UCBMC |
| XRCC6    | 8.51E-18 | 0.36749325 | 0.598 | 0.5   | 3.01E-13 | CD4_CAMK4_UCBMC |
| ILKAP    | 8.54E-18 | 0.32055337 | 0.638 | 0.552 | 3.03E-13 | CD4_CAMK4_UCBMC |
| RBM33    | 8.88E-18 | 0.28003361 | 0.765 | 0.669 | 3.15E-13 | CD4_CAMK4_UCBMC |
| COPS2    | 9.80E-18 | 0.54200349 | 0.387 | 0.296 | 3.47E-13 | CD4_CAMK4_UCBMC |
| NCAPD3   | 1.22E-17 | 0.40274606 | 0.408 | 0.308 | 4.31E-13 | CD4_CAMK4_UCBMC |
| ACBD3    | 1.26E-17 | 0.50251323 | 0.373 | 0.277 | 4.47E-13 | CD4_CAMK4_UCBMC |
| FKBP3    | 1.39E-17 | 0.54402718 | 0.308 | 0.216 | 4.91E-13 | CD4_CAMK4_UCBMC |
| SART3    | 1.44E-17 | 0.64858749 | 0.283 | 0.194 | 5.10E-13 | CD4_CAMK4_UCBMC |
| EPRS1    | 1.46E-17 | 0.4532673  | 0.371 | 0.275 | 5.17E-13 | CD4_CAMK4_UCBMC |
| BRD7     | 1.82E-17 | 0.41242492 | 0.48  | 0.38  | 6.45E-13 | CD4_CAMK4_UCBMC |

|                    |          |            |       |       |          |                 |
|--------------------|----------|------------|-------|-------|----------|-----------------|
| TANC1              | 1.95E-17 | 0.19344835 | 0.741 | 0.613 | 6.90E-13 | CD4_CAMK4_UCBMC |
| HERPUD2            | 2.22E-17 | 0.33933863 | 0.461 | 0.354 | 7.87E-13 | CD4_CAMK4_UCBMC |
| PISD               | 2.35E-17 | 0.56173592 | 0.329 | 0.237 | 8.34E-13 | CD4_CAMK4_UCBMC |
| KLHL23             | 3.63E-17 | 0.37353125 | 0.533 | 0.447 | 1.28E-12 | CD4_CAMK4_UCBMC |
| ENSMMUG00000022489 | 3.71E-17 | 0.41048068 | 0.381 | 0.286 | 1.31E-12 | CD4_CAMK4_UCBMC |
| JPT1               | 3.77E-17 | 0.39372881 | 0.489 | 0.398 | 1.34E-12 | CD4_CAMK4_UCBMC |
| SEC61G             | 4.96E-17 | 0.47860536 | 0.265 | 0.177 | 1.76E-12 | CD4_CAMK4_UCBMC |
| ENSMMUG00000008346 | 6.18E-17 | 0.27503689 | 0.645 | 0.539 | 2.19E-12 | CD4_CAMK4_UCBMC |
| SCAMP2             | 6.37E-17 | 0.5897615  | 0.31  | 0.222 | 2.26E-12 | CD4_CAMK4_UCBMC |
| RCAN3              | 7.30E-17 | 0.34125579 | 0.529 | 0.428 | 2.59E-12 | CD4_CAMK4_UCBMC |
| CEBPZ              | 7.70E-17 | 0.39086067 | 0.451 | 0.357 | 2.73E-12 | CD4_CAMK4_UCBMC |
| SUGT1              | 7.88E-17 | 0.36682363 | 0.464 | 0.368 | 2.79E-12 | CD4_CAMK4_UCBMC |
| TARDBP             | 7.93E-17 | 0.4625276  | 0.405 | 0.313 | 2.81E-12 | CD4_CAMK4_UCBMC |
| HNRNPUL1           | 8.12E-17 | 0.31911798 | 0.583 | 0.479 | 2.88E-12 | CD4_CAMK4_UCBMC |
| ARID4A             | 8.84E-17 | 0.48462773 | 0.387 | 0.292 | 3.13E-12 | CD4_CAMK4_UCBMC |
| COX6C              | 8.96E-17 | 0.39102646 | 0.427 | 0.334 | 3.18E-12 | CD4_CAMK4_UCBMC |
| PSME1              | 9.40E-17 | 0.47282574 | 0.307 | 0.217 | 3.33E-12 | CD4_CAMK4_UCBMC |
| CFLAR              | 1.05E-16 | 0.37503705 | 0.529 | 0.431 | 3.73E-12 | CD4_CAMK4_UCBMC |
| SMU1               | 1.10E-16 | 0.57556752 | 0.358 | 0.27  | 3.91E-12 | CD4_CAMK4_UCBMC |
| UBE2Q2             | 1.11E-16 | 0.4252475  | 0.367 | 0.269 | 3.95E-12 | CD4_CAMK4_UCBMC |
| SRSF4              | 1.13E-16 | 0.29269435 | 0.697 | 0.602 | 4.00E-12 | CD4_CAMK4_UCBMC |
| RYBP               | 1.14E-16 | 0.27233255 | 0.566 | 0.459 | 4.03E-12 | CD4_CAMK4_UCBMC |
| ENSMMUG00000015583 | 1.16E-16 | 0.24176167 | 0.714 | 0.639 | 4.09E-12 | CD4_CAMK4_UCBMC |
| ZMYM5              | 1.22E-16 | 0.48297541 | 0.399 | 0.306 | 4.31E-12 | CD4_CAMK4_UCBMC |
| RPS26              | 1.25E-16 | 0.27362662 | 0.775 | 0.752 | 4.44E-12 | CD4_CAMK4_UCBMC |
| ENSMMUG00000053384 | 1.36E-16 | 0.56168091 | 0.266 | 0.181 | 4.81E-12 | CD4_CAMK4_UCBMC |
| SLC25A43           | 1.47E-16 | 0.5386027  | 0.287 | 0.201 | 5.22E-12 | CD4_CAMK4_UCBMC |
| RSL1D1             | 1.48E-16 | 0.44131414 | 0.354 | 0.259 | 5.23E-12 | CD4_CAMK4_UCBMC |
| ZC3H10             | 1.54E-16 | 0.38010618 | 0.43  | 0.347 | 5.46E-12 | CD4_CAMK4_UCBMC |
| ZNF708             | 1.71E-16 | 0.65330865 | 0.264 | 0.181 | 6.05E-12 | CD4_CAMK4_UCBMC |
| BNIP2              | 1.89E-16 | 0.49720165 | 0.335 | 0.243 | 6.68E-12 | CD4_CAMK4_UCBMC |
| ZNF506             | 2.02E-16 | 0.42206007 | 0.492 | 0.397 | 7.16E-12 | CD4_CAMK4_UCBMC |
| MPP7               | 2.24E-16 | 0.11986083 | 0.889 | 0.82  | 7.93E-12 | CD4_CAMK4_UCBMC |

|                   |          |            |       |       |          |                 |
|-------------------|----------|------------|-------|-------|----------|-----------------|
| ATP6V1H           | 2.67E-16 | 0.44443648 | 0.424 | 0.328 | 9.47E-12 | CD4_CAMK4_UCBMC |
| CEP295            | 2.69E-16 | 0.47255288 | 0.353 | 0.262 | 9.52E-12 | CD4_CAMK4_UCBMC |
| TEX10             | 2.77E-16 | 0.46508583 | 0.384 | 0.292 | 9.81E-12 | CD4_CAMK4_UCBMC |
| ZCCHC8            | 3.37E-16 | 0.52217785 | 0.276 | 0.19  | 1.19E-11 | CD4_CAMK4_UCBMC |
| NDUFB4            | 3.79E-16 | 0.49258467 | 0.277 | 0.19  | 1.34E-11 | CD4_CAMK4_UCBMC |
| PIP5K1A           | 3.94E-16 | 0.38131672 | 0.505 | 0.414 | 1.40E-11 | CD4_CAMK4_UCBMC |
| TALDO1            | 4.39E-16 | 0.55683661 | 0.259 | 0.175 | 1.55E-11 | CD4_CAMK4_UCBMC |
| ABCE1             | 4.51E-16 | 0.39306887 | 0.469 | 0.374 | 1.60E-11 | CD4_CAMK4_UCBMC |
| THOC1             | 4.71E-16 | 0.42951686 | 0.409 | 0.317 | 1.67E-11 | CD4_CAMK4_UCBMC |
| WDR43             | 4.71E-16 | 0.29490262 | 0.64  | 0.543 | 1.67E-11 | CD4_CAMK4_UCBMC |
| GIMAP7            | 4.99E-16 | 0.33276448 | 0.382 | 0.284 | 1.77E-11 | CD4_CAMK4_UCBMC |
| MARF1             | 5.02E-16 | 0.54666746 | 0.299 | 0.213 | 1.78E-11 | CD4_CAMK4_UCBMC |
| TMA7              | 5.12E-16 | 0.29791031 | 0.396 | 0.301 | 1.81E-11 | CD4_CAMK4_UCBMC |
| SNRNP200          | 5.95E-16 | 0.53568934 | 0.303 | 0.216 | 2.11E-11 | CD4_CAMK4_UCBMC |
| PRPF4B            | 6.28E-16 | 0.25654146 | 0.769 | 0.694 | 2.23E-11 | CD4_CAMK4_UCBMC |
| IWS1              | 6.39E-16 | 0.47535624 | 0.407 | 0.319 | 2.27E-11 | CD4_CAMK4_UCBMC |
| CHIC2             | 6.54E-16 | 0.32846425 | 0.512 | 0.421 | 2.32E-11 | CD4_CAMK4_UCBMC |
| SLC25A26          | 6.90E-16 | 0.36119097 | 0.519 | 0.421 | 2.45E-11 | CD4_CAMK4_UCBMC |
| USP16             | 7.68E-16 | 0.38857424 | 0.467 | 0.372 | 2.72E-11 | CD4_CAMK4_UCBMC |
| ZRSR2             | 7.75E-16 | 0.67786914 | 0.254 | 0.173 | 2.75E-11 | CD4_CAMK4_UCBMC |
| PSMA7             | 9.01E-16 | 0.47459892 | 0.376 | 0.288 | 3.19E-11 | CD4_CAMK4_UCBMC |
| CSNK1A1           | 9.70E-16 | 0.21548553 | 0.829 | 0.763 | 3.44E-11 | CD4_CAMK4_UCBMC |
| MED15             | 1.02E-15 | 0.38285972 | 0.455 | 0.36  | 3.62E-11 | CD4_CAMK4_UCBMC |
| APOOL             | 1.09E-15 | 0.48075778 | 0.313 | 0.223 | 3.86E-11 | CD4_CAMK4_UCBMC |
| CHD6              | 1.25E-15 | 0.24772985 | 0.662 | 0.574 | 4.42E-11 | CD4_CAMK4_UCBMC |
| ENSMUG00000038348 | 1.26E-15 | 0.61354424 | 0.268 | 0.187 | 4.48E-11 | CD4_CAMK4_UCBMC |
| SLC30A9           | 1.27E-15 | 0.35635674 | 0.503 | 0.406 | 4.49E-11 | CD4_CAMK4_UCBMC |
| MPHOSPH8          | 1.27E-15 | 0.3917178  | 0.466 | 0.377 | 4.51E-11 | CD4_CAMK4_UCBMC |
| ZNF43             | 1.34E-15 | 0.40238598 | 0.436 | 0.347 | 4.76E-11 | CD4_CAMK4_UCBMC |
| CKAP5             | 1.36E-15 | 0.46321336 | 0.292 | 0.204 | 4.81E-11 | CD4_CAMK4_UCBMC |
| PLEKHM1           | 1.42E-15 | 0.45898524 | 0.354 | 0.263 | 5.03E-11 | CD4_CAMK4_UCBMC |
| PDXDC1            | 1.46E-15 | 0.31531409 | 0.399 | 0.303 | 5.17E-11 | CD4_CAMK4_UCBMC |
| GAPVD1            | 1.53E-15 | 0.27817385 | 0.567 | 0.463 | 5.41E-11 | CD4_CAMK4_UCBMC |

|                    |          |            |       |       |          |                 |
|--------------------|----------|------------|-------|-------|----------|-----------------|
| APLP2              | 1.57E-15 | 0.45788876 | 0.386 | 0.295 | 5.56E-11 | CD4_CAMK4_UCBMC |
| MYSM1              | 1.58E-15 | 0.48602466 | 0.334 | 0.245 | 5.58E-11 | CD4_CAMK4_UCBMC |
| CRBN               | 1.62E-15 | 0.4626408  | 0.28  | 0.194 | 5.74E-11 | CD4_CAMK4_UCBMC |
| C18H18orf25        | 1.79E-15 | 0.2502312  | 0.564 | 0.457 | 6.33E-11 | CD4_CAMK4_UCBMC |
| ZNF326             | 1.80E-15 | 0.33435188 | 0.505 | 0.41  | 6.39E-11 | CD4_CAMK4_UCBMC |
| TMEM123            | 1.98E-15 | 0.16214342 | 0.889 | 0.838 | 7.02E-11 | CD4_CAMK4_UCBMC |
| LIMK2              | 2.03E-15 | 0.45343719 | 0.338 | 0.248 | 7.19E-11 | CD4_CAMK4_UCBMC |
| RCL1               | 2.25E-15 | 0.50699843 | 0.327 | 0.237 | 7.99E-11 | CD4_CAMK4_UCBMC |
| ESCO1              | 2.34E-15 | 0.25784095 | 0.696 | 0.606 | 8.29E-11 | CD4_CAMK4_UCBMC |
| TMEM59             | 2.40E-15 | 0.37660037 | 0.339 | 0.249 | 8.49E-11 | CD4_CAMK4_UCBMC |
| NARS1              | 2.44E-15 | 0.39770561 | 0.457 | 0.364 | 8.64E-11 | CD4_CAMK4_UCBMC |
| ABCC1              | 2.59E-15 | 0.45912781 | 0.335 | 0.245 | 9.16E-11 | CD4_CAMK4_UCBMC |
| KCMF1              | 2.63E-15 | 0.31532729 | 0.526 | 0.426 | 9.31E-11 | CD4_CAMK4_UCBMC |
| CDC14A             | 2.63E-15 | 0.10301958 | 0.872 | 0.79  | 9.31E-11 | CD4_CAMK4_UCBMC |
| AMDHD1             | 2.66E-15 | 0.48656253 | 0.309 | 0.222 | 9.42E-11 | CD4_CAMK4_UCBMC |
| OCIAD1             | 2.80E-15 | 0.37297241 | 0.373 | 0.279 | 9.94E-11 | CD4_CAMK4_UCBMC |
| MIER1              | 3.20E-15 | 0.25642202 | 0.664 | 0.569 | 1.14E-10 | CD4_CAMK4_UCBMC |
| PSMA3              | 3.36E-15 | 0.43434452 | 0.379 | 0.291 | 1.19E-10 | CD4_CAMK4_UCBMC |
| DHX29              | 3.49E-15 | 0.31893531 | 0.39  | 0.292 | 1.24E-10 | CD4_CAMK4_UCBMC |
| PSMD11             | 3.59E-15 | 0.56550085 | 0.292 | 0.21  | 1.27E-10 | CD4_CAMK4_UCBMC |
| CS                 | 4.45E-15 | 0.3356853  | 0.517 | 0.426 | 1.58E-10 | CD4_CAMK4_UCBMC |
| PGGT1B             | 4.83E-15 | 0.54542627 | 0.288 | 0.205 | 1.71E-10 | CD4_CAMK4_UCBMC |
| WDR26              | 5.24E-15 | 0.29107541 | 0.546 | 0.445 | 1.86E-10 | CD4_CAMK4_UCBMC |
| ENSMMUG00000049010 | 5.54E-15 | 0.47125583 | 0.316 | 0.229 | 1.96E-10 | CD4_CAMK4_UCBMC |
| MAMU-A             | 5.93E-15 | 0.24604399 | 0.641 | 0.559 | 2.10E-10 | CD4_CAMK4_UCBMC |
| UBXN1              | 6.54E-15 | 0.38868074 | 0.28  | 0.195 | 2.32E-10 | CD4_CAMK4_UCBMC |
| SELENOT            | 6.59E-15 | 0.41556128 | 0.416 | 0.327 | 2.33E-10 | CD4_CAMK4_UCBMC |
| PLAG1              | 7.33E-15 | 0.40682228 | 0.315 | 0.228 | 2.60E-10 | CD4_CAMK4_UCBMC |
| TAGLN2             | 7.36E-15 | 0.41273392 | 0.367 | 0.284 | 2.61E-10 | CD4_CAMK4_UCBMC |
| COG3               | 7.59E-15 | 0.48760306 | 0.302 | 0.22  | 2.69E-10 | CD4_CAMK4_UCBMC |
| ERLEC1             | 8.06E-15 | 0.48330388 | 0.275 | 0.192 | 2.86E-10 | CD4_CAMK4_UCBMC |
| EIF2S3             | 8.43E-15 | 0.48555902 | 0.36  | 0.278 | 2.99E-10 | CD4_CAMK4_UCBMC |
| UBE2L3             | 9.00E-15 | 0.38188258 | 0.419 | 0.329 | 3.19E-10 | CD4_CAMK4_UCBMC |

|                    |          |            |       |       |          |                 |
|--------------------|----------|------------|-------|-------|----------|-----------------|
| ENSMMUG00000012419 | 9.15E-15 | 0.47962196 | 0.257 | 0.177 | 3.24E-10 | CD4_CAMK4_UCBMC |
| NFYC               | 1.06E-14 | 0.39341266 | 0.469 | 0.38  | 3.75E-10 | CD4_CAMK4_UCBMC |
| UHKM1              | 1.06E-14 | 0.45989319 | 0.357 | 0.273 | 3.76E-10 | CD4_CAMK4_UCBMC |
| TMX3               | 1.15E-14 | 0.469633   | 0.379 | 0.294 | 4.06E-10 | CD4_CAMK4_UCBMC |
| PDSS1              | 1.32E-14 | 0.49576241 | 0.276 | 0.194 | 4.66E-10 | CD4_CAMK4_UCBMC |
| FOXJ3              | 1.33E-14 | 0.29999591 | 0.696 | 0.611 | 4.72E-10 | CD4_CAMK4_UCBMC |
| SLU7               | 1.33E-14 | 0.45905471 | 0.374 | 0.287 | 4.73E-10 | CD4_CAMK4_UCBMC |
| ACE                | 1.44E-14 | 0.46118869 | 0.354 | 0.267 | 5.09E-10 | CD4_CAMK4_UCBMC |
| PRPF8              | 1.44E-14 | 0.4074517  | 0.42  | 0.334 | 5.11E-10 | CD4_CAMK4_UCBMC |
| ATP5PB             | 1.47E-14 | 0.46049638 | 0.279 | 0.197 | 5.21E-10 | CD4_CAMK4_UCBMC |
| KCTD20             | 1.48E-14 | 0.44848187 | 0.361 | 0.277 | 5.25E-10 | CD4_CAMK4_UCBMC |
| PPHLN1             | 1.82E-14 | 0.30335622 | 0.664 | 0.577 | 6.44E-10 | CD4_CAMK4_UCBMC |
| MSRB3              | 1.83E-14 | 0.3281048  | 0.25  | 0.165 | 6.47E-10 | CD4_CAMK4_UCBMC |
| UBE2I              | 1.84E-14 | 0.48640773 | 0.299 | 0.218 | 6.51E-10 | CD4_CAMK4_UCBMC |
| PCMTD1             | 1.93E-14 | 0.26965547 | 0.602 | 0.507 | 6.84E-10 | CD4_CAMK4_UCBMC |
| WDFY2              | 2.10E-14 | 0.31338378 | 0.644 | 0.56  | 7.45E-10 | CD4_CAMK4_UCBMC |
| ENSMMUG00000042951 | 2.32E-14 | 0.47125637 | 0.315 | 0.231 | 8.21E-10 | CD4_CAMK4_UCBMC |
| GALNT11            | 2.49E-14 | 0.33258661 | 0.44  | 0.346 | 8.82E-10 | CD4_CAMK4_UCBMC |
| SETD2              | 2.50E-14 | 0.22186426 | 0.861 | 0.776 | 8.87E-10 | CD4_CAMK4_UCBMC |
| SEC61B             | 2.66E-14 | 0.48275747 | 0.277 | 0.194 | 9.43E-10 | CD4_CAMK4_UCBMC |
| ABCB7              | 2.67E-14 | 0.39853427 | 0.351 | 0.263 | 9.47E-10 | CD4_CAMK4_UCBMC |
| ZNF107             | 2.73E-14 | 0.38705646 | 0.302 | 0.218 | 9.67E-10 | CD4_CAMK4_UCBMC |
| PIAS1              | 2.90E-14 | 0.2328202  | 0.804 | 0.734 | 1.03E-09 | CD4_CAMK4_UCBMC |
| PPP2R1B            | 2.96E-14 | 0.52569718 | 0.279 | 0.2   | 1.05E-09 | CD4_CAMK4_UCBMC |
| VAPA               | 3.02E-14 | 0.29296442 | 0.666 | 0.581 | 1.07E-09 | CD4_CAMK4_UCBMC |
| SOS2               | 3.15E-14 | 0.42258521 | 0.352 | 0.266 | 1.12E-09 | CD4_CAMK4_UCBMC |
| ENSMMUG00000060377 | 3.31E-14 | 0.30421641 | 0.342 | 0.26  | 1.17E-09 | CD4_CAMK4_UCBMC |
| SDF2               | 3.35E-14 | 0.54158493 | 0.292 | 0.21  | 1.19E-09 | CD4_CAMK4_UCBMC |
| SLC22A18           | 3.47E-14 | 0.31923469 | 0.462 | 0.372 | 1.23E-09 | CD4_CAMK4_UCBMC |
| KPNA6              | 3.53E-14 | 0.40205762 | 0.422 | 0.335 | 1.25E-09 | CD4_CAMK4_UCBMC |
| RFX3               | 3.64E-14 | 0.20066307 | 0.839 | 0.766 | 1.29E-09 | CD4_CAMK4_UCBMC |
| LMTK2              | 3.80E-14 | 0.31932121 | 0.551 | 0.456 | 1.35E-09 | CD4_CAMK4_UCBMC |
| CAND1              | 3.82E-14 | 0.30953321 | 0.53  | 0.44  | 1.36E-09 | CD4_CAMK4_UCBMC |



|                    |          |            |       |       |          |                 |
|--------------------|----------|------------|-------|-------|----------|-----------------|
| SSR1               | 3.86E-14 | 0.40217747 | 0.358 | 0.272 | 1.37E-09 | CD4_CAMK4_UCBMC |
| SERINC5            | 3.98E-14 | 0.35049352 | 0.327 | 0.237 | 1.41E-09 | CD4_CAMK4_UCBMC |
| DIDO1              | 4.07E-14 | 0.36814562 | 0.442 | 0.361 | 1.44E-09 | CD4_CAMK4_UCBMC |
| S100A6             | 4.17E-14 | 0.36027254 | 0.264 | 0.183 | 1.48E-09 | CD4_CAMK4_UCBMC |
| SNX3               | 4.43E-14 | 0.57260091 | 0.266 | 0.19  | 1.57E-09 | CD4_CAMK4_UCBMC |
| BIRC2              | 4.63E-14 | 0.40790336 | 0.348 | 0.263 | 1.64E-09 | CD4_CAMK4_UCBMC |
| PHF3               | 4.78E-14 | 0.23333356 | 0.739 | 0.656 | 1.69E-09 | CD4_CAMK4_UCBMC |
| IK                 | 4.79E-14 | 0.34528084 | 0.299 | 0.214 | 1.70E-09 | CD4_CAMK4_UCBMC |
| ENSMMUG00000056354 | 4.85E-14 | 0.31103643 | 0.476 | 0.399 | 1.72E-09 | CD4_CAMK4_UCBMC |
| ELF2               | 5.02E-14 | 0.24496418 | 0.482 | 0.386 | 1.78E-09 | CD4_CAMK4_UCBMC |
| EPC2               | 5.13E-14 | 0.26277866 | 0.712 | 0.627 | 1.82E-09 | CD4_CAMK4_UCBMC |
| DYRK2              | 5.43E-14 | 0.25412065 | 0.57  | 0.473 | 1.92E-09 | CD4_CAMK4_UCBMC |
| PLCL1              | 5.72E-14 | 0.15670721 | 0.823 | 0.726 | 2.03E-09 | CD4_CAMK4_UCBMC |
| PCNP               | 6.03E-14 | 0.40002896 | 0.404 | 0.319 | 2.14E-09 | CD4_CAMK4_UCBMC |
| TBC1D22B           | 6.24E-14 | 0.37254198 | 0.396 | 0.306 | 2.21E-09 | CD4_CAMK4_UCBMC |
| CNOT2              | 6.64E-14 | 0.20772316 | 0.831 | 0.741 | 2.35E-09 | CD4_CAMK4_UCBMC |
| IPO5               | 6.67E-14 | 0.4451093  | 0.338 | 0.254 | 2.36E-09 | CD4_CAMK4_UCBMC |
| MTPAP              | 7.43E-14 | 0.55623555 | 0.264 | 0.188 | 2.63E-09 | CD4_CAMK4_UCBMC |
| RTTN               | 8.27E-14 | 0.47555248 | 0.35  | 0.267 | 2.93E-09 | CD4_CAMK4_UCBMC |
| RALGPS2            | 9.25E-14 | 0.20776734 | 0.527 | 0.424 | 3.28E-09 | CD4_CAMK4_UCBMC |
| LRRFIP2            | 9.43E-14 | 0.24754842 | 0.418 | 0.319 | 3.34E-09 | CD4_CAMK4_UCBMC |
| GPR155             | 1.04E-13 | 0.41783365 | 0.27  | 0.19  | 3.68E-09 | CD4_CAMK4_UCBMC |
| MANBA              | 1.10E-13 | 0.253418   | 0.44  | 0.342 | 3.90E-09 | CD4_CAMK4_UCBMC |
| NT5C2              | 1.29E-13 | 0.20075147 | 0.65  | 0.556 | 4.57E-09 | CD4_CAMK4_UCBMC |
| CCDC50             | 1.29E-13 | 0.43003558 | 0.329 | 0.245 | 4.58E-09 | CD4_CAMK4_UCBMC |
| TET2               | 1.31E-13 | 0.30847599 | 0.501 | 0.406 | 4.65E-09 | CD4_CAMK4_UCBMC |
| EEF1D              | 1.35E-13 | 0.22678439 | 0.538 | 0.471 | 4.77E-09 | CD4_CAMK4_UCBMC |
| STAU1              | 1.38E-13 | 0.25129728 | 0.699 | 0.616 | 4.88E-09 | CD4_CAMK4_UCBMC |
| NDUFA4             | 1.41E-13 | 0.36192239 | 0.318 | 0.234 | 5.00E-09 | CD4_CAMK4_UCBMC |
| MAU2               | 1.46E-13 | 0.47310441 | 0.279 | 0.2   | 5.17E-09 | CD4_CAMK4_UCBMC |
| WTAP               | 1.55E-13 | 0.21667287 | 0.702 | 0.616 | 5.51E-09 | CD4_CAMK4_UCBMC |
| RPL19              | 1.58E-13 | 0.24248    | 0.636 | 0.573 | 5.60E-09 | CD4_CAMK4_UCBMC |
| PCM1               | 1.60E-13 | 0.24747242 | 0.615 | 0.527 | 5.65E-09 | CD4_CAMK4_UCBMC |

|                   |          |            |       |       |          |                 |
|-------------------|----------|------------|-------|-------|----------|-----------------|
| PSMD7             | 1.97E-13 | 0.52144829 | 0.268 | 0.192 | 6.97E-09 | CD4_CAMK4_UCBMC |
| ZNF207            | 2.04E-13 | 0.32985343 | 0.594 | 0.518 | 7.23E-09 | CD4_CAMK4_UCBMC |
| CHD8              | 2.28E-13 | 0.40239444 | 0.347 | 0.264 | 8.06E-09 | CD4_CAMK4_UCBMC |
| FBXO7             | 2.38E-13 | 0.56509376 | 0.257 | 0.183 | 8.42E-09 | CD4_CAMK4_UCBMC |
| LAMTOR3           | 2.47E-13 | 0.53082386 | 0.259 | 0.184 | 8.74E-09 | CD4_CAMK4_UCBMC |
| HSD17B11          | 2.59E-13 | 0.3169923  | 0.287 | 0.204 | 9.19E-09 | CD4_CAMK4_UCBMC |
| QKI               | 2.77E-13 | 0.21160048 | 0.71  | 0.614 | 9.83E-09 | CD4_CAMK4_UCBMC |
| MAP3K3            | 2.80E-13 | 0.35333634 | 0.382 | 0.296 | 9.92E-09 | CD4_CAMK4_UCBMC |
| ADIPOR1           | 2.82E-13 | 0.55298478 | 0.273 | 0.199 | 9.98E-09 | CD4_CAMK4_UCBMC |
| ARPC3             | 2.82E-13 | 0.33232983 | 0.39  | 0.307 | 1.00E-08 | CD4_CAMK4_UCBMC |
| ACSL3             | 3.12E-13 | 0.31542678 | 0.43  | 0.34  | 1.10E-08 | CD4_CAMK4_UCBMC |
| NOL10             | 3.27E-13 | 0.28808699 | 0.456 | 0.361 | 1.16E-08 | CD4_CAMK4_UCBMC |
| CD96              | 3.64E-13 | 0.32775175 | 0.484 | 0.392 | 1.29E-08 | CD4_CAMK4_UCBMC |
| SMURF1            | 4.08E-13 | 0.36946645 | 0.341 | 0.253 | 1.45E-08 | CD4_CAMK4_UCBMC |
| LRRC40            | 4.25E-13 | 0.44738004 | 0.313 | 0.234 | 1.50E-08 | CD4_CAMK4_UCBMC |
| ARHGAP17          | 4.38E-13 | 0.38752006 | 0.379 | 0.296 | 1.55E-08 | CD4_CAMK4_UCBMC |
| ENSMUG00000007657 | 4.55E-13 | 0.30619309 | 0.302 | 0.222 | 1.61E-08 | CD4_CAMK4_UCBMC |
| CHD4              | 4.77E-13 | 0.27334273 | 0.508 | 0.417 | 1.69E-08 | CD4_CAMK4_UCBMC |
| TAB2              | 4.88E-13 | 0.23008323 | 0.539 | 0.446 | 1.73E-08 | CD4_CAMK4_UCBMC |
| PFDN2             | 4.88E-13 | 0.38332278 | 0.38  | 0.297 | 1.73E-08 | CD4_CAMK4_UCBMC |
| UTP18             | 5.47E-13 | 0.47128582 | 0.266 | 0.191 | 1.94E-08 | CD4_CAMK4_UCBMC |
| RBIS              | 5.98E-13 | 0.41672375 | 0.261 | 0.184 | 2.12E-08 | CD4_CAMK4_UCBMC |
| DPM1              | 6.65E-13 | 0.44048853 | 0.288 | 0.209 | 2.36E-08 | CD4_CAMK4_UCBMC |
| FAM91A1           | 6.98E-13 | 0.3770361  | 0.407 | 0.327 | 2.47E-08 | CD4_CAMK4_UCBMC |
| KIDINS220         | 7.47E-13 | 0.29516733 | 0.539 | 0.447 | 2.65E-08 | CD4_CAMK4_UCBMC |
| TSG101            | 7.48E-13 | 0.3100558  | 0.364 | 0.278 | 2.65E-08 | CD4_CAMK4_UCBMC |
| LIMD2             | 7.52E-13 | 0.30612406 | 0.423 | 0.341 | 2.66E-08 | CD4_CAMK4_UCBMC |
| SNX13             | 7.98E-13 | 0.29807029 | 0.57  | 0.479 | 2.83E-08 | CD4_CAMK4_UCBMC |
| USP14             | 8.39E-13 | 0.33840561 | 0.397 | 0.313 | 2.97E-08 | CD4_CAMK4_UCBMC |
| GTF2H1            | 1.06E-12 | 0.46434936 | 0.297 | 0.221 | 3.76E-08 | CD4_CAMK4_UCBMC |
| KRTCAP2           | 1.10E-12 | 0.359051   | 0.329 | 0.252 | 3.91E-08 | CD4_CAMK4_UCBMC |
| VPS54             | 1.12E-12 | 0.29876354 | 0.493 | 0.403 | 3.96E-08 | CD4_CAMK4_UCBMC |
| MINDY2            | 1.19E-12 | 0.40198096 | 0.334 | 0.252 | 4.23E-08 | CD4_CAMK4_UCBMC |

|                   |          |            |       |       |          |                 |
|-------------------|----------|------------|-------|-------|----------|-----------------|
| ENSMUG00000053735 | 1.35E-12 | 0.36149567 | 0.253 | 0.178 | 4.78E-08 | CD4_CAMK4_UCBMC |
| GMFG              | 1.37E-12 | 0.22827476 | 0.536 | 0.461 | 4.84E-08 | CD4_CAMK4_UCBMC |
| CDC5L             | 1.39E-12 | 0.34267819 | 0.352 | 0.272 | 4.92E-08 | CD4_CAMK4_UCBMC |
| HNRNPM            | 1.44E-12 | 0.26281254 | 0.669 | 0.592 | 5.09E-08 | CD4_CAMK4_UCBMC |
| PJA2              | 1.51E-12 | 0.26953312 | 0.49  | 0.4   | 5.35E-08 | CD4_CAMK4_UCBMC |
| ATG16L1           | 1.52E-12 | 0.48910849 | 0.373 | 0.298 | 5.38E-08 | CD4_CAMK4_UCBMC |
| RNF145            | 1.52E-12 | 0.19070445 | 0.774 | 0.689 | 5.39E-08 | CD4_CAMK4_UCBMC |
| TOGARAM1          | 1.52E-12 | 0.33860995 | 0.354 | 0.268 | 5.39E-08 | CD4_CAMK4_UCBMC |
| ENSMUG00000046264 | 1.53E-12 | 0.2681145  | 0.615 | 0.529 | 5.42E-08 | CD4_CAMK4_UCBMC |
| STAG2             | 1.58E-12 | 0.22450747 | 0.776 | 0.701 | 5.61E-08 | CD4_CAMK4_UCBMC |
| GTF2E2            | 1.78E-12 | 0.3990034  | 0.455 | 0.375 | 6.32E-08 | CD4_CAMK4_UCBMC |
| RSRP1             | 1.79E-12 | 0.25222301 | 0.796 | 0.735 | 6.34E-08 | CD4_CAMK4_UCBMC |
| SREK1             | 1.84E-12 | 0.21219246 | 0.787 | 0.7   | 6.50E-08 | CD4_CAMK4_UCBMC |
| SEC24C            | 2.04E-12 | 0.50063884 | 0.25  | 0.177 | 7.24E-08 | CD4_CAMK4_UCBMC |
| ZER1              | 2.22E-12 | 0.45096641 | 0.264 | 0.19  | 7.86E-08 | CD4_CAMK4_UCBMC |
| PSMA2             | 2.26E-12 | 0.39997798 | 0.287 | 0.209 | 7.99E-08 | CD4_CAMK4_UCBMC |
| CTPS1             | 2.48E-12 | 0.45224145 | 0.295 | 0.22  | 8.80E-08 | CD4_CAMK4_UCBMC |
| HOOK3             | 3.16E-12 | 0.21044321 | 0.707 | 0.623 | 1.12E-07 | CD4_CAMK4_UCBMC |
| RAF1              | 3.37E-12 | 0.24961392 | 0.612 | 0.523 | 1.19E-07 | CD4_CAMK4_UCBMC |
| MYNN              | 3.60E-12 | 0.41922454 | 0.256 | 0.181 | 1.27E-07 | CD4_CAMK4_UCBMC |
| WDR83OS           | 3.99E-12 | 0.2847531  | 0.382 | 0.301 | 1.41E-07 | CD4_CAMK4_UCBMC |
| ZNF528            | 4.05E-12 | 0.3879672  | 0.345 | 0.268 | 1.43E-07 | CD4_CAMK4_UCBMC |
| NUP155            | 4.52E-12 | 0.4817037  | 0.259 | 0.187 | 1.60E-07 | CD4_CAMK4_UCBMC |
| SUCLG2            | 4.56E-12 | 0.22321994 | 0.784 | 0.724 | 1.62E-07 | CD4_CAMK4_UCBMC |
| ATP9B             | 4.74E-12 | 0.22951687 | 0.694 | 0.603 | 1.68E-07 | CD4_CAMK4_UCBMC |
| ANAPC7            | 4.83E-12 | 0.55766091 | 0.26  | 0.191 | 1.71E-07 | CD4_CAMK4_UCBMC |
| ENSMUG00000015208 | 4.84E-12 | 0.36592996 | 0.425 | 0.347 | 1.71E-07 | CD4_CAMK4_UCBMC |
| MAML1             | 5.06E-12 | 0.4009081  | 0.38  | 0.3   | 1.79E-07 | CD4_CAMK4_UCBMC |
| ENSMUG00000053012 | 5.22E-12 | 0.44884138 | 0.281 | 0.208 | 1.85E-07 | CD4_CAMK4_UCBMC |
| UFD1              | 5.50E-12 | 0.46656457 | 0.267 | 0.195 | 1.95E-07 | CD4_CAMK4_UCBMC |
| SEC23A            | 5.64E-12 | 0.33734627 | 0.397 | 0.315 | 2.00E-07 | CD4_CAMK4_UCBMC |
| IL1RAP            | 5.77E-12 | 0.43582837 | 0.258 | 0.183 | 2.04E-07 | CD4_CAMK4_UCBMC |
| UBE2H             | 5.94E-12 | 0.20786195 | 0.839 | 0.753 | 2.11E-07 | CD4_CAMK4_UCBMC |

|                    |          |            |       |       |          |                 |
|--------------------|----------|------------|-------|-------|----------|-----------------|
| ENSMMUG00000061913 | 6.66E-12 | 0.42608904 | 0.288 | 0.217 | 2.36E-07 | CD4_CAMK4_UCBMC |
| BAZ2A              | 6.76E-12 | 0.44173197 | 0.29  | 0.217 | 2.39E-07 | CD4_CAMK4_UCBMC |
| SFMBT1             | 6.76E-12 | 0.25537268 | 0.531 | 0.439 | 2.39E-07 | CD4_CAMK4_UCBMC |
| IL7R               | 6.89E-12 | 0.10836575 | 0.751 | 0.671 | 2.44E-07 | CD4_CAMK4_UCBMC |
| BRAF               | 7.06E-12 | 0.17664496 | 0.851 | 0.801 | 2.50E-07 | CD4_CAMK4_UCBMC |
| UBE2V1             | 7.81E-12 | 0.33481274 | 0.401 | 0.321 | 2.77E-07 | CD4_CAMK4_UCBMC |
| IRAG2              | 7.87E-12 | 0.36519943 | 0.322 | 0.243 | 2.79E-07 | CD4_CAMK4_UCBMC |
| SAP18              | 8.95E-12 | 0.39983434 | 0.291 | 0.217 | 3.17E-07 | CD4_CAMK4_UCBMC |
| CTSH               | 9.15E-12 | 0.21494477 | 0.252 | 0.176 | 3.24E-07 | CD4_CAMK4_UCBMC |
| TBC1D23            | 9.17E-12 | 0.30097461 | 0.495 | 0.408 | 3.25E-07 | CD4_CAMK4_UCBMC |
| TTC7A              | 9.53E-12 | 0.29594461 | 0.442 | 0.357 | 3.38E-07 | CD4_CAMK4_UCBMC |
| FMR1               | 9.60E-12 | 0.42441618 | 0.263 | 0.192 | 3.40E-07 | CD4_CAMK4_UCBMC |
| AGO3               | 1.05E-11 | 0.19701123 | 0.748 | 0.674 | 3.73E-07 | CD4_CAMK4_UCBMC |
| MAN2A1             | 1.05E-11 | 0.18515967 | 0.903 | 0.843 | 3.73E-07 | CD4_CAMK4_UCBMC |
| HELZ               | 1.06E-11 | 0.19463922 | 0.762 | 0.676 | 3.74E-07 | CD4_CAMK4_UCBMC |
| CLDND1             | 1.10E-11 | 0.49178756 | 0.253 | 0.184 | 3.91E-07 | CD4_CAMK4_UCBMC |
| ENSMMUG00000063637 | 1.21E-11 | 0.22838051 | 0.614 | 0.551 | 4.27E-07 | CD4_CAMK4_UCBMC |
| RAB22A             | 1.28E-11 | 0.28477031 | 0.261 | 0.187 | 4.52E-07 | CD4_CAMK4_UCBMC |
| MRPS31             | 1.28E-11 | 0.27843609 | 0.396 | 0.312 | 4.53E-07 | CD4_CAMK4_UCBMC |
| ZDHHC17            | 1.30E-11 | 0.39804348 | 0.417 | 0.345 | 4.62E-07 | CD4_CAMK4_UCBMC |
| NIPA2              | 1.40E-11 | 0.42976645 | 0.321 | 0.245 | 4.95E-07 | CD4_CAMK4_UCBMC |
| ZNF451             | 1.45E-11 | 0.23726479 | 0.597 | 0.515 | 5.14E-07 | CD4_CAMK4_UCBMC |
| ENSMMUG00000056043 | 1.53E-11 | 0.40613917 | 0.28  | 0.208 | 5.43E-07 | CD4_CAMK4_UCBMC |
| ENY2               | 1.56E-11 | 0.39664813 | 0.298 | 0.223 | 5.52E-07 | CD4_CAMK4_UCBMC |
| OPA1               | 1.57E-11 | 0.25250881 | 0.458 | 0.373 | 5.56E-07 | CD4_CAMK4_UCBMC |
| ATP11B             | 1.72E-11 | 0.22626656 | 0.712 | 0.63  | 6.10E-07 | CD4_CAMK4_UCBMC |
| CD2AP              | 1.81E-11 | 0.24776206 | 0.49  | 0.401 | 6.42E-07 | CD4_CAMK4_UCBMC |
| RHEB               | 1.86E-11 | 0.28039981 | 0.576 | 0.497 | 6.59E-07 | CD4_CAMK4_UCBMC |
| MTMR6              | 1.89E-11 | 0.38758519 | 0.265 | 0.192 | 6.70E-07 | CD4_CAMK4_UCBMC |
| XRCC5              | 1.89E-11 | 0.21350259 | 0.668 | 0.584 | 6.70E-07 | CD4_CAMK4_UCBMC |
| C3H21orf91         | 1.91E-11 | 0.40570011 | 0.332 | 0.258 | 6.76E-07 | CD4_CAMK4_UCBMC |
| VAC14              | 2.00E-11 | 0.42346913 | 0.297 | 0.226 | 7.10E-07 | CD4_CAMK4_UCBMC |
| TOPORS             | 2.06E-11 | 0.40936416 | 0.343 | 0.27  | 7.30E-07 | CD4_CAMK4_UCBMC |

|                    |          |            |       |       |          |                 |
|--------------------|----------|------------|-------|-------|----------|-----------------|
| ATP5F1A            | 2.15E-11 | 0.26954746 | 0.403 | 0.323 | 7.63E-07 | CD4_CAMK4_UCBMC |
| ELMOD3             | 2.37E-11 | 0.35753422 | 0.401 | 0.321 | 8.38E-07 | CD4_CAMK4_UCBMC |
| PHC3               | 2.39E-11 | 0.20487911 | 0.649 | 0.565 | 8.47E-07 | CD4_CAMK4_UCBMC |
| IRF1               | 2.43E-11 | 0.2450732  | 0.345 | 0.264 | 8.61E-07 | CD4_CAMK4_UCBMC |
| NUP214             | 2.50E-11 | 0.27140277 | 0.542 | 0.466 | 8.84E-07 | CD4_CAMK4_UCBMC |
| DCTN6              | 2.50E-11 | 0.44448417 | 0.278 | 0.206 | 8.86E-07 | CD4_CAMK4_UCBMC |
| MED1               | 2.55E-11 | 0.38841886 | 0.3   | 0.227 | 9.05E-07 | CD4_CAMK4_UCBMC |
| ZNRF2              | 2.69E-11 | 0.35471817 | 0.398 | 0.318 | 9.54E-07 | CD4_CAMK4_UCBMC |
| FBXL3              | 2.93E-11 | 0.44191262 | 0.258 | 0.19  | 1.04E-06 | CD4_CAMK4_UCBMC |
| POLR1B             | 3.26E-11 | 0.46088087 | 0.287 | 0.216 | 1.15E-06 | CD4_CAMK4_UCBMC |
| FOXO3              | 3.72E-11 | 0.24405173 | 0.427 | 0.337 | 1.32E-06 | CD4_CAMK4_UCBMC |
| FRS2               | 3.83E-11 | 0.24430115 | 0.413 | 0.329 | 1.36E-06 | CD4_CAMK4_UCBMC |
| ENSMMUG00000012140 | 4.00E-11 | 0.2252441  | 0.779 | 0.774 | 1.42E-06 | CD4_CAMK4_UCBMC |
| ENSMMUG00000064224 | 4.32E-11 | 0.25495111 | 0.507 | 0.446 | 1.53E-06 | CD4_CAMK4_UCBMC |
| PSMB1              | 4.35E-11 | 0.28519985 | 0.294 | 0.221 | 1.54E-06 | CD4_CAMK4_UCBMC |
| PIK3C2A            | 4.43E-11 | 0.28282951 | 0.455 | 0.373 | 1.57E-06 | CD4_CAMK4_UCBMC |
| XPO4               | 4.43E-11 | 0.26781952 | 0.419 | 0.338 | 1.57E-06 | CD4_CAMK4_UCBMC |
| DDX6               | 4.56E-11 | 0.2023961  | 0.736 | 0.667 | 1.61E-06 | CD4_CAMK4_UCBMC |
| SF3B1              | 5.14E-11 | 0.19445035 | 0.772 | 0.709 | 1.82E-06 | CD4_CAMK4_UCBMC |
| PPM1D              | 5.46E-11 | 0.37643068 | 0.33  | 0.254 | 1.93E-06 | CD4_CAMK4_UCBMC |
| QRICH1             | 5.59E-11 | 0.29374749 | 0.558 | 0.484 | 1.98E-06 | CD4_CAMK4_UCBMC |
| INTS9              | 5.82E-11 | 0.43488772 | 0.276 | 0.204 | 2.06E-06 | CD4_CAMK4_UCBMC |
| SSR2               | 6.41E-11 | 0.37758856 | 0.277 | 0.208 | 2.27E-06 | CD4_CAMK4_UCBMC |
| ITGB1              | 6.41E-11 | 0.32033025 | 0.253 | 0.185 | 2.27E-06 | CD4_CAMK4_UCBMC |
| ENSMMUG00000052477 | 6.68E-11 | 0.36345493 | 0.275 | 0.204 | 2.37E-06 | CD4_CAMK4_UCBMC |
| EIF3F              | 6.88E-11 | 0.32823691 | 0.374 | 0.302 | 2.44E-06 | CD4_CAMK4_UCBMC |
| MFF                | 6.96E-11 | 0.35454454 | 0.367 | 0.292 | 2.47E-06 | CD4_CAMK4_UCBMC |
| MON2               | 7.47E-11 | 0.20513632 | 0.582 | 0.503 | 2.65E-06 | CD4_CAMK4_UCBMC |
| PREP               | 7.50E-11 | 0.23955185 | 0.536 | 0.453 | 2.66E-06 | CD4_CAMK4_UCBMC |
| ITCH               | 7.58E-11 | 0.178551   | 0.858 | 0.785 | 2.69E-06 | CD4_CAMK4_UCBMC |
| RAB14              | 8.61E-11 | 0.28219575 | 0.419 | 0.343 | 3.05E-06 | CD4_CAMK4_UCBMC |
| PPP1R12A           | 9.35E-11 | 0.20238566 | 0.821 | 0.759 | 3.31E-06 | CD4_CAMK4_UCBMC |
| RBM39              | 9.95E-11 | 0.13141262 | 0.929 | 0.843 | 3.53E-06 | CD4_CAMK4_UCBMC |

|                    |          |            |       |       |          |                 |
|--------------------|----------|------------|-------|-------|----------|-----------------|
| PFDN1              | 1.00E-10 | 0.34506253 | 0.37  | 0.294 | 3.55E-06 | CD4_CAMK4_UCBMC |
| RAB8B              | 1.01E-10 | 0.12937632 | 0.812 | 0.727 | 3.58E-06 | CD4_CAMK4_UCBMC |
| USP15              | 1.01E-10 | 0.1407812  | 0.934 | 0.898 | 3.59E-06 | CD4_CAMK4_UCBMC |
| GABPB1             | 1.20E-10 | 0.24820679 | 0.526 | 0.442 | 4.26E-06 | CD4_CAMK4_UCBMC |
| GPSM3              | 1.29E-10 | 0.33777903 | 0.25  | 0.184 | 4.58E-06 | CD4_CAMK4_UCBMC |
| XPO7               | 1.32E-10 | 0.28375558 | 0.439 | 0.358 | 4.66E-06 | CD4_CAMK4_UCBMC |
| RCC1               | 1.42E-10 | 0.44726443 | 0.275 | 0.211 | 5.02E-06 | CD4_CAMK4_UCBMC |
| TOMM20             | 1.43E-10 | 0.26353921 | 0.533 | 0.465 | 5.07E-06 | CD4_CAMK4_UCBMC |
| HSPE1              | 1.45E-10 | 0.21594798 | 0.572 | 0.489 | 5.15E-06 | CD4_CAMK4_UCBMC |
| NCBP1              | 1.45E-10 | 0.35081161 | 0.32  | 0.248 | 5.15E-06 | CD4_CAMK4_UCBMC |
| SLIRP              | 1.48E-10 | 0.3239155  | 0.317 | 0.246 | 5.25E-06 | CD4_CAMK4_UCBMC |
| YTHDF3             | 1.57E-10 | 0.24828042 | 0.578 | 0.499 | 5.56E-06 | CD4_CAMK4_UCBMC |
| MFSD14B            | 1.60E-10 | 0.33594673 | 0.366 | 0.291 | 5.66E-06 | CD4_CAMK4_UCBMC |
| GTPBP4             | 1.63E-10 | 0.43437998 | 0.261 | 0.194 | 5.78E-06 | CD4_CAMK4_UCBMC |
| ATG12              | 1.90E-10 | 0.35433473 | 0.292 | 0.221 | 6.72E-06 | CD4_CAMK4_UCBMC |
| RTRAF              | 1.92E-10 | 0.34012445 | 0.357 | 0.288 | 6.80E-06 | CD4_CAMK4_UCBMC |
| UBE2E3             | 1.98E-10 | 0.19695522 | 0.43  | 0.342 | 7.03E-06 | CD4_CAMK4_UCBMC |
| DCAF10             | 2.08E-10 | 0.29708374 | 0.366 | 0.292 | 7.36E-06 | CD4_CAMK4_UCBMC |
| CTNNB1             | 2.36E-10 | 0.17733722 | 0.769 | 0.686 | 8.35E-06 | CD4_CAMK4_UCBMC |
| SEPTIN7            | 2.48E-10 | 0.15430306 | 0.83  | 0.763 | 8.79E-06 | CD4_CAMK4_UCBMC |
| BTF3L4             | 2.60E-10 | 0.28754638 | 0.461 | 0.39  | 9.21E-06 | CD4_CAMK4_UCBMC |
| MYO5A              | 2.63E-10 | 0.24733587 | 0.443 | 0.358 | 9.31E-06 | CD4_CAMK4_UCBMC |
| MTMR3              | 2.78E-10 | 0.22950254 | 0.538 | 0.454 | 9.86E-06 | CD4_CAMK4_UCBMC |
| ZNF827             | 2.81E-10 | 0.18876601 | 0.729 | 0.646 | 9.96E-06 | CD4_CAMK4_UCBMC |
| ENSMMUG00000056331 | 2.96E-10 | 0.12682047 | 0.465 | 0.368 | 1.05E-05 | CD4_CAMK4_UCBMC |
| GNA13              | 3.01E-10 | 0.24089826 | 0.454 | 0.375 | 1.07E-05 | CD4_CAMK4_UCBMC |
| MED13              | 3.01E-10 | 0.22477748 | 0.609 | 0.532 | 1.07E-05 | CD4_CAMK4_UCBMC |
| PSEN1              | 3.02E-10 | 0.24737696 | 0.482 | 0.399 | 1.07E-05 | CD4_CAMK4_UCBMC |
| AP2A2              | 3.32E-10 | 0.28591061 | 0.436 | 0.363 | 1.18E-05 | CD4_CAMK4_UCBMC |
| ATP5MC2            | 3.35E-10 | 0.28159933 | 0.293 | 0.222 | 1.19E-05 | CD4_CAMK4_UCBMC |
| ENSMMUG00000051392 | 3.39E-10 | 0.32610471 | 0.297 | 0.229 | 1.20E-05 | CD4_CAMK4_UCBMC |
| RSRC2              | 3.63E-10 | 0.20996601 | 0.647 | 0.574 | 1.28E-05 | CD4_CAMK4_UCBMC |
| CAPZA2             | 4.18E-10 | 0.22514349 | 0.622 | 0.546 | 1.48E-05 | CD4_CAMK4_UCBMC |

|                    |          |            |       |       |          |                 |
|--------------------|----------|------------|-------|-------|----------|-----------------|
| AHCTF1             | 4.34E-10 | 0.21656707 | 0.612 | 0.536 | 1.54E-05 | CD4_CAMK4_UCBMC |
| HERC6              | 5.12E-10 | 0.38084342 | 0.337 | 0.268 | 1.81E-05 | CD4_CAMK4_UCBMC |
| FMC1-LUC7L2        | 5.20E-10 | 0.17525356 | 0.749 | 0.672 | 1.84E-05 | CD4_CAMK4_UCBMC |
| TMEM183A           | 5.68E-10 | 0.41843582 | 0.302 | 0.238 | 2.01E-05 | CD4_CAMK4_UCBMC |
| LMBR1              | 5.71E-10 | 0.1653893  | 0.66  | 0.57  | 2.02E-05 | CD4_CAMK4_UCBMC |
| ARFGAP3            | 5.73E-10 | 0.21615292 | 0.586 | 0.508 | 2.03E-05 | CD4_CAMK4_UCBMC |
| SEC22A             | 5.89E-10 | 0.23162454 | 0.327 | 0.25  | 2.09E-05 | CD4_CAMK4_UCBMC |
| ADSL               | 6.10E-10 | 0.23267055 | 0.314 | 0.243 | 2.16E-05 | CD4_CAMK4_UCBMC |
| HNRNPA3            | 6.66E-10 | 0.20078165 | 0.662 | 0.6   | 2.36E-05 | CD4_CAMK4_UCBMC |
| KDM7A              | 6.82E-10 | 0.25309013 | 0.534 | 0.462 | 2.41E-05 | CD4_CAMK4_UCBMC |
| TMEM131            | 7.06E-10 | 0.21446009 | 0.722 | 0.657 | 2.50E-05 | CD4_CAMK4_UCBMC |
| INTS8              | 7.20E-10 | 0.38678187 | 0.299 | 0.232 | 2.55E-05 | CD4_CAMK4_UCBMC |
| NCK1               | 7.62E-10 | 0.28309455 | 0.483 | 0.403 | 2.70E-05 | CD4_CAMK4_UCBMC |
| RNF10              | 8.26E-10 | 0.29970225 | 0.435 | 0.364 | 2.93E-05 | CD4_CAMK4_UCBMC |
| ENSMMUG00000065089 | 8.39E-10 | 0.30009645 | 0.335 | 0.265 | 2.97E-05 | CD4_CAMK4_UCBMC |
| BMPR2              | 8.56E-10 | 0.29615451 | 0.284 | 0.213 | 3.03E-05 | CD4_CAMK4_UCBMC |
| TMOD3              | 9.49E-10 | 0.2338771  | 0.468 | 0.392 | 3.36E-05 | CD4_CAMK4_UCBMC |
| FBXO28             | 9.61E-10 | 0.30445828 | 0.349 | 0.276 | 3.41E-05 | CD4_CAMK4_UCBMC |
| IKZF5              | 9.72E-10 | 0.44180206 | 0.285 | 0.222 | 3.44E-05 | CD4_CAMK4_UCBMC |
| DYNC1LI2           | 1.06E-09 | 0.29410905 | 0.31  | 0.239 | 3.77E-05 | CD4_CAMK4_UCBMC |
| SNX9               | 1.09E-09 | 0.25668306 | 0.439 | 0.362 | 3.87E-05 | CD4_CAMK4_UCBMC |
| FAXDC2             | 1.11E-09 | 0.39950197 | 0.265 | 0.2   | 3.95E-05 | CD4_CAMK4_UCBMC |
| ZRANB2             | 1.17E-09 | 0.27581666 | 0.58  | 0.507 | 4.14E-05 | CD4_CAMK4_UCBMC |
| MEF2A              | 1.22E-09 | 0.22038012 | 0.605 | 0.527 | 4.34E-05 | CD4_CAMK4_UCBMC |
| TRPC4AP            | 1.24E-09 | 0.2318128  | 0.483 | 0.407 | 4.38E-05 | CD4_CAMK4_UCBMC |
| VRK1               | 1.28E-09 | 0.30505211 | 0.409 | 0.336 | 4.54E-05 | CD4_CAMK4_UCBMC |
| DDX46              | 1.31E-09 | 0.24156797 | 0.469 | 0.398 | 4.66E-05 | CD4_CAMK4_UCBMC |
| TM9SF2             | 1.32E-09 | 0.2375749  | 0.473 | 0.397 | 4.68E-05 | CD4_CAMK4_UCBMC |
| GNG5               | 1.40E-09 | 0.23929954 | 0.263 | 0.195 | 4.96E-05 | CD4_CAMK4_UCBMC |
| PHF8               | 1.49E-09 | 0.33252365 | 0.329 | 0.262 | 5.30E-05 | CD4_CAMK4_UCBMC |
| CFL1               | 1.52E-09 | 0.24973498 | 0.424 | 0.358 | 5.38E-05 | CD4_CAMK4_UCBMC |
| PPIB               | 1.57E-09 | 0.25360628 | 0.323 | 0.256 | 5.56E-05 | CD4_CAMK4_UCBMC |
| CCNT2              | 1.68E-09 | 0.23856978 | 0.576 | 0.509 | 5.95E-05 | CD4_CAMK4_UCBMC |

|                    |          |            |       |       |            |                 |
|--------------------|----------|------------|-------|-------|------------|-----------------|
| CHCHD2             | 1.69E-09 | 0.25820968 | 0.338 | 0.273 | 5.98E-05   | CD4_CAMK4_UCBMC |
| POLR1D             | 1.74E-09 | 0.29335838 | 0.254 | 0.19  | 6.15E-05   | CD4_CAMK4_UCBMC |
| C11H12orf57        | 1.77E-09 | 0.27750812 | 0.272 | 0.207 | 6.28E-05   | CD4_CAMK4_UCBMC |
| EIF4B              | 1.84E-09 | 0.26423742 | 0.493 | 0.422 | 6.50E-05   | CD4_CAMK4_UCBMC |
| DHX8               | 1.88E-09 | 0.33768218 | 0.306 | 0.239 | 6.65E-05   | CD4_CAMK4_UCBMC |
| BIRC6              | 1.90E-09 | 0.14064142 | 0.93  | 0.88  | 6.74E-05   | CD4_CAMK4_UCBMC |
| DNTTIP2            | 1.95E-09 | 0.38155525 | 0.304 | 0.238 | 6.90E-05   | CD4_CAMK4_UCBMC |
| WARS2              | 1.99E-09 | 0.32227093 | 0.332 | 0.263 | 7.05E-05   | CD4_CAMK4_UCBMC |
| NUCKS1             | 2.11E-09 | 0.28101192 | 0.405 | 0.336 | 7.47E-05   | CD4_CAMK4_UCBMC |
| MRI1               | 2.12E-09 | 0.23639318 | 0.323 | 0.253 | 7.52E-05   | CD4_CAMK4_UCBMC |
| MIA3               | 2.21E-09 | 0.3537743  | 0.257 | 0.194 | 7.82E-05   | CD4_CAMK4_UCBMC |
| TAF2               | 2.47E-09 | 0.30409844 | 0.386 | 0.316 | 8.73E-05   | CD4_CAMK4_UCBMC |
| MAPKAPK2           | 2.54E-09 | 0.31237622 | 0.328 | 0.261 | 8.99E-05   | CD4_CAMK4_UCBMC |
| UBR4               | 2.57E-09 | 0.25962087 | 0.541 | 0.474 | 9.10E-05   | CD4_CAMK4_UCBMC |
| CPSF7              | 2.59E-09 | 0.37145954 | 0.289 | 0.223 | 9.19E-05   | CD4_CAMK4_UCBMC |
| MBD3               | 2.73E-09 | 0.17307353 | 0.302 | 0.236 | 9.68E-05   | CD4_CAMK4_UCBMC |
| ERH                | 2.85E-09 | 0.31114164 | 0.291 | 0.226 | 0.00010098 | CD4_CAMK4_UCBMC |
| SLC4A7             | 2.97E-09 | 0.17170209 | 0.581 | 0.494 | 0.00010518 | CD4_CAMK4_UCBMC |
| UBE4A              | 3.03E-09 | 0.31199056 | 0.381 | 0.311 | 0.00010718 | CD4_CAMK4_UCBMC |
| ENSMMUG00000002320 | 3.20E-09 | 0.27453029 | 0.563 | 0.53  | 0.00011351 | CD4_CAMK4_UCBMC |
| PCBP1              | 3.20E-09 | 0.2729699  | 0.3   | 0.233 | 0.00011356 | CD4_CAMK4_UCBMC |
| LSM12              | 3.57E-09 | 0.40739763 | 0.318 | 0.255 | 0.00012643 | CD4_CAMK4_UCBMC |
| UBE2B              | 3.81E-09 | 0.20513392 | 0.624 | 0.55  | 0.00013502 | CD4_CAMK4_UCBMC |
| RBM17              | 3.85E-09 | 0.26247252 | 0.447 | 0.377 | 0.00013638 | CD4_CAMK4_UCBMC |
| SLC39A9            | 4.08E-09 | 0.42229477 | 0.273 | 0.212 | 0.00014444 | CD4_CAMK4_UCBMC |
| SEC31A             | 4.71E-09 | 0.20283729 | 0.674 | 0.613 | 0.00016701 | CD4_CAMK4_UCBMC |
| TRAPPC10           | 4.85E-09 | 0.23524977 | 0.615 | 0.553 | 0.00017186 | CD4_CAMK4_UCBMC |
| WDR20              | 4.88E-09 | 0.25572455 | 0.405 | 0.332 | 0.00017288 | CD4_CAMK4_UCBMC |
| SCAPER             | 4.94E-09 | 0.17837045 | 0.781 | 0.725 | 0.00017506 | CD4_CAMK4_UCBMC |
| PELI2              | 4.95E-09 | 0.14095271 | 0.328 | 0.25  | 0.00017536 | CD4_CAMK4_UCBMC |
| FNBP4              | 5.10E-09 | 0.20089546 | 0.59  | 0.516 | 0.00018082 | CD4_CAMK4_UCBMC |
| RBM25              | 5.16E-09 | 0.19679036 | 0.636 | 0.57  | 0.00018299 | CD4_CAMK4_UCBMC |
| GCC2               | 5.20E-09 | 0.17352459 | 0.445 | 0.373 | 0.00018439 | CD4_CAMK4_UCBMC |



|          |          |            |       |       |            |                 |
|----------|----------|------------|-------|-------|------------|-----------------|
| RTN4     | 5.41E-09 | 0.23853513 | 0.478 | 0.401 | 0.0001917  | CD4_CAMK4_UCBMC |
| ARHGEF3  | 5.51E-09 | 0.1523832  | 0.71  | 0.625 | 0.00019534 | CD4_CAMK4_UCBMC |
| SMARCC2  | 5.81E-09 | 0.40217897 | 0.275 | 0.214 | 0.00020571 | CD4_CAMK4_UCBMC |
| BTAF1    | 5.95E-09 | 0.18452035 | 0.693 | 0.623 | 0.00021074 | CD4_CAMK4_UCBMC |
| TDG      | 6.30E-09 | 0.27436431 | 0.356 | 0.291 | 0.00022327 | CD4_CAMK4_UCBMC |
| PXK      | 6.32E-09 | 0.24769605 | 0.395 | 0.323 | 0.00022382 | CD4_CAMK4_UCBMC |
| GMPS     | 6.71E-09 | 0.30084969 | 0.321 | 0.257 | 0.00023792 | CD4_CAMK4_UCBMC |
| ELOB     | 7.55E-09 | 0.11081316 | 0.316 | 0.246 | 0.00026759 | CD4_CAMK4_UCBMC |
| ARNTL    | 7.63E-09 | 0.35258484 | 0.318 | 0.253 | 0.00027051 | CD4_CAMK4_UCBMC |
| SMARCB1  | 7.65E-09 | 0.26785699 | 0.26  | 0.198 | 0.00027095 | CD4_CAMK4_UCBMC |
| FAM168B  | 7.77E-09 | 0.31075951 | 0.427 | 0.362 | 0.00027529 | CD4_CAMK4_UCBMC |
| TBC1D24  | 7.89E-09 | 0.21633238 | 0.318 | 0.252 | 0.00027968 | CD4_CAMK4_UCBMC |
| GTF3C1   | 8.55E-09 | 0.3162793  | 0.305 | 0.243 | 0.00030286 | CD4_CAMK4_UCBMC |
| LDHB     | 8.56E-09 | 0.29765044 | 0.282 | 0.219 | 0.00030322 | CD4_CAMK4_UCBMC |
| TMEM245  | 8.73E-09 | 0.22878249 | 0.489 | 0.415 | 0.0003094  | CD4_CAMK4_UCBMC |
| BUD23    | 9.09E-09 | 0.37074607 | 0.285 | 0.225 | 0.00032218 | CD4_CAMK4_UCBMC |
| MOB2     | 9.91E-09 | 0.26489166 | 0.554 | 0.488 | 0.00035096 | CD4_CAMK4_UCBMC |
| PITPNB   | 1.03E-08 | 0.21056979 | 0.523 | 0.449 | 0.00036343 | CD4_CAMK4_UCBMC |
| EEF1G    | 1.03E-08 | 0.20233112 | 0.497 | 0.442 | 0.00036396 | CD4_CAMK4_UCBMC |
| PTPN2    | 1.06E-08 | 0.21360345 | 0.552 | 0.481 | 0.00037424 | CD4_CAMK4_UCBMC |
| TRIM37   | 1.06E-08 | 0.2293922  | 0.283 | 0.218 | 0.0003744  | CD4_CAMK4_UCBMC |
| RBM15    | 1.09E-08 | 0.38595851 | 0.272 | 0.213 | 0.00038646 | CD4_CAMK4_UCBMC |
| HDAC2    | 1.19E-08 | 0.27933222 | 0.365 | 0.302 | 0.00042291 | CD4_CAMK4_UCBMC |
| CD247    | 1.21E-08 | 0.10735649 | 0.929 | 0.867 | 0.0004303  | CD4_CAMK4_UCBMC |
| AFTPH    | 1.28E-08 | 0.24755188 | 0.531 | 0.468 | 0.00045479 | CD4_CAMK4_UCBMC |
| TNIP1    | 1.33E-08 | 0.35429195 | 0.267 | 0.205 | 0.00047187 | CD4_CAMK4_UCBMC |
| SSR4     | 1.36E-08 | 0.26725647 | 0.302 | 0.239 | 0.00048206 | CD4_CAMK4_UCBMC |
| MDM2     | 1.38E-08 | 0.38843335 | 0.298 | 0.235 | 0.00049022 | CD4_CAMK4_UCBMC |
| NR1D2    | 1.46E-08 | 0.3248594  | 0.341 | 0.276 | 0.00051902 | CD4_CAMK4_UCBMC |
| POLR3E   | 1.47E-08 | 0.24195967 | 0.295 | 0.232 | 0.00052085 | CD4_CAMK4_UCBMC |
| ATXN7L3B | 1.70E-08 | 0.37698703 | 0.254 | 0.194 | 0.00060135 | CD4_CAMK4_UCBMC |
| GRAP     | 1.87E-08 | 0.32403219 | 0.43  | 0.371 | 0.0006637  | CD4_CAMK4_UCBMC |
| PTPRA    | 1.99E-08 | 0.1697171  | 0.745 | 0.669 | 0.00070396 | CD4_CAMK4_UCBMC |

|         |          |            |       |       |            |                 |
|---------|----------|------------|-------|-------|------------|-----------------|
| AATF    | 2.07E-08 | 0.28292162 | 0.421 | 0.356 | 0.00073346 | CD4_CAMK4_UCBMC |
| SREBF2  | 2.39E-08 | 0.21443626 | 0.414 | 0.345 | 0.00084589 | CD4_CAMK4_UCBMC |
| COX7B   | 2.39E-08 | 0.3186101  | 0.269 | 0.209 | 0.00084629 | CD4_CAMK4_UCBMC |
| ATP2C1  | 2.40E-08 | 0.20167776 | 0.493 | 0.421 | 0.00084937 | CD4_CAMK4_UCBMC |
| SP100   | 2.46E-08 | 0.1832699  | 0.621 | 0.559 | 0.00087263 | CD4_CAMK4_UCBMC |
| EIF3D   | 2.55E-08 | 0.25800517 | 0.347 | 0.283 | 0.00090282 | CD4_CAMK4_UCBMC |
| BTF3    | 2.75E-08 | 0.31150998 | 0.434 | 0.384 | 0.00097529 | CD4_CAMK4_UCBMC |
| SPCS2   | 2.75E-08 | 0.36924167 | 0.25  | 0.194 | 0.00097609 | CD4_CAMK4_UCBMC |
| PPIG    | 2.77E-08 | 0.19267555 | 0.621 | 0.546 | 0.00098217 | CD4_CAMK4_UCBMC |
| GSTP1   | 3.13E-08 | 0.24728019 | 0.262 | 0.204 | 0.00111057 | CD4_CAMK4_UCBMC |
| DNAJC3  | 3.39E-08 | 0.15311519 | 0.619 | 0.546 | 0.00120089 | CD4_CAMK4_UCBMC |
| ZC3H18  | 3.84E-08 | 0.18722364 | 0.46  | 0.394 | 0.00136125 | CD4_CAMK4_UCBMC |
| ACSL1   | 3.89E-08 | 0.27184602 | 0.294 | 0.234 | 0.00138004 | CD4_CAMK4_UCBMC |
| CPSF6   | 4.01E-08 | 0.22411882 | 0.583 | 0.526 | 0.00141944 | CD4_CAMK4_UCBMC |
| MFSD8   | 4.02E-08 | 0.37582122 | 0.25  | 0.194 | 0.00142406 | CD4_CAMK4_UCBMC |
| TENT4B  | 4.21E-08 | 0.27077462 | 0.376 | 0.309 | 0.00149067 | CD4_CAMK4_UCBMC |
| SNRPD3  | 4.22E-08 | 0.20191273 | 0.253 | 0.194 | 0.00149467 | CD4_CAMK4_UCBMC |
| EIF3H   | 4.43E-08 | 0.15404822 | 0.657 | 0.597 | 0.00157009 | CD4_CAMK4_UCBMC |
| HSD17B4 | 4.45E-08 | 0.17354216 | 0.69  | 0.611 | 0.00157833 | CD4_CAMK4_UCBMC |
| PRKD3   | 4.61E-08 | 0.11361297 | 0.599 | 0.518 | 0.00163464 | CD4_CAMK4_UCBMC |
| DDOST   | 4.69E-08 | 0.35384643 | 0.266 | 0.208 | 0.00166328 | CD4_CAMK4_UCBMC |
| FBXL4   | 4.77E-08 | 0.22827512 | 0.361 | 0.296 | 0.00168895 | CD4_CAMK4_UCBMC |
| RPN1    | 4.88E-08 | 0.36660678 | 0.267 | 0.209 | 0.00172891 | CD4_CAMK4_UCBMC |
| TRIM33  | 4.92E-08 | 0.15906054 | 0.682 | 0.608 | 0.00174376 | CD4_CAMK4_UCBMC |
| GAN     | 5.01E-08 | 0.30897232 | 0.254 | 0.197 | 0.00177377 | CD4_CAMK4_UCBMC |
| KLF12   | 5.07E-08 | 0.13139098 | 0.962 | 0.923 | 0.00179767 | CD4_CAMK4_UCBMC |
| LMBR1L  | 5.62E-08 | 0.25260582 | 0.283 | 0.224 | 0.00199255 | CD4_CAMK4_UCBMC |
| CREBBP  | 5.82E-08 | 0.16107882 | 0.827 | 0.77  | 0.00206223 | CD4_CAMK4_UCBMC |
| UPF1    | 6.05E-08 | 0.46475843 | 0.287 | 0.233 | 0.0021445  | CD4_CAMK4_UCBMC |
| MAPRE1  | 6.14E-08 | 0.23780437 | 0.488 | 0.425 | 0.00217592 | CD4_CAMK4_UCBMC |
| PRIM2   | 6.48E-08 | 0.22601248 | 0.412 | 0.338 | 0.0022955  | CD4_CAMK4_UCBMC |
| ARAP2   | 6.66E-08 | 0.17438166 | 0.373 | 0.303 | 0.00236044 | CD4_CAMK4_UCBMC |
| CSNK1D  | 6.73E-08 | 0.37073032 | 0.337 | 0.281 | 0.00238318 | CD4_CAMK4_UCBMC |

|                    |          |            |       |       |            |                 |
|--------------------|----------|------------|-------|-------|------------|-----------------|
| KDM5C              | 6.88E-08 | 0.39755079 | 0.276 | 0.223 | 0.00243795 | CD4_CAMK4_UCBMC |
| BNIP3L             | 7.32E-08 | 0.20314296 | 0.509 | 0.442 | 0.00259237 | CD4_CAMK4_UCBMC |
| RASA3              | 7.43E-08 | 0.22044509 | 0.536 | 0.47  | 0.00263372 | CD4_CAMK4_UCBMC |
| ZNF438             | 7.50E-08 | 0.23081578 | 0.342 | 0.275 | 0.00265847 | CD4_CAMK4_UCBMC |
| ERO1B              | 7.51E-08 | 0.17197484 | 0.647 | 0.577 | 0.00265993 | CD4_CAMK4_UCBMC |
| FAF2               | 9.19E-08 | 0.37745305 | 0.261 | 0.206 | 0.00325589 | CD4_CAMK4_UCBMC |
| TMEM248            | 9.53E-08 | 0.32932947 | 0.315 | 0.257 | 0.003378   | CD4_CAMK4_UCBMC |
| NDUFB2             | 1.08E-07 | 0.21648986 | 0.354 | 0.294 | 0.00381543 | CD4_CAMK4_UCBMC |
| TOR1AIP1           | 1.08E-07 | 0.3290294  | 0.324 | 0.267 | 0.00383645 | CD4_CAMK4_UCBMC |
| SLC44A2            | 1.11E-07 | 0.17936877 | 0.475 | 0.409 | 0.00393925 | CD4_CAMK4_UCBMC |
| TM9SF4             | 1.11E-07 | 0.23491082 | 0.334 | 0.273 | 0.00394953 | CD4_CAMK4_UCBMC |
| SF3B6              | 1.12E-07 | 0.30432425 | 0.287 | 0.228 | 0.00398069 | CD4_CAMK4_UCBMC |
| ENSMMUG00000030408 | 1.14E-07 | 0.1258901  | 0.273 | 0.212 | 0.00402391 | CD4_CAMK4_UCBMC |
| PDCD4              | 1.17E-07 | 0.19074086 | 0.514 | 0.448 | 0.00413593 | CD4_CAMK4_UCBMC |
| ENSMMUG00000028699 | 1.21E-07 | 0.11168713 | 0.55  | 0.476 | 0.00428626 | CD4_CAMK4_UCBMC |
| RBPJ               | 1.21E-07 | 0.17120043 | 0.555 | 0.485 | 0.00430389 | CD4_CAMK4_UCBMC |
| MPZL1              | 1.38E-07 | 0.12921133 | 0.585 | 0.506 | 0.00487683 | CD4_CAMK4_UCBMC |
| NDUFA10            | 1.40E-07 | 0.31015494 | 0.297 | 0.239 | 0.00496607 | CD4_CAMK4_UCBMC |
| SMC1A              | 1.46E-07 | 0.28980632 | 0.303 | 0.246 | 0.0051778  | CD4_CAMK4_UCBMC |
| VPS36              | 1.51E-07 | 0.28042216 | 0.274 | 0.216 | 0.00533397 | CD4_CAMK4_UCBMC |
| HBS1L              | 1.60E-07 | 0.14624273 | 0.665 | 0.594 | 0.00565685 | CD4_CAMK4_UCBMC |
| WDR44              | 1.74E-07 | 0.14615796 | 0.375 | 0.305 | 0.00616064 | CD4_CAMK4_UCBMC |
| RLIM               | 1.87E-07 | 0.28625557 | 0.364 | 0.304 | 0.00660865 | CD4_CAMK4_UCBMC |
| CLSTN1             | 2.15E-07 | 0.19505984 | 0.441 | 0.376 | 0.00762062 | CD4_CAMK4_UCBMC |
| CNBP               | 2.21E-07 | 0.22556575 | 0.458 | 0.398 | 0.00781806 | CD4_CAMK4_UCBMC |
| CLK4               | 2.28E-07 | 0.30196462 | 0.336 | 0.282 | 0.00806804 | CD4_CAMK4_UCBMC |
| SUMO1              | 2.30E-07 | 0.14835365 | 0.464 | 0.397 | 0.00813387 | CD4_CAMK4_UCBMC |
| STAM               | 2.33E-07 | 0.25755864 | 0.299 | 0.241 | 0.00826466 | CD4_CAMK4_UCBMC |
| EIF4H              | 2.39E-07 | 0.23346378 | 0.467 | 0.407 | 0.0084651  | CD4_CAMK4_UCBMC |
| PRPF6              | 2.63E-07 | 0.32354429 | 0.326 | 0.272 | 0.00932184 | CD4_CAMK4_UCBMC |
| SOD1               | 2.80E-07 | 0.21023677 | 0.25  | 0.197 | 0.00993082 | CD4_CAMK4_UCBMC |
| AP3S1              | 2.89E-07 | 0.2630307  | 0.288 | 0.229 | 0.01022494 | CD4_CAMK4_UCBMC |
| PARP12             | 3.16E-07 | 0.29003322 | 0.278 | 0.224 | 0.01119847 | CD4_CAMK4_UCBMC |

|                    |          |            |       |       |            |                 |
|--------------------|----------|------------|-------|-------|------------|-----------------|
| FUBP1              | 3.31E-07 | 0.13807253 | 0.726 | 0.643 | 0.01174556 | CD4_CAMK4_UCBMC |
| AP3B1              | 3.54E-07 | 0.17647887 | 0.708 | 0.642 | 0.01255526 | CD4_CAMK4_UCBMC |
| FOXP1              | 4.16E-07 | 0.14127981 | 0.922 | 0.872 | 0.01473825 | CD4_CAMK4_UCBMC |
| VPS26A             | 4.40E-07 | 0.23132773 | 0.345 | 0.285 | 0.01559237 | CD4_CAMK4_UCBMC |
| RBBP7              | 4.76E-07 | 0.28616792 | 0.259 | 0.205 | 0.01686252 | CD4_CAMK4_UCBMC |
| ANKH               | 4.76E-07 | 0.14473869 | 0.623 | 0.554 | 0.01687596 | CD4_CAMK4_UCBMC |
| ATP6V0D1           | 5.09E-07 | 0.28031527 | 0.362 | 0.307 | 0.01804844 | CD4_CAMK4_UCBMC |
| RHOA               | 5.74E-07 | 0.16581508 | 0.676 | 0.606 | 0.02034336 | CD4_CAMK4_UCBMC |
| UBA6               | 5.76E-07 | 0.32987795 | 0.297 | 0.243 | 0.02040769 | CD4_CAMK4_UCBMC |
| HP1BP3             | 5.76E-07 | 0.19348628 | 0.528 | 0.467 | 0.02041409 | CD4_CAMK4_UCBMC |
| WBP11              | 5.80E-07 | 0.24655285 | 0.37  | 0.31  | 0.02055349 | CD4_CAMK4_UCBMC |
| DDX18              | 6.58E-07 | 0.24411926 | 0.393 | 0.337 | 0.02330909 | CD4_CAMK4_UCBMC |
| PSMD13             | 7.02E-07 | 0.26743052 | 0.276 | 0.222 | 0.02488504 | CD4_CAMK4_UCBMC |
| GPR89A             | 7.04E-07 | 0.18853259 | 0.38  | 0.315 | 0.024931   | CD4_CAMK4_UCBMC |
| INPP4B             | 7.34E-07 | 0.12799258 | 0.662 | 0.592 | 0.02600921 | CD4_CAMK4_UCBMC |
| PHF12              | 7.94E-07 | 0.22171367 | 0.309 | 0.251 | 0.02811581 | CD4_CAMK4_UCBMC |
| COG5               | 7.96E-07 | 0.12052337 | 0.862 | 0.817 | 0.02821006 | CD4_CAMK4_UCBMC |
| EEFSEC             | 7.97E-07 | 0.19927796 | 0.317 | 0.259 | 0.02822544 | CD4_CAMK4_UCBMC |
| SPTLC1             | 8.15E-07 | 0.29521427 | 0.318 | 0.264 | 0.02887334 | CD4_CAMK4_UCBMC |
| SPCS3              | 8.71E-07 | 0.25668981 | 0.311 | 0.257 | 0.03085707 | CD4_CAMK4_UCBMC |
| CHD7               | 8.86E-07 | 0.11481542 | 0.764 | 0.686 | 0.03137615 | CD4_CAMK4_UCBMC |
| BOD1L1             | 9.22E-07 | 0.22405001 | 0.409 | 0.352 | 0.03268556 | CD4_CAMK4_UCBMC |
| RPAP2              | 9.32E-07 | 0.24248984 | 0.322 | 0.264 | 0.03301156 | CD4_CAMK4_UCBMC |
| NDUFS4             | 9.51E-07 | 0.2225417  | 0.422 | 0.359 | 0.03369621 | CD4_CAMK4_UCBMC |
| NFKBIB             | 9.80E-07 | 0.2984872  | 0.25  | 0.199 | 0.03473784 | CD4_CAMK4_UCBMC |
| ENSMMUG00000051300 | 9.89E-07 | 0.29329912 | 0.914 | 0.852 | 0.0350532  | CD4_CAMK4_UCBMC |
| ITM2B              | 9.92E-07 | 0.11464214 | 0.738 | 0.66  | 0.03514433 | CD4_CAMK4_UCBMC |
| MED21              | 1.01E-06 | 0.23212191 | 0.321 | 0.266 | 0.03585306 | CD4_CAMK4_UCBMC |
| UCHL3              | 1.03E-06 | 0.31006501 | 0.254 | 0.202 | 0.03633339 | CD4_CAMK4_UCBMC |
| UBASH3B            | 1.07E-06 | 0.18123407 | 0.512 | 0.44  | 0.03790379 | CD4_CAMK4_UCBMC |
| CHP1               | 1.09E-06 | 0.30341469 | 0.253 | 0.204 | 0.03862079 | CD4_CAMK4_UCBMC |
| NOP14              | 1.14E-06 | 0.2648831  | 0.253 | 0.199 | 0.04055382 | CD4_CAMK4_UCBMC |
| CCNK               | 1.17E-06 | 0.20291652 | 0.522 | 0.455 | 0.04154966 | CD4_CAMK4_UCBMC |

|                     |          |            |       |       |            |                 |
|---------------------|----------|------------|-------|-------|------------|-----------------|
| DOP1A               | 1.32E-06 | 0.18036787 | 0.345 | 0.286 | 0.04690807 | CD4_CAMK4_UCBMC |
| ECPAS               | 1.33E-06 | 0.23534307 | 0.382 | 0.322 | 0.04699952 | CD4_CAMK4_UCBMC |
| RNF125              | 1.34E-06 | 0.15761118 | 0.398 | 0.333 | 0.04731252 | CD4_CAMK4_UCBMC |
| ENSMMUG00000003130  | 1.36E-06 | 0.27908903 | 0.325 | 0.269 | 0.0481759  | CD4_CAMK4_UCBMC |
| ZFYVE9              | 1.42E-06 | 0.21689873 | 0.259 | 0.205 | 0.05014503 | CD4_CAMK4_UCBMC |
| ZNF160              | 1.44E-06 | 0.27189341 | 0.305 | 0.253 | 0.05101885 | CD4_CAMK4_UCBMC |
| KLHL28              | 1.47E-06 | 0.15600925 | 0.47  | 0.409 | 0.05202909 | CD4_CAMK4_UCBMC |
| LONP2               | 1.60E-06 | 0.15995003 | 0.625 | 0.556 | 0.05684981 | CD4_CAMK4_UCBMC |
| SUCLG1              | 1.63E-06 | 0.20051696 | 0.32  | 0.265 | 0.05770996 | CD4_CAMK4_UCBMC |
| MARCHF8             | 1.70E-06 | 0.18427461 | 0.258 | 0.204 | 0.06020827 | CD4_CAMK4_UCBMC |
| DDX24               | 1.72E-06 | 0.16794557 | 0.498 | 0.437 | 0.06107109 | CD4_CAMK4_UCBMC |
| FXR1                | 1.82E-06 | 0.16096939 | 0.587 | 0.522 | 0.06463841 | CD4_CAMK4_UCBMC |
| TRRAP               | 1.85E-06 | 0.28417905 | 0.407 | 0.355 | 0.065577   | CD4_CAMK4_UCBMC |
| SERBP1              | 1.88E-06 | 0.15542121 | 0.467 | 0.409 | 0.06658932 | CD4_CAMK4_UCBMC |
| AFF4                | 2.16E-06 | 0.16119831 | 0.485 | 0.422 | 0.07635737 | CD4_CAMK4_UCBMC |
| NIPBL               | 2.27E-06 | 0.13880259 | 0.749 | 0.701 | 0.08046586 | CD4_CAMK4_UCBMC |
| GLRX3               | 2.30E-06 | 0.28689551 | 0.294 | 0.242 | 0.08159284 | CD4_CAMK4_UCBMC |
| GTF3C2              | 2.39E-06 | 0.31264521 | 0.261 | 0.211 | 0.08456138 | CD4_CAMK4_UCBMC |
| CDC27               | 2.49E-06 | 0.1507002  | 0.466 | 0.407 | 0.08831972 | CD4_CAMK4_UCBMC |
| ENSMMUG00000004545  | 2.53E-06 | 0.13119823 | 0.368 | 0.309 | 0.08977992 | CD4_CAMK4_UCBMC |
| TRIB2               | 2.55E-06 | 0.13198104 | 0.417 | 0.363 | 0.09051178 | CD4_CAMK4_UCBMC |
| ENSMMUG000000040181 | 2.75E-06 | 0.35034856 | 0.269 | 0.221 | 0.09733542 | CD4_CAMK4_UCBMC |
| NAPG                | 2.80E-06 | 0.20941351 | 0.375 | 0.316 | 0.09932894 | CD4_CAMK4_UCBMC |
| FYCO1               | 3.15E-06 | 0.40635931 | 0.267 | 0.222 | 0.11167299 | CD4_CAMK4_UCBMC |
| STK4                | 3.16E-06 | 0.12114428 | 0.806 | 0.754 | 0.11189902 | CD4_CAMK4_UCBMC |
| RSBN1               | 3.20E-06 | 0.20377169 | 0.277 | 0.225 | 0.11321951 | CD4_CAMK4_UCBMC |
| TCF25               | 3.38E-06 | 0.20338902 | 0.406 | 0.353 | 0.11991047 | CD4_CAMK4_UCBMC |
| FBXO21              | 3.51E-06 | 0.18951389 | 0.359 | 0.303 | 0.1242927  | CD4_CAMK4_UCBMC |
| SEC62               | 3.55E-06 | 0.16299059 | 0.475 | 0.419 | 0.12582427 | CD4_CAMK4_UCBMC |
| HTT                 | 3.64E-06 | 0.12375941 | 0.594 | 0.529 | 0.12901261 | CD4_CAMK4_UCBMC |
| ARHGAP12            | 3.80E-06 | 0.15777406 | 0.633 | 0.578 | 0.13446781 | CD4_CAMK4_UCBMC |
| CACUL1              | 4.01E-06 | 0.21432981 | 0.337 | 0.281 | 0.14218977 | CD4_CAMK4_UCBMC |
| ENSMMUG000000019238 | 4.08E-06 | 0.25148014 | 0.329 | 0.279 | 0.14447881 | CD4_CAMK4_UCBMC |

|         |          |            |       |       |            |                 |
|---------|----------|------------|-------|-------|------------|-----------------|
| CSNK1G3 | 4.38E-06 | 0.13212593 | 0.586 | 0.52  | 0.1551654  | CD4_CAMK4_UCBMC |
| TMEM41B | 4.48E-06 | 0.22636873 | 0.255 | 0.206 | 0.15857795 | CD4_CAMK4_UCBMC |
| DLST    | 4.52E-06 | 0.23580394 | 0.308 | 0.255 | 0.16022293 | CD4_CAMK4_UCBMC |
| ZNF420  | 4.73E-06 | 0.23039546 | 0.267 | 0.216 | 0.16749324 | CD4_CAMK4_UCBMC |
| MYL12B  | 4.98E-06 | 0.11018915 | 0.321 | 0.268 | 0.17658659 | CD4_CAMK4_UCBMC |
| SHOC2   | 5.14E-06 | 0.1348715  | 0.643 | 0.581 | 0.18218621 | CD4_CAMK4_UCBMC |
| USP47   | 5.57E-06 | 0.13888072 | 0.792 | 0.741 | 0.19750803 | CD4_CAMK4_UCBMC |
| EEF1E1  | 5.73E-06 | 0.26671029 | 0.266 | 0.217 | 0.20304943 | CD4_CAMK4_UCBMC |
| SNX6    | 5.76E-06 | 0.17066727 | 0.465 | 0.41  | 0.20398884 | CD4_CAMK4_UCBMC |
| LEMD3   | 5.76E-06 | 0.12481898 | 0.59  | 0.521 | 0.20408338 | CD4_CAMK4_UCBMC |
| ABHD12  | 5.99E-06 | 0.23821393 | 0.381 | 0.327 | 0.21221028 | CD4_CAMK4_UCBMC |
| SCP2    | 6.04E-06 | 0.14477819 | 0.344 | 0.286 | 0.21414163 | CD4_CAMK4_UCBMC |
| MDM4    | 6.13E-06 | 0.15909695 | 0.58  | 0.528 | 0.21703672 | CD4_CAMK4_UCBMC |
| SERINC3 | 6.29E-06 | 0.22387206 | 0.309 | 0.257 | 0.22286308 | CD4_CAMK4_UCBMC |
| RPRD2   | 6.58E-06 | 0.12137949 | 0.676 | 0.615 | 0.23302585 | CD4_CAMK4_UCBMC |
| KAT7    | 7.40E-06 | 0.14961429 | 0.546 | 0.483 | 0.26211315 | CD4_CAMK4_UCBMC |
| DDHD1   | 7.50E-06 | 0.24895563 | 0.331 | 0.279 | 0.2656776  | CD4_CAMK4_UCBMC |
| KDM2B   | 7.90E-06 | 0.16479325 | 0.403 | 0.345 | 0.27986662 | CD4_CAMK4_UCBMC |
| KLHL2   | 8.13E-06 | 0.22222984 | 0.453 | 0.4   | 0.28813669 | CD4_CAMK4_UCBMC |
| TRIM22  | 8.52E-06 | 0.22962583 | 0.42  | 0.37  | 0.30173691 | CD4_CAMK4_UCBMC |
| MRTFB   | 9.66E-06 | 0.15518011 | 0.474 | 0.415 | 0.34229636 | CD4_CAMK4_UCBMC |
| HSF2    | 9.70E-06 | 0.23160348 | 0.297 | 0.25  | 0.34365239 | CD4_CAMK4_UCBMC |
| FNTB    | 9.78E-06 | 0.16936208 | 0.275 | 0.223 | 0.3466013  | CD4_CAMK4_UCBMC |
| MED14   | 9.82E-06 | 0.32952221 | 0.297 | 0.249 | 0.34800265 | CD4_CAMK4_UCBMC |
| PTP4A2  | 1.02E-05 | 0.14798221 | 0.403 | 0.35  | 0.36101655 | CD4_CAMK4_UCBMC |
| CCT3    | 1.05E-05 | 0.11536917 | 0.316 | 0.263 | 0.37287275 | CD4_CAMK4_UCBMC |
| DAZAP1  | 1.09E-05 | 0.12758521 | 0.535 | 0.495 | 0.38651153 | CD4_CAMK4_UCBMC |
| KIFBP   | 1.22E-05 | 0.10187615 | 0.691 | 0.628 | 0.43168252 | CD4_CAMK4_UCBMC |
| ASB3    | 1.24E-05 | 0.19735105 | 0.409 | 0.358 | 0.43996532 | CD4_CAMK4_UCBMC |
| TNKS    | 1.25E-05 | 0.14574741 | 0.677 | 0.622 | 0.44425746 | CD4_CAMK4_UCBMC |
| KATNA1  | 1.27E-05 | 0.32212763 | 0.275 | 0.23  | 0.45003304 | CD4_CAMK4_UCBMC |
| ZNF514  | 1.29E-05 | 0.22833129 | 0.317 | 0.268 | 0.45553594 | CD4_CAMK4_UCBMC |
| SS18    | 1.33E-05 | 0.17517391 | 0.631 | 0.576 | 0.47200916 | CD4_CAMK4_UCBMC |

|          |          |            |       |       |            |                 |
|----------|----------|------------|-------|-------|------------|-----------------|
| CCDC12   | 1.34E-05 | 0.34852045 | 0.327 | 0.282 | 0.47617243 | CD4_CAMK4_UCBMC |
| ZRANB1   | 1.37E-05 | 0.18309421 | 0.412 | 0.357 | 0.48599108 | CD4_CAMK4_UCBMC |
| HECTD4   | 1.52E-05 | 0.13792958 | 0.539 | 0.472 | 0.538883   | CD4_CAMK4_UCBMC |
| SNIP1    | 1.59E-05 | 0.34541114 | 0.261 | 0.217 | 0.56406334 | CD4_CAMK4_UCBMC |
| TTC17    | 1.61E-05 | 0.12864148 | 0.656 | 0.604 | 0.57203422 | CD4_CAMK4_UCBMC |
| CLIP1    | 1.72E-05 | 0.13091741 | 0.446 | 0.385 | 0.60993728 | CD4_CAMK4_UCBMC |
| ENTPD4   | 1.75E-05 | 0.18758786 | 0.391 | 0.34  | 0.62111079 | CD4_CAMK4_UCBMC |
| METAP2   | 1.78E-05 | 0.15927826 | 0.367 | 0.314 | 0.62924984 | CD4_CAMK4_UCBMC |
| RAB3GAP2 | 1.98E-05 | 0.14729606 | 0.427 | 0.369 | 0.70031634 | CD4_CAMK4_UCBMC |
| NAA15    | 2.02E-05 | 0.13063372 | 0.547 | 0.484 | 0.71426806 | CD4_CAMK4_UCBMC |
| MAGI3    | 2.05E-05 | 0.21352151 | 0.315 | 0.264 | 0.72552474 | CD4_CAMK4_UCBMC |
| SZRD1    | 2.06E-05 | 0.21857183 | 0.388 | 0.341 | 0.72916199 | CD4_CAMK4_UCBMC |
| GGNBP2   | 2.08E-05 | 0.14363812 | 0.462 | 0.407 | 0.73619818 | CD4_CAMK4_UCBMC |
| RLF      | 2.08E-05 | 0.12697749 | 0.652 | 0.593 | 0.73623764 | CD4_CAMK4_UCBMC |
| PRPF31   | 2.08E-05 | 0.12676661 | 0.256 | 0.209 | 0.73632466 | CD4_CAMK4_UCBMC |
| TRIM25   | 2.09E-05 | 0.26427965 | 0.276 | 0.231 | 0.74191524 | CD4_CAMK4_UCBMC |
| NCL      | 2.20E-05 | 0.11156046 | 0.558 | 0.517 | 0.7800349  | CD4_CAMK4_UCBMC |
| EIF2A    | 2.22E-05 | 0.21025709 | 0.337 | 0.288 | 0.78768736 | CD4_CAMK4_UCBMC |
| ARHGDIB  | 2.28E-05 | 0.1290738  | 0.657 | 0.634 | 0.80803003 | CD4_CAMK4_UCBMC |
| RBX1     | 2.33E-05 | 0.19755422 | 0.296 | 0.247 | 0.82636408 | CD4_CAMK4_UCBMC |
| PRKCI    | 2.47E-05 | 0.11002136 | 0.326 | 0.272 | 0.87629502 | CD4_CAMK4_UCBMC |
| MED30    | 2.54E-05 | 0.235591   | 0.26  | 0.215 | 0.89941398 | CD4_CAMK4_UCBMC |
| DCUN1D1  | 2.54E-05 | 0.26218972 | 0.271 | 0.226 | 0.90027629 | CD4_CAMK4_UCBMC |
| DCTN4    | 2.86E-05 | 0.17820297 | 0.273 | 0.227 | 1          | CD4_CAMK4_UCBMC |
| LNPEP    | 3.01E-05 | 0.12239231 | 0.717 | 0.654 | 1          | CD4_CAMK4_UCBMC |
| DIP2B    | 3.17E-05 | 0.11508964 | 0.913 | 0.875 | 1          | CD4_CAMK4_UCBMC |
| FAR1     | 3.47E-05 | 0.12617129 | 0.549 | 0.493 | 1          | CD4_CAMK4_UCBMC |
| NDUFA1   | 3.49E-05 | 0.10082998 | 0.281 | 0.234 | 1          | CD4_CAMK4_UCBMC |
| SYNE1    | 3.52E-05 | 0.1651509  | 0.494 | 0.438 | 1          | CD4_CAMK4_UCBMC |
| KBTBD2   | 3.70E-05 | 0.22508209 | 0.348 | 0.3   | 1          | CD4_CAMK4_UCBMC |
| SEC24B   | 3.81E-05 | 0.10207211 | 0.656 | 0.602 | 1          | CD4_CAMK4_UCBMC |
| DPP8     | 3.90E-05 | 0.18266791 | 0.313 | 0.264 | 1          | CD4_CAMK4_UCBMC |
| RNF115   | 4.04E-05 | 0.13286329 | 0.398 | 0.346 | 1          | CD4_CAMK4_UCBMC |

|                     |            |            |       |       |                   |
|---------------------|------------|------------|-------|-------|-------------------|
| DAAM1               | 4.26E-05   | 0.15215799 | 0.379 | 0.324 | 1 CD4_CAMK4_UCBMC |
| NDUFAF7             | 4.59E-05   | 0.25616881 | 0.251 | 0.209 | 1 CD4_CAMK4_UCBMC |
| ENSMMUG000000016894 | 4.66E-05   | 0.11021915 | 0.313 | 0.264 | 1 CD4_CAMK4_UCBMC |
| UBXN2A              | 4.67E-05   | 0.25685721 | 0.29  | 0.245 | 1 CD4_CAMK4_UCBMC |
| TRNT1               | 4.77E-05   | 0.28268949 | 0.289 | 0.245 | 1 CD4_CAMK4_UCBMC |
| PAK1IP1             | 4.87E-05   | 0.24972072 | 0.284 | 0.241 | 1 CD4_CAMK4_UCBMC |
| ACO2                | 4.88E-05   | 0.14685203 | 0.293 | 0.245 | 1 CD4_CAMK4_UCBMC |
| IFNGR1              | 5.30E-05   | 0.22445784 | 0.26  | 0.218 | 1 CD4_CAMK4_UCBMC |
| RAPGEF1             | 5.37E-05   | 0.11564655 | 0.662 | 0.61  | 1 CD4_CAMK4_UCBMC |
| MTDH                | 5.58E-05   | 0.14962682 | 0.559 | 0.497 | 1 CD4_CAMK4_UCBMC |
| TUT4                | 6.06E-05   | 0.11164469 | 0.86  | 0.805 | 1 CD4_CAMK4_UCBMC |
| ENSMMUG000000001458 | 6.11E-05   | 0.14792628 | 0.488 | 0.44  | 1 CD4_CAMK4_UCBMC |
| UBA3                | 6.40E-05   | 0.19130242 | 0.318 | 0.272 | 1 CD4_CAMK4_UCBMC |
| ZC3H11A             | 6.72E-05   | 0.13261276 | 0.626 | 0.579 | 1 CD4_CAMK4_UCBMC |
| SEC11A              | 7.75E-05   | 0.15257929 | 0.338 | 0.289 | 1 CD4_CAMK4_UCBMC |
| ATP2A2              | 8.09E-05   | 0.10806866 | 0.544 | 0.491 | 1 CD4_CAMK4_UCBMC |
| AMBRA1              | 8.15E-05   | 0.13571705 | 0.641 | 0.585 | 1 CD4_CAMK4_UCBMC |
| EWSR1               | 8.28E-05   | 0.14097071 | 0.598 | 0.552 | 1 CD4_CAMK4_UCBMC |
| CXHXorf38           | 8.34E-05   | 0.22281192 | 0.274 | 0.231 | 1 CD4_CAMK4_UCBMC |
| SLC9A8              | 9.57E-05   | 0.28722865 | 0.255 | 0.217 | 1 CD4_CAMK4_UCBMC |
| SNX2                | 9.59E-05   | 0.16131512 | 0.337 | 0.29  | 1 CD4_CAMK4_UCBMC |
| ENSMMUG000000022610 | 9.98E-05   | 0.11180798 | 0.618 | 0.559 | 1 CD4_CAMK4_UCBMC |
| SFI1                | 0.00010034 | 0.21986688 | 0.256 | 0.213 | 1 CD4_CAMK4_UCBMC |
| OFD1                | 0.00010549 | 0.18436051 | 0.278 | 0.236 | 1 CD4_CAMK4_UCBMC |
| SYNJ1               | 0.0001061  | 0.24502717 | 0.276 | 0.234 | 1 CD4_CAMK4_UCBMC |
| RBBP6               | 0.00011256 | 0.15602833 | 0.497 | 0.447 | 1 CD4_CAMK4_UCBMC |
| SPTLC2              | 0.00011815 | 0.13686669 | 0.265 | 0.222 | 1 CD4_CAMK4_UCBMC |
| ENSMMUG000000021425 | 0.00011872 | 0.18014571 | 0.445 | 0.394 | 1 CD4_CAMK4_UCBMC |
| FAM76B              | 0.0001202  | 0.20392986 | 0.265 | 0.222 | 1 CD4_CAMK4_UCBMC |
| SAP130              | 0.00013173 | 0.17377537 | 0.273 | 0.228 | 1 CD4_CAMK4_UCBMC |
| EIF3J               | 0.0001348  | 0.13205491 | 0.379 | 0.335 | 1 CD4_CAMK4_UCBMC |
| NAA25               | 0.00013632 | 0.14175768 | 0.515 | 0.464 | 1 CD4_CAMK4_UCBMC |
| RAB5A               | 0.00014062 | 0.11319336 | 0.43  | 0.38  | 1 CD4_CAMK4_UCBMC |



|                   |            |            |       |       |                   |
|-------------------|------------|------------|-------|-------|-------------------|
| CDC73             | 0.00014839 | 0.12223578 | 0.628 | 0.574 | 1 CD4_CAMK4_UCBMC |
| PPIP5K2           | 0.00014966 | 0.21947638 | 0.329 | 0.285 | 1 CD4_CAMK4_UCBMC |
| ATXN10            | 0.00015431 | 0.13586155 | 0.688 | 0.636 | 1 CD4_CAMK4_UCBMC |
| FBXW2             | 0.0001634  | 0.21956796 | 0.296 | 0.256 | 1 CD4_CAMK4_UCBMC |
| SCLT1             | 0.00017135 | 0.12452304 | 0.481 | 0.428 | 1 CD4_CAMK4_UCBMC |
| NOC3L             | 0.00017563 | 0.2738374  | 0.258 | 0.219 | 1 CD4_CAMK4_UCBMC |
| TMEM14B           | 0.00017599 | 0.19308905 | 0.326 | 0.286 | 1 CD4_CAMK4_UCBMC |
| NUDC              | 0.00018035 | 0.15668951 | 0.268 | 0.226 | 1 CD4_CAMK4_UCBMC |
| MYO6              | 0.00018082 | 0.12753142 | 0.291 | 0.246 | 1 CD4_CAMK4_UCBMC |
| CCDC82            | 0.00018333 | 0.13645042 | 0.303 | 0.26  | 1 CD4_CAMK4_UCBMC |
| METTL9            | 0.00018372 | 0.14310767 | 0.358 | 0.314 | 1 CD4_CAMK4_UCBMC |
| RRP1B             | 0.00020202 | 0.10921997 | 0.344 | 0.299 | 1 CD4_CAMK4_UCBMC |
| ENSMUG00000006803 | 0.00021963 | 0.10679871 | 0.615 | 0.565 | 1 CD4_CAMK4_UCBMC |
| NAA16             | 0.00022927 | 0.19082814 | 0.313 | 0.271 | 1 CD4_CAMK4_UCBMC |
| MAGOH             | 0.00024669 | 0.19097923 | 0.268 | 0.227 | 1 CD4_CAMK4_UCBMC |
| AZIN1             | 0.00025483 | 0.16581784 | 0.376 | 0.332 | 1 CD4_CAMK4_UCBMC |
| HSPA4             | 0.00025852 | 0.16184973 | 0.346 | 0.301 | 1 CD4_CAMK4_UCBMC |
| SCYL2             | 0.0002604  | 0.16999424 | 0.255 | 0.216 | 1 CD4_CAMK4_UCBMC |
| SUN2              | 0.00026681 | 0.11507525 | 0.272 | 0.231 | 1 CD4_CAMK4_UCBMC |
| SAR1A             | 0.00026736 | 0.1767379  | 0.375 | 0.329 | 1 CD4_CAMK4_UCBMC |
| CNOT6             | 0.00027631 | 0.18749184 | 0.392 | 0.348 | 1 CD4_CAMK4_UCBMC |
| RSL24D1           | 0.00027831 | 0.13883738 | 0.43  | 0.39  | 1 CD4_CAMK4_UCBMC |
| GORASP2           | 0.00028072 | 0.1643224  | 0.38  | 0.338 | 1 CD4_CAMK4_UCBMC |
| H2AFY             | 0.00028441 | 0.13968736 | 0.49  | 0.445 | 1 CD4_CAMK4_UCBMC |
| SLAIN2            | 0.00030607 | 0.13494913 | 0.421 | 0.372 | 1 CD4_CAMK4_UCBMC |
| RAD21             | 0.00030917 | 0.12744056 | 0.59  | 0.545 | 1 CD4_CAMK4_UCBMC |
| DCP2              | 0.00031778 | 0.1557184  | 0.323 | 0.279 | 1 CD4_CAMK4_UCBMC |
| G3BP1             | 0.00031801 | 0.11822075 | 0.672 | 0.616 | 1 CD4_CAMK4_UCBMC |
| ARHGAP1           | 0.0003365  | 0.16402617 | 0.263 | 0.222 | 1 CD4_CAMK4_UCBMC |
| MED28             | 0.00034034 | 0.21773916 | 0.316 | 0.278 | 1 CD4_CAMK4_UCBMC |
| IARS1             | 0.00036145 | 0.12484191 | 0.352 | 0.306 | 1 CD4_CAMK4_UCBMC |
| WAC               | 0.00036231 | 0.10473271 | 0.789 | 0.738 | 1 CD4_CAMK4_UCBMC |
| PNRC2             | 0.00036255 | 0.15920713 | 0.296 | 0.257 | 1 CD4_CAMK4_UCBMC |

|              |            |            |       |       |                   |
|--------------|------------|------------|-------|-------|-------------------|
| DCAF1        | 0.00039362 | 0.10731154 | 0.418 | 0.37  | 1 CD4_CAMK4_UCBMC |
| MLXIP        | 0.00040776 | 0.11141451 | 0.511 | 0.455 | 1 CD4_CAMK4_UCBMC |
| C10H20orf194 | 0.00043039 | 0.14458812 | 0.322 | 0.279 | 1 CD4_CAMK4_UCBMC |
| C2CD5        | 0.00046929 | 0.12411195 | 0.343 | 0.298 | 1 CD4_CAMK4_UCBMC |
| CLTC         | 0.0004743  | 0.14393457 | 0.416 | 0.373 | 1 CD4_CAMK4_UCBMC |
| ARHGAP26     | 0.00048165 | 0.1084589  | 0.494 | 0.44  | 1 CD4_CAMK4_UCBMC |
| ZNF44        | 0.00048255 | 0.16725636 | 0.387 | 0.347 | 1 CD4_CAMK4_UCBMC |
| PEX14        | 0.00050438 | 0.10971457 | 0.522 | 0.471 | 1 CD4_CAMK4_UCBMC |
| MRTFA        | 0.00051097 | 0.10941731 | 0.691 | 0.629 | 1 CD4_CAMK4_UCBMC |
| ZC3H15       | 0.00052297 | 0.1665889  | 0.378 | 0.337 | 1 CD4_CAMK4_UCBMC |
| CAPZA1       | 0.00052469 | 0.11693117 | 0.648 | 0.602 | 1 CD4_CAMK4_UCBMC |
| HNRNPL       | 0.00053354 | 0.13137457 | 0.53  | 0.488 | 1 CD4_CAMK4_UCBMC |
| KANSL2       | 0.00056056 | 0.12004702 | 0.477 | 0.425 | 1 CD4_CAMK4_UCBMC |
| KDM3B        | 0.00061708 | 0.12861262 | 0.564 | 0.523 | 1 CD4_CAMK4_UCBMC |
| CASC3        | 0.00061908 | 0.14545246 | 0.465 | 0.424 | 1 CD4_CAMK4_UCBMC |
| FANCM        | 0.0006466  | 0.21100018 | 0.321 | 0.282 | 1 CD4_CAMK4_UCBMC |
| KLHDC2       | 0.00066386 | 0.11725998 | 0.256 | 0.22  | 1 CD4_CAMK4_UCBMC |
| IP6K2        | 0.00067003 | 0.19539771 | 0.304 | 0.265 | 1 CD4_CAMK4_UCBMC |
| PITPNM2      | 0.00076427 | 0.16055459 | 0.461 | 0.421 | 1 CD4_CAMK4_UCBMC |
| CEP57        | 0.00079119 | 0.10393906 | 0.316 | 0.273 | 1 CD4_CAMK4_UCBMC |
| PLEKHM3      | 0.00082955 | 0.10589649 | 0.364 | 0.322 | 1 CD4_CAMK4_UCBMC |
| TPP2         | 0.00088171 | 0.10743796 | 0.428 | 0.384 | 1 CD4_CAMK4_UCBMC |
| MED27        | 0.00095764 | 0.10226393 | 0.518 | 0.474 | 1 CD4_CAMK4_UCBMC |
| LTN1         | 0.0009838  | 0.14582577 | 0.395 | 0.357 | 1 CD4_CAMK4_UCBMC |
| ADD1         | 0.00099398 | 0.11552136 | 0.563 | 0.521 | 1 CD4_CAMK4_UCBMC |
| AGK          | 0.00100384 | 0.12786912 | 0.271 | 0.234 | 1 CD4_CAMK4_UCBMC |
| EIF5B        | 0.00100853 | 0.1108969  | 0.336 | 0.294 | 1 CD4_CAMK4_UCBMC |
| UBAP1        | 0.0011755  | 0.13959286 | 0.535 | 0.493 | 1 CD4_CAMK4_UCBMC |
| CNOT7        | 0.0011802  | 0.16221409 | 0.252 | 0.218 | 1 CD4_CAMK4_UCBMC |
| STK39        | 0.00119005 | 0.11735004 | 0.636 | 0.581 | 1 CD4_CAMK4_UCBMC |
| DIABLO       | 0.00128935 | 0.24726167 | 0.277 | 0.243 | 1 CD4_CAMK4_UCBMC |
| NUFIP1       | 0.0013393  | 0.15989612 | 0.288 | 0.25  | 1 CD4_CAMK4_UCBMC |
| SCAMP1       | 0.00152474 | 0.1076873  | 0.257 | 0.22  | 1 CD4_CAMK4_UCBMC |

|                   |            |            |       |       |                   |
|-------------------|------------|------------|-------|-------|-------------------|
| TMEM38B           | 0.00152524 | 0.18355977 | 0.304 | 0.268 | 1 CD4_CAMK4_UCBMC |
| WDPCP             | 0.00156071 | 0.1140002  | 0.351 | 0.311 | 1 CD4_CAMK4_UCBMC |
| HEATR1            | 0.00167208 | 0.11718172 | 0.261 | 0.225 | 1 CD4_CAMK4_UCBMC |
| NEMF              | 0.00176186 | 0.13904857 | 0.448 | 0.409 | 1 CD4_CAMK4_UCBMC |
| ARL5A             | 0.00193219 | 0.20353385 | 0.261 | 0.228 | 1 CD4_CAMK4_UCBMC |
| RBM23             | 0.0019538  | 0.13924992 | 0.27  | 0.235 | 1 CD4_CAMK4_UCBMC |
| DGCR2             | 0.00208875 | 0.12139215 | 0.365 | 0.327 | 1 CD4_CAMK4_UCBMC |
| ATP6V0A1          | 0.00222292 | 0.11263611 | 0.272 | 0.237 | 1 CD4_CAMK4_UCBMC |
| TOPBP1            | 0.00246116 | 0.20700613 | 0.266 | 0.236 | 1 CD4_CAMK4_UCBMC |
| RAP1GDS1          | 0.00246549 | 0.10796372 | 0.47  | 0.424 | 1 CD4_CAMK4_UCBMC |
| NEPRO             | 0.00255667 | 0.22375469 | 0.258 | 0.227 | 1 CD4_CAMK4_UCBMC |
| TAF3              | 0.0026368  | 0.10566186 | 0.629 | 0.576 | 1 CD4_CAMK4_UCBMC |
| OSBPL2            | 0.00301305 | 0.11890258 | 0.255 | 0.222 | 1 CD4_CAMK4_UCBMC |
| ARF1              | 0.00305062 | 0.13654464 | 0.436 | 0.403 | 1 CD4_CAMK4_UCBMC |
| SCAP              | 0.00319859 | 0.18097568 | 0.273 | 0.243 | 1 CD4_CAMK4_UCBMC |
| ERGIC2            | 0.00375896 | 0.11047673 | 0.282 | 0.248 | 1 CD4_CAMK4_UCBMC |
| ADAM17            | 0.00390496 | 0.11704114 | 0.336 | 0.299 | 1 CD4_CAMK4_UCBMC |
| TP53BP2           | 0.00407026 | 0.11460861 | 0.449 | 0.411 | 1 CD4_CAMK4_UCBMC |
| INPP5A            | 0.00418658 | 0.1313562  | 0.67  | 0.639 | 1 CD4_CAMK4_UCBMC |
| OTUD5             | 0.00478683 | 0.13593668 | 0.252 | 0.224 | 1 CD4_CAMK4_UCBMC |
| ENSMUG00000020316 | 0.00528797 | 0.15455219 | 0.377 | 0.347 | 1 CD4_CAMK4_UCBMC |
| PPP4R3A           | 0.00544779 | 0.10997524 | 0.5   | 0.471 | 1 CD4_CAMK4_UCBMC |
| TOX4              | 0.00560604 | 0.15774427 | 0.37  | 0.339 | 1 CD4_CAMK4_UCBMC |
| AGPAT3            | 0.00591011 | 0.10355705 | 0.326 | 0.293 | 1 CD4_CAMK4_UCBMC |
| ALMS1             | 0.00604923 | 0.11279607 | 0.353 | 0.316 | 1 CD4_CAMK4_UCBMC |
| CD37              | 0.00742643 | 0.10762924 | 0.343 | 0.315 | 1 CD4_CAMK4_UCBMC |
| PMPCB             | 0.00923914 | 0.18954843 | 0.257 | 0.231 | 1 CD4_CAMK4_UCBMC |
| JADE1             | 0.01333505 | 0.10391768 | 0.269 | 0.242 | 1 CD4_CAMK4_UCBMC |
| VPS13A            | 0.01832939 | 0.1057583  | 0.426 | 0.393 | 1 CD4_CAMK4_UCBMC |
| PLCD4             | 0.01890609 | 0.1392618  | 0.274 | 0.25  | 1 CD4_CAMK4_UCBMC |
| MTRR              | 0.01892119 | 0.10545383 | 0.289 | 0.263 | 1 CD4_CAMK4_UCBMC |
| DDHD2             | 0.01963791 | 0.10031032 | 0.336 | 0.31  | 1 CD4_CAMK4_UCBMC |
| BRD1              | 0.02001881 | 0.15760481 | 0.253 | 0.229 | 1 CD4_CAMK4_UCBMC |

|                   |            |            |       |       |           |                  |
|-------------------|------------|------------|-------|-------|-----------|------------------|
| KHDRBS1           | 0.02426666 | 0.10268163 | 0.349 | 0.324 | 1         | CD4_CAMK4_UCBMC  |
| SERGEF            | 0.03538242 | 0.12493074 | 0.261 | 0.236 | 1         | CD4_CAMK4_UCBMC  |
| TMEM161B          | 0.03706289 | 0.11949341 | 0.255 | 0.232 | 1         | CD4_CAMK4_UCBMC  |
| NUBPL             | 0.07396305 | 0.11077882 | 0.337 | 0.315 | 1         | CD4_CAMK4_UCBMC  |
| FOSB              | 0          | 2.72624663 | 0.51  | 0.13  | 0         | CD4_CAMK4_spleen |
| HSPH1             | 3.76E-290  | 2.66687264 | 0.689 | 0.31  | 1.33E-285 | CD4_CAMK4_spleen |
| ENSMUG00000020050 | 1.72E-251  | 2.315574   | 0.451 | 0.12  | 6.09E-247 | CD4_CAMK4_spleen |
| NABP1             | 3.94E-244  | 1.67750236 | 0.732 | 0.361 | 1.40E-239 | CD4_CAMK4_spleen |
| FOS               | 1.40E-230  | 1.58992953 | 0.776 | 0.397 | 4.97E-226 | CD4_CAMK4_spleen |
| JUN               | 7.82E-229  | 1.99563485 | 0.606 | 0.261 | 2.77E-224 | CD4_CAMK4_spleen |
| HIST1H2AC         | 1.33E-214  | 2.49076325 | 0.487 | 0.171 | 4.73E-210 | CD4_CAMK4_spleen |
| KLF6              | 8.48E-184  | 1.3725339  | 0.832 | 0.572 | 3.01E-179 | CD4_CAMK4_spleen |
| STK17B            | 3.41E-183  | 0.92149009 | 0.958 | 0.864 | 1.21E-178 | CD4_CAMK4_spleen |
| BCL11B            | 2.58E-176  | 0.79915253 | 0.968 | 0.896 | 9.14E-172 | CD4_CAMK4_spleen |
| DUSP1             | 4.62E-162  | 1.78215065 | 0.494 | 0.203 | 1.64E-157 | CD4_CAMK4_spleen |
| ZC3HAV1           | 9.67E-159  | 0.88002116 | 0.944 | 0.834 | 3.43E-154 | CD4_CAMK4_spleen |
| ENSMUG00000054358 | 3.76E-155  | 1.18962893 | 0.969 | 0.927 | 1.33E-150 | CD4_CAMK4_spleen |
| NOL4L             | 3.36E-151  | 1.51665029 | 0.489 | 0.199 | 1.19E-146 | CD4_CAMK4_spleen |
| ITPKB             | 2.51E-150  | 1.14031557 | 0.759 | 0.478 | 8.88E-146 | CD4_CAMK4_spleen |
| SLC2A3            | 9.52E-150  | 1.29680933 | 0.737 | 0.481 | 3.37E-145 | CD4_CAMK4_spleen |
| THEMIS            | 8.49E-141  | 0.88663371 | 0.908 | 0.774 | 3.01E-136 | CD4_CAMK4_spleen |
| ADORA2B           | 9.10E-141  | 3.14856986 | 0.263 | 0.069 | 3.22E-136 | CD4_CAMK4_spleen |
| CARD11            | 1.20E-134  | 1.24501813 | 0.666 | 0.398 | 4.25E-130 | CD4_CAMK4_spleen |
| HSPD1             | 1.25E-134  | 1.81200966 | 0.443 | 0.186 | 4.43E-130 | CD4_CAMK4_spleen |
| SRSF7             | 2.41E-134  | 1.07920239 | 0.742 | 0.474 | 8.52E-130 | CD4_CAMK4_spleen |
| AUTS2             | 5.28E-133  | 1.03548427 | 0.777 | 0.526 | 1.87E-128 | CD4_CAMK4_spleen |
| YPEL5             | 7.94E-126  | 1.10338034 | 0.768 | 0.546 | 2.81E-121 | CD4_CAMK4_spleen |
| CCND3             | 2.13E-125  | 0.65675117 | 0.958 | 0.869 | 7.55E-121 | CD4_CAMK4_spleen |
| YWHAZ             | 6.73E-123  | 0.90869197 | 0.886 | 0.756 | 2.38E-118 | CD4_CAMK4_spleen |
| DNAJA1            | 2.89E-120  | 1.53022988 | 0.51  | 0.255 | 1.02E-115 | CD4_CAMK4_spleen |
| NDEL1             | 2.29E-119  | 1.17820134 | 0.651 | 0.393 | 8.12E-115 | CD4_CAMK4_spleen |
| LDLR              | 1.15E-117  | 1.48754357 | 0.471 | 0.222 | 4.08E-113 | CD4_CAMK4_spleen |
| IFRD1             | 1.37E-116  | 1.14068344 | 0.668 | 0.412 | 4.87E-112 | CD4_CAMK4_spleen |

|                   |           |            |       |       |           |                  |
|-------------------|-----------|------------|-------|-------|-----------|------------------|
| LTB               | 2.24E-114 | 1.61912345 | 0.501 | 0.262 | 7.93E-110 | CD4_CAMK4_spleen |
| DGKD              | 2.31E-111 | 1.1871772  | 0.548 | 0.285 | 8.18E-107 | CD4_CAMK4_spleen |
| PM20D2            | 2.86E-109 | 0.91906695 | 0.739 | 0.509 | 1.01E-104 | CD4_CAMK4_spleen |
| TOB2              | 2.13E-108 | 1.76831584 | 0.278 | 0.09  | 7.54E-104 | CD4_CAMK4_spleen |
| ENSMUG00000053918 | 9.03E-106 | 1.92005645 | 0.257 | 0.079 | 3.20E-101 | CD4_CAMK4_spleen |
| SEMA4D            | 2.05E-101 | 0.78278805 | 0.838 | 0.651 | 7.25E-97  | CD4_CAMK4_spleen |
| PPP1R10           | 1.52E-100 | 1.19658024 | 0.517 | 0.274 | 5.39E-96  | CD4_CAMK4_spleen |
| VAV1              | 1.55E-100 | 1.03141595 | 0.577 | 0.326 | 5.51E-96  | CD4_CAMK4_spleen |
| ADGRE5            | 2.19E-100 | 1.64221789 | 0.6   | 0.373 | 7.77E-96  | CD4_CAMK4_spleen |
| SLC7A5            | 1.46E-99  | 1.51497196 | 0.335 | 0.13  | 5.19E-95  | CD4_CAMK4_spleen |
| RGCC              | 4.16E-98  | 1.31249463 | 0.546 | 0.312 | 1.47E-93  | CD4_CAMK4_spleen |
| GTF2I             | 1.99E-97  | 0.7428655  | 0.808 | 0.604 | 7.04E-93  | CD4_CAMK4_spleen |
| COTL1             | 1.43E-96  | 1.18963952 | 0.597 | 0.377 | 5.08E-92  | CD4_CAMK4_spleen |
| JMJD1C            | 7.60E-95  | 0.55522516 | 0.977 | 0.946 | 2.69E-90  | CD4_CAMK4_spleen |
| RASGEF1B          | 5.24E-94  | 1.76515296 | 0.378 | 0.173 | 1.86E-89  | CD4_CAMK4_spleen |
| PDE7A             | 7.02E-94  | 0.68481271 | 0.898 | 0.759 | 2.49E-89  | CD4_CAMK4_spleen |
| STIM1             | 4.51E-93  | 0.72585197 | 0.827 | 0.649 | 1.60E-88  | CD4_CAMK4_spleen |
| ITGA1             | 6.39E-93  | 1.48535787 | 0.491 | 0.277 | 2.27E-88  | CD4_CAMK4_spleen |
| LCP1              | 1.53E-92  | 0.96651535 | 0.684 | 0.457 | 5.43E-88  | CD4_CAMK4_spleen |
| GLCE              | 9.80E-92  | 1.11080376 | 0.632 | 0.407 | 3.47E-87  | CD4_CAMK4_spleen |
| PTK2B             | 1.03E-90  | 1.35777765 | 0.391 | 0.179 | 3.67E-86  | CD4_CAMK4_spleen |
| FAM102A           | 2.37E-88  | 1.12629065 | 0.441 | 0.216 | 8.38E-84  | CD4_CAMK4_spleen |
| ITGAL             | 7.61E-88  | 1.25545654 | 0.406 | 0.19  | 2.70E-83  | CD4_CAMK4_spleen |
| GRAP2             | 2.82E-87  | 0.93265827 | 0.654 | 0.429 | 9.99E-83  | CD4_CAMK4_spleen |
| IL21R             | 3.34E-87  | 1.3002344  | 0.322 | 0.13  | 1.18E-82  | CD4_CAMK4_spleen |
| FMNL3             | 3.66E-87  | 1.56811231 | 0.3   | 0.118 | 1.30E-82  | CD4_CAMK4_spleen |
| DDX3X             | 6.16E-87  | 0.72472808 | 0.829 | 0.664 | 2.18E-82  | CD4_CAMK4_spleen |
| NR4A2             | 4.87E-86  | 1.14927212 | 0.418 | 0.201 | 1.73E-81  | CD4_CAMK4_spleen |
| SSBP3             | 5.88E-86  | 0.88989671 | 0.71  | 0.498 | 2.08E-81  | CD4_CAMK4_spleen |
| DENND2D           | 9.83E-86  | 1.24271898 | 0.412 | 0.202 | 3.48E-81  | CD4_CAMK4_spleen |
| TNFAIP3           | 2.34E-84  | 1.15470432 | 0.729 | 0.567 | 8.31E-80  | CD4_CAMK4_spleen |
| TFRC              | 3.13E-84  | 1.32736996 | 0.398 | 0.192 | 1.11E-79  | CD4_CAMK4_spleen |
| MOB3A             | 3.32E-84  | 1.33244928 | 0.405 | 0.201 | 1.17E-79  | CD4_CAMK4_spleen |

|                    |          |            |       |       |          |                  |
|--------------------|----------|------------|-------|-------|----------|------------------|
| TET3               | 1.70E-83 | 0.9829433  | 0.609 | 0.381 | 6.04E-79 | CD4_CAMK4_spleen |
| ZFAND5             | 3.64E-83 | 1.19465635 | 0.35  | 0.152 | 1.29E-78 | CD4_CAMK4_spleen |
| ACAP2              | 2.23E-82 | 0.61455732 | 0.9   | 0.779 | 7.90E-78 | CD4_CAMK4_spleen |
| IL6ST              | 3.63E-82 | 0.84154131 | 0.776 | 0.624 | 1.29E-77 | CD4_CAMK4_spleen |
| IKZF1              | 4.01E-82 | 0.49633214 | 0.94  | 0.854 | 1.42E-77 | CD4_CAMK4_spleen |
| TRAC               | 6.58E-81 | 0.65379079 | 0.891 | 0.771 | 2.33E-76 | CD4_CAMK4_spleen |
| CD69               | 7.52E-81 | 0.75766069 | 0.841 | 0.655 | 2.66E-76 | CD4_CAMK4_spleen |
| TESC               | 2.25E-80 | 1.38236133 | 0.419 | 0.223 | 7.96E-76 | CD4_CAMK4_spleen |
| ZBTB10             | 6.77E-80 | 1.0409467  | 0.573 | 0.36  | 2.40E-75 | CD4_CAMK4_spleen |
| NSD1               | 3.45E-79 | 0.70514794 | 0.806 | 0.623 | 1.22E-74 | CD4_CAMK4_spleen |
| WNK1               | 6.28E-79 | 0.5594426  | 0.859 | 0.719 | 2.22E-74 | CD4_CAMK4_spleen |
| PTP4A1             | 2.51E-78 | 0.98509083 | 0.527 | 0.31  | 8.90E-74 | CD4_CAMK4_spleen |
| MYH9               | 3.87E-77 | 0.71710921 | 0.809 | 0.648 | 1.37E-72 | CD4_CAMK4_spleen |
| PTPRC              | 9.99E-76 | 0.33245372 | 0.992 | 0.977 | 3.54E-71 | CD4_CAMK4_spleen |
| TOB1               | 3.40E-74 | 1.16857138 | 0.439 | 0.236 | 1.21E-69 | CD4_CAMK4_spleen |
| SRSF2              | 3.94E-74 | 1.1718752  | 0.387 | 0.192 | 1.40E-69 | CD4_CAMK4_spleen |
| CD3G               | 4.88E-74 | 1.10339348 | 0.441 | 0.236 | 1.73E-69 | CD4_CAMK4_spleen |
| ENSMMUG00000049833 | 6.46E-74 | 1.89005846 | 0.372 | 0.188 | 2.29E-69 | CD4_CAMK4_spleen |
| FNBP1              | 1.72E-73 | 0.43595109 | 0.958 | 0.891 | 6.10E-69 | CD4_CAMK4_spleen |
| UBE2D3             | 3.38E-72 | 0.5665679  | 0.903 | 0.804 | 1.20E-67 | CD4_CAMK4_spleen |
| PLEKHG3            | 9.74E-72 | 1.35298875 | 0.3   | 0.131 | 3.45E-67 | CD4_CAMK4_spleen |
| ZFP36              | 2.17E-71 | 0.99961015 | 0.559 | 0.355 | 7.69E-67 | CD4_CAMK4_spleen |
| DNAJB6             | 2.83E-71 | 0.74495586 | 0.786 | 0.634 | 1.00E-66 | CD4_CAMK4_spleen |
| PTGES3             | 2.87E-71 | 0.90987075 | 0.685 | 0.501 | 1.02E-66 | CD4_CAMK4_spleen |
| RASSF1             | 1.16E-70 | 0.86264865 | 0.572 | 0.36  | 4.11E-66 | CD4_CAMK4_spleen |
| CHORDC1            | 2.93E-70 | 0.83215204 | 0.667 | 0.461 | 1.04E-65 | CD4_CAMK4_spleen |
| ZHX2               | 6.27E-70 | 0.71180424 | 0.641 | 0.415 | 2.22E-65 | CD4_CAMK4_spleen |
| CLK1               | 1.22E-69 | 0.68374875 | 0.726 | 0.532 | 4.33E-65 | CD4_CAMK4_spleen |
| ARHGEF2            | 2.61E-69 | 1.36638233 | 0.288 | 0.123 | 9.24E-65 | CD4_CAMK4_spleen |
| CD38               | 7.78E-68 | 0.88397767 | 0.646 | 0.471 | 2.76E-63 | CD4_CAMK4_spleen |
| PTPN22             | 1.29E-67 | 1.13971546 | 0.354 | 0.175 | 4.55E-63 | CD4_CAMK4_spleen |
| BMT2               | 1.35E-67 | 1.8992448  | 0.454 | 0.28  | 4.78E-63 | CD4_CAMK4_spleen |
| SRGN               | 4.14E-67 | 1.01772722 | 0.568 | 0.376 | 1.47E-62 | CD4_CAMK4_spleen |

|                    |          |            |       |       |          |                  |
|--------------------|----------|------------|-------|-------|----------|------------------|
| TNIK               | 9.79E-67 | 0.37337502 | 0.984 | 0.952 | 3.47E-62 | CD4_CAMK4_spleen |
| SFMBT2             | 2.02E-66 | 0.80759716 | 0.672 | 0.483 | 7.15E-62 | CD4_CAMK4_spleen |
| HSP90AA1           | 2.06E-66 | 0.88796674 | 0.732 | 0.546 | 7.30E-62 | CD4_CAMK4_spleen |
| GLS                | 3.84E-66 | 0.71540184 | 0.701 | 0.51  | 1.36E-61 | CD4_CAMK4_spleen |
| VGLL4              | 7.25E-66 | 0.92803256 | 0.488 | 0.29  | 2.57E-61 | CD4_CAMK4_spleen |
| VAV3               | 1.49E-65 | 0.93400533 | 0.592 | 0.396 | 5.28E-61 | CD4_CAMK4_spleen |
| EVL                | 1.68E-64 | 0.67461694 | 0.769 | 0.592 | 5.94E-60 | CD4_CAMK4_spleen |
| APBA2              | 1.68E-64 | 0.86231031 | 0.588 | 0.401 | 5.96E-60 | CD4_CAMK4_spleen |
| DNMT3A             | 1.83E-64 | 0.8206374  | 0.519 | 0.313 | 6.47E-60 | CD4_CAMK4_spleen |
| RASA1              | 8.20E-64 | 0.84732292 | 0.59  | 0.394 | 2.90E-59 | CD4_CAMK4_spleen |
| MAP2K1             | 5.65E-63 | 0.95061755 | 0.461 | 0.267 | 2.00E-58 | CD4_CAMK4_spleen |
| TOX                | 1.56E-62 | 0.51734643 | 0.951 | 0.893 | 5.52E-58 | CD4_CAMK4_spleen |
| SLC38A2            | 3.85E-62 | 0.91530922 | 0.468 | 0.276 | 1.36E-57 | CD4_CAMK4_spleen |
| PIP4K2A            | 1.22E-61 | 0.50517691 | 0.908 | 0.836 | 4.31E-57 | CD4_CAMK4_spleen |
| SGK1               | 6.58E-61 | 1.39252464 | 0.281 | 0.128 | 2.33E-56 | CD4_CAMK4_spleen |
| ENSMMUG00000060923 | 3.77E-60 | 0.69156333 | 0.671 | 0.469 | 1.34E-55 | CD4_CAMK4_spleen |
| MBNL1              | 8.15E-60 | 0.28133901 | 0.999 | 0.997 | 2.89E-55 | CD4_CAMK4_spleen |
| RNF138             | 1.12E-59 | 0.84362116 | 0.538 | 0.346 | 3.97E-55 | CD4_CAMK4_spleen |
| AKAP10             | 1.32E-59 | 0.83905255 | 0.48  | 0.283 | 4.67E-55 | CD4_CAMK4_spleen |
| SATB1              | 1.82E-59 | 0.46320391 | 0.932 | 0.899 | 6.44E-55 | CD4_CAMK4_spleen |
| PAG1               | 3.19E-59 | 0.39968896 | 0.946 | 0.894 | 1.13E-54 | CD4_CAMK4_spleen |
| ZMYND8             | 3.84E-59 | 0.57195001 | 0.797 | 0.638 | 1.36E-54 | CD4_CAMK4_spleen |
| KIAA1671           | 4.12E-59 | 1.00584495 | 0.42  | 0.238 | 1.46E-54 | CD4_CAMK4_spleen |
| CSRNP1             | 2.17E-58 | 1.16374214 | 0.25  | 0.107 | 7.69E-54 | CD4_CAMK4_spleen |
| FAM107B            | 2.37E-58 | 0.82010709 | 0.642 | 0.471 | 8.39E-54 | CD4_CAMK4_spleen |
| MGAT4A             | 2.45E-58 | 0.69398259 | 0.586 | 0.39  | 8.69E-54 | CD4_CAMK4_spleen |
| ETS1               | 5.61E-58 | 0.44615341 | 0.911 | 0.827 | 1.99E-53 | CD4_CAMK4_spleen |
| TCF7               | 9.17E-58 | 0.82969681 | 0.534 | 0.341 | 3.25E-53 | CD4_CAMK4_spleen |
| HNRNPA2B1          | 2.09E-57 | 0.42483409 | 0.937 | 0.838 | 7.41E-53 | CD4_CAMK4_spleen |
| HNRNPU             | 2.45E-57 | 0.6067672  | 0.808 | 0.661 | 8.70E-53 | CD4_CAMK4_spleen |
| IL17RA             | 3.74E-57 | 1.0299377  | 0.338 | 0.171 | 1.32E-52 | CD4_CAMK4_spleen |
| STK10              | 4.87E-57 | 0.58750174 | 0.737 | 0.567 | 1.73E-52 | CD4_CAMK4_spleen |
| PPIA               | 5.29E-57 | 1.06450931 | 0.363 | 0.191 | 1.87E-52 | CD4_CAMK4_spleen |

|                    |          |            |       |       |          |                  |
|--------------------|----------|------------|-------|-------|----------|------------------|
| TRA2B              | 3.18E-56 | 0.44726308 | 0.934 | 0.86  | 1.13E-51 | CD4_CAMK4_spleen |
| G3BP2              | 5.42E-56 | 0.71126808 | 0.821 | 0.689 | 1.92E-51 | CD4_CAMK4_spleen |
| ULK2               | 1.22E-55 | 1.06157092 | 0.382 | 0.215 | 4.31E-51 | CD4_CAMK4_spleen |
| ARL5B              | 2.50E-55 | 1.04116236 | 0.33  | 0.169 | 8.85E-51 | CD4_CAMK4_spleen |
| DUSP10             | 5.18E-55 | 1.02872656 | 0.46  | 0.287 | 1.84E-50 | CD4_CAMK4_spleen |
| CCNL1              | 5.20E-55 | 0.51373035 | 0.887 | 0.786 | 1.84E-50 | CD4_CAMK4_spleen |
| RPL13              | 4.20E-54 | 0.72360919 | 0.857 | 0.766 | 1.49E-49 | CD4_CAMK4_spleen |
| NFATC2             | 5.91E-54 | 0.64778083 | 0.608 | 0.41  | 2.09E-49 | CD4_CAMK4_spleen |
| ENSMMUG00000052802 | 7.36E-54 | 0.76986699 | 0.513 | 0.327 | 2.61E-49 | CD4_CAMK4_spleen |
| TFCP2              | 1.03E-53 | 0.89078394 | 0.402 | 0.228 | 3.65E-49 | CD4_CAMK4_spleen |
| RNF111             | 1.23E-53 | 1.01254957 | 0.253 | 0.111 | 4.35E-49 | CD4_CAMK4_spleen |
| SETX               | 2.10E-53 | 0.63634285 | 0.676 | 0.499 | 7.45E-49 | CD4_CAMK4_spleen |
| MARK2              | 4.02E-53 | 0.66793003 | 0.554 | 0.358 | 1.43E-48 | CD4_CAMK4_spleen |
| CHST11             | 4.76E-53 | 0.5069928  | 0.821 | 0.678 | 1.69E-48 | CD4_CAMK4_spleen |
| TAOK1              | 8.87E-53 | 0.56997802 | 0.727 | 0.547 | 3.14E-48 | CD4_CAMK4_spleen |
| ENSMMUG00000056190 | 9.18E-53 | 0.57744269 | 0.73  | 0.571 | 3.25E-48 | CD4_CAMK4_spleen |
| RUNX1              | 2.54E-52 | 0.47756532 | 0.912 | 0.854 | 9.00E-48 | CD4_CAMK4_spleen |
| GNG2               | 1.27E-51 | 0.50128428 | 0.899 | 0.831 | 4.51E-47 | CD4_CAMK4_spleen |
| SLFN5              | 1.87E-51 | 1.0752284  | 0.317 | 0.164 | 6.62E-47 | CD4_CAMK4_spleen |
| ARG2               | 1.93E-51 | 1.23370327 | 0.266 | 0.126 | 6.84E-47 | CD4_CAMK4_spleen |
| PER1               | 2.44E-51 | 0.66388259 | 0.586 | 0.399 | 8.65E-47 | CD4_CAMK4_spleen |
| TTC39C             | 4.34E-51 | 0.8353165  | 0.5   | 0.325 | 1.54E-46 | CD4_CAMK4_spleen |
| SRRM2              | 4.84E-51 | 0.5664599  | 0.767 | 0.604 | 1.72E-46 | CD4_CAMK4_spleen |
| HSPA9              | 7.68E-51 | 0.71204814 | 0.598 | 0.422 | 2.72E-46 | CD4_CAMK4_spleen |
| LRRFIP1            | 1.17E-50 | 0.69649781 | 0.642 | 0.472 | 4.15E-46 | CD4_CAMK4_spleen |
| AHDC1              | 2.11E-50 | 1.12850159 | 0.25  | 0.114 | 7.48E-46 | CD4_CAMK4_spleen |
| NPEPPS             | 2.40E-50 | 0.70860614 | 0.537 | 0.35  | 8.49E-46 | CD4_CAMK4_spleen |
| NEDD9              | 2.49E-50 | 0.62105947 | 0.685 | 0.517 | 8.83E-46 | CD4_CAMK4_spleen |
| BRD2               | 2.64E-50 | 0.72793895 | 0.499 | 0.318 | 9.35E-46 | CD4_CAMK4_spleen |
| ARRDC3             | 3.20E-50 | 1.15870795 | 0.333 | 0.181 | 1.13E-45 | CD4_CAMK4_spleen |
| RBM14              | 3.20E-49 | 0.58885107 | 0.825 | 0.713 | 1.14E-44 | CD4_CAMK4_spleen |
| ROCK2              | 4.96E-49 | 0.79834059 | 0.362 | 0.197 | 1.76E-44 | CD4_CAMK4_spleen |
| SEPTIN9            | 5.24E-49 | 0.60352127 | 0.721 | 0.564 | 1.86E-44 | CD4_CAMK4_spleen |



|                    |          |            |       |       |          |                  |
|--------------------|----------|------------|-------|-------|----------|------------------|
| ELF1               | 6.05E-49 | 0.44708129 | 0.915 | 0.848 | 2.14E-44 | CD4_CAMK4_spleen |
| ENSMMUG00000063859 | 8.75E-49 | 0.80202235 | 0.429 | 0.256 | 3.10E-44 | CD4_CAMK4_spleen |
| GNB1               | 1.36E-48 | 0.52334936 | 0.759 | 0.596 | 4.82E-44 | CD4_CAMK4_spleen |
| TRERF1             | 1.40E-48 | 0.5605978  | 0.749 | 0.596 | 4.97E-44 | CD4_CAMK4_spleen |
| SMC4               | 2.59E-48 | 0.70016232 | 0.776 | 0.65  | 9.17E-44 | CD4_CAMK4_spleen |
| TRAF3IP3           | 1.06E-47 | 0.87142913 | 0.465 | 0.298 | 3.76E-43 | CD4_CAMK4_spleen |
| BTG1               | 1.18E-47 | 0.45712295 | 0.843 | 0.737 | 4.18E-43 | CD4_CAMK4_spleen |
| ATF1               | 4.33E-47 | 0.98872664 | 0.343 | 0.191 | 1.53E-42 | CD4_CAMK4_spleen |
| SKAP1              | 9.49E-47 | 0.31588938 | 0.984 | 0.966 | 3.36E-42 | CD4_CAMK4_spleen |
| SLC16A7            | 1.09E-46 | 0.77702927 | 0.433 | 0.268 | 3.88E-42 | CD4_CAMK4_spleen |
| TMEM131L           | 1.78E-46 | 0.4553237  | 0.862 | 0.742 | 6.32E-42 | CD4_CAMK4_spleen |
| SARAF              | 2.45E-46 | 0.57461638 | 0.77  | 0.64  | 8.70E-42 | CD4_CAMK4_spleen |
| TGFBR1             | 7.57E-46 | 0.76498269 | 0.389 | 0.227 | 2.68E-41 | CD4_CAMK4_spleen |
| ARHGAP35           | 8.12E-46 | 0.79823109 | 0.444 | 0.276 | 2.88E-41 | CD4_CAMK4_spleen |
| LCK                | 1.26E-45 | 0.63907602 | 0.642 | 0.476 | 4.45E-41 | CD4_CAMK4_spleen |
| SIRPG              | 2.83E-45 | 1.05212578 | 0.289 | 0.15  | 1.00E-40 | CD4_CAMK4_spleen |
| ENSMMUG00000062103 | 3.20E-45 | 0.54249401 | 0.784 | 0.635 | 1.14E-40 | CD4_CAMK4_spleen |
| DGKZ               | 4.85E-45 | 0.80125352 | 0.467 | 0.299 | 1.72E-40 | CD4_CAMK4_spleen |
| DOCK2              | 6.36E-45 | 0.38208445 | 0.923 | 0.843 | 2.25E-40 | CD4_CAMK4_spleen |
| TPM4               | 2.21E-44 | 0.97235325 | 0.272 | 0.136 | 7.82E-40 | CD4_CAMK4_spleen |
| HERC4              | 2.27E-44 | 0.55921777 | 0.652 | 0.481 | 8.04E-40 | CD4_CAMK4_spleen |
| LRCH1              | 3.71E-44 | 0.70492616 | 0.534 | 0.369 | 1.31E-39 | CD4_CAMK4_spleen |
| PELI1              | 3.83E-44 | 0.65229981 | 0.846 | 0.771 | 1.36E-39 | CD4_CAMK4_spleen |
| TAGAP              | 5.23E-44 | 0.93713041 | 0.495 | 0.341 | 1.85E-39 | CD4_CAMK4_spleen |
| CREM               | 7.26E-44 | 0.56884767 | 0.33  | 0.179 | 2.57E-39 | CD4_CAMK4_spleen |
| CD164              | 1.05E-43 | 0.65381534 | 0.597 | 0.426 | 3.72E-39 | CD4_CAMK4_spleen |
| STT3B              | 1.10E-43 | 0.48749394 | 0.8   | 0.661 | 3.88E-39 | CD4_CAMK4_spleen |
| DNAJB4             | 4.93E-43 | 1.02781682 | 0.292 | 0.156 | 1.75E-38 | CD4_CAMK4_spleen |
| ASAP1              | 8.83E-43 | 0.50656009 | 0.833 | 0.72  | 3.13E-38 | CD4_CAMK4_spleen |
| FLI1               | 1.15E-42 | 0.5912228  | 0.607 | 0.443 | 4.07E-38 | CD4_CAMK4_spleen |
| ECHDC1             | 3.23E-42 | 0.77659924 | 0.438 | 0.281 | 1.15E-37 | CD4_CAMK4_spleen |
| UBE2R2             | 3.36E-42 | 0.63903766 | 0.603 | 0.441 | 1.19E-37 | CD4_CAMK4_spleen |
| FAM120A            | 3.83E-42 | 0.57429486 | 0.635 | 0.47  | 1.36E-37 | CD4_CAMK4_spleen |

|                    |          |            |       |       |          |                  |
|--------------------|----------|------------|-------|-------|----------|------------------|
| NUP210             | 4.40E-42 | 0.63858512 | 0.511 | 0.338 | 1.56E-37 | CD4_CAMK4_spleen |
| XPO6               | 4.99E-42 | 0.49037886 | 0.699 | 0.537 | 1.77E-37 | CD4_CAMK4_spleen |
| SMURF2             | 6.37E-42 | 0.73150868 | 0.511 | 0.347 | 2.26E-37 | CD4_CAMK4_spleen |
| PLEKHG1            | 1.06E-41 | 0.58523674 | 0.643 | 0.485 | 3.74E-37 | CD4_CAMK4_spleen |
| PRKCA              | 2.16E-41 | 0.59185066 | 0.704 | 0.556 | 7.66E-37 | CD4_CAMK4_spleen |
| SIK2               | 2.39E-41 | 0.85089589 | 0.255 | 0.126 | 8.46E-37 | CD4_CAMK4_spleen |
| HSPA8              | 4.68E-41 | 0.82056156 | 0.497 | 0.348 | 1.66E-36 | CD4_CAMK4_spleen |
| TTC13              | 6.08E-41 | 0.64633027 | 0.543 | 0.376 | 2.15E-36 | CD4_CAMK4_spleen |
| PHF20              | 1.22E-40 | 0.52697909 | 0.711 | 0.566 | 4.33E-36 | CD4_CAMK4_spleen |
| ADAM10             | 1.76E-40 | 0.53648486 | 0.659 | 0.503 | 6.25E-36 | CD4_CAMK4_spleen |
| RIN3               | 1.85E-40 | 0.74687119 | 0.454 | 0.295 | 6.54E-36 | CD4_CAMK4_spleen |
| CRLF3              | 3.07E-40 | 0.76972941 | 0.438 | 0.283 | 1.09E-35 | CD4_CAMK4_spleen |
| RUNX3              | 3.08E-40 | 0.90075744 | 0.341 | 0.199 | 1.09E-35 | CD4_CAMK4_spleen |
| LARP1              | 3.81E-40 | 0.74496123 | 0.414 | 0.261 | 1.35E-35 | CD4_CAMK4_spleen |
| PDE4B              | 4.47E-40 | 0.78828712 | 0.631 | 0.505 | 1.58E-35 | CD4_CAMK4_spleen |
| ARID1A             | 4.66E-40 | 0.47003154 | 0.78  | 0.656 | 1.65E-35 | CD4_CAMK4_spleen |
| EIF4A1             | 5.74E-40 | 0.68310524 | 0.462 | 0.301 | 2.03E-35 | CD4_CAMK4_spleen |
| AMD1               | 8.09E-40 | 0.7273204  | 0.509 | 0.35  | 2.87E-35 | CD4_CAMK4_spleen |
| SFPQ               | 2.82E-39 | 0.4055955  | 0.833 | 0.724 | 9.99E-35 | CD4_CAMK4_spleen |
| IPCEF1             | 3.49E-39 | 0.77040072 | 0.54  | 0.394 | 1.24E-34 | CD4_CAMK4_spleen |
| ABR                | 1.11E-38 | 0.90477527 | 0.293 | 0.161 | 3.94E-34 | CD4_CAMK4_spleen |
| ASXL2              | 1.46E-38 | 0.54599133 | 0.577 | 0.415 | 5.18E-34 | CD4_CAMK4_spleen |
| BTG2               | 1.72E-38 | 0.74915754 | 0.561 | 0.413 | 6.10E-34 | CD4_CAMK4_spleen |
| IRAK2              | 2.19E-38 | 0.57019258 | 0.714 | 0.581 | 7.74E-34 | CD4_CAMK4_spleen |
| HNRNPF             | 2.22E-38 | 0.71292079 | 0.442 | 0.292 | 7.86E-34 | CD4_CAMK4_spleen |
| PHF14              | 2.34E-38 | 0.49109946 | 0.729 | 0.583 | 8.28E-34 | CD4_CAMK4_spleen |
| MCL1               | 3.79E-38 | 0.71216703 | 0.522 | 0.367 | 1.34E-33 | CD4_CAMK4_spleen |
| FOXN2              | 5.18E-38 | 0.83472531 | 0.412 | 0.269 | 1.83E-33 | CD4_CAMK4_spleen |
| KIF2A              | 6.53E-38 | 0.63002293 | 0.524 | 0.363 | 2.31E-33 | CD4_CAMK4_spleen |
| SKI                | 8.05E-38 | 0.65108537 | 0.437 | 0.28  | 2.85E-33 | CD4_CAMK4_spleen |
| ENSMMUG00000011588 | 8.82E-38 | 0.73837181 | 0.341 | 0.198 | 3.13E-33 | CD4_CAMK4_spleen |
| DENND4A            | 2.05E-37 | 0.54702471 | 0.908 | 0.866 | 7.25E-33 | CD4_CAMK4_spleen |
| ZSWIM6             | 2.25E-37 | 0.5619492  | 0.545 | 0.383 | 7.97E-33 | CD4_CAMK4_spleen |

|          |          |            |       |       |          |                  |
|----------|----------|------------|-------|-------|----------|------------------|
| MYCBP2   | 3.57E-37 | 0.32262792 | 0.902 | 0.829 | 1.27E-32 | CD4_CAMK4_spleen |
| MBD5     | 4.19E-37 | 0.50049153 | 0.758 | 0.637 | 1.48E-32 | CD4_CAMK4_spleen |
| SMAD3    | 7.06E-37 | 0.5823033  | 0.633 | 0.492 | 2.50E-32 | CD4_CAMK4_spleen |
| ZNF609   | 8.16E-37 | 0.44797017 | 0.818 | 0.695 | 2.89E-32 | CD4_CAMK4_spleen |
| RAP1B    | 1.64E-36 | 0.34353085 | 0.937 | 0.897 | 5.82E-32 | CD4_CAMK4_spleen |
| SLC39A10 | 2.63E-36 | 0.67949962 | 0.345 | 0.203 | 9.32E-32 | CD4_CAMK4_spleen |
| ADCY7    | 2.66E-36 | 0.74503794 | 0.334 | 0.196 | 9.43E-32 | CD4_CAMK4_spleen |
| ARHGAP15 | 2.87E-36 | 0.22224525 | 0.995 | 0.993 | 1.02E-31 | CD4_CAMK4_spleen |
| SYTL3    | 3.21E-36 | 0.62474585 | 0.539 | 0.393 | 1.14E-31 | CD4_CAMK4_spleen |
| ITGB2    | 4.05E-36 | 0.83989287 | 0.315 | 0.184 | 1.44E-31 | CD4_CAMK4_spleen |
| EIF4G3   | 1.32E-35 | 0.62315173 | 0.578 | 0.438 | 4.69E-31 | CD4_CAMK4_spleen |
| SMARCA2  | 1.40E-35 | 0.53707721 | 0.631 | 0.487 | 4.97E-31 | CD4_CAMK4_spleen |
| CBL      | 1.75E-35 | 0.84586039 | 0.333 | 0.199 | 6.21E-31 | CD4_CAMK4_spleen |
| ID2      | 1.83E-35 | 0.87291218 | 0.404 | 0.265 | 6.48E-31 | CD4_CAMK4_spleen |
| KDM6B    | 1.87E-35 | 0.97022575 | 0.255 | 0.138 | 6.64E-31 | CD4_CAMK4_spleen |
| TCF20    | 1.97E-35 | 0.51447685 | 0.718 | 0.593 | 6.97E-31 | CD4_CAMK4_spleen |
| IGF2BP3  | 2.63E-35 | 0.58031385 | 0.681 | 0.555 | 9.30E-31 | CD4_CAMK4_spleen |
| GLG1     | 2.94E-35 | 0.39045901 | 0.862 | 0.769 | 1.04E-30 | CD4_CAMK4_spleen |
| GBF1     | 3.51E-35 | 0.64817954 | 0.473 | 0.324 | 1.24E-30 | CD4_CAMK4_spleen |
| GRB2     | 3.79E-35 | 0.57226873 | 0.536 | 0.385 | 1.34E-30 | CD4_CAMK4_spleen |
| MGA      | 5.26E-35 | 0.55736671 | 0.514 | 0.355 | 1.86E-30 | CD4_CAMK4_spleen |
| ZMYM2    | 5.41E-35 | 0.40922088 | 0.776 | 0.645 | 1.92E-30 | CD4_CAMK4_spleen |
| PHTF2    | 6.14E-35 | 0.90407987 | 0.316 | 0.188 | 2.17E-30 | CD4_CAMK4_spleen |
| PAK2     | 6.26E-35 | 0.43690241 | 0.776 | 0.661 | 2.22E-30 | CD4_CAMK4_spleen |
| ERBIN    | 1.31E-34 | 0.34310791 | 0.897 | 0.816 | 4.64E-30 | CD4_CAMK4_spleen |
| MALT1    | 1.43E-34 | 0.41270858 | 0.714 | 0.566 | 5.08E-30 | CD4_CAMK4_spleen |
| HNRNPC   | 1.48E-34 | 0.36548655 | 0.83  | 0.717 | 5.25E-30 | CD4_CAMK4_spleen |
| WDR37    | 2.79E-34 | 0.77433058 | 0.342 | 0.207 | 9.87E-30 | CD4_CAMK4_spleen |
| ANKRD44  | 4.14E-34 | 0.24306771 | 0.993 | 0.981 | 1.47E-29 | CD4_CAMK4_spleen |
| LCP2     | 4.35E-34 | 0.65248456 | 0.483 | 0.333 | 1.54E-29 | CD4_CAMK4_spleen |
| BCLAF1   | 4.38E-34 | 0.40465579 | 0.855 | 0.765 | 1.55E-29 | CD4_CAMK4_spleen |
| FAM53B   | 5.32E-34 | 0.55220349 | 0.433 | 0.281 | 1.88E-29 | CD4_CAMK4_spleen |
| INPP5D   | 8.75E-34 | 0.43121073 | 0.614 | 0.458 | 3.10E-29 | CD4_CAMK4_spleen |

|                    |          |            |       |       |          |                  |
|--------------------|----------|------------|-------|-------|----------|------------------|
| RABEP1             | 1.21E-33 | 0.57872878 | 0.428 | 0.28  | 4.28E-29 | CD4_CAMK4_spleen |
| NOP53              | 1.33E-33 | 0.68140027 | 0.366 | 0.228 | 4.70E-29 | CD4_CAMK4_spleen |
| RASGRP1            | 1.56E-33 | 0.48098357 | 0.664 | 0.518 | 5.51E-29 | CD4_CAMK4_spleen |
| IRF2               | 1.61E-33 | 0.88650353 | 0.349 | 0.222 | 5.72E-29 | CD4_CAMK4_spleen |
| CPNE1              | 2.24E-33 | 0.63772505 | 0.455 | 0.311 | 7.94E-29 | CD4_CAMK4_spleen |
| DIAPH1             | 4.10E-33 | 0.44312149 | 0.77  | 0.66  | 1.45E-28 | CD4_CAMK4_spleen |
| ASCC1              | 4.70E-33 | 0.66283535 | 0.423 | 0.281 | 1.66E-28 | CD4_CAMK4_spleen |
| RSU1               | 5.53E-33 | 0.54064555 | 0.586 | 0.443 | 1.96E-28 | CD4_CAMK4_spleen |
| ARHGAP9            | 6.43E-33 | 0.94409842 | 0.252 | 0.139 | 2.28E-28 | CD4_CAMK4_spleen |
| TOP1               | 1.28E-32 | 0.40188745 | 0.877 | 0.803 | 4.54E-28 | CD4_CAMK4_spleen |
| CYRIB              | 1.50E-32 | 0.38984488 | 0.854 | 0.768 | 5.33E-28 | CD4_CAMK4_spleen |
| ENSMMUG00000060287 | 1.87E-32 | 0.39547454 | 0.831 | 0.719 | 6.63E-28 | CD4_CAMK4_spleen |
| HUWE1              | 2.91E-32 | 0.40081943 | 0.755 | 0.625 | 1.03E-27 | CD4_CAMK4_spleen |
| BAZ1A              | 3.29E-32 | 0.41878633 | 0.705 | 0.573 | 1.17E-27 | CD4_CAMK4_spleen |
| SKP1               | 3.91E-32 | 0.41323953 | 0.825 | 0.724 | 1.39E-27 | CD4_CAMK4_spleen |
| ACTN1              | 8.71E-32 | 0.62132588 | 0.453 | 0.314 | 3.09E-27 | CD4_CAMK4_spleen |
| DGKA               | 9.98E-32 | 0.36552361 | 0.776 | 0.625 | 3.54E-27 | CD4_CAMK4_spleen |
| PSME4              | 1.70E-31 | 0.46507928 | 0.709 | 0.586 | 6.01E-27 | CD4_CAMK4_spleen |
| RABGAP1L           | 2.01E-31 | 0.29986281 | 0.952 | 0.909 | 7.11E-27 | CD4_CAMK4_spleen |
| MAML2              | 2.81E-31 | 0.42952498 | 0.965 | 0.935 | 9.95E-27 | CD4_CAMK4_spleen |
| IVNS1ABP           | 3.73E-31 | 0.6341364  | 0.453 | 0.313 | 1.32E-26 | CD4_CAMK4_spleen |
| TSC22D1            | 4.22E-31 | 0.57932906 | 0.467 | 0.323 | 1.50E-26 | CD4_CAMK4_spleen |
| ANKFY1             | 4.30E-31 | 0.57528119 | 0.449 | 0.305 | 1.53E-26 | CD4_CAMK4_spleen |
| MAT2A              | 5.11E-31 | 0.77095265 | 0.254 | 0.142 | 1.81E-26 | CD4_CAMK4_spleen |
| KRIT1              | 6.04E-31 | 0.69860552 | 0.356 | 0.224 | 2.14E-26 | CD4_CAMK4_spleen |
| CD28               | 6.71E-31 | 0.46086171 | 0.779 | 0.696 | 2.38E-26 | CD4_CAMK4_spleen |
| KLF13              | 8.02E-31 | 0.5545745  | 0.481 | 0.336 | 2.84E-26 | CD4_CAMK4_spleen |
| XPO1               | 9.01E-31 | 0.56828411 | 0.512 | 0.37  | 3.19E-26 | CD4_CAMK4_spleen |
| ANKS1A             | 1.73E-30 | 0.66507768 | 0.374 | 0.241 | 6.13E-26 | CD4_CAMK4_spleen |
| KTN1               | 1.79E-30 | 0.54747939 | 0.477 | 0.332 | 6.33E-26 | CD4_CAMK4_spleen |
| STAT5B             | 1.80E-30 | 0.39598186 | 0.688 | 0.542 | 6.36E-26 | CD4_CAMK4_spleen |
| EEA1               | 2.69E-30 | 0.52264956 | 0.551 | 0.414 | 9.54E-26 | CD4_CAMK4_spleen |
| NFATC1             | 3.47E-30 | 0.67022448 | 0.512 | 0.373 | 1.23E-25 | CD4_CAMK4_spleen |

|                    |          |            |       |       |          |                  |
|--------------------|----------|------------|-------|-------|----------|------------------|
| RAP1A              | 4.46E-30 | 0.50227162 | 0.724 | 0.615 | 1.58E-25 | CD4_CAMK4_spleen |
| PPARD              | 4.77E-30 | 0.55431658 | 0.381 | 0.245 | 1.69E-25 | CD4_CAMK4_spleen |
| EHMT1              | 5.04E-30 | 0.40341926 | 0.711 | 0.577 | 1.78E-25 | CD4_CAMK4_spleen |
| TRAPPC8            | 5.55E-30 | 0.59728512 | 0.365 | 0.232 | 1.97E-25 | CD4_CAMK4_spleen |
| BIN2               | 5.57E-30 | 0.48293947 | 0.644 | 0.499 | 1.98E-25 | CD4_CAMK4_spleen |
| TNRC6C             | 9.24E-30 | 0.47515547 | 0.556 | 0.41  | 3.27E-25 | CD4_CAMK4_spleen |
| RCOR1              | 1.05E-29 | 0.52291732 | 0.514 | 0.372 | 3.70E-25 | CD4_CAMK4_spleen |
| ATXN2              | 1.07E-29 | 0.44253138 | 0.648 | 0.5   | 3.77E-25 | CD4_CAMK4_spleen |
| PPP1CB             | 1.27E-29 | 0.58085046 | 0.797 | 0.724 | 4.48E-25 | CD4_CAMK4_spleen |
| ZCCHC7             | 1.71E-29 | 0.35265629 | 0.863 | 0.785 | 6.07E-25 | CD4_CAMK4_spleen |
| CD226              | 2.16E-29 | 0.55920314 | 0.559 | 0.431 | 7.65E-25 | CD4_CAMK4_spleen |
| CDK8               | 2.81E-29 | 0.54460626 | 0.434 | 0.298 | 9.97E-25 | CD4_CAMK4_spleen |
| USP44              | 3.93E-29 | 0.52870975 | 0.522 | 0.378 | 1.39E-24 | CD4_CAMK4_spleen |
| ANXA1              | 5.33E-29 | 1.23318458 | 0.412 | 0.308 | 1.89E-24 | CD4_CAMK4_spleen |
| ITPK1              | 5.93E-29 | 0.70704581 | 0.276 | 0.162 | 2.10E-24 | CD4_CAMK4_spleen |
| SERTAD2            | 6.57E-29 | 0.59776427 | 0.459 | 0.322 | 2.33E-24 | CD4_CAMK4_spleen |
| TMEM164            | 6.78E-29 | 0.69228441 | 0.276 | 0.162 | 2.40E-24 | CD4_CAMK4_spleen |
| BRD9               | 9.97E-29 | 0.68187874 | 0.306 | 0.187 | 3.53E-24 | CD4_CAMK4_spleen |
| MTA1               | 1.39E-28 | 0.65050483 | 0.29  | 0.17  | 4.91E-24 | CD4_CAMK4_spleen |
| PLAC8              | 1.54E-28 | 0.97532558 | 0.312 | 0.2   | 5.44E-24 | CD4_CAMK4_spleen |
| NFAT5              | 1.62E-28 | 0.48009348 | 0.644 | 0.509 | 5.75E-24 | CD4_CAMK4_spleen |
| BANP               | 1.72E-28 | 0.58898292 | 0.402 | 0.268 | 6.11E-24 | CD4_CAMK4_spleen |
| RBM26              | 2.18E-28 | 0.41788927 | 0.683 | 0.557 | 7.74E-24 | CD4_CAMK4_spleen |
| CAMK1D             | 2.28E-28 | 0.38538776 | 0.865 | 0.804 | 8.09E-24 | CD4_CAMK4_spleen |
| SETD5              | 2.53E-28 | 0.4660017  | 0.625 | 0.491 | 8.97E-24 | CD4_CAMK4_spleen |
| CD4                | 2.63E-28 | 0.7314179  | 0.356 | 0.233 | 9.34E-24 | CD4_CAMK4_spleen |
| ENSMMUG00000061824 | 3.00E-28 | 0.56047419 | 0.778 | 0.659 | 1.06E-23 | CD4_CAMK4_spleen |
| TBC1D5             | 4.24E-28 | 0.27445472 | 0.956 | 0.9   | 1.50E-23 | CD4_CAMK4_spleen |
| PPP6R3             | 4.83E-28 | 0.30934969 | 0.816 | 0.715 | 1.71E-23 | CD4_CAMK4_spleen |
| ZNF146             | 5.12E-28 | 0.59852669 | 0.31  | 0.191 | 1.81E-23 | CD4_CAMK4_spleen |
| EIF5               | 5.56E-28 | 0.51404402 | 0.594 | 0.463 | 1.97E-23 | CD4_CAMK4_spleen |
| UBE2F              | 6.17E-28 | 0.70692998 | 0.411 | 0.286 | 2.19E-23 | CD4_CAMK4_spleen |
| HSP90AB1           | 8.37E-28 | 0.50899735 | 0.702 | 0.562 | 2.97E-23 | CD4_CAMK4_spleen |

|         |          |            |       |       |          |                  |
|---------|----------|------------|-------|-------|----------|------------------|
| PBX4    | 1.09E-27 | 0.70117252 | 0.271 | 0.16  | 3.86E-23 | CD4_CAMK4_spleen |
| ZNF217  | 1.14E-27 | 0.58289939 | 0.35  | 0.225 | 4.04E-23 | CD4_CAMK4_spleen |
| CHCHD3  | 1.77E-27 | 0.45110016 | 0.582 | 0.445 | 6.29E-23 | CD4_CAMK4_spleen |
| SRSF6   | 1.87E-27 | 0.4805099  | 0.503 | 0.362 | 6.64E-23 | CD4_CAMK4_spleen |
| CHM     | 2.13E-27 | 0.48079612 | 0.431 | 0.295 | 7.54E-23 | CD4_CAMK4_spleen |
| PRKCB   | 2.35E-27 | 0.35073876 | 0.828 | 0.749 | 8.34E-23 | CD4_CAMK4_spleen |
| ADARB2  | 2.86E-27 | 0.74149883 | 0.267 | 0.158 | 1.01E-22 | CD4_CAMK4_spleen |
| ARIH1   | 2.87E-27 | 0.35158475 | 0.874 | 0.813 | 1.02E-22 | CD4_CAMK4_spleen |
| MAP3K1  | 2.92E-27 | 0.47962227 | 0.642 | 0.52  | 1.04E-22 | CD4_CAMK4_spleen |
| ST3GAL1 | 3.33E-27 | 0.49022102 | 0.607 | 0.483 | 1.18E-22 | CD4_CAMK4_spleen |
| EFCAB2  | 4.26E-27 | 0.58954146 | 0.462 | 0.336 | 1.51E-22 | CD4_CAMK4_spleen |
| SENP7   | 4.74E-27 | 0.44407583 | 0.672 | 0.541 | 1.68E-22 | CD4_CAMK4_spleen |
| PABPC1  | 7.07E-27 | 0.30507574 | 0.893 | 0.833 | 2.51E-22 | CD4_CAMK4_spleen |
| SH3KBP1 | 7.89E-27 | 0.25154986 | 0.962 | 0.927 | 2.80E-22 | CD4_CAMK4_spleen |
| FARS2   | 1.35E-26 | 0.3943272  | 0.759 | 0.665 | 4.79E-22 | CD4_CAMK4_spleen |
| FCHSD2  | 1.59E-26 | 0.39667003 | 0.688 | 0.568 | 5.62E-22 | CD4_CAMK4_spleen |
| FBXW7   | 2.57E-26 | 0.38008144 | 0.809 | 0.712 | 9.11E-22 | CD4_CAMK4_spleen |
| HNRNPH1 | 2.68E-26 | 0.28715823 | 0.818 | 0.723 | 9.50E-22 | CD4_CAMK4_spleen |
| LDHA    | 3.04E-26 | 0.87839083 | 0.274 | 0.17  | 1.08E-21 | CD4_CAMK4_spleen |
| BCL2L13 | 4.61E-26 | 0.61650361 | 0.318 | 0.202 | 1.63E-21 | CD4_CAMK4_spleen |
| GATA3   | 4.81E-26 | 0.96034795 | 0.271 | 0.168 | 1.71E-21 | CD4_CAMK4_spleen |
| FYB1    | 6.29E-26 | 0.32000269 | 0.875 | 0.817 | 2.23E-21 | CD4_CAMK4_spleen |
| ANXA6   | 7.34E-26 | 0.75056389 | 0.274 | 0.168 | 2.60E-21 | CD4_CAMK4_spleen |
| CMIP    | 7.59E-26 | 0.42712508 | 0.594 | 0.459 | 2.69E-21 | CD4_CAMK4_spleen |
| NXPE3   | 1.10E-25 | 0.54783226 | 0.619 | 0.507 | 3.91E-21 | CD4_CAMK4_spleen |
| TBCD    | 1.55E-25 | 0.53825048 | 0.321 | 0.204 | 5.48E-21 | CD4_CAMK4_spleen |
| RBMS1   | 1.84E-25 | 0.41355216 | 0.755 | 0.646 | 6.51E-21 | CD4_CAMK4_spleen |
| MARS1   | 2.22E-25 | 0.60204276 | 0.305 | 0.191 | 7.87E-21 | CD4_CAMK4_spleen |
| SPTAN1  | 2.38E-25 | 0.55282009 | 0.456 | 0.328 | 8.45E-21 | CD4_CAMK4_spleen |
| HIVP2   | 4.80E-25 | 0.80221888 | 0.251 | 0.15  | 1.70E-20 | CD4_CAMK4_spleen |
| EZR     | 4.81E-25 | 0.52534579 | 0.742 | 0.654 | 1.70E-20 | CD4_CAMK4_spleen |
| UBASH3A | 5.99E-25 | 0.61641609 | 0.272 | 0.165 | 2.12E-20 | CD4_CAMK4_spleen |
| LRP5    | 6.25E-25 | 0.5943338  | 0.294 | 0.182 | 2.21E-20 | CD4_CAMK4_spleen |

|          |          |            |       |       |          |                  |
|----------|----------|------------|-------|-------|----------|------------------|
| RETREG1  | 6.80E-25 | 0.33036837 | 0.796 | 0.704 | 2.41E-20 | CD4_CAMK4_spleen |
| SEPTIN11 | 8.65E-25 | 0.69353385 | 0.274 | 0.168 | 3.06E-20 | CD4_CAMK4_spleen |
| EIF4G2   | 1.24E-24 | 0.37707271 | 0.735 | 0.614 | 4.40E-20 | CD4_CAMK4_spleen |
| R3HDM2   | 1.26E-24 | 0.47067731 | 0.619 | 0.508 | 4.45E-20 | CD4_CAMK4_spleen |
| CRTC3    | 1.27E-24 | 0.31839973 | 0.848 | 0.748 | 4.52E-20 | CD4_CAMK4_spleen |
| COMT     | 1.31E-24 | 0.66428711 | 0.328 | 0.215 | 4.65E-20 | CD4_CAMK4_spleen |
| VPS4A    | 1.50E-24 | 0.70309208 | 0.311 | 0.203 | 5.31E-20 | CD4_CAMK4_spleen |
| CWC27    | 1.51E-24 | 0.53162996 | 0.519 | 0.402 | 5.36E-20 | CD4_CAMK4_spleen |
| B3GNT2   | 2.52E-24 | 0.62567282 | 0.355 | 0.238 | 8.94E-20 | CD4_CAMK4_spleen |
| MSN      | 2.62E-24 | 0.38840814 | 0.735 | 0.627 | 9.28E-20 | CD4_CAMK4_spleen |
| IKZF3    | 2.68E-24 | 0.57821053 | 0.518 | 0.395 | 9.51E-20 | CD4_CAMK4_spleen |
| WDR74    | 2.95E-24 | 0.73702439 | 0.3   | 0.193 | 1.05E-19 | CD4_CAMK4_spleen |
| STRN3    | 3.04E-24 | 0.34726833 | 0.687 | 0.557 | 1.08E-19 | CD4_CAMK4_spleen |
| THRAP3   | 3.09E-24 | 0.40794122 | 0.61  | 0.483 | 1.10E-19 | CD4_CAMK4_spleen |
| CSTF3    | 3.41E-24 | 0.61776052 | 0.315 | 0.204 | 1.21E-19 | CD4_CAMK4_spleen |
| PTPN9    | 3.96E-24 | 0.65494115 | 0.383 | 0.268 | 1.40E-19 | CD4_CAMK4_spleen |
| P4HA1    | 4.16E-24 | 0.65463101 | 0.327 | 0.215 | 1.47E-19 | CD4_CAMK4_spleen |
| RCSD1    | 4.70E-24 | 0.43274581 | 0.553 | 0.425 | 1.67E-19 | CD4_CAMK4_spleen |
| ALG13    | 4.91E-24 | 0.6804133  | 0.268 | 0.165 | 1.74E-19 | CD4_CAMK4_spleen |
| HDAC4    | 4.97E-24 | 0.3873628  | 0.574 | 0.436 | 1.76E-19 | CD4_CAMK4_spleen |
| RAI1     | 5.12E-24 | 0.48258313 | 0.366 | 0.245 | 1.81E-19 | CD4_CAMK4_spleen |
| RIPOR2   | 5.77E-24 | 0.22946601 | 0.976 | 0.961 | 2.04E-19 | CD4_CAMK4_spleen |
| MLLT10   | 6.58E-24 | 0.35179546 | 0.769 | 0.658 | 2.33E-19 | CD4_CAMK4_spleen |
| ZFP36L1  | 7.17E-24 | 0.55907047 | 0.535 | 0.412 | 2.54E-19 | CD4_CAMK4_spleen |
| ORC4     | 7.67E-24 | 0.57539396 | 0.368 | 0.251 | 2.72E-19 | CD4_CAMK4_spleen |
| SLC20A1  | 9.13E-24 | 0.49876204 | 0.436 | 0.313 | 3.23E-19 | CD4_CAMK4_spleen |
| INTS6L   | 9.30E-24 | 0.47899026 | 0.476 | 0.349 | 3.29E-19 | CD4_CAMK4_spleen |
| CAMK2G   | 1.18E-23 | 0.6083218  | 0.268 | 0.164 | 4.18E-19 | CD4_CAMK4_spleen |
| DNAJC13  | 1.57E-23 | 0.62553806 | 0.258 | 0.157 | 5.57E-19 | CD4_CAMK4_spleen |
| RBM6     | 1.62E-23 | 0.38413827 | 0.678 | 0.56  | 5.75E-19 | CD4_CAMK4_spleen |
| RBMX     | 1.62E-23 | 0.43724479 | 0.608 | 0.483 | 5.75E-19 | CD4_CAMK4_spleen |
| UBE2K    | 1.69E-23 | 0.33052145 | 0.69  | 0.563 | 5.99E-19 | CD4_CAMK4_spleen |
| ARHGAP30 | 2.18E-23 | 0.53003093 | 0.387 | 0.267 | 7.74E-19 | CD4_CAMK4_spleen |

|                    |          |            |       |       |          |                  |
|--------------------|----------|------------|-------|-------|----------|------------------|
| MACF1              | 2.25E-23 | 0.2856525  | 0.858 | 0.766 | 7.97E-19 | CD4_CAMK4_spleen |
| PCDHGB5            | 2.31E-23 | 0.61134154 | 0.369 | 0.253 | 8.19E-19 | CD4_CAMK4_spleen |
| SLC35E2            | 2.85E-23 | 0.60994066 | 0.271 | 0.168 | 1.01E-18 | CD4_CAMK4_spleen |
| CAPZB              | 3.92E-23 | 0.38862793 | 0.706 | 0.598 | 1.39E-18 | CD4_CAMK4_spleen |
| FLNB               | 4.07E-23 | 0.79063536 | 0.315 | 0.21  | 1.44E-18 | CD4_CAMK4_spleen |
| CD53               | 4.40E-23 | 0.36685804 | 0.56  | 0.431 | 1.56E-18 | CD4_CAMK4_spleen |
| SF3B3              | 4.74E-23 | 0.507648   | 0.396 | 0.272 | 1.68E-18 | CD4_CAMK4_spleen |
| SUPT20H            | 4.80E-23 | 0.61683384 | 0.312 | 0.204 | 1.70E-18 | CD4_CAMK4_spleen |
| CD44               | 6.01E-23 | 0.57121314 | 0.672 | 0.57  | 2.13E-18 | CD4_CAMK4_spleen |
| YWHAG              | 6.32E-23 | 0.62612229 | 0.332 | 0.221 | 2.24E-18 | CD4_CAMK4_spleen |
| MAPK14             | 8.40E-23 | 0.43964484 | 0.435 | 0.308 | 2.98E-18 | CD4_CAMK4_spleen |
| PPP3CB             | 8.84E-23 | 0.58493309 | 0.31  | 0.2   | 3.13E-18 | CD4_CAMK4_spleen |
| PRPF38B            | 1.12E-22 | 0.37097926 | 0.559 | 0.428 | 3.95E-18 | CD4_CAMK4_spleen |
| IQGAP1             | 1.24E-22 | 0.40262704 | 0.737 | 0.648 | 4.41E-18 | CD4_CAMK4_spleen |
| ZNF638             | 1.56E-22 | 0.34002361 | 0.775 | 0.673 | 5.53E-18 | CD4_CAMK4_spleen |
| RGS1               | 2.43E-22 | 0.76247505 | 0.307 | 0.205 | 8.59E-18 | CD4_CAMK4_spleen |
| ERO1A              | 2.47E-22 | 0.59303542 | 0.325 | 0.217 | 8.76E-18 | CD4_CAMK4_spleen |
| HPCAL1             | 2.86E-22 | 0.34936719 | 0.672 | 0.551 | 1.01E-17 | CD4_CAMK4_spleen |
| ND2                | 4.14E-22 | 0.37613374 | 0.947 | 0.901 | 1.47E-17 | CD4_CAMK4_spleen |
| DARS1              | 4.53E-22 | 0.4954089  | 0.383 | 0.27  | 1.61E-17 | CD4_CAMK4_spleen |
| NOLC1              | 4.90E-22 | 0.65134363 | 0.254 | 0.156 | 1.74E-17 | CD4_CAMK4_spleen |
| CRADD              | 5.95E-22 | 0.88153151 | 0.313 | 0.215 | 2.11E-17 | CD4_CAMK4_spleen |
| GLUD1              | 9.01E-22 | 0.76871151 | 0.357 | 0.251 | 3.19E-17 | CD4_CAMK4_spleen |
| ATP2A3             | 9.62E-22 | 0.67806542 | 0.251 | 0.157 | 3.41E-17 | CD4_CAMK4_spleen |
| NARS2              | 1.29E-21 | 0.53141976 | 0.366 | 0.254 | 4.57E-17 | CD4_CAMK4_spleen |
| ZNF831             | 1.66E-21 | 0.59992847 | 0.297 | 0.196 | 5.88E-17 | CD4_CAMK4_spleen |
| JUND               | 2.50E-21 | 0.40187858 | 0.61  | 0.483 | 8.87E-17 | CD4_CAMK4_spleen |
| ENSMMUG00000061756 | 2.66E-21 | 0.49368779 | 0.431 | 0.313 | 9.42E-17 | CD4_CAMK4_spleen |
| LRIG1              | 3.04E-21 | 0.4706802  | 0.489 | 0.372 | 1.08E-16 | CD4_CAMK4_spleen |
| MARK3              | 3.46E-21 | 0.33245737 | 0.69  | 0.562 | 1.23E-16 | CD4_CAMK4_spleen |
| TMEM87B            | 4.02E-21 | 0.51848453 | 0.341 | 0.232 | 1.42E-16 | CD4_CAMK4_spleen |
| CAB39              | 4.37E-21 | 0.30510151 | 0.817 | 0.738 | 1.55E-16 | CD4_CAMK4_spleen |
| PUM3               | 4.65E-21 | 0.6491953  | 0.264 | 0.168 | 1.65E-16 | CD4_CAMK4_spleen |



|                    |          |            |       |       |          |                  |
|--------------------|----------|------------|-------|-------|----------|------------------|
| CCNY               | 4.98E-21 | 0.36576259 | 0.692 | 0.579 | 1.76E-16 | CD4_CAMK4_spleen |
| C3H7orf50          | 5.96E-21 | 0.4299153  | 0.586 | 0.472 | 2.11E-16 | CD4_CAMK4_spleen |
| TAOK3              | 7.01E-21 | 0.36261178 | 0.696 | 0.588 | 2.48E-16 | CD4_CAMK4_spleen |
| TBC1D22A           | 8.42E-21 | 0.36814303 | 0.58  | 0.456 | 2.98E-16 | CD4_CAMK4_spleen |
| DYRK1A             | 9.75E-21 | 0.32822784 | 0.722 | 0.61  | 3.46E-16 | CD4_CAMK4_spleen |
| PDSS2              | 1.07E-20 | 0.47758572 | 0.493 | 0.379 | 3.78E-16 | CD4_CAMK4_spleen |
| TASOR              | 1.11E-20 | 0.52365987 | 0.433 | 0.322 | 3.93E-16 | CD4_CAMK4_spleen |
| PPP1R15A           | 1.20E-20 | 0.49937782 | 0.447 | 0.331 | 4.25E-16 | CD4_CAMK4_spleen |
| UBE2J1             | 1.21E-20 | 0.6142743  | 0.313 | 0.213 | 4.29E-16 | CD4_CAMK4_spleen |
| NRDC               | 1.51E-20 | 0.48083017 | 0.388 | 0.276 | 5.34E-16 | CD4_CAMK4_spleen |
| EIPR1              | 1.51E-20 | 0.36235605 | 0.443 | 0.321 | 5.36E-16 | CD4_CAMK4_spleen |
| GARRE1             | 1.67E-20 | 0.61091065 | 0.27  | 0.174 | 5.92E-16 | CD4_CAMK4_spleen |
| TRA2A              | 1.75E-20 | 0.25359877 | 0.907 | 0.837 | 6.21E-16 | CD4_CAMK4_spleen |
| ZFAND3             | 1.78E-20 | 0.24252379 | 0.883 | 0.836 | 6.31E-16 | CD4_CAMK4_spleen |
| RPS6KA3            | 1.92E-20 | 0.37958863 | 0.538 | 0.419 | 6.79E-16 | CD4_CAMK4_spleen |
| CAMKMT             | 1.92E-20 | 0.44459506 | 0.672 | 0.58  | 6.80E-16 | CD4_CAMK4_spleen |
| CEP350             | 2.16E-20 | 0.32157015 | 0.619 | 0.496 | 7.66E-16 | CD4_CAMK4_spleen |
| ATL2               | 3.03E-20 | 0.41065476 | 0.54  | 0.424 | 1.07E-15 | CD4_CAMK4_spleen |
| ENSMMUG00000052424 | 3.45E-20 | 0.21783374 | 0.961 | 0.936 | 1.22E-15 | CD4_CAMK4_spleen |
| CBFB               | 3.87E-20 | 0.53138929 | 0.419 | 0.313 | 1.37E-15 | CD4_CAMK4_spleen |
| LRRC8D             | 5.38E-20 | 0.64282959 | 0.3   | 0.204 | 1.91E-15 | CD4_CAMK4_spleen |
| CCT2               | 6.08E-20 | 0.41383936 | 0.515 | 0.398 | 2.15E-15 | CD4_CAMK4_spleen |
| LARP4B             | 6.89E-20 | 0.35848048 | 0.618 | 0.49  | 2.44E-15 | CD4_CAMK4_spleen |
| ERI3               | 7.27E-20 | 0.40980458 | 0.373 | 0.261 | 2.58E-15 | CD4_CAMK4_spleen |
| HMBOX1             | 8.75E-20 | 0.386776   | 0.553 | 0.435 | 3.10E-15 | CD4_CAMK4_spleen |
| KDM4B              | 1.13E-19 | 0.45387786 | 0.315 | 0.209 | 3.99E-15 | CD4_CAMK4_spleen |
| KLHL6              | 1.28E-19 | 0.46481266 | 0.42  | 0.306 | 4.54E-15 | CD4_CAMK4_spleen |
| LPIN1              | 1.70E-19 | 0.44553232 | 0.323 | 0.218 | 6.02E-15 | CD4_CAMK4_spleen |
| TBCK               | 1.85E-19 | 0.53099881 | 0.358 | 0.254 | 6.54E-15 | CD4_CAMK4_spleen |
| BMP2K              | 1.89E-19 | 0.27967589 | 0.582 | 0.469 | 6.71E-15 | CD4_CAMK4_spleen |
| ITM2A              | 3.77E-19 | 0.66779166 | 0.301 | 0.206 | 1.33E-14 | CD4_CAMK4_spleen |
| CEP170             | 4.19E-19 | 0.37149482 | 0.541 | 0.428 | 1.48E-14 | CD4_CAMK4_spleen |
| GPD2               | 4.41E-19 | 0.4963888  | 0.382 | 0.274 | 1.56E-14 | CD4_CAMK4_spleen |

|                    |          |            |       |       |          |                  |
|--------------------|----------|------------|-------|-------|----------|------------------|
| DPH6               | 4.45E-19 | 0.48422774 | 0.423 | 0.317 | 1.58E-14 | CD4_CAMK4_spleen |
| CCNH               | 4.86E-19 | 0.51711673 | 0.416 | 0.305 | 1.72E-14 | CD4_CAMK4_spleen |
| CSNK1G1            | 4.90E-19 | 0.35260424 | 0.669 | 0.565 | 1.73E-14 | CD4_CAMK4_spleen |
| ENSMMUG00000043332 | 5.93E-19 | 0.52529538 | 0.327 | 0.226 | 2.10E-14 | CD4_CAMK4_spleen |
| GALNT2             | 7.53E-19 | 0.58752321 | 0.263 | 0.171 | 2.67E-14 | CD4_CAMK4_spleen |
| KDM2A              | 8.57E-19 | 0.28167163 | 0.809 | 0.707 | 3.04E-14 | CD4_CAMK4_spleen |
| NCOR2              | 9.12E-19 | 0.57642707 | 0.263 | 0.171 | 3.23E-14 | CD4_CAMK4_spleen |
| EIF4A2             | 9.34E-19 | 0.3781654  | 0.589 | 0.473 | 3.31E-14 | CD4_CAMK4_spleen |
| ZNF268             | 9.36E-19 | 0.54388663 | 0.312 | 0.215 | 3.32E-14 | CD4_CAMK4_spleen |
| ENSMMUG00000011711 | 1.04E-18 | 0.43866548 | 0.376 | 0.269 | 3.70E-14 | CD4_CAMK4_spleen |
| BPTF               | 1.07E-18 | 0.2799162  | 0.777 | 0.69  | 3.80E-14 | CD4_CAMK4_spleen |
| ARGLU1             | 1.36E-18 | 0.28225194 | 0.801 | 0.699 | 4.83E-14 | CD4_CAMK4_spleen |
| RBL1               | 1.38E-18 | 0.52730262 | 0.27  | 0.175 | 4.88E-14 | CD4_CAMK4_spleen |
| PAXBP1             | 1.38E-18 | 0.46807232 | 0.33  | 0.227 | 4.89E-14 | CD4_CAMK4_spleen |
| SPTBN1             | 1.47E-18 | 0.27808182 | 0.838 | 0.761 | 5.21E-14 | CD4_CAMK4_spleen |
| ST7L               | 1.52E-18 | 0.59342828 | 0.325 | 0.227 | 5.37E-14 | CD4_CAMK4_spleen |
| EDEM3              | 1.89E-18 | 0.42098923 | 0.42  | 0.31  | 6.71E-14 | CD4_CAMK4_spleen |
| AKNA               | 2.05E-18 | 0.36754853 | 0.533 | 0.415 | 7.25E-14 | CD4_CAMK4_spleen |
| NCOR1              | 2.17E-18 | 0.26146905 | 0.778 | 0.688 | 7.67E-14 | CD4_CAMK4_spleen |
| SYAP1              | 3.19E-18 | 0.46111551 | 0.486 | 0.379 | 1.13E-13 | CD4_CAMK4_spleen |
| CYBA               | 3.64E-18 | 0.53310827 | 0.3   | 0.205 | 1.29E-13 | CD4_CAMK4_spleen |
| TCP1               | 3.92E-18 | 0.5832969  | 0.332 | 0.235 | 1.39E-13 | CD4_CAMK4_spleen |
| RFX7               | 5.01E-18 | 0.4115609  | 0.543 | 0.437 | 1.78E-13 | CD4_CAMK4_spleen |
| RASGRF2            | 5.04E-18 | 0.43572666 | 0.564 | 0.474 | 1.79E-13 | CD4_CAMK4_spleen |
| MIA2               | 5.32E-18 | 0.32652834 | 0.585 | 0.466 | 1.88E-13 | CD4_CAMK4_spleen |
| PKN1               | 5.74E-18 | 0.60405685 | 0.262 | 0.173 | 2.03E-13 | CD4_CAMK4_spleen |
| TIA1               | 6.23E-18 | 0.37172961 | 0.52  | 0.405 | 2.21E-13 | CD4_CAMK4_spleen |
| IPO11              | 7.04E-18 | 0.43949233 | 0.446 | 0.338 | 2.49E-13 | CD4_CAMK4_spleen |
| NUMB               | 7.52E-18 | 0.37431277 | 0.572 | 0.469 | 2.66E-13 | CD4_CAMK4_spleen |
| PIK3CD             | 7.79E-18 | 0.34260371 | 0.688 | 0.577 | 2.76E-13 | CD4_CAMK4_spleen |
| TRIO               | 8.32E-18 | 0.41304784 | 0.396 | 0.292 | 2.95E-13 | CD4_CAMK4_spleen |
| MAPK6              | 9.57E-18 | 0.46015481 | 0.414 | 0.311 | 3.39E-13 | CD4_CAMK4_spleen |
| PAPOLA             | 9.62E-18 | 0.30901626 | 0.674 | 0.571 | 3.41E-13 | CD4_CAMK4_spleen |

|                    |          |            |       |       |          |                  |
|--------------------|----------|------------|-------|-------|----------|------------------|
| ABI1               | 9.73E-18 | 0.37803434 | 0.846 | 0.787 | 3.45E-13 | CD4_CAMK4_spleen |
| TRAPPC9            | 1.07E-17 | 0.33903192 | 0.542 | 0.431 | 3.78E-13 | CD4_CAMK4_spleen |
| CSK                | 1.13E-17 | 0.6178653  | 0.251 | 0.165 | 3.99E-13 | CD4_CAMK4_spleen |
| MED13L             | 1.14E-17 | 0.18796745 | 0.945 | 0.91  | 4.05E-13 | CD4_CAMK4_spleen |
| RASGRP2            | 1.72E-17 | 0.33721647 | 0.413 | 0.304 | 6.10E-13 | CD4_CAMK4_spleen |
| DHX36              | 1.74E-17 | 0.25276891 | 0.589 | 0.469 | 6.18E-13 | CD4_CAMK4_spleen |
| ANKRD10            | 2.16E-17 | 0.28760682 | 0.588 | 0.464 | 7.67E-13 | CD4_CAMK4_spleen |
| ITK                | 2.17E-17 | 0.31379812 | 0.846 | 0.799 | 7.69E-13 | CD4_CAMK4_spleen |
| NCK2               | 2.18E-17 | 0.23781348 | 0.623 | 0.508 | 7.72E-13 | CD4_CAMK4_spleen |
| WDR59              | 2.39E-17 | 0.48565399 | 0.326 | 0.229 | 8.48E-13 | CD4_CAMK4_spleen |
| METTL15            | 2.63E-17 | 0.60434209 | 0.316 | 0.223 | 9.32E-13 | CD4_CAMK4_spleen |
| SLC7A6             | 2.71E-17 | 0.36611792 | 0.516 | 0.398 | 9.60E-13 | CD4_CAMK4_spleen |
| TBC1D10B           | 4.14E-17 | 0.47842042 | 0.332 | 0.236 | 1.47E-12 | CD4_CAMK4_spleen |
| RREB1              | 5.04E-17 | 0.45480021 | 0.358 | 0.259 | 1.78E-12 | CD4_CAMK4_spleen |
| MEMO1              | 5.40E-17 | 0.26628421 | 0.703 | 0.604 | 1.91E-12 | CD4_CAMK4_spleen |
| C20H16orf72        | 5.91E-17 | 0.28668039 | 0.701 | 0.588 | 2.10E-12 | CD4_CAMK4_spleen |
| SLTM               | 6.88E-17 | 0.32952453 | 0.602 | 0.49  | 2.44E-12 | CD4_CAMK4_spleen |
| SPEN               | 7.09E-17 | 0.30686657 | 0.635 | 0.523 | 2.51E-12 | CD4_CAMK4_spleen |
| ENSMMUG00000030374 | 7.35E-17 | 0.37576992 | 0.461 | 0.352 | 2.60E-12 | CD4_CAMK4_spleen |
| ACTG1              | 7.46E-17 | 0.44562691 | 0.632 | 0.533 | 2.64E-12 | CD4_CAMK4_spleen |
| GRK5               | 8.77E-17 | 0.43053759 | 0.551 | 0.457 | 3.11E-12 | CD4_CAMK4_spleen |
| REV1               | 8.96E-17 | 0.421265   | 0.322 | 0.225 | 3.18E-12 | CD4_CAMK4_spleen |
| CDC42              | 9.22E-17 | 0.24323576 | 0.894 | 0.835 | 3.27E-12 | CD4_CAMK4_spleen |
| ATRX               | 9.32E-17 | 0.23078107 | 0.844 | 0.781 | 3.30E-12 | CD4_CAMK4_spleen |
| VIM                | 9.74E-17 | 0.65285337 | 0.337 | 0.247 | 3.45E-12 | CD4_CAMK4_spleen |
| KCNQ5              | 9.93E-17 | 0.3598295  | 0.808 | 0.766 | 3.52E-12 | CD4_CAMK4_spleen |
| NUDT4              | 1.12E-16 | 0.51290439 | 0.353 | 0.255 | 3.98E-12 | CD4_CAMK4_spleen |
| YWHAH              | 1.22E-16 | 0.44518459 | 0.326 | 0.231 | 4.32E-12 | CD4_CAMK4_spleen |
| REL                | 1.22E-16 | 0.38188723 | 0.635 | 0.545 | 4.32E-12 | CD4_CAMK4_spleen |
| MORF4L2            | 1.43E-16 | 0.42923897 | 0.332 | 0.236 | 5.05E-12 | CD4_CAMK4_spleen |
| MSL2               | 1.69E-16 | 0.39273986 | 0.547 | 0.445 | 5.98E-12 | CD4_CAMK4_spleen |
| KCNAB2             | 1.96E-16 | 0.35679319 | 0.506 | 0.394 | 6.94E-12 | CD4_CAMK4_spleen |
| ANKRD17            | 1.98E-16 | 0.24645601 | 0.792 | 0.714 | 7.02E-12 | CD4_CAMK4_spleen |

|                    |          |            |       |       |          |                  |
|--------------------|----------|------------|-------|-------|----------|------------------|
| MIDEAS             | 1.98E-16 | 0.48606428 | 0.251 | 0.166 | 7.03E-12 | CD4_CAMK4_spleen |
| ENSMMUG00000057691 | 2.14E-16 | 0.42232706 | 0.414 | 0.311 | 7.59E-12 | CD4_CAMK4_spleen |
| ZMYM4              | 2.16E-16 | 0.32238599 | 0.609 | 0.5   | 7.64E-12 | CD4_CAMK4_spleen |
| SLC38A10           | 2.18E-16 | 0.4584413  | 0.268 | 0.18  | 7.71E-12 | CD4_CAMK4_spleen |
| SBF2               | 2.27E-16 | 0.3183914  | 0.602 | 0.497 | 8.05E-12 | CD4_CAMK4_spleen |
| CEP112             | 2.51E-16 | 0.56606455 | 0.283 | 0.195 | 8.91E-12 | CD4_CAMK4_spleen |
| C10H20orf24        | 2.90E-16 | 0.37680421 | 0.408 | 0.303 | 1.03E-11 | CD4_CAMK4_spleen |
| CLCN3              | 3.19E-16 | 0.48237825 | 0.292 | 0.203 | 1.13E-11 | CD4_CAMK4_spleen |
| PACS1              | 3.85E-16 | 0.25456659 | 0.776 | 0.681 | 1.36E-11 | CD4_CAMK4_spleen |
| CLEC2B             | 4.04E-16 | 0.54201057 | 0.365 | 0.273 | 1.43E-11 | CD4_CAMK4_spleen |
| IKZF2              | 4.04E-16 | 0.62857075 | 0.506 | 0.419 | 1.43E-11 | CD4_CAMK4_spleen |
| UIMC1              | 4.15E-16 | 0.29270452 | 0.506 | 0.388 | 1.47E-11 | CD4_CAMK4_spleen |
| BAZ1B              | 5.52E-16 | 0.36833605 | 0.44  | 0.327 | 1.96E-11 | CD4_CAMK4_spleen |
| PITRM1             | 5.66E-16 | 0.56024438 | 0.258 | 0.174 | 2.01E-11 | CD4_CAMK4_spleen |
| INTS6              | 5.91E-16 | 0.30108124 | 0.631 | 0.523 | 2.09E-11 | CD4_CAMK4_spleen |
| ST8SIA4            | 6.67E-16 | 0.39374186 | 0.495 | 0.399 | 2.36E-11 | CD4_CAMK4_spleen |
| TRAF5              | 6.72E-16 | 0.49463953 | 0.299 | 0.208 | 2.38E-11 | CD4_CAMK4_spleen |
| PIK3R1             | 8.35E-16 | 0.50245112 | 0.414 | 0.315 | 2.96E-11 | CD4_CAMK4_spleen |
| PTBP3              | 8.35E-16 | 0.26930266 | 0.753 | 0.651 | 2.96E-11 | CD4_CAMK4_spleen |
| CDIP1              | 8.67E-16 | 0.46414093 | 0.255 | 0.171 | 3.07E-11 | CD4_CAMK4_spleen |
| NCOA6              | 8.73E-16 | 0.36001365 | 0.356 | 0.259 | 3.09E-11 | CD4_CAMK4_spleen |
| DIPK1A             | 1.09E-15 | 0.38215168 | 0.452 | 0.349 | 3.85E-11 | CD4_CAMK4_spleen |
| ATF7IP2            | 1.19E-15 | 0.36944737 | 0.481 | 0.383 | 4.23E-11 | CD4_CAMK4_spleen |
| DROSHA             | 1.22E-15 | 0.55040727 | 0.283 | 0.2   | 4.31E-11 | CD4_CAMK4_spleen |
| SND1               | 1.26E-15 | 0.27279194 | 0.695 | 0.596 | 4.46E-11 | CD4_CAMK4_spleen |
| UBE2N              | 1.28E-15 | 0.46780211 | 0.435 | 0.338 | 4.53E-11 | CD4_CAMK4_spleen |
| LARS1              | 1.66E-15 | 0.48657702 | 0.27  | 0.185 | 5.87E-11 | CD4_CAMK4_spleen |
| RNF11              | 2.01E-15 | 0.44065267 | 0.418 | 0.321 | 7.14E-11 | CD4_CAMK4_spleen |
| CAP1               | 2.07E-15 | 0.49729676 | 0.296 | 0.21  | 7.34E-11 | CD4_CAMK4_spleen |
| FOCAD              | 2.09E-15 | 0.40976295 | 0.427 | 0.329 | 7.42E-11 | CD4_CAMK4_spleen |
| MAP4K4             | 2.13E-15 | 0.28441878 | 0.918 | 0.892 | 7.56E-11 | CD4_CAMK4_spleen |
| USP48              | 2.19E-15 | 0.31624413 | 0.431 | 0.324 | 7.76E-11 | CD4_CAMK4_spleen |
| POLR2A             | 2.20E-15 | 0.36446992 | 0.546 | 0.448 | 7.79E-11 | CD4_CAMK4_spleen |

|          |          |            |       |       |          |                  |
|----------|----------|------------|-------|-------|----------|------------------|
| B3GNTL1  | 2.24E-15 | 0.52846984 | 0.27  | 0.186 | 7.92E-11 | CD4_CAMK4_spleen |
| SLK      | 2.69E-15 | 0.46196424 | 0.263 | 0.179 | 9.53E-11 | CD4_CAMK4_spleen |
| INPP4A   | 2.73E-15 | 0.28544255 | 0.684 | 0.58  | 9.67E-11 | CD4_CAMK4_spleen |
| STIM2    | 2.77E-15 | 0.32284587 | 0.646 | 0.547 | 9.80E-11 | CD4_CAMK4_spleen |
| TBC1D10C | 3.20E-15 | 0.48172839 | 0.295 | 0.206 | 1.13E-10 | CD4_CAMK4_spleen |
| BICRAL   | 3.77E-15 | 0.42052028 | 0.334 | 0.241 | 1.33E-10 | CD4_CAMK4_spleen |
| GON4L    | 4.05E-15 | 0.41393526 | 0.398 | 0.303 | 1.44E-10 | CD4_CAMK4_spleen |
| NME3     | 4.88E-15 | 0.6446954  | 0.261 | 0.183 | 1.73E-10 | CD4_CAMK4_spleen |
| IKBKB    | 6.41E-15 | 0.45868478 | 0.305 | 0.218 | 2.27E-10 | CD4_CAMK4_spleen |
| IQSEC1   | 6.78E-15 | 0.31195718 | 0.449 | 0.346 | 2.40E-10 | CD4_CAMK4_spleen |
| FYN      | 7.57E-15 | 0.20969944 | 0.925 | 0.884 | 2.68E-10 | CD4_CAMK4_spleen |
| ZNF331   | 7.58E-15 | 0.19122996 | 0.264 | 0.179 | 2.69E-10 | CD4_CAMK4_spleen |
| PAOX     | 8.79E-15 | 0.40280122 | 0.357 | 0.264 | 3.12E-10 | CD4_CAMK4_spleen |
| TTC27    | 9.35E-15 | 0.38201928 | 0.403 | 0.309 | 3.31E-10 | CD4_CAMK4_spleen |
| ARMH3    | 1.01E-14 | 0.29989929 | 0.481 | 0.373 | 3.58E-10 | CD4_CAMK4_spleen |
| RPS6KC1  | 1.11E-14 | 0.37968495 | 0.489 | 0.393 | 3.92E-10 | CD4_CAMK4_spleen |
| MTX2     | 1.15E-14 | 0.45500049 | 0.329 | 0.24  | 4.08E-10 | CD4_CAMK4_spleen |
| UBQLN1   | 1.26E-14 | 0.32924832 | 0.503 | 0.398 | 4.48E-10 | CD4_CAMK4_spleen |
| VCP      | 1.37E-14 | 0.30646747 | 0.354 | 0.256 | 4.84E-10 | CD4_CAMK4_spleen |
| SPAG9    | 1.45E-14 | 0.28321468 | 0.77  | 0.69  | 5.14E-10 | CD4_CAMK4_spleen |
| CD2      | 1.47E-14 | 0.4159938  | 0.347 | 0.255 | 5.21E-10 | CD4_CAMK4_spleen |
| IFT80    | 1.54E-14 | 0.31609866 | 0.639 | 0.545 | 5.47E-10 | CD4_CAMK4_spleen |
| RELCH    | 1.69E-14 | 0.27525026 | 0.596 | 0.487 | 5.99E-10 | CD4_CAMK4_spleen |
| WWOX     | 1.70E-14 | 0.41840021 | 0.584 | 0.493 | 6.03E-10 | CD4_CAMK4_spleen |
| TNRC18   | 1.86E-14 | 0.38671721 | 0.324 | 0.233 | 6.58E-10 | CD4_CAMK4_spleen |
| DDX10    | 2.23E-14 | 0.36457246 | 0.552 | 0.455 | 7.91E-10 | CD4_CAMK4_spleen |
| ANKRD27  | 2.43E-14 | 0.40828948 | 0.288 | 0.202 | 8.62E-10 | CD4_CAMK4_spleen |
| PPP3CA   | 2.61E-14 | 0.25539813 | 0.862 | 0.806 | 9.24E-10 | CD4_CAMK4_spleen |
| UBR2     | 2.80E-14 | 0.30421304 | 0.549 | 0.44  | 9.92E-10 | CD4_CAMK4_spleen |
| RERE     | 2.91E-14 | 0.15522256 | 0.939 | 0.892 | 1.03E-09 | CD4_CAMK4_spleen |
| SPATA5   | 3.38E-14 | 0.33490558 | 0.622 | 0.538 | 1.20E-09 | CD4_CAMK4_spleen |
| SUSD6    | 3.52E-14 | 0.29858767 | 0.521 | 0.419 | 1.25E-09 | CD4_CAMK4_spleen |
| DCAF5    | 3.61E-14 | 0.29515153 | 0.548 | 0.446 | 1.28E-09 | CD4_CAMK4_spleen |

|                    |          |             |       |       |          |                  |
|--------------------|----------|-------------|-------|-------|----------|------------------|
| UBAC2              | 3.63E-14 | 0.17898686  | 0.92  | 0.865 | 1.29E-09 | CD4_CAMK4_spleen |
| RPS6KA5            | 4.04E-14 | 0.43989346  | 0.618 | 0.538 | 1.43E-09 | CD4_CAMK4_spleen |
| SINHCAF            | 4.42E-14 | 0.34624899  | 0.6   | 0.505 | 1.57E-09 | CD4_CAMK4_spleen |
| USP22              | 5.22E-14 | 0.37250447  | 0.316 | 0.226 | 1.85E-09 | CD4_CAMK4_spleen |
| TCF12              | 5.94E-14 | 0.127777015 | 0.972 | 0.947 | 2.11E-09 | CD4_CAMK4_spleen |
| MAPRE2             | 5.99E-14 | 0.51909601  | 0.467 | 0.376 | 2.12E-09 | CD4_CAMK4_spleen |
| UPF2               | 6.15E-14 | 0.26838401  | 0.523 | 0.422 | 2.18E-09 | CD4_CAMK4_spleen |
| TGFBR2             | 7.35E-14 | 0.27120678  | 0.747 | 0.674 | 2.61E-09 | CD4_CAMK4_spleen |
| TMC6               | 7.35E-14 | 0.333578    | 0.37  | 0.275 | 2.61E-09 | CD4_CAMK4_spleen |
| SP140              | 7.94E-14 | 0.399287    | 0.348 | 0.26  | 2.81E-09 | CD4_CAMK4_spleen |
| OXR1               | 8.49E-14 | 0.37142776  | 0.526 | 0.433 | 3.01E-09 | CD4_CAMK4_spleen |
| TRIM24             | 9.32E-14 | 0.31085346  | 0.502 | 0.404 | 3.30E-09 | CD4_CAMK4_spleen |
| SNU13              | 9.89E-14 | 0.39942495  | 0.456 | 0.358 | 3.51E-09 | CD4_CAMK4_spleen |
| VMP1               | 1.18E-13 | 0.36425689  | 0.443 | 0.351 | 4.17E-09 | CD4_CAMK4_spleen |
| ARL15              | 1.21E-13 | 0.26688507  | 0.762 | 0.69  | 4.27E-09 | CD4_CAMK4_spleen |
| PMS1               | 1.29E-13 | 0.42434629  | 0.275 | 0.193 | 4.56E-09 | CD4_CAMK4_spleen |
| XIAP               | 1.33E-13 | 0.36626187  | 0.267 | 0.185 | 4.70E-09 | CD4_CAMK4_spleen |
| PLEKHA1            | 1.38E-13 | 0.3537665   | 0.383 | 0.294 | 4.90E-09 | CD4_CAMK4_spleen |
| RSC1A1             | 1.42E-13 | 0.38288969  | 0.271 | 0.188 | 5.04E-09 | CD4_CAMK4_spleen |
| TBL1XR1            | 1.47E-13 | 0.19989314  | 0.91  | 0.875 | 5.19E-09 | CD4_CAMK4_spleen |
| DIP2A              | 1.53E-13 | 0.34238131  | 0.371 | 0.277 | 5.42E-09 | CD4_CAMK4_spleen |
| NLK                | 1.61E-13 | 0.36004797  | 0.395 | 0.304 | 5.70E-09 | CD4_CAMK4_spleen |
| PCNX1              | 1.62E-13 | 0.29486232  | 0.602 | 0.508 | 5.73E-09 | CD4_CAMK4_spleen |
| TNPO3              | 1.72E-13 | 0.29109991  | 0.47  | 0.371 | 6.08E-09 | CD4_CAMK4_spleen |
| MTMR12             | 2.08E-13 | 0.54163438  | 0.305 | 0.226 | 7.36E-09 | CD4_CAMK4_spleen |
| EXT1               | 2.23E-13 | 0.33506579  | 0.557 | 0.464 | 7.89E-09 | CD4_CAMK4_spleen |
| CREB1              | 2.31E-13 | 0.31136427  | 0.522 | 0.426 | 8.19E-09 | CD4_CAMK4_spleen |
| ENSMMUG00000039874 | 2.40E-13 | 0.35203056  | 0.365 | 0.275 | 8.49E-09 | CD4_CAMK4_spleen |
| TESPA1             | 2.43E-13 | 0.31594952  | 0.386 | 0.293 | 8.61E-09 | CD4_CAMK4_spleen |
| OGDH               | 2.62E-13 | 0.38357318  | 0.351 | 0.266 | 9.28E-09 | CD4_CAMK4_spleen |
| SNX27              | 2.70E-13 | 0.33712161  | 0.298 | 0.214 | 9.56E-09 | CD4_CAMK4_spleen |
| ITFG1              | 2.76E-13 | 0.26874726  | 0.621 | 0.512 | 9.78E-09 | CD4_CAMK4_spleen |
| EIF2B3             | 2.89E-13 | 0.33837214  | 0.485 | 0.386 | 1.02E-08 | CD4_CAMK4_spleen |

|                    |          |            |       |       |          |                  |
|--------------------|----------|------------|-------|-------|----------|------------------|
| ARHGEF1            | 3.18E-13 | 0.25459468 | 0.679 | 0.572 | 1.13E-08 | CD4_CAMK4_spleen |
| MAPK1IP1L          | 3.27E-13 | 0.35208127 | 0.457 | 0.359 | 1.16E-08 | CD4_CAMK4_spleen |
| DNAJC1             | 4.67E-13 | 0.40128546 | 0.379 | 0.294 | 1.66E-08 | CD4_CAMK4_spleen |
| AKAP13             | 4.92E-13 | 0.16794376 | 0.956 | 0.929 | 1.74E-08 | CD4_CAMK4_spleen |
| FAM53C             | 4.93E-13 | 0.3732505  | 0.302 | 0.219 | 1.75E-08 | CD4_CAMK4_spleen |
| ENSMMUG00000061125 | 5.28E-13 | 0.43942626 | 0.685 | 0.634 | 1.87E-08 | CD4_CAMK4_spleen |
| ETF1               | 5.30E-13 | 0.28344796 | 0.585 | 0.485 | 1.88E-08 | CD4_CAMK4_spleen |
| RSRC1              | 6.28E-13 | 0.28020575 | 0.66  | 0.563 | 2.23E-08 | CD4_CAMK4_spleen |
| HIPK2              | 6.72E-13 | 0.32985529 | 0.457 | 0.365 | 2.38E-08 | CD4_CAMK4_spleen |
| ZMYND11            | 7.12E-13 | 0.23549613 | 0.659 | 0.568 | 2.52E-08 | CD4_CAMK4_spleen |
| IP6K1              | 7.12E-13 | 0.30317018 | 0.494 | 0.4   | 2.52E-08 | CD4_CAMK4_spleen |
| ANTXR2             | 7.55E-13 | 0.32761087 | 0.42  | 0.33  | 2.67E-08 | CD4_CAMK4_spleen |
| ST6GALNAC3         | 8.82E-13 | 0.65882659 | 0.324 | 0.249 | 3.13E-08 | CD4_CAMK4_spleen |
| TAF1               | 8.99E-13 | 0.30829092 | 0.415 | 0.319 | 3.19E-08 | CD4_CAMK4_spleen |
| NOP58              | 1.12E-12 | 0.30154331 | 0.609 | 0.519 | 3.97E-08 | CD4_CAMK4_spleen |
| EIF3B              | 1.14E-12 | 0.31426409 | 0.325 | 0.238 | 4.03E-08 | CD4_CAMK4_spleen |
| BHLHB9             | 1.15E-12 | 0.44385707 | 0.291 | 0.214 | 4.08E-08 | CD4_CAMK4_spleen |
| UBL3               | 1.17E-12 | 0.28977248 | 0.563 | 0.476 | 4.16E-08 | CD4_CAMK4_spleen |
| SACM1L             | 1.20E-12 | 0.27743754 | 0.422 | 0.323 | 4.26E-08 | CD4_CAMK4_spleen |
| CHD9               | 1.20E-12 | 0.39542079 | 0.34  | 0.257 | 4.26E-08 | CD4_CAMK4_spleen |
| SEC14L1            | 1.22E-12 | 0.32596287 | 0.427 | 0.338 | 4.31E-08 | CD4_CAMK4_spleen |
| ENSMMUG00000055687 | 1.34E-12 | 0.36029059 | 0.536 | 0.436 | 4.74E-08 | CD4_CAMK4_spleen |
| MLLT3              | 1.47E-12 | 0.22621043 | 0.879 | 0.854 | 5.19E-08 | CD4_CAMK4_spleen |
| SLC39A11           | 1.51E-12 | 0.31133543 | 0.588 | 0.508 | 5.33E-08 | CD4_CAMK4_spleen |
| TMEM117            | 1.84E-12 | 0.41838536 | 0.436 | 0.353 | 6.53E-08 | CD4_CAMK4_spleen |
| PPM1B              | 1.86E-12 | 0.27066338 | 0.521 | 0.426 | 6.58E-08 | CD4_CAMK4_spleen |
| RSBN1L             | 1.90E-12 | 0.32990896 | 0.416 | 0.327 | 6.75E-08 | CD4_CAMK4_spleen |
| MKLN1              | 2.13E-12 | 0.18468245 | 0.805 | 0.718 | 7.54E-08 | CD4_CAMK4_spleen |
| MARCHF5            | 2.25E-12 | 0.37003065 | 0.287 | 0.207 | 7.98E-08 | CD4_CAMK4_spleen |
| CCAR1              | 2.38E-12 | 0.26461151 | 0.461 | 0.362 | 8.43E-08 | CD4_CAMK4_spleen |
| CBX3               | 2.45E-12 | 0.3793587  | 0.345 | 0.26  | 8.67E-08 | CD4_CAMK4_spleen |
| COMMD7             | 2.77E-12 | 0.27508361 | 0.457 | 0.363 | 9.80E-08 | CD4_CAMK4_spleen |
| TASP1              | 2.83E-12 | 0.29706902 | 0.58  | 0.494 | 1.00E-07 | CD4_CAMK4_spleen |

|         |          |            |       |       |          |                  |
|---------|----------|------------|-------|-------|----------|------------------|
| AHCYL2  | 3.34E-12 | 0.40245639 | 0.44  | 0.361 | 1.18E-07 | CD4_CAMK4_spleen |
| HIF1A   | 3.66E-12 | 0.429924   | 0.64  | 0.586 | 1.30E-07 | CD4_CAMK4_spleen |
| IMMP2L  | 4.08E-12 | 0.26426111 | 0.801 | 0.749 | 1.45E-07 | CD4_CAMK4_spleen |
| ATP2B4  | 4.12E-12 | 0.27790254 | 0.597 | 0.504 | 1.46E-07 | CD4_CAMK4_spleen |
| GTPBP1  | 4.68E-12 | 0.32420622 | 0.357 | 0.27  | 1.66E-07 | CD4_CAMK4_spleen |
| CD5     | 5.00E-12 | 0.39992749 | 0.337 | 0.257 | 1.77E-07 | CD4_CAMK4_spleen |
| CEP85L  | 5.25E-12 | 0.29410056 | 0.684 | 0.609 | 1.86E-07 | CD4_CAMK4_spleen |
| SH3GL1  | 5.55E-12 | 0.36817416 | 0.355 | 0.271 | 1.97E-07 | CD4_CAMK4_spleen |
| VPS37B  | 5.78E-12 | 0.30596116 | 0.562 | 0.475 | 2.05E-07 | CD4_CAMK4_spleen |
| SPG7    | 5.82E-12 | 0.27184302 | 0.286 | 0.206 | 2.06E-07 | CD4_CAMK4_spleen |
| SNX14   | 5.87E-12 | 0.2498312  | 0.481 | 0.389 | 2.08E-07 | CD4_CAMK4_spleen |
| GMDS    | 5.96E-12 | 0.2500915  | 0.714 | 0.65  | 2.11E-07 | CD4_CAMK4_spleen |
| CUL1    | 6.08E-12 | 0.24007778 | 0.519 | 0.422 | 2.15E-07 | CD4_CAMK4_spleen |
| NASP    | 7.81E-12 | 0.3322694  | 0.446 | 0.355 | 2.77E-07 | CD4_CAMK4_spleen |
| PIBF1   | 8.34E-12 | 0.3166339  | 0.424 | 0.339 | 2.96E-07 | CD4_CAMK4_spleen |
| WWP1    | 9.20E-12 | 0.3027072  | 0.51  | 0.424 | 3.26E-07 | CD4_CAMK4_spleen |
| AKIRIN1 | 9.74E-12 | 0.27951354 | 0.375 | 0.286 | 3.45E-07 | CD4_CAMK4_spleen |
| GPR174  | 1.04E-11 | 0.2405143  | 0.379 | 0.292 | 3.70E-07 | CD4_CAMK4_spleen |
| EFL1    | 1.09E-11 | 0.37108047 | 0.477 | 0.391 | 3.88E-07 | CD4_CAMK4_spleen |
| SCML4   | 1.15E-11 | 0.25594757 | 0.83  | 0.788 | 4.07E-07 | CD4_CAMK4_spleen |
| USP34   | 1.15E-11 | 0.14693061 | 0.928 | 0.887 | 4.08E-07 | CD4_CAMK4_spleen |
| PI4KA   | 1.22E-11 | 0.23898053 | 0.432 | 0.335 | 4.32E-07 | CD4_CAMK4_spleen |
| ARF4    | 1.27E-11 | 0.31354098 | 0.561 | 0.471 | 4.51E-07 | CD4_CAMK4_spleen |
| MAPKAP1 | 1.28E-11 | 0.23288578 | 0.581 | 0.494 | 4.52E-07 | CD4_CAMK4_spleen |
| TUBA1A  | 1.28E-11 | 0.46387887 | 0.404 | 0.322 | 4.54E-07 | CD4_CAMK4_spleen |
| UBE2D1  | 1.39E-11 | 0.41356648 | 0.276 | 0.204 | 4.94E-07 | CD4_CAMK4_spleen |
| DENND1A | 1.42E-11 | 0.2438496  | 0.634 | 0.542 | 5.03E-07 | CD4_CAMK4_spleen |
| USO1    | 1.48E-11 | 0.41610851 | 0.274 | 0.199 | 5.23E-07 | CD4_CAMK4_spleen |
| HDLBP   | 1.52E-11 | 0.33188703 | 0.4   | 0.314 | 5.37E-07 | CD4_CAMK4_spleen |
| JAZF1   | 1.53E-11 | 0.48439635 | 0.428 | 0.351 | 5.43E-07 | CD4_CAMK4_spleen |
| USP4    | 1.55E-11 | 0.29122749 | 0.441 | 0.349 | 5.50E-07 | CD4_CAMK4_spleen |
| SAE1    | 1.59E-11 | 0.31103331 | 0.321 | 0.241 | 5.64E-07 | CD4_CAMK4_spleen |
| XYLT1   | 1.64E-11 | 0.16089211 | 0.812 | 0.734 | 5.80E-07 | CD4_CAMK4_spleen |



|                    |          |            |       |       |          |                  |
|--------------------|----------|------------|-------|-------|----------|------------------|
| WDR47              | 2.09E-11 | 0.4496608  | 0.263 | 0.193 | 7.42E-07 | CD4_CAMK4_spleen |
| ENSMMUG00000006965 | 2.34E-11 | 0.41464767 | 0.379 | 0.303 | 8.28E-07 | CD4_CAMK4_spleen |
| SETD3              | 2.44E-11 | 0.38769143 | 0.29  | 0.216 | 8.63E-07 | CD4_CAMK4_spleen |
| IL2RG              | 2.48E-11 | 0.30266307 | 0.391 | 0.306 | 8.80E-07 | CD4_CAMK4_spleen |
| SPOP               | 2.69E-11 | 0.27683833 | 0.525 | 0.434 | 9.52E-07 | CD4_CAMK4_spleen |
| STX8               | 2.76E-11 | 0.38834317 | 0.42  | 0.346 | 9.77E-07 | CD4_CAMK4_spleen |
| TSPAN14            | 3.60E-11 | 0.27954077 | 0.386 | 0.301 | 1.28E-06 | CD4_CAMK4_spleen |
| ARHGEF7            | 3.86E-11 | 0.26182507 | 0.892 | 0.86  | 1.37E-06 | CD4_CAMK4_spleen |
| VDAC2              | 4.10E-11 | 0.36836939 | 0.407 | 0.325 | 1.45E-06 | CD4_CAMK4_spleen |
| MAD1L1             | 4.48E-11 | 0.30297982 | 0.36  | 0.277 | 1.59E-06 | CD4_CAMK4_spleen |
| KIAA2026           | 4.71E-11 | 0.36261022 | 0.379 | 0.298 | 1.67E-06 | CD4_CAMK4_spleen |
| EIF4A3             | 4.81E-11 | 0.38360758 | 0.274 | 0.2   | 1.71E-06 | CD4_CAMK4_spleen |
| UBE3D              | 4.94E-11 | 0.47171451 | 0.279 | 0.209 | 1.75E-06 | CD4_CAMK4_spleen |
| KPNA1              | 4.99E-11 | 0.21593511 | 0.494 | 0.401 | 1.77E-06 | CD4_CAMK4_spleen |
| ANKRD11            | 5.38E-11 | 0.15426876 | 0.861 | 0.806 | 1.91E-06 | CD4_CAMK4_spleen |
| VKORC1L1           | 6.48E-11 | 0.34698982 | 0.255 | 0.185 | 2.29E-06 | CD4_CAMK4_spleen |
| SPAST              | 6.96E-11 | 0.35999869 | 0.322 | 0.246 | 2.47E-06 | CD4_CAMK4_spleen |
| PTGER4             | 7.70E-11 | 0.51555772 | 0.324 | 0.255 | 2.73E-06 | CD4_CAMK4_spleen |
| FAM120B            | 7.92E-11 | 0.34353011 | 0.325 | 0.247 | 2.81E-06 | CD4_CAMK4_spleen |
| CLEC2D             | 8.38E-11 | 0.33560299 | 0.537 | 0.466 | 2.97E-06 | CD4_CAMK4_spleen |
| CELF2              | 9.44E-11 | 0.13141699 | 0.984 | 0.973 | 3.34E-06 | CD4_CAMK4_spleen |
| SLX4IP             | 1.01E-10 | 0.3762997  | 0.323 | 0.249 | 3.60E-06 | CD4_CAMK4_spleen |
| ST3GAL3            | 1.02E-10 | 0.28829037 | 0.417 | 0.332 | 3.60E-06 | CD4_CAMK4_spleen |
| CUL4A              | 1.05E-10 | 0.23082868 | 0.531 | 0.437 | 3.72E-06 | CD4_CAMK4_spleen |
| HERC3              | 1.09E-10 | 0.22737326 | 0.679 | 0.599 | 3.85E-06 | CD4_CAMK4_spleen |
| TRIR               | 1.09E-10 | 0.22794607 | 0.35  | 0.267 | 3.86E-06 | CD4_CAMK4_spleen |
| ELMO1              | 1.12E-10 | 0.15742894 | 0.953 | 0.929 | 3.97E-06 | CD4_CAMK4_spleen |
| TRIP12             | 1.19E-10 | 0.17609859 | 0.772 | 0.692 | 4.22E-06 | CD4_CAMK4_spleen |
| DCUN1D2            | 1.24E-10 | 0.3831338  | 0.3   | 0.226 | 4.39E-06 | CD4_CAMK4_spleen |
| UQCC1              | 1.24E-10 | 0.28164435 | 0.413 | 0.329 | 4.41E-06 | CD4_CAMK4_spleen |
| NOL7               | 1.51E-10 | 0.43352645 | 0.255 | 0.188 | 5.34E-06 | CD4_CAMK4_spleen |
| ZNF131             | 1.71E-10 | 0.23255954 | 0.553 | 0.458 | 6.07E-06 | CD4_CAMK4_spleen |
| STRBP              | 1.73E-10 | 0.2692036  | 0.468 | 0.382 | 6.12E-06 | CD4_CAMK4_spleen |

|                    |          |            |       |       |          |                  |
|--------------------|----------|------------|-------|-------|----------|------------------|
| ZNF800             | 1.90E-10 | 0.32811541 | 0.296 | 0.222 | 6.73E-06 | CD4_CAMK4_spleen |
| ENSMMUG00000049951 | 2.21E-10 | 0.42899179 | 0.286 | 0.218 | 7.83E-06 | CD4_CAMK4_spleen |
| PTEN               | 2.25E-10 | 0.22646308 | 0.704 | 0.623 | 7.96E-06 | CD4_CAMK4_spleen |
| ZNF148             | 2.39E-10 | 0.19948453 | 0.74  | 0.661 | 8.48E-06 | CD4_CAMK4_spleen |
| MAP2K4             | 2.49E-10 | 0.19187227 | 0.541 | 0.451 | 8.81E-06 | CD4_CAMK4_spleen |
| MPRIP              | 2.94E-10 | 0.27551589 | 0.338 | 0.257 | 1.04E-05 | CD4_CAMK4_spleen |
| XRCC4              | 2.99E-10 | 0.39338135 | 0.325 | 0.256 | 1.06E-05 | CD4_CAMK4_spleen |
| KATNBL1            | 3.26E-10 | 0.25338642 | 0.367 | 0.289 | 1.16E-05 | CD4_CAMK4_spleen |
| SUFU               | 3.29E-10 | 0.28488089 | 0.423 | 0.341 | 1.17E-05 | CD4_CAMK4_spleen |
| TAF15              | 3.30E-10 | 0.19991779 | 0.722 | 0.632 | 1.17E-05 | CD4_CAMK4_spleen |
| SBNO1              | 3.53E-10 | 0.20887747 | 0.472 | 0.383 | 1.25E-05 | CD4_CAMK4_spleen |
| PHF20L1            | 3.60E-10 | 0.24716659 | 0.393 | 0.309 | 1.27E-05 | CD4_CAMK4_spleen |
| HK1                | 3.64E-10 | 0.3350058  | 0.344 | 0.268 | 1.29E-05 | CD4_CAMK4_spleen |
| SMYD3              | 3.81E-10 | 0.23419211 | 0.804 | 0.752 | 1.35E-05 | CD4_CAMK4_spleen |
| SRSF1              | 3.88E-10 | 0.26548403 | 0.444 | 0.355 | 1.38E-05 | CD4_CAMK4_spleen |
| PICALM             | 4.24E-10 | 0.13876925 | 0.853 | 0.786 | 1.50E-05 | CD4_CAMK4_spleen |
| BZW2               | 4.54E-10 | 0.35470398 | 0.439 | 0.367 | 1.61E-05 | CD4_CAMK4_spleen |
| CNOT6L             | 4.59E-10 | 0.15179791 | 0.839 | 0.809 | 1.63E-05 | CD4_CAMK4_spleen |
| ATRN               | 4.61E-10 | 0.29768829 | 0.473 | 0.391 | 1.63E-05 | CD4_CAMK4_spleen |
| AXIN1              | 5.01E-10 | 0.25476366 | 0.308 | 0.231 | 1.78E-05 | CD4_CAMK4_spleen |
| SOX4               | 5.10E-10 | 0.45465461 | 0.577 | 0.513 | 1.81E-05 | CD4_CAMK4_spleen |
| ARHGAP45           | 5.15E-10 | 0.25039934 | 0.501 | 0.412 | 1.83E-05 | CD4_CAMK4_spleen |
| CEMP2              | 5.78E-10 | 0.14930662 | 0.49  | 0.401 | 2.05E-05 | CD4_CAMK4_spleen |
| MAP3K4             | 5.82E-10 | 0.24133303 | 0.396 | 0.314 | 2.06E-05 | CD4_CAMK4_spleen |
| PPP6R2             | 6.61E-10 | 0.21065448 | 0.342 | 0.261 | 2.34E-05 | CD4_CAMK4_spleen |
| MTF2               | 6.80E-10 | 0.29007774 | 0.367 | 0.291 | 2.41E-05 | CD4_CAMK4_spleen |
| RABGAP1            | 6.94E-10 | 0.24160229 | 0.438 | 0.353 | 2.46E-05 | CD4_CAMK4_spleen |
| BICDL1             | 6.95E-10 | 0.17923693 | 0.703 | 0.653 | 2.46E-05 | CD4_CAMK4_spleen |
| CLASP1             | 7.11E-10 | 0.20582996 | 0.717 | 0.639 | 2.52E-05 | CD4_CAMK4_spleen |
| PARG               | 7.17E-10 | 0.28954034 | 0.381 | 0.306 | 2.54E-05 | CD4_CAMK4_spleen |
| STX16              | 7.84E-10 | 0.20733641 | 0.414 | 0.328 | 2.78E-05 | CD4_CAMK4_spleen |
| DDX42              | 9.59E-10 | 0.25371948 | 0.353 | 0.275 | 3.40E-05 | CD4_CAMK4_spleen |
| FOXO1              | 9.75E-10 | 0.17412263 | 0.937 | 0.903 | 3.45E-05 | CD4_CAMK4_spleen |

|         |          |            |       |       |          |                  |
|---------|----------|------------|-------|-------|----------|------------------|
| CNTRL   | 1.08E-09 | 0.26108604 | 0.412 | 0.33  | 3.84E-05 | CD4_CAMK4_spleen |
| GDI2    | 1.13E-09 | 0.3594657  | 0.349 | 0.277 | 4.02E-05 | CD4_CAMK4_spleen |
| KANSL1  | 1.31E-09 | 0.14557272 | 0.923 | 0.88  | 4.65E-05 | CD4_CAMK4_spleen |
| NONO    | 1.32E-09 | 0.29044639 | 0.538 | 0.449 | 4.69E-05 | CD4_CAMK4_spleen |
| TTC37   | 1.32E-09 | 0.35975204 | 0.332 | 0.262 | 4.69E-05 | CD4_CAMK4_spleen |
| CALR    | 1.36E-09 | 0.3511251  | 0.349 | 0.276 | 4.83E-05 | CD4_CAMK4_spleen |
| VTI1A   | 1.37E-09 | 0.169356   | 0.811 | 0.757 | 4.85E-05 | CD4_CAMK4_spleen |
| SNX1    | 1.39E-09 | 0.29893482 | 0.311 | 0.236 | 4.93E-05 | CD4_CAMK4_spleen |
| VPS8    | 1.40E-09 | 0.24983689 | 0.51  | 0.428 | 4.97E-05 | CD4_CAMK4_spleen |
| EXOC4   | 1.40E-09 | 0.15568003 | 0.865 | 0.821 | 4.98E-05 | CD4_CAMK4_spleen |
| ANO6    | 1.47E-09 | 0.23959975 | 0.355 | 0.278 | 5.20E-05 | CD4_CAMK4_spleen |
| SLC30A7 | 1.48E-09 | 0.23396133 | 0.662 | 0.579 | 5.24E-05 | CD4_CAMK4_spleen |
| SYNCRIP | 1.50E-09 | 0.21912893 | 0.518 | 0.434 | 5.31E-05 | CD4_CAMK4_spleen |
| TSC22D3 | 1.51E-09 | 0.31165592 | 0.53  | 0.437 | 5.35E-05 | CD4_CAMK4_spleen |
| ATE1    | 1.55E-09 | 0.26611858 | 0.496 | 0.417 | 5.50E-05 | CD4_CAMK4_spleen |
| HSPA5   | 1.58E-09 | 0.32496552 | 0.468 | 0.386 | 5.61E-05 | CD4_CAMK4_spleen |
| KLHL18  | 1.82E-09 | 0.38499618 | 0.253 | 0.19  | 6.44E-05 | CD4_CAMK4_spleen |
| WBP1L   | 1.92E-09 | 0.33491652 | 0.4   | 0.325 | 6.79E-05 | CD4_CAMK4_spleen |
| CHD2    | 1.93E-09 | 0.1662355  | 0.907 | 0.866 | 6.84E-05 | CD4_CAMK4_spleen |
| SSBP2   | 2.04E-09 | 0.14935924 | 0.936 | 0.901 | 7.24E-05 | CD4_CAMK4_spleen |
| P2RY8   | 2.10E-09 | 0.11487419 | 0.473 | 0.389 | 7.45E-05 | CD4_CAMK4_spleen |
| WDR82   | 2.13E-09 | 0.25591354 | 0.352 | 0.273 | 7.56E-05 | CD4_CAMK4_spleen |
| EHBP1   | 2.16E-09 | 0.17605261 | 0.59  | 0.503 | 7.65E-05 | CD4_CAMK4_spleen |
| ILF3    | 2.29E-09 | 0.19107812 | 0.63  | 0.547 | 8.11E-05 | CD4_CAMK4_spleen |
| ATP5F1B | 2.33E-09 | 0.33366848 | 0.257 | 0.192 | 8.25E-05 | CD4_CAMK4_spleen |
| BTN2A2  | 2.34E-09 | 0.1861265  | 0.609 | 0.518 | 8.31E-05 | CD4_CAMK4_spleen |
| HDAC7   | 2.38E-09 | 0.31013728 | 0.365 | 0.29  | 8.42E-05 | CD4_CAMK4_spleen |
| DENND6A | 2.50E-09 | 0.22505849 | 0.511 | 0.426 | 8.87E-05 | CD4_CAMK4_spleen |
| FOXN3   | 2.72E-09 | 0.11732989 | 0.991 | 0.984 | 9.63E-05 | CD4_CAMK4_spleen |
| SLC20A2 | 2.73E-09 | 0.34005123 | 0.286 | 0.218 | 9.66E-05 | CD4_CAMK4_spleen |
| ABL1    | 2.78E-09 | 0.33575569 | 0.428 | 0.36  | 9.84E-05 | CD4_CAMK4_spleen |
| NFATC3  | 2.79E-09 | 0.18892982 | 0.772 | 0.696 | 9.89E-05 | CD4_CAMK4_spleen |
| SEPTIN2 | 2.81E-09 | 0.22488205 | 0.332 | 0.256 | 9.96E-05 | CD4_CAMK4_spleen |

|                    |          |            |       |       |            |                  |
|--------------------|----------|------------|-------|-------|------------|------------------|
| FOXK1              | 2.92E-09 | 0.23299576 | 0.49  | 0.406 | 0.00010339 | CD4_CAMK4_spleen |
| DPP7               | 2.99E-09 | 0.35492634 | 0.286 | 0.219 | 0.00010603 | CD4_CAMK4_spleen |
| SLC10A7            | 3.28E-09 | 0.30688344 | 0.419 | 0.348 | 0.00011614 | CD4_CAMK4_spleen |
| ENSMMUG00000006343 | 3.79E-09 | 0.22805044 | 0.45  | 0.368 | 0.00013414 | CD4_CAMK4_spleen |
| ELL                | 3.86E-09 | 0.19719443 | 0.399 | 0.318 | 0.00013685 | CD4_CAMK4_spleen |
| ATF7IP             | 4.09E-09 | 0.17999724 | 0.844 | 0.775 | 0.00014476 | CD4_CAMK4_spleen |
| LPP                | 4.36E-09 | 0.27779235 | 0.56  | 0.487 | 0.00015457 | CD4_CAMK4_spleen |
| TAPBP              | 4.49E-09 | 0.28392042 | 0.389 | 0.316 | 0.00015898 | CD4_CAMK4_spleen |
| LRPPRC             | 4.51E-09 | 0.20372744 | 0.615 | 0.535 | 0.00015996 | CD4_CAMK4_spleen |
| AKAP17A            | 4.71E-09 | 0.3159732  | 0.346 | 0.274 | 0.0001668  | CD4_CAMK4_spleen |
| COMMD10            | 4.71E-09 | 0.21414411 | 0.569 | 0.493 | 0.00016694 | CD4_CAMK4_spleen |
| CFDP1              | 4.78E-09 | 0.26261831 | 0.505 | 0.431 | 0.00016931 | CD4_CAMK4_spleen |
| ABI2               | 4.99E-09 | 0.33982773 | 0.286 | 0.219 | 0.0001769  | CD4_CAMK4_spleen |
| CHD3               | 5.32E-09 | 0.15286764 | 0.533 | 0.438 | 0.00018838 | CD4_CAMK4_spleen |
| CCDC66             | 5.93E-09 | 0.23466896 | 0.352 | 0.28  | 0.00021009 | CD4_CAMK4_spleen |
| CD6                | 6.27E-09 | 0.17835108 | 0.712 | 0.646 | 0.00022211 | CD4_CAMK4_spleen |
| PTBP1              | 6.29E-09 | 0.25391502 | 0.274 | 0.206 | 0.00022293 | CD4_CAMK4_spleen |
| VPS35L             | 6.56E-09 | 0.23896092 | 0.334 | 0.261 | 0.0002323  | CD4_CAMK4_spleen |
| GATAD2A            | 7.13E-09 | 0.20491722 | 0.597 | 0.514 | 0.00025264 | CD4_CAMK4_spleen |
| ATP13A3            | 7.15E-09 | 0.26946575 | 0.316 | 0.246 | 0.00025335 | CD4_CAMK4_spleen |
| GOLM2              | 7.18E-09 | 0.20123494 | 0.617 | 0.537 | 0.00025437 | CD4_CAMK4_spleen |
| ZBTB11             | 7.42E-09 | 0.28644784 | 0.359 | 0.287 | 0.0002629  | CD4_CAMK4_spleen |
| BABAM2             | 7.89E-09 | 0.17642917 | 0.647 | 0.567 | 0.00027971 | CD4_CAMK4_spleen |
| MAP1LC3B           | 8.52E-09 | 0.43440871 | 0.261 | 0.201 | 0.00030197 | CD4_CAMK4_spleen |
| NRROS              | 9.99E-09 | 0.22953542 | 0.482 | 0.402 | 0.00035397 | CD4_CAMK4_spleen |
| SMG7               | 1.06E-08 | 0.20088455 | 0.577 | 0.492 | 0.00037432 | CD4_CAMK4_spleen |
| AHI1               | 1.18E-08 | 0.21349854 | 0.596 | 0.515 | 0.00041938 | CD4_CAMK4_spleen |
| ST6GAL1            | 1.21E-08 | 0.18005079 | 0.73  | 0.649 | 0.00042987 | CD4_CAMK4_spleen |
| CYTH1              | 1.29E-08 | 0.12996469 | 0.885 | 0.832 | 0.0004572  | CD4_CAMK4_spleen |
| UGGT1              | 1.55E-08 | 0.17821548 | 0.301 | 0.23  | 0.00054985 | CD4_CAMK4_spleen |
| GLCC1              | 1.59E-08 | 0.38706605 | 0.416 | 0.353 | 0.00056463 | CD4_CAMK4_spleen |
| FBXL17             | 1.62E-08 | 0.24057571 | 0.702 | 0.651 | 0.00057372 | CD4_CAMK4_spleen |
| UBE2G2             | 1.82E-08 | 0.28987993 | 0.267 | 0.206 | 0.00064547 | CD4_CAMK4_spleen |

|                    |          |            |       |       |            |                  |
|--------------------|----------|------------|-------|-------|------------|------------------|
| MDN1               | 1.84E-08 | 0.20609877 | 0.518 | 0.437 | 0.00065134 | CD4_CAMK4_spleen |
| ZNF277             | 1.86E-08 | 0.2938163  | 0.316 | 0.248 | 0.00065896 | CD4_CAMK4_spleen |
| SRBD1              | 1.87E-08 | 0.36343917 | 0.28  | 0.218 | 0.00066235 | CD4_CAMK4_spleen |
| LPXN               | 1.92E-08 | 0.21473086 | 0.253 | 0.19  | 0.00068034 | CD4_CAMK4_spleen |
| ENSMMUG00000064749 | 2.10E-08 | 0.23493672 | 0.355 | 0.282 | 0.00074537 | CD4_CAMK4_spleen |
| ATF7               | 2.13E-08 | 0.26657628 | 0.457 | 0.385 | 0.00075484 | CD4_CAMK4_spleen |
| CTSS               | 2.31E-08 | 0.32980305 | 0.304 | 0.239 | 0.00081845 | CD4_CAMK4_spleen |
| DEAF1              | 2.39E-08 | 0.21068127 | 0.27  | 0.204 | 0.0008479  | CD4_CAMK4_spleen |
| RASSF2             | 2.45E-08 | 0.30912265 | 0.259 | 0.199 | 0.00086896 | CD4_CAMK4_spleen |
| NF1                | 2.54E-08 | 0.29756951 | 0.38  | 0.314 | 0.00089993 | CD4_CAMK4_spleen |
| RALY               | 2.56E-08 | 0.1586085  | 0.659 | 0.573 | 0.00090796 | CD4_CAMK4_spleen |
| SCAI               | 2.63E-08 | 0.42445544 | 0.322 | 0.261 | 0.00093281 | CD4_CAMK4_spleen |
| ATXN7L1            | 2.66E-08 | 0.17750529 | 0.522 | 0.44  | 0.00094224 | CD4_CAMK4_spleen |
| ATM                | 2.78E-08 | 0.20296482 | 0.658 | 0.581 | 0.00098481 | CD4_CAMK4_spleen |
| ATAD2B             | 2.80E-08 | 0.13480147 | 0.753 | 0.677 | 0.00099146 | CD4_CAMK4_spleen |
| ARHGAP4            | 2.98E-08 | 0.20222125 | 0.443 | 0.365 | 0.0010551  | CD4_CAMK4_spleen |
| LEF1               | 3.09E-08 | 0.11676572 | 0.964 | 0.935 | 0.0010933  | CD4_CAMK4_spleen |
| SH2B3              | 3.21E-08 | 0.37872079 | 0.307 | 0.243 | 0.00113601 | CD4_CAMK4_spleen |
| ECE1               | 3.25E-08 | 0.17399828 | 0.268 | 0.204 | 0.00115175 | CD4_CAMK4_spleen |
| SMAD2              | 3.34E-08 | 0.20596257 | 0.453 | 0.379 | 0.00118219 | CD4_CAMK4_spleen |
| ENSMMUG00000016959 | 3.57E-08 | 0.19781962 | 0.541 | 0.459 | 0.00126368 | CD4_CAMK4_spleen |
| H1-2               | 3.78E-08 | 0.33558649 | 0.267 | 0.206 | 0.00133765 | CD4_CAMK4_spleen |
| ENSMMUG00000065373 | 4.13E-08 | 0.49595195 | 0.912 | 0.951 | 0.00146317 | CD4_CAMK4_spleen |
| UBE3A              | 4.16E-08 | 0.15400327 | 0.586 | 0.503 | 0.00147376 | CD4_CAMK4_spleen |
| PNPLA8             | 4.39E-08 | 0.2743753  | 0.519 | 0.455 | 0.00155542 | CD4_CAMK4_spleen |
| UBN2               | 4.47E-08 | 0.28645444 | 0.284 | 0.222 | 0.00158307 | CD4_CAMK4_spleen |
| AARS1              | 4.56E-08 | 0.31533344 | 0.511 | 0.431 | 0.00161604 | CD4_CAMK4_spleen |
| FUT8               | 4.67E-08 | 0.20526684 | 0.521 | 0.441 | 0.00165613 | CD4_CAMK4_spleen |
| DAP                | 4.75E-08 | 0.39398875 | 0.251 | 0.193 | 0.00168364 | CD4_CAMK4_spleen |
| ATP11A             | 5.23E-08 | 0.25009195 | 0.379 | 0.307 | 0.00185237 | CD4_CAMK4_spleen |
| MIB1               | 5.39E-08 | 0.23064798 | 0.502 | 0.432 | 0.0019084  | CD4_CAMK4_spleen |
| R3HDM1             | 5.47E-08 | 0.22088407 | 0.484 | 0.409 | 0.00193736 | CD4_CAMK4_spleen |
| SRSF10             | 6.07E-08 | 0.16775876 | 0.552 | 0.471 | 0.0021507  | CD4_CAMK4_spleen |

|                    |          |            |       |       |            |                  |
|--------------------|----------|------------|-------|-------|------------|------------------|
| DSTN               | 6.24E-08 | 0.37754344 | 0.295 | 0.237 | 0.00220966 | CD4_CAMK4_spleen |
| CCDC69             | 6.36E-08 | 0.25190468 | 0.328 | 0.262 | 0.00225432 | CD4_CAMK4_spleen |
| SP110              | 6.68E-08 | 0.20034178 | 0.617 | 0.531 | 0.00236628 | CD4_CAMK4_spleen |
| TENT5C             | 6.92E-08 | 0.24177431 | 0.423 | 0.356 | 0.00245123 | CD4_CAMK4_spleen |
| WIPF1              | 7.08E-08 | 0.16014105 | 0.717 | 0.645 | 0.00250908 | CD4_CAMK4_spleen |
| JAML               | 7.31E-08 | 0.4479278  | 0.42  | 0.357 | 0.00259107 | CD4_CAMK4_spleen |
| MGAT5              | 7.88E-08 | 0.11064365 | 0.863 | 0.816 | 0.00279131 | CD4_CAMK4_spleen |
| ENSMMUG00000028906 | 8.40E-08 | 0.17201665 | 0.878 | 0.846 | 0.00297693 | CD4_CAMK4_spleen |
| ACTR3              | 8.65E-08 | 0.19023622 | 0.706 | 0.634 | 0.00306571 | CD4_CAMK4_spleen |
| CUX1               | 8.70E-08 | 0.16038815 | 0.786 | 0.732 | 0.00308259 | CD4_CAMK4_spleen |
| ENSMMUG00000053817 | 8.82E-08 | 0.39848344 | 0.327 | 0.269 | 0.00312382 | CD4_CAMK4_spleen |
| TMEM201            | 8.83E-08 | 0.25415721 | 0.345 | 0.278 | 0.00312835 | CD4_CAMK4_spleen |
| PPP1R2             | 9.04E-08 | 0.2863161  | 0.594 | 0.527 | 0.00320234 | CD4_CAMK4_spleen |
| COA1               | 9.14E-08 | 0.29222297 | 0.4   | 0.333 | 0.00323968 | CD4_CAMK4_spleen |
| REV3L              | 9.15E-08 | 0.17004585 | 0.698 | 0.618 | 0.00324286 | CD4_CAMK4_spleen |
| SF1                | 9.55E-08 | 0.17161142 | 0.703 | 0.631 | 0.00338303 | CD4_CAMK4_spleen |
| RNF144A            | 9.67E-08 | 0.35188441 | 0.289 | 0.229 | 0.00342577 | CD4_CAMK4_spleen |
| FAF1               | 9.77E-08 | 0.17989392 | 0.798 | 0.742 | 0.00346236 | CD4_CAMK4_spleen |
| GTDC1              | 1.01E-07 | 0.34870195 | 0.256 | 0.2   | 0.00359609 | CD4_CAMK4_spleen |
| BACH2              | 1.08E-07 | 0.10947545 | 0.943 | 0.935 | 0.00384272 | CD4_CAMK4_spleen |
| NUP50              | 1.10E-07 | 0.25651115 | 0.465 | 0.395 | 0.00388883 | CD4_CAMK4_spleen |
| MXD1               | 1.17E-07 | 0.3380082  | 0.414 | 0.351 | 0.00414733 | CD4_CAMK4_spleen |
| SMAD7              | 1.38E-07 | 0.50101046 | 0.327 | 0.271 | 0.00487253 | CD4_CAMK4_spleen |
| GNAI2.1            | 1.40E-07 | 0.25728457 | 0.332 | 0.266 | 0.00494882 | CD4_CAMK4_spleen |
| MRPS6              | 1.41E-07 | 0.2040268  | 0.51  | 0.446 | 0.0049861  | CD4_CAMK4_spleen |
| MIGA1              | 1.41E-07 | 0.1625128  | 0.334 | 0.266 | 0.0049876  | CD4_CAMK4_spleen |
| RHBDD1             | 1.44E-07 | 0.33974684 | 0.299 | 0.239 | 0.00508674 | CD4_CAMK4_spleen |
| IFNAR2             | 1.47E-07 | 0.23734054 | 0.284 | 0.223 | 0.00521433 | CD4_CAMK4_spleen |
| BDP1               | 1.51E-07 | 0.18685331 | 0.618 | 0.54  | 0.00536182 | CD4_CAMK4_spleen |
| OXSRI              | 1.63E-07 | 0.14009462 | 0.492 | 0.41  | 0.00576917 | CD4_CAMK4_spleen |
| VPS53              | 1.69E-07 | 0.18221464 | 0.489 | 0.411 | 0.00600384 | CD4_CAMK4_spleen |
| ZZZ3               | 1.71E-07 | 0.13245033 | 0.724 | 0.652 | 0.00605985 | CD4_CAMK4_spleen |
| PPP1CC             | 1.72E-07 | 0.25637206 | 0.403 | 0.336 | 0.00609743 | CD4_CAMK4_spleen |

|                    |          |            |       |       |            |                  |
|--------------------|----------|------------|-------|-------|------------|------------------|
| TXLNG              | 1.77E-07 | 0.20778477 | 0.478 | 0.407 | 0.00627472 | CD4_CAMK4_spleen |
| ND4L               | 1.78E-07 | 0.25073144 | 0.333 | 0.273 | 0.00629519 | CD4_CAMK4_spleen |
| NF2                | 1.81E-07 | 0.19342285 | 0.272 | 0.21  | 0.00640377 | CD4_CAMK4_spleen |
| ACTB               | 1.82E-07 | 0.24804938 | 0.83  | 0.761 | 0.00645101 | CD4_CAMK4_spleen |
| SPG11              | 1.83E-07 | 0.19445837 | 0.415 | 0.343 | 0.0064937  | CD4_CAMK4_spleen |
| HS2ST1             | 1.84E-07 | 0.23522271 | 0.437 | 0.374 | 0.00651568 | CD4_CAMK4_spleen |
| SMARCC1            | 2.01E-07 | 0.13897963 | 0.753 | 0.683 | 0.0071388  | CD4_CAMK4_spleen |
| YY1                | 2.10E-07 | 0.18063816 | 0.42  | 0.347 | 0.00744357 | CD4_CAMK4_spleen |
| MTHFD1L            | 2.12E-07 | 0.24887295 | 0.532 | 0.467 | 0.00751738 | CD4_CAMK4_spleen |
| DDX3Y              | 2.15E-07 | 0.55769772 | 0.472 | 0.464 | 0.00763347 | CD4_CAMK4_spleen |
| MAN1C1             | 2.30E-07 | 0.28532167 | 0.304 | 0.244 | 0.0081572  | CD4_CAMK4_spleen |
| ILF2               | 2.36E-07 | 0.25678745 | 0.295 | 0.233 | 0.00836752 | CD4_CAMK4_spleen |
| STMN3              | 2.36E-07 | 0.24498967 | 0.267 | 0.207 | 0.00837197 | CD4_CAMK4_spleen |
| TERF2IP            | 2.53E-07 | 0.17575562 | 0.331 | 0.265 | 0.0089587  | CD4_CAMK4_spleen |
| DNAJC15            | 2.59E-07 | 0.30757204 | 0.297 | 0.239 | 0.00918745 | CD4_CAMK4_spleen |
| ENSMMUG00000017113 | 2.64E-07 | 0.17807977 | 0.521 | 0.449 | 0.00937012 | CD4_CAMK4_spleen |
| GLMN               | 2.74E-07 | 0.17742869 | 0.55  | 0.468 | 0.00970934 | CD4_CAMK4_spleen |
| USP36              | 2.88E-07 | 0.18576244 | 0.606 | 0.531 | 0.01020621 | CD4_CAMK4_spleen |
| BRD4               | 3.05E-07 | 0.22872729 | 0.346 | 0.28  | 0.01079688 | CD4_CAMK4_spleen |
| SQSTM1             | 3.17E-07 | 0.51790528 | 0.295 | 0.241 | 0.01121986 | CD4_CAMK4_spleen |
| ABHD18             | 3.23E-07 | 0.25693489 | 0.282 | 0.223 | 0.01142816 | CD4_CAMK4_spleen |
| CTCF               | 3.45E-07 | 0.13291644 | 0.617 | 0.536 | 0.01221989 | CD4_CAMK4_spleen |
| FBXW4              | 3.49E-07 | 0.20784525 | 0.451 | 0.382 | 0.01236927 | CD4_CAMK4_spleen |
| ATP1B3             | 3.53E-07 | 0.28044991 | 0.487 | 0.43  | 0.01249619 | CD4_CAMK4_spleen |
| FRYL               | 3.57E-07 | 0.16761586 | 0.672 | 0.599 | 0.01264662 | CD4_CAMK4_spleen |
| RESF1              | 3.84E-07 | 0.23406952 | 0.364 | 0.297 | 0.01361154 | CD4_CAMK4_spleen |
| NVL                | 4.00E-07 | 0.3446678  | 0.292 | 0.236 | 0.01418516 | CD4_CAMK4_spleen |
| NCOA7              | 4.31E-07 | 0.15744962 | 0.548 | 0.476 | 0.01528697 | CD4_CAMK4_spleen |
| AGO2               | 4.56E-07 | 0.12503157 | 0.551 | 0.472 | 0.01614332 | CD4_CAMK4_spleen |
| SYNRG              | 4.74E-07 | 0.19778614 | 0.389 | 0.322 | 0.01680454 | CD4_CAMK4_spleen |
| CYFIP2             | 4.79E-07 | 0.13230024 | 0.639 | 0.56  | 0.01696635 | CD4_CAMK4_spleen |
| PARP6              | 5.06E-07 | 0.26995098 | 0.304 | 0.244 | 0.01793038 | CD4_CAMK4_spleen |
| ROCK1              | 5.15E-07 | 0.13227952 | 0.829 | 0.761 | 0.0182374  | CD4_CAMK4_spleen |

|                   |          |            |       |       |            |                  |
|-------------------|----------|------------|-------|-------|------------|------------------|
| ANKZF1            | 5.75E-07 | 0.15039516 | 0.287 | 0.226 | 0.02037792 | CD4_CAMK4_spleen |
| FMNL1             | 5.79E-07 | 0.23490736 | 0.307 | 0.245 | 0.02051751 | CD4_CAMK4_spleen |
| PPM1G             | 5.82E-07 | 0.32079552 | 0.282 | 0.225 | 0.02061854 | CD4_CAMK4_spleen |
| TASOR2            | 5.99E-07 | 0.16991104 | 0.61  | 0.531 | 0.02123471 | CD4_CAMK4_spleen |
| REST              | 7.00E-07 | 0.24645876 | 0.315 | 0.255 | 0.02481223 | CD4_CAMK4_spleen |
| ENSMUG00000011714 | 7.05E-07 | 0.16459241 | 0.389 | 0.32  | 0.02499629 | CD4_CAMK4_spleen |
| USP7              | 7.12E-07 | 0.15532298 | 0.563 | 0.48  | 0.02524209 | CD4_CAMK4_spleen |
| HNRNPK            | 7.52E-07 | 0.1541692  | 0.719 | 0.638 | 0.02664351 | CD4_CAMK4_spleen |
| C2CD3             | 7.54E-07 | 0.26158    | 0.291 | 0.233 | 0.02671349 | CD4_CAMK4_spleen |
| PPFIA1            | 7.64E-07 | 0.21170969 | 0.325 | 0.262 | 0.02705975 | CD4_CAMK4_spleen |
| TTC19             | 8.07E-07 | 0.14337176 | 0.4   | 0.328 | 0.02857804 | CD4_CAMK4_spleen |
| CLEC16A           | 8.13E-07 | 0.19171144 | 0.357 | 0.293 | 0.02882286 | CD4_CAMK4_spleen |
| PRR14L            | 8.34E-07 | 0.28493564 | 0.334 | 0.273 | 0.0295501  | CD4_CAMK4_spleen |
| NDFIP1            | 8.45E-07 | 0.19536235 | 0.778 | 0.725 | 0.02993546 | CD4_CAMK4_spleen |
| XPR1              | 8.82E-07 | 0.17409525 | 0.633 | 0.569 | 0.03124506 | CD4_CAMK4_spleen |
| CDK5RAP2          | 8.98E-07 | 0.23385516 | 0.369 | 0.304 | 0.03180941 | CD4_CAMK4_spleen |
| STK26             | 9.27E-07 | 0.26391441 | 0.428 | 0.366 | 0.03284389 | CD4_CAMK4_spleen |
| PPP4R3B           | 9.44E-07 | 0.15294354 | 0.451 | 0.377 | 0.03346167 | CD4_CAMK4_spleen |
| SLCO3A1           | 9.48E-07 | 0.44009027 | 0.291 | 0.241 | 0.03360153 | CD4_CAMK4_spleen |
| ANP32A            | 9.96E-07 | 0.23799819 | 0.334 | 0.273 | 0.03529255 | CD4_CAMK4_spleen |
| YWHAE             | 1.03E-06 | 0.13027608 | 0.682 | 0.608 | 0.03655098 | CD4_CAMK4_spleen |
| SENP6             | 1.04E-06 | 0.12384538 | 0.795 | 0.744 | 0.03695256 | CD4_CAMK4_spleen |
| SPATS2            | 1.05E-06 | 0.36949272 | 0.264 | 0.211 | 0.0370324  | CD4_CAMK4_spleen |
| NSRP1             | 1.12E-06 | 0.18899773 | 0.421 | 0.354 | 0.03951846 | CD4_CAMK4_spleen |
| GHITM             | 1.25E-06 | 0.17849159 | 0.393 | 0.325 | 0.04433465 | CD4_CAMK4_spleen |
| NUP58             | 1.30E-06 | 0.25154487 | 0.264 | 0.208 | 0.0458896  | CD4_CAMK4_spleen |
| QSER1             | 1.31E-06 | 0.16976901 | 0.272 | 0.216 | 0.04637736 | CD4_CAMK4_spleen |
| HMGB2             | 1.35E-06 | 0.42531725 | 0.274 | 0.222 | 0.04770136 | CD4_CAMK4_spleen |
| GPHN              | 1.50E-06 | 0.17998007 | 0.795 | 0.755 | 0.05301497 | CD4_CAMK4_spleen |
| GSK3B             | 1.54E-06 | 0.10049432 | 0.903 | 0.862 | 0.0546023  | CD4_CAMK4_spleen |
| RGS10             | 1.58E-06 | 0.43969248 | 0.339 | 0.289 | 0.05597161 | CD4_CAMK4_spleen |
| EP300             | 1.59E-06 | 0.14420046 | 0.714 | 0.65  | 0.05635479 | CD4_CAMK4_spleen |
| DAP3              | 1.61E-06 | 0.19741306 | 0.347 | 0.286 | 0.05698938 | CD4_CAMK4_spleen |



|                     |          |            |       |       |            |                  |
|---------------------|----------|------------|-------|-------|------------|------------------|
| ATF4                | 1.63E-06 | 0.23290847 | 0.35  | 0.288 | 0.0577887  | CD4_CAMK4_spleen |
| DIAPH2              | 1.64E-06 | 0.11680582 | 0.753 | 0.704 | 0.05802046 | CD4_CAMK4_spleen |
| UVRAG               | 1.79E-06 | 0.13505284 | 0.709 | 0.638 | 0.06328578 | CD4_CAMK4_spleen |
| FBXO34              | 1.79E-06 | 0.17408127 | 0.839 | 0.799 | 0.06357297 | CD4_CAMK4_spleen |
| RANBP2              | 1.99E-06 | 0.20198647 | 0.733 | 0.671 | 0.0705756  | CD4_CAMK4_spleen |
| NPTN                | 2.01E-06 | 0.18817711 | 0.438 | 0.372 | 0.07139406 | CD4_CAMK4_spleen |
| ENSMMUG00000000350  | 2.03E-06 | 0.2480538  | 0.274 | 0.219 | 0.07188157 | CD4_CAMK4_spleen |
| GNAQ                | 2.04E-06 | 0.37353032 | 0.327 | 0.275 | 0.07244964 | CD4_CAMK4_spleen |
| ZFX                 | 2.14E-06 | 0.16942924 | 0.453 | 0.388 | 0.07570753 | CD4_CAMK4_spleen |
| SLC22A23            | 2.16E-06 | 0.16869735 | 0.526 | 0.457 | 0.07645426 | CD4_CAMK4_spleen |
| SUPT3H              | 2.21E-06 | 0.24302189 | 0.495 | 0.437 | 0.07837552 | CD4_CAMK4_spleen |
| ATP6V0E1            | 2.26E-06 | 0.24283927 | 0.267 | 0.215 | 0.08005742 | CD4_CAMK4_spleen |
| COX1                | 2.31E-06 | 0.33235188 | 0.846 | 0.927 | 0.08187688 | CD4_CAMK4_spleen |
| GNL3                | 2.38E-06 | 0.15427513 | 0.305 | 0.245 | 0.08445884 | CD4_CAMK4_spleen |
| TMEM71              | 2.48E-06 | 0.17502089 | 0.423 | 0.362 | 0.0879129  | CD4_CAMK4_spleen |
| TIAM1               | 2.49E-06 | 0.23154264 | 0.343 | 0.285 | 0.08823689 | CD4_CAMK4_spleen |
| DTNBP1              | 2.67E-06 | 0.15685964 | 0.667 | 0.61  | 0.09464493 | CD4_CAMK4_spleen |
| MAPK8IP3            | 2.69E-06 | 0.12849446 | 0.312 | 0.25  | 0.09545062 | CD4_CAMK4_spleen |
| RNF149              | 2.73E-06 | 0.19897481 | 0.596 | 0.533 | 0.09670601 | CD4_CAMK4_spleen |
| PAFAH1B1            | 2.75E-06 | 0.11039949 | 0.757 | 0.693 | 0.09756072 | CD4_CAMK4_spleen |
| ENSMMUG000000005482 | 2.77E-06 | 0.15558501 | 0.6   | 0.53  | 0.09817807 | CD4_CAMK4_spleen |
| SAMD8               | 2.94E-06 | 0.30458262 | 0.33  | 0.275 | 0.10417898 | CD4_CAMK4_spleen |
| EPS15L1             | 2.97E-06 | 0.22253331 | 0.327 | 0.268 | 0.10510948 | CD4_CAMK4_spleen |
| EP400               | 3.09E-06 | 0.11461632 | 0.458 | 0.383 | 0.10940081 | CD4_CAMK4_spleen |
| TEX264              | 3.15E-06 | 0.20812757 | 0.33  | 0.272 | 0.1116371  | CD4_CAMK4_spleen |
| RNF216              | 3.31E-06 | 0.14652535 | 0.685 | 0.615 | 0.11739599 | CD4_CAMK4_spleen |
| AAK1                | 3.50E-06 | 0.10935719 | 0.84  | 0.791 | 0.12404093 | CD4_CAMK4_spleen |
| VPS41               | 3.67E-06 | 0.21805707 | 0.313 | 0.257 | 0.13017974 | CD4_CAMK4_spleen |
| ZBTB20              | 3.83E-06 | 0.11451883 | 0.892 | 0.869 | 0.13557391 | CD4_CAMK4_spleen |
| AKT2                | 3.91E-06 | 0.14745466 | 0.257 | 0.201 | 0.13859641 | CD4_CAMK4_spleen |
| CCT4                | 4.04E-06 | 0.20164896 | 0.478 | 0.415 | 0.14325297 | CD4_CAMK4_spleen |
| TIGAR               | 4.07E-06 | 0.12244872 | 0.7   | 0.638 | 0.14435419 | CD4_CAMK4_spleen |
| GTF2F2              | 4.18E-06 | 0.22442136 | 0.414 | 0.363 | 0.14809927 | CD4_CAMK4_spleen |

|                   |          |            |       |       |            |                  |
|-------------------|----------|------------|-------|-------|------------|------------------|
| PTPRJ             | 4.19E-06 | 0.34296127 | 0.469 | 0.423 | 0.14844111 | CD4_CAMK4_spleen |
| TM2D1             | 4.20E-06 | 0.20618906 | 0.291 | 0.235 | 0.14887265 | CD4_CAMK4_spleen |
| FAM126A           | 4.38E-06 | 0.35141547 | 0.326 | 0.275 | 0.15535443 | CD4_CAMK4_spleen |
| ADIPOR2           | 4.53E-06 | 0.25074059 | 0.255 | 0.204 | 0.16041561 | CD4_CAMK4_spleen |
| TMEM181           | 4.67E-06 | 0.12070153 | 0.411 | 0.345 | 0.1655626  | CD4_CAMK4_spleen |
| CCDC6             | 4.79E-06 | 0.13287536 | 0.436 | 0.363 | 0.16979876 | CD4_CAMK4_spleen |
| DHX15             | 4.92E-06 | 0.11721085 | 0.526 | 0.455 | 0.17448799 | CD4_CAMK4_spleen |
| DNAJC24           | 5.18E-06 | 0.18124572 | 0.556 | 0.497 | 0.1833685  | CD4_CAMK4_spleen |
| CDK19             | 5.22E-06 | 0.2083167  | 0.308 | 0.254 | 0.1849279  | CD4_CAMK4_spleen |
| PPP6R1            | 5.24E-06 | 0.2000371  | 0.286 | 0.229 | 0.18558444 | CD4_CAMK4_spleen |
| AVL9              | 5.40E-06 | 0.19451339 | 0.467 | 0.405 | 0.19135235 | CD4_CAMK4_spleen |
| ROS1              | 5.44E-06 | 0.25769268 | 0.261 | 0.208 | 0.19291506 | CD4_CAMK4_spleen |
| UBAP2             | 5.53E-06 | 0.22446871 | 0.46  | 0.402 | 0.19605491 | CD4_CAMK4_spleen |
| CDK6              | 5.57E-06 | 0.23177524 | 0.465 | 0.409 | 0.19720251 | CD4_CAMK4_spleen |
| TULP4             | 5.81E-06 | 0.18647156 | 0.404 | 0.345 | 0.20584265 | CD4_CAMK4_spleen |
| TBPL1             | 5.88E-06 | 0.20991063 | 0.25  | 0.2   | 0.208318   | CD4_CAMK4_spleen |
| MTA3              | 6.18E-06 | 0.16028036 | 0.385 | 0.325 | 0.21879716 | CD4_CAMK4_spleen |
| TSC22D2           | 6.19E-06 | 0.2578994  | 0.406 | 0.348 | 0.21930033 | CD4_CAMK4_spleen |
| UBR3              | 6.24E-06 | 0.12894173 | 0.685 | 0.614 | 0.22120761 | CD4_CAMK4_spleen |
| SUCO              | 6.41E-06 | 0.16250807 | 0.66  | 0.59  | 0.22701838 | CD4_CAMK4_spleen |
| AVEN              | 6.41E-06 | 0.40483466 | 0.258 | 0.213 | 0.2272641  | CD4_CAMK4_spleen |
| DICER1            | 6.62E-06 | 0.1636482  | 0.374 | 0.313 | 0.23441217 | CD4_CAMK4_spleen |
| PFN1              | 6.67E-06 | 0.31305151 | 0.524 | 0.461 | 0.23620191 | CD4_CAMK4_spleen |
| SMARCA4           | 6.71E-06 | 0.11142787 | 0.457 | 0.384 | 0.23791233 | CD4_CAMK4_spleen |
| KIAA0232          | 6.98E-06 | 0.18282423 | 0.487 | 0.42  | 0.24733676 | CD4_CAMK4_spleen |
| SAFB2             | 7.19E-06 | 0.19972386 | 0.402 | 0.343 | 0.25460287 | CD4_CAMK4_spleen |
| UBE2V2            | 7.25E-06 | 0.22333668 | 0.258 | 0.207 | 0.25696792 | CD4_CAMK4_spleen |
| FUBP3             | 7.43E-06 | 0.18777438 | 0.261 | 0.209 | 0.2632494  | CD4_CAMK4_spleen |
| AFF1              | 7.59E-06 | 0.184436   | 0.807 | 0.773 | 0.26877984 | CD4_CAMK4_spleen |
| ARNT              | 7.69E-06 | 0.17914385 | 0.439 | 0.379 | 0.27234517 | CD4_CAMK4_spleen |
| MAGT1             | 7.92E-06 | 0.24354405 | 0.262 | 0.211 | 0.28053218 | CD4_CAMK4_spleen |
| LASP1             | 8.02E-06 | 0.21792917 | 0.305 | 0.252 | 0.28404084 | CD4_CAMK4_spleen |
| ENSMUG00000063316 | 8.25E-06 | 0.31126883 | 0.599 | 0.543 | 0.2923407  | CD4_CAMK4_spleen |

|                    |          |            |       |       |            |                  |
|--------------------|----------|------------|-------|-------|------------|------------------|
| ZCCHC2             | 8.42E-06 | 0.24398331 | 0.274 | 0.223 | 0.29832946 | CD4_CAMK4_spleen |
| NCOA1              | 9.00E-06 | 0.18914767 | 0.56  | 0.499 | 0.31887378 | CD4_CAMK4_spleen |
| UBE2W              | 9.53E-06 | 0.23826233 | 0.329 | 0.277 | 0.33773834 | CD4_CAMK4_spleen |
| PCGF3              | 1.01E-05 | 0.20202526 | 0.27  | 0.218 | 0.35612029 | CD4_CAMK4_spleen |
| OSER1              | 1.06E-05 | 0.27365927 | 0.332 | 0.281 | 0.37726693 | CD4_CAMK4_spleen |
| TANGO6             | 1.09E-05 | 0.11930949 | 0.555 | 0.489 | 0.38677739 | CD4_CAMK4_spleen |
| TOP2B              | 1.12E-05 | 0.11063576 | 0.639 | 0.571 | 0.39577727 | CD4_CAMK4_spleen |
| HIPK1              | 1.15E-05 | 0.20066719 | 0.485 | 0.428 | 0.4088382  | CD4_CAMK4_spleen |
| CCR7               | 1.38E-05 | 0.17259519 | 0.317 | 0.261 | 0.48719767 | CD4_CAMK4_spleen |
| SPECC1L            | 1.42E-05 | 0.14258735 | 0.557 | 0.491 | 0.5029118  | CD4_CAMK4_spleen |
| ENSMMUG00000019882 | 1.48E-05 | 0.23365069 | 0.291 | 0.239 | 0.52308703 | CD4_CAMK4_spleen |
| ENSMMUG00000060229 | 1.50E-05 | 0.21707225 | 0.307 | 0.252 | 0.53166462 | CD4_CAMK4_spleen |
| EIF1AX             | 1.53E-05 | 0.19435363 | 0.387 | 0.329 | 0.54124809 | CD4_CAMK4_spleen |
| PHKB               | 1.57E-05 | 0.24852948 | 0.275 | 0.227 | 0.55795486 | CD4_CAMK4_spleen |
| FTO                | 1.58E-05 | 0.13265963 | 0.614 | 0.547 | 0.55832871 | CD4_CAMK4_spleen |
| SIPA1L3            | 1.62E-05 | 0.21583138 | 0.379 | 0.324 | 0.57525433 | CD4_CAMK4_spleen |
| GPR183             | 1.66E-05 | 0.29361181 | 0.377 | 0.33  | 0.58875755 | CD4_CAMK4_spleen |
| GSPT1              | 1.74E-05 | 0.17484419 | 0.491 | 0.43  | 0.61745989 | CD4_CAMK4_spleen |
| EYA3               | 1.80E-05 | 0.2686864  | 0.354 | 0.302 | 0.63824652 | CD4_CAMK4_spleen |
| ZNF407             | 1.89E-05 | 0.12509276 | 0.733 | 0.698 | 0.66896835 | CD4_CAMK4_spleen |
| STK17A             | 1.99E-05 | 0.15810694 | 0.798 | 0.736 | 0.70350376 | CD4_CAMK4_spleen |
| CRTC1              | 1.99E-05 | 0.12784039 | 0.324 | 0.268 | 0.70373278 | CD4_CAMK4_spleen |
| CEPT1              | 2.02E-05 | 0.16618082 | 0.313 | 0.261 | 0.71650613 | CD4_CAMK4_spleen |
| ZNF592             | 2.07E-05 | 0.18428937 | 0.276 | 0.227 | 0.73488809 | CD4_CAMK4_spleen |
| RAB10              | 2.18E-05 | 0.13709406 | 0.535 | 0.467 | 0.77260538 | CD4_CAMK4_spleen |
| SAMD4B             | 2.22E-05 | 0.14856564 | 0.374 | 0.315 | 0.78789135 | CD4_CAMK4_spleen |
| SEPTIN6            | 2.30E-05 | 0.12356569 | 0.893 | 0.851 | 0.81356274 | CD4_CAMK4_spleen |
| ARID5B             | 2.48E-05 | 0.13409345 | 0.713 | 0.669 | 0.87863544 | CD4_CAMK4_spleen |
| TRIM44             | 2.51E-05 | 0.17891016 | 0.402 | 0.348 | 0.88825878 | CD4_CAMK4_spleen |
| PRKCH              | 2.54E-05 | 0.10092574 | 0.949 | 0.932 | 0.89920519 | CD4_CAMK4_spleen |
| FAM222B            | 2.55E-05 | 0.2312472  | 0.467 | 0.418 | 0.90212374 | CD4_CAMK4_spleen |
| TTC14              | 2.62E-05 | 0.11486342 | 0.41  | 0.346 | 0.92837918 | CD4_CAMK4_spleen |
| PDCD10             | 2.65E-05 | 0.16750604 | 0.375 | 0.315 | 0.93815924 | CD4_CAMK4_spleen |

|                    |          |            |       |       |            |                  |
|--------------------|----------|------------|-------|-------|------------|------------------|
| KIAA0319L          | 2.77E-05 | 0.32694158 | 0.259 | 0.213 | 0.9815681  | CD4_CAMK4_spleen |
| STAU2              | 2.80E-05 | 0.19074351 | 0.552 | 0.502 | 0.99352385 | CD4_CAMK4_spleen |
| N4BP2              | 2.90E-05 | 0.21488915 | 0.286 | 0.237 | 1          | CD4_CAMK4_spleen |
| ZNF236             | 3.00E-05 | 0.21217799 | 0.354 | 0.301 | 1          | CD4_CAMK4_spleen |
| SCFD2              | 3.24E-05 | 0.14601745 | 0.678 | 0.628 | 1          | CD4_CAMK4_spleen |
| TMED10             | 3.59E-05 | 0.16392621 | 0.467 | 0.405 | 1          | CD4_CAMK4_spleen |
| SLC38A1            | 3.61E-05 | 0.11894075 | 0.866 | 0.838 | 1          | CD4_CAMK4_spleen |
| ENSMMUG00000006499 | 3.64E-05 | 0.1047659  | 0.457 | 0.387 | 1          | CD4_CAMK4_spleen |
| RPN2               | 3.94E-05 | 0.15649723 | 0.311 | 0.259 | 1          | CD4_CAMK4_spleen |
| DAD1               | 3.94E-05 | 0.34184902 | 0.25  | 0.209 | 1          | CD4_CAMK4_spleen |
| FAM13B             | 3.99E-05 | 0.10660881 | 0.528 | 0.469 | 1          | CD4_CAMK4_spleen |
| KIF5B              | 4.14E-05 | 0.12503747 | 0.578 | 0.512 | 1          | CD4_CAMK4_spleen |
| PHF21A             | 4.21E-05 | 0.159905   | 0.619 | 0.559 | 1          | CD4_CAMK4_spleen |
| BCAS3              | 4.23E-05 | 0.14450656 | 0.731 | 0.678 | 1          | CD4_CAMK4_spleen |
| PRPSAP2            | 4.29E-05 | 0.10915978 | 0.388 | 0.33  | 1          | CD4_CAMK4_spleen |
| ADSS2              | 4.36E-05 | 0.10691256 | 0.258 | 0.21  | 1          | CD4_CAMK4_spleen |
| WIPF2              | 4.58E-05 | 0.17691135 | 0.392 | 0.339 | 1          | CD4_CAMK4_spleen |
| STXBP5             | 4.65E-05 | 0.15559238 | 0.476 | 0.422 | 1          | CD4_CAMK4_spleen |
| LARGE1             | 4.84E-05 | 0.18117626 | 0.327 | 0.277 | 1          | CD4_CAMK4_spleen |
| XRN2               | 5.02E-05 | 0.11110795 | 0.719 | 0.656 | 1          | CD4_CAMK4_spleen |
| SLC12A2            | 5.16E-05 | 0.32379475 | 0.28  | 0.237 | 1          | CD4_CAMK4_spleen |
| KDM5B              | 5.16E-05 | 0.19977654 | 0.357 | 0.303 | 1          | CD4_CAMK4_spleen |
| UQCRH              | 5.29E-05 | 0.12354841 | 0.377 | 0.323 | 1          | CD4_CAMK4_spleen |
| CD3E               | 5.51E-05 | 0.15770503 | 0.531 | 0.465 | 1          | CD4_CAMK4_spleen |
| MSH3               | 5.56E-05 | 0.15987577 | 0.451 | 0.399 | 1          | CD4_CAMK4_spleen |
| PDLIM5             | 5.97E-05 | 0.26020656 | 0.345 | 0.301 | 1          | CD4_CAMK4_spleen |
| NCOA2              | 6.05E-05 | 0.10803564 | 0.701 | 0.645 | 1          | CD4_CAMK4_spleen |
| IPO7               | 6.05E-05 | 0.13802715 | 0.433 | 0.377 | 1          | CD4_CAMK4_spleen |
| SESN1              | 6.31E-05 | 0.17202287 | 0.393 | 0.34  | 1          | CD4_CAMK4_spleen |
| PRKAG2             | 6.51E-05 | 0.16989966 | 0.44  | 0.382 | 1          | CD4_CAMK4_spleen |
| P2RX4              | 6.60E-05 | 0.21133518 | 0.257 | 0.213 | 1          | CD4_CAMK4_spleen |
| CMTM6              | 6.77E-05 | 0.24721899 | 0.304 | 0.256 | 1          | CD4_CAMK4_spleen |
| RELL1              | 7.11E-05 | 0.26775099 | 0.519 | 0.472 | 1          | CD4_CAMK4_spleen |

|                     |            |            |       |       |                    |
|---------------------|------------|------------|-------|-------|--------------------|
| ENSMMUG00000032231  | 7.46E-05   | 0.23927227 | 0.257 | 0.213 | 1 CD4_CAMK4_spleen |
| DTNB                | 7.51E-05   | 0.10436814 | 0.487 | 0.431 | 1 CD4_CAMK4_spleen |
| AEBP2               | 8.31E-05   | 0.11762453 | 0.666 | 0.609 | 1 CD4_CAMK4_spleen |
| JAK2                | 8.86E-05   | 0.1075634  | 0.412 | 0.358 | 1 CD4_CAMK4_spleen |
| PPP2R5A             | 9.43E-05   | 0.13819662 | 0.602 | 0.536 | 1 CD4_CAMK4_spleen |
| SLC35B1             | 9.45E-05   | 0.17952864 | 0.477 | 0.423 | 1 CD4_CAMK4_spleen |
| MORF4L1             | 9.79E-05   | 0.13158216 | 0.773 | 0.719 | 1 CD4_CAMK4_spleen |
| BCAS2               | 0.00010607 | 0.20789735 | 0.345 | 0.298 | 1 CD4_CAMK4_spleen |
| TP53BP1             | 0.00011232 | 0.12377727 | 0.511 | 0.447 | 1 CD4_CAMK4_spleen |
| NDUFAF2             | 0.00011264 | 0.17838673 | 0.326 | 0.279 | 1 CD4_CAMK4_spleen |
| TMPO                | 0.00011285 | 0.11174249 | 0.315 | 0.262 | 1 CD4_CAMK4_spleen |
| DISP1               | 0.00011345 | 0.25642493 | 0.346 | 0.304 | 1 CD4_CAMK4_spleen |
| NADSYN1             | 0.00011542 | 0.10932438 | 0.27  | 0.222 | 1 CD4_CAMK4_spleen |
| ENSMMUG00000009264  | 0.00011666 | 0.14046269 | 0.344 | 0.293 | 1 CD4_CAMK4_spleen |
| SMN1                | 0.00011825 | 0.18989564 | 0.324 | 0.275 | 1 CD4_CAMK4_spleen |
| EXOC6               | 0.00012118 | 0.13489586 | 0.778 | 0.739 | 1 CD4_CAMK4_spleen |
| ENSMMUG000000063635 | 0.00012464 | 0.16409153 | 0.407 | 0.361 | 1 CD4_CAMK4_spleen |
| PRDM2               | 0.00012535 | 0.1643351  | 0.569 | 0.528 | 1 CD4_CAMK4_spleen |
| RNF213              | 0.00012774 | 0.11541373 | 0.611 | 0.545 | 1 CD4_CAMK4_spleen |
| ENSMMUG000000017297 | 0.00013315 | 0.13744915 | 0.326 | 0.278 | 1 CD4_CAMK4_spleen |
| GIGYF2              | 0.00014311 | 0.10723968 | 0.681 | 0.615 | 1 CD4_CAMK4_spleen |
| ADD3                | 0.00014802 | 0.10465006 | 0.892 | 0.851 | 1 CD4_CAMK4_spleen |
| FBXW11              | 0.00014878 | 0.11396768 | 0.404 | 0.355 | 1 CD4_CAMK4_spleen |
| ENSMMUG000000062941 | 0.0001514  | 0.10546335 | 0.322 | 0.271 | 1 CD4_CAMK4_spleen |
| CSGALNACT2          | 0.00017066 | 0.11535487 | 0.634 | 0.575 | 1 CD4_CAMK4_spleen |
| GAK                 | 0.0001727  | 0.12988794 | 0.332 | 0.281 | 1 CD4_CAMK4_spleen |
| MICU1               | 0.00017317 | 0.19847684 | 0.29  | 0.248 | 1 CD4_CAMK4_spleen |
| CNOT10              | 0.00017424 | 0.12862714 | 0.355 | 0.302 | 1 CD4_CAMK4_spleen |
| ENSMMUG000000017466 | 0.00017642 | 0.12889331 | 0.35  | 0.303 | 1 CD4_CAMK4_spleen |
| ADK                 | 0.00017936 | 0.14717864 | 0.623 | 0.582 | 1 CD4_CAMK4_spleen |
| ZBED1               | 0.00018306 | 0.1923499  | 0.403 | 0.357 | 1 CD4_CAMK4_spleen |
| RNGTT               | 0.00019735 | 0.10007918 | 0.695 | 0.642 | 1 CD4_CAMK4_spleen |
| PARN                | 0.00019856 | 0.17393032 | 0.404 | 0.355 | 1 CD4_CAMK4_spleen |

|         |            |            |       |       |                    |
|---------|------------|------------|-------|-------|--------------------|
| CACYBP  | 0.0002042  | 0.33141837 | 0.304 | 0.262 | 1 CD4_CAMK4_spleen |
| ELOVL5  | 0.00021424 | 0.21071033 | 0.665 | 0.624 | 1 CD4_CAMK4_spleen |
| CDK12   | 0.0002244  | 0.1097953  | 0.5   | 0.438 | 1 CD4_CAMK4_spleen |
| MIC1    | 0.00023782 | 0.25350334 | 0.337 | 0.292 | 1 CD4_CAMK4_spleen |
| NECAP1  | 0.00028879 | 0.15556029 | 0.256 | 0.214 | 1 CD4_CAMK4_spleen |
| YTHDF2  | 0.00032784 | 0.11059689 | 0.374 | 0.322 | 1 CD4_CAMK4_spleen |
| MED25   | 0.00034093 | 0.19508558 | 0.336 | 0.289 | 1 CD4_CAMK4_spleen |
| STX17   | 0.00036013 | 0.11904092 | 0.325 | 0.278 | 1 CD4_CAMK4_spleen |
| CDS2    | 0.00036167 | 0.22271112 | 0.28  | 0.24  | 1 CD4_CAMK4_spleen |
| TBCE    | 0.00036877 | 0.17117722 | 0.356 | 0.31  | 1 CD4_CAMK4_spleen |
| MCM3AP  | 0.00037266 | 0.1004049  | 0.255 | 0.211 | 1 CD4_CAMK4_spleen |
| TBC1D1  | 0.00038764 | 0.14601654 | 0.687 | 0.651 | 1 CD4_CAMK4_spleen |
| LPIN2   | 0.0003922  | 0.12356614 | 0.474 | 0.422 | 1 CD4_CAMK4_spleen |
| PHF6    | 0.0003981  | 0.19235317 | 0.264 | 0.224 | 1 CD4_CAMK4_spleen |
| ME2     | 0.00039845 | 0.1045426  | 0.626 | 0.569 | 1 CD4_CAMK4_spleen |
| PLEKHB2 | 0.00041094 | 0.16557824 | 0.449 | 0.404 | 1 CD4_CAMK4_spleen |
| EIF2AK4 | 0.00047283 | 0.17549314 | 0.282 | 0.243 | 1 CD4_CAMK4_spleen |
| DNAJB14 | 0.00047615 | 0.11663165 | 0.359 | 0.312 | 1 CD4_CAMK4_spleen |
| FAM126B | 0.0004863  | 0.15274855 | 0.278 | 0.236 | 1 CD4_CAMK4_spleen |
| H2AZ2   | 0.00052769 | 0.11768731 | 0.609 | 0.549 | 1 CD4_CAMK4_spleen |
| ABL2    | 0.00053834 | 0.22742234 | 0.274 | 0.236 | 1 CD4_CAMK4_spleen |
| MTOR    | 0.00057497 | 0.11534755 | 0.272 | 0.229 | 1 CD4_CAMK4_spleen |
| RAD51B  | 0.0005937  | 0.22348529 | 0.419 | 0.381 | 1 CD4_CAMK4_spleen |
| SPIDR   | 0.00059874 | 0.12389786 | 0.468 | 0.424 | 1 CD4_CAMK4_spleen |
| NUFIP2  | 0.00060227 | 0.18668962 | 0.635 | 0.586 | 1 CD4_CAMK4_spleen |
| ANP32B  | 0.00060597 | 0.14106423 | 0.452 | 0.403 | 1 CD4_CAMK4_spleen |
| ANAPC1  | 0.00063355 | 0.12687356 | 0.343 | 0.298 | 1 CD4_CAMK4_spleen |
| PPIL4   | 0.00064467 | 0.16264631 | 0.607 | 0.552 | 1 CD4_CAMK4_spleen |
| NAMPT   | 0.00064622 | 0.19354006 | 0.409 | 0.367 | 1 CD4_CAMK4_spleen |
| MAML3   | 0.00078635 | 0.10617432 | 0.841 | 0.818 | 1 CD4_CAMK4_spleen |
| USP9X   | 0.00079527 | 0.10566954 | 0.77  | 0.724 | 1 CD4_CAMK4_spleen |
| CITED1  | 0.00084812 | 0.10719497 | 0.402 | 0.358 | 1 CD4_CAMK4_spleen |
| LCLAT1  | 0.00095437 | 0.15179075 | 0.46  | 0.422 | 1 CD4_CAMK4_spleen |

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|--------------------|------------|------------|-------|-------|--------------------|
| SMARCA5            | 0.00095811 | 0.16128628 | 0.449 | 0.401 | 1 CD4_CAMK4_spleen |
| TMEM243            | 0.00099197 | 0.1680925  | 0.325 | 0.284 | 1 CD4_CAMK4_spleen |
| RAB6A              | 0.00106051 | 0.11812271 | 0.401 | 0.357 | 1 CD4_CAMK4_spleen |
| NSMCE1             | 0.00115624 | 0.18928846 | 0.268 | 0.231 | 1 CD4_CAMK4_spleen |
| PLCL2              | 0.0011566  | 0.12080913 | 0.691 | 0.658 | 1 CD4_CAMK4_spleen |
| MAP4               | 0.00116196 | 0.130479   | 0.287 | 0.248 | 1 CD4_CAMK4_spleen |
| KPNB1              | 0.0011861  | 0.10928385 | 0.449 | 0.397 | 1 CD4_CAMK4_spleen |
| AMMECR1            | 0.0012198  | 0.13234204 | 0.28  | 0.243 | 1 CD4_CAMK4_spleen |
| TUBB               | 0.00122922 | 0.19761143 | 0.261 | 0.225 | 1 CD4_CAMK4_spleen |
| DENND4C            | 0.00127158 | 0.15361596 | 0.386 | 0.341 | 1 CD4_CAMK4_spleen |
| CMSS1              | 0.00131131 | 0.2633666  | 0.4   | 0.368 | 1 CD4_CAMK4_spleen |
| RTN3               | 0.00157348 | 0.16986877 | 0.424 | 0.385 | 1 CD4_CAMK4_spleen |
| NPM1               | 0.00161067 | 0.10974396 | 0.687 | 0.605 | 1 CD4_CAMK4_spleen |
| ASPH               | 0.0017201  | 0.19534341 | 0.3   | 0.265 | 1 CD4_CAMK4_spleen |
| PPFIBP2            | 0.00173132 | 0.21006304 | 0.322 | 0.287 | 1 CD4_CAMK4_spleen |
| GLIPR1L2           | 0.00174728 | 0.16286203 | 0.333 | 0.292 | 1 CD4_CAMK4_spleen |
| CALCOCO2           | 0.00190517 | 0.10005087 | 0.298 | 0.257 | 1 CD4_CAMK4_spleen |
| ACBD6              | 0.00203954 | 0.22845078 | 0.327 | 0.293 | 1 CD4_CAMK4_spleen |
| CBFA2T2            | 0.00227287 | 0.12220671 | 0.363 | 0.325 | 1 CD4_CAMK4_spleen |
| INVS               | 0.00232598 | 0.15548322 | 0.278 | 0.243 | 1 CD4_CAMK4_spleen |
| MAP2K6             | 0.00260378 | 0.20221762 | 0.381 | 0.349 | 1 CD4_CAMK4_spleen |
| NSD2               | 0.00265771 | 0.14221304 | 0.296 | 0.261 | 1 CD4_CAMK4_spleen |
| ZNF652             | 0.0027967  | 0.20054946 | 0.357 | 0.321 | 1 CD4_CAMK4_spleen |
| POC1B              | 0.00292774 | 0.1413878  | 0.339 | 0.303 | 1 CD4_CAMK4_spleen |
| ANKRD28            | 0.0030745  | 0.10444642 | 0.634 | 0.592 | 1 CD4_CAMK4_spleen |
| ENSMMUG00000055114 | 0.00309929 | 0.24928087 | 0.367 | 0.339 | 1 CD4_CAMK4_spleen |
| HMOX2              | 0.00314619 | 0.12010956 | 0.4   | 0.361 | 1 CD4_CAMK4_spleen |
| MAP4K5             | 0.00327758 | 0.1555397  | 0.279 | 0.244 | 1 CD4_CAMK4_spleen |
| DENND1B            | 0.00383915 | 0.10220941 | 0.465 | 0.426 | 1 CD4_CAMK4_spleen |
| OLA1               | 0.00405941 | 0.12362017 | 0.532 | 0.493 | 1 CD4_CAMK4_spleen |
| ENSMMUG00000065362 | 0.00413746 | 0.34586416 | 0.998 | 0.996 | 1 CD4_CAMK4_spleen |
| XPC                | 0.00436749 | 0.12361332 | 0.302 | 0.267 | 1 CD4_CAMK4_spleen |
| WWP2               | 0.00467309 | 0.12701633 | 0.416 | 0.381 | 1 CD4_CAMK4_spleen |

|                    |            |            |       |       |                    |
|--------------------|------------|------------|-------|-------|--------------------|
| IPO9               | 0.00494131 | 0.10816027 | 0.319 | 0.281 | 1 CD4_CAMK4_spleen |
| UQCRC2             | 0.00509192 | 0.10761322 | 0.27  | 0.234 | 1 CD4_CAMK4_spleen |
| MCPH1              | 0.00517302 | 0.22922881 | 0.258 | 0.229 | 1 CD4_CAMK4_spleen |
| SRPK2              | 0.00584697 | 0.10227435 | 0.723 | 0.697 | 1 CD4_CAMK4_spleen |
| MTERF1             | 0.00596971 | 0.14102554 | 0.262 | 0.23  | 1 CD4_CAMK4_spleen |
| SELENOI            | 0.00610294 | 0.11756002 | 0.304 | 0.269 | 1 CD4_CAMK4_spleen |
| TANC2              | 0.00682804 | 0.11963118 | 0.483 | 0.452 | 1 CD4_CAMK4_spleen |
| CCNT1              | 0.0071941  | 0.11334159 | 0.407 | 0.369 | 1 CD4_CAMK4_spleen |
| PAIP2              | 0.00734619 | 0.11571014 | 0.73  | 0.706 | 1 CD4_CAMK4_spleen |
| PGK1               | 0.00760055 | 0.15333458 | 0.261 | 0.231 | 1 CD4_CAMK4_spleen |
| PHACTR4            | 0.00870264 | 0.10963003 | 0.441 | 0.404 | 1 CD4_CAMK4_spleen |
| ENSMMUG00000054038 | 0.00876742 | 0.10584957 | 0.461 | 0.419 | 1 CD4_CAMK4_spleen |
| SLC16A10           | 0.01214846 | 0.14760078 | 0.27  | 0.242 | 1 CD4_CAMK4_spleen |
| RASSF3             | 0.01389437 | 0.11042718 | 0.816 | 0.81  | 1 CD4_CAMK4_spleen |
| IGF1R              | 0.01419217 | 0.1602534  | 0.396 | 0.37  | 1 CD4_CAMK4_spleen |
| USP9Y              | 0.01575794 | 0.17044662 | 0.326 | 0.307 | 1 CD4_CAMK4_spleen |
| TMTC2              | 0.01771853 | 0.20030967 | 0.305 | 0.28  | 1 CD4_CAMK4_spleen |
| CPEB4              | 0.01950126 | 0.11724851 | 0.259 | 0.233 | 1 CD4_CAMK4_spleen |
| NFKB1              | 0.02071155 | 0.24992677 | 0.715 | 0.699 | 1 CD4_CAMK4_spleen |
| RPS2               | 0.02090047 | 0.18383896 | 0.527 | 0.489 | 1 CD4_CAMK4_spleen |
| JMY                | 0.02273726 | 0.22465027 | 0.73  | 0.716 | 1 CD4_CAMK4_spleen |
| BTRC               | 0.0233977  | 0.15460069 | 0.42  | 0.394 | 1 CD4_CAMK4_spleen |
| NSMCE2             | 0.02646589 | 0.10769679 | 0.633 | 0.607 | 1 CD4_CAMK4_spleen |
| CARMIL1            | 0.04057206 | 0.10523431 | 0.471 | 0.447 | 1 CD4_CAMK4_spleen |
| PPM1L              | 0.05048174 | 0.19580275 | 0.277 | 0.259 | 1 CD4_CAMK4_spleen |
| TRAM1              | 0.0512901  | 0.1206248  | 0.357 | 0.332 | 1 CD4_CAMK4_spleen |
| PSMD12             | 0.05775987 | 0.13683135 | 0.716 | 0.678 | 1 CD4_CAMK4_spleen |
| RMDN1              | 0.07157311 | 0.17491157 | 0.266 | 0.244 | 1 CD4_CAMK4_spleen |
| ETFA               | 0.08553182 | 0.1361889  | 0.271 | 0.254 | 1 CD4_CAMK4_spleen |
| GTF2B              | 0.1032155  | 0.10128662 | 0.696 | 0.673 | 1 CD4_CAMK4_spleen |
| BBS9               | 0.10751335 | 0.10319435 | 0.291 | 0.272 | 1 CD4_CAMK4_spleen |
| RPIA               | 0.14085443 | 0.10461388 | 0.452 | 0.425 | 1 CD4_CAMK4_spleen |
| CD83               | 0.17268237 | 0.20594553 | 0.408 | 0.404 | 1 CD4_CAMK4_spleen |



|                     |            |            |       |       |           |                  |
|---------------------|------------|------------|-------|-------|-----------|------------------|
| ND3                 | 0.19208365 | 0.13213013 | 0.682 | 0.672 | 1         | CD4_CAMK4_spleen |
| CYSLTR1             | 0.28567371 | 0.13759723 | 0.257 | 0.247 | 1         | CD4_CAMK4_spleen |
| ST6GALNAC5          | 0.30941025 | 0.12489625 | 0.433 | 0.422 | 1         | CD4_CAMK4_spleen |
| BMPR1B              | 0.63857771 | 0.14580781 | 0.365 | 0.368 | 1         | CD4_CAMK4_spleen |
| UBE2E2              | 0.80016941 | 0.15933058 | 0.527 | 0.555 | 1         | CD4_CAMK4_spleen |
| FHIT                | 0.88871582 | 0.11025705 | 0.363 | 0.374 | 1         | CD4_CAMK4_spleen |
| RPS21               | 0          | 1.79859833 | 0.998 | 0.992 | 0         | CD8_lung         |
| ENSMMUG000000062350 | 0          | 1.53816324 | 0.998 | 0.997 | 0         | CD8_lung         |
| ATP5F1E             | 6.06E-283  | 1.6362374  | 0.986 | 0.971 | 2.15E-278 | CD8_lung         |
| RPS28               | 4.38E-270  | 1.05451445 | 0.997 | 0.998 | 1.55E-265 | CD8_lung         |
| RPL36               | 1.28E-262  | 1.5890997  | 0.975 | 0.96  | 4.52E-258 | CD8_lung         |
| ENSMMUG000000005593 | 4.04E-260  | 1.38066658 | 0.997 | 0.997 | 1.43E-255 | CD8_lung         |
| RPL39               | 1.80E-254  | 1.19011991 | 0.991 | 0.995 | 6.38E-250 | CD8_lung         |
| RPS12               | 2.00E-233  | 0.98497915 | 1     | 0.998 | 7.08E-229 | CD8_lung         |
| RPL12               | 5.18E-230  | 0.99620263 | 0.995 | 0.995 | 1.84E-225 | CD8_lung         |
| RPL34               | 4.11E-229  | 0.82328443 | 0.997 | 0.999 | 1.46E-224 | CD8_lung         |
| ENSMMUG000000015563 | 7.86E-224  | 0.95721239 | 0.994 | 0.997 | 2.79E-219 | CD8_lung         |
| ZC3H10              | 7.82E-220  | 1.65103378 | 0.952 | 0.915 | 2.77E-215 | CD8_lung         |
| RPL32               | 1.45E-219  | 0.81527116 | 1     | 0.998 | 5.13E-215 | CD8_lung         |
| RPL35A              | 6.13E-210  | 0.86679192 | 0.997 | 0.997 | 2.17E-205 | CD8_lung         |
| NUDT3               | 5.34E-208  | 0.85498972 | 0.995 | 0.997 | 1.89E-203 | CD8_lung         |
| RPL10               | 3.04E-205  | 0.78076876 | 0.998 | 0.997 | 1.08E-200 | CD8_lung         |
| FAU                 | 4.74E-195  | 0.89393669 | 0.991 | 0.993 | 1.68E-190 | CD8_lung         |
| ENSMMUG000000013257 | 7.15E-195  | 1.5432158  | 0.964 | 0.929 | 2.53E-190 | CD8_lung         |
| RPL18               | 7.91E-194  | 0.79489656 | 0.998 | 0.998 | 2.80E-189 | CD8_lung         |
| RPS13               | 1.18E-182  | 0.7580982  | 0.995 | 0.996 | 4.17E-178 | CD8_lung         |
| ELOA                | 5.98E-179  | 0.7300555  | 0.998 | 0.996 | 2.12E-174 | CD8_lung         |
| RPS23               | 9.45E-178  | 0.7034621  | 1     | 0.997 | 3.35E-173 | CD8_lung         |
| RPLP1               | 4.50E-176  | 0.79999264 | 0.998 | 0.998 | 1.59E-171 | CD8_lung         |
| RPS7                | 1.17E-175  | 0.70894675 | 0.997 | 0.997 | 4.15E-171 | CD8_lung         |
| ENSMMUG000000060377 | 6.39E-172  | 1.76061428 | 0.888 | 0.806 | 2.26E-167 | CD8_lung         |
| RPL24               | 7.75E-168  | 0.79473469 | 0.998 | 0.995 | 2.75E-163 | CD8_lung         |
| ENSMMUG000000013429 | 6.46E-166  | 0.64902893 | 0.998 | 0.999 | 2.29E-161 | CD8_lung         |

|                     |           |            |       |       |           |          |
|---------------------|-----------|------------|-------|-------|-----------|----------|
| RPL8                | 1.94E-159 | 0.78265547 | 0.998 | 0.996 | 6.89E-155 | CD8_lung |
| RPL30               | 5.00E-156 | 0.60867514 | 0.997 | 0.998 | 1.77E-151 | CD8_lung |
| ENSMMUG000000004545 | 2.63E-153 | 1.42101033 | 0.927 | 0.847 | 9.34E-149 | CD8_lung |
| RPS9                | 1.74E-151 | 0.85109332 | 0.995 | 0.994 | 6.15E-147 | CD8_lung |
| RPL22L1             | 5.24E-151 | 1.21107426 | 0.958 | 0.962 | 1.86E-146 | CD8_lung |
| RPS24               | 2.01E-150 | 0.61412233 | 1     | 0.999 | 7.11E-146 | CD8_lung |
| RPS29               | 9.19E-149 | 0.74785601 | 0.998 | 0.997 | 3.26E-144 | CD8_lung |
| TMSB10              | 1.22E-148 | 1.02918366 | 0.994 | 0.994 | 4.31E-144 | CD8_lung |
| RPS26               | 2.13E-147 | 0.82298477 | 0.995 | 0.998 | 7.55E-143 | CD8_lung |
| RPS5                | 3.97E-147 | 0.73250536 | 0.995 | 0.994 | 1.41E-142 | CD8_lung |
| UBA52               | 9.35E-147 | 0.75494356 | 0.989 | 0.993 | 3.31E-142 | CD8_lung |
| BTG1                | 7.72E-142 | 1.40185284 | 0.924 | 0.894 | 2.73E-137 | CD8_lung |
| ENSMMUG000000056354 | 6.35E-133 | 1.13602844 | 0.927 | 0.943 | 2.25E-128 | CD8_lung |
| RPL7A               | 2.36E-132 | 0.6464776  | 0.994 | 0.996 | 8.35E-128 | CD8_lung |
| RPL19               | 8.19E-130 | 0.94511338 | 0.984 | 0.982 | 2.90E-125 | CD8_lung |
| RPL22               | 2.24E-125 | 0.70263181 | 0.983 | 0.993 | 7.93E-121 | CD8_lung |
| GPR65               | 1.41E-122 | 3.50408944 | 0.464 | 0.15  | 5.00E-118 | CD8_lung |
| RPL28               | 3.35E-122 | 0.58805159 | 1     | 0.997 | 1.19E-117 | CD8_lung |
| RPSA                | 1.34E-120 | 0.65590752 | 0.992 | 0.995 | 4.74E-116 | CD8_lung |
| ENSMMUG000000064224 | 1.78E-112 | 1.13308248 | 0.936 | 0.927 | 6.30E-108 | CD8_lung |
| ENSMMUG000000003867 | 4.22E-111 | 0.49221709 | 1     | 1     | 1.50E-106 | CD8_lung |
| RPL5                | 1.55E-101 | 0.53517002 | 0.995 | 0.998 | 5.51E-97  | CD8_lung |
| RPS4X               | 1.70E-98  | 0.58751785 | 0.995 | 0.997 | 6.04E-94  | CD8_lung |
| HNRNPH2             | 6.42E-96  | 0.64880904 | 0.988 | 0.991 | 2.27E-91  | CD8_lung |
| FTL                 | 2.90E-94  | 1.08164645 | 0.898 | 0.915 | 1.03E-89  | CD8_lung |
| RPL27               | 2.24E-90  | 0.483734   | 0.995 | 0.996 | 7.94E-86  | CD8_lung |
| ENSMMUG000000016305 | 3.46E-85  | 1.33444183 | 0.786 | 0.725 | 1.23E-80  | CD8_lung |
| ENSMMUG000000012140 | 5.79E-84  | 0.63627849 | 0.988 | 0.992 | 2.05E-79  | CD8_lung |
| NME2                | 1.16E-83  | 0.73777133 | 0.958 | 0.976 | 4.10E-79  | CD8_lung |
| MBD3                | 3.03E-83  | 1.46918439 | 0.747 | 0.687 | 1.07E-78  | CD8_lung |
| CD3D                | 7.69E-82  | 1.13522047 | 0.835 | 0.823 | 2.73E-77  | CD8_lung |
| ENSMMUG000000044585 | 8.73E-82  | 1.54330246 | 0.722 | 0.631 | 3.09E-77  | CD8_lung |
| RPL38               | 9.74E-82  | 0.58000302 | 0.989 | 0.997 | 3.45E-77  | CD8_lung |

|                    |          |            |       |       |          |          |
|--------------------|----------|------------|-------|-------|----------|----------|
| GMFG               | 1.19E-81 | 1.00767128 | 0.873 | 0.91  | 4.23E-77 | CD8_lung |
| ELOB               | 1.78E-79 | 1.35373271 | 0.75  | 0.7   | 6.31E-75 | CD8_lung |
| RPL6               | 1.10E-78 | 0.46024212 | 0.998 | 0.997 | 3.88E-74 | CD8_lung |
| PRPF31             | 1.44E-78 | 1.80577977 | 0.665 | 0.526 | 5.08E-74 | CD8_lung |
| ENSMMUG00000003073 | 1.42E-73 | 0.52194519 | 0.989 | 0.994 | 5.04E-69 | CD8_lung |
| RPS27A             | 9.47E-73 | 0.96931881 | 0.862 | 0.869 | 3.36E-68 | CD8_lung |
| TMA7               | 2.08E-71 | 1.19290414 | 0.793 | 0.809 | 7.39E-67 | CD8_lung |
| ENSMMUG00000022428 | 5.89E-71 | 2.12423022 | 0.564 | 0.367 | 2.09E-66 | CD8_lung |
| RPL36AL            | 1.74E-70 | 0.94158925 | 0.849 | 0.91  | 6.17E-66 | CD8_lung |
| ATP5MPL            | 9.07E-70 | 1.20720397 | 0.758 | 0.747 | 3.21E-65 | CD8_lung |
| GCN1               | 4.30E-69 | 0.50919339 | 0.989 | 0.993 | 1.52E-64 | CD8_lung |
| ROMO1              | 1.20E-67 | 1.52375489 | 0.691 | 0.626 | 4.25E-63 | CD8_lung |
| ENSMMUG00000022489 | 1.69E-65 | 1.05695026 | 0.807 | 0.838 | 6.00E-61 | CD8_lung |
| ATP5MG             | 3.43E-64 | 0.92730261 | 0.84  | 0.885 | 1.22E-59 | CD8_lung |
| UBL5               | 3.20E-63 | 1.56801787 | 0.637 | 0.53  | 1.13E-58 | CD8_lung |
| EEF1A1             | 6.42E-62 | 0.53742978 | 0.988 | 0.988 | 2.27E-57 | CD8_lung |
| H2AFZ              | 4.46E-59 | 1.76757853 | 0.598 | 0.458 | 1.58E-54 | CD8_lung |
| EIF3K              | 6.82E-59 | 0.72591261 | 0.899 | 0.929 | 2.42E-54 | CD8_lung |
| SRP14              | 1.47E-57 | 0.91557051 | 0.821 | 0.859 | 5.20E-53 | CD8_lung |
| ENSMMUG00000019505 | 6.68E-56 | 1.20844337 | 0.734 | 0.736 | 2.37E-51 | CD8_lung |
| ROBO2              | 7.13E-55 | 0.90623516 | 0.845 | 0.864 | 2.53E-50 | CD8_lung |
| ENSMMUG00000052747 | 7.69E-54 | 1.01526091 | 0.781 | 0.801 | 2.72E-49 | CD8_lung |
| CCR7               | 6.93E-51 | 2.02781341 | 0.526 | 0.375 | 2.45E-46 | CD8_lung |
| RPL35              | 9.11E-51 | 0.4768417  | 0.978 | 0.991 | 3.23E-46 | CD8_lung |
| ENSMMUG00000056126 | 6.28E-50 | 2.41110413 | 0.401 | 0.215 | 2.23E-45 | CD8_lung |
| ENSMMUG00000030408 | 1.13E-49 | 1.49058821 | 0.635 | 0.598 | 4.00E-45 | CD8_lung |
| HINT1              | 3.82E-47 | 0.75979919 | 0.868 | 0.922 | 1.35E-42 | CD8_lung |
| ENSMMUG00000063637 | 1.41E-46 | 0.67046274 | 0.939 | 0.952 | 4.99E-42 | CD8_lung |
| ENSMMUG00000007657 | 2.83E-45 | 1.11511367 | 0.697 | 0.715 | 1.00E-40 | CD8_lung |
| COX5B              | 1.54E-44 | 1.47005609 | 0.59  | 0.519 | 5.44E-40 | CD8_lung |
| JPT1               | 2.22E-42 | 1.04583052 | 0.708 | 0.752 | 7.87E-38 | CD8_lung |
| ATP6V1G1           | 2.49E-41 | 0.96689355 | 0.745 | 0.821 | 8.83E-37 | CD8_lung |
| ENSMMUG00000001210 | 1.85E-40 | 0.56422642 | 0.91  | 0.943 | 6.55E-36 | CD8_lung |

|                    |          |            |       |       |          |          |
|--------------------|----------|------------|-------|-------|----------|----------|
| COX7C              | 3.98E-39 | 0.72554833 | 0.803 | 0.868 | 1.41E-34 | CD8_lung |
| COX6C              | 9.94E-38 | 0.8008535  | 0.787 | 0.853 | 3.52E-33 | CD8_lung |
| STMN1              | 2.12E-37 | 1.63468568 | 0.565 | 0.488 | 7.53E-33 | CD8_lung |
| ENSMMUG00000006463 | 5.41E-37 | 0.62526045 | 0.863 | 0.916 | 1.92E-32 | CD8_lung |
| ENSMMUG00000003532 | 1.11E-36 | 0.88327142 | 0.762 | 0.785 | 3.94E-32 | CD8_lung |
| NDUFA4             | 5.88E-36 | 0.98498458 | 0.683 | 0.71  | 2.08E-31 | CD8_lung |
| SOX4               | 2.09E-35 | 1.14258207 | 0.73  | 0.772 | 7.41E-31 | CD8_lung |
| MAMU-E             | 2.23E-35 | 0.6716141  | 0.863 | 0.933 | 7.90E-31 | CD8_lung |
| ENSMMUG00000047481 | 4.98E-35 | 1.183044   | 0.616 | 0.595 | 1.76E-30 | CD8_lung |
| HCST               | 5.53E-34 | 1.55203613 | 0.543 | 0.475 | 1.96E-29 | CD8_lung |
| COMMD6             | 6.02E-34 | 0.77151895 | 0.783 | 0.854 | 2.13E-29 | CD8_lung |
| NDUFA1             | 1.19E-33 | 1.14039416 | 0.646 | 0.657 | 4.23E-29 | CD8_lung |
| TMEM258            | 7.84E-32 | 1.25560876 | 0.582 | 0.561 | 2.78E-27 | CD8_lung |
| GSTP1              | 1.07E-31 | 1.03111131 | 0.663 | 0.692 | 3.78E-27 | CD8_lung |
| ENSMMUG00000016894 | 6.42E-31 | 0.995548   | 0.654 | 0.696 | 2.27E-26 | CD8_lung |
| EEF1D              | 1.54E-30 | 0.62105178 | 0.845 | 0.913 | 5.45E-26 | CD8_lung |
| MRI1               | 8.68E-30 | 1.08397097 | 0.618 | 0.634 | 3.08E-25 | CD8_lung |
| GAPDH              | 1.29E-29 | 0.93011418 | 0.686 | 0.721 | 4.56E-25 | CD8_lung |
| RAB11A             | 1.35E-29 | 2.36080338 | 0.329 | 0.195 | 4.78E-25 | CD8_lung |
| ENSMMUG00000056793 | 2.69E-29 | 0.79666722 | 0.722 | 0.799 | 9.53E-25 | CD8_lung |
| WDR83OS            | 1.17E-28 | 0.86610908 | 0.693 | 0.77  | 4.15E-24 | CD8_lung |
| ENSMMUG00000064139 | 1.78E-27 | 0.78602772 | 0.786 | 0.877 | 6.29E-23 | CD8_lung |
| OST4               | 2.01E-27 | 1.14911644 | 0.601 | 0.629 | 7.12E-23 | CD8_lung |
| ENSMMUG00000053146 | 2.89E-27 | 1.41923535 | 0.526 | 0.485 | 1.02E-22 | CD8_lung |
| CREM               | 4.78E-27 | 2.06405344 | 0.362 | 0.24  | 1.70E-22 | CD8_lung |
| TAGLN2             | 5.42E-27 | 1.05619064 | 0.672 | 0.695 | 1.92E-22 | CD8_lung |
| UQCRQ              | 1.58E-26 | 1.0597995  | 0.612 | 0.633 | 5.61E-22 | CD8_lung |
| CTSW               | 2.30E-26 | 1.46793497 | 0.514 | 0.463 | 8.16E-22 | CD8_lung |
| RPL3               | 7.96E-26 | 0.25314333 | 0.988 | 0.997 | 2.82E-21 | CD8_lung |
| ENSMMUG00000016665 | 8.24E-26 | 1.05716204 | 0.584 | 0.599 | 2.92E-21 | CD8_lung |
| CRIP1              | 1.24E-25 | 1.46446216 | 0.564 | 0.552 | 4.40E-21 | CD8_lung |
| NDUFB11            | 1.74E-25 | 1.64416177 | 0.422 | 0.33  | 6.15E-21 | CD8_lung |
| CD7                | 5.82E-25 | 1.03719531 | 0.646 | 0.713 | 2.06E-20 | CD8_lung |

|                     |          |            |       |       |          |          |
|---------------------|----------|------------|-------|-------|----------|----------|
| PFDN5               | 4.86E-24 | 1.5408845  | 0.455 | 0.382 | 1.72E-19 | CD8_lung |
| PET100              | 8.11E-24 | 2.14132016 | 0.298 | 0.181 | 2.87E-19 | CD8_lung |
| MYL6                | 1.65E-23 | 1.03416346 | 0.601 | 0.637 | 5.86E-19 | CD8_lung |
| ND4L                | 6.85E-23 | 1.76860669 | 0.435 | 0.364 | 2.43E-18 | CD8_lung |
| SMDT1               | 1.57E-22 | 0.83633663 | 0.675 | 0.761 | 5.56E-18 | CD8_lung |
| ENSMMUG00000006283  | 1.03E-21 | 1.98452429 | 0.323 | 0.216 | 3.66E-17 | CD8_lung |
| GPR171              | 1.66E-21 | 2.20577543 | 0.272 | 0.16  | 5.89E-17 | CD8_lung |
| NSA2                | 2.12E-21 | 0.86686818 | 0.674 | 0.771 | 7.50E-17 | CD8_lung |
| MYL12B              | 5.71E-20 | 0.85774787 | 0.66  | 0.713 | 2.02E-15 | CD8_lung |
| NPM1                | 1.21E-19 | 0.43907026 | 0.863 | 0.944 | 4.28E-15 | CD8_lung |
| SLC25A43            | 1.96E-19 | 0.93115877 | 0.612 | 0.68  | 6.94E-15 | CD8_lung |
| ATP5MC2             | 1.16E-18 | 0.94725063 | 0.592 | 0.64  | 4.10E-14 | CD8_lung |
| MYG1                | 1.34E-18 | 1.54277228 | 0.393 | 0.324 | 4.76E-14 | CD8_lung |
| EEF1B2              | 2.81E-18 | 0.30539354 | 0.938 | 0.982 | 9.95E-14 | CD8_lung |
| SLC38A2             | 2.91E-18 | 1.50529421 | 0.447 | 0.402 | 1.03E-13 | CD8_lung |
| HNRNPDL             | 5.96E-18 | 0.72398096 | 0.688 | 0.788 | 2.11E-13 | CD8_lung |
| IFI16               | 3.74E-17 | 1.29738189 | 0.472 | 0.447 | 1.32E-12 | CD8_lung |
| SSR4                | 5.00E-17 | 0.8186607  | 0.613 | 0.697 | 1.77E-12 | CD8_lung |
| SEC61G              | 5.62E-17 | 1.0013527  | 0.554 | 0.602 | 1.99E-12 | CD8_lung |
| IFI27L2             | 1.53E-16 | 1.02298601 | 0.561 | 0.596 | 5.42E-12 | CD8_lung |
| RPS4Y1              | 1.12E-15 | 0.45644143 | 0.759 | 0.796 | 3.96E-11 | CD8_lung |
| NDUFB2              | 1.29E-15 | 0.92106297 | 0.593 | 0.678 | 4.58E-11 | CD8_lung |
| CNOT6L              | 1.96E-15 | 0.14983717 | 0.317 | 0.614 | 6.96E-11 | CD8_lung |
| ENSMMUG000000017466 | 4.10E-15 | 1.2165768  | 0.45  | 0.427 | 1.45E-10 | CD8_lung |
| UQCRH               | 4.52E-15 | 0.95501433 | 0.537 | 0.574 | 1.60E-10 | CD8_lung |
| COX6B1              | 2.12E-14 | 1.60428525 | 0.349 | 0.287 | 7.50E-10 | CD8_lung |
| BTF3                | 2.60E-14 | 0.48548709 | 0.815 | 0.871 | 9.23E-10 | CD8_lung |
| EDEM1               | 3.73E-14 | 0.11520576 | 0.141 | 0.327 | 1.32E-09 | CD8_lung |
| NDUFB4              | 5.13E-14 | 0.99222025 | 0.537 | 0.598 | 1.82E-09 | CD8_lung |
| ENSMMUG000000049722 | 5.53E-14 | 1.48154222 | 0.382 | 0.339 | 1.96E-09 | CD8_lung |
| COX7B               | 5.93E-14 | 0.93906647 | 0.564 | 0.649 | 2.10E-09 | CD8_lung |
| ENSMMUG000000012419 | 1.07E-13 | 0.87634614 | 0.573 | 0.661 | 3.80E-09 | CD8_lung |
| ATP5MC3             | 5.24E-13 | 0.87953546 | 0.581 | 0.666 | 1.86E-08 | CD8_lung |

|                    |          |            |       |       |            |          |
|--------------------|----------|------------|-------|-------|------------|----------|
| SEC61B             | 1.65E-12 | 0.78514072 | 0.573 | 0.651 | 5.85E-08   | CD8_lung |
| ENSMMUG00000062026 | 2.61E-12 | 1.63923156 | 0.317 | 0.257 | 9.23E-08   | CD8_lung |
| NHP2               | 2.93E-12 | 1.19449379 | 0.425 | 0.412 | 1.04E-07   | CD8_lung |
| ENSMMUG00000053735 | 3.90E-12 | 0.91878519 | 0.534 | 0.598 | 1.38E-07   | CD8_lung |
| LDHA               | 4.73E-12 | 1.41753117 | 0.379 | 0.342 | 1.68E-07   | CD8_lung |
| TAF4B              | 4.92E-12 | 0.24452488 | 0.134 | 0.294 | 1.74E-07   | CD8_lung |
| ENSMMUG00000015270 | 1.66E-11 | 0.13731013 | 0.997 | 0.999 | 5.89E-07   | CD8_lung |
| COX17              | 6.48E-11 | 1.73236562 | 0.281 | 0.219 | 2.30E-06   | CD8_lung |
| CCDC82             | 1.09E-10 | 0.10558021 | 0.138 | 0.293 | 3.86E-06   | CD8_lung |
| IL7R               | 1.44E-10 | 0.55673494 | 0.767 | 0.855 | 5.10E-06   | CD8_lung |
| CHCHD2             | 2.19E-10 | 0.6620649  | 0.637 | 0.793 | 7.74E-06   | CD8_lung |
| ENSMMUG00000042951 | 2.40E-10 | 0.11161487 | 0.241 | 0.461 | 8.50E-06   | CD8_lung |
| TMSB4X             | 2.60E-10 | 0.15387585 | 1     | 0.999 | 9.20E-06   | CD8_lung |
| PTAR1              | 2.95E-10 | 0.12401873 | 0.188 | 0.369 | 1.05E-05   | CD8_lung |
| CPNE1              | 3.39E-10 | 0.12864264 | 0.216 | 0.415 | 1.20E-05   | CD8_lung |
| CORO1A             | 9.77E-10 | 0.64423915 | 0.657 | 0.786 | 3.46E-05   | CD8_lung |
| ENSMMUG00000054038 | 1.07E-09 | 0.86327161 | 0.562 | 0.669 | 3.78E-05   | CD8_lung |
| ENSMMUG00000019238 | 1.24E-09 | 0.19841401 | 0.191 | 0.37  | 4.39E-05   | CD8_lung |
| BIRC2              | 1.25E-09 | 0.11047129 | 0.177 | 0.343 | 4.44E-05   | CD8_lung |
| ARPC3              | 1.51E-09 | 0.54761823 | 0.669 | 0.812 | 5.35E-05   | CD8_lung |
| UBE2V1             | 1.90E-09 | 0.13749085 | 0.234 | 0.44  | 6.73E-05   | CD8_lung |
| ENSMMUG00000001458 | 2.15E-09 | 0.55426872 | 0.666 | 0.799 | 7.61E-05   | CD8_lung |
| SSR3               | 2.33E-09 | 0.22893092 | 0.129 | 0.267 | 8.25E-05   | CD8_lung |
| SUB1               | 2.56E-09 | 0.51161908 | 0.671 | 0.802 | 9.06E-05   | CD8_lung |
| ZNF483             | 2.85E-09 | 0.42575019 | 0.699 | 0.835 | 0.00010101 | CD8_lung |
| PFDN1              | 3.12E-09 | 0.10460834 | 0.22  | 0.414 | 0.00011055 | CD8_lung |
| ENSMMUG00000014648 | 3.65E-09 | 0.41771837 | 0.755 | 0.878 | 0.00012943 | CD8_lung |
| PSMC4              | 4.31E-09 | 0.17092401 | 0.126 | 0.258 | 0.00015288 | CD8_lung |
| CCT5               | 4.50E-09 | 0.10208645 | 0.264 | 0.482 | 0.00015929 | CD8_lung |
| RER1               | 4.70E-09 | 0.10603676 | 0.152 | 0.301 | 0.00016643 | CD8_lung |
| ENSMMUG00000058389 | 4.91E-09 | 1.39160393 | 0.357 | 0.343 | 0.00017393 | CD8_lung |
| SELENOK            | 4.91E-09 | 1.40369613 | 0.339 | 0.309 | 0.00017414 | CD8_lung |
| ENSMMUG00000061630 | 5.54E-09 | 0.11609459 | 0.286 | 0.514 | 0.00019634 | CD8_lung |

|                    |          |            |       |       |            |          |
|--------------------|----------|------------|-------|-------|------------|----------|
| CALR               | 5.87E-09 | 0.12871339 | 0.23  | 0.417 | 0.00020807 | CD8_lung |
| NFATC1             | 7.13E-09 | 0.25551808 | 0.127 | 0.259 | 0.00025259 | CD8_lung |
| N4BP2L2            | 7.22E-09 | 0.13163605 | 0.236 | 0.434 | 0.00025578 | CD8_lung |
| ENSMMUG00000058581 | 7.41E-09 | 1.3557327  | 0.466 | 0.493 | 0.00026242 | CD8_lung |
| RDH5               | 1.64E-08 | 1.04790122 | 0.435 | 0.462 | 0.00058153 | CD8_lung |
| KDELRL1            | 1.65E-08 | 0.12815413 | 0.126 | 0.253 | 0.00058427 | CD8_lung |
| PDCD4              | 1.75E-08 | 0.10178907 | 0.345 | 0.596 | 0.00061993 | CD8_lung |
| RBM8A              | 1.76E-08 | 1.22618562 | 0.407 | 0.422 | 0.00062337 | CD8_lung |
| CLDND1             | 1.85E-08 | 0.23947052 | 0.138 | 0.273 | 0.00065641 | CD8_lung |
| ENSMMUG00000049295 | 2.06E-08 | 0.21204994 | 0.124 | 0.25  | 0.00072948 | CD8_lung |
| PFDN4              | 2.33E-08 | 0.19205085 | 0.165 | 0.315 | 0.00082483 | CD8_lung |
| GHITM              | 2.80E-08 | 0.14848056 | 0.236 | 0.428 | 0.00099113 | CD8_lung |
| CUTA               | 3.34E-08 | 1.04160212 | 0.466 | 0.527 | 0.00118212 | CD8_lung |
| ZC3H15             | 3.59E-08 | 0.12652653 | 0.244 | 0.441 | 0.00127057 | CD8_lung |
| STMN3              | 4.70E-08 | 0.19598438 | 0.144 | 0.278 | 0.00166364 | CD8_lung |
| HMGB1              | 5.22E-08 | 0.49795763 | 0.685 | 0.828 | 0.00184939 | CD8_lung |
| PAOX               | 5.59E-08 | 0.24832946 | 0.175 | 0.327 | 0.00197904 | CD8_lung |
| PSMA5              | 5.62E-08 | 0.24156646 | 0.177 | 0.328 | 0.00199028 | CD8_lung |
| NDUFA2             | 5.73E-08 | 1.01962234 | 0.444 | 0.488 | 0.00202942 | CD8_lung |
| MGAT4A             | 5.80E-08 | 0.17956704 | 0.267 | 0.473 | 0.00205651 | CD8_lung |
| PRR13              | 5.83E-08 | 0.31601643 | 0.182 | 0.338 | 0.00206732 | CD8_lung |
| PPP6R1             | 6.14E-08 | 0.2147827  | 0.14  | 0.27  | 0.00217436 | CD8_lung |
| UBE2L3             | 6.20E-08 | 0.16158494 | 0.236 | 0.427 | 0.00219834 | CD8_lung |
| OAZ1               | 6.22E-08 | 1.47920152 | 0.315 | 0.287 | 0.00220392 | CD8_lung |
| NDUFS3             | 6.39E-08 | 0.19410639 | 0.14  | 0.27  | 0.00226489 | CD8_lung |
| CD74               | 6.97E-08 | 0.23738807 | 0.129 | 0.25  | 0.00246956 | CD8_lung |
| RAN                | 7.02E-08 | 0.88147319 | 0.486 | 0.554 | 0.00248654 | CD8_lung |
| WAS                | 7.23E-08 | 0.20472999 | 0.208 | 0.38  | 0.00256319 | CD8_lung |
| NDUFAF4            | 7.37E-08 | 0.24203953 | 0.155 | 0.294 | 0.00261238 | CD8_lung |
| SUCLG1             | 7.57E-08 | 0.12698641 | 0.262 | 0.465 | 0.00268073 | CD8_lung |
| NDUFA5             | 9.59E-08 | 0.10983945 | 0.163 | 0.303 | 0.00339691 | CD8_lung |
| CDC37              | 1.06E-07 | 0.15360219 | 0.171 | 0.316 | 0.00374521 | CD8_lung |
| MOB2               | 1.10E-07 | 0.17377021 | 0.208 | 0.376 | 0.00390813 | CD8_lung |

|                     |          |            |       |       |            |          |
|---------------------|----------|------------|-------|-------|------------|----------|
| KRTCAP2             | 1.56E-07 | 0.62196554 | 0.592 | 0.718 | 0.0055395  | CD8_lung |
| PPIB                | 1.95E-07 | 0.82410402 | 0.506 | 0.607 | 0.00691898 | CD8_lung |
| ATF4                | 1.96E-07 | 0.11513884 | 0.306 | 0.532 | 0.0069365  | CD8_lung |
| RBFA                | 2.10E-07 | 0.10796469 | 0.245 | 0.435 | 0.00744667 | CD8_lung |
| SAFB                | 2.24E-07 | 0.32952074 | 0.801 | 0.924 | 0.00794225 | CD8_lung |
| ATP5PF              | 2.77E-07 | 0.74250141 | 0.522 | 0.617 | 0.0098008  | CD8_lung |
| RAMAC               | 2.96E-07 | 0.10673901 | 0.175 | 0.316 | 0.01048223 | CD8_lung |
| GLIPR2              | 3.17E-07 | 0.26566993 | 0.132 | 0.251 | 0.01122711 | CD8_lung |
| ENSMMUG000000041517 | 3.38E-07 | 0.22205566 | 0.177 | 0.322 | 0.01198309 | CD8_lung |
| CFL1                | 3.50E-07 | 0.42130477 | 0.731 | 0.876 | 0.01239123 | CD8_lung |
| RNASEH2C            | 3.51E-07 | 0.14615509 | 0.188 | 0.336 | 0.01243131 | CD8_lung |
| HMOX2               | 3.84E-07 | 0.22971691 | 0.202 | 0.359 | 0.01360495 | CD8_lung |
| METAP2              | 4.44E-07 | 0.17608371 | 0.22  | 0.39  | 0.01571412 | CD8_lung |
| ATP5F1B             | 4.48E-07 | 0.24528408 | 0.16  | 0.294 | 0.01586362 | CD8_lung |
| H4C15               | 4.60E-07 | 0.26831508 | 0.134 | 0.25  | 0.01628419 | CD8_lung |
| FTH1                | 4.69E-07 | 0.86077712 | 0.627 | 0.788 | 0.01660179 | CD8_lung |
| ENSMMUG000000004441 | 5.11E-07 | 1.64249013 | 0.306 | 0.277 | 0.01808868 | CD8_lung |
| H2AFJ               | 5.81E-07 | 1.31300472 | 0.345 | 0.34  | 0.02060172 | CD8_lung |
| CALCOCO2            | 6.28E-07 | 0.25831163 | 0.196 | 0.349 | 0.02225286 | CD8_lung |
| UFC1                | 6.63E-07 | 0.21370085 | 0.245 | 0.428 | 0.02350639 | CD8_lung |
| ATOX1               | 6.81E-07 | 1.15743037 | 0.36  | 0.359 | 0.02411268 | CD8_lung |
| SEPTIN2             | 7.19E-07 | 0.2876866  | 0.144 | 0.267 | 0.02547166 | CD8_lung |
| ENSMMUG000000038348 | 8.32E-07 | 0.86056277 | 0.682 | 0.747 | 0.02947641 | CD8_lung |
| APEX1               | 8.67E-07 | 0.15920091 | 0.297 | 0.515 | 0.03071707 | CD8_lung |
| CCT8                | 1.01E-06 | 0.18967858 | 0.256 | 0.447 | 0.03583115 | CD8_lung |
| RBX1                | 1.13E-06 | 0.97722462 | 0.433 | 0.482 | 0.03991948 | CD8_lung |
| NOSIP               | 1.39E-06 | 0.33432997 | 0.194 | 0.341 | 0.04921561 | CD8_lung |
| COPS5               | 1.52E-06 | 0.2538605  | 0.138 | 0.254 | 0.05392816 | CD8_lung |
| VIM                 | 1.63E-06 | 0.15470276 | 0.213 | 0.36  | 0.05759714 | CD8_lung |
| ENSMMUG000000065089 | 1.65E-06 | 0.26912554 | 0.165 | 0.294 | 0.05841376 | CD8_lung |
| ENSMMUG000000045959 | 1.78E-06 | 0.29471548 | 0.18  | 0.319 | 0.06318238 | CD8_lung |
| PPP4C               | 2.04E-06 | 0.30347512 | 0.168 | 0.3   | 0.07224151 | CD8_lung |
| LSM7                | 2.17E-06 | 1.03289105 | 0.427 | 0.48  | 0.07679766 | CD8_lung |



|                     |          |            |       |       |            |          |
|---------------------|----------|------------|-------|-------|------------|----------|
| BCAS2               | 2.26E-06 | 0.25381704 | 0.225 | 0.39  | 0.08008389 | CD8_lung |
| RPL37A              | 2.28E-06 | 0.25967323 | 0.986 | 0.996 | 0.08083117 | CD8_lung |
| GSTM4               | 2.29E-06 | 0.26762475 | 0.16  | 0.285 | 0.08097152 | CD8_lung |
| GIMAP7              | 2.65E-06 | 0.78370602 | 0.514 | 0.595 | 0.09389057 | CD8_lung |
| TDG                 | 2.95E-06 | 0.39193428 | 0.185 | 0.322 | 0.10460757 | CD8_lung |
| C1D                 | 3.04E-06 | 0.33262606 | 0.194 | 0.339 | 0.10770228 | CD8_lung |
| TMEM167A            | 3.05E-06 | 0.24055081 | 0.161 | 0.286 | 0.10818465 | CD8_lung |
| HSD17B11            | 3.27E-06 | 0.19986867 | 0.154 | 0.273 | 0.11568781 | CD8_lung |
| TBC1D24             | 3.35E-06 | 0.20267356 | 0.301 | 0.514 | 0.11879797 | CD8_lung |
| PSMD4               | 3.36E-06 | 0.28421598 | 0.151 | 0.269 | 0.11922438 | CD8_lung |
| SSR2                | 3.45E-06 | 0.69593469 | 0.492 | 0.58  | 0.12226225 | CD8_lung |
| SLC2A3              | 3.73E-06 | 0.91979015 | 0.446 | 0.484 | 0.13200656 | CD8_lung |
| ENSMMUG00000018687  | 4.24E-06 | 0.43055358 | 0.144 | 0.258 | 0.15014699 | CD8_lung |
| ANXA2               | 4.44E-06 | 0.14905299 | 0.203 | 0.343 | 0.15724593 | CD8_lung |
| RNF181              | 4.47E-06 | 0.77989316 | 0.489 | 0.582 | 0.15839888 | CD8_lung |
| ENSMMUG00000029987  | 4.54E-06 | 0.42570932 | 0.207 | 0.359 | 0.16102815 | CD8_lung |
| TKT                 | 4.79E-06 | 0.15493434 | 0.329 | 0.551 | 0.16962019 | CD8_lung |
| HYPK                | 5.11E-06 | 1.02407696 | 0.396 | 0.429 | 0.18120683 | CD8_lung |
| SOD1                | 5.55E-06 | 0.24166138 | 0.242 | 0.412 | 0.19672136 | CD8_lung |
| GNG5                | 5.56E-06 | 0.83926432 | 0.48  | 0.576 | 0.19699357 | CD8_lung |
| POLR2F              | 5.76E-06 | 0.35025794 | 0.166 | 0.293 | 0.20391429 | CD8_lung |
| ABCF1               | 5.96E-06 | 0.30980214 | 0.148 | 0.259 | 0.21109842 | CD8_lung |
| ENSMMUG000000061128 | 6.69E-06 | 0.20660621 | 0.273 | 0.458 | 0.23718027 | CD8_lung |
| GNAI2.1             | 8.19E-06 | 0.31381727 | 0.188 | 0.325 | 0.2902985  | CD8_lung |
| THOC7               | 8.86E-06 | 0.20512473 | 0.177 | 0.301 | 0.31378432 | CD8_lung |
| ENSMMUG000000005880 | 9.39E-06 | 0.29659335 | 0.236 | 0.399 | 0.3325484  | CD8_lung |
| SH3BGRL             | 9.42E-06 | 0.3832844  | 0.193 | 0.331 | 0.33367338 | CD8_lung |
| CYCS                | 9.69E-06 | 0.27933107 | 0.239 | 0.408 | 0.34321666 | CD8_lung |
| HIGD2A              | 9.69E-06 | 0.33235322 | 0.171 | 0.295 | 0.34342244 | CD8_lung |
| PYHIN1              | 1.00E-05 | 0.27228592 | 0.199 | 0.34  | 0.35448037 | CD8_lung |
| NDUFB9              | 1.02E-05 | 1.1090501  | 0.398 | 0.441 | 0.36006322 | CD8_lung |
| MDH1                | 1.07E-05 | 0.27079529 | 0.244 | 0.413 | 0.37797236 | CD8_lung |
| IRF3                | 1.11E-05 | 0.39388825 | 0.151 | 0.263 | 0.39163652 | CD8_lung |

|                    |          |            |       |       |            |          |
|--------------------|----------|------------|-------|-------|------------|----------|
| SNRPD3             | 1.11E-05 | 0.77509599 | 0.47  | 0.558 | 0.39448236 | CD8_lung |
| CD3G               | 1.12E-05 | 0.22927023 | 0.234 | 0.385 | 0.3984695  | CD8_lung |
| LBH                | 1.19E-05 | 0.21334945 | 0.323 | 0.536 | 0.42101517 | CD8_lung |
| ENSMMUG00000031947 | 1.37E-05 | 0.40354371 | 0.661 | 0.829 | 0.48534309 | CD8_lung |
| ESF1               | 1.45E-05 | 0.286195   | 0.224 | 0.371 | 0.51532191 | CD8_lung |
| EDF1               | 1.61E-05 | 0.94251928 | 0.401 | 0.446 | 0.5717824  | CD8_lung |
| COX7A2             | 2.07E-05 | 1.31141892 | 0.287 | 0.271 | 0.73200209 | CD8_lung |
| NR4A2              | 2.10E-05 | 0.29218613 | 0.16  | 0.269 | 0.74266423 | CD8_lung |
| WDR13              | 2.24E-05 | 0.11142621 | 0.422 | 0.686 | 0.79520958 | CD8_lung |
| CNBP               | 2.34E-05 | 0.12642947 | 0.402 | 0.656 | 0.83009823 | CD8_lung |
| ENSMMUG00000058919 | 2.40E-05 | 0.47891133 | 0.188 | 0.318 | 0.84951347 | CD8_lung |
| TOMM7              | 2.53E-05 | 0.19666278 | 0.874 | 0.966 | 0.89819723 | CD8_lung |
| S100A6             | 2.58E-05 | 0.83308994 | 0.542 | 0.632 | 0.91388287 | CD8_lung |
| DGUOK              | 2.83E-05 | 0.24875889 | 0.171 | 0.288 | 1          | CD8_lung |
| MRFAP1             | 2.95E-05 | 0.30223208 | 0.154 | 0.263 | 1          | CD8_lung |
| NCLN               | 2.95E-05 | 0.38420289 | 0.189 | 0.316 | 1          | CD8_lung |
| RBBP4              | 3.00E-05 | 0.28139177 | 0.217 | 0.361 | 1          | CD8_lung |
| HSP90B1            | 3.12E-05 | 0.36751581 | 0.311 | 0.505 | 1          | CD8_lung |
| CD63               | 3.24E-05 | 0.27758782 | 0.239 | 0.391 | 1          | CD8_lung |
| ANAPC16            | 3.37E-05 | 0.28572893 | 0.196 | 0.326 | 1          | CD8_lung |
| VDAC1              | 3.39E-05 | 0.29844483 | 0.16  | 0.273 | 1          | CD8_lung |
| NDUFB10            | 3.79E-05 | 0.91803148 | 0.394 | 0.436 | 1          | CD8_lung |
| ARPC2              | 3.98E-05 | 0.28560193 | 0.301 | 0.501 | 1          | CD8_lung |
| C11H12orf45        | 4.51E-05 | 0.30348549 | 0.258 | 0.426 | 1          | CD8_lung |
| PGK1               | 4.59E-05 | 0.87125912 | 0.458 | 0.544 | 1          | CD8_lung |
| HMGB2              | 4.96E-05 | 0.35905617 | 0.199 | 0.33  | 1          | CD8_lung |
| CLNS1A             | 5.56E-05 | 0.3704805  | 0.199 | 0.333 | 1          | CD8_lung |
| COX8A              | 6.21E-05 | 0.9768333  | 0.425 | 0.5   | 1          | CD8_lung |
| PLGRKT             | 6.95E-05 | 0.30349071 | 0.161 | 0.27  | 1          | CD8_lung |
| ENSMMUG00000016278 | 7.29E-05 | 0.38696594 | 0.255 | 0.42  | 1          | CD8_lung |
| ATG12              | 8.03E-05 | 0.22330146 | 0.325 | 0.53  | 1          | CD8_lung |
| GABARAPL2          | 8.09E-05 | 1.03586358 | 0.368 | 0.399 | 1          | CD8_lung |
| HNRNPF             | 8.18E-05 | 0.20633476 | 0.315 | 0.516 | 1          | CD8_lung |

|                    |            |            |       |       |            |
|--------------------|------------|------------|-------|-------|------------|
| GPSM3              | 8.61E-05   | 0.83491253 | 0.464 | 0.575 | 1 CD8_lung |
| LAMTOR1            | 9.03E-05   | 0.48288435 | 0.185 | 0.307 | 1 CD8_lung |
| RASGRP2            | 0.00010911 | 0.40574541 | 0.227 | 0.37  | 1 CD8_lung |
| ENSMMUG00000032031 | 0.0001179  | 0.28771107 | 0.208 | 0.335 | 1 CD8_lung |
| VAMP8              | 0.00013263 | 1.04478825 | 0.359 | 0.389 | 1 CD8_lung |
| TALDO1             | 0.00013938 | 0.28872326 | 0.289 | 0.476 | 1 CD8_lung |
| PSMB6              | 0.0001418  | 1.05024257 | 0.356 | 0.388 | 1 CD8_lung |
| FKBP1A             | 0.00015043 | 0.40333863 | 0.194 | 0.316 | 1 CD8_lung |
| TUBB               | 0.00015985 | 0.97491073 | 0.416 | 0.475 | 1 CD8_lung |
| ENSMMUG00000065104 | 0.00018031 | 0.55826973 | 0.55  | 0.673 | 1 CD8_lung |
| AP2M1              | 0.00018669 | 0.4434296  | 0.186 | 0.304 | 1 CD8_lung |
| ENSMMUG00000055825 | 0.00019818 | 0.28145722 | 0.183 | 0.294 | 1 CD8_lung |
| ERH                | 0.00020245 | 1.07220805 | 0.363 | 0.403 | 1 CD8_lung |
| ILF2               | 0.0002102  | 0.34571399 | 0.22  | 0.356 | 1 CD8_lung |
| PTGES3             | 0.0002119  | 0.13598872 | 0.452 | 0.705 | 1 CD8_lung |
| ENSMMUG00000057449 | 0.00021562 | 0.34352955 | 0.253 | 0.408 | 1 CD8_lung |
| SNRPB2             | 0.00023641 | 0.27088792 | 0.266 | 0.426 | 1 CD8_lung |
| AMD1               | 0.00024198 | 0.33702687 | 0.261 | 0.418 | 1 CD8_lung |
| EEF1E1             | 0.00027028 | 0.33621716 | 0.2   | 0.32  | 1 CD8_lung |
| SAP18              | 0.00027347 | 0.27451356 | 0.339 | 0.549 | 1 CD8_lung |
| SEM1               | 0.00027873 | 0.94171134 | 0.384 | 0.432 | 1 CD8_lung |
| HIKESHI            | 0.0002844  | 0.53062029 | 0.211 | 0.344 | 1 CD8_lung |
| SEC62              | 0.00035059 | 0.86410981 | 0.446 | 0.535 | 1 CD8_lung |
| CCNDBP1            | 0.0003644  | 0.41663095 | 0.155 | 0.251 | 1 CD8_lung |
| ACOT13             | 0.00038044 | 0.4106943  | 0.165 | 0.264 | 1 CD8_lung |
| TWF2               | 0.00039071 | 0.55254696 | 0.22  | 0.356 | 1 CD8_lung |
| MRPL51             | 0.00039251 | 0.89602306 | 0.407 | 0.469 | 1 CD8_lung |
| CLEC2D             | 0.00039544 | 0.41085111 | 0.307 | 0.483 | 1 CD8_lung |
| TBCC               | 0.00042095 | 0.43005215 | 0.213 | 0.341 | 1 CD8_lung |
| COPS6              | 0.00042427 | 0.47422464 | 0.228 | 0.364 | 1 CD8_lung |
| EIF4A3             | 0.00044746 | 0.44775583 | 0.179 | 0.285 | 1 CD8_lung |
| OSTF1              | 0.00046844 | 0.44575857 | 0.211 | 0.338 | 1 CD8_lung |
| EIF1B              | 0.00051189 | 0.40195855 | 0.248 | 0.398 | 1 CD8_lung |

|                     |            |            |       |       |            |
|---------------------|------------|------------|-------|-------|------------|
| ATP5IF1             | 0.00054076 | 0.64330615 | 0.481 | 0.586 | 1 CD8_lung |
| ENSMMUG000000061913 | 0.00055518 | 0.10940888 | 0.464 | 0.725 | 1 CD8_lung |
| ENSMMUG000000017097 | 0.0005969  | 0.40537335 | 0.158 | 0.252 | 1 CD8_lung |
| NCOA7               | 0.00062365 | 0.35054102 | 0.259 | 0.407 | 1 CD8_lung |
| CCT7                | 0.00069988 | 0.42103638 | 0.2   | 0.317 | 1 CD8_lung |
| NDUFS8              | 0.00072416 | 1.04609626 | 0.351 | 0.391 | 1 CD8_lung |
| GTF3C6              | 0.00077819 | 0.43557446 | 0.2   | 0.318 | 1 CD8_lung |
| ENSMMUG000000006206 | 0.00078489 | 0.33428885 | 0.323 | 0.508 | 1 CD8_lung |
| SARAF               | 0.00088295 | 0.46646727 | 0.592 | 0.766 | 1 CD8_lung |
| SLC39A7             | 0.00089139 | 0.63407202 | 0.168 | 0.266 | 1 CD8_lung |
| C16H17orf49         | 0.00101871 | 0.82034846 | 0.438 | 0.539 | 1 CD8_lung |
| NDUFS2              | 0.00102266 | 0.5782214  | 0.182 | 0.288 | 1 CD8_lung |
| CD53                | 0.0010761  | 0.30139287 | 0.359 | 0.56  | 1 CD8_lung |
| CD2                 | 0.00114267 | 1.00056953 | 0.379 | 0.431 | 1 CD8_lung |
| POLR1D              | 0.00121824 | 0.20048422 | 0.363 | 0.577 | 1 CD8_lung |
| LEPROTL1            | 0.00146478 | 0.99528231 | 0.351 | 0.392 | 1 CD8_lung |
| MRPL52              | 0.00157343 | 1.36708993 | 0.255 | 0.252 | 1 CD8_lung |
| UQCRC1              | 0.00157543 | 0.5473742  | 0.172 | 0.27  | 1 CD8_lung |
| IK                  | 0.00165329 | 0.3147922  | 0.307 | 0.48  | 1 CD8_lung |
| COX16               | 0.00173212 | 0.21347064 | 0.441 | 0.685 | 1 CD8_lung |
| TMBIM6              | 0.0017337  | 0.3314505  | 0.307 | 0.482 | 1 CD8_lung |
| STRAP               | 0.00181343 | 0.36345092 | 0.314 | 0.495 | 1 CD8_lung |
| MICOS13             | 0.00184446 | 0.93453892 | 0.356 | 0.398 | 1 CD8_lung |
| MRPL23              | 0.00202798 | 0.86157053 | 0.408 | 0.49  | 1 CD8_lung |
| TMEM219             | 0.00204419 | 0.59326804 | 0.199 | 0.31  | 1 CD8_lung |
| PSMA2               | 0.00205535 | 0.87502377 | 0.419 | 0.512 | 1 CD8_lung |
| NCL                 | 0.00205971 | 0.46625789 | 0.618 | 0.773 | 1 CD8_lung |
| GABARAP             | 0.00229743 | 0.24092398 | 0.379 | 0.6   | 1 CD8_lung |
| MRPL11              | 0.00231014 | 0.39020262 | 0.28  | 0.44  | 1 CD8_lung |
| NDUFC2              | 0.00231146 | 0.8558759  | 0.399 | 0.476 | 1 CD8_lung |
| BAX                 | 0.00241748 | 0.47919765 | 0.199 | 0.305 | 1 CD8_lung |
| NMT1                | 0.0024577  | 0.58737541 | 0.172 | 0.266 | 1 CD8_lung |
| ENSMMUG000000064120 | 0.00252528 | 1.20412159 | 0.295 | 0.308 | 1 CD8_lung |

|                    |            |            |       |       |            |
|--------------------|------------|------------|-------|-------|------------|
| ENSMMUG00000054982 | 0.00332343 | 0.26729524 | 0.238 | 0.333 | 1 CD8_lung |
| YJEFN3             | 0.00370344 | 0.77836441 | 0.416 | 0.508 | 1 CD8_lung |
| UBE2D1             | 0.00381138 | 0.62489117 | 0.2   | 0.305 | 1 CD8_lung |
| ENY2               | 0.00393451 | 0.39701987 | 0.325 | 0.506 | 1 CD8_lung |
| C14H11orf58        | 0.004397   | 0.50078221 | 0.228 | 0.351 | 1 CD8_lung |
| ATP5PD             | 0.00442783 | 1.0836563  | 0.28  | 0.289 | 1 CD8_lung |
| LIMD2              | 0.00452176 | 0.53511451 | 0.551 | 0.714 | 1 CD8_lung |
| ENSMMUG00000006499 | 0.00453482 | 0.35236408 | 0.303 | 0.467 | 1 CD8_lung |
| SPOCK2             | 0.00478557 | 0.41166348 | 0.363 | 0.565 | 1 CD8_lung |
| MGST3              | 0.00510556 | 1.12678463 | 0.3   | 0.323 | 1 CD8_lung |
| CSNK2B             | 0.0051552  | 0.52296068 | 0.236 | 0.363 | 1 CD8_lung |
| BUD31              | 0.00589486 | 0.52971994 | 0.175 | 0.265 | 1 CD8_lung |
| ENSMMUG00000053817 | 0.0059835  | 0.98699489 | 0.349 | 0.401 | 1 CD8_lung |
| RGS10              | 0.00610598 | 0.27453521 | 0.385 | 0.589 | 1 CD8_lung |
| LSM2               | 0.0063986  | 0.46149153 | 0.188 | 0.281 | 1 CD8_lung |
| SUMO1              | 0.00660006 | 0.24456319 | 0.382 | 0.588 | 1 CD8_lung |
| ENSMMUG00000063859 | 0.00660436 | 0.69679704 | 0.174 | 0.259 | 1 CD8_lung |
| NBEAL1             | 0.00704697 | 0.34946809 | 0.245 | 0.353 | 1 CD8_lung |
| PPIH               | 0.00722618 | 0.68277056 | 0.172 | 0.258 | 1 CD8_lung |
| NDUFB8             | 0.00737218 | 0.90561262 | 0.379 | 0.461 | 1 CD8_lung |
| NCBP2              | 0.00779109 | 0.91381453 | 0.394 | 0.48  | 1 CD8_lung |
| STAT4              | 0.00818332 | 0.76641355 | 0.314 | 0.469 | 1 CD8_lung |
| MRPL34             | 0.00824836 | 1.07051923 | 0.275 | 0.291 | 1 CD8_lung |
| CTSS               | 0.00840495 | 0.53436981 | 0.224 | 0.335 | 1 CD8_lung |
| TOPORS             | 0.00852119 | 0.31999137 | 0.339 | 0.521 | 1 CD8_lung |
| CBX3               | 0.00903297 | 0.86541894 | 0.399 | 0.485 | 1 CD8_lung |
| ENSMMUG00000016009 | 0.00961899 | 0.26328572 | 0.394 | 0.603 | 1 CD8_lung |
| SPCS2              | 0.00979779 | 1.04629209 | 0.306 | 0.336 | 1 CD8_lung |
| EIF1AY             | 0.00985154 | 0.56950252 | 0.183 | 0.269 | 1 CD8_lung |
| PLAAT4             | 0.01018964 | 0.69409496 | 0.191 | 0.279 | 1 CD8_lung |
| GTF2H5             | 0.01063241 | 0.77640054 | 0.408 | 0.501 | 1 CD8_lung |
| RABAC1             | 0.01089036 | 1.05980333 | 0.335 | 0.384 | 1 CD8_lung |
| RBMX               | 0.01104861 | 0.33392457 | 0.385 | 0.581 | 1 CD8_lung |

|                    |            |            |       |       |            |
|--------------------|------------|------------|-------|-------|------------|
| SRSF7              | 0.01119316 | 0.32318535 | 0.385 | 0.584 | 1 CD8_lung |
| ENSMMUG00000029026 | 0.01147351 | 0.49594278 | 0.526 | 0.675 | 1 CD8_lung |
| SSBP1              | 0.01215337 | 0.61929213 | 0.203 | 0.298 | 1 CD8_lung |
| LSM5               | 0.01238544 | 1.03835394 | 0.321 | 0.36  | 1 CD8_lung |
| ENSMMUG00000055026 | 0.01263706 | 0.50085397 | 0.292 | 0.437 | 1 CD8_lung |
| HNRNPA1            | 0.01320848 | 0.12573788 | 0.489 | 0.726 | 1 CD8_lung |
| PRDX6              | 0.01441083 | 0.57066758 | 0.248 | 0.37  | 1 CD8_lung |
| SPCS3              | 0.01476312 | 0.48341801 | 0.273 | 0.409 | 1 CD8_lung |
| ENSMMUG00000055376 | 0.0150108  | 0.61870245 | 0.244 | 0.364 | 1 CD8_lung |
| ISCA1              | 0.01539216 | 0.52927932 | 0.222 | 0.325 | 1 CD8_lung |
| LSM6               | 0.01671213 | 0.86055241 | 0.38  | 0.463 | 1 CD8_lung |
| IL2RG              | 0.01676253 | 0.38557086 | 0.343 | 0.523 | 1 CD8_lung |
| SMNDC1             | 0.0171746  | 0.5942555  | 0.252 | 0.374 | 1 CD8_lung |
| NDUFAB1            | 0.01721213 | 0.63062345 | 0.208 | 0.309 | 1 CD8_lung |
| TUBA1A             | 0.01746153 | 0.2534747  | 0.43  | 0.643 | 1 CD8_lung |
| ENSMMUG00000051392 | 0.01747812 | 0.4341938  | 0.36  | 0.553 | 1 CD8_lung |
| TRAPPC4            | 0.01755722 | 0.66609282 | 0.177 | 0.258 | 1 CD8_lung |
| MFNG               | 0.01887221 | 0.59958222 | 0.276 | 0.413 | 1 CD8_lung |
| SLIRP              | 0.01944559 | 0.23276594 | 0.457 | 0.696 | 1 CD8_lung |
| SLC25A3            | 0.01965155 | 0.29834501 | 0.382 | 0.58  | 1 CD8_lung |
| YWHAB              | 0.01984763 | 0.3137446  | 0.404 | 0.616 | 1 CD8_lung |
| PSMB9              | 0.02031303 | 0.52607287 | 0.261 | 0.387 | 1 CD8_lung |
| THYN1              | 0.02150343 | 0.59123026 | 0.202 | 0.294 | 1 CD8_lung |
| PDCD10             | 0.02160315 | 0.47984172 | 0.262 | 0.39  | 1 CD8_lung |
| SERBP1             | 0.02175192 | 0.26132537 | 0.441 | 0.661 | 1 CD8_lung |
| MIC1               | 0.02196412 | 0.5529875  | 0.506 | 0.644 | 1 CD8_lung |
| ENSMMUG00000002320 | 0.02279891 | 0.2676265  | 0.741 | 0.895 | 1 CD8_lung |
| TPI1               | 0.02332883 | 0.60948413 | 0.219 | 0.317 | 1 CD8_lung |
| TMEM14B            | 0.02524487 | 0.55240391 | 0.494 | 0.64  | 1 CD8_lung |
| PRMT1              | 0.02548806 | 0.49552297 | 0.281 | 0.417 | 1 CD8_lung |
| SNRPD2             | 0.0255567  | 0.46604722 | 0.533 | 0.707 | 1 CD8_lung |
| EIF3J              | 0.02737646 | 0.43098725 | 0.284 | 0.416 | 1 CD8_lung |
| DSTN               | 0.02908089 | 0.62056465 | 0.216 | 0.309 | 1 CD8_lung |

|                    |            |            |       |       |            |
|--------------------|------------|------------|-------|-------|------------|
| LSP1               | 0.03110906 | 0.26163203 | 0.408 | 0.613 | 1 CD8_lung |
| DGKB               | 0.03384487 | 0.79836251 | 0.175 | 0.252 | 1 CD8_lung |
| BST2               | 0.03488652 | 0.68557818 | 0.189 | 0.271 | 1 CD8_lung |
| AMDHD1             | 0.03562214 | 0.48834584 | 0.325 | 0.489 | 1 CD8_lung |
| POLR1H             | 0.03566107 | 0.51866824 | 0.272 | 0.397 | 1 CD8_lung |
| COX20              | 0.03805531 | 1.21103247 | 0.253 | 0.27  | 1 CD8_lung |
| EIF3I              | 0.04195566 | 0.5470873  | 0.266 | 0.39  | 1 CD8_lung |
| ENSMMUG00000018740 | 0.04228284 | 0.66183811 | 0.193 | 0.272 | 1 CD8_lung |
| TRAC               | 0.04247103 | 0.12232672 | 0.675 | 0.864 | 1 CD8_lung |
| TAPBPL             | 0.04530515 | 1.23954654 | 0.272 | 0.297 | 1 CD8_lung |
| ANP32A             | 0.04977272 | 0.52995353 | 0.28  | 0.402 | 1 CD8_lung |
| CD37               | 0.05092572 | 0.31764357 | 0.398 | 0.609 | 1 CD8_lung |
| ZNHIT1             | 0.05200025 | 0.96676526 | 0.326 | 0.386 | 1 CD8_lung |
| PRDX1              | 0.05661963 | 0.99988952 | 0.262 | 0.285 | 1 CD8_lung |
| MDH2               | 0.05728408 | 0.43409392 | 0.278 | 0.403 | 1 CD8_lung |
| NDUFA6             | 0.05765604 | 0.5476631  | 0.29  | 0.429 | 1 CD8_lung |
| DRAP1              | 0.05808126 | 0.53700706 | 0.283 | 0.413 | 1 CD8_lung |
| SPCS1              | 0.06672697 | 0.44746779 | 0.332 | 0.487 | 1 CD8_lung |
| PSMB3              | 0.06677313 | 0.6499879  | 0.233 | 0.335 | 1 CD8_lung |
| HSPD1              | 0.07064196 | 0.50329368 | 0.233 | 0.323 | 1 CD8_lung |
| PDGFRA             | 0.07505652 | 0.35891003 | 0.708 | 0.886 | 1 CD8_lung |
| PFDN6              | 0.07851352 | 0.96886022 | 0.278 | 0.313 | 1 CD8_lung |
| SNRPN              | 0.07865644 | 0.94687928 | 0.325 | 0.389 | 1 CD8_lung |
| TENT5C             | 0.08025488 | 0.56979369 | 0.3   | 0.42  | 1 CD8_lung |
| MPC2               | 0.0803211  | 0.58006148 | 0.253 | 0.36  | 1 CD8_lung |
| MAP1LC3B           | 0.08426238 | 0.58051949 | 0.248 | 0.351 | 1 CD8_lung |
| EEF1G              | 0.08832884 | 0.20220206 | 0.728 | 0.893 | 1 CD8_lung |
| BID                | 0.09091616 | 0.87165286 | 0.216 | 0.303 | 1 CD8_lung |
| ADI1               | 0.09702011 | 0.74738144 | 0.193 | 0.264 | 1 CD8_lung |
| SRGN               | 0.09718182 | 0.78176527 | 0.396 | 0.48  | 1 CD8_lung |
| NDUFB7             | 0.10037962 | 0.67501618 | 0.23  | 0.321 | 1 CD8_lung |
| STAR               | 0.10046701 | 0.63885683 | 0.213 | 0.295 | 1 CD8_lung |
| EIF4E2             | 0.10530538 | 0.6628419  | 0.216 | 0.298 | 1 CD8_lung |

|                     |            |            |       |       |            |
|---------------------|------------|------------|-------|-------|------------|
| RNF7                | 0.11675619 | 0.68389479 | 0.242 | 0.337 | 1 CD8_lung |
| BUD23               | 0.11704164 | 0.46837616 | 0.328 | 0.477 | 1 CD8_lung |
| MRPL14              | 0.11759608 | 1.0473431  | 0.276 | 0.317 | 1 CD8_lung |
| LAMTOR4             | 0.11970662 | 0.54381659 | 0.273 | 0.385 | 1 CD8_lung |
| RGS1                | 0.12202025 | 0.68538492 | 0.275 | 0.384 | 1 CD8_lung |
| RPS19BP1            | 0.12266795 | 0.78003279 | 0.191 | 0.26  | 1 CD8_lung |
| PSME1               | 0.12489831 | 0.47087705 | 0.537 | 0.721 | 1 CD8_lung |
| SHISA5              | 0.12658266 | 0.75261911 | 0.384 | 0.488 | 1 CD8_lung |
| ENSMMUG000000065362 | 0.12722423 | 0.15373566 | 0.989 | 1     | 1 CD8_lung |
| PPA1                | 0.13379401 | 0.52467151 | 0.262 | 0.366 | 1 CD8_lung |
| AIMP1               | 0.1360387  | 0.72696582 | 0.398 | 0.503 | 1 CD8_lung |
| ENSMMUG00000002075  | 0.14453075 | 0.65767247 | 0.197 | 0.266 | 1 CD8_lung |
| NDUFS6              | 0.14542124 | 0.80732953 | 0.332 | 0.409 | 1 CD8_lung |
| SIRPG               | 0.15245919 | 0.69178422 | 0.197 | 0.265 | 1 CD8_lung |
| PSMA4               | 0.15731283 | 0.49817848 | 0.28  | 0.392 | 1 CD8_lung |
| PARK7               | 0.15838941 | 0.57954    | 0.262 | 0.365 | 1 CD8_lung |
| RBIS                | 0.16668944 | 0.65603417 | 0.43  | 0.569 | 1 CD8_lung |
| PTP4A1              | 0.17796492 | 0.79559402 | 0.241 | 0.331 | 1 CD8_lung |
| RPS4Y2              | 0.18517731 | 0.5217117  | 0.304 | 0.422 | 1 CD8_lung |
| PTRHD1              | 0.18687853 | 0.68589048 | 0.193 | 0.256 | 1 CD8_lung |
| C18H18orf32         | 0.19337711 | 0.10973389 | 0.969 | 0.991 | 1 CD8_lung |
| ENSMMUG00000000983  | 0.19352625 | 0.72473238 | 0.337 | 0.412 | 1 CD8_lung |
| ANAPC13             | 0.1938804  | 0.71077073 | 0.199 | 0.266 | 1 CD8_lung |
| ENSMMUG000000055584 | 0.20363624 | 0.19800793 | 0.699 | 0.885 | 1 CD8_lung |
| ENSMMUG000000029973 | 0.2045505  | 0.26993719 | 0.45  | 0.644 | 1 CD8_lung |
| MRPS33              | 0.20495038 | 0.72462665 | 0.193 | 0.256 | 1 CD8_lung |
| ENSMMUG000000064692 | 0.21335354 | 0.13544982 | 0.62  | 0.831 | 1 CD8_lung |
| SATB1               | 0.22404249 | 0.27754683 | 0.632 | 0.837 | 1 CD8_lung |
| ATP6V1FNB           | 0.22747304 | 0.61106171 | 0.272 | 0.379 | 1 CD8_lung |
| MRPS6               | 0.23119136 | 0.73797408 | 0.28  | 0.388 | 1 CD8_lung |
| MIF                 | 0.24121155 | 0.45360666 | 0.432 | 0.638 | 1 CD8_lung |
| OSTC                | 0.24358343 | 0.84974292 | 0.317 | 0.389 | 1 CD8_lung |
| MRPS25              | 0.2459969  | 0.79188927 | 0.236 | 0.319 | 1 CD8_lung |



|                     |            |            |       |       |            |
|---------------------|------------|------------|-------|-------|------------|
| PSMB1               | 0.2474297  | 0.61649434 | 0.43  | 0.576 | 1 CD8_lung |
| UBA7                | 0.2489205  | 0.67080061 | 0.217 | 0.288 | 1 CD8_lung |
| CD320               | 0.25312215 | 0.72566677 | 0.377 | 0.491 | 1 CD8_lung |
| DCTN3               | 0.25529586 | 0.64026311 | 0.252 | 0.342 | 1 CD8_lung |
| SNRPD1              | 0.2575919  | 1.02547953 | 0.286 | 0.342 | 1 CD8_lung |
| ATP6V0E1            | 0.25774328 | 0.79960114 | 0.339 | 0.423 | 1 CD8_lung |
| SYTL2               | 0.26739092 | 1.08458056 | 0.343 | 0.42  | 1 CD8_lung |
| ENO1                | 0.2696736  | 0.40669486 | 0.543 | 0.742 | 1 CD8_lung |
| ENSMMUG000000012019 | 0.27782117 | 0.54748302 | 0.28  | 0.387 | 1 CD8_lung |
| CFDP1               | 0.27929045 | 0.5848374  | 0.422 | 0.541 | 1 CD8_lung |
| LLPH                | 0.27991059 | 0.60436307 | 0.278 | 0.38  | 1 CD8_lung |
| ISG20               | 0.28017515 | 1.04172426 | 0.238 | 0.269 | 1 CD8_lung |
| CHMP2A              | 0.28303077 | 0.79683844 | 0.194 | 0.255 | 1 CD8_lung |
| S100A10             | 0.28788307 | 0.51958822 | 0.39  | 0.55  | 1 CD8_lung |
| ZNF706              | 0.29872456 | 0.63561606 | 0.366 | 0.466 | 1 CD8_lung |
| LSM8                | 0.30316688 | 1.05469297 | 0.228 | 0.258 | 1 CD8_lung |
| PSMB8               | 0.31052394 | 0.44328527 | 0.399 | 0.581 | 1 CD8_lung |
| DAD1                | 0.31164601 | 0.72421155 | 0.346 | 0.441 | 1 CD8_lung |
| TRMT112             | 0.32346675 | 0.50905102 | 0.368 | 0.536 | 1 CD8_lung |
| CD58                | 0.3236997  | 1.03177315 | 0.231 | 0.264 | 1 CD8_lung |
| UBXN1               | 0.32995201 | 0.69363926 | 0.374 | 0.498 | 1 CD8_lung |
| POMP                | 0.33387765 | 0.71923682 | 0.273 | 0.377 | 1 CD8_lung |
| ENSMMUG000000002324 | 0.33413726 | 0.42858276 | 0.514 | 0.695 | 1 CD8_lung |
| ETFB                | 0.33493213 | 0.78932038 | 0.339 | 0.426 | 1 CD8_lung |
| EIF2S2              | 0.33899703 | 0.45357028 | 0.385 | 0.539 | 1 CD8_lung |
| FNTB                | 0.3594773  | 0.58427336 | 0.359 | 0.515 | 1 CD8_lung |
| ENSMMUG000000007536 | 0.37144739 | 0.6485085  | 0.425 | 0.577 | 1 CD8_lung |
| KIFBP               | 0.37164871 | 0.47764184 | 0.494 | 0.664 | 1 CD8_lung |
| COPE                | 0.37613232 | 0.91621576 | 0.292 | 0.36  | 1 CD8_lung |
| EIF4A1              | 0.38298824 | 0.56412987 | 0.323 | 0.443 | 1 CD8_lung |
| DDT                 | 0.3830277  | 0.57404683 | 0.312 | 0.431 | 1 CD8_lung |
| DNAJC19             | 0.38659947 | 0.89196827 | 0.216 | 0.282 | 1 CD8_lung |
| CAPZB               | 0.39558667 | 0.33567466 | 0.444 | 0.636 | 1 CD8_lung |

|                    |            |            |       |       |            |
|--------------------|------------|------------|-------|-------|------------|
| NDUFV2             | 0.39669619 | 0.82059324 | 0.328 | 0.417 | 1 CD8_lung |
| DAZAP1             | 0.39821692 | 0.40469938 | 0.533 | 0.749 | 1 CD8_lung |
| VDAC2              | 0.41107312 | 0.52926292 | 0.36  | 0.513 | 1 CD8_lung |
| PSMB7              | 0.41262932 | 0.2832952  | 0.469 | 0.679 | 1 CD8_lung |
| TOMM22             | 0.42857691 | 0.68269272 | 0.261 | 0.349 | 1 CD8_lung |
| PRDX5              | 0.44159851 | 0.72540321 | 0.255 | 0.341 | 1 CD8_lung |
| ICOS               | 0.45590384 | 0.31122012 | 0.443 | 0.525 | 1 CD8_lung |
| ADSL               | 0.45684245 | 0.79229432 | 0.207 | 0.265 | 1 CD8_lung |
| CYB5A              | 0.46617864 | 0.80152159 | 0.283 | 0.384 | 1 CD8_lung |
| ND3                | 0.47272957 | 0.37943737 | 0.557 | 0.737 | 1 CD8_lung |
| REXO2              | 0.47724979 | 0.79422897 | 0.331 | 0.42  | 1 CD8_lung |
| ENSMMUG00000030465 | 0.48749848 | 0.30416253 | 0.484 | 0.68  | 1 CD8_lung |
| MRPS12             | 0.50073727 | 0.8939696  | 0.219 | 0.281 | 1 CD8_lung |
| RAC2               | 0.50253693 | 0.75684268 | 0.357 | 0.468 | 1 CD8_lung |
| RTRAF              | 0.50437941 | 0.42758431 | 0.436 | 0.631 | 1 CD8_lung |
| CAPG               | 0.50938101 | 0.61263387 | 0.325 | 0.443 | 1 CD8_lung |
| CD3E               | 0.51093093 | 0.43107416 | 0.433 | 0.626 | 1 CD8_lung |
| SYTL3              | 0.52704681 | 0.4807046  | 0.38  | 0.495 | 1 CD8_lung |
| PSME2              | 0.55268262 | 0.83498526 | 0.238 | 0.308 | 1 CD8_lung |
| PHB                | 0.57966141 | 0.87968693 | 0.207 | 0.262 | 1 CD8_lung |
| SELL               | 0.59271855 | 0.33979748 | 0.505 | 0.704 | 1 CD8_lung |
| DYNLL1             | 0.59591196 | 0.81283562 | 0.266 | 0.314 | 1 CD8_lung |
| HSPE1              | 0.60484893 | 0.40378931 | 0.498 | 0.703 | 1 CD8_lung |
| ANXA1              | 0.64290397 | 0.72374438 | 0.346 | 0.42  | 1 CD8_lung |
| CLEC2B             | 0.65016973 | 0.89142847 | 0.245 | 0.315 | 1 CD8_lung |
| SF3B6              | 0.65628293 | 0.58283373 | 0.405 | 0.551 | 1 CD8_lung |
| ENSMMUG00000050829 | 0.66139673 | 0.49736574 | 0.438 | 0.621 | 1 CD8_lung |
| TXN                | 0.66446826 | 0.59631583 | 0.396 | 0.524 | 1 CD8_lung |
| ENSMMUG00000053392 | 0.66679381 | 0.64497385 | 0.334 | 0.455 | 1 CD8_lung |
| ENSMMUG00000012525 | 0.66685438 | 0.34566431 | 0.474 | 0.64  | 1 CD8_lung |
| ENSMMUG00000058325 | 0.67746115 | 0.15235849 | 0.821 | 0.94  | 1 CD8_lung |
| DBI                | 0.69989053 | 0.75077878 | 0.298 | 0.398 | 1 CD8_lung |
| TINF2              | 0.72051603 | 0.45025798 | 0.419 | 0.572 | 1 CD8_lung |

|                    |            |            |       |       |           |           |
|--------------------|------------|------------|-------|-------|-----------|-----------|
| NDUFA12            | 0.72653354 | 0.83152412 | 0.25  | 0.305 | 1         | CD8_lung  |
| ATP5F1C            | 0.74274677 | 0.61095863 | 0.387 | 0.525 | 1         | CD8_lung  |
| PDCD5              | 0.74984715 | 0.73655258 | 0.272 | 0.357 | 1         | CD8_lung  |
| ENSMMUG00000043332 | 0.75741649 | 0.74464505 | 0.276 | 0.363 | 1         | CD8_lung  |
| CARHSP1            | 0.77547936 | 0.75419344 | 0.272 | 0.353 | 1         | CD8_lung  |
| CEMIP2             | 0.78281614 | 1.02974578 | 0.208 | 0.254 | 1         | CD8_lung  |
| TMEM59             | 0.7862658  | 0.5706144  | 0.359 | 0.499 | 1         | CD8_lung  |
| ARHGDI A           | 0.8166211  | 0.91876999 | 0.225 | 0.284 | 1         | CD8_lung  |
| AIP                | 0.82812937 | 0.76189535 | 0.301 | 0.389 | 1         | CD8_lung  |
| MAGOH              | 0.84776402 | 0.73491508 | 0.317 | 0.416 | 1         | CD8_lung  |
| MRPL57             | 0.89520266 | 0.96548917 | 0.225 | 0.273 | 1         | CD8_lung  |
| RPS27L             | 0.92553997 | 0.60736545 | 0.362 | 0.496 | 1         | CD8_lung  |
| C11H12orf57        | 0.93067254 | 0.46383563 | 0.438 | 0.602 | 1         | CD8_lung  |
| UCP2               | 0.9382785  | 0.66531139 | 0.362 | 0.484 | 1         | CD8_lung  |
| PSMC5              | 0.97121539 | 0.81893261 | 0.27  | 0.346 | 1         | CD8_lung  |
| SNRPB              | 0.97235492 | 0.61405234 | 0.351 | 0.474 | 1         | CD8_lung  |
| ST13               | 0.98351828 | 0.46908811 | 0.39  | 0.529 | 1         | CD8_lung  |
| HBE1               | 0          | 1.70744379 | 0.649 | 0.141 | 0         | CD8_UCBMC |
| HBA                | 1.20E-307  | 2.01758887 | 0.625 | 0.129 | 4.24E-303 | CD8_UCBMC |
| COX3               | 3.17E-303  | 0.94957497 | 0.991 | 0.88  | 1.12E-298 | CD8_UCBMC |
| OSBPL9             | 4.97E-211  | 1.33291787 | 0.826 | 0.528 | 1.76E-206 | CD8_UCBMC |
| ENSMMUG00000056654 | 5.58E-211  | 1.05060309 | 0.918 | 0.745 | 1.98E-206 | CD8_UCBMC |
| PNISR              | 5.28E-176  | 0.91778713 | 0.905 | 0.677 | 1.87E-171 | CD8_UCBMC |
| EPB41              | 8.72E-167  | 1.02227479 | 0.848 | 0.57  | 3.09E-162 | CD8_UCBMC |
| ENSMMUG00000047632 | 6.29E-166  | 1.46012908 | 0.655 | 0.306 | 2.23E-161 | CD8_UCBMC |
| EPC1               | 3.18E-162  | 0.95318248 | 0.861 | 0.608 | 1.13E-157 | CD8_UCBMC |
| HIVEP1             | 1.04E-161  | 1.41439089 | 0.678 | 0.352 | 3.69E-157 | CD8_UCBMC |
| ENSMMUG00000049151 | 6.97E-157  | 0.72586166 | 0.972 | 0.901 | 2.47E-152 | CD8_UCBMC |
| ARID4B             | 5.93E-153  | 0.98995741 | 0.851 | 0.6   | 2.10E-148 | CD8_UCBMC |
| MBTD1              | 9.73E-151  | 1.43697086 | 0.648 | 0.339 | 3.45E-146 | CD8_UCBMC |
| NCOA3              | 6.17E-150  | 0.86372615 | 0.903 | 0.689 | 2.19E-145 | CD8_UCBMC |
| EIF2AK3            | 4.35E-144  | 1.50812208 | 0.606 | 0.289 | 1.54E-139 | CD8_UCBMC |
| CREBRF             | 3.09E-134  | 1.15395078 | 0.697 | 0.394 | 1.09E-129 | CD8_UCBMC |

|                    |           |            |       |       |           |           |
|--------------------|-----------|------------|-------|-------|-----------|-----------|
| GOLGA4             | 3.31E-128 | 1.09023116 | 0.716 | 0.447 | 1.17E-123 | CD8_UCBMC |
| SPPL3              | 4.49E-127 | 1.20540634 | 0.68  | 0.408 | 1.59E-122 | CD8_UCBMC |
| FAM117B            | 2.69E-124 | 1.2321994  | 0.666 | 0.383 | 9.53E-120 | CD8_UCBMC |
| USP3               | 1.08E-123 | 1.04252673 | 0.74  | 0.494 | 3.84E-119 | CD8_UCBMC |
| CAMK4              | 1.98E-121 | 0.71429784 | 0.936 | 0.782 | 7.01E-117 | CD8_UCBMC |
| FBXO33             | 6.27E-121 | 1.2406629  | 0.626 | 0.337 | 2.22E-116 | CD8_UCBMC |
| CPEB1              | 1.04E-120 | 0.40645785 | 0.995 | 0.967 | 3.69E-116 | CD8_UCBMC |
| RPS14              | 1.38E-120 | 0.32813086 | 0.997 | 0.996 | 4.88E-116 | CD8_UCBMC |
| ATP6               | 1.53E-120 | 0.61473102 | 0.967 | 0.798 | 5.43E-116 | CD8_UCBMC |
| TM9SF3             | 6.14E-119 | 1.09497213 | 0.722 | 0.477 | 2.18E-114 | CD8_UCBMC |
| RPL13A             | 7.38E-119 | 0.36635275 | 0.998 | 0.99  | 2.62E-114 | CD8_UCBMC |
| STAG1              | 4.29E-115 | 0.81332287 | 0.846 | 0.639 | 1.52E-110 | CD8_UCBMC |
| RICTOR             | 1.46E-106 | 0.9666238  | 0.713 | 0.471 | 5.16E-102 | CD8_UCBMC |
| JAK1               | 9.54E-106 | 0.78375927 | 0.861 | 0.673 | 3.38E-101 | CD8_UCBMC |
| PDGFRA             | 3.89E-103 | 0.54496583 | 0.908 | 0.778 | 1.38E-98  | CD8_UCBMC |
| KMT2E              | 7.82E-103 | 0.91224018 | 0.724 | 0.478 | 2.77E-98  | CD8_UCBMC |
| CUL3               | 9.39E-103 | 1.03710151 | 0.682 | 0.434 | 3.33E-98  | CD8_UCBMC |
| CASP3              | 2.80E-102 | 1.17050817 | 0.593 | 0.325 | 9.91E-98  | CD8_UCBMC |
| ATF2               | 1.31E-101 | 1.18514015 | 0.58  | 0.321 | 4.65E-97  | CD8_UCBMC |
| SIK3               | 1.43E-101 | 0.7357759  | 0.823 | 0.593 | 5.08E-97  | CD8_UCBMC |
| ENSMMUG00000030448 | 8.09E-100 | 1.04037273 | 0.659 | 0.424 | 2.87E-95  | CD8_UCBMC |
| UBE2E1             | 1.99E-99  | 1.55575365 | 0.456 | 0.193 | 7.04E-95  | CD8_UCBMC |
| UTRN               | 7.12E-99  | 0.67121987 | 0.901 | 0.711 | 2.52E-94  | CD8_UCBMC |
| USP15              | 1.86E-98  | 0.70339871 | 0.871 | 0.678 | 6.58E-94  | CD8_UCBMC |
| TFDP2              | 4.40E-98  | 1.07619887 | 0.632 | 0.377 | 1.56E-93  | CD8_UCBMC |
| CDC42SE2           | 2.61E-97  | 0.62436678 | 0.926 | 0.801 | 9.24E-93  | CD8_UCBMC |
| RANBP9             | 2.55E-96  | 1.04268409 | 0.635 | 0.392 | 9.03E-92  | CD8_UCBMC |
| SLC35A3            | 9.65E-96  | 1.10120703 | 0.607 | 0.355 | 3.42E-91  | CD8_UCBMC |
| ESYT2              | 2.09E-94  | 0.85153177 | 0.751 | 0.523 | 7.42E-90  | CD8_UCBMC |
| MPP7               | 5.87E-94  | 0.86353032 | 0.756 | 0.537 | 2.08E-89  | CD8_UCBMC |
| LMBRD1             | 7.48E-94  | 1.21410703 | 0.558 | 0.306 | 2.65E-89  | CD8_UCBMC |
| SENP5              | 8.86E-94  | 1.32709977 | 0.519 | 0.272 | 3.14E-89  | CD8_UCBMC |
| ATP8A1             | 1.49E-92  | 0.72082493 | 0.775 | 0.544 | 5.29E-88  | CD8_UCBMC |

|                     |          |            |       |       |          |           |
|---------------------|----------|------------|-------|-------|----------|-----------|
| CTDSPL2             | 1.33E-91 | 1.14401784 | 0.541 | 0.283 | 4.72E-87 | CD8_UCBMC |
| RPL23A              | 7.18E-91 | 0.3249546  | 0.998 | 0.992 | 2.54E-86 | CD8_UCBMC |
| NKIRAS1             | 1.20E-90 | 1.5037796  | 0.422 | 0.173 | 4.23E-86 | CD8_UCBMC |
| BRAF                | 1.87E-90 | 0.93930686 | 0.71  | 0.482 | 6.61E-86 | CD8_UCBMC |
| YIPF5               | 3.69E-90 | 1.5915846  | 0.433 | 0.19  | 1.31E-85 | CD8_UCBMC |
| RSRP1               | 3.99E-90 | 0.64589402 | 0.877 | 0.661 | 1.41E-85 | CD8_UCBMC |
| ZNF292              | 7.55E-90 | 0.88797509 | 0.717 | 0.493 | 2.67E-85 | CD8_UCBMC |
| CD247               | 9.58E-90 | 0.80658348 | 0.758 | 0.534 | 3.39E-85 | CD8_UCBMC |
| ENSMMUG000000065175 | 1.80E-89 | 1.01121911 | 0.633 | 0.407 | 6.39E-85 | CD8_UCBMC |
| PTBP2               | 2.28E-89 | 1.00608193 | 0.637 | 0.395 | 8.07E-85 | CD8_UCBMC |
| ENSMMUG000000006165 | 7.52E-89 | 0.65946615 | 0.871 | 0.692 | 2.66E-84 | CD8_UCBMC |
| ATG13               | 2.42E-88 | 1.32644209 | 0.498 | 0.261 | 8.56E-84 | CD8_UCBMC |
| DCP1A               | 2.76E-88 | 1.28078615 | 0.521 | 0.277 | 9.77E-84 | CD8_UCBMC |
| ATG5                | 3.34E-88 | 1.12875231 | 0.555 | 0.309 | 1.18E-83 | CD8_UCBMC |
| PIK3CA              | 2.77E-86 | 1.32887927 | 0.487 | 0.245 | 9.83E-82 | CD8_UCBMC |
| KLF12               | 3.87E-86 | 0.69006426 | 0.858 | 0.664 | 1.37E-81 | CD8_UCBMC |
| PUM1                | 8.65E-86 | 0.72731899 | 0.792 | 0.579 | 3.06E-81 | CD8_UCBMC |
| RCC1                | 3.31E-85 | 1.12373105 | 0.536 | 0.295 | 1.17E-80 | CD8_UCBMC |
| COG5                | 5.42E-85 | 0.80543552 | 0.728 | 0.5   | 1.92E-80 | CD8_UCBMC |
| ENSMMUG000000011580 | 6.58E-85 | 0.79590346 | 0.742 | 0.533 | 2.33E-80 | CD8_UCBMC |
| RAB2A               | 2.78E-84 | 0.8978693  | 0.687 | 0.482 | 9.84E-80 | CD8_UCBMC |
| G3BP2               | 4.60E-83 | 0.76824096 | 0.821 | 0.658 | 1.63E-78 | CD8_UCBMC |
| BIN3                | 7.26E-83 | 1.113131   | 0.552 | 0.326 | 2.57E-78 | CD8_UCBMC |
| AGO3                | 8.50E-83 | 0.92747622 | 0.634 | 0.408 | 3.01E-78 | CD8_UCBMC |
| MARCHF6             | 3.06E-82 | 0.91973979 | 0.633 | 0.403 | 1.08E-77 | CD8_UCBMC |
| RBM39               | 1.72E-81 | 0.57869605 | 0.915 | 0.741 | 6.10E-77 | CD8_UCBMC |
| BSDC1               | 3.01E-81 | 1.62162462 | 0.393 | 0.168 | 1.07E-76 | CD8_UCBMC |
| SETD2               | 5.65E-81 | 0.85045593 | 0.709 | 0.504 | 2.00E-76 | CD8_UCBMC |
| RFX3                | 1.72E-80 | 0.82822593 | 0.685 | 0.455 | 6.11E-76 | CD8_UCBMC |
| QKI                 | 3.93E-80 | 1.05937556 | 0.567 | 0.335 | 1.39E-75 | CD8_UCBMC |
| ENSMMUG000000006778 | 8.61E-80 | 0.82424018 | 0.633 | 0.392 | 3.05E-75 | CD8_UCBMC |
| MTMR14              | 2.36E-79 | 1.58831025 | 0.364 | 0.142 | 8.37E-75 | CD8_UCBMC |
| CERT1               | 5.47E-79 | 1.0013969  | 0.591 | 0.365 | 1.94E-74 | CD8_UCBMC |

|                    |          |            |       |       |          |           |
|--------------------|----------|------------|-------|-------|----------|-----------|
| CELF1              | 8.59E-79 | 0.85731287 | 0.678 | 0.465 | 3.04E-74 | CD8_UCBMC |
| MXI1               | 1.04E-78 | 1.38402305 | 0.412 | 0.185 | 3.69E-74 | CD8_UCBMC |
| HERC1              | 1.62E-78 | 0.95530019 | 0.602 | 0.372 | 5.73E-74 | CD8_UCBMC |
| ENSMMUG00000059742 | 1.66E-78 | 0.96823852 | 0.567 | 0.344 | 5.87E-74 | CD8_UCBMC |
| EIF2AK2            | 4.49E-78 | 1.45730197 | 0.394 | 0.169 | 1.59E-73 | CD8_UCBMC |
| MARCHF3            | 7.92E-78 | 0.82792238 | 0.696 | 0.484 | 2.80E-73 | CD8_UCBMC |
| RPL7               | 1.08E-77 | 0.35559307 | 0.988 | 0.953 | 3.84E-73 | CD8_UCBMC |
| EPC2               | 2.49E-77 | 1.02720752 | 0.587 | 0.37  | 8.83E-73 | CD8_UCBMC |
| ABLIM1             | 7.50E-77 | 0.66129917 | 0.844 | 0.667 | 2.66E-72 | CD8_UCBMC |
| SRSF11             | 7.55E-77 | 0.55523962 | 0.899 | 0.74  | 2.68E-72 | CD8_UCBMC |
| LUC7L3             | 2.61E-76 | 0.74235763 | 0.729 | 0.522 | 9.23E-72 | CD8_UCBMC |
| MYLIP              | 3.15E-76 | 1.02302722 | 0.534 | 0.304 | 1.12E-71 | CD8_UCBMC |
| DDX6               | 5.73E-76 | 0.73758764 | 0.738 | 0.531 | 2.03E-71 | CD8_UCBMC |
| PIAS1              | 2.10E-75 | 0.78507074 | 0.713 | 0.506 | 7.43E-71 | CD8_UCBMC |
| NRIP1              | 2.67E-75 | 0.68965811 | 0.702 | 0.483 | 9.44E-71 | CD8_UCBMC |
| TPT1               | 4.97E-75 | 0.2507102  | 0.999 | 0.997 | 1.76E-70 | CD8_UCBMC |
| ZFC3H1             | 5.76E-75 | 0.96559313 | 0.568 | 0.344 | 2.04E-70 | CD8_UCBMC |
| ATG14              | 5.84E-75 | 1.5724758  | 0.364 | 0.148 | 2.07E-70 | CD8_UCBMC |
| SCAPER             | 3.33E-74 | 0.82380157 | 0.675 | 0.462 | 1.18E-69 | CD8_UCBMC |
| ENSMMUG00000014862 | 5.44E-74 | 0.67500766 | 0.769 | 0.593 | 1.93E-69 | CD8_UCBMC |
| RB1CC1             | 7.52E-73 | 1.28052524 | 0.443 | 0.223 | 2.66E-68 | CD8_UCBMC |
| FOXP1              | 1.29E-72 | 0.65673929 | 0.797 | 0.592 | 4.58E-68 | CD8_UCBMC |
| ZEB1               | 2.48E-72 | 0.71471592 | 0.772 | 0.595 | 8.77E-68 | CD8_UCBMC |
| MAPK8              | 3.84E-72 | 1.16347388 | 0.478 | 0.255 | 1.36E-67 | CD8_UCBMC |
| KDM6A              | 9.75E-72 | 0.75607288 | 0.74  | 0.537 | 3.45E-67 | CD8_UCBMC |
| CTNNB1             | 2.54E-71 | 0.78778906 | 0.67  | 0.46  | 9.01E-67 | CD8_UCBMC |
| TLE4               | 4.40E-71 | 1.14483493 | 0.479 | 0.256 | 1.56E-66 | CD8_UCBMC |
| WRN                | 1.14E-70 | 0.75618261 | 0.685 | 0.479 | 4.02E-66 | CD8_UCBMC |
| EDRF1              | 2.32E-69 | 1.63360771 | 0.346 | 0.146 | 8.23E-65 | CD8_UCBMC |
| MARCHF7            | 2.75E-69 | 0.85723438 | 0.626 | 0.429 | 9.75E-65 | CD8_UCBMC |
| PPP1R12A           | 4.26E-69 | 0.75970861 | 0.704 | 0.506 | 1.51E-64 | CD8_UCBMC |
| YEATS2             | 2.25E-68 | 0.71652094 | 0.683 | 0.469 | 7.96E-64 | CD8_UCBMC |
| NR3C1              | 4.49E-68 | 0.8041496  | 0.691 | 0.504 | 1.59E-63 | CD8_UCBMC |

|                     |          |            |       |       |          |           |
|---------------------|----------|------------|-------|-------|----------|-----------|
| ENSMMUG00000003412  | 1.05E-67 | 0.26261403 | 0.998 | 0.992 | 3.70E-63 | CD8_UCBMC |
| GIT2                | 1.11E-67 | 1.00991477 | 0.525 | 0.316 | 3.94E-63 | CD8_UCBMC |
| TAX1BP1             | 9.64E-67 | 0.74568843 | 0.68  | 0.473 | 3.42E-62 | CD8_UCBMC |
| RAB5A               | 2.07E-66 | 0.93620785 | 0.534 | 0.32  | 7.33E-62 | CD8_UCBMC |
| NUP54               | 3.43E-66 | 1.26969583 | 0.405 | 0.197 | 1.21E-61 | CD8_UCBMC |
| ENSMMUG000000055457 | 5.60E-66 | 0.77465735 | 0.627 | 0.43  | 1.98E-61 | CD8_UCBMC |
| INO80D              | 6.19E-66 | 1.12544673 | 0.466 | 0.256 | 2.19E-61 | CD8_UCBMC |
| SCFD1               | 6.41E-66 | 0.95552301 | 0.539 | 0.33  | 2.27E-61 | CD8_UCBMC |
| RPS3                | 6.44E-66 | 0.27881682 | 0.995 | 0.984 | 2.28E-61 | CD8_UCBMC |
| ENSMMUG000000031367 | 9.39E-66 | 1.01147178 | 0.502 | 0.295 | 3.33E-61 | CD8_UCBMC |
| KLF7                | 1.16E-65 | 1.2687661  | 0.411 | 0.206 | 4.13E-61 | CD8_UCBMC |
| RASA2               | 1.42E-65 | 0.58888178 | 0.837 | 0.654 | 5.04E-61 | CD8_UCBMC |
| CCSER2              | 1.93E-65 | 1.09089087 | 0.492 | 0.285 | 6.84E-61 | CD8_UCBMC |
| PLCL1               | 7.40E-65 | 1.05610067 | 0.466 | 0.255 | 2.62E-60 | CD8_UCBMC |
| RAB1A               | 8.00E-65 | 0.80192354 | 0.616 | 0.404 | 2.84E-60 | CD8_UCBMC |
| SLC12A6             | 1.61E-64 | 0.76483252 | 0.661 | 0.459 | 5.71E-60 | CD8_UCBMC |
| SECISBP2L           | 2.73E-64 | 1.44648549 | 0.352 | 0.155 | 9.66E-60 | CD8_UCBMC |
| CERS6               | 3.60E-64 | 0.62481704 | 0.777 | 0.573 | 1.27E-59 | CD8_UCBMC |
| TGFB1               | 5.67E-64 | 1.0524207  | 0.484 | 0.279 | 2.01E-59 | CD8_UCBMC |
| BTBD11              | 6.35E-64 | 0.70559821 | 0.645 | 0.438 | 2.25E-59 | CD8_UCBMC |
| CDC14A              | 9.37E-64 | 0.59725005 | 0.761 | 0.571 | 3.32E-59 | CD8_UCBMC |
| TSN                 | 1.08E-63 | 1.2866832  | 0.382 | 0.182 | 3.82E-59 | CD8_UCBMC |
| TRPM7               | 3.57E-63 | 0.70287079 | 0.7   | 0.501 | 1.26E-58 | CD8_UCBMC |
| TNRC6A              | 1.26E-62 | 0.88444023 | 0.593 | 0.403 | 4.45E-58 | CD8_UCBMC |
| BBX                 | 1.72E-62 | 0.86121492 | 0.565 | 0.361 | 6.09E-58 | CD8_UCBMC |
| EMP3                | 1.75E-62 | 0.95803353 | 0.383 | 0.165 | 6.19E-58 | CD8_UCBMC |
| TIMM23              | 2.53E-62 | 1.11422761 | 0.459 | 0.26  | 8.97E-58 | CD8_UCBMC |
| PTPN1               | 3.76E-62 | 0.95619184 | 0.54  | 0.345 | 1.33E-57 | CD8_UCBMC |
| DENND5A             | 3.81E-62 | 1.18301233 | 0.412 | 0.209 | 1.35E-57 | CD8_UCBMC |
| FBXL20              | 3.93E-62 | 0.84118167 | 0.596 | 0.393 | 1.39E-57 | CD8_UCBMC |
| UHRF1BP1L           | 4.06E-62 | 1.06930708 | 0.453 | 0.249 | 1.44E-57 | CD8_UCBMC |
| PIK3R5              | 4.74E-62 | 1.09234009 | 0.471 | 0.268 | 1.68E-57 | CD8_UCBMC |
| RFC1                | 7.24E-62 | 0.92146667 | 0.53  | 0.324 | 2.57E-57 | CD8_UCBMC |

|                    |          |            |       |       |          |           |
|--------------------|----------|------------|-------|-------|----------|-----------|
| ECD                | 1.18E-61 | 1.16382541 | 0.42  | 0.215 | 4.17E-57 | CD8_UCBMC |
| RBM5               | 2.72E-61 | 0.74031349 | 0.608 | 0.405 | 9.64E-57 | CD8_UCBMC |
| CSNK1A1            | 2.72E-61 | 0.69921509 | 0.705 | 0.522 | 9.64E-57 | CD8_UCBMC |
| N4BP1              | 3.97E-61 | 1.29241582 | 0.381 | 0.185 | 1.41E-56 | CD8_UCBMC |
| RAB7A              | 7.76E-61 | 0.76135126 | 0.638 | 0.452 | 2.75E-56 | CD8_UCBMC |
| RAB8B              | 5.33E-60 | 0.6816922  | 0.725 | 0.543 | 1.89E-55 | CD8_UCBMC |
| BIRC6              | 1.25E-59 | 0.56687747 | 0.806 | 0.625 | 4.43E-55 | CD8_UCBMC |
| CNOT2              | 1.29E-59 | 0.6836747  | 0.678 | 0.486 | 4.56E-55 | CD8_UCBMC |
| AFF1               | 2.92E-59 | 0.76745387 | 0.594 | 0.392 | 1.04E-54 | CD8_UCBMC |
| PDZD8              | 5.03E-59 | 1.19928475 | 0.4   | 0.207 | 1.78E-54 | CD8_UCBMC |
| DIP2B              | 7.09E-59 | 0.66151715 | 0.705 | 0.516 | 2.51E-54 | CD8_UCBMC |
| ENSMMUG00000059977 | 7.27E-59 | 1.24716176 | 0.365 | 0.175 | 2.57E-54 | CD8_UCBMC |
| TMEM87A            | 1.61E-58 | 0.87435742 | 0.575 | 0.38  | 5.69E-54 | CD8_UCBMC |
| FAM241A            | 1.75E-58 | 1.4834267  | 0.332 | 0.147 | 6.19E-54 | CD8_UCBMC |
| TXNIP              | 2.04E-58 | 0.59125547 | 0.735 | 0.55  | 7.22E-54 | CD8_UCBMC |
| TUT4               | 2.62E-58 | 0.60348532 | 0.755 | 0.564 | 9.27E-54 | CD8_UCBMC |
| CNOT4              | 2.97E-58 | 0.81053842 | 0.594 | 0.406 | 1.05E-53 | CD8_UCBMC |
| RSF1               | 6.43E-58 | 0.68072858 | 0.668 | 0.479 | 2.28E-53 | CD8_UCBMC |
| CDK13              | 9.18E-58 | 0.7236947  | 0.641 | 0.447 | 3.25E-53 | CD8_UCBMC |
| WDR48              | 1.07E-57 | 1.22895819 | 0.374 | 0.185 | 3.81E-53 | CD8_UCBMC |
| RPL4               | 1.37E-57 | 0.31266664 | 0.978 | 0.946 | 4.85E-53 | CD8_UCBMC |
| RPS6KB1            | 2.07E-57 | 0.817136   | 0.567 | 0.374 | 7.32E-53 | CD8_UCBMC |
| KMT2C              | 3.72E-57 | 0.53338809 | 0.808 | 0.622 | 1.32E-52 | CD8_UCBMC |
| CAMTA1             | 4.11E-57 | 0.86938326 | 0.534 | 0.34  | 1.46E-52 | CD8_UCBMC |
| ARIH2              | 6.11E-57 | 0.93733205 | 0.478 | 0.285 | 2.16E-52 | CD8_UCBMC |
| IREB2              | 8.20E-57 | 1.04472769 | 0.451 | 0.257 | 2.91E-52 | CD8_UCBMC |
| VTA1               | 1.07E-56 | 1.13749286 | 0.423 | 0.231 | 3.78E-52 | CD8_UCBMC |
| UBE2G1             | 2.65E-56 | 0.87244431 | 0.537 | 0.346 | 9.39E-52 | CD8_UCBMC |
| VPS13B             | 3.02E-56 | 0.49906797 | 0.83  | 0.644 | 1.07E-51 | CD8_UCBMC |
| S1PR1              | 5.15E-56 | 1.03910088 | 0.394 | 0.199 | 1.82E-51 | CD8_UCBMC |
| PPP3CC             | 5.82E-56 | 0.78388944 | 0.6   | 0.411 | 2.06E-51 | CD8_UCBMC |
| VPS37B             | 1.86E-55 | 0.88529019 | 0.473 | 0.28  | 6.61E-51 | CD8_UCBMC |
| FOXJ3              | 2.91E-55 | 0.86361169 | 0.558 | 0.371 | 1.03E-50 | CD8_UCBMC |



|                    |          |            |       |       |          |           |
|--------------------|----------|------------|-------|-------|----------|-----------|
| UBXN7              | 6.80E-55 | 0.89562537 | 0.49  | 0.297 | 2.41E-50 | CD8_UCBMC |
| PDZRN3             | 9.32E-55 | 0.68451083 | 0.668 | 0.465 | 3.30E-50 | CD8_UCBMC |
| UTY                | 1.01E-54 | 0.83754356 | 0.506 | 0.3   | 3.59E-50 | CD8_UCBMC |
| POU2F1             | 1.19E-54 | 0.91801741 | 0.466 | 0.269 | 4.23E-50 | CD8_UCBMC |
| SMCHD1             | 5.05E-54 | 0.60613843 | 0.767 | 0.605 | 1.79E-49 | CD8_UCBMC |
| TNRC6B             | 5.33E-54 | 0.4437737  | 0.911 | 0.766 | 1.89E-49 | CD8_UCBMC |
| OSBPL8             | 7.52E-54 | 0.64828476 | 0.701 | 0.517 | 2.67E-49 | CD8_UCBMC |
| UBAP1              | 7.77E-54 | 0.94525874 | 0.485 | 0.296 | 2.75E-49 | CD8_UCBMC |
| LSM14A             | 1.02E-53 | 0.64095251 | 0.681 | 0.505 | 3.63E-49 | CD8_UCBMC |
| PPM1A              | 1.50E-53 | 1.11827973 | 0.396 | 0.212 | 5.32E-49 | CD8_UCBMC |
| TET2               | 4.94E-53 | 1.05762777 | 0.398 | 0.211 | 1.75E-48 | CD8_UCBMC |
| RLF                | 6.36E-53 | 0.77738795 | 0.551 | 0.364 | 2.25E-48 | CD8_UCBMC |
| CHD7               | 8.59E-53 | 0.8604536  | 0.535 | 0.356 | 3.04E-48 | CD8_UCBMC |
| JMY                | 1.22E-52 | 0.60547497 | 0.642 | 0.436 | 4.33E-48 | CD8_UCBMC |
| WASHC5             | 1.70E-52 | 1.47734311 | 0.301 | 0.133 | 6.03E-48 | CD8_UCBMC |
| RPS20              | 1.81E-52 | 0.33639731 | 0.997 | 0.921 | 6.41E-48 | CD8_UCBMC |
| ZFAND6             | 2.57E-52 | 0.58839413 | 0.725 | 0.557 | 9.11E-48 | CD8_UCBMC |
| TXNDC11            | 5.04E-52 | 1.13936634 | 0.345 | 0.166 | 1.79E-47 | CD8_UCBMC |
| RAB18              | 6.88E-52 | 1.00226144 | 0.396 | 0.211 | 2.44E-47 | CD8_UCBMC |
| ZNF644             | 8.38E-52 | 0.70476582 | 0.664 | 0.487 | 2.97E-47 | CD8_UCBMC |
| CSDE1              | 1.08E-51 | 0.6467037  | 0.679 | 0.509 | 3.81E-47 | CD8_UCBMC |
| ENSMUG00000008346  | 5.13E-51 | 0.79962228 | 0.541 | 0.355 | 1.82E-46 | CD8_UCBMC |
| MTMR10             | 5.17E-51 | 1.26967159 | 0.319 | 0.149 | 1.83E-46 | CD8_UCBMC |
| LANCL2             | 5.27E-51 | 1.34619386 | 0.324 | 0.155 | 1.87E-46 | CD8_UCBMC |
| RAB3GAP1           | 6.88E-51 | 0.96973979 | 0.438 | 0.255 | 2.44E-46 | CD8_UCBMC |
| TRA2A              | 1.74E-50 | 0.46975022 | 0.853 | 0.683 | 6.18E-46 | CD8_UCBMC |
| GOLGA1             | 2.46E-50 | 0.47322253 | 0.869 | 0.731 | 8.71E-46 | CD8_UCBMC |
| WAC                | 2.58E-50 | 0.63867212 | 0.657 | 0.475 | 9.14E-46 | CD8_UCBMC |
| ENSMUG000000063979 | 4.37E-50 | 0.88167424 | 0.473 | 0.291 | 1.55E-45 | CD8_UCBMC |
| HELZ               | 5.64E-50 | 0.67643045 | 0.613 | 0.426 | 2.00E-45 | CD8_UCBMC |
| CCM2               | 6.30E-50 | 0.73040179 | 0.59  | 0.413 | 2.23E-45 | CD8_UCBMC |
| BTAF1              | 1.27E-49 | 0.80886092 | 0.548 | 0.369 | 4.51E-45 | CD8_UCBMC |
| ARIH1              | 1.62E-49 | 0.58556891 | 0.719 | 0.545 | 5.76E-45 | CD8_UCBMC |

|         |          |            |       |       |          |           |
|---------|----------|------------|-------|-------|----------|-----------|
| SSH2    | 2.66E-49 | 0.41546565 | 0.867 | 0.717 | 9.44E-45 | CD8_UCBMC |
| ARMC8   | 2.97E-49 | 0.81157055 | 0.51  | 0.33  | 1.05E-44 | CD8_UCBMC |
| CDKAL1  | 1.15E-48 | 0.60441434 | 0.7   | 0.525 | 4.09E-44 | CD8_UCBMC |
| CBLB    | 1.24E-48 | 0.43863512 | 0.832 | 0.654 | 4.40E-44 | CD8_UCBMC |
| SUCLG2  | 1.86E-48 | 0.62420344 | 0.685 | 0.52  | 6.58E-44 | CD8_UCBMC |
| UXS1    | 2.45E-48 | 0.73406092 | 0.597 | 0.422 | 8.68E-44 | CD8_UCBMC |
| MAN2A1  | 2.68E-48 | 0.58569596 | 0.726 | 0.542 | 9.51E-44 | CD8_UCBMC |
| RHOH    | 6.29E-48 | 0.53224986 | 0.784 | 0.618 | 2.23E-43 | CD8_UCBMC |
| ELMO1   | 8.20E-48 | 0.48960294 | 0.772 | 0.596 | 2.91E-43 | CD8_UCBMC |
| UBE2H   | 1.68E-47 | 0.62691524 | 0.685 | 0.508 | 5.94E-43 | CD8_UCBMC |
| GPR107  | 1.80E-47 | 0.98465036 | 0.42  | 0.244 | 6.38E-43 | CD8_UCBMC |
| MTREX   | 1.99E-47 | 0.51457214 | 0.744 | 0.578 | 7.05E-43 | CD8_UCBMC |
| LMBR1   | 2.24E-47 | 0.8988229  | 0.44  | 0.263 | 7.94E-43 | CD8_UCBMC |
| SAP30BP | 2.26E-47 | 1.00126774 | 0.393 | 0.221 | 8.01E-43 | CD8_UCBMC |
| RPL27A  | 2.47E-47 | 0.28514926 | 0.998 | 0.961 | 8.76E-43 | CD8_UCBMC |
| SLMAP   | 2.61E-47 | 0.72722148 | 0.597 | 0.431 | 9.24E-43 | CD8_UCBMC |
| KPNA3   | 2.64E-47 | 0.882042   | 0.464 | 0.287 | 9.36E-43 | CD8_UCBMC |
| ITCH    | 3.16E-47 | 0.60446347 | 0.693 | 0.524 | 1.12E-42 | CD8_UCBMC |
| CNOT1   | 3.56E-47 | 0.73249508 | 0.556 | 0.384 | 1.26E-42 | CD8_UCBMC |
| SCAF8   | 5.22E-47 | 0.65173407 | 0.607 | 0.438 | 1.85E-42 | CD8_UCBMC |
| MINDY3  | 6.50E-47 | 0.9438934  | 0.417 | 0.244 | 2.30E-42 | CD8_UCBMC |
| YME1L1  | 7.15E-47 | 0.75536123 | 0.526 | 0.349 | 2.53E-42 | CD8_UCBMC |
| ATP11B  | 1.54E-46 | 0.80386693 | 0.502 | 0.333 | 5.44E-42 | CD8_UCBMC |
| PI4K2B  | 1.73E-46 | 0.48902738 | 0.747 | 0.6   | 6.12E-42 | CD8_UCBMC |
| MBNL2   | 2.33E-46 | 0.78805549 | 0.518 | 0.34  | 8.27E-42 | CD8_UCBMC |
| EZH2    | 2.40E-46 | 0.89809662 | 0.471 | 0.296 | 8.51E-42 | CD8_UCBMC |
| MAX     | 3.47E-46 | 0.69491903 | 0.558 | 0.381 | 1.23E-41 | CD8_UCBMC |
| SENP2   | 6.53E-46 | 0.96355762 | 0.416 | 0.244 | 2.31E-41 | CD8_UCBMC |
| APBB1IP | 8.81E-46 | 0.38728336 | 0.911 | 0.784 | 3.12E-41 | CD8_UCBMC |
| TLK1    | 9.10E-46 | 0.51749037 | 0.72  | 0.556 | 3.22E-41 | CD8_UCBMC |
| VPS39   | 9.18E-46 | 1.0016101  | 0.364 | 0.195 | 3.25E-41 | CD8_UCBMC |
| BTBD10  | 9.55E-46 | 1.09530028 | 0.343 | 0.178 | 3.38E-41 | CD8_UCBMC |
| TMEM131 | 9.84E-46 | 0.75107353 | 0.525 | 0.35  | 3.49E-41 | CD8_UCBMC |

|                    |          |            |       |       |          |           |
|--------------------|----------|------------|-------|-------|----------|-----------|
| CREBBP             | 1.30E-45 | 0.6652994  | 0.615 | 0.448 | 4.59E-41 | CD8_UCBMC |
| LEMD3              | 1.52E-45 | 0.84719384 | 0.457 | 0.287 | 5.40E-41 | CD8_UCBMC |
| RNF13              | 1.55E-45 | 0.78782393 | 0.531 | 0.359 | 5.51E-41 | CD8_UCBMC |
| NIPSNAP2           | 1.74E-45 | 1.02897036 | 0.386 | 0.218 | 6.16E-41 | CD8_UCBMC |
| PTPRA              | 2.09E-45 | 0.71668421 | 0.58  | 0.408 | 7.39E-41 | CD8_UCBMC |
| ENSMMUG00000065373 | 2.17E-45 | 0.19898226 | 0.988 | 0.905 | 7.70E-41 | CD8_UCBMC |
| STK38L             | 3.14E-45 | 1.23018083 | 0.276 | 0.119 | 1.11E-40 | CD8_UCBMC |
| DNAJC2             | 3.78E-45 | 0.69821064 | 0.573 | 0.394 | 1.34E-40 | CD8_UCBMC |
| VEZT               | 4.30E-45 | 1.04402297 | 0.353 | 0.188 | 1.52E-40 | CD8_UCBMC |
| RBM33              | 4.48E-45 | 0.7210347  | 0.582 | 0.422 | 1.59E-40 | CD8_UCBMC |
| CENPC              | 4.92E-45 | 0.88498193 | 0.432 | 0.261 | 1.74E-40 | CD8_UCBMC |
| METTL16            | 5.20E-45 | 1.13400605 | 0.349 | 0.185 | 1.84E-40 | CD8_UCBMC |
| XPO4               | 5.34E-45 | 1.1164224  | 0.341 | 0.178 | 1.89E-40 | CD8_UCBMC |
| FBXO34             | 2.01E-44 | 0.599255   | 0.649 | 0.477 | 7.13E-40 | CD8_UCBMC |
| GMCL1              | 2.62E-44 | 0.80591236 | 0.439 | 0.257 | 9.27E-40 | CD8_UCBMC |
| EIF3A              | 3.08E-44 | 0.55209527 | 0.657 | 0.491 | 1.09E-39 | CD8_UCBMC |
| DHX9               | 3.77E-44 | 0.68582642 | 0.598 | 0.437 | 1.34E-39 | CD8_UCBMC |
| TUBB2B             | 3.94E-44 | 1.08612683 | 0.33  | 0.167 | 1.40E-39 | CD8_UCBMC |
| DLG1               | 4.32E-44 | 0.57594695 | 0.686 | 0.527 | 1.53E-39 | CD8_UCBMC |
| USP47              | 5.94E-44 | 0.60284054 | 0.649 | 0.484 | 2.10E-39 | CD8_UCBMC |
| TNKS               | 5.97E-44 | 0.74353087 | 0.513 | 0.345 | 2.11E-39 | CD8_UCBMC |
| MBNL1              | 6.76E-44 | 0.28825407 | 0.991 | 0.933 | 2.40E-39 | CD8_UCBMC |
| TBC1D23            | 9.92E-44 | 0.95151105 | 0.381 | 0.214 | 3.51E-39 | CD8_UCBMC |
| COPA               | 1.05E-43 | 0.86328432 | 0.444 | 0.273 | 3.73E-39 | CD8_UCBMC |
| EML4               | 1.09E-43 | 0.43071822 | 0.811 | 0.662 | 3.86E-39 | CD8_UCBMC |
| MACO1              | 1.31E-43 | 0.85358668 | 0.441 | 0.27  | 4.63E-39 | CD8_UCBMC |
| CDC73              | 1.43E-43 | 0.73170917 | 0.518 | 0.35  | 5.08E-39 | CD8_UCBMC |
| TCERG1             | 3.10E-43 | 0.77206945 | 0.519 | 0.353 | 1.10E-38 | CD8_UCBMC |
| FYN                | 3.47E-43 | 0.48066245 | 0.755 | 0.581 | 1.23E-38 | CD8_UCBMC |
| PRPF40A            | 4.64E-43 | 0.52999134 | 0.703 | 0.547 | 1.64E-38 | CD8_UCBMC |
| CELF2              | 5.20E-43 | 0.39531375 | 0.907 | 0.757 | 1.84E-38 | CD8_UCBMC |
| TTC17              | 5.93E-43 | 0.76038073 | 0.527 | 0.361 | 2.10E-38 | CD8_UCBMC |
| DAZAP2             | 8.23E-43 | 0.65544282 | 0.576 | 0.41  | 2.91E-38 | CD8_UCBMC |

|                    |          |            |       |       |          |           |
|--------------------|----------|------------|-------|-------|----------|-----------|
| SFSWAP             | 9.07E-43 | 0.8851466  | 0.448 | 0.286 | 3.21E-38 | CD8_UCBMC |
| ENSMUG00000006463  | 1.17E-42 | 0.27072125 | 0.926 | 0.877 | 4.15E-38 | CD8_UCBMC |
| RNF38              | 1.37E-42 | 0.69114158 | 0.584 | 0.416 | 4.84E-38 | CD8_UCBMC |
| COX2               | 1.43E-42 | 0.23744887 | 0.989 | 0.865 | 5.08E-38 | CD8_UCBMC |
| AKT3               | 1.54E-42 | 0.44889278 | 0.749 | 0.588 | 5.45E-38 | CD8_UCBMC |
| FBXO3              | 1.79E-42 | 1.36050682 | 0.27  | 0.124 | 6.33E-38 | CD8_UCBMC |
| LATS1              | 3.33E-42 | 1.16428349 | 0.311 | 0.155 | 1.18E-37 | CD8_UCBMC |
| CD83               | 1.10E-41 | 0.75736962 | 0.39  | 0.22  | 3.89E-37 | CD8_UCBMC |
| PSEN1              | 1.24E-41 | 0.96283551 | 0.389 | 0.228 | 4.40E-37 | CD8_UCBMC |
| ZNF654             | 1.32E-41 | 0.91519688 | 0.401 | 0.236 | 4.67E-37 | CD8_UCBMC |
| ILKAP              | 1.33E-41 | 0.74517963 | 0.518 | 0.361 | 4.70E-37 | CD8_UCBMC |
| ERO1B              | 1.37E-41 | 0.69206497 | 0.516 | 0.345 | 4.85E-37 | CD8_UCBMC |
| MON2               | 1.39E-41 | 0.83306696 | 0.445 | 0.279 | 4.94E-37 | CD8_UCBMC |
| CHD2               | 1.49E-41 | 0.4811834  | 0.753 | 0.582 | 5.28E-37 | CD8_UCBMC |
| FAM172A            | 2.12E-41 | 0.49046402 | 0.727 | 0.559 | 7.52E-37 | CD8_UCBMC |
| ZFR                | 2.19E-41 | 0.78063519 | 0.484 | 0.327 | 7.77E-37 | CD8_UCBMC |
| RPS16              | 2.40E-41 | 0.17855002 | 0.998 | 0.996 | 8.51E-37 | CD8_UCBMC |
| STAU1              | 2.45E-41 | 0.74633848 | 0.515 | 0.355 | 8.67E-37 | CD8_UCBMC |
| ND4                | 3.05E-41 | 0.25132777 | 0.978 | 0.849 | 1.08E-36 | CD8_UCBMC |
| MRTFA              | 3.16E-41 | 0.79163918 | 0.52  | 0.363 | 1.12E-36 | CD8_UCBMC |
| SLC22A18           | 3.54E-41 | 0.62921506 | 0.579 | 0.417 | 1.26E-36 | CD8_UCBMC |
| ENSMUG000000051957 | 4.95E-41 | 1.13564648 | 0.331 | 0.178 | 1.76E-36 | CD8_UCBMC |
| THUMP2             | 5.14E-41 | 0.89558822 | 0.415 | 0.254 | 1.82E-36 | CD8_UCBMC |
| EXOC6              | 7.05E-41 | 0.68996412 | 0.545 | 0.374 | 2.50E-36 | CD8_UCBMC |
| ARHGEF3            | 1.06E-40 | 0.6658873  | 0.547 | 0.373 | 3.76E-36 | CD8_UCBMC |
| DHX40              | 1.07E-40 | 0.97593032 | 0.348 | 0.189 | 3.81E-36 | CD8_UCBMC |
| CIR1               | 1.37E-40 | 0.75042524 | 0.439 | 0.274 | 4.85E-36 | CD8_UCBMC |
| TBC1D15            | 1.97E-40 | 0.77006034 | 0.466 | 0.303 | 6.99E-36 | CD8_UCBMC |
| PELI1              | 2.45E-40 | 0.45359079 | 0.688 | 0.51  | 8.68E-36 | CD8_UCBMC |
| COPB1              | 2.57E-40 | 0.87113195 | 0.401 | 0.241 | 9.12E-36 | CD8_UCBMC |
| USP10              | 3.58E-40 | 0.5936031  | 0.585 | 0.419 | 1.27E-35 | CD8_UCBMC |
| WDFY2              | 5.40E-40 | 0.76002737 | 0.524 | 0.375 | 1.91E-35 | CD8_UCBMC |
| MORC3              | 5.48E-40 | 0.87051216 | 0.401 | 0.244 | 1.94E-35 | CD8_UCBMC |

|                   |          |            |       |       |          |           |
|-------------------|----------|------------|-------|-------|----------|-----------|
| ATP10A            | 5.60E-40 | 0.52824758 | 0.648 | 0.479 | 1.98E-35 | CD8_UCBMC |
| EXOC6B            | 6.17E-40 | 0.79052291 | 0.459 | 0.296 | 2.19E-35 | CD8_UCBMC |
| KIAA1143          | 7.36E-40 | 0.92042385 | 0.363 | 0.203 | 2.61E-35 | CD8_UCBMC |
| ARID2             | 7.60E-40 | 0.53115883 | 0.633 | 0.465 | 2.69E-35 | CD8_UCBMC |
| WDR26             | 9.28E-40 | 0.97311607 | 0.373 | 0.217 | 3.29E-35 | CD8_UCBMC |
| SETD7             | 1.08E-39 | 1.08511379 | 0.319 | 0.171 | 3.82E-35 | CD8_UCBMC |
| CWC15             | 1.12E-39 | 0.56611784 | 0.578 | 0.418 | 3.99E-35 | CD8_UCBMC |
| ACTR2             | 1.75E-39 | 0.47845521 | 0.802 | 0.673 | 6.21E-35 | CD8_UCBMC |
| ZNF92             | 2.38E-39 | 0.95688615 | 0.373 | 0.217 | 8.45E-35 | CD8_UCBMC |
| SERINC1           | 2.81E-39 | 0.60418379 | 0.571 | 0.405 | 9.94E-35 | CD8_UCBMC |
| MSI2              | 3.39E-39 | 0.58649729 | 0.635 | 0.476 | 1.20E-34 | CD8_UCBMC |
| PLAA              | 3.89E-39 | 1.06390309 | 0.32  | 0.168 | 1.38E-34 | CD8_UCBMC |
| CHD6              | 4.64E-39 | 0.57779405 | 0.517 | 0.346 | 1.64E-34 | CD8_UCBMC |
| ESCO1             | 5.32E-39 | 0.66022318 | 0.545 | 0.377 | 1.89E-34 | CD8_UCBMC |
| HACD2             | 5.59E-39 | 1.34035651 | 0.259 | 0.122 | 1.98E-34 | CD8_UCBMC |
| DIS3L2            | 5.64E-39 | 0.7076944  | 0.511 | 0.349 | 2.00E-34 | CD8_UCBMC |
| LRBA              | 5.93E-39 | 0.45153507 | 0.764 | 0.601 | 2.10E-34 | CD8_UCBMC |
| PLEKHM1           | 7.22E-39 | 1.15700371 | 0.295 | 0.151 | 2.56E-34 | CD8_UCBMC |
| RPLP2             | 8.39E-39 | 0.18282793 | 0.995 | 0.993 | 2.97E-34 | CD8_UCBMC |
| TUT7              | 8.53E-39 | 0.75570732 | 0.471 | 0.313 | 3.02E-34 | CD8_UCBMC |
| RPS6KA5           | 9.45E-39 | 0.76894217 | 0.473 | 0.308 | 3.35E-34 | CD8_UCBMC |
| TEC               | 9.65E-39 | 0.62009645 | 0.581 | 0.418 | 3.42E-34 | CD8_UCBMC |
| GABPB1            | 1.05E-38 | 0.93733646 | 0.435 | 0.287 | 3.70E-34 | CD8_UCBMC |
| DUSP16            | 1.09E-38 | 0.96319947 | 0.302 | 0.149 | 3.88E-34 | CD8_UCBMC |
| CCNL1             | 1.68E-38 | 0.4022771  | 0.78  | 0.6   | 5.94E-34 | CD8_UCBMC |
| ZNF483            | 2.34E-38 | 0.34312086 | 0.849 | 0.76  | 8.29E-34 | CD8_UCBMC |
| TGS1              | 2.39E-38 | 0.77335075 | 0.461 | 0.308 | 8.46E-34 | CD8_UCBMC |
| XRN1              | 2.61E-38 | 0.69105154 | 0.491 | 0.329 | 9.26E-34 | CD8_UCBMC |
| RIOK3             | 3.37E-38 | 0.78039373 | 0.439 | 0.281 | 1.19E-33 | CD8_UCBMC |
| MED13             | 4.22E-38 | 0.79930352 | 0.445 | 0.288 | 1.50E-33 | CD8_UCBMC |
| ENSMUG00000056012 | 5.35E-38 | 0.51759421 | 0.615 | 0.457 | 1.90E-33 | CD8_UCBMC |
| PAN3              | 6.46E-38 | 0.48575579 | 0.697 | 0.54  | 2.29E-33 | CD8_UCBMC |
| C20H16orf87       | 7.84E-38 | 0.99014313 | 0.305 | 0.157 | 2.78E-33 | CD8_UCBMC |

|                    |          |            |       |       |          |           |
|--------------------|----------|------------|-------|-------|----------|-----------|
| CUL2               | 8.16E-38 | 0.8450197  | 0.383 | 0.227 | 2.89E-33 | CD8_UCBMC |
| SEC24B             | 9.57E-38 | 0.70138676 | 0.499 | 0.337 | 3.39E-33 | CD8_UCBMC |
| GTPBP10            | 1.06E-37 | 0.8915889  | 0.405 | 0.258 | 3.74E-33 | CD8_UCBMC |
| POC5               | 1.09E-37 | 0.53543437 | 0.585 | 0.432 | 3.86E-33 | CD8_UCBMC |
| MRPS35             | 1.13E-37 | 0.77723437 | 0.48  | 0.326 | 4.00E-33 | CD8_UCBMC |
| ENSMMUG00000056331 | 1.20E-37 | 0.82120121 | 0.354 | 0.195 | 4.26E-33 | CD8_UCBMC |
| QRICH1             | 1.73E-37 | 0.88147872 | 0.397 | 0.246 | 6.13E-33 | CD8_UCBMC |
| BNIP3L             | 2.56E-37 | 0.62992277 | 0.531 | 0.373 | 9.08E-33 | CD8_UCBMC |
| HBS1L              | 3.67E-37 | 0.52082226 | 0.599 | 0.439 | 1.30E-32 | CD8_UCBMC |
| OGT                | 5.51E-37 | 0.5350257  | 0.638 | 0.483 | 1.95E-32 | CD8_UCBMC |
| CLASP2             | 5.59E-37 | 0.61895475 | 0.539 | 0.38  | 1.98E-32 | CD8_UCBMC |
| HECA               | 6.62E-37 | 0.72560737 | 0.479 | 0.326 | 2.35E-32 | CD8_UCBMC |
| NUP214             | 9.22E-37 | 0.73440911 | 0.431 | 0.276 | 3.27E-32 | CD8_UCBMC |
| CLINT1             | 1.03E-36 | 0.65917599 | 0.558 | 0.405 | 3.65E-32 | CD8_UCBMC |
| KDM7A              | 1.52E-36 | 0.82036344 | 0.385 | 0.234 | 5.37E-32 | CD8_UCBMC |
| EAPP               | 1.67E-36 | 0.91306316 | 0.32  | 0.173 | 5.91E-32 | CD8_UCBMC |
| YTHDF3             | 1.92E-36 | 0.71964159 | 0.455 | 0.293 | 6.79E-32 | CD8_UCBMC |
| DNAJC3             | 2.07E-36 | 0.618177   | 0.527 | 0.372 | 7.33E-32 | CD8_UCBMC |
| ZC3H7A             | 2.25E-36 | 0.91410093 | 0.34  | 0.194 | 7.97E-32 | CD8_UCBMC |
| RAPGEF1            | 2.32E-36 | 0.72858586 | 0.477 | 0.326 | 8.23E-32 | CD8_UCBMC |
| SRPK2              | 2.59E-36 | 0.57884894 | 0.564 | 0.402 | 9.18E-32 | CD8_UCBMC |
| ZNF93              | 3.15E-36 | 0.79027361 | 0.393 | 0.245 | 1.12E-31 | CD8_UCBMC |
| PCED1B             | 3.75E-36 | 0.64053514 | 0.48  | 0.32  | 1.33E-31 | CD8_UCBMC |
| RPRD1A             | 3.86E-36 | 0.82471757 | 0.39  | 0.235 | 1.37E-31 | CD8_UCBMC |
| ATP9B              | 5.17E-36 | 0.72672771 | 0.481 | 0.333 | 1.83E-31 | CD8_UCBMC |
| NIPBL              | 5.40E-36 | 0.52636809 | 0.644 | 0.492 | 1.91E-31 | CD8_UCBMC |
| SYF2               | 5.89E-36 | 0.51135364 | 0.595 | 0.442 | 2.09E-31 | CD8_UCBMC |
| FOXO1              | 6.08E-36 | 0.40850552 | 0.739 | 0.565 | 2.16E-31 | CD8_UCBMC |
| RYBP               | 6.34E-36 | 1.01122548 | 0.333 | 0.192 | 2.24E-31 | CD8_UCBMC |
| DDX5               | 8.95E-36 | 0.29716987 | 0.982 | 0.856 | 3.17E-31 | CD8_UCBMC |
| TRPS1              | 9.62E-36 | 0.7509409  | 0.409 | 0.258 | 3.41E-31 | CD8_UCBMC |
| TCF12              | 1.05E-35 | 0.37636637 | 0.836 | 0.68  | 3.72E-31 | CD8_UCBMC |
| ACIN1              | 1.25E-35 | 0.54746519 | 0.607 | 0.455 | 4.43E-31 | CD8_UCBMC |

|                    |          |            |       |       |          |           |
|--------------------|----------|------------|-------|-------|----------|-----------|
| PITPNC1            | 1.27E-35 | 0.30639926 | 0.944 | 0.818 | 4.50E-31 | CD8_UCBMC |
| ENSMMUG00000061038 | 1.50E-35 | 0.56361876 | 0.581 | 0.421 | 5.32E-31 | CD8_UCBMC |
| CHMP7              | 1.74E-35 | 0.90930984 | 0.364 | 0.219 | 6.17E-31 | CD8_UCBMC |
| FBXL5              | 1.87E-35 | 0.91410928 | 0.337 | 0.191 | 6.61E-31 | CD8_UCBMC |
| ZNF827             | 1.93E-35 | 0.60548398 | 0.555 | 0.4   | 6.85E-31 | CD8_UCBMC |
| TBC1D22B           | 2.04E-35 | 1.11070287 | 0.265 | 0.13  | 7.22E-31 | CD8_UCBMC |
| APC                | 2.42E-35 | 0.8635892  | 0.372 | 0.222 | 8.59E-31 | CD8_UCBMC |
| SREK1              | 2.79E-35 | 0.48699184 | 0.669 | 0.521 | 9.90E-31 | CD8_UCBMC |
| RNF145             | 3.03E-35 | 0.56679109 | 0.579 | 0.431 | 1.07E-30 | CD8_UCBMC |
| EMC3               | 5.46E-35 | 0.95187008 | 0.307 | 0.166 | 1.94E-30 | CD8_UCBMC |
| ASH1L              | 6.33E-35 | 0.47986339 | 0.729 | 0.594 | 2.24E-30 | CD8_UCBMC |
| RALA               | 6.47E-35 | 0.71727285 | 0.439 | 0.289 | 2.29E-30 | CD8_UCBMC |
| PAPOLG             | 7.49E-35 | 1.06880338 | 0.28  | 0.145 | 2.66E-30 | CD8_UCBMC |
| CMTR1              | 8.93E-35 | 0.83032373 | 0.361 | 0.217 | 3.16E-30 | CD8_UCBMC |
| AP3B1              | 9.13E-35 | 0.59271048 | 0.578 | 0.435 | 3.24E-30 | CD8_UCBMC |
| CYTH1              | 1.03E-34 | 0.50500994 | 0.653 | 0.502 | 3.64E-30 | CD8_UCBMC |
| FOXN3              | 1.11E-34 | 0.28991539 | 0.929 | 0.765 | 3.92E-30 | CD8_UCBMC |
| WIP12              | 1.13E-34 | 0.81574401 | 0.399 | 0.252 | 4.00E-30 | CD8_UCBMC |
| PRKX               | 1.32E-34 | 0.60102285 | 0.589 | 0.432 | 4.69E-30 | CD8_UCBMC |
| ENSMMUG00000030465 | 1.41E-34 | 0.40660191 | 0.7   | 0.571 | 4.99E-30 | CD8_UCBMC |
| NUP98              | 1.43E-34 | 0.58016668 | 0.575 | 0.423 | 5.06E-30 | CD8_UCBMC |
| FBXO11             | 1.44E-34 | 0.64983342 | 0.528 | 0.382 | 5.09E-30 | CD8_UCBMC |
| NUP133             | 1.91E-34 | 0.90335881 | 0.321 | 0.178 | 6.76E-30 | CD8_UCBMC |
| PIP5K1A            | 2.27E-34 | 0.80875508 | 0.424 | 0.281 | 8.04E-30 | CD8_UCBMC |
| LCOR               | 2.57E-34 | 0.63577998 | 0.525 | 0.374 | 9.09E-30 | CD8_UCBMC |
| SNED1              | 3.62E-34 | 0.91529297 | 0.373 | 0.228 | 1.28E-29 | CD8_UCBMC |
| ZMYM5              | 3.82E-34 | 0.92365229 | 0.336 | 0.194 | 1.35E-29 | CD8_UCBMC |
| CCNT2              | 4.00E-34 | 0.80834321 | 0.425 | 0.28  | 1.42E-29 | CD8_UCBMC |
| SELENOS            | 4.06E-34 | 0.43805858 | 0.627 | 0.46  | 1.44E-29 | CD8_UCBMC |
| GSK3B              | 4.07E-34 | 0.45599027 | 0.705 | 0.542 | 1.44E-29 | CD8_UCBMC |
| RAF1               | 5.68E-34 | 0.78710239 | 0.43  | 0.284 | 2.01E-29 | CD8_UCBMC |
| TRAPPC10           | 7.34E-34 | 0.81573166 | 0.41  | 0.267 | 2.60E-29 | CD8_UCBMC |
| JMJD1C             | 7.95E-34 | 0.32609807 | 0.894 | 0.73  | 2.82E-29 | CD8_UCBMC |

|                   |          |            |       |       |          |           |
|-------------------|----------|------------|-------|-------|----------|-----------|
| DBF4              | 8.44E-34 | 1.03349672 | 0.262 | 0.129 | 2.99E-29 | CD8_UCBMC |
| SCMH1             | 1.07E-33 | 1.14315761 | 0.279 | 0.145 | 3.79E-29 | CD8_UCBMC |
| SIAH1             | 1.43E-33 | 1.16080233 | 0.278 | 0.149 | 5.06E-29 | CD8_UCBMC |
| ADNP              | 1.47E-33 | 0.69200801 | 0.424 | 0.277 | 5.21E-29 | CD8_UCBMC |
| RRAS2             | 1.71E-33 | 0.97337528 | 0.341 | 0.203 | 6.06E-29 | CD8_UCBMC |
| WDR7              | 1.94E-33 | 0.48521703 | 0.649 | 0.496 | 6.88E-29 | CD8_UCBMC |
| TAPT1             | 2.03E-33 | 1.06255562 | 0.274 | 0.142 | 7.18E-29 | CD8_UCBMC |
| SNX29             | 2.45E-33 | 0.63755236 | 0.482 | 0.334 | 8.69E-29 | CD8_UCBMC |
| SEC31A            | 2.56E-33 | 0.53590996 | 0.612 | 0.469 | 9.07E-29 | CD8_UCBMC |
| THOC1             | 2.63E-33 | 0.85394172 | 0.363 | 0.223 | 9.30E-29 | CD8_UCBMC |
| LRRC8C            | 4.05E-33 | 0.98848772 | 0.326 | 0.192 | 1.44E-28 | CD8_UCBMC |
| ADAMTS6           | 5.14E-33 | 0.75289359 | 0.422 | 0.27  | 1.82E-28 | CD8_UCBMC |
| ANAPC10           | 9.66E-33 | 0.72491262 | 0.415 | 0.271 | 3.42E-28 | CD8_UCBMC |
| MED27             | 1.00E-32 | 0.77173107 | 0.418 | 0.28  | 3.55E-28 | CD8_UCBMC |
| MAML3             | 1.16E-32 | 0.46272687 | 0.675 | 0.521 | 4.11E-28 | CD8_UCBMC |
| SLC38A1           | 1.30E-32 | 0.42267256 | 0.737 | 0.597 | 4.60E-28 | CD8_UCBMC |
| GTF2B             | 2.21E-32 | 0.43199355 | 0.677 | 0.522 | 7.83E-28 | CD8_UCBMC |
| U2SURP            | 2.22E-32 | 0.46008335 | 0.614 | 0.467 | 7.87E-28 | CD8_UCBMC |
| ENSMUG00000060545 | 2.41E-32 | 0.49022576 | 0.571 | 0.407 | 8.53E-28 | CD8_UCBMC |
| NBR1              | 2.69E-32 | 0.62006805 | 0.465 | 0.322 | 9.54E-28 | CD8_UCBMC |
| FAM214A           | 3.12E-32 | 0.68001849 | 0.419 | 0.271 | 1.10E-27 | CD8_UCBMC |
| PRKCH             | 3.31E-32 | 0.31110459 | 0.852 | 0.697 | 1.17E-27 | CD8_UCBMC |
| PNN               | 3.34E-32 | 0.48260803 | 0.658 | 0.515 | 1.18E-27 | CD8_UCBMC |
| ZRANB2            | 4.34E-32 | 0.51414339 | 0.573 | 0.429 | 1.54E-27 | CD8_UCBMC |
| ZNF43             | 4.38E-32 | 0.76012565 | 0.391 | 0.249 | 1.55E-27 | CD8_UCBMC |
| GINM1             | 4.46E-32 | 0.70479632 | 0.401 | 0.255 | 1.58E-27 | CD8_UCBMC |
| SUPV3L1           | 5.67E-32 | 0.9928915  | 0.29  | 0.156 | 2.01E-27 | CD8_UCBMC |
| NT5C2             | 5.89E-32 | 0.5964761  | 0.513 | 0.364 | 2.09E-27 | CD8_UCBMC |
| COP1              | 5.94E-32 | 0.52930309 | 0.551 | 0.398 | 2.10E-27 | CD8_UCBMC |
| KCMF1             | 8.76E-32 | 0.79757353 | 0.358 | 0.217 | 3.10E-27 | CD8_UCBMC |
| RALGPS2           | 9.59E-32 | 0.81159553 | 0.384 | 0.244 | 3.40E-27 | CD8_UCBMC |
| MED23             | 9.84E-32 | 0.78352545 | 0.377 | 0.242 | 3.49E-27 | CD8_UCBMC |
| SLC25A26          | 9.99E-32 | 0.76146375 | 0.428 | 0.29  | 3.54E-27 | CD8_UCBMC |



|                    |          |            |       |       |          |           |
|--------------------|----------|------------|-------|-------|----------|-----------|
| TNKS2              | 1.00E-31 | 0.75609454 | 0.414 | 0.273 | 3.55E-27 | CD8_UCBMC |
| FAF1               | 1.03E-31 | 0.5401895  | 0.599 | 0.452 | 3.65E-27 | CD8_UCBMC |
| FAM168A            | 1.05E-31 | 0.71136046 | 0.425 | 0.281 | 3.73E-27 | CD8_UCBMC |
| SEC23A             | 1.35E-31 | 0.91452183 | 0.335 | 0.2   | 4.78E-27 | CD8_UCBMC |
| TANC1              | 1.35E-31 | 0.71970911 | 0.435 | 0.288 | 4.79E-27 | CD8_UCBMC |
| CYLD               | 1.48E-31 | 0.44832546 | 0.619 | 0.469 | 5.24E-27 | CD8_UCBMC |
| GNG2               | 1.50E-31 | 0.33892834 | 0.825 | 0.69  | 5.32E-27 | CD8_UCBMC |
| C18H18orf25        | 1.52E-31 | 0.74562884 | 0.371 | 0.231 | 5.40E-27 | CD8_UCBMC |
| PPTC7              | 1.59E-31 | 1.02421747 | 0.297 | 0.168 | 5.62E-27 | CD8_UCBMC |
| MED13L             | 1.74E-31 | 0.39410871 | 0.774 | 0.602 | 6.15E-27 | CD8_UCBMC |
| ENSMMUG00000058755 | 1.95E-31 | 0.17756929 | 0.995 | 0.993 | 6.92E-27 | CD8_UCBMC |
| IWS1               | 2.08E-31 | 0.78567637 | 0.373 | 0.232 | 7.38E-27 | CD8_UCBMC |
| SOS1               | 2.10E-31 | 0.61329471 | 0.528 | 0.386 | 7.45E-27 | CD8_UCBMC |
| VPS4B              | 2.53E-31 | 0.6727542  | 0.422 | 0.279 | 8.96E-27 | CD8_UCBMC |
| KRAS               | 3.43E-31 | 0.73901188 | 0.399 | 0.261 | 1.22E-26 | CD8_UCBMC |
| ENSMMUG00000045362 | 3.50E-31 | 1.18876617 | 0.25  | 0.13  | 1.24E-26 | CD8_UCBMC |
| SLC35D1            | 4.30E-31 | 0.91347778 | 0.32  | 0.188 | 1.52E-26 | CD8_UCBMC |
| INTS9              | 4.45E-31 | 1.0213723  | 0.276 | 0.148 | 1.58E-26 | CD8_UCBMC |
| AQR                | 4.95E-31 | 0.68999812 | 0.418 | 0.278 | 1.75E-26 | CD8_UCBMC |
| NAA25              | 5.16E-31 | 0.73340921 | 0.398 | 0.256 | 1.83E-26 | CD8_UCBMC |
| EFR3A              | 5.59E-31 | 0.72904072 | 0.385 | 0.244 | 1.98E-26 | CD8_UCBMC |
| ABI1               | 6.58E-31 | 0.37198864 | 0.703 | 0.532 | 2.33E-26 | CD8_UCBMC |
| PAIP2              | 1.19E-30 | 0.35215606 | 0.789 | 0.676 | 4.21E-26 | CD8_UCBMC |
| CWC25              | 1.24E-30 | 0.87544626 | 0.299 | 0.169 | 4.39E-26 | CD8_UCBMC |
| ENSMMUG00000029973 | 1.33E-30 | 0.40680367 | 0.664 | 0.533 | 4.71E-26 | CD8_UCBMC |
| SPAG9              | 1.46E-30 | 0.51021793 | 0.562 | 0.416 | 5.19E-26 | CD8_UCBMC |
| PPIG               | 1.53E-30 | 0.53141313 | 0.555 | 0.413 | 5.41E-26 | CD8_UCBMC |
| SELENOT            | 1.87E-30 | 0.89620821 | 0.333 | 0.201 | 6.62E-26 | CD8_UCBMC |
| KLHL2              | 2.06E-30 | 0.86184997 | 0.312 | 0.183 | 7.31E-26 | CD8_UCBMC |
| RNF4               | 2.17E-30 | 0.94375561 | 0.318 | 0.191 | 7.70E-26 | CD8_UCBMC |
| KDM3A              | 2.34E-30 | 0.90805396 | 0.31  | 0.182 | 8.30E-26 | CD8_UCBMC |
| SREK1IP1           | 2.48E-30 | 0.60680889 | 0.39  | 0.246 | 8.77E-26 | CD8_UCBMC |
| DCTN6              | 2.89E-30 | 0.95697269 | 0.291 | 0.164 | 1.02E-25 | CD8_UCBMC |

|                    |          |            |       |       |          |           |
|--------------------|----------|------------|-------|-------|----------|-----------|
| HSPA5              | 3.13E-30 | 0.46980583 | 0.639 | 0.495 | 1.11E-25 | CD8_UCBMC |
| ITSN2              | 3.24E-30 | 0.49116926 | 0.619 | 0.477 | 1.15E-25 | CD8_UCBMC |
| ENSMMUG00000028699 | 4.90E-30 | 0.41618205 | 0.614 | 0.471 | 1.74E-25 | CD8_UCBMC |
| ARHGEF7            | 6.00E-30 | 0.44723653 | 0.619 | 0.474 | 2.13E-25 | CD8_UCBMC |
| PHC3               | 6.02E-30 | 0.62432683 | 0.487 | 0.343 | 2.13E-25 | CD8_UCBMC |
| CPSF3              | 6.63E-30 | 0.82027635 | 0.36  | 0.227 | 2.35E-25 | CD8_UCBMC |
| HNRNPUL1           | 7.20E-30 | 0.56562514 | 0.46  | 0.316 | 2.55E-25 | CD8_UCBMC |
| PDE3B              | 7.32E-30 | 0.35098316 | 0.758 | 0.614 | 2.59E-25 | CD8_UCBMC |
| KAT7               | 8.29E-30 | 0.65219717 | 0.428 | 0.289 | 2.94E-25 | CD8_UCBMC |
| MRTFB              | 8.96E-30 | 0.79694898 | 0.336 | 0.203 | 3.18E-25 | CD8_UCBMC |
| CAPN7              | 1.09E-29 | 0.86858869 | 0.335 | 0.205 | 3.85E-25 | CD8_UCBMC |
| IRAG2              | 1.17E-29 | 0.9449642  | 0.262 | 0.139 | 4.14E-25 | CD8_UCBMC |
| SHOC2              | 1.39E-29 | 0.52832535 | 0.539 | 0.407 | 4.93E-25 | CD8_UCBMC |
| USP16              | 1.67E-29 | 0.72300515 | 0.42  | 0.285 | 5.91E-25 | CD8_UCBMC |
| ZNF451             | 2.15E-29 | 0.66191557 | 0.428 | 0.294 | 7.61E-25 | CD8_UCBMC |
| MANBA              | 2.17E-29 | 0.69880535 | 0.413 | 0.278 | 7.68E-25 | CD8_UCBMC |
| TMEM123            | 2.33E-29 | 0.29753685 | 0.879 | 0.756 | 8.24E-25 | CD8_UCBMC |
| FBXO28             | 2.34E-29 | 0.88531196 | 0.283 | 0.158 | 8.31E-25 | CD8_UCBMC |
| CCNK               | 2.77E-29 | 0.59229019 | 0.509 | 0.377 | 9.83E-25 | CD8_UCBMC |
| NFYC               | 3.01E-29 | 0.71435918 | 0.357 | 0.222 | 1.06E-24 | CD8_UCBMC |
| SDF2               | 3.10E-29 | 0.81950089 | 0.299 | 0.171 | 1.10E-24 | CD8_UCBMC |
| ARHGAP15           | 3.31E-29 | 0.251797   | 0.963 | 0.837 | 1.17E-24 | CD8_UCBMC |
| RPL23              | 3.34E-29 | 0.20469865 | 0.995 | 0.963 | 1.18E-24 | CD8_UCBMC |
| SUCO               | 3.46E-29 | 0.58663694 | 0.447 | 0.307 | 1.23E-24 | CD8_UCBMC |
| ATG16L1            | 3.47E-29 | 1.04821112 | 0.267 | 0.147 | 1.23E-24 | CD8_UCBMC |
| CFLAR              | 3.78E-29 | 0.5898873  | 0.471 | 0.337 | 1.34E-24 | CD8_UCBMC |
| UBR5               | 4.62E-29 | 0.56122967 | 0.502 | 0.362 | 1.64E-24 | CD8_UCBMC |
| GTF2H1             | 5.14E-29 | 0.8947975  | 0.289 | 0.165 | 1.82E-24 | CD8_UCBMC |
| RASSF3             | 5.98E-29 | 0.33255274 | 0.63  | 0.469 | 2.12E-24 | CD8_UCBMC |
| PRDM2              | 6.05E-29 | 0.6639641  | 0.438 | 0.306 | 2.14E-24 | CD8_UCBMC |
| LONP2              | 6.13E-29 | 0.62751079 | 0.475 | 0.341 | 2.17E-24 | CD8_UCBMC |
| CD2AP              | 6.71E-29 | 0.72872996 | 0.424 | 0.294 | 2.38E-24 | CD8_UCBMC |
| DDX52              | 9.88E-29 | 0.68960689 | 0.4   | 0.267 | 3.50E-24 | CD8_UCBMC |

|                     |          |            |       |       |          |           |
|---------------------|----------|------------|-------|-------|----------|-----------|
| ENSMMUG00000002320  | 1.24E-28 | 0.27031871 | 0.904 | 0.824 | 4.40E-24 | CD8_UCBMC |
| AKAP13              | 1.26E-28 | 0.30941524 | 0.875 | 0.736 | 4.46E-24 | CD8_UCBMC |
| NRAS                | 1.29E-28 | 0.80988056 | 0.313 | 0.185 | 4.58E-24 | CD8_UCBMC |
| WDR33               | 1.81E-28 | 0.60165292 | 0.463 | 0.329 | 6.42E-24 | CD8_UCBMC |
| PCCA                | 2.01E-28 | 0.49410514 | 0.591 | 0.449 | 7.13E-24 | CD8_UCBMC |
| AMBRA1              | 2.02E-28 | 0.68448145 | 0.429 | 0.297 | 7.16E-24 | CD8_UCBMC |
| TNPO1               | 2.22E-28 | 0.72441946 | 0.349 | 0.217 | 7.86E-24 | CD8_UCBMC |
| ATP2C1              | 2.85E-28 | 0.7585371  | 0.356 | 0.226 | 1.01E-23 | CD8_UCBMC |
| PCM1                | 2.97E-28 | 0.5990979  | 0.472 | 0.337 | 1.05E-23 | CD8_UCBMC |
| SECISBP2            | 3.24E-28 | 0.63843035 | 0.431 | 0.292 | 1.15E-23 | CD8_UCBMC |
| NDUFA9              | 3.92E-28 | 0.73358606 | 0.365 | 0.235 | 1.39E-23 | CD8_UCBMC |
| INPP4B              | 4.13E-28 | 0.93565449 | 0.276 | 0.154 | 1.46E-23 | CD8_UCBMC |
| SNX4                | 4.33E-28 | 0.64610045 | 0.44  | 0.309 | 1.53E-23 | CD8_UCBMC |
| ATL2                | 5.24E-28 | 0.73260173 | 0.386 | 0.257 | 1.86E-23 | CD8_UCBMC |
| CUL5                | 5.65E-28 | 0.49469168 | 0.648 | 0.524 | 2.00E-23 | CD8_UCBMC |
| TRIM72              | 6.29E-28 | 0.39169018 | 0.726 | 0.581 | 2.23E-23 | CD8_UCBMC |
| TAB2                | 7.01E-28 | 0.66135049 | 0.404 | 0.27  | 2.48E-23 | CD8_UCBMC |
| CCDC91              | 7.80E-28 | 0.3945765  | 0.7   | 0.558 | 2.76E-23 | CD8_UCBMC |
| ABCG1               | 7.86E-28 | 0.77121357 | 0.375 | 0.246 | 2.79E-23 | CD8_UCBMC |
| GPR89A              | 1.04E-27 | 0.85015546 | 0.293 | 0.171 | 3.69E-23 | CD8_UCBMC |
| ENSMMUG000000041517 | 1.17E-27 | 0.62440437 | 0.347 | 0.216 | 4.14E-23 | CD8_UCBMC |
| HBP1                | 1.26E-27 | 0.52471357 | 0.457 | 0.321 | 4.47E-23 | CD8_UCBMC |
| DAZAP1              | 1.38E-27 | 0.27388074 | 0.768 | 0.635 | 4.89E-23 | CD8_UCBMC |
| EXOSC10             | 1.44E-27 | 0.89366289 | 0.269 | 0.152 | 5.09E-23 | CD8_UCBMC |
| ASB3                | 1.46E-27 | 0.74101368 | 0.358 | 0.225 | 5.17E-23 | CD8_UCBMC |
| FNDC3A              | 1.49E-27 | 0.52264384 | 0.588 | 0.46  | 5.27E-23 | CD8_UCBMC |
| KLHL28              | 1.64E-27 | 0.59133792 | 0.405 | 0.271 | 5.81E-23 | CD8_UCBMC |
| ENSMMUG000000046264 | 1.69E-27 | 0.67788847 | 0.436 | 0.306 | 5.98E-23 | CD8_UCBMC |
| RAPGEF2             | 2.03E-27 | 0.56880878 | 0.37  | 0.236 | 7.20E-23 | CD8_UCBMC |
| ATXN7               | 2.11E-27 | 0.43824266 | 0.563 | 0.427 | 7.49E-23 | CD8_UCBMC |
| ENSMMUG000000053384 | 2.41E-27 | 0.99094796 | 0.272 | 0.153 | 8.55E-23 | CD8_UCBMC |
| KIZ                 | 2.69E-27 | 0.79306714 | 0.329 | 0.204 | 9.53E-23 | CD8_UCBMC |
| ZBTB20              | 3.41E-27 | 0.37645495 | 0.72  | 0.572 | 1.21E-22 | CD8_UCBMC |

|                   |          |            |       |       |          |           |
|-------------------|----------|------------|-------|-------|----------|-----------|
| DOP1A             | 3.45E-27 | 1.06105844 | 0.256 | 0.141 | 1.22E-22 | CD8_UCBMC |
| DNM1L             | 4.03E-27 | 0.7659485  | 0.375 | 0.249 | 1.43E-22 | CD8_UCBMC |
| G2E3              | 4.08E-27 | 0.7637269  | 0.329 | 0.202 | 1.44E-22 | CD8_UCBMC |
| PRRC2B            | 4.47E-27 | 0.57369585 | 0.528 | 0.397 | 1.59E-22 | CD8_UCBMC |
| USP33             | 5.69E-27 | 0.75682014 | 0.402 | 0.276 | 2.02E-22 | CD8_UCBMC |
| PRKD3             | 6.34E-27 | 0.5737125  | 0.444 | 0.308 | 2.25E-22 | CD8_UCBMC |
| TAF2              | 6.47E-27 | 0.93513983 | 0.289 | 0.171 | 2.29E-22 | CD8_UCBMC |
| ICE1              | 7.61E-27 | 0.77994527 | 0.331 | 0.208 | 2.70E-22 | CD8_UCBMC |
| WDR13             | 7.80E-27 | 0.35876791 | 0.696 | 0.578 | 2.76E-22 | CD8_UCBMC |
| RBM27             | 8.00E-27 | 0.52089032 | 0.53  | 0.4   | 2.83E-22 | CD8_UCBMC |
| RPRD2             | 9.60E-27 | 0.60288415 | 0.48  | 0.35  | 3.40E-22 | CD8_UCBMC |
| OPA1              | 1.34E-26 | 0.7208633  | 0.368 | 0.247 | 4.76E-22 | CD8_UCBMC |
| ENSMUG00000029026 | 1.44E-26 | 0.30223559 | 0.701 | 0.565 | 5.11E-22 | CD8_UCBMC |
| DNTTIP2           | 1.56E-26 | 0.63452245 | 0.398 | 0.27  | 5.54E-22 | CD8_UCBMC |
| MPHOSPH8          | 1.62E-26 | 0.53599175 | 0.503 | 0.374 | 5.75E-22 | CD8_UCBMC |
| NOL10             | 1.99E-26 | 0.70033993 | 0.377 | 0.251 | 7.04E-22 | CD8_UCBMC |
| CD96              | 2.07E-26 | 0.53352258 | 0.564 | 0.429 | 7.33E-22 | CD8_UCBMC |
| RPS11             | 2.13E-26 | 0.14034544 | 0.997 | 0.995 | 7.56E-22 | CD8_UCBMC |
| LYST              | 2.55E-26 | 0.70868573 | 0.347 | 0.219 | 9.02E-22 | CD8_UCBMC |
| APPBP2            | 3.08E-26 | 0.6957215  | 0.351 | 0.225 | 1.09E-21 | CD8_UCBMC |
| MTMR3             | 4.76E-26 | 0.786648   | 0.328 | 0.204 | 1.69E-21 | CD8_UCBMC |
| PPHLN1            | 6.65E-26 | 0.51944048 | 0.558 | 0.44  | 2.36E-21 | CD8_UCBMC |
| ENSMUG00000014947 | 6.67E-26 | 0.56754136 | 0.451 | 0.317 | 2.36E-21 | CD8_UCBMC |
| HEXA              | 6.87E-26 | 0.86309742 | 0.286 | 0.169 | 2.43E-21 | CD8_UCBMC |
| BCL7B             | 7.10E-26 | 0.94260266 | 0.283 | 0.168 | 2.52E-21 | CD8_UCBMC |
| KIDINS220         | 7.92E-26 | 0.66323311 | 0.391 | 0.266 | 2.80E-21 | CD8_UCBMC |
| KANSL1            | 8.43E-26 | 0.36259215 | 0.7   | 0.57  | 2.99E-21 | CD8_UCBMC |
| RSBN1             | 9.18E-26 | 0.88531519 | 0.282 | 0.166 | 3.25E-21 | CD8_UCBMC |
| TM9SF2            | 9.69E-26 | 0.71353531 | 0.363 | 0.238 | 3.43E-21 | CD8_UCBMC |
| CSNK1G3           | 1.17E-25 | 0.59693725 | 0.428 | 0.299 | 4.14E-21 | CD8_UCBMC |
| AFTPH             | 1.25E-25 | 0.60521183 | 0.409 | 0.279 | 4.44E-21 | CD8_UCBMC |
| SLC4A7            | 1.45E-25 | 0.70773838 | 0.341 | 0.22  | 5.13E-21 | CD8_UCBMC |
| TLK2              | 1.93E-25 | 0.63060053 | 0.434 | 0.31  | 6.84E-21 | CD8_UCBMC |

|                     |          |            |       |       |          |           |
|---------------------|----------|------------|-------|-------|----------|-----------|
| DYRK2               | 2.17E-25 | 0.52385034 | 0.467 | 0.335 | 7.70E-21 | CD8_UCBMC |
| RBPJ                | 2.24E-25 | 0.54216251 | 0.481 | 0.352 | 7.93E-21 | CD8_UCBMC |
| ENSMMUG000000032031 | 2.32E-25 | 0.56581008 | 0.362 | 0.232 | 8.24E-21 | CD8_UCBMC |
| SYNE1               | 2.50E-25 | 0.63714544 | 0.403 | 0.28  | 8.85E-21 | CD8_UCBMC |
| THUMPD1             | 3.55E-25 | 0.78624027 | 0.324 | 0.207 | 1.26E-20 | CD8_UCBMC |
| DISP1               | 3.55E-25 | 0.59277482 | 0.447 | 0.317 | 1.26E-20 | CD8_UCBMC |
| GALNT1              | 4.30E-25 | 0.76788072 | 0.316 | 0.2   | 1.52E-20 | CD8_UCBMC |
| GATAD2B             | 4.96E-25 | 0.50146712 | 0.537 | 0.404 | 1.76E-20 | CD8_UCBMC |
| CTDP1               | 5.03E-25 | 0.75752589 | 0.327 | 0.212 | 1.78E-20 | CD8_UCBMC |
| HSD17B4             | 5.34E-25 | 0.41266483 | 0.7   | 0.574 | 1.89E-20 | CD8_UCBMC |
| MORF4L1             | 5.75E-25 | 0.33481073 | 0.759 | 0.638 | 2.04E-20 | CD8_UCBMC |
| SS18                | 6.08E-25 | 0.69798204 | 0.429 | 0.312 | 2.16E-20 | CD8_UCBMC |
| SCAF11              | 8.73E-25 | 0.41141105 | 0.663 | 0.535 | 3.09E-20 | CD8_UCBMC |
| WASL                | 8.74E-25 | 0.6142714  | 0.441 | 0.32  | 3.10E-20 | CD8_UCBMC |
| FRS2                | 9.94E-25 | 0.94420117 | 0.295 | 0.182 | 3.52E-20 | CD8_UCBMC |
| RACK1               | 9.96E-25 | 0.15702452 | 0.996 | 0.993 | 3.53E-20 | CD8_UCBMC |
| MICU2               | 1.22E-24 | 0.63784096 | 0.439 | 0.317 | 4.33E-20 | CD8_UCBMC |
| ENSMMUG000000012537 | 1.52E-24 | 0.50279404 | 0.545 | 0.421 | 5.38E-20 | CD8_UCBMC |
| ZNFX1               | 1.59E-24 | 0.93184864 | 0.256 | 0.148 | 5.64E-20 | CD8_UCBMC |
| PSPC1               | 1.67E-24 | 0.43720954 | 0.552 | 0.42  | 5.92E-20 | CD8_UCBMC |
| CHN2                | 1.89E-24 | 0.74585159 | 0.318 | 0.197 | 6.71E-20 | CD8_UCBMC |
| MCM9                | 2.01E-24 | 0.7405034  | 0.336 | 0.217 | 7.13E-20 | CD8_UCBMC |
| NUFIP1              | 2.03E-24 | 0.79633544 | 0.299 | 0.184 | 7.18E-20 | CD8_UCBMC |
| TSC22D3             | 2.03E-24 | 0.34331709 | 0.749 | 0.628 | 7.19E-20 | CD8_UCBMC |
| GALNT11             | 2.11E-24 | 0.77862156 | 0.296 | 0.18  | 7.48E-20 | CD8_UCBMC |
| PXK                 | 2.34E-24 | 0.9474501  | 0.262 | 0.154 | 8.27E-20 | CD8_UCBMC |
| AFF4                | 2.41E-24 | 0.71840411 | 0.341 | 0.222 | 8.55E-20 | CD8_UCBMC |
| PDXDC1              | 2.55E-24 | 0.71272464 | 0.299 | 0.181 | 9.05E-20 | CD8_UCBMC |
| ENSMMUG000000006803 | 3.04E-24 | 0.48644518 | 0.493 | 0.368 | 1.08E-19 | CD8_UCBMC |
| AGTPBP1             | 3.14E-24 | 0.51537625 | 0.491 | 0.361 | 1.11E-19 | CD8_UCBMC |
| KAT6B               | 3.50E-24 | 0.4051616  | 0.647 | 0.509 | 1.24E-19 | CD8_UCBMC |
| SEC22A              | 3.89E-24 | 0.76160076 | 0.268 | 0.153 | 1.38E-19 | CD8_UCBMC |
| REPS1               | 5.33E-24 | 0.52620166 | 0.441 | 0.315 | 1.89E-19 | CD8_UCBMC |

|                    |          |            |       |       |          |           |
|--------------------|----------|------------|-------|-------|----------|-----------|
| DOCK8              | 6.07E-24 | 0.3701148  | 0.728 | 0.6   | 2.15E-19 | CD8_UCBMC |
| STK39              | 6.92E-24 | 0.71034141 | 0.344 | 0.226 | 2.45E-19 | CD8_UCBMC |
| LIMK2              | 7.06E-24 | 0.88267339 | 0.279 | 0.169 | 2.50E-19 | CD8_UCBMC |
| MED15              | 7.13E-24 | 0.87633915 | 0.31  | 0.203 | 2.53E-19 | CD8_UCBMC |
| HTT                | 7.48E-24 | 0.63480742 | 0.413 | 0.296 | 2.65E-19 | CD8_UCBMC |
| GOLPH3             | 8.21E-24 | 0.58621763 | 0.46  | 0.341 | 2.91E-19 | CD8_UCBMC |
| HACD3              | 9.41E-24 | 0.79273098 | 0.292 | 0.178 | 3.33E-19 | CD8_UCBMC |
| ROCK1              | 9.44E-24 | 0.3606798  | 0.667 | 0.539 | 3.35E-19 | CD8_UCBMC |
| PHF3               | 1.09E-23 | 0.43166659 | 0.565 | 0.448 | 3.87E-19 | CD8_UCBMC |
| RNGTT              | 1.20E-23 | 0.51421136 | 0.491 | 0.373 | 4.24E-19 | CD8_UCBMC |
| WARS2              | 1.62E-23 | 0.86789076 | 0.309 | 0.198 | 5.75E-19 | CD8_UCBMC |
| ENSMMUG00000002324 | 1.77E-23 | 0.27412431 | 0.713 | 0.595 | 6.29E-19 | CD8_UCBMC |
| UBE2E2             | 1.86E-23 | 0.74501929 | 0.293 | 0.176 | 6.58E-19 | CD8_UCBMC |
| TRAF3              | 2.12E-23 | 0.61376887 | 0.4   | 0.281 | 7.50E-19 | CD8_UCBMC |
| YPEL5              | 2.57E-23 | 0.40806382 | 0.581 | 0.457 | 9.09E-19 | CD8_UCBMC |
| DAAM1              | 2.58E-23 | 0.85858427 | 0.266 | 0.156 | 9.15E-19 | CD8_UCBMC |
| FBXO25             | 2.66E-23 | 0.69196575 | 0.307 | 0.193 | 9.42E-19 | CD8_UCBMC |
| UHRF2              | 3.06E-23 | 0.59264689 | 0.408 | 0.291 | 1.09E-18 | CD8_UCBMC |
| ITGA4              | 3.31E-23 | 0.40843785 | 0.532 | 0.395 | 1.17E-18 | CD8_UCBMC |
| MTR                | 3.79E-23 | 0.66454356 | 0.338 | 0.223 | 1.34E-18 | CD8_UCBMC |
| ENSMMUG00000012525 | 4.06E-23 | 0.34255202 | 0.658 | 0.545 | 1.44E-18 | CD8_UCBMC |
| GLYR1              | 4.34E-23 | 0.6987729  | 0.304 | 0.19  | 1.54E-18 | CD8_UCBMC |
| ADK                | 4.60E-23 | 0.46192303 | 0.539 | 0.411 | 1.63E-18 | CD8_UCBMC |
| ENSMMUG00000020751 | 5.37E-23 | 0.61913854 | 0.38  | 0.261 | 1.90E-18 | CD8_UCBMC |
| USP8               | 5.57E-23 | 0.79099605 | 0.311 | 0.2   | 1.97E-18 | CD8_UCBMC |
| NFKB1              | 5.76E-23 | 0.41812245 | 0.552 | 0.425 | 2.04E-18 | CD8_UCBMC |
| ETF1               | 6.86E-23 | 0.60208795 | 0.43  | 0.313 | 2.43E-18 | CD8_UCBMC |
| BCLAF1             | 1.31E-22 | 0.28971857 | 0.786 | 0.66  | 4.66E-18 | CD8_UCBMC |
| DCAF10             | 1.33E-22 | 0.80474768 | 0.296 | 0.188 | 4.70E-18 | CD8_UCBMC |
| RAD21              | 1.35E-22 | 0.44569628 | 0.543 | 0.418 | 4.78E-18 | CD8_UCBMC |
| LRCH3              | 1.58E-22 | 0.48468464 | 0.491 | 0.369 | 5.61E-18 | CD8_UCBMC |
| ZNF410             | 1.61E-22 | 0.87998647 | 0.266 | 0.161 | 5.71E-18 | CD8_UCBMC |
| SNX13              | 1.73E-22 | 0.6964757  | 0.373 | 0.259 | 6.12E-18 | CD8_UCBMC |

|                    |          |            |       |       |          |           |
|--------------------|----------|------------|-------|-------|----------|-----------|
| ERN1               | 1.74E-22 | 0.73791894 | 0.309 | 0.197 | 6.17E-18 | CD8_UCBMC |
| NUP153             | 2.13E-22 | 0.68694472 | 0.397 | 0.284 | 7.54E-18 | CD8_UCBMC |
| RIF1               | 2.21E-22 | 0.80267923 | 0.277 | 0.17  | 7.83E-18 | CD8_UCBMC |
| ARHGAP17           | 2.33E-22 | 0.87908665 | 0.271 | 0.167 | 8.24E-18 | CD8_UCBMC |
| PAFAH1B2           | 2.33E-22 | 0.75043151 | 0.307 | 0.198 | 8.26E-18 | CD8_UCBMC |
| USP34              | 2.66E-22 | 0.34317907 | 0.733 | 0.611 | 9.44E-18 | CD8_UCBMC |
| ALMS1              | 2.72E-22 | 0.82709259 | 0.278 | 0.172 | 9.63E-18 | CD8_UCBMC |
| AHCTF1             | 3.08E-22 | 0.59009049 | 0.431 | 0.311 | 1.09E-17 | CD8_UCBMC |
| FUBP1              | 4.01E-22 | 0.46660109 | 0.567 | 0.449 | 1.42E-17 | CD8_UCBMC |
| PPP1R15A           | 4.03E-22 | 0.46338759 | 0.578 | 0.449 | 1.43E-17 | CD8_UCBMC |
| ENSMMUG00000060229 | 4.09E-22 | 0.45556832 | 0.519 | 0.401 | 1.45E-17 | CD8_UCBMC |
| RELL1              | 4.55E-22 | 0.32630504 | 0.603 | 0.462 | 1.61E-17 | CD8_UCBMC |
| PICALM             | 4.83E-22 | 0.32349673 | 0.624 | 0.492 | 1.71E-17 | CD8_UCBMC |
| CAND1              | 5.16E-22 | 0.52854921 | 0.454 | 0.337 | 1.83E-17 | CD8_UCBMC |
| C12orf65           | 5.51E-22 | 0.86859255 | 0.258 | 0.154 | 1.95E-17 | CD8_UCBMC |
| SP100              | 5.59E-22 | 0.38531283 | 0.617 | 0.5   | 1.98E-17 | CD8_UCBMC |
| CRY1               | 5.73E-22 | 0.61176568 | 0.311 | 0.198 | 2.03E-17 | CD8_UCBMC |
| ARL8B              | 6.96E-22 | 0.68303836 | 0.374 | 0.261 | 2.46E-17 | CD8_UCBMC |
| CBLL1              | 7.14E-22 | 0.73263663 | 0.28  | 0.175 | 2.53E-17 | CD8_UCBMC |
| PLEKHB2            | 7.40E-22 | 0.68115816 | 0.337 | 0.224 | 2.62E-17 | CD8_UCBMC |
| MIER1              | 8.64E-22 | 0.44704443 | 0.558 | 0.44  | 3.06E-17 | CD8_UCBMC |
| WDR43              | 9.70E-22 | 0.41290415 | 0.531 | 0.405 | 3.44E-17 | CD8_UCBMC |
| NAE1               | 9.78E-22 | 0.69799253 | 0.339 | 0.232 | 3.47E-17 | CD8_UCBMC |
| SCLT1              | 9.85E-22 | 0.62858703 | 0.391 | 0.279 | 3.49E-17 | CD8_UCBMC |
| SRSF5              | 1.22E-21 | 0.27257472 | 0.869 | 0.754 | 4.31E-17 | CD8_UCBMC |
| VPS54              | 1.28E-21 | 0.67559962 | 0.334 | 0.224 | 4.55E-17 | CD8_UCBMC |
| SREBF2             | 1.36E-21 | 0.72225145 | 0.313 | 0.205 | 4.81E-17 | CD8_UCBMC |
| DNAJC7             | 1.36E-21 | 0.55138815 | 0.414 | 0.297 | 4.82E-17 | CD8_UCBMC |
| USP9X              | 1.36E-21 | 0.42616171 | 0.515 | 0.391 | 4.83E-17 | CD8_UCBMC |
| ATP6V1H            | 1.47E-21 | 0.73717806 | 0.311 | 0.203 | 5.21E-17 | CD8_UCBMC |
| KDM1A              | 1.73E-21 | 0.68205282 | 0.318 | 0.208 | 6.13E-17 | CD8_UCBMC |
| AKAP9              | 1.81E-21 | 0.34825825 | 0.668 | 0.558 | 6.43E-17 | CD8_UCBMC |
| EWSR1              | 1.87E-21 | 0.45838578 | 0.471 | 0.354 | 6.62E-17 | CD8_UCBMC |

|          |          |            |       |       |          |           |
|----------|----------|------------|-------|-------|----------|-----------|
| AP2B1    | 1.90E-21 | 0.65151417 | 0.388 | 0.279 | 6.73E-17 | CD8_UCBMC |
| PPP3CA   | 1.93E-21 | 0.29206045 | 0.736 | 0.602 | 6.83E-17 | CD8_UCBMC |
| ZNF326   | 2.01E-21 | 0.58260188 | 0.428 | 0.316 | 7.12E-17 | CD8_UCBMC |
| TXLNG    | 2.08E-21 | 0.66553709 | 0.364 | 0.253 | 7.39E-17 | CD8_UCBMC |
| DNAJB6   | 2.25E-21 | 0.31848664 | 0.693 | 0.565 | 7.98E-17 | CD8_UCBMC |
| DIAPH2   | 2.29E-21 | 0.46937507 | 0.51  | 0.385 | 8.11E-17 | CD8_UCBMC |
| MXD1     | 2.33E-21 | 0.67786797 | 0.324 | 0.213 | 8.26E-17 | CD8_UCBMC |
| RAB14    | 2.62E-21 | 0.5254011  | 0.408 | 0.294 | 9.28E-17 | CD8_UCBMC |
| BRD7     | 2.63E-21 | 0.59674859 | 0.385 | 0.272 | 9.32E-17 | CD8_UCBMC |
| WDR70    | 2.80E-21 | 0.46099536 | 0.566 | 0.454 | 9.91E-17 | CD8_UCBMC |
| ILRUN    | 4.24E-21 | 0.85400252 | 0.261 | 0.159 | 1.50E-16 | CD8_UCBMC |
| RPL15    | 4.34E-21 | 0.15913534 | 0.991 | 0.98  | 1.54E-16 | CD8_UCBMC |
| ABCB7    | 4.76E-21 | 0.85847866 | 0.291 | 0.191 | 1.69E-16 | CD8_UCBMC |
| PREP     | 5.02E-21 | 0.61249921 | 0.401 | 0.291 | 1.78E-16 | CD8_UCBMC |
| RBM25    | 5.21E-21 | 0.3992999  | 0.574 | 0.458 | 1.85E-16 | CD8_UCBMC |
| JAML     | 5.25E-21 | 0.43125221 | 0.462 | 0.348 | 1.86E-16 | CD8_UCBMC |
| REL      | 5.27E-21 | 0.41352539 | 0.509 | 0.387 | 1.87E-16 | CD8_UCBMC |
| SRSF4    | 5.35E-21 | 0.46748743 | 0.546 | 0.438 | 1.89E-16 | CD8_UCBMC |
| DPM1     | 5.39E-21 | 0.77193397 | 0.286 | 0.184 | 1.91E-16 | CD8_UCBMC |
| ARID1B   | 5.89E-21 | 0.30079795 | 0.732 | 0.598 | 2.09E-16 | CD8_UCBMC |
| SNIP1    | 6.09E-21 | 0.77976647 | 0.281 | 0.18  | 2.16E-16 | CD8_UCBMC |
| RNMT     | 6.56E-21 | 0.24376838 | 0.707 | 0.586 | 2.33E-16 | CD8_UCBMC |
| WDFY1    | 6.75E-21 | 0.67236351 | 0.288 | 0.183 | 2.39E-16 | CD8_UCBMC |
| ARHGAP12 | 7.56E-21 | 0.52322336 | 0.422 | 0.308 | 2.68E-16 | CD8_UCBMC |
| DYM      | 7.65E-21 | 0.47623968 | 0.478 | 0.358 | 2.71E-16 | CD8_UCBMC |
| CAPZA2   | 8.21E-21 | 0.41040488 | 0.579 | 0.461 | 2.91E-16 | CD8_UCBMC |
| IGHMBP2  | 9.26E-21 | 0.63688775 | 0.303 | 0.195 | 3.28E-16 | CD8_UCBMC |
| PEX14    | 9.28E-21 | 0.67773088 | 0.339 | 0.233 | 3.29E-16 | CD8_UCBMC |
| BTBD9    | 1.13E-20 | 0.57274091 | 0.407 | 0.289 | 4.00E-16 | CD8_UCBMC |
| SEPTIN7  | 1.27E-20 | 0.27538741 | 0.827 | 0.721 | 4.50E-16 | CD8_UCBMC |
| PLAG1    | 1.36E-20 | 0.77527731 | 0.268 | 0.166 | 4.81E-16 | CD8_UCBMC |
| GPBP1    | 1.41E-20 | 0.3589459  | 0.695 | 0.585 | 5.01E-16 | CD8_UCBMC |
| RAMAC    | 1.45E-20 | 0.53291092 | 0.337 | 0.222 | 5.14E-16 | CD8_UCBMC |



|                    |          |            |       |       |          |           |
|--------------------|----------|------------|-------|-------|----------|-----------|
| ELK3               | 1.49E-20 | 0.46905623 | 0.455 | 0.339 | 5.29E-16 | CD8_UCBMC |
| ARHGAP26           | 1.50E-20 | 0.6260138  | 0.37  | 0.26  | 5.33E-16 | CD8_UCBMC |
| RLIM               | 1.85E-20 | 0.68925154 | 0.342 | 0.237 | 6.54E-16 | CD8_UCBMC |
| MAPK1              | 1.94E-20 | 0.58084969 | 0.424 | 0.319 | 6.88E-16 | CD8_UCBMC |
| SOS2               | 2.00E-20 | 0.89024647 | 0.25  | 0.152 | 7.09E-16 | CD8_UCBMC |
| CNST               | 2.27E-20 | 0.55559333 | 0.376 | 0.267 | 8.03E-16 | CD8_UCBMC |
| TFG                | 2.45E-20 | 0.73460477 | 0.349 | 0.247 | 8.68E-16 | CD8_UCBMC |
| UBR4               | 2.65E-20 | 0.61952153 | 0.342 | 0.238 | 9.39E-16 | CD8_UCBMC |
| ENSMMUG00000014648 | 2.77E-20 | 0.21314012 | 0.881 | 0.83  | 9.80E-16 | CD8_UCBMC |
| GPBP1L1            | 2.80E-20 | 0.4458093  | 0.502 | 0.386 | 9.91E-16 | CD8_UCBMC |
| MEF2A              | 2.83E-20 | 0.6145302  | 0.407 | 0.296 | 1.00E-15 | CD8_UCBMC |
| GPATCH8            | 2.83E-20 | 0.44071594 | 0.544 | 0.427 | 1.00E-15 | CD8_UCBMC |
| SSBP2              | 3.10E-20 | 0.34228711 | 0.7   | 0.578 | 1.10E-15 | CD8_UCBMC |
| SRRM1              | 3.16E-20 | 0.33837779 | 0.631 | 0.507 | 1.12E-15 | CD8_UCBMC |
| ENSMMUG00000015270 | 3.26E-20 | 0.11389719 | 0.999 | 0.998 | 1.15E-15 | CD8_UCBMC |
| VPS13D             | 3.28E-20 | 0.66173384 | 0.331 | 0.224 | 1.16E-15 | CD8_UCBMC |
| SDHAF4             | 3.44E-20 | 0.43473186 | 0.567 | 0.455 | 1.22E-15 | CD8_UCBMC |
| TRA2B              | 3.49E-20 | 0.23792279 | 0.917 | 0.815 | 1.24E-15 | CD8_UCBMC |
| RTF2               | 3.53E-20 | 0.77433908 | 0.309 | 0.208 | 1.25E-15 | CD8_UCBMC |
| AFF3               | 4.02E-20 | 0.28226444 | 0.773 | 0.65  | 1.43E-15 | CD8_UCBMC |
| RBM23              | 4.12E-20 | 0.70789734 | 0.256 | 0.154 | 1.46E-15 | CD8_UCBMC |
| STAG2              | 4.17E-20 | 0.37597698 | 0.644 | 0.532 | 1.48E-15 | CD8_UCBMC |
| MAP3K7             | 4.82E-20 | 0.68734605 | 0.28  | 0.179 | 1.71E-15 | CD8_UCBMC |
| OSER1              | 5.12E-20 | 0.64150005 | 0.328 | 0.224 | 1.81E-15 | CD8_UCBMC |
| RNF149             | 6.90E-20 | 0.50814566 | 0.425 | 0.315 | 2.45E-15 | CD8_UCBMC |
| ACSL3              | 6.91E-20 | 0.75816917 | 0.28  | 0.18  | 2.45E-15 | CD8_UCBMC |
| ENSMMUG00000031947 | 7.23E-20 | 0.20887245 | 0.838 | 0.754 | 2.56E-15 | CD8_UCBMC |
| CSGALNACT2         | 1.00E-19 | 0.39510592 | 0.534 | 0.418 | 3.54E-15 | CD8_UCBMC |
| KPNA6              | 1.04E-19 | 0.72001579 | 0.291 | 0.191 | 3.68E-15 | CD8_UCBMC |
| CCNC               | 1.08E-19 | 0.55398158 | 0.351 | 0.244 | 3.84E-15 | CD8_UCBMC |
| SNW1               | 1.09E-19 | 0.4535893  | 0.443 | 0.327 | 3.86E-15 | CD8_UCBMC |
| DCK                | 1.13E-19 | 0.7844747  | 0.277 | 0.176 | 3.99E-15 | CD8_UCBMC |
| KDM3B              | 1.24E-19 | 0.54962592 | 0.397 | 0.29  | 4.40E-15 | CD8_UCBMC |

|                   |          |            |       |       |          |           |
|-------------------|----------|------------|-------|-------|----------|-----------|
| EEF2              | 1.24E-19 | 0.23450752 | 0.906 | 0.803 | 4.41E-15 | CD8_UCBMC |
| TCP11L2           | 1.33E-19 | 0.44518714 | 0.393 | 0.281 | 4.71E-15 | CD8_UCBMC |
| NARS1             | 1.34E-19 | 0.45917345 | 0.467 | 0.352 | 4.73E-15 | CD8_UCBMC |
| SNRK              | 1.36E-19 | 0.31199977 | 0.543 | 0.426 | 4.83E-15 | CD8_UCBMC |
| KANSL2            | 1.45E-19 | 0.53255196 | 0.379 | 0.271 | 5.15E-15 | CD8_UCBMC |
| IQGAP2            | 1.61E-19 | 0.42685587 | 0.506 | 0.384 | 5.72E-15 | CD8_UCBMC |
| AP1G1             | 1.73E-19 | 0.60354761 | 0.333 | 0.227 | 6.12E-15 | CD8_UCBMC |
| GRAMD1B           | 2.10E-19 | 0.85930921 | 0.257 | 0.162 | 7.45E-15 | CD8_UCBMC |
| RSRC2             | 2.25E-19 | 0.3145855  | 0.658 | 0.529 | 7.96E-15 | CD8_UCBMC |
| ZDHHHC17          | 2.31E-19 | 0.81573556 | 0.281 | 0.185 | 8.19E-15 | CD8_UCBMC |
| TMCC1             | 2.61E-19 | 0.55744058 | 0.428 | 0.323 | 9.26E-15 | CD8_UCBMC |
| MBTPS1            | 2.79E-19 | 0.46180175 | 0.458 | 0.351 | 9.90E-15 | CD8_UCBMC |
| RNF19A            | 2.91E-19 | 0.55159086 | 0.362 | 0.254 | 1.03E-14 | CD8_UCBMC |
| ANKRD44           | 2.99E-19 | 0.19205381 | 0.925 | 0.78  | 1.06E-14 | CD8_UCBMC |
| UBR1              | 3.05E-19 | 0.40003202 | 0.529 | 0.42  | 1.08E-14 | CD8_UCBMC |
| TMEM245           | 3.23E-19 | 0.68426831 | 0.323 | 0.221 | 1.15E-14 | CD8_UCBMC |
| ANKRD13C          | 3.36E-19 | 0.56465968 | 0.3   | 0.195 | 1.19E-14 | CD8_UCBMC |
| CARMIL1           | 3.39E-19 | 0.67525374 | 0.279 | 0.178 | 1.20E-14 | CD8_UCBMC |
| ANKH              | 3.44E-19 | 0.57745231 | 0.351 | 0.244 | 1.22E-14 | CD8_UCBMC |
| SLU7              | 3.54E-19 | 0.58538507 | 0.35  | 0.246 | 1.25E-14 | CD8_UCBMC |
| TAF3              | 3.59E-19 | 0.50425325 | 0.472 | 0.37  | 1.27E-14 | CD8_UCBMC |
| MATR3             | 3.82E-19 | 0.30096549 | 0.81  | 0.693 | 1.35E-14 | CD8_UCBMC |
| PIK3C2A           | 4.20E-19 | 0.66606009 | 0.325 | 0.225 | 1.49E-14 | CD8_UCBMC |
| ENSMUG00000061630 | 4.26E-19 | 0.34047848 | 0.523 | 0.419 | 1.51E-14 | CD8_UCBMC |
| PUM2              | 4.31E-19 | 0.30661788 | 0.656 | 0.527 | 1.53E-14 | CD8_UCBMC |
| GORASP2           | 4.52E-19 | 0.58543528 | 0.339 | 0.234 | 1.60E-14 | CD8_UCBMC |
| APPL2             | 5.06E-19 | 0.69607369 | 0.283 | 0.184 | 1.79E-14 | CD8_UCBMC |
| CPSF6             | 5.19E-19 | 0.45367938 | 0.445 | 0.34  | 1.84E-14 | CD8_UCBMC |
| CACUL1            | 5.43E-19 | 0.64866432 | 0.262 | 0.163 | 1.93E-14 | CD8_UCBMC |
| MED10             | 5.60E-19 | 0.63390474 | 0.256 | 0.159 | 1.98E-14 | CD8_UCBMC |
| SIN3A             | 5.97E-19 | 0.60282972 | 0.367 | 0.265 | 2.12E-14 | CD8_UCBMC |
| RRM1              | 6.36E-19 | 0.5926517  | 0.29  | 0.188 | 2.25E-14 | CD8_UCBMC |
| RORA              | 6.61E-19 | 0.53303633 | 0.375 | 0.267 | 2.34E-14 | CD8_UCBMC |

|                      |          |            |       |       |          |           |
|----------------------|----------|------------|-------|-------|----------|-----------|
| PPP2R2A              | 7.11E-19 | 0.43027831 | 0.527 | 0.42  | 2.52E-14 | CD8_UCBMC |
| SLC30A9              | 7.38E-19 | 0.57038688 | 0.399 | 0.294 | 2.62E-14 | CD8_UCBMC |
| AAK1                 | 8.66E-19 | 0.33708975 | 0.663 | 0.541 | 3.07E-14 | CD8_UCBMC |
| PRRC2C               | 8.91E-19 | 0.2914128  | 0.784 | 0.672 | 3.16E-14 | CD8_UCBMC |
| GAPVD1               | 1.07E-18 | 0.54500294 | 0.395 | 0.292 | 3.79E-14 | CD8_UCBMC |
| SDHB                 | 1.08E-18 | 0.67670592 | 0.327 | 0.23  | 3.82E-14 | CD8_UCBMC |
| LAMTOR3              | 1.18E-18 | 0.66424175 | 0.279 | 0.181 | 4.17E-14 | CD8_UCBMC |
| CDC27                | 1.18E-18 | 0.60346339 | 0.348 | 0.247 | 4.17E-14 | CD8_UCBMC |
| NAA16                | 1.23E-18 | 0.60490228 | 0.296 | 0.194 | 4.37E-14 | CD8_UCBMC |
| XRCC5                | 1.51E-18 | 0.32103872 | 0.633 | 0.527 | 5.34E-14 | CD8_UCBMC |
| TOX4                 | 1.52E-18 | 0.62547629 | 0.358 | 0.255 | 5.37E-14 | CD8_UCBMC |
| ZC3H18               | 1.79E-18 | 0.54179314 | 0.351 | 0.249 | 6.35E-14 | CD8_UCBMC |
| DNM3                 | 1.85E-18 | 0.42590218 | 0.532 | 0.418 | 6.56E-14 | CD8_UCBMC |
| ZNF506               | 2.46E-18 | 0.56996202 | 0.351 | 0.248 | 8.70E-14 | CD8_UCBMC |
| ENSMMUG000000001894  | 2.66E-18 | 0.50585235 | 0.417 | 0.315 | 9.43E-14 | CD8_UCBMC |
| ATP6V0D1             | 2.81E-18 | 0.59764867 | 0.333 | 0.233 | 9.97E-14 | CD8_UCBMC |
| MED21                | 3.58E-18 | 0.46097913 | 0.344 | 0.238 | 1.27E-13 | CD8_UCBMC |
| ENSMMUG0000000052127 | 3.62E-18 | 0.23495946 | 0.991 | 0.911 | 1.28E-13 | CD8_UCBMC |
| MRPS9                | 4.05E-18 | 0.56949741 | 0.329 | 0.228 | 1.43E-13 | CD8_UCBMC |
| TMX3                 | 4.15E-18 | 0.58993032 | 0.296 | 0.197 | 1.47E-13 | CD8_UCBMC |
| CRNKL1               | 4.33E-18 | 0.6572875  | 0.296 | 0.199 | 1.53E-13 | CD8_UCBMC |
| INPP5A               | 4.40E-18 | 0.51081232 | 0.392 | 0.286 | 1.56E-13 | CD8_UCBMC |
| PDS5B                | 4.61E-18 | 0.4080642  | 0.468 | 0.358 | 1.63E-13 | CD8_UCBMC |
| ARFGAP3              | 4.63E-18 | 0.62173685 | 0.365 | 0.262 | 1.64E-13 | CD8_UCBMC |
| TRIM33               | 4.67E-18 | 0.46213792 | 0.432 | 0.323 | 1.66E-13 | CD8_UCBMC |
| ENSMMUG0000000006293 | 5.16E-18 | 0.43427286 | 0.532 | 0.434 | 1.83E-13 | CD8_UCBMC |
| XPR1                 | 5.50E-18 | 0.48342922 | 0.409 | 0.303 | 1.95E-13 | CD8_UCBMC |
| VTI1A                | 6.10E-18 | 0.34455181 | 0.597 | 0.481 | 2.16E-13 | CD8_UCBMC |
| TRMT10C              | 8.43E-18 | 0.41850523 | 0.396 | 0.285 | 2.99E-13 | CD8_UCBMC |
| SEC22B               | 8.62E-18 | 0.70298479 | 0.276 | 0.184 | 3.05E-13 | CD8_UCBMC |
| BCL2                 | 1.13E-17 | 0.3011685  | 0.502 | 0.386 | 3.99E-13 | CD8_UCBMC |
| TP53BP1              | 1.16E-17 | 0.54707777 | 0.38  | 0.279 | 4.12E-13 | CD8_UCBMC |
| KDM5A                | 1.32E-17 | 0.44491396 | 0.462 | 0.352 | 4.69E-13 | CD8_UCBMC |

|                     |          |            |       |       |          |           |
|---------------------|----------|------------|-------|-------|----------|-----------|
| PNPLA8              | 1.45E-17 | 0.48670007 | 0.377 | 0.273 | 5.13E-13 | CD8_UCBMC |
| ENSMMUG00000007536  | 1.68E-17 | 0.17553758 | 0.597 | 0.482 | 5.96E-13 | CD8_UCBMC |
| ATXN10              | 1.96E-17 | 0.42794968 | 0.55  | 0.458 | 6.93E-13 | CD8_UCBMC |
| FAM168B             | 1.98E-17 | 0.63727013 | 0.292 | 0.198 | 7.01E-13 | CD8_UCBMC |
| ZZZ3                | 2.00E-17 | 0.43202562 | 0.496 | 0.388 | 7.09E-13 | CD8_UCBMC |
| PAIP1               | 2.02E-17 | 0.78163677 | 0.256 | 0.166 | 7.15E-13 | CD8_UCBMC |
| GPHN                | 2.78E-17 | 0.33597324 | 0.632 | 0.515 | 9.85E-13 | CD8_UCBMC |
| KDM4C               | 2.91E-17 | 0.3783817  | 0.568 | 0.457 | 1.03E-12 | CD8_UCBMC |
| TBL1X               | 3.11E-17 | 0.53270163 | 0.41  | 0.312 | 1.10E-12 | CD8_UCBMC |
| PHIP                | 3.16E-17 | 0.41986929 | 0.476 | 0.363 | 1.12E-12 | CD8_UCBMC |
| COX10               | 3.70E-17 | 0.64806535 | 0.292 | 0.197 | 1.31E-12 | CD8_UCBMC |
| ENSMMUG00000002075  | 3.71E-17 | 0.39918497 | 0.289 | 0.188 | 1.31E-12 | CD8_UCBMC |
| ENSMMUG000000063316 | 3.81E-17 | 0.21952086 | 0.631 | 0.483 | 1.35E-12 | CD8_UCBMC |
| ZNF407              | 4.04E-17 | 0.38263629 | 0.516 | 0.403 | 1.43E-12 | CD8_UCBMC |
| CCNT1               | 4.17E-17 | 0.5856596  | 0.322 | 0.224 | 1.48E-12 | CD8_UCBMC |
| RCL1                | 4.23E-17 | 0.71720049 | 0.279 | 0.189 | 1.50E-12 | CD8_UCBMC |
| GRAP                | 4.42E-17 | 0.46749382 | 0.361 | 0.259 | 1.57E-12 | CD8_UCBMC |
| GSTT1               | 4.50E-17 | 0.37369504 | 0.378 | 0.266 | 1.59E-12 | CD8_UCBMC |
| TOR1AIP1            | 4.78E-17 | 0.61198806 | 0.268 | 0.176 | 1.70E-12 | CD8_UCBMC |
| ENSMMUG000000016009 | 5.15E-17 | 0.28228323 | 0.612 | 0.516 | 1.82E-12 | CD8_UCBMC |
| ANKRD11             | 5.17E-17 | 0.29927332 | 0.624 | 0.509 | 1.83E-12 | CD8_UCBMC |
| OGA                 | 5.21E-17 | 0.32337542 | 0.518 | 0.407 | 1.85E-12 | CD8_UCBMC |
| ENTPD4              | 5.42E-17 | 0.65306109 | 0.268 | 0.175 | 1.92E-12 | CD8_UCBMC |
| MAP4K4              | 6.17E-17 | 0.2129621  | 0.699 | 0.571 | 2.18E-12 | CD8_UCBMC |
| ENSMMUG000000022610 | 6.70E-17 | 0.35150584 | 0.511 | 0.406 | 2.37E-12 | CD8_UCBMC |
| SF3B1               | 6.74E-17 | 0.28352888 | 0.73  | 0.622 | 2.39E-12 | CD8_UCBMC |
| MYNN                | 6.87E-17 | 0.50936123 | 0.295 | 0.196 | 2.43E-12 | CD8_UCBMC |
| CDK17               | 6.89E-17 | 0.29021559 | 0.579 | 0.464 | 2.44E-12 | CD8_UCBMC |
| NAMPT               | 7.91E-17 | 0.62337714 | 0.267 | 0.173 | 2.80E-12 | CD8_UCBMC |
| ENSMMUG000000020316 | 8.97E-17 | 0.54506859 | 0.344 | 0.248 | 3.18E-12 | CD8_UCBMC |
| CUX1                | 9.43E-17 | 0.38934057 | 0.564 | 0.458 | 3.34E-12 | CD8_UCBMC |
| CSNK2A1             | 1.21E-16 | 0.3357058  | 0.564 | 0.457 | 4.30E-12 | CD8_UCBMC |
| RTN4                | 1.28E-16 | 0.48670631 | 0.381 | 0.28  | 4.53E-12 | CD8_UCBMC |

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|--------------------|----------|------------|-------|-------|----------|-----------|
| MYO5A              | 1.34E-16 | 0.56687349 | 0.318 | 0.223 | 4.73E-12 | CD8_UCBMC |
| UBR3               | 1.34E-16 | 0.40228329 | 0.418 | 0.311 | 4.73E-12 | CD8_UCBMC |
| ARHGAP32           | 1.42E-16 | 0.5246553  | 0.276 | 0.183 | 5.03E-12 | CD8_UCBMC |
| LNPEP              | 1.89E-16 | 0.34274676 | 0.596 | 0.488 | 6.70E-12 | CD8_UCBMC |
| ACE                | 1.92E-16 | 0.60880676 | 0.288 | 0.197 | 6.81E-12 | CD8_UCBMC |
| ASCC3              | 2.49E-16 | 0.37339063 | 0.497 | 0.396 | 8.81E-12 | CD8_UCBMC |
| PRKCQ              | 2.58E-16 | 0.29947038 | 0.621 | 0.516 | 9.13E-12 | CD8_UCBMC |
| NSMCE2             | 2.71E-16 | 0.38094727 | 0.469 | 0.357 | 9.60E-12 | CD8_UCBMC |
| CLDND1             | 2.76E-16 | 0.4002046  | 0.289 | 0.192 | 9.78E-12 | CD8_UCBMC |
| FOXO3              | 3.04E-16 | 0.64366926 | 0.282 | 0.191 | 1.08E-11 | CD8_UCBMC |
| BIRC2              | 3.13E-16 | 0.33995947 | 0.358 | 0.255 | 1.11E-11 | CD8_UCBMC |
| NRF1               | 3.41E-16 | 0.53487799 | 0.394 | 0.298 | 1.21E-11 | CD8_UCBMC |
| YTHDC1             | 3.76E-16 | 0.34341157 | 0.571 | 0.464 | 1.33E-11 | CD8_UCBMC |
| INTS8              | 3.97E-16 | 0.73730509 | 0.256 | 0.168 | 1.41E-11 | CD8_UCBMC |
| CHIC2              | 4.19E-16 | 0.56341293 | 0.376 | 0.282 | 1.48E-11 | CD8_UCBMC |
| WDR20              | 4.21E-16 | 0.55824683 | 0.283 | 0.191 | 1.49E-11 | CD8_UCBMC |
| C1GALT1            | 4.43E-16 | 0.49936692 | 0.446 | 0.349 | 1.57E-11 | CD8_UCBMC |
| ENSMMUG00000063877 | 4.47E-16 | 0.54390368 | 0.331 | 0.239 | 1.58E-11 | CD8_UCBMC |
| RNPC3              | 4.55E-16 | 0.58115543 | 0.263 | 0.174 | 1.61E-11 | CD8_UCBMC |
| SIPA1L1            | 4.70E-16 | 0.36948412 | 0.559 | 0.455 | 1.66E-11 | CD8_UCBMC |
| TOGARAM1           | 4.96E-16 | 0.58875675 | 0.288 | 0.199 | 1.76E-11 | CD8_UCBMC |
| SEPTIN6            | 5.07E-16 | 0.22018467 | 0.872 | 0.747 | 1.80E-11 | CD8_UCBMC |
| ENSMMUG00000061458 | 5.19E-16 | 0.59970819 | 0.312 | 0.223 | 1.84E-11 | CD8_UCBMC |
| STK38              | 5.29E-16 | 0.2566162  | 0.773 | 0.663 | 1.88E-11 | CD8_UCBMC |
| RHEB               | 5.51E-16 | 0.48497725 | 0.437 | 0.347 | 1.95E-11 | CD8_UCBMC |
| UBE4A              | 5.52E-16 | 0.63767599 | 0.323 | 0.236 | 1.96E-11 | CD8_UCBMC |
| PITPNB             | 5.62E-16 | 0.52785878 | 0.397 | 0.303 | 1.99E-11 | CD8_UCBMC |
| ATP2A2             | 5.65E-16 | 0.46269194 | 0.374 | 0.281 | 2.00E-11 | CD8_UCBMC |
| NCAPD3             | 6.26E-16 | 0.526416   | 0.322 | 0.226 | 2.22E-11 | CD8_UCBMC |
| EIF2S3             | 6.49E-16 | 0.51672012 | 0.396 | 0.302 | 2.30E-11 | CD8_UCBMC |
| EP300              | 6.88E-16 | 0.37728496 | 0.499 | 0.392 | 2.44E-11 | CD8_UCBMC |
| RPS4Y1             | 6.91E-16 | 0.18300347 | 0.829 | 0.709 | 2.45E-11 | CD8_UCBMC |
| SLC23A2            | 7.63E-16 | 0.64478093 | 0.31  | 0.222 | 2.70E-11 | CD8_UCBMC |

|          |          |            |       |       |          |           |
|----------|----------|------------|-------|-------|----------|-----------|
| MAN1A2   | 8.25E-16 | 0.45991931 | 0.423 | 0.323 | 2.92E-11 | CD8_UCBMC |
| BDP1     | 8.29E-16 | 0.3397304  | 0.481 | 0.379 | 2.94E-11 | CD8_UCBMC |
| COPS8    | 9.42E-16 | 0.52811773 | 0.29  | 0.199 | 3.34E-11 | CD8_UCBMC |
| TCEA1    | 9.49E-16 | 0.35635641 | 0.54  | 0.443 | 3.36E-11 | CD8_UCBMC |
| ARAP2    | 1.05E-15 | 0.54924368 | 0.261 | 0.171 | 3.71E-11 | CD8_UCBMC |
| PLCL2    | 1.10E-15 | 0.35752722 | 0.517 | 0.408 | 3.89E-11 | CD8_UCBMC |
| TBC1D5   | 1.16E-15 | 0.22856832 | 0.774 | 0.644 | 4.10E-11 | CD8_UCBMC |
| MPZL1    | 1.46E-15 | 0.44044394 | 0.41  | 0.319 | 5.18E-11 | CD8_UCBMC |
| NSF      | 1.51E-15 | 0.38298699 | 0.531 | 0.422 | 5.35E-11 | CD8_UCBMC |
| KAT6A    | 1.59E-15 | 0.29517364 | 0.595 | 0.488 | 5.64E-11 | CD8_UCBMC |
| BCAS3    | 1.70E-15 | 0.41216955 | 0.524 | 0.429 | 6.02E-11 | CD8_UCBMC |
| GNA13    | 1.73E-15 | 0.48480377 | 0.334 | 0.24  | 6.11E-11 | CD8_UCBMC |
| XPO7     | 1.79E-15 | 0.5661416  | 0.309 | 0.219 | 6.35E-11 | CD8_UCBMC |
| SORL1    | 1.87E-15 | 0.34431812 | 0.595 | 0.493 | 6.64E-11 | CD8_UCBMC |
| FAM222B  | 1.89E-15 | 0.46483189 | 0.356 | 0.262 | 6.69E-11 | CD8_UCBMC |
| ATP6V1E1 | 2.00E-15 | 0.47043231 | 0.323 | 0.233 | 7.08E-11 | CD8_UCBMC |
| EIF4E    | 2.15E-15 | 0.41052072 | 0.354 | 0.257 | 7.60E-11 | CD8_UCBMC |
| EXOC4    | 2.17E-15 | 0.3216404  | 0.643 | 0.532 | 7.70E-11 | CD8_UCBMC |
| KCNQ5    | 2.25E-15 | 0.19437006 | 0.726 | 0.603 | 7.98E-11 | CD8_UCBMC |
| PSMD14   | 2.27E-15 | 0.38171087 | 0.468 | 0.369 | 8.03E-11 | CD8_UCBMC |
| ZCRB1    | 2.28E-15 | 0.52292765 | 0.328 | 0.233 | 8.09E-11 | CD8_UCBMC |
| ARFGEF2  | 2.66E-15 | 0.65838812 | 0.272 | 0.187 | 9.42E-11 | CD8_UCBMC |
| TENT4B   | 2.66E-15 | 0.51964223 | 0.312 | 0.22  | 9.43E-11 | CD8_UCBMC |
| RNF103   | 2.72E-15 | 0.42836692 | 0.359 | 0.262 | 9.65E-11 | CD8_UCBMC |
| THADA    | 2.93E-15 | 0.36395727 | 0.535 | 0.44  | 1.04E-10 | CD8_UCBMC |
| PPP1R12B | 3.15E-15 | 0.70669132 | 0.273 | 0.188 | 1.12E-10 | CD8_UCBMC |
| PJA2     | 3.23E-15 | 0.44814357 | 0.379 | 0.285 | 1.15E-10 | CD8_UCBMC |
| RABGAP1L | 3.27E-15 | 0.19953957 | 0.825 | 0.702 | 1.16E-10 | CD8_UCBMC |
| RSL1D1   | 3.40E-15 | 0.33499946 | 0.509 | 0.411 | 1.21E-10 | CD8_UCBMC |
| APOOL    | 3.48E-15 | 0.7289526  | 0.263 | 0.182 | 1.23E-10 | CD8_UCBMC |
| BICDL1   | 3.91E-15 | 0.1900689  | 0.548 | 0.426 | 1.39E-10 | CD8_UCBMC |
| DERL2    | 4.01E-15 | 0.54825782 | 0.25  | 0.162 | 1.42E-10 | CD8_UCBMC |
| SF3B2    | 4.27E-15 | 0.4139603  | 0.406 | 0.31  | 1.51E-10 | CD8_UCBMC |

|                    |          |            |       |       |          |           |
|--------------------|----------|------------|-------|-------|----------|-----------|
| IARS1              | 4.35E-15 | 0.52232042 | 0.309 | 0.219 | 1.54E-10 | CD8_UCBMC |
| UBE2E3             | 4.37E-15 | 0.61866011 | 0.29  | 0.201 | 1.55E-10 | CD8_UCBMC |
| ENSMMUG00000055026 | 4.40E-15 | 0.25468124 | 0.454 | 0.351 | 1.56E-10 | CD8_UCBMC |
| LRRFIP2            | 4.54E-15 | 0.64389456 | 0.291 | 0.205 | 1.61E-10 | CD8_UCBMC |
| SP3                | 4.66E-15 | 0.46226824 | 0.384 | 0.291 | 1.65E-10 | CD8_UCBMC |
| SH3GLB1            | 4.89E-15 | 0.74480211 | 0.251 | 0.169 | 1.73E-10 | CD8_UCBMC |
| HERPUD2            | 5.30E-15 | 0.44611031 | 0.371 | 0.275 | 1.88E-10 | CD8_UCBMC |
| SDHC               | 5.36E-15 | 0.51740622 | 0.32  | 0.232 | 1.90E-10 | CD8_UCBMC |
| HOOK3              | 6.22E-15 | 0.34604205 | 0.57  | 0.481 | 2.20E-10 | CD8_UCBMC |
| TBL1XR1            | 6.99E-15 | 0.21352597 | 0.702 | 0.583 | 2.48E-10 | CD8_UCBMC |
| ERP44              | 8.52E-15 | 0.38864781 | 0.414 | 0.317 | 3.02E-10 | CD8_UCBMC |
| RBM34              | 8.82E-15 | 0.47767524 | 0.291 | 0.202 | 3.12E-10 | CD8_UCBMC |
| ZFAND3             | 9.28E-15 | 0.29021605 | 0.646 | 0.533 | 3.29E-10 | CD8_UCBMC |
| PCMTD1             | 1.06E-14 | 0.36498707 | 0.478 | 0.38  | 3.76E-10 | CD8_UCBMC |
| DOCK10             | 1.07E-14 | 0.25136829 | 0.749 | 0.652 | 3.78E-10 | CD8_UCBMC |
| FGD3               | 1.08E-14 | 0.3104962  | 0.52  | 0.414 | 3.83E-10 | CD8_UCBMC |
| ZNF207             | 1.11E-14 | 0.36171272 | 0.515 | 0.424 | 3.93E-10 | CD8_UCBMC |
| SMG6               | 1.12E-14 | 0.31190432 | 0.569 | 0.459 | 3.96E-10 | CD8_UCBMC |
| DENND4A            | 1.12E-14 | 0.10897369 | 0.831 | 0.723 | 3.97E-10 | CD8_UCBMC |
| PRIM2              | 1.15E-14 | 0.57385717 | 0.292 | 0.205 | 4.09E-10 | CD8_UCBMC |
| MAMU-A             | 1.35E-14 | 0.22133459 | 0.786 | 0.697 | 4.79E-10 | CD8_UCBMC |
| TEX10              | 1.53E-14 | 0.44532395 | 0.319 | 0.227 | 5.42E-10 | CD8_UCBMC |
| ELOVL5             | 1.53E-14 | 0.34956287 | 0.468 | 0.37  | 5.43E-10 | CD8_UCBMC |
| STK24              | 1.69E-14 | 0.52773138 | 0.314 | 0.226 | 5.99E-10 | CD8_UCBMC |
| MAPK6              | 1.76E-14 | 0.57892215 | 0.294 | 0.21  | 6.24E-10 | CD8_UCBMC |
| FBXO21             | 1.81E-14 | 0.57293901 | 0.292 | 0.208 | 6.41E-10 | CD8_UCBMC |
| TMEM106B           | 1.82E-14 | 0.5578209  | 0.297 | 0.213 | 6.44E-10 | CD8_UCBMC |
| TOP1               | 2.11E-14 | 0.26180059 | 0.717 | 0.598 | 7.48E-10 | CD8_UCBMC |
| C15H9orf78         | 2.27E-14 | 0.32615221 | 0.548 | 0.459 | 8.05E-10 | CD8_UCBMC |
| TSG101             | 2.48E-14 | 0.55173801 | 0.304 | 0.216 | 8.79E-10 | CD8_UCBMC |
| ITGA6              | 3.15E-14 | 0.24937776 | 0.64  | 0.534 | 1.12E-09 | CD8_UCBMC |
| IST1               | 3.55E-14 | 0.48446429 | 0.323 | 0.234 | 1.26E-09 | CD8_UCBMC |
| ERC1               | 3.76E-14 | 0.46257911 | 0.341 | 0.254 | 1.33E-09 | CD8_UCBMC |

|            |          |            |       |       |          |           |
|------------|----------|------------|-------|-------|----------|-----------|
| TP53BP2    | 4.14E-14 | 0.64812983 | 0.288 | 0.207 | 1.47E-09 | CD8_UCBMC |
| RNF216     | 4.75E-14 | 0.35605659 | 0.482 | 0.386 | 1.68E-09 | CD8_UCBMC |
| UBE3C      | 5.01E-14 | 0.43882579 | 0.396 | 0.309 | 1.78E-09 | CD8_UCBMC |
| PHF11      | 5.09E-14 | 0.42802601 | 0.372 | 0.283 | 1.80E-09 | CD8_UCBMC |
| CEP85L     | 5.78E-14 | 0.31174056 | 0.492 | 0.394 | 2.05E-09 | CD8_UCBMC |
| FAR1       | 5.80E-14 | 0.42649407 | 0.4   | 0.311 | 2.05E-09 | CD8_UCBMC |
| TPP2       | 5.99E-14 | 0.52130201 | 0.33  | 0.244 | 2.12E-09 | CD8_UCBMC |
| C3H21orf91 | 6.41E-14 | 0.46760331 | 0.319 | 0.233 | 2.27E-09 | CD8_UCBMC |
| UVRAG      | 6.65E-14 | 0.41040655 | 0.482 | 0.393 | 2.36E-09 | CD8_UCBMC |
| MDM4       | 7.14E-14 | 0.38565236 | 0.435 | 0.34  | 2.53E-09 | CD8_UCBMC |
| ERLEC1     | 7.29E-14 | 0.5437714  | 0.299 | 0.217 | 2.58E-09 | CD8_UCBMC |
| ATP5PB     | 7.83E-14 | 0.34761507 | 0.485 | 0.401 | 2.77E-09 | CD8_UCBMC |
| ACO2       | 7.99E-14 | 0.43043654 | 0.321 | 0.233 | 2.83E-09 | CD8_UCBMC |
| FKBP3      | 8.49E-14 | 0.36598891 | 0.407 | 0.314 | 3.01E-09 | CD8_UCBMC |
| FHIT       | 8.70E-14 | 0.46731702 | 0.358 | 0.267 | 3.08E-09 | CD8_UCBMC |
| BNIP2      | 9.30E-14 | 0.53295539 | 0.264 | 0.183 | 3.29E-09 | CD8_UCBMC |
| DIDO1      | 9.45E-14 | 0.5557113  | 0.304 | 0.222 | 3.35E-09 | CD8_UCBMC |
| RNF125     | 1.03E-13 | 0.52786215 | 0.268 | 0.185 | 3.66E-09 | CD8_UCBMC |
| IRF1       | 1.07E-13 | 0.37739434 | 0.301 | 0.214 | 3.81E-09 | CD8_UCBMC |
| CDC40      | 1.09E-13 | 0.48761697 | 0.326 | 0.24  | 3.87E-09 | CD8_UCBMC |
| NUFIP2     | 1.18E-13 | 0.34863318 | 0.477 | 0.378 | 4.17E-09 | CD8_UCBMC |
| PTPN2      | 1.21E-13 | 0.41316083 | 0.474 | 0.388 | 4.27E-09 | CD8_UCBMC |
| PREX1      | 1.21E-13 | 0.37524528 | 0.409 | 0.32  | 4.28E-09 | CD8_UCBMC |
| HERPUD1    | 1.40E-13 | 0.48136566 | 0.277 | 0.193 | 4.96E-09 | CD8_UCBMC |
| ECSIT      | 1.48E-13 | 0.61074112 | 0.252 | 0.173 | 5.23E-09 | CD8_UCBMC |
| ASAP1      | 1.50E-13 | 0.28493058 | 0.546 | 0.442 | 5.31E-09 | CD8_UCBMC |
| NKTR       | 1.64E-13 | 0.41243234 | 0.422 | 0.335 | 5.79E-09 | CD8_UCBMC |
| NFKBIA     | 1.67E-13 | 0.32783441 | 0.367 | 0.275 | 5.92E-09 | CD8_UCBMC |
| SFMBT1     | 1.76E-13 | 0.5435253  | 0.325 | 0.242 | 6.24E-09 | CD8_UCBMC |
| ANKRD28    | 2.01E-13 | 0.36118903 | 0.457 | 0.366 | 7.12E-09 | CD8_UCBMC |
| NAA15      | 2.04E-13 | 0.40618486 | 0.401 | 0.313 | 7.23E-09 | CD8_UCBMC |
| MACF1      | 2.45E-13 | 0.22042824 | 0.655 | 0.548 | 8.69E-09 | CD8_UCBMC |
| DDX3Y      | 2.87E-13 | 0.17965695 | 0.576 | 0.443 | 1.02E-08 | CD8_UCBMC |



|                   |          |            |       |       |          |           |
|-------------------|----------|------------|-------|-------|----------|-----------|
| MTPN              | 2.93E-13 | 0.36929745 | 0.44  | 0.357 | 1.04E-08 | CD8_UCBMC |
| ANKIB1            | 3.17E-13 | 0.36492706 | 0.427 | 0.338 | 1.12E-08 | CD8_UCBMC |
| TTC14             | 3.34E-13 | 0.48311871 | 0.337 | 0.252 | 1.18E-08 | CD8_UCBMC |
| MCUB              | 3.46E-13 | 0.34778807 | 0.5   | 0.409 | 1.23E-08 | CD8_UCBMC |
| GLMN              | 3.56E-13 | 0.41718869 | 0.405 | 0.315 | 1.26E-08 | CD8_UCBMC |
| LMTK2             | 3.82E-13 | 0.41821511 | 0.387 | 0.3   | 1.35E-08 | CD8_UCBMC |
| PDE4D             | 4.23E-13 | 0.29058822 | 0.399 | 0.308 | 1.50E-08 | CD8_UCBMC |
| CTNBNL1           | 4.48E-13 | 0.35219346 | 0.422 | 0.33  | 1.59E-08 | CD8_UCBMC |
| HNRNPM            | 4.69E-13 | 0.29023621 | 0.551 | 0.46  | 1.66E-08 | CD8_UCBMC |
| CHD8              | 4.74E-13 | 0.59382607 | 0.253 | 0.175 | 1.68E-08 | CD8_UCBMC |
| CCDC59            | 5.17E-13 | 0.47315752 | 0.317 | 0.234 | 1.83E-08 | CD8_UCBMC |
| GALNT7            | 5.70E-13 | 0.55273161 | 0.301 | 0.22  | 2.02E-08 | CD8_UCBMC |
| CDK12             | 5.89E-13 | 0.44454798 | 0.351 | 0.264 | 2.09E-08 | CD8_UCBMC |
| RIPOR2            | 6.06E-13 | 0.13229651 | 0.964 | 0.879 | 2.15E-08 | CD8_UCBMC |
| EIF3L             | 6.06E-13 | 0.22747228 | 0.691 | 0.602 | 2.15E-08 | CD8_UCBMC |
| FAM91A1           | 6.06E-13 | 0.59852576 | 0.257 | 0.181 | 2.15E-08 | CD8_UCBMC |
| MLXIP             | 7.04E-13 | 0.551915   | 0.321 | 0.243 | 2.50E-08 | CD8_UCBMC |
| VRK1              | 7.56E-13 | 0.46651555 | 0.313 | 0.232 | 2.68E-08 | CD8_UCBMC |
| WBP11             | 7.71E-13 | 0.35368812 | 0.392 | 0.309 | 2.73E-08 | CD8_UCBMC |
| SZRD1             | 8.02E-13 | 0.46544505 | 0.314 | 0.232 | 2.84E-08 | CD8_UCBMC |
| MPHOSPH10         | 8.18E-13 | 0.50715984 | 0.267 | 0.188 | 2.90E-08 | CD8_UCBMC |
| ST6GAL1           | 8.29E-13 | 0.27386305 | 0.566 | 0.467 | 2.94E-08 | CD8_UCBMC |
| ELMOD3            | 8.40E-13 | 0.39749931 | 0.388 | 0.3   | 2.98E-08 | CD8_UCBMC |
| RBBP6             | 1.03E-12 | 0.42491597 | 0.362 | 0.277 | 3.64E-08 | CD8_UCBMC |
| ELF2              | 1.06E-12 | 0.43289974 | 0.347 | 0.262 | 3.75E-08 | CD8_UCBMC |
| KIAA1328          | 1.11E-12 | 0.51572088 | 0.336 | 0.254 | 3.92E-08 | CD8_UCBMC |
| C20H16orf72       | 1.14E-12 | 0.33220461 | 0.42  | 0.329 | 4.05E-08 | CD8_UCBMC |
| ZC3H11A           | 1.16E-12 | 0.32682951 | 0.493 | 0.411 | 4.09E-08 | CD8_UCBMC |
| NCOA2             | 1.26E-12 | 0.43475346 | 0.42  | 0.339 | 4.45E-08 | CD8_UCBMC |
| TMEM135           | 1.30E-12 | 0.45179091 | 0.341 | 0.259 | 4.60E-08 | CD8_UCBMC |
| ENSMUG00000061125 | 1.55E-12 | 0.10183673 | 0.716 | 0.561 | 5.51E-08 | CD8_UCBMC |
| PRPF18            | 1.60E-12 | 0.54322818 | 0.254 | 0.177 | 5.67E-08 | CD8_UCBMC |
| FAM118A           | 1.71E-12 | 0.29829595 | 0.422 | 0.334 | 6.07E-08 | CD8_UCBMC |

|                     |          |            |       |       |          |           |
|---------------------|----------|------------|-------|-------|----------|-----------|
| ARHGEF6             | 1.73E-12 | 0.39068735 | 0.349 | 0.265 | 6.14E-08 | CD8_UCBMC |
| TCF25               | 1.73E-12 | 0.35567743 | 0.375 | 0.291 | 6.14E-08 | CD8_UCBMC |
| SEC61A2             | 1.85E-12 | 0.50638797 | 0.317 | 0.239 | 6.54E-08 | CD8_UCBMC |
| RNF34               | 1.96E-12 | 0.4999404  | 0.279 | 0.199 | 6.93E-08 | CD8_UCBMC |
| CWF19L2             | 2.29E-12 | 0.37164813 | 0.41  | 0.326 | 8.12E-08 | CD8_UCBMC |
| CLIP1               | 2.32E-12 | 0.50980573 | 0.285 | 0.207 | 8.20E-08 | CD8_UCBMC |
| MED30               | 2.38E-12 | 0.44985145 | 0.357 | 0.278 | 8.42E-08 | CD8_UCBMC |
| ANKRD17             | 2.47E-12 | 0.27375648 | 0.549 | 0.455 | 8.74E-08 | CD8_UCBMC |
| DHX29               | 2.60E-12 | 0.37507363 | 0.32  | 0.236 | 9.21E-08 | CD8_UCBMC |
| SMU1                | 2.61E-12 | 0.41219587 | 0.356 | 0.273 | 9.26E-08 | CD8_UCBMC |
| ND2                 | 2.66E-12 | 0.11805234 | 0.956 | 0.887 | 9.42E-08 | CD8_UCBMC |
| RFTN1               | 2.76E-12 | 0.38655361 | 0.431 | 0.347 | 9.77E-08 | CD8_UCBMC |
| RBM7                | 2.77E-12 | 0.44130812 | 0.251 | 0.174 | 9.82E-08 | CD8_UCBMC |
| SH3KBP1             | 2.86E-12 | 0.18934575 | 0.847 | 0.73  | 1.01E-07 | CD8_UCBMC |
| FAM193A             | 3.22E-12 | 0.42052239 | 0.355 | 0.275 | 1.14E-07 | CD8_UCBMC |
| RHOA                | 3.23E-12 | 0.22152238 | 0.741 | 0.652 | 1.15E-07 | CD8_UCBMC |
| FBXW2               | 3.30E-12 | 0.48851809 | 0.27  | 0.193 | 1.17E-07 | CD8_UCBMC |
| ATP2B1              | 3.42E-12 | 0.4497319  | 0.27  | 0.191 | 1.21E-07 | CD8_UCBMC |
| ENSMMUG000000062716 | 3.66E-12 | 0.65066731 | 0.274 | 0.197 | 1.30E-07 | CD8_UCBMC |
| ENSMMUG000000012690 | 3.75E-12 | 0.49360584 | 0.277 | 0.2   | 1.33E-07 | CD8_UCBMC |
| VPS36               | 4.28E-12 | 0.51285392 | 0.283 | 0.207 | 1.52E-07 | CD8_UCBMC |
| RPAP2               | 4.39E-12 | 0.44743868 | 0.317 | 0.239 | 1.56E-07 | CD8_UCBMC |
| RPTOR               | 4.91E-12 | 0.43306606 | 0.388 | 0.31  | 1.74E-07 | CD8_UCBMC |
| DCAF8               | 5.04E-12 | 0.3784292  | 0.372 | 0.291 | 1.79E-07 | CD8_UCBMC |
| PPP4R3A             | 5.06E-12 | 0.4378152  | 0.325 | 0.248 | 1.79E-07 | CD8_UCBMC |
| MYO6                | 5.09E-12 | 0.65821779 | 0.264 | 0.191 | 1.80E-07 | CD8_UCBMC |
| NFKBIB              | 5.17E-12 | 0.58988116 | 0.279 | 0.206 | 1.83E-07 | CD8_UCBMC |
| PKN2                | 5.32E-12 | 0.36180468 | 0.52  | 0.441 | 1.89E-07 | CD8_UCBMC |
| DOCK2               | 5.39E-12 | 0.21604677 | 0.714 | 0.601 | 1.91E-07 | CD8_UCBMC |
| EIF4H               | 5.45E-12 | 0.3430325  | 0.449 | 0.369 | 1.93E-07 | CD8_UCBMC |
| TNFRSF10A           | 5.60E-12 | 0.61944921 | 0.253 | 0.179 | 1.99E-07 | CD8_UCBMC |
| HSF2                | 5.62E-12 | 0.49174933 | 0.269 | 0.194 | 1.99E-07 | CD8_UCBMC |
| NFATC3              | 5.63E-12 | 0.26498099 | 0.567 | 0.478 | 2.00E-07 | CD8_UCBMC |

|              |          |            |       |       |          |           |
|--------------|----------|------------|-------|-------|----------|-----------|
| HNRNPR       | 5.65E-12 | 0.2691861  | 0.534 | 0.439 | 2.00E-07 | CD8_UCBMC |
| PTEN         | 5.69E-12 | 0.39722276 | 0.435 | 0.349 | 2.02E-07 | CD8_UCBMC |
| VAPA         | 5.87E-12 | 0.31677111 | 0.548 | 0.478 | 2.08E-07 | CD8_UCBMC |
| ANKRD12      | 5.91E-12 | 0.23059544 | 0.577 | 0.481 | 2.09E-07 | CD8_UCBMC |
| FAM133B      | 6.49E-12 | 0.31433408 | 0.433 | 0.346 | 2.30E-07 | CD8_UCBMC |
| USP36        | 6.50E-12 | 0.31461364 | 0.408 | 0.319 | 2.30E-07 | CD8_UCBMC |
| SMG7         | 6.86E-12 | 0.43021074 | 0.401 | 0.319 | 2.43E-07 | CD8_UCBMC |
| JUND         | 7.08E-12 | 0.28222977 | 0.619 | 0.547 | 2.51E-07 | CD8_UCBMC |
| EIF2A        | 7.15E-12 | 0.35042568 | 0.411 | 0.326 | 2.53E-07 | CD8_UCBMC |
| RAP1GDS1     | 7.46E-12 | 0.54760286 | 0.296 | 0.218 | 2.64E-07 | CD8_UCBMC |
| PCNP         | 9.14E-12 | 0.33601684 | 0.441 | 0.357 | 3.24E-07 | CD8_UCBMC |
| SCFD2        | 9.17E-12 | 0.37609107 | 0.474 | 0.391 | 3.25E-07 | CD8_UCBMC |
| PAK1IP1      | 9.22E-12 | 0.4123177  | 0.364 | 0.281 | 3.27E-07 | CD8_UCBMC |
| FBXL17       | 9.37E-12 | 0.36030561 | 0.421 | 0.333 | 3.32E-07 | CD8_UCBMC |
| TMEM50A      | 9.37E-12 | 0.31439713 | 0.475 | 0.396 | 3.32E-07 | CD8_UCBMC |
| CS           | 9.57E-12 | 0.30499813 | 0.475 | 0.39  | 3.39E-07 | CD8_UCBMC |
| KDM2A        | 1.00E-11 | 0.26771051 | 0.564 | 0.474 | 3.56E-07 | CD8_UCBMC |
| RALGAPA2     | 1.14E-11 | 0.41960425 | 0.388 | 0.304 | 4.04E-07 | CD8_UCBMC |
| USP14        | 1.24E-11 | 0.52887828 | 0.318 | 0.244 | 4.39E-07 | CD8_UCBMC |
| PDS5A        | 1.27E-11 | 0.29502797 | 0.474 | 0.385 | 4.51E-07 | CD8_UCBMC |
| TRRAP        | 1.30E-11 | 0.60951608 | 0.267 | 0.196 | 4.60E-07 | CD8_UCBMC |
| AP2A2        | 1.49E-11 | 0.54691813 | 0.279 | 0.206 | 5.27E-07 | CD8_UCBMC |
| C10H20orf194 | 1.50E-11 | 0.56683433 | 0.267 | 0.195 | 5.33E-07 | CD8_UCBMC |
| MECP2        | 1.50E-11 | 0.37839748 | 0.388 | 0.304 | 5.33E-07 | CD8_UCBMC |
| TRPC4AP      | 1.57E-11 | 0.4460431  | 0.354 | 0.278 | 5.57E-07 | CD8_UCBMC |
| SEC63        | 1.68E-11 | 0.24059776 | 0.548 | 0.457 | 5.96E-07 | CD8_UCBMC |
| COPS2        | 1.86E-11 | 0.39293162 | 0.366 | 0.283 | 6.59E-07 | CD8_UCBMC |
| AUH          | 1.87E-11 | 0.38784356 | 0.364 | 0.283 | 6.61E-07 | CD8_UCBMC |
| PFDN1        | 2.02E-11 | 0.28061695 | 0.421 | 0.338 | 7.14E-07 | CD8_UCBMC |
| ARF1         | 2.12E-11 | 0.20938096 | 0.621 | 0.528 | 7.50E-07 | CD8_UCBMC |
| USP7         | 2.25E-11 | 0.43228789 | 0.3   | 0.222 | 7.99E-07 | CD8_UCBMC |
| DHX8         | 2.54E-11 | 0.4400829  | 0.265 | 0.191 | 8.99E-07 | CD8_UCBMC |
| FMC1-LUC7L2  | 2.66E-11 | 0.23304176 | 0.705 | 0.611 | 9.42E-07 | CD8_UCBMC |

|                    |          |            |       |       |          |           |
|--------------------|----------|------------|-------|-------|----------|-----------|
| FANCC              | 2.92E-11 | 0.32777514 | 0.37  | 0.289 | 1.03E-06 | CD8_UCBMC |
| BRWD1              | 2.97E-11 | 0.28818586 | 0.503 | 0.422 | 1.05E-06 | CD8_UCBMC |
| ASXL1              | 3.85E-11 | 0.46977135 | 0.317 | 0.241 | 1.36E-06 | CD8_UCBMC |
| ENSMMUG00000055687 | 4.01E-11 | 0.34401159 | 0.45  | 0.367 | 1.42E-06 | CD8_UCBMC |
| DOP1B              | 4.38E-11 | 0.35645231 | 0.361 | 0.282 | 1.55E-06 | CD8_UCBMC |
| MAP2K5             | 4.44E-11 | 0.47538149 | 0.323 | 0.25  | 1.57E-06 | CD8_UCBMC |
| MED4               | 4.52E-11 | 0.39501567 | 0.304 | 0.225 | 1.60E-06 | CD8_UCBMC |
| SH2D1A             | 5.15E-11 | 0.38148755 | 0.258 | 0.184 | 1.82E-06 | CD8_UCBMC |
| CLSTN1             | 5.31E-11 | 0.59416746 | 0.259 | 0.189 | 1.88E-06 | CD8_UCBMC |
| SP110              | 5.46E-11 | 0.2571434  | 0.553 | 0.466 | 1.93E-06 | CD8_UCBMC |
| ENSMMUG00000021539 | 5.58E-11 | 0.51176478 | 0.256 | 0.186 | 1.98E-06 | CD8_UCBMC |
| PRKCB              | 5.80E-11 | 0.19115096 | 0.653 | 0.547 | 2.06E-06 | CD8_UCBMC |
| FXR1               | 6.49E-11 | 0.25555306 | 0.583 | 0.493 | 2.30E-06 | CD8_UCBMC |
| NBEA               | 6.90E-11 | 0.31567591 | 0.459 | 0.373 | 2.45E-06 | CD8_UCBMC |
| SMYD3              | 7.54E-11 | 0.19570136 | 0.62  | 0.526 | 2.67E-06 | CD8_UCBMC |
| NECAP1             | 8.08E-11 | 0.52937016 | 0.276 | 0.207 | 2.86E-06 | CD8_UCBMC |
| ENSMMUG00000054982 | 8.36E-11 | 0.24637072 | 0.349 | 0.263 | 2.96E-06 | CD8_UCBMC |
| ITPR2              | 8.59E-11 | 0.23395463 | 0.561 | 0.469 | 3.04E-06 | CD8_UCBMC |
| FTO                | 9.52E-11 | 0.38147194 | 0.35  | 0.271 | 3.37E-06 | CD8_UCBMC |
| CDC5L              | 9.92E-11 | 0.40883251 | 0.341 | 0.268 | 3.51E-06 | CD8_UCBMC |
| TMED2              | 1.05E-10 | 0.45365495 | 0.334 | 0.264 | 3.73E-06 | CD8_UCBMC |
| FAM204A            | 1.06E-10 | 0.3699354  | 0.29  | 0.215 | 3.76E-06 | CD8_UCBMC |
| MRPL44             | 1.22E-10 | 0.43196614 | 0.268 | 0.196 | 4.32E-06 | CD8_UCBMC |
| TRIM25             | 1.33E-10 | 0.45809365 | 0.275 | 0.204 | 4.72E-06 | CD8_UCBMC |
| APP                | 1.44E-10 | 0.38543212 | 0.312 | 0.239 | 5.11E-06 | CD8_UCBMC |
| OFD1               | 1.44E-10 | 0.42329022 | 0.26  | 0.189 | 5.11E-06 | CD8_UCBMC |
| RIC1               | 1.47E-10 | 0.4256937  | 0.36  | 0.289 | 5.23E-06 | CD8_UCBMC |
| SAR1A              | 1.51E-10 | 0.37580182 | 0.327 | 0.252 | 5.36E-06 | CD8_UCBMC |
| BABAM2             | 1.54E-10 | 0.30969758 | 0.451 | 0.369 | 5.47E-06 | CD8_UCBMC |
| ACTR10             | 1.55E-10 | 0.36002996 | 0.328 | 0.25  | 5.51E-06 | CD8_UCBMC |
| ATP5PO             | 1.67E-10 | 0.18807317 | 0.773 | 0.696 | 5.92E-06 | CD8_UCBMC |
| GOLM2              | 1.70E-10 | 0.28149677 | 0.482 | 0.401 | 6.02E-06 | CD8_UCBMC |
| PSMA6              | 1.73E-10 | 0.31908119 | 0.374 | 0.294 | 6.12E-06 | CD8_UCBMC |

|                   |          |            |       |       |          |           |
|-------------------|----------|------------|-------|-------|----------|-----------|
| TOX               | 1.77E-10 | 0.10691735 | 0.755 | 0.616 | 6.27E-06 | CD8_UCBMC |
| ABCG2             | 1.81E-10 | 0.39411905 | 0.327 | 0.251 | 6.42E-06 | CD8_UCBMC |
| ITFG1             | 1.87E-10 | 0.35533413 | 0.412 | 0.333 | 6.61E-06 | CD8_UCBMC |
| DDB1              | 1.92E-10 | 0.44448317 | 0.263 | 0.193 | 6.81E-06 | CD8_UCBMC |
| TRANK1            | 2.08E-10 | 0.46484018 | 0.306 | 0.236 | 7.35E-06 | CD8_UCBMC |
| KCTD20            | 2.15E-10 | 0.34670715 | 0.387 | 0.314 | 7.62E-06 | CD8_UCBMC |
| CD44              | 2.16E-10 | 0.2317725  | 0.725 | 0.638 | 7.67E-06 | CD8_UCBMC |
| JARID2            | 2.23E-10 | 0.20097455 | 0.703 | 0.607 | 7.88E-06 | CD8_UCBMC |
| UGCG              | 2.58E-10 | 0.41939745 | 0.273 | 0.2   | 9.15E-06 | CD8_UCBMC |
| IP6K2             | 2.63E-10 | 0.3219008  | 0.409 | 0.331 | 9.33E-06 | CD8_UCBMC |
| CRBN              | 2.78E-10 | 0.46304395 | 0.266 | 0.196 | 9.84E-06 | CD8_UCBMC |
| FNBP4             | 3.12E-10 | 0.30356519 | 0.414 | 0.338 | 1.11E-05 | CD8_UCBMC |
| CDC42             | 3.13E-10 | 0.13207233 | 0.941 | 0.865 | 1.11E-05 | CD8_UCBMC |
| CEBPZ             | 3.22E-10 | 0.26353394 | 0.437 | 0.363 | 1.14E-05 | CD8_UCBMC |
| NAPG              | 3.31E-10 | 0.42995996 | 0.296 | 0.225 | 1.17E-05 | CD8_UCBMC |
| EXOC2             | 3.49E-10 | 0.45972168 | 0.264 | 0.197 | 1.24E-05 | CD8_UCBMC |
| ZZEF1             | 3.55E-10 | 0.33989614 | 0.315 | 0.241 | 1.26E-05 | CD8_UCBMC |
| TRNT1             | 3.62E-10 | 0.53860041 | 0.292 | 0.224 | 1.28E-05 | CD8_UCBMC |
| ENSMUG00000065104 | 4.11E-10 | 0.15985887 | 0.684 | 0.609 | 1.46E-05 | CD8_UCBMC |
| SPTBN1            | 4.11E-10 | 0.20702186 | 0.6   | 0.52  | 1.46E-05 | CD8_UCBMC |
| ADD1              | 4.12E-10 | 0.35018261 | 0.402 | 0.331 | 1.46E-05 | CD8_UCBMC |
| UBA3              | 4.42E-10 | 0.4313627  | 0.279 | 0.21  | 1.57E-05 | CD8_UCBMC |
| TNFSF8            | 4.53E-10 | 0.35402748 | 0.33  | 0.255 | 1.60E-05 | CD8_UCBMC |
| RABGEF1           | 4.71E-10 | 0.44699828 | 0.297 | 0.227 | 1.67E-05 | CD8_UCBMC |
| SYAP1             | 5.12E-10 | 0.28402417 | 0.391 | 0.311 | 1.82E-05 | CD8_UCBMC |
| PSMA3             | 5.43E-10 | 0.24780654 | 0.458 | 0.383 | 1.93E-05 | CD8_UCBMC |
| PSMD11            | 5.79E-10 | 0.47171361 | 0.269 | 0.202 | 2.05E-05 | CD8_UCBMC |
| CLASP1            | 6.65E-10 | 0.31717716 | 0.397 | 0.322 | 2.36E-05 | CD8_UCBMC |
| GPCPD1            | 6.78E-10 | 0.20512089 | 0.549 | 0.474 | 2.40E-05 | CD8_UCBMC |
| PTPN4             | 7.31E-10 | 0.27176492 | 0.503 | 0.427 | 2.59E-05 | CD8_UCBMC |
| PRPF8             | 7.97E-10 | 0.33448733 | 0.372 | 0.296 | 2.82E-05 | CD8_UCBMC |
| ACBD3             | 8.29E-10 | 0.54439927 | 0.25  | 0.186 | 2.94E-05 | CD8_UCBMC |
| PPIP5K2           | 8.81E-10 | 0.4630392  | 0.292 | 0.225 | 3.12E-05 | CD8_UCBMC |

|                     |          |            |       |       |            |           |
|---------------------|----------|------------|-------|-------|------------|-----------|
| NLRC5               | 9.54E-10 | 0.49469017 | 0.282 | 0.214 | 3.38E-05   | CD8_UCBMC |
| KPNA4               | 1.05E-09 | 0.47967826 | 0.282 | 0.215 | 3.71E-05   | CD8_UCBMC |
| MLLT3               | 1.06E-09 | 0.19026762 | 0.624 | 0.525 | 3.77E-05   | CD8_UCBMC |
| YAF2                | 1.07E-09 | 0.29561861 | 0.454 | 0.379 | 3.80E-05   | CD8_UCBMC |
| ZBTB11              | 1.07E-09 | 0.46672892 | 0.266 | 0.202 | 3.80E-05   | CD8_UCBMC |
| PIK3IP1             | 1.07E-09 | 0.42379313 | 0.275 | 0.208 | 3.81E-05   | CD8_UCBMC |
| SAFB2               | 1.08E-09 | 0.37109906 | 0.307 | 0.237 | 3.81E-05   | CD8_UCBMC |
| ENSMMUG00000005482  | 1.09E-09 | 0.28342517 | 0.396 | 0.317 | 3.88E-05   | CD8_UCBMC |
| TPR                 | 1.10E-09 | 0.23771404 | 0.5   | 0.41  | 3.91E-05   | CD8_UCBMC |
| NOP14               | 1.17E-09 | 0.44960652 | 0.276 | 0.21  | 4.14E-05   | CD8_UCBMC |
| KIAA1109            | 1.48E-09 | 0.44537115 | 0.304 | 0.238 | 5.24E-05   | CD8_UCBMC |
| POGZ                | 1.60E-09 | 0.29755238 | 0.406 | 0.333 | 5.67E-05   | CD8_UCBMC |
| ENSMMUG00000001210  | 1.63E-09 | 0.11727863 | 0.943 | 0.934 | 5.78E-05   | CD8_UCBMC |
| LYSMD3              | 1.66E-09 | 0.49356815 | 0.258 | 0.192 | 5.88E-05   | CD8_UCBMC |
| MGAT5               | 1.68E-09 | 0.14112721 | 0.574 | 0.486 | 5.95E-05   | CD8_UCBMC |
| ENSMMUG000000049010 | 1.71E-09 | 0.35326241 | 0.306 | 0.238 | 6.04E-05   | CD8_UCBMC |
| AATF                | 1.71E-09 | 0.39967528 | 0.29  | 0.224 | 6.04E-05   | CD8_UCBMC |
| CEP57               | 1.75E-09 | 0.38935398 | 0.288 | 0.223 | 6.21E-05   | CD8_UCBMC |
| PNRC2               | 1.88E-09 | 0.27779716 | 0.487 | 0.412 | 6.68E-05   | CD8_UCBMC |
| SAP18               | 1.92E-09 | 0.17398783 | 0.553 | 0.471 | 6.82E-05   | CD8_UCBMC |
| SLC44A2             | 2.02E-09 | 0.35323845 | 0.361 | 0.292 | 7.14E-05   | CD8_UCBMC |
| NPAT                | 2.05E-09 | 0.23266088 | 0.487 | 0.402 | 7.28E-05   | CD8_UCBMC |
| ERCC6L2             | 2.07E-09 | 0.35624448 | 0.319 | 0.248 | 7.34E-05   | CD8_UCBMC |
| MKLN1               | 2.10E-09 | 0.22237194 | 0.569 | 0.48  | 7.45E-05   | CD8_UCBMC |
| TRIM22              | 2.20E-09 | 0.29857338 | 0.422 | 0.353 | 7.78E-05   | CD8_UCBMC |
| ENSMMUG000000028906 | 2.22E-09 | 0.18224053 | 0.626 | 0.539 | 7.88E-05   | CD8_UCBMC |
| RELCH               | 2.39E-09 | 0.26226416 | 0.37  | 0.296 | 8.46E-05   | CD8_UCBMC |
| CMSS1               | 2.48E-09 | 0.30065462 | 0.339 | 0.263 | 8.80E-05   | CD8_UCBMC |
| RTF1                | 2.57E-09 | 0.39409574 | 0.328 | 0.26  | 9.12E-05   | CD8_UCBMC |
| TRDMT1              | 2.71E-09 | 0.32617707 | 0.277 | 0.211 | 9.59E-05   | CD8_UCBMC |
| CRTC3               | 2.77E-09 | 0.19920574 | 0.615 | 0.531 | 9.82E-05   | CD8_UCBMC |
| SINHCAF             | 3.31E-09 | 0.22384461 | 0.467 | 0.384 | 0.0001172  | CD8_UCBMC |
| NONO                | 3.42E-09 | 0.1673484  | 0.537 | 0.446 | 0.00012102 | CD8_UCBMC |

|                    |          |            |       |       |            |           |
|--------------------|----------|------------|-------|-------|------------|-----------|
| MED25              | 3.51E-09 | 0.35057517 | 0.286 | 0.217 | 0.00012428 | CD8_UCBMC |
| DNM2               | 3.59E-09 | 0.3496281  | 0.334 | 0.265 | 0.00012725 | CD8_UCBMC |
| LCORL              | 3.75E-09 | 0.47659664 | 0.35  | 0.284 | 0.00013287 | CD8_UCBMC |
| PHF21A             | 3.95E-09 | 0.33553019 | 0.377 | 0.307 | 0.00014001 | CD8_UCBMC |
| DCAF1              | 4.05E-09 | 0.41221556 | 0.28  | 0.216 | 0.00014355 | CD8_UCBMC |
| NUBPL              | 4.26E-09 | 0.49497688 | 0.25  | 0.189 | 0.00015094 | CD8_UCBMC |
| ILF3               | 4.29E-09 | 0.26288314 | 0.471 | 0.399 | 0.00015213 | CD8_UCBMC |
| ENSMMUG00000018557 | 4.32E-09 | 0.35481046 | 0.35  | 0.284 | 0.00015302 | CD8_UCBMC |
| LIMS1              | 4.34E-09 | 0.33715266 | 0.296 | 0.227 | 0.00015382 | CD8_UCBMC |
| ZNF438             | 4.72E-09 | 0.53962648 | 0.254 | 0.192 | 0.00016739 | CD8_UCBMC |
| OCIAD1             | 5.28E-09 | 0.2825535  | 0.392 | 0.322 | 0.0001871  | CD8_UCBMC |
| TMEM131L           | 6.18E-09 | 0.23187627 | 0.591 | 0.513 | 0.00021912 | CD8_UCBMC |
| SNX2               | 6.54E-09 | 0.3825171  | 0.29  | 0.224 | 0.0002316  | CD8_UCBMC |
| ENSMMUG00000008587 | 6.69E-09 | 0.24037454 | 0.489 | 0.411 | 0.00023706 | CD8_UCBMC |
| CHKA               | 6.73E-09 | 0.35975486 | 0.255 | 0.191 | 0.00023853 | CD8_UCBMC |
| SBNO1              | 6.73E-09 | 0.38409098 | 0.321 | 0.254 | 0.00023862 | CD8_UCBMC |
| HIF1A              | 7.17E-09 | 0.1529382  | 0.448 | 0.366 | 0.00025392 | CD8_UCBMC |
| RBM14              | 9.15E-09 | 0.14625603 | 0.696 | 0.603 | 0.00032416 | CD8_UCBMC |
| RAB3GAP2           | 9.15E-09 | 0.29286619 | 0.353 | 0.282 | 0.00032432 | CD8_UCBMC |
| FAM126A            | 9.91E-09 | 0.34964444 | 0.322 | 0.256 | 0.00035103 | CD8_UCBMC |
| NCK1               | 9.97E-09 | 0.26543437 | 0.4   | 0.327 | 0.0003531  | CD8_UCBMC |
| NR2C2              | 1.01E-08 | 0.41573511 | 0.266 | 0.204 | 0.00035718 | CD8_UCBMC |
| CCDC12             | 1.01E-08 | 0.32965175 | 0.341 | 0.275 | 0.00035928 | CD8_UCBMC |
| SKAP1              | 1.05E-08 | 0.12426597 | 0.891 | 0.788 | 0.00037322 | CD8_UCBMC |
| UBE2D3             | 1.06E-08 | 0.1371391  | 0.866 | 0.767 | 0.00037433 | CD8_UCBMC |
| ITK                | 1.29E-08 | 0.1023393  | 0.776 | 0.673 | 0.00045533 | CD8_UCBMC |
| ATR                | 1.43E-08 | 0.41784293 | 0.293 | 0.23  | 0.00050829 | CD8_UCBMC |
| PIAS2              | 1.45E-08 | 0.35914807 | 0.303 | 0.237 | 0.00051388 | CD8_UCBMC |
| PPP2R5E            | 1.50E-08 | 0.35779127 | 0.425 | 0.365 | 0.00053201 | CD8_UCBMC |
| URI1               | 1.50E-08 | 0.19905565 | 0.487 | 0.406 | 0.00053228 | CD8_UCBMC |
| LARP4              | 1.57E-08 | 0.35129153 | 0.416 | 0.354 | 0.00055549 | CD8_UCBMC |
| WTAP               | 1.61E-08 | 0.17800081 | 0.6   | 0.508 | 0.00057221 | CD8_UCBMC |
| CAMK1D             | 1.69E-08 | 0.16342565 | 0.568 | 0.483 | 0.00060032 | CD8_UCBMC |

|                   |          |            |       |       |            |           |
|-------------------|----------|------------|-------|-------|------------|-----------|
| CAPZA1            | 1.70E-08 | 0.18362264 | 0.614 | 0.528 | 0.00060326 | CD8_UCBMC |
| BOD1L1            | 1.73E-08 | 0.37906403 | 0.285 | 0.221 | 0.00061429 | CD8_UCBMC |
| PPP2R5A           | 1.83E-08 | 0.34111542 | 0.404 | 0.339 | 0.0006482  | CD8_UCBMC |
| MTHFD1L           | 1.88E-08 | 0.28736444 | 0.4   | 0.333 | 0.0006677  | CD8_UCBMC |
| DDX17             | 2.00E-08 | 0.15055542 | 0.679 | 0.586 | 0.000707   | CD8_UCBMC |
| PRPF4B            | 2.01E-08 | 0.15675353 | 0.739 | 0.658 | 0.00071083 | CD8_UCBMC |
| PPP1R16B          | 2.14E-08 | 0.15216735 | 0.362 | 0.29  | 0.00075774 | CD8_UCBMC |
| LENG8             | 2.16E-08 | 0.38614163 | 0.27  | 0.208 | 0.00076488 | CD8_UCBMC |
| HIPK1             | 2.26E-08 | 0.33432075 | 0.32  | 0.253 | 0.0008005  | CD8_UCBMC |
| NBAS              | 2.36E-08 | 0.37797797 | 0.252 | 0.191 | 0.00083756 | CD8_UCBMC |
| CWC22             | 2.37E-08 | 0.32815822 | 0.271 | 0.206 | 0.00083852 | CD8_UCBMC |
| FBXW7             | 2.41E-08 | 0.14325931 | 0.582 | 0.493 | 0.00085243 | CD8_UCBMC |
| EIF4B             | 2.46E-08 | 0.17533177 | 0.576 | 0.491 | 0.00087124 | CD8_UCBMC |
| TRIB2             | 2.71E-08 | 0.30960284 | 0.385 | 0.32  | 0.00096067 | CD8_UCBMC |
| EIF4G2            | 2.73E-08 | 0.1855435  | 0.687 | 0.607 | 0.00096617 | CD8_UCBMC |
| TAF15             | 2.82E-08 | 0.18102044 | 0.581 | 0.508 | 0.00099909 | CD8_UCBMC |
| KDM2B             | 2.91E-08 | 0.4651836  | 0.256 | 0.195 | 0.0010314  | CD8_UCBMC |
| ATAD2B            | 3.12E-08 | 0.27017832 | 0.484 | 0.408 | 0.00110542 | CD8_UCBMC |
| LDLRAD4           | 3.64E-08 | 0.22208025 | 0.505 | 0.433 | 0.0012884  | CD8_UCBMC |
| ARID4A            | 3.64E-08 | 0.34987438 | 0.273 | 0.211 | 0.00128866 | CD8_UCBMC |
| NUP50             | 3.80E-08 | 0.31348656 | 0.338 | 0.271 | 0.00134536 | CD8_UCBMC |
| TRIP12            | 3.80E-08 | 0.1804128  | 0.582 | 0.499 | 0.00134702 | CD8_UCBMC |
| DENND4C           | 3.91E-08 | 0.39346429 | 0.261 | 0.201 | 0.00138452 | CD8_UCBMC |
| MAPK1IP1L         | 3.99E-08 | 0.30739726 | 0.365 | 0.299 | 0.00141537 | CD8_UCBMC |
| MFF               | 4.13E-08 | 0.30747382 | 0.365 | 0.302 | 0.00146428 | CD8_UCBMC |
| SAMM50            | 4.14E-08 | 0.28539933 | 0.257 | 0.195 | 0.00146783 | CD8_UCBMC |
| PBXIP1            | 4.27E-08 | 0.27502008 | 0.351 | 0.285 | 0.00151151 | CD8_UCBMC |
| RTN3              | 4.42E-08 | 0.33446713 | 0.357 | 0.296 | 0.0015676  | CD8_UCBMC |
| LEF1              | 4.50E-08 | 0.14723522 | 0.848 | 0.748 | 0.00159314 | CD8_UCBMC |
| ENSMUG00000061298 | 4.59E-08 | 0.30783665 | 0.273 | 0.208 | 0.00162509 | CD8_UCBMC |
| ENSMUG00000021425 | 4.70E-08 | 0.42535148 | 0.26  | 0.202 | 0.00166651 | CD8_UCBMC |
| TANK              | 5.36E-08 | 0.34262194 | 0.323 | 0.257 | 0.00189913 | CD8_UCBMC |
| GCC2              | 5.68E-08 | 0.25151466 | 0.352 | 0.282 | 0.00201091 | CD8_UCBMC |



|                    |          |            |       |       |            |           |
|--------------------|----------|------------|-------|-------|------------|-----------|
| ENSMMUG00000015583 | 5.72E-08 | 0.14169284 | 0.874 | 0.771 | 0.00202711 | CD8_UCBMC |
| GGNBP2             | 6.04E-08 | 0.329446   | 0.362 | 0.303 | 0.00213964 | CD8_UCBMC |
| CMAH               | 6.09E-08 | 0.3395743  | 0.314 | 0.252 | 0.00215733 | CD8_UCBMC |
| MSH3               | 6.25E-08 | 0.45946749 | 0.272 | 0.213 | 0.00221446 | CD8_UCBMC |
| ARHGAP25           | 6.52E-08 | 0.40204612 | 0.295 | 0.233 | 0.00230868 | CD8_UCBMC |
| TBC1D22A           | 6.91E-08 | 0.29885092 | 0.312 | 0.249 | 0.00244759 | CD8_UCBMC |
| HERC2              | 7.06E-08 | 0.18813018 | 0.44  | 0.372 | 0.00250141 | CD8_UCBMC |
| PPP1R2             | 7.07E-08 | 0.16031121 | 0.573 | 0.49  | 0.00250573 | CD8_UCBMC |
| TFAM               | 7.38E-08 | 0.27493163 | 0.415 | 0.35  | 0.00261624 | CD8_UCBMC |
| OLA1               | 7.93E-08 | 0.24640976 | 0.485 | 0.421 | 0.00280958 | CD8_UCBMC |
| UBAP2              | 8.04E-08 | 0.35863263 | 0.316 | 0.255 | 0.00284992 | CD8_UCBMC |
| CASP8              | 8.10E-08 | 0.17799157 | 0.614 | 0.534 | 0.00287135 | CD8_UCBMC |
| ARFGEF1            | 8.76E-08 | 0.28628908 | 0.365 | 0.299 | 0.00310353 | CD8_UCBMC |
| REV3L              | 9.25E-08 | 0.24247372 | 0.463 | 0.389 | 0.00327838 | CD8_UCBMC |
| ZNF44              | 9.47E-08 | 0.3691292  | 0.297 | 0.237 | 0.00335375 | CD8_UCBMC |
| TARDBP             | 9.91E-08 | 0.29797823 | 0.315 | 0.253 | 0.00351045 | CD8_UCBMC |
| UQCC1              | 1.01E-07 | 0.46981042 | 0.253 | 0.197 | 0.00357515 | CD8_UCBMC |
| GNAI3              | 1.01E-07 | 0.27745977 | 0.362 | 0.301 | 0.00357782 | CD8_UCBMC |
| RALGAP1            | 1.12E-07 | 0.34813359 | 0.273 | 0.213 | 0.00397656 | CD8_UCBMC |
| ZNF148             | 1.16E-07 | 0.20069912 | 0.471 | 0.397 | 0.00409395 | CD8_UCBMC |
| IMMP2L             | 1.23E-07 | 0.1426658  | 0.604 | 0.523 | 0.00437478 | CD8_UCBMC |
| PTPRJ              | 1.25E-07 | 0.29657518 | 0.3   | 0.238 | 0.00443642 | CD8_UCBMC |
| VPS13A             | 1.30E-07 | 0.31825002 | 0.324 | 0.264 | 0.00461631 | CD8_UCBMC |
| EZR                | 1.32E-07 | 0.15114218 | 0.693 | 0.612 | 0.00466207 | CD8_UCBMC |
| SUGT1              | 1.39E-07 | 0.25858658 | 0.405 | 0.339 | 0.00493573 | CD8_UCBMC |
| SPIDR              | 1.40E-07 | 0.33626228 | 0.296 | 0.236 | 0.00495723 | CD8_UCBMC |
| EIF3G              | 1.49E-07 | 0.17830014 | 0.56  | 0.488 | 0.00526607 | CD8_UCBMC |
| PSMA1              | 1.49E-07 | 0.17339808 | 0.554 | 0.481 | 0.00529413 | CD8_UCBMC |
| SMAD4              | 1.57E-07 | 0.39906186 | 0.269 | 0.213 | 0.00556436 | CD8_UCBMC |
| CEP192             | 1.57E-07 | 0.29884787 | 0.339 | 0.277 | 0.00557343 | CD8_UCBMC |
| ENSMMUG00000047277 | 1.60E-07 | 0.26901688 | 0.71  | 0.668 | 0.00568445 | CD8_UCBMC |
| AHI1               | 1.76E-07 | 0.21033805 | 0.43  | 0.37  | 0.0062268  | CD8_UCBMC |
| POC1B              | 1.86E-07 | 0.34351167 | 0.276 | 0.216 | 0.00659471 | CD8_UCBMC |

|                   |          |            |       |       |            |           |
|-------------------|----------|------------|-------|-------|------------|-----------|
| USP24             | 1.89E-07 | 0.30631658 | 0.349 | 0.289 | 0.00668478 | CD8_UCBMC |
| FYTTD1            | 1.93E-07 | 0.29037771 | 0.299 | 0.238 | 0.00683414 | CD8_UCBMC |
| RSL24D1           | 2.22E-07 | 0.13735183 | 0.739 | 0.667 | 0.00784843 | CD8_UCBMC |
| GATAD2A           | 2.25E-07 | 0.29741324 | 0.335 | 0.274 | 0.00798746 | CD8_UCBMC |
| IPO5              | 2.29E-07 | 0.43605274 | 0.283 | 0.23  | 0.00810546 | CD8_UCBMC |
| TMOD3             | 2.42E-07 | 0.218401   | 0.432 | 0.367 | 0.00858108 | CD8_UCBMC |
| AEBP2             | 2.54E-07 | 0.23037542 | 0.448 | 0.374 | 0.00899604 | CD8_UCBMC |
| STK4              | 2.56E-07 | 0.13360876 | 0.695 | 0.608 | 0.00906197 | CD8_UCBMC |
| AOPEP             | 2.58E-07 | 0.14712999 | 0.524 | 0.456 | 0.00914173 | CD8_UCBMC |
| DTNBP1            | 2.80E-07 | 0.20336663 | 0.537 | 0.469 | 0.00991306 | CD8_UCBMC |
| UFD1              | 2.82E-07 | 0.18438564 | 0.263 | 0.203 | 0.00998389 | CD8_UCBMC |
| UBE2L3            | 2.86E-07 | 0.16485933 | 0.43  | 0.36  | 0.01012455 | CD8_UCBMC |
| RUBCN             | 3.00E-07 | 0.29848334 | 0.301 | 0.245 | 0.01061286 | CD8_UCBMC |
| CRYL1             | 3.13E-07 | 0.37215334 | 0.262 | 0.203 | 0.0111037  | CD8_UCBMC |
| EIF5              | 3.23E-07 | 0.23802466 | 0.478 | 0.414 | 0.01145731 | CD8_UCBMC |
| DOCK11            | 3.29E-07 | 0.20492042 | 0.576 | 0.504 | 0.01164016 | CD8_UCBMC |
| CASP12            | 3.31E-07 | 0.16450974 | 0.459 | 0.394 | 0.01174551 | CD8_UCBMC |
| RNF213            | 3.39E-07 | 0.1856059  | 0.457 | 0.391 | 0.01200444 | CD8_UCBMC |
| INO80             | 3.51E-07 | 0.37263435 | 0.295 | 0.239 | 0.01244206 | CD8_UCBMC |
| SCAF4             | 3.71E-07 | 0.29442985 | 0.326 | 0.265 | 0.01315351 | CD8_UCBMC |
| EIF3H             | 3.73E-07 | 0.12843492 | 0.842 | 0.78  | 0.01320416 | CD8_UCBMC |
| GGPS1             | 3.74E-07 | 0.34170404 | 0.269 | 0.213 | 0.01324928 | CD8_UCBMC |
| ENSMUG00000003130 | 3.75E-07 | 0.33601719 | 0.273 | 0.217 | 0.0132759  | CD8_UCBMC |
| HS2ST1            | 4.00E-07 | 0.37756404 | 0.285 | 0.229 | 0.01417313 | CD8_UCBMC |
| TBC1D1            | 4.06E-07 | 0.17743522 | 0.513 | 0.437 | 0.01437181 | CD8_UCBMC |
| PRKACB            | 4.24E-07 | 0.18423281 | 0.599 | 0.538 | 0.01503471 | CD8_UCBMC |
| HECTD4            | 4.25E-07 | 0.29780254 | 0.338 | 0.278 | 0.01505534 | CD8_UCBMC |
| ATXN7L3B          | 4.42E-07 | 0.27976044 | 0.323 | 0.266 | 0.01567131 | CD8_UCBMC |
| SUGP2             | 4.44E-07 | 0.36154697 | 0.32  | 0.265 | 0.01572276 | CD8_UCBMC |
| MAPKAP1           | 4.47E-07 | 0.26100533 | 0.382 | 0.322 | 0.01585274 | CD8_UCBMC |
| PTP4A2            | 4.59E-07 | 0.26282048 | 0.393 | 0.333 | 0.01625485 | CD8_UCBMC |
| ZNF160            | 4.79E-07 | 0.43124457 | 0.25  | 0.198 | 0.01698578 | CD8_UCBMC |
| INTS6             | 4.89E-07 | 0.25676555 | 0.416 | 0.354 | 0.01732567 | CD8_UCBMC |

|          |          |            |       |       |            |           |
|----------|----------|------------|-------|-------|------------|-----------|
| CAST     | 5.39E-07 | 0.29751218 | 0.402 | 0.343 | 0.01911213 | CD8_UCBMC |
| ZDHC20   | 5.69E-07 | 0.31668476 | 0.329 | 0.271 | 0.02017692 | CD8_UCBMC |
| EPRS1    | 5.74E-07 | 0.34199039 | 0.331 | 0.273 | 0.02033061 | CD8_UCBMC |
| SND1     | 5.80E-07 | 0.19315979 | 0.479 | 0.411 | 0.02056657 | CD8_UCBMC |
| CLK4     | 6.05E-07 | 0.31325039 | 0.303 | 0.249 | 0.02141993 | CD8_UCBMC |
| SCML4    | 6.08E-07 | 0.11147989 | 0.746 | 0.664 | 0.02152568 | CD8_UCBMC |
| SLC39A11 | 7.22E-07 | 0.26576185 | 0.335 | 0.273 | 0.0255895  | CD8_UCBMC |
| GPRIN3   | 7.41E-07 | 0.26773941 | 0.398 | 0.336 | 0.02626166 | CD8_UCBMC |
| ATAD1    | 7.67E-07 | 0.23594954 | 0.3   | 0.241 | 0.02717813 | CD8_UCBMC |
| MAPRE2   | 8.10E-07 | 0.14705569 | 0.475 | 0.402 | 0.02869918 | CD8_UCBMC |
| ACBD6    | 8.26E-07 | 0.32802193 | 0.26  | 0.205 | 0.02925287 | CD8_UCBMC |
| PACS1    | 8.55E-07 | 0.2419705  | 0.474 | 0.41  | 0.03029726 | CD8_UCBMC |
| SSR1     | 8.68E-07 | 0.27757727 | 0.309 | 0.253 | 0.03076142 | CD8_UCBMC |
| ZNF749   | 9.03E-07 | 0.22620023 | 0.297 | 0.237 | 0.03200368 | CD8_UCBMC |
| SENP6    | 1.02E-06 | 0.18627963 | 0.545 | 0.476 | 0.03605871 | CD8_UCBMC |
| PSMD7    | 1.06E-06 | 0.28558126 | 0.344 | 0.287 | 0.03754898 | CD8_UCBMC |
| RPS6KC1  | 1.08E-06 | 0.42401362 | 0.277 | 0.224 | 0.03809926 | CD8_UCBMC |
| RASA3    | 1.08E-06 | 0.28959081 | 0.367 | 0.31  | 0.03829456 | CD8_UCBMC |
| PBRM1    | 1.14E-06 | 0.24172178 | 0.432 | 0.372 | 0.0403956  | CD8_UCBMC |
| RPL26    | 1.21E-06 | 0.10034117 | 0.988 | 0.932 | 0.0430438  | CD8_UCBMC |
| TENT2    | 1.24E-06 | 0.25045835 | 0.359 | 0.301 | 0.04383852 | CD8_UCBMC |
| PSMD12   | 1.25E-06 | 0.11281679 | 0.765 | 0.666 | 0.04430979 | CD8_UCBMC |
| MLLT10   | 1.32E-06 | 0.1857835  | 0.485 | 0.426 | 0.04661991 | CD8_UCBMC |
| LCLAT1   | 1.45E-06 | 0.28001182 | 0.351 | 0.294 | 0.05126952 | CD8_UCBMC |
| SUSD6    | 1.45E-06 | 0.28259748 | 0.265 | 0.21  | 0.05136409 | CD8_UCBMC |
| ZNF609   | 1.54E-06 | 0.19064662 | 0.496 | 0.432 | 0.05442982 | CD8_UCBMC |
| SLC38A9  | 1.54E-06 | 0.28182896 | 0.258 | 0.202 | 0.05453195 | CD8_UCBMC |
| RMND5A   | 1.56E-06 | 0.28699338 | 0.346 | 0.288 | 0.05544354 | CD8_UCBMC |
| DNAJC24  | 1.67E-06 | 0.20819824 | 0.421 | 0.357 | 0.05902097 | CD8_UCBMC |
| BTRC     | 1.74E-06 | 0.37582848 | 0.258 | 0.205 | 0.06170322 | CD8_UCBMC |
| RSRC1    | 1.82E-06 | 0.21905323 | 0.475 | 0.411 | 0.06432921 | CD8_UCBMC |
| LSM12    | 1.84E-06 | 0.32098988 | 0.261 | 0.209 | 0.06503137 | CD8_UCBMC |
| MAPRE1   | 1.99E-06 | 0.1953155  | 0.408 | 0.344 | 0.07041938 | CD8_UCBMC |

|                   |          |            |       |       |            |           |
|-------------------|----------|------------|-------|-------|------------|-----------|
| TMEM63A           | 2.11E-06 | 0.25578408 | 0.327 | 0.271 | 0.07489899 | CD8_UCBMC |
| EIF3M             | 2.20E-06 | 0.16964501 | 0.635 | 0.561 | 0.07796345 | CD8_UCBMC |
| LUC7L             | 2.23E-06 | 0.29588886 | 0.373 | 0.32  | 0.07893493 | CD8_UCBMC |
| ENSMUG00000051300 | 2.45E-06 | 0.17316521 | 0.978 | 0.807 | 0.08688013 | CD8_UCBMC |
| MBD5              | 2.50E-06 | 0.10419067 | 0.535 | 0.462 | 0.08867636 | CD8_UCBMC |
| ETNK1             | 2.54E-06 | 0.18887429 | 0.342 | 0.285 | 0.08990169 | CD8_UCBMC |
| CHP1              | 2.61E-06 | 0.26972872 | 0.301 | 0.249 | 0.09236671 | CD8_UCBMC |
| ENSMUG00000022769 | 3.04E-06 | 0.11716812 | 0.645 | 0.579 | 0.10785588 | CD8_UCBMC |
| BCCIP             | 3.20E-06 | 0.25636672 | 0.318 | 0.263 | 0.1134926  | CD8_UCBMC |
| ADA               | 3.34E-06 | 0.20650076 | 0.278 | 0.223 | 0.11848186 | CD8_UCBMC |
| MRPS15            | 3.45E-06 | 0.2090487  | 0.366 | 0.308 | 0.12239062 | CD8_UCBMC |
| CALU              | 3.48E-06 | 0.39554601 | 0.259 | 0.211 | 0.12318372 | CD8_UCBMC |
| IPO7              | 3.59E-06 | 0.27999859 | 0.317 | 0.265 | 0.12714061 | CD8_UCBMC |
| NUMB              | 3.70E-06 | 0.24791877 | 0.341 | 0.284 | 0.13123454 | CD8_UCBMC |
| IMPDH2            | 3.75E-06 | 0.19587652 | 0.384 | 0.327 | 0.13275732 | CD8_UCBMC |
| BZW2              | 3.79E-06 | 0.16196071 | 0.473 | 0.411 | 0.13427879 | CD8_UCBMC |
| MTIF2             | 4.07E-06 | 0.3073762  | 0.302 | 0.252 | 0.14403119 | CD8_UCBMC |
| NEMF              | 4.12E-06 | 0.2560272  | 0.378 | 0.324 | 0.1460516  | CD8_UCBMC |
| SMARCC1           | 4.23E-06 | 0.16878794 | 0.528 | 0.459 | 0.15004411 | CD8_UCBMC |
| RWDD1             | 4.51E-06 | 0.12024472 | 0.62  | 0.546 | 0.15980206 | CD8_UCBMC |
| GSPT1             | 4.62E-06 | 0.33599547 | 0.268 | 0.219 | 0.16364309 | CD8_UCBMC |
| HSPA4             | 4.85E-06 | 0.19380705 | 0.347 | 0.29  | 0.17189893 | CD8_UCBMC |
| SESN1             | 4.86E-06 | 0.24762318 | 0.3   | 0.247 | 0.17205449 | CD8_UCBMC |
| MIGA1             | 5.01E-06 | 0.26724337 | 0.283 | 0.232 | 0.17746111 | CD8_UCBMC |
| ENSA              | 5.42E-06 | 0.15205306 | 0.513 | 0.449 | 0.19211213 | CD8_UCBMC |
| ZNF28             | 5.61E-06 | 0.27794776 | 0.301 | 0.249 | 0.19867559 | CD8_UCBMC |
| VPS53             | 5.64E-06 | 0.38127875 | 0.289 | 0.243 | 0.19985415 | CD8_UCBMC |
| OS9               | 6.56E-06 | 0.28144376 | 0.26  | 0.211 | 0.23240962 | CD8_UCBMC |
| DDX39B            | 7.04E-06 | 0.19034852 | 0.429 | 0.376 | 0.2495968  | CD8_UCBMC |
| DUSP10            | 7.11E-06 | 0.27014625 | 0.276 | 0.225 | 0.25182268 | CD8_UCBMC |
| AGO2              | 7.33E-06 | 0.38485664 | 0.264 | 0.217 | 0.25962484 | CD8_UCBMC |
| IQGAP1            | 8.94E-06 | 0.11031041 | 0.568 | 0.499 | 0.31664496 | CD8_UCBMC |
| C4H6orf62         | 9.17E-06 | 0.17806549 | 0.37  | 0.312 | 0.32491735 | CD8_UCBMC |

|          |          |            |       |       |            |           |
|----------|----------|------------|-------|-------|------------|-----------|
| SMG1     | 9.22E-06 | 0.19617651 | 0.394 | 0.339 | 0.3267988  | CD8_UCBMC |
| DLST     | 9.37E-06 | 0.34077164 | 0.275 | 0.229 | 0.33190786 | CD8_UCBMC |
| KRR1     | 9.44E-06 | 0.25939991 | 0.255 | 0.208 | 0.33461854 | CD8_UCBMC |
| UBAC2    | 9.93E-06 | 0.12275271 | 0.788 | 0.702 | 0.35185577 | CD8_UCBMC |
| NDUFA10  | 1.03E-05 | 0.27305612 | 0.277 | 0.23  | 0.36448936 | CD8_UCBMC |
| PHACTR4  | 1.12E-05 | 0.30635272 | 0.299 | 0.25  | 0.39566448 | CD8_UCBMC |
| FASTKD2  | 1.17E-05 | 0.22327044 | 0.261 | 0.212 | 0.41500436 | CD8_UCBMC |
| RNF10    | 1.27E-05 | 0.22920203 | 0.316 | 0.263 | 0.44910652 | CD8_UCBMC |
| ABCE1    | 1.27E-05 | 0.19848296 | 0.417 | 0.36  | 0.44919586 | CD8_UCBMC |
| TMEM183A | 1.34E-05 | 0.31173359 | 0.281 | 0.235 | 0.47392824 | CD8_UCBMC |
| FCHSD2   | 1.41E-05 | 0.22521342 | 0.415 | 0.361 | 0.49782495 | CD8_UCBMC |
| TASP1    | 1.42E-05 | 0.21095256 | 0.433 | 0.376 | 0.50384756 | CD8_UCBMC |
| SPATA5   | 1.43E-05 | 0.25268088 | 0.388 | 0.34  | 0.50550281 | CD8_UCBMC |
| DMXL1    | 1.55E-05 | 0.34693279 | 0.251 | 0.207 | 0.54850955 | CD8_UCBMC |
| ATF7IP2  | 1.57E-05 | 0.19215027 | 0.395 | 0.342 | 0.55669093 | CD8_UCBMC |
| RAD51B   | 1.58E-05 | 0.27576243 | 0.256 | 0.208 | 0.55935929 | CD8_UCBMC |
| ATG3     | 1.65E-05 | 0.22891489 | 0.393 | 0.343 | 0.5840857  | CD8_UCBMC |
| NCOA1    | 1.65E-05 | 0.19910455 | 0.324 | 0.273 | 0.58471102 | CD8_UCBMC |
| PDK1     | 1.70E-05 | 0.10041501 | 0.563 | 0.497 | 0.60213289 | CD8_UCBMC |
| BTF3L4   | 1.81E-05 | 0.13469804 | 0.492 | 0.44  | 0.64066856 | CD8_UCBMC |
| SMARCB1  | 1.82E-05 | 0.27099174 | 0.256 | 0.209 | 0.64642566 | CD8_UCBMC |
| ZFX      | 1.93E-05 | 0.28078532 | 0.281 | 0.231 | 0.68536934 | CD8_UCBMC |
| PARN     | 1.98E-05 | 0.27095825 | 0.253 | 0.208 | 0.70274407 | CD8_UCBMC |
| CASC3    | 2.03E-05 | 0.28814448 | 0.348 | 0.301 | 0.72022868 | CD8_UCBMC |
| CLTC     | 2.16E-05 | 0.29905482 | 0.273 | 0.226 | 0.76414667 | CD8_UCBMC |
| C1D      | 2.16E-05 | 0.10110632 | 0.342 | 0.288 | 0.7653424  | CD8_UCBMC |
| GTF2F2   | 2.20E-05 | 0.24429347 | 0.327 | 0.277 | 0.77825278 | CD8_UCBMC |
| AGPS     | 2.20E-05 | 0.26826976 | 0.368 | 0.321 | 0.77827008 | CD8_UCBMC |
| GSTM4    | 2.25E-05 | 0.13418563 | 0.288 | 0.236 | 0.79584066 | CD8_UCBMC |
| FAM13B   | 2.28E-05 | 0.23595858 | 0.311 | 0.261 | 0.80906637 | CD8_UCBMC |
| ZBTB1    | 2.47E-05 | 0.24941572 | 0.323 | 0.273 | 0.87462331 | CD8_UCBMC |
| XRCC6    | 2.47E-05 | 0.10565013 | 0.608 | 0.547 | 0.87561518 | CD8_UCBMC |
| RERE     | 2.53E-05 | 0.11780738 | 0.7   | 0.627 | 0.89555977 | CD8_UCBMC |

|                   |          |            |       |       |            |           |
|-------------------|----------|------------|-------|-------|------------|-----------|
| ENSMUG00000030374 | 2.58E-05 | 0.34488661 | 0.3   | 0.255 | 0.91405073 | CD8_UCBMC |
| CTCF              | 2.62E-05 | 0.19374338 | 0.39  | 0.342 | 0.92820571 | CD8_UCBMC |
| CNOT7             | 2.71E-05 | 0.21819661 | 0.284 | 0.235 | 0.96059385 | CD8_UCBMC |
| WSB1              | 2.73E-05 | 0.13337355 | 0.46  | 0.404 | 0.9672012  | CD8_UCBMC |
| HSD17B11          | 2.74E-05 | 0.15633486 | 0.277 | 0.225 | 0.97242089 | CD8_UCBMC |
| PCNX1             | 2.81E-05 | 0.29048745 | 0.326 | 0.281 | 0.99475006 | CD8_UCBMC |
| LTN1              | 2.84E-05 | 0.25151672 | 0.311 | 0.264 | 1          | CD8_UCBMC |
| RBBP7             | 2.87E-05 | 0.33366386 | 0.254 | 0.212 | 1          | CD8_UCBMC |
| TSPAN3            | 2.93E-05 | 0.31224273 | 0.254 | 0.21  | 1          | CD8_UCBMC |
| SUZ12             | 3.00E-05 | 0.22027767 | 0.35  | 0.302 | 1          | CD8_UCBMC |
| DPEP2             | 3.10E-05 | 0.24438525 | 0.256 | 0.208 | 1          | CD8_UCBMC |
| HERC3             | 3.19E-05 | 0.16455774 | 0.426 | 0.374 | 1          | CD8_UCBMC |
| SMC3              | 3.39E-05 | 0.20114153 | 0.343 | 0.294 | 1          | CD8_UCBMC |
| FRYL              | 3.81E-05 | 0.18758777 | 0.39  | 0.337 | 1          | CD8_UCBMC |
| PDSS2             | 3.91E-05 | 0.27722251 | 0.304 | 0.259 | 1          | CD8_UCBMC |
| CABIN1            | 4.15E-05 | 0.35414576 | 0.283 | 0.24  | 1          | CD8_UCBMC |
| CSNK1G1           | 4.63E-05 | 0.20254323 | 0.436 | 0.386 | 1          | CD8_UCBMC |
| EPS15             | 4.63E-05 | 0.1763788  | 0.391 | 0.342 | 1          | CD8_UCBMC |
| PPP4R3B           | 4.82E-05 | 0.19572868 | 0.378 | 0.333 | 1          | CD8_UCBMC |
| SUPT5H            | 5.14E-05 | 0.27634883 | 0.26  | 0.215 | 1          | CD8_UCBMC |
| EHMT1             | 5.24E-05 | 0.15523187 | 0.401 | 0.346 | 1          | CD8_UCBMC |
| HACE1             | 5.59E-05 | 0.18631269 | 0.305 | 0.259 | 1          | CD8_UCBMC |
| TANGO6            | 5.87E-05 | 0.27231802 | 0.33  | 0.286 | 1          | CD8_UCBMC |
| AVL9              | 6.04E-05 | 0.21358968 | 0.271 | 0.225 | 1          | CD8_UCBMC |
| STAU2             | 6.62E-05 | 0.1883371  | 0.394 | 0.345 | 1          | CD8_UCBMC |
| RALGAPB           | 6.64E-05 | 0.27595293 | 0.283 | 0.24  | 1          | CD8_UCBMC |
| DDX10             | 7.80E-05 | 0.16647539 | 0.346 | 0.296 | 1          | CD8_UCBMC |
| VPS26A            | 8.03E-05 | 0.2472458  | 0.253 | 0.21  | 1          | CD8_UCBMC |
| VPS8              | 8.19E-05 | 0.2174383  | 0.286 | 0.242 | 1          | CD8_UCBMC |
| USP4              | 8.50E-05 | 0.17377437 | 0.276 | 0.229 | 1          | CD8_UCBMC |
| USP9Y             | 8.77E-05 | 0.18749877 | 0.263 | 0.217 | 1          | CD8_UCBMC |
| STIM2             | 9.23E-05 | 0.2033058  | 0.384 | 0.331 | 1          | CD8_UCBMC |
| LPP               | 9.25E-05 | 0.22339515 | 0.3   | 0.252 | 1          | CD8_UCBMC |

|                    |            |            |       |       |             |
|--------------------|------------|------------|-------|-------|-------------|
| IGBP1              | 9.83E-05   | 0.1259042  | 0.387 | 0.34  | 1 CD8_UCBMC |
| PWP1               | 0.00010042 | 0.16803594 | 0.316 | 0.27  | 1 CD8_UCBMC |
| MGMT               | 0.00010396 | 0.13405739 | 0.401 | 0.348 | 1 CD8_UCBMC |
| KPNB1              | 0.00010539 | 0.18561694 | 0.412 | 0.364 | 1 CD8_UCBMC |
| GIGYF2             | 0.00010573 | 0.18985511 | 0.438 | 0.385 | 1 CD8_UCBMC |
| KARS1              | 0.00011289 | 0.26980775 | 0.261 | 0.222 | 1 CD8_UCBMC |
| KLHL23             | 0.00011604 | 0.11629435 | 0.808 | 0.729 | 1 CD8_UCBMC |
| COPS3              | 0.00011684 | 0.20780352 | 0.254 | 0.211 | 1 CD8_UCBMC |
| FGFR10P2           | 0.0001227  | 0.1127435  | 0.379 | 0.333 | 1 CD8_UCBMC |
| DCAF6              | 0.00013085 | 0.12931762 | 0.376 | 0.327 | 1 CD8_UCBMC |
| PAFAH1B1           | 0.00014193 | 0.13058896 | 0.547 | 0.491 | 1 CD8_UCBMC |
| MARK3              | 0.00014938 | 0.12845053 | 0.425 | 0.377 | 1 CD8_UCBMC |
| ARL15              | 0.00015925 | 0.11832071 | 0.451 | 0.399 | 1 CD8_UCBMC |
| RCAN3              | 0.00019139 | 0.22753652 | 0.41  | 0.363 | 1 CD8_UCBMC |
| TANC2              | 0.00020359 | 0.22626278 | 0.34  | 0.298 | 1 CD8_UCBMC |
| SMARCA4            | 0.00020619 | 0.26396895 | 0.26  | 0.219 | 1 CD8_UCBMC |
| RAB6A              | 0.00020624 | 0.28935444 | 0.255 | 0.216 | 1 CD8_UCBMC |
| ENSMMUG00000040181 | 0.00021296 | 0.18867122 | 0.303 | 0.261 | 1 CD8_UCBMC |
| ZC3H13             | 0.00023591 | 0.17598831 | 0.371 | 0.323 | 1 CD8_UCBMC |
| R3HDM1             | 0.00024161 | 0.23933084 | 0.328 | 0.287 | 1 CD8_UCBMC |
| EIF2B3             | 0.00024379 | 0.18327833 | 0.356 | 0.313 | 1 CD8_UCBMC |
| CDC25B             | 0.00025034 | 0.18047455 | 0.304 | 0.261 | 1 CD8_UCBMC |
| GTF2E2             | 0.00026266 | 0.28722377 | 0.321 | 0.284 | 1 CD8_UCBMC |
| FARS2              | 0.00026355 | 0.11790398 | 0.481 | 0.431 | 1 CD8_UCBMC |
| HM13               | 0.0002682  | 0.25728807 | 0.274 | 0.235 | 1 CD8_UCBMC |
| TDRD3              | 0.00026955 | 0.26298929 | 0.321 | 0.282 | 1 CD8_UCBMC |
| ARID1A             | 0.00027153 | 0.14458228 | 0.485 | 0.436 | 1 CD8_UCBMC |
| YTHDF2             | 0.00027317 | 0.25400222 | 0.293 | 0.254 | 1 CD8_UCBMC |
| ITFG2              | 0.00029722 | 0.21717847 | 0.331 | 0.288 | 1 CD8_UCBMC |
| CDKN1B             | 0.00030674 | 0.15402249 | 0.284 | 0.24  | 1 CD8_UCBMC |
| STXBP5             | 0.0003184  | 0.22132036 | 0.284 | 0.243 | 1 CD8_UCBMC |
| PLGRKT             | 0.00033258 | 0.12590609 | 0.273 | 0.229 | 1 CD8_UCBMC |
| XYLT1              | 0.00035402 | 0.14580073 | 0.453 | 0.408 | 1 CD8_UCBMC |

|                    |            |            |       |       |             |
|--------------------|------------|------------|-------|-------|-------------|
| SMARCE1            | 0.00035531 | 0.16256039 | 0.342 | 0.302 | 1 CD8_UCBMC |
| DNAJA2             | 0.0003584  | 0.14741505 | 0.321 | 0.281 | 1 CD8_UCBMC |
| KMT5B              | 0.00036149 | 0.20675802 | 0.337 | 0.297 | 1 CD8_UCBMC |
| PSME4              | 0.00036476 | 0.10891874 | 0.432 | 0.382 | 1 CD8_UCBMC |
| WASF2              | 0.00039668 | 0.10539216 | 0.537 | 0.483 | 1 CD8_UCBMC |
| ATP6AP2            | 0.00039759 | 0.1242234  | 0.253 | 0.211 | 1 CD8_UCBMC |
| DENND1A            | 0.00044621 | 0.20113467 | 0.357 | 0.316 | 1 CD8_UCBMC |
| ZNF131             | 0.00048452 | 0.14006895 | 0.382 | 0.34  | 1 CD8_UCBMC |
| TASOR2             | 0.00051723 | 0.16114409 | 0.435 | 0.388 | 1 CD8_UCBMC |
| EIF4EBP3           | 0.00058014 | 0.13914369 | 0.424 | 0.384 | 1 CD8_UCBMC |
| ENSMMUG00000017113 | 0.00059826 | 0.25802991 | 0.314 | 0.278 | 1 CD8_UCBMC |
| EIF3D              | 0.00064466 | 0.14339558 | 0.461 | 0.416 | 1 CD8_UCBMC |
| EFL1               | 0.00067218 | 0.19406475 | 0.318 | 0.277 | 1 CD8_UCBMC |
| SRSF1              | 0.00085891 | 0.15699368 | 0.363 | 0.324 | 1 CD8_UCBMC |
| YLPM1              | 0.00090745 | 0.21520618 | 0.291 | 0.255 | 1 CD8_UCBMC |
| ATE1               | 0.00100201 | 0.19136113 | 0.302 | 0.265 | 1 CD8_UCBMC |
| RC3H1              | 0.00111359 | 0.18576902 | 0.254 | 0.219 | 1 CD8_UCBMC |
| TRAM1              | 0.00128054 | 0.1342926  | 0.383 | 0.342 | 1 CD8_UCBMC |
| NCKAP1L            | 0.00135451 | 0.19621034 | 0.3   | 0.264 | 1 CD8_UCBMC |
| CAMLG              | 0.00138459 | 0.12729185 | 0.359 | 0.318 | 1 CD8_UCBMC |
| SNRNP200           | 0.0013943  | 0.13702139 | 0.278 | 0.24  | 1 CD8_UCBMC |
| PRKCA              | 0.00143885 | 0.11957948 | 0.372 | 0.332 | 1 CD8_UCBMC |
| TRIM24             | 0.00145647 | 0.24326592 | 0.288 | 0.255 | 1 CD8_UCBMC |
| ENSMMUG00000015208 | 0.00149739 | 0.12561494 | 0.36  | 0.321 | 1 CD8_UCBMC |
| COMMD3             | 0.00155649 | 0.24130305 | 0.26  | 0.229 | 1 CD8_UCBMC |
| PRPF6              | 0.00156691 | 0.1224505  | 0.337 | 0.3   | 1 CD8_UCBMC |
| MAP3K1             | 0.00161507 | 0.20544419 | 0.306 | 0.271 | 1 CD8_UCBMC |
| SF3A1              | 0.0016218  | 0.24634949 | 0.257 | 0.225 | 1 CD8_UCBMC |
| PRXL2A             | 0.00162629 | 0.13312179 | 0.272 | 0.237 | 1 CD8_UCBMC |
| H1-3               | 0.00167205 | 0.12215693 | 0.309 | 0.266 | 1 CD8_UCBMC |
| SLAIN2             | 0.00169075 | 0.17099546 | 0.289 | 0.255 | 1 CD8_UCBMC |
| DHX15              | 0.00177693 | 0.19592452 | 0.314 | 0.281 | 1 CD8_UCBMC |
| PDCD6IP            | 0.001904   | 0.10573784 | 0.39  | 0.349 | 1 CD8_UCBMC |



|          |            |            |       |       |             |
|----------|------------|------------|-------|-------|-------------|
| COMMD1   | 0.00208592 | 0.16642032 | 0.375 | 0.339 | 1 CD8_UCBMC |
| SBF2     | 0.00220261 | 0.15177766 | 0.345 | 0.308 | 1 CD8_UCBMC |
| ARNT     | 0.00221617 | 0.18276672 | 0.276 | 0.24  | 1 CD8_UCBMC |
| RALY     | 0.00231013 | 0.18929688 | 0.397 | 0.366 | 1 CD8_UCBMC |
| PMPCB    | 0.00234787 | 0.11565802 | 0.299 | 0.264 | 1 CD8_UCBMC |
| MNAT1    | 0.0025     | 0.15343601 | 0.451 | 0.417 | 1 CD8_UCBMC |
| NFAT5    | 0.00253768 | 0.16063384 | 0.386 | 0.353 | 1 CD8_UCBMC |
| SERTAD2  | 0.00262235 | 0.18053559 | 0.298 | 0.265 | 1 CD8_UCBMC |
| ATP1B3   | 0.00284353 | 0.15507742 | 0.351 | 0.317 | 1 CD8_UCBMC |
| ATF6     | 0.00341223 | 0.22059769 | 0.292 | 0.263 | 1 CD8_UCBMC |
| TCF20    | 0.0035069  | 0.16872518 | 0.36  | 0.329 | 1 CD8_UCBMC |
| NUCKS1   | 0.00359834 | 0.11153104 | 0.492 | 0.443 | 1 CD8_UCBMC |
| USP25    | 0.00412398 | 0.14556145 | 0.323 | 0.291 | 1 CD8_UCBMC |
| NEK7     | 0.00460662 | 0.1540539  | 0.364 | 0.328 | 1 CD8_UCBMC |
| FUT8     | 0.00516592 | 0.16856079 | 0.296 | 0.264 | 1 CD8_UCBMC |
| KIAA0232 | 0.00579697 | 0.16176721 | 0.282 | 0.251 | 1 CD8_UCBMC |
| DTNB     | 0.00615052 | 0.21767164 | 0.278 | 0.25  | 1 CD8_UCBMC |
| INPP5D   | 0.00622424 | 0.14518394 | 0.36  | 0.329 | 1 CD8_UCBMC |
| PIBF1    | 0.00713932 | 0.18791121 | 0.309 | 0.281 | 1 CD8_UCBMC |
| PPP2R2D  | 0.00746908 | 0.20414107 | 0.296 | 0.27  | 1 CD8_UCBMC |
| PSIP1    | 0.00928532 | 0.14914515 | 0.454 | 0.422 | 1 CD8_UCBMC |
| ATF7     | 0.00935667 | 0.10412319 | 0.307 | 0.278 | 1 CD8_UCBMC |
| MEMO1    | 0.00965471 | 0.13131829 | 0.404 | 0.371 | 1 CD8_UCBMC |
| PCF11    | 0.01165232 | 0.17212405 | 0.275 | 0.248 | 1 CD8_UCBMC |
| MRPS31   | 0.01186355 | 0.11308625 | 0.371 | 0.341 | 1 CD8_UCBMC |
| WAPL     | 0.01248157 | 0.12396842 | 0.353 | 0.326 | 1 CD8_UCBMC |
| INPP4A   | 0.01314375 | 0.10236625 | 0.389 | 0.357 | 1 CD8_UCBMC |
| EXOSC7   | 0.01398963 | 0.14094978 | 0.258 | 0.233 | 1 CD8_UCBMC |
| SMN1     | 0.01405714 | 0.10444836 | 0.261 | 0.235 | 1 CD8_UCBMC |
| HP1BP3   | 0.01913161 | 0.11716777 | 0.443 | 0.414 | 1 CD8_UCBMC |
| MDN1     | 0.01923609 | 0.10033575 | 0.353 | 0.323 | 1 CD8_UCBMC |
| EHBP1    | 0.01968355 | 0.15052109 | 0.334 | 0.309 | 1 CD8_UCBMC |
| SMAD2    | 0.01988507 | 0.10663041 | 0.269 | 0.242 | 1 CD8_UCBMC |

|                   |            |            |       |       |           |            |
|-------------------|------------|------------|-------|-------|-----------|------------|
| DYNC1H1           | 0.020828   | 0.10478322 | 0.293 | 0.267 | 1         | CD8_UCBMC  |
| NEDD4L            | 0.02332127 | 0.18622    | 0.302 | 0.278 | 1         | CD8_UCBMC  |
| NPTN              | 0.02489868 | 0.12118824 | 0.259 | 0.235 | 1         | CD8_UCBMC  |
| TTC27             | 0.0262945  | 0.21985411 | 0.265 | 0.244 | 1         | CD8_UCBMC  |
| IVNS1ABP          | 0.0277618  | 0.1009524  | 0.336 | 0.311 | 1         | CD8_UCBMC  |
| PRPSAP2           | 0.03109866 | 0.15114866 | 0.268 | 0.245 | 1         | CD8_UCBMC  |
| SMC1A             | 0.03619453 | 0.13143921 | 0.262 | 0.24  | 1         | CD8_UCBMC  |
| DAP3              | 0.03691598 | 0.16507901 | 0.276 | 0.259 | 1         | CD8_UCBMC  |
| TTC19             | 0.03860845 | 0.13784333 | 0.275 | 0.256 | 1         | CD8_UCBMC  |
| CDK6              | 0.04147152 | 0.14722305 | 0.302 | 0.282 | 1         | CD8_UCBMC  |
| DCP2              | 0.04640969 | 0.19171829 | 0.255 | 0.237 | 1         | CD8_UCBMC  |
| RNF115            | 0.06338193 | 0.16524416 | 0.288 | 0.274 | 1         | CD8_UCBMC  |
| UBR2              | 0.07233226 | 0.1313367  | 0.309 | 0.291 | 1         | CD8_UCBMC  |
| EIPR1             | 0.07415519 | 0.11130932 | 0.269 | 0.253 | 1         | CD8_UCBMC  |
| HMBOX1            | 0.08043282 | 0.10982536 | 0.309 | 0.291 | 1         | CD8_UCBMC  |
| UHMK1             | 0.0845949  | 0.16547821 | 0.274 | 0.259 | 1         | CD8_UCBMC  |
| RFX7              | 0.13789777 | 0.12457242 | 0.282 | 0.267 | 1         | CD8_UCBMC  |
| MAP2K4            | 0.18800251 | 0.12666018 | 0.275 | 0.263 | 1         | CD8_UCBMC  |
| LTB               | 0          | 2.68618238 | 0.918 | 0.355 | 0         | CD8_spleen |
| C1QBP             | 0          | 2.70809505 | 0.586 | 0.111 | 0         | CD8_spleen |
| JUN               | 0          | 2.1462189  | 0.848 | 0.398 | 0         | CD8_spleen |
| RPS2              | 0          | 1.22761539 | 0.978 | 0.864 | 0         | CD8_spleen |
| RPL13             | 0          | 1.93569172 | 0.999 | 0.953 | 0         | CD8_spleen |
| TRAPPC5           | 3.01E-281  | 3.05117581 | 0.374 | 0.038 | 1.07E-276 | CD8_spleen |
| PFN1              | 1.73E-268  | 1.1937731  | 0.976 | 0.825 | 6.13E-264 | CD8_spleen |
| CCDC85B           | 2.87E-268  | 3.49200733 | 0.32  | 0.025 | 1.02E-263 | CD8_spleen |
| NOP53             | 1.46E-244  | 1.78568739 | 0.719 | 0.263 | 5.19E-240 | CD8_spleen |
| PM20D2            | 3.46E-241  | 1.42160141 | 0.884 | 0.503 | 1.23E-236 | CD8_spleen |
| ATP5F1D           | 4.24E-241  | 2.0243584  | 0.578 | 0.155 | 1.50E-236 | CD8_spleen |
| GZMM              | 3.38E-235  | 1.74001246 | 0.745 | 0.305 | 1.20E-230 | CD8_spleen |
| ENSMUG00000040065 | 1.71E-221  | 2.29916595 | 0.452 | 0.094 | 6.07E-217 | CD8_spleen |
| ENSMUG00000008417 | 1.80E-204  | 2.34878133 | 0.407 | 0.081 | 6.40E-200 | CD8_spleen |
| ADORA2B           | 2.28E-202  | 3.54561347 | 0.317 | 0.046 | 8.09E-198 | CD8_spleen |

|                   |           |            |       |       |           |            |
|-------------------|-----------|------------|-------|-------|-----------|------------|
| HIST1H2AC         | 5.27E-185 | 2.16890041 | 0.578 | 0.211 | 1.87E-180 | CD8_spleen |
| ID3               | 9.88E-183 | 2.63376662 | 0.337 | 0.059 | 3.50E-178 | CD8_spleen |
| SRSF2             | 8.91E-175 | 1.59026635 | 0.616 | 0.231 | 3.16E-170 | CD8_spleen |
| TRIR              | 2.76E-174 | 1.43299343 | 0.704 | 0.312 | 9.79E-170 | CD8_spleen |
| NT5C              | 9.83E-174 | 2.34874899 | 0.333 | 0.06  | 3.48E-169 | CD8_spleen |
| COX5A             | 3.99E-172 | 1.62107516 | 0.619 | 0.241 | 1.41E-167 | CD8_spleen |
| MZT2B             | 7.71E-167 | 1.77477205 | 0.471 | 0.134 | 2.73E-162 | CD8_spleen |
| CHCHD10           | 1.67E-166 | 2.53589559 | 0.291 | 0.045 | 5.93E-162 | CD8_spleen |
| COTL1             | 3.01E-159 | 1.14923008 | 0.853 | 0.543 | 1.07E-154 | CD8_spleen |
| FOS               | 2.89E-158 | 1.12673921 | 0.95  | 0.729 | 1.02E-153 | CD8_spleen |
| BTG1              | 2.18E-157 | 0.70999246 | 0.977 | 0.877 | 7.74E-153 | CD8_spleen |
| PTPRCAP           | 9.69E-153 | 2.63918763 | 0.258 | 0.038 | 3.43E-148 | CD8_spleen |
| HSPD1             | 1.39E-146 | 1.50330321 | 0.595 | 0.243 | 4.94E-142 | CD8_spleen |
| TXNL4A            | 6.14E-145 | 1.98555405 | 0.361 | 0.088 | 2.17E-140 | CD8_spleen |
| HSPA8             | 9.60E-144 | 1.0158619  | 0.893 | 0.617 | 3.40E-139 | CD8_spleen |
| DUSP1             | 4.92E-143 | 1.4260766  | 0.693 | 0.346 | 1.74E-138 | CD8_spleen |
| HSPH1             | 1.14E-142 | 1.75671034 | 0.711 | 0.376 | 4.02E-138 | CD8_spleen |
| GADD45GIP1        | 3.65E-140 | 1.91904628 | 0.366 | 0.093 | 1.29E-135 | CD8_spleen |
| FOSB              | 3.39E-139 | 1.52610304 | 0.615 | 0.275 | 1.20E-134 | CD8_spleen |
| BCL11B            | 1.75E-132 | 1.01509674 | 0.882 | 0.599 | 6.20E-128 | CD8_spleen |
| STK17A            | 3.31E-127 | 1.00916105 | 0.829 | 0.526 | 1.17E-122 | CD8_spleen |
| TMEM160           | 2.33E-125 | 1.81835074 | 0.363 | 0.101 | 8.24E-121 | CD8_spleen |
| NABP1             | 4.15E-125 | 1.41204011 | 0.621 | 0.293 | 1.47E-120 | CD8_spleen |
| DNAJB1            | 1.23E-124 | 2.65153906 | 0.317 | 0.082 | 4.38E-120 | CD8_spleen |
| H4C15             | 1.32E-123 | 1.46364267 | 0.488 | 0.176 | 4.67E-119 | CD8_spleen |
| ACTG1             | 2.31E-122 | 0.73350614 | 0.978 | 0.906 | 8.18E-118 | CD8_spleen |
| PLAC8             | 2.10E-120 | 0.91257786 | 0.893 | 0.658 | 7.43E-116 | CD8_spleen |
| ACTB              | 7.77E-119 | 0.57130065 | 0.999 | 0.984 | 2.75E-114 | CD8_spleen |
| H1FX              | 5.66E-117 | 2.13626987 | 0.263 | 0.056 | 2.01E-112 | CD8_spleen |
| ITM2B             | 2.06E-114 | 0.79956108 | 0.923 | 0.728 | 7.28E-110 | CD8_spleen |
| ANP32B            | 1.73E-113 | 0.88881066 | 0.837 | 0.55  | 6.14E-109 | CD8_spleen |
| ENSMUG00000054358 | 5.97E-110 | 1.08418664 | 0.985 | 0.879 | 2.11E-105 | CD8_spleen |
| INKA1             | 3.03E-109 | 2.00125326 | 0.26  | 0.058 | 1.07E-104 | CD8_spleen |

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| RASSF1             | 1.12E-108 | 1.22870086 | 0.607 | 0.293 | 3.98E-104 | CD8_spleen |
| PAK2               | 6.88E-107 | 0.949813   | 0.811 | 0.552 | 2.44E-102 | CD8_spleen |
| ENSMMUG00000053918 | 1.04E-106 | 1.72289691 | 0.376 | 0.125 | 3.68E-102 | CD8_spleen |
| BMT2               | 9.77E-106 | 2.48870683 | 0.433 | 0.188 | 3.46E-101 | CD8_spleen |
| PPIA               | 8.56E-105 | 1.3358277  | 0.448 | 0.169 | 3.03E-100 | CD8_spleen |
| TRAC               | 1.02E-104 | 0.68453824 | 0.951 | 0.819 | 3.60E-100 | CD8_spleen |
| SRRM2              | 2.88E-104 | 1.02570282 | 0.717 | 0.406 | 1.02E-99  | CD8_spleen |
| HNRNPAB            | 4.96E-100 | 1.40474879 | 0.422 | 0.157 | 1.76E-95  | CD8_spleen |
| CD3G               | 8.30E-99  | 1.08854713 | 0.617 | 0.308 | 2.94E-94  | CD8_spleen |
| CYC1               | 1.40E-98  | 1.42636383 | 0.393 | 0.14  | 4.97E-94  | CD8_spleen |
| UBE2S              | 7.02E-98  | 1.69001391 | 0.314 | 0.093 | 2.49E-93  | CD8_spleen |
| LSM4               | 7.17E-98  | 1.20315676 | 0.544 | 0.248 | 2.54E-93  | CD8_spleen |
| DENND2D            | 2.59E-96  | 1.10824597 | 0.602 | 0.304 | 9.19E-92  | CD8_spleen |
| ARF6               | 1.00E-95  | 1.32994012 | 0.384 | 0.134 | 3.55E-91  | CD8_spleen |
| HNRNPF             | 1.02E-93  | 0.92330639 | 0.732 | 0.436 | 3.60E-89  | CD8_spleen |
| TESC               | 2.38E-93  | 1.30164122 | 0.504 | 0.229 | 8.42E-89  | CD8_spleen |
| MARCKSL1           | 4.91E-93  | 1.61676487 | 0.335 | 0.11  | 1.74E-88  | CD8_spleen |
| RANBP1             | 6.46E-93  | 1.46477458 | 0.374 | 0.132 | 2.29E-88  | CD8_spleen |
| PPP1R10            | 1.76E-92  | 1.11322374 | 0.609 | 0.324 | 6.23E-88  | CD8_spleen |
| STK17B             | 1.18E-91  | 0.70241306 | 0.964 | 0.827 | 4.18E-87  | CD8_spleen |
| CLTA               | 2.79E-89  | 1.23420847 | 0.456 | 0.19  | 9.88E-85  | CD8_spleen |
| BCL2L2-PABPN1      | 5.12E-89  | 1.75238185 | 0.255 | 0.067 | 1.82E-84  | CD8_spleen |
| EEF1A1             | 1.07E-88  | 0.36653437 | 0.994 | 0.986 | 3.79E-84  | CD8_spleen |
| MYC                | 1.39E-86  | 1.44683439 | 0.362 | 0.132 | 4.93E-82  | CD8_spleen |
| DNAJA1             | 2.92E-86  | 1.06911011 | 0.642 | 0.36  | 1.04E-81  | CD8_spleen |
| CD38               | 5.03E-86  | 0.91625277 | 0.751 | 0.475 | 1.78E-81  | CD8_spleen |
| IL6ST              | 8.11E-86  | 1.04865524 | 0.722 | 0.457 | 2.88E-81  | CD8_spleen |
| ENSMMUG00000051300 | 2.00E-85  | 0.42071916 | 0.999 | 0.908 | 7.10E-81  | CD8_spleen |
| TSEN54             | 7.04E-85  | 1.6708066  | 0.252 | 0.068 | 2.49E-80  | CD8_spleen |
| ZC3HAV1            | 2.34E-84  | 0.85037103 | 0.881 | 0.674 | 8.29E-80  | CD8_spleen |
| LCP1               | 4.38E-84  | 0.86690992 | 0.784 | 0.531 | 1.55E-79  | CD8_spleen |
| ARRDC3             | 3.36E-83  | 1.26486826 | 0.458 | 0.202 | 1.19E-78  | CD8_spleen |
| RPS26              | 6.89E-83  | 0.31207145 | 1     | 0.997 | 2.44E-78  | CD8_spleen |

|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| SLC9A3R1           | 8.87E-83 | 1.3395406  | 0.409 | 0.168 | 3.14E-78 | CD8_spleen |
| GIMAP4             | 3.10E-82 | 1.5581801  | 0.27  | 0.079 | 1.10E-77 | CD8_spleen |
| PPM1G              | 1.10E-81 | 1.18323016 | 0.44  | 0.187 | 3.89E-77 | CD8_spleen |
| EIF3F              | 1.84E-80 | 0.71486535 | 0.852 | 0.629 | 6.54E-76 | CD8_spleen |
| PDCD6-AHRR         | 3.51E-80 | 1.34277813 | 0.338 | 0.12  | 1.24E-75 | CD8_spleen |
| ITGA1              | 4.57E-79 | 1.42865547 | 0.461 | 0.22  | 1.62E-74 | CD8_spleen |
| HSP90AA1           | 1.06E-78 | 0.78821355 | 0.887 | 0.715 | 3.77E-74 | CD8_spleen |
| PTPRC              | 1.81E-78 | 0.48997613 | 0.988 | 0.948 | 6.42E-74 | CD8_spleen |
| SLFN5              | 2.19E-78 | 1.27656675 | 0.369 | 0.143 | 7.77E-74 | CD8_spleen |
| IL27RA             | 4.08E-78 | 1.55948781 | 0.303 | 0.104 | 1.45E-73 | CD8_spleen |
| GLS                | 1.25E-77 | 0.92793073 | 0.618 | 0.339 | 4.43E-73 | CD8_spleen |
| NME3               | 3.67E-77 | 0.94333279 | 0.591 | 0.315 | 1.30E-72 | CD8_spleen |
| CD8A               | 8.53E-77 | 0.80366556 | 0.752 | 0.48  | 3.02E-72 | CD8_spleen |
| ITGAL              | 1.16E-76 | 1.35117928 | 0.335 | 0.123 | 4.09E-72 | CD8_spleen |
| FAM174C            | 7.03E-76 | 1.52741057 | 0.26  | 0.079 | 2.49E-71 | CD8_spleen |
| SGK1               | 2.70E-75 | 1.20884472 | 0.474 | 0.224 | 9.58E-71 | CD8_spleen |
| NOL4L              | 5.53E-75 | 1.67365804 | 0.257 | 0.08  | 1.96E-70 | CD8_spleen |
| ITPKB              | 8.83E-75 | 1.02515334 | 0.572 | 0.31  | 3.13E-70 | CD8_spleen |
| IL17RA             | 1.48E-74 | 1.50288434 | 0.278 | 0.092 | 5.23E-70 | CD8_spleen |
| FAM102A            | 1.62E-73 | 1.22375884 | 0.379 | 0.154 | 5.75E-69 | CD8_spleen |
| CARD11             | 1.00E-72 | 1.21906131 | 0.458 | 0.221 | 3.55E-68 | CD8_spleen |
| PTPN22             | 1.76E-72 | 1.18791349 | 0.418 | 0.185 | 6.22E-68 | CD8_spleen |
| AUTS2              | 2.78E-72 | 0.89762733 | 0.612 | 0.346 | 9.86E-68 | CD8_spleen |
| SEMA4D             | 1.55E-70 | 0.81505566 | 0.651 | 0.381 | 5.49E-66 | CD8_spleen |
| RPL19              | 1.73E-70 | 0.32553545 | 0.988 | 0.981 | 6.12E-66 | CD8_spleen |
| DGKD               | 1.48E-69 | 1.14995657 | 0.414 | 0.187 | 5.23E-65 | CD8_spleen |
| ENSMMUG00000049833 | 2.59E-69 | 1.84419103 | 0.369 | 0.163 | 9.19E-65 | CD8_spleen |
| ENSMMUG00000053392 | 8.72E-69 | 0.81120587 | 0.654 | 0.389 | 3.09E-64 | CD8_spleen |
| RALBP1             | 1.83E-66 | 1.13594374 | 0.403 | 0.181 | 6.47E-62 | CD8_spleen |
| PDE7A              | 9.85E-66 | 0.76986906 | 0.766 | 0.53  | 3.49E-61 | CD8_spleen |
| CLIC1              | 1.51E-65 | 1.23071982 | 0.309 | 0.118 | 5.35E-61 | CD8_spleen |
| DECR2              | 5.21E-65 | 1.08647084 | 0.358 | 0.148 | 1.85E-60 | CD8_spleen |
| USP44              | 7.72E-65 | 0.96237708 | 0.486 | 0.245 | 2.74E-60 | CD8_spleen |

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| SRSF7              | 6.91E-64 | 0.71599392 | 0.758 | 0.516 | 2.45E-59 | CD8_spleen |
| BRD9               | 9.33E-64 | 1.11340868 | 0.368 | 0.158 | 3.30E-59 | CD8_spleen |
| TMEM59L            | 2.55E-63 | 0.99161926 | 0.409 | 0.184 | 9.02E-59 | CD8_spleen |
| PRELID1            | 2.90E-63 | 1.32075818 | 0.261 | 0.09  | 1.03E-58 | CD8_spleen |
| VIM                | 3.16E-63 | 1.03421067 | 0.528 | 0.299 | 1.12E-58 | CD8_spleen |
| CREM               | 3.41E-63 | 0.74136713 | 0.437 | 0.204 | 1.21E-58 | CD8_spleen |
| TERF2IP            | 4.63E-63 | 1.12948602 | 0.398 | 0.182 | 1.64E-58 | CD8_spleen |
| TRAF3IP3           | 1.24E-62 | 0.74450176 | 0.72  | 0.472 | 4.39E-58 | CD8_spleen |
| SFMBT2             | 1.25E-62 | 0.8906954  | 0.571 | 0.325 | 4.42E-58 | CD8_spleen |
| ALKBH7             | 1.66E-62 | 1.10898716 | 0.39  | 0.177 | 5.90E-58 | CD8_spleen |
| ZFP36              | 4.12E-62 | 0.87929495 | 0.708 | 0.482 | 1.46E-57 | CD8_spleen |
| BTG2               | 4.27E-62 | 0.82538644 | 0.726 | 0.492 | 1.51E-57 | CD8_spleen |
| LCK                | 1.39E-61 | 0.68831489 | 0.758 | 0.505 | 4.93E-57 | CD8_spleen |
| ID2                | 2.73E-61 | 0.8178079  | 0.753 | 0.545 | 9.69E-57 | CD8_spleen |
| THEMIS             | 3.35E-61 | 0.63487586 | 0.864 | 0.665 | 1.19E-56 | CD8_spleen |
| SLC2A3             | 4.11E-61 | 0.97799203 | 0.663 | 0.433 | 1.45E-56 | CD8_spleen |
| SIRPG              | 4.92E-61 | 1.00399861 | 0.435 | 0.213 | 1.74E-56 | CD8_spleen |
| ENSMMUG00000061128 | 1.55E-60 | 0.78778237 | 0.632 | 0.391 | 5.49E-56 | CD8_spleen |
| H2AZ2              | 1.68E-60 | 0.65893511 | 0.784 | 0.538 | 5.94E-56 | CD8_spleen |
| ENSMMUG00000062086 | 2.38E-60 | 1.09155769 | 0.366 | 0.161 | 8.43E-56 | CD8_spleen |
| GLCE               | 4.41E-59 | 0.84234942 | 0.63  | 0.394 | 1.56E-54 | CD8_spleen |
| GPR171             | 5.96E-59 | 0.91278009 | 0.323 | 0.131 | 2.11E-54 | CD8_spleen |
| MANF               | 1.28E-58 | 1.09856078 | 0.341 | 0.146 | 4.53E-54 | CD8_spleen |
| IKZF1              | 1.37E-58 | 0.6202143  | 0.847 | 0.632 | 4.85E-54 | CD8_spleen |
| GTF2I              | 1.80E-58 | 0.70952978 | 0.728 | 0.5   | 6.39E-54 | CD8_spleen |
| HNRNPU             | 2.33E-58 | 0.64537352 | 0.816 | 0.592 | 8.24E-54 | CD8_spleen |
| HSP90AB1           | 3.48E-58 | 0.44378692 | 0.976 | 0.907 | 1.23E-53 | CD8_spleen |
| ETS1               | 4.94E-58 | 0.57852112 | 0.928 | 0.782 | 1.75E-53 | CD8_spleen |
| TET3               | 5.95E-58 | 1.04912604 | 0.429 | 0.217 | 2.11E-53 | CD8_spleen |
| PDIA6              | 2.03E-57 | 1.21495999 | 0.315 | 0.132 | 7.19E-53 | CD8_spleen |
| EIF4A2             | 6.48E-57 | 0.60365521 | 0.821 | 0.599 | 2.30E-52 | CD8_spleen |
| C10H20orf24        | 8.11E-56 | 0.82145242 | 0.495 | 0.265 | 2.87E-51 | CD8_spleen |
| ZFAND5             | 9.78E-56 | 1.02644986 | 0.335 | 0.145 | 3.46E-51 | CD8_spleen |

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| RRP36              | 2.05E-55 | 1.22736895 | 0.265 | 0.1   | 7.25E-51 | CD8_spleen |
| FAM107B            | 2.09E-55 | 0.75488152 | 0.68  | 0.446 | 7.39E-51 | CD8_spleen |
| DYNLL1             | 3.51E-55 | 0.90034682 | 0.486 | 0.264 | 1.24E-50 | CD8_spleen |
| ACAP2              | 4.15E-55 | 0.68128363 | 0.78  | 0.545 | 1.47E-50 | CD8_spleen |
| PIK3R1             | 8.07E-55 | 0.87154228 | 0.461 | 0.241 | 2.86E-50 | CD8_spleen |
| NOL7               | 2.77E-54 | 0.87840381 | 0.455 | 0.235 | 9.82E-50 | CD8_spleen |
| NKG2D              | 3.53E-54 | 0.99363977 | 0.403 | 0.195 | 1.25E-49 | CD8_spleen |
| RUNX3              | 3.79E-54 | 0.89220066 | 0.451 | 0.236 | 1.34E-49 | CD8_spleen |
| CSK                | 8.28E-54 | 0.91435235 | 0.43  | 0.218 | 2.93E-49 | CD8_spleen |
| KTN1               | 1.56E-53 | 0.96092861 | 0.442 | 0.234 | 5.54E-49 | CD8_spleen |
| ENSMMUG00000060287 | 7.15E-53 | 0.40717738 | 0.967 | 0.88  | 2.53E-48 | CD8_spleen |
| UBE2D2             | 8.21E-53 | 0.80076896 | 0.466 | 0.242 | 2.91E-48 | CD8_spleen |
| RAC2               | 2.46E-52 | 0.65386313 | 0.646 | 0.409 | 8.70E-48 | CD8_spleen |
| ZHX2               | 3.37E-52 | 0.82123603 | 0.448 | 0.233 | 1.19E-47 | CD8_spleen |
| AKIRIN1            | 5.59E-52 | 0.87575676 | 0.418 | 0.208 | 1.98E-47 | CD8_spleen |
| CAP1               | 6.09E-52 | 0.76369713 | 0.567 | 0.332 | 2.16E-47 | CD8_spleen |
| MCL1               | 7.20E-52 | 0.79937253 | 0.601 | 0.381 | 2.55E-47 | CD8_spleen |
| TAGAP              | 8.15E-52 | 0.87844869 | 0.608 | 0.389 | 2.89E-47 | CD8_spleen |
| KLF6               | 8.97E-52 | 0.63854855 | 0.875 | 0.696 | 3.18E-47 | CD8_spleen |
| ENSMMUG00000051343 | 1.55E-51 | 1.14150138 | 0.304 | 0.131 | 5.49E-47 | CD8_spleen |
| SSBP3              | 2.42E-51 | 0.76920313 | 0.604 | 0.376 | 8.57E-47 | CD8_spleen |
| TCP1               | 4.88E-51 | 0.89235038 | 0.449 | 0.236 | 1.73E-46 | CD8_spleen |
| SEM1               | 1.04E-50 | 0.645748   | 0.618 | 0.378 | 3.67E-46 | CD8_spleen |
| RB1                | 1.21E-50 | 1.21477243 | 0.275 | 0.113 | 4.29E-46 | CD8_spleen |
| HPCAL1             | 1.25E-50 | 0.68946821 | 0.529 | 0.298 | 4.44E-46 | CD8_spleen |
| ATP6V0E1           | 3.40E-50 | 0.60489511 | 0.611 | 0.365 | 1.20E-45 | CD8_spleen |
| CHORDC1            | 1.27E-49 | 0.80673826 | 0.603 | 0.377 | 4.49E-45 | CD8_spleen |
| HNRNPA2B1          | 2.93E-49 | 0.37094602 | 0.975 | 0.895 | 1.04E-44 | CD8_spleen |
| PYHIN1             | 3.90E-49 | 0.69109349 | 0.511 | 0.279 | 1.38E-44 | CD8_spleen |
| ZMYND8             | 4.64E-49 | 0.64038394 | 0.637 | 0.396 | 1.65E-44 | CD8_spleen |
| TOB1               | 6.24E-49 | 0.72531888 | 0.612 | 0.386 | 2.21E-44 | CD8_spleen |
| RABEP1             | 7.03E-49 | 0.9840761  | 0.346 | 0.163 | 2.49E-44 | CD8_spleen |
| NFATC2             | 7.07E-49 | 1.00297348 | 0.389 | 0.198 | 2.51E-44 | CD8_spleen |

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| ZFP36L1            | 1.18E-48 | 0.69699934 | 0.669 | 0.439 | 4.19E-44 | CD8_spleen |
| TMC8               | 2.28E-48 | 1.01050027 | 0.317 | 0.144 | 8.09E-44 | CD8_spleen |
| HMGA1              | 1.01E-47 | 0.70078233 | 0.598 | 0.383 | 3.56E-43 | CD8_spleen |
| EFCAB2             | 1.57E-47 | 0.70891398 | 0.563 | 0.339 | 5.55E-43 | CD8_spleen |
| PDIA3              | 1.83E-47 | 0.96514989 | 0.298 | 0.129 | 6.47E-43 | CD8_spleen |
| TLN1               | 1.87E-47 | 0.74145633 | 0.54  | 0.321 | 6.62E-43 | CD8_spleen |
| EIF3B              | 2.66E-47 | 0.94806069 | 0.371 | 0.185 | 9.44E-43 | CD8_spleen |
| MLLT11             | 3.10E-47 | 1.00557719 | 0.291 | 0.125 | 1.10E-42 | CD8_spleen |
| DNMT3A             | 4.95E-47 | 0.89873351 | 0.422 | 0.226 | 1.75E-42 | CD8_spleen |
| CMPK1              | 6.53E-47 | 0.97570613 | 0.315 | 0.142 | 2.31E-42 | CD8_spleen |
| TBC1D10C           | 2.55E-46 | 0.74801103 | 0.465 | 0.253 | 9.05E-42 | CD8_spleen |
| ITGB2              | 4.26E-46 | 0.89767951 | 0.354 | 0.173 | 1.51E-41 | CD8_spleen |
| CD53               | 1.23E-45 | 0.59532273 | 0.715 | 0.496 | 4.36E-41 | CD8_spleen |
| VCP                | 1.69E-45 | 0.84339439 | 0.407 | 0.211 | 5.99E-41 | CD8_spleen |
| FLNB               | 3.34E-45 | 1.26477368 | 0.273 | 0.12  | 1.18E-40 | CD8_spleen |
| RGCC               | 5.15E-45 | 0.82107249 | 0.486 | 0.281 | 1.83E-40 | CD8_spleen |
| EIF4A1             | 5.16E-45 | 0.64360833 | 0.607 | 0.387 | 1.83E-40 | CD8_spleen |
| COX17              | 8.79E-45 | 0.66913848 | 0.376 | 0.186 | 3.11E-40 | CD8_spleen |
| DEK                | 9.48E-45 | 0.82706199 | 0.448 | 0.247 | 3.36E-40 | CD8_spleen |
| METTL26            | 1.46E-44 | 0.91742149 | 0.354 | 0.175 | 5.16E-40 | CD8_spleen |
| AKNA               | 1.90E-44 | 0.77510683 | 0.5   | 0.29  | 6.73E-40 | CD8_spleen |
| PTK2B              | 3.93E-44 | 1.10736094 | 0.269 | 0.117 | 1.39E-39 | CD8_spleen |
| ENSMMUG00000058325 | 1.18E-43 | 0.38480842 | 0.977 | 0.917 | 4.20E-39 | CD8_spleen |
| STIP1              | 2.79E-43 | 0.84431128 | 0.386 | 0.202 | 9.87E-39 | CD8_spleen |
| CCT2               | 5.26E-43 | 0.60368412 | 0.677 | 0.459 | 1.87E-38 | CD8_spleen |
| VGLL4              | 5.61E-43 | 0.81337337 | 0.423 | 0.232 | 1.99E-38 | CD8_spleen |
| METTL9             | 8.34E-43 | 0.73027934 | 0.468 | 0.271 | 2.95E-38 | CD8_spleen |
| LCP2               | 9.37E-43 | 0.87235746 | 0.352 | 0.176 | 3.32E-38 | CD8_spleen |
| B2M                | 1.05E-42 | 0.21597392 | 0.999 | 0.999 | 3.73E-38 | CD8_spleen |
| BTF3               | 1.44E-42 | 0.37063786 | 0.95  | 0.844 | 5.12E-38 | CD8_spleen |
| CD63               | 2.67E-42 | 0.66807373 | 0.543 | 0.334 | 9.46E-38 | CD8_spleen |
| CALR               | 2.80E-42 | 0.73565431 | 0.561 | 0.358 | 9.93E-38 | CD8_spleen |
| WDR82              | 5.92E-42 | 0.78557418 | 0.376 | 0.195 | 2.10E-37 | CD8_spleen |



|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| YWHAH              | 6.14E-42 | 0.92251529 | 0.318 | 0.153 | 2.18E-37 | CD8_spleen |
| GRAP2              | 6.22E-42 | 0.68379986 | 0.572 | 0.364 | 2.20E-37 | CD8_spleen |
| NDFIP1             | 8.83E-42 | 0.54128781 | 0.787 | 0.579 | 3.13E-37 | CD8_spleen |
| MIC1               | 8.86E-42 | 0.47512776 | 0.793 | 0.589 | 3.14E-37 | CD8_spleen |
| TFRC               | 9.81E-42 | 1.05632034 | 0.289 | 0.134 | 3.48E-37 | CD8_spleen |
| STT3B              | 1.15E-41 | 0.59759746 | 0.659 | 0.44  | 4.06E-37 | CD8_spleen |
| KDM6B              | 1.22E-41 | 0.83001761 | 0.37  | 0.192 | 4.31E-37 | CD8_spleen |
| ADAM10             | 1.29E-41 | 0.68898929 | 0.547 | 0.343 | 4.58E-37 | CD8_spleen |
| EDEM3              | 1.42E-41 | 0.89496485 | 0.375 | 0.196 | 5.02E-37 | CD8_spleen |
| SETX               | 1.43E-41 | 0.67475888 | 0.56  | 0.353 | 5.06E-37 | CD8_spleen |
| THY1               | 2.08E-41 | 0.96900792 | 0.293 | 0.137 | 7.37E-37 | CD8_spleen |
| KIF2A              | 2.39E-41 | 0.6351746  | 0.559 | 0.345 | 8.47E-37 | CD8_spleen |
| YPEL3              | 2.85E-41 | 0.94758069 | 0.302 | 0.143 | 1.01E-36 | CD8_spleen |
| MAP2K1             | 3.35E-41 | 1.00481488 | 0.29  | 0.135 | 1.19E-36 | CD8_spleen |
| CD47               | 3.68E-41 | 0.75882409 | 0.456 | 0.261 | 1.30E-36 | CD8_spleen |
| TPST2              | 4.93E-41 | 0.7908511  | 0.368 | 0.192 | 1.75E-36 | CD8_spleen |
| PIP4K2A            | 5.85E-41 | 0.46813824 | 0.871 | 0.703 | 2.07E-36 | CD8_spleen |
| CYRIB              | 6.60E-41 | 0.50755114 | 0.813 | 0.636 | 2.34E-36 | CD8_spleen |
| CD3D               | 9.08E-41 | 0.3647087  | 0.908 | 0.802 | 3.22E-36 | CD8_spleen |
| GTF3A              | 1.37E-40 | 0.93965877 | 0.315 | 0.151 | 4.85E-36 | CD8_spleen |
| SASH3              | 1.69E-40 | 1.02876789 | 0.262 | 0.116 | 5.97E-36 | CD8_spleen |
| ENSMMUG00000060923 | 2.78E-40 | 0.53918511 | 0.771 | 0.581 | 9.85E-36 | CD8_spleen |
| RGS10              | 3.84E-40 | 0.54015809 | 0.724 | 0.53  | 1.36E-35 | CD8_spleen |
| CCND3              | 3.85E-40 | 0.43164596 | 0.879 | 0.716 | 1.36E-35 | CD8_spleen |
| ANP32A             | 3.86E-40 | 0.58324109 | 0.56  | 0.347 | 1.37E-35 | CD8_spleen |
| ACTN1              | 4.38E-40 | 0.84326011 | 0.405 | 0.224 | 1.55E-35 | CD8_spleen |
| CYBA               | 4.45E-40 | 0.50933324 | 0.683 | 0.454 | 1.58E-35 | CD8_spleen |
| VAV3               | 4.78E-40 | 0.78312861 | 0.511 | 0.315 | 1.69E-35 | CD8_spleen |
| AHSA1              | 5.05E-40 | 0.81073901 | 0.296 | 0.137 | 1.79E-35 | CD8_spleen |
| IRF2               | 5.91E-40 | 0.74548117 | 0.419 | 0.23  | 2.10E-35 | CD8_spleen |
| STIM1              | 6.09E-40 | 0.6323635  | 0.659 | 0.457 | 2.16E-35 | CD8_spleen |
| ENSMMUG00000011711 | 7.81E-40 | 0.89947964 | 0.362 | 0.194 | 2.77E-35 | CD8_spleen |
| ACTR3              | 8.15E-40 | 0.54675616 | 0.719 | 0.525 | 2.89E-35 | CD8_spleen |

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| PRPF38B            | 9.04E-40 | 0.65497542 | 0.55  | 0.343 | 3.20E-35 | CD8_spleen |
| TMPO               | 9.07E-40 | 0.84329842 | 0.346 | 0.177 | 3.21E-35 | CD8_spleen |
| MYH9               | 1.09E-39 | 0.53199566 | 0.79  | 0.599 | 3.88E-35 | CD8_spleen |
| CHI3L2             | 1.28E-39 | 0.93185691 | 0.355 | 0.188 | 4.52E-35 | CD8_spleen |
| PHF20L1            | 9.14E-39 | 0.86896979 | 0.338 | 0.173 | 3.24E-34 | CD8_spleen |
| PAG1               | 1.60E-38 | 0.4812297  | 0.86  | 0.677 | 5.69E-34 | CD8_spleen |
| HUWE1              | 1.95E-38 | 0.57277964 | 0.647 | 0.443 | 6.91E-34 | CD8_spleen |
| ENSMMUG00000052802 | 2.59E-38 | 0.86596499 | 0.367 | 0.198 | 9.16E-34 | CD8_spleen |
| RETREG1            | 2.93E-38 | 0.61456865 | 0.627 | 0.427 | 1.04E-33 | CD8_spleen |
| HYPK               | 3.42E-38 | 0.54705761 | 0.594 | 0.383 | 1.21E-33 | CD8_spleen |
| NXPE3              | 4.28E-38 | 0.84434283 | 0.511 | 0.324 | 1.52E-33 | CD8_spleen |
| MGRN1              | 5.07E-38 | 0.80955224 | 0.311 | 0.153 | 1.80E-33 | CD8_spleen |
| PSMA5              | 6.01E-38 | 0.5903028  | 0.47  | 0.274 | 2.13E-33 | CD8_spleen |
| SRP9               | 6.42E-38 | 0.81076521 | 0.328 | 0.167 | 2.28E-33 | CD8_spleen |
| KRIT1              | 8.69E-38 | 0.84581763 | 0.333 | 0.17  | 3.08E-33 | CD8_spleen |
| CHST11             | 9.54E-38 | 0.66572532 | 0.604 | 0.407 | 3.38E-33 | CD8_spleen |
| CLK1               | 9.85E-38 | 0.53538751 | 0.665 | 0.454 | 3.49E-33 | CD8_spleen |
| RASA1              | 1.07E-37 | 0.77965377 | 0.444 | 0.257 | 3.81E-33 | CD8_spleen |
| YY1                | 1.51E-37 | 0.65726405 | 0.428 | 0.245 | 5.35E-33 | CD8_spleen |
| CD2                | 1.70E-37 | 0.60534564 | 0.581 | 0.387 | 6.03E-33 | CD8_spleen |
| RCSD1              | 1.88E-37 | 0.65854275 | 0.515 | 0.316 | 6.66E-33 | CD8_spleen |
| CD69               | 2.95E-37 | 0.40637573 | 0.949 | 0.843 | 1.05E-32 | CD8_spleen |
| JTB                | 2.97E-37 | 0.69049906 | 0.442 | 0.256 | 1.05E-32 | CD8_spleen |
| MAF1               | 3.29E-37 | 0.86943559 | 0.315 | 0.158 | 1.16E-32 | CD8_spleen |
| ECHDC1             | 3.62E-37 | 0.62693861 | 0.559 | 0.356 | 1.28E-32 | CD8_spleen |
| HSPA9              | 4.28E-37 | 0.61655903 | 0.586 | 0.374 | 1.52E-32 | CD8_spleen |
| ARL14EP            | 7.07E-37 | 0.77394735 | 0.286 | 0.135 | 2.51E-32 | CD8_spleen |
| NOLC1              | 8.48E-37 | 0.7753326  | 0.339 | 0.176 | 3.01E-32 | CD8_spleen |
| RASSF2             | 1.14E-36 | 1.01056399 | 0.258 | 0.119 | 4.05E-32 | CD8_spleen |
| IL16               | 1.14E-36 | 0.85219655 | 0.294 | 0.143 | 4.05E-32 | CD8_spleen |
| XPO6               | 1.24E-36 | 0.65718447 | 0.584 | 0.388 | 4.38E-32 | CD8_spleen |
| CBX3               | 1.40E-36 | 0.48433486 | 0.649 | 0.433 | 4.95E-32 | CD8_spleen |
| TASOR              | 1.59E-36 | 0.76582434 | 0.365 | 0.196 | 5.63E-32 | CD8_spleen |

|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| PLEKHG1            | 2.07E-36 | 0.82919014 | 0.475 | 0.294 | 7.32E-32 | CD8_spleen |
| PTGES3             | 2.60E-36 | 0.4904935  | 0.819 | 0.645 | 9.21E-32 | CD8_spleen |
| FLI1               | 2.86E-36 | 0.71265175 | 0.437 | 0.258 | 1.01E-31 | CD8_spleen |
| SYTL3              | 3.32E-36 | 0.67966794 | 0.628 | 0.448 | 1.18E-31 | CD8_spleen |
| MIA2               | 3.91E-36 | 0.57310162 | 0.555 | 0.351 | 1.38E-31 | CD8_spleen |
| RIN3               | 4.27E-36 | 0.76980632 | 0.374 | 0.204 | 1.51E-31 | CD8_spleen |
| ENSMMUG00000038373 | 6.92E-36 | 0.50122262 | 0.707 | 0.503 | 2.45E-31 | CD8_spleen |
| VAV1               | 7.35E-36 | 0.89409628 | 0.325 | 0.17  | 2.60E-31 | CD8_spleen |
| IKZF3              | 7.52E-36 | 0.72442626 | 0.534 | 0.358 | 2.66E-31 | CD8_spleen |
| HSPE1              | 8.93E-36 | 0.42647651 | 0.824 | 0.648 | 3.16E-31 | CD8_spleen |
| TFCP2              | 9.68E-36 | 0.95650981 | 0.302 | 0.153 | 3.43E-31 | CD8_spleen |
| IRAK2              | 9.93E-36 | 0.69911813 | 0.621 | 0.429 | 3.52E-31 | CD8_spleen |
| AKR7A2             | 1.00E-35 | 0.73036523 | 0.292 | 0.141 | 3.56E-31 | CD8_spleen |
| ARGLU1             | 1.17E-35 | 0.44014394 | 0.813 | 0.636 | 4.15E-31 | CD8_spleen |
| TRMO               | 1.42E-35 | 0.97231611 | 0.258 | 0.121 | 5.02E-31 | CD8_spleen |
| ADCY7              | 1.80E-35 | 0.95539291 | 0.254 | 0.118 | 6.39E-31 | CD8_spleen |
| SURF4              | 2.56E-35 | 0.88169295 | 0.29  | 0.143 | 9.08E-31 | CD8_spleen |
| ARL5A              | 2.60E-35 | 0.80398855 | 0.322 | 0.165 | 9.20E-31 | CD8_spleen |
| TGFB1              | 4.02E-35 | 0.8454765  | 0.283 | 0.139 | 1.42E-30 | CD8_spleen |
| LRRFIP1            | 4.21E-35 | 0.7072134  | 0.522 | 0.333 | 1.49E-30 | CD8_spleen |
| GPR174             | 4.34E-35 | 0.77753267 | 0.369 | 0.203 | 1.54E-30 | CD8_spleen |
| CACYBP             | 6.05E-35 | 0.51667572 | 0.673 | 0.472 | 2.14E-30 | CD8_spleen |
| NUP210             | 6.18E-35 | 0.71467588 | 0.383 | 0.216 | 2.19E-30 | CD8_spleen |
| ARHGAP30           | 6.80E-35 | 0.62361845 | 0.507 | 0.311 | 2.41E-30 | CD8_spleen |
| PRDX3              | 1.13E-34 | 0.75260387 | 0.315 | 0.16  | 4.01E-30 | CD8_spleen |
| RGS19              | 1.60E-34 | 0.89625337 | 0.273 | 0.131 | 5.66E-30 | CD8_spleen |
| ZNF217             | 2.10E-34 | 0.82988186 | 0.334 | 0.178 | 7.43E-30 | CD8_spleen |
| ZNF146             | 2.30E-34 | 0.81347551 | 0.315 | 0.163 | 8.14E-30 | CD8_spleen |
| CHM                | 3.11E-34 | 0.66271367 | 0.374 | 0.206 | 1.10E-29 | CD8_spleen |
| CRTAM              | 3.38E-34 | 0.74933359 | 0.457 | 0.28  | 1.20E-29 | CD8_spleen |
| CDK8               | 3.48E-34 | 0.85684386 | 0.331 | 0.177 | 1.23E-29 | CD8_spleen |
| TCF7               | 3.60E-34 | 0.68524151 | 0.446 | 0.265 | 1.28E-29 | CD8_spleen |
| CCT7               | 3.96E-34 | 0.57061615 | 0.458 | 0.268 | 1.40E-29 | CD8_spleen |

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| GIMAP6              | 4.24E-34 | 0.6396715  | 0.318 | 0.162 | 1.50E-29 | CD8_spleen |
| TGFBR2              | 4.45E-34 | 0.564987   | 0.661 | 0.466 | 1.58E-29 | CD8_spleen |
| IL2RG               | 5.57E-34 | 0.49169103 | 0.665 | 0.465 | 1.97E-29 | CD8_spleen |
| HNRNPD              | 5.83E-34 | 0.45770725 | 0.733 | 0.532 | 2.07E-29 | CD8_spleen |
| DEF6                | 9.62E-34 | 0.95167567 | 0.262 | 0.127 | 3.41E-29 | CD8_spleen |
| WDR1                | 1.19E-33 | 0.73156257 | 0.317 | 0.164 | 4.20E-29 | CD8_spleen |
| ERO1A               | 1.51E-33 | 0.9291025  | 0.257 | 0.124 | 5.35E-29 | CD8_spleen |
| NSD1                | 2.13E-33 | 0.58245949 | 0.599 | 0.411 | 7.54E-29 | CD8_spleen |
| IQCG                | 2.43E-33 | 0.81691753 | 0.295 | 0.151 | 8.63E-29 | CD8_spleen |
| SDF2L1              | 3.94E-33 | 0.90023394 | 0.292 | 0.15  | 1.40E-28 | CD8_spleen |
| SMC4                | 4.18E-33 | 0.64388281 | 0.775 | 0.607 | 1.48E-28 | CD8_spleen |
| ENSMMUG00000016898  | 4.46E-33 | 0.69672377 | 0.411 | 0.241 | 1.58E-28 | CD8_spleen |
| ATF1                | 5.29E-33 | 0.89204938 | 0.293 | 0.151 | 1.87E-28 | CD8_spleen |
| NCOR1               | 7.13E-33 | 0.50234002 | 0.675 | 0.482 | 2.53E-28 | CD8_spleen |
| RAP1A               | 7.58E-33 | 0.575123   | 0.636 | 0.439 | 2.69E-28 | CD8_spleen |
| FNBP1               | 1.23E-32 | 0.38097946 | 0.911 | 0.744 | 4.37E-28 | CD8_spleen |
| ITGB7               | 1.32E-32 | 0.7778317  | 0.287 | 0.146 | 4.66E-28 | CD8_spleen |
| APBA2               | 1.75E-32 | 0.70808371 | 0.425 | 0.254 | 6.20E-28 | CD8_spleen |
| TAOK1               | 3.33E-32 | 0.6368532  | 0.487 | 0.31  | 1.18E-27 | CD8_spleen |
| ENSMMUG00000004545  | 5.62E-32 | 0.21327728 | 0.943 | 0.832 | 1.99E-27 | CD8_spleen |
| PPP1CC              | 5.90E-32 | 0.59482464 | 0.519 | 0.336 | 2.09E-27 | CD8_spleen |
| ENSMMUG000000059988 | 7.58E-32 | 0.66602031 | 0.27  | 0.131 | 2.69E-27 | CD8_spleen |
| RPL26               | 7.81E-32 | 0.22689735 | 0.986 | 0.967 | 2.77E-27 | CD8_spleen |
| CGGBP1              | 7.99E-32 | 0.65559851 | 0.391 | 0.226 | 2.83E-27 | CD8_spleen |
| NEDD9               | 8.14E-32 | 0.58126406 | 0.573 | 0.386 | 2.88E-27 | CD8_spleen |
| TNIK                | 9.57E-32 | 0.39907103 | 0.926 | 0.795 | 3.39E-27 | CD8_spleen |
| ZSCAN18             | 1.16E-31 | 0.8059564  | 0.281 | 0.142 | 4.11E-27 | CD8_spleen |
| PUM3                | 1.45E-31 | 0.71948467 | 0.33  | 0.179 | 5.15E-27 | CD8_spleen |
| WDR74               | 1.48E-31 | 0.65160401 | 0.411 | 0.241 | 5.24E-27 | CD8_spleen |
| SLC39A10            | 1.58E-31 | 0.72955911 | 0.31  | 0.165 | 5.59E-27 | CD8_spleen |
| DBN1                | 3.67E-31 | 0.63869393 | 0.356 | 0.198 | 1.30E-26 | CD8_spleen |
| YWHAG               | 7.50E-31 | 0.7389361  | 0.299 | 0.158 | 2.66E-26 | CD8_spleen |
| PARK7               | 9.28E-31 | 0.50836138 | 0.501 | 0.317 | 3.29E-26 | CD8_spleen |

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| CFAP97             | 1.13E-30 | 0.74676166 | 0.255 | 0.125 | 4.00E-26 | CD8_spleen |
| ME2                | 1.22E-30 | 0.537326   | 0.575 | 0.392 | 4.33E-26 | CD8_spleen |
| CCNI               | 2.05E-30 | 0.47864394 | 0.69  | 0.492 | 7.27E-26 | CD8_spleen |
| TRAF5              | 2.05E-30 | 0.73479485 | 0.262 | 0.13  | 7.28E-26 | CD8_spleen |
| CUL4A              | 2.26E-30 | 0.57329715 | 0.446 | 0.271 | 8.02E-26 | CD8_spleen |
| MGA                | 2.44E-30 | 0.65026312 | 0.377 | 0.218 | 8.63E-26 | CD8_spleen |
| PDIA4              | 2.61E-30 | 0.75643099 | 0.256 | 0.126 | 9.26E-26 | CD8_spleen |
| SPTAN1             | 4.63E-30 | 0.63191637 | 0.386 | 0.226 | 1.64E-25 | CD8_spleen |
| STAT5B             | 5.42E-30 | 0.55462597 | 0.511 | 0.327 | 1.92E-25 | CD8_spleen |
| CD74               | 5.44E-30 | 0.69544246 | 0.361 | 0.207 | 1.93E-25 | CD8_spleen |
| PGK1               | 8.17E-30 | 0.44941883 | 0.679 | 0.5   | 2.90E-25 | CD8_spleen |
| IGF2BP3            | 9.78E-30 | 0.66832242 | 0.527 | 0.359 | 3.46E-25 | CD8_spleen |
| GLUD1              | 1.27E-29 | 0.76539142 | 0.398 | 0.241 | 4.49E-25 | CD8_spleen |
| GNB2               | 1.77E-29 | 0.61436252 | 0.388 | 0.228 | 6.28E-25 | CD8_spleen |
| SMURF2             | 1.94E-29 | 0.75742438 | 0.338 | 0.194 | 6.88E-25 | CD8_spleen |
| RASGEF1B           | 2.10E-29 | 1.00849023 | 0.351 | 0.209 | 7.45E-25 | CD8_spleen |
| ANKFY1             | 2.11E-29 | 0.70645427 | 0.373 | 0.221 | 7.48E-25 | CD8_spleen |
| RPS19BP1           | 2.62E-29 | 0.57064765 | 0.38  | 0.221 | 9.29E-25 | CD8_spleen |
| GRB2               | 3.41E-29 | 0.56590109 | 0.472 | 0.302 | 1.21E-24 | CD8_spleen |
| RBM17              | 3.64E-29 | 0.56146221 | 0.494 | 0.317 | 1.29E-24 | CD8_spleen |
| AKAP10             | 4.30E-29 | 0.73513234 | 0.315 | 0.173 | 1.53E-24 | CD8_spleen |
| RAD23B             | 7.06E-29 | 0.59913765 | 0.434 | 0.27  | 2.50E-24 | CD8_spleen |
| ENSMMUG00000056190 | 8.05E-29 | 0.57144976 | 0.557 | 0.377 | 2.85E-24 | CD8_spleen |
| HEXIM1             | 8.14E-29 | 0.76199783 | 0.282 | 0.147 | 2.88E-24 | CD8_spleen |
| PARP1              | 8.76E-29 | 0.76850438 | 0.253 | 0.127 | 3.10E-24 | CD8_spleen |
| NDUFB5             | 9.02E-29 | 0.54319173 | 0.362 | 0.205 | 3.20E-24 | CD8_spleen |
| SATB1              | 9.49E-29 | 0.41272195 | 0.907 | 0.794 | 3.36E-24 | CD8_spleen |
| SQSTM1             | 1.09E-28 | 0.9295259  | 0.269 | 0.143 | 3.87E-24 | CD8_spleen |
| MBP                | 1.37E-28 | 0.41649204 | 0.73  | 0.539 | 4.84E-24 | CD8_spleen |
| PCDHGB5            | 1.75E-28 | 0.77836847 | 0.252 | 0.127 | 6.18E-24 | CD8_spleen |
| DDX3X              | 2.41E-28 | 0.45340259 | 0.763 | 0.59  | 8.54E-24 | CD8_spleen |
| IFT80              | 2.96E-28 | 0.53857485 | 0.589 | 0.41  | 1.05E-23 | CD8_spleen |
| FYB1               | 2.99E-28 | 0.37143277 | 0.88  | 0.735 | 1.06E-23 | CD8_spleen |

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| MRPL20             | 3.02E-28 | 0.60578116 | 0.275 | 0.142 | 1.07E-23 | CD8_spleen |
| CREB1              | 3.60E-28 | 0.57154147 | 0.503 | 0.328 | 1.27E-23 | CD8_spleen |
| CCDC107            | 4.57E-28 | 0.66731156 | 0.32  | 0.175 | 1.62E-23 | CD8_spleen |
| SLC35E2            | 5.06E-28 | 0.75594839 | 0.262 | 0.136 | 1.79E-23 | CD8_spleen |
| MRPS14             | 5.13E-28 | 0.69984222 | 0.269 | 0.14  | 1.82E-23 | CD8_spleen |
| RPS20              | 5.74E-28 | 0.21543381 | 0.997 | 0.968 | 2.03E-23 | CD8_spleen |
| SMARCA2            | 6.17E-28 | 0.54107163 | 0.53  | 0.354 | 2.18E-23 | CD8_spleen |
| CCT5               | 6.47E-28 | 0.48525321 | 0.612 | 0.423 | 2.29E-23 | CD8_spleen |
| IFNAR2             | 8.82E-28 | 0.64818896 | 0.375 | 0.223 | 3.12E-23 | CD8_spleen |
| RASSF5             | 9.65E-28 | 0.62281109 | 0.355 | 0.203 | 3.42E-23 | CD8_spleen |
| MAT2B              | 9.95E-28 | 0.67774759 | 0.283 | 0.15  | 3.53E-23 | CD8_spleen |
| SUPT4H1            | 1.04E-27 | 0.70543159 | 0.291 | 0.156 | 3.69E-23 | CD8_spleen |
| ESYT1              | 1.06E-27 | 0.72380521 | 0.273 | 0.143 | 3.75E-23 | CD8_spleen |
| TES                | 1.29E-27 | 0.6930051  | 0.257 | 0.132 | 4.56E-23 | CD8_spleen |
| ENSMMUG00000054038 | 1.62E-27 | 0.35085561 | 0.801 | 0.623 | 5.73E-23 | CD8_spleen |
| RNF167             | 1.79E-27 | 0.63136513 | 0.349 | 0.2   | 6.33E-23 | CD8_spleen |
| NOP56              | 1.81E-27 | 0.59885509 | 0.341 | 0.194 | 6.41E-23 | CD8_spleen |
| WNK1               | 2.41E-27 | 0.4679685  | 0.73  | 0.557 | 8.55E-23 | CD8_spleen |
| GIMAP7             | 2.52E-27 | 0.4423136  | 0.723 | 0.552 | 8.95E-23 | CD8_spleen |
| TAPBPL             | 2.66E-27 | 0.47126249 | 0.427 | 0.261 | 9.42E-23 | CD8_spleen |
| COMT               | 2.82E-27 | 0.56227747 | 0.328 | 0.182 | 1.00E-22 | CD8_spleen |
| AKAP17A            | 3.20E-27 | 0.62373781 | 0.357 | 0.209 | 1.14E-22 | CD8_spleen |
| SF3B3              | 3.45E-27 | 0.61522579 | 0.355 | 0.206 | 1.22E-22 | CD8_spleen |
| IFRD1              | 3.94E-27 | 0.57116214 | 0.56  | 0.389 | 1.40E-22 | CD8_spleen |
| MALT1              | 4.02E-27 | 0.46740206 | 0.504 | 0.327 | 1.42E-22 | CD8_spleen |
| RNASEH2B           | 4.07E-27 | 0.73249908 | 0.286 | 0.154 | 1.44E-22 | CD8_spleen |
| FOXN2              | 6.68E-27 | 0.66962922 | 0.359 | 0.215 | 2.37E-22 | CD8_spleen |
| PITHD1             | 7.14E-27 | 0.72055406 | 0.25  | 0.127 | 2.53E-22 | CD8_spleen |
| FAM120A            | 7.46E-27 | 0.53946708 | 0.463 | 0.298 | 2.64E-22 | CD8_spleen |
| CRLF3              | 1.05E-26 | 0.53946041 | 0.446 | 0.282 | 3.72E-22 | CD8_spleen |
| DCAF5              | 1.31E-26 | 0.53173947 | 0.479 | 0.311 | 4.66E-22 | CD8_spleen |
| PDLIM2             | 1.51E-26 | 0.56203778 | 0.414 | 0.251 | 5.35E-22 | CD8_spleen |
| HERC4              | 1.57E-26 | 0.5324713  | 0.495 | 0.324 | 5.56E-22 | CD8_spleen |

|                    |          |            |       |       |          |            |
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| MRPL14             | 1.59E-26 | 0.43099859 | 0.45  | 0.278 | 5.62E-22 | CD8_spleen |
| STK10              | 2.03E-26 | 0.511063   | 0.567 | 0.395 | 7.19E-22 | CD8_spleen |
| TUBA4A             | 2.06E-26 | 0.85715645 | 0.257 | 0.136 | 7.29E-22 | CD8_spleen |
| RBM26              | 2.37E-26 | 0.51960062 | 0.54  | 0.373 | 8.41E-22 | CD8_spleen |
| ENSMMUG00000049722 | 2.38E-26 | 0.38252914 | 0.483 | 0.307 | 8.42E-22 | CD8_spleen |
| RESF1              | 2.46E-26 | 0.57069027 | 0.407 | 0.249 | 8.72E-22 | CD8_spleen |
| MYCBP2             | 3.34E-26 | 0.39591258 | 0.79  | 0.624 | 1.18E-21 | CD8_spleen |
| TTC39C             | 3.68E-26 | 0.73690829 | 0.338 | 0.2   | 1.30E-21 | CD8_spleen |
| MRPL13             | 4.00E-26 | 0.59876991 | 0.299 | 0.164 | 1.42E-21 | CD8_spleen |
| MYL12B             | 4.24E-26 | 0.35434951 | 0.82  | 0.679 | 1.50E-21 | CD8_spleen |
| AARS1              | 4.61E-26 | 0.41935601 | 0.577 | 0.395 | 1.64E-21 | CD8_spleen |
| MYDGF              | 5.02E-26 | 0.45035559 | 0.469 | 0.295 | 1.78E-21 | CD8_spleen |
| TRERF1             | 6.60E-26 | 0.43514238 | 0.576 | 0.399 | 2.34E-21 | CD8_spleen |
| GLCC11             | 8.22E-26 | 0.72629608 | 0.343 | 0.203 | 2.91E-21 | CD8_spleen |
| ENSMMUG00000063637 | 9.69E-26 | 0.28233919 | 0.967 | 0.947 | 3.43E-21 | CD8_spleen |
| NR4A2              | 1.04E-25 | 0.63764311 | 0.375 | 0.228 | 3.70E-21 | CD8_spleen |
| NPEPPS             | 1.12E-25 | 0.66826587 | 0.335 | 0.196 | 3.95E-21 | CD8_spleen |
| CAB39              | 1.12E-25 | 0.46854779 | 0.714 | 0.548 | 3.98E-21 | CD8_spleen |
| PTBP3              | 1.16E-25 | 0.42026099 | 0.664 | 0.474 | 4.09E-21 | CD8_spleen |
| LARS1              | 2.31E-25 | 0.57931731 | 0.314 | 0.177 | 8.19E-21 | CD8_spleen |
| SEPTIN11           | 2.45E-25 | 0.59025096 | 0.374 | 0.227 | 8.67E-21 | CD8_spleen |
| SYNRG              | 2.65E-25 | 0.619299   | 0.344 | 0.203 | 9.38E-21 | CD8_spleen |
| EEF1G              | 2.75E-25 | 0.26347938 | 0.936 | 0.863 | 9.75E-21 | CD8_spleen |
| CFL1               | 4.84E-25 | 0.26309331 | 0.936 | 0.843 | 1.72E-20 | CD8_spleen |
| GNAI2.1            | 5.45E-25 | 0.51910137 | 0.439 | 0.279 | 1.93E-20 | CD8_spleen |
| RHOG               | 5.64E-25 | 0.57529335 | 0.32  | 0.181 | 2.00E-20 | CD8_spleen |
| TMSB4X             | 5.97E-25 | 0.15467811 | 1     | 0.999 | 2.11E-20 | CD8_spleen |
| SRSF10             | 7.38E-25 | 0.46196497 | 0.638 | 0.464 | 2.61E-20 | CD8_spleen |
| CD164              | 8.32E-25 | 0.50226884 | 0.567 | 0.408 | 2.95E-20 | CD8_spleen |
| LASP1              | 1.17E-24 | 0.65061007 | 0.305 | 0.174 | 4.14E-20 | CD8_spleen |
| ENSMMUG00000016894 | 1.24E-24 | 0.27288807 | 0.813 | 0.661 | 4.38E-20 | CD8_spleen |
| MAT2A              | 1.61E-24 | 0.61576716 | 0.315 | 0.181 | 5.69E-20 | CD8_spleen |
| SP140              | 1.90E-24 | 0.60141805 | 0.406 | 0.261 | 6.72E-20 | CD8_spleen |

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|----------|----------|------------|-------|-------|----------|------------|
| TSC22D1  | 1.91E-24 | 0.73863046 | 0.348 | 0.211 | 6.77E-20 | CD8_spleen |
| YWHAB    | 2.06E-24 | 0.409653   | 0.722 | 0.564 | 7.30E-20 | CD8_spleen |
| GNB1     | 2.17E-24 | 0.50344166 | 0.505 | 0.343 | 7.69E-20 | CD8_spleen |
| DIAPH1   | 2.99E-24 | 0.46281654 | 0.644 | 0.474 | 1.06E-19 | CD8_spleen |
| BST2     | 3.06E-24 | 0.54387375 | 0.38  | 0.233 | 1.08E-19 | CD8_spleen |
| UBE2D1   | 3.21E-24 | 0.46071743 | 0.421 | 0.263 | 1.14E-19 | CD8_spleen |
| ALG13    | 4.08E-24 | 0.58128453 | 0.296 | 0.166 | 1.44E-19 | CD8_spleen |
| STRN3    | 4.20E-24 | 0.45409275 | 0.491 | 0.328 | 1.49E-19 | CD8_spleen |
| UQCRH    | 4.78E-24 | 0.32877075 | 0.712 | 0.535 | 1.69E-19 | CD8_spleen |
| RAC1     | 5.21E-24 | 0.63271709 | 0.275 | 0.152 | 1.85E-19 | CD8_spleen |
| EIF4G3   | 5.50E-24 | 0.55212073 | 0.47  | 0.314 | 1.95E-19 | CD8_spleen |
| MAML2    | 5.56E-24 | 0.36191501 | 0.903 | 0.795 | 1.97E-19 | CD8_spleen |
| RPS6KA1  | 5.58E-24 | 0.64752235 | 0.29  | 0.163 | 1.98E-19 | CD8_spleen |
| H1-2     | 6.26E-24 | 0.5220373  | 0.464 | 0.307 | 2.22E-19 | CD8_spleen |
| TTC13    | 7.44E-24 | 0.70712793 | 0.34  | 0.209 | 2.64E-19 | CD8_spleen |
| ATP5MC2  | 7.74E-24 | 0.32416615 | 0.762 | 0.603 | 2.74E-19 | CD8_spleen |
| CHCHD1   | 9.36E-24 | 0.46995876 | 0.311 | 0.177 | 3.32E-19 | CD8_spleen |
| RNASEH2C | 1.12E-23 | 0.50379786 | 0.452 | 0.288 | 3.97E-19 | CD8_spleen |
| GON4L    | 1.39E-23 | 0.51189095 | 0.401 | 0.25  | 4.91E-19 | CD8_spleen |
| IFI16    | 1.39E-23 | 0.3395621  | 0.588 | 0.414 | 4.93E-19 | CD8_spleen |
| RER1     | 1.50E-23 | 0.47949892 | 0.409 | 0.256 | 5.32E-19 | CD8_spleen |
| CD226    | 1.52E-23 | 0.6037296  | 0.401 | 0.256 | 5.39E-19 | CD8_spleen |
| P4HB     | 2.10E-23 | 0.59168025 | 0.276 | 0.153 | 7.45E-19 | CD8_spleen |
| AHCYL2   | 2.23E-23 | 0.6095385  | 0.352 | 0.215 | 7.92E-19 | CD8_spleen |
| WWOX     | 2.68E-23 | 0.57439931 | 0.534 | 0.381 | 9.49E-19 | CD8_spleen |
| TMEM134  | 2.70E-23 | 0.63590535 | 0.26  | 0.141 | 9.57E-19 | CD8_spleen |
| RBMS1    | 2.74E-23 | 0.46729402 | 0.539 | 0.381 | 9.71E-19 | CD8_spleen |
| HNRNPC   | 3.34E-23 | 0.32860686 | 0.842 | 0.71  | 1.18E-18 | CD8_spleen |
| UBASH3A  | 4.18E-23 | 0.64469824 | 0.281 | 0.158 | 1.48E-18 | CD8_spleen |
| LDHA     | 4.18E-23 | 0.38196157 | 0.474 | 0.313 | 1.48E-18 | CD8_spleen |
| DARS1    | 4.50E-23 | 0.60166466 | 0.398 | 0.256 | 1.60E-18 | CD8_spleen |
| SLC20A1  | 4.84E-23 | 0.58648662 | 0.333 | 0.199 | 1.72E-18 | CD8_spleen |
| PTP4A1   | 5.02E-23 | 0.45890222 | 0.449 | 0.291 | 1.78E-18 | CD8_spleen |



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| TIMM8B             | 5.47E-23 | 0.52236642 | 0.263 | 0.144 | 1.94E-18 | CD8_spleen |
| SUPT16H            | 5.55E-23 | 0.47269535 | 0.421 | 0.271 | 1.97E-18 | CD8_spleen |
| TUBB               | 6.67E-23 | 0.38214782 | 0.612 | 0.433 | 2.36E-18 | CD8_spleen |
| ENSMMUG00000019882 | 7.08E-23 | 0.44568707 | 0.406 | 0.253 | 2.51E-18 | CD8_spleen |
| XPO1               | 7.19E-23 | 0.46601729 | 0.473 | 0.315 | 2.55E-18 | CD8_spleen |
| CTSS               | 7.21E-23 | 0.50892018 | 0.447 | 0.293 | 2.55E-18 | CD8_spleen |
| BRD2               | 8.52E-23 | 0.45318167 | 0.535 | 0.371 | 3.02E-18 | CD8_spleen |
| POLR2A             | 1.08E-22 | 0.46082633 | 0.556 | 0.389 | 3.82E-18 | CD8_spleen |
| UBA2               | 1.11E-22 | 0.51151618 | 0.462 | 0.304 | 3.93E-18 | CD8_spleen |
| ANKRD10            | 1.36E-22 | 0.49493841 | 0.474 | 0.321 | 4.84E-18 | CD8_spleen |
| ZNF638             | 1.43E-22 | 0.4033252  | 0.607 | 0.437 | 5.08E-18 | CD8_spleen |
| CAPRIN1            | 1.62E-22 | 0.43505082 | 0.431 | 0.277 | 5.73E-18 | CD8_spleen |
| BTN2A2             | 1.71E-22 | 0.37998871 | 0.622 | 0.448 | 6.06E-18 | CD8_spleen |
| ADSS2              | 1.84E-22 | 0.47173677 | 0.36  | 0.22  | 6.50E-18 | CD8_spleen |
| LYPLA1             | 2.23E-22 | 0.6370357  | 0.267 | 0.15  | 7.92E-18 | CD8_spleen |
| BMP2K              | 2.88E-22 | 0.50897671 | 0.444 | 0.298 | 1.02E-17 | CD8_spleen |
| ARL2               | 3.33E-22 | 0.49417361 | 0.289 | 0.164 | 1.18E-17 | CD8_spleen |
| TNFAIP3            | 3.57E-22 | 0.56138038 | 0.769 | 0.666 | 1.27E-17 | CD8_spleen |
| ENSMMUG00000038348 | 3.60E-22 | 0.16870864 | 0.864 | 0.709 | 1.28E-17 | CD8_spleen |
| HDAC4              | 3.66E-22 | 0.51560816 | 0.398 | 0.257 | 1.30E-17 | CD8_spleen |
| GMDS               | 3.83E-22 | 0.39899241 | 0.604 | 0.429 | 1.36E-17 | CD8_spleen |
| SNRNP70            | 4.74E-22 | 0.38106841 | 0.555 | 0.381 | 1.68E-17 | CD8_spleen |
| VAMP8              | 5.01E-22 | 0.38550399 | 0.515 | 0.353 | 1.77E-17 | CD8_spleen |
| ADGRE5             | 6.71E-22 | 0.60872807 | 0.512 | 0.359 | 2.38E-17 | CD8_spleen |
| SLC38A2            | 6.72E-22 | 0.35013008 | 0.537 | 0.373 | 2.38E-17 | CD8_spleen |
| ENSMMUG00000064232 | 8.78E-22 | 0.55007178 | 0.258 | 0.144 | 3.11E-17 | CD8_spleen |
| MOB3A              | 1.13E-21 | 0.62098151 | 0.328 | 0.2   | 4.01E-17 | CD8_spleen |
| STMN3              | 1.29E-21 | 0.49187653 | 0.378 | 0.236 | 4.57E-17 | CD8_spleen |
| DYNC1I2            | 1.37E-21 | 0.57444023 | 0.291 | 0.17  | 4.87E-17 | CD8_spleen |
| VASP               | 1.41E-21 | 0.5150872  | 0.356 | 0.219 | 4.98E-17 | CD8_spleen |
| MTX2               | 1.44E-21 | 0.50750324 | 0.328 | 0.196 | 5.12E-17 | CD8_spleen |
| GRK5               | 1.46E-21 | 0.49563555 | 0.356 | 0.224 | 5.18E-17 | CD8_spleen |
| ZCCHC7             | 1.85E-21 | 0.35341923 | 0.772 | 0.618 | 6.57E-17 | CD8_spleen |

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| PFDN6              | 1.88E-21 | 0.39345315 | 0.43  | 0.279 | 6.66E-17 | CD8_spleen |
| RPS6KA3            | 2.16E-21 | 0.58761076 | 0.438 | 0.295 | 7.65E-17 | CD8_spleen |
| CBFB               | 2.27E-21 | 0.66441498 | 0.265 | 0.152 | 8.04E-17 | CD8_spleen |
| HNRNPK             | 2.48E-21 | 0.29792369 | 0.881 | 0.757 | 8.80E-17 | CD8_spleen |
| CORO1A             | 2.61E-21 | 0.25935797 | 0.881 | 0.747 | 9.26E-17 | CD8_spleen |
| BUB3               | 2.69E-21 | 0.4701706  | 0.281 | 0.161 | 9.53E-17 | CD8_spleen |
| USO1               | 2.69E-21 | 0.70248052 | 0.27  | 0.157 | 9.54E-17 | CD8_spleen |
| LDLR               | 2.73E-21 | 0.6954036  | 0.305 | 0.184 | 9.69E-17 | CD8_spleen |
| FKBP2              | 3.34E-21 | 0.39486474 | 0.299 | 0.172 | 1.18E-16 | CD8_spleen |
| SLC16A7            | 4.05E-21 | 0.73377907 | 0.297 | 0.181 | 1.43E-16 | CD8_spleen |
| NOP58              | 4.38E-21 | 0.3925555  | 0.62  | 0.451 | 1.55E-16 | CD8_spleen |
| RSU1               | 4.52E-21 | 0.40824952 | 0.526 | 0.363 | 1.60E-16 | CD8_spleen |
| NXF1               | 5.25E-21 | 0.63874162 | 0.27  | 0.155 | 1.86E-16 | CD8_spleen |
| ARHGAP35           | 5.26E-21 | 0.61476221 | 0.283 | 0.167 | 1.86E-16 | CD8_spleen |
| RPL27A             | 5.35E-21 | 0.16146744 | 0.996 | 0.985 | 1.90E-16 | CD8_spleen |
| ENSMMUG00000011798 | 5.99E-21 | 0.4773814  | 0.451 | 0.303 | 2.12E-16 | CD8_spleen |
| SMARCA5            | 6.05E-21 | 0.44852777 | 0.503 | 0.344 | 2.14E-16 | CD8_spleen |
| R3HDM2             | 6.61E-21 | 0.46237622 | 0.497 | 0.347 | 2.34E-16 | CD8_spleen |
| BHLHB9             | 6.61E-21 | 0.62731975 | 0.265 | 0.152 | 2.34E-16 | CD8_spleen |
| STMN1              | 7.83E-21 | 0.27231532 | 0.623 | 0.462 | 2.77E-16 | CD8_spleen |
| RAB10              | 7.98E-21 | 0.44375238 | 0.484 | 0.329 | 2.83E-16 | CD8_spleen |
| SRGN               | 8.06E-21 | 0.47250697 | 0.591 | 0.442 | 2.86E-16 | CD8_spleen |
| GLG1               | 9.03E-21 | 0.38514959 | 0.723 | 0.561 | 3.20E-16 | CD8_spleen |
| PDCD10             | 9.79E-21 | 0.31893791 | 0.51  | 0.344 | 3.47E-16 | CD8_spleen |
| PCBP1              | 9.93E-21 | 0.37674627 | 0.649 | 0.482 | 3.52E-16 | CD8_spleen |
| NDEL1              | 1.06E-20 | 0.50666851 | 0.453 | 0.311 | 3.76E-16 | CD8_spleen |
| ADD3               | 1.08E-20 | 0.3390696  | 0.814 | 0.653 | 3.82E-16 | CD8_spleen |
| SNX1               | 1.17E-20 | 0.49543768 | 0.328 | 0.199 | 4.16E-16 | CD8_spleen |
| MARK2              | 1.37E-20 | 0.49038314 | 0.341 | 0.212 | 4.86E-16 | CD8_spleen |
| SLC30A7            | 1.47E-20 | 0.35590203 | 0.743 | 0.579 | 5.21E-16 | CD8_spleen |
| CSKMT              | 2.57E-20 | 0.57456715 | 0.3   | 0.18  | 9.12E-16 | CD8_spleen |
| OSTF1              | 2.60E-20 | 0.37189015 | 0.45  | 0.294 | 9.22E-16 | CD8_spleen |
| TOX                | 2.79E-20 | 0.39722997 | 0.808 | 0.689 | 9.88E-16 | CD8_spleen |

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| ZMYM2              | 3.60E-20 | 0.43777478 | 0.59  | 0.435 | 1.28E-15 | CD8_spleen |
| LARP1              | 3.61E-20 | 0.61608766 | 0.29  | 0.174 | 1.28E-15 | CD8_spleen |
| TAOK3              | 3.70E-20 | 0.40265446 | 0.591 | 0.429 | 1.31E-15 | CD8_spleen |
| ABCF1              | 4.21E-20 | 0.48345812 | 0.351 | 0.223 | 1.49E-15 | CD8_spleen |
| CWC27              | 4.41E-20 | 0.51519116 | 0.475 | 0.333 | 1.56E-15 | CD8_spleen |
| CEP350             | 5.40E-20 | 0.41451337 | 0.479 | 0.328 | 1.91E-15 | CD8_spleen |
| KIF5B              | 7.09E-20 | 0.45381249 | 0.528 | 0.371 | 2.51E-15 | CD8_spleen |
| ENSMMUG00000062103 | 7.21E-20 | 0.43376657 | 0.602 | 0.449 | 2.56E-15 | CD8_spleen |
| SMAD3              | 7.77E-20 | 0.5693798  | 0.325 | 0.203 | 2.75E-15 | CD8_spleen |
| MRPL42             | 8.17E-20 | 0.41744545 | 0.345 | 0.213 | 2.90E-15 | CD8_spleen |
| DDX17              | 9.68E-20 | 0.31292705 | 0.787 | 0.617 | 3.43E-15 | CD8_spleen |
| MRPL33             | 1.14E-19 | 0.39590308 | 0.34  | 0.209 | 4.05E-15 | CD8_spleen |
| ZNF268             | 1.17E-19 | 0.52762081 | 0.347 | 0.222 | 4.16E-15 | CD8_spleen |
| B3GNT2             | 1.25E-19 | 0.59078047 | 0.315 | 0.195 | 4.44E-15 | CD8_spleen |
| ZBTB10             | 1.38E-19 | 0.61412964 | 0.322 | 0.203 | 4.90E-15 | CD8_spleen |
| DAD1               | 2.35E-19 | 0.35526863 | 0.557 | 0.4   | 8.33E-15 | CD8_spleen |
| TMBIM6             | 2.43E-19 | 0.33343347 | 0.601 | 0.431 | 8.62E-15 | CD8_spleen |
| RASGRP1            | 2.64E-19 | 0.49547812 | 0.449 | 0.314 | 9.34E-15 | CD8_spleen |
| OAZ1               | 2.67E-19 | 0.23988915 | 0.41  | 0.259 | 9.44E-15 | CD8_spleen |
| ADARB2             | 3.21E-19 | 0.53516211 | 0.274 | 0.162 | 1.14E-14 | CD8_spleen |
| SPCS2              | 3.28E-19 | 0.32018598 | 0.454 | 0.302 | 1.16E-14 | CD8_spleen |
| NDUFAB1            | 3.32E-19 | 0.35263595 | 0.421 | 0.269 | 1.18E-14 | CD8_spleen |
| RABL6              | 3.64E-19 | 0.54569028 | 0.276 | 0.163 | 1.29E-14 | CD8_spleen |
| ENSMMUG00000011714 | 3.65E-19 | 0.50368337 | 0.307 | 0.188 | 1.29E-14 | CD8_spleen |
| MEMO1              | 3.68E-19 | 0.39590714 | 0.513 | 0.364 | 1.30E-14 | CD8_spleen |
| LBR                | 3.89E-19 | 0.38641913 | 0.485 | 0.336 | 1.38E-14 | CD8_spleen |
| PIK3CD             | 4.32E-19 | 0.37069341 | 0.574 | 0.422 | 1.53E-14 | CD8_spleen |
| TBC1D10B           | 4.44E-19 | 0.37274633 | 0.45  | 0.301 | 1.57E-14 | CD8_spleen |
| DPH6               | 5.48E-19 | 0.54637618 | 0.345 | 0.222 | 1.94E-14 | CD8_spleen |
| ENSMMUG00000018740 | 5.68E-19 | 0.43613933 | 0.369 | 0.238 | 2.01E-14 | CD8_spleen |
| RUNX1              | 5.87E-19 | 0.46716338 | 0.649 | 0.515 | 2.08E-14 | CD8_spleen |
| GBP3               | 5.94E-19 | 0.74077343 | 0.253 | 0.15  | 2.10E-14 | CD8_spleen |
| ATXN2              | 6.79E-19 | 0.42576129 | 0.464 | 0.319 | 2.40E-14 | CD8_spleen |

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| PSIP1              | 8.54E-19 | 0.32336805 | 0.573 | 0.411 | 3.02E-14 | CD8_spleen |
| PMS1               | 1.03E-18 | 0.58694375 | 0.258 | 0.151 | 3.64E-14 | CD8_spleen |
| XRCC4              | 1.05E-18 | 0.58661726 | 0.294 | 0.181 | 3.71E-14 | CD8_spleen |
| BAZ1A              | 1.07E-18 | 0.41835221 | 0.554 | 0.403 | 3.78E-14 | CD8_spleen |
| PSME4              | 1.29E-18 | 0.46358958 | 0.532 | 0.388 | 4.58E-14 | CD8_spleen |
| GBF1               | 1.41E-18 | 0.57642184 | 0.312 | 0.196 | 4.99E-14 | CD8_spleen |
| CIAO2B             | 1.44E-18 | 0.32999422 | 0.341 | 0.212 | 5.11E-14 | CD8_spleen |
| RPL23              | 1.50E-18 | 0.15620388 | 0.994 | 0.983 | 5.32E-14 | CD8_spleen |
| PHF5A              | 1.58E-18 | 0.36362796 | 0.33  | 0.203 | 5.60E-14 | CD8_spleen |
| INPP4A             | 1.68E-18 | 0.39312701 | 0.495 | 0.35  | 5.96E-14 | CD8_spleen |
| DNAJB9             | 1.85E-18 | 0.68703013 | 0.27  | 0.163 | 6.54E-14 | CD8_spleen |
| BOLA2B             | 1.94E-18 | 0.3926064  | 0.346 | 0.218 | 6.89E-14 | CD8_spleen |
| PRDX1              | 1.97E-18 | 0.3959841  | 0.388 | 0.256 | 6.98E-14 | CD8_spleen |
| TMEM131L           | 2.04E-18 | 0.31869768 | 0.701 | 0.533 | 7.24E-14 | CD8_spleen |
| RNF113A            | 2.11E-18 | 0.49037765 | 0.264 | 0.154 | 7.49E-14 | CD8_spleen |
| ASXL2              | 2.21E-18 | 0.48606262 | 0.396 | 0.265 | 7.82E-14 | CD8_spleen |
| GPD2               | 2.36E-18 | 0.56713342 | 0.286 | 0.175 | 8.36E-14 | CD8_spleen |
| TMCO1              | 2.71E-18 | 0.35229287 | 0.32  | 0.196 | 9.62E-14 | CD8_spleen |
| ENSMMUG00000063859 | 2.97E-18 | 0.45993623 | 0.35  | 0.225 | 1.05E-13 | CD8_spleen |
| IKZF2              | 3.00E-18 | 0.65957231 | 0.526 | 0.396 | 1.06E-13 | CD8_spleen |
| STX16              | 3.38E-18 | 0.56014557 | 0.327 | 0.208 | 1.20E-13 | CD8_spleen |
| DYRK1A             | 3.57E-18 | 0.41616942 | 0.492 | 0.35  | 1.26E-13 | CD8_spleen |
| DDX5               | 4.45E-18 | 0.19103187 | 0.988 | 0.933 | 1.58E-13 | CD8_spleen |
| EEA1               | 4.67E-18 | 0.36739291 | 0.519 | 0.37  | 1.65E-13 | CD8_spleen |
| SPECC1L            | 4.70E-18 | 0.40282581 | 0.52  | 0.373 | 1.66E-13 | CD8_spleen |
| PPP6R3             | 4.74E-18 | 0.35276803 | 0.61  | 0.452 | 1.68E-13 | CD8_spleen |
| BICRAL             | 4.94E-18 | 0.52518961 | 0.255 | 0.152 | 1.75E-13 | CD8_spleen |
| DCTPP1             | 5.21E-18 | 0.38918446 | 0.275 | 0.163 | 1.85E-13 | CD8_spleen |
| ARID1A             | 5.62E-18 | 0.37695551 | 0.594 | 0.439 | 1.99E-13 | CD8_spleen |
| DBNL               | 5.86E-18 | 0.50345815 | 0.312 | 0.195 | 2.08E-13 | CD8_spleen |
| PER1               | 6.10E-18 | 0.41716047 | 0.505 | 0.361 | 2.16E-13 | CD8_spleen |
| LMAN1              | 6.12E-18 | 0.507826   | 0.295 | 0.184 | 2.17E-13 | CD8_spleen |
| DGKA               | 6.29E-18 | 0.35734535 | 0.612 | 0.458 | 2.23E-13 | CD8_spleen |

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| WIPF1              | 6.33E-18 | 0.29907577 | 0.711 | 0.553 | 2.24E-13 | CD8_spleen |
| ZNF609             | 6.82E-18 | 0.37963722 | 0.599 | 0.446 | 2.42E-13 | CD8_spleen |
| ENSMMUG00000006206 | 7.23E-18 | 0.33777562 | 0.612 | 0.46  | 2.56E-13 | CD8_spleen |
| MRPS18C            | 7.27E-18 | 0.47554278 | 0.251 | 0.147 | 2.57E-13 | CD8_spleen |
| EXT1               | 8.28E-18 | 0.548417   | 0.405 | 0.281 | 2.93E-13 | CD8_spleen |
| MSN                | 8.31E-18 | 0.28515242 | 0.812 | 0.672 | 2.95E-13 | CD8_spleen |
| OSTC               | 8.86E-18 | 0.28186219 | 0.503 | 0.352 | 3.14E-13 | CD8_spleen |
| USP48              | 9.26E-18 | 0.50774022 | 0.291 | 0.18  | 3.28E-13 | CD8_spleen |
| ERBIN              | 9.92E-18 | 0.34027036 | 0.722 | 0.56  | 3.52E-13 | CD8_spleen |
| KHDRBS1            | 1.00E-17 | 0.38766921 | 0.418 | 0.28  | 3.54E-13 | CD8_spleen |
| MIDN               | 1.03E-17 | 0.51003722 | 0.252 | 0.149 | 3.67E-13 | CD8_spleen |
| MAP3K4             | 1.04E-17 | 0.57129449 | 0.281 | 0.172 | 3.67E-13 | CD8_spleen |
| TAF7               | 1.13E-17 | 0.36043022 | 0.418 | 0.279 | 4.00E-13 | CD8_spleen |
| SPOP               | 1.28E-17 | 0.40173826 | 0.469 | 0.328 | 4.52E-13 | CD8_spleen |
| XYLT1              | 1.36E-17 | 0.35647777 | 0.561 | 0.409 | 4.81E-13 | CD8_spleen |
| RASGRF2            | 1.41E-17 | 0.47933698 | 0.38  | 0.259 | 5.00E-13 | CD8_spleen |
| RSBN1L             | 1.52E-17 | 0.46791449 | 0.356 | 0.233 | 5.39E-13 | CD8_spleen |
| UBE2R2             | 1.60E-17 | 0.39622985 | 0.435 | 0.296 | 5.68E-13 | CD8_spleen |
| MBD5               | 1.62E-17 | 0.40589954 | 0.631 | 0.483 | 5.73E-13 | CD8_spleen |
| ZMAT2              | 1.64E-17 | 0.46875161 | 0.3   | 0.185 | 5.81E-13 | CD8_spleen |
| MRFAP1             | 1.73E-17 | 0.36641333 | 0.355 | 0.226 | 6.14E-13 | CD8_spleen |
| PIGY               | 1.87E-17 | 0.35989806 | 0.44  | 0.297 | 6.62E-13 | CD8_spleen |
| ST3GAL1            | 1.92E-17 | 0.37747624 | 0.515 | 0.366 | 6.82E-13 | CD8_spleen |
| CEP170             | 2.15E-17 | 0.39290056 | 0.493 | 0.353 | 7.63E-13 | CD8_spleen |
| CHD3               | 2.22E-17 | 0.41958901 | 0.479 | 0.34  | 7.86E-13 | CD8_spleen |
| SEC14L2            | 2.68E-17 | 0.35507636 | 0.339 | 0.215 | 9.49E-13 | CD8_spleen |
| PPP2R5C            | 2.75E-17 | 0.27005253 | 0.808 | 0.672 | 9.75E-13 | CD8_spleen |
| FOCAD              | 3.16E-17 | 0.56599428 | 0.341 | 0.225 | 1.12E-12 | CD8_spleen |
| RAP1B              | 3.59E-17 | 0.26695846 | 0.905 | 0.79  | 1.27E-12 | CD8_spleen |
| TESPA1             | 3.74E-17 | 0.54707741 | 0.264 | 0.161 | 1.32E-12 | CD8_spleen |
| RNF5               | 3.85E-17 | 0.42362944 | 0.267 | 0.16  | 1.37E-12 | CD8_spleen |
| HNRNPH1            | 4.12E-17 | 0.30473823 | 0.761 | 0.618 | 1.46E-12 | CD8_spleen |
| MRPS21             | 4.17E-17 | 0.37711895 | 0.291 | 0.179 | 1.48E-12 | CD8_spleen |

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| SETD5              | 4.99E-17 | 0.41735416 | 0.443 | 0.311 | 1.77E-12 | CD8_spleen |
| CMIP               | 5.20E-17 | 0.52999572 | 0.325 | 0.209 | 1.84E-12 | CD8_spleen |
| ENSMMUG00000038088 | 5.65E-17 | 0.47451905 | 0.27  | 0.165 | 2.00E-12 | CD8_spleen |
| BANP               | 6.10E-17 | 0.5146109  | 0.257 | 0.153 | 2.16E-12 | CD8_spleen |
| UBE2F              | 6.11E-17 | 0.53172269 | 0.393 | 0.27  | 2.17E-12 | CD8_spleen |
| COX6B1             | 6.42E-17 | 0.24129205 | 0.402 | 0.265 | 2.28E-12 | CD8_spleen |
| LRCH1              | 6.80E-17 | 0.57198592 | 0.306 | 0.196 | 2.41E-12 | CD8_spleen |
| TMEM167A           | 7.03E-17 | 0.3643096  | 0.38  | 0.248 | 2.49E-12 | CD8_spleen |
| RANBP2             | 7.66E-17 | 0.36798098 | 0.67  | 0.522 | 2.71E-12 | CD8_spleen |
| RBL2               | 8.03E-17 | 0.36806043 | 0.493 | 0.35  | 2.85E-12 | CD8_spleen |
| ELAVL1             | 9.13E-17 | 0.49219183 | 0.27  | 0.164 | 3.23E-12 | CD8_spleen |
| NCK2               | 1.00E-16 | 0.46656944 | 0.325 | 0.209 | 3.56E-12 | CD8_spleen |
| RUVBL1             | 1.01E-16 | 0.46273278 | 0.272 | 0.165 | 3.58E-12 | CD8_spleen |
| MCTS1              | 1.07E-16 | 0.45837108 | 0.311 | 0.199 | 3.80E-12 | CD8_spleen |
| ZMYM4              | 1.21E-16 | 0.4203629  | 0.445 | 0.312 | 4.29E-12 | CD8_spleen |
| UBE2I              | 1.29E-16 | 0.35600195 | 0.525 | 0.378 | 4.58E-12 | CD8_spleen |
| FARS2              | 1.34E-16 | 0.36893578 | 0.584 | 0.436 | 4.73E-12 | CD8_spleen |
| N4BP2L2            | 1.40E-16 | 0.36822736 | 0.533 | 0.385 | 4.95E-12 | CD8_spleen |
| ENSMMUG00000051239 | 1.43E-16 | 0.29483492 | 0.253 | 0.149 | 5.05E-12 | CD8_spleen |
| IGF1R              | 1.48E-16 | 0.49602464 | 0.349 | 0.232 | 5.24E-12 | CD8_spleen |
| OXR1               | 1.53E-16 | 0.52080115 | 0.393 | 0.271 | 5.43E-12 | CD8_spleen |
| UBE3A              | 1.55E-16 | 0.3822553  | 0.44  | 0.307 | 5.49E-12 | CD8_spleen |
| CAMKMT             | 1.57E-16 | 0.44819543 | 0.526 | 0.4   | 5.58E-12 | CD8_spleen |
| EIF4A3             | 2.06E-16 | 0.35430041 | 0.377 | 0.249 | 7.29E-12 | CD8_spleen |
| TIA1               | 2.13E-16 | 0.361525   | 0.473 | 0.332 | 7.53E-12 | CD8_spleen |
| NFAT5              | 2.37E-16 | 0.36796628 | 0.49  | 0.347 | 8.41E-12 | CD8_spleen |
| ARHGAP9            | 3.03E-16 | 0.54458291 | 0.274 | 0.17  | 1.07E-11 | CD8_spleen |
| PFDN5              | 3.07E-16 | 0.17030392 | 0.511 | 0.357 | 1.09E-11 | CD8_spleen |
| MORF4L2            | 3.10E-16 | 0.46690521 | 0.368 | 0.247 | 1.10E-11 | CD8_spleen |
| SLC7A6             | 3.26E-16 | 0.41067429 | 0.428 | 0.297 | 1.16E-11 | CD8_spleen |
| MTDH               | 3.63E-16 | 0.34256359 | 0.545 | 0.404 | 1.29E-11 | CD8_spleen |
| TSC22D4            | 3.95E-16 | 0.50396423 | 0.268 | 0.166 | 1.40E-11 | CD8_spleen |
| SNRPD1             | 4.07E-16 | 0.26670584 | 0.444 | 0.309 | 1.44E-11 | CD8_spleen |

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| ST3GAL3            | 4.68E-16 | 0.5236291  | 0.315 | 0.208 | 1.66E-11 | CD8_spleen |
| ATP5F1B            | 4.89E-16 | 0.39984453 | 0.379 | 0.256 | 1.73E-11 | CD8_spleen |
| CHD9               | 4.94E-16 | 0.56201323 | 0.275 | 0.172 | 1.75E-11 | CD8_spleen |
| TMEM117            | 5.17E-16 | 0.56210664 | 0.294 | 0.191 | 1.83E-11 | CD8_spleen |
| DDX24              | 5.35E-16 | 0.28291162 | 0.622 | 0.468 | 1.89E-11 | CD8_spleen |
| NFATC1             | 6.33E-16 | 0.48207637 | 0.338 | 0.223 | 2.24E-11 | CD8_spleen |
| WASF2              | 6.44E-16 | 0.31348616 | 0.644 | 0.489 | 2.28E-11 | CD8_spleen |
| PHF14              | 7.12E-16 | 0.3429726  | 0.599 | 0.462 | 2.52E-11 | CD8_spleen |
| UBL3               | 7.22E-16 | 0.43840383 | 0.438 | 0.311 | 2.56E-11 | CD8_spleen |
| ASCC1              | 8.17E-16 | 0.46823586 | 0.35  | 0.234 | 2.89E-11 | CD8_spleen |
| UBE2V2             | 8.61E-16 | 0.35405104 | 0.311 | 0.198 | 3.05E-11 | CD8_spleen |
| CCDC88C            | 8.89E-16 | 0.3889065  | 0.402 | 0.275 | 3.15E-11 | CD8_spleen |
| UBE2B              | 1.00E-15 | 0.34475379 | 0.638 | 0.496 | 3.54E-11 | CD8_spleen |
| TBC1D5             | 1.08E-15 | 0.25827016 | 0.841 | 0.708 | 3.81E-11 | CD8_spleen |
| LEF1               | 1.09E-15 | 0.24386617 | 0.914 | 0.794 | 3.87E-11 | CD8_spleen |
| DDX42              | 1.19E-15 | 0.46994724 | 0.305 | 0.196 | 4.21E-11 | CD8_spleen |
| NSD3               | 1.24E-15 | 0.30036954 | 0.573 | 0.432 | 4.39E-11 | CD8_spleen |
| ATIC               | 1.35E-15 | 0.46625647 | 0.26  | 0.162 | 4.77E-11 | CD8_spleen |
| ATRX               | 1.44E-15 | 0.29406765 | 0.753 | 0.606 | 5.12E-11 | CD8_spleen |
| ENSMMUG00000052127 | 1.48E-15 | 0.15719138 | 0.996 | 0.959 | 5.25E-11 | CD8_spleen |
| CANX               | 1.48E-15 | 0.47528876 | 0.269 | 0.168 | 5.25E-11 | CD8_spleen |
| ARL15              | 1.53E-15 | 0.38309597 | 0.544 | 0.407 | 5.43E-11 | CD8_spleen |
| ZMYND11            | 1.54E-15 | 0.35510621 | 0.542 | 0.401 | 5.45E-11 | CD8_spleen |
| ACOT13             | 1.68E-15 | 0.31043807 | 0.353 | 0.229 | 5.96E-11 | CD8_spleen |
| ANKRD44            | 1.86E-15 | 0.24451793 | 0.954 | 0.863 | 6.58E-11 | CD8_spleen |
| ORC4               | 1.87E-15 | 0.5392895  | 0.286 | 0.185 | 6.63E-11 | CD8_spleen |
| PRMT1              | 1.92E-15 | 0.26100081 | 0.527 | 0.373 | 6.82E-11 | CD8_spleen |
| MRPL57             | 2.08E-15 | 0.31346092 | 0.366 | 0.243 | 7.37E-11 | CD8_spleen |
| ENSMMUG00000043332 | 2.13E-15 | 0.3243218  | 0.463 | 0.328 | 7.54E-11 | CD8_spleen |
| RBM6               | 2.29E-15 | 0.34684319 | 0.488 | 0.354 | 8.12E-11 | CD8_spleen |
| GNL3               | 2.76E-15 | 0.38503677 | 0.365 | 0.247 | 9.78E-11 | CD8_spleen |
| HDAC7              | 2.87E-15 | 0.432203   | 0.351 | 0.235 | 1.02E-10 | CD8_spleen |
| YWHAZ              | 2.94E-15 | 0.2501486  | 0.886 | 0.759 | 1.04E-10 | CD8_spleen |

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| CSNK1G1           | 3.04E-15 | 0.32455828 | 0.534 | 0.392 | 1.08E-10 | CD8_spleen |
| BAZ1B             | 3.10E-15 | 0.45857355 | 0.302 | 0.197 | 1.10E-10 | CD8_spleen |
| PPM1B             | 3.36E-15 | 0.44123974 | 0.373 | 0.255 | 1.19E-10 | CD8_spleen |
| STK26             | 3.59E-15 | 0.33817137 | 0.496 | 0.359 | 1.27E-10 | CD8_spleen |
| CHD4              | 4.14E-15 | 0.3980127  | 0.463 | 0.331 | 1.47E-10 | CD8_spleen |
| FBXW7             | 4.40E-15 | 0.35885651 | 0.664 | 0.528 | 1.56E-10 | CD8_spleen |
| ELF1              | 5.41E-15 | 0.26793252 | 0.907 | 0.798 | 1.92E-10 | CD8_spleen |
| NCL               | 5.50E-15 | 0.25758206 | 0.836 | 0.738 | 1.95E-10 | CD8_spleen |
| SNX14             | 5.87E-15 | 0.41439401 | 0.349 | 0.237 | 2.08E-10 | CD8_spleen |
| SNRPD3            | 5.97E-15 | 0.25085764 | 0.667 | 0.519 | 2.12E-10 | CD8_spleen |
| PTPMT1            | 6.11E-15 | 0.36353427 | 0.394 | 0.268 | 2.17E-10 | CD8_spleen |
| TMEM14B           | 6.12E-15 | 0.2551149  | 0.741 | 0.597 | 2.17E-10 | CD8_spleen |
| ATM               | 7.57E-15 | 0.30780651 | 0.636 | 0.489 | 2.68E-10 | CD8_spleen |
| NUCKS1            | 8.13E-15 | 0.30621289 | 0.586 | 0.45  | 2.88E-10 | CD8_spleen |
| INPP5D            | 8.14E-15 | 0.37344947 | 0.453 | 0.324 | 2.88E-10 | CD8_spleen |
| PLAAT4            | 8.23E-15 | 0.45009198 | 0.358 | 0.248 | 2.92E-10 | CD8_spleen |
| MAZ               | 8.58E-15 | 0.44675718 | 0.296 | 0.192 | 3.04E-10 | CD8_spleen |
| ENSMUG00000017890 | 1.02E-14 | 0.50785967 | 0.292 | 0.19  | 3.61E-10 | CD8_spleen |
| TACC1             | 1.02E-14 | 0.33580611 | 0.465 | 0.332 | 3.62E-10 | CD8_spleen |
| TTC1              | 1.10E-14 | 0.48821938 | 0.259 | 0.164 | 3.91E-10 | CD8_spleen |
| IDH2              | 1.12E-14 | 0.51731781 | 0.254 | 0.159 | 3.95E-10 | CD8_spleen |
| C11H12orf45       | 1.21E-14 | 0.27832407 | 0.526 | 0.38  | 4.29E-10 | CD8_spleen |
| LBH               | 1.22E-14 | 0.27340682 | 0.636 | 0.485 | 4.33E-10 | CD8_spleen |
| CCT4              | 1.27E-14 | 0.2953916  | 0.626 | 0.482 | 4.49E-10 | CD8_spleen |
| ENSMUG00000052424 | 1.29E-14 | 0.26038835 | 0.787 | 0.643 | 4.56E-10 | CD8_spleen |
| CAMK1D            | 1.40E-14 | 0.3653058  | 0.652 | 0.515 | 4.95E-10 | CD8_spleen |
| MRPL32            | 1.59E-14 | 0.39061847 | 0.307 | 0.199 | 5.62E-10 | CD8_spleen |
| BIN2              | 1.62E-14 | 0.25042377 | 0.779 | 0.619 | 5.73E-10 | CD8_spleen |
| LSP1              | 1.68E-14 | 0.25849788 | 0.719 | 0.562 | 5.95E-10 | CD8_spleen |
| PRKCA             | 1.72E-14 | 0.41269721 | 0.458 | 0.334 | 6.11E-10 | CD8_spleen |
| SUPT20H           | 1.81E-14 | 0.51301236 | 0.295 | 0.194 | 6.42E-10 | CD8_spleen |
| DNAJB14           | 2.07E-14 | 0.4060663  | 0.333 | 0.221 | 7.33E-10 | CD8_spleen |
| EEF1E1            | 2.08E-14 | 0.25184317 | 0.413 | 0.282 | 7.35E-10 | CD8_spleen |



|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| GTF2A2             | 2.16E-14 | 0.32123654 | 0.293 | 0.187 | 7.64E-10 | CD8_spleen |
| FAM53C             | 2.19E-14 | 0.41952329 | 0.305 | 0.198 | 7.74E-10 | CD8_spleen |
| PNKP               | 2.24E-14 | 0.45993226 | 0.291 | 0.188 | 7.93E-10 | CD8_spleen |
| PAOX               | 2.63E-14 | 0.31861898 | 0.412 | 0.288 | 9.32E-10 | CD8_spleen |
| TTC37              | 2.68E-14 | 0.3975563  | 0.307 | 0.203 | 9.51E-10 | CD8_spleen |
| DPH5               | 2.71E-14 | 0.45721364 | 0.28  | 0.18  | 9.62E-10 | CD8_spleen |
| TIGAR              | 3.00E-14 | 0.33021005 | 0.696 | 0.562 | 1.06E-09 | CD8_spleen |
| HMBOX1             | 3.11E-14 | 0.36496992 | 0.399 | 0.279 | 1.10E-09 | CD8_spleen |
| KCNQ5              | 3.17E-14 | 0.34504856 | 0.793 | 0.663 | 1.12E-09 | CD8_spleen |
| RWDD4              | 3.68E-14 | 0.49410743 | 0.252 | 0.158 | 1.30E-09 | CD8_spleen |
| LARP4B             | 3.75E-14 | 0.33668342 | 0.423 | 0.301 | 1.33E-09 | CD8_spleen |
| RPL31              | 3.82E-14 | 0.22123809 | 0.897 | 0.794 | 1.35E-09 | CD8_spleen |
| TOP1               | 3.95E-14 | 0.25260439 | 0.793 | 0.653 | 1.40E-09 | CD8_spleen |
| ENSMMUG00000039874 | 4.08E-14 | 0.49906062 | 0.295 | 0.194 | 1.44E-09 | CD8_spleen |
| RALY               | 4.11E-14 | 0.28410191 | 0.499 | 0.359 | 1.45E-09 | CD8_spleen |
| HP1BP3             | 4.33E-14 | 0.26106863 | 0.55  | 0.405 | 1.53E-09 | CD8_spleen |
| H2AFY              | 4.46E-14 | 0.30627882 | 0.557 | 0.41  | 1.58E-09 | CD8_spleen |
| ESD                | 4.97E-14 | 0.4114849  | 0.265 | 0.167 | 1.76E-09 | CD8_spleen |
| RFX7               | 5.79E-14 | 0.35477065 | 0.367 | 0.254 | 2.05E-09 | CD8_spleen |
| TRMT112            | 5.95E-14 | 0.23502711 | 0.638 | 0.49  | 2.11E-09 | CD8_spleen |
| ENSMMUG00000053817 | 6.80E-14 | 0.25340408 | 0.503 | 0.369 | 2.41E-09 | CD8_spleen |
| IPO11              | 7.02E-14 | 0.4046458  | 0.315 | 0.212 | 2.49E-09 | CD8_spleen |
| CUL1               | 7.44E-14 | 0.38500526 | 0.391 | 0.273 | 2.64E-09 | CD8_spleen |
| NCOA7              | 7.84E-14 | 0.26124453 | 0.5   | 0.366 | 2.78E-09 | CD8_spleen |
| PKN1               | 7.96E-14 | 0.39892499 | 0.261 | 0.166 | 2.82E-09 | CD8_spleen |
| MARK3              | 8.77E-14 | 0.36730299 | 0.517 | 0.384 | 3.11E-09 | CD8_spleen |
| TRIM44             | 1.04E-13 | 0.34407461 | 0.352 | 0.241 | 3.68E-09 | CD8_spleen |
| NDUFA8             | 1.25E-13 | 0.30858662 | 0.283 | 0.181 | 4.42E-09 | CD8_spleen |
| TUBA1A             | 1.25E-13 | 0.26800519 | 0.738 | 0.594 | 4.43E-09 | CD8_spleen |
| TMBIM4             | 1.33E-13 | 0.33944662 | 0.388 | 0.271 | 4.70E-09 | CD8_spleen |
| ZNF514             | 1.34E-13 | 0.29252251 | 0.488 | 0.357 | 4.74E-09 | CD8_spleen |
| CD3E               | 1.45E-13 | 0.23137172 | 0.727 | 0.577 | 5.14E-09 | CD8_spleen |
| POLR2H             | 1.46E-13 | 0.31326679 | 0.287 | 0.185 | 5.18E-09 | CD8_spleen |

|                      |          |            |       |       |          |            |
|----------------------|----------|------------|-------|-------|----------|------------|
| MTF2                 | 1.50E-13 | 0.41045918 | 0.325 | 0.222 | 5.33E-09 | CD8_spleen |
| RPL9                 | 1.67E-13 | 0.12221076 | 0.996 | 0.986 | 5.91E-09 | CD8_spleen |
| ENSMMUG000000001458  | 1.72E-13 | 0.16832625 | 0.88  | 0.763 | 6.10E-09 | CD8_spleen |
| TBC1D1               | 1.84E-13 | 0.32253108 | 0.594 | 0.464 | 6.53E-09 | CD8_spleen |
| ENSMMUG0000000061756 | 2.01E-13 | 0.43747611 | 0.32  | 0.218 | 7.14E-09 | CD8_spleen |
| RILPL2               | 2.04E-13 | 0.37411735 | 0.327 | 0.224 | 7.23E-09 | CD8_spleen |
| TMEM147              | 2.07E-13 | 0.30771487 | 0.399 | 0.274 | 7.33E-09 | CD8_spleen |
| ZNF277               | 2.35E-13 | 0.47646458 | 0.265 | 0.172 | 8.32E-09 | CD8_spleen |
| NLK                  | 2.43E-13 | 0.45334234 | 0.254 | 0.164 | 8.61E-09 | CD8_spleen |
| TMEM243              | 2.45E-13 | 0.27582631 | 0.51  | 0.377 | 8.68E-09 | CD8_spleen |
| TNPO3                | 2.47E-13 | 0.39775765 | 0.349 | 0.241 | 8.77E-09 | CD8_spleen |
| THRAP3               | 2.53E-13 | 0.27764326 | 0.629 | 0.488 | 8.95E-09 | CD8_spleen |
| KPNA1                | 2.53E-13 | 0.37577827 | 0.364 | 0.253 | 8.96E-09 | CD8_spleen |
| CCNY                 | 2.53E-13 | 0.30067878 | 0.466 | 0.339 | 8.97E-09 | CD8_spleen |
| CPNE1                | 2.55E-13 | 0.26124108 | 0.505 | 0.369 | 9.03E-09 | CD8_spleen |
| DENND6A              | 2.55E-13 | 0.39138958 | 0.356 | 0.248 | 9.05E-09 | CD8_spleen |
| MARS1                | 2.58E-13 | 0.49533192 | 0.272 | 0.179 | 9.16E-09 | CD8_spleen |
| PLEKHA1              | 2.71E-13 | 0.36879137 | 0.362 | 0.254 | 9.59E-09 | CD8_spleen |
| IQGAP1               | 2.76E-13 | 0.34765221 | 0.658 | 0.519 | 9.77E-09 | CD8_spleen |
| MAP2K4               | 2.83E-13 | 0.35227563 | 0.36  | 0.248 | 1.00E-08 | CD8_spleen |
| ROS1                 | 2.95E-13 | 0.48067634 | 0.279 | 0.185 | 1.05E-08 | CD8_spleen |
| DDX39A               | 2.96E-13 | 0.28278882 | 0.544 | 0.405 | 1.05E-08 | CD8_spleen |
| TCF3                 | 3.20E-13 | 0.38243262 | 0.265 | 0.171 | 1.13E-08 | CD8_spleen |
| HADH                 | 3.23E-13 | 0.32312471 | 0.291 | 0.19  | 1.14E-08 | CD8_spleen |
| STRBP                | 3.27E-13 | 0.33932215 | 0.346 | 0.243 | 1.16E-08 | CD8_spleen |
| TRIM28               | 3.33E-13 | 0.34560422 | 0.303 | 0.202 | 1.18E-08 | CD8_spleen |
| ENSMMUG0000000064531 | 3.38E-13 | 0.21673881 | 0.32  | 0.208 | 1.20E-08 | CD8_spleen |
| COMMD10              | 3.39E-13 | 0.35989314 | 0.474 | 0.354 | 1.20E-08 | CD8_spleen |
| SMARCC1              | 3.51E-13 | 0.29237073 | 0.615 | 0.48  | 1.24E-08 | CD8_spleen |
| NAA50                | 4.39E-13 | 0.31900089 | 0.381 | 0.264 | 1.56E-08 | CD8_spleen |
| MED28                | 4.56E-13 | 0.36710268 | 0.323 | 0.219 | 1.62E-08 | CD8_spleen |
| GLIPR1L2             | 4.65E-13 | 0.30339487 | 0.539 | 0.403 | 1.65E-08 | CD8_spleen |
| MITD1                | 4.68E-13 | 0.27420022 | 0.258 | 0.163 | 1.66E-08 | CD8_spleen |

|                   |          |            |       |       |          |            |
|-------------------|----------|------------|-------|-------|----------|------------|
| NRDC              | 4.70E-13 | 0.33246741 | 0.378 | 0.265 | 1.67E-08 | CD8_spleen |
| NEK7              | 4.80E-13 | 0.33105486 | 0.448 | 0.329 | 1.70E-08 | CD8_spleen |
| MIF               | 4.83E-13 | 0.26883049 | 0.725 | 0.591 | 1.71E-08 | CD8_spleen |
| TMED4             | 5.00E-13 | 0.3972415  | 0.271 | 0.176 | 1.77E-08 | CD8_spleen |
| CD48              | 5.13E-13 | 0.27022629 | 0.285 | 0.185 | 1.82E-08 | CD8_spleen |
| NRROS             | 5.13E-13 | 0.43340158 | 0.352 | 0.246 | 1.82E-08 | CD8_spleen |
| FOXN3             | 5.33E-13 | 0.23460253 | 0.955 | 0.86  | 1.89E-08 | CD8_spleen |
| RNF115            | 5.38E-13 | 0.29102973 | 0.377 | 0.26  | 1.91E-08 | CD8_spleen |
| DOCK11            | 5.49E-13 | 0.21763796 | 0.671 | 0.524 | 1.95E-08 | CD8_spleen |
| C11H12orf57       | 6.05E-13 | 0.25275263 | 0.69  | 0.56  | 2.14E-08 | CD8_spleen |
| DHX36             | 6.21E-13 | 0.32092725 | 0.546 | 0.414 | 2.20E-08 | CD8_spleen |
| DDX50             | 6.26E-13 | 0.32639926 | 0.455 | 0.331 | 2.22E-08 | CD8_spleen |
| TRIP12            | 6.35E-13 | 0.24601728 | 0.669 | 0.528 | 2.25E-08 | CD8_spleen |
| ENSMUG00000054462 | 6.44E-13 | 0.40768601 | 0.299 | 0.2   | 2.28E-08 | CD8_spleen |
| ENSMUG00000030317 | 6.58E-13 | 0.2842975  | 0.296 | 0.194 | 2.33E-08 | CD8_spleen |
| CAPZB             | 6.64E-13 | 0.20335806 | 0.727 | 0.59  | 2.35E-08 | CD8_spleen |
| CHMP5             | 7.41E-13 | 0.3670547  | 0.269 | 0.175 | 2.63E-08 | CD8_spleen |
| MLLT10            | 7.59E-13 | 0.31013474 | 0.58  | 0.438 | 2.69E-08 | CD8_spleen |
| NCLN              | 8.27E-13 | 0.31004265 | 0.397 | 0.28  | 2.93E-08 | CD8_spleen |
| MRPL47            | 8.88E-13 | 0.31231162 | 0.289 | 0.19  | 3.15E-08 | CD8_spleen |
| FBL               | 8.90E-13 | 0.31075623 | 0.424 | 0.305 | 3.15E-08 | CD8_spleen |
| TCF20             | 9.60E-13 | 0.30861941 | 0.449 | 0.325 | 3.40E-08 | CD8_spleen |
| OXSRI             | 1.06E-12 | 0.30733297 | 0.378 | 0.267 | 3.76E-08 | CD8_spleen |
| NEDD4L            | 1.10E-12 | 0.33487282 | 0.383 | 0.272 | 3.89E-08 | CD8_spleen |
| MSL2              | 1.10E-12 | 0.46664289 | 0.38  | 0.272 | 3.89E-08 | CD8_spleen |
| FCHSD2            | 1.16E-12 | 0.32130516 | 0.497 | 0.374 | 4.11E-08 | CD8_spleen |
| RBMX              | 1.28E-12 | 0.2320344  | 0.675 | 0.534 | 4.54E-08 | CD8_spleen |
| UBTF              | 1.29E-12 | 0.34551003 | 0.32  | 0.215 | 4.57E-08 | CD8_spleen |
| LMAN2             | 1.30E-12 | 0.36701391 | 0.326 | 0.223 | 4.61E-08 | CD8_spleen |
| P4HA1             | 1.33E-12 | 0.36082573 | 0.255 | 0.165 | 4.70E-08 | CD8_spleen |
| CCDC66            | 1.35E-12 | 0.25324344 | 0.403 | 0.286 | 4.78E-08 | CD8_spleen |
| HDLBP             | 1.53E-12 | 0.39335586 | 0.331 | 0.231 | 5.41E-08 | CD8_spleen |
| ENSMUG00000032231 | 1.76E-12 | 0.4255165  | 0.255 | 0.166 | 6.25E-08 | CD8_spleen |

|                     |          |            |       |       |          |            |
|---------------------|----------|------------|-------|-------|----------|------------|
| CTCF                | 1.78E-12 | 0.35362338 | 0.474 | 0.35  | 6.30E-08 | CD8_spleen |
| PPP2R2D             | 1.91E-12 | 0.34361015 | 0.377 | 0.266 | 6.75E-08 | CD8_spleen |
| ENSMMUG000000061824 | 2.21E-12 | 0.24944358 | 0.96  | 0.891 | 7.85E-08 | CD8_spleen |
| VDAC3               | 2.26E-12 | 0.29898638 | 0.319 | 0.214 | 8.01E-08 | CD8_spleen |
| MRPS33              | 2.26E-12 | 0.22756273 | 0.338 | 0.227 | 8.02E-08 | CD8_spleen |
| SLC25A4             | 2.42E-12 | 0.37235123 | 0.346 | 0.242 | 8.57E-08 | CD8_spleen |
| ENSMMUG000000063609 | 2.49E-12 | 0.19393758 | 0.266 | 0.171 | 8.81E-08 | CD8_spleen |
| RMDN1               | 2.54E-12 | 0.37153554 | 0.309 | 0.211 | 9.00E-08 | CD8_spleen |
| UIMC1               | 2.59E-12 | 0.42034907 | 0.359 | 0.254 | 9.17E-08 | CD8_spleen |
| H1-4                | 2.64E-12 | 0.36903026 | 0.373 | 0.267 | 9.35E-08 | CD8_spleen |
| DRAP1               | 2.89E-12 | 0.17772372 | 0.516 | 0.371 | 1.02E-07 | CD8_spleen |
| ENSMMUG000000017466 | 3.10E-12 | 0.16424304 | 0.543 | 0.4   | 1.10E-07 | CD8_spleen |
| SRSF6               | 3.16E-12 | 0.18535279 | 0.537 | 0.396 | 1.12E-07 | CD8_spleen |
| PSMD12              | 3.52E-12 | 0.25812984 | 0.827 | 0.712 | 1.25E-07 | CD8_spleen |
| ENSMMUG000000015095 | 3.61E-12 | 0.30207611 | 0.271 | 0.178 | 1.28E-07 | CD8_spleen |
| RNF138              | 3.69E-12 | 0.43731013 | 0.384 | 0.278 | 1.31E-07 | CD8_spleen |
| CCT6A               | 4.00E-12 | 0.25832773 | 0.631 | 0.492 | 1.42E-07 | CD8_spleen |
| WTAP                | 4.09E-12 | 0.2765474  | 0.675 | 0.546 | 1.45E-07 | CD8_spleen |
| FLII                | 4.24E-12 | 0.35062242 | 0.273 | 0.179 | 1.50E-07 | CD8_spleen |
| XPC                 | 4.47E-12 | 0.27957986 | 0.419 | 0.298 | 1.58E-07 | CD8_spleen |
| SENP6               | 4.63E-12 | 0.25169794 | 0.634 | 0.496 | 1.64E-07 | CD8_spleen |
| BPTF                | 4.64E-12 | 0.24671967 | 0.625 | 0.485 | 1.64E-07 | CD8_spleen |
| CCT8                | 4.68E-12 | 0.18146691 | 0.547 | 0.398 | 1.66E-07 | CD8_spleen |
| CRIP1               | 4.93E-12 | 0.15792274 | 0.659 | 0.525 | 1.75E-07 | CD8_spleen |
| SYNCRIP             | 5.23E-12 | 0.31150415 | 0.51  | 0.389 | 1.85E-07 | CD8_spleen |
| DPY30               | 5.30E-12 | 0.23040198 | 0.303 | 0.201 | 1.88E-07 | CD8_spleen |
| EIF5B               | 5.37E-12 | 0.25398758 | 0.455 | 0.335 | 1.90E-07 | CD8_spleen |
| UBE2L6              | 5.46E-12 | 0.27640556 | 0.278 | 0.183 | 1.93E-07 | CD8_spleen |
| GDI2                | 5.77E-12 | 0.27397042 | 0.469 | 0.347 | 2.04E-07 | CD8_spleen |
| SF1                 | 5.82E-12 | 0.23553241 | 0.692 | 0.54  | 2.06E-07 | CD8_spleen |
| EHBP1               | 5.88E-12 | 0.28495723 | 0.418 | 0.303 | 2.08E-07 | CD8_spleen |
| HNRNPL              | 6.01E-12 | 0.22699517 | 0.587 | 0.45  | 2.13E-07 | CD8_spleen |
| UBE2K               | 6.40E-12 | 0.2187552  | 0.533 | 0.396 | 2.27E-07 | CD8_spleen |

|          |          |            |       |       |          |            |
|----------|----------|------------|-------|-------|----------|------------|
| DGKZ     | 6.60E-12 | 0.34267442 | 0.327 | 0.228 | 2.34E-07 | CD8_spleen |
| HK1      | 6.87E-12 | 0.44684443 | 0.276 | 0.186 | 2.43E-07 | CD8_spleen |
| EIF3I    | 7.11E-12 | 0.23895743 | 0.477 | 0.352 | 2.52E-07 | CD8_spleen |
| WBP1L    | 7.19E-12 | 0.2928123  | 0.354 | 0.248 | 2.55E-07 | CD8_spleen |
| SLIRP    | 7.66E-12 | 0.20755921 | 0.779 | 0.646 | 2.71E-07 | CD8_spleen |
| LRPPRC   | 7.97E-12 | 0.2823876  | 0.545 | 0.415 | 2.82E-07 | CD8_spleen |
| EIF4EBP3 | 9.08E-12 | 0.28596824 | 0.516 | 0.385 | 3.22E-07 | CD8_spleen |
| GLRX3    | 9.53E-12 | 0.32739104 | 0.386 | 0.277 | 3.38E-07 | CD8_spleen |
| SMYD3    | 9.85E-12 | 0.28649242 | 0.696 | 0.565 | 3.49E-07 | CD8_spleen |
| FAM162A  | 9.92E-12 | 0.29020121 | 0.265 | 0.173 | 3.51E-07 | CD8_spleen |
| MLLT3    | 1.04E-11 | 0.28279564 | 0.693 | 0.57  | 3.68E-07 | CD8_spleen |
| EHMT1    | 1.08E-11 | 0.33082219 | 0.474 | 0.361 | 3.83E-07 | CD8_spleen |
| SMAP2    | 1.10E-11 | 0.22947144 | 0.569 | 0.431 | 3.89E-07 | CD8_spleen |
| RPN2     | 1.10E-11 | 0.28135056 | 0.339 | 0.234 | 3.91E-07 | CD8_spleen |
| ADAR     | 1.12E-11 | 0.29262468 | 0.427 | 0.311 | 3.95E-07 | CD8_spleen |
| ATP5PD   | 1.15E-11 | 0.17289153 | 0.38  | 0.265 | 4.07E-07 | CD8_spleen |
| ANXA6    | 1.17E-11 | 0.52719513 | 0.266 | 0.182 | 4.16E-07 | CD8_spleen |
| DPP7     | 1.21E-11 | 0.38323493 | 0.25  | 0.165 | 4.30E-07 | CD8_spleen |
| KDELRL2  | 1.21E-11 | 0.38769381 | 0.269 | 0.18  | 4.30E-07 | CD8_spleen |
| SUPT3H   | 1.32E-11 | 0.3774466  | 0.485 | 0.371 | 4.66E-07 | CD8_spleen |
| DNAJC19  | 1.32E-11 | 0.16971097 | 0.364 | 0.253 | 4.69E-07 | CD8_spleen |
| DENND1A  | 1.34E-11 | 0.29110821 | 0.435 | 0.321 | 4.73E-07 | CD8_spleen |
| NVL      | 1.39E-11 | 0.36581689 | 0.265 | 0.176 | 4.91E-07 | CD8_spleen |
| HMGN4    | 1.40E-11 | 0.26377061 | 0.284 | 0.189 | 4.98E-07 | CD8_spleen |
| ARMH3    | 1.41E-11 | 0.30314771 | 0.31  | 0.213 | 5.00E-07 | CD8_spleen |
| DIPK1A   | 1.41E-11 | 0.32350147 | 0.332 | 0.234 | 5.01E-07 | CD8_spleen |
| UBAC2    | 1.46E-11 | 0.20941    | 0.857 | 0.738 | 5.17E-07 | CD8_spleen |
| LRIG1    | 1.47E-11 | 0.35993982 | 0.281 | 0.189 | 5.22E-07 | CD8_spleen |
| IMMP2L   | 1.51E-11 | 0.27432894 | 0.68  | 0.554 | 5.34E-07 | CD8_spleen |
| CHD1     | 1.51E-11 | 0.28366982 | 0.463 | 0.346 | 5.35E-07 | CD8_spleen |
| TAPBP    | 1.56E-11 | 0.23994491 | 0.456 | 0.33  | 5.51E-07 | CD8_spleen |
| NARS2    | 1.62E-11 | 0.37471737 | 0.278 | 0.188 | 5.75E-07 | CD8_spleen |
| KATNBL1  | 1.68E-11 | 0.23303681 | 0.366 | 0.254 | 5.96E-07 | CD8_spleen |

|                     |          |            |       |       |          |            |
|---------------------|----------|------------|-------|-------|----------|------------|
| ATRN                | 1.72E-11 | 0.3464828  | 0.319 | 0.223 | 6.08E-07 | CD8_spleen |
| RBX1                | 1.88E-11 | 0.17508928 | 0.586 | 0.449 | 6.67E-07 | CD8_spleen |
| ZFAND3              | 1.90E-11 | 0.22409665 | 0.716 | 0.586 | 6.74E-07 | CD8_spleen |
| COX5B               | 1.93E-11 | 0.12667205 | 0.649 | 0.495 | 6.84E-07 | CD8_spleen |
| PDCD4               | 2.00E-11 | 0.22782967 | 0.673 | 0.546 | 7.08E-07 | CD8_spleen |
| PARP6               | 2.09E-11 | 0.40904288 | 0.302 | 0.211 | 7.39E-07 | CD8_spleen |
| UQCRC2              | 2.13E-11 | 0.28691899 | 0.403 | 0.294 | 7.55E-07 | CD8_spleen |
| PRKDC               | 2.24E-11 | 0.23171286 | 0.633 | 0.499 | 7.95E-07 | CD8_spleen |
| PDK1                | 2.38E-11 | 0.26693912 | 0.651 | 0.515 | 8.44E-07 | CD8_spleen |
| UBQLN1              | 2.41E-11 | 0.24096411 | 0.443 | 0.321 | 8.55E-07 | CD8_spleen |
| HCLS1               | 2.58E-11 | 0.28073521 | 0.368 | 0.266 | 9.16E-07 | CD8_spleen |
| PSMB4               | 3.12E-11 | 0.25467805 | 0.479 | 0.358 | 1.11E-06 | CD8_spleen |
| ILF2                | 3.26E-11 | 0.2124609  | 0.443 | 0.317 | 1.15E-06 | CD8_spleen |
| SPATA5              | 3.50E-11 | 0.27139111 | 0.471 | 0.349 | 1.24E-06 | CD8_spleen |
| ENSMMUG000000016959 | 3.51E-11 | 0.27193623 | 0.479 | 0.356 | 1.24E-06 | CD8_spleen |
| PPA1                | 3.64E-11 | 0.21096034 | 0.453 | 0.331 | 1.29E-06 | CD8_spleen |
| ENSMMUG000000000350 | 3.72E-11 | 0.35895058 | 0.264 | 0.177 | 1.32E-06 | CD8_spleen |
| UBXN4               | 3.89E-11 | 0.25331743 | 0.495 | 0.369 | 1.38E-06 | CD8_spleen |
| SENP7               | 4.26E-11 | 0.26084541 | 0.539 | 0.411 | 1.51E-06 | CD8_spleen |
| INTS6L              | 4.33E-11 | 0.36129945 | 0.266 | 0.18  | 1.53E-06 | CD8_spleen |
| CRTC3               | 4.38E-11 | 0.23646323 | 0.701 | 0.562 | 1.55E-06 | CD8_spleen |
| UPF2                | 4.45E-11 | 0.23219374 | 0.449 | 0.334 | 1.58E-06 | CD8_spleen |
| SPEN                | 4.51E-11 | 0.33662997 | 0.422 | 0.312 | 1.60E-06 | CD8_spleen |
| TMED10              | 4.69E-11 | 0.23627519 | 0.547 | 0.417 | 1.66E-06 | CD8_spleen |
| NSRP1               | 4.85E-11 | 0.24685395 | 0.411 | 0.3   | 1.72E-06 | CD8_spleen |
| KLHL6               | 4.89E-11 | 0.33452257 | 0.281 | 0.192 | 1.73E-06 | CD8_spleen |
| PTPN11              | 5.09E-11 | 0.33028442 | 0.308 | 0.215 | 1.80E-06 | CD8_spleen |
| UBR2                | 5.35E-11 | 0.26886747 | 0.389 | 0.282 | 1.89E-06 | CD8_spleen |
| U2AF2               | 5.45E-11 | 0.31118578 | 0.255 | 0.169 | 1.93E-06 | CD8_spleen |
| TASP1               | 5.62E-11 | 0.26716187 | 0.51  | 0.392 | 1.99E-06 | CD8_spleen |
| CEPT1               | 5.87E-11 | 0.29345418 | 0.298 | 0.205 | 2.08E-06 | CD8_spleen |
| ATP2B4              | 6.14E-11 | 0.33768619 | 0.47  | 0.36  | 2.18E-06 | CD8_spleen |
| JPT1                | 6.39E-11 | 0.13480307 | 0.836 | 0.725 | 2.26E-06 | CD8_spleen |

|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| ENSMMUG00000057691 | 6.76E-11 | 0.33329304 | 0.351 | 0.252 | 2.39E-06 | CD8_spleen |
| WAPL               | 7.74E-11 | 0.26453052 | 0.436 | 0.322 | 2.74E-06 | CD8_spleen |
| LPXN               | 7.91E-11 | 0.29493223 | 0.27  | 0.183 | 2.80E-06 | CD8_spleen |
| DNAJC1             | 8.10E-11 | 0.35571021 | 0.3   | 0.211 | 2.87E-06 | CD8_spleen |
| TNRC6C             | 8.16E-11 | 0.29597067 | 0.339 | 0.238 | 2.89E-06 | CD8_spleen |
| BCAP31             | 8.28E-11 | 0.20192954 | 0.296 | 0.201 | 2.93E-06 | CD8_spleen |
| TASOR2             | 9.00E-11 | 0.24254164 | 0.516 | 0.397 | 3.19E-06 | CD8_spleen |
| MACF1              | 9.01E-11 | 0.24324385 | 0.731 | 0.595 | 3.19E-06 | CD8_spleen |
| OST4               | 9.04E-11 | 0.13404665 | 0.735 | 0.598 | 3.20E-06 | CD8_spleen |
| HNRNPA0            | 9.07E-11 | 0.1660299  | 0.576 | 0.431 | 3.21E-06 | CD8_spleen |
| RRP1B              | 9.69E-11 | 0.36170623 | 0.323 | 0.232 | 3.43E-06 | CD8_spleen |
| ARF4               | 9.89E-11 | 0.25583595 | 0.606 | 0.476 | 3.50E-06 | CD8_spleen |
| PSMA4              | 1.04E-10 | 0.19896351 | 0.485 | 0.355 | 3.67E-06 | CD8_spleen |
| RCAN3              | 1.14E-10 | 0.2291364  | 0.488 | 0.372 | 4.05E-06 | CD8_spleen |
| TRAPPC9            | 1.17E-10 | 0.24921632 | 0.338 | 0.24  | 4.16E-06 | CD8_spleen |
| IPCEF1             | 1.24E-10 | 0.40319233 | 0.468 | 0.369 | 4.38E-06 | CD8_spleen |
| ARF5               | 1.28E-10 | 0.16964531 | 0.492 | 0.361 | 4.55E-06 | CD8_spleen |
| SNRPE              | 1.36E-10 | 0.21982253 | 0.576 | 0.455 | 4.84E-06 | CD8_spleen |
| MNAT1              | 1.38E-10 | 0.18229663 | 0.547 | 0.414 | 4.88E-06 | CD8_spleen |
| VMP1               | 1.46E-10 | 0.26399521 | 0.39  | 0.283 | 5.17E-06 | CD8_spleen |
| PPIH               | 1.52E-10 | 0.23632383 | 0.328 | 0.23  | 5.40E-06 | CD8_spleen |
| BCL2L13            | 1.59E-10 | 0.41336555 | 0.278 | 0.193 | 5.64E-06 | CD8_spleen |
| CDK6               | 1.59E-10 | 0.27859963 | 0.379 | 0.274 | 5.65E-06 | CD8_spleen |
| ENSMMUG00000050845 | 1.68E-10 | 0.24386511 | 0.262 | 0.176 | 5.94E-06 | CD8_spleen |
| NADSYN1            | 1.78E-10 | 0.37324069 | 0.315 | 0.226 | 6.30E-06 | CD8_spleen |
| SEPTIN9            | 1.79E-10 | 0.21100936 | 0.68  | 0.552 | 6.34E-06 | CD8_spleen |
| IMMT               | 1.82E-10 | 0.33836795 | 0.255 | 0.172 | 6.44E-06 | CD8_spleen |
| AIP                | 1.85E-10 | 0.18506005 | 0.481 | 0.355 | 6.57E-06 | CD8_spleen |
| DMTF1              | 1.91E-10 | 0.21654304 | 0.401 | 0.289 | 6.78E-06 | CD8_spleen |
| ATP1B3             | 1.93E-10 | 0.28237428 | 0.429 | 0.318 | 6.82E-06 | CD8_spleen |
| CD81               | 1.93E-10 | 0.21287766 | 0.275 | 0.188 | 6.84E-06 | CD8_spleen |
| HIKESHI            | 2.02E-10 | 0.21115942 | 0.422 | 0.309 | 7.16E-06 | CD8_spleen |
| RAD23A             | 2.04E-10 | 0.28251745 | 0.312 | 0.217 | 7.21E-06 | CD8_spleen |

|                     |          |            |       |       |          |            |
|---------------------|----------|------------|-------|-------|----------|------------|
| ENSMMUG000000058919 | 2.05E-10 | 0.19911765 | 0.392 | 0.284 | 7.26E-06 | CD8_spleen |
| MTG2                | 2.15E-10 | 0.31571383 | 0.253 | 0.17  | 7.61E-06 | CD8_spleen |
| PIBF1               | 2.15E-10 | 0.27739806 | 0.383 | 0.279 | 7.62E-06 | CD8_spleen |
| TWF2                | 2.32E-10 | 0.17738265 | 0.436 | 0.319 | 8.20E-06 | CD8_spleen |
| SCP2                | 2.40E-10 | 0.22390326 | 0.443 | 0.326 | 8.50E-06 | CD8_spleen |
| HADHB               | 2.56E-10 | 0.30250865 | 0.252 | 0.17  | 9.06E-06 | CD8_spleen |
| ZNF652              | 2.62E-10 | 0.4463774  | 0.273 | 0.189 | 9.27E-06 | CD8_spleen |
| ZNF706              | 2.67E-10 | 0.19894368 | 0.557 | 0.431 | 9.45E-06 | CD8_spleen |
| SLC35B1             | 2.78E-10 | 0.31590839 | 0.419 | 0.315 | 9.85E-06 | CD8_spleen |
| PRKCB               | 2.98E-10 | 0.23316173 | 0.718 | 0.597 | 1.06E-05 | CD8_spleen |
| ASAP1               | 3.02E-10 | 0.26223769 | 0.609 | 0.491 | 1.07E-05 | CD8_spleen |
| SEPTIN2             | 3.29E-10 | 0.28619183 | 0.33  | 0.236 | 1.17E-05 | CD8_spleen |
| LYAR                | 3.60E-10 | 0.35143195 | 0.293 | 0.208 | 1.28E-05 | CD8_spleen |
| ERP29               | 3.62E-10 | 0.25820232 | 0.289 | 0.2   | 1.28E-05 | CD8_spleen |
| LSM2                | 4.03E-10 | 0.23015771 | 0.353 | 0.252 | 1.43E-05 | CD8_spleen |
| AASDHPPT            | 4.04E-10 | 0.32536963 | 0.306 | 0.216 | 1.43E-05 | CD8_spleen |
| DCTN3               | 4.08E-10 | 0.20421816 | 0.424 | 0.31  | 1.44E-05 | CD8_spleen |
| UBE2G2              | 4.58E-10 | 0.38129867 | 0.263 | 0.182 | 1.62E-05 | CD8_spleen |
| SBF2                | 4.70E-10 | 0.27188969 | 0.416 | 0.313 | 1.67E-05 | CD8_spleen |
| DOCK2               | 5.00E-10 | 0.20298239 | 0.779 | 0.655 | 1.77E-05 | CD8_spleen |
| RERE                | 5.08E-10 | 0.17998356 | 0.782 | 0.652 | 1.80E-05 | CD8_spleen |
| RPN1                | 5.20E-10 | 0.259263   | 0.419 | 0.311 | 1.84E-05 | CD8_spleen |
| DICER1              | 5.49E-10 | 0.35073833 | 0.262 | 0.18  | 1.95E-05 | CD8_spleen |
| ENSMMUG000000003532 | 6.06E-10 | 0.15367834 | 0.853 | 0.765 | 2.15E-05 | CD8_spleen |
| ZBED1               | 6.25E-10 | 0.3014117  | 0.268 | 0.186 | 2.21E-05 | CD8_spleen |
| SERBP1              | 6.52E-10 | 0.1682692  | 0.73  | 0.616 | 2.31E-05 | CD8_spleen |
| KPNB1               | 6.53E-10 | 0.26281252 | 0.488 | 0.374 | 2.31E-05 | CD8_spleen |
| ENSMMUG000000059070 | 6.77E-10 | 0.28308902 | 0.266 | 0.181 | 2.40E-05 | CD8_spleen |
| TTC27               | 7.12E-10 | 0.2589108  | 0.333 | 0.239 | 2.52E-05 | CD8_spleen |
| PPP1CA              | 7.28E-10 | 0.19462391 | 0.504 | 0.377 | 2.58E-05 | CD8_spleen |
| ENSMMUG000000006343 | 7.38E-10 | 0.26008625 | 0.364 | 0.264 | 2.61E-05 | CD8_spleen |
| ENSMMUG000000053146 | 7.67E-10 | 0.11768883 | 0.589 | 0.463 | 2.72E-05 | CD8_spleen |
| MDN1                | 7.98E-10 | 0.23216598 | 0.427 | 0.323 | 2.83E-05 | CD8_spleen |



|                    |          |            |       |       |          |            |
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| SH3KBP1            | 8.00E-10 | 0.16945679 | 0.898 | 0.79  | 2.83E-05 | CD8_spleen |
| SLC25A36           | 8.37E-10 | 0.2674446  | 0.321 | 0.228 | 2.97E-05 | CD8_spleen |
| MAP3K1             | 9.00E-10 | 0.29727657 | 0.372 | 0.276 | 3.19E-05 | CD8_spleen |
| IP6K1              | 9.08E-10 | 0.25468422 | 0.316 | 0.225 | 3.22E-05 | CD8_spleen |
| PHF20              | 1.01E-09 | 0.24587388 | 0.499 | 0.386 | 3.59E-05 | CD8_spleen |
| UHMK1              | 1.12E-09 | 0.23235175 | 0.347 | 0.249 | 3.96E-05 | CD8_spleen |
| ZNHIT6             | 1.14E-09 | 0.35693826 | 0.258 | 0.181 | 4.05E-05 | CD8_spleen |
| R3HDM4             | 1.15E-09 | 0.30807902 | 0.259 | 0.178 | 4.06E-05 | CD8_spleen |
| CCDC69             | 1.28E-09 | 0.3135963  | 0.355 | 0.261 | 4.52E-05 | CD8_spleen |
| ACAP1              | 1.28E-09 | 0.22128142 | 0.304 | 0.213 | 4.53E-05 | CD8_spleen |
| SLC25A10           | 1.34E-09 | 0.15497233 | 0.276 | 0.188 | 4.74E-05 | CD8_spleen |
| APPL1              | 1.38E-09 | 0.26895811 | 0.262 | 0.18  | 4.89E-05 | CD8_spleen |
| ENSMMUG00000028906 | 1.45E-09 | 0.23278271 | 0.703 | 0.574 | 5.14E-05 | CD8_spleen |
| CYTIP              | 1.54E-09 | 0.23410221 | 0.709 | 0.59  | 5.45E-05 | CD8_spleen |
| G3BP1              | 1.61E-09 | 0.19060113 | 0.676 | 0.54  | 5.71E-05 | CD8_spleen |
| NDUFAF2            | 1.69E-09 | 0.20852141 | 0.332 | 0.237 | 5.98E-05 | CD8_spleen |
| MIB1               | 1.71E-09 | 0.36183749 | 0.362 | 0.268 | 6.05E-05 | CD8_spleen |
| ITM2A              | 1.74E-09 | 0.24340629 | 0.312 | 0.223 | 6.16E-05 | CD8_spleen |
| DDHD1              | 1.74E-09 | 0.31907026 | 0.259 | 0.18  | 6.18E-05 | CD8_spleen |
| CSTF3              | 1.75E-09 | 0.37520744 | 0.271 | 0.19  | 6.22E-05 | CD8_spleen |
| HNRNPA1            | 1.78E-09 | 0.17019955 | 0.793 | 0.68  | 6.29E-05 | CD8_spleen |
| ANKRD17            | 1.80E-09 | 0.23033577 | 0.617 | 0.497 | 6.36E-05 | CD8_spleen |
| COX20              | 1.85E-09 | 0.21647977 | 0.345 | 0.249 | 6.54E-05 | CD8_spleen |
| TMEM258            | 2.01E-09 | 0.11276872 | 0.676 | 0.535 | 7.11E-05 | CD8_spleen |
| KIAA0232           | 2.07E-09 | 0.31535586 | 0.344 | 0.254 | 7.33E-05 | CD8_spleen |
| ATAD2B             | 2.15E-09 | 0.21866367 | 0.55  | 0.439 | 7.60E-05 | CD8_spleen |
| HDAC1              | 2.16E-09 | 0.18317205 | 0.477 | 0.36  | 7.66E-05 | CD8_spleen |
| ENSMMUG00000006965 | 2.21E-09 | 0.18763861 | 0.519 | 0.4   | 7.82E-05 | CD8_spleen |
| CDC37              | 2.21E-09 | 0.24790556 | 0.383 | 0.282 | 7.84E-05 | CD8_spleen |
| TOP2B              | 2.29E-09 | 0.24884832 | 0.47  | 0.363 | 8.12E-05 | CD8_spleen |
| ENSMMUG00000000249 | 2.36E-09 | 0.23518819 | 0.259 | 0.177 | 8.37E-05 | CD8_spleen |
| SPTBN1             | 2.49E-09 | 0.17691965 | 0.688 | 0.547 | 8.83E-05 | CD8_spleen |
| CALCOCO2           | 2.77E-09 | 0.18335802 | 0.424 | 0.312 | 9.82E-05 | CD8_spleen |

|                    |          |            |       |       |            |            |
|--------------------|----------|------------|-------|-------|------------|------------|
| SLTM               | 2.88E-09 | 0.24619957 | 0.604 | 0.485 | 0.00010216 | CD8_spleen |
| ZSWIM6             | 2.95E-09 | 0.35106594 | 0.336 | 0.251 | 0.00010459 | CD8_spleen |
| PCNX1              | 2.96E-09 | 0.25904617 | 0.392 | 0.292 | 0.00010496 | CD8_spleen |
| ENSMMUG00000006608 | 3.30E-09 | 0.19706812 | 0.722 | 0.603 | 0.00011705 | CD8_spleen |
| SAE1               | 3.36E-09 | 0.2848596  | 0.315 | 0.228 | 0.00011891 | CD8_spleen |
| DYNC1H1            | 3.63E-09 | 0.25519229 | 0.36  | 0.266 | 0.00012869 | CD8_spleen |
| JMJD1C             | 3.72E-09 | 0.18964527 | 0.933 | 0.823 | 0.00013186 | CD8_spleen |
| TRIM24             | 3.86E-09 | 0.23437257 | 0.352 | 0.259 | 0.00013679 | CD8_spleen |
| RABGAP1L           | 3.88E-09 | 0.20984621 | 0.88  | 0.765 | 0.00013745 | CD8_spleen |
| ST8SIA4            | 3.90E-09 | 0.265386   | 0.426 | 0.323 | 0.00013836 | CD8_spleen |
| EVL                | 3.93E-09 | 0.18878977 | 0.769 | 0.644 | 0.00013907 | CD8_spleen |
| DAP3               | 3.98E-09 | 0.20320425 | 0.349 | 0.251 | 0.00014103 | CD8_spleen |
| BACH2              | 4.15E-09 | 0.21773555 | 0.874 | 0.784 | 0.00014713 | CD8_spleen |
| SFPQ               | 4.23E-09 | 0.20205716 | 0.655 | 0.536 | 0.00014986 | CD8_spleen |
| EIF2AK4            | 4.26E-09 | 0.28558869 | 0.283 | 0.202 | 0.00015105 | CD8_spleen |
| PPP2R1A            | 4.33E-09 | 0.25769405 | 0.332 | 0.243 | 0.00015346 | CD8_spleen |
| ENSMMUG00000058818 | 4.63E-09 | 0.19963288 | 0.304 | 0.218 | 0.00016392 | CD8_spleen |
| RBM14              | 4.94E-09 | 0.2212198  | 0.769 | 0.642 | 0.00017486 | CD8_spleen |
| STIM2              | 4.97E-09 | 0.23591523 | 0.446 | 0.348 | 0.00017617 | CD8_spleen |
| PPP4C              | 4.98E-09 | 0.21051294 | 0.365 | 0.267 | 0.00017651 | CD8_spleen |
| PCF11              | 5.23E-09 | 0.24894833 | 0.338 | 0.249 | 0.00018535 | CD8_spleen |
| NUDC               | 5.25E-09 | 0.19981133 | 0.518 | 0.402 | 0.00018604 | CD8_spleen |
| RCOR3              | 5.39E-09 | 0.28326216 | 0.315 | 0.228 | 0.00019115 | CD8_spleen |
| NSMCE1             | 5.68E-09 | 0.2656818  | 0.309 | 0.222 | 0.00020131 | CD8_spleen |
| CLCN3              | 5.77E-09 | 0.28069665 | 0.268 | 0.187 | 0.00020441 | CD8_spleen |
| EIF1AX             | 5.83E-09 | 0.21610737 | 0.479 | 0.366 | 0.00020655 | CD8_spleen |
| SMC1A              | 5.85E-09 | 0.31045328 | 0.325 | 0.238 | 0.00020714 | CD8_spleen |
| MAP2K6             | 5.88E-09 | 0.26113043 | 0.308 | 0.225 | 0.00020848 | CD8_spleen |
| UVRAG              | 5.97E-09 | 0.15730272 | 0.552 | 0.431 | 0.00021168 | CD8_spleen |
| TIAL1              | 6.01E-09 | 0.18807947 | 0.398 | 0.298 | 0.00021291 | CD8_spleen |
| PRPSAP2            | 6.04E-09 | 0.24631447 | 0.332 | 0.243 | 0.00021412 | CD8_spleen |
| ENSMMUG00000010266 | 6.29E-09 | 0.18168984 | 0.798 | 0.669 | 0.00022303 | CD8_spleen |
| SKP1               | 6.34E-09 | 0.15997458 | 0.859 | 0.754 | 0.00022479 | CD8_spleen |

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|-------------------|----------|------------|-------|-------|------------|------------|
| NDUFV3            | 6.37E-09 | 0.21822681 | 0.26  | 0.179 | 0.00022576 | CD8_spleen |
| COMMD7            | 7.38E-09 | 0.17954559 | 0.489 | 0.372 | 0.0002614  | CD8_spleen |
| RCOR1             | 8.26E-09 | 0.3771282  | 0.275 | 0.2   | 0.0002928  | CD8_spleen |
| ACAD10            | 8.30E-09 | 0.22480243 | 0.309 | 0.22  | 0.00029394 | CD8_spleen |
| PPDPF             | 8.52E-09 | 0.22237109 | 0.327 | 0.236 | 0.00030198 | CD8_spleen |
| EFL1              | 9.57E-09 | 0.29951124 | 0.377 | 0.288 | 0.00033921 | CD8_spleen |
| BTBD7             | 9.70E-09 | 0.26703237 | 0.255 | 0.179 | 0.00034354 | CD8_spleen |
| CFDP1             | 9.92E-09 | 0.14374982 | 0.625 | 0.505 | 0.00035136 | CD8_spleen |
| ENSMUG00000017297 | 1.09E-08 | 0.23919786 | 0.263 | 0.186 | 0.00038556 | CD8_spleen |
| SRSF1             | 1.13E-08 | 0.20708858 | 0.433 | 0.331 | 0.00040193 | CD8_spleen |
| AMDHD1            | 1.18E-08 | 0.15463915 | 0.57  | 0.448 | 0.00041848 | CD8_spleen |
| TSPYL1            | 1.19E-08 | 0.23930243 | 0.255 | 0.178 | 0.0004233  | CD8_spleen |
| GLIPR2            | 1.23E-08 | 0.24257272 | 0.307 | 0.222 | 0.00043726 | CD8_spleen |
| SLAIN2            | 1.31E-08 | 0.30063259 | 0.35  | 0.261 | 0.00046254 | CD8_spleen |
| AMD1              | 1.31E-08 | 0.26960138 | 0.488 | 0.382 | 0.00046282 | CD8_spleen |
| ATE1              | 1.31E-08 | 0.26303254 | 0.363 | 0.272 | 0.00046578 | CD8_spleen |
| TTC19             | 1.37E-08 | 0.22322437 | 0.343 | 0.25  | 0.00048675 | CD8_spleen |
| AGPS              | 1.40E-08 | 0.20206177 | 0.437 | 0.332 | 0.00049529 | CD8_spleen |
| ADI1              | 1.55E-08 | 0.18036085 | 0.327 | 0.239 | 0.000548   | CD8_spleen |
| PSMA7             | 1.56E-08 | 0.18614374 | 0.854 | 0.76  | 0.00055213 | CD8_spleen |
| MAN1A1            | 1.58E-08 | 0.16821217 | 0.497 | 0.383 | 0.00055868 | CD8_spleen |
| IVNS1ABP          | 1.58E-08 | 0.20784337 | 0.409 | 0.308 | 0.00055937 | CD8_spleen |
| ENSMUG00000049295 | 1.60E-08 | 0.21395195 | 0.306 | 0.22  | 0.00056601 | CD8_spleen |
| DNAJC24           | 1.61E-08 | 0.24314677 | 0.482 | 0.381 | 0.00057146 | CD8_spleen |
| CAST              | 1.65E-08 | 0.1965912  | 0.469 | 0.363 | 0.00058489 | CD8_spleen |
| CXCR4             | 1.90E-08 | 0.20858162 | 0.291 | 0.209 | 0.00067417 | CD8_spleen |
| PAFAH1B1          | 1.99E-08 | 0.15628616 | 0.631 | 0.505 | 0.00070394 | CD8_spleen |
| FUT8              | 2.14E-08 | 0.24113862 | 0.357 | 0.269 | 0.00075707 | CD8_spleen |
| CCAR1             | 2.20E-08 | 0.21827432 | 0.34  | 0.251 | 0.00077972 | CD8_spleen |
| EIF2S1            | 2.42E-08 | 0.24586805 | 0.293 | 0.21  | 0.00085806 | CD8_spleen |
| PSMB9             | 2.63E-08 | 0.17321978 | 0.458 | 0.353 | 0.00093219 | CD8_spleen |
| TAF15             | 2.86E-08 | 0.19727206 | 0.662 | 0.533 | 0.0010137  | CD8_spleen |
| SERTAD2           | 3.19E-08 | 0.23573376 | 0.36  | 0.27  | 0.00112889 | CD8_spleen |

|                    |          |            |       |       |            |            |
|--------------------|----------|------------|-------|-------|------------|------------|
| ATF7IP             | 3.25E-08 | 0.20671247 | 0.74  | 0.632 | 0.00115243 | CD8_spleen |
| CLNS1A             | 3.28E-08 | 0.15304336 | 0.398 | 0.3   | 0.00116262 | CD8_spleen |
| MTRR               | 3.29E-08 | 0.25514914 | 0.302 | 0.22  | 0.00116721 | CD8_spleen |
| PRKAG2             | 3.37E-08 | 0.31814219 | 0.286 | 0.211 | 0.00119504 | CD8_spleen |
| PPP1R2             | 3.50E-08 | 0.22685547 | 0.639 | 0.525 | 0.00124065 | CD8_spleen |
| SLC3A2             | 3.70E-08 | 0.214531   | 0.254 | 0.179 | 0.00131176 | CD8_spleen |
| PACS1              | 3.71E-08 | 0.16692709 | 0.542 | 0.432 | 0.00131444 | CD8_spleen |
| GSTP1              | 3.96E-08 | 0.15441513 | 0.773 | 0.668 | 0.00140199 | CD8_spleen |
| PRR14L             | 3.96E-08 | 0.27025253 | 0.255 | 0.182 | 0.00140365 | CD8_spleen |
| VPS13C             | 4.29E-08 | 0.19174708 | 0.434 | 0.337 | 0.00152178 | CD8_spleen |
| EPS15L1            | 4.41E-08 | 0.30336998 | 0.258 | 0.185 | 0.00156191 | CD8_spleen |
| UBE2D3             | 4.52E-08 | 0.17498377 | 0.915 | 0.816 | 0.00160032 | CD8_spleen |
| REV3L              | 4.74E-08 | 0.22651876 | 0.522 | 0.42  | 0.00167895 | CD8_spleen |
| CMTM6              | 4.81E-08 | 0.25541206 | 0.345 | 0.26  | 0.00170342 | CD8_spleen |
| GTF2H5             | 4.93E-08 | 0.11171507 | 0.594 | 0.466 | 0.00174639 | CD8_spleen |
| PPP2R5A            | 5.02E-08 | 0.18149118 | 0.469 | 0.363 | 0.0017777  | CD8_spleen |
| ENSMMUG00000030374 | 5.05E-08 | 0.21896911 | 0.357 | 0.268 | 0.00178768 | CD8_spleen |
| RAN                | 5.31E-08 | 0.14756057 | 0.635 | 0.525 | 0.00188185 | CD8_spleen |
| ENSMMUG00000056043 | 5.39E-08 | 0.25689789 | 0.292 | 0.213 | 0.00191075 | CD8_spleen |
| SNX3               | 5.47E-08 | 0.1923174  | 0.329 | 0.241 | 0.00193648 | CD8_spleen |
| KMT5B              | 6.37E-08 | 0.21535742 | 0.401 | 0.306 | 0.00225568 | CD8_spleen |
| CCNH               | 6.41E-08 | 0.30139189 | 0.325 | 0.242 | 0.00227108 | CD8_spleen |
| PHB                | 6.44E-08 | 0.1845973  | 0.325 | 0.239 | 0.00228039 | CD8_spleen |
| POMP               | 6.45E-08 | 0.10914273 | 0.456 | 0.344 | 0.0022862  | CD8_spleen |
| LTV1               | 6.48E-08 | 0.22657273 | 0.362 | 0.273 | 0.0022943  | CD8_spleen |
| NDUFA2             | 6.86E-08 | 0.11012643 | 0.578 | 0.46  | 0.00243176 | CD8_spleen |
| ENSMMUG00000004539 | 6.94E-08 | 0.18014441 | 0.427 | 0.327 | 0.00245759 | CD8_spleen |
| ARHGEF1            | 7.00E-08 | 0.18837777 | 0.685 | 0.567 | 0.00247943 | CD8_spleen |
| VDAC1              | 7.79E-08 | 0.21183351 | 0.331 | 0.245 | 0.00276068 | CD8_spleen |
| HECTD1             | 7.81E-08 | 0.20026407 | 0.382 | 0.292 | 0.00276586 | CD8_spleen |
| VDAC2              | 8.10E-08 | 0.12624087 | 0.593 | 0.474 | 0.00286951 | CD8_spleen |
| NELFCD             | 8.32E-08 | 0.2869083  | 0.274 | 0.199 | 0.00294759 | CD8_spleen |
| SUZ12              | 8.41E-08 | 0.22074822 | 0.412 | 0.316 | 0.00297931 | CD8_spleen |

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|--------------------|----------|------------|-------|-------|------------|------------|
| PTBP1              | 9.90E-08 | 0.2596443  | 0.286 | 0.211 | 0.00350768 | CD8_spleen |
| ARHGAP15           | 1.01E-07 | 0.1451016  | 0.972 | 0.913 | 0.00356476 | CD8_spleen |
| XRN2               | 1.03E-07 | 0.17774021 | 0.663 | 0.543 | 0.00366396 | CD8_spleen |
| DTNB               | 1.07E-07 | 0.20401392 | 0.337 | 0.252 | 0.00378758 | CD8_spleen |
| ARHGAP45           | 1.10E-07 | 0.12091244 | 0.545 | 0.427 | 0.003891   | CD8_spleen |
| AAK1               | 1.11E-07 | 0.15656808 | 0.724 | 0.601 | 0.00394335 | CD8_spleen |
| BAX                | 1.12E-07 | 0.12037509 | 0.371 | 0.276 | 0.00397218 | CD8_spleen |
| EIF2B3             | 1.17E-07 | 0.22138728 | 0.419 | 0.324 | 0.00415277 | CD8_spleen |
| NPAT               | 1.18E-07 | 0.22365799 | 0.541 | 0.441 | 0.00419606 | CD8_spleen |
| KDM5B              | 1.20E-07 | 0.26902375 | 0.269 | 0.196 | 0.00423539 | CD8_spleen |
| ENSMMUG00000016278 | 1.21E-07 | 0.12709741 | 0.489 | 0.383 | 0.00429003 | CD8_spleen |
| ZNF493             | 1.27E-07 | 0.18990038 | 0.257 | 0.184 | 0.00451651 | CD8_spleen |
| PAPOLA             | 1.29E-07 | 0.17465841 | 0.71  | 0.584 | 0.00457094 | CD8_spleen |
| THOC2              | 1.34E-07 | 0.16648217 | 0.526 | 0.413 | 0.00474326 | CD8_spleen |
| SOD1               | 1.36E-07 | 0.14914471 | 0.479 | 0.375 | 0.00480556 | CD8_spleen |
| PSMD1              | 1.38E-07 | 0.238218   | 0.281 | 0.205 | 0.00487266 | CD8_spleen |
| PRKAR1A            | 1.41E-07 | 0.27313553 | 0.279 | 0.205 | 0.00498508 | CD8_spleen |
| VPS41              | 1.48E-07 | 0.31713865 | 0.251 | 0.181 | 0.00522923 | CD8_spleen |
| RAB37              | 1.52E-07 | 0.22542692 | 0.256 | 0.184 | 0.00539223 | CD8_spleen |
| MRPS6              | 1.68E-07 | 0.10896302 | 0.461 | 0.356 | 0.00595479 | CD8_spleen |
| ST6GALNAC5         | 1.70E-07 | 0.36498813 | 0.276 | 0.207 | 0.00602265 | CD8_spleen |
| COA1               | 1.72E-07 | 0.14728359 | 0.54  | 0.433 | 0.00610722 | CD8_spleen |
| PAICS              | 1.75E-07 | 0.22402846 | 0.273 | 0.197 | 0.00621143 | CD8_spleen |
| DDX10              | 1.78E-07 | 0.23599239 | 0.401 | 0.314 | 0.00629347 | CD8_spleen |
| YTHDC1             | 1.79E-07 | 0.15641363 | 0.633 | 0.515 | 0.00635371 | CD8_spleen |
| SNF8               | 1.83E-07 | 0.18885234 | 0.299 | 0.22  | 0.00646796 | CD8_spleen |
| SKAP1              | 2.03E-07 | 0.1645822  | 0.916 | 0.846 | 0.00720002 | CD8_spleen |
| HMOX2              | 2.18E-07 | 0.15607312 | 0.424 | 0.324 | 0.00771091 | CD8_spleen |
| EXOC4              | 2.21E-07 | 0.14142298 | 0.701 | 0.586 | 0.00783855 | CD8_spleen |
| FOKK1              | 2.21E-07 | 0.18774278 | 0.29  | 0.214 | 0.00784285 | CD8_spleen |
| USP25              | 2.33E-07 | 0.19772443 | 0.385 | 0.295 | 0.00827068 | CD8_spleen |
| EIPR1              | 2.55E-07 | 0.19802212 | 0.332 | 0.247 | 0.00904494 | CD8_spleen |
| ZNF22              | 2.74E-07 | 0.18084013 | 0.255 | 0.183 | 0.00972233 | CD8_spleen |

|                    |          |            |       |       |            |            |
|--------------------|----------|------------|-------|-------|------------|------------|
| TAF1               | 2.82E-07 | 0.25600778 | 0.3   | 0.224 | 0.00998934 | CD8_spleen |
| SP110              | 2.87E-07 | 0.18139344 | 0.619 | 0.503 | 0.01017895 | CD8_spleen |
| MRPS18A            | 2.89E-07 | 0.16904461 | 0.258 | 0.185 | 0.01023181 | CD8_spleen |
| PDS5A              | 2.90E-07 | 0.22900478 | 0.528 | 0.427 | 0.01027187 | CD8_spleen |
| MTHFD1L            | 2.99E-07 | 0.21704527 | 0.458 | 0.36  | 0.01060613 | CD8_spleen |
| NOC3L              | 3.00E-07 | 0.16810995 | 0.312 | 0.231 | 0.01063649 | CD8_spleen |
| CD46               | 3.10E-07 | 0.19070397 | 0.561 | 0.455 | 0.01099069 | CD8_spleen |
| COPB2              | 3.21E-07 | 0.19375811 | 0.25  | 0.18  | 0.01138447 | CD8_spleen |
| UQCRB              | 3.33E-07 | 0.14982348 | 0.448 | 0.347 | 0.01179541 | CD8_spleen |
| SARS1              | 3.42E-07 | 0.14086363 | 0.281 | 0.206 | 0.01210557 | CD8_spleen |
| AEBP2              | 3.69E-07 | 0.2058516  | 0.5   | 0.407 | 0.01307613 | CD8_spleen |
| CYFIP2             | 3.74E-07 | 0.16030176 | 0.538 | 0.425 | 0.01325622 | CD8_spleen |
| NFATC3             | 3.78E-07 | 0.19746079 | 0.636 | 0.516 | 0.01339605 | CD8_spleen |
| CD28               | 3.87E-07 | 0.21392166 | 0.598 | 0.493 | 0.01369943 | CD8_spleen |
| SMG1               | 3.95E-07 | 0.20726594 | 0.454 | 0.359 | 0.01399685 | CD8_spleen |
| RSRC1              | 4.07E-07 | 0.1721386  | 0.54  | 0.435 | 0.01442051 | CD8_spleen |
| FCMR               | 4.69E-07 | 0.14047181 | 0.582 | 0.475 | 0.01660073 | CD8_spleen |
| ATXN7L1            | 4.81E-07 | 0.19160387 | 0.398 | 0.313 | 0.01704108 | CD8_spleen |
| FBXW11             | 4.88E-07 | 0.22211869 | 0.264 | 0.194 | 0.01727336 | CD8_spleen |
| HDAC2              | 4.88E-07 | 0.21786609 | 0.451 | 0.354 | 0.01727894 | CD8_spleen |
| ZNF528             | 5.05E-07 | 0.18834768 | 0.436 | 0.346 | 0.01787875 | CD8_spleen |
| KDM4C              | 5.13E-07 | 0.13648264 | 0.625 | 0.512 | 0.0181661  | CD8_spleen |
| CALM3              | 5.14E-07 | 0.23080764 | 0.263 | 0.193 | 0.01820163 | CD8_spleen |
| KANSL1             | 5.21E-07 | 0.1545764  | 0.772 | 0.633 | 0.01847605 | CD8_spleen |
| TTF1               | 5.70E-07 | 0.1540801  | 0.354 | 0.269 | 0.02019115 | CD8_spleen |
| ENSMMUG00000008587 | 5.74E-07 | 0.19833139 | 0.546 | 0.445 | 0.02034631 | CD8_spleen |
| GIGYF2             | 6.07E-07 | 0.1486015  | 0.501 | 0.402 | 0.02150047 | CD8_spleen |
| DUSP10             | 6.08E-07 | 0.34818599 | 0.319 | 0.246 | 0.02155603 | CD8_spleen |
| ENSMMUG00000017113 | 6.19E-07 | 0.17502889 | 0.373 | 0.285 | 0.02194063 | CD8_spleen |
| GTF2F2             | 6.55E-07 | 0.24003244 | 0.377 | 0.295 | 0.02320994 | CD8_spleen |
| ANKZF1             | 7.07E-07 | 0.17258399 | 0.291 | 0.216 | 0.02504212 | CD8_spleen |
| MAGOH              | 7.40E-07 | 0.10942314 | 0.491 | 0.385 | 0.02621508 | CD8_spleen |
| UBAP2L             | 7.71E-07 | 0.21843509 | 0.403 | 0.317 | 0.02731046 | CD8_spleen |

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|-----------|----------|------------|-------|-------|------------|------------|
| ETFA      | 7.87E-07 | 0.19355228 | 0.33  | 0.247 | 0.02787912 | CD8_spleen |
| MGAT5     | 7.91E-07 | 0.1673221  | 0.635 | 0.525 | 0.0280251  | CD8_spleen |
| MLF2      | 7.96E-07 | 0.19987607 | 0.25  | 0.181 | 0.02818699 | CD8_spleen |
| MAPKAP1   | 7.99E-07 | 0.19772302 | 0.438 | 0.346 | 0.02829445 | CD8_spleen |
| TAF1D     | 8.18E-07 | 0.20577191 | 0.355 | 0.273 | 0.02898405 | CD8_spleen |
| DGKB      | 8.20E-07 | 0.16517479 | 0.303 | 0.23  | 0.02904678 | CD8_spleen |
| FBXW8     | 8.45E-07 | 0.24156238 | 0.337 | 0.261 | 0.02993374 | CD8_spleen |
| KDM2A     | 8.55E-07 | 0.1668048  | 0.627 | 0.514 | 0.03028466 | CD8_spleen |
| DCUN1D5   | 8.82E-07 | 0.13572784 | 0.262 | 0.19  | 0.03126375 | CD8_spleen |
| MMD       | 8.95E-07 | 0.13478922 | 0.33  | 0.248 | 0.03170477 | CD8_spleen |
| FOXO1     | 9.09E-07 | 0.18549038 | 0.776 | 0.665 | 0.03221157 | CD8_spleen |
| TPI1      | 9.10E-07 | 0.15197063 | 0.376 | 0.29  | 0.03225607 | CD8_spleen |
| C3H7orf50 | 9.24E-07 | 0.13463311 | 0.652 | 0.543 | 0.03273619 | CD8_spleen |
| YTHDF2    | 9.73E-07 | 0.21882759 | 0.345 | 0.265 | 0.0344759  | CD8_spleen |
| SLC10A7   | 1.03E-06 | 0.23756833 | 0.276 | 0.208 | 0.03652545 | CD8_spleen |
| GOLM2     | 1.04E-06 | 0.18755084 | 0.541 | 0.436 | 0.03696001 | CD8_spleen |
| ZBTB44    | 1.07E-06 | 0.28032445 | 0.276 | 0.208 | 0.0378541  | CD8_spleen |
| NASP      | 1.07E-06 | 0.16568121 | 0.474 | 0.383 | 0.03786396 | CD8_spleen |
| VPS8      | 1.07E-06 | 0.28569745 | 0.333 | 0.258 | 0.03801578 | CD8_spleen |
| PTEN      | 1.08E-06 | 0.14741859 | 0.484 | 0.39  | 0.03829005 | CD8_spleen |
| ARNT      | 1.09E-06 | 0.19528639 | 0.323 | 0.251 | 0.03861082 | CD8_spleen |
| STAU2     | 1.10E-06 | 0.16811205 | 0.454 | 0.36  | 0.03900757 | CD8_spleen |
| SMG6      | 1.19E-06 | 0.1653242  | 0.616 | 0.515 | 0.04203863 | CD8_spleen |
| MAPRE2    | 1.25E-06 | 0.23401765 | 0.526 | 0.434 | 0.04415383 | CD8_spleen |
| DCP2      | 1.27E-06 | 0.14933129 | 0.312 | 0.233 | 0.04511217 | CD8_spleen |
| ZNF148    | 1.32E-06 | 0.21065945 | 0.525 | 0.429 | 0.04679899 | CD8_spleen |
| POLR2G    | 1.35E-06 | 0.12776263 | 0.289 | 0.215 | 0.04777314 | CD8_spleen |
| PBRM1     | 1.40E-06 | 0.14213325 | 0.494 | 0.393 | 0.04946351 | CD8_spleen |
| CCNL1     | 1.48E-06 | 0.17879781 | 0.816 | 0.703 | 0.05256719 | CD8_spleen |
| PPP1R8    | 1.54E-06 | 0.19009274 | 0.261 | 0.195 | 0.05445548 | CD8_spleen |
| NUCB2     | 1.58E-06 | 0.10713603 | 0.336 | 0.254 | 0.05604727 | CD8_spleen |
| SNX6      | 1.59E-06 | 0.17168035 | 0.55  | 0.446 | 0.05645637 | CD8_spleen |
| GPRIN3    | 1.62E-06 | 0.16196272 | 0.451 | 0.361 | 0.05743016 | CD8_spleen |

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|--------------------|----------|------------|-------|-------|------------|------------|
| ARID1B             | 1.65E-06 | 0.14658251 | 0.782 | 0.669 | 0.05843356 | CD8_spleen |
| REST               | 1.92E-06 | 0.25772914 | 0.285 | 0.216 | 0.06818468 | CD8_spleen |
| SRP72              | 1.97E-06 | 0.21922905 | 0.274 | 0.204 | 0.06972335 | CD8_spleen |
| HERC3              | 1.97E-06 | 0.16614665 | 0.49  | 0.39  | 0.06990403 | CD8_spleen |
| ZNF131             | 2.05E-06 | 0.16301304 | 0.445 | 0.35  | 0.07280071 | CD8_spleen |
| SUFU               | 2.13E-06 | 0.29890753 | 0.265 | 0.199 | 0.07548131 | CD8_spleen |
| PDCD6IP            | 2.14E-06 | 0.17577072 | 0.451 | 0.359 | 0.07574415 | CD8_spleen |
| SPG11              | 2.23E-06 | 0.22403996 | 0.298 | 0.223 | 0.07888244 | CD8_spleen |
| PPP2R5E            | 2.31E-06 | 0.10247341 | 0.492 | 0.385 | 0.08183005 | CD8_spleen |
| PHF21A             | 2.34E-06 | 0.21493821 | 0.425 | 0.338 | 0.08287227 | CD8_spleen |
| ENSMMUG00000049718 | 2.40E-06 | 0.12580888 | 0.257 | 0.188 | 0.08520484 | CD8_spleen |
| STXBP5             | 2.41E-06 | 0.23623103 | 0.33  | 0.257 | 0.08527685 | CD8_spleen |
| TEX264             | 2.41E-06 | 0.15282168 | 0.309 | 0.236 | 0.08554687 | CD8_spleen |
| SH3BGR             | 2.43E-06 | 0.15252378 | 0.383 | 0.301 | 0.08596983 | CD8_spleen |
| ANKRD11            | 2.54E-06 | 0.1317314  | 0.68  | 0.566 | 0.08994818 | CD8_spleen |
| ITK                | 2.63E-06 | 0.20119236 | 0.819 | 0.727 | 0.09301432 | CD8_spleen |
| ENSMMUG00000015217 | 2.64E-06 | 0.18860856 | 0.256 | 0.189 | 0.09361814 | CD8_spleen |
| INTS6              | 2.71E-06 | 0.19908584 | 0.471 | 0.379 | 0.09614206 | CD8_spleen |
| SMAD2              | 2.76E-06 | 0.21928125 | 0.318 | 0.246 | 0.09772796 | CD8_spleen |
| LSM10              | 2.81E-06 | 0.1278454  | 0.26  | 0.191 | 0.0995479  | CD8_spleen |
| CHCHD3             | 2.88E-06 | 0.14091875 | 0.476 | 0.379 | 0.10214822 | CD8_spleen |
| CCT3               | 2.99E-06 | 0.11055026 | 0.69  | 0.576 | 0.10580187 | CD8_spleen |
| CUL7               | 3.06E-06 | 0.19166006 | 0.286 | 0.215 | 0.10839557 | CD8_spleen |
| VPS53              | 3.16E-06 | 0.13674565 | 0.338 | 0.259 | 0.11198118 | CD8_spleen |
| POLR3GL            | 3.17E-06 | 0.14160253 | 0.412 | 0.324 | 0.11240703 | CD8_spleen |
| SESN1              | 3.37E-06 | 0.2785173  | 0.341 | 0.27  | 0.11946021 | CD8_spleen |
| TULP4              | 3.42E-06 | 0.15593046 | 0.254 | 0.189 | 0.12132983 | CD8_spleen |
| TANGO6             | 3.45E-06 | 0.14543828 | 0.384 | 0.299 | 0.12223159 | CD8_spleen |
| EIF3E              | 3.45E-06 | 0.1120115  | 0.913 | 0.848 | 0.12234112 | CD8_spleen |
| EXOC3              | 3.61E-06 | 0.11883773 | 0.269 | 0.2   | 0.12785683 | CD8_spleen |
| ENSMMUG00000064692 | 3.70E-06 | 0.26169971 | 0.863 | 0.798 | 0.13092262 | CD8_spleen |
| ARHGAP4            | 3.76E-06 | 0.15573534 | 0.397 | 0.309 | 0.13326256 | CD8_spleen |
| STK4               | 3.81E-06 | 0.13700179 | 0.76  | 0.646 | 0.13490068 | CD8_spleen |



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|--------------------|----------|------------|-------|-------|------------|------------|
| SF3A1              | 3.95E-06 | 0.13479697 | 0.306 | 0.233 | 0.14002872 | CD8_spleen |
| UBE2W              | 4.23E-06 | 0.16818593 | 0.263 | 0.197 | 0.14988895 | CD8_spleen |
| NMT1               | 4.38E-06 | 0.13416232 | 0.315 | 0.242 | 0.15522202 | CD8_spleen |
| HOOK3              | 4.62E-06 | 0.115135   | 0.644 | 0.518 | 0.16374473 | CD8_spleen |
| LDLRAD4            | 4.88E-06 | 0.1215199  | 0.566 | 0.462 | 0.17280253 | CD8_spleen |
| SND1               | 5.14E-06 | 0.17160915 | 0.537 | 0.439 | 0.18214952 | CD8_spleen |
| FRYL               | 5.16E-06 | 0.15437667 | 0.443 | 0.356 | 0.18290159 | CD8_spleen |
| M6PR               | 5.20E-06 | 0.21099271 | 0.275 | 0.21  | 0.18423022 | CD8_spleen |
| CCDC6              | 5.43E-06 | 0.12681535 | 0.294 | 0.225 | 0.19228619 | CD8_spleen |
| TRIM22             | 5.91E-06 | 0.17178174 | 0.479 | 0.382 | 0.20942251 | CD8_spleen |
| EIF4G2             | 6.01E-06 | 0.11679665 | 0.764 | 0.638 | 0.21311501 | CD8_spleen |
| RMND5A             | 6.13E-06 | 0.17452339 | 0.392 | 0.313 | 0.21725786 | CD8_spleen |
| DNAJC15            | 6.24E-06 | 0.15343637 | 0.356 | 0.279 | 0.22126747 | CD8_spleen |
| HNRNPH3            | 6.29E-06 | 0.10225015 | 0.681 | 0.555 | 0.22281144 | CD8_spleen |
| MKLN1              | 6.98E-06 | 0.15093002 | 0.621 | 0.522 | 0.24745412 | CD8_spleen |
| SSU72              | 7.04E-06 | 0.12576388 | 0.251 | 0.186 | 0.24958105 | CD8_spleen |
| NOL8               | 7.13E-06 | 0.13593066 | 0.268 | 0.202 | 0.25247022 | CD8_spleen |
| PSMD2              | 7.38E-06 | 0.21034367 | 0.284 | 0.219 | 0.26149855 | CD8_spleen |
| MPC2               | 8.22E-06 | 0.10328941 | 0.422 | 0.331 | 0.29111903 | CD8_spleen |
| CNTRL              | 8.71E-06 | 0.16856637 | 0.336 | 0.262 | 0.30845341 | CD8_spleen |
| KLF13              | 8.76E-06 | 0.15858453 | 0.25  | 0.186 | 0.31046039 | CD8_spleen |
| JAK2               | 8.88E-06 | 0.23018346 | 0.254 | 0.194 | 0.31467551 | CD8_spleen |
| CMC1               | 9.08E-06 | 0.14952989 | 0.26  | 0.196 | 0.3218635  | CD8_spleen |
| NUMB               | 9.30E-06 | 0.2137985  | 0.383 | 0.309 | 0.32940157 | CD8_spleen |
| USP9Y              | 9.77E-06 | 0.30872251 | 0.298 | 0.237 | 0.34614238 | CD8_spleen |
| ENSMMUG00000044345 | 1.06E-05 | 0.16210904 | 0.286 | 0.222 | 0.37491441 | CD8_spleen |
| TSC22D2            | 1.06E-05 | 0.29067382 | 0.26  | 0.2   | 0.37531416 | CD8_spleen |
| PPIL4              | 1.07E-05 | 0.18294073 | 0.599 | 0.499 | 0.3808166  | CD8_spleen |
| CXHXorf38          | 1.09E-05 | 0.19291414 | 0.25  | 0.189 | 0.38592047 | CD8_spleen |
| ARCN1              | 1.10E-05 | 0.10858155 | 0.296 | 0.227 | 0.38941229 | CD8_spleen |
| CCDC90B            | 1.11E-05 | 0.19892831 | 0.271 | 0.208 | 0.39220743 | CD8_spleen |
| DLST               | 1.18E-05 | 0.14532745 | 0.318 | 0.247 | 0.41870323 | CD8_spleen |
| NF1                | 1.19E-05 | 0.29941459 | 0.282 | 0.221 | 0.42088807 | CD8_spleen |

|                    |          |            |       |       |            |            |
|--------------------|----------|------------|-------|-------|------------|------------|
| RC3H1              | 1.19E-05 | 0.19299178 | 0.296 | 0.23  | 0.42107196 | CD8_spleen |
| USP24              | 1.19E-05 | 0.14481044 | 0.396 | 0.315 | 0.42270433 | CD8_spleen |
| PDSS2              | 1.20E-05 | 0.10095231 | 0.35  | 0.275 | 0.42362796 | CD8_spleen |
| SMARCA4            | 1.20E-05 | 0.17632335 | 0.299 | 0.234 | 0.42567168 | CD8_spleen |
| LNPEP              | 1.21E-05 | 0.12565175 | 0.651 | 0.542 | 0.42907337 | CD8_spleen |
| ATF7               | 1.29E-05 | 0.14110534 | 0.361 | 0.282 | 0.45757965 | CD8_spleen |
| SCAF4              | 1.32E-05 | 0.1578595  | 0.366 | 0.293 | 0.46818532 | CD8_spleen |
| ENSMMUG00000055114 | 1.33E-05 | 0.29784855 | 0.352 | 0.284 | 0.47284062 | CD8_spleen |
| GPHN               | 1.34E-05 | 0.12953256 | 0.675 | 0.576 | 0.4747536  | CD8_spleen |
| SDCCAG8            | 1.37E-05 | 0.14566097 | 0.287 | 0.22  | 0.4839632  | CD8_spleen |
| MGAT4A             | 1.40E-05 | 0.13570255 | 0.53  | 0.434 | 0.49541355 | CD8_spleen |
| PPP3CA             | 1.51E-05 | 0.14556538 | 0.782 | 0.674 | 0.53455201 | CD8_spleen |
| ITFG2              | 1.59E-05 | 0.11493921 | 0.38  | 0.302 | 0.56358415 | CD8_spleen |
| FMC1-LUC7L2        | 1.60E-05 | 0.12540254 | 0.77  | 0.653 | 0.5669942  | CD8_spleen |
| PPP4R3B            | 1.61E-05 | 0.12802766 | 0.436 | 0.346 | 0.57169941 | CD8_spleen |
| BRWD1              | 1.76E-05 | 0.11973386 | 0.564 | 0.457 | 0.62390278 | CD8_spleen |
| ITFG1              | 1.85E-05 | 0.16323566 | 0.454 | 0.371 | 0.65519305 | CD8_spleen |
| USP34              | 1.88E-05 | 0.10030854 | 0.8   | 0.67  | 0.66716593 | CD8_spleen |
| TRIO               | 1.99E-05 | 0.24034205 | 0.27  | 0.212 | 0.70460831 | CD8_spleen |
| TBL1XR1            | 2.01E-05 | 0.16249119 | 0.745 | 0.646 | 0.71383332 | CD8_spleen |
| HSP90B1            | 2.10E-05 | 0.15726131 | 0.563 | 0.467 | 0.74296034 | CD8_spleen |
| RAD51B             | 2.18E-05 | 0.28048052 | 0.29  | 0.229 | 0.77311591 | CD8_spleen |
| UCHL3              | 2.27E-05 | 0.13691622 | 0.293 | 0.229 | 0.80406466 | CD8_spleen |
| CLASP1             | 2.29E-05 | 0.16624445 | 0.44  | 0.358 | 0.81065594 | CD8_spleen |
| EIF5               | 2.30E-05 | 0.10160053 | 0.54  | 0.439 | 0.8136696  | CD8_spleen |
| PTPN4              | 2.31E-05 | 0.1100483  | 0.563 | 0.46  | 0.81797563 | CD8_spleen |
| OXNAD1             | 2.33E-05 | 0.24295485 | 0.286 | 0.224 | 0.82608919 | CD8_spleen |
| URI1               | 2.38E-05 | 0.13965519 | 0.533 | 0.444 | 0.84202378 | CD8_spleen |
| HSPA14             | 2.49E-05 | 0.19543921 | 0.288 | 0.225 | 0.88125479 | CD8_spleen |
| CLEC2B             | 2.52E-05 | 0.13339331 | 0.368 | 0.293 | 0.89241557 | CD8_spleen |
| SLC39A11           | 2.83E-05 | 0.23596854 | 0.371 | 0.302 | 1          | CD8_spleen |
| ZC3H13             | 2.84E-05 | 0.12654812 | 0.419 | 0.341 | 1          | CD8_spleen |
| RIPOR2             | 2.96E-05 | 0.1373294  | 0.971 | 0.93  | 1          | CD8_spleen |

|                    |          |            |       |       |              |
|--------------------|----------|------------|-------|-------|--------------|
| ERICH1             | 3.07E-05 | 0.16360172 | 0.27  | 0.208 | 1 CD8_spleen |
| TPM3               | 3.34E-05 | 0.1144275  | 0.808 | 0.729 | 1 CD8_spleen |
| ANKRD28            | 3.37E-05 | 0.12539615 | 0.501 | 0.411 | 1 CD8_spleen |
| EP300              | 3.62E-05 | 0.13082699 | 0.537 | 0.449 | 1 CD8_spleen |
| SNRNP200           | 3.71E-05 | 0.16803474 | 0.319 | 0.253 | 1 CD8_spleen |
| SEC63              | 4.08E-05 | 0.14002747 | 0.602 | 0.501 | 1 CD8_spleen |
| KCNAB2             | 4.10E-05 | 0.13270311 | 0.359 | 0.284 | 1 CD8_spleen |
| CCNDBP1            | 4.19E-05 | 0.13178719 | 0.294 | 0.229 | 1 CD8_spleen |
| FLNA               | 4.42E-05 | 0.15532608 | 0.48  | 0.399 | 1 CD8_spleen |
| FNBP4              | 4.52E-05 | 0.13015225 | 0.46  | 0.374 | 1 CD8_spleen |
| BABAM2             | 4.61E-05 | 0.13374998 | 0.495 | 0.409 | 1 CD8_spleen |
| GATAD2A            | 4.94E-05 | 0.19347701 | 0.373 | 0.302 | 1 CD8_spleen |
| PITPNC1            | 4.95E-05 | 0.10535813 | 0.973 | 0.889 | 1 CD8_spleen |
| CAMLG              | 5.04E-05 | 0.11295549 | 0.409 | 0.331 | 1 CD8_spleen |
| YLPM1              | 5.39E-05 | 0.10283403 | 0.336 | 0.266 | 1 CD8_spleen |
| CDC42SE1           | 5.47E-05 | 0.11332097 | 0.271 | 0.21  | 1 CD8_spleen |
| MALSU1             | 5.51E-05 | 0.1460551  | 0.279 | 0.216 | 1 CD8_spleen |
| ABL1               | 5.67E-05 | 0.25810441 | 0.278 | 0.221 | 1 CD8_spleen |
| SMN1               | 6.16E-05 | 0.11337218 | 0.307 | 0.239 | 1 CD8_spleen |
| RPS6KC1            | 6.25E-05 | 0.12260151 | 0.312 | 0.248 | 1 CD8_spleen |
| ATL3               | 6.28E-05 | 0.14035477 | 0.28  | 0.218 | 1 CD8_spleen |
| HECTD4             | 6.42E-05 | 0.13211283 | 0.377 | 0.305 | 1 CD8_spleen |
| FBXW4              | 6.85E-05 | 0.23424353 | 0.259 | 0.205 | 1 CD8_spleen |
| ENSMMUG00000000983 | 6.89E-05 | 0.10493099 | 0.474 | 0.388 | 1 CD8_spleen |
| STAT1              | 7.04E-05 | 0.1371554  | 0.273 | 0.212 | 1 CD8_spleen |
| LCLAT1             | 7.41E-05 | 0.11320954 | 0.393 | 0.319 | 1 CD8_spleen |
| NIFK               | 7.50E-05 | 0.11752894 | 0.364 | 0.291 | 1 CD8_spleen |
| CEP85L             | 7.58E-05 | 0.16764965 | 0.533 | 0.445 | 1 CD8_spleen |
| ATF7IP2            | 7.58E-05 | 0.12868277 | 0.445 | 0.362 | 1 CD8_spleen |
| VTI1A              | 7.65E-05 | 0.11572977 | 0.642 | 0.542 | 1 CD8_spleen |
| NONO               | 7.81E-05 | 0.16386531 | 0.578 | 0.492 | 1 CD8_spleen |
| LPP                | 7.92E-05 | 0.19785437 | 0.336 | 0.273 | 1 CD8_spleen |
| AVL9               | 8.61E-05 | 0.18229941 | 0.305 | 0.245 | 1 CD8_spleen |

|         |            |            |       |       |              |
|---------|------------|------------|-------|-------|--------------|
| PUM2    | 8.80E-05   | 0.11363483 | 0.696 | 0.597 | 1 CD8_spleen |
| PTPRJ   | 9.46E-05   | 0.28908867 | 0.33  | 0.27  | 1 CD8_spleen |
| STX8    | 0.00010029 | 0.14423136 | 0.385 | 0.312 | 1 CD8_spleen |
| TSNAX   | 0.00010359 | 0.10276173 | 0.275 | 0.214 | 1 CD8_spleen |
| HNRNPA3 | 0.00010711 | 0.12160762 | 0.786 | 0.702 | 1 CD8_spleen |
| MAPRE1  | 0.00011074 | 0.12867009 | 0.451 | 0.373 | 1 CD8_spleen |
| NCOA1   | 0.00011865 | 0.1377625  | 0.364 | 0.295 | 1 CD8_spleen |
| HM13    | 0.00012009 | 0.11489884 | 0.314 | 0.249 | 1 CD8_spleen |
| ZFX     | 0.0001207  | 0.14439896 | 0.314 | 0.254 | 1 CD8_spleen |
| GNAL    | 0.0001279  | 0.18664614 | 0.262 | 0.208 | 1 CD8_spleen |
| EYA3    | 0.00013521 | 0.19792011 | 0.252 | 0.199 | 1 CD8_spleen |
| DENND1B | 0.00013924 | 0.10592365 | 0.267 | 0.21  | 1 CD8_spleen |
| ANAPC1  | 0.00014252 | 0.12068768 | 0.27  | 0.212 | 1 CD8_spleen |
| NIPA2   | 0.00015335 | 0.12821052 | 0.251 | 0.196 | 1 CD8_spleen |
| ICAM2   | 0.00016412 | 0.14653959 | 0.262 | 0.208 | 1 CD8_spleen |
| CNOT8   | 0.00017593 | 0.23592177 | 0.275 | 0.22  | 1 CD8_spleen |
| HERC2   | 0.00019621 | 0.13400138 | 0.489 | 0.402 | 1 CD8_spleen |
| TENT2   | 0.00021956 | 0.10286134 | 0.401 | 0.327 | 1 CD8_spleen |
| BTRC    | 0.00022242 | 0.17100776 | 0.286 | 0.231 | 1 CD8_spleen |
| AHI1    | 0.00023699 | 0.1328972  | 0.483 | 0.394 | 1 CD8_spleen |
| PLCL2   | 0.00025543 | 0.11922873 | 0.549 | 0.467 | 1 CD8_spleen |
| HIPK1   | 0.00026898 | 0.15701376 | 0.349 | 0.288 | 1 CD8_spleen |
| DCAF6   | 0.00029316 | 0.12484879 | 0.42  | 0.347 | 1 CD8_spleen |
| PARG    | 0.00030423 | 0.1092136  | 0.257 | 0.203 | 1 CD8_spleen |
| DDX54   | 0.00031078 | 0.10276726 | 0.278 | 0.222 | 1 CD8_spleen |
| ZBTB20  | 0.00034199 | 0.10963891 | 0.751 | 0.656 | 1 CD8_spleen |
| RNF10   | 0.00036276 | 0.14145222 | 0.35  | 0.288 | 1 CD8_spleen |
| FBXL17  | 0.00036292 | 0.10987455 | 0.451 | 0.38  | 1 CD8_spleen |
| TMEM181 | 0.00036435 | 0.12131182 | 0.266 | 0.213 | 1 CD8_spleen |
| CDC25B  | 0.00039453 | 0.10595253 | 0.341 | 0.278 | 1 CD8_spleen |
| ARFGEF1 | 0.00041595 | 0.11216669 | 0.399 | 0.332 | 1 CD8_spleen |
| NFKBIA  | 0.00057513 | 0.29143147 | 0.386 | 0.327 | 1 CD8_spleen |
| FAM126A | 0.00058878 | 0.13803183 | 0.351 | 0.289 | 1 CD8_spleen |

|                     |            |            |       |       |           |                 |
|---------------------|------------|------------|-------|-------|-----------|-----------------|
| USP4                | 0.00087598 | 0.15643436 | 0.304 | 0.251 | 1         | CD8_spleen      |
| BIRC3               | 0.0009024  | 0.14398048 | 0.332 | 0.277 | 1         | CD8_spleen      |
| C20H16orf72         | 0.00102988 | 0.12422657 | 0.448 | 0.379 | 1         | CD8_spleen      |
| VPS26A              | 0.00114774 | 0.10893005 | 0.281 | 0.23  | 1         | CD8_spleen      |
| ENSMMUG00000005482  | 0.00140366 | 0.1143121  | 0.424 | 0.359 | 1         | CD8_spleen      |
| NUFIP2              | 0.00159177 | 0.1262166  | 0.504 | 0.433 | 1         | CD8_spleen      |
| TBC1D22A            | 0.00172457 | 0.10099853 | 0.338 | 0.282 | 1         | CD8_spleen      |
| ENSMMUG00000003130  | 0.00251154 | 0.10384127 | 0.296 | 0.246 | 1         | CD8_spleen      |
| IQSEC1              | 0.0028832  | 0.10188712 | 0.25  | 0.206 | 1         | CD8_spleen      |
| SPIDR               | 0.00299096 | 0.10001844 | 0.32  | 0.268 | 1         | CD8_spleen      |
| ABI1                | 0.00400109 | 0.14379359 | 0.706 | 0.638 | 1         | CD8_spleen      |
| ENSMMUG000000063316 | 0.00418605 | 0.20031757 | 0.619 | 0.578 | 1         | CD8_spleen      |
| PDE4B               | 0.00432949 | 0.1475601  | 0.541 | 0.474 | 1         | CD8_spleen      |
| SUN2                | 0.00494413 | 0.10881833 | 0.265 | 0.221 | 1         | CD8_spleen      |
| DOP1B               | 0.00558622 | 0.11409604 | 0.383 | 0.326 | 1         | CD8_spleen      |
| SUSD6               | 0.00590344 | 0.12868788 | 0.283 | 0.24  | 1         | CD8_spleen      |
| RASSF3              | 0.01697902 | 0.17219614 | 0.631 | 0.569 | 1         | CD8_spleen      |
| BMPR1B              | 0.02427438 | 0.20798569 | 0.251 | 0.223 | 1         | CD8_spleen      |
| HIF1A               | 0.0531264  | 0.12854001 | 0.463 | 0.413 | 1         | CD8_spleen      |
| ENSMMUG000000061125 | 0.10151824 | 0.16394384 | 0.674 | 0.668 | 1         | CD8_spleen      |
| KLF3                | 0.32554656 | 0.13716157 | 0.371 | 0.351 | 1         | CD8_spleen      |
| DDX3Y               | 0.51964878 | 0.10036264 | 0.537 | 0.536 | 1         | CD8_spleen      |
| ENSMMUG000000065373 | 0.81744463 | 0.13044819 | 0.936 | 0.971 | 1         | CD8_spleen      |
| RPL36               | 0          | 1.75813247 | 0.95  | 0.856 | 0         | CD4_EM_CTL_lung |
| ATP5F1E             | 0          | 1.92783719 | 0.96  | 0.871 | 0         | CD4_EM_CTL_lung |
| RPS21               | 0          | 1.83161474 | 0.969 | 0.902 | 0         | CD4_EM_CTL_lung |
| FAU                 | 0          | 1.24932927 | 0.969 | 0.92  | 0         | CD4_EM_CTL_lung |
| ENSMMUG000000062350 | 0          | 1.64748283 | 0.981 | 0.945 | 0         | CD4_EM_CTL_lung |
| RPS28               | 0          | 1.36818854 | 0.977 | 0.942 | 0         | CD4_EM_CTL_lung |
| RPL10               | 2.42E-305  | 1.08106762 | 0.978 | 0.952 | 8.58E-301 | CD4_EM_CTL_lung |
| ENSMMUG000000064224 | 1.90E-293  | 1.79290655 | 0.942 | 0.849 | 6.72E-289 | CD4_EM_CTL_lung |
| RPL35A              | 2.31E-289  | 1.09432247 | 0.969 | 0.939 | 8.20E-285 | CD4_EM_CTL_lung |
| ENSMMUG000000015563 | 1.64E-280  | 1.09918688 | 0.978 | 0.946 | 5.83E-276 | CD4_EM_CTL_lung |

|                    |           |            |       |       |           |                 |
|--------------------|-----------|------------|-------|-------|-----------|-----------------|
| RPS23              | 6.45E-280 | 0.99684364 | 0.979 | 0.943 | 2.29E-275 | CD4_EM_CTL_lung |
| RPL18              | 4.36E-276 | 1.05328226 | 0.967 | 0.941 | 1.54E-271 | CD4_EM_CTL_lung |
| RPLP1              | 8.28E-276 | 1.06808562 | 0.975 | 0.946 | 2.93E-271 | CD4_EM_CTL_lung |
| ENSMMUG00000005593 | 3.91E-274 | 1.31360128 | 0.967 | 0.937 | 1.38E-269 | CD4_EM_CTL_lung |
| RPL32              | 2.45E-273 | 1.00760879 | 0.975 | 0.953 | 8.67E-269 | CD4_EM_CTL_lung |
| RPL39              | 1.17E-272 | 1.18626561 | 0.964 | 0.916 | 4.14E-268 | CD4_EM_CTL_lung |
| TMSB10             | 2.83E-268 | 1.55566867 | 0.974 | 0.909 | 1.00E-263 | CD4_EM_CTL_lung |
| NUDT3              | 1.56E-266 | 1.02998379 | 0.97  | 0.958 | 5.53E-262 | CD4_EM_CTL_lung |
| GPR65              | 1.04E-265 | 3.9333312  | 0.647 | 0.215 | 3.70E-261 | CD4_EM_CTL_lung |
| ENSMMUG00000056354 | 8.26E-263 | 1.52212771 | 0.933 | 0.855 | 2.93E-258 | CD4_EM_CTL_lung |
| RPL12              | 1.07E-258 | 1.151238   | 0.959 | 0.92  | 3.80E-254 | CD4_EM_CTL_lung |
| RPL34              | 1.73E-257 | 0.93946898 | 0.982 | 0.95  | 6.15E-253 | CD4_EM_CTL_lung |
| RPS29              | 5.89E-257 | 1.01342945 | 0.976 | 0.951 | 2.09E-252 | CD4_EM_CTL_lung |
| HCST               | 1.11E-256 | 2.33647868 | 0.849 | 0.612 | 3.95E-252 | CD4_EM_CTL_lung |
| RPS12              | 5.22E-253 | 1.05594951 | 0.975 | 0.951 | 1.85E-248 | CD4_EM_CTL_lung |
| UBA52              | 6.55E-252 | 1.07919372 | 0.967 | 0.924 | 2.32E-247 | CD4_EM_CTL_lung |
| RPS7               | 9.72E-241 | 0.9389806  | 0.972 | 0.945 | 3.44E-236 | CD4_EM_CTL_lung |
| RPL24              | 4.20E-239 | 1.03547549 | 0.958 | 0.93  | 1.49E-234 | CD4_EM_CTL_lung |
| RPL30              | 9.41E-238 | 0.88228686 | 0.973 | 0.953 | 3.34E-233 | CD4_EM_CTL_lung |
| FTL                | 1.13E-236 | 1.45460506 | 0.927 | 0.834 | 4.02E-232 | CD4_EM_CTL_lung |
| ZC3H10             | 3.18E-236 | 1.71326843 | 0.873 | 0.771 | 1.13E-231 | CD4_EM_CTL_lung |
| ELOA               | 1.21E-232 | 0.91860251 | 0.972 | 0.946 | 4.29E-228 | CD4_EM_CTL_lung |
| RPL8               | 6.18E-231 | 1.04666767 | 0.951 | 0.929 | 2.19E-226 | CD4_EM_CTL_lung |
| RPS9               | 3.04E-228 | 1.01698016 | 0.971 | 0.936 | 1.08E-223 | CD4_EM_CTL_lung |
| ENSMMUG00000004441 | 2.07E-227 | 2.68269112 | 0.773 | 0.499 | 7.34E-223 | CD4_EM_CTL_lung |
| RPS13              | 6.95E-227 | 0.9428457  | 0.971 | 0.939 | 2.46E-222 | CD4_EM_CTL_lung |
| RPS5               | 8.86E-215 | 0.9679001  | 0.961 | 0.921 | 3.14E-210 | CD4_EM_CTL_lung |
| ENSMMUG00000013429 | 2.13E-210 | 0.84770394 | 0.977 | 0.957 | 7.55E-206 | CD4_EM_CTL_lung |
| S100A4             | 4.44E-199 | 2.43118066 | 0.819 | 0.583 | 1.57E-194 | CD4_EM_CTL_lung |
| ENSMMUG00000013257 | 5.30E-199 | 1.40034412 | 0.898 | 0.864 | 1.88E-194 | CD4_EM_CTL_lung |
| RPS24              | 2.27E-197 | 0.80909041 | 0.974 | 0.947 | 8.03E-193 | CD4_EM_CTL_lung |
| RPL7A              | 2.68E-193 | 0.91525623 | 0.96  | 0.925 | 9.49E-189 | CD4_EM_CTL_lung |
| RPL28              | 1.33E-188 | 0.84437695 | 0.967 | 0.946 | 4.73E-184 | CD4_EM_CTL_lung |

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| ENSMMUG00000012140  | 2.17E-188 | 1.0229819  | 0.964 | 0.947 | 7.68E-184 | CD4_EM_CTL_lung |
| RPL22               | 1.73E-182 | 0.92699538 | 0.953 | 0.921 | 6.12E-178 | CD4_EM_CTL_lung |
| GMFG                | 2.91E-182 | 1.37488196 | 0.874 | 0.814 | 1.03E-177 | CD4_EM_CTL_lung |
| ENSMMUG000000060377 | 4.15E-178 | 1.89590482 | 0.781 | 0.663 | 1.47E-173 | CD4_EM_CTL_lung |
| NME2                | 2.92E-175 | 1.13730751 | 0.909 | 0.872 | 1.03E-170 | CD4_EM_CTL_lung |
| ENSMMUG000000003867 | 1.04E-170 | 0.69978298 | 0.981 | 0.97  | 3.68E-166 | CD4_EM_CTL_lung |
| RPL36AL             | 4.56E-166 | 1.2786453  | 0.879 | 0.817 | 1.62E-161 | CD4_EM_CTL_lung |
| RPL27               | 2.13E-159 | 0.78985961 | 0.96  | 0.923 | 7.54E-155 | CD4_EM_CTL_lung |
| ENSMMUG000000004545 | 3.24E-157 | 1.49613386 | 0.807 | 0.72  | 1.15E-152 | CD4_EM_CTL_lung |
| MYL12B              | 3.25E-157 | 1.33752126 | 0.862 | 0.794 | 1.15E-152 | CD4_EM_CTL_lung |
| TMSB4X              | 2.53E-155 | 0.73712033 | 0.981 | 0.977 | 8.98E-151 | CD4_EM_CTL_lung |
| ENSMMUG000000003073 | 5.07E-153 | 0.83069694 | 0.952 | 0.918 | 1.80E-148 | CD4_EM_CTL_lung |
| ATP5MPL             | 4.45E-150 | 1.5472135  | 0.786 | 0.69  | 1.58E-145 | CD4_EM_CTL_lung |
| ELOB                | 1.34E-148 | 1.76246437 | 0.746 | 0.622 | 4.74E-144 | CD4_EM_CTL_lung |
| RPS26               | 1.51E-148 | 0.801079   | 0.969 | 0.947 | 5.37E-144 | CD4_EM_CTL_lung |
| RPSA                | 1.54E-145 | 0.83498124 | 0.957 | 0.933 | 5.46E-141 | CD4_EM_CTL_lung |
| GZMB                | 8.19E-145 | 3.33798674 | 0.428 | 0.118 | 2.90E-140 | CD4_EM_CTL_lung |
| RPL19               | 6.81E-144 | 0.92579591 | 0.939 | 0.897 | 2.41E-139 | CD4_EM_CTL_lung |
| HINT1               | 1.21E-142 | 1.3841247  | 0.811 | 0.74  | 4.28E-138 | CD4_EM_CTL_lung |
| RPL5                | 1.24E-139 | 0.74096754 | 0.96  | 0.948 | 4.40E-135 | CD4_EM_CTL_lung |
| MYL6                | 3.62E-136 | 1.68394062 | 0.75  | 0.655 | 1.28E-131 | CD4_EM_CTL_lung |
| TMA7                | 3.40E-133 | 1.48495524 | 0.779 | 0.713 | 1.20E-128 | CD4_EM_CTL_lung |
| ATP5MG              | 9.25E-128 | 1.24525606 | 0.823 | 0.777 | 3.28E-123 | CD4_EM_CTL_lung |
| SRP14               | 2.91E-126 | 1.29233031 | 0.806 | 0.772 | 1.03E-121 | CD4_EM_CTL_lung |
| MBD3                | 5.18E-125 | 1.77768047 | 0.701 | 0.582 | 1.83E-120 | CD4_EM_CTL_lung |
| IFI27L2             | 1.03E-121 | 1.73422644 | 0.721 | 0.608 | 3.64E-117 | CD4_EM_CTL_lung |
| RPS4X               | 1.11E-121 | 0.71976189 | 0.968 | 0.942 | 3.94E-117 | CD4_EM_CTL_lung |
| RPS27A              | 5.22E-121 | 1.454927   | 0.765 | 0.698 | 1.85E-116 | CD4_EM_CTL_lung |
| KLRB1               | 1.55E-119 | 1.87847403 | 0.725 | 0.499 | 5.48E-115 | CD4_EM_CTL_lung |
| RPL38               | 1.40E-113 | 0.70005682 | 0.957 | 0.929 | 4.97E-109 | CD4_EM_CTL_lung |
| ROBO2               | 8.92E-113 | 1.38402235 | 0.762 | 0.69  | 3.16E-108 | CD4_EM_CTL_lung |
| CRIP1               | 2.74E-112 | 1.90016533 | 0.728 | 0.633 | 9.71E-108 | CD4_EM_CTL_lung |
| GAPDH               | 8.61E-110 | 1.59815719 | 0.73  | 0.663 | 3.05E-105 | CD4_EM_CTL_lung |

|                    |           |            |       |       |           |                 |
|--------------------|-----------|------------|-------|-------|-----------|-----------------|
| ROMO1              | 1.13E-109 | 1.81944862 | 0.674 | 0.562 | 3.99E-105 | CD4_EM_CTL_lung |
| GCN1               | 3.14E-104 | 0.70320566 | 0.953 | 0.926 | 1.11E-99  | CD4_EM_CTL_lung |
| MAMU-E             | 1.28E-103 | 0.93763028 | 0.897 | 0.914 | 4.52E-99  | CD4_EM_CTL_lung |
| TYROBP             | 1.68E-103 | 2.11997889 | 0.591 | 0.342 | 5.96E-99  | CD4_EM_CTL_lung |
| PRPF31             | 3.28E-103 | 1.94297582 | 0.624 | 0.479 | 1.16E-98  | CD4_EM_CTL_lung |
| ENSMMUG00000044585 | 1.45E-102 | 1.76599504 | 0.662 | 0.559 | 5.14E-98  | CD4_EM_CTL_lung |
| ENSMMUG00000001210 | 7.91E-101 | 1.04581335 | 0.82  | 0.803 | 2.80E-96  | CD4_EM_CTL_lung |
| RPL22L1            | 2.56E-100 | 1.20204997 | 0.811 | 0.783 | 9.08E-96  | CD4_EM_CTL_lung |
| ENSMMUG00000056793 | 2.98E-99  | 1.37236607 | 0.728 | 0.678 | 1.05E-94  | CD4_EM_CTL_lung |
| TAGLN2             | 3.78E-99  | 1.70519617 | 0.691 | 0.59  | 1.34E-94  | CD4_EM_CTL_lung |
| GSTP1              | 5.07E-98  | 1.5678377  | 0.711 | 0.655 | 1.80E-93  | CD4_EM_CTL_lung |
| ENSMMUG00000022428 | 1.71E-95  | 2.15954589 | 0.569 | 0.398 | 6.06E-91  | CD4_EM_CTL_lung |
| EEF1D              | 2.19E-91  | 1.02588388 | 0.814 | 0.811 | 7.75E-87  | CD4_EM_CTL_lung |
| CORO1A             | 3.25E-90  | 1.29885374 | 0.74  | 0.719 | 1.15E-85  | CD4_EM_CTL_lung |
| ENSMMUG00000052747 | 1.16E-88  | 1.46672078 | 0.694 | 0.64  | 4.10E-84  | CD4_EM_CTL_lung |
| RPL35              | 2.62E-88  | 0.69331991 | 0.942 | 0.915 | 9.30E-84  | CD4_EM_CTL_lung |
| HOPX               | 4.45E-88  | 2.21300774 | 0.516 | 0.292 | 1.58E-83  | CD4_EM_CTL_lung |
| BTG1               | 5.78E-87  | 1.13517672 | 0.81  | 0.841 | 2.05E-82  | CD4_EM_CTL_lung |
| UBL5               | 9.40E-87  | 1.64227346 | 0.642 | 0.561 | 3.33E-82  | CD4_EM_CTL_lung |
| CFL1               | 1.98E-85  | 1.04169216 | 0.806 | 0.795 | 7.03E-81  | CD4_EM_CTL_lung |
| COX6C              | 6.49E-85  | 1.19131565 | 0.749 | 0.725 | 2.30E-80  | CD4_EM_CTL_lung |
| ENSMMUG00000019505 | 7.87E-85  | 1.40763962 | 0.696 | 0.637 | 2.79E-80  | CD4_EM_CTL_lung |
| COMMD6             | 2.96E-84  | 1.19471829 | 0.753 | 0.738 | 1.05E-79  | CD4_EM_CTL_lung |
| EIF3K              | 5.02E-84  | 1.01369024 | 0.797 | 0.787 | 1.78E-79  | CD4_EM_CTL_lung |
| ENSMMUG00000016305 | 5.78E-84  | 1.86078544 | 0.6   | 0.484 | 2.05E-79  | CD4_EM_CTL_lung |
| CTSW               | 1.25E-82  | 2.43104406 | 0.562 | 0.401 | 4.42E-78  | CD4_EM_CTL_lung |
| ENSMMUG00000030408 | 9.03E-82  | 1.66336908 | 0.625 | 0.534 | 3.20E-77  | CD4_EM_CTL_lung |
| ENSMMUG00000002320 | 6.56E-81  | 1.00042275 | 0.867 | 0.867 | 2.32E-76  | CD4_EM_CTL_lung |
| SAMSN1             | 1.60E-80  | 3.12269415 | 0.34  | 0.131 | 5.66E-76  | CD4_EM_CTL_lung |
| S100A6             | 4.04E-80  | 2.66399732 | 0.563 | 0.399 | 1.43E-75  | CD4_EM_CTL_lung |
| XCL1               | 2.40E-77  | 2.89138306 | 0.502 | 0.307 | 8.49E-73  | CD4_EM_CTL_lung |
| ENSMMUG00000007657 | 4.76E-77  | 1.36516231 | 0.674 | 0.633 | 1.69E-72  | CD4_EM_CTL_lung |
| COX7C              | 7.22E-77  | 0.99561075 | 0.772 | 0.769 | 2.56E-72  | CD4_EM_CTL_lung |



|                     |          |            |       |       |          |                 |
|---------------------|----------|------------|-------|-------|----------|-----------------|
| JPT1                | 4.24E-76 | 1.23287621 | 0.719 | 0.723 | 1.50E-71 | CD4_EM_CTL_lung |
| ARPC3               | 4.24E-76 | 1.0372171  | 0.77  | 0.769 | 1.50E-71 | CD4_EM_CTL_lung |
| OST4                | 1.21E-74 | 1.49983731 | 0.649 | 0.598 | 4.30E-70 | CD4_EM_CTL_lung |
| ENSMMUG00000001458  | 6.01E-73 | 1.09718751 | 0.749 | 0.782 | 2.13E-68 | CD4_EM_CTL_lung |
| HNRNP2              | 1.79E-72 | 0.71052073 | 0.895 | 0.895 | 6.33E-68 | CD4_EM_CTL_lung |
| ENSMMUG000000064139 | 4.46E-72 | 1.08890115 | 0.815 | 0.857 | 1.58E-67 | CD4_EM_CTL_lung |
| ENSMMUG000000050862 | 1.22E-71 | 1.56069743 | 0.695 | 0.569 | 4.33E-67 | CD4_EM_CTL_lung |
| RPL6                | 3.96E-70 | 0.5099247  | 0.951 | 0.941 | 1.40E-65 | CD4_EM_CTL_lung |
| CD3D                | 4.08E-68 | 1.08947688 | 0.759 | 0.793 | 1.44E-63 | CD4_EM_CTL_lung |
| ENSMMUG000000006463 | 9.96E-68 | 1.13613393 | 0.725 | 0.703 | 3.53E-63 | CD4_EM_CTL_lung |
| S100A10             | 1.07E-66 | 1.29736999 | 0.719 | 0.65  | 3.78E-62 | CD4_EM_CTL_lung |
| FOSL2               | 5.62E-66 | 2.8956926  | 0.299 | 0.116 | 1.99E-61 | CD4_EM_CTL_lung |
| SMDT1               | 6.53E-66 | 1.23021533 | 0.683 | 0.657 | 2.31E-61 | CD4_EM_CTL_lung |
| EEF1A1              | 3.13E-65 | 0.56034923 | 0.923 | 0.925 | 1.11E-60 | CD4_EM_CTL_lung |
| ANXA1               | 1.09E-64 | 1.90868671 | 0.5   | 0.312 | 3.86E-60 | CD4_EM_CTL_lung |
| NKG7                | 1.14E-63 | 1.77518952 | 0.563 | 0.402 | 4.04E-59 | CD4_EM_CTL_lung |
| CD7                 | 6.69E-63 | 1.40510921 | 0.699 | 0.715 | 2.37E-58 | CD4_EM_CTL_lung |
| CLIC1               | 3.50E-57 | 1.62013601 | 0.574 | 0.494 | 1.24E-52 | CD4_EM_CTL_lung |
| NDUFA1              | 6.26E-56 | 1.40163551 | 0.615 | 0.585 | 2.22E-51 | CD4_EM_CTL_lung |
| COX5B               | 1.73E-53 | 1.58249388 | 0.552 | 0.476 | 6.14E-49 | CD4_EM_CTL_lung |
| CST7                | 2.44E-53 | 2.61055794 | 0.329 | 0.165 | 8.64E-49 | CD4_EM_CTL_lung |
| ARHGDIB             | 1.80E-52 | 0.70771976 | 0.828 | 0.867 | 6.36E-48 | CD4_EM_CTL_lung |
| MYG1                | 8.54E-52 | 2.09476807 | 0.427 | 0.285 | 3.02E-47 | CD4_EM_CTL_lung |
| ENSMMUG000000022489 | 2.07E-51 | 1.23615618 | 0.644 | 0.641 | 7.34E-47 | CD4_EM_CTL_lung |
| TMEM258             | 1.43E-50 | 1.51799113 | 0.572 | 0.531 | 5.08E-46 | CD4_EM_CTL_lung |
| EEF1B2              | 1.85E-50 | 0.61954485 | 0.857 | 0.858 | 6.57E-46 | CD4_EM_CTL_lung |
| CREM                | 3.18E-50 | 1.82988128 | 0.518 | 0.415 | 1.13E-45 | CD4_EM_CTL_lung |
| IFI16               | 3.98E-50 | 1.52993089 | 0.576 | 0.528 | 1.41E-45 | CD4_EM_CTL_lung |
| ENSMMUG000000047481 | 4.34E-49 | 1.36900304 | 0.601 | 0.578 | 1.54E-44 | CD4_EM_CTL_lung |
| RPL3                | 4.37E-49 | 0.42046056 | 0.951 | 0.943 | 1.55E-44 | CD4_EM_CTL_lung |
| ENSMMUG000000063583 | 8.77E-49 | 2.58924644 | 0.352 | 0.181 | 3.11E-44 | CD4_EM_CTL_lung |
| SSR4                | 2.52E-48 | 1.09527606 | 0.652 | 0.66  | 8.94E-44 | CD4_EM_CTL_lung |
| CHCHD2              | 7.72E-48 | 0.91348186 | 0.719 | 0.753 | 2.74E-43 | CD4_EM_CTL_lung |

|                    |          |            |       |       |          |                 |
|--------------------|----------|------------|-------|-------|----------|-----------------|
| LGALS3             | 1.66E-47 | 2.77957285 | 0.269 | 0.12  | 5.89E-43 | CD4_EM_CTL_lung |
| ATP6V1G1           | 2.54E-47 | 1.07592766 | 0.661 | 0.689 | 9.02E-43 | CD4_EM_CTL_lung |
| COX8A              | 7.71E-47 | 1.64320182 | 0.523 | 0.447 | 2.73E-42 | CD4_EM_CTL_lung |
| ATOX1              | 6.84E-46 | 1.67190065 | 0.505 | 0.414 | 2.42E-41 | CD4_EM_CTL_lung |
| H2AFJ              | 2.15E-45 | 1.68763729 | 0.538 | 0.473 | 7.61E-41 | CD4_EM_CTL_lung |
| COX7B              | 7.27E-45 | 1.3377391  | 0.594 | 0.583 | 2.58E-40 | CD4_EM_CTL_lung |
| SEC61B             | 1.47E-44 | 1.31353663 | 0.584 | 0.561 | 5.21E-40 | CD4_EM_CTL_lung |
| ENSMMUG00000012419 | 6.80E-44 | 1.31696105 | 0.587 | 0.568 | 2.41E-39 | CD4_EM_CTL_lung |
| RPS16              | 1.61E-43 | 0.38594929 | 0.967 | 0.938 | 5.72E-39 | CD4_EM_CTL_lung |
| SRGN               | 8.25E-43 | 0.79095969 | 0.789 | 0.831 | 2.92E-38 | CD4_EM_CTL_lung |
| WDR83OS            | 7.00E-42 | 0.99178134 | 0.659 | 0.7   | 2.48E-37 | CD4_EM_CTL_lung |
| NDUFB2             | 7.72E-42 | 1.34783945 | 0.58  | 0.572 | 2.74E-37 | CD4_EM_CTL_lung |
| ACTG1              | 8.48E-41 | 0.68131065 | 0.854 | 0.885 | 3.01E-36 | CD4_EM_CTL_lung |
| MRI1               | 8.59E-41 | 1.30837745 | 0.58  | 0.572 | 3.04E-36 | CD4_EM_CTL_lung |
| ENSMMUG00000049722 | 1.17E-40 | 1.80770281 | 0.442 | 0.341 | 4.16E-36 | CD4_EM_CTL_lung |
| HNRNPDL            | 5.97E-40 | 1.0239087  | 0.662 | 0.712 | 2.11E-35 | CD4_EM_CTL_lung |
| ENSMMUG00000063637 | 1.97E-39 | 0.66923248 | 0.812 | 0.837 | 6.97E-35 | CD4_EM_CTL_lung |
| PET100             | 4.29E-39 | 2.20023682 | 0.34  | 0.209 | 1.52E-34 | CD4_EM_CTL_lung |
| ENSMMUG00000015270 | 1.60E-38 | 0.33811407 | 0.975 | 0.968 | 5.68E-34 | CD4_EM_CTL_lung |
| ENSMMUG00000053735 | 2.57E-38 | 1.38854158 | 0.55  | 0.528 | 9.12E-34 | CD4_EM_CTL_lung |
| PSME1              | 9.13E-38 | 0.99159084 | 0.659 | 0.682 | 3.24E-33 | CD4_EM_CTL_lung |
| H2AFZ              | 4.70E-37 | 1.56037038 | 0.508 | 0.457 | 1.67E-32 | CD4_EM_CTL_lung |
| SEC61G             | 7.64E-37 | 1.31666335 | 0.549 | 0.53  | 2.71E-32 | CD4_EM_CTL_lung |
| NDUFA4             | 7.83E-37 | 1.06212968 | 0.619 | 0.642 | 2.77E-32 | CD4_EM_CTL_lung |
| COX17              | 9.82E-37 | 1.85864016 | 0.39  | 0.272 | 3.48E-32 | CD4_EM_CTL_lung |
| GNG5               | 2.13E-36 | 1.17953493 | 0.599 | 0.618 | 7.56E-32 | CD4_EM_CTL_lung |
| ENSMMUG00000053146 | 7.77E-35 | 1.5466931  | 0.492 | 0.441 | 2.75E-30 | CD4_EM_CTL_lung |
| NDUFB4             | 9.24E-35 | 1.31273222 | 0.544 | 0.528 | 3.27E-30 | CD4_EM_CTL_lung |
| RDH5               | 1.28E-34 | 1.51349582 | 0.493 | 0.44  | 4.52E-30 | CD4_EM_CTL_lung |
| CLEC2B             | 1.54E-34 | 1.64359988 | 0.485 | 0.418 | 5.44E-30 | CD4_EM_CTL_lung |
| GABARAPL2          | 2.79E-34 | 1.51293029 | 0.504 | 0.461 | 9.89E-30 | CD4_EM_CTL_lung |
| ENSMMUG00000038348 | 4.19E-34 | 1.39681638 | 0.599 | 0.587 | 1.48E-29 | CD4_EM_CTL_lung |
| STMN1              | 5.83E-34 | 1.82807824 | 0.46  | 0.38  | 2.07E-29 | CD4_EM_CTL_lung |

|                    |          |            |       |       |          |                 |
|--------------------|----------|------------|-------|-------|----------|-----------------|
| TOMM7              | 1.37E-33 | 0.57212309 | 0.824 | 0.836 | 4.86E-29 | CD4_EM_CTL_lung |
| UQCRQ              | 3.43E-33 | 1.35689133 | 0.523 | 0.502 | 1.21E-28 | CD4_EM_CTL_lung |
| CUTA               | 3.61E-33 | 1.51578652 | 0.503 | 0.471 | 1.28E-28 | CD4_EM_CTL_lung |
| TPT1               | 4.07E-33 | 0.33203761 | 0.976 | 0.964 | 1.44E-28 | CD4_EM_CTL_lung |
| ENSMMUG00000051239 | 4.47E-33 | 2.20449943 | 0.325 | 0.209 | 1.58E-28 | CD4_EM_CTL_lung |
| RPS4Y1             | 1.19E-32 | 0.92768057 | 0.611 | 0.551 | 4.21E-28 | CD4_EM_CTL_lung |
| EDF1               | 5.85E-32 | 1.50155965 | 0.476 | 0.429 | 2.07E-27 | CD4_EM_CTL_lung |
| LDHA               | 6.69E-32 | 1.59878466 | 0.468 | 0.416 | 2.37E-27 | CD4_EM_CTL_lung |
| NDUFB11            | 3.41E-31 | 1.82397271 | 0.397 | 0.31  | 1.21E-26 | CD4_EM_CTL_lung |
| ENSMMUG00000014648 | 7.26E-31 | 0.88469661 | 0.647 | 0.689 | 2.57E-26 | CD4_EM_CTL_lung |
| RPL37A             | 2.42E-30 | 0.53012767 | 0.943 | 0.942 | 8.58E-26 | CD4_EM_CTL_lung |
| NSA2               | 3.97E-30 | 0.95592699 | 0.644 | 0.697 | 1.41E-25 | CD4_EM_CTL_lung |
| ENSMMUG00000016665 | 4.01E-30 | 1.3231828  | 0.51  | 0.488 | 1.42E-25 | CD4_EM_CTL_lung |
| RPLP2              | 7.76E-29 | 0.34843878 | 0.941 | 0.926 | 2.75E-24 | CD4_EM_CTL_lung |
| COX6B1             | 9.08E-29 | 1.64552208 | 0.417 | 0.348 | 3.22E-24 | CD4_EM_CTL_lung |
| GPR183             | 1.55E-28 | 2.20088597 | 0.388 | 0.295 | 5.49E-24 | CD4_EM_CTL_lung |
| ENSMMUG00000031947 | 1.82E-27 | 1.00199247 | 0.594 | 0.634 | 6.45E-23 | CD4_EM_CTL_lung |
| ATP5MC2            | 3.08E-27 | 1.00486963 | 0.578 | 0.599 | 1.09E-22 | CD4_EM_CTL_lung |
| ENSMMUG00000016894 | 8.83E-27 | 1.11543599 | 0.556 | 0.582 | 3.13E-22 | CD4_EM_CTL_lung |
| ZNF483             | 2.06E-26 | 0.99534527 | 0.589 | 0.625 | 7.31E-22 | CD4_EM_CTL_lung |
| BTF3               | 3.56E-26 | 0.72397386 | 0.702 | 0.764 | 1.26E-21 | CD4_EM_CTL_lung |
| MAP3K8             | 4.41E-26 | 1.94892591 | 0.292 | 0.182 | 1.56E-21 | CD4_EM_CTL_lung |
| TNFSF10            | 5.64E-26 | 2.2507236  | 0.282 | 0.18  | 2.00E-21 | CD4_EM_CTL_lung |
| OAZ1               | 5.75E-25 | 1.66233792 | 0.415 | 0.359 | 2.04E-20 | CD4_EM_CTL_lung |
| LAT2               | 2.03E-24 | 2.17702252 | 0.257 | 0.156 | 7.19E-20 | CD4_EM_CTL_lung |
| SELENOK            | 5.60E-24 | 1.69977898 | 0.379 | 0.308 | 1.98E-19 | CD4_EM_CTL_lung |
| TIMP1              | 1.50E-23 | 1.99156951 | 0.318 | 0.219 | 5.30E-19 | CD4_EM_CTL_lung |
| PFDN5              | 1.50E-23 | 1.49812147 | 0.448 | 0.417 | 5.31E-19 | CD4_EM_CTL_lung |
| SRI                | 1.53E-23 | 1.68365558 | 0.375 | 0.3   | 5.41E-19 | CD4_EM_CTL_lung |
| C16H17orf49        | 3.68E-22 | 1.23303172 | 0.497 | 0.502 | 1.31E-17 | CD4_EM_CTL_lung |
| MICOS13            | 1.15E-21 | 1.59921861 | 0.387 | 0.331 | 4.09E-17 | CD4_EM_CTL_lung |
| CD52               | 1.92E-21 | 0.39992772 | 0.872 | 0.875 | 6.79E-17 | CD4_EM_CTL_lung |
| ND4L               | 2.93E-21 | 1.68122268 | 0.396 | 0.336 | 1.04E-16 | CD4_EM_CTL_lung |

|                    |          |            |       |       |          |                 |
|--------------------|----------|------------|-------|-------|----------|-----------------|
| RAC2               | 3.91E-21 | 1.27590951 | 0.487 | 0.483 | 1.39E-16 | CD4_EM_CTL_lung |
| RBM8A              | 7.92E-21 | 1.42588384 | 0.412 | 0.368 | 2.81E-16 | CD4_EM_CTL_lung |
| HMGB1              | 2.31E-20 | 0.64919991 | 0.701 | 0.812 | 8.17E-16 | CD4_EM_CTL_lung |
| RPL10A             | 2.46E-20 | 0.27028344 | 0.961 | 0.926 | 8.71E-16 | CD4_EM_CTL_lung |
| TXN                | 2.52E-20 | 1.36079073 | 0.451 | 0.43  | 8.92E-16 | CD4_EM_CTL_lung |
| LSM7               | 6.57E-20 | 1.42454359 | 0.447 | 0.435 | 2.33E-15 | CD4_EM_CTL_lung |
| ENSMMUG00000056126 | 7.45E-20 | 1.94354247 | 0.283 | 0.202 | 2.64E-15 | CD4_EM_CTL_lung |
| KRTCAP2            | 2.51E-19 | 0.91210012 | 0.568 | 0.614 | 8.91E-15 | CD4_EM_CTL_lung |
| ENSMMUG00000047632 | 3.55E-19 | 1.12929825 | 0.418 | 0.335 | 1.26E-14 | CD4_EM_CTL_lung |
| MGST3              | 4.09E-19 | 1.5757355  | 0.369 | 0.318 | 1.45E-14 | CD4_EM_CTL_lung |
| UQCRH              | 7.25E-19 | 1.04734751 | 0.533 | 0.586 | 2.57E-14 | CD4_EM_CTL_lung |
| MRPL33             | 9.51E-19 | 1.72413164 | 0.332 | 0.267 | 3.37E-14 | CD4_EM_CTL_lung |
| TXNL1              | 1.30E-18 | 0.14193683 | 0.157 | 0.332 | 4.60E-14 | CD4_EM_CTL_lung |
| ATP5PF             | 1.78E-18 | 1.10623341 | 0.503 | 0.533 | 6.29E-14 | CD4_EM_CTL_lung |
| ENSMMUG00000017466 | 2.73E-18 | 1.10346849 | 0.511 | 0.551 | 9.67E-14 | CD4_EM_CTL_lung |
| SLC25A43           | 6.66E-18 | 1.01793662 | 0.549 | 0.59  | 2.36E-13 | CD4_EM_CTL_lung |
| ENSMMUG00000000983 | 1.27E-17 | 1.26814866 | 0.444 | 0.439 | 4.49E-13 | CD4_EM_CTL_lung |
| ENSMMUG00000058581 | 1.57E-17 | 1.63489488 | 0.462 | 0.448 | 5.57E-13 | CD4_EM_CTL_lung |
| NDUFA2             | 1.61E-17 | 1.28196126 | 0.457 | 0.457 | 5.71E-13 | CD4_EM_CTL_lung |
| ENSMMUG00000016898 | 3.44E-17 | 0.15669347 | 0.156 | 0.324 | 1.22E-12 | CD4_EM_CTL_lung |
| ACTB               | 3.93E-17 | 0.41275614 | 0.951 | 0.953 | 1.39E-12 | CD4_EM_CTL_lung |
| PSMA2              | 1.26E-16 | 1.13971396 | 0.498 | 0.539 | 4.45E-12 | CD4_EM_CTL_lung |
| SUB1               | 1.32E-16 | 0.69775433 | 0.652 | 0.785 | 4.68E-12 | CD4_EM_CTL_lung |
| TAPBPL             | 1.42E-16 | 1.35990785 | 0.469 | 0.485 | 5.04E-12 | CD4_EM_CTL_lung |
| PSMB1              | 1.51E-16 | 1.00621971 | 0.521 | 0.579 | 5.35E-12 | CD4_EM_CTL_lung |
| ENSMMUG00000019238 | 1.88E-16 | 0.18731068 | 0.168 | 0.342 | 6.67E-12 | CD4_EM_CTL_lung |
| NCL                | 2.03E-16 | 0.79746731 | 0.612 | 0.702 | 7.20E-12 | CD4_EM_CTL_lung |
| CIB1               | 4.41E-16 | 1.79226022 | 0.272 | 0.202 | 1.56E-11 | CD4_EM_CTL_lung |
| ISCA1              | 6.79E-16 | 1.77750091 | 0.363 | 0.322 | 2.40E-11 | CD4_EM_CTL_lung |
| PSMB6              | 8.13E-16 | 1.44702451 | 0.388 | 0.363 | 2.88E-11 | CD4_EM_CTL_lung |
| TBC1D25            | 1.24E-15 | 0.10111435 | 0.136 | 0.281 | 4.41E-11 | CD4_EM_CTL_lung |
| DBI                | 1.35E-15 | 1.18900816 | 0.465 | 0.482 | 4.80E-11 | CD4_EM_CTL_lung |
| SNRPB              | 1.85E-15 | 1.2718622  | 0.433 | 0.441 | 6.55E-11 | CD4_EM_CTL_lung |

|                    |          |            |       |       |          |                 |
|--------------------|----------|------------|-------|-------|----------|-----------------|
| UBE2L6             | 1.92E-15 | 0.16241996 | 0.132 | 0.276 | 6.79E-11 | CD4_EM_CTL_lung |
| APEX1              | 2.61E-15 | 0.15472788 | 0.193 | 0.371 | 9.25E-11 | CD4_EM_CTL_lung |
| TMEM243            | 3.55E-15 | 0.24720984 | 0.234 | 0.443 | 1.26E-10 | CD4_EM_CTL_lung |
| IDH2               | 4.18E-15 | 0.17274981 | 0.184 | 0.356 | 1.48E-10 | CD4_EM_CTL_lung |
| ACAP1              | 8.85E-15 | 0.26937017 | 0.174 | 0.34  | 3.14E-10 | CD4_EM_CTL_lung |
| ID2                | 9.34E-15 | 1.19768157 | 0.549 | 0.571 | 3.31E-10 | CD4_EM_CTL_lung |
| CD63               | 1.30E-14 | 1.17261111 | 0.499 | 0.531 | 4.61E-10 | CD4_EM_CTL_lung |
| SACM1L             | 1.60E-14 | 0.21371754 | 0.147 | 0.294 | 5.68E-10 | CD4_EM_CTL_lung |
| MIDN               | 1.74E-14 | 0.24479879 | 0.164 | 0.32  | 6.18E-10 | CD4_EM_CTL_lung |
| MAZ                | 1.95E-14 | 0.21396363 | 0.12  | 0.252 | 6.92E-10 | CD4_EM_CTL_lung |
| GTF2A2             | 1.99E-14 | 0.21835668 | 0.144 | 0.29  | 7.06E-10 | CD4_EM_CTL_lung |
| ENSMMUG00000055825 | 2.02E-14 | 0.21987306 | 0.199 | 0.374 | 7.15E-10 | CD4_EM_CTL_lung |
| GLRX3              | 2.04E-14 | 0.25643054 | 0.17  | 0.331 | 7.24E-10 | CD4_EM_CTL_lung |
| ITGAE              | 2.28E-14 | 0.11183703 | 0.125 | 0.258 | 8.09E-10 | CD4_EM_CTL_lung |
| PCBP1              | 2.43E-14 | 0.22366783 | 0.258 | 0.471 | 8.63E-10 | CD4_EM_CTL_lung |
| PPID               | 2.82E-14 | 0.2360858  | 0.12  | 0.25  | 9.99E-10 | CD4_EM_CTL_lung |
| ENO1               | 3.24E-14 | 0.91759618 | 0.549 | 0.627 | 1.15E-09 | CD4_EM_CTL_lung |
| SCP2               | 3.55E-14 | 0.2057411  | 0.221 | 0.409 | 1.26E-09 | CD4_EM_CTL_lung |
| OSTF1              | 3.63E-14 | 1.17347676 | 0.475 | 0.502 | 1.29E-09 | CD4_EM_CTL_lung |
| OCIAD1             | 4.29E-14 | 0.2064311  | 0.201 | 0.378 | 1.52E-09 | CD4_EM_CTL_lung |
| SRRM1              | 4.50E-14 | 0.10853054 | 0.316 | 0.554 | 1.59E-09 | CD4_EM_CTL_lung |
| ATP5MC3            | 4.70E-14 | 0.98939111 | 0.514 | 0.583 | 1.67E-09 | CD4_EM_CTL_lung |
| CDC42SE1           | 5.60E-14 | 0.18150111 | 0.132 | 0.267 | 1.99E-09 | CD4_EM_CTL_lung |
| SPOCK2             | 7.37E-14 | 0.12344614 | 0.235 | 0.418 | 2.61E-09 | CD4_EM_CTL_lung |
| LPXN               | 1.05E-13 | 0.32106193 | 0.196 | 0.366 | 3.71E-09 | CD4_EM_CTL_lung |
| LYAR               | 1.20E-13 | 0.17276555 | 0.136 | 0.269 | 4.26E-09 | CD4_EM_CTL_lung |
| SATB1              | 1.30E-13 | 0.28881267 | 0.281 | 0.482 | 4.59E-09 | CD4_EM_CTL_lung |
| MYDGF              | 1.32E-13 | 0.22812393 | 0.212 | 0.397 | 4.69E-09 | CD4_EM_CTL_lung |
| HAT1               | 1.41E-13 | 0.10628466 | 0.131 | 0.263 | 4.99E-09 | CD4_EM_CTL_lung |
| MAP2K3             | 1.49E-13 | 0.14636206 | 0.131 | 0.262 | 5.30E-09 | CD4_EM_CTL_lung |
| PDE4D              | 1.56E-13 | 0.2376724  | 0.182 | 0.336 | 5.52E-09 | CD4_EM_CTL_lung |
| ETFB               | 1.84E-13 | 1.56300418 | 0.355 | 0.329 | 6.52E-09 | CD4_EM_CTL_lung |
| TBC1D24            | 1.91E-13 | 0.17449161 | 0.296 | 0.525 | 6.78E-09 | CD4_EM_CTL_lung |

|                    |          |            |       |       |          |                 |
|--------------------|----------|------------|-------|-------|----------|-----------------|
| RGS10              | 2.39E-13 | 0.14161846 | 0.237 | 0.43  | 8.46E-09 | CD4_EM_CTL_lung |
| TTC39C             | 3.48E-13 | 0.18450937 | 0.14  | 0.271 | 1.23E-08 | CD4_EM_CTL_lung |
| TINF2              | 3.49E-13 | 1.06189477 | 0.487 | 0.539 | 1.24E-08 | CD4_EM_CTL_lung |
| MRPL42             | 3.97E-13 | 0.16452485 | 0.133 | 0.264 | 1.41E-08 | CD4_EM_CTL_lung |
| FLNA               | 4.48E-13 | 0.21141051 | 0.214 | 0.389 | 1.59E-08 | CD4_EM_CTL_lung |
| RASGRP2            | 8.24E-13 | 0.21712223 | 0.164 | 0.311 | 2.92E-08 | CD4_EM_CTL_lung |
| SMU1               | 9.60E-13 | 0.18373667 | 0.149 | 0.288 | 3.40E-08 | CD4_EM_CTL_lung |
| DDOST              | 1.22E-12 | 0.22144738 | 0.235 | 0.422 | 4.32E-08 | CD4_EM_CTL_lung |
| SERPINB9           | 1.25E-12 | 0.12000465 | 0.193 | 0.349 | 4.44E-08 | CD4_EM_CTL_lung |
| LEPROTL1           | 1.41E-12 | 1.43782976 | 0.363 | 0.34  | 4.98E-08 | CD4_EM_CTL_lung |
| PLAAT4             | 1.45E-12 | 1.08446183 | 0.481 | 0.49  | 5.12E-08 | CD4_EM_CTL_lung |
| SEM1               | 1.64E-12 | 1.12973984 | 0.459 | 0.488 | 5.79E-08 | CD4_EM_CTL_lung |
| DDX24              | 1.70E-12 | 0.20979711 | 0.282 | 0.499 | 6.04E-08 | CD4_EM_CTL_lung |
| METAP2             | 2.15E-12 | 0.10721368 | 0.174 | 0.32  | 7.63E-08 | CD4_EM_CTL_lung |
| PSMA3              | 2.34E-12 | 0.17114716 | 0.234 | 0.418 | 8.31E-08 | CD4_EM_CTL_lung |
| PSMB4              | 2.35E-12 | 0.19269443 | 0.221 | 0.4   | 8.32E-08 | CD4_EM_CTL_lung |
| DIABLO             | 3.14E-12 | 0.13098122 | 0.144 | 0.273 | 1.11E-07 | CD4_EM_CTL_lung |
| NPM1               | 3.59E-12 | 0.43856107 | 0.727 | 0.833 | 1.27E-07 | CD4_EM_CTL_lung |
| CCDC82             | 3.74E-12 | 0.23385015 | 0.142 | 0.271 | 1.33E-07 | CD4_EM_CTL_lung |
| SNF8               | 4.11E-12 | 0.17266521 | 0.13  | 0.254 | 1.46E-07 | CD4_EM_CTL_lung |
| TMEM14B            | 4.96E-12 | 0.93204042 | 0.522 | 0.602 | 1.76E-07 | CD4_EM_CTL_lung |
| SUPT16H            | 5.40E-12 | 0.30269843 | 0.165 | 0.309 | 1.91E-07 | CD4_EM_CTL_lung |
| ENSMMUG00000058919 | 5.54E-12 | 0.32072343 | 0.15  | 0.286 | 1.96E-07 | CD4_EM_CTL_lung |
| C15H9orf78         | 6.09E-12 | 0.20375973 | 0.276 | 0.482 | 2.16E-07 | CD4_EM_CTL_lung |
| RAB11A             | 7.26E-12 | 1.82932414 | 0.271 | 0.221 | 2.57E-07 | CD4_EM_CTL_lung |
| ENSMMUG00000045425 | 8.31E-12 | 0.26888    | 0.146 | 0.276 | 2.94E-07 | CD4_EM_CTL_lung |
| CALCOCO2           | 9.02E-12 | 0.16815729 | 0.218 | 0.387 | 3.20E-07 | CD4_EM_CTL_lung |
| SPCS1              | 9.30E-12 | 1.27572692 | 0.427 | 0.448 | 3.29E-07 | CD4_EM_CTL_lung |
| ENSMMUG00000004539 | 9.64E-12 | 0.29272744 | 0.24  | 0.423 | 3.42E-07 | CD4_EM_CTL_lung |
| ENSMMUG00000042951 | 1.34E-11 | 0.21734769 | 0.263 | 0.461 | 4.75E-07 | CD4_EM_CTL_lung |
| CYCS               | 1.55E-11 | 0.22969866 | 0.194 | 0.349 | 5.50E-07 | CD4_EM_CTL_lung |
| ARF5               | 1.72E-11 | 0.2637293  | 0.247 | 0.439 | 6.09E-07 | CD4_EM_CTL_lung |
| VIM                | 1.83E-11 | 1.28912775 | 0.419 | 0.409 | 6.48E-07 | CD4_EM_CTL_lung |

|                   |          |            |       |       |          |                 |
|-------------------|----------|------------|-------|-------|----------|-----------------|
| SOD1              | 1.99E-11 | 0.17370741 | 0.241 | 0.42  | 7.04E-07 | CD4_EM_CTL_lung |
| TAGAP             | 2.11E-11 | 0.20304763 | 0.225 | 0.389 | 7.49E-07 | CD4_EM_CTL_lung |
| CLDND1            | 2.18E-11 | 0.21848751 | 0.252 | 0.438 | 7.71E-07 | CD4_EM_CTL_lung |
| UQCRB             | 2.75E-11 | 0.33255537 | 0.203 | 0.364 | 9.73E-07 | CD4_EM_CTL_lung |
| FBH1              | 2.93E-11 | 1.24582186 | 0.565 | 0.665 | 1.04E-06 | CD4_EM_CTL_lung |
| ATP5F1C           | 3.59E-11 | 1.17202093 | 0.429 | 0.455 | 1.27E-06 | CD4_EM_CTL_lung |
| TM2D1             | 3.64E-11 | 0.25545277 | 0.142 | 0.266 | 1.29E-06 | CD4_EM_CTL_lung |
| BID               | 5.40E-11 | 0.25516461 | 0.207 | 0.365 | 1.91E-06 | CD4_EM_CTL_lung |
| MRPL23            | 5.67E-11 | 1.17171113 | 0.414 | 0.426 | 2.01E-06 | CD4_EM_CTL_lung |
| ITGB2             | 6.01E-11 | 0.34884737 | 0.294 | 0.508 | 2.13E-06 | CD4_EM_CTL_lung |
| TBCC              | 6.73E-11 | 0.29542254 | 0.171 | 0.309 | 2.38E-06 | CD4_EM_CTL_lung |
| BIRC2             | 7.29E-11 | 0.37159109 | 0.205 | 0.364 | 2.58E-06 | CD4_EM_CTL_lung |
| VAMP8             | 8.40E-11 | 1.2750463  | 0.386 | 0.385 | 2.98E-06 | CD4_EM_CTL_lung |
| DAZAP1            | 1.06E-10 | 0.85738208 | 0.54  | 0.657 | 3.77E-06 | CD4_EM_CTL_lung |
| JTB               | 1.27E-10 | 0.22700033 | 0.174 | 0.31  | 4.51E-06 | CD4_EM_CTL_lung |
| ENSMUG00000065089 | 1.28E-10 | 0.27993919 | 0.2   | 0.348 | 4.53E-06 | CD4_EM_CTL_lung |
| SMC3              | 1.32E-10 | 0.33956846 | 0.179 | 0.317 | 4.68E-06 | CD4_EM_CTL_lung |
| NCLN              | 1.41E-10 | 0.35455807 | 0.146 | 0.267 | 4.99E-06 | CD4_EM_CTL_lung |
| RNASEH2C          | 1.75E-10 | 0.23931726 | 0.193 | 0.339 | 6.18E-06 | CD4_EM_CTL_lung |
| SDCBP             | 1.95E-10 | 0.30169197 | 0.137 | 0.253 | 6.90E-06 | CD4_EM_CTL_lung |
| ENSMUG00000054038 | 1.97E-10 | 0.67557446 | 0.627 | 0.758 | 6.99E-06 | CD4_EM_CTL_lung |
| MRPL52            | 2.43E-10 | 1.66107851 | 0.277 | 0.234 | 8.59E-06 | CD4_EM_CTL_lung |
| ZNF493            | 2.54E-10 | 0.38217843 | 0.156 | 0.284 | 9.00E-06 | CD4_EM_CTL_lung |
| ENSMUG00000059017 | 2.73E-10 | 0.158709   | 0.304 | 0.507 | 9.68E-06 | CD4_EM_CTL_lung |
| NDUFC2            | 2.83E-10 | 1.18992337 | 0.398 | 0.411 | 1.00E-05 | CD4_EM_CTL_lung |
| MOB2              | 2.90E-10 | 0.2022206  | 0.238 | 0.405 | 1.03E-05 | CD4_EM_CTL_lung |
| UBE2V1            | 2.96E-10 | 0.26040281 | 0.267 | 0.457 | 1.05E-05 | CD4_EM_CTL_lung |
| NPM3              | 3.19E-10 | 0.25419118 | 0.198 | 0.347 | 1.13E-05 | CD4_EM_CTL_lung |
| EIF1AX            | 3.65E-10 | 0.25944979 | 0.28  | 0.475 | 1.29E-05 | CD4_EM_CTL_lung |
| TMEM59L           | 3.76E-10 | 0.34072456 | 0.165 | 0.293 | 1.33E-05 | CD4_EM_CTL_lung |
| ENSMUG00000013779 | 5.32E-10 | 2.13797538 | 0.275 | 0.226 | 1.88E-05 | CD4_EM_CTL_lung |
| CCT8              | 5.33E-10 | 0.32016494 | 0.236 | 0.406 | 1.89E-05 | CD4_EM_CTL_lung |
| TKT               | 5.57E-10 | 0.31817073 | 0.244 | 0.418 | 1.97E-05 | CD4_EM_CTL_lung |

|                    |          |            |       |       |            |                 |
|--------------------|----------|------------|-------|-------|------------|-----------------|
| ENSMMUG00000061913 | 5.90E-10 | 0.12533982 | 0.32  | 0.527 | 2.09E-05   | CD4_EM_CTL_lung |
| FKBP2              | 6.15E-10 | 1.59886567 | 0.274 | 0.235 | 2.18E-05   | CD4_EM_CTL_lung |
| COX4I1             | 6.23E-10 | 0.38596599 | 0.71  | 0.803 | 2.21E-05   | CD4_EM_CTL_lung |
| ENSMMUG00000029973 | 8.45E-10 | 1.00627214 | 0.442 | 0.48  | 3.00E-05   | CD4_EM_CTL_lung |
| ZNHIT1             | 9.73E-10 | 1.32180585 | 0.37  | 0.368 | 3.45E-05   | CD4_EM_CTL_lung |
| PAOX               | 1.17E-09 | 0.49273691 | 0.147 | 0.264 | 4.16E-05   | CD4_EM_CTL_lung |
| CYBA               | 1.38E-09 | 0.23035859 | 0.365 | 0.619 | 4.88E-05   | CD4_EM_CTL_lung |
| ENSMMUG00000014947 | 1.42E-09 | 0.34610643 | 0.156 | 0.279 | 5.02E-05   | CD4_EM_CTL_lung |
| PSENE1             | 1.42E-09 | 1.59881109 | 0.271 | 0.232 | 5.02E-05   | CD4_EM_CTL_lung |
| TENT5C             | 1.62E-09 | 0.9403488  | 0.46  | 0.494 | 5.75E-05   | CD4_EM_CTL_lung |
| HSD17B11           | 1.75E-09 | 0.3485628  | 0.147 | 0.263 | 6.19E-05   | CD4_EM_CTL_lung |
| ENSMMUG00000056012 | 1.89E-09 | 0.35277941 | 0.227 | 0.386 | 6.71E-05   | CD4_EM_CTL_lung |
| CASP1              | 1.97E-09 | 1.66081986 | 0.253 | 0.209 | 6.98E-05   | CD4_EM_CTL_lung |
| SSR2               | 2.04E-09 | 0.92201796 | 0.491 | 0.574 | 7.22E-05   | CD4_EM_CTL_lung |
| PPIB               | 2.18E-09 | 0.87606854 | 0.506 | 0.59  | 7.74E-05   | CD4_EM_CTL_lung |
| GTF2H5             | 2.30E-09 | 1.19456049 | 0.397 | 0.416 | 8.17E-05   | CD4_EM_CTL_lung |
| BST2               | 2.88E-09 | 0.88116188 | 0.513 | 0.572 | 0.000102   | CD4_EM_CTL_lung |
| QARS1              | 3.19E-09 | 0.37926589 | 0.172 | 0.3   | 0.00011303 | CD4_EM_CTL_lung |
| SREK1IP1           | 3.31E-09 | 0.29195937 | 0.189 | 0.321 | 0.00011732 | CD4_EM_CTL_lung |
| POMP               | 3.49E-09 | 1.44001448 | 0.352 | 0.354 | 0.00012378 | CD4_EM_CTL_lung |
| ENSMMUG00000049295 | 3.65E-09 | 0.34494162 | 0.141 | 0.253 | 0.00012937 | CD4_EM_CTL_lung |
| SAFB               | 3.94E-09 | 0.43672909 | 0.688 | 0.815 | 0.00013973 | CD4_EM_CTL_lung |
| PGK1               | 4.16E-09 | 1.03727957 | 0.435 | 0.479 | 0.00014726 | CD4_EM_CTL_lung |
| PYHIN1             | 4.57E-09 | 0.45430899 | 0.194 | 0.333 | 0.00016177 | CD4_EM_CTL_lung |
| NSMCE1             | 4.72E-09 | 0.29817037 | 0.156 | 0.272 | 0.00016724 | CD4_EM_CTL_lung |
| STARD3NL           | 4.86E-09 | 0.2316169  | 0.215 | 0.359 | 0.00017224 | CD4_EM_CTL_lung |
| NCBP2              | 6.19E-09 | 1.25560352 | 0.386 | 0.406 | 0.00021943 | CD4_EM_CTL_lung |
| COPE               | 6.30E-09 | 1.29425428 | 0.346 | 0.343 | 0.00022338 | CD4_EM_CTL_lung |
| LCP1               | 6.38E-09 | 0.71255204 | 0.601 | 0.716 | 0.00022593 | CD4_EM_CTL_lung |
| MRPS15             | 6.48E-09 | 0.39569483 | 0.165 | 0.287 | 0.00022951 | CD4_EM_CTL_lung |
| RER1               | 6.77E-09 | 0.35927724 | 0.221 | 0.378 | 0.00024001 | CD4_EM_CTL_lung |
| KDELRL1            | 9.07E-09 | 0.41214788 | 0.165 | 0.288 | 0.00032154 | CD4_EM_CTL_lung |
| ATP5F1B            | 1.03E-08 | 0.49308312 | 0.157 | 0.274 | 0.0003635  | CD4_EM_CTL_lung |



|                     |          |            |       |       |            |                 |
|---------------------|----------|------------|-------|-------|------------|-----------------|
| ERH                 | 1.03E-08 | 1.32384511 | 0.364 | 0.374 | 0.00036511 | CD4_EM_CTL_lung |
| GLIPR2              | 1.12E-08 | 1.34075244 | 0.324 | 0.302 | 0.0003963  | CD4_EM_CTL_lung |
| RBFA                | 1.13E-08 | 0.28378669 | 0.196 | 0.331 | 0.00040144 | CD4_EM_CTL_lung |
| COX7A2              | 1.19E-08 | 1.48464389 | 0.299 | 0.277 | 0.00042179 | CD4_EM_CTL_lung |
| COX16               | 1.24E-08 | 0.2135247  | 0.371 | 0.6   | 0.00043915 | CD4_EM_CTL_lung |
| PSME2               | 1.31E-08 | 1.19252553 | 0.371 | 0.375 | 0.00046384 | CD4_EM_CTL_lung |
| ILF2                | 1.32E-08 | 0.35949897 | 0.187 | 0.316 | 0.00046885 | CD4_EM_CTL_lung |
| POLR3GL             | 1.53E-08 | 0.40866124 | 0.168 | 0.288 | 0.00054258 | CD4_EM_CTL_lung |
| CWC15               | 1.87E-08 | 0.27586924 | 0.262 | 0.434 | 0.0006629  | CD4_EM_CTL_lung |
| OSBPL2              | 1.91E-08 | 0.40611807 | 0.186 | 0.317 | 0.00067671 | CD4_EM_CTL_lung |
| ENSMMUG00000006778  | 2.13E-08 | 0.39607635 | 0.256 | 0.428 | 0.00075324 | CD4_EM_CTL_lung |
| BOLA2B              | 2.30E-08 | 1.49524182 | 0.268 | 0.232 | 0.00081432 | CD4_EM_CTL_lung |
| SRSF7               | 2.49E-08 | 0.10082202 | 0.438 | 0.698 | 0.00088087 | CD4_EM_CTL_lung |
| PFDN4               | 2.58E-08 | 0.49166254 | 0.145 | 0.253 | 0.00091427 | CD4_EM_CTL_lung |
| CDC37               | 2.72E-08 | 0.44829796 | 0.231 | 0.39  | 0.00096259 | CD4_EM_CTL_lung |
| ENSMMUG00000002075  | 2.87E-08 | 1.59587502 | 0.272 | 0.243 | 0.0010168  | CD4_EM_CTL_lung |
| ENSMMUG00000011798  | 3.27E-08 | 0.41377521 | 0.184 | 0.312 | 0.00115782 | CD4_EM_CTL_lung |
| TPI1                | 3.55E-08 | 1.18217189 | 0.399 | 0.425 | 0.00125763 | CD4_EM_CTL_lung |
| RABAC1              | 3.60E-08 | 1.40081178 | 0.322 | 0.307 | 0.00127502 | CD4_EM_CTL_lung |
| SELENOS             | 3.79E-08 | 0.30299463 | 0.315 | 0.517 | 0.00134303 | CD4_EM_CTL_lung |
| PSMA6               | 4.39E-08 | 0.31434622 | 0.201 | 0.331 | 0.00155538 | CD4_EM_CTL_lung |
| PTP4A1              | 4.52E-08 | 0.53136992 | 0.268 | 0.441 | 0.00160226 | CD4_EM_CTL_lung |
| ENSMMUG00000007536  | 5.24E-08 | 1.26799425 | 0.357 | 0.366 | 0.00185788 | CD4_EM_CTL_lung |
| ENSMMUG000000057791 | 5.25E-08 | 0.66586296 | 0.543 | 0.54  | 0.00186083 | CD4_EM_CTL_lung |
| TDG                 | 5.76E-08 | 0.42893964 | 0.177 | 0.296 | 0.00204188 | CD4_EM_CTL_lung |
| SUCLG1              | 6.62E-08 | 0.39673438 | 0.235 | 0.387 | 0.00234733 | CD4_EM_CTL_lung |
| RPS3A               | 7.18E-08 | 0.1529544  | 0.961 | 0.945 | 0.00254413 | CD4_EM_CTL_lung |
| CD320               | 7.20E-08 | 1.23977199 | 0.38  | 0.403 | 0.0025511  | CD4_EM_CTL_lung |
| RPS27L              | 8.30E-08 | 1.38855249 | 0.354 | 0.362 | 0.00293952 | CD4_EM_CTL_lung |
| PDAP1               | 8.30E-08 | 0.42324261 | 0.188 | 0.315 | 0.00294122 | CD4_EM_CTL_lung |
| ANAPC16             | 9.17E-08 | 0.46095995 | 0.162 | 0.273 | 0.00325087 | CD4_EM_CTL_lung |
| PIK3R1              | 1.02E-07 | 0.5648742  | 0.317 | 0.514 | 0.00360698 | CD4_EM_CTL_lung |
| PPP4C               | 1.09E-07 | 0.4526983  | 0.194 | 0.322 | 0.00385847 | CD4_EM_CTL_lung |

|                    |          |            |       |       |            |                 |
|--------------------|----------|------------|-------|-------|------------|-----------------|
| NUDC               | 1.14E-07 | 0.21329322 | 0.297 | 0.482 | 0.00405137 | CD4_EM_CTL_lung |
| TAF9               | 1.15E-07 | 0.40863582 | 0.198 | 0.328 | 0.00409053 | CD4_EM_CTL_lung |
| B2M                | 1.20E-07 | 0.1389074  | 0.984 | 0.983 | 0.00424518 | CD4_EM_CTL_lung |
| ENSMMUG00000038373 | 1.26E-07 | 0.30306859 | 0.355 | 0.578 | 0.00445432 | CD4_EM_CTL_lung |
| MED4               | 1.43E-07 | 0.5090954  | 0.162 | 0.275 | 0.00506386 | CD4_EM_CTL_lung |
| RNF181             | 1.53E-07 | 1.0642545  | 0.412 | 0.45  | 0.0054265  | CD4_EM_CTL_lung |
| TES                | 1.57E-07 | 0.46201752 | 0.162 | 0.271 | 0.00555692 | CD4_EM_CTL_lung |
| NCOA7              | 1.58E-07 | 0.3348866  | 0.336 | 0.54  | 0.00558587 | CD4_EM_CTL_lung |
| SNRPB2             | 1.65E-07 | 0.35855341 | 0.239 | 0.391 | 0.00585004 | CD4_EM_CTL_lung |
| RBMX               | 1.66E-07 | 0.20594283 | 0.37  | 0.585 | 0.00588428 | CD4_EM_CTL_lung |
| STOML2             | 1.82E-07 | 0.46833098 | 0.166 | 0.279 | 0.00644604 | CD4_EM_CTL_lung |
| NDUFS8             | 1.91E-07 | 1.28007846 | 0.317 | 0.309 | 0.00676091 | CD4_EM_CTL_lung |
| RGS9               | 1.92E-07 | 1.14604161 | 0.37  | 0.363 | 0.00680525 | CD4_EM_CTL_lung |
| MRPS6              | 1.98E-07 | 0.30673296 | 0.256 | 0.413 | 0.00702532 | CD4_EM_CTL_lung |
| ACTR10             | 2.33E-07 | 0.44240083 | 0.187 | 0.31  | 0.00825734 | CD4_EM_CTL_lung |
| TXNIP              | 2.59E-07 | 1.04849455 | 0.432 | 0.469 | 0.00918728 | CD4_EM_CTL_lung |
| ABCF1              | 2.64E-07 | 0.44139153 | 0.196 | 0.32  | 0.00934438 | CD4_EM_CTL_lung |
| ENSMMUG00000017890 | 3.10E-07 | 0.44470296 | 0.208 | 0.341 | 0.01096647 | CD4_EM_CTL_lung |
| NMT1               | 3.15E-07 | 0.45185502 | 0.171 | 0.283 | 0.0111779  | CD4_EM_CTL_lung |
| NUB1               | 3.17E-07 | 0.38667191 | 0.153 | 0.253 | 0.01124399 | CD4_EM_CTL_lung |
| NDUFB8             | 3.52E-07 | 1.07243313 | 0.394 | 0.433 | 0.01246729 | CD4_EM_CTL_lung |
| RNF167             | 3.73E-07 | 0.46061168 | 0.192 | 0.314 | 0.01322925 | CD4_EM_CTL_lung |
| ENSMMUG00000005880 | 3.77E-07 | 0.49071869 | 0.279 | 0.453 | 0.01334442 | CD4_EM_CTL_lung |
| PTPN6              | 4.20E-07 | 0.45642787 | 0.154 | 0.254 | 0.014864   | CD4_EM_CTL_lung |
| CD3E               | 4.51E-07 | 0.28268255 | 0.379 | 0.615 | 0.01596958 | CD4_EM_CTL_lung |
| LSP1               | 4.95E-07 | 0.85813618 | 0.508 | 0.622 | 0.0175264  | CD4_EM_CTL_lung |
| IL2RB              | 5.48E-07 | 0.26613809 | 0.277 | 0.423 | 0.01941934 | CD4_EM_CTL_lung |
| ENSMMUG00000006499 | 5.48E-07 | 0.39060807 | 0.273 | 0.442 | 0.0194264  | CD4_EM_CTL_lung |
| RWDD1              | 5.81E-07 | 0.20779423 | 0.333 | 0.522 | 0.02058978 | CD4_EM_CTL_lung |
| ATP5F1A            | 5.92E-07 | 0.11561009 | 0.424 | 0.645 | 0.02097002 | CD4_EM_CTL_lung |
| ARL6IP5            | 6.98E-07 | 0.3345021  | 0.329 | 0.527 | 0.02472504 | CD4_EM_CTL_lung |
| ENSMMUG00000012525 | 7.02E-07 | 1.08384058 | 0.392 | 0.429 | 0.02485885 | CD4_EM_CTL_lung |
| ENSMMUG00000055026 | 7.16E-07 | 1.23726658 | 0.335 | 0.334 | 0.02535955 | CD4_EM_CTL_lung |

|                    |          |            |       |       |            |                 |
|--------------------|----------|------------|-------|-------|------------|-----------------|
| PTBP1              | 7.52E-07 | 0.45679602 | 0.161 | 0.264 | 0.02664798 | CD4_EM_CTL_lung |
| HIKESHI            | 8.28E-07 | 0.5046591  | 0.193 | 0.316 | 0.02933126 | CD4_EM_CTL_lung |
| RILPL2             | 8.54E-07 | 0.52547011 | 0.176 | 0.286 | 0.03026311 | CD4_EM_CTL_lung |
| ENSMMUG00000029026 | 8.73E-07 | 0.99244741 | 0.407 | 0.449 | 0.03094979 | CD4_EM_CTL_lung |
| ENSMMUG00000058325 | 8.96E-07 | 0.23030086 | 0.874 | 0.915 | 0.0317603  | CD4_EM_CTL_lung |
| CEMIP2             | 9.09E-07 | 0.16507137 | 0.375 | 0.56  | 0.03219501 | CD4_EM_CTL_lung |
| MAGOH              | 9.58E-07 | 1.15004744 | 0.367 | 0.388 | 0.03394447 | CD4_EM_CTL_lung |
| RHOF               | 1.03E-06 | 1.50063445 | 0.281 | 0.261 | 0.03659264 | CD4_EM_CTL_lung |
| TMCO1              | 1.06E-06 | 0.40932627 | 0.184 | 0.298 | 0.03744982 | CD4_EM_CTL_lung |
| CD53               | 1.06E-06 | 0.13685479 | 0.425 | 0.665 | 0.03771436 | CD4_EM_CTL_lung |
| LSM6               | 1.13E-06 | 1.15036077 | 0.374 | 0.408 | 0.04020491 | CD4_EM_CTL_lung |
| SNRPD3             | 1.25E-06 | 0.93177889 | 0.438 | 0.507 | 0.04431416 | CD4_EM_CTL_lung |
| ATP6V1FNB          | 1.33E-06 | 1.26034452 | 0.324 | 0.328 | 0.0470534  | CD4_EM_CTL_lung |
| ENSMMUG00000022769 | 1.38E-06 | 0.21528642 | 0.381 | 0.609 | 0.04883818 | CD4_EM_CTL_lung |
| ENSMMUG00000056654 | 2.26E-06 | 0.52292241 | 0.569 | 0.669 | 0.08010893 | CD4_EM_CTL_lung |
| CD81               | 2.57E-06 | 0.49230102 | 0.238 | 0.38  | 0.09118431 | CD4_EM_CTL_lung |
| ATP5PO             | 2.61E-06 | 0.18877101 | 0.433 | 0.667 | 0.09247524 | CD4_EM_CTL_lung |
| CCT7               | 3.28E-06 | 0.54995983 | 0.175 | 0.282 | 0.11611521 | CD4_EM_CTL_lung |
| SSR3               | 3.28E-06 | 0.58763841 | 0.184 | 0.296 | 0.11616804 | CD4_EM_CTL_lung |
| ERBB3              | 4.09E-06 | 0.31023412 | 0.28  | 0.437 | 0.14499989 | CD4_EM_CTL_lung |
| PLD3               | 4.09E-06 | 0.43443254 | 0.179 | 0.283 | 0.14503006 | CD4_EM_CTL_lung |
| SNRPE              | 4.20E-06 | 0.37220895 | 0.27  | 0.428 | 0.14864165 | CD4_EM_CTL_lung |
| RGS1               | 4.47E-06 | 1.12812299 | 0.406 | 0.444 | 0.15851375 | CD4_EM_CTL_lung |
| MRFAP1             | 4.54E-06 | 0.44532339 | 0.186 | 0.296 | 0.16100527 | CD4_EM_CTL_lung |
| RAN                | 4.60E-06 | 0.97083269 | 0.415 | 0.471 | 0.1631491  | CD4_EM_CTL_lung |
| PSMA1              | 5.02E-06 | 0.48592723 | 0.269 | 0.426 | 0.17774216 | CD4_EM_CTL_lung |
| RBBP4              | 5.07E-06 | 0.45562896 | 0.219 | 0.347 | 0.17948587 | CD4_EM_CTL_lung |
| SAP18              | 5.28E-06 | 1.0067602  | 0.419 | 0.481 | 0.18694807 | CD4_EM_CTL_lung |
| CCDC59             | 5.78E-06 | 0.43906318 | 0.158 | 0.252 | 0.20464596 | CD4_EM_CTL_lung |
| CCNDBP1            | 6.06E-06 | 0.66420299 | 0.162 | 0.261 | 0.21486631 | CD4_EM_CTL_lung |
| PSMB9              | 7.86E-06 | 0.98380377 | 0.428 | 0.494 | 0.27834869 | CD4_EM_CTL_lung |
| GNAI2.1            | 8.40E-06 | 0.48190465 | 0.268 | 0.422 | 0.2976172  | CD4_EM_CTL_lung |
| ESF1               | 8.67E-06 | 0.51787758 | 0.212 | 0.33  | 0.30701958 | CD4_EM_CTL_lung |

|                     |          |            |       |       |            |                 |
|---------------------|----------|------------|-------|-------|------------|-----------------|
| GHITM               | 8.99E-06 | 0.41013691 | 0.267 | 0.418 | 0.31845786 | CD4_EM_CTL_lung |
| DNAJA2              | 9.58E-06 | 0.50288622 | 0.183 | 0.288 | 0.33927624 | CD4_EM_CTL_lung |
| CD83                | 1.13E-05 | 0.7998341  | 0.266 | 0.418 | 0.4011704  | CD4_EM_CTL_lung |
| C18H18orf32         | 1.14E-05 | 0.16412409 | 0.91  | 0.912 | 0.4034536  | CD4_EM_CTL_lung |
| SERTAD1             | 1.23E-05 | 1.48048698 | 0.262 | 0.245 | 0.43436066 | CD4_EM_CTL_lung |
| PDCD5               | 1.28E-05 | 1.38864425 | 0.295 | 0.294 | 0.45280329 | CD4_EM_CTL_lung |
| MRPL34              | 1.42E-05 | 1.46222419 | 0.274 | 0.267 | 0.50417848 | CD4_EM_CTL_lung |
| WDR1                | 1.52E-05 | 0.68155835 | 0.161 | 0.253 | 0.53981994 | CD4_EM_CTL_lung |
| DNAJC8              | 1.66E-05 | 0.39003654 | 0.231 | 0.357 | 0.58839938 | CD4_EM_CTL_lung |
| ATP5PD              | 1.67E-05 | 1.32080487 | 0.286 | 0.283 | 0.5912807  | CD4_EM_CTL_lung |
| ZNF331              | 1.68E-05 | 1.44957289 | 0.293 | 0.288 | 0.59616993 | CD4_EM_CTL_lung |
| COPS6               | 1.96E-05 | 0.59671785 | 0.211 | 0.331 | 0.69487493 | CD4_EM_CTL_lung |
| ENSMMUG00000002324  | 2.05E-05 | 0.93218358 | 0.414 | 0.475 | 0.72787449 | CD4_EM_CTL_lung |
| VPS28               | 2.14E-05 | 1.44300715 | 0.258 | 0.245 | 0.7599398  | CD4_EM_CTL_lung |
| GLIPR1L2            | 2.17E-05 | 0.63574728 | 0.175 | 0.273 | 0.76890274 | CD4_EM_CTL_lung |
| NDUFB9              | 2.66E-05 | 1.14241655 | 0.357 | 0.386 | 0.94253092 | CD4_EM_CTL_lung |
| STRAP               | 2.96E-05 | 0.53192037 | 0.294 | 0.457 | 1          | CD4_EM_CTL_lung |
| EIF3J               | 3.01E-05 | 0.46993994 | 0.282 | 0.434 | 1          | CD4_EM_CTL_lung |
| ENSMMUG000000062086 | 3.11E-05 | 0.47193024 | 0.273 | 0.421 | 1          | CD4_EM_CTL_lung |
| NDUFB10             | 3.31E-05 | 1.20024813 | 0.334 | 0.354 | 1          | CD4_EM_CTL_lung |
| DAD1                | 3.42E-05 | 1.08251515 | 0.384 | 0.441 | 1          | CD4_EM_CTL_lung |
| DYNLL1              | 3.56E-05 | 0.9871126  | 0.4   | 0.44  | 1          | CD4_EM_CTL_lung |
| C1D                 | 3.84E-05 | 0.51494809 | 0.196 | 0.301 | 1          | CD4_EM_CTL_lung |
| UBE2I               | 4.17E-05 | 0.36252285 | 0.299 | 0.464 | 1          | CD4_EM_CTL_lung |
| EIF1B               | 4.49E-05 | 0.47429574 | 0.263 | 0.406 | 1          | CD4_EM_CTL_lung |
| POLR1D              | 4.55E-05 | 0.37128557 | 0.332 | 0.513 | 1          | CD4_EM_CTL_lung |
| RBX1                | 4.68E-05 | 1.02873993 | 0.377 | 0.427 | 1          | CD4_EM_CTL_lung |
| ENSMMUG000000055584 | 5.09E-05 | 0.34143738 | 0.683 | 0.843 | 1          | CD4_EM_CTL_lung |
| WDR13               | 5.26E-05 | 0.91031111 | 0.464 | 0.568 | 1          | CD4_EM_CTL_lung |
| PFDN2               | 6.36E-05 | 0.395567   | 0.299 | 0.464 | 1          | CD4_EM_CTL_lung |
| CD37                | 7.89E-05 | 0.7681585  | 0.487 | 0.596 | 1          | CD4_EM_CTL_lung |
| PRDX5               | 8.03E-05 | 1.32420973 | 0.282 | 0.286 | 1          | CD4_EM_CTL_lung |
| EIF4A3              | 8.37E-05 | 0.55221983 | 0.215 | 0.326 | 1          | CD4_EM_CTL_lung |

|                    |            |            |       |       |                   |
|--------------------|------------|------------|-------|-------|-------------------|
| VDAC1              | 9.55E-05   | 0.56931661 | 0.172 | 0.263 | 1 CD4_EM_CTL_lung |
| SEC11A             | 0.00010091 | 0.46101449 | 0.279 | 0.432 | 1 CD4_EM_CTL_lung |
| NDUFA5             | 0.00010151 | 0.50444961 | 0.185 | 0.281 | 1 CD4_EM_CTL_lung |
| SMNDC1             | 0.00010228 | 0.71598498 | 0.215 | 0.327 | 1 CD4_EM_CTL_lung |
| SLC2A3             | 0.0001025  | 0.91716758 | 0.38  | 0.401 | 1 CD4_EM_CTL_lung |
| ENSMMUG00000055457 | 0.0001026  | 0.58922412 | 0.243 | 0.375 | 1 CD4_EM_CTL_lung |
| EIF3L              | 0.00011112 | 0.30619799 | 0.376 | 0.578 | 1 CD4_EM_CTL_lung |
| PSMA5              | 0.0001142  | 0.54386114 | 0.276 | 0.418 | 1 CD4_EM_CTL_lung |
| GPSM3              | 0.00011702 | 0.93417399 | 0.409 | 0.481 | 1 CD4_EM_CTL_lung |
| LAMTOR4            | 0.00013365 | 1.15680319 | 0.34  | 0.369 | 1 CD4_EM_CTL_lung |
| ENSMMUG00000051392 | 0.00014526 | 0.97701921 | 0.433 | 0.525 | 1 CD4_EM_CTL_lung |
| SNU13              | 0.00015057 | 0.22485229 | 0.391 | 0.593 | 1 CD4_EM_CTL_lung |
| CBX3               | 0.00015882 | 0.82568246 | 0.465 | 0.567 | 1 CD4_EM_CTL_lung |
| ENSMMUG00000059742 | 0.00017643 | 0.58916256 | 0.223 | 0.335 | 1 CD4_EM_CTL_lung |
| NDUFS6             | 0.00022058 | 1.27508372 | 0.304 | 0.32  | 1 CD4_EM_CTL_lung |
| THOC7              | 0.00022976 | 0.533294   | 0.18  | 0.269 | 1 CD4_EM_CTL_lung |
| ARPC2              | 0.00024247 | 1.06289133 | 0.389 | 0.456 | 1 CD4_EM_CTL_lung |
| IK                 | 0.00032237 | 0.49196149 | 0.287 | 0.433 | 1 CD4_EM_CTL_lung |
| DSTN               | 0.00032321 | 0.52796616 | 0.247 | 0.369 | 1 CD4_EM_CTL_lung |
| CASP12             | 0.00038773 | 0.47886652 | 0.241 | 0.356 | 1 CD4_EM_CTL_lung |
| NR4A2              | 0.00039592 | 0.31395521 | 0.43  | 0.611 | 1 CD4_EM_CTL_lung |
| ENSMMUG00000053817 | 0.00044733 | 1.05605925 | 0.355 | 0.399 | 1 CD4_EM_CTL_lung |
| ATP5IF1            | 0.00049435 | 0.84338095 | 0.437 | 0.528 | 1 CD4_EM_CTL_lung |
| CLNS1A             | 0.00058065 | 0.65154332 | 0.21  | 0.312 | 1 CD4_EM_CTL_lung |
| ENSMMUG00000017097 | 0.00058515 | 0.66183439 | 0.172 | 0.254 | 1 CD4_EM_CTL_lung |
| ENSMMUG00000065104 | 0.00062146 | 0.90633577 | 0.403 | 0.469 | 1 CD4_EM_CTL_lung |
| REEP5              | 0.00062628 | 0.50195905 | 0.245 | 0.363 | 1 CD4_EM_CTL_lung |
| NDUFA6             | 0.00066808 | 1.09765005 | 0.334 | 0.366 | 1 CD4_EM_CTL_lung |
| CIAO2B             | 0.00069323 | 1.31577201 | 0.271 | 0.279 | 1 CD4_EM_CTL_lung |
| MRPL51             | 0.00069965 | 0.98166045 | 0.381 | 0.44  | 1 CD4_EM_CTL_lung |
| VDAC3              | 0.00070799 | 1.33643311 | 0.262 | 0.266 | 1 CD4_EM_CTL_lung |
| WAS                | 0.00074212 | 0.68811173 | 0.23  | 0.345 | 1 CD4_EM_CTL_lung |
| ENSMMUG00000064692 | 0.0007569  | 0.31273537 | 0.633 | 0.711 | 1 CD4_EM_CTL_lung |

|                    |            |            |       |       |                   |
|--------------------|------------|------------|-------|-------|-------------------|
| PLAAT3             | 0.00078402 | 1.0299931  | 0.26  | 0.252 | 1 CD4_EM_CTL_lung |
| BUD31              | 0.00079839 | 0.52593852 | 0.213 | 0.312 | 1 CD4_EM_CTL_lung |
| KIFBP              | 0.00081165 | 0.36319515 | 0.376 | 0.556 | 1 CD4_EM_CTL_lung |
| DRAP1              | 0.00082195 | 1.02803297 | 0.368 | 0.42  | 1 CD4_EM_CTL_lung |
| UFC1               | 0.00083539 | 0.45474564 | 0.281 | 0.412 | 1 CD4_EM_CTL_lung |
| HNRNPK             | 0.0008509  | 0.13248104 | 0.542 | 0.793 | 1 CD4_EM_CTL_lung |
| HNRNPA1            | 0.00089071 | 0.237265   | 0.424 | 0.646 | 1 CD4_EM_CTL_lung |
| CAP1               | 0.00101625 | 0.42476492 | 0.304 | 0.456 | 1 CD4_EM_CTL_lung |
| ATP6V0E1           | 0.00104617 | 0.85722133 | 0.425 | 0.516 | 1 CD4_EM_CTL_lung |
| PDGFRA             | 0.0012011  | 0.38216161 | 0.662 | 0.816 | 1 CD4_EM_CTL_lung |
| ENSMMUG00000059289 | 0.00134233 | 0.64296452 | 0.175 | 0.255 | 1 CD4_EM_CTL_lung |
| MDH1               | 0.00138291 | 0.5900737  | 0.224 | 0.328 | 1 CD4_EM_CTL_lung |
| TALDO1             | 0.00142625 | 0.98745399 | 0.364 | 0.418 | 1 CD4_EM_CTL_lung |
| TIGAR              | 0.00156204 | 0.95160174 | 0.378 | 0.429 | 1 CD4_EM_CTL_lung |
| BAX                | 0.00166687 | 0.71016472 | 0.198 | 0.289 | 1 CD4_EM_CTL_lung |
| TMBIM4             | 0.00184669 | 0.51091569 | 0.312 | 0.461 | 1 CD4_EM_CTL_lung |
| CNBP               | 0.00186124 | 0.3673056  | 0.379 | 0.57  | 1 CD4_EM_CTL_lung |
| ENSMMUG00000030465 | 0.00197941 | 0.81743894 | 0.397 | 0.466 | 1 CD4_EM_CTL_lung |
| SSBP1              | 0.00311642 | 0.65903703 | 0.201 | 0.288 | 1 CD4_EM_CTL_lung |
| ITGB1              | 0.00332523 | 0.61188417 | 0.224 | 0.319 | 1 CD4_EM_CTL_lung |
| MRPL14             | 0.00360081 | 1.13843047 | 0.286 | 0.311 | 1 CD4_EM_CTL_lung |
| CD48               | 0.00380634 | 0.67557697 | 0.215 | 0.31  | 1 CD4_EM_CTL_lung |
| LCK                | 0.0038513  | 0.21505473 | 0.531 | 0.771 | 1 CD4_EM_CTL_lung |
| ARHGDI1A           | 0.0044416  | 1.4080263  | 0.258 | 0.269 | 1 CD4_EM_CTL_lung |
| TOMM20             | 0.00447735 | 0.29941089 | 0.443 | 0.65  | 1 CD4_EM_CTL_lung |
| YJEFN3             | 0.00485055 | 0.97257181 | 0.391 | 0.476 | 1 CD4_EM_CTL_lung |
| KLRD1              | 0.00561748 | 0.19423433 | 0.482 | 0.623 | 1 CD4_EM_CTL_lung |
| COX2               | 0.00562046 | 0.17050408 | 0.877 | 0.8   | 1 CD4_EM_CTL_lung |
| STAT4              | 0.00588536 | 0.99195435 | 0.396 | 0.448 | 1 CD4_EM_CTL_lung |
| AMDHD1             | 0.0065844  | 0.5330142  | 0.291 | 0.423 | 1 CD4_EM_CTL_lung |
| PAIP2              | 0.00660231 | 0.22635103 | 0.484 | 0.705 | 1 CD4_EM_CTL_lung |
| SIRPG              | 0.00664437 | 0.67077537 | 0.209 | 0.295 | 1 CD4_EM_CTL_lung |
| ISG20              | 0.00671656 | 1.36101915 | 0.256 | 0.268 | 1 CD4_EM_CTL_lung |

|                    |            |            |       |       |                   |
|--------------------|------------|------------|-------|-------|-------------------|
| SF3B6              | 0.0068269  | 0.82712095 | 0.419 | 0.52  | 1 CD4_EM_CTL_lung |
| GIMAP7             | 0.00692764 | 0.95948075 | 0.381 | 0.447 | 1 CD4_EM_CTL_lung |
| PRMT1              | 0.00705415 | 0.6384298  | 0.254 | 0.364 | 1 CD4_EM_CTL_lung |
| HSP90B1            | 0.00713466 | 0.45560687 | 0.36  | 0.527 | 1 CD4_EM_CTL_lung |
| PSMC5              | 0.00725162 | 0.70327135 | 0.213 | 0.299 | 1 CD4_EM_CTL_lung |
| POLR2F             | 0.00754537 | 0.72868354 | 0.181 | 0.255 | 1 CD4_EM_CTL_lung |
| ENSMMUG00000029987 | 0.00819196 | 0.68472416 | 0.201 | 0.283 | 1 CD4_EM_CTL_lung |
| JUND               | 0.00858835 | 0.26236041 | 0.534 | 0.743 | 1 CD4_EM_CTL_lung |
| ENSMMUG00000058389 | 0.00895905 | 1.31269549 | 0.241 | 0.25  | 1 CD4_EM_CTL_lung |
| TUBB               | 0.00904142 | 0.52579884 | 0.326 | 0.473 | 1 CD4_EM_CTL_lung |
| DGKB               | 0.00904401 | 1.1924162  | 0.283 | 0.306 | 1 CD4_EM_CTL_lung |
| ICAM3              | 0.00938999 | 0.73045968 | 0.255 | 0.367 | 1 CD4_EM_CTL_lung |
| FNTB               | 0.010425   | 0.5944398  | 0.321 | 0.465 | 1 CD4_EM_CTL_lung |
| LSM2               | 0.01066009 | 0.64351186 | 0.212 | 0.296 | 1 CD4_EM_CTL_lung |
| POC5               | 0.01080989 | 0.57932428 | 0.269 | 0.382 | 1 CD4_EM_CTL_lung |
| PRDX6              | 0.01111194 | 1.0640264  | 0.381 | 0.466 | 1 CD4_EM_CTL_lung |
| TOMM22             | 0.0119431  | 0.68285814 | 0.209 | 0.292 | 1 CD4_EM_CTL_lung |
| SH3BGRL            | 0.01205092 | 0.96392974 | 0.345 | 0.399 | 1 CD4_EM_CTL_lung |
| PSMA7              | 0.01215095 | 0.18555241 | 0.469 | 0.662 | 1 CD4_EM_CTL_lung |
| NHP2               | 0.01322244 | 1.08680473 | 0.304 | 0.343 | 1 CD4_EM_CTL_lung |
| EIF3G              | 0.01361335 | 0.51898171 | 0.299 | 0.434 | 1 CD4_EM_CTL_lung |
| CFDP1              | 0.01378932 | 0.72395342 | 0.454 | 0.569 | 1 CD4_EM_CTL_lung |
| SOX4               | 0.01530424 | 0.49930618 | 0.453 | 0.611 | 1 CD4_EM_CTL_lung |
| ENSMMUG00000049151 | 0.01560975 | 0.19173864 | 0.785 | 0.902 | 1 CD4_EM_CTL_lung |
| ANP32A             | 0.01777833 | 0.58667834 | 0.331 | 0.48  | 1 CD4_EM_CTL_lung |
| NDUFA12            | 0.01912035 | 1.16343578 | 0.252 | 0.269 | 1 CD4_EM_CTL_lung |
| COPZ1              | 0.02016107 | 0.78426722 | 0.183 | 0.251 | 1 CD4_EM_CTL_lung |
| EIF4A1             | 0.02096377 | 0.55250065 | 0.32  | 0.458 | 1 CD4_EM_CTL_lung |
| PVRIG              | 0.02299714 | 0.90192069 | 0.225 | 0.317 | 1 CD4_EM_CTL_lung |
| RPS19BP1           | 0.02402845 | 0.88939298 | 0.187 | 0.256 | 1 CD4_EM_CTL_lung |
| CSNK2B             | 0.02444845 | 0.76735019 | 0.237 | 0.329 | 1 CD4_EM_CTL_lung |
| ZNF706             | 0.0253374  | 0.57713032 | 0.295 | 0.416 | 1 CD4_EM_CTL_lung |
| ARF1               | 0.02534962 | 0.67785379 | 0.459 | 0.593 | 1 CD4_EM_CTL_lung |

|                     |            |            |       |       |                   |
|---------------------|------------|------------|-------|-------|-------------------|
| TOPORS              | 0.02676617 | 0.56634311 | 0.318 | 0.459 | 1 CD4_EM_CTL_lung |
| EIF4E2              | 0.02732021 | 0.72373739 | 0.228 | 0.315 | 1 CD4_EM_CTL_lung |
| SYTL3               | 0.02819003 | 0.40435577 | 0.531 | 0.624 | 1 CD4_EM_CTL_lung |
| ENSMMUG000000061630 | 0.02983254 | 0.69417663 | 0.244 | 0.34  | 1 CD4_EM_CTL_lung |
| EIF2S2              | 0.03039532 | 0.4622813  | 0.343 | 0.477 | 1 CD4_EM_CTL_lung |
| MAMU-A              | 0.03061374 | 0.16164616 | 0.614 | 0.837 | 1 CD4_EM_CTL_lung |
| BZW1                | 0.0322741  | 0.60084886 | 0.504 | 0.651 | 1 CD4_EM_CTL_lung |
| YWHAB               | 0.03464552 | 0.55732045 | 0.487 | 0.633 | 1 CD4_EM_CTL_lung |
| PPP1R18             | 0.03617817 | 0.8181677  | 0.21  | 0.289 | 1 CD4_EM_CTL_lung |
| GADD45B             | 0.03818405 | 0.65227207 | 0.286 | 0.381 | 1 CD4_EM_CTL_lung |
| LLPH                | 0.03954679 | 1.15467885 | 0.283 | 0.319 | 1 CD4_EM_CTL_lung |
| ENSMMUG000000006206 | 0.04008519 | 0.6930857  | 0.335 | 0.476 | 1 CD4_EM_CTL_lung |
| UCP2                | 0.04064015 | 1.10983479 | 0.281 | 0.315 | 1 CD4_EM_CTL_lung |
| TMEM147             | 0.04211609 | 1.23559781 | 0.316 | 0.375 | 1 CD4_EM_CTL_lung |
| COX20               | 0.04315951 | 1.19967027 | 0.256 | 0.278 | 1 CD4_EM_CTL_lung |
| BUD23               | 0.04330878 | 0.63046469 | 0.331 | 0.468 | 1 CD4_EM_CTL_lung |
| ST13                | 0.04745803 | 0.46852888 | 0.362 | 0.518 | 1 CD4_EM_CTL_lung |
| RPS4Y2              | 0.04847453 | 0.75750386 | 0.215 | 0.286 | 1 CD4_EM_CTL_lung |
| ENSMMUG000000053392 | 0.04875465 | 0.72958171 | 0.418 | 0.522 | 1 CD4_EM_CTL_lung |
| MIF                 | 0.05019718 | 0.57903339 | 0.39  | 0.574 | 1 CD4_EM_CTL_lung |
| VDAC2               | 0.05201624 | 0.4470023  | 0.353 | 0.505 | 1 CD4_EM_CTL_lung |
| LIMD2               | 0.05288894 | 0.7192793  | 0.442 | 0.576 | 1 CD4_EM_CTL_lung |
| ENSMMUG000000016278 | 0.05311156 | 0.6967404  | 0.253 | 0.346 | 1 CD4_EM_CTL_lung |
| ENSMMUG000000012019 | 0.05856523 | 1.00346216 | 0.313 | 0.369 | 1 CD4_EM_CTL_lung |
| ENSMMUG000000050829 | 0.06069844 | 0.607858   | 0.508 | 0.661 | 1 CD4_EM_CTL_lung |
| NDUFB7              | 0.06168758 | 1.08112603 | 0.283 | 0.322 | 1 CD4_EM_CTL_lung |
| SYF2                | 0.06174333 | 0.59716941 | 0.33  | 0.469 | 1 CD4_EM_CTL_lung |
| PSMB8               | 0.07220676 | 0.57208038 | 0.472 | 0.608 | 1 CD4_EM_CTL_lung |
| RNF7                | 0.08192087 | 1.12292087 | 0.271 | 0.308 | 1 CD4_EM_CTL_lung |
| PRDX1               | 0.08373367 | 1.1421325  | 0.272 | 0.308 | 1 CD4_EM_CTL_lung |
| ENSMMUG000000014862 | 0.08440161 | 0.56715976 | 0.337 | 0.471 | 1 CD4_EM_CTL_lung |
| THY1                | 0.08852667 | 1.00451162 | 0.281 | 0.314 | 1 CD4_EM_CTL_lung |
| AIP                 | 0.09174709 | 0.73599634 | 0.266 | 0.367 | 1 CD4_EM_CTL_lung |



|                    |            |            |       |       |                   |
|--------------------|------------|------------|-------|-------|-------------------|
| REXO2              | 0.09549652 | 0.87364737 | 0.229 | 0.306 | 1 CD4_EM_CTL_lung |
| HYPK               | 0.09674296 | 0.99029428 | 0.317 | 0.371 | 1 CD4_EM_CTL_lung |
| THYN1              | 0.10522687 | 0.82631686 | 0.197 | 0.259 | 1 CD4_EM_CTL_lung |
| MPC2               | 0.10907794 | 1.07043948 | 0.279 | 0.319 | 1 CD4_EM_CTL_lung |
| AIMP1              | 0.11244034 | 0.60394455 | 0.302 | 0.415 | 1 CD4_EM_CTL_lung |
| SEPTIN2            | 0.1230271  | 0.82760466 | 0.234 | 0.311 | 1 CD4_EM_CTL_lung |
| ENSMMUG00000043332 | 0.12390264 | 0.94140213 | 0.195 | 0.255 | 1 CD4_EM_CTL_lung |
| IRF3               | 0.12549176 | 0.86594932 | 0.209 | 0.278 | 1 CD4_EM_CTL_lung |
| TNFRSF1B           | 0.13670036 | 1.16468907 | 0.28  | 0.317 | 1 CD4_EM_CTL_lung |
| MRPL57             | 0.15747931 | 0.94401633 | 0.206 | 0.27  | 1 CD4_EM_CTL_lung |
| SLC25A3            | 0.17176572 | 0.55134528 | 0.388 | 0.552 | 1 CD4_EM_CTL_lung |
| PDE4B              | 0.1748018  | 0.80312457 | 0.295 | 0.327 | 1 CD4_EM_CTL_lung |
| PFDN6              | 0.17836098 | 0.82249841 | 0.233 | 0.307 | 1 CD4_EM_CTL_lung |
| MFNG               | 0.18231122 | 0.75633425 | 0.254 | 0.339 | 1 CD4_EM_CTL_lung |
| ENSMMUG00000016009 | 0.18354818 | 0.95793163 | 0.293 | 0.347 | 1 CD4_EM_CTL_lung |
| TMED9              | 0.18856078 | 1.16292691 | 0.256 | 0.294 | 1 CD4_EM_CTL_lung |
| C3H7orf50          | 0.19209658 | 0.63406865 | 0.442 | 0.581 | 1 CD4_EM_CTL_lung |
| AP2M1              | 0.19439808 | 1.06357815 | 0.248 | 0.282 | 1 CD4_EM_CTL_lung |
| CTSS               | 0.19817184 | 0.90844109 | 0.31  | 0.368 | 1 CD4_EM_CTL_lung |
| MDH2               | 0.19891094 | 0.96843987 | 0.298 | 0.355 | 1 CD4_EM_CTL_lung |
| CD2                | 0.20227382 | 0.64089694 | 0.374 | 0.527 | 1 CD4_EM_CTL_lung |
| LSM8               | 0.20596027 | 0.90714705 | 0.222 | 0.291 | 1 CD4_EM_CTL_lung |
| LSM5               | 0.20888243 | 1.08461572 | 0.257 | 0.294 | 1 CD4_EM_CTL_lung |
| POLR1H             | 0.21191905 | 1.10861    | 0.272 | 0.32  | 1 CD4_EM_CTL_lung |
| NDUFV2             | 0.21414367 | 0.91864082 | 0.331 | 0.408 | 1 CD4_EM_CTL_lung |
| TMBIM6             | 0.21898556 | 0.65843315 | 0.433 | 0.576 | 1 CD4_EM_CTL_lung |
| DNAJC19            | 0.21900349 | 1.03495198 | 0.286 | 0.337 | 1 CD4_EM_CTL_lung |
| EIF3I              | 0.22057844 | 0.86430292 | 0.277 | 0.379 | 1 CD4_EM_CTL_lung |
| ENSMMUG00000057449 | 0.22111319 | 1.04564326 | 0.27  | 0.316 | 1 CD4_EM_CTL_lung |
| BRK1               | 0.22576154 | 0.7838522  | 0.282 | 0.381 | 1 CD4_EM_CTL_lung |
| ENSMMUG00000018740 | 0.22675825 | 0.82465167 | 0.278 | 0.375 | 1 CD4_EM_CTL_lung |
| SARAF              | 0.22802956 | 0.3993291  | 0.594 | 0.789 | 1 CD4_EM_CTL_lung |
| PDCD10             | 0.24566247 | 0.75221713 | 0.36  | 0.452 | 1 CD4_EM_CTL_lung |

|                    |            |            |       |       |                   |
|--------------------|------------|------------|-------|-------|-------------------|
| RBIS               | 0.26388948 | 0.63978024 | 0.386 | 0.488 | 1 CD4_EM_CTL_lung |
| GTF3C6             | 0.26501894 | 0.81751843 | 0.219 | 0.283 | 1 CD4_EM_CTL_lung |
| PSMA4              | 0.28343282 | 0.75684644 | 0.277 | 0.367 | 1 CD4_EM_CTL_lung |
| GTF3C1             | 0.29344126 | 1.12806674 | 0.26  | 0.303 | 1 CD4_EM_CTL_lung |
| ENY2               | 0.30040554 | 0.66322373 | 0.342 | 0.468 | 1 CD4_EM_CTL_lung |
| TRMT112            | 0.30481335 | 0.64299573 | 0.4   | 0.512 | 1 CD4_EM_CTL_lung |
| PLGRKT             | 0.30628533 | 0.88711666 | 0.199 | 0.251 | 1 CD4_EM_CTL_lung |
| P2RY8              | 0.31841097 | 1.06282096 | 0.199 | 0.25  | 1 CD4_EM_CTL_lung |
| HSPE1              | 0.32424392 | 0.45845907 | 0.526 | 0.709 | 1 CD4_EM_CTL_lung |
| NDUFB5             | 0.32594622 | 1.04225093 | 0.241 | 0.279 | 1 CD4_EM_CTL_lung |
| DCTN3              | 0.34904022 | 0.74975508 | 0.28  | 0.37  | 1 CD4_EM_CTL_lung |
| ENSMMUG00000055627 | 0.35849411 | 0.35145952 | 0.49  | 0.685 | 1 CD4_EM_CTL_lung |
| ARF6               | 0.37605171 | 1.00804393 | 0.259 | 0.34  | 1 CD4_EM_CTL_lung |
| LAMTOR1            | 0.3779676  | 0.94086667 | 0.216 | 0.275 | 1 CD4_EM_CTL_lung |
| SNRPD1             | 0.38462037 | 0.82196266 | 0.263 | 0.343 | 1 CD4_EM_CTL_lung |
| BCAP31             | 0.38580175 | 0.88009823 | 0.247 | 0.318 | 1 CD4_EM_CTL_lung |
| SPCS3              | 0.39012544 | 0.74422564 | 0.326 | 0.446 | 1 CD4_EM_CTL_lung |
| RTRAF              | 0.39205327 | 0.61591935 | 0.362 | 0.5   | 1 CD4_EM_CTL_lung |
| PRR13              | 0.39372097 | 0.95393633 | 0.321 | 0.399 | 1 CD4_EM_CTL_lung |
| MAP1LC3B           | 0.40169349 | 0.77161446 | 0.309 | 0.417 | 1 CD4_EM_CTL_lung |
| ATG12              | 0.42688682 | 0.69391578 | 0.362 | 0.495 | 1 CD4_EM_CTL_lung |
| ENSMMUG00000018687 | 0.44043743 | 1.1307877  | 0.221 | 0.253 | 1 CD4_EM_CTL_lung |
| C14H11orf58        | 0.44691513 | 0.79884309 | 0.265 | 0.344 | 1 CD4_EM_CTL_lung |
| SNRPN              | 0.46734296 | 0.93296097 | 0.302 | 0.372 | 1 CD4_EM_CTL_lung |
| OSTC               | 0.48010181 | 0.86081816 | 0.326 | 0.412 | 1 CD4_EM_CTL_lung |
| FKBP1A             | 0.48174028 | 0.94230078 | 0.261 | 0.339 | 1 CD4_EM_CTL_lung |
| DPY30              | 0.48378297 | 0.93656207 | 0.217 | 0.272 | 1 CD4_EM_CTL_lung |
| SUMO1              | 0.50688008 | 0.55154496 | 0.39  | 0.546 | 1 CD4_EM_CTL_lung |
| C11H12orf57        | 0.5111908  | 0.57737306 | 0.442 | 0.577 | 1 CD4_EM_CTL_lung |
| TPM3               | 0.51596079 | 0.28603273 | 0.561 | 0.755 | 1 CD4_EM_CTL_lung |
| PYCARD             | 0.52353403 | 1.05470926 | 0.24  | 0.281 | 1 CD4_EM_CTL_lung |
| DDT                | 0.54105838 | 0.96746018 | 0.252 | 0.297 | 1 CD4_EM_CTL_lung |
| EEF1G              | 0.55642529 | 0.28263775 | 0.543 | 0.694 | 1 CD4_EM_CTL_lung |

|                    |            |            |       |       |                   |
|--------------------|------------|------------|-------|-------|-------------------|
| ANXA2              | 0.5656313  | 0.828987   | 0.242 | 0.301 | 1 CD4_EM_CTL_lung |
| PHF5A              | 0.56658244 | 0.99442334 | 0.246 | 0.292 | 1 CD4_EM_CTL_lung |
| CARHSP1            | 0.58576258 | 0.81303134 | 0.272 | 0.347 | 1 CD4_EM_CTL_lung |
| ANP32E             | 0.58694285 | 1.03210042 | 0.221 | 0.275 | 1 CD4_EM_CTL_lung |
| GABARAP            | 0.59457474 | 0.62054355 | 0.402 | 0.531 | 1 CD4_EM_CTL_lung |
| SEC62              | 0.60264673 | 0.72137323 | 0.348 | 0.446 | 1 CD4_EM_CTL_lung |
| ENSMMUG00000064120 | 0.60320596 | 0.81613613 | 0.342 | 0.43  | 1 CD4_EM_CTL_lung |
| IL2RG              | 0.62609457 | 0.46288435 | 0.447 | 0.621 | 1 CD4_EM_CTL_lung |
| SLC38A2            | 0.63063494 | 0.79243808 | 0.284 | 0.364 | 1 CD4_EM_CTL_lung |
| PSMB3              | 0.63194902 | 0.84570411 | 0.246 | 0.311 | 1 CD4_EM_CTL_lung |
| TMEM219            | 0.64326591 | 0.86163495 | 0.26  | 0.333 | 1 CD4_EM_CTL_lung |
| HMGB2              | 0.65222018 | 0.88406723 | 0.268 | 0.342 | 1 CD4_EM_CTL_lung |
| MRPS12             | 0.66138864 | 1.01657897 | 0.207 | 0.253 | 1 CD4_EM_CTL_lung |
| UBXN1              | 0.66738167 | 0.7011843  | 0.37  | 0.486 | 1 CD4_EM_CTL_lung |
| CDC42              | 0.66869967 | 0.1762193  | 0.716 | 0.892 | 1 CD4_EM_CTL_lung |
| RHOA               | 0.67712596 | 0.26301972 | 0.54  | 0.737 | 1 CD4_EM_CTL_lung |
| TWF2               | 0.69193612 | 0.79705112 | 0.286 | 0.365 | 1 CD4_EM_CTL_lung |
| PPDPF              | 0.6988558  | 0.99795571 | 0.224 | 0.276 | 1 CD4_EM_CTL_lung |
| TMEM230            | 0.70732239 | 1.01663482 | 0.243 | 0.304 | 1 CD4_EM_CTL_lung |
| PARK7              | 0.70815967 | 0.78904429 | 0.293 | 0.379 | 1 CD4_EM_CTL_lung |
| SNRPD2             | 0.70966275 | 0.46309535 | 0.441 | 0.608 | 1 CD4_EM_CTL_lung |
| PRMT2              | 0.71158528 | 1.03531502 | 0.212 | 0.259 | 1 CD4_EM_CTL_lung |
| SRP9               | 0.72535731 | 0.98470973 | 0.215 | 0.264 | 1 CD4_EM_CTL_lung |
| SPCS2              | 0.78002056 | 0.87275849 | 0.315 | 0.401 | 1 CD4_EM_CTL_lung |
| ND3                | 0.78428453 | 0.28098448 | 0.495 | 0.626 | 1 CD4_EM_CTL_lung |
| GIMAP4             | 0.7897733  | 0.96148013 | 0.21  | 0.251 | 1 CD4_EM_CTL_lung |
| RSL24D1            | 0.80811718 | 0.5740213  | 0.446 | 0.612 | 1 CD4_EM_CTL_lung |
| TMEM59             | 0.81016117 | 0.72153461 | 0.368 | 0.489 | 1 CD4_EM_CTL_lung |
| TSPO               | 0.81624998 | 0.97961805 | 0.216 | 0.251 | 1 CD4_EM_CTL_lung |
| PSMB7              | 0.83153569 | 0.48301032 | 0.445 | 0.606 | 1 CD4_EM_CTL_lung |
| ENSMMUG00000064531 | 0.83315236 | 0.95355156 | 0.219 | 0.266 | 1 CD4_EM_CTL_lung |
| ENSMMUG00000061128 | 0.84755251 | 0.71122057 | 0.335 | 0.44  | 1 CD4_EM_CTL_lung |
| HMGN3              | 0.88262504 | 0.86826263 | 0.266 | 0.325 | 1 CD4_EM_CTL_lung |

|                    |            |            |       |       |           |                  |
|--------------------|------------|------------|-------|-------|-----------|------------------|
| NDUFAB1            | 0.92480085 | 1.04016739 | 0.228 | 0.276 | 1         | CD4_EM_CTL_lung  |
| TMEM50A            | 0.92510132 | 0.76888101 | 0.355 | 0.47  | 1         | CD4_EM_CTL_lung  |
| SLIRP              | 0.93527932 | 0.45082963 | 0.45  | 0.601 | 1         | CD4_EM_CTL_lung  |
| SHISA5             | 0.97156978 | 0.74098468 | 0.347 | 0.457 | 1         | CD4_EM_CTL_lung  |
| SERBP1             | 0.97206824 | 0.51826676 | 0.436 | 0.591 | 1         | CD4_EM_CTL_lung  |
| MRPL11             | 0.97855286 | 0.88798461 | 0.266 | 0.332 | 1         | CD4_EM_CTL_lung  |
| MIC1               | 0.98276993 | 0.47859145 | 0.487 | 0.663 | 1         | CD4_EM_CTL_lung  |
| CAPZB              | 0.98563295 | 0.52098182 | 0.418 | 0.566 | 1         | CD4_EM_CTL_lung  |
| HBE1               | 1.97E-270  | 2.36304831 | 0.645 | 0.143 | 6.97E-266 | CD4_EM_CTL_UCBMC |
| HBA                | 9.69E-252  | 2.41886827 | 0.625 | 0.146 | 3.43E-247 | CD4_EM_CTL_UCBMC |
| CAMK4              | 1.76E-142  | 1.21591799 | 0.892 | 0.551 | 6.22E-138 | CD4_EM_CTL_UCBMC |
| PNISR              | 8.12E-93   | 0.8583188  | 0.879 | 0.666 | 2.88E-88  | CD4_EM_CTL_UCBMC |
| USP3               | 6.10E-81   | 1.06835749 | 0.73  | 0.464 | 2.16E-76  | CD4_EM_CTL_UCBMC |
| MPP7               | 7.04E-80   | 1.00511162 | 0.717 | 0.424 | 2.49E-75  | CD4_EM_CTL_UCBMC |
| OSBPL9             | 1.08E-78   | 0.92741064 | 0.794 | 0.556 | 3.82E-74  | CD4_EM_CTL_UCBMC |
| NCOA3              | 3.90E-78   | 0.83266114 | 0.842 | 0.605 | 1.38E-73  | CD4_EM_CTL_UCBMC |
| IL7R               | 5.32E-75   | 0.87584599 | 0.725 | 0.417 | 1.89E-70  | CD4_EM_CTL_UCBMC |
| GNG2               | 1.62E-71   | 0.68791561 | 0.859 | 0.587 | 5.74E-67  | CD4_EM_CTL_UCBMC |
| NKIRAS1            | 1.38E-69   | 1.41993723 | 0.459 | 0.204 | 4.89E-65  | CD4_EM_CTL_UCBMC |
| NUP54              | 5.54E-69   | 1.38418127 | 0.411 | 0.168 | 1.96E-64  | CD4_EM_CTL_UCBMC |
| USP15              | 1.60E-67   | 0.71521072 | 0.867 | 0.68  | 5.69E-63  | CD4_EM_CTL_UCBMC |
| MBTD1              | 3.31E-67   | 1.06678535 | 0.62  | 0.359 | 1.17E-62  | CD4_EM_CTL_UCBMC |
| DCP1A              | 8.09E-67   | 1.19718128 | 0.556 | 0.293 | 2.87E-62  | CD4_EM_CTL_UCBMC |
| COX3               | 2.84E-66   | 0.53037857 | 0.931 | 0.815 | 1.01E-61  | CD4_EM_CTL_UCBMC |
| ESYT2              | 4.31E-66   | 0.79161029 | 0.777 | 0.527 | 1.53E-61  | CD4_EM_CTL_UCBMC |
| EPB41              | 2.19E-65   | 0.78579087 | 0.838 | 0.623 | 7.77E-61  | CD4_EM_CTL_UCBMC |
| CDC14A             | 3.47E-65   | 0.80914534 | 0.742 | 0.48  | 1.23E-60  | CD4_EM_CTL_UCBMC |
| FAM117B            | 4.44E-65   | 1.03930118 | 0.608 | 0.34  | 1.57E-60  | CD4_EM_CTL_UCBMC |
| EMP3               | 9.23E-65   | 1.05766376 | 0.451 | 0.188 | 3.27E-60  | CD4_EM_CTL_UCBMC |
| ENSMMUG00000056654 | 8.36E-64   | 0.9069316  | 0.796 | 0.611 | 2.96E-59  | CD4_EM_CTL_UCBMC |
| G3BP2              | 1.16E-63   | 0.90007732 | 0.769 | 0.546 | 4.12E-59  | CD4_EM_CTL_UCBMC |
| EPC1               | 1.33E-63   | 0.75661825 | 0.825 | 0.622 | 4.73E-59  | CD4_EM_CTL_UCBMC |
| PLCL1              | 2.29E-63   | 1.18716054 | 0.461 | 0.211 | 8.12E-59  | CD4_EM_CTL_UCBMC |

|                    |          |            |       |       |          |                  |
|--------------------|----------|------------|-------|-------|----------|------------------|
| MTMR14             | 8.24E-62 | 1.46715448 | 0.384 | 0.161 | 2.92E-57 | CD4_EM_CTL_UCBMC |
| CUL3               | 2.10E-61 | 0.88253456 | 0.716 | 0.468 | 7.44E-57 | CD4_EM_CTL_UCBMC |
| FBXO33             | 2.18E-61 | 1.06463376 | 0.604 | 0.358 | 7.72E-57 | CD4_EM_CTL_UCBMC |
| RASA2              | 6.62E-61 | 0.80926588 | 0.796 | 0.576 | 2.35E-56 | CD4_EM_CTL_UCBMC |
| GOLGA4             | 8.27E-61 | 0.90591596 | 0.717 | 0.485 | 2.93E-56 | CD4_EM_CTL_UCBMC |
| CNTNAP2            | 2.36E-60 | 1.03621392 | 0.536 | 0.277 | 8.35E-56 | CD4_EM_CTL_UCBMC |
| CREBRF             | 3.84E-60 | 0.97097586 | 0.623 | 0.374 | 1.36E-55 | CD4_EM_CTL_UCBMC |
| SLC35A3            | 1.54E-59 | 0.90046743 | 0.644 | 0.391 | 5.45E-55 | CD4_EM_CTL_UCBMC |
| TIMM23             | 2.32E-59 | 1.25003531 | 0.491 | 0.258 | 8.21E-55 | CD4_EM_CTL_UCBMC |
| ENSMMUG00000047632 | 3.75E-59 | 1.01351099 | 0.554 | 0.301 | 1.33E-54 | CD4_EM_CTL_UCBMC |
| TFDP2              | 8.37E-59 | 0.92608505 | 0.662 | 0.416 | 2.97E-54 | CD4_EM_CTL_UCBMC |
| UBE2E1             | 9.10E-59 | 1.15315383 | 0.486 | 0.247 | 3.22E-54 | CD4_EM_CTL_UCBMC |
| PTBP2              | 1.62E-58 | 0.93378868 | 0.673 | 0.436 | 5.73E-54 | CD4_EM_CTL_UCBMC |
| EIF2AK3            | 1.65E-58 | 0.93832292 | 0.625 | 0.374 | 5.83E-54 | CD4_EM_CTL_UCBMC |
| SPPL3              | 4.27E-58 | 0.8727112  | 0.702 | 0.455 | 1.51E-53 | CD4_EM_CTL_UCBMC |
| CHD7               | 4.31E-58 | 1.09692267 | 0.505 | 0.261 | 1.53E-53 | CD4_EM_CTL_UCBMC |
| ENSMMUG00000011580 | 2.52E-57 | 0.86711975 | 0.715 | 0.492 | 8.93E-53 | CD4_EM_CTL_UCBMC |
| ITGA6              | 9.08E-57 | 0.84083914 | 0.625 | 0.358 | 3.22E-52 | CD4_EM_CTL_UCBMC |
| SENP5              | 1.29E-56 | 1.14455467 | 0.521 | 0.286 | 4.58E-52 | CD4_EM_CTL_UCBMC |
| S1PR1              | 1.85E-56 | 1.28349346 | 0.366 | 0.152 | 6.56E-52 | CD4_EM_CTL_UCBMC |
| AGO3               | 6.79E-56 | 0.84917567 | 0.659 | 0.412 | 2.40E-51 | CD4_EM_CTL_UCBMC |
| ATG13              | 1.55E-55 | 1.17090908 | 0.479 | 0.252 | 5.49E-51 | CD4_EM_CTL_UCBMC |
| RSRP1              | 5.82E-55 | 0.72585066 | 0.841 | 0.639 | 2.06E-50 | CD4_EM_CTL_UCBMC |
| RFX3               | 6.69E-55 | 0.71024104 | 0.773 | 0.535 | 2.37E-50 | CD4_EM_CTL_UCBMC |
| TSN                | 8.57E-55 | 1.35250515 | 0.379 | 0.168 | 3.04E-50 | CD4_EM_CTL_UCBMC |
| MAN2A1             | 3.07E-54 | 0.89720211 | 0.712 | 0.499 | 1.09E-49 | CD4_EM_CTL_UCBMC |
| EDRF1              | 4.65E-54 | 1.33741474 | 0.352 | 0.145 | 1.65E-49 | CD4_EM_CTL_UCBMC |
| ATG5               | 7.52E-54 | 1.01927869 | 0.531 | 0.296 | 2.66E-49 | CD4_EM_CTL_UCBMC |
| ENSMMUG00000065175 | 8.72E-54 | 1.13581527 | 0.535 | 0.311 | 3.09E-49 | CD4_EM_CTL_UCBMC |
| STK38              | 8.91E-54 | 0.86549305 | 0.689 | 0.452 | 3.16E-49 | CD4_EM_CTL_UCBMC |
| RICTOR             | 4.27E-53 | 0.82453288 | 0.72  | 0.508 | 1.51E-48 | CD4_EM_CTL_UCBMC |
| LEF1               | 6.20E-53 | 0.65242813 | 0.775 | 0.505 | 2.20E-48 | CD4_EM_CTL_UCBMC |
| ZNF292             | 3.61E-52 | 0.75200702 | 0.754 | 0.535 | 1.28E-47 | CD4_EM_CTL_UCBMC |

|                    |          |            |       |       |          |                  |
|--------------------|----------|------------|-------|-------|----------|------------------|
| STAG1              | 6.05E-52 | 0.65607135 | 0.845 | 0.652 | 2.14E-47 | CD4_EM_CTL_UCBMC |
| ABLIM1             | 7.58E-52 | 0.66188683 | 0.784 | 0.571 | 2.69E-47 | CD4_EM_CTL_UCBMC |
| VTA1               | 2.10E-51 | 1.08841895 | 0.465 | 0.242 | 7.45E-47 | CD4_EM_CTL_UCBMC |
| ATG14              | 1.08E-50 | 1.35973679 | 0.356 | 0.158 | 3.81E-46 | CD4_EM_CTL_UCBMC |
| LUC7L3             | 1.23E-50 | 0.80347144 | 0.708 | 0.49  | 4.35E-46 | CD4_EM_CTL_UCBMC |
| TNRC6A             | 1.45E-50 | 0.85536915 | 0.629 | 0.406 | 5.13E-46 | CD4_EM_CTL_UCBMC |
| WRN                | 2.36E-50 | 0.8761189  | 0.635 | 0.409 | 8.37E-46 | CD4_EM_CTL_UCBMC |
| DAAM1              | 3.97E-50 | 1.22999186 | 0.418 | 0.204 | 1.41E-45 | CD4_EM_CTL_UCBMC |
| WASHC5             | 7.55E-50 | 1.53019728 | 0.309 | 0.126 | 2.68E-45 | CD4_EM_CTL_UCBMC |
| BRAF               | 9.11E-50 | 0.74329351 | 0.71  | 0.496 | 3.23E-45 | CD4_EM_CTL_UCBMC |
| CTDSPL2            | 1.23E-49 | 0.93302824 | 0.593 | 0.368 | 4.35E-45 | CD4_EM_CTL_UCBMC |
| TUBB2B             | 1.26E-49 | 1.27807372 | 0.323 | 0.131 | 4.46E-45 | CD4_EM_CTL_UCBMC |
| TMEM87A            | 9.40E-49 | 0.94595729 | 0.568 | 0.342 | 3.33E-44 | CD4_EM_CTL_UCBMC |
| TM9SF3             | 3.38E-48 | 0.73290151 | 0.723 | 0.5   | 1.20E-43 | CD4_EM_CTL_UCBMC |
| CHMP7              | 4.41E-48 | 1.23184439 | 0.372 | 0.174 | 1.56E-43 | CD4_EM_CTL_UCBMC |
| ENSMMUG00000049151 | 1.37E-47 | 0.56070844 | 0.935 | 0.863 | 4.85E-43 | CD4_EM_CTL_UCBMC |
| SRSF11             | 2.23E-47 | 0.55868976 | 0.882 | 0.713 | 7.90E-43 | CD4_EM_CTL_UCBMC |
| ECD                | 1.48E-46 | 1.06554337 | 0.443 | 0.233 | 5.25E-42 | CD4_EM_CTL_UCBMC |
| RPL13A             | 1.70E-46 | 0.3997294  | 0.979 | 0.931 | 6.03E-42 | CD4_EM_CTL_UCBMC |
| LDLRAD4            | 3.23E-46 | 1.14440816 | 0.382 | 0.181 | 1.14E-41 | CD4_EM_CTL_UCBMC |
| MAPK8              | 3.65E-46 | 0.92008566 | 0.55  | 0.323 | 1.29E-41 | CD4_EM_CTL_UCBMC |
| ENSMMUG00000061038 | 4.46E-46 | 1.41857026 | 0.305 | 0.127 | 1.58E-41 | CD4_EM_CTL_UCBMC |
| LMBRD1             | 6.99E-46 | 0.87147927 | 0.62  | 0.404 | 2.48E-41 | CD4_EM_CTL_UCBMC |
| PNN                | 7.41E-46 | 0.79016117 | 0.671 | 0.46  | 2.63E-41 | CD4_EM_CTL_UCBMC |
| FOXN3              | 1.06E-45 | 0.59640714 | 0.875 | 0.696 | 3.77E-41 | CD4_EM_CTL_UCBMC |
| RCC1               | 1.67E-45 | 1.0134741  | 0.439 | 0.225 | 5.90E-41 | CD4_EM_CTL_UCBMC |
| CDC42SE2           | 3.68E-45 | 0.55590526 | 0.867 | 0.729 | 1.30E-40 | CD4_EM_CTL_UCBMC |
| CCSER2             | 4.53E-45 | 0.99555257 | 0.465 | 0.257 | 1.60E-40 | CD4_EM_CTL_UCBMC |
| RBM5               | 6.93E-45 | 0.75516144 | 0.646 | 0.428 | 2.45E-40 | CD4_EM_CTL_UCBMC |
| YIPF5              | 7.37E-45 | 1.25850991 | 0.366 | 0.175 | 2.61E-40 | CD4_EM_CTL_UCBMC |
| RHOH               | 2.74E-44 | 0.65706709 | 0.729 | 0.514 | 9.72E-40 | CD4_EM_CTL_UCBMC |
| EIF2AK2            | 3.05E-44 | 0.975958   | 0.442 | 0.233 | 1.08E-39 | CD4_EM_CTL_UCBMC |
| SNX4               | 7.14E-44 | 0.93495083 | 0.512 | 0.302 | 2.53E-39 | CD4_EM_CTL_UCBMC |

|                    |          |            |       |       |          |                  |
|--------------------|----------|------------|-------|-------|----------|------------------|
| TANC1              | 9.32E-44 | 1.30437389 | 0.275 | 0.109 | 3.30E-39 | CD4_EM_CTL_UCBMC |
| HIVEP1             | 1.45E-43 | 0.67922173 | 0.688 | 0.473 | 5.14E-39 | CD4_EM_CTL_UCBMC |
| RPL7               | 2.08E-43 | 0.47727108 | 0.917 | 0.823 | 7.36E-39 | CD4_EM_CTL_UCBMC |
| WDR48              | 2.40E-43 | 1.08868667 | 0.424 | 0.221 | 8.50E-39 | CD4_EM_CTL_UCBMC |
| SETD7              | 4.22E-43 | 1.3956574  | 0.303 | 0.13  | 1.49E-38 | CD4_EM_CTL_UCBMC |
| SSBP2              | 4.28E-43 | 0.84940209 | 0.626 | 0.417 | 1.52E-38 | CD4_EM_CTL_UCBMC |
| SSH2               | 7.09E-43 | 0.46389953 | 0.904 | 0.719 | 2.51E-38 | CD4_EM_CTL_UCBMC |
| MARCHF6            | 8.91E-43 | 0.74263272 | 0.692 | 0.486 | 3.16E-38 | CD4_EM_CTL_UCBMC |
| PPM1A              | 3.66E-42 | 1.05889264 | 0.43  | 0.228 | 1.30E-37 | CD4_EM_CTL_UCBMC |
| SCFD1              | 5.94E-42 | 0.96501854 | 0.542 | 0.337 | 2.10E-37 | CD4_EM_CTL_UCBMC |
| C20H16orf87        | 6.69E-42 | 1.20361375 | 0.349 | 0.167 | 2.37E-37 | CD4_EM_CTL_UCBMC |
| PRPF40A            | 6.82E-42 | 0.7349075  | 0.681 | 0.488 | 2.42E-37 | CD4_EM_CTL_UCBMC |
| PIK3CA             | 9.46E-42 | 0.99192232 | 0.479 | 0.277 | 3.35E-37 | CD4_EM_CTL_UCBMC |
| TMEM123            | 1.41E-41 | 0.64078927 | 0.806 | 0.652 | 5.01E-37 | CD4_EM_CTL_UCBMC |
| RAP1GAP2           | 1.86E-41 | 1.03535751 | 0.275 | 0.11  | 6.59E-37 | CD4_EM_CTL_UCBMC |
| COG5               | 1.91E-41 | 0.71352497 | 0.723 | 0.525 | 6.77E-37 | CD4_EM_CTL_UCBMC |
| DDX6               | 3.08E-41 | 0.68955968 | 0.705 | 0.504 | 1.09E-36 | CD4_EM_CTL_UCBMC |
| CERT1              | 3.33E-41 | 0.86320398 | 0.579 | 0.383 | 1.18E-36 | CD4_EM_CTL_UCBMC |
| CBLL1              | 3.40E-41 | 1.14715286 | 0.339 | 0.158 | 1.21E-36 | CD4_EM_CTL_UCBMC |
| TXNIP              | 4.17E-41 | 0.66001903 | 0.626 | 0.419 | 1.48E-36 | CD4_EM_CTL_UCBMC |
| WDFY2              | 6.12E-41 | 0.94263164 | 0.492 | 0.287 | 2.17E-36 | CD4_EM_CTL_UCBMC |
| CELF1              | 1.22E-40 | 0.73918261 | 0.687 | 0.482 | 4.33E-36 | CD4_EM_CTL_UCBMC |
| PRKD3              | 1.66E-40 | 1.05201352 | 0.417 | 0.222 | 5.88E-36 | CD4_EM_CTL_UCBMC |
| DLG1               | 1.85E-40 | 0.62583788 | 0.724 | 0.512 | 6.54E-36 | CD4_EM_CTL_UCBMC |
| ARHGAP15           | 3.81E-40 | 0.42385978 | 0.945 | 0.813 | 1.35E-35 | CD4_EM_CTL_UCBMC |
| RANBP9             | 1.00E-39 | 0.83743779 | 0.543 | 0.336 | 3.56E-35 | CD4_EM_CTL_UCBMC |
| PUM1               | 2.05E-39 | 0.62503084 | 0.774 | 0.581 | 7.27E-35 | CD4_EM_CTL_UCBMC |
| RALA               | 2.14E-39 | 0.98265561 | 0.487 | 0.286 | 7.57E-35 | CD4_EM_CTL_UCBMC |
| ENSMMUG00000056331 | 2.62E-39 | 0.80194226 | 0.453 | 0.242 | 9.28E-35 | CD4_EM_CTL_UCBMC |
| ARIH2              | 4.87E-39 | 0.81435417 | 0.521 | 0.312 | 1.72E-34 | CD4_EM_CTL_UCBMC |
| OSBPL8             | 6.12E-39 | 0.69332831 | 0.696 | 0.499 | 2.17E-34 | CD4_EM_CTL_UCBMC |
| TGS1               | 8.45E-39 | 0.95012751 | 0.444 | 0.25  | 2.99E-34 | CD4_EM_CTL_UCBMC |
| CNOT4              | 9.74E-39 | 0.69899531 | 0.647 | 0.445 | 3.45E-34 | CD4_EM_CTL_UCBMC |

|                   |          |            |       |       |          |                  |
|-------------------|----------|------------|-------|-------|----------|------------------|
| RBM39             | 1.06E-38 | 0.46797881 | 0.919 | 0.794 | 3.77E-34 | CD4_EM_CTL_UCBMC |
| APBB1IP           | 1.48E-38 | 0.48233569 | 0.892 | 0.774 | 5.23E-34 | CD4_EM_CTL_UCBMC |
| CLINT1            | 1.88E-38 | 0.67884254 | 0.69  | 0.48  | 6.67E-34 | CD4_EM_CTL_UCBMC |
| RAB1A             | 9.55E-38 | 0.69348019 | 0.664 | 0.462 | 3.38E-33 | CD4_EM_CTL_UCBMC |
| BIRC6             | 1.66E-37 | 0.53149693 | 0.817 | 0.644 | 5.90E-33 | CD4_EM_CTL_UCBMC |
| KLF12             | 1.76E-37 | 0.42647999 | 0.941 | 0.768 | 6.23E-33 | CD4_EM_CTL_UCBMC |
| MXI1              | 3.59E-37 | 1.07418499 | 0.331 | 0.161 | 1.27E-32 | CD4_EM_CTL_UCBMC |
| G2E3              | 5.09E-37 | 0.93620904 | 0.387 | 0.201 | 1.80E-32 | CD4_EM_CTL_UCBMC |
| PTPRA             | 5.41E-37 | 0.66854453 | 0.63  | 0.431 | 1.92E-32 | CD4_EM_CTL_UCBMC |
| RB1CC1            | 1.14E-36 | 0.87307657 | 0.458 | 0.267 | 4.04E-32 | CD4_EM_CTL_UCBMC |
| PLAA              | 1.61E-36 | 1.0921706  | 0.359 | 0.184 | 5.71E-32 | CD4_EM_CTL_UCBMC |
| TLE4              | 1.89E-36 | 0.74247769 | 0.581 | 0.377 | 6.71E-32 | CD4_EM_CTL_UCBMC |
| DNAJC2            | 1.97E-36 | 0.77212014 | 0.533 | 0.339 | 6.98E-32 | CD4_EM_CTL_UCBMC |
| ZNF644            | 1.98E-36 | 0.61509541 | 0.709 | 0.519 | 7.03E-32 | CD4_EM_CTL_UCBMC |
| BTBD10            | 2.01E-36 | 1.05575325 | 0.376 | 0.199 | 7.11E-32 | CD4_EM_CTL_UCBMC |
| BSDC1             | 4.11E-36 | 0.99980864 | 0.398 | 0.22  | 1.46E-31 | CD4_EM_CTL_UCBMC |
| SECISBP2L         | 4.15E-36 | 1.14552704 | 0.375 | 0.202 | 1.47E-31 | CD4_EM_CTL_UCBMC |
| SENP2             | 4.41E-36 | 0.98863943 | 0.435 | 0.248 | 1.56E-31 | CD4_EM_CTL_UCBMC |
| THUMPD2           | 5.82E-36 | 0.90525716 | 0.416 | 0.233 | 2.06E-31 | CD4_EM_CTL_UCBMC |
| POU2F1            | 7.05E-36 | 0.84850886 | 0.511 | 0.313 | 2.50E-31 | CD4_EM_CTL_UCBMC |
| AKT3              | 8.43E-36 | 0.45300512 | 0.811 | 0.603 | 2.99E-31 | CD4_EM_CTL_UCBMC |
| ENSMUG00000008346 | 1.27E-35 | 0.79320811 | 0.577 | 0.387 | 4.52E-31 | CD4_EM_CTL_UCBMC |
| SOS1              | 1.34E-35 | 0.68230844 | 0.593 | 0.394 | 4.76E-31 | CD4_EM_CTL_UCBMC |
| SUPV3L1           | 1.48E-35 | 1.25873654 | 0.265 | 0.115 | 5.23E-31 | CD4_EM_CTL_UCBMC |
| YEATS2            | 1.59E-35 | 0.59766836 | 0.683 | 0.483 | 5.62E-31 | CD4_EM_CTL_UCBMC |
| SMCHD1            | 2.70E-35 | 0.67354452 | 0.719 | 0.547 | 9.58E-31 | CD4_EM_CTL_UCBMC |
| RPS20             | 2.79E-35 | 0.37892981 | 0.963 | 0.876 | 9.88E-31 | CD4_EM_CTL_UCBMC |
| SETD2             | 6.06E-35 | 0.55966385 | 0.757 | 0.566 | 2.15E-30 | CD4_EM_CTL_UCBMC |
| MON2              | 1.06E-34 | 0.87687651 | 0.478 | 0.291 | 3.76E-30 | CD4_EM_CTL_UCBMC |
| UBXN7             | 1.11E-34 | 0.91628484 | 0.468 | 0.283 | 3.92E-30 | CD4_EM_CTL_UCBMC |
| TCERG1            | 1.15E-34 | 0.83440685 | 0.501 | 0.311 | 4.07E-30 | CD4_EM_CTL_UCBMC |
| SLC30A7           | 1.41E-34 | 0.62257632 | 0.615 | 0.398 | 4.99E-30 | CD4_EM_CTL_UCBMC |
| MARCHF7           | 1.78E-34 | 0.67365618 | 0.63  | 0.428 | 6.29E-30 | CD4_EM_CTL_UCBMC |



|                    |          |            |       |       |          |                  |
|--------------------|----------|------------|-------|-------|----------|------------------|
| TXNDC11            | 1.97E-34 | 1.06632325 | 0.363 | 0.194 | 6.99E-30 | CD4_EM_CTL_UCBMC |
| CSNK1A1            | 2.44E-34 | 0.5786391  | 0.726 | 0.551 | 8.66E-30 | CD4_EM_CTL_UCBMC |
| DBF4               | 2.64E-34 | 0.94971308 | 0.348 | 0.176 | 9.35E-30 | CD4_EM_CTL_UCBMC |
| SAP30BP            | 2.65E-34 | 1.00042669 | 0.396 | 0.219 | 9.39E-30 | CD4_EM_CTL_UCBMC |
| ACTR2              | 2.95E-34 | 0.53101602 | 0.809 | 0.667 | 1.05E-29 | CD4_EM_CTL_UCBMC |
| TEC                | 4.58E-34 | 0.5577139  | 0.63  | 0.417 | 1.62E-29 | CD4_EM_CTL_UCBMC |
| SIAH1              | 6.56E-34 | 1.24852516 | 0.298 | 0.143 | 2.33E-29 | CD4_EM_CTL_UCBMC |
| GOLGA1             | 7.85E-34 | 0.65011548 | 0.729 | 0.551 | 2.78E-29 | CD4_EM_CTL_UCBMC |
| RAB2A              | 1.24E-33 | 0.66252955 | 0.692 | 0.53  | 4.39E-29 | CD4_EM_CTL_UCBMC |
| INO80D             | 1.47E-33 | 0.79600126 | 0.495 | 0.307 | 5.22E-29 | CD4_EM_CTL_UCBMC |
| U2SURP             | 1.83E-33 | 0.67351531 | 0.624 | 0.435 | 6.48E-29 | CD4_EM_CTL_UCBMC |
| KLF7               | 2.83E-33 | 1.2642209  | 0.296 | 0.142 | 1.00E-28 | CD4_EM_CTL_UCBMC |
| UTRN               | 3.43E-33 | 0.3701697  | 0.932 | 0.769 | 1.21E-28 | CD4_EM_CTL_UCBMC |
| ZNF654             | 4.17E-33 | 0.86639907 | 0.411 | 0.233 | 1.48E-28 | CD4_EM_CTL_UCBMC |
| IREB2              | 4.38E-33 | 0.88116115 | 0.439 | 0.254 | 1.55E-28 | CD4_EM_CTL_UCBMC |
| HERC1              | 4.48E-33 | 0.72765317 | 0.565 | 0.372 | 1.59E-28 | CD4_EM_CTL_UCBMC |
| NUP133             | 4.93E-33 | 1.0955157  | 0.302 | 0.146 | 1.75E-28 | CD4_EM_CTL_UCBMC |
| NRAS               | 6.11E-33 | 1.09713394 | 0.31  | 0.153 | 2.16E-28 | CD4_EM_CTL_UCBMC |
| MRTFA              | 8.90E-33 | 0.73663341 | 0.515 | 0.317 | 3.15E-28 | CD4_EM_CTL_UCBMC |
| MRPS35             | 9.12E-33 | 0.93516867 | 0.393 | 0.219 | 3.23E-28 | CD4_EM_CTL_UCBMC |
| CTNNB1             | 1.28E-32 | 0.62274288 | 0.675 | 0.495 | 4.53E-28 | CD4_EM_CTL_UCBMC |
| TAX1BP1            | 1.36E-32 | 0.59246208 | 0.689 | 0.5   | 4.83E-28 | CD4_EM_CTL_UCBMC |
| RNF4               | 1.38E-32 | 0.94472745 | 0.368 | 0.199 | 4.87E-28 | CD4_EM_CTL_UCBMC |
| ENSMMUG00000028906 | 2.82E-32 | 0.65036708 | 0.62  | 0.427 | 9.98E-28 | CD4_EM_CTL_UCBMC |
| RLF                | 4.04E-32 | 0.64217963 | 0.609 | 0.419 | 1.43E-27 | CD4_EM_CTL_UCBMC |
| ZNF92              | 4.73E-32 | 0.90981466 | 0.443 | 0.265 | 1.68E-27 | CD4_EM_CTL_UCBMC |
| ENSMMUG00000059977 | 4.74E-32 | 1.28202176 | 0.258 | 0.118 | 1.68E-27 | CD4_EM_CTL_UCBMC |
| SCAPER             | 5.17E-32 | 0.55936013 | 0.726 | 0.532 | 1.83E-27 | CD4_EM_CTL_UCBMC |
| MTREX              | 5.53E-32 | 0.52721049 | 0.72  | 0.534 | 1.96E-27 | CD4_EM_CTL_UCBMC |
| SELL               | 5.78E-32 | 0.63186043 | 0.5   | 0.297 | 2.05E-27 | CD4_EM_CTL_UCBMC |
| UTY                | 6.36E-32 | 0.68005742 | 0.472 | 0.278 | 2.26E-27 | CD4_EM_CTL_UCBMC |
| NCAPD3             | 1.31E-31 | 0.88226412 | 0.384 | 0.214 | 4.63E-27 | CD4_EM_CTL_UCBMC |
| THOC1              | 1.69E-31 | 0.94171172 | 0.38  | 0.211 | 6.00E-27 | CD4_EM_CTL_UCBMC |

|                   |          |            |       |       |          |                  |
|-------------------|----------|------------|-------|-------|----------|------------------|
| NUCB2             | 1.92E-31 | 0.86238758 | 0.461 | 0.279 | 6.81E-27 | CD4_EM_CTL_UCBMC |
| YME1L1            | 1.93E-31 | 0.70483405 | 0.531 | 0.35  | 6.82E-27 | CD4_EM_CTL_UCBMC |
| DNM3              | 2.15E-31 | 0.88300354 | 0.364 | 0.197 | 7.61E-27 | CD4_EM_CTL_UCBMC |
| S100A10           | 2.21E-31 | 0.41373389 | 0.808 | 0.628 | 7.85E-27 | CD4_EM_CTL_UCBMC |
| BIN3              | 2.52E-31 | 0.82535276 | 0.48  | 0.3   | 8.92E-27 | CD4_EM_CTL_UCBMC |
| PDE3B             | 2.55E-31 | 0.70468309 | 0.568 | 0.388 | 9.04E-27 | CD4_EM_CTL_UCBMC |
| BNIP3L            | 3.46E-31 | 0.68807033 | 0.499 | 0.313 | 1.23E-26 | CD4_EM_CTL_UCBMC |
| UHRF1BP1L         | 3.56E-31 | 0.77219271 | 0.497 | 0.312 | 1.26E-26 | CD4_EM_CTL_UCBMC |
| TLK1              | 4.80E-31 | 0.55848818 | 0.668 | 0.484 | 1.70E-26 | CD4_EM_CTL_UCBMC |
| ENSMUG00000063979 | 5.29E-31 | 0.90215049 | 0.442 | 0.271 | 1.87E-26 | CD4_EM_CTL_UCBMC |
| ZMYM5             | 6.29E-31 | 0.82083721 | 0.383 | 0.213 | 2.23E-26 | CD4_EM_CTL_UCBMC |
| ADD3              | 8.12E-31 | 0.56185583 | 0.634 | 0.435 | 2.88E-26 | CD4_EM_CTL_UCBMC |
| TCP11L2           | 8.88E-31 | 0.78937657 | 0.401 | 0.228 | 3.15E-26 | CD4_EM_CTL_UCBMC |
| PTPN1             | 9.14E-31 | 0.79614292 | 0.497 | 0.32  | 3.24E-26 | CD4_EM_CTL_UCBMC |
| TAPT1             | 9.36E-31 | 0.94871383 | 0.342 | 0.182 | 3.32E-26 | CD4_EM_CTL_UCBMC |
| FBXL20            | 9.70E-31 | 0.63973883 | 0.603 | 0.418 | 3.44E-26 | CD4_EM_CTL_UCBMC |
| CMTR1             | 1.14E-30 | 0.89440884 | 0.361 | 0.198 | 4.04E-26 | CD4_EM_CTL_UCBMC |
| ENSMUG00000006165 | 1.16E-30 | 0.42325541 | 0.872 | 0.711 | 4.12E-26 | CD4_EM_CTL_UCBMC |
| TBC1D22B          | 1.25E-30 | 1.04964941 | 0.293 | 0.145 | 4.42E-26 | CD4_EM_CTL_UCBMC |
| WDR43             | 1.67E-30 | 0.73178414 | 0.514 | 0.339 | 5.91E-26 | CD4_EM_CTL_UCBMC |
| ARHGEF3           | 1.68E-30 | 0.79131195 | 0.496 | 0.316 | 5.96E-26 | CD4_EM_CTL_UCBMC |
| RNF13             | 2.29E-30 | 0.75952162 | 0.551 | 0.373 | 8.13E-26 | CD4_EM_CTL_UCBMC |
| TRA2A             | 2.95E-30 | 0.45261948 | 0.879 | 0.727 | 1.04E-25 | CD4_EM_CTL_UCBMC |
| FOXP1             | 4.18E-30 | 0.66499665 | 0.61  | 0.429 | 1.48E-25 | CD4_EM_CTL_UCBMC |
| ENSMUG00000064068 | 4.87E-30 | 1.22478804 | 0.255 | 0.117 | 1.73E-25 | CD4_EM_CTL_UCBMC |
| KDM7A             | 7.19E-30 | 0.93010475 | 0.381 | 0.217 | 2.55E-25 | CD4_EM_CTL_UCBMC |
| EIF3A             | 8.27E-30 | 0.60693419 | 0.635 | 0.452 | 2.93E-25 | CD4_EM_CTL_UCBMC |
| CAPG              | 9.51E-30 | 0.44172057 | 0.315 | 0.154 | 3.37E-25 | CD4_EM_CTL_UCBMC |
| STK38L            | 9.94E-30 | 1.04078632 | 0.293 | 0.148 | 3.52E-25 | CD4_EM_CTL_UCBMC |
| RFC1              | 1.02E-29 | 0.70099585 | 0.55  | 0.379 | 3.63E-25 | CD4_EM_CTL_UCBMC |
| NIPBL             | 1.11E-29 | 0.51437876 | 0.675 | 0.49  | 3.93E-25 | CD4_EM_CTL_UCBMC |
| CCDC91            | 1.11E-29 | 0.54901932 | 0.718 | 0.554 | 3.94E-25 | CD4_EM_CTL_UCBMC |
| FAM172A           | 1.27E-29 | 0.47028614 | 0.79  | 0.617 | 4.50E-25 | CD4_EM_CTL_UCBMC |

|                    |          |            |       |       |          |                  |
|--------------------|----------|------------|-------|-------|----------|------------------|
| MBTPS1             | 1.34E-29 | 0.79821485 | 0.467 | 0.294 | 4.75E-25 | CD4_EM_CTL_UCBMC |
| VEZT               | 1.76E-29 | 1.09606603 | 0.34  | 0.186 | 6.24E-25 | CD4_EM_CTL_UCBMC |
| GPR107             | 1.97E-29 | 0.81661819 | 0.46  | 0.287 | 6.97E-25 | CD4_EM_CTL_UCBMC |
| ATF2               | 2.14E-29 | 0.54733246 | 0.604 | 0.414 | 7.58E-25 | CD4_EM_CTL_UCBMC |
| ZNF93              | 2.61E-29 | 0.77135479 | 0.412 | 0.239 | 9.23E-25 | CD4_EM_CTL_UCBMC |
| PCED1B             | 2.76E-29 | 1.09059392 | 0.268 | 0.13  | 9.77E-25 | CD4_EM_CTL_UCBMC |
| FAM13A             | 2.84E-29 | 0.75260591 | 0.457 | 0.282 | 1.01E-24 | CD4_EM_CTL_UCBMC |
| CCM2               | 3.03E-29 | 0.61723983 | 0.652 | 0.475 | 1.07E-24 | CD4_EM_CTL_UCBMC |
| ARHGAP12           | 3.31E-29 | 0.7902533  | 0.438 | 0.267 | 1.17E-24 | CD4_EM_CTL_UCBMC |
| LATS1              | 4.35E-29 | 0.94651671 | 0.32  | 0.169 | 1.54E-24 | CD4_EM_CTL_UCBMC |
| RASSF3             | 4.63E-29 | 0.55392551 | 0.493 | 0.307 | 1.64E-24 | CD4_EM_CTL_UCBMC |
| CAPN7              | 6.16E-29 | 0.86815112 | 0.37  | 0.208 | 2.18E-24 | CD4_EM_CTL_UCBMC |
| BMPR1B             | 6.30E-29 | 1.11399957 | 0.269 | 0.129 | 2.23E-24 | CD4_EM_CTL_UCBMC |
| TTC17              | 6.40E-29 | 0.68277519 | 0.582 | 0.412 | 2.27E-24 | CD4_EM_CTL_UCBMC |
| NUP214             | 8.26E-29 | 0.72531868 | 0.475 | 0.304 | 2.93E-24 | CD4_EM_CTL_UCBMC |
| ARMC8              | 9.19E-29 | 0.79106068 | 0.467 | 0.294 | 3.26E-24 | CD4_EM_CTL_UCBMC |
| PIK3R5             | 1.03E-28 | 0.67260656 | 0.557 | 0.373 | 3.66E-24 | CD4_EM_CTL_UCBMC |
| ENSMMUG00000031367 | 1.06E-28 | 0.79440509 | 0.392 | 0.226 | 3.77E-24 | CD4_EM_CTL_UCBMC |
| PRDM2              | 1.28E-28 | 0.70736644 | 0.504 | 0.324 | 4.53E-24 | CD4_EM_CTL_UCBMC |
| FOXJ3              | 1.39E-28 | 0.66999904 | 0.574 | 0.4   | 4.93E-24 | CD4_EM_CTL_UCBMC |
| RNF38              | 1.45E-28 | 0.59866512 | 0.605 | 0.43  | 5.14E-24 | CD4_EM_CTL_UCBMC |
| EPC2               | 2.00E-28 | 0.64779086 | 0.567 | 0.39  | 7.08E-24 | CD4_EM_CTL_UCBMC |
| DDX47              | 2.08E-28 | 1.16305644 | 0.26  | 0.126 | 7.37E-24 | CD4_EM_CTL_UCBMC |
| MACO1              | 2.38E-28 | 0.7753536  | 0.452 | 0.286 | 8.42E-24 | CD4_EM_CTL_UCBMC |
| DAZAP2             | 2.38E-28 | 0.59302464 | 0.59  | 0.41  | 8.45E-24 | CD4_EM_CTL_UCBMC |
| MED23              | 2.48E-28 | 0.79203054 | 0.411 | 0.245 | 8.79E-24 | CD4_EM_CTL_UCBMC |
| CNOT1              | 2.53E-28 | 0.64942724 | 0.576 | 0.404 | 8.98E-24 | CD4_EM_CTL_UCBMC |
| DNAJB12            | 3.42E-28 | 1.06296017 | 0.256 | 0.122 | 1.21E-23 | CD4_EM_CTL_UCBMC |
| CAMTA1             | 3.79E-28 | 0.64565481 | 0.575 | 0.4   | 1.34E-23 | CD4_EM_CTL_UCBMC |
| RPS14              | 4.42E-28 | 0.32282022 | 0.975 | 0.941 | 1.57E-23 | CD4_EM_CTL_UCBMC |
| NIPSNAP2           | 5.31E-28 | 0.81727043 | 0.411 | 0.251 | 1.88E-23 | CD4_EM_CTL_UCBMC |
| RPRD1A             | 5.86E-28 | 0.94350947 | 0.369 | 0.216 | 2.08E-23 | CD4_EM_CTL_UCBMC |
| N4BP1              | 7.59E-28 | 0.84961412 | 0.371 | 0.212 | 2.69E-23 | CD4_EM_CTL_UCBMC |

|                    |          |            |       |       |          |                  |
|--------------------|----------|------------|-------|-------|----------|------------------|
| GIT2               | 7.93E-28 | 0.73981482 | 0.525 | 0.359 | 2.81E-23 | CD4_EM_CTL_UCBMC |
| USP33              | 8.30E-28 | 0.80747438 | 0.407 | 0.244 | 2.94E-23 | CD4_EM_CTL_UCBMC |
| CASP8              | 1.01E-27 | 0.68274558 | 0.522 | 0.344 | 3.59E-23 | CD4_EM_CTL_UCBMC |
| FOXO1              | 1.05E-27 | 0.55488816 | 0.569 | 0.388 | 3.73E-23 | CD4_EM_CTL_UCBMC |
| ENSMMUG00000030448 | 1.11E-27 | 0.75447385 | 0.495 | 0.331 | 3.94E-23 | CD4_EM_CTL_UCBMC |
| RAB5A              | 1.77E-27 | 0.66215807 | 0.537 | 0.368 | 6.26E-23 | CD4_EM_CTL_UCBMC |
| VPS13B             | 1.77E-27 | 0.39153447 | 0.852 | 0.685 | 6.28E-23 | CD4_EM_CTL_UCBMC |
| ZFC3H1             | 1.89E-27 | 0.59162874 | 0.591 | 0.408 | 6.70E-23 | CD4_EM_CTL_UCBMC |
| KMT2E              | 2.22E-27 | 0.47144536 | 0.743 | 0.586 | 7.88E-23 | CD4_EM_CTL_UCBMC |
| MCM9               | 2.23E-27 | 0.88919894 | 0.391 | 0.23  | 7.91E-23 | CD4_EM_CTL_UCBMC |
| RSF1               | 2.23E-27 | 0.53240401 | 0.677 | 0.501 | 7.91E-23 | CD4_EM_CTL_UCBMC |
| MARF1              | 2.50E-27 | 1.06136133 | 0.278 | 0.14  | 8.85E-23 | CD4_EM_CTL_UCBMC |
| MINDY3             | 3.22E-27 | 0.90765066 | 0.412 | 0.251 | 1.14E-22 | CD4_EM_CTL_UCBMC |
| ENSMMUG00000014862 | 5.82E-27 | 0.61919293 | 0.575 | 0.409 | 2.06E-22 | CD4_EM_CTL_UCBMC |
| CCNK               | 5.87E-27 | 0.69555601 | 0.531 | 0.363 | 2.08E-22 | CD4_EM_CTL_UCBMC |
| CENPC              | 5.89E-27 | 0.8739739  | 0.408 | 0.252 | 2.09E-22 | CD4_EM_CTL_UCBMC |
| RAB18              | 6.34E-27 | 0.763161   | 0.411 | 0.249 | 2.25E-22 | CD4_EM_CTL_UCBMC |
| SUCLG2             | 6.74E-27 | 0.6183447  | 0.613 | 0.44  | 2.39E-22 | CD4_EM_CTL_UCBMC |
| MBNL2              | 1.02E-26 | 0.6999339  | 0.532 | 0.364 | 3.62E-22 | CD4_EM_CTL_UCBMC |
| CPEB1              | 1.46E-26 | 0.28721038 | 0.957 | 0.915 | 5.17E-22 | CD4_EM_CTL_UCBMC |
| DHX9               | 1.74E-26 | 0.57491062 | 0.621 | 0.452 | 6.16E-22 | CD4_EM_CTL_UCBMC |
| SEC31A             | 1.86E-26 | 0.59975838 | 0.608 | 0.435 | 6.60E-22 | CD4_EM_CTL_UCBMC |
| RPL23A             | 2.00E-26 | 0.30299961 | 0.976 | 0.946 | 7.07E-22 | CD4_EM_CTL_UCBMC |
| TMCC1              | 3.02E-26 | 0.69726585 | 0.522 | 0.355 | 1.07E-21 | CD4_EM_CTL_UCBMC |
| DIP2B              | 3.20E-26 | 0.4759275  | 0.705 | 0.537 | 1.13E-21 | CD4_EM_CTL_UCBMC |
| DCK                | 3.66E-26 | 0.87617596 | 0.294 | 0.153 | 1.30E-21 | CD4_EM_CTL_UCBMC |
| MIER1              | 3.78E-26 | 0.53271134 | 0.653 | 0.483 | 1.34E-21 | CD4_EM_CTL_UCBMC |
| RBM27              | 4.94E-26 | 0.62577415 | 0.556 | 0.386 | 1.75E-21 | CD4_EM_CTL_UCBMC |
| KPNA3              | 5.14E-26 | 0.66524059 | 0.451 | 0.285 | 1.82E-21 | CD4_EM_CTL_UCBMC |
| CUL2               | 6.01E-26 | 0.76048732 | 0.401 | 0.243 | 2.13E-21 | CD4_EM_CTL_UCBMC |
| CUL5               | 7.08E-26 | 0.59888883 | 0.629 | 0.48  | 2.51E-21 | CD4_EM_CTL_UCBMC |
| ARID4B             | 7.19E-26 | 0.33305797 | 0.879 | 0.708 | 2.55E-21 | CD4_EM_CTL_UCBMC |
| CSDE1              | 7.79E-26 | 0.6012338  | 0.639 | 0.486 | 2.76E-21 | CD4_EM_CTL_UCBMC |

|                    |          |            |       |       |          |                  |
|--------------------|----------|------------|-------|-------|----------|------------------|
| SEPTIN6            | 8.11E-26 | 0.40142092 | 0.835 | 0.678 | 2.87E-21 | CD4_EM_CTL_UCBMC |
| FBXO28             | 8.38E-26 | 0.92826261 | 0.303 | 0.161 | 2.97E-21 | CD4_EM_CTL_UCBMC |
| GTPBP10            | 8.39E-26 | 0.86764161 | 0.357 | 0.207 | 2.97E-21 | CD4_EM_CTL_UCBMC |
| ATP2B1             | 8.62E-26 | 0.70106282 | 0.425 | 0.258 | 3.06E-21 | CD4_EM_CTL_UCBMC |
| VPS4B              | 1.03E-25 | 0.71875555 | 0.445 | 0.287 | 3.64E-21 | CD4_EM_CTL_UCBMC |
| ESCO1              | 1.07E-25 | 0.57000164 | 0.555 | 0.386 | 3.78E-21 | CD4_EM_CTL_UCBMC |
| SLMAP              | 1.08E-25 | 0.50975572 | 0.614 | 0.442 | 3.82E-21 | CD4_EM_CTL_UCBMC |
| ZNF43              | 1.12E-25 | 0.74851649 | 0.453 | 0.291 | 3.97E-21 | CD4_EM_CTL_UCBMC |
| LRBA               | 1.14E-25 | 0.38985112 | 0.808 | 0.634 | 4.04E-21 | CD4_EM_CTL_UCBMC |
| TRPM7              | 1.25E-25 | 0.40516277 | 0.785 | 0.616 | 4.45E-21 | CD4_EM_CTL_UCBMC |
| ENSMMUG00000055457 | 1.30E-25 | 0.61630885 | 0.478 | 0.314 | 4.62E-21 | CD4_EM_CTL_UCBMC |
| AMBRA1             | 1.40E-25 | 0.71292141 | 0.479 | 0.315 | 4.97E-21 | CD4_EM_CTL_UCBMC |
| XRN1               | 1.42E-25 | 0.61935022 | 0.54  | 0.368 | 5.02E-21 | CD4_EM_CTL_UCBMC |
| CPSF3              | 1.56E-25 | 0.851882   | 0.374 | 0.221 | 5.52E-21 | CD4_EM_CTL_UCBMC |
| GPATCH8            | 1.61E-25 | 0.62862293 | 0.578 | 0.42  | 5.70E-21 | CD4_EM_CTL_UCBMC |
| MED15              | 1.77E-25 | 0.82219523 | 0.349 | 0.202 | 6.26E-21 | CD4_EM_CTL_UCBMC |
| TNKS               | 1.85E-25 | 0.65769632 | 0.577 | 0.409 | 6.56E-21 | CD4_EM_CTL_UCBMC |
| MAX                | 1.91E-25 | 0.60462301 | 0.541 | 0.375 | 6.76E-21 | CD4_EM_CTL_UCBMC |
| EEF2               | 1.96E-25 | 0.45346552 | 0.798 | 0.657 | 6.94E-21 | CD4_EM_CTL_UCBMC |
| NRIP1              | 2.04E-25 | 0.4973725  | 0.643 | 0.475 | 7.24E-21 | CD4_EM_CTL_UCBMC |
| SS18               | 2.22E-25 | 0.74240202 | 0.505 | 0.349 | 7.88E-21 | CD4_EM_CTL_UCBMC |
| SELENOT            | 2.23E-25 | 0.92111038 | 0.343 | 0.198 | 7.91E-21 | CD4_EM_CTL_UCBMC |
| LRR8C              | 2.50E-25 | 0.86016288 | 0.394 | 0.238 | 8.84E-21 | CD4_EM_CTL_UCBMC |
| ABCB7              | 2.71E-25 | 1.03988796 | 0.34  | 0.198 | 9.62E-21 | CD4_EM_CTL_UCBMC |
| C1GALT1            | 2.94E-25 | 0.81396685 | 0.403 | 0.248 | 1.04E-20 | CD4_EM_CTL_UCBMC |
| MAML2              | 3.13E-25 | 0.39452824 | 0.82  | 0.654 | 1.11E-20 | CD4_EM_CTL_UCBMC |
| ZEB1               | 3.51E-25 | 0.4438603  | 0.778 | 0.628 | 1.24E-20 | CD4_EM_CTL_UCBMC |
| FAM160B1           | 3.89E-25 | 1.10193875 | 0.26  | 0.132 | 1.38E-20 | CD4_EM_CTL_UCBMC |
| CCNT2              | 4.24E-25 | 0.76032612 | 0.431 | 0.274 | 1.50E-20 | CD4_EM_CTL_UCBMC |
| KMT2C              | 4.50E-25 | 0.37590968 | 0.822 | 0.651 | 1.60E-20 | CD4_EM_CTL_UCBMC |
| CAPZA2             | 5.53E-25 | 0.56269684 | 0.622 | 0.455 | 1.96E-20 | CD4_EM_CTL_UCBMC |
| ZNF451             | 6.30E-25 | 0.76413363 | 0.481 | 0.323 | 2.23E-20 | CD4_EM_CTL_UCBMC |
| PDSS1              | 6.37E-25 | 0.96821165 | 0.258 | 0.13  | 2.26E-20 | CD4_EM_CTL_UCBMC |

|          |          |            |       |       |          |                  |
|----------|----------|------------|-------|-------|----------|------------------|
| LAMTOR3  | 6.60E-25 | 0.88594929 | 0.3   | 0.162 | 2.34E-20 | CD4_EM_CTL_UCBMC |
| PAN3     | 8.03E-25 | 0.39198873 | 0.744 | 0.573 | 2.85E-20 | CD4_EM_CTL_UCBMC |
| RPS4Y2   | 1.06E-24 | 0.6154622  | 0.401 | 0.238 | 3.76E-20 | CD4_EM_CTL_UCBMC |
| LMBR1    | 1.31E-24 | 0.66251833 | 0.411 | 0.252 | 4.64E-20 | CD4_EM_CTL_UCBMC |
| UBAP1    | 1.72E-24 | 0.59691411 | 0.54  | 0.375 | 6.09E-20 | CD4_EM_CTL_UCBMC |
| LEMD3    | 2.26E-24 | 0.63250404 | 0.478 | 0.315 | 8.00E-20 | CD4_EM_CTL_UCBMC |
| URI1     | 2.72E-24 | 0.65814998 | 0.505 | 0.335 | 9.64E-20 | CD4_EM_CTL_UCBMC |
| OPA1     | 3.41E-24 | 0.75778139 | 0.434 | 0.28  | 1.21E-19 | CD4_EM_CTL_UCBMC |
| KAT6A    | 3.53E-24 | 0.43136577 | 0.708 | 0.549 | 1.25E-19 | CD4_EM_CTL_UCBMC |
| LANCL2   | 3.62E-24 | 1.0093478  | 0.295 | 0.164 | 1.28E-19 | CD4_EM_CTL_UCBMC |
| PIAS1    | 4.54E-24 | 0.47516237 | 0.689 | 0.531 | 1.61E-19 | CD4_EM_CTL_UCBMC |
| EXOC6B   | 4.67E-24 | 0.63050597 | 0.518 | 0.357 | 1.65E-19 | CD4_EM_CTL_UCBMC |
| KLHL2    | 5.14E-24 | 0.74104789 | 0.372 | 0.222 | 1.82E-19 | CD4_EM_CTL_UCBMC |
| RNMT     | 5.51E-24 | 0.47648972 | 0.653 | 0.492 | 1.95E-19 | CD4_EM_CTL_UCBMC |
| CYB5A    | 5.73E-24 | 0.53496696 | 0.343 | 0.192 | 2.03E-19 | CD4_EM_CTL_UCBMC |
| SREK1    | 6.74E-24 | 0.47277108 | 0.705 | 0.541 | 2.39E-19 | CD4_EM_CTL_UCBMC |
| ZNF618   | 6.75E-24 | 0.77412814 | 0.286 | 0.152 | 2.39E-19 | CD4_EM_CTL_UCBMC |
| TNPO1    | 7.09E-24 | 0.66311235 | 0.386 | 0.235 | 2.51E-19 | CD4_EM_CTL_UCBMC |
| TNRC6B   | 9.36E-24 | 0.29131854 | 0.936 | 0.802 | 3.31E-19 | CD4_EM_CTL_UCBMC |
| NDUFAF7  | 9.51E-24 | 0.91815278 | 0.274 | 0.144 | 3.37E-19 | CD4_EM_CTL_UCBMC |
| GPBP1L1  | 1.01E-23 | 0.63446253 | 0.553 | 0.395 | 3.58E-19 | CD4_EM_CTL_UCBMC |
| RNF125   | 1.01E-23 | 0.87189221 | 0.298 | 0.163 | 3.58E-19 | CD4_EM_CTL_UCBMC |
| SEC24B   | 1.11E-23 | 0.61039163 | 0.514 | 0.354 | 3.95E-19 | CD4_EM_CTL_UCBMC |
| CDKAL1   | 1.26E-23 | 0.43800211 | 0.705 | 0.52  | 4.47E-19 | CD4_EM_CTL_UCBMC |
| TM9SF2   | 1.33E-23 | 0.69471675 | 0.391 | 0.237 | 4.72E-19 | CD4_EM_CTL_UCBMC |
| ZFR      | 1.34E-23 | 0.63713082 | 0.496 | 0.345 | 4.75E-19 | CD4_EM_CTL_UCBMC |
| AP3B1    | 1.38E-23 | 0.53796702 | 0.622 | 0.45  | 4.90E-19 | CD4_EM_CTL_UCBMC |
| WAC      | 1.39E-23 | 0.31725215 | 0.773 | 0.597 | 4.92E-19 | CD4_EM_CTL_UCBMC |
| TYW5     | 1.62E-23 | 0.99029033 | 0.254 | 0.13  | 5.72E-19 | CD4_EM_CTL_UCBMC |
| TBC1D15  | 2.08E-23 | 0.64511692 | 0.461 | 0.303 | 7.38E-19 | CD4_EM_CTL_UCBMC |
| SLC22A18 | 2.31E-23 | 0.50574937 | 0.547 | 0.379 | 8.18E-19 | CD4_EM_CTL_UCBMC |
| IFT80    | 2.51E-23 | 0.71795423 | 0.544 | 0.385 | 8.89E-19 | CD4_EM_CTL_UCBMC |
| EMC3     | 3.38E-23 | 0.85959643 | 0.306 | 0.173 | 1.20E-18 | CD4_EM_CTL_UCBMC |

|           |          |            |       |       |          |                  |
|-----------|----------|------------|-------|-------|----------|------------------|
| SCAF8     | 3.78E-23 | 0.52110658 | 0.639 | 0.473 | 1.34E-18 | CD4_EM_CTL_UCBMC |
| MAP4K4    | 3.94E-23 | 0.40386675 | 0.574 | 0.392 | 1.40E-18 | CD4_EM_CTL_UCBMC |
| TSC22D3   | 3.96E-23 | 0.4948739  | 0.713 | 0.542 | 1.40E-18 | CD4_EM_CTL_UCBMC |
| CYLD      | 4.14E-23 | 0.49430444 | 0.606 | 0.443 | 1.47E-18 | CD4_EM_CTL_UCBMC |
| NDUFA9    | 4.31E-23 | 0.79458986 | 0.366 | 0.225 | 1.53E-18 | CD4_EM_CTL_UCBMC |
| AKAP13    | 4.59E-23 | 0.32084711 | 0.874 | 0.752 | 1.63E-18 | CD4_EM_CTL_UCBMC |
| RPS6KB1   | 4.84E-23 | 0.55196118 | 0.559 | 0.394 | 1.72E-18 | CD4_EM_CTL_UCBMC |
| CIR1      | 4.85E-23 | 0.66229326 | 0.425 | 0.275 | 1.72E-18 | CD4_EM_CTL_UCBMC |
| RAB8B     | 4.86E-23 | 0.45836203 | 0.738 | 0.575 | 1.72E-18 | CD4_EM_CTL_UCBMC |
| TRIB2     | 4.89E-23 | 0.92434267 | 0.281 | 0.153 | 1.73E-18 | CD4_EM_CTL_UCBMC |
| CELF2     | 6.97E-23 | 0.28351682 | 0.936 | 0.793 | 2.47E-18 | CD4_EM_CTL_UCBMC |
| SDHB      | 7.10E-23 | 0.77969572 | 0.334 | 0.195 | 2.52E-18 | CD4_EM_CTL_UCBMC |
| RPL4      | 7.24E-23 | 0.35272282 | 0.904 | 0.822 | 2.57E-18 | CD4_EM_CTL_UCBMC |
| SCAF11    | 7.79E-23 | 0.45762606 | 0.669 | 0.515 | 2.76E-18 | CD4_EM_CTL_UCBMC |
| TGFB1     | 8.73E-23 | 0.38896414 | 0.645 | 0.48  | 3.09E-18 | CD4_EM_CTL_UCBMC |
| RNF149    | 8.85E-23 | 0.65213345 | 0.468 | 0.312 | 3.13E-18 | CD4_EM_CTL_UCBMC |
| ATP11B    | 1.17E-22 | 0.51330689 | 0.51  | 0.348 | 4.14E-18 | CD4_EM_CTL_UCBMC |
| ARID2     | 1.18E-22 | 0.44932026 | 0.666 | 0.5   | 4.17E-18 | CD4_EM_CTL_UCBMC |
| CDC73     | 1.53E-22 | 0.60013355 | 0.531 | 0.381 | 5.43E-18 | CD4_EM_CTL_UCBMC |
| RBPJ      | 1.69E-22 | 0.63180607 | 0.497 | 0.341 | 5.99E-18 | CD4_EM_CTL_UCBMC |
| TRA2B     | 1.89E-22 | 0.36640077 | 0.908 | 0.789 | 6.70E-18 | CD4_EM_CTL_UCBMC |
| TET2      | 1.90E-22 | 0.63496947 | 0.442 | 0.289 | 6.74E-18 | CD4_EM_CTL_UCBMC |
| ZNF326    | 2.36E-22 | 0.64120947 | 0.472 | 0.319 | 8.35E-18 | CD4_EM_CTL_UCBMC |
| TNFRSF10A | 2.43E-22 | 0.85564513 | 0.279 | 0.153 | 8.62E-18 | CD4_EM_CTL_UCBMC |
| STXBP5    | 2.45E-22 | 0.68821767 | 0.405 | 0.253 | 8.68E-18 | CD4_EM_CTL_UCBMC |
| RYK       | 2.60E-22 | 0.87287869 | 0.261 | 0.137 | 9.21E-18 | CD4_EM_CTL_UCBMC |
| ANKH      | 2.61E-22 | 0.74837788 | 0.294 | 0.162 | 9.25E-18 | CD4_EM_CTL_UCBMC |
| GINM1     | 3.10E-22 | 0.66581719 | 0.419 | 0.271 | 1.10E-17 | CD4_EM_CTL_UCBMC |
| PCM1      | 3.16E-22 | 0.59239372 | 0.569 | 0.416 | 1.12E-17 | CD4_EM_CTL_UCBMC |
| LONP2     | 3.24E-22 | 0.60431592 | 0.484 | 0.329 | 1.15E-17 | CD4_EM_CTL_UCBMC |
| MAPK1     | 3.40E-22 | 0.51646102 | 0.574 | 0.41  | 1.21E-17 | CD4_EM_CTL_UCBMC |
| DHX40     | 3.66E-22 | 0.8295528  | 0.332 | 0.197 | 1.30E-17 | CD4_EM_CTL_UCBMC |
| XPO4      | 3.91E-22 | 0.83020566 | 0.339 | 0.203 | 1.38E-17 | CD4_EM_CTL_UCBMC |

|                   |          |            |       |       |          |                  |
|-------------------|----------|------------|-------|-------|----------|------------------|
| RRM1              | 3.95E-22 | 0.86326225 | 0.319 | 0.186 | 1.40E-17 | CD4_EM_CTL_UCBMC |
| IWS1              | 4.37E-22 | 0.72400858 | 0.373 | 0.232 | 1.55E-17 | CD4_EM_CTL_UCBMC |
| ARL8B             | 4.41E-22 | 0.73602296 | 0.395 | 0.255 | 1.56E-17 | CD4_EM_CTL_UCBMC |
| HACD3             | 4.66E-22 | 0.93910665 | 0.287 | 0.16  | 1.65E-17 | CD4_EM_CTL_UCBMC |
| MARCHF3           | 5.67E-22 | 0.70550075 | 0.416 | 0.27  | 2.01E-17 | CD4_EM_CTL_UCBMC |
| NUP98             | 6.30E-22 | 0.42915478 | 0.643 | 0.477 | 2.23E-17 | CD4_EM_CTL_UCBMC |
| ARHGEF7           | 6.84E-22 | 0.61469201 | 0.503 | 0.354 | 2.42E-17 | CD4_EM_CTL_UCBMC |
| PHF3              | 6.93E-22 | 0.52764454 | 0.565 | 0.411 | 2.46E-17 | CD4_EM_CTL_UCBMC |
| SLC25A26          | 8.10E-22 | 0.66369587 | 0.46  | 0.308 | 2.87E-17 | CD4_EM_CTL_UCBMC |
| SEC61A2           | 9.33E-22 | 0.73145851 | 0.37  | 0.229 | 3.31E-17 | CD4_EM_CTL_UCBMC |
| FKBP5             | 9.79E-22 | 0.57562173 | 0.387 | 0.239 | 3.47E-17 | CD4_EM_CTL_UCBMC |
| LMTK2             | 1.01E-21 | 0.78013799 | 0.385 | 0.243 | 3.56E-17 | CD4_EM_CTL_UCBMC |
| CCNC              | 1.12E-21 | 0.75049361 | 0.367 | 0.224 | 3.97E-17 | CD4_EM_CTL_UCBMC |
| SFSWAP            | 1.29E-21 | 0.70412538 | 0.432 | 0.29  | 4.56E-17 | CD4_EM_CTL_UCBMC |
| PHC3              | 1.41E-21 | 0.68545896 | 0.459 | 0.316 | 5.00E-17 | CD4_EM_CTL_UCBMC |
| VTI1A             | 1.46E-21 | 0.42087587 | 0.678 | 0.5   | 5.16E-17 | CD4_EM_CTL_UCBMC |
| IQGAP2            | 1.46E-21 | 0.35503904 | 0.699 | 0.517 | 5.17E-17 | CD4_EM_CTL_UCBMC |
| ATG16L1           | 1.47E-21 | 0.9114826  | 0.281 | 0.156 | 5.20E-17 | CD4_EM_CTL_UCBMC |
| QKI               | 2.06E-21 | 0.40440439 | 0.658 | 0.493 | 7.31E-17 | CD4_EM_CTL_UCBMC |
| RAF1              | 2.09E-21 | 0.63164235 | 0.499 | 0.343 | 7.41E-17 | CD4_EM_CTL_UCBMC |
| ENSMUG00000012537 | 2.26E-21 | 0.61980576 | 0.459 | 0.31  | 8.00E-17 | CD4_EM_CTL_UCBMC |
| KAT7              | 2.34E-21 | 0.68402213 | 0.415 | 0.27  | 8.28E-17 | CD4_EM_CTL_UCBMC |
| SORL1             | 2.41E-21 | 0.43934612 | 0.653 | 0.484 | 8.53E-17 | CD4_EM_CTL_UCBMC |
| AFF3              | 3.14E-21 | 0.2689214  | 0.878 | 0.723 | 1.11E-16 | CD4_EM_CTL_UCBMC |
| BTAF1             | 3.18E-21 | 0.54827347 | 0.556 | 0.403 | 1.13E-16 | CD4_EM_CTL_UCBMC |
| RTF2              | 3.20E-21 | 0.78806839 | 0.34  | 0.207 | 1.13E-16 | CD4_EM_CTL_UCBMC |
| RIOK3             | 3.31E-21 | 0.72982139 | 0.418 | 0.274 | 1.17E-16 | CD4_EM_CTL_UCBMC |
| DNTTIP2           | 3.54E-21 | 0.62164525 | 0.39  | 0.248 | 1.26E-16 | CD4_EM_CTL_UCBMC |
| CDK13             | 4.01E-21 | 0.37859839 | 0.663 | 0.499 | 1.42E-16 | CD4_EM_CTL_UCBMC |
| COPB1             | 4.38E-21 | 0.70974268 | 0.375 | 0.239 | 1.55E-16 | CD4_EM_CTL_UCBMC |
| BRD7              | 6.60E-21 | 0.65154352 | 0.403 | 0.26  | 2.34E-16 | CD4_EM_CTL_UCBMC |
| RCL1              | 7.14E-21 | 0.87752368 | 0.257 | 0.139 | 2.53E-16 | CD4_EM_CTL_UCBMC |
| CYTH1             | 7.17E-21 | 0.47441807 | 0.607 | 0.445 | 2.54E-16 | CD4_EM_CTL_UCBMC |



|                   |          |            |       |       |          |                  |
|-------------------|----------|------------|-------|-------|----------|------------------|
| TBC1D23           | 7.64E-21 | 0.66801472 | 0.446 | 0.3   | 2.71E-16 | CD4_EM_CTL_UCBMC |
| ILKAP             | 7.81E-21 | 0.62486948 | 0.498 | 0.349 | 2.77E-16 | CD4_EM_CTL_UCBMC |
| CRNKL1            | 7.97E-21 | 0.74287259 | 0.339 | 0.203 | 2.82E-16 | CD4_EM_CTL_UCBMC |
| DENND5A           | 7.98E-21 | 0.80670135 | 0.332 | 0.2   | 2.83E-16 | CD4_EM_CTL_UCBMC |
| DHX29             | 8.24E-21 | 0.71533136 | 0.305 | 0.174 | 2.92E-16 | CD4_EM_CTL_UCBMC |
| NR3C1             | 8.66E-21 | 0.41461997 | 0.682 | 0.536 | 3.07E-16 | CD4_EM_CTL_UCBMC |
| CYTIP             | 8.71E-21 | 0.43502689 | 0.607 | 0.443 | 3.09E-16 | CD4_EM_CTL_UCBMC |
| PAPOLG            | 9.19E-21 | 0.91099685 | 0.271 | 0.152 | 3.26E-16 | CD4_EM_CTL_UCBMC |
| TASP1             | 1.02E-20 | 0.60757266 | 0.486 | 0.335 | 3.61E-16 | CD4_EM_CTL_UCBMC |
| AP1G1             | 1.08E-20 | 0.57254304 | 0.464 | 0.319 | 3.82E-16 | CD4_EM_CTL_UCBMC |
| RALGAPA2          | 1.08E-20 | 0.59894793 | 0.475 | 0.325 | 3.83E-16 | CD4_EM_CTL_UCBMC |
| ZRANB2            | 1.22E-20 | 0.5600594  | 0.562 | 0.411 | 4.32E-16 | CD4_EM_CTL_UCBMC |
| NAA16             | 1.22E-20 | 0.83102183 | 0.288 | 0.163 | 4.33E-16 | CD4_EM_CTL_UCBMC |
| ZNF506            | 1.29E-20 | 0.64412523 | 0.42  | 0.278 | 4.58E-16 | CD4_EM_CTL_UCBMC |
| ADAMTS6           | 1.42E-20 | 0.77456051 | 0.302 | 0.175 | 5.04E-16 | CD4_EM_CTL_UCBMC |
| ARHGAP17          | 1.54E-20 | 0.75407941 | 0.325 | 0.193 | 5.45E-16 | CD4_EM_CTL_UCBMC |
| CNOT2             | 1.58E-20 | 0.40906587 | 0.722 | 0.577 | 5.59E-16 | CD4_EM_CTL_UCBMC |
| ANXA2             | 1.71E-20 | 0.53746473 | 0.408 | 0.259 | 6.07E-16 | CD4_EM_CTL_UCBMC |
| PDK1              | 2.29E-20 | 0.7960273  | 0.296 | 0.171 | 8.12E-16 | CD4_EM_CTL_UCBMC |
| WDR33             | 2.54E-20 | 0.56548841 | 0.506 | 0.364 | 8.99E-16 | CD4_EM_CTL_UCBMC |
| ENSMUG00000046264 | 2.80E-20 | 0.56462482 | 0.481 | 0.33  | 9.91E-16 | CD4_EM_CTL_UCBMC |
| AQR               | 3.17E-20 | 0.64686423 | 0.426 | 0.286 | 1.12E-15 | CD4_EM_CTL_UCBMC |
| SEC23A            | 3.43E-20 | 0.67221352 | 0.352 | 0.22  | 1.22E-15 | CD4_EM_CTL_UCBMC |
| SLC38A1           | 3.53E-20 | 0.29027408 | 0.775 | 0.603 | 1.25E-15 | CD4_EM_CTL_UCBMC |
| EFR3A             | 3.70E-20 | 0.56576972 | 0.472 | 0.325 | 1.31E-15 | CD4_EM_CTL_UCBMC |
| KDM3A             | 3.73E-20 | 0.76169655 | 0.312 | 0.186 | 1.32E-15 | CD4_EM_CTL_UCBMC |
| GALNT1            | 3.77E-20 | 0.60129641 | 0.476 | 0.327 | 1.34E-15 | CD4_EM_CTL_UCBMC |
| USP10             | 4.01E-20 | 0.56074843 | 0.529 | 0.38  | 1.42E-15 | CD4_EM_CTL_UCBMC |
| ARHGAP32          | 4.38E-20 | 0.69792751 | 0.261 | 0.143 | 1.55E-15 | CD4_EM_CTL_UCBMC |
| RBM33             | 4.76E-20 | 0.49973741 | 0.585 | 0.44  | 1.69E-15 | CD4_EM_CTL_UCBMC |
| WDFY1             | 5.81E-20 | 0.72024184 | 0.368 | 0.23  | 2.06E-15 | CD4_EM_CTL_UCBMC |
| RFWD3             | 6.91E-20 | 0.79803788 | 0.258 | 0.14  | 2.45E-15 | CD4_EM_CTL_UCBMC |
| SPTBN1            | 7.17E-20 | 0.50529782 | 0.543 | 0.394 | 2.54E-15 | CD4_EM_CTL_UCBMC |

|           |          |            |       |       |          |                  |
|-----------|----------|------------|-------|-------|----------|------------------|
| MAML3     | 7.61E-20 | 0.45236759 | 0.527 | 0.37  | 2.70E-15 | CD4_EM_CTL_UCBMC |
| CD52      | 7.62E-20 | 0.34005318 | 0.926 | 0.861 | 2.70E-15 | CD4_EM_CTL_UCBMC |
| ASH1L     | 7.81E-20 | 0.29664625 | 0.789 | 0.631 | 2.77E-15 | CD4_EM_CTL_UCBMC |
| APC       | 8.51E-20 | 0.71284368 | 0.403 | 0.266 | 3.01E-15 | CD4_EM_CTL_UCBMC |
| PIK3C2A   | 8.70E-20 | 0.65102045 | 0.395 | 0.259 | 3.08E-15 | CD4_EM_CTL_UCBMC |
| RRAS2     | 9.02E-20 | 0.59484872 | 0.506 | 0.351 | 3.19E-15 | CD4_EM_CTL_UCBMC |
| AFTPH     | 9.45E-20 | 0.52702401 | 0.49  | 0.338 | 3.35E-15 | CD4_EM_CTL_UCBMC |
| ZNF207    | 9.69E-20 | 0.54680262 | 0.55  | 0.395 | 3.43E-15 | CD4_EM_CTL_UCBMC |
| YAF2      | 1.01E-19 | 0.41902173 | 0.586 | 0.418 | 3.59E-15 | CD4_EM_CTL_UCBMC |
| RNPC3     | 1.04E-19 | 0.90577828 | 0.265 | 0.148 | 3.67E-15 | CD4_EM_CTL_UCBMC |
| UBE2G1    | 1.15E-19 | 0.57553357 | 0.526 | 0.383 | 4.06E-15 | CD4_EM_CTL_UCBMC |
| YTHDF3    | 1.15E-19 | 0.52443787 | 0.509 | 0.362 | 4.07E-15 | CD4_EM_CTL_UCBMC |
| CYB5R4    | 1.30E-19 | 0.66679922 | 0.392 | 0.254 | 4.60E-15 | CD4_EM_CTL_UCBMC |
| PAIP2     | 1.30E-19 | 0.35249798 | 0.771 | 0.629 | 4.62E-15 | CD4_EM_CTL_UCBMC |
| CHD6      | 1.39E-19 | 0.47614039 | 0.562 | 0.413 | 4.93E-15 | CD4_EM_CTL_UCBMC |
| SNW1      | 1.40E-19 | 0.55067661 | 0.471 | 0.32  | 4.95E-15 | CD4_EM_CTL_UCBMC |
| COPA      | 1.46E-19 | 0.60033145 | 0.463 | 0.322 | 5.17E-15 | CD4_EM_CTL_UCBMC |
| DYRK2     | 1.70E-19 | 0.60443781 | 0.45  | 0.303 | 6.01E-15 | CD4_EM_CTL_UCBMC |
| RNF145    | 1.72E-19 | 0.5050604  | 0.592 | 0.447 | 6.08E-15 | CD4_EM_CTL_UCBMC |
| ATP6V1H   | 1.92E-19 | 0.66869173 | 0.339 | 0.209 | 6.82E-15 | CD4_EM_CTL_UCBMC |
| TCEA1     | 2.01E-19 | 0.49862527 | 0.565 | 0.407 | 7.13E-15 | CD4_EM_CTL_UCBMC |
| CCDC50    | 2.02E-19 | 0.83957283 | 0.289 | 0.167 | 7.16E-15 | CD4_EM_CTL_UCBMC |
| TAB2      | 2.12E-19 | 0.59063257 | 0.426 | 0.285 | 7.52E-15 | CD4_EM_CTL_UCBMC |
| SOX4      | 2.29E-19 | 0.21825183 | 0.713 | 0.544 | 8.12E-15 | CD4_EM_CTL_UCBMC |
| KPNA6     | 2.32E-19 | 0.83482225 | 0.309 | 0.186 | 8.21E-15 | CD4_EM_CTL_UCBMC |
| DTNBP1    | 2.60E-19 | 0.57944504 | 0.486 | 0.344 | 9.20E-15 | CD4_EM_CTL_UCBMC |
| BCLAF1    | 2.61E-19 | 0.34375009 | 0.776 | 0.641 | 9.25E-15 | CD4_EM_CTL_UCBMC |
| SCFD2     | 2.79E-19 | 0.52022777 | 0.474 | 0.324 | 9.90E-15 | CD4_EM_CTL_UCBMC |
| RAB7A     | 2.80E-19 | 0.43987093 | 0.658 | 0.519 | 9.92E-15 | CD4_EM_CTL_UCBMC |
| AAK1      | 2.80E-19 | 0.45892684 | 0.616 | 0.462 | 9.92E-15 | CD4_EM_CTL_UCBMC |
| KIDINS220 | 2.96E-19 | 0.66420574 | 0.369 | 0.233 | 1.05E-14 | CD4_EM_CTL_UCBMC |
| ATP2C1    | 3.36E-19 | 0.62030609 | 0.471 | 0.325 | 1.19E-14 | CD4_EM_CTL_UCBMC |
| DERL2     | 3.63E-19 | 0.71046254 | 0.289 | 0.167 | 1.29E-14 | CD4_EM_CTL_UCBMC |

|                    |          |            |       |       |          |                  |
|--------------------|----------|------------|-------|-------|----------|------------------|
| ENSMMUG00000006778 | 3.75E-19 | 0.41505739 | 0.518 | 0.359 | 1.33E-14 | CD4_EM_CTL_UCBMC |
| CD28               | 3.75E-19 | 0.48251986 | 0.418 | 0.265 | 1.33E-14 | CD4_EM_CTL_UCBMC |
| FAM168A            | 3.84E-19 | 0.55276633 | 0.405 | 0.266 | 1.36E-14 | CD4_EM_CTL_UCBMC |
| SECISBP2           | 3.88E-19 | 0.71509927 | 0.387 | 0.253 | 1.37E-14 | CD4_EM_CTL_UCBMC |
| LCOR               | 4.15E-19 | 0.44296977 | 0.589 | 0.44  | 1.47E-14 | CD4_EM_CTL_UCBMC |
| SYF2               | 4.50E-19 | 0.40117915 | 0.559 | 0.409 | 1.60E-14 | CD4_EM_CTL_UCBMC |
| FAM102B            | 4.68E-19 | 0.65792726 | 0.268 | 0.149 | 1.66E-14 | CD4_EM_CTL_UCBMC |
| BNIP2              | 4.71E-19 | 0.75781163 | 0.311 | 0.186 | 1.67E-14 | CD4_EM_CTL_UCBMC |
| CWC22              | 5.04E-19 | 0.60594173 | 0.335 | 0.203 | 1.79E-14 | CD4_EM_CTL_UCBMC |
| DDA1               | 5.07E-19 | 0.77159818 | 0.27  | 0.152 | 1.80E-14 | CD4_EM_CTL_UCBMC |
| EXOSC10            | 5.11E-19 | 0.80679897 | 0.262 | 0.148 | 1.81E-14 | CD4_EM_CTL_UCBMC |
| OSER1              | 6.12E-19 | 0.756002   | 0.272 | 0.155 | 2.17E-14 | CD4_EM_CTL_UCBMC |
| VPS37B             | 7.03E-19 | 0.54931568 | 0.401 | 0.262 | 2.49E-14 | CD4_EM_CTL_UCBMC |
| ZC3H7A             | 7.30E-19 | 0.77918086 | 0.317 | 0.195 | 2.59E-14 | CD4_EM_CTL_UCBMC |
| NAE1               | 7.46E-19 | 0.82036146 | 0.292 | 0.175 | 2.64E-14 | CD4_EM_CTL_UCBMC |
| ING3               | 7.92E-19 | 0.92004283 | 0.253 | 0.141 | 2.81E-14 | CD4_EM_CTL_UCBMC |
| ZNF410             | 8.30E-19 | 0.72796131 | 0.366 | 0.239 | 2.94E-14 | CD4_EM_CTL_UCBMC |
| ITGA4              | 8.84E-19 | 0.62069415 | 0.518 | 0.377 | 3.13E-14 | CD4_EM_CTL_UCBMC |
| RAD21              | 9.57E-19 | 0.50533983 | 0.561 | 0.423 | 3.39E-14 | CD4_EM_CTL_UCBMC |
| SMC4               | 1.02E-18 | 0.37737056 | 0.713 | 0.552 | 3.62E-14 | CD4_EM_CTL_UCBMC |
| MICU2              | 1.06E-18 | 0.60406563 | 0.473 | 0.336 | 3.76E-14 | CD4_EM_CTL_UCBMC |
| PCCA               | 1.07E-18 | 0.51095935 | 0.54  | 0.396 | 3.77E-14 | CD4_EM_CTL_UCBMC |
| FUBP1              | 1.27E-18 | 0.46597109 | 0.601 | 0.449 | 4.50E-14 | CD4_EM_CTL_UCBMC |
| IKZF5              | 1.36E-18 | 0.84462485 | 0.254 | 0.143 | 4.83E-14 | CD4_EM_CTL_UCBMC |
| LSM14A             | 1.40E-18 | 0.40868761 | 0.675 | 0.535 | 4.97E-14 | CD4_EM_CTL_UCBMC |
| HERC3              | 1.45E-18 | 0.53625539 | 0.395 | 0.256 | 5.14E-14 | CD4_EM_CTL_UCBMC |
| RPS4Y1             | 1.51E-18 | 0.31325824 | 0.711 | 0.526 | 5.33E-14 | CD4_EM_CTL_UCBMC |
| DHX8               | 1.57E-18 | 0.72777227 | 0.338 | 0.213 | 5.55E-14 | CD4_EM_CTL_UCBMC |
| GSK3B              | 1.59E-18 | 0.37632093 | 0.713 | 0.56  | 5.63E-14 | CD4_EM_CTL_UCBMC |
| SFMBT1             | 1.67E-18 | 0.64675436 | 0.25  | 0.137 | 5.93E-14 | CD4_EM_CTL_UCBMC |
| CFLAR              | 1.75E-18 | 0.53924747 | 0.496 | 0.358 | 6.19E-14 | CD4_EM_CTL_UCBMC |
| TRIM25             | 1.75E-18 | 0.76269835 | 0.301 | 0.181 | 6.20E-14 | CD4_EM_CTL_UCBMC |
| PSEN1              | 1.79E-18 | 0.64771311 | 0.39  | 0.254 | 6.36E-14 | CD4_EM_CTL_UCBMC |

|                   |          |            |       |       |          |                  |
|-------------------|----------|------------|-------|-------|----------|------------------|
| COP1              | 1.81E-18 | 0.38091964 | 0.636 | 0.477 | 6.41E-14 | CD4_EM_CTL_UCBMC |
| BCL2              | 1.96E-18 | 0.69322253 | 0.375 | 0.244 | 6.93E-14 | CD4_EM_CTL_UCBMC |
| PITPNB            | 1.98E-18 | 0.64322811 | 0.416 | 0.279 | 7.01E-14 | CD4_EM_CTL_UCBMC |
| DOCK8             | 2.02E-18 | 0.34362507 | 0.791 | 0.636 | 7.15E-14 | CD4_EM_CTL_UCBMC |
| PPHLN1            | 2.29E-18 | 0.51916806 | 0.608 | 0.47  | 8.11E-14 | CD4_EM_CTL_UCBMC |
| HELZ              | 2.33E-18 | 0.41827526 | 0.667 | 0.513 | 8.25E-14 | CD4_EM_CTL_UCBMC |
| WASL              | 2.42E-18 | 0.5843294  | 0.474 | 0.334 | 8.58E-14 | CD4_EM_CTL_UCBMC |
| ANAPC10           | 2.51E-18 | 0.67862626 | 0.397 | 0.262 | 8.90E-14 | CD4_EM_CTL_UCBMC |
| KANSL1            | 2.69E-18 | 0.33864735 | 0.726 | 0.564 | 9.54E-14 | CD4_EM_CTL_UCBMC |
| FAM133B           | 2.86E-18 | 0.49890766 | 0.45  | 0.311 | 1.01E-13 | CD4_EM_CTL_UCBMC |
| WDR7              | 2.89E-18 | 0.5422706  | 0.538 | 0.389 | 1.02E-13 | CD4_EM_CTL_UCBMC |
| STAU1             | 3.00E-18 | 0.49464238 | 0.525 | 0.385 | 1.06E-13 | CD4_EM_CTL_UCBMC |
| SDHAF4            | 3.85E-18 | 0.44479772 | 0.633 | 0.487 | 1.36E-13 | CD4_EM_CTL_UCBMC |
| NUP50             | 4.34E-18 | 0.64117704 | 0.326 | 0.201 | 1.54E-13 | CD4_EM_CTL_UCBMC |
| SNX13             | 4.38E-18 | 0.62814763 | 0.445 | 0.311 | 1.55E-13 | CD4_EM_CTL_UCBMC |
| ENSMUG00000056012 | 4.62E-18 | 0.57679524 | 0.455 | 0.326 | 1.64E-13 | CD4_EM_CTL_UCBMC |
| SP100             | 4.72E-18 | 0.44005319 | 0.672 | 0.538 | 1.67E-13 | CD4_EM_CTL_UCBMC |
| EDEM1             | 4.85E-18 | 0.62846615 | 0.406 | 0.267 | 1.72E-13 | CD4_EM_CTL_UCBMC |
| ACIN1             | 5.47E-18 | 0.48556208 | 0.575 | 0.44  | 1.94E-13 | CD4_EM_CTL_UCBMC |
| MYLIP             | 5.62E-18 | 0.38095236 | 0.606 | 0.442 | 1.99E-13 | CD4_EM_CTL_UCBMC |
| SPOCK2            | 5.78E-18 | 0.39048466 | 0.5   | 0.349 | 2.05E-13 | CD4_EM_CTL_UCBMC |
| RPTOR             | 6.45E-18 | 0.50261793 | 0.462 | 0.318 | 2.28E-13 | CD4_EM_CTL_UCBMC |
| TAF2              | 6.67E-18 | 0.81791173 | 0.301 | 0.184 | 2.36E-13 | CD4_EM_CTL_UCBMC |
| ZBTB20            | 7.12E-18 | 0.28294717 | 0.81  | 0.643 | 2.52E-13 | CD4_EM_CTL_UCBMC |
| SKAP1             | 7.27E-18 | 0.2402012  | 0.92  | 0.815 | 2.57E-13 | CD4_EM_CTL_UCBMC |
| DIAPH1            | 7.46E-18 | 0.3862091  | 0.627 | 0.475 | 2.64E-13 | CD4_EM_CTL_UCBMC |
| ENSMUG00000012690 | 7.55E-18 | 0.75677305 | 0.306 | 0.187 | 2.68E-13 | CD4_EM_CTL_UCBMC |
| CDC40             | 7.90E-18 | 0.70821651 | 0.314 | 0.193 | 2.80E-13 | CD4_EM_CTL_UCBMC |
| ATP2B4            | 7.94E-18 | 0.49756079 | 0.505 | 0.36  | 2.81E-13 | CD4_EM_CTL_UCBMC |
| MAP3K1            | 8.18E-18 | 0.5135808  | 0.474 | 0.326 | 2.90E-13 | CD4_EM_CTL_UCBMC |
| ENSMUG00000006293 | 9.23E-18 | 0.51973702 | 0.565 | 0.424 | 3.27E-13 | CD4_EM_CTL_UCBMC |
| ZRSR2             | 9.37E-18 | 0.80813559 | 0.268 | 0.155 | 3.32E-13 | CD4_EM_CTL_UCBMC |
| ICOS              | 9.43E-18 | 0.69847694 | 0.334 | 0.206 | 3.34E-13 | CD4_EM_CTL_UCBMC |

|                   |          |            |       |       |          |                  |
|-------------------|----------|------------|-------|-------|----------|------------------|
| DPM1              | 9.46E-18 | 0.80828493 | 0.294 | 0.178 | 3.35E-13 | CD4_EM_CTL_UCBMC |
| ZNF407            | 9.95E-18 | 0.46781351 | 0.557 | 0.408 | 3.53E-13 | CD4_EM_CTL_UCBMC |
| MFSD14B           | 1.06E-17 | 0.82764537 | 0.285 | 0.172 | 3.75E-13 | CD4_EM_CTL_UCBMC |
| PLEKHM3           | 1.09E-17 | 0.78342638 | 0.303 | 0.186 | 3.86E-13 | CD4_EM_CTL_UCBMC |
| KLHL28            | 1.13E-17 | 0.5565318  | 0.415 | 0.278 | 4.01E-13 | CD4_EM_CTL_UCBMC |
| PAFAH1B2          | 1.27E-17 | 0.74878938 | 0.301 | 0.182 | 4.50E-13 | CD4_EM_CTL_UCBMC |
| KIZ               | 1.36E-17 | 0.660748   | 0.333 | 0.211 | 4.83E-13 | CD4_EM_CTL_UCBMC |
| ZDHHHC17          | 1.36E-17 | 0.68486181 | 0.292 | 0.174 | 4.83E-13 | CD4_EM_CTL_UCBMC |
| ENSMUG00000065104 | 1.43E-17 | 0.37866792 | 0.569 | 0.427 | 5.06E-13 | CD4_EM_CTL_UCBMC |
| ATP6              | 1.46E-17 | 0.16061221 | 0.889 | 0.757 | 5.19E-13 | CD4_EM_CTL_UCBMC |
| POLH              | 1.47E-17 | 0.68043677 | 0.299 | 0.181 | 5.20E-13 | CD4_EM_CTL_UCBMC |
| RWDD1             | 1.48E-17 | 0.39497195 | 0.605 | 0.451 | 5.24E-13 | CD4_EM_CTL_UCBMC |
| FAF1              | 1.56E-17 | 0.46267766 | 0.595 | 0.459 | 5.52E-13 | CD4_EM_CTL_UCBMC |
| HECA              | 1.60E-17 | 0.43388415 | 0.464 | 0.318 | 5.66E-13 | CD4_EM_CTL_UCBMC |
| IGHMBP2           | 1.71E-17 | 0.74723141 | 0.273 | 0.16  | 6.08E-13 | CD4_EM_CTL_UCBMC |
| VPS39             | 1.76E-17 | 0.74287337 | 0.325 | 0.205 | 6.23E-13 | CD4_EM_CTL_UCBMC |
| MYSM1             | 1.83E-17 | 0.89928594 | 0.255 | 0.148 | 6.47E-13 | CD4_EM_CTL_UCBMC |
| UXS1              | 1.90E-17 | 0.39686661 | 0.574 | 0.419 | 6.72E-13 | CD4_EM_CTL_UCBMC |
| MTMR10            | 1.94E-17 | 0.67435175 | 0.294 | 0.177 | 6.89E-13 | CD4_EM_CTL_UCBMC |
| MGAT4A            | 2.01E-17 | 0.53713335 | 0.307 | 0.182 | 7.11E-13 | CD4_EM_CTL_UCBMC |
| ATP9B             | 2.01E-17 | 0.5249984  | 0.514 | 0.376 | 7.12E-13 | CD4_EM_CTL_UCBMC |
| APOOL             | 2.02E-17 | 0.77127093 | 0.289 | 0.173 | 7.15E-13 | CD4_EM_CTL_UCBMC |
| CPSF6             | 2.03E-17 | 0.56389832 | 0.458 | 0.321 | 7.19E-13 | CD4_EM_CTL_UCBMC |
| ECSIT             | 2.07E-17 | 0.60315056 | 0.253 | 0.142 | 7.34E-13 | CD4_EM_CTL_UCBMC |
| ZNF483            | 2.16E-17 | 0.29450037 | 0.738 | 0.587 | 7.65E-13 | CD4_EM_CTL_UCBMC |
| KDM4C             | 2.29E-17 | 0.38707063 | 0.644 | 0.492 | 8.12E-13 | CD4_EM_CTL_UCBMC |
| CAND1             | 2.39E-17 | 0.53446419 | 0.475 | 0.337 | 8.46E-13 | CD4_EM_CTL_UCBMC |
| ZNF44             | 2.40E-17 | 0.61448482 | 0.39  | 0.261 | 8.51E-13 | CD4_EM_CTL_UCBMC |
| CNOT6             | 2.45E-17 | 0.65625487 | 0.321 | 0.201 | 8.68E-13 | CD4_EM_CTL_UCBMC |
| KCTD20            | 2.55E-17 | 0.65554026 | 0.368 | 0.244 | 9.04E-13 | CD4_EM_CTL_UCBMC |
| CLDND1            | 2.78E-17 | 0.55867725 | 0.507 | 0.371 | 9.84E-13 | CD4_EM_CTL_UCBMC |
| SLC35D1           | 2.95E-17 | 0.70052185 | 0.288 | 0.173 | 1.05E-12 | CD4_EM_CTL_UCBMC |
| JAK1              | 3.00E-17 | 0.27735575 | 0.861 | 0.745 | 1.06E-12 | CD4_EM_CTL_UCBMC |

|                    |          |            |       |       |          |                  |
|--------------------|----------|------------|-------|-------|----------|------------------|
| SCMH1              | 3.45E-17 | 0.69239442 | 0.32  | 0.199 | 1.22E-12 | CD4_EM_CTL_UCBMC |
| GRAP               | 3.46E-17 | 0.65012113 | 0.287 | 0.171 | 1.22E-12 | CD4_EM_CTL_UCBMC |
| ARFGEF2            | 3.49E-17 | 0.77673603 | 0.321 | 0.202 | 1.23E-12 | CD4_EM_CTL_UCBMC |
| DNAJC7             | 3.52E-17 | 0.58246454 | 0.415 | 0.285 | 1.25E-12 | CD4_EM_CTL_UCBMC |
| MED13              | 3.92E-17 | 0.44303396 | 0.473 | 0.332 | 1.39E-12 | CD4_EM_CTL_UCBMC |
| ANKRD28            | 4.45E-17 | 0.38033359 | 0.603 | 0.439 | 1.58E-12 | CD4_EM_CTL_UCBMC |
| INTS8              | 4.85E-17 | 0.85677149 | 0.325 | 0.207 | 1.72E-12 | CD4_EM_CTL_UCBMC |
| PDZD8              | 5.06E-17 | 0.35584231 | 0.528 | 0.375 | 1.79E-12 | CD4_EM_CTL_UCBMC |
| ABCD3              | 5.81E-17 | 0.74653081 | 0.278 | 0.166 | 2.06E-12 | CD4_EM_CTL_UCBMC |
| ENSMMUG00000014947 | 5.83E-17 | 0.61073499 | 0.353 | 0.228 | 2.07E-12 | CD4_EM_CTL_UCBMC |
| GMCL1              | 6.32E-17 | 0.42229316 | 0.51  | 0.364 | 2.24E-12 | CD4_EM_CTL_UCBMC |
| CD247              | 6.57E-17 | 0.25987452 | 0.714 | 0.568 | 2.33E-12 | CD4_EM_CTL_UCBMC |
| SMG7               | 6.57E-17 | 0.52782335 | 0.489 | 0.355 | 2.33E-12 | CD4_EM_CTL_UCBMC |
| WDR70              | 6.62E-17 | 0.3929066  | 0.62  | 0.471 | 2.35E-12 | CD4_EM_CTL_UCBMC |
| SNX29              | 6.70E-17 | 0.56597862 | 0.403 | 0.271 | 2.37E-12 | CD4_EM_CTL_UCBMC |
| HERC6              | 6.87E-17 | 0.7476858  | 0.251 | 0.144 | 2.43E-12 | CD4_EM_CTL_UCBMC |
| GATAD2B            | 7.50E-17 | 0.40630256 | 0.558 | 0.421 | 2.66E-12 | CD4_EM_CTL_UCBMC |
| ZFAND6             | 7.72E-17 | 0.33994461 | 0.715 | 0.575 | 2.73E-12 | CD4_EM_CTL_UCBMC |
| UBR1               | 7.74E-17 | 0.43407025 | 0.595 | 0.45  | 2.74E-12 | CD4_EM_CTL_UCBMC |
| AGTPBP1            | 7.76E-17 | 0.5227112  | 0.447 | 0.316 | 2.75E-12 | CD4_EM_CTL_UCBMC |
| KIAA1143           | 7.80E-17 | 0.73465067 | 0.305 | 0.189 | 2.76E-12 | CD4_EM_CTL_UCBMC |
| NT5C2              | 7.92E-17 | 0.46503692 | 0.52  | 0.379 | 2.81E-12 | CD4_EM_CTL_UCBMC |
| FBXL5              | 8.16E-17 | 0.61136328 | 0.36  | 0.234 | 2.89E-12 | CD4_EM_CTL_UCBMC |
| EXOC6              | 8.58E-17 | 0.5333627  | 0.449 | 0.316 | 3.04E-12 | CD4_EM_CTL_UCBMC |
| TFG                | 8.88E-17 | 0.56977523 | 0.374 | 0.248 | 3.15E-12 | CD4_EM_CTL_UCBMC |
| NSF                | 1.13E-16 | 0.4013855  | 0.545 | 0.398 | 4.01E-12 | CD4_EM_CTL_UCBMC |
| JAML               | 1.16E-16 | 0.54717848 | 0.482 | 0.347 | 4.10E-12 | CD4_EM_CTL_UCBMC |
| NAA25              | 1.21E-16 | 0.66064846 | 0.356 | 0.234 | 4.29E-12 | CD4_EM_CTL_UCBMC |
| DIS3L2             | 1.23E-16 | 0.47360841 | 0.497 | 0.37  | 4.37E-12 | CD4_EM_CTL_UCBMC |
| UBA3               | 1.30E-16 | 0.68883072 | 0.314 | 0.198 | 4.61E-12 | CD4_EM_CTL_UCBMC |
| ENSMMUG00000020751 | 1.34E-16 | 0.6903619  | 0.345 | 0.228 | 4.76E-12 | CD4_EM_CTL_UCBMC |
| MED21              | 1.43E-16 | 0.60842679 | 0.346 | 0.223 | 5.06E-12 | CD4_EM_CTL_UCBMC |
| BCL7B              | 1.45E-16 | 0.63208423 | 0.335 | 0.216 | 5.15E-12 | CD4_EM_CTL_UCBMC |

|                     |          |            |       |       |          |                  |
|---------------------|----------|------------|-------|-------|----------|------------------|
| UBR3                | 1.51E-16 | 0.46700404 | 0.504 | 0.364 | 5.34E-12 | CD4_EM_CTL_UCBMC |
| VPS53               | 1.71E-16 | 0.65868161 | 0.338 | 0.218 | 6.07E-12 | CD4_EM_CTL_UCBMC |
| XPO7                | 1.89E-16 | 0.67694168 | 0.331 | 0.211 | 6.70E-12 | CD4_EM_CTL_UCBMC |
| ABI1                | 1.91E-16 | 0.26348539 | 0.695 | 0.539 | 6.77E-12 | CD4_EM_CTL_UCBMC |
| RSL1D1              | 1.98E-16 | 0.57847551 | 0.421 | 0.296 | 7.02E-12 | CD4_EM_CTL_UCBMC |
| ZNF708              | 2.08E-16 | 0.68857533 | 0.303 | 0.188 | 7.36E-12 | CD4_EM_CTL_UCBMC |
| ADK                 | 2.10E-16 | 0.52894952 | 0.514 | 0.374 | 7.43E-12 | CD4_EM_CTL_UCBMC |
| IP6K2               | 2.21E-16 | 0.63350616 | 0.402 | 0.278 | 7.84E-12 | CD4_EM_CTL_UCBMC |
| RPS16               | 2.22E-16 | 0.23846883 | 0.968 | 0.938 | 7.86E-12 | CD4_EM_CTL_UCBMC |
| PDS5B               | 2.27E-16 | 0.45687168 | 0.523 | 0.389 | 8.05E-12 | CD4_EM_CTL_UCBMC |
| SRSF4               | 2.47E-16 | 0.46730162 | 0.542 | 0.404 | 8.74E-12 | CD4_EM_CTL_UCBMC |
| SLU7                | 2.54E-16 | 0.65290737 | 0.385 | 0.261 | 9.01E-12 | CD4_EM_CTL_UCBMC |
| TMEM106B            | 2.66E-16 | 0.75764851 | 0.283 | 0.172 | 9.44E-12 | CD4_EM_CTL_UCBMC |
| FLNA                | 2.75E-16 | 0.35358465 | 0.467 | 0.323 | 9.75E-12 | CD4_EM_CTL_UCBMC |
| RIPOR2              | 2.82E-16 | 0.20158401 | 0.945 | 0.827 | 9.98E-12 | CD4_EM_CTL_UCBMC |
| RLIM                | 2.86E-16 | 0.61086168 | 0.337 | 0.217 | 1.01E-11 | CD4_EM_CTL_UCBMC |
| TTC7A               | 2.86E-16 | 0.73364849 | 0.275 | 0.166 | 1.01E-11 | CD4_EM_CTL_UCBMC |
| MEMO1               | 2.98E-16 | 0.39815485 | 0.6   | 0.448 | 1.06E-11 | CD4_EM_CTL_UCBMC |
| CWC15               | 2.99E-16 | 0.45588622 | 0.507 | 0.37  | 1.06E-11 | CD4_EM_CTL_UCBMC |
| PDGFRA              | 3.00E-16 | 0.23122911 | 0.856 | 0.765 | 1.06E-11 | CD4_EM_CTL_UCBMC |
| BIRC2               | 3.01E-16 | 0.39129066 | 0.438 | 0.303 | 1.06E-11 | CD4_EM_CTL_UCBMC |
| TAF3                | 3.19E-16 | 0.48819213 | 0.47  | 0.33  | 1.13E-11 | CD4_EM_CTL_UCBMC |
| ELMO1               | 3.20E-16 | 0.26686087 | 0.834 | 0.686 | 1.13E-11 | CD4_EM_CTL_UCBMC |
| KDM5A               | 3.33E-16 | 0.50354542 | 0.509 | 0.379 | 1.18E-11 | CD4_EM_CTL_UCBMC |
| ENSMMUG00000003412  | 3.37E-16 | 0.23355198 | 0.967 | 0.937 | 1.19E-11 | CD4_EM_CTL_UCBMC |
| TMEM135             | 3.40E-16 | 0.52710334 | 0.434 | 0.298 | 1.21E-11 | CD4_EM_CTL_UCBMC |
| PPTC7               | 3.58E-16 | 0.68068743 | 0.327 | 0.211 | 1.27E-11 | CD4_EM_CTL_UCBMC |
| TMEM131L            | 3.58E-16 | 0.33783505 | 0.654 | 0.496 | 1.27E-11 | CD4_EM_CTL_UCBMC |
| BIN2                | 3.66E-16 | 0.37111612 | 0.705 | 0.567 | 1.30E-11 | CD4_EM_CTL_UCBMC |
| TMX3                | 3.86E-16 | 0.69041814 | 0.331 | 0.212 | 1.37E-11 | CD4_EM_CTL_UCBMC |
| UBR5                | 3.88E-16 | 0.38700417 | 0.59  | 0.444 | 1.37E-11 | CD4_EM_CTL_UCBMC |
| IGF2BP3             | 4.05E-16 | 0.46807445 | 0.503 | 0.352 | 1.43E-11 | CD4_EM_CTL_UCBMC |
| ENSMMUG000000063635 | 4.07E-16 | 0.43283092 | 0.259 | 0.15  | 1.44E-11 | CD4_EM_CTL_UCBMC |

|                    |          |            |       |       |          |                  |
|--------------------|----------|------------|-------|-------|----------|------------------|
| HACD2              | 4.07E-16 | 0.67403338 | 0.271 | 0.161 | 1.44E-11 | CD4_EM_CTL_UCBMC |
| QRICH1             | 4.23E-16 | 0.41882604 | 0.417 | 0.287 | 1.50E-11 | CD4_EM_CTL_UCBMC |
| TRIM72             | 4.55E-16 | 0.37160399 | 0.716 | 0.583 | 1.61E-11 | CD4_EM_CTL_UCBMC |
| KDM6A              | 4.66E-16 | 0.32624056 | 0.742 | 0.605 | 1.65E-11 | CD4_EM_CTL_UCBMC |
| SDF2               | 4.97E-16 | 0.62390459 | 0.289 | 0.178 | 1.76E-11 | CD4_EM_CTL_UCBMC |
| ACSL3              | 5.13E-16 | 0.54128833 | 0.339 | 0.215 | 1.82E-11 | CD4_EM_CTL_UCBMC |
| RSRC2              | 5.27E-16 | 0.41883325 | 0.661 | 0.532 | 1.87E-11 | CD4_EM_CTL_UCBMC |
| MBNL1              | 6.12E-16 | 0.20995579 | 0.975 | 0.905 | 2.17E-11 | CD4_EM_CTL_UCBMC |
| FAR1               | 6.40E-16 | 0.48123353 | 0.482 | 0.351 | 2.27E-11 | CD4_EM_CTL_UCBMC |
| HBS1L              | 6.86E-16 | 0.37625523 | 0.648 | 0.508 | 2.43E-11 | CD4_EM_CTL_UCBMC |
| MED27              | 6.90E-16 | 0.51138604 | 0.43  | 0.303 | 2.45E-11 | CD4_EM_CTL_UCBMC |
| AUTS2              | 7.24E-16 | 0.68829522 | 0.281 | 0.17  | 2.56E-11 | CD4_EM_CTL_UCBMC |
| TAGLN2             | 7.47E-16 | 0.18299479 | 0.713 | 0.586 | 2.65E-11 | CD4_EM_CTL_UCBMC |
| ZFAND3             | 7.86E-16 | 0.25545133 | 0.762 | 0.618 | 2.78E-11 | CD4_EM_CTL_UCBMC |
| NOL10              | 8.22E-16 | 0.77298923 | 0.306 | 0.196 | 2.91E-11 | CD4_EM_CTL_UCBMC |
| XRCC5              | 8.31E-16 | 0.38272947 | 0.633 | 0.494 | 2.94E-11 | CD4_EM_CTL_UCBMC |
| MRTFB              | 8.41E-16 | 0.68412164 | 0.308 | 0.196 | 2.98E-11 | CD4_EM_CTL_UCBMC |
| EZH2               | 8.52E-16 | 0.4623206  | 0.49  | 0.35  | 3.02E-11 | CD4_EM_CTL_UCBMC |
| ENSMMUG00000055114 | 9.33E-16 | 0.36099871 | 0.466 | 0.327 | 3.31E-11 | CD4_EM_CTL_UCBMC |
| MORC3              | 9.69E-16 | 0.58750971 | 0.362 | 0.245 | 3.43E-11 | CD4_EM_CTL_UCBMC |
| RPL23              | 9.74E-16 | 0.22004306 | 0.962 | 0.897 | 3.45E-11 | CD4_EM_CTL_UCBMC |
| PIP5K1A            | 9.91E-16 | 0.53288407 | 0.421 | 0.294 | 3.51E-11 | CD4_EM_CTL_UCBMC |
| REPS1              | 1.04E-15 | 0.5403961  | 0.398 | 0.27  | 3.68E-11 | CD4_EM_CTL_UCBMC |
| ABCG1              | 1.05E-15 | 0.57511609 | 0.348 | 0.227 | 3.73E-11 | CD4_EM_CTL_UCBMC |
| POC5               | 1.08E-15 | 0.45907281 | 0.464 | 0.331 | 3.81E-11 | CD4_EM_CTL_UCBMC |
| SP3                | 1.16E-15 | 0.5098819  | 0.443 | 0.314 | 4.12E-11 | CD4_EM_CTL_UCBMC |
| CDC42              | 1.16E-15 | 0.22245541 | 0.909 | 0.841 | 4.12E-11 | CD4_EM_CTL_UCBMC |
| TOR1AIP1           | 1.17E-15 | 0.66056108 | 0.311 | 0.197 | 4.13E-11 | CD4_EM_CTL_UCBMC |
| AHCTF1             | 1.17E-15 | 0.59148364 | 0.419 | 0.301 | 4.15E-11 | CD4_EM_CTL_UCBMC |
| ADNP               | 1.24E-15 | 0.50661274 | 0.484 | 0.352 | 4.38E-11 | CD4_EM_CTL_UCBMC |
| C18H18orf25        | 1.26E-15 | 0.51740479 | 0.423 | 0.291 | 4.47E-11 | CD4_EM_CTL_UCBMC |
| PUM2               | 1.49E-15 | 0.33332861 | 0.7   | 0.557 | 5.28E-11 | CD4_EM_CTL_UCBMC |
| EFL1               | 1.85E-15 | 0.38495864 | 0.475 | 0.335 | 6.56E-11 | CD4_EM_CTL_UCBMC |



|                    |          |            |       |       |          |                  |
|--------------------|----------|------------|-------|-------|----------|------------------|
| CDK6               | 1.92E-15 | 0.79677537 | 0.317 | 0.204 | 6.80E-11 | CD4_EM_CTL_UCBMC |
| ACE                | 2.00E-15 | 0.56112303 | 0.334 | 0.217 | 7.07E-11 | CD4_EM_CTL_UCBMC |
| KCMF1              | 2.11E-15 | 0.60674905 | 0.36  | 0.244 | 7.49E-11 | CD4_EM_CTL_UCBMC |
| OGT                | 2.18E-15 | 0.32764591 | 0.642 | 0.494 | 7.72E-11 | CD4_EM_CTL_UCBMC |
| ZZZ3               | 2.30E-15 | 0.4038468  | 0.501 | 0.367 | 8.16E-11 | CD4_EM_CTL_UCBMC |
| ENSMMUG00000060545 | 2.64E-15 | 0.37195058 | 0.471 | 0.333 | 9.35E-11 | CD4_EM_CTL_UCBMC |
| TUT7               | 2.71E-15 | 0.49347217 | 0.452 | 0.326 | 9.60E-11 | CD4_EM_CTL_UCBMC |
| PECAM1             | 2.72E-15 | 0.35854282 | 0.602 | 0.463 | 9.65E-11 | CD4_EM_CTL_UCBMC |
| SREK1IP1           | 2.78E-15 | 0.4258947  | 0.394 | 0.268 | 9.84E-11 | CD4_EM_CTL_UCBMC |
| USP8               | 3.01E-15 | 0.61957151 | 0.358 | 0.242 | 1.07E-10 | CD4_EM_CTL_UCBMC |
| TRIM33             | 3.84E-15 | 0.48028872 | 0.495 | 0.363 | 1.36E-10 | CD4_EM_CTL_UCBMC |
| TMEM131            | 3.89E-15 | 0.39955228 | 0.546 | 0.413 | 1.38E-10 | CD4_EM_CTL_UCBMC |
| COPS8              | 4.24E-15 | 0.59655481 | 0.333 | 0.22  | 1.50E-10 | CD4_EM_CTL_UCBMC |
| HNRNPR             | 4.58E-15 | 0.40266053 | 0.543 | 0.413 | 1.62E-10 | CD4_EM_CTL_UCBMC |
| CHD8               | 4.71E-15 | 0.64730147 | 0.296 | 0.188 | 1.67E-10 | CD4_EM_CTL_UCBMC |
| MAN1A2             | 4.86E-15 | 0.42357714 | 0.498 | 0.365 | 1.72E-10 | CD4_EM_CTL_UCBMC |
| NECAP1             | 5.15E-15 | 0.73634988 | 0.266 | 0.161 | 1.82E-10 | CD4_EM_CTL_UCBMC |
| CWF19L2            | 5.34E-15 | 0.58400684 | 0.43  | 0.308 | 1.89E-10 | CD4_EM_CTL_UCBMC |
| RPL27A             | 5.36E-15 | 0.21937885 | 0.967 | 0.895 | 1.90E-10 | CD4_EM_CTL_UCBMC |
| MAP3K7             | 6.01E-15 | 0.69447526 | 0.261 | 0.158 | 2.13E-10 | CD4_EM_CTL_UCBMC |
| MED1               | 6.04E-15 | 0.58503506 | 0.273 | 0.167 | 2.14E-10 | CD4_EM_CTL_UCBMC |
| KLHL23             | 6.13E-15 | 0.31576413 | 0.744 | 0.614 | 2.17E-10 | CD4_EM_CTL_UCBMC |
| ENSMMUG00000029026 | 6.20E-15 | 0.33977418 | 0.551 | 0.412 | 2.20E-10 | CD4_EM_CTL_UCBMC |
| ABCE1              | 6.27E-15 | 0.50912462 | 0.421 | 0.298 | 2.22E-10 | CD4_EM_CTL_UCBMC |
| IARS1              | 6.30E-15 | 0.68531117 | 0.292 | 0.186 | 2.23E-10 | CD4_EM_CTL_UCBMC |
| CDC27              | 6.96E-15 | 0.56191093 | 0.403 | 0.282 | 2.47E-10 | CD4_EM_CTL_UCBMC |
| UHRF2              | 7.04E-15 | 0.4360143  | 0.415 | 0.286 | 2.49E-10 | CD4_EM_CTL_UCBMC |
| MLLT3              | 7.43E-15 | 0.32858371 | 0.582 | 0.432 | 2.63E-10 | CD4_EM_CTL_UCBMC |
| SMG6               | 8.15E-15 | 0.34097152 | 0.612 | 0.478 | 2.89E-10 | CD4_EM_CTL_UCBMC |
| FBXO21             | 8.18E-15 | 0.71193097 | 0.301 | 0.192 | 2.90E-10 | CD4_EM_CTL_UCBMC |
| TMEM41B            | 8.20E-15 | 0.65880904 | 0.299 | 0.191 | 2.90E-10 | CD4_EM_CTL_UCBMC |
| BACH2              | 8.48E-15 | 0.22739323 | 0.661 | 0.511 | 3.00E-10 | CD4_EM_CTL_UCBMC |
| NSMCE2             | 9.07E-15 | 0.36905061 | 0.509 | 0.369 | 3.21E-10 | CD4_EM_CTL_UCBMC |

|                   |          |            |       |       |          |                  |
|-------------------|----------|------------|-------|-------|----------|------------------|
| LIMD2             | 9.69E-15 | 0.29317498 | 0.652 | 0.522 | 3.43E-10 | CD4_EM_CTL_UCBMC |
| GAPVD1            | 9.88E-15 | 0.51077833 | 0.445 | 0.32  | 3.50E-10 | CD4_EM_CTL_UCBMC |
| CDK17             | 1.05E-14 | 0.20804799 | 0.713 | 0.559 | 3.72E-10 | CD4_EM_CTL_UCBMC |
| TMEM245           | 1.06E-14 | 0.5794821  | 0.347 | 0.231 | 3.74E-10 | CD4_EM_CTL_UCBMC |
| RPRD2             | 1.07E-14 | 0.45004456 | 0.474 | 0.346 | 3.77E-10 | CD4_EM_CTL_UCBMC |
| MED14             | 1.11E-14 | 0.70049066 | 0.267 | 0.165 | 3.93E-10 | CD4_EM_CTL_UCBMC |
| PPP1R12A          | 1.29E-14 | 0.28643285 | 0.795 | 0.669 | 4.58E-10 | CD4_EM_CTL_UCBMC |
| DCAF10            | 1.29E-14 | 0.74544543 | 0.276 | 0.176 | 4.59E-10 | CD4_EM_CTL_UCBMC |
| ERO1B             | 1.32E-14 | 0.39777343 | 0.512 | 0.381 | 4.67E-10 | CD4_EM_CTL_UCBMC |
| MTMR6             | 1.37E-14 | 0.77203833 | 0.262 | 0.162 | 4.84E-10 | CD4_EM_CTL_UCBMC |
| NBEA              | 1.37E-14 | 0.63345352 | 0.348 | 0.232 | 4.85E-10 | CD4_EM_CTL_UCBMC |
| ZNF107            | 1.39E-14 | 0.71128662 | 0.255 | 0.155 | 4.91E-10 | CD4_EM_CTL_UCBMC |
| CSGALNACT2        | 1.51E-14 | 0.42238731 | 0.523 | 0.39  | 5.33E-10 | CD4_EM_CTL_UCBMC |
| DDX52             | 1.61E-14 | 0.66968987 | 0.349 | 0.236 | 5.70E-10 | CD4_EM_CTL_UCBMC |
| SF3B2             | 1.61E-14 | 0.5215974  | 0.395 | 0.275 | 5.71E-10 | CD4_EM_CTL_UCBMC |
| DNM1L             | 1.63E-14 | 0.5852462  | 0.376 | 0.263 | 5.77E-10 | CD4_EM_CTL_UCBMC |
| AATF              | 1.78E-14 | 0.6184672  | 0.305 | 0.197 | 6.30E-10 | CD4_EM_CTL_UCBMC |
| WDR26             | 1.79E-14 | 0.39984064 | 0.477 | 0.343 | 6.34E-10 | CD4_EM_CTL_UCBMC |
| PPP2R2A           | 1.79E-14 | 0.38981577 | 0.553 | 0.421 | 6.35E-10 | CD4_EM_CTL_UCBMC |
| CERS6             | 1.90E-14 | 0.50090115 | 0.471 | 0.354 | 6.72E-10 | CD4_EM_CTL_UCBMC |
| MRPS9             | 1.93E-14 | 0.60854993 | 0.319 | 0.208 | 6.85E-10 | CD4_EM_CTL_UCBMC |
| ALMS1             | 1.96E-14 | 0.71211103 | 0.279 | 0.176 | 6.93E-10 | CD4_EM_CTL_UCBMC |
| RAB14             | 1.99E-14 | 0.45056651 | 0.444 | 0.317 | 7.05E-10 | CD4_EM_CTL_UCBMC |
| KLF3              | 2.04E-14 | 0.42761017 | 0.375 | 0.251 | 7.23E-10 | CD4_EM_CTL_UCBMC |
| HEXA              | 2.06E-14 | 0.74081957 | 0.257 | 0.157 | 7.30E-10 | CD4_EM_CTL_UCBMC |
| ELMOD3            | 2.12E-14 | 0.49518498 | 0.399 | 0.274 | 7.52E-10 | CD4_EM_CTL_UCBMC |
| ENSMUG00000016009 | 2.28E-14 | 0.31933903 | 0.441 | 0.309 | 8.08E-10 | CD4_EM_CTL_UCBMC |
| ATP5PO            | 2.30E-14 | 0.29807739 | 0.723 | 0.591 | 8.15E-10 | CD4_EM_CTL_UCBMC |
| TMED2             | 2.37E-14 | 0.53998673 | 0.349 | 0.237 | 8.38E-10 | CD4_EM_CTL_UCBMC |
| MIA3              | 2.62E-14 | 0.76709259 | 0.264 | 0.165 | 9.30E-10 | CD4_EM_CTL_UCBMC |
| ASB3              | 2.71E-14 | 0.59737956 | 0.385 | 0.268 | 9.61E-10 | CD4_EM_CTL_UCBMC |
| EIF3H             | 2.97E-14 | 0.32701766 | 0.761 | 0.665 | 1.05E-09 | CD4_EM_CTL_UCBMC |
| CS                | 3.08E-14 | 0.45681449 | 0.495 | 0.369 | 1.09E-09 | CD4_EM_CTL_UCBMC |

|                   |          |            |       |       |          |                  |
|-------------------|----------|------------|-------|-------|----------|------------------|
| PRPF8             | 3.30E-14 | 0.50849101 | 0.393 | 0.275 | 1.17E-09 | CD4_EM_CTL_UCBMC |
| NFYC              | 3.68E-14 | 0.43166915 | 0.375 | 0.258 | 1.30E-09 | CD4_EM_CTL_UCBMC |
| DIAPH2            | 3.71E-14 | 0.36830895 | 0.533 | 0.401 | 1.31E-09 | CD4_EM_CTL_UCBMC |
| SUGT1             | 3.92E-14 | 0.46792925 | 0.429 | 0.306 | 1.39E-09 | CD4_EM_CTL_UCBMC |
| NUBPL             | 4.13E-14 | 0.76527699 | 0.278 | 0.176 | 1.46E-09 | CD4_EM_CTL_UCBMC |
| PTPRJ             | 4.15E-14 | 0.41605309 | 0.537 | 0.403 | 1.47E-09 | CD4_EM_CTL_UCBMC |
| BTF3L4            | 4.25E-14 | 0.52119606 | 0.428 | 0.311 | 1.51E-09 | CD4_EM_CTL_UCBMC |
| BROX              | 4.29E-14 | 0.58390648 | 0.259 | 0.158 | 1.52E-09 | CD4_EM_CTL_UCBMC |
| CWC25             | 4.39E-14 | 0.57829171 | 0.316 | 0.209 | 1.56E-09 | CD4_EM_CTL_UCBMC |
| ENSMUG00000015583 | 4.40E-14 | 0.30874752 | 0.802 | 0.697 | 1.56E-09 | CD4_EM_CTL_UCBMC |
| INPP5A            | 5.11E-14 | 0.55961914 | 0.414 | 0.298 | 1.81E-09 | CD4_EM_CTL_UCBMC |
| NOP14             | 5.13E-14 | 0.69675828 | 0.262 | 0.164 | 1.82E-09 | CD4_EM_CTL_UCBMC |
| ENSMUG00000001894 | 5.41E-14 | 0.49078413 | 0.407 | 0.289 | 1.92E-09 | CD4_EM_CTL_UCBMC |
| TNFSF8            | 5.61E-14 | 0.64127594 | 0.26  | 0.158 | 1.99E-09 | CD4_EM_CTL_UCBMC |
| IMMP2L            | 5.79E-14 | 0.37123001 | 0.601 | 0.463 | 2.05E-09 | CD4_EM_CTL_UCBMC |
| TNIK              | 5.96E-14 | 0.22375706 | 0.835 | 0.688 | 2.11E-09 | CD4_EM_CTL_UCBMC |
| SDHC              | 5.99E-14 | 0.56076733 | 0.309 | 0.202 | 2.12E-09 | CD4_EM_CTL_UCBMC |
| DOP1B             | 6.25E-14 | 0.56285695 | 0.329 | 0.218 | 2.21E-09 | CD4_EM_CTL_UCBMC |
| ENSMUG00000006463 | 6.65E-14 | 0.2400091  | 0.781 | 0.689 | 2.36E-09 | CD4_EM_CTL_UCBMC |
| DIDO1             | 6.81E-14 | 0.48379189 | 0.371 | 0.251 | 2.41E-09 | CD4_EM_CTL_UCBMC |
| ADIPOR1           | 7.14E-14 | 0.68805085 | 0.282 | 0.179 | 2.53E-09 | CD4_EM_CTL_UCBMC |
| RAPGEF1           | 7.19E-14 | 0.31825237 | 0.542 | 0.406 | 2.55E-09 | CD4_EM_CTL_UCBMC |
| AKAP9             | 7.52E-14 | 0.32351257 | 0.657 | 0.515 | 2.67E-09 | CD4_EM_CTL_UCBMC |
| CAMKMT            | 7.80E-14 | 0.37692472 | 0.497 | 0.365 | 2.76E-09 | CD4_EM_CTL_UCBMC |
| BBX               | 7.89E-14 | 0.37785358 | 0.592 | 0.47  | 2.79E-09 | CD4_EM_CTL_UCBMC |
| USP37             | 8.11E-14 | 0.49693355 | 0.324 | 0.212 | 2.87E-09 | CD4_EM_CTL_UCBMC |
| RAB3GAP1          | 8.51E-14 | 0.48349939 | 0.414 | 0.293 | 3.01E-09 | CD4_EM_CTL_UCBMC |
| GLMN              | 8.86E-14 | 0.58750316 | 0.38  | 0.27  | 3.14E-09 | CD4_EM_CTL_UCBMC |
| CREBBP            | 8.99E-14 | 0.3137855  | 0.612 | 0.48  | 3.18E-09 | CD4_EM_CTL_UCBMC |
| LIMK2             | 9.27E-14 | 0.64477425 | 0.259 | 0.162 | 3.29E-09 | CD4_EM_CTL_UCBMC |
| NFATC3            | 9.45E-14 | 0.32655249 | 0.64  | 0.5   | 3.35E-09 | CD4_EM_CTL_UCBMC |
| WDR20             | 9.46E-14 | 0.69944553 | 0.304 | 0.198 | 3.35E-09 | CD4_EM_CTL_UCBMC |
| EIF2S3            | 1.06E-13 | 0.56277421 | 0.407 | 0.293 | 3.77E-09 | CD4_EM_CTL_UCBMC |

|                   |          |            |       |       |          |                  |
|-------------------|----------|------------|-------|-------|----------|------------------|
| APPL2             | 1.22E-13 | 0.65148024 | 0.266 | 0.166 | 4.31E-09 | CD4_EM_CTL_UCBMC |
| MSI2              | 1.24E-13 | 0.24681432 | 0.712 | 0.58  | 4.39E-09 | CD4_EM_CTL_UCBMC |
| USP34             | 1.26E-13 | 0.24462482 | 0.775 | 0.626 | 4.47E-09 | CD4_EM_CTL_UCBMC |
| TUT4              | 1.31E-13 | 0.28185317 | 0.775 | 0.639 | 4.66E-09 | CD4_EM_CTL_UCBMC |
| TBC1D5            | 1.34E-13 | 0.21562127 | 0.798 | 0.669 | 4.73E-09 | CD4_EM_CTL_UCBMC |
| GALNT11           | 1.41E-13 | 0.55167158 | 0.341 | 0.228 | 4.98E-09 | CD4_EM_CTL_UCBMC |
| KDM1A             | 1.83E-13 | 0.51529755 | 0.347 | 0.236 | 6.47E-09 | CD4_EM_CTL_UCBMC |
| TMOD3             | 1.93E-13 | 0.42225277 | 0.506 | 0.386 | 6.83E-09 | CD4_EM_CTL_UCBMC |
| UBR4              | 2.07E-13 | 0.49519285 | 0.397 | 0.287 | 7.34E-09 | CD4_EM_CTL_UCBMC |
| VPS36             | 2.11E-13 | 0.50636044 | 0.371 | 0.259 | 7.46E-09 | CD4_EM_CTL_UCBMC |
| ENSMUG00000030465 | 2.45E-13 | 0.33953119 | 0.554 | 0.426 | 8.68E-09 | CD4_EM_CTL_UCBMC |
| FBXO25            | 2.48E-13 | 0.61597397 | 0.301 | 0.197 | 8.77E-09 | CD4_EM_CTL_UCBMC |
| MKLN1             | 2.50E-13 | 0.33107582 | 0.643 | 0.513 | 8.86E-09 | CD4_EM_CTL_UCBMC |
| PPP3CC            | 2.55E-13 | 0.29193879 | 0.675 | 0.542 | 9.03E-09 | CD4_EM_CTL_UCBMC |
| SLCO3A1           | 2.76E-13 | 0.38317404 | 0.297 | 0.189 | 9.77E-09 | CD4_EM_CTL_UCBMC |
| FBXW2             | 2.83E-13 | 0.64128913 | 0.264 | 0.166 | 1.00E-08 | CD4_EM_CTL_UCBMC |
| SLC12A6           | 2.99E-13 | 0.30205166 | 0.574 | 0.443 | 1.06E-08 | CD4_EM_CTL_UCBMC |
| SVIL              | 3.02E-13 | 0.5472227  | 0.258 | 0.159 | 1.07E-08 | CD4_EM_CTL_UCBMC |
| RNGTT             | 3.39E-13 | 0.41479535 | 0.516 | 0.392 | 1.20E-08 | CD4_EM_CTL_UCBMC |
| TNKS2             | 3.44E-13 | 0.4179231  | 0.468 | 0.344 | 1.22E-08 | CD4_EM_CTL_UCBMC |
| AFF4              | 3.44E-13 | 0.47520673 | 0.392 | 0.277 | 1.22E-08 | CD4_EM_CTL_UCBMC |
| MTPN              | 3.53E-13 | 0.41788194 | 0.499 | 0.374 | 1.25E-08 | CD4_EM_CTL_UCBMC |
| ICE1              | 3.71E-13 | 0.6619321  | 0.301 | 0.199 | 1.32E-08 | CD4_EM_CTL_UCBMC |
| CPSF7             | 3.73E-13 | 0.71757968 | 0.256 | 0.16  | 1.32E-08 | CD4_EM_CTL_UCBMC |
| LPIN2             | 3.75E-13 | 0.58727194 | 0.335 | 0.229 | 1.33E-08 | CD4_EM_CTL_UCBMC |
| VPS13D            | 3.79E-13 | 0.49897193 | 0.358 | 0.244 | 1.34E-08 | CD4_EM_CTL_UCBMC |
| METTL16           | 3.90E-13 | 0.53387073 | 0.33  | 0.222 | 1.38E-08 | CD4_EM_CTL_UCBMC |
| ZNF827            | 3.96E-13 | 0.35530707 | 0.55  | 0.428 | 1.40E-08 | CD4_EM_CTL_UCBMC |
| LCORL             | 3.98E-13 | 0.52479441 | 0.457 | 0.346 | 1.41E-08 | CD4_EM_CTL_UCBMC |
| DNAJC3            | 4.02E-13 | 0.40991603 | 0.52  | 0.4   | 1.42E-08 | CD4_EM_CTL_UCBMC |
| WWOX              | 4.03E-13 | 0.40862314 | 0.509 | 0.384 | 1.43E-08 | CD4_EM_CTL_UCBMC |
| ADAM17            | 4.18E-13 | 0.52041579 | 0.297 | 0.193 | 1.48E-08 | CD4_EM_CTL_UCBMC |
| SERINC1           | 4.19E-13 | 0.37918378 | 0.524 | 0.414 | 1.49E-08 | CD4_EM_CTL_UCBMC |

|                   |          |            |       |       |          |                  |
|-------------------|----------|------------|-------|-------|----------|------------------|
| MED13L            | 4.29E-13 | 0.24301011 | 0.768 | 0.628 | 1.52E-08 | CD4_EM_CTL_UCBMC |
| SEC22B            | 4.47E-13 | 0.72116494 | 0.273 | 0.177 | 1.58E-08 | CD4_EM_CTL_UCBMC |
| PRKX              | 4.53E-13 | 0.31668905 | 0.692 | 0.563 | 1.60E-08 | CD4_EM_CTL_UCBMC |
| MORF4L1           | 4.65E-13 | 0.34016046 | 0.723 | 0.61  | 1.65E-08 | CD4_EM_CTL_UCBMC |
| WIPI2             | 4.70E-13 | 0.54955665 | 0.35  | 0.242 | 1.66E-08 | CD4_EM_CTL_UCBMC |
| RBL2              | 5.57E-13 | 0.49487187 | 0.374 | 0.263 | 1.97E-08 | CD4_EM_CTL_UCBMC |
| ITFG1             | 5.75E-13 | 0.44368569 | 0.471 | 0.35  | 2.04E-08 | CD4_EM_CTL_UCBMC |
| PSMA7             | 5.83E-13 | 0.31412842 | 0.718 | 0.596 | 2.06E-08 | CD4_EM_CTL_UCBMC |
| COX16             | 5.87E-13 | 0.32405252 | 0.645 | 0.528 | 2.08E-08 | CD4_EM_CTL_UCBMC |
| YTHDC1            | 5.89E-13 | 0.39293271 | 0.604 | 0.489 | 2.09E-08 | CD4_EM_CTL_UCBMC |
| GPR89A            | 6.33E-13 | 0.61543362 | 0.31  | 0.208 | 2.24E-08 | CD4_EM_CTL_UCBMC |
| ELK3              | 7.12E-13 | 0.35558457 | 0.564 | 0.44  | 2.52E-08 | CD4_EM_CTL_UCBMC |
| MDM4              | 7.30E-13 | 0.41852482 | 0.488 | 0.369 | 2.59E-08 | CD4_EM_CTL_UCBMC |
| SCAF4             | 7.76E-13 | 0.43826912 | 0.407 | 0.29  | 2.75E-08 | CD4_EM_CTL_UCBMC |
| PSPC1             | 8.04E-13 | 0.40793536 | 0.552 | 0.429 | 2.85E-08 | CD4_EM_CTL_UCBMC |
| GRK3              | 8.09E-13 | 0.70048077 | 0.262 | 0.167 | 2.87E-08 | CD4_EM_CTL_UCBMC |
| ENSMUG00000029973 | 8.18E-13 | 0.28217583 | 0.573 | 0.446 | 2.90E-08 | CD4_EM_CTL_UCBMC |
| AP2A2             | 9.05E-13 | 0.54682928 | 0.28  | 0.183 | 3.21E-08 | CD4_EM_CTL_UCBMC |
| PI4K2B            | 9.87E-13 | 0.39206843 | 0.613 | 0.506 | 3.50E-08 | CD4_EM_CTL_UCBMC |
| CASP3             | 1.07E-12 | 0.36097089 | 0.579 | 0.449 | 3.80E-08 | CD4_EM_CTL_UCBMC |
| SHOC2             | 1.09E-12 | 0.42941108 | 0.524 | 0.404 | 3.88E-08 | CD4_EM_CTL_UCBMC |
| OLA1              | 1.14E-12 | 0.45526129 | 0.504 | 0.389 | 4.05E-08 | CD4_EM_CTL_UCBMC |
| TARDBP            | 1.20E-12 | 0.59796524 | 0.325 | 0.224 | 4.24E-08 | CD4_EM_CTL_UCBMC |
| TOGARAM1          | 1.20E-12 | 0.60208252 | 0.323 | 0.22  | 4.26E-08 | CD4_EM_CTL_UCBMC |
| RSBN1             | 1.20E-12 | 0.54443226 | 0.256 | 0.16  | 4.26E-08 | CD4_EM_CTL_UCBMC |
| MTSS1             | 1.20E-12 | 0.1194445  | 0.642 | 0.483 | 4.26E-08 | CD4_EM_CTL_UCBMC |
| EPS15             | 1.23E-12 | 0.3897335  | 0.516 | 0.398 | 4.35E-08 | CD4_EM_CTL_UCBMC |
| NBR1              | 1.25E-12 | 0.31246487 | 0.509 | 0.383 | 4.44E-08 | CD4_EM_CTL_UCBMC |
| ENSMUG00000061298 | 1.29E-12 | 0.5039259  | 0.272 | 0.177 | 4.56E-08 | CD4_EM_CTL_UCBMC |
| MTR               | 1.30E-12 | 0.56477591 | 0.33  | 0.225 | 4.59E-08 | CD4_EM_CTL_UCBMC |
| STK4              | 1.30E-12 | 0.32952044 | 0.706 | 0.602 | 4.61E-08 | CD4_EM_CTL_UCBMC |
| RBM25             | 1.32E-12 | 0.38598706 | 0.565 | 0.451 | 4.66E-08 | CD4_EM_CTL_UCBMC |
| GABPB1            | 1.35E-12 | 0.38166731 | 0.481 | 0.368 | 4.78E-08 | CD4_EM_CTL_UCBMC |

|          |          |            |       |       |          |                  |
|----------|----------|------------|-------|-------|----------|------------------|
| ARID1B   | 1.39E-12 | 0.23187499 | 0.772 | 0.615 | 4.94E-08 | CD4_EM_CTL_UCBMC |
| KANSL2   | 1.46E-12 | 0.51797912 | 0.388 | 0.281 | 5.19E-08 | CD4_EM_CTL_UCBMC |
| NOSIP    | 1.57E-12 | 0.60081798 | 0.293 | 0.193 | 5.55E-08 | CD4_EM_CTL_UCBMC |
| WDPCP    | 1.67E-12 | 0.68521504 | 0.3   | 0.201 | 5.92E-08 | CD4_EM_CTL_UCBMC |
| ANKRD12  | 1.72E-12 | 0.29851821 | 0.651 | 0.535 | 6.11E-08 | CD4_EM_CTL_UCBMC |
| ITSN2    | 1.80E-12 | 0.30988491 | 0.671 | 0.548 | 6.39E-08 | CD4_EM_CTL_UCBMC |
| TSPO     | 1.85E-12 | 0.41833527 | 0.329 | 0.222 | 6.55E-08 | CD4_EM_CTL_UCBMC |
| CSNK1G3  | 1.87E-12 | 0.39243647 | 0.481 | 0.362 | 6.63E-08 | CD4_EM_CTL_UCBMC |
| MAP3K3   | 1.93E-12 | 0.60066844 | 0.258 | 0.165 | 6.83E-08 | CD4_EM_CTL_UCBMC |
| IGBP1    | 1.98E-12 | 0.44541605 | 0.399 | 0.287 | 7.00E-08 | CD4_EM_CTL_UCBMC |
| SERINC3  | 1.99E-12 | 0.59411244 | 0.288 | 0.189 | 7.07E-08 | CD4_EM_CTL_UCBMC |
| ARL15    | 2.13E-12 | 0.26621474 | 0.645 | 0.505 | 7.56E-08 | CD4_EM_CTL_UCBMC |
| PSMA6    | 2.24E-12 | 0.43813954 | 0.394 | 0.281 | 7.94E-08 | CD4_EM_CTL_UCBMC |
| USP42    | 2.27E-12 | 0.64709069 | 0.255 | 0.163 | 8.03E-08 | CD4_EM_CTL_UCBMC |
| TOP1     | 2.28E-12 | 0.28642463 | 0.713 | 0.579 | 8.06E-08 | CD4_EM_CTL_UCBMC |
| SMYD3    | 2.29E-12 | 0.36373997 | 0.608 | 0.492 | 8.13E-08 | CD4_EM_CTL_UCBMC |
| TPP2     | 2.42E-12 | 0.42834391 | 0.356 | 0.245 | 8.56E-08 | CD4_EM_CTL_UCBMC |
| EWSR1    | 2.42E-12 | 0.45274378 | 0.506 | 0.388 | 8.57E-08 | CD4_EM_CTL_UCBMC |
| ROCK1    | 2.43E-12 | 0.29256078 | 0.723 | 0.599 | 8.61E-08 | CD4_EM_CTL_UCBMC |
| ATR      | 2.44E-12 | 0.59767283 | 0.346 | 0.239 | 8.64E-08 | CD4_EM_CTL_UCBMC |
| ERCC6L2  | 3.32E-12 | 0.58701371 | 0.294 | 0.195 | 1.18E-07 | CD4_EM_CTL_UCBMC |
| PLEKHM1  | 3.36E-12 | 0.6293466  | 0.25  | 0.158 | 1.19E-07 | CD4_EM_CTL_UCBMC |
| GLCE     | 3.92E-12 | 0.2319007  | 0.532 | 0.396 | 1.39E-07 | CD4_EM_CTL_UCBMC |
| ARHGDIB  | 3.94E-12 | 0.17878957 | 0.908 | 0.846 | 1.40E-07 | CD4_EM_CTL_UCBMC |
| MTMR3    | 4.03E-12 | 0.43647986 | 0.394 | 0.283 | 1.43E-07 | CD4_EM_CTL_UCBMC |
| THUMPD1  | 4.25E-12 | 0.54933703 | 0.31  | 0.211 | 1.51E-07 | CD4_EM_CTL_UCBMC |
| SREBF2   | 4.88E-12 | 0.50026865 | 0.385 | 0.276 | 1.73E-07 | CD4_EM_CTL_UCBMC |
| IPO5     | 6.00E-12 | 0.61857176 | 0.252 | 0.161 | 2.13E-07 | CD4_EM_CTL_UCBMC |
| RBM14    | 6.02E-12 | 0.23863959 | 0.725 | 0.591 | 2.13E-07 | CD4_EM_CTL_UCBMC |
| ATP6V0D1 | 6.26E-12 | 0.49272073 | 0.378 | 0.271 | 2.22E-07 | CD4_EM_CTL_UCBMC |
| SIPA1L2  | 6.45E-12 | 0.27505655 | 0.31  | 0.204 | 2.29E-07 | CD4_EM_CTL_UCBMC |
| SMARCC2  | 6.63E-12 | 0.68311415 | 0.252 | 0.163 | 2.35E-07 | CD4_EM_CTL_UCBMC |
| HDAC2    | 6.77E-12 | 0.54620874 | 0.391 | 0.285 | 2.40E-07 | CD4_EM_CTL_UCBMC |

|                   |          |            |       |       |          |                  |
|-------------------|----------|------------|-------|-------|----------|------------------|
| PAK1IP1           | 6.94E-12 | 0.52267481 | 0.282 | 0.184 | 2.46E-07 | CD4_EM_CTL_UCBMC |
| GTF2H1            | 7.30E-12 | 0.6019601  | 0.256 | 0.165 | 2.59E-07 | CD4_EM_CTL_UCBMC |
| RBM34             | 7.77E-12 | 0.60707678 | 0.272 | 0.177 | 2.75E-07 | CD4_EM_CTL_UCBMC |
| COX10             | 8.49E-12 | 0.48504608 | 0.328 | 0.226 | 3.01E-07 | CD4_EM_CTL_UCBMC |
| NUP153            | 8.89E-12 | 0.3505902  | 0.481 | 0.356 | 3.15E-07 | CD4_EM_CTL_UCBMC |
| THADA             | 9.31E-12 | 0.33993497 | 0.539 | 0.42  | 3.30E-07 | CD4_EM_CTL_UCBMC |
| AGPAT4            | 9.50E-12 | 0.49981421 | 0.259 | 0.166 | 3.37E-07 | CD4_EM_CTL_UCBMC |
| C15H9orf78        | 9.89E-12 | 0.33839975 | 0.532 | 0.415 | 3.50E-07 | CD4_EM_CTL_UCBMC |
| ENSMUG00000061630 | 1.19E-11 | 0.35893901 | 0.41  | 0.296 | 4.20E-07 | CD4_EM_CTL_UCBMC |
| ATXN7L1           | 1.24E-11 | 0.40539867 | 0.27  | 0.174 | 4.39E-07 | CD4_EM_CTL_UCBMC |
| MPHOSPH8          | 1.35E-11 | 0.36893245 | 0.475 | 0.362 | 4.80E-07 | CD4_EM_CTL_UCBMC |
| PEX14             | 1.35E-11 | 0.47183741 | 0.374 | 0.266 | 4.80E-07 | CD4_EM_CTL_UCBMC |
| EIF4E             | 1.36E-11 | 0.54180993 | 0.313 | 0.215 | 4.82E-07 | CD4_EM_CTL_UCBMC |
| PSMA1             | 1.38E-11 | 0.26254441 | 0.49  | 0.368 | 4.88E-07 | CD4_EM_CTL_UCBMC |
| ENSMUG00000028699 | 1.42E-11 | 0.2201931  | 0.566 | 0.435 | 5.05E-07 | CD4_EM_CTL_UCBMC |
| MANBA             | 1.43E-11 | 0.2939099  | 0.567 | 0.432 | 5.07E-07 | CD4_EM_CTL_UCBMC |
| USP16             | 1.44E-11 | 0.43991349 | 0.408 | 0.3   | 5.11E-07 | CD4_EM_CTL_UCBMC |
| CD6               | 1.52E-11 | 0.35254126 | 0.471 | 0.351 | 5.37E-07 | CD4_EM_CTL_UCBMC |
| TRDMT1            | 1.56E-11 | 0.54844431 | 0.251 | 0.162 | 5.53E-07 | CD4_EM_CTL_UCBMC |
| TEX10             | 1.57E-11 | 0.56940596 | 0.257 | 0.165 | 5.56E-07 | CD4_EM_CTL_UCBMC |
| ENSMUG00000049010 | 1.57E-11 | 0.53108055 | 0.324 | 0.222 | 5.57E-07 | CD4_EM_CTL_UCBMC |
| CD2AP             | 1.58E-11 | 0.36279815 | 0.462 | 0.349 | 5.61E-07 | CD4_EM_CTL_UCBMC |
| FAM168B           | 1.64E-11 | 0.47823648 | 0.362 | 0.258 | 5.82E-07 | CD4_EM_CTL_UCBMC |
| SNX9              | 1.71E-11 | 0.46812915 | 0.293 | 0.195 | 6.06E-07 | CD4_EM_CTL_UCBMC |
| RPS3              | 1.73E-11 | 0.20027649 | 0.948 | 0.906 | 6.14E-07 | CD4_EM_CTL_UCBMC |
| NR1D2             | 1.78E-11 | 0.63971081 | 0.275 | 0.18  | 6.31E-07 | CD4_EM_CTL_UCBMC |
| PRIM2             | 1.79E-11 | 0.48690735 | 0.325 | 0.224 | 6.34E-07 | CD4_EM_CTL_UCBMC |
| CHIC2             | 1.80E-11 | 0.51510028 | 0.474 | 0.371 | 6.36E-07 | CD4_EM_CTL_UCBMC |
| CLIP1             | 1.80E-11 | 0.51633106 | 0.273 | 0.179 | 6.37E-07 | CD4_EM_CTL_UCBMC |
| UBA6              | 1.85E-11 | 0.64340819 | 0.256 | 0.168 | 6.56E-07 | CD4_EM_CTL_UCBMC |
| ATP10A            | 1.87E-11 | 0.26717198 | 0.611 | 0.492 | 6.61E-07 | CD4_EM_CTL_UCBMC |
| SRPK2             | 1.88E-11 | 0.34840392 | 0.585 | 0.462 | 6.65E-07 | CD4_EM_CTL_UCBMC |
| ZNF420            | 1.97E-11 | 0.63811798 | 0.254 | 0.165 | 6.97E-07 | CD4_EM_CTL_UCBMC |

|                    |          |            |       |       |          |                  |
|--------------------|----------|------------|-------|-------|----------|------------------|
| BCAS3              | 2.01E-11 | 0.25913758 | 0.608 | 0.485 | 7.13E-07 | CD4_EM_CTL_UCBMC |
| ATL2               | 2.16E-11 | 0.42659245 | 0.371 | 0.264 | 7.64E-07 | CD4_EM_CTL_UCBMC |
| SIPA1L1            | 2.26E-11 | 0.4064758  | 0.474 | 0.361 | 8.00E-07 | CD4_EM_CTL_UCBMC |
| BOD1L1             | 2.39E-11 | 0.45090432 | 0.328 | 0.227 | 8.48E-07 | CD4_EM_CTL_UCBMC |
| TRIP12             | 2.61E-11 | 0.32914207 | 0.587 | 0.468 | 9.25E-07 | CD4_EM_CTL_UCBMC |
| MYNN               | 2.69E-11 | 0.55862965 | 0.27  | 0.179 | 9.53E-07 | CD4_EM_CTL_UCBMC |
| TRRAP              | 2.95E-11 | 0.51872068 | 0.311 | 0.212 | 1.05E-06 | CD4_EM_CTL_UCBMC |
| ATF7IP2            | 2.98E-11 | 0.46382248 | 0.325 | 0.224 | 1.06E-06 | CD4_EM_CTL_UCBMC |
| PRRC2C             | 3.10E-11 | 0.22464739 | 0.78  | 0.675 | 1.10E-06 | CD4_EM_CTL_UCBMC |
| TAF15              | 3.23E-11 | 0.29624725 | 0.622 | 0.488 | 1.14E-06 | CD4_EM_CTL_UCBMC |
| ENSMMUG00000022874 | 3.31E-11 | 0.66050792 | 0.261 | 0.174 | 1.17E-06 | CD4_EM_CTL_UCBMC |
| SYNE1              | 3.33E-11 | 0.3460586  | 0.504 | 0.39  | 1.18E-06 | CD4_EM_CTL_UCBMC |
| TP53BP1            | 3.35E-11 | 0.37907712 | 0.557 | 0.434 | 1.19E-06 | CD4_EM_CTL_UCBMC |
| ERLEC1             | 3.40E-11 | 0.46514867 | 0.335 | 0.234 | 1.20E-06 | CD4_EM_CTL_UCBMC |
| SATB1              | 3.44E-11 | 0.16525369 | 0.539 | 0.415 | 1.22E-06 | CD4_EM_CTL_UCBMC |
| HERPUD2            | 3.45E-11 | 0.47354666 | 0.342 | 0.242 | 1.22E-06 | CD4_EM_CTL_UCBMC |
| ANKIB1             | 3.59E-11 | 0.28691975 | 0.513 | 0.392 | 1.27E-06 | CD4_EM_CTL_UCBMC |
| XPR1               | 3.74E-11 | 0.33270475 | 0.501 | 0.378 | 1.32E-06 | CD4_EM_CTL_UCBMC |
| ILRUN              | 3.97E-11 | 0.57991885 | 0.294 | 0.201 | 1.41E-06 | CD4_EM_CTL_UCBMC |
| ENSMMUG00000057691 | 4.05E-11 | 0.58913664 | 0.274 | 0.182 | 1.44E-06 | CD4_EM_CTL_UCBMC |
| MRPS15             | 4.19E-11 | 0.37199808 | 0.343 | 0.241 | 1.48E-06 | CD4_EM_CTL_UCBMC |
| TMEM183A           | 4.19E-11 | 0.55646373 | 0.29  | 0.198 | 1.49E-06 | CD4_EM_CTL_UCBMC |
| HACE1              | 4.25E-11 | 0.53265587 | 0.307 | 0.213 | 1.51E-06 | CD4_EM_CTL_UCBMC |
| TOMM20             | 4.45E-11 | 0.23586619 | 0.708 | 0.581 | 1.58E-06 | CD4_EM_CTL_UCBMC |
| RNF216             | 4.96E-11 | 0.30733573 | 0.526 | 0.405 | 1.76E-06 | CD4_EM_CTL_UCBMC |
| HBP1               | 5.15E-11 | 0.38267364 | 0.474 | 0.361 | 1.83E-06 | CD4_EM_CTL_UCBMC |
| DUSP10             | 5.24E-11 | 0.35526571 | 0.353 | 0.249 | 1.86E-06 | CD4_EM_CTL_UCBMC |
| MFF                | 5.28E-11 | 0.43664216 | 0.393 | 0.29  | 1.87E-06 | CD4_EM_CTL_UCBMC |
| ELF2               | 5.51E-11 | 0.35120565 | 0.472 | 0.357 | 1.95E-06 | CD4_EM_CTL_UCBMC |
| TPT1               | 5.51E-11 | 0.18253537 | 0.984 | 0.962 | 1.95E-06 | CD4_EM_CTL_UCBMC |
| CNOT7              | 5.54E-11 | 0.55082014 | 0.32  | 0.222 | 1.96E-06 | CD4_EM_CTL_UCBMC |
| SLC38A9            | 5.66E-11 | 0.54150763 | 0.295 | 0.2   | 2.00E-06 | CD4_EM_CTL_UCBMC |
| LRRFIP2            | 5.68E-11 | 0.42684282 | 0.335 | 0.236 | 2.01E-06 | CD4_EM_CTL_UCBMC |



|                     |          |            |       |       |          |                  |
|---------------------|----------|------------|-------|-------|----------|------------------|
| DHRS7B              | 5.76E-11 | 0.53184624 | 0.266 | 0.177 | 2.04E-06 | CD4_EM_CTL_UCBMC |
| MLXIP               | 5.91E-11 | 0.50445198 | 0.281 | 0.188 | 2.09E-06 | CD4_EM_CTL_UCBMC |
| G3BP1               | 6.24E-11 | 0.3238651  | 0.605 | 0.487 | 2.21E-06 | CD4_EM_CTL_UCBMC |
| GGNBP2              | 6.38E-11 | 0.43795503 | 0.432 | 0.328 | 2.26E-06 | CD4_EM_CTL_UCBMC |
| FAM222B             | 6.44E-11 | 0.33544349 | 0.38  | 0.273 | 2.28E-06 | CD4_EM_CTL_UCBMC |
| PIK3C3              | 6.83E-11 | 0.56482768 | 0.288 | 0.197 | 2.42E-06 | CD4_EM_CTL_UCBMC |
| TXLNG               | 6.87E-11 | 0.35693813 | 0.376 | 0.27  | 2.43E-06 | CD4_EM_CTL_UCBMC |
| ENSMMUG00000007536  | 7.26E-11 | 0.17399437 | 0.46  | 0.34  | 2.57E-06 | CD4_EM_CTL_UCBMC |
| ATXN7               | 7.60E-11 | 0.24582969 | 0.561 | 0.443 | 2.69E-06 | CD4_EM_CTL_UCBMC |
| DOCK11              | 7.76E-11 | 0.29328646 | 0.584 | 0.468 | 2.75E-06 | CD4_EM_CTL_UCBMC |
| ZDHHC20             | 7.79E-11 | 0.35134887 | 0.413 | 0.305 | 2.76E-06 | CD4_EM_CTL_UCBMC |
| PSMB7               | 9.31E-11 | 0.28047069 | 0.662 | 0.549 | 3.30E-06 | CD4_EM_CTL_UCBMC |
| EAPP                | 9.35E-11 | 0.49845596 | 0.287 | 0.196 | 3.31E-06 | CD4_EM_CTL_UCBMC |
| PTP4A2              | 9.77E-11 | 0.38428345 | 0.467 | 0.355 | 3.46E-06 | CD4_EM_CTL_UCBMC |
| DPP8                | 9.86E-11 | 0.53064854 | 0.25  | 0.165 | 3.49E-06 | CD4_EM_CTL_UCBMC |
| MYO5A               | 9.87E-11 | 0.38719599 | 0.377 | 0.275 | 3.50E-06 | CD4_EM_CTL_UCBMC |
| CHP1                | 1.04E-10 | 0.4268522  | 0.327 | 0.229 | 3.69E-06 | CD4_EM_CTL_UCBMC |
| LARP4               | 1.12E-10 | 0.42458503 | 0.403 | 0.301 | 3.98E-06 | CD4_EM_CTL_UCBMC |
| CTCF                | 1.15E-10 | 0.42709217 | 0.462 | 0.36  | 4.06E-06 | CD4_EM_CTL_UCBMC |
| ATE1                | 1.15E-10 | 0.44338167 | 0.389 | 0.284 | 4.07E-06 | CD4_EM_CTL_UCBMC |
| RNF34               | 1.23E-10 | 0.53588951 | 0.288 | 0.199 | 4.34E-06 | CD4_EM_CTL_UCBMC |
| XRN2                | 1.32E-10 | 0.32778655 | 0.608 | 0.497 | 4.68E-06 | CD4_EM_CTL_UCBMC |
| FAM204A             | 1.36E-10 | 0.45400356 | 0.303 | 0.208 | 4.82E-06 | CD4_EM_CTL_UCBMC |
| UQCRC1              | 1.41E-10 | 0.38694128 | 0.298 | 0.204 | 4.99E-06 | CD4_EM_CTL_UCBMC |
| HIPK2               | 1.57E-10 | 0.45816032 | 0.337 | 0.237 | 5.56E-06 | CD4_EM_CTL_UCBMC |
| SOS2                | 1.60E-10 | 0.42735545 | 0.346 | 0.245 | 5.68E-06 | CD4_EM_CTL_UCBMC |
| SCAMP1              | 1.63E-10 | 0.55416172 | 0.287 | 0.197 | 5.79E-06 | CD4_EM_CTL_UCBMC |
| HTT                 | 1.65E-10 | 0.42077592 | 0.426 | 0.323 | 5.84E-06 | CD4_EM_CTL_UCBMC |
| RYBP                | 1.74E-10 | 0.45639747 | 0.357 | 0.258 | 6.17E-06 | CD4_EM_CTL_UCBMC |
| ENSMMUG000000032031 | 1.76E-10 | 0.34643617 | 0.256 | 0.166 | 6.22E-06 | CD4_EM_CTL_UCBMC |
| FXR1                | 1.76E-10 | 0.3107904  | 0.613 | 0.502 | 6.24E-06 | CD4_EM_CTL_UCBMC |
| PAG1                | 1.77E-10 | 0.24804308 | 0.689 | 0.562 | 6.27E-06 | CD4_EM_CTL_UCBMC |
| PLCD4               | 1.88E-10 | 0.49439513 | 0.303 | 0.21  | 6.65E-06 | CD4_EM_CTL_UCBMC |

|                    |          |            |       |       |          |                  |
|--------------------|----------|------------|-------|-------|----------|------------------|
| SUCO               | 1.97E-10 | 0.26894379 | 0.48  | 0.369 | 6.99E-06 | CD4_EM_CTL_UCBMC |
| SEC63              | 2.03E-10 | 0.25468885 | 0.545 | 0.43  | 7.19E-06 | CD4_EM_CTL_UCBMC |
| TRANK1             | 2.17E-10 | 0.45466876 | 0.345 | 0.247 | 7.69E-06 | CD4_EM_CTL_UCBMC |
| EXOC4              | 2.19E-10 | 0.21658685 | 0.709 | 0.572 | 7.78E-06 | CD4_EM_CTL_UCBMC |
| SPIN1              | 2.20E-10 | 0.53401452 | 0.286 | 0.194 | 7.79E-06 | CD4_EM_CTL_UCBMC |
| CITED1             | 2.28E-10 | 0.56994466 | 0.357 | 0.264 | 8.09E-06 | CD4_EM_CTL_UCBMC |
| SEC22A             | 2.41E-10 | 0.56824659 | 0.257 | 0.17  | 8.53E-06 | CD4_EM_CTL_UCBMC |
| ANKRD11            | 2.57E-10 | 0.22473204 | 0.712 | 0.589 | 9.11E-06 | CD4_EM_CTL_UCBMC |
| RMND5A             | 2.58E-10 | 0.32945408 | 0.375 | 0.272 | 9.14E-06 | CD4_EM_CTL_UCBMC |
| USP9Y              | 2.77E-10 | 0.5098748  | 0.276 | 0.183 | 9.80E-06 | CD4_EM_CTL_UCBMC |
| RPIA               | 2.77E-10 | 0.40491698 | 0.372 | 0.273 | 9.83E-06 | CD4_EM_CTL_UCBMC |
| PDXDC1             | 2.89E-10 | 0.54780709 | 0.31  | 0.218 | 1.02E-05 | CD4_EM_CTL_UCBMC |
| DDX5               | 2.96E-10 | 0.1763487  | 0.963 | 0.857 | 1.05E-05 | CD4_EM_CTL_UCBMC |
| RBBP6              | 3.02E-10 | 0.37380135 | 0.395 | 0.293 | 1.07E-05 | CD4_EM_CTL_UCBMC |
| ATG7               | 3.05E-10 | 0.40312358 | 0.254 | 0.168 | 1.08E-05 | CD4_EM_CTL_UCBMC |
| UBP1               | 3.17E-10 | 0.58748881 | 0.27  | 0.184 | 1.12E-05 | CD4_EM_CTL_UCBMC |
| UFD1               | 3.45E-10 | 0.52375766 | 0.268 | 0.184 | 1.22E-05 | CD4_EM_CTL_UCBMC |
| GLYR1              | 3.49E-10 | 0.49828175 | 0.292 | 0.203 | 1.24E-05 | CD4_EM_CTL_UCBMC |
| RIC1               | 3.53E-10 | 0.48357279 | 0.404 | 0.309 | 1.25E-05 | CD4_EM_CTL_UCBMC |
| PPP1R16B           | 3.67E-10 | 0.26631712 | 0.534 | 0.419 | 1.30E-05 | CD4_EM_CTL_UCBMC |
| ENSMMUG00000022769 | 3.67E-10 | 0.2624345  | 0.647 | 0.539 | 1.30E-05 | CD4_EM_CTL_UCBMC |
| SPEN               | 3.71E-10 | 0.31509543 | 0.427 | 0.321 | 1.32E-05 | CD4_EM_CTL_UCBMC |
| ARFGEF1            | 3.89E-10 | 0.35580916 | 0.492 | 0.388 | 1.38E-05 | CD4_EM_CTL_UCBMC |
| ENTPD4             | 4.57E-10 | 0.33611078 | 0.344 | 0.246 | 1.62E-05 | CD4_EM_CTL_UCBMC |
| SNIP1              | 4.67E-10 | 0.60048485 | 0.293 | 0.206 | 1.65E-05 | CD4_EM_CTL_UCBMC |
| UBE4A              | 4.80E-10 | 0.53873252 | 0.296 | 0.207 | 1.70E-05 | CD4_EM_CTL_UCBMC |
| RNF103             | 4.88E-10 | 0.38288591 | 0.374 | 0.277 | 1.73E-05 | CD4_EM_CTL_UCBMC |
| BAZ2B              | 4.97E-10 | 0.59810673 | 0.312 | 0.224 | 1.76E-05 | CD4_EM_CTL_UCBMC |
| IL6ST              | 5.10E-10 | 0.27126484 | 0.535 | 0.397 | 1.81E-05 | CD4_EM_CTL_UCBMC |
| RBM7               | 5.32E-10 | 0.51862594 | 0.25  | 0.168 | 1.89E-05 | CD4_EM_CTL_UCBMC |
| ENSMMUG00000063316 | 5.69E-10 | 0.21211901 | 0.557 | 0.424 | 2.02E-05 | CD4_EM_CTL_UCBMC |
| RABGAP1L           | 5.95E-10 | 0.1297536  | 0.873 | 0.749 | 2.11E-05 | CD4_EM_CTL_UCBMC |
| LTN1               | 6.30E-10 | 0.45900944 | 0.342 | 0.247 | 2.23E-05 | CD4_EM_CTL_UCBMC |

|                     |          |            |       |       |          |                  |
|---------------------|----------|------------|-------|-------|----------|------------------|
| EIF2A               | 6.39E-10 | 0.44631475 | 0.36  | 0.266 | 2.27E-05 | CD4_EM_CTL_UCBMC |
| EIF4H               | 6.86E-10 | 0.36186574 | 0.495 | 0.387 | 2.43E-05 | CD4_EM_CTL_UCBMC |
| NAA15               | 6.86E-10 | 0.4521219  | 0.367 | 0.274 | 2.43E-05 | CD4_EM_CTL_UCBMC |
| STAT5B              | 8.37E-10 | 0.29548339 | 0.455 | 0.343 | 2.97E-05 | CD4_EM_CTL_UCBMC |
| PPP2R2D             | 8.70E-10 | 0.46534134 | 0.349 | 0.254 | 3.08E-05 | CD4_EM_CTL_UCBMC |
| BTBD1               | 8.77E-10 | 0.41436639 | 0.316 | 0.221 | 3.11E-05 | CD4_EM_CTL_UCBMC |
| TENT2               | 8.84E-10 | 0.36493227 | 0.395 | 0.293 | 3.13E-05 | CD4_EM_CTL_UCBMC |
| UBE2E2              | 9.64E-10 | 0.2119016  | 0.483 | 0.372 | 3.42E-05 | CD4_EM_CTL_UCBMC |
| SELENOS             | 1.00E-09 | 0.22445922 | 0.562 | 0.452 | 3.54E-05 | CD4_EM_CTL_UCBMC |
| HERC2               | 1.03E-09 | 0.33726032 | 0.442 | 0.342 | 3.63E-05 | CD4_EM_CTL_UCBMC |
| PSMD14              | 1.06E-09 | 0.33504466 | 0.468 | 0.363 | 3.77E-05 | CD4_EM_CTL_UCBMC |
| ENSMMUG00000002324  | 1.10E-09 | 0.29912766 | 0.545 | 0.441 | 3.89E-05 | CD4_EM_CTL_UCBMC |
| TIMM17A             | 1.10E-09 | 0.38876442 | 0.284 | 0.194 | 3.90E-05 | CD4_EM_CTL_UCBMC |
| EIF4EBP3            | 1.11E-09 | 0.30904326 | 0.514 | 0.409 | 3.93E-05 | CD4_EM_CTL_UCBMC |
| MTHFD1L             | 1.11E-09 | 0.2542412  | 0.383 | 0.28  | 3.95E-05 | CD4_EM_CTL_UCBMC |
| THOC2               | 1.16E-09 | 0.43179229 | 0.452 | 0.354 | 4.10E-05 | CD4_EM_CTL_UCBMC |
| PIAS2               | 1.26E-09 | 0.4372904  | 0.323 | 0.232 | 4.47E-05 | CD4_EM_CTL_UCBMC |
| ENSMMUG000000061458 | 1.27E-09 | 0.49843252 | 0.368 | 0.276 | 4.49E-05 | CD4_EM_CTL_UCBMC |
| GOLPH3              | 1.27E-09 | 0.33007344 | 0.514 | 0.408 | 4.51E-05 | CD4_EM_CTL_UCBMC |
| USP7                | 1.30E-09 | 0.43844528 | 0.358 | 0.265 | 4.59E-05 | CD4_EM_CTL_UCBMC |
| FANCC               | 1.39E-09 | 0.43206931 | 0.347 | 0.254 | 4.91E-05 | CD4_EM_CTL_UCBMC |
| MCU                 | 1.40E-09 | 0.4819151  | 0.297 | 0.208 | 4.96E-05 | CD4_EM_CTL_UCBMC |
| CDC5L               | 1.42E-09 | 0.40752036 | 0.342 | 0.25  | 5.02E-05 | CD4_EM_CTL_UCBMC |
| TRPC4AP             | 1.50E-09 | 0.39978255 | 0.384 | 0.288 | 5.32E-05 | CD4_EM_CTL_UCBMC |
| SIN3A               | 1.58E-09 | 0.37432547 | 0.414 | 0.318 | 5.58E-05 | CD4_EM_CTL_UCBMC |
| TRMT10C             | 1.66E-09 | 0.40765712 | 0.371 | 0.271 | 5.87E-05 | CD4_EM_CTL_UCBMC |
| DCTN4               | 1.68E-09 | 0.51511383 | 0.257 | 0.172 | 5.97E-05 | CD4_EM_CTL_UCBMC |
| STK24               | 1.96E-09 | 0.33257695 | 0.458 | 0.352 | 6.94E-05 | CD4_EM_CTL_UCBMC |
| UBAC2               | 1.97E-09 | 0.20999981 | 0.777 | 0.666 | 6.99E-05 | CD4_EM_CTL_UCBMC |
| PSMD11              | 2.07E-09 | 0.5509293  | 0.276 | 0.195 | 7.32E-05 | CD4_EM_CTL_UCBMC |
| PPIG                | 2.13E-09 | 0.24484159 | 0.561 | 0.451 | 7.54E-05 | CD4_EM_CTL_UCBMC |
| RTKN2               | 2.15E-09 | 0.24722384 | 0.471 | 0.369 | 7.60E-05 | CD4_EM_CTL_UCBMC |
| MDH1                | 2.16E-09 | 0.34981076 | 0.382 | 0.287 | 7.66E-05 | CD4_EM_CTL_UCBMC |

|                    |          |            |       |       |            |                  |
|--------------------|----------|------------|-------|-------|------------|------------------|
| ENSMMUG00000018557 | 2.20E-09 | 0.38607713 | 0.389 | 0.296 | 7.80E-05   | CD4_EM_CTL_UCBMC |
| MGAT5              | 2.29E-09 | 0.18340167 | 0.597 | 0.474 | 8.11E-05   | CD4_EM_CTL_UCBMC |
| ENSMMUG00000015270 | 2.38E-09 | 0.16080985 | 0.985 | 0.965 | 8.42E-05   | CD4_EM_CTL_UCBMC |
| ATP5PB             | 2.38E-09 | 0.32199952 | 0.411 | 0.309 | 8.44E-05   | CD4_EM_CTL_UCBMC |
| CRY1               | 2.41E-09 | 0.42997561 | 0.307 | 0.218 | 8.54E-05   | CD4_EM_CTL_UCBMC |
| UBE2Q2             | 2.42E-09 | 0.30345954 | 0.398 | 0.294 | 8.56E-05   | CD4_EM_CTL_UCBMC |
| RTRAF              | 2.56E-09 | 0.22415849 | 0.56  | 0.448 | 9.09E-05   | CD4_EM_CTL_UCBMC |
| GATAD2A            | 2.59E-09 | 0.36103555 | 0.447 | 0.346 | 9.17E-05   | CD4_EM_CTL_UCBMC |
| DCAF6              | 2.61E-09 | 0.39039906 | 0.431 | 0.331 | 9.27E-05   | CD4_EM_CTL_UCBMC |
| CAST               | 2.68E-09 | 0.29205399 | 0.52  | 0.414 | 9.51E-05   | CD4_EM_CTL_UCBMC |
| CMSS1              | 2.71E-09 | 0.45283743 | 0.26  | 0.177 | 9.62E-05   | CD4_EM_CTL_UCBMC |
| KPNA4              | 2.72E-09 | 0.46092355 | 0.311 | 0.224 | 9.63E-05   | CD4_EM_CTL_UCBMC |
| ENSMMUG00000006803 | 2.76E-09 | 0.2871863  | 0.491 | 0.386 | 9.77E-05   | CD4_EM_CTL_UCBMC |
| KIAA1328           | 2.83E-09 | 0.35899917 | 0.376 | 0.283 | 0.0001002  | CD4_EM_CTL_UCBMC |
| TRAF3              | 2.89E-09 | 0.32242127 | 0.374 | 0.274 | 0.00010225 | CD4_EM_CTL_UCBMC |
| LCLAT1             | 2.91E-09 | 0.531234   | 0.289 | 0.204 | 0.00010295 | CD4_EM_CTL_UCBMC |
| PPP2R5A            | 3.01E-09 | 0.41126891 | 0.403 | 0.307 | 0.00010676 | CD4_EM_CTL_UCBMC |
| CHD2               | 3.02E-09 | 0.18878347 | 0.757 | 0.644 | 0.00010694 | CD4_EM_CTL_UCBMC |
| ELF1               | 3.02E-09 | 0.14679415 | 0.863 | 0.745 | 0.00010703 | CD4_EM_CTL_UCBMC |
| DOCK10             | 3.03E-09 | 0.18921431 | 0.794 | 0.683 | 0.00010734 | CD4_EM_CTL_UCBMC |
| FAM214A            | 3.06E-09 | 0.33409156 | 0.424 | 0.322 | 0.00010843 | CD4_EM_CTL_UCBMC |
| TRNT1              | 3.11E-09 | 0.59131468 | 0.252 | 0.173 | 0.00011005 | CD4_EM_CTL_UCBMC |
| VPS54              | 3.11E-09 | 0.51718787 | 0.319 | 0.232 | 0.00011006 | CD4_EM_CTL_UCBMC |
| SEPTIN9            | 3.14E-09 | 0.25972095 | 0.609 | 0.504 | 0.00011129 | CD4_EM_CTL_UCBMC |
| PBXIP1             | 3.19E-09 | 0.41469389 | 0.39  | 0.297 | 0.0001131  | CD4_EM_CTL_UCBMC |
| PPP1R15A           | 3.23E-09 | 0.26644014 | 0.574 | 0.464 | 0.00011442 | CD4_EM_CTL_UCBMC |
| USP47              | 3.46E-09 | 0.23104836 | 0.646 | 0.53  | 0.00012277 | CD4_EM_CTL_UCBMC |
| AVL9               | 3.54E-09 | 0.32856057 | 0.347 | 0.25  | 0.00012542 | CD4_EM_CTL_UCBMC |
| TCF20              | 3.56E-09 | 0.43037455 | 0.342 | 0.256 | 0.00012624 | CD4_EM_CTL_UCBMC |
| RAB6A              | 3.57E-09 | 0.48409924 | 0.342 | 0.255 | 0.00012637 | CD4_EM_CTL_UCBMC |
| ZC3H18             | 3.67E-09 | 0.4888633  | 0.318 | 0.232 | 0.0001301  | CD4_EM_CTL_UCBMC |
| AOPEP              | 3.71E-09 | 0.21643702 | 0.501 | 0.392 | 0.00013157 | CD4_EM_CTL_UCBMC |
| KIAA0232           | 3.79E-09 | 0.30948844 | 0.356 | 0.259 | 0.00013425 | CD4_EM_CTL_UCBMC |

|             |          |            |       |       |            |                  |
|-------------|----------|------------|-------|-------|------------|------------------|
| KIF5B       | 3.81E-09 | 0.32056947 | 0.488 | 0.386 | 0.00013489 | CD4_EM_CTL_UCBMC |
| EIF3E       | 3.87E-09 | 0.21057668 | 0.796 | 0.694 | 0.00013725 | CD4_EM_CTL_UCBMC |
| PRKCQ       | 3.94E-09 | 0.20676538 | 0.611 | 0.492 | 0.00013955 | CD4_EM_CTL_UCBMC |
| NBAS        | 3.99E-09 | 0.40159457 | 0.288 | 0.201 | 0.0001415  | CD4_EM_CTL_UCBMC |
| ZC3H11A     | 4.01E-09 | 0.31126108 | 0.505 | 0.403 | 0.00014223 | CD4_EM_CTL_UCBMC |
| RPL26       | 4.08E-09 | 0.18372511 | 0.935 | 0.838 | 0.0001445  | CD4_EM_CTL_UCBMC |
| NCOA1       | 4.20E-09 | 0.33280058 | 0.511 | 0.411 | 0.00014874 | CD4_EM_CTL_UCBMC |
| BDP1        | 4.26E-09 | 0.31641422 | 0.486 | 0.39  | 0.00015084 | CD4_EM_CTL_UCBMC |
| MFNG        | 4.47E-09 | 0.29965211 | 0.399 | 0.301 | 0.00015828 | CD4_EM_CTL_UCBMC |
| MCUB        | 4.50E-09 | 0.30589994 | 0.561 | 0.448 | 0.00015952 | CD4_EM_CTL_UCBMC |
| EXOC1       | 4.70E-09 | 0.51327301 | 0.264 | 0.186 | 0.00016637 | CD4_EM_CTL_UCBMC |
| PDS5A       | 4.89E-09 | 0.30714986 | 0.489 | 0.388 | 0.00017329 | CD4_EM_CTL_UCBMC |
| PPP1CA      | 4.91E-09 | 0.31657667 | 0.462 | 0.36  | 0.00017408 | CD4_EM_CTL_UCBMC |
| EP300       | 4.95E-09 | 0.20434696 | 0.542 | 0.426 | 0.00017548 | CD4_EM_CTL_UCBMC |
| CASK        | 5.08E-09 | 0.3538302  | 0.36  | 0.265 | 0.00018003 | CD4_EM_CTL_UCBMC |
| FMC1-LUC7L2 | 5.09E-09 | 0.25822675 | 0.742 | 0.631 | 0.00018044 | CD4_EM_CTL_UCBMC |
| ATXN10      | 5.16E-09 | 0.29047657 | 0.571 | 0.463 | 0.00018283 | CD4_EM_CTL_UCBMC |
| CEBPZ       | 5.25E-09 | 0.35545717 | 0.449 | 0.35  | 0.00018617 | CD4_EM_CTL_UCBMC |
| NR2C2       | 5.35E-09 | 0.42070626 | 0.324 | 0.232 | 0.00018973 | CD4_EM_CTL_UCBMC |
| FYB1        | 5.38E-09 | 0.21967692 | 0.768 | 0.661 | 0.00019071 | CD4_EM_CTL_UCBMC |
| COX4I1      | 5.51E-09 | 0.20753666 | 0.855 | 0.765 | 0.00019507 | CD4_EM_CTL_UCBMC |
| ACSL4       | 5.61E-09 | 0.44779833 | 0.253 | 0.175 | 0.00019879 | CD4_EM_CTL_UCBMC |
| PDE4D       | 5.80E-09 | 0.1461796  | 0.384 | 0.283 | 0.00020533 | CD4_EM_CTL_UCBMC |
| NDUFAF4     | 5.96E-09 | 0.41548414 | 0.271 | 0.189 | 0.0002112  | CD4_EM_CTL_UCBMC |
| MTMR1       | 6.26E-09 | 0.47170108 | 0.303 | 0.218 | 0.00022175 | CD4_EM_CTL_UCBMC |
| MXD1        | 6.63E-09 | 0.40789182 | 0.291 | 0.205 | 0.00023487 | CD4_EM_CTL_UCBMC |
| FAM126A     | 6.73E-09 | 0.53459141 | 0.313 | 0.229 | 0.00023862 | CD4_EM_CTL_UCBMC |
| DDHD2       | 6.77E-09 | 0.41193041 | 0.262 | 0.18  | 0.00023971 | CD4_EM_CTL_UCBMC |
| PCNP        | 7.01E-09 | 0.30486642 | 0.432 | 0.336 | 0.00024851 | CD4_EM_CTL_UCBMC |
| RASGRP2     | 7.02E-09 | 0.39357426 | 0.352 | 0.262 | 0.00024869 | CD4_EM_CTL_UCBMC |
| UGCG        | 7.15E-09 | 0.26833012 | 0.32  | 0.228 | 0.00025326 | CD4_EM_CTL_UCBMC |
| ATXN7L3B    | 7.23E-09 | 0.50201009 | 0.342 | 0.255 | 0.00025614 | CD4_EM_CTL_UCBMC |
| DENND4C     | 7.56E-09 | 0.36009016 | 0.386 | 0.29  | 0.00026785 | CD4_EM_CTL_UCBMC |

|                   |          |            |       |       |            |                  |
|-------------------|----------|------------|-------|-------|------------|------------------|
| TENT4B            | 8.01E-09 | 0.32808332 | 0.323 | 0.234 | 0.00028364 | CD4_EM_CTL_UCBMC |
| CRTC3             | 8.60E-09 | 0.29723115 | 0.575 | 0.468 | 0.00030475 | CD4_EM_CTL_UCBMC |
| ENSMUG00000008587 | 8.95E-09 | 0.25918732 | 0.69  | 0.585 | 0.00031721 | CD4_EM_CTL_UCBMC |
| GLG1              | 9.00E-09 | 0.21787721 | 0.575 | 0.464 | 0.00031892 | CD4_EM_CTL_UCBMC |
| CSPP1             | 9.13E-09 | 0.41237119 | 0.354 | 0.266 | 0.00032333 | CD4_EM_CTL_UCBMC |
| ELOVL5            | 9.30E-09 | 0.16940759 | 0.696 | 0.575 | 0.00032943 | CD4_EM_CTL_UCBMC |
| FNDC3A            | 9.38E-09 | 0.24813588 | 0.598 | 0.484 | 0.00033244 | CD4_EM_CTL_UCBMC |
| TACC1             | 9.61E-09 | 0.27213242 | 0.41  | 0.308 | 0.00034047 | CD4_EM_CTL_UCBMC |
| FANCM             | 1.00E-08 | 0.58055375 | 0.253 | 0.177 | 0.00035541 | CD4_EM_CTL_UCBMC |
| EIF4B             | 1.06E-08 | 0.32408175 | 0.499 | 0.4   | 0.00037498 | CD4_EM_CTL_UCBMC |
| PSMA3             | 1.06E-08 | 0.27388849 | 0.461 | 0.358 | 0.00037554 | CD4_EM_CTL_UCBMC |
| ZNRF2             | 1.08E-08 | 0.46581904 | 0.262 | 0.184 | 0.0003835  | CD4_EM_CTL_UCBMC |
| NDUFA10           | 1.09E-08 | 0.45278841 | 0.301 | 0.216 | 0.00038449 | CD4_EM_CTL_UCBMC |
| CD44              | 1.09E-08 | 0.18834253 | 0.783 | 0.692 | 0.00038613 | CD4_EM_CTL_UCBMC |
| SLC39A11          | 1.11E-08 | 0.29025329 | 0.422 | 0.323 | 0.00039172 | CD4_EM_CTL_UCBMC |
| UVRAG             | 1.13E-08 | 0.23169399 | 0.596 | 0.486 | 0.00040031 | CD4_EM_CTL_UCBMC |
| RIF1              | 1.15E-08 | 0.42633205 | 0.324 | 0.236 | 0.00040583 | CD4_EM_CTL_UCBMC |
| FAF2              | 1.16E-08 | 0.60022428 | 0.256 | 0.179 | 0.00041078 | CD4_EM_CTL_UCBMC |
| SAR1A             | 1.16E-08 | 0.34634255 | 0.383 | 0.292 | 0.00041152 | CD4_EM_CTL_UCBMC |
| CCDC12            | 1.18E-08 | 0.30022912 | 0.452 | 0.354 | 0.00041656 | CD4_EM_CTL_UCBMC |
| TFAM              | 1.19E-08 | 0.38808721 | 0.334 | 0.245 | 0.0004216  | CD4_EM_CTL_UCBMC |
| MED25             | 1.19E-08 | 0.42231054 | 0.285 | 0.203 | 0.00042267 | CD4_EM_CTL_UCBMC |
| DOCK2             | 1.23E-08 | 0.16595393 | 0.782 | 0.664 | 0.00043442 | CD4_EM_CTL_UCBMC |
| RTN4              | 1.30E-08 | 0.32282355 | 0.41  | 0.315 | 0.00046049 | CD4_EM_CTL_UCBMC |
| IRF2BP2           | 1.30E-08 | 0.37504526 | 0.258 | 0.18  | 0.00046221 | CD4_EM_CTL_UCBMC |
| SAP18             | 1.36E-08 | 0.12109087 | 0.557 | 0.445 | 0.00048292 | CD4_EM_CTL_UCBMC |
| C20H16orf72       | 1.37E-08 | 0.28417461 | 0.46  | 0.361 | 0.00048536 | CD4_EM_CTL_UCBMC |
| LAPTM5            | 1.38E-08 | 0.22825266 | 0.66  | 0.567 | 0.00048944 | CD4_EM_CTL_UCBMC |
| WDR13             | 1.38E-08 | 0.17036293 | 0.627 | 0.526 | 0.00048992 | CD4_EM_CTL_UCBMC |
| MYO6              | 1.40E-08 | 0.32148939 | 0.375 | 0.281 | 0.0004949  | CD4_EM_CTL_UCBMC |
| DCAF1             | 1.48E-08 | 0.42398904 | 0.315 | 0.227 | 0.00052444 | CD4_EM_CTL_UCBMC |
| DGKA              | 1.55E-08 | 0.35319179 | 0.442 | 0.348 | 0.00054972 | CD4_EM_CTL_UCBMC |
| WWP2              | 1.59E-08 | 0.46793936 | 0.298 | 0.218 | 0.00056207 | CD4_EM_CTL_UCBMC |

|                   |          |            |       |       |            |                  |
|-------------------|----------|------------|-------|-------|------------|------------------|
| USP9X             | 1.74E-08 | 0.20419675 | 0.558 | 0.457 | 0.00061559 | CD4_EM_CTL_UCBMC |
| ENSMUG00000002075 | 1.77E-08 | 0.14708773 | 0.323 | 0.231 | 0.00062614 | CD4_EM_CTL_UCBMC |
| GPBP1             | 1.77E-08 | 0.1770073  | 0.711 | 0.596 | 0.00062727 | CD4_EM_CTL_UCBMC |
| SLC30A9           | 1.80E-08 | 0.40171399 | 0.398 | 0.307 | 0.00063635 | CD4_EM_CTL_UCBMC |
| RAP1GDS1          | 1.80E-08 | 0.4251762  | 0.373 | 0.285 | 0.00063922 | CD4_EM_CTL_UCBMC |
| MSN               | 1.84E-08 | 0.21928429 | 0.755 | 0.662 | 0.00065354 | CD4_EM_CTL_UCBMC |
| NARS1             | 1.88E-08 | 0.33744588 | 0.429 | 0.333 | 0.0006644  | CD4_EM_CTL_UCBMC |
| ATF7              | 1.88E-08 | 0.2351273  | 0.414 | 0.317 | 0.00066589 | CD4_EM_CTL_UCBMC |
| PWP1              | 1.93E-08 | 0.48593981 | 0.268 | 0.19  | 0.00068293 | CD4_EM_CTL_UCBMC |
| CNST              | 2.05E-08 | 0.22794018 | 0.503 | 0.398 | 0.00072494 | CD4_EM_CTL_UCBMC |
| DDT               | 2.05E-08 | 0.24791422 | 0.363 | 0.268 | 0.00072781 | CD4_EM_CTL_UCBMC |
| PRKAG1            | 2.09E-08 | 0.55389061 | 0.276 | 0.198 | 0.00074129 | CD4_EM_CTL_UCBMC |
| BTRC              | 2.22E-08 | 0.39835365 | 0.304 | 0.217 | 0.00078544 | CD4_EM_CTL_UCBMC |
| ERBB3             | 2.25E-08 | 0.2727006  | 0.491 | 0.381 | 0.00079719 | CD4_EM_CTL_UCBMC |
| PTAR1             | 2.27E-08 | 0.33103895 | 0.317 | 0.229 | 0.0008051  | CD4_EM_CTL_UCBMC |
| LRCH3             | 2.28E-08 | 0.269339   | 0.57  | 0.467 | 0.0008092  | CD4_EM_CTL_UCBMC |
| USP25             | 2.32E-08 | 0.3557656  | 0.409 | 0.317 | 0.00082059 | CD4_EM_CTL_UCBMC |
| UFC1              | 2.32E-08 | 0.35276677 | 0.458 | 0.366 | 0.00082159 | CD4_EM_CTL_UCBMC |
| PPP4R3A           | 2.34E-08 | 0.35278    | 0.379 | 0.29  | 0.00082846 | CD4_EM_CTL_UCBMC |
| STAU2             | 2.40E-08 | 0.34555932 | 0.541 | 0.441 | 0.00085165 | CD4_EM_CTL_UCBMC |
| CLSTN1            | 2.41E-08 | 0.47273113 | 0.27  | 0.192 | 0.00085404 | CD4_EM_CTL_UCBMC |
| IFT88             | 2.51E-08 | 0.52794585 | 0.251 | 0.175 | 0.00088976 | CD4_EM_CTL_UCBMC |
| RAB3GAP2          | 2.55E-08 | 0.35921031 | 0.414 | 0.322 | 0.00090413 | CD4_EM_CTL_UCBMC |
| STX17             | 2.57E-08 | 0.45700726 | 0.289 | 0.209 | 0.00090979 | CD4_EM_CTL_UCBMC |
| UBE3C             | 2.61E-08 | 0.31498244 | 0.425 | 0.328 | 0.00092445 | CD4_EM_CTL_UCBMC |
| ENSMUG00000017400 | 2.64E-08 | 0.43018128 | 0.291 | 0.208 | 0.0009364  | CD4_EM_CTL_UCBMC |
| SSR1              | 2.68E-08 | 0.30720953 | 0.35  | 0.261 | 0.00095121 | CD4_EM_CTL_UCBMC |
| PELI1             | 2.80E-08 | 0.10117667 | 0.527 | 0.421 | 0.00099078 | CD4_EM_CTL_UCBMC |
| WARS2             | 2.85E-08 | 0.58568746 | 0.324 | 0.246 | 0.00101019 | CD4_EM_CTL_UCBMC |
| CCDC69            | 2.87E-08 | 0.29959816 | 0.468 | 0.377 | 0.00101619 | CD4_EM_CTL_UCBMC |
| ENSMUG00000012203 | 3.03E-08 | 0.262776   | 0.374 | 0.278 | 0.00107315 | CD4_EM_CTL_UCBMC |
| HNRNPM            | 3.34E-08 | 0.23678824 | 0.563 | 0.467 | 0.00118373 | CD4_EM_CTL_UCBMC |
| PPP4R3B           | 3.44E-08 | 0.30096237 | 0.429 | 0.335 | 0.00121845 | CD4_EM_CTL_UCBMC |

|         |          |            |       |       |            |                  |
|---------|----------|------------|-------|-------|------------|------------------|
| WDR44   | 3.49E-08 | 0.34661377 | 0.311 | 0.226 | 0.00123721 | CD4_EM_CTL_UCBMC |
| ASAP1   | 3.52E-08 | 0.16794865 | 0.578 | 0.467 | 0.00124703 | CD4_EM_CTL_UCBMC |
| SLC4A7  | 3.63E-08 | 0.29870788 | 0.462 | 0.37  | 0.00128734 | CD4_EM_CTL_UCBMC |
| FRYL    | 3.68E-08 | 0.24886883 | 0.493 | 0.389 | 0.00130418 | CD4_EM_CTL_UCBMC |
| PDCD6IP | 3.86E-08 | 0.33366332 | 0.45  | 0.357 | 0.00136858 | CD4_EM_CTL_UCBMC |
| IST1    | 3.90E-08 | 0.27158473 | 0.4   | 0.309 | 0.00138086 | CD4_EM_CTL_UCBMC |
| PKN2    | 3.97E-08 | 0.22347722 | 0.558 | 0.455 | 0.00140797 | CD4_EM_CTL_UCBMC |
| CCNL1   | 3.98E-08 | 0.12954424 | 0.844 | 0.699 | 0.00141159 | CD4_EM_CTL_UCBMC |
| ASCC3   | 4.02E-08 | 0.32494548 | 0.501 | 0.414 | 0.00142547 | CD4_EM_CTL_UCBMC |
| ATRX    | 4.02E-08 | 0.22147713 | 0.699 | 0.592 | 0.00142563 | CD4_EM_CTL_UCBMC |
| TOPORS  | 4.28E-08 | 0.20786437 | 0.508 | 0.409 | 0.00151699 | CD4_EM_CTL_UCBMC |
| SUMO1   | 4.70E-08 | 0.20501273 | 0.592 | 0.493 | 0.00166372 | CD4_EM_CTL_UCBMC |
| PNRC2   | 4.72E-08 | 0.30105479 | 0.452 | 0.359 | 0.00167313 | CD4_EM_CTL_UCBMC |
| ERICH1  | 4.72E-08 | 0.37499586 | 0.335 | 0.251 | 0.00167339 | CD4_EM_CTL_UCBMC |
| MARK3   | 4.86E-08 | 0.1900825  | 0.504 | 0.404 | 0.00172221 | CD4_EM_CTL_UCBMC |
| MOB2    | 4.86E-08 | 0.27777795 | 0.449 | 0.35  | 0.00172302 | CD4_EM_CTL_UCBMC |
| CCDC90B | 5.00E-08 | 0.42502848 | 0.275 | 0.197 | 0.00176987 | CD4_EM_CTL_UCBMC |
| CNOT8   | 5.01E-08 | 0.42445526 | 0.258 | 0.183 | 0.00177482 | CD4_EM_CTL_UCBMC |
| LSM12   | 5.11E-08 | 0.36878474 | 0.277 | 0.198 | 0.00181209 | CD4_EM_CTL_UCBMC |
| AP2B1   | 5.39E-08 | 0.31807655 | 0.388 | 0.293 | 0.00190824 | CD4_EM_CTL_UCBMC |
| GTF2E2  | 5.44E-08 | 0.42973758 | 0.305 | 0.226 | 0.00192732 | CD4_EM_CTL_UCBMC |
| DYM     | 5.70E-08 | 0.23311764 | 0.479 | 0.382 | 0.00202122 | CD4_EM_CTL_UCBMC |
| PRPF4B  | 5.73E-08 | 0.21454899 | 0.771 | 0.678 | 0.00202926 | CD4_EM_CTL_UCBMC |
| SCLT1   | 5.79E-08 | 0.30638592 | 0.49  | 0.396 | 0.00205197 | CD4_EM_CTL_UCBMC |
| CCDC59  | 5.80E-08 | 0.331246   | 0.301 | 0.215 | 0.00205343 | CD4_EM_CTL_UCBMC |
| REV3L   | 5.87E-08 | 0.34925351 | 0.466 | 0.376 | 0.00207813 | CD4_EM_CTL_UCBMC |
| PLEKHB2 | 6.41E-08 | 0.31144608 | 0.387 | 0.297 | 0.00227075 | CD4_EM_CTL_UCBMC |
| BZW2    | 6.57E-08 | 0.26665547 | 0.426 | 0.332 | 0.00232746 | CD4_EM_CTL_UCBMC |
| PPP1R2  | 7.25E-08 | 0.31744568 | 0.476 | 0.386 | 0.00256836 | CD4_EM_CTL_UCBMC |
| COMMD1  | 7.39E-08 | 0.26606856 | 0.425 | 0.33  | 0.00261794 | CD4_EM_CTL_UCBMC |
| ZNF160  | 7.62E-08 | 0.47215074 | 0.28  | 0.202 | 0.00269903 | CD4_EM_CTL_UCBMC |
| FBXL17  | 7.79E-08 | 0.17343779 | 0.553 | 0.447 | 0.00275899 | CD4_EM_CTL_UCBMC |
| ERP44   | 7.85E-08 | 0.26309695 | 0.473 | 0.374 | 0.00278283 | CD4_EM_CTL_UCBMC |



|                   |          |            |       |       |            |                  |
|-------------------|----------|------------|-------|-------|------------|------------------|
| BRWD1             | 7.98E-08 | 0.22574242 | 0.516 | 0.42  | 0.00282832 | CD4_EM_CTL_UCBMC |
| ZCCHC7            | 8.69E-08 | 0.18102458 | 0.685 | 0.573 | 0.00308046 | CD4_EM_CTL_UCBMC |
| CNOT10            | 9.04E-08 | 0.31541456 | 0.301 | 0.22  | 0.00320438 | CD4_EM_CTL_UCBMC |
| FGD3              | 9.06E-08 | 0.23609197 | 0.519 | 0.424 | 0.00321015 | CD4_EM_CTL_UCBMC |
| MTIF2             | 9.16E-08 | 0.35834882 | 0.258 | 0.183 | 0.0032449  | CD4_EM_CTL_UCBMC |
| POLR1D            | 9.26E-08 | 0.20936217 | 0.558 | 0.454 | 0.0032806  | CD4_EM_CTL_UCBMC |
| SUGP2             | 9.31E-08 | 0.38387952 | 0.262 | 0.186 | 0.00329758 | CD4_EM_CTL_UCBMC |
| VAPA              | 9.52E-08 | 0.25314965 | 0.578 | 0.48  | 0.00337143 | CD4_EM_CTL_UCBMC |
| SLC10A7           | 1.00E-07 | 0.51170698 | 0.314 | 0.236 | 0.00355087 | CD4_EM_CTL_UCBMC |
| SBNO1             | 1.03E-07 | 0.40963398 | 0.336 | 0.252 | 0.00363549 | CD4_EM_CTL_UCBMC |
| RTF1              | 1.05E-07 | 0.35655173 | 0.374 | 0.289 | 0.00370883 | CD4_EM_CTL_UCBMC |
| PHIP              | 1.06E-07 | 0.22590875 | 0.546 | 0.443 | 0.00375811 | CD4_EM_CTL_UCBMC |
| RASA3             | 1.07E-07 | 0.31577373 | 0.413 | 0.323 | 0.00379964 | CD4_EM_CTL_UCBMC |
| PPIL4             | 1.11E-07 | 0.20149614 | 0.486 | 0.39  | 0.00392258 | CD4_EM_CTL_UCBMC |
| CSNK1G1           | 1.12E-07 | 0.23100746 | 0.497 | 0.391 | 0.00395808 | CD4_EM_CTL_UCBMC |
| PXK               | 1.26E-07 | 0.30954897 | 0.277 | 0.2   | 0.00447439 | CD4_EM_CTL_UCBMC |
| VPS13A            | 1.27E-07 | 0.39400327 | 0.368 | 0.284 | 0.00451239 | CD4_EM_CTL_UCBMC |
| ARNTL             | 1.33E-07 | 0.34203829 | 0.271 | 0.195 | 0.00470924 | CD4_EM_CTL_UCBMC |
| ENSMUG00000059742 | 1.35E-07 | 0.30720362 | 0.379 | 0.294 | 0.00477927 | CD4_EM_CTL_UCBMC |
| USP24             | 1.36E-07 | 0.35807165 | 0.38  | 0.294 | 0.00482957 | CD4_EM_CTL_UCBMC |
| ELL2              | 1.45E-07 | 0.19196053 | 0.37  | 0.278 | 0.00514496 | CD4_EM_CTL_UCBMC |
| EPRS1             | 1.47E-07 | 0.38666716 | 0.316 | 0.236 | 0.00519245 | CD4_EM_CTL_UCBMC |
| HSD17B4           | 1.47E-07 | 0.24830445 | 0.629 | 0.543 | 0.00520036 | CD4_EM_CTL_UCBMC |
| NRROS             | 1.55E-07 | 0.29729603 | 0.442 | 0.346 | 0.00547623 | CD4_EM_CTL_UCBMC |
| ILF3              | 1.57E-07 | 0.19250438 | 0.494 | 0.395 | 0.00556577 | CD4_EM_CTL_UCBMC |
| EYA3              | 1.57E-07 | 0.32855055 | 0.265 | 0.188 | 0.00557155 | CD4_EM_CTL_UCBMC |
| PICALM            | 1.59E-07 | 0.13597174 | 0.734 | 0.616 | 0.00563845 | CD4_EM_CTL_UCBMC |
| HSPA4             | 1.60E-07 | 0.36158135 | 0.317 | 0.237 | 0.00566631 | CD4_EM_CTL_UCBMC |
| XYLT1             | 1.62E-07 | 0.23110506 | 0.477 | 0.38  | 0.00572952 | CD4_EM_CTL_UCBMC |
| PPP3CA            | 1.64E-07 | 0.16508689 | 0.72  | 0.612 | 0.00582722 | CD4_EM_CTL_UCBMC |
| PPP1R12B          | 1.70E-07 | 0.3961631  | 0.311 | 0.232 | 0.00600672 | CD4_EM_CTL_UCBMC |
| DDOST             | 1.85E-07 | 0.19161698 | 0.458 | 0.363 | 0.00655749 | CD4_EM_CTL_UCBMC |
| MAPKAP1           | 2.05E-07 | 0.2417427  | 0.428 | 0.339 | 0.00726667 | CD4_EM_CTL_UCBMC |

|                    |          |            |       |       |            |                  |
|--------------------|----------|------------|-------|-------|------------|------------------|
| PIIP5K2            | 2.06E-07 | 0.37640103 | 0.291 | 0.215 | 0.00728259 | CD4_EM_CTL_UCBMC |
| CRYL1              | 2.11E-07 | 0.35460645 | 0.331 | 0.249 | 0.00749059 | CD4_EM_CTL_UCBMC |
| FAM91A1            | 2.15E-07 | 0.35074118 | 0.298 | 0.223 | 0.00761306 | CD4_EM_CTL_UCBMC |
| LNPEP              | 2.19E-07 | 0.25635982 | 0.591 | 0.484 | 0.00777676 | CD4_EM_CTL_UCBMC |
| SNRK               | 2.21E-07 | 0.15989677 | 0.566 | 0.467 | 0.00782707 | CD4_EM_CTL_UCBMC |
| STT3B              | 2.24E-07 | 0.24247089 | 0.517 | 0.424 | 0.00794945 | CD4_EM_CTL_UCBMC |
| HMGA1              | 2.31E-07 | 0.38152886 | 0.346 | 0.263 | 0.00819167 | CD4_EM_CTL_UCBMC |
| SH3KBP1            | 2.34E-07 | 0.10972539 | 0.859 | 0.753 | 0.00830524 | CD4_EM_CTL_UCBMC |
| RETREG1            | 2.45E-07 | 0.29823091 | 0.403 | 0.316 | 0.00867668 | CD4_EM_CTL_UCBMC |
| COPS2              | 2.47E-07 | 0.34760043 | 0.354 | 0.271 | 0.00876116 | CD4_EM_CTL_UCBMC |
| GTF2B              | 2.48E-07 | 0.10096225 | 0.609 | 0.504 | 0.00880077 | CD4_EM_CTL_UCBMC |
| TCF12              | 2.67E-07 | 0.13718624 | 0.881 | 0.74  | 0.00945044 | CD4_EM_CTL_UCBMC |
| ZCCHC10            | 2.69E-07 | 0.40715032 | 0.256 | 0.184 | 0.0095243  | CD4_EM_CTL_UCBMC |
| DNM2               | 2.80E-07 | 0.35913095 | 0.389 | 0.308 | 0.00991663 | CD4_EM_CTL_UCBMC |
| UBE2H              | 3.01E-07 | 0.14584636 | 0.67  | 0.55  | 0.01065647 | CD4_EM_CTL_UCBMC |
| KIFBP              | 3.02E-07 | 0.174289   | 0.602 | 0.497 | 0.01071095 | CD4_EM_CTL_UCBMC |
| ENSMMUG00000015208 | 3.32E-07 | 0.29750327 | 0.442 | 0.349 | 0.01177531 | CD4_EM_CTL_UCBMC |
| NEMF               | 3.37E-07 | 0.36442746 | 0.429 | 0.345 | 0.01194163 | CD4_EM_CTL_UCBMC |
| SMU1               | 3.43E-07 | 0.28245417 | 0.323 | 0.242 | 0.0121577  | CD4_EM_CTL_UCBMC |
| INPP4A             | 3.44E-07 | 0.25147631 | 0.427 | 0.334 | 0.0121894  | CD4_EM_CTL_UCBMC |
| GPHN               | 3.58E-07 | 0.33191628 | 0.49  | 0.403 | 0.01269668 | CD4_EM_CTL_UCBMC |
| IMPDH2             | 3.59E-07 | 0.35808622 | 0.303 | 0.224 | 0.01273213 | CD4_EM_CTL_UCBMC |
| BTBD9              | 3.64E-07 | 0.22515928 | 0.507 | 0.415 | 0.01291418 | CD4_EM_CTL_UCBMC |
| ENSMMUG00000020316 | 3.65E-07 | 0.31825819 | 0.382 | 0.299 | 0.01294715 | CD4_EM_CTL_UCBMC |
| SLC25A43           | 3.70E-07 | 0.16183254 | 0.66  | 0.562 | 0.01311314 | CD4_EM_CTL_UCBMC |
| PTEN               | 3.74E-07 | 0.26989277 | 0.508 | 0.414 | 0.01324375 | CD4_EM_CTL_UCBMC |
| MED30              | 3.78E-07 | 0.46741972 | 0.305 | 0.234 | 0.01340608 | CD4_EM_CTL_UCBMC |
| KDM3B              | 3.93E-07 | 0.27318586 | 0.448 | 0.361 | 0.01391046 | CD4_EM_CTL_UCBMC |
| DAZAP1             | 4.04E-07 | 0.12206133 | 0.697 | 0.615 | 0.01430184 | CD4_EM_CTL_UCBMC |
| UBE2E3             | 4.10E-07 | 0.36022694 | 0.372 | 0.288 | 0.01453516 | CD4_EM_CTL_UCBMC |
| RELCH              | 4.34E-07 | 0.37125018 | 0.403 | 0.322 | 0.01537122 | CD4_EM_CTL_UCBMC |
| DOP1A              | 4.34E-07 | 0.2985048  | 0.275 | 0.2   | 0.01537435 | CD4_EM_CTL_UCBMC |
| PELI2              | 4.37E-07 | 0.39466653 | 0.264 | 0.192 | 0.01547331 | CD4_EM_CTL_UCBMC |

|                   |          |            |       |       |            |                  |
|-------------------|----------|------------|-------|-------|------------|------------------|
| POGZ              | 4.38E-07 | 0.3284363  | 0.421 | 0.338 | 0.01552678 | CD4_EM_CTL_UCBMC |
| PHF12             | 4.47E-07 | 0.25705919 | 0.315 | 0.235 | 0.01584437 | CD4_EM_CTL_UCBMC |
| CAMK1D            | 4.55E-07 | 0.13575206 | 0.627 | 0.51  | 0.01610795 | CD4_EM_CTL_UCBMC |
| RSC1A1            | 4.56E-07 | 0.44504528 | 0.266 | 0.196 | 0.01614556 | CD4_EM_CTL_UCBMC |
| NRF1              | 4.57E-07 | 0.33364528 | 0.387 | 0.304 | 0.01618363 | CD4_EM_CTL_UCBMC |
| FAM13B            | 4.60E-07 | 0.31074492 | 0.418 | 0.335 | 0.01628831 | CD4_EM_CTL_UCBMC |
| NONO              | 4.61E-07 | 0.23443599 | 0.515 | 0.427 | 0.01633259 | CD4_EM_CTL_UCBMC |
| OGA               | 4.96E-07 | 0.26826545 | 0.539 | 0.445 | 0.01757027 | CD4_EM_CTL_UCBMC |
| RELL1             | 5.04E-07 | 0.219252   | 0.492 | 0.395 | 0.01786009 | CD4_EM_CTL_UCBMC |
| EIF3M             | 5.52E-07 | 0.24923139 | 0.568 | 0.481 | 0.0195422  | CD4_EM_CTL_UCBMC |
| EMC7              | 5.71E-07 | 0.21247295 | 0.281 | 0.205 | 0.02021629 | CD4_EM_CTL_UCBMC |
| TOX4              | 5.72E-07 | 0.38436405 | 0.349 | 0.273 | 0.02027173 | CD4_EM_CTL_UCBMC |
| YTHDF2            | 5.84E-07 | 0.42265913 | 0.292 | 0.221 | 0.02069956 | CD4_EM_CTL_UCBMC |
| WBP11             | 6.00E-07 | 0.27828991 | 0.396 | 0.308 | 0.02126709 | CD4_EM_CTL_UCBMC |
| ZNF28             | 6.06E-07 | 0.35618503 | 0.353 | 0.275 | 0.02145862 | CD4_EM_CTL_UCBMC |
| UBXN2A            | 6.08E-07 | 0.27007412 | 0.307 | 0.227 | 0.02153509 | CD4_EM_CTL_UCBMC |
| PHF11             | 6.25E-07 | 0.30820505 | 0.396 | 0.317 | 0.02216227 | CD4_EM_CTL_UCBMC |
| WASF2             | 6.34E-07 | 0.27659604 | 0.52  | 0.425 | 0.02245799 | CD4_EM_CTL_UCBMC |
| TRAPPC9           | 6.38E-07 | 0.42305498 | 0.335 | 0.259 | 0.02259854 | CD4_EM_CTL_UCBMC |
| CLASP1            | 6.43E-07 | 0.25905099 | 0.444 | 0.355 | 0.02276864 | CD4_EM_CTL_UCBMC |
| TRIM24            | 6.43E-07 | 0.41407913 | 0.316 | 0.241 | 0.02279933 | CD4_EM_CTL_UCBMC |
| HNRNPUL1          | 6.53E-07 | 0.21841752 | 0.482 | 0.39  | 0.02312943 | CD4_EM_CTL_UCBMC |
| KLF13             | 6.56E-07 | 0.29893548 | 0.253 | 0.182 | 0.02324603 | CD4_EM_CTL_UCBMC |
| SCAMP2            | 7.19E-07 | 0.41786773 | 0.265 | 0.196 | 0.02545835 | CD4_EM_CTL_UCBMC |
| ANKRD13C          | 7.38E-07 | 0.32964126 | 0.291 | 0.214 | 0.02615557 | CD4_EM_CTL_UCBMC |
| GCC2              | 7.41E-07 | 0.36733435 | 0.376 | 0.296 | 0.02625403 | CD4_EM_CTL_UCBMC |
| APLP2             | 7.49E-07 | 0.36080401 | 0.341 | 0.266 | 0.02653814 | CD4_EM_CTL_UCBMC |
| UCP2              | 7.56E-07 | 0.12416386 | 0.378 | 0.29  | 0.02677948 | CD4_EM_CTL_UCBMC |
| DDX10             | 7.60E-07 | 0.29144897 | 0.348 | 0.267 | 0.02694235 | CD4_EM_CTL_UCBMC |
| MLLT10            | 7.83E-07 | 0.18699919 | 0.492 | 0.397 | 0.02772956 | CD4_EM_CTL_UCBMC |
| ENSMUG00000055687 | 7.87E-07 | 0.18161077 | 0.452 | 0.362 | 0.02789574 | CD4_EM_CTL_UCBMC |
| L3MBTL3           | 7.89E-07 | 0.33595214 | 0.276 | 0.202 | 0.02796552 | CD4_EM_CTL_UCBMC |
| MAP2K6            | 8.41E-07 | 0.3465281  | 0.37  | 0.287 | 0.02979613 | CD4_EM_CTL_UCBMC |

|                    |          |            |       |       |            |                  |
|--------------------|----------|------------|-------|-------|------------|------------------|
| PFDN1              | 8.73E-07 | 0.25757276 | 0.405 | 0.319 | 0.03093401 | CD4_EM_CTL_UCBMC |
| TERF1              | 9.20E-07 | 0.39517793 | 0.26  | 0.194 | 0.03258624 | CD4_EM_CTL_UCBMC |
| ERC1               | 9.69E-07 | 0.25356288 | 0.421 | 0.332 | 0.03433272 | CD4_EM_CTL_UCBMC |
| PMPCB              | 9.79E-07 | 0.23335027 | 0.304 | 0.227 | 0.03468738 | CD4_EM_CTL_UCBMC |
| EXOC2              | 9.93E-07 | 0.28216794 | 0.311 | 0.236 | 0.0351902  | CD4_EM_CTL_UCBMC |
| TTC14              | 1.00E-06 | 0.46085622 | 0.32  | 0.247 | 0.03549066 | CD4_EM_CTL_UCBMC |
| ERN1               | 1.00E-06 | 0.38581125 | 0.292 | 0.218 | 0.03555381 | CD4_EM_CTL_UCBMC |
| ENSMMUG00000022610 | 1.02E-06 | 0.19486573 | 0.471 | 0.379 | 0.03600728 | CD4_EM_CTL_UCBMC |
| RAMAC              | 1.03E-06 | 0.17866574 | 0.276 | 0.202 | 0.03636939 | CD4_EM_CTL_UCBMC |
| CLASP2             | 1.05E-06 | 0.2334896  | 0.585 | 0.501 | 0.03723337 | CD4_EM_CTL_UCBMC |
| RALY               | 1.15E-06 | 0.20752366 | 0.51  | 0.426 | 0.04070073 | CD4_EM_CTL_UCBMC |
| FBXO42             | 1.17E-06 | 0.21118629 | 0.259 | 0.186 | 0.04133689 | CD4_EM_CTL_UCBMC |
| PBRM1              | 1.21E-06 | 0.30075326 | 0.482 | 0.401 | 0.04280686 | CD4_EM_CTL_UCBMC |
| VPS8               | 1.24E-06 | 0.30597859 | 0.351 | 0.271 | 0.04402127 | CD4_EM_CTL_UCBMC |
| WAPL               | 1.29E-06 | 0.28089519 | 0.444 | 0.361 | 0.04563329 | CD4_EM_CTL_UCBMC |
| PIH1D1             | 1.31E-06 | 0.32964624 | 0.257 | 0.188 | 0.04642827 | CD4_EM_CTL_UCBMC |
| ATAD2B             | 1.32E-06 | 0.19085916 | 0.569 | 0.468 | 0.04668411 | CD4_EM_CTL_UCBMC |
| MAP2K5             | 1.33E-06 | 0.26346459 | 0.384 | 0.304 | 0.04697938 | CD4_EM_CTL_UCBMC |
| IKZF1              | 1.40E-06 | 0.19277123 | 0.676 | 0.576 | 0.04959306 | CD4_EM_CTL_UCBMC |
| ENSMMUG00000005482 | 1.59E-06 | 0.22852674 | 0.453 | 0.36  | 0.05616998 | CD4_EM_CTL_UCBMC |
| ERBIN              | 1.63E-06 | 0.17956817 | 0.665 | 0.558 | 0.05773289 | CD4_EM_CTL_UCBMC |
| ARF1               | 1.67E-06 | 0.14763079 | 0.638 | 0.546 | 0.05903442 | CD4_EM_CTL_UCBMC |
| ZBTB1              | 1.74E-06 | 0.26939623 | 0.393 | 0.31  | 0.06181722 | CD4_EM_CTL_UCBMC |
| DTNB               | 1.75E-06 | 0.31977847 | 0.363 | 0.287 | 0.06212658 | CD4_EM_CTL_UCBMC |
| HIF1A              | 1.76E-06 | 0.21908957 | 0.346 | 0.265 | 0.06245458 | CD4_EM_CTL_UCBMC |
| NCKAP1L            | 1.79E-06 | 0.31383935 | 0.37  | 0.293 | 0.0633056  | CD4_EM_CTL_UCBMC |
| MAPK6              | 1.79E-06 | 0.29495315 | 0.338 | 0.258 | 0.06330716 | CD4_EM_CTL_UCBMC |
| DDX46              | 1.87E-06 | 0.17576231 | 0.558 | 0.459 | 0.06611247 | CD4_EM_CTL_UCBMC |
| RCOR3              | 1.88E-06 | 0.36368341 | 0.318 | 0.246 | 0.06652049 | CD4_EM_CTL_UCBMC |
| ENSMMUG00000006965 | 1.90E-06 | 0.27266364 | 0.451 | 0.367 | 0.06747899 | CD4_EM_CTL_UCBMC |
| TANC2              | 1.95E-06 | 0.23517544 | 0.453 | 0.366 | 0.06912961 | CD4_EM_CTL_UCBMC |
| UBAP2              | 2.08E-06 | 0.25639436 | 0.339 | 0.262 | 0.07383841 | CD4_EM_CTL_UCBMC |
| INPP4B             | 2.09E-06 | 0.18025175 | 0.513 | 0.42  | 0.07413153 | CD4_EM_CTL_UCBMC |

|            |          |            |       |       |            |                  |
|------------|----------|------------|-------|-------|------------|------------------|
| PCNX1      | 2.12E-06 | 0.33267874 | 0.372 | 0.294 | 0.07514957 | CD4_EM_CTL_UCBMC |
| FAM118A    | 2.14E-06 | 0.24343371 | 0.457 | 0.376 | 0.07565545 | CD4_EM_CTL_UCBMC |
| RO60       | 2.14E-06 | 0.40092706 | 0.253 | 0.187 | 0.07577468 | CD4_EM_CTL_UCBMC |
| SLAIN2     | 2.16E-06 | 0.32606008 | 0.308 | 0.235 | 0.07637816 | CD4_EM_CTL_UCBMC |
| SUZ12      | 2.25E-06 | 0.29883676 | 0.383 | 0.307 | 0.07982448 | CD4_EM_CTL_UCBMC |
| EIPR1      | 2.31E-06 | 0.33355869 | 0.352 | 0.277 | 0.08183732 | CD4_EM_CTL_UCBMC |
| AEBP2      | 2.33E-06 | 0.2753635  | 0.47  | 0.392 | 0.08270242 | CD4_EM_CTL_UCBMC |
| ACO2       | 2.36E-06 | 0.343747   | 0.288 | 0.216 | 0.08345852 | CD4_EM_CTL_UCBMC |
| SMG1       | 2.38E-06 | 0.23072192 | 0.469 | 0.381 | 0.08420412 | CD4_EM_CTL_UCBMC |
| C1D        | 2.43E-06 | 0.24304007 | 0.337 | 0.265 | 0.08624835 | CD4_EM_CTL_UCBMC |
| RAPGEF2    | 2.44E-06 | 0.12741939 | 0.576 | 0.478 | 0.08650303 | CD4_EM_CTL_UCBMC |
| ST6GALNAC3 | 2.45E-06 | 0.46534958 | 0.269 | 0.204 | 0.08663603 | CD4_EM_CTL_UCBMC |
| IPO7       | 2.45E-06 | 0.34252761 | 0.325 | 0.249 | 0.08679595 | CD4_EM_CTL_UCBMC |
| RUBCN      | 2.46E-06 | 0.31955068 | 0.291 | 0.22  | 0.08700143 | CD4_EM_CTL_UCBMC |
| EP400      | 2.53E-06 | 0.37093286 | 0.279 | 0.212 | 0.08967803 | CD4_EM_CTL_UCBMC |
| GORASP2    | 2.53E-06 | 0.27977548 | 0.284 | 0.213 | 0.08972706 | CD4_EM_CTL_UCBMC |
| BRK1       | 2.58E-06 | 0.14639994 | 0.425 | 0.344 | 0.09124793 | CD4_EM_CTL_UCBMC |
| SP4        | 2.61E-06 | 0.30798306 | 0.255 | 0.187 | 0.09245646 | CD4_EM_CTL_UCBMC |
| TSG101     | 2.64E-06 | 0.3585159  | 0.308 | 0.236 | 0.09349705 | CD4_EM_CTL_UCBMC |
| SMAD4      | 2.70E-06 | 0.34932204 | 0.258 | 0.189 | 0.09554828 | CD4_EM_CTL_UCBMC |
| PPP2R3C    | 2.74E-06 | 0.35482349 | 0.279 | 0.211 | 0.09714384 | CD4_EM_CTL_UCBMC |
| DMTF1      | 2.77E-06 | 0.26266599 | 0.367 | 0.291 | 0.09797891 | CD4_EM_CTL_UCBMC |
| ZNF700     | 2.81E-06 | 0.34209127 | 0.273 | 0.206 | 0.0997276  | CD4_EM_CTL_UCBMC |
| CD46       | 2.93E-06 | 0.19449842 | 0.577 | 0.493 | 0.10366304 | CD4_EM_CTL_UCBMC |
| ANKRD17    | 2.96E-06 | 0.18458983 | 0.596 | 0.508 | 0.10495789 | CD4_EM_CTL_UCBMC |
| SSBP3      | 3.06E-06 | 0.240357   | 0.504 | 0.413 | 0.10842812 | CD4_EM_CTL_UCBMC |
| R3HDM1     | 3.12E-06 | 0.37576835 | 0.342 | 0.269 | 0.11057548 | CD4_EM_CTL_UCBMC |
| NAPG       | 3.14E-06 | 0.24816429 | 0.337 | 0.261 | 0.11135672 | CD4_EM_CTL_UCBMC |
| ENY2       | 3.18E-06 | 0.1629255  | 0.508 | 0.424 | 0.11269563 | CD4_EM_CTL_UCBMC |
| RACK1      | 3.27E-06 | 0.12335108 | 0.949 | 0.919 | 0.11588823 | CD4_EM_CTL_UCBMC |
| ARID1A     | 3.39E-06 | 0.16659716 | 0.545 | 0.449 | 0.11994068 | CD4_EM_CTL_UCBMC |
| NKTR       | 3.52E-06 | 0.23584051 | 0.478 | 0.394 | 0.12470303 | CD4_EM_CTL_UCBMC |
| APBP2      | 3.54E-06 | 0.28117429 | 0.338 | 0.264 | 0.12549392 | CD4_EM_CTL_UCBMC |

|                    |          |            |       |       |            |                  |
|--------------------|----------|------------|-------|-------|------------|------------------|
| UBE2L3             | 3.61E-06 | 0.14252334 | 0.44  | 0.351 | 0.12796975 | CD4_EM_CTL_UCBMC |
| ZNF528             | 3.65E-06 | 0.25448283 | 0.409 | 0.331 | 0.1294922  | CD4_EM_CTL_UCBMC |
| SF3A1              | 3.78E-06 | 0.33823969 | 0.309 | 0.237 | 0.13402371 | CD4_EM_CTL_UCBMC |
| WAS                | 3.95E-06 | 0.17274674 | 0.385 | 0.305 | 0.13998655 | CD4_EM_CTL_UCBMC |
| DHX15              | 4.28E-06 | 0.42303562 | 0.325 | 0.257 | 0.15149978 | CD4_EM_CTL_UCBMC |
| SAMD4B             | 4.42E-06 | 0.30402896 | 0.296 | 0.228 | 0.1566036  | CD4_EM_CTL_UCBMC |
| RSRC1              | 4.52E-06 | 0.25653746 | 0.461 | 0.382 | 0.16003826 | CD4_EM_CTL_UCBMC |
| HMOX2              | 4.55E-06 | 0.21710751 | 0.263 | 0.196 | 0.16120318 | CD4_EM_CTL_UCBMC |
| RHEB               | 4.72E-06 | 0.23353117 | 0.483 | 0.4   | 0.16713809 | CD4_EM_CTL_UCBMC |
| PAIP1              | 5.01E-06 | 0.3721486  | 0.276 | 0.211 | 0.17764376 | CD4_EM_CTL_UCBMC |
| ZBTB11             | 5.05E-06 | 0.30252782 | 0.313 | 0.24  | 0.17896945 | CD4_EM_CTL_UCBMC |
| ENSMMUG00000060229 | 5.24E-06 | 0.31980251 | 0.425 | 0.35  | 0.18555152 | CD4_EM_CTL_UCBMC |
| TMEM263            | 5.36E-06 | 0.3919186  | 0.256 | 0.192 | 0.18994626 | CD4_EM_CTL_UCBMC |
| MIGA1              | 5.43E-06 | 0.42840667 | 0.303 | 0.238 | 0.19244821 | CD4_EM_CTL_UCBMC |
| PREP               | 5.71E-06 | 0.19617806 | 0.397 | 0.317 | 0.20231333 | CD4_EM_CTL_UCBMC |
| KAT6B              | 5.84E-06 | 0.11170587 | 0.722 | 0.608 | 0.20694121 | CD4_EM_CTL_UCBMC |
| TLK2               | 6.30E-06 | 0.16962792 | 0.444 | 0.363 | 0.22333064 | CD4_EM_CTL_UCBMC |
| INO80              | 6.55E-06 | 0.44424604 | 0.311 | 0.246 | 0.23203724 | CD4_EM_CTL_UCBMC |
| ENSMMUG00000014648 | 6.61E-06 | 0.16318306 | 0.742 | 0.665 | 0.23405414 | CD4_EM_CTL_UCBMC |
| ATP1B3             | 6.61E-06 | 0.19282082 | 0.448 | 0.364 | 0.23417133 | CD4_EM_CTL_UCBMC |
| AUH                | 7.02E-06 | 0.28287961 | 0.368 | 0.293 | 0.24866102 | CD4_EM_CTL_UCBMC |
| BABAM2             | 7.12E-06 | 0.22917229 | 0.545 | 0.467 | 0.2521976  | CD4_EM_CTL_UCBMC |
| SF1                | 7.15E-06 | 0.24823868 | 0.552 | 0.469 | 0.25333717 | CD4_EM_CTL_UCBMC |
| TP53BP2            | 7.24E-06 | 0.29193076 | 0.325 | 0.253 | 0.25663675 | CD4_EM_CTL_UCBMC |
| NAA35              | 7.79E-06 | 0.35257172 | 0.274 | 0.209 | 0.2760834  | CD4_EM_CTL_UCBMC |
| SMC3               | 7.91E-06 | 0.29193652 | 0.344 | 0.274 | 0.28015411 | CD4_EM_CTL_UCBMC |
| NDUFS3             | 7.93E-06 | 0.18718138 | 0.275 | 0.207 | 0.2809734  | CD4_EM_CTL_UCBMC |
| PFDN4              | 8.18E-06 | 0.21857084 | 0.284 | 0.216 | 0.28973615 | CD4_EM_CTL_UCBMC |
| SZRD1              | 8.38E-06 | 0.30376273 | 0.355 | 0.283 | 0.29680784 | CD4_EM_CTL_UCBMC |
| HOOK3              | 8.44E-06 | 0.14400668 | 0.644 | 0.547 | 0.29901136 | CD4_EM_CTL_UCBMC |
| CNTRL              | 8.51E-06 | 0.30396139 | 0.335 | 0.268 | 0.30138327 | CD4_EM_CTL_UCBMC |
| SP110              | 9.03E-06 | 0.25821565 | 0.464 | 0.388 | 0.32009102 | CD4_EM_CTL_UCBMC |
| FNBP4              | 9.20E-06 | 0.25252918 | 0.446 | 0.37  | 0.32583155 | CD4_EM_CTL_UCBMC |

|         |          |            |       |       |            |                  |
|---------|----------|------------|-------|-------|------------|------------------|
| AP3S1   | 9.49E-06 | 0.24695493 | 0.279 | 0.214 | 0.33639089 | CD4_EM_CTL_UCBMC |
| INTS6   | 9.51E-06 | 0.17986465 | 0.458 | 0.375 | 0.33678651 | CD4_EM_CTL_UCBMC |
| SEC11A  | 1.01E-05 | 0.15653661 | 0.469 | 0.382 | 0.35810451 | CD4_EM_CTL_UCBMC |
| MYO1F   | 1.03E-05 | 0.18014198 | 0.365 | 0.29  | 0.36367852 | CD4_EM_CTL_UCBMC |
| NIFK    | 1.06E-05 | 0.4144493  | 0.261 | 0.199 | 0.37730169 | CD4_EM_CTL_UCBMC |
| NTAN1   | 1.12E-05 | 0.34237576 | 0.267 | 0.202 | 0.39537843 | CD4_EM_CTL_UCBMC |
| FAM193A | 1.13E-05 | 0.26979713 | 0.36  | 0.291 | 0.40094536 | CD4_EM_CTL_UCBMC |
| PNPLA8  | 1.16E-05 | 0.17622456 | 0.417 | 0.335 | 0.41070803 | CD4_EM_CTL_UCBMC |
| RAB37   | 1.22E-05 | 0.31401003 | 0.442 | 0.371 | 0.4318168  | CD4_EM_CTL_UCBMC |
| SND1    | 1.30E-05 | 0.14397164 | 0.49  | 0.405 | 0.45922822 | CD4_EM_CTL_UCBMC |
| RPAP2   | 1.31E-05 | 0.24318688 | 0.3   | 0.231 | 0.46340127 | CD4_EM_CTL_UCBMC |
| KRR1    | 1.35E-05 | 0.31962756 | 0.259 | 0.198 | 0.47942848 | CD4_EM_CTL_UCBMC |
| SH3GLB1 | 1.35E-05 | 0.3156898  | 0.295 | 0.23  | 0.47956285 | CD4_EM_CTL_UCBMC |
| SMC1A   | 1.41E-05 | 0.36012944 | 0.29  | 0.225 | 0.49871998 | CD4_EM_CTL_UCBMC |
| MED4    | 1.41E-05 | 0.14541307 | 0.307 | 0.237 | 0.50119013 | CD4_EM_CTL_UCBMC |
| UHMK1   | 1.43E-05 | 0.28994183 | 0.338 | 0.267 | 0.50737233 | CD4_EM_CTL_UCBMC |
| HAT1    | 1.45E-05 | 0.33949603 | 0.288 | 0.222 | 0.51550564 | CD4_EM_CTL_UCBMC |
| STRN    | 1.53E-05 | 0.31477231 | 0.257 | 0.197 | 0.54256972 | CD4_EM_CTL_UCBMC |
| APEX1   | 1.71E-05 | 0.20011588 | 0.396 | 0.318 | 0.60557053 | CD4_EM_CTL_UCBMC |
| STX8    | 1.72E-05 | 0.25745541 | 0.449 | 0.374 | 0.60817662 | CD4_EM_CTL_UCBMC |
| SRSF1   | 1.72E-05 | 0.251979   | 0.373 | 0.298 | 0.60917166 | CD4_EM_CTL_UCBMC |
| DLST    | 1.84E-05 | 0.32428639 | 0.258 | 0.194 | 0.65158323 | CD4_EM_CTL_UCBMC |
| UBTF    | 1.97E-05 | 0.37735593 | 0.296 | 0.233 | 0.69785221 | CD4_EM_CTL_UCBMC |
| NCOA2   | 2.02E-05 | 0.15043054 | 0.552 | 0.465 | 0.71418685 | CD4_EM_CTL_UCBMC |
| CLYBL   | 2.05E-05 | 0.5224571  | 0.253 | 0.196 | 0.72626289 | CD4_EM_CTL_UCBMC |
| CPLANE1 | 2.09E-05 | 0.22125356 | 0.269 | 0.204 | 0.73980649 | CD4_EM_CTL_UCBMC |
| ADD1    | 2.13E-05 | 0.12271224 | 0.444 | 0.359 | 0.75419036 | CD4_EM_CTL_UCBMC |
| PCMTD1  | 2.14E-05 | 0.21414523 | 0.48  | 0.404 | 0.75891126 | CD4_EM_CTL_UCBMC |
| KATNBL1 | 2.16E-05 | 0.27789948 | 0.31  | 0.247 | 0.7665159  | CD4_EM_CTL_UCBMC |
| EIF3L   | 2.29E-05 | 0.15267887 | 0.611 | 0.516 | 0.81188855 | CD4_EM_CTL_UCBMC |
| NUCKS1  | 2.40E-05 | 0.26999969 | 0.499 | 0.423 | 0.85159861 | CD4_EM_CTL_UCBMC |
| UBA2    | 2.48E-05 | 0.28060783 | 0.329 | 0.263 | 0.87871644 | CD4_EM_CTL_UCBMC |
| CEP57   | 2.51E-05 | 0.17368141 | 0.315 | 0.247 | 0.88760943 | CD4_EM_CTL_UCBMC |

|                   |          |            |       |       |            |                  |
|-------------------|----------|------------|-------|-------|------------|------------------|
| GMPS              | 2.52E-05 | 0.31070861 | 0.293 | 0.233 | 0.89151126 | CD4_EM_CTL_UCBMC |
| FRS2              | 2.52E-05 | 0.28587476 | 0.305 | 0.24  | 0.89214765 | CD4_EM_CTL_UCBMC |
| SRSF5             | 2.54E-05 | 0.1348634  | 0.828 | 0.748 | 0.90026847 | CD4_EM_CTL_UCBMC |
| RBBP4             | 2.58E-05 | 0.17535455 | 0.379 | 0.305 | 0.91309058 | CD4_EM_CTL_UCBMC |
| HDAC7             | 2.61E-05 | 0.29045141 | 0.368 | 0.3   | 0.92579777 | CD4_EM_CTL_UCBMC |
| PJA2              | 2.66E-05 | 0.24040552 | 0.414 | 0.343 | 0.94225442 | CD4_EM_CTL_UCBMC |
| IRAK2             | 2.71E-05 | 0.14422567 | 0.429 | 0.349 | 0.96032882 | CD4_EM_CTL_UCBMC |
| ARHGEF6           | 2.81E-05 | 0.22510344 | 0.399 | 0.326 | 0.99575326 | CD4_EM_CTL_UCBMC |
| OS9               | 2.92E-05 | 0.20799233 | 0.291 | 0.226 | 1          | CD4_EM_CTL_UCBMC |
| ENSMUG00000040181 | 2.95E-05 | 0.26648482 | 0.307 | 0.24  | 1          | CD4_EM_CTL_UCBMC |
| LUC7L             | 2.98E-05 | 0.22564934 | 0.373 | 0.309 | 1          | CD4_EM_CTL_UCBMC |
| SF3B1             | 3.00E-05 | 0.1593017  | 0.708 | 0.628 | 1          | CD4_EM_CTL_UCBMC |
| ACBD3             | 3.23E-05 | 0.34366349 | 0.268 | 0.209 | 1          | CD4_EM_CTL_UCBMC |
| ATP6AP2           | 3.30E-05 | 0.29408401 | 0.261 | 0.201 | 1          | CD4_EM_CTL_UCBMC |
| CEP192            | 3.38E-05 | 0.25504675 | 0.434 | 0.36  | 1          | CD4_EM_CTL_UCBMC |
| NECAP2            | 3.52E-05 | 0.29333973 | 0.25  | 0.19  | 1          | CD4_EM_CTL_UCBMC |
| C4H6orf62         | 3.58E-05 | 0.22985373 | 0.391 | 0.316 | 1          | CD4_EM_CTL_UCBMC |
| CDC123            | 3.62E-05 | 0.23468077 | 0.255 | 0.194 | 1          | CD4_EM_CTL_UCBMC |
| PRKAG2            | 3.65E-05 | 0.28879485 | 0.28  | 0.219 | 1          | CD4_EM_CTL_UCBMC |
| BCCIP             | 3.81E-05 | 0.27606756 | 0.3   | 0.238 | 1          | CD4_EM_CTL_UCBMC |
| SMAD2             | 3.96E-05 | 0.46485406 | 0.291 | 0.233 | 1          | CD4_EM_CTL_UCBMC |
| SEPTIN7           | 4.06E-05 | 0.10506362 | 0.856 | 0.798 | 1          | CD4_EM_CTL_UCBMC |
| NEDD4L            | 4.13E-05 | 0.14839767 | 0.372 | 0.298 | 1          | CD4_EM_CTL_UCBMC |
| MNAT1             | 4.17E-05 | 0.17575604 | 0.436 | 0.365 | 1          | CD4_EM_CTL_UCBMC |
| TNPO3             | 4.55E-05 | 0.23378862 | 0.334 | 0.267 | 1          | CD4_EM_CTL_UCBMC |
| SLC44A2           | 4.56E-05 | 0.16386067 | 0.37  | 0.3   | 1          | CD4_EM_CTL_UCBMC |
| ACBD6             | 4.64E-05 | 0.22423851 | 0.259 | 0.199 | 1          | CD4_EM_CTL_UCBMC |
| ATRN              | 4.66E-05 | 0.29746374 | 0.299 | 0.24  | 1          | CD4_EM_CTL_UCBMC |
| TBL1X             | 4.67E-05 | 0.2166405  | 0.312 | 0.247 | 1          | CD4_EM_CTL_UCBMC |
| VPS26A            | 4.75E-05 | 0.28969192 | 0.269 | 0.207 | 1          | CD4_EM_CTL_UCBMC |
| TRAM1             | 4.84E-05 | 0.22141445 | 0.446 | 0.378 | 1          | CD4_EM_CTL_UCBMC |
| SON               | 4.90E-05 | 0.14821905 | 0.808 | 0.741 | 1          | CD4_EM_CTL_UCBMC |
| HNRNPA3           | 5.00E-05 | 0.12608858 | 0.742 | 0.662 | 1          | CD4_EM_CTL_UCBMC |



|                   |            |            |       |       |                    |
|-------------------|------------|------------|-------|-------|--------------------|
| UBAP2L            | 5.13E-05   | 0.18326839 | 0.358 | 0.289 | 1 CD4_EM_CTL_UCBMC |
| GTF2F2            | 5.24E-05   | 0.17525468 | 0.355 | 0.285 | 1 CD4_EM_CTL_UCBMC |
| PDSS2             | 5.24E-05   | 0.20591078 | 0.33  | 0.264 | 1 CD4_EM_CTL_UCBMC |
| MAP4              | 5.26E-05   | 0.28830913 | 0.26  | 0.203 | 1 CD4_EM_CTL_UCBMC |
| RPL31             | 5.29E-05   | 0.16902804 | 0.693 | 0.606 | 1 CD4_EM_CTL_UCBMC |
| ARRB2             | 5.30E-05   | 0.21828752 | 0.267 | 0.205 | 1 CD4_EM_CTL_UCBMC |
| SNX6              | 5.32E-05   | 0.16343372 | 0.538 | 0.462 | 1 CD4_EM_CTL_UCBMC |
| FBXW8             | 5.45E-05   | 0.31647662 | 0.25  | 0.192 | 1 CD4_EM_CTL_UCBMC |
| ZRANB1            | 5.45E-05   | 0.27524369 | 0.258 | 0.201 | 1 CD4_EM_CTL_UCBMC |
| PDZRN3            | 5.62E-05   | 0.24516555 | 0.435 | 0.363 | 1 CD4_EM_CTL_UCBMC |
| UBE3A             | 5.80E-05   | 0.13033035 | 0.426 | 0.344 | 1 CD4_EM_CTL_UCBMC |
| CARMIL1           | 6.00E-05   | 0.29389611 | 0.328 | 0.263 | 1 CD4_EM_CTL_UCBMC |
| ARHGEF1           | 6.05E-05   | 0.14464278 | 0.562 | 0.47  | 1 CD4_EM_CTL_UCBMC |
| DERL1             | 6.11E-05   | 0.36540446 | 0.318 | 0.258 | 1 CD4_EM_CTL_UCBMC |
| LENG8             | 6.15E-05   | 0.19825056 | 0.267 | 0.209 | 1 CD4_EM_CTL_UCBMC |
| CDYL              | 6.36E-05   | 0.12245387 | 0.295 | 0.23  | 1 CD4_EM_CTL_UCBMC |
| ENSMUG00000016959 | 6.42E-05   | 0.13521188 | 0.447 | 0.371 | 1 CD4_EM_CTL_UCBMC |
| WASHC4            | 6.42E-05   | 0.15119788 | 0.27  | 0.206 | 1 CD4_EM_CTL_UCBMC |
| ARHGAP4           | 6.75E-05   | 0.11125534 | 0.375 | 0.304 | 1 CD4_EM_CTL_UCBMC |
| DISP1             | 6.93E-05   | 0.17876323 | 0.301 | 0.235 | 1 CD4_EM_CTL_UCBMC |
| TBC1D24           | 7.38E-05   | 0.10287586 | 0.541 | 0.461 | 1 CD4_EM_CTL_UCBMC |
| RBM23             | 7.94E-05   | 0.32396341 | 0.274 | 0.217 | 1 CD4_EM_CTL_UCBMC |
| TALDO1            | 8.66E-05   | 0.11382906 | 0.462 | 0.392 | 1 CD4_EM_CTL_UCBMC |
| SPATA5            | 8.93E-05   | 0.21968929 | 0.407 | 0.335 | 1 CD4_EM_CTL_UCBMC |
| STAG2             | 9.15E-05   | 0.1572589  | 0.614 | 0.53  | 1 CD4_EM_CTL_UCBMC |
| STAR              | 9.27E-05   | 0.19990071 | 0.262 | 0.206 | 1 CD4_EM_CTL_UCBMC |
| AGO2              | 9.30E-05   | 0.27856824 | 0.332 | 0.268 | 1 CD4_EM_CTL_UCBMC |
| FKBP3             | 9.52E-05   | 0.23382248 | 0.375 | 0.311 | 1 CD4_EM_CTL_UCBMC |
| HSPA14            | 9.73E-05   | 0.18828471 | 0.276 | 0.217 | 1 CD4_EM_CTL_UCBMC |
| RPS3A             | 9.85E-05   | 0.11549607 | 0.967 | 0.944 | 1 CD4_EM_CTL_UCBMC |
| UBE2K             | 0.00010028 | 0.21529015 | 0.51  | 0.433 | 1 CD4_EM_CTL_UCBMC |
| PRKDC             | 0.00010109 | 0.13987297 | 0.504 | 0.424 | 1 CD4_EM_CTL_UCBMC |
| ZNF280D           | 0.00010388 | 0.24500239 | 0.309 | 0.247 | 1 CD4_EM_CTL_UCBMC |

|                   |            |            |       |       |                    |
|-------------------|------------|------------|-------|-------|--------------------|
| CEP85L            | 0.00010652 | 0.10548754 | 0.594 | 0.501 | 1 CD4_EM_CTL_UCBMC |
| IVNS1ABP          | 0.00010935 | 0.20577399 | 0.432 | 0.357 | 1 CD4_EM_CTL_UCBMC |
| POLR2D            | 0.00010946 | 0.1091784  | 0.271 | 0.21  | 1 CD4_EM_CTL_UCBMC |
| USP14             | 0.00010962 | 0.30195566 | 0.288 | 0.23  | 1 CD4_EM_CTL_UCBMC |
| ENSMUG00000017113 | 0.00011117 | 0.19055913 | 0.354 | 0.286 | 1 CD4_EM_CTL_UCBMC |
| ITFG2             | 0.00011188 | 0.29936225 | 0.37  | 0.308 | 1 CD4_EM_CTL_UCBMC |
| WBP1L             | 0.00011389 | 0.15257982 | 0.345 | 0.28  | 1 CD4_EM_CTL_UCBMC |
| CEP170            | 0.00011396 | 0.24259518 | 0.437 | 0.369 | 1 CD4_EM_CTL_UCBMC |
| MIB1              | 0.00011504 | 0.17767835 | 0.368 | 0.303 | 1 CD4_EM_CTL_UCBMC |
| LIMS1             | 0.00011513 | 0.1662051  | 0.418 | 0.344 | 1 CD4_EM_CTL_UCBMC |
| TM9SF4            | 0.00011604 | 0.30356399 | 0.256 | 0.199 | 1 CD4_EM_CTL_UCBMC |
| NAP1L4            | 0.0001166  | 0.13203831 | 0.696 | 0.611 | 1 CD4_EM_CTL_UCBMC |
| ENSMUG00000030374 | 0.00011708 | 0.31135582 | 0.303 | 0.246 | 1 CD4_EM_CTL_UCBMC |
| ZCRB1             | 0.00012042 | 0.19335377 | 0.287 | 0.227 | 1 CD4_EM_CTL_UCBMC |
| TBPL1             | 0.00012267 | 0.19469389 | 0.275 | 0.215 | 1 CD4_EM_CTL_UCBMC |
| KLHL18            | 0.00012346 | 0.15390549 | 0.312 | 0.252 | 1 CD4_EM_CTL_UCBMC |
| STX16             | 0.00012466 | 0.31571952 | 0.269 | 0.212 | 1 CD4_EM_CTL_UCBMC |
| CSNK2A1           | 0.00012666 | 0.20183332 | 0.492 | 0.428 | 1 CD4_EM_CTL_UCBMC |
| PPP2R1A           | 0.00012775 | 0.20825399 | 0.317 | 0.258 | 1 CD4_EM_CTL_UCBMC |
| MDN1              | 0.00013228 | 0.22734297 | 0.327 | 0.262 | 1 CD4_EM_CTL_UCBMC |
| RAD23B            | 0.00013705 | 0.33968822 | 0.292 | 0.236 | 1 CD4_EM_CTL_UCBMC |
| PHF14             | 0.00013892 | 0.18435341 | 0.507 | 0.428 | 1 CD4_EM_CTL_UCBMC |
| EIF3G             | 0.00014626 | 0.12529188 | 0.467 | 0.39  | 1 CD4_EM_CTL_UCBMC |
| KIAA1109          | 0.00014827 | 0.22310154 | 0.363 | 0.301 | 1 CD4_EM_CTL_UCBMC |
| TAPBP             | 0.00015283 | 0.1692817  | 0.448 | 0.376 | 1 CD4_EM_CTL_UCBMC |
| DNAJA2            | 0.00015304 | 0.2076322  | 0.312 | 0.254 | 1 CD4_EM_CTL_UCBMC |
| JAZF1             | 0.00015376 | 0.24057313 | 0.344 | 0.282 | 1 CD4_EM_CTL_UCBMC |
| CLTC              | 0.00016454 | 0.20618452 | 0.338 | 0.276 | 1 CD4_EM_CTL_UCBMC |
| ATP2A2            | 0.00016546 | 0.2454362  | 0.367 | 0.308 | 1 CD4_EM_CTL_UCBMC |
| GIGYF2            | 0.00016548 | 0.20735923 | 0.453 | 0.385 | 1 CD4_EM_CTL_UCBMC |
| SPG11             | 0.00016796 | 0.32231526 | 0.269 | 0.216 | 1 CD4_EM_CTL_UCBMC |
| TBCC              | 0.00016934 | 0.12441871 | 0.332 | 0.266 | 1 CD4_EM_CTL_UCBMC |
| RPLP2             | 0.00017128 | 0.10255114 | 0.963 | 0.921 | 1 CD4_EM_CTL_UCBMC |

|                   |            |            |       |       |                    |
|-------------------|------------|------------|-------|-------|--------------------|
| ZNF131            | 0.00018122 | 0.12138873 | 0.391 | 0.32  | 1 CD4_EM_CTL_UCBMC |
| DIABLO            | 0.00018543 | 0.2396494  | 0.292 | 0.234 | 1 CD4_EM_CTL_UCBMC |
| XPC               | 0.00018819 | 0.24293886 | 0.286 | 0.226 | 1 CD4_EM_CTL_UCBMC |
| DDX18             | 0.00019403 | 0.15144159 | 0.486 | 0.412 | 1 CD4_EM_CTL_UCBMC |
| KDELRL            | 0.00019774 | 0.14491154 | 0.31  | 0.249 | 1 CD4_EM_CTL_UCBMC |
| CMAH              | 0.00019834 | 0.20833556 | 0.484 | 0.414 | 1 CD4_EM_CTL_UCBMC |
| PHACTR4           | 0.00019853 | 0.18586296 | 0.353 | 0.294 | 1 CD4_EM_CTL_UCBMC |
| ABCG2             | 0.00019958 | 0.2056253  | 0.264 | 0.209 | 1 CD4_EM_CTL_UCBMC |
| OCIAD1            | 0.00020029 | 0.15268381 | 0.394 | 0.327 | 1 CD4_EM_CTL_UCBMC |
| ANKZF1            | 0.00020058 | 0.14913677 | 0.252 | 0.197 | 1 CD4_EM_CTL_UCBMC |
| EIF3D             | 0.00021319 | 0.13399477 | 0.412 | 0.343 | 1 CD4_EM_CTL_UCBMC |
| TANGO6            | 0.0002152  | 0.17247887 | 0.33  | 0.268 | 1 CD4_EM_CTL_UCBMC |
| ENSMUG00000042951 | 0.00021653 | 0.13586983 | 0.483 | 0.403 | 1 CD4_EM_CTL_UCBMC |
| HMBX1             | 0.00021967 | 0.17918353 | 0.347 | 0.284 | 1 CD4_EM_CTL_UCBMC |
| CWC27             | 0.00022983 | 0.13698883 | 0.41  | 0.336 | 1 CD4_EM_CTL_UCBMC |
| PIBF1             | 0.00023276 | 0.26309397 | 0.319 | 0.261 | 1 CD4_EM_CTL_UCBMC |
| RSU1              | 0.00023637 | 0.14289295 | 0.418 | 0.352 | 1 CD4_EM_CTL_UCBMC |
| TAOK3             | 0.00023674 | 0.18531121 | 0.575 | 0.498 | 1 CD4_EM_CTL_UCBMC |
| SETD5             | 0.00024589 | 0.18060233 | 0.479 | 0.403 | 1 CD4_EM_CTL_UCBMC |
| DENND1A           | 0.00025063 | 0.14675395 | 0.401 | 0.333 | 1 CD4_EM_CTL_UCBMC |
| MATR3             | 0.00025245 | 0.11040374 | 0.789 | 0.702 | 1 CD4_EM_CTL_UCBMC |
| ITGAE             | 0.00025583 | 0.22376064 | 0.276 | 0.218 | 1 CD4_EM_CTL_UCBMC |
| PHF6              | 0.00027708 | 0.2021528  | 0.257 | 0.203 | 1 CD4_EM_CTL_UCBMC |
| YLPM1             | 0.00027769 | 0.26171449 | 0.292 | 0.238 | 1 CD4_EM_CTL_UCBMC |
| ZNF438            | 0.00028129 | 0.15421852 | 0.268 | 0.212 | 1 CD4_EM_CTL_UCBMC |
| TMED10            | 0.00029394 | 0.12636703 | 0.495 | 0.422 | 1 CD4_EM_CTL_UCBMC |
| POLR3GL           | 0.00029687 | 0.1682126  | 0.307 | 0.251 | 1 CD4_EM_CTL_UCBMC |
| GGPS1             | 0.00030102 | 0.26198777 | 0.276 | 0.223 | 1 CD4_EM_CTL_UCBMC |
| SNRNP200          | 0.00032545 | 0.24093153 | 0.278 | 0.225 | 1 CD4_EM_CTL_UCBMC |
| KMT5B             | 0.00032864 | 0.17109334 | 0.359 | 0.298 | 1 CD4_EM_CTL_UCBMC |
| FBXO7             | 0.000342   | 0.26556693 | 0.255 | 0.206 | 1 CD4_EM_CTL_UCBMC |
| VRK1              | 0.00034359 | 0.12171394 | 0.38  | 0.313 | 1 CD4_EM_CTL_UCBMC |
| TASOR2            | 0.00034523 | 0.17634632 | 0.454 | 0.384 | 1 CD4_EM_CTL_UCBMC |

|                    |            |            |       |       |                    |
|--------------------|------------|------------|-------|-------|--------------------|
| CCNT1              | 0.00034831 | 0.3603867  | 0.301 | 0.25  | 1 CD4_EM_CTL_UCBMC |
| HDAC4              | 0.00035151 | 0.29510888 | 0.308 | 0.251 | 1 CD4_EM_CTL_UCBMC |
| KPNB1              | 0.00036302 | 0.24475901 | 0.374 | 0.315 | 1 CD4_EM_CTL_UCBMC |
| RESF1              | 0.00038691 | 0.19276367 | 0.253 | 0.197 | 1 CD4_EM_CTL_UCBMC |
| SINHCAF            | 0.00039072 | 0.18477165 | 0.411 | 0.348 | 1 CD4_EM_CTL_UCBMC |
| CTNNBL1            | 0.0003952  | 0.16118088 | 0.391 | 0.326 | 1 CD4_EM_CTL_UCBMC |
| TCF25              | 0.00039692 | 0.18309636 | 0.409 | 0.351 | 1 CD4_EM_CTL_UCBMC |
| AGPS               | 0.00039828 | 0.12270683 | 0.482 | 0.409 | 1 CD4_EM_CTL_UCBMC |
| RALGPS2            | 0.00040889 | 0.16971967 | 0.477 | 0.397 | 1 CD4_EM_CTL_UCBMC |
| FBXL4              | 0.00043729 | 0.2093282  | 0.271 | 0.215 | 1 CD4_EM_CTL_UCBMC |
| ENSMUG00000006608  | 0.00043731 | 0.12853275 | 0.629 | 0.551 | 1 CD4_EM_CTL_UCBMC |
| ENSMUG000000065089 | 0.00044723 | 0.11876147 | 0.369 | 0.303 | 1 CD4_EM_CTL_UCBMC |
| HM13               | 0.00045324 | 0.15508625 | 0.291 | 0.234 | 1 CD4_EM_CTL_UCBMC |
| ABL1               | 0.00048095 | 0.18660066 | 0.281 | 0.226 | 1 CD4_EM_CTL_UCBMC |
| DGUOK              | 0.00051261 | 0.21370812 | 0.272 | 0.218 | 1 CD4_EM_CTL_UCBMC |
| PIP4K2A            | 0.00051376 | 0.12117028 | 0.75  | 0.659 | 1 CD4_EM_CTL_UCBMC |
| RALGAPB            | 0.00051708 | 0.18956718 | 0.325 | 0.265 | 1 CD4_EM_CTL_UCBMC |
| EIF2B3             | 0.00051997 | 0.13797006 | 0.352 | 0.292 | 1 CD4_EM_CTL_UCBMC |
| SAMD8              | 0.00053171 | 0.25012302 | 0.25  | 0.199 | 1 CD4_EM_CTL_UCBMC |
| RC3H1              | 0.0005393  | 0.18727312 | 0.319 | 0.263 | 1 CD4_EM_CTL_UCBMC |
| TOB1               | 0.00054257 | 0.24172346 | 0.311 | 0.253 | 1 CD4_EM_CTL_UCBMC |
| ENSMUG000000011798 | 0.0005438  | 0.13790363 | 0.332 | 0.273 | 1 CD4_EM_CTL_UCBMC |
| DDX17              | 0.00055871 | 0.15712478 | 0.689 | 0.613 | 1 CD4_EM_CTL_UCBMC |
| SNF8               | 0.00056343 | 0.17033723 | 0.27  | 0.217 | 1 CD4_EM_CTL_UCBMC |
| CCDC82             | 0.00057184 | 0.13522529 | 0.289 | 0.233 | 1 CD4_EM_CTL_UCBMC |
| ATL3               | 0.00059211 | 0.17891061 | 0.276 | 0.224 | 1 CD4_EM_CTL_UCBMC |
| RHOA               | 0.00060527 | 0.10134414 | 0.747 | 0.682 | 1 CD4_EM_CTL_UCBMC |
| KBTBD2             | 0.00061617 | 0.16723615 | 0.289 | 0.234 | 1 CD4_EM_CTL_UCBMC |
| UBE2F              | 0.00063423 | 0.17868005 | 0.319 | 0.257 | 1 CD4_EM_CTL_UCBMC |
| RFX7               | 0.00064844 | 0.20866945 | 0.386 | 0.325 | 1 CD4_EM_CTL_UCBMC |
| NUMA1              | 0.00068617 | 0.16888406 | 0.305 | 0.253 | 1 CD4_EM_CTL_UCBMC |
| ARID4A             | 0.00069063 | 0.24263009 | 0.281 | 0.231 | 1 CD4_EM_CTL_UCBMC |
| CLK4               | 0.00071034 | 0.20433201 | 0.295 | 0.243 | 1 CD4_EM_CTL_UCBMC |

|           |            |            |       |       |                    |
|-----------|------------|------------|-------|-------|--------------------|
| ZMYM4     | 0.00071504 | 0.20825537 | 0.399 | 0.344 | 1 CD4_EM_CTL_UCBMC |
| PRPF6     | 0.00080017 | 0.12033413 | 0.344 | 0.285 | 1 CD4_EM_CTL_UCBMC |
| ST3GAL3   | 0.00081632 | 0.26085092 | 0.277 | 0.227 | 1 CD4_EM_CTL_UCBMC |
| BRWD3     | 0.00082988 | 0.26981188 | 0.272 | 0.224 | 1 CD4_EM_CTL_UCBMC |
| MSH3      | 0.00088742 | 0.23130324 | 0.315 | 0.26  | 1 CD4_EM_CTL_UCBMC |
| TBC1D10B  | 0.00091112 | 0.22934049 | 0.331 | 0.279 | 1 CD4_EM_CTL_UCBMC |
| STRN3     | 0.00092664 | 0.179394   | 0.408 | 0.345 | 1 CD4_EM_CTL_UCBMC |
| DIPK1A    | 0.0009335  | 0.19955401 | 0.281 | 0.23  | 1 CD4_EM_CTL_UCBMC |
| SMN1      | 0.0009848  | 0.28344228 | 0.269 | 0.222 | 1 CD4_EM_CTL_UCBMC |
| DMXL1     | 0.00099786 | 0.22649423 | 0.29  | 0.24  | 1 CD4_EM_CTL_UCBMC |
| SPIDR     | 0.00100661 | 0.11978268 | 0.437 | 0.374 | 1 CD4_EM_CTL_UCBMC |
| PLGRKT    | 0.0010399  | 0.11647929 | 0.282 | 0.23  | 1 CD4_EM_CTL_UCBMC |
| SDCCAG8   | 0.00106255 | 0.29279523 | 0.259 | 0.212 | 1 CD4_EM_CTL_UCBMC |
| WIPF2     | 0.00108035 | 0.11074284 | 0.262 | 0.214 | 1 CD4_EM_CTL_UCBMC |
| CDK12     | 0.00108044 | 0.16831085 | 0.366 | 0.308 | 1 CD4_EM_CTL_UCBMC |
| NRDC      | 0.00115564 | 0.11778642 | 0.357 | 0.296 | 1 CD4_EM_CTL_UCBMC |
| SUFU      | 0.00118101 | 0.14620404 | 0.253 | 0.205 | 1 CD4_EM_CTL_UCBMC |
| MYO9A     | 0.00119674 | 0.24929156 | 0.257 | 0.211 | 1 CD4_EM_CTL_UCBMC |
| PTBP3     | 0.00123202 | 0.12761084 | 0.586 | 0.52  | 1 CD4_EM_CTL_UCBMC |
| CACUL1    | 0.00128686 | 0.21008559 | 0.269 | 0.22  | 1 CD4_EM_CTL_UCBMC |
| TRIM22    | 0.00131307 | 0.129962   | 0.42  | 0.359 | 1 CD4_EM_CTL_UCBMC |
| ICAM2     | 0.00131715 | 0.19584856 | 0.292 | 0.24  | 1 CD4_EM_CTL_UCBMC |
| FUT8      | 0.00132235 | 0.15768639 | 0.37  | 0.316 | 1 CD4_EM_CTL_UCBMC |
| TEX264    | 0.00132754 | 0.19626831 | 0.262 | 0.214 | 1 CD4_EM_CTL_UCBMC |
| LARP4B    | 0.00133555 | 0.18678751 | 0.369 | 0.314 | 1 CD4_EM_CTL_UCBMC |
| SYPL1     | 0.00138515 | 0.22218152 | 0.284 | 0.235 | 1 CD4_EM_CTL_UCBMC |
| HGSNAT    | 0.0014161  | 0.3802564  | 0.25  | 0.208 | 1 CD4_EM_CTL_UCBMC |
| LAP3      | 0.00144526 | 0.33848667 | 0.251 | 0.207 | 1 CD4_EM_CTL_UCBMC |
| METAP2    | 0.00147829 | 0.17604617 | 0.33  | 0.278 | 1 CD4_EM_CTL_UCBMC |
| GOLM2     | 0.00149234 | 0.15433232 | 0.477 | 0.414 | 1 CD4_EM_CTL_UCBMC |
| RRP1B     | 0.00152732 | 0.3131293  | 0.255 | 0.206 | 1 CD4_EM_CTL_UCBMC |
| MAPK1IP1L | 0.00152812 | 0.12050805 | 0.376 | 0.319 | 1 CD4_EM_CTL_UCBMC |
| DENND1B   | 0.001542   | 0.22309272 | 0.322 | 0.268 | 1 CD4_EM_CTL_UCBMC |

|                   |            |            |       |       |                    |
|-------------------|------------|------------|-------|-------|--------------------|
| RBBP7             | 0.00154463 | 0.20190872 | 0.281 | 0.232 | 1 CD4_EM_CTL_UCBMC |
| TTC27             | 0.00165333 | 0.2670428  | 0.258 | 0.211 | 1 CD4_EM_CTL_UCBMC |
| HLCS              | 0.00169037 | 0.13324932 | 0.28  | 0.23  | 1 CD4_EM_CTL_UCBMC |
| ETNK1             | 0.00174385 | 0.14553153 | 0.361 | 0.308 | 1 CD4_EM_CTL_UCBMC |
| LPP               | 0.0017506  | 0.11208079 | 0.606 | 0.533 | 1 CD4_EM_CTL_UCBMC |
| SNX2              | 0.00179924 | 0.19973576 | 0.325 | 0.273 | 1 CD4_EM_CTL_UCBMC |
| CREB1             | 0.00180449 | 0.21892535 | 0.418 | 0.363 | 1 CD4_EM_CTL_UCBMC |
| MPZL1             | 0.00196706 | 0.10632907 | 0.417 | 0.357 | 1 CD4_EM_CTL_UCBMC |
| CD8A              | 0.00200071 | 0.10659428 | 0.279 | 0.227 | 1 CD4_EM_CTL_UCBMC |
| GALNT7            | 0.00205054 | 0.12192465 | 0.319 | 0.269 | 1 CD4_EM_CTL_UCBMC |
| RABGAP1           | 0.00210294 | 0.10904775 | 0.262 | 0.216 | 1 CD4_EM_CTL_UCBMC |
| VMP1              | 0.00223625 | 0.23560024 | 0.367 | 0.317 | 1 CD4_EM_CTL_UCBMC |
| PSMD13            | 0.00230713 | 0.15528231 | 0.437 | 0.378 | 1 CD4_EM_CTL_UCBMC |
| TPR               | 0.00236779 | 0.1290606  | 0.455 | 0.396 | 1 CD4_EM_CTL_UCBMC |
| SYNCRIP           | 0.00248069 | 0.12455126 | 0.426 | 0.365 | 1 CD4_EM_CTL_UCBMC |
| PSIP1             | 0.0025471  | 0.21617032 | 0.458 | 0.41  | 1 CD4_EM_CTL_UCBMC |
| TDRD3             | 0.00261029 | 0.15933371 | 0.353 | 0.297 | 1 CD4_EM_CTL_UCBMC |
| EHMT1             | 0.00266543 | 0.13423846 | 0.441 | 0.378 | 1 CD4_EM_CTL_UCBMC |
| ENSMUG00000045425 | 0.00267245 | 0.14795861 | 0.288 | 0.239 | 1 CD4_EM_CTL_UCBMC |
| KIAA0040          | 0.00270533 | 0.19498929 | 0.253 | 0.208 | 1 CD4_EM_CTL_UCBMC |
| PTPN11            | 0.00274838 | 0.2346758  | 0.284 | 0.236 | 1 CD4_EM_CTL_UCBMC |
| SNX25             | 0.00286294 | 0.16018284 | 0.298 | 0.249 | 1 CD4_EM_CTL_UCBMC |
| UBQLN1            | 0.00293958 | 0.16753623 | 0.346 | 0.293 | 1 CD4_EM_CTL_UCBMC |
| UQCRB             | 0.00306153 | 0.13078376 | 0.37  | 0.32  | 1 CD4_EM_CTL_UCBMC |
| AARS1             | 0.00309738 | 0.11300406 | 0.427 | 0.369 | 1 CD4_EM_CTL_UCBMC |
| MTF2              | 0.00324489 | 0.23049763 | 0.275 | 0.23  | 1 CD4_EM_CTL_UCBMC |
| DCAF8             | 0.00326673 | 0.15102912 | 0.347 | 0.297 | 1 CD4_EM_CTL_UCBMC |
| ZZEF1             | 0.00331016 | 0.25539745 | 0.308 | 0.264 | 1 CD4_EM_CTL_UCBMC |
| TBC1D22A          | 0.00333371 | 0.14470918 | 0.41  | 0.356 | 1 CD4_EM_CTL_UCBMC |
| CMTM6             | 0.00341551 | 0.1419997  | 0.494 | 0.432 | 1 CD4_EM_CTL_UCBMC |
| UBR2              | 0.00370995 | 0.15950605 | 0.364 | 0.313 | 1 CD4_EM_CTL_UCBMC |
| HERC4             | 0.00372862 | 0.13177932 | 0.476 | 0.414 | 1 CD4_EM_CTL_UCBMC |
| FBL               | 0.00392724 | 0.18155934 | 0.255 | 0.213 | 1 CD4_EM_CTL_UCBMC |

|                    |            |            |       |       |                    |
|--------------------|------------|------------|-------|-------|--------------------|
| ATP6V1E1           | 0.00399105 | 0.18852688 | 0.287 | 0.245 | 1 CD4_EM_CTL_UCBMC |
| C3H21orf91         | 0.00401015 | 0.21008608 | 0.293 | 0.247 | 1 CD4_EM_CTL_UCBMC |
| RCOR1              | 0.00436524 | 0.13335013 | 0.294 | 0.249 | 1 CD4_EM_CTL_UCBMC |
| GNAI3              | 0.00449907 | 0.14031603 | 0.373 | 0.323 | 1 CD4_EM_CTL_UCBMC |
| CDK5RAP2           | 0.00467683 | 0.22093684 | 0.252 | 0.209 | 1 CD4_EM_CTL_UCBMC |
| CASC3              | 0.00478845 | 0.15256667 | 0.337 | 0.288 | 1 CD4_EM_CTL_UCBMC |
| NAA20              | 0.0053607  | 0.137254   | 0.252 | 0.209 | 1 CD4_EM_CTL_UCBMC |
| GDI2               | 0.00551454 | 0.116865   | 0.426 | 0.373 | 1 CD4_EM_CTL_UCBMC |
| NPTN               | 0.00580044 | 0.14160693 | 0.308 | 0.262 | 1 CD4_EM_CTL_UCBMC |
| SMAP2              | 0.00581596 | 0.10375333 | 0.496 | 0.444 | 1 CD4_EM_CTL_UCBMC |
| TTC19              | 0.00638661 | 0.16477795 | 0.34  | 0.293 | 1 CD4_EM_CTL_UCBMC |
| ATG3               | 0.00650813 | 0.19412258 | 0.361 | 0.314 | 1 CD4_EM_CTL_UCBMC |
| ARMH3              | 0.00738723 | 0.10433412 | 0.283 | 0.239 | 1 CD4_EM_CTL_UCBMC |
| RMDN1              | 0.00739773 | 0.12582137 | 0.342 | 0.296 | 1 CD4_EM_CTL_UCBMC |
| FOCAD              | 0.00747218 | 0.13784781 | 0.262 | 0.219 | 1 CD4_EM_CTL_UCBMC |
| SUPT5H             | 0.00932039 | 0.13479412 | 0.299 | 0.259 | 1 CD4_EM_CTL_UCBMC |
| HNRNPA0            | 0.00951031 | 0.12747417 | 0.497 | 0.446 | 1 CD4_EM_CTL_UCBMC |
| ENSMMUG00000054743 | 0.0095151  | 0.1311046  | 0.258 | 0.217 | 1 CD4_EM_CTL_UCBMC |
| YWHAЕ              | 0.00990656 | 0.12365086 | 0.558 | 0.501 | 1 CD4_EM_CTL_UCBMC |
| H2AFY              | 0.01046324 | 0.13967155 | 0.49  | 0.433 | 1 CD4_EM_CTL_UCBMC |
| OXNAD1             | 0.01089151 | 0.1844099  | 0.265 | 0.225 | 1 CD4_EM_CTL_UCBMC |
| STRBP              | 0.01146941 | 0.2157806  | 0.278 | 0.241 | 1 CD4_EM_CTL_UCBMC |
| SLC35B1            | 0.0119037  | 0.10574778 | 0.375 | 0.328 | 1 CD4_EM_CTL_UCBMC |
| KHDRBS1            | 0.01194062 | 0.14135486 | 0.363 | 0.317 | 1 CD4_EM_CTL_UCBMC |
| PNKP               | 0.01252891 | 0.27469506 | 0.288 | 0.251 | 1 CD4_EM_CTL_UCBMC |
| SUN2               | 0.01360935 | 0.14128347 | 0.326 | 0.283 | 1 CD4_EM_CTL_UCBMC |
| KRAS               | 0.01386068 | 0.12709142 | 0.402 | 0.353 | 1 CD4_EM_CTL_UCBMC |
| LAMP1              | 0.01391788 | 0.19231298 | 0.263 | 0.224 | 1 CD4_EM_CTL_UCBMC |
| TRIM44             | 0.01419404 | 0.16442728 | 0.323 | 0.281 | 1 CD4_EM_CTL_UCBMC |
| ANKRD10            | 0.01488905 | 0.11910157 | 0.419 | 0.367 | 1 CD4_EM_CTL_UCBMC |
| CHCHD3             | 0.01496048 | 0.11634632 | 0.406 | 0.354 | 1 CD4_EM_CTL_UCBMC |
| UIMC1              | 0.01541196 | 0.21367123 | 0.312 | 0.278 | 1 CD4_EM_CTL_UCBMC |
| VPS41              | 0.01739181 | 0.18865901 | 0.265 | 0.23  | 1 CD4_EM_CTL_UCBMC |

|                    |            |            |       |       |           |                   |
|--------------------|------------|------------|-------|-------|-----------|-------------------|
| DENR               | 0.01867293 | 0.24879962 | 0.258 | 0.223 | 1         | CD4_EM_CTL_UCBMC  |
| SLC7A6             | 0.021051   | 0.12615192 | 0.298 | 0.259 | 1         | CD4_EM_CTL_UCBMC  |
| IPO11              | 0.02425859 | 0.22464493 | 0.251 | 0.217 | 1         | CD4_EM_CTL_UCBMC  |
| STXBP3             | 0.02491824 | 0.1055789  | 0.273 | 0.233 | 1         | CD4_EM_CTL_UCBMC  |
| DCP2               | 0.02776515 | 0.10676488 | 0.332 | 0.293 | 1         | CD4_EM_CTL_UCBMC  |
| CAPRIN1            | 0.0301285  | 0.10031533 | 0.315 | 0.278 | 1         | CD4_EM_CTL_UCBMC  |
| COMMD3             | 0.03186059 | 0.17879507 | 0.26  | 0.228 | 1         | CD4_EM_CTL_UCBMC  |
| ENSMMUG00000047277 | 0.03331945 | 0.19045465 | 0.55  | 0.528 | 1         | CD4_EM_CTL_UCBMC  |
| IKZF2              | 0.03441317 | 0.17087945 | 0.758 | 0.686 | 1         | CD4_EM_CTL_UCBMC  |
| CCDC6              | 0.03582235 | 0.10444097 | 0.268 | 0.235 | 1         | CD4_EM_CTL_UCBMC  |
| PCF11              | 0.03612978 | 0.17271556 | 0.305 | 0.274 | 1         | CD4_EM_CTL_UCBMC  |
| ADAR               | 0.038515   | 0.10140417 | 0.367 | 0.331 | 1         | CD4_EM_CTL_UCBMC  |
| MALT1              | 0.03930997 | 0.11459038 | 0.315 | 0.282 | 1         | CD4_EM_CTL_UCBMC  |
| KPNA1              | 0.04015058 | 0.11806121 | 0.325 | 0.29  | 1         | CD4_EM_CTL_UCBMC  |
| RNF115             | 0.04037514 | 0.12125609 | 0.382 | 0.349 | 1         | CD4_EM_CTL_UCBMC  |
| ENSMMUG00000056043 | 0.04469646 | 0.11739743 | 0.269 | 0.236 | 1         | CD4_EM_CTL_UCBMC  |
| FBXW4              | 0.0463661  | 0.10746164 | 0.326 | 0.29  | 1         | CD4_EM_CTL_UCBMC  |
| PTPMT1             | 0.04782596 | 0.11263616 | 0.279 | 0.248 | 1         | CD4_EM_CTL_UCBMC  |
| MAPRE1             | 0.05543105 | 0.19716964 | 0.391 | 0.36  | 1         | CD4_EM_CTL_UCBMC  |
| SLC25A36           | 0.10040508 | 0.14303354 | 0.268 | 0.243 | 1         | CD4_EM_CTL_UCBMC  |
| CCDC88C            | 0.10656894 | 0.13608724 | 0.417 | 0.382 | 1         | CD4_EM_CTL_UCBMC  |
| HCLS1              | 0.11365385 | 0.10155546 | 0.367 | 0.339 | 1         | CD4_EM_CTL_UCBMC  |
| VOPP1              | 0.16170269 | 0.10014816 | 0.275 | 0.254 | 1         | CD4_EM_CTL_UCBMC  |
| RPS6KC1            | 0.2298854  | 0.11831604 | 0.334 | 0.311 | 1         | CD4_EM_CTL_UCBMC  |
| JUN                | 0          | 2.61210305 | 0.858 | 0.337 | 0         | CD4_EM_CTL_spleen |
| ENSMMUG00000051300 | 0          | 1.24428689 | 0.986 | 0.641 | 0         | CD4_EM_CTL_spleen |
| RPL13              | 0          | 2.15700648 | 0.955 | 0.809 | 0         | CD4_EM_CTL_spleen |
| PM20D2             | 3.10E-272  | 1.61901385 | 0.848 | 0.399 | 1.10E-267 | CD4_EM_CTL_spleen |
| TOX                | 2.46E-250  | 1.41897414 | 0.945 | 0.579 | 8.70E-246 | CD4_EM_CTL_spleen |
| KLF6               | 8.40E-249  | 1.38385818 | 0.92  | 0.496 | 2.98E-244 | CD4_EM_CTL_spleen |
| ENSMMUG00000054358 | 1.16E-246  | 1.87976203 | 0.977 | 0.734 | 4.09E-242 | CD4_EM_CTL_spleen |
| LTB                | 1.21E-242  | 2.06644171 | 0.728 | 0.289 | 4.28E-238 | CD4_EM_CTL_spleen |
| SRRM2              | 2.31E-232  | 1.67914311 | 0.754 | 0.295 | 8.17E-228 | CD4_EM_CTL_spleen |



|                   |           |            |       |       |           |                   |
|-------------------|-----------|------------|-------|-------|-----------|-------------------|
| STK17A            | 1.60E-212 | 1.32968547 | 0.85  | 0.448 | 5.67E-208 | CD4_EM_CTL_spleen |
| DUSP1             | 1.00E-211 | 1.70536115 | 0.751 | 0.326 | 3.55E-207 | CD4_EM_CTL_spleen |
| PDGFD             | 3.90E-208 | 2.31705521 | 0.631 | 0.213 | 1.38E-203 | CD4_EM_CTL_spleen |
| FOSB              | 8.42E-206 | 1.82646608 | 0.725 | 0.304 | 2.98E-201 | CD4_EM_CTL_spleen |
| RPS2              | 5.75E-198 | 1.28376074 | 0.853 | 0.622 | 2.04E-193 | CD4_EM_CTL_spleen |
| ITM2B             | 1.56E-195 | 1.12250397 | 0.884 | 0.528 | 5.54E-191 | CD4_EM_CTL_spleen |
| GZMM              | 1.83E-195 | 1.38149399 | 0.811 | 0.433 | 6.47E-191 | CD4_EM_CTL_spleen |
| GLIS3             | 2.65E-195 | 3.12599928 | 0.456 | 0.071 | 9.37E-191 | CD4_EM_CTL_spleen |
| PRKCH             | 1.48E-186 | 1.02414738 | 0.968 | 0.713 | 5.25E-182 | CD4_EM_CTL_spleen |
| VAV3              | 2.48E-182 | 1.52486341 | 0.757 | 0.356 | 8.78E-178 | CD4_EM_CTL_spleen |
| RUSF1             | 9.13E-177 | 2.07831363 | 0.557 | 0.167 | 3.23E-172 | CD4_EM_CTL_spleen |
| FOS               | 5.09E-174 | 1.24061196 | 0.924 | 0.693 | 1.80E-169 | CD4_EM_CTL_spleen |
| UBASH3B           | 4.68E-169 | 1.30723477 | 0.805 | 0.42  | 1.66E-164 | CD4_EM_CTL_spleen |
| SNTB1             | 1.32E-167 | 1.78891157 | 0.608 | 0.219 | 4.69E-163 | CD4_EM_CTL_spleen |
| ADGRE5            | 1.52E-166 | 1.6941559  | 0.779 | 0.428 | 5.40E-162 | CD4_EM_CTL_spleen |
| DGKD              | 1.01E-164 | 2.03297114 | 0.517 | 0.146 | 3.59E-160 | CD4_EM_CTL_spleen |
| ENSMUG00000052127 | 1.23E-161 | 0.94655508 | 0.993 | 0.851 | 4.36E-157 | CD4_EM_CTL_spleen |
| NFKBIA            | 2.20E-159 | 1.74287595 | 0.703 | 0.36  | 7.81E-155 | CD4_EM_CTL_spleen |
| SQSTM1            | 1.68E-157 | 1.96289772 | 0.537 | 0.175 | 5.95E-153 | CD4_EM_CTL_spleen |
| PITPNC1           | 7.37E-156 | 0.88697978 | 0.979 | 0.714 | 2.61E-151 | CD4_EM_CTL_spleen |
| TCF12             | 1.28E-154 | 0.97240271 | 0.913 | 0.563 | 4.54E-150 | CD4_EM_CTL_spleen |
| ITGAX             | 1.32E-154 | 1.32060405 | 0.753 | 0.397 | 4.69E-150 | CD4_EM_CTL_spleen |
| NOP53             | 1.38E-154 | 1.52547111 | 0.55  | 0.175 | 4.89E-150 | CD4_EM_CTL_spleen |
| KCNQ5             | 4.27E-153 | 1.16276978 | 0.824 | 0.455 | 1.51E-148 | CD4_EM_CTL_spleen |
| SLC24A3           | 3.13E-151 | 1.75608925 | 0.616 | 0.244 | 1.11E-146 | CD4_EM_CTL_spleen |
| HSPH1             | 8.16E-151 | 2.39237929 | 0.552 | 0.207 | 2.89E-146 | CD4_EM_CTL_spleen |
| GLUD1             | 3.59E-149 | 1.61569304 | 0.656 | 0.289 | 1.27E-144 | CD4_EM_CTL_spleen |
| PLCB1             | 1.39E-147 | 2.2935341  | 0.48  | 0.14  | 4.92E-143 | CD4_EM_CTL_spleen |
| PRKCB             | 3.40E-145 | 1.10168221 | 0.84  | 0.485 | 1.20E-140 | CD4_EM_CTL_spleen |
| ITCH              | 2.16E-144 | 1.03974034 | 0.873 | 0.534 | 7.64E-140 | CD4_EM_CTL_spleen |
| SIK3              | 1.06E-141 | 1.00698596 | 0.928 | 0.632 | 3.74E-137 | CD4_EM_CTL_spleen |
| FYN               | 3.78E-140 | 1.03534611 | 0.845 | 0.473 | 1.34E-135 | CD4_EM_CTL_spleen |
| TRIR              | 8.20E-139 | 1.15997325 | 0.64  | 0.266 | 2.90E-134 | CD4_EM_CTL_spleen |

|          |           |            |       |       |           |                   |
|----------|-----------|------------|-------|-------|-----------|-------------------|
| STK39    | 2.80E-137 | 1.29771524 | 0.685 | 0.316 | 9.93E-133 | CD4_EM_CTL_spleen |
| BMT2     | 4.77E-137 | 1.89473311 | 0.553 | 0.219 | 1.69E-132 | CD4_EM_CTL_spleen |
| RASSF1   | 4.82E-137 | 1.12587551 | 0.696 | 0.324 | 1.71E-132 | CD4_EM_CTL_spleen |
| ZNF609   | 3.06E-136 | 1.13653344 | 0.755 | 0.392 | 1.08E-131 | CD4_EM_CTL_spleen |
| FBNP1    | 5.86E-136 | 0.83863715 | 0.926 | 0.638 | 2.08E-131 | CD4_EM_CTL_spleen |
| IKZF3    | 3.32E-135 | 1.08926515 | 0.752 | 0.391 | 1.18E-130 | CD4_EM_CTL_spleen |
| ANKRD44  | 6.34E-131 | 0.83121574 | 0.939 | 0.643 | 2.25E-126 | CD4_EM_CTL_spleen |
| COTL1    | 7.81E-131 | 1.09048798 | 0.741 | 0.399 | 2.77E-126 | CD4_EM_CTL_spleen |
| MAPRE2   | 8.07E-131 | 1.15139438 | 0.796 | 0.448 | 2.86E-126 | CD4_EM_CTL_spleen |
| STIM1    | 6.11E-130 | 1.30471964 | 0.669 | 0.316 | 2.16E-125 | CD4_EM_CTL_spleen |
| BANK1    | 1.02E-128 | 2.42682703 | 0.372 | 0.079 | 3.62E-124 | CD4_EM_CTL_spleen |
| C1QBP    | 3.32E-128 | 2.30614307 | 0.349 | 0.062 | 1.18E-123 | CD4_EM_CTL_spleen |
| JMJD1C   | 2.98E-127 | 0.97500314 | 0.89  | 0.566 | 1.05E-122 | CD4_EM_CTL_spleen |
| SPAG9    | 1.53E-126 | 1.18942761 | 0.694 | 0.336 | 5.42E-122 | CD4_EM_CTL_spleen |
| CMC1     | 4.88E-125 | 1.56545264 | 0.697 | 0.392 | 1.73E-120 | CD4_EM_CTL_spleen |
| ST6GAL1  | 1.61E-124 | 1.18492349 | 0.687 | 0.338 | 5.71E-120 | CD4_EM_CTL_spleen |
| SRSF2    | 7.37E-124 | 1.27872345 | 0.529 | 0.191 | 2.61E-119 | CD4_EM_CTL_spleen |
| DDX5     | 6.63E-123 | 0.66734321 | 0.963 | 0.758 | 2.35E-118 | CD4_EM_CTL_spleen |
| ATP5F1D  | 3.27E-122 | 1.35678498 | 0.454 | 0.128 | 1.16E-117 | CD4_EM_CTL_spleen |
| UBE2S    | 7.22E-122 | 2.04772028 | 0.368 | 0.08  | 2.56E-117 | CD4_EM_CTL_spleen |
| CARD11   | 1.72E-121 | 1.44016917 | 0.534 | 0.204 | 6.11E-117 | CD4_EM_CTL_spleen |
| CUX1     | 1.77E-121 | 1.05016234 | 0.777 | 0.425 | 6.28E-117 | CD4_EM_CTL_spleen |
| RPS6KA5  | 2.18E-121 | 1.30662852 | 0.648 | 0.308 | 7.73E-117 | CD4_EM_CTL_spleen |
| GTF2I    | 5.65E-121 | 1.10018885 | 0.664 | 0.325 | 2.00E-116 | CD4_EM_CTL_spleen |
| GRK5     | 1.16E-120 | 1.29987304 | 0.647 | 0.307 | 4.10E-116 | CD4_EM_CTL_spleen |
| IFRD1    | 3.25E-120 | 1.25447523 | 0.647 | 0.319 | 1.15E-115 | CD4_EM_CTL_spleen |
| CHST11   | 6.69E-118 | 1.03601621 | 0.753 | 0.424 | 2.37E-113 | CD4_EM_CTL_spleen |
| CHN2     | 1.25E-116 | 1.11588809 | 0.727 | 0.399 | 4.43E-112 | CD4_EM_CTL_spleen |
| ARAP2    | 3.84E-116 | 1.02660607 | 0.701 | 0.359 | 1.36E-111 | CD4_EM_CTL_spleen |
| SFMBT2   | 5.30E-116 | 1.63414816 | 0.493 | 0.183 | 1.88E-111 | CD4_EM_CTL_spleen |
| RABGAP1L | 1.37E-115 | 0.828662   | 0.905 | 0.587 | 4.87E-111 | CD4_EM_CTL_spleen |
| CCNL1    | 3.16E-115 | 0.85135312 | 0.864 | 0.536 | 1.12E-110 | CD4_EM_CTL_spleen |
| ADORA2B  | 5.96E-115 | 1.98544312 | 0.434 | 0.14  | 2.11E-110 | CD4_EM_CTL_spleen |

|                    |           |            |       |       |           |                   |
|--------------------|-----------|------------|-------|-------|-----------|-------------------|
| DNAJC1             | 1.69E-114 | 1.13742593 | 0.693 | 0.358 | 6.00E-110 | CD4_EM_CTL_spleen |
| STK10              | 6.63E-114 | 1.04428223 | 0.723 | 0.385 | 2.35E-109 | CD4_EM_CTL_spleen |
| MCL1               | 9.64E-114 | 1.1418305  | 0.62  | 0.292 | 3.42E-109 | CD4_EM_CTL_spleen |
| RASA1              | 1.91E-113 | 1.51441198 | 0.516 | 0.203 | 6.78E-109 | CD4_EM_CTL_spleen |
| ZFP36              | 4.24E-113 | 1.00889618 | 0.857 | 0.599 | 1.50E-108 | CD4_EM_CTL_spleen |
| ENSMMUG00000049833 | 1.07E-112 | 1.99598143 | 0.43  | 0.137 | 3.78E-108 | CD4_EM_CTL_spleen |
| HIST1H2AC          | 2.04E-112 | 1.8027898  | 0.416 | 0.126 | 7.22E-108 | CD4_EM_CTL_spleen |
| EOMES              | 6.31E-112 | 1.85515311 | 0.332 | 0.064 | 2.23E-107 | CD4_EM_CTL_spleen |
| COX5A              | 3.55E-111 | 1.59630129 | 0.436 | 0.14  | 1.26E-106 | CD4_EM_CTL_spleen |
| CYRIB              | 4.39E-111 | 0.85115634 | 0.862 | 0.543 | 1.55E-106 | CD4_EM_CTL_spleen |
| RERE               | 5.13E-111 | 0.83807881 | 0.824 | 0.503 | 1.82E-106 | CD4_EM_CTL_spleen |
| PLCG2              | 3.92E-109 | 1.96612572 | 0.383 | 0.105 | 1.39E-104 | CD4_EM_CTL_spleen |
| ARL5B              | 4.46E-109 | 1.49899028 | 0.468 | 0.163 | 1.58E-104 | CD4_EM_CTL_spleen |
| NKG2D              | 7.49E-109 | 1.14355113 | 0.593 | 0.26  | 2.65E-104 | CD4_EM_CTL_spleen |
| ZFAND5             | 1.63E-108 | 1.56777053 | 0.416 | 0.126 | 5.77E-104 | CD4_EM_CTL_spleen |
| ZC3HAV1            | 2.04E-108 | 0.96007455 | 0.796 | 0.489 | 7.24E-104 | CD4_EM_CTL_spleen |
| MTMR12             | 5.65E-107 | 1.81382923 | 0.435 | 0.15  | 2.00E-102 | CD4_EM_CTL_spleen |
| PSMD12             | 7.05E-107 | 0.8602856  | 0.864 | 0.564 | 2.50E-102 | CD4_EM_CTL_spleen |
| ITPKB              | 8.07E-107 | 1.26189139 | 0.567 | 0.261 | 2.86E-102 | CD4_EM_CTL_spleen |
| TRPS1              | 1.70E-106 | 0.97968843 | 0.737 | 0.416 | 6.04E-102 | CD4_EM_CTL_spleen |
| ACAP2              | 9.45E-106 | 0.87371085 | 0.765 | 0.44  | 3.35E-101 | CD4_EM_CTL_spleen |
| ARL5A              | 2.92E-105 | 1.33380206 | 0.479 | 0.175 | 1.03E-100 | CD4_EM_CTL_spleen |
| PTPN22             | 1.54E-104 | 0.91306318 | 0.727 | 0.404 | 5.46E-100 | CD4_EM_CTL_spleen |
| THEMIS             | 2.11E-104 | 1.0790121  | 0.701 | 0.384 | 7.47E-100 | CD4_EM_CTL_spleen |
| ATP8A1             | 4.55E-104 | 0.92807214 | 0.776 | 0.451 | 1.61E-99  | CD4_EM_CTL_spleen |
| ARIH1              | 1.22E-103 | 1.00886039 | 0.765 | 0.433 | 4.33E-99  | CD4_EM_CTL_spleen |
| ENSMMUG00000052424 | 5.82E-103 | 0.85370872 | 0.837 | 0.515 | 2.06E-98  | CD4_EM_CTL_spleen |
| PACS1              | 6.81E-103 | 1.00362117 | 0.645 | 0.317 | 2.41E-98  | CD4_EM_CTL_spleen |
| NCOR1              | 6.85E-103 | 0.91054418 | 0.694 | 0.356 | 2.43E-98  | CD4_EM_CTL_spleen |
| IKZF2              | 1.12E-102 | 0.77108141 | 0.829 | 0.519 | 3.96E-98  | CD4_EM_CTL_spleen |
| TGFB2              | 4.61E-101 | 0.92385858 | 0.703 | 0.383 | 1.63E-96  | CD4_EM_CTL_spleen |
| ENSMMUG00000008417 | 6.16E-101 | 1.97691259 | 0.309 | 0.063 | 2.18E-96  | CD4_EM_CTL_spleen |
| LYST               | 1.05E-100 | 1.22410803 | 0.593 | 0.286 | 3.74E-96  | CD4_EM_CTL_spleen |

|                    |           |            |       |       |          |                   |
|--------------------|-----------|------------|-------|-------|----------|-------------------|
| KAT6B              | 1.20E-100 | 0.9037961  | 0.766 | 0.439 | 4.24E-96 | CD4_EM_CTL_spleen |
| TBL1XR1            | 4.63E-100 | 0.88592592 | 0.801 | 0.476 | 1.64E-95 | CD4_EM_CTL_spleen |
| FBXW7              | 5.87E-100 | 1.00270283 | 0.735 | 0.417 | 2.08E-95 | CD4_EM_CTL_spleen |
| TERF2IP            | 9.08E-100 | 1.46667544 | 0.403 | 0.129 | 3.22E-95 | CD4_EM_CTL_spleen |
| NSD1               | 1.39E-99  | 1.06840245 | 0.622 | 0.31  | 4.91E-95 | CD4_EM_CTL_spleen |
| CELF2              | 1.75E-98  | 0.68986835 | 0.939 | 0.654 | 6.19E-94 | CD4_EM_CTL_spleen |
| ME2                | 2.69E-98  | 1.25181967 | 0.562 | 0.266 | 9.51E-94 | CD4_EM_CTL_spleen |
| CD244              | 6.68E-98  | 1.90477107 | 0.328 | 0.076 | 2.37E-93 | CD4_EM_CTL_spleen |
| RABGEF1            | 2.19E-96  | 1.12124258 | 0.546 | 0.246 | 7.78E-92 | CD4_EM_CTL_spleen |
| NEK7               | 2.79E-95  | 1.1798352  | 0.544 | 0.249 | 9.89E-91 | CD4_EM_CTL_spleen |
| UTRN               | 5.69E-95  | 0.7269757  | 0.928 | 0.623 | 2.02E-90 | CD4_EM_CTL_spleen |
| HSBP1L1            | 9.54E-95  | 1.98293813 | 0.304 | 0.065 | 3.38E-90 | CD4_EM_CTL_spleen |
| PPP2R5E            | 1.19E-94  | 0.96838653 | 0.611 | 0.297 | 4.20E-90 | CD4_EM_CTL_spleen |
| ENSMMUG00000020050 | 2.33E-94  | 2.04437561 | 0.318 | 0.078 | 8.24E-90 | CD4_EM_CTL_spleen |
| MBD5               | 6.05E-94  | 1.02500101 | 0.686 | 0.382 | 2.14E-89 | CD4_EM_CTL_spleen |
| ARHGAP26           | 1.16E-93  | 1.11948507 | 0.613 | 0.305 | 4.10E-89 | CD4_EM_CTL_spleen |
| PHF21A             | 1.36E-93  | 0.95749988 | 0.639 | 0.326 | 4.81E-89 | CD4_EM_CTL_spleen |
| RIN3               | 1.96E-93  | 1.04155955 | 0.556 | 0.259 | 6.95E-89 | CD4_EM_CTL_spleen |
| UBE2H              | 4.05E-93  | 0.91995714 | 0.703 | 0.391 | 1.44E-88 | CD4_EM_CTL_spleen |
| ARRDC3             | 4.54E-93  | 1.45602296 | 0.411 | 0.142 | 1.61E-88 | CD4_EM_CTL_spleen |
| CRTAM              | 1.15E-92  | 1.14733727 | 0.499 | 0.203 | 4.07E-88 | CD4_EM_CTL_spleen |
| LRRFIP1            | 1.46E-92  | 0.90624637 | 0.649 | 0.331 | 5.18E-88 | CD4_EM_CTL_spleen |
| TBC1D5             | 1.82E-92  | 0.78307218 | 0.831 | 0.502 | 6.44E-88 | CD4_EM_CTL_spleen |
| LDB2               | 2.12E-92  | 1.7020406  | 0.408 | 0.142 | 7.50E-88 | CD4_EM_CTL_spleen |
| SYNRG              | 3.02E-92  | 1.06793627 | 0.521 | 0.229 | 1.07E-87 | CD4_EM_CTL_spleen |
| ENSMMUG00000011776 | 2.43E-91  | 2.59056494 | 0.252 | 0.04  | 8.60E-87 | CD4_EM_CTL_spleen |
| PTPRC              | 7.05E-91  | 0.50026848 | 0.984 | 0.87  | 2.50E-86 | CD4_EM_CTL_spleen |
| CBLB               | 7.59E-91  | 0.83307631 | 0.811 | 0.52  | 2.69E-86 | CD4_EM_CTL_spleen |
| PAK2               | 1.08E-90  | 0.7540757  | 0.811 | 0.507 | 3.84E-86 | CD4_EM_CTL_spleen |
| TXNL4A             | 1.19E-90  | 1.47780679 | 0.342 | 0.094 | 4.23E-86 | CD4_EM_CTL_spleen |
| JAKMIP1            | 1.30E-90  | 2.05184632 | 0.294 | 0.065 | 4.59E-86 | CD4_EM_CTL_spleen |
| TRERF1             | 8.07E-90  | 1.01246017 | 0.612 | 0.308 | 2.86E-85 | CD4_EM_CTL_spleen |
| ITPR2              | 8.53E-90  | 0.84511251 | 0.752 | 0.435 | 3.02E-85 | CD4_EM_CTL_spleen |

|                    |          |            |       |       |          |                   |
|--------------------|----------|------------|-------|-------|----------|-------------------|
| ENSMMUG00000062894 | 2.06E-89 | 2.51097705 | 0.268 | 0.051 | 7.29E-85 | CD4_EM_CTL_spleen |
| C10H20orf24        | 6.41E-89 | 1.08811646 | 0.51  | 0.219 | 2.27E-84 | CD4_EM_CTL_spleen |
| PRRC2B             | 1.22E-88 | 0.89773984 | 0.681 | 0.362 | 4.34E-84 | CD4_EM_CTL_spleen |
| FBXO34             | 2.54E-88 | 0.8864666  | 0.752 | 0.446 | 8.99E-84 | CD4_EM_CTL_spleen |
| PLCL2              | 2.72E-88 | 1.05554443 | 0.627 | 0.328 | 9.64E-84 | CD4_EM_CTL_spleen |
| ENSMMUG00000040065 | 3.79E-88 | 1.50484946 | 0.327 | 0.087 | 1.34E-83 | CD4_EM_CTL_spleen |
| NT5C               | 4.27E-88 | 1.83145207 | 0.292 | 0.065 | 1.51E-83 | CD4_EM_CTL_spleen |
| DNAJA1             | 6.51E-88 | 1.05609938 | 0.641 | 0.343 | 2.31E-83 | CD4_EM_CTL_spleen |
| MZT2B              | 8.30E-88 | 1.14624169 | 0.354 | 0.103 | 2.94E-83 | CD4_EM_CTL_spleen |
| EIF4G3             | 1.85E-87 | 1.23388797 | 0.513 | 0.236 | 6.57E-83 | CD4_EM_CTL_spleen |
| DNAJB1             | 4.16E-87 | 1.63400575 | 0.315 | 0.084 | 1.47E-82 | CD4_EM_CTL_spleen |
| FCHSD2             | 1.15E-86 | 1.00482068 | 0.618 | 0.318 | 4.06E-82 | CD4_EM_CTL_spleen |
| AKIRIN1            | 1.82E-86 | 1.19096036 | 0.438 | 0.168 | 6.44E-82 | CD4_EM_CTL_spleen |
| LRCH1              | 8.08E-86 | 1.18933918 | 0.495 | 0.222 | 2.86E-81 | CD4_EM_CTL_spleen |
| TMEM160            | 4.20E-85 | 1.65773442 | 0.303 | 0.075 | 1.49E-80 | CD4_EM_CTL_spleen |
| LCP2               | 4.34E-85 | 1.17007166 | 0.459 | 0.184 | 1.54E-80 | CD4_EM_CTL_spleen |
| ARGLU1             | 5.21E-85 | 0.69770404 | 0.751 | 0.438 | 1.84E-80 | CD4_EM_CTL_spleen |
| KDM6A              | 6.92E-85 | 0.7473715  | 0.767 | 0.442 | 2.45E-80 | CD4_EM_CTL_spleen |
| RUNX1              | 2.04E-84 | 1.00824248 | 0.649 | 0.365 | 7.22E-80 | CD4_EM_CTL_spleen |
| BCL11B             | 2.06E-84 | 1.03183847 | 0.594 | 0.316 | 7.30E-80 | CD4_EM_CTL_spleen |
| SENP6              | 3.25E-84 | 0.88674704 | 0.654 | 0.352 | 1.15E-79 | CD4_EM_CTL_spleen |
| PLXNC1             | 1.71E-83 | 1.67449425 | 0.302 | 0.079 | 6.05E-79 | CD4_EM_CTL_spleen |
| LPP                | 2.47E-83 | 0.8080753  | 0.673 | 0.369 | 8.75E-79 | CD4_EM_CTL_spleen |
| MACF1              | 3.32E-83 | 0.80284685 | 0.777 | 0.479 | 1.18E-78 | CD4_EM_CTL_spleen |
| GLCC1              | 3.85E-83 | 1.22262451 | 0.476 | 0.21  | 1.36E-78 | CD4_EM_CTL_spleen |
| ENSMMUG00000062103 | 4.15E-83 | 1.256352   | 0.518 | 0.25  | 1.47E-78 | CD4_EM_CTL_spleen |
| PHLPP1             | 7.80E-83 | 1.2859296  | 0.494 | 0.228 | 2.76E-78 | CD4_EM_CTL_spleen |
| CAMK1D             | 8.09E-83 | 0.93337311 | 0.653 | 0.365 | 2.86E-78 | CD4_EM_CTL_spleen |
| ENSMMUG00000060287 | 9.42E-83 | 0.56801801 | 0.922 | 0.76  | 3.34E-78 | CD4_EM_CTL_spleen |
| KLF12              | 2.23E-82 | 0.62035933 | 0.928 | 0.625 | 7.92E-78 | CD4_EM_CTL_spleen |
| PPP1R10            | 2.30E-82 | 1.05402333 | 0.517 | 0.236 | 8.14E-78 | CD4_EM_CTL_spleen |
| HPCAL1             | 2.56E-82 | 1.08866433 | 0.475 | 0.203 | 9.07E-78 | CD4_EM_CTL_spleen |
| ARID1B             | 5.07E-82 | 0.74567892 | 0.77  | 0.472 | 1.80E-77 | CD4_EM_CTL_spleen |

|                    |          |            |       |       |          |                   |
|--------------------|----------|------------|-------|-------|----------|-------------------|
| IRF1               | 2.16E-81 | 1.07608393 | 0.571 | 0.291 | 7.66E-77 | CD4_EM_CTL_spleen |
| RGCC               | 4.71E-81 | 1.12466229 | 0.495 | 0.225 | 1.67E-76 | CD4_EM_CTL_spleen |
| SEMA4D             | 4.92E-81 | 0.80213285 | 0.765 | 0.474 | 1.74E-76 | CD4_EM_CTL_spleen |
| JARID2             | 6.63E-81 | 0.77069189 | 0.814 | 0.515 | 2.35E-76 | CD4_EM_CTL_spleen |
| TNIK               | 6.65E-81 | 0.6862022  | 0.84  | 0.543 | 2.35E-76 | CD4_EM_CTL_spleen |
| BTBD11             | 8.04E-81 | 0.72951496 | 0.782 | 0.477 | 2.85E-76 | CD4_EM_CTL_spleen |
| TBC1D1             | 9.27E-81 | 0.97181399 | 0.59  | 0.306 | 3.28E-76 | CD4_EM_CTL_spleen |
| CHORDC1            | 9.29E-81 | 1.06111911 | 0.525 | 0.25  | 3.29E-76 | CD4_EM_CTL_spleen |
| PREX1              | 1.51E-80 | 0.83151274 | 0.678 | 0.375 | 5.33E-76 | CD4_EM_CTL_spleen |
| B4GALT1            | 2.09E-80 | 1.23458213 | 0.39  | 0.14  | 7.41E-76 | CD4_EM_CTL_spleen |
| HNRNPU             | 2.25E-80 | 0.72585327 | 0.77  | 0.47  | 7.97E-76 | CD4_EM_CTL_spleen |
| H4C15              | 3.61E-80 | 1.07593514 | 0.387 | 0.134 | 1.28E-75 | CD4_EM_CTL_spleen |
| VPS13B             | 5.67E-80 | 0.64786208 | 0.851 | 0.53  | 2.01E-75 | CD4_EM_CTL_spleen |
| HNRNPA2B1          | 6.27E-80 | 0.50170602 | 0.953 | 0.779 | 2.22E-75 | CD4_EM_CTL_spleen |
| NFATC2             | 7.15E-80 | 1.30422125 | 0.383 | 0.139 | 2.53E-75 | CD4_EM_CTL_spleen |
| ZFP36L1            | 7.26E-80 | 0.76415274 | 0.679 | 0.387 | 2.57E-75 | CD4_EM_CTL_spleen |
| REL                | 7.70E-80 | 0.79770495 | 0.758 | 0.488 | 2.73E-75 | CD4_EM_CTL_spleen |
| ZMYND8             | 1.19E-79 | 1.12715855 | 0.519 | 0.248 | 4.23E-75 | CD4_EM_CTL_spleen |
| ST3GAL1            | 2.19E-79 | 0.9606389  | 0.55  | 0.271 | 7.75E-75 | CD4_EM_CTL_spleen |
| ARID4B             | 2.53E-79 | 0.68115915 | 0.868 | 0.565 | 8.95E-75 | CD4_EM_CTL_spleen |
| KDM2A              | 2.54E-79 | 0.79814042 | 0.701 | 0.401 | 9.01E-75 | CD4_EM_CTL_spleen |
| ANP32B             | 3.24E-79 | 0.82781372 | 0.639 | 0.35  | 1.15E-74 | CD4_EM_CTL_spleen |
| DENND2D            | 5.70E-79 | 0.81942033 | 0.518 | 0.235 | 2.02E-74 | CD4_EM_CTL_spleen |
| TNFAIP3            | 2.02E-78 | 0.85080591 | 0.764 | 0.505 | 7.16E-74 | CD4_EM_CTL_spleen |
| MSL2               | 2.25E-78 | 1.26159384 | 0.463 | 0.207 | 7.96E-74 | CD4_EM_CTL_spleen |
| FCRL6              | 2.25E-78 | 1.18756786 | 0.464 | 0.201 | 7.98E-74 | CD4_EM_CTL_spleen |
| AFF1               | 2.61E-78 | 0.9760482  | 0.644 | 0.359 | 9.23E-74 | CD4_EM_CTL_spleen |
| ENSMMUG00000028689 | 3.30E-78 | 2.30185011 | 0.282 | 0.075 | 1.17E-73 | CD4_EM_CTL_spleen |
| MYCBP2             | 4.15E-78 | 0.74609785 | 0.758 | 0.461 | 1.47E-73 | CD4_EM_CTL_spleen |
| SLC9A9             | 4.55E-78 | 1.10893379 | 0.485 | 0.219 | 1.61E-73 | CD4_EM_CTL_spleen |
| EXOC4              | 4.88E-78 | 0.77829554 | 0.721 | 0.429 | 1.73E-73 | CD4_EM_CTL_spleen |
| MBP                | 7.17E-78 | 0.68164426 | 0.731 | 0.431 | 2.54E-73 | CD4_EM_CTL_spleen |
| STK17B             | 7.95E-78 | 0.68783983 | 0.906 | 0.665 | 2.82E-73 | CD4_EM_CTL_spleen |

|         |          |            |       |       |          |                   |
|---------|----------|------------|-------|-------|----------|-------------------|
| TOP1    | 1.03E-77 | 0.7527039  | 0.73  | 0.43  | 3.64E-73 | CD4_EM_CTL_spleen |
| NEDD9   | 1.11E-77 | 0.8468937  | 0.641 | 0.351 | 3.93E-73 | CD4_EM_CTL_spleen |
| EIF4A2  | 1.46E-77 | 0.68934128 | 0.741 | 0.436 | 5.17E-73 | CD4_EM_CTL_spleen |
| ELMO1   | 1.78E-77 | 0.65565585 | 0.84  | 0.54  | 6.29E-73 | CD4_EM_CTL_spleen |
| SMARCA5 | 3.15E-77 | 0.94635572 | 0.544 | 0.267 | 1.12E-72 | CD4_EM_CTL_spleen |
| ZFAND3  | 7.08E-77 | 0.7032471  | 0.774 | 0.466 | 2.51E-72 | CD4_EM_CTL_spleen |
| MICAL2  | 1.05E-76 | 1.63091507 | 0.33  | 0.108 | 3.73E-72 | CD4_EM_CTL_spleen |
| ATXN1   | 1.08E-76 | 1.35651715 | 0.406 | 0.163 | 3.84E-72 | CD4_EM_CTL_spleen |
| ELOVL5  | 1.29E-76 | 0.77354367 | 0.724 | 0.423 | 4.59E-72 | CD4_EM_CTL_spleen |
| ZNF638  | 2.35E-76 | 0.75696801 | 0.622 | 0.336 | 8.34E-72 | CD4_EM_CTL_spleen |
| UVRAG   | 7.10E-76 | 0.86516828 | 0.627 | 0.34  | 2.52E-71 | CD4_EM_CTL_spleen |
| PPP3CC  | 7.21E-76 | 0.77150477 | 0.694 | 0.391 | 2.55E-71 | CD4_EM_CTL_spleen |
| RANBP2  | 9.90E-76 | 0.83681037 | 0.657 | 0.372 | 3.51E-71 | CD4_EM_CTL_spleen |
| HECTD4  | 1.03E-75 | 0.9964286  | 0.525 | 0.256 | 3.63E-71 | CD4_EM_CTL_spleen |
| PTEN    | 1.38E-75 | 0.94578105 | 0.545 | 0.273 | 4.91E-71 | CD4_EM_CTL_spleen |
| NFKB1   | 2.49E-75 | 0.84841105 | 0.761 | 0.497 | 8.82E-71 | CD4_EM_CTL_spleen |
| ANKRD17 | 3.81E-75 | 0.78861655 | 0.646 | 0.354 | 1.35E-70 | CD4_EM_CTL_spleen |
| TSC22D1 | 4.85E-75 | 1.38085646 | 0.398 | 0.159 | 1.72E-70 | CD4_EM_CTL_spleen |
| CXXC5   | 5.17E-75 | 1.39206563 | 0.352 | 0.121 | 1.83E-70 | CD4_EM_CTL_spleen |
| PPP3CA  | 5.26E-75 | 0.72796382 | 0.755 | 0.462 | 1.86E-70 | CD4_EM_CTL_spleen |
| OXSRI   | 5.41E-75 | 1.09172634 | 0.495 | 0.236 | 1.92E-70 | CD4_EM_CTL_spleen |
| PSME4   | 6.91E-75 | 0.95839665 | 0.585 | 0.31  | 2.45E-70 | CD4_EM_CTL_spleen |
| MOB3A   | 9.54E-75 | 1.16606235 | 0.455 | 0.203 | 3.38E-70 | CD4_EM_CTL_spleen |
| RPL27A  | 1.05E-74 | 0.51033879 | 0.927 | 0.884 | 3.72E-70 | CD4_EM_CTL_spleen |
| MTDH    | 2.73E-74 | 0.91106373 | 0.523 | 0.254 | 9.66E-70 | CD4_EM_CTL_spleen |
| IRAG2   | 3.81E-74 | 1.18048921 | 0.452 | 0.203 | 1.35E-69 | CD4_EM_CTL_spleen |
| MBNL1   | 9.41E-74 | 0.5149329  | 0.983 | 0.828 | 3.33E-69 | CD4_EM_CTL_spleen |
| CCDC88C | 1.38E-73 | 0.89416521 | 0.498 | 0.234 | 4.87E-69 | CD4_EM_CTL_spleen |
| DOCK2   | 1.55E-73 | 0.69760695 | 0.81  | 0.513 | 5.50E-69 | CD4_EM_CTL_spleen |
| SPTAN1  | 2.41E-73 | 1.13448013 | 0.448 | 0.199 | 8.53E-69 | CD4_EM_CTL_spleen |
| NUFIP2  | 2.49E-73 | 0.99056791 | 0.571 | 0.305 | 8.81E-69 | CD4_EM_CTL_spleen |
| RBMS1   | 4.02E-73 | 0.87784041 | 0.6   | 0.327 | 1.42E-68 | CD4_EM_CTL_spleen |
| TC2N    | 5.98E-73 | 1.23804962 | 0.4   | 0.157 | 2.12E-68 | CD4_EM_CTL_spleen |

|          |          |            |       |       |          |                   |
|----------|----------|------------|-------|-------|----------|-------------------|
| CCND3    | 6.12E-73 | 0.75947846 | 0.792 | 0.514 | 2.17E-68 | CD4_EM_CTL_spleen |
| TRAPPC10 | 7.99E-73 | 1.05765862 | 0.512 | 0.254 | 2.83E-68 | CD4_EM_CTL_spleen |
| ATXN2    | 1.67E-72 | 0.98545352 | 0.511 | 0.246 | 5.93E-68 | CD4_EM_CTL_spleen |
| CRTC3    | 2.68E-72 | 0.83753138 | 0.606 | 0.326 | 9.50E-68 | CD4_EM_CTL_spleen |
| ID3      | 3.16E-72 | 0.77040685 | 0.419 | 0.165 | 1.12E-67 | CD4_EM_CTL_spleen |
| MAGI3    | 3.85E-72 | 1.65812785 | 0.386 | 0.159 | 1.36E-67 | CD4_EM_CTL_spleen |
| R3HDM2   | 4.83E-72 | 1.04347326 | 0.507 | 0.253 | 1.71E-67 | CD4_EM_CTL_spleen |
| HNRNPD   | 5.89E-72 | 0.72398442 | 0.657 | 0.366 | 2.09E-67 | CD4_EM_CTL_spleen |
| HUWE1    | 1.54E-71 | 0.7361182  | 0.616 | 0.343 | 5.47E-67 | CD4_EM_CTL_spleen |
| KANSL1   | 2.01E-71 | 0.72127275 | 0.717 | 0.425 | 7.13E-67 | CD4_EM_CTL_spleen |
| AFF3     | 2.53E-71 | 0.65233155 | 0.869 | 0.59  | 8.96E-67 | CD4_EM_CTL_spleen |
| ZBTB20   | 2.61E-71 | 0.65506399 | 0.793 | 0.511 | 9.26E-67 | CD4_EM_CTL_spleen |
| PPP1CC   | 5.01E-71 | 0.93696887 | 0.501 | 0.244 | 1.78E-66 | CD4_EM_CTL_spleen |
| RIPOR2   | 8.49E-71 | 0.56127269 | 0.948 | 0.714 | 3.01E-66 | CD4_EM_CTL_spleen |
| NXPE3    | 1.43E-70 | 1.00701085 | 0.48  | 0.23  | 5.07E-66 | CD4_EM_CTL_spleen |
| RPS20    | 1.64E-70 | 0.50815618 | 0.92  | 0.856 | 5.79E-66 | CD4_EM_CTL_spleen |
| CEP85L   | 1.65E-70 | 0.79940277 | 0.635 | 0.356 | 5.85E-66 | CD4_EM_CTL_spleen |
| ERBIN    | 2.18E-70 | 0.71225627 | 0.696 | 0.414 | 7.73E-66 | CD4_EM_CTL_spleen |
| PTPN2    | 2.42E-70 | 0.76812299 | 0.641 | 0.368 | 8.59E-66 | CD4_EM_CTL_spleen |
| CYRIA    | 2.97E-70 | 1.81117321 | 0.281 | 0.081 | 1.05E-65 | CD4_EM_CTL_spleen |
| CLTA     | 3.09E-70 | 1.08690369 | 0.392 | 0.154 | 1.10E-65 | CD4_EM_CTL_spleen |
| ZBTB10   | 3.24E-70 | 1.57575733 | 0.346 | 0.129 | 1.15E-65 | CD4_EM_CTL_spleen |
| LARGE1   | 3.37E-70 | 1.43290693 | 0.399 | 0.172 | 1.19E-65 | CD4_EM_CTL_spleen |
| SCML4    | 3.93E-70 | 0.65378798 | 0.824 | 0.55  | 1.39E-65 | CD4_EM_CTL_spleen |
| BRD2     | 4.44E-70 | 0.75832393 | 0.564 | 0.294 | 1.57E-65 | CD4_EM_CTL_spleen |
| METTL9   | 5.11E-70 | 0.92978375 | 0.459 | 0.203 | 1.81E-65 | CD4_EM_CTL_spleen |
| CLK1     | 5.74E-70 | 0.67968228 | 0.667 | 0.376 | 2.03E-65 | CD4_EM_CTL_spleen |
| TET3     | 5.95E-70 | 1.28145757 | 0.395 | 0.164 | 2.11E-65 | CD4_EM_CTL_spleen |
| FLI1     | 7.09E-70 | 0.83340622 | 0.546 | 0.284 | 2.51E-65 | CD4_EM_CTL_spleen |
| KIAA1671 | 7.31E-70 | 1.53920725 | 0.326 | 0.114 | 2.59E-65 | CD4_EM_CTL_spleen |
| ITGAL    | 1.31E-69 | 0.80481642 | 0.528 | 0.256 | 4.63E-65 | CD4_EM_CTL_spleen |
| ATAD2B   | 4.67E-69 | 0.8241136  | 0.6   | 0.329 | 1.66E-64 | CD4_EM_CTL_spleen |
| WDR74    | 5.36E-69 | 1.03431307 | 0.478 | 0.227 | 1.90E-64 | CD4_EM_CTL_spleen |



|                    |          |            |       |       |          |                   |
|--------------------|----------|------------|-------|-------|----------|-------------------|
| MED13L             | 5.42E-69 | 0.67306098 | 0.776 | 0.487 | 1.92E-64 | CD4_EM_CTL_spleen |
| PARD3              | 7.02E-69 | 1.49713923 | 0.355 | 0.138 | 2.49E-64 | CD4_EM_CTL_spleen |
| ENSMMUG00000008587 | 1.10E-68 | 0.67124563 | 0.726 | 0.436 | 3.91E-64 | CD4_EM_CTL_spleen |
| HOOK3              | 1.65E-68 | 0.70062417 | 0.684 | 0.399 | 5.84E-64 | CD4_EM_CTL_spleen |
| ZNF268             | 1.72E-68 | 1.11554507 | 0.385 | 0.154 | 6.10E-64 | CD4_EM_CTL_spleen |
| TNRC6B             | 4.71E-68 | 0.53135828 | 0.935 | 0.679 | 1.67E-63 | CD4_EM_CTL_spleen |
| KTN1               | 4.76E-68 | 0.96094795 | 0.437 | 0.193 | 1.69E-63 | CD4_EM_CTL_spleen |
| ETS1               | 5.63E-68 | 0.5170307  | 0.896 | 0.681 | 1.99E-63 | CD4_EM_CTL_spleen |
| NFAT5              | 7.12E-68 | 0.93914051 | 0.515 | 0.258 | 2.52E-63 | CD4_EM_CTL_spleen |
| USP47              | 7.41E-68 | 0.74514203 | 0.67  | 0.388 | 2.63E-63 | CD4_EM_CTL_spleen |
| STIM2              | 7.56E-68 | 1.05678992 | 0.473 | 0.228 | 2.68E-63 | CD4_EM_CTL_spleen |
| RBM26              | 9.23E-68 | 0.80532037 | 0.555 | 0.294 | 3.27E-63 | CD4_EM_CTL_spleen |
| GSK3B              | 1.12E-67 | 0.68564515 | 0.711 | 0.421 | 3.95E-63 | CD4_EM_CTL_spleen |
| ENSMMUG00000006343 | 1.28E-67 | 1.0137582  | 0.447 | 0.203 | 4.53E-63 | CD4_EM_CTL_spleen |
| MCUB               | 1.36E-67 | 0.80859144 | 0.58  | 0.316 | 4.83E-63 | CD4_EM_CTL_spleen |
| GNB1               | 2.86E-67 | 0.755853   | 0.561 | 0.296 | 1.01E-62 | CD4_EM_CTL_spleen |
| SMARCC1            | 3.12E-67 | 0.79139251 | 0.606 | 0.336 | 1.11E-62 | CD4_EM_CTL_spleen |
| PPIA               | 3.39E-67 | 0.75423369 | 0.453 | 0.196 | 1.20E-62 | CD4_EM_CTL_spleen |
| CHD2               | 3.42E-67 | 0.6249868  | 0.79  | 0.491 | 1.21E-62 | CD4_EM_CTL_spleen |
| POLR2A             | 3.89E-67 | 0.87975613 | 0.471 | 0.222 | 1.38E-62 | CD4_EM_CTL_spleen |
| EIF3F              | 4.01E-67 | 0.74384526 | 0.687 | 0.422 | 1.42E-62 | CD4_EM_CTL_spleen |
| USP44              | 4.81E-67 | 0.93736704 | 0.423 | 0.182 | 1.71E-62 | CD4_EM_CTL_spleen |
| RALBP1             | 5.18E-67 | 1.10450652 | 0.352 | 0.13  | 1.83E-62 | CD4_EM_CTL_spleen |
| KIF2A              | 8.85E-67 | 0.75384575 | 0.548 | 0.282 | 3.14E-62 | CD4_EM_CTL_spleen |
| DYRK1A             | 1.21E-66 | 0.9590425  | 0.534 | 0.279 | 4.28E-62 | CD4_EM_CTL_spleen |
| YPEL5              | 1.58E-66 | 0.79529035 | 0.685 | 0.412 | 5.59E-62 | CD4_EM_CTL_spleen |
| RCSD1              | 5.52E-66 | 0.67818099 | 0.66  | 0.378 | 1.96E-61 | CD4_EM_CTL_spleen |
| GMDS               | 5.81E-66 | 0.83585949 | 0.578 | 0.321 | 2.06E-61 | CD4_EM_CTL_spleen |
| ZMYM2              | 6.73E-66 | 0.76737049 | 0.605 | 0.337 | 2.39E-61 | CD4_EM_CTL_spleen |
| TASOR              | 7.15E-66 | 0.89939505 | 0.44  | 0.197 | 2.53E-61 | CD4_EM_CTL_spleen |
| TMEM131L           | 8.27E-66 | 0.78637976 | 0.638 | 0.371 | 2.93E-61 | CD4_EM_CTL_spleen |
| FOXN3              | 1.39E-65 | 0.49176535 | 0.861 | 0.548 | 4.93E-61 | CD4_EM_CTL_spleen |
| DDX17              | 1.44E-65 | 0.5601757  | 0.752 | 0.453 | 5.09E-61 | CD4_EM_CTL_spleen |

|          |          |            |       |       |          |                   |
|----------|----------|------------|-------|-------|----------|-------------------|
| ARF4     | 1.54E-65 | 0.64986307 | 0.706 | 0.43  | 5.45E-61 | CD4_EM_CTL_spleen |
| APBA2    | 1.98E-65 | 1.13314417 | 0.475 | 0.236 | 7.02E-61 | CD4_EM_CTL_spleen |
| TAOK1    | 2.72E-65 | 0.91277186 | 0.503 | 0.251 | 9.64E-61 | CD4_EM_CTL_spleen |
| TMX4     | 3.86E-65 | 1.03307409 | 0.42  | 0.186 | 1.37E-60 | CD4_EM_CTL_spleen |
| DNMT3A   | 5.75E-65 | 1.17458795 | 0.372 | 0.151 | 2.04E-60 | CD4_EM_CTL_spleen |
| MSI2     | 6.41E-65 | 0.6954249  | 0.725 | 0.438 | 2.27E-60 | CD4_EM_CTL_spleen |
| INTS6L   | 9.10E-65 | 1.2109998  | 0.38  | 0.161 | 3.22E-60 | CD4_EM_CTL_spleen |
| LSM4     | 9.22E-65 | 0.79757261 | 0.443 | 0.193 | 3.27E-60 | CD4_EM_CTL_spleen |
| USP34    | 1.01E-64 | 0.63368127 | 0.773 | 0.49  | 3.56E-60 | CD4_EM_CTL_spleen |
| NDFIP1   | 1.03E-64 | 0.68286906 | 0.701 | 0.428 | 3.64E-60 | CD4_EM_CTL_spleen |
| JMY      | 1.42E-64 | 0.94115176 | 0.558 | 0.305 | 5.03E-60 | CD4_EM_CTL_spleen |
| PLEK     | 1.95E-64 | 1.33660727 | 0.285 | 0.089 | 6.91E-60 | CD4_EM_CTL_spleen |
| MEF2A    | 2.79E-64 | 0.80377301 | 0.574 | 0.314 | 9.89E-60 | CD4_EM_CTL_spleen |
| NABP1    | 3.56E-64 | 1.07127244 | 0.405 | 0.177 | 1.26E-59 | CD4_EM_CTL_spleen |
| MTSS1    | 4.35E-64 | 1.01805166 | 0.616 | 0.372 | 1.54E-59 | CD4_EM_CTL_spleen |
| PTPN12   | 4.55E-64 | 1.78912594 | 0.25  | 0.069 | 1.61E-59 | CD4_EM_CTL_spleen |
| ARID1A   | 4.73E-64 | 0.80600182 | 0.576 | 0.315 | 1.68E-59 | CD4_EM_CTL_spleen |
| TPD52    | 5.53E-64 | 1.48396806 | 0.296 | 0.097 | 1.96E-59 | CD4_EM_CTL_spleen |
| ANKRD11  | 6.06E-64 | 0.59443474 | 0.731 | 0.447 | 2.15E-59 | CD4_EM_CTL_spleen |
| PAM      | 7.38E-64 | 1.34387651 | 0.325 | 0.119 | 2.61E-59 | CD4_EM_CTL_spleen |
| SNRNP70  | 1.48E-63 | 0.82565107 | 0.533 | 0.276 | 5.25E-59 | CD4_EM_CTL_spleen |
| RUNX3    | 1.85E-63 | 0.68146775 | 0.56  | 0.295 | 6.56E-59 | CD4_EM_CTL_spleen |
| CAB39    | 1.89E-63 | 0.7071226  | 0.655 | 0.384 | 6.69E-59 | CD4_EM_CTL_spleen |
| HSP90AB1 | 2.05E-63 | 0.54365747 | 0.925 | 0.793 | 7.25E-59 | CD4_EM_CTL_spleen |
| ASAP1    | 2.30E-63 | 0.79389633 | 0.597 | 0.337 | 8.15E-59 | CD4_EM_CTL_spleen |
| GRAMD1B  | 3.43E-63 | 1.23627209 | 0.413 | 0.192 | 1.21E-58 | CD4_EM_CTL_spleen |
| RBM17    | 8.11E-63 | 0.9478728  | 0.415 | 0.187 | 2.87E-58 | CD4_EM_CTL_spleen |
| PAG1     | 9.25E-63 | 0.64094827 | 0.7   | 0.427 | 3.28E-58 | CD4_EM_CTL_spleen |
| HIP1     | 9.95E-63 | 1.2677621  | 0.378 | 0.161 | 3.53E-58 | CD4_EM_CTL_spleen |
| ZCCHC7   | 1.37E-62 | 0.692713   | 0.708 | 0.436 | 4.86E-58 | CD4_EM_CTL_spleen |
| CMIP     | 1.86E-62 | 0.87167782 | 0.468 | 0.23  | 6.59E-58 | CD4_EM_CTL_spleen |
| JAK1     | 2.71E-62 | 0.54399672 | 0.888 | 0.599 | 9.62E-58 | CD4_EM_CTL_spleen |
| CNOT6L   | 2.83E-62 | 0.54857006 | 0.767 | 0.506 | 1.00E-57 | CD4_EM_CTL_spleen |

|                    |          |            |       |       |          |                   |
|--------------------|----------|------------|-------|-------|----------|-------------------|
| CD247              | 2.84E-62 | 0.71133747 | 0.713 | 0.434 | 1.01E-57 | CD4_EM_CTL_spleen |
| PPM1G              | 3.11E-62 | 1.15124987 | 0.36  | 0.146 | 1.10E-57 | CD4_EM_CTL_spleen |
| ARL15              | 9.89E-62 | 0.73213142 | 0.641 | 0.381 | 3.50E-57 | CD4_EM_CTL_spleen |
| RASGEF1B           | 1.03E-61 | 1.65617571 | 0.291 | 0.099 | 3.66E-57 | CD4_EM_CTL_spleen |
| SH2D1A             | 1.10E-61 | 0.80878823 | 0.505 | 0.263 | 3.90E-57 | CD4_EM_CTL_spleen |
| PICALM             | 1.13E-61 | 0.63666162 | 0.755 | 0.477 | 4.00E-57 | CD4_EM_CTL_spleen |
| TP53BP1            | 1.61E-61 | 0.76278844 | 0.564 | 0.31  | 5.70E-57 | CD4_EM_CTL_spleen |
| PLAC8              | 1.87E-61 | 0.5947693  | 0.788 | 0.575 | 6.61E-57 | CD4_EM_CTL_spleen |
| CLASP2             | 1.95E-61 | 0.6906465  | 0.632 | 0.355 | 6.93E-57 | CD4_EM_CTL_spleen |
| UBE2D3             | 2.40E-61 | 0.50649157 | 0.893 | 0.649 | 8.50E-57 | CD4_EM_CTL_spleen |
| XPO6               | 2.57E-61 | 0.80559044 | 0.513 | 0.269 | 9.09E-57 | CD4_EM_CTL_spleen |
| RALGPS2            | 3.41E-61 | 0.86427538 | 0.511 | 0.275 | 1.21E-56 | CD4_EM_CTL_spleen |
| GALNT2             | 4.97E-61 | 1.15624752 | 0.33  | 0.125 | 1.76E-56 | CD4_EM_CTL_spleen |
| DUSP2              | 5.17E-61 | 0.79805858 | 0.324 | 0.113 | 1.83E-56 | CD4_EM_CTL_spleen |
| FBXO11             | 5.20E-61 | 0.7649362  | 0.595 | 0.336 | 1.84E-56 | CD4_EM_CTL_spleen |
| POC1B              | 8.84E-61 | 1.01121308 | 0.46  | 0.226 | 3.13E-56 | CD4_EM_CTL_spleen |
| WNK1               | 1.60E-60 | 0.59722502 | 0.692 | 0.428 | 5.66E-56 | CD4_EM_CTL_spleen |
| CD38               | 1.91E-60 | 0.74554055 | 0.646 | 0.389 | 6.75E-56 | CD4_EM_CTL_spleen |
| GPR174             | 6.33E-60 | 0.67134569 | 0.471 | 0.223 | 2.24E-55 | CD4_EM_CTL_spleen |
| ATM                | 7.16E-60 | 0.69660645 | 0.596 | 0.341 | 2.54E-55 | CD4_EM_CTL_spleen |
| PTPRCAP            | 8.16E-60 | 0.83721715 | 0.262 | 0.074 | 2.89E-55 | CD4_EM_CTL_spleen |
| ABI1               | 1.51E-59 | 0.76112014 | 0.68  | 0.414 | 5.35E-55 | CD4_EM_CTL_spleen |
| CCNH               | 3.39E-59 | 0.89974083 | 0.438 | 0.206 | 1.20E-54 | CD4_EM_CTL_spleen |
| IL21R              | 3.61E-59 | 1.06932187 | 0.353 | 0.145 | 1.28E-54 | CD4_EM_CTL_spleen |
| EHMT1              | 7.03E-59 | 0.83467319 | 0.487 | 0.253 | 2.49E-54 | CD4_EM_CTL_spleen |
| TTC13              | 9.31E-59 | 0.99218989 | 0.408 | 0.188 | 3.30E-54 | CD4_EM_CTL_spleen |
| BICDL1             | 1.12E-58 | 0.5636765  | 0.75  | 0.494 | 3.98E-54 | CD4_EM_CTL_spleen |
| PMAIP1             | 1.34E-58 | 0.78354475 | 0.467 | 0.23  | 4.76E-54 | CD4_EM_CTL_spleen |
| KDM5B              | 1.46E-58 | 1.24385773 | 0.361 | 0.153 | 5.16E-54 | CD4_EM_CTL_spleen |
| ZNF148             | 2.25E-58 | 0.75550178 | 0.597 | 0.343 | 7.99E-54 | CD4_EM_CTL_spleen |
| ENSMMUG00000021425 | 2.42E-58 | 0.97393195 | 0.472 | 0.243 | 8.58E-54 | CD4_EM_CTL_spleen |
| TOB2               | 2.79E-58 | 0.92142415 | 0.336 | 0.13  | 9.88E-54 | CD4_EM_CTL_spleen |
| SLC9A3R1           | 4.44E-58 | 0.74949274 | 0.412 | 0.184 | 1.57E-53 | CD4_EM_CTL_spleen |

|                    |          |            |       |       |          |                   |
|--------------------|----------|------------|-------|-------|----------|-------------------|
| SLAMF6             | 5.61E-58 | 1.3066845  | 0.263 | 0.083 | 1.99E-53 | CD4_EM_CTL_spleen |
| UBAC2              | 7.76E-58 | 0.60301864 | 0.798 | 0.532 | 2.75E-53 | CD4_EM_CTL_spleen |
| SLC25A42           | 1.46E-57 | 1.42007874 | 0.28  | 0.095 | 5.16E-53 | CD4_EM_CTL_spleen |
| TCP1               | 2.12E-57 | 0.7772523  | 0.392 | 0.172 | 7.52E-53 | CD4_EM_CTL_spleen |
| IPCEF1             | 2.63E-57 | 0.92269351 | 0.397 | 0.183 | 9.30E-53 | CD4_EM_CTL_spleen |
| VPS4A              | 2.81E-57 | 1.05845958 | 0.366 | 0.157 | 9.95E-53 | CD4_EM_CTL_spleen |
| CDKAL1             | 3.34E-57 | 0.64508551 | 0.665 | 0.403 | 1.18E-52 | CD4_EM_CTL_spleen |
| VWA8               | 3.74E-57 | 1.36709777 | 0.315 | 0.122 | 1.33E-52 | CD4_EM_CTL_spleen |
| ENSMMUG00000056190 | 6.16E-57 | 0.9948831  | 0.427 | 0.207 | 2.18E-52 | CD4_EM_CTL_spleen |
| M6PR               | 6.97E-57 | 0.76669158 | 0.508 | 0.268 | 2.47E-52 | CD4_EM_CTL_spleen |
| NPAT               | 1.12E-56 | 0.77751619 | 0.532 | 0.29  | 3.97E-52 | CD4_EM_CTL_spleen |
| SMAD3              | 1.25E-56 | 1.21906538 | 0.362 | 0.159 | 4.41E-52 | CD4_EM_CTL_spleen |
| ENSMMUG00000062941 | 1.45E-56 | 1.12708864 | 0.366 | 0.163 | 5.14E-52 | CD4_EM_CTL_spleen |
| ASXL2              | 2.52E-56 | 0.95108595 | 0.418 | 0.199 | 8.92E-52 | CD4_EM_CTL_spleen |
| TMEM181            | 2.53E-56 | 0.86810742 | 0.44  | 0.217 | 8.97E-52 | CD4_EM_CTL_spleen |
| CBL                | 4.32E-56 | 1.47230106 | 0.276 | 0.097 | 1.53E-51 | CD4_EM_CTL_spleen |
| VGLL4              | 7.47E-56 | 1.00540017 | 0.389 | 0.177 | 2.65E-51 | CD4_EM_CTL_spleen |
| CREBBP             | 8.31E-56 | 0.68375746 | 0.614 | 0.354 | 2.94E-51 | CD4_EM_CTL_spleen |
| GLS                | 8.56E-56 | 0.89803119 | 0.45  | 0.227 | 3.03E-51 | CD4_EM_CTL_spleen |
| PPP6R3             | 9.09E-56 | 0.62418076 | 0.611 | 0.355 | 3.22E-51 | CD4_EM_CTL_spleen |
| PTPRM              | 1.00E-55 | 1.36770969 | 0.274 | 0.095 | 3.54E-51 | CD4_EM_CTL_spleen |
| KLRD1              | 1.03E-55 | 0.55601296 | 0.696 | 0.448 | 3.66E-51 | CD4_EM_CTL_spleen |
| SLC12A6            | 1.06E-55 | 0.74963222 | 0.572 | 0.324 | 3.75E-51 | CD4_EM_CTL_spleen |
| BRD9               | 1.46E-55 | 1.0186502  | 0.353 | 0.15  | 5.19E-51 | CD4_EM_CTL_spleen |
| PPP1R12A           | 1.49E-55 | 0.55843107 | 0.808 | 0.532 | 5.29E-51 | CD4_EM_CTL_spleen |
| FAM241A            | 1.52E-55 | 1.10193521 | 0.427 | 0.216 | 5.38E-51 | CD4_EM_CTL_spleen |
| TTC28              | 1.67E-55 | 1.14289034 | 0.348 | 0.148 | 5.93E-51 | CD4_EM_CTL_spleen |
| HERC4              | 1.90E-55 | 0.76072215 | 0.524 | 0.287 | 6.74E-51 | CD4_EM_CTL_spleen |
| ENSMMUG00000052802 | 2.13E-55 | 1.02868903 | 0.385 | 0.176 | 7.53E-51 | CD4_EM_CTL_spleen |
| YWHAH              | 2.36E-55 | 0.93483261 | 0.373 | 0.162 | 8.35E-51 | CD4_EM_CTL_spleen |
| PHF20              | 2.76E-55 | 0.66276124 | 0.605 | 0.35  | 9.78E-51 | CD4_EM_CTL_spleen |
| PSIP1              | 2.91E-55 | 0.63155345 | 0.523 | 0.274 | 1.03E-50 | CD4_EM_CTL_spleen |
| ADAM10             | 2.98E-55 | 0.7472571  | 0.536 | 0.297 | 1.06E-50 | CD4_EM_CTL_spleen |

|         |          |            |       |       |          |                   |
|---------|----------|------------|-------|-------|----------|-------------------|
| YTHDC1  | 3.13E-55 | 0.58316947 | 0.622 | 0.355 | 1.11E-50 | CD4_EM_CTL_spleen |
| PIP4K2A | 3.28E-55 | 0.48536532 | 0.785 | 0.524 | 1.16E-50 | CD4_EM_CTL_spleen |
| SETX    | 4.52E-55 | 0.70204875 | 0.557 | 0.311 | 1.60E-50 | CD4_EM_CTL_spleen |
| MYC     | 4.62E-55 | 1.19329873 | 0.259 | 0.084 | 1.64E-50 | CD4_EM_CTL_spleen |
| RNF115  | 5.81E-55 | 0.82317149 | 0.45  | 0.222 | 2.06E-50 | CD4_EM_CTL_spleen |
| ZSWIM6  | 5.97E-55 | 0.97213169 | 0.436 | 0.22  | 2.11E-50 | CD4_EM_CTL_spleen |
| ITSN2   | 7.38E-55 | 0.58184161 | 0.684 | 0.414 | 2.61E-50 | CD4_EM_CTL_spleen |
| DENND1A | 1.09E-54 | 0.94210053 | 0.436 | 0.22  | 3.86E-50 | CD4_EM_CTL_spleen |
| PDE4A   | 1.17E-54 | 0.84519976 | 0.309 | 0.116 | 4.13E-50 | CD4_EM_CTL_spleen |
| NCOA2   | 1.49E-54 | 0.68320034 | 0.584 | 0.339 | 5.27E-50 | CD4_EM_CTL_spleen |
| GOLPH3  | 1.98E-54 | 0.76621405 | 0.528 | 0.289 | 7.00E-50 | CD4_EM_CTL_spleen |
| PDE7A   | 2.22E-54 | 0.68708279 | 0.584 | 0.346 | 7.88E-50 | CD4_EM_CTL_spleen |
| HNRNPAB | 2.64E-54 | 1.06097037 | 0.299 | 0.111 | 9.36E-50 | CD4_EM_CTL_spleen |
| FOXN2   | 2.88E-54 | 0.90337951 | 0.448 | 0.227 | 1.02E-49 | CD4_EM_CTL_spleen |
| EDEM3   | 2.97E-54 | 1.10118478 | 0.334 | 0.14  | 1.05E-49 | CD4_EM_CTL_spleen |
| FAM107B | 2.98E-54 | 0.7437483  | 0.61  | 0.361 | 1.06E-49 | CD4_EM_CTL_spleen |
| EZR     | 4.12E-54 | 0.54503996 | 0.85  | 0.614 | 1.46E-49 | CD4_EM_CTL_spleen |
| DOCK10  | 6.62E-54 | 0.4978883  | 0.816 | 0.547 | 2.35E-49 | CD4_EM_CTL_spleen |
| ZHX2    | 7.27E-54 | 0.70421794 | 0.44  | 0.217 | 2.57E-49 | CD4_EM_CTL_spleen |
| ATF7IP  | 7.39E-54 | 0.64983512 | 0.672 | 0.419 | 2.62E-49 | CD4_EM_CTL_spleen |
| ASH1L   | 7.68E-54 | 0.58760411 | 0.775 | 0.503 | 2.72E-49 | CD4_EM_CTL_spleen |
| B3GNT2  | 7.74E-54 | 1.12396468 | 0.333 | 0.14  | 2.74E-49 | CD4_EM_CTL_spleen |
| ERO1B   | 2.01E-53 | 0.83019034 | 0.503 | 0.272 | 7.12E-49 | CD4_EM_CTL_spleen |
| PPM1B   | 2.46E-53 | 0.91161957 | 0.422 | 0.209 | 8.71E-49 | CD4_EM_CTL_spleen |
| PDCD4   | 2.65E-53 | 0.57227106 | 0.624 | 0.371 | 9.40E-49 | CD4_EM_CTL_spleen |
| SPIDR   | 2.90E-53 | 0.8182351  | 0.48  | 0.254 | 1.03E-48 | CD4_EM_CTL_spleen |
| RBM6    | 3.66E-53 | 0.80465029 | 0.477 | 0.253 | 1.30E-48 | CD4_EM_CTL_spleen |
| FARS2   | 4.39E-53 | 0.88051755 | 0.48  | 0.261 | 1.56E-48 | CD4_EM_CTL_spleen |
| MARK3   | 4.81E-53 | 0.80424709 | 0.521 | 0.287 | 1.70E-48 | CD4_EM_CTL_spleen |
| AXIN1   | 5.02E-53 | 0.88024394 | 0.402 | 0.194 | 1.78E-48 | CD4_EM_CTL_spleen |
| E2F3    | 5.15E-53 | 1.14320923 | 0.324 | 0.134 | 1.83E-48 | CD4_EM_CTL_spleen |
| ZMYM4   | 5.32E-53 | 0.83693345 | 0.447 | 0.226 | 1.88E-48 | CD4_EM_CTL_spleen |
| GSE1    | 6.22E-53 | 1.08758358 | 0.327 | 0.134 | 2.20E-48 | CD4_EM_CTL_spleen |

|                   |          |            |       |       |          |                   |
|-------------------|----------|------------|-------|-------|----------|-------------------|
| RELB              | 6.25E-53 | 0.97695614 | 0.413 | 0.204 | 2.22E-48 | CD4_EM_CTL_spleen |
| RABEP1            | 6.66E-53 | 0.97682645 | 0.333 | 0.14  | 2.36E-48 | CD4_EM_CTL_spleen |
| TUT4              | 6.89E-53 | 0.51004571 | 0.779 | 0.506 | 2.44E-48 | CD4_EM_CTL_spleen |
| COP1              | 6.95E-53 | 0.67662739 | 0.611 | 0.364 | 2.46E-48 | CD4_EM_CTL_spleen |
| PAN3              | 8.45E-53 | 0.56138044 | 0.72  | 0.448 | 2.99E-48 | CD4_EM_CTL_spleen |
| NME3              | 8.86E-53 | 0.60362928 | 0.498 | 0.257 | 3.14E-48 | CD4_EM_CTL_spleen |
| KMT2C             | 1.21E-52 | 0.53336551 | 0.798 | 0.525 | 4.27E-48 | CD4_EM_CTL_spleen |
| KDM6B             | 1.22E-52 | 0.87514437 | 0.349 | 0.151 | 4.31E-48 | CD4_EM_CTL_spleen |
| ARHGAP25          | 1.56E-52 | 0.82920652 | 0.43  | 0.212 | 5.52E-48 | CD4_EM_CTL_spleen |
| HNRNPC            | 1.78E-52 | 0.50896658 | 0.824 | 0.573 | 6.30E-48 | CD4_EM_CTL_spleen |
| MAML2             | 1.89E-52 | 0.55800508 | 0.793 | 0.538 | 6.69E-48 | CD4_EM_CTL_spleen |
| STT3B             | 1.94E-52 | 0.76282629 | 0.541 | 0.303 | 6.89E-48 | CD4_EM_CTL_spleen |
| EFCAB2            | 2.11E-52 | 0.67456972 | 0.55  | 0.308 | 7.47E-48 | CD4_EM_CTL_spleen |
| ROCK1             | 2.14E-52 | 0.54097079 | 0.735 | 0.465 | 7.58E-48 | CD4_EM_CTL_spleen |
| ANO10             | 2.47E-52 | 1.20079785 | 0.273 | 0.097 | 8.76E-48 | CD4_EM_CTL_spleen |
| SEPTIN11          | 2.61E-52 | 0.57366387 | 0.63  | 0.376 | 9.25E-48 | CD4_EM_CTL_spleen |
| HSPA8             | 2.72E-52 | 0.51391792 | 0.795 | 0.575 | 9.63E-48 | CD4_EM_CTL_spleen |
| AKNA              | 2.89E-52 | 0.65790368 | 0.514 | 0.276 | 1.02E-47 | CD4_EM_CTL_spleen |
| IQGAP1            | 3.36E-52 | 0.55281823 | 0.714 | 0.449 | 1.19E-47 | CD4_EM_CTL_spleen |
| PRPF38B           | 4.87E-52 | 0.62874553 | 0.515 | 0.276 | 1.73E-47 | CD4_EM_CTL_spleen |
| TASOR2            | 6.31E-52 | 0.68713633 | 0.492 | 0.264 | 2.24E-47 | CD4_EM_CTL_spleen |
| RPS6KC1           | 7.97E-52 | 0.81836438 | 0.401 | 0.194 | 2.82E-47 | CD4_EM_CTL_spleen |
| VAV1              | 9.39E-52 | 0.96966758 | 0.383 | 0.181 | 3.33E-47 | CD4_EM_CTL_spleen |
| SAMHD1            | 9.83E-52 | 0.56802461 | 0.614 | 0.358 | 3.48E-47 | CD4_EM_CTL_spleen |
| FAM120A           | 1.05E-51 | 0.75534314 | 0.453 | 0.233 | 3.70E-47 | CD4_EM_CTL_spleen |
| NOL4L             | 1.13E-51 | 1.4900036  | 0.27  | 0.1   | 3.99E-47 | CD4_EM_CTL_spleen |
| IRF2              | 1.15E-51 | 0.66635736 | 0.43  | 0.206 | 4.06E-47 | CD4_EM_CTL_spleen |
| NCOA1             | 1.16E-51 | 0.70836991 | 0.529 | 0.293 | 4.12E-47 | CD4_EM_CTL_spleen |
| ENSMUG00000055687 | 1.17E-51 | 0.8927183  | 0.471 | 0.251 | 4.13E-47 | CD4_EM_CTL_spleen |
| GOLM2             | 1.30E-51 | 0.6637636  | 0.524 | 0.29  | 4.60E-47 | CD4_EM_CTL_spleen |
| NOP58             | 1.30E-51 | 0.7356564  | 0.533 | 0.302 | 4.62E-47 | CD4_EM_CTL_spleen |
| SH3KBP1           | 1.34E-51 | 0.44420656 | 0.877 | 0.63  | 4.76E-47 | CD4_EM_CTL_spleen |
| PDCD1             | 1.46E-51 | 0.738322   | 0.293 | 0.106 | 5.17E-47 | CD4_EM_CTL_spleen |

|          |          |            |       |       |          |                   |
|----------|----------|------------|-------|-------|----------|-------------------|
| WTAP     | 1.65E-51 | 0.62139904 | 0.652 | 0.398 | 5.84E-47 | CD4_EM_CTL_spleen |
| FBXW4    | 2.01E-51 | 1.00669662 | 0.38  | 0.18  | 7.12E-47 | CD4_EM_CTL_spleen |
| BAZ1A    | 2.08E-51 | 0.65045571 | 0.535 | 0.3   | 7.36E-47 | CD4_EM_CTL_spleen |
| EIF5     | 2.37E-51 | 0.60673108 | 0.552 | 0.311 | 8.38E-47 | CD4_EM_CTL_spleen |
| FNDC3A   | 2.47E-51 | 0.63964348 | 0.606 | 0.365 | 8.77E-47 | CD4_EM_CTL_spleen |
| CYC1     | 2.62E-51 | 1.00234991 | 0.287 | 0.107 | 9.29E-47 | CD4_EM_CTL_spleen |
| SBF2     | 3.78E-51 | 0.90964555 | 0.432 | 0.222 | 1.34E-46 | CD4_EM_CTL_spleen |
| SLC38A1  | 3.81E-51 | 0.59866395 | 0.743 | 0.488 | 1.35E-46 | CD4_EM_CTL_spleen |
| SETD5    | 3.99E-51 | 0.68602244 | 0.512 | 0.286 | 1.41E-46 | CD4_EM_CTL_spleen |
| DCAF5    | 6.48E-51 | 0.75400226 | 0.496 | 0.272 | 2.30E-46 | CD4_EM_CTL_spleen |
| HSPD1    | 7.26E-51 | 0.73254926 | 0.436 | 0.219 | 2.57E-46 | CD4_EM_CTL_spleen |
| CD84     | 9.38E-51 | 0.74849514 | 0.43  | 0.211 | 3.32E-46 | CD4_EM_CTL_spleen |
| PHF14    | 9.93E-51 | 0.67260551 | 0.54  | 0.308 | 3.52E-46 | CD4_EM_CTL_spleen |
| PAFAH1B1 | 1.22E-50 | 0.60783961 | 0.647 | 0.395 | 4.32E-46 | CD4_EM_CTL_spleen |
| RSRP1    | 1.52E-50 | 0.40403929 | 0.808 | 0.496 | 5.38E-46 | CD4_EM_CTL_spleen |
| WIPF1    | 1.71E-50 | 0.53515106 | 0.798 | 0.558 | 6.07E-46 | CD4_EM_CTL_spleen |
| BTG2     | 2.18E-50 | 0.55153515 | 0.686 | 0.435 | 7.71E-46 | CD4_EM_CTL_spleen |
| ATRX     | 5.21E-50 | 0.49843338 | 0.723 | 0.459 | 1.85E-45 | CD4_EM_CTL_spleen |
| NOL7     | 5.60E-50 | 0.9371463  | 0.342 | 0.149 | 1.98E-45 | CD4_EM_CTL_spleen |
| TRA2A    | 6.01E-50 | 0.44052824 | 0.876 | 0.59  | 2.13E-45 | CD4_EM_CTL_spleen |
| PFN1     | 6.14E-50 | 0.45342473 | 0.867 | 0.771 | 2.18E-45 | CD4_EM_CTL_spleen |
| GNA13    | 6.37E-50 | 0.65003158 | 0.575 | 0.335 | 2.26E-45 | CD4_EM_CTL_spleen |
| PRKCA    | 6.64E-50 | 1.05201331 | 0.444 | 0.239 | 2.35E-45 | CD4_EM_CTL_spleen |
| ANKRD10  | 8.43E-50 | 0.6970022  | 0.468 | 0.25  | 2.99E-45 | CD4_EM_CTL_spleen |
| NIN      | 9.64E-50 | 0.95790516 | 0.371 | 0.174 | 3.42E-45 | CD4_EM_CTL_spleen |
| QKI      | 1.13E-49 | 0.67837343 | 0.626 | 0.384 | 4.01E-45 | CD4_EM_CTL_spleen |
| GLG1     | 1.22E-49 | 0.66869308 | 0.584 | 0.347 | 4.32E-45 | CD4_EM_CTL_spleen |
| ND2      | 1.27E-49 | 0.51753024 | 0.957 | 0.814 | 4.50E-45 | CD4_EM_CTL_spleen |
| PER1     | 1.56E-49 | 0.6244738  | 0.511 | 0.276 | 5.53E-45 | CD4_EM_CTL_spleen |
| DNAJC24  | 1.82E-49 | 0.80265947 | 0.478 | 0.262 | 6.44E-45 | CD4_EM_CTL_spleen |
| CHD1     | 2.01E-49 | 0.63976019 | 0.504 | 0.276 | 7.11E-45 | CD4_EM_CTL_spleen |
| LRCH3    | 2.07E-49 | 0.62087504 | 0.588 | 0.345 | 7.34E-45 | CD4_EM_CTL_spleen |
| BPTF     | 2.88E-49 | 0.54600961 | 0.641 | 0.385 | 1.02E-44 | CD4_EM_CTL_spleen |

|                    |          |            |       |       |          |                   |
|--------------------|----------|------------|-------|-------|----------|-------------------|
| TAF15              | 3.13E-49 | 0.58550817 | 0.614 | 0.375 | 1.11E-44 | CD4_EM_CTL_spleen |
| SPATA5             | 3.94E-49 | 0.82540193 | 0.435 | 0.228 | 1.40E-44 | CD4_EM_CTL_spleen |
| MKLN1              | 4.38E-49 | 0.57059091 | 0.644 | 0.392 | 1.55E-44 | CD4_EM_CTL_spleen |
| VOPP1              | 5.06E-49 | 1.06007098 | 0.336 | 0.149 | 1.79E-44 | CD4_EM_CTL_spleen |
| USP48              | 7.78E-49 | 1.01732531 | 0.337 | 0.151 | 2.76E-44 | CD4_EM_CTL_spleen |
| SMARCA4            | 7.85E-49 | 0.86303897 | 0.388 | 0.192 | 2.78E-44 | CD4_EM_CTL_spleen |
| HIPK1              | 9.16E-49 | 0.79135113 | 0.453 | 0.241 | 3.24E-44 | CD4_EM_CTL_spleen |
| EP300              | 9.88E-49 | 0.72120133 | 0.542 | 0.316 | 3.50E-44 | CD4_EM_CTL_spleen |
| GAK                | 1.19E-48 | 0.89779945 | 0.364 | 0.168 | 4.22E-44 | CD4_EM_CTL_spleen |
| TRAC               | 1.25E-48 | 0.47616271 | 0.837 | 0.605 | 4.43E-44 | CD4_EM_CTL_spleen |
| TRAF3IP3           | 1.69E-48 | 0.50668175 | 0.583 | 0.339 | 6.00E-44 | CD4_EM_CTL_spleen |
| FNBP4              | 1.69E-48 | 0.69530282 | 0.477 | 0.256 | 6.00E-44 | CD4_EM_CTL_spleen |
| NCALD              | 1.90E-48 | 1.20436835 | 0.358 | 0.172 | 6.73E-44 | CD4_EM_CTL_spleen |
| BCAS3              | 2.42E-48 | 0.67313236 | 0.608 | 0.371 | 8.56E-44 | CD4_EM_CTL_spleen |
| PPP1R15A           | 2.44E-48 | 0.58016921 | 0.585 | 0.345 | 8.65E-44 | CD4_EM_CTL_spleen |
| NFATC3             | 4.03E-48 | 0.59776942 | 0.627 | 0.388 | 1.43E-43 | CD4_EM_CTL_spleen |
| TANC2              | 4.65E-48 | 0.77136426 | 0.471 | 0.259 | 1.65E-43 | CD4_EM_CTL_spleen |
| ENSMMUG00000053089 | 5.98E-48 | 1.15912999 | 0.273 | 0.105 | 2.12E-43 | CD4_EM_CTL_spleen |
| NUP210             | 6.00E-48 | 0.77356226 | 0.398 | 0.195 | 2.13E-43 | CD4_EM_CTL_spleen |
| KRAS               | 6.57E-48 | 0.71676654 | 0.45  | 0.238 | 2.33E-43 | CD4_EM_CTL_spleen |
| DENND4A            | 8.19E-48 | 0.60163779 | 0.813 | 0.598 | 2.90E-43 | CD4_EM_CTL_spleen |
| TRIP12             | 9.64E-48 | 0.58280957 | 0.591 | 0.351 | 3.41E-43 | CD4_EM_CTL_spleen |
| HSP90AA1           | 9.81E-48 | 0.50663061 | 0.865 | 0.679 | 3.48E-43 | CD4_EM_CTL_spleen |
| XPR1               | 1.00E-47 | 0.76429324 | 0.491 | 0.277 | 3.54E-43 | CD4_EM_CTL_spleen |
| H2AZ2              | 1.14E-47 | 0.43725824 | 0.757 | 0.511 | 4.05E-43 | CD4_EM_CTL_spleen |
| EML4               | 1.21E-47 | 0.46921029 | 0.924 | 0.731 | 4.28E-43 | CD4_EM_CTL_spleen |
| CCNY               | 1.28E-47 | 0.79498637 | 0.442 | 0.234 | 4.55E-43 | CD4_EM_CTL_spleen |
| TFCP2              | 1.49E-47 | 1.10036548 | 0.297 | 0.123 | 5.27E-43 | CD4_EM_CTL_spleen |
| FBXL17             | 1.78E-47 | 0.6682922  | 0.562 | 0.335 | 6.29E-43 | CD4_EM_CTL_spleen |
| HSPA9              | 1.93E-47 | 0.62814808 | 0.514 | 0.29  | 6.84E-43 | CD4_EM_CTL_spleen |
| VCP                | 2.06E-47 | 0.68139646 | 0.393 | 0.188 | 7.28E-43 | CD4_EM_CTL_spleen |
| MAP2K4             | 2.10E-47 | 0.828248   | 0.408 | 0.207 | 7.44E-43 | CD4_EM_CTL_spleen |
| IFNAR2             | 2.37E-47 | 0.49180848 | 0.582 | 0.334 | 8.39E-43 | CD4_EM_CTL_spleen |



|                    |          |            |       |       |          |                   |
|--------------------|----------|------------|-------|-------|----------|-------------------|
| KDM4C              | 2.93E-47 | 0.60195581 | 0.621 | 0.383 | 1.04E-42 | CD4_EM_CTL_spleen |
| RNF138             | 3.03E-47 | 0.85060166 | 0.394 | 0.197 | 1.07E-42 | CD4_EM_CTL_spleen |
| MLLT10             | 4.08E-47 | 0.70905813 | 0.506 | 0.289 | 1.45E-42 | CD4_EM_CTL_spleen |
| PUM2               | 4.20E-47 | 0.51322732 | 0.691 | 0.436 | 1.49E-42 | CD4_EM_CTL_spleen |
| BABAM2             | 4.56E-47 | 0.61137723 | 0.58  | 0.344 | 1.62E-42 | CD4_EM_CTL_spleen |
| PDCD6-AHRR         | 5.17E-47 | 0.85907759 | 0.291 | 0.115 | 1.83E-42 | CD4_EM_CTL_spleen |
| ENSMMUG00000060923 | 5.73E-47 | 0.50589214 | 0.728 | 0.482 | 2.03E-42 | CD4_EM_CTL_spleen |
| INPP5D             | 6.14E-47 | 0.54183886 | 0.58  | 0.349 | 2.18E-42 | CD4_EM_CTL_spleen |
| TMEM87B            | 6.19E-47 | 1.10615486 | 0.288 | 0.118 | 2.19E-42 | CD4_EM_CTL_spleen |
| SF1                | 6.31E-47 | 0.53575201 | 0.587 | 0.342 | 2.24E-42 | CD4_EM_CTL_spleen |
| LRBA               | 6.34E-47 | 0.4916123  | 0.779 | 0.514 | 2.25E-42 | CD4_EM_CTL_spleen |
| NLRC5              | 6.53E-47 | 0.91103351 | 0.388 | 0.195 | 2.32E-42 | CD4_EM_CTL_spleen |
| CDK13              | 6.70E-47 | 0.63018699 | 0.632 | 0.39  | 2.37E-42 | CD4_EM_CTL_spleen |
| PDE8A              | 7.75E-47 | 0.8612967  | 0.426 | 0.222 | 2.75E-42 | CD4_EM_CTL_spleen |
| SORL1              | 8.28E-47 | 0.61552354 | 0.615 | 0.38  | 2.93E-42 | CD4_EM_CTL_spleen |
| RAD51B             | 1.01E-46 | 1.00594787 | 0.392 | 0.202 | 3.57E-42 | CD4_EM_CTL_spleen |
| MIA2               | 1.02E-46 | 0.63879342 | 0.495 | 0.273 | 3.60E-42 | CD4_EM_CTL_spleen |
| TLN1               | 1.06E-46 | 0.5069962  | 0.559 | 0.324 | 3.74E-42 | CD4_EM_CTL_spleen |
| TCF7               | 1.23E-46 | 0.84050745 | 0.41  | 0.208 | 4.36E-42 | CD4_EM_CTL_spleen |
| LRPPRC             | 1.25E-46 | 0.70023564 | 0.462 | 0.248 | 4.43E-42 | CD4_EM_CTL_spleen |
| PLEKHG1            | 1.47E-46 | 0.71449766 | 0.421 | 0.221 | 5.20E-42 | CD4_EM_CTL_spleen |
| RASGRP1            | 1.61E-46 | 0.92854463 | 0.376 | 0.188 | 5.71E-42 | CD4_EM_CTL_spleen |
| PRKX               | 1.80E-46 | 0.55306964 | 0.691 | 0.444 | 6.37E-42 | CD4_EM_CTL_spleen |
| GNAQ               | 1.99E-46 | 0.8703931  | 0.401 | 0.204 | 7.06E-42 | CD4_EM_CTL_spleen |
| MYLIP              | 2.12E-46 | 0.67925301 | 0.568 | 0.344 | 7.50E-42 | CD4_EM_CTL_spleen |
| AGPS               | 2.34E-46 | 0.67603284 | 0.515 | 0.294 | 8.28E-42 | CD4_EM_CTL_spleen |
| PUM1               | 2.42E-46 | 0.45002065 | 0.733 | 0.458 | 8.59E-42 | CD4_EM_CTL_spleen |
| FAM118A            | 2.49E-46 | 0.74951214 | 0.481 | 0.266 | 8.81E-42 | CD4_EM_CTL_spleen |
| CSNK1G1            | 2.78E-46 | 0.72589169 | 0.499 | 0.288 | 9.84E-42 | CD4_EM_CTL_spleen |
| EHBP1              | 3.12E-46 | 0.8197209  | 0.458 | 0.254 | 1.11E-41 | CD4_EM_CTL_spleen |
| RANBP1             | 4.29E-46 | 0.93427217 | 0.281 | 0.112 | 1.52E-41 | CD4_EM_CTL_spleen |
| ALKBH7             | 4.48E-46 | 0.71555848 | 0.324 | 0.139 | 1.59E-41 | CD4_EM_CTL_spleen |
| ABCC1              | 4.49E-46 | 1.00783462 | 0.365 | 0.179 | 1.59E-41 | CD4_EM_CTL_spleen |

|             |          |            |       |       |          |                   |
|-------------|----------|------------|-------|-------|----------|-------------------|
| CD74        | 4.85E-46 | 0.43758117 | 0.381 | 0.178 | 1.72E-41 | CD4_EM_CTL_spleen |
| PTPRJ       | 5.01E-46 | 0.68954326 | 0.518 | 0.304 | 1.77E-41 | CD4_EM_CTL_spleen |
| AEBP2       | 6.46E-46 | 0.65612008 | 0.5   | 0.277 | 2.29E-41 | CD4_EM_CTL_spleen |
| IGF1R       | 7.79E-46 | 1.19561531 | 0.315 | 0.142 | 2.76E-41 | CD4_EM_CTL_spleen |
| USP9X       | 8.97E-46 | 0.68841204 | 0.573 | 0.341 | 3.18E-41 | CD4_EM_CTL_spleen |
| COMMD10     | 9.73E-46 | 0.74734461 | 0.51  | 0.3   | 3.45E-41 | CD4_EM_CTL_spleen |
| TPM4        | 9.94E-46 | 0.74780493 | 0.356 | 0.164 | 3.52E-41 | CD4_EM_CTL_spleen |
| ARHGAP15    | 1.01E-45 | 0.4114151  | 0.932 | 0.708 | 3.59E-41 | CD4_EM_CTL_spleen |
| RFX7        | 1.08E-45 | 0.77799334 | 0.419 | 0.221 | 3.84E-41 | CD4_EM_CTL_spleen |
| SESN1       | 1.33E-45 | 0.86764225 | 0.383 | 0.195 | 4.70E-41 | CD4_EM_CTL_spleen |
| NFKBIB      | 1.56E-45 | 0.71866671 | 0.456 | 0.246 | 5.53E-41 | CD4_EM_CTL_spleen |
| PDS5A       | 1.69E-45 | 0.68862048 | 0.499 | 0.28  | 6.00E-41 | CD4_EM_CTL_spleen |
| TMC8        | 2.01E-45 | 0.89505364 | 0.336 | 0.154 | 7.11E-41 | CD4_EM_CTL_spleen |
| NPEPPS      | 2.09E-45 | 0.90658483 | 0.354 | 0.169 | 7.42E-41 | CD4_EM_CTL_spleen |
| THADA       | 2.32E-45 | 0.64606449 | 0.536 | 0.313 | 8.23E-41 | CD4_EM_CTL_spleen |
| SRSF10      | 2.59E-45 | 0.5060312  | 0.562 | 0.324 | 9.19E-41 | CD4_EM_CTL_spleen |
| NUMB        | 2.68E-45 | 0.7774961  | 0.442 | 0.242 | 9.50E-41 | CD4_EM_CTL_spleen |
| GTF3A       | 2.98E-45 | 1.13699161 | 0.254 | 0.095 | 1.06E-40 | CD4_EM_CTL_spleen |
| CHD4        | 3.40E-45 | 0.6609786  | 0.533 | 0.311 | 1.20E-40 | CD4_EM_CTL_spleen |
| CYFIP2      | 4.23E-45 | 0.56640134 | 0.616 | 0.38  | 1.50E-40 | CD4_EM_CTL_spleen |
| STIP1       | 5.67E-45 | 0.66489833 | 0.342 | 0.156 | 2.01E-40 | CD4_EM_CTL_spleen |
| C20H16orf72 | 6.13E-45 | 0.75753969 | 0.468 | 0.259 | 2.17E-40 | CD4_EM_CTL_spleen |
| LPIN1       | 6.51E-45 | 0.83855694 | 0.321 | 0.143 | 2.31E-40 | CD4_EM_CTL_spleen |
| GPHN        | 7.02E-45 | 0.66706886 | 0.509 | 0.294 | 2.49E-40 | CD4_EM_CTL_spleen |
| IL2RB       | 7.54E-45 | 0.49362274 | 0.485 | 0.26  | 2.67E-40 | CD4_EM_CTL_spleen |
| SFPQ        | 7.77E-45 | 0.46806431 | 0.636 | 0.391 | 2.75E-40 | CD4_EM_CTL_spleen |
| RC3H2       | 7.92E-45 | 1.00623182 | 0.25  | 0.092 | 2.81E-40 | CD4_EM_CTL_spleen |
| MEMO1       | 9.12E-45 | 0.62764133 | 0.57  | 0.349 | 3.23E-40 | CD4_EM_CTL_spleen |
| FAF1        | 9.45E-45 | 0.57628584 | 0.583 | 0.349 | 3.35E-40 | CD4_EM_CTL_spleen |
| SGMS1       | 1.08E-44 | 0.77888694 | 0.39  | 0.198 | 3.82E-40 | CD4_EM_CTL_spleen |
| PELI1       | 1.16E-44 | 0.78075012 | 0.532 | 0.315 | 4.12E-40 | CD4_EM_CTL_spleen |
| NFATC1      | 1.29E-44 | 0.79360964 | 0.354 | 0.169 | 4.58E-40 | CD4_EM_CTL_spleen |
| SNX14       | 1.31E-44 | 0.54867788 | 0.463 | 0.247 | 4.64E-40 | CD4_EM_CTL_spleen |

|          |          |            |       |       |          |                   |
|----------|----------|------------|-------|-------|----------|-------------------|
| IQCG     | 1.43E-44 | 0.93895692 | 0.31  | 0.135 | 5.06E-40 | CD4_EM_CTL_spleen |
| DOCK11   | 1.54E-44 | 0.58715475 | 0.588 | 0.354 | 5.45E-40 | CD4_EM_CTL_spleen |
| GBP3     | 1.61E-44 | 1.09631255 | 0.33  | 0.154 | 5.69E-40 | CD4_EM_CTL_spleen |
| UBE2E2   | 1.84E-44 | 0.87084727 | 0.478 | 0.276 | 6.51E-40 | CD4_EM_CTL_spleen |
| TRIO     | 1.96E-44 | 0.91679962 | 0.338 | 0.158 | 6.95E-40 | CD4_EM_CTL_spleen |
| MYH9     | 3.00E-44 | 0.4985226  | 0.695 | 0.449 | 1.06E-39 | CD4_EM_CTL_spleen |
| SSBP3    | 3.01E-44 | 0.64645913 | 0.521 | 0.304 | 1.07E-39 | CD4_EM_CTL_spleen |
| IKZF1    | 3.96E-44 | 0.48695493 | 0.697 | 0.452 | 1.40E-39 | CD4_EM_CTL_spleen |
| ABHD17B  | 4.17E-44 | 0.84686638 | 0.355 | 0.17  | 1.48E-39 | CD4_EM_CTL_spleen |
| MGA      | 5.94E-44 | 0.79814142 | 0.364 | 0.177 | 2.10E-39 | CD4_EM_CTL_spleen |
| LNPEP    | 6.80E-44 | 0.52300335 | 0.599 | 0.372 | 2.41E-39 | CD4_EM_CTL_spleen |
| AKAP10   | 7.67E-44 | 1.05524394 | 0.298 | 0.131 | 2.72E-39 | CD4_EM_CTL_spleen |
| SLA      | 7.92E-44 | 0.74652843 | 0.289 | 0.118 | 2.80E-39 | CD4_EM_CTL_spleen |
| MAPKAP1  | 8.75E-44 | 0.81151757 | 0.44  | 0.24  | 3.10E-39 | CD4_EM_CTL_spleen |
| SIK2     | 9.09E-44 | 1.01262353 | 0.25  | 0.094 | 3.22E-39 | CD4_EM_CTL_spleen |
| CMAH     | 9.68E-44 | 0.67832332 | 0.517 | 0.303 | 3.43E-39 | CD4_EM_CTL_spleen |
| CLASP1   | 9.71E-44 | 0.6524398  | 0.458 | 0.253 | 3.44E-39 | CD4_EM_CTL_spleen |
| SMYD3    | 9.71E-44 | 0.5525205  | 0.612 | 0.379 | 3.44E-39 | CD4_EM_CTL_spleen |
| SLC4A7   | 9.75E-44 | 0.72129116 | 0.476 | 0.265 | 3.45E-39 | CD4_EM_CTL_spleen |
| UBE2B    | 9.89E-44 | 0.51219403 | 0.53  | 0.298 | 3.50E-39 | CD4_EM_CTL_spleen |
| XPO1     | 1.35E-43 | 0.73886642 | 0.406 | 0.21  | 4.78E-39 | CD4_EM_CTL_spleen |
| GBF1     | 1.71E-43 | 0.84538746 | 0.347 | 0.167 | 6.05E-39 | CD4_EM_CTL_spleen |
| BTBD9    | 1.95E-43 | 0.6510736  | 0.523 | 0.308 | 6.92E-39 | CD4_EM_CTL_spleen |
| TBC1D22A | 2.22E-43 | 0.7423924  | 0.451 | 0.248 | 7.88E-39 | CD4_EM_CTL_spleen |
| ANKRD28  | 2.77E-43 | 0.67553447 | 0.558 | 0.35  | 9.82E-39 | CD4_EM_CTL_spleen |
| SETD2    | 3.25E-43 | 0.48605313 | 0.711 | 0.453 | 1.15E-38 | CD4_EM_CTL_spleen |
| NUP98    | 3.30E-43 | 0.60295067 | 0.607 | 0.374 | 1.17E-38 | CD4_EM_CTL_spleen |
| SERTAD2  | 4.71E-43 | 0.90974316 | 0.329 | 0.155 | 1.67E-38 | CD4_EM_CTL_spleen |
| RPS6KA3  | 4.95E-43 | 0.51281865 | 0.569 | 0.344 | 1.75E-38 | CD4_EM_CTL_spleen |
| NDEL1    | 6.04E-43 | 0.84444312 | 0.411 | 0.22  | 2.14E-38 | CD4_EM_CTL_spleen |
| HTT      | 6.38E-43 | 0.72302163 | 0.425 | 0.228 | 2.26E-38 | CD4_EM_CTL_spleen |
| GAS7     | 6.50E-43 | 0.63687546 | 0.422 | 0.223 | 2.30E-38 | CD4_EM_CTL_spleen |
| BTAF1    | 6.64E-43 | 0.63608125 | 0.525 | 0.304 | 2.35E-38 | CD4_EM_CTL_spleen |

|                    |          |            |       |       |          |                   |
|--------------------|----------|------------|-------|-------|----------|-------------------|
| CDK17              | 6.67E-43 | 0.51144793 | 0.688 | 0.451 | 2.36E-38 | CD4_EM_CTL_spleen |
| ENSMMUG00000011588 | 7.19E-43 | 1.22583654 | 0.252 | 0.1   | 2.55E-38 | CD4_EM_CTL_spleen |
| CTCF               | 1.02E-42 | 0.66577586 | 0.467 | 0.258 | 3.62E-38 | CD4_EM_CTL_spleen |
| TRPM7              | 1.33E-42 | 0.47519003 | 0.757 | 0.499 | 4.72E-38 | CD4_EM_CTL_spleen |
| DENND6A            | 1.55E-42 | 0.94804179 | 0.361 | 0.182 | 5.48E-38 | CD4_EM_CTL_spleen |
| WASF2              | 1.84E-42 | 0.53117182 | 0.535 | 0.315 | 6.52E-38 | CD4_EM_CTL_spleen |
| RAB10              | 2.39E-42 | 0.62986925 | 0.441 | 0.24  | 8.48E-38 | CD4_EM_CTL_spleen |
| OGT                | 3.09E-42 | 0.54874765 | 0.619 | 0.389 | 1.09E-37 | CD4_EM_CTL_spleen |
| ARFGEF1            | 3.59E-42 | 0.58132466 | 0.496 | 0.284 | 1.27E-37 | CD4_EM_CTL_spleen |
| CD164              | 4.16E-42 | 0.51813709 | 0.613 | 0.389 | 1.47E-37 | CD4_EM_CTL_spleen |
| BRWD1              | 5.47E-42 | 0.56634227 | 0.53  | 0.31  | 1.94E-37 | CD4_EM_CTL_spleen |
| AHCYL2             | 5.49E-42 | 1.30095176 | 0.266 | 0.111 | 1.94E-37 | CD4_EM_CTL_spleen |
| WDR82              | 5.55E-42 | 0.71334401 | 0.333 | 0.157 | 1.97E-37 | CD4_EM_CTL_spleen |
| SMG1               | 6.14E-42 | 0.62382786 | 0.483 | 0.278 | 2.17E-37 | CD4_EM_CTL_spleen |
| ERC1               | 6.34E-42 | 0.79758419 | 0.428 | 0.238 | 2.25E-37 | CD4_EM_CTL_spleen |
| ARHGAP35           | 7.40E-42 | 0.95207186 | 0.303 | 0.136 | 2.62E-37 | CD4_EM_CTL_spleen |
| FBXW11             | 7.93E-42 | 0.84860962 | 0.35  | 0.173 | 2.81E-37 | CD4_EM_CTL_spleen |
| SDF2L1             | 8.68E-42 | 0.7454297  | 0.357 | 0.175 | 3.08E-37 | CD4_EM_CTL_spleen |
| FRYL               | 9.55E-42 | 0.64572886 | 0.495 | 0.289 | 3.38E-37 | CD4_EM_CTL_spleen |
| FAM172A            | 9.70E-42 | 0.4398741  | 0.758 | 0.501 | 3.44E-37 | CD4_EM_CTL_spleen |
| CEP350             | 1.03E-41 | 0.62863097 | 0.428 | 0.225 | 3.65E-37 | CD4_EM_CTL_spleen |
| IMMP2L             | 1.12E-41 | 0.64520198 | 0.577 | 0.368 | 3.99E-37 | CD4_EM_CTL_spleen |
| TAOK3              | 1.23E-41 | 0.51158568 | 0.608 | 0.379 | 4.36E-37 | CD4_EM_CTL_spleen |
| ZMYND11            | 1.29E-41 | 0.64274627 | 0.478 | 0.27  | 4.56E-37 | CD4_EM_CTL_spleen |
| RHEB               | 1.31E-41 | 0.61002515 | 0.505 | 0.291 | 4.64E-37 | CD4_EM_CTL_spleen |
| PIK3CD             | 1.38E-41 | 0.64584941 | 0.456 | 0.254 | 4.91E-37 | CD4_EM_CTL_spleen |
| RALY               | 1.51E-41 | 0.53489724 | 0.535 | 0.312 | 5.36E-37 | CD4_EM_CTL_spleen |
| RFTN1              | 1.89E-41 | 0.69947328 | 0.407 | 0.218 | 6.69E-37 | CD4_EM_CTL_spleen |
| NUP153             | 3.06E-41 | 0.70520049 | 0.462 | 0.267 | 1.08E-36 | CD4_EM_CTL_spleen |
| IPMK               | 3.21E-41 | 1.22253712 | 0.257 | 0.105 | 1.14E-36 | CD4_EM_CTL_spleen |
| SUCO               | 3.26E-41 | 0.75817797 | 0.475 | 0.273 | 1.15E-36 | CD4_EM_CTL_spleen |
| RAPGEF2            | 4.09E-41 | 0.44572959 | 0.588 | 0.369 | 1.45E-36 | CD4_EM_CTL_spleen |
| RBM14              | 4.10E-41 | 0.50562585 | 0.718 | 0.475 | 1.45E-36 | CD4_EM_CTL_spleen |

|          |          |            |       |       |          |                   |
|----------|----------|------------|-------|-------|----------|-------------------|
| ANKS1A   | 4.15E-41 | 1.00791808 | 0.251 | 0.099 | 1.47E-36 | CD4_EM_CTL_spleen |
| PKN2     | 4.75E-41 | 0.57372422 | 0.566 | 0.348 | 1.68E-36 | CD4_EM_CTL_spleen |
| RNF213   | 5.11E-41 | 0.54716029 | 0.559 | 0.336 | 1.81E-36 | CD4_EM_CTL_spleen |
| ZBED1    | 5.18E-41 | 0.76799972 | 0.389 | 0.202 | 1.84E-36 | CD4_EM_CTL_spleen |
| KLHL18   | 7.84E-41 | 1.06690924 | 0.334 | 0.164 | 2.78E-36 | CD4_EM_CTL_spleen |
| STRN3    | 8.40E-41 | 0.67514701 | 0.437 | 0.244 | 2.98E-36 | CD4_EM_CTL_spleen |
| MGRN1    | 8.85E-41 | 0.75290737 | 0.284 | 0.12  | 3.13E-36 | CD4_EM_CTL_spleen |
| GIGYF2   | 9.10E-41 | 0.62050617 | 0.483 | 0.278 | 3.22E-36 | CD4_EM_CTL_spleen |
| ACTN1    | 9.29E-41 | 0.87238759 | 0.321 | 0.151 | 3.29E-36 | CD4_EM_CTL_spleen |
| NSD3     | 9.42E-41 | 0.4417698  | 0.55  | 0.327 | 3.34E-36 | CD4_EM_CTL_spleen |
| PREP     | 1.09E-40 | 0.84709006 | 0.409 | 0.225 | 3.86E-36 | CD4_EM_CTL_spleen |
| STAMBPL1 | 1.11E-40 | 0.78011406 | 0.327 | 0.155 | 3.94E-36 | CD4_EM_CTL_spleen |
| CEP192   | 1.21E-40 | 0.61790519 | 0.458 | 0.257 | 4.28E-36 | CD4_EM_CTL_spleen |
| UBE2R2   | 1.26E-40 | 0.81119172 | 0.426 | 0.24  | 4.47E-36 | CD4_EM_CTL_spleen |
| CWC27    | 1.54E-40 | 0.7386503  | 0.429 | 0.241 | 5.45E-36 | CD4_EM_CTL_spleen |
| MLLT3    | 2.36E-40 | 0.70838616 | 0.545 | 0.344 | 8.38E-36 | CD4_EM_CTL_spleen |
| PHACTR2  | 2.92E-40 | 0.86562471 | 0.289 | 0.128 | 1.04E-35 | CD4_EM_CTL_spleen |
| SINHCAF  | 2.96E-40 | 0.66675981 | 0.443 | 0.245 | 1.05E-35 | CD4_EM_CTL_spleen |
| RAP1B    | 3.24E-40 | 0.42937885 | 0.89  | 0.687 | 1.15E-35 | CD4_EM_CTL_spleen |
| FEZ2     | 3.44E-40 | 1.01527883 | 0.259 | 0.108 | 1.22E-35 | CD4_EM_CTL_spleen |
| PTPN4    | 4.31E-40 | 0.53185796 | 0.536 | 0.32  | 1.53E-35 | CD4_EM_CTL_spleen |
| CDK8     | 4.85E-40 | 1.02016065 | 0.307 | 0.145 | 1.72E-35 | CD4_EM_CTL_spleen |
| DLG1     | 4.86E-40 | 0.51034418 | 0.652 | 0.415 | 1.72E-35 | CD4_EM_CTL_spleen |
| PSPC1    | 5.08E-40 | 0.54335788 | 0.544 | 0.326 | 1.80E-35 | CD4_EM_CTL_spleen |
| JAK2     | 5.18E-40 | 0.79249189 | 0.358 | 0.181 | 1.84E-35 | CD4_EM_CTL_spleen |
| ROCK2    | 8.83E-40 | 1.0985654  | 0.26  | 0.111 | 3.13E-35 | CD4_EM_CTL_spleen |
| MAF1     | 1.07E-39 | 0.61039316 | 0.289 | 0.126 | 3.77E-35 | CD4_EM_CTL_spleen |
| GPD2     | 1.10E-39 | 0.80673841 | 0.354 | 0.179 | 3.91E-35 | CD4_EM_CTL_spleen |
| CCAR1    | 1.15E-39 | 0.786403   | 0.368 | 0.187 | 4.07E-35 | CD4_EM_CTL_spleen |
| BIRC6    | 1.15E-39 | 0.4253131  | 0.787 | 0.526 | 4.08E-35 | CD4_EM_CTL_spleen |
| DYNC1H1  | 1.18E-39 | 0.81932071 | 0.363 | 0.187 | 4.17E-35 | CD4_EM_CTL_spleen |
| DOCK8    | 1.28E-39 | 0.43369423 | 0.768 | 0.524 | 4.53E-35 | CD4_EM_CTL_spleen |
| CLCN3    | 1.48E-39 | 0.70848626 | 0.351 | 0.174 | 5.24E-35 | CD4_EM_CTL_spleen |

|                    |          |            |       |       |          |                   |
|--------------------|----------|------------|-------|-------|----------|-------------------|
| DARS1              | 1.66E-39 | 0.68630719 | 0.377 | 0.193 | 5.88E-35 | CD4_EM_CTL_spleen |
| DECR1              | 1.71E-39 | 0.69585664 | 0.34  | 0.165 | 6.07E-35 | CD4_EM_CTL_spleen |
| GPRIN3             | 2.22E-39 | 0.80921238 | 0.418 | 0.233 | 7.87E-35 | CD4_EM_CTL_spleen |
| SRPK2              | 2.27E-39 | 0.52287152 | 0.576 | 0.361 | 8.06E-35 | CD4_EM_CTL_spleen |
| RBM39              | 2.40E-39 | 0.36308381 | 0.924 | 0.672 | 8.51E-35 | CD4_EM_CTL_spleen |
| PTK2B              | 2.61E-39 | 0.76187892 | 0.34  | 0.168 | 9.25E-35 | CD4_EM_CTL_spleen |
| CCDC91             | 2.96E-39 | 0.40955998 | 0.692 | 0.437 | 1.05E-34 | CD4_EM_CTL_spleen |
| AKIRIN2            | 4.03E-39 | 0.96567862 | 0.253 | 0.104 | 1.43E-34 | CD4_EM_CTL_spleen |
| WWP1               | 4.09E-39 | 0.75827204 | 0.378 | 0.201 | 1.45E-34 | CD4_EM_CTL_spleen |
| ANKIB1             | 4.36E-39 | 0.68955894 | 0.499 | 0.299 | 1.54E-34 | CD4_EM_CTL_spleen |
| CNOT2              | 4.70E-39 | 0.44451757 | 0.71  | 0.458 | 1.67E-34 | CD4_EM_CTL_spleen |
| ST8SIA4            | 4.94E-39 | 0.5221995  | 0.562 | 0.353 | 1.75E-34 | CD4_EM_CTL_spleen |
| FTO                | 5.26E-39 | 0.76114781 | 0.382 | 0.206 | 1.86E-34 | CD4_EM_CTL_spleen |
| H1-2               | 7.27E-39 | 0.73639633 | 0.353 | 0.178 | 2.58E-34 | CD4_EM_CTL_spleen |
| TRIM22             | 7.69E-39 | 0.60691548 | 0.452 | 0.256 | 2.72E-34 | CD4_EM_CTL_spleen |
| TM9SF3             | 8.75E-39 | 0.45681679 | 0.646 | 0.401 | 3.10E-34 | CD4_EM_CTL_spleen |
| SF3B3              | 1.00E-38 | 0.68672307 | 0.337 | 0.166 | 3.55E-34 | CD4_EM_CTL_spleen |
| NKTR               | 1.05E-38 | 0.5071552  | 0.496 | 0.29  | 3.73E-34 | CD4_EM_CTL_spleen |
| ATF1               | 1.07E-38 | 0.87818213 | 0.276 | 0.12  | 3.78E-34 | CD4_EM_CTL_spleen |
| KRIT1              | 1.44E-38 | 0.65710559 | 0.337 | 0.165 | 5.10E-34 | CD4_EM_CTL_spleen |
| REV3L              | 1.59E-38 | 0.59111714 | 0.478 | 0.275 | 5.64E-34 | CD4_EM_CTL_spleen |
| KDM2B              | 2.04E-38 | 0.73032493 | 0.409 | 0.224 | 7.22E-34 | CD4_EM_CTL_spleen |
| PDZRN3             | 2.16E-38 | 0.78929755 | 0.452 | 0.27  | 7.66E-34 | CD4_EM_CTL_spleen |
| UCKL1              | 2.29E-38 | 0.78732657 | 0.291 | 0.131 | 8.13E-34 | CD4_EM_CTL_spleen |
| HBS1L              | 3.46E-38 | 0.46759671 | 0.632 | 0.401 | 1.23E-33 | CD4_EM_CTL_spleen |
| ZNF217             | 3.83E-38 | 0.75573332 | 0.315 | 0.152 | 1.36E-33 | CD4_EM_CTL_spleen |
| RAPGEF1            | 5.00E-38 | 0.61697654 | 0.517 | 0.315 | 1.77E-33 | CD4_EM_CTL_spleen |
| CEP170             | 5.00E-38 | 0.62054203 | 0.463 | 0.268 | 1.77E-33 | CD4_EM_CTL_spleen |
| MDM4               | 5.91E-38 | 0.62965584 | 0.475 | 0.276 | 2.09E-33 | CD4_EM_CTL_spleen |
| TLK2               | 7.57E-38 | 0.57798007 | 0.46  | 0.264 | 2.68E-33 | CD4_EM_CTL_spleen |
| SURF4              | 8.62E-38 | 0.73424351 | 0.317 | 0.153 | 3.05E-33 | CD4_EM_CTL_spleen |
| ENSMMUG00000010266 | 9.76E-38 | 0.37852123 | 0.785 | 0.55  | 3.46E-33 | CD4_EM_CTL_spleen |
| IL12RB2            | 9.92E-38 | 0.86341001 | 0.297 | 0.139 | 3.51E-33 | CD4_EM_CTL_spleen |

|                    |          |            |       |       |          |                   |
|--------------------|----------|------------|-------|-------|----------|-------------------|
| LSM14A             | 1.58E-37 | 0.44439522 | 0.663 | 0.42  | 5.59E-33 | CD4_EM_CTL_spleen |
| HMBOX1             | 1.89E-37 | 0.79240954 | 0.367 | 0.197 | 6.69E-33 | CD4_EM_CTL_spleen |
| HS2ST1             | 1.90E-37 | 0.90300449 | 0.361 | 0.191 | 6.74E-33 | CD4_EM_CTL_spleen |
| MAP2K5             | 1.97E-37 | 0.70705951 | 0.394 | 0.215 | 7.00E-33 | CD4_EM_CTL_spleen |
| SCAF8              | 2.06E-37 | 0.45192089 | 0.6   | 0.373 | 7.28E-33 | CD4_EM_CTL_spleen |
| ETF1               | 2.26E-37 | 0.56674016 | 0.465 | 0.267 | 8.01E-33 | CD4_EM_CTL_spleen |
| BICRAL             | 2.56E-37 | 0.89932734 | 0.277 | 0.127 | 9.07E-33 | CD4_EM_CTL_spleen |
| ENSMMUG00000006165 | 2.97E-37 | 0.36119608 | 0.849 | 0.593 | 1.05E-32 | CD4_EM_CTL_spleen |
| GPCPD1             | 3.09E-37 | 0.44693896 | 0.6   | 0.379 | 1.09E-32 | CD4_EM_CTL_spleen |
| PPP1R2             | 3.12E-37 | 0.55650012 | 0.488 | 0.285 | 1.10E-32 | CD4_EM_CTL_spleen |
| PIK3R1             | 3.16E-37 | 0.13234128 | 0.568 | 0.336 | 1.12E-32 | CD4_EM_CTL_spleen |
| SCAPER             | 3.21E-37 | 0.43048895 | 0.668 | 0.434 | 1.14E-32 | CD4_EM_CTL_spleen |
| CCT2               | 3.27E-37 | 0.46475771 | 0.559 | 0.34  | 1.16E-32 | CD4_EM_CTL_spleen |
| EPC2               | 3.30E-37 | 0.5868903  | 0.511 | 0.305 | 1.17E-32 | CD4_EM_CTL_spleen |
| CAPRIN1            | 3.36E-37 | 0.71925733 | 0.357 | 0.185 | 1.19E-32 | CD4_EM_CTL_spleen |
| SLTM               | 3.68E-37 | 0.46254994 | 0.562 | 0.346 | 1.30E-32 | CD4_EM_CTL_spleen |
| ENSMMUG00000017297 | 3.81E-37 | 0.65137577 | 0.393 | 0.213 | 1.35E-32 | CD4_EM_CTL_spleen |
| H2AFY              | 3.96E-37 | 0.47149158 | 0.531 | 0.321 | 1.40E-32 | CD4_EM_CTL_spleen |
| NRROS              | 3.96E-37 | 0.65999907 | 0.441 | 0.257 | 1.40E-32 | CD4_EM_CTL_spleen |
| TGFBR3             | 4.17E-37 | 0.75618075 | 0.395 | 0.214 | 1.48E-32 | CD4_EM_CTL_spleen |
| CALR               | 4.36E-37 | 0.46594842 | 0.561 | 0.343 | 1.55E-32 | CD4_EM_CTL_spleen |
| PARP8              | 4.44E-37 | 0.4486409  | 0.518 | 0.308 | 1.57E-32 | CD4_EM_CTL_spleen |
| DEK                | 5.29E-37 | 0.5587785  | 0.369 | 0.193 | 1.87E-32 | CD4_EM_CTL_spleen |
| ARID5B             | 5.90E-37 | 0.60079715 | 0.57  | 0.368 | 2.09E-32 | CD4_EM_CTL_spleen |
| WDR47              | 6.40E-37 | 1.26285258 | 0.254 | 0.112 | 2.27E-32 | CD4_EM_CTL_spleen |
| ZZZ3               | 6.43E-37 | 0.61807747 | 0.474 | 0.28  | 2.28E-32 | CD4_EM_CTL_spleen |
| GATAD2A            | 6.47E-37 | 0.586407   | 0.444 | 0.256 | 2.29E-32 | CD4_EM_CTL_spleen |
| GABPB1             | 7.06E-37 | 0.66435751 | 0.472 | 0.275 | 2.50E-32 | CD4_EM_CTL_spleen |
| XYLT1              | 7.57E-37 | 0.65112703 | 0.479 | 0.287 | 2.68E-32 | CD4_EM_CTL_spleen |
| ZFAND6             | 8.01E-37 | 0.46414164 | 0.702 | 0.462 | 2.84E-32 | CD4_EM_CTL_spleen |
| INPP4B             | 8.81E-37 | 0.66094578 | 0.518 | 0.326 | 3.12E-32 | CD4_EM_CTL_spleen |
| COMT               | 9.88E-37 | 0.35968873 | 0.525 | 0.305 | 3.50E-32 | CD4_EM_CTL_spleen |
| ITK                | 1.03E-36 | 0.46087729 | 0.608 | 0.385 | 3.65E-32 | CD4_EM_CTL_spleen |

|          |          |            |       |       |          |                   |
|----------|----------|------------|-------|-------|----------|-------------------|
| SND1     | 1.11E-36 | 0.61890912 | 0.504 | 0.306 | 3.94E-32 | CD4_EM_CTL_spleen |
| PDIA6    | 1.56E-36 | 0.72340839 | 0.316 | 0.154 | 5.51E-32 | CD4_EM_CTL_spleen |
| VTI1A    | 1.63E-36 | 0.50831879 | 0.623 | 0.412 | 5.77E-32 | CD4_EM_CTL_spleen |
| GRAP2    | 1.69E-36 | 0.70849282 | 0.331 | 0.166 | 6.01E-32 | CD4_EM_CTL_spleen |
| STK26    | 1.86E-36 | 0.509682   | 0.454 | 0.261 | 6.58E-32 | CD4_EM_CTL_spleen |
| IQSEC1   | 1.91E-36 | 0.82857152 | 0.284 | 0.132 | 6.76E-32 | CD4_EM_CTL_spleen |
| SMG6     | 1.96E-36 | 0.49247749 | 0.596 | 0.375 | 6.96E-32 | CD4_EM_CTL_spleen |
| LARP4B   | 2.45E-36 | 0.65983468 | 0.399 | 0.22  | 8.69E-32 | CD4_EM_CTL_spleen |
| ZNF407   | 2.58E-36 | 0.5886153  | 0.52  | 0.321 | 9.13E-32 | CD4_EM_CTL_spleen |
| GLCE     | 2.64E-36 | 0.7721373  | 0.501 | 0.314 | 9.37E-32 | CD4_EM_CTL_spleen |
| RAB21    | 2.70E-36 | 0.84254542 | 0.278 | 0.128 | 9.58E-32 | CD4_EM_CTL_spleen |
| SYAP1    | 3.65E-36 | 0.71948494 | 0.446 | 0.256 | 1.29E-31 | CD4_EM_CTL_spleen |
| SUSD6    | 3.69E-36 | 0.75011179 | 0.376 | 0.204 | 1.31E-31 | CD4_EM_CTL_spleen |
| TRIM44   | 4.75E-36 | 0.66665536 | 0.36  | 0.19  | 1.68E-31 | CD4_EM_CTL_spleen |
| AKAP17A  | 5.06E-36 | 0.86242216 | 0.28  | 0.13  | 1.79E-31 | CD4_EM_CTL_spleen |
| TIA1     | 5.15E-36 | 0.52052201 | 0.434 | 0.245 | 1.83E-31 | CD4_EM_CTL_spleen |
| FUT8     | 5.29E-36 | 0.65956836 | 0.401 | 0.221 | 1.87E-31 | CD4_EM_CTL_spleen |
| ATP2A2   | 5.54E-36 | 0.65352818 | 0.394 | 0.215 | 1.96E-31 | CD4_EM_CTL_spleen |
| AKT3     | 5.62E-36 | 0.43887584 | 0.739 | 0.511 | 1.99E-31 | CD4_EM_CTL_spleen |
| RELL1    | 6.22E-36 | 0.6223462  | 0.494 | 0.301 | 2.20E-31 | CD4_EM_CTL_spleen |
| TBC1D2B  | 6.47E-36 | 0.74807497 | 0.287 | 0.134 | 2.29E-31 | CD4_EM_CTL_spleen |
| LARP1    | 6.61E-36 | 0.89533905 | 0.282 | 0.132 | 2.34E-31 | CD4_EM_CTL_spleen |
| FOXO3    | 8.06E-36 | 0.92655876 | 0.319 | 0.166 | 2.86E-31 | CD4_EM_CTL_spleen |
| LCOR     | 9.36E-36 | 0.50391123 | 0.557 | 0.346 | 3.32E-31 | CD4_EM_CTL_spleen |
| SLMAP    | 9.66E-36 | 0.53518558 | 0.565 | 0.352 | 3.42E-31 | CD4_EM_CTL_spleen |
| YWHAZ    | 1.01E-35 | 0.43319853 | 0.897 | 0.724 | 3.56E-31 | CD4_EM_CTL_spleen |
| LASP1    | 1.06E-35 | 0.46985573 | 0.399 | 0.215 | 3.77E-31 | CD4_EM_CTL_spleen |
| FAM102A  | 1.15E-35 | 0.68622601 | 0.26  | 0.114 | 4.08E-31 | CD4_EM_CTL_spleen |
| EIF4EBP3 | 1.29E-35 | 0.51926769 | 0.515 | 0.31  | 4.58E-31 | CD4_EM_CTL_spleen |
| TPST2    | 1.45E-35 | 0.55013166 | 0.423 | 0.237 | 5.15E-31 | CD4_EM_CTL_spleen |
| ADCY7    | 1.49E-35 | 0.68874424 | 0.283 | 0.131 | 5.27E-31 | CD4_EM_CTL_spleen |
| GTDC1    | 1.54E-35 | 1.0461332  | 0.257 | 0.115 | 5.46E-31 | CD4_EM_CTL_spleen |
| FOXJ3    | 1.54E-35 | 0.48790767 | 0.522 | 0.313 | 5.47E-31 | CD4_EM_CTL_spleen |



|                    |          |            |       |       |          |                   |
|--------------------|----------|------------|-------|-------|----------|-------------------|
| HELZ               | 1.76E-35 | 0.41121535 | 0.637 | 0.413 | 6.25E-31 | CD4_EM_CTL_spleen |
| BBX                | 1.77E-35 | 0.46042979 | 0.585 | 0.366 | 6.28E-31 | CD4_EM_CTL_spleen |
| ENSMMUG00000005482 | 1.89E-35 | 0.61831099 | 0.454 | 0.271 | 6.71E-31 | CD4_EM_CTL_spleen |
| EZH2               | 1.93E-35 | 0.62724508 | 0.454 | 0.271 | 6.83E-31 | CD4_EM_CTL_spleen |
| YPEL3              | 1.94E-35 | 0.5117693  | 0.341 | 0.172 | 6.86E-31 | CD4_EM_CTL_spleen |
| ZNF652             | 2.07E-35 | 0.98143682 | 0.309 | 0.155 | 7.35E-31 | CD4_EM_CTL_spleen |
| ZNF146             | 2.14E-35 | 0.93005994 | 0.282 | 0.133 | 7.57E-31 | CD4_EM_CTL_spleen |
| GRB2               | 2.14E-35 | 0.50248359 | 0.488 | 0.289 | 7.59E-31 | CD4_EM_CTL_spleen |
| ENSMMUG00000058532 | 2.27E-35 | 1.04213601 | 0.296 | 0.145 | 8.04E-31 | CD4_EM_CTL_spleen |
| STAU2              | 2.44E-35 | 0.40309624 | 0.547 | 0.339 | 8.66E-31 | CD4_EM_CTL_spleen |
| MAP3K4             | 2.53E-35 | 0.96983353 | 0.271 | 0.126 | 8.96E-31 | CD4_EM_CTL_spleen |
| ELF1               | 2.57E-35 | 0.42297573 | 0.856 | 0.646 | 9.11E-31 | CD4_EM_CTL_spleen |
| STRBP              | 2.79E-35 | 0.8178284  | 0.314 | 0.156 | 9.87E-31 | CD4_EM_CTL_spleen |
| GON4L              | 3.40E-35 | 0.59658348 | 0.351 | 0.182 | 1.21E-30 | CD4_EM_CTL_spleen |
| IGF2BP3            | 3.86E-35 | 0.67920096 | 0.455 | 0.28  | 1.37E-30 | CD4_EM_CTL_spleen |
| SLC39A11           | 4.19E-35 | 0.7813168  | 0.415 | 0.24  | 1.48E-30 | CD4_EM_CTL_spleen |
| CDK12              | 4.37E-35 | 0.6364732  | 0.391 | 0.217 | 1.55E-30 | CD4_EM_CTL_spleen |
| PHIP               | 4.40E-35 | 0.55992818 | 0.546 | 0.347 | 1.56E-30 | CD4_EM_CTL_spleen |
| SP140              | 4.44E-35 | 0.62265869 | 0.395 | 0.218 | 1.57E-30 | CD4_EM_CTL_spleen |
| AAK1               | 4.86E-35 | 0.49363205 | 0.579 | 0.37  | 1.72E-30 | CD4_EM_CTL_spleen |
| RALGAPA1           | 5.12E-35 | 0.64511447 | 0.388 | 0.215 | 1.81E-30 | CD4_EM_CTL_spleen |
| TMEM201            | 5.29E-35 | 0.90989261 | 0.297 | 0.146 | 1.88E-30 | CD4_EM_CTL_spleen |
| RNGTT              | 5.45E-35 | 0.5186352  | 0.498 | 0.302 | 1.93E-30 | CD4_EM_CTL_spleen |
| ANKFY1             | 5.57E-35 | 0.71375596 | 0.32  | 0.159 | 1.97E-30 | CD4_EM_CTL_spleen |
| TNKS               | 5.88E-35 | 0.43918011 | 0.528 | 0.322 | 2.08E-30 | CD4_EM_CTL_spleen |
| CUL1               | 6.10E-35 | 0.73353548 | 0.35  | 0.185 | 2.16E-30 | CD4_EM_CTL_spleen |
| TESC               | 6.35E-35 | 0.54098514 | 0.532 | 0.344 | 2.25E-30 | CD4_EM_CTL_spleen |
| PARN               | 6.71E-35 | 0.71961708 | 0.348 | 0.184 | 2.38E-30 | CD4_EM_CTL_spleen |
| PHF20L1            | 6.76E-35 | 0.85717704 | 0.3   | 0.148 | 2.40E-30 | CD4_EM_CTL_spleen |
| RNF216             | 7.00E-35 | 0.58236614 | 0.509 | 0.316 | 2.48E-30 | CD4_EM_CTL_spleen |
| GADD45B            | 7.04E-35 | 0.232643   | 0.443 | 0.244 | 2.50E-30 | CD4_EM_CTL_spleen |
| ENSMMUG00000060293 | 8.06E-35 | 1.07267437 | 0.402 | 0.244 | 2.86E-30 | CD4_EM_CTL_spleen |
| DECR2              | 8.74E-35 | 0.65125608 | 0.252 | 0.109 | 3.10E-30 | CD4_EM_CTL_spleen |

|         |          |            |       |       |          |                   |
|---------|----------|------------|-------|-------|----------|-------------------|
| PBRM1   | 8.83E-35 | 0.48380612 | 0.501 | 0.299 | 3.13E-30 | CD4_EM_CTL_spleen |
| KDM3B   | 9.64E-35 | 0.56190108 | 0.456 | 0.268 | 3.41E-30 | CD4_EM_CTL_spleen |
| SLC7A6  | 9.88E-35 | 0.70940201 | 0.334 | 0.173 | 3.50E-30 | CD4_EM_CTL_spleen |
| ZFX     | 1.03E-34 | 0.81097248 | 0.344 | 0.183 | 3.64E-30 | CD4_EM_CTL_spleen |
| BTN2A2  | 1.04E-34 | 0.3822138  | 0.605 | 0.383 | 3.69E-30 | CD4_EM_CTL_spleen |
| SEC63   | 1.09E-34 | 0.53061199 | 0.537 | 0.334 | 3.87E-30 | CD4_EM_CTL_spleen |
| CAST    | 1.12E-34 | 0.52329633 | 0.517 | 0.318 | 3.96E-30 | CD4_EM_CTL_spleen |
| HECA    | 1.17E-34 | 0.76166534 | 0.419 | 0.247 | 4.15E-30 | CD4_EM_CTL_spleen |
| CREB1   | 1.45E-34 | 0.45732379 | 0.453 | 0.262 | 5.15E-30 | CD4_EM_CTL_spleen |
| SPECC1L | 1.66E-34 | 0.50855701 | 0.463 | 0.272 | 5.88E-30 | CD4_EM_CTL_spleen |
| UBXN4   | 1.75E-34 | 0.45313038 | 0.479 | 0.283 | 6.20E-30 | CD4_EM_CTL_spleen |
| SCLT1   | 1.78E-34 | 0.49235458 | 0.495 | 0.3   | 6.30E-30 | CD4_EM_CTL_spleen |
| DENND1B | 1.87E-34 | 0.7903261  | 0.345 | 0.185 | 6.62E-30 | CD4_EM_CTL_spleen |
| ST3GAL3 | 2.03E-34 | 0.90629832 | 0.3   | 0.149 | 7.19E-30 | CD4_EM_CTL_spleen |
| YY1     | 2.03E-34 | 0.58746146 | 0.371 | 0.2   | 7.19E-30 | CD4_EM_CTL_spleen |
| TP53BP2 | 2.05E-34 | 0.84473947 | 0.332 | 0.175 | 7.27E-30 | CD4_EM_CTL_spleen |
| SPG7    | 2.09E-34 | 0.66897426 | 0.28  | 0.131 | 7.41E-30 | CD4_EM_CTL_spleen |
| UBE3A   | 2.43E-34 | 0.62757254 | 0.433 | 0.258 | 8.61E-30 | CD4_EM_CTL_spleen |
| NRF1    | 2.50E-34 | 0.71429948 | 0.391 | 0.22  | 8.85E-30 | CD4_EM_CTL_spleen |
| TRIM33  | 2.62E-34 | 0.51133109 | 0.468 | 0.279 | 9.28E-30 | CD4_EM_CTL_spleen |
| SRSF4   | 2.67E-34 | 0.50594824 | 0.514 | 0.314 | 9.47E-30 | CD4_EM_CTL_spleen |
| IL6ST   | 3.28E-34 | 0.67119098 | 0.495 | 0.325 | 1.16E-29 | CD4_EM_CTL_spleen |
| ATP1B3  | 3.90E-34 | 0.60982939 | 0.456 | 0.273 | 1.38E-29 | CD4_EM_CTL_spleen |
| CCNT1   | 4.00E-34 | 0.71314715 | 0.327 | 0.167 | 1.42E-29 | CD4_EM_CTL_spleen |
| PRKCQ   | 4.29E-34 | 0.4704621  | 0.603 | 0.393 | 1.52E-29 | CD4_EM_CTL_spleen |
| TRIP4   | 4.78E-34 | 0.81748223 | 0.302 | 0.15  | 1.69E-29 | CD4_EM_CTL_spleen |
| DYM     | 4.91E-34 | 0.56253518 | 0.48  | 0.29  | 1.74E-29 | CD4_EM_CTL_spleen |
| UBR2    | 5.20E-34 | 0.57058892 | 0.396 | 0.221 | 1.84E-29 | CD4_EM_CTL_spleen |
| TTC19   | 5.42E-34 | 0.57930087 | 0.373 | 0.202 | 1.92E-29 | CD4_EM_CTL_spleen |
| SMAP2   | 6.67E-34 | 0.44605128 | 0.541 | 0.331 | 2.36E-29 | CD4_EM_CTL_spleen |
| SPTLC2  | 6.82E-34 | 0.82791499 | 0.317 | 0.166 | 2.42E-29 | CD4_EM_CTL_spleen |
| ARHGAP9 | 8.44E-34 | 0.46745756 | 0.367 | 0.192 | 2.99E-29 | CD4_EM_CTL_spleen |
| CDK19   | 1.02E-33 | 0.88280913 | 0.277 | 0.132 | 3.62E-29 | CD4_EM_CTL_spleen |

|                    |          |            |       |       |          |                   |
|--------------------|----------|------------|-------|-------|----------|-------------------|
| SLC20A1            | 1.13E-33 | 0.85740176 | 0.288 | 0.141 | 4.02E-29 | CD4_EM_CTL_spleen |
| RBM33              | 1.25E-33 | 0.43954141 | 0.558 | 0.343 | 4.42E-29 | CD4_EM_CTL_spleen |
| TLK1               | 1.58E-33 | 0.42028034 | 0.612 | 0.391 | 5.59E-29 | CD4_EM_CTL_spleen |
| P4HA1              | 1.96E-33 | 0.70426951 | 0.301 | 0.149 | 6.95E-29 | CD4_EM_CTL_spleen |
| DTNB               | 1.98E-33 | 0.73109176 | 0.371 | 0.205 | 7.03E-29 | CD4_EM_CTL_spleen |
| ATP10A             | 2.38E-33 | 0.4315857  | 0.606 | 0.389 | 8.43E-29 | CD4_EM_CTL_spleen |
| SUPT20H            | 2.38E-33 | 0.57177649 | 0.331 | 0.171 | 8.44E-29 | CD4_EM_CTL_spleen |
| TMPO               | 2.55E-33 | 0.73976889 | 0.279 | 0.132 | 9.04E-29 | CD4_EM_CTL_spleen |
| NEDD4L             | 2.60E-33 | 0.70040594 | 0.381 | 0.216 | 9.20E-29 | CD4_EM_CTL_spleen |
| PTBP3              | 2.62E-33 | 0.39589757 | 0.625 | 0.403 | 9.30E-29 | CD4_EM_CTL_spleen |
| DDX3X              | 3.64E-33 | 0.39408542 | 0.734 | 0.51  | 1.29E-28 | CD4_EM_CTL_spleen |
| WAC                | 3.71E-33 | 0.47993607 | 0.727 | 0.499 | 1.31E-28 | CD4_EM_CTL_spleen |
| TANK               | 3.88E-33 | 0.57457473 | 0.523 | 0.331 | 1.38E-28 | CD4_EM_CTL_spleen |
| NONO               | 4.37E-33 | 0.45744671 | 0.529 | 0.326 | 1.55E-28 | CD4_EM_CTL_spleen |
| BCL2L13            | 4.41E-33 | 0.79381255 | 0.285 | 0.139 | 1.56E-28 | CD4_EM_CTL_spleen |
| OSBPL8             | 5.15E-33 | 0.38670698 | 0.631 | 0.407 | 1.83E-28 | CD4_EM_CTL_spleen |
| BDP1               | 5.64E-33 | 0.51033215 | 0.49  | 0.295 | 2.00E-28 | CD4_EM_CTL_spleen |
| IQGAP2             | 5.85E-33 | 0.55089107 | 0.635 | 0.437 | 2.07E-28 | CD4_EM_CTL_spleen |
| PCF11              | 6.90E-33 | 0.53719179 | 0.348 | 0.184 | 2.44E-28 | CD4_EM_CTL_spleen |
| UBQLN1             | 7.12E-33 | 0.64446267 | 0.373 | 0.207 | 2.52E-28 | CD4_EM_CTL_spleen |
| NLK                | 7.91E-33 | 0.85654951 | 0.283 | 0.14  | 2.80E-28 | CD4_EM_CTL_spleen |
| CRTC1              | 8.21E-33 | 1.04526133 | 0.251 | 0.116 | 2.91E-28 | CD4_EM_CTL_spleen |
| CCDC6              | 1.01E-32 | 0.76404763 | 0.303 | 0.154 | 3.58E-28 | CD4_EM_CTL_spleen |
| IP6K1              | 1.05E-32 | 0.67684872 | 0.357 | 0.198 | 3.71E-28 | CD4_EM_CTL_spleen |
| SRSF6              | 1.11E-32 | 0.4052977  | 0.468 | 0.277 | 3.92E-28 | CD4_EM_CTL_spleen |
| VPS8               | 1.14E-32 | 0.74087439 | 0.353 | 0.195 | 4.04E-28 | CD4_EM_CTL_spleen |
| BAZ1B              | 1.29E-32 | 0.66652395 | 0.317 | 0.162 | 4.58E-28 | CD4_EM_CTL_spleen |
| ASCC1              | 1.46E-32 | 0.691071   | 0.375 | 0.212 | 5.17E-28 | CD4_EM_CTL_spleen |
| ZNF131             | 1.53E-32 | 0.67081569 | 0.404 | 0.236 | 5.44E-28 | CD4_EM_CTL_spleen |
| ENSMMUG00000047277 | 1.59E-32 | 0.2949007  | 0.626 | 0.399 | 5.62E-28 | CD4_EM_CTL_spleen |
| UBR1               | 1.64E-32 | 0.40877741 | 0.565 | 0.358 | 5.82E-28 | CD4_EM_CTL_spleen |
| STARD3NL           | 1.71E-32 | 0.3491628  | 0.405 | 0.22  | 6.05E-28 | CD4_EM_CTL_spleen |
| DIP2B              | 1.81E-32 | 0.37511344 | 0.664 | 0.439 | 6.40E-28 | CD4_EM_CTL_spleen |

|                    |          |            |       |       |          |                   |
|--------------------|----------|------------|-------|-------|----------|-------------------|
| USP24              | 2.04E-32 | 0.61381657 | 0.38  | 0.214 | 7.23E-28 | CD4_EM_CTL_spleen |
| ABL1               | 2.39E-32 | 0.901562   | 0.297 | 0.153 | 8.48E-28 | CD4_EM_CTL_spleen |
| OXNAD1             | 2.44E-32 | 0.86836636 | 0.292 | 0.148 | 8.64E-28 | CD4_EM_CTL_spleen |
| YWHAG              | 2.98E-32 | 0.60733268 | 0.318 | 0.162 | 1.05E-27 | CD4_EM_CTL_spleen |
| AUH                | 3.25E-32 | 0.6697681  | 0.376 | 0.213 | 1.15E-27 | CD4_EM_CTL_spleen |
| HNRNPF             | 3.59E-32 | 0.32743935 | 0.672 | 0.448 | 1.27E-27 | CD4_EM_CTL_spleen |
| RIC1               | 4.22E-32 | 0.56846542 | 0.4   | 0.227 | 1.50E-27 | CD4_EM_CTL_spleen |
| RASA3              | 4.87E-32 | 0.63293629 | 0.411 | 0.242 | 1.73E-27 | CD4_EM_CTL_spleen |
| CD2AP              | 4.94E-32 | 0.60160646 | 0.446 | 0.267 | 1.75E-27 | CD4_EM_CTL_spleen |
| RNF11              | 4.95E-32 | 0.68910583 | 0.288 | 0.143 | 1.75E-27 | CD4_EM_CTL_spleen |
| RSRC1              | 7.04E-32 | 0.51504631 | 0.474 | 0.289 | 2.50E-27 | CD4_EM_CTL_spleen |
| MAP2K6             | 7.13E-32 | 0.69782179 | 0.37  | 0.21  | 2.53E-27 | CD4_EM_CTL_spleen |
| ARFGAP3            | 7.30E-32 | 0.57459988 | 0.466 | 0.286 | 2.59E-27 | CD4_EM_CTL_spleen |
| ENSMMUG00000022610 | 7.37E-32 | 0.5543349  | 0.472 | 0.291 | 2.61E-27 | CD4_EM_CTL_spleen |
| RELCH              | 7.47E-32 | 0.52733767 | 0.411 | 0.236 | 2.65E-27 | CD4_EM_CTL_spleen |
| AHI1               | 7.72E-32 | 0.49449665 | 0.541 | 0.343 | 2.73E-27 | CD4_EM_CTL_spleen |
| MIB1               | 7.75E-32 | 0.64960285 | 0.384 | 0.219 | 2.75E-27 | CD4_EM_CTL_spleen |
| CUL4A              | 8.02E-32 | 0.59365736 | 0.365 | 0.2   | 2.84E-27 | CD4_EM_CTL_spleen |
| ARMH3              | 8.67E-32 | 0.83746048 | 0.309 | 0.162 | 3.07E-27 | CD4_EM_CTL_spleen |
| MAN1A1             | 9.24E-32 | 0.51945957 | 0.424 | 0.246 | 3.27E-27 | CD4_EM_CTL_spleen |
| CD47               | 1.07E-31 | 0.40965564 | 0.444 | 0.261 | 3.79E-27 | CD4_EM_CTL_spleen |
| CD96               | 1.13E-31 | 0.59101493 | 0.427 | 0.254 | 4.01E-27 | CD4_EM_CTL_spleen |
| ILF3               | 1.25E-31 | 0.48648215 | 0.493 | 0.304 | 4.43E-27 | CD4_EM_CTL_spleen |
| TBC1D10C           | 1.30E-31 | 0.38009011 | 0.425 | 0.244 | 4.60E-27 | CD4_EM_CTL_spleen |
| TAF1               | 1.41E-31 | 0.6175852  | 0.334 | 0.177 | 5.01E-27 | CD4_EM_CTL_spleen |
| EPB41              | 1.47E-31 | 0.27083435 | 0.779 | 0.506 | 5.21E-27 | CD4_EM_CTL_spleen |
| ITFG2              | 1.52E-31 | 0.5193463  | 0.391 | 0.221 | 5.40E-27 | CD4_EM_CTL_spleen |
| WDR70              | 1.54E-31 | 0.43516952 | 0.585 | 0.383 | 5.45E-27 | CD4_EM_CTL_spleen |
| ARID2              | 1.54E-31 | 0.40621577 | 0.621 | 0.409 | 5.45E-27 | CD4_EM_CTL_spleen |
| TRIM72             | 1.62E-31 | 0.35109263 | 0.707 | 0.473 | 5.74E-27 | CD4_EM_CTL_spleen |
| ZEB1               | 1.66E-31 | 0.27476102 | 0.76  | 0.513 | 5.89E-27 | CD4_EM_CTL_spleen |
| SAFB2              | 1.83E-31 | 0.65777509 | 0.365 | 0.204 | 6.48E-27 | CD4_EM_CTL_spleen |
| ADNP               | 1.96E-31 | 0.51781387 | 0.452 | 0.273 | 6.94E-27 | CD4_EM_CTL_spleen |

|                    |          |            |       |       |          |                   |
|--------------------|----------|------------|-------|-------|----------|-------------------|
| LCORL              | 1.98E-31 | 0.48206491 | 0.444 | 0.261 | 7.00E-27 | CD4_EM_CTL_spleen |
| MAP4K5             | 2.00E-31 | 0.90678933 | 0.257 | 0.122 | 7.08E-27 | CD4_EM_CTL_spleen |
| OGA                | 2.13E-31 | 0.3867299  | 0.547 | 0.345 | 7.55E-27 | CD4_EM_CTL_spleen |
| ITFG1              | 2.39E-31 | 0.53595328 | 0.448 | 0.271 | 8.47E-27 | CD4_EM_CTL_spleen |
| BTBD7              | 2.52E-31 | 0.76922148 | 0.295 | 0.151 | 8.94E-27 | CD4_EM_CTL_spleen |
| WSB1               | 2.57E-31 | 0.33801562 | 0.583 | 0.371 | 9.11E-27 | CD4_EM_CTL_spleen |
| ADAR               | 2.76E-31 | 0.43717996 | 0.411 | 0.234 | 9.76E-27 | CD4_EM_CTL_spleen |
| HSD17B4            | 2.80E-31 | 0.36487292 | 0.654 | 0.427 | 9.93E-27 | CD4_EM_CTL_spleen |
| ENSMMUG00000063877 | 2.82E-31 | 0.71716587 | 0.338 | 0.186 | 1.00E-26 | CD4_EM_CTL_spleen |
| RAP1A              | 3.31E-31 | 0.33981068 | 0.643 | 0.434 | 1.17E-26 | CD4_EM_CTL_spleen |
| ENSMMUG00000017113 | 3.42E-31 | 0.7349318  | 0.364 | 0.208 | 1.21E-26 | CD4_EM_CTL_spleen |
| ROS1               | 3.43E-31 | 0.77509498 | 0.274 | 0.135 | 1.21E-26 | CD4_EM_CTL_spleen |
| CHIC2              | 4.21E-31 | 0.41320613 | 0.47  | 0.28  | 1.49E-26 | CD4_EM_CTL_spleen |
| TMEM131            | 4.23E-31 | 0.47374261 | 0.52  | 0.326 | 1.50E-26 | CD4_EM_CTL_spleen |
| MARCHF5            | 4.50E-31 | 0.82297311 | 0.255 | 0.122 | 1.59E-26 | CD4_EM_CTL_spleen |
| ABHD12             | 4.72E-31 | 0.65508038 | 0.37  | 0.21  | 1.67E-26 | CD4_EM_CTL_spleen |
| INTS6              | 5.34E-31 | 0.5786672  | 0.465 | 0.287 | 1.89E-26 | CD4_EM_CTL_spleen |
| TDRD3              | 5.77E-31 | 0.59889441 | 0.374 | 0.214 | 2.04E-26 | CD4_EM_CTL_spleen |
| SUZ12              | 6.49E-31 | 0.49895636 | 0.391 | 0.224 | 2.30E-26 | CD4_EM_CTL_spleen |
| NF1                | 7.13E-31 | 0.71044486 | 0.307 | 0.163 | 2.53E-26 | CD4_EM_CTL_spleen |
| MARK2              | 8.16E-31 | 0.68527447 | 0.295 | 0.151 | 2.89E-26 | CD4_EM_CTL_spleen |
| EXT1               | 8.32E-31 | 0.76129571 | 0.333 | 0.186 | 2.95E-26 | CD4_EM_CTL_spleen |
| CTNNB1             | 9.20E-31 | 0.35412038 | 0.624 | 0.399 | 3.26E-26 | CD4_EM_CTL_spleen |
| ORC4               | 9.35E-31 | 0.76030884 | 0.287 | 0.145 | 3.31E-26 | CD4_EM_CTL_spleen |
| MATR3              | 9.45E-31 | 0.33382989 | 0.811 | 0.589 | 3.35E-26 | CD4_EM_CTL_spleen |
| HDAC4              | 1.00E-30 | 0.72143345 | 0.324 | 0.175 | 3.55E-26 | CD4_EM_CTL_spleen |
| SDHAF4             | 1.17E-30 | 0.37677681 | 0.605 | 0.391 | 4.13E-26 | CD4_EM_CTL_spleen |
| KMT5B              | 1.26E-30 | 0.57455518 | 0.377 | 0.215 | 4.45E-26 | CD4_EM_CTL_spleen |
| CD3G               | 1.36E-30 | 0.33154886 | 0.503 | 0.302 | 4.81E-26 | CD4_EM_CTL_spleen |
| PDSS2              | 1.40E-30 | 0.75879506 | 0.34  | 0.188 | 4.96E-26 | CD4_EM_CTL_spleen |
| CRLF3              | 1.71E-30 | 0.56511004 | 0.336 | 0.181 | 6.06E-26 | CD4_EM_CTL_spleen |
| MDN1               | 1.73E-30 | 0.7557532  | 0.337 | 0.188 | 6.13E-26 | CD4_EM_CTL_spleen |
| RAB1A              | 1.76E-30 | 0.41089563 | 0.59  | 0.379 | 6.24E-26 | CD4_EM_CTL_spleen |

|                    |          |            |       |       |          |                   |
|--------------------|----------|------------|-------|-------|----------|-------------------|
| TULP4              | 1.91E-30 | 0.79016282 | 0.292 | 0.151 | 6.76E-26 | CD4_EM_CTL_spleen |
| TNRC6C             | 1.99E-30 | 0.5399731  | 0.357 | 0.199 | 7.05E-26 | CD4_EM_CTL_spleen |
| EWSR1              | 2.02E-30 | 0.45674424 | 0.489 | 0.302 | 7.16E-26 | CD4_EM_CTL_spleen |
| DGKZ               | 2.05E-30 | 0.42275859 | 0.394 | 0.223 | 7.25E-26 | CD4_EM_CTL_spleen |
| DCAF8              | 2.08E-30 | 0.56969489 | 0.374 | 0.212 | 7.36E-26 | CD4_EM_CTL_spleen |
| HP1BP3             | 2.22E-30 | 0.33556456 | 0.532 | 0.333 | 7.86E-26 | CD4_EM_CTL_spleen |
| KPNB1              | 2.47E-30 | 0.52753255 | 0.396 | 0.229 | 8.76E-26 | CD4_EM_CTL_spleen |
| FGD3               | 2.65E-30 | 0.44242644 | 0.525 | 0.328 | 9.39E-26 | CD4_EM_CTL_spleen |
| KDELR2             | 2.90E-30 | 0.57120843 | 0.285 | 0.142 | 1.03E-25 | CD4_EM_CTL_spleen |
| HIPK3              | 3.23E-30 | 0.7155887  | 0.311 | 0.164 | 1.14E-25 | CD4_EM_CTL_spleen |
| COG5               | 3.24E-30 | 0.29936474 | 0.662 | 0.427 | 1.15E-25 | CD4_EM_CTL_spleen |
| FYB1               | 3.27E-30 | 0.3729487  | 0.774 | 0.552 | 1.16E-25 | CD4_EM_CTL_spleen |
| UBL3               | 3.47E-30 | 0.68200244 | 0.352 | 0.198 | 1.23E-25 | CD4_EM_CTL_spleen |
| PDIA3              | 3.61E-30 | 0.48551504 | 0.291 | 0.145 | 1.28E-25 | CD4_EM_CTL_spleen |
| FAM193A            | 4.07E-30 | 0.5692673  | 0.371 | 0.21  | 1.44E-25 | CD4_EM_CTL_spleen |
| FAM214A            | 4.45E-30 | 0.57330537 | 0.411 | 0.245 | 1.58E-25 | CD4_EM_CTL_spleen |
| STAG1              | 4.49E-30 | 0.30850032 | 0.795 | 0.544 | 1.59E-25 | CD4_EM_CTL_spleen |
| TOP2B              | 4.93E-30 | 0.3981315  | 0.51  | 0.32  | 1.75E-25 | CD4_EM_CTL_spleen |
| RNF145             | 5.64E-30 | 0.39886679 | 0.561 | 0.356 | 2.00E-25 | CD4_EM_CTL_spleen |
| TRA2B              | 6.16E-30 | 0.28194923 | 0.906 | 0.681 | 2.18E-25 | CD4_EM_CTL_spleen |
| SMARCA2            | 6.27E-30 | 0.48933955 | 0.405 | 0.238 | 2.22E-25 | CD4_EM_CTL_spleen |
| CABIN1             | 6.73E-30 | 0.55257702 | 0.351 | 0.196 | 2.38E-25 | CD4_EM_CTL_spleen |
| NR4A2              | 6.95E-30 | 0.19949726 | 0.661 | 0.447 | 2.46E-25 | CD4_EM_CTL_spleen |
| ATXN10             | 7.08E-30 | 0.42474811 | 0.568 | 0.367 | 2.51E-25 | CD4_EM_CTL_spleen |
| RNF19A             | 8.90E-30 | 0.48485977 | 0.454 | 0.274 | 3.15E-25 | CD4_EM_CTL_spleen |
| CNST               | 1.16E-29 | 0.47855548 | 0.495 | 0.312 | 4.11E-25 | CD4_EM_CTL_spleen |
| GTPBP8             | 1.33E-29 | 0.75902815 | 0.273 | 0.138 | 4.71E-25 | CD4_EM_CTL_spleen |
| DUSP10             | 1.38E-29 | 0.897137   | 0.33  | 0.186 | 4.89E-25 | CD4_EM_CTL_spleen |
| USP25              | 1.52E-29 | 0.54537275 | 0.404 | 0.239 | 5.38E-25 | CD4_EM_CTL_spleen |
| SUPT3H             | 1.54E-29 | 0.65411177 | 0.393 | 0.233 | 5.45E-25 | CD4_EM_CTL_spleen |
| SSH2               | 1.60E-29 | 0.30832529 | 0.858 | 0.611 | 5.65E-25 | CD4_EM_CTL_spleen |
| ENSMMUG00000011714 | 1.83E-29 | 0.57658433 | 0.3   | 0.156 | 6.50E-25 | CD4_EM_CTL_spleen |
| SPOP               | 1.90E-29 | 0.56151657 | 0.38  | 0.22  | 6.74E-25 | CD4_EM_CTL_spleen |

|                    |          |            |       |       |          |                   |
|--------------------|----------|------------|-------|-------|----------|-------------------|
| ZFC3H1             | 2.01E-29 | 0.46365526 | 0.523 | 0.333 | 7.12E-25 | CD4_EM_CTL_spleen |
| HERC2              | 2.21E-29 | 0.50199766 | 0.434 | 0.26  | 7.83E-25 | CD4_EM_CTL_spleen |
| WWOX               | 2.23E-29 | 0.6073716  | 0.48  | 0.31  | 7.90E-25 | CD4_EM_CTL_spleen |
| SIPA1L1            | 2.58E-29 | 0.51411939 | 0.454 | 0.283 | 9.13E-25 | CD4_EM_CTL_spleen |
| RPS6KB1            | 2.96E-29 | 0.44399613 | 0.506 | 0.317 | 1.05E-24 | CD4_EM_CTL_spleen |
| ENSMMUG00000046264 | 3.14E-29 | 0.57088705 | 0.429 | 0.263 | 1.11E-24 | CD4_EM_CTL_spleen |
| TSC22D2            | 3.24E-29 | 0.76192533 | 0.311 | 0.17  | 1.15E-24 | CD4_EM_CTL_spleen |
| ITGB2              | 3.27E-29 | 0.14427178 | 0.552 | 0.336 | 1.16E-24 | CD4_EM_CTL_spleen |
| SP110              | 3.36E-29 | 0.46939477 | 0.479 | 0.296 | 1.19E-24 | CD4_EM_CTL_spleen |
| CAMLG              | 3.36E-29 | 0.31992359 | 0.435 | 0.254 | 1.19E-24 | CD4_EM_CTL_spleen |
| EIF3B              | 3.38E-29 | 0.68504255 | 0.251 | 0.12  | 1.20E-24 | CD4_EM_CTL_spleen |
| MALT1              | 3.55E-29 | 0.5813266  | 0.353 | 0.197 | 1.26E-24 | CD4_EM_CTL_spleen |
| EFL1               | 3.72E-29 | 0.68845808 | 0.43  | 0.268 | 1.32E-24 | CD4_EM_CTL_spleen |
| ABR                | 3.97E-29 | 0.8809754  | 0.297 | 0.16  | 1.41E-24 | CD4_EM_CTL_spleen |
| MPZL1              | 4.27E-29 | 0.46538662 | 0.44  | 0.268 | 1.51E-24 | CD4_EM_CTL_spleen |
| CASC3              | 4.37E-29 | 0.44255697 | 0.364 | 0.205 | 1.55E-24 | CD4_EM_CTL_spleen |
| FBXL20             | 4.92E-29 | 0.40714062 | 0.536 | 0.34  | 1.74E-24 | CD4_EM_CTL_spleen |
| PLEKHB2            | 4.92E-29 | 0.58180553 | 0.381 | 0.222 | 1.74E-24 | CD4_EM_CTL_spleen |
| SLC35E2            | 4.99E-29 | 0.67937356 | 0.261 | 0.128 | 1.77E-24 | CD4_EM_CTL_spleen |
| ZNF800             | 5.08E-29 | 0.72660027 | 0.271 | 0.135 | 1.80E-24 | CD4_EM_CTL_spleen |
| ABHD3              | 5.25E-29 | 0.64673936 | 0.262 | 0.129 | 1.86E-24 | CD4_EM_CTL_spleen |
| ARPC5L             | 5.80E-29 | 0.43820194 | 0.35  | 0.194 | 2.06E-24 | CD4_EM_CTL_spleen |
| ZBTB11             | 6.01E-29 | 0.71287868 | 0.313 | 0.172 | 2.13E-24 | CD4_EM_CTL_spleen |
| INPP5A             | 6.21E-29 | 0.55234879 | 0.388 | 0.227 | 2.20E-24 | CD4_EM_CTL_spleen |
| RFX3               | 6.73E-29 | 0.3480503  | 0.677 | 0.45  | 2.38E-24 | CD4_EM_CTL_spleen |
| NSRP1              | 7.94E-29 | 0.4093152  | 0.411 | 0.24  | 2.81E-24 | CD4_EM_CTL_spleen |
| ENSMMUG00000060229 | 8.24E-29 | 0.39788513 | 0.437 | 0.263 | 2.92E-24 | CD4_EM_CTL_spleen |
| ATXN7              | 1.23E-28 | 0.40674846 | 0.546 | 0.355 | 4.35E-24 | CD4_EM_CTL_spleen |
| GALNT7             | 1.28E-28 | 0.66369866 | 0.341 | 0.192 | 4.55E-24 | CD4_EM_CTL_spleen |
| DENND4C            | 1.29E-28 | 0.62618247 | 0.373 | 0.219 | 4.59E-24 | CD4_EM_CTL_spleen |
| MORF4L2            | 1.36E-28 | 0.42330531 | 0.372 | 0.208 | 4.82E-24 | CD4_EM_CTL_spleen |
| PPP2R5A            | 1.44E-28 | 0.56069843 | 0.393 | 0.232 | 5.09E-24 | CD4_EM_CTL_spleen |
| P4HB               | 1.67E-28 | 0.5129728  | 0.274 | 0.136 | 5.90E-24 | CD4_EM_CTL_spleen |

|                    |          |            |       |       |          |                   |
|--------------------|----------|------------|-------|-------|----------|-------------------|
| ILKAP              | 1.69E-28 | 0.41527749 | 0.451 | 0.276 | 5.99E-24 | CD4_EM_CTL_spleen |
| ECHDC1             | 1.76E-28 | 0.43584314 | 0.397 | 0.231 | 6.23E-24 | CD4_EM_CTL_spleen |
| ZC3H11A            | 1.84E-28 | 0.34615348 | 0.501 | 0.312 | 6.53E-24 | CD4_EM_CTL_spleen |
| YEATS2             | 1.89E-28 | 0.39036397 | 0.61  | 0.4   | 6.69E-24 | CD4_EM_CTL_spleen |
| WAPL               | 1.98E-28 | 0.42852418 | 0.45  | 0.275 | 7.02E-24 | CD4_EM_CTL_spleen |
| ZNF827             | 2.54E-28 | 0.4409112  | 0.531 | 0.341 | 9.01E-24 | CD4_EM_CTL_spleen |
| ENSMMUG00000054743 | 2.58E-28 | 0.82493873 | 0.28  | 0.147 | 9.13E-24 | CD4_EM_CTL_spleen |
| ENSMMUG00000030374 | 2.64E-28 | 0.68947597 | 0.317 | 0.173 | 9.34E-24 | CD4_EM_CTL_spleen |
| RSF1               | 2.90E-28 | 0.37509294 | 0.624 | 0.413 | 1.03E-23 | CD4_EM_CTL_spleen |
| PIAS1              | 3.14E-28 | 0.33985001 | 0.654 | 0.433 | 1.11E-23 | CD4_EM_CTL_spleen |
| SYNE1              | 3.39E-28 | 0.45326502 | 0.487 | 0.307 | 1.20E-23 | CD4_EM_CTL_spleen |
| ERO1A              | 3.84E-28 | 0.52613494 | 0.252 | 0.121 | 1.36E-23 | CD4_EM_CTL_spleen |
| UIMC1              | 4.00E-28 | 0.49404101 | 0.349 | 0.194 | 1.42E-23 | CD4_EM_CTL_spleen |
| UBE2K              | 4.09E-28 | 0.36973017 | 0.526 | 0.338 | 1.45E-23 | CD4_EM_CTL_spleen |
| ASCC3              | 4.21E-28 | 0.40629379 | 0.51  | 0.32  | 1.49E-23 | CD4_EM_CTL_spleen |
| TMTC2              | 4.23E-28 | 0.93042113 | 0.26  | 0.133 | 1.50E-23 | CD4_EM_CTL_spleen |
| SCFD2              | 4.50E-28 | 0.66388246 | 0.42  | 0.261 | 1.60E-23 | CD4_EM_CTL_spleen |
| ATRN               | 4.54E-28 | 0.65995064 | 0.31  | 0.169 | 1.61E-23 | CD4_EM_CTL_spleen |
| CSNK1G3            | 4.60E-28 | 0.45931728 | 0.457 | 0.285 | 1.63E-23 | CD4_EM_CTL_spleen |
| CHD3               | 4.71E-28 | 0.46299808 | 0.39  | 0.227 | 1.67E-23 | CD4_EM_CTL_spleen |
| PPP1R12B           | 4.74E-28 | 0.79199357 | 0.305 | 0.168 | 1.68E-23 | CD4_EM_CTL_spleen |
| WDR7               | 5.88E-28 | 0.43271121 | 0.493 | 0.314 | 2.08E-23 | CD4_EM_CTL_spleen |
| PPP2R2A            | 6.58E-28 | 0.3826429  | 0.525 | 0.337 | 2.33E-23 | CD4_EM_CTL_spleen |
| USP36              | 6.61E-28 | 0.29554168 | 0.521 | 0.332 | 2.34E-23 | CD4_EM_CTL_spleen |
| KIAA2026           | 6.84E-28 | 0.7758567  | 0.272 | 0.141 | 2.42E-23 | CD4_EM_CTL_spleen |
| MAPK6              | 6.85E-28 | 0.70364442 | 0.332 | 0.191 | 2.43E-23 | CD4_EM_CTL_spleen |
| TRAF5              | 8.49E-28 | 0.56366906 | 0.29  | 0.151 | 3.01E-23 | CD4_EM_CTL_spleen |
| UBR5               | 9.62E-28 | 0.39261438 | 0.552 | 0.362 | 3.41E-23 | CD4_EM_CTL_spleen |
| HLCS               | 1.06E-27 | 0.82154159 | 0.295 | 0.161 | 3.75E-23 | CD4_EM_CTL_spleen |
| WIPF2              | 1.13E-27 | 0.75213454 | 0.279 | 0.146 | 4.00E-23 | CD4_EM_CTL_spleen |
| UBE2G1             | 1.41E-27 | 0.38811997 | 0.488 | 0.304 | 5.01E-23 | CD4_EM_CTL_spleen |
| DIAPH2             | 1.43E-27 | 0.48408483 | 0.5   | 0.325 | 5.07E-23 | CD4_EM_CTL_spleen |
| FAM13B             | 1.52E-27 | 0.51568854 | 0.42  | 0.255 | 5.39E-23 | CD4_EM_CTL_spleen |



|                    |          |            |       |       |          |                   |
|--------------------|----------|------------|-------|-------|----------|-------------------|
| USP4               | 1.91E-27 | 0.55435374 | 0.321 | 0.174 | 6.76E-23 | CD4_EM_CTL_spleen |
| CDC73              | 1.91E-27 | 0.4248712  | 0.487 | 0.304 | 6.77E-23 | CD4_EM_CTL_spleen |
| PTPRA              | 1.95E-27 | 0.44352244 | 0.552 | 0.356 | 6.90E-23 | CD4_EM_CTL_spleen |
| SCAF4              | 2.09E-27 | 0.64258096 | 0.376 | 0.225 | 7.39E-23 | CD4_EM_CTL_spleen |
| TBCK               | 2.15E-27 | 0.73458844 | 0.266 | 0.136 | 7.62E-23 | CD4_EM_CTL_spleen |
| EIF2B3             | 2.54E-27 | 0.59389226 | 0.366 | 0.215 | 8.99E-23 | CD4_EM_CTL_spleen |
| AGO2               | 2.60E-27 | 0.529753   | 0.341 | 0.195 | 9.20E-23 | CD4_EM_CTL_spleen |
| MAP2K1             | 2.64E-27 | 0.74750885 | 0.254 | 0.128 | 9.34E-23 | CD4_EM_CTL_spleen |
| MBNL2              | 2.76E-27 | 0.4108658  | 0.471 | 0.294 | 9.79E-23 | CD4_EM_CTL_spleen |
| MSH3               | 2.94E-27 | 0.63157249 | 0.33  | 0.187 | 1.04E-22 | CD4_EM_CTL_spleen |
| GATAD2B            | 3.25E-27 | 0.38870525 | 0.527 | 0.338 | 1.15E-22 | CD4_EM_CTL_spleen |
| SPTBN1             | 3.28E-27 | 0.48005245 | 0.498 | 0.32  | 1.16E-22 | CD4_EM_CTL_spleen |
| HSPA5              | 3.45E-27 | 0.44066669 | 0.656 | 0.459 | 1.22E-22 | CD4_EM_CTL_spleen |
| BRWD3              | 3.65E-27 | 0.67659916 | 0.29  | 0.154 | 1.29E-22 | CD4_EM_CTL_spleen |
| ENSMMUG00000003854 | 3.69E-27 | 0.41551844 | 0.342 | 0.187 | 1.31E-22 | CD4_EM_CTL_spleen |
| ATP1A1             | 3.90E-27 | 0.56099013 | 0.252 | 0.124 | 1.38E-22 | CD4_EM_CTL_spleen |
| YTHDC2             | 3.93E-27 | 0.69143851 | 0.274 | 0.143 | 1.39E-22 | CD4_EM_CTL_spleen |
| DDX10              | 5.00E-27 | 0.63586517 | 0.343 | 0.199 | 1.77E-22 | CD4_EM_CTL_spleen |
| SLC30A9            | 5.39E-27 | 0.47919595 | 0.39  | 0.233 | 1.91E-22 | CD4_EM_CTL_spleen |
| RSU1               | 5.43E-27 | 0.525902   | 0.434 | 0.268 | 1.92E-22 | CD4_EM_CTL_spleen |
| FXR1               | 5.71E-27 | 0.31815499 | 0.611 | 0.401 | 2.02E-22 | CD4_EM_CTL_spleen |
| SMCHD1             | 5.95E-27 | 0.25066494 | 0.677 | 0.446 | 2.11E-22 | CD4_EM_CTL_spleen |
| ATP9B              | 6.37E-27 | 0.40061309 | 0.476 | 0.302 | 2.26E-22 | CD4_EM_CTL_spleen |
| CRADD              | 6.40E-27 | 0.80515939 | 0.284 | 0.152 | 2.27E-22 | CD4_EM_CTL_spleen |
| RC3H1              | 6.60E-27 | 0.55001813 | 0.334 | 0.189 | 2.34E-22 | CD4_EM_CTL_spleen |
| MAP3K1             | 6.61E-27 | 0.56376477 | 0.42  | 0.264 | 2.34E-22 | CD4_EM_CTL_spleen |
| GATA3              | 6.77E-27 | 0.65836513 | 0.312 | 0.173 | 2.40E-22 | CD4_EM_CTL_spleen |
| TCF20              | 6.84E-27 | 0.6579645  | 0.332 | 0.189 | 2.43E-22 | CD4_EM_CTL_spleen |
| MAPK1              | 6.95E-27 | 0.40993286 | 0.519 | 0.335 | 2.46E-22 | CD4_EM_CTL_spleen |
| CGGBP1             | 7.24E-27 | 0.42665049 | 0.346 | 0.195 | 2.57E-22 | CD4_EM_CTL_spleen |
| DDX39B             | 7.72E-27 | 0.34457298 | 0.454 | 0.279 | 2.74E-22 | CD4_EM_CTL_spleen |
| LMAN1              | 7.94E-27 | 0.39459062 | 0.307 | 0.163 | 2.81E-22 | CD4_EM_CTL_spleen |
| USO1               | 8.42E-27 | 0.5611302  | 0.285 | 0.15  | 2.98E-22 | CD4_EM_CTL_spleen |

|                     |          |            |       |       |          |                   |
|---------------------|----------|------------|-------|-------|----------|-------------------|
| MARCHF6             | 8.76E-27 | 0.2859538  | 0.617 | 0.401 | 3.10E-22 | CD4_EM_CTL_spleen |
| DPH6                | 9.61E-27 | 0.60452342 | 0.337 | 0.194 | 3.41E-22 | CD4_EM_CTL_spleen |
| SYTL3               | 9.62E-27 | 0.37630033 | 0.687 | 0.486 | 3.41E-22 | CD4_EM_CTL_spleen |
| MMD                 | 1.01E-26 | 0.48508277 | 0.302 | 0.163 | 3.59E-22 | CD4_EM_CTL_spleen |
| CELF1               | 1.02E-26 | 0.30768942 | 0.61  | 0.4   | 3.63E-22 | CD4_EM_CTL_spleen |
| ATF2                | 1.05E-26 | 0.48760801 | 0.528 | 0.345 | 3.72E-22 | CD4_EM_CTL_spleen |
| DNM2                | 1.08E-26 | 0.42179449 | 0.39  | 0.231 | 3.81E-22 | CD4_EM_CTL_spleen |
| ENSMMUG000000061125 | 1.14E-26 | 0.55662207 | 0.625 | 0.46  | 4.03E-22 | CD4_EM_CTL_spleen |
| CDYL                | 1.17E-26 | 0.8394975  | 0.297 | 0.166 | 4.15E-22 | CD4_EM_CTL_spleen |
| IPO11               | 1.18E-26 | 0.71614707 | 0.277 | 0.147 | 4.20E-22 | CD4_EM_CTL_spleen |
| SLC22A18            | 1.23E-26 | 0.49773692 | 0.484 | 0.311 | 4.34E-22 | CD4_EM_CTL_spleen |
| JAZF1               | 1.27E-26 | 0.5842179  | 0.355 | 0.208 | 4.49E-22 | CD4_EM_CTL_spleen |
| SAMD4B              | 1.37E-26 | 0.72967613 | 0.298 | 0.163 | 4.85E-22 | CD4_EM_CTL_spleen |
| TRAF3               | 1.45E-26 | 0.68949858 | 0.353 | 0.211 | 5.14E-22 | CD4_EM_CTL_spleen |
| ZZEF1               | 1.46E-26 | 0.49805575 | 0.333 | 0.187 | 5.17E-22 | CD4_EM_CTL_spleen |
| MANF                | 1.48E-26 | 0.49634693 | 0.285 | 0.149 | 5.24E-22 | CD4_EM_CTL_spleen |
| ENSMMUG000000003130 | 1.48E-26 | 0.42437055 | 0.427 | 0.263 | 5.24E-22 | CD4_EM_CTL_spleen |
| KIF5B               | 1.48E-26 | 0.40558534 | 0.48  | 0.302 | 5.26E-22 | CD4_EM_CTL_spleen |
| FOXO1               | 1.51E-26 | 0.49017824 | 0.497 | 0.322 | 5.36E-22 | CD4_EM_CTL_spleen |
| ECPAS               | 1.56E-26 | 0.69403404 | 0.304 | 0.169 | 5.51E-22 | CD4_EM_CTL_spleen |
| PHACTR4             | 1.59E-26 | 0.46742733 | 0.37  | 0.215 | 5.63E-22 | CD4_EM_CTL_spleen |
| ENSMMUG000000039874 | 1.60E-26 | 0.71315613 | 0.265 | 0.138 | 5.67E-22 | CD4_EM_CTL_spleen |
| BANP                | 1.74E-26 | 0.77744646 | 0.263 | 0.137 | 6.16E-22 | CD4_EM_CTL_spleen |
| PBX3                | 1.81E-26 | 0.97235514 | 0.257 | 0.134 | 6.40E-22 | CD4_EM_CTL_spleen |
| FKBP15              | 1.87E-26 | 0.71191957 | 0.253 | 0.127 | 6.62E-22 | CD4_EM_CTL_spleen |
| RNF38               | 1.93E-26 | 0.37462726 | 0.545 | 0.352 | 6.83E-22 | CD4_EM_CTL_spleen |
| VMP1                | 2.26E-26 | 0.41454741 | 0.393 | 0.233 | 8.02E-22 | CD4_EM_CTL_spleen |
| NUCKS1              | 2.30E-26 | 0.31147042 | 0.514 | 0.33  | 8.16E-22 | CD4_EM_CTL_spleen |
| SLAIN2              | 2.45E-26 | 0.650611   | 0.305 | 0.17  | 8.68E-22 | CD4_EM_CTL_spleen |
| SKP1                | 2.46E-26 | 0.25562645 | 0.846 | 0.644 | 8.71E-22 | CD4_EM_CTL_spleen |
| FHIT                | 2.74E-26 | 0.79939397 | 0.319 | 0.184 | 9.70E-22 | CD4_EM_CTL_spleen |
| RETREG1             | 3.03E-26 | 0.48919981 | 0.397 | 0.244 | 1.07E-21 | CD4_EM_CTL_spleen |
| NSMCE2              | 3.06E-26 | 0.50593134 | 0.464 | 0.302 | 1.08E-21 | CD4_EM_CTL_spleen |

|          |          |            |       |       |          |                   |
|----------|----------|------------|-------|-------|----------|-------------------|
| SMG7     | 3.37E-26 | 0.42318081 | 0.452 | 0.283 | 1.19E-21 | CD4_EM_CTL_spleen |
| MGMT     | 3.53E-26 | 0.3804744  | 0.568 | 0.383 | 1.25E-21 | CD4_EM_CTL_spleen |
| ATE1     | 3.63E-26 | 0.61361992 | 0.366 | 0.22  | 1.29E-21 | CD4_EM_CTL_spleen |
| MICU2    | 3.82E-26 | 0.44951322 | 0.432 | 0.266 | 1.35E-21 | CD4_EM_CTL_spleen |
| UBE3C    | 3.92E-26 | 0.41183846 | 0.414 | 0.255 | 1.39E-21 | CD4_EM_CTL_spleen |
| PRRC2C   | 4.15E-26 | 0.28855704 | 0.793 | 0.558 | 1.47E-21 | CD4_EM_CTL_spleen |
| RMDN1    | 4.19E-26 | 0.49821631 | 0.368 | 0.216 | 1.48E-21 | CD4_EM_CTL_spleen |
| AP3B1    | 4.21E-26 | 0.34576888 | 0.563 | 0.373 | 1.49E-21 | CD4_EM_CTL_spleen |
| PCNX1    | 4.94E-26 | 0.49496796 | 0.372 | 0.222 | 1.75E-21 | CD4_EM_CTL_spleen |
| PDZD8    | 5.04E-26 | 0.54118565 | 0.473 | 0.311 | 1.79E-21 | CD4_EM_CTL_spleen |
| UBE2D1   | 5.11E-26 | 0.37717338 | 0.346 | 0.196 | 1.81E-21 | CD4_EM_CTL_spleen |
| FCMR     | 5.41E-26 | 0.29522519 | 0.479 | 0.297 | 1.92E-21 | CD4_EM_CTL_spleen |
| ZNF277   | 5.88E-26 | 0.60356742 | 0.277 | 0.147 | 2.08E-21 | CD4_EM_CTL_spleen |
| AMD1     | 5.95E-26 | 0.33907588 | 0.46  | 0.288 | 2.11E-21 | CD4_EM_CTL_spleen |
| NPTN     | 6.00E-26 | 0.61496725 | 0.33  | 0.189 | 2.12E-21 | CD4_EM_CTL_spleen |
| UBE2D2   | 6.15E-26 | 0.4895148  | 0.273 | 0.141 | 2.18E-21 | CD4_EM_CTL_spleen |
| CAPZA1   | 6.31E-26 | 0.28417755 | 0.705 | 0.487 | 2.23E-21 | CD4_EM_CTL_spleen |
| CPNE1    | 6.44E-26 | 0.23890405 | 0.561 | 0.361 | 2.28E-21 | CD4_EM_CTL_spleen |
| TSC22D4  | 6.49E-26 | 0.58907733 | 0.288 | 0.155 | 2.30E-21 | CD4_EM_CTL_spleen |
| PRKACB   | 7.09E-26 | 0.33441576 | 0.665 | 0.467 | 2.51E-21 | CD4_EM_CTL_spleen |
| FGFR10P2 | 7.21E-26 | 0.25801368 | 0.478 | 0.294 | 2.55E-21 | CD4_EM_CTL_spleen |
| TTC27    | 7.32E-26 | 0.74710581 | 0.273 | 0.147 | 2.59E-21 | CD4_EM_CTL_spleen |
| KPNA1    | 8.23E-26 | 0.42956294 | 0.359 | 0.209 | 2.92E-21 | CD4_EM_CTL_spleen |
| RPRD2    | 8.84E-26 | 0.46052662 | 0.439 | 0.276 | 3.13E-21 | CD4_EM_CTL_spleen |
| TANGO6   | 8.86E-26 | 0.65673413 | 0.339 | 0.198 | 3.14E-21 | CD4_EM_CTL_spleen |
| ETNK1    | 9.06E-26 | 0.40639351 | 0.383 | 0.227 | 3.21E-21 | CD4_EM_CTL_spleen |
| CSTF3    | 9.10E-26 | 0.65660956 | 0.26  | 0.134 | 3.22E-21 | CD4_EM_CTL_spleen |
| RAF1     | 1.00E-25 | 0.41767842 | 0.441 | 0.279 | 3.55E-21 | CD4_EM_CTL_spleen |
| THOC2    | 1.08E-25 | 0.38687001 | 0.443 | 0.276 | 3.83E-21 | CD4_EM_CTL_spleen |
| CAMKMT   | 1.15E-25 | 0.56263216 | 0.457 | 0.3   | 4.08E-21 | CD4_EM_CTL_spleen |
| ZDHHC20  | 1.21E-25 | 0.53114175 | 0.39  | 0.238 | 4.29E-21 | CD4_EM_CTL_spleen |
| MYO1D    | 1.22E-25 | 0.83073072 | 0.255 | 0.134 | 4.32E-21 | CD4_EM_CTL_spleen |
| MAPRE1   | 1.24E-25 | 0.27916805 | 0.438 | 0.265 | 4.41E-21 | CD4_EM_CTL_spleen |

|                   |          |            |       |       |          |                   |
|-------------------|----------|------------|-------|-------|----------|-------------------|
| CHD9              | 1.81E-25 | 0.50444437 | 0.324 | 0.183 | 6.40E-21 | CD4_EM_CTL_spleen |
| SUFU              | 1.81E-25 | 0.69550673 | 0.266 | 0.141 | 6.42E-21 | CD4_EM_CTL_spleen |
| AMBRA1            | 1.83E-25 | 0.49033798 | 0.413 | 0.256 | 6.48E-21 | CD4_EM_CTL_spleen |
| RCOR1             | 1.89E-25 | 0.54462889 | 0.314 | 0.178 | 6.70E-21 | CD4_EM_CTL_spleen |
| YLPM1             | 2.02E-25 | 0.59375646 | 0.305 | 0.17  | 7.15E-21 | CD4_EM_CTL_spleen |
| SENP7             | 2.17E-25 | 0.36220363 | 0.531 | 0.352 | 7.68E-21 | CD4_EM_CTL_spleen |
| DIS3L2            | 2.18E-25 | 0.39715386 | 0.468 | 0.293 | 7.72E-21 | CD4_EM_CTL_spleen |
| USP7              | 2.36E-25 | 0.54564509 | 0.343 | 0.199 | 8.35E-21 | CD4_EM_CTL_spleen |
| ALG13             | 2.58E-25 | 0.47909752 | 0.266 | 0.138 | 9.12E-21 | CD4_EM_CTL_spleen |
| MGAT5             | 2.63E-25 | 0.34071554 | 0.573 | 0.393 | 9.32E-21 | CD4_EM_CTL_spleen |
| MTMR1             | 3.35E-25 | 0.76208624 | 0.287 | 0.16  | 1.19E-20 | CD4_EM_CTL_spleen |
| MRPL10            | 3.59E-25 | 0.3755154  | 0.424 | 0.259 | 1.27E-20 | CD4_EM_CTL_spleen |
| GPATCH8           | 3.63E-25 | 0.30012631 | 0.53  | 0.34  | 1.29E-20 | CD4_EM_CTL_spleen |
| SIPA1L3           | 3.73E-25 | 0.89053068 | 0.256 | 0.135 | 1.32E-20 | CD4_EM_CTL_spleen |
| KIAA0232          | 3.88E-25 | 0.6304371  | 0.335 | 0.198 | 1.38E-20 | CD4_EM_CTL_spleen |
| FOXP1             | 3.94E-25 | 0.37989851 | 0.542 | 0.358 | 1.39E-20 | CD4_EM_CTL_spleen |
| CACUL1            | 4.42E-25 | 0.63688446 | 0.283 | 0.155 | 1.57E-20 | CD4_EM_CTL_spleen |
| PIKFYVE           | 4.68E-25 | 0.65469824 | 0.256 | 0.133 | 1.66E-20 | CD4_EM_CTL_spleen |
| RMND5A            | 4.85E-25 | 0.65624652 | 0.351 | 0.21  | 1.72E-20 | CD4_EM_CTL_spleen |
| SIRPG             | 5.61E-25 | 0.13952799 | 0.341 | 0.186 | 1.99E-20 | CD4_EM_CTL_spleen |
| LUC7L             | 6.06E-25 | 0.44977594 | 0.387 | 0.23  | 2.15E-20 | CD4_EM_CTL_spleen |
| ZNF326            | 6.22E-25 | 0.49548783 | 0.415 | 0.257 | 2.20E-20 | CD4_EM_CTL_spleen |
| CHM               | 6.68E-25 | 0.38731658 | 0.323 | 0.18  | 2.37E-20 | CD4_EM_CTL_spleen |
| ELL               | 6.72E-25 | 0.8161263  | 0.27  | 0.147 | 2.38E-20 | CD4_EM_CTL_spleen |
| MYO9A             | 7.17E-25 | 0.73220203 | 0.272 | 0.147 | 2.54E-20 | CD4_EM_CTL_spleen |
| STAG2             | 7.33E-25 | 0.3177583  | 0.629 | 0.431 | 2.60E-20 | CD4_EM_CTL_spleen |
| HNRNPL            | 8.01E-25 | 0.27821454 | 0.553 | 0.373 | 2.84E-20 | CD4_EM_CTL_spleen |
| SLC23A2           | 8.24E-25 | 0.42942645 | 0.354 | 0.213 | 2.92E-20 | CD4_EM_CTL_spleen |
| ENSMUG00000061824 | 8.28E-25 | 0.45416849 | 0.923 | 0.833 | 2.94E-20 | CD4_EM_CTL_spleen |
| ADK               | 8.76E-25 | 0.4366241  | 0.47  | 0.307 | 3.10E-20 | CD4_EM_CTL_spleen |
| ENSMUG00000063316 | 8.77E-25 | 0.52775656 | 0.516 | 0.358 | 3.11E-20 | CD4_EM_CTL_spleen |
| LIMS1             | 9.00E-25 | 0.36871496 | 0.424 | 0.267 | 3.19E-20 | CD4_EM_CTL_spleen |
| PIBF1             | 9.10E-25 | 0.60156539 | 0.329 | 0.192 | 3.22E-20 | CD4_EM_CTL_spleen |

|          |          |            |       |       |          |                   |
|----------|----------|------------|-------|-------|----------|-------------------|
| WDR26    | 9.17E-25 | 0.48085233 | 0.434 | 0.279 | 3.25E-20 | CD4_EM_CTL_spleen |
| TXLNG    | 9.24E-25 | 0.63506762 | 0.349 | 0.209 | 3.28E-20 | CD4_EM_CTL_spleen |
| NAA50    | 1.02E-24 | 0.46398774 | 0.381 | 0.231 | 3.62E-20 | CD4_EM_CTL_spleen |
| PAPOLA   | 1.07E-24 | 0.27624116 | 0.691 | 0.483 | 3.78E-20 | CD4_EM_CTL_spleen |
| RAD23B   | 1.11E-24 | 0.5261157  | 0.303 | 0.169 | 3.92E-20 | CD4_EM_CTL_spleen |
| NT5DC1   | 1.13E-24 | 0.56903254 | 0.332 | 0.195 | 4.00E-20 | CD4_EM_CTL_spleen |
| TTC17    | 1.14E-24 | 0.33036556 | 0.523 | 0.336 | 4.04E-20 | CD4_EM_CTL_spleen |
| FANCC    | 1.19E-24 | 0.63325288 | 0.33  | 0.193 | 4.22E-20 | CD4_EM_CTL_spleen |
| ATL2     | 1.23E-24 | 0.6039385  | 0.343 | 0.204 | 4.35E-20 | CD4_EM_CTL_spleen |
| LONP2    | 1.35E-24 | 0.4793103  | 0.425 | 0.268 | 4.80E-20 | CD4_EM_CTL_spleen |
| GTF2F2   | 1.50E-24 | 0.57336649 | 0.358 | 0.216 | 5.32E-20 | CD4_EM_CTL_spleen |
| NCK2     | 2.15E-24 | 0.52794426 | 0.313 | 0.18  | 7.63E-20 | CD4_EM_CTL_spleen |
| RBBP6    | 2.20E-24 | 0.52595096 | 0.374 | 0.227 | 7.80E-20 | CD4_EM_CTL_spleen |
| TOB1     | 2.30E-24 | 0.57552123 | 0.319 | 0.187 | 8.15E-20 | CD4_EM_CTL_spleen |
| RPL26    | 2.35E-24 | 0.27770736 | 0.883 | 0.822 | 8.33E-20 | CD4_EM_CTL_spleen |
| SMURF2   | 2.86E-24 | 0.59193236 | 0.293 | 0.166 | 1.01E-19 | CD4_EM_CTL_spleen |
| PCMTD1   | 2.91E-24 | 0.25712935 | 0.493 | 0.315 | 1.03E-19 | CD4_EM_CTL_spleen |
| AVL9     | 3.21E-24 | 0.66324621 | 0.324 | 0.193 | 1.14E-19 | CD4_EM_CTL_spleen |
| AARS1    | 3.30E-24 | 0.38839512 | 0.448 | 0.285 | 1.17E-19 | CD4_EM_CTL_spleen |
| BCLAF1   | 3.31E-24 | 0.29933164 | 0.763 | 0.533 | 1.17E-19 | CD4_EM_CTL_spleen |
| CITED1   | 3.46E-24 | 0.51027377 | 0.341 | 0.2   | 1.22E-19 | CD4_EM_CTL_spleen |
| DHX36    | 5.07E-24 | 0.24651775 | 0.532 | 0.35  | 1.80E-19 | CD4_EM_CTL_spleen |
| USP14    | 5.27E-24 | 0.60397319 | 0.295 | 0.166 | 1.87E-19 | CD4_EM_CTL_spleen |
| KIAA1109 | 5.34E-24 | 0.43794014 | 0.374 | 0.227 | 1.89E-19 | CD4_EM_CTL_spleen |
| FAM168A  | 5.72E-24 | 0.63585158 | 0.351 | 0.213 | 2.03E-19 | CD4_EM_CTL_spleen |
| TMCC1    | 5.75E-24 | 0.38495088 | 0.456 | 0.293 | 2.04E-19 | CD4_EM_CTL_spleen |
| FUBP1    | 6.21E-24 | 0.34102099 | 0.555 | 0.372 | 2.20E-19 | CD4_EM_CTL_spleen |
| XRCC4    | 6.65E-24 | 0.57972339 | 0.298 | 0.169 | 2.36E-19 | CD4_EM_CTL_spleen |
| BTRC     | 6.81E-24 | 0.70269996 | 0.285 | 0.163 | 2.41E-19 | CD4_EM_CTL_spleen |
| TMEM135  | 7.05E-24 | 0.53267198 | 0.384 | 0.242 | 2.50E-19 | CD4_EM_CTL_spleen |
| TMEM59L  | 7.08E-24 | 0.22193165 | 0.325 | 0.182 | 2.51E-19 | CD4_EM_CTL_spleen |
| TENT2    | 7.87E-24 | 0.44721883 | 0.373 | 0.229 | 2.79E-19 | CD4_EM_CTL_spleen |
| UPF2     | 7.96E-24 | 0.35730934 | 0.437 | 0.278 | 2.82E-19 | CD4_EM_CTL_spleen |

|                    |          |            |       |       |          |                   |
|--------------------|----------|------------|-------|-------|----------|-------------------|
| ENSMMUG00000028906 | 8.05E-24 | 0.37426562 | 0.539 | 0.362 | 2.85E-19 | CD4_EM_CTL_spleen |
| ENSMMUG00000016959 | 8.52E-24 | 0.37182404 | 0.454 | 0.291 | 3.02E-19 | CD4_EM_CTL_spleen |
| TNKS2              | 8.70E-24 | 0.4173533  | 0.433 | 0.278 | 3.08E-19 | CD4_EM_CTL_spleen |
| SIN3A              | 8.86E-24 | 0.4079857  | 0.402 | 0.247 | 3.14E-19 | CD4_EM_CTL_spleen |
| DBN1               | 8.86E-24 | 0.48408669 | 0.254 | 0.132 | 3.14E-19 | CD4_EM_CTL_spleen |
| FYTTD1             | 9.27E-24 | 0.37647146 | 0.424 | 0.266 | 3.29E-19 | CD4_EM_CTL_spleen |
| RAB7A              | 9.75E-24 | 0.32611406 | 0.631 | 0.428 | 3.45E-19 | CD4_EM_CTL_spleen |
| FRS2               | 9.82E-24 | 0.64288524 | 0.306 | 0.177 | 3.48E-19 | CD4_EM_CTL_spleen |
| METTL15            | 9.89E-24 | 0.68487056 | 0.26  | 0.14  | 3.50E-19 | CD4_EM_CTL_spleen |
| ENSMMUG00000058818 | 1.12E-23 | 0.60895533 | 0.278 | 0.153 | 3.95E-19 | CD4_EM_CTL_spleen |
| UBR3               | 1.19E-23 | 0.3914668  | 0.459 | 0.297 | 4.20E-19 | CD4_EM_CTL_spleen |
| REST               | 1.24E-23 | 0.60798901 | 0.27  | 0.148 | 4.38E-19 | CD4_EM_CTL_spleen |
| DCAF6              | 1.24E-23 | 0.30419653 | 0.415 | 0.261 | 4.39E-19 | CD4_EM_CTL_spleen |
| PCCA               | 1.31E-23 | 0.35868643 | 0.495 | 0.325 | 4.65E-19 | CD4_EM_CTL_spleen |
| TLE4               | 1.35E-23 | 0.40916857 | 0.487 | 0.32  | 4.77E-19 | CD4_EM_CTL_spleen |
| CERS6              | 1.35E-23 | 0.46055092 | 0.444 | 0.284 | 4.77E-19 | CD4_EM_CTL_spleen |
| CSRNP1             | 1.40E-23 | 0.18426586 | 0.32  | 0.179 | 4.96E-19 | CD4_EM_CTL_spleen |
| WBP1L              | 1.44E-23 | 0.53268938 | 0.351 | 0.211 | 5.11E-19 | CD4_EM_CTL_spleen |
| YTHDF3             | 1.51E-23 | 0.40412654 | 0.46  | 0.295 | 5.34E-19 | CD4_EM_CTL_spleen |
| SRSF7              | 1.52E-23 | 0.22625734 | 0.734 | 0.515 | 5.38E-19 | CD4_EM_CTL_spleen |
| MAML3              | 1.54E-23 | 0.50401668 | 0.466 | 0.31  | 5.47E-19 | CD4_EM_CTL_spleen |
| PPP2R2D            | 1.59E-23 | 0.56701237 | 0.329 | 0.195 | 5.63E-19 | CD4_EM_CTL_spleen |
| RPTOR              | 1.78E-23 | 0.47756158 | 0.408 | 0.26  | 6.30E-19 | CD4_EM_CTL_spleen |
| R3HDM1             | 1.91E-23 | 0.50795097 | 0.34  | 0.204 | 6.76E-19 | CD4_EM_CTL_spleen |
| NBR1               | 2.02E-23 | 0.44154693 | 0.476 | 0.312 | 7.16E-19 | CD4_EM_CTL_spleen |
| APBB2              | 2.05E-23 | 0.74512488 | 0.257 | 0.14  | 7.25E-19 | CD4_EM_CTL_spleen |
| SKAP2              | 2.09E-23 | 0.46773678 | 0.31  | 0.176 | 7.39E-19 | CD4_EM_CTL_spleen |
| GGNBP2             | 2.49E-23 | 0.36339596 | 0.413 | 0.256 | 8.82E-19 | CD4_EM_CTL_spleen |
| IVNS1ABP           | 2.63E-23 | 0.36107499 | 0.437 | 0.279 | 9.33E-19 | CD4_EM_CTL_spleen |
| EXOC6B             | 2.71E-23 | 0.43141512 | 0.456 | 0.295 | 9.61E-19 | CD4_EM_CTL_spleen |
| RRAS2              | 2.72E-23 | 0.39484016 | 0.446 | 0.291 | 9.64E-19 | CD4_EM_CTL_spleen |
| PCM1               | 2.86E-23 | 0.27344755 | 0.522 | 0.339 | 1.01E-18 | CD4_EM_CTL_spleen |
| SLC35B1            | 3.00E-23 | 0.38809248 | 0.4   | 0.248 | 1.06E-18 | CD4_EM_CTL_spleen |

|                     |          |            |       |       |          |                   |
|---------------------|----------|------------|-------|-------|----------|-------------------|
| MAN1A2              | 3.03E-23 | 0.43074337 | 0.458 | 0.299 | 1.07E-18 | CD4_EM_CTL_spleen |
| ENSMMUG000000061756 | 3.06E-23 | 0.52137271 | 0.3   | 0.17  | 1.09E-18 | CD4_EM_CTL_spleen |
| PPA2                | 3.19E-23 | 0.50206139 | 0.274 | 0.149 | 1.13E-18 | CD4_EM_CTL_spleen |
| ATP2C1              | 3.23E-23 | 0.40790414 | 0.417 | 0.267 | 1.15E-18 | CD4_EM_CTL_spleen |
| CSNK1A1             | 3.34E-23 | 0.29133628 | 0.676 | 0.458 | 1.18E-18 | CD4_EM_CTL_spleen |
| IFT80               | 3.37E-23 | 0.26707268 | 0.486 | 0.319 | 1.19E-18 | CD4_EM_CTL_spleen |
| SREK1               | 3.67E-23 | 0.31580332 | 0.658 | 0.455 | 1.30E-18 | CD4_EM_CTL_spleen |
| OXR1                | 3.82E-23 | 0.44808322 | 0.359 | 0.217 | 1.35E-18 | CD4_EM_CTL_spleen |
| ENSMMUG000000012203 | 3.84E-23 | 0.66696721 | 0.353 | 0.219 | 1.36E-18 | CD4_EM_CTL_spleen |
| UBAP1               | 3.90E-23 | 0.37544843 | 0.478 | 0.309 | 1.38E-18 | CD4_EM_CTL_spleen |
| GAPVD1              | 4.28E-23 | 0.42111234 | 0.408 | 0.256 | 1.51E-18 | CD4_EM_CTL_spleen |
| INO80               | 5.00E-23 | 0.46416217 | 0.314 | 0.181 | 1.77E-18 | CD4_EM_CTL_spleen |
| SMC4                | 5.18E-23 | 0.32910333 | 0.661 | 0.477 | 1.84E-18 | CD4_EM_CTL_spleen |
| SPG11               | 5.20E-23 | 0.60437994 | 0.277 | 0.154 | 1.84E-18 | CD4_EM_CTL_spleen |
| HECTD1              | 5.31E-23 | 0.37213148 | 0.331 | 0.194 | 1.88E-18 | CD4_EM_CTL_spleen |
| POGZ                | 5.59E-23 | 0.29984679 | 0.419 | 0.263 | 1.98E-18 | CD4_EM_CTL_spleen |
| AFTPH               | 5.64E-23 | 0.47967893 | 0.432 | 0.279 | 2.00E-18 | CD4_EM_CTL_spleen |
| CHST12              | 5.82E-23 | 0.42800186 | 0.254 | 0.135 | 2.06E-18 | CD4_EM_CTL_spleen |
| AKAP9               | 6.65E-23 | 0.26708678 | 0.622 | 0.433 | 2.36E-18 | CD4_EM_CTL_spleen |
| MYO6                | 7.09E-23 | 0.45730265 | 0.356 | 0.22  | 2.51E-18 | CD4_EM_CTL_spleen |
| WARS2               | 7.31E-23 | 0.45107978 | 0.317 | 0.183 | 2.59E-18 | CD4_EM_CTL_spleen |
| NAPG                | 7.34E-23 | 0.46975579 | 0.331 | 0.198 | 2.60E-18 | CD4_EM_CTL_spleen |
| RYBP                | 7.35E-23 | 0.55130044 | 0.333 | 0.2   | 2.60E-18 | CD4_EM_CTL_spleen |
| CASK                | 7.44E-23 | 0.5317682  | 0.34  | 0.206 | 2.64E-18 | CD4_EM_CTL_spleen |
| FMC1-LUC7L2         | 8.36E-23 | 0.25022761 | 0.741 | 0.528 | 2.96E-18 | CD4_EM_CTL_spleen |
| TTC14               | 8.52E-23 | 0.45598077 | 0.316 | 0.184 | 3.02E-18 | CD4_EM_CTL_spleen |
| LUC7L3              | 8.78E-23 | 0.23668786 | 0.62  | 0.412 | 3.11E-18 | CD4_EM_CTL_spleen |
| CCDC66              | 9.88E-23 | 0.3343621  | 0.332 | 0.195 | 3.50E-18 | CD4_EM_CTL_spleen |
| SAMD8               | 1.08E-22 | 0.64857628 | 0.258 | 0.141 | 3.83E-18 | CD4_EM_CTL_spleen |
| ESYT1               | 1.09E-22 | 0.38774599 | 0.337 | 0.2   | 3.86E-18 | CD4_EM_CTL_spleen |
| SPEN                | 1.14E-22 | 0.43637977 | 0.404 | 0.255 | 4.06E-18 | CD4_EM_CTL_spleen |
| RICTOR              | 1.16E-22 | 0.20653565 | 0.641 | 0.423 | 4.11E-18 | CD4_EM_CTL_spleen |
| TOX4                | 1.22E-22 | 0.37258734 | 0.347 | 0.206 | 4.33E-18 | CD4_EM_CTL_spleen |

|             |          |            |       |       |          |                   |
|-------------|----------|------------|-------|-------|----------|-------------------|
| KHDRBS1     | 1.27E-22 | 0.30315712 | 0.388 | 0.238 | 4.51E-18 | CD4_EM_CTL_spleen |
| TASP1       | 1.30E-22 | 0.42801767 | 0.428 | 0.276 | 4.59E-18 | CD4_EM_CTL_spleen |
| MTHFD1L     | 1.41E-22 | 0.63329881 | 0.356 | 0.223 | 5.01E-18 | CD4_EM_CTL_spleen |
| RNF10       | 1.48E-22 | 0.49628502 | 0.309 | 0.18  | 5.24E-18 | CD4_EM_CTL_spleen |
| TMC6        | 1.57E-22 | 0.36075395 | 0.297 | 0.169 | 5.56E-18 | CD4_EM_CTL_spleen |
| PPP1R16B    | 1.72E-22 | 0.33177999 | 0.51  | 0.345 | 6.09E-18 | CD4_EM_CTL_spleen |
| IRAK2       | 1.81E-22 | 0.46160371 | 0.428 | 0.277 | 6.41E-18 | CD4_EM_CTL_spleen |
| CDK5RAP2    | 1.89E-22 | 0.60459681 | 0.266 | 0.149 | 6.71E-18 | CD4_EM_CTL_spleen |
| ZNF644      | 1.99E-22 | 0.28118234 | 0.642 | 0.437 | 7.05E-18 | CD4_EM_CTL_spleen |
| CLINT1      | 2.11E-22 | 0.29729563 | 0.6   | 0.412 | 7.46E-18 | CD4_EM_CTL_spleen |
| SPPL3       | 2.18E-22 | 0.30605981 | 0.583 | 0.394 | 7.71E-18 | CD4_EM_CTL_spleen |
| SYNCRIP     | 2.24E-22 | 0.32575879 | 0.442 | 0.285 | 7.92E-18 | CD4_EM_CTL_spleen |
| TRPC4AP     | 2.37E-22 | 0.4589394  | 0.366 | 0.225 | 8.40E-18 | CD4_EM_CTL_spleen |
| INPP4A      | 2.39E-22 | 0.45311849 | 0.413 | 0.267 | 8.48E-18 | CD4_EM_CTL_spleen |
| C18H18orf25 | 2.71E-22 | 0.54003509 | 0.374 | 0.238 | 9.60E-18 | CD4_EM_CTL_spleen |
| CMTM6       | 3.10E-22 | 0.28313185 | 0.515 | 0.345 | 1.10E-17 | CD4_EM_CTL_spleen |
| CMPK1       | 3.42E-22 | 0.36690368 | 0.277 | 0.151 | 1.21E-17 | CD4_EM_CTL_spleen |
| ST6GALNAC3  | 3.55E-22 | 0.66827237 | 0.266 | 0.148 | 1.26E-17 | CD4_EM_CTL_spleen |
| GMPS        | 3.58E-22 | 0.47888608 | 0.298 | 0.17  | 1.27E-17 | CD4_EM_CTL_spleen |
| MAT2B       | 3.79E-22 | 0.33809296 | 0.255 | 0.135 | 1.34E-17 | CD4_EM_CTL_spleen |
| CYTIP       | 3.81E-22 | 0.37077902 | 0.548 | 0.375 | 1.35E-17 | CD4_EM_CTL_spleen |
| PDS5B       | 3.94E-22 | 0.36940552 | 0.485 | 0.318 | 1.40E-17 | CD4_EM_CTL_spleen |
| TNPO3       | 4.04E-22 | 0.48442425 | 0.335 | 0.203 | 1.43E-17 | CD4_EM_CTL_spleen |
| EP400       | 4.12E-22 | 0.66914254 | 0.275 | 0.156 | 1.46E-17 | CD4_EM_CTL_spleen |
| ACBD3       | 4.27E-22 | 0.53168044 | 0.27  | 0.151 | 1.51E-17 | CD4_EM_CTL_spleen |
| DDX42       | 4.80E-22 | 0.50569902 | 0.271 | 0.152 | 1.70E-17 | CD4_EM_CTL_spleen |
| RTN4        | 5.06E-22 | 0.47334202 | 0.394 | 0.25  | 1.79E-17 | CD4_EM_CTL_spleen |
| SNX13       | 5.14E-22 | 0.41205125 | 0.399 | 0.251 | 1.82E-17 | CD4_EM_CTL_spleen |
| VPS41       | 5.25E-22 | 0.55623549 | 0.288 | 0.164 | 1.86E-17 | CD4_EM_CTL_spleen |
| SASH3       | 5.29E-22 | 0.31898906 | 0.274 | 0.15  | 1.88E-17 | CD4_EM_CTL_spleen |
| PPP4R3A     | 5.35E-22 | 0.37712287 | 0.366 | 0.225 | 1.90E-17 | CD4_EM_CTL_spleen |
| ASB3        | 5.95E-22 | 0.47149067 | 0.347 | 0.213 | 2.11E-17 | CD4_EM_CTL_spleen |
| PRKAG2      | 6.29E-22 | 0.66644153 | 0.281 | 0.161 | 2.23E-17 | CD4_EM_CTL_spleen |



|                     |          |            |       |       |          |                   |
|---------------------|----------|------------|-------|-------|----------|-------------------|
| FBXL4               | 7.32E-22 | 0.61255941 | 0.274 | 0.158 | 2.59E-17 | CD4_EM_CTL_spleen |
| NADSYN1             | 7.82E-22 | 0.45068956 | 0.336 | 0.202 | 2.77E-17 | CD4_EM_CTL_spleen |
| ACIN1               | 7.94E-22 | 0.29331363 | 0.544 | 0.359 | 2.81E-17 | CD4_EM_CTL_spleen |
| FNBP1L              | 8.68E-22 | 0.54680567 | 0.256 | 0.14  | 3.07E-17 | CD4_EM_CTL_spleen |
| ATP11B              | 9.00E-22 | 0.44157987 | 0.444 | 0.291 | 3.19E-17 | CD4_EM_CTL_spleen |
| ESCO1               | 9.04E-22 | 0.37744842 | 0.488 | 0.323 | 3.20E-17 | CD4_EM_CTL_spleen |
| UBE2E3              | 9.12E-22 | 0.47806131 | 0.361 | 0.226 | 3.23E-17 | CD4_EM_CTL_spleen |
| NAA15               | 1.02E-21 | 0.46494328 | 0.349 | 0.212 | 3.62E-17 | CD4_EM_CTL_spleen |
| CARMIL1             | 1.03E-21 | 0.41542517 | 0.33  | 0.2   | 3.65E-17 | CD4_EM_CTL_spleen |
| PRPSAP2             | 1.09E-21 | 0.56229037 | 0.273 | 0.154 | 3.87E-17 | CD4_EM_CTL_spleen |
| PELI2               | 1.23E-21 | 0.76266599 | 0.252 | 0.141 | 4.36E-17 | CD4_EM_CTL_spleen |
| RAB2A               | 1.25E-21 | 0.21711906 | 0.653 | 0.434 | 4.42E-17 | CD4_EM_CTL_spleen |
| SERPINB9            | 1.25E-21 | 0.25987298 | 0.376 | 0.23  | 4.44E-17 | CD4_EM_CTL_spleen |
| SNX25               | 1.30E-21 | 0.47046578 | 0.311 | 0.185 | 4.62E-17 | CD4_EM_CTL_spleen |
| NBEAL1              | 1.35E-21 | 0.29017377 | 0.444 | 0.286 | 4.77E-17 | CD4_EM_CTL_spleen |
| GNAL                | 1.36E-21 | 0.30524206 | 0.319 | 0.187 | 4.82E-17 | CD4_EM_CTL_spleen |
| UHMK1               | 1.69E-21 | 0.38003694 | 0.336 | 0.203 | 5.99E-17 | CD4_EM_CTL_spleen |
| NSF                 | 1.79E-21 | 0.40105209 | 0.493 | 0.335 | 6.35E-17 | CD4_EM_CTL_spleen |
| KMT2E               | 1.79E-21 | 0.28656349 | 0.708 | 0.49  | 6.35E-17 | CD4_EM_CTL_spleen |
| RTN3                | 1.82E-21 | 0.28842081 | 0.411 | 0.259 | 6.46E-17 | CD4_EM_CTL_spleen |
| NCK1                | 1.90E-21 | 0.30948664 | 0.463 | 0.305 | 6.71E-17 | CD4_EM_CTL_spleen |
| ENSMMUG000000062086 | 2.17E-21 | 0.10739499 | 0.46  | 0.29  | 7.70E-17 | CD4_EM_CTL_spleen |
| PDCD6IP             | 2.38E-21 | 0.34663939 | 0.44  | 0.285 | 8.42E-17 | CD4_EM_CTL_spleen |
| ENSMMUG000000032231 | 2.40E-21 | 0.45959086 | 0.259 | 0.142 | 8.50E-17 | CD4_EM_CTL_spleen |
| HDAC7               | 2.54E-21 | 0.35898659 | 0.372 | 0.23  | 9.00E-17 | CD4_EM_CTL_spleen |
| RPL23A              | 2.56E-21 | 0.21389728 | 0.949 | 0.957 | 9.07E-17 | CD4_EM_CTL_spleen |
| EIPR1               | 2.65E-21 | 0.41084081 | 0.348 | 0.213 | 9.40E-17 | CD4_EM_CTL_spleen |
| PTGES3              | 2.70E-21 | 0.22688659 | 0.761 | 0.562 | 9.58E-17 | CD4_EM_CTL_spleen |
| FOCAD               | 2.96E-21 | 0.54454979 | 0.275 | 0.16  | 1.05E-16 | CD4_EM_CTL_spleen |
| ENSMMUG000000006803 | 3.29E-21 | 0.34341829 | 0.474 | 0.313 | 1.17E-16 | CD4_EM_CTL_spleen |
| EXOC2               | 3.43E-21 | 0.58605038 | 0.302 | 0.18  | 1.22E-16 | CD4_EM_CTL_spleen |
| ZBTB44              | 3.49E-21 | 0.48105919 | 0.258 | 0.142 | 1.24E-16 | CD4_EM_CTL_spleen |
| YAF2                | 3.82E-21 | 0.35549018 | 0.518 | 0.357 | 1.35E-16 | CD4_EM_CTL_spleen |

|                    |          |            |       |       |          |                   |
|--------------------|----------|------------|-------|-------|----------|-------------------|
| UXS1               | 3.91E-21 | 0.3676725  | 0.517 | 0.356 | 1.39E-16 | CD4_EM_CTL_spleen |
| NLRC3              | 4.45E-21 | 0.49336816 | 0.261 | 0.147 | 1.58E-16 | CD4_EM_CTL_spleen |
| OGDH               | 4.86E-21 | 0.41697582 | 0.316 | 0.187 | 1.72E-16 | CD4_EM_CTL_spleen |
| CACYBP             | 5.60E-21 | 0.2361561  | 0.539 | 0.361 | 1.98E-16 | CD4_EM_CTL_spleen |
| ASXL1              | 5.63E-21 | 0.67880142 | 0.258 | 0.146 | 1.99E-16 | CD4_EM_CTL_spleen |
| CYTH1              | 6.03E-21 | 0.33411963 | 0.547 | 0.378 | 2.14E-16 | CD4_EM_CTL_spleen |
| HDLBP              | 6.07E-21 | 0.2731318  | 0.321 | 0.189 | 2.15E-16 | CD4_EM_CTL_spleen |
| KIAA1328           | 6.43E-21 | 0.49580289 | 0.357 | 0.224 | 2.28E-16 | CD4_EM_CTL_spleen |
| RBM25              | 6.51E-21 | 0.27422492 | 0.549 | 0.367 | 2.31E-16 | CD4_EM_CTL_spleen |
| DMXL1              | 7.26E-21 | 0.47442016 | 0.301 | 0.177 | 2.57E-16 | CD4_EM_CTL_spleen |
| RAP1GDS1           | 7.28E-21 | 0.42750245 | 0.358 | 0.224 | 2.58E-16 | CD4_EM_CTL_spleen |
| CSK                | 7.61E-21 | 0.18992708 | 0.36  | 0.222 | 2.70E-16 | CD4_EM_CTL_spleen |
| PPP2R5C            | 7.78E-21 | 0.2147311  | 0.756 | 0.548 | 2.76E-16 | CD4_EM_CTL_spleen |
| ENSMMUG00000015274 | 8.63E-21 | 0.31694531 | 0.306 | 0.178 | 3.06E-16 | CD4_EM_CTL_spleen |
| RASSF5             | 8.82E-21 | 0.23017153 | 0.294 | 0.168 | 3.12E-16 | CD4_EM_CTL_spleen |
| SPINT2             | 9.04E-21 | 0.19699909 | 0.29  | 0.163 | 3.20E-16 | CD4_EM_CTL_spleen |
| NDUFAF2            | 9.25E-21 | 0.54128405 | 0.311 | 0.189 | 3.28E-16 | CD4_EM_CTL_spleen |
| STRN               | 9.31E-21 | 0.65881011 | 0.255 | 0.143 | 3.30E-16 | CD4_EM_CTL_spleen |
| TRIM24             | 1.01E-20 | 0.47513552 | 0.308 | 0.184 | 3.57E-16 | CD4_EM_CTL_spleen |
| ANKRD12            | 1.03E-20 | 0.19173612 | 0.642 | 0.44  | 3.64E-16 | CD4_EM_CTL_spleen |
| CCNK               | 1.09E-20 | 0.29554935 | 0.463 | 0.303 | 3.85E-16 | CD4_EM_CTL_spleen |
| SUCLG2             | 1.16E-20 | 0.26540169 | 0.548 | 0.372 | 4.12E-16 | CD4_EM_CTL_spleen |
| LRRC8D             | 1.18E-20 | 0.52338938 | 0.259 | 0.146 | 4.18E-16 | CD4_EM_CTL_spleen |
| SP3                | 1.18E-20 | 0.397171   | 0.4   | 0.256 | 4.19E-16 | CD4_EM_CTL_spleen |
| PDLIM2             | 1.20E-20 | 0.18925944 | 0.372 | 0.227 | 4.26E-16 | CD4_EM_CTL_spleen |
| UBE2Q2             | 1.21E-20 | 0.51506742 | 0.369 | 0.239 | 4.29E-16 | CD4_EM_CTL_spleen |
| KBTBD2             | 1.22E-20 | 0.51292389 | 0.295 | 0.174 | 4.32E-16 | CD4_EM_CTL_spleen |
| SLC10A7            | 1.23E-20 | 0.51720218 | 0.302 | 0.181 | 4.37E-16 | CD4_EM_CTL_spleen |
| MTMR3              | 1.30E-20 | 0.46509919 | 0.36  | 0.227 | 4.62E-16 | CD4_EM_CTL_spleen |
| ACTR3              | 1.68E-20 | 0.17553329 | 0.692 | 0.488 | 5.96E-16 | CD4_EM_CTL_spleen |
| PPP4R3B            | 1.70E-20 | 0.32466834 | 0.415 | 0.268 | 6.03E-16 | CD4_EM_CTL_spleen |
| RSBN1L             | 1.71E-20 | 0.32752735 | 0.346 | 0.213 | 6.07E-16 | CD4_EM_CTL_spleen |
| SEC31A             | 1.84E-20 | 0.261876   | 0.542 | 0.368 | 6.53E-16 | CD4_EM_CTL_spleen |

|                    |          |            |       |       |          |                   |
|--------------------|----------|------------|-------|-------|----------|-------------------|
| STAT5B             | 1.87E-20 | 0.37094105 | 0.425 | 0.281 | 6.63E-16 | CD4_EM_CTL_spleen |
| DNAJB14            | 2.11E-20 | 0.37383999 | 0.366 | 0.229 | 7.48E-16 | CD4_EM_CTL_spleen |
| DAP3               | 2.18E-20 | 0.52080634 | 0.288 | 0.171 | 7.74E-16 | CD4_EM_CTL_spleen |
| LRRFIP2            | 2.34E-20 | 0.58181919 | 0.306 | 0.186 | 8.30E-16 | CD4_EM_CTL_spleen |
| FAR1               | 2.39E-20 | 0.36403896 | 0.441 | 0.288 | 8.47E-16 | CD4_EM_CTL_spleen |
| SBNO1              | 2.50E-20 | 0.39596727 | 0.32  | 0.196 | 8.84E-16 | CD4_EM_CTL_spleen |
| DGKA               | 3.00E-20 | 0.28766325 | 0.43  | 0.278 | 1.06E-15 | CD4_EM_CTL_spleen |
| AHCTF1             | 3.39E-20 | 0.37825007 | 0.384 | 0.241 | 1.20E-15 | CD4_EM_CTL_spleen |
| RALGAPA2           | 3.65E-20 | 0.38418571 | 0.415 | 0.272 | 1.29E-15 | CD4_EM_CTL_spleen |
| NEMF               | 3.79E-20 | 0.25142094 | 0.425 | 0.273 | 1.34E-15 | CD4_EM_CTL_spleen |
| DNAJC3             | 3.84E-20 | 0.29832609 | 0.492 | 0.328 | 1.36E-15 | CD4_EM_CTL_spleen |
| RABGAP1            | 4.02E-20 | 0.59239692 | 0.273 | 0.158 | 1.43E-15 | CD4_EM_CTL_spleen |
| EFHD2              | 4.17E-20 | 0.36878803 | 0.29  | 0.169 | 1.48E-15 | CD4_EM_CTL_spleen |
| UBA2               | 4.17E-20 | 0.37377379 | 0.33  | 0.201 | 1.48E-15 | CD4_EM_CTL_spleen |
| LMNA               | 4.44E-20 | 0.6209951  | 0.251 | 0.141 | 1.57E-15 | CD4_EM_CTL_spleen |
| MIDN               | 4.45E-20 | 0.13353358 | 0.344 | 0.206 | 1.58E-15 | CD4_EM_CTL_spleen |
| STK24              | 4.45E-20 | 0.33474462 | 0.434 | 0.288 | 1.58E-15 | CD4_EM_CTL_spleen |
| DYRK2              | 4.60E-20 | 0.44914607 | 0.389 | 0.253 | 1.63E-15 | CD4_EM_CTL_spleen |
| QRICH1             | 4.80E-20 | 0.50422217 | 0.368 | 0.235 | 1.70E-15 | CD4_EM_CTL_spleen |
| MED13              | 5.20E-20 | 0.38859512 | 0.419 | 0.276 | 1.84E-15 | CD4_EM_CTL_spleen |
| ZC3H13             | 5.46E-20 | 0.30861742 | 0.4   | 0.256 | 1.94E-15 | CD4_EM_CTL_spleen |
| UBASH3A            | 5.57E-20 | 0.44477452 | 0.255 | 0.142 | 1.97E-15 | CD4_EM_CTL_spleen |
| SNX1               | 6.05E-20 | 0.38598675 | 0.299 | 0.175 | 2.14E-15 | CD4_EM_CTL_spleen |
| FAM91A1            | 6.08E-20 | 0.53690625 | 0.286 | 0.169 | 2.16E-15 | CD4_EM_CTL_spleen |
| WWP2               | 6.19E-20 | 0.60366296 | 0.282 | 0.166 | 2.19E-15 | CD4_EM_CTL_spleen |
| MNAT1              | 6.27E-20 | 0.35028698 | 0.442 | 0.291 | 2.22E-15 | CD4_EM_CTL_spleen |
| DIPK1A             | 6.50E-20 | 0.63366175 | 0.287 | 0.173 | 2.30E-15 | CD4_EM_CTL_spleen |
| GTF2E2             | 7.17E-20 | 0.43375833 | 0.291 | 0.172 | 2.54E-15 | CD4_EM_CTL_spleen |
| ADARB2             | 7.72E-20 | 0.10768848 | 0.266 | 0.148 | 2.74E-15 | CD4_EM_CTL_spleen |
| MARCHF7            | 7.81E-20 | 0.27670302 | 0.54  | 0.368 | 2.77E-15 | CD4_EM_CTL_spleen |
| TRAPPC9            | 8.14E-20 | 0.38677382 | 0.327 | 0.2   | 2.88E-15 | CD4_EM_CTL_spleen |
| CHCHD3             | 8.20E-20 | 0.32515387 | 0.424 | 0.279 | 2.91E-15 | CD4_EM_CTL_spleen |
| ENSMMUG00000020316 | 8.58E-20 | 0.33093708 | 0.373 | 0.235 | 3.04E-15 | CD4_EM_CTL_spleen |

|         |          |            |       |       |          |                   |
|---------|----------|------------|-------|-------|----------|-------------------|
| DCP2    | 9.05E-20 | 0.33548512 | 0.356 | 0.221 | 3.21E-15 | CD4_EM_CTL_spleen |
| TAGAP   | 9.15E-20 | 0.23472384 | 0.415 | 0.268 | 3.24E-15 | CD4_EM_CTL_spleen |
| RCOR3   | 9.30E-20 | 0.38701443 | 0.311 | 0.188 | 3.29E-15 | CD4_EM_CTL_spleen |
| UBAP2L  | 9.40E-20 | 0.37198395 | 0.358 | 0.225 | 3.33E-15 | CD4_EM_CTL_spleen |
| EIF4G2  | 1.11E-19 | 0.2243653  | 0.703 | 0.504 | 3.93E-15 | CD4_EM_CTL_spleen |
| SEC24B  | 1.18E-19 | 0.34191127 | 0.448 | 0.297 | 4.18E-15 | CD4_EM_CTL_spleen |
| SEPTIN6 | 1.28E-19 | 0.23798849 | 0.798 | 0.584 | 4.55E-15 | CD4_EM_CTL_spleen |
| PNKP    | 1.29E-19 | 0.25225072 | 0.31  | 0.184 | 4.55E-15 | CD4_EM_CTL_spleen |
| DMTF1   | 1.33E-19 | 0.32524163 | 0.361 | 0.227 | 4.72E-15 | CD4_EM_CTL_spleen |
| EPC1    | 1.47E-19 | 0.18541759 | 0.765 | 0.517 | 5.21E-15 | CD4_EM_CTL_spleen |
| CALU    | 1.52E-19 | 0.37866867 | 0.326 | 0.204 | 5.37E-15 | CD4_EM_CTL_spleen |
| KAT6A   | 1.71E-19 | 0.17098831 | 0.664 | 0.464 | 6.06E-15 | CD4_EM_CTL_spleen |
| LBH     | 1.72E-19 | 0.24170823 | 0.446 | 0.295 | 6.09E-15 | CD4_EM_CTL_spleen |
| PEX14   | 1.74E-19 | 0.45064954 | 0.339 | 0.215 | 6.17E-15 | CD4_EM_CTL_spleen |
| ZRANB1  | 1.76E-19 | 0.53459257 | 0.257 | 0.148 | 6.24E-15 | CD4_EM_CTL_spleen |
| VASP    | 1.78E-19 | 0.13490452 | 0.401 | 0.252 | 6.31E-15 | CD4_EM_CTL_spleen |
| CLEC2D  | 1.78E-19 | 0.21077503 | 0.538 | 0.373 | 6.32E-15 | CD4_EM_CTL_spleen |
| DOP1A   | 1.85E-19 | 0.70209387 | 0.259 | 0.153 | 6.55E-15 | CD4_EM_CTL_spleen |
| STAU1   | 1.87E-19 | 0.29232108 | 0.479 | 0.319 | 6.61E-15 | CD4_EM_CTL_spleen |
| CD53    | 1.92E-19 | 0.17984011 | 0.694 | 0.501 | 6.82E-15 | CD4_EM_CTL_spleen |
| ANXA6   | 2.01E-19 | 0.25220136 | 0.323 | 0.194 | 7.11E-15 | CD4_EM_CTL_spleen |
| SNX29   | 2.55E-19 | 0.51154462 | 0.35  | 0.224 | 9.04E-15 | CD4_EM_CTL_spleen |
| TAF7    | 2.84E-19 | 0.25208843 | 0.42  | 0.273 | 1.01E-14 | CD4_EM_CTL_spleen |
| RPL23   | 3.24E-19 | 0.2244017  | 0.916 | 0.901 | 1.15E-14 | CD4_EM_CTL_spleen |
| EXOC6   | 3.40E-19 | 0.43410626 | 0.399 | 0.263 | 1.21E-14 | CD4_EM_CTL_spleen |
| CCNI    | 3.67E-19 | 0.22883205 | 0.569 | 0.401 | 1.30E-14 | CD4_EM_CTL_spleen |
| UGCG    | 3.75E-19 | 0.65232057 | 0.293 | 0.18  | 1.33E-14 | CD4_EM_CTL_spleen |
| DERA    | 3.98E-19 | 0.38515504 | 0.266 | 0.152 | 1.41E-14 | CD4_EM_CTL_spleen |
| GALK2   | 4.09E-19 | 0.49253049 | 0.258 | 0.148 | 1.45E-14 | CD4_EM_CTL_spleen |
| NRDC    | 4.12E-19 | 0.31363582 | 0.362 | 0.232 | 1.46E-14 | CD4_EM_CTL_spleen |
| DDX50   | 4.46E-19 | 0.18302801 | 0.381 | 0.245 | 1.58E-14 | CD4_EM_CTL_spleen |
| CUL5    | 4.95E-19 | 0.23099129 | 0.589 | 0.397 | 1.76E-14 | CD4_EM_CTL_spleen |
| MXD1    | 5.57E-19 | 0.65314412 | 0.267 | 0.159 | 1.97E-14 | CD4_EM_CTL_spleen |

|            |          |            |       |       |          |                   |
|------------|----------|------------|-------|-------|----------|-------------------|
| ZNF514     | 6.13E-19 | 0.23055885 | 0.36  | 0.225 | 2.17E-14 | CD4_EM_CTL_spleen |
| HNRNPA0    | 6.85E-19 | 0.17051732 | 0.528 | 0.355 | 2.43E-14 | CD4_EM_CTL_spleen |
| ASL        | 6.92E-19 | 0.23304209 | 0.334 | 0.207 | 2.45E-14 | CD4_EM_CTL_spleen |
| WASL       | 7.67E-19 | 0.3166272  | 0.421 | 0.279 | 2.72E-14 | CD4_EM_CTL_spleen |
| UHRF1BP1L  | 7.97E-19 | 0.3701436  | 0.406 | 0.269 | 2.82E-14 | CD4_EM_CTL_spleen |
| RAC1       | 8.07E-19 | 0.30080654 | 0.266 | 0.154 | 2.86E-14 | CD4_EM_CTL_spleen |
| LARP4      | 8.38E-19 | 0.38351536 | 0.377 | 0.243 | 2.97E-14 | CD4_EM_CTL_spleen |
| UBE2W      | 9.78E-19 | 0.42309038 | 0.26  | 0.151 | 3.47E-14 | CD4_EM_CTL_spleen |
| NCOA3      | 9.88E-19 | 0.21050067 | 0.747 | 0.518 | 3.50E-14 | CD4_EM_CTL_spleen |
| RSRC2      | 1.19E-18 | 0.20911971 | 0.637 | 0.445 | 4.23E-14 | CD4_EM_CTL_spleen |
| DPP7       | 1.31E-18 | 0.31097445 | 0.264 | 0.151 | 4.63E-14 | CD4_EM_CTL_spleen |
| IL16       | 1.39E-18 | 0.24092953 | 0.251 | 0.14  | 4.93E-14 | CD4_EM_CTL_spleen |
| CCM2       | 1.39E-18 | 0.24031389 | 0.586 | 0.403 | 4.93E-14 | CD4_EM_CTL_spleen |
| PTPN6      | 1.42E-18 | 0.16689852 | 0.282 | 0.163 | 5.05E-14 | CD4_EM_CTL_spleen |
| AP2B1      | 1.56E-18 | 0.34799652 | 0.364 | 0.238 | 5.54E-14 | CD4_EM_CTL_spleen |
| HIPK2      | 1.57E-18 | 0.52316135 | 0.304 | 0.19  | 5.55E-14 | CD4_EM_CTL_spleen |
| SREBF2     | 1.74E-18 | 0.38759114 | 0.35  | 0.224 | 6.17E-14 | CD4_EM_CTL_spleen |
| MAN2A1     | 1.74E-18 | 0.12169015 | 0.626 | 0.423 | 6.17E-14 | CD4_EM_CTL_spleen |
| OSBPL9     | 1.76E-18 | 0.14569013 | 0.698 | 0.471 | 6.23E-14 | CD4_EM_CTL_spleen |
| PTPN11     | 1.77E-18 | 0.38228497 | 0.293 | 0.178 | 6.26E-14 | CD4_EM_CTL_spleen |
| H2AC20     | 1.90E-18 | 0.29316477 | 0.254 | 0.144 | 6.73E-14 | CD4_EM_CTL_spleen |
| LTV1       | 2.09E-18 | 0.29373467 | 0.347 | 0.218 | 7.40E-14 | CD4_EM_CTL_spleen |
| CUL3       | 2.15E-18 | 0.21452862 | 0.595 | 0.408 | 7.60E-14 | CD4_EM_CTL_spleen |
| PIK3CG     | 2.18E-18 | 0.47289068 | 0.257 | 0.151 | 7.72E-14 | CD4_EM_CTL_spleen |
| TBL1X      | 2.53E-18 | 0.41117326 | 0.308 | 0.192 | 8.97E-14 | CD4_EM_CTL_spleen |
| C3H21orf91 | 3.06E-18 | 0.31370421 | 0.306 | 0.187 | 1.08E-13 | CD4_EM_CTL_spleen |
| ZNF292     | 3.15E-18 | 0.18745322 | 0.665 | 0.459 | 1.12E-13 | CD4_EM_CTL_spleen |
| ZRANB2     | 3.28E-18 | 0.20777869 | 0.51  | 0.345 | 1.16E-13 | CD4_EM_CTL_spleen |
| PRDM2      | 3.43E-18 | 0.31973483 | 0.417 | 0.279 | 1.22E-13 | CD4_EM_CTL_spleen |
| SLFN5      | 3.63E-18 | 0.2961509  | 0.38  | 0.248 | 1.28E-13 | CD4_EM_CTL_spleen |
| PKN1       | 3.66E-18 | 0.3284385  | 0.251 | 0.144 | 1.30E-13 | CD4_EM_CTL_spleen |
| DIAPH1     | 3.72E-18 | 0.22667065 | 0.577 | 0.405 | 1.32E-13 | CD4_EM_CTL_spleen |
| IDH2       | 4.07E-18 | 0.15718646 | 0.377 | 0.238 | 1.44E-13 | CD4_EM_CTL_spleen |

|                    |          |            |       |       |          |                   |
|--------------------|----------|------------|-------|-------|----------|-------------------|
| RASA2              | 4.11E-18 | 0.15551171 | 0.71  | 0.494 | 1.45E-13 | CD4_EM_CTL_spleen |
| PNPLA8             | 4.43E-18 | 0.35672065 | 0.408 | 0.272 | 1.57E-13 | CD4_EM_CTL_spleen |
| PIP5K1A            | 4.73E-18 | 0.26943498 | 0.374 | 0.243 | 1.68E-13 | CD4_EM_CTL_spleen |
| PIAS2              | 5.19E-18 | 0.52407776 | 0.297 | 0.184 | 1.84E-13 | CD4_EM_CTL_spleen |
| BCL6               | 5.34E-18 | 0.2316994  | 0.286 | 0.17  | 1.89E-13 | CD4_EM_CTL_spleen |
| ZNF44              | 5.53E-18 | 0.37532081 | 0.338 | 0.215 | 1.96E-13 | CD4_EM_CTL_spleen |
| APPBP2             | 5.66E-18 | 0.45444194 | 0.329 | 0.209 | 2.01E-13 | CD4_EM_CTL_spleen |
| CSNK2A1            | 6.22E-18 | 0.19303991 | 0.509 | 0.344 | 2.20E-13 | CD4_EM_CTL_spleen |
| VPS13C             | 6.57E-18 | 0.15701643 | 0.457 | 0.307 | 2.33E-13 | CD4_EM_CTL_spleen |
| ADSS2              | 6.77E-18 | 0.24129512 | 0.35  | 0.22  | 2.40E-13 | CD4_EM_CTL_spleen |
| ENSMMUG00000016898 | 6.96E-18 | 0.12353775 | 0.342 | 0.212 | 2.47E-13 | CD4_EM_CTL_spleen |
| UBR4               | 7.14E-18 | 0.34221333 | 0.364 | 0.232 | 2.53E-13 | CD4_EM_CTL_spleen |
| BTBD1              | 7.49E-18 | 0.43843718 | 0.285 | 0.177 | 2.65E-13 | CD4_EM_CTL_spleen |
| VPS54              | 8.55E-18 | 0.46377503 | 0.296 | 0.183 | 3.03E-13 | CD4_EM_CTL_spleen |
| CNTRL              | 9.81E-18 | 0.31369126 | 0.333 | 0.208 | 3.48E-13 | CD4_EM_CTL_spleen |
| SSU72              | 1.16E-17 | 0.2337337  | 0.278 | 0.163 | 4.10E-13 | CD4_EM_CTL_spleen |
| CCT6A              | 1.24E-17 | 0.15360288 | 0.504 | 0.342 | 4.41E-13 | CD4_EM_CTL_spleen |
| NR3C1              | 1.25E-17 | 0.21388726 | 0.645 | 0.453 | 4.44E-13 | CD4_EM_CTL_spleen |
| ATP2B4             | 1.50E-17 | 0.34682324 | 0.447 | 0.308 | 5.33E-13 | CD4_EM_CTL_spleen |
| TAF3               | 1.60E-17 | 0.2772727  | 0.413 | 0.281 | 5.68E-13 | CD4_EM_CTL_spleen |
| STX16              | 1.64E-17 | 0.41219684 | 0.268 | 0.161 | 5.82E-13 | CD4_EM_CTL_spleen |
| SUPT5H             | 1.67E-17 | 0.21692369 | 0.318 | 0.196 | 5.91E-13 | CD4_EM_CTL_spleen |
| ATG3               | 1.89E-17 | 0.15771144 | 0.379 | 0.244 | 6.71E-13 | CD4_EM_CTL_spleen |
| EFR3A              | 1.95E-17 | 0.28871671 | 0.412 | 0.273 | 6.91E-13 | CD4_EM_CTL_spleen |
| VPS13D             | 1.98E-17 | 0.48472552 | 0.313 | 0.201 | 7.01E-13 | CD4_EM_CTL_spleen |
| LYPLA1             | 2.00E-17 | 0.40837183 | 0.25  | 0.148 | 7.10E-13 | CD4_EM_CTL_spleen |
| URI1               | 2.05E-17 | 0.30671821 | 0.425 | 0.29  | 7.26E-13 | CD4_EM_CTL_spleen |
| RAB6A              | 2.12E-17 | 0.29074744 | 0.323 | 0.202 | 7.51E-13 | CD4_EM_CTL_spleen |
| ZEB2               | 2.22E-17 | 0.31672059 | 0.262 | 0.153 | 7.85E-13 | CD4_EM_CTL_spleen |
| ARID4A             | 2.48E-17 | 0.44876265 | 0.286 | 0.176 | 8.78E-13 | CD4_EM_CTL_spleen |
| SMAD2              | 2.49E-17 | 0.28456932 | 0.292 | 0.178 | 8.81E-13 | CD4_EM_CTL_spleen |
| UBE2F              | 2.69E-17 | 0.36066207 | 0.317 | 0.203 | 9.53E-13 | CD4_EM_CTL_spleen |
| PABPC1             | 2.70E-17 | 0.15584575 | 0.924 | 0.794 | 9.56E-13 | CD4_EM_CTL_spleen |

|                    |          |            |       |       |          |                   |
|--------------------|----------|------------|-------|-------|----------|-------------------|
| LTN1               | 2.72E-17 | 0.42461712 | 0.314 | 0.198 | 9.65E-13 | CD4_EM_CTL_spleen |
| RRP1B              | 2.89E-17 | 0.30606259 | 0.259 | 0.155 | 1.02E-12 | CD4_EM_CTL_spleen |
| RSC1A1             | 2.93E-17 | 0.51034297 | 0.252 | 0.15  | 1.04E-12 | CD4_EM_CTL_spleen |
| RLF                | 3.08E-17 | 0.25498988 | 0.524 | 0.362 | 1.09E-12 | CD4_EM_CTL_spleen |
| SDCCAG8            | 3.44E-17 | 0.43660332 | 0.265 | 0.159 | 1.22E-12 | CD4_EM_CTL_spleen |
| EEA1               | 3.50E-17 | 0.42788336 | 0.306 | 0.194 | 1.24E-12 | CD4_EM_CTL_spleen |
| CD46               | 3.70E-17 | 0.1630535  | 0.583 | 0.406 | 1.31E-12 | CD4_EM_CTL_spleen |
| SNIP1              | 3.77E-17 | 0.42241837 | 0.267 | 0.162 | 1.34E-12 | CD4_EM_CTL_spleen |
| ENSMMUG00000061458 | 4.02E-17 | 0.26016047 | 0.346 | 0.221 | 1.42E-12 | CD4_EM_CTL_spleen |
| MIGA1              | 4.21E-17 | 0.23207614 | 0.299 | 0.183 | 1.49E-12 | CD4_EM_CTL_spleen |
| H1-4               | 4.32E-17 | 0.15397698 | 0.401 | 0.263 | 1.53E-12 | CD4_EM_CTL_spleen |
| PRIM2              | 4.58E-17 | 0.49968407 | 0.289 | 0.182 | 1.62E-12 | CD4_EM_CTL_spleen |
| CPLANE1            | 4.87E-17 | 0.5467352  | 0.259 | 0.158 | 1.72E-12 | CD4_EM_CTL_spleen |
| PTBP2              | 4.96E-17 | 0.20109696 | 0.555 | 0.383 | 1.76E-12 | CD4_EM_CTL_spleen |
| KDM5A              | 5.08E-17 | 0.24674706 | 0.468 | 0.316 | 1.80E-12 | CD4_EM_CTL_spleen |
| NR2C2              | 5.09E-17 | 0.49092545 | 0.295 | 0.187 | 1.80E-12 | CD4_EM_CTL_spleen |
| ARHGEF6            | 5.59E-17 | 0.21902094 | 0.396 | 0.262 | 1.98E-12 | CD4_EM_CTL_spleen |
| N4BP2L2            | 5.72E-17 | 0.1296205  | 0.537 | 0.373 | 2.03E-12 | CD4_EM_CTL_spleen |
| ARHGEF1            | 5.95E-17 | 0.15065353 | 0.556 | 0.393 | 2.11E-12 | CD4_EM_CTL_spleen |
| RALGAPB            | 6.25E-17 | 0.35082241 | 0.325 | 0.209 | 2.21E-12 | CD4_EM_CTL_spleen |
| AKAP13             | 6.26E-17 | 0.25683097 | 0.858 | 0.661 | 2.22E-12 | CD4_EM_CTL_spleen |
| BAZ2B              | 6.27E-17 | 0.43936428 | 0.286 | 0.178 | 2.22E-12 | CD4_EM_CTL_spleen |
| TSNAX              | 6.48E-17 | 0.20403273 | 0.296 | 0.18  | 2.30E-12 | CD4_EM_CTL_spleen |
| UBAP2              | 6.51E-17 | 0.39631983 | 0.326 | 0.209 | 2.31E-12 | CD4_EM_CTL_spleen |
| MTRR               | 6.88E-17 | 0.3949529  | 0.256 | 0.151 | 2.44E-12 | CD4_EM_CTL_spleen |
| EPS15              | 7.59E-17 | 0.241979   | 0.483 | 0.333 | 2.69E-12 | CD4_EM_CTL_spleen |
| PRKDC              | 7.85E-17 | 0.25829823 | 0.503 | 0.35  | 2.78E-12 | CD4_EM_CTL_spleen |
| NASP               | 9.41E-17 | 0.17974188 | 0.471 | 0.314 | 3.33E-12 | CD4_EM_CTL_spleen |
| NT5C2              | 9.51E-17 | 0.17621076 | 0.467 | 0.321 | 3.37E-12 | CD4_EM_CTL_spleen |
| ENSMMUG00000022619 | 9.54E-17 | 0.26115107 | 0.25  | 0.146 | 3.38E-12 | CD4_EM_CTL_spleen |
| TRRAP              | 9.65E-17 | 0.50799253 | 0.275 | 0.172 | 3.42E-12 | CD4_EM_CTL_spleen |
| CHD6               | 1.15E-16 | 0.22624488 | 0.508 | 0.351 | 4.07E-12 | CD4_EM_CTL_spleen |
| BMP2K              | 1.19E-16 | 0.23823987 | 0.331 | 0.215 | 4.21E-12 | CD4_EM_CTL_spleen |

|                    |          |            |       |       |          |                   |
|--------------------|----------|------------|-------|-------|----------|-------------------|
| ZBTB1              | 1.22E-16 | 0.2811981  | 0.379 | 0.253 | 4.31E-12 | CD4_EM_CTL_spleen |
| NAA25              | 1.30E-16 | 0.44521656 | 0.305 | 0.193 | 4.59E-12 | CD4_EM_CTL_spleen |
| C11H12orf45        | 1.31E-16 | 0.13430317 | 0.515 | 0.358 | 4.64E-12 | CD4_EM_CTL_spleen |
| CNOT4              | 1.32E-16 | 0.21647656 | 0.556 | 0.386 | 4.68E-12 | CD4_EM_CTL_spleen |
| MSN                | 1.36E-16 | 0.19411199 | 0.767 | 0.559 | 4.83E-12 | CD4_EM_CTL_spleen |
| ATF7               | 1.73E-16 | 0.3222245  | 0.39  | 0.261 | 6.14E-12 | CD4_EM_CTL_spleen |
| ZNF28              | 2.05E-16 | 0.24073404 | 0.341 | 0.219 | 7.28E-12 | CD4_EM_CTL_spleen |
| ADD1               | 2.21E-16 | 0.24566345 | 0.432 | 0.297 | 7.82E-12 | CD4_EM_CTL_spleen |
| ENSMMUG00000008346 | 2.25E-16 | 0.19251315 | 0.491 | 0.333 | 7.98E-12 | CD4_EM_CTL_spleen |
| GNAI3              | 2.26E-16 | 0.221725   | 0.388 | 0.255 | 8.02E-12 | CD4_EM_CTL_spleen |
| AOPEP              | 2.33E-16 | 0.27468175 | 0.472 | 0.331 | 8.25E-12 | CD4_EM_CTL_spleen |
| EIF2AK3            | 2.33E-16 | 0.28699982 | 0.487 | 0.337 | 8.26E-12 | CD4_EM_CTL_spleen |
| EIF3A              | 2.38E-16 | 0.19149482 | 0.558 | 0.39  | 8.44E-12 | CD4_EM_CTL_spleen |
| ARHGAP4            | 2.54E-16 | 0.28235455 | 0.371 | 0.244 | 9.00E-12 | CD4_EM_CTL_spleen |
| TPR                | 2.58E-16 | 0.17394466 | 0.47  | 0.32  | 9.14E-12 | CD4_EM_CTL_spleen |
| METTTL16           | 2.66E-16 | 0.47322816 | 0.287 | 0.182 | 9.43E-12 | CD4_EM_CTL_spleen |
| USP10              | 2.78E-16 | 0.20820873 | 0.471 | 0.323 | 9.84E-12 | CD4_EM_CTL_spleen |
| APLP2              | 2.90E-16 | 0.31226205 | 0.33  | 0.211 | 1.03E-11 | CD4_EM_CTL_spleen |
| ZNF267             | 3.20E-16 | 0.34260836 | 0.296 | 0.186 | 1.14E-11 | CD4_EM_CTL_spleen |
| EVL                | 3.53E-16 | 0.14550301 | 0.733 | 0.542 | 1.25E-11 | CD4_EM_CTL_spleen |
| SRSF1              | 3.57E-16 | 0.18877714 | 0.364 | 0.24  | 1.27E-11 | CD4_EM_CTL_spleen |
| MAP4               | 3.72E-16 | 0.4265162  | 0.256 | 0.155 | 1.32E-11 | CD4_EM_CTL_spleen |
| ADAM17             | 4.37E-16 | 0.56411608 | 0.254 | 0.157 | 1.55E-11 | CD4_EM_CTL_spleen |
| ZC3H18             | 4.57E-16 | 0.33522456 | 0.295 | 0.185 | 1.62E-11 | CD4_EM_CTL_spleen |
| AFF4               | 4.67E-16 | 0.325206   | 0.349 | 0.23  | 1.65E-11 | CD4_EM_CTL_spleen |
| VPS13A             | 4.71E-16 | 0.2675644  | 0.351 | 0.23  | 1.67E-11 | CD4_EM_CTL_spleen |
| SKAP1              | 4.82E-16 | 0.2374934  | 0.899 | 0.746 | 1.71E-11 | CD4_EM_CTL_spleen |
| DISP1              | 4.83E-16 | 0.58373732 | 0.291 | 0.188 | 1.71E-11 | CD4_EM_CTL_spleen |
| PIGY               | 5.05E-16 | 0.15818336 | 0.308 | 0.19  | 1.79E-11 | CD4_EM_CTL_spleen |
| USP16              | 5.48E-16 | 0.29520213 | 0.374 | 0.249 | 1.94E-11 | CD4_EM_CTL_spleen |
| UBTF               | 5.77E-16 | 0.19977785 | 0.291 | 0.181 | 2.04E-11 | CD4_EM_CTL_spleen |
| COA1               | 5.94E-16 | 0.19411557 | 0.505 | 0.349 | 2.11E-11 | CD4_EM_CTL_spleen |
| ESYT2              | 6.11E-16 | 0.20633323 | 0.657 | 0.464 | 2.17E-11 | CD4_EM_CTL_spleen |



|           |          |            |       |       |          |                   |
|-----------|----------|------------|-------|-------|----------|-------------------|
| VRK1      | 6.12E-16 | 0.27245369 | 0.378 | 0.254 | 2.17E-11 | CD4_EM_CTL_spleen |
| GLMN      | 6.25E-16 | 0.32915627 | 0.342 | 0.222 | 2.22E-11 | CD4_EM_CTL_spleen |
| EMC6      | 6.27E-16 | 0.15973752 | 0.26  | 0.155 | 2.22E-11 | CD4_EM_CTL_spleen |
| TBC1D23   | 6.58E-16 | 0.26020027 | 0.381 | 0.256 | 2.33E-11 | CD4_EM_CTL_spleen |
| RBM27     | 6.98E-16 | 0.2113336  | 0.483 | 0.332 | 2.47E-11 | CD4_EM_CTL_spleen |
| NIPBL     | 7.39E-16 | 0.19506997 | 0.599 | 0.425 | 2.62E-11 | CD4_EM_CTL_spleen |
| ARHGAP30  | 7.59E-16 | 0.1367776  | 0.407 | 0.271 | 2.69E-11 | CD4_EM_CTL_spleen |
| SNX3      | 7.93E-16 | 0.26045855 | 0.32  | 0.203 | 2.81E-11 | CD4_EM_CTL_spleen |
| ZNF438    | 8.23E-16 | 0.46771854 | 0.264 | 0.165 | 2.92E-11 | CD4_EM_CTL_spleen |
| IPO7      | 8.37E-16 | 0.27888993 | 0.31  | 0.199 | 2.96E-11 | CD4_EM_CTL_spleen |
| LMAN2     | 8.83E-16 | 0.16054279 | 0.338 | 0.214 | 3.13E-11 | CD4_EM_CTL_spleen |
| DCAF1     | 8.89E-16 | 0.42128693 | 0.287 | 0.184 | 3.15E-11 | CD4_EM_CTL_spleen |
| AP1G1     | 9.17E-16 | 0.19027899 | 0.404 | 0.269 | 3.25E-11 | CD4_EM_CTL_spleen |
| C4H6orf62 | 9.34E-16 | 0.15599631 | 0.384 | 0.256 | 3.31E-11 | CD4_EM_CTL_spleen |
| KDM1A     | 9.37E-16 | 0.43441514 | 0.303 | 0.195 | 3.32E-11 | CD4_EM_CTL_spleen |
| GPR107    | 1.07E-15 | 0.31511711 | 0.373 | 0.25  | 3.78E-11 | CD4_EM_CTL_spleen |
| PAIP1     | 1.07E-15 | 0.40307051 | 0.266 | 0.164 | 3.78E-11 | CD4_EM_CTL_spleen |
| VAPA      | 1.13E-15 | 0.18695507 | 0.57  | 0.401 | 4.01E-11 | CD4_EM_CTL_spleen |
| ZNF410    | 1.55E-15 | 0.3714782  | 0.31  | 0.199 | 5.49E-11 | CD4_EM_CTL_spleen |
| IL4R      | 1.78E-15 | 0.18986255 | 0.335 | 0.218 | 6.32E-11 | CD4_EM_CTL_spleen |
| PRKAR1A   | 1.82E-15 | 0.13255958 | 0.392 | 0.261 | 6.44E-11 | CD4_EM_CTL_spleen |
| ATP6V0D1  | 1.84E-15 | 0.32759041 | 0.34  | 0.225 | 6.51E-11 | CD4_EM_CTL_spleen |
| SLC25A36  | 1.87E-15 | 0.15723121 | 0.294 | 0.183 | 6.62E-11 | CD4_EM_CTL_spleen |
| GALNT1    | 2.01E-15 | 0.26645308 | 0.41  | 0.282 | 7.13E-11 | CD4_EM_CTL_spleen |
| CLK4      | 2.03E-15 | 0.2205296  | 0.299 | 0.189 | 7.18E-11 | CD4_EM_CTL_spleen |
| SPIN1     | 2.07E-15 | 0.57003406 | 0.252 | 0.157 | 7.33E-11 | CD4_EM_CTL_spleen |
| CEP57     | 2.17E-15 | 0.34074687 | 0.305 | 0.198 | 7.67E-11 | CD4_EM_CTL_spleen |
| TENT4B    | 2.19E-15 | 0.37425598 | 0.296 | 0.19  | 7.76E-11 | CD4_EM_CTL_spleen |
| ARMC8     | 2.19E-15 | 0.31111436 | 0.38  | 0.257 | 7.78E-11 | CD4_EM_CTL_spleen |
| CCT4      | 2.52E-15 | 0.14428698 | 0.531 | 0.372 | 8.91E-11 | CD4_EM_CTL_spleen |
| DNAJB6    | 2.64E-15 | 0.25544062 | 0.705 | 0.533 | 9.35E-11 | CD4_EM_CTL_spleen |
| NBEA      | 2.74E-15 | 0.4035586  | 0.299 | 0.195 | 9.71E-11 | CD4_EM_CTL_spleen |
| CSPP1     | 2.77E-15 | 0.35062381 | 0.331 | 0.217 | 9.81E-11 | CD4_EM_CTL_spleen |

|                    |          |            |       |       |          |                   |
|--------------------|----------|------------|-------|-------|----------|-------------------|
| PTP4A2             | 2.82E-15 | 0.18926015 | 0.434 | 0.298 | 9.98E-11 | CD4_EM_CTL_spleen |
| FAM168B            | 3.33E-15 | 0.32446332 | 0.325 | 0.213 | 1.18E-10 | CD4_EM_CTL_spleen |
| PIK3C2A            | 3.48E-15 | 0.36611072 | 0.333 | 0.22  | 1.23E-10 | CD4_EM_CTL_spleen |
| PSMD1              | 3.74E-15 | 0.35815652 | 0.254 | 0.154 | 1.33E-10 | CD4_EM_CTL_spleen |
| UHRF2              | 3.95E-15 | 0.3489759  | 0.36  | 0.244 | 1.40E-10 | CD4_EM_CTL_spleen |
| SDCBP              | 4.24E-15 | 0.14674332 | 0.272 | 0.167 | 1.50E-10 | CD4_EM_CTL_spleen |
| SRSF5              | 4.48E-15 | 0.21476474 | 0.841 | 0.656 | 1.59E-10 | CD4_EM_CTL_spleen |
| ARNTL              | 4.49E-15 | 0.4159766  | 0.25  | 0.155 | 1.59E-10 | CD4_EM_CTL_spleen |
| MED25              | 4.50E-15 | 0.51202711 | 0.26  | 0.163 | 1.59E-10 | CD4_EM_CTL_spleen |
| MRPS31             | 4.92E-15 | 0.22854636 | 0.377 | 0.257 | 1.74E-10 | CD4_EM_CTL_spleen |
| RBM23              | 5.03E-15 | 0.3040845  | 0.271 | 0.169 | 1.78E-10 | CD4_EM_CTL_spleen |
| KAT7               | 5.35E-15 | 0.30192212 | 0.347 | 0.231 | 1.90E-10 | CD4_EM_CTL_spleen |
| REPS1              | 5.56E-15 | 0.34350527 | 0.342 | 0.231 | 1.97E-10 | CD4_EM_CTL_spleen |
| LCLAT1             | 6.60E-15 | 0.40618751 | 0.262 | 0.164 | 2.34E-10 | CD4_EM_CTL_spleen |
| PTPMT1             | 7.99E-15 | 0.20198126 | 0.3   | 0.19  | 2.83E-10 | CD4_EM_CTL_spleen |
| PXK                | 8.12E-15 | 0.45621985 | 0.255 | 0.16  | 2.88E-10 | CD4_EM_CTL_spleen |
| CERT1              | 8.25E-15 | 0.15720358 | 0.486 | 0.332 | 2.92E-10 | CD4_EM_CTL_spleen |
| ARHGEF7            | 9.02E-15 | 0.24719843 | 0.44  | 0.303 | 3.20E-10 | CD4_EM_CTL_spleen |
| DDX39A             | 9.19E-15 | 0.18782816 | 0.41  | 0.279 | 3.26E-10 | CD4_EM_CTL_spleen |
| CCNT2              | 9.68E-15 | 0.29603772 | 0.354 | 0.237 | 3.43E-10 | CD4_EM_CTL_spleen |
| PECAM1             | 9.72E-15 | 0.14911745 | 0.556 | 0.399 | 3.44E-10 | CD4_EM_CTL_spleen |
| N4BP2L1            | 9.82E-15 | 0.24400612 | 0.283 | 0.178 | 3.48E-10 | CD4_EM_CTL_spleen |
| HGSNAT             | 9.90E-15 | 0.28639778 | 0.258 | 0.157 | 3.51E-10 | CD4_EM_CTL_spleen |
| ABCG2              | 1.02E-14 | 0.33809488 | 0.26  | 0.163 | 3.62E-10 | CD4_EM_CTL_spleen |
| PNISR              | 1.03E-14 | 0.12678389 | 0.817 | 0.556 | 3.66E-10 | CD4_EM_CTL_spleen |
| GPBP1              | 1.04E-14 | 0.22919445 | 0.691 | 0.517 | 3.67E-10 | CD4_EM_CTL_spleen |
| G3BP1              | 1.04E-14 | 0.13462162 | 0.578 | 0.414 | 3.68E-10 | CD4_EM_CTL_spleen |
| STAT1              | 1.09E-14 | 0.45209787 | 0.254 | 0.159 | 3.86E-10 | CD4_EM_CTL_spleen |
| SMN1               | 1.17E-14 | 0.23745903 | 0.275 | 0.171 | 4.16E-10 | CD4_EM_CTL_spleen |
| ATF6               | 1.30E-14 | 0.17778709 | 0.326 | 0.215 | 4.62E-10 | CD4_EM_CTL_spleen |
| ENSMMUG00000056043 | 1.35E-14 | 0.25759178 | 0.285 | 0.181 | 4.79E-10 | CD4_EM_CTL_spleen |
| YTHDF2             | 1.38E-14 | 0.3030063  | 0.277 | 0.175 | 4.90E-10 | CD4_EM_CTL_spleen |
| DENR               | 1.50E-14 | 0.16561612 | 0.272 | 0.171 | 5.32E-10 | CD4_EM_CTL_spleen |

|                    |          |            |       |       |          |                   |
|--------------------|----------|------------|-------|-------|----------|-------------------|
| AGO3               | 1.51E-14 | 0.22976504 | 0.526 | 0.371 | 5.35E-10 | CD4_EM_CTL_spleen |
| GOLGA4             | 1.53E-14 | 0.1232339  | 0.609 | 0.422 | 5.41E-10 | CD4_EM_CTL_spleen |
| GIT2               | 1.76E-14 | 0.16941389 | 0.451 | 0.309 | 6.24E-10 | CD4_EM_CTL_spleen |
| COX10              | 1.81E-14 | 0.46278289 | 0.288 | 0.188 | 6.40E-10 | CD4_EM_CTL_spleen |
| ENTPD4             | 1.87E-14 | 0.34216779 | 0.309 | 0.204 | 6.63E-10 | CD4_EM_CTL_spleen |
| PPIG               | 1.95E-14 | 0.17260574 | 0.538 | 0.382 | 6.90E-10 | CD4_EM_CTL_spleen |
| JAML               | 2.02E-14 | 0.17538961 | 0.428 | 0.297 | 7.17E-10 | CD4_EM_CTL_spleen |
| RIF1               | 2.10E-14 | 0.35300383 | 0.296 | 0.193 | 7.45E-10 | CD4_EM_CTL_spleen |
| BRD4               | 2.14E-14 | 0.13712516 | 0.324 | 0.21  | 7.59E-10 | CD4_EM_CTL_spleen |
| PPP2R1A            | 2.17E-14 | 0.16496235 | 0.316 | 0.204 | 7.69E-10 | CD4_EM_CTL_spleen |
| ARHGAP45           | 2.22E-14 | 0.10043257 | 0.416 | 0.281 | 7.87E-10 | CD4_EM_CTL_spleen |
| ZNF506             | 2.26E-14 | 0.23246096 | 0.355 | 0.238 | 8.01E-10 | CD4_EM_CTL_spleen |
| EIF2A              | 2.43E-14 | 0.19715724 | 0.332 | 0.218 | 8.61E-10 | CD4_EM_CTL_spleen |
| ATR                | 2.47E-14 | 0.29375998 | 0.303 | 0.2   | 8.75E-10 | CD4_EM_CTL_spleen |
| SZRD1              | 2.47E-14 | 0.13568555 | 0.345 | 0.229 | 8.76E-10 | CD4_EM_CTL_spleen |
| SS18               | 2.53E-14 | 0.17109797 | 0.437 | 0.299 | 8.98E-10 | CD4_EM_CTL_spleen |
| SFSWAP             | 2.55E-14 | 0.2176084  | 0.368 | 0.247 | 9.03E-10 | CD4_EM_CTL_spleen |
| MTREX              | 2.74E-14 | 0.18437909 | 0.646 | 0.465 | 9.72E-10 | CD4_EM_CTL_spleen |
| PPTC7              | 2.76E-14 | 0.38647804 | 0.275 | 0.177 | 9.78E-10 | CD4_EM_CTL_spleen |
| APBB1IP            | 2.83E-14 | 0.14336812 | 0.886 | 0.674 | 1.00E-09 | CD4_EM_CTL_spleen |
| ZNF160             | 2.90E-14 | 0.36058181 | 0.257 | 0.163 | 1.03E-09 | CD4_EM_CTL_spleen |
| CAND1              | 3.22E-14 | 0.17732902 | 0.419 | 0.288 | 1.14E-09 | CD4_EM_CTL_spleen |
| POU2F1             | 3.34E-14 | 0.24232094 | 0.402 | 0.282 | 1.18E-09 | CD4_EM_CTL_spleen |
| FAM13A             | 3.39E-14 | 0.3468733  | 0.364 | 0.25  | 1.20E-09 | CD4_EM_CTL_spleen |
| NFYC               | 3.59E-14 | 0.3565637  | 0.326 | 0.217 | 1.27E-09 | CD4_EM_CTL_spleen |
| MTF2               | 4.04E-14 | 0.27853009 | 0.28  | 0.18  | 1.43E-09 | CD4_EM_CTL_spleen |
| CSGALNACT2         | 4.07E-14 | 0.24994476 | 0.473 | 0.337 | 1.44E-09 | CD4_EM_CTL_spleen |
| ENSMMUG00000017400 | 4.13E-14 | 0.33633109 | 0.264 | 0.169 | 1.46E-09 | CD4_EM_CTL_spleen |
| TET2               | 4.58E-14 | 0.2897944  | 0.368 | 0.251 | 1.62E-09 | CD4_EM_CTL_spleen |
| WDFY1              | 4.93E-14 | 0.39738582 | 0.299 | 0.199 | 1.75E-09 | CD4_EM_CTL_spleen |
| ZNF280D            | 5.02E-14 | 0.296186   | 0.302 | 0.198 | 1.78E-09 | CD4_EM_CTL_spleen |
| INO80D             | 5.10E-14 | 0.26564022 | 0.395 | 0.273 | 1.81E-09 | CD4_EM_CTL_spleen |
| ELF2               | 5.18E-14 | 0.20645238 | 0.433 | 0.305 | 1.83E-09 | CD4_EM_CTL_spleen |

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|----------|----------|------------|-------|-------|----------|-------------------|
| RNF149   | 5.23E-14 | 0.24191319 | 0.393 | 0.272 | 1.85E-09 | CD4_EM_CTL_spleen |
| PPHLN1   | 5.26E-14 | 0.12215443 | 0.567 | 0.4   | 1.86E-09 | CD4_EM_CTL_spleen |
| LEF1     | 5.89E-14 | 0.35083715 | 0.611 | 0.486 | 2.09E-09 | CD4_EM_CTL_spleen |
| PHF3     | 6.09E-14 | 0.235254   | 0.503 | 0.355 | 2.16E-09 | CD4_EM_CTL_spleen |
| CNOT1    | 6.35E-14 | 0.1331487  | 0.501 | 0.35  | 2.25E-09 | CD4_EM_CTL_spleen |
| XRN2     | 7.03E-14 | 0.13290959 | 0.588 | 0.422 | 2.49E-09 | CD4_EM_CTL_spleen |
| CRYL1    | 7.42E-14 | 0.33289867 | 0.308 | 0.205 | 2.63E-09 | CD4_EM_CTL_spleen |
| WDR44    | 7.67E-14 | 0.43681645 | 0.283 | 0.186 | 2.72E-09 | CD4_EM_CTL_spleen |
| OLA1     | 7.81E-14 | 0.16535759 | 0.469 | 0.331 | 2.77E-09 | CD4_EM_CTL_spleen |
| FAM126A  | 8.14E-14 | 0.29170621 | 0.287 | 0.187 | 2.88E-09 | CD4_EM_CTL_spleen |
| MRTFA    | 8.51E-14 | 0.33362407 | 0.404 | 0.289 | 3.02E-09 | CD4_EM_CTL_spleen |
| NUP214   | 9.13E-14 | 0.29130348 | 0.389 | 0.268 | 3.23E-09 | CD4_EM_CTL_spleen |
| MCU      | 9.29E-14 | 0.42247379 | 0.264 | 0.172 | 3.29E-09 | CD4_EM_CTL_spleen |
| LAMP1    | 9.98E-14 | 0.1572047  | 0.273 | 0.174 | 3.54E-09 | CD4_EM_CTL_spleen |
| KPNA4    | 1.03E-13 | 0.33904367 | 0.282 | 0.184 | 3.66E-09 | CD4_EM_CTL_spleen |
| EEF1E1   | 1.26E-13 | 0.2508707  | 0.329 | 0.219 | 4.45E-09 | CD4_EM_CTL_spleen |
| RAB27A   | 1.29E-13 | 0.16990477 | 0.284 | 0.181 | 4.57E-09 | CD4_EM_CTL_spleen |
| ZNF700   | 1.49E-13 | 0.36770039 | 0.258 | 0.164 | 5.30E-09 | CD4_EM_CTL_spleen |
| HK1      | 1.59E-13 | 0.21279918 | 0.252 | 0.158 | 5.64E-09 | CD4_EM_CTL_spleen |
| HM13     | 1.68E-13 | 0.21077034 | 0.287 | 0.187 | 5.94E-09 | CD4_EM_CTL_spleen |
| LMTK2    | 1.71E-13 | 0.3511343  | 0.314 | 0.211 | 6.06E-09 | CD4_EM_CTL_spleen |
| AQR      | 1.79E-13 | 0.20271007 | 0.362 | 0.246 | 6.33E-09 | CD4_EM_CTL_spleen |
| DNAJC15  | 1.83E-13 | 0.11677126 | 0.306 | 0.198 | 6.49E-09 | CD4_EM_CTL_spleen |
| CPSF6    | 1.88E-13 | 0.17556488 | 0.399 | 0.277 | 6.67E-09 | CD4_EM_CTL_spleen |
| CCDC12   | 2.07E-13 | 0.14442516 | 0.429 | 0.296 | 7.35E-09 | CD4_EM_CTL_spleen |
| L3MBTL3  | 2.29E-13 | 0.38930379 | 0.254 | 0.164 | 8.10E-09 | CD4_EM_CTL_spleen |
| TGFB1    | 2.43E-13 | 0.23654257 | 0.577 | 0.424 | 8.61E-09 | CD4_EM_CTL_spleen |
| HNRNPUL1 | 2.55E-13 | 0.15911952 | 0.465 | 0.328 | 9.04E-09 | CD4_EM_CTL_spleen |
| RPS6KA1  | 2.72E-13 | 0.15425861 | 0.254 | 0.159 | 9.65E-09 | CD4_EM_CTL_spleen |
| HIVEP1   | 2.87E-13 | 0.18614447 | 0.584 | 0.421 | 1.02E-08 | CD4_EM_CTL_spleen |
| PIK3R5   | 3.11E-13 | 0.19683302 | 0.464 | 0.333 | 1.10E-08 | CD4_EM_CTL_spleen |
| TTC37    | 3.38E-13 | 0.16365295 | 0.294 | 0.192 | 1.20E-08 | CD4_EM_CTL_spleen |
| RNF13    | 3.39E-13 | 0.15837133 | 0.466 | 0.328 | 1.20E-08 | CD4_EM_CTL_spleen |

|                    |          |            |       |       |          |                   |
|--------------------|----------|------------|-------|-------|----------|-------------------|
| GMCL1              | 3.42E-13 | 0.22040439 | 0.447 | 0.319 | 1.21E-08 | CD4_EM_CTL_spleen |
| BZW2               | 3.60E-13 | 0.22338495 | 0.401 | 0.279 | 1.28E-08 | CD4_EM_CTL_spleen |
| CTNNBL1            | 3.73E-13 | 0.13180444 | 0.389 | 0.268 | 1.32E-08 | CD4_EM_CTL_spleen |
| STX8               | 3.79E-13 | 0.1790355  | 0.443 | 0.312 | 1.34E-08 | CD4_EM_CTL_spleen |
| MYO5A              | 3.88E-13 | 0.31312286 | 0.34  | 0.233 | 1.37E-08 | CD4_EM_CTL_spleen |
| CDC14A             | 3.92E-13 | 0.22998204 | 0.599 | 0.439 | 1.39E-08 | CD4_EM_CTL_spleen |
| RANBP9             | 4.17E-13 | 0.22815994 | 0.43  | 0.304 | 1.48E-08 | CD4_EM_CTL_spleen |
| MED27              | 4.29E-13 | 0.25175239 | 0.378 | 0.26  | 1.52E-08 | CD4_EM_CTL_spleen |
| AGTPBP1            | 4.31E-13 | 0.20458303 | 0.391 | 0.272 | 1.53E-08 | CD4_EM_CTL_spleen |
| LEMD3              | 4.96E-13 | 0.25871257 | 0.396 | 0.279 | 1.76E-08 | CD4_EM_CTL_spleen |
| SF3B1              | 5.13E-13 | 0.1024773  | 0.724 | 0.531 | 1.82E-08 | CD4_EM_CTL_spleen |
| ILRUN              | 5.15E-13 | 0.35880202 | 0.257 | 0.167 | 1.83E-08 | CD4_EM_CTL_spleen |
| SMC1A              | 6.13E-13 | 0.19679915 | 0.278 | 0.181 | 2.17E-08 | CD4_EM_CTL_spleen |
| ACAD10             | 6.13E-13 | 0.11533311 | 0.252 | 0.158 | 2.17E-08 | CD4_EM_CTL_spleen |
| ATP5PB             | 6.31E-13 | 0.17275498 | 0.378 | 0.262 | 2.23E-08 | CD4_EM_CTL_spleen |
| PNRC2              | 6.55E-13 | 0.11011838 | 0.432 | 0.301 | 2.32E-08 | CD4_EM_CTL_spleen |
| BRAF               | 7.26E-13 | 0.10266805 | 0.613 | 0.436 | 2.57E-08 | CD4_EM_CTL_spleen |
| RTF1               | 7.41E-13 | 0.23308815 | 0.353 | 0.24  | 2.62E-08 | CD4_EM_CTL_spleen |
| WIPI2              | 7.41E-13 | 0.29250127 | 0.305 | 0.204 | 2.63E-08 | CD4_EM_CTL_spleen |
| CLTC               | 7.93E-13 | 0.12872094 | 0.334 | 0.225 | 2.81E-08 | CD4_EM_CTL_spleen |
| CD69               | 8.52E-13 | 0.29115617 | 0.879 | 0.788 | 3.02E-08 | CD4_EM_CTL_spleen |
| CD6                | 8.95E-13 | 0.13989013 | 0.425 | 0.304 | 3.17E-08 | CD4_EM_CTL_spleen |
| RAB3GAP2           | 8.97E-13 | 0.15682408 | 0.39  | 0.27  | 3.18E-08 | CD4_EM_CTL_spleen |
| ENSMMUG00000063859 | 9.29E-13 | 0.10211631 | 0.262 | 0.164 | 3.29E-08 | CD4_EM_CTL_spleen |
| SCAF11             | 9.60E-13 | 0.10151293 | 0.619 | 0.442 | 3.40E-08 | CD4_EM_CTL_spleen |
| DOP1B              | 1.00E-12 | 0.37633441 | 0.278 | 0.186 | 3.55E-08 | CD4_EM_CTL_spleen |
| XPC                | 1.00E-12 | 0.25228521 | 0.277 | 0.183 | 3.56E-08 | CD4_EM_CTL_spleen |
| APC                | 1.07E-12 | 0.27377674 | 0.338 | 0.232 | 3.79E-08 | CD4_EM_CTL_spleen |
| SF3A1              | 1.20E-12 | 0.26360149 | 0.292 | 0.195 | 4.25E-08 | CD4_EM_CTL_spleen |
| DNM1L              | 1.23E-12 | 0.21978171 | 0.33  | 0.223 | 4.36E-08 | CD4_EM_CTL_spleen |
| HSPA4              | 1.25E-12 | 0.2892345  | 0.293 | 0.196 | 4.44E-08 | CD4_EM_CTL_spleen |
| ICE1               | 1.27E-12 | 0.30197996 | 0.257 | 0.167 | 4.50E-08 | CD4_EM_CTL_spleen |
| BIN2               | 1.38E-12 | 0.13357835 | 0.668 | 0.491 | 4.88E-08 | CD4_EM_CTL_spleen |

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|--------------------|----------|------------|-------|-------|----------|-------------------|
| ATAD1              | 1.47E-12 | 0.13277243 | 0.354 | 0.244 | 5.20E-08 | CD4_EM_CTL_spleen |
| SELENOT            | 1.51E-12 | 0.41545684 | 0.264 | 0.174 | 5.33E-08 | CD4_EM_CTL_spleen |
| ARFGEF2            | 1.51E-12 | 0.28983814 | 0.263 | 0.174 | 5.35E-08 | CD4_EM_CTL_spleen |
| MTX2               | 1.68E-12 | 0.22223971 | 0.264 | 0.171 | 5.94E-08 | CD4_EM_CTL_spleen |
| DHX15              | 1.70E-12 | 0.15549844 | 0.313 | 0.209 | 6.01E-08 | CD4_EM_CTL_spleen |
| RBL2               | 1.75E-12 | 0.22598656 | 0.328 | 0.224 | 6.22E-08 | CD4_EM_CTL_spleen |
| ENSMMUG00000055114 | 1.95E-12 | 0.36199079 | 0.401 | 0.29  | 6.91E-08 | CD4_EM_CTL_spleen |
| BACH2              | 2.09E-12 | 0.22756473 | 0.597 | 0.461 | 7.41E-08 | CD4_EM_CTL_spleen |
| ENSMMUG00000063979 | 2.14E-12 | 0.22239207 | 0.351 | 0.24  | 7.58E-08 | CD4_EM_CTL_spleen |
| MIER1              | 2.40E-12 | 0.16439408 | 0.584 | 0.424 | 8.51E-08 | CD4_EM_CTL_spleen |
| ERP44              | 2.53E-12 | 0.12044856 | 0.447 | 0.319 | 8.98E-08 | CD4_EM_CTL_spleen |
| LMBRD1             | 2.60E-12 | 0.1276587  | 0.509 | 0.36  | 9.22E-08 | CD4_EM_CTL_spleen |
| SOS2               | 2.76E-12 | 0.27946781 | 0.305 | 0.209 | 9.79E-08 | CD4_EM_CTL_spleen |
| SLC25A26           | 2.77E-12 | 0.17795698 | 0.386 | 0.271 | 9.82E-08 | CD4_EM_CTL_spleen |
| KANSL2             | 2.79E-12 | 0.18298372 | 0.349 | 0.237 | 9.90E-08 | CD4_EM_CTL_spleen |
| MED30              | 2.88E-12 | 0.15039115 | 0.29  | 0.189 | 1.02E-07 | CD4_EM_CTL_spleen |
| SHOC2              | 2.89E-12 | 0.12109186 | 0.486 | 0.346 | 1.03E-07 | CD4_EM_CTL_spleen |
| RAD21              | 3.06E-12 | 0.1034743  | 0.514 | 0.362 | 1.08E-07 | CD4_EM_CTL_spleen |
| SECISBP2           | 3.10E-12 | 0.18487957 | 0.323 | 0.22  | 1.10E-07 | CD4_EM_CTL_spleen |
| VPS53              | 3.30E-12 | 0.42908067 | 0.28  | 0.189 | 1.17E-07 | CD4_EM_CTL_spleen |
| RUBCN              | 3.75E-12 | 0.2164359  | 0.272 | 0.18  | 1.33E-07 | CD4_EM_CTL_spleen |
| ELL2               | 3.91E-12 | 0.31366344 | 0.337 | 0.238 | 1.38E-07 | CD4_EM_CTL_spleen |
| OPA1               | 4.26E-12 | 0.21126708 | 0.356 | 0.247 | 1.51E-07 | CD4_EM_CTL_spleen |
| RPL13A             | 4.38E-12 | 0.14452728 | 0.941 | 0.941 | 1.55E-07 | CD4_EM_CTL_spleen |
| NCKAP1L            | 4.41E-12 | 0.13523205 | 0.354 | 0.243 | 1.56E-07 | CD4_EM_CTL_spleen |
| UBE2V2             | 4.74E-12 | 0.10429995 | 0.28  | 0.184 | 1.68E-07 | CD4_EM_CTL_spleen |
| DAZAP2             | 5.05E-12 | 0.11276499 | 0.506 | 0.362 | 1.79E-07 | CD4_EM_CTL_spleen |
| WDPCP              | 5.16E-12 | 0.30873646 | 0.257 | 0.17  | 1.83E-07 | CD4_EM_CTL_spleen |
| CNOT6              | 6.35E-12 | 0.35351528 | 0.261 | 0.174 | 2.25E-07 | CD4_EM_CTL_spleen |
| RLIM               | 6.36E-12 | 0.29826977 | 0.279 | 0.188 | 2.25E-07 | CD4_EM_CTL_spleen |
| PPP1CB             | 6.51E-12 | 0.31964228 | 0.651 | 0.504 | 2.31E-07 | CD4_EM_CTL_spleen |
| FAM222B            | 6.72E-12 | 0.32145992 | 0.336 | 0.236 | 2.38E-07 | CD4_EM_CTL_spleen |
| ABCG1              | 6.78E-12 | 0.36116588 | 0.289 | 0.198 | 2.40E-07 | CD4_EM_CTL_spleen |

|          |          |            |       |       |          |                   |
|----------|----------|------------|-------|-------|----------|-------------------|
| CDC27    | 7.26E-12 | 0.211828   | 0.35  | 0.244 | 2.57E-07 | CD4_EM_CTL_spleen |
| TRANK1   | 7.52E-12 | 0.22211883 | 0.307 | 0.21  | 2.67E-07 | CD4_EM_CTL_spleen |
| TOGARAM1 | 8.39E-12 | 0.2901256  | 0.278 | 0.187 | 2.97E-07 | CD4_EM_CTL_spleen |
| DIDO1    | 8.52E-12 | 0.21087655 | 0.315 | 0.218 | 3.02E-07 | CD4_EM_CTL_spleen |
| VPS26A   | 8.79E-12 | 0.23140571 | 0.256 | 0.169 | 3.11E-07 | CD4_EM_CTL_spleen |
| PBXIP1   | 8.80E-12 | 0.12252083 | 0.362 | 0.25  | 3.12E-07 | CD4_EM_CTL_spleen |
| SEC61A2  | 9.25E-12 | 0.35325274 | 0.296 | 0.202 | 3.28E-07 | CD4_EM_CTL_spleen |
| CNOT10   | 9.55E-12 | 0.33760901 | 0.273 | 0.184 | 3.39E-07 | CD4_EM_CTL_spleen |
| TEX264   | 1.03E-11 | 0.22755965 | 0.261 | 0.171 | 3.64E-07 | CD4_EM_CTL_spleen |
| RPL31    | 1.05E-11 | 0.14736892 | 0.689 | 0.531 | 3.71E-07 | CD4_EM_CTL_spleen |
| MFF      | 1.22E-11 | 0.18342521 | 0.356 | 0.247 | 4.33E-07 | CD4_EM_CTL_spleen |
| DHX9     | 1.49E-11 | 0.13524547 | 0.547 | 0.399 | 5.28E-07 | CD4_EM_CTL_spleen |
| FAM117B  | 1.54E-11 | 0.21691508 | 0.444 | 0.324 | 5.45E-07 | CD4_EM_CTL_spleen |
| TMEM245  | 1.61E-11 | 0.26562996 | 0.292 | 0.201 | 5.72E-07 | CD4_EM_CTL_spleen |
| SLU7     | 1.62E-11 | 0.15972027 | 0.328 | 0.226 | 5.75E-07 | CD4_EM_CTL_spleen |
| ERN1     | 1.68E-11 | 0.16886789 | 0.269 | 0.181 | 5.94E-07 | CD4_EM_CTL_spleen |
| NAMPT    | 1.87E-11 | 0.20831134 | 0.28  | 0.189 | 6.63E-07 | CD4_EM_CTL_spleen |
| SOS1     | 1.93E-11 | 0.13367577 | 0.49  | 0.356 | 6.84E-07 | CD4_EM_CTL_spleen |
| IP6K2    | 1.95E-11 | 0.14745441 | 0.347 | 0.24  | 6.91E-07 | CD4_EM_CTL_spleen |
| STX17    | 2.30E-11 | 0.25169799 | 0.261 | 0.174 | 8.14E-07 | CD4_EM_CTL_spleen |
| KCMF1    | 2.35E-11 | 0.23059266 | 0.308 | 0.21  | 8.33E-07 | CD4_EM_CTL_spleen |
| ATL3     | 2.38E-11 | 0.20992498 | 0.273 | 0.181 | 8.44E-07 | CD4_EM_CTL_spleen |
| TACC1    | 2.47E-11 | 0.11046053 | 0.373 | 0.266 | 8.74E-07 | CD4_EM_CTL_spleen |
| CEBPZ    | 2.76E-11 | 0.11221382 | 0.42  | 0.299 | 9.79E-07 | CD4_EM_CTL_spleen |
| HERC3    | 2.96E-11 | 0.29099554 | 0.323 | 0.228 | 1.05E-06 | CD4_EM_CTL_spleen |
| SLC25A4  | 2.97E-11 | 0.12296156 | 0.275 | 0.183 | 1.05E-06 | CD4_EM_CTL_spleen |
| RNF34    | 3.08E-11 | 0.27498758 | 0.252 | 0.167 | 1.09E-06 | CD4_EM_CTL_spleen |
| STXBP3   | 3.46E-11 | 0.11574389 | 0.278 | 0.189 | 1.23E-06 | CD4_EM_CTL_spleen |
| MINDY3   | 3.52E-11 | 0.19318666 | 0.324 | 0.227 | 1.25E-06 | CD4_EM_CTL_spleen |
| DDX3Y    | 3.74E-11 | 0.5111627  | 0.447 | 0.369 | 1.33E-06 | CD4_EM_CTL_spleen |
| KATNBL1  | 4.08E-11 | 0.14764873 | 0.299 | 0.203 | 1.45E-06 | CD4_EM_CTL_spleen |
| TBC1D15  | 4.08E-11 | 0.20264141 | 0.38  | 0.271 | 1.45E-06 | CD4_EM_CTL_spleen |
| PHC3     | 4.20E-11 | 0.19531844 | 0.392 | 0.277 | 1.49E-06 | CD4_EM_CTL_spleen |

|                    |          |            |       |       |          |                   |
|--------------------|----------|------------|-------|-------|----------|-------------------|
| LRR8C              | 4.27E-11 | 0.2291173  | 0.308 | 0.216 | 1.51E-06 | CD4_EM_CTL_spleen |
| HERC1              | 4.66E-11 | 0.12019756 | 0.463 | 0.337 | 1.65E-06 | CD4_EM_CTL_spleen |
| HERPUD2            | 4.73E-11 | 0.24305465 | 0.3   | 0.208 | 1.68E-06 | CD4_EM_CTL_spleen |
| XPO7               | 4.77E-11 | 0.33628253 | 0.27  | 0.185 | 1.69E-06 | CD4_EM_CTL_spleen |
| LPIN2              | 4.84E-11 | 0.17500723 | 0.288 | 0.197 | 1.71E-06 | CD4_EM_CTL_spleen |
| ZNF43              | 4.85E-11 | 0.142514   | 0.368 | 0.26  | 1.72E-06 | CD4_EM_CTL_spleen |
| ADD3               | 4.91E-11 | 0.19368581 | 0.529 | 0.398 | 1.74E-06 | CD4_EM_CTL_spleen |
| USP8               | 5.00E-11 | 0.15429976 | 0.306 | 0.209 | 1.77E-06 | CD4_EM_CTL_spleen |
| ERGIC2             | 5.02E-11 | 0.14830212 | 0.273 | 0.182 | 1.78E-06 | CD4_EM_CTL_spleen |
| GTF2B              | 5.18E-11 | 0.24826179 | 0.585 | 0.44  | 1.84E-06 | CD4_EM_CTL_spleen |
| ACSL3              | 6.34E-11 | 0.40709749 | 0.274 | 0.192 | 2.25E-06 | CD4_EM_CTL_spleen |
| ZNF749             | 6.68E-11 | 0.11565293 | 0.332 | 0.233 | 2.37E-06 | CD4_EM_CTL_spleen |
| PSEN1              | 8.24E-11 | 0.23979145 | 0.32  | 0.227 | 2.92E-06 | CD4_EM_CTL_spleen |
| ENSMMUG00000065373 | 8.28E-11 | 0.49890857 | 0.872 | 0.855 | 2.93E-06 | CD4_EM_CTL_spleen |
| GORASP2            | 9.25E-11 | 0.27614099 | 0.262 | 0.178 | 3.28E-06 | CD4_EM_CTL_spleen |
| MCM9               | 9.64E-11 | 0.21692204 | 0.3   | 0.209 | 3.42E-06 | CD4_EM_CTL_spleen |
| HACE1              | 1.22E-10 | 0.22877203 | 0.268 | 0.181 | 4.31E-06 | CD4_EM_CTL_spleen |
| CASP3              | 1.54E-10 | 0.12851846 | 0.531 | 0.396 | 5.44E-06 | CD4_EM_CTL_spleen |
| NBAS               | 1.68E-10 | 0.30170793 | 0.252 | 0.172 | 5.94E-06 | CD4_EM_CTL_spleen |
| CEMIP2             | 1.68E-10 | 0.10919898 | 0.576 | 0.442 | 5.97E-06 | CD4_EM_CTL_spleen |
| KIAA0040           | 1.75E-10 | 0.19885014 | 0.251 | 0.168 | 6.22E-06 | CD4_EM_CTL_spleen |
| RASSF3             | 1.84E-10 | 0.3546953  | 0.384 | 0.287 | 6.51E-06 | CD4_EM_CTL_spleen |
| FBXO7              | 1.93E-10 | 0.1175906  | 0.251 | 0.165 | 6.83E-06 | CD4_EM_CTL_spleen |
| SCMH1              | 1.94E-10 | 0.42047771 | 0.256 | 0.177 | 6.89E-06 | CD4_EM_CTL_spleen |
| ARL8B              | 2.25E-10 | 0.18261027 | 0.323 | 0.226 | 7.96E-06 | CD4_EM_CTL_spleen |
| PPIP5K2            | 2.50E-10 | 0.24375457 | 0.265 | 0.181 | 8.87E-06 | CD4_EM_CTL_spleen |
| RPS3               | 2.59E-10 | 0.15854456 | 0.919 | 0.907 | 9.18E-06 | CD4_EM_CTL_spleen |
| LENG8              | 2.65E-10 | 0.17864295 | 0.255 | 0.171 | 9.40E-06 | CD4_EM_CTL_spleen |
| HIF1A              | 2.86E-10 | 0.22595008 | 0.319 | 0.228 | 1.01E-05 | CD4_EM_CTL_spleen |
| ABLIM1             | 3.64E-10 | 0.12874954 | 0.687 | 0.511 | 1.29E-05 | CD4_EM_CTL_spleen |
| GALNT11            | 3.98E-10 | 0.26254648 | 0.286 | 0.201 | 1.41E-05 | CD4_EM_CTL_spleen |
| TCERG1             | 4.92E-10 | 0.11107593 | 0.394 | 0.285 | 1.74E-05 | CD4_EM_CTL_spleen |
| PHF12              | 5.24E-10 | 0.14906614 | 0.287 | 0.2   | 1.86E-05 | CD4_EM_CTL_spleen |



|                    |          |            |       |       |            |                   |
|--------------------|----------|------------|-------|-------|------------|-------------------|
| MYO1F              | 5.25E-10 | 0.17573539 | 0.345 | 0.248 | 1.86E-05   | CD4_EM_CTL_spleen |
| MAP4K4             | 5.72E-10 | 0.23604297 | 0.474 | 0.364 | 2.03E-05   | CD4_EM_CTL_spleen |
| STXBP5             | 6.56E-10 | 0.24089265 | 0.32  | 0.232 | 2.32E-05   | CD4_EM_CTL_spleen |
| WDR20              | 8.64E-10 | 0.18808472 | 0.252 | 0.174 | 3.06E-05   | CD4_EM_CTL_spleen |
| ENSMMUG00000015583 | 8.67E-10 | 0.10396499 | 0.796 | 0.608 | 3.07E-05   | CD4_EM_CTL_spleen |
| XPO4               | 9.45E-10 | 0.24904412 | 0.264 | 0.183 | 3.35E-05   | CD4_EM_CTL_spleen |
| KLHL28             | 1.12E-09 | 0.17958992 | 0.345 | 0.25  | 3.98E-05   | CD4_EM_CTL_spleen |
| DDX52              | 1.33E-09 | 0.14334014 | 0.295 | 0.207 | 4.73E-05   | CD4_EM_CTL_spleen |
| EPRS1              | 1.38E-09 | 0.14482593 | 0.287 | 0.202 | 4.89E-05   | CD4_EM_CTL_spleen |
| GPR89A             | 1.66E-09 | 0.21428566 | 0.262 | 0.181 | 5.87E-05   | CD4_EM_CTL_spleen |
| TBPL1              | 1.78E-09 | 0.10024849 | 0.26  | 0.18  | 6.30E-05   | CD4_EM_CTL_spleen |
| RPAP2              | 2.01E-09 | 0.11129157 | 0.279 | 0.196 | 7.13E-05   | CD4_EM_CTL_spleen |
| UBE4A              | 2.02E-09 | 0.13829507 | 0.259 | 0.178 | 7.16E-05   | CD4_EM_CTL_spleen |
| ANAPC10            | 2.10E-09 | 0.13768693 | 0.327 | 0.236 | 7.45E-05   | CD4_EM_CTL_spleen |
| ARHGEF3            | 2.16E-09 | 0.15985674 | 0.395 | 0.293 | 7.67E-05   | CD4_EM_CTL_spleen |
| MADD               | 2.61E-09 | 0.12920864 | 0.273 | 0.192 | 9.24E-05   | CD4_EM_CTL_spleen |
| SENP2              | 3.06E-09 | 0.21021471 | 0.322 | 0.233 | 0.00010836 | CD4_EM_CTL_spleen |
| COMMD1             | 3.37E-09 | 0.19074636 | 0.39  | 0.291 | 0.00011948 | CD4_EM_CTL_spleen |
| NOL10              | 3.88E-09 | 0.15502642 | 0.25  | 0.173 | 0.00013732 | CD4_EM_CTL_spleen |
| INTS8              | 4.55E-09 | 0.10519691 | 0.264 | 0.185 | 0.00016117 | CD4_EM_CTL_spleen |
| SH3GLB1            | 4.55E-09 | 0.11093841 | 0.278 | 0.194 | 0.00016125 | CD4_EM_CTL_spleen |
| HMGA1              | 4.66E-09 | 0.11256387 | 0.316 | 0.228 | 0.00016516 | CD4_EM_CTL_spleen |
| HSPA14             | 4.90E-09 | 0.11326009 | 0.262 | 0.182 | 0.00017345 | CD4_EM_CTL_spleen |
| MTR                | 5.07E-09 | 0.17091368 | 0.28  | 0.199 | 0.00017962 | CD4_EM_CTL_spleen |
| WASHC4             | 5.39E-09 | 0.14490482 | 0.25  | 0.175 | 0.00019112 | CD4_EM_CTL_spleen |
| SEC23A             | 6.56E-09 | 0.23811074 | 0.28  | 0.198 | 0.00023254 | CD4_EM_CTL_spleen |
| IWS1               | 7.53E-09 | 0.19617817 | 0.296 | 0.21  | 0.00026698 | CD4_EM_CTL_spleen |
| CYB5R4             | 8.52E-09 | 0.19471009 | 0.319 | 0.231 | 0.00030172 | CD4_EM_CTL_spleen |
| SLC38A9            | 8.73E-09 | 0.27046558 | 0.25  | 0.177 | 0.00030919 | CD4_EM_CTL_spleen |
| SLC35A3            | 9.24E-09 | 0.10017968 | 0.495 | 0.367 | 0.00032723 | CD4_EM_CTL_spleen |
| MACO1              | 9.97E-09 | 0.14072375 | 0.36  | 0.261 | 0.00035321 | CD4_EM_CTL_spleen |
| KLF3               | 1.43E-08 | 0.28912598 | 0.308 | 0.23  | 0.00050774 | CD4_EM_CTL_spleen |
| TFG                | 1.48E-08 | 0.1824258  | 0.309 | 0.223 | 0.00052567 | CD4_EM_CTL_spleen |

|                    |            |            |       |       |            |                   |
|--------------------|------------|------------|-------|-------|------------|-------------------|
| CRY1               | 1.56E-08   | 0.29015861 | 0.266 | 0.192 | 0.00055206 | CD4_EM_CTL_spleen |
| TNPO1              | 2.35E-08   | 0.19342684 | 0.299 | 0.217 | 0.00083278 | CD4_EM_CTL_spleen |
| VPS39              | 3.37E-08   | 0.15042601 | 0.261 | 0.186 | 0.00119338 | CD4_EM_CTL_spleen |
| UBXN2A             | 3.76E-08   | 0.11234093 | 0.275 | 0.199 | 0.00133048 | CD4_EM_CTL_spleen |
| TARDBP             | 4.12E-08   | 0.12275291 | 0.277 | 0.198 | 0.00145926 | CD4_EM_CTL_spleen |
| BOD1L1             | 4.43E-08   | 0.19954269 | 0.278 | 0.203 | 0.00156899 | CD4_EM_CTL_spleen |
| CAPN7              | 7.41E-08   | 0.24765665 | 0.271 | 0.198 | 0.0026251  | CD4_EM_CTL_spleen |
| CDK6               | 1.04E-07   | 0.10923861 | 0.256 | 0.186 | 0.00367923 | CD4_EM_CTL_spleen |
| GLYR1              | 1.31E-07   | 0.10429077 | 0.251 | 0.179 | 0.00463159 | CD4_EM_CTL_spleen |
| BRD7               | 1.97E-07   | 0.10022188 | 0.324 | 0.24  | 0.00696593 | CD4_EM_CTL_spleen |
| BCL7B              | 2.26E-07   | 0.14681674 | 0.27  | 0.197 | 0.00800365 | CD4_EM_CTL_spleen |
| CD28               | 2.43E-07   | 0.28120014 | 0.326 | 0.254 | 0.0086096  | CD4_EM_CTL_spleen |
| MARCHF3            | 2.54E-07   | 0.13252063 | 0.334 | 0.25  | 0.00898751 | CD4_EM_CTL_spleen |
| ARHGAP12           | 3.97E-07   | 0.14427416 | 0.335 | 0.253 | 0.01407082 | CD4_EM_CTL_spleen |
| MANBA              | 5.55E-07   | 0.12011998 | 0.503 | 0.398 | 0.01968188 | CD4_EM_CTL_spleen |
| FBXL5              | 6.01E-07   | 0.10925099 | 0.289 | 0.216 | 0.02128901 | CD4_EM_CTL_spleen |
| ATF7IP2            | 9.00E-07   | 0.19505585 | 0.273 | 0.204 | 0.03187213 | CD4_EM_CTL_spleen |
| ATP6V1H            | 9.94E-07   | 0.12393112 | 0.263 | 0.195 | 0.03520794 | CD4_EM_CTL_spleen |
| AP3S1              | 1.07E-06   | 0.11187623 | 0.255 | 0.186 | 0.03791665 | CD4_EM_CTL_spleen |
| ZNF654             | 1.50E-06   | 0.16970599 | 0.298 | 0.227 | 0.05331536 | CD4_EM_CTL_spleen |
| TPP2               | 1.60E-06   | 0.11773702 | 0.297 | 0.225 | 0.05662204 | CD4_EM_CTL_spleen |
| KLHL2              | 2.04E-06   | 0.14587235 | 0.28  | 0.212 | 0.07222084 | CD4_EM_CTL_spleen |
| CUL2               | 2.84E-06   | 0.10083248 | 0.306 | 0.232 | 0.1007213  | CD4_EM_CTL_spleen |
| TM9SF2             | 3.12E-06   | 0.10588264 | 0.297 | 0.227 | 0.11056598 | CD4_EM_CTL_spleen |
| UTY                | 1.20E-05   | 0.24538359 | 0.344 | 0.279 | 0.42400871 | CD4_EM_CTL_spleen |
| MED15              | 2.44E-05   | 0.10701618 | 0.257 | 0.196 | 0.86333707 | CD4_EM_CTL_spleen |
| GNG2               | 5.63E-05   | 0.13058937 | 0.691 | 0.572 | 1          | CD4_EM_CTL_spleen |
| ENSMMUG00000056331 | 0.00156681 | 0.19595291 | 0.303 | 0.258 | 1          | CD4_EM_CTL_spleen |
| COX3               | 0.01775941 | 0.1025195  | 0.805 | 0.886 | 1          | CD4_EM_CTL_spleen |
| ATP5F1E            | 0          | 1.77273276 | 0.972 | 0.941 | 0          | CD16neg_NK_lung   |
| RPS21              | 0          | 1.56740038 | 0.993 | 0.974 | 0          | CD16neg_NK_lung   |
| ENSMMUG00000062350 | 0          | 1.41855652 | 0.997 | 0.987 | 0          | CD16neg_NK_lung   |
| RPS28              | 0          | 1.21330025 | 0.998 | 0.989 | 0          | CD16neg_NK_lung   |

|                     |           |            |       |       |           |                 |
|---------------------|-----------|------------|-------|-------|-----------|-----------------|
| FAU                 | 7.86E-267 | 1.07692725 | 0.994 | 0.991 | 2.79E-262 | CD16neg_NK_lung |
| RPL10               | 1.15E-253 | 0.96574915 | 0.998 | 0.992 | 4.07E-249 | CD16neg_NK_lung |
| TMSB10              | 3.97E-239 | 1.66073175 | 0.977 | 0.963 | 1.41E-234 | CD16neg_NK_lung |
| GPR65               | 5.02E-237 | 3.64275908 | 0.803 | 0.347 | 1.78E-232 | CD16neg_NK_lung |
| ENSMMUG00000004441  | 7.51E-229 | 1.95916081 | 0.912 | 0.83  | 2.66E-224 | CD16neg_NK_lung |
| HCST                | 6.15E-225 | 1.54044388 | 0.958 | 0.934 | 2.18E-220 | CD16neg_NK_lung |
| RPL36               | 2.25E-223 | 1.4500997  | 0.948 | 0.94  | 7.99E-219 | CD16neg_NK_lung |
| RPL35A              | 2.10E-220 | 0.96524077 | 0.99  | 0.98  | 7.43E-216 | CD16neg_NK_lung |
| RPS23               | 3.93E-216 | 0.84049873 | 0.997 | 0.991 | 1.39E-211 | CD16neg_NK_lung |
| ENSMMUG00000015563  | 4.26E-216 | 0.88789945 | 0.998 | 0.99  | 1.51E-211 | CD16neg_NK_lung |
| RPS29               | 1.77E-214 | 0.83844946 | 0.999 | 0.992 | 6.28E-210 | CD16neg_NK_lung |
| NUDT3               | 3.47E-214 | 0.89678007 | 0.993 | 0.991 | 1.23E-209 | CD16neg_NK_lung |
| RPLP1               | 2.72E-212 | 0.88951262 | 0.997 | 0.993 | 9.64E-208 | CD16neg_NK_lung |
| RPL18               | 4.12E-206 | 0.9102734  | 0.995 | 0.985 | 1.46E-201 | CD16neg_NK_lung |
| RPL32               | 1.80E-202 | 0.8678275  | 0.995 | 0.991 | 6.37E-198 | CD16neg_NK_lung |
| RPL34               | 2.90E-202 | 0.84845138 | 0.996 | 0.989 | 1.03E-197 | CD16neg_NK_lung |
| RPS12               | 1.39E-198 | 0.93774417 | 0.993 | 0.986 | 4.94E-194 | CD16neg_NK_lung |
| ENSMMUG00000005593  | 1.26E-197 | 1.09021886 | 0.981 | 0.983 | 4.46E-193 | CD16neg_NK_lung |
| RPS13               | 1.86E-194 | 0.88819653 | 0.988 | 0.983 | 6.58E-190 | CD16neg_NK_lung |
| GZMB                | 3.63E-193 | 2.35921065 | 0.898 | 0.674 | 1.29E-188 | CD16neg_NK_lung |
| RPL30               | 8.20E-184 | 0.73945706 | 0.997 | 0.994 | 2.91E-179 | CD16neg_NK_lung |
| RPL12               | 1.47E-179 | 1.01660949 | 0.982 | 0.981 | 5.21E-175 | CD16neg_NK_lung |
| RPS7                | 1.57E-177 | 0.7633455  | 0.997 | 0.99  | 5.56E-173 | CD16neg_NK_lung |
| ENSMMUG000000056354 | 1.73E-169 | 1.25972444 | 0.934 | 0.924 | 6.13E-165 | CD16neg_NK_lung |
| ENSMMUG00000013429  | 2.86E-165 | 0.72511434 | 0.998 | 0.994 | 1.01E-160 | CD16neg_NK_lung |
| FTL                 | 1.64E-164 | 1.22803631 | 0.946 | 0.933 | 5.82E-160 | CD16neg_NK_lung |
| UBA52               | 3.69E-163 | 0.82918559 | 0.985 | 0.986 | 1.31E-158 | CD16neg_NK_lung |
| RPS5                | 4.57E-158 | 0.86320122 | 0.979 | 0.969 | 1.62E-153 | CD16neg_NK_lung |
| RPL39               | 1.27E-153 | 0.92538449 | 0.976 | 0.977 | 4.50E-149 | CD16neg_NK_lung |
| RPL24               | 1.12E-151 | 0.85385046 | 0.98  | 0.975 | 3.98E-147 | CD16neg_NK_lung |
| RPS9                | 4.09E-149 | 0.83136888 | 0.986 | 0.983 | 1.45E-144 | CD16neg_NK_lung |
| TYROBP              | 2.73E-142 | 1.07243262 | 0.964 | 0.963 | 9.66E-138 | CD16neg_NK_lung |
| ENSMMUG00000012140  | 6.70E-142 | 0.95874452 | 0.966 | 0.985 | 2.37E-137 | CD16neg_NK_lung |

|                     |           |            |       |       |           |                 |
|---------------------|-----------|------------|-------|-------|-----------|-----------------|
| ENSMMUG00000003867  | 1.01E-140 | 0.5737726  | 0.999 | 0.995 | 3.59E-136 | CD16neg_NK_lung |
| ELOA                | 9.73E-131 | 0.70391001 | 0.989 | 0.988 | 3.45E-126 | CD16neg_NK_lung |
| XCL1                | 1.84E-130 | 2.38107697 | 0.819 | 0.797 | 6.51E-126 | CD16neg_NK_lung |
| RPL8                | 9.12E-129 | 0.82156239 | 0.971 | 0.985 | 3.23E-124 | CD16neg_NK_lung |
| RPS24               | 3.05E-124 | 0.65023062 | 0.993 | 0.99  | 1.08E-119 | CD16neg_NK_lung |
| MYL12B              | 4.77E-124 | 1.18358063 | 0.891 | 0.914 | 1.69E-119 | CD16neg_NK_lung |
| RPL36AL             | 1.22E-122 | 1.21419834 | 0.867 | 0.906 | 4.32E-118 | CD16neg_NK_lung |
| ENSMMUG000000064224 | 1.68E-122 | 1.3363706  | 0.898 | 0.92  | 5.94E-118 | CD16neg_NK_lung |
| RPL7A               | 3.43E-120 | 0.74925797 | 0.981 | 0.979 | 1.21E-115 | CD16neg_NK_lung |
| GMFG                | 1.27E-119 | 1.33011707 | 0.843 | 0.859 | 4.51E-115 | CD16neg_NK_lung |
| ENSMMUG000000013257 | 5.25E-119 | 1.20509992 | 0.905 | 0.937 | 1.86E-114 | CD16neg_NK_lung |
| RPL28               | 6.66E-117 | 0.7259296  | 0.99  | 0.984 | 2.36E-112 | CD16neg_NK_lung |
| MYL6                | 4.47E-112 | 1.53526877 | 0.784 | 0.76  | 1.58E-107 | CD16neg_NK_lung |
| RPS26               | 7.10E-112 | 0.67956215 | 0.993 | 0.992 | 2.51E-107 | CD16neg_NK_lung |
| S100A4              | 2.71E-110 | 1.89661538 | 0.785 | 0.706 | 9.59E-106 | CD16neg_NK_lung |
| RPL22               | 2.63E-109 | 0.7489929  | 0.964 | 0.98  | 9.33E-105 | CD16neg_NK_lung |
| RPL27               | 1.27E-108 | 0.66350011 | 0.98  | 0.98  | 4.50E-104 | CD16neg_NK_lung |
| RPL5                | 1.91E-104 | 0.71543325 | 0.964 | 0.99  | 6.77E-100 | CD16neg_NK_lung |
| ENSMMUG000000050862 | 9.62E-103 | 0.89483795 | 0.974 | 0.984 | 3.41E-98  | CD16neg_NK_lung |
| ZC3H10              | 4.64E-100 | 1.36813329 | 0.783 | 0.809 | 1.64E-95  | CD16neg_NK_lung |
| SRP14               | 2.41E-97  | 1.24471153 | 0.814 | 0.85  | 8.53E-93  | CD16neg_NK_lung |
| RPS4X               | 1.23E-96  | 0.65436922 | 0.988 | 0.989 | 4.35E-92  | CD16neg_NK_lung |
| TMSB4X              | 2.51E-95  | 0.51199054 | 0.999 | 0.998 | 8.88E-91  | CD16neg_NK_lung |
| KLRB1               | 4.04E-93  | 0.88790709 | 0.979 | 0.985 | 1.43E-88  | CD16neg_NK_lung |
| ATP5MPL             | 5.47E-92  | 1.34783284 | 0.775 | 0.799 | 1.94E-87  | CD16neg_NK_lung |
| TMA7                | 5.59E-90  | 1.37443991 | 0.751 | 0.747 | 1.98E-85  | CD16neg_NK_lung |
| IFI27L2             | 4.86E-89  | 1.60141762 | 0.726 | 0.681 | 1.72E-84  | CD16neg_NK_lung |
| RPSA                | 4.58E-84  | 0.69249178 | 0.961 | 0.973 | 1.62E-79  | CD16neg_NK_lung |
| RPL19               | 1.12E-83  | 0.73480594 | 0.948 | 0.971 | 3.96E-79  | CD16neg_NK_lung |
| NME2                | 9.86E-83  | 0.82784688 | 0.892 | 0.942 | 3.49E-78  | CD16neg_NK_lung |
| ENSMMUG000000003073 | 7.53E-80  | 0.6752838  | 0.949 | 0.972 | 2.67E-75  | CD16neg_NK_lung |
| ELOB                | 2.10E-77  | 1.58092712 | 0.69  | 0.684 | 7.44E-73  | CD16neg_NK_lung |
| ENSMMUG000000060377 | 4.29E-75  | 1.59735346 | 0.679 | 0.677 | 1.52E-70  | CD16neg_NK_lung |

|                     |          |            |       |       |          |                 |
|---------------------|----------|------------|-------|-------|----------|-----------------|
| RPS27A              | 1.74E-74 | 1.36722465 | 0.726 | 0.747 | 6.18E-70 | CD16neg_NK_lung |
| ATP5MG              | 5.87E-74 | 1.11095584 | 0.772 | 0.828 | 2.08E-69 | CD16neg_NK_lung |
| CORO1A              | 1.63E-73 | 1.28921908 | 0.744 | 0.784 | 5.78E-69 | CD16neg_NK_lung |
| HOPX                | 1.45E-68 | 1.06518809 | 0.808 | 0.853 | 5.13E-64 | CD16neg_NK_lung |
| S100A10             | 2.15E-68 | 1.82499028 | 0.666 | 0.623 | 7.60E-64 | CD16neg_NK_lung |
| JPT1                | 8.03E-68 | 1.26478484 | 0.719 | 0.769 | 2.85E-63 | CD16neg_NK_lung |
| TAGLN2              | 1.23E-65 | 1.62057873 | 0.672 | 0.66  | 4.35E-61 | CD16neg_NK_lung |
| HINT1               | 3.11E-64 | 1.20202418 | 0.734 | 0.783 | 1.10E-59 | CD16neg_NK_lung |
| ENSMMUG00000004545  | 2.62E-63 | 1.16595841 | 0.73  | 0.779 | 9.28E-59 | CD16neg_NK_lung |
| ROBO2               | 5.91E-60 | 1.35935866 | 0.68  | 0.696 | 2.09E-55 | CD16neg_NK_lung |
| EEF1D               | 2.33E-57 | 0.88639217 | 0.803 | 0.9   | 8.27E-53 | CD16neg_NK_lung |
| ENSMMUG000000052747 | 4.32E-57 | 1.47596802 | 0.647 | 0.644 | 1.53E-52 | CD16neg_NK_lung |
| ENSMMUG000000056793 | 1.86E-55 | 1.18815026 | 0.691 | 0.747 | 6.58E-51 | CD16neg_NK_lung |
| ARPC3               | 2.30E-54 | 0.97267206 | 0.753 | 0.851 | 8.14E-50 | CD16neg_NK_lung |
| UBL5                | 2.55E-53 | 1.47794485 | 0.639 | 0.659 | 9.04E-49 | CD16neg_NK_lung |
| MBD3                | 1.18E-52 | 1.52425387 | 0.618 | 0.612 | 4.17E-48 | CD16neg_NK_lung |
| ENSMMUG000000030408 | 2.20E-52 | 1.64211661 | 0.59  | 0.547 | 7.79E-48 | CD16neg_NK_lung |
| ENSMMUG000000019505 | 2.28E-52 | 1.33549865 | 0.671 | 0.713 | 8.08E-48 | CD16neg_NK_lung |
| ENSMMUG000000064139 | 8.18E-51 | 0.91958709 | 0.855 | 0.946 | 2.90E-46 | CD16neg_NK_lung |
| RPL38               | 2.76E-50 | 0.51032665 | 0.968 | 0.986 | 9.78E-46 | CD16neg_NK_lung |
| ENSMMUG000000044585 | 1.75E-48 | 1.56260735 | 0.591 | 0.566 | 6.21E-44 | CD16neg_NK_lung |
| ENSMMUG000000022428 | 1.93E-48 | 1.95466953 | 0.536 | 0.456 | 6.84E-44 | CD16neg_NK_lung |
| ACTG1               | 2.18E-48 | 0.75633564 | 0.862 | 0.927 | 7.72E-44 | CD16neg_NK_lung |
| SAMSN1              | 2.12E-46 | 2.82672476 | 0.372 | 0.174 | 7.52E-42 | CD16neg_NK_lung |
| GSTP1               | 4.02E-46 | 1.18985048 | 0.677 | 0.734 | 1.42E-41 | CD16neg_NK_lung |
| CRIP1               | 6.51E-46 | 1.45834007 | 0.639 | 0.655 | 2.31E-41 | CD16neg_NK_lung |
| GPR183              | 7.83E-46 | 3.19292778 | 0.368 | 0.166 | 2.77E-41 | CD16neg_NK_lung |
| MAMU-E              | 1.10E-45 | 0.65578198 | 0.909 | 0.981 | 3.90E-41 | CD16neg_NK_lung |
| COX7C               | 1.58E-45 | 0.90131118 | 0.756 | 0.841 | 5.59E-41 | CD16neg_NK_lung |
| COMMD6              | 3.31E-44 | 1.06095255 | 0.698 | 0.79  | 1.17E-39 | CD16neg_NK_lung |
| ROMO1               | 4.21E-44 | 1.47598228 | 0.599 | 0.598 | 1.49E-39 | CD16neg_NK_lung |
| CD83                | 1.83E-43 | 1.92125958 | 0.618 | 0.625 | 6.48E-39 | CD16neg_NK_lung |
| COX6C               | 5.33E-43 | 0.99366958 | 0.702 | 0.777 | 1.89E-38 | CD16neg_NK_lung |

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| ENSMMUG000000001458 | 8.62E-43 | 1.02738119 | 0.71  | 0.808 | 3.06E-38 | CD16neg_NK_lung |
| PRPF31              | 1.51E-42 | 1.70879965 | 0.55  | 0.522 | 5.36E-38 | CD16neg_NK_lung |
| EIF3K               | 3.38E-41 | 0.84994164 | 0.748 | 0.86  | 1.20E-36 | CD16neg_NK_lung |
| NKG7                | 1.49E-40 | 0.80857463 | 0.814 | 0.92  | 5.27E-36 | CD16neg_NK_lung |
| ENSMMUG000000001210 | 4.74E-40 | 0.91607491 | 0.725 | 0.844 | 1.68E-35 | CD16neg_NK_lung |
| ANXA1               | 6.57E-39 | 1.10444265 | 0.678 | 0.653 | 2.33E-34 | CD16neg_NK_lung |
| OST4                | 3.17E-38 | 1.22989872 | 0.622 | 0.685 | 1.12E-33 | CD16neg_NK_lung |
| ENSMMUG000000063583 | 7.74E-38 | 2.07529553 | 0.462 | 0.283 | 2.74E-33 | CD16neg_NK_lung |
| ENSMMUG000000007657 | 2.44E-37 | 1.2721142  | 0.592 | 0.613 | 8.65E-33 | CD16neg_NK_lung |
| BTG1                | 9.33E-36 | 1.06674497 | 0.732 | 0.836 | 3.30E-31 | CD16neg_NK_lung |
| CLIC1               | 5.48E-35 | 1.10815564 | 0.636 | 0.698 | 1.94E-30 | CD16neg_NK_lung |
| TPT1                | 1.70E-34 | 0.29584912 | 0.996 | 0.996 | 6.01E-30 | CD16neg_NK_lung |
| CFL1                | 1.88E-34 | 0.77127932 | 0.764 | 0.877 | 6.67E-30 | CD16neg_NK_lung |
| RPL35               | 3.49E-34 | 0.45278739 | 0.94  | 0.975 | 1.24E-29 | CD16neg_NK_lung |
| NDUFA1              | 5.07E-32 | 1.29928829 | 0.58  | 0.62  | 1.80E-27 | CD16neg_NK_lung |
| GCN1                | 6.81E-32 | 0.44823879 | 0.924 | 0.971 | 2.41E-27 | CD16neg_NK_lung |
| GZMA                | 3.11E-31 | 2.06022903 | 0.378 | 0.213 | 1.10E-26 | CD16neg_NK_lung |
| GZMK                | 4.67E-31 | 1.20678595 | 0.658 | 0.637 | 1.66E-26 | CD16neg_NK_lung |
| ARHGDIB             | 5.34E-31 | 0.63528806 | 0.798 | 0.918 | 1.89E-26 | CD16neg_NK_lung |
| KLRF1               | 1.06E-28 | 1.11946265 | 0.637 | 0.686 | 3.76E-24 | CD16neg_NK_lung |
| CST7                | 1.09E-28 | 1.58975431 | 0.506 | 0.483 | 3.87E-24 | CD16neg_NK_lung |
| ATP6V1G1            | 3.25E-27 | 1.11515682 | 0.596 | 0.668 | 1.15E-22 | CD16neg_NK_lung |
| RPL6                | 9.48E-27 | 0.33097178 | 0.966 | 0.985 | 3.36E-22 | CD16neg_NK_lung |
| ASL                 | 1.08E-26 | 0.13674604 | 0.185 | 0.431 | 3.82E-22 | CD16neg_NK_lung |
| SMDT1               | 1.52E-26 | 1.03504205 | 0.617 | 0.719 | 5.38E-22 | CD16neg_NK_lung |
| GNG5                | 2.91E-26 | 1.16568608 | 0.58  | 0.64  | 1.03E-21 | CD16neg_NK_lung |
| ENSMMUG000000016305 | 9.21E-26 | 1.86294895 | 0.45  | 0.403 | 3.26E-21 | CD16neg_NK_lung |
| RPS16               | 3.34E-25 | 0.31167948 | 0.979 | 0.992 | 1.18E-20 | CD16neg_NK_lung |
| NBEAL1              | 2.07E-24 | 0.16690265 | 0.153 | 0.364 | 7.33E-20 | CD16neg_NK_lung |
| EEF1A1              | 2.75E-24 | 0.42094848 | 0.903 | 0.966 | 9.75E-20 | CD16neg_NK_lung |
| HNRNPDL             | 4.44E-24 | 0.91899743 | 0.649 | 0.77  | 1.57E-19 | CD16neg_NK_lung |
| SEC61G              | 3.11E-23 | 1.34378683 | 0.518 | 0.546 | 1.10E-18 | CD16neg_NK_lung |
| HNRNPH2             | 6.07E-23 | 0.47405619 | 0.848 | 0.947 | 2.15E-18 | CD16neg_NK_lung |

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|--------------------|----------|------------|-------|-------|----------|-----------------|
| OPTN               | 7.46E-23 | 0.11138003 | 0.163 | 0.375 | 2.64E-18 | CD16neg_NK_lung |
| H2AFJ              | 1.23E-22 | 1.61705218 | 0.515 | 0.549 | 4.35E-18 | CD16neg_NK_lung |
| ARF5               | 1.40E-22 | 0.12896021 | 0.225 | 0.488 | 4.97E-18 | CD16neg_NK_lung |
| NDUFB2             | 2.93E-22 | 1.34489703 | 0.513 | 0.546 | 1.04E-17 | CD16neg_NK_lung |
| CHCHD2             | 3.19E-22 | 0.80195829 | 0.668 | 0.82  | 1.13E-17 | CD16neg_NK_lung |
| COX5B              | 4.90E-22 | 1.44322816 | 0.491 | 0.5   | 1.74E-17 | CD16neg_NK_lung |
| GAPDH              | 5.39E-22 | 1.02397748 | 0.593 | 0.669 | 1.91E-17 | CD16neg_NK_lung |
| SRI                | 9.71E-22 | 1.5421528  | 0.506 | 0.53  | 3.44E-17 | CD16neg_NK_lung |
| ENSMMUG00000006463 | 1.32E-21 | 1.05610329 | 0.585 | 0.702 | 4.67E-17 | CD16neg_NK_lung |
| ENSMMUG00000015208 | 1.35E-21 | 0.1896974  | 0.156 | 0.356 | 4.80E-17 | CD16neg_NK_lung |
| CFLAR              | 1.38E-21 | 0.12381201 | 0.155 | 0.351 | 4.91E-17 | CD16neg_NK_lung |
| ENSMMUG00000002320 | 2.03E-21 | 0.47087227 | 0.885 | 0.971 | 7.19E-17 | CD16neg_NK_lung |
| AMD1               | 7.08E-21 | 0.10952879 | 0.173 | 0.378 | 2.51E-16 | CD16neg_NK_lung |
| ADSS2              | 7.83E-21 | 0.10477154 | 0.109 | 0.267 | 2.78E-16 | CD16neg_NK_lung |
| TMED4              | 1.30E-20 | 0.14665808 | 0.109 | 0.266 | 4.59E-16 | CD16neg_NK_lung |
| ENSMMUG00000053735 | 2.21E-20 | 1.18408153 | 0.548 | 0.623 | 7.83E-16 | CD16neg_NK_lung |
| SMARCE1            | 2.93E-20 | 0.19366016 | 0.176 | 0.385 | 1.04E-15 | CD16neg_NK_lung |
| FGR                | 4.58E-20 | 0.20265137 | 0.175 | 0.385 | 1.62E-15 | CD16neg_NK_lung |
| IDH2               | 5.75E-20 | 0.17682913 | 0.185 | 0.402 | 2.04E-15 | CD16neg_NK_lung |
| BUD31              | 6.23E-20 | 0.1016901  | 0.191 | 0.409 | 2.21E-15 | CD16neg_NK_lung |
| TXNL1              | 7.43E-20 | 0.12384383 | 0.141 | 0.32  | 2.63E-15 | CD16neg_NK_lung |
| GNAI2.1            | 1.09E-19 | 0.21957251 | 0.204 | 0.433 | 3.88E-15 | CD16neg_NK_lung |
| RNF167             | 1.27E-19 | 0.22411661 | 0.168 | 0.369 | 4.51E-15 | CD16neg_NK_lung |
| DIABLO             | 1.32E-19 | 0.16085437 | 0.117 | 0.276 | 4.67E-15 | CD16neg_NK_lung |
| NTAN1              | 2.13E-19 | 0.2950857  | 0.113 | 0.27  | 7.56E-15 | CD16neg_NK_lung |
| BCL2A1             | 2.18E-19 | 2.25736265 | 0.415 | 0.373 | 7.74E-15 | CD16neg_NK_lung |
| TMEM258            | 2.31E-19 | 1.22355251 | 0.531 | 0.598 | 8.18E-15 | CD16neg_NK_lung |
| RPL3               | 2.51E-19 | 0.28606882 | 0.957 | 0.983 | 8.91E-15 | CD16neg_NK_lung |
| BUB3               | 2.59E-19 | 0.1138077  | 0.109 | 0.26  | 9.18E-15 | CD16neg_NK_lung |
| OSTF1              | 3.04E-19 | 0.92354704 | 0.611 | 0.733 | 1.08E-14 | CD16neg_NK_lung |
| NUDC               | 3.05E-19 | 0.1378914  | 0.203 | 0.425 | 1.08E-14 | CD16neg_NK_lung |
| CDK2AP2            | 3.19E-19 | 0.11488768 | 0.118 | 0.275 | 1.13E-14 | CD16neg_NK_lung |
| XRCC6              | 3.30E-19 | 0.11236498 | 0.265 | 0.544 | 1.17E-14 | CD16neg_NK_lung |

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|--------------------|----------|------------|-------|-------|----------|-----------------|
| PI4K2B             | 4.14E-19 | 0.11988334 | 0.264 | 0.541 | 1.47E-14 | CD16neg_NK_lung |
| ENSMMUG00000038373 | 4.97E-19 | 0.12864881 | 0.292 | 0.591 | 1.76E-14 | CD16neg_NK_lung |
| WDR83OS            | 5.47E-19 | 0.9816272  | 0.591 | 0.713 | 1.94E-14 | CD16neg_NK_lung |
| BID                | 5.56E-19 | 0.24325229 | 0.196 | 0.418 | 1.97E-14 | CD16neg_NK_lung |
| ENSMMUG00000011798 | 6.66E-19 | 0.17609148 | 0.118 | 0.275 | 2.36E-14 | CD16neg_NK_lung |
| PTP4A1             | 7.63E-19 | 0.21982552 | 0.165 | 0.356 | 2.70E-14 | CD16neg_NK_lung |
| IGBP1              | 8.29E-19 | 0.12289185 | 0.133 | 0.302 | 2.94E-14 | CD16neg_NK_lung |
| ENSMMUG00000006206 | 9.60E-19 | 0.24654117 | 0.244 | 0.501 | 3.40E-14 | CD16neg_NK_lung |
| ENSMMUG00000047481 | 1.05E-18 | 1.07304806 | 0.557 | 0.646 | 3.71E-14 | CD16neg_NK_lung |
| ENSMMUG00000042951 | 1.13E-18 | 0.21345607 | 0.204 | 0.429 | 4.00E-14 | CD16neg_NK_lung |
| TMCO1              | 2.06E-18 | 0.24974255 | 0.175 | 0.376 | 7.29E-14 | CD16neg_NK_lung |
| ENSMMUG00000063637 | 2.53E-18 | 0.51564678 | 0.774 | 0.866 | 8.96E-14 | CD16neg_NK_lung |
| ENSMMUG00000004539 | 2.62E-18 | 0.17259557 | 0.198 | 0.414 | 9.27E-14 | CD16neg_NK_lung |
| PPP1CB             | 2.73E-18 | 0.11086138 | 0.214 | 0.438 | 9.69E-14 | CD16neg_NK_lung |
| UBE2L3             | 3.46E-18 | 0.31545904 | 0.171 | 0.367 | 1.22E-13 | CD16neg_NK_lung |
| C15H9orf78         | 4.92E-18 | 0.20313906 | 0.212 | 0.439 | 1.74E-13 | CD16neg_NK_lung |
| SUB1               | 5.97E-18 | 0.73268974 | 0.648 | 0.791 | 2.11E-13 | CD16neg_NK_lung |
| ILK                | 6.45E-18 | 0.11196481 | 0.15  | 0.323 | 2.28E-13 | CD16neg_NK_lung |
| ZNF749             | 7.45E-18 | 0.20183756 | 0.137 | 0.303 | 2.64E-13 | CD16neg_NK_lung |
| FOSL2              | 7.55E-18 | 2.3575869  | 0.27  | 0.169 | 2.68E-13 | CD16neg_NK_lung |
| TOMM7              | 8.92E-18 | 0.4515936  | 0.841 | 0.939 | 3.16E-13 | CD16neg_NK_lung |
| CUTA               | 1.79E-17 | 1.49382877 | 0.466 | 0.482 | 6.35E-13 | CD16neg_NK_lung |
| EIF4A3             | 1.86E-17 | 0.22931901 | 0.18  | 0.374 | 6.57E-13 | CD16neg_NK_lung |
| ENSMMUG00000051239 | 1.94E-17 | 2.08038641 | 0.313 | 0.228 | 6.88E-13 | CD16neg_NK_lung |
| SNRPE              | 2.87E-17 | 0.19196859 | 0.189 | 0.393 | 1.02E-12 | CD16neg_NK_lung |
| SOD1               | 2.90E-17 | 0.24781543 | 0.169 | 0.354 | 1.03E-12 | CD16neg_NK_lung |
| OCIAD1             | 3.59E-17 | 0.2195409  | 0.156 | 0.333 | 1.27E-12 | CD16neg_NK_lung |
| EVL                | 3.83E-17 | 0.11610033 | 0.354 | 0.694 | 1.36E-12 | CD16neg_NK_lung |
| COX8A              | 4.38E-17 | 1.32191274 | 0.482 | 0.516 | 1.55E-12 | CD16neg_NK_lung |
| PSMA5              | 4.59E-17 | 0.19993806 | 0.245 | 0.495 | 1.63E-12 | CD16neg_NK_lung |
| CLEC2D             | 5.18E-17 | 0.13602491 | 0.18  | 0.366 | 1.84E-12 | CD16neg_NK_lung |
| CASP3              | 5.38E-17 | 0.1816872  | 0.233 | 0.46  | 1.91E-12 | CD16neg_NK_lung |
| ENSMMUG00000022489 | 7.55E-17 | 1.19407921 | 0.52  | 0.601 | 2.67E-12 | CD16neg_NK_lung |



|                    |          |            |       |       |          |                 |
|--------------------|----------|------------|-------|-------|----------|-----------------|
| GIMAP6             | 7.91E-17 | 0.29642907 | 0.111 | 0.254 | 2.80E-12 | CD16neg_NK_lung |
| MYG1               | 8.88E-17 | 1.80022879 | 0.384 | 0.343 | 3.15E-12 | CD16neg_NK_lung |
| MRPS15             | 9.75E-17 | 0.13986401 | 0.127 | 0.279 | 3.46E-12 | CD16neg_NK_lung |
| JTB                | 1.13E-16 | 0.15806276 | 0.162 | 0.34  | 4.02E-12 | CD16neg_NK_lung |
| C11H12orf45        | 1.34E-16 | 0.15983057 | 0.235 | 0.467 | 4.74E-12 | CD16neg_NK_lung |
| DDX18              | 1.61E-16 | 0.35951812 | 0.2   | 0.41  | 5.70E-12 | CD16neg_NK_lung |
| STMN1              | 1.69E-16 | 1.86251551 | 0.355 | 0.281 | 6.00E-12 | CD16neg_NK_lung |
| CTSD               | 1.72E-16 | 0.38507158 | 0.15  | 0.32  | 6.11E-12 | CD16neg_NK_lung |
| CCT8               | 1.77E-16 | 0.25517222 | 0.181 | 0.373 | 6.28E-12 | CD16neg_NK_lung |
| SNRK               | 1.83E-16 | 0.15174378 | 0.165 | 0.341 | 6.48E-12 | CD16neg_NK_lung |
| CD2                | 1.92E-16 | 0.23831078 | 0.281 | 0.555 | 6.79E-12 | CD16neg_NK_lung |
| TKT                | 2.03E-16 | 0.24319127 | 0.16  | 0.335 | 7.20E-12 | CD16neg_NK_lung |
| C16H17orf49        | 2.10E-16 | 1.27934746 | 0.497 | 0.549 | 7.44E-12 | CD16neg_NK_lung |
| RNF103             | 2.16E-16 | 0.22319645 | 0.133 | 0.288 | 7.66E-12 | CD16neg_NK_lung |
| PSME1              | 2.19E-16 | 0.78987141 | 0.633 | 0.773 | 7.76E-12 | CD16neg_NK_lung |
| GTF2A2             | 2.56E-16 | 0.17927185 | 0.132 | 0.287 | 9.05E-12 | CD16neg_NK_lung |
| ITGB2              | 2.70E-16 | 0.1079495  | 0.326 | 0.633 | 9.56E-12 | CD16neg_NK_lung |
| SNF8               | 2.80E-16 | 0.29048095 | 0.132 | 0.287 | 9.94E-12 | CD16neg_NK_lung |
| IFI16              | 4.14E-16 | 1.27777858 | 0.515 | 0.589 | 1.47E-11 | CD16neg_NK_lung |
| ACAP1              | 4.99E-16 | 0.27343985 | 0.159 | 0.334 | 1.77E-11 | CD16neg_NK_lung |
| SERPINB9           | 6.76E-16 | 0.13389999 | 0.127 | 0.273 | 2.40E-11 | CD16neg_NK_lung |
| DDX46              | 7.02E-16 | 0.14179535 | 0.256 | 0.494 | 2.49E-11 | CD16neg_NK_lung |
| ENSMMUG00000065089 | 7.11E-16 | 0.28823282 | 0.144 | 0.305 | 2.52E-11 | CD16neg_NK_lung |
| GHITM              | 7.30E-16 | 0.22020228 | 0.231 | 0.459 | 2.59E-11 | CD16neg_NK_lung |
| CDC42SE1           | 8.48E-16 | 0.26092203 | 0.141 | 0.298 | 3.00E-11 | CD16neg_NK_lung |
| CREM               | 9.46E-16 | 1.4753306  | 0.486 | 0.531 | 3.35E-11 | CD16neg_NK_lung |
| ENSMMUG00000049722 | 9.96E-16 | 1.71515302 | 0.398 | 0.377 | 3.53E-11 | CD16neg_NK_lung |
| AIM2               | 1.14E-15 | 0.29274821 | 0.247 | 0.484 | 4.04E-11 | CD16neg_NK_lung |
| PTPN6              | 1.20E-15 | 0.36290778 | 0.172 | 0.353 | 4.24E-11 | CD16neg_NK_lung |
| PET100             | 1.27E-15 | 2.14813475 | 0.298 | 0.221 | 4.51E-11 | CD16neg_NK_lung |
| TM9SF1             | 1.32E-15 | 0.36423306 | 0.114 | 0.254 | 4.68E-11 | CD16neg_NK_lung |
| HDAC1              | 1.58E-15 | 0.28975887 | 0.182 | 0.372 | 5.59E-11 | CD16neg_NK_lung |
| EMC7               | 2.46E-15 | 0.3719423  | 0.119 | 0.258 | 8.72E-11 | CD16neg_NK_lung |

|                    |          |            |       |       |          |                 |
|--------------------|----------|------------|-------|-------|----------|-----------------|
| ATOX1              | 2.63E-15 | 1.37160184 | 0.451 | 0.462 | 9.32E-11 | CD16neg_NK_lung |
| FLII               | 2.75E-15 | 0.3173614  | 0.115 | 0.253 | 9.73E-11 | CD16neg_NK_lung |
| ATP6V1E1           | 2.77E-15 | 0.30029301 | 0.118 | 0.256 | 9.80E-11 | CD16neg_NK_lung |
| NUCB2              | 4.59E-15 | 0.16890881 | 0.138 | 0.287 | 1.63E-10 | CD16neg_NK_lung |
| PPID               | 5.11E-15 | 0.27182929 | 0.117 | 0.253 | 1.81E-10 | CD16neg_NK_lung |
| ENSMMUG00000017890 | 5.52E-15 | 0.32800702 | 0.157 | 0.323 | 1.96E-10 | CD16neg_NK_lung |
| UBE2N              | 6.33E-15 | 0.26201672 | 0.162 | 0.331 | 2.24E-10 | CD16neg_NK_lung |
| S100A6             | 6.91E-15 | 2.28721992 | 0.307 | 0.229 | 2.45E-10 | CD16neg_NK_lung |
| MRPL13             | 7.17E-15 | 0.39525005 | 0.122 | 0.262 | 2.54E-10 | CD16neg_NK_lung |
| SRRM1              | 9.45E-15 | 0.21279886 | 0.293 | 0.566 | 3.35E-10 | CD16neg_NK_lung |
| SACM1L             | 1.64E-14 | 0.26910796 | 0.146 | 0.297 | 5.80E-10 | CD16neg_NK_lung |
| ENSMMUG00000017097 | 1.71E-14 | 0.35731032 | 0.12  | 0.256 | 6.05E-10 | CD16neg_NK_lung |
| LYAR               | 1.75E-14 | 0.40304223 | 0.127 | 0.268 | 6.21E-10 | CD16neg_NK_lung |
| GTF3C1             | 2.17E-14 | 2.11356712 | 0.309 | 0.239 | 7.70E-10 | CD16neg_NK_lung |
| DBI                | 2.25E-14 | 1.25874414 | 0.494 | 0.56  | 7.97E-10 | CD16neg_NK_lung |
| OSBPL2             | 2.35E-14 | 0.33739725 | 0.139 | 0.288 | 8.32E-10 | CD16neg_NK_lung |
| CASP12             | 2.39E-14 | 0.24478101 | 0.182 | 0.361 | 8.47E-10 | CD16neg_NK_lung |
| EIF4A1             | 2.61E-14 | 0.2082849  | 0.238 | 0.46  | 9.26E-10 | CD16neg_NK_lung |
| DNAJB6             | 2.92E-14 | 0.12033346 | 0.334 | 0.623 | 1.04E-09 | CD16neg_NK_lung |
| EIF3L              | 3.60E-14 | 0.23863113 | 0.265 | 0.51  | 1.28E-09 | CD16neg_NK_lung |
| LAP3               | 4.70E-14 | 0.27883076 | 0.12  | 0.254 | 1.67E-09 | CD16neg_NK_lung |
| EIF3J              | 5.90E-14 | 0.33405908 | 0.219 | 0.425 | 2.09E-09 | CD16neg_NK_lung |
| ERBB3              | 6.48E-14 | 0.281391   | 0.183 | 0.358 | 2.29E-09 | CD16neg_NK_lung |
| ENSMMUG00000015270 | 7.28E-14 | 0.20857034 | 0.986 | 0.992 | 2.58E-09 | CD16neg_NK_lung |
| ENSMMUG00000056012 | 1.51E-13 | 0.44891788 | 0.161 | 0.323 | 5.35E-09 | CD16neg_NK_lung |
| GSN                | 1.62E-13 | 0.39612766 | 0.155 | 0.311 | 5.75E-09 | CD16neg_NK_lung |
| GABARAPL2          | 1.62E-13 | 1.35106969 | 0.465 | 0.517 | 5.75E-09 | CD16neg_NK_lung |
| ARF6               | 1.64E-13 | 0.35527727 | 0.259 | 0.496 | 5.80E-09 | CD16neg_NK_lung |
| REEP5              | 1.67E-13 | 0.44841403 | 0.184 | 0.365 | 5.91E-09 | CD16neg_NK_lung |
| SMU1               | 1.82E-13 | 0.29015515 | 0.129 | 0.266 | 6.46E-09 | CD16neg_NK_lung |
| ATP5PO             | 2.06E-13 | 0.11206734 | 0.35  | 0.656 | 7.31E-09 | CD16neg_NK_lung |
| ARL6IP5            | 2.41E-13 | 0.20326557 | 0.301 | 0.56  | 8.55E-09 | CD16neg_NK_lung |
| CIR1               | 2.63E-13 | 0.33411744 | 0.129 | 0.264 | 9.30E-09 | CD16neg_NK_lung |

|                     |          |            |       |       |          |                 |
|---------------------|----------|------------|-------|-------|----------|-----------------|
| SCP2                | 2.67E-13 | 0.35034419 | 0.229 | 0.442 | 9.46E-09 | CD16neg_NK_lung |
| ZC3H15              | 2.98E-13 | 0.35129341 | 0.201 | 0.387 | 1.06E-08 | CD16neg_NK_lung |
| ZNF493              | 3.05E-13 | 0.25493068 | 0.129 | 0.264 | 1.08E-08 | CD16neg_NK_lung |
| RER1                | 3.28E-13 | 0.35010924 | 0.202 | 0.391 | 1.16E-08 | CD16neg_NK_lung |
| TAGAP               | 3.74E-13 | 0.18923331 | 0.282 | 0.514 | 1.32E-08 | CD16neg_NK_lung |
| EIF2S2              | 4.09E-13 | 0.29801916 | 0.232 | 0.436 | 1.45E-08 | CD16neg_NK_lung |
| RDH5                | 4.37E-13 | 1.40188087 | 0.45  | 0.491 | 1.55E-08 | CD16neg_NK_lung |
| COX17               | 4.99E-13 | 1.55419121 | 0.393 | 0.378 | 1.77E-08 | CD16neg_NK_lung |
| UBE2I               | 7.05E-13 | 0.37392186 | 0.223 | 0.431 | 2.50E-08 | CD16neg_NK_lung |
| COX7B               | 9.12E-13 | 1.00141816 | 0.522 | 0.615 | 3.23E-08 | CD16neg_NK_lung |
| NDUFB4              | 9.69E-13 | 1.30787688 | 0.447 | 0.484 | 3.44E-08 | CD16neg_NK_lung |
| ENSMMUG000000047632 | 9.97E-13 | 1.42625553 | 0.371 | 0.32  | 3.53E-08 | CD16neg_NK_lung |
| SELENOS             | 1.13E-12 | 0.31515787 | 0.262 | 0.492 | 4.00E-08 | CD16neg_NK_lung |
| CCDC82              | 1.20E-12 | 0.43788299 | 0.131 | 0.265 | 4.26E-08 | CD16neg_NK_lung |
| ENSMMUG000000006499 | 1.29E-12 | 0.34745783 | 0.188 | 0.361 | 4.56E-08 | CD16neg_NK_lung |
| KLRD1               | 1.30E-12 | 0.62555847 | 0.722 | 0.873 | 4.61E-08 | CD16neg_NK_lung |
| TAF9                | 1.37E-12 | 0.34158131 | 0.13  | 0.263 | 4.85E-08 | CD16neg_NK_lung |
| ENSMMUG000000049295 | 1.55E-12 | 0.42902751 | 0.178 | 0.346 | 5.50E-08 | CD16neg_NK_lung |
| BIRC2               | 2.10E-12 | 0.46711563 | 0.152 | 0.3   | 7.45E-08 | CD16neg_NK_lung |
| ENSMMUG000000012419 | 2.18E-12 | 1.14654751 | 0.5   | 0.603 | 7.71E-08 | CD16neg_NK_lung |
| HSP90B1             | 2.64E-12 | 0.25154847 | 0.334 | 0.625 | 9.37E-08 | CD16neg_NK_lung |
| GLRX3               | 2.78E-12 | 0.4055353  | 0.145 | 0.286 | 9.85E-08 | CD16neg_NK_lung |
| TBC1D24             | 2.93E-12 | 0.29403877 | 0.263 | 0.49  | 1.04E-07 | CD16neg_NK_lung |
| ENSMMUG000000059742 | 3.04E-12 | 0.48017164 | 0.176 | 0.34  | 1.08E-07 | CD16neg_NK_lung |
| PLAAT4              | 3.09E-12 | 0.75793037 | 0.63  | 0.782 | 1.10E-07 | CD16neg_NK_lung |
| GIMAP4              | 4.05E-12 | 0.29273288 | 0.243 | 0.45  | 1.43E-07 | CD16neg_NK_lung |
| ATP5F1B             | 4.14E-12 | 0.49011112 | 0.124 | 0.25  | 1.47E-07 | CD16neg_NK_lung |
| ICAM3               | 4.75E-12 | 0.34657825 | 0.185 | 0.352 | 1.68E-07 | CD16neg_NK_lung |
| HIKESHI             | 5.02E-12 | 0.44843646 | 0.138 | 0.272 | 1.78E-07 | CD16neg_NK_lung |
| SEC61B              | 5.19E-12 | 1.12887775 | 0.504 | 0.608 | 1.84E-07 | CD16neg_NK_lung |
| ENSMMUG000000017466 | 6.48E-12 | 1.17896307 | 0.484 | 0.556 | 2.30E-07 | CD16neg_NK_lung |
| CCL3                | 6.65E-12 | 1.09260779 | 0.618 | 0.678 | 2.36E-07 | CD16neg_NK_lung |
| SERBP1              | 8.63E-12 | 0.18165966 | 0.324 | 0.596 | 3.06E-07 | CD16neg_NK_lung |

|                    |          |            |       |       |          |                 |
|--------------------|----------|------------|-------|-------|----------|-----------------|
| MRFAP1             | 9.06E-12 | 0.47228434 | 0.166 | 0.319 | 3.21E-07 | CD16neg_NK_lung |
| WDR1               | 9.71E-12 | 0.47244098 | 0.144 | 0.282 | 3.44E-07 | CD16neg_NK_lung |
| UBE2V1             | 9.75E-12 | 0.36860053 | 0.231 | 0.435 | 3.46E-07 | CD16neg_NK_lung |
| CD7                | 1.24E-11 | 0.75854125 | 0.626 | 0.808 | 4.39E-07 | CD16neg_NK_lung |
| ENSMMUG00000054038 | 1.59E-11 | 0.63023072 | 0.678 | 0.875 | 5.64E-07 | CD16neg_NK_lung |
| CHMP5              | 1.71E-11 | 0.47549203 | 0.128 | 0.254 | 6.06E-07 | CD16neg_NK_lung |
| CCT5               | 1.83E-11 | 0.42483026 | 0.159 | 0.305 | 6.48E-07 | CD16neg_NK_lung |
| OAZ1               | 1.90E-11 | 1.40593191 | 0.431 | 0.473 | 6.74E-07 | CD16neg_NK_lung |
| THY1               | 2.05E-11 | 0.28176636 | 0.314 | 0.566 | 7.25E-07 | CD16neg_NK_lung |
| PSMB10             | 2.14E-11 | 0.44272522 | 0.19  | 0.359 | 7.59E-07 | CD16neg_NK_lung |
| PSMD4              | 2.20E-11 | 0.2919737  | 0.13  | 0.254 | 7.78E-07 | CD16neg_NK_lung |
| BHLHE40            | 2.42E-11 | 1.78630558 | 0.279 | 0.212 | 8.59E-07 | CD16neg_NK_lung |
| SSR3               | 2.60E-11 | 0.39653945 | 0.157 | 0.3   | 9.21E-07 | CD16neg_NK_lung |
| APOBEC3F           | 2.65E-11 | 0.43979907 | 0.187 | 0.352 | 9.37E-07 | CD16neg_NK_lung |
| METAP2             | 3.14E-11 | 0.48055887 | 0.143 | 0.274 | 1.11E-06 | CD16neg_NK_lung |
| CLEC2B             | 3.16E-11 | 1.3537669  | 0.464 | 0.509 | 1.12E-06 | CD16neg_NK_lung |
| ABCF1              | 3.54E-11 | 0.42454202 | 0.176 | 0.332 | 1.25E-06 | CD16neg_NK_lung |
| ATP5F1A            | 3.79E-11 | 0.18758602 | 0.32  | 0.582 | 1.34E-06 | CD16neg_NK_lung |
| MIF                | 4.04E-11 | 0.3104775  | 0.307 | 0.56  | 1.43E-06 | CD16neg_NK_lung |
| ENSMMUG00000055457 | 4.55E-11 | 0.4678758  | 0.186 | 0.351 | 1.61E-06 | CD16neg_NK_lung |
| NUB1               | 4.80E-11 | 0.38169463 | 0.14  | 0.27  | 1.70E-06 | CD16neg_NK_lung |
| EEF1B2             | 5.15E-11 | 0.34686948 | 0.805 | 0.926 | 1.82E-06 | CD16neg_NK_lung |
| FRMD4B             | 6.02E-11 | 0.26310887 | 0.189 | 0.344 | 2.13E-06 | CD16neg_NK_lung |
| SSR4               | 6.11E-11 | 0.79200322 | 0.581 | 0.735 | 2.17E-06 | CD16neg_NK_lung |
| SUCLG1             | 6.20E-11 | 0.39791251 | 0.192 | 0.357 | 2.20E-06 | CD16neg_NK_lung |
| SREK1IP1           | 7.22E-11 | 0.40277708 | 0.147 | 0.279 | 2.56E-06 | CD16neg_NK_lung |
| ENSMMUG00000053146 | 7.97E-11 | 1.38021721 | 0.427 | 0.47  | 2.82E-06 | CD16neg_NK_lung |
| CD53               | 8.20E-11 | 0.21073396 | 0.357 | 0.655 | 2.91E-06 | CD16neg_NK_lung |
| RWDD1              | 9.18E-11 | 0.25908767 | 0.272 | 0.49  | 3.25E-06 | CD16neg_NK_lung |
| PRDX6              | 9.85E-11 | 1.51304906 | 0.426 | 0.46  | 3.49E-06 | CD16neg_NK_lung |
| DNAJC8             | 1.00E-10 | 0.46115345 | 0.18  | 0.337 | 3.55E-06 | CD16neg_NK_lung |
| CD81               | 1.03E-10 | 0.40659544 | 0.231 | 0.421 | 3.64E-06 | CD16neg_NK_lung |
| PSMA6              | 1.11E-10 | 0.45802072 | 0.139 | 0.267 | 3.93E-06 | CD16neg_NK_lung |

|                    |          |            |       |       |            |                 |
|--------------------|----------|------------|-------|-------|------------|-----------------|
| MRI1               | 2.13E-10 | 1.02191932 | 0.488 | 0.58  | 7.53E-06   | CD16neg_NK_lung |
| HNRNPM             | 2.18E-10 | 0.42369272 | 0.238 | 0.435 | 7.74E-06   | CD16neg_NK_lung |
| HMGB1              | 2.22E-10 | 0.54881833 | 0.677 | 0.853 | 7.87E-06   | CD16neg_NK_lung |
| ENSMMUG00000014862 | 2.67E-10 | 0.45441242 | 0.242 | 0.443 | 9.47E-06   | CD16neg_NK_lung |
| DDX24              | 2.87E-10 | 0.47026171 | 0.229 | 0.416 | 1.02E-05   | CD16neg_NK_lung |
| EDF1               | 3.44E-10 | 1.33004    | 0.431 | 0.481 | 1.22E-05   | CD16neg_NK_lung |
| MRPS6              | 3.50E-10 | 0.47785298 | 0.167 | 0.306 | 1.24E-05   | CD16neg_NK_lung |
| RPS4Y1             | 3.70E-10 | 0.83424742 | 0.504 | 0.491 | 1.31E-05   | CD16neg_NK_lung |
| DNAJA2             | 4.22E-10 | 0.53613612 | 0.138 | 0.261 | 1.50E-05   | CD16neg_NK_lung |
| MDH2               | 5.23E-10 | 0.44165739 | 0.184 | 0.336 | 1.85E-05   | CD16neg_NK_lung |
| NCOA7              | 5.65E-10 | 0.32299698 | 0.293 | 0.53  | 2.00E-05   | CD16neg_NK_lung |
| RBMX               | 6.98E-10 | 0.24013619 | 0.327 | 0.582 | 2.47E-05   | CD16neg_NK_lung |
| TIGAR              | 7.34E-10 | 1.17929693 | 0.501 | 0.594 | 2.60E-05   | CD16neg_NK_lung |
| ZC3H12A            | 8.93E-10 | 0.55285708 | 0.136 | 0.255 | 3.16E-05   | CD16neg_NK_lung |
| SEC11A             | 9.21E-10 | 0.40881816 | 0.226 | 0.407 | 3.26E-05   | CD16neg_NK_lung |
| CCDC107            | 1.00E-09 | 0.78026974 | 0.167 | 0.308 | 3.56E-05   | CD16neg_NK_lung |
| CAP1               | 1.19E-09 | 0.32599381 | 0.304 | 0.547 | 4.21E-05   | CD16neg_NK_lung |
| HMGB2              | 1.27E-09 | 0.36811657 | 0.301 | 0.537 | 4.49E-05   | CD16neg_NK_lung |
| POLR1D             | 1.34E-09 | 0.39471716 | 0.263 | 0.474 | 4.75E-05   | CD16neg_NK_lung |
| ENSMMUG00000016278 | 1.37E-09 | 0.50261973 | 0.181 | 0.328 | 4.86E-05   | CD16neg_NK_lung |
| BST2               | 1.39E-09 | 0.63087174 | 0.656 | 0.82  | 4.93E-05   | CD16neg_NK_lung |
| ENSMMUG00000006778 | 1.54E-09 | 0.53991864 | 0.185 | 0.335 | 5.46E-05   | CD16neg_NK_lung |
| ENSMMUG00000055584 | 1.55E-09 | 0.55375006 | 0.645 | 0.824 | 5.51E-05   | CD16neg_NK_lung |
| COX16              | 1.97E-09 | 0.3931497  | 0.289 | 0.513 | 6.98E-05   | CD16neg_NK_lung |
| SSBP1              | 2.77E-09 | 0.64017001 | 0.171 | 0.313 | 9.81E-05   | CD16neg_NK_lung |
| SELENOK            | 3.00E-09 | 1.58609308 | 0.341 | 0.325 | 0.00010622 | CD16neg_NK_lung |
| PLAAT3             | 3.31E-09 | 0.89202357 | 0.55  | 0.68  | 0.00011717 | CD16neg_NK_lung |
| TOMM20             | 3.37E-09 | 0.27108871 | 0.33  | 0.579 | 0.00011949 | CD16neg_NK_lung |
| PPP4C              | 3.41E-09 | 0.52955338 | 0.15  | 0.274 | 0.00012073 | CD16neg_NK_lung |
| PIK3R1             | 3.42E-09 | 1.2934839  | 0.464 | 0.539 | 0.00012128 | CD16neg_NK_lung |
| ENSMMUG00000016665 | 3.63E-09 | 1.19736542 | 0.442 | 0.511 | 0.00012851 | CD16neg_NK_lung |
| TAPBPL             | 4.06E-09 | 1.2498499  | 0.464 | 0.548 | 0.00014384 | CD16neg_NK_lung |
| NCL                | 5.73E-09 | 0.85785283 | 0.569 | 0.739 | 0.00020309 | CD16neg_NK_lung |

|                   |          |            |       |       |            |                 |
|-------------------|----------|------------|-------|-------|------------|-----------------|
| SAT2              | 6.01E-09 | 0.64128609 | 0.135 | 0.25  | 0.00021294 | CD16neg_NK_lung |
| UQCRQ             | 6.89E-09 | 1.17048054 | 0.434 | 0.494 | 0.00024411 | CD16neg_NK_lung |
| TBC1D25           | 7.30E-09 | 0.55415365 | 0.142 | 0.26  | 0.00025858 | CD16neg_NK_lung |
| PSMA2             | 7.43E-09 | 1.05096864 | 0.488 | 0.6   | 0.00026344 | CD16neg_NK_lung |
| VIM               | 7.45E-09 | 1.32511769 | 0.326 | 0.283 | 0.00026395 | CD16neg_NK_lung |
| MOB2              | 8.95E-09 | 0.50314596 | 0.175 | 0.313 | 0.0003172  | CD16neg_NK_lung |
| PVRIG             | 8.96E-09 | 0.52606929 | 0.248 | 0.442 | 0.00031757 | CD16neg_NK_lung |
| ENSMUG00000022769 | 9.23E-09 | 0.33180164 | 0.324 | 0.575 | 0.00032697 | CD16neg_NK_lung |
| WAS               | 9.63E-09 | 0.5755376  | 0.195 | 0.346 | 0.00034125 | CD16neg_NK_lung |
| TMEM243           | 9.76E-09 | 0.47472739 | 0.277 | 0.49  | 0.00034587 | CD16neg_NK_lung |
| UFC1              | 1.09E-08 | 0.59972326 | 0.203 | 0.363 | 0.00038452 | CD16neg_NK_lung |
| ATP5PF            | 1.12E-08 | 1.11986155 | 0.45  | 0.53  | 0.00039843 | CD16neg_NK_lung |
| RPLP2             | 1.15E-08 | 0.19695837 | 0.959 | 0.985 | 0.00040605 | CD16neg_NK_lung |
| CTSC              | 1.20E-08 | 0.38543228 | 0.275 | 0.48  | 0.00042451 | CD16neg_NK_lung |
| SRGN              | 1.20E-08 | 0.37626086 | 0.806 | 0.946 | 0.00042677 | CD16neg_NK_lung |
| LSM2              | 1.27E-08 | 0.5982507  | 0.151 | 0.272 | 0.00044914 | CD16neg_NK_lung |
| BCAP31            | 1.29E-08 | 0.56135867 | 0.208 | 0.369 | 0.00045739 | CD16neg_NK_lung |
| CLNS1A            | 1.51E-08 | 0.51918108 | 0.14  | 0.254 | 0.00053596 | CD16neg_NK_lung |
| EIF1AX            | 1.55E-08 | 0.45888567 | 0.265 | 0.467 | 0.00055049 | CD16neg_NK_lung |
| EIF3G             | 1.60E-08 | 0.36925908 | 0.25  | 0.436 | 0.0005679  | CD16neg_NK_lung |
| PSMA3             | 1.72E-08 | 0.47045197 | 0.218 | 0.384 | 0.00060848 | CD16neg_NK_lung |
| CSNK2B            | 2.17E-08 | 0.61118936 | 0.174 | 0.311 | 0.00076979 | CD16neg_NK_lung |
| HNRNPA3           | 2.47E-08 | 0.10557885 | 0.422 | 0.725 | 0.00087465 | CD16neg_NK_lung |
| RGS1              | 3.86E-08 | 0.24744583 | 0.292 | 0.478 | 0.00136808 | CD16neg_NK_lung |
| LCP1              | 5.29E-08 | 0.5725357  | 0.643 | 0.832 | 0.00187422 | CD16neg_NK_lung |
| TES               | 5.79E-08 | 0.53340331 | 0.143 | 0.254 | 0.00205153 | CD16neg_NK_lung |
| EIF1B             | 6.02E-08 | 0.5250636  | 0.231 | 0.401 | 0.00213233 | CD16neg_NK_lung |
| PPDPF             | 6.33E-08 | 0.54046618 | 0.175 | 0.305 | 0.00224296 | CD16neg_NK_lung |
| NDUFA2            | 6.75E-08 | 1.1288234  | 0.432 | 0.496 | 0.00239046 | CD16neg_NK_lung |
| HNRNPA1           | 8.92E-08 | 0.28006497 | 0.351 | 0.607 | 0.00315893 | CD16neg_NK_lung |
| ESF1              | 9.03E-08 | 0.48831153 | 0.173 | 0.297 | 0.00319967 | CD16neg_NK_lung |
| CXCR4             | 9.70E-08 | 1.83076449 | 0.282 | 0.249 | 0.00343547 | CD16neg_NK_lung |
| NDUFB11           | 1.04E-07 | 1.51387984 | 0.332 | 0.331 | 0.00367957 | CD16neg_NK_lung |

|                     |          |            |       |       |            |                 |
|---------------------|----------|------------|-------|-------|------------|-----------------|
| AMZ2                | 1.08E-07 | 0.62882548 | 0.229 | 0.399 | 0.00384378 | CD16neg_NK_lung |
| DPY30               | 1.32E-07 | 0.69609273 | 0.181 | 0.318 | 0.00467057 | CD16neg_NK_lung |
| SRSF7               | 1.33E-07 | 0.12661041 | 0.446 | 0.757 | 0.00470233 | CD16neg_NK_lung |
| ENSMMUG000000014648 | 1.84E-07 | 0.81287727 | 0.535 | 0.683 | 0.00652772 | CD16neg_NK_lung |
| TWF2                | 2.04E-07 | 0.63145058 | 0.196 | 0.339 | 0.00724201 | CD16neg_NK_lung |
| RBIS                | 2.19E-07 | 0.49783572 | 0.267 | 0.464 | 0.00775222 | CD16neg_NK_lung |
| IL2RG               | 2.39E-07 | 0.14634385 | 0.429 | 0.728 | 0.00847429 | CD16neg_NK_lung |
| LSM8                | 2.46E-07 | 0.60303778 | 0.173 | 0.299 | 0.00872669 | CD16neg_NK_lung |
| H2AFZ               | 3.45E-07 | 1.29423876 | 0.4   | 0.442 | 0.01223488 | CD16neg_NK_lung |
| MRPL11              | 3.60E-07 | 0.63431644 | 0.205 | 0.352 | 0.01276668 | CD16neg_NK_lung |
| COPS6               | 4.20E-07 | 0.59531925 | 0.185 | 0.315 | 0.01489193 | CD16neg_NK_lung |
| ANP32E              | 4.77E-07 | 0.46164073 | 0.285 | 0.483 | 0.01691734 | CD16neg_NK_lung |
| SNRPB2              | 6.37E-07 | 0.53562222 | 0.22  | 0.373 | 0.0225673  | CD16neg_NK_lung |
| PPP1R18             | 6.62E-07 | 0.64621524 | 0.201 | 0.341 | 0.02345485 | CD16neg_NK_lung |
| SLIRP               | 7.03E-07 | 0.27540938 | 0.377 | 0.653 | 0.02490101 | CD16neg_NK_lung |
| RPL22L1             | 7.19E-07 | 0.86590139 | 0.526 | 0.657 | 0.0254725  | CD16neg_NK_lung |
| ISG20               | 7.24E-07 | 1.59141504 | 0.347 | 0.359 | 0.02566633 | CD16neg_NK_lung |
| EIF3I               | 7.59E-07 | 0.6198206  | 0.231 | 0.395 | 0.0268821  | CD16neg_NK_lung |
| FNTB                | 9.55E-07 | 0.65079658 | 0.235 | 0.401 | 0.0338448  | CD16neg_NK_lung |
| IK                  | 1.26E-06 | 0.54962848 | 0.261 | 0.442 | 0.04478809 | CD16neg_NK_lung |
| ENSMMUG000000054210 | 1.36E-06 | 1.74309312 | 0.29  | 0.263 | 0.04834484 | CD16neg_NK_lung |
| GIMAP7              | 1.39E-06 | 0.39532223 | 0.352 | 0.595 | 0.04925319 | CD16neg_NK_lung |
| KRTCAP2             | 1.43E-06 | 0.7505744  | 0.531 | 0.686 | 0.05055683 | CD16neg_NK_lung |
| ANP32A              | 1.54E-06 | 0.52003538 | 0.251 | 0.424 | 0.05442178 | CD16neg_NK_lung |
| FLNA                | 1.75E-06 | 0.58636696 | 0.167 | 0.278 | 0.06201725 | CD16neg_NK_lung |
| GLIPR2              | 1.75E-06 | 1.41244973 | 0.346 | 0.365 | 0.06209651 | CD16neg_NK_lung |
| MICOS13             | 1.90E-06 | 1.44018728 | 0.347 | 0.365 | 0.06728307 | CD16neg_NK_lung |
| ERP29               | 2.11E-06 | 0.71009109 | 0.157 | 0.266 | 0.07480666 | CD16neg_NK_lung |
| POC5                | 2.18E-06 | 0.64398992 | 0.202 | 0.337 | 0.07732939 | CD16neg_NK_lung |
| ENSMMUG000000000983 | 2.28E-06 | 1.1665271  | 0.412 | 0.484 | 0.0807666  | CD16neg_NK_lung |
| PDAP1               | 2.40E-06 | 0.68913023 | 0.184 | 0.309 | 0.08505284 | CD16neg_NK_lung |
| RABAC1              | 2.61E-06 | 1.45335333 | 0.323 | 0.327 | 0.09249525 | CD16neg_NK_lung |
| RPL10A              | 2.67E-06 | 0.17169173 | 0.957 | 0.984 | 0.09458946 | CD16neg_NK_lung |

|                    |          |            |       |       |            |                 |
|--------------------|----------|------------|-------|-------|------------|-----------------|
| C1D                | 3.60E-06 | 0.73487912 | 0.152 | 0.255 | 0.12765005 | CD16neg_NK_lung |
| SAMD3              | 3.72E-06 | 0.62073726 | 0.155 | 0.258 | 0.13166527 | CD16neg_NK_lung |
| NMT1               | 4.91E-06 | 0.62278547 | 0.151 | 0.252 | 0.17397846 | CD16neg_NK_lung |
| DSTN               | 6.00E-06 | 0.8218133  | 0.177 | 0.294 | 0.21261126 | CD16neg_NK_lung |
| SEPTIN2            | 7.03E-06 | 0.61739878 | 0.222 | 0.366 | 0.24899878 | CD16neg_NK_lung |
| SNRPD2             | 7.59E-06 | 0.38701483 | 0.361 | 0.621 | 0.26905483 | CD16neg_NK_lung |
| C14H11orf58        | 7.61E-06 | 0.68896355 | 0.204 | 0.338 | 0.26950543 | CD16neg_NK_lung |
| RTRAF              | 8.06E-06 | 0.62384262 | 0.273 | 0.46  | 0.28563567 | CD16neg_NK_lung |
| SKIL               | 8.25E-06 | 0.58567333 | 0.189 | 0.308 | 0.2923533  | CD16neg_NK_lung |
| ENSMMUG00000059289 | 8.40E-06 | 0.73172696 | 0.161 | 0.267 | 0.29777461 | CD16neg_NK_lung |
| TBCC               | 8.62E-06 | 0.79843532 | 0.152 | 0.251 | 0.30524669 | CD16neg_NK_lung |
| PSMB9              | 9.17E-06 | 0.96030791 | 0.476 | 0.606 | 0.32496317 | CD16neg_NK_lung |
| NDUFA4             | 9.72E-06 | 0.8643604  | 0.486 | 0.621 | 0.34436114 | CD16neg_NK_lung |
| ACTB               | 1.02E-05 | 0.23880563 | 0.966 | 0.996 | 0.36191327 | CD16neg_NK_lung |
| ENSMMUG00000012525 | 1.04E-05 | 0.59889838 | 0.242 | 0.4   | 0.36702395 | CD16neg_NK_lung |
| NSA2               | 1.15E-05 | 0.796017   | 0.551 | 0.731 | 0.40812377 | CD16neg_NK_lung |
| KIFBP              | 1.15E-05 | 0.59534731 | 0.274 | 0.451 | 0.40918958 | CD16neg_NK_lung |
| ARPC2              | 1.20E-05 | 1.23159531 | 0.39  | 0.456 | 0.42567087 | CD16neg_NK_lung |
| BUD23              | 1.21E-05 | 0.51465997 | 0.275 | 0.454 | 0.42821433 | CD16neg_NK_lung |
| LDHA               | 1.29E-05 | 1.18250294 | 0.412 | 0.495 | 0.45785381 | CD16neg_NK_lung |
| AIP                | 1.30E-05 | 0.62425772 | 0.218 | 0.357 | 0.46108682 | CD16neg_NK_lung |
| AMDHD1             | 1.34E-05 | 0.57093456 | 0.233 | 0.379 | 0.47411519 | CD16neg_NK_lung |
| PFDN6              | 1.36E-05 | 0.64986421 | 0.178 | 0.29  | 0.48143729 | CD16neg_NK_lung |
| SMNDC1             | 1.57E-05 | 0.73640608 | 0.177 | 0.288 | 0.55596637 | CD16neg_NK_lung |
| ATP5MC2            | 1.58E-05 | 0.90037511 | 0.468 | 0.588 | 0.55809502 | CD16neg_NK_lung |
| ENSMMUG00000061630 | 1.59E-05 | 0.6944317  | 0.177 | 0.288 | 0.56389684 | CD16neg_NK_lung |
| RPS27L             | 1.87E-05 | 1.28724114 | 0.38  | 0.426 | 0.66195483 | CD16neg_NK_lung |
| LAT2               | 1.87E-05 | 1.38764537 | 0.348 | 0.379 | 0.66349267 | CD16neg_NK_lung |
| COPZ1              | 1.91E-05 | 0.64408221 | 0.16  | 0.26  | 0.67779475 | CD16neg_NK_lung |
| ENSMMUG00000055627 | 2.04E-05 | 0.32143441 | 0.387 | 0.648 | 0.72354854 | CD16neg_NK_lung |
| MRPL57             | 2.07E-05 | 0.66492514 | 0.167 | 0.271 | 0.73387465 | CD16neg_NK_lung |
| MRPL14             | 2.29E-05 | 0.79888793 | 0.252 | 0.418 | 0.81282539 | CD16neg_NK_lung |
| SLC38A2            | 2.34E-05 | 0.60846301 | 0.252 | 0.409 | 0.82910528 | CD16neg_NK_lung |



|                    |            |            |       |       |            |                 |
|--------------------|------------|------------|-------|-------|------------|-----------------|
| POLR2F             | 2.40E-05   | 0.81041868 | 0.161 | 0.262 | 0.84984743 | CD16neg_NK_lung |
| ENSMMUG00000057449 | 2.41E-05   | 0.74774856 | 0.184 | 0.298 | 0.85226541 | CD16neg_NK_lung |
| TOPORS             | 2.42E-05   | 0.58176983 | 0.241 | 0.392 | 0.8589828  | CD16neg_NK_lung |
| RPL37A             | 2.47E-05   | 0.32378992 | 0.915 | 0.99  | 0.87386137 | CD16neg_NK_lung |
| GUK1               | 2.54E-05   | 0.77878352 | 0.177 | 0.287 | 0.90000686 | CD16neg_NK_lung |
| PAIP2              | 2.69E-05   | 0.44346623 | 0.354 | 0.59  | 0.95256769 | CD16neg_NK_lung |
| ENSMMUG00000018740 | 2.84E-05   | 0.59893577 | 0.255 | 0.417 | 1          | CD16neg_NK_lung |
| ENSMMUG00000030465 | 2.97E-05   | 0.59936826 | 0.259 | 0.426 | 1          | CD16neg_NK_lung |
| MDH1               | 3.05E-05   | 0.7453911  | 0.156 | 0.253 | 1          | CD16neg_NK_lung |
| STRAP              | 3.20E-05   | 0.62860226 | 0.218 | 0.352 | 1          | CD16neg_NK_lung |
| ATP6V0E1           | 3.50E-05   | 0.4486072  | 0.336 | 0.559 | 1          | CD16neg_NK_lung |
| PSMA1              | 3.76E-05   | 0.67560821 | 0.24  | 0.39  | 1          | CD16neg_NK_lung |
| TNFRSF1B           | 3.79E-05   | 0.72961257 | 0.268 | 0.44  | 1          | CD16neg_NK_lung |
| PSMC5              | 4.26E-05   | 0.79963381 | 0.184 | 0.297 | 1          | CD16neg_NK_lung |
| DAZAP1             | 4.29E-05   | 0.88601714 | 0.469 | 0.599 | 1          | CD16neg_NK_lung |
| ST13               | 4.38E-05   | 0.57241285 | 0.296 | 0.487 | 1          | CD16neg_NK_lung |
| ENSMMUG00000013779 | 4.40E-05   | 2.04556275 | 0.352 | 0.375 | 1          | CD16neg_NK_lung |
| NDUFAB1            | 4.67E-05   | 0.75138705 | 0.168 | 0.271 | 1          | CD16neg_NK_lung |
| TMEM59             | 4.81E-05   | 0.59497808 | 0.304 | 0.506 | 1          | CD16neg_NK_lung |
| PSMB1              | 5.57E-05   | 0.96008806 | 0.467 | 0.612 | 1          | CD16neg_NK_lung |
| EIF4E2             | 5.63E-05   | 0.76432487 | 0.196 | 0.314 | 1          | CD16neg_NK_lung |
| TMED9              | 5.69E-05   | 0.74526813 | 0.225 | 0.365 | 1          | CD16neg_NK_lung |
| ENSMMUG00000031947 | 5.77E-05   | 0.76843443 | 0.521 | 0.687 | 1          | CD16neg_NK_lung |
| DCTN3              | 6.25E-05   | 0.71667644 | 0.237 | 0.388 | 1          | CD16neg_NK_lung |
| MAP3K8             | 7.24E-05   | 0.88570084 | 0.467 | 0.565 | 1          | CD16neg_NK_lung |
| IRF3               | 8.59E-05   | 0.82562285 | 0.191 | 0.307 | 1          | CD16neg_NK_lung |
| SEC62              | 9.24E-05   | 0.6157475  | 0.237 | 0.375 | 1          | CD16neg_NK_lung |
| PFDN5              | 9.47E-05   | 1.066628   | 0.428 | 0.535 | 1          | CD16neg_NK_lung |
| PSMA4              | 0.00010121 | 0.63155418 | 0.25  | 0.4   | 1          | CD16neg_NK_lung |
| PRMT1              | 0.00010397 | 0.7113291  | 0.173 | 0.273 | 1          | CD16neg_NK_lung |
| NDUFB5             | 0.00011035 | 0.84942744 | 0.174 | 0.277 | 1          | CD16neg_NK_lung |
| STAT4              | 0.00013423 | 0.48388023 | 0.473 | 0.753 | 1          | CD16neg_NK_lung |
| SNRPD1             | 0.00013583 | 0.64682282 | 0.223 | 0.353 | 1          | CD16neg_NK_lung |

|                    |            |            |       |       |                   |
|--------------------|------------|------------|-------|-------|-------------------|
| SERTAD1            | 0.00014124 | 1.3498871  | 0.355 | 0.397 | 1 CD16neg_NK_lung |
| RNF7               | 0.00014651 | 0.72088412 | 0.2   | 0.316 | 1 CD16neg_NK_lung |
| ENSMMUG00000049151 | 0.00020942 | 0.24337415 | 0.836 | 0.971 | 1 CD16neg_NK_lung |
| ITGB1              | 0.00021277 | 0.68360483 | 0.256 | 0.406 | 1 CD16neg_NK_lung |
| ISCA1              | 0.00022284 | 1.62191412 | 0.279 | 0.285 | 1 CD16neg_NK_lung |
| AIMP1              | 0.00023673 | 0.67748006 | 0.224 | 0.353 | 1 CD16neg_NK_lung |
| LCK                | 0.00025652 | 0.2528297  | 0.443 | 0.728 | 1 CD16neg_NK_lung |
| MIC1               | 0.00028743 | 0.24634094 | 0.455 | 0.721 | 1 CD16neg_NK_lung |
| PTPRE              | 0.00031342 | 0.87386366 | 0.173 | 0.27  | 1 CD16neg_NK_lung |
| COPE               | 0.0003411  | 1.43369587 | 0.314 | 0.345 | 1 CD16neg_NK_lung |
| PFDN2              | 0.00036671 | 0.79940422 | 0.249 | 0.4   | 1 CD16neg_NK_lung |
| PPM1J              | 0.00042413 | 0.59966801 | 0.317 | 0.515 | 1 CD16neg_NK_lung |
| ITM2C              | 0.00045211 | 0.74028804 | 0.248 | 0.385 | 1 CD16neg_NK_lung |
| LEPROTL1           | 0.00048056 | 1.58023309 | 0.255 | 0.251 | 1 CD16neg_NK_lung |
| PSMA7              | 0.00050688 | 0.27992507 | 0.394 | 0.626 | 1 CD16neg_NK_lung |
| THYN1              | 0.00052523 | 0.82810391 | 0.165 | 0.254 | 1 CD16neg_NK_lung |
| LSM7               | 0.00059025 | 1.21985836 | 0.371 | 0.444 | 1 CD16neg_NK_lung |
| ENSMMUG00000016009 | 0.00076803 | 0.83086226 | 0.202 | 0.314 | 1 CD16neg_NK_lung |
| LAMTOR1            | 0.00077005 | 0.85175164 | 0.172 | 0.264 | 1 CD16neg_NK_lung |
| ZNF483             | 0.00079044 | 0.93648177 | 0.437 | 0.562 | 1 CD16neg_NK_lung |
| ATG12              | 0.00108442 | 0.69354924 | 0.311 | 0.497 | 1 CD16neg_NK_lung |
| UCP2               | 0.00113801 | 0.85355741 | 0.209 | 0.32  | 1 CD16neg_NK_lung |
| POLR1H             | 0.0012237  | 0.89500221 | 0.212 | 0.328 | 1 CD16neg_NK_lung |
| COX4I1             | 0.00124137 | 0.33436717 | 0.653 | 0.852 | 1 CD16neg_NK_lung |
| SEC11C             | 0.00126235 | 0.81604602 | 0.179 | 0.27  | 1 CD16neg_NK_lung |
| RSL24D1            | 0.00126847 | 0.51237616 | 0.334 | 0.53  | 1 CD16neg_NK_lung |
| BAX                | 0.00129562 | 0.87066039 | 0.19  | 0.288 | 1 CD16neg_NK_lung |
| RBBP4              | 0.00140294 | 0.82102019 | 0.194 | 0.294 | 1 CD16neg_NK_lung |
| TRMT112            | 0.00143282 | 0.47130881 | 0.348 | 0.557 | 1 CD16neg_NK_lung |
| C3H7orf50          | 0.00149924 | 0.56251066 | 0.369 | 0.61  | 1 CD16neg_NK_lung |
| COX6B1             | 0.00176523 | 1.23184946 | 0.341 | 0.4   | 1 CD16neg_NK_lung |
| SEPTIN7            | 0.00183695 | 0.36206342 | 0.652 | 0.861 | 1 CD16neg_NK_lung |
| SYF2               | 0.00184473 | 0.69271629 | 0.272 | 0.418 | 1 CD16neg_NK_lung |

|                   |            |            |       |       |                   |
|-------------------|------------|------------|-------|-------|-------------------|
| ND4L              | 0.00194032 | 1.41825457 | 0.314 | 0.348 | 1 CD16neg_NK_lung |
| LSP1              | 0.00198331 | 0.79579773 | 0.491 | 0.667 | 1 CD16neg_NK_lung |
| PSMB3             | 0.00199129 | 0.88986409 | 0.203 | 0.307 | 1 CD16neg_NK_lung |
| TRAPPC4           | 0.00208366 | 0.90370247 | 0.166 | 0.25  | 1 CD16neg_NK_lung |
| MRPL33            | 0.00213329 | 1.40361474 | 0.282 | 0.303 | 1 CD16neg_NK_lung |
| HNRNPK            | 0.00215082 | 0.20135006 | 0.509 | 0.809 | 1 CD16neg_NK_lung |
| TMEM219           | 0.00225975 | 0.8405551  | 0.233 | 0.36  | 1 CD16neg_NK_lung |
| SPCS1             | 0.00229486 | 0.31312116 | 0.44  | 0.692 | 1 CD16neg_NK_lung |
| BTF3              | 0.00236991 | 0.51328758 | 0.566 | 0.73  | 1 CD16neg_NK_lung |
| CHMP2A            | 0.00266173 | 0.93119552 | 0.171 | 0.255 | 1 CD16neg_NK_lung |
| TMBIM6            | 0.00278402 | 0.48916143 | 0.383 | 0.615 | 1 CD16neg_NK_lung |
| RAC2              | 0.00286625 | 0.96870901 | 0.428 | 0.561 | 1 CD16neg_NK_lung |
| SNRPB             | 0.00342799 | 1.08774488 | 0.373 | 0.456 | 1 CD16neg_NK_lung |
| CBX3              | 0.00347031 | 0.79352994 | 0.482 | 0.658 | 1 CD16neg_NK_lung |
| MRPS12            | 0.00416686 | 0.92350558 | 0.172 | 0.255 | 1 CD16neg_NK_lung |
| SNU13             | 0.00444441 | 0.59790858 | 0.327 | 0.511 | 1 CD16neg_NK_lung |
| ENSMUG00000016894 | 0.00459256 | 0.87173102 | 0.434 | 0.575 | 1 CD16neg_NK_lung |
| VDAC3             | 0.00495582 | 0.83078363 | 0.228 | 0.342 | 1 CD16neg_NK_lung |
| TMEM14B           | 0.0049898  | 0.77346636 | 0.472 | 0.639 | 1 CD16neg_NK_lung |
| NCBP2             | 0.00501755 | 0.83043963 | 0.253 | 0.386 | 1 CD16neg_NK_lung |
| MANBA             | 0.0055046  | 0.46872562 | 0.348 | 0.516 | 1 CD16neg_NK_lung |
| TMEM50A           | 0.0060072  | 0.58972766 | 0.333 | 0.522 | 1 CD16neg_NK_lung |
| RBM8A             | 0.00603624 | 1.17306967 | 0.36  | 0.439 | 1 CD16neg_NK_lung |
| SPCS3             | 0.00646415 | 0.65943723 | 0.296 | 0.452 | 1 CD16neg_NK_lung |
| LGALS3            | 0.00658169 | 1.33498756 | 0.296 | 0.331 | 1 CD16neg_NK_lung |
| CCL5              | 0.00691006 | 0.56663773 | 0.354 | 0.475 | 1 CD16neg_NK_lung |
| TALDO1            | 0.00691922 | 0.77096153 | 0.248 | 0.374 | 1 CD16neg_NK_lung |
| HMGN4             | 0.00723996 | 0.88815312 | 0.204 | 0.3   | 1 CD16neg_NK_lung |
| SHISA5            | 0.00838243 | 0.70302815 | 0.274 | 0.415 | 1 CD16neg_NK_lung |
| VDAC2             | 0.00869635 | 0.60021057 | 0.326 | 0.506 | 1 CD16neg_NK_lung |
| ATP5F1C           | 0.0088316  | 1.20277151 | 0.324 | 0.379 | 1 CD16neg_NK_lung |
| PRMT2             | 0.00961961 | 0.8717218  | 0.203 | 0.295 | 1 CD16neg_NK_lung |
| SLC25A43          | 0.01012403 | 0.92728329 | 0.405 | 0.512 | 1 CD16neg_NK_lung |

|                    |            |            |       |       |                   |
|--------------------|------------|------------|-------|-------|-------------------|
| MGST3              | 0.01019032 | 1.33855978 | 0.273 | 0.3   | 1 CD16neg_NK_lung |
| PSMB6              | 0.01053136 | 1.2618038  | 0.319 | 0.377 | 1 CD16neg_NK_lung |
| LLPH               | 0.01074103 | 0.86638378 | 0.219 | 0.32  | 1 CD16neg_NK_lung |
| SLC25A3            | 0.011272   | 0.67861373 | 0.331 | 0.521 | 1 CD16neg_NK_lung |
| LSM5               | 0.01136236 | 0.85252762 | 0.199 | 0.287 | 1 CD16neg_NK_lung |
| NDUFB9             | 0.0114333  | 1.40362848 | 0.265 | 0.288 | 1 CD16neg_NK_lung |
| ENSMMUG00000053392 | 0.01147958 | 0.46821014 | 0.396 | 0.629 | 1 CD16neg_NK_lung |
| ENSMMUG00000064531 | 0.01179068 | 1.38288237 | 0.318 | 0.376 | 1 CD16neg_NK_lung |
| SF3B6              | 0.01245401 | 0.6534424  | 0.341 | 0.535 | 1 CD16neg_NK_lung |
| TPI1               | 0.01261286 | 0.97742753 | 0.403 | 0.515 | 1 CD16neg_NK_lung |
| ERH                | 0.01269493 | 1.23663443 | 0.301 | 0.345 | 1 CD16neg_NK_lung |
| SAP18              | 0.01278711 | 1.04268819 | 0.383 | 0.491 | 1 CD16neg_NK_lung |
| MAP1LC3B           | 0.01312989 | 0.73287749 | 0.287 | 0.434 | 1 CD16neg_NK_lung |
| RNF181             | 0.0133036  | 1.09880287 | 0.362 | 0.452 | 1 CD16neg_NK_lung |
| MPC2               | 0.01422422 | 0.87357064 | 0.214 | 0.314 | 1 CD16neg_NK_lung |
| SRP9               | 0.01453554 | 1.01657845 | 0.192 | 0.278 | 1 CD16neg_NK_lung |
| APOBEC3H           | 0.01546348 | 0.904562   | 0.198 | 0.285 | 1 CD16neg_NK_lung |
| ENSMMUG00000061128 | 0.01583554 | 0.68138451 | 0.298 | 0.453 | 1 CD16neg_NK_lung |
| UQCRH              | 0.0160424  | 0.82607922 | 0.44  | 0.598 | 1 CD16neg_NK_lung |
| MAGOH              | 0.01819083 | 1.18184105 | 0.327 | 0.391 | 1 CD16neg_NK_lung |
| ENSMMUG00000002075 | 0.01838917 | 1.45400304 | 0.244 | 0.26  | 1 CD16neg_NK_lung |
| CWC15              | 0.01844386 | 0.74530743 | 0.242 | 0.352 | 1 CD16neg_NK_lung |
| PYCARD             | 0.01862997 | 0.85638343 | 0.232 | 0.337 | 1 CD16neg_NK_lung |
| ENSMMUG00000050829 | 0.01945335 | 0.56789387 | 0.562 | 0.781 | 1 CD16neg_NK_lung |
| TMEM230            | 0.01954969 | 0.94667581 | 0.193 | 0.275 | 1 CD16neg_NK_lung |
| STX10              | 0.01995495 | 1.03366486 | 0.185 | 0.266 | 1 CD16neg_NK_lung |
| MRPL51             | 0.01995607 | 1.15080357 | 0.339 | 0.416 | 1 CD16neg_NK_lung |
| PHF5A              | 0.0200126  | 0.92244218 | 0.187 | 0.266 | 1 CD16neg_NK_lung |
| PPIB               | 0.02128241 | 0.73077842 | 0.474 | 0.659 | 1 CD16neg_NK_lung |
| FTH1               | 0.02247024 | 0.96583222 | 0.507 | 0.724 | 1 CD16neg_NK_lung |
| PDCD10             | 0.02259036 | 0.69770277 | 0.317 | 0.482 | 1 CD16neg_NK_lung |
| TINF2              | 0.02425869 | 0.82101782 | 0.431 | 0.594 | 1 CD16neg_NK_lung |
| DAD1               | 0.02447374 | 0.73482165 | 0.299 | 0.451 | 1 CD16neg_NK_lung |

|                     |            |            |       |       |                   |
|---------------------|------------|------------|-------|-------|-------------------|
| PRDX1               | 0.02583941 | 0.92445636 | 0.177 | 0.25  | 1 CD16neg_NK_lung |
| SERPINB1            | 0.02840797 | 0.98123515 | 0.184 | 0.259 | 1 CD16neg_NK_lung |
| YJEFN3              | 0.02864566 | 0.65896174 | 0.309 | 0.467 | 1 CD16neg_NK_lung |
| ENSMMUG00000051392  | 0.02876544 | 0.64642247 | 0.351 | 0.533 | 1 CD16neg_NK_lung |
| ATP5MC3             | 0.02904195 | 0.82241708 | 0.42  | 0.551 | 1 CD16neg_NK_lung |
| UBXN1               | 0.02939362 | 0.62521431 | 0.328 | 0.502 | 1 CD16neg_NK_lung |
| RGS9                | 0.03250158 | 0.27157709 | 0.509 | 0.746 | 1 CD16neg_NK_lung |
| ENSMMUG00000007536  | 0.03345022 | 1.38081974 | 0.265 | 0.298 | 1 CD16neg_NK_lung |
| ETFB                | 0.03373139 | 1.2193971  | 0.309 | 0.368 | 1 CD16neg_NK_lung |
| TMBIM4              | 0.0337357  | 0.69384282 | 0.324 | 0.489 | 1 CD16neg_NK_lung |
| NDUFS6              | 0.03682426 | 0.98461504 | 0.22  | 0.317 | 1 CD16neg_NK_lung |
| CEMIP2              | 0.04732767 | 0.70589994 | 0.352 | 0.518 | 1 CD16neg_NK_lung |
| RBX1                | 0.05008108 | 1.0614894  | 0.346 | 0.432 | 1 CD16neg_NK_lung |
| TXN                 | 0.05153736 | 0.74555609 | 0.294 | 0.429 | 1 CD16neg_NK_lung |
| NDUFC2              | 0.05400922 | 1.09245484 | 0.325 | 0.397 | 1 CD16neg_NK_lung |
| LIMD2               | 0.05630936 | 0.90677556 | 0.405 | 0.539 | 1 CD16neg_NK_lung |
| SAFB                | 0.06023208 | 0.24929015 | 0.508 | 0.782 | 1 CD16neg_NK_lung |
| CDC42               | 0.06111632 | 0.30696065 | 0.629 | 0.86  | 1 CD16neg_NK_lung |
| ENSMMUG000000029973 | 0.06171759 | 0.97489668 | 0.385 | 0.5   | 1 CD16neg_NK_lung |
| NDUFB7              | 0.063183   | 0.98541503 | 0.21  | 0.295 | 1 CD16neg_NK_lung |
| RHOA                | 0.06440971 | 0.39113289 | 0.447 | 0.711 | 1 CD16neg_NK_lung |
| OSTC                | 0.06484243 | 0.80512586 | 0.277 | 0.404 | 1 CD16neg_NK_lung |
| NDUFA6              | 0.06566292 | 1.12619906 | 0.319 | 0.389 | 1 CD16neg_NK_lung |
| CD63                | 0.07041657 | 0.67144249 | 0.485 | 0.667 | 1 CD16neg_NK_lung |
| TOMM22              | 0.07560602 | 0.96810172 | 0.196 | 0.271 | 1 CD16neg_NK_lung |
| DYNLL1              | 0.07653928 | 1.02362574 | 0.361 | 0.452 | 1 CD16neg_NK_lung |
| ENSMMUG000000053817 | 0.07904216 | 1.23374865 | 0.281 | 0.326 | 1 CD16neg_NK_lung |
| NDUFB10             | 0.08225588 | 0.92306158 | 0.258 | 0.37  | 1 CD16neg_NK_lung |
| BRK1                | 0.09031043 | 0.94923182 | 0.232 | 0.325 | 1 CD16neg_NK_lung |
| FKBP2               | 0.09263733 | 1.28591828 | 0.268 | 0.309 | 1 CD16neg_NK_lung |
| TPM3                | 0.10134528 | 0.33294908 | 0.505 | 0.773 | 1 CD16neg_NK_lung |
| ENY2                | 0.10304532 | 0.77125644 | 0.3   | 0.433 | 1 CD16neg_NK_lung |
| SEM1                | 0.1033869  | 0.78487176 | 0.406 | 0.542 | 1 CD16neg_NK_lung |

|                    |            |            |       |       |                   |
|--------------------|------------|------------|-------|-------|-------------------|
| NDUFV2             | 0.10849303 | 1.00921455 | 0.203 | 0.278 | 1 CD16neg_NK_lung |
| MFNG               | 0.10975711 | 0.89818004 | 0.197 | 0.264 | 1 CD16neg_NK_lung |
| ENSMMUG00000038348 | 0.11023423 | 0.99014751 | 0.414 | 0.529 | 1 CD16neg_NK_lung |
| NHP2               | 0.11733915 | 1.00203801 | 0.199 | 0.27  | 1 CD16neg_NK_lung |
| C18H18orf32        | 0.12077191 | 0.1164207  | 0.895 | 0.977 | 1 CD16neg_NK_lung |
| PGK1               | 0.1247596  | 0.80262946 | 0.275 | 0.391 | 1 CD16neg_NK_lung |
| HYPK               | 0.12532185 | 0.94798157 | 0.236 | 0.329 | 1 CD16neg_NK_lung |
| TMEM147            | 0.13471246 | 1.00152813 | 0.276 | 0.395 | 1 CD16neg_NK_lung |
| PARK7              | 0.13801057 | 0.75781123 | 0.317 | 0.465 | 1 CD16neg_NK_lung |
| ATP5PD             | 0.14098266 | 0.88092195 | 0.202 | 0.27  | 1 CD16neg_NK_lung |
| ID2                | 0.15563202 | 0.385374   | 0.692 | 0.87  | 1 CD16neg_NK_lung |
| SARAF              | 0.15914911 | 0.27208922 | 0.54  | 0.816 | 1 CD16neg_NK_lung |
| CTSS               | 0.15952386 | 0.79495277 | 0.31  | 0.449 | 1 CD16neg_NK_lung |
| NDUFS8             | 0.17486524 | 0.94733259 | 0.22  | 0.298 | 1 CD16neg_NK_lung |
| PRDX5              | 0.18087742 | 0.91591462 | 0.227 | 0.308 | 1 CD16neg_NK_lung |
| POMP               | 0.18849028 | 1.18701998 | 0.296 | 0.367 | 1 CD16neg_NK_lung |
| CD37               | 0.20107048 | 0.68786804 | 0.471 | 0.683 | 1 CD16neg_NK_lung |
| AP2M1              | 0.20457399 | 0.94642144 | 0.216 | 0.289 | 1 CD16neg_NK_lung |
| MRPL34             | 0.20566075 | 1.39718472 | 0.237 | 0.273 | 1 CD16neg_NK_lung |
| PSMB7              | 0.20788093 | 0.57795302 | 0.37  | 0.551 | 1 CD16neg_NK_lung |
| WDR13              | 0.22397106 | 0.68274503 | 0.393 | 0.597 | 1 CD16neg_NK_lung |
| COX7A2             | 0.23389535 | 1.35123698 | 0.222 | 0.252 | 1 CD16neg_NK_lung |
| VPS28              | 0.2361439  | 1.17215827 | 0.201 | 0.267 | 1 CD16neg_NK_lung |
| ZNHIT1             | 0.24296051 | 1.1383176  | 0.304 | 0.38  | 1 CD16neg_NK_lung |
| CD48               | 0.25850272 | 0.99413544 | 0.261 | 0.361 | 1 CD16neg_NK_lung |
| ARHGDI4            | 0.26363629 | 1.28226339 | 0.234 | 0.27  | 1 CD16neg_NK_lung |
| HMGN3              | 0.26557226 | 1.07578198 | 0.203 | 0.266 | 1 CD16neg_NK_lung |
| TXNIP              | 0.27667847 | 1.09531535 | 0.279 | 0.387 | 1 CD16neg_NK_lung |
| ENSMMUG00000002324 | 0.28336679 | 1.10489355 | 0.306 | 0.385 | 1 CD16neg_NK_lung |
| DGKB               | 0.33814868 | 1.11197655 | 0.291 | 0.36  | 1 CD16neg_NK_lung |
| SH3BGR1            | 0.34436058 | 0.93753121 | 0.304 | 0.432 | 1 CD16neg_NK_lung |
| SPCS2              | 0.36398139 | 0.82704342 | 0.315 | 0.451 | 1 CD16neg_NK_lung |
| DRAP1              | 0.37736036 | 0.98277343 | 0.355 | 0.478 | 1 CD16neg_NK_lung |

|                    |            |            |       |       |                   |
|--------------------|------------|------------|-------|-------|-------------------|
| SNRPN              | 0.4161131  | 1.09106495 | 0.22  | 0.288 | 1 CD16neg_NK_lung |
| ENSMMUG00000057791 | 0.41779008 | 0.33055963 | 0.596 | 0.771 | 1 CD16neg_NK_lung |
| TENT5C             | 0.42099635 | 0.51468852 | 0.456 | 0.671 | 1 CD16neg_NK_lung |
| NDUFB8             | 0.4339491  | 1.00266161 | 0.32  | 0.417 | 1 CD16neg_NK_lung |
| CD320              | 0.44274313 | 0.88147201 | 0.27  | 0.368 | 1 CD16neg_NK_lung |
| CIAO2B             | 0.46033787 | 1.26906532 | 0.242 | 0.291 | 1 CD16neg_NK_lung |
| BZW1               | 0.46351559 | 0.54504237 | 0.489 | 0.727 | 1 CD16neg_NK_lung |
| CD52               | 0.4788549  | 0.34350911 | 0.588 | 0.741 | 1 CD16neg_NK_lung |
| LAMTOR4            | 0.49314976 | 1.0205239  | 0.33  | 0.437 | 1 CD16neg_NK_lung |
| ENSMMUG00000055026 | 0.49940545 | 1.0925657  | 0.277 | 0.343 | 1 CD16neg_NK_lung |
| LSM6               | 0.51895359 | 1.04203284 | 0.291 | 0.37  | 1 CD16neg_NK_lung |
| PDGFRA             | 0.54777732 | 0.33961843 | 0.574 | 0.786 | 1 CD16neg_NK_lung |
| ENSMMUG00000012019 | 0.55163011 | 0.96871383 | 0.292 | 0.402 | 1 CD16neg_NK_lung |
| DNAJC19            | 0.5649673  | 0.93932579 | 0.277 | 0.373 | 1 CD16neg_NK_lung |
| ENSMMUG00000064120 | 0.57424447 | 0.86725864 | 0.37  | 0.504 | 1 CD16neg_NK_lung |
| ZNF706             | 0.57976822 | 1.00232054 | 0.273 | 0.366 | 1 CD16neg_NK_lung |
| MRPL23             | 0.57987677 | 1.01469147 | 0.303 | 0.389 | 1 CD16neg_NK_lung |
| CASP1              | 0.59305113 | 0.95227028 | 0.337 | 0.452 | 1 CD16neg_NK_lung |
| ARF1               | 0.61366023 | 0.68202029 | 0.412 | 0.582 | 1 CD16neg_NK_lung |
| ENSMMUG00000029026 | 0.62427849 | 1.00553911 | 0.274 | 0.369 | 1 CD16neg_NK_lung |
| SSR2               | 0.63856487 | 0.64021728 | 0.429 | 0.615 | 1 CD16neg_NK_lung |
| CFDP1              | 0.66323857 | 0.76847626 | 0.389 | 0.535 | 1 CD16neg_NK_lung |
| VAMP8              | 0.66918727 | 1.05919167 | 0.319 | 0.43  | 1 CD16neg_NK_lung |
| GABARAP            | 0.69759118 | 0.71756637 | 0.39  | 0.574 | 1 CD16neg_NK_lung |
| ENSMMUG00000065104 | 0.70648164 | 0.92994632 | 0.298 | 0.405 | 1 CD16neg_NK_lung |
| PSME2              | 0.70809374 | 0.9828561  | 0.316 | 0.418 | 1 CD16neg_NK_lung |
| GPSM3              | 0.71754481 | 0.97992035 | 0.332 | 0.45  | 1 CD16neg_NK_lung |
| CLDND1             | 0.72312931 | 1.18547647 | 0.211 | 0.264 | 1 CD16neg_NK_lung |
| PRR13              | 0.74588498 | 0.89109724 | 0.345 | 0.488 | 1 CD16neg_NK_lung |
| CCL4L1             | 0.76538421 | 0.97370382 | 0.332 | 0.414 | 1 CD16neg_NK_lung |
| RAN                | 0.77303423 | 0.86302581 | 0.331 | 0.449 | 1 CD16neg_NK_lung |
| FKBP1A             | 0.77345225 | 1.08390409 | 0.218 | 0.272 | 1 CD16neg_NK_lung |
| NR4A2              | 0.7966194  | 0.64928523 | 0.467 | 0.659 | 1 CD16neg_NK_lung |

|                    |            |            |       |       |          |                  |
|--------------------|------------|------------|-------|-------|----------|------------------|
| COX20              | 0.80502007 | 1.07010158 | 0.241 | 0.306 | 1        | CD16neg_NK_lung  |
| CAPZB              | 0.81439629 | 0.78885696 | 0.377 | 0.549 | 1        | CD16neg_NK_lung  |
| SUMO1              | 0.83550168 | 0.80466172 | 0.332 | 0.458 | 1        | CD16neg_NK_lung  |
| PDCD5              | 0.84178304 | 1.2038332  | 0.209 | 0.251 | 1        | CD16neg_NK_lung  |
| ENSMMUG00000056654 | 0.85092596 | 0.48158944 | 0.489 | 0.713 | 1        | CD16neg_NK_lung  |
| PSMB8              | 0.85940997 | 0.52233452 | 0.465 | 0.706 | 1        | CD16neg_NK_lung  |
| NPM1               | 0.86244786 | 0.26954152 | 0.586 | 0.833 | 1        | CD16neg_NK_lung  |
| ATP6V1FNB          | 0.86503939 | 1.10491978 | 0.262 | 0.333 | 1        | CD16neg_NK_lung  |
| ENSMMUG00000065362 | 0.87233922 | 0.1311769  | 0.98  | 1     | 1        | CD16neg_NK_lung  |
| YWHAB              | 0.88321153 | 0.67181757 | 0.425 | 0.625 | 1        | CD16neg_NK_lung  |
| ENO1               | 0.88998412 | 0.57606169 | 0.435 | 0.624 | 1        | CD16neg_NK_lung  |
| ENSMMUG00000059843 | 0.9075707  | 1.27611456 | 0.208 | 0.258 | 1        | CD16neg_NK_lung  |
| ATP5IF1            | 0.91483155 | 0.83751452 | 0.342 | 0.475 | 1        | CD16neg_NK_lung  |
| CTSW               | 0.9403733  | 1.11597088 | 0.37  | 0.509 | 1        | CD16neg_NK_lung  |
| GADD45B            | 0.95255012 | 0.77274137 | 0.511 | 0.707 | 1        | CD16neg_NK_lung  |
| ND3                | 0.96222973 | 0.5708131  | 0.435 | 0.598 | 1        | CD16neg_NK_lung  |
| HSPE1              | 0.9797862  | 0.58338796 | 0.476 | 0.693 | 1        | CD16neg_NK_lung  |
| GTF2H5             | 0.98230549 | 0.92598526 | 0.313 | 0.418 | 1        | CD16neg_NK_lung  |
| ZNF331             | 0.9920228  | 1.13362121 | 0.22  | 0.267 | 1        | CD16neg_NK_lung  |
| SNRPD3             | 0.99582567 | 0.80080152 | 0.348 | 0.483 | 1        | CD16neg_NK_lung  |
| RAP1GAP2           | 2.28E-78   | 5.16603607 | 0.522 | 0.026 | 8.07E-74 | CD16neg_NK_UCBMC |
| HBE1               | 1.04E-55   | 2.38773697 | 0.674 | 0.067 | 3.69E-51 | CD16neg_NK_UCBMC |
| HBA                | 6.55E-36   | 2.12974512 | 0.565 | 0.073 | 2.32E-31 | CD16neg_NK_UCBMC |
| SLCO3A1            | 1.53E-28   | 3.59250634 | 0.413 | 0.049 | 5.43E-24 | CD16neg_NK_UCBMC |
| NCALD              | 6.03E-17   | 2.50942749 | 0.543 | 0.13  | 2.14E-12 | CD16neg_NK_UCBMC |
| MADD               | 1.52E-16   | 2.06419155 | 0.522 | 0.118 | 5.39E-12 | CD16neg_NK_UCBMC |
| POLH               | 1.76E-16   | 2.5344249  | 0.457 | 0.096 | 6.25E-12 | CD16neg_NK_UCBMC |
| LATS1              | 8.93E-16   | 2.55467461 | 0.37  | 0.067 | 3.17E-11 | CD16neg_NK_UCBMC |
| TSN                | 1.28E-15   | 2.33695491 | 0.413 | 0.082 | 4.55E-11 | CD16neg_NK_UCBMC |
| PPP3CC             | 2.05E-15   | 2.08484905 | 0.674 | 0.225 | 7.26E-11 | CD16neg_NK_UCBMC |
| RNF125             | 9.72E-15   | 2.70549897 | 0.304 | 0.049 | 3.44E-10 | CD16neg_NK_UCBMC |
| PDZD8              | 1.24E-14   | 2.40651572 | 0.478 | 0.116 | 4.40E-10 | CD16neg_NK_UCBMC |
| IQGAP2             | 1.34E-14   | 1.86617233 | 0.674 | 0.221 | 4.75E-10 | CD16neg_NK_UCBMC |



|                    |          |            |       |       |          |                  |
|--------------------|----------|------------|-------|-------|----------|------------------|
| GOLGA4             | 1.90E-14 | 1.8824971  | 0.652 | 0.202 | 6.74E-10 | CD16neg_NK_UCBMC |
| KIF20B             | 1.23E-13 | 2.70889626 | 0.283 | 0.046 | 4.36E-09 | CD16neg_NK_UCBMC |
| LUC7L3             | 1.29E-13 | 1.9026548  | 0.652 | 0.229 | 4.59E-09 | CD16neg_NK_UCBMC |
| PLEKHA1            | 2.20E-13 | 2.07436803 | 0.413 | 0.093 | 7.79E-09 | CD16neg_NK_UCBMC |
| CERT1              | 2.44E-13 | 2.03268633 | 0.543 | 0.16  | 8.65E-09 | CD16neg_NK_UCBMC |
| PNISR              | 2.80E-13 | 1.42098071 | 0.87  | 0.355 | 9.91E-09 | CD16neg_NK_UCBMC |
| RSRP1              | 5.39E-13 | 1.36989481 | 0.913 | 0.384 | 1.91E-08 | CD16neg_NK_UCBMC |
| AKT3               | 6.27E-13 | 2.2029437  | 0.5   | 0.139 | 2.22E-08 | CD16neg_NK_UCBMC |
| PICALM             | 6.38E-13 | 1.55087705 | 0.804 | 0.329 | 2.26E-08 | CD16neg_NK_UCBMC |
| PIAS1              | 6.69E-13 | 1.75194086 | 0.696 | 0.253 | 2.37E-08 | CD16neg_NK_UCBMC |
| EDRF1              | 7.16E-13 | 2.47003845 | 0.304 | 0.055 | 2.54E-08 | CD16neg_NK_UCBMC |
| TRIM33             | 7.96E-13 | 1.92681623 | 0.5   | 0.136 | 2.82E-08 | CD16neg_NK_UCBMC |
| CREBBP             | 8.55E-13 | 1.92431265 | 0.63  | 0.211 | 3.03E-08 | CD16neg_NK_UCBMC |
| ELMO1              | 9.03E-13 | 1.75541651 | 0.717 | 0.29  | 3.20E-08 | CD16neg_NK_UCBMC |
| AGO3               | 9.07E-13 | 1.92752662 | 0.587 | 0.19  | 3.21E-08 | CD16neg_NK_UCBMC |
| KLF3               | 9.23E-13 | 2.38464799 | 0.261 | 0.041 | 3.27E-08 | CD16neg_NK_UCBMC |
| RAB1A              | 9.26E-13 | 1.73312345 | 0.674 | 0.246 | 3.28E-08 | CD16neg_NK_UCBMC |
| CTDSPL2            | 9.88E-13 | 1.86914217 | 0.543 | 0.16  | 3.50E-08 | CD16neg_NK_UCBMC |
| SELL               | 1.22E-12 | 2.25713457 | 0.304 | 0.055 | 4.32E-08 | CD16neg_NK_UCBMC |
| ENSMMUG00000056331 | 1.36E-12 | 2.66695203 | 0.37  | 0.082 | 4.83E-08 | CD16neg_NK_UCBMC |
| QKI                | 1.59E-12 | 1.58468279 | 0.739 | 0.289 | 5.63E-08 | CD16neg_NK_UCBMC |
| VPS13B             | 2.08E-12 | 1.30861151 | 0.891 | 0.37  | 7.36E-08 | CD16neg_NK_UCBMC |
| MYO6               | 2.68E-12 | 2.24596944 | 0.457 | 0.125 | 9.51E-08 | CD16neg_NK_UCBMC |
| FOXO1              | 3.00E-12 | 1.97583147 | 0.457 | 0.121 | 1.06E-07 | CD16neg_NK_UCBMC |
| CENPC              | 3.65E-12 | 1.75004216 | 0.457 | 0.116 | 1.29E-07 | CD16neg_NK_UCBMC |
| UBASH3B            | 4.19E-12 | 1.79129632 | 0.63  | 0.224 | 1.48E-07 | CD16neg_NK_UCBMC |
| PDE3B              | 5.89E-12 | 2.43979275 | 0.326 | 0.066 | 2.09E-07 | CD16neg_NK_UCBMC |
| ENSMMUG00000006165 | 7.21E-12 | 1.30301457 | 0.913 | 0.424 | 2.55E-07 | CD16neg_NK_UCBMC |
| EPB41              | 7.75E-12 | 1.59921503 | 0.674 | 0.26  | 2.75E-07 | CD16neg_NK_UCBMC |
| ATG14              | 7.75E-12 | 2.28777648 | 0.326 | 0.067 | 2.75E-07 | CD16neg_NK_UCBMC |
| ATXN7L1            | 9.80E-12 | 2.43131266 | 0.261 | 0.045 | 3.47E-07 | CD16neg_NK_UCBMC |
| RASSF3             | 1.24E-11 | 1.97891848 | 0.391 | 0.095 | 4.40E-07 | CD16neg_NK_UCBMC |
| PPP1R12B           | 1.26E-11 | 2.12426296 | 0.391 | 0.094 | 4.45E-07 | CD16neg_NK_UCBMC |

|                    |          |            |       |       |          |                  |
|--------------------|----------|------------|-------|-------|----------|------------------|
| KLF12              | 1.30E-11 | 1.42574463 | 0.891 | 0.438 | 4.60E-07 | CD16neg_NK_UCBMC |
| IKZF1              | 1.40E-11 | 1.2664368  | 0.804 | 0.319 | 4.95E-07 | CD16neg_NK_UCBMC |
| OSBPL8             | 1.56E-11 | 1.83921393 | 0.609 | 0.22  | 5.53E-07 | CD16neg_NK_UCBMC |
| SSH2               | 2.12E-11 | 1.22564787 | 0.848 | 0.367 | 7.52E-07 | CD16neg_NK_UCBMC |
| USP3               | 2.35E-11 | 1.50870723 | 0.609 | 0.207 | 8.33E-07 | CD16neg_NK_UCBMC |
| AHNAK              | 3.50E-11 | 1.64800056 | 0.478 | 0.133 | 1.24E-06 | CD16neg_NK_UCBMC |
| SREK1              | 3.54E-11 | 1.43820426 | 0.717 | 0.282 | 1.25E-06 | CD16neg_NK_UCBMC |
| MRPL37             | 4.22E-11 | 1.89462387 | 0.304 | 0.061 | 1.49E-06 | CD16neg_NK_UCBMC |
| RFX3               | 5.14E-11 | 1.67764246 | 0.652 | 0.259 | 1.82E-06 | CD16neg_NK_UCBMC |
| DIAPH1             | 6.66E-11 | 1.69610945 | 0.609 | 0.228 | 2.36E-06 | CD16neg_NK_UCBMC |
| NCOA3              | 7.02E-11 | 1.74931232 | 0.674 | 0.287 | 2.49E-06 | CD16neg_NK_UCBMC |
| TMCC1              | 8.73E-11 | 2.15912083 | 0.413 | 0.109 | 3.09E-06 | CD16neg_NK_UCBMC |
| KANSL1             | 9.18E-11 | 1.56902704 | 0.63  | 0.243 | 3.25E-06 | CD16neg_NK_UCBMC |
| FOXN3              | 9.31E-11 | 1.59138166 | 0.783 | 0.342 | 3.30E-06 | CD16neg_NK_UCBMC |
| DLG1               | 9.38E-11 | 1.6587614  | 0.609 | 0.22  | 3.32E-06 | CD16neg_NK_UCBMC |
| MTSS1              | 9.68E-11 | 2.3426392  | 0.478 | 0.146 | 3.43E-06 | CD16neg_NK_UCBMC |
| NUP214             | 1.09E-10 | 1.85450507 | 0.457 | 0.132 | 3.87E-06 | CD16neg_NK_UCBMC |
| MBTD1              | 1.27E-10 | 1.71262583 | 0.457 | 0.133 | 4.49E-06 | CD16neg_NK_UCBMC |
| SYNE1              | 1.31E-10 | 1.66036199 | 0.609 | 0.228 | 4.65E-06 | CD16neg_NK_UCBMC |
| ENSMMUG00000028906 | 1.44E-10 | 2.06753947 | 0.348 | 0.083 | 5.09E-06 | CD16neg_NK_UCBMC |
| ABLIM1             | 1.47E-10 | 1.55468351 | 0.609 | 0.219 | 5.22E-06 | CD16neg_NK_UCBMC |
| RIPOR2             | 1.63E-10 | 1.28983718 | 0.891 | 0.471 | 5.79E-06 | CD16neg_NK_UCBMC |
| CDKAL1             | 1.89E-10 | 1.32976251 | 0.696 | 0.263 | 6.69E-06 | CD16neg_NK_UCBMC |
| PITPNC1            | 2.09E-10 | 1.1201012  | 0.957 | 0.553 | 7.41E-06 | CD16neg_NK_UCBMC |
| PRKX               | 2.24E-10 | 1.53629895 | 0.739 | 0.307 | 7.94E-06 | CD16neg_NK_UCBMC |
| ELMOD3             | 2.39E-10 | 1.75096219 | 0.435 | 0.121 | 8.47E-06 | CD16neg_NK_UCBMC |
| SLMAP              | 2.42E-10 | 1.63221349 | 0.522 | 0.171 | 8.56E-06 | CD16neg_NK_UCBMC |
| HERC4              | 2.46E-10 | 1.41779342 | 0.565 | 0.196 | 8.73E-06 | CD16neg_NK_UCBMC |
| TGFBR3             | 2.73E-10 | 1.70382229 | 0.761 | 0.363 | 9.67E-06 | CD16neg_NK_UCBMC |
| NIPSNAP2           | 2.75E-10 | 1.88966268 | 0.37  | 0.093 | 9.74E-06 | CD16neg_NK_UCBMC |
| PDE8A              | 2.78E-10 | 1.77857393 | 0.413 | 0.113 | 9.85E-06 | CD16neg_NK_UCBMC |
| TM9SF3             | 3.04E-10 | 1.80105648 | 0.587 | 0.229 | 1.08E-05 | CD16neg_NK_UCBMC |
| DIAPH2             | 3.18E-10 | 1.93924457 | 0.5   | 0.165 | 1.13E-05 | CD16neg_NK_UCBMC |

|                    |          |            |       |       |            |                  |
|--------------------|----------|------------|-------|-------|------------|------------------|
| ENSMMUG00000063979 | 3.85E-10 | 2.25177336 | 0.391 | 0.107 | 1.36E-05   | CD16neg_NK_UCBMC |
| CELF1              | 4.21E-10 | 1.64640734 | 0.543 | 0.188 | 1.49E-05   | CD16neg_NK_UCBMC |
| RPS20              | 4.92E-10 | 0.86578105 | 1     | 0.8   | 1.74E-05   | CD16neg_NK_UCBMC |
| SMCHD1             | 4.97E-10 | 1.60659484 | 0.674 | 0.276 | 1.76E-05   | CD16neg_NK_UCBMC |
| OSBPL9             | 5.09E-10 | 1.45044872 | 0.652 | 0.256 | 1.80E-05   | CD16neg_NK_UCBMC |
| AFF1               | 5.21E-10 | 1.68192526 | 0.5   | 0.162 | 1.84E-05   | CD16neg_NK_UCBMC |
| CREBRF             | 7.23E-10 | 1.6133976  | 0.522 | 0.17  | 2.56E-05   | CD16neg_NK_UCBMC |
| ENSMMUG00000065175 | 7.59E-10 | 1.37935538 | 0.565 | 0.197 | 2.69E-05   | CD16neg_NK_UCBMC |
| TNFRSF10A          | 7.99E-10 | 2.25879742 | 0.283 | 0.061 | 2.83E-05   | CD16neg_NK_UCBMC |
| PIK3R5             | 8.63E-10 | 1.50676387 | 0.652 | 0.268 | 3.06E-05   | CD16neg_NK_UCBMC |
| RAF1               | 8.87E-10 | 1.4589016  | 0.478 | 0.147 | 3.14E-05   | CD16neg_NK_UCBMC |
| HIPK2              | 1.07E-09 | 1.86684458 | 0.435 | 0.132 | 3.80E-05   | CD16neg_NK_UCBMC |
| MARCHF7            | 1.14E-09 | 1.55520041 | 0.565 | 0.205 | 4.03E-05   | CD16neg_NK_UCBMC |
| RICTOR             | 1.22E-09 | 1.53354269 | 0.587 | 0.224 | 4.33E-05   | CD16neg_NK_UCBMC |
| NUP133             | 1.37E-09 | 1.83387672 | 0.304 | 0.07  | 4.84E-05   | CD16neg_NK_UCBMC |
| CDC14A             | 1.42E-09 | 1.92064212 | 0.478 | 0.161 | 5.03E-05   | CD16neg_NK_UCBMC |
| RNF4               | 1.43E-09 | 2.36180303 | 0.326 | 0.081 | 5.06E-05   | CD16neg_NK_UCBMC |
| SPPL3              | 1.44E-09 | 2.31004104 | 0.435 | 0.14  | 5.10E-05   | CD16neg_NK_UCBMC |
| FBXO33             | 1.68E-09 | 1.75136322 | 0.478 | 0.157 | 5.97E-05   | CD16neg_NK_UCBMC |
| IREB2              | 1.75E-09 | 2.01667389 | 0.391 | 0.111 | 6.18E-05   | CD16neg_NK_UCBMC |
| CCNK               | 1.88E-09 | 1.30463321 | 0.543 | 0.184 | 6.66E-05   | CD16neg_NK_UCBMC |
| CAMK4              | 2.08E-09 | 2.33273982 | 0.37  | 0.103 | 7.36E-05   | CD16neg_NK_UCBMC |
| ADAM17             | 2.13E-09 | 2.38313797 | 0.304 | 0.073 | 7.55E-05   | CD16neg_NK_UCBMC |
| RASA2              | 2.14E-09 | 1.46065467 | 0.652 | 0.27  | 7.57E-05   | CD16neg_NK_UCBMC |
| MCTP2              | 2.26E-09 | 2.16296879 | 0.435 | 0.134 | 7.99E-05   | CD16neg_NK_UCBMC |
| CUL3               | 2.28E-09 | 1.55989106 | 0.565 | 0.214 | 8.09E-05   | CD16neg_NK_UCBMC |
| FLNA               | 2.41E-09 | 1.07093951 | 0.587 | 0.2   | 8.55E-05   | CD16neg_NK_UCBMC |
| FAM172A            | 2.43E-09 | 1.46362473 | 0.696 | 0.304 | 8.60E-05   | CD16neg_NK_UCBMC |
| PDZRN3             | 2.74E-09 | 2.13322105 | 0.391 | 0.118 | 9.70E-05   | CD16neg_NK_UCBMC |
| SIK3               | 2.74E-09 | 1.05681891 | 0.935 | 0.538 | 9.71E-05   | CD16neg_NK_UCBMC |
| PTEN               | 3.37E-09 | 1.75925327 | 0.457 | 0.148 | 0.00011941 | CD16neg_NK_UCBMC |
| ITSN2              | 3.48E-09 | 1.27436952 | 0.674 | 0.287 | 0.0001234  | CD16neg_NK_UCBMC |
| ITCH               | 3.55E-09 | 1.14117272 | 0.87  | 0.445 | 0.00012564 | CD16neg_NK_UCBMC |

|                   |          |            |       |       |            |                  |
|-------------------|----------|------------|-------|-------|------------|------------------|
| PRKCB             | 3.57E-09 | 1.56010561 | 0.696 | 0.314 | 0.00012646 | CD16neg_NK_UCBMC |
| CELF2             | 3.60E-09 | 0.93634309 | 0.957 | 0.485 | 0.00012747 | CD16neg_NK_UCBMC |
| UTRN              | 3.63E-09 | 1.17267497 | 0.891 | 0.479 | 0.00012872 | CD16neg_NK_UCBMC |
| TWF1              | 3.79E-09 | 1.57875339 | 0.304 | 0.07  | 0.00013437 | CD16neg_NK_UCBMC |
| SCAF4             | 3.81E-09 | 1.98225092 | 0.37  | 0.103 | 0.0001349  | CD16neg_NK_UCBMC |
| COG5              | 4.03E-09 | 1.29281758 | 0.609 | 0.239 | 0.00014284 | CD16neg_NK_UCBMC |
| SNIP1             | 4.18E-09 | 1.8135855  | 0.391 | 0.116 | 0.00014815 | CD16neg_NK_UCBMC |
| CEP290            | 4.27E-09 | 2.24442571 | 0.261 | 0.057 | 0.00015136 | CD16neg_NK_UCBMC |
| PUM1              | 4.75E-09 | 1.61540194 | 0.63  | 0.272 | 0.00016814 | CD16neg_NK_UCBMC |
| FBXO21            | 4.95E-09 | 2.0196776  | 0.304 | 0.074 | 0.00017539 | CD16neg_NK_UCBMC |
| CHN2              | 5.01E-09 | 0.95518157 | 0.87  | 0.397 | 0.0001774  | CD16neg_NK_UCBMC |
| VAV3              | 5.50E-09 | 1.19687622 | 0.674 | 0.281 | 0.00019471 | CD16neg_NK_UCBMC |
| DHX9              | 6.25E-09 | 1.3177043  | 0.565 | 0.214 | 0.00022136 | CD16neg_NK_UCBMC |
| CPLANE1           | 6.57E-09 | 1.90644771 | 0.37  | 0.106 | 0.00023282 | CD16neg_NK_UCBMC |
| PRKD3             | 6.61E-09 | 1.49084643 | 0.391 | 0.112 | 0.00023438 | CD16neg_NK_UCBMC |
| STK39             | 6.80E-09 | 1.13444256 | 0.761 | 0.338 | 0.00024098 | CD16neg_NK_UCBMC |
| PTBP2             | 7.32E-09 | 1.33582696 | 0.543 | 0.198 | 0.00025946 | CD16neg_NK_UCBMC |
| DOCK8             | 8.34E-09 | 1.1102178  | 0.848 | 0.402 | 0.00029544 | CD16neg_NK_UCBMC |
| CLINT1            | 8.55E-09 | 1.16362468 | 0.609 | 0.222 | 0.00030308 | CD16neg_NK_UCBMC |
| SSBP2             | 9.28E-09 | 1.87855218 | 0.391 | 0.117 | 0.00032868 | CD16neg_NK_UCBMC |
| RLF               | 9.82E-09 | 1.22689078 | 0.565 | 0.212 | 0.00034793 | CD16neg_NK_UCBMC |
| RIC1              | 1.02E-08 | 2.08787129 | 0.326 | 0.087 | 0.00036061 | CD16neg_NK_UCBMC |
| ZNF326            | 1.10E-08 | 1.64413399 | 0.391 | 0.118 | 0.0003895  | CD16neg_NK_UCBMC |
| NCOA2             | 1.17E-08 | 1.53083704 | 0.587 | 0.242 | 0.00041446 | CD16neg_NK_UCBMC |
| ANAPC10           | 1.34E-08 | 1.69125948 | 0.413 | 0.131 | 0.00047434 | CD16neg_NK_UCBMC |
| GOLPH3            | 1.42E-08 | 1.51047453 | 0.543 | 0.209 | 0.00050272 | CD16neg_NK_UCBMC |
| SAMD4B            | 1.44E-08 | 1.89243937 | 0.304 | 0.077 | 0.00051137 | CD16neg_NK_UCBMC |
| GNG2              | 1.45E-08 | 1.30092166 | 0.696 | 0.318 | 0.00051414 | CD16neg_NK_UCBMC |
| NLRC3             | 1.57E-08 | 1.72165872 | 0.413 | 0.132 | 0.00055727 | CD16neg_NK_UCBMC |
| PUM2              | 1.64E-08 | 1.20301173 | 0.674 | 0.283 | 0.00058279 | CD16neg_NK_UCBMC |
| SLC22A18          | 1.70E-08 | 1.56070053 | 0.457 | 0.153 | 0.00060222 | CD16neg_NK_UCBMC |
| DYRK2             | 1.91E-08 | 1.94617781 | 0.304 | 0.079 | 0.00067522 | CD16neg_NK_UCBMC |
| ENSMUG00000041183 | 1.93E-08 | 1.84445153 | 0.391 | 0.123 | 0.00068446 | CD16neg_NK_UCBMC |

|                     |          |            |       |       |            |                  |
|---------------------|----------|------------|-------|-------|------------|------------------|
| TGFB1               | 2.23E-08 | 1.62267603 | 0.63  | 0.302 | 0.00078857 | CD16neg_NK_UCBMC |
| BRD7                | 2.34E-08 | 1.84407899 | 0.348 | 0.098 | 0.00082793 | CD16neg_NK_UCBMC |
| ENSMMUG000000051300 | 2.37E-08 | 1.10332353 | 1     | 0.537 | 0.00084053 | CD16neg_NK_UCBMC |
| HSPA9               | 2.45E-08 | 1.36121582 | 0.565 | 0.222 | 0.00086771 | CD16neg_NK_UCBMC |
| EPC1                | 2.72E-08 | 1.232292   | 0.739 | 0.371 | 0.00096378 | CD16neg_NK_UCBMC |
| GLG1                | 2.86E-08 | 1.410525   | 0.478 | 0.165 | 0.0010144  | CD16neg_NK_UCBMC |
| ZNF680              | 2.94E-08 | 1.70643507 | 0.261 | 0.059 | 0.00104078 | CD16neg_NK_UCBMC |
| FNDC3A              | 3.03E-08 | 1.36593539 | 0.565 | 0.227 | 0.00107366 | CD16neg_NK_UCBMC |
| LCLAT1              | 3.14E-08 | 1.87544739 | 0.283 | 0.069 | 0.00111247 | CD16neg_NK_UCBMC |
| UBE2Q2              | 3.28E-08 | 1.31836094 | 0.457 | 0.153 | 0.00116173 | CD16neg_NK_UCBMC |
| MPP7                | 3.29E-08 | 1.85099449 | 0.391 | 0.123 | 0.00116421 | CD16neg_NK_UCBMC |
| RAB2A               | 3.49E-08 | 1.4101639  | 0.652 | 0.295 | 0.00123574 | CD16neg_NK_UCBMC |
| RABGAP1L            | 3.52E-08 | 1.12179402 | 0.804 | 0.407 | 0.0012462  | CD16neg_NK_UCBMC |
| ANKRD44             | 3.61E-08 | 0.97188818 | 0.87  | 0.495 | 0.00128065 | CD16neg_NK_UCBMC |
| TMEM131             | 3.86E-08 | 1.53025311 | 0.478 | 0.178 | 0.00136923 | CD16neg_NK_UCBMC |
| MSN                 | 4.23E-08 | 0.97133514 | 0.848 | 0.483 | 0.00149922 | CD16neg_NK_UCBMC |
| GABPB1              | 4.27E-08 | 1.1790401  | 0.587 | 0.228 | 0.00151406 | CD16neg_NK_UCBMC |
| NUP98               | 4.38E-08 | 1.25178814 | 0.543 | 0.211 | 0.00155293 | CD16neg_NK_UCBMC |
| ADD3                | 4.78E-08 | 1.92806067 | 0.348 | 0.102 | 0.00169315 | CD16neg_NK_UCBMC |
| FBXO34              | 5.03E-08 | 1.28863635 | 0.652 | 0.289 | 0.00178224 | CD16neg_NK_UCBMC |
| LANCL2              | 5.03E-08 | 1.88376889 | 0.283 | 0.07  | 0.0017823  | CD16neg_NK_UCBMC |
| STAG1               | 5.41E-08 | 1.32502425 | 0.674 | 0.341 | 0.00191622 | CD16neg_NK_UCBMC |
| NUP153              | 5.44E-08 | 1.62194524 | 0.522 | 0.204 | 0.00192864 | CD16neg_NK_UCBMC |
| CLSTN1              | 5.61E-08 | 2.22081313 | 0.261 | 0.063 | 0.00198626 | CD16neg_NK_UCBMC |
| TNRC6B              | 5.84E-08 | 1.04724908 | 0.848 | 0.424 | 0.00206922 | CD16neg_NK_UCBMC |
| DNAJC1              | 5.90E-08 | 1.16276336 | 0.717 | 0.35  | 0.00208976 | CD16neg_NK_UCBMC |
| NKIRAS1             | 6.29E-08 | 2.36377359 | 0.261 | 0.065 | 0.00222785 | CD16neg_NK_UCBMC |
| WRN                 | 6.32E-08 | 1.66687232 | 0.413 | 0.14  | 0.00224065 | CD16neg_NK_UCBMC |
| PAN3                | 6.72E-08 | 1.36720903 | 0.609 | 0.267 | 0.00238233 | CD16neg_NK_UCBMC |
| DLST                | 7.24E-08 | 1.61764458 | 0.37  | 0.115 | 0.00256431 | CD16neg_NK_UCBMC |
| VPS39               | 8.41E-08 | 1.91780996 | 0.283 | 0.074 | 0.00297965 | CD16neg_NK_UCBMC |
| FBXW7               | 8.58E-08 | 1.59062351 | 0.565 | 0.251 | 0.00304071 | CD16neg_NK_UCBMC |
| KPNA4               | 8.63E-08 | 1.72772163 | 0.304 | 0.082 | 0.0030578  | CD16neg_NK_UCBMC |

|                    |          |            |       |       |            |                  |
|--------------------|----------|------------|-------|-------|------------|------------------|
| ZEB2               | 9.67E-08 | 1.82835582 | 0.587 | 0.29  | 0.00342603 | CD16neg_NK_UCBMC |
| DDX6               | 1.00E-07 | 1.42837812 | 0.587 | 0.256 | 0.00354334 | CD16neg_NK_UCBMC |
| DYNC1H1            | 1.01E-07 | 1.55774946 | 0.391 | 0.127 | 0.00357282 | CD16neg_NK_UCBMC |
| ASCC3              | 1.06E-07 | 1.37105246 | 0.543 | 0.22  | 0.00376058 | CD16neg_NK_UCBMC |
| ARHGAP15           | 1.08E-07 | 0.9915579  | 0.913 | 0.545 | 0.00381321 | CD16neg_NK_UCBMC |
| IFNGR1             | 1.08E-07 | 1.48192649 | 0.261 | 0.062 | 0.00383564 | CD16neg_NK_UCBMC |
| SCAF8              | 1.09E-07 | 1.40181616 | 0.522 | 0.209 | 0.00387949 | CD16neg_NK_UCBMC |
| SDHAF4             | 1.13E-07 | 1.42375077 | 0.609 | 0.286 | 0.00399521 | CD16neg_NK_UCBMC |
| GPHN               | 1.15E-07 | 2.07870668 | 0.304 | 0.085 | 0.00407822 | CD16neg_NK_UCBMC |
| RPL13A             | 1.18E-07 | 0.65598238 | 1     | 0.915 | 0.00418962 | CD16neg_NK_UCBMC |
| ATP10A             | 1.22E-07 | 1.63540374 | 0.457 | 0.169 | 0.00433242 | CD16neg_NK_UCBMC |
| NFKB1              | 1.31E-07 | 0.90826223 | 0.87  | 0.484 | 0.00464614 | CD16neg_NK_UCBMC |
| PTPRA              | 1.37E-07 | 1.63025616 | 0.435 | 0.156 | 0.0048441  | CD16neg_NK_UCBMC |
| DNAJC2             | 1.39E-07 | 1.64608656 | 0.457 | 0.169 | 0.00493355 | CD16neg_NK_UCBMC |
| PHF14              | 1.45E-07 | 1.47940274 | 0.435 | 0.156 | 0.00513918 | CD16neg_NK_UCBMC |
| KMT2E              | 1.54E-07 | 1.06040322 | 0.739 | 0.362 | 0.00547006 | CD16neg_NK_UCBMC |
| LCOR               | 1.63E-07 | 1.50024298 | 0.5   | 0.204 | 0.00576317 | CD16neg_NK_UCBMC |
| RPL27A             | 1.69E-07 | 0.71523355 | 1     | 0.832 | 0.00597034 | CD16neg_NK_UCBMC |
| CAMK2G             | 1.78E-07 | 2.04914999 | 0.261 | 0.066 | 0.0063099  | CD16neg_NK_UCBMC |
| OGT                | 1.82E-07 | 1.36104915 | 0.522 | 0.213 | 0.00645984 | CD16neg_NK_UCBMC |
| TYW5               | 1.83E-07 | 1.76516886 | 0.283 | 0.075 | 0.00649854 | CD16neg_NK_UCBMC |
| BTBD11             | 1.93E-07 | 1.29882605 | 0.63  | 0.291 | 0.00683675 | CD16neg_NK_UCBMC |
| USP34              | 2.02E-07 | 1.0508422  | 0.717 | 0.342 | 0.00717154 | CD16neg_NK_UCBMC |
| SMG1               | 2.03E-07 | 1.21057297 | 0.457 | 0.162 | 0.0071824  | CD16neg_NK_UCBMC |
| EFR3A              | 2.14E-07 | 1.60046435 | 0.435 | 0.158 | 0.00757908 | CD16neg_NK_UCBMC |
| PRRC2C             | 2.15E-07 | 0.91384615 | 0.804 | 0.418 | 0.00763132 | CD16neg_NK_UCBMC |
| TNRC6A             | 2.40E-07 | 1.41973266 | 0.457 | 0.169 | 0.00850331 | CD16neg_NK_UCBMC |
| PREX1              | 2.45E-07 | 1.18061917 | 0.696 | 0.336 | 0.00869259 | CD16neg_NK_UCBMC |
| TSPAN14            | 2.76E-07 | 1.26053398 | 0.37  | 0.114 | 0.00978173 | CD16neg_NK_UCBMC |
| CRYBG1             | 2.84E-07 | 1.3161391  | 0.348 | 0.105 | 0.01004503 | CD16neg_NK_UCBMC |
| ENSMMUG00000006343 | 2.86E-07 | 1.55625005 | 0.457 | 0.166 | 0.01012469 | CD16neg_NK_UCBMC |
| APBB1IP            | 3.00E-07 | 0.97909214 | 0.891 | 0.556 | 0.01061917 | CD16neg_NK_UCBMC |
| NR3C1              | 3.22E-07 | 1.22939759 | 0.63  | 0.287 | 0.0114101  | CD16neg_NK_UCBMC |

|           |          |            |       |       |            |                  |
|-----------|----------|------------|-------|-------|------------|------------------|
| VTI1A     | 3.34E-07 | 1.05464462 | 0.587 | 0.247 | 0.01184766 | CD16neg_NK_UCBMC |
| UBP1      | 3.58E-07 | 1.85678048 | 0.283 | 0.079 | 0.01267127 | CD16neg_NK_UCBMC |
| ASH1L     | 3.62E-07 | 1.05508654 | 0.739 | 0.35  | 0.01281107 | CD16neg_NK_UCBMC |
| MED13L    | 3.66E-07 | 1.2523856  | 0.63  | 0.297 | 0.01296442 | CD16neg_NK_UCBMC |
| INPP4A    | 3.86E-07 | 1.36732585 | 0.522 | 0.213 | 0.01367055 | CD16neg_NK_UCBMC |
| SAP30BP   | 4.10E-07 | 1.5215518  | 0.348 | 0.11  | 0.01453432 | CD16neg_NK_UCBMC |
| BDP1      | 4.21E-07 | 1.28790753 | 0.478 | 0.184 | 0.01490262 | CD16neg_NK_UCBMC |
| ESYT2     | 4.37E-07 | 1.24316302 | 0.543 | 0.233 | 0.01549956 | CD16neg_NK_UCBMC |
| RPL23A    | 4.91E-07 | 0.56288351 | 1     | 0.946 | 0.01738238 | CD16neg_NK_UCBMC |
| RMDN1     | 5.17E-07 | 1.25767471 | 0.457 | 0.169 | 0.01831989 | CD16neg_NK_UCBMC |
| ADNP      | 5.54E-07 | 1.46982717 | 0.37  | 0.123 | 0.01962908 | CD16neg_NK_UCBMC |
| WDR48     | 5.74E-07 | 1.682362   | 0.304 | 0.09  | 0.02034076 | CD16neg_NK_UCBMC |
| STK10     | 5.77E-07 | 1.19440646 | 0.652 | 0.319 | 0.02043796 | CD16neg_NK_UCBMC |
| SECISBP2L | 6.03E-07 | 2.56137945 | 0.261 | 0.072 | 0.02135143 | CD16neg_NK_UCBMC |
| ROCK1     | 6.19E-07 | 1.198607   | 0.652 | 0.321 | 0.02194178 | CD16neg_NK_UCBMC |
| EP300     | 6.64E-07 | 1.25957452 | 0.5   | 0.206 | 0.02352717 | CD16neg_NK_UCBMC |
| ADIPOR1   | 6.90E-07 | 1.65261104 | 0.326 | 0.102 | 0.02444496 | CD16neg_NK_UCBMC |
| GPR107    | 7.23E-07 | 1.52315771 | 0.37  | 0.127 | 0.0256042  | CD16neg_NK_UCBMC |
| JAK1      | 7.70E-07 | 0.89098586 | 0.87  | 0.559 | 0.02728838 | CD16neg_NK_UCBMC |
| DOCK10    | 7.75E-07 | 0.96773454 | 0.739 | 0.374 | 0.02746401 | CD16neg_NK_UCBMC |
| NRIP1     | 7.76E-07 | 1.61889374 | 0.457 | 0.184 | 0.02749357 | CD16neg_NK_UCBMC |
| RLIM      | 8.21E-07 | 1.95519708 | 0.348 | 0.117 | 0.02908415 | CD16neg_NK_UCBMC |
| CYLD      | 8.67E-07 | 1.3332945  | 0.543 | 0.238 | 0.03073146 | CD16neg_NK_UCBMC |
| IP6K2     | 9.11E-07 | 1.39893085 | 0.348 | 0.112 | 0.03227382 | CD16neg_NK_UCBMC |
| CNOT4     | 9.26E-07 | 1.10785427 | 0.543 | 0.233 | 0.03281583 | CD16neg_NK_UCBMC |
| PRRC2B    | 9.37E-07 | 1.01948145 | 0.609 | 0.267 | 0.03318325 | CD16neg_NK_UCBMC |
| ZFAND3    | 9.38E-07 | 1.13540136 | 0.652 | 0.318 | 0.03323398 | CD16neg_NK_UCBMC |
| UBE2R2    | 9.41E-07 | 1.17778541 | 0.413 | 0.149 | 0.0333383  | CD16neg_NK_UCBMC |
| ACAP2     | 1.01E-06 | 0.66593872 | 0.739 | 0.324 | 0.03587293 | CD16neg_NK_UCBMC |
| KLHL28    | 1.01E-06 | 1.63925623 | 0.326 | 0.104 | 0.0358984  | CD16neg_NK_UCBMC |
| PPP2R5A   | 1.06E-06 | 1.32411181 | 0.348 | 0.11  | 0.03755143 | CD16neg_NK_UCBMC |
| USP14     | 1.08E-06 | 1.46489758 | 0.326 | 0.102 | 0.03833614 | CD16neg_NK_UCBMC |
| RELL1     | 1.11E-06 | 0.99495151 | 0.565 | 0.248 | 0.03929221 | CD16neg_NK_UCBMC |

|         |          |            |       |       |            |                  |
|---------|----------|------------|-------|-------|------------|------------------|
| CAPG    | 1.17E-06 | 1.08260438 | 0.261 | 0.068 | 0.04161711 | CD16neg_NK_UCBMC |
| ATR     | 1.20E-06 | 1.54209568 | 0.326 | 0.103 | 0.04248162 | CD16neg_NK_UCBMC |
| CTCF    | 1.21E-06 | 1.58060838 | 0.391 | 0.141 | 0.04304727 | CD16neg_NK_UCBMC |
| FUBP1   | 1.23E-06 | 1.04712241 | 0.587 | 0.261 | 0.04351909 | CD16neg_NK_UCBMC |
| MED1    | 1.28E-06 | 2.17624913 | 0.283 | 0.084 | 0.04541847 | CD16neg_NK_UCBMC |
| RANBP9  | 1.30E-06 | 2.09441183 | 0.348 | 0.12  | 0.04590068 | CD16neg_NK_UCBMC |
| BSDC1   | 1.34E-06 | 1.57114426 | 0.304 | 0.093 | 0.04760278 | CD16neg_NK_UCBMC |
| INPP5D  | 1.37E-06 | 1.00211662 | 0.674 | 0.326 | 0.04836993 | CD16neg_NK_UCBMC |
| KLHL2   | 1.37E-06 | 1.56986763 | 0.283 | 0.082 | 0.04854755 | CD16neg_NK_UCBMC |
| TET2    | 1.41E-06 | 1.58126229 | 0.391 | 0.145 | 0.04982571 | CD16neg_NK_UCBMC |
| FYN     | 1.45E-06 | 0.81168399 | 0.826 | 0.426 | 0.05132994 | CD16neg_NK_UCBMC |
| DCP1A   | 1.46E-06 | 1.55319182 | 0.37  | 0.13  | 0.05177592 | CD16neg_NK_UCBMC |
| SEC31A  | 1.47E-06 | 1.1763579  | 0.522 | 0.219 | 0.05216609 | CD16neg_NK_UCBMC |
| STIM1   | 1.48E-06 | 1.05619772 | 0.565 | 0.242 | 0.05228296 | CD16neg_NK_UCBMC |
| SETD2   | 1.53E-06 | 1.19294008 | 0.587 | 0.285 | 0.05408451 | CD16neg_NK_UCBMC |
| SEC61A2 | 1.55E-06 | 1.85911815 | 0.261 | 0.074 | 0.05474687 | CD16neg_NK_UCBMC |
| ATP9B   | 1.55E-06 | 1.61483744 | 0.391 | 0.148 | 0.05477995 | CD16neg_NK_UCBMC |
| EPSTI1  | 1.62E-06 | 1.59040903 | 0.391 | 0.143 | 0.05727626 | CD16neg_NK_UCBMC |
| TNKS2   | 1.65E-06 | 1.41805621 | 0.326 | 0.104 | 0.05857779 | CD16neg_NK_UCBMC |
| METTL15 | 1.71E-06 | 1.70870722 | 0.304 | 0.094 | 0.06054401 | CD16neg_NK_UCBMC |
| LMBRD1  | 1.73E-06 | 1.60624368 | 0.435 | 0.177 | 0.06117929 | CD16neg_NK_UCBMC |
| SEN2    | 1.74E-06 | 1.61491515 | 0.304 | 0.094 | 0.06181687 | CD16neg_NK_UCBMC |
| ZNF749  | 1.76E-06 | 0.82355219 | 0.5   | 0.191 | 0.06247672 | CD16neg_NK_UCBMC |
| MED10   | 1.79E-06 | 0.99353952 | 0.348 | 0.111 | 0.06352295 | CD16neg_NK_UCBMC |
| UBXN2B  | 1.90E-06 | 1.46427277 | 0.261 | 0.072 | 0.0674859  | CD16neg_NK_UCBMC |
| SLC38A1 | 1.94E-06 | 1.00762293 | 0.696 | 0.343 | 0.06882704 | CD16neg_NK_UCBMC |
| SLC9A9  | 1.97E-06 | 1.05185777 | 0.652 | 0.344 | 0.0699625  | CD16neg_NK_UCBMC |
| KAT6B   | 1.98E-06 | 1.05610743 | 0.609 | 0.284 | 0.07007661 | CD16neg_NK_UCBMC |
| SEC14L1 | 1.98E-06 | 1.68132517 | 0.261 | 0.074 | 0.07021479 | CD16neg_NK_UCBMC |
| PPP3CA  | 2.01E-06 | 1.22163401 | 0.652 | 0.332 | 0.0713644  | CD16neg_NK_UCBMC |
| MYH9    | 2.02E-06 | 1.09374313 | 0.652 | 0.333 | 0.07148158 | CD16neg_NK_UCBMC |
| TTC17   | 2.13E-06 | 1.44055056 | 0.457 | 0.185 | 0.07531075 | CD16neg_NK_UCBMC |
| TAF3    | 2.14E-06 | 1.28321488 | 0.413 | 0.157 | 0.07586886 | CD16neg_NK_UCBMC |



|           |          |            |       |       |            |                  |
|-----------|----------|------------|-------|-------|------------|------------------|
| CBLB      | 2.20E-06 | 0.96733782 | 0.804 | 0.457 | 0.07806436 | CD16neg_NK_UCBMC |
| AGPS      | 2.22E-06 | 1.31226376 | 0.457 | 0.18  | 0.0786058  | CD16neg_NK_UCBMC |
| RPRD1A    | 2.32E-06 | 1.89805864 | 0.261 | 0.075 | 0.08216224 | CD16neg_NK_UCBMC |
| CUL5      | 2.38E-06 | 1.03994134 | 0.543 | 0.24  | 0.08430133 | CD16neg_NK_UCBMC |
| DENND5A   | 2.42E-06 | 1.96241213 | 0.283 | 0.087 | 0.08562006 | CD16neg_NK_UCBMC |
| ZNF451    | 2.43E-06 | 1.35678497 | 0.413 | 0.159 | 0.08594304 | CD16neg_NK_UCBMC |
| RAB28     | 2.53E-06 | 1.12634192 | 0.326 | 0.103 | 0.08976348 | CD16neg_NK_UCBMC |
| XPO4      | 2.54E-06 | 2.0168491  | 0.261 | 0.077 | 0.08992691 | CD16neg_NK_UCBMC |
| PAG1      | 2.60E-06 | 1.34601112 | 0.478 | 0.211 | 0.09229774 | CD16neg_NK_UCBMC |
| ASCC1     | 2.62E-06 | 1.53362727 | 0.348 | 0.121 | 0.09285193 | CD16neg_NK_UCBMC |
| ZFC3H1    | 2.62E-06 | 0.99605489 | 0.522 | 0.22  | 0.09299682 | CD16neg_NK_UCBMC |
| NR1D2     | 2.69E-06 | 1.51905198 | 0.348 | 0.121 | 0.09519512 | CD16neg_NK_UCBMC |
| ZRANB2    | 2.78E-06 | 0.96120647 | 0.565 | 0.253 | 0.09867589 | CD16neg_NK_UCBMC |
| UBE2E1    | 2.82E-06 | 2.39463112 | 0.261 | 0.077 | 0.09995796 | CD16neg_NK_UCBMC |
| IRAG2     | 2.82E-06 | 1.07112269 | 0.435 | 0.166 | 0.09997411 | CD16neg_NK_UCBMC |
| RBM39     | 2.91E-06 | 0.86690325 | 0.891 | 0.59  | 0.10325303 | CD16neg_NK_UCBMC |
| MAML2     | 3.08E-06 | 1.06121852 | 0.674 | 0.344 | 0.10927861 | CD16neg_NK_UCBMC |
| SNX4      | 3.13E-06 | 1.5657013  | 0.37  | 0.135 | 0.11104469 | CD16neg_NK_UCBMC |
| RBM5      | 3.21E-06 | 1.27696338 | 0.5   | 0.222 | 0.11356686 | CD16neg_NK_UCBMC |
| ATG13     | 3.31E-06 | 1.75739322 | 0.304 | 0.1   | 0.11740785 | CD16neg_NK_UCBMC |
| NUP54     | 3.34E-06 | 1.76497952 | 0.261 | 0.077 | 0.11828483 | CD16neg_NK_UCBMC |
| SMYD3     | 3.38E-06 | 1.16012548 | 0.522 | 0.219 | 0.11989056 | CD16neg_NK_UCBMC |
| FAM13B    | 3.40E-06 | 1.40406168 | 0.37  | 0.136 | 0.12052889 | CD16neg_NK_UCBMC |
| WDR43     | 3.51E-06 | 1.55706746 | 0.348 | 0.123 | 0.12426812 | CD16neg_NK_UCBMC |
| ARID1B    | 3.57E-06 | 1.23319746 | 0.587 | 0.293 | 0.12640908 | CD16neg_NK_UCBMC |
| EXOC6     | 3.63E-06 | 1.63770527 | 0.348 | 0.127 | 0.12852855 | CD16neg_NK_UCBMC |
| PCED1B    | 3.87E-06 | 1.49614949 | 0.304 | 0.098 | 0.13694695 | CD16neg_NK_UCBMC |
| ARNTL     | 3.91E-06 | 1.39794666 | 0.413 | 0.163 | 0.13843743 | CD16neg_NK_UCBMC |
| CAMKMT    | 3.92E-06 | 1.47368865 | 0.37  | 0.137 | 0.13889573 | CD16neg_NK_UCBMC |
| RPS6KA5   | 3.92E-06 | 1.12708202 | 0.543 | 0.24  | 0.13894983 | CD16neg_NK_UCBMC |
| PHF20     | 3.95E-06 | 1.23137193 | 0.522 | 0.237 | 0.13988946 | CD16neg_NK_UCBMC |
| GMDS      | 4.22E-06 | 1.18646885 | 0.457 | 0.191 | 0.14948183 | CD16neg_NK_UCBMC |
| RAB11FIP1 | 4.24E-06 | 1.3084248  | 0.457 | 0.185 | 0.15018377 | CD16neg_NK_UCBMC |

|                    |          |            |       |       |            |                  |
|--------------------|----------|------------|-------|-------|------------|------------------|
| ARL15              | 4.27E-06 | 1.09695271 | 0.522 | 0.232 | 0.15122414 | CD16neg_NK_UCBMC |
| LRRC8C             | 4.38E-06 | 1.7263859  | 0.37  | 0.143 | 0.15527386 | CD16neg_NK_UCBMC |
| MACF1              | 4.45E-06 | 0.88323331 | 0.717 | 0.364 | 0.15772301 | CD16neg_NK_UCBMC |
| ERLEC1             | 4.49E-06 | 1.33655172 | 0.413 | 0.162 | 0.15909069 | CD16neg_NK_UCBMC |
| UGCG               | 4.49E-06 | 1.56194512 | 0.261 | 0.076 | 0.15923073 | CD16neg_NK_UCBMC |
| MAPRE2             | 4.61E-06 | 0.81166633 | 0.761 | 0.407 | 0.16320964 | CD16neg_NK_UCBMC |
| URI1               | 4.67E-06 | 1.51902967 | 0.348 | 0.121 | 0.16556474 | CD16neg_NK_UCBMC |
| ELOVL5             | 4.81E-06 | 1.15915229 | 0.565 | 0.261 | 0.17042623 | CD16neg_NK_UCBMC |
| ENSMMUG00000061458 | 4.98E-06 | 1.34966018 | 0.37  | 0.134 | 0.17629403 | CD16neg_NK_UCBMC |
| GTF2F2             | 5.01E-06 | 1.9221181  | 0.326 | 0.116 | 0.17763075 | CD16neg_NK_UCBMC |
| ENSMMUG00000058581 | 5.12E-06 | 0.24791698 | 0.522 | 0.2   | 0.18148587 | CD16neg_NK_UCBMC |
| PCCA               | 5.43E-06 | 1.15888885 | 0.413 | 0.16  | 0.19238704 | CD16neg_NK_UCBMC |
| FAR1               | 5.56E-06 | 1.44185899 | 0.37  | 0.136 | 0.19686351 | CD16neg_NK_UCBMC |
| BIRC6              | 5.71E-06 | 1.24925579 | 0.609 | 0.333 | 0.20230583 | CD16neg_NK_UCBMC |
| ZNF609             | 5.91E-06 | 1.2527851  | 0.587 | 0.301 | 0.209467   | CD16neg_NK_UCBMC |
| TP53BP2            | 6.05E-06 | 1.75117172 | 0.304 | 0.103 | 0.21453665 | CD16neg_NK_UCBMC |
| RBM14              | 6.25E-06 | 1.06551613 | 0.63  | 0.329 | 0.221427   | CD16neg_NK_UCBMC |
| PSEN1              | 6.26E-06 | 1.53174764 | 0.304 | 0.101 | 0.22186769 | CD16neg_NK_UCBMC |
| ANKRD11            | 6.63E-06 | 1.12483233 | 0.565 | 0.266 | 0.23481708 | CD16neg_NK_UCBMC |
| ATXN7              | 6.65E-06 | 1.01714727 | 0.478 | 0.204 | 0.2357247  | CD16neg_NK_UCBMC |
| MED27              | 6.73E-06 | 1.68655578 | 0.326 | 0.116 | 0.23845167 | CD16neg_NK_UCBMC |
| RALGPS2            | 6.78E-06 | 1.44641307 | 0.326 | 0.113 | 0.24007966 | CD16neg_NK_UCBMC |
| RPRD2              | 6.80E-06 | 1.57934461 | 0.37  | 0.145 | 0.24087252 | CD16neg_NK_UCBMC |
| NFX1               | 6.96E-06 | 1.69588643 | 0.283 | 0.091 | 0.24650309 | CD16neg_NK_UCBMC |
| PNN                | 7.25E-06 | 0.84258845 | 0.587 | 0.277 | 0.25694222 | CD16neg_NK_UCBMC |
| PTBP3              | 7.39E-06 | 0.86400261 | 0.652 | 0.317 | 0.26194933 | CD16neg_NK_UCBMC |
| KPNA3              | 7.46E-06 | 1.62854651 | 0.326 | 0.114 | 0.26431134 | CD16neg_NK_UCBMC |
| DOCK2              | 7.58E-06 | 0.92993771 | 0.739 | 0.407 | 0.26844381 | CD16neg_NK_UCBMC |
| PLCL2              | 7.66E-06 | 1.47419208 | 0.457 | 0.205 | 0.27127459 | CD16neg_NK_UCBMC |
| EML4               | 7.79E-06 | 0.67919662 | 0.891 | 0.543 | 0.2761313  | CD16neg_NK_UCBMC |
| ZDHHC20            | 7.89E-06 | 1.89148766 | 0.326 | 0.118 | 0.27943298 | CD16neg_NK_UCBMC |
| CEP170             | 7.89E-06 | 1.58381686 | 0.37  | 0.145 | 0.27972697 | CD16neg_NK_UCBMC |
| SBF2               | 8.07E-06 | 1.35440747 | 0.413 | 0.168 | 0.28598285 | CD16neg_NK_UCBMC |

|          |          |            |       |       |            |                  |
|----------|----------|------------|-------|-------|------------|------------------|
| YEATS2   | 8.31E-06 | 1.30574194 | 0.435 | 0.186 | 0.29426391 | CD16neg_NK_UCBMC |
| SLC30A7  | 8.40E-06 | 1.56446455 | 0.304 | 0.102 | 0.29770069 | CD16neg_NK_UCBMC |
| AP5M1    | 8.47E-06 | 1.30419228 | 0.261 | 0.078 | 0.30027315 | CD16neg_NK_UCBMC |
| UTY      | 8.64E-06 | 1.51111789 | 0.326 | 0.114 | 0.30598803 | CD16neg_NK_UCBMC |
| TIMM23   | 8.69E-06 | 1.35804569 | 0.37  | 0.138 | 0.30787276 | CD16neg_NK_UCBMC |
| PPP2R2A  | 8.71E-06 | 1.14758328 | 0.478 | 0.213 | 0.30853178 | CD16neg_NK_UCBMC |
| BRAF     | 8.78E-06 | 1.26172897 | 0.5   | 0.22  | 0.31092055 | CD16neg_NK_UCBMC |
| PHIP     | 8.85E-06 | 0.96831359 | 0.565 | 0.268 | 0.31356524 | CD16neg_NK_UCBMC |
| EIF3A    | 8.92E-06 | 1.08716742 | 0.5   | 0.227 | 0.3161849  | CD16neg_NK_UCBMC |
| ARID4B   | 8.93E-06 | 0.67131824 | 0.826 | 0.452 | 0.316534   | CD16neg_NK_UCBMC |
| AATF     | 9.01E-06 | 1.20807464 | 0.326 | 0.11  | 0.31933032 | CD16neg_NK_UCBMC |
| FARS2    | 9.14E-06 | 1.68674982 | 0.348 | 0.136 | 0.32387849 | CD16neg_NK_UCBMC |
| VRK2     | 9.15E-06 | 1.25181433 | 0.304 | 0.102 | 0.32405958 | CD16neg_NK_UCBMC |
| TPD52    | 9.20E-06 | 1.13962954 | 0.478 | 0.205 | 0.32598566 | CD16neg_NK_UCBMC |
| ATP6V1H  | 9.26E-06 | 1.3113605  | 0.304 | 0.101 | 0.32822437 | CD16neg_NK_UCBMC |
| PPP1R16B | 9.31E-06 | 0.99572216 | 0.457 | 0.189 | 0.32971811 | CD16neg_NK_UCBMC |
| CDK13    | 9.65E-06 | 1.1357397  | 0.522 | 0.247 | 0.34192127 | CD16neg_NK_UCBMC |
| SOS1     | 1.01E-05 | 1.29529049 | 0.435 | 0.186 | 0.35928427 | CD16neg_NK_UCBMC |
| CLASP2   | 1.02E-05 | 1.32279285 | 0.435 | 0.187 | 0.36096117 | CD16neg_NK_UCBMC |
| TRA2A    | 1.02E-05 | 0.81102693 | 0.804 | 0.461 | 0.36271248 | CD16neg_NK_UCBMC |
| MCUB     | 1.05E-05 | 1.27991176 | 0.413 | 0.167 | 0.37143099 | CD16neg_NK_UCBMC |
| SP3      | 1.05E-05 | 1.54858028 | 0.37  | 0.148 | 0.37244314 | CD16neg_NK_UCBMC |
| RSU1     | 1.06E-05 | 1.24981438 | 0.391 | 0.153 | 0.37637326 | CD16neg_NK_UCBMC |
| GNB1     | 1.07E-05 | 1.39834498 | 0.457 | 0.204 | 0.37800156 | CD16neg_NK_UCBMC |
| UBR3     | 1.08E-05 | 1.52241926 | 0.413 | 0.177 | 0.38264264 | CD16neg_NK_UCBMC |
| CUX1     | 1.09E-05 | 1.37631763 | 0.413 | 0.171 | 0.38773679 | CD16neg_NK_UCBMC |
| CDK17    | 1.20E-05 | 0.7867601  | 0.609 | 0.292 | 0.4257547  | CD16neg_NK_UCBMC |
| STK38    | 1.24E-05 | 1.19830225 | 0.37  | 0.141 | 0.43854973 | CD16neg_NK_UCBMC |
| TNIK     | 1.27E-05 | 1.12653749 | 0.674 | 0.408 | 0.45051592 | CD16neg_NK_UCBMC |
| RSF1     | 1.31E-05 | 1.21250752 | 0.478 | 0.21  | 0.46393484 | CD16neg_NK_UCBMC |
| LSM14A   | 1.32E-05 | 1.0149578  | 0.609 | 0.312 | 0.46629365 | CD16neg_NK_UCBMC |
| EPS15    | 1.32E-05 | 1.25319241 | 0.478 | 0.22  | 0.46676822 | CD16neg_NK_UCBMC |
| CIR1     | 1.37E-05 | 0.86981953 | 0.435 | 0.173 | 0.48398041 | CD16neg_NK_UCBMC |

|                    |          |            |       |       |            |                  |
|--------------------|----------|------------|-------|-------|------------|------------------|
| ITGA4              | 1.37E-05 | 1.24957175 | 0.457 | 0.199 | 0.48709342 | CD16neg_NK_UCBMC |
| TMEM41B            | 1.38E-05 | 1.33700938 | 0.326 | 0.117 | 0.48853545 | CD16neg_NK_UCBMC |
| TERF1              | 1.39E-05 | 1.47925095 | 0.304 | 0.103 | 0.49178841 | CD16neg_NK_UCBMC |
| AAK1               | 1.39E-05 | 1.11453444 | 0.522 | 0.251 | 0.4929284  | CD16neg_NK_UCBMC |
| ATF2               | 1.40E-05 | 1.3223826  | 0.435 | 0.187 | 0.49487733 | CD16neg_NK_UCBMC |
| SPTBN1             | 1.40E-05 | 1.50065446 | 0.283 | 0.094 | 0.49590138 | CD16neg_NK_UCBMC |
| WDR26              | 1.42E-05 | 1.31566477 | 0.457 | 0.201 | 0.50161343 | CD16neg_NK_UCBMC |
| DIDO1              | 1.42E-05 | 1.28376688 | 0.348 | 0.13  | 0.5029045  | CD16neg_NK_UCBMC |
| MOB3A              | 1.43E-05 | 1.23386352 | 0.435 | 0.186 | 0.5061124  | CD16neg_NK_UCBMC |
| MAP2K3             | 1.53E-05 | 1.04750557 | 0.457 | 0.19  | 0.54242663 | CD16neg_NK_UCBMC |
| SLC12A6            | 1.53E-05 | 1.32978964 | 0.457 | 0.212 | 0.54332298 | CD16neg_NK_UCBMC |
| PLCB1              | 1.54E-05 | 0.72776317 | 0.674 | 0.321 | 0.54612341 | CD16neg_NK_UCBMC |
| HECA               | 1.61E-05 | 1.46817174 | 0.304 | 0.105 | 0.57146085 | CD16neg_NK_UCBMC |
| RC3H1              | 1.66E-05 | 1.27528589 | 0.304 | 0.105 | 0.58863801 | CD16neg_NK_UCBMC |
| ENSMMUG00000032031 | 1.66E-05 | 0.84822701 | 0.326 | 0.11  | 0.58885519 | CD16neg_NK_UCBMC |
| MARCHF3            | 1.76E-05 | 1.62891843 | 0.304 | 0.106 | 0.62278356 | CD16neg_NK_UCBMC |
| ARHGAP32           | 1.79E-05 | 1.52671407 | 0.304 | 0.107 | 0.63362601 | CD16neg_NK_UCBMC |
| PHF6               | 1.79E-05 | 1.73552655 | 0.304 | 0.111 | 0.63384815 | CD16neg_NK_UCBMC |
| GAS7               | 1.80E-05 | 1.13816129 | 0.435 | 0.182 | 0.63768432 | CD16neg_NK_UCBMC |
| MBP                | 1.81E-05 | 0.85179006 | 0.696 | 0.36  | 0.64228632 | CD16neg_NK_UCBMC |
| DNAJC24            | 1.81E-05 | 1.07677827 | 0.457 | 0.194 | 0.64274432 | CD16neg_NK_UCBMC |
| NSF                | 1.84E-05 | 1.337405   | 0.478 | 0.229 | 0.65244066 | CD16neg_NK_UCBMC |
| CPEB1              | 1.85E-05 | 0.54002819 | 0.978 | 0.87  | 0.65594053 | CD16neg_NK_UCBMC |
| SUCO               | 1.86E-05 | 0.99117482 | 0.457 | 0.196 | 0.65774463 | CD16neg_NK_UCBMC |
| LTV1               | 1.93E-05 | 0.94378892 | 0.435 | 0.18  | 0.6836441  | CD16neg_NK_UCBMC |
| TAOK3              | 1.94E-05 | 0.933368   | 0.543 | 0.253 | 0.68819129 | CD16neg_NK_UCBMC |
| TENT2              | 1.97E-05 | 1.38432205 | 0.326 | 0.12  | 0.69733149 | CD16neg_NK_UCBMC |
| EMP3               | 1.99E-05 | 0.99795962 | 0.413 | 0.166 | 0.7049041  | CD16neg_NK_UCBMC |
| CHST11             | 2.00E-05 | 1.25582212 | 0.565 | 0.294 | 0.70742242 | CD16neg_NK_UCBMC |
| ECD                | 2.03E-05 | 1.83087055 | 0.326 | 0.124 | 0.71977079 | CD16neg_NK_UCBMC |
| ZFAND6             | 2.04E-05 | 1.01603583 | 0.587 | 0.298 | 0.72126487 | CD16neg_NK_UCBMC |
| MRPS35             | 2.04E-05 | 1.57459464 | 0.261 | 0.084 | 0.72308349 | CD16neg_NK_UCBMC |
| TLE4               | 2.05E-05 | 1.45736694 | 0.37  | 0.151 | 0.7263174  | CD16neg_NK_UCBMC |

|         |          |            |       |       |            |                  |
|---------|----------|------------|-------|-------|------------|------------------|
| SMC4    | 2.06E-05 | 0.955547   | 0.522 | 0.245 | 0.73146141 | CD16neg_NK_UCBMC |
| USP15   | 2.11E-05 | 0.74463969 | 0.761 | 0.424 | 0.74833783 | CD16neg_NK_UCBMC |
| FNBP1   | 2.11E-05 | 0.66977473 | 0.891 | 0.546 | 0.74894876 | CD16neg_NK_UCBMC |
| ZZZ3    | 2.12E-05 | 1.48460566 | 0.348 | 0.132 | 0.75142289 | CD16neg_NK_UCBMC |
| USP47   | 2.15E-05 | 0.70309463 | 0.609 | 0.293 | 0.76284338 | CD16neg_NK_UCBMC |
| ATAD2B  | 2.22E-05 | 1.26744406 | 0.457 | 0.218 | 0.78676168 | CD16neg_NK_UCBMC |
| CCSER2  | 2.23E-05 | 1.33742523 | 0.37  | 0.145 | 0.79121342 | CD16neg_NK_UCBMC |
| ATE1    | 2.34E-05 | 1.30906722 | 0.304 | 0.108 | 0.82744345 | CD16neg_NK_UCBMC |
| CDYL    | 2.35E-05 | 1.69586338 | 0.326 | 0.126 | 0.8310763  | CD16neg_NK_UCBMC |
| SLA2    | 2.35E-05 | 1.16996034 | 0.37  | 0.144 | 0.83238169 | CD16neg_NK_UCBMC |
| FBXL17  | 2.38E-05 | 1.5044485  | 0.457 | 0.205 | 0.84454399 | CD16neg_NK_UCBMC |
| TAB2    | 2.39E-05 | 1.06923162 | 0.391 | 0.161 | 0.84702089 | CD16neg_NK_UCBMC |
| LAMTOR3 | 2.54E-05 | 1.59017032 | 0.261 | 0.086 | 0.90018315 | CD16neg_NK_UCBMC |
| CD44    | 2.57E-05 | 0.91663548 | 0.783 | 0.469 | 0.91040688 | CD16neg_NK_UCBMC |
| CYTH1   | 2.62E-05 | 1.94972148 | 0.348 | 0.144 | 0.92748825 | CD16neg_NK_UCBMC |
| TBC1D1  | 2.62E-05 | 1.04141801 | 0.478 | 0.216 | 0.92794779 | CD16neg_NK_UCBMC |
| SRSF11  | 2.72E-05 | 0.90658731 | 0.761 | 0.455 | 0.96496745 | CD16neg_NK_UCBMC |
| FAM168B | 2.76E-05 | 1.53716432 | 0.326 | 0.12  | 0.97824829 | CD16neg_NK_UCBMC |
| SS18    | 2.77E-05 | 0.99923952 | 0.413 | 0.17  | 0.9818044  | CD16neg_NK_UCBMC |
| RPL7    | 2.77E-05 | 0.63953208 | 0.957 | 0.71  | 0.98278323 | CD16neg_NK_UCBMC |
| RNF13   | 2.78E-05 | 1.29246274 | 0.37  | 0.148 | 0.9853571  | CD16neg_NK_UCBMC |
| AP1G1   | 2.79E-05 | 1.17894504 | 0.391 | 0.164 | 0.98894175 | CD16neg_NK_UCBMC |
| MLLT3   | 2.83E-05 | 1.33722769 | 0.457 | 0.21  | 1          | CD16neg_NK_UCBMC |
| SELENOS | 2.87E-05 | 0.68977132 | 0.652 | 0.339 | 1          | CD16neg_NK_UCBMC |
| PCM1    | 2.94E-05 | 1.1348994  | 0.457 | 0.213 | 1          | CD16neg_NK_UCBMC |
| PBRM1   | 3.00E-05 | 1.18008181 | 0.457 | 0.199 | 1          | CD16neg_NK_UCBMC |
| DAZAP2  | 3.01E-05 | 0.74932549 | 0.565 | 0.267 | 1          | CD16neg_NK_UCBMC |
| TRPM7   | 3.03E-05 | 0.94988654 | 0.674 | 0.383 | 1          | CD16neg_NK_UCBMC |
| KDM6A   | 3.07E-05 | 0.95250831 | 0.587 | 0.309 | 1          | CD16neg_NK_UCBMC |
| TEC     | 3.17E-05 | 0.7707262  | 0.826 | 0.55  | 1          | CD16neg_NK_UCBMC |
| DMXL1   | 3.21E-05 | 1.26664071 | 0.304 | 0.11  | 1          | CD16neg_NK_UCBMC |
| PPP4R3B | 3.30E-05 | 0.99382744 | 0.413 | 0.173 | 1          | CD16neg_NK_UCBMC |
| TCERG1  | 3.31E-05 | 1.37150308 | 0.304 | 0.109 | 1          | CD16neg_NK_UCBMC |

|                    |          |            |       |       |                    |
|--------------------|----------|------------|-------|-------|--------------------|
| HELZ               | 3.32E-05 | 1.03011141 | 0.565 | 0.286 | 1 CD16neg_NK_UCBMC |
| SNX3               | 3.39E-05 | 0.94056333 | 0.457 | 0.202 | 1 CD16neg_NK_UCBMC |
| CNOT7              | 3.46E-05 | 1.11308436 | 0.348 | 0.133 | 1 CD16neg_NK_UCBMC |
| KAT7               | 3.46E-05 | 1.90902913 | 0.283 | 0.104 | 1 CD16neg_NK_UCBMC |
| MKLN1              | 3.52E-05 | 1.11893593 | 0.457 | 0.21  | 1 CD16neg_NK_UCBMC |
| DDX3Y              | 3.53E-05 | 0.86061939 | 0.522 | 0.242 | 1 CD16neg_NK_UCBMC |
| RBM6               | 3.57E-05 | 1.48252696 | 0.348 | 0.14  | 1 CD16neg_NK_UCBMC |
| ENSMMUG00000040181 | 3.63E-05 | 0.99995988 | 0.391 | 0.16  | 1 CD16neg_NK_UCBMC |
| CAMK1D             | 3.63E-05 | 0.91707481 | 0.565 | 0.274 | 1 CD16neg_NK_UCBMC |
| FOXP1              | 3.65E-05 | 1.02099026 | 0.457 | 0.209 | 1 CD16neg_NK_UCBMC |
| EFL1               | 3.76E-05 | 1.29605403 | 0.348 | 0.135 | 1 CD16neg_NK_UCBMC |
| EMB                | 3.87E-05 | 1.22111419 | 0.261 | 0.085 | 1 CD16neg_NK_UCBMC |
| GRB2               | 3.91E-05 | 0.86428037 | 0.478 | 0.21  | 1 CD16neg_NK_UCBMC |
| EIF4H              | 4.09E-05 | 0.88271028 | 0.543 | 0.259 | 1 CD16neg_NK_UCBMC |
| ENSMMUG00000011588 | 4.21E-05 | 1.62689061 | 0.283 | 0.102 | 1 CD16neg_NK_UCBMC |
| MBNL1              | 4.24E-05 | 0.66554696 | 1     | 0.708 | 1 CD16neg_NK_UCBMC |
| ITPR2              | 4.33E-05 | 0.89665903 | 0.565 | 0.281 | 1 CD16neg_NK_UCBMC |
| PSPC1              | 4.43E-05 | 1.16976214 | 0.435 | 0.184 | 1 CD16neg_NK_UCBMC |
| LDB2               | 4.52E-05 | 0.96849618 | 0.652 | 0.365 | 1 CD16neg_NK_UCBMC |
| PTP4A2             | 4.53E-05 | 0.9791787  | 0.435 | 0.191 | 1 CD16neg_NK_UCBMC |
| TANGO6             | 4.54E-05 | 1.30852343 | 0.283 | 0.098 | 1 CD16neg_NK_UCBMC |
| CNST               | 4.59E-05 | 0.9532143  | 0.5   | 0.242 | 1 CD16neg_NK_UCBMC |
| UBE2H              | 4.62E-05 | 1.05255725 | 0.522 | 0.257 | 1 CD16neg_NK_UCBMC |
| KAT6A              | 4.65E-05 | 1.10292669 | 0.457 | 0.216 | 1 CD16neg_NK_UCBMC |
| ARIH2              | 4.65E-05 | 1.43521786 | 0.348 | 0.147 | 1 CD16neg_NK_UCBMC |
| GSK3B              | 4.69E-05 | 0.89836492 | 0.543 | 0.269 | 1 CD16neg_NK_UCBMC |
| ZMYM5              | 4.75E-05 | 1.74147034 | 0.261 | 0.089 | 1 CD16neg_NK_UCBMC |
| ACTR2              | 4.88E-05 | 0.81942028 | 0.739 | 0.456 | 1 CD16neg_NK_UCBMC |
| YTHDF2             | 4.98E-05 | 1.60038958 | 0.261 | 0.091 | 1 CD16neg_NK_UCBMC |
| DDX5               | 5.05E-05 | 0.42677062 | 1     | 0.694 | 1 CD16neg_NK_UCBMC |
| MYLIP              | 5.08E-05 | 0.84146545 | 0.565 | 0.282 | 1 CD16neg_NK_UCBMC |
| SP100              | 5.12E-05 | 0.8754753  | 0.696 | 0.396 | 1 CD16neg_NK_UCBMC |
| ARID2              | 5.15E-05 | 0.97390667 | 0.522 | 0.242 | 1 CD16neg_NK_UCBMC |

|                    |          |            |       |       |                    |
|--------------------|----------|------------|-------|-------|--------------------|
| ILKAP              | 5.17E-05 | 1.27486836 | 0.37  | 0.159 | 1 CD16neg_NK_UCBMC |
| SEC23A             | 5.37E-05 | 1.29229844 | 0.304 | 0.113 | 1 CD16neg_NK_UCBMC |
| SMU1               | 5.42E-05 | 0.82203652 | 0.413 | 0.174 | 1 CD16neg_NK_UCBMC |
| ATP5PB             | 5.43E-05 | 1.12819791 | 0.413 | 0.183 | 1 CD16neg_NK_UCBMC |
| RPS6KB1            | 5.48E-05 | 0.97248832 | 0.478 | 0.224 | 1 CD16neg_NK_UCBMC |
| PHC3               | 5.48E-05 | 1.34723263 | 0.348 | 0.143 | 1 CD16neg_NK_UCBMC |
| ARIH1              | 5.49E-05 | 0.71296855 | 0.587 | 0.288 | 1 CD16neg_NK_UCBMC |
| TMEM135            | 5.49E-05 | 1.81358955 | 0.304 | 0.118 | 1 CD16neg_NK_UCBMC |
| RBMS1              | 5.51E-05 | 1.04704727 | 0.435 | 0.195 | 1 CD16neg_NK_UCBMC |
| TMEM183A           | 5.56E-05 | 1.3807136  | 0.283 | 0.101 | 1 CD16neg_NK_UCBMC |
| HBS1L              | 5.57E-05 | 0.96719086 | 0.522 | 0.254 | 1 CD16neg_NK_UCBMC |
| ATP11B             | 5.71E-05 | 1.19563431 | 0.391 | 0.17  | 1 CD16neg_NK_UCBMC |
| RAB7A              | 5.92E-05 | 0.80244496 | 0.565 | 0.281 | 1 CD16neg_NK_UCBMC |
| TBC1D22A           | 6.02E-05 | 1.09461534 | 0.413 | 0.177 | 1 CD16neg_NK_UCBMC |
| ADA                | 6.07E-05 | 0.91980313 | 0.283 | 0.097 | 1 CD16neg_NK_UCBMC |
| ENSMMUG00000014947 | 6.10E-05 | 0.8995908  | 0.348 | 0.133 | 1 CD16neg_NK_UCBMC |
| TASOR2             | 6.15E-05 | 1.33939345 | 0.391 | 0.173 | 1 CD16neg_NK_UCBMC |
| PKN2               | 6.33E-05 | 0.7614003  | 0.5   | 0.229 | 1 CD16neg_NK_UCBMC |
| LRCH3              | 6.45E-05 | 1.12777907 | 0.457 | 0.212 | 1 CD16neg_NK_UCBMC |
| KDM1A              | 6.46E-05 | 1.7422031  | 0.261 | 0.093 | 1 CD16neg_NK_UCBMC |
| KCMF1              | 6.47E-05 | 1.51029164 | 0.283 | 0.101 | 1 CD16neg_NK_UCBMC |
| IMMP2L             | 6.53E-05 | 1.30105698 | 0.348 | 0.141 | 1 CD16neg_NK_UCBMC |
| KLHL18             | 6.62E-05 | 1.60700061 | 0.348 | 0.145 | 1 CD16neg_NK_UCBMC |
| RORA               | 6.66E-05 | 1.09035815 | 0.565 | 0.296 | 1 CD16neg_NK_UCBMC |
| PRKAR1A            | 6.67E-05 | 0.54192335 | 0.565 | 0.264 | 1 CD16neg_NK_UCBMC |
| AMBRA1             | 6.69E-05 | 1.37434329 | 0.304 | 0.114 | 1 CD16neg_NK_UCBMC |
| STK24              | 6.69E-05 | 1.0294668  | 0.391 | 0.162 | 1 CD16neg_NK_UCBMC |
| NDUFAF4            | 6.72E-05 | 1.34432129 | 0.261 | 0.088 | 1 CD16neg_NK_UCBMC |
| RASA3              | 6.82E-05 | 1.48566838 | 0.261 | 0.091 | 1 CD16neg_NK_UCBMC |
| CDC27              | 6.99E-05 | 1.00022815 | 0.348 | 0.138 | 1 CD16neg_NK_UCBMC |
| ADK                | 7.11E-05 | 1.25549661 | 0.348 | 0.137 | 1 CD16neg_NK_UCBMC |
| TBC1D5             | 7.23E-05 | 0.94045962 | 0.609 | 0.347 | 1 CD16neg_NK_UCBMC |
| SH3KBP1            | 7.25E-05 | 0.74876808 | 0.783 | 0.461 | 1 CD16neg_NK_UCBMC |

|                    |            |            |       |       |                    |
|--------------------|------------|------------|-------|-------|--------------------|
| COP1               | 7.26E-05   | 1.16549738 | 0.435 | 0.203 | 1 CD16neg_NK_UCBMC |
| ATRN               | 7.37E-05   | 1.94473053 | 0.261 | 0.096 | 1 CD16neg_NK_UCBMC |
| KRAS               | 7.48E-05   | 1.13205545 | 0.37  | 0.156 | 1 CD16neg_NK_UCBMC |
| FBXO11             | 7.51E-05   | 1.15516386 | 0.435 | 0.199 | 1 CD16neg_NK_UCBMC |
| UBAC2              | 7.54E-05   | 0.97371037 | 0.565 | 0.291 | 1 CD16neg_NK_UCBMC |
| MAN1A2             | 7.66E-05   | 1.12427109 | 0.37  | 0.154 | 1 CD16neg_NK_UCBMC |
| PLAA               | 7.85E-05   | 1.39635023 | 0.261 | 0.09  | 1 CD16neg_NK_UCBMC |
| NAPG               | 7.98E-05   | 1.28520665 | 0.283 | 0.101 | 1 CD16neg_NK_UCBMC |
| LRBA               | 7.99E-05   | 1.0735211  | 0.609 | 0.314 | 1 CD16neg_NK_UCBMC |
| USP33              | 8.00E-05   | 1.30353887 | 0.283 | 0.104 | 1 CD16neg_NK_UCBMC |
| ARHGAP25           | 8.12E-05   | 1.27494438 | 0.391 | 0.171 | 1 CD16neg_NK_UCBMC |
| TMEM248            | 8.19E-05   | 1.0346434  | 0.261 | 0.089 | 1 CD16neg_NK_UCBMC |
| RNF216             | 8.21E-05   | 1.29838033 | 0.413 | 0.198 | 1 CD16neg_NK_UCBMC |
| ENSMMUG00000008587 | 8.27E-05   | 0.96486058 | 0.457 | 0.209 | 1 CD16neg_NK_UCBMC |
| COX10              | 8.28E-05   | 1.28409082 | 0.261 | 0.089 | 1 CD16neg_NK_UCBMC |
| UBAP1              | 8.37E-05   | 0.8837887  | 0.457 | 0.208 | 1 CD16neg_NK_UCBMC |
| CPSF3              | 8.51E-05   | 1.36958214 | 0.304 | 0.117 | 1 CD16neg_NK_UCBMC |
| SNTB1              | 8.84E-05   | 0.92353488 | 0.435 | 0.2   | 1 CD16neg_NK_UCBMC |
| CMAH               | 9.11E-05   | 1.31545242 | 0.391 | 0.174 | 1 CD16neg_NK_UCBMC |
| PSMD12             | 9.24E-05   | 0.76931081 | 0.717 | 0.43  | 1 CD16neg_NK_UCBMC |
| ZBTB1              | 9.80E-05   | 0.92321604 | 0.391 | 0.168 | 1 CD16neg_NK_UCBMC |
| LONP2              | 9.84E-05   | 1.01646231 | 0.391 | 0.17  | 1 CD16neg_NK_UCBMC |
| MED13              | 9.85E-05   | 1.12353705 | 0.391 | 0.174 | 1 CD16neg_NK_UCBMC |
| CTPS1              | 0.00010334 | 1.42777068 | 0.304 | 0.119 | 1 CD16neg_NK_UCBMC |
| MTHFD1L            | 0.00010526 | 1.43527904 | 0.261 | 0.092 | 1 CD16neg_NK_UCBMC |
| PRPF4B             | 0.00010619 | 0.61077933 | 0.826 | 0.496 | 1 CD16neg_NK_UCBMC |
| SEPTIN6            | 0.00010717 | 0.77647342 | 0.63  | 0.348 | 1 CD16neg_NK_UCBMC |
| MSH3               | 0.00010732 | 1.70385958 | 0.304 | 0.121 | 1 CD16neg_NK_UCBMC |
| EIF2AK2            | 0.00010955 | 1.44214153 | 0.283 | 0.107 | 1 CD16neg_NK_UCBMC |
| NBAS               | 0.00011029 | 1.63365333 | 0.261 | 0.097 | 1 CD16neg_NK_UCBMC |
| CERS6              | 0.00011049 | 1.12604577 | 0.413 | 0.192 | 1 CD16neg_NK_UCBMC |
| PAFAH1B1           | 0.00011106 | 0.93822703 | 0.565 | 0.294 | 1 CD16neg_NK_UCBMC |
| NRROS              | 0.00011206 | 1.39984638 | 0.283 | 0.109 | 1 CD16neg_NK_UCBMC |



|                    |            |            |       |       |                    |
|--------------------|------------|------------|-------|-------|--------------------|
| SENP6              | 0.00011254 | 0.68354822 | 0.522 | 0.246 | 1 CD16neg_NK_UCBMC |
| EPC2               | 0.00011364 | 1.25881635 | 0.37  | 0.161 | 1 CD16neg_NK_UCBMC |
| OGA                | 0.00011405 | 0.68661066 | 0.478 | 0.216 | 1 CD16neg_NK_UCBMC |
| KMT2C              | 0.00011525 | 0.87449505 | 0.63  | 0.353 | 1 CD16neg_NK_UCBMC |
| RBM27              | 0.00011663 | 0.86970564 | 0.435 | 0.196 | 1 CD16neg_NK_UCBMC |
| POU2F1             | 0.00011893 | 1.24203826 | 0.304 | 0.12  | 1 CD16neg_NK_UCBMC |
| RAP1GDS1           | 0.00011977 | 1.09039663 | 0.348 | 0.146 | 1 CD16neg_NK_UCBMC |
| CAB39              | 0.00012015 | 1.15738325 | 0.478 | 0.247 | 1 CD16neg_NK_UCBMC |
| ENSMMUG00000012203 | 0.00012048 | 0.97908059 | 0.348 | 0.143 | 1 CD16neg_NK_UCBMC |
| UHRF1BP1L          | 0.00012164 | 1.28971412 | 0.348 | 0.15  | 1 CD16neg_NK_UCBMC |
| LEF1               | 0.00012491 | 1.209125   | 0.283 | 0.105 | 1 CD16neg_NK_UCBMC |
| CDC73              | 0.00012588 | 1.26562233 | 0.37  | 0.162 | 1 CD16neg_NK_UCBMC |
| MTREX              | 0.0001285  | 0.75690739 | 0.587 | 0.296 | 1 CD16neg_NK_UCBMC |
| CD247              | 0.00013041 | 0.80782351 | 0.63  | 0.36  | 1 CD16neg_NK_UCBMC |
| CDC42SE2           | 0.00013146 | 0.69472204 | 0.848 | 0.547 | 1 CD16neg_NK_UCBMC |
| CSNK1A1            | 0.00013153 | 0.85959643 | 0.565 | 0.3   | 1 CD16neg_NK_UCBMC |
| MAX                | 0.00013455 | 1.02946392 | 0.5   | 0.261 | 1 CD16neg_NK_UCBMC |
| STK4               | 0.00013604 | 0.62515663 | 0.674 | 0.362 | 1 CD16neg_NK_UCBMC |
| MAPKAP1            | 0.0001361  | 0.9642392  | 0.37  | 0.157 | 1 CD16neg_NK_UCBMC |
| SUCLG2             | 0.00013815 | 1.28802629 | 0.391 | 0.181 | 1 CD16neg_NK_UCBMC |
| XRN2               | 0.00013836 | 0.59867764 | 0.543 | 0.258 | 1 CD16neg_NK_UCBMC |
| GPR89A             | 0.00013884 | 1.77272184 | 0.283 | 0.111 | 1 CD16neg_NK_UCBMC |
| TACC1              | 0.00014125 | 1.11954448 | 0.37  | 0.163 | 1 CD16neg_NK_UCBMC |
| PSME4              | 0.00014169 | 1.12862718 | 0.478 | 0.243 | 1 CD16neg_NK_UCBMC |
| PTPN1              | 0.00014221 | 0.70725214 | 0.5   | 0.242 | 1 CD16neg_NK_UCBMC |
| CYTIP              | 0.0001428  | 0.62417745 | 0.435 | 0.19  | 1 CD16neg_NK_UCBMC |
| BIN3               | 0.00014722 | 1.16411989 | 0.391 | 0.176 | 1 CD16neg_NK_UCBMC |
| RCC1               | 0.00014842 | 1.3130701  | 0.304 | 0.123 | 1 CD16neg_NK_UCBMC |
| TET3               | 0.00014969 | 1.07942568 | 0.326 | 0.132 | 1 CD16neg_NK_UCBMC |
| WBP2               | 0.00014999 | 0.86292543 | 0.304 | 0.116 | 1 CD16neg_NK_UCBMC |
| PRIM2              | 0.00015095 | 1.53282707 | 0.283 | 0.11  | 1 CD16neg_NK_UCBMC |
| ENSMMUG00000005482 | 0.00015352 | 1.21825669 | 0.413 | 0.196 | 1 CD16neg_NK_UCBMC |
| NEMF               | 0.00015745 | 1.39672619 | 0.37  | 0.168 | 1 CD16neg_NK_UCBMC |

|                    |            |            |       |       |                    |
|--------------------|------------|------------|-------|-------|--------------------|
| GAK                | 0.00016304 | 1.05597894 | 0.413 | 0.19  | 1 CD16neg_NK_UCBMC |
| CCM2               | 0.00016319 | 1.26027557 | 0.457 | 0.23  | 1 CD16neg_NK_UCBMC |
| TCF12              | 0.00016371 | 0.9839045  | 0.543 | 0.29  | 1 CD16neg_NK_UCBMC |
| RPL4               | 0.00016416 | 0.54186763 | 0.935 | 0.685 | 1 CD16neg_NK_UCBMC |
| AGPAT4             | 0.00016741 | 0.82537638 | 0.391 | 0.173 | 1 CD16neg_NK_UCBMC |
| TBK1               | 0.00017254 | 1.07226459 | 0.283 | 0.105 | 1 CD16neg_NK_UCBMC |
| ENSMMUG00000052127 | 0.00017423 | 0.80330219 | 0.978 | 0.771 | 1 CD16neg_NK_UCBMC |
| AKIRIN1            | 0.00017555 | 1.31116935 | 0.348 | 0.155 | 1 CD16neg_NK_UCBMC |
| PLAC8              | 0.00017627 | 0.73401408 | 0.826 | 0.575 | 1 CD16neg_NK_UCBMC |
| ENSMMUG00000011580 | 0.00017643 | 0.89944906 | 0.543 | 0.295 | 1 CD16neg_NK_UCBMC |
| RAB18              | 0.00017761 | 0.96491099 | 0.348 | 0.145 | 1 CD16neg_NK_UCBMC |
| PIK3CA             | 0.00017981 | 1.42769546 | 0.261 | 0.097 | 1 CD16neg_NK_UCBMC |
| NIPBL              | 0.00018211 | 0.81060719 | 0.522 | 0.268 | 1 CD16neg_NK_UCBMC |
| IQSEC1             | 0.00018378 | 1.39693543 | 0.283 | 0.112 | 1 CD16neg_NK_UCBMC |
| VPS37A             | 0.00018625 | 1.08523744 | 0.283 | 0.106 | 1 CD16neg_NK_UCBMC |
| LYN                | 0.00019134 | 0.84801107 | 0.5   | 0.258 | 1 CD16neg_NK_UCBMC |
| HIF1A              | 0.00019173 | 0.78543065 | 0.283 | 0.103 | 1 CD16neg_NK_UCBMC |
| PPP2R3C            | 0.0001926  | 1.08020306 | 0.304 | 0.12  | 1 CD16neg_NK_UCBMC |
| ZNF407             | 0.00019436 | 1.25670069 | 0.37  | 0.169 | 1 CD16neg_NK_UCBMC |
| USP8               | 0.00019575 | 1.37798873 | 0.304 | 0.126 | 1 CD16neg_NK_UCBMC |
| THADA              | 0.00019787 | 1.06743203 | 0.37  | 0.163 | 1 CD16neg_NK_UCBMC |
| ENSMMUG00000063583 | 0.00019894 | 0.363479   | 0.696 | 0.394 | 1 CD16neg_NK_UCBMC |
| WAC                | 0.00020109 | 0.88015076 | 0.565 | 0.318 | 1 CD16neg_NK_UCBMC |
| IRAK2              | 0.00020189 | 1.05319065 | 0.37  | 0.164 | 1 CD16neg_NK_UCBMC |
| ENSMMUG00000017297 | 0.00020487 | 1.12493655 | 0.391 | 0.18  | 1 CD16neg_NK_UCBMC |
| RAP1B              | 0.00020582 | 0.65416288 | 0.913 | 0.59  | 1 CD16neg_NK_UCBMC |
| CMIP               | 0.00020723 | 0.78290171 | 0.391 | 0.169 | 1 CD16neg_NK_UCBMC |
| PPP1R12A           | 0.00021065 | 0.79620764 | 0.696 | 0.401 | 1 CD16neg_NK_UCBMC |
| BCAS3              | 0.00021089 | 0.80294992 | 0.457 | 0.218 | 1 CD16neg_NK_UCBMC |
| ZMYM2              | 0.00021539 | 1.20660466 | 0.413 | 0.193 | 1 CD16neg_NK_UCBMC |
| TOX                | 0.00022536 | 0.6532979  | 0.739 | 0.457 | 1 CD16neg_NK_UCBMC |
| TCP11L2            | 0.00022661 | 1.04018669 | 0.261 | 0.095 | 1 CD16neg_NK_UCBMC |
| KATNA1             | 0.00023457 | 1.07419961 | 0.261 | 0.097 | 1 CD16neg_NK_UCBMC |

|                    |            |            |       |       |                    |
|--------------------|------------|------------|-------|-------|--------------------|
| RBM23              | 0.00023804 | 0.94377576 | 0.348 | 0.146 | 1 CD16neg_NK_UCBMC |
| FAM126A            | 0.00024054 | 1.36968753 | 0.283 | 0.113 | 1 CD16neg_NK_UCBMC |
| POGZ               | 0.00024259 | 0.87440669 | 0.348 | 0.149 | 1 CD16neg_NK_UCBMC |
| HTT                | 0.0002429  | 1.5798372  | 0.283 | 0.11  | 1 CD16neg_NK_UCBMC |
| SCAF11             | 0.00024571 | 0.74378535 | 0.609 | 0.326 | 1 CD16neg_NK_UCBMC |
| SFSWAP             | 0.00024859 | 0.9636047  | 0.304 | 0.121 | 1 CD16neg_NK_UCBMC |
| MIER1              | 0.00025601 | 0.83600361 | 0.565 | 0.305 | 1 CD16neg_NK_UCBMC |
| DNM3               | 0.00025944 | 1.92029883 | 0.261 | 0.102 | 1 CD16neg_NK_UCBMC |
| XYLT1              | 0.00026173 | 1.4613101  | 0.435 | 0.232 | 1 CD16neg_NK_UCBMC |
| SKAP1              | 0.00026757 | 0.61471355 | 0.913 | 0.666 | 1 CD16neg_NK_UCBMC |
| C18H18orf25        | 0.000268   | 1.147938   | 0.304 | 0.125 | 1 CD16neg_NK_UCBMC |
| CABIN1             | 0.00027218 | 0.91781586 | 0.37  | 0.164 | 1 CD16neg_NK_UCBMC |
| PHACTR2            | 0.00027315 | 1.95784357 | 0.261 | 0.103 | 1 CD16neg_NK_UCBMC |
| MAPK1IP1L          | 0.00028269 | 0.94893127 | 0.413 | 0.194 | 1 CD16neg_NK_UCBMC |
| PITRM1             | 0.00028785 | 1.07536114 | 0.283 | 0.11  | 1 CD16neg_NK_UCBMC |
| ATG3               | 0.00029305 | 1.07308561 | 0.391 | 0.188 | 1 CD16neg_NK_UCBMC |
| S100A10            | 0.00030249 | 0.3799161  | 0.913 | 0.647 | 1 CD16neg_NK_UCBMC |
| WDFY2              | 0.0003027  | 1.84352214 | 0.261 | 0.102 | 1 CD16neg_NK_UCBMC |
| ENSMMUG00000061125 | 0.00030514 | 0.68637345 | 0.652 | 0.373 | 1 CD16neg_NK_UCBMC |
| TXNIP              | 0.00030536 | 0.48390105 | 0.587 | 0.313 | 1 CD16neg_NK_UCBMC |
| POC5               | 0.00031342 | 0.67270952 | 0.5   | 0.246 | 1 CD16neg_NK_UCBMC |
| MSI2               | 0.00031458 | 1.12602968 | 0.37  | 0.177 | 1 CD16neg_NK_UCBMC |
| ENSMMUG00000028699 | 0.00031814 | 0.59086088 | 0.522 | 0.261 | 1 CD16neg_NK_UCBMC |
| ASAP1              | 0.00031842 | 0.8871912  | 0.478 | 0.253 | 1 CD16neg_NK_UCBMC |
| PPP2R1A            | 0.0003241  | 0.85156345 | 0.348 | 0.148 | 1 CD16neg_NK_UCBMC |
| ENSMMUG00000031367 | 0.00033024 | 0.99935307 | 0.326 | 0.139 | 1 CD16neg_NK_UCBMC |
| EIF2S3             | 0.00033073 | 0.96358977 | 0.37  | 0.166 | 1 CD16neg_NK_UCBMC |
| RNF19A             | 0.00033573 | 0.69388165 | 0.413 | 0.186 | 1 CD16neg_NK_UCBMC |
| OLA1               | 0.0003431  | 1.17535186 | 0.391 | 0.192 | 1 CD16neg_NK_UCBMC |
| ABCC1              | 0.00034558 | 1.07622962 | 0.391 | 0.187 | 1 CD16neg_NK_UCBMC |
| CEP350             | 0.00035005 | 0.94541951 | 0.348 | 0.153 | 1 CD16neg_NK_UCBMC |
| EWSR1              | 0.00035202 | 0.73606608 | 0.435 | 0.211 | 1 CD16neg_NK_UCBMC |
| PPP1CC             | 0.00035402 | 0.75015789 | 0.413 | 0.195 | 1 CD16neg_NK_UCBMC |

|                    |            |            |       |       |                    |
|--------------------|------------|------------|-------|-------|--------------------|
| RANBP2             | 0.00035443 | 0.64129367 | 0.522 | 0.263 | 1 CD16neg_NK_UCBMC |
| DIP2B              | 0.00035545 | 0.93515145 | 0.457 | 0.24  | 1 CD16neg_NK_UCBMC |
| OPA1               | 0.00035559 | 1.23203068 | 0.304 | 0.127 | 1 CD16neg_NK_UCBMC |
| TPST2              | 0.00035697 | 0.96957988 | 0.413 | 0.196 | 1 CD16neg_NK_UCBMC |
| WASF2              | 0.00036118 | 1.09475718 | 0.391 | 0.186 | 1 CD16neg_NK_UCBMC |
| ENSMMUG00000010266 | 0.00036342 | 0.57947999 | 0.717 | 0.418 | 1 CD16neg_NK_UCBMC |
| HDAC7              | 0.00036609 | 1.05520863 | 0.326 | 0.14  | 1 CD16neg_NK_UCBMC |
| SLC20A1            | 0.00037394 | 1.14904588 | 0.283 | 0.114 | 1 CD16neg_NK_UCBMC |
| PPHLN1             | 0.0003791  | 0.84113941 | 0.457 | 0.238 | 1 CD16neg_NK_UCBMC |
| SMARCA4            | 0.00037951 | 1.46361402 | 0.261 | 0.103 | 1 CD16neg_NK_UCBMC |
| RAPGEF2            | 0.00038188 | 1.11393428 | 0.391 | 0.193 | 1 CD16neg_NK_UCBMC |
| KIF5B              | 0.0003821  | 1.10784616 | 0.391 | 0.196 | 1 CD16neg_NK_UCBMC |
| ZNF644             | 0.0003829  | 0.92767979 | 0.522 | 0.282 | 1 CD16neg_NK_UCBMC |
| WDR70              | 0.000385   | 1.1809977  | 0.457 | 0.236 | 1 CD16neg_NK_UCBMC |
| ZNF292             | 0.00038879 | 0.86949367 | 0.543 | 0.3   | 1 CD16neg_NK_UCBMC |
| FBXO7              | 0.00039273 | 1.37979643 | 0.261 | 0.103 | 1 CD16neg_NK_UCBMC |
| SLC35A3            | 0.00039533 | 1.3752546  | 0.37  | 0.175 | 1 CD16neg_NK_UCBMC |
| ZNF92              | 0.00041963 | 1.24063294 | 0.326 | 0.144 | 1 CD16neg_NK_UCBMC |
| NUCKS1             | 0.00042138 | 0.88920282 | 0.5   | 0.263 | 1 CD16neg_NK_UCBMC |
| LASP1              | 0.00043274 | 0.86443747 | 0.457 | 0.232 | 1 CD16neg_NK_UCBMC |
| ABI1               | 0.00043357 | 0.96320627 | 0.457 | 0.233 | 1 CD16neg_NK_UCBMC |
| SUN2               | 0.00043608 | 0.6823781  | 0.326 | 0.135 | 1 CD16neg_NK_UCBMC |
| EDEM1              | 0.00043918 | 1.13405392 | 0.261 | 0.102 | 1 CD16neg_NK_UCBMC |
| EIF4EBP3           | 0.00044512 | 0.80635822 | 0.413 | 0.193 | 1 CD16neg_NK_UCBMC |
| GRK5               | 0.00044719 | 1.24160632 | 0.478 | 0.262 | 1 CD16neg_NK_UCBMC |
| APC                | 0.00045263 | 1.2401336  | 0.261 | 0.1   | 1 CD16neg_NK_UCBMC |
| KDM4C              | 0.00045575 | 1.07917109 | 0.435 | 0.23  | 1 CD16neg_NK_UCBMC |
| RRAS2              | 0.00046026 | 1.02459551 | 0.413 | 0.201 | 1 CD16neg_NK_UCBMC |
| MARK3              | 0.00046446 | 1.35067399 | 0.348 | 0.164 | 1 CD16neg_NK_UCBMC |
| FAM118A            | 0.00046829 | 0.73428378 | 0.326 | 0.135 | 1 CD16neg_NK_UCBMC |
| FAM214A            | 0.00046924 | 1.3900871  | 0.304 | 0.135 | 1 CD16neg_NK_UCBMC |
| AFF3               | 0.00047335 | 0.83756887 | 0.63  | 0.38  | 1 CD16neg_NK_UCBMC |
| NCOR1              | 0.00048001 | 0.77426112 | 0.478 | 0.248 | 1 CD16neg_NK_UCBMC |

|                    |            |            |       |       |                    |
|--------------------|------------|------------|-------|-------|--------------------|
| ZFR                | 0.00048123 | 1.32271066 | 0.326 | 0.149 | 1 CD16neg_NK_UCBMC |
| TSC22D3            | 0.00048259 | 0.43471926 | 0.587 | 0.304 | 1 CD16neg_NK_UCBMC |
| DIS3L2             | 0.00049318 | 1.6298019  | 0.283 | 0.123 | 1 CD16neg_NK_UCBMC |
| ATP2B4             | 0.00049926 | 1.56105908 | 0.283 | 0.123 | 1 CD16neg_NK_UCBMC |
| TNKS               | 0.00050074 | 1.16614322 | 0.37  | 0.177 | 1 CD16neg_NK_UCBMC |
| FAM241A            | 0.00050083 | 0.77507457 | 0.457 | 0.232 | 1 CD16neg_NK_UCBMC |
| DTNBP1             | 0.00050339 | 1.08596649 | 0.348 | 0.158 | 1 CD16neg_NK_UCBMC |
| MEMO1              | 0.00050808 | 1.21158054 | 0.391 | 0.196 | 1 CD16neg_NK_UCBMC |
| DCTN6              | 0.00052887 | 0.88527348 | 0.283 | 0.113 | 1 CD16neg_NK_UCBMC |
| KIDINS220          | 0.0005289  | 1.1252361  | 0.283 | 0.115 | 1 CD16neg_NK_UCBMC |
| HIVEP1             | 0.00054744 | 0.87893533 | 0.5   | 0.268 | 1 CD16neg_NK_UCBMC |
| PPP6R3             | 0.00056197 | 0.78756386 | 0.478 | 0.237 | 1 CD16neg_NK_UCBMC |
| YIF1A              | 0.00056408 | 0.74220486 | 0.261 | 0.099 | 1 CD16neg_NK_UCBMC |
| CCNY               | 0.00056645 | 1.03787509 | 0.348 | 0.157 | 1 CD16neg_NK_UCBMC |
| CLASP1             | 0.00057013 | 0.94890315 | 0.326 | 0.143 | 1 CD16neg_NK_UCBMC |
| JAZF1              | 0.00057648 | 1.15335858 | 0.391 | 0.188 | 1 CD16neg_NK_UCBMC |
| ARFGEF1            | 0.00058915 | 1.07586292 | 0.37  | 0.179 | 1 CD16neg_NK_UCBMC |
| MDM4               | 0.00059305 | 1.15621648 | 0.304 | 0.133 | 1 CD16neg_NK_UCBMC |
| SEC63              | 0.00059927 | 0.55589318 | 0.413 | 0.192 | 1 CD16neg_NK_UCBMC |
| ME2                | 0.00060269 | 1.16898409 | 0.413 | 0.213 | 1 CD16neg_NK_UCBMC |
| ZNF43              | 0.00060499 | 1.76919942 | 0.304 | 0.138 | 1 CD16neg_NK_UCBMC |
| WASL               | 0.00061002 | 1.54556574 | 0.304 | 0.14  | 1 CD16neg_NK_UCBMC |
| KBTBD2             | 0.00063125 | 1.02249792 | 0.348 | 0.163 | 1 CD16neg_NK_UCBMC |
| DDX52              | 0.00063952 | 1.1613581  | 0.283 | 0.12  | 1 CD16neg_NK_UCBMC |
| AUH                | 0.00064119 | 0.95993368 | 0.304 | 0.129 | 1 CD16neg_NK_UCBMC |
| SP110              | 0.00064124 | 0.86365722 | 0.413 | 0.21  | 1 CD16neg_NK_UCBMC |
| ILF3               | 0.0006574  | 1.03549325 | 0.37  | 0.179 | 1 CD16neg_NK_UCBMC |
| IQGAP1             | 0.00066498 | 0.71423194 | 0.63  | 0.389 | 1 CD16neg_NK_UCBMC |
| BNIP3L             | 0.00066948 | 0.78898381 | 0.37  | 0.171 | 1 CD16neg_NK_UCBMC |
| U2SURP             | 0.00067003 | 0.78737753 | 0.457 | 0.239 | 1 CD16neg_NK_UCBMC |
| OSBPL2             | 0.00067596 | 0.88215739 | 0.391 | 0.189 | 1 CD16neg_NK_UCBMC |
| ENSMMUG00000020316 | 0.00067724 | 0.89666024 | 0.348 | 0.159 | 1 CD16neg_NK_UCBMC |
| RNF115             | 0.00068201 | 0.93262954 | 0.413 | 0.207 | 1 CD16neg_NK_UCBMC |

|          |            |            |       |       |                    |
|----------|------------|------------|-------|-------|--------------------|
| ZNF44    | 0.0006862  | 1.20455297 | 0.261 | 0.105 | 1 CD16neg_NK_UCBMC |
| NT5C2    | 0.0006921  | 0.65464301 | 0.391 | 0.184 | 1 CD16neg_NK_UCBMC |
| ERBB3    | 0.00069921 | 0.51756643 | 0.478 | 0.241 | 1 CD16neg_NK_UCBMC |
| TRA2B    | 0.00070182 | 0.54058129 | 0.848 | 0.586 | 1 CD16neg_NK_UCBMC |
| MYO1D    | 0.00070587 | 0.82881108 | 0.435 | 0.218 | 1 CD16neg_NK_UCBMC |
| SMG6     | 0.00070604 | 1.02913107 | 0.457 | 0.253 | 1 CD16neg_NK_UCBMC |
| SECISBP2 | 0.00070608 | 1.1323183  | 0.283 | 0.12  | 1 CD16neg_NK_UCBMC |
| INO80D   | 0.00071116 | 1.31676317 | 0.326 | 0.151 | 1 CD16neg_NK_UCBMC |
| PHF3     | 0.00072095 | 0.9663185  | 0.37  | 0.178 | 1 CD16neg_NK_UCBMC |
| PHLPP1   | 0.00072705 | 0.9677877  | 0.413 | 0.214 | 1 CD16neg_NK_UCBMC |
| GOLM2    | 0.00073745 | 0.92886285 | 0.435 | 0.232 | 1 CD16neg_NK_UCBMC |
| SF1      | 0.00073918 | 0.92459972 | 0.435 | 0.224 | 1 CD16neg_NK_UCBMC |
| CCDC91   | 0.00074425 | 1.0250467  | 0.413 | 0.214 | 1 CD16neg_NK_UCBMC |
| SRSF4    | 0.00074829 | 1.18790925 | 0.37  | 0.188 | 1 CD16neg_NK_UCBMC |
| SMG7     | 0.00075387 | 1.26976861 | 0.326 | 0.151 | 1 CD16neg_NK_UCBMC |
| COX3     | 0.00075505 | 0.62152159 | 0.891 | 0.819 | 1 CD16neg_NK_UCBMC |
| IL4R     | 0.00076169 | 0.87208217 | 0.391 | 0.187 | 1 CD16neg_NK_UCBMC |
| YME1L1   | 0.0007672  | 0.50068118 | 0.413 | 0.194 | 1 CD16neg_NK_UCBMC |
| USP4     | 0.00077167 | 1.10852926 | 0.261 | 0.106 | 1 CD16neg_NK_UCBMC |
| RIOK3    | 0.0007756  | 0.81427734 | 0.348 | 0.16  | 1 CD16neg_NK_UCBMC |
| TMED2    | 0.00079431 | 0.88483539 | 0.348 | 0.16  | 1 CD16neg_NK_UCBMC |
| DDX17    | 0.00080132 | 0.7290237  | 0.587 | 0.341 | 1 CD16neg_NK_UCBMC |
| MYCBP2   | 0.00080914 | 0.84640047 | 0.565 | 0.328 | 1 CD16neg_NK_UCBMC |
| PDS5B    | 0.00081513 | 1.00700292 | 0.348 | 0.162 | 1 CD16neg_NK_UCBMC |
| SH3BP5   | 0.00081912 | 1.12894509 | 0.261 | 0.107 | 1 CD16neg_NK_UCBMC |
| PACS1    | 0.00082103 | 0.66747957 | 0.522 | 0.281 | 1 CD16neg_NK_UCBMC |
| JMY      | 0.00084087 | 0.51213212 | 0.435 | 0.215 | 1 CD16neg_NK_UCBMC |
| HECTD1   | 0.00084362 | 0.90869641 | 0.283 | 0.117 | 1 CD16neg_NK_UCBMC |
| TLN1     | 0.00085108 | 0.87168652 | 0.63  | 0.382 | 1 CD16neg_NK_UCBMC |
| ECPAS    | 0.00086056 | 1.48011115 | 0.283 | 0.122 | 1 CD16neg_NK_UCBMC |
| GPATCH8  | 0.00086298 | 1.19417396 | 0.37  | 0.184 | 1 CD16neg_NK_UCBMC |
| EZH2     | 0.00086602 | 0.76433801 | 0.413 | 0.204 | 1 CD16neg_NK_UCBMC |
| PCMTD1   | 0.00087772 | 0.97870343 | 0.37  | 0.177 | 1 CD16neg_NK_UCBMC |

|          |            |            |       |       |                    |
|----------|------------|------------|-------|-------|--------------------|
| DAP3     | 0.00088228 | 0.94606751 | 0.261 | 0.104 | 1 CD16neg_NK_UCBMC |
| PJA2     | 0.00089107 | 0.6948686  | 0.435 | 0.217 | 1 CD16neg_NK_UCBMC |
| ADGRE5   | 0.00090743 | 0.29380774 | 0.848 | 0.501 | 1 CD16neg_NK_UCBMC |
| JMJD1C   | 0.00090835 | 0.52038689 | 0.717 | 0.411 | 1 CD16neg_NK_UCBMC |
| VPS13C   | 0.00092467 | 0.6507885  | 0.5   | 0.264 | 1 CD16neg_NK_UCBMC |
| EIF3M    | 0.00093781 | 0.66837075 | 0.5   | 0.26  | 1 CD16neg_NK_UCBMC |
| MTMR3    | 0.0009386  | 1.12693712 | 0.261 | 0.108 | 1 CD16neg_NK_UCBMC |
| ATP5PO   | 0.00093949 | 0.52006543 | 0.761 | 0.454 | 1 CD16neg_NK_UCBMC |
| ASXL2    | 0.00094621 | 1.37947995 | 0.304 | 0.14  | 1 CD16neg_NK_UCBMC |
| CAST     | 0.00097386 | 0.95744788 | 0.413 | 0.217 | 1 CD16neg_NK_UCBMC |
| SORL1    | 0.00097946 | 0.89809463 | 0.413 | 0.215 | 1 CD16neg_NK_UCBMC |
| DERL1    | 0.00098771 | 0.99928273 | 0.37  | 0.181 | 1 CD16neg_NK_UCBMC |
| CUL4A    | 0.00099001 | 1.43325624 | 0.261 | 0.11  | 1 CD16neg_NK_UCBMC |
| SLC23A2  | 0.00099332 | 0.91695719 | 0.348 | 0.165 | 1 CD16neg_NK_UCBMC |
| MICAL2   | 0.00099335 | 1.00348901 | 0.391 | 0.199 | 1 CD16neg_NK_UCBMC |
| CAPZA2   | 0.00099782 | 0.77741345 | 0.5   | 0.276 | 1 CD16neg_NK_UCBMC |
| WDR7     | 0.0010054  | 0.95518596 | 0.348 | 0.162 | 1 CD16neg_NK_UCBMC |
| MFF      | 0.0010122  | 1.09709131 | 0.304 | 0.136 | 1 CD16neg_NK_UCBMC |
| USP24    | 0.00101941 | 0.83162355 | 0.283 | 0.118 | 1 CD16neg_NK_UCBMC |
| ERP44    | 0.00102212 | 0.84169711 | 0.413 | 0.208 | 1 CD16neg_NK_UCBMC |
| FLI1     | 0.00104115 | 0.62913614 | 0.457 | 0.23  | 1 CD16neg_NK_UCBMC |
| APH1A    | 0.00106013 | 0.70814841 | 0.261 | 0.104 | 1 CD16neg_NK_UCBMC |
| RPTOR    | 0.00106425 | 1.20384752 | 0.326 | 0.157 | 1 CD16neg_NK_UCBMC |
| CNOT2    | 0.00107257 | 0.5510255  | 0.565 | 0.313 | 1 CD16neg_NK_UCBMC |
| PRDM2    | 0.00108047 | 1.11309308 | 0.304 | 0.14  | 1 CD16neg_NK_UCBMC |
| CHD2     | 0.00108302 | 0.57191012 | 0.609 | 0.341 | 1 CD16neg_NK_UCBMC |
| CSNK1G3  | 0.0011404  | 1.00196528 | 0.304 | 0.136 | 1 CD16neg_NK_UCBMC |
| SPIDR    | 0.00114976 | 1.03993927 | 0.37  | 0.18  | 1 CD16neg_NK_UCBMC |
| ZEB1     | 0.0011653  | 0.73386431 | 0.478 | 0.25  | 1 CD16neg_NK_UCBMC |
| KLF6     | 0.00116667 | 0.2613383  | 0.804 | 0.442 | 1 CD16neg_NK_UCBMC |
| PPP1R15A | 0.00117683 | 0.41660005 | 0.565 | 0.301 | 1 CD16neg_NK_UCBMC |
| SESN1    | 0.00118924 | 0.85066254 | 0.435 | 0.234 | 1 CD16neg_NK_UCBMC |
| TP53BP1  | 0.00120928 | 1.01380114 | 0.391 | 0.196 | 1 CD16neg_NK_UCBMC |

|                    |            |            |       |       |                    |
|--------------------|------------|------------|-------|-------|--------------------|
| ELF2               | 0.00121409 | 0.79240982 | 0.413 | 0.206 | 1 CD16neg_NK_UCBMC |
| SYNCRIP            | 0.00121474 | 0.63478747 | 0.391 | 0.193 | 1 CD16neg_NK_UCBMC |
| FOXJ3              | 0.00121998 | 1.34994599 | 0.326 | 0.154 | 1 CD16neg_NK_UCBMC |
| THUMPD1            | 0.0012339  | 0.87694023 | 0.283 | 0.121 | 1 CD16neg_NK_UCBMC |
| KIF3A              | 0.00123434 | 0.85724913 | 0.283 | 0.121 | 1 CD16neg_NK_UCBMC |
| FXR1               | 0.00127144 | 0.80019354 | 0.478 | 0.271 | 1 CD16neg_NK_UCBMC |
| LYST               | 0.00128045 | 0.61963907 | 0.63  | 0.368 | 1 CD16neg_NK_UCBMC |
| GPBP1L1            | 0.00128267 | 0.73999833 | 0.391 | 0.195 | 1 CD16neg_NK_UCBMC |
| PSAP               | 0.0012869  | 0.77144259 | 0.326 | 0.151 | 1 CD16neg_NK_UCBMC |
| GPCPD1             | 0.00129141 | 0.45436425 | 0.5   | 0.26  | 1 CD16neg_NK_UCBMC |
| ENSMMUG00000059017 | 0.00129667 | 0.42657571 | 0.543 | 0.29  | 1 CD16neg_NK_UCBMC |
| PIP4K2A            | 0.00129918 | 0.33010796 | 0.761 | 0.426 | 1 CD16neg_NK_UCBMC |
| CNOT1              | 0.00130605 | 0.84221109 | 0.391 | 0.199 | 1 CD16neg_NK_UCBMC |
| MGAT5              | 0.00130714 | 0.60676287 | 0.587 | 0.338 | 1 CD16neg_NK_UCBMC |
| SIPA1L1            | 0.00131627 | 1.13156004 | 0.304 | 0.141 | 1 CD16neg_NK_UCBMC |
| ANKRD10            | 0.00131746 | 1.24008537 | 0.304 | 0.145 | 1 CD16neg_NK_UCBMC |
| GPBP1              | 0.00131929 | 0.44393573 | 0.609 | 0.348 | 1 CD16neg_NK_UCBMC |
| LARP4              | 0.00132721 | 0.98149926 | 0.283 | 0.123 | 1 CD16neg_NK_UCBMC |
| ATXN10             | 0.00134376 | 0.77351825 | 0.457 | 0.239 | 1 CD16neg_NK_UCBMC |
| RALA               | 0.0013531  | 0.8594906  | 0.304 | 0.139 | 1 CD16neg_NK_UCBMC |
| UBR5               | 0.00135695 | 0.97024041 | 0.413 | 0.22  | 1 CD16neg_NK_UCBMC |
| DOCK11             | 0.00140939 | 0.83085691 | 0.435 | 0.236 | 1 CD16neg_NK_UCBMC |
| COPA               | 0.00142369 | 0.87040809 | 0.37  | 0.19  | 1 CD16neg_NK_UCBMC |
| CD52               | 0.00144234 | 0.46424338 | 0.848 | 0.639 | 1 CD16neg_NK_UCBMC |
| ASB3               | 0.0014481  | 1.24511515 | 0.261 | 0.112 | 1 CD16neg_NK_UCBMC |
| ENSMMUG00000055687 | 0.00145288 | 1.02684543 | 0.326 | 0.158 | 1 CD16neg_NK_UCBMC |
| RESF1              | 0.00145536 | 0.88039601 | 0.261 | 0.109 | 1 CD16neg_NK_UCBMC |
| CWC25              | 0.00146003 | 0.94249316 | 0.283 | 0.126 | 1 CD16neg_NK_UCBMC |
| ENSMMUG00000030448 | 0.00146218 | 1.01418417 | 0.37  | 0.189 | 1 CD16neg_NK_UCBMC |
| TMEM181            | 0.00147681 | 0.78890906 | 0.37  | 0.182 | 1 CD16neg_NK_UCBMC |
| TGS1               | 0.00147804 | 0.6533658  | 0.261 | 0.105 | 1 CD16neg_NK_UCBMC |
| AP3B1              | 0.00147928 | 1.15976681 | 0.391 | 0.208 | 1 CD16neg_NK_UCBMC |
| CSNK1G1            | 0.00148974 | 1.14810368 | 0.326 | 0.158 | 1 CD16neg_NK_UCBMC |



|                    |            |            |       |       |                    |
|--------------------|------------|------------|-------|-------|--------------------|
| DENND4A            | 0.00149684 | 0.2601432  | 0.804 | 0.509 | 1 CD16neg_NK_UCBMC |
| ENSMMUG00000055457 | 0.00150982 | 0.59489835 | 0.457 | 0.241 | 1 CD16neg_NK_UCBMC |
| EEF2               | 0.00153239 | 0.46418263 | 0.717 | 0.432 | 1 CD16neg_NK_UCBMC |
| XRN1               | 0.00153362 | 0.7040652  | 0.435 | 0.223 | 1 CD16neg_NK_UCBMC |
| TMEM131L           | 0.00157682 | 1.03552066 | 0.413 | 0.216 | 1 CD16neg_NK_UCBMC |
| ELF1               | 0.00158753 | 0.53161986 | 0.783 | 0.522 | 1 CD16neg_NK_UCBMC |
| TRIP12             | 0.0016048  | 0.62897117 | 0.435 | 0.226 | 1 CD16neg_NK_UCBMC |
| BTA1F1             | 0.00160497 | 0.94752727 | 0.326 | 0.155 | 1 CD16neg_NK_UCBMC |
| TMEM71             | 0.00163528 | 0.70069324 | 0.37  | 0.181 | 1 CD16neg_NK_UCBMC |
| TRPS1              | 0.00165079 | 0.71032969 | 0.5   | 0.272 | 1 CD16neg_NK_UCBMC |
| RPS14              | 0.00169487 | 0.29955128 | 1     | 0.977 | 1 CD16neg_NK_UCBMC |
| ENSMMUG00000004539 | 0.00170846 | 0.30452887 | 0.522 | 0.27  | 1 CD16neg_NK_UCBMC |
| EHBP1              | 0.00171804 | 1.19732105 | 0.348 | 0.178 | 1 CD16neg_NK_UCBMC |
| FOXN2              | 0.0017577  | 0.81391566 | 0.391 | 0.202 | 1 CD16neg_NK_UCBMC |
| DNTTIP2            | 0.00176803 | 0.81374097 | 0.326 | 0.154 | 1 CD16neg_NK_UCBMC |
| YTHDC1             | 0.00182148 | 0.92984271 | 0.413 | 0.223 | 1 CD16neg_NK_UCBMC |
| NFATC3             | 0.0018387  | 0.86986926 | 0.457 | 0.246 | 1 CD16neg_NK_UCBMC |
| ITPR1              | 0.001846   | 0.98496503 | 0.326 | 0.156 | 1 CD16neg_NK_UCBMC |
| MARCHF6            | 0.00185671 | 0.9522179  | 0.391 | 0.209 | 1 CD16neg_NK_UCBMC |
| ARHGEF3            | 0.00185897 | 0.94195075 | 0.37  | 0.186 | 1 CD16neg_NK_UCBMC |
| SLC25A26           | 0.00186322 | 1.01982694 | 0.283 | 0.126 | 1 CD16neg_NK_UCBMC |
| ANXA7              | 0.00186845 | 0.54434011 | 0.326 | 0.147 | 1 CD16neg_NK_UCBMC |
| PSMC1              | 0.0018896  | 0.94187207 | 0.261 | 0.113 | 1 CD16neg_NK_UCBMC |
| YIPF5              | 0.0019284  | 1.06821123 | 0.261 | 0.114 | 1 CD16neg_NK_UCBMC |
| UBR2               | 0.00198001 | 0.73571598 | 0.304 | 0.138 | 1 CD16neg_NK_UCBMC |
| PDCD6IP            | 0.00201827 | 1.01329379 | 0.37  | 0.196 | 1 CD16neg_NK_UCBMC |
| MTDH               | 0.00202454 | 0.78180769 | 0.37  | 0.19  | 1 CD16neg_NK_UCBMC |
| MRPL42             | 0.00208864 | 0.69983254 | 0.304 | 0.141 | 1 CD16neg_NK_UCBMC |
| SEC24B             | 0.00212586 | 0.93663955 | 0.283 | 0.127 | 1 CD16neg_NK_UCBMC |
| CCDC69             | 0.00216852 | 0.90028548 | 0.435 | 0.243 | 1 CD16neg_NK_UCBMC |
| PAPOLA             | 0.00221788 | 0.64629876 | 0.587 | 0.351 | 1 CD16neg_NK_UCBMC |
| RERE               | 0.00223424 | 0.57041078 | 0.609 | 0.367 | 1 CD16neg_NK_UCBMC |
| CTNNB1             | 0.00224016 | 0.51363944 | 0.435 | 0.226 | 1 CD16neg_NK_UCBMC |

|                    |            |            |       |       |                    |
|--------------------|------------|------------|-------|-------|--------------------|
| RBM25              | 0.00225147 | 0.71016749 | 0.435 | 0.238 | 1 CD16neg_NK_UCBMC |
| UVRAG              | 0.00225324 | 0.93841349 | 0.478 | 0.274 | 1 CD16neg_NK_UCBMC |
| MYO1E              | 0.00226249 | 1.05467326 | 0.435 | 0.253 | 1 CD16neg_NK_UCBMC |
| ENSMMUG00000006499 | 0.00231554 | 0.36054785 | 0.478 | 0.246 | 1 CD16neg_NK_UCBMC |
| MYO1F              | 0.00233478 | 0.86378566 | 0.435 | 0.245 | 1 CD16neg_NK_UCBMC |
| NTAN1              | 0.00233588 | 0.50552819 | 0.348 | 0.166 | 1 CD16neg_NK_UCBMC |
| PRKCH              | 0.00233625 | 0.34062398 | 0.87  | 0.621 | 1 CD16neg_NK_UCBMC |
| CS                 | 0.00234181 | 0.56294179 | 0.413 | 0.215 | 1 CD16neg_NK_UCBMC |
| ATG5               | 0.0023435  | 0.85534482 | 0.348 | 0.172 | 1 CD16neg_NK_UCBMC |
| ENSMMUG00000046264 | 0.00236002 | 1.09262276 | 0.283 | 0.13  | 1 CD16neg_NK_UCBMC |
| ACO2               | 0.00238506 | 0.87262693 | 0.261 | 0.114 | 1 CD16neg_NK_UCBMC |
| WTAP               | 0.00239352 | 0.6047366  | 0.522 | 0.304 | 1 CD16neg_NK_UCBMC |
| PRPF40A            | 0.00240293 | 0.72851754 | 0.435 | 0.243 | 1 CD16neg_NK_UCBMC |
| VTA1               | 0.0024111  | 1.17032509 | 0.261 | 0.118 | 1 CD16neg_NK_UCBMC |
| MBNL2              | 0.00241318 | 1.36328685 | 0.261 | 0.122 | 1 CD16neg_NK_UCBMC |
| EEA1               | 0.00241595 | 0.80646682 | 0.391 | 0.203 | 1 CD16neg_NK_UCBMC |
| ATP8B4             | 0.00245113 | 0.83225866 | 0.304 | 0.141 | 1 CD16neg_NK_UCBMC |
| BCL7B              | 0.00245983 | 0.84061516 | 0.261 | 0.115 | 1 CD16neg_NK_UCBMC |
| SEPTIN9            | 0.00247414 | 0.59708521 | 0.413 | 0.217 | 1 CD16neg_NK_UCBMC |
| MTMR12             | 0.00248462 | 0.63960272 | 0.37  | 0.185 | 1 CD16neg_NK_UCBMC |
| GATA3              | 0.00249027 | 1.133257   | 0.283 | 0.133 | 1 CD16neg_NK_UCBMC |
| IFRD1              | 0.00249341 | 0.40936425 | 0.587 | 0.33  | 1 CD16neg_NK_UCBMC |
| FRYL               | 0.00251181 | 1.09467981 | 0.326 | 0.166 | 1 CD16neg_NK_UCBMC |
| TMEM87A            | 0.00252521 | 1.22180905 | 0.348 | 0.185 | 1 CD16neg_NK_UCBMC |
| CREB1              | 0.00252981 | 0.79414126 | 0.37  | 0.191 | 1 CD16neg_NK_UCBMC |
| NSD1               | 0.0025329  | 1.09439758 | 0.413 | 0.235 | 1 CD16neg_NK_UCBMC |
| CARD11             | 0.0025391  | 1.16085009 | 0.37  | 0.197 | 1 CD16neg_NK_UCBMC |
| C4H6orf62          | 0.00253931 | 0.47440276 | 0.348 | 0.166 | 1 CD16neg_NK_UCBMC |
| ENSMMUG00000006803 | 0.00254851 | 0.74507724 | 0.391 | 0.202 | 1 CD16neg_NK_UCBMC |
| BPTF               | 0.00256883 | 0.75398048 | 0.5   | 0.293 | 1 CD16neg_NK_UCBMC |
| BBX                | 0.00258238 | 0.75695256 | 0.457 | 0.254 | 1 CD16neg_NK_UCBMC |
| PPIL4              | 0.00259652 | 0.56315919 | 0.37  | 0.184 | 1 CD16neg_NK_UCBMC |
| AFF4               | 0.00261525 | 0.9485105  | 0.261 | 0.115 | 1 CD16neg_NK_UCBMC |

|                    |            |            |       |       |                    |
|--------------------|------------|------------|-------|-------|--------------------|
| ELL2               | 0.00266099 | 0.86888007 | 0.326 | 0.155 | 1 CD16neg_NK_UCBMC |
| KANSL2             | 0.00267468 | 0.77971351 | 0.304 | 0.146 | 1 CD16neg_NK_UCBMC |
| VPS4B              | 0.00269457 | 0.65928175 | 0.37  | 0.187 | 1 CD16neg_NK_UCBMC |
| ENSMMUG00000022610 | 0.00270768 | 1.03244914 | 0.37  | 0.199 | 1 CD16neg_NK_UCBMC |
| UBR1               | 0.00272939 | 0.59312505 | 0.413 | 0.217 | 1 CD16neg_NK_UCBMC |
| ENSMMUG00000006965 | 0.00274452 | 0.53534228 | 0.413 | 0.212 | 1 CD16neg_NK_UCBMC |
| CMTM6              | 0.00275959 | 0.76233894 | 0.565 | 0.348 | 1 CD16neg_NK_UCBMC |
| MRPL11             | 0.0027958  | 0.58514726 | 0.457 | 0.254 | 1 CD16neg_NK_UCBMC |
| ENSMMUG00000006778 | 0.00280612 | 0.62352516 | 0.435 | 0.235 | 1 CD16neg_NK_UCBMC |
| CASP8              | 0.00284544 | 1.10146947 | 0.37  | 0.198 | 1 CD16neg_NK_UCBMC |
| ABCE1              | 0.00286911 | 0.90660619 | 0.304 | 0.148 | 1 CD16neg_NK_UCBMC |
| GOLGA1             | 0.00292159 | 0.57656811 | 0.652 | 0.419 | 1 CD16neg_NK_UCBMC |
| USP9X              | 0.00292395 | 1.02851502 | 0.413 | 0.228 | 1 CD16neg_NK_UCBMC |
| TUT4               | 0.00294058 | 0.62293357 | 0.5   | 0.287 | 1 CD16neg_NK_UCBMC |
| PRPF6              | 0.00295826 | 0.63945849 | 0.326 | 0.159 | 1 CD16neg_NK_UCBMC |
| CAMLG              | 0.00296382 | 0.56743425 | 0.478 | 0.255 | 1 CD16neg_NK_UCBMC |
| DYM                | 0.0030139  | 0.87663017 | 0.37  | 0.193 | 1 CD16neg_NK_UCBMC |
| RAB14              | 0.00302063 | 0.76424451 | 0.348 | 0.178 | 1 CD16neg_NK_UCBMC |
| CAMTA1             | 0.00306132 | 0.92670388 | 0.326 | 0.167 | 1 CD16neg_NK_UCBMC |
| FAF1               | 0.00306148 | 0.98868904 | 0.413 | 0.231 | 1 CD16neg_NK_UCBMC |
| RAD21              | 0.00307811 | 0.64333082 | 0.435 | 0.236 | 1 CD16neg_NK_UCBMC |
| ATP6V0D1           | 0.00311894 | 0.90008894 | 0.283 | 0.134 | 1 CD16neg_NK_UCBMC |
| GGNBP2             | 0.0031332  | 0.72821319 | 0.348 | 0.174 | 1 CD16neg_NK_UCBMC |
| SPTLC2             | 0.00313689 | 0.64240371 | 0.348 | 0.176 | 1 CD16neg_NK_UCBMC |
| YPEL5              | 0.00317706 | 0.71678228 | 0.522 | 0.321 | 1 CD16neg_NK_UCBMC |
| TMEM123            | 0.00317816 | 0.7026525  | 0.522 | 0.319 | 1 CD16neg_NK_UCBMC |
| TSNAX              | 0.0031848  | 0.7394076  | 0.304 | 0.142 | 1 CD16neg_NK_UCBMC |
| TLK1               | 0.00320433 | 0.80208964 | 0.348 | 0.178 | 1 CD16neg_NK_UCBMC |
| PPM1G              | 0.00330613 | 0.88370255 | 0.261 | 0.118 | 1 CD16neg_NK_UCBMC |
| R3HDM2             | 0.00332126 | 1.1538823  | 0.304 | 0.155 | 1 CD16neg_NK_UCBMC |
| ENSMMUG00000056654 | 0.00335218 | 0.71756465 | 0.783 | 0.565 | 1 CD16neg_NK_UCBMC |
| RBM26              | 0.00339659 | 0.60953845 | 0.435 | 0.231 | 1 CD16neg_NK_UCBMC |
| ERBIN              | 0.00347168 | 0.57235601 | 0.478 | 0.263 | 1 CD16neg_NK_UCBMC |

|                    |            |            |       |       |                    |
|--------------------|------------|------------|-------|-------|--------------------|
| SPEN               | 0.00348132 | 1.45184714 | 0.283 | 0.14  | 1 CD16neg_NK_UCBMC |
| SERINC1            | 0.00348814 | 0.50970373 | 0.478 | 0.267 | 1 CD16neg_NK_UCBMC |
| ANKRD12            | 0.0035193  | 0.74293658 | 0.457 | 0.263 | 1 CD16neg_NK_UCBMC |
| HNRNPD             | 0.00352646 | 0.62255272 | 0.522 | 0.308 | 1 CD16neg_NK_UCBMC |
| WVOX               | 0.00355971 | 0.82789949 | 0.326 | 0.158 | 1 CD16neg_NK_UCBMC |
| PDGFD              | 0.0035938  | 0.3809738  | 0.717 | 0.48  | 1 CD16neg_NK_UCBMC |
| YAF2               | 0.00360398 | 0.6004158  | 0.478 | 0.277 | 1 CD16neg_NK_UCBMC |
| RPN1               | 0.00363149 | 0.61827016 | 0.348 | 0.173 | 1 CD16neg_NK_UCBMC |
| LTN1               | 0.00364423 | 1.13343686 | 0.261 | 0.123 | 1 CD16neg_NK_UCBMC |
| GAPVD1             | 0.00365034 | 1.13254124 | 0.283 | 0.138 | 1 CD16neg_NK_UCBMC |
| FCHSD2             | 0.00374472 | 0.79125118 | 0.435 | 0.246 | 1 CD16neg_NK_UCBMC |
| ENSMMUG00000063549 | 0.00374717 | 0.51586559 | 0.478 | 0.271 | 1 CD16neg_NK_UCBMC |
| CSDE1              | 0.00383828 | 0.68918942 | 0.5   | 0.303 | 1 CD16neg_NK_UCBMC |
| ANXA11             | 0.00387194 | 0.6780476  | 0.348 | 0.176 | 1 CD16neg_NK_UCBMC |
| CRYL1              | 0.00390932 | 1.14697102 | 0.283 | 0.139 | 1 CD16neg_NK_UCBMC |
| TNRC6C             | 0.00391159 | 0.99341632 | 0.283 | 0.138 | 1 CD16neg_NK_UCBMC |
| KPNB1              | 0.00391439 | 1.13643148 | 0.261 | 0.124 | 1 CD16neg_NK_UCBMC |
| RCSD1              | 0.00392099 | 0.62864815 | 0.457 | 0.268 | 1 CD16neg_NK_UCBMC |
| INTS6L             | 0.00397609 | 0.70027711 | 0.326 | 0.159 | 1 CD16neg_NK_UCBMC |
| SLTM               | 0.00397666 | 0.66984719 | 0.457 | 0.262 | 1 CD16neg_NK_UCBMC |
| RAD51B             | 0.00399844 | 1.40670405 | 0.283 | 0.139 | 1 CD16neg_NK_UCBMC |
| TRAM1              | 0.00404498 | 0.54143206 | 0.457 | 0.257 | 1 CD16neg_NK_UCBMC |
| AARS1              | 0.00412006 | 0.74821039 | 0.348 | 0.18  | 1 CD16neg_NK_UCBMC |
| BIN2               | 0.00413642 | 0.59133345 | 0.609 | 0.38  | 1 CD16neg_NK_UCBMC |
| RASGRP2            | 0.00419837 | 0.60499289 | 0.304 | 0.143 | 1 CD16neg_NK_UCBMC |
| SMARCC1            | 0.00428315 | 0.82502264 | 0.391 | 0.216 | 1 CD16neg_NK_UCBMC |
| XPO6               | 0.0042978  | 0.82962211 | 0.391 | 0.224 | 1 CD16neg_NK_UCBMC |
| NPAT               | 0.00441396 | 0.47180771 | 0.413 | 0.218 | 1 CD16neg_NK_UCBMC |
| TSC22D2            | 0.00443616 | 1.07192517 | 0.261 | 0.122 | 1 CD16neg_NK_UCBMC |
| GLYR1              | 0.00444492 | 0.48202848 | 0.261 | 0.116 | 1 CD16neg_NK_UCBMC |
| UPF2               | 0.00447065 | 0.56863617 | 0.391 | 0.212 | 1 CD16neg_NK_UCBMC |
| ENSMMUG00000056043 | 0.00452784 | 0.62461884 | 0.283 | 0.133 | 1 CD16neg_NK_UCBMC |
| HERC2              | 0.00462456 | 0.57511041 | 0.304 | 0.145 | 1 CD16neg_NK_UCBMC |

|                    |            |            |       |       |                    |
|--------------------|------------|------------|-------|-------|--------------------|
| GATAD2B            | 0.00463931 | 0.95975555 | 0.348 | 0.186 | 1 CD16neg_NK_UCBMC |
| PCF11              | 0.00469046 | 0.90038724 | 0.304 | 0.155 | 1 CD16neg_NK_UCBMC |
| RNGTT              | 0.00479597 | 1.12338396 | 0.283 | 0.141 | 1 CD16neg_NK_UCBMC |
| MYO5A              | 0.00483798 | 0.59145145 | 0.348 | 0.176 | 1 CD16neg_NK_UCBMC |
| VAV1               | 0.00484414 | 0.88867447 | 0.283 | 0.135 | 1 CD16neg_NK_UCBMC |
| SASH3              | 0.00485838 | 0.68451577 | 0.326 | 0.166 | 1 CD16neg_NK_UCBMC |
| NDUFA6             | 0.00485942 | 0.18195441 | 0.609 | 0.34  | 1 CD16neg_NK_UCBMC |
| MICU2              | 0.00485951 | 1.56862053 | 0.283 | 0.15  | 1 CD16neg_NK_UCBMC |
| PHF21A             | 0.00491093 | 0.79065912 | 0.457 | 0.272 | 1 CD16neg_NK_UCBMC |
| TASOR              | 0.00495333 | 0.72551744 | 0.326 | 0.17  | 1 CD16neg_NK_UCBMC |
| LUC7L              | 0.00496628 | 1.3362222  | 0.261 | 0.129 | 1 CD16neg_NK_UCBMC |
| FOCAD              | 0.00501518 | 0.83419137 | 0.283 | 0.136 | 1 CD16neg_NK_UCBMC |
| EIF3D              | 0.00511074 | 0.73621878 | 0.348 | 0.186 | 1 CD16neg_NK_UCBMC |
| HIP1               | 0.00514049 | 1.10443707 | 0.326 | 0.172 | 1 CD16neg_NK_UCBMC |
| GRK2               | 0.0051752  | 0.5101652  | 0.283 | 0.133 | 1 CD16neg_NK_UCBMC |
| CD96               | 0.00519946 | 0.91604975 | 0.478 | 0.305 | 1 CD16neg_NK_UCBMC |
| STAR               | 0.00522565 | 0.70042201 | 0.304 | 0.153 | 1 CD16neg_NK_UCBMC |
| ELK3               | 0.00524838 | 0.45548961 | 0.522 | 0.301 | 1 CD16neg_NK_UCBMC |
| RPS3               | 0.00528137 | 0.37722812 | 0.957 | 0.873 | 1 CD16neg_NK_UCBMC |
| TSC22D1            | 0.00528309 | 0.92993232 | 0.261 | 0.124 | 1 CD16neg_NK_UCBMC |
| RNF149             | 0.00530925 | 1.20241156 | 0.326 | 0.184 | 1 CD16neg_NK_UCBMC |
| TBC1D23            | 0.00548251 | 1.16838172 | 0.261 | 0.128 | 1 CD16neg_NK_UCBMC |
| HOOK3              | 0.00554636 | 0.68352182 | 0.5   | 0.307 | 1 CD16neg_NK_UCBMC |
| ENSMMUG00000055114 | 0.00561877 | 0.61339076 | 0.304 | 0.149 | 1 CD16neg_NK_UCBMC |
| FBXL20             | 0.00564462 | 0.90241584 | 0.304 | 0.159 | 1 CD16neg_NK_UCBMC |
| AKAP13             | 0.00572918 | 0.46490716 | 0.783 | 0.544 | 1 CD16neg_NK_UCBMC |
| EXT1               | 0.00573279 | 0.94213156 | 0.283 | 0.14  | 1 CD16neg_NK_UCBMC |
| CSGALNACT2         | 0.00580798 | 0.55793484 | 0.391 | 0.215 | 1 CD16neg_NK_UCBMC |
| UXS1               | 0.00582506 | 1.23363889 | 0.413 | 0.255 | 1 CD16neg_NK_UCBMC |
| OGDH               | 0.0058259  | 0.70367651 | 0.261 | 0.122 | 1 CD16neg_NK_UCBMC |
| CEBPZ              | 0.0058408  | 0.43568719 | 0.457 | 0.253 | 1 CD16neg_NK_UCBMC |
| C20H16orf72        | 0.00594065 | 0.91512437 | 0.304 | 0.16  | 1 CD16neg_NK_UCBMC |
| XPR1               | 0.0059753  | 1.30025237 | 0.283 | 0.149 | 1 CD16neg_NK_UCBMC |

|                    |            |            |       |       |                    |
|--------------------|------------|------------|-------|-------|--------------------|
| VPS36              | 0.00600702 | 0.66034107 | 0.283 | 0.136 | 1 CD16neg_NK_UCBMC |
| DENND1B            | 0.00609524 | 0.6590846  | 0.326 | 0.166 | 1 CD16neg_NK_UCBMC |
| RAB3GAP2           | 0.00613542 | 0.98727928 | 0.304 | 0.158 | 1 CD16neg_NK_UCBMC |
| ZNF506             | 0.00614873 | 0.83903154 | 0.283 | 0.14  | 1 CD16neg_NK_UCBMC |
| CCDC12             | 0.0062157  | 0.56154078 | 0.457 | 0.269 | 1 CD16neg_NK_UCBMC |
| WSB1               | 0.00631224 | 0.31907029 | 0.565 | 0.33  | 1 CD16neg_NK_UCBMC |
| TM2D1              | 0.00639881 | 0.77486232 | 0.304 | 0.154 | 1 CD16neg_NK_UCBMC |
| STRN3              | 0.00647297 | 1.13534408 | 0.261 | 0.132 | 1 CD16neg_NK_UCBMC |
| KDM3B              | 0.00655417 | 1.24922954 | 0.283 | 0.143 | 1 CD16neg_NK_UCBMC |
| PHF11              | 0.00655702 | 0.58848729 | 0.348 | 0.181 | 1 CD16neg_NK_UCBMC |
| TRAF3              | 0.00656557 | 1.09807837 | 0.283 | 0.142 | 1 CD16neg_NK_UCBMC |
| PTPMT1             | 0.00656799 | 0.69466228 | 0.283 | 0.137 | 1 CD16neg_NK_UCBMC |
| ENSMMUG00000029026 | 0.00666419 | 0.45217827 | 0.522 | 0.304 | 1 CD16neg_NK_UCBMC |
| ESCO1              | 0.00667879 | 1.04526537 | 0.304 | 0.162 | 1 CD16neg_NK_UCBMC |
| ENSMMUG00000032231 | 0.00669375 | 0.52378534 | 0.283 | 0.136 | 1 CD16neg_NK_UCBMC |
| EIF2B3             | 0.00670575 | 1.26525781 | 0.283 | 0.145 | 1 CD16neg_NK_UCBMC |
| SYK                | 0.00680408 | 0.31534172 | 0.478 | 0.262 | 1 CD16neg_NK_UCBMC |
| SYTL2              | 0.0069111  | 0.68026513 | 0.261 | 0.122 | 1 CD16neg_NK_UCBMC |
| BABAM2             | 0.00696016 | 0.89203598 | 0.435 | 0.262 | 1 CD16neg_NK_UCBMC |
| SUPT5H             | 0.00700941 | 0.73787251 | 0.283 | 0.141 | 1 CD16neg_NK_UCBMC |
| STAU1              | 0.00709689 | 1.07775506 | 0.326 | 0.171 | 1 CD16neg_NK_UCBMC |
| RPAP2              | 0.00713494 | 0.6027216  | 0.261 | 0.123 | 1 CD16neg_NK_UCBMC |
| SIN3A              | 0.00715722 | 0.74173586 | 0.304 | 0.155 | 1 CD16neg_NK_UCBMC |
| RAB5A              | 0.00716767 | 0.6354798  | 0.37  | 0.203 | 1 CD16neg_NK_UCBMC |
| ZNF410             | 0.00732125 | 1.02097438 | 0.283 | 0.146 | 1 CD16neg_NK_UCBMC |
| RNF213             | 0.0073786  | 0.53031489 | 0.5   | 0.302 | 1 CD16neg_NK_UCBMC |
| IVNS1ABP           | 0.00741354 | 0.61179708 | 0.391 | 0.224 | 1 CD16neg_NK_UCBMC |
| TERF2IP            | 0.0074301  | 1.20230591 | 0.283 | 0.147 | 1 CD16neg_NK_UCBMC |
| BZW2               | 0.00744611 | 0.87338381 | 0.283 | 0.141 | 1 CD16neg_NK_UCBMC |
| DHX36              | 0.00752195 | 0.45705255 | 0.435 | 0.243 | 1 CD16neg_NK_UCBMC |
| MAP4K4             | 0.00754268 | 0.70285723 | 0.391 | 0.233 | 1 CD16neg_NK_UCBMC |
| COPB1              | 0.00758827 | 0.69427877 | 0.261 | 0.124 | 1 CD16neg_NK_UCBMC |
| RPL23              | 0.00758915 | 0.31204542 | 1     | 0.844 | 1 CD16neg_NK_UCBMC |

|                   |            |            |       |       |                    |
|-------------------|------------|------------|-------|-------|--------------------|
| KDM2A             | 0.00761079 | 0.50201775 | 0.522 | 0.31  | 1 CD16neg_NK_UCBMC |
| COMMD10           | 0.00771559 | 0.66538386 | 0.37  | 0.205 | 1 CD16neg_NK_UCBMC |
| TASP1             | 0.00774517 | 0.92493367 | 0.304 | 0.158 | 1 CD16neg_NK_UCBMC |
| RPL26             | 0.00775548 | 0.40677271 | 0.935 | 0.731 | 1 CD16neg_NK_UCBMC |
| RASGRP1           | 0.00776379 | 1.07359388 | 0.283 | 0.145 | 1 CD16neg_NK_UCBMC |
| SMC1A             | 0.00794163 | 0.90447501 | 0.261 | 0.129 | 1 CD16neg_NK_UCBMC |
| XRCC5             | 0.00823114 | 0.50157375 | 0.5   | 0.301 | 1 CD16neg_NK_UCBMC |
| OPTN              | 0.0083232  | 0.87434304 | 0.391 | 0.236 | 1 CD16neg_NK_UCBMC |
| GMCL1             | 0.00835896 | 0.73842378 | 0.348 | 0.192 | 1 CD16neg_NK_UCBMC |
| MANBA             | 0.00839118 | 0.34540458 | 0.63  | 0.404 | 1 CD16neg_NK_UCBMC |
| YTHDF3            | 0.00854088 | 1.10428546 | 0.304 | 0.166 | 1 CD16neg_NK_UCBMC |
| GPSM3             | 0.0085751  | 0.17105734 | 0.63  | 0.37  | 1 CD16neg_NK_UCBMC |
| ENSMUG00000008346 | 0.00864001 | 0.77058264 | 0.348 | 0.19  | 1 CD16neg_NK_UCBMC |
| ENSMUG00000012525 | 0.00877034 | 0.39540258 | 0.5   | 0.294 | 1 CD16neg_NK_UCBMC |
| BRD4              | 0.0088539  | 0.97756318 | 0.304 | 0.169 | 1 CD16neg_NK_UCBMC |
| ARGLU1            | 0.00887486 | 0.38938734 | 0.543 | 0.328 | 1 CD16neg_NK_UCBMC |
| COMMD7            | 0.00890569 | 0.59826666 | 0.413 | 0.239 | 1 CD16neg_NK_UCBMC |
| PFDN4             | 0.00902486 | 0.62712077 | 0.283 | 0.141 | 1 CD16neg_NK_UCBMC |
| SH3GLB1           | 0.00902937 | 0.70206969 | 0.283 | 0.142 | 1 CD16neg_NK_UCBMC |
| MAPK1             | 0.00905616 | 0.66259669 | 0.457 | 0.277 | 1 CD16neg_NK_UCBMC |
| KIF13B            | 0.0092412  | 0.80193343 | 0.261 | 0.129 | 1 CD16neg_NK_UCBMC |
| WAPL              | 0.00925623 | 1.03447495 | 0.304 | 0.169 | 1 CD16neg_NK_UCBMC |
| IKZF2             | 0.00928857 | 0.91360018 | 0.391 | 0.235 | 1 CD16neg_NK_UCBMC |
| EIF3H             | 0.00929012 | 0.56617109 | 0.63  | 0.446 | 1 CD16neg_NK_UCBMC |
| MECP2             | 0.00940684 | 0.56024548 | 0.37  | 0.201 | 1 CD16neg_NK_UCBMC |
| CSPP1             | 0.00954659 | 1.14625009 | 0.261 | 0.136 | 1 CD16neg_NK_UCBMC |
| PDLIM2            | 0.00966942 | 0.25808073 | 0.435 | 0.238 | 1 CD16neg_NK_UCBMC |
| TOP1              | 0.00967495 | 0.50576401 | 0.5   | 0.298 | 1 CD16neg_NK_UCBMC |
| RUNX3             | 0.00968124 | 0.33680359 | 0.457 | 0.26  | 1 CD16neg_NK_UCBMC |
| FAM204A           | 0.0098634  | 0.66303661 | 0.283 | 0.143 | 1 CD16neg_NK_UCBMC |
| SRPK2             | 0.00995046 | 0.7311289  | 0.37  | 0.207 | 1 CD16neg_NK_UCBMC |
| SGMS1             | 0.01005267 | 0.5948218  | 0.326 | 0.174 | 1 CD16neg_NK_UCBMC |
| PPP2R5C           | 0.01015877 | 0.5395873  | 0.674 | 0.437 | 1 CD16neg_NK_UCBMC |

|                    |            |            |       |       |                    |
|--------------------|------------|------------|-------|-------|--------------------|
| PIK3CG             | 0.01022199 | 0.65479534 | 0.261 | 0.129 | 1 CD16neg_NK_UCBMC |
| HNRNPUL1           | 0.01025153 | 0.75277331 | 0.37  | 0.209 | 1 CD16neg_NK_UCBMC |
| ENSMMUG00000014862 | 0.01034765 | 0.53084533 | 0.5   | 0.31  | 1 CD16neg_NK_UCBMC |
| NSMCE2             | 0.01040542 | 0.80816503 | 0.326 | 0.185 | 1 CD16neg_NK_UCBMC |
| ARL5A              | 0.01050239 | 0.65433079 | 0.261 | 0.129 | 1 CD16neg_NK_UCBMC |
| NDUFA10            | 0.01053479 | 0.44647001 | 0.261 | 0.126 | 1 CD16neg_NK_UCBMC |
| MGMT               | 0.01069438 | 0.53776187 | 0.413 | 0.236 | 1 CD16neg_NK_UCBMC |
| HECTD4             | 0.01093054 | 0.95207796 | 0.304 | 0.166 | 1 CD16neg_NK_UCBMC |
| TTC39C             | 0.01099559 | 0.61901092 | 0.37  | 0.213 | 1 CD16neg_NK_UCBMC |
| SNW1               | 0.01111984 | 0.5448586  | 0.37  | 0.208 | 1 CD16neg_NK_UCBMC |
| PPP1CA             | 0.01123922 | 0.69533785 | 0.413 | 0.245 | 1 CD16neg_NK_UCBMC |
| TBL1XR1            | 0.01127492 | 0.58609341 | 0.457 | 0.282 | 1 CD16neg_NK_UCBMC |
| RNF38              | 0.01128939 | 1.01567105 | 0.348 | 0.205 | 1 CD16neg_NK_UCBMC |
| ENSMMUG00000056012 | 0.01132894 | 0.23878318 | 0.391 | 0.216 | 1 CD16neg_NK_UCBMC |
| WBP1L              | 0.01145351 | 0.53737842 | 0.261 | 0.131 | 1 CD16neg_NK_UCBMC |
| SAR1A              | 0.01146439 | 0.63724061 | 0.348 | 0.196 | 1 CD16neg_NK_UCBMC |
| YY1                | 0.0115767  | 0.59843261 | 0.261 | 0.129 | 1 CD16neg_NK_UCBMC |
| KTN1               | 0.01172168 | 0.62645529 | 0.304 | 0.159 | 1 CD16neg_NK_UCBMC |
| PIP5K1A            | 0.0117329  | 1.09750547 | 0.261 | 0.135 | 1 CD16neg_NK_UCBMC |
| HSPH1              | 0.01193439 | 0.20792872 | 0.37  | 0.21  | 1 CD16neg_NK_UCBMC |
| MAN2A1             | 0.01208855 | 0.91224366 | 0.326 | 0.182 | 1 CD16neg_NK_UCBMC |
| GTF2I              | 0.01210408 | 0.67913602 | 0.391 | 0.236 | 1 CD16neg_NK_UCBMC |
| ZBTB20             | 0.01214341 | 0.74945168 | 0.457 | 0.287 | 1 CD16neg_NK_UCBMC |
| SOD1               | 0.01215174 | 0.3174302  | 0.413 | 0.232 | 1 CD16neg_NK_UCBMC |
| GLS                | 0.01240534 | 0.61994231 | 0.326 | 0.182 | 1 CD16neg_NK_UCBMC |
| ENSMMUG00000021425 | 0.01247097 | 0.65728847 | 0.304 | 0.165 | 1 CD16neg_NK_UCBMC |
| POLR2G             | 0.01257941 | 0.30901296 | 0.283 | 0.141 | 1 CD16neg_NK_UCBMC |
| ENSMMUG00000019238 | 0.01260841 | 0.54777891 | 0.326 | 0.178 | 1 CD16neg_NK_UCBMC |
| PSMA5              | 0.01268924 | 0.26550323 | 0.543 | 0.33  | 1 CD16neg_NK_UCBMC |
| STK17B             | 0.01292047 | 0.3648866  | 0.761 | 0.555 | 1 CD16neg_NK_UCBMC |
| GIT2               | 0.01300911 | 0.85218261 | 0.304 | 0.165 | 1 CD16neg_NK_UCBMC |
| DMTF1              | 0.01302415 | 0.98491943 | 0.261 | 0.138 | 1 CD16neg_NK_UCBMC |
| NCOA1              | 0.01305672 | 0.74879394 | 0.304 | 0.167 | 1 CD16neg_NK_UCBMC |



|                    |            |            |       |       |                    |
|--------------------|------------|------------|-------|-------|--------------------|
| RGS9               | 0.01310373 | 0.34708276 | 0.87  | 0.588 | 1 CD16neg_NK_UCBMC |
| NONO               | 0.01361171 | 0.45650929 | 0.391 | 0.233 | 1 CD16neg_NK_UCBMC |
| SNRNP200           | 0.01364124 | 0.55614251 | 0.283 | 0.147 | 1 CD16neg_NK_UCBMC |
| LAMTOR1            | 0.01373775 | 0.29335334 | 0.37  | 0.202 | 1 CD16neg_NK_UCBMC |
| CRY1               | 0.01378316 | 0.73587564 | 0.326 | 0.191 | 1 CD16neg_NK_UCBMC |
| RBPJ               | 0.01380153 | 0.86337197 | 0.304 | 0.17  | 1 CD16neg_NK_UCBMC |
| M6PR               | 0.01381333 | 0.38203372 | 0.37  | 0.204 | 1 CD16neg_NK_UCBMC |
| PRKCQ              | 0.01382897 | 0.41555726 | 0.478 | 0.287 | 1 CD16neg_NK_UCBMC |
| SREK1IP1           | 0.01408371 | 0.50459742 | 0.348 | 0.192 | 1 CD16neg_NK_UCBMC |
| DBF4               | 0.0141102  | 0.74391394 | 0.261 | 0.133 | 1 CD16neg_NK_UCBMC |
| TAX1BP1            | 0.01414649 | 0.46585579 | 0.522 | 0.334 | 1 CD16neg_NK_UCBMC |
| NFKBIB             | 0.01436239 | 0.53609646 | 0.478 | 0.302 | 1 CD16neg_NK_UCBMC |
| PER1               | 0.01463401 | 0.57312078 | 0.391 | 0.229 | 1 CD16neg_NK_UCBMC |
| GATAD2A            | 0.0147213  | 0.950669   | 0.304 | 0.167 | 1 CD16neg_NK_UCBMC |
| KLHL23             | 0.01477932 | 0.27720884 | 0.652 | 0.43  | 1 CD16neg_NK_UCBMC |
| ENSMMUG00000012537 | 0.01501491 | 0.69725231 | 0.326 | 0.185 | 1 CD16neg_NK_UCBMC |
| SERPINB9           | 0.01511106 | 0.50939762 | 0.326 | 0.177 | 1 CD16neg_NK_UCBMC |
| RFC1               | 0.01511127 | 0.74167424 | 0.326 | 0.188 | 1 CD16neg_NK_UCBMC |
| SETD5              | 0.01556475 | 0.53684207 | 0.391 | 0.23  | 1 CD16neg_NK_UCBMC |
| AOPEP              | 0.01597429 | 1.01970831 | 0.283 | 0.158 | 1 CD16neg_NK_UCBMC |
| STK26              | 0.01602881 | 0.6583206  | 0.326 | 0.184 | 1 CD16neg_NK_UCBMC |
| TFDP2              | 0.01605146 | 0.68813974 | 0.326 | 0.185 | 1 CD16neg_NK_UCBMC |
| TUT7               | 0.0161027  | 1.13952377 | 0.348 | 0.21  | 1 CD16neg_NK_UCBMC |
| CCT6A              | 0.01641451 | 0.30631792 | 0.435 | 0.256 | 1 CD16neg_NK_UCBMC |
| ARID1A             | 0.01646661 | 0.50870133 | 0.348 | 0.204 | 1 CD16neg_NK_UCBMC |
| SUSD6              | 0.01655144 | 0.63281561 | 0.283 | 0.151 | 1 CD16neg_NK_UCBMC |
| PTPN4              | 0.01685874 | 0.49888342 | 0.413 | 0.25  | 1 CD16neg_NK_UCBMC |
| RALGAPB            | 0.0169029  | 0.80802845 | 0.261 | 0.137 | 1 CD16neg_NK_UCBMC |
| TAF1               | 0.01702181 | 0.61126238 | 0.261 | 0.135 | 1 CD16neg_NK_UCBMC |
| THRAP3             | 0.01707033 | 0.30309484 | 0.543 | 0.333 | 1 CD16neg_NK_UCBMC |
| TRIM72             | 0.01710551 | 0.48945398 | 0.565 | 0.371 | 1 CD16neg_NK_UCBMC |
| USP25              | 0.01718793 | 0.71028774 | 0.283 | 0.151 | 1 CD16neg_NK_UCBMC |
| STT3B              | 0.01760878 | 0.7252821  | 0.304 | 0.172 | 1 CD16neg_NK_UCBMC |

|                     |            |            |       |       |                    |
|---------------------|------------|------------|-------|-------|--------------------|
| TRAPPC10            | 0.01762282 | 0.34840041 | 0.37  | 0.206 | 1 CD16neg_NK_UCBMC |
| ARHGAP30            | 0.01762673 | 0.48086648 | 0.391 | 0.236 | 1 CD16neg_NK_UCBMC |
| MPZL1               | 0.01786068 | 1.07169613 | 0.326 | 0.2   | 1 CD16neg_NK_UCBMC |
| WWP1                | 0.01795922 | 0.98578492 | 0.261 | 0.144 | 1 CD16neg_NK_UCBMC |
| MON2                | 0.01800573 | 0.90034549 | 0.261 | 0.139 | 1 CD16neg_NK_UCBMC |
| REV3L               | 0.0180567  | 0.561911   | 0.326 | 0.187 | 1 CD16neg_NK_UCBMC |
| MED28               | 0.01827157 | 0.58723382 | 0.283 | 0.153 | 1 CD16neg_NK_UCBMC |
| RGS3                | 0.01831892 | 0.74102074 | 0.348 | 0.207 | 1 CD16neg_NK_UCBMC |
| DIRAS2              | 0.0184592  | 0.15513902 | 0.348 | 0.187 | 1 CD16neg_NK_UCBMC |
| PPP4R3A             | 0.01846811 | 0.62846396 | 0.261 | 0.136 | 1 CD16neg_NK_UCBMC |
| ATP2A2              | 0.01848406 | 1.29045927 | 0.261 | 0.143 | 1 CD16neg_NK_UCBMC |
| ARHGAP9             | 0.01859167 | 0.31754373 | 0.457 | 0.274 | 1 CD16neg_NK_UCBMC |
| GTF2B               | 0.01867372 | 0.22863444 | 0.587 | 0.367 | 1 CD16neg_NK_UCBMC |
| BCCIP               | 0.01872298 | 0.78836586 | 0.283 | 0.154 | 1 CD16neg_NK_UCBMC |
| EIF2A               | 0.01881847 | 0.40377409 | 0.283 | 0.149 | 1 CD16neg_NK_UCBMC |
| SND1                | 0.01912732 | 0.38217201 | 0.348 | 0.195 | 1 CD16neg_NK_UCBMC |
| UBE2V2              | 0.01947293 | 0.69143898 | 0.261 | 0.139 | 1 CD16neg_NK_UCBMC |
| ZMYND8              | 0.01948136 | 0.61956048 | 0.283 | 0.154 | 1 CD16neg_NK_UCBMC |
| UBE2F               | 0.01960918 | 0.90245799 | 0.283 | 0.158 | 1 CD16neg_NK_UCBMC |
| ENSMMUG00000006608  | 0.01963752 | 0.251081   | 0.543 | 0.344 | 1 CD16neg_NK_UCBMC |
| NFAT5               | 0.0201957  | 1.0657619  | 0.348 | 0.217 | 1 CD16neg_NK_UCBMC |
| PELI1               | 0.02046694 | 0.61719775 | 0.326 | 0.186 | 1 CD16neg_NK_UCBMC |
| BTBD9               | 0.02051898 | 0.79849932 | 0.304 | 0.177 | 1 CD16neg_NK_UCBMC |
| DNAJC7              | 0.02059258 | 0.99972964 | 0.261 | 0.144 | 1 CD16neg_NK_UCBMC |
| USP16               | 0.02062529 | 0.72173445 | 0.304 | 0.176 | 1 CD16neg_NK_UCBMC |
| ZC3HAV1             | 0.02074765 | 0.10533629 | 0.522 | 0.307 | 1 CD16neg_NK_UCBMC |
| PLEKHG1             | 0.02076817 | 0.43775702 | 0.326 | 0.184 | 1 CD16neg_NK_UCBMC |
| COPB2               | 0.02080171 | 0.74274953 | 0.283 | 0.153 | 1 CD16neg_NK_UCBMC |
| NEDD9               | 0.02085031 | 0.39040007 | 0.5   | 0.318 | 1 CD16neg_NK_UCBMC |
| ATRX                | 0.02130312 | 0.32319898 | 0.5   | 0.308 | 1 CD16neg_NK_UCBMC |
| AP1S1               | 0.02144542 | 0.58187671 | 0.304 | 0.169 | 1 CD16neg_NK_UCBMC |
| ATXN7L3B            | 0.02146568 | 0.69901437 | 0.261 | 0.142 | 1 CD16neg_NK_UCBMC |
| ENSMMUG000000057449 | 0.02164338 | 0.13067148 | 0.391 | 0.222 | 1 CD16neg_NK_UCBMC |

|                    |            |            |       |       |                    |
|--------------------|------------|------------|-------|-------|--------------------|
| ETNK1              | 0.02204987 | 0.57995433 | 0.304 | 0.173 | 1 CD16neg_NK_UCBMC |
| ARAP2              | 0.02218725 | 0.16680453 | 0.587 | 0.364 | 1 CD16neg_NK_UCBMC |
| ANKIB1             | 0.02283395 | 0.69209933 | 0.37  | 0.229 | 1 CD16neg_NK_UCBMC |
| SOS2               | 0.02283581 | 0.86808858 | 0.283 | 0.161 | 1 CD16neg_NK_UCBMC |
| KHDRBS1            | 0.02284708 | 0.72509819 | 0.283 | 0.159 | 1 CD16neg_NK_UCBMC |
| AP2B1              | 0.02296351 | 0.49160942 | 0.326 | 0.19  | 1 CD16neg_NK_UCBMC |
| GALNT7             | 0.02357982 | 0.58309153 | 0.261 | 0.141 | 1 CD16neg_NK_UCBMC |
| ZC3H11A            | 0.02412331 | 0.40040728 | 0.348 | 0.203 | 1 CD16neg_NK_UCBMC |
| JAML               | 0.02414097 | 0.40669381 | 0.391 | 0.233 | 1 CD16neg_NK_UCBMC |
| CYFIP2             | 0.02444181 | 0.15926709 | 0.478 | 0.291 | 1 CD16neg_NK_UCBMC |
| USP10              | 0.02459531 | 0.6734443  | 0.304 | 0.171 | 1 CD16neg_NK_UCBMC |
| TMED10             | 0.02459993 | 0.43957598 | 0.435 | 0.271 | 1 CD16neg_NK_UCBMC |
| RALY               | 0.02477032 | 0.23786246 | 0.37  | 0.213 | 1 CD16neg_NK_UCBMC |
| RILPL2             | 0.02494192 | 0.47526629 | 0.304 | 0.173 | 1 CD16neg_NK_UCBMC |
| UBE3A              | 0.02548268 | 0.57126547 | 0.283 | 0.158 | 1 CD16neg_NK_UCBMC |
| COX4I1             | 0.02554068 | 0.26702602 | 0.935 | 0.72  | 1 CD16neg_NK_UCBMC |
| SCAPER             | 0.0256726  | 0.79099999 | 0.391 | 0.263 | 1 CD16neg_NK_UCBMC |
| SLC25A4            | 0.02570632 | 0.76350304 | 0.261 | 0.143 | 1 CD16neg_NK_UCBMC |
| PSIP1              | 0.02662155 | 0.50103549 | 0.283 | 0.158 | 1 CD16neg_NK_UCBMC |
| MLLT10             | 0.02670006 | 1.33533662 | 0.283 | 0.169 | 1 CD16neg_NK_UCBMC |
| SHOC2              | 0.02673604 | 0.55402132 | 0.37  | 0.228 | 1 CD16neg_NK_UCBMC |
| EHMT1              | 0.02703736 | 1.11646807 | 0.261 | 0.152 | 1 CD16neg_NK_UCBMC |
| ENSMMUG00000015274 | 0.02721224 | 0.40016551 | 0.348 | 0.206 | 1 CD16neg_NK_UCBMC |
| EXOC4              | 0.02743478 | 0.48630794 | 0.413 | 0.251 | 1 CD16neg_NK_UCBMC |
| SMARCA2            | 0.02768094 | 0.47737522 | 0.391 | 0.242 | 1 CD16neg_NK_UCBMC |
| TMX4               | 0.02777714 | 0.49184529 | 0.326 | 0.191 | 1 CD16neg_NK_UCBMC |
| LAPTM5             | 0.02783345 | 0.59506798 | 0.391 | 0.249 | 1 CD16neg_NK_UCBMC |
| RACK1              | 0.02805023 | 0.30499871 | 1     | 0.925 | 1 CD16neg_NK_UCBMC |
| GLRX3              | 0.02807282 | 0.47778981 | 0.326 | 0.193 | 1 CD16neg_NK_UCBMC |
| RUNX1              | 0.02812373 | 0.2896664  | 0.587 | 0.371 | 1 CD16neg_NK_UCBMC |
| CHORDC1            | 0.02820527 | 0.18840422 | 0.37  | 0.216 | 1 CD16neg_NK_UCBMC |
| IL12RB2            | 0.02820977 | 0.47772267 | 0.674 | 0.451 | 1 CD16neg_NK_UCBMC |
| STAG2              | 0.0282133  | 0.24789055 | 0.543 | 0.34  | 1 CD16neg_NK_UCBMC |

|                    |            |            |       |       |                    |
|--------------------|------------|------------|-------|-------|--------------------|
| ENSMMUG00000060229 | 0.02889235 | 0.5096229  | 0.304 | 0.176 | 1 CD16neg_NK_UCBMC |
| SYAP1              | 0.02904561 | 0.92317619 | 0.283 | 0.171 | 1 CD16neg_NK_UCBMC |
| ZSWIM6             | 0.02926035 | 0.82816799 | 0.261 | 0.15  | 1 CD16neg_NK_UCBMC |
| TPM3               | 0.02940446 | 0.24015162 | 0.826 | 0.597 | 1 CD16neg_NK_UCBMC |
| BRK1               | 0.02952048 | 0.20682324 | 0.435 | 0.263 | 1 CD16neg_NK_UCBMC |
| HERC1              | 0.02958329 | 0.836543   | 0.37  | 0.236 | 1 CD16neg_NK_UCBMC |
| LNPEP              | 0.02964747 | 0.57202458 | 0.522 | 0.365 | 1 CD16neg_NK_UCBMC |
| ATF4               | 0.03015154 | 0.44342043 | 0.457 | 0.288 | 1 CD16neg_NK_UCBMC |
| SCP2               | 0.03049851 | 0.23969207 | 0.478 | 0.302 | 1 CD16neg_NK_UCBMC |
| BTN2A2             | 0.03071637 | 0.62585932 | 0.435 | 0.291 | 1 CD16neg_NK_UCBMC |
| CCDC88C            | 0.03073472 | 0.82519779 | 0.304 | 0.188 | 1 CD16neg_NK_UCBMC |
| METTL9             | 0.03116006 | 0.54807332 | 0.326 | 0.197 | 1 CD16neg_NK_UCBMC |
| NRDC               | 0.03125557 | 0.51271246 | 0.283 | 0.16  | 1 CD16neg_NK_UCBMC |
| PRKDC              | 0.03125903 | 0.27063575 | 0.391 | 0.234 | 1 CD16neg_NK_UCBMC |
| BIRC2              | 0.03126947 | 0.2330044  | 0.348 | 0.202 | 1 CD16neg_NK_UCBMC |
| TCF25              | 0.03154697 | 0.50280489 | 0.326 | 0.196 | 1 CD16neg_NK_UCBMC |
| WNK1               | 0.03165865 | 0.22820732 | 0.5   | 0.324 | 1 CD16neg_NK_UCBMC |
| LRCH1              | 0.0316595  | 0.76168023 | 0.304 | 0.189 | 1 CD16neg_NK_UCBMC |
| ZC3H13             | 0.03178449 | 0.8569753  | 0.283 | 0.171 | 1 CD16neg_NK_UCBMC |
| TMOD3              | 0.03180202 | 0.61062806 | 0.391 | 0.258 | 1 CD16neg_NK_UCBMC |
| CHIC2              | 0.03237271 | 0.80740494 | 0.283 | 0.166 | 1 CD16neg_NK_UCBMC |
| DYRK1A             | 0.03251594 | 0.75339331 | 0.304 | 0.184 | 1 CD16neg_NK_UCBMC |
| SPECC1L            | 0.03264586 | 0.63180883 | 0.261 | 0.148 | 1 CD16neg_NK_UCBMC |
| LRPPRC             | 0.03310226 | 0.79215825 | 0.261 | 0.149 | 1 CD16neg_NK_UCBMC |
| HSPA5              | 0.03356084 | 0.26940822 | 0.587 | 0.416 | 1 CD16neg_NK_UCBMC |
| ACIN1              | 0.03370351 | 0.68449301 | 0.348 | 0.219 | 1 CD16neg_NK_UCBMC |
| DNAJC3             | 0.03378408 | 0.41640207 | 0.391 | 0.254 | 1 CD16neg_NK_UCBMC |
| ENSMMUG00000038373 | 0.03384938 | 0.26325861 | 0.587 | 0.395 | 1 CD16neg_NK_UCBMC |
| CD8A               | 0.03394481 | 0.59565699 | 0.304 | 0.18  | 1 CD16neg_NK_UCBMC |
| SURF4              | 0.03414886 | 0.46475001 | 0.326 | 0.199 | 1 CD16neg_NK_UCBMC |
| CSNK2B             | 0.03419659 | 0.22097006 | 0.37  | 0.22  | 1 CD16neg_NK_UCBMC |
| CHD6               | 0.03427584 | 0.75498158 | 0.304 | 0.185 | 1 CD16neg_NK_UCBMC |
| B4GALT1            | 0.03509287 | 0.62485308 | 0.283 | 0.166 | 1 CD16neg_NK_UCBMC |

|                    |            |            |       |       |                    |
|--------------------|------------|------------|-------|-------|--------------------|
| HIPK1              | 0.03522731 | 0.56042811 | 0.391 | 0.25  | 1 CD16neg_NK_UCBMC |
| PDIA6              | 0.03528183 | 0.58530674 | 0.326 | 0.195 | 1 CD16neg_NK_UCBMC |
| USP36              | 0.0354783  | 0.371245   | 0.348 | 0.211 | 1 CD16neg_NK_UCBMC |
| ENSMMUG00000047277 | 0.03582327 | 0.57759757 | 0.457 | 0.312 | 1 CD16neg_NK_UCBMC |
| ENSMMUG00000058532 | 0.03595375 | 0.13294126 | 0.391 | 0.238 | 1 CD16neg_NK_UCBMC |
| SRRM2              | 0.03610222 | 0.37288028 | 0.457 | 0.292 | 1 CD16neg_NK_UCBMC |
| MBD5               | 0.03613402 | 0.62424015 | 0.37  | 0.237 | 1 CD16neg_NK_UCBMC |
| USP44              | 0.03615906 | 0.51563842 | 0.283 | 0.166 | 1 CD16neg_NK_UCBMC |
| APEX1              | 0.03635061 | 0.43282004 | 0.261 | 0.145 | 1 CD16neg_NK_UCBMC |
| ATXN1              | 0.03638416 | 0.72154697 | 0.348 | 0.227 | 1 CD16neg_NK_UCBMC |
| MTPN               | 0.03684697 | 0.31719093 | 0.348 | 0.207 | 1 CD16neg_NK_UCBMC |
| PRKCA              | 0.03755062 | 0.32033431 | 0.543 | 0.357 | 1 CD16neg_NK_UCBMC |
| SMARCA5            | 0.03785785 | 0.48380451 | 0.391 | 0.245 | 1 CD16neg_NK_UCBMC |
| HAT1               | 0.0379856  | 0.47839414 | 0.283 | 0.164 | 1 CD16neg_NK_UCBMC |
| ENSMMUG00000061630 | 0.03805357 | 0.60348797 | 0.348 | 0.215 | 1 CD16neg_NK_UCBMC |
| SRSF5              | 0.03827591 | 0.34231503 | 0.87  | 0.665 | 1 CD16neg_NK_UCBMC |
| CAPZA1             | 0.03864973 | 0.35037393 | 0.652 | 0.446 | 1 CD16neg_NK_UCBMC |
| MRPL10             | 0.03874451 | 0.40195742 | 0.457 | 0.301 | 1 CD16neg_NK_UCBMC |
| E2F3               | 0.03899097 | 0.42981746 | 0.283 | 0.161 | 1 CD16neg_NK_UCBMC |
| SSR1               | 0.03915912 | 0.59088259 | 0.283 | 0.169 | 1 CD16neg_NK_UCBMC |
| LPP                | 0.03939758 | 0.64978082 | 0.413 | 0.274 | 1 CD16neg_NK_UCBMC |
| TMEM243            | 0.03989233 | 0.38265053 | 0.522 | 0.35  | 1 CD16neg_NK_UCBMC |
| PPIG               | 0.04061236 | 0.50116202 | 0.413 | 0.27  | 1 CD16neg_NK_UCBMC |
| GNAQ               | 0.04240115 | 0.65305648 | 0.348 | 0.225 | 1 CD16neg_NK_UCBMC |
| HNRNPA0            | 0.04256072 | 0.26829424 | 0.5   | 0.327 | 1 CD16neg_NK_UCBMC |
| AKAP9              | 0.04277852 | 0.51693653 | 0.413 | 0.283 | 1 CD16neg_NK_UCBMC |
| APOBEC3F           | 0.04285421 | 0.2633564  | 0.391 | 0.244 | 1 CD16neg_NK_UCBMC |
| DNAJB14            | 0.04298575 | 0.62281527 | 0.304 | 0.18  | 1 CD16neg_NK_UCBMC |
| CD47               | 0.04345058 | 0.64025945 | 0.37  | 0.241 | 1 CD16neg_NK_UCBMC |
| VCP                | 0.04394655 | 0.44148285 | 0.326 | 0.202 | 1 CD16neg_NK_UCBMC |
| MATR3              | 0.04431732 | 0.24286386 | 0.696 | 0.476 | 1 CD16neg_NK_UCBMC |
| EIF3E              | 0.04459047 | 0.39740431 | 0.674 | 0.509 | 1 CD16neg_NK_UCBMC |
| PDAP1              | 0.04465264 | 0.1763421  | 0.37  | 0.226 | 1 CD16neg_NK_UCBMC |

|                   |            |            |       |       |                    |
|-------------------|------------|------------|-------|-------|--------------------|
| CDC42SE1          | 0.04475554 | 0.25240293 | 0.326 | 0.194 | 1 CD16neg_NK_UCBMC |
| GALNT1            | 0.04480405 | 0.315632   | 0.304 | 0.18  | 1 CD16neg_NK_UCBMC |
| RGCC              | 0.0448776  | 0.61614442 | 0.283 | 0.168 | 1 CD16neg_NK_UCBMC |
| SDF2L1            | 0.04508557 | 0.62778175 | 0.304 | 0.188 | 1 CD16neg_NK_UCBMC |
| ENSMUG00000006293 | 0.04526816 | 0.58904031 | 0.37  | 0.244 | 1 CD16neg_NK_UCBMC |
| HNRNPR            | 0.04531981 | 0.56089271 | 0.391 | 0.259 | 1 CD16neg_NK_UCBMC |
| RPL31             | 0.04543447 | 0.31051894 | 0.609 | 0.409 | 1 CD16neg_NK_UCBMC |
| TRANK1            | 0.04553783 | 0.31720217 | 0.283 | 0.162 | 1 CD16neg_NK_UCBMC |
| ENSMUG00000003412 | 0.04614498 | 0.25605146 | 1     | 0.96  | 1 CD16neg_NK_UCBMC |
| MPHOSPH8          | 0.04618071 | 0.56577144 | 0.348 | 0.227 | 1 CD16neg_NK_UCBMC |
| CLNS1A            | 0.04629137 | 0.2464786  | 0.304 | 0.178 | 1 CD16neg_NK_UCBMC |
| ADAR              | 0.04661025 | 0.4000328  | 0.304 | 0.183 | 1 CD16neg_NK_UCBMC |
| CCNH              | 0.04667643 | 0.25498632 | 0.304 | 0.177 | 1 CD16neg_NK_UCBMC |
| EIF3L             | 0.04670558 | 0.23060337 | 0.522 | 0.349 | 1 CD16neg_NK_UCBMC |
| SNRK              | 0.04675879 | 0.60743612 | 0.348 | 0.226 | 1 CD16neg_NK_UCBMC |
| ADAM10            | 0.04712601 | 0.5274305  | 0.326 | 0.201 | 1 CD16neg_NK_UCBMC |
| ARHGEF6           | 0.04720763 | 0.50274271 | 0.326 | 0.201 | 1 CD16neg_NK_UCBMC |
| RBM17             | 0.04804436 | 0.70535753 | 0.261 | 0.152 | 1 CD16neg_NK_UCBMC |
| FAM120A           | 0.04878856 | 0.50641659 | 0.283 | 0.172 | 1 CD16neg_NK_UCBMC |
| ZNF207            | 0.04896879 | 0.35758823 | 0.413 | 0.274 | 1 CD16neg_NK_UCBMC |
| NSRP1             | 0.04959523 | 0.49301987 | 0.348 | 0.22  | 1 CD16neg_NK_UCBMC |
| PDE7A             | 0.04976824 | 0.27189928 | 0.391 | 0.247 | 1 CD16neg_NK_UCBMC |
| SLC35B1           | 0.0501868  | 0.48520737 | 0.261 | 0.153 | 1 CD16neg_NK_UCBMC |
| PLGRKT            | 0.05029738 | 0.41968241 | 0.283 | 0.169 | 1 CD16neg_NK_UCBMC |
| RBBP6             | 0.0506808  | 0.64920823 | 0.261 | 0.154 | 1 CD16neg_NK_UCBMC |
| ITGB1             | 0.05095883 | 0.20285145 | 0.478 | 0.306 | 1 CD16neg_NK_UCBMC |
| LRRFIP1           | 0.0512196  | 0.59217827 | 0.391 | 0.27  | 1 CD16neg_NK_UCBMC |
| POC1B             | 0.05180764 | 0.24994629 | 0.37  | 0.232 | 1 CD16neg_NK_UCBMC |
| TBC1D25           | 0.05219459 | 0.29326783 | 0.304 | 0.182 | 1 CD16neg_NK_UCBMC |
| VMP1              | 0.05252887 | 0.82036553 | 0.283 | 0.18  | 1 CD16neg_NK_UCBMC |
| ATP8A1            | 0.05332128 | 0.25262218 | 0.478 | 0.314 | 1 CD16neg_NK_UCBMC |
| RIN3              | 0.05369255 | 0.48544607 | 0.435 | 0.293 | 1 CD16neg_NK_UCBMC |
| CYRIB             | 0.05380641 | 0.33742731 | 0.783 | 0.533 | 1 CD16neg_NK_UCBMC |

|                    |            |            |       |       |                    |
|--------------------|------------|------------|-------|-------|--------------------|
| ZMYND11            | 0.05409582 | 0.42932259 | 0.326 | 0.205 | 1 CD16neg_NK_UCBMC |
| KDM5A              | 0.0545526  | 0.69949724 | 0.304 | 0.199 | 1 CD16neg_NK_UCBMC |
| ENSMMUG00000016959 | 0.05483141 | 0.30381837 | 0.326 | 0.198 | 1 CD16neg_NK_UCBMC |
| GUK1               | 0.05529056 | 0.21576056 | 0.348 | 0.214 | 1 CD16neg_NK_UCBMC |
| PSMD14             | 0.05550033 | 0.36832605 | 0.348 | 0.223 | 1 CD16neg_NK_UCBMC |
| ZNF148             | 0.05560069 | 0.4045529  | 0.413 | 0.275 | 1 CD16neg_NK_UCBMC |
| DDX39B             | 0.05587075 | 0.67852642 | 0.283 | 0.177 | 1 CD16neg_NK_UCBMC |
| RBM33              | 0.05652002 | 0.3289856  | 0.304 | 0.186 | 1 CD16neg_NK_UCBMC |
| ARFGAP3            | 0.0567568  | 0.37004371 | 0.326 | 0.207 | 1 CD16neg_NK_UCBMC |
| ZCCHC7             | 0.05678897 | 0.30423504 | 0.457 | 0.298 | 1 CD16neg_NK_UCBMC |
| QARS1              | 0.05706153 | 0.26502893 | 0.261 | 0.15  | 1 CD16neg_NK_UCBMC |
| FYB1               | 0.05792176 | 0.72645911 | 0.457 | 0.343 | 1 CD16neg_NK_UCBMC |
| RAPGEF1            | 0.05802719 | 1.05147539 | 0.283 | 0.191 | 1 CD16neg_NK_UCBMC |
| CNOT6L             | 0.05808477 | 0.42288168 | 0.543 | 0.393 | 1 CD16neg_NK_UCBMC |
| RPS4Y2             | 0.0581898  | 0.31872396 | 0.283 | 0.166 | 1 CD16neg_NK_UCBMC |
| TUBA1A             | 0.0599099  | 0.33248425 | 0.652 | 0.46  | 1 CD16neg_NK_UCBMC |
| DDX3X              | 0.05994501 | 0.21878987 | 0.652 | 0.455 | 1 CD16neg_NK_UCBMC |
| ACTR3              | 0.06029397 | 0.18102717 | 0.652 | 0.45  | 1 CD16neg_NK_UCBMC |
| RNF145             | 0.06131815 | 0.68409441 | 0.304 | 0.196 | 1 CD16neg_NK_UCBMC |
| RAB10              | 0.06174678 | 0.43181179 | 0.304 | 0.189 | 1 CD16neg_NK_UCBMC |
| PSMA7              | 0.0619224  | 0.38057711 | 0.652 | 0.474 | 1 CD16neg_NK_UCBMC |
| CHD1               | 0.06269513 | 0.51206639 | 0.37  | 0.247 | 1 CD16neg_NK_UCBMC |
| XPO1               | 0.06377335 | 0.49055564 | 0.261 | 0.158 | 1 CD16neg_NK_UCBMC |
| TCEA1              | 0.06411766 | 0.34367483 | 0.413 | 0.276 | 1 CD16neg_NK_UCBMC |
| RSRC2              | 0.06446074 | 0.37878192 | 0.522 | 0.366 | 1 CD16neg_NK_UCBMC |
| PIK3CD             | 0.06482797 | 0.50329349 | 0.326 | 0.206 | 1 CD16neg_NK_UCBMC |
| UQCRB              | 0.06565211 | 0.10468833 | 0.37  | 0.235 | 1 CD16neg_NK_UCBMC |
| BRWD1              | 0.06831216 | 0.42005124 | 0.283 | 0.172 | 1 CD16neg_NK_UCBMC |
| RPS6KC1            | 0.06859594 | 0.67238804 | 0.261 | 0.16  | 1 CD16neg_NK_UCBMC |
| TC2N               | 0.06874226 | 0.62037015 | 0.326 | 0.213 | 1 CD16neg_NK_UCBMC |
| ENSMMUG00000059742 | 0.06907695 | 0.38899297 | 0.348 | 0.232 | 1 CD16neg_NK_UCBMC |
| DDX39A             | 0.0691646  | 0.29304498 | 0.413 | 0.273 | 1 CD16neg_NK_UCBMC |
| CHD9               | 0.06945947 | 0.81546157 | 0.283 | 0.18  | 1 CD16neg_NK_UCBMC |

|                    |            |            |       |       |                    |
|--------------------|------------|------------|-------|-------|--------------------|
| RPS4Y1             | 0.0695608  | 0.30716668 | 0.652 | 0.497 | 1 CD16neg_NK_UCBMC |
| SCLT1              | 0.06956451 | 0.49942429 | 0.348 | 0.231 | 1 CD16neg_NK_UCBMC |
| ENSMMUG00000052424 | 0.06958664 | 0.45473207 | 0.5   | 0.362 | 1 CD16neg_NK_UCBMC |
| ENSMMUG00000015583 | 0.06994499 | 0.32334289 | 0.63  | 0.461 | 1 CD16neg_NK_UCBMC |
| CCDC82             | 0.07068303 | 0.38447352 | 0.283 | 0.177 | 1 CD16neg_NK_UCBMC |
| IFNAR2             | 0.07151805 | 0.20242893 | 0.717 | 0.532 | 1 CD16neg_NK_UCBMC |
| SSU72              | 0.07186766 | 0.50653094 | 0.261 | 0.159 | 1 CD16neg_NK_UCBMC |
| FNBP4              | 0.0720804  | 0.50288526 | 0.261 | 0.159 | 1 CD16neg_NK_UCBMC |
| ST3GAL1            | 0.07236227 | 0.26546175 | 0.37  | 0.243 | 1 CD16neg_NK_UCBMC |
| WDR33              | 0.07282526 | 0.4960893  | 0.283 | 0.177 | 1 CD16neg_NK_UCBMC |
| TMED9              | 0.07366092 | 0.42554656 | 0.391 | 0.273 | 1 CD16neg_NK_UCBMC |
| HERPUD1            | 0.07425762 | 0.15979192 | 0.435 | 0.284 | 1 CD16neg_NK_UCBMC |
| FAM107B            | 0.07427941 | 0.45774982 | 0.457 | 0.313 | 1 CD16neg_NK_UCBMC |
| CD46               | 0.07476966 | 0.33376848 | 0.37  | 0.244 | 1 CD16neg_NK_UCBMC |
| MAPRE1             | 0.07510269 | 0.24456125 | 0.326 | 0.207 | 1 CD16neg_NK_UCBMC |
| PFDN6              | 0.07533871 | 0.26773049 | 0.348 | 0.216 | 1 CD16neg_NK_UCBMC |
| FGD3               | 0.07535168 | 0.38245902 | 0.326 | 0.212 | 1 CD16neg_NK_UCBMC |
| THOC2              | 0.07594875 | 0.43747849 | 0.261 | 0.161 | 1 CD16neg_NK_UCBMC |
| TLK2               | 0.07618077 | 0.67862833 | 0.261 | 0.164 | 1 CD16neg_NK_UCBMC |
| SEPTIN7            | 0.07626491 | 0.17607731 | 0.935 | 0.723 | 1 CD16neg_NK_UCBMC |
| SF3B2              | 0.07660126 | 0.64919286 | 0.261 | 0.162 | 1 CD16neg_NK_UCBMC |
| GDI2               | 0.07700116 | 0.36566344 | 0.37  | 0.252 | 1 CD16neg_NK_UCBMC |
| ENSMMUG00000062103 | 0.07713558 | 0.14350434 | 0.37  | 0.236 | 1 CD16neg_NK_UCBMC |
| MFNG               | 0.07767932 | 0.18136745 | 0.348 | 0.218 | 1 CD16neg_NK_UCBMC |
| PI4K2B             | 0.07782366 | 0.14266629 | 0.522 | 0.36  | 1 CD16neg_NK_UCBMC |
| BUD23              | 0.07783345 | 0.18848753 | 0.5   | 0.336 | 1 CD16neg_NK_UCBMC |
| TXNL1              | 0.07811006 | 0.14339137 | 0.326 | 0.203 | 1 CD16neg_NK_UCBMC |
| ZNF827             | 0.07833232 | 0.55806263 | 0.304 | 0.198 | 1 CD16neg_NK_UCBMC |
| CCND3              | 0.07834342 | 0.28688753 | 0.5   | 0.352 | 1 CD16neg_NK_UCBMC |
| PTPRC              | 0.07964348 | 0.25737107 | 1     | 0.791 | 1 CD16neg_NK_UCBMC |
| SON                | 0.07994321 | 0.19478573 | 0.783 | 0.565 | 1 CD16neg_NK_UCBMC |
| EIF4G2             | 0.0805425  | 0.19227672 | 0.587 | 0.402 | 1 CD16neg_NK_UCBMC |
| ITGAL              | 0.08080725 | 0.22881091 | 0.543 | 0.372 | 1 CD16neg_NK_UCBMC |



|                   |            |            |       |       |                    |
|-------------------|------------|------------|-------|-------|--------------------|
| G3BP2             | 0.08088493 | 0.22397415 | 0.435 | 0.295 | 1 CD16neg_NK_UCBMC |
| CCPG1             | 0.08150409 | 0.6174247  | 0.261 | 0.166 | 1 CD16neg_NK_UCBMC |
| FMC1-LUC7L2       | 0.08174763 | 0.32115265 | 0.543 | 0.389 | 1 CD16neg_NK_UCBMC |
| DEK               | 0.08253504 | 0.32630362 | 0.348 | 0.231 | 1 CD16neg_NK_UCBMC |
| ENSMUG00000030465 | 0.08339647 | 0.2149376  | 0.457 | 0.316 | 1 CD16neg_NK_UCBMC |
| VDAC1             | 0.08342318 | 0.29858574 | 0.283 | 0.175 | 1 CD16neg_NK_UCBMC |
| UBXN4             | 0.08350199 | 0.37038823 | 0.37  | 0.252 | 1 CD16neg_NK_UCBMC |
| SPAG9             | 0.08356194 | 0.42504322 | 0.348 | 0.233 | 1 CD16neg_NK_UCBMC |
| RWDD1             | 0.08356378 | 0.37005757 | 0.478 | 0.347 | 1 CD16neg_NK_UCBMC |
| HEG1              | 0.08366083 | 0.40284691 | 0.391 | 0.275 | 1 CD16neg_NK_UCBMC |
| YWHAG             | 0.08370216 | 0.24229697 | 0.261 | 0.157 | 1 CD16neg_NK_UCBMC |
| ENSMUG00000018687 | 0.08375583 | 0.47488025 | 0.304 | 0.183 | 1 CD16neg_NK_UCBMC |
| SAMD3             | 0.08377815 | 0.22976351 | 0.304 | 0.19  | 1 CD16neg_NK_UCBMC |
| HNRNPA2B1         | 0.0838807  | 0.24380865 | 0.87  | 0.75  | 1 CD16neg_NK_UCBMC |
| EIF4A2            | 0.08433031 | 0.17616815 | 0.543 | 0.374 | 1 CD16neg_NK_UCBMC |
| CSNK2A1           | 0.08595357 | 0.41651224 | 0.304 | 0.203 | 1 CD16neg_NK_UCBMC |
| NCR1              | 0.08663514 | 0.22036777 | 0.522 | 0.365 | 1 CD16neg_NK_UCBMC |
| ENSMUG00000055825 | 0.08712396 | 0.51831431 | 0.283 | 0.176 | 1 CD16neg_NK_UCBMC |
| NF1               | 0.08965444 | 0.31896836 | 0.283 | 0.178 | 1 CD16neg_NK_UCBMC |
| PSMD13            | 0.09133843 | 0.20528078 | 0.435 | 0.299 | 1 CD16neg_NK_UCBMC |
| ANAPC11           | 0.09136103 | 0.27551106 | 0.261 | 0.16  | 1 CD16neg_NK_UCBMC |
| NSD3              | 0.09152178 | 0.10412082 | 0.348 | 0.229 | 1 CD16neg_NK_UCBMC |
| CRTC3             | 0.09282839 | 0.68728773 | 0.283 | 0.186 | 1 CD16neg_NK_UCBMC |
| WAS               | 0.0934169  | 0.16553767 | 0.37  | 0.246 | 1 CD16neg_NK_UCBMC |
| AOAH              | 0.09346559 | 0.29957552 | 0.457 | 0.323 | 1 CD16neg_NK_UCBMC |
| H1-4              | 0.09519177 | 0.37726424 | 0.326 | 0.216 | 1 CD16neg_NK_UCBMC |
| RHOH              | 0.09686975 | 0.26376922 | 0.457 | 0.33  | 1 CD16neg_NK_UCBMC |
| RPS15             | 0.09828245 | 0.13932612 | 1     | 0.983 | 1 CD16neg_NK_UCBMC |
| IST1              | 0.10209077 | 0.22707208 | 0.283 | 0.177 | 1 CD16neg_NK_UCBMC |
| DNM2              | 0.10271803 | 0.15653084 | 0.283 | 0.178 | 1 CD16neg_NK_UCBMC |
| MAN1A1            | 0.10332392 | 0.32608964 | 0.326 | 0.226 | 1 CD16neg_NK_UCBMC |
| LCP2              | 0.10510463 | 0.3535223  | 0.326 | 0.218 | 1 CD16neg_NK_UCBMC |
| ENSMUG00000017890 | 0.10579996 | 0.17406751 | 0.326 | 0.214 | 1 CD16neg_NK_UCBMC |

|          |            |            |       |       |                    |
|----------|------------|------------|-------|-------|--------------------|
| SMARCE1  | 0.10727422 | 0.17446023 | 0.37  | 0.248 | 1 CD16neg_NK_UCBMC |
| BAZ1A    | 0.10761706 | 0.10412597 | 0.391 | 0.262 | 1 CD16neg_NK_UCBMC |
| ZNF638   | 0.10805    | 0.48621387 | 0.326 | 0.221 | 1 CD16neg_NK_UCBMC |
| UFC1     | 0.10818478 | 0.20081102 | 0.37  | 0.258 | 1 CD16neg_NK_UCBMC |
| G3BP1    | 0.10892322 | 0.33812603 | 0.348 | 0.237 | 1 CD16neg_NK_UCBMC |
| MEF2A    | 0.10898783 | 0.23222989 | 0.37  | 0.248 | 1 CD16neg_NK_UCBMC |
| ERO1B    | 0.10926348 | 0.64404496 | 0.283 | 0.193 | 1 CD16neg_NK_UCBMC |
| COA1     | 0.11038048 | 0.21652047 | 0.37  | 0.254 | 1 CD16neg_NK_UCBMC |
| JTB      | 0.11038359 | 0.41541193 | 0.326 | 0.224 | 1 CD16neg_NK_UCBMC |
| SUPT3H   | 0.11213746 | 0.41010933 | 0.304 | 0.208 | 1 CD16neg_NK_UCBMC |
| CALCOCO2 | 0.11330947 | 0.30146411 | 0.435 | 0.305 | 1 CD16neg_NK_UCBMC |
| EIF4G3   | 0.11466982 | 0.26617852 | 0.304 | 0.199 | 1 CD16neg_NK_UCBMC |
| NUFIP2   | 0.1152529  | 0.45514994 | 0.348 | 0.248 | 1 CD16neg_NK_UCBMC |
| AEBP2    | 0.1154989  | 0.48553196 | 0.261 | 0.172 | 1 CD16neg_NK_UCBMC |
| TGFBR2   | 0.11779869 | 0.31216824 | 0.457 | 0.318 | 1 CD16neg_NK_UCBMC |
| CD3E     | 0.11780886 | 0.21857146 | 0.326 | 0.22  | 1 CD16neg_NK_UCBMC |
| SNX6     | 0.11871073 | 0.16174957 | 0.457 | 0.32  | 1 CD16neg_NK_UCBMC |
| NCK1     | 0.12108038 | 0.46142604 | 0.304 | 0.209 | 1 CD16neg_NK_UCBMC |
| ITGB2    | 0.12163378 | 0.11452844 | 0.609 | 0.432 | 1 CD16neg_NK_UCBMC |
| CDC42    | 0.12205298 | 0.1360776  | 0.935 | 0.707 | 1 CD16neg_NK_UCBMC |
| SLC24A3  | 0.12271895 | 0.30536074 | 0.63  | 0.461 | 1 CD16neg_NK_UCBMC |
| GNAI3    | 0.12358031 | 0.2840836  | 0.283 | 0.182 | 1 CD16neg_NK_UCBMC |
| TUBB2B   | 0.12694938 | 0.23467231 | 0.261 | 0.166 | 1 CD16neg_NK_UCBMC |
| CCT3     | 0.13038574 | 0.11167091 | 0.413 | 0.282 | 1 CD16neg_NK_UCBMC |
| MRPS12   | 0.13152093 | 0.13808777 | 0.304 | 0.2   | 1 CD16neg_NK_UCBMC |
| NKTR     | 0.13406128 | 0.23107843 | 0.261 | 0.169 | 1 CD16neg_NK_UCBMC |
| ST6GAL1  | 0.13452733 | 0.37886659 | 0.283 | 0.192 | 1 CD16neg_NK_UCBMC |
| IGBP1    | 0.13697316 | 0.33892115 | 0.283 | 0.192 | 1 CD16neg_NK_UCBMC |
| SFPQ     | 0.13807505 | 0.23550687 | 0.435 | 0.311 | 1 CD16neg_NK_UCBMC |
| C1D      | 0.13808731 | 0.36177684 | 0.283 | 0.187 | 1 CD16neg_NK_UCBMC |
| SETX     | 0.13883172 | 0.19876844 | 0.391 | 0.271 | 1 CD16neg_NK_UCBMC |
| SNX2     | 0.14468442 | 0.39600124 | 0.261 | 0.177 | 1 CD16neg_NK_UCBMC |
| KCNQ5    | 0.14733639 | 0.49704646 | 0.391 | 0.3   | 1 CD16neg_NK_UCBMC |

|                    |            |            |       |       |                    |
|--------------------|------------|------------|-------|-------|--------------------|
| COX5A              | 0.14985309 | 0.32002954 | 0.261 | 0.173 | 1 CD16neg_NK_UCBMC |
| MORF4L1            | 0.14997224 | 0.23684512 | 0.543 | 0.4   | 1 CD16neg_NK_UCBMC |
| PSMB7              | 0.15278423 | 0.118717   | 0.587 | 0.432 | 1 CD16neg_NK_UCBMC |
| CASP12             | 0.1543579  | 0.1431959  | 0.348 | 0.244 | 1 CD16neg_NK_UCBMC |
| CCT4               | 0.1549596  | 0.1367754  | 0.37  | 0.26  | 1 CD16neg_NK_UCBMC |
| ARF1               | 0.15737376 | 0.14940423 | 0.63  | 0.47  | 1 CD16neg_NK_UCBMC |
| PFDN1              | 0.15787003 | 0.30059513 | 0.283 | 0.195 | 1 CD16neg_NK_UCBMC |
| GLCC11             | 0.16135203 | 0.77578067 | 0.304 | 0.231 | 1 CD16neg_NK_UCBMC |
| TPR                | 0.16404333 | 0.1913198  | 0.348 | 0.252 | 1 CD16neg_NK_UCBMC |
| PCNP               | 0.16707893 | 0.12004257 | 0.326 | 0.23  | 1 CD16neg_NK_UCBMC |
| DCAF5              | 0.16888852 | 0.40242255 | 0.283 | 0.2   | 1 CD16neg_NK_UCBMC |
| RPLP2              | 0.1735812  | 0.13261476 | 1     | 0.967 | 1 CD16neg_NK_UCBMC |
| ARHGAP45           | 0.17797945 | 0.3030763  | 0.283 | 0.201 | 1 CD16neg_NK_UCBMC |
| PTPN2              | 0.17935166 | 0.2573413  | 0.435 | 0.34  | 1 CD16neg_NK_UCBMC |
| HDLBP              | 0.18055781 | 0.12510942 | 0.304 | 0.217 | 1 CD16neg_NK_UCBMC |
| ITGAX              | 0.18076842 | 0.21163472 | 0.609 | 0.445 | 1 CD16neg_NK_UCBMC |
| INTS6              | 0.18107725 | 0.23260311 | 0.304 | 0.22  | 1 CD16neg_NK_UCBMC |
| TAF9               | 0.18136861 | 0.21648903 | 0.261 | 0.176 | 1 CD16neg_NK_UCBMC |
| CPNE1              | 0.18172787 | 0.25992562 | 0.413 | 0.297 | 1 CD16neg_NK_UCBMC |
| MRPS15             | 0.18590836 | 0.28763654 | 0.261 | 0.179 | 1 CD16neg_NK_UCBMC |
| BCLAF1             | 0.18903663 | 0.15657315 | 0.565 | 0.434 | 1 CD16neg_NK_UCBMC |
| EFCAB2             | 0.19079957 | 0.41199938 | 0.348 | 0.259 | 1 CD16neg_NK_UCBMC |
| SENP7              | 0.19122981 | 0.184804   | 0.304 | 0.22  | 1 CD16neg_NK_UCBMC |
| GTF2A2             | 0.19162312 | 0.40501265 | 0.261 | 0.186 | 1 CD16neg_NK_UCBMC |
| UBE2K              | 0.19289649 | 0.2939033  | 0.283 | 0.204 | 1 CD16neg_NK_UCBMC |
| NKG2D              | 0.19599027 | 0.2517462  | 0.435 | 0.332 | 1 CD16neg_NK_UCBMC |
| STX8               | 0.20103897 | 0.69571817 | 0.283 | 0.216 | 1 CD16neg_NK_UCBMC |
| NDUFS4             | 0.20423088 | 0.18255398 | 0.261 | 0.182 | 1 CD16neg_NK_UCBMC |
| SMAP2              | 0.20707726 | 0.24915473 | 0.283 | 0.202 | 1 CD16neg_NK_UCBMC |
| ENSMMUG00000065089 | 0.20840553 | 0.19883154 | 0.283 | 0.2   | 1 CD16neg_NK_UCBMC |
| RTN3               | 0.2136558  | 0.11802991 | 0.261 | 0.184 | 1 CD16neg_NK_UCBMC |
| CHST12             | 0.21730517 | 0.20743564 | 0.283 | 0.203 | 1 CD16neg_NK_UCBMC |
| PSMB3              | 0.2223483  | 0.19021155 | 0.326 | 0.238 | 1 CD16neg_NK_UCBMC |

|                    |            |            |       |       |                    |
|--------------------|------------|------------|-------|-------|--------------------|
| COMMD1             | 0.22316195 | 0.54916454 | 0.261 | 0.191 | 1 CD16neg_NK_UCBMC |
| DDX50              | 0.2240631  | 0.35419507 | 0.261 | 0.193 | 1 CD16neg_NK_UCBMC |
| CASP3              | 0.22559815 | 0.22771409 | 0.413 | 0.312 | 1 CD16neg_NK_UCBMC |
| CSRNP1             | 0.22605561 | 0.2741685  | 0.304 | 0.222 | 1 CD16neg_NK_UCBMC |
| FKBP1A             | 0.22678356 | 0.14836473 | 0.326 | 0.236 | 1 CD16neg_NK_UCBMC |
| ENSMMUG00000061913 | 0.22726988 | 0.16773353 | 0.391 | 0.294 | 1 CD16neg_NK_UCBMC |
| DNAJB6             | 0.23001513 | 0.15604488 | 0.543 | 0.435 | 1 CD16neg_NK_UCBMC |
| YWHAZ              | 0.23011728 | 0.12911719 | 0.87  | 0.701 | 1 CD16neg_NK_UCBMC |
| SYNRG              | 0.23176843 | 0.50688151 | 0.283 | 0.214 | 1 CD16neg_NK_UCBMC |
| ENSMMUG00000063316 | 0.23941483 | 0.18589296 | 0.326 | 0.241 | 1 CD16neg_NK_UCBMC |
| ENSMMUG00000015270 | 0.24077117 | 0.10712941 | 1     | 0.988 | 1 CD16neg_NK_UCBMC |
| PRKACB             | 0.24194783 | 0.17164539 | 0.522 | 0.403 | 1 CD16neg_NK_UCBMC |
| EIF4B              | 0.24254905 | 0.39813548 | 0.304 | 0.233 | 1 CD16neg_NK_UCBMC |
| ADD1               | 0.24847579 | 0.20612054 | 0.261 | 0.191 | 1 CD16neg_NK_UCBMC |
| RPL9               | 0.26951399 | 0.17166921 | 1     | 0.884 | 1 CD16neg_NK_UCBMC |
| PARP8              | 0.27910883 | 0.38160212 | 0.391 | 0.312 | 1 CD16neg_NK_UCBMC |
| HDAC1              | 0.29099368 | 0.18395315 | 0.326 | 0.248 | 1 CD16neg_NK_UCBMC |
| PDGFRA             | 0.29492185 | 0.115649   | 0.783 | 0.647 | 1 CD16neg_NK_UCBMC |
| FCRL6              | 0.29622104 | 0.14625314 | 0.304 | 0.228 | 1 CD16neg_NK_UCBMC |
| CMC1               | 0.2980162  | 0.12058774 | 0.717 | 0.553 | 1 CD16neg_NK_UCBMC |
| THY1               | 0.30343198 | 0.22540702 | 0.478 | 0.402 | 1 CD16neg_NK_UCBMC |
| RHEB               | 0.31476877 | 0.14364624 | 0.304 | 0.233 | 1 CD16neg_NK_UCBMC |
| ATF7IP             | 0.32020661 | 0.2360827  | 0.391 | 0.319 | 1 CD16neg_NK_UCBMC |
| ANP32B             | 0.32085682 | 0.19177521 | 0.304 | 0.238 | 1 CD16neg_NK_UCBMC |
| PPP2R5E            | 0.32684188 | 0.49208445 | 0.304 | 0.247 | 1 CD16neg_NK_UCBMC |
| CFLAR              | 0.33505732 | 0.34382622 | 0.283 | 0.223 | 1 CD16neg_NK_UCBMC |
| ITK                | 0.35149274 | 0.2796676  | 0.37  | 0.312 | 1 CD16neg_NK_UCBMC |
| CWC15              | 0.35215505 | 0.29298059 | 0.348 | 0.28  | 1 CD16neg_NK_UCBMC |
| MOB2               | 0.36432415 | 0.15911171 | 0.283 | 0.223 | 1 CD16neg_NK_UCBMC |
| CEP85L             | 0.36588875 | 0.19567341 | 0.326 | 0.263 | 1 CD16neg_NK_UCBMC |
| NAP1L4             | 0.37388718 | 0.17583157 | 0.457 | 0.371 | 1 CD16neg_NK_UCBMC |
| ENSMMUG00000003130 | 0.38575003 | 0.19144753 | 0.391 | 0.33  | 1 CD16neg_NK_UCBMC |
| FAM133B            | 0.38734733 | 0.11766655 | 0.261 | 0.207 | 1 CD16neg_NK_UCBMC |

|                     |            |            |       |       |           |                   |
|---------------------|------------|------------|-------|-------|-----------|-------------------|
| SEPTIN11            | 0.39040206 | 0.10776711 | 0.435 | 0.362 | 1         | CD16neg_NK_UCBMC  |
| RPS3A               | 0.39108809 | 0.11716984 | 1     | 0.981 | 1         | CD16neg_NK_UCBMC  |
| SEC11A              | 0.42670141 | 0.14034912 | 0.348 | 0.289 | 1         | CD16neg_NK_UCBMC  |
| RPL15               | 0.43758429 | 0.10295058 | 1     | 0.919 | 1         | CD16neg_NK_UCBMC  |
| RNMT                | 0.51321539 | 0.10344135 | 0.326 | 0.28  | 1         | CD16neg_NK_UCBMC  |
| NBR1                | 0.54077131 | 0.18840953 | 0.261 | 0.231 | 1         | CD16neg_NK_UCBMC  |
| PMAIP1              | 0.99441512 | 0.18698718 | 0.261 | 0.262 | 1         | CD16neg_NK_UCBMC  |
| KLF6                | 0          | 3.13258372 | 0.961 | 0.184 | 0         | CD16neg_NK_spleen |
| JUN                 | 0          | 3.53352148 | 0.965 | 0.24  | 0         | CD16neg_NK_spleen |
| NFKBIA              | 0          | 2.86318688 | 0.954 | 0.268 | 0         | CD16neg_NK_spleen |
| ENSMMUG000000051300 | 0          | 2.85930918 | 0.988 | 0.316 | 0         | CD16neg_NK_spleen |
| RPL13               | 0          | 2.74745957 | 0.991 | 0.608 | 0         | CD16neg_NK_spleen |
| RPS20               | 6.97E-301  | 1.734949   | 0.991 | 0.706 | 2.47E-296 | CD16neg_NK_spleen |
| DUSP1               | 3.58E-300  | 2.97063762 | 0.836 | 0.122 | 1.27E-295 | CD16neg_NK_spleen |
| SRRM2               | 7.93E-300  | 3.12210802 | 0.743 | 0.064 | 2.81E-295 | CD16neg_NK_spleen |
| FOSB                | 3.58E-287  | 2.81773454 | 0.884 | 0.187 | 1.27E-282 | CD16neg_NK_spleen |
| DDX5                | 2.50E-280  | 1.8971285  | 0.995 | 0.547 | 8.88E-276 | CD16neg_NK_spleen |
| ANKRD44             | 3.85E-280  | 2.29218041 | 0.943 | 0.273 | 1.37E-275 | CD16neg_NK_spleen |
| TOX                 | 9.83E-279  | 2.43156928 | 0.919 | 0.226 | 3.48E-274 | CD16neg_NK_spleen |
| CCNL1               | 1.10E-273  | 2.26577953 | 0.928 | 0.245 | 3.89E-269 | CD16neg_NK_spleen |
| SIK3                | 1.06E-256  | 2.11090435 | 0.961 | 0.33  | 3.75E-252 | CD16neg_NK_spleen |
| KCNQ5               | 4.84E-252  | 2.97480657 | 0.71  | 0.091 | 1.71E-247 | CD16neg_NK_spleen |
| SLC24A3             | 2.14E-251  | 2.26450177 | 0.907 | 0.235 | 7.58E-247 | CD16neg_NK_spleen |
| PITPNC1             | 1.57E-250  | 2.04638649 | 0.951 | 0.358 | 5.57E-246 | CD16neg_NK_spleen |
| AFF3                | 3.59E-247  | 2.39538274 | 0.823 | 0.159 | 1.27E-242 | CD16neg_NK_spleen |
| JMJD1C              | 2.37E-246  | 2.36750396 | 0.858 | 0.189 | 8.40E-242 | CD16neg_NK_spleen |
| STK39               | 2.27E-244  | 2.51084509 | 0.768 | 0.127 | 8.04E-240 | CD16neg_NK_spleen |
| ZNF609              | 6.39E-244  | 2.65239866 | 0.718 | 0.093 | 2.26E-239 | CD16neg_NK_spleen |
| UTRN                | 1.77E-241  | 2.03787135 | 0.918 | 0.264 | 6.26E-237 | CD16neg_NK_spleen |
| LTB                 | 4.30E-237  | 2.65913253 | 0.716 | 0.101 | 1.52E-232 | CD16neg_NK_spleen |
| PRKCA               | 9.91E-237  | 2.51048609 | 0.783 | 0.143 | 3.51E-232 | CD16neg_NK_spleen |
| ENSMMUG000000052127 | 1.98E-236  | 1.87413344 | 0.987 | 0.665 | 7.02E-232 | CD16neg_NK_spleen |
| KLF12               | 2.04E-235  | 2.00936378 | 0.889 | 0.217 | 7.22E-231 | CD16neg_NK_spleen |

|                    |           |            |       |       |           |                   |
|--------------------|-----------|------------|-------|-------|-----------|-------------------|
| ARIH1              | 2.15E-235 | 2.77824439 | 0.69  | 0.088 | 7.62E-231 | CD16neg_NK_spleen |
| PRKCH              | 2.28E-235 | 1.86608016 | 0.971 | 0.448 | 8.06E-231 | CD16neg_NK_spleen |
| UVRAG              | 4.39E-232 | 2.52025954 | 0.67  | 0.076 | 1.55E-227 | CD16neg_NK_spleen |
| PLCB1              | 4.64E-232 | 2.46235921 | 0.733 | 0.117 | 1.64E-227 | CD16neg_NK_spleen |
| KDM6A              | 2.00E-229 | 2.40639301 | 0.721 | 0.104 | 7.07E-225 | CD16neg_NK_spleen |
| VPS13B             | 1.10E-228 | 2.12437759 | 0.805 | 0.159 | 3.91E-224 | CD16neg_NK_spleen |
| BANK1              | 1.95E-228 | 2.7145245  | 0.667 | 0.081 | 6.93E-224 | CD16neg_NK_spleen |
| CD247              | 4.22E-227 | 2.29792728 | 0.786 | 0.147 | 1.49E-222 | CD16neg_NK_spleen |
| RPL27A             | 1.33E-225 | 1.29928437 | 0.985 | 0.758 | 4.70E-221 | CD16neg_NK_spleen |
| FOXN3              | 1.42E-225 | 2.2086882  | 0.767 | 0.134 | 5.02E-221 | CD16neg_NK_spleen |
| ARID4B             | 2.62E-225 | 2.05469821 | 0.891 | 0.236 | 9.27E-221 | CD16neg_NK_spleen |
| GLUD1              | 8.09E-225 | 2.94450355 | 0.623 | 0.066 | 2.87E-220 | CD16neg_NK_spleen |
| STK17A             | 2.32E-221 | 1.88516631 | 0.878 | 0.215 | 8.23E-217 | CD16neg_NK_spleen |
| MCL1               | 8.54E-217 | 2.23289496 | 0.738 | 0.124 | 3.02E-212 | CD16neg_NK_spleen |
| TBC1D5             | 3.07E-216 | 2.2153513  | 0.762 | 0.14  | 1.09E-211 | CD16neg_NK_spleen |
| ENSMMUG00000054358 | 2.96E-215 | 2.33540833 | 0.97  | 0.466 | 1.05E-210 | CD16neg_NK_spleen |
| ATP8A1             | 6.81E-214 | 2.27001106 | 0.711 | 0.114 | 2.41E-209 | CD16neg_NK_spleen |
| CELF2              | 4.82E-213 | 1.85671504 | 0.909 | 0.278 | 1.71E-208 | CD16neg_NK_spleen |
| DNAJC1             | 2.58E-212 | 2.01472579 | 0.77  | 0.142 | 9.15E-208 | CD16neg_NK_spleen |
| GSK3B              | 5.57E-212 | 2.48909484 | 0.645 | 0.082 | 1.97E-207 | CD16neg_NK_spleen |
| PDGFD              | 1.34E-211 | 2.00312866 | 0.885 | 0.278 | 4.76E-207 | CD16neg_NK_spleen |
| ARHGAP26           | 1.52E-210 | 2.13468684 | 0.723 | 0.117 | 5.37E-206 | CD16neg_NK_spleen |
| ITCH               | 1.89E-207 | 1.8544381  | 0.869 | 0.237 | 6.70E-203 | CD16neg_NK_spleen |
| FCHSD2             | 5.22E-207 | 2.71580105 | 0.603 | 0.068 | 1.85E-202 | CD16neg_NK_spleen |
| RSRP1              | 3.51E-206 | 1.87045166 | 0.817 | 0.174 | 1.24E-201 | CD16neg_NK_spleen |
| RPS2               | 1.66E-205 | 1.75191392 | 0.93  | 0.349 | 5.89E-201 | CD16neg_NK_spleen |
| ARID1B             | 3.04E-205 | 2.2528977  | 0.679 | 0.102 | 1.08E-200 | CD16neg_NK_spleen |
| KAT6B              | 1.05E-204 | 2.34987832 | 0.664 | 0.096 | 3.72E-200 | CD16neg_NK_spleen |
| KANSL1             | 9.84E-204 | 2.54187751 | 0.601 | 0.068 | 3.49E-199 | CD16neg_NK_spleen |
| PM20D2             | 1.05E-203 | 1.76001529 | 0.874 | 0.221 | 3.73E-199 | CD16neg_NK_spleen |
| PHF21A             | 1.34E-203 | 2.30703652 | 0.642 | 0.086 | 4.74E-199 | CD16neg_NK_spleen |
| CAMK1D             | 3.16E-203 | 2.39922378 | 0.647 | 0.09  | 1.12E-198 | CD16neg_NK_spleen |
| TM9SF3             | 2.11E-202 | 2.58711114 | 0.577 | 0.058 | 7.47E-198 | CD16neg_NK_spleen |

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| RUNX1              | 2.04E-198 | 2.1248997  | 0.773 | 0.169 | 7.23E-194 | CD16neg_NK_spleen |
| XYLT1              | 9.42E-198 | 2.58231156 | 0.574 | 0.061 | 3.34E-193 | CD16neg_NK_spleen |
| ME2                | 9.99E-198 | 2.92336272 | 0.542 | 0.049 | 3.54E-193 | CD16neg_NK_spleen |
| ASAP1              | 1.00E-197 | 2.40631129 | 0.609 | 0.075 | 3.54E-193 | CD16neg_NK_spleen |
| MYLIP              | 1.66E-196 | 2.1643799  | 0.657 | 0.097 | 5.88E-192 | CD16neg_NK_spleen |
| IFRD1              | 6.37E-196 | 2.19475927 | 0.722 | 0.135 | 2.26E-191 | CD16neg_NK_spleen |
| RFX3               | 2.32E-195 | 2.30590301 | 0.622 | 0.082 | 8.23E-191 | CD16neg_NK_spleen |
| FOS                | 7.72E-193 | 1.82385018 | 0.958 | 0.483 | 2.74E-188 | CD16neg_NK_spleen |
| FAM241A            | 1.22E-192 | 2.78185798 | 0.568 | 0.065 | 4.31E-188 | CD16neg_NK_spleen |
| RUSF1              | 3.47E-192 | 3.06525585 | 0.496 | 0.034 | 1.23E-187 | CD16neg_NK_spleen |
| ENSMMUG00000052424 | 5.13E-192 | 1.86851783 | 0.766 | 0.158 | 1.82E-187 | CD16neg_NK_spleen |
| GRK5               | 3.90E-190 | 2.25282919 | 0.618 | 0.084 | 1.38E-185 | CD16neg_NK_spleen |
| ERO1B              | 6.25E-189 | 3.20020095 | 0.498 | 0.038 | 2.21E-184 | CD16neg_NK_spleen |
| PACS1              | 8.07E-189 | 2.25350106 | 0.643 | 0.101 | 2.86E-184 | CD16neg_NK_spleen |
| MAML2              | 2.49E-188 | 2.09431151 | 0.729 | 0.154 | 8.82E-184 | CD16neg_NK_spleen |
| ENSMMUG00000011776 | 2.83E-188 | 3.48709811 | 0.469 | 0.028 | 1.00E-183 | CD16neg_NK_spleen |
| ACAP2              | 3.17E-187 | 1.88916624 | 0.711 | 0.135 | 1.12E-182 | CD16neg_NK_spleen |
| ZBTB20             | 4.17E-186 | 2.05805048 | 0.651 | 0.104 | 1.48E-181 | CD16neg_NK_spleen |
| NEK7               | 3.12E-185 | 2.18171884 | 0.651 | 0.109 | 1.10E-180 | CD16neg_NK_spleen |
| PSMD12             | 2.13E-184 | 1.83057076 | 0.836 | 0.228 | 7.54E-180 | CD16neg_NK_spleen |
| TNIK               | 5.47E-184 | 1.76857798 | 0.811 | 0.208 | 1.94E-179 | CD16neg_NK_spleen |
| DGKD               | 9.21E-184 | 3.00994083 | 0.483 | 0.035 | 3.26E-179 | CD16neg_NK_spleen |
| SLC12A6            | 5.59E-183 | 2.51387468 | 0.532 | 0.054 | 1.98E-178 | CD16neg_NK_spleen |
| ZFAND3             | 5.85E-183 | 2.00825063 | 0.697 | 0.131 | 2.07E-178 | CD16neg_NK_spleen |
| CDKAL1             | 7.88E-183 | 2.27682326 | 0.615 | 0.093 | 2.79E-178 | CD16neg_NK_spleen |
| ZBTB16             | 1.50E-182 | 2.63851911 | 0.561 | 0.068 | 5.30E-178 | CD16neg_NK_spleen |
| CHST11             | 4.47E-182 | 2.00382314 | 0.662 | 0.112 | 1.58E-177 | CD16neg_NK_spleen |
| TRPM7              | 6.79E-181 | 1.70157183 | 0.791 | 0.181 | 2.41E-176 | CD16neg_NK_spleen |
| RABGAP1L           | 2.49E-179 | 1.88748634 | 0.795 | 0.217 | 8.84E-175 | CD16neg_NK_spleen |
| BTBD11             | 1.35E-178 | 2.0658236  | 0.652 | 0.114 | 4.77E-174 | CD16neg_NK_spleen |
| SQSTM1             | 4.98E-178 | 2.0101049  | 0.696 | 0.136 | 1.77E-173 | CD16neg_NK_spleen |
| TMEM131L           | 1.01E-176 | 2.44568502 | 0.532 | 0.059 | 3.59E-172 | CD16neg_NK_spleen |
| PHLPP1             | 1.01E-176 | 2.62123717 | 0.528 | 0.058 | 3.59E-172 | CD16neg_NK_spleen |

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|---------------------|-----------|------------|-------|-------|-----------|-------------------|
| SFMBT2              | 1.17E-176 | 3.00708724 | 0.471 | 0.035 | 4.14E-172 | CD16neg_NK_spleen |
| LPP                 | 2.60E-175 | 2.04617711 | 0.624 | 0.098 | 9.21E-171 | CD16neg_NK_spleen |
| PRKCB               | 7.64E-175 | 1.89723883 | 0.686 | 0.132 | 2.71E-170 | CD16neg_NK_spleen |
| ADGRE5              | 7.43E-174 | 1.96701356 | 0.882 | 0.314 | 2.63E-169 | CD16neg_NK_spleen |
| STIM1               | 5.74E-173 | 2.13379107 | 0.575 | 0.078 | 2.03E-168 | CD16neg_NK_spleen |
| TP53BP1             | 7.79E-173 | 2.76357347 | 0.495 | 0.048 | 2.76E-168 | CD16neg_NK_spleen |
| VAV3                | 1.34E-172 | 2.12075258 | 0.633 | 0.11  | 4.73E-168 | CD16neg_NK_spleen |
| PPP2R5E             | 5.04E-172 | 2.11899326 | 0.576 | 0.08  | 1.79E-167 | CD16neg_NK_spleen |
| FBNP1               | 1.21E-171 | 1.48818316 | 0.931 | 0.357 | 4.29E-167 | CD16neg_NK_spleen |
| ENSMMUG00000006165  | 1.29E-171 | 1.62013837 | 0.834 | 0.225 | 4.56E-167 | CD16neg_NK_spleen |
| CEP85L              | 1.96E-171 | 1.93323495 | 0.601 | 0.09  | 6.96E-167 | CD16neg_NK_spleen |
| FAF1                | 2.13E-171 | 2.4439203  | 0.549 | 0.073 | 7.56E-167 | CD16neg_NK_spleen |
| ATXN1               | 3.82E-171 | 2.3768375  | 0.542 | 0.068 | 1.36E-166 | CD16neg_NK_spleen |
| ITM2B               | 6.88E-171 | 1.48698879 | 0.922 | 0.336 | 2.44E-166 | CD16neg_NK_spleen |
| TCF12               | 8.85E-171 | 2.1827701  | 0.637 | 0.118 | 3.14E-166 | CD16neg_NK_spleen |
| JMY                 | 1.63E-170 | 2.55162    | 0.524 | 0.062 | 5.79E-166 | CD16neg_NK_spleen |
| FYN                 | 2.20E-170 | 1.58015843 | 0.831 | 0.228 | 7.78E-166 | CD16neg_NK_spleen |
| FBXW7               | 3.12E-170 | 2.19842495 | 0.584 | 0.087 | 1.10E-165 | CD16neg_NK_spleen |
| PAN3                | 3.97E-170 | 1.94413502 | 0.613 | 0.098 | 1.41E-165 | CD16neg_NK_spleen |
| ANKRD17             | 4.05E-170 | 2.34331642 | 0.522 | 0.06  | 1.44E-165 | CD16neg_NK_spleen |
| ATF3                | 4.49E-170 | 4.56414953 | 0.401 | 0.017 | 1.59E-165 | CD16neg_NK_spleen |
| PPP3CA              | 4.92E-170 | 1.79748217 | 0.706 | 0.148 | 1.74E-165 | CD16neg_NK_spleen |
| CHN2                | 7.48E-170 | 1.72304163 | 0.78  | 0.211 | 2.65E-165 | CD16neg_NK_spleen |
| PSME4               | 8.27E-170 | 2.12868969 | 0.57  | 0.08  | 2.93E-165 | CD16neg_NK_spleen |
| RPS6KA5             | 1.47E-169 | 2.3009341  | 0.566 | 0.08  | 5.22E-165 | CD16neg_NK_spleen |
| SCAPER              | 2.02E-169 | 2.05255349 | 0.601 | 0.093 | 7.15E-165 | CD16neg_NK_spleen |
| ENSMMUG000000062103 | 2.36E-169 | 2.12542312 | 0.558 | 0.074 | 8.37E-165 | CD16neg_NK_spleen |
| HSPH1               | 2.73E-169 | 3.27651065 | 0.509 | 0.06  | 9.66E-165 | CD16neg_NK_spleen |
| PLCG2               | 4.75E-169 | 1.80946759 | 0.709 | 0.152 | 1.68E-164 | CD16neg_NK_spleen |
| SORL1               | 1.38E-168 | 2.2895188  | 0.524 | 0.061 | 4.90E-164 | CD16neg_NK_spleen |
| UBE2H               | 8.55E-168 | 2.04317004 | 0.593 | 0.091 | 3.03E-163 | CD16neg_NK_spleen |
| TNRC6B              | 1.20E-167 | 1.63016663 | 0.824 | 0.229 | 4.26E-163 | CD16neg_NK_spleen |
| PUM1                | 1.34E-167 | 1.88886403 | 0.619 | 0.102 | 4.74E-163 | CD16neg_NK_spleen |



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| MBP      | 1.74E-167 | 1.6650024  | 0.745 | 0.17  | 6.18E-163 | CD16neg_NK_spleen |
| ABCC1    | 2.57E-167 | 2.66908093 | 0.476 | 0.043 | 9.10E-163 | CD16neg_NK_spleen |
| GOLPH3   | 3.60E-167 | 2.36345483 | 0.516 | 0.059 | 1.27E-162 | CD16neg_NK_spleen |
| CARD11   | 2.57E-166 | 2.58006051 | 0.491 | 0.051 | 9.12E-162 | CD16neg_NK_spleen |
| STK10    | 7.94E-166 | 1.65355019 | 0.692 | 0.136 | 2.81E-161 | CD16neg_NK_spleen |
| MGAT5    | 7.79E-165 | 1.69104821 | 0.71  | 0.152 | 2.76E-160 | CD16neg_NK_spleen |
| KLHL18   | 3.48E-164 | 3.60527279 | 0.399 | 0.019 | 1.23E-159 | CD16neg_NK_spleen |
| UBE2S    | 3.08E-163 | 3.29996917 | 0.415 | 0.025 | 1.09E-158 | CD16neg_NK_spleen |
| DLG1     | 1.16E-162 | 2.22473582 | 0.531 | 0.07  | 4.10E-158 | CD16neg_NK_spleen |
| MACF1    | 3.70E-162 | 1.671197   | 0.744 | 0.177 | 1.31E-157 | CD16neg_NK_spleen |
| RIN3     | 5.06E-162 | 1.75799827 | 0.643 | 0.117 | 1.79E-157 | CD16neg_NK_spleen |
| QKI      | 1.40E-161 | 2.00637593 | 0.636 | 0.122 | 4.95E-157 | CD16neg_NK_spleen |
| USP34    | 3.09E-161 | 1.67812307 | 0.719 | 0.158 | 1.10E-156 | CD16neg_NK_spleen |
| SLC38A1  | 5.62E-161 | 1.75300518 | 0.714 | 0.16  | 1.99E-156 | CD16neg_NK_spleen |
| ELMO1    | 1.26E-160 | 1.75433732 | 0.642 | 0.119 | 4.48E-156 | CD16neg_NK_spleen |
| TRA2A    | 4.61E-160 | 1.43748175 | 0.865 | 0.261 | 1.63E-155 | CD16neg_NK_spleen |
| TOP1     | 2.05E-159 | 1.82602284 | 0.645 | 0.124 | 7.27E-155 | CD16neg_NK_spleen |
| TRAPPC10 | 5.71E-159 | 2.34099048 | 0.499 | 0.059 | 2.02E-154 | CD16neg_NK_spleen |
| RAB1A    | 2.38E-158 | 1.93192848 | 0.571 | 0.088 | 8.44E-154 | CD16neg_NK_spleen |
| RAPGEF1  | 7.05E-158 | 2.46027713 | 0.473 | 0.049 | 2.50E-153 | CD16neg_NK_spleen |
| DOCK8    | 7.14E-158 | 1.52790919 | 0.794 | 0.211 | 2.53E-153 | CD16neg_NK_spleen |
| KMT2C    | 8.32E-158 | 1.57596618 | 0.727 | 0.168 | 2.95E-153 | CD16neg_NK_spleen |
| GLCC1    | 1.08E-157 | 2.07918092 | 0.538 | 0.075 | 3.84E-153 | CD16neg_NK_spleen |
| NCOR1    | 1.42E-157 | 1.86657735 | 0.57  | 0.088 | 5.03E-153 | CD16neg_NK_spleen |
| STAG1    | 1.54E-157 | 1.74321306 | 0.703 | 0.162 | 5.46E-153 | CD16neg_NK_spleen |
| LRBA     | 1.67E-157 | 1.76193324 | 0.668 | 0.14  | 5.92E-153 | CD16neg_NK_spleen |
| BIRC6    | 3.55E-157 | 1.57947449 | 0.7   | 0.152 | 1.26E-152 | CD16neg_NK_spleen |
| LDB2     | 5.49E-157 | 1.68837364 | 0.737 | 0.181 | 1.95E-152 | CD16neg_NK_spleen |
| HOOK3    | 7.93E-157 | 1.62421099 | 0.661 | 0.129 | 2.81E-152 | CD16neg_NK_spleen |
| UBASH3B  | 8.74E-157 | 2.26797452 | 0.53  | 0.076 | 3.10E-152 | CD16neg_NK_spleen |
| MEF2A    | 1.33E-156 | 2.03135526 | 0.563 | 0.089 | 4.71E-152 | CD16neg_NK_spleen |
| SETD2    | 1.80E-155 | 1.81302731 | 0.625 | 0.117 | 6.38E-151 | CD16neg_NK_spleen |
| TRPS1    | 2.67E-155 | 1.85214351 | 0.601 | 0.109 | 9.46E-151 | CD16neg_NK_spleen |

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| RIPOR2             | 6.33E-155 | 1.52698941 | 0.849 | 0.287 | 2.24E-150 | CD16neg_NK_spleen |
| COG5               | 8.70E-155 | 2.01883436 | 0.554 | 0.086 | 3.08E-150 | CD16neg_NK_spleen |
| PPP3CC             | 1.06E-154 | 2.07884998 | 0.535 | 0.076 | 3.74E-150 | CD16neg_NK_spleen |
| RICTOR             | 5.41E-154 | 2.03750356 | 0.531 | 0.075 | 1.92E-149 | CD16neg_NK_spleen |
| ITPR2              | 6.27E-154 | 1.71586374 | 0.618 | 0.115 | 2.22E-149 | CD16neg_NK_spleen |
| RASSF1             | 9.83E-154 | 1.59878298 | 0.637 | 0.12  | 3.48E-149 | CD16neg_NK_spleen |
| SPAG9              | 1.86E-153 | 1.96091585 | 0.539 | 0.079 | 6.59E-149 | CD16neg_NK_spleen |
| HECTD4             | 3.13E-153 | 2.60157597 | 0.427 | 0.035 | 1.11E-148 | CD16neg_NK_spleen |
| NOP53              | 3.47E-153 | 2.036182   | 0.506 | 0.064 | 1.23E-148 | CD16neg_NK_spleen |
| COP1               | 5.20E-153 | 2.14898661 | 0.493 | 0.059 | 1.84E-148 | CD16neg_NK_spleen |
| TBL1XR1            | 6.44E-153 | 1.7686214  | 0.615 | 0.116 | 2.28E-148 | CD16neg_NK_spleen |
| PRRC2B             | 1.16E-152 | 1.79312018 | 0.596 | 0.106 | 4.12E-148 | CD16neg_NK_spleen |
| PLCL2              | 1.32E-152 | 2.16464741 | 0.496 | 0.062 | 4.69E-148 | CD16neg_NK_spleen |
| ATAD2B             | 3.30E-152 | 2.16573046 | 0.516 | 0.07  | 1.17E-147 | CD16neg_NK_spleen |
| NFKBIB             | 5.44E-152 | 1.65527253 | 0.649 | 0.128 | 1.93E-147 | CD16neg_NK_spleen |
| DOCK10             | 5.70E-152 | 1.64649766 | 0.745 | 0.193 | 2.02E-147 | CD16neg_NK_spleen |
| ENSMMUG00000058532 | 1.45E-151 | 2.40444217 | 0.538 | 0.088 | 5.15E-147 | CD16neg_NK_spleen |
| CRTC3              | 3.33E-151 | 2.47303856 | 0.457 | 0.049 | 1.18E-146 | CD16neg_NK_spleen |
| NCOA2              | 3.91E-151 | 1.88684142 | 0.557 | 0.089 | 1.38E-146 | CD16neg_NK_spleen |
| CBLB               | 3.40E-150 | 1.44121819 | 0.838 | 0.269 | 1.20E-145 | CD16neg_NK_spleen |
| MLLT3              | 8.13E-150 | 2.18811278 | 0.5   | 0.068 | 2.88E-145 | CD16neg_NK_spleen |
| ARL15              | 1.23E-149 | 2.08597119 | 0.536 | 0.083 | 4.37E-145 | CD16neg_NK_spleen |
| ASH1L              | 1.68E-149 | 1.51362715 | 0.717 | 0.17  | 5.96E-145 | CD16neg_NK_spleen |
| GNAQ               | 4.81E-149 | 2.21253636 | 0.519 | 0.076 | 1.70E-144 | CD16neg_NK_spleen |
| MYCBP2             | 2.21E-148 | 1.57938972 | 0.684 | 0.152 | 7.83E-144 | CD16neg_NK_spleen |
| ERC1               | 3.40E-148 | 2.37076199 | 0.46  | 0.053 | 1.20E-143 | CD16neg_NK_spleen |
| RPL23A             | 6.70E-148 | 0.80838879 | 0.991 | 0.924 | 2.37E-143 | CD16neg_NK_spleen |
| NFAT5              | 7.03E-148 | 2.05216289 | 0.509 | 0.071 | 2.49E-143 | CD16neg_NK_spleen |
| CERS6              | 2.40E-147 | 2.33780886 | 0.468 | 0.056 | 8.52E-143 | CD16neg_NK_spleen |
| TNKS               | 4.98E-147 | 2.3354393  | 0.442 | 0.045 | 1.77E-142 | CD16neg_NK_spleen |
| EIF4G3             | 5.31E-147 | 2.14758244 | 0.478 | 0.059 | 1.88E-142 | CD16neg_NK_spleen |
| NUP98              | 1.24E-146 | 2.14163542 | 0.5   | 0.07  | 4.39E-142 | CD16neg_NK_spleen |
| MED13L             | 2.50E-146 | 1.58543788 | 0.636 | 0.131 | 8.87E-142 | CD16neg_NK_spleen |

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| ARHGAP15           | 2.94E-146 | 1.40056207 | 0.916 | 0.363 | 1.04E-141 | CD16neg_NK_spleen |
| CREBBP             | 3.52E-146 | 1.97482189 | 0.503 | 0.07  | 1.25E-141 | CD16neg_NK_spleen |
| MBNL1              | 2.81E-145 | 1.21291875 | 0.966 | 0.583 | 9.95E-141 | CD16neg_NK_spleen |
| KDM4C              | 3.89E-145 | 2.03601045 | 0.528 | 0.082 | 1.38E-140 | CD16neg_NK_spleen |
| FBXO34             | 8.48E-145 | 1.68284314 | 0.625 | 0.126 | 3.00E-140 | CD16neg_NK_spleen |
| SMYD3              | 1.10E-144 | 2.22918788 | 0.508 | 0.078 | 3.90E-140 | CD16neg_NK_spleen |
| ST6GAL1            | 2.35E-144 | 2.34473328 | 0.462 | 0.056 | 8.33E-140 | CD16neg_NK_spleen |
| NXPE3              | 4.16E-144 | 1.66122671 | 0.73  | 0.196 | 1.47E-139 | CD16neg_NK_spleen |
| NUFIP2             | 9.30E-144 | 1.86311337 | 0.552 | 0.094 | 3.29E-139 | CD16neg_NK_spleen |
| ZC3HAV1            | 1.06E-143 | 1.58867002 | 0.645 | 0.138 | 3.76E-139 | CD16neg_NK_spleen |
| MBD5               | 5.60E-143 | 2.07672537 | 0.534 | 0.088 | 1.98E-138 | CD16neg_NK_spleen |
| KDM2A              | 8.67E-143 | 1.58151129 | 0.65  | 0.14  | 3.07E-138 | CD16neg_NK_spleen |
| NSD1               | 1.13E-142 | 1.88143787 | 0.534 | 0.085 | 4.00E-138 | CD16neg_NK_spleen |
| EXOC4              | 3.49E-142 | 1.85689074 | 0.558 | 0.098 | 1.24E-137 | CD16neg_NK_spleen |
| PTEN               | 5.00E-142 | 2.93784626 | 0.391 | 0.031 | 1.77E-137 | CD16neg_NK_spleen |
| TRIR               | 5.50E-141 | 1.55912184 | 0.635 | 0.136 | 1.95E-136 | CD16neg_NK_spleen |
| PREX1              | 1.02E-140 | 1.43967613 | 0.692 | 0.163 | 3.63E-136 | CD16neg_NK_spleen |
| ATP5F1D            | 1.08E-140 | 1.72272861 | 0.507 | 0.074 | 3.82E-136 | CD16neg_NK_spleen |
| HNRNPD             | 1.84E-140 | 1.35706048 | 0.651 | 0.136 | 6.52E-136 | CD16neg_NK_spleen |
| SLC9A9             | 2.04E-140 | 1.55149916 | 0.696 | 0.171 | 7.24E-136 | CD16neg_NK_spleen |
| IRF1               | 3.36E-140 | 1.62854551 | 0.714 | 0.184 | 1.19E-135 | CD16neg_NK_spleen |
| ARRDC3             | 3.87E-140 | 2.42286202 | 0.441 | 0.051 | 1.37E-135 | CD16neg_NK_spleen |
| ENSMMUG00000062269 | 4.75E-140 | 4.32075453 | 0.346 | 0.018 | 1.68E-135 | CD16neg_NK_spleen |
| GMDS               | 5.29E-140 | 2.25232832 | 0.46  | 0.059 | 1.87E-135 | CD16neg_NK_spleen |
| SCAF8              | 7.26E-140 | 1.93440176 | 0.493 | 0.07  | 2.57E-135 | CD16neg_NK_spleen |
| FOXP1              | 7.78E-140 | 1.97219109 | 0.491 | 0.07  | 2.76E-135 | CD16neg_NK_spleen |
| AFF1               | 1.34E-139 | 2.5718873  | 0.415 | 0.041 | 4.76E-135 | CD16neg_NK_spleen |
| HELZ               | 1.52E-139 | 1.5862396  | 0.613 | 0.124 | 5.38E-135 | CD16neg_NK_spleen |
| NUP153             | 1.75E-139 | 2.04706204 | 0.485 | 0.068 | 6.21E-135 | CD16neg_NK_spleen |
| PMAIP1             | 1.81E-139 | 1.64473203 | 0.569 | 0.105 | 6.42E-135 | CD16neg_NK_spleen |
| ZFP36              | 1.84E-139 | 1.3222267  | 0.973 | 0.588 | 6.52E-135 | CD16neg_NK_spleen |
| SSH2               | 4.21E-139 | 1.44747691 | 0.727 | 0.194 | 1.49E-134 | CD16neg_NK_spleen |
| RHOB               | 4.38E-139 | 3.28721271 | 0.363 | 0.023 | 1.55E-134 | CD16neg_NK_spleen |

|         |           |            |       |       |           |                   |
|---------|-----------|------------|-------|-------|-----------|-------------------|
| AAK1    | 2.96E-138 | 1.77306779 | 0.556 | 0.101 | 1.05E-133 | CD16neg_NK_spleen |
| CHD2    | 3.72E-138 | 1.3818827  | 0.695 | 0.166 | 1.32E-133 | CD16neg_NK_spleen |
| CDK13   | 3.93E-138 | 1.85177884 | 0.549 | 0.099 | 1.39E-133 | CD16neg_NK_spleen |
| CUL3    | 4.86E-138 | 1.90576572 | 0.5   | 0.075 | 1.72E-133 | CD16neg_NK_spleen |
| TOX2    | 6.81E-138 | 2.73127016 | 0.408 | 0.04  | 2.41E-133 | CD16neg_NK_spleen |
| RBM14   | 9.83E-138 | 1.46464827 | 0.677 | 0.158 | 3.48E-133 | CD16neg_NK_spleen |
| ITSN2   | 1.04E-137 | 1.470482   | 0.618 | 0.127 | 3.70E-133 | CD16neg_NK_spleen |
| MCUB    | 1.83E-137 | 2.52891404 | 0.418 | 0.043 | 6.48E-133 | CD16neg_NK_spleen |
| ITGAX   | 2.32E-137 | 1.4330541  | 0.81  | 0.262 | 8.24E-133 | CD16neg_NK_spleen |
| PAG1    | 3.84E-137 | 1.87575012 | 0.494 | 0.073 | 1.36E-132 | CD16neg_NK_spleen |
| ESYT2   | 4.76E-137 | 1.6439363  | 0.53  | 0.088 | 1.69E-132 | CD16neg_NK_spleen |
| SLMAP   | 5.42E-137 | 2.43756916 | 0.428 | 0.047 | 1.92E-132 | CD16neg_NK_spleen |
| MSI2    | 1.31E-136 | 2.39166475 | 0.433 | 0.05  | 4.63E-132 | CD16neg_NK_spleen |
| SENP6   | 1.93E-136 | 1.73296088 | 0.548 | 0.097 | 6.85E-132 | CD16neg_NK_spleen |
| NPAT    | 2.81E-136 | 1.91874188 | 0.5   | 0.078 | 9.96E-132 | CD16neg_NK_spleen |
| ZFAND5  | 6.32E-136 | 1.74296619 | 0.482 | 0.067 | 2.24E-131 | CD16neg_NK_spleen |
| ZEB1    | 9.58E-136 | 1.76380011 | 0.549 | 0.102 | 3.39E-131 | CD16neg_NK_spleen |
| REV3L   | 1.96E-135 | 2.13819688 | 0.448 | 0.056 | 6.96E-131 | CD16neg_NK_spleen |
| CCDC88C | 3.28E-135 | 2.06833633 | 0.45  | 0.056 | 1.16E-130 | CD16neg_NK_spleen |
| NFATC2  | 3.69E-135 | 2.68931465 | 0.389 | 0.035 | 1.31E-130 | CD16neg_NK_spleen |
| EPC1    | 8.67E-135 | 1.35537132 | 0.736 | 0.193 | 3.07E-130 | CD16neg_NK_spleen |
| CYRIB   | 8.90E-135 | 1.33637231 | 0.891 | 0.355 | 3.15E-130 | CD16neg_NK_spleen |
| MTMR12  | 1.09E-134 | 2.03954303 | 0.446 | 0.056 | 3.87E-130 | CD16neg_NK_spleen |
| ANKIB1  | 1.19E-134 | 1.80622995 | 0.516 | 0.085 | 4.20E-130 | CD16neg_NK_spleen |
| GZMM    | 1.45E-134 | 1.23257747 | 0.942 | 0.442 | 5.14E-130 | CD16neg_NK_spleen |
| USP47   | 2.41E-134 | 1.54751921 | 0.618 | 0.134 | 8.52E-130 | CD16neg_NK_spleen |
| TBC1D1  | 2.57E-134 | 1.92757222 | 0.498 | 0.077 | 9.10E-130 | CD16neg_NK_spleen |
| SPIDR   | 3.41E-134 | 2.33414919 | 0.436 | 0.054 | 1.21E-129 | CD16neg_NK_spleen |
| LRRFIP1 | 1.11E-133 | 1.56839717 | 0.579 | 0.114 | 3.95E-129 | CD16neg_NK_spleen |
| FOXJ3   | 1.13E-133 | 2.35023162 | 0.392 | 0.036 | 4.02E-129 | CD16neg_NK_spleen |
| BCAS3   | 3.34E-133 | 2.01422028 | 0.498 | 0.08  | 1.18E-128 | CD16neg_NK_spleen |
| SESN1   | 7.54E-133 | 1.62721039 | 0.525 | 0.089 | 2.67E-128 | CD16neg_NK_spleen |
| FBXL17  | 7.81E-133 | 1.98790711 | 0.476 | 0.071 | 2.77E-128 | CD16neg_NK_spleen |

|             |           |            |       |       |           |                   |
|-------------|-----------|------------|-------|-------|-----------|-------------------|
| SMARCC1     | 1.91E-132 | 1.82365891 | 0.495 | 0.078 | 6.75E-128 | CD16neg_NK_spleen |
| NCOA3       | 2.90E-132 | 1.45225757 | 0.612 | 0.129 | 1.03E-127 | CD16neg_NK_spleen |
| SCML4       | 3.88E-132 | 1.4065556  | 0.803 | 0.262 | 1.37E-127 | CD16neg_NK_spleen |
| RPS6KB1     | 4.27E-132 | 1.81942694 | 0.508 | 0.084 | 1.51E-127 | CD16neg_NK_spleen |
| ANKRD11     | 5.96E-132 | 1.53180989 | 0.576 | 0.114 | 2.11E-127 | CD16neg_NK_spleen |
| ATXN2       | 6.40E-132 | 2.00616546 | 0.452 | 0.061 | 2.27E-127 | CD16neg_NK_spleen |
| YTHDC1      | 6.64E-132 | 1.69150512 | 0.507 | 0.081 | 2.35E-127 | CD16neg_NK_spleen |
| OSBPL8      | 6.76E-132 | 1.89033944 | 0.503 | 0.084 | 2.40E-127 | CD16neg_NK_spleen |
| ZCCHC7      | 1.04E-131 | 1.59798308 | 0.618 | 0.137 | 3.67E-127 | CD16neg_NK_spleen |
| PNISR       | 2.13E-131 | 1.23575761 | 0.714 | 0.182 | 7.56E-127 | CD16neg_NK_spleen |
| USP9X       | 2.78E-131 | 1.7142304  | 0.512 | 0.086 | 9.86E-127 | CD16neg_NK_spleen |
| SRSF4       | 4.02E-131 | 1.89996637 | 0.447 | 0.059 | 1.43E-126 | CD16neg_NK_spleen |
| IKZF1       | 4.29E-131 | 1.37734247 | 0.66  | 0.155 | 1.52E-126 | CD16neg_NK_spleen |
| HERC4       | 6.14E-131 | 1.99816999 | 0.465 | 0.067 | 2.17E-126 | CD16neg_NK_spleen |
| PPP1R10     | 6.61E-131 | 1.54388467 | 0.64  | 0.149 | 2.34E-126 | CD16neg_NK_spleen |
| PSPC1       | 6.67E-131 | 2.14687627 | 0.44  | 0.058 | 2.36E-126 | CD16neg_NK_spleen |
| HPCAL1      | 1.31E-130 | 2.05797842 | 0.417 | 0.047 | 4.64E-126 | CD16neg_NK_spleen |
| DDX17       | 1.39E-130 | 1.36203792 | 0.688 | 0.169 | 4.94E-126 | CD16neg_NK_spleen |
| EFCAB2      | 1.71E-130 | 1.70469083 | 0.558 | 0.109 | 6.07E-126 | CD16neg_NK_spleen |
| PDE1C       | 3.27E-130 | 2.76799915 | 0.376 | 0.034 | 1.16E-125 | CD16neg_NK_spleen |
| HSPA5       | 5.12E-130 | 1.58782332 | 0.771 | 0.237 | 1.82E-125 | CD16neg_NK_spleen |
| SDHAF4      | 8.19E-130 | 1.41727195 | 0.608 | 0.128 | 2.90E-125 | CD16neg_NK_spleen |
| C20H16orf72 | 9.07E-130 | 2.28279814 | 0.399 | 0.041 | 3.21E-125 | CD16neg_NK_spleen |
| PKN2        | 9.33E-130 | 1.66766534 | 0.515 | 0.089 | 3.31E-125 | CD16neg_NK_spleen |
| LRCH3       | 1.20E-129 | 1.89397795 | 0.486 | 0.077 | 4.24E-125 | CD16neg_NK_spleen |
| DOCK11      | 1.21E-129 | 1.56824475 | 0.526 | 0.092 | 4.27E-125 | CD16neg_NK_spleen |
| SYNRG       | 1.85E-129 | 1.73207094 | 0.488 | 0.075 | 6.54E-125 | CD16neg_NK_spleen |
| MAPKAP1     | 4.00E-129 | 2.44776351 | 0.393 | 0.04  | 1.42E-124 | CD16neg_NK_spleen |
| ARID1A      | 1.18E-128 | 1.78117053 | 0.472 | 0.07  | 4.18E-124 | CD16neg_NK_spleen |
| SETD5       | 1.38E-128 | 1.61690152 | 0.514 | 0.087 | 4.88E-124 | CD16neg_NK_spleen |
| EIF3F       | 1.90E-128 | 1.3634581  | 0.69  | 0.173 | 6.73E-124 | CD16neg_NK_spleen |
| RNF38       | 2.28E-128 | 1.82033947 | 0.473 | 0.071 | 8.08E-124 | CD16neg_NK_spleen |
| DENND4A     | 3.68E-128 | 1.26955755 | 0.868 | 0.332 | 1.30E-123 | CD16neg_NK_spleen |

|         |           |            |       |       |           |                   |
|---------|-----------|------------|-------|-------|-----------|-------------------|
| RANBP2  | 3.69E-128 | 1.7187971  | 0.562 | 0.116 | 1.31E-123 | CD16neg_NK_spleen |
| ZFC3H1  | 3.96E-128 | 1.85871926 | 0.5   | 0.084 | 1.40E-123 | CD16neg_NK_spleen |
| DCAF5   | 5.24E-128 | 1.77649727 | 0.463 | 0.067 | 1.86E-123 | CD16neg_NK_spleen |
| RASA1   | 1.02E-127 | 2.1496323  | 0.41  | 0.046 | 3.61E-123 | CD16neg_NK_spleen |
| COTL1   | 1.10E-127 | 1.29125032 | 0.767 | 0.227 | 3.88E-123 | CD16neg_NK_spleen |
| TERF2IP | 2.04E-127 | 2.25625818 | 0.374 | 0.034 | 7.22E-123 | CD16neg_NK_spleen |
| DENND1A | 2.06E-127 | 2.39917975 | 0.371 | 0.033 | 7.29E-123 | CD16neg_NK_spleen |
| GBP3    | 2.07E-127 | 2.66904398 | 0.436 | 0.061 | 7.34E-123 | CD16neg_NK_spleen |
| CCND3   | 2.49E-127 | 1.47285277 | 0.692 | 0.181 | 8.83E-123 | CD16neg_NK_spleen |
| USP15   | 2.65E-127 | 1.20011677 | 0.793 | 0.242 | 9.39E-123 | CD16neg_NK_spleen |
| GLIS3   | 2.99E-127 | 3.98672547 | 0.305 | 0.012 | 1.06E-122 | CD16neg_NK_spleen |
| MEMO1   | 6.50E-127 | 1.93642412 | 0.457 | 0.067 | 2.30E-122 | CD16neg_NK_spleen |
| MOB3A   | 1.07E-126 | 1.94500688 | 0.441 | 0.061 | 3.79E-122 | CD16neg_NK_spleen |
| NFATC3  | 1.54E-126 | 1.57332826 | 0.536 | 0.103 | 5.44E-122 | CD16neg_NK_spleen |
| BBX     | 3.51E-126 | 1.56897005 | 0.549 | 0.107 | 1.24E-121 | CD16neg_NK_spleen |
| ITFG1   | 8.15E-126 | 2.34966572 | 0.405 | 0.048 | 2.89E-121 | CD16neg_NK_spleen |
| MLLT10  | 1.29E-125 | 2.03426316 | 0.41  | 0.048 | 4.58E-121 | CD16neg_NK_spleen |
| UBR5    | 1.42E-125 | 1.68789618 | 0.494 | 0.084 | 5.04E-121 | CD16neg_NK_spleen |
| OXSRI   | 1.61E-125 | 1.90363575 | 0.441 | 0.061 | 5.70E-121 | CD16neg_NK_spleen |
| EIF5    | 2.66E-125 | 1.41823901 | 0.596 | 0.131 | 9.41E-121 | CD16neg_NK_spleen |
| ERBIN   | 3.16E-125 | 1.52582682 | 0.562 | 0.115 | 1.12E-120 | CD16neg_NK_spleen |
| CAB39   | 4.73E-125 | 1.53171376 | 0.54  | 0.103 | 1.67E-120 | CD16neg_NK_spleen |
| ST3GAL1 | 6.23E-125 | 1.50101413 | 0.531 | 0.098 | 2.21E-120 | CD16neg_NK_spleen |
| GABPB1  | 9.24E-125 | 1.80585314 | 0.507 | 0.093 | 3.27E-120 | CD16neg_NK_spleen |
| CCDC91  | 2.08E-124 | 1.90111211 | 0.484 | 0.081 | 7.37E-120 | CD16neg_NK_spleen |
| ABR     | 2.52E-124 | 2.12067443 | 0.423 | 0.056 | 8.91E-120 | CD16neg_NK_spleen |
| DIP2B   | 2.90E-124 | 1.49391803 | 0.526 | 0.099 | 1.03E-119 | CD16neg_NK_spleen |
| JAML    | 3.18E-124 | 1.69136157 | 0.513 | 0.093 | 1.13E-119 | CD16neg_NK_spleen |
| ZNF292  | 3.60E-124 | 1.34867556 | 0.621 | 0.141 | 1.28E-119 | CD16neg_NK_spleen |
| ATP11B  | 1.09E-123 | 2.18158247 | 0.411 | 0.052 | 3.87E-119 | CD16neg_NK_spleen |
| MICAL2  | 1.53E-123 | 1.79872708 | 0.46  | 0.07  | 5.41E-119 | CD16neg_NK_spleen |
| ZNF148  | 2.91E-123 | 1.53814985 | 0.574 | 0.125 | 1.03E-118 | CD16neg_NK_spleen |
| LYST    | 3.05E-123 | 1.33017577 | 0.708 | 0.2   | 1.08E-118 | CD16neg_NK_spleen |

|          |           |            |       |       |           |                   |
|----------|-----------|------------|-------|-------|-----------|-------------------|
| JAK1     | 3.80E-123 | 1.21272279 | 0.91  | 0.386 | 1.34E-118 | CD16neg_NK_spleen |
| HNRNPU   | 4.04E-123 | 1.34601532 | 0.707 | 0.197 | 1.43E-118 | CD16neg_NK_spleen |
| PUM2     | 9.17E-123 | 1.45198894 | 0.594 | 0.133 | 3.25E-118 | CD16neg_NK_spleen |
| GTF2I    | 2.02E-122 | 1.53281594 | 0.517 | 0.095 | 7.15E-118 | CD16neg_NK_spleen |
| TMEM131  | 2.43E-122 | 2.0357427  | 0.426 | 0.058 | 8.62E-118 | CD16neg_NK_spleen |
| ZSWIM4   | 3.28E-122 | 3.66192402 | 0.312 | 0.017 | 1.16E-117 | CD16neg_NK_spleen |
| RORA     | 4.22E-122 | 1.39055719 | 0.611 | 0.141 | 1.50E-117 | CD16neg_NK_spleen |
| THEMIS   | 5.41E-122 | 2.58286833 | 0.385 | 0.044 | 1.92E-117 | CD16neg_NK_spleen |
| RNF115   | 1.06E-121 | 1.70581915 | 0.472 | 0.076 | 3.75E-117 | CD16neg_NK_spleen |
| NEDD9    | 1.48E-121 | 1.34096608 | 0.638 | 0.157 | 5.25E-117 | CD16neg_NK_spleen |
| OSBPL9   | 2.06E-121 | 1.53571903 | 0.551 | 0.114 | 7.30E-117 | CD16neg_NK_spleen |
| LONP2    | 3.36E-121 | 2.08347602 | 0.408 | 0.053 | 1.19E-116 | CD16neg_NK_spleen |
| CDK17    | 4.26E-121 | 1.40032323 | 0.602 | 0.14  | 1.51E-116 | CD16neg_NK_spleen |
| ELOVL5   | 4.48E-121 | 1.45962207 | 0.558 | 0.116 | 1.59E-116 | CD16neg_NK_spleen |
| PTPRM    | 5.57E-121 | 2.55080924 | 0.352 | 0.031 | 1.97E-116 | CD16neg_NK_spleen |
| SBF2     | 8.51E-121 | 2.22145112 | 0.405 | 0.052 | 3.01E-116 | CD16neg_NK_spleen |
| ZNF407   | 1.14E-120 | 2.11155436 | 0.407 | 0.052 | 4.03E-116 | CD16neg_NK_spleen |
| MSL2     | 1.30E-120 | 2.05629295 | 0.418 | 0.056 | 4.61E-116 | CD16neg_NK_spleen |
| TRIP12   | 2.26E-120 | 1.63369897 | 0.499 | 0.09  | 8.01E-116 | CD16neg_NK_spleen |
| PBRM1    | 2.53E-120 | 1.82172777 | 0.457 | 0.072 | 8.96E-116 | CD16neg_NK_spleen |
| PPP1R12A | 4.80E-120 | 1.21550887 | 0.756 | 0.226 | 1.70E-115 | CD16neg_NK_spleen |
| MAN2A1   | 5.06E-120 | 1.88554731 | 0.427 | 0.06  | 1.79E-115 | CD16neg_NK_spleen |
| MKLN1    | 7.73E-120 | 1.72197312 | 0.475 | 0.08  | 2.74E-115 | CD16neg_NK_spleen |
| ROCK1    | 1.10E-119 | 1.36199062 | 0.641 | 0.164 | 3.91E-115 | CD16neg_NK_spleen |
| FAM172A  | 1.14E-119 | 1.44039898 | 0.622 | 0.15  | 4.05E-115 | CD16neg_NK_spleen |
| PPP6R3   | 1.63E-119 | 1.5197805  | 0.517 | 0.099 | 5.78E-115 | CD16neg_NK_spleen |
| CD74     | 1.92E-119 | 1.62485781 | 0.475 | 0.081 | 6.82E-115 | CD16neg_NK_spleen |
| R3HDM2   | 2.19E-119 | 2.33820469 | 0.38  | 0.043 | 7.77E-115 | CD16neg_NK_spleen |
| EHMT1    | 6.35E-119 | 2.1522601  | 0.375 | 0.04  | 2.25E-114 | CD16neg_NK_spleen |
| COX5A    | 7.73E-119 | 1.98493647 | 0.409 | 0.055 | 2.74E-114 | CD16neg_NK_spleen |
| TMX4     | 7.73E-119 | 1.90816403 | 0.439 | 0.067 | 2.74E-114 | CD16neg_NK_spleen |
| RRAS2    | 1.03E-118 | 1.85754513 | 0.456 | 0.075 | 3.64E-114 | CD16neg_NK_spleen |
| IPCEF1   | 1.04E-118 | 1.58845353 | 0.503 | 0.094 | 3.68E-114 | CD16neg_NK_spleen |

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|--------------------|-----------|------------|-------|-------|-----------|-------------------|
| MYO1D              | 1.97E-118 | 1.88687466 | 0.482 | 0.088 | 6.99E-114 | CD16neg_NK_spleen |
| AEBP2              | 2.58E-118 | 2.01684152 | 0.407 | 0.054 | 9.15E-114 | CD16neg_NK_spleen |
| EPC2               | 3.11E-118 | 2.05650406 | 0.392 | 0.047 | 1.10E-113 | CD16neg_NK_spleen |
| JAKMIP1            | 5.60E-118 | 1.80315258 | 0.399 | 0.05  | 1.98E-113 | CD16neg_NK_spleen |
| WDR26              | 5.64E-118 | 1.69695322 | 0.459 | 0.075 | 2.00E-113 | CD16neg_NK_spleen |
| RBM39              | 6.86E-118 | 1.10197141 | 0.942 | 0.416 | 2.43E-113 | CD16neg_NK_spleen |
| TTC13              | 7.04E-118 | 2.67644336 | 0.344 | 0.03  | 2.49E-113 | CD16neg_NK_spleen |
| HERC1              | 7.99E-118 | 1.53676468 | 0.511 | 0.099 | 2.83E-113 | CD16neg_NK_spleen |
| FBXL20             | 1.41E-117 | 2.30940364 | 0.385 | 0.046 | 4.99E-113 | CD16neg_NK_spleen |
| SYNE1              | 2.32E-117 | 1.54355022 | 0.504 | 0.095 | 8.21E-113 | CD16neg_NK_spleen |
| TMEM160            | 2.51E-117 | 2.4144018  | 0.339 | 0.028 | 8.88E-113 | CD16neg_NK_spleen |
| ENSMMUG00000054743 | 2.88E-117 | 2.31051491 | 0.357 | 0.035 | 1.02E-112 | CD16neg_NK_spleen |
| ENSMMUG00000061025 | 3.99E-117 | 3.82969577 | 0.288 | 0.012 | 1.42E-112 | CD16neg_NK_spleen |
| METTL9             | 5.86E-117 | 1.72121184 | 0.449 | 0.071 | 2.08E-112 | CD16neg_NK_spleen |
| PRKX               | 7.17E-117 | 1.37466625 | 0.623 | 0.155 | 2.54E-112 | CD16neg_NK_spleen |
| PSIP1              | 1.08E-116 | 2.03465479 | 0.383 | 0.045 | 3.81E-112 | CD16neg_NK_spleen |
| GOLM2              | 1.27E-116 | 1.45836462 | 0.507 | 0.095 | 4.49E-112 | CD16neg_NK_spleen |
| PTBP2              | 2.18E-116 | 1.64963715 | 0.454 | 0.074 | 7.72E-112 | CD16neg_NK_spleen |
| ENSMMUG00000008587 | 2.82E-116 | 1.86648892 | 0.467 | 0.083 | 9.98E-112 | CD16neg_NK_spleen |
| DYM                | 2.95E-116 | 1.86731637 | 0.441 | 0.07  | 1.05E-111 | CD16neg_NK_spleen |
| ARFGEF1            | 3.95E-116 | 1.91197176 | 0.421 | 0.06  | 1.40E-111 | CD16neg_NK_spleen |
| IRAG2              | 5.19E-116 | 2.07530983 | 0.397 | 0.053 | 1.84E-111 | CD16neg_NK_spleen |
| CRY1               | 8.56E-116 | 1.89246054 | 0.435 | 0.068 | 3.03E-111 | CD16neg_NK_spleen |
| ENSMMUG00000052802 | 8.85E-116 | 2.68768482 | 0.335 | 0.029 | 3.14E-111 | CD16neg_NK_spleen |
| MTDH               | 1.79E-115 | 1.73633853 | 0.436 | 0.067 | 6.33E-111 | CD16neg_NK_spleen |
| AGO3               | 2.36E-115 | 1.75921126 | 0.441 | 0.07  | 8.35E-111 | CD16neg_NK_spleen |
| VTI1A              | 4.07E-115 | 1.54196506 | 0.527 | 0.111 | 1.44E-110 | CD16neg_NK_spleen |
| HDAC9              | 4.75E-115 | 1.70165469 | 0.493 | 0.096 | 1.68E-110 | CD16neg_NK_spleen |
| CTNNB1             | 6.13E-115 | 1.5175401  | 0.494 | 0.093 | 2.17E-110 | CD16neg_NK_spleen |
| SPPL3              | 8.49E-115 | 2.38623468 | 0.355 | 0.036 | 3.01E-110 | CD16neg_NK_spleen |
| SP140              | 1.07E-114 | 1.53749478 | 0.467 | 0.08  | 3.78E-110 | CD16neg_NK_spleen |
| YPEL5              | 1.18E-114 | 1.43060204 | 0.633 | 0.165 | 4.18E-110 | CD16neg_NK_spleen |
| XPR1               | 2.00E-114 | 2.36627866 | 0.366 | 0.041 | 7.10E-110 | CD16neg_NK_spleen |



|                    |           |            |       |       |           |                   |
|--------------------|-----------|------------|-------|-------|-----------|-------------------|
| THADA              | 2.05E-114 | 2.12607932 | 0.391 | 0.051 | 7.26E-110 | CD16neg_NK_spleen |
| EIF4A2             | 2.67E-114 | 1.15037549 | 0.718 | 0.202 | 9.47E-110 | CD16neg_NK_spleen |
| EP300              | 2.69E-114 | 1.626024   | 0.463 | 0.08  | 9.52E-110 | CD16neg_NK_spleen |
| UBR3               | 3.32E-114 | 1.90751652 | 0.416 | 0.061 | 1.18E-109 | CD16neg_NK_spleen |
| GAK                | 4.73E-114 | 1.70273149 | 0.436 | 0.069 | 1.68E-109 | CD16neg_NK_spleen |
| RBM26              | 5.43E-114 | 1.41624422 | 0.502 | 0.097 | 1.92E-109 | CD16neg_NK_spleen |
| TMEM181            | 6.83E-114 | 1.75744492 | 0.422 | 0.064 | 2.42E-109 | CD16neg_NK_spleen |
| RERE               | 8.25E-114 | 1.23730238 | 0.698 | 0.203 | 2.92E-109 | CD16neg_NK_spleen |
| ENSMMUG00000049833 | 9.23E-114 | 3.37285595 | 0.316 | 0.025 | 3.27E-109 | CD16neg_NK_spleen |
| MAP1LC3A           | 4.82E-113 | 1.52337028 | 0.449 | 0.073 | 1.71E-108 | CD16neg_NK_spleen |
| RLF                | 5.68E-113 | 1.49152257 | 0.474 | 0.086 | 2.01E-108 | CD16neg_NK_spleen |
| ITPKB              | 6.83E-113 | 1.49047269 | 0.478 | 0.086 | 2.42E-108 | CD16neg_NK_spleen |
| PHIP               | 9.55E-113 | 1.35995553 | 0.561 | 0.125 | 3.38E-108 | CD16neg_NK_spleen |
| LSM14A             | 1.02E-112 | 1.19755792 | 0.63  | 0.156 | 3.60E-108 | CD16neg_NK_spleen |
| RABGEF1            | 1.06E-112 | 1.20868077 | 0.594 | 0.14  | 3.75E-108 | CD16neg_NK_spleen |
| CELF1              | 1.23E-112 | 1.85251205 | 0.433 | 0.07  | 4.34E-108 | CD16neg_NK_spleen |
| RPL13A             | 1.26E-112 | 0.74842849 | 0.986 | 0.88  | 4.45E-108 | CD16neg_NK_spleen |
| ACTA2              | 1.63E-112 | 2.10850596 | 0.378 | 0.047 | 5.79E-108 | CD16neg_NK_spleen |
| ENSMMUG00000055687 | 2.25E-112 | 1.86220551 | 0.381 | 0.047 | 7.96E-108 | CD16neg_NK_spleen |
| PELI1              | 2.76E-112 | 1.7657282  | 0.425 | 0.066 | 9.80E-108 | CD16neg_NK_spleen |
| CCNT1              | 3.61E-112 | 2.12159778 | 0.353 | 0.037 | 1.28E-107 | CD16neg_NK_spleen |
| SRSF2              | 3.72E-112 | 1.33735274 | 0.55  | 0.12  | 1.32E-107 | CD16neg_NK_spleen |
| RASA2              | 4.65E-112 | 1.3281325  | 0.564 | 0.128 | 1.65E-107 | CD16neg_NK_spleen |
| SGMS1              | 5.39E-112 | 1.92836817 | 0.405 | 0.059 | 1.91E-107 | CD16neg_NK_spleen |
| UXS1               | 6.26E-112 | 1.3619322  | 0.537 | 0.114 | 2.22E-107 | CD16neg_NK_spleen |
| WTAP               | 6.58E-112 | 1.24658346 | 0.613 | 0.15  | 2.33E-107 | CD16neg_NK_spleen |
| SRPK2              | 7.60E-112 | 1.78497872 | 0.458 | 0.082 | 2.69E-107 | CD16neg_NK_spleen |
| MARK3              | 1.05E-111 | 2.06641205 | 0.39  | 0.053 | 3.73E-107 | CD16neg_NK_spleen |
| WWP1               | 1.90E-111 | 2.11044828 | 0.355 | 0.039 | 6.72E-107 | CD16neg_NK_spleen |
| UBAP1              | 2.09E-111 | 1.58381597 | 0.463 | 0.083 | 7.39E-107 | CD16neg_NK_spleen |
| CLASP1             | 2.30E-111 | 2.0127006  | 0.356 | 0.039 | 8.14E-107 | CD16neg_NK_spleen |
| ZNF638             | 2.82E-111 | 1.42662329 | 0.481 | 0.09  | 9.98E-107 | CD16neg_NK_spleen |
| RPS6KA3            | 6.44E-111 | 1.28775484 | 0.602 | 0.15  | 2.28E-106 | CD16neg_NK_spleen |

|                    |           |            |       |       |           |                   |
|--------------------|-----------|------------|-------|-------|-----------|-------------------|
| PAK2               | 7.06E-111 | 1.14168417 | 0.708 | 0.204 | 2.50E-106 | CD16neg_NK_spleen |
| AGPS               | 8.01E-111 | 1.83517534 | 0.417 | 0.065 | 2.84E-106 | CD16neg_NK_spleen |
| CCM2               | 1.05E-110 | 1.4477431  | 0.499 | 0.098 | 3.73E-106 | CD16neg_NK_spleen |
| BRD2               | 1.51E-110 | 1.11523337 | 0.681 | 0.184 | 5.37E-106 | CD16neg_NK_spleen |
| FBNP4              | 1.60E-110 | 1.9921119  | 0.378 | 0.049 | 5.67E-106 | CD16neg_NK_spleen |
| HIP1               | 2.66E-110 | 1.94901803 | 0.4   | 0.058 | 9.42E-106 | CD16neg_NK_spleen |
| BTAF1              | 2.88E-110 | 2.0988921  | 0.373 | 0.047 | 1.02E-105 | CD16neg_NK_spleen |
| PBX3               | 3.26E-110 | 2.56223064 | 0.341 | 0.035 | 1.16E-105 | CD16neg_NK_spleen |
| ATRX               | 3.72E-110 | 1.1257999  | 0.618 | 0.154 | 1.32E-105 | CD16neg_NK_spleen |
| SMCHD1             | 4.14E-110 | 1.32512816 | 0.57  | 0.134 | 1.47E-105 | CD16neg_NK_spleen |
| DAPK2              | 1.11E-109 | 2.73292037 | 0.324 | 0.03  | 3.92E-105 | CD16neg_NK_spleen |
| DOCK2              | 2.34E-109 | 1.25400022 | 0.742 | 0.244 | 8.30E-105 | CD16neg_NK_spleen |
| APBA2              | 4.76E-109 | 2.60791201 | 0.321 | 0.029 | 1.69E-104 | CD16neg_NK_spleen |
| EFL1               | 5.13E-109 | 2.43503937 | 0.338 | 0.035 | 1.82E-104 | CD16neg_NK_spleen |
| RNF145             | 5.69E-109 | 1.5570158  | 0.439 | 0.074 | 2.02E-104 | CD16neg_NK_spleen |
| FARS2              | 5.89E-109 | 2.20568289 | 0.342 | 0.036 | 2.09E-104 | CD16neg_NK_spleen |
| YTHDF3             | 9.69E-109 | 1.79713275 | 0.39  | 0.054 | 3.43E-104 | CD16neg_NK_spleen |
| ENSMMUG00000040065 | 1.06E-108 | 1.47752953 | 0.434 | 0.07  | 3.75E-104 | CD16neg_NK_spleen |
| CD244              | 1.14E-108 | 1.21408041 | 0.531 | 0.112 | 4.05E-104 | CD16neg_NK_spleen |
| TLK1               | 2.22E-108 | 1.82633136 | 0.409 | 0.063 | 7.88E-104 | CD16neg_NK_spleen |
| GOLGA4             | 3.04E-108 | 1.59433803 | 0.455 | 0.083 | 1.08E-103 | CD16neg_NK_spleen |
| LCOR               | 5.09E-108 | 1.56466343 | 0.454 | 0.082 | 1.80E-103 | CD16neg_NK_spleen |
| WDR7               | 5.65E-108 | 1.62949235 | 0.385 | 0.053 | 2.00E-103 | CD16neg_NK_spleen |
| MAP4K4             | 6.63E-108 | 1.38417084 | 0.498 | 0.101 | 2.35E-103 | CD16neg_NK_spleen |
| CUX1               | 6.96E-108 | 1.934778   | 0.399 | 0.06  | 2.46E-103 | CD16neg_NK_spleen |
| ZNF652             | 9.35E-108 | 3.14150205 | 0.292 | 0.02  | 3.31E-103 | CD16neg_NK_spleen |
| PDE7A              | 1.14E-107 | 1.34010499 | 0.516 | 0.112 | 4.05E-103 | CD16neg_NK_spleen |
| SNTB1              | 1.61E-107 | 1.63114341 | 0.444 | 0.08  | 5.70E-103 | CD16neg_NK_spleen |
| TAOK1              | 1.79E-107 | 1.94308427 | 0.373 | 0.05  | 6.35E-103 | CD16neg_NK_spleen |
| INPP5D             | 2.13E-107 | 1.17098695 | 0.639 | 0.174 | 7.55E-103 | CD16neg_NK_spleen |
| TRIM72             | 2.26E-107 | 1.11530415 | 0.703 | 0.205 | 8.00E-103 | CD16neg_NK_spleen |
| PLEKHG1            | 3.45E-107 | 1.73605178 | 0.417 | 0.068 | 1.22E-102 | CD16neg_NK_spleen |
| E2F3               | 3.67E-107 | 1.95183605 | 0.379 | 0.052 | 1.30E-102 | CD16neg_NK_spleen |

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|-------------------|-----------|------------|-------|-------|-----------|-------------------|
| ARGLU1            | 4.60E-107 | 1.04484824 | 0.645 | 0.17  | 1.63E-102 | CD16neg_NK_spleen |
| CLASP2            | 4.94E-107 | 1.68876067 | 0.425 | 0.07  | 1.75E-102 | CD16neg_NK_spleen |
| SMARCA5           | 7.61E-107 | 1.24691374 | 0.516 | 0.109 | 2.70E-102 | CD16neg_NK_spleen |
| EPB41             | 1.00E-106 | 1.28747545 | 0.544 | 0.124 | 3.54E-102 | CD16neg_NK_spleen |
| TLE4              | 1.22E-106 | 2.04530857 | 0.364 | 0.046 | 4.33E-102 | CD16neg_NK_spleen |
| ZMYND11           | 1.84E-106 | 1.5325539  | 0.45  | 0.082 | 6.53E-102 | CD16neg_NK_spleen |
| B3GNT2            | 1.94E-106 | 2.09843717 | 0.329 | 0.033 | 6.87E-102 | CD16neg_NK_spleen |
| EZH2              | 2.16E-106 | 1.59059106 | 0.449 | 0.082 | 7.65E-102 | CD16neg_NK_spleen |
| PICALM            | 2.21E-106 | 1.0695608  | 0.647 | 0.177 | 7.82E-102 | CD16neg_NK_spleen |
| GNB1              | 2.49E-106 | 1.58799808 | 0.45  | 0.083 | 8.84E-102 | CD16neg_NK_spleen |
| ILKAP             | 2.83E-106 | 1.95411995 | 0.377 | 0.052 | 1.00E-101 | CD16neg_NK_spleen |
| RBMS1             | 2.93E-106 | 1.57365242 | 0.437 | 0.077 | 1.04E-101 | CD16neg_NK_spleen |
| STT3B             | 3.42E-106 | 1.73863299 | 0.397 | 0.06  | 1.21E-101 | CD16neg_NK_spleen |
| MPZL1             | 3.48E-106 | 1.5495318  | 0.443 | 0.079 | 1.23E-101 | CD16neg_NK_spleen |
| RPS6KC1           | 4.99E-106 | 1.95241193 | 0.375 | 0.052 | 1.77E-101 | CD16neg_NK_spleen |
| MICU2             | 5.75E-106 | 1.96977845 | 0.36  | 0.045 | 2.04E-101 | CD16neg_NK_spleen |
| RLIM              | 6.74E-106 | 2.51903412 | 0.305 | 0.025 | 2.39E-101 | CD16neg_NK_spleen |
| LCP2              | 7.35E-106 | 1.3858605  | 0.471 | 0.091 | 2.60E-101 | CD16neg_NK_spleen |
| PPP1R15A          | 1.31E-105 | 1.20821085 | 0.597 | 0.155 | 4.64E-101 | CD16neg_NK_spleen |
| TASOR2            | 1.51E-105 | 1.6558335  | 0.4   | 0.061 | 5.37E-101 | CD16neg_NK_spleen |
| ZBTB10            | 1.72E-105 | 2.37167576 | 0.327 | 0.033 | 6.08E-101 | CD16neg_NK_spleen |
| POC1B             | 2.06E-105 | 1.32887088 | 0.494 | 0.102 | 7.32E-101 | CD16neg_NK_spleen |
| ABI1              | 2.88E-105 | 1.33774494 | 0.497 | 0.103 | 1.02E-100 | CD16neg_NK_spleen |
| SREK1             | 3.68E-105 | 1.23392088 | 0.576 | 0.141 | 1.30E-100 | CD16neg_NK_spleen |
| SCFD2             | 3.86E-105 | 2.54465921 | 0.33  | 0.035 | 1.37E-100 | CD16neg_NK_spleen |
| WWOX              | 4.24E-105 | 2.49578071 | 0.368 | 0.054 | 1.50E-100 | CD16neg_NK_spleen |
| BCLAF1            | 4.50E-105 | 1.06618534 | 0.78  | 0.259 | 1.60E-100 | CD16neg_NK_spleen |
| MON2              | 4.84E-105 | 2.01797793 | 0.341 | 0.039 | 1.71E-100 | CD16neg_NK_spleen |
| NBR1              | 5.54E-105 | 1.27030839 | 0.49  | 0.099 | 1.96E-100 | CD16neg_NK_spleen |
| WDR74             | 5.66E-105 | 1.4520592  | 0.562 | 0.141 | 2.01E-100 | CD16neg_NK_spleen |
| ENSMUG00000046264 | 5.68E-105 | 2.38173277 | 0.325 | 0.033 | 2.01E-100 | CD16neg_NK_spleen |
| RAB11FIP1         | 6.08E-105 | 1.66350331 | 0.42  | 0.071 | 2.15E-100 | CD16neg_NK_spleen |
| PTPRA             | 6.52E-105 | 1.88819146 | 0.372 | 0.051 | 2.31E-100 | CD16neg_NK_spleen |

|          |           |            |       |       |           |                   |
|----------|-----------|------------|-------|-------|-----------|-------------------|
| RAB2A    | 7.33E-105 | 1.10523751 | 0.596 | 0.15  | 2.60E-100 | CD16neg_NK_spleen |
| TRERF1   | 7.74E-105 | 2.29928789 | 0.329 | 0.035 | 2.74E-100 | CD16neg_NK_spleen |
| CWC27    | 1.30E-104 | 1.96902306 | 0.383 | 0.056 | 4.62E-100 | CD16neg_NK_spleen |
| TGFBR3   | 1.68E-104 | 1.18924831 | 0.678 | 0.21  | 5.97E-100 | CD16neg_NK_spleen |
| TESC     | 3.15E-104 | 1.04374513 | 0.8   | 0.279 | 1.11E-99  | CD16neg_NK_spleen |
| FAM107B  | 3.28E-104 | 1.14739843 | 0.612 | 0.163 | 1.16E-99  | CD16neg_NK_spleen |
| CMAH     | 3.55E-104 | 1.95377459 | 0.399 | 0.064 | 1.26E-99  | CD16neg_NK_spleen |
| SOS1     | 3.62E-104 | 1.65067722 | 0.42  | 0.071 | 1.28E-99  | CD16neg_NK_spleen |
| LRCH1    | 3.87E-104 | 1.62203729 | 0.423 | 0.072 | 1.37E-99  | CD16neg_NK_spleen |
| ARID2    | 4.25E-104 | 1.38589708 | 0.507 | 0.113 | 1.51E-99  | CD16neg_NK_spleen |
| MTREX    | 4.88E-104 | 1.2679028  | 0.59  | 0.152 | 1.73E-99  | CD16neg_NK_spleen |
| YEATS2   | 4.90E-104 | 1.61560082 | 0.421 | 0.071 | 1.74E-99  | CD16neg_NK_spleen |
| BRAF     | 6.05E-104 | 1.37214953 | 0.474 | 0.097 | 2.14E-99  | CD16neg_NK_spleen |
| UBE2G1   | 6.85E-104 | 2.06011949 | 0.363 | 0.049 | 2.43E-99  | CD16neg_NK_spleen |
| ARAP2    | 7.69E-104 | 1.00836976 | 0.686 | 0.204 | 2.72E-99  | CD16neg_NK_spleen |
| SMG6     | 1.36E-103 | 1.36023497 | 0.524 | 0.118 | 4.81E-99  | CD16neg_NK_spleen |
| TAF15    | 1.36E-103 | 1.24192887 | 0.533 | 0.121 | 4.83E-99  | CD16neg_NK_spleen |
| C1QBP    | 2.22E-103 | 3.19464864 | 0.255 | 0.01  | 7.86E-99  | CD16neg_NK_spleen |
| ATP1B3   | 2.64E-103 | 1.46327125 | 0.463 | 0.09  | 9.35E-99  | CD16neg_NK_spleen |
| PLXNC1   | 4.07E-103 | 1.12651073 | 0.511 | 0.11  | 1.44E-98  | CD16neg_NK_spleen |
| RALY     | 6.01E-103 | 1.33753745 | 0.462 | 0.089 | 2.13E-98  | CD16neg_NK_spleen |
| TASOR    | 6.81E-103 | 1.62303536 | 0.392 | 0.06  | 2.41E-98  | CD16neg_NK_spleen |
| TGFBR2   | 6.90E-103 | 1.15112478 | 0.616 | 0.169 | 2.44E-98  | CD16neg_NK_spleen |
| CTCF     | 7.51E-103 | 1.98432593 | 0.346 | 0.042 | 2.66E-98  | CD16neg_NK_spleen |
| OGT      | 9.61E-103 | 1.3722667  | 0.465 | 0.091 | 3.41E-98  | CD16neg_NK_spleen |
| EIF4EBP3 | 1.84E-102 | 1.57264921 | 0.43  | 0.077 | 6.53E-98  | CD16neg_NK_spleen |
| MAN1A1   | 2.88E-102 | 1.44048039 | 0.478 | 0.099 | 1.02E-97  | CD16neg_NK_spleen |
| TRA2B    | 4.35E-102 | 1.02665341 | 0.914 | 0.424 | 1.54E-97  | CD16neg_NK_spleen |
| PIK3R5   | 4.50E-102 | 1.21776383 | 0.55  | 0.133 | 1.60E-97  | CD16neg_NK_spleen |
| FBXO11   | 6.60E-102 | 1.47999767 | 0.439 | 0.081 | 2.34E-97  | CD16neg_NK_spleen |
| DENND1B  | 8.59E-102 | 1.99521631 | 0.38  | 0.059 | 3.04E-97  | CD16neg_NK_spleen |
| RSF1     | 1.16E-101 | 1.47900957 | 0.456 | 0.09  | 4.09E-97  | CD16neg_NK_spleen |
| GATAD2B  | 1.62E-101 | 1.6055998  | 0.416 | 0.072 | 5.73E-97  | CD16neg_NK_spleen |

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|--------------------|-----------|------------|-------|-------|----------|-------------------|
| PCGF3              | 1.66E-101 | 2.63685154 | 0.284 | 0.021 | 5.87E-97 | CD16neg_NK_spleen |
| XPO6               | 2.01E-101 | 1.25027049 | 0.478 | 0.097 | 7.12E-97 | CD16neg_NK_spleen |
| UBAC2              | 2.05E-101 | 1.19063417 | 0.58  | 0.15  | 7.26E-97 | CD16neg_NK_spleen |
| RELL1              | 2.22E-101 | 1.32458051 | 0.516 | 0.118 | 7.87E-97 | CD16neg_NK_spleen |
| EIF2AK3            | 2.46E-101 | 2.50340683 | 0.302 | 0.028 | 8.72E-97 | CD16neg_NK_spleen |
| PARD3              | 2.58E-101 | 2.25662054 | 0.332 | 0.039 | 9.15E-97 | CD16neg_NK_spleen |
| C10H20orf24        | 2.67E-101 | 1.34616984 | 0.453 | 0.086 | 9.48E-97 | CD16neg_NK_spleen |
| TSC22D3            | 3.63E-101 | 1.36187923 | 0.59  | 0.163 | 1.29E-96 | CD16neg_NK_spleen |
| USP24              | 4.24E-101 | 2.39942574 | 0.302 | 0.028 | 1.50E-96 | CD16neg_NK_spleen |
| ATF7IP             | 4.95E-101 | 1.08496599 | 0.619 | 0.166 | 1.75E-96 | CD16neg_NK_spleen |
| SIPA1L1            | 5.12E-101 | 2.04000289 | 0.341 | 0.042 | 1.82E-96 | CD16neg_NK_spleen |
| RAB7A              | 5.69E-101 | 1.31984841 | 0.563 | 0.142 | 2.02E-96 | CD16neg_NK_spleen |
| ZNF644             | 7.62E-101 | 1.23964197 | 0.565 | 0.142 | 2.70E-96 | CD16neg_NK_spleen |
| CSNK1A1            | 9.61E-101 | 1.22425334 | 0.592 | 0.156 | 3.41E-96 | CD16neg_NK_spleen |
| ENSMMUG00000063316 | 9.75E-101 | 1.53211476 | 0.498 | 0.112 | 3.46E-96 | CD16neg_NK_spleen |
| PHF20              | 1.12E-100 | 1.26511358 | 0.5   | 0.109 | 3.98E-96 | CD16neg_NK_spleen |
| RNGTT              | 1.28E-100 | 2.10290168 | 0.341 | 0.042 | 4.53E-96 | CD16neg_NK_spleen |
| PPP2R2A            | 1.42E-100 | 1.46489993 | 0.461 | 0.092 | 5.02E-96 | CD16neg_NK_spleen |
| MAPRE2             | 1.92E-100 | 1.13457225 | 0.738 | 0.245 | 6.81E-96 | CD16neg_NK_spleen |
| MARCHF6            | 2.37E-100 | 1.43811889 | 0.452 | 0.088 | 8.41E-96 | CD16neg_NK_spleen |
| FBXW4              | 2.83E-100 | 2.05387809 | 0.306 | 0.029 | 1.00E-95 | CD16neg_NK_spleen |
| NCOA1              | 6.87E-100 | 1.69125907 | 0.383 | 0.059 | 2.43E-95 | CD16neg_NK_spleen |
| CNOT4              | 9.67E-100 | 1.23557521 | 0.494 | 0.107 | 3.43E-95 | CD16neg_NK_spleen |
| NR3C1              | 1.06E-99  | 1.13229329 | 0.575 | 0.148 | 3.76E-95 | CD16neg_NK_spleen |
| RBM33              | 1.08E-99  | 1.41106758 | 0.414 | 0.072 | 3.82E-95 | CD16neg_NK_spleen |
| FNDC3A             | 2.80E-99  | 1.29855447 | 0.483 | 0.104 | 9.94E-95 | CD16neg_NK_spleen |
| MYO1F              | 3.46E-99  | 1.25242612 | 0.508 | 0.114 | 1.23E-94 | CD16neg_NK_spleen |
| GRAMD1B            | 3.59E-99  | 3.02610746 | 0.27  | 0.018 | 1.27E-94 | CD16neg_NK_spleen |
| WASF2              | 3.60E-99  | 1.47692412 | 0.416 | 0.073 | 1.28E-94 | CD16neg_NK_spleen |
| STRN3              | 3.76E-99  | 1.99565716 | 0.323 | 0.036 | 1.33E-94 | CD16neg_NK_spleen |
| CNOT6L             | 4.99E-99  | 0.9623085  | 0.72  | 0.229 | 1.77E-94 | CD16neg_NK_spleen |
| SMG1               | 5.02E-99  | 1.70691879 | 0.378 | 0.059 | 1.78E-94 | CD16neg_NK_spleen |
| ZMYM4              | 6.03E-99  | 2.23778147 | 0.311 | 0.033 | 2.14E-94 | CD16neg_NK_spleen |

|                     |          |            |       |       |          |                   |
|---------------------|----------|------------|-------|-------|----------|-------------------|
| FRYL                | 6.87E-99 | 1.63291752 | 0.381 | 0.059 | 2.43E-94 | CD16neg_NK_spleen |
| ENSMMUG00000006343  | 8.77E-99 | 1.69421989 | 0.384 | 0.061 | 3.11E-94 | CD16neg_NK_spleen |
| SKAP1               | 1.02E-98 | 0.99067377 | 0.942 | 0.531 | 3.60E-94 | CD16neg_NK_spleen |
| RPRD2               | 1.79E-98 | 1.61994484 | 0.348 | 0.046 | 6.36E-94 | CD16neg_NK_spleen |
| VPS13D              | 1.85E-98 | 2.14256217 | 0.317 | 0.035 | 6.55E-94 | CD16neg_NK_spleen |
| ARNTL               | 2.04E-98 | 1.63311991 | 0.377 | 0.059 | 7.24E-94 | CD16neg_NK_spleen |
| AMBRA1              | 2.32E-98 | 2.30538668 | 0.294 | 0.027 | 8.23E-94 | CD16neg_NK_spleen |
| BTBD9               | 2.68E-98 | 1.61911883 | 0.397 | 0.068 | 9.50E-94 | CD16neg_NK_spleen |
| KRAS                | 6.28E-98 | 1.63586489 | 0.366 | 0.054 | 2.22E-93 | CD16neg_NK_spleen |
| SFPQ                | 6.60E-98 | 1.0605404  | 0.605 | 0.163 | 2.34E-93 | CD16neg_NK_spleen |
| ZNF410              | 7.04E-98 | 1.79915761 | 0.346 | 0.046 | 2.50E-93 | CD16neg_NK_spleen |
| IMMP2L              | 7.13E-98 | 2.3564864  | 0.338 | 0.045 | 2.53E-93 | CD16neg_NK_spleen |
| ARF4                | 8.85E-98 | 1.05814702 | 0.777 | 0.278 | 3.13E-93 | CD16neg_NK_spleen |
| CNOT2               | 9.50E-98 | 1.16546153 | 0.603 | 0.171 | 3.37E-93 | CD16neg_NK_spleen |
| MYO5A               | 1.48E-97 | 1.76001162 | 0.395 | 0.068 | 5.23E-93 | CD16neg_NK_spleen |
| FCRL6               | 2.04E-97 | 1.37992918 | 0.476 | 0.103 | 7.24E-93 | CD16neg_NK_spleen |
| USP25               | 2.41E-97 | 1.88680197 | 0.354 | 0.05  | 8.54E-93 | CD16neg_NK_spleen |
| ENSMMUG000000021425 | 3.32E-97 | 1.55325435 | 0.377 | 0.059 | 1.18E-92 | CD16neg_NK_spleen |
| EHBP1               | 3.55E-97 | 1.724682   | 0.397 | 0.07  | 1.26E-92 | CD16neg_NK_spleen |
| KIAA1671            | 3.72E-97 | 2.69883718 | 0.272 | 0.02  | 1.32E-92 | CD16neg_NK_spleen |
| CD160               | 3.86E-97 | 1.3084819  | 0.449 | 0.088 | 1.37E-92 | CD16neg_NK_spleen |
| SUCO                | 4.14E-97 | 1.38785103 | 0.431 | 0.082 | 1.47E-92 | CD16neg_NK_spleen |
| ZMYND8              | 4.36E-97 | 1.65297493 | 0.36  | 0.052 | 1.54E-92 | CD16neg_NK_spleen |
| BRWD1               | 6.66E-97 | 1.46644409 | 0.388 | 0.064 | 2.36E-92 | CD16neg_NK_spleen |
| KTN1                | 1.03E-96 | 1.5716515  | 0.367 | 0.056 | 3.66E-92 | CD16neg_NK_spleen |
| GALNT7              | 1.32E-96 | 1.85127105 | 0.337 | 0.044 | 4.69E-92 | CD16neg_NK_spleen |
| HTT                 | 1.40E-96 | 2.65777623 | 0.284 | 0.025 | 4.96E-92 | CD16neg_NK_spleen |
| HBS1L               | 2.20E-96 | 1.18155293 | 0.521 | 0.124 | 7.79E-92 | CD16neg_NK_spleen |
| PTPN12              | 2.43E-96 | 2.00703132 | 0.312 | 0.034 | 8.62E-92 | CD16neg_NK_spleen |
| CCDC85B             | 3.15E-96 | 2.31426381 | 0.273 | 0.02  | 1.12E-91 | CD16neg_NK_spleen |
| STIM2               | 3.67E-96 | 1.84502389 | 0.341 | 0.045 | 1.30E-91 | CD16neg_NK_spleen |
| NDFIP1              | 6.18E-96 | 1.00391358 | 0.653 | 0.191 | 2.19E-91 | CD16neg_NK_spleen |
| PAFAH1B1            | 6.80E-96 | 1.09296555 | 0.578 | 0.154 | 2.41E-91 | CD16neg_NK_spleen |

|                    |          |            |       |       |          |                   |
|--------------------|----------|------------|-------|-------|----------|-------------------|
| NSF                | 7.20E-96 | 1.26006326 | 0.48  | 0.106 | 2.55E-91 | CD16neg_NK_spleen |
| HNRNPC             | 7.78E-96 | 1.0079129  | 0.842 | 0.324 | 2.76E-91 | CD16neg_NK_spleen |
| BAZ1A              | 9.74E-96 | 1.13454988 | 0.526 | 0.129 | 3.45E-91 | CD16neg_NK_spleen |
| ANP32B             | 1.05E-95 | 1.37814943 | 0.487 | 0.112 | 3.71E-91 | CD16neg_NK_spleen |
| PRPF40A            | 1.41E-95 | 1.19610398 | 0.501 | 0.115 | 5.01E-91 | CD16neg_NK_spleen |
| SPATA5             | 1.64E-95 | 2.18412676 | 0.312 | 0.036 | 5.82E-91 | CD16neg_NK_spleen |
| ARL5B              | 1.72E-95 | 1.1855401  | 0.47  | 0.101 | 6.08E-91 | CD16neg_NK_spleen |
| EOMES              | 1.82E-95 | 1.1383811  | 0.43  | 0.082 | 6.44E-91 | CD16neg_NK_spleen |
| SF1                | 1.83E-95 | 1.24995658 | 0.473 | 0.102 | 6.49E-91 | CD16neg_NK_spleen |
| JAZF1              | 2.42E-95 | 1.59359027 | 0.413 | 0.078 | 8.58E-91 | CD16neg_NK_spleen |
| ATP2A2             | 2.47E-95 | 1.73667757 | 0.34  | 0.045 | 8.76E-91 | CD16neg_NK_spleen |
| SLC39A11           | 3.63E-95 | 2.27505129 | 0.305 | 0.033 | 1.29E-90 | CD16neg_NK_spleen |
| ENSMMUG00000053089 | 5.99E-95 | 1.7760684  | 0.334 | 0.044 | 2.12E-90 | CD16neg_NK_spleen |
| DNM2               | 6.47E-95 | 1.43627171 | 0.395 | 0.069 | 2.29E-90 | CD16neg_NK_spleen |
| KIAA1328           | 6.54E-95 | 2.04971983 | 0.333 | 0.044 | 2.32E-90 | CD16neg_NK_spleen |
| SEMA4D             | 6.84E-95 | 1.20115008 | 0.565 | 0.148 | 2.42E-90 | CD16neg_NK_spleen |
| CDYL               | 7.22E-95 | 2.1723878  | 0.311 | 0.036 | 2.56E-90 | CD16neg_NK_spleen |
| SEPTIN11           | 9.83E-95 | 1.04660974 | 0.67  | 0.206 | 3.48E-90 | CD16neg_NK_spleen |
| CCNK               | 1.06E-94 | 1.50091096 | 0.41  | 0.077 | 3.76E-90 | CD16neg_NK_spleen |
| RELB               | 1.25E-94 | 1.47606049 | 0.397 | 0.07  | 4.44E-90 | CD16neg_NK_spleen |
| RGCC               | 1.39E-94 | 1.8920526  | 0.376 | 0.064 | 4.93E-90 | CD16neg_NK_spleen |
| RBM6               | 1.92E-94 | 1.74268922 | 0.336 | 0.045 | 6.80E-90 | CD16neg_NK_spleen |
| DTNB               | 2.11E-94 | 2.52039415 | 0.291 | 0.029 | 7.47E-90 | CD16neg_NK_spleen |
| ENSMMUG00000005482 | 2.56E-94 | 1.3538051  | 0.427 | 0.083 | 9.06E-90 | CD16neg_NK_spleen |
| SLC22A18           | 2.61E-94 | 1.70854364 | 0.359 | 0.055 | 9.24E-90 | CD16neg_NK_spleen |
| PIAS1              | 3.17E-94 | 1.17112121 | 0.52  | 0.126 | 1.12E-89 | CD16neg_NK_spleen |
| HUWE1              | 3.32E-94 | 1.04754224 | 0.547 | 0.138 | 1.18E-89 | CD16neg_NK_spleen |
| RBM17              | 3.50E-94 | 1.68032198 | 0.353 | 0.052 | 1.24E-89 | CD16neg_NK_spleen |
| ZBTB11             | 4.69E-94 | 2.42547184 | 0.284 | 0.026 | 1.66E-89 | CD16neg_NK_spleen |
| JARID2             | 5.41E-94 | 1.02603254 | 0.68  | 0.218 | 1.92E-89 | CD16neg_NK_spleen |
| SMC4               | 6.02E-94 | 1.28061682 | 0.501 | 0.119 | 2.13E-89 | CD16neg_NK_spleen |
| GRB2               | 6.68E-94 | 1.40582918 | 0.446 | 0.094 | 2.37E-89 | CD16neg_NK_spleen |
| CYRIA              | 7.68E-94 | 2.01779792 | 0.321 | 0.04  | 2.72E-89 | CD16neg_NK_spleen |

|                    |          |            |       |       |          |                   |
|--------------------|----------|------------|-------|-------|----------|-------------------|
| WDR70              | 1.02E-93 | 1.13129925 | 0.49  | 0.111 | 3.63E-89 | CD16neg_NK_spleen |
| FYB1               | 1.38E-93 | 1.03405523 | 0.641 | 0.192 | 4.91E-89 | CD16neg_NK_spleen |
| CHIC2              | 1.78E-93 | 1.51714521 | 0.375 | 0.061 | 6.30E-89 | CD16neg_NK_spleen |
| ZFAND6             | 1.93E-93 | 1.02321304 | 0.582 | 0.159 | 6.83E-89 | CD16neg_NK_spleen |
| NT5C               | 2.74E-93 | 2.46062893 | 0.264 | 0.02  | 9.72E-89 | CD16neg_NK_spleen |
| TRIM33             | 2.86E-93 | 1.95798829 | 0.33  | 0.044 | 1.01E-88 | CD16neg_NK_spleen |
| ANKRD10            | 3.25E-93 | 1.8090812  | 0.341 | 0.048 | 1.15E-88 | CD16neg_NK_spleen |
| FAM168A            | 3.38E-93 | 2.61983738 | 0.269 | 0.022 | 1.20E-88 | CD16neg_NK_spleen |
| TTC19              | 3.78E-93 | 1.42142441 | 0.36  | 0.055 | 1.34E-88 | CD16neg_NK_spleen |
| ITPR1              | 3.94E-93 | 1.69452468 | 0.36  | 0.056 | 1.40E-88 | CD16neg_NK_spleen |
| SEC63              | 5.90E-93 | 1.43933824 | 0.417 | 0.081 | 2.09E-88 | CD16neg_NK_spleen |
| ANK3               | 8.69E-93 | 2.93432354 | 0.254 | 0.017 | 3.08E-88 | CD16neg_NK_spleen |
| ZMYM2              | 9.30E-93 | 1.34465994 | 0.421 | 0.082 | 3.30E-88 | CD16neg_NK_spleen |
| ATM                | 9.42E-93 | 1.15763532 | 0.56  | 0.15  | 3.34E-88 | CD16neg_NK_spleen |
| DYRK1A             | 1.22E-92 | 1.3371452  | 0.403 | 0.074 | 4.32E-88 | CD16neg_NK_spleen |
| ACTR2              | 1.60E-92 | 0.90640085 | 0.798 | 0.288 | 5.66E-88 | CD16neg_NK_spleen |
| UHRF1BP1L          | 1.70E-92 | 1.78214916 | 0.349 | 0.053 | 6.01E-88 | CD16neg_NK_spleen |
| PCCA               | 1.73E-92 | 1.60505193 | 0.367 | 0.06  | 6.14E-88 | CD16neg_NK_spleen |
| TET3               | 1.84E-92 | 2.04579728 | 0.318 | 0.041 | 6.53E-88 | CD16neg_NK_spleen |
| FTO                | 2.35E-92 | 2.70840525 | 0.264 | 0.021 | 8.31E-88 | CD16neg_NK_spleen |
| NUMB               | 2.39E-92 | 1.58628827 | 0.361 | 0.057 | 8.48E-88 | CD16neg_NK_spleen |
| INTS6L             | 2.82E-92 | 1.56748988 | 0.364 | 0.058 | 1.00E-87 | CD16neg_NK_spleen |
| CDC73              | 3.09E-92 | 1.62053936 | 0.368 | 0.061 | 1.10E-87 | CD16neg_NK_spleen |
| UBR1               | 5.74E-92 | 1.1718929  | 0.457 | 0.099 | 2.03E-87 | CD16neg_NK_spleen |
| HIPK2              | 1.09E-91 | 2.05120937 | 0.32  | 0.042 | 3.87E-87 | CD16neg_NK_spleen |
| LYN                | 1.30E-91 | 1.27253032 | 0.517 | 0.131 | 4.60E-87 | CD16neg_NK_spleen |
| ENSMMUG00000060229 | 1.47E-91 | 1.30781782 | 0.391 | 0.069 | 5.23E-87 | CD16neg_NK_spleen |
| SEL1L3             | 1.49E-91 | 2.30901572 | 0.284 | 0.028 | 5.29E-87 | CD16neg_NK_spleen |
| LUC7L3             | 2.31E-91 | 1.15489576 | 0.481 | 0.11  | 8.18E-87 | CD16neg_NK_spleen |
| MAP2K5             | 2.59E-91 | 1.9610802  | 0.318 | 0.041 | 9.16E-87 | CD16neg_NK_spleen |
| NFKB1              | 2.63E-91 | 1.02062782 | 0.804 | 0.329 | 9.31E-87 | CD16neg_NK_spleen |
| GATAD2A            | 2.76E-91 | 1.5354197  | 0.374 | 0.064 | 9.77E-87 | CD16neg_NK_spleen |
| GPRIN3             | 3.62E-91 | 1.69027885 | 0.334 | 0.047 | 1.28E-86 | CD16neg_NK_spleen |



|                    |          |            |       |       |          |                   |
|--------------------|----------|------------|-------|-------|----------|-------------------|
| ANKRD6             | 4.80E-91 | 1.64376336 | 0.358 | 0.057 | 1.70E-86 | CD16neg_NK_spleen |
| GALM               | 5.17E-91 | 1.81290797 | 0.323 | 0.043 | 1.83E-86 | CD16neg_NK_spleen |
| CERT1              | 5.86E-91 | 1.64679057 | 0.369 | 0.062 | 2.08E-86 | CD16neg_NK_spleen |
| SMARCA2            | 7.28E-91 | 0.97305899 | 0.495 | 0.115 | 2.58E-86 | CD16neg_NK_spleen |
| YAF2               | 9.25E-91 | 1.12925459 | 0.544 | 0.145 | 3.28E-86 | CD16neg_NK_spleen |
| ARHGAP35           | 9.33E-91 | 2.3515238  | 0.278 | 0.027 | 3.31E-86 | CD16neg_NK_spleen |
| JAK2               | 1.10E-90 | 1.78551873 | 0.335 | 0.048 | 3.88E-86 | CD16neg_NK_spleen |
| BTBD1              | 1.11E-90 | 2.32161008 | 0.279 | 0.027 | 3.93E-86 | CD16neg_NK_spleen |
| ZZZ3               | 1.16E-90 | 2.04776603 | 0.317 | 0.042 | 4.12E-86 | CD16neg_NK_spleen |
| DNAJC24            | 1.20E-90 | 1.47225424 | 0.419 | 0.085 | 4.25E-86 | CD16neg_NK_spleen |
| GIT2               | 1.36E-90 | 1.59881206 | 0.37  | 0.063 | 4.81E-86 | CD16neg_NK_spleen |
| BPTF               | 1.38E-90 | 1.01039711 | 0.57  | 0.156 | 4.90E-86 | CD16neg_NK_spleen |
| INO80D             | 1.55E-90 | 1.70371052 | 0.348 | 0.054 | 5.49E-86 | CD16neg_NK_spleen |
| ITK                | 1.95E-90 | 1.09608244 | 0.592 | 0.169 | 6.89E-86 | CD16neg_NK_spleen |
| NKTR               | 1.99E-90 | 1.48829427 | 0.375 | 0.065 | 7.04E-86 | CD16neg_NK_spleen |
| PREP               | 2.94E-90 | 1.96268277 | 0.315 | 0.041 | 1.04E-85 | CD16neg_NK_spleen |
| ENSMMUG00000047277 | 3.71E-90 | 1.02867403 | 0.597 | 0.169 | 1.32E-85 | CD16neg_NK_spleen |
| ARHGAP25           | 4.41E-90 | 1.41003096 | 0.382 | 0.068 | 1.56E-85 | CD16neg_NK_spleen |
| ENSMMUG00000060923 | 4.90E-90 | 1.02217603 | 0.799 | 0.302 | 1.73E-85 | CD16neg_NK_spleen |
| UNC5D              | 6.26E-90 | 2.97616317 | 0.261 | 0.022 | 2.22E-85 | CD16neg_NK_spleen |
| TPST2              | 6.42E-90 | 1.29688673 | 0.422 | 0.085 | 2.28E-85 | CD16neg_NK_spleen |
| SUCLG2             | 6.71E-90 | 1.55437504 | 0.396 | 0.075 | 2.38E-85 | CD16neg_NK_spleen |
| IQGAP2             | 6.92E-90 | 1.47709431 | 0.462 | 0.108 | 2.45E-85 | CD16neg_NK_spleen |
| TMCC1              | 7.10E-90 | 2.42498533 | 0.28  | 0.029 | 2.52E-85 | CD16neg_NK_spleen |
| LCORL              | 7.21E-90 | 2.10889157 | 0.3   | 0.036 | 2.55E-85 | CD16neg_NK_spleen |
| UBR4               | 7.60E-90 | 1.62312228 | 0.333 | 0.047 | 2.69E-85 | CD16neg_NK_spleen |
| SP3                | 8.23E-90 | 1.61478707 | 0.345 | 0.053 | 2.91E-85 | CD16neg_NK_spleen |
| WNK1               | 8.35E-90 | 0.8141849  | 0.617 | 0.178 | 2.96E-85 | CD16neg_NK_spleen |
| TMEM87B            | 1.02E-89 | 2.8671433  | 0.255 | 0.02  | 3.63E-85 | CD16neg_NK_spleen |
| CSNK1G1            | 1.09E-89 | 1.66845283 | 0.359 | 0.059 | 3.87E-85 | CD16neg_NK_spleen |
| INPP4A             | 1.15E-89 | 1.18773231 | 0.45  | 0.099 | 4.06E-85 | CD16neg_NK_spleen |
| CITED1             | 1.18E-89 | 2.15395414 | 0.295 | 0.033 | 4.18E-85 | CD16neg_NK_spleen |
| CAMKMT             | 1.20E-89 | 2.0383786  | 0.324 | 0.046 | 4.24E-85 | CD16neg_NK_spleen |

|         |          |            |       |       |          |                   |
|---------|----------|------------|-------|-------|----------|-------------------|
| LNPEP   | 1.26E-89 | 0.85237868 | 0.673 | 0.211 | 4.45E-85 | CD16neg_NK_spleen |
| TASP1   | 1.71E-89 | 1.5692104  | 0.359 | 0.059 | 6.04E-85 | CD16neg_NK_spleen |
| ITGAL   | 2.04E-89 | 0.87932787 | 0.684 | 0.216 | 7.24E-85 | CD16neg_NK_spleen |
| TXNL4A  | 2.08E-89 | 2.12438913 | 0.271 | 0.025 | 7.36E-85 | CD16neg_NK_spleen |
| KLHL3   | 2.50E-89 | 2.3569889  | 0.26  | 0.021 | 8.85E-85 | CD16neg_NK_spleen |
| RMDN1   | 2.55E-89 | 1.46273583 | 0.378 | 0.068 | 9.02E-85 | CD16neg_NK_spleen |
| EFR3A   | 3.20E-89 | 1.50139774 | 0.362 | 0.06  | 1.13E-84 | CD16neg_NK_spleen |
| TULP4   | 3.41E-89 | 2.5275499  | 0.263 | 0.023 | 1.21E-84 | CD16neg_NK_spleen |
| HERC2   | 3.68E-89 | 1.69155623 | 0.336 | 0.051 | 1.30E-84 | CD16neg_NK_spleen |
| PEX14   | 3.77E-89 | 1.95139806 | 0.298 | 0.035 | 1.33E-84 | CD16neg_NK_spleen |
| TUT4    | 3.79E-89 | 1.17085237 | 0.557 | 0.154 | 1.34E-84 | CD16neg_NK_spleen |
| OXNAD1  | 3.83E-89 | 1.98210554 | 0.298 | 0.035 | 1.36E-84 | CD16neg_NK_spleen |
| FOCAD   | 4.32E-89 | 2.03248264 | 0.321 | 0.045 | 1.53E-84 | CD16neg_NK_spleen |
| FLI1    | 5.38E-89 | 1.21775749 | 0.473 | 0.111 | 1.91E-84 | CD16neg_NK_spleen |
| NF1     | 5.59E-89 | 1.41664418 | 0.388 | 0.072 | 1.98E-84 | CD16neg_NK_spleen |
| CCNY    | 6.85E-89 | 1.62051668 | 0.358 | 0.059 | 2.43E-84 | CD16neg_NK_spleen |
| SIN3A   | 1.24E-88 | 1.4816005  | 0.352 | 0.057 | 4.38E-84 | CD16neg_NK_spleen |
| EWSR1   | 1.54E-88 | 1.1016408  | 0.444 | 0.096 | 5.47E-84 | CD16neg_NK_spleen |
| RELCH   | 1.57E-88 | 1.93541085 | 0.303 | 0.038 | 5.55E-84 | CD16neg_NK_spleen |
| PLEKHB2 | 1.62E-88 | 1.51265724 | 0.355 | 0.058 | 5.72E-84 | CD16neg_NK_spleen |
| PRKCQ   | 1.87E-88 | 1.02667269 | 0.558 | 0.152 | 6.62E-84 | CD16neg_NK_spleen |
| TLK2    | 2.73E-88 | 1.47463224 | 0.367 | 0.063 | 9.66E-84 | CD16neg_NK_spleen |
| MZT2B   | 2.99E-88 | 1.32468306 | 0.397 | 0.076 | 1.06E-83 | CD16neg_NK_spleen |
| CLK1    | 3.10E-88 | 0.83806713 | 0.704 | 0.229 | 1.10E-83 | CD16neg_NK_spleen |
| LRRC8C  | 3.54E-88 | 1.94375124 | 0.334 | 0.051 | 1.25E-83 | CD16neg_NK_spleen |
| RASGRP1 | 3.67E-88 | 1.62210133 | 0.335 | 0.051 | 1.30E-83 | CD16neg_NK_spleen |
| STAU2   | 3.83E-88 | 1.28178329 | 0.473 | 0.112 | 1.36E-83 | CD16neg_NK_spleen |
| CMIP    | 3.84E-88 | 1.35776176 | 0.376 | 0.068 | 1.36E-83 | CD16neg_NK_spleen |
| GLG1    | 5.27E-88 | 1.61533604 | 0.37  | 0.066 | 1.87E-83 | CD16neg_NK_spleen |
| ATP2C1  | 6.04E-88 | 1.74984006 | 0.325 | 0.046 | 2.14E-83 | CD16neg_NK_spleen |
| DMXL2   | 6.15E-88 | 1.7768986  | 0.322 | 0.045 | 2.18E-83 | CD16neg_NK_spleen |
| ELL     | 6.82E-88 | 2.13981318 | 0.286 | 0.032 | 2.42E-83 | CD16neg_NK_spleen |
| PITPNM2 | 7.46E-88 | 2.09370053 | 0.287 | 0.032 | 2.64E-83 | CD16neg_NK_spleen |

|          |          |            |       |       |          |                   |
|----------|----------|------------|-------|-------|----------|-------------------|
| MARCHF7  | 8.71E-88 | 1.20260165 | 0.437 | 0.094 | 3.09E-83 | CD16neg_NK_spleen |
| DNAJB1   | 1.08E-87 | 1.9859195  | 0.333 | 0.053 | 3.84E-83 | CD16neg_NK_spleen |
| HECA     | 1.16E-87 | 2.45644194 | 0.268 | 0.026 | 4.12E-83 | CD16neg_NK_spleen |
| TP53BP2  | 1.21E-87 | 2.55060531 | 0.265 | 0.025 | 4.27E-83 | CD16neg_NK_spleen |
| SPTAN1   | 1.39E-87 | 1.44576485 | 0.367 | 0.063 | 4.91E-83 | CD16neg_NK_spleen |
| SPECC1   | 1.73E-87 | 2.54609868 | 0.272 | 0.027 | 6.12E-83 | CD16neg_NK_spleen |
| KDM2B    | 2.11E-87 | 1.57029481 | 0.402 | 0.082 | 7.48E-83 | CD16neg_NK_spleen |
| SNX14    | 2.21E-87 | 1.05063343 | 0.455 | 0.102 | 7.84E-83 | CD16neg_NK_spleen |
| TAOK3    | 2.42E-87 | 1.24736968 | 0.504 | 0.131 | 8.57E-83 | CD16neg_NK_spleen |
| TSC22D1  | 2.56E-87 | 2.01491984 | 0.299 | 0.037 | 9.07E-83 | CD16neg_NK_spleen |
| TC2N     | 2.84E-87 | 1.22125068 | 0.443 | 0.098 | 1.01E-82 | CD16neg_NK_spleen |
| HIPK1    | 3.28E-87 | 0.99751439 | 0.502 | 0.124 | 1.16E-82 | CD16neg_NK_spleen |
| PPP1CC   | 3.53E-87 | 1.1390588  | 0.419 | 0.085 | 1.25E-82 | CD16neg_NK_spleen |
| TPD52    | 4.11E-87 | 1.46924438 | 0.431 | 0.096 | 1.46E-82 | CD16neg_NK_spleen |
| CNOT1    | 4.41E-87 | 1.11494308 | 0.424 | 0.088 | 1.56E-82 | CD16neg_NK_spleen |
| ATF2     | 4.86E-87 | 1.21157792 | 0.405 | 0.081 | 1.72E-82 | CD16neg_NK_spleen |
| PDS5A    | 5.92E-87 | 1.84100243 | 0.323 | 0.047 | 2.10E-82 | CD16neg_NK_spleen |
| SDF2L1   | 6.99E-87 | 1.26445956 | 0.403 | 0.08  | 2.48E-82 | CD16neg_NK_spleen |
| RAD51B   | 9.03E-87 | 2.18839518 | 0.321 | 0.049 | 3.20E-82 | CD16neg_NK_spleen |
| DNAJA1   | 9.29E-87 | 1.1792372  | 0.712 | 0.248 | 3.29E-82 | CD16neg_NK_spleen |
| SNX29    | 1.30E-86 | 2.6152456  | 0.256 | 0.022 | 4.61E-82 | CD16neg_NK_spleen |
| GALNT2   | 1.59E-86 | 1.93609485 | 0.299 | 0.037 | 5.64E-82 | CD16neg_NK_spleen |
| PTPN2    | 1.99E-86 | 0.88359295 | 0.633 | 0.192 | 7.04E-82 | CD16neg_NK_spleen |
| CHD4     | 2.59E-86 | 1.13493271 | 0.522 | 0.138 | 9.16E-82 | CD16neg_NK_spleen |
| STAMBPL1 | 3.46E-86 | 1.09691029 | 0.522 | 0.137 | 1.23E-81 | CD16neg_NK_spleen |
| SNRNP70  | 3.57E-86 | 1.30270468 | 0.407 | 0.082 | 1.26E-81 | CD16neg_NK_spleen |
| RAPGEF2  | 3.74E-86 | 1.14082271 | 0.413 | 0.085 | 1.33E-81 | CD16neg_NK_spleen |
| SH3KBP1  | 3.81E-86 | 0.88784268 | 0.79  | 0.299 | 1.35E-81 | CD16neg_NK_spleen |
| ZNF92    | 3.93E-86 | 1.66255378 | 0.333 | 0.052 | 1.39E-81 | CD16neg_NK_spleen |
| MBNL2    | 3.99E-86 | 2.06840146 | 0.295 | 0.036 | 1.41E-81 | CD16neg_NK_spleen |
| PCNX1    | 4.24E-86 | 1.59004544 | 0.341 | 0.055 | 1.50E-81 | CD16neg_NK_spleen |
| IL6ST    | 4.90E-86 | 2.03825367 | 0.291 | 0.035 | 1.74E-81 | CD16neg_NK_spleen |
| ABHD12   | 5.81E-86 | 1.24463729 | 0.39  | 0.075 | 2.06E-81 | CD16neg_NK_spleen |

|                    |          |            |       |       |          |                   |
|--------------------|----------|------------|-------|-------|----------|-------------------|
| DAZAP2             | 6.61E-86 | 0.91205969 | 0.531 | 0.139 | 2.34E-81 | CD16neg_NK_spleen |
| PIP4K2A            | 6.67E-86 | 0.83883018 | 0.749 | 0.268 | 2.36E-81 | CD16neg_NK_spleen |
| RCSD1              | 7.44E-86 | 0.93981411 | 0.53  | 0.138 | 2.63E-81 | CD16neg_NK_spleen |
| SEPTIN6            | 1.23E-85 | 0.83113004 | 0.651 | 0.199 | 4.35E-81 | CD16neg_NK_spleen |
| AKIRIN1            | 1.44E-85 | 1.16150853 | 0.353 | 0.058 | 5.12E-81 | CD16neg_NK_spleen |
| FAM13B             | 1.61E-85 | 1.77622279 | 0.32  | 0.047 | 5.69E-81 | CD16neg_NK_spleen |
| GNA13              | 1.67E-85 | 0.8857461  | 0.629 | 0.192 | 5.90E-81 | CD16neg_NK_spleen |
| SCLT1              | 1.81E-85 | 1.03256764 | 0.468 | 0.112 | 6.42E-81 | CD16neg_NK_spleen |
| POLR2A             | 1.86E-85 | 1.16490759 | 0.439 | 0.099 | 6.58E-81 | CD16neg_NK_spleen |
| SP110              | 1.88E-85 | 1.0956874  | 0.439 | 0.097 | 6.66E-81 | CD16neg_NK_spleen |
| NUP214             | 2.12E-85 | 1.72342514 | 0.316 | 0.045 | 7.52E-81 | CD16neg_NK_spleen |
| ZNF827             | 2.16E-85 | 1.19980048 | 0.419 | 0.088 | 7.64E-81 | CD16neg_NK_spleen |
| ENSMMUG00000022610 | 2.35E-85 | 1.20468534 | 0.422 | 0.089 | 8.33E-81 | CD16neg_NK_spleen |
| FUZ                | 3.06E-85 | 2.16867075 | 0.288 | 0.035 | 1.08E-80 | CD16neg_NK_spleen |
| MAPK1              | 4.10E-85 | 0.97744893 | 0.542 | 0.146 | 1.45E-80 | CD16neg_NK_spleen |
| FAM193A            | 4.77E-85 | 2.05641496 | 0.277 | 0.031 | 1.69E-80 | CD16neg_NK_spleen |
| LLGL2              | 5.11E-85 | 2.10301778 | 0.267 | 0.027 | 1.81E-80 | CD16neg_NK_spleen |
| AUH                | 5.78E-85 | 1.91933942 | 0.305 | 0.042 | 2.05E-80 | CD16neg_NK_spleen |
| ENSMMUG00000008417 | 6.15E-85 | 2.0463792  | 0.266 | 0.026 | 2.18E-80 | CD16neg_NK_spleen |
| CREBRF             | 6.42E-85 | 1.55744181 | 0.376 | 0.072 | 2.27E-80 | CD16neg_NK_spleen |
| GPATCH8            | 7.25E-85 | 1.37244764 | 0.396 | 0.08  | 2.57E-80 | CD16neg_NK_spleen |
| FAM214A            | 7.30E-85 | 1.71309822 | 0.317 | 0.046 | 2.59E-80 | CD16neg_NK_spleen |
| RIPK2              | 8.18E-85 | 1.6510989  | 0.336 | 0.054 | 2.90E-80 | CD16neg_NK_spleen |
| UBE3A              | 8.41E-85 | 1.4065031  | 0.353 | 0.061 | 2.98E-80 | CD16neg_NK_spleen |
| TBC1D22A           | 8.88E-85 | 1.28013354 | 0.387 | 0.075 | 3.15E-80 | CD16neg_NK_spleen |
| ENSMMUG00000008346 | 9.59E-85 | 1.24808931 | 0.404 | 0.084 | 3.40E-80 | CD16neg_NK_spleen |
| CEP192             | 1.08E-84 | 1.19351081 | 0.395 | 0.078 | 3.84E-80 | CD16neg_NK_spleen |
| RFTN1              | 1.25E-84 | 1.81352609 | 0.3   | 0.04  | 4.42E-80 | CD16neg_NK_spleen |
| ATP10A             | 1.29E-84 | 1.48007237 | 0.373 | 0.071 | 4.58E-80 | CD16neg_NK_spleen |
| RFX7               | 1.32E-84 | 2.12845465 | 0.28  | 0.032 | 4.68E-80 | CD16neg_NK_spleen |
| SLC30A9            | 1.33E-84 | 1.60441569 | 0.338 | 0.055 | 4.71E-80 | CD16neg_NK_spleen |
| RNF149             | 1.36E-84 | 1.1853086  | 0.396 | 0.078 | 4.81E-80 | CD16neg_NK_spleen |
| SETX               | 1.50E-84 | 0.91788258 | 0.53  | 0.141 | 5.32E-80 | CD16neg_NK_spleen |

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|---------|----------|------------|-------|-------|----------|-------------------|
| IKZF2   | 1.55E-84 | 1.17022856 | 0.471 | 0.118 | 5.49E-80 | CD16neg_NK_spleen |
| DIS3L2  | 1.56E-84 | 1.9127559  | 0.297 | 0.038 | 5.53E-80 | CD16neg_NK_spleen |
| CAST    | 1.57E-84 | 1.11128269 | 0.448 | 0.103 | 5.56E-80 | CD16neg_NK_spleen |
| CARMIL1 | 1.59E-84 | 2.45634637 | 0.26  | 0.025 | 5.63E-80 | CD16neg_NK_spleen |
| STXBP5  | 1.60E-84 | 1.81505406 | 0.306 | 0.042 | 5.65E-80 | CD16neg_NK_spleen |
| IQCG    | 1.65E-84 | 1.53749566 | 0.377 | 0.073 | 5.85E-80 | CD16neg_NK_spleen |
| ZHX2    | 2.01E-84 | 1.21074616 | 0.407 | 0.086 | 7.14E-80 | CD16neg_NK_spleen |
| SPRY2   | 2.04E-84 | 1.65732328 | 0.311 | 0.044 | 7.22E-80 | CD16neg_NK_spleen |
| GSE1    | 2.97E-84 | 1.73033607 | 0.302 | 0.041 | 1.05E-79 | CD16neg_NK_spleen |
| SEC31A  | 3.45E-84 | 1.11844606 | 0.453 | 0.106 | 1.22E-79 | CD16neg_NK_spleen |
| CEP170  | 3.97E-84 | 1.55773058 | 0.333 | 0.053 | 1.41E-79 | CD16neg_NK_spleen |
| CD96    | 6.48E-84 | 0.96140587 | 0.576 | 0.169 | 2.30E-79 | CD16neg_NK_spleen |
| KIF5B   | 9.93E-84 | 1.11460547 | 0.416 | 0.087 | 3.52E-79 | CD16neg_NK_spleen |
| AP3B1   | 1.41E-83 | 1.19321182 | 0.433 | 0.098 | 4.99E-79 | CD16neg_NK_spleen |
| OPA1    | 2.18E-83 | 1.81136975 | 0.3   | 0.041 | 7.73E-79 | CD16neg_NK_spleen |
| MED13   | 3.08E-83 | 1.30960108 | 0.379 | 0.074 | 1.09E-78 | CD16neg_NK_spleen |
| FOXO3   | 4.09E-83 | 1.82110473 | 0.298 | 0.04  | 1.45E-78 | CD16neg_NK_spleen |
| RALGPS2 | 5.11E-83 | 2.39144356 | 0.278 | 0.033 | 1.81E-78 | CD16neg_NK_spleen |
| GIGYF2  | 6.02E-83 | 1.16546487 | 0.39  | 0.077 | 2.13E-78 | CD16neg_NK_spleen |
| POU2F1  | 6.32E-83 | 2.04197404 | 0.289 | 0.037 | 2.24E-78 | CD16neg_NK_spleen |
| BMT2    | 6.47E-83 | 1.98862194 | 0.408 | 0.102 | 2.29E-78 | CD16neg_NK_spleen |
| PIP5K1A | 7.05E-83 | 1.60236004 | 0.313 | 0.046 | 2.50E-78 | CD16neg_NK_spleen |
| ZSWIM6  | 8.13E-83 | 1.74341329 | 0.337 | 0.057 | 2.88E-78 | CD16neg_NK_spleen |
| IFT80   | 8.35E-83 | 2.13156436 | 0.264 | 0.028 | 2.96E-78 | CD16neg_NK_spleen |
| SUZ12   | 9.85E-83 | 1.3303015  | 0.342 | 0.058 | 3.49E-78 | CD16neg_NK_spleen |
| PCM1    | 1.08E-82 | 1.09723859 | 0.441 | 0.102 | 3.84E-78 | CD16neg_NK_spleen |
| WAC     | 1.40E-82 | 0.94812309 | 0.596 | 0.18  | 4.96E-78 | CD16neg_NK_spleen |
| RHEB    | 1.67E-82 | 0.95187702 | 0.467 | 0.114 | 5.90E-78 | CD16neg_NK_spleen |
| TRAF3   | 1.74E-82 | 1.72649116 | 0.324 | 0.052 | 6.17E-78 | CD16neg_NK_spleen |
| EIF3A   | 2.43E-82 | 0.90985232 | 0.463 | 0.112 | 8.61E-78 | CD16neg_NK_spleen |
| SENP5   | 2.50E-82 | 1.79227272 | 0.29  | 0.037 | 8.85E-78 | CD16neg_NK_spleen |
| THAP9   | 2.63E-82 | 2.02098998 | 0.264 | 0.028 | 9.33E-78 | CD16neg_NK_spleen |
| ASXL2   | 3.25E-82 | 1.71045005 | 0.321 | 0.051 | 1.15E-77 | CD16neg_NK_spleen |

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|--------------------|----------|------------|-------|-------|----------|-------------------|
| HNRNPA2B1          | 4.42E-82 | 0.80448992 | 0.965 | 0.642 | 1.57E-77 | CD16neg_NK_spleen |
| TRIM44             | 4.52E-82 | 1.9090351  | 0.282 | 0.035 | 1.60E-77 | CD16neg_NK_spleen |
| DCAF6              | 5.20E-82 | 1.67025896 | 0.309 | 0.046 | 1.84E-77 | CD16neg_NK_spleen |
| FMC1-LUC7L2        | 5.38E-82 | 0.87258476 | 0.695 | 0.235 | 1.91E-77 | CD16neg_NK_spleen |
| WAPL               | 5.64E-82 | 1.28302511 | 0.368 | 0.07  | 2.00E-77 | CD16neg_NK_spleen |
| CLTA               | 5.96E-82 | 1.46940449 | 0.339 | 0.057 | 2.11E-77 | CD16neg_NK_spleen |
| CBL                | 7.00E-82 | 1.96560785 | 0.263 | 0.028 | 2.48E-77 | CD16neg_NK_spleen |
| USP16              | 7.70E-82 | 1.18607049 | 0.38  | 0.075 | 2.73E-77 | CD16neg_NK_spleen |
| MDM4               | 9.32E-82 | 1.48238043 | 0.31  | 0.046 | 3.30E-77 | CD16neg_NK_spleen |
| TFDP2              | 1.30E-81 | 1.45788658 | 0.391 | 0.082 | 4.61E-77 | CD16neg_NK_spleen |
| RAF1               | 1.34E-81 | 1.64657821 | 0.336 | 0.058 | 4.75E-77 | CD16neg_NK_spleen |
| RGS3               | 1.41E-81 | 1.08741377 | 0.429 | 0.097 | 5.01E-77 | CD16neg_NK_spleen |
| NLRC5              | 1.50E-81 | 1.95021611 | 0.273 | 0.032 | 5.30E-77 | CD16neg_NK_spleen |
| YWHAH              | 2.16E-81 | 1.43089302 | 0.337 | 0.057 | 7.65E-77 | CD16neg_NK_spleen |
| KDM3B              | 2.22E-81 | 1.47895672 | 0.325 | 0.053 | 7.86E-77 | CD16neg_NK_spleen |
| CHORDC1            | 2.51E-81 | 1.05348183 | 0.441 | 0.104 | 8.90E-77 | CD16neg_NK_spleen |
| RNF216             | 3.43E-81 | 1.18560184 | 0.416 | 0.091 | 1.22E-76 | CD16neg_NK_spleen |
| ENSMMUG00000012203 | 4.50E-81 | 1.6833573  | 0.325 | 0.054 | 1.59E-76 | CD16neg_NK_spleen |
| NKG2D              | 6.18E-81 | 0.78866735 | 0.617 | 0.188 | 2.19E-76 | CD16neg_NK_spleen |
| EXT1               | 7.50E-81 | 1.8839086  | 0.318 | 0.052 | 2.66E-76 | CD16neg_NK_spleen |
| STK17B             | 9.42E-81 | 0.86093628 | 0.882 | 0.392 | 3.34E-76 | CD16neg_NK_spleen |
| HDAC4              | 1.03E-80 | 2.27044286 | 0.257 | 0.027 | 3.65E-76 | CD16neg_NK_spleen |
| STK4               | 1.09E-80 | 0.85277449 | 0.659 | 0.217 | 3.85E-76 | CD16neg_NK_spleen |
| CDK12              | 1.71E-80 | 1.37513131 | 0.348 | 0.063 | 6.07E-76 | CD16neg_NK_spleen |
| ESCO1              | 1.75E-80 | 1.34906096 | 0.357 | 0.066 | 6.19E-76 | CD16neg_NK_spleen |
| FOXO1              | 2.16E-80 | 1.84963037 | 0.293 | 0.041 | 7.65E-76 | CD16neg_NK_spleen |
| CHD9               | 2.32E-80 | 1.14704244 | 0.383 | 0.078 | 8.21E-76 | CD16neg_NK_spleen |
| MAP4               | 3.35E-80 | 1.97675257 | 0.288 | 0.039 | 1.19E-75 | CD16neg_NK_spleen |
| RRAD               | 3.39E-80 | 1.97771158 | 0.31  | 0.05  | 1.20E-75 | CD16neg_NK_spleen |
| PRKN               | 3.59E-80 | 2.46157453 | 0.257 | 0.028 | 1.27E-75 | CD16neg_NK_spleen |
| KDELRL2            | 4.45E-80 | 1.80753531 | 0.262 | 0.028 | 1.58E-75 | CD16neg_NK_spleen |
| SRSF10             | 4.49E-80 | 0.79684947 | 0.521 | 0.138 | 1.59E-75 | CD16neg_NK_spleen |
| MAP2K4             | 5.28E-80 | 1.65517647 | 0.295 | 0.041 | 1.87E-75 | CD16neg_NK_spleen |

|                    |          |            |       |       |          |                   |
|--------------------|----------|------------|-------|-------|----------|-------------------|
| ASCC3              | 6.49E-80 | 1.09758076 | 0.45  | 0.11  | 2.30E-75 | CD16neg_NK_spleen |
| GAS7               | 7.02E-80 | 1.31239843 | 0.386 | 0.083 | 2.49E-75 | CD16neg_NK_spleen |
| DIAPH2             | 1.07E-79 | 1.44875113 | 0.364 | 0.071 | 3.81E-75 | CD16neg_NK_spleen |
| PRDM2              | 1.29E-79 | 1.49106651 | 0.32  | 0.052 | 4.58E-75 | CD16neg_NK_spleen |
| DENND4C            | 1.33E-79 | 1.67847883 | 0.297 | 0.042 | 4.70E-75 | CD16neg_NK_spleen |
| ENSMMUG00000065175 | 1.47E-79 | 1.03658731 | 0.416 | 0.093 | 5.20E-75 | CD16neg_NK_spleen |
| TAF3               | 1.73E-79 | 1.44280895 | 0.349 | 0.065 | 6.13E-75 | CD16neg_NK_spleen |
| NSMCE2             | 2.62E-79 | 1.2221465  | 0.39  | 0.083 | 9.28E-75 | CD16neg_NK_spleen |
| ENSMMUG00000063979 | 3.09E-79 | 1.97885837 | 0.266 | 0.031 | 1.09E-74 | CD16neg_NK_spleen |
| RPTOR              | 3.20E-79 | 1.24045351 | 0.348 | 0.063 | 1.13E-74 | CD16neg_NK_spleen |
| FEZ2               | 3.23E-79 | 1.98679289 | 0.254 | 0.027 | 1.14E-74 | CD16neg_NK_spleen |
| HDAC7              | 3.36E-79 | 1.562873   | 0.319 | 0.052 | 1.19E-74 | CD16neg_NK_spleen |
| UBE2D3             | 3.75E-79 | 0.85850158 | 0.863 | 0.388 | 1.33E-74 | CD16neg_NK_spleen |
| RABEP1             | 3.94E-79 | 1.70156575 | 0.29  | 0.04  | 1.40E-74 | CD16neg_NK_spleen |
| ASB3               | 4.42E-79 | 1.95383708 | 0.272 | 0.034 | 1.57E-74 | CD16neg_NK_spleen |
| DNM3               | 4.50E-79 | 2.53808106 | 0.254 | 0.028 | 1.60E-74 | CD16neg_NK_spleen |
| GAPVD1             | 5.38E-79 | 1.47288507 | 0.315 | 0.051 | 1.91E-74 | CD16neg_NK_spleen |
| NIPBL              | 6.32E-79 | 0.86113496 | 0.521 | 0.144 | 2.24E-74 | CD16neg_NK_spleen |
| PHF14              | 7.36E-79 | 1.45395683 | 0.347 | 0.065 | 2.61E-74 | CD16neg_NK_spleen |
| SNX13              | 9.93E-79 | 1.58151563 | 0.304 | 0.046 | 3.52E-74 | CD16neg_NK_spleen |
| CLINT1             | 1.22E-78 | 1.1716782  | 0.449 | 0.114 | 4.33E-74 | CD16neg_NK_spleen |
| YTHDC2             | 1.32E-78 | 1.53055374 | 0.295 | 0.042 | 4.66E-74 | CD16neg_NK_spleen |
| ENSMMUG00000017297 | 1.77E-78 | 1.24823691 | 0.384 | 0.081 | 6.27E-74 | CD16neg_NK_spleen |
| NBN                | 1.99E-78 | 1.22538537 | 0.391 | 0.084 | 7.04E-74 | CD16neg_NK_spleen |
| PRPF38B            | 2.80E-78 | 0.90708372 | 0.504 | 0.136 | 9.90E-74 | CD16neg_NK_spleen |
| WIPF1              | 3.40E-78 | 0.83625588 | 0.887 | 0.413 | 1.21E-73 | CD16neg_NK_spleen |
| EML4               | 3.55E-78 | 0.79111264 | 0.858 | 0.39  | 1.26E-73 | CD16neg_NK_spleen |
| ARHGEF3            | 3.82E-78 | 1.33341983 | 0.39  | 0.086 | 1.35E-73 | CD16neg_NK_spleen |
| DNMT3A             | 3.98E-78 | 2.12649931 | 0.25  | 0.026 | 1.41E-73 | CD16neg_NK_spleen |
| BDP1               | 4.15E-78 | 1.13924491 | 0.391 | 0.084 | 1.47E-73 | CD16neg_NK_spleen |
| CNST               | 4.19E-78 | 0.91708996 | 0.48  | 0.125 | 1.49E-73 | CD16neg_NK_spleen |
| ENSA               | 4.26E-78 | 1.01681978 | 0.684 | 0.245 | 1.51E-73 | CD16neg_NK_spleen |
| RPL23              | 6.00E-78 | 0.63118997 | 0.98  | 0.778 | 2.12E-73 | CD16neg_NK_spleen |

|          |          |            |       |       |          |                   |
|----------|----------|------------|-------|-------|----------|-------------------|
| ZEB2     | 7.77E-78 | 0.93192794 | 0.549 | 0.165 | 2.75E-73 | CD16neg_NK_spleen |
| ZRANB2   | 8.04E-78 | 0.86628386 | 0.499 | 0.134 | 2.85E-73 | CD16neg_NK_spleen |
| GPR107   | 9.36E-78 | 1.65573495 | 0.298 | 0.045 | 3.32E-73 | CD16neg_NK_spleen |
| SAFB2    | 1.30E-77 | 1.1818838  | 0.358 | 0.069 | 4.61E-73 | CD16neg_NK_spleen |
| TMEM135  | 1.33E-77 | 1.92563711 | 0.281 | 0.039 | 4.70E-73 | CD16neg_NK_spleen |
| BRD9     | 1.63E-77 | 1.59405879 | 0.282 | 0.038 | 5.76E-73 | CD16neg_NK_spleen |
| USP36    | 1.78E-77 | 1.01104361 | 0.43  | 0.102 | 6.29E-73 | CD16neg_NK_spleen |
| TXLNG    | 1.81E-77 | 2.0956688  | 0.269 | 0.034 | 6.41E-73 | CD16neg_NK_spleen |
| SCAF4    | 1.85E-77 | 2.11725563 | 0.257 | 0.03  | 6.56E-73 | CD16neg_NK_spleen |
| WARS2    | 2.01E-77 | 1.86569335 | 0.269 | 0.034 | 7.12E-73 | CD16neg_NK_spleen |
| STX11    | 2.20E-77 | 1.17208969 | 0.403 | 0.091 | 7.80E-73 | CD16neg_NK_spleen |
| HS2ST1   | 2.52E-77 | 2.06976917 | 0.265 | 0.033 | 8.92E-73 | CD16neg_NK_spleen |
| CUL5     | 2.59E-77 | 0.94747245 | 0.478 | 0.125 | 9.19E-73 | CD16neg_NK_spleen |
| DEK      | 3.69E-77 | 1.00851778 | 0.459 | 0.117 | 1.31E-72 | CD16neg_NK_spleen |
| ARMC2    | 3.80E-77 | 0.79373712 | 0.601 | 0.188 | 1.35E-72 | CD16neg_NK_spleen |
| KIAA1109 | 4.10E-77 | 1.79152206 | 0.277 | 0.037 | 1.45E-72 | CD16neg_NK_spleen |
| RBM27    | 4.46E-77 | 0.99973664 | 0.409 | 0.092 | 1.58E-72 | CD16neg_NK_spleen |
| CDS2     | 4.47E-77 | 1.8941701  | 0.255 | 0.029 | 1.58E-72 | CD16neg_NK_spleen |
| TTC17    | 4.87E-77 | 1.26001753 | 0.389 | 0.086 | 1.72E-72 | CD16neg_NK_spleen |
| WRN      | 6.13E-77 | 1.47955408 | 0.319 | 0.055 | 2.17E-72 | CD16neg_NK_spleen |
| PCF11    | 7.33E-77 | 1.35721303 | 0.341 | 0.063 | 2.60E-72 | CD16neg_NK_spleen |
| MTO1     | 8.27E-77 | 2.13438269 | 0.252 | 0.028 | 2.93E-72 | CD16neg_NK_spleen |
| ARID5B   | 1.12E-76 | 1.51076613 | 0.335 | 0.063 | 3.98E-72 | CD16neg_NK_spleen |
| MATK     | 1.21E-76 | 1.05855516 | 0.388 | 0.083 | 4.27E-72 | CD16neg_NK_spleen |
| LEMD3    | 1.25E-76 | 1.36463603 | 0.326 | 0.058 | 4.42E-72 | CD16neg_NK_spleen |
| KMT2E    | 1.49E-76 | 0.77697314 | 0.655 | 0.22  | 5.27E-72 | CD16neg_NK_spleen |
| PIK3AP1  | 1.52E-76 | 1.16596404 | 0.381 | 0.082 | 5.39E-72 | CD16neg_NK_spleen |
| PTPRC    | 1.57E-76 | 0.68824838 | 0.973 | 0.702 | 5.56E-72 | CD16neg_NK_spleen |
| ATXN7    | 1.71E-76 | 1.01202345 | 0.42  | 0.1   | 6.06E-72 | CD16neg_NK_spleen |
| CUL1     | 2.31E-76 | 1.46818754 | 0.304 | 0.049 | 8.17E-72 | CD16neg_NK_spleen |
| CHD1     | 2.65E-76 | 0.92064769 | 0.483 | 0.129 | 9.39E-72 | CD16neg_NK_spleen |
| LSM4     | 2.72E-76 | 1.01080261 | 0.433 | 0.105 | 9.62E-72 | CD16neg_NK_spleen |
| TANK     | 2.85E-76 | 0.96245769 | 0.522 | 0.152 | 1.01E-71 | CD16neg_NK_spleen |



|                    |          |            |       |       |          |                   |
|--------------------|----------|------------|-------|-------|----------|-------------------|
| AGO2               | 3.13E-76 | 2.04508378 | 0.255 | 0.03  | 1.11E-71 | CD16neg_NK_spleen |
| UBE3C              | 3.30E-76 | 1.90717308 | 0.268 | 0.034 | 1.17E-71 | CD16neg_NK_spleen |
| DCP1A              | 3.83E-76 | 1.57750978 | 0.301 | 0.048 | 1.36E-71 | CD16neg_NK_spleen |
| HINT2              | 3.84E-76 | 1.46430309 | 0.3   | 0.047 | 1.36E-71 | CD16neg_NK_spleen |
| SPTLC2             | 4.35E-76 | 1.26125543 | 0.373 | 0.079 | 1.54E-71 | CD16neg_NK_spleen |
| SP100              | 4.44E-76 | 0.84162853 | 0.699 | 0.247 | 1.57E-71 | CD16neg_NK_spleen |
| PHACTR2            | 5.15E-76 | 2.23799658 | 0.253 | 0.03  | 1.82E-71 | CD16neg_NK_spleen |
| RNF213             | 5.55E-76 | 0.77327681 | 0.569 | 0.17  | 1.97E-71 | CD16neg_NK_spleen |
| TRAC               | 6.38E-76 | 0.81075276 | 0.763 | 0.297 | 2.26E-71 | CD16neg_NK_spleen |
| GPD2               | 6.50E-76 | 1.89822292 | 0.287 | 0.042 | 2.30E-71 | CD16neg_NK_spleen |
| NSD3               | 7.41E-76 | 0.77422701 | 0.454 | 0.116 | 2.63E-71 | CD16neg_NK_spleen |
| RANBP9             | 8.41E-76 | 1.78660672 | 0.284 | 0.041 | 2.98E-71 | CD16neg_NK_spleen |
| LMBRD1             | 1.03E-75 | 1.08913544 | 0.378 | 0.08  | 3.66E-71 | CD16neg_NK_spleen |
| SMG7               | 1.17E-75 | 1.40156146 | 0.333 | 0.061 | 4.16E-71 | CD16neg_NK_spleen |
| RBBP6              | 1.28E-75 | 1.25954411 | 0.337 | 0.063 | 4.53E-71 | CD16neg_NK_spleen |
| SND1               | 1.37E-75 | 1.10515759 | 0.402 | 0.093 | 4.84E-71 | CD16neg_NK_spleen |
| ALKBH7             | 1.46E-75 | 1.2766253  | 0.354 | 0.07  | 5.18E-71 | CD16neg_NK_spleen |
| GGNBP2             | 2.04E-75 | 1.24316394 | 0.368 | 0.078 | 7.23E-71 | CD16neg_NK_spleen |
| STK24              | 2.97E-75 | 1.30121183 | 0.351 | 0.07  | 1.05E-70 | CD16neg_NK_spleen |
| SLC35A3            | 3.63E-75 | 1.16314806 | 0.371 | 0.079 | 1.29E-70 | CD16neg_NK_spleen |
| CDC42SE2           | 4.12E-75 | 0.7642596  | 0.875 | 0.386 | 1.46E-70 | CD16neg_NK_spleen |
| NOP58              | 4.52E-75 | 1.09321443 | 0.434 | 0.109 | 1.60E-70 | CD16neg_NK_spleen |
| ENSMMUG00000011580 | 4.52E-75 | 0.74721396 | 0.559 | 0.166 | 1.60E-70 | CD16neg_NK_spleen |
| CAND1              | 4.70E-75 | 1.17337687 | 0.364 | 0.075 | 1.66E-70 | CD16neg_NK_spleen |
| INPP5B             | 6.03E-75 | 1.44373268 | 0.304 | 0.05  | 2.14E-70 | CD16neg_NK_spleen |
| UBE2Q2             | 6.20E-75 | 1.19136521 | 0.339 | 0.065 | 2.20E-70 | CD16neg_NK_spleen |
| DYNC1H1            | 8.14E-75 | 1.45565575 | 0.296 | 0.046 | 2.88E-70 | CD16neg_NK_spleen |
| ARL5A              | 8.88E-75 | 1.47307085 | 0.295 | 0.046 | 3.15E-70 | CD16neg_NK_spleen |
| CHD3               | 8.95E-75 | 1.176142   | 0.344 | 0.067 | 3.17E-70 | CD16neg_NK_spleen |
| ENSMMUG00000011588 | 9.35E-75 | 2.06870939 | 0.252 | 0.03  | 3.31E-70 | CD16neg_NK_spleen |
| URI1               | 1.30E-74 | 1.74255832 | 0.284 | 0.043 | 4.62E-70 | CD16neg_NK_spleen |
| CAPZA1             | 1.31E-74 | 0.72937308 | 0.766 | 0.287 | 4.63E-70 | CD16neg_NK_spleen |
| TANC2              | 1.60E-74 | 1.69243188 | 0.277 | 0.039 | 5.69E-70 | CD16neg_NK_spleen |

|          |          |            |       |       |          |                   |
|----------|----------|------------|-------|-------|----------|-------------------|
| NRF1     | 1.94E-74 | 1.82892514 | 0.28  | 0.041 | 6.88E-70 | CD16neg_NK_spleen |
| ZFP36L1  | 1.97E-74 | 0.73785567 | 0.787 | 0.308 | 6.97E-70 | CD16neg_NK_spleen |
| MRTFA    | 2.11E-74 | 1.73806821 | 0.267 | 0.036 | 7.47E-70 | CD16neg_NK_spleen |
| ANKRD12  | 2.27E-74 | 0.8821933  | 0.504 | 0.143 | 8.03E-70 | CD16neg_NK_spleen |
| RAP1GDS1 | 2.36E-74 | 1.61511666 | 0.322 | 0.06  | 8.35E-70 | CD16neg_NK_spleen |
| CHD6     | 3.15E-74 | 0.94100595 | 0.386 | 0.085 | 1.12E-69 | CD16neg_NK_spleen |
| TRIM22   | 3.71E-74 | 1.10279939 | 0.396 | 0.09  | 1.31E-69 | CD16neg_NK_spleen |
| CXXC5    | 4.05E-74 | 1.12826501 | 0.343 | 0.066 | 1.43E-69 | CD16neg_NK_spleen |
| TGFB1    | 4.08E-74 | 0.91314852 | 0.561 | 0.176 | 1.45E-69 | CD16neg_NK_spleen |
| KAT6A    | 4.25E-74 | 0.94230617 | 0.434 | 0.109 | 1.51E-69 | CD16neg_NK_spleen |
| ARHGEF6  | 4.33E-74 | 0.95072944 | 0.411 | 0.097 | 1.53E-69 | CD16neg_NK_spleen |
| NPEPPS   | 4.89E-74 | 1.79094276 | 0.272 | 0.038 | 1.73E-69 | CD16neg_NK_spleen |
| DOP1A    | 5.11E-74 | 1.9073732  | 0.255 | 0.032 | 1.81E-69 | CD16neg_NK_spleen |
| PPM1B    | 6.60E-74 | 1.49045919 | 0.322 | 0.059 | 2.34E-69 | CD16neg_NK_spleen |
| PHC3     | 7.18E-74 | 1.28091795 | 0.32  | 0.057 | 2.54E-69 | CD16neg_NK_spleen |
| ATP9B    | 8.04E-74 | 1.37368337 | 0.328 | 0.062 | 2.85E-69 | CD16neg_NK_spleen |
| BABAM2   | 8.07E-74 | 0.85046305 | 0.501 | 0.143 | 2.86E-69 | CD16neg_NK_spleen |
| ADNP     | 1.12E-73 | 1.71292382 | 0.288 | 0.045 | 3.96E-69 | CD16neg_NK_spleen |
| MAP2K6   | 1.12E-73 | 1.64601584 | 0.296 | 0.047 | 3.98E-69 | CD16neg_NK_spleen |
| MAP4K5   | 1.15E-73 | 1.70960146 | 0.26  | 0.033 | 4.07E-69 | CD16neg_NK_spleen |
| COMMD10  | 1.23E-73 | 1.22528748 | 0.413 | 0.103 | 4.36E-69 | CD16neg_NK_spleen |
| SCFD1    | 1.29E-73 | 1.18481699 | 0.357 | 0.074 | 4.58E-69 | CD16neg_NK_spleen |
| MAN1A2   | 1.42E-73 | 1.44654222 | 0.336 | 0.066 | 5.02E-69 | CD16neg_NK_spleen |
| IP6K1    | 1.43E-73 | 1.61636389 | 0.298 | 0.049 | 5.06E-69 | CD16neg_NK_spleen |
| GMCL1    | 1.50E-73 | 1.12257766 | 0.395 | 0.091 | 5.32E-69 | CD16neg_NK_spleen |
| PARN     | 1.74E-73 | 1.61130286 | 0.294 | 0.047 | 6.17E-69 | CD16neg_NK_spleen |
| POGZ     | 1.83E-73 | 1.42046548 | 0.327 | 0.062 | 6.50E-69 | CD16neg_NK_spleen |
| NRIP1    | 1.93E-73 | 1.03632213 | 0.385 | 0.087 | 6.83E-69 | CD16neg_NK_spleen |
| INTS6    | 2.41E-73 | 0.78832179 | 0.439 | 0.11  | 8.55E-69 | CD16neg_NK_spleen |
| AP2B1    | 2.78E-73 | 1.05428692 | 0.392 | 0.09  | 9.86E-69 | CD16neg_NK_spleen |
| XPO1     | 3.67E-73 | 1.25609052 | 0.34  | 0.067 | 1.30E-68 | CD16neg_NK_spleen |
| NCK2     | 4.39E-73 | 1.66510555 | 0.269 | 0.037 | 1.56E-68 | CD16neg_NK_spleen |
| NOL7     | 4.66E-73 | 1.57598742 | 0.294 | 0.047 | 1.65E-68 | CD16neg_NK_spleen |

|                    |          |            |       |       |          |                   |
|--------------------|----------|------------|-------|-------|----------|-------------------|
| DENND6A            | 4.81E-73 | 2.00035266 | 0.25  | 0.031 | 1.70E-68 | CD16neg_NK_spleen |
| ZNF131             | 6.87E-73 | 1.45662987 | 0.317 | 0.058 | 2.44E-68 | CD16neg_NK_spleen |
| PPM1G              | 7.57E-73 | 1.63610576 | 0.275 | 0.04  | 2.68E-68 | CD16neg_NK_spleen |
| TBL1X              | 8.98E-73 | 1.62204917 | 0.279 | 0.042 | 3.18E-68 | CD16neg_NK_spleen |
| MORF4L2            | 9.74E-73 | 1.07307115 | 0.379 | 0.085 | 3.45E-68 | CD16neg_NK_spleen |
| ACIN1              | 1.38E-72 | 0.86306676 | 0.436 | 0.11  | 4.88E-68 | CD16neg_NK_spleen |
| PBXIP1             | 1.77E-72 | 1.14885656 | 0.345 | 0.069 | 6.29E-68 | CD16neg_NK_spleen |
| ATE1               | 1.93E-72 | 2.00325901 | 0.258 | 0.035 | 6.83E-68 | CD16neg_NK_spleen |
| ABLIM1             | 2.60E-72 | 1.03058372 | 0.439 | 0.115 | 9.20E-68 | CD16neg_NK_spleen |
| ENSMMUG00000058818 | 2.86E-72 | 1.67834981 | 0.258 | 0.034 | 1.01E-67 | CD16neg_NK_spleen |
| AGTPBP1            | 2.90E-72 | 1.5752544  | 0.28  | 0.042 | 1.03E-67 | CD16neg_NK_spleen |
| NONO               | 3.04E-72 | 0.87006291 | 0.457 | 0.121 | 1.08E-67 | CD16neg_NK_spleen |
| AKAP9              | 3.61E-72 | 0.79335567 | 0.532 | 0.158 | 1.28E-67 | CD16neg_NK_spleen |
| CSNK1G3            | 4.37E-72 | 1.41353972 | 0.305 | 0.054 | 1.55E-67 | CD16neg_NK_spleen |
| CHST12             | 4.48E-72 | 0.89759934 | 0.41  | 0.099 | 1.59E-67 | CD16neg_NK_spleen |
| MTSS1              | 4.70E-72 | 1.43387853 | 0.324 | 0.063 | 1.67E-67 | CD16neg_NK_spleen |
| APOL6              | 4.88E-72 | 1.53187083 | 0.273 | 0.04  | 1.73E-67 | CD16neg_NK_spleen |
| FUBP1              | 5.63E-72 | 0.78206544 | 0.502 | 0.144 | 2.00E-67 | CD16neg_NK_spleen |
| PPP1R16B           | 5.67E-72 | 1.07548084 | 0.39  | 0.091 | 2.01E-67 | CD16neg_NK_spleen |
| HMGCS1             | 6.14E-72 | 1.62733895 | 0.265 | 0.037 | 2.18E-67 | CD16neg_NK_spleen |
| ADK                | 6.25E-72 | 1.71999888 | 0.305 | 0.056 | 2.22E-67 | CD16neg_NK_spleen |
| UBQLN1             | 7.46E-72 | 1.48629425 | 0.293 | 0.049 | 2.64E-67 | CD16neg_NK_spleen |
| PER1               | 8.16E-72 | 0.81986058 | 0.452 | 0.119 | 2.89E-67 | CD16neg_NK_spleen |
| IQSEC1             | 8.21E-72 | 1.63167099 | 0.265 | 0.037 | 2.91E-67 | CD16neg_NK_spleen |
| USP3               | 8.32E-72 | 0.97720067 | 0.422 | 0.106 | 2.95E-67 | CD16neg_NK_spleen |
| TRANK1             | 1.10E-71 | 1.23183161 | 0.346 | 0.071 | 3.89E-67 | CD16neg_NK_spleen |
| SMAD3              | 1.16E-71 | 1.74133078 | 0.267 | 0.038 | 4.11E-67 | CD16neg_NK_spleen |
| INO80              | 1.28E-71 | 1.76021642 | 0.264 | 0.037 | 4.53E-67 | CD16neg_NK_spleen |
| ENSMMUG00000061125 | 1.42E-71 | 0.92862413 | 0.645 | 0.24  | 5.02E-67 | CD16neg_NK_spleen |
| PIBF1              | 1.51E-71 | 1.69472014 | 0.268 | 0.039 | 5.35E-67 | CD16neg_NK_spleen |
| MRPL10             | 1.72E-71 | 0.67894307 | 0.561 | 0.171 | 6.11E-67 | CD16neg_NK_spleen |
| MIB1               | 1.95E-71 | 1.69498659 | 0.261 | 0.036 | 6.91E-67 | CD16neg_NK_spleen |
| DDX39B             | 2.27E-71 | 0.91782965 | 0.369 | 0.08  | 8.05E-67 | CD16neg_NK_spleen |

|                    |          |            |       |       |          |                   |
|--------------------|----------|------------|-------|-------|----------|-------------------|
| WDR44              | 2.27E-71 | 1.84428602 | 0.25  | 0.032 | 8.06E-67 | CD16neg_NK_spleen |
| SURF4              | 2.57E-71 | 0.96106619 | 0.404 | 0.097 | 9.12E-67 | CD16neg_NK_spleen |
| RTN4               | 2.59E-71 | 1.31882183 | 0.332 | 0.066 | 9.17E-67 | CD16neg_NK_spleen |
| ENSMMUG00000022874 | 3.78E-71 | 1.13826455 | 0.338 | 0.068 | 1.34E-66 | CD16neg_NK_spleen |
| MYO6               | 4.06E-71 | 1.46277931 | 0.291 | 0.048 | 1.44E-66 | CD16neg_NK_spleen |
| VPS54              | 4.60E-71 | 1.9031688  | 0.254 | 0.034 | 1.63E-66 | CD16neg_NK_spleen |
| WASL               | 5.31E-71 | 1.32291244 | 0.311 | 0.057 | 1.88E-66 | CD16neg_NK_spleen |
| ELF2               | 5.96E-71 | 1.05517394 | 0.413 | 0.104 | 2.11E-66 | CD16neg_NK_spleen |
| AP1G1              | 6.09E-71 | 1.2942295  | 0.35  | 0.074 | 2.16E-66 | CD16neg_NK_spleen |
| TET2               | 9.57E-71 | 1.38618807 | 0.319 | 0.061 | 3.39E-66 | CD16neg_NK_spleen |
| RBM5               | 1.16E-70 | 0.85938811 | 0.44  | 0.116 | 4.11E-66 | CD16neg_NK_spleen |
| RNF138             | 2.61E-70 | 1.22527923 | 0.306 | 0.055 | 9.25E-66 | CD16neg_NK_spleen |
| TOB2               | 3.03E-70 | 1.08472023 | 0.328 | 0.064 | 1.07E-65 | CD16neg_NK_spleen |
| ADAM10             | 4.12E-70 | 0.92619739 | 0.405 | 0.1   | 1.46E-65 | CD16neg_NK_spleen |
| ZDHHC20            | 5.24E-70 | 1.63034572 | 0.275 | 0.043 | 1.86E-65 | CD16neg_NK_spleen |
| CREB1              | 5.66E-70 | 1.08337576 | 0.39  | 0.093 | 2.01E-65 | CD16neg_NK_spleen |
| MYH9               | 5.67E-70 | 0.67190131 | 0.608 | 0.2   | 2.01E-65 | CD16neg_NK_spleen |
| DCAF8              | 5.86E-70 | 1.13780664 | 0.31  | 0.057 | 2.08E-65 | CD16neg_NK_spleen |
| ILF3               | 5.99E-70 | 1.00279866 | 0.371 | 0.084 | 2.12E-65 | CD16neg_NK_spleen |
| PCMTD1             | 7.55E-70 | 1.08097187 | 0.367 | 0.083 | 2.67E-65 | CD16neg_NK_spleen |
| PTPN1              | 7.81E-70 | 0.8078429  | 0.469 | 0.132 | 2.77E-65 | CD16neg_NK_spleen |
| SLC9A3R1           | 9.61E-70 | 0.96434589 | 0.38  | 0.088 | 3.40E-65 | CD16neg_NK_spleen |
| YY1                | 1.24E-69 | 1.41206506 | 0.291 | 0.05  | 4.38E-65 | CD16neg_NK_spleen |
| ZC3H11A            | 1.32E-69 | 0.94778138 | 0.408 | 0.102 | 4.68E-65 | CD16neg_NK_spleen |
| SPEN               | 1.35E-69 | 1.17138876 | 0.309 | 0.057 | 4.77E-65 | CD16neg_NK_spleen |
| SOS2               | 1.40E-69 | 1.09282107 | 0.343 | 0.071 | 4.97E-65 | CD16neg_NK_spleen |
| SNIP1              | 1.51E-69 | 1.54230645 | 0.272 | 0.042 | 5.36E-65 | CD16neg_NK_spleen |
| RCOR3              | 1.61E-69 | 1.2100636  | 0.314 | 0.06  | 5.72E-65 | CD16neg_NK_spleen |
| DGKZ               | 1.89E-69 | 0.78834142 | 0.408 | 0.099 | 6.70E-65 | CD16neg_NK_spleen |
| CCNH               | 1.96E-69 | 1.01435508 | 0.367 | 0.082 | 6.95E-65 | CD16neg_NK_spleen |
| RSRC1              | 1.98E-69 | 1.2119515  | 0.343 | 0.073 | 7.00E-65 | CD16neg_NK_spleen |
| TSC22D2            | 2.13E-69 | 1.57160607 | 0.279 | 0.045 | 7.55E-65 | CD16neg_NK_spleen |
| DPH3               | 2.54E-69 | 1.5254998  | 0.289 | 0.05  | 8.99E-65 | CD16neg_NK_spleen |

|                     |          |            |       |       |          |                   |
|---------------------|----------|------------|-------|-------|----------|-------------------|
| ZFX                 | 2.93E-69 | 1.78229606 | 0.267 | 0.04  | 1.04E-64 | CD16neg_NK_spleen |
| CYFIP2              | 2.94E-69 | 0.6794829  | 0.543 | 0.166 | 1.04E-64 | CD16neg_NK_spleen |
| NME3                | 3.03E-69 | 0.73037895 | 0.525 | 0.158 | 1.07E-64 | CD16neg_NK_spleen |
| FAM118A             | 3.79E-69 | 1.43364767 | 0.3   | 0.055 | 1.34E-64 | CD16neg_NK_spleen |
| CDC14A              | 6.94E-69 | 1.28449784 | 0.344 | 0.074 | 2.46E-64 | CD16neg_NK_spleen |
| XRN1                | 7.09E-69 | 0.92310132 | 0.437 | 0.118 | 2.51E-64 | CD16neg_NK_spleen |
| FOXN2               | 8.77E-69 | 0.90975613 | 0.407 | 0.102 | 3.11E-64 | CD16neg_NK_spleen |
| PLEK                | 8.89E-69 | 0.77288533 | 0.425 | 0.109 | 3.15E-64 | CD16neg_NK_spleen |
| ENSMMUG00000030448  | 9.15E-69 | 0.76450222 | 0.387 | 0.091 | 3.24E-64 | CD16neg_NK_spleen |
| USP44               | 9.37E-69 | 1.10030755 | 0.349 | 0.075 | 3.32E-64 | CD16neg_NK_spleen |
| ENSMMUG00000010266  | 1.01E-68 | 0.69223207 | 0.718 | 0.27  | 3.57E-64 | CD16neg_NK_spleen |
| HSF1                | 1.20E-68 | 1.22159918 | 0.286 | 0.047 | 4.24E-64 | CD16neg_NK_spleen |
| RALBP1              | 1.34E-68 | 1.2166286  | 0.309 | 0.059 | 4.76E-64 | CD16neg_NK_spleen |
| OGA                 | 1.38E-68 | 0.84641488 | 0.429 | 0.114 | 4.90E-64 | CD16neg_NK_spleen |
| DNAJC3              | 1.53E-68 | 0.82531167 | 0.484 | 0.139 | 5.43E-64 | CD16neg_NK_spleen |
| RPL26               | 2.05E-68 | 0.70945589 | 0.946 | 0.625 | 7.25E-64 | CD16neg_NK_spleen |
| PPP2R5A             | 2.08E-68 | 1.80853611 | 0.259 | 0.039 | 7.38E-64 | CD16neg_NK_spleen |
| EXOC6               | 2.14E-68 | 1.41226932 | 0.288 | 0.05  | 7.57E-64 | CD16neg_NK_spleen |
| NABP1               | 2.50E-68 | 1.41829495 | 0.312 | 0.061 | 8.87E-64 | CD16neg_NK_spleen |
| CD164               | 2.56E-68 | 0.71638615 | 0.733 | 0.28  | 9.08E-64 | CD16neg_NK_spleen |
| LARP4B              | 3.53E-68 | 1.56988834 | 0.272 | 0.043 | 1.25E-63 | CD16neg_NK_spleen |
| APPBP2              | 3.96E-68 | 1.47177093 | 0.28  | 0.046 | 1.40E-63 | CD16neg_NK_spleen |
| TOP2B               | 6.04E-68 | 0.76251306 | 0.486 | 0.14  | 2.14E-63 | CD16neg_NK_spleen |
| ENSMMUG00000001894  | 6.44E-68 | 1.14558173 | 0.309 | 0.059 | 2.28E-63 | CD16neg_NK_spleen |
| UBXN4               | 7.79E-68 | 0.79240448 | 0.481 | 0.138 | 2.76E-63 | CD16neg_NK_spleen |
| UBE2F               | 8.04E-68 | 1.21496826 | 0.334 | 0.071 | 2.85E-63 | CD16neg_NK_spleen |
| ZNF43               | 9.98E-68 | 1.24805304 | 0.303 | 0.057 | 3.53E-63 | CD16neg_NK_spleen |
| SEC24B              | 1.23E-67 | 1.60656457 | 0.285 | 0.05  | 4.35E-63 | CD16neg_NK_spleen |
| DHX9                | 1.37E-67 | 0.85863323 | 0.427 | 0.113 | 4.85E-63 | CD16neg_NK_spleen |
| PDS5B               | 1.41E-67 | 1.04320141 | 0.343 | 0.074 | 4.98E-63 | CD16neg_NK_spleen |
| ENSMMUG000000062941 | 1.44E-67 | 1.18294738 | 0.334 | 0.07  | 5.12E-63 | CD16neg_NK_spleen |
| AOPEP               | 1.45E-67 | 1.21341021 | 0.333 | 0.071 | 5.13E-63 | CD16neg_NK_spleen |
| EPSTI1              | 1.57E-67 | 1.26549943 | 0.314 | 0.062 | 5.56E-63 | CD16neg_NK_spleen |

|                    |          |            |       |       |          |                   |
|--------------------|----------|------------|-------|-------|----------|-------------------|
| SUSD6              | 1.65E-67 | 1.27190395 | 0.323 | 0.066 | 5.84E-63 | CD16neg_NK_spleen |
| GLS                | 1.78E-67 | 0.98782944 | 0.372 | 0.088 | 6.32E-63 | CD16neg_NK_spleen |
| SFSWAP             | 1.87E-67 | 1.39552056 | 0.277 | 0.046 | 6.62E-63 | CD16neg_NK_spleen |
| KIF13B             | 2.44E-67 | 1.4454394  | 0.288 | 0.051 | 8.63E-63 | CD16neg_NK_spleen |
| PNKP               | 3.00E-67 | 1.36929325 | 0.285 | 0.049 | 1.06E-62 | CD16neg_NK_spleen |
| SEC23A             | 3.16E-67 | 1.5878372  | 0.262 | 0.04  | 1.12E-62 | CD16neg_NK_spleen |
| PTBP3              | 3.39E-67 | 0.74308027 | 0.576 | 0.192 | 1.20E-62 | CD16neg_NK_spleen |
| HEG1               | 3.44E-67 | 0.79386434 | 0.507 | 0.159 | 1.22E-62 | CD16neg_NK_spleen |
| VCP                | 3.91E-67 | 0.87078736 | 0.403 | 0.102 | 1.38E-62 | CD16neg_NK_spleen |
| SLC20A1            | 4.05E-67 | 1.55634366 | 0.264 | 0.041 | 1.44E-62 | CD16neg_NK_spleen |
| ANKRD28            | 4.16E-67 | 1.52421869 | 0.263 | 0.041 | 1.47E-62 | CD16neg_NK_spleen |
| M6PR               | 4.19E-67 | 0.9187688  | 0.406 | 0.104 | 1.48E-62 | CD16neg_NK_spleen |
| ST8SIA4            | 5.68E-67 | 0.71711169 | 0.64  | 0.229 | 2.01E-62 | CD16neg_NK_spleen |
| NUP210             | 7.13E-67 | 1.35422586 | 0.286 | 0.05  | 2.53E-62 | CD16neg_NK_spleen |
| TBC1D2B            | 7.33E-67 | 1.39332604 | 0.266 | 0.042 | 2.60E-62 | CD16neg_NK_spleen |
| MDN1               | 8.36E-67 | 1.47963851 | 0.252 | 0.036 | 2.96E-62 | CD16neg_NK_spleen |
| ENSMMUG00000020316 | 9.57E-67 | 1.07852967 | 0.337 | 0.072 | 3.39E-62 | CD16neg_NK_spleen |
| AFTPH              | 1.13E-66 | 1.24162018 | 0.318 | 0.064 | 4.00E-62 | CD16neg_NK_spleen |
| ENSMMUG00000052132 | 1.65E-66 | 1.6624916  | 0.273 | 0.046 | 5.83E-62 | CD16neg_NK_spleen |
| ECPAS              | 1.92E-66 | 1.47115088 | 0.276 | 0.047 | 6.80E-62 | CD16neg_NK_spleen |
| KHDRBS1            | 2.28E-66 | 0.91316477 | 0.336 | 0.071 | 8.10E-62 | CD16neg_NK_spleen |
| TIMM23             | 2.35E-66 | 1.36165327 | 0.303 | 0.059 | 8.34E-62 | CD16neg_NK_spleen |
| VRK1               | 3.13E-66 | 0.74660989 | 0.465 | 0.132 | 1.11E-61 | CD16neg_NK_spleen |
| ARHGEF7            | 3.65E-66 | 1.22175106 | 0.278 | 0.047 | 1.29E-61 | CD16neg_NK_spleen |
| RBL2               | 5.76E-66 | 1.53922579 | 0.268 | 0.044 | 2.04E-61 | CD16neg_NK_spleen |
| SECISBP2           | 6.40E-66 | 1.26982113 | 0.272 | 0.045 | 2.27E-61 | CD16neg_NK_spleen |
| GBF1               | 7.02E-66 | 1.66215688 | 0.259 | 0.04  | 2.49E-61 | CD16neg_NK_spleen |
| BAZ1B              | 7.49E-66 | 1.43030487 | 0.267 | 0.043 | 2.65E-61 | CD16neg_NK_spleen |
| CD47               | 8.34E-66 | 0.86330584 | 0.459 | 0.131 | 2.96E-61 | CD16neg_NK_spleen |
| GPCPD1             | 8.94E-66 | 0.72756574 | 0.491 | 0.147 | 3.17E-61 | CD16neg_NK_spleen |
| MBTD1              | 9.24E-66 | 1.39671963 | 0.297 | 0.057 | 3.27E-61 | CD16neg_NK_spleen |
| PTPN4              | 9.83E-66 | 0.7538232  | 0.473 | 0.139 | 3.48E-61 | CD16neg_NK_spleen |
| ARIH2              | 9.89E-66 | 1.10713344 | 0.316 | 0.064 | 3.51E-61 | CD16neg_NK_spleen |

|                    |          |            |       |       |          |                   |
|--------------------|----------|------------|-------|-------|----------|-------------------|
| PPP1R2             | 1.20E-65 | 1.08725598 | 0.341 | 0.076 | 4.24E-61 | CD16neg_NK_spleen |
| IKZF3              | 1.41E-65 | 0.6291844  | 0.805 | 0.339 | 4.99E-61 | CD16neg_NK_spleen |
| B4GALT1            | 1.90E-65 | 0.93395602 | 0.345 | 0.077 | 6.72E-61 | CD16neg_NK_spleen |
| BCL2L13            | 2.60E-65 | 1.46005964 | 0.25  | 0.037 | 9.21E-61 | CD16neg_NK_spleen |
| ENSMMUG00000060287 | 3.04E-65 | 0.64441552 | 0.953 | 0.626 | 1.08E-60 | CD16neg_NK_spleen |
| H2AFY              | 3.84E-65 | 0.81523746 | 0.391 | 0.099 | 1.36E-60 | CD16neg_NK_spleen |
| SPECC1L            | 4.31E-65 | 1.1604468  | 0.314 | 0.065 | 1.53E-60 | CD16neg_NK_spleen |
| PHF20L1            | 4.51E-65 | 1.42364084 | 0.263 | 0.042 | 1.60E-60 | CD16neg_NK_spleen |
| TCERG1             | 4.96E-65 | 1.5931034  | 0.254 | 0.039 | 1.76E-60 | CD16neg_NK_spleen |
| LPIN1              | 7.16E-65 | 1.2272423  | 0.288 | 0.053 | 2.54E-60 | CD16neg_NK_spleen |
| DDX39A             | 7.31E-65 | 0.68381725 | 0.506 | 0.156 | 2.59E-60 | CD16neg_NK_spleen |
| TLN1               | 7.79E-65 | 0.58373537 | 0.67  | 0.24  | 2.76E-60 | CD16neg_NK_spleen |
| FBXW11             | 9.33E-65 | 1.29998932 | 0.294 | 0.056 | 3.31E-60 | CD16neg_NK_spleen |
| PRIM2              | 9.66E-65 | 1.82636895 | 0.254 | 0.04  | 3.42E-60 | CD16neg_NK_spleen |
| ZNF451             | 1.18E-64 | 1.12790431 | 0.335 | 0.074 | 4.19E-60 | CD16neg_NK_spleen |
| TMEM41B            | 1.26E-64 | 1.36596893 | 0.268 | 0.045 | 4.45E-60 | CD16neg_NK_spleen |
| PHF3               | 1.33E-64 | 0.97250287 | 0.364 | 0.087 | 4.70E-60 | CD16neg_NK_spleen |
| VGLL4              | 1.33E-64 | 1.22988385 | 0.296 | 0.057 | 4.71E-60 | CD16neg_NK_spleen |
| ZFR                | 1.55E-64 | 0.94858279 | 0.319 | 0.066 | 5.48E-60 | CD16neg_NK_spleen |
| CUL4A              | 1.76E-64 | 1.45604631 | 0.254 | 0.039 | 6.25E-60 | CD16neg_NK_spleen |
| AKNA               | 1.78E-64 | 0.59710043 | 0.478 | 0.14  | 6.32E-60 | CD16neg_NK_spleen |
| TBC1D23            | 2.15E-64 | 1.31965334 | 0.283 | 0.052 | 7.62E-60 | CD16neg_NK_spleen |
| PPP2R5C            | 2.72E-64 | 0.66608626 | 0.734 | 0.29  | 9.65E-60 | CD16neg_NK_spleen |
| UBR2               | 3.89E-64 | 1.36826863 | 0.299 | 0.06  | 1.38E-59 | CD16neg_NK_spleen |
| MAF1               | 5.17E-64 | 0.96358337 | 0.331 | 0.072 | 1.83E-59 | CD16neg_NK_spleen |
| ERN1               | 5.84E-64 | 1.42625288 | 0.256 | 0.041 | 2.07E-59 | CD16neg_NK_spleen |
| HNRNPAB            | 5.87E-64 | 1.37043447 | 0.265 | 0.044 | 2.08E-59 | CD16neg_NK_spleen |
| MSH3               | 5.93E-64 | 1.46010414 | 0.272 | 0.048 | 2.10E-59 | CD16neg_NK_spleen |
| ANO10              | 6.69E-64 | 0.97736071 | 0.366 | 0.089 | 2.37E-59 | CD16neg_NK_spleen |
| STAU1              | 8.02E-64 | 0.83513343 | 0.352 | 0.082 | 2.84E-59 | CD16neg_NK_spleen |
| C18H18orf25        | 8.44E-64 | 1.30466545 | 0.278 | 0.051 | 2.99E-59 | CD16neg_NK_spleen |
| FAM120A            | 9.26E-64 | 0.9421     | 0.351 | 0.082 | 3.28E-59 | CD16neg_NK_spleen |
| LRPPRC             | 1.01E-63 | 1.06746684 | 0.316 | 0.066 | 3.58E-59 | CD16neg_NK_spleen |

|                   |          |            |       |       |          |                   |
|-------------------|----------|------------|-------|-------|----------|-------------------|
| CSPP1             | 1.07E-63 | 1.1585478  | 0.296 | 0.058 | 3.80E-59 | CD16neg_NK_spleen |
| SYK               | 1.08E-63 | 0.79474434 | 0.488 | 0.152 | 3.82E-59 | CD16neg_NK_spleen |
| ATXN7L3B          | 1.10E-63 | 1.04734673 | 0.305 | 0.062 | 3.90E-59 | CD16neg_NK_spleen |
| MTMR3             | 1.51E-63 | 1.47349093 | 0.25  | 0.039 | 5.36E-59 | CD16neg_NK_spleen |
| EIF2B3            | 3.17E-63 | 1.12564663 | 0.307 | 0.064 | 1.12E-58 | CD16neg_NK_spleen |
| TNRC6A            | 3.67E-63 | 1.02285642 | 0.35  | 0.083 | 1.30E-58 | CD16neg_NK_spleen |
| DNAJC2            | 4.09E-63 | 0.98879852 | 0.351 | 0.083 | 1.45E-58 | CD16neg_NK_spleen |
| HP1BP3            | 4.31E-63 | 0.55842988 | 0.522 | 0.164 | 1.53E-58 | CD16neg_NK_spleen |
| DTNBP1            | 4.34E-63 | 0.91553086 | 0.331 | 0.074 | 1.54E-58 | CD16neg_NK_spleen |
| CEP350            | 4.40E-63 | 0.99656846 | 0.322 | 0.07  | 1.56E-58 | CD16neg_NK_spleen |
| NSRP1             | 6.07E-63 | 0.79068351 | 0.424 | 0.118 | 2.15E-58 | CD16neg_NK_spleen |
| WBP1L             | 8.68E-63 | 1.04299155 | 0.286 | 0.055 | 3.08E-58 | CD16neg_NK_spleen |
| QRICH1            | 1.33E-62 | 1.24066666 | 0.272 | 0.049 | 4.73E-58 | CD16neg_NK_spleen |
| AQR               | 1.39E-62 | 1.32024265 | 0.272 | 0.049 | 4.91E-58 | CD16neg_NK_spleen |
| FAR1              | 1.84E-62 | 1.07911604 | 0.296 | 0.059 | 6.53E-58 | CD16neg_NK_spleen |
| ADORA2B           | 2.10E-62 | 1.99923549 | 0.333 | 0.09  | 7.45E-58 | CD16neg_NK_spleen |
| CCAR1             | 2.18E-62 | 1.07588662 | 0.301 | 0.062 | 7.74E-58 | CD16neg_NK_spleen |
| GALNT1            | 2.22E-62 | 0.94084713 | 0.363 | 0.09  | 7.86E-58 | CD16neg_NK_spleen |
| PTK2B             | 2.33E-62 | 0.93365607 | 0.316 | 0.067 | 8.24E-58 | CD16neg_NK_spleen |
| TTC39C            | 2.58E-62 | 0.74680901 | 0.413 | 0.114 | 9.14E-58 | CD16neg_NK_spleen |
| KMT5B             | 3.43E-62 | 1.4226625  | 0.257 | 0.043 | 1.22E-57 | CD16neg_NK_spleen |
| ZNF326            | 3.64E-62 | 1.43132347 | 0.267 | 0.047 | 1.29E-57 | CD16neg_NK_spleen |
| CUL2              | 3.89E-62 | 1.19449423 | 0.267 | 0.047 | 1.38E-57 | CD16neg_NK_spleen |
| SMAP2             | 4.43E-62 | 0.81489602 | 0.395 | 0.105 | 1.57E-57 | CD16neg_NK_spleen |
| NEMF              | 5.01E-62 | 1.03482369 | 0.343 | 0.082 | 1.78E-57 | CD16neg_NK_spleen |
| FAM126A           | 5.34E-62 | 1.54501375 | 0.257 | 0.043 | 1.89E-57 | CD16neg_NK_spleen |
| ENSMUG00000011604 | 5.42E-62 | 0.98285215 | 0.323 | 0.072 | 1.92E-57 | CD16neg_NK_spleen |
| MCTP2             | 6.60E-62 | 1.41650598 | 0.293 | 0.06  | 2.34E-57 | CD16neg_NK_spleen |
| PIK3CD            | 7.01E-62 | 0.85766347 | 0.4   | 0.109 | 2.48E-57 | CD16neg_NK_spleen |
| MPP7              | 8.51E-62 | 1.22478762 | 0.276 | 0.052 | 3.02E-57 | CD16neg_NK_spleen |
| NR1D2             | 1.00E-61 | 1.34612602 | 0.271 | 0.05  | 3.55E-57 | CD16neg_NK_spleen |
| CDC27             | 1.29E-61 | 1.10045932 | 0.298 | 0.061 | 4.58E-57 | CD16neg_NK_spleen |
| CAMLG             | 1.61E-61 | 0.71244498 | 0.476 | 0.147 | 5.72E-57 | CD16neg_NK_spleen |



|          |          |            |       |       |          |                   |
|----------|----------|------------|-------|-------|----------|-------------------|
| ARHGAP9  | 1.81E-61 | 0.54841389 | 0.507 | 0.159 | 6.41E-57 | CD16neg_NK_spleen |
| ND2      | 1.83E-61 | 0.6738553  | 0.945 | 0.591 | 6.47E-57 | CD16neg_NK_spleen |
| U2.106   | 1.88E-61 | 1.52059879 | 0.289 | 0.059 | 6.67E-57 | CD16neg_NK_spleen |
| TSEN54   | 2.50E-61 | 1.20983145 | 0.279 | 0.053 | 8.85E-57 | CD16neg_NK_spleen |
| DDX6     | 2.71E-61 | 0.63945397 | 0.482 | 0.149 | 9.61E-57 | CD16neg_NK_spleen |
| VPS13A   | 2.88E-61 | 1.26348929 | 0.28  | 0.054 | 1.02E-56 | CD16neg_NK_spleen |
| LARP4    | 3.04E-61 | 1.36946856 | 0.272 | 0.051 | 1.08E-56 | CD16neg_NK_spleen |
| RAD21    | 3.50E-61 | 0.61696888 | 0.449 | 0.131 | 1.24E-56 | CD16neg_NK_spleen |
| LTV1     | 3.93E-61 | 0.89869592 | 0.364 | 0.091 | 1.39E-56 | CD16neg_NK_spleen |
| GPBP1L1  | 3.93E-61 | 0.76953713 | 0.386 | 0.102 | 1.39E-56 | CD16neg_NK_spleen |
| GTPBP8   | 3.99E-61 | 0.98463356 | 0.302 | 0.063 | 1.41E-56 | CD16neg_NK_spleen |
| MYO1E    | 4.26E-61 | 1.03360234 | 0.462 | 0.15  | 1.51E-56 | CD16neg_NK_spleen |
| IQGAP1   | 4.81E-61 | 0.60836287 | 0.671 | 0.251 | 1.71E-56 | CD16neg_NK_spleen |
| PPP4R3B  | 4.89E-61 | 0.88774137 | 0.352 | 0.087 | 1.73E-56 | CD16neg_NK_spleen |
| UTY      | 6.60E-61 | 1.81193717 | 0.256 | 0.045 | 2.34E-56 | CD16neg_NK_spleen |
| APBB1IP  | 6.98E-61 | 0.69424733 | 0.862 | 0.407 | 2.47E-56 | CD16neg_NK_spleen |
| HSPA9    | 8.21E-61 | 0.69799562 | 0.429 | 0.123 | 2.91E-56 | CD16neg_NK_spleen |
| RAB10    | 8.46E-61 | 0.93438959 | 0.373 | 0.097 | 3.00E-56 | CD16neg_NK_spleen |
| RAB6A    | 1.14E-60 | 1.46223488 | 0.252 | 0.042 | 4.03E-56 | CD16neg_NK_spleen |
| SRSF11   | 1.34E-60 | 0.60759045 | 0.757 | 0.307 | 4.75E-56 | CD16neg_NK_spleen |
| CYTH1    | 1.69E-60 | 1.22550628 | 0.304 | 0.066 | 5.97E-56 | CD16neg_NK_spleen |
| IL4R     | 2.47E-60 | 0.87984859 | 0.372 | 0.097 | 8.75E-56 | CD16neg_NK_spleen |
| MIA2     | 2.80E-60 | 0.8202502  | 0.373 | 0.097 | 9.91E-56 | CD16neg_NK_spleen |
| PHACTR4  | 2.84E-60 | 1.50108762 | 0.256 | 0.045 | 1.01E-55 | CD16neg_NK_spleen |
| TTC14    | 3.19E-60 | 1.20098074 | 0.282 | 0.056 | 1.13E-55 | CD16neg_NK_spleen |
| USP8     | 3.26E-60 | 1.15851686 | 0.276 | 0.053 | 1.16E-55 | CD16neg_NK_spleen |
| AKIRIN2  | 3.30E-60 | 1.05427504 | 0.285 | 0.057 | 1.17E-55 | CD16neg_NK_spleen |
| DMTF1    | 4.34E-60 | 0.92218156 | 0.295 | 0.061 | 1.54E-55 | CD16neg_NK_spleen |
| MPHOSPH8 | 4.38E-60 | 0.62670879 | 0.432 | 0.125 | 1.55E-55 | CD16neg_NK_spleen |
| CMC1     | 6.02E-60 | 0.78059558 | 0.822 | 0.419 | 2.13E-55 | CD16neg_NK_spleen |
| HDLBP    | 6.40E-60 | 0.67494662 | 0.416 | 0.117 | 2.27E-55 | CD16neg_NK_spleen |
| EPS15    | 7.73E-60 | 0.73954693 | 0.422 | 0.122 | 2.74E-55 | CD16neg_NK_spleen |
| ZNF800   | 9.04E-60 | 1.29831906 | 0.263 | 0.049 | 3.20E-55 | CD16neg_NK_spleen |

|                    |          |            |       |       |          |                   |
|--------------------|----------|------------|-------|-------|----------|-------------------|
| ATXN10             | 9.05E-60 | 0.72231501 | 0.45  | 0.135 | 3.21E-55 | CD16neg_NK_spleen |
| RAB8B              | 1.14E-59 | 0.69119766 | 0.835 | 0.396 | 4.03E-55 | CD16neg_NK_spleen |
| CD3E               | 1.37E-59 | 0.62034711 | 0.42  | 0.12  | 4.84E-55 | CD16neg_NK_spleen |
| DDX3X              | 1.37E-59 | 0.70357935 | 0.74  | 0.313 | 4.86E-55 | CD16neg_NK_spleen |
| UBE2K              | 1.71E-59 | 0.95786602 | 0.391 | 0.109 | 6.04E-55 | CD16neg_NK_spleen |
| WSB1               | 1.88E-59 | 0.62105679 | 0.583 | 0.206 | 6.67E-55 | CD16neg_NK_spleen |
| VAV1               | 1.95E-59 | 1.20944259 | 0.289 | 0.06  | 6.91E-55 | CD16neg_NK_spleen |
| TNRC6C             | 2.08E-59 | 1.13908877 | 0.293 | 0.062 | 7.38E-55 | CD16neg_NK_spleen |
| TNPO3              | 2.53E-59 | 1.4009593  | 0.257 | 0.046 | 8.98E-55 | CD16neg_NK_spleen |
| TRPC4AP            | 2.59E-59 | 0.99482418 | 0.289 | 0.059 | 9.18E-55 | CD16neg_NK_spleen |
| RPS3               | 2.79E-59 | 0.53664494 | 0.979 | 0.821 | 9.90E-55 | CD16neg_NK_spleen |
| TENT2              | 3.13E-59 | 1.2467456  | 0.266 | 0.05  | 1.11E-54 | CD16neg_NK_spleen |
| PAPOLA             | 3.16E-59 | 0.55664238 | 0.617 | 0.221 | 1.12E-54 | CD16neg_NK_spleen |
| COPA               | 4.15E-59 | 0.78792633 | 0.374 | 0.099 | 1.47E-54 | CD16neg_NK_spleen |
| HIVEP1             | 5.14E-59 | 0.72671583 | 0.489 | 0.16  | 1.82E-54 | CD16neg_NK_spleen |
| NXF1               | 5.81E-59 | 1.16065442 | 0.276 | 0.054 | 2.06E-54 | CD16neg_NK_spleen |
| GON4L              | 8.01E-59 | 0.97868465 | 0.289 | 0.059 | 2.84E-54 | CD16neg_NK_spleen |
| ATP5PB             | 8.61E-59 | 0.77921363 | 0.366 | 0.095 | 3.05E-54 | CD16neg_NK_spleen |
| ENSMMUG00000003130 | 9.19E-59 | 0.4751902  | 0.584 | 0.201 | 3.26E-54 | CD16neg_NK_spleen |
| PDIA3              | 9.62E-59 | 0.8409242  | 0.376 | 0.1   | 3.41E-54 | CD16neg_NK_spleen |
| NFYC               | 9.94E-59 | 1.07906895 | 0.283 | 0.057 | 3.52E-54 | CD16neg_NK_spleen |
| IVNS1ABP           | 1.07E-58 | 0.62216323 | 0.427 | 0.123 | 3.79E-54 | CD16neg_NK_spleen |
| EEA1               | 1.13E-58 | 0.67728162 | 0.394 | 0.11  | 4.02E-54 | CD16neg_NK_spleen |
| ECD                | 1.34E-58 | 1.21939868 | 0.271 | 0.053 | 4.73E-54 | CD16neg_NK_spleen |
| TRIP4              | 1.97E-58 | 1.30380718 | 0.263 | 0.05  | 6.99E-54 | CD16neg_NK_spleen |
| ZFHX3              | 2.26E-58 | 1.08348399 | 0.27  | 0.052 | 8.00E-54 | CD16neg_NK_spleen |
| BICDL1             | 2.27E-58 | 0.75684999 | 0.548 | 0.198 | 8.04E-54 | CD16neg_NK_spleen |
| RALGAPA1           | 2.34E-58 | 1.12696553 | 0.28  | 0.057 | 8.28E-54 | CD16neg_NK_spleen |
| RNF13              | 3.04E-58 | 1.0427385  | 0.309 | 0.071 | 1.08E-53 | CD16neg_NK_spleen |
| GNB2               | 3.48E-58 | 0.61749427 | 0.392 | 0.107 | 1.23E-53 | CD16neg_NK_spleen |
| CLTC               | 4.50E-58 | 0.90538917 | 0.335 | 0.082 | 1.59E-53 | CD16neg_NK_spleen |
| RB1                | 5.04E-58 | 0.96255136 | 0.287 | 0.06  | 1.78E-53 | CD16neg_NK_spleen |
| USO1               | 5.50E-58 | 1.18751031 | 0.284 | 0.059 | 1.95E-53 | CD16neg_NK_spleen |

|                     |          |            |       |       |          |                   |
|---------------------|----------|------------|-------|-------|----------|-------------------|
| VMP1                | 5.74E-58 | 0.85279819 | 0.357 | 0.092 | 2.03E-53 | CD16neg_NK_spleen |
| PDE8A               | 7.72E-58 | 1.45796787 | 0.254 | 0.047 | 2.73E-53 | CD16neg_NK_spleen |
| HEXIM1              | 9.00E-58 | 1.0208167  | 0.281 | 0.058 | 3.19E-53 | CD16neg_NK_spleen |
| TAF1                | 9.19E-58 | 1.0377769  | 0.286 | 0.06  | 3.26E-53 | CD16neg_NK_spleen |
| PPHLN1              | 1.01E-57 | 0.58619862 | 0.448 | 0.135 | 3.58E-53 | CD16neg_NK_spleen |
| RBM25               | 1.13E-57 | 0.67049563 | 0.445 | 0.136 | 4.00E-53 | CD16neg_NK_spleen |
| DARS1               | 1.16E-57 | 0.83947796 | 0.347 | 0.088 | 4.13E-53 | CD16neg_NK_spleen |
| ATP10D              | 1.25E-57 | 0.98724799 | 0.302 | 0.067 | 4.42E-53 | CD16neg_NK_spleen |
| SLC6A6              | 1.39E-57 | 1.21312569 | 0.265 | 0.051 | 4.93E-53 | CD16neg_NK_spleen |
| ENSMMUG00000003854  | 1.65E-57 | 0.57137176 | 0.395 | 0.11  | 5.84E-53 | CD16neg_NK_spleen |
| RANBP1              | 1.86E-57 | 1.08544769 | 0.28  | 0.057 | 6.59E-53 | CD16neg_NK_spleen |
| ENSMMUG000000065373 | 3.70E-57 | 0.9869483  | 0.879 | 0.719 | 1.31E-52 | CD16neg_NK_spleen |
| AXIN1               | 5.74E-57 | 1.23974483 | 0.256 | 0.048 | 2.03E-52 | CD16neg_NK_spleen |
| KPNA1               | 7.01E-57 | 1.10384681 | 0.28  | 0.059 | 2.48E-52 | CD16neg_NK_spleen |
| MICU1               | 9.78E-57 | 1.21177745 | 0.282 | 0.06  | 3.47E-52 | CD16neg_NK_spleen |
| SH2B3               | 1.32E-56 | 1.35918129 | 0.257 | 0.049 | 4.69E-52 | CD16neg_NK_spleen |
| ARFGAP3             | 2.87E-56 | 0.74209387 | 0.394 | 0.114 | 1.02E-51 | CD16neg_NK_spleen |
| ZNF28               | 3.08E-56 | 0.99626975 | 0.295 | 0.066 | 1.09E-51 | CD16neg_NK_spleen |
| LPIN2               | 3.48E-56 | 0.96906269 | 0.297 | 0.067 | 1.23E-51 | CD16neg_NK_spleen |
| ADAR                | 4.53E-56 | 0.67885984 | 0.36  | 0.096 | 1.61E-51 | CD16neg_NK_spleen |
| HNRNPA0             | 4.82E-56 | 0.46485808 | 0.573 | 0.205 | 1.71E-51 | CD16neg_NK_spleen |
| SPOP                | 4.88E-56 | 0.9784583  | 0.308 | 0.073 | 1.73E-51 | CD16neg_NK_spleen |
| LASP1               | 4.88E-56 | 0.58383095 | 0.435 | 0.132 | 1.73E-51 | CD16neg_NK_spleen |
| UCKL1               | 4.96E-56 | 1.0788956  | 0.254 | 0.047 | 1.76E-51 | CD16neg_NK_spleen |
| RPL31               | 5.53E-56 | 0.53464256 | 0.687 | 0.271 | 1.96E-51 | CD16neg_NK_spleen |
| STAT1               | 6.15E-56 | 1.03200178 | 0.264 | 0.053 | 2.18E-51 | CD16neg_NK_spleen |
| TMC8                | 6.16E-56 | 0.71497506 | 0.316 | 0.075 | 2.18E-51 | CD16neg_NK_spleen |
| SCAF11              | 6.53E-56 | 0.63682119 | 0.569 | 0.207 | 2.31E-51 | CD16neg_NK_spleen |
| TAX1BP1             | 8.89E-56 | 0.43879195 | 0.588 | 0.209 | 3.15E-51 | CD16neg_NK_spleen |
| DENND2D             | 1.19E-55 | 0.51489674 | 0.429 | 0.128 | 4.22E-51 | CD16neg_NK_spleen |
| UHMK1               | 2.00E-55 | 1.00545985 | 0.264 | 0.053 | 7.09E-51 | CD16neg_NK_spleen |
| DDX50               | 3.29E-55 | 0.71329387 | 0.371 | 0.103 | 1.17E-50 | CD16neg_NK_spleen |
| PDCD6IP             | 5.35E-55 | 0.57746852 | 0.379 | 0.106 | 1.90E-50 | CD16neg_NK_spleen |

|                   |          |            |       |       |          |                   |
|-------------------|----------|------------|-------|-------|----------|-------------------|
| AFF4              | 5.89E-55 | 1.20421761 | 0.251 | 0.049 | 2.09E-50 | CD16neg_NK_spleen |
| H2AZ2             | 6.71E-55 | 0.59139778 | 0.79  | 0.341 | 2.38E-50 | CD16neg_NK_spleen |
| PPIA              | 6.94E-55 | 0.60050352 | 0.476 | 0.155 | 2.46E-50 | CD16neg_NK_spleen |
| CASP8             | 7.52E-55 | 0.66964709 | 0.381 | 0.108 | 2.66E-50 | CD16neg_NK_spleen |
| HSP90AB1          | 1.07E-54 | 0.63842436 | 0.974 | 0.703 | 3.81E-50 | CD16neg_NK_spleen |
| CACYBP            | 1.12E-54 | 0.4919264  | 0.606 | 0.223 | 3.98E-50 | CD16neg_NK_spleen |
| NLRC3             | 1.31E-54 | 0.90417812 | 0.282 | 0.062 | 4.62E-50 | CD16neg_NK_spleen |
| PPIG              | 1.39E-54 | 0.50355574 | 0.489 | 0.161 | 4.93E-50 | CD16neg_NK_spleen |
| SHOC2             | 1.80E-54 | 0.60537889 | 0.426 | 0.129 | 6.37E-50 | CD16neg_NK_spleen |
| GNG2              | 1.94E-54 | 0.60721265 | 0.556 | 0.204 | 6.87E-50 | CD16neg_NK_spleen |
| C3H21orf91        | 1.95E-54 | 0.75064632 | 0.312 | 0.075 | 6.92E-50 | CD16neg_NK_spleen |
| DIDO1             | 2.06E-54 | 1.07856683 | 0.276 | 0.06  | 7.31E-50 | CD16neg_NK_spleen |
| STAG2             | 2.08E-54 | 0.57664088 | 0.585 | 0.218 | 7.37E-50 | CD16neg_NK_spleen |
| USP10             | 2.10E-54 | 0.76932389 | 0.338 | 0.089 | 7.44E-50 | CD16neg_NK_spleen |
| EIF4G2            | 2.29E-54 | 0.43482857 | 0.68  | 0.264 | 8.13E-50 | CD16neg_NK_spleen |
| VPS4A             | 2.31E-54 | 1.10168867 | 0.274 | 0.059 | 8.17E-50 | CD16neg_NK_spleen |
| PTP4A2            | 2.45E-54 | 0.76037613 | 0.37  | 0.104 | 8.68E-50 | CD16neg_NK_spleen |
| ATP8B4            | 2.46E-54 | 1.18032927 | 0.291 | 0.068 | 8.73E-50 | CD16neg_NK_spleen |
| PNN               | 2.88E-54 | 0.5168141  | 0.502 | 0.169 | 1.02E-49 | CD16neg_NK_spleen |
| ATP2B4            | 3.05E-54 | 0.99646581 | 0.265 | 0.055 | 1.08E-49 | CD16neg_NK_spleen |
| IPO7              | 3.14E-54 | 1.04796831 | 0.266 | 0.056 | 1.11E-49 | CD16neg_NK_spleen |
| CPEB1             | 3.15E-54 | 0.50079891 | 0.976 | 0.818 | 1.11E-49 | CD16neg_NK_spleen |
| SLC44A2           | 3.22E-54 | 0.8193187  | 0.341 | 0.09  | 1.14E-49 | CD16neg_NK_spleen |
| ENSMUG00000015274 | 3.30E-54 | 0.64756831 | 0.391 | 0.114 | 1.17E-49 | CD16neg_NK_spleen |
| ELF1              | 3.57E-54 | 0.62855936 | 0.818 | 0.377 | 1.26E-49 | CD16neg_NK_spleen |
| KDM6B             | 4.06E-54 | 0.6486137  | 0.395 | 0.116 | 1.44E-49 | CD16neg_NK_spleen |
| NEK1              | 4.96E-54 | 0.91543024 | 0.272 | 0.058 | 1.76E-49 | CD16neg_NK_spleen |
| PDCD4             | 6.45E-54 | 0.50356379 | 0.572 | 0.207 | 2.28E-49 | CD16neg_NK_spleen |
| ASCC1             | 7.42E-54 | 1.0971666  | 0.262 | 0.054 | 2.63E-49 | CD16neg_NK_spleen |
| ZNF506            | 7.60E-54 | 0.91481244 | 0.29  | 0.066 | 2.69E-49 | CD16neg_NK_spleen |
| ABHD2             | 8.46E-54 | 0.8358287  | 0.287 | 0.065 | 3.00E-49 | CD16neg_NK_spleen |
| LUC7L             | 8.67E-54 | 0.95193845 | 0.273 | 0.059 | 3.07E-49 | CD16neg_NK_spleen |
| ENSMUG00000058089 | 1.20E-53 | 1.43463044 | 0.261 | 0.056 | 4.26E-49 | CD16neg_NK_spleen |

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|--------------------|----------|------------|-------|-------|----------|-------------------|
| PPA2               | 1.45E-53 | 0.97148938 | 0.255 | 0.051 | 5.15E-49 | CD16neg_NK_spleen |
| DECR1              | 1.47E-53 | 0.87794183 | 0.3   | 0.071 | 5.19E-49 | CD16neg_NK_spleen |
| NDEL1              | 1.57E-53 | 0.89234936 | 0.307 | 0.074 | 5.56E-49 | CD16neg_NK_spleen |
| SF3A1              | 1.97E-53 | 0.88203389 | 0.275 | 0.06  | 6.97E-49 | CD16neg_NK_spleen |
| TOX4               | 3.05E-53 | 0.83414777 | 0.299 | 0.071 | 1.08E-48 | CD16neg_NK_spleen |
| BTN2A2             | 3.26E-53 | 0.43434186 | 0.52  | 0.177 | 1.16E-48 | CD16neg_NK_spleen |
| RNASET2            | 3.47E-53 | 0.77416536 | 0.302 | 0.072 | 1.23E-48 | CD16neg_NK_spleen |
| UBE2R2             | 3.73E-53 | 1.00504852 | 0.304 | 0.075 | 1.32E-48 | CD16neg_NK_spleen |
| UBE2B              | 4.24E-53 | 0.53992602 | 0.456 | 0.147 | 1.50E-48 | CD16neg_NK_spleen |
| ENSMMUG00000016959 | 5.39E-53 | 0.61195578 | 0.378 | 0.109 | 1.91E-48 | CD16neg_NK_spleen |
| CASC3              | 6.58E-53 | 0.94732235 | 0.257 | 0.053 | 2.33E-48 | CD16neg_NK_spleen |
| TRAF3IP3           | 7.64E-53 | 0.46054648 | 0.57  | 0.205 | 2.71E-48 | CD16neg_NK_spleen |
| ENSMMUG00000050413 | 1.04E-52 | 1.01368068 | 0.272 | 0.06  | 3.68E-48 | CD16neg_NK_spleen |
| LBH                | 1.05E-52 | 0.33277544 | 0.537 | 0.187 | 3.72E-48 | CD16neg_NK_spleen |
| MORF4L1            | 1.18E-52 | 0.5431034  | 0.668 | 0.265 | 4.17E-48 | CD16neg_NK_spleen |
| MNAT1              | 1.21E-52 | 0.86261346 | 0.336 | 0.09  | 4.28E-48 | CD16neg_NK_spleen |
| DHX36              | 1.26E-52 | 0.58828335 | 0.443 | 0.144 | 4.46E-48 | CD16neg_NK_spleen |
| NT5C2              | 1.36E-52 | 0.70702675 | 0.356 | 0.1   | 4.82E-48 | CD16neg_NK_spleen |
| KDM5A              | 1.58E-52 | 0.71024034 | 0.376 | 0.11  | 5.59E-48 | CD16neg_NK_spleen |
| ETNK1              | 1.67E-52 | 0.67571634 | 0.339 | 0.09  | 5.91E-48 | CD16neg_NK_spleen |
| NUCKS1             | 1.69E-52 | 0.61132475 | 0.474 | 0.161 | 5.99E-48 | CD16neg_NK_spleen |
| CCT6A              | 1.89E-52 | 0.57836332 | 0.464 | 0.154 | 6.71E-48 | CD16neg_NK_spleen |
| RTF1               | 2.69E-52 | 0.7651326  | 0.349 | 0.097 | 9.53E-48 | CD16neg_NK_spleen |
| CRYL1              | 3.26E-52 | 1.02546811 | 0.286 | 0.067 | 1.16E-47 | CD16neg_NK_spleen |
| EIF2S3             | 3.97E-52 | 0.73656938 | 0.329 | 0.087 | 1.41E-47 | CD16neg_NK_spleen |
| GNAL               | 6.67E-52 | 0.71732174 | 0.391 | 0.118 | 2.36E-47 | CD16neg_NK_spleen |
| FGD3               | 7.87E-52 | 0.57593443 | 0.397 | 0.12  | 2.79E-47 | CD16neg_NK_spleen |
| ETS1               | 8.00E-52 | 0.52584035 | 0.88  | 0.448 | 2.83E-47 | CD16neg_NK_spleen |
| ENSMMUG00000061458 | 1.11E-51 | 0.95356804 | 0.28  | 0.065 | 3.94E-47 | CD16neg_NK_spleen |
| P4HB               | 1.31E-51 | 0.82143831 | 0.289 | 0.069 | 4.64E-47 | CD16neg_NK_spleen |
| ARPC5L             | 1.53E-51 | 0.40101992 | 0.494 | 0.166 | 5.43E-47 | CD16neg_NK_spleen |
| NCALD              | 1.79E-51 | 1.3956629  | 0.275 | 0.066 | 6.35E-47 | CD16neg_NK_spleen |
| SUPT3H             | 2.00E-51 | 0.78682594 | 0.386 | 0.118 | 7.09E-47 | CD16neg_NK_spleen |

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|--------------------|----------|------------|-------|-------|----------|-------------------|
| SH2D1A             | 3.02E-51 | 0.45186676 | 0.581 | 0.217 | 1.07E-46 | CD16neg_NK_spleen |
| MED27              | 3.24E-51 | 1.03548718 | 0.251 | 0.052 | 1.15E-46 | CD16neg_NK_spleen |
| OLA1               | 3.56E-51 | 0.73722313 | 0.367 | 0.107 | 1.26E-46 | CD16neg_NK_spleen |
| BMP2K              | 3.87E-51 | 0.99548799 | 0.256 | 0.055 | 1.37E-46 | CD16neg_NK_spleen |
| UPF2               | 4.76E-51 | 0.61364592 | 0.395 | 0.122 | 1.69E-46 | CD16neg_NK_spleen |
| SRSF6              | 4.93E-51 | 0.5241194  | 0.44  | 0.142 | 1.75E-46 | CD16neg_NK_spleen |
| EIF4H              | 5.41E-51 | 0.41205123 | 0.469 | 0.158 | 1.92E-46 | CD16neg_NK_spleen |
| ENSMMUG00000056190 | 7.77E-51 | 0.57551868 | 0.272 | 0.062 | 2.75E-46 | CD16neg_NK_spleen |
| SLC25A26           | 7.91E-51 | 1.01201505 | 0.264 | 0.059 | 2.80E-46 | CD16neg_NK_spleen |
| RALGAPB            | 1.06E-50 | 0.76133502 | 0.282 | 0.066 | 3.76E-46 | CD16neg_NK_spleen |
| U5.18              | 1.09E-50 | 0.95085877 | 0.379 | 0.118 | 3.88E-46 | CD16neg_NK_spleen |
| PRKDC              | 1.36E-50 | 0.721449   | 0.425 | 0.14  | 4.82E-46 | CD16neg_NK_spleen |
| TDRD3              | 1.65E-50 | 1.14974526 | 0.261 | 0.058 | 5.84E-46 | CD16neg_NK_spleen |
| SYAP1              | 1.71E-50 | 0.72385242 | 0.332 | 0.091 | 6.06E-46 | CD16neg_NK_spleen |
| ETF1               | 1.73E-50 | 0.49356844 | 0.371 | 0.109 | 6.13E-46 | CD16neg_NK_spleen |
| DIAPH1             | 1.87E-50 | 0.48623277 | 0.425 | 0.135 | 6.61E-46 | CD16neg_NK_spleen |
| BIN3               | 3.03E-50 | 0.61442753 | 0.343 | 0.096 | 1.07E-45 | CD16neg_NK_spleen |
| TMEM123            | 3.05E-50 | 0.48585198 | 0.551 | 0.205 | 1.08E-45 | CD16neg_NK_spleen |
| SRSF1              | 3.26E-50 | 0.56322984 | 0.352 | 0.1   | 1.15E-45 | CD16neg_NK_spleen |
| THOC2              | 3.28E-50 | 0.60820468 | 0.318 | 0.083 | 1.16E-45 | CD16neg_NK_spleen |
| FBNP1L             | 4.30E-50 | 0.86946583 | 0.268 | 0.061 | 1.52E-45 | CD16neg_NK_spleen |
| NRDC               | 5.03E-50 | 0.74247483 | 0.314 | 0.083 | 1.78E-45 | CD16neg_NK_spleen |
| OXR1               | 9.61E-50 | 0.92778979 | 0.262 | 0.059 | 3.40E-45 | CD16neg_NK_spleen |
| KPNB1              | 1.21E-49 | 0.93804283 | 0.259 | 0.058 | 4.27E-45 | CD16neg_NK_spleen |
| VAPA               | 1.26E-49 | 0.44860979 | 0.528 | 0.191 | 4.45E-45 | CD16neg_NK_spleen |
| ENSMMUG00000006293 | 1.37E-49 | 0.4695463  | 0.442 | 0.145 | 4.87E-45 | CD16neg_NK_spleen |
| LTN1               | 1.51E-49 | 1.04193091 | 0.258 | 0.058 | 5.34E-45 | CD16neg_NK_spleen |
| SYNCRIP            | 1.62E-49 | 0.38508983 | 0.367 | 0.108 | 5.75E-45 | CD16neg_NK_spleen |
| ATG3               | 1.69E-49 | 0.49469326 | 0.36  | 0.105 | 5.98E-45 | CD16neg_NK_spleen |
| RSRC2              | 2.65E-49 | 0.4289709  | 0.618 | 0.241 | 9.39E-45 | CD16neg_NK_spleen |
| CD46               | 2.77E-49 | 0.50623142 | 0.44  | 0.147 | 9.81E-45 | CD16neg_NK_spleen |
| RASAL3             | 2.96E-49 | 0.66397275 | 0.294 | 0.074 | 1.05E-44 | CD16neg_NK_spleen |
| EIPR1              | 3.02E-49 | 0.72113636 | 0.291 | 0.072 | 1.07E-44 | CD16neg_NK_spleen |

|         |          |            |       |       |          |                   |
|---------|----------|------------|-------|-------|----------|-------------------|
| KIF2A   | 3.33E-49 | 0.38603148 | 0.471 | 0.162 | 1.18E-44 | CD16neg_NK_spleen |
| CCDC12  | 3.39E-49 | 0.38354091 | 0.482 | 0.164 | 1.20E-44 | CD16neg_NK_spleen |
| CD38    | 3.54E-49 | 0.58749539 | 0.747 | 0.344 | 1.25E-44 | CD16neg_NK_spleen |
| ADD1    | 3.70E-49 | 0.3955501  | 0.362 | 0.105 | 1.31E-44 | CD16neg_NK_spleen |
| ANAPC10 | 3.75E-49 | 0.8882971  | 0.273 | 0.065 | 1.33E-44 | CD16neg_NK_spleen |
| CNTRL   | 3.95E-49 | 0.74173774 | 0.308 | 0.081 | 1.40E-44 | CD16neg_NK_spleen |
| G3BP1   | 4.93E-49 | 0.4044101  | 0.432 | 0.14  | 1.75E-44 | CD16neg_NK_spleen |
| HNRNPL  | 6.42E-49 | 0.40754352 | 0.534 | 0.194 | 2.27E-44 | CD16neg_NK_spleen |
| PDIA6   | 8.12E-49 | 0.58955515 | 0.367 | 0.11  | 2.88E-44 | CD16neg_NK_spleen |
| AARS1   | 1.05E-48 | 0.53870931 | 0.346 | 0.099 | 3.72E-44 | CD16neg_NK_spleen |
| DNMT1   | 1.20E-48 | 0.70730035 | 0.307 | 0.081 | 4.26E-44 | CD16neg_NK_spleen |
| UBAP2L  | 1.22E-48 | 0.76489265 | 0.295 | 0.075 | 4.34E-44 | CD16neg_NK_spleen |
| CTDSPL2 | 1.70E-48 | 0.74553572 | 0.319 | 0.087 | 6.02E-44 | CD16neg_NK_spleen |
| SLTM    | 2.18E-48 | 0.44594599 | 0.468 | 0.161 | 7.71E-44 | CD16neg_NK_spleen |
| ZC3H13  | 2.32E-48 | 0.65787658 | 0.33  | 0.092 | 8.22E-44 | CD16neg_NK_spleen |
| MAX     | 2.54E-48 | 0.39586522 | 0.467 | 0.16  | 9.01E-44 | CD16neg_NK_spleen |
| SZRD1   | 2.76E-48 | 0.5789003  | 0.326 | 0.09  | 9.77E-44 | CD16neg_NK_spleen |
| AOAH    | 3.13E-48 | 0.58659885 | 0.546 | 0.212 | 1.11E-43 | CD16neg_NK_spleen |
| CTPS1   | 3.15E-48 | 1.05755376 | 0.25  | 0.056 | 1.12E-43 | CD16neg_NK_spleen |
| LIMS1   | 3.57E-48 | 0.85286754 | 0.268 | 0.063 | 1.26E-43 | CD16neg_NK_spleen |
| BIN2    | 3.85E-48 | 0.34910593 | 0.641 | 0.251 | 1.36E-43 | CD16neg_NK_spleen |
| FXR1    | 3.94E-48 | 0.5123236  | 0.479 | 0.169 | 1.40E-43 | CD16neg_NK_spleen |
| PARP8   | 4.68E-48 | 0.4683165  | 0.534 | 0.201 | 1.66E-43 | CD16neg_NK_spleen |
| DERL1   | 5.93E-48 | 0.64636261 | 0.346 | 0.102 | 2.10E-43 | CD16neg_NK_spleen |
| EIF2A   | 6.27E-48 | 0.65050602 | 0.296 | 0.076 | 2.22E-43 | CD16neg_NK_spleen |
| ERP44   | 6.45E-48 | 0.59935078 | 0.386 | 0.121 | 2.29E-43 | CD16neg_NK_spleen |
| TIA1    | 8.89E-48 | 0.7690657  | 0.293 | 0.075 | 3.15E-43 | CD16neg_NK_spleen |
| CYLD    | 9.19E-48 | 0.44715608 | 0.433 | 0.145 | 3.26E-43 | CD16neg_NK_spleen |
| WDR33   | 1.20E-47 | 0.40264457 | 0.339 | 0.097 | 4.25E-43 | CD16neg_NK_spleen |
| P4HA1   | 1.87E-47 | 0.75974285 | 0.288 | 0.074 | 6.64E-43 | CD16neg_NK_spleen |
| TUT7    | 1.90E-47 | 0.6076011  | 0.386 | 0.123 | 6.74E-43 | CD16neg_NK_spleen |
| TPM4    | 2.48E-47 | 0.64382521 | 0.338 | 0.098 | 8.79E-43 | CD16neg_NK_spleen |
| U8.13   | 2.96E-47 | 0.79222904 | 0.34  | 0.101 | 1.05E-42 | CD16neg_NK_spleen |

|                    |          |            |       |       |          |                   |
|--------------------|----------|------------|-------|-------|----------|-------------------|
| NASP               | 3.00E-47 | 0.60355334 | 0.454 | 0.161 | 1.06E-42 | CD16neg_NK_spleen |
| ENSMMUG00000041183 | 3.62E-47 | 0.74715769 | 0.259 | 0.06  | 1.28E-42 | CD16neg_NK_spleen |
| CLCN3              | 3.69E-47 | 0.65867453 | 0.288 | 0.074 | 1.31E-42 | CD16neg_NK_spleen |
| TCP1               | 3.92E-47 | 0.6719363  | 0.297 | 0.078 | 1.39E-42 | CD16neg_NK_spleen |
| MAT2B              | 4.40E-47 | 0.63198923 | 0.294 | 0.076 | 1.56E-42 | CD16neg_NK_spleen |
| IRF8               | 4.52E-47 | 0.24565089 | 0.486 | 0.17  | 1.60E-42 | CD16neg_NK_spleen |
| CMTM6              | 5.44E-47 | 0.56724874 | 0.582 | 0.233 | 1.93E-42 | CD16neg_NK_spleen |
| VPS13C             | 7.71E-47 | 0.4808473  | 0.466 | 0.166 | 2.73E-42 | CD16neg_NK_spleen |
| IRAK2              | 1.18E-46 | 0.61888775 | 0.318 | 0.089 | 4.18E-42 | CD16neg_NK_spleen |
| ENSMMUG00000032231 | 1.21E-46 | 0.82819747 | 0.274 | 0.069 | 4.28E-42 | CD16neg_NK_spleen |
| UBE2E3             | 1.35E-46 | 0.82956773 | 0.25  | 0.057 | 4.79E-42 | CD16neg_NK_spleen |
| CYC1               | 1.37E-46 | 0.92466964 | 0.267 | 0.066 | 4.84E-42 | CD16neg_NK_spleen |
| IL2RB              | 1.90E-46 | 0.47922143 | 0.907 | 0.493 | 6.73E-42 | CD16neg_NK_spleen |
| ACOT7              | 2.52E-46 | 0.67532184 | 0.287 | 0.075 | 8.91E-42 | CD16neg_NK_spleen |
| CABIN1             | 2.57E-46 | 0.51539637 | 0.318 | 0.089 | 9.09E-42 | CD16neg_NK_spleen |
| MSN                | 3.58E-46 | 0.52083676 | 0.767 | 0.346 | 1.27E-41 | CD16neg_NK_spleen |
| SAR1A              | 3.80E-46 | 0.50246553 | 0.365 | 0.113 | 1.35E-41 | CD16neg_NK_spleen |
| CDC5L              | 4.08E-46 | 0.63138861 | 0.278 | 0.07  | 1.45E-41 | CD16neg_NK_spleen |
| NT5DC1             | 6.09E-46 | 0.85096846 | 0.289 | 0.077 | 2.16E-41 | CD16neg_NK_spleen |
| CCNI               | 6.55E-46 | 0.30729865 | 0.524 | 0.194 | 2.32E-41 | CD16neg_NK_spleen |
| SNX1               | 8.34E-46 | 0.61922602 | 0.326 | 0.094 | 2.96E-41 | CD16neg_NK_spleen |
| RBM23              | 1.07E-45 | 0.75187331 | 0.289 | 0.077 | 3.79E-41 | CD16neg_NK_spleen |
| ARHGAP30           | 1.31E-45 | 0.48609748 | 0.424 | 0.144 | 4.66E-41 | CD16neg_NK_spleen |
| ENSMMUG00000060293 | 1.34E-45 | 1.64852251 | 0.284 | 0.081 | 4.74E-41 | CD16neg_NK_spleen |
| KIZ                | 1.40E-45 | 0.69153533 | 0.306 | 0.085 | 4.98E-41 | CD16neg_NK_spleen |
| TIPARP             | 1.86E-45 | 0.63340599 | 0.38  | 0.124 | 6.60E-41 | CD16neg_NK_spleen |
| PDCD6-AHRR         | 2.33E-45 | 0.72767451 | 0.267 | 0.066 | 8.26E-41 | CD16neg_NK_spleen |
| ZNF207             | 2.55E-45 | 0.44069767 | 0.479 | 0.173 | 9.02E-41 | CD16neg_NK_spleen |
| ATP1A1             | 2.55E-45 | 0.7972808  | 0.254 | 0.061 | 9.05E-41 | CD16neg_NK_spleen |
| PIK3CG             | 2.58E-45 | 0.79393039 | 0.261 | 0.064 | 9.15E-41 | CD16neg_NK_spleen |
| SUPT20H            | 2.79E-45 | 0.83966964 | 0.255 | 0.061 | 9.87E-41 | CD16neg_NK_spleen |
| PTPRCAP            | 2.87E-45 | 0.6808452  | 0.271 | 0.068 | 1.02E-40 | CD16neg_NK_spleen |
| RNASEH2C           | 3.67E-45 | 0.44750154 | 0.44  | 0.152 | 1.30E-40 | CD16neg_NK_spleen |



|                    |          |            |       |       |          |                   |
|--------------------|----------|------------|-------|-------|----------|-------------------|
| HNRNPF             | 5.21E-45 | 0.49220195 | 0.747 | 0.334 | 1.84E-40 | CD16neg_NK_spleen |
| CPSF6              | 5.21E-45 | 0.75477704 | 0.27  | 0.068 | 1.85E-40 | CD16neg_NK_spleen |
| CYTIP              | 6.56E-45 | 0.62236612 | 0.355 | 0.112 | 2.32E-40 | CD16neg_NK_spleen |
| YPEL3              | 6.89E-45 | 0.35312928 | 0.338 | 0.1   | 2.44E-40 | CD16neg_NK_spleen |
| MIER1              | 7.11E-45 | 0.3342424  | 0.527 | 0.197 | 2.52E-40 | CD16neg_NK_spleen |
| UBXN2A             | 7.42E-45 | 0.91888201 | 0.267 | 0.068 | 2.63E-40 | CD16neg_NK_spleen |
| KANSL2             | 8.46E-45 | 0.6027104  | 0.287 | 0.077 | 3.00E-40 | CD16neg_NK_spleen |
| NPTN               | 9.28E-45 | 0.76641353 | 0.265 | 0.066 | 3.29E-40 | CD16neg_NK_spleen |
| ENSMMUG00000055114 | 9.37E-45 | 0.99226062 | 0.29  | 0.081 | 3.32E-40 | CD16neg_NK_spleen |
| ATP6V0D1           | 1.40E-44 | 0.71071291 | 0.269 | 0.069 | 4.96E-40 | CD16neg_NK_spleen |
| ATF6               | 1.47E-44 | 0.60159462 | 0.337 | 0.102 | 5.23E-40 | CD16neg_NK_spleen |
| CALR               | 1.81E-44 | 0.3862294  | 0.63  | 0.26  | 6.40E-40 | CD16neg_NK_spleen |
| SS18               | 2.03E-44 | 0.48906725 | 0.325 | 0.096 | 7.19E-40 | CD16neg_NK_spleen |
| ENSMMUG00000022619 | 2.55E-44 | 0.86030695 | 0.265 | 0.068 | 9.05E-40 | CD16neg_NK_spleen |
| CSRNP1             | 4.56E-44 | 0.39230062 | 0.399 | 0.133 | 1.62E-39 | CD16neg_NK_spleen |
| H4C15              | 4.68E-44 | 0.60416193 | 0.274 | 0.071 | 1.66E-39 | CD16neg_NK_spleen |
| KATNBL1            | 5.72E-44 | 0.76539774 | 0.255 | 0.063 | 2.03E-39 | CD16neg_NK_spleen |
| EIF3M              | 8.70E-44 | 0.39310779 | 0.457 | 0.165 | 3.08E-39 | CD16neg_NK_spleen |
| GTF2B              | 9.19E-44 | 0.57167542 | 0.602 | 0.252 | 3.26E-39 | CD16neg_NK_spleen |
| DCP2               | 1.04E-43 | 0.60177757 | 0.328 | 0.1   | 3.70E-39 | CD16neg_NK_spleen |
| CCDC66             | 1.60E-43 | 0.79208354 | 0.261 | 0.067 | 5.65E-39 | CD16neg_NK_spleen |
| CAMTA1             | 1.77E-43 | 0.60352881 | 0.317 | 0.094 | 6.27E-39 | CD16neg_NK_spleen |
| CLK4               | 1.98E-43 | 0.63563311 | 0.256 | 0.064 | 7.03E-39 | CD16neg_NK_spleen |
| ENSMMUG00000015583 | 2.02E-43 | 0.43052933 | 0.73  | 0.327 | 7.16E-39 | CD16neg_NK_spleen |
| ENSMMUG00000006803 | 2.03E-43 | 0.46058052 | 0.37  | 0.12  | 7.20E-39 | CD16neg_NK_spleen |
| EEF2               | 2.23E-43 | 0.38245471 | 0.7   | 0.302 | 7.89E-39 | CD16neg_NK_spleen |
| ATF1               | 2.23E-43 | 0.83989281 | 0.255 | 0.064 | 7.91E-39 | CD16neg_NK_spleen |
| TSG101             | 2.25E-43 | 0.65658631 | 0.316 | 0.094 | 7.98E-39 | CD16neg_NK_spleen |
| ARHGAP45           | 2.43E-43 | 0.40360133 | 0.367 | 0.118 | 8.60E-39 | CD16neg_NK_spleen |
| PPP4R3A            | 2.75E-43 | 0.73302431 | 0.269 | 0.071 | 9.75E-39 | CD16neg_NK_spleen |
| FBXO33             | 3.31E-43 | 0.71600413 | 0.304 | 0.089 | 1.17E-38 | CD16neg_NK_spleen |
| NADSYN1            | 7.20E-43 | 0.5343852  | 0.279 | 0.075 | 2.55E-38 | CD16neg_NK_spleen |
| AHI1               | 7.48E-43 | 0.86202538 | 0.257 | 0.066 | 2.65E-38 | CD16neg_NK_spleen |

|                   |          |            |       |       |          |                   |
|-------------------|----------|------------|-------|-------|----------|-------------------|
| PNRC2             | 7.79E-43 | 0.35168661 | 0.416 | 0.144 | 2.76E-38 | CD16neg_NK_spleen |
| CCDC69            | 8.79E-43 | 0.44878226 | 0.428 | 0.153 | 3.11E-38 | CD16neg_NK_spleen |
| MTPN              | 9.11E-43 | 0.4412629  | 0.376 | 0.124 | 3.23E-38 | CD16neg_NK_spleen |
| RTN3              | 1.01E-42 | 0.4211974  | 0.339 | 0.106 | 3.58E-38 | CD16neg_NK_spleen |
| ENSMUG00000012537 | 1.21E-42 | 0.43281905 | 0.343 | 0.107 | 4.28E-38 | CD16neg_NK_spleen |
| ZNF267            | 1.25E-42 | 0.62627727 | 0.309 | 0.091 | 4.42E-38 | CD16neg_NK_spleen |
| DNM1L             | 1.51E-42 | 0.83187476 | 0.25  | 0.063 | 5.36E-38 | CD16neg_NK_spleen |
| C4H6orf62         | 1.70E-42 | 0.41343048 | 0.314 | 0.093 | 6.01E-38 | CD16neg_NK_spleen |
| SNX4              | 1.74E-42 | 0.7012779  | 0.269 | 0.072 | 6.16E-38 | CD16neg_NK_spleen |
| AKT3              | 1.85E-42 | 1.05326982 | 0.276 | 0.078 | 6.54E-38 | CD16neg_NK_spleen |
| NUMA1             | 1.99E-42 | 0.4898274  | 0.281 | 0.076 | 7.06E-38 | CD16neg_NK_spleen |
| TACC1             | 2.45E-42 | 0.54365196 | 0.309 | 0.092 | 8.68E-38 | CD16neg_NK_spleen |
| HNRNPUL1          | 2.77E-42 | 0.30191875 | 0.379 | 0.126 | 9.80E-38 | CD16neg_NK_spleen |
| ARHGAP4           | 2.92E-42 | 0.48464389 | 0.286 | 0.079 | 1.04E-37 | CD16neg_NK_spleen |
| STIP1             | 4.61E-42 | 0.53401746 | 0.282 | 0.077 | 1.63E-37 | CD16neg_NK_spleen |
| HSP90AA1          | 5.56E-42 | 0.62052541 | 0.923 | 0.54  | 1.97E-37 | CD16neg_NK_spleen |
| REL               | 5.79E-42 | 0.36028494 | 0.759 | 0.348 | 2.05E-37 | CD16neg_NK_spleen |
| SLC25A36          | 6.00E-42 | 0.45224778 | 0.263 | 0.069 | 2.12E-37 | CD16neg_NK_spleen |
| PRRC2C            | 6.99E-42 | 0.35893119 | 0.682 | 0.291 | 2.48E-37 | CD16neg_NK_spleen |
| STX8              | 7.47E-42 | 0.54927955 | 0.383 | 0.131 | 2.65E-37 | CD16neg_NK_spleen |
| KBTBD2            | 7.76E-42 | 0.57473719 | 0.308 | 0.092 | 2.75E-37 | CD16neg_NK_spleen |
| HSD17B4           | 7.90E-42 | 0.35574023 | 0.672 | 0.289 | 2.80E-37 | CD16neg_NK_spleen |
| NCKAP1L           | 1.19E-41 | 0.54326063 | 0.321 | 0.099 | 4.22E-37 | CD16neg_NK_spleen |
| FCMR              | 1.27E-41 | 0.2618218  | 0.466 | 0.17  | 4.50E-37 | CD16neg_NK_spleen |
| UQCRC2            | 1.31E-41 | 0.60403087 | 0.298 | 0.087 | 4.64E-37 | CD16neg_NK_spleen |
| FAM133B           | 1.81E-41 | 0.22791484 | 0.372 | 0.124 | 6.40E-37 | CD16neg_NK_spleen |
| RSU1              | 3.19E-41 | 0.68045431 | 0.294 | 0.086 | 1.13E-36 | CD16neg_NK_spleen |
| CPNE1             | 3.34E-41 | 0.29249223 | 0.506 | 0.192 | 1.18E-36 | CD16neg_NK_spleen |
| CCT2              | 3.74E-41 | 0.45202537 | 0.435 | 0.16  | 1.32E-36 | CD16neg_NK_spleen |
| ITGA4             | 3.89E-41 | 0.54880341 | 0.363 | 0.122 | 1.38E-36 | CD16neg_NK_spleen |
| LPXN              | 3.96E-41 | 0.19235306 | 0.447 | 0.162 | 1.40E-36 | CD16neg_NK_spleen |
| SUPT5H            | 4.03E-41 | 0.57683928 | 0.274 | 0.076 | 1.43E-36 | CD16neg_NK_spleen |
| SNRNP200          | 5.45E-41 | 0.64213278 | 0.282 | 0.08  | 1.93E-36 | CD16neg_NK_spleen |

|                    |          |            |       |       |          |                   |
|--------------------|----------|------------|-------|-------|----------|-------------------|
| CCT4               | 7.17E-41 | 0.34300709 | 0.45  | 0.165 | 2.54E-36 | CD16neg_NK_spleen |
| LMAN2              | 8.49E-41 | 0.28677627 | 0.381 | 0.127 | 3.01E-36 | CD16neg_NK_spleen |
| BCL2               | 9.03E-41 | 0.90652158 | 0.256 | 0.069 | 3.20E-36 | CD16neg_NK_spleen |
| YME1L1             | 1.11E-40 | 0.352837   | 0.355 | 0.117 | 3.92E-36 | CD16neg_NK_spleen |
| CHCHD3             | 1.15E-40 | 0.48740868 | 0.328 | 0.104 | 4.09E-36 | CD16neg_NK_spleen |
| IFNG               | 1.39E-40 | 0.75380905 | 0.357 | 0.124 | 4.93E-36 | CD16neg_NK_spleen |
| ABCE1              | 1.40E-40 | 0.55408358 | 0.284 | 0.081 | 4.96E-36 | CD16neg_NK_spleen |
| YWHAG              | 1.45E-40 | 0.58251419 | 0.296 | 0.088 | 5.15E-36 | CD16neg_NK_spleen |
| CCPG1              | 1.81E-40 | 0.41924653 | 0.309 | 0.094 | 6.40E-36 | CD16neg_NK_spleen |
| PSMB4              | 1.84E-40 | 0.249178   | 0.418 | 0.149 | 6.52E-36 | CD16neg_NK_spleen |
| IL12RB2            | 2.13E-40 | 0.40274683 | 0.696 | 0.33  | 7.56E-36 | CD16neg_NK_spleen |
| HSPA14             | 2.26E-40 | 0.54755568 | 0.263 | 0.071 | 8.00E-36 | CD16neg_NK_spleen |
| MFF                | 2.42E-40 | 0.67376824 | 0.266 | 0.074 | 8.59E-36 | CD16neg_NK_spleen |
| SAMHD1             | 3.30E-40 | 0.39256165 | 0.811 | 0.394 | 1.17E-35 | CD16neg_NK_spleen |
| ENSMMUG00000006608 | 4.19E-40 | 0.22193756 | 0.573 | 0.231 | 1.48E-35 | CD16neg_NK_spleen |
| STK26              | 4.72E-40 | 0.42027907 | 0.337 | 0.108 | 1.67E-35 | CD16neg_NK_spleen |
| UBE2D1             | 5.39E-40 | 0.59558155 | 0.291 | 0.087 | 1.91E-35 | CD16neg_NK_spleen |
| SF3B2              | 6.33E-40 | 0.47975175 | 0.303 | 0.092 | 2.24E-35 | CD16neg_NK_spleen |
| SNX3               | 7.00E-40 | 0.31385447 | 0.367 | 0.123 | 2.48E-35 | CD16neg_NK_spleen |
| SSBP4              | 1.67E-39 | 0.57325082 | 0.273 | 0.077 | 5.93E-35 | CD16neg_NK_spleen |
| CD84               | 1.81E-39 | 0.46776173 | 0.281 | 0.081 | 6.40E-35 | CD16neg_NK_spleen |
| TNFAIP3            | 1.96E-39 | 0.53969121 | 0.69  | 0.339 | 6.96E-35 | CD16neg_NK_spleen |
| UBE2L6             | 2.50E-39 | 0.30024406 | 0.333 | 0.108 | 8.84E-35 | CD16neg_NK_spleen |
| DUSP2              | 2.66E-39 | 0.50522036 | 0.369 | 0.13  | 9.41E-35 | CD16neg_NK_spleen |
| CTNBL1             | 4.60E-39 | 0.55046448 | 0.324 | 0.105 | 1.63E-34 | CD16neg_NK_spleen |
| COPB2              | 5.08E-39 | 0.49366847 | 0.289 | 0.086 | 1.80E-34 | CD16neg_NK_spleen |
| MBTPS1             | 5.42E-39 | 0.61658    | 0.254 | 0.07  | 1.92E-34 | CD16neg_NK_spleen |
| COX3               | 5.69E-39 | 0.73187903 | 0.828 | 0.817 | 2.02E-34 | CD16neg_NK_spleen |
| TMEM87A            | 8.27E-39 | 0.3866737  | 0.337 | 0.111 | 2.93E-34 | CD16neg_NK_spleen |
| PFKP               | 1.10E-38 | 0.57073868 | 0.261 | 0.073 | 3.88E-34 | CD16neg_NK_spleen |
| ENSMMUG00000056043 | 1.14E-38 | 0.55826699 | 0.258 | 0.072 | 4.03E-34 | CD16neg_NK_spleen |
| SKAP2              | 2.20E-38 | 0.38292935 | 0.499 | 0.201 | 7.81E-34 | CD16neg_NK_spleen |
| PHACTR1            | 2.39E-38 | 0.54895524 | 0.302 | 0.095 | 8.47E-34 | CD16neg_NK_spleen |

|                   |          |            |       |       |          |                   |
|-------------------|----------|------------|-------|-------|----------|-------------------|
| RAMP1             | 2.53E-38 | 0.57487114 | 0.363 | 0.132 | 8.96E-34 | CD16neg_NK_spleen |
| AGPAT4            | 2.97E-38 | 0.4763297  | 0.317 | 0.104 | 1.05E-33 | CD16neg_NK_spleen |
| ESYT1             | 3.45E-38 | 0.48038605 | 0.292 | 0.089 | 1.22E-33 | CD16neg_NK_spleen |
| KIAA0040          | 3.81E-38 | 0.3943755  | 0.304 | 0.096 | 1.35E-33 | CD16neg_NK_spleen |
| SASH3             | 4.02E-38 | 0.44354944 | 0.308 | 0.097 | 1.42E-33 | CD16neg_NK_spleen |
| RAP1A             | 4.38E-38 | 0.30466545 | 0.736 | 0.337 | 1.55E-33 | CD16neg_NK_spleen |
| TTF1              | 4.92E-38 | 0.26028982 | 0.372 | 0.131 | 1.74E-33 | CD16neg_NK_spleen |
| TBC1D10B          | 5.48E-38 | 0.33215731 | 0.294 | 0.089 | 1.94E-33 | CD16neg_NK_spleen |
| LITAF             | 5.57E-38 | 0.25907632 | 0.641 | 0.275 | 1.97E-33 | CD16neg_NK_spleen |
| PSMD14            | 5.94E-38 | 0.30651821 | 0.391 | 0.14  | 2.11E-33 | CD16neg_NK_spleen |
| SMC1A             | 6.35E-38 | 0.59817628 | 0.251 | 0.069 | 2.25E-33 | CD16neg_NK_spleen |
| MANF              | 7.90E-38 | 0.2492579  | 0.362 | 0.124 | 2.80E-33 | CD16neg_NK_spleen |
| RAB5A             | 1.51E-37 | 0.33585425 | 0.361 | 0.126 | 5.33E-33 | CD16neg_NK_spleen |
| PHF11             | 1.64E-37 | 0.23878658 | 0.331 | 0.109 | 5.82E-33 | CD16neg_NK_spleen |
| HBP1              | 1.69E-37 | 0.20024257 | 0.362 | 0.125 | 5.99E-33 | CD16neg_NK_spleen |
| PNPLA7            | 1.75E-37 | 0.37839737 | 0.306 | 0.098 | 6.20E-33 | CD16neg_NK_spleen |
| ATG5              | 1.78E-37 | 0.4162822  | 0.315 | 0.103 | 6.30E-33 | CD16neg_NK_spleen |
| SLA               | 1.88E-37 | 0.15623828 | 0.402 | 0.147 | 6.66E-33 | CD16neg_NK_spleen |
| ENSMUG00000061913 | 1.96E-37 | 0.30127013 | 0.493 | 0.195 | 6.94E-33 | CD16neg_NK_spleen |
| CGGBP1            | 2.41E-37 | 0.34619371 | 0.299 | 0.093 | 8.54E-33 | CD16neg_NK_spleen |
| CSGALNACT2        | 3.73E-37 | 0.34226522 | 0.376 | 0.136 | 1.32E-32 | CD16neg_NK_spleen |
| ZNF514            | 4.26E-37 | 0.51285331 | 0.26  | 0.075 | 1.51E-32 | CD16neg_NK_spleen |
| ATF7              | 4.26E-37 | 0.57696093 | 0.273 | 0.082 | 1.51E-32 | CD16neg_NK_spleen |
| ERLEC1            | 5.20E-37 | 0.41180538 | 0.302 | 0.096 | 1.84E-32 | CD16neg_NK_spleen |
| PDE4A             | 6.86E-37 | 0.42643823 | 0.309 | 0.101 | 2.43E-32 | CD16neg_NK_spleen |
| CSDE1             | 7.10E-37 | 0.22126809 | 0.509 | 0.202 | 2.52E-32 | CD16neg_NK_spleen |
| SENP7             | 7.88E-37 | 0.31144114 | 0.383 | 0.139 | 2.79E-32 | CD16neg_NK_spleen |
| DPH6              | 8.34E-37 | 0.60335562 | 0.263 | 0.077 | 2.96E-32 | CD16neg_NK_spleen |
| BRD4              | 9.31E-37 | 0.20443566 | 0.31  | 0.1   | 3.30E-32 | CD16neg_NK_spleen |
| NAA50             | 9.79E-37 | 0.29114935 | 0.321 | 0.106 | 3.47E-32 | CD16neg_NK_spleen |
| DENR              | 1.25E-36 | 0.64006469 | 0.25  | 0.071 | 4.44E-32 | CD16neg_NK_spleen |
| TRAM1             | 1.28E-36 | 0.20867359 | 0.44  | 0.167 | 4.54E-32 | CD16neg_NK_spleen |
| DDX3Y             | 1.36E-36 | 1.04065851 | 0.396 | 0.17  | 4.82E-32 | CD16neg_NK_spleen |

|                    |          |            |       |       |          |                   |
|--------------------|----------|------------|-------|-------|----------|-------------------|
| EZR                | 1.47E-36 | 0.40524162 | 0.84  | 0.429 | 5.21E-32 | CD16neg_NK_spleen |
| FYTTD1             | 1.74E-36 | 0.40760347 | 0.301 | 0.097 | 6.18E-32 | CD16neg_NK_spleen |
| CEBPZ              | 1.75E-36 | 0.2272389  | 0.433 | 0.166 | 6.21E-32 | CD16neg_NK_spleen |
| SLA2               | 1.84E-36 | 0.46462261 | 0.273 | 0.083 | 6.54E-32 | CD16neg_NK_spleen |
| RAB14              | 1.97E-36 | 0.28910443 | 0.323 | 0.107 | 6.97E-32 | CD16neg_NK_spleen |
| PLCD4              | 2.09E-36 | 0.41225293 | 0.256 | 0.074 | 7.40E-32 | CD16neg_NK_spleen |
| LMAN1              | 2.54E-36 | 0.31257278 | 0.314 | 0.103 | 9.00E-32 | CD16neg_NK_spleen |
| TMOD3              | 2.98E-36 | 0.13037947 | 0.441 | 0.167 | 1.06E-31 | CD16neg_NK_spleen |
| IFNAR2             | 4.46E-36 | 0.34360692 | 0.811 | 0.393 | 1.58E-31 | CD16neg_NK_spleen |
| DNAJC7             | 4.68E-36 | 0.55898108 | 0.27  | 0.082 | 1.66E-31 | CD16neg_NK_spleen |
| SNX2               | 4.89E-36 | 0.37534705 | 0.319 | 0.106 | 1.73E-31 | CD16neg_NK_spleen |
| TPR                | 5.40E-36 | 0.1243421  | 0.43  | 0.163 | 1.91E-31 | CD16neg_NK_spleen |
| VPS37B             | 5.51E-36 | 0.35026625 | 0.284 | 0.088 | 1.95E-31 | CD16neg_NK_spleen |
| KRIT1              | 9.67E-36 | 0.54666989 | 0.256 | 0.076 | 3.43E-31 | CD16neg_NK_spleen |
| RNF19A             | 1.50E-35 | 0.36070529 | 0.333 | 0.116 | 5.32E-31 | CD16neg_NK_spleen |
| PPP2R1A            | 1.58E-35 | 0.41668528 | 0.277 | 0.086 | 5.62E-31 | CD16neg_NK_spleen |
| UBE2D2             | 1.71E-35 | 0.34259443 | 0.256 | 0.075 | 6.06E-31 | CD16neg_NK_spleen |
| TMEM59L            | 3.26E-35 | 0.22325781 | 0.367 | 0.132 | 1.16E-30 | CD16neg_NK_spleen |
| MIDN               | 3.27E-35 | 0.35972319 | 0.303 | 0.1   | 1.16E-30 | CD16neg_NK_spleen |
| DNTTIP2            | 3.68E-35 | 0.45076155 | 0.285 | 0.091 | 1.30E-30 | CD16neg_NK_spleen |
| CD3G               | 3.85E-35 | 0.41427975 | 0.287 | 0.092 | 1.36E-30 | CD16neg_NK_spleen |
| CD8A               | 4.01E-35 | 0.30213486 | 0.323 | 0.11  | 1.42E-30 | CD16neg_NK_spleen |
| WBP11              | 4.66E-35 | 0.16966124 | 0.342 | 0.119 | 1.65E-30 | CD16neg_NK_spleen |
| RASSF5             | 5.83E-35 | 0.14571314 | 0.348 | 0.121 | 2.07E-30 | CD16neg_NK_spleen |
| CWF19L2            | 6.43E-35 | 0.36102845 | 0.317 | 0.109 | 2.28E-30 | CD16neg_NK_spleen |
| ENSMMUG00000016898 | 6.65E-35 | 0.39369027 | 0.337 | 0.119 | 2.35E-30 | CD16neg_NK_spleen |
| XRCC5              | 6.96E-35 | 0.23399921 | 0.5   | 0.203 | 2.47E-30 | CD16neg_NK_spleen |
| DBNL               | 7.03E-35 | 0.21199616 | 0.312 | 0.105 | 2.49E-30 | CD16neg_NK_spleen |
| RPN1               | 7.16E-35 | 0.25080984 | 0.313 | 0.105 | 2.54E-30 | CD16neg_NK_spleen |
| FGFR10P2           | 7.87E-35 | 0.23225546 | 0.574 | 0.244 | 2.79E-30 | CD16neg_NK_spleen |
| MED30              | 9.19E-35 | 0.44942785 | 0.252 | 0.075 | 3.26E-30 | CD16neg_NK_spleen |
| KIR3DH             | 1.11E-34 | 0.55030558 | 0.256 | 0.078 | 3.92E-30 | CD16neg_NK_spleen |
| EIF4B              | 1.33E-34 | 0.21953172 | 0.397 | 0.15  | 4.73E-30 | CD16neg_NK_spleen |

|                    |          |            |       |       |          |                   |
|--------------------|----------|------------|-------|-------|----------|-------------------|
| ECHDC1             | 1.64E-34 | 0.51822609 | 0.266 | 0.082 | 5.81E-30 | CD16neg_NK_spleen |
| TCF25              | 1.72E-34 | 0.30487566 | 0.345 | 0.123 | 6.08E-30 | CD16neg_NK_spleen |
| DNAJB14            | 1.84E-34 | 0.29395393 | 0.321 | 0.111 | 6.51E-30 | CD16neg_NK_spleen |
| PPP1CA             | 1.87E-34 | 0.14551336 | 0.418 | 0.16  | 6.61E-30 | CD16neg_NK_spleen |
| MYDGF              | 1.96E-34 | 0.18281416 | 0.454 | 0.178 | 6.94E-30 | CD16neg_NK_spleen |
| RAP1B              | 2.25E-34 | 0.44826707 | 0.847 | 0.465 | 7.96E-30 | CD16neg_NK_spleen |
| SEPTIN9            | 2.55E-34 | 0.20772754 | 0.377 | 0.139 | 9.02E-30 | CD16neg_NK_spleen |
| TEC                | 3.21E-34 | 0.40195464 | 0.784 | 0.436 | 1.14E-29 | CD16neg_NK_spleen |
| ACTN4              | 5.32E-34 | 0.17603062 | 0.522 | 0.216 | 1.89E-29 | CD16neg_NK_spleen |
| MECP2              | 5.58E-34 | 0.26785899 | 0.352 | 0.128 | 1.98E-29 | CD16neg_NK_spleen |
| RHOH               | 6.37E-34 | 0.30510154 | 0.529 | 0.23  | 2.26E-29 | CD16neg_NK_spleen |
| EID1               | 6.41E-34 | 0.22279969 | 0.364 | 0.133 | 2.27E-29 | CD16neg_NK_spleen |
| AKAP13             | 7.02E-34 | 0.36275819 | 0.81  | 0.414 | 2.49E-29 | CD16neg_NK_spleen |
| SUGT1              | 9.54E-34 | 0.29501229 | 0.313 | 0.108 | 3.38E-29 | CD16neg_NK_spleen |
| CYBA               | 1.08E-33 | 0.19495233 | 0.709 | 0.325 | 3.81E-29 | CD16neg_NK_spleen |
| ELK3               | 1.10E-33 | 0.24695104 | 0.493 | 0.207 | 3.90E-29 | CD16neg_NK_spleen |
| ENSMMUG00000064329 | 1.15E-33 | 0.23017405 | 0.335 | 0.119 | 4.08E-29 | CD16neg_NK_spleen |
| MATR3              | 1.18E-33 | 0.3447388  | 0.733 | 0.349 | 4.19E-29 | CD16neg_NK_spleen |
| CALU               | 1.23E-33 | 0.3557039  | 0.266 | 0.083 | 4.35E-29 | CD16neg_NK_spleen |
| SERINC1            | 1.51E-33 | 0.17273978 | 0.447 | 0.179 | 5.37E-29 | CD16neg_NK_spleen |
| RAB3GAP2           | 1.63E-33 | 0.41723725 | 0.287 | 0.095 | 5.79E-29 | CD16neg_NK_spleen |
| Metazoa-SRP.1344   | 1.94E-33 | 0.49454761 | 0.261 | 0.082 | 6.88E-29 | CD16neg_NK_spleen |
| HNRNPR             | 2.61E-33 | 0.14749352 | 0.435 | 0.171 | 9.25E-29 | CD16neg_NK_spleen |
| RAB3GAP1           | 3.11E-33 | 0.42919942 | 0.267 | 0.084 | 1.10E-28 | CD16neg_NK_spleen |
| U2SURP             | 4.02E-33 | 0.11239884 | 0.407 | 0.158 | 1.42E-28 | CD16neg_NK_spleen |
| RAB37              | 4.10E-33 | 0.11141576 | 0.444 | 0.178 | 1.45E-28 | CD16neg_NK_spleen |
| CSK                | 5.43E-33 | 0.17867035 | 0.375 | 0.14  | 1.93E-28 | CD16neg_NK_spleen |
| TMC6               | 6.28E-33 | 0.36622297 | 0.252 | 0.077 | 2.22E-28 | CD16neg_NK_spleen |
| COMMD1             | 7.70E-33 | 0.41359451 | 0.33  | 0.121 | 2.73E-28 | CD16neg_NK_spleen |
| DIRAS2             | 8.43E-33 | 0.3915526  | 0.326 | 0.119 | 2.99E-28 | CD16neg_NK_spleen |
| ID3                | 1.18E-32 | 0.15334745 | 0.326 | 0.119 | 4.17E-28 | CD16neg_NK_spleen |
| NCK1               | 2.50E-32 | 0.21748744 | 0.359 | 0.135 | 8.84E-28 | CD16neg_NK_spleen |
| HSPA8              | 2.66E-32 | 0.38840932 | 0.814 | 0.423 | 9.44E-28 | CD16neg_NK_spleen |

|                    |          |            |       |       |          |                   |
|--------------------|----------|------------|-------|-------|----------|-------------------|
| PIGY               | 2.82E-32 | 0.37847436 | 0.261 | 0.083 | 1.00E-27 | CD16neg_NK_spleen |
| HCLS1              | 3.34E-32 | 0.11726423 | 0.423 | 0.166 | 1.18E-27 | CD16neg_NK_spleen |
| RFC1               | 3.90E-32 | 0.14312613 | 0.329 | 0.119 | 1.38E-27 | CD16neg_NK_spleen |
| MAPRE1             | 5.28E-32 | 0.2145041  | 0.356 | 0.133 | 1.87E-27 | CD16neg_NK_spleen |
| TSNAX              | 5.58E-32 | 0.40633596 | 0.262 | 0.085 | 1.98E-27 | CD16neg_NK_spleen |
| EIF3D              | 8.28E-32 | 0.12395478 | 0.327 | 0.118 | 2.93E-27 | CD16neg_NK_spleen |
| PPIL4              | 8.65E-32 | 0.2276203  | 0.323 | 0.117 | 3.06E-27 | CD16neg_NK_spleen |
| TMEM71             | 8.80E-32 | 0.39658464 | 0.318 | 0.115 | 3.12E-27 | CD16neg_NK_spleen |
| NAP1L4             | 1.01E-31 | 0.1654128  | 0.588 | 0.262 | 3.59E-27 | CD16neg_NK_spleen |
| CD69               | 1.54E-31 | 0.43622817 | 0.988 | 0.882 | 5.47E-27 | CD16neg_NK_spleen |
| COMMD7             | 2.19E-31 | 0.1384158  | 0.403 | 0.16  | 7.75E-27 | CD16neg_NK_spleen |
| PNPLA8             | 2.68E-31 | 0.1506451  | 0.334 | 0.122 | 9.51E-27 | CD16neg_NK_spleen |
| THRAP3             | 3.91E-31 | 0.14327739 | 0.539 | 0.233 | 1.39E-26 | CD16neg_NK_spleen |
| DCXR               | 4.35E-31 | 0.21916861 | 0.284 | 0.097 | 1.54E-26 | CD16neg_NK_spleen |
| TTC1               | 5.82E-31 | 0.11328223 | 0.325 | 0.118 | 2.06E-26 | CD16neg_NK_spleen |
| HNRNPH1            | 7.21E-31 | 0.11872326 | 0.656 | 0.299 | 2.55E-26 | CD16neg_NK_spleen |
| ENSMMUG00000060545 | 7.72E-31 | 0.18159212 | 0.305 | 0.109 | 2.73E-26 | CD16neg_NK_spleen |
| TAB2               | 8.99E-31 | 0.19208916 | 0.29  | 0.101 | 3.18E-26 | CD16neg_NK_spleen |
| TIAL1              | 1.26E-30 | 0.12676473 | 0.299 | 0.105 | 4.45E-26 | CD16neg_NK_spleen |
| NARS1              | 1.84E-30 | 0.14340473 | 0.376 | 0.148 | 6.51E-26 | CD16neg_NK_spleen |
| USP37              | 2.43E-30 | 0.2473086  | 0.264 | 0.089 | 8.60E-26 | CD16neg_NK_spleen |
| RPN2               | 3.09E-30 | 0.28801834 | 0.267 | 0.089 | 1.10E-25 | CD16neg_NK_spleen |
| ENSMMUG00000005880 | 3.20E-30 | 0.1085904  | 0.461 | 0.193 | 1.13E-25 | CD16neg_NK_spleen |
| BNIP3L             | 3.73E-30 | 0.2176498  | 0.302 | 0.109 | 1.32E-25 | CD16neg_NK_spleen |
| ENSMMUG00000064286 | 5.12E-30 | 0.28286793 | 0.264 | 0.089 | 1.82E-25 | CD16neg_NK_spleen |
| SLC23A2            | 5.93E-30 | 0.25179512 | 0.291 | 0.104 | 2.10E-25 | CD16neg_NK_spleen |
| VPS4B              | 6.35E-30 | 0.15573579 | 0.324 | 0.121 | 2.25E-25 | CD16neg_NK_spleen |
| STXBP3             | 6.84E-30 | 0.34630371 | 0.251 | 0.083 | 2.42E-25 | CD16neg_NK_spleen |
| MAP2K3             | 7.89E-30 | 0.30255822 | 0.328 | 0.125 | 2.80E-25 | CD16neg_NK_spleen |
| ELL2               | 9.95E-30 | 0.33729321 | 0.275 | 0.097 | 3.53E-25 | CD16neg_NK_spleen |
| PSMD13             | 1.14E-29 | 0.21699009 | 0.481 | 0.208 | 4.04E-25 | CD16neg_NK_spleen |
| ENSMMUG00000058919 | 1.27E-29 | 0.32275321 | 0.258 | 0.086 | 4.50E-25 | CD16neg_NK_spleen |
| RPS6KA1            | 1.68E-29 | 0.24651983 | 0.259 | 0.087 | 5.95E-25 | CD16neg_NK_spleen |

|                    |          |            |       |       |          |                   |
|--------------------|----------|------------|-------|-------|----------|-------------------|
| GRK6               | 1.81E-29 | 0.2233664  | 0.259 | 0.087 | 6.40E-25 | CD16neg_NK_spleen |
| SLC35B1            | 2.08E-29 | 0.28795777 | 0.272 | 0.094 | 7.36E-25 | CD16neg_NK_spleen |
| CSNK2A1            | 3.07E-29 | 0.12040674 | 0.345 | 0.132 | 1.09E-24 | CD16neg_NK_spleen |
| MAPK1IP1L          | 3.21E-29 | 0.12465159 | 0.335 | 0.127 | 1.14E-24 | CD16neg_NK_spleen |
| MMD                | 4.48E-29 | 0.25467332 | 0.25  | 0.083 | 1.59E-24 | CD16neg_NK_spleen |
| SLFN5              | 6.24E-29 | 0.1925922  | 0.374 | 0.15  | 2.21E-24 | CD16neg_NK_spleen |
| CALM3              | 8.97E-29 | 0.140604   | 0.319 | 0.12  | 3.18E-24 | CD16neg_NK_spleen |
| H1-2               | 8.99E-29 | 0.44449801 | 0.263 | 0.093 | 3.19E-24 | CD16neg_NK_spleen |
| ZBTB1              | 3.25E-28 | 0.21852741 | 0.294 | 0.109 | 1.15E-23 | CD16neg_NK_spleen |
| PTPN22             | 3.95E-28 | 0.29393054 | 0.861 | 0.474 | 1.40E-23 | CD16neg_NK_spleen |
| CCSER2             | 5.18E-28 | 0.19814233 | 0.26  | 0.091 | 1.84E-23 | CD16neg_NK_spleen |
| PFN1               | 5.41E-28 | 0.32500859 | 0.966 | 0.706 | 1.92E-23 | CD16neg_NK_spleen |
| ZNF528             | 5.82E-28 | 0.20044501 | 0.313 | 0.12  | 2.06E-23 | CD16neg_NK_spleen |
| CAPZA2             | 6.33E-28 | 0.11575586 | 0.447 | 0.193 | 2.24E-23 | CD16neg_NK_spleen |
| GDI2               | 9.01E-28 | 0.13636425 | 0.412 | 0.173 | 3.19E-23 | CD16neg_NK_spleen |
| ENSMMUG00000062086 | 1.04E-27 | 0.15683569 | 0.636 | 0.301 | 3.69E-23 | CD16neg_NK_spleen |
| BZW2               | 2.37E-27 | 0.33924594 | 0.251 | 0.087 | 8.39E-23 | CD16neg_NK_spleen |
| GCC2               | 3.54E-27 | 0.17563772 | 0.255 | 0.09  | 1.26E-22 | CD16neg_NK_spleen |
| KLHL23             | 1.01E-26 | 0.15044817 | 0.663 | 0.316 | 3.59E-22 | CD16neg_NK_spleen |
| STK38              | 1.38E-26 | 0.27072654 | 0.251 | 0.089 | 4.90E-22 | CD16neg_NK_spleen |
| CS                 | 1.64E-26 | 0.14294595 | 0.358 | 0.147 | 5.80E-22 | CD16neg_NK_spleen |
| DDIT3              | 3.50E-26 | 0.1860045  | 0.29  | 0.11  | 1.24E-21 | CD16neg_NK_spleen |
| MGMT               | 5.26E-26 | 0.22289024 | 0.383 | 0.164 | 1.86E-21 | CD16neg_NK_spleen |
| ETFA               | 5.42E-26 | 0.20721239 | 0.279 | 0.105 | 1.92E-21 | CD16neg_NK_spleen |
| UBB                | 8.07E-26 | 0.46584783 | 0.968 | 0.74  | 2.86E-21 | CD16neg_NK_spleen |
| EIF3H              | 1.17E-25 | 0.17317914 | 0.681 | 0.33  | 4.14E-21 | CD16neg_NK_spleen |
| SLC25A4            | 1.20E-25 | 0.20757067 | 0.251 | 0.09  | 4.27E-21 | CD16neg_NK_spleen |
| TUBA1A             | 1.52E-25 | 0.12625764 | 0.7   | 0.341 | 5.38E-21 | CD16neg_NK_spleen |
| APOL2              | 2.02E-25 | 0.17217544 | 0.372 | 0.159 | 7.14E-21 | CD16neg_NK_spleen |
| ZCRB1              | 2.52E-25 | 0.17810098 | 0.253 | 0.092 | 8.92E-21 | CD16neg_NK_spleen |
| G3BP2              | 3.27E-25 | 0.1417791  | 0.462 | 0.213 | 1.16E-20 | CD16neg_NK_spleen |
| CMPK1              | 1.05E-24 | 0.14335764 | 0.253 | 0.093 | 3.72E-20 | CD16neg_NK_spleen |
| PITPNB             | 1.36E-24 | 0.13212011 | 0.278 | 0.107 | 4.81E-20 | CD16neg_NK_spleen |



|                    |            |            |       |       |            |                   |
|--------------------|------------|------------|-------|-------|------------|-------------------|
| H1-4               | 1.39E-24   | 0.10665524 | 0.352 | 0.15  | 4.93E-20   | CD16neg_NK_spleen |
| SON                | 2.91E-24   | 0.21743192 | 0.827 | 0.436 | 1.03E-19   | CD16neg_NK_spleen |
| ACTR3              | 8.12E-24   | 0.1651451  | 0.674 | 0.34  | 2.88E-19   | CD16neg_NK_spleen |
| H2AC20             | 9.17E-24   | 0.10834121 | 0.263 | 0.101 | 3.25E-19   | CD16neg_NK_spleen |
| NAMPT              | 9.35E-24   | 0.11194114 | 0.326 | 0.137 | 3.31E-19   | CD16neg_NK_spleen |
| URGCP              | 1.90E-23   | 0.10585449 | 0.272 | 0.106 | 6.72E-19   | CD16neg_NK_spleen |
| PTGES3             | 3.80E-22   | 0.20084956 | 0.796 | 0.423 | 1.35E-17   | CD16neg_NK_spleen |
| BTG2               | 7.28E-19   | 0.14138536 | 0.69  | 0.381 | 2.58E-14   | CD16neg_NK_spleen |
| SRSF5              | 7.43E-19   | 0.22365049 | 0.901 | 0.548 | 2.63E-14   | CD16neg_NK_spleen |
| GOLGA1             | 1.70E-18   | 0.14481754 | 0.602 | 0.33  | 6.01E-14   | CD16neg_NK_spleen |
| RPL9               | 2.44E-18   | 0.25185775 | 0.975 | 0.84  | 8.64E-14   | CD16neg_NK_spleen |
| RPL7               | 1.75E-17   | 0.3183063  | 0.909 | 0.613 | 6.21E-13   | CD16neg_NK_spleen |
| YWHAZ              | 4.17E-15   | 0.21938495 | 0.912 | 0.597 | 1.48E-10   | CD16neg_NK_spleen |
| SLC2A3             | 1.05E-14   | 0.1547002  | 0.51  | 0.289 | 3.72E-10   | CD16neg_NK_spleen |
| RPS15              | 6.40E-14   | 0.16380568 | 0.983 | 0.983 | 2.27E-09   | CD16neg_NK_spleen |
| SKP1               | 5.19E-12   | 0.10712825 | 0.847 | 0.512 | 1.84E-07   | CD16neg_NK_spleen |
| RPL4               | 1.00E-11   | 0.17235358 | 0.892 | 0.585 | 3.56E-07   | CD16neg_NK_spleen |
| B2M                | 3.19E-11   | 0.12338324 | 0.999 | 0.999 | 1.13E-06   | CD16neg_NK_spleen |
| ENSMMUG00000058755 | 1.01E-09   | 0.17019701 | 0.985 | 0.926 | 3.58E-05   | CD16neg_NK_spleen |
| COX1               | 2.43E-05   | 0.14768299 | 0.802 | 0.753 | 0.86240072 | CD16neg_NK_spleen |
| ATP6               | 0.00070597 | 0.11984468 | 0.791 | 0.733 | 1          | CD16neg_NK_spleen |
| ENSMMUG00000061824 | 0.47177654 | 0.13195635 | 0.967 | 0.817 | 1          | CD16neg_NK_spleen |
| ATP5F1E            | 0          | 1.64531195 | 0.976 | 0.934 | 0          | CD16pos_NK_lung   |
| RPS21              | 0          | 1.81417305 | 0.995 | 0.958 | 0          | CD16pos_NK_lung   |
| ENSMMUG00000005593 | 0          | 1.35245639 | 0.987 | 0.963 | 0          | CD16pos_NK_lung   |
| RPL10              | 0          | 1.01849759 | 0.998 | 0.984 | 0          | CD16pos_NK_lung   |
| ENSMMUG00000062350 | 0          | 1.50032531 | 0.999 | 0.986 | 0          | CD16pos_NK_lung   |
| FAU                | 0          | 1.08146075 | 0.996 | 0.984 | 0          | CD16pos_NK_lung   |
| TMSB10             | 0          | 1.31558241 | 0.998 | 0.986 | 0          | CD16pos_NK_lung   |
| RPS28              | 0          | 1.21911062 | 0.997 | 0.985 | 0          | CD16pos_NK_lung   |
| RPL36              | 5.77E-292  | 1.63624745 | 0.949 | 0.856 | 2.04E-287  | CD16pos_NK_lung   |
| HCST               | 1.92E-273  | 1.50985767 | 0.967 | 0.896 | 6.79E-269  | CD16pos_NK_lung   |
| RPS23              | 5.12E-272  | 0.87467763 | 0.998 | 0.987 | 1.82E-267  | CD16pos_NK_lung   |

|                     |           |            |       |       |           |                 |
|---------------------|-----------|------------|-------|-------|-----------|-----------------|
| ENSMMUG00000015563  | 1.02E-270 | 1.00878196 | 0.996 | 0.982 | 3.60E-266 | CD16pos_NK_lung |
| NUDT3               | 7.01E-270 | 0.95775158 | 0.996 | 0.982 | 2.48E-265 | CD16pos_NK_lung |
| RPS12               | 3.90E-257 | 1.01646744 | 0.995 | 0.987 | 1.38E-252 | CD16pos_NK_lung |
| ENSMMUG000000064224 | 1.99E-255 | 1.3521057  | 0.972 | 0.942 | 7.07E-251 | CD16pos_NK_lung |
| RPL32               | 2.46E-255 | 0.94398251 | 0.996 | 0.989 | 8.71E-251 | CD16pos_NK_lung |
| RPL35A              | 2.00E-245 | 0.97288357 | 0.991 | 0.978 | 7.07E-241 | CD16pos_NK_lung |
| RPS29               | 7.25E-245 | 0.88726895 | 0.998 | 0.984 | 2.57E-240 | CD16pos_NK_lung |
| RPL34               | 7.59E-240 | 0.91290531 | 0.994 | 0.986 | 2.69E-235 | CD16pos_NK_lung |
| RPL39               | 3.40E-231 | 1.20505084 | 0.966 | 0.934 | 1.20E-226 | CD16pos_NK_lung |
| RPLP1               | 8.89E-227 | 0.86873878 | 0.998 | 0.989 | 3.15E-222 | CD16pos_NK_lung |
| RPS13               | 6.52E-226 | 0.94473307 | 0.99  | 0.98  | 2.31E-221 | CD16pos_NK_lung |
| RPL12               | 3.01E-225 | 1.10886968 | 0.976 | 0.941 | 1.07E-220 | CD16pos_NK_lung |
| RPL18               | 2.63E-223 | 0.8980962  | 0.994 | 0.981 | 9.32E-219 | CD16pos_NK_lung |
| RPL30               | 8.86E-219 | 0.77056087 | 0.997 | 0.991 | 3.14E-214 | CD16pos_NK_lung |
| GZMB                | 6.86E-211 | 1.06718858 | 0.993 | 0.935 | 2.43E-206 | CD16pos_NK_lung |
| FTL                 | 1.53E-206 | 1.16628718 | 0.96  | 0.938 | 5.41E-202 | CD16pos_NK_lung |
| RPS7                | 2.73E-206 | 0.80004029 | 0.996 | 0.988 | 9.66E-202 | CD16pos_NK_lung |
| UBA52               | 1.23E-203 | 0.88397558 | 0.989 | 0.976 | 4.36E-199 | CD16pos_NK_lung |
| ENSMMUG000000004441 | 3.54E-203 | 1.51205057 | 0.911 | 0.821 | 1.25E-198 | CD16pos_NK_lung |
| ENSMMUG000000013257 | 2.41E-201 | 1.31985257 | 0.935 | 0.888 | 8.52E-197 | CD16pos_NK_lung |
| ENSMMUG000000056354 | 8.62E-179 | 1.20534746 | 0.922 | 0.887 | 3.05E-174 | CD16pos_NK_lung |
| ENSMMUG000000013429 | 1.05E-177 | 0.76824566 | 0.998 | 0.992 | 3.71E-173 | CD16pos_NK_lung |
| RPS26               | 5.62E-170 | 0.81416319 | 0.996 | 0.984 | 1.99E-165 | CD16pos_NK_lung |
| RPS9                | 1.06E-169 | 0.85699765 | 0.982 | 0.971 | 3.74E-165 | CD16pos_NK_lung |
| RPS5                | 6.68E-169 | 0.85805805 | 0.984 | 0.974 | 2.37E-164 | CD16pos_NK_lung |
| ELOA                | 7.01E-168 | 0.77843782 | 0.986 | 0.975 | 2.49E-163 | CD16pos_NK_lung |
| RPL8                | 9.18E-167 | 0.87774399 | 0.979 | 0.968 | 3.25E-162 | CD16pos_NK_lung |
| RPL7A               | 1.85E-166 | 0.81636239 | 0.979 | 0.976 | 6.55E-162 | CD16pos_NK_lung |
| RPL24               | 3.20E-165 | 0.8837234  | 0.973 | 0.962 | 1.13E-160 | CD16pos_NK_lung |
| TYROBP              | 1.22E-163 | 1.01814231 | 0.964 | 0.929 | 4.32E-159 | CD16pos_NK_lung |
| RPL28               | 1.37E-162 | 0.82603455 | 0.984 | 0.973 | 4.85E-158 | CD16pos_NK_lung |
| ATP5MPL             | 1.46E-162 | 1.37382824 | 0.858 | 0.804 | 5.18E-158 | CD16pos_NK_lung |
| ENSMMUG000000003867 | 1.40E-154 | 0.59962987 | 0.999 | 0.994 | 4.96E-150 | CD16pos_NK_lung |

|                      |           |            |       |       |           |                 |
|----------------------|-----------|------------|-------|-------|-----------|-----------------|
| RPSA                 | 9.05E-151 | 0.90127731 | 0.966 | 0.948 | 3.21E-146 | CD16pos_NK_lung |
| RPS24                | 6.41E-150 | 0.69277772 | 0.991 | 0.985 | 2.27E-145 | CD16pos_NK_lung |
| RPL22                | 1.64E-144 | 0.84308236 | 0.964 | 0.967 | 5.80E-140 | CD16pos_NK_lung |
| RPS4X                | 6.94E-143 | 0.7628278  | 0.989 | 0.983 | 2.46E-138 | CD16pos_NK_lung |
| RPL5                 | 3.75E-140 | 0.77724106 | 0.972 | 0.973 | 1.33E-135 | CD16pos_NK_lung |
| GMFG                 | 2.09E-139 | 1.16773647 | 0.871 | 0.844 | 7.41E-135 | CD16pos_NK_lung |
| ENSMMUG000000012140  | 1.38E-138 | 0.85884204 | 0.968 | 0.967 | 4.89E-134 | CD16pos_NK_lung |
| SRP14                | 5.42E-131 | 1.21955236 | 0.843 | 0.808 | 1.92E-126 | CD16pos_NK_lung |
| RPL36AL              | 1.88E-130 | 1.06773683 | 0.878 | 0.869 | 6.65E-126 | CD16pos_NK_lung |
| RPL27                | 1.33E-125 | 0.69239821 | 0.98  | 0.973 | 4.70E-121 | CD16pos_NK_lung |
| S100A10              | 1.77E-124 | 0.95009007 | 0.934 | 0.915 | 6.28E-120 | CD16pos_NK_lung |
| RPL19                | 4.62E-123 | 0.84258575 | 0.958 | 0.948 | 1.64E-118 | CD16pos_NK_lung |
| ZC3H10               | 6.50E-120 | 1.51264699 | 0.754 | 0.655 | 2.30E-115 | CD16pos_NK_lung |
| IFI27L2              | 2.48E-112 | 1.279798   | 0.799 | 0.734 | 8.79E-108 | CD16pos_NK_lung |
| MYL12B               | 5.68E-111 | 0.92285248 | 0.909 | 0.908 | 2.01E-106 | CD16pos_NK_lung |
| ENSMMUG000000003073  | 4.91E-103 | 0.69183477 | 0.959 | 0.963 | 1.74E-98  | CD16pos_NK_lung |
| ENSMMUG000000004545  | 2.45E-96  | 1.3319858  | 0.736 | 0.665 | 8.69E-92  | CD16pos_NK_lung |
| ELOB                 | 3.41E-95  | 1.47811481 | 0.697 | 0.617 | 1.21E-90  | CD16pos_NK_lung |
| NME2                 | 1.45E-89  | 0.86826796 | 0.864 | 0.888 | 5.15E-85  | CD16pos_NK_lung |
| MYL6                 | 2.88E-89  | 1.18646433 | 0.77  | 0.725 | 1.02E-84  | CD16pos_NK_lung |
| CORO1A               | 3.26E-89  | 1.0248351  | 0.822 | 0.839 | 1.16E-84  | CD16pos_NK_lung |
| ENSMMUG0000000050862 | 1.83E-85  | 0.69741375 | 0.966 | 0.971 | 6.50E-81  | CD16pos_NK_lung |
| HINT1                | 2.29E-83  | 1.06898121 | 0.772 | 0.769 | 8.11E-79  | CD16pos_NK_lung |
| UBL5                 | 9.74E-79  | 1.42859614 | 0.668 | 0.609 | 3.45E-74  | CD16pos_NK_lung |
| ENSMMUG000000001458  | 2.02E-77  | 0.95597182 | 0.811 | 0.849 | 7.14E-73  | CD16pos_NK_lung |
| JPT1                 | 2.77E-77  | 1.17093009 | 0.72  | 0.684 | 9.82E-73  | CD16pos_NK_lung |
| S100A4               | 3.06E-77  | 1.05471962 | 0.843 | 0.809 | 1.08E-72  | CD16pos_NK_lung |
| TMA7                 | 8.91E-76  | 1.24476676 | 0.703 | 0.67  | 3.16E-71  | CD16pos_NK_lung |
| HOPX                 | 1.70E-75  | 0.90486842 | 0.842 | 0.846 | 6.02E-71  | CD16pos_NK_lung |
| MBD3                 | 1.89E-75  | 1.47287717 | 0.64  | 0.544 | 6.70E-71  | CD16pos_NK_lung |
| RPS27A               | 5.21E-74  | 1.34089892 | 0.674 | 0.606 | 1.85E-69  | CD16pos_NK_lung |
| ENSMMUG000000022428  | 1.15E-73  | 2.0586605  | 0.532 | 0.345 | 4.07E-69  | CD16pos_NK_lung |
| ENSMMUG000000060377  | 1.40E-73  | 1.5976086  | 0.617 | 0.5   | 4.95E-69  | CD16pos_NK_lung |

|                     |          |            |       |       |          |                 |
|---------------------|----------|------------|-------|-------|----------|-----------------|
| ATP5MG              | 4.55E-73 | 0.98540276 | 0.782 | 0.788 | 1.61E-68 | CD16pos_NK_lung |
| MAMU-E              | 5.24E-73 | 0.69522285 | 0.937 | 0.957 | 1.86E-68 | CD16pos_NK_lung |
| RPL38               | 6.00E-70 | 0.53996606 | 0.963 | 0.979 | 2.13E-65 | CD16pos_NK_lung |
| ARPC3               | 6.72E-69 | 0.93756928 | 0.768 | 0.794 | 2.38E-64 | CD16pos_NK_lung |
| ENSMMUG000000044585 | 2.60E-68 | 1.61506796 | 0.594 | 0.493 | 9.22E-64 | CD16pos_NK_lung |
| ENSMMUG000000052747 | 8.53E-68 | 1.35047619 | 0.657 | 0.606 | 3.02E-63 | CD16pos_NK_lung |
| BTG1                | 1.85E-64 | 1.32603963 | 0.674 | 0.607 | 6.56E-60 | CD16pos_NK_lung |
| CRIP1               | 4.56E-64 | 1.42785889 | 0.649 | 0.567 | 1.62E-59 | CD16pos_NK_lung |
| GPR65               | 1.38E-63 | 3.473638   | 0.36  | 0.117 | 4.89E-59 | CD16pos_NK_lung |
| EIF3K               | 1.56E-62 | 0.90461575 | 0.768 | 0.802 | 5.52E-58 | CD16pos_NK_lung |
| RPL6                | 1.88E-62 | 0.48737471 | 0.972 | 0.978 | 6.66E-58 | CD16pos_NK_lung |
| HNRNPH2             | 2.11E-62 | 0.77175637 | 0.837 | 0.884 | 7.48E-58 | CD16pos_NK_lung |
| NKG7                | 1.13E-60 | 0.59365218 | 0.954 | 0.963 | 3.99E-56 | CD16pos_NK_lung |
| GTF3C1              | 1.90E-59 | 1.70312916 | 0.552 | 0.43  | 6.72E-55 | CD16pos_NK_lung |
| ENSMMUG000000001210 | 5.34E-59 | 1.08889819 | 0.698 | 0.685 | 1.89E-54 | CD16pos_NK_lung |
| GCN1                | 7.69E-59 | 0.58811626 | 0.929 | 0.94  | 2.73E-54 | CD16pos_NK_lung |
| ENSMMUG000000030408 | 1.93E-58 | 1.55061766 | 0.563 | 0.459 | 6.83E-54 | CD16pos_NK_lung |
| EEF1A1              | 3.46E-58 | 0.65984164 | 0.877 | 0.89  | 1.23E-53 | CD16pos_NK_lung |
| ENSMMUG000000056793 | 2.64E-57 | 1.05376455 | 0.695 | 0.727 | 9.37E-53 | CD16pos_NK_lung |
| PRPF31              | 4.90E-57 | 1.67966006 | 0.535 | 0.413 | 1.74E-52 | CD16pos_NK_lung |
| OST4                | 5.27E-57 | 1.25687221 | 0.638 | 0.615 | 1.87E-52 | CD16pos_NK_lung |
| ENSMMUG000000064139 | 6.00E-55 | 0.82934481 | 0.835 | 0.89  | 2.12E-50 | CD16pos_NK_lung |
| EEF1D               | 2.31E-54 | 0.82180769 | 0.778 | 0.824 | 8.20E-50 | CD16pos_NK_lung |
| CST7                | 3.46E-54 | 1.5939228  | 0.559 | 0.468 | 1.22E-49 | CD16pos_NK_lung |
| ROBO2               | 5.94E-52 | 1.20241782 | 0.64  | 0.627 | 2.10E-47 | CD16pos_NK_lung |
| GSTP1               | 7.17E-52 | 1.16444805 | 0.644 | 0.627 | 2.54E-47 | CD16pos_NK_lung |
| ENSMMUG000000019505 | 1.69E-51 | 1.26947398 | 0.616 | 0.591 | 5.98E-47 | CD16pos_NK_lung |
| ENSMMUG000000058581 | 3.89E-50 | 1.32793945 | 0.691 | 0.683 | 1.38E-45 | CD16pos_NK_lung |
| CFL1                | 4.09E-50 | 0.77587366 | 0.794 | 0.836 | 1.45E-45 | CD16pos_NK_lung |
| ROMO1               | 2.59E-48 | 1.60324603 | 0.524 | 0.429 | 9.17E-44 | CD16pos_NK_lung |
| RPL35               | 5.09E-48 | 0.50632827 | 0.938 | 0.968 | 1.80E-43 | CD16pos_NK_lung |
| KLRB1               | 4.00E-47 | 0.63575411 | 0.919 | 0.929 | 1.42E-42 | CD16pos_NK_lung |
| COMMD6              | 8.03E-47 | 0.96146365 | 0.692 | 0.725 | 2.84E-42 | CD16pos_NK_lung |

|                     |          |            |       |       |          |                 |
|---------------------|----------|------------|-------|-------|----------|-----------------|
| COX7C               | 1.28E-46 | 0.8814896  | 0.717 | 0.753 | 4.55E-42 | CD16pos_NK_lung |
| ANXA1               | 2.06E-46 | 0.83097827 | 0.765 | 0.773 | 7.29E-42 | CD16pos_NK_lung |
| COX5B               | 5.03E-44 | 1.41115773 | 0.545 | 0.485 | 1.78E-39 | CD16pos_NK_lung |
| TMEM258             | 8.48E-42 | 1.39269668 | 0.533 | 0.465 | 3.01E-37 | CD16pos_NK_lung |
| GAPDH               | 1.43E-40 | 1.28556854 | 0.567 | 0.524 | 5.06E-36 | CD16pos_NK_lung |
| TAGLN2              | 2.13E-39 | 1.11676993 | 0.623 | 0.629 | 7.55E-35 | CD16pos_NK_lung |
| ACTG1               | 1.43E-38 | 0.56464584 | 0.884 | 0.937 | 5.07E-34 | CD16pos_NK_lung |
| TMSB4X              | 2.02E-38 | 0.25865682 | 1     | 0.998 | 7.17E-34 | CD16pos_NK_lung |
| ENSMMUG00000007657  | 2.58E-38 | 1.18359635 | 0.57  | 0.555 | 9.14E-34 | CD16pos_NK_lung |
| CLIC1               | 3.32E-38 | 0.83873818 | 0.692 | 0.707 | 1.18E-33 | CD16pos_NK_lung |
| COX6C               | 7.71E-38 | 0.94332466 | 0.649 | 0.703 | 2.73E-33 | CD16pos_NK_lung |
| SMDT1               | 1.11E-37 | 1.05995283 | 0.616 | 0.621 | 3.93E-33 | CD16pos_NK_lung |
| NDUFA1              | 3.13E-36 | 1.24473707 | 0.548 | 0.516 | 1.11E-31 | CD16pos_NK_lung |
| HNRNPDL             | 5.60E-34 | 0.92748447 | 0.638 | 0.671 | 1.98E-29 | CD16pos_NK_lung |
| ATP6V1G1            | 1.51E-33 | 0.99847234 | 0.623 | 0.68  | 5.34E-29 | CD16pos_NK_lung |
| GNG5                | 1.13E-32 | 1.00416872 | 0.601 | 0.635 | 3.99E-28 | CD16pos_NK_lung |
| ENSMMUG00000016305  | 1.11E-31 | 1.57914848 | 0.429 | 0.332 | 3.95E-27 | CD16pos_NK_lung |
| ENSMMUG00000015270  | 5.49E-31 | 0.28407938 | 0.99  | 0.992 | 1.94E-26 | CD16pos_NK_lung |
| MYG1                | 2.98E-30 | 1.75360382 | 0.388 | 0.277 | 1.06E-25 | CD16pos_NK_lung |
| RPL3                | 2.75E-29 | 0.33212548 | 0.956 | 0.967 | 9.75E-25 | CD16pos_NK_lung |
| COX8A               | 4.65E-29 | 1.30600941 | 0.501 | 0.477 | 1.65E-24 | CD16pos_NK_lung |
| CHCHD2              | 8.33E-29 | 0.743934   | 0.665 | 0.709 | 2.95E-24 | CD16pos_NK_lung |
| ENSMMUG00000006463  | 1.43E-28 | 0.98504658 | 0.584 | 0.6   | 5.07E-24 | CD16pos_NK_lung |
| NSA2                | 3.59E-28 | 1.0945212  | 0.58  | 0.608 | 1.27E-23 | CD16pos_NK_lung |
| WDR83OS             | 5.77E-27 | 0.94156094 | 0.597 | 0.654 | 2.05E-22 | CD16pos_NK_lung |
| PET100              | 1.13E-24 | 2.18525711 | 0.276 | 0.153 | 3.99E-20 | CD16pos_NK_lung |
| RDH5                | 2.22E-24 | 1.16059497 | 0.496 | 0.474 | 7.87E-20 | CD16pos_NK_lung |
| ENSMMUG000000051239 | 4.41E-24 | 1.95681767 | 0.323 | 0.217 | 1.56E-19 | CD16pos_NK_lung |
| ENSMMUG00000012419  | 6.37E-24 | 1.0781163  | 0.519 | 0.528 | 2.26E-19 | CD16pos_NK_lung |
| ISCA1               | 1.68E-23 | 1.35607129 | 0.455 | 0.406 | 5.95E-19 | CD16pos_NK_lung |
| SEC61G              | 1.69E-23 | 1.1731284  | 0.49  | 0.481 | 5.99E-19 | CD16pos_NK_lung |
| PFDN5               | 3.60E-23 | 1.36196056 | 0.438 | 0.388 | 1.27E-18 | CD16pos_NK_lung |
| GABARAPL2           | 3.70E-23 | 1.15029716 | 0.513 | 0.534 | 1.31E-18 | CD16pos_NK_lung |

|                    |          |            |       |       |          |                 |
|--------------------|----------|------------|-------|-------|----------|-----------------|
| MRI1               | 1.03E-22 | 1.24652028 | 0.476 | 0.467 | 3.64E-18 | CD16pos_NK_lung |
| ENSMMUG00000047481 | 2.10E-22 | 1.01916163 | 0.528 | 0.537 | 7.44E-18 | CD16pos_NK_lung |
| SEC61B             | 2.73E-22 | 1.07395622 | 0.504 | 0.506 | 9.68E-18 | CD16pos_NK_lung |
| CD52               | 5.11E-22 | 0.39070627 | 0.886 | 0.904 | 1.81E-17 | CD16pos_NK_lung |
| ENSMMUG00000063637 | 8.61E-22 | 0.58160249 | 0.739 | 0.803 | 3.05E-17 | CD16pos_NK_lung |
| ATOX1              | 9.55E-22 | 1.23057429 | 0.472 | 0.452 | 3.38E-17 | CD16pos_NK_lung |
| DBI                | 2.25E-21 | 0.87483154 | 0.586 | 0.641 | 7.96E-17 | CD16pos_NK_lung |
| IFI16              | 2.65E-21 | 1.11028221 | 0.499 | 0.496 | 9.38E-17 | CD16pos_NK_lung |
| ENSMMUG00000002320 | 3.16E-21 | 0.51579705 | 0.794 | 0.875 | 1.12E-16 | CD16pos_NK_lung |
| NDUFA4             | 3.48E-21 | 1.08357566 | 0.502 | 0.51  | 1.23E-16 | CD16pos_NK_lung |
| NDUFB11            | 1.74E-20 | 1.71717184 | 0.332 | 0.245 | 6.15E-16 | CD16pos_NK_lung |
| CREM               | 2.02E-20 | 1.69063048 | 0.376 | 0.304 | 7.16E-16 | CD16pos_NK_lung |
| ARF6               | 2.03E-20 | 0.10230086 | 0.19  | 0.382 | 7.21E-16 | CD16pos_NK_lung |
| LDHA               | 4.76E-20 | 1.3152118  | 0.417 | 0.374 | 1.69E-15 | CD16pos_NK_lung |
| OSTF1              | 7.66E-20 | 0.72635384 | 0.64  | 0.733 | 2.71E-15 | CD16pos_NK_lung |
| CD7                | 3.06E-19 | 0.69737371 | 0.646 | 0.727 | 1.08E-14 | CD16pos_NK_lung |
| EEF1B2             | 4.09E-19 | 0.4648211  | 0.781 | 0.873 | 1.45E-14 | CD16pos_NK_lung |
| NDUFB2             | 6.08E-19 | 1.10642053 | 0.475 | 0.475 | 2.16E-14 | CD16pos_NK_lung |
| ENSMMUG00000053146 | 1.67E-18 | 1.34678418 | 0.411 | 0.371 | 5.92E-14 | CD16pos_NK_lung |
| PRF1               | 3.81E-18 | 1.47658756 | 0.396 | 0.35  | 1.35E-13 | CD16pos_NK_lung |
| ENSMMUG00000049722 | 4.87E-18 | 1.58273959 | 0.355 | 0.294 | 1.72E-13 | CD16pos_NK_lung |
| ENSMMUG00000016665 | 1.31E-17 | 1.09532821 | 0.455 | 0.452 | 4.64E-13 | CD16pos_NK_lung |
| OAZ1               | 2.04E-17 | 1.2993365  | 0.42  | 0.399 | 7.22E-13 | CD16pos_NK_lung |
| ENSMMUG00000053735 | 2.57E-17 | 1.02489952 | 0.495 | 0.527 | 9.10E-13 | CD16pos_NK_lung |
| EDF1               | 5.51E-17 | 1.24931257 | 0.407 | 0.375 | 1.95E-12 | CD16pos_NK_lung |
| RPL10A             | 9.03E-17 | 0.25433546 | 0.936 | 0.959 | 3.20E-12 | CD16pos_NK_lung |
| COX6B1             | 1.10E-16 | 1.440318   | 0.355 | 0.297 | 3.91E-12 | CD16pos_NK_lung |
| IGBP1              | 3.95E-16 | 0.13643567 | 0.146 | 0.286 | 1.40E-11 | CD16pos_NK_lung |
| AMZ2               | 4.57E-16 | 0.10961954 | 0.137 | 0.273 | 1.62E-11 | CD16pos_NK_lung |
| HMGB1              | 1.40E-15 | 0.5716963  | 0.684 | 0.783 | 4.98E-11 | CD16pos_NK_lung |
| UQCRQ              | 1.45E-15 | 1.2117391  | 0.421 | 0.408 | 5.13E-11 | CD16pos_NK_lung |
| ENSMMUG00000061824 | 1.70E-15 | 0.35482659 | 0.792 | 0.864 | 6.02E-11 | CD16pos_NK_lung |
| ND4L               | 2.03E-15 | 1.91426511 | 0.273 | 0.193 | 7.20E-11 | CD16pos_NK_lung |

|                    |          |            |       |       |          |                 |
|--------------------|----------|------------|-------|-------|----------|-----------------|
| TAPBPL             | 2.12E-15 | 1.24043854 | 0.416 | 0.397 | 7.52E-11 | CD16pos_NK_lung |
| NCR3               | 2.86E-15 | 1.62315125 | 0.311 | 0.241 | 1.01E-10 | CD16pos_NK_lung |
| STARD3NL           | 3.37E-15 | 0.13736271 | 0.163 | 0.309 | 1.19E-10 | CD16pos_NK_lung |
| C16H17orf49        | 3.77E-15 | 1.09204252 | 0.463 | 0.489 | 1.34E-10 | CD16pos_NK_lung |
| IRF2               | 1.23E-14 | 0.1654517  | 0.189 | 0.353 | 4.36E-10 | CD16pos_NK_lung |
| STMN1              | 1.38E-14 | 1.81016349 | 0.274 | 0.192 | 4.89E-10 | CD16pos_NK_lung |
| SELENOK            | 1.64E-14 | 1.45607001 | 0.323 | 0.261 | 5.82E-10 | CD16pos_NK_lung |
| PDLIM2             | 2.22E-14 | 0.16508774 | 0.172 | 0.323 | 7.85E-10 | CD16pos_NK_lung |
| H2AFZ              | 2.57E-14 | 1.32355374 | 0.383 | 0.355 | 9.09E-10 | CD16pos_NK_lung |
| COX17              | 2.65E-14 | 1.56610315 | 0.321 | 0.266 | 9.38E-10 | CD16pos_NK_lung |
| PSME1              | 9.77E-14 | 0.72740694 | 0.578 | 0.668 | 3.46E-09 | CD16pos_NK_lung |
| CD81               | 1.19E-13 | 0.12066615 | 0.15  | 0.28  | 4.23E-09 | CD16pos_NK_lung |
| PHF11              | 1.28E-13 | 0.14412497 | 0.136 | 0.258 | 4.52E-09 | CD16pos_NK_lung |
| SSR4               | 1.29E-13 | 0.8675892  | 0.516 | 0.582 | 4.57E-09 | CD16pos_NK_lung |
| HDAC1              | 1.36E-13 | 0.15629911 | 0.182 | 0.333 | 4.81E-09 | CD16pos_NK_lung |
| SUB1               | 1.66E-13 | 0.63638288 | 0.602 | 0.705 | 5.89E-09 | CD16pos_NK_lung |
| GDI2               | 1.86E-13 | 0.17364259 | 0.162 | 0.301 | 6.57E-09 | CD16pos_NK_lung |
| ATP5F1A            | 2.96E-13 | 0.1115373  | 0.281 | 0.497 | 1.05E-08 | CD16pos_NK_lung |
| CASP12             | 5.26E-13 | 0.12670964 | 0.202 | 0.362 | 1.86E-08 | CD16pos_NK_lung |
| XRCC6              | 5.97E-13 | 0.118326   | 0.238 | 0.425 | 2.12E-08 | CD16pos_NK_lung |
| ATP5MC2            | 6.46E-13 | 1.03456049 | 0.448 | 0.472 | 2.29E-08 | CD16pos_NK_lung |
| PPP1CB             | 8.19E-13 | 0.10256155 | 0.212 | 0.373 | 2.90E-08 | CD16pos_NK_lung |
| NUDC               | 8.62E-13 | 0.21764537 | 0.202 | 0.367 | 3.05E-08 | CD16pos_NK_lung |
| NCL                | 1.02E-12 | 0.83540496 | 0.533 | 0.609 | 3.61E-08 | CD16pos_NK_lung |
| PYHIN1             | 1.04E-12 | 0.17388875 | 0.219 | 0.39  | 3.68E-08 | CD16pos_NK_lung |
| RBM8A              | 1.13E-12 | 1.51714391 | 0.31  | 0.259 | 4.01E-08 | CD16pos_NK_lung |
| ENSMMUG00000042951 | 1.62E-12 | 0.10506741 | 0.194 | 0.343 | 5.73E-08 | CD16pos_NK_lung |
| ENSMMUG00000059017 | 2.40E-12 | 0.14358705 | 0.212 | 0.373 | 8.49E-08 | CD16pos_NK_lung |
| TOMM7              | 2.62E-12 | 0.33478546 | 0.817 | 0.913 | 9.30E-08 | CD16pos_NK_lung |
| SRI                | 2.90E-12 | 0.97087819 | 0.46  | 0.487 | 1.03E-07 | CD16pos_NK_lung |
| ARPC2              | 3.02E-12 | 1.01179529 | 0.473 | 0.521 | 1.07E-07 | CD16pos_NK_lung |
| APOBEC3F           | 3.33E-12 | 0.18142231 | 0.154 | 0.28  | 1.18E-07 | CD16pos_NK_lung |
| NCOA7              | 5.37E-12 | 0.14880278 | 0.191 | 0.337 | 1.90E-07 | CD16pos_NK_lung |

|                    |          |            |       |       |          |                 |
|--------------------|----------|------------|-------|-------|----------|-----------------|
| OSBPL2             | 6.04E-12 | 0.21031328 | 0.144 | 0.263 | 2.14E-07 | CD16pos_NK_lung |
| HERPUD1            | 6.59E-12 | 0.10579198 | 0.142 | 0.259 | 2.34E-07 | CD16pos_NK_lung |
| COX7B              | 8.74E-12 | 0.92900798 | 0.467 | 0.501 | 3.10E-07 | CD16pos_NK_lung |
| PSMA2              | 8.91E-12 | 1.08277998 | 0.429 | 0.456 | 3.16E-07 | CD16pos_NK_lung |
| CALCOCO2           | 1.27E-11 | 0.18488176 | 0.197 | 0.347 | 4.49E-07 | CD16pos_NK_lung |
| PSMD13             | 1.54E-11 | 0.21044209 | 0.186 | 0.33  | 5.44E-07 | CD16pos_NK_lung |
| SERTAD1            | 2.10E-11 | 1.48940688 | 0.294 | 0.241 | 7.44E-07 | CD16pos_NK_lung |
| JTB                | 2.25E-11 | 0.18030436 | 0.139 | 0.253 | 7.96E-07 | CD16pos_NK_lung |
| RPS16              | 2.43E-11 | 0.195136   | 0.973 | 0.981 | 8.62E-07 | CD16pos_NK_lung |
| HSP90B1            | 2.59E-11 | 0.12629677 | 0.257 | 0.437 | 9.18E-07 | CD16pos_NK_lung |
| MICOS13            | 2.97E-11 | 1.37875605 | 0.308 | 0.263 | 1.05E-06 | CD16pos_NK_lung |
| UBE2I              | 5.01E-11 | 0.22247457 | 0.209 | 0.366 | 1.78E-06 | CD16pos_NK_lung |
| RPLP2              | 5.33E-11 | 0.22426077 | 0.946 | 0.976 | 1.89E-06 | CD16pos_NK_lung |
| RPL22L1            | 5.97E-11 | 1.02036284 | 0.435 | 0.443 | 2.11E-06 | CD16pos_NK_lung |
| SAMD3              | 6.77E-11 | 0.18116863 | 0.21  | 0.361 | 2.40E-06 | CD16pos_NK_lung |
| ARL6IP5            | 6.91E-11 | 0.14207601 | 0.251 | 0.43  | 2.45E-06 | CD16pos_NK_lung |
| PSMB6              | 7.40E-11 | 1.28595444 | 0.339 | 0.313 | 2.62E-06 | CD16pos_NK_lung |
| NDUFB4             | 7.95E-11 | 1.0443869  | 0.399 | 0.391 | 2.82E-06 | CD16pos_NK_lung |
| SNX6               | 9.09E-11 | 0.16755953 | 0.237 | 0.407 | 3.22E-06 | CD16pos_NK_lung |
| SELENOS            | 9.27E-11 | 0.25137848 | 0.24  | 0.413 | 3.28E-06 | CD16pos_NK_lung |
| PLAAT4             | 1.26E-10 | 0.71677285 | 0.531 | 0.583 | 4.47E-06 | CD16pos_NK_lung |
| LSM7               | 1.30E-10 | 1.1926544  | 0.372 | 0.365 | 4.59E-06 | CD16pos_NK_lung |
| ENSMMUG00000022489 | 1.47E-10 | 1.02898054 | 0.446 | 0.489 | 5.21E-06 | CD16pos_NK_lung |
| GNAI2.1            | 1.65E-10 | 0.28103882 | 0.191 | 0.333 | 5.83E-06 | CD16pos_NK_lung |
| UBE2V1             | 1.90E-10 | 0.23688483 | 0.217 | 0.376 | 6.73E-06 | CD16pos_NK_lung |
| DDX24              | 2.28E-10 | 0.30754942 | 0.188 | 0.329 | 8.08E-06 | CD16pos_NK_lung |
| NDUFA2             | 2.49E-10 | 1.01109334 | 0.414 | 0.424 | 8.82E-06 | CD16pos_NK_lung |
| ENSMMUG00000016894 | 2.68E-10 | 1.00363173 | 0.419 | 0.437 | 9.49E-06 | CD16pos_NK_lung |
| APBB2              | 2.81E-10 | 0.12975258 | 0.187 | 0.315 | 9.97E-06 | CD16pos_NK_lung |
| LIMD2              | 3.38E-10 | 1.0049332  | 0.441 | 0.483 | 1.20E-05 | CD16pos_NK_lung |
| PSMA5              | 3.44E-10 | 0.17285447 | 0.242 | 0.413 | 1.22E-05 | CD16pos_NK_lung |
| UBE2L3             | 3.47E-10 | 0.26117169 | 0.178 | 0.308 | 1.23E-05 | CD16pos_NK_lung |
| C11H12orf45        | 4.14E-10 | 0.1473049  | 0.235 | 0.395 | 1.47E-05 | CD16pos_NK_lung |



|                     |          |            |       |       |            |                 |
|---------------------|----------|------------|-------|-------|------------|-----------------|
| SCP2                | 4.14E-10 | 0.15928217 | 0.231 | 0.39  | 1.47E-05   | CD16pos_NK_lung |
| DDX18               | 4.74E-10 | 0.28432856 | 0.169 | 0.292 | 1.68E-05   | CD16pos_NK_lung |
| CX3CR1              | 5.50E-10 | 0.1329148  | 0.223 | 0.37  | 1.95E-05   | CD16pos_NK_lung |
| LBH                 | 5.73E-10 | 0.21116039 | 0.161 | 0.277 | 2.03E-05   | CD16pos_NK_lung |
| ICAM3               | 5.77E-10 | 0.2472403  | 0.143 | 0.251 | 2.04E-05   | CD16pos_NK_lung |
| CCT8                | 7.33E-10 | 0.24316018 | 0.16  | 0.278 | 2.60E-05   | CD16pos_NK_lung |
| ARHGDIB             | 7.70E-10 | 0.31321614 | 0.821 | 0.912 | 2.73E-05   | CD16pos_NK_lung |
| CDC42SE1            | 9.73E-10 | 0.27242612 | 0.167 | 0.288 | 3.45E-05   | CD16pos_NK_lung |
| ENSMMUG00000006499  | 1.03E-09 | 0.2901005  | 0.166 | 0.287 | 3.65E-05   | CD16pos_NK_lung |
| ENSMMUG000000014862 | 1.08E-09 | 0.21246558 | 0.197 | 0.333 | 3.84E-05   | CD16pos_NK_lung |
| COX16               | 1.15E-09 | 0.21107889 | 0.261 | 0.438 | 4.09E-05   | CD16pos_NK_lung |
| ENSMMUG000000017466 | 1.56E-09 | 0.93296126 | 0.458 | 0.515 | 5.53E-05   | CD16pos_NK_lung |
| ENSMMUG000000063583 | 1.80E-09 | 0.54478683 | 0.709 | 0.762 | 6.37E-05   | CD16pos_NK_lung |
| ERBB3               | 1.82E-09 | 0.32521127 | 0.169 | 0.289 | 6.46E-05   | CD16pos_NK_lung |
| REEP5               | 1.83E-09 | 0.25891623 | 0.236 | 0.402 | 6.50E-05   | CD16pos_NK_lung |
| TMEM59              | 2.00E-09 | 0.19636814 | 0.286 | 0.484 | 7.07E-05   | CD16pos_NK_lung |
| POC5                | 2.81E-09 | 0.25724994 | 0.184 | 0.312 | 9.97E-05   | CD16pos_NK_lung |
| ARPC5L              | 2.92E-09 | 0.27713336 | 0.212 | 0.36  | 0.00010358 | CD16pos_NK_lung |
| EIF3L               | 3.04E-09 | 0.17167556 | 0.267 | 0.449 | 0.0001078  | CD16pos_NK_lung |
| ENSMMUG000000047632 | 3.33E-09 | 0.9936232  | 0.372 | 0.343 | 0.00011789 | CD16pos_NK_lung |
| IL10RA              | 3.76E-09 | 0.17203715 | 0.155 | 0.264 | 0.00013305 | CD16pos_NK_lung |
| UBE2N               | 4.62E-09 | 0.2852156  | 0.146 | 0.252 | 0.00016362 | CD16pos_NK_lung |
| ENSMMUG000000006206 | 4.63E-09 | 0.35362563 | 0.203 | 0.342 | 0.00016397 | CD16pos_NK_lung |
| ENSMMUG000000059742 | 5.02E-09 | 0.34790963 | 0.157 | 0.268 | 0.00017772 | CD16pos_NK_lung |
| CWC15               | 9.07E-09 | 0.29947533 | 0.232 | 0.39  | 0.00032121 | CD16pos_NK_lung |
| PFDN1               | 9.28E-09 | 0.22344663 | 0.154 | 0.26  | 0.00032895 | CD16pos_NK_lung |
| SERBP1              | 9.86E-09 | 0.23058387 | 0.296 | 0.493 | 0.0003495  | CD16pos_NK_lung |
| NTAN1               | 1.03E-08 | 0.2748398  | 0.162 | 0.273 | 0.00036378 | CD16pos_NK_lung |
| SRRM1               | 1.09E-08 | 0.23663712 | 0.244 | 0.399 | 0.00038533 | CD16pos_NK_lung |
| MGST3               | 1.25E-08 | 1.17019857 | 0.352 | 0.353 | 0.00044393 | CD16pos_NK_lung |
| CDC37               | 1.43E-08 | 0.24976843 | 0.161 | 0.27  | 0.00050806 | CD16pos_NK_lung |
| COPE                | 1.46E-08 | 1.2577541  | 0.314 | 0.291 | 0.00051643 | CD16pos_NK_lung |
| ATP5MC3             | 1.55E-08 | 0.97503386 | 0.414 | 0.453 | 0.00055064 | CD16pos_NK_lung |

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| ENSMMUG000000031947 | 1.79E-08 | 0.80524051 | 0.494 | 0.578 | 0.00063396 | CD16pos_NK_lung |
| SEPTIN2             | 1.83E-08 | 0.32870984 | 0.178 | 0.298 | 0.00064779 | CD16pos_NK_lung |
| ENSMMUG000000000983 | 2.23E-08 | 1.19797696 | 0.337 | 0.328 | 0.0007915  | CD16pos_NK_lung |
| SLC38A2             | 3.09E-08 | 0.32541748 | 0.185 | 0.304 | 0.0010957  | CD16pos_NK_lung |
| RAC2                | 3.76E-08 | 0.94176945 | 0.441 | 0.503 | 0.00133255 | CD16pos_NK_lung |
| CIB1                | 4.74E-08 | 1.46480546 | 0.272 | 0.238 | 0.00167885 | CD16pos_NK_lung |
| ATP5PF              | 4.84E-08 | 0.86686834 | 0.422 | 0.463 | 0.00171442 | CD16pos_NK_lung |
| PSMB10              | 4.96E-08 | 0.34291552 | 0.159 | 0.264 | 0.00175883 | CD16pos_NK_lung |
| ABCF1               | 5.38E-08 | 0.36052234 | 0.165 | 0.275 | 0.00190448 | CD16pos_NK_lung |
| ENSMMUG000000055584 | 6.07E-08 | 0.38456043 | 0.67  | 0.805 | 0.00215145 | CD16pos_NK_lung |
| RER1                | 6.24E-08 | 0.30876253 | 0.188 | 0.309 | 0.00221097 | CD16pos_NK_lung |
| PPP4C               | 6.43E-08 | 0.32333965 | 0.159 | 0.265 | 0.00227979 | CD16pos_NK_lung |
| UQCRH               | 6.91E-08 | 0.93394571 | 0.412 | 0.453 | 0.00244997 | CD16pos_NK_lung |
| ARF5                | 8.66E-08 | 0.24520446 | 0.237 | 0.387 | 0.00306964 | CD16pos_NK_lung |
| RPS4Y1              | 9.29E-08 | 0.64597408 | 0.5   | 0.511 | 0.00329255 | CD16pos_NK_lung |
| ANP32E              | 1.16E-07 | 0.25308568 | 0.177 | 0.287 | 0.0041038  | CD16pos_NK_lung |
| TPT1                | 1.35E-07 | 0.10847833 | 0.998 | 0.996 | 0.00478258 | CD16pos_NK_lung |
| ERH                 | 1.37E-07 | 1.19171026 | 0.32  | 0.311 | 0.00486661 | CD16pos_NK_lung |
| PSMB9               | 1.76E-07 | 0.84853203 | 0.46  | 0.543 | 0.00623352 | CD16pos_NK_lung |
| RWDD1               | 1.88E-07 | 0.17186214 | 0.289 | 0.458 | 0.00666141 | CD16pos_NK_lung |
| C18H18orf32         | 1.95E-07 | 0.24494629 | 0.89  | 0.954 | 0.00690107 | CD16pos_NK_lung |
| CUTA                | 1.98E-07 | 1.25262947 | 0.307 | 0.292 | 0.0070119  | CD16pos_NK_lung |
| IK                  | 2.19E-07 | 0.31490531 | 0.251 | 0.408 | 0.00777603 | CD16pos_NK_lung |
| DNAJC8              | 2.27E-07 | 0.36954953 | 0.167 | 0.272 | 0.00804163 | CD16pos_NK_lung |
| WAS                 | 2.48E-07 | 0.39958926 | 0.177 | 0.289 | 0.00879619 | CD16pos_NK_lung |
| EIF2S2              | 2.87E-07 | 0.36209096 | 0.227 | 0.366 | 0.01015808 | CD16pos_NK_lung |
| HNRNPM              | 3.04E-07 | 0.40510581 | 0.199 | 0.326 | 0.01077894 | CD16pos_NK_lung |
| CBX3                | 5.69E-07 | 0.88318103 | 0.439 | 0.502 | 0.02015855 | CD16pos_NK_lung |
| DYNLL1              | 5.73E-07 | 0.97059119 | 0.397 | 0.415 | 0.02029086 | CD16pos_NK_lung |
| ENSMMUG000000054038 | 5.87E-07 | 0.51361569 | 0.604 | 0.746 | 0.02080975 | CD16pos_NK_lung |
| RBMX                | 6.60E-07 | 0.27155738 | 0.263 | 0.421 | 0.02336988 | CD16pos_NK_lung |
| YWHAE               | 7.86E-07 | 0.38609957 | 0.231 | 0.371 | 0.0278344  | CD16pos_NK_lung |
| COPS6               | 8.15E-07 | 0.37882132 | 0.157 | 0.252 | 0.02886521 | CD16pos_NK_lung |

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|--------------------|----------|------------|-------|-------|------------|-----------------|
| ENSMMUG00000060382 | 9.49E-07 | 0.24486959 | 0.288 | 0.455 | 0.03362765 | CD16pos_NK_lung |
| MIC1               | 9.98E-07 | 0.66157353 | 0.523 | 0.624 | 0.03535278 | CD16pos_NK_lung |
| PSMA1              | 1.13E-06 | 0.31989821 | 0.205 | 0.326 | 0.0401119  | CD16pos_NK_lung |
| TBC1D24            | 1.23E-06 | 0.3313395  | 0.25  | 0.4   | 0.04358439 | CD16pos_NK_lung |
| CD2                | 1.35E-06 | 0.38733708 | 0.228 | 0.364 | 0.04798123 | CD16pos_NK_lung |
| PSMB1              | 1.49E-06 | 0.89488286 | 0.431 | 0.506 | 0.05294452 | CD16pos_NK_lung |
| AMDHD1             | 1.58E-06 | 0.36564315 | 0.193 | 0.307 | 0.05604314 | CD16pos_NK_lung |
| RNF181             | 1.68E-06 | 1.00404135 | 0.386 | 0.425 | 0.05934979 | CD16pos_NK_lung |
| ZC3H15             | 1.71E-06 | 0.38451714 | 0.197 | 0.313 | 0.06072198 | CD16pos_NK_lung |
| MRPL34             | 2.76E-06 | 1.27974441 | 0.261 | 0.238 | 0.09793303 | CD16pos_NK_lung |
| RPS3A              | 2.83E-06 | 0.13635101 | 0.974 | 0.989 | 0.10029437 | CD16pos_NK_lung |
| BHLHE40            | 3.92E-06 | 0.38707647 | 0.165 | 0.259 | 0.13872685 | CD16pos_NK_lung |
| NDUFC2             | 3.99E-06 | 1.0859813  | 0.352 | 0.373 | 0.14134317 | CD16pos_NK_lung |
| KLRD1              | 4.30E-06 | 0.39715874 | 0.732 | 0.859 | 0.15227061 | CD16pos_NK_lung |
| TOMM20             | 4.37E-06 | 0.21464659 | 0.316 | 0.5   | 0.15467737 | CD16pos_NK_lung |
| ENSMMUG00000014648 | 5.61E-06 | 0.66671332 | 0.485 | 0.574 | 0.19860231 | CD16pos_NK_lung |
| POMP               | 8.52E-06 | 1.16623074 | 0.284 | 0.27  | 0.30180288 | CD16pos_NK_lung |
| NDUFB9             | 8.80E-06 | 1.13484202 | 0.32  | 0.327 | 0.31188889 | CD16pos_NK_lung |
| DNAJB6             | 9.86E-06 | 0.27523677 | 0.279 | 0.435 | 0.34949728 | CD16pos_NK_lung |
| ZNF483             | 1.05E-05 | 0.83543502 | 0.415 | 0.472 | 0.37165983 | CD16pos_NK_lung |
| ATP5PO             | 1.11E-05 | 0.17705849 | 0.386 | 0.606 | 0.39218731 | CD16pos_NK_lung |
| PSMA3              | 1.19E-05 | 0.28528625 | 0.19  | 0.292 | 0.42331838 | CD16pos_NK_lung |
| HNRNPA1            | 1.31E-05 | 0.30089182 | 0.321 | 0.507 | 0.46311022 | CD16pos_NK_lung |
| MAGOH              | 1.34E-05 | 1.27359338 | 0.292 | 0.294 | 0.47548158 | CD16pos_NK_lung |
| UCP2               | 1.56E-05 | 0.99767829 | 0.347 | 0.366 | 0.55287736 | CD16pos_NK_lung |
| ENSMMUG00000005880 | 1.57E-05 | 0.37485894 | 0.175 | 0.269 | 0.55693906 | CD16pos_NK_lung |
| ID2                | 1.61E-05 | 0.53167124 | 0.606 | 0.703 | 0.57056086 | CD16pos_NK_lung |
| GPSM3              | 1.72E-05 | 1.00998134 | 0.365 | 0.398 | 0.60806899 | CD16pos_NK_lung |
| GHITM              | 2.19E-05 | 0.44376791 | 0.207 | 0.322 | 0.77611683 | CD16pos_NK_lung |
| SRSF7              | 3.37E-05 | 0.26048668 | 0.335 | 0.519 | 1          | CD16pos_NK_lung |
| TBCC               | 3.94E-05 | 0.37425532 | 0.173 | 0.264 | 1          | CD16pos_NK_lung |
| KRTCAP2            | 4.11E-05 | 0.61954642 | 0.501 | 0.608 | 1          | CD16pos_NK_lung |
| CMA1               | 4.19E-05 | 1.19767975 | 0.274 | 0.262 | 1          | CD16pos_NK_lung |

|                    |            |            |       |       |                   |
|--------------------|------------|------------|-------|-------|-------------------|
| PLAC8              | 4.29E-05   | 0.41380362 | 0.656 | 0.737 | 1 CD16pos_NK_lung |
| NDUFB10            | 5.58E-05   | 1.115866   | 0.284 | 0.282 | 1 CD16pos_NK_lung |
| RPS27L             | 6.11E-05   | 0.99528579 | 0.345 | 0.368 | 1 CD16pos_NK_lung |
| ENSMMUG00000022769 | 6.17E-05   | 0.34104606 | 0.287 | 0.441 | 1 CD16pos_NK_lung |
| TMBIM4             | 6.67E-05   | 0.35723981 | 0.304 | 0.471 | 1 CD16pos_NK_lung |
| TINF2              | 7.88E-05   | 0.75993422 | 0.444 | 0.543 | 1 CD16pos_NK_lung |
| STRAP              | 8.31E-05   | 0.44907144 | 0.179 | 0.271 | 1 CD16pos_NK_lung |
| BCAP31             | 8.83E-05   | 0.46746303 | 0.211 | 0.321 | 1 CD16pos_NK_lung |
| NPM1               | 9.21E-05   | 0.45316534 | 0.563 | 0.691 | 1 CD16pos_NK_lung |
| UFC1               | 9.34E-05   | 0.50980021 | 0.195 | 0.297 | 1 CD16pos_NK_lung |
| RABAC1             | 9.38E-05   | 1.00926851 | 0.311 | 0.323 | 1 CD16pos_NK_lung |
| ENY2               | 9.67E-05   | 0.44934771 | 0.261 | 0.4   | 1 CD16pos_NK_lung |
| ENSMMUG00000038373 | 9.82E-05   | 0.41941733 | 0.293 | 0.45  | 1 CD16pos_NK_lung |
| EIF1AX             | 0.00011947 | 0.48264891 | 0.224 | 0.34  | 1 CD16pos_NK_lung |
| PAIP2              | 0.00012081 | 0.31352792 | 0.33  | 0.504 | 1 CD16pos_NK_lung |
| TMEM14B            | 0.00013617 | 0.84412052 | 0.411 | 0.488 | 1 CD16pos_NK_lung |
| ISG20              | 0.0001479  | 1.24342425 | 0.261 | 0.255 | 1 CD16pos_NK_lung |
| PRMT2              | 0.00014791 | 0.54779661 | 0.185 | 0.281 | 1 CD16pos_NK_lung |
| EEF1G              | 0.00014803 | 0.23365896 | 0.344 | 0.523 | 1 CD16pos_NK_lung |
| NCBP2              | 0.00014981 | 1.30588154 | 0.265 | 0.263 | 1 CD16pos_NK_lung |
| MAP3K8             | 0.00015045 | 0.24875741 | 0.201 | 0.292 | 1 CD16pos_NK_lung |
| DRAP1              | 0.00015172 | 0.87118585 | 0.388 | 0.448 | 1 CD16pos_NK_lung |
| GIMAP4             | 0.00016573 | 0.41108703 | 0.17  | 0.252 | 1 CD16pos_NK_lung |
| RSL24D1            | 0.00017366 | 0.30673349 | 0.313 | 0.481 | 1 CD16pos_NK_lung |
| NDUFA6             | 0.00017454 | 1.07300849 | 0.295 | 0.303 | 1 CD16pos_NK_lung |
| ACTB               | 0.00017475 | 0.1526743  | 0.985 | 0.995 | 1 CD16pos_NK_lung |
| PPM1J              | 0.00026528 | 0.75036331 | 0.43  | 0.514 | 1 CD16pos_NK_lung |
| PRKACB             | 0.00028533 | 0.37305795 | 0.303 | 0.461 | 1 CD16pos_NK_lung |
| PSMB8              | 0.00029364 | 0.62773244 | 0.491 | 0.625 | 1 CD16pos_NK_lung |
| LSP1               | 0.00030154 | 0.66640125 | 0.478 | 0.6   | 1 CD16pos_NK_lung |
| ZNHIT1             | 0.00037571 | 1.05651814 | 0.311 | 0.332 | 1 CD16pos_NK_lung |
| TUBB               | 0.00039657 | 0.4887925  | 0.25  | 0.374 | 1 CD16pos_NK_lung |
| KIFBP              | 0.00041286 | 0.52631909 | 0.187 | 0.275 | 1 CD16pos_NK_lung |

|                    |            |            |       |       |                   |
|--------------------|------------|------------|-------|-------|-------------------|
| PPP1R18            | 0.00050549 | 0.55888822 | 0.23  | 0.347 | 1 CD16pos_NK_lung |
| DAZAP1             | 0.00053207 | 0.74015367 | 0.441 | 0.544 | 1 CD16pos_NK_lung |
| FGR                | 0.00053959 | 0.50259506 | 0.181 | 0.265 | 1 CD16pos_NK_lung |
| SUCLG1             | 0.00055979 | 0.48437917 | 0.186 | 0.273 | 1 CD16pos_NK_lung |
| HNRNPK             | 0.00056257 | 0.12912793 | 0.46  | 0.694 | 1 CD16pos_NK_lung |
| FCGR3              | 0.00060111 | 0.27315008 | 0.291 | 0.42  | 1 CD16pos_NK_lung |
| YWHAB              | 0.00066138 | 0.65703599 | 0.475 | 0.597 | 1 CD16pos_NK_lung |
| PSMC5              | 0.00074846 | 0.60658944 | 0.175 | 0.26  | 1 CD16pos_NK_lung |
| CASP1              | 0.00080055 | 0.80007125 | 0.415 | 0.501 | 1 CD16pos_NK_lung |
| CCL5               | 0.00094313 | 0.87207657 | 0.325 | 0.306 | 1 CD16pos_NK_lung |
| PRDX6              | 0.00122769 | 1.03143407 | 0.3   | 0.322 | 1 CD16pos_NK_lung |
| FTH1               | 0.00137557 | 0.63287481 | 0.528 | 0.657 | 1 CD16pos_NK_lung |
| RPS27              | 0.00139163 | 0.13503335 | 0.931 | 0.962 | 1 CD16pos_NK_lung |
| LAMTOR4            | 0.00141058 | 0.94512383 | 0.333 | 0.373 | 1 CD16pos_NK_lung |
| RNF167             | 0.00141974 | 0.43393099 | 0.251 | 0.366 | 1 CD16pos_NK_lung |
| CCL3               | 0.00150208 | 0.90661272 | 0.305 | 0.304 | 1 CD16pos_NK_lung |
| SLC25A3            | 0.00161887 | 0.41853149 | 0.308 | 0.462 | 1 CD16pos_NK_lung |
| SPCS3              | 0.00165622 | 0.57505373 | 0.229 | 0.335 | 1 CD16pos_NK_lung |
| HMGB2              | 0.00167102 | 0.37647894 | 0.311 | 0.455 | 1 CD16pos_NK_lung |
| SERPINB1           | 0.0016873  | 0.50588449 | 0.221 | 0.32  | 1 CD16pos_NK_lung |
| EIF1B              | 0.00171384 | 0.62017361 | 0.203 | 0.297 | 1 CD16pos_NK_lung |
| SLC25A43           | 0.00192563 | 0.85950838 | 0.366 | 0.424 | 1 CD16pos_NK_lung |
| AIP                | 0.00196869 | 0.49855656 | 0.195 | 0.281 | 1 CD16pos_NK_lung |
| ENSMMUG00000030465 | 0.00219824 | 0.40520453 | 0.252 | 0.365 | 1 CD16pos_NK_lung |
| LSM6               | 0.00229995 | 1.07058589 | 0.293 | 0.321 | 1 CD16pos_NK_lung |
| SNRPD3             | 0.0024373  | 0.83062196 | 0.359 | 0.419 | 1 CD16pos_NK_lung |
| ENSMMUG00000057791 | 0.00275829 | 0.58367928 | 0.468 | 0.555 | 1 CD16pos_NK_lung |
| ATP5F1C            | 0.00282997 | 1.02119806 | 0.305 | 0.335 | 1 CD16pos_NK_lung |
| ENSMMUG00000055627 | 0.00287681 | 0.30534381 | 0.369 | 0.55  | 1 CD16pos_NK_lung |
| UBXN1              | 0.00289382 | 0.93832631 | 0.326 | 0.367 | 1 CD16pos_NK_lung |
| ENSMMUG00000054210 | 0.00376562 | 1.28406527 | 0.26  | 0.27  | 1 CD16pos_NK_lung |
| SAP18              | 0.00385807 | 0.8097323  | 0.376 | 0.456 | 1 CD16pos_NK_lung |
| PPIB               | 0.00437838 | 0.68674094 | 0.446 | 0.571 | 1 CD16pos_NK_lung |

|                     |            |            |       |       |                   |
|---------------------|------------|------------|-------|-------|-------------------|
| FNTB                | 0.00475746 | 0.54345729 | 0.211 | 0.301 | 1 CD16pos_NK_lung |
| MOB2                | 0.00486616 | 0.4658676  | 0.322 | 0.481 | 1 CD16pos_NK_lung |
| KLRF1               | 0.00489257 | 0.47863722 | 0.535 | 0.669 | 1 CD16pos_NK_lung |
| MRPL23              | 0.00510264 | 0.88272274 | 0.318 | 0.354 | 1 CD16pos_NK_lung |
| ENSMMUG000000012019 | 0.005164   | 0.53837691 | 0.26  | 0.379 | 1 CD16pos_NK_lung |
| EIF4A1              | 0.00671542 | 0.53234188 | 0.19  | 0.268 | 1 CD16pos_NK_lung |
| CLEC2B              | 0.00779955 | 0.85478908 | 0.367 | 0.43  | 1 CD16pos_NK_lung |
| PYCARD              | 0.00825368 | 0.42857509 | 0.276 | 0.396 | 1 CD16pos_NK_lung |
| H2AFJ               | 0.00846751 | 0.93841738 | 0.318 | 0.358 | 1 CD16pos_NK_lung |
| TMEM243             | 0.00913128 | 0.58367802 | 0.244 | 0.35  | 1 CD16pos_NK_lung |
| NDUFB8              | 0.00953593 | 0.92866228 | 0.317 | 0.364 | 1 CD16pos_NK_lung |
| VAMP8               | 0.00980466 | 1.05178801 | 0.259 | 0.278 | 1 CD16pos_NK_lung |
| CAPG                | 0.01088936 | 0.98556932 | 0.269 | 0.281 | 1 CD16pos_NK_lung |
| GZMA                | 0.01227239 | 0.69269515 | 0.378 | 0.389 | 1 CD16pos_NK_lung |
| BTF3                | 0.01374818 | 0.3832353  | 0.529 | 0.644 | 1 CD16pos_NK_lung |
| GIMAP7              | 0.01418375 | 0.72021552 | 0.38  | 0.448 | 1 CD16pos_NK_lung |
| SNRPB               | 0.0147903  | 0.83648135 | 0.355 | 0.428 | 1 CD16pos_NK_lung |
| C11H12orf57         | 0.01535694 | 0.55636522 | 0.468 | 0.591 | 1 CD16pos_NK_lung |
| ARF1                | 0.01553008 | 0.42790283 | 0.356 | 0.531 | 1 CD16pos_NK_lung |
| SNRPD2              | 0.01631576 | 0.36921998 | 0.347 | 0.502 | 1 CD16pos_NK_lung |
| BUD23               | 0.01781559 | 0.55611206 | 0.244 | 0.341 | 1 CD16pos_NK_lung |
| ENSMMUG000000002075 | 0.01896222 | 0.96229163 | 0.253 | 0.269 | 1 CD16pos_NK_lung |
| NUDT1               | 0.0190707  | 0.94215328 | 0.251 | 0.262 | 1 CD16pos_NK_lung |
| NOSIP               | 0.01923121 | 0.54111366 | 0.203 | 0.277 | 1 CD16pos_NK_lung |
| RAN                 | 0.01950172 | 0.94954174 | 0.276 | 0.301 | 1 CD16pos_NK_lung |
| GLIPR2              | 0.01991568 | 0.60502918 | 0.44  | 0.557 | 1 CD16pos_NK_lung |
| CSNK2B              | 0.02032462 | 0.67088083 | 0.187 | 0.259 | 1 CD16pos_NK_lung |
| SPCS1               | 0.02082889 | 0.76009    | 0.343 | 0.395 | 1 CD16pos_NK_lung |
| SAFB                | 0.02194141 | 0.23776998 | 0.445 | 0.658 | 1 CD16pos_NK_lung |
| SEM1                | 0.02225112 | 0.76622898 | 0.36  | 0.434 | 1 CD16pos_NK_lung |
| SH3BGRL             | 0.02369381 | 0.86366285 | 0.339 | 0.403 | 1 CD16pos_NK_lung |
| PIK3R1              | 0.02510795 | 0.44419542 | 0.343 | 0.494 | 1 CD16pos_NK_lung |
| ENSMMUG000000002324 | 0.02621665 | 0.99576507 | 0.27  | 0.299 | 1 CD16pos_NK_lung |

|                   |            |            |       |       |                   |
|-------------------|------------|------------|-------|-------|-------------------|
| RBIS              | 0.02669137 | 0.48196132 | 0.276 | 0.389 | 1 CD16pos_NK_lung |
| RHOA              | 0.02682871 | 0.23517607 | 0.46  | 0.681 | 1 CD16pos_NK_lung |
| HMG3              | 0.02722764 | 0.55162425 | 0.24  | 0.333 | 1 CD16pos_NK_lung |
| ENSMUG00000051392 | 0.02835612 | 0.78640315 | 0.358 | 0.422 | 1 CD16pos_NK_lung |
| HSPE1             | 0.02978858 | 0.39925576 | 0.348 | 0.499 | 1 CD16pos_NK_lung |
| CD3D              | 0.03087261 | 0.75841249 | 0.385 | 0.435 | 1 CD16pos_NK_lung |
| ANP32A            | 0.03119101 | 0.64392324 | 0.226 | 0.315 | 1 CD16pos_NK_lung |
| THY1              | 0.03354696 | 0.38026886 | 0.338 | 0.469 | 1 CD16pos_NK_lung |
| POLR1D            | 0.03472168 | 0.48092851 | 0.277 | 0.389 | 1 CD16pos_NK_lung |
| RBX1              | 0.03487027 | 0.83635796 | 0.311 | 0.36  | 1 CD16pos_NK_lung |
| C14H11orf58       | 0.03520326 | 0.61839946 | 0.195 | 0.264 | 1 CD16pos_NK_lung |
| EIF3G             | 0.03631086 | 0.55550381 | 0.267 | 0.374 | 1 CD16pos_NK_lung |
| TXN               | 0.03662801 | 0.52898948 | 0.245 | 0.34  | 1 CD16pos_NK_lung |
| PSMA4             | 0.03989538 | 0.6187365  | 0.22  | 0.302 | 1 CD16pos_NK_lung |
| EIF4E2            | 0.04103808 | 0.66207524 | 0.19  | 0.256 | 1 CD16pos_NK_lung |
| ENSMUG00000065362 | 0.04250701 | 0.18647899 | 0.986 | 0.997 | 1 CD16pos_NK_lung |
| TMBIM6            | 0.04433018 | 0.32752253 | 0.375 | 0.535 | 1 CD16pos_NK_lung |
| MFNG              | 0.04434843 | 0.60474457 | 0.254 | 0.356 | 1 CD16pos_NK_lung |
| CD48              | 0.04437694 | 1.02292683 | 0.288 | 0.329 | 1 CD16pos_NK_lung |
| TMEM219           | 0.04965409 | 0.66298513 | 0.209 | 0.284 | 1 CD16pos_NK_lung |
| TRMT112           | 0.05025878 | 0.47620334 | 0.313 | 0.442 | 1 CD16pos_NK_lung |
| PGK1              | 0.05143395 | 0.68869683 | 0.192 | 0.259 | 1 CD16pos_NK_lung |
| PDAP1             | 0.05169806 | 0.62124511 | 0.258 | 0.358 | 1 CD16pos_NK_lung |
| MRPL11            | 0.05178377 | 0.64218352 | 0.212 | 0.289 | 1 CD16pos_NK_lung |
| ENSMUG00000018740 | 0.05370193 | 0.63460383 | 0.25  | 0.346 | 1 CD16pos_NK_lung |
| LCP1              | 0.06179037 | 0.35525884 | 0.588 | 0.761 | 1 CD16pos_NK_lung |
| SUMO1             | 0.06674244 | 0.77706907 | 0.328 | 0.391 | 1 CD16pos_NK_lung |
| ST13              | 0.06930878 | 0.54843495 | 0.256 | 0.351 | 1 CD16pos_NK_lung |
| ENSMUG00000053817 | 0.06947867 | 0.96422825 | 0.255 | 0.281 | 1 CD16pos_NK_lung |
| ENSMUG00000059289 | 0.07410498 | 0.7774574  | 0.193 | 0.26  | 1 CD16pos_NK_lung |
| COX4I1            | 0.07789233 | 0.22252414 | 0.653 | 0.82  | 1 CD16pos_NK_lung |
| S100A6            | 0.07915828 | 0.85862799 | 0.292 | 0.319 | 1 CD16pos_NK_lung |
| CTSS              | 0.08918464 | 0.46226289 | 0.352 | 0.502 | 1 CD16pos_NK_lung |

|                    |            |            |       |       |                   |
|--------------------|------------|------------|-------|-------|-------------------|
| ATP6V1FNB          | 0.09189157 | 0.96325063 | 0.233 | 0.254 | 1 CD16pos_NK_lung |
| PSMB3              | 0.09269711 | 0.69316006 | 0.2   | 0.266 | 1 CD16pos_NK_lung |
| MIF                | 0.09531461 | 0.63784047 | 0.257 | 0.35  | 1 CD16pos_NK_lung |
| EIF3J              | 0.09537407 | 0.7226275  | 0.214 | 0.286 | 1 CD16pos_NK_lung |
| PFDN2              | 0.09894058 | 0.66877802 | 0.221 | 0.298 | 1 CD16pos_NK_lung |
| PARK7              | 0.10200019 | 0.94577359 | 0.278 | 0.319 | 1 CD16pos_NK_lung |
| SNRPB2             | 0.1034814  | 0.68245477 | 0.234 | 0.316 | 1 CD16pos_NK_lung |
| BST2               | 0.10936555 | 0.45494781 | 0.503 | 0.651 | 1 CD16pos_NK_lung |
| SKP1               | 0.11236946 | 0.25901979 | 0.444 | 0.631 | 1 CD16pos_NK_lung |
| SEC62              | 0.11784241 | 0.58255096 | 0.225 | 0.294 | 1 CD16pos_NK_lung |
| ENSMMUG00000053392 | 0.12414169 | 0.69787291 | 0.357 | 0.438 | 1 CD16pos_NK_lung |
| DGKB               | 0.12904687 | 0.88518435 | 0.294 | 0.347 | 1 CD16pos_NK_lung |
| CD63               | 0.13454177 | 0.24043375 | 0.479 | 0.667 | 1 CD16pos_NK_lung |
| SSR2               | 0.13756542 | 0.5538643  | 0.415 | 0.535 | 1 CD16pos_NK_lung |
| SYF2               | 0.14043649 | 0.75780303 | 0.322 | 0.385 | 1 CD16pos_NK_lung |
| MAP1LC3B           | 0.14312299 | 0.54170354 | 0.282 | 0.385 | 1 CD16pos_NK_lung |
| AIMP1              | 0.15260694 | 0.96440628 | 0.253 | 0.288 | 1 CD16pos_NK_lung |
| ATG12              | 0.15447809 | 0.56537867 | 0.296 | 0.405 | 1 CD16pos_NK_lung |
| C3H7orf50          | 0.16352371 | 0.64464338 | 0.392 | 0.508 | 1 CD16pos_NK_lung |
| SF3B6              | 0.17258687 | 0.74077808 | 0.349 | 0.439 | 1 CD16pos_NK_lung |
| TMED9              | 0.17456058 | 0.73665088 | 0.202 | 0.263 | 1 CD16pos_NK_lung |
| SLIRP              | 0.17615355 | 0.43475983 | 0.354 | 0.499 | 1 CD16pos_NK_lung |
| SNU13              | 0.17899802 | 0.60543474 | 0.273 | 0.369 | 1 CD16pos_NK_lung |
| ETFB               | 0.20045942 | 0.75182644 | 0.225 | 0.297 | 1 CD16pos_NK_lung |
| TMEM50A            | 0.20142936 | 0.4986626  | 0.339 | 0.471 | 1 CD16pos_NK_lung |
| ENSMMUG00000064692 | 0.20672749 | 0.16992045 | 0.544 | 0.694 | 1 CD16pos_NK_lung |
| IRF3               | 0.20853377 | 0.77138374 | 0.212 | 0.277 | 1 CD16pos_NK_lung |
| MDH2               | 0.2098049  | 0.77315551 | 0.196 | 0.252 | 1 CD16pos_NK_lung |
| ND3                | 0.21039787 | 0.60490478 | 0.38  | 0.461 | 1 CD16pos_NK_lung |
| TXNIP              | 0.22041518 | 0.61285098 | 0.409 | 0.514 | 1 CD16pos_NK_lung |
| TWF2               | 0.22368208 | 0.7563473  | 0.225 | 0.298 | 1 CD16pos_NK_lung |
| ENSMMUG00000029026 | 0.22405798 | 0.876956   | 0.265 | 0.308 | 1 CD16pos_NK_lung |
| PDGFRA             | 0.2346888  | 0.31591941 | 0.564 | 0.721 | 1 CD16pos_NK_lung |



|                    |            |            |       |       |                   |
|--------------------|------------|------------|-------|-------|-------------------|
| RAMP1              | 0.23728183 | 0.67454872 | 0.224 | 0.282 | 1 CD16pos_NK_lung |
| OSTC               | 0.23971527 | 0.91726957 | 0.242 | 0.276 | 1 CD16pos_NK_lung |
| YJEFN3             | 0.24184661 | 0.78189521 | 0.323 | 0.403 | 1 CD16pos_NK_lung |
| CFDP1              | 0.24900663 | 0.64243675 | 0.361 | 0.444 | 1 CD16pos_NK_lung |
| GTF2H5             | 0.26156491 | 0.79903769 | 0.281 | 0.332 | 1 CD16pos_NK_lung |
| PDCD10             | 0.26552488 | 0.59841573 | 0.283 | 0.381 | 1 CD16pos_NK_lung |
| XCL1               | 0.26721818 | 0.85341471 | 0.248 | 0.318 | 1 CD16pos_NK_lung |
| ENSMMUG00000065104 | 0.28260479 | 0.75642787 | 0.312 | 0.379 | 1 CD16pos_NK_lung |
| DAD1               | 0.31096772 | 0.80834399 | 0.284 | 0.342 | 1 CD16pos_NK_lung |
| SHISA5             | 0.3138614  | 0.72892418 | 0.309 | 0.376 | 1 CD16pos_NK_lung |
| FKBP1A             | 0.31759577 | 0.7437321  | 0.282 | 0.333 | 1 CD16pos_NK_lung |
| VDAC2              | 0.32034673 | 0.79384934 | 0.302 | 0.37  | 1 CD16pos_NK_lung |
| CD3G               | 0.32963067 | 0.99760518 | 0.239 | 0.275 | 1 CD16pos_NK_lung |
| ENSMMUG00000038348 | 0.3378398  | 0.64905694 | 0.326 | 0.426 | 1 CD16pos_NK_lung |
| CD37               | 0.34280805 | 0.46742952 | 0.444 | 0.584 | 1 CD16pos_NK_lung |
| NDUFS6             | 0.34554214 | 1.01146835 | 0.225 | 0.258 | 1 CD16pos_NK_lung |
| NDUFB7             | 0.35185043 | 0.91050204 | 0.268 | 0.322 | 1 CD16pos_NK_lung |
| RASGRP2            | 0.3598401  | 0.63831201 | 0.28  | 0.368 | 1 CD16pos_NK_lung |
| BRK1               | 0.37404849 | 0.66072986 | 0.247 | 0.32  | 1 CD16pos_NK_lung |
| PSMB7              | 0.38187181 | 0.65372382 | 0.357 | 0.459 | 1 CD16pos_NK_lung |
| DCTN3              | 0.39321418 | 0.79487219 | 0.28  | 0.336 | 1 CD16pos_NK_lung |
| LCK                | 0.40917949 | 0.27495857 | 0.496 | 0.708 | 1 CD16pos_NK_lung |
| RTRAF              | 0.4139334  | 0.76893057 | 0.287 | 0.35  | 1 CD16pos_NK_lung |
| MPC2               | 0.41448633 | 0.97991752 | 0.228 | 0.264 | 1 CD16pos_NK_lung |
| GABARAP            | 0.41468922 | 0.583934   | 0.392 | 0.512 | 1 CD16pos_NK_lung |
| ZNF706             | 0.41959463 | 0.88107866 | 0.207 | 0.263 | 1 CD16pos_NK_lung |
| ENSMMUG00000007536 | 0.43123553 | 0.66559995 | 0.228 | 0.289 | 1 CD16pos_NK_lung |
| LAT2               | 0.43853996 | 0.7611456  | 0.312 | 0.391 | 1 CD16pos_NK_lung |
| EIF3I              | 0.44709754 | 0.92238267 | 0.242 | 0.286 | 1 CD16pos_NK_lung |
| BZW1               | 0.46979516 | 0.47493411 | 0.461 | 0.629 | 1 CD16pos_NK_lung |
| SNRPN              | 0.4764782  | 0.9692431  | 0.219 | 0.254 | 1 CD16pos_NK_lung |
| ENSMMUG00000012525 | 0.50697323 | 0.73918296 | 0.226 | 0.284 | 1 CD16pos_NK_lung |
| ENSMMUG00000055026 | 0.52539144 | 0.73306146 | 0.207 | 0.257 | 1 CD16pos_NK_lung |

|                    |            |            |       |       |                   |
|--------------------|------------|------------|-------|-------|-------------------|
| CAPZB              | 0.52800137 | 0.53670468 | 0.418 | 0.553 | 1 CD16pos_NK_lung |
| TPI1               | 0.55834573 | 0.70508097 | 0.333 | 0.427 | 1 CD16pos_NK_lung |
| SEPTIN7            | 0.56519608 | 0.19956625 | 0.646 | 0.844 | 1 CD16pos_NK_lung |
| WDR13              | 0.58155587 | 0.54438103 | 0.355 | 0.487 | 1 CD16pos_NK_lung |
| PTPN6              | 0.58426616 | 0.79639861 | 0.207 | 0.257 | 1 CD16pos_NK_lung |
| MAMU-A             | 0.59964845 | 0.22081193 | 0.67  | 0.862 | 1 CD16pos_NK_lung |
| TALDO1             | 0.60202065 | 0.80343532 | 0.28  | 0.347 | 1 CD16pos_NK_lung |
| PRR13              | 0.61337197 | 0.56041125 | 0.346 | 0.47  | 1 CD16pos_NK_lung |
| RPL37A             | 0.62593061 | 0.16803131 | 0.872 | 0.962 | 1 CD16pos_NK_lung |
| TNFRSF1B           | 0.6285712  | 0.80014605 | 0.274 | 0.358 | 1 CD16pos_NK_lung |
| SPCS2              | 0.64027189 | 0.73853828 | 0.312 | 0.399 | 1 CD16pos_NK_lung |
| ENSMMUG00000050829 | 0.66368173 | 0.38508238 | 0.508 | 0.675 | 1 CD16pos_NK_lung |
| ENSMMUG00000061128 | 0.66431885 | 0.64669187 | 0.339 | 0.441 | 1 CD16pos_NK_lung |
| ATP6V0E1           | 0.66584746 | 0.54404815 | 0.346 | 0.468 | 1 CD16pos_NK_lung |
| ENO1               | 0.6709677  | 0.5182871  | 0.369 | 0.506 | 1 CD16pos_NK_lung |
| DSTN               | 0.67860888 | 0.86722172 | 0.229 | 0.267 | 1 CD16pos_NK_lung |
| LGALS3             | 0.69392137 | 0.84102117 | 0.229 | 0.286 | 1 CD16pos_NK_lung |
| TOPORS             | 0.69771493 | 0.66829329 | 0.259 | 0.328 | 1 CD16pos_NK_lung |
| LAIR1              | 0.71680402 | 0.78226118 | 0.25  | 0.299 | 1 CD16pos_NK_lung |
| ANXA2              | 0.73111626 | 0.60293617 | 0.325 | 0.406 | 1 CD16pos_NK_lung |
| ENSMMUG00000064120 | 0.74108568 | 0.69711216 | 0.331 | 0.421 | 1 CD16pos_NK_lung |
| SNRPD1             | 0.74609174 | 0.9354786  | 0.218 | 0.259 | 1 CD16pos_NK_lung |
| TIGAR              | 0.75500086 | 0.66622005 | 0.327 | 0.426 | 1 CD16pos_NK_lung |
| CD320              | 0.75657909 | 0.85671936 | 0.249 | 0.302 | 1 CD16pos_NK_lung |
| AP2M1              | 0.7675921  | 0.76700113 | 0.23  | 0.286 | 1 CD16pos_NK_lung |
| ATP5IF1            | 0.78826201 | 0.70999752 | 0.286 | 0.356 | 1 CD16pos_NK_lung |
| PLAAT3             | 0.78945094 | 0.64662326 | 0.33  | 0.427 | 1 CD16pos_NK_lung |
| COX2               | 0.81066226 | 0.1118619  | 0.872 | 0.833 | 1 CD16pos_NK_lung |
| VDAC3              | 0.82547457 | 0.91063135 | 0.224 | 0.281 | 1 CD16pos_NK_lung |
| ENSMMUG00000029973 | 0.90807554 | 0.69648132 | 0.319 | 0.413 | 1 CD16pos_NK_lung |
| TPM3               | 0.94952997 | 0.25807631 | 0.536 | 0.732 | 1 CD16pos_NK_lung |
| CDC42              | 0.96729549 | 0.13996403 | 0.661 | 0.86  | 1 CD16pos_NK_lung |
| REXO2              | 0.97984682 | 0.59314389 | 0.344 | 0.45  | 1 CD16pos_NK_lung |

|                     |            |            |       |       |           |                  |
|---------------------|------------|------------|-------|-------|-----------|------------------|
| ENSMMUG00000018687  | 0.98314671 | 0.7055922  | 0.257 | 0.314 | 1         | CD16pos_NK_lung  |
| MRPL51              | 0.98699938 | 0.71252243 | 0.286 | 0.367 | 1         | CD16pos_NK_lung  |
| HBE1                | 0          | 4.87905018 | 0.587 | 0.025 | 0         | CD16pos_NK_UCBMC |
| HBA                 | 4.18E-287  | 4.48075446 | 0.619 | 0.056 | 1.48E-282 | CD16pos_NK_UCBMC |
| ENSMMUG000000051300 | 8.82E-135  | 2.06440044 | 0.944 | 0.358 | 3.12E-130 | CD16pos_NK_UCBMC |
| RSRP1               | 6.13E-133  | 1.95918292 | 0.817 | 0.232 | 2.17E-128 | CD16pos_NK_UCBMC |
| ANKRD44             | 4.63E-132  | 2.01607148 | 0.849 | 0.282 | 1.64E-127 | CD16pos_NK_UCBMC |
| PITPNC1             | 5.17E-130  | 1.84524129 | 0.939 | 0.392 | 1.83E-125 | CD16pos_NK_UCBMC |
| RPS20               | 8.86E-128  | 1.49065802 | 0.992 | 0.691 | 3.14E-123 | CD16pos_NK_UCBMC |
| FOXN3               | 2.93E-118  | 2.05687787 | 0.701 | 0.193 | 1.04E-113 | CD16pos_NK_UCBMC |
| SIK3                | 1.43E-112  | 1.82686418 | 0.767 | 0.239 | 5.07E-108 | CD16pos_NK_UCBMC |
| KLF12               | 9.84E-111  | 1.81170287 | 0.836 | 0.3   | 3.49E-106 | CD16pos_NK_UCBMC |
| RAP1GAP2            | 1.04E-110  | 1.97114989 | 0.706 | 0.201 | 3.69E-106 | CD16pos_NK_UCBMC |
| KLF6                | 3.55E-110  | 1.76981695 | 0.688 | 0.183 | 1.26E-105 | CD16pos_NK_UCBMC |
| VPS13B              | 7.78E-108  | 1.82926989 | 0.749 | 0.229 | 2.76E-103 | CD16pos_NK_UCBMC |
| CD247               | 4.86E-104  | 1.96336429 | 0.653 | 0.179 | 1.72E-99  | CD16pos_NK_UCBMC |
| STK39               | 1.17E-102  | 2.00467998 | 0.616 | 0.162 | 4.14E-98  | CD16pos_NK_UCBMC |
| LRRC8C              | 1.04E-101  | 2.06818485 | 0.521 | 0.115 | 3.69E-97  | CD16pos_NK_UCBMC |
| UTRN                | 3.89E-98   | 1.61193622 | 0.812 | 0.293 | 1.38E-93  | CD16pos_NK_UCBMC |
| NCOA3               | 1.82E-97   | 1.97936576 | 0.601 | 0.161 | 6.46E-93  | CD16pos_NK_UCBMC |
| PPP3CA              | 9.25E-97   | 1.72078639 | 0.743 | 0.245 | 3.28E-92  | CD16pos_NK_UCBMC |
| CELF2               | 1.85E-96   | 1.61740875 | 0.828 | 0.309 | 6.55E-92  | CD16pos_NK_UCBMC |
| PPP3CC              | 1.24E-95   | 1.8358756  | 0.627 | 0.171 | 4.40E-91  | CD16pos_NK_UCBMC |
| ENSMMUG000000056331 | 1.39E-95   | 2.4275631  | 0.365 | 0.06  | 4.92E-91  | CD16pos_NK_UCBMC |
| XYLT1               | 5.08E-95   | 2.24093898 | 0.471 | 0.101 | 1.80E-90  | CD16pos_NK_UCBMC |
| ZEB2                | 2.13E-93   | 1.63014852 | 0.82  | 0.31  | 7.56E-89  | CD16pos_NK_UCBMC |
| ARL15               | 8.44E-92   | 2.12897171 | 0.516 | 0.127 | 2.99E-87  | CD16pos_NK_UCBMC |
| PRKCA               | 9.11E-91   | 2.03027305 | 0.556 | 0.144 | 3.23E-86  | CD16pos_NK_UCBMC |
| ASH1L               | 6.22E-90   | 1.73868414 | 0.643 | 0.187 | 2.20E-85  | CD16pos_NK_UCBMC |
| VAV3                | 2.00E-89   | 1.85641601 | 0.653 | 0.201 | 7.10E-85  | CD16pos_NK_UCBMC |
| RAPGEF1             | 2.79E-89   | 2.03186038 | 0.45  | 0.097 | 9.89E-85  | CD16pos_NK_UCBMC |
| DNAJC1              | 5.30E-89   | 1.76500125 | 0.643 | 0.196 | 1.88E-84  | CD16pos_NK_UCBMC |
| STAG1               | 4.27E-88   | 1.87783523 | 0.616 | 0.182 | 1.51E-83  | CD16pos_NK_UCBMC |

|                    |          |            |       |       |          |                  |
|--------------------|----------|------------|-------|-------|----------|------------------|
| ARHGAP15           | 1.24E-86 | 1.54648558 | 0.847 | 0.375 | 4.41E-82 | CD16pos_NK_UCBMC |
| LRBA               | 9.44E-86 | 1.92322518 | 0.574 | 0.161 | 3.34E-81 | CD16pos_NK_UCBMC |
| RRAS2              | 1.05E-85 | 2.02603046 | 0.471 | 0.109 | 3.72E-81 | CD16pos_NK_UCBMC |
| SCAPER             | 3.77E-85 | 1.95204996 | 0.503 | 0.124 | 1.34E-80 | CD16pos_NK_UCBMC |
| ENSMMUG00000058532 | 4.53E-85 | 1.84489548 | 0.606 | 0.179 | 1.60E-80 | CD16pos_NK_UCBMC |
| SSH2               | 6.83E-85 | 1.6831516  | 0.669 | 0.214 | 2.42E-80 | CD16pos_NK_UCBMC |
| KANSL1             | 1.52E-84 | 1.98167871 | 0.474 | 0.111 | 5.37E-80 | CD16pos_NK_UCBMC |
| ZFAND3             | 2.06E-84 | 2.02361655 | 0.553 | 0.154 | 7.29E-80 | CD16pos_NK_UCBMC |
| PSMD12             | 2.07E-84 | 1.59059695 | 0.738 | 0.26  | 7.34E-80 | CD16pos_NK_UCBMC |
| OSBPL9             | 8.12E-84 | 1.93694312 | 0.519 | 0.134 | 2.88E-79 | CD16pos_NK_UCBMC |
| RABGAP1L           | 1.90E-83 | 1.63002041 | 0.712 | 0.248 | 6.73E-79 | CD16pos_NK_UCBMC |
| ENSMMUG00000006165 | 7.56E-83 | 1.68171524 | 0.688 | 0.238 | 2.68E-78 | CD16pos_NK_UCBMC |
| TMEM131            | 9.79E-83 | 2.30321162 | 0.386 | 0.079 | 3.47E-78 | CD16pos_NK_UCBMC |
| PRKCH              | 3.20E-82 | 1.36812071 | 0.902 | 0.459 | 1.13E-77 | CD16pos_NK_UCBMC |
| SETD2              | 9.99E-82 | 1.91284733 | 0.519 | 0.137 | 3.54E-77 | CD16pos_NK_UCBMC |
| ELMO1              | 1.30E-81 | 1.78807188 | 0.556 | 0.154 | 4.61E-77 | CD16pos_NK_UCBMC |
| KMT2C              | 2.96E-81 | 1.63867089 | 0.624 | 0.188 | 1.05E-76 | CD16pos_NK_UCBMC |
| GSK3B              | 9.41E-80 | 1.87335172 | 0.484 | 0.123 | 3.33E-75 | CD16pos_NK_UCBMC |
| TRPM7              | 3.20E-79 | 1.54558745 | 0.622 | 0.186 | 1.14E-74 | CD16pos_NK_UCBMC |
| CAMK1D             | 1.52E-78 | 1.98686136 | 0.458 | 0.113 | 5.37E-74 | CD16pos_NK_UCBMC |
| RICTOR             | 2.96E-78 | 2.00606209 | 0.46  | 0.114 | 1.05E-73 | CD16pos_NK_UCBMC |
| RPS6KA5            | 3.25E-78 | 2.04176836 | 0.41  | 0.09  | 1.15E-73 | CD16pos_NK_UCBMC |
| TM9SF3             | 4.41E-78 | 2.25732219 | 0.389 | 0.084 | 1.56E-73 | CD16pos_NK_UCBMC |
| RPL27A             | 6.71E-78 | 1.0484974  | 0.974 | 0.725 | 2.38E-73 | CD16pos_NK_UCBMC |
| ARID4B             | 9.56E-78 | 1.51088633 | 0.667 | 0.221 | 3.39E-73 | CD16pos_NK_UCBMC |
| ENSMMUG00000052424 | 3.65E-77 | 1.66068908 | 0.603 | 0.185 | 1.29E-72 | CD16pos_NK_UCBMC |
| MED13L             | 3.71E-76 | 1.72096765 | 0.55  | 0.158 | 1.32E-71 | CD16pos_NK_UCBMC |
| OSBPL8             | 4.32E-75 | 1.85149048 | 0.474 | 0.122 | 1.53E-70 | CD16pos_NK_UCBMC |
| POU2F1             | 5.10E-75 | 2.60016926 | 0.262 | 0.039 | 1.81E-70 | CD16pos_NK_UCBMC |
| KAT6B              | 8.56E-75 | 1.72764216 | 0.505 | 0.136 | 3.03E-70 | CD16pos_NK_UCBMC |
| PRKCB              | 9.81E-75 | 1.48630266 | 0.698 | 0.241 | 3.48E-70 | CD16pos_NK_UCBMC |
| SLCO3A1            | 3.48E-74 | 1.85676366 | 0.519 | 0.149 | 1.23E-69 | CD16pos_NK_UCBMC |
| QKI                | 3.70E-74 | 1.87931981 | 0.513 | 0.145 | 1.31E-69 | CD16pos_NK_UCBMC |

|                    |          |            |       |       |          |                  |
|--------------------|----------|------------|-------|-------|----------|------------------|
| EPC1               | 5.86E-74 | 1.46787392 | 0.659 | 0.219 | 2.08E-69 | CD16pos_NK_UCBMC |
| UTY                | 7.28E-74 | 2.27664112 | 0.304 | 0.053 | 2.58E-69 | CD16pos_NK_UCBMC |
| PNISR              | 1.99E-73 | 1.57623668 | 0.653 | 0.227 | 7.06E-69 | CD16pos_NK_UCBMC |
| FOXP1              | 2.31E-73 | 2.03424122 | 0.413 | 0.098 | 8.19E-69 | CD16pos_NK_UCBMC |
| ITCH               | 2.64E-73 | 1.48309552 | 0.688 | 0.244 | 9.35E-69 | CD16pos_NK_UCBMC |
| SKAP1              | 5.74E-73 | 1.2730148  | 0.91  | 0.525 | 2.03E-68 | CD16pos_NK_UCBMC |
| AAK1               | 1.27E-72 | 1.77794348 | 0.5   | 0.14  | 4.49E-68 | CD16pos_NK_UCBMC |
| PSPC1              | 2.43E-72 | 2.08231413 | 0.36  | 0.076 | 8.62E-68 | CD16pos_NK_UCBMC |
| FAF1               | 5.52E-72 | 1.90487311 | 0.421 | 0.101 | 1.96E-67 | CD16pos_NK_UCBMC |
| COG5               | 2.27E-71 | 1.85668227 | 0.479 | 0.13  | 8.04E-67 | CD16pos_NK_UCBMC |
| ZNF407             | 2.86E-71 | 2.15721165 | 0.368 | 0.08  | 1.01E-66 | CD16pos_NK_UCBMC |
| CDKAL1             | 9.21E-71 | 2.03659697 | 0.429 | 0.11  | 3.26E-66 | CD16pos_NK_UCBMC |
| CREBBP             | 1.02E-70 | 1.99097761 | 0.389 | 0.089 | 3.61E-66 | CD16pos_NK_UCBMC |
| SMCHD1             | 1.07E-70 | 1.65912945 | 0.532 | 0.156 | 3.78E-66 | CD16pos_NK_UCBMC |
| TNKS               | 1.50E-70 | 2.25284393 | 0.354 | 0.076 | 5.31E-66 | CD16pos_NK_UCBMC |
| NCOA2              | 1.99E-70 | 1.89878639 | 0.431 | 0.108 | 7.04E-66 | CD16pos_NK_UCBMC |
| FBXO34             | 4.12E-70 | 1.77077323 | 0.497 | 0.141 | 1.46E-65 | CD16pos_NK_UCBMC |
| ENSMMUG00000065175 | 5.04E-70 | 1.97089685 | 0.415 | 0.102 | 1.79E-65 | CD16pos_NK_UCBMC |
| DCP1A              | 5.18E-70 | 2.33282264 | 0.294 | 0.053 | 1.84E-65 | CD16pos_NK_UCBMC |
| ARID1B             | 9.58E-70 | 1.80395663 | 0.479 | 0.131 | 3.39E-65 | CD16pos_NK_UCBMC |
| FBXW7              | 1.09E-69 | 1.63591009 | 0.55  | 0.168 | 3.84E-65 | CD16pos_NK_UCBMC |
| USP15              | 6.38E-69 | 1.56369302 | 0.643 | 0.229 | 2.26E-64 | CD16pos_NK_UCBMC |
| CBLB               | 1.64E-68 | 1.41877616 | 0.741 | 0.298 | 5.81E-64 | CD16pos_NK_UCBMC |
| SPPL3              | 3.73E-68 | 2.21806282 | 0.349 | 0.077 | 1.32E-63 | CD16pos_NK_UCBMC |
| UHRF1BP1L          | 7.25E-68 | 2.30720276 | 0.291 | 0.053 | 2.57E-63 | CD16pos_NK_UCBMC |
| MCTP2              | 5.21E-67 | 1.79611552 | 0.447 | 0.12  | 1.85E-62 | CD16pos_NK_UCBMC |
| UBASH3B            | 1.31E-66 | 1.63879692 | 0.569 | 0.19  | 4.65E-62 | CD16pos_NK_UCBMC |
| GRK5               | 1.35E-66 | 1.66771681 | 0.545 | 0.171 | 4.80E-62 | CD16pos_NK_UCBMC |
| OPA1               | 2.40E-66 | 2.18186987 | 0.312 | 0.062 | 8.50E-62 | CD16pos_NK_UCBMC |
| SYNE1              | 3.56E-66 | 1.51022252 | 0.608 | 0.209 | 1.26E-61 | CD16pos_NK_UCBMC |
| MAPRE2             | 3.71E-66 | 1.34963634 | 0.667 | 0.238 | 1.31E-61 | CD16pos_NK_UCBMC |
| PTBP2              | 1.46E-65 | 1.95650734 | 0.365 | 0.084 | 5.17E-61 | CD16pos_NK_UCBMC |
| HEG1               | 1.54E-65 | 1.73715198 | 0.466 | 0.129 | 5.47E-61 | CD16pos_NK_UCBMC |

|         |          |            |       |       |          |                  |
|---------|----------|------------|-------|-------|----------|------------------|
| CDC14A  | 4.17E-65 | 1.88074322 | 0.397 | 0.099 | 1.48E-60 | CD16pos_NK_UCBMC |
| CUL3    | 5.32E-65 | 1.76073936 | 0.418 | 0.107 | 1.88E-60 | CD16pos_NK_UCBMC |
| CHST11  | 6.39E-65 | 1.63174058 | 0.46  | 0.127 | 2.27E-60 | CD16pos_NK_UCBMC |
| MTSS1   | 6.81E-65 | 1.48159333 | 0.495 | 0.142 | 2.41E-60 | CD16pos_NK_UCBMC |
| KDM6A   | 7.78E-65 | 1.72915296 | 0.46  | 0.129 | 2.76E-60 | CD16pos_NK_UCBMC |
| EFR3A   | 1.08E-64 | 1.98978637 | 0.323 | 0.067 | 3.84E-60 | CD16pos_NK_UCBMC |
| TOX     | 1.59E-64 | 1.6008192  | 0.537 | 0.169 | 5.63E-60 | CD16pos_NK_UCBMC |
| COP1    | 1.79E-64 | 2.05853808 | 0.376 | 0.092 | 6.36E-60 | CD16pos_NK_UCBMC |
| SENP5   | 3.20E-64 | 2.11186077 | 0.323 | 0.068 | 1.13E-59 | CD16pos_NK_UCBMC |
| KDM4C   | 1.67E-63 | 1.70667253 | 0.413 | 0.106 | 5.93E-59 | CD16pos_NK_UCBMC |
| DOCK8   | 2.04E-63 | 1.44071763 | 0.638 | 0.225 | 7.24E-59 | CD16pos_NK_UCBMC |
| ZNF292  | 2.33E-63 | 1.54771578 | 0.529 | 0.166 | 8.27E-59 | CD16pos_NK_UCBMC |
| CELF1   | 2.55E-63 | 1.83695472 | 0.389 | 0.097 | 9.04E-59 | CD16pos_NK_UCBMC |
| YEATS2  | 3.59E-63 | 1.73001068 | 0.437 | 0.119 | 1.27E-58 | CD16pos_NK_UCBMC |
| ZNF609  | 4.28E-63 | 1.70310822 | 0.444 | 0.123 | 1.52E-58 | CD16pos_NK_UCBMC |
| MAN1A2  | 1.01E-62 | 1.9673836  | 0.336 | 0.074 | 3.56E-58 | CD16pos_NK_UCBMC |
| ARIH1   | 1.54E-62 | 1.80073252 | 0.407 | 0.106 | 5.47E-58 | CD16pos_NK_UCBMC |
| RPL13A  | 2.66E-62 | 0.82132274 | 1     | 0.898 | 9.41E-58 | CD16pos_NK_UCBMC |
| BIRC6   | 3.18E-62 | 1.49510341 | 0.563 | 0.187 | 1.13E-57 | CD16pos_NK_UCBMC |
| WDR7    | 4.10E-62 | 1.9358199  | 0.357 | 0.084 | 1.45E-57 | CD16pos_NK_UCBMC |
| TBC1D5  | 4.35E-62 | 1.64004722 | 0.529 | 0.171 | 1.54E-57 | CD16pos_NK_UCBMC |
| PSME4   | 6.43E-62 | 1.65100515 | 0.421 | 0.112 | 2.28E-57 | CD16pos_NK_UCBMC |
| ANKIB1  | 7.71E-62 | 1.7727386  | 0.413 | 0.11  | 2.73E-57 | CD16pos_NK_UCBMC |
| CCNL1   | 9.22E-62 | 1.32254633 | 0.558 | 0.177 | 3.27E-57 | CD16pos_NK_UCBMC |
| RAB1A   | 1.21E-61 | 1.76533552 | 0.41  | 0.108 | 4.29E-57 | CD16pos_NK_UCBMC |
| SOS1    | 1.37E-61 | 1.83417557 | 0.378 | 0.093 | 4.84E-57 | CD16pos_NK_UCBMC |
| ITSN2   | 1.47E-61 | 1.62904834 | 0.452 | 0.127 | 5.21E-57 | CD16pos_NK_UCBMC |
| RNGTT   | 2.74E-61 | 1.86829157 | 0.349 | 0.081 | 9.72E-57 | CD16pos_NK_UCBMC |
| SLC38A1 | 6.98E-61 | 1.43017443 | 0.524 | 0.162 | 2.47E-56 | CD16pos_NK_UCBMC |
| GOLGA4  | 1.34E-60 | 1.6174504  | 0.413 | 0.109 | 4.75E-56 | CD16pos_NK_UCBMC |
| RASSF3  | 2.06E-60 | 1.60776005 | 0.373 | 0.092 | 7.30E-56 | CD16pos_NK_UCBMC |
| KAT6A   | 3.51E-60 | 1.61737973 | 0.442 | 0.125 | 1.25E-55 | CD16pos_NK_UCBMC |
| GNG2    | 6.33E-60 | 1.40457712 | 0.635 | 0.24  | 2.24E-55 | CD16pos_NK_UCBMC |

|          |          |            |       |       |          |                  |
|----------|----------|------------|-------|-------|----------|------------------|
| INPP4A   | 7.51E-60 | 1.64307538 | 0.442 | 0.125 | 2.66E-55 | CD16pos_NK_UCBMC |
| IKZF1    | 8.81E-60 | 1.44893626 | 0.598 | 0.213 | 3.12E-55 | CD16pos_NK_UCBMC |
| PICALM   | 1.37E-59 | 1.33331102 | 0.622 | 0.224 | 4.85E-55 | CD16pos_NK_UCBMC |
| TAF3     | 1.63E-59 | 1.85590686 | 0.354 | 0.085 | 5.78E-55 | CD16pos_NK_UCBMC |
| RFX3     | 1.80E-59 | 1.8056302  | 0.394 | 0.104 | 6.38E-55 | CD16pos_NK_UCBMC |
| TASP1    | 1.86E-59 | 1.8671145  | 0.365 | 0.091 | 6.60E-55 | CD16pos_NK_UCBMC |
| UBE2H    | 1.96E-59 | 1.62641117 | 0.431 | 0.12  | 6.94E-55 | CD16pos_NK_UCBMC |
| PAN3     | 3.61E-59 | 1.7832279  | 0.437 | 0.126 | 1.28E-54 | CD16pos_NK_UCBMC |
| PLCB1    | 4.37E-59 | 1.62787073 | 0.479 | 0.145 | 1.55E-54 | CD16pos_NK_UCBMC |
| JMY      | 5.20E-59 | 1.80667256 | 0.354 | 0.086 | 1.84E-54 | CD16pos_NK_UCBMC |
| PUM1     | 6.45E-59 | 1.51872764 | 0.476 | 0.143 | 2.28E-54 | CD16pos_NK_UCBMC |
| MEMO1    | 1.03E-58 | 1.89229815 | 0.347 | 0.083 | 3.64E-54 | CD16pos_NK_UCBMC |
| FYN      | 1.16E-58 | 1.27553372 | 0.63  | 0.227 | 4.10E-54 | CD16pos_NK_UCBMC |
| PPP1R12A | 1.81E-58 | 1.33620066 | 0.683 | 0.27  | 6.40E-54 | CD16pos_NK_UCBMC |
| ARID2    | 1.94E-58 | 1.6927723  | 0.397 | 0.106 | 6.89E-54 | CD16pos_NK_UCBMC |
| JMJD1C   | 3.25E-58 | 1.3460919  | 0.571 | 0.2   | 1.15E-53 | CD16pos_NK_UCBMC |
| LCOR     | 3.46E-58 | 1.7038953  | 0.376 | 0.095 | 1.23E-53 | CD16pos_NK_UCBMC |
| VTI1A    | 3.96E-58 | 1.57717097 | 0.447 | 0.131 | 1.40E-53 | CD16pos_NK_UCBMC |
| SORL1    | 4.87E-58 | 1.48873038 | 0.476 | 0.143 | 1.73E-53 | CD16pos_NK_UCBMC |
| STIM1    | 5.14E-58 | 1.7690053  | 0.418 | 0.118 | 1.82E-53 | CD16pos_NK_UCBMC |
| CDK17    | 6.55E-58 | 1.5218293  | 0.5   | 0.158 | 2.32E-53 | CD16pos_NK_UCBMC |
| ITFG1    | 1.08E-57 | 2.07725413 | 0.331 | 0.079 | 3.82E-53 | CD16pos_NK_UCBMC |
| THEMIS   | 1.27E-57 | 2.08766946 | 0.307 | 0.067 | 4.52E-53 | CD16pos_NK_UCBMC |
| TNIK     | 1.40E-57 | 1.36750378 | 0.651 | 0.262 | 4.96E-53 | CD16pos_NK_UCBMC |
| FBXL17   | 2.18E-57 | 1.84707235 | 0.378 | 0.099 | 7.72E-53 | CD16pos_NK_UCBMC |
| LUC7L3   | 2.31E-57 | 1.47705725 | 0.471 | 0.143 | 8.17E-53 | CD16pos_NK_UCBMC |
| CNOT4    | 2.92E-57 | 1.5952094  | 0.429 | 0.121 | 1.03E-52 | CD16pos_NK_UCBMC |
| DENND1A  | 3.17E-57 | 2.1878394  | 0.278 | 0.057 | 1.12E-52 | CD16pos_NK_UCBMC |
| MAML2    | 5.48E-57 | 1.53344422 | 0.54  | 0.186 | 1.94E-52 | CD16pos_NK_UCBMC |
| WAC      | 7.24E-57 | 1.358517   | 0.556 | 0.189 | 2.57E-52 | CD16pos_NK_UCBMC |
| PTPRA    | 8.89E-57 | 1.87064057 | 0.354 | 0.089 | 3.15E-52 | CD16pos_NK_UCBMC |
| LPP      | 1.17E-56 | 1.76914032 | 0.437 | 0.131 | 4.15E-52 | CD16pos_NK_UCBMC |
| FAM172A  | 1.50E-56 | 1.56450316 | 0.534 | 0.187 | 5.31E-52 | CD16pos_NK_UCBMC |

|         |          |            |       |       |          |                  |
|---------|----------|------------|-------|-------|----------|------------------|
| SMG6    | 2.18E-56 | 1.50339656 | 0.452 | 0.135 | 7.73E-52 | CD16pos_NK_UCBMC |
| DOCK2   | 3.07E-56 | 1.23669005 | 0.688 | 0.278 | 1.09E-51 | CD16pos_NK_UCBMC |
| TRA2A   | 3.12E-56 | 1.38723839 | 0.627 | 0.245 | 1.11E-51 | CD16pos_NK_UCBMC |
| ABLM1   | 4.81E-56 | 1.45423824 | 0.556 | 0.195 | 1.71E-51 | CD16pos_NK_UCBMC |
| WDFY1   | 1.08E-55 | 2.11918441 | 0.275 | 0.057 | 3.82E-51 | CD16pos_NK_UCBMC |
| IQGAP2  | 1.32E-55 | 1.46360471 | 0.487 | 0.154 | 4.69E-51 | CD16pos_NK_UCBMC |
| BTBD9   | 1.36E-55 | 1.86040152 | 0.336 | 0.082 | 4.83E-51 | CD16pos_NK_UCBMC |
| MON2    | 1.47E-55 | 1.91867271 | 0.32  | 0.075 | 5.21E-51 | CD16pos_NK_UCBMC |
| TNRC6B  | 1.51E-55 | 1.30798941 | 0.614 | 0.231 | 5.35E-51 | CD16pos_NK_UCBMC |
| PLCL2   | 1.98E-55 | 1.7947618  | 0.386 | 0.105 | 7.03E-51 | CD16pos_NK_UCBMC |
| DYM     | 2.59E-55 | 1.76781774 | 0.36  | 0.093 | 9.18E-51 | CD16pos_NK_UCBMC |
| MYO1E   | 2.74E-55 | 1.37177511 | 0.69  | 0.29  | 9.70E-51 | CD16pos_NK_UCBMC |
| THADA   | 4.61E-55 | 1.75425992 | 0.328 | 0.078 | 1.63E-50 | CD16pos_NK_UCBMC |
| MGAT5   | 5.49E-55 | 1.85679368 | 0.36  | 0.094 | 1.94E-50 | CD16pos_NK_UCBMC |
| BABAM2  | 8.20E-55 | 1.26411023 | 0.627 | 0.236 | 2.90E-50 | CD16pos_NK_UCBMC |
| MKLN1   | 1.01E-54 | 1.60996865 | 0.41  | 0.117 | 3.59E-50 | CD16pos_NK_UCBMC |
| GPATCH8 | 1.23E-54 | 1.65976228 | 0.384 | 0.104 | 4.37E-50 | CD16pos_NK_UCBMC |
| DNAJC2  | 1.53E-54 | 1.78513309 | 0.347 | 0.087 | 5.42E-50 | CD16pos_NK_UCBMC |
| FAM102B | 1.63E-54 | 1.74142395 | 0.307 | 0.069 | 5.79E-50 | CD16pos_NK_UCBMC |
| CAB39   | 1.99E-54 | 1.5368329  | 0.455 | 0.141 | 7.04E-50 | CD16pos_NK_UCBMC |
| SCAF8   | 2.03E-54 | 1.7958842  | 0.37  | 0.099 | 7.20E-50 | CD16pos_NK_UCBMC |
| FOXO1   | 3.40E-54 | 2.03986805 | 0.317 | 0.076 | 1.20E-49 | CD16pos_NK_UCBMC |
| ANKRD17 | 4.76E-54 | 1.77727568 | 0.37  | 0.1   | 1.69E-49 | CD16pos_NK_UCBMC |
| EIF4G3  | 5.61E-54 | 1.91925868 | 0.312 | 0.073 | 1.99E-49 | CD16pos_NK_UCBMC |
| PIAS1   | 6.67E-54 | 1.45949206 | 0.5   | 0.166 | 2.36E-49 | CD16pos_NK_UCBMC |
| SFSWAP  | 7.18E-54 | 2.03760515 | 0.272 | 0.057 | 2.54E-49 | CD16pos_NK_UCBMC |
| NCOR1   | 7.27E-54 | 1.59533429 | 0.429 | 0.129 | 2.58E-49 | CD16pos_NK_UCBMC |
| BCL2    | 9.97E-54 | 2.46501208 | 0.278 | 0.06  | 3.53E-49 | CD16pos_NK_UCBMC |
| ABCC1   | 1.73E-53 | 2.00602527 | 0.278 | 0.06  | 6.14E-49 | CD16pos_NK_UCBMC |
| RPL23A  | 2.62E-53 | 0.70140248 | 0.997 | 0.903 | 9.29E-49 | CD16pos_NK_UCBMC |
| FNBP1   | 3.23E-53 | 1.14643626 | 0.749 | 0.344 | 1.14E-48 | CD16pos_NK_UCBMC |
| USP34   | 5.14E-53 | 1.44645902 | 0.54  | 0.19  | 1.82E-48 | CD16pos_NK_UCBMC |
| PHLPP1  | 5.38E-53 | 1.99079326 | 0.312 | 0.075 | 1.91E-48 | CD16pos_NK_UCBMC |



|                   |          |            |       |       |          |                  |
|-------------------|----------|------------|-------|-------|----------|------------------|
| TRIM33            | 6.12E-53 | 2.13463203 | 0.283 | 0.063 | 2.17E-48 | CD16pos_NK_UCBMC |
| GOLPH3            | 7.87E-53 | 1.75931917 | 0.354 | 0.093 | 2.79E-48 | CD16pos_NK_UCBMC |
| HELZ              | 9.05E-53 | 1.56233531 | 0.444 | 0.139 | 3.21E-48 | CD16pos_NK_UCBMC |
| LMBRD1            | 1.47E-52 | 1.71271537 | 0.365 | 0.098 | 5.20E-48 | CD16pos_NK_UCBMC |
| RNF38             | 4.08E-52 | 1.77531566 | 0.357 | 0.096 | 1.45E-47 | CD16pos_NK_UCBMC |
| TNRC6A            | 5.74E-52 | 1.5377742  | 0.399 | 0.114 | 2.04E-47 | CD16pos_NK_UCBMC |
| UBR1              | 7.09E-52 | 1.68230023 | 0.368 | 0.101 | 2.51E-47 | CD16pos_NK_UCBMC |
| LONP2             | 1.17E-51 | 1.91259969 | 0.296 | 0.069 | 4.14E-47 | CD16pos_NK_UCBMC |
| TOX2              | 2.26E-51 | 2.0094623  | 0.257 | 0.053 | 8.00E-47 | CD16pos_NK_UCBMC |
| ACAP2             | 2.55E-51 | 1.30644343 | 0.54  | 0.192 | 9.03E-47 | CD16pos_NK_UCBMC |
| AGO3              | 2.55E-51 | 1.78699981 | 0.341 | 0.089 | 9.05E-47 | CD16pos_NK_UCBMC |
| PCM1              | 3.20E-51 | 1.47575229 | 0.392 | 0.111 | 1.13E-46 | CD16pos_NK_UCBMC |
| BRAF              | 3.30E-51 | 1.53622299 | 0.349 | 0.091 | 1.17E-46 | CD16pos_NK_UCBMC |
| TP53BP1           | 3.35E-51 | 1.87629991 | 0.317 | 0.079 | 1.19E-46 | CD16pos_NK_UCBMC |
| NRF1              | 4.64E-51 | 2.06865005 | 0.257 | 0.054 | 1.65E-46 | CD16pos_NK_UCBMC |
| GMDS              | 4.98E-51 | 1.97989723 | 0.307 | 0.075 | 1.76E-46 | CD16pos_NK_UCBMC |
| SLC12A6           | 6.83E-51 | 1.71101605 | 0.344 | 0.091 | 2.42E-46 | CD16pos_NK_UCBMC |
| PDGFD             | 7.64E-51 | 1.29474452 | 0.701 | 0.324 | 2.71E-46 | CD16pos_NK_UCBMC |
| ME2               | 9.31E-51 | 1.81953387 | 0.347 | 0.093 | 3.30E-46 | CD16pos_NK_UCBMC |
| PRPF40A           | 1.49E-50 | 1.43553873 | 0.442 | 0.139 | 5.27E-46 | CD16pos_NK_UCBMC |
| FBXO11            | 1.82E-50 | 1.697685   | 0.354 | 0.096 | 6.45E-46 | CD16pos_NK_UCBMC |
| ASCC3             | 2.17E-50 | 1.52914998 | 0.384 | 0.108 | 7.69E-46 | CD16pos_NK_UCBMC |
| PCNX1             | 3.19E-50 | 1.86221995 | 0.294 | 0.069 | 1.13E-45 | CD16pos_NK_UCBMC |
| DLG1              | 3.22E-50 | 1.70303316 | 0.362 | 0.101 | 1.14E-45 | CD16pos_NK_UCBMC |
| ENSMUG00000008587 | 3.54E-50 | 1.60803747 | 0.405 | 0.121 | 1.26E-45 | CD16pos_NK_UCBMC |
| RUNX1             | 3.65E-50 | 1.41306116 | 0.471 | 0.155 | 1.29E-45 | CD16pos_NK_UCBMC |
| GPR107            | 4.70E-50 | 1.92881742 | 0.286 | 0.067 | 1.66E-45 | CD16pos_NK_UCBMC |
| DOCK11            | 4.79E-50 | 1.46968288 | 0.471 | 0.158 | 1.70E-45 | CD16pos_NK_UCBMC |
| NFATC3            | 4.87E-50 | 1.31770374 | 0.563 | 0.208 | 1.73E-45 | CD16pos_NK_UCBMC |
| MARK3             | 5.65E-50 | 1.74719409 | 0.31  | 0.076 | 2.00E-45 | CD16pos_NK_UCBMC |
| MACF1             | 6.41E-50 | 1.2740622  | 0.585 | 0.223 | 2.27E-45 | CD16pos_NK_UCBMC |
| PELI1             | 7.84E-50 | 1.78874255 | 0.288 | 0.068 | 2.78E-45 | CD16pos_NK_UCBMC |
| JAK1              | 1.01E-49 | 0.99453931 | 0.847 | 0.45  | 3.60E-45 | CD16pos_NK_UCBMC |

|         |          |            |       |       |          |                  |
|---------|----------|------------|-------|-------|----------|------------------|
| PIK3R5  | 1.14E-49 | 1.64457535 | 0.418 | 0.132 | 4.04E-45 | CD16pos_NK_UCBMC |
| SLC9A9  | 1.31E-49 | 1.33597903 | 0.529 | 0.191 | 4.65E-45 | CD16pos_NK_UCBMC |
| LYST    | 1.55E-49 | 1.24088316 | 0.582 | 0.223 | 5.48E-45 | CD16pos_NK_UCBMC |
| PRDM2   | 1.73E-49 | 1.87203651 | 0.296 | 0.071 | 6.14E-45 | CD16pos_NK_UCBMC |
| FOXJ3   | 1.93E-49 | 2.12238497 | 0.288 | 0.07  | 6.83E-45 | CD16pos_NK_UCBMC |
| TLE4    | 3.14E-49 | 1.80802703 | 0.288 | 0.068 | 1.11E-44 | CD16pos_NK_UCBMC |
| TIMM23  | 3.18E-49 | 2.10856856 | 0.257 | 0.056 | 1.13E-44 | CD16pos_NK_UCBMC |
| SENP6   | 3.28E-49 | 1.47306186 | 0.402 | 0.12  | 1.16E-44 | CD16pos_NK_UCBMC |
| GALNT1  | 4.02E-49 | 1.60552466 | 0.344 | 0.092 | 1.42E-44 | CD16pos_NK_UCBMC |
| MBNL1   | 4.06E-49 | 1.00028998 | 0.907 | 0.578 | 1.44E-44 | CD16pos_NK_UCBMC |
| RAF1    | 4.07E-49 | 1.78743383 | 0.296 | 0.071 | 1.44E-44 | CD16pos_NK_UCBMC |
| PACS1   | 4.09E-49 | 1.85657585 | 0.344 | 0.095 | 1.45E-44 | CD16pos_NK_UCBMC |
| CDK6    | 4.34E-49 | 1.94359662 | 0.278 | 0.064 | 1.54E-44 | CD16pos_NK_UCBMC |
| SP100   | 5.98E-49 | 1.24729981 | 0.669 | 0.288 | 2.12E-44 | CD16pos_NK_UCBMC |
| INPP5D  | 8.73E-49 | 1.16080827 | 0.516 | 0.178 | 3.09E-44 | CD16pos_NK_UCBMC |
| DOCK10  | 9.29E-49 | 1.30903457 | 0.54  | 0.2   | 3.29E-44 | CD16pos_NK_UCBMC |
| RASA2   | 1.07E-48 | 1.54907278 | 0.45  | 0.15  | 3.79E-44 | CD16pos_NK_UCBMC |
| PPP2R5E | 2.11E-48 | 1.84627444 | 0.357 | 0.101 | 7.47E-44 | CD16pos_NK_UCBMC |
| TTC17   | 2.18E-48 | 1.57645346 | 0.362 | 0.102 | 7.71E-44 | CD16pos_NK_UCBMC |
| HIPK2   | 2.22E-48 | 1.85460187 | 0.302 | 0.075 | 7.85E-44 | CD16pos_NK_UCBMC |
| KIF13B  | 2.23E-48 | 1.86639618 | 0.272 | 0.062 | 7.89E-44 | CD16pos_NK_UCBMC |
| HECTD4  | 2.30E-48 | 2.01530594 | 0.251 | 0.055 | 8.16E-44 | CD16pos_NK_UCBMC |
| ATAD2B  | 2.53E-48 | 1.83485992 | 0.333 | 0.091 | 8.96E-44 | CD16pos_NK_UCBMC |
| GLCC11  | 3.06E-48 | 1.61578362 | 0.349 | 0.096 | 1.08E-43 | CD16pos_NK_UCBMC |
| CDK13   | 3.32E-48 | 1.39880646 | 0.413 | 0.127 | 1.18E-43 | CD16pos_NK_UCBMC |
| COX3    | 3.67E-48 | 0.83365832 | 0.979 | 0.827 | 1.30E-43 | CD16pos_NK_UCBMC |
| ESYT2   | 3.72E-48 | 1.53835699 | 0.386 | 0.115 | 1.32E-43 | CD16pos_NK_UCBMC |
| EPC2    | 4.26E-48 | 1.96332832 | 0.278 | 0.065 | 1.51E-43 | CD16pos_NK_UCBMC |
| AFF3    | 4.91E-48 | 1.74623185 | 0.362 | 0.105 | 1.74E-43 | CD16pos_NK_UCBMC |
| FAM126A | 7.34E-48 | 2.06336893 | 0.296 | 0.075 | 2.60E-43 | CD16pos_NK_UCBMC |
| HERC4   | 1.13E-47 | 1.62316614 | 0.347 | 0.096 | 3.99E-43 | CD16pos_NK_UCBMC |
| GIT2    | 1.24E-47 | 1.89774985 | 0.296 | 0.075 | 4.40E-43 | CD16pos_NK_UCBMC |
| SEC24B  | 1.30E-47 | 1.9539189  | 0.275 | 0.065 | 4.59E-43 | CD16pos_NK_UCBMC |

|                    |          |            |       |       |          |                  |
|--------------------|----------|------------|-------|-------|----------|------------------|
| CCNT2              | 1.53E-47 | 2.1089711  | 0.251 | 0.056 | 5.44E-43 | CD16pos_NK_UCBMC |
| ENSMMUG00000030448 | 1.72E-47 | 1.61402055 | 0.349 | 0.097 | 6.10E-43 | CD16pos_NK_UCBMC |
| SLC35A3            | 2.16E-47 | 1.6962124  | 0.331 | 0.089 | 7.64E-43 | CD16pos_NK_UCBMC |
| KCNQ5              | 2.20E-47 | 2.03165961 | 0.296 | 0.076 | 7.80E-43 | CD16pos_NK_UCBMC |
| TRPS1              | 2.38E-47 | 1.70611349 | 0.347 | 0.098 | 8.43E-43 | CD16pos_NK_UCBMC |
| TBL1XR1            | 2.63E-47 | 1.60759949 | 0.378 | 0.114 | 9.34E-43 | CD16pos_NK_UCBMC |
| ROCK1              | 3.10E-47 | 1.25862038 | 0.524 | 0.188 | 1.10E-42 | CD16pos_NK_UCBMC |
| MAP4K4             | 3.83E-47 | 1.46432943 | 0.341 | 0.093 | 1.36E-42 | CD16pos_NK_UCBMC |
| ITPR2              | 7.30E-47 | 1.43808406 | 0.394 | 0.12  | 2.59E-42 | CD16pos_NK_UCBMC |
| RIN3               | 8.10E-47 | 1.37238915 | 0.429 | 0.137 | 2.87E-42 | CD16pos_NK_UCBMC |
| ZFC3H1             | 8.69E-47 | 1.50969463 | 0.357 | 0.101 | 3.08E-42 | CD16pos_NK_UCBMC |
| EXOC4              | 1.07E-46 | 1.57920405 | 0.399 | 0.125 | 3.78E-42 | CD16pos_NK_UCBMC |
| BBX                | 1.91E-46 | 1.40111076 | 0.426 | 0.136 | 6.77E-42 | CD16pos_NK_UCBMC |
| RLF                | 2.13E-46 | 1.51018274 | 0.347 | 0.097 | 7.54E-42 | CD16pos_NK_UCBMC |
| PHIP               | 3.78E-46 | 1.42867844 | 0.426 | 0.138 | 1.34E-41 | CD16pos_NK_UCBMC |
| HIP1               | 6.92E-46 | 1.9685217  | 0.325 | 0.091 | 2.45E-41 | CD16pos_NK_UCBMC |
| ERBIN              | 8.50E-46 | 1.40020309 | 0.444 | 0.148 | 3.01E-41 | CD16pos_NK_UCBMC |
| USP47              | 8.78E-46 | 1.40756365 | 0.444 | 0.15  | 3.11E-41 | CD16pos_NK_UCBMC |
| ZNF92              | 8.83E-46 | 1.94183053 | 0.286 | 0.072 | 3.13E-41 | CD16pos_NK_UCBMC |
| CERS6              | 1.03E-45 | 1.83735863 | 0.283 | 0.07  | 3.66E-41 | CD16pos_NK_UCBMC |
| UBR3               | 1.06E-45 | 1.938635   | 0.296 | 0.077 | 3.77E-41 | CD16pos_NK_UCBMC |
| ZNF43              | 1.25E-45 | 1.66066475 | 0.288 | 0.071 | 4.44E-41 | CD16pos_NK_UCBMC |
| WDR26              | 1.90E-45 | 1.80435337 | 0.288 | 0.073 | 6.75E-41 | CD16pos_NK_UCBMC |
| PRKX               | 2.46E-45 | 1.55336729 | 0.429 | 0.144 | 8.70E-41 | CD16pos_NK_UCBMC |
| CHN2               | 3.54E-45 | 1.419228   | 0.392 | 0.122 | 1.26E-40 | CD16pos_NK_UCBMC |
| EIF2AK2            | 3.65E-45 | 1.61123788 | 0.278 | 0.066 | 1.29E-40 | CD16pos_NK_UCBMC |
| TCF12              | 3.67E-45 | 1.44548016 | 0.423 | 0.139 | 1.30E-40 | CD16pos_NK_UCBMC |
| AGPS               | 3.91E-45 | 1.47947706 | 0.389 | 0.121 | 1.39E-40 | CD16pos_NK_UCBMC |
| ENSMMUG00000011580 | 4.07E-45 | 1.26020538 | 0.513 | 0.185 | 1.44E-40 | CD16pos_NK_UCBMC |
| PUM2               | 4.21E-45 | 1.31390398 | 0.45  | 0.153 | 1.49E-40 | CD16pos_NK_UCBMC |
| NRIP1              | 4.22E-45 | 1.50454341 | 0.349 | 0.101 | 1.50E-40 | CD16pos_NK_UCBMC |
| ENSMMUG00000052127 | 5.73E-45 | 1.54930815 | 0.939 | 0.691 | 2.03E-40 | CD16pos_NK_UCBMC |
| ASAP1              | 6.98E-45 | 1.80662863 | 0.28  | 0.07  | 2.47E-40 | CD16pos_NK_UCBMC |

|         |          |            |       |       |          |                  |
|---------|----------|------------|-------|-------|----------|------------------|
| MICU2   | 1.18E-44 | 1.80824327 | 0.288 | 0.074 | 4.19E-40 | CD16pos_NK_UCBMC |
| ATP11B  | 1.20E-44 | 1.7157114  | 0.283 | 0.071 | 4.25E-40 | CD16pos_NK_UCBMC |
| ANKRD11 | 2.12E-44 | 1.29915475 | 0.447 | 0.152 | 7.52E-40 | CD16pos_NK_UCBMC |
| MLLT3   | 2.79E-44 | 1.65428873 | 0.354 | 0.106 | 9.90E-40 | CD16pos_NK_UCBMC |
| CMAH    | 3.69E-44 | 1.79334788 | 0.384 | 0.123 | 1.31E-39 | CD16pos_NK_UCBMC |
| CNST    | 4.15E-44 | 1.21633566 | 0.439 | 0.144 | 1.47E-39 | CD16pos_NK_UCBMC |
| MYCBP2  | 4.86E-44 | 1.31903635 | 0.489 | 0.177 | 1.72E-39 | CD16pos_NK_UCBMC |
| CYTIP   | 5.62E-44 | 1.32848912 | 0.463 | 0.162 | 1.99E-39 | CD16pos_NK_UCBMC |
| JAZF1   | 6.27E-44 | 1.57199321 | 0.344 | 0.1   | 2.22E-39 | CD16pos_NK_UCBMC |
| USP3    | 6.69E-44 | 1.49289666 | 0.389 | 0.123 | 2.37E-39 | CD16pos_NK_UCBMC |
| ERO1B   | 6.89E-44 | 1.95272203 | 0.265 | 0.065 | 2.44E-39 | CD16pos_NK_UCBMC |
| USP24   | 7.54E-44 | 1.79076927 | 0.278 | 0.07  | 2.67E-39 | CD16pos_NK_UCBMC |
| KAT2B   | 8.17E-44 | 1.86599014 | 0.262 | 0.063 | 2.89E-39 | CD16pos_NK_UCBMC |
| ARHGEF3 | 1.04E-43 | 1.61751744 | 0.339 | 0.098 | 3.69E-39 | CD16pos_NK_UCBMC |
| ZNF148  | 1.08E-43 | 1.37274227 | 0.452 | 0.16  | 3.83E-39 | CD16pos_NK_UCBMC |
| ZNF644  | 1.19E-43 | 1.36873876 | 0.455 | 0.158 | 4.20E-39 | CD16pos_NK_UCBMC |
| EHBP1   | 1.28E-43 | 1.39241603 | 0.399 | 0.127 | 4.55E-39 | CD16pos_NK_UCBMC |
| BTAF1   | 1.31E-43 | 2.01246477 | 0.257 | 0.062 | 4.65E-39 | CD16pos_NK_UCBMC |
| MARCHF6 | 1.42E-43 | 1.50812512 | 0.352 | 0.104 | 5.03E-39 | CD16pos_NK_UCBMC |
| SDHAF4  | 2.19E-43 | 1.3208101  | 0.415 | 0.137 | 7.76E-39 | CD16pos_NK_UCBMC |
| PREX1   | 3.33E-43 | 1.44690688 | 0.45  | 0.16  | 1.18E-38 | CD16pos_NK_UCBMC |
| SLMAP   | 5.95E-43 | 1.95191574 | 0.28  | 0.074 | 2.11E-38 | CD16pos_NK_UCBMC |
| COL11A1 | 6.38E-43 | 1.25515178 | 0.516 | 0.197 | 2.26E-38 | CD16pos_NK_UCBMC |
| TGFBR3  | 6.96E-43 | 1.0449775  | 0.728 | 0.35  | 2.47E-38 | CD16pos_NK_UCBMC |
| IRAG2   | 9.16E-43 | 1.6069173  | 0.299 | 0.081 | 3.24E-38 | CD16pos_NK_UCBMC |
| TGFB1   | 1.15E-42 | 1.25341477 | 0.532 | 0.207 | 4.09E-38 | CD16pos_NK_UCBMC |
| PHC3    | 1.46E-42 | 1.82968043 | 0.291 | 0.077 | 5.18E-38 | CD16pos_NK_UCBMC |
| RPS6KB1 | 1.65E-42 | 1.66905761 | 0.296 | 0.079 | 5.84E-38 | CD16pos_NK_UCBMC |
| TFDP2   | 1.79E-42 | 1.49329874 | 0.386 | 0.124 | 6.34E-38 | CD16pos_NK_UCBMC |
| TEC     | 1.98E-42 | 1.00682207 | 0.81  | 0.438 | 7.01E-38 | CD16pos_NK_UCBMC |
| UVRAG   | 2.23E-42 | 1.61544784 | 0.328 | 0.095 | 7.91E-38 | CD16pos_NK_UCBMC |
| ITK     | 2.39E-42 | 1.23858736 | 0.487 | 0.18  | 8.46E-38 | CD16pos_NK_UCBMC |
| SMG7    | 2.57E-42 | 1.75419204 | 0.262 | 0.064 | 9.11E-38 | CD16pos_NK_UCBMC |

|         |          |            |       |       |          |                  |
|---------|----------|------------|-------|-------|----------|------------------|
| OGT     | 2.68E-42 | 1.33826256 | 0.407 | 0.134 | 9.48E-38 | CD16pos_NK_UCBMC |
| KMT2E   | 3.38E-42 | 1.24607425 | 0.487 | 0.18  | 1.20E-37 | CD16pos_NK_UCBMC |
| HSPH1   | 3.97E-42 | 1.26508102 | 0.373 | 0.117 | 1.40E-37 | CD16pos_NK_UCBMC |
| MOB3A   | 4.37E-42 | 1.49890388 | 0.302 | 0.082 | 1.55E-37 | CD16pos_NK_UCBMC |
| PNN     | 5.24E-42 | 1.25073369 | 0.466 | 0.167 | 1.86E-37 | CD16pos_NK_UCBMC |
| LDB2    | 7.60E-42 | 1.57348771 | 0.325 | 0.094 | 2.69E-37 | CD16pos_NK_UCBMC |
| R3HDM2  | 8.13E-42 | 1.95180081 | 0.265 | 0.068 | 2.88E-37 | CD16pos_NK_UCBMC |
| XPR1    | 9.65E-42 | 1.83907219 | 0.257 | 0.063 | 3.42E-37 | CD16pos_NK_UCBMC |
| EP300   | 1.07E-41 | 1.53198449 | 0.328 | 0.096 | 3.79E-37 | CD16pos_NK_UCBMC |
| CERT1   | 1.09E-41 | 1.57406041 | 0.299 | 0.081 | 3.85E-37 | CD16pos_NK_UCBMC |
| BCAS3   | 1.66E-41 | 1.60772286 | 0.381 | 0.126 | 5.87E-37 | CD16pos_NK_UCBMC |
| AFF1    | 2.19E-41 | 1.83010492 | 0.257 | 0.063 | 7.74E-37 | CD16pos_NK_UCBMC |
| ARFGEF1 | 2.75E-41 | 1.46024504 | 0.312 | 0.088 | 9.73E-37 | CD16pos_NK_UCBMC |
| DDX5    | 3.83E-41 | 0.92058514 | 0.86  | 0.474 | 1.36E-36 | CD16pos_NK_UCBMC |
| GOLGA1  | 3.86E-41 | 0.97378403 | 0.696 | 0.317 | 1.37E-36 | CD16pos_NK_UCBMC |
| UBR5    | 3.88E-41 | 1.43273455 | 0.349 | 0.107 | 1.37E-36 | CD16pos_NK_UCBMC |
| SPAG9   | 3.88E-41 | 1.44392492 | 0.339 | 0.101 | 1.38E-36 | CD16pos_NK_UCBMC |
| ZBTB20  | 4.04E-41 | 1.5057548  | 0.341 | 0.104 | 1.43E-36 | CD16pos_NK_UCBMC |
| PHF21A  | 4.14E-41 | 1.5652232  | 0.357 | 0.113 | 1.47E-36 | CD16pos_NK_UCBMC |
| MAN1A1  | 5.11E-41 | 1.40000573 | 0.368 | 0.116 | 1.81E-36 | CD16pos_NK_UCBMC |
| PBRM1   | 5.52E-41 | 1.42929688 | 0.328 | 0.095 | 1.96E-36 | CD16pos_NK_UCBMC |
| SCFD1   | 7.06E-41 | 1.48323569 | 0.32  | 0.091 | 2.50E-36 | CD16pos_NK_UCBMC |
| FBXO33  | 7.41E-41 | 1.51313659 | 0.323 | 0.094 | 2.63E-36 | CD16pos_NK_UCBMC |
| RELCH   | 7.41E-41 | 1.63962289 | 0.288 | 0.078 | 2.63E-36 | CD16pos_NK_UCBMC |
| CUL5    | 8.14E-41 | 1.35220407 | 0.415 | 0.142 | 2.88E-36 | CD16pos_NK_UCBMC |
| PPP6R3  | 8.23E-41 | 1.45084887 | 0.392 | 0.131 | 2.92E-36 | CD16pos_NK_UCBMC |
| LRRFIP1 | 1.67E-40 | 1.42425469 | 0.354 | 0.11  | 5.93E-36 | CD16pos_NK_UCBMC |
| AP1G1   | 2.13E-40 | 1.52614524 | 0.296 | 0.082 | 7.54E-36 | CD16pos_NK_UCBMC |
| WRN     | 2.32E-40 | 1.63443985 | 0.262 | 0.066 | 8.22E-36 | CD16pos_NK_UCBMC |
| RBM39   | 2.70E-40 | 0.95980864 | 0.778 | 0.405 | 9.58E-36 | CD16pos_NK_UCBMC |
| ATP9B   | 3.10E-40 | 1.59979333 | 0.278 | 0.074 | 1.10E-35 | CD16pos_NK_UCBMC |
| RIPOR2  | 3.48E-40 | 0.92720433 | 0.865 | 0.52  | 1.23E-35 | CD16pos_NK_UCBMC |
| USP9X   | 3.55E-40 | 1.24527965 | 0.344 | 0.103 | 1.26E-35 | CD16pos_NK_UCBMC |

|          |          |            |       |       |          |                  |
|----------|----------|------------|-------|-------|----------|------------------|
| DNAJC3   | 3.56E-40 | 1.23137179 | 0.386 | 0.124 | 1.26E-35 | CD16pos_NK_UCBMC |
| GATAD2A  | 3.81E-40 | 1.72969896 | 0.27  | 0.071 | 1.35E-35 | CD16pos_NK_UCBMC |
| ARID1A   | 4.58E-40 | 1.5222242  | 0.307 | 0.087 | 1.62E-35 | CD16pos_NK_UCBMC |
| NEDD9    | 4.76E-40 | 1.21633951 | 0.447 | 0.16  | 1.69E-35 | CD16pos_NK_UCBMC |
| SREK1    | 6.50E-40 | 1.29150036 | 0.434 | 0.154 | 2.30E-35 | CD16pos_NK_UCBMC |
| MSI2     | 7.24E-40 | 1.71944302 | 0.275 | 0.074 | 2.57E-35 | CD16pos_NK_UCBMC |
| TMEM131L | 9.05E-40 | 1.59472321 | 0.307 | 0.089 | 3.21E-35 | CD16pos_NK_UCBMC |
| LRCH3    | 1.02E-39 | 1.6077771  | 0.315 | 0.093 | 3.60E-35 | CD16pos_NK_UCBMC |
| MEF2A    | 1.06E-39 | 1.50516604 | 0.333 | 0.102 | 3.76E-35 | CD16pos_NK_UCBMC |
| FBXL20   | 1.17E-39 | 1.62112402 | 0.288 | 0.08  | 4.15E-35 | CD16pos_NK_UCBMC |
| SPIDR    | 1.35E-39 | 1.81705321 | 0.265 | 0.069 | 4.79E-35 | CD16pos_NK_UCBMC |
| SMYD3    | 1.92E-39 | 1.56725816 | 0.341 | 0.108 | 6.79E-35 | CD16pos_NK_UCBMC |
| IQGAP1   | 1.99E-39 | 1.09089877 | 0.59  | 0.248 | 7.05E-35 | CD16pos_NK_UCBMC |
| TAOK3    | 2.15E-39 | 1.29548088 | 0.468 | 0.178 | 7.62E-35 | CD16pos_NK_UCBMC |
| GNB1     | 2.22E-39 | 1.36716954 | 0.341 | 0.105 | 7.87E-35 | CD16pos_NK_UCBMC |
| MAPK1    | 2.72E-39 | 1.1986712  | 0.495 | 0.191 | 9.65E-35 | CD16pos_NK_UCBMC |
| MBP      | 3.15E-39 | 1.05155813 | 0.566 | 0.232 | 1.11E-34 | CD16pos_NK_UCBMC |
| HBS1L    | 3.29E-39 | 1.36762366 | 0.37  | 0.119 | 1.17E-34 | CD16pos_NK_UCBMC |
| MARCHF7  | 3.32E-39 | 1.48559609 | 0.336 | 0.104 | 1.18E-34 | CD16pos_NK_UCBMC |
| MYLIP    | 3.35E-39 | 1.35175303 | 0.352 | 0.11  | 1.19E-34 | CD16pos_NK_UCBMC |
| SMC4     | 5.84E-39 | 1.39799403 | 0.376 | 0.125 | 2.07E-34 | CD16pos_NK_UCBMC |
| SEC31A   | 6.56E-39 | 1.22592363 | 0.415 | 0.144 | 2.33E-34 | CD16pos_NK_UCBMC |
| DHX9     | 6.57E-39 | 1.28060664 | 0.378 | 0.125 | 2.33E-34 | CD16pos_NK_UCBMC |
| UXS1     | 7.49E-39 | 1.38013113 | 0.341 | 0.105 | 2.65E-34 | CD16pos_NK_UCBMC |
| PKN2     | 7.81E-39 | 1.33559563 | 0.36  | 0.115 | 2.77E-34 | CD16pos_NK_UCBMC |
| EPB41    | 7.97E-39 | 1.3097124  | 0.471 | 0.181 | 2.82E-34 | CD16pos_NK_UCBMC |
| ATP8A1   | 8.86E-39 | 1.49708678 | 0.354 | 0.116 | 3.14E-34 | CD16pos_NK_UCBMC |
| MTMR12   | 1.03E-38 | 1.52064204 | 0.328 | 0.1   | 3.65E-34 | CD16pos_NK_UCBMC |
| PRRC2B   | 1.09E-38 | 1.31811421 | 0.402 | 0.139 | 3.85E-34 | CD16pos_NK_UCBMC |
| TASOR2   | 1.17E-38 | 1.63925069 | 0.288 | 0.081 | 4.15E-34 | CD16pos_NK_UCBMC |
| AOAH     | 1.19E-38 | 1.14721999 | 0.513 | 0.202 | 4.21E-34 | CD16pos_NK_UCBMC |
| ZCCHC7   | 1.32E-38 | 1.25989045 | 0.452 | 0.168 | 4.69E-34 | CD16pos_NK_UCBMC |
| FCHSD2   | 1.64E-38 | 1.65276516 | 0.286 | 0.081 | 5.82E-34 | CD16pos_NK_UCBMC |

|         |          |            |       |       |          |                  |
|---------|----------|------------|-------|-------|----------|------------------|
| MTDH    | 1.89E-38 | 1.67264257 | 0.286 | 0.08  | 6.70E-34 | CD16pos_NK_UCBMC |
| DAZAP2  | 2.22E-38 | 1.13153419 | 0.447 | 0.163 | 7.88E-34 | CD16pos_NK_UCBMC |
| CCDC91  | 3.35E-38 | 1.68826211 | 0.296 | 0.087 | 1.19E-33 | CD16pos_NK_UCBMC |
| NCOA1   | 3.69E-38 | 1.5369307  | 0.294 | 0.084 | 1.31E-33 | CD16pos_NK_UCBMC |
| RBM27   | 3.94E-38 | 1.33399795 | 0.32  | 0.095 | 1.40E-33 | CD16pos_NK_UCBMC |
| APBB1IP | 4.08E-38 | 0.89402447 | 0.847 | 0.494 | 1.45E-33 | CD16pos_NK_UCBMC |
| BTBD1   | 6.17E-38 | 1.6212864  | 0.254 | 0.066 | 2.19E-33 | CD16pos_NK_UCBMC |
| NFAT5   | 6.23E-38 | 1.55201715 | 0.307 | 0.091 | 2.21E-33 | CD16pos_NK_UCBMC |
| PLCG2   | 6.35E-38 | 1.49223144 | 0.336 | 0.105 | 2.25E-33 | CD16pos_NK_UCBMC |
| CSNK1G1 | 6.80E-38 | 1.58311476 | 0.296 | 0.085 | 2.41E-33 | CD16pos_NK_UCBMC |
| STK17B  | 1.05E-37 | 0.87594845 | 0.667 | 0.3   | 3.72E-33 | CD16pos_NK_UCBMC |
| SLC24A3 | 1.28E-37 | 1.17570509 | 0.41  | 0.144 | 4.54E-33 | CD16pos_NK_UCBMC |
| PDE3B   | 1.51E-37 | 1.60981566 | 0.296 | 0.087 | 5.34E-33 | CD16pos_NK_UCBMC |
| MYO5A   | 1.87E-37 | 1.61119344 | 0.296 | 0.087 | 6.63E-33 | CD16pos_NK_UCBMC |
| VTA1    | 2.40E-37 | 1.50931128 | 0.275 | 0.076 | 8.51E-33 | CD16pos_NK_UCBMC |
| PCCA    | 2.73E-37 | 1.50244372 | 0.288 | 0.083 | 9.67E-33 | CD16pos_NK_UCBMC |
| MTREX   | 2.93E-37 | 1.08627587 | 0.458 | 0.169 | 1.04E-32 | CD16pos_NK_UCBMC |
| CHD2    | 2.96E-37 | 1.18758007 | 0.418 | 0.148 | 1.05E-32 | CD16pos_NK_UCBMC |
| KDM2A   | 3.05E-37 | 1.12109608 | 0.45  | 0.166 | 1.08E-32 | CD16pos_NK_UCBMC |
| CRTC3   | 5.33E-37 | 1.68216276 | 0.267 | 0.074 | 1.89E-32 | CD16pos_NK_UCBMC |
| DDX6    | 6.81E-37 | 1.09570618 | 0.455 | 0.17  | 2.41E-32 | CD16pos_NK_UCBMC |
| CPEB1   | 7.89E-37 | 0.64235844 | 0.974 | 0.792 | 2.80E-32 | CD16pos_NK_UCBMC |
| CDC73   | 9.04E-37 | 1.56608    | 0.286 | 0.083 | 3.20E-32 | CD16pos_NK_UCBMC |
| RNF216  | 9.54E-37 | 1.2979693  | 0.344 | 0.11  | 3.38E-32 | CD16pos_NK_UCBMC |
| MDM4    | 1.03E-36 | 1.48831384 | 0.257 | 0.068 | 3.65E-32 | CD16pos_NK_UCBMC |
| ILKAP   | 1.05E-36 | 1.73108169 | 0.278 | 0.08  | 3.73E-32 | CD16pos_NK_UCBMC |
| SESN1   | 1.05E-36 | 1.88811978 | 0.254 | 0.069 | 3.73E-32 | CD16pos_NK_UCBMC |
| NLRC3   | 1.07E-36 | 1.46333963 | 0.283 | 0.08  | 3.78E-32 | CD16pos_NK_UCBMC |
| MLLT10  | 1.19E-36 | 1.63987167 | 0.267 | 0.075 | 4.23E-32 | CD16pos_NK_UCBMC |
| CYTH1   | 1.25E-36 | 1.53499283 | 0.31  | 0.095 | 4.44E-32 | CD16pos_NK_UCBMC |
| AQR     | 1.48E-36 | 1.51185358 | 0.265 | 0.072 | 5.26E-32 | CD16pos_NK_UCBMC |
| SRSF11  | 1.90E-36 | 0.89340669 | 0.69  | 0.317 | 6.73E-32 | CD16pos_NK_UCBMC |
| TAOK1   | 2.12E-36 | 1.49283773 | 0.275 | 0.077 | 7.52E-32 | CD16pos_NK_UCBMC |

|                    |          |            |       |       |          |                  |
|--------------------|----------|------------|-------|-------|----------|------------------|
| DCAF5              | 2.20E-36 | 1.38545402 | 0.325 | 0.101 | 7.81E-32 | CD16pos_NK_UCBMC |
| BDP1               | 2.47E-36 | 1.44722256 | 0.31  | 0.094 | 8.76E-32 | CD16pos_NK_UCBMC |
| IL12RB2            | 2.74E-36 | 1.17760763 | 0.513 | 0.214 | 9.71E-32 | CD16pos_NK_UCBMC |
| ABI1               | 2.80E-36 | 1.19802667 | 0.389 | 0.134 | 9.92E-32 | CD16pos_NK_UCBMC |
| AUH                | 2.87E-36 | 1.63746221 | 0.257 | 0.07  | 1.02E-31 | CD16pos_NK_UCBMC |
| ATF2               | 3.02E-36 | 1.41203522 | 0.323 | 0.101 | 1.07E-31 | CD16pos_NK_UCBMC |
| DDX17              | 3.08E-36 | 1.06993111 | 0.508 | 0.207 | 1.09E-31 | CD16pos_NK_UCBMC |
| PRKD3              | 3.37E-36 | 1.3461479  | 0.296 | 0.087 | 1.19E-31 | CD16pos_NK_UCBMC |
| CNOT1              | 3.63E-36 | 1.23315118 | 0.315 | 0.096 | 1.29E-31 | CD16pos_NK_UCBMC |
| EIF4EBP3           | 3.73E-36 | 1.42153541 | 0.317 | 0.099 | 1.32E-31 | CD16pos_NK_UCBMC |
| XPO6               | 4.67E-36 | 1.11070842 | 0.41  | 0.145 | 1.65E-31 | CD16pos_NK_UCBMC |
| RAB11FIP1          | 4.67E-36 | 1.57978135 | 0.265 | 0.074 | 1.65E-31 | CD16pos_NK_UCBMC |
| ARNTL              | 5.04E-36 | 1.79356083 | 0.254 | 0.07  | 1.78E-31 | CD16pos_NK_UCBMC |
| CCNK               | 5.95E-36 | 1.46185318 | 0.291 | 0.085 | 2.11E-31 | CD16pos_NK_UCBMC |
| HERC1              | 6.83E-36 | 1.43474666 | 0.323 | 0.102 | 2.42E-31 | CD16pos_NK_UCBMC |
| ZFR                | 7.07E-36 | 1.39630607 | 0.291 | 0.086 | 2.51E-31 | CD16pos_NK_UCBMC |
| MBD5               | 7.23E-36 | 1.5207643  | 0.31  | 0.096 | 2.56E-31 | CD16pos_NK_UCBMC |
| ENSMMUG00000008346 | 1.03E-35 | 1.33605908 | 0.328 | 0.105 | 3.66E-31 | CD16pos_NK_UCBMC |
| ZRANB2             | 1.06E-35 | 1.11912828 | 0.41  | 0.146 | 3.74E-31 | CD16pos_NK_UCBMC |
| CLASP2             | 1.14E-35 | 1.42092526 | 0.312 | 0.097 | 4.04E-31 | CD16pos_NK_UCBMC |
| DDX3Y              | 1.19E-35 | 1.27653777 | 0.368 | 0.125 | 4.20E-31 | CD16pos_NK_UCBMC |
| SRPK2              | 1.28E-35 | 1.33986327 | 0.368 | 0.126 | 4.52E-31 | CD16pos_NK_UCBMC |
| PHF20              | 1.42E-35 | 1.23933326 | 0.354 | 0.118 | 5.04E-31 | CD16pos_NK_UCBMC |
| EML4               | 1.59E-35 | 0.92730702 | 0.653 | 0.319 | 5.64E-31 | CD16pos_NK_UCBMC |
| ATP2B4             | 1.67E-35 | 1.07457152 | 0.497 | 0.197 | 5.93E-31 | CD16pos_NK_UCBMC |
| UBAP1              | 1.80E-35 | 1.48941554 | 0.291 | 0.087 | 6.37E-31 | CD16pos_NK_UCBMC |
| AP3B1              | 2.12E-35 | 1.28122852 | 0.354 | 0.117 | 7.50E-31 | CD16pos_NK_UCBMC |
| CTDSPL2            | 2.41E-35 | 1.48180114 | 0.315 | 0.099 | 8.54E-31 | CD16pos_NK_UCBMC |
| CCDC88C            | 2.56E-35 | 1.5671179  | 0.254 | 0.07  | 9.07E-31 | CD16pos_NK_UCBMC |
| RSF1               | 3.53E-35 | 1.28750621 | 0.376 | 0.132 | 1.25E-30 | CD16pos_NK_UCBMC |
| WDR70              | 4.03E-35 | 1.34903394 | 0.386 | 0.14  | 1.43E-30 | CD16pos_NK_UCBMC |
| CREBRF             | 4.36E-35 | 1.40958741 | 0.315 | 0.1   | 1.55E-30 | CD16pos_NK_UCBMC |
| STK10              | 9.02E-35 | 1.01827887 | 0.521 | 0.217 | 3.20E-30 | CD16pos_NK_UCBMC |



|          |          |            |       |       |          |                  |
|----------|----------|------------|-------|-------|----------|------------------|
| NUP214   | 1.73E-34 | 1.60149233 | 0.251 | 0.069 | 6.13E-30 | CD16pos_NK_UCBMC |
| RAP1GDS1 | 2.40E-34 | 1.33315858 | 0.304 | 0.094 | 8.51E-30 | CD16pos_NK_UCBMC |
| FNDC3A   | 2.71E-34 | 1.30541958 | 0.336 | 0.111 | 9.59E-30 | CD16pos_NK_UCBMC |
| YPEL5    | 2.79E-34 | 1.01891413 | 0.476 | 0.188 | 9.88E-30 | CD16pos_NK_UCBMC |
| YTHDF3   | 3.55E-34 | 1.57431222 | 0.259 | 0.074 | 1.26E-29 | CD16pos_NK_UCBMC |
| TGFBR2   | 4.33E-34 | 1.14826908 | 0.376 | 0.132 | 1.53E-29 | CD16pos_NK_UCBMC |
| TRAPPC10 | 7.06E-34 | 1.45683245 | 0.288 | 0.088 | 2.50E-29 | CD16pos_NK_UCBMC |
| TIPARP   | 7.70E-34 | 1.36369075 | 0.265 | 0.076 | 2.73E-29 | CD16pos_NK_UCBMC |
| CAMKMT   | 7.73E-34 | 1.52898541 | 0.286 | 0.087 | 2.74E-29 | CD16pos_NK_UCBMC |
| RORA     | 9.40E-34 | 1.41848099 | 0.344 | 0.119 | 3.33E-29 | CD16pos_NK_UCBMC |
| ARHGAP25 | 1.11E-33 | 1.43536979 | 0.325 | 0.108 | 3.94E-29 | CD16pos_NK_UCBMC |
| RPS6KC1  | 1.17E-33 | 1.42326559 | 0.28  | 0.084 | 4.14E-29 | CD16pos_NK_UCBMC |
| SNX4     | 1.46E-33 | 1.46074826 | 0.299 | 0.093 | 5.17E-29 | CD16pos_NK_UCBMC |
| ATP10A   | 2.11E-33 | 1.64402781 | 0.251 | 0.072 | 7.47E-29 | CD16pos_NK_UCBMC |
| GABPB1   | 3.06E-33 | 1.55563276 | 0.275 | 0.083 | 1.08E-28 | CD16pos_NK_UCBMC |
| KIF5B    | 3.50E-33 | 1.32588401 | 0.299 | 0.094 | 1.24E-28 | CD16pos_NK_UCBMC |
| MED13    | 3.64E-33 | 1.42453395 | 0.262 | 0.076 | 1.29E-28 | CD16pos_NK_UCBMC |
| SNTB1    | 4.03E-33 | 1.47253256 | 0.331 | 0.115 | 1.43E-28 | CD16pos_NK_UCBMC |
| LCORL    | 4.27E-33 | 1.6732149  | 0.251 | 0.072 | 1.51E-28 | CD16pos_NK_UCBMC |
| NSF      | 4.53E-33 | 1.27578159 | 0.354 | 0.124 | 1.61E-28 | CD16pos_NK_UCBMC |
| SYNRG    | 5.06E-33 | 1.43733414 | 0.28  | 0.086 | 1.79E-28 | CD16pos_NK_UCBMC |
| TBC1D1   | 5.87E-33 | 1.35862288 | 0.302 | 0.097 | 2.08E-28 | CD16pos_NK_UCBMC |
| SUCO     | 7.36E-33 | 1.56804458 | 0.259 | 0.076 | 2.61E-28 | CD16pos_NK_UCBMC |
| TAF15    | 7.88E-33 | 1.16900056 | 0.394 | 0.145 | 2.79E-28 | CD16pos_NK_UCBMC |
| NEK7     | 8.76E-33 | 1.37152412 | 0.307 | 0.099 | 3.11E-28 | CD16pos_NK_UCBMC |
| ACIN1    | 8.93E-33 | 1.13506193 | 0.37  | 0.131 | 3.16E-28 | CD16pos_NK_UCBMC |
| PIP4K2A  | 1.20E-32 | 0.89857833 | 0.561 | 0.246 | 4.24E-28 | CD16pos_NK_UCBMC |
| ARAP2    | 1.46E-32 | 1.02016941 | 0.476 | 0.193 | 5.17E-28 | CD16pos_NK_UCBMC |
| RBM14    | 1.76E-32 | 1.1017725  | 0.463 | 0.187 | 6.22E-28 | CD16pos_NK_UCBMC |
| OGA      | 2.16E-32 | 1.13327766 | 0.368 | 0.132 | 7.66E-28 | CD16pos_NK_UCBMC |
| PHF14    | 2.20E-32 | 1.49621408 | 0.267 | 0.081 | 7.81E-28 | CD16pos_NK_UCBMC |
| GLUD1    | 2.78E-32 | 1.47059779 | 0.294 | 0.095 | 9.84E-28 | CD16pos_NK_UCBMC |
| LYN      | 3.04E-32 | 1.3733808  | 0.362 | 0.133 | 1.08E-27 | CD16pos_NK_UCBMC |

|           |          |            |       |       |          |                  |
|-----------|----------|------------|-------|-------|----------|------------------|
| PDS5B     | 3.43E-32 | 1.44971826 | 0.299 | 0.097 | 1.22E-27 | CD16pos_NK_UCBMC |
| CNOT2     | 4.92E-32 | 1.12459043 | 0.389 | 0.144 | 1.74E-27 | CD16pos_NK_UCBMC |
| HOOK3     | 6.23E-32 | 1.19925092 | 0.415 | 0.164 | 2.21E-27 | CD16pos_NK_UCBMC |
| BTBD11    | 6.31E-32 | 1.12883344 | 0.354 | 0.126 | 2.24E-27 | CD16pos_NK_UCBMC |
| DIP2B     | 6.81E-32 | 1.38538694 | 0.294 | 0.095 | 2.41E-27 | CD16pos_NK_UCBMC |
| LSM14A    | 7.86E-32 | 1.05349527 | 0.447 | 0.179 | 2.79E-27 | CD16pos_NK_UCBMC |
| UBE2G1    | 9.28E-32 | 1.50675848 | 0.262 | 0.079 | 3.29E-27 | CD16pos_NK_UCBMC |
| PTPN1     | 9.43E-32 | 1.25512575 | 0.376 | 0.14  | 3.34E-27 | CD16pos_NK_UCBMC |
| TRIP12    | 1.32E-31 | 1.4500901  | 0.307 | 0.103 | 4.69E-27 | CD16pos_NK_UCBMC |
| SGMS1     | 1.36E-31 | 1.37444138 | 0.272 | 0.083 | 4.82E-27 | CD16pos_NK_UCBMC |
| LNPEP     | 1.41E-31 | 0.99699893 | 0.474 | 0.195 | 5.00E-27 | CD16pos_NK_UCBMC |
| DIAPH2    | 1.55E-31 | 1.32607544 | 0.294 | 0.094 | 5.49E-27 | CD16pos_NK_UCBMC |
| ACTR2     | 1.61E-31 | 0.82764671 | 0.648 | 0.314 | 5.71E-27 | CD16pos_NK_UCBMC |
| KLHL28    | 2.16E-31 | 1.3454016  | 0.257 | 0.075 | 7.66E-27 | CD16pos_NK_UCBMC |
| ELOVL5    | 2.79E-31 | 1.22844414 | 0.368 | 0.135 | 9.89E-27 | CD16pos_NK_UCBMC |
| GAK       | 4.70E-31 | 1.33194771 | 0.272 | 0.084 | 1.67E-26 | CD16pos_NK_UCBMC |
| IL2RB     | 4.93E-31 | 0.84821668 | 0.63  | 0.297 | 1.75E-26 | CD16pos_NK_UCBMC |
| TLK1      | 6.01E-31 | 1.69167173 | 0.257 | 0.078 | 2.13E-26 | CD16pos_NK_UCBMC |
| PPP2R2A   | 6.60E-31 | 1.09815773 | 0.336 | 0.116 | 2.34E-26 | CD16pos_NK_UCBMC |
| GATAD2B   | 6.94E-31 | 1.33685997 | 0.278 | 0.088 | 2.46E-26 | CD16pos_NK_UCBMC |
| SMG1      | 8.21E-31 | 1.4977049  | 0.254 | 0.076 | 2.91E-26 | CD16pos_NK_UCBMC |
| NUP153    | 8.44E-31 | 1.43144365 | 0.265 | 0.081 | 2.99E-26 | CD16pos_NK_UCBMC |
| C1H1orf21 | 8.94E-31 | 1.21824554 | 0.347 | 0.124 | 3.17E-26 | CD16pos_NK_UCBMC |
| NSMCE2    | 9.43E-31 | 1.52857385 | 0.286 | 0.093 | 3.34E-26 | CD16pos_NK_UCBMC |
| UBAC2     | 1.21E-30 | 1.12868711 | 0.41  | 0.163 | 4.30E-26 | CD16pos_NK_UCBMC |
| EIF3A     | 1.61E-30 | 1.06346467 | 0.368 | 0.135 | 5.69E-26 | CD16pos_NK_UCBMC |
| MSN       | 1.68E-30 | 0.741418   | 0.786 | 0.448 | 5.95E-26 | CD16pos_NK_UCBMC |
| KDM5A     | 1.86E-30 | 0.91736826 | 0.378 | 0.138 | 6.58E-26 | CD16pos_NK_UCBMC |
| BIN3      | 2.00E-30 | 1.2966647  | 0.294 | 0.096 | 7.10E-26 | CD16pos_NK_UCBMC |
| RERE      | 2.08E-30 | 1.03423791 | 0.442 | 0.181 | 7.37E-26 | CD16pos_NK_UCBMC |
| NSD1      | 2.36E-30 | 1.26371364 | 0.354 | 0.13  | 8.34E-26 | CD16pos_NK_UCBMC |
| EPS15     | 3.30E-30 | 0.95893768 | 0.444 | 0.18  | 1.17E-25 | CD16pos_NK_UCBMC |
| WASF2     | 5.64E-30 | 1.25523614 | 0.352 | 0.132 | 2.00E-25 | CD16pos_NK_UCBMC |

|         |          |            |       |       |          |                  |
|---------|----------|------------|-------|-------|----------|------------------|
| IKZF3   | 5.72E-30 | 0.85554805 | 0.566 | 0.256 | 2.03E-25 | CD16pos_NK_UCBMC |
| COPA    | 6.91E-30 | 1.29532557 | 0.304 | 0.104 | 2.45E-25 | CD16pos_NK_UCBMC |
| SUCLG2  | 7.02E-30 | 1.34515219 | 0.286 | 0.093 | 2.49E-25 | CD16pos_NK_UCBMC |
| PCED1B  | 8.99E-30 | 1.3438961  | 0.296 | 0.099 | 3.18E-25 | CD16pos_NK_UCBMC |
| RBM33   | 1.22E-29 | 1.20206803 | 0.291 | 0.096 | 4.31E-25 | CD16pos_NK_UCBMC |
| ZNF638  | 1.61E-29 | 1.23040466 | 0.315 | 0.11  | 5.72E-25 | CD16pos_NK_UCBMC |
| SP110   | 1.93E-29 | 1.17214263 | 0.315 | 0.109 | 6.85E-25 | CD16pos_NK_UCBMC |
| CDC27   | 2.50E-29 | 1.4050658  | 0.265 | 0.083 | 8.86E-25 | CD16pos_NK_UCBMC |
| MIER1   | 2.61E-29 | 0.79365586 | 0.492 | 0.206 | 9.25E-25 | CD16pos_NK_UCBMC |
| RNF115  | 2.67E-29 | 1.4128183  | 0.288 | 0.097 | 9.46E-25 | CD16pos_NK_UCBMC |
| TOP1    | 2.79E-29 | 1.15014385 | 0.37  | 0.142 | 9.88E-25 | CD16pos_NK_UCBMC |
| RBL2    | 3.51E-29 | 1.23620417 | 0.278 | 0.089 | 1.24E-24 | CD16pos_NK_UCBMC |
| CCM2    | 3.52E-29 | 1.03733457 | 0.386 | 0.15  | 1.25E-24 | CD16pos_NK_UCBMC |
| CEP192  | 3.92E-29 | 1.17138888 | 0.294 | 0.098 | 1.39E-24 | CD16pos_NK_UCBMC |
| ADGRE5  | 4.10E-29 | 0.82300928 | 0.519 | 0.227 | 1.45E-24 | CD16pos_NK_UCBMC |
| AKT3    | 4.73E-29 | 1.25406032 | 0.32  | 0.114 | 1.67E-24 | CD16pos_NK_UCBMC |
| GNA13   | 4.91E-29 | 1.00927443 | 0.41  | 0.165 | 1.74E-24 | CD16pos_NK_UCBMC |
| YME1L1  | 5.31E-29 | 1.16408323 | 0.296 | 0.1   | 1.88E-24 | CD16pos_NK_UCBMC |
| ATRX    | 9.06E-29 | 0.90630546 | 0.463 | 0.193 | 3.21E-24 | CD16pos_NK_UCBMC |
| NIPBL   | 9.57E-29 | 0.99546547 | 0.397 | 0.155 | 3.39E-24 | CD16pos_NK_UCBMC |
| HIVEP1  | 9.61E-29 | 1.28317754 | 0.302 | 0.105 | 3.40E-24 | CD16pos_NK_UCBMC |
| RBMS1   | 1.13E-28 | 1.13306243 | 0.304 | 0.105 | 4.01E-24 | CD16pos_NK_UCBMC |
| FAM13B  | 1.73E-28 | 1.23871171 | 0.259 | 0.082 | 6.12E-24 | CD16pos_NK_UCBMC |
| FOS     | 2.00E-28 | 0.71871854 | 0.635 | 0.319 | 7.09E-24 | CD16pos_NK_UCBMC |
| MYH9    | 2.30E-28 | 0.78228374 | 0.593 | 0.271 | 8.14E-24 | CD16pos_NK_UCBMC |
| TUT7    | 2.33E-28 | 1.07859756 | 0.357 | 0.134 | 8.24E-24 | CD16pos_NK_UCBMC |
| ATP5PB  | 2.36E-28 | 0.95157633 | 0.344 | 0.125 | 8.36E-24 | CD16pos_NK_UCBMC |
| CYRIB   | 2.43E-28 | 0.78845132 | 0.735 | 0.401 | 8.60E-24 | CD16pos_NK_UCBMC |
| ARHGAP9 | 2.49E-28 | 0.99079077 | 0.368 | 0.139 | 8.84E-24 | CD16pos_NK_UCBMC |
| CEP85L  | 3.08E-28 | 1.22578681 | 0.299 | 0.104 | 1.09E-23 | CD16pos_NK_UCBMC |
| STAU2   | 3.10E-28 | 1.21917388 | 0.333 | 0.123 | 1.10E-23 | CD16pos_NK_UCBMC |
| GLG1    | 3.62E-28 | 1.21804721 | 0.296 | 0.102 | 1.28E-23 | CD16pos_NK_UCBMC |
| CCNY    | 4.61E-28 | 1.46368887 | 0.251 | 0.078 | 1.63E-23 | CD16pos_NK_UCBMC |

|         |          |            |       |       |          |                  |
|---------|----------|------------|-------|-------|----------|------------------|
| ZFAND6  | 5.14E-28 | 1.01964601 | 0.418 | 0.171 | 1.82E-23 | CD16pos_NK_UCBMC |
| RBM5    | 6.34E-28 | 0.98093682 | 0.341 | 0.126 | 2.25E-23 | CD16pos_NK_UCBMC |
| ATXN7L1 | 7.27E-28 | 1.14074331 | 0.325 | 0.118 | 2.58E-23 | CD16pos_NK_UCBMC |
| ATXN2   | 7.73E-28 | 1.4832197  | 0.251 | 0.081 | 2.74E-23 | CD16pos_NK_UCBMC |
| GOLM2   | 8.81E-28 | 1.36642395 | 0.286 | 0.099 | 3.12E-23 | CD16pos_NK_UCBMC |
| SCML4   | 8.86E-28 | 0.90082822 | 0.532 | 0.247 | 3.14E-23 | CD16pos_NK_UCBMC |
| NUP98   | 9.08E-28 | 1.45977442 | 0.259 | 0.085 | 3.22E-23 | CD16pos_NK_UCBMC |
| PTP4A2  | 1.02E-27 | 0.97292049 | 0.354 | 0.134 | 3.62E-23 | CD16pos_NK_UCBMC |
| ANKRD12 | 1.04E-27 | 0.9212677  | 0.447 | 0.191 | 3.68E-23 | CD16pos_NK_UCBMC |
| PPHLN1  | 1.45E-27 | 1.0451347  | 0.392 | 0.156 | 5.12E-23 | CD16pos_NK_UCBMC |
| UBE2Q2  | 1.64E-27 | 1.26499603 | 0.315 | 0.114 | 5.82E-23 | CD16pos_NK_UCBMC |
| MYO1F   | 1.69E-27 | 1.11229022 | 0.397 | 0.16  | 6.00E-23 | CD16pos_NK_UCBMC |
| PPP2R5C | 5.25E-27 | 0.73687788 | 0.696 | 0.369 | 1.86E-22 | CD16pos_NK_UCBMC |
| CSNK1A1 | 7.30E-27 | 0.91996749 | 0.405 | 0.166 | 2.59E-22 | CD16pos_NK_UCBMC |
| PTBP3   | 1.09E-26 | 0.7447842  | 0.563 | 0.26  | 3.86E-22 | CD16pos_NK_UCBMC |
| LRCH1   | 1.25E-26 | 1.24621411 | 0.283 | 0.099 | 4.45E-22 | CD16pos_NK_UCBMC |
| TPD52   | 1.38E-26 | 1.15746471 | 0.341 | 0.131 | 4.89E-22 | CD16pos_NK_UCBMC |
| TUT4    | 1.44E-26 | 1.00663215 | 0.389 | 0.159 | 5.09E-22 | CD16pos_NK_UCBMC |
| ARIH2   | 1.44E-26 | 1.19101291 | 0.254 | 0.082 | 5.11E-22 | CD16pos_NK_UCBMC |
| WNK1    | 1.44E-26 | 0.90665783 | 0.41  | 0.168 | 5.11E-22 | CD16pos_NK_UCBMC |
| GNAQ    | 1.62E-26 | 1.30292463 | 0.262 | 0.088 | 5.74E-22 | CD16pos_NK_UCBMC |
| HNRNPC  | 1.66E-26 | 0.78710469 | 0.563 | 0.272 | 5.87E-22 | CD16pos_NK_UCBMC |
| NPAT    | 1.92E-26 | 1.21423227 | 0.296 | 0.107 | 6.82E-22 | CD16pos_NK_UCBMC |
| SUPT3H  | 1.98E-26 | 1.07933436 | 0.328 | 0.122 | 7.03E-22 | CD16pos_NK_UCBMC |
| AGPAT4  | 2.17E-26 | 1.02592162 | 0.386 | 0.156 | 7.70E-22 | CD16pos_NK_UCBMC |
| NR3C1   | 2.27E-26 | 0.91774363 | 0.45  | 0.194 | 8.04E-22 | CD16pos_NK_UCBMC |
| CNTRL   | 3.68E-26 | 1.16216959 | 0.275 | 0.094 | 1.30E-21 | CD16pos_NK_UCBMC |
| PTPRC   | 3.76E-26 | 0.62289128 | 0.913 | 0.664 | 1.33E-21 | CD16pos_NK_UCBMC |
| ELF2    | 3.85E-26 | 1.01423636 | 0.349 | 0.135 | 1.36E-21 | CD16pos_NK_UCBMC |
| YAF2    | 4.49E-26 | 1.24760809 | 0.31  | 0.115 | 1.59E-21 | CD16pos_NK_UCBMC |
| STAU1   | 5.46E-26 | 1.21214517 | 0.262 | 0.088 | 1.94E-21 | CD16pos_NK_UCBMC |
| GMCL1   | 1.01E-25 | 1.17047133 | 0.291 | 0.105 | 3.57E-21 | CD16pos_NK_UCBMC |
| FLI1    | 1.07E-25 | 0.98074315 | 0.339 | 0.13  | 3.78E-21 | CD16pos_NK_UCBMC |

|                   |          |            |       |       |          |                  |
|-------------------|----------|------------|-------|-------|----------|------------------|
| CASP8             | 1.21E-25 | 0.78594983 | 0.392 | 0.157 | 4.30E-21 | CD16pos_NK_UCBMC |
| CD44              | 1.63E-25 | 0.98752567 | 0.442 | 0.198 | 5.76E-21 | CD16pos_NK_UCBMC |
| STK4              | 2.36E-25 | 0.73890059 | 0.545 | 0.255 | 8.37E-21 | CD16pos_NK_UCBMC |
| RAB2A             | 2.41E-25 | 0.92269732 | 0.439 | 0.194 | 8.54E-21 | CD16pos_NK_UCBMC |
| SYTL2             | 2.81E-25 | 0.79757052 | 0.444 | 0.194 | 9.96E-21 | CD16pos_NK_UCBMC |
| GRB2              | 3.24E-25 | 0.94144591 | 0.365 | 0.146 | 1.15E-20 | CD16pos_NK_UCBMC |
| CTNNB1            | 3.92E-25 | 1.07786716 | 0.307 | 0.113 | 1.39E-20 | CD16pos_NK_UCBMC |
| SRSF4             | 4.09E-25 | 1.11626798 | 0.27  | 0.093 | 1.45E-20 | CD16pos_NK_UCBMC |
| ELK3              | 4.20E-25 | 0.9439506  | 0.407 | 0.174 | 1.49E-20 | CD16pos_NK_UCBMC |
| ENSMUG00000001894 | 4.21E-25 | 1.17584848 | 0.267 | 0.093 | 1.49E-20 | CD16pos_NK_UCBMC |
| IKZF2             | 4.32E-25 | 1.27927819 | 0.291 | 0.107 | 1.53E-20 | CD16pos_NK_UCBMC |
| BCLAF1            | 5.03E-25 | 0.86547094 | 0.5   | 0.233 | 1.78E-20 | CD16pos_NK_UCBMC |
| GPBP1L1           | 5.57E-25 | 1.14417698 | 0.299 | 0.111 | 1.97E-20 | CD16pos_NK_UCBMC |
| DIAPH1            | 6.78E-25 | 0.90863163 | 0.46  | 0.21  | 2.40E-20 | CD16pos_NK_UCBMC |
| SEPTIN6           | 6.91E-25 | 0.8657426  | 0.471 | 0.217 | 2.45E-20 | CD16pos_NK_UCBMC |
| TRIM72            | 9.93E-25 | 0.82045861 | 0.439 | 0.191 | 3.52E-20 | CD16pos_NK_UCBMC |
| PTPN2             | 1.02E-24 | 0.89489618 | 0.447 | 0.201 | 3.62E-20 | CD16pos_NK_UCBMC |
| TMEM87A           | 1.19E-24 | 1.09774881 | 0.31  | 0.117 | 4.23E-20 | CD16pos_NK_UCBMC |
| REL               | 1.25E-24 | 0.87310793 | 0.476 | 0.219 | 4.42E-20 | CD16pos_NK_UCBMC |
| RAPGEF2           | 2.13E-24 | 1.20453093 | 0.312 | 0.121 | 7.55E-20 | CD16pos_NK_UCBMC |
| RAD21             | 2.60E-24 | 0.94593113 | 0.362 | 0.147 | 9.20E-20 | CD16pos_NK_UCBMC |
| SEC63             | 2.67E-24 | 1.12959469 | 0.27  | 0.095 | 9.46E-20 | CD16pos_NK_UCBMC |
| CLINT1            | 3.51E-24 | 1.24210823 | 0.286 | 0.106 | 1.24E-19 | CD16pos_NK_UCBMC |
| MPZL1             | 4.81E-24 | 1.08078244 | 0.339 | 0.136 | 1.70E-19 | CD16pos_NK_UCBMC |
| PRKCQ             | 5.46E-24 | 0.91868525 | 0.339 | 0.134 | 1.94E-19 | CD16pos_NK_UCBMC |
| CDC42SE2          | 6.09E-24 | 0.73380487 | 0.661 | 0.365 | 2.16E-19 | CD16pos_NK_UCBMC |
| SS18              | 6.57E-24 | 1.1100916  | 0.283 | 0.104 | 2.33E-19 | CD16pos_NK_UCBMC |
| TMOD3             | 6.92E-24 | 0.83500352 | 0.413 | 0.178 | 2.45E-19 | CD16pos_NK_UCBMC |
| SP140             | 7.01E-24 | 1.20517046 | 0.259 | 0.092 | 2.48E-19 | CD16pos_NK_UCBMC |
| ZNF451            | 8.13E-24 | 1.23975404 | 0.262 | 0.092 | 2.88E-19 | CD16pos_NK_UCBMC |
| PPP4R3B           | 8.41E-24 | 1.07705381 | 0.278 | 0.101 | 2.98E-19 | CD16pos_NK_UCBMC |
| CAST              | 8.44E-24 | 0.91477642 | 0.354 | 0.144 | 2.99E-19 | CD16pos_NK_UCBMC |
| NUFIP2            | 9.32E-24 | 1.08283893 | 0.272 | 0.098 | 3.30E-19 | CD16pos_NK_UCBMC |

|                    |          |            |       |       |          |                  |
|--------------------|----------|------------|-------|-------|----------|------------------|
| ENSMMUG00000022610 | 9.56E-24 | 0.88732545 | 0.386 | 0.165 | 3.39E-19 | CD16pos_NK_UCBMC |
| RNF149             | 9.74E-24 | 1.05285537 | 0.331 | 0.132 | 3.45E-19 | CD16pos_NK_UCBMC |
| FAR1               | 1.12E-23 | 1.12855425 | 0.265 | 0.093 | 3.96E-19 | CD16pos_NK_UCBMC |
| DUSP1              | 1.12E-23 | 0.94677524 | 0.302 | 0.114 | 3.98E-19 | CD16pos_NK_UCBMC |
| SLU7               | 1.16E-23 | 1.05104352 | 0.251 | 0.086 | 4.12E-19 | CD16pos_NK_UCBMC |
| ESCO1              | 1.30E-23 | 0.86258495 | 0.299 | 0.11  | 4.59E-19 | CD16pos_NK_UCBMC |
| RAB7A              | 1.35E-23 | 0.89389146 | 0.407 | 0.176 | 4.80E-19 | CD16pos_NK_UCBMC |
| CNOT6L             | 1.37E-23 | 0.80419784 | 0.479 | 0.225 | 4.85E-19 | CD16pos_NK_UCBMC |
| MNAT1              | 1.42E-23 | 1.05184735 | 0.272 | 0.098 | 5.02E-19 | CD16pos_NK_UCBMC |
| ATF7IP             | 1.48E-23 | 0.84074958 | 0.466 | 0.214 | 5.25E-19 | CD16pos_NK_UCBMC |
| SEPTIN11           | 2.03E-23 | 0.79448615 | 0.529 | 0.258 | 7.19E-19 | CD16pos_NK_UCBMC |
| STK38              | 2.18E-23 | 0.87430306 | 0.418 | 0.184 | 7.72E-19 | CD16pos_NK_UCBMC |
| SMARCC1            | 3.42E-23 | 1.10927926 | 0.28  | 0.104 | 1.21E-18 | CD16pos_NK_UCBMC |
| PARP8              | 4.26E-23 | 1.02495332 | 0.362 | 0.154 | 1.51E-18 | CD16pos_NK_UCBMC |
| NBR1               | 4.27E-23 | 1.02989944 | 0.312 | 0.123 | 1.51E-18 | CD16pos_NK_UCBMC |
| FYB1               | 4.28E-23 | 0.71241212 | 0.558 | 0.277 | 1.52E-18 | CD16pos_NK_UCBMC |
| DYRK1A             | 4.84E-23 | 1.1347627  | 0.257 | 0.091 | 1.71E-18 | CD16pos_NK_UCBMC |
| KBTBD2             | 5.52E-23 | 0.90727265 | 0.27  | 0.096 | 1.96E-18 | CD16pos_NK_UCBMC |
| LCP2               | 5.80E-23 | 1.04695396 | 0.299 | 0.115 | 2.06E-18 | CD16pos_NK_UCBMC |
| SMARCA2            | 5.94E-23 | 1.03617653 | 0.323 | 0.129 | 2.10E-18 | CD16pos_NK_UCBMC |
| SF1                | 6.08E-23 | 1.0180725  | 0.304 | 0.117 | 2.15E-18 | CD16pos_NK_UCBMC |
| RSU1               | 7.04E-23 | 1.0574478  | 0.294 | 0.112 | 2.49E-18 | CD16pos_NK_UCBMC |
| RPL23              | 7.24E-23 | 0.49820461 | 0.971 | 0.772 | 2.57E-18 | CD16pos_NK_UCBMC |
| RAB8B              | 8.24E-23 | 0.7703571  | 0.556 | 0.276 | 2.92E-18 | CD16pos_NK_UCBMC |
| DNAJC24            | 1.03E-22 | 1.06119376 | 0.283 | 0.106 | 3.66E-18 | CD16pos_NK_UCBMC |
| RPS3               | 1.09E-22 | 0.47065504 | 0.976 | 0.84  | 3.88E-18 | CD16pos_NK_UCBMC |
| HNRNP              | 1.20E-22 | 0.88166648 | 0.376 | 0.162 | 4.25E-18 | CD16pos_NK_UCBMC |
| RFC1               | 1.20E-22 | 0.78729314 | 0.37  | 0.155 | 4.27E-18 | CD16pos_NK_UCBMC |
| EWSR1              | 1.35E-22 | 1.03977388 | 0.283 | 0.106 | 4.79E-18 | CD16pos_NK_UCBMC |
| ENSMMUG00000006293 | 2.15E-22 | 0.81162222 | 0.413 | 0.184 | 7.62E-18 | CD16pos_NK_UCBMC |
| MECP2              | 2.21E-22 | 0.84447675 | 0.341 | 0.139 | 7.84E-18 | CD16pos_NK_UCBMC |
| MADD               | 2.61E-22 | 0.87979879 | 0.325 | 0.131 | 9.24E-18 | CD16pos_NK_UCBMC |
| PSIP1              | 3.01E-22 | 1.1529738  | 0.262 | 0.097 | 1.07E-17 | CD16pos_NK_UCBMC |

|                   |          |            |       |       |          |                  |
|-------------------|----------|------------|-------|-------|----------|------------------|
| SH3KBP1           | 3.46E-22 | 0.76313994 | 0.63  | 0.348 | 1.23E-17 | CD16pos_NK_UCBMC |
| FUBP1             | 7.61E-22 | 0.87284627 | 0.331 | 0.136 | 2.70E-17 | CD16pos_NK_UCBMC |
| AKAP13            | 8.09E-22 | 0.70270433 | 0.738 | 0.44  | 2.87E-17 | CD16pos_NK_UCBMC |
| ERP44             | 1.03E-21 | 0.80267538 | 0.32  | 0.127 | 3.65E-17 | CD16pos_NK_UCBMC |
| SNX14             | 1.10E-21 | 0.96732584 | 0.307 | 0.123 | 3.89E-17 | CD16pos_NK_UCBMC |
| BRD7              | 1.20E-21 | 1.133434   | 0.275 | 0.106 | 4.26E-17 | CD16pos_NK_UCBMC |
| PAFAH1B1          | 1.22E-21 | 0.91030412 | 0.376 | 0.164 | 4.33E-17 | CD16pos_NK_UCBMC |
| ATXN7             | 1.36E-21 | 1.10051931 | 0.267 | 0.101 | 4.82E-17 | CD16pos_NK_UCBMC |
| RNF13             | 2.34E-21 | 1.02135203 | 0.262 | 0.097 | 8.28E-17 | CD16pos_NK_UCBMC |
| SPOP              | 2.36E-21 | 1.09967114 | 0.254 | 0.093 | 8.37E-17 | CD16pos_NK_UCBMC |
| RBM26             | 2.47E-21 | 1.03461657 | 0.302 | 0.121 | 8.77E-17 | CD16pos_NK_UCBMC |
| NRDC              | 4.18E-21 | 0.83526688 | 0.265 | 0.097 | 1.48E-16 | CD16pos_NK_UCBMC |
| XRN1              | 4.62E-21 | 0.85285802 | 0.336 | 0.14  | 1.64E-16 | CD16pos_NK_UCBMC |
| VMP1              | 4.69E-21 | 1.10510311 | 0.257 | 0.096 | 1.66E-16 | CD16pos_NK_UCBMC |
| YTHDC1            | 5.00E-21 | 1.09528862 | 0.254 | 0.095 | 1.77E-16 | CD16pos_NK_UCBMC |
| SF3B2             | 5.19E-21 | 0.99247586 | 0.291 | 0.115 | 1.84E-16 | CD16pos_NK_UCBMC |
| HSPA5             | 5.58E-21 | 0.71090071 | 0.463 | 0.219 | 1.98E-16 | CD16pos_NK_UCBMC |
| RSRC2             | 5.71E-21 | 0.69240388 | 0.487 | 0.238 | 2.02E-16 | CD16pos_NK_UCBMC |
| GPCPD1            | 5.91E-21 | 0.81027632 | 0.36  | 0.154 | 2.09E-16 | CD16pos_NK_UCBMC |
| HNRNPA2B1         | 6.70E-21 | 0.55522462 | 0.899 | 0.606 | 2.38E-16 | CD16pos_NK_UCBMC |
| PPP1R15A          | 1.02E-20 | 0.82397874 | 0.304 | 0.122 | 3.60E-16 | CD16pos_NK_UCBMC |
| NFKB1             | 1.33E-20 | 0.80693651 | 0.317 | 0.131 | 4.70E-16 | CD16pos_NK_UCBMC |
| RPS6KA3           | 1.34E-20 | 0.83320579 | 0.299 | 0.12  | 4.75E-16 | CD16pos_NK_UCBMC |
| RAB3GAP1          | 1.53E-20 | 1.01109202 | 0.265 | 0.101 | 5.41E-16 | CD16pos_NK_UCBMC |
| TAX1BP1           | 1.53E-20 | 0.66075341 | 0.481 | 0.235 | 5.42E-16 | CD16pos_NK_UCBMC |
| GIGYF2            | 1.65E-20 | 1.01689588 | 0.257 | 0.096 | 5.83E-16 | CD16pos_NK_UCBMC |
| SRRM2             | 1.92E-20 | 0.90519541 | 0.299 | 0.121 | 6.80E-16 | CD16pos_NK_UCBMC |
| ITPKB             | 2.06E-20 | 0.9816032  | 0.28  | 0.11  | 7.29E-16 | CD16pos_NK_UCBMC |
| ENSMUG00000005482 | 2.25E-20 | 1.15261449 | 0.251 | 0.095 | 7.96E-16 | CD16pos_NK_UCBMC |
| RPL26             | 2.62E-20 | 0.54534848 | 0.884 | 0.624 | 9.30E-16 | CD16pos_NK_UCBMC |
| GPBP1             | 2.76E-20 | 0.74992235 | 0.437 | 0.21  | 9.78E-16 | CD16pos_NK_UCBMC |
| ITGA4             | 2.97E-20 | 0.93536574 | 0.336 | 0.145 | 1.05E-15 | CD16pos_NK_UCBMC |
| SCAF11            | 4.48E-20 | 0.69714169 | 0.458 | 0.22  | 1.59E-15 | CD16pos_NK_UCBMC |

|                   |          |            |       |       |          |                  |
|-------------------|----------|------------|-------|-------|----------|------------------|
| TRIM22            | 5.10E-20 | 0.93689979 | 0.283 | 0.113 | 1.81E-15 | CD16pos_NK_UCBMC |
| HNRNPR            | 6.11E-20 | 0.70776249 | 0.394 | 0.177 | 2.16E-15 | CD16pos_NK_UCBMC |
| ARHGEF6           | 8.83E-20 | 0.92285508 | 0.272 | 0.107 | 3.13E-15 | CD16pos_NK_UCBMC |
| TMED10            | 9.86E-20 | 0.74579656 | 0.386 | 0.176 | 3.50E-15 | CD16pos_NK_UCBMC |
| HNRNPU            | 1.55E-19 | 0.71972237 | 0.452 | 0.219 | 5.48E-15 | CD16pos_NK_UCBMC |
| HUWE1             | 2.54E-19 | 0.92220311 | 0.31  | 0.131 | 9.00E-15 | CD16pos_NK_UCBMC |
| WDR33             | 2.62E-19 | 0.94883001 | 0.267 | 0.106 | 9.30E-15 | CD16pos_NK_UCBMC |
| THOC2             | 2.78E-19 | 1.08294483 | 0.251 | 0.097 | 9.86E-15 | CD16pos_NK_UCBMC |
| U2SURP            | 3.44E-19 | 0.6800333  | 0.376 | 0.169 | 1.22E-14 | CD16pos_NK_UCBMC |
| IFRD1             | 3.57E-19 | 1.09927091 | 0.262 | 0.103 | 1.27E-14 | CD16pos_NK_UCBMC |
| NEMF              | 3.61E-19 | 0.91805656 | 0.259 | 0.101 | 1.28E-14 | CD16pos_NK_UCBMC |
| ATG5              | 3.67E-19 | 0.8358395  | 0.291 | 0.119 | 1.30E-14 | CD16pos_NK_UCBMC |
| EIF4A2            | 4.07E-19 | 0.65511988 | 0.481 | 0.24  | 1.44E-14 | CD16pos_NK_UCBMC |
| IVNS1ABP          | 5.64E-19 | 0.86249133 | 0.296 | 0.123 | 2.00E-14 | CD16pos_NK_UCBMC |
| RBM25             | 5.65E-19 | 0.83361855 | 0.328 | 0.143 | 2.00E-14 | CD16pos_NK_UCBMC |
| EZR               | 6.55E-19 | 0.76679126 | 0.397 | 0.188 | 2.32E-14 | CD16pos_NK_UCBMC |
| ITGAL             | 6.60E-19 | 0.6172658  | 0.484 | 0.234 | 2.34E-14 | CD16pos_NK_UCBMC |
| DENND4A           | 8.30E-19 | 0.4795108  | 0.534 | 0.271 | 2.94E-14 | CD16pos_NK_UCBMC |
| SYAP1             | 8.63E-19 | 0.92769861 | 0.257 | 0.1   | 3.06E-14 | CD16pos_NK_UCBMC |
| ADAM10            | 8.64E-19 | 0.79842227 | 0.352 | 0.16  | 3.06E-14 | CD16pos_NK_UCBMC |
| CD46              | 1.29E-18 | 0.72289403 | 0.36  | 0.163 | 4.56E-14 | CD16pos_NK_UCBMC |
| WIPF1             | 1.32E-18 | 0.52043199 | 0.667 | 0.366 | 4.67E-14 | CD16pos_NK_UCBMC |
| PPP1CA            | 1.32E-18 | 0.57992346 | 0.444 | 0.213 | 4.68E-14 | CD16pos_NK_UCBMC |
| ZMYM2             | 1.42E-18 | 1.01599793 | 0.251 | 0.099 | 5.03E-14 | CD16pos_NK_UCBMC |
| ADD1              | 1.49E-18 | 0.66989748 | 0.347 | 0.153 | 5.28E-14 | CD16pos_NK_UCBMC |
| ENSMUG00000063549 | 1.99E-18 | 0.83219529 | 0.328 | 0.145 | 7.05E-14 | CD16pos_NK_UCBMC |
| G3BP1             | 2.43E-18 | 0.67854859 | 0.373 | 0.17  | 8.62E-14 | CD16pos_NK_UCBMC |
| JARID2            | 2.70E-18 | 0.61976039 | 0.37  | 0.168 | 9.55E-14 | CD16pos_NK_UCBMC |
| ENSMUG00000061125 | 3.29E-18 | 0.530934   | 0.548 | 0.278 | 1.17E-13 | CD16pos_NK_UCBMC |
| CD38              | 3.44E-18 | 0.59597161 | 0.685 | 0.398 | 1.22E-13 | CD16pos_NK_UCBMC |
| NUCKS1            | 3.44E-18 | 0.64891621 | 0.407 | 0.193 | 1.22E-13 | CD16pos_NK_UCBMC |
| CMTM6             | 3.52E-18 | 0.59331473 | 0.447 | 0.217 | 1.25E-13 | CD16pos_NK_UCBMC |
| CFLAR             | 3.60E-18 | 0.72401262 | 0.36  | 0.164 | 1.27E-13 | CD16pos_NK_UCBMC |



|                   |          |            |       |       |          |                  |
|-------------------|----------|------------|-------|-------|----------|------------------|
| MTPN              | 4.25E-18 | 0.77077603 | 0.368 | 0.17  | 1.50E-13 | CD16pos_NK_UCBMC |
| EMP3              | 4.25E-18 | 0.64320931 | 0.373 | 0.169 | 1.51E-13 | CD16pos_NK_UCBMC |
| NFKBIB            | 5.78E-18 | 0.81790643 | 0.32  | 0.142 | 2.05E-13 | CD16pos_NK_UCBMC |
| FXR1              | 5.89E-18 | 0.60768049 | 0.381 | 0.175 | 2.09E-13 | CD16pos_NK_UCBMC |
| ZC3HAV1           | 7.15E-18 | 0.72771809 | 0.394 | 0.188 | 2.53E-13 | CD16pos_NK_UCBMC |
| ATXN10            | 8.38E-18 | 0.77729533 | 0.352 | 0.161 | 2.97E-13 | CD16pos_NK_UCBMC |
| ENSMUG00000056654 | 1.02E-17 | 0.65603092 | 0.765 | 0.501 | 3.62E-13 | CD16pos_NK_UCBMC |
| WTAP              | 1.02E-17 | 0.71832539 | 0.349 | 0.16  | 3.62E-13 | CD16pos_NK_UCBMC |
| NONO              | 1.04E-17 | 0.81069059 | 0.302 | 0.13  | 3.68E-13 | CD16pos_NK_UCBMC |
| RHOH              | 1.04E-17 | 0.90359259 | 0.304 | 0.134 | 3.69E-13 | CD16pos_NK_UCBMC |
| PNRC2             | 1.17E-17 | 0.59477998 | 0.362 | 0.163 | 4.14E-13 | CD16pos_NK_UCBMC |
| TBC1D22A          | 1.59E-17 | 0.75057153 | 0.32  | 0.142 | 5.62E-13 | CD16pos_NK_UCBMC |
| CASP3             | 1.90E-17 | 0.781018   | 0.299 | 0.129 | 6.73E-13 | CD16pos_NK_UCBMC |
| CPD               | 1.97E-17 | 0.77147404 | 0.262 | 0.106 | 6.98E-13 | CD16pos_NK_UCBMC |
| ENSMUG00000006343 | 2.53E-17 | 0.83568485 | 0.27  | 0.112 | 8.98E-13 | CD16pos_NK_UCBMC |
| B2M               | 3.01E-17 | 0.27738116 | 1     | 0.999 | 1.06E-12 | CD16pos_NK_UCBMC |
| BPTF              | 3.72E-17 | 0.76084346 | 0.339 | 0.157 | 1.32E-12 | CD16pos_NK_UCBMC |
| ST8SIA4           | 4.01E-17 | 0.73010109 | 0.376 | 0.179 | 1.42E-12 | CD16pos_NK_UCBMC |
| EFCAB2            | 4.24E-17 | 0.90950315 | 0.27  | 0.115 | 1.50E-12 | CD16pos_NK_UCBMC |
| NSD3              | 4.38E-17 | 0.88993261 | 0.272 | 0.116 | 1.55E-12 | CD16pos_NK_UCBMC |
| UBE2F             | 4.50E-17 | 0.7997381  | 0.288 | 0.123 | 1.59E-12 | CD16pos_NK_UCBMC |
| AKAP9             | 5.22E-17 | 0.70578748 | 0.362 | 0.171 | 1.85E-12 | CD16pos_NK_UCBMC |
| SETX              | 6.06E-17 | 0.59180553 | 0.365 | 0.171 | 2.15E-12 | CD16pos_NK_UCBMC |
| EIF4H             | 9.26E-17 | 0.6535956  | 0.333 | 0.152 | 3.28E-12 | CD16pos_NK_UCBMC |
| FOXN2             | 9.82E-17 | 0.83957721 | 0.32  | 0.146 | 3.48E-12 | CD16pos_NK_UCBMC |
| SEMA4D            | 9.95E-17 | 0.7709626  | 0.376 | 0.183 | 3.53E-12 | CD16pos_NK_UCBMC |
| ST3GAL1           | 1.33E-16 | 0.80046138 | 0.283 | 0.123 | 4.70E-12 | CD16pos_NK_UCBMC |
| CHIC2             | 1.49E-16 | 1.0373411  | 0.251 | 0.106 | 5.28E-12 | CD16pos_NK_UCBMC |
| RCSD1             | 1.52E-16 | 0.69525757 | 0.328 | 0.149 | 5.39E-12 | CD16pos_NK_UCBMC |
| PRRC2C            | 1.55E-16 | 0.62480349 | 0.529 | 0.287 | 5.48E-12 | CD16pos_NK_UCBMC |
| CCND3             | 1.82E-16 | 0.67357456 | 0.479 | 0.252 | 6.44E-12 | CD16pos_NK_UCBMC |
| RGS9              | 2.24E-16 | 0.47828588 | 0.854 | 0.588 | 7.95E-12 | CD16pos_NK_UCBMC |
| STAT4             | 2.85E-16 | 0.53517673 | 0.458 | 0.234 | 1.01E-11 | CD16pos_NK_UCBMC |

|                    |          |            |       |       |          |                  |
|--------------------|----------|------------|-------|-------|----------|------------------|
| MIA2               | 3.10E-16 | 0.64423145 | 0.328 | 0.151 | 1.10E-11 | CD16pos_NK_UCBMC |
| TRA2B              | 3.36E-16 | 0.48647735 | 0.696 | 0.416 | 1.19E-11 | CD16pos_NK_UCBMC |
| HIPK1              | 3.41E-16 | 0.76895738 | 0.275 | 0.119 | 1.21E-11 | CD16pos_NK_UCBMC |
| TLN1               | 4.19E-16 | 0.55394038 | 0.532 | 0.29  | 1.49E-11 | CD16pos_NK_UCBMC |
| FGD3               | 4.62E-16 | 0.58047292 | 0.36  | 0.17  | 1.64E-11 | CD16pos_NK_UCBMC |
| ADD3               | 4.64E-16 | 0.84225172 | 0.288 | 0.128 | 1.64E-11 | CD16pos_NK_UCBMC |
| UBE2K              | 6.90E-16 | 0.82419212 | 0.272 | 0.12  | 2.45E-11 | CD16pos_NK_UCBMC |
| ENSMMUG00000055457 | 7.09E-16 | 0.55743937 | 0.386 | 0.186 | 2.51E-11 | CD16pos_NK_UCBMC |
| EIF3F              | 7.17E-16 | 0.66581807 | 0.439 | 0.226 | 2.54E-11 | CD16pos_NK_UCBMC |
| NFKBIA             | 9.17E-16 | 0.4795251  | 0.339 | 0.157 | 3.25E-11 | CD16pos_NK_UCBMC |
| VRK1               | 1.07E-15 | 0.61247768 | 0.299 | 0.132 | 3.79E-11 | CD16pos_NK_UCBMC |
| SYK                | 1.35E-15 | 0.72850818 | 0.323 | 0.152 | 4.77E-11 | CD16pos_NK_UCBMC |
| ENSMMUG00000010266 | 1.35E-15 | 0.47054318 | 0.516 | 0.281 | 4.78E-11 | CD16pos_NK_UCBMC |
| SLTM               | 1.39E-15 | 0.7126051  | 0.362 | 0.178 | 4.92E-11 | CD16pos_NK_UCBMC |
| DDX39B             | 2.33E-15 | 0.72373484 | 0.251 | 0.107 | 8.27E-11 | CD16pos_NK_UCBMC |
| PIK3AP1            | 2.70E-15 | 0.68045722 | 0.296 | 0.135 | 9.56E-11 | CD16pos_NK_UCBMC |
| PPIG               | 3.19E-15 | 0.54875665 | 0.386 | 0.191 | 1.13E-10 | CD16pos_NK_UCBMC |
| FAM107B            | 3.31E-15 | 0.74615794 | 0.286 | 0.128 | 1.17E-10 | CD16pos_NK_UCBMC |
| PDCD6IP            | 4.27E-15 | 0.80694847 | 0.265 | 0.117 | 1.51E-10 | CD16pos_NK_UCBMC |
| ZNF207             | 6.02E-15 | 0.54961965 | 0.349 | 0.166 | 2.13E-10 | CD16pos_NK_UCBMC |
| RANBP2             | 6.49E-15 | 0.78890314 | 0.304 | 0.144 | 2.30E-10 | CD16pos_NK_UCBMC |
| ATF7               | 6.88E-15 | 0.83879782 | 0.254 | 0.111 | 2.44E-10 | CD16pos_NK_UCBMC |
| CTNBL1             | 7.14E-15 | 0.61199378 | 0.27  | 0.118 | 2.53E-10 | CD16pos_NK_UCBMC |
| PI4K2B             | 7.32E-15 | 0.49714144 | 0.479 | 0.255 | 2.59E-10 | CD16pos_NK_UCBMC |
| KLF3               | 7.38E-15 | 0.72671476 | 0.275 | 0.124 | 2.61E-10 | CD16pos_NK_UCBMC |
| SERINC1            | 7.47E-15 | 0.55057113 | 0.344 | 0.165 | 2.65E-10 | CD16pos_NK_UCBMC |
| RPL7               | 8.14E-15 | 0.46641253 | 0.849 | 0.641 | 2.89E-10 | CD16pos_NK_UCBMC |
| ENSMMUG00000063316 | 8.44E-15 | 0.60927212 | 0.291 | 0.132 | 2.99E-10 | CD16pos_NK_UCBMC |
| ITM2B              | 8.80E-15 | 0.3934283  | 0.646 | 0.357 | 3.12E-10 | CD16pos_NK_UCBMC |
| FMC1-LUC7L2        | 9.77E-15 | 0.45374214 | 0.508 | 0.269 | 3.46E-10 | CD16pos_NK_UCBMC |
| PAPOLA             | 9.95E-15 | 0.56858385 | 0.431 | 0.226 | 3.53E-10 | CD16pos_NK_UCBMC |
| CCPG1              | 1.34E-14 | 0.78075608 | 0.262 | 0.116 | 4.76E-10 | CD16pos_NK_UCBMC |
| ENSMMUG00000054358 | 1.39E-14 | 0.34489221 | 0.81  | 0.535 | 4.93E-10 | CD16pos_NK_UCBMC |

|                    |          |            |       |       |          |                  |
|--------------------|----------|------------|-------|-------|----------|------------------|
| CYFIP2             | 1.71E-14 | 0.47298412 | 0.336 | 0.16  | 6.05E-10 | CD16pos_NK_UCBMC |
| SEPTIN9            | 1.78E-14 | 0.52265876 | 0.317 | 0.147 | 6.31E-10 | CD16pos_NK_UCBMC |
| KLHL23             | 2.24E-14 | 0.49937748 | 0.611 | 0.352 | 7.95E-10 | CD16pos_NK_UCBMC |
| VASP               | 3.75E-14 | 0.42926856 | 0.423 | 0.214 | 1.33E-09 | CD16pos_NK_UCBMC |
| ARHGAP30           | 4.30E-14 | 0.47441577 | 0.405 | 0.207 | 1.52E-09 | CD16pos_NK_UCBMC |
| CSGALNACT2         | 5.26E-14 | 0.60622071 | 0.296 | 0.139 | 1.87E-09 | CD16pos_NK_UCBMC |
| AHNAK              | 5.30E-14 | 0.49286479 | 0.54  | 0.304 | 1.88E-09 | CD16pos_NK_UCBMC |
| RUNX3              | 5.87E-14 | 0.42215985 | 0.455 | 0.242 | 2.08E-09 | CD16pos_NK_UCBMC |
| RASA3              | 6.20E-14 | 0.719297   | 0.251 | 0.112 | 2.20E-09 | CD16pos_NK_UCBMC |
| EIF4G2             | 6.27E-14 | 0.53717908 | 0.418 | 0.221 | 2.22E-09 | CD16pos_NK_UCBMC |
| CCDC69             | 8.49E-14 | 0.61285208 | 0.362 | 0.183 | 3.01E-09 | CD16pos_NK_UCBMC |
| SHOC2              | 8.59E-14 | 0.54484082 | 0.307 | 0.145 | 3.04E-09 | CD16pos_NK_UCBMC |
| RAP1B              | 9.45E-14 | 0.51206118 | 0.77  | 0.534 | 3.35E-09 | CD16pos_NK_UCBMC |
| ELF1               | 1.00E-13 | 0.50092618 | 0.601 | 0.356 | 3.56E-09 | CD16pos_NK_UCBMC |
| UBXN4              | 1.01E-13 | 0.53767403 | 0.32  | 0.155 | 3.58E-09 | CD16pos_NK_UCBMC |
| PSMD14             | 1.72E-13 | 0.58733098 | 0.28  | 0.13  | 6.09E-09 | CD16pos_NK_UCBMC |
| RAB5A              | 1.95E-13 | 0.57261165 | 0.265 | 0.121 | 6.91E-09 | CD16pos_NK_UCBMC |
| ARGLU1             | 2.35E-13 | 0.51088474 | 0.376 | 0.193 | 8.33E-09 | CD16pos_NK_UCBMC |
| ENSMMUG00000012537 | 2.51E-13 | 0.80139998 | 0.251 | 0.116 | 8.91E-09 | CD16pos_NK_UCBMC |
| SMAP2              | 3.81E-13 | 0.68561942 | 0.265 | 0.123 | 1.35E-08 | CD16pos_NK_UCBMC |
| CAPZA1             | 4.37E-13 | 0.46271509 | 0.534 | 0.306 | 1.55E-08 | CD16pos_NK_UCBMC |
| HP1BP3             | 5.37E-13 | 0.53756576 | 0.352 | 0.18  | 1.90E-08 | CD16pos_NK_UCBMC |
| DDOST              | 5.50E-13 | 0.43958753 | 0.357 | 0.18  | 1.95E-08 | CD16pos_NK_UCBMC |
| MORC3              | 5.50E-13 | 0.63552915 | 0.251 | 0.114 | 1.95E-08 | CD16pos_NK_UCBMC |
| AKNA               | 5.59E-13 | 0.54440349 | 0.336 | 0.17  | 1.98E-08 | CD16pos_NK_UCBMC |
| EIF3M              | 5.77E-13 | 0.49684856 | 0.352 | 0.177 | 2.04E-08 | CD16pos_NK_UCBMC |
| PAK2               | 5.92E-13 | 0.48176442 | 0.384 | 0.201 | 2.10E-08 | CD16pos_NK_UCBMC |
| NKG2D              | 5.93E-13 | 0.53169386 | 0.405 | 0.215 | 2.10E-08 | CD16pos_NK_UCBMC |
| MRPS31             | 5.98E-13 | 0.5119564  | 0.257 | 0.117 | 2.12E-08 | CD16pos_NK_UCBMC |
| ENSMMUG00000006803 | 6.11E-13 | 0.59702547 | 0.27  | 0.126 | 2.16E-08 | CD16pos_NK_UCBMC |
| ENSMMUG00000049736 | 6.33E-13 | 0.63060502 | 0.28  | 0.132 | 2.24E-08 | CD16pos_NK_UCBMC |
| BTN2A2             | 6.67E-13 | 0.47614947 | 0.399 | 0.208 | 2.36E-08 | CD16pos_NK_UCBMC |
| BAZ1A              | 7.58E-13 | 0.64107924 | 0.275 | 0.131 | 2.69E-08 | CD16pos_NK_UCBMC |

|                     |          |            |       |       |          |                  |
|---------------------|----------|------------|-------|-------|----------|------------------|
| ENSMMUG000000065373 | 1.32E-12 | 0.25162098 | 0.944 | 0.772 | 4.68E-08 | CD16pos_NK_UCBMC |
| ACTB                | 1.82E-12 | 0.26337785 | 1     | 0.986 | 6.44E-08 | CD16pos_NK_UCBMC |
| BNIP3L              | 2.24E-12 | 0.5271361  | 0.272 | 0.129 | 7.92E-08 | CD16pos_NK_UCBMC |
| TOP2B               | 2.35E-12 | 0.57623678 | 0.296 | 0.147 | 8.32E-08 | CD16pos_NK_UCBMC |
| PCNP                | 2.65E-12 | 0.58203309 | 0.299 | 0.147 | 9.38E-08 | CD16pos_NK_UCBMC |
| CWF19L2             | 2.86E-12 | 0.56378902 | 0.265 | 0.126 | 1.01E-07 | CD16pos_NK_UCBMC |
| MPHOSPH8            | 2.97E-12 | 0.56952726 | 0.32  | 0.162 | 1.05E-07 | CD16pos_NK_UCBMC |
| CSDE1               | 3.28E-12 | 0.38982959 | 0.37  | 0.193 | 1.16E-07 | CD16pos_NK_UCBMC |
| XRCC5               | 3.48E-12 | 0.38543975 | 0.418 | 0.223 | 1.23E-07 | CD16pos_NK_UCBMC |
| RSL1D1              | 4.87E-12 | 0.59289847 | 0.262 | 0.124 | 1.73E-07 | CD16pos_NK_UCBMC |
| NDFIP1              | 5.11E-12 | 0.54238813 | 0.31  | 0.157 | 1.81E-07 | CD16pos_NK_UCBMC |
| STK17A              | 5.20E-12 | 0.38603089 | 0.373 | 0.195 | 1.84E-07 | CD16pos_NK_UCBMC |
| LASP1               | 6.28E-12 | 0.52019144 | 0.272 | 0.131 | 2.23E-07 | CD16pos_NK_UCBMC |
| RNF213              | 6.54E-12 | 0.58534188 | 0.32  | 0.164 | 2.32E-07 | CD16pos_NK_UCBMC |
| SFPQ                | 6.82E-12 | 0.43541701 | 0.299 | 0.149 | 2.41E-07 | CD16pos_NK_UCBMC |
| DNAJB14             | 6.95E-12 | 0.47134537 | 0.265 | 0.126 | 2.46E-07 | CD16pos_NK_UCBMC |
| PRKDC               | 7.69E-12 | 0.5391584  | 0.283 | 0.14  | 2.72E-07 | CD16pos_NK_UCBMC |
| ARHGAP32            | 9.05E-12 | 0.47284345 | 0.275 | 0.132 | 3.21E-07 | CD16pos_NK_UCBMC |
| BIN2                | 9.73E-12 | 0.41064247 | 0.608 | 0.361 | 3.45E-07 | CD16pos_NK_UCBMC |
| RABGEF1             | 1.04E-11 | 0.47455316 | 0.299 | 0.149 | 3.68E-07 | CD16pos_NK_UCBMC |
| RAB14               | 1.30E-11 | 0.50018498 | 0.31  | 0.157 | 4.60E-07 | CD16pos_NK_UCBMC |
| STX8                | 1.31E-11 | 0.41912868 | 0.328 | 0.167 | 4.63E-07 | CD16pos_NK_UCBMC |
| ENSMMUG000000004539 | 1.56E-11 | 0.34458602 | 0.415 | 0.223 | 5.53E-07 | CD16pos_NK_UCBMC |
| ARF4                | 1.89E-11 | 0.42671219 | 0.378 | 0.203 | 6.69E-07 | CD16pos_NK_UCBMC |
| RAB37               | 2.08E-11 | 0.415941   | 0.392 | 0.213 | 7.37E-07 | CD16pos_NK_UCBMC |
| UBE2D3              | 2.13E-11 | 0.40130486 | 0.63  | 0.391 | 7.56E-07 | CD16pos_NK_UCBMC |
| VPS4B               | 4.24E-11 | 0.45693004 | 0.299 | 0.152 | 1.50E-06 | CD16pos_NK_UCBMC |
| CAPZA2              | 4.98E-11 | 0.41200977 | 0.429 | 0.24  | 1.76E-06 | CD16pos_NK_UCBMC |
| HNRNPA3             | 6.13E-11 | 0.40291241 | 0.619 | 0.398 | 2.17E-06 | CD16pos_NK_UCBMC |
| ARHGEF1             | 6.59E-11 | 0.36212488 | 0.41  | 0.227 | 2.33E-06 | CD16pos_NK_UCBMC |
| CSNK2A1             | 8.08E-11 | 0.40403418 | 0.315 | 0.162 | 2.86E-06 | CD16pos_NK_UCBMC |
| ENSMMUG000000003130 | 1.03E-10 | 0.32571606 | 0.421 | 0.231 | 3.66E-06 | CD16pos_NK_UCBMC |
| NUCB2               | 1.38E-10 | 0.48086264 | 0.368 | 0.202 | 4.88E-06 | CD16pos_NK_UCBMC |

|                    |          |            |       |       |            |                  |
|--------------------|----------|------------|-------|-------|------------|------------------|
| RAB27A             | 1.40E-10 | 0.2818613  | 0.352 | 0.185 | 4.95E-06   | CD16pos_NK_UCBMC |
| TRAM1              | 1.90E-10 | 0.42596136 | 0.315 | 0.166 | 6.73E-06   | CD16pos_NK_UCBMC |
| CD164              | 2.17E-10 | 0.33287019 | 0.45  | 0.258 | 7.68E-06   | CD16pos_NK_UCBMC |
| PIK3CD             | 2.58E-10 | 0.45804688 | 0.262 | 0.132 | 9.14E-06   | CD16pos_NK_UCBMC |
| FLNA               | 2.65E-10 | 0.27578353 | 0.558 | 0.336 | 9.39E-06   | CD16pos_NK_UCBMC |
| EEF2               | 3.11E-10 | 0.31749221 | 0.545 | 0.325 | 1.10E-05   | CD16pos_NK_UCBMC |
| HCLS1              | 3.21E-10 | 0.44590709 | 0.333 | 0.18  | 1.14E-05   | CD16pos_NK_UCBMC |
| ACTR3              | 3.22E-10 | 0.3567893  | 0.601 | 0.376 | 1.14E-05   | CD16pos_NK_UCBMC |
| TUBA1A             | 3.23E-10 | 0.38000826 | 0.582 | 0.367 | 1.14E-05   | CD16pos_NK_UCBMC |
| C3H21orf91         | 3.26E-10 | 0.49699355 | 0.251 | 0.126 | 1.15E-05   | CD16pos_NK_UCBMC |
| TSPAN14            | 3.75E-10 | 0.48249915 | 0.259 | 0.131 | 1.33E-05   | CD16pos_NK_UCBMC |
| DDX3X              | 3.86E-10 | 0.31422445 | 0.45  | 0.256 | 1.37E-05   | CD16pos_NK_UCBMC |
| AARS1              | 6.38E-10 | 0.49382063 | 0.265 | 0.136 | 2.26E-05   | CD16pos_NK_UCBMC |
| DDX39A             | 9.03E-10 | 0.4356484  | 0.267 | 0.138 | 3.20E-05   | CD16pos_NK_UCBMC |
| CCT4               | 9.35E-10 | 0.39178751 | 0.302 | 0.162 | 3.31E-05   | CD16pos_NK_UCBMC |
| VPS13C             | 1.17E-09 | 0.31530501 | 0.349 | 0.193 | 4.14E-05   | CD16pos_NK_UCBMC |
| ATM                | 1.29E-09 | 0.46763014 | 0.299 | 0.162 | 4.58E-05   | CD16pos_NK_UCBMC |
| ITGAX              | 1.35E-09 | 0.42980749 | 0.439 | 0.26  | 4.77E-05   | CD16pos_NK_UCBMC |
| TMEM123            | 1.75E-09 | 0.5235416  | 0.283 | 0.151 | 6.21E-05   | CD16pos_NK_UCBMC |
| ENSMMUG00000058325 | 1.90E-09 | 0.3018908  | 0.955 | 0.868 | 6.74E-05   | CD16pos_NK_UCBMC |
| MORF4L1            | 2.18E-09 | 0.30549202 | 0.466 | 0.277 | 7.71E-05   | CD16pos_NK_UCBMC |
| G3BP2              | 2.19E-09 | 0.37658649 | 0.283 | 0.15  | 7.77E-05   | CD16pos_NK_UCBMC |
| SH3BP5             | 2.38E-09 | 0.36974471 | 0.267 | 0.139 | 8.45E-05   | CD16pos_NK_UCBMC |
| RPL4               | 2.49E-09 | 0.35200867 | 0.839 | 0.605 | 8.84E-05   | CD16pos_NK_UCBMC |
| RAP1A              | 2.59E-09 | 0.40133449 | 0.41  | 0.244 | 9.17E-05   | CD16pos_NK_UCBMC |
| CD8A               | 2.66E-09 | 0.24960809 | 0.376 | 0.209 | 9.42E-05   | CD16pos_NK_UCBMC |
| CD47               | 3.00E-09 | 0.39321809 | 0.325 | 0.179 | 0.00010644 | CD16pos_NK_UCBMC |
| EIF3D              | 3.63E-09 | 0.36207366 | 0.251 | 0.129 | 0.00012845 | CD16pos_NK_UCBMC |
| TCEA1              | 3.69E-09 | 0.3063884  | 0.397 | 0.227 | 0.00013075 | CD16pos_NK_UCBMC |
| COMMD1             | 3.86E-09 | 0.55701446 | 0.28  | 0.152 | 0.00013686 | CD16pos_NK_UCBMC |
| TSC22D3            | 4.53E-09 | 0.3533741  | 0.481 | 0.295 | 0.00016063 | CD16pos_NK_UCBMC |
| RNMT               | 4.87E-09 | 0.18749084 | 0.37  | 0.208 | 0.0001724  | CD16pos_NK_UCBMC |
| SUGT1              | 5.23E-09 | 0.34937777 | 0.251 | 0.13  | 0.00018543 | CD16pos_NK_UCBMC |

|                     |          |            |       |       |            |                  |
|---------------------|----------|------------|-------|-------|------------|------------------|
| ENSMMUG00000006965  | 7.37E-09 | 0.31993412 | 0.294 | 0.16  | 0.00026112 | CD16pos_NK_UCBMC |
| UPF2                | 8.33E-09 | 0.32436664 | 0.299 | 0.164 | 0.00029501 | CD16pos_NK_UCBMC |
| MATR3               | 8.61E-09 | 0.28337137 | 0.54  | 0.334 | 0.00030502 | CD16pos_NK_UCBMC |
| RPS14               | 8.73E-09 | 0.237752   | 0.984 | 0.965 | 0.00030919 | CD16pos_NK_UCBMC |
| TPR                 | 9.64E-09 | 0.3310601  | 0.333 | 0.189 | 0.00034159 | CD16pos_NK_UCBMC |
| ENSMMUG000000060923 | 9.75E-09 | 0.35940111 | 0.437 | 0.261 | 0.00034529 | CD16pos_NK_UCBMC |
| SNRK                | 1.34E-08 | 0.26680463 | 0.392 | 0.231 | 0.00047355 | CD16pos_NK_UCBMC |
| SNW1                | 1.59E-08 | 0.35029159 | 0.291 | 0.161 | 0.00056469 | CD16pos_NK_UCBMC |
| HSP90B1             | 2.23E-08 | 0.19775475 | 0.466 | 0.277 | 0.00079088 | CD16pos_NK_UCBMC |
| ARHGAP45            | 2.45E-08 | 0.31795461 | 0.291 | 0.16  | 0.00086847 | CD16pos_NK_UCBMC |
| PCBP1               | 2.72E-08 | 0.31695114 | 0.41  | 0.245 | 0.00096354 | CD16pos_NK_UCBMC |
| ENSMMUG000000047277 | 3.04E-08 | 0.44822713 | 0.315 | 0.185 | 0.00107768 | CD16pos_NK_UCBMC |
| VAPA                | 3.16E-08 | 0.37992413 | 0.328 | 0.19  | 0.00111823 | CD16pos_NK_UCBMC |
| TNFAIP3             | 3.97E-08 | 0.36920061 | 0.339 | 0.201 | 0.00140706 | CD16pos_NK_UCBMC |
| ENSA                | 4.19E-08 | 0.2866516  | 0.421 | 0.253 | 0.00148319 | CD16pos_NK_UCBMC |
| COMMD7              | 4.46E-08 | 0.30784527 | 0.265 | 0.144 | 0.00158089 | CD16pos_NK_UCBMC |
| STAG2               | 6.23E-08 | 0.33404625 | 0.376 | 0.224 | 0.00220883 | CD16pos_NK_UCBMC |
| GNB2                | 6.36E-08 | 0.22485241 | 0.257 | 0.139 | 0.00225303 | CD16pos_NK_UCBMC |
| PLEK                | 6.37E-08 | 0.2851858  | 0.267 | 0.147 | 0.00225861 | CD16pos_NK_UCBMC |
| PTPN4               | 7.03E-08 | 0.27606829 | 0.397 | 0.236 | 0.00249059 | CD16pos_NK_UCBMC |
| IFNAR2              | 7.66E-08 | 0.28595854 | 0.646 | 0.423 | 0.0027124  | CD16pos_NK_UCBMC |
| SKAP2               | 8.30E-08 | 0.33989263 | 0.347 | 0.206 | 0.0029393  | CD16pos_NK_UCBMC |
| SNX3                | 9.94E-08 | 0.27580615 | 0.32  | 0.185 | 0.00352328 | CD16pos_NK_UCBMC |
| RWDD1               | 1.04E-07 | 0.1984283  | 0.5   | 0.307 | 0.00366901 | CD16pos_NK_UCBMC |
| APOBEC3F            | 1.21E-07 | 0.22151709 | 0.296 | 0.168 | 0.00428302 | CD16pos_NK_UCBMC |
| ENSMMUG000000015583 | 1.22E-07 | 0.19827544 | 0.492 | 0.305 | 0.0043148  | CD16pos_NK_UCBMC |
| WSB1                | 1.35E-07 | 0.44559771 | 0.357 | 0.217 | 0.00479652 | CD16pos_NK_UCBMC |
| MAX                 | 1.85E-07 | 0.28500491 | 0.296 | 0.171 | 0.00654995 | CD16pos_NK_UCBMC |
| CAMLG               | 2.00E-07 | 0.34064688 | 0.251 | 0.141 | 0.00708335 | CD16pos_NK_UCBMC |
| CS                  | 2.10E-07 | 0.19379126 | 0.291 | 0.164 | 0.00742801 | CD16pos_NK_UCBMC |
| CCDC12              | 2.62E-07 | 0.26878971 | 0.317 | 0.187 | 0.00927697 | CD16pos_NK_UCBMC |
| ANP32B              | 3.07E-07 | 0.33410294 | 0.257 | 0.145 | 0.01086212 | CD16pos_NK_UCBMC |
| CHST12              | 5.59E-07 | 0.3204694  | 0.251 | 0.142 | 0.01980552 | CD16pos_NK_UCBMC |

|                     |          |            |       |       |            |                  |
|---------------------|----------|------------|-------|-------|------------|------------------|
| ENSMMUG00000003412  | 5.83E-07 | 0.20866399 | 0.995 | 0.944 | 0.02066058 | CD16pos_NK_UCBMC |
| SMARCE1             | 9.44E-07 | 0.16767621 | 0.333 | 0.198 | 0.03345945 | CD16pos_NK_UCBMC |
| TESC                | 9.99E-07 | 0.22006586 | 0.579 | 0.371 | 0.03538473 | CD16pos_NK_UCBMC |
| CAP1                | 1.01E-06 | 0.19274117 | 0.614 | 0.394 | 0.03579603 | CD16pos_NK_UCBMC |
| AFAP1L2             | 1.01E-06 | 0.14966132 | 0.288 | 0.168 | 0.03583137 | CD16pos_NK_UCBMC |
| UQCRB               | 1.14E-06 | 0.15810292 | 0.317 | 0.187 | 0.0404106  | CD16pos_NK_UCBMC |
| CCT6A               | 1.19E-06 | 0.21225751 | 0.272 | 0.158 | 0.04207464 | CD16pos_NK_UCBMC |
| C15H9orf78          | 1.33E-06 | 0.13350513 | 0.392 | 0.24  | 0.04728808 | CD16pos_NK_UCBMC |
| PSMB4               | 1.40E-06 | 0.10079594 | 0.299 | 0.175 | 0.04968199 | CD16pos_NK_UCBMC |
| POC5                | 1.51E-06 | 0.21540163 | 0.328 | 0.198 | 0.05356638 | CD16pos_NK_UCBMC |
| XRN2                | 2.20E-06 | 0.11669925 | 0.333 | 0.201 | 0.0780749  | CD16pos_NK_UCBMC |
| ND2                 | 2.28E-06 | 0.16281852 | 0.82  | 0.6   | 0.08095918 | CD16pos_NK_UCBMC |
| IL2RG               | 2.29E-06 | 0.18801068 | 0.598 | 0.399 | 0.08124214 | CD16pos_NK_UCBMC |
| NCR1                | 2.90E-06 | 0.22880478 | 0.27  | 0.16  | 0.10292555 | CD16pos_NK_UCBMC |
| MRPL10              | 3.73E-06 | 0.21378434 | 0.28  | 0.168 | 0.13206026 | CD16pos_NK_UCBMC |
| APOL2               | 3.78E-06 | 0.1993209  | 0.254 | 0.149 | 0.13407501 | CD16pos_NK_UCBMC |
| NR4A2               | 4.10E-06 | 0.15361473 | 0.376 | 0.236 | 0.14517804 | CD16pos_NK_UCBMC |
| FGFR1OP2            | 4.16E-06 | 0.24168467 | 0.317 | 0.195 | 0.14728657 | CD16pos_NK_UCBMC |
| ENSMMUG000000056012 | 4.27E-06 | 0.2039915  | 0.254 | 0.149 | 0.15130109 | CD16pos_NK_UCBMC |
| TCF25               | 4.40E-06 | 0.34025501 | 0.251 | 0.149 | 0.15603161 | CD16pos_NK_UCBMC |
| GNAI3               | 4.51E-06 | 0.26373413 | 0.267 | 0.16  | 0.1598993  | CD16pos_NK_UCBMC |
| PTPN22              | 4.98E-06 | 0.21224103 | 0.635 | 0.431 | 0.17655684 | CD16pos_NK_UCBMC |
| ENSMMUG000000014862 | 6.47E-06 | 0.19299934 | 0.341 | 0.213 | 0.22916149 | CD16pos_NK_UCBMC |
| COA1                | 7.65E-06 | 0.18015617 | 0.272 | 0.166 | 0.2710688  | CD16pos_NK_UCBMC |
| EIF3H               | 8.53E-06 | 0.22609753 | 0.537 | 0.359 | 0.30212248 | CD16pos_NK_UCBMC |
| SAMHD1              | 9.48E-06 | 0.21073925 | 0.558 | 0.384 | 0.33601399 | CD16pos_NK_UCBMC |
| NCK1                | 1.13E-05 | 0.19083241 | 0.262 | 0.16  | 0.40005808 | CD16pos_NK_UCBMC |
| CNBP                | 1.31E-05 | 0.15112969 | 0.476 | 0.314 | 0.46344311 | CD16pos_NK_UCBMC |
| EVL                 | 1.38E-05 | 0.11000181 | 0.421 | 0.269 | 0.48960525 | CD16pos_NK_UCBMC |
| OPTN                | 1.44E-05 | 0.18920884 | 0.286 | 0.177 | 0.51175146 | CD16pos_NK_UCBMC |
| GTF2B               | 1.68E-05 | 0.12972036 | 0.362 | 0.232 | 0.59352238 | CD16pos_NK_UCBMC |
| ENSMMUG000000006608 | 2.69E-05 | 0.17128818 | 0.352 | 0.23  | 0.95352114 | CD16pos_NK_UCBMC |
| SLC9A3R1            | 2.76E-05 | 0.13567052 | 0.254 | 0.155 | 0.97798969 | CD16pos_NK_UCBMC |

|                   |            |            |       |       |           |                   |
|-------------------|------------|------------|-------|-------|-----------|-------------------|
| FAM133B           | 2.97E-05   | 0.21630424 | 0.257 | 0.159 | 1         | CD16pos_NK_UCBMC  |
| TRAC              | 3.52E-05   | 0.18897784 | 0.336 | 0.22  | 1         | CD16pos_NK_UCBMC  |
| CTSC              | 5.38E-05   | 0.12954021 | 0.275 | 0.174 | 1         | CD16pos_NK_UCBMC  |
| EIF3L             | 5.44E-05   | 0.10352098 | 0.444 | 0.29  | 1         | CD16pos_NK_UCBMC  |
| PSMA7             | 6.95E-05   | 0.18623064 | 0.595 | 0.418 | 1         | CD16pos_NK_UCBMC  |
| DNAJA1            | 7.11E-05   | 0.3653142  | 0.307 | 0.205 | 1         | CD16pos_NK_UCBMC  |
| RASSF1            | 8.12E-05   | 0.10495023 | 0.294 | 0.189 | 1         | CD16pos_NK_UCBMC  |
| EIF3E             | 8.60E-05   | 0.20404754 | 0.611 | 0.431 | 1         | CD16pos_NK_UCBMC  |
| IGBP1             | 8.71E-05   | 0.12727353 | 0.259 | 0.165 | 1         | CD16pos_NK_UCBMC  |
| CCNI              | 0.00015144 | 0.15447167 | 0.317 | 0.21  | 1         | CD16pos_NK_UCBMC  |
| RPS15             | 0.00015197 | 0.12865356 | 0.995 | 0.974 | 1         | CD16pos_NK_UCBMC  |
| CALR              | 0.00015931 | 0.10768617 | 0.37  | 0.249 | 1         | CD16pos_NK_UCBMC  |
| YWHAZ             | 0.00017555 | 0.13548246 | 0.807 | 0.582 | 1         | CD16pos_NK_UCBMC  |
| CEMP2             | 0.0001926  | 0.11105848 | 0.434 | 0.298 | 1         | CD16pos_NK_UCBMC  |
| CD63              | 0.00023284 | 0.13260908 | 0.685 | 0.501 | 1         | CD16pos_NK_UCBMC  |
| HSP90AB1          | 0.00035788 | 0.14285038 | 0.78  | 0.573 | 1         | CD16pos_NK_UCBMC  |
| ZFP36             | 0.00037722 | 0.10201253 | 0.481 | 0.343 | 1         | CD16pos_NK_UCBMC  |
| SRSF5             | 0.00047658 | 0.1532259  | 0.735 | 0.536 | 1         | CD16pos_NK_UCBMC  |
| ENSMUG00000058755 | 0.00519907 | 0.10473584 | 0.971 | 0.926 | 1         | CD16pos_NK_UCBMC  |
| KLF6              | 0          | 3.01762204 | 0.84  | 0.138 | 0         | CD16pos_NK_spleen |
| JUN               | 0          | 3.71112245 | 0.789 | 0.105 | 0         | CD16pos_NK_spleen |
| ENSMUG00000051300 | 0          | 2.45681682 | 0.982 | 0.324 | 0         | CD16pos_NK_spleen |
| SRRM2             | 0          | 2.92712918 | 0.645 | 0.068 | 0         | CD16pos_NK_spleen |
| FOSB              | 0          | 3.48843086 | 0.621 | 0.064 | 0         | CD16pos_NK_spleen |
| RPL13             | 0          | 2.69711631 | 0.982 | 0.585 | 0         | CD16pos_NK_spleen |
| DUSP1             | 1.46E-307  | 3.1780575  | 0.606 | 0.066 | 5.16E-303 | CD16pos_NK_spleen |
| NFKBIA            | 2.54E-290  | 3.05330775 | 0.689 | 0.103 | 9.00E-286 | CD16pos_NK_spleen |
| ANKRD44           | 1.30E-245  | 2.13407776 | 0.908 | 0.246 | 4.61E-241 | CD16pos_NK_spleen |
| STK39             | 4.04E-234  | 2.35743548 | 0.698 | 0.129 | 1.43E-229 | CD16pos_NK_spleen |
| KDM6A             | 5.78E-232  | 2.35949997 | 0.61  | 0.093 | 2.05E-227 | CD16pos_NK_spleen |
| VPS13B            | 6.89E-228  | 2.05138398 | 0.827 | 0.193 | 2.44E-223 | CD16pos_NK_spleen |
| PITPNC1           | 8.53E-228  | 2.0746372  | 0.955 | 0.363 | 3.02E-223 | CD16pos_NK_spleen |
| KLF12             | 1.53E-223  | 2.10032132 | 0.887 | 0.267 | 5.42E-219 | CD16pos_NK_spleen |



|                    |           |            |       |       |           |                   |
|--------------------|-----------|------------|-------|-------|-----------|-------------------|
| STIM1              | 3.91E-220 | 2.3174489  | 0.571 | 0.083 | 1.38E-215 | CD16pos_NK_spleen |
| CCNL1              | 4.55E-220 | 2.22441805 | 0.705 | 0.138 | 1.61E-215 | CD16pos_NK_spleen |
| AKT3               | 3.02E-216 | 2.59500746 | 0.537 | 0.076 | 1.07E-211 | CD16pos_NK_spleen |
| STK17A             | 5.09E-216 | 2.06322637 | 0.718 | 0.142 | 1.80E-211 | CD16pos_NK_spleen |
| ZNF609             | 7.75E-216 | 2.43943564 | 0.576 | 0.089 | 2.75E-211 | CD16pos_NK_spleen |
| CHST11             | 5.70E-214 | 2.34987706 | 0.587 | 0.094 | 2.02E-209 | CD16pos_NK_spleen |
| FOS                | 1.90E-213 | 2.35460164 | 0.873 | 0.272 | 6.73E-209 | CD16pos_NK_spleen |
| SIK3               | 4.74E-211 | 2.18059033 | 0.813 | 0.207 | 1.68E-206 | CD16pos_NK_spleen |
| PM20D2             | 8.03E-210 | 1.94824116 | 0.755 | 0.164 | 2.85E-205 | CD16pos_NK_spleen |
| PIK3R5             | 1.67E-208 | 2.22005778 | 0.589 | 0.096 | 5.91E-204 | CD16pos_NK_spleen |
| ZFAND3             | 4.93E-207 | 2.10484878 | 0.653 | 0.121 | 1.75E-202 | CD16pos_NK_spleen |
| PPP3CC             | 1.54E-206 | 2.05519833 | 0.694 | 0.14  | 5.44E-202 | CD16pos_NK_spleen |
| TOX                | 1.56E-203 | 2.33991472 | 0.66  | 0.134 | 5.54E-199 | CD16pos_NK_spleen |
| GSK3B              | 8.76E-201 | 2.33093305 | 0.569 | 0.094 | 3.10E-196 | CD16pos_NK_spleen |
| PLCB1              | 8.15E-200 | 2.39708127 | 0.603 | 0.112 | 2.89E-195 | CD16pos_NK_spleen |
| VAV3               | 2.32E-199 | 2.04008909 | 0.74  | 0.167 | 8.22E-195 | CD16pos_NK_spleen |
| RPS20              | 9.55E-199 | 1.53987519 | 0.976 | 0.678 | 3.38E-194 | CD16pos_NK_spleen |
| DDX5               | 1.26E-197 | 1.76536282 | 0.968 | 0.441 | 4.47E-193 | CD16pos_NK_spleen |
| PHF21A             | 3.84E-197 | 2.23172069 | 0.527 | 0.079 | 1.36E-192 | CD16pos_NK_spleen |
| UVRAG              | 1.08E-196 | 2.42829111 | 0.479 | 0.064 | 3.84E-192 | CD16pos_NK_spleen |
| KANSL1             | 1.10E-195 | 2.17558181 | 0.54  | 0.085 | 3.91E-191 | CD16pos_NK_spleen |
| RFX3               | 1.19E-195 | 2.36846199 | 0.508 | 0.074 | 4.23E-191 | CD16pos_NK_spleen |
| UTRN               | 7.58E-195 | 1.90538311 | 0.858 | 0.261 | 2.69E-190 | CD16pos_NK_spleen |
| FOXN3              | 1.83E-193 | 1.994526   | 0.724 | 0.165 | 6.50E-189 | CD16pos_NK_spleen |
| TNIK               | 2.99E-193 | 1.84530995 | 0.821 | 0.22  | 1.06E-188 | CD16pos_NK_spleen |
| ARID1B             | 5.09E-193 | 2.15537031 | 0.579 | 0.101 | 1.81E-188 | CD16pos_NK_spleen |
| NOP53              | 1.19E-192 | 2.01675395 | 0.498 | 0.069 | 4.23E-188 | CD16pos_NK_spleen |
| CAMK1D             | 1.23E-192 | 2.33372383 | 0.537 | 0.085 | 4.36E-188 | CD16pos_NK_spleen |
| CD247              | 6.74E-192 | 2.02286487 | 0.69  | 0.151 | 2.39E-187 | CD16pos_NK_spleen |
| RICTOR             | 1.35E-191 | 2.12063969 | 0.544 | 0.086 | 4.79E-187 | CD16pos_NK_spleen |
| RABGAP1L           | 1.68E-191 | 2.00406463 | 0.797 | 0.213 | 5.95E-187 | CD16pos_NK_spleen |
| ENSMMUG00000058532 | 1.72E-190 | 2.0933818  | 0.682 | 0.148 | 6.11E-186 | CD16pos_NK_spleen |
| SPAG9              | 2.54E-190 | 2.33852105 | 0.487 | 0.07  | 9.01E-186 | CD16pos_NK_spleen |

|                    |           |            |       |       |           |                   |
|--------------------|-----------|------------|-------|-------|-----------|-------------------|
| GLUD1              | 5.93E-190 | 2.39192491 | 0.466 | 0.063 | 2.10E-185 | CD16pos_NK_spleen |
| JMJD1C             | 1.66E-189 | 2.19521292 | 0.708 | 0.164 | 5.89E-185 | CD16pos_NK_spleen |
| PAN3               | 5.54E-188 | 2.11091307 | 0.56  | 0.095 | 1.96E-183 | CD16pos_NK_spleen |
| ARIH1              | 1.08E-187 | 2.44258792 | 0.503 | 0.078 | 3.83E-183 | CD16pos_NK_spleen |
| XYLT1              | 1.45E-187 | 2.43379404 | 0.505 | 0.078 | 5.14E-183 | CD16pos_NK_spleen |
| PLCG2              | 1.16E-185 | 2.26369073 | 0.492 | 0.073 | 4.10E-181 | CD16pos_NK_spleen |
| NCOR1              | 2.52E-185 | 2.01240643 | 0.563 | 0.096 | 8.94E-181 | CD16pos_NK_spleen |
| DNAJC1             | 7.10E-185 | 1.88213221 | 0.719 | 0.164 | 2.52E-180 | CD16pos_NK_spleen |
| UBE2H              | 3.32E-184 | 2.30012598 | 0.539 | 0.091 | 1.17E-179 | CD16pos_NK_spleen |
| CELF2              | 1.91E-182 | 1.72772607 | 0.881 | 0.276 | 6.78E-178 | CD16pos_NK_spleen |
| JMY                | 2.40E-182 | 2.58545366 | 0.445 | 0.061 | 8.49E-178 | CD16pos_NK_spleen |
| RSRP1              | 3.69E-181 | 1.66415561 | 0.806 | 0.204 | 1.31E-176 | CD16pos_NK_spleen |
| LTB                | 5.94E-181 | 3.69457373 | 0.303 | 0.023 | 2.10E-176 | CD16pos_NK_spleen |
| ITCH               | 6.43E-181 | 1.84299294 | 0.782 | 0.21  | 2.28E-176 | CD16pos_NK_spleen |
| PSMD12             | 2.95E-180 | 1.84524408 | 0.805 | 0.227 | 1.05E-175 | CD16pos_NK_spleen |
| FBXW7              | 3.87E-180 | 1.97306192 | 0.65  | 0.136 | 1.37E-175 | CD16pos_NK_spleen |
| MTSS1              | 1.55E-179 | 2.2653945  | 0.582 | 0.113 | 5.50E-175 | CD16pos_NK_spleen |
| RIN3               | 1.52E-178 | 2.02736931 | 0.571 | 0.104 | 5.39E-174 | CD16pos_NK_spleen |
| RUNX1              | 2.35E-177 | 2.12878518 | 0.605 | 0.122 | 8.31E-173 | CD16pos_NK_spleen |
| ME2                | 7.63E-176 | 2.42913598 | 0.455 | 0.066 | 2.70E-171 | CD16pos_NK_spleen |
| DLG1               | 9.79E-175 | 2.21418256 | 0.476 | 0.073 | 3.47E-170 | CD16pos_NK_spleen |
| ITM2B              | 7.74E-174 | 1.66548758 | 0.9   | 0.31  | 2.74E-169 | CD16pos_NK_spleen |
| QKI                | 1.28E-173 | 1.97903809 | 0.592 | 0.116 | 4.52E-169 | CD16pos_NK_spleen |
| SESN1              | 1.83E-173 | 2.47883105 | 0.381 | 0.044 | 6.48E-169 | CD16pos_NK_spleen |
| TNRC6B             | 2.81E-173 | 1.79353227 | 0.753 | 0.194 | 9.94E-169 | CD16pos_NK_spleen |
| TCF12              | 1.30E-172 | 2.07677534 | 0.565 | 0.107 | 4.62E-168 | CD16pos_NK_spleen |
| SLC24A3            | 9.37E-172 | 2.30220582 | 0.565 | 0.111 | 3.32E-167 | CD16pos_NK_spleen |
| MED13L             | 2.04E-170 | 1.89176871 | 0.621 | 0.129 | 7.22E-166 | CD16pos_NK_spleen |
| RAP1GAP2           | 2.83E-170 | 2.08407491 | 0.694 | 0.177 | 1.00E-165 | CD16pos_NK_spleen |
| ENSMMUG00000052127 | 1.72E-169 | 1.61404648 | 0.99  | 0.672 | 6.10E-165 | CD16pos_NK_spleen |
| RPS6KA5            | 1.15E-168 | 2.36738059 | 0.453 | 0.069 | 4.07E-164 | CD16pos_NK_spleen |
| IFRD1              | 1.23E-168 | 2.32700191 | 0.458 | 0.07  | 4.35E-164 | CD16pos_NK_spleen |
| PACS1              | 1.29E-168 | 2.32260305 | 0.453 | 0.069 | 4.56E-164 | CD16pos_NK_spleen |

|                    |           |            |       |       |           |                   |
|--------------------|-----------|------------|-------|-------|-----------|-------------------|
| NFAT5              | 3.16E-168 | 2.29900565 | 0.439 | 0.064 | 1.12E-163 | CD16pos_NK_spleen |
| AAK1               | 3.32E-168 | 1.88442803 | 0.577 | 0.111 | 1.17E-163 | CD16pos_NK_spleen |
| PLCL2              | 6.07E-168 | 2.11133385 | 0.484 | 0.078 | 2.15E-163 | CD16pos_NK_spleen |
| ENSMMUG00000049833 | 2.24E-167 | 3.40977942 | 0.256 | 0.016 | 7.95E-163 | CD16pos_NK_spleen |
| CHN2               | 6.46E-167 | 2.20181177 | 0.518 | 0.093 | 2.29E-162 | CD16pos_NK_spleen |
| CDK13              | 1.09E-166 | 2.05202417 | 0.534 | 0.097 | 3.84E-162 | CD16pos_NK_spleen |
| SMCHD1             | 2.15E-166 | 1.89497293 | 0.606 | 0.128 | 7.62E-162 | CD16pos_NK_spleen |
| LRBA               | 7.90E-166 | 1.85086307 | 0.623 | 0.134 | 2.80E-161 | CD16pos_NK_spleen |
| CCDC85B            | 1.76E-165 | 2.65672963 | 0.292 | 0.023 | 6.23E-161 | CD16pos_NK_spleen |
| AFF1               | 1.19E-164 | 2.54426152 | 0.356 | 0.04  | 4.23E-160 | CD16pos_NK_spleen |
| NFATC2             | 3.35E-164 | 2.43057645 | 0.345 | 0.037 | 1.19E-159 | CD16pos_NK_spleen |
| TRPM7              | 4.01E-164 | 1.84724133 | 0.673 | 0.158 | 1.42E-159 | CD16pos_NK_spleen |
| ATXN2              | 8.33E-164 | 2.36676453 | 0.4   | 0.053 | 2.95E-159 | CD16pos_NK_spleen |
| OSBPL8             | 1.06E-163 | 2.06425308 | 0.529 | 0.098 | 3.74E-159 | CD16pos_NK_spleen |
| PSME4              | 1.08E-163 | 2.01790684 | 0.502 | 0.086 | 3.83E-159 | CD16pos_NK_spleen |
| ESYT2              | 7.31E-163 | 2.12802267 | 0.498 | 0.087 | 2.59E-158 | CD16pos_NK_spleen |
| ATP8A1             | 8.64E-163 | 1.98549101 | 0.498 | 0.085 | 3.06E-158 | CD16pos_NK_spleen |
| ENSMMUG00000052424 | 5.17E-162 | 1.77653926 | 0.665 | 0.157 | 1.83E-157 | CD16pos_NK_spleen |
| ARID4B             | 8.11E-162 | 1.80634326 | 0.729 | 0.19  | 2.87E-157 | CD16pos_NK_spleen |
| RPS2               | 3.08E-161 | 1.7704766  | 0.844 | 0.302 | 1.09E-156 | CD16pos_NK_spleen |
| TOP1               | 6.78E-161 | 1.82191474 | 0.555 | 0.106 | 2.40E-156 | CD16pos_NK_spleen |
| ERO1B              | 1.38E-160 | 2.50171728 | 0.36  | 0.042 | 4.88E-156 | CD16pos_NK_spleen |
| FCHSD2             | 3.41E-160 | 2.44767677 | 0.402 | 0.055 | 1.21E-155 | CD16pos_NK_spleen |
| COP1               | 6.95E-160 | 2.08730509 | 0.445 | 0.069 | 2.46E-155 | CD16pos_NK_spleen |
| UBASH3B            | 7.04E-160 | 1.90917644 | 0.663 | 0.159 | 2.49E-155 | CD16pos_NK_spleen |
| ANKRD11            | 1.24E-159 | 1.82980497 | 0.585 | 0.12  | 4.39E-155 | CD16pos_NK_spleen |
| GLCC1              | 2.10E-159 | 2.29859596 | 0.445 | 0.071 | 7.43E-155 | CD16pos_NK_spleen |
| FNBP1              | 3.04E-159 | 1.66457626 | 0.877 | 0.307 | 1.08E-154 | CD16pos_NK_spleen |
| PHLPP1             | 7.90E-159 | 2.48399775 | 0.392 | 0.053 | 2.80E-154 | CD16pos_NK_spleen |
| TERF2IP            | 1.89E-158 | 2.39841706 | 0.347 | 0.039 | 6.69E-154 | CD16pos_NK_spleen |
| BMT2               | 3.60E-158 | 2.57790068 | 0.431 | 0.069 | 1.28E-153 | CD16pos_NK_spleen |
| MLLT3              | 3.72E-158 | 2.23486828 | 0.469 | 0.079 | 1.32E-153 | CD16pos_NK_spleen |
| ENSMMUG00000054358 | 7.46E-158 | 2.14668997 | 0.956 | 0.502 | 2.64E-153 | CD16pos_NK_spleen |

|         |           |            |       |       |           |                   |
|---------|-----------|------------|-------|-------|-----------|-------------------|
| MAML2   | 3.67E-157 | 1.96736776 | 0.642 | 0.155 | 1.30E-152 | CD16pos_NK_spleen |
| PREX1   | 1.15E-156 | 1.8276574  | 0.595 | 0.127 | 4.09E-152 | CD16pos_NK_spleen |
| RRAS2   | 6.42E-156 | 2.10335527 | 0.492 | 0.088 | 2.27E-151 | CD16pos_NK_spleen |
| TM9SF3  | 6.78E-156 | 2.12275    | 0.426 | 0.064 | 2.40E-151 | CD16pos_NK_spleen |
| BTBD11  | 7.88E-156 | 2.16788433 | 0.505 | 0.095 | 2.79E-151 | CD16pos_NK_spleen |
| STAG1   | 8.42E-156 | 1.66778043 | 0.658 | 0.155 | 2.98E-151 | CD16pos_NK_spleen |
| MCUB    | 1.45E-155 | 2.26521097 | 0.389 | 0.053 | 5.14E-151 | CD16pos_NK_spleen |
| ELMO1   | 1.88E-155 | 1.80583546 | 0.597 | 0.129 | 6.68E-151 | CD16pos_NK_spleen |
| ACAP2   | 5.61E-155 | 1.6825825  | 0.663 | 0.158 | 1.99E-150 | CD16pos_NK_spleen |
| MACF1   | 8.85E-155 | 1.64899986 | 0.718 | 0.187 | 3.14E-150 | CD16pos_NK_spleen |
| TMEM160 | 1.33E-154 | 2.38051409 | 0.319 | 0.033 | 4.72E-150 | CD16pos_NK_spleen |
| MCL1    | 4.24E-154 | 1.8692232  | 0.481 | 0.082 | 1.50E-149 | CD16pos_NK_spleen |
| GMDS    | 1.54E-153 | 2.36939719 | 0.385 | 0.053 | 5.46E-149 | CD16pos_NK_spleen |
| GRK5    | 4.28E-153 | 1.86346401 | 0.616 | 0.143 | 1.52E-148 | CD16pos_NK_spleen |
| GOLPH3  | 8.68E-153 | 2.05282973 | 0.437 | 0.07  | 3.08E-148 | CD16pos_NK_spleen |
| AFF3    | 9.78E-153 | 2.38678114 | 0.458 | 0.08  | 3.47E-148 | CD16pos_NK_spleen |
| KCNQ5   | 2.45E-152 | 2.5047818  | 0.382 | 0.053 | 8.67E-148 | CD16pos_NK_spleen |
| ZBTB20  | 2.63E-152 | 2.13591938 | 0.455 | 0.077 | 9.31E-148 | CD16pos_NK_spleen |
| IQGAP2  | 3.00E-152 | 1.90034675 | 0.574 | 0.126 | 1.06E-147 | CD16pos_NK_spleen |
| FBXO34  | 3.23E-152 | 1.84951789 | 0.558 | 0.115 | 1.14E-147 | CD16pos_NK_spleen |
| TBC1D5  | 7.73E-152 | 1.84895316 | 0.615 | 0.142 | 2.74E-147 | CD16pos_NK_spleen |
| KAT6B   | 1.03E-151 | 1.88383261 | 0.548 | 0.112 | 3.64E-147 | CD16pos_NK_spleen |
| SLCO3A1 | 1.41E-151 | 1.78243828 | 0.577 | 0.123 | 4.98E-147 | CD16pos_NK_spleen |
| ABCC1   | 5.03E-151 | 2.38944672 | 0.342 | 0.041 | 1.78E-146 | CD16pos_NK_spleen |
| USP34   | 6.41E-151 | 1.62220562 | 0.658 | 0.157 | 2.27E-146 | CD16pos_NK_spleen |
| FOXJ3   | 6.97E-151 | 2.31729576 | 0.368 | 0.048 | 2.47E-146 | CD16pos_NK_spleen |
| CUX1    | 1.25E-149 | 2.06353266 | 0.432 | 0.069 | 4.45E-145 | CD16pos_NK_spleen |
| RELB    | 1.50E-149 | 2.76712332 | 0.311 | 0.033 | 5.30E-145 | CD16pos_NK_spleen |
| NEK7    | 1.83E-149 | 2.06039076 | 0.439 | 0.072 | 6.48E-145 | CD16pos_NK_spleen |
| TRIR    | 3.01E-149 | 1.59301604 | 0.624 | 0.14  | 1.07E-144 | CD16pos_NK_spleen |
| SCAPER  | 3.77E-149 | 1.90245589 | 0.521 | 0.103 | 1.34E-144 | CD16pos_NK_spleen |
| LPP     | 5.40E-149 | 1.89979671 | 0.524 | 0.104 | 1.91E-144 | CD16pos_NK_spleen |
| DOCK11  | 3.15E-148 | 1.73969777 | 0.584 | 0.127 | 1.12E-143 | CD16pos_NK_spleen |

|                    |           |            |       |       |           |                   |
|--------------------|-----------|------------|-------|-------|-----------|-------------------|
| NCOA2              | 6.19E-148 | 1.93597119 | 0.476 | 0.086 | 2.19E-143 | CD16pos_NK_spleen |
| SQSTM1             | 6.86E-148 | 2.12231934 | 0.431 | 0.07  | 2.43E-143 | CD16pos_NK_spleen |
| IKZF1              | 1.17E-147 | 1.68782497 | 0.69  | 0.181 | 4.14E-143 | CD16pos_NK_spleen |
| TGFBR3             | 2.40E-147 | 1.66003349 | 0.856 | 0.315 | 8.51E-143 | CD16pos_NK_spleen |
| PRKCB              | 3.20E-147 | 1.6214865  | 0.744 | 0.212 | 1.13E-142 | CD16pos_NK_spleen |
| PRKCH              | 3.21E-147 | 1.59914458 | 0.921 | 0.434 | 1.14E-142 | CD16pos_NK_spleen |
| TRPS1              | 6.39E-147 | 1.97250504 | 0.44  | 0.073 | 2.26E-142 | CD16pos_NK_spleen |
| FOXO1              | 6.48E-147 | 2.23251218 | 0.385 | 0.055 | 2.30E-142 | CD16pos_NK_spleen |
| NFATC3             | 9.26E-147 | 1.72758203 | 0.674 | 0.176 | 3.28E-142 | CD16pos_NK_spleen |
| LDB2               | 9.75E-147 | 2.271767   | 0.424 | 0.07  | 3.46E-142 | CD16pos_NK_spleen |
| ST6GAL1            | 1.33E-146 | 2.32477827 | 0.361 | 0.048 | 4.72E-142 | CD16pos_NK_spleen |
| ENSMMUG00000006165 | 3.81E-146 | 1.51616745 | 0.75  | 0.207 | 1.35E-141 | CD16pos_NK_spleen |
| RPL27A             | 7.64E-146 | 1.21030594 | 0.969 | 0.714 | 2.71E-141 | CD16pos_NK_spleen |
| TBL1XR1            | 1.25E-145 | 1.98492028 | 0.477 | 0.088 | 4.43E-141 | CD16pos_NK_spleen |
| CDKAL1             | 1.25E-145 | 1.81174014 | 0.481 | 0.087 | 4.44E-141 | CD16pos_NK_spleen |
| RAB1A              | 3.76E-145 | 1.88213784 | 0.469 | 0.085 | 1.33E-140 | CD16pos_NK_spleen |
| SCAF8              | 7.25E-145 | 1.89873261 | 0.447 | 0.076 | 2.57E-140 | CD16pos_NK_spleen |
| PRKX               | 7.43E-145 | 1.8045369  | 0.545 | 0.115 | 2.63E-140 | CD16pos_NK_spleen |
| KDM4C              | 8.29E-145 | 1.99667236 | 0.465 | 0.084 | 2.94E-140 | CD16pos_NK_spleen |
| SNTB1              | 1.12E-144 | 1.88929835 | 0.473 | 0.086 | 3.97E-140 | CD16pos_NK_spleen |
| RANBP2             | 1.25E-144 | 1.73601043 | 0.531 | 0.106 | 4.41E-140 | CD16pos_NK_spleen |
| PPP3CA             | 1.93E-144 | 1.63612452 | 0.745 | 0.22  | 6.82E-140 | CD16pos_NK_spleen |
| SENP6              | 2.24E-144 | 1.7602643  | 0.495 | 0.094 | 7.94E-140 | CD16pos_NK_spleen |
| C10H20orf24        | 2.98E-144 | 1.76503497 | 0.416 | 0.064 | 1.06E-139 | CD16pos_NK_spleen |
| TRAPPC10           | 1.03E-143 | 2.01667844 | 0.406 | 0.063 | 3.66E-139 | CD16pos_NK_spleen |
| KMT2C              | 1.36E-143 | 1.56335785 | 0.655 | 0.162 | 4.83E-139 | CD16pos_NK_spleen |
| TPD52              | 3.44E-143 | 1.93454517 | 0.503 | 0.1   | 1.22E-138 | CD16pos_NK_spleen |
| ARNTL              | 4.38E-143 | 2.19622402 | 0.356 | 0.047 | 1.55E-138 | CD16pos_NK_spleen |
| BTA1F1             | 4.75E-143 | 2.31810574 | 0.337 | 0.042 | 1.68E-138 | CD16pos_NK_spleen |
| ZC3HAV1            | 5.47E-143 | 1.66743771 | 0.619 | 0.149 | 1.94E-138 | CD16pos_NK_spleen |
| FAM241A            | 6.45E-143 | 2.97541553 | 0.287 | 0.029 | 2.29E-138 | CD16pos_NK_spleen |
| RAPGEF1            | 1.43E-142 | 2.04134915 | 0.448 | 0.079 | 5.06E-138 | CD16pos_NK_spleen |
| TC2N               | 1.53E-142 | 2.56550294 | 0.292 | 0.03  | 5.42E-138 | CD16pos_NK_spleen |

|                   |           |            |       |       |           |                   |
|-------------------|-----------|------------|-------|-------|-----------|-------------------|
| ADORA2B           | 2.00E-142 | 2.85366148 | 0.352 | 0.05  | 7.07E-138 | CD16pos_NK_spleen |
| RASSF3            | 1.55E-141 | 2.30468806 | 0.423 | 0.071 | 5.50E-137 | CD16pos_NK_spleen |
| FBXL17            | 3.24E-141 | 2.12603995 | 0.437 | 0.077 | 1.15E-136 | CD16pos_NK_spleen |
| TMEM131L          | 3.96E-141 | 2.03056498 | 0.408 | 0.065 | 1.40E-136 | CD16pos_NK_spleen |
| MYLIP             | 5.89E-141 | 1.85952989 | 0.461 | 0.084 | 2.09E-136 | CD16pos_NK_spleen |
| STK10             | 9.82E-141 | 1.55620057 | 0.689 | 0.18  | 3.48E-136 | CD16pos_NK_spleen |
| ZFP36             | 9.89E-141 | 1.78019244 | 0.823 | 0.292 | 3.50E-136 | CD16pos_NK_spleen |
| HOOK3             | 1.03E-140 | 1.61289902 | 0.584 | 0.13  | 3.64E-136 | CD16pos_NK_spleen |
| FOXP1             | 1.20E-140 | 1.97163148 | 0.444 | 0.078 | 4.26E-136 | CD16pos_NK_spleen |
| SSH2              | 1.55E-140 | 1.59729066 | 0.692 | 0.188 | 5.51E-136 | CD16pos_NK_spleen |
| CCDC88C           | 1.72E-140 | 2.25112749 | 0.353 | 0.048 | 6.08E-136 | CD16pos_NK_spleen |
| ARRDC3            | 2.22E-140 | 1.99671435 | 0.397 | 0.061 | 7.88E-136 | CD16pos_NK_spleen |
| HIP1              | 3.93E-140 | 2.13671528 | 0.413 | 0.068 | 1.39E-135 | CD16pos_NK_spleen |
| INPP5D            | 5.75E-140 | 1.6891449  | 0.611 | 0.149 | 2.04E-135 | CD16pos_NK_spleen |
| FAF1              | 6.51E-140 | 1.95414691 | 0.452 | 0.081 | 2.31E-135 | CD16pos_NK_spleen |
| LRCH1             | 7.41E-140 | 2.03653522 | 0.426 | 0.072 | 2.62E-135 | CD16pos_NK_spleen |
| NR3C1             | 7.68E-140 | 1.59180766 | 0.637 | 0.157 | 2.72E-135 | CD16pos_NK_spleen |
| SPPL3             | 2.16E-139 | 2.0950173  | 0.385 | 0.058 | 7.67E-135 | CD16pos_NK_spleen |
| ENSMUG00000008587 | 2.40E-139 | 1.90368401 | 0.487 | 0.096 | 8.49E-135 | CD16pos_NK_spleen |
| MYCBP2            | 2.41E-139 | 1.62276824 | 0.611 | 0.145 | 8.53E-135 | CD16pos_NK_spleen |
| SLC9A9            | 4.22E-139 | 1.69614997 | 0.635 | 0.16  | 1.50E-134 | CD16pos_NK_spleen |
| EXOC4             | 6.82E-139 | 1.98464069 | 0.492 | 0.099 | 2.42E-134 | CD16pos_NK_spleen |
| DGKD              | 1.34E-138 | 2.05583115 | 0.356 | 0.049 | 4.75E-134 | CD16pos_NK_spleen |
| MAPRE2            | 1.66E-138 | 1.69066302 | 0.726 | 0.209 | 5.88E-134 | CD16pos_NK_spleen |
| NUP153            | 1.95E-138 | 2.11316189 | 0.381 | 0.057 | 6.90E-134 | CD16pos_NK_spleen |
| SETD2             | 2.47E-138 | 1.64016352 | 0.54  | 0.115 | 8.76E-134 | CD16pos_NK_spleen |
| BCL11B            | 8.95E-138 | 2.79859892 | 0.271 | 0.026 | 3.17E-133 | CD16pos_NK_spleen |
| PREP              | 1.83E-137 | 2.16754676 | 0.342 | 0.045 | 6.50E-133 | CD16pos_NK_spleen |
| MSI2              | 1.86E-137 | 2.18070457 | 0.363 | 0.052 | 6.58E-133 | CD16pos_NK_spleen |
| XPR1              | 2.25E-137 | 2.26152762 | 0.334 | 0.044 | 7.99E-133 | CD16pos_NK_spleen |
| GNB1              | 3.09E-137 | 1.93598588 | 0.444 | 0.08  | 1.09E-132 | CD16pos_NK_spleen |
| CREBBP            | 3.11E-136 | 1.96910231 | 0.416 | 0.071 | 1.10E-131 | CD16pos_NK_spleen |
| TBC1D1            | 3.16E-136 | 1.94993181 | 0.419 | 0.071 | 1.12E-131 | CD16pos_NK_spleen |

|         |           |            |       |       |           |                   |
|---------|-----------|------------|-------|-------|-----------|-------------------|
| NUP98   | 3.27E-136 | 1.91360472 | 0.385 | 0.06  | 1.16E-131 | CD16pos_NK_spleen |
| CRTC3   | 6.10E-136 | 2.21412019 | 0.36  | 0.052 | 2.16E-131 | CD16pos_NK_spleen |
| TGFB1   | 7.12E-136 | 1.73067945 | 0.652 | 0.175 | 2.52E-131 | CD16pos_NK_spleen |
| SORL1   | 9.59E-136 | 1.63450732 | 0.544 | 0.118 | 3.40E-131 | CD16pos_NK_spleen |
| NCOA3   | 2.49E-135 | 1.71655455 | 0.585 | 0.141 | 8.83E-131 | CD16pos_NK_spleen |
| ARL5B   | 3.26E-135 | 2.26287354 | 0.3   | 0.034 | 1.15E-130 | CD16pos_NK_spleen |
| AGPS    | 8.59E-135 | 1.72710659 | 0.484 | 0.095 | 3.04E-130 | CD16pos_NK_spleen |
| ILKAP   | 5.79E-134 | 1.92067888 | 0.376 | 0.057 | 2.05E-129 | CD16pos_NK_spleen |
| TMEM131 | 1.42E-133 | 1.89486645 | 0.39  | 0.063 | 5.03E-129 | CD16pos_NK_spleen |
| ITSN2   | 6.54E-133 | 1.72996894 | 0.503 | 0.105 | 2.32E-128 | CD16pos_NK_spleen |
| ZFC3H1  | 8.68E-133 | 1.86414599 | 0.434 | 0.079 | 3.08E-128 | CD16pos_NK_spleen |
| CEP85L  | 1.09E-132 | 1.84715518 | 0.432 | 0.077 | 3.87E-128 | CD16pos_NK_spleen |
| SLC4A7  | 2.60E-132 | 2.47951234 | 0.323 | 0.043 | 9.20E-128 | CD16pos_NK_spleen |
| PSIP1   | 3.87E-132 | 1.83439405 | 0.411 | 0.07  | 1.37E-127 | CD16pos_NK_spleen |
| SEMA4D  | 4.83E-132 | 1.57436789 | 0.598 | 0.145 | 1.71E-127 | CD16pos_NK_spleen |
| SLC12A6 | 5.40E-132 | 2.12636756 | 0.406 | 0.07  | 1.91E-127 | CD16pos_NK_spleen |
| PTPN12  | 9.78E-132 | 2.24282112 | 0.3   | 0.035 | 3.47E-127 | CD16pos_NK_spleen |
| ATAD2B  | 1.23E-131 | 1.78557513 | 0.408 | 0.069 | 4.36E-127 | CD16pos_NK_spleen |
| MGAT5   | 1.62E-131 | 2.00714251 | 0.416 | 0.073 | 5.73E-127 | CD16pos_NK_spleen |
| RNF38   | 2.56E-131 | 1.83003723 | 0.423 | 0.075 | 9.08E-127 | CD16pos_NK_spleen |
| COG5    | 2.61E-131 | 1.7506293  | 0.508 | 0.109 | 9.26E-127 | CD16pos_NK_spleen |
| LRRFIP1 | 7.37E-131 | 1.78532958 | 0.452 | 0.086 | 2.61E-126 | CD16pos_NK_spleen |
| IRAG2   | 1.63E-130 | 2.1547435  | 0.376 | 0.06  | 5.78E-126 | CD16pos_NK_spleen |
| ELOVL5  | 2.25E-130 | 1.59265873 | 0.506 | 0.106 | 7.96E-126 | CD16pos_NK_spleen |
| ASH1L   | 3.51E-130 | 1.61492341 | 0.632 | 0.166 | 1.24E-125 | CD16pos_NK_spleen |
| HIPK2   | 5.43E-130 | 1.95985919 | 0.365 | 0.056 | 1.93E-125 | CD16pos_NK_spleen |
| ANKRD17 | 6.97E-130 | 1.88172601 | 0.429 | 0.079 | 2.47E-125 | CD16pos_NK_spleen |
| CDK17   | 2.58E-129 | 1.66783428 | 0.561 | 0.133 | 9.13E-125 | CD16pos_NK_spleen |
| RASSF1  | 3.50E-129 | 1.50486181 | 0.597 | 0.145 | 1.24E-124 | CD16pos_NK_spleen |
| BCAS3   | 8.14E-129 | 1.84091224 | 0.481 | 0.1   | 2.89E-124 | CD16pos_NK_spleen |
| PRKCA   | 1.06E-128 | 1.7362237  | 0.539 | 0.126 | 3.76E-124 | CD16pos_NK_spleen |
| LRCH3   | 2.61E-128 | 1.91544313 | 0.403 | 0.07  | 9.25E-124 | CD16pos_NK_spleen |
| RALY    | 2.99E-128 | 1.72142422 | 0.437 | 0.081 | 1.06E-123 | CD16pos_NK_spleen |

|           |           |            |       |       |           |                   |
|-----------|-----------|------------|-------|-------|-----------|-------------------|
| TNKS      | 5.33E-128 | 1.90986405 | 0.373 | 0.059 | 1.89E-123 | CD16pos_NK_spleen |
| MCTP2     | 1.15E-127 | 1.74470526 | 0.481 | 0.099 | 4.07E-123 | CD16pos_NK_spleen |
| MBP       | 1.39E-127 | 1.50637148 | 0.69  | 0.2   | 4.94E-123 | CD16pos_NK_spleen |
| VTI1A     | 1.95E-127 | 1.6621637  | 0.503 | 0.108 | 6.90E-123 | CD16pos_NK_spleen |
| CREBRF    | 1.95E-127 | 1.82045777 | 0.419 | 0.076 | 6.91E-123 | CD16pos_NK_spleen |
| HNRNPD    | 2.20E-127 | 1.387132   | 0.56  | 0.128 | 7.78E-123 | CD16pos_NK_spleen |
| TRA2A     | 4.52E-127 | 1.4157847  | 0.724 | 0.213 | 1.60E-122 | CD16pos_NK_spleen |
| LRRC8C    | 6.22E-127 | 1.83665483 | 0.477 | 0.1   | 2.20E-122 | CD16pos_NK_spleen |
| HPCAL1    | 7.06E-127 | 1.93593082 | 0.377 | 0.061 | 2.50E-122 | CD16pos_NK_spleen |
| MARK3     | 1.41E-126 | 1.96691285 | 0.365 | 0.058 | 4.99E-122 | CD16pos_NK_spleen |
| RAB11FIP1 | 1.84E-126 | 2.25566564 | 0.35  | 0.053 | 6.53E-122 | CD16pos_NK_spleen |
| ROCK1     | 2.64E-126 | 1.46420087 | 0.618 | 0.159 | 9.35E-122 | CD16pos_NK_spleen |
| CLASP1    | 2.79E-126 | 2.42571123 | 0.297 | 0.037 | 9.88E-122 | CD16pos_NK_spleen |
| TMX4      | 3.67E-126 | 1.73373716 | 0.427 | 0.079 | 1.30E-121 | CD16pos_NK_spleen |
| SLMAP     | 5.79E-126 | 1.97396745 | 0.353 | 0.054 | 2.05E-121 | CD16pos_NK_spleen |
| EZH2      | 6.25E-126 | 2.18221498 | 0.324 | 0.045 | 2.21E-121 | CD16pos_NK_spleen |
| RNF115    | 8.20E-126 | 1.85347425 | 0.406 | 0.072 | 2.90E-121 | CD16pos_NK_spleen |
| TAOK1     | 2.97E-125 | 2.08068645 | 0.358 | 0.057 | 1.05E-120 | CD16pos_NK_spleen |
| PUM1      | 3.96E-125 | 1.58596413 | 0.529 | 0.12  | 1.40E-120 | CD16pos_NK_spleen |
| DIP2B     | 5.29E-125 | 1.83481109 | 0.402 | 0.071 | 1.87E-120 | CD16pos_NK_spleen |
| OGT       | 1.10E-124 | 1.51763787 | 0.505 | 0.108 | 3.88E-120 | CD16pos_NK_spleen |
| TP53BP1   | 1.13E-124 | 2.02385477 | 0.369 | 0.06  | 4.01E-120 | CD16pos_NK_spleen |
| CBLB      | 1.30E-124 | 1.51804943 | 0.777 | 0.271 | 4.60E-120 | CD16pos_NK_spleen |
| TMEM181   | 1.98E-124 | 1.97672143 | 0.366 | 0.059 | 7.02E-120 | CD16pos_NK_spleen |
| PRRC2B    | 2.35E-124 | 1.62697606 | 0.508 | 0.112 | 8.33E-120 | CD16pos_NK_spleen |
| ANKIB1    | 3.17E-124 | 1.72697441 | 0.45  | 0.09  | 1.12E-119 | CD16pos_NK_spleen |
| EHBP1     | 4.18E-124 | 1.78849201 | 0.481 | 0.103 | 1.48E-119 | CD16pos_NK_spleen |
| RORA      | 5.60E-124 | 1.86946386 | 0.456 | 0.094 | 1.98E-119 | CD16pos_NK_spleen |
| PAK2      | 6.00E-124 | 1.41247273 | 0.621 | 0.161 | 2.13E-119 | CD16pos_NK_spleen |
| JAK1      | 7.53E-124 | 1.29269845 | 0.923 | 0.42  | 2.67E-119 | CD16pos_NK_spleen |
| PSPC1     | 1.10E-123 | 1.95841271 | 0.368 | 0.06  | 3.91E-119 | CD16pos_NK_spleen |
| RCSD1     | 1.65E-123 | 1.62789957 | 0.515 | 0.116 | 5.84E-119 | CD16pos_NK_spleen |
| SYNE1     | 2.09E-123 | 1.45021782 | 0.66  | 0.182 | 7.41E-119 | CD16pos_NK_spleen |



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|----------|-----------|------------|-------|-------|-----------|-------------------|
| ITPKB    | 3.12E-123 | 1.76932759 | 0.431 | 0.082 | 1.10E-118 | CD16pos_NK_spleen |
| EHMT1    | 6.12E-123 | 2.19132171 | 0.308 | 0.042 | 2.17E-118 | CD16pos_NK_spleen |
| ZHX2     | 1.19E-122 | 1.76365409 | 0.4   | 0.072 | 4.20E-118 | CD16pos_NK_spleen |
| ARL15    | 1.51E-122 | 1.66895458 | 0.497 | 0.11  | 5.33E-118 | CD16pos_NK_spleen |
| CAST     | 1.67E-122 | 1.5779483  | 0.511 | 0.114 | 5.92E-118 | CD16pos_NK_spleen |
| CDC14A   | 1.80E-122 | 2.0253135  | 0.421 | 0.081 | 6.37E-118 | CD16pos_NK_spleen |
| GLG1     | 3.02E-122 | 1.7579244  | 0.415 | 0.077 | 1.07E-117 | CD16pos_NK_spleen |
| PDZRN3   | 3.45E-122 | 2.42135654 | 0.31  | 0.043 | 1.22E-117 | CD16pos_NK_spleen |
| SLC20A1  | 5.17E-122 | 2.11345579 | 0.305 | 0.041 | 1.83E-117 | CD16pos_NK_spleen |
| TFDP2    | 6.53E-122 | 1.7750288  | 0.469 | 0.1   | 2.31E-117 | CD16pos_NK_spleen |
| ARGLU1   | 8.44E-122 | 1.31668505 | 0.61  | 0.154 | 2.99E-117 | CD16pos_NK_spleen |
| YTHDC1   | 9.28E-122 | 1.72122145 | 0.394 | 0.069 | 3.29E-117 | CD16pos_NK_spleen |
| HELZ     | 1.67E-121 | 1.49886387 | 0.515 | 0.114 | 5.92E-117 | CD16pos_NK_spleen |
| RNF149   | 3.19E-121 | 1.63816401 | 0.479 | 0.103 | 1.13E-116 | CD16pos_NK_spleen |
| ARHGAP15 | 1.49E-120 | 1.34777233 | 0.868 | 0.349 | 5.29E-116 | CD16pos_NK_spleen |
| ATP11B   | 1.61E-120 | 1.99069164 | 0.342 | 0.053 | 5.71E-116 | CD16pos_NK_spleen |
| CELF1    | 2.55E-120 | 1.75763847 | 0.416 | 0.079 | 9.05E-116 | CD16pos_NK_spleen |
| RERE     | 2.67E-120 | 1.43251564 | 0.585 | 0.15  | 9.47E-116 | CD16pos_NK_spleen |
| INPP4A   | 4.57E-120 | 1.81925403 | 0.476 | 0.105 | 1.62E-115 | CD16pos_NK_spleen |
| UBR3     | 1.11E-119 | 1.83317829 | 0.358 | 0.058 | 3.92E-115 | CD16pos_NK_spleen |
| ARHGAP26 | 1.31E-119 | 1.87752305 | 0.342 | 0.053 | 4.63E-115 | CD16pos_NK_spleen |
| PDGFD    | 1.35E-119 | 1.5498582  | 0.785 | 0.294 | 4.80E-115 | CD16pos_NK_spleen |
| ZNF292   | 1.76E-119 | 1.41227144 | 0.574 | 0.142 | 6.25E-115 | CD16pos_NK_spleen |
| ARFGEF1  | 2.92E-119 | 1.81307106 | 0.382 | 0.067 | 1.04E-114 | CD16pos_NK_spleen |
| SGMS1    | 4.20E-119 | 1.85086276 | 0.366 | 0.062 | 1.49E-114 | CD16pos_NK_spleen |
| DOCK8    | 6.12E-119 | 1.39444308 | 0.679 | 0.199 | 2.17E-114 | CD16pos_NK_spleen |
| SUCO     | 1.03E-118 | 1.88510242 | 0.347 | 0.055 | 3.65E-114 | CD16pos_NK_spleen |
| BIRC6    | 1.05E-118 | 1.42434815 | 0.61  | 0.162 | 3.73E-114 | CD16pos_NK_spleen |
| JAZF1    | 1.43E-118 | 1.76810082 | 0.413 | 0.079 | 5.06E-114 | CD16pos_NK_spleen |
| EPB41    | 3.40E-118 | 1.49353101 | 0.584 | 0.152 | 1.21E-113 | CD16pos_NK_spleen |
| RBM14    | 5.28E-118 | 1.44095156 | 0.597 | 0.156 | 1.87E-113 | CD16pos_NK_spleen |
| PUM2     | 9.01E-118 | 1.35753222 | 0.539 | 0.127 | 3.19E-113 | CD16pos_NK_spleen |
| COX5A    | 1.23E-117 | 2.03627329 | 0.302 | 0.041 | 4.36E-113 | CD16pos_NK_spleen |

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|-------------------|-----------|------------|-------|-------|-----------|-------------------|
| DENND4A           | 1.47E-117 | 1.38212316 | 0.726 | 0.234 | 5.20E-113 | CD16pos_NK_spleen |
| SMYD3             | 1.58E-117 | 1.83416142 | 0.426 | 0.085 | 5.61E-113 | CD16pos_NK_spleen |
| WASF2             | 1.73E-117 | 1.51131898 | 0.482 | 0.104 | 6.11E-113 | CD16pos_NK_spleen |
| R3HDM2            | 2.12E-117 | 2.04308228 | 0.327 | 0.05  | 7.51E-113 | CD16pos_NK_spleen |
| PPP1R12A          | 3.81E-117 | 1.34481926 | 0.739 | 0.242 | 1.35E-112 | CD16pos_NK_spleen |
| DOCK10            | 4.99E-117 | 1.49453637 | 0.623 | 0.172 | 1.77E-112 | CD16pos_NK_spleen |
| MARCHF6           | 5.90E-117 | 1.75809685 | 0.421 | 0.083 | 2.09E-112 | CD16pos_NK_spleen |
| MTDH              | 8.10E-117 | 1.81566131 | 0.36  | 0.061 | 2.87E-112 | CD16pos_NK_spleen |
| SLC38A1           | 1.04E-116 | 1.53025244 | 0.555 | 0.14  | 3.67E-112 | CD16pos_NK_spleen |
| CDYL              | 1.66E-116 | 2.15525353 | 0.29  | 0.039 | 5.89E-112 | CD16pos_NK_spleen |
| NSD1              | 2.70E-116 | 1.54268145 | 0.476 | 0.103 | 9.57E-112 | CD16pos_NK_spleen |
| FBXL20            | 6.31E-116 | 1.82486442 | 0.358 | 0.06  | 2.23E-111 | CD16pos_NK_spleen |
| AUH               | 8.10E-116 | 2.00100606 | 0.329 | 0.051 | 2.87E-111 | CD16pos_NK_spleen |
| MON2              | 1.11E-115 | 1.7694229  | 0.353 | 0.059 | 3.94E-111 | CD16pos_NK_spleen |
| BTBD9             | 1.48E-115 | 1.94811787 | 0.368 | 0.065 | 5.24E-111 | CD16pos_NK_spleen |
| PPP1R10           | 2.21E-115 | 1.74010423 | 0.453 | 0.097 | 7.82E-111 | CD16pos_NK_spleen |
| PPP2R5E           | 2.95E-115 | 1.65365782 | 0.413 | 0.081 | 1.05E-110 | CD16pos_NK_spleen |
| OSBPL9            | 3.99E-115 | 1.56093525 | 0.5   | 0.117 | 1.41E-110 | CD16pos_NK_spleen |
| EML4              | 7.82E-115 | 1.31534781 | 0.802 | 0.283 | 2.77E-110 | CD16pos_NK_spleen |
| LCOR              | 1.30E-114 | 1.86681624 | 0.402 | 0.078 | 4.59E-110 | CD16pos_NK_spleen |
| ZEB2              | 1.52E-114 | 1.61343433 | 0.758 | 0.293 | 5.38E-110 | CD16pos_NK_spleen |
| CLASP2            | 2.02E-114 | 1.67198212 | 0.398 | 0.076 | 7.16E-110 | CD16pos_NK_spleen |
| MEMO1             | 2.17E-114 | 1.79386361 | 0.373 | 0.067 | 7.68E-110 | CD16pos_NK_spleen |
| ERBIN             | 2.24E-114 | 1.43281685 | 0.519 | 0.124 | 7.93E-110 | CD16pos_NK_spleen |
| ARID2             | 4.56E-114 | 1.68663439 | 0.429 | 0.088 | 1.62E-109 | CD16pos_NK_spleen |
| ADGRE5            | 8.66E-114 | 1.7137641  | 0.653 | 0.195 | 3.07E-109 | CD16pos_NK_spleen |
| PKN2              | 8.70E-114 | 1.53338614 | 0.444 | 0.092 | 3.08E-109 | CD16pos_NK_spleen |
| EP300             | 9.17E-114 | 1.70422352 | 0.397 | 0.075 | 3.25E-109 | CD16pos_NK_spleen |
| PICALM            | 9.91E-114 | 1.2739556  | 0.674 | 0.197 | 3.51E-109 | CD16pos_NK_spleen |
| CUL3              | 1.03E-113 | 1.70073115 | 0.431 | 0.089 | 3.65E-109 | CD16pos_NK_spleen |
| ENSMUG00000011588 | 1.60E-113 | 2.44635872 | 0.256 | 0.031 | 5.68E-109 | CD16pos_NK_spleen |
| MAP4K4            | 2.04E-113 | 1.78157229 | 0.39  | 0.074 | 7.23E-109 | CD16pos_NK_spleen |
| RIPOR2            | 2.07E-113 | 1.24425537 | 0.934 | 0.494 | 7.34E-109 | CD16pos_NK_spleen |

|                    |           |            |       |       |           |                   |
|--------------------|-----------|------------|-------|-------|-----------|-------------------|
| MEF2A              | 2.12E-113 | 1.72076507 | 0.408 | 0.08  | 7.50E-109 | CD16pos_NK_spleen |
| PNISR              | 2.24E-113 | 1.20211556 | 0.692 | 0.2   | 7.95E-109 | CD16pos_NK_spleen |
| USP15              | 2.81E-113 | 1.23877299 | 0.689 | 0.202 | 9.97E-109 | CD16pos_NK_spleen |
| YEATS2             | 2.84E-113 | 1.5337655  | 0.461 | 0.1   | 1.01E-108 | CD16pos_NK_spleen |
| TGFBR2             | 8.86E-113 | 1.6031932  | 0.474 | 0.107 | 3.14E-108 | CD16pos_NK_spleen |
| MLLT10             | 1.23E-112 | 1.74038714 | 0.34  | 0.056 | 4.36E-108 | CD16pos_NK_spleen |
| ENSMMUG00000022610 | 1.44E-112 | 1.45744624 | 0.54  | 0.134 | 5.11E-108 | CD16pos_NK_spleen |
| SRPK2              | 1.48E-112 | 1.68921719 | 0.458 | 0.102 | 5.26E-108 | CD16pos_NK_spleen |
| TRIP12             | 2.73E-112 | 1.57332961 | 0.408 | 0.08  | 9.66E-108 | CD16pos_NK_spleen |
| FYN                | 3.49E-112 | 1.3710479  | 0.671 | 0.202 | 1.24E-107 | CD16pos_NK_spleen |
| HERC4              | 3.50E-112 | 1.6388023  | 0.398 | 0.077 | 1.24E-107 | CD16pos_NK_spleen |
| ITPR2              | 3.89E-112 | 1.55006874 | 0.453 | 0.099 | 1.38E-107 | CD16pos_NK_spleen |
| SLC30A9            | 6.26E-112 | 2.0214363  | 0.311 | 0.047 | 2.22E-107 | CD16pos_NK_spleen |
| SRSF4              | 1.17E-111 | 1.61900572 | 0.381 | 0.07  | 4.14E-107 | CD16pos_NK_spleen |
| ATF2               | 2.23E-111 | 1.70321498 | 0.405 | 0.08  | 7.91E-107 | CD16pos_NK_spleen |
| RBM26              | 2.82E-111 | 1.58737007 | 0.44  | 0.094 | 9.99E-107 | CD16pos_NK_spleen |
| AEBP2              | 3.57E-111 | 1.87074928 | 0.324 | 0.052 | 1.26E-106 | CD16pos_NK_spleen |
| BANK1              | 3.92E-111 | 2.16919698 | 0.31  | 0.048 | 1.39E-106 | CD16pos_NK_spleen |
| OXSRI              | 5.06E-111 | 1.89820606 | 0.319 | 0.05  | 1.79E-106 | CD16pos_NK_spleen |
| MPZL1              | 7.46E-111 | 1.43643438 | 0.479 | 0.108 | 2.64E-106 | CD16pos_NK_spleen |
| PPP6R3             | 9.98E-111 | 1.44207108 | 0.474 | 0.107 | 3.54E-106 | CD16pos_NK_spleen |
| B3GNT2             | 1.10E-110 | 2.16211116 | 0.253 | 0.03  | 3.89E-106 | CD16pos_NK_spleen |
| WWP1               | 1.46E-110 | 1.98431348 | 0.297 | 0.043 | 5.16E-106 | CD16pos_NK_spleen |
| DOCK2              | 2.28E-110 | 1.37684583 | 0.734 | 0.251 | 8.08E-106 | CD16pos_NK_spleen |
| ATP5F1D            | 4.37E-110 | 1.4677651  | 0.398 | 0.077 | 1.55E-105 | CD16pos_NK_spleen |
| PTBP2              | 4.40E-110 | 1.77172399 | 0.373 | 0.069 | 1.56E-105 | CD16pos_NK_spleen |
| EFCAB2             | 1.17E-109 | 1.49491437 | 0.424 | 0.087 | 4.14E-105 | CD16pos_NK_spleen |
| BABAM2             | 1.65E-109 | 1.40046919 | 0.671 | 0.211 | 5.84E-105 | CD16pos_NK_spleen |
| MICU2              | 1.73E-109 | 1.97393293 | 0.335 | 0.057 | 6.12E-105 | CD16pos_NK_spleen |
| CARD11             | 1.87E-109 | 2.28886897 | 0.273 | 0.037 | 6.61E-105 | CD16pos_NK_spleen |
| SETD5              | 2.57E-109 | 1.84199863 | 0.344 | 0.059 | 9.11E-105 | CD16pos_NK_spleen |
| UBR5               | 2.65E-109 | 1.62011113 | 0.416 | 0.086 | 9.40E-105 | CD16pos_NK_spleen |
| WDR26              | 3.28E-109 | 1.85779295 | 0.334 | 0.056 | 1.16E-104 | CD16pos_NK_spleen |

|             |           |            |       |       |           |                   |
|-------------|-----------|------------|-------|-------|-----------|-------------------|
| EPC2        | 4.30E-109 | 1.98600126 | 0.315 | 0.05  | 1.52E-104 | CD16pos_NK_spleen |
| ZMYM2       | 4.58E-109 | 1.69367667 | 0.385 | 0.074 | 1.62E-104 | CD16pos_NK_spleen |
| UBE2Q2      | 5.05E-109 | 1.4988811  | 0.429 | 0.089 | 1.79E-104 | CD16pos_NK_spleen |
| ARID1A      | 1.49E-108 | 1.79820061 | 0.368 | 0.069 | 5.27E-104 | CD16pos_NK_spleen |
| STRN3       | 1.52E-108 | 2.21769174 | 0.271 | 0.036 | 5.37E-104 | CD16pos_NK_spleen |
| KDM2A       | 1.52E-108 | 1.39978587 | 0.545 | 0.139 | 5.38E-104 | CD16pos_NK_spleen |
| LNPEP       | 2.23E-108 | 1.34899507 | 0.595 | 0.165 | 7.89E-104 | CD16pos_NK_spleen |
| RPS6KB1     | 5.86E-108 | 1.9219056  | 0.348 | 0.062 | 2.08E-103 | CD16pos_NK_spleen |
| ZNF407      | 6.14E-108 | 1.79661832 | 0.361 | 0.067 | 2.17E-103 | CD16pos_NK_spleen |
| RBMS1       | 7.59E-108 | 1.6225519  | 0.403 | 0.082 | 2.69E-103 | CD16pos_NK_spleen |
| LCORL       | 8.42E-108 | 1.97386026 | 0.323 | 0.053 | 2.98E-103 | CD16pos_NK_spleen |
| C20H16orf72 | 9.42E-108 | 2.03768682 | 0.315 | 0.05  | 3.34E-103 | CD16pos_NK_spleen |
| EPC1        | 1.23E-107 | 1.26647973 | 0.661 | 0.197 | 4.35E-103 | CD16pos_NK_spleen |
| RLF         | 1.59E-107 | 1.69522044 | 0.394 | 0.078 | 5.62E-103 | CD16pos_NK_spleen |
| CHD2        | 1.76E-107 | 1.43014328 | 0.505 | 0.124 | 6.23E-103 | CD16pos_NK_spleen |
| SYNRG       | 2.48E-107 | 1.63791558 | 0.361 | 0.066 | 8.79E-103 | CD16pos_NK_spleen |
| VPS8        | 3.60E-107 | 2.01318687 | 0.273 | 0.037 | 1.28E-102 | CD16pos_NK_spleen |
| FAM214A     | 7.90E-107 | 1.97168621 | 0.302 | 0.047 | 2.80E-102 | CD16pos_NK_spleen |
| ASAP1       | 8.22E-107 | 1.97958227 | 0.323 | 0.054 | 2.91E-102 | CD16pos_NK_spleen |
| ZCCHC7      | 8.83E-107 | 1.46990283 | 0.54  | 0.143 | 3.13E-102 | CD16pos_NK_spleen |
| STIM2       | 9.16E-107 | 2.01214726 | 0.295 | 0.044 | 3.25E-102 | CD16pos_NK_spleen |
| MSH3        | 1.59E-106 | 1.97574841 | 0.318 | 0.052 | 5.63E-102 | CD16pos_NK_spleen |
| MZT2B       | 4.21E-106 | 1.44703103 | 0.363 | 0.066 | 1.49E-101 | CD16pos_NK_spleen |
| C18H18orf25 | 4.51E-106 | 2.1250445  | 0.294 | 0.045 | 1.60E-101 | CD16pos_NK_spleen |
| PTPRA       | 6.27E-106 | 1.65369606 | 0.376 | 0.073 | 2.22E-101 | CD16pos_NK_spleen |
| DCAF5       | 6.82E-106 | 1.55817598 | 0.398 | 0.081 | 2.42E-101 | CD16pos_NK_spleen |
| DENND1A     | 6.82E-106 | 2.22857494 | 0.29  | 0.044 | 2.42E-101 | CD16pos_NK_spleen |
| BRAF        | 9.34E-106 | 1.80133121 | 0.377 | 0.075 | 3.31E-101 | CD16pos_NK_spleen |
| MKLN1       | 1.10E-105 | 1.4667543  | 0.442 | 0.098 | 3.90E-101 | CD16pos_NK_spleen |
| ASXL2       | 1.31E-105 | 1.76349317 | 0.316 | 0.051 | 4.63E-101 | CD16pos_NK_spleen |
| PTPN1       | 1.56E-105 | 1.43297051 | 0.482 | 0.114 | 5.51E-101 | CD16pos_NK_spleen |
| RABEP1      | 2.23E-105 | 1.95717103 | 0.258 | 0.033 | 7.92E-101 | CD16pos_NK_spleen |
| WTAP        | 2.63E-105 | 1.38578317 | 0.515 | 0.129 | 9.33E-101 | CD16pos_NK_spleen |

|                   |           |            |       |       |           |                   |
|-------------------|-----------|------------|-------|-------|-----------|-------------------|
| TXLNG             | 2.91E-105 | 2.22693754 | 0.252 | 0.032 | 1.03E-100 | CD16pos_NK_spleen |
| HSPH1             | 2.99E-105 | 1.94808759 | 0.429 | 0.097 | 1.06E-100 | CD16pos_NK_spleen |
| PCNX1             | 3.36E-105 | 2.01366999 | 0.321 | 0.054 | 1.19E-100 | CD16pos_NK_spleen |
| RASA2             | 4.24E-105 | 1.42722808 | 0.508 | 0.128 | 1.50E-100 | CD16pos_NK_spleen |
| IFNG              | 1.07E-104 | 2.28126999 | 0.252 | 0.032 | 3.77E-100 | CD16pos_NK_spleen |
| KAT2B             | 1.10E-104 | 1.964183   | 0.303 | 0.048 | 3.90E-100 | CD16pos_NK_spleen |
| STK17B            | 1.13E-104 | 1.4156023  | 0.75  | 0.271 | 4.01E-100 | CD16pos_NK_spleen |
| HTT               | 1.16E-104 | 2.15654984 | 0.26  | 0.034 | 4.11E-100 | CD16pos_NK_spleen |
| CARMIL1           | 1.27E-104 | 2.11275257 | 0.281 | 0.041 | 4.50E-100 | CD16pos_NK_spleen |
| CCNY              | 1.28E-104 | 1.74596942 | 0.335 | 0.059 | 4.54E-100 | CD16pos_NK_spleen |
| PHF20             | 1.32E-104 | 1.52045255 | 0.435 | 0.096 | 4.66E-100 | CD16pos_NK_spleen |
| SDHAF4            | 1.33E-104 | 1.37334001 | 0.484 | 0.114 | 4.72E-100 | CD16pos_NK_spleen |
| FNBP4             | 1.69E-104 | 1.74704245 | 0.324 | 0.055 | 5.99E-100 | CD16pos_NK_spleen |
| PDZD8             | 2.28E-104 | 2.01778233 | 0.302 | 0.048 | 8.09E-100 | CD16pos_NK_spleen |
| DDX17             | 4.22E-104 | 1.23563812 | 0.621 | 0.177 | 1.50E-99  | CD16pos_NK_spleen |
| SMG1              | 5.21E-104 | 1.63407467 | 0.332 | 0.058 | 1.85E-99  | CD16pos_NK_spleen |
| NSD3              | 6.50E-104 | 1.4735509  | 0.419 | 0.09  | 2.30E-99  | CD16pos_NK_spleen |
| BRD9              | 6.62E-104 | 1.67337362 | 0.332 | 0.057 | 2.35E-99  | CD16pos_NK_spleen |
| GAK               | 6.95E-104 | 1.74226015 | 0.352 | 0.065 | 2.46E-99  | CD16pos_NK_spleen |
| ABR               | 9.47E-104 | 1.64878024 | 0.381 | 0.076 | 3.35E-99  | CD16pos_NK_spleen |
| SLC22A18          | 1.31E-103 | 1.79216234 | 0.334 | 0.059 | 4.64E-99  | CD16pos_NK_spleen |
| UXS1              | 1.97E-103 | 1.61362847 | 0.405 | 0.085 | 7.00E-99  | CD16pos_NK_spleen |
| GOLM2             | 2.30E-103 | 1.5316415  | 0.385 | 0.077 | 8.16E-99  | CD16pos_NK_spleen |
| MTMR12            | 2.36E-103 | 1.56976136 | 0.392 | 0.08  | 8.37E-99  | CD16pos_NK_spleen |
| PTEN              | 2.73E-103 | 2.09437903 | 0.274 | 0.039 | 9.67E-99  | CD16pos_NK_spleen |
| FNDC3A            | 3.38E-103 | 1.55602031 | 0.416 | 0.089 | 1.20E-98  | CD16pos_NK_spleen |
| ENSMUG00000063877 | 4.00E-103 | 2.13043993 | 0.252 | 0.033 | 1.42E-98  | CD16pos_NK_spleen |
| SMARCA2           | 4.12E-103 | 1.46746773 | 0.45  | 0.103 | 1.46E-98  | CD16pos_NK_spleen |
| UBE2G1            | 4.71E-103 | 1.69533835 | 0.337 | 0.06  | 1.67E-98  | CD16pos_NK_spleen |
| METTL9            | 5.50E-103 | 1.59875623 | 0.35  | 0.064 | 1.95E-98  | CD16pos_NK_spleen |
| FBXO11            | 6.69E-103 | 1.61444508 | 0.387 | 0.079 | 2.37E-98  | CD16pos_NK_spleen |
| CCM2              | 9.20E-103 | 1.33581114 | 0.5   | 0.124 | 3.26E-98  | CD16pos_NK_spleen |
| XPO6              | 9.89E-103 | 1.44047423 | 0.492 | 0.122 | 3.50E-98  | CD16pos_NK_spleen |

|                     |           |            |       |       |          |                   |
|---------------------|-----------|------------|-------|-------|----------|-------------------|
| IRF1                | 1.03E-102 | 1.37152512 | 0.532 | 0.139 | 3.64E-98 | CD16pos_NK_spleen |
| ATP10A              | 1.06E-102 | 1.85683934 | 0.318 | 0.054 | 3.76E-98 | CD16pos_NK_spleen |
| ENSMMUG000000021425 | 1.07E-102 | 2.27948623 | 0.255 | 0.034 | 3.81E-98 | CD16pos_NK_spleen |
| EIF3F               | 1.36E-102 | 1.28583816 | 0.632 | 0.19  | 4.82E-98 | CD16pos_NK_spleen |
| IKZF2               | 2.05E-102 | 1.70168412 | 0.397 | 0.084 | 7.28E-98 | CD16pos_NK_spleen |
| MBD5                | 2.11E-102 | 1.85575602 | 0.377 | 0.077 | 7.48E-98 | CD16pos_NK_spleen |
| TUT4                | 2.45E-102 | 1.30867971 | 0.516 | 0.131 | 8.69E-98 | CD16pos_NK_spleen |
| OGA                 | 2.67E-102 | 1.37182676 | 0.463 | 0.108 | 9.44E-98 | CD16pos_NK_spleen |
| KAT6A               | 3.09E-102 | 1.48354291 | 0.456 | 0.107 | 1.10E-97 | CD16pos_NK_spleen |
| HECA                | 3.11E-102 | 2.28191511 | 0.253 | 0.034 | 1.10E-97 | CD16pos_NK_spleen |
| ARHGAP25            | 7.88E-102 | 1.4980813  | 0.406 | 0.086 | 2.79E-97 | CD16pos_NK_spleen |
| RPS6KC1             | 8.74E-102 | 1.7702628  | 0.348 | 0.065 | 3.10E-97 | CD16pos_NK_spleen |
| DNAJC24             | 1.27E-101 | 1.60830781 | 0.395 | 0.083 | 4.50E-97 | CD16pos_NK_spleen |
| EIF4EBP3            | 1.29E-101 | 1.48323059 | 0.387 | 0.079 | 4.58E-97 | CD16pos_NK_spleen |
| TLK1                | 1.57E-101 | 1.7980208  | 0.332 | 0.06  | 5.55E-97 | CD16pos_NK_spleen |
| FAM193A             | 2.06E-101 | 2.25487904 | 0.255 | 0.034 | 7.31E-97 | CD16pos_NK_spleen |
| LYST                | 2.24E-101 | 1.37343693 | 0.639 | 0.198 | 7.92E-97 | CD16pos_NK_spleen |
| PHF14               | 2.63E-101 | 1.68507346 | 0.34  | 0.062 | 9.33E-97 | CD16pos_NK_spleen |
| CCSER2              | 4.79E-101 | 1.81981826 | 0.294 | 0.046 | 1.70E-96 | CD16pos_NK_spleen |
| ENSMMUG000000005482 | 4.94E-101 | 1.57414242 | 0.368 | 0.072 | 1.75E-96 | CD16pos_NK_spleen |
| DIAPH2              | 6.16E-101 | 1.75033922 | 0.369 | 0.074 | 2.18E-96 | CD16pos_NK_spleen |
| USP9X               | 6.19E-101 | 1.79956638 | 0.394 | 0.084 | 2.19E-96 | CD16pos_NK_spleen |
| FAM172A             | 9.77E-101 | 1.34703275 | 0.577 | 0.164 | 3.46E-96 | CD16pos_NK_spleen |
| CTCF                | 1.35E-100 | 1.90453787 | 0.292 | 0.046 | 4.79E-96 | CD16pos_NK_spleen |
| ENSMMUG000000046264 | 1.42E-100 | 2.30963077 | 0.265 | 0.038 | 5.04E-96 | CD16pos_NK_spleen |
| CHIC2               | 1.82E-100 | 1.56207234 | 0.39  | 0.081 | 6.45E-96 | CD16pos_NK_spleen |
| POC1B               | 1.83E-100 | 2.05186768 | 0.292 | 0.047 | 6.48E-96 | CD16pos_NK_spleen |
| BRWD1               | 1.90E-100 | 1.63590572 | 0.337 | 0.061 | 6.74E-96 | CD16pos_NK_spleen |
| TMCC1               | 2.07E-100 | 2.18225592 | 0.252 | 0.034 | 7.34E-96 | CD16pos_NK_spleen |
| RELL1               | 2.84E-100 | 1.56864305 | 0.402 | 0.086 | 1.01E-95 | CD16pos_NK_spleen |
| GNA13               | 2.87E-100 | 1.31280807 | 0.527 | 0.138 | 1.02E-95 | CD16pos_NK_spleen |
| REL                 | 4.59E-100 | 1.17515896 | 0.627 | 0.186 | 1.63E-95 | CD16pos_NK_spleen |
| MBTD1               | 5.04E-100 | 2.121727   | 0.285 | 0.045 | 1.79E-95 | CD16pos_NK_spleen |

|                    |           |            |       |       |          |                   |
|--------------------|-----------|------------|-------|-------|----------|-------------------|
| RASA3              | 5.14E-100 | 1.51979228 | 0.402 | 0.086 | 1.82E-95 | CD16pos_NK_spleen |
| ITFG1              | 5.37E-100 | 1.80835131 | 0.344 | 0.065 | 1.90E-95 | CD16pos_NK_spleen |
| CSNK1G1            | 6.04E-100 | 1.73676105 | 0.352 | 0.068 | 2.14E-95 | CD16pos_NK_spleen |
| PPM1G              | 6.27E-100 | 1.79739517 | 0.284 | 0.043 | 2.22E-95 | CD16pos_NK_spleen |
| WAC                | 1.51E-99  | 1.21346268 | 0.587 | 0.166 | 5.35E-95 | CD16pos_NK_spleen |
| EIF4A2             | 2.15E-99  | 1.11276712 | 0.668 | 0.204 | 7.63E-95 | CD16pos_NK_spleen |
| FLI1               | 2.30E-99  | 1.5185431  | 0.445 | 0.106 | 8.15E-95 | CD16pos_NK_spleen |
| MBNL1              | 3.28E-99  | 1.0982619  | 0.947 | 0.557 | 1.16E-94 | CD16pos_NK_spleen |
| E2F3               | 5.47E-99  | 1.9579228  | 0.305 | 0.051 | 1.94E-94 | CD16pos_NK_spleen |
| ATXN1              | 1.19E-98  | 2.18766984 | 0.285 | 0.046 | 4.20E-94 | CD16pos_NK_spleen |
| NEDD9              | 1.28E-98  | 1.26465631 | 0.518 | 0.136 | 4.53E-94 | CD16pos_NK_spleen |
| NPAT               | 1.54E-98  | 1.50833904 | 0.395 | 0.084 | 5.47E-94 | CD16pos_NK_spleen |
| TRPC4AP            | 1.74E-98  | 1.77860971 | 0.315 | 0.055 | 6.16E-94 | CD16pos_NK_spleen |
| RBM33              | 1.93E-98  | 1.46127436 | 0.374 | 0.076 | 6.84E-94 | CD16pos_NK_spleen |
| GNAQ               | 2.35E-98  | 1.77342241 | 0.348 | 0.068 | 8.34E-94 | CD16pos_NK_spleen |
| ENSMMUG00000040065 | 2.40E-98  | 1.5026717  | 0.347 | 0.065 | 8.50E-94 | CD16pos_NK_spleen |
| IMMP2L             | 2.54E-98  | 2.17128676 | 0.295 | 0.049 | 8.98E-94 | CD16pos_NK_spleen |
| TASOR2             | 3.16E-98  | 1.73422776 | 0.339 | 0.064 | 1.12E-93 | CD16pos_NK_spleen |
| MSL2               | 4.20E-98  | 1.85563057 | 0.274 | 0.041 | 1.49E-93 | CD16pos_NK_spleen |
| HECTD4             | 4.32E-98  | 2.03371138 | 0.274 | 0.042 | 1.53E-93 | CD16pos_NK_spleen |
| BBX                | 4.41E-98  | 1.47191353 | 0.468 | 0.116 | 1.56E-93 | CD16pos_NK_spleen |
| MTREX              | 4.76E-98  | 1.28774683 | 0.535 | 0.145 | 1.69E-93 | CD16pos_NK_spleen |
| RASA1              | 5.22E-98  | 2.14171423 | 0.261 | 0.038 | 1.85E-93 | CD16pos_NK_spleen |
| ST3GAL1            | 6.26E-98  | 1.37398228 | 0.427 | 0.097 | 2.22E-93 | CD16pos_NK_spleen |
| KIAA1109           | 1.37E-97  | 1.81977704 | 0.3   | 0.05  | 4.86E-93 | CD16pos_NK_spleen |
| MRTFA              | 1.53E-97  | 1.89262332 | 0.273 | 0.041 | 5.43E-93 | CD16pos_NK_spleen |
| NUP210             | 1.55E-97  | 1.57889254 | 0.327 | 0.059 | 5.48E-93 | CD16pos_NK_spleen |
| SMG6               | 3.03E-97  | 1.45845168 | 0.468 | 0.117 | 1.07E-92 | CD16pos_NK_spleen |
| GATAD2B            | 3.20E-97  | 1.71112376 | 0.35  | 0.069 | 1.13E-92 | CD16pos_NK_spleen |
| HERC1              | 5.24E-97  | 1.53992846 | 0.385 | 0.083 | 1.86E-92 | CD16pos_NK_spleen |
| CYTH1              | 5.47E-97  | 1.65649315 | 0.371 | 0.077 | 1.94E-92 | CD16pos_NK_spleen |
| RALBP1             | 6.09E-97  | 1.49759182 | 0.303 | 0.051 | 2.16E-92 | CD16pos_NK_spleen |
| CMAH               | 6.45E-97  | 1.4645456  | 0.435 | 0.104 | 2.28E-92 | CD16pos_NK_spleen |

|         |          |            |       |       |          |                   |
|---------|----------|------------|-------|-------|----------|-------------------|
| GLS     | 7.10E-97 | 1.91699148 | 0.321 | 0.059 | 2.52E-92 | CD16pos_NK_spleen |
| AGO3    | 1.10E-96 | 1.67829593 | 0.363 | 0.074 | 3.90E-92 | CD16pos_NK_spleen |
| JAK2    | 1.25E-96 | 1.82115842 | 0.285 | 0.046 | 4.43E-92 | CD16pos_NK_spleen |
| ARHGEF7 | 1.43E-96 | 1.77890483 | 0.315 | 0.056 | 5.06E-92 | CD16pos_NK_spleen |
| STT3B   | 7.06E-96 | 1.73097346 | 0.298 | 0.051 | 2.50E-91 | CD16pos_NK_spleen |
| NDFIP1  | 8.39E-96 | 1.23294366 | 0.494 | 0.126 | 2.97E-91 | CD16pos_NK_spleen |
| NXPE3   | 8.51E-96 | 1.69487743 | 0.327 | 0.061 | 3.02E-91 | CD16pos_NK_spleen |
| CAB39   | 9.09E-96 | 1.34397914 | 0.479 | 0.122 | 3.22E-91 | CD16pos_NK_spleen |
| DYM     | 1.07E-95 | 1.59291713 | 0.371 | 0.078 | 3.78E-91 | CD16pos_NK_spleen |
| WDR7    | 1.09E-95 | 1.65749399 | 0.353 | 0.071 | 3.85E-91 | CD16pos_NK_spleen |
| ZNF148  | 1.59E-95 | 1.26308293 | 0.516 | 0.137 | 5.64E-91 | CD16pos_NK_spleen |
| BPTF    | 1.60E-95 | 1.2940455  | 0.495 | 0.128 | 5.68E-91 | CD16pos_NK_spleen |
| CNOT2   | 1.65E-95 | 1.37167179 | 0.476 | 0.121 | 5.85E-91 | CD16pos_NK_spleen |
| MAPKAP1 | 2.63E-95 | 2.0890452  | 0.281 | 0.045 | 9.32E-91 | CD16pos_NK_spleen |
| SKAP1   | 2.67E-95 | 1.22656544 | 0.908 | 0.506 | 9.46E-91 | CD16pos_NK_spleen |
| ZNF638  | 2.78E-95 | 1.50765505 | 0.398 | 0.088 | 9.86E-91 | CD16pos_NK_spleen |
| PDS5A   | 3.14E-95 | 1.8260645  | 0.289 | 0.048 | 1.11E-90 | CD16pos_NK_spleen |
| TBL1X   | 3.19E-95 | 2.14875948 | 0.256 | 0.038 | 1.13E-90 | CD16pos_NK_spleen |
| CERT1   | 3.54E-95 | 1.70278998 | 0.337 | 0.065 | 1.25E-90 | CD16pos_NK_spleen |
| IL4R    | 4.12E-95 | 1.73399439 | 0.315 | 0.057 | 1.46E-90 | CD16pos_NK_spleen |
| JARID2  | 5.17E-95 | 1.42263174 | 0.511 | 0.14  | 1.83E-90 | CD16pos_NK_spleen |
| MOB3A   | 7.45E-95 | 1.65508477 | 0.339 | 0.066 | 2.64E-90 | CD16pos_NK_spleen |
| HERC3   | 8.73E-95 | 1.93914675 | 0.269 | 0.042 | 3.09E-90 | CD16pos_NK_spleen |
| PRKCQ   | 1.53E-94 | 1.22738971 | 0.452 | 0.11  | 5.42E-90 | CD16pos_NK_spleen |
| HEG1    | 1.66E-94 | 1.47667362 | 0.453 | 0.114 | 5.89E-90 | CD16pos_NK_spleen |
| CCDC91  | 2.43E-94 | 1.60849349 | 0.347 | 0.07  | 8.60E-90 | CD16pos_NK_spleen |
| ATXN7   | 3.47E-94 | 1.51733799 | 0.373 | 0.079 | 1.23E-89 | CD16pos_NK_spleen |
| ATP2C1  | 5.81E-94 | 1.74764056 | 0.294 | 0.05  | 2.06E-89 | CD16pos_NK_spleen |
| SRSF2   | 8.24E-94 | 1.29874734 | 0.423 | 0.098 | 2.92E-89 | CD16pos_NK_spleen |
| CMIP    | 8.25E-94 | 1.55286021 | 0.308 | 0.055 | 2.92E-89 | CD16pos_NK_spleen |
| GGNBP2  | 2.56E-93 | 1.51920797 | 0.348 | 0.07  | 9.07E-89 | CD16pos_NK_spleen |
| ABI1    | 3.41E-93 | 1.35519211 | 0.453 | 0.113 | 1.21E-88 | CD16pos_NK_spleen |
| LSM14A  | 4.55E-93 | 1.18245728 | 0.545 | 0.153 | 1.61E-88 | CD16pos_NK_spleen |



|          |          |            |       |       |          |                   |
|----------|----------|------------|-------|-------|----------|-------------------|
| SPTLC2   | 4.61E-93 | 1.483683   | 0.337 | 0.065 | 1.63E-88 | CD16pos_NK_spleen |
| RNF145   | 4.63E-93 | 1.52659362 | 0.339 | 0.066 | 1.64E-88 | CD16pos_NK_spleen |
| RGCC     | 8.26E-93 | 1.95943324 | 0.287 | 0.049 | 2.93E-88 | CD16pos_NK_spleen |
| UBAP1    | 1.23E-92 | 1.49828861 | 0.347 | 0.069 | 4.36E-88 | CD16pos_NK_spleen |
| ATP1B3   | 1.36E-92 | 1.37952457 | 0.361 | 0.074 | 4.81E-88 | CD16pos_NK_spleen |
| CTNNB1   | 1.45E-92 | 1.34654922 | 0.403 | 0.091 | 5.13E-88 | CD16pos_NK_spleen |
| CD47     | 1.84E-92 | 1.12213086 | 0.531 | 0.145 | 6.50E-88 | CD16pos_NK_spleen |
| NFKB1    | 4.27E-92 | 1.56880999 | 0.429 | 0.108 | 1.51E-87 | CD16pos_NK_spleen |
| SCML4    | 5.12E-92 | 1.27237485 | 0.652 | 0.217 | 1.81E-87 | CD16pos_NK_spleen |
| GPATCH8  | 1.10E-91 | 1.50845997 | 0.392 | 0.089 | 3.91E-87 | CD16pos_NK_spleen |
| SOS1     | 1.81E-91 | 1.59968262 | 0.368 | 0.081 | 6.41E-87 | CD16pos_NK_spleen |
| IQGAP1   | 1.93E-91 | 1.09550602 | 0.677 | 0.22  | 6.83E-87 | CD16pos_NK_spleen |
| FUZ      | 2.04E-91 | 1.96974827 | 0.263 | 0.041 | 7.24E-87 | CD16pos_NK_spleen |
| CAMKMT   | 3.87E-91 | 1.9085511  | 0.339 | 0.07  | 1.37E-86 | CD16pos_NK_spleen |
| RPS6KA3  | 4.13E-91 | 1.50380769 | 0.41  | 0.097 | 1.46E-86 | CD16pos_NK_spleen |
| LUC7L3   | 4.24E-91 | 1.21440818 | 0.479 | 0.125 | 1.50E-86 | CD16pos_NK_spleen |
| USP25    | 5.04E-91 | 1.73946072 | 0.308 | 0.057 | 1.79E-86 | CD16pos_NK_spleen |
| ARAP2    | 8.50E-91 | 1.156783   | 0.566 | 0.167 | 3.01E-86 | CD16pos_NK_spleen |
| ZFAND5   | 8.52E-91 | 1.80444437 | 0.263 | 0.041 | 3.02E-86 | CD16pos_NK_spleen |
| USP47    | 9.69E-91 | 1.26969794 | 0.487 | 0.13  | 3.43E-86 | CD16pos_NK_spleen |
| NCALD    | 1.08E-90 | 2.31557442 | 0.274 | 0.047 | 3.82E-86 | CD16pos_NK_spleen |
| GRB2     | 1.09E-90 | 1.2839434  | 0.469 | 0.122 | 3.86E-86 | CD16pos_NK_spleen |
| PAFAH1B1 | 1.25E-90 | 1.23370185 | 0.503 | 0.137 | 4.44E-86 | CD16pos_NK_spleen |
| RBM17    | 1.27E-90 | 1.8146813  | 0.269 | 0.044 | 4.51E-86 | CD16pos_NK_spleen |
| LMBRD1   | 1.39E-90 | 1.47506723 | 0.377 | 0.083 | 4.91E-86 | CD16pos_NK_spleen |
| PPP2R2A  | 1.47E-90 | 1.25244174 | 0.41  | 0.095 | 5.21E-86 | CD16pos_NK_spleen |
| SEC63    | 1.57E-90 | 1.61278987 | 0.355 | 0.075 | 5.57E-86 | CD16pos_NK_spleen |
| PIP4K2A  | 1.81E-90 | 1.1575784  | 0.652 | 0.218 | 6.40E-86 | CD16pos_NK_spleen |
| IQSEC1   | 2.21E-90 | 2.00485117 | 0.26  | 0.041 | 7.82E-86 | CD16pos_NK_spleen |
| TRANK1   | 3.00E-90 | 1.8761107  | 0.276 | 0.046 | 1.06E-85 | CD16pos_NK_spleen |
| WNK1     | 4.90E-90 | 1.30458793 | 0.51  | 0.143 | 1.74E-85 | CD16pos_NK_spleen |
| CNOT6L   | 6.60E-90 | 1.1413923  | 0.619 | 0.194 | 2.34E-85 | CD16pos_NK_spleen |
| AP1G1    | 7.05E-90 | 1.51404655 | 0.334 | 0.066 | 2.50E-85 | CD16pos_NK_spleen |

|         |          |            |       |       |          |                   |
|---------|----------|------------|-------|-------|----------|-------------------|
| MICAL2  | 7.61E-90 | 1.82767832 | 0.279 | 0.048 | 2.70E-85 | CD16pos_NK_spleen |
| EIF4G3  | 1.11E-89 | 1.82526606 | 0.315 | 0.061 | 3.94E-85 | CD16pos_NK_spleen |
| SMARCC1 | 1.89E-89 | 1.48868644 | 0.374 | 0.083 | 6.70E-85 | CD16pos_NK_spleen |
| ABLIM1  | 2.31E-89 | 1.14189786 | 0.577 | 0.174 | 8.20E-85 | CD16pos_NK_spleen |
| USP24   | 2.34E-89 | 1.49527147 | 0.305 | 0.056 | 8.28E-85 | CD16pos_NK_spleen |
| FAM107B | 2.47E-89 | 1.32487707 | 0.424 | 0.103 | 8.74E-85 | CD16pos_NK_spleen |
| COTL1   | 3.47E-89 | 2.1228338  | 0.268 | 0.045 | 1.23E-84 | CD16pos_NK_spleen |
| NFKBIB  | 1.15E-88 | 1.25954909 | 0.453 | 0.116 | 4.08E-84 | CD16pos_NK_spleen |
| KMT2E   | 1.33E-88 | 1.23073742 | 0.542 | 0.158 | 4.72E-84 | CD16pos_NK_spleen |
| KAT7    | 1.50E-88 | 1.96022281 | 0.258 | 0.041 | 5.30E-84 | CD16pos_NK_spleen |
| FRYL    | 1.95E-88 | 1.45034962 | 0.318 | 0.061 | 6.91E-84 | CD16pos_NK_spleen |
| SMARCA5 | 1.97E-88 | 1.20338735 | 0.41  | 0.096 | 6.98E-84 | CD16pos_NK_spleen |
| HNRNPU  | 3.43E-88 | 1.19665471 | 0.598 | 0.188 | 1.21E-83 | CD16pos_NK_spleen |
| RPRD2   | 3.78E-88 | 1.72057727 | 0.29  | 0.052 | 1.34E-83 | CD16pos_NK_spleen |
| DNM2    | 7.77E-88 | 1.74354071 | 0.26  | 0.042 | 2.75E-83 | CD16pos_NK_spleen |
| WDR70   | 9.22E-88 | 1.21375012 | 0.458 | 0.118 | 3.27E-83 | CD16pos_NK_spleen |
| GOLGA4  | 1.35E-87 | 1.41661538 | 0.398 | 0.095 | 4.77E-83 | CD16pos_NK_spleen |
| SMC4    | 1.50E-87 | 1.39536179 | 0.424 | 0.106 | 5.30E-83 | CD16pos_NK_spleen |
| GTF2I   | 1.75E-87 | 1.33858002 | 0.371 | 0.082 | 6.21E-83 | CD16pos_NK_spleen |
| TRIM33  | 2.41E-87 | 1.65544366 | 0.287 | 0.051 | 8.54E-83 | CD16pos_NK_spleen |
| ZMYND8  | 3.04E-87 | 1.52298673 | 0.334 | 0.069 | 1.08E-82 | CD16pos_NK_spleen |
| PAG1    | 4.75E-87 | 2.14060405 | 0.256 | 0.042 | 1.68E-82 | CD16pos_NK_spleen |
| WAPL    | 5.27E-87 | 1.41127546 | 0.326 | 0.065 | 1.87E-82 | CD16pos_NK_spleen |
| ST8SIA4 | 7.62E-87 | 1.20447269 | 0.523 | 0.151 | 2.70E-82 | CD16pos_NK_spleen |
| CERS6   | 8.11E-87 | 1.74460341 | 0.302 | 0.057 | 2.87E-82 | CD16pos_NK_spleen |
| SREK1   | 8.93E-87 | 1.20790527 | 0.487 | 0.133 | 3.16E-82 | CD16pos_NK_spleen |
| HUWE1   | 1.13E-86 | 1.1843301  | 0.431 | 0.107 | 4.00E-82 | CD16pos_NK_spleen |
| PPM1B   | 1.18E-86 | 1.6424797  | 0.263 | 0.043 | 4.17E-82 | CD16pos_NK_spleen |
| PMAIP1  | 1.87E-86 | 1.93845488 | 0.277 | 0.049 | 6.61E-82 | CD16pos_NK_spleen |
| UBR1    | 2.00E-86 | 1.3642227  | 0.377 | 0.086 | 7.10E-82 | CD16pos_NK_spleen |
| PIAS1   | 2.53E-86 | 1.17880205 | 0.518 | 0.147 | 8.95E-82 | CD16pos_NK_spleen |
| MYO1F   | 2.62E-86 | 1.2173769  | 0.49  | 0.136 | 9.27E-82 | CD16pos_NK_spleen |
| SPATA5  | 2.94E-86 | 1.8229073  | 0.25  | 0.04  | 1.04E-81 | CD16pos_NK_spleen |

|         |          |            |       |       |          |                   |
|---------|----------|------------|-------|-------|----------|-------------------|
| TESC    | 3.04E-86 | 1.06068536 | 0.815 | 0.33  | 1.08E-81 | CD16pos_NK_spleen |
| LCP2    | 5.29E-86 | 1.23528966 | 0.397 | 0.093 | 1.88E-81 | CD16pos_NK_spleen |
| SEC31A  | 5.98E-86 | 1.15488564 | 0.468 | 0.124 | 2.12E-81 | CD16pos_NK_spleen |
| WWOX    | 7.39E-86 | 2.06777921 | 0.298 | 0.058 | 2.62E-81 | CD16pos_NK_spleen |
| ADD3    | 8.56E-86 | 1.22546528 | 0.419 | 0.103 | 3.03E-81 | CD16pos_NK_spleen |
| RAB2A   | 1.63E-85 | 1.14512436 | 0.556 | 0.166 | 5.79E-81 | CD16pos_NK_spleen |
| SP3     | 2.16E-85 | 1.51188051 | 0.292 | 0.054 | 7.66E-81 | CD16pos_NK_spleen |
| ITPR1   | 3.01E-85 | 1.86771031 | 0.26  | 0.043 | 1.07E-80 | CD16pos_NK_spleen |
| TAOK3   | 5.10E-85 | 1.27742261 | 0.527 | 0.156 | 1.81E-80 | CD16pos_NK_spleen |
| SURF4   | 6.54E-85 | 1.33591362 | 0.3   | 0.056 | 2.32E-80 | CD16pos_NK_spleen |
| RC3H1   | 6.73E-85 | 1.78805584 | 0.25  | 0.04  | 2.38E-80 | CD16pos_NK_spleen |
| PBX3    | 7.45E-85 | 2.00742808 | 0.256 | 0.043 | 2.64E-80 | CD16pos_NK_spleen |
| RELCH   | 7.83E-85 | 1.55970397 | 0.316 | 0.064 | 2.77E-80 | CD16pos_NK_spleen |
| PHIP    | 8.29E-85 | 1.30552616 | 0.45  | 0.12  | 2.94E-80 | CD16pos_NK_spleen |
| CRY1    | 8.34E-85 | 1.77880685 | 0.281 | 0.051 | 2.95E-80 | CD16pos_NK_spleen |
| TBC1D23 | 1.56E-84 | 1.62585744 | 0.277 | 0.049 | 5.53E-80 | CD16pos_NK_spleen |
| GZMM    | 1.59E-84 | 1.46264734 | 0.606 | 0.217 | 5.64E-80 | CD16pos_NK_spleen |
| PCM1    | 1.86E-84 | 1.27627787 | 0.398 | 0.096 | 6.58E-80 | CD16pos_NK_spleen |
| SUSD6   | 4.34E-84 | 1.73178272 | 0.271 | 0.048 | 1.54E-79 | CD16pos_NK_spleen |
| CRTAM   | 5.71E-84 | 1.60485008 | 0.426 | 0.112 | 2.02E-79 | CD16pos_NK_spleen |
| SP140   | 1.13E-83 | 1.42077045 | 0.34  | 0.073 | 4.00E-79 | CD16pos_NK_spleen |
| RHEB    | 1.88E-83 | 1.35253014 | 0.371 | 0.086 | 6.67E-79 | CD16pos_NK_spleen |
| RBM6    | 3.81E-83 | 1.59499772 | 0.284 | 0.053 | 1.35E-78 | CD16pos_NK_spleen |
| SCLT1   | 5.55E-83 | 1.81513945 | 0.306 | 0.062 | 1.97E-78 | CD16pos_NK_spleen |
| CNOT4   | 6.47E-83 | 1.28395744 | 0.418 | 0.106 | 2.29E-78 | CD16pos_NK_spleen |
| IP6K1   | 8.96E-83 | 1.7304071  | 0.266 | 0.047 | 3.17E-78 | CD16pos_NK_spleen |
| PRDM2   | 9.54E-83 | 1.70540523 | 0.3   | 0.06  | 3.38E-78 | CD16pos_NK_spleen |
| DCAF6   | 1.03E-82 | 1.64080059 | 0.266 | 0.047 | 3.66E-78 | CD16pos_NK_spleen |
| ZMYND11 | 1.34E-82 | 1.38137837 | 0.36  | 0.081 | 4.75E-78 | CD16pos_NK_spleen |
| GPR107  | 1.45E-82 | 1.59704058 | 0.29  | 0.055 | 5.14E-78 | CD16pos_NK_spleen |
| RNF216  | 1.73E-82 | 1.28793596 | 0.385 | 0.093 | 6.12E-78 | CD16pos_NK_spleen |
| GATAD2A | 1.84E-82 | 1.79399692 | 0.294 | 0.058 | 6.53E-78 | CD16pos_NK_spleen |
| CLINT1  | 2.15E-82 | 1.44051859 | 0.369 | 0.087 | 7.64E-78 | CD16pos_NK_spleen |

|         |          |            |       |       |          |                   |
|---------|----------|------------|-------|-------|----------|-------------------|
| PTPN2   | 2.31E-82 | 1.13806257 | 0.561 | 0.174 | 8.18E-78 | CD16pos_NK_spleen |
| PCCA    | 2.83E-82 | 1.35128273 | 0.326 | 0.068 | 1.00E-77 | CD16pos_NK_spleen |
| TLE4    | 2.84E-82 | 1.69668683 | 0.292 | 0.056 | 1.01E-77 | CD16pos_NK_spleen |
| PBRM1   | 3.34E-82 | 1.39833645 | 0.353 | 0.08  | 1.19E-77 | CD16pos_NK_spleen |
| NUFIP2  | 4.58E-82 | 1.35514485 | 0.352 | 0.079 | 1.62E-77 | CD16pos_NK_spleen |
| YTHDF3  | 5.47E-82 | 1.47878334 | 0.3   | 0.059 | 1.94E-77 | CD16pos_NK_spleen |
| KTN1    | 1.04E-81 | 1.48546525 | 0.276 | 0.05  | 3.69E-77 | CD16pos_NK_spleen |
| HBS1L   | 1.08E-81 | 1.2995653  | 0.405 | 0.102 | 3.81E-77 | CD16pos_NK_spleen |
| TTC17   | 1.10E-81 | 1.32107641 | 0.373 | 0.088 | 3.89E-77 | CD16pos_NK_spleen |
| CEP350  | 1.35E-81 | 1.37108625 | 0.324 | 0.068 | 4.79E-77 | CD16pos_NK_spleen |
| NSF     | 1.66E-81 | 1.25387067 | 0.413 | 0.105 | 5.86E-77 | CD16pos_NK_spleen |
| NCOA1   | 1.94E-81 | 1.46361586 | 0.324 | 0.069 | 6.88E-77 | CD16pos_NK_spleen |
| ATP2B4  | 2.77E-81 | 1.17670481 | 0.553 | 0.175 | 9.81E-77 | CD16pos_NK_spleen |
| MACO1   | 3.79E-81 | 1.61689054 | 0.263 | 0.046 | 1.34E-76 | CD16pos_NK_spleen |
| BAZ1A   | 7.21E-81 | 1.2901087  | 0.413 | 0.106 | 2.55E-76 | CD16pos_NK_spleen |
| PTPRC   | 7.55E-81 | 0.88170563 | 0.969 | 0.644 | 2.67E-76 | CD16pos_NK_spleen |
| PTPRJ   | 7.81E-81 | 1.98161448 | 0.25  | 0.043 | 2.77E-76 | CD16pos_NK_spleen |
| GIT2    | 8.63E-81 | 1.52395704 | 0.306 | 0.062 | 3.06E-76 | CD16pos_NK_spleen |
| MARCHF7 | 1.56E-80 | 1.31821827 | 0.371 | 0.088 | 5.52E-76 | CD16pos_NK_spleen |
| KDM3B   | 1.74E-80 | 1.61704224 | 0.295 | 0.059 | 6.17E-76 | CD16pos_NK_spleen |
| SSBP3   | 2.17E-80 | 1.54750741 | 0.281 | 0.053 | 7.69E-76 | CD16pos_NK_spleen |
| SETX    | 2.28E-80 | 1.03039638 | 0.5   | 0.144 | 8.06E-76 | CD16pos_NK_spleen |
| REV3L   | 2.61E-80 | 1.83362409 | 0.26  | 0.046 | 9.24E-76 | CD16pos_NK_spleen |
| SNRNP70 | 2.80E-80 | 1.4177894  | 0.337 | 0.074 | 9.93E-76 | CD16pos_NK_spleen |
| AKIRIN2 | 3.15E-80 | 1.47790186 | 0.281 | 0.052 | 1.12E-75 | CD16pos_NK_spleen |
| DYRK1A  | 3.37E-80 | 1.3843771  | 0.332 | 0.073 | 1.19E-75 | CD16pos_NK_spleen |
| BCLAF1  | 3.59E-80 | 1.02223978 | 0.619 | 0.204 | 1.27E-75 | CD16pos_NK_spleen |
| NRIP1   | 4.53E-80 | 1.27084916 | 0.366 | 0.086 | 1.61E-75 | CD16pos_NK_spleen |
| SSBP2   | 5.08E-80 | 1.75230638 | 0.31  | 0.065 | 1.80E-75 | CD16pos_NK_spleen |
| PTK2B   | 5.79E-80 | 1.50301989 | 0.289 | 0.056 | 2.05E-75 | CD16pos_NK_spleen |
| TASP1   | 5.83E-80 | 1.52869369 | 0.345 | 0.079 | 2.07E-75 | CD16pos_NK_spleen |
| CCND3   | 6.89E-80 | 1.14303354 | 0.637 | 0.221 | 2.44E-75 | CD16pos_NK_spleen |
| NKG2D   | 8.89E-80 | 1.08642799 | 0.574 | 0.184 | 3.15E-75 | CD16pos_NK_spleen |

|                     |          |            |       |       |          |                   |
|---------------------|----------|------------|-------|-------|----------|-------------------|
| HERC2               | 1.17E-79 | 1.44874406 | 0.297 | 0.059 | 4.15E-75 | CD16pos_NK_spleen |
| ATF7IP              | 1.39E-79 | 1.07473213 | 0.581 | 0.187 | 4.91E-75 | CD16pos_NK_spleen |
| TASOR               | 1.40E-79 | 1.32142846 | 0.327 | 0.071 | 4.97E-75 | CD16pos_NK_spleen |
| SPIDR               | 1.91E-79 | 1.77545064 | 0.285 | 0.056 | 6.77E-75 | CD16pos_NK_spleen |
| ENSMMUG00000008346  | 2.93E-79 | 1.29802288 | 0.369 | 0.088 | 1.04E-74 | CD16pos_NK_spleen |
| SLC35A3             | 3.23E-79 | 1.27016265 | 0.34  | 0.076 | 1.15E-74 | CD16pos_NK_spleen |
| DIS3L2              | 4.41E-79 | 1.78421021 | 0.258 | 0.046 | 1.56E-74 | CD16pos_NK_spleen |
| RPL13A              | 5.85E-79 | 0.7179674  | 0.982 | 0.895 | 2.07E-74 | CD16pos_NK_spleen |
| SBF2                | 1.65E-78 | 1.72199056 | 0.265 | 0.049 | 5.84E-74 | CD16pos_NK_spleen |
| UBAC2               | 1.89E-78 | 1.14482807 | 0.485 | 0.141 | 6.70E-74 | CD16pos_NK_spleen |
| ENSMMUG000000055687 | 1.96E-78 | 1.68207607 | 0.276 | 0.053 | 6.96E-74 | CD16pos_NK_spleen |
| ITGA4               | 2.29E-78 | 1.26161247 | 0.442 | 0.122 | 8.10E-74 | CD16pos_NK_spleen |
| MAP2K6              | 2.47E-78 | 1.69804487 | 0.255 | 0.045 | 8.76E-74 | CD16pos_NK_spleen |
| CLK1                | 4.11E-78 | 0.98013119 | 0.56  | 0.176 | 1.46E-73 | CD16pos_NK_spleen |
| RAF1                | 4.22E-78 | 1.4778684  | 0.295 | 0.06  | 1.49E-73 | CD16pos_NK_spleen |
| RBM39               | 4.76E-78 | 0.95971672 | 0.85  | 0.377 | 1.69E-73 | CD16pos_NK_spleen |
| MAN2A1              | 1.00E-77 | 1.71103936 | 0.263 | 0.049 | 3.55E-73 | CD16pos_NK_spleen |
| RBM5                | 1.27E-77 | 1.13017954 | 0.41  | 0.106 | 4.51E-73 | CD16pos_NK_spleen |
| ILRUN               | 1.34E-77 | 1.63703395 | 0.282 | 0.056 | 4.74E-73 | CD16pos_NK_spleen |
| NKTR                | 1.59E-77 | 1.52805736 | 0.29  | 0.059 | 5.63E-73 | CD16pos_NK_spleen |
| PHACTR2             | 2.35E-77 | 1.67190075 | 0.274 | 0.053 | 8.33E-73 | CD16pos_NK_spleen |
| MAN1A1              | 2.42E-77 | 1.30711912 | 0.39  | 0.1   | 8.56E-73 | CD16pos_NK_spleen |
| PELI1               | 3.04E-77 | 1.80637081 | 0.284 | 0.057 | 1.08E-72 | CD16pos_NK_spleen |
| DIAPH1              | 3.10E-77 | 0.95387782 | 0.576 | 0.182 | 1.10E-72 | CD16pos_NK_spleen |
| ZSWIM6              | 3.10E-77 | 1.79749421 | 0.273 | 0.053 | 1.10E-72 | CD16pos_NK_spleen |
| ATRX                | 3.72E-77 | 1.15265309 | 0.534 | 0.17  | 1.32E-72 | CD16pos_NK_spleen |
| ANP32B              | 5.29E-77 | 1.15546207 | 0.432 | 0.117 | 1.87E-72 | CD16pos_NK_spleen |
| BRD2                | 7.16E-77 | 1.03097753 | 0.49  | 0.142 | 2.54E-72 | CD16pos_NK_spleen |
| PTBP3               | 7.83E-77 | 0.98958638 | 0.658 | 0.233 | 2.77E-72 | CD16pos_NK_spleen |
| RPL23A              | 8.39E-77 | 0.74171958 | 0.973 | 0.901 | 2.97E-72 | CD16pos_NK_spleen |
| ATG13               | 1.25E-76 | 1.51023311 | 0.26  | 0.048 | 4.43E-72 | CD16pos_NK_spleen |
| GAPVD1              | 1.26E-76 | 1.52450343 | 0.284 | 0.057 | 4.48E-72 | CD16pos_NK_spleen |
| CYRIA               | 1.46E-76 | 1.31946998 | 0.332 | 0.075 | 5.18E-72 | CD16pos_NK_spleen |

|           |          |            |       |       |          |                   |
|-----------|----------|------------|-------|-------|----------|-------------------|
| RMDN1     | 2.52E-76 | 1.36456488 | 0.308 | 0.066 | 8.93E-72 | CD16pos_NK_spleen |
| APBB1IP   | 2.88E-76 | 1.01134101 | 0.889 | 0.471 | 1.02E-71 | CD16pos_NK_spleen |
| MYO5A     | 3.25E-76 | 1.44445577 | 0.324 | 0.073 | 1.15E-71 | CD16pos_NK_spleen |
| PPP1R15A  | 3.45E-76 | 1.33420888 | 0.39  | 0.102 | 1.22E-71 | CD16pos_NK_spleen |
| ZFAND6    | 3.72E-76 | 1.11765454 | 0.494 | 0.149 | 1.32E-71 | CD16pos_NK_spleen |
| SF1       | 5.29E-76 | 1.09704072 | 0.387 | 0.097 | 1.87E-71 | CD16pos_NK_spleen |
| PCF11     | 5.31E-76 | 1.4419127  | 0.276 | 0.054 | 1.88E-71 | CD16pos_NK_spleen |
| SOS2      | 6.80E-76 | 1.50526514 | 0.3   | 0.064 | 2.41E-71 | CD16pos_NK_spleen |
| ZNF800    | 7.04E-76 | 1.33826106 | 0.271 | 0.051 | 2.49E-71 | CD16pos_NK_spleen |
| MAPK1     | 7.93E-76 | 1.07215628 | 0.542 | 0.17  | 2.81E-71 | CD16pos_NK_spleen |
| TNFAIP3   | 8.32E-76 | 1.18953151 | 0.527 | 0.17  | 2.95E-71 | CD16pos_NK_spleen |
| UBE2K     | 8.43E-76 | 1.26568179 | 0.384 | 0.098 | 2.99E-71 | CD16pos_NK_spleen |
| STK4      | 1.02E-75 | 0.96149983 | 0.648 | 0.227 | 3.61E-71 | CD16pos_NK_spleen |
| USP44     | 1.05E-75 | 1.34542639 | 0.269 | 0.051 | 3.72E-71 | CD16pos_NK_spleen |
| SDF2L1    | 1.11E-75 | 1.18693088 | 0.366 | 0.089 | 3.92E-71 | CD16pos_NK_spleen |
| C1H1orf21 | 1.23E-75 | 1.31075585 | 0.4   | 0.106 | 4.35E-71 | CD16pos_NK_spleen |
| CDKN2D    | 1.47E-75 | 1.31295388 | 0.289 | 0.058 | 5.21E-71 | CD16pos_NK_spleen |
| POLR2A    | 1.94E-75 | 1.23659798 | 0.35  | 0.083 | 6.86E-71 | CD16pos_NK_spleen |
| CHORDC1   | 1.96E-75 | 1.31822624 | 0.324 | 0.073 | 6.94E-71 | CD16pos_NK_spleen |
| CDK12     | 2.28E-75 | 1.33871905 | 0.295 | 0.061 | 8.08E-71 | CD16pos_NK_spleen |
| PEX14     | 4.18E-75 | 1.4274665  | 0.258 | 0.048 | 1.48E-70 | CD16pos_NK_spleen |
| URI1      | 4.50E-75 | 1.39259844 | 0.298 | 0.063 | 1.60E-70 | CD16pos_NK_spleen |
| KMT5B     | 5.58E-75 | 1.44558011 | 0.266 | 0.051 | 1.98E-70 | CD16pos_NK_spleen |
| PIK3AP1   | 8.69E-75 | 1.14102442 | 0.415 | 0.112 | 3.08E-70 | CD16pos_NK_spleen |
| ZNF92     | 1.06E-74 | 1.34566416 | 0.29  | 0.06  | 3.75E-70 | CD16pos_NK_spleen |
| ITK       | 1.22E-74 | 1.02640899 | 0.516 | 0.16  | 4.31E-70 | CD16pos_NK_spleen |
| EFR3A     | 1.73E-74 | 1.51455608 | 0.285 | 0.059 | 6.12E-70 | CD16pos_NK_spleen |
| YPEL3     | 2.77E-74 | 1.09080272 | 0.387 | 0.099 | 9.80E-70 | CD16pos_NK_spleen |
| PARP8     | 3.08E-74 | 1.16703433 | 0.452 | 0.132 | 1.09E-69 | CD16pos_NK_spleen |
| SEC24B    | 3.36E-74 | 1.53890537 | 0.274 | 0.055 | 1.19E-69 | CD16pos_NK_spleen |
| YWHAH     | 3.89E-74 | 1.50952471 | 0.265 | 0.051 | 1.38E-69 | CD16pos_NK_spleen |
| YPEL5     | 4.39E-74 | 1.11929872 | 0.526 | 0.167 | 1.56E-69 | CD16pos_NK_spleen |
| USP36     | 5.50E-74 | 1.59186217 | 0.25  | 0.046 | 1.95E-69 | CD16pos_NK_spleen |

|                    |          |            |       |       |          |                   |
|--------------------|----------|------------|-------|-------|----------|-------------------|
| CYTIP              | 6.17E-74 | 1.21910649 | 0.481 | 0.145 | 2.18E-69 | CD16pos_NK_spleen |
| TMEM41B            | 7.15E-74 | 1.57495188 | 0.268 | 0.053 | 2.53E-69 | CD16pos_NK_spleen |
| ARID5B             | 7.82E-74 | 1.55488452 | 0.368 | 0.095 | 2.77E-69 | CD16pos_NK_spleen |
| KLF3               | 8.68E-74 | 1.14448525 | 0.389 | 0.102 | 3.08E-69 | CD16pos_NK_spleen |
| YAF2               | 8.72E-74 | 1.15770616 | 0.377 | 0.097 | 3.09E-69 | CD16pos_NK_spleen |
| CD244              | 1.12E-73 | 1.29696249 | 0.356 | 0.088 | 3.95E-69 | CD16pos_NK_spleen |
| FAM118A            | 1.34E-73 | 1.56492232 | 0.256 | 0.048 | 4.75E-69 | CD16pos_NK_spleen |
| UBE3A              | 2.43E-73 | 1.4361491  | 0.269 | 0.053 | 8.61E-69 | CD16pos_NK_spleen |
| RSF1               | 2.52E-73 | 1.19462682 | 0.416 | 0.115 | 8.94E-69 | CD16pos_NK_spleen |
| RABGEF1            | 2.99E-73 | 1.14700845 | 0.437 | 0.124 | 1.06E-68 | CD16pos_NK_spleen |
| ZNF644             | 3.10E-73 | 1.03031303 | 0.474 | 0.141 | 1.10E-68 | CD16pos_NK_spleen |
| GALNT1             | 4.25E-73 | 1.26879457 | 0.337 | 0.08  | 1.51E-68 | CD16pos_NK_spleen |
| KIF5B              | 5.79E-73 | 1.21774795 | 0.335 | 0.079 | 2.05E-68 | CD16pos_NK_spleen |
| HNRNPC             | 6.86E-73 | 0.91790768 | 0.671 | 0.243 | 2.43E-68 | CD16pos_NK_spleen |
| RPTOR              | 7.05E-73 | 1.70751262 | 0.25  | 0.047 | 2.50E-68 | CD16pos_NK_spleen |
| CNST               | 8.43E-73 | 1.13472492 | 0.445 | 0.129 | 2.99E-68 | CD16pos_NK_spleen |
| HIPK3              | 8.43E-73 | 1.56022959 | 0.256 | 0.049 | 2.99E-68 | CD16pos_NK_spleen |
| CYRIB              | 9.14E-73 | 1.00694711 | 0.813 | 0.375 | 3.24E-68 | CD16pos_NK_spleen |
| OSBPL5             | 1.54E-72 | 1.39834114 | 0.281 | 0.058 | 5.44E-68 | CD16pos_NK_spleen |
| ENSMMUG00000063316 | 2.80E-72 | 1.29633068 | 0.398 | 0.11  | 9.93E-68 | CD16pos_NK_spleen |
| TENT2              | 3.13E-72 | 1.53998127 | 0.261 | 0.051 | 1.11E-67 | CD16pos_NK_spleen |
| FOXN2              | 3.66E-72 | 0.94415373 | 0.437 | 0.122 | 1.30E-67 | CD16pos_NK_spleen |
| LEMD3              | 4.53E-72 | 1.41431813 | 0.269 | 0.054 | 1.61E-67 | CD16pos_NK_spleen |
| NLRC5              | 6.00E-72 | 1.51575194 | 0.253 | 0.048 | 2.13E-67 | CD16pos_NK_spleen |
| CSNK1A1            | 6.54E-72 | 0.92905082 | 0.482 | 0.144 | 2.32E-67 | CD16pos_NK_spleen |
| THADA              | 6.63E-72 | 1.46422235 | 0.303 | 0.068 | 2.35E-67 | CD16pos_NK_spleen |
| CEP192             | 1.11E-71 | 1.1655895  | 0.34  | 0.082 | 3.94E-67 | CD16pos_NK_spleen |
| SPTAN1             | 1.76E-71 | 1.24190441 | 0.284 | 0.059 | 6.23E-67 | CD16pos_NK_spleen |
| FYB1               | 2.08E-71 | 0.99892858 | 0.656 | 0.25  | 7.38E-67 | CD16pos_NK_spleen |
| GABPB1             | 2.11E-71 | 1.43006764 | 0.306 | 0.069 | 7.48E-67 | CD16pos_NK_spleen |
| RNASET2            | 2.14E-71 | 1.34871166 | 0.265 | 0.052 | 7.58E-67 | CD16pos_NK_spleen |
| SRSF10             | 2.16E-71 | 0.94000755 | 0.403 | 0.108 | 7.64E-67 | CD16pos_NK_spleen |
| ROR2               | 2.42E-71 | 1.95917976 | 0.297 | 0.068 | 8.58E-67 | CD16pos_NK_spleen |

|                    |          |            |       |       |          |                   |
|--------------------|----------|------------|-------|-------|----------|-------------------|
| STXBP5             | 2.61E-71 | 1.55130782 | 0.263 | 0.053 | 9.23E-67 | CD16pos_NK_spleen |
| TNRC6C             | 3.44E-71 | 1.33598236 | 0.287 | 0.061 | 1.22E-66 | CD16pos_NK_spleen |
| ETS1               | 3.58E-71 | 0.92071701 | 0.798 | 0.352 | 1.27E-66 | CD16pos_NK_spleen |
| ENSMMUG00000055114 | 3.75E-71 | 1.68639779 | 0.273 | 0.057 | 1.33E-66 | CD16pos_NK_spleen |
| TLK2               | 4.16E-71 | 1.34471867 | 0.292 | 0.064 | 1.48E-66 | CD16pos_NK_spleen |
| KIF13B             | 4.45E-71 | 1.41125405 | 0.265 | 0.053 | 1.58E-66 | CD16pos_NK_spleen |
| SUZ12              | 4.86E-71 | 1.24610848 | 0.289 | 0.061 | 1.72E-66 | CD16pos_NK_spleen |
| NBR1               | 4.94E-71 | 1.06234415 | 0.39  | 0.104 | 1.75E-66 | CD16pos_NK_spleen |
| TRIM72             | 5.71E-71 | 0.90378954 | 0.527 | 0.167 | 2.02E-66 | CD16pos_NK_spleen |
| HIPK1              | 9.17E-71 | 1.07241713 | 0.377 | 0.098 | 3.25E-66 | CD16pos_NK_spleen |
| ENSMMUG00000047277 | 9.71E-71 | 0.90316653 | 0.5   | 0.154 | 3.44E-66 | CD16pos_NK_spleen |
| PPP1R16B           | 1.28E-70 | 1.45974096 | 0.266 | 0.054 | 4.53E-66 | CD16pos_NK_spleen |
| NRROS              | 2.32E-70 | 1.38222484 | 0.287 | 0.062 | 8.21E-66 | CD16pos_NK_spleen |
| ENSMMUG00000006343 | 3.32E-70 | 1.18513028 | 0.361 | 0.092 | 1.18E-65 | CD16pos_NK_spleen |
| TAF15              | 3.56E-70 | 1.09684327 | 0.437 | 0.127 | 1.26E-65 | CD16pos_NK_spleen |
| MYO1E              | 3.60E-70 | 1.2322347  | 0.656 | 0.275 | 1.28E-65 | CD16pos_NK_spleen |
| ARHGEF3            | 5.82E-70 | 1.2843188  | 0.342 | 0.086 | 2.06E-65 | CD16pos_NK_spleen |
| FAM13B             | 7.23E-70 | 1.28185    | 0.3   | 0.067 | 2.56E-65 | CD16pos_NK_spleen |
| KDM2B              | 7.63E-70 | 1.43493437 | 0.263 | 0.053 | 2.70E-65 | CD16pos_NK_spleen |
| PHC3               | 1.73E-69 | 1.372962   | 0.295 | 0.066 | 6.15E-65 | CD16pos_NK_spleen |
| PPP1R2             | 2.23E-69 | 1.23630972 | 0.308 | 0.071 | 7.90E-65 | CD16pos_NK_spleen |
| TNPO3              | 2.32E-69 | 1.44037765 | 0.25  | 0.049 | 8.23E-65 | CD16pos_NK_spleen |
| TAX1BP1            | 5.74E-69 | 0.83237027 | 0.605 | 0.207 | 2.04E-64 | CD16pos_NK_spleen |
| DAZAP2             | 5.89E-69 | 0.84761244 | 0.479 | 0.144 | 2.09E-64 | CD16pos_NK_spleen |
| UBR2               | 6.15E-69 | 1.59059129 | 0.268 | 0.056 | 2.18E-64 | CD16pos_NK_spleen |
| DDX3X              | 9.53E-69 | 0.9731484  | 0.616 | 0.224 | 3.38E-64 | CD16pos_NK_spleen |
| CLTA               | 5.19E-68 | 1.14512684 | 0.306 | 0.071 | 1.84E-63 | CD16pos_NK_spleen |
| PPP1CC             | 7.43E-68 | 1.20738    | 0.305 | 0.071 | 2.63E-63 | CD16pos_NK_spleen |
| MDM4               | 9.14E-68 | 1.60178772 | 0.268 | 0.057 | 3.24E-63 | CD16pos_NK_spleen |
| MED13              | 1.01E-67 | 1.46940281 | 0.284 | 0.064 | 3.58E-63 | CD16pos_NK_spleen |
| FAR1               | 1.47E-67 | 1.1696399  | 0.321 | 0.078 | 5.19E-63 | CD16pos_NK_spleen |
| EFCC1              | 1.50E-67 | 1.38473297 | 0.258 | 0.053 | 5.31E-63 | CD16pos_NK_spleen |
| NT5C2              | 1.67E-67 | 1.15107364 | 0.352 | 0.091 | 5.91E-63 | CD16pos_NK_spleen |



|          |          |            |       |       |          |                   |
|----------|----------|------------|-------|-------|----------|-------------------|
| PDE8A    | 1.86E-67 | 1.57659589 | 0.256 | 0.053 | 6.59E-63 | CD16pos_NK_spleen |
| MAF1     | 1.97E-67 | 1.07568992 | 0.306 | 0.071 | 6.98E-63 | CD16pos_NK_spleen |
| NUMB     | 2.08E-67 | 1.50965991 | 0.258 | 0.054 | 7.36E-63 | CD16pos_NK_spleen |
| SENP5    | 2.43E-67 | 1.38516413 | 0.277 | 0.061 | 8.61E-63 | CD16pos_NK_spleen |
| RAPGEF2  | 2.49E-67 | 1.19825501 | 0.374 | 0.103 | 8.81E-63 | CD16pos_NK_spleen |
| GNG2     | 8.06E-67 | 0.99564739 | 0.605 | 0.224 | 2.86E-62 | CD16pos_NK_spleen |
| FUBP1    | 8.18E-67 | 0.98062652 | 0.408 | 0.116 | 2.90E-62 | CD16pos_NK_spleen |
| PRPF40A  | 9.60E-67 | 0.98677547 | 0.427 | 0.126 | 3.40E-62 | CD16pos_NK_spleen |
| VAV1     | 1.12E-66 | 1.19695205 | 0.276 | 0.06  | 3.98E-62 | CD16pos_NK_spleen |
| TTC14    | 2.71E-66 | 1.43002055 | 0.25  | 0.051 | 9.60E-62 | CD16pos_NK_spleen |
| INTS6    | 3.13E-66 | 1.25326533 | 0.303 | 0.072 | 1.11E-61 | CD16pos_NK_spleen |
| HP1BP3   | 3.32E-66 | 0.84433394 | 0.489 | 0.154 | 1.18E-61 | CD16pos_NK_spleen |
| FAM126A  | 3.38E-66 | 1.35111982 | 0.285 | 0.065 | 1.20E-61 | CD16pos_NK_spleen |
| ATP9B    | 4.52E-66 | 1.33085429 | 0.281 | 0.063 | 1.60E-61 | CD16pos_NK_spleen |
| UBE2R2   | 4.55E-66 | 1.46055947 | 0.279 | 0.063 | 1.61E-61 | CD16pos_NK_spleen |
| TRIM22   | 5.24E-66 | 1.21800183 | 0.358 | 0.095 | 1.86E-61 | CD16pos_NK_spleen |
| RNF213   | 6.68E-66 | 0.91504843 | 0.455 | 0.139 | 2.37E-61 | CD16pos_NK_spleen |
| CDC42SE2 | 7.93E-66 | 0.91413631 | 0.774 | 0.336 | 2.81E-61 | CD16pos_NK_spleen |
| SIN3A    | 1.20E-65 | 1.42141334 | 0.263 | 0.056 | 4.25E-61 | CD16pos_NK_spleen |
| PHF3     | 1.66E-65 | 1.20008219 | 0.318 | 0.078 | 5.87E-61 | CD16pos_NK_spleen |
| TAF3     | 2.46E-65 | 1.32697509 | 0.313 | 0.077 | 8.70E-61 | CD16pos_NK_spleen |
| ATM      | 2.57E-65 | 1.10242542 | 0.444 | 0.136 | 9.12E-61 | CD16pos_NK_spleen |
| EZR      | 2.70E-65 | 0.98245966 | 0.5   | 0.164 | 9.56E-61 | CD16pos_NK_spleen |
| RAB7A    | 2.97E-65 | 0.97393938 | 0.484 | 0.155 | 1.05E-60 | CD16pos_NK_spleen |
| XPO1     | 3.32E-65 | 1.27257754 | 0.281 | 0.063 | 1.18E-60 | CD16pos_NK_spleen |
| DEK      | 3.44E-65 | 1.13831954 | 0.348 | 0.092 | 1.22E-60 | CD16pos_NK_spleen |
| PPP2R5A  | 4.85E-65 | 1.27374337 | 0.256 | 0.054 | 1.72E-60 | CD16pos_NK_spleen |
| STK38    | 6.38E-65 | 0.86860868 | 0.5   | 0.162 | 2.26E-60 | CD16pos_NK_spleen |
| TEC      | 6.80E-65 | 0.88447402 | 0.835 | 0.416 | 2.41E-60 | CD16pos_NK_spleen |
| CHST12   | 7.11E-65 | 0.93908699 | 0.406 | 0.116 | 2.52E-60 | CD16pos_NK_spleen |
| STAU1    | 9.38E-65 | 1.26428708 | 0.305 | 0.074 | 3.32E-60 | CD16pos_NK_spleen |
| CSPP1    | 1.27E-64 | 1.28647794 | 0.282 | 0.065 | 4.49E-60 | CD16pos_NK_spleen |
| RPS6KA2  | 1.34E-64 | 1.44204907 | 0.279 | 0.064 | 4.75E-60 | CD16pos_NK_spleen |

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|--------------------|----------|------------|-------|-------|----------|-------------------|
| COL11A1            | 3.49E-64 | 1.24445521 | 0.508 | 0.182 | 1.24E-59 | CD16pos_NK_spleen |
| CDC73              | 5.48E-64 | 1.26839073 | 0.297 | 0.071 | 1.94E-59 | CD16pos_NK_spleen |
| CD46               | 5.89E-64 | 0.85948599 | 0.456 | 0.141 | 2.09E-59 | CD16pos_NK_spleen |
| ZFP36L1            | 5.97E-64 | 0.82137838 | 0.506 | 0.165 | 2.11E-59 | CD16pos_NK_spleen |
| ALKBH7             | 6.55E-64 | 1.06629469 | 0.298 | 0.07  | 2.32E-59 | CD16pos_NK_spleen |
| NSMCE2             | 1.32E-63 | 1.18869147 | 0.316 | 0.08  | 4.67E-59 | CD16pos_NK_spleen |
| WIPF1              | 1.56E-63 | 0.8019097  | 0.79  | 0.335 | 5.53E-59 | CD16pos_NK_spleen |
| AFTPH              | 2.02E-63 | 1.34951322 | 0.252 | 0.053 | 7.16E-59 | CD16pos_NK_spleen |
| ADD1               | 2.97E-63 | 0.93993214 | 0.435 | 0.132 | 1.05E-58 | CD16pos_NK_spleen |
| ENSMMUG00000017297 | 3.74E-63 | 1.30434471 | 0.273 | 0.062 | 1.33E-58 | CD16pos_NK_spleen |
| BDP1               | 3.97E-63 | 1.15281861 | 0.321 | 0.082 | 1.41E-58 | CD16pos_NK_spleen |
| SMAP2              | 4.53E-63 | 0.98013345 | 0.371 | 0.103 | 1.61E-58 | CD16pos_NK_spleen |
| PER1               | 5.43E-63 | 0.85731337 | 0.405 | 0.117 | 1.92E-58 | CD16pos_NK_spleen |
| CDC27              | 8.69E-63 | 1.21589111 | 0.294 | 0.071 | 3.08E-58 | CD16pos_NK_spleen |
| RALGAP1            | 1.32E-62 | 1.28346719 | 0.268 | 0.06  | 4.68E-58 | CD16pos_NK_spleen |
| TBC1D22A           | 1.34E-62 | 1.07372412 | 0.406 | 0.122 | 4.73E-58 | CD16pos_NK_spleen |
| NDEL1              | 1.47E-62 | 1.30472932 | 0.25  | 0.053 | 5.20E-58 | CD16pos_NK_spleen |
| ENSMMUG00000065175 | 1.54E-62 | 0.84197702 | 0.353 | 0.094 | 5.44E-58 | CD16pos_NK_spleen |
| TMEM123            | 1.59E-62 | 0.97397333 | 0.419 | 0.127 | 5.64E-58 | CD16pos_NK_spleen |
| PDS5B              | 1.66E-62 | 1.13180254 | 0.324 | 0.084 | 5.88E-58 | CD16pos_NK_spleen |
| USP3               | 1.70E-62 | 0.89488936 | 0.387 | 0.11  | 6.02E-58 | CD16pos_NK_spleen |
| SND1               | 1.84E-62 | 1.2563985  | 0.316 | 0.081 | 6.53E-58 | CD16pos_NK_spleen |
| ATXN7L1            | 1.99E-62 | 1.31378111 | 0.363 | 0.103 | 7.05E-58 | CD16pos_NK_spleen |
| GPCPD1             | 2.52E-62 | 0.95407018 | 0.432 | 0.134 | 8.93E-58 | CD16pos_NK_spleen |
| CNOT1              | 4.87E-62 | 1.02282998 | 0.324 | 0.084 | 1.72E-57 | CD16pos_NK_spleen |
| CD69               | 5.01E-62 | 1.16997631 | 0.873 | 0.543 | 1.77E-57 | CD16pos_NK_spleen |
| TUT7               | 5.40E-62 | 0.91727498 | 0.4   | 0.118 | 1.91E-57 | CD16pos_NK_spleen |
| TOP2B              | 5.80E-62 | 0.87223535 | 0.415 | 0.124 | 2.06E-57 | CD16pos_NK_spleen |
| PRPF38B            | 7.33E-62 | 0.94797607 | 0.347 | 0.093 | 2.60E-57 | CD16pos_NK_spleen |
| AP3B1              | 7.99E-62 | 1.13276734 | 0.366 | 0.104 | 2.83E-57 | CD16pos_NK_spleen |
| KBTBD2             | 9.17E-62 | 1.32301634 | 0.316 | 0.082 | 3.25E-57 | CD16pos_NK_spleen |
| LYN                | 9.52E-62 | 0.99196182 | 0.395 | 0.117 | 3.37E-57 | CD16pos_NK_spleen |
| SP100              | 9.82E-62 | 0.80479248 | 0.681 | 0.268 | 3.48E-57 | CD16pos_NK_spleen |

|            |          |            |       |       |          |                   |
|------------|----------|------------|-------|-------|----------|-------------------|
| DMTF1      | 1.05E-61 | 1.13898248 | 0.29  | 0.069 | 3.74E-57 | CD16pos_NK_spleen |
| SPEN       | 1.23E-61 | 1.23546083 | 0.265 | 0.06  | 4.36E-57 | CD16pos_NK_spleen |
| BTBD1      | 1.29E-61 | 1.3655938  | 0.255 | 0.056 | 4.57E-57 | CD16pos_NK_spleen |
| SH3KBP1    | 1.35E-61 | 0.86317187 | 0.752 | 0.318 | 4.78E-57 | CD16pos_NK_spleen |
| SNX14      | 1.51E-61 | 1.04110896 | 0.371 | 0.105 | 5.36E-57 | CD16pos_NK_spleen |
| HSPA9      | 2.08E-61 | 0.96908619 | 0.342 | 0.092 | 7.35E-57 | CD16pos_NK_spleen |
| RGS3       | 2.50E-61 | 0.9742522  | 0.315 | 0.079 | 8.84E-57 | CD16pos_NK_spleen |
| NIPBL      | 2.82E-61 | 0.92238711 | 0.439 | 0.138 | 9.99E-57 | CD16pos_NK_spleen |
| BICDL1     | 3.06E-61 | 1.69793162 | 0.276 | 0.066 | 1.08E-56 | CD16pos_NK_spleen |
| GMCL1      | 3.12E-61 | 1.10144619 | 0.335 | 0.089 | 1.10E-56 | CD16pos_NK_spleen |
| COPA       | 4.16E-61 | 0.96217065 | 0.337 | 0.089 | 1.47E-56 | CD16pos_NK_spleen |
| CREB1      | 4.18E-61 | 1.00730562 | 0.324 | 0.084 | 1.48E-56 | CD16pos_NK_spleen |
| LPIN2      | 4.19E-61 | 1.21907077 | 0.269 | 0.062 | 1.48E-56 | CD16pos_NK_spleen |
| DCAF8      | 6.76E-61 | 1.22109307 | 0.263 | 0.059 | 2.39E-56 | CD16pos_NK_spleen |
| PIK3CD     | 9.30E-61 | 1.0407324  | 0.379 | 0.11  | 3.30E-56 | CD16pos_NK_spleen |
| MIA2       | 1.17E-60 | 0.88491671 | 0.424 | 0.13  | 4.14E-56 | CD16pos_NK_spleen |
| MNAT1      | 1.22E-60 | 1.17457746 | 0.319 | 0.083 | 4.33E-56 | CD16pos_NK_spleen |
| RAB10      | 1.54E-60 | 1.00970981 | 0.331 | 0.088 | 5.45E-56 | CD16pos_NK_spleen |
| TPST2      | 2.34E-60 | 1.01492399 | 0.31  | 0.078 | 8.28E-56 | CD16pos_NK_spleen |
| FGD3       | 2.45E-60 | 0.94419762 | 0.456 | 0.148 | 8.68E-56 | CD16pos_NK_spleen |
| ANKRD10    | 2.53E-60 | 1.34052267 | 0.258 | 0.058 | 8.97E-56 | CD16pos_NK_spleen |
| RNGTT      | 2.67E-60 | 1.27929446 | 0.295 | 0.074 | 9.45E-56 | CD16pos_NK_spleen |
| CEP170     | 4.12E-60 | 1.18218933 | 0.271 | 0.063 | 1.46E-55 | CD16pos_NK_spleen |
| AGPAT4     | 4.52E-60 | 0.93016955 | 0.435 | 0.138 | 1.60E-55 | CD16pos_NK_spleen |
| SUCLG2     | 4.68E-60 | 1.13353186 | 0.311 | 0.081 | 1.66E-55 | CD16pos_NK_spleen |
| SEPTIN6    | 4.80E-60 | 0.78740199 | 0.552 | 0.194 | 1.70E-55 | CD16pos_NK_spleen |
| CCNK       | 5.46E-60 | 1.13358217 | 0.297 | 0.074 | 1.94E-55 | CD16pos_NK_spleen |
| CSGALNACT2 | 5.60E-60 | 1.0798402  | 0.392 | 0.119 | 1.98E-55 | CD16pos_NK_spleen |
| SLC25A26   | 5.94E-60 | 0.94858414 | 0.31  | 0.079 | 2.10E-55 | CD16pos_NK_spleen |
| TIPARP     | 5.95E-60 | 1.50563408 | 0.273 | 0.065 | 2.11E-55 | CD16pos_NK_spleen |
| CD96       | 1.02E-59 | 1.27395565 | 0.294 | 0.074 | 3.63E-55 | CD16pos_NK_spleen |
| NFYC       | 1.10E-59 | 1.22943809 | 0.258 | 0.058 | 3.91E-55 | CD16pos_NK_spleen |
| APC        | 1.14E-59 | 1.39082304 | 0.253 | 0.057 | 4.02E-55 | CD16pos_NK_spleen |

|                    |          |            |       |       |          |                   |
|--------------------|----------|------------|-------|-------|----------|-------------------|
| LONP2              | 1.47E-59 | 1.29160517 | 0.265 | 0.062 | 5.21E-55 | CD16pos_NK_spleen |
| PNPLA8             | 1.96E-59 | 1.09735524 | 0.3   | 0.076 | 6.96E-55 | CD16pos_NK_spleen |
| PPP4R3A            | 3.63E-59 | 1.20117999 | 0.252 | 0.056 | 1.29E-54 | CD16pos_NK_spleen |
| IKZF3              | 4.29E-59 | 0.83041977 | 0.606 | 0.235 | 1.52E-54 | CD16pos_NK_spleen |
| TRA2B              | 8.91E-59 | 0.82127084 | 0.826 | 0.386 | 3.16E-54 | CD16pos_NK_spleen |
| SP110              | 9.30E-59 | 0.93710461 | 0.344 | 0.095 | 3.30E-54 | CD16pos_NK_spleen |
| RSRC1              | 1.06E-58 | 1.07930064 | 0.315 | 0.083 | 3.77E-54 | CD16pos_NK_spleen |
| ACIN1              | 1.35E-58 | 0.86567937 | 0.39  | 0.116 | 4.78E-54 | CD16pos_NK_spleen |
| H2AZ2              | 1.43E-58 | 0.7501938  | 0.676 | 0.267 | 5.08E-54 | CD16pos_NK_spleen |
| XRN1               | 1.60E-58 | 0.86251253 | 0.402 | 0.122 | 5.65E-54 | CD16pos_NK_spleen |
| CAND1              | 2.61E-58 | 1.0573334  | 0.295 | 0.074 | 9.24E-54 | CD16pos_NK_spleen |
| ENSMMUG00000028906 | 3.43E-58 | 1.56474805 | 0.274 | 0.068 | 1.22E-53 | CD16pos_NK_spleen |
| ARHGAP9            | 3.53E-58 | 0.85002635 | 0.402 | 0.123 | 1.25E-53 | CD16pos_NK_spleen |
| CHD1               | 3.71E-58 | 0.99040318 | 0.335 | 0.093 | 1.32E-53 | CD16pos_NK_spleen |
| ANKRD12            | 3.80E-58 | 0.87098815 | 0.495 | 0.172 | 1.35E-53 | CD16pos_NK_spleen |
| PDCD6IP            | 4.07E-58 | 0.98105775 | 0.348 | 0.099 | 1.44E-53 | CD16pos_NK_spleen |
| ENSMMUG00000060923 | 4.56E-58 | 0.81372243 | 0.608 | 0.23  | 1.62E-53 | CD16pos_NK_spleen |
| NLRC3              | 6.97E-58 | 1.1585344  | 0.282 | 0.07  | 2.47E-53 | CD16pos_NK_spleen |
| RBM25              | 7.20E-58 | 0.862983   | 0.403 | 0.124 | 2.55E-53 | CD16pos_NK_spleen |
| ADAM10             | 1.04E-57 | 0.83336692 | 0.435 | 0.14  | 3.69E-53 | CD16pos_NK_spleen |
| KHDRBS1            | 1.07E-57 | 1.17395027 | 0.289 | 0.073 | 3.79E-53 | CD16pos_NK_spleen |
| B4GALT1            | 1.51E-57 | 1.11757678 | 0.252 | 0.057 | 5.34E-53 | CD16pos_NK_spleen |
| ESCO1              | 1.73E-57 | 0.98995701 | 0.34  | 0.096 | 6.14E-53 | CD16pos_NK_spleen |
| SS18               | 1.94E-57 | 0.92637275 | 0.327 | 0.089 | 6.88E-53 | CD16pos_NK_spleen |
| HSPA5              | 2.28E-57 | 0.82250321 | 0.544 | 0.196 | 8.09E-53 | CD16pos_NK_spleen |
| RAD21              | 4.31E-57 | 0.85264819 | 0.415 | 0.13  | 1.53E-52 | CD16pos_NK_spleen |
| SAFB2              | 5.30E-57 | 1.18757733 | 0.271 | 0.066 | 1.88E-52 | CD16pos_NK_spleen |
| GNB2               | 1.45E-56 | 0.72052981 | 0.389 | 0.116 | 5.13E-52 | CD16pos_NK_spleen |
| AP2B1              | 1.50E-56 | 1.00551471 | 0.321 | 0.088 | 5.31E-52 | CD16pos_NK_spleen |
| PNN                | 1.72E-56 | 0.82578502 | 0.458 | 0.153 | 6.11E-52 | CD16pos_NK_spleen |
| ELF1               | 1.92E-56 | 0.7843074  | 0.744 | 0.325 | 6.79E-52 | CD16pos_NK_spleen |
| CCAR1              | 6.07E-56 | 1.02981462 | 0.252 | 0.058 | 2.15E-51 | CD16pos_NK_spleen |
| TNRC6A             | 8.13E-56 | 0.90216706 | 0.358 | 0.105 | 2.88E-51 | CD16pos_NK_spleen |

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|--------------------|----------|------------|-------|-------|----------|-------------------|
| MATK               | 1.13E-55 | 0.69113413 | 0.361 | 0.104 | 4.02E-51 | CD16pos_NK_spleen |
| ARHGEF6            | 2.45E-55 | 0.88813859 | 0.327 | 0.092 | 8.69E-51 | CD16pos_NK_spleen |
| SUPT3H             | 2.56E-55 | 1.11891936 | 0.356 | 0.108 | 9.07E-51 | CD16pos_NK_spleen |
| SFPQ               | 3.07E-55 | 0.73272133 | 0.406 | 0.128 | 1.09E-50 | CD16pos_NK_spleen |
| CWC27              | 3.20E-55 | 1.32055265 | 0.253 | 0.061 | 1.13E-50 | CD16pos_NK_spleen |
| DNAJC3             | 3.88E-55 | 0.85346432 | 0.373 | 0.113 | 1.37E-50 | CD16pos_NK_spleen |
| CHD6               | 5.57E-55 | 1.07617418 | 0.285 | 0.074 | 1.97E-50 | CD16pos_NK_spleen |
| EOMES              | 7.88E-55 | 0.74775064 | 0.365 | 0.108 | 2.79E-50 | CD16pos_NK_spleen |
| PPP2R5C            | 1.01E-54 | 0.78005294 | 0.753 | 0.345 | 3.57E-50 | CD16pos_NK_spleen |
| ENSMMUG00000001894 | 1.56E-54 | 1.06669554 | 0.298 | 0.08  | 5.52E-50 | CD16pos_NK_spleen |
| PTP4A2             | 2.27E-54 | 0.73206814 | 0.387 | 0.119 | 8.05E-50 | CD16pos_NK_spleen |
| RAP1GDS1           | 2.77E-54 | 1.16648063 | 0.303 | 0.084 | 9.80E-50 | CD16pos_NK_spleen |
| EPS15              | 2.92E-54 | 0.83277372 | 0.469 | 0.163 | 1.04E-49 | CD16pos_NK_spleen |
| AOAH               | 4.85E-54 | 0.80642431 | 0.508 | 0.187 | 1.72E-49 | CD16pos_NK_spleen |
| SLAMF6             | 6.50E-54 | 0.85149972 | 0.329 | 0.093 | 2.30E-49 | CD16pos_NK_spleen |
| PAPOLA             | 9.39E-54 | 0.59291303 | 0.553 | 0.2   | 3.33E-49 | CD16pos_NK_spleen |
| ZFR                | 1.12E-53 | 0.94722853 | 0.287 | 0.076 | 3.96E-49 | CD16pos_NK_spleen |
| ADCY7              | 1.23E-53 | 0.91711567 | 0.31  | 0.085 | 4.35E-49 | CD16pos_NK_spleen |
| SH2D3C             | 1.36E-53 | 1.08423381 | 0.265 | 0.066 | 4.82E-49 | CD16pos_NK_spleen |
| HDLBP              | 1.56E-53 | 1.01660277 | 0.271 | 0.069 | 5.54E-49 | CD16pos_NK_spleen |
| USP16              | 1.61E-53 | 1.05274628 | 0.271 | 0.069 | 5.69E-49 | CD16pos_NK_spleen |
| CD44               | 1.71E-53 | 0.92886635 | 0.489 | 0.179 | 6.05E-49 | CD16pos_NK_spleen |
| STAU2              | 1.79E-53 | 1.00757317 | 0.356 | 0.109 | 6.34E-49 | CD16pos_NK_spleen |
| WSB1               | 2.10E-53 | 0.61456872 | 0.527 | 0.188 | 7.44E-49 | CD16pos_NK_spleen |
| ARFGAP3            | 2.44E-53 | 1.0397353  | 0.298 | 0.081 | 8.64E-49 | CD16pos_NK_spleen |
| PARN               | 3.88E-53 | 1.25880212 | 0.26  | 0.065 | 1.38E-48 | CD16pos_NK_spleen |
| NEMF               | 5.08E-53 | 0.81848645 | 0.311 | 0.086 | 1.80E-48 | CD16pos_NK_spleen |
| RPL26              | 5.68E-53 | 0.69873372 | 0.923 | 0.606 | 2.01E-48 | CD16pos_NK_spleen |
| CFLAR              | 6.13E-53 | 0.83731665 | 0.431 | 0.145 | 2.17E-48 | CD16pos_NK_spleen |
| KPNB1              | 9.11E-53 | 1.13812406 | 0.268 | 0.069 | 3.23E-48 | CD16pos_NK_spleen |
| THEMIS             | 1.16E-52 | 1.46841231 | 0.25  | 0.062 | 4.12E-48 | CD16pos_NK_spleen |
| ITGAL              | 1.27E-52 | 0.760797   | 0.556 | 0.212 | 4.50E-48 | CD16pos_NK_spleen |
| ZNF43              | 2.92E-52 | 1.06648831 | 0.258 | 0.064 | 1.04E-47 | CD16pos_NK_spleen |

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|--------------------|----------|------------|-------|-------|----------|-------------------|
| HIVEP1             | 3.10E-52 | 0.97432065 | 0.321 | 0.093 | 1.10E-47 | CD16pos_NK_spleen |
| SYNCRIP            | 3.55E-52 | 0.85731166 | 0.323 | 0.092 | 1.26E-47 | CD16pos_NK_spleen |
| CASP8              | 6.52E-52 | 0.79973714 | 0.421 | 0.141 | 2.31E-47 | CD16pos_NK_spleen |
| BTN2A2             | 1.12E-51 | 0.70718402 | 0.506 | 0.185 | 3.98E-47 | CD16pos_NK_spleen |
| PBXIP1             | 2.32E-51 | 0.92830682 | 0.287 | 0.078 | 8.23E-47 | CD16pos_NK_spleen |
| FAM120A            | 2.73E-51 | 0.93274412 | 0.287 | 0.078 | 9.66E-47 | CD16pos_NK_spleen |
| UBE2B              | 3.35E-51 | 0.76994213 | 0.411 | 0.136 | 1.19E-46 | CD16pos_NK_spleen |
| SPECC1L            | 5.88E-51 | 0.93517469 | 0.281 | 0.075 | 2.08E-46 | CD16pos_NK_spleen |
| LSM4               | 7.21E-51 | 0.85157472 | 0.318 | 0.091 | 2.55E-46 | CD16pos_NK_spleen |
| MAN1A2             | 1.21E-50 | 1.16342882 | 0.265 | 0.07  | 4.27E-46 | CD16pos_NK_spleen |
| PPP4R3B            | 1.49E-50 | 0.86660665 | 0.308 | 0.088 | 5.29E-46 | CD16pos_NK_spleen |
| ILF3               | 1.91E-50 | 1.04334165 | 0.253 | 0.064 | 6.77E-46 | CD16pos_NK_spleen |
| NME3               | 1.94E-50 | 0.69624428 | 0.448 | 0.154 | 6.88E-46 | CD16pos_NK_spleen |
| CD164              | 2.25E-50 | 0.68447657 | 0.587 | 0.231 | 7.98E-46 | CD16pos_NK_spleen |
| IL2RB              | 2.62E-50 | 0.69400263 | 0.66  | 0.276 | 9.28E-46 | CD16pos_NK_spleen |
| WDR74              | 2.71E-50 | 0.87835889 | 0.331 | 0.099 | 9.60E-46 | CD16pos_NK_spleen |
| RCOR3              | 7.37E-50 | 1.1895719  | 0.256 | 0.067 | 2.61E-45 | CD16pos_NK_spleen |
| AQR                | 1.02E-49 | 0.99499621 | 0.252 | 0.064 | 3.62E-45 | CD16pos_NK_spleen |
| SYAP1              | 1.18E-49 | 1.04817913 | 0.3   | 0.086 | 4.17E-45 | CD16pos_NK_spleen |
| FMC1-LUC7L2        | 1.23E-49 | 0.66789279 | 0.61  | 0.244 | 4.34E-45 | CD16pos_NK_spleen |
| SYK                | 1.27E-49 | 0.70513515 | 0.4   | 0.133 | 4.49E-45 | CD16pos_NK_spleen |
| EIF4G2             | 1.64E-49 | 0.59004776 | 0.529 | 0.197 | 5.80E-45 | CD16pos_NK_spleen |
| HNRNPA0            | 3.36E-49 | 0.72979942 | 0.427 | 0.146 | 1.19E-44 | CD16pos_NK_spleen |
| DTNBP1             | 4.50E-49 | 0.9704399  | 0.285 | 0.08  | 1.59E-44 | CD16pos_NK_spleen |
| ADAR               | 5.05E-49 | 0.78497512 | 0.305 | 0.088 | 1.79E-44 | CD16pos_NK_spleen |
| RBL2               | 9.03E-49 | 0.88253687 | 0.284 | 0.079 | 3.20E-44 | CD16pos_NK_spleen |
| EIF3A              | 9.71E-49 | 0.63997799 | 0.379 | 0.122 | 3.44E-44 | CD16pos_NK_spleen |
| ENSMMUG00000016959 | 1.40E-48 | 0.8729329  | 0.316 | 0.094 | 4.97E-44 | CD16pos_NK_spleen |
| AKNA               | 1.47E-48 | 0.64391214 | 0.432 | 0.149 | 5.21E-44 | CD16pos_NK_spleen |
| ASCC3              | 1.51E-48 | 0.95877055 | 0.329 | 0.102 | 5.34E-44 | CD16pos_NK_spleen |
| ACTR2              | 1.86E-48 | 0.63012025 | 0.689 | 0.293 | 6.57E-44 | CD16pos_NK_spleen |
| CUL5               | 2.48E-48 | 0.75868171 | 0.392 | 0.131 | 8.80E-44 | CD16pos_NK_spleen |
| GPBP1L1            | 2.57E-48 | 0.79562904 | 0.324 | 0.098 | 9.12E-44 | CD16pos_NK_spleen |

|                    |          |            |       |       |          |                   |
|--------------------|----------|------------|-------|-------|----------|-------------------|
| UPF2               | 3.03E-48 | 0.65365384 | 0.416 | 0.142 | 1.07E-43 | CD16pos_NK_spleen |
| EEA1               | 3.13E-48 | 0.88007193 | 0.319 | 0.096 | 1.11E-43 | CD16pos_NK_spleen |
| ARIH2              | 3.35E-48 | 0.92243657 | 0.266 | 0.072 | 1.19E-43 | CD16pos_NK_spleen |
| ULBP3              | 3.51E-48 | 0.92573474 | 0.253 | 0.066 | 1.25E-43 | CD16pos_NK_spleen |
| UBAP2L             | 3.94E-48 | 1.01565934 | 0.256 | 0.068 | 1.40E-43 | CD16pos_NK_spleen |
| RAB8B              | 8.17E-48 | 0.8325638  | 0.6   | 0.256 | 2.90E-43 | CD16pos_NK_spleen |
| SUPT20H            | 8.31E-48 | 0.85767051 | 0.263 | 0.07  | 2.94E-43 | CD16pos_NK_spleen |
| ENSMMUG00000003854 | 8.76E-48 | 0.83238366 | 0.306 | 0.09  | 3.10E-43 | CD16pos_NK_spleen |
| PLEK               | 1.57E-47 | 0.6477047  | 0.382 | 0.126 | 5.57E-43 | CD16pos_NK_spleen |
| VRK1               | 1.98E-47 | 0.8329905  | 0.358 | 0.116 | 7.02E-43 | CD16pos_NK_spleen |
| CENPC              | 2.00E-47 | 0.94429203 | 0.25  | 0.066 | 7.08E-43 | CD16pos_NK_spleen |
| GBP3               | 3.49E-47 | 1.05882391 | 0.279 | 0.079 | 1.24E-42 | CD16pos_NK_spleen |
| ENSMMUG00000030448 | 4.90E-47 | 0.84885753 | 0.303 | 0.09  | 1.74E-42 | CD16pos_NK_spleen |
| ARF4               | 5.12E-47 | 0.69721454 | 0.484 | 0.181 | 1.82E-42 | CD16pos_NK_spleen |
| ATXN10             | 1.02E-46 | 0.83597677 | 0.41  | 0.143 | 3.62E-42 | CD16pos_NK_spleen |
| AKAP13             | 1.10E-46 | 0.73490202 | 0.813 | 0.415 | 3.89E-42 | CD16pos_NK_spleen |
| BIN3               | 1.14E-46 | 0.77397877 | 0.295 | 0.086 | 4.05E-42 | CD16pos_NK_spleen |
| CALU               | 1.41E-46 | 0.92650227 | 0.255 | 0.069 | 4.98E-42 | CD16pos_NK_spleen |
| SEPTIN11           | 1.65E-46 | 0.61736521 | 0.59  | 0.237 | 5.86E-42 | CD16pos_NK_spleen |
| EWSR1              | 2.09E-46 | 0.79733855 | 0.311 | 0.094 | 7.42E-42 | CD16pos_NK_spleen |
| VGLL4              | 2.43E-46 | 1.05066258 | 0.255 | 0.069 | 8.61E-42 | CD16pos_NK_spleen |
| GIGYF2             | 2.60E-46 | 0.96220122 | 0.287 | 0.084 | 9.21E-42 | CD16pos_NK_spleen |
| CTDSPL2            | 2.74E-46 | 0.87754282 | 0.302 | 0.09  | 9.70E-42 | CD16pos_NK_spleen |
| LPXN               | 3.16E-46 | 0.84884839 | 0.277 | 0.079 | 1.12E-41 | CD16pos_NK_spleen |
| COMMD10            | 4.14E-46 | 1.06517794 | 0.3   | 0.091 | 1.47E-41 | CD16pos_NK_spleen |
| WBP1L              | 4.33E-46 | 1.02749434 | 0.253 | 0.069 | 1.53E-41 | CD16pos_NK_spleen |
| DDX50              | 4.56E-46 | 0.64117453 | 0.295 | 0.086 | 1.62E-41 | CD16pos_NK_spleen |
| H2AFY              | 6.11E-46 | 0.75063189 | 0.298 | 0.088 | 2.17E-41 | CD16pos_NK_spleen |
| DHX9               | 8.80E-46 | 0.6900581  | 0.353 | 0.115 | 3.12E-41 | CD16pos_NK_spleen |
| NRDC               | 9.27E-46 | 0.90058664 | 0.29  | 0.086 | 3.29E-41 | CD16pos_NK_spleen |
| SSBP4              | 1.08E-45 | 0.5804612  | 0.339 | 0.106 | 3.82E-41 | CD16pos_NK_spleen |
| IL12RB2            | 1.27E-45 | 0.63200407 | 0.502 | 0.201 | 4.51E-41 | CD16pos_NK_spleen |
| SRSF11             | 1.51E-45 | 0.59701177 | 0.689 | 0.298 | 5.35E-41 | CD16pos_NK_spleen |

|                     |          |            |       |       |          |                   |
|---------------------|----------|------------|-------|-------|----------|-------------------|
| NCK1                | 2.05E-45 | 0.50126495 | 0.402 | 0.137 | 7.26E-41 | CD16pos_NK_spleen |
| SLTM                | 2.22E-45 | 0.70436355 | 0.437 | 0.159 | 7.88E-41 | CD16pos_NK_spleen |
| PCMTD1              | 2.24E-45 | 0.76945482 | 0.308 | 0.093 | 7.95E-41 | CD16pos_NK_spleen |
| MPHOSPH8            | 2.49E-45 | 0.63762049 | 0.41  | 0.143 | 8.84E-41 | CD16pos_NK_spleen |
| CHD4                | 2.63E-45 | 0.82628195 | 0.308 | 0.095 | 9.31E-41 | CD16pos_NK_spleen |
| SNRK                | 3.10E-45 | 0.56870946 | 0.527 | 0.205 | 1.10E-40 | CD16pos_NK_spleen |
| AKAP9               | 3.42E-45 | 0.62874673 | 0.427 | 0.153 | 1.21E-40 | CD16pos_NK_spleen |
| LAMP1               | 4.23E-45 | 0.66850727 | 0.294 | 0.087 | 1.50E-40 | CD16pos_NK_spleen |
| ENSMMUG000000011580 | 5.35E-45 | 0.63931705 | 0.468 | 0.174 | 1.90E-40 | CD16pos_NK_spleen |
| AHNAK               | 6.23E-45 | 0.63566073 | 0.642 | 0.279 | 2.21E-40 | CD16pos_NK_spleen |
| FCMR                | 1.43E-44 | 0.66901976 | 0.411 | 0.146 | 5.08E-40 | CD16pos_NK_spleen |
| ZC3H11A             | 1.80E-44 | 0.8153037  | 0.285 | 0.084 | 6.37E-40 | CD16pos_NK_spleen |
| FBXO33              | 2.07E-44 | 1.01583759 | 0.287 | 0.087 | 7.33E-40 | CD16pos_NK_spleen |
| VMP1                | 2.47E-44 | 0.93831306 | 0.284 | 0.084 | 8.75E-40 | CD16pos_NK_spleen |
| PPIG                | 3.10E-44 | 0.6037788  | 0.46  | 0.171 | 1.10E-39 | CD16pos_NK_spleen |
| UBXN4               | 4.73E-44 | 0.65027319 | 0.394 | 0.137 | 1.68E-39 | CD16pos_NK_spleen |
| HERPUD2             | 4.86E-44 | 0.845377   | 0.263 | 0.074 | 1.72E-39 | CD16pos_NK_spleen |
| TSPAN14             | 5.18E-44 | 0.6976592  | 0.345 | 0.113 | 1.83E-39 | CD16pos_NK_spleen |
| CAPZA1              | 9.86E-44 | 0.60743907 | 0.648 | 0.28  | 3.49E-39 | CD16pos_NK_spleen |
| THOC2               | 1.29E-43 | 0.80774751 | 0.284 | 0.085 | 4.56E-39 | CD16pos_NK_spleen |
| VPS13A              | 1.40E-43 | 0.89263824 | 0.253 | 0.071 | 4.97E-39 | CD16pos_NK_spleen |
| TMEM87A             | 1.60E-43 | 0.75778069 | 0.326 | 0.105 | 5.69E-39 | CD16pos_NK_spleen |
| NCLN                | 5.33E-43 | 0.76674497 | 0.279 | 0.083 | 1.89E-38 | CD16pos_NK_spleen |
| ATP6V0D1            | 6.62E-43 | 0.81692986 | 0.256 | 0.073 | 2.35E-38 | CD16pos_NK_spleen |
| KDM5A               | 6.95E-43 | 0.60941977 | 0.369 | 0.127 | 2.46E-38 | CD16pos_NK_spleen |
| PCED1B              | 1.13E-42 | 0.83847895 | 0.29  | 0.089 | 4.01E-38 | CD16pos_NK_spleen |
| RHOH                | 1.20E-42 | 0.76796606 | 0.352 | 0.12  | 4.25E-38 | CD16pos_NK_spleen |
| ENSMMUG000000006803 | 1.51E-42 | 0.66651658 | 0.335 | 0.11  | 5.36E-38 | CD16pos_NK_spleen |
| PLEKHA1             | 1.56E-42 | 0.71033112 | 0.324 | 0.105 | 5.52E-38 | CD16pos_NK_spleen |
| EIF4H               | 2.23E-42 | 0.55227797 | 0.389 | 0.136 | 7.90E-38 | CD16pos_NK_spleen |
| TAPBP               | 2.27E-42 | 0.62743362 | 0.345 | 0.115 | 8.04E-38 | CD16pos_NK_spleen |
| ITGAX               | 2.30E-42 | 0.70730908 | 0.558 | 0.236 | 8.15E-38 | CD16pos_NK_spleen |
| KIZ                 | 3.14E-42 | 0.75796718 | 0.256 | 0.073 | 1.11E-37 | CD16pos_NK_spleen |



|                    |          |            |       |       |          |                   |
|--------------------|----------|------------|-------|-------|----------|-------------------|
| DDX6               | 3.40E-42 | 0.64983489 | 0.427 | 0.16  | 1.20E-37 | CD16pos_NK_spleen |
| FXR1               | 3.85E-42 | 0.64991569 | 0.427 | 0.158 | 1.36E-37 | CD16pos_NK_spleen |
| ZRANB2             | 4.32E-42 | 0.6483441  | 0.382 | 0.136 | 1.53E-37 | CD16pos_NK_spleen |
| C4H6orf62          | 4.35E-42 | 0.70065035 | 0.281 | 0.084 | 1.54E-37 | CD16pos_NK_spleen |
| RNF19A             | 4.81E-42 | 0.84319301 | 0.265 | 0.078 | 1.71E-37 | CD16pos_NK_spleen |
| GPBP1              | 4.88E-42 | 0.50387802 | 0.494 | 0.191 | 1.73E-37 | CD16pos_NK_spleen |
| DDX39A             | 5.09E-42 | 0.71985576 | 0.352 | 0.121 | 1.81E-37 | CD16pos_NK_spleen |
| AARS1              | 5.25E-42 | 0.68264712 | 0.35  | 0.119 | 1.86E-37 | CD16pos_NK_spleen |
| MTPN               | 5.74E-42 | 0.61087776 | 0.421 | 0.154 | 2.03E-37 | CD16pos_NK_spleen |
| RAB5A              | 6.18E-42 | 0.5975504  | 0.326 | 0.106 | 2.19E-37 | CD16pos_NK_spleen |
| RNF13              | 1.21E-41 | 0.91290679 | 0.281 | 0.086 | 4.28E-37 | CD16pos_NK_spleen |
| ATP5PB             | 1.60E-41 | 0.55826288 | 0.342 | 0.114 | 5.67E-37 | CD16pos_NK_spleen |
| ZBTB1              | 1.97E-41 | 0.89410212 | 0.274 | 0.083 | 6.96E-37 | CD16pos_NK_spleen |
| PDE3B              | 2.28E-41 | 1.01180717 | 0.265 | 0.08  | 8.07E-37 | CD16pos_NK_spleen |
| PPHLN1             | 3.99E-41 | 0.72021162 | 0.394 | 0.144 | 1.41E-36 | CD16pos_NK_spleen |
| ELF2               | 4.74E-41 | 0.68231653 | 0.355 | 0.123 | 1.68E-36 | CD16pos_NK_spleen |
| C3H21orf91         | 5.94E-41 | 0.68587757 | 0.329 | 0.109 | 2.10E-36 | CD16pos_NK_spleen |
| OSTM1              | 7.55E-41 | 0.65650432 | 0.274 | 0.083 | 2.68E-36 | CD16pos_NK_spleen |
| ZNF451             | 9.87E-41 | 0.81498814 | 0.271 | 0.083 | 3.50E-36 | CD16pos_NK_spleen |
| WDR33              | 1.89E-40 | 0.68122985 | 0.295 | 0.094 | 6.68E-36 | CD16pos_NK_spleen |
| ENSMMUG00000012537 | 1.89E-40 | 0.54375793 | 0.313 | 0.101 | 6.69E-36 | CD16pos_NK_spleen |
| DGKZ               | 2.02E-40 | 0.59741715 | 0.318 | 0.104 | 7.16E-36 | CD16pos_NK_spleen |
| ZBP1               | 2.09E-40 | 0.82638761 | 0.271 | 0.082 | 7.42E-36 | CD16pos_NK_spleen |
| UBE2F              | 2.43E-40 | 0.76959594 | 0.326 | 0.11  | 8.60E-36 | CD16pos_NK_spleen |
| ELK3               | 3.84E-40 | 0.77241109 | 0.421 | 0.161 | 1.36E-35 | CD16pos_NK_spleen |
| SPOP               | 4.48E-40 | 0.79395951 | 0.271 | 0.083 | 1.59E-35 | CD16pos_NK_spleen |
| KIAA0040           | 5.22E-40 | 0.50053983 | 0.321 | 0.106 | 1.85E-35 | CD16pos_NK_spleen |
| SRSF1              | 8.34E-40 | 0.6826441  | 0.289 | 0.092 | 2.96E-35 | CD16pos_NK_spleen |
| SYTL2              | 1.16E-39 | 0.63135138 | 0.452 | 0.18  | 4.09E-35 | CD16pos_NK_spleen |
| PTPN22             | 1.17E-39 | 0.66021763 | 0.79  | 0.4   | 4.15E-35 | CD16pos_NK_spleen |
| SNX3               | 1.61E-39 | 0.55287787 | 0.432 | 0.163 | 5.71E-35 | CD16pos_NK_spleen |
| NADSYN1            | 1.63E-39 | 0.77212474 | 0.256 | 0.076 | 5.77E-35 | CD16pos_NK_spleen |
| STAT4              | 1.70E-39 | 0.54562373 | 0.516 | 0.216 | 6.04E-35 | CD16pos_NK_spleen |

|                   |          |            |       |       |          |                   |
|-------------------|----------|------------|-------|-------|----------|-------------------|
| CNTRL             | 1.93E-39 | 0.79628782 | 0.273 | 0.085 | 6.84E-35 | CD16pos_NK_spleen |
| RPL23             | 1.94E-39 | 0.51327293 | 0.958 | 0.764 | 6.87E-35 | CD16pos_NK_spleen |
| SCAF11            | 1.97E-39 | 0.52891667 | 0.502 | 0.202 | 6.97E-35 | CD16pos_NK_spleen |
| MADD              | 2.34E-39 | 0.59827499 | 0.342 | 0.119 | 8.30E-35 | CD16pos_NK_spleen |
| RAP1B             | 3.21E-39 | 0.69874529 | 0.865 | 0.51  | 1.14E-34 | CD16pos_NK_spleen |
| JUND              | 4.74E-39 | 0.6152993  | 0.744 | 0.378 | 1.68E-34 | CD16pos_NK_spleen |
| RUNX3             | 4.91E-39 | 0.44058001 | 0.539 | 0.22  | 1.74E-34 | CD16pos_NK_spleen |
| CYFIP2            | 5.75E-39 | 0.47994777 | 0.394 | 0.144 | 2.04E-34 | CD16pos_NK_spleen |
| LASP1             | 5.88E-39 | 0.6312087  | 0.335 | 0.116 | 2.08E-34 | CD16pos_NK_spleen |
| STAG2             | 6.82E-39 | 0.4909767  | 0.498 | 0.2   | 2.41E-34 | CD16pos_NK_spleen |
| RAP1A             | 7.37E-39 | 0.57370946 | 0.529 | 0.22  | 2.61E-34 | CD16pos_NK_spleen |
| TRAC              | 7.38E-39 | 0.70723897 | 0.474 | 0.196 | 2.61E-34 | CD16pos_NK_spleen |
| WBP11             | 7.56E-39 | 0.68187769 | 0.285 | 0.091 | 2.68E-34 | CD16pos_NK_spleen |
| MBTPS1            | 1.15E-38 | 0.67797754 | 0.253 | 0.076 | 4.07E-34 | CD16pos_NK_spleen |
| ARHGAP45          | 1.26E-38 | 0.54116905 | 0.385 | 0.141 | 4.48E-34 | CD16pos_NK_spleen |
| PAFAH2            | 1.31E-38 | 0.76149005 | 0.313 | 0.106 | 4.66E-34 | CD16pos_NK_spleen |
| ACTN4             | 1.41E-38 | 0.52289844 | 0.394 | 0.144 | 5.00E-34 | CD16pos_NK_spleen |
| NONO              | 1.46E-38 | 0.56637838 | 0.339 | 0.117 | 5.18E-34 | CD16pos_NK_spleen |
| CHD9              | 1.56E-38 | 0.63355996 | 0.287 | 0.092 | 5.53E-34 | CD16pos_NK_spleen |
| MATR3             | 1.93E-38 | 0.53095875 | 0.676 | 0.306 | 6.85E-34 | CD16pos_NK_spleen |
| ENSMUG00000060545 | 1.98E-38 | 0.48448797 | 0.308 | 0.101 | 7.01E-34 | CD16pos_NK_spleen |
| ETF1              | 2.29E-38 | 0.73214097 | 0.266 | 0.083 | 8.13E-34 | CD16pos_NK_spleen |
| BNIP3L            | 4.01E-38 | 0.60051754 | 0.331 | 0.115 | 1.42E-33 | CD16pos_NK_spleen |
| RPL31             | 5.25E-38 | 0.52232898 | 0.597 | 0.256 | 1.86E-33 | CD16pos_NK_spleen |
| KIF2A             | 7.44E-38 | 0.44114504 | 0.427 | 0.163 | 2.64E-33 | CD16pos_NK_spleen |
| SNX4              | 1.16E-37 | 0.71122345 | 0.271 | 0.086 | 4.13E-33 | CD16pos_NK_spleen |
| DNAJA1            | 1.43E-37 | 0.74687956 | 0.448 | 0.182 | 5.07E-33 | CD16pos_NK_spleen |
| RBM27             | 1.51E-37 | 0.71386985 | 0.277 | 0.089 | 5.34E-33 | CD16pos_NK_spleen |
| NCKAP1L           | 1.65E-37 | 0.64190916 | 0.29  | 0.095 | 5.84E-33 | CD16pos_NK_spleen |
| PPIA              | 1.75E-37 | 0.54254409 | 0.34  | 0.119 | 6.19E-33 | CD16pos_NK_spleen |
| DERL1             | 1.88E-37 | 0.7593263  | 0.281 | 0.091 | 6.66E-33 | CD16pos_NK_spleen |
| MORC3             | 2.10E-37 | 0.61123645 | 0.302 | 0.101 | 7.45E-33 | CD16pos_NK_spleen |
| SLFN5             | 2.22E-37 | 0.5689407  | 0.389 | 0.147 | 7.87E-33 | CD16pos_NK_spleen |

|                     |          |            |       |       |          |                   |
|---------------------|----------|------------|-------|-------|----------|-------------------|
| CD38                | 2.72E-37 | 0.59735532 | 0.747 | 0.376 | 9.65E-33 | CD16pos_NK_spleen |
| NUCKS1              | 3.15E-37 | 0.46094521 | 0.448 | 0.177 | 1.12E-32 | CD16pos_NK_spleen |
| BTG2                | 3.97E-37 | 0.53848894 | 0.476 | 0.196 | 1.41E-32 | CD16pos_NK_spleen |
| ACE                 | 4.45E-37 | 0.80319708 | 0.265 | 0.084 | 1.58E-32 | CD16pos_NK_spleen |
| SLC35B1             | 4.53E-37 | 0.79848712 | 0.25  | 0.077 | 1.60E-32 | CD16pos_NK_spleen |
| RTF1                | 5.03E-37 | 0.58174284 | 0.315 | 0.108 | 1.78E-32 | CD16pos_NK_spleen |
| RALA                | 6.31E-37 | 0.72429272 | 0.252 | 0.077 | 2.23E-32 | CD16pos_NK_spleen |
| RTN4                | 6.48E-37 | 0.57751632 | 0.329 | 0.115 | 2.30E-32 | CD16pos_NK_spleen |
| CCPG1               | 7.09E-37 | 0.59491532 | 0.305 | 0.103 | 2.51E-32 | CD16pos_NK_spleen |
| EEF2                | 2.35E-36 | 0.44949646 | 0.666 | 0.298 | 8.32E-32 | CD16pos_NK_spleen |
| CCNI                | 2.89E-36 | 0.37154843 | 0.468 | 0.185 | 1.03E-31 | CD16pos_NK_spleen |
| TACC1               | 2.98E-36 | 0.69689362 | 0.263 | 0.084 | 1.05E-31 | CD16pos_NK_spleen |
| PPIL4               | 3.02E-36 | 0.71033031 | 0.274 | 0.09  | 1.07E-31 | CD16pos_NK_spleen |
| STK26               | 3.38E-36 | 0.60927948 | 0.292 | 0.098 | 1.20E-31 | CD16pos_NK_spleen |
| ENSMMUG00000010266  | 3.86E-36 | 0.41967692 | 0.594 | 0.259 | 1.37E-31 | CD16pos_NK_spleen |
| GNAL                | 4.38E-36 | 0.65330048 | 0.26  | 0.082 | 1.55E-31 | CD16pos_NK_spleen |
| RAB27A              | 4.70E-36 | 0.49276337 | 0.426 | 0.167 | 1.67E-31 | CD16pos_NK_spleen |
| G3BP2               | 6.57E-36 | 0.51251954 | 0.361 | 0.133 | 2.33E-31 | CD16pos_NK_spleen |
| NCR1                | 6.93E-36 | 0.58173354 | 0.373 | 0.141 | 2.46E-31 | CD16pos_NK_spleen |
| MAX                 | 8.28E-36 | 0.34248681 | 0.4   | 0.151 | 2.93E-31 | CD16pos_NK_spleen |
| YME1L1              | 1.04E-35 | 0.66270938 | 0.277 | 0.092 | 3.69E-31 | CD16pos_NK_spleen |
| GTF2B               | 1.63E-35 | 0.50130918 | 0.497 | 0.208 | 5.78E-31 | CD16pos_NK_spleen |
| VIM                 | 1.69E-35 | 0.93825832 | 0.308 | 0.112 | 5.99E-31 | CD16pos_NK_spleen |
| GK5                 | 1.85E-35 | 0.70573073 | 0.298 | 0.105 | 6.57E-31 | CD16pos_NK_spleen |
| ENSMMUG000000061125 | 2.21E-35 | 0.79122144 | 0.552 | 0.264 | 7.84E-31 | CD16pos_NK_spleen |
| PRRC2C              | 3.20E-35 | 0.42910701 | 0.603 | 0.266 | 1.13E-30 | CD16pos_NK_spleen |
| HNRNPA2B1           | 6.04E-35 | 0.54163004 | 0.908 | 0.59  | 2.14E-30 | CD16pos_NK_spleen |
| ASL                 | 7.39E-35 | 0.61348416 | 0.342 | 0.127 | 2.62E-30 | CD16pos_NK_spleen |
| EIF5                | 9.37E-35 | 0.54474187 | 0.323 | 0.116 | 3.32E-30 | CD16pos_NK_spleen |
| VPS13C              | 1.17E-34 | 0.47912901 | 0.431 | 0.174 | 4.15E-30 | CD16pos_NK_spleen |
| IVNS1ABP            | 1.25E-34 | 0.52522665 | 0.316 | 0.112 | 4.44E-30 | CD16pos_NK_spleen |
| ARHGAP4             | 1.59E-34 | 0.67689042 | 0.252 | 0.081 | 5.62E-30 | CD16pos_NK_spleen |
| DHX36               | 2.15E-34 | 0.63473144 | 0.311 | 0.112 | 7.60E-30 | CD16pos_NK_spleen |

|                    |          |            |       |       |          |                   |
|--------------------|----------|------------|-------|-------|----------|-------------------|
| ENSMMUG00000015274 | 2.92E-34 | 0.50354508 | 0.269 | 0.089 | 1.04E-29 | CD16pos_NK_spleen |
| TSG101             | 3.29E-34 | 0.71767585 | 0.266 | 0.088 | 1.17E-29 | CD16pos_NK_spleen |
| TLN1               | 4.06E-34 | 0.41882507 | 0.606 | 0.269 | 1.44E-29 | CD16pos_NK_spleen |
| FCRL6              | 4.31E-34 | 0.69256457 | 0.253 | 0.082 | 1.53E-29 | CD16pos_NK_spleen |
| CCDC69             | 4.36E-34 | 0.38360324 | 0.423 | 0.167 | 1.54E-29 | CD16pos_NK_spleen |
| DNAJB14            | 4.40E-34 | 0.51949757 | 0.315 | 0.113 | 1.56E-29 | CD16pos_NK_spleen |
| ERP44              | 5.92E-34 | 0.70585216 | 0.321 | 0.118 | 2.10E-29 | CD16pos_NK_spleen |
| ATF7               | 6.54E-34 | 0.64746973 | 0.287 | 0.099 | 2.32E-29 | CD16pos_NK_spleen |
| DDX39B             | 7.50E-34 | 0.53248816 | 0.281 | 0.095 | 2.66E-29 | CD16pos_NK_spleen |
| OLA1               | 9.40E-34 | 0.64076988 | 0.279 | 0.096 | 3.33E-29 | CD16pos_NK_spleen |
| MIER1              | 1.05E-33 | 0.37573888 | 0.468 | 0.195 | 3.72E-29 | CD16pos_NK_spleen |
| ITGAM              | 1.74E-33 | 0.66595171 | 0.274 | 0.094 | 6.18E-29 | CD16pos_NK_spleen |
| ESYT1              | 2.15E-33 | 0.41397116 | 0.302 | 0.106 | 7.61E-29 | CD16pos_NK_spleen |
| NASP               | 3.68E-33 | 0.57338894 | 0.31  | 0.112 | 1.30E-28 | CD16pos_NK_spleen |
| MYH9               | 3.76E-33 | 0.41449762 | 0.573 | 0.257 | 1.33E-28 | CD16pos_NK_spleen |
| BRD7               | 6.68E-33 | 0.54388603 | 0.279 | 0.097 | 2.37E-28 | CD16pos_NK_spleen |
| RTN3               | 1.18E-32 | 0.61892013 | 0.282 | 0.099 | 4.16E-28 | CD16pos_NK_spleen |
| MORF4L1            | 1.42E-32 | 0.35672589 | 0.574 | 0.253 | 5.05E-28 | CD16pos_NK_spleen |
| CYLD               | 1.73E-32 | 0.40251444 | 0.284 | 0.099 | 6.14E-28 | CD16pos_NK_spleen |
| BRD4               | 4.66E-32 | 0.4903697  | 0.269 | 0.092 | 1.65E-27 | CD16pos_NK_spleen |
| UBE2D3             | 5.38E-32 | 0.45702422 | 0.735 | 0.366 | 1.91E-27 | CD16pos_NK_spleen |
| ENSA               | 6.89E-32 | 0.5954237  | 0.513 | 0.233 | 2.44E-27 | CD16pos_NK_spleen |
| ARHGEF1            | 7.41E-32 | 0.33796575 | 0.49  | 0.207 | 2.63E-27 | CD16pos_NK_spleen |
| TRAM1              | 7.49E-32 | 0.37752936 | 0.381 | 0.15  | 2.66E-27 | CD16pos_NK_spleen |
| SLC9A3R1           | 8.81E-32 | 0.34880548 | 0.356 | 0.137 | 3.12E-27 | CD16pos_NK_spleen |
| HNRNPH1            | 1.26E-31 | 0.31607283 | 0.547 | 0.24  | 4.46E-27 | CD16pos_NK_spleen |
| ENSMMUG00000006608 | 1.30E-31 | 0.32576769 | 0.485 | 0.207 | 4.61E-27 | CD16pos_NK_spleen |
| SENP7              | 1.38E-31 | 0.43661849 | 0.347 | 0.134 | 4.89E-27 | CD16pos_NK_spleen |
| CLTC               | 2.00E-31 | 0.43871735 | 0.261 | 0.089 | 7.09E-27 | CD16pos_NK_spleen |
| SASH3              | 2.02E-31 | 0.47573882 | 0.289 | 0.104 | 7.17E-27 | CD16pos_NK_spleen |
| ND2                | 2.16E-31 | 0.5502657  | 0.894 | 0.579 | 7.66E-27 | CD16pos_NK_spleen |
| DNAJC2             | 2.48E-31 | 0.62291991 | 0.252 | 0.086 | 8.78E-27 | CD16pos_NK_spleen |
| RSRC2              | 2.72E-31 | 0.34359549 | 0.511 | 0.223 | 9.64E-27 | CD16pos_NK_spleen |

|                   |          |            |       |       |          |                   |
|-------------------|----------|------------|-------|-------|----------|-------------------|
| TRAF3IP3          | 3.17E-31 | 0.30950632 | 0.519 | 0.225 | 1.12E-26 | CD16pos_NK_spleen |
| HNRNPUL1          | 3.76E-31 | 0.39374054 | 0.295 | 0.106 | 1.33E-26 | CD16pos_NK_spleen |
| TMOD3             | 5.00E-31 | 0.34705958 | 0.41  | 0.167 | 1.77E-26 | CD16pos_NK_spleen |
| TPM4              | 5.44E-31 | 0.62520417 | 0.294 | 0.108 | 1.93E-26 | CD16pos_NK_spleen |
| TCF25             | 5.93E-31 | 0.3088529  | 0.345 | 0.132 | 2.10E-26 | CD16pos_NK_spleen |
| CD8A              | 6.57E-31 | 0.37864079 | 0.45  | 0.191 | 2.33E-26 | CD16pos_NK_spleen |
| ATG5              | 8.89E-31 | 0.46735223 | 0.298 | 0.109 | 3.15E-26 | CD16pos_NK_spleen |
| CAMLG             | 9.90E-31 | 0.3098176  | 0.331 | 0.125 | 3.51E-26 | CD16pos_NK_spleen |
| CPD               | 1.06E-30 | 0.56954251 | 0.273 | 0.097 | 3.76E-26 | CD16pos_NK_spleen |
| ELMOD3            | 1.11E-30 | 0.48225927 | 0.261 | 0.09  | 3.95E-26 | CD16pos_NK_spleen |
| VCP               | 1.20E-30 | 0.4339061  | 0.277 | 0.098 | 4.25E-26 | CD16pos_NK_spleen |
| SERINC1           | 1.44E-30 | 0.42114406 | 0.377 | 0.151 | 5.10E-26 | CD16pos_NK_spleen |
| ARHGAP30          | 1.48E-30 | 0.33629983 | 0.45  | 0.191 | 5.26E-26 | CD16pos_NK_spleen |
| HBP1              | 1.69E-30 | 0.5325373  | 0.292 | 0.107 | 5.98E-26 | CD16pos_NK_spleen |
| HSD17B4           | 2.87E-30 | 0.30557511 | 0.519 | 0.228 | 1.02E-25 | CD16pos_NK_spleen |
| SLC25A4           | 3.06E-30 | 0.40597856 | 0.316 | 0.119 | 1.09E-25 | CD16pos_NK_spleen |
| ICAM2             | 3.18E-30 | 0.394585   | 0.385 | 0.157 | 1.13E-25 | CD16pos_NK_spleen |
| NOP58             | 3.85E-30 | 0.5142331  | 0.268 | 0.095 | 1.36E-25 | CD16pos_NK_spleen |
| SUN2              | 4.06E-30 | 0.47674441 | 0.266 | 0.094 | 1.44E-25 | CD16pos_NK_spleen |
| MSN               | 5.89E-30 | 0.46552268 | 0.803 | 0.428 | 2.09E-25 | CD16pos_NK_spleen |
| G3BP1             | 9.05E-30 | 0.45988359 | 0.384 | 0.159 | 3.21E-25 | CD16pos_NK_spleen |
| ENSMUG00000003130 | 1.10E-29 | 0.40880749 | 0.484 | 0.213 | 3.90E-25 | CD16pos_NK_spleen |
| THRAP3            | 2.84E-29 | 0.19777231 | 0.492 | 0.212 | 1.00E-24 | CD16pos_NK_spleen |
| TPR               | 3.18E-29 | 0.32033214 | 0.41  | 0.171 | 1.13E-24 | CD16pos_NK_spleen |
| ZC3H13            | 5.51E-29 | 0.58054755 | 0.258 | 0.093 | 1.95E-24 | CD16pos_NK_spleen |
| CABIN1            | 5.70E-29 | 0.39194263 | 0.266 | 0.095 | 2.02E-24 | CD16pos_NK_spleen |
| TMEM59L           | 6.53E-29 | 0.34012166 | 0.303 | 0.115 | 2.31E-24 | CD16pos_NK_spleen |
| CSDE1             | 1.03E-28 | 0.25961449 | 0.421 | 0.177 | 3.65E-24 | CD16pos_NK_spleen |
| PDIA3             | 1.08E-28 | 0.3626209  | 0.287 | 0.106 | 3.81E-24 | CD16pos_NK_spleen |
| CCT2              | 1.11E-28 | 0.39055917 | 0.356 | 0.144 | 3.94E-24 | CD16pos_NK_spleen |
| SH3BP5            | 1.92E-28 | 0.32775827 | 0.323 | 0.126 | 6.79E-24 | CD16pos_NK_spleen |
| PTP4A1            | 3.46E-28 | 0.45340328 | 0.276 | 0.102 | 1.23E-23 | CD16pos_NK_spleen |
| MRPL10            | 5.12E-28 | 0.37729155 | 0.368 | 0.151 | 1.81E-23 | CD16pos_NK_spleen |

|                    |          |            |       |       |          |                   |
|--------------------|----------|------------|-------|-------|----------|-------------------|
| DBNL               | 5.20E-28 | 0.24336784 | 0.276 | 0.101 | 1.84E-23 | CD16pos_NK_spleen |
| ARF6               | 5.59E-28 | 0.16835526 | 0.455 | 0.196 | 1.98E-23 | CD16pos_NK_spleen |
| LMO4               | 5.75E-28 | 0.36519204 | 0.302 | 0.115 | 2.04E-23 | CD16pos_NK_spleen |
| ENSMMUG00000060287 | 6.72E-28 | 0.4019866  | 0.96  | 0.73  | 2.38E-23 | CD16pos_NK_spleen |
| CMTM6              | 1.07E-27 | 0.51671951 | 0.455 | 0.205 | 3.79E-23 | CD16pos_NK_spleen |
| EIF3D              | 1.43E-27 | 0.40674654 | 0.3   | 0.116 | 5.07E-23 | CD16pos_NK_spleen |
| NAP1L4             | 1.70E-27 | 0.29948093 | 0.487 | 0.219 | 6.04E-23 | CD16pos_NK_spleen |
| VAPA               | 2.63E-27 | 0.3600342  | 0.405 | 0.173 | 9.31E-23 | CD16pos_NK_spleen |
| ZNF207             | 3.45E-27 | 0.42937708 | 0.366 | 0.155 | 1.22E-22 | CD16pos_NK_spleen |
| CWF19L2            | 3.70E-27 | 0.23235332 | 0.298 | 0.115 | 1.31E-22 | CD16pos_NK_spleen |
| CPNE1              | 5.43E-27 | 0.28448841 | 0.4   | 0.171 | 1.93E-22 | CD16pos_NK_spleen |
| RPS3               | 5.60E-27 | 0.41750127 | 0.956 | 0.836 | 1.98E-22 | CD16pos_NK_spleen |
| SKAP2              | 6.44E-27 | 0.33097025 | 0.427 | 0.188 | 2.28E-22 | CD16pos_NK_spleen |
| ATG3               | 9.27E-27 | 0.34374275 | 0.29  | 0.112 | 3.29E-22 | CD16pos_NK_spleen |
| SHOC2              | 1.26E-26 | 0.39178617 | 0.331 | 0.134 | 4.46E-22 | CD16pos_NK_spleen |
| CCT4               | 2.28E-26 | 0.19349158 | 0.358 | 0.148 | 8.08E-22 | CD16pos_NK_spleen |
| COMT               | 4.00E-26 | 0.26016169 | 0.371 | 0.155 | 1.42E-21 | CD16pos_NK_spleen |
| PRKDC              | 4.31E-26 | 0.39367726 | 0.316 | 0.128 | 1.53E-21 | CD16pos_NK_spleen |
| NSRP1              | 6.08E-26 | 0.46853511 | 0.271 | 0.105 | 2.16E-21 | CD16pos_NK_spleen |
| MAPRE1             | 6.24E-26 | 0.32043839 | 0.306 | 0.123 | 2.21E-21 | CD16pos_NK_spleen |
| ENSMMUG00000051343 | 6.39E-26 | 0.19670653 | 0.315 | 0.126 | 2.26E-21 | CD16pos_NK_spleen |
| HSP90AB1           | 7.13E-26 | 0.4788907  | 0.868 | 0.551 | 2.53E-21 | CD16pos_NK_spleen |
| ENSMMUG00000065373 | 7.64E-26 | 0.80192725 | 0.873 | 0.773 | 2.71E-21 | CD16pos_NK_spleen |
| UBE2L6             | 7.74E-26 | 0.36861545 | 0.26  | 0.098 | 2.74E-21 | CD16pos_NK_spleen |
| H1-4               | 8.10E-26 | 0.31412201 | 0.334 | 0.138 | 2.87E-21 | CD16pos_NK_spleen |
| RAB3GAP1           | 8.87E-26 | 0.35251143 | 0.253 | 0.094 | 3.14E-21 | CD16pos_NK_spleen |
| CGGBP1             | 9.20E-26 | 0.21120233 | 0.274 | 0.104 | 3.26E-21 | CD16pos_NK_spleen |
| TSC22D3            | 1.14E-25 | 0.34712932 | 0.558 | 0.276 | 4.05E-21 | CD16pos_NK_spleen |
| PTPN4              | 2.03E-25 | 0.36532419 | 0.469 | 0.219 | 7.21E-21 | CD16pos_NK_spleen |
| EIF3M              | 2.78E-25 | 0.28236151 | 0.382 | 0.165 | 9.84E-21 | CD16pos_NK_spleen |
| ENSMMUG00000015583 | 2.82E-25 | 0.23577586 | 0.592 | 0.283 | 1.00E-20 | CD16pos_NK_spleen |
| CACYBP             | 3.02E-25 | 0.17467219 | 0.469 | 0.209 | 1.07E-20 | CD16pos_NK_spleen |
| SAMHD1             | 3.64E-25 | 0.42895077 | 0.676 | 0.36  | 1.29E-20 | CD16pos_NK_spleen |

|                   |          |            |       |       |          |                   |
|-------------------|----------|------------|-------|-------|----------|-------------------|
| AMD1              | 4.03E-25 | 0.42930955 | 0.326 | 0.136 | 1.43E-20 | CD16pos_NK_spleen |
| DDX3Y             | 4.88E-25 | 0.98357527 | 0.285 | 0.123 | 1.73E-20 | CD16pos_NK_spleen |
| SF3B2             | 5.33E-25 | 0.37469409 | 0.276 | 0.108 | 1.89E-20 | CD16pos_NK_spleen |
| TBC1D10C          | 6.09E-25 | 0.16361034 | 0.431 | 0.191 | 2.16E-20 | CD16pos_NK_spleen |
| OPTN              | 7.13E-25 | 0.34915025 | 0.371 | 0.161 | 2.53E-20 | CD16pos_NK_spleen |
| STX8              | 1.50E-24 | 0.38195371 | 0.358 | 0.155 | 5.30E-20 | CD16pos_NK_spleen |
| CHCHD3            | 1.61E-24 | 0.37793352 | 0.263 | 0.102 | 5.70E-20 | CD16pos_NK_spleen |
| GNAI3             | 2.09E-24 | 0.30544998 | 0.342 | 0.145 | 7.41E-20 | CD16pos_NK_spleen |
| SERPINB9          | 2.27E-24 | 0.27056618 | 0.611 | 0.301 | 8.04E-20 | CD16pos_NK_spleen |
| TAGAP             | 2.31E-24 | 0.41955805 | 0.389 | 0.174 | 8.20E-20 | CD16pos_NK_spleen |
| OPLAH             | 2.44E-24 | 0.35218793 | 0.255 | 0.097 | 8.63E-20 | CD16pos_NK_spleen |
| COMMD1            | 3.16E-24 | 0.5260282  | 0.324 | 0.14  | 1.12E-19 | CD16pos_NK_spleen |
| GADD45B           | 3.60E-24 | 0.23344217 | 0.5   | 0.24  | 1.28E-19 | CD16pos_NK_spleen |
| XRN2              | 4.16E-24 | 0.27539077 | 0.408 | 0.185 | 1.47E-19 | CD16pos_NK_spleen |
| CCDC12            | 5.93E-24 | 0.20992331 | 0.389 | 0.171 | 2.10E-19 | CD16pos_NK_spleen |
| TTC1              | 7.50E-24 | 0.27801027 | 0.294 | 0.119 | 2.66E-19 | CD16pos_NK_spleen |
| ENSMUG00000063549 | 7.98E-24 | 0.33120507 | 0.323 | 0.136 | 2.83E-19 | CD16pos_NK_spleen |
| GPR174            | 8.62E-24 | 0.22007858 | 0.29  | 0.118 | 3.05E-19 | CD16pos_NK_spleen |
| MIDN              | 1.03E-23 | 0.30393399 | 0.282 | 0.114 | 3.66E-19 | CD16pos_NK_spleen |
| PCBP1             | 1.05E-23 | 0.21625965 | 0.487 | 0.226 | 3.72E-19 | CD16pos_NK_spleen |
| PRKAR1A           | 1.38E-23 | 0.13163516 | 0.389 | 0.17  | 4.88E-19 | CD16pos_NK_spleen |
| EVL               | 1.91E-23 | 0.28646426 | 0.518 | 0.249 | 6.75E-19 | CD16pos_NK_spleen |
| ENSMUG00000006293 | 2.13E-23 | 0.20627183 | 0.394 | 0.175 | 7.54E-19 | CD16pos_NK_spleen |
| HNRNPL            | 2.58E-23 | 0.16847892 | 0.434 | 0.196 | 9.15E-19 | CD16pos_NK_spleen |
| CALR              | 5.00E-23 | 0.20694188 | 0.485 | 0.228 | 1.77E-18 | CD16pos_NK_spleen |
| TMEM147           | 5.20E-23 | 0.25985922 | 0.277 | 0.112 | 1.84E-18 | CD16pos_NK_spleen |
| RIOK3             | 5.35E-23 | 0.19643884 | 0.273 | 0.109 | 1.90E-18 | CD16pos_NK_spleen |
| MECP2             | 8.67E-23 | 0.25800163 | 0.311 | 0.132 | 3.07E-18 | CD16pos_NK_spleen |
| BIN2              | 9.57E-23 | 0.23058041 | 0.669 | 0.34  | 3.39E-18 | CD16pos_NK_spleen |
| LBR               | 1.20E-22 | 0.28508046 | 0.297 | 0.124 | 4.26E-18 | CD16pos_NK_spleen |
| ATAD1             | 1.37E-22 | 0.26434368 | 0.303 | 0.128 | 4.85E-18 | CD16pos_NK_spleen |
| CPEB1             | 2.09E-22 | 0.36976416 | 0.955 | 0.785 | 7.39E-18 | CD16pos_NK_spleen |
| TIAL1             | 2.98E-22 | 0.28552947 | 0.25  | 0.099 | 1.05E-17 | CD16pos_NK_spleen |

|                    |          |            |       |       |          |                   |
|--------------------|----------|------------|-------|-------|----------|-------------------|
| FGFR1OP2           | 3.46E-22 | 0.18878244 | 0.395 | 0.179 | 1.23E-17 | CD16pos_NK_spleen |
| SLC44A2            | 3.77E-22 | 0.18558563 | 0.281 | 0.116 | 1.33E-17 | CD16pos_NK_spleen |
| TMEM71             | 5.73E-22 | 0.31876593 | 0.26  | 0.106 | 2.03E-17 | CD16pos_NK_spleen |
| SRSF6              | 1.18E-21 | 0.26128309 | 0.281 | 0.117 | 4.18E-17 | CD16pos_NK_spleen |
| SUGT1              | 1.52E-21 | 0.24760952 | 0.284 | 0.119 | 5.37E-17 | CD16pos_NK_spleen |
| PJA2               | 3.52E-21 | 0.23832109 | 0.327 | 0.145 | 1.25E-16 | CD16pos_NK_spleen |
| APOL2              | 8.32E-21 | 0.2778697  | 0.31  | 0.137 | 2.95E-16 | CD16pos_NK_spleen |
| CS                 | 8.75E-21 | 0.24289091 | 0.337 | 0.152 | 3.10E-16 | CD16pos_NK_spleen |
| ENSMMUG00000016898 | 1.19E-20 | 0.18210927 | 0.256 | 0.106 | 4.23E-16 | CD16pos_NK_spleen |
| RAB14              | 1.38E-20 | 0.24977957 | 0.327 | 0.147 | 4.88E-16 | CD16pos_NK_spleen |
| NR4A2              | 1.59E-20 | 0.23860193 | 0.445 | 0.22  | 5.64E-16 | CD16pos_NK_spleen |
| LAPTM5             | 2.08E-20 | 0.24862374 | 0.479 | 0.239 | 7.35E-16 | CD16pos_NK_spleen |
| FRMD4B             | 2.21E-20 | 0.49640175 | 0.253 | 0.107 | 7.84E-16 | CD16pos_NK_spleen |
| COA1               | 2.38E-20 | 0.10224674 | 0.339 | 0.152 | 8.45E-16 | CD16pos_NK_spleen |
| PPP6R1             | 2.44E-20 | 0.23810061 | 0.282 | 0.121 | 8.65E-16 | CD16pos_NK_spleen |
| CSNK2A1            | 1.01E-19 | 0.11467192 | 0.335 | 0.152 | 3.58E-15 | CD16pos_NK_spleen |
| RSU1               | 1.03E-19 | 0.36084763 | 0.253 | 0.108 | 3.65E-15 | CD16pos_NK_spleen |
| SNX2               | 1.29E-19 | 0.11160754 | 0.258 | 0.108 | 4.56E-15 | CD16pos_NK_spleen |
| CSK                | 1.57E-19 | 0.1492895  | 0.289 | 0.126 | 5.55E-15 | CD16pos_NK_spleen |
| CD53               | 1.76E-19 | 0.16590869 | 0.652 | 0.336 | 6.24E-15 | CD16pos_NK_spleen |
| MAPK1IP1L          | 1.82E-19 | 0.26504806 | 0.268 | 0.115 | 6.44E-15 | CD16pos_NK_spleen |
| CCT6A              | 1.83E-19 | 0.15315865 | 0.323 | 0.146 | 6.49E-15 | CD16pos_NK_spleen |
| CD83               | 1.03E-18 | 0.17857718 | 0.255 | 0.112 | 3.64E-14 | CD16pos_NK_spleen |
| NUCB2              | 1.10E-18 | 0.1716237  | 0.392 | 0.191 | 3.91E-14 | CD16pos_NK_spleen |
| ENSMMUG00000006965 | 1.30E-18 | 0.12242286 | 0.324 | 0.149 | 4.62E-14 | CD16pos_NK_spleen |
| CTNBL1             | 7.84E-18 | 0.14156449 | 0.255 | 0.112 | 2.78E-13 | CD16pos_NK_spleen |
| SLC2A3             | 1.74E-17 | 0.35500743 | 0.276 | 0.128 | 6.16E-13 | CD16pos_NK_spleen |
| ARHGAP32           | 2.72E-17 | 0.43688047 | 0.269 | 0.126 | 9.64E-13 | CD16pos_NK_spleen |
| YWHAZ              | 3.64E-17 | 0.37745138 | 0.863 | 0.564 | 1.29E-12 | CD16pos_NK_spleen |
| ACTR3              | 5.72E-17 | 0.17936141 | 0.665 | 0.356 | 2.03E-12 | CD16pos_NK_spleen |
| SRSF5              | 1.12E-16 | 0.29531111 | 0.835 | 0.513 | 3.98E-12 | CD16pos_NK_spleen |
| CEBPZ              | 1.41E-16 | 0.21352216 | 0.273 | 0.126 | 5.00E-12 | CD16pos_NK_spleen |
| KLHL23             | 2.39E-16 | 0.16783962 | 0.623 | 0.337 | 8.47E-12 | CD16pos_NK_spleen |



|                    |            |            |       |       |            |                   |
|--------------------|------------|------------|-------|-------|------------|-------------------|
| PSMD14             | 2.53E-16   | 0.13230489 | 0.269 | 0.124 | 8.98E-12   | CD16pos_NK_spleen |
| IFNAR2             | 3.51E-16   | 0.21132839 | 0.71  | 0.404 | 1.24E-11   | CD16pos_NK_spleen |
| TUBA1A             | 3.57E-16   | 0.13667189 | 0.642 | 0.348 | 1.26E-11   | CD16pos_NK_spleen |
| EMP3               | 2.35E-15   | 0.47930312 | 0.318 | 0.166 | 8.32E-11   | CD16pos_NK_spleen |
| CCL4L1             | 3.95E-15   | 0.15286988 | 0.456 | 0.247 | 1.40E-10   | CD16pos_NK_spleen |
| CIR1               | 5.79E-15   | 0.18900804 | 0.269 | 0.129 | 2.05E-10   | CD16pos_NK_spleen |
| MAP3K8             | 1.89E-14   | 0.168224   | 0.376 | 0.197 | 6.70E-10   | CD16pos_NK_spleen |
| CLEC2D             | 2.05E-14   | 0.16722592 | 0.277 | 0.137 | 7.27E-10   | CD16pos_NK_spleen |
| RPL9               | 5.18E-14   | 0.28238337 | 0.96  | 0.828 | 1.83E-09   | CD16pos_NK_spleen |
| HNRNPf             | 3.16E-13   | 0.11175837 | 0.623 | 0.347 | 1.12E-08   | CD16pos_NK_spleen |
| HSPA8              | 1.08E-12   | 0.15325464 | 0.703 | 0.411 | 3.82E-08   | CD16pos_NK_spleen |
| SARAF              | 1.16E-12   | 0.14529145 | 0.715 | 0.418 | 4.12E-08   | CD16pos_NK_spleen |
| PABPC1             | 3.44E-12   | 0.17353049 | 0.79  | 0.477 | 1.22E-07   | CD16pos_NK_spleen |
| HSP90AA1           | 1.04E-11   | 0.16763705 | 0.861 | 0.544 | 3.70E-07   | CD16pos_NK_spleen |
| RGS9               | 1.61E-11   | 0.2069154  | 0.848 | 0.576 | 5.71E-07   | CD16pos_NK_spleen |
| SYTL3              | 2.12E-11   | 0.25131296 | 0.744 | 0.482 | 7.50E-07   | CD16pos_NK_spleen |
| ENSMMUG00000060293 | 2.22E-11   | 0.76107486 | 0.271 | 0.158 | 7.85E-07   | CD16pos_NK_spleen |
| COX3               | 7.52E-11   | 0.52671553 | 0.808 | 0.842 | 2.67E-06   | CD16pos_NK_spleen |
| RPL7               | 1.56E-08   | 0.19036728 | 0.881 | 0.626 | 0.00055171 | CD16pos_NK_spleen |
| CMC1               | 2.44E-08   | 0.18051813 | 0.85  | 0.64  | 0.00086384 | CD16pos_NK_spleen |
| PFN1               | 2.67E-08   | 0.15894539 | 0.94  | 0.78  | 0.00094683 | CD16pos_NK_spleen |
| ENSMMUG00000064692 | 1.28E-07   | 0.13708335 | 0.758 | 0.547 | 0.00453892 | CD16pos_NK_spleen |
| RPS15              | 2.09E-05   | 0.12720447 | 0.982 | 0.974 | 0.74207307 | CD16pos_NK_spleen |
| UBB                | 2.40E-05   | 0.13313542 | 0.916 | 0.726 | 0.85089248 | CD16pos_NK_spleen |
| ENSMMUG00000058755 | 0.00014941 | 0.12237809 | 0.971 | 0.923 | 1          | CD16pos_NK_spleen |
| ENSMMUG00000062350 | 1.26E-235  | 1.68690993 | 0.978 | 0.936 | 4.46E-231  | NKT_lung          |
| RPS21              | 4.38E-230  | 1.83655346 | 0.971 | 0.931 | 1.55E-225  | NKT_lung          |
| RPS28              | 6.89E-210  | 1.23620709 | 0.976 | 0.959 | 2.44E-205  | NKT_lung          |
| RPL36              | 1.90E-205  | 1.74148971 | 0.957 | 0.879 | 6.74E-201  | NKT_lung          |
| ATP5F1E            | 6.62E-199  | 1.78651456 | 0.962 | 0.885 | 2.35E-194  | NKT_lung          |
| ENSMMUG00000005593 | 2.39E-182  | 1.47229908 | 0.964 | 0.947 | 8.45E-178  | NKT_lung          |
| RPL10              | 3.76E-178  | 1.04986836 | 0.969 | 0.963 | 1.33E-173  | NKT_lung          |
| FAU                | 2.29E-176  | 1.13357786 | 0.973 | 0.935 | 8.12E-172  | NKT_lung          |

|                   |           |            |       |       |           |          |
|-------------------|-----------|------------|-------|-------|-----------|----------|
| ENSMUG00000015563 | 1.05E-171 | 1.12897798 | 0.964 | 0.951 | 3.72E-167 | NKT_lung |
| RPLP1             | 1.90E-171 | 1.05127063 | 0.966 | 0.958 | 6.74E-167 | NKT_lung |
| RPL34             | 4.78E-170 | 1.02330234 | 0.978 | 0.96  | 1.69E-165 | NKT_lung |
| NUDT3             | 6.54E-170 | 1.03473438 | 0.969 | 0.965 | 2.32E-165 | NKT_lung |
| RPL39             | 5.08E-168 | 1.31181315 | 0.959 | 0.917 | 1.80E-163 | NKT_lung |
| ENSMUG00000013257 | 1.21E-166 | 1.79374757 | 0.938 | 0.861 | 4.29E-162 | NKT_lung |
| RPS29             | 5.20E-166 | 1.04147356 | 0.973 | 0.95  | 1.84E-161 | NKT_lung |
| RPL32             | 5.58E-166 | 0.98303993 | 0.976 | 0.956 | 1.98E-161 | NKT_lung |
| RPS12             | 8.53E-166 | 1.15263448 | 0.976 | 0.958 | 3.02E-161 | NKT_lung |
| RPL18             | 1.63E-162 | 0.99340475 | 0.969 | 0.954 | 5.78E-158 | NKT_lung |
| RPL35A            | 1.03E-160 | 1.01211064 | 0.966 | 0.947 | 3.65E-156 | NKT_lung |
| RPL12             | 1.72E-160 | 1.11140247 | 0.961 | 0.932 | 6.10E-156 | NKT_lung |
| ZC3H10            | 2.39E-154 | 1.78350958 | 0.916 | 0.806 | 8.46E-150 | NKT_lung |
| RPS23             | 3.12E-154 | 0.96379679 | 0.969 | 0.957 | 1.11E-149 | NKT_lung |
| GPR65             | 1.45E-151 | 4.01001847 | 0.626 | 0.156 | 5.14E-147 | NKT_lung |
| RPS13             | 5.18E-146 | 0.95877949 | 0.976 | 0.938 | 1.84E-141 | NKT_lung |
| RPS7              | 4.42E-144 | 0.87455713 | 0.978 | 0.96  | 1.57E-139 | NKT_lung |
| ENSMUG00000013429 | 4.50E-136 | 0.82514374 | 0.976 | 0.968 | 1.60E-131 | NKT_lung |
| RPS9              | 1.38E-135 | 1.01625055 | 0.973 | 0.948 | 4.89E-131 | NKT_lung |
| ENSMUG00000056354 | 7.18E-133 | 1.44801737 | 0.94  | 0.866 | 2.54E-128 | NKT_lung |
| RPL30             | 4.19E-130 | 0.76734851 | 0.979 | 0.959 | 1.49E-125 | NKT_lung |
| TMSB10            | 1.21E-128 | 1.28340789 | 0.968 | 0.936 | 4.29E-124 | NKT_lung |
| RPL24             | 1.40E-128 | 0.92025722 | 0.968 | 0.933 | 4.97E-124 | NKT_lung |
| ENSMUG00000060377 | 2.42E-124 | 1.92792391 | 0.846 | 0.697 | 8.58E-120 | NKT_lung |
| ENSMUG00000004441 | 1.17E-120 | 1.72413229 | 0.897 | 0.78  | 4.14E-116 | NKT_lung |
| ENSMUG00000064224 | 2.14E-120 | 1.47875278 | 0.947 | 0.878 | 7.60E-116 | NKT_lung |
| RPS5              | 3.75E-120 | 0.89378763 | 0.968 | 0.937 | 1.33E-115 | NKT_lung |
| ENSMUG00000003867 | 9.88E-117 | 0.70648496 | 0.981 | 0.973 | 3.50E-112 | NKT_lung |
| RPS26             | 3.99E-116 | 0.98162633 | 0.971 | 0.951 | 1.41E-111 | NKT_lung |
| RPL8              | 1.70E-113 | 0.88472376 | 0.966 | 0.946 | 6.04E-109 | NKT_lung |
| ELOA              | 3.54E-113 | 0.79064233 | 0.974 | 0.955 | 1.25E-108 | NKT_lung |
| UBA52             | 5.47E-113 | 0.89866679 | 0.966 | 0.932 | 1.94E-108 | NKT_lung |
| RPS24             | 5.96E-109 | 0.75937765 | 0.969 | 0.966 | 2.11E-104 | NKT_lung |

|                     |           |            |       |       |           |          |
|---------------------|-----------|------------|-------|-------|-----------|----------|
| RPL7A               | 2.51E-106 | 0.79092279 | 0.964 | 0.945 | 8.88E-102 | NKT_lung |
| FTL                 | 1.41E-105 | 1.22759191 | 0.933 | 0.867 | 4.99E-101 | NKT_lung |
| RPL28               | 3.30E-105 | 0.78288238 | 0.976 | 0.951 | 1.17E-100 | NKT_lung |
| RPL22               | 3.62E-102 | 0.85454116 | 0.964 | 0.929 | 1.28E-97  | NKT_lung |
| ENSMMUG00000004545  | 3.67E-97  | 1.47367506 | 0.856 | 0.767 | 1.30E-92  | NKT_lung |
| CRIP1               | 3.11E-95  | 1.850368   | 0.86  | 0.725 | 1.10E-90  | NKT_lung |
| RPL22L1             | 2.83E-94  | 1.31200623 | 0.908 | 0.833 | 1.00E-89  | NKT_lung |
| RPS4X               | 3.63E-94  | 0.77542847 | 0.969 | 0.951 | 1.29E-89  | NKT_lung |
| GMFG                | 4.89E-93  | 1.29858129 | 0.884 | 0.832 | 1.73E-88  | NKT_lung |
| RPL27               | 4.83E-90  | 0.70190764 | 0.969 | 0.941 | 1.71E-85  | NKT_lung |
| RPL19               | 1.88E-87  | 1.02387881 | 0.947 | 0.904 | 6.66E-83  | NKT_lung |
| RPL36AL             | 3.32E-82  | 1.17269786 | 0.882 | 0.834 | 1.18E-77  | NKT_lung |
| RPL38               | 3.19E-81  | 0.76457139 | 0.969 | 0.94  | 1.13E-76  | NKT_lung |
| RPSA                | 8.39E-81  | 0.7567636  | 0.954 | 0.947 | 2.97E-76  | NKT_lung |
| ENSMMUG000000012140 | 1.14E-77  | 0.80451363 | 0.952 | 0.934 | 4.02E-73  | NKT_lung |
| NME2                | 6.86E-77  | 0.93369215 | 0.918 | 0.888 | 2.43E-72  | NKT_lung |
| ELOB                | 1.21E-76  | 1.62905212 | 0.762 | 0.636 | 4.29E-72  | NKT_lung |
| RPL5                | 8.31E-70  | 0.62181328 | 0.978 | 0.963 | 2.95E-65  | NKT_lung |
| HINT1               | 1.74E-69  | 0.96628868 | 0.887 | 0.839 | 6.16E-65  | NKT_lung |
| GCN1                | 1.79E-68  | 0.69340972 | 0.961 | 0.939 | 6.34E-64  | NKT_lung |
| ENSMMUG000000003073 | 1.62E-67  | 0.66552242 | 0.957 | 0.94  | 5.74E-63  | NKT_lung |
| RPS27A              | 1.76E-67  | 1.25323515 | 0.815 | 0.749 | 6.22E-63  | NKT_lung |
| EEF1A1              | 1.98E-66  | 0.7357727  | 0.949 | 0.935 | 7.02E-62  | NKT_lung |
| TMA7                | 2.49E-66  | 1.33740989 | 0.79  | 0.751 | 8.82E-62  | NKT_lung |
| ROBO2               | 5.70E-65  | 1.22067072 | 0.827 | 0.745 | 2.02E-60  | NKT_lung |
| MYL12B              | 2.79E-61  | 1.10072149 | 0.853 | 0.8   | 9.88E-57  | NKT_lung |
| ENSMMUG000000016305 | 5.51E-60  | 1.55767613 | 0.715 | 0.591 | 1.95E-55  | NKT_lung |
| ENSMMUG000000044585 | 1.16E-59  | 1.71487827 | 0.677 | 0.543 | 4.11E-55  | NKT_lung |
| GAPDH               | 2.14E-59  | 1.29310416 | 0.809 | 0.747 | 7.57E-55  | NKT_lung |
| SRP14               | 3.49E-59  | 1.10961978 | 0.815 | 0.791 | 1.23E-54  | NKT_lung |
| RPL35               | 6.07E-59  | 0.6903448  | 0.954 | 0.934 | 2.15E-54  | NKT_lung |
| MBD3                | 8.60E-58  | 1.58219317 | 0.689 | 0.576 | 3.05E-53  | NKT_lung |
| JPT1                | 1.07E-57  | 1.18647944 | 0.781 | 0.734 | 3.77E-53  | NKT_lung |

|                     |          |            |       |       |          |          |
|---------------------|----------|------------|-------|-------|----------|----------|
| GPR183              | 1.00E-56 | 1.72680246 | 0.72  | 0.603 | 3.55E-52 | NKT_lung |
| ENSMMUG00000022428  | 1.95E-56 | 2.24957274 | 0.571 | 0.363 | 6.91E-52 | NKT_lung |
| ROMO1               | 1.42E-54 | 1.64054415 | 0.677 | 0.556 | 5.04E-50 | NKT_lung |
| RPL6                | 4.11E-54 | 0.55144017 | 0.969 | 0.948 | 1.46E-49 | NKT_lung |
| ENSMMUG000000063637 | 1.25E-53 | 0.91280669 | 0.921 | 0.872 | 4.44E-49 | NKT_lung |
| SAMSN1              | 2.18E-52 | 2.9728734  | 0.409 | 0.161 | 7.71E-48 | NKT_lung |
| IFI27L2             | 2.28E-50 | 1.34532145 | 0.721 | 0.645 | 8.09E-46 | NKT_lung |
| HNRNPH2             | 3.61E-50 | 0.71493137 | 0.937 | 0.914 | 1.28E-45 | NKT_lung |
| SMDT1               | 1.27E-49 | 1.17606671 | 0.756 | 0.726 | 4.52E-45 | NKT_lung |
| MAMU-E              | 1.31E-49 | 0.88252273 | 0.884 | 0.903 | 4.66E-45 | NKT_lung |
| ENSMMUG000000030408 | 3.44E-49 | 1.65167044 | 0.648 | 0.542 | 1.22E-44 | NKT_lung |
| GSTP1               | 1.75E-48 | 1.34874069 | 0.74  | 0.685 | 6.20E-44 | NKT_lung |
| ENSMMUG000000001210 | 2.24E-48 | 0.86102705 | 0.872 | 0.857 | 7.94E-44 | NKT_lung |
| UBL5                | 4.41E-46 | 1.56944594 | 0.632 | 0.523 | 1.56E-41 | NKT_lung |
| ATP5MG              | 4.65E-45 | 1.02607153 | 0.807 | 0.785 | 1.65E-40 | NKT_lung |
| PRPF31              | 1.40E-44 | 1.78477334 | 0.588 | 0.456 | 4.97E-40 | NKT_lung |
| ATP5MPL             | 3.33E-44 | 1.26755925 | 0.715 | 0.674 | 1.18E-39 | NKT_lung |
| CD3D                | 5.19E-44 | 1.08046679 | 0.764 | 0.733 | 1.84E-39 | NKT_lung |
| TAGLN2              | 7.15E-43 | 1.12217827 | 0.814 | 0.806 | 2.53E-38 | NKT_lung |
| ENSMMUG000000006463 | 4.65E-42 | 0.91930552 | 0.824 | 0.805 | 1.65E-37 | NKT_lung |
| ENSMMUG000000052747 | 6.22E-42 | 1.28737312 | 0.72  | 0.69  | 2.20E-37 | NKT_lung |
| COMMD6              | 6.77E-42 | 1.03425062 | 0.798 | 0.777 | 2.40E-37 | NKT_lung |
| CTSL                | 1.15E-41 | 2.87619271 | 0.385 | 0.172 | 4.07E-37 | NKT_lung |
| ENSMMUG000000064139 | 2.02E-41 | 1.02622294 | 0.817 | 0.865 | 7.14E-37 | NKT_lung |
| EEF1D               | 5.72E-39 | 0.81502742 | 0.834 | 0.838 | 2.03E-34 | NKT_lung |
| ENSMMUG000000022489 | 1.22E-38 | 1.11792603 | 0.726 | 0.716 | 4.34E-34 | NKT_lung |
| ENSMMUG000000019505 | 1.32E-38 | 1.29381053 | 0.697 | 0.666 | 4.69E-34 | NKT_lung |
| CREM                | 1.48E-38 | 2.22980091 | 0.503 | 0.329 | 5.24E-34 | NKT_lung |
| S100A4              | 4.91E-38 | 1.94158008 | 0.629 | 0.455 | 1.74E-33 | NKT_lung |
| RPL3                | 9.77E-38 | 0.45775979 | 0.962 | 0.946 | 3.46E-33 | NKT_lung |
| ENSMMUG000000056793 | 2.31E-37 | 1.11483553 | 0.711 | 0.698 | 8.17E-33 | NKT_lung |
| OST4                | 3.79E-37 | 1.34541866 | 0.672 | 0.628 | 1.34E-32 | NKT_lung |
| COX6C               | 4.93E-37 | 1.06947098 | 0.74  | 0.738 | 1.75E-32 | NKT_lung |

|                    |          |            |       |       |          |          |
|--------------------|----------|------------|-------|-------|----------|----------|
| BTG1               | 1.53E-36 | 1.34676451 | 0.726 | 0.73  | 5.42E-32 | NKT_lung |
| ANXA1              | 4.84E-35 | 0.87891345 | 0.85  | 0.85  | 1.71E-30 | NKT_lung |
| IFI16              | 5.56E-35 | 1.60288111 | 0.576 | 0.47  | 1.97E-30 | NKT_lung |
| EIF3K              | 8.02E-35 | 0.87629394 | 0.81  | 0.823 | 2.84E-30 | NKT_lung |
| LDHA               | 4.75E-34 | 1.86403048 | 0.523 | 0.388 | 1.68E-29 | NKT_lung |
| NDUFA4             | 5.21E-34 | 1.1392347  | 0.684 | 0.675 | 1.85E-29 | NKT_lung |
| MYL6               | 7.44E-34 | 1.1537902  | 0.697 | 0.686 | 2.64E-29 | NKT_lung |
| ARPC3              | 2.91E-32 | 0.9483933  | 0.75  | 0.763 | 1.03E-27 | NKT_lung |
| STMN1              | 8.48E-32 | 1.43248679 | 0.636 | 0.579 | 3.00E-27 | NKT_lung |
| ENSMUG00000007657  | 4.10E-31 | 1.19701816 | 0.667 | 0.669 | 1.45E-26 | NKT_lung |
| COX7C              | 1.17E-29 | 0.89197271 | 0.769 | 0.774 | 4.15E-25 | NKT_lung |
| S100A6             | 1.52E-29 | 1.12703991 | 0.786 | 0.765 | 5.38E-25 | NKT_lung |
| ENSMUG000000053146 | 1.90E-29 | 1.55958172 | 0.533 | 0.425 | 6.73E-25 | NKT_lung |
| NDUFV2             | 4.17E-29 | 1.76375671 | 0.518 | 0.418 | 1.48E-24 | NKT_lung |
| ENSMUG000000016894 | 1.12E-28 | 1.15460925 | 0.641 | 0.63  | 3.95E-24 | NKT_lung |
| S100A10            | 2.56E-28 | 0.92252165 | 0.797 | 0.781 | 9.06E-24 | NKT_lung |
| NDUFB2             | 6.03E-27 | 1.1643813  | 0.624 | 0.622 | 2.14E-22 | NKT_lung |
| ATP6V1G1           | 1.14E-26 | 1.00714716 | 0.68  | 0.703 | 4.05E-22 | NKT_lung |
| WDR83OS            | 1.35E-26 | 0.96450644 | 0.679 | 0.695 | 4.78E-22 | NKT_lung |
| H2AFZ              | 4.53E-26 | 1.54855238 | 0.53  | 0.455 | 1.60E-21 | NKT_lung |
| UQCRQ              | 5.19E-26 | 1.28180606 | 0.6   | 0.569 | 1.84E-21 | NKT_lung |
| NDUFB9             | 3.51E-24 | 1.46800805 | 0.544 | 0.485 | 1.24E-19 | NKT_lung |
| ENSMUG000000047481 | 6.17E-24 | 1.31147571 | 0.566 | 0.542 | 2.18E-19 | NKT_lung |
| KRTCAP2            | 7.18E-24 | 0.94300982 | 0.684 | 0.693 | 2.54E-19 | NKT_lung |
| COX7B              | 8.02E-24 | 1.21550148 | 0.59  | 0.563 | 2.84E-19 | NKT_lung |
| ENSMUG000000015270 | 2.36E-23 | 0.31751159 | 0.974 | 0.969 | 8.35E-19 | NKT_lung |
| TMSB4X             | 3.19E-23 | 0.36254111 | 0.976 | 0.972 | 1.13E-18 | NKT_lung |
| GIMAP7             | 3.70E-23 | 1.56386107 | 0.533 | 0.467 | 1.31E-18 | NKT_lung |
| TMEM258            | 6.62E-23 | 1.40462531 | 0.549 | 0.518 | 2.35E-18 | NKT_lung |
| OAZ1               | 3.07E-22 | 1.67057985 | 0.446 | 0.341 | 1.09E-17 | NKT_lung |
| ENSMUG000000031947 | 5.74E-22 | 0.81460421 | 0.709 | 0.741 | 2.03E-17 | NKT_lung |
| NSA2               | 2.38E-21 | 1.04199878 | 0.641 | 0.667 | 8.42E-17 | NKT_lung |
| COX5B              | 3.85E-21 | 1.38806258 | 0.525 | 0.485 | 1.37E-16 | NKT_lung |

|                    |          |            |       |       |          |          |
|--------------------|----------|------------|-------|-------|----------|----------|
| IL7R               | 5.29E-21 | 0.66252647 | 0.882 | 0.926 | 1.88E-16 | NKT_lung |
| BTF3               | 1.21E-20 | 0.69345991 | 0.79  | 0.774 | 4.30E-16 | NKT_lung |
| NDUFB11            | 1.24E-20 | 1.647504   | 0.436 | 0.336 | 4.39E-16 | NKT_lung |
| MYG1               | 3.26E-20 | 1.76868654 | 0.402 | 0.296 | 1.16E-15 | NKT_lung |
| ENSMMUG00000056126 | 3.50E-20 | 2.07727273 | 0.326 | 0.199 | 1.24E-15 | NKT_lung |
| ATP5MC2            | 6.40E-20 | 1.11366786 | 0.586 | 0.595 | 2.27E-15 | NKT_lung |
| NDUFA1             | 1.26E-19 | 1.18769078 | 0.576 | 0.584 | 4.47E-15 | NKT_lung |
| SEC61G             | 2.44E-19 | 1.19837172 | 0.559 | 0.543 | 8.66E-15 | NKT_lung |
| EEF1B2             | 3.59E-19 | 0.46473556 | 0.909 | 0.898 | 1.27E-14 | NKT_lung |
| CAPG               | 4.54E-19 | 0.93266813 | 0.65  | 0.681 | 1.61E-14 | NKT_lung |
| PET100             | 1.72E-18 | 2.14653914 | 0.284 | 0.159 | 6.08E-14 | NKT_lung |
| ENSMMUG00000051239 | 1.81E-18 | 2.17334417 | 0.284 | 0.16  | 6.40E-14 | NKT_lung |
| C18H18orf32        | 4.96E-18 | 0.41708126 | 0.933 | 0.926 | 1.76E-13 | NKT_lung |
| COX8A              | 5.10E-18 | 1.43014423 | 0.489 | 0.448 | 1.81E-13 | NKT_lung |
| ENSMMUG00000001458 | 5.15E-18 | 0.7293061  | 0.723 | 0.798 | 1.83E-13 | NKT_lung |
| RPL10A             | 5.91E-18 | 0.33265302 | 0.962 | 0.936 | 2.09E-13 | NKT_lung |
| ENSMMUG00000049722 | 8.62E-18 | 1.58853903 | 0.422 | 0.343 | 3.05E-13 | NKT_lung |
| ENSMMUG00000014648 | 2.36E-17 | 0.66178264 | 0.726 | 0.767 | 8.35E-13 | NKT_lung |
| ATOX1              | 2.61E-17 | 1.44969056 | 0.47  | 0.414 | 9.26E-13 | NKT_lung |
| SUB1               | 4.63E-17 | 0.71141291 | 0.708 | 0.805 | 1.64E-12 | NKT_lung |
| MRI1               | 5.45E-16 | 1.08614573 | 0.557 | 0.569 | 1.93E-11 | NKT_lung |
| NDUFA2             | 5.54E-16 | 1.33460729 | 0.487 | 0.464 | 1.96E-11 | NKT_lung |
| SEC61B             | 7.80E-16 | 1.00805316 | 0.578 | 0.602 | 2.76E-11 | NKT_lung |
| CHCHD2             | 1.14E-15 | 0.74465374 | 0.692 | 0.748 | 4.04E-11 | NKT_lung |
| SRGN               | 1.52E-15 | 0.75076586 | 0.733 | 0.779 | 5.37E-11 | NKT_lung |
| TOMM7              | 1.52E-15 | 0.4687182  | 0.832 | 0.867 | 5.40E-11 | NKT_lung |
| ENSMMUG00000063609 | 5.49E-15 | 1.90526639 | 0.299 | 0.193 | 1.94E-10 | NKT_lung |
| SSR4               | 5.78E-15 | 0.80930709 | 0.626 | 0.68  | 2.05E-10 | NKT_lung |
| COX6B1             | 9.06E-15 | 1.67564805 | 0.364 | 0.279 | 3.21E-10 | NKT_lung |
| NDUFB4             | 1.01E-14 | 1.13140984 | 0.542 | 0.554 | 3.57E-10 | NKT_lung |
| HNRNPDL            | 1.34E-14 | 0.77482695 | 0.677 | 0.744 | 4.74E-10 | NKT_lung |
| PSMA2              | 1.43E-14 | 1.17074045 | 0.509 | 0.508 | 5.06E-10 | NKT_lung |
| SLC2A3             | 1.82E-14 | 1.11358268 | 0.571 | 0.551 | 6.46E-10 | NKT_lung |

|                     |          |            |       |       |          |          |
|---------------------|----------|------------|-------|-------|----------|----------|
| CORO1A              | 3.10E-14 | 0.74282312 | 0.665 | 0.736 | 1.10E-09 | NKT_lung |
| COX17               | 3.16E-14 | 1.7386591  | 0.357 | 0.267 | 1.12E-09 | NKT_lung |
| PFDN5               | 3.51E-14 | 1.48374839 | 0.421 | 0.365 | 1.24E-09 | NKT_lung |
| SELENOK             | 3.82E-14 | 1.51153097 | 0.407 | 0.34  | 1.35E-09 | NKT_lung |
| PSME1               | 5.48E-14 | 0.77237776 | 0.668 | 0.707 | 1.94E-09 | NKT_lung |
| H2AFJ               | 5.96E-14 | 1.40056622 | 0.446 | 0.4   | 2.11E-09 | NKT_lung |
| ENSMMUG000000016665 | 1.10E-13 | 1.17274472 | 0.496 | 0.496 | 3.89E-09 | NKT_lung |
| NUFIP1              | 1.63E-13 | 0.17863088 | 0.089 | 0.25  | 5.77E-09 | NKT_lung |
| LSM7                | 1.12E-12 | 1.30461583 | 0.472 | 0.471 | 3.96E-08 | NKT_lung |
| OSTF1               | 1.56E-12 | 1.2014864  | 0.501 | 0.503 | 5.54E-08 | NKT_lung |
| TMEM14B             | 2.30E-12 | 0.86340411 | 0.566 | 0.602 | 8.14E-08 | NKT_lung |
| ENSMMUG000000053735 | 4.02E-12 | 1.00067408 | 0.532 | 0.553 | 1.43E-07 | NKT_lung |
| MICOS13             | 4.74E-12 | 1.30472948 | 0.412 | 0.365 | 1.68E-07 | NKT_lung |
| ZNF483              | 7.63E-12 | 0.68138022 | 0.644 | 0.708 | 2.70E-07 | NKT_lung |
| RAB11A              | 1.23E-11 | 1.84406048 | 0.321 | 0.246 | 4.35E-07 | NKT_lung |
| PPIB                | 1.46E-11 | 0.89869912 | 0.557 | 0.586 | 5.17E-07 | NKT_lung |
| ENSMMUG000000002320 | 1.59E-11 | 0.49525915 | 0.855 | 0.903 | 5.64E-07 | NKT_lung |
| RPL37A              | 2.48E-11 | 0.44382899 | 0.961 | 0.945 | 8.77E-07 | NKT_lung |
| RDH5                | 2.62E-11 | 1.33700897 | 0.441 | 0.429 | 9.28E-07 | NKT_lung |
| ENSMMUG000000012419 | 4.32E-11 | 0.93035006 | 0.533 | 0.579 | 1.53E-06 | NKT_lung |
| GPSM3               | 4.55E-11 | 1.03203814 | 0.523 | 0.55  | 1.61E-06 | NKT_lung |
| ENSMMUG000000000983 | 5.96E-11 | 1.02798051 | 0.521 | 0.553 | 2.11E-06 | NKT_lung |
| CFL1                | 1.04E-10 | 0.54975226 | 0.72  | 0.793 | 3.68E-06 | NKT_lung |
| EDF1                | 1.14E-10 | 1.23754013 | 0.455 | 0.46  | 4.05E-06 | NKT_lung |
| VAMP8               | 2.55E-10 | 1.37009288 | 0.409 | 0.383 | 9.05E-06 | NKT_lung |
| RPS16               | 3.48E-10 | 0.21241269 | 0.973 | 0.956 | 1.23E-05 | NKT_lung |
| ENSMMUG000000004539 | 3.59E-10 | 0.10404468 | 0.188 | 0.389 | 1.27E-05 | NKT_lung |
| ARHGAP21            | 5.69E-10 | 0.1565665  | 0.161 | 0.325 | 2.02E-05 | NKT_lung |
| NPM1                | 9.66E-10 | 0.43490418 | 0.778 | 0.852 | 3.42E-05 | NKT_lung |
| ENSMMUG000000017466 | 1.11E-09 | 1.17573893 | 0.448 | 0.45  | 3.93E-05 | NKT_lung |
| CUTA                | 1.27E-09 | 1.21379914 | 0.46  | 0.472 | 4.49E-05 | NKT_lung |
| ZC3H15              | 1.68E-09 | 0.12077585 | 0.232 | 0.45  | 5.96E-05 | NKT_lung |
| ATP5MC3             | 1.80E-09 | 0.93683942 | 0.521 | 0.563 | 6.38E-05 | NKT_lung |

|                    |          |            |       |       |            |          |
|--------------------|----------|------------|-------|-------|------------|----------|
| ND4L               | 2.00E-09 | 1.71944593 | 0.352 | 0.303 | 7.07E-05   | NKT_lung |
| NDUFC2             | 2.32E-09 | 1.17709842 | 0.455 | 0.471 | 8.23E-05   | NKT_lung |
| ENSMMUG00000058581 | 2.41E-09 | 1.5649886  | 0.491 | 0.517 | 8.54E-05   | NKT_lung |
| ENSMMUG00000061959 | 2.45E-09 | 1.62521291 | 0.274 | 0.197 | 8.69E-05   | NKT_lung |
| PSMB6              | 3.20E-09 | 1.34307797 | 0.386 | 0.359 | 0.00011321 | NKT_lung |
| CDC37              | 5.01E-09 | 0.27049264 | 0.157 | 0.327 | 0.00017749 | NKT_lung |
| LPXN               | 5.66E-09 | 0.13289845 | 0.168 | 0.339 | 0.0002005  | NKT_lung |
| CD47               | 6.78E-09 | 0.134951   | 0.251 | 0.472 | 0.00024008 | NKT_lung |
| ATP5PF             | 6.89E-09 | 0.92694171 | 0.523 | 0.591 | 0.00024414 | NKT_lung |
| PIK3AP1            | 9.00E-09 | 0.1520822  | 0.263 | 0.463 | 0.00031877 | NKT_lung |
| DUSP16             | 9.47E-09 | 0.12349215 | 0.135 | 0.278 | 0.00033564 | NKT_lung |
| TTF1               | 1.21E-08 | 0.2134179  | 0.133 | 0.277 | 0.00042976 | NKT_lung |
| HMGB1              | 1.77E-08 | 0.58521574 | 0.692 | 0.807 | 0.00062739 | NKT_lung |
| GADD45B            | 1.98E-08 | 1.87685525 | 0.275 | 0.208 | 0.00070099 | NKT_lung |
| PTBP1              | 2.34E-08 | 0.12153737 | 0.123 | 0.262 | 0.00082966 | NKT_lung |
| MRPL33             | 2.64E-08 | 1.64514017 | 0.277 | 0.215 | 0.00093662 | NKT_lung |
| CSK                | 3.25E-08 | 0.15577403 | 0.144 | 0.296 | 0.00115282 | NKT_lung |
| SEM1               | 3.49E-08 | 1.21135068 | 0.398 | 0.381 | 0.00123747 | NKT_lung |
| TKT                | 3.72E-08 | 0.1354408  | 0.238 | 0.447 | 0.00131824 | NKT_lung |
| PTGER4             | 4.17E-08 | 0.1049531  | 0.157 | 0.311 | 0.00147612 | NKT_lung |
| BIRC3              | 4.47E-08 | 0.16294208 | 0.162 | 0.318 | 0.00158555 | NKT_lung |
| RNF167             | 5.55E-08 | 0.17563465 | 0.137 | 0.28  | 0.00196695 | NKT_lung |
| GNG5               | 5.83E-08 | 0.85361933 | 0.538 | 0.619 | 0.00206556 | NKT_lung |
| ENSMMUG00000011798 | 6.02E-08 | 0.10777519 | 0.154 | 0.306 | 0.00213266 | NKT_lung |
| CLEC2B             | 6.30E-08 | 1.36205055 | 0.427 | 0.431 | 0.00223189 | NKT_lung |
| RPS27              | 6.41E-08 | 0.24102856 | 0.942 | 0.927 | 0.00227062 | NKT_lung |
| HCST               | 6.68E-08 | 1.52867346 | 0.376 | 0.352 | 0.00236752 | NKT_lung |
| TMEM243            | 6.74E-08 | 0.11682341 | 0.236 | 0.44  | 0.00238959 | NKT_lung |
| MIDN               | 7.41E-08 | 0.14704953 | 0.121 | 0.251 | 0.00262577 | NKT_lung |
| SAFB               | 7.62E-08 | 0.41415099 | 0.752 | 0.87  | 0.0026986  | NKT_lung |
| UQCRH              | 8.44E-08 | 0.98693754 | 0.487 | 0.542 | 0.00298972 | NKT_lung |
| RAB37              | 1.15E-07 | 0.13223031 | 0.132 | 0.265 | 0.00408232 | NKT_lung |
| SLC25A43           | 1.21E-07 | 0.75739589 | 0.556 | 0.624 | 0.00429164 | NKT_lung |



|                    |          |            |       |       |            |          |
|--------------------|----------|------------|-------|-------|------------|----------|
| PAOX               | 1.38E-07 | 0.2439243  | 0.197 | 0.369 | 0.00489968 | NKT_lung |
| COX19              | 1.48E-07 | 1.74891455 | 0.26  | 0.201 | 0.00524596 | NKT_lung |
| CAT                | 1.67E-07 | 0.10009234 | 0.176 | 0.335 | 0.00590669 | NKT_lung |
| DNAJC15            | 1.75E-07 | 0.17488935 | 0.138 | 0.276 | 0.00618561 | NKT_lung |
| ENSMMUG00000059742 | 1.91E-07 | 0.1350372  | 0.255 | 0.457 | 0.00677292 | NKT_lung |
| PPP4C              | 2.05E-07 | 0.19757378 | 0.142 | 0.281 | 0.00724663 | NKT_lung |
| N4BP2L2            | 2.23E-07 | 0.25692069 | 0.243 | 0.444 | 0.00789675 | NKT_lung |
| MGST3              | 2.32E-07 | 1.20807309 | 0.391 | 0.387 | 0.00823751 | NKT_lung |
| H1-2               | 2.72E-07 | 0.13515134 | 0.166 | 0.317 | 0.00962074 | NKT_lung |
| METAP2             | 2.88E-07 | 0.19557424 | 0.19  | 0.351 | 0.01020431 | NKT_lung |
| FGFR1OP2           | 3.09E-07 | 0.19733016 | 0.188 | 0.354 | 0.01093268 | NKT_lung |
| ENSMMUG00000006206 | 3.47E-07 | 0.18582803 | 0.262 | 0.473 | 0.01228264 | NKT_lung |
| PGK1               | 3.56E-07 | 0.96883976 | 0.458 | 0.489 | 0.01261684 | NKT_lung |
| MRPL14             | 3.69E-07 | 1.53506468 | 0.318 | 0.285 | 0.01307141 | NKT_lung |
| CCT5               | 3.89E-07 | 0.19561457 | 0.226 | 0.417 | 0.01378602 | NKT_lung |
| REEP5              | 4.01E-07 | 0.13149556 | 0.193 | 0.357 | 0.01419126 | NKT_lung |
| C16H17orf49        | 4.06E-07 | 1.12218954 | 0.453 | 0.49  | 0.01436986 | NKT_lung |
| RNF181             | 4.06E-07 | 1.06497289 | 0.431 | 0.457 | 0.01439725 | NKT_lung |
| SSR2               | 4.39E-07 | 0.86109915 | 0.496 | 0.557 | 0.01553891 | NKT_lung |
| ENSMMUG00000002324 | 4.44E-07 | 0.81563625 | 0.506 | 0.558 | 0.01573603 | NKT_lung |
| HSD17B11           | 5.37E-07 | 0.23928314 | 0.161 | 0.307 | 0.01902836 | NKT_lung |
| TIMP1              | 6.71E-07 | 1.2685943  | 0.391 | 0.382 | 0.02376891 | NKT_lung |
| PFDN4              | 6.93E-07 | 0.14086154 | 0.138 | 0.269 | 0.02454343 | NKT_lung |
| PLD3               | 6.97E-07 | 0.23777248 | 0.137 | 0.265 | 0.02471138 | NKT_lung |
| RPS4Y1             | 7.63E-07 | 0.61239214 | 0.59  | 0.651 | 0.02702564 | NKT_lung |
| CMTM1              | 9.36E-07 | 1.52470249 | 0.263 | 0.209 | 0.03315472 | NKT_lung |
| ATP5F1B            | 9.79E-07 | 0.25733179 | 0.145 | 0.281 | 0.03469483 | NKT_lung |
| ACAP1              | 1.06E-06 | 0.22899769 | 0.156 | 0.294 | 0.03754403 | NKT_lung |
| CDKN1B             | 1.38E-06 | 0.3261415  | 0.171 | 0.318 | 0.04885518 | NKT_lung |
| RAN                | 1.50E-06 | 1.03910039 | 0.448 | 0.484 | 0.05300392 | NKT_lung |
| CCDC59             | 1.69E-06 | 0.25596336 | 0.156 | 0.291 | 0.05984132 | NKT_lung |
| ENSMMUG00000038348 | 1.70E-06 | 0.95685924 | 0.588 | 0.636 | 0.06030972 | NKT_lung |
| BIN1               | 1.73E-06 | 0.17838962 | 0.13  | 0.252 | 0.06139939 | NKT_lung |

|                   |          |            |       |       |            |          |
|-------------------|----------|------------|-------|-------|------------|----------|
| NUDC              | 1.80E-06 | 0.25285302 | 0.229 | 0.412 | 0.06383575 | NKT_lung |
| ADSS2             | 1.82E-06 | 0.22708943 | 0.147 | 0.278 | 0.06443984 | NKT_lung |
| NOSIP             | 1.85E-06 | 0.2908335  | 0.198 | 0.36  | 0.06552163 | NKT_lung |
| SELL              | 2.03E-06 | 0.16963253 | 0.232 | 0.4   | 0.07192043 | NKT_lung |
| RABAC1            | 2.11E-06 | 1.24694194 | 0.374 | 0.367 | 0.07461033 | NKT_lung |
| GABARAPL2         | 2.36E-06 | 0.97874419 | 0.429 | 0.46  | 0.08362561 | NKT_lung |
| WAS               | 2.59E-06 | 0.32990911 | 0.191 | 0.348 | 0.09184474 | NKT_lung |
| PTP4A1            | 2.69E-06 | 0.33953293 | 0.19  | 0.344 | 0.09529163 | NKT_lung |
| UBE2D1            | 3.07E-06 | 0.27020759 | 0.145 | 0.271 | 0.10877488 | NKT_lung |
| PDE4D             | 3.26E-06 | 0.32715946 | 0.188 | 0.334 | 0.11533298 | NKT_lung |
| TNFSF10           | 3.27E-06 | 1.12975933 | 0.391 | 0.386 | 0.11601177 | NKT_lung |
| CTSD              | 4.28E-06 | 0.38215642 | 0.15  | 0.281 | 0.15149544 | NKT_lung |
| C11H12orf45       | 4.40E-06 | 0.19569038 | 0.154 | 0.28  | 0.15599092 | NKT_lung |
| STAT4             | 4.87E-06 | 0.76393567 | 0.244 | 0.418 | 0.17253046 | NKT_lung |
| PPDPF             | 5.12E-06 | 0.27279922 | 0.179 | 0.325 | 0.18131569 | NKT_lung |
| EIF4A1            | 5.17E-06 | 0.23199404 | 0.256 | 0.449 | 0.18321034 | NKT_lung |
| SNRPE             | 6.16E-06 | 0.22345359 | 0.232 | 0.413 | 0.21843094 | NKT_lung |
| CCT8              | 6.23E-06 | 0.20789278 | 0.221 | 0.39  | 0.22066144 | NKT_lung |
| EIF5B             | 6.26E-06 | 0.23438914 | 0.197 | 0.346 | 0.22185446 | NKT_lung |
| SATB1             | 6.28E-06 | 0.14204575 | 0.48  | 0.707 | 0.22250861 | NKT_lung |
| CD7               | 7.25E-06 | 0.95564611 | 0.462 | 0.516 | 0.25686539 | NKT_lung |
| CD52              | 7.57E-06 | 0.23903346 | 0.923 | 0.916 | 0.26820711 | NKT_lung |
| PSMA6             | 7.82E-06 | 0.2361151  | 0.2   | 0.353 | 0.27716616 | NKT_lung |
| TAF9              | 7.83E-06 | 0.17444939 | 0.197 | 0.347 | 0.27759884 | NKT_lung |
| MRPS15            | 8.17E-06 | 0.25829377 | 0.174 | 0.313 | 0.28956755 | NKT_lung |
| ITGAE             | 8.68E-06 | 0.3927309  | 0.147 | 0.266 | 0.30756873 | NKT_lung |
| UBE2D2            | 8.70E-06 | 0.40935975 | 0.138 | 0.259 | 0.30822    | NKT_lung |
| APEX1             | 9.97E-06 | 0.18275663 | 0.209 | 0.363 | 0.35312328 | NKT_lung |
| ENSMUG00000061824 | 1.10E-05 | 0.28758127 | 0.827 | 0.915 | 0.39039606 | NKT_lung |
| CLIC1             | 1.13E-05 | 1.10951585 | 0.376 | 0.369 | 0.40150734 | NKT_lung |
| GTF2H5            | 1.22E-05 | 0.98766544 | 0.429 | 0.457 | 0.43332001 | NKT_lung |
| BRK1              | 1.24E-05 | 0.20992975 | 0.205 | 0.36  | 0.43950284 | NKT_lung |
| TBCC              | 1.26E-05 | 0.22427171 | 0.179 | 0.319 | 0.44600321 | NKT_lung |

|                    |          |            |       |       |            |          |
|--------------------|----------|------------|-------|-------|------------|----------|
| RBBP4              | 1.37E-05 | 0.25647017 | 0.203 | 0.356 | 0.4845489  | NKT_lung |
| POLR2D             | 1.41E-05 | 0.23855153 | 0.152 | 0.274 | 0.50047234 | NKT_lung |
| PSMA3              | 1.70E-05 | 0.20107251 | 0.263 | 0.452 | 0.60330415 | NKT_lung |
| MRPL34             | 1.74E-05 | 1.51990907 | 0.285 | 0.258 | 0.61557251 | NKT_lung |
| CYB5A              | 2.37E-05 | 1.04117304 | 0.443 | 0.498 | 0.83931982 | NKT_lung |
| DNAJA2             | 2.38E-05 | 0.21598143 | 0.181 | 0.319 | 0.84433837 | NKT_lung |
| IRF2               | 2.39E-05 | 0.40932604 | 0.145 | 0.262 | 0.8481091  | NKT_lung |
| NPM3               | 2.60E-05 | 0.16329078 | 0.217 | 0.37  | 0.9204935  | NKT_lung |
| SOX4               | 2.93E-05 | 1.27243108 | 0.453 | 0.497 | 1          | NKT_lung |
| CALCOCO2           | 2.96E-05 | 0.29418208 | 0.202 | 0.348 | 1          | NKT_lung |
| QARS1              | 3.03E-05 | 0.25319712 | 0.186 | 0.323 | 1          | NKT_lung |
| ENSMMUG00000059843 | 3.03E-05 | 1.54519507 | 0.272 | 0.241 | 1          | NKT_lung |
| NDUFB8             | 3.15E-05 | 1.0924559  | 0.381 | 0.396 | 1          | NKT_lung |
| ENO1               | 3.35E-05 | 0.70035088 | 0.557 | 0.661 | 1          | NKT_lung |
| TENT5C             | 3.40E-05 | 0.16189678 | 0.215 | 0.362 | 1          | NKT_lung |
| ANAPC16            | 3.42E-05 | 0.38199231 | 0.162 | 0.287 | 1          | NKT_lung |
| NCBP2              | 3.56E-05 | 1.05468952 | 0.395 | 0.423 | 1          | NKT_lung |
| LSM6               | 3.66E-05 | 1.08749114 | 0.385 | 0.406 | 1          | NKT_lung |
| NCL                | 3.67E-05 | 0.60689945 | 0.61  | 0.735 | 1          | NKT_lung |
| TMEM230            | 3.77E-05 | 0.38987409 | 0.188 | 0.327 | 1          | NKT_lung |
| ZNF749             | 4.20E-05 | 0.34199358 | 0.147 | 0.261 | 1          | NKT_lung |
| NDUFB10            | 4.40E-05 | 1.15749825 | 0.373 | 0.392 | 1          | NKT_lung |
| EIF1AX             | 4.53E-05 | 0.25928058 | 0.265 | 0.445 | 1          | NKT_lung |
| BUD31              | 4.54E-05 | 0.18152111 | 0.207 | 0.353 | 1          | NKT_lung |
| PPA1               | 4.79E-05 | 0.25457003 | 0.188 | 0.323 | 1          | NKT_lung |
| NSMCE1             | 4.81E-05 | 0.36108788 | 0.181 | 0.314 | 1          | NKT_lung |
| GNAI2.1            | 4.85E-05 | 0.30304845 | 0.232 | 0.394 | 1          | NKT_lung |
| DAZAP1             | 5.10E-05 | 0.57770544 | 0.579 | 0.704 | 1          | NKT_lung |
| DDIT4              | 5.14E-05 | 1.1879319  | 0.325 | 0.304 | 1          | NKT_lung |
| NCOA7              | 5.33E-05 | 0.19386067 | 0.362 | 0.592 | 1          | NKT_lung |
| ENSMMUG00000005880 | 5.71E-05 | 0.25442874 | 0.239 | 0.405 | 1          | NKT_lung |
| ENSMMUG00000058389 | 5.95E-05 | 1.35332892 | 0.304 | 0.29  | 1          | NKT_lung |
| GHITM              | 6.36E-05 | 0.22937247 | 0.272 | 0.458 | 1          | NKT_lung |

|                   |            |            |       |       |            |
|-------------------|------------|------------|-------|-------|------------|
| CIB1              | 6.40E-05   | 1.4950584  | 0.265 | 0.234 | 1 NKT_lung |
| STOML2            | 6.46E-05   | 0.23829897 | 0.154 | 0.267 | 1 NKT_lung |
| CD3G              | 6.65E-05   | 0.17732268 | 0.197 | 0.332 | 1 NKT_lung |
| PSMB1             | 6.77E-05   | 0.75738952 | 0.494 | 0.601 | 1 NKT_lung |
| ZNHIT1            | 7.26E-05   | 1.21454386 | 0.359 | 0.374 | 1 NKT_lung |
| EMC7              | 7.63E-05   | 0.32818176 | 0.147 | 0.258 | 1 NKT_lung |
| COMT              | 7.81E-05   | 0.24384155 | 0.207 | 0.348 | 1 NKT_lung |
| MRPL51            | 7.95E-05   | 1.04660055 | 0.39  | 0.42  | 1 NKT_lung |
| ENSMUG00000062086 | 9.01E-05   | 0.21913305 | 0.147 | 0.254 | 1 NKT_lung |
| ENSMUG00000016278 | 9.30E-05   | 0.38168937 | 0.195 | 0.329 | 1 NKT_lung |
| ENSMUG00000022769 | 9.31E-05   | 0.10054211 | 0.398 | 0.658 | 1 NKT_lung |
| RBM8A             | 9.51E-05   | 1.03163575 | 0.388 | 0.416 | 1 NKT_lung |
| MRPL42            | 9.53E-05   | 0.41840153 | 0.149 | 0.258 | 1 NKT_lung |
| ENSMUG00000059017 | 9.63E-05   | 0.14407509 | 0.289 | 0.476 | 1 NKT_lung |
| B2M               | 0.00010156 | 0.12621874 | 0.978 | 0.989 | 1 NKT_lung |
| LIMD2             | 0.00010365 | 0.73545495 | 0.506 | 0.596 | 1 NKT_lung |
| S1PR1             | 0.00011406 | 0.3328189  | 0.176 | 0.298 | 1 NKT_lung |
| UQCRC1            | 0.00011557 | 0.41113579 | 0.157 | 0.272 | 1 NKT_lung |
| CBX3              | 0.00013347 | 0.89623792 | 0.432 | 0.489 | 1 NKT_lung |
| ATP6V0E1          | 0.00014049 | 1.00328515 | 0.397 | 0.431 | 1 NKT_lung |
| AMDHD1            | 0.00015611 | 0.2682747  | 0.239 | 0.397 | 1 NKT_lung |
| ENSMUG00000018687 | 0.00016819 | 0.35971402 | 0.236 | 0.393 | 1 NKT_lung |
| PFDN2             | 0.00017049 | 0.20887671 | 0.268 | 0.444 | 1 NKT_lung |
| ATP5F1C           | 0.00017597 | 0.97030402 | 0.424 | 0.485 | 1 NKT_lung |
| UFC1              | 0.00018158 | 0.26578114 | 0.263 | 0.434 | 1 NKT_lung |
| RGS10             | 0.0001904  | 0.23711149 | 0.262 | 0.43  | 1 NKT_lung |
| MED4              | 0.00019491 | 0.37188607 | 0.159 | 0.27  | 1 NKT_lung |
| CLDND1            | 0.00020694 | 0.30650031 | 0.214 | 0.352 | 1 NKT_lung |
| ENSMUG00000038373 | 0.00023057 | 0.32011599 | 0.304 | 0.501 | 1 NKT_lung |
| C1D               | 0.00023802 | 0.33802837 | 0.179 | 0.301 | 1 NKT_lung |
| HSPE1             | 0.00024295 | 0.71481845 | 0.503 | 0.599 | 1 NKT_lung |
| ATP5IF1           | 0.00024402 | 0.84406712 | 0.443 | 0.509 | 1 NKT_lung |
| PSMA5             | 0.00026272 | 0.28981805 | 0.238 | 0.387 | 1 NKT_lung |

|                    |            |            |       |       |            |
|--------------------|------------|------------|-------|-------|------------|
| ENSMMUG00000042951 | 0.00026789 | 0.20379826 | 0.243 | 0.396 | 1 NKT_lung |
| RPL15              | 0.00027903 | 0.16677173 | 0.926 | 0.915 | 1 NKT_lung |
| TXN                | 0.00034437 | 0.90227592 | 0.429 | 0.482 | 1 NKT_lung |
| MDH1               | 0.00037991 | 0.29499325 | 0.258 | 0.422 | 1 NKT_lung |
| CIAO2B             | 0.00042323 | 1.35488779 | 0.251 | 0.228 | 1 NKT_lung |
| RASGRP2            | 0.00043074 | 0.33634116 | 0.221 | 0.358 | 1 NKT_lung |
| TPT1               | 0.00043898 | 0.12222001 | 0.973 | 0.978 | 1 NKT_lung |
| ENSMMUG00000050829 | 0.00045701 | 0.87503431 | 0.506 | 0.628 | 1 NKT_lung |
| RPS27L             | 0.00048476 | 0.89176879 | 0.448 | 0.525 | 1 NKT_lung |
| SRSF7              | 0.00056266 | 0.12823882 | 0.388 | 0.619 | 1 NKT_lung |
| LEPROTL1           | 0.00056638 | 1.22970812 | 0.342 | 0.357 | 1 NKT_lung |
| CASP12             | 0.00058655 | 0.20152704 | 0.282 | 0.448 | 1 NKT_lung |
| LSM2               | 0.00058976 | 0.34191106 | 0.162 | 0.267 | 1 NKT_lung |
| TDG                | 0.0005911  | 0.41848793 | 0.198 | 0.325 | 1 NKT_lung |
| STRAP              | 0.00061031 | 0.32316693 | 0.28  | 0.456 | 1 NKT_lung |
| RPS3A              | 0.00064763 | 0.12108262 | 0.964 | 0.956 | 1 NKT_lung |
| ENSMMUG00000054038 | 0.0006936  | 0.64948293 | 0.557 | 0.677 | 1 NKT_lung |
| ARF1               | 0.000694   | 0.13414445 | 0.385 | 0.613 | 1 NKT_lung |
| ENSMMUG00000055376 | 0.00069921 | 0.46231822 | 0.185 | 0.301 | 1 NKT_lung |
| POLR2F             | 0.0007165  | 0.41859084 | 0.159 | 0.26  | 1 NKT_lung |
| MRPL23             | 0.00080594 | 0.99533825 | 0.388 | 0.436 | 1 NKT_lung |
| EEF1G              | 0.00083474 | 0.35343714 | 0.684 | 0.795 | 1 NKT_lung |
| PYCARD             | 0.00085238 | 0.43575533 | 0.171 | 0.278 | 1 NKT_lung |
| PSME2              | 0.00090997 | 1.13987144 | 0.332 | 0.342 | 1 NKT_lung |
| TOPORS             | 0.00094579 | 0.31702809 | 0.272 | 0.437 | 1 NKT_lung |
| MRPL11             | 0.00103899 | 0.40044976 | 0.232 | 0.376 | 1 NKT_lung |
| IL2RG              | 0.00107851 | 0.20386925 | 0.366 | 0.585 | 1 NKT_lung |
| MRPL57             | 0.00113505 | 1.23621017 | 0.26  | 0.243 | 1 NKT_lung |
| ILF2               | 0.00117085 | 0.42547716 | 0.179 | 0.288 | 1 NKT_lung |
| ENSMMUG00000029026 | 0.00120855 | 0.66869734 | 0.463 | 0.542 | 1 NKT_lung |
| ENSMMUG00000029973 | 0.00126129 | 0.68092669 | 0.484 | 0.574 | 1 NKT_lung |
| HSP90B1            | 0.0013212  | 0.56463659 | 0.268 | 0.429 | 1 NKT_lung |
| SNRPD3             | 0.00138035 | 0.77320921 | 0.438 | 0.517 | 1 NKT_lung |

|                    |            |            |       |       |            |
|--------------------|------------|------------|-------|-------|------------|
| DPY30              | 0.00165126 | 1.22150738 | 0.292 | 0.294 | 1 NKT_lung |
| TIMM17A            | 0.00166905 | 0.41905018 | 0.166 | 0.264 | 1 NKT_lung |
| ENSMMUG00000065104 | 0.0017503  | 0.72473755 | 0.463 | 0.55  | 1 NKT_lung |
| THOC7              | 0.00176563 | 0.38747501 | 0.179 | 0.287 | 1 NKT_lung |
| SNRPB2             | 0.00176963 | 0.44581381 | 0.238 | 0.378 | 1 NKT_lung |
| TCEA3              | 0.00183151 | 0.24028234 | 0.202 | 0.311 | 1 NKT_lung |
| TPI1               | 0.00184962 | 0.83257858 | 0.436 | 0.509 | 1 NKT_lung |
| RGS19              | 0.00188514 | 0.45053782 | 0.161 | 0.256 | 1 NKT_lung |
| ENSMMUG00000055438 | 0.00191108 | 1.34691516 | 0.26  | 0.244 | 1 NKT_lung |
| RAMAC              | 0.00191254 | 0.46967685 | 0.171 | 0.275 | 1 NKT_lung |
| P2RY8              | 0.00193939 | 1.42880898 | 0.313 | 0.32  | 1 NKT_lung |
| TIGAR              | 0.00197431 | 0.12580904 | 0.427 | 0.66  | 1 NKT_lung |
| PDCD5              | 0.0019901  | 1.1437678  | 0.325 | 0.342 | 1 NKT_lung |
| SUMO1              | 0.00202567 | 0.54730005 | 0.533 | 0.664 | 1 NKT_lung |
| TRMT112            | 0.00208319 | 0.97469824 | 0.369 | 0.41  | 1 NKT_lung |
| NHP2               | 0.002091   | 1.10075992 | 0.328 | 0.343 | 1 NKT_lung |
| COX7A2             | 0.00225058 | 1.26054981 | 0.27  | 0.263 | 1 NKT_lung |
| PSMB10             | 0.00239178 | 0.51662546 | 0.164 | 0.262 | 1 NKT_lung |
| COX4I1             | 0.00254923 | 0.28919962 | 0.728 | 0.827 | 1 NKT_lung |
| POMP               | 0.00263352 | 1.03148234 | 0.335 | 0.357 | 1 NKT_lung |
| MIC1               | 0.00264821 | 0.69151586 | 0.485 | 0.584 | 1 NKT_lung |
| RER1               | 0.0027872  | 0.44235845 | 0.202 | 0.319 | 1 NKT_lung |
| CARHSP1            | 0.0028275  | 1.11653182 | 0.364 | 0.411 | 1 NKT_lung |
| DYNLL1             | 0.00288361 | 1.02217085 | 0.323 | 0.327 | 1 NKT_lung |
| MRPS6              | 0.00298552 | 0.52477067 | 0.291 | 0.458 | 1 NKT_lung |
| BCAP31             | 0.00301334 | 0.51318303 | 0.191 | 0.301 | 1 NKT_lung |
| C11H12orf57        | 0.00329314 | 0.6412302  | 0.511 | 0.61  | 1 NKT_lung |
| RHOF               | 0.00355564 | 1.29739871 | 0.26  | 0.251 | 1 NKT_lung |
| SUCLG1             | 0.00391522 | 0.41597694 | 0.274 | 0.43  | 1 NKT_lung |
| SPCS2              | 0.00397178 | 1.0857176  | 0.332 | 0.355 | 1 NKT_lung |
| ENSMMUG00000045959 | 0.00417855 | 0.39194838 | 0.168 | 0.261 | 1 NKT_lung |
| KIFBP              | 0.00441658 | 0.14964891 | 0.419 | 0.631 | 1 NKT_lung |
| MIF                | 0.00456143 | 0.38895188 | 0.345 | 0.55  | 1 NKT_lung |

|                    |            |            |       |       |            |
|--------------------|------------|------------|-------|-------|------------|
| ETFB               | 0.00491259 | 1.02327634 | 0.335 | 0.366 | 1 NKT_lung |
| CYSLTR1            | 0.00502675 | 0.34987284 | 0.25  | 0.369 | 1 NKT_lung |
| NDUFA6             | 0.00537779 | 0.85964449 | 0.385 | 0.437 | 1 NKT_lung |
| CEMIP2             | 0.00606126 | 0.87282272 | 0.185 | 0.279 | 1 NKT_lung |
| MAGOH              | 0.00610802 | 1.02297255 | 0.34  | 0.377 | 1 NKT_lung |
| ND3                | 0.00659485 | 0.27014802 | 0.41  | 0.613 | 1 NKT_lung |
| CFDP1              | 0.00666452 | 0.71223817 | 0.462 | 0.552 | 1 NKT_lung |
| SYF2               | 0.00672034 | 0.33417329 | 0.34  | 0.526 | 1 NKT_lung |
| ENSMMUG00000065362 | 0.00672058 | 0.12795994 | 0.979 | 1     | 1 NKT_lung |
| PLAAT4             | 0.0070553  | 1.11245853 | 0.337 | 0.36  | 1 NKT_lung |
| POLR1H             | 0.00722302 | 0.529964   | 0.202 | 0.309 | 1 NKT_lung |
| STAR               | 0.00738569 | 0.55957032 | 0.171 | 0.264 | 1 NKT_lung |
| WDR13              | 0.00769961 | 0.23561768 | 0.414 | 0.64  | 1 NKT_lung |
| ENSMMUG00000055584 | 0.00791125 | 0.24755605 | 0.711 | 0.833 | 1 NKT_lung |
| PPIA               | 0.00914182 | 0.44646573 | 0.207 | 0.311 | 1 NKT_lung |
| JTB                | 0.00933221 | 0.40734613 | 0.217 | 0.328 | 1 NKT_lung |
| PSMA1              | 0.00972189 | 0.29149595 | 0.32  | 0.492 | 1 NKT_lung |
| IK                 | 0.00987127 | 0.30039474 | 0.309 | 0.471 | 1 NKT_lung |
| ENSMMUG00000061913 | 0.01043786 | 0.21207749 | 0.354 | 0.532 | 1 NKT_lung |
| PRDX1              | 0.01061881 | 0.8208897  | 0.374 | 0.425 | 1 NKT_lung |
| CCT7               | 0.01074058 | 0.5534415  | 0.19  | 0.288 | 1 NKT_lung |
| RBMX               | 0.01154246 | 0.27014836 | 0.349 | 0.535 | 1 NKT_lung |
| ICAM3              | 0.01186157 | 0.46112664 | 0.256 | 0.39  | 1 NKT_lung |
| RSL24D1            | 0.01233774 | 0.14861355 | 0.432 | 0.653 | 1 NKT_lung |
| LAMTOR1            | 0.01237626 | 0.6073855  | 0.183 | 0.275 | 1 NKT_lung |
| GTF3C6             | 0.01239154 | 0.54163928 | 0.185 | 0.277 | 1 NKT_lung |
| ENSMMUG00000053392 | 0.01262322 | 0.80548664 | 0.378 | 0.431 | 1 NKT_lung |
| ATP6V1FNB          | 0.0131757  | 1.13682442 | 0.311 | 0.339 | 1 NKT_lung |
| FKBP1A             | 0.01319994 | 0.42472428 | 0.238 | 0.361 | 1 NKT_lung |
| TMBIM4             | 0.01378852 | 0.46148655 | 0.27  | 0.408 | 1 NKT_lung |
| ITGB1              | 0.01474111 | 0.65827656 | 0.185 | 0.268 | 1 NKT_lung |
| EIF3G              | 0.01482654 | 0.37030995 | 0.315 | 0.478 | 1 NKT_lung |
| SARAF              | 0.01530743 | 0.10419742 | 0.533 | 0.789 | 1 NKT_lung |

|                   |            |            |       |       |            |
|-------------------|------------|------------|-------|-------|------------|
| DRAP1             | 0.01546017 | 0.9249265  | 0.315 | 0.341 | 1 NKT_lung |
| ARHGDIB           | 0.01553217 | 0.26992876 | 0.781 | 0.879 | 1 NKT_lung |
| ACTG1             | 0.01719032 | 0.12620721 | 0.826 | 0.875 | 1 NKT_lung |
| ENSMUG00000012525 | 0.01740645 | 0.7456319  | 0.427 | 0.512 | 1 NKT_lung |
| ENSMUG00000056012 | 0.01824753 | 0.28980995 | 0.328 | 0.496 | 1 NKT_lung |
| OSTC              | 0.01921587 | 0.97230101 | 0.333 | 0.378 | 1 NKT_lung |
| COX16             | 0.01982325 | 0.32437758 | 0.373 | 0.574 | 1 NKT_lung |
| COX20             | 0.02057384 | 1.17875224 | 0.28  | 0.298 | 1 NKT_lung |
| ENSMUG00000002075 | 0.02132627 | 1.00503967 | 0.297 | 0.318 | 1 NKT_lung |
| ERBB3             | 0.0219531  | 0.44171052 | 0.303 | 0.458 | 1 NKT_lung |
| ANP32A            | 0.02311195 | 0.54468842 | 0.256 | 0.384 | 1 NKT_lung |
| FTH1              | 0.02335024 | 0.76265233 | 0.549 | 0.688 | 1 NKT_lung |
| BUD23             | 0.02473458 | 0.53365465 | 0.263 | 0.396 | 1 NKT_lung |
| EIF1B             | 0.02691503 | 0.54301803 | 0.231 | 0.343 | 1 NKT_lung |
| GLIPR2            | 0.02777075 | 0.81777856 | 0.403 | 0.48  | 1 NKT_lung |
| DSTN              | 0.02798778 | 0.38897782 | 0.289 | 0.428 | 1 NKT_lung |
| TMEM59L           | 0.02919898 | 0.59164672 | 0.176 | 0.254 | 1 NKT_lung |
| SLC25A3           | 0.03011909 | 0.32559096 | 0.378 | 0.576 | 1 NKT_lung |
| PDGFRA            | 0.03065129 | 0.30793795 | 0.716 | 0.846 | 1 NKT_lung |
| CD53              | 0.03076432 | 0.31846426 | 0.388 | 0.582 | 1 NKT_lung |
| ENSMUG00000058919 | 0.03288061 | 0.6658949  | 0.19  | 0.276 | 1 NKT_lung |
| TMBIM6            | 0.03302656 | 0.26901712 | 0.352 | 0.522 | 1 NKT_lung |
| ENSMUG00000055627 | 0.033305   | 0.31697233 | 0.631 | 0.742 | 1 NKT_lung |
| LLPH              | 0.03441265 | 1.20481812 | 0.26  | 0.271 | 1 NKT_lung |
| EIF4A3            | 0.03484673 | 0.46503223 | 0.224 | 0.326 | 1 NKT_lung |
| CD3E              | 0.03588576 | 0.32231628 | 0.359 | 0.537 | 1 NKT_lung |
| SPCS1             | 0.03644395 | 0.69190163 | 0.378 | 0.446 | 1 NKT_lung |
| TINF2             | 0.0404559  | 0.70819145 | 0.417 | 0.531 | 1 NKT_lung |
| HYPK              | 0.04162317 | 0.92822224 | 0.337 | 0.384 | 1 NKT_lung |
| EIF3L             | 0.04266767 | 0.22496398 | 0.415 | 0.618 | 1 NKT_lung |
| LSM5              | 0.0441458  | 1.06416756 | 0.284 | 0.309 | 1 NKT_lung |
| CD37              | 0.0459075  | 0.50038474 | 0.508 | 0.651 | 1 NKT_lung |
| LSP1              | 0.04628294 | 0.5623479  | 0.497 | 0.632 | 1 NKT_lung |



|                     |            |            |       |       |            |
|---------------------|------------|------------|-------|-------|------------|
| DNAJC19             | 0.04647242 | 1.1170333  | 0.255 | 0.269 | 1 NKT_lung |
| ERH                 | 0.04736352 | 0.86720488 | 0.337 | 0.391 | 1 NKT_lung |
| SSR3                | 0.04838074 | 0.56128032 | 0.205 | 0.294 | 1 NKT_lung |
| ANP32E              | 0.04841392 | 0.69254885 | 0.2   | 0.288 | 1 NKT_lung |
| GABARAPL1           | 0.05057171 | 0.66289454 | 0.191 | 0.274 | 1 NKT_lung |
| EIF4E2              | 0.05277354 | 1.11882709 | 0.272 | 0.297 | 1 NKT_lung |
| PSMC5               | 0.05414019 | 1.03420281 | 0.311 | 0.354 | 1 NKT_lung |
| PSMC4               | 0.05504824 | 0.71793903 | 0.179 | 0.255 | 1 NKT_lung |
| VIM                 | 0.05573866 | 0.11065013 | 0.547 | 0.728 | 1 NKT_lung |
| TMEM147             | 0.05786218 | 0.86445031 | 0.239 | 0.346 | 1 NKT_lung |
| NDUFA5              | 0.06001283 | 0.61138153 | 0.205 | 0.294 | 1 NKT_lung |
| SEPTIN2             | 0.0682373  | 0.67182353 | 0.222 | 0.316 | 1 NKT_lung |
| ENSMMUG00000016009  | 0.06945514 | 0.58092022 | 0.407 | 0.491 | 1 NKT_lung |
| CD63                | 0.06951645 | 0.6313128  | 0.248 | 0.354 | 1 NKT_lung |
| COPS6               | 0.07274324 | 0.55560446 | 0.244 | 0.351 | 1 NKT_lung |
| DGKB                | 0.07409762 | 1.07241392 | 0.284 | 0.315 | 1 NKT_lung |
| ENSMMUG00000007536  | 0.07797846 | 0.68810502 | 0.402 | 0.499 | 1 NKT_lung |
| YJEFN3              | 0.07975114 | 0.89762794 | 0.338 | 0.401 | 1 NKT_lung |
| NDUFS6              | 0.08234563 | 0.62098139 | 0.222 | 0.315 | 1 NKT_lung |
| RTKN2               | 0.08301774 | 0.47520231 | 0.318 | 0.451 | 1 NKT_lung |
| TUBB                | 0.08326363 | 0.41901245 | 0.357 | 0.522 | 1 NKT_lung |
| ARPC2               | 0.08392261 | 0.35799887 | 0.315 | 0.45  | 1 NKT_lung |
| BZW1                | 0.08693989 | 0.26592536 | 0.434 | 0.637 | 1 NKT_lung |
| C14H11orf58         | 0.08943827 | 0.62619932 | 0.246 | 0.352 | 1 NKT_lung |
| ENSMMUG000000061630 | 0.09251677 | 0.52975368 | 0.289 | 0.415 | 1 NKT_lung |
| ATP5PD              | 0.09292489 | 1.00095071 | 0.275 | 0.305 | 1 NKT_lung |
| POC5                | 0.10041604 | 0.38695115 | 0.325 | 0.47  | 1 NKT_lung |
| CSNK2B              | 0.10106938 | 0.59243981 | 0.221 | 0.308 | 1 NKT_lung |
| EIF3J               | 0.11380835 | 0.53962527 | 0.311 | 0.446 | 1 NKT_lung |
| BST2                | 0.11622821 | 0.95668774 | 0.316 | 0.365 | 1 NKT_lung |
| SSBP1               | 0.11677471 | 0.7879776  | 0.19  | 0.265 | 1 NKT_lung |
| FNTB                | 0.1179185  | 0.47827578 | 0.308 | 0.445 | 1 NKT_lung |
| VDAC1               | 0.11872728 | 0.55637236 | 0.229 | 0.318 | 1 NKT_lung |

|                    |            |            |       |       |            |
|--------------------|------------|------------|-------|-------|------------|
| CD320              | 0.1279484  | 0.82841107 | 0.328 | 0.396 | 1 NKT_lung |
| ENSMMUG00000018740 | 0.13721961 | 0.72101988 | 0.207 | 0.285 | 1 NKT_lung |
| HIGD2A             | 0.13776615 | 0.79944236 | 0.183 | 0.251 | 1 NKT_lung |
| COPE               | 0.14284215 | 0.96163038 | 0.303 | 0.355 | 1 NKT_lung |
| DCTN3              | 0.14381353 | 1.0870493  | 0.296 | 0.347 | 1 NKT_lung |
| UBXN1              | 0.14685033 | 0.75759537 | 0.373 | 0.463 | 1 NKT_lung |
| SAP18              | 0.1505085  | 0.66004146 | 0.415 | 0.533 | 1 NKT_lung |
| KDEL1              | 0.15229522 | 0.67155538 | 0.215 | 0.297 | 1 NKT_lung |
| REXO2              | 0.15653968 | 0.53948041 | 0.241 | 0.332 | 1 NKT_lung |
| TMEM219            | 0.15686176 | 1.09609199 | 0.268 | 0.307 | 1 NKT_lung |
| EIF2S2             | 0.15740173 | 0.50452584 | 0.342 | 0.492 | 1 NKT_lung |
| TUBA1A             | 0.15824183 | 0.10539293 | 0.549 | 0.737 | 1 NKT_lung |
| ANAPC13            | 0.15916022 | 0.75586994 | 0.202 | 0.278 | 1 NKT_lung |
| PSMB7              | 0.16208452 | 0.47064328 | 0.474 | 0.607 | 1 NKT_lung |
| DAD1               | 0.16487948 | 0.76699356 | 0.371 | 0.462 | 1 NKT_lung |
| ENSMMUG00000032031 | 0.16645159 | 0.72982203 | 0.195 | 0.265 | 1 NKT_lung |
| TOMM22             | 0.16970194 | 0.7961691  | 0.214 | 0.294 | 1 NKT_lung |
| SPOCK2             | 0.18245693 | 0.59715767 | 0.47  | 0.622 | 1 NKT_lung |
| MRPS12             | 0.18757891 | 0.75472031 | 0.188 | 0.256 | 1 NKT_lung |
| ARHGDIA            | 0.18790223 | 1.00670051 | 0.284 | 0.328 | 1 NKT_lung |
| TMEM50A            | 0.1904836  | 0.4714157  | 0.311 | 0.439 | 1 NKT_lung |
| ENSMMUG00000064120 | 0.19835549 | 0.71086514 | 0.239 | 0.329 | 1 NKT_lung |
| TWF2               | 0.20538785 | 0.67249026 | 0.236 | 0.324 | 1 NKT_lung |
| SOD1               | 0.21058677 | 0.5571827  | 0.333 | 0.476 | 1 NKT_lung |
| SPCS3              | 0.21498773 | 0.66909156 | 0.308 | 0.439 | 1 NKT_lung |
| BAX                | 0.21520344 | 0.816497   | 0.197 | 0.265 | 1 NKT_lung |
| ENSMMUG00000061128 | 0.21763073 | 0.63996643 | 0.369 | 0.453 | 1 NKT_lung |
| EIF3I              | 0.22138554 | 0.7333616  | 0.251 | 0.349 | 1 NKT_lung |
| LAMTOR4            | 0.2278756  | 0.86828583 | 0.335 | 0.41  | 1 NKT_lung |
| ZNF706             | 0.23182399 | 0.70485138 | 0.255 | 0.352 | 1 NKT_lung |
| PRDX6              | 0.2349003  | 0.82022757 | 0.364 | 0.453 | 1 NKT_lung |
| RTRAF              | 0.23530751 | 0.59440452 | 0.415 | 0.54  | 1 NKT_lung |
| ENSMMUG00000012019 | 0.23558269 | 0.61007542 | 0.282 | 0.398 | 1 NKT_lung |

|                    |            |            |       |       |            |
|--------------------|------------|------------|-------|-------|------------|
| HMGB2              | 0.23920206 | 0.51813625 | 0.303 | 0.415 | 1 NKT_lung |
| C3H7orf50          | 0.23922164 | 0.28162772 | 0.424 | 0.611 | 1 NKT_lung |
| SYTL3              | 0.24381275 | 0.43942433 | 0.465 | 0.55  | 1 NKT_lung |
| RNF7               | 0.24434273 | 0.96540333 | 0.285 | 0.337 | 1 NKT_lung |
| PRMT1              | 0.24506065 | 0.72203978 | 0.224 | 0.308 | 1 NKT_lung |
| CD58               | 0.24664171 | 0.56259477 | 0.239 | 0.323 | 1 NKT_lung |
| HIKESHI            | 0.24742849 | 0.68952708 | 0.215 | 0.291 | 1 NKT_lung |
| HSPD1              | 0.25076421 | 0.68839002 | 0.222 | 0.292 | 1 NKT_lung |
| SEC62              | 0.25190503 | 0.71973317 | 0.379 | 0.479 | 1 NKT_lung |
| ISCA1              | 0.26463779 | 1.09136963 | 0.268 | 0.311 | 1 NKT_lung |
| PSMB9              | 0.26841666 | 0.79333287 | 0.335 | 0.409 | 1 NKT_lung |
| CAPZB              | 0.27820768 | 0.41828222 | 0.403 | 0.579 | 1 NKT_lung |
| RPS4Y2             | 0.27917096 | 0.63901097 | 0.253 | 0.337 | 1 NKT_lung |
| SNRPN              | 0.27975673 | 1.07184654 | 0.267 | 0.308 | 1 NKT_lung |
| NCLN               | 0.28479745 | 0.7440914  | 0.231 | 0.311 | 1 NKT_lung |
| ATG12              | 0.28679706 | 0.52265041 | 0.345 | 0.489 | 1 NKT_lung |
| PSMB3              | 0.2922763  | 0.75500382 | 0.229 | 0.311 | 1 NKT_lung |
| SNRPB              | 0.29337263 | 0.73025465 | 0.369 | 0.475 | 1 NKT_lung |
| PARK7              | 0.31978491 | 0.76797262 | 0.229 | 0.307 | 1 NKT_lung |
| PLAAT3             | 0.32830901 | 0.55348019 | 0.333 | 0.379 | 1 NKT_lung |
| HNRNPF             | 0.3288405  | 0.47642113 | 0.379 | 0.541 | 1 NKT_lung |
| ICAM2              | 0.3332089  | 0.67507767 | 0.232 | 0.306 | 1 NKT_lung |
| ENSMMUG00000059289 | 0.33691853 | 0.88253383 | 0.191 | 0.251 | 1 NKT_lung |
| DDT                | 0.34090051 | 0.57935047 | 0.303 | 0.418 | 1 NKT_lung |
| MFNG               | 0.34147931 | 0.54842171 | 0.299 | 0.413 | 1 NKT_lung |
| PRR13              | 0.35513494 | 0.66146757 | 0.277 | 0.377 | 1 NKT_lung |
| ENSMMUG00000029987 | 0.37169016 | 0.97810293 | 0.243 | 0.28  | 1 NKT_lung |
| CCNDBP1            | 0.37234071 | 0.77585709 | 0.207 | 0.27  | 1 NKT_lung |
| NDUFB7             | 0.37734512 | 0.88154343 | 0.265 | 0.31  | 1 NKT_lung |
| TXNIP              | 0.38516336 | 0.1514177  | 0.593 | 0.783 | 1 NKT_lung |
| ENY2               | 0.38735244 | 0.65002193 | 0.368 | 0.463 | 1 NKT_lung |
| IRF3               | 0.39337045 | 0.99893176 | 0.232 | 0.264 | 1 NKT_lung |
| SLC38A2            | 0.39779601 | 0.71804805 | 0.251 | 0.332 | 1 NKT_lung |

|                    |            |            |       |       |            |
|--------------------|------------|------------|-------|-------|------------|
| VDAC2              | 0.40239819 | 0.66166315 | 0.385 | 0.499 | 1 NKT_lung |
| VDAC3              | 0.40406537 | 0.69760702 | 0.229 | 0.302 | 1 NKT_lung |
| NDUFB5             | 0.40705116 | 0.95501959 | 0.229 | 0.261 | 1 NKT_lung |
| YWHAB              | 0.41856979 | 0.35299824 | 0.45  | 0.63  | 1 NKT_lung |
| HNRNPA1            | 0.42136299 | 0.2760086  | 0.46  | 0.654 | 1 NKT_lung |
| NMT1               | 0.43551254 | 0.73382247 | 0.207 | 0.266 | 1 NKT_lung |
| RBX1               | 0.43878262 | 0.71703604 | 0.335 | 0.416 | 1 NKT_lung |
| SNRPD1             | 0.43964486 | 0.89671021 | 0.244 | 0.281 | 1 NKT_lung |
| SF3B6              | 0.44395583 | 0.57217892 | 0.403 | 0.521 | 1 NKT_lung |
| MDH2               | 0.44580798 | 0.84156244 | 0.219 | 0.287 | 1 NKT_lung |
| CTSS               | 0.45612655 | 0.78385096 | 0.248 | 0.331 | 1 NKT_lung |
| PRMT2              | 0.46803732 | 0.75830431 | 0.229 | 0.297 | 1 NKT_lung |
| ANXA2              | 0.46859537 | 0.70786282 | 0.32  | 0.389 | 1 NKT_lung |
| LST1               | 0.48755264 | 0.81934329 | 0.279 | 0.33  | 1 NKT_lung |
| RILPL2             | 0.50335033 | 0.80660104 | 0.311 | 0.377 | 1 NKT_lung |
| MPC2               | 0.54168341 | 0.83868643 | 0.27  | 0.326 | 1 NKT_lung |
| PSMA4              | 0.54587588 | 0.59959023 | 0.277 | 0.368 | 1 NKT_lung |
| RAC2               | 0.56228319 | 0.72105268 | 0.342 | 0.437 | 1 NKT_lung |
| PRDX5              | 0.56990934 | 0.92102096 | 0.248 | 0.296 | 1 NKT_lung |
| THYN1              | 0.57288291 | 0.84269517 | 0.227 | 0.296 | 1 NKT_lung |
| SMNDC1             | 0.59270415 | 0.7758805  | 0.243 | 0.315 | 1 NKT_lung |
| ENSMMUG00000053817 | 0.59364686 | 0.83799361 | 0.313 | 0.389 | 1 NKT_lung |
| MAP1LC3B           | 0.61248249 | 0.55048126 | 0.32  | 0.43  | 1 NKT_lung |
| NDUFAB1            | 0.61335178 | 0.79813816 | 0.202 | 0.254 | 1 NKT_lung |
| UBA7               | 0.63101588 | 0.78480554 | 0.226 | 0.286 | 1 NKT_lung |
| SHISA5             | 0.63415941 | 0.62618984 | 0.325 | 0.44  | 1 NKT_lung |
| DBI                | 0.63765107 | 0.83906803 | 0.333 | 0.43  | 1 NKT_lung |
| SNU13              | 0.63992505 | 0.47945773 | 0.45  | 0.602 | 1 NKT_lung |
| PSMB8              | 0.64046057 | 0.58635344 | 0.374 | 0.516 | 1 NKT_lung |
| AIP                | 0.64212583 | 0.91877764 | 0.27  | 0.334 | 1 NKT_lung |
| TALDO1             | 0.64665241 | 0.66172627 | 0.369 | 0.492 | 1 NKT_lung |
| ENSMMUG00000058325 | 0.65160525 | 0.11207167 | 0.829 | 0.906 | 1 NKT_lung |
| TSPO               | 0.66018782 | 0.74517777 | 0.309 | 0.375 | 1 NKT_lung |

|                    |            |            |       |       |           |           |
|--------------------|------------|------------|-------|-------|-----------|-----------|
| UCP2               | 0.66057452 | 0.71594612 | 0.309 | 0.414 | 1         | NKT_lung  |
| NDUFA12            | 0.68839329 | 1.0241647  | 0.236 | 0.282 | 1         | NKT_lung  |
| ST13               | 0.69106095 | 0.51677775 | 0.374 | 0.523 | 1         | NKT_lung  |
| ENSMMUG00000043332 | 0.69971575 | 0.90496194 | 0.28  | 0.347 | 1         | NKT_lung  |
| RGS1               | 0.71700455 | 1.00275687 | 0.243 | 0.305 | 1         | NKT_lung  |
| ENSMMUG00000064692 | 0.71701132 | 0.25117584 | 0.605 | 0.746 | 1         | NKT_lung  |
| ENSMMUG00000051392 | 0.73059184 | 0.59487841 | 0.366 | 0.479 | 1         | NKT_lung  |
| PDCD10             | 0.73582024 | 0.71037112 | 0.338 | 0.44  | 1         | NKT_lung  |
| ENSMMUG00000030465 | 0.75652978 | 0.53335283 | 0.414 | 0.548 | 1         | NKT_lung  |
| ECHS1              | 0.75686744 | 1.0488973  | 0.202 | 0.252 | 1         | NKT_lung  |
| SH3BGRL            | 0.76517371 | 0.78893367 | 0.267 | 0.346 | 1         | NKT_lung  |
| EIF3E              | 0.77921179 | 0.14650543 | 0.597 | 0.78  | 1         | NKT_lung  |
| MAMU-A             | 0.8152256  | 0.22970502 | 0.602 | 0.783 | 1         | NKT_lung  |
| NDUFS8             | 0.83660408 | 0.74285964 | 0.275 | 0.345 | 1         | NKT_lung  |
| RBIS               | 0.84134958 | 0.54803539 | 0.342 | 0.465 | 1         | NKT_lung  |
| SNRPD2             | 0.84950221 | 0.42357821 | 0.448 | 0.622 | 1         | NKT_lung  |
| GABARAP            | 0.85230259 | 0.44003005 | 0.446 | 0.621 | 1         | NKT_lung  |
| SLIRP              | 0.87429339 | 0.38906954 | 0.441 | 0.606 | 1         | NKT_lung  |
| TAPBPL             | 0.88160617 | 1.08500015 | 0.205 | 0.251 | 1         | NKT_lung  |
| HSPA8              | 0.9120026  | 0.22319485 | 0.53  | 0.683 | 1         | NKT_lung  |
| TMEM59             | 0.93612491 | 0.62122269 | 0.361 | 0.489 | 1         | NKT_lung  |
| ENSMMUG00000055026 | 0.93795622 | 0.57467247 | 0.304 | 0.384 | 1         | NKT_lung  |
| ENSMMUG00000057449 | 0.94431626 | 0.92277916 | 0.256 | 0.323 | 1         | NKT_lung  |
| TMED9              | 0.9447417  | 0.87360085 | 0.239 | 0.298 | 1         | NKT_lung  |
| AIMP1              | 0.97958564 | 0.58678807 | 0.321 | 0.42  | 1         | NKT_lung  |
| POLR1D             | 0.99578273 | 0.54199117 | 0.39  | 0.529 | 1         | NKT_lung  |
| AP2M1              | 0.99763254 | 0.83486728 | 0.241 | 0.301 | 1         | NKT_lung  |
| HBE1               | 2.03E-164  | 3.56829174 | 0.608 | 0.078 | 7.18E-160 | NKT_UCBMC |
| HBA                | 2.35E-149  | 3.32039792 | 0.6   | 0.098 | 8.34E-145 | NKT_UCBMC |
| NCOA3              | 1.98E-96   | 1.2446737  | 0.881 | 0.549 | 7.01E-92  | NKT_UCBMC |
| RPS20              | 2.65E-92   | 0.84022539 | 0.953 | 0.825 | 9.38E-88  | NKT_UCBMC |
| SIK3               | 2.61E-91   | 1.02421864 | 0.934 | 0.589 | 9.26E-87  | NKT_UCBMC |
| PNISR              | 4.64E-89   | 1.13803077 | 0.847 | 0.504 | 1.64E-84  | NKT_UCBMC |

|                   |          |            |       |       |          |           |
|-------------------|----------|------------|-------|-------|----------|-----------|
| CAMK4             | 3.78E-83 | 0.99473842 | 0.913 | 0.625 | 1.34E-78 | NKT_UCBMC |
| UTRN              | 2.41E-80 | 0.96723301 | 0.902 | 0.579 | 8.56E-76 | NKT_UCBMC |
| TM9SF3            | 5.29E-76 | 1.25250782 | 0.749 | 0.404 | 1.87E-71 | NKT_UCBMC |
| RFX3              | 1.78E-74 | 1.26483596 | 0.724 | 0.366 | 6.31E-70 | NKT_UCBMC |
| RPL13A            | 1.67E-71 | 0.58142335 | 0.968 | 0.949 | 5.90E-67 | NKT_UCBMC |
| CPEB1             | 3.40E-71 | 0.60500788 | 0.963 | 0.901 | 1.21E-66 | NKT_UCBMC |
| FAM117B           | 3.43E-71 | 1.63789288 | 0.566 | 0.22  | 1.21E-66 | NKT_UCBMC |
| CDC14A            | 6.84E-71 | 0.92927867 | 0.87  | 0.531 | 2.42E-66 | NKT_UCBMC |
| GOLGA4            | 1.20E-70 | 1.28577374 | 0.687 | 0.342 | 4.24E-66 | NKT_UCBMC |
| MPP7              | 2.59E-70 | 1.2986695  | 0.684 | 0.33  | 9.16E-66 | NKT_UCBMC |
| FOXN3             | 5.47E-70 | 0.91490719 | 0.844 | 0.513 | 1.94E-65 | NKT_UCBMC |
| COX3              | 5.47E-69 | 0.65474612 | 0.946 | 0.855 | 1.94E-64 | NKT_UCBMC |
| ARID4B            | 1.65E-68 | 0.90440325 | 0.86  | 0.53  | 5.83E-64 | NKT_UCBMC |
| SSH2              | 4.72E-68 | 0.83421305 | 0.872 | 0.551 | 1.67E-63 | NKT_UCBMC |
| GNG2              | 6.08E-68 | 1.07015521 | 0.814 | 0.514 | 2.15E-63 | NKT_UCBMC |
| RICTOR            | 6.23E-68 | 1.17536125 | 0.713 | 0.376 | 2.21E-63 | NKT_UCBMC |
| RSRP1             | 8.90E-68 | 0.98897772 | 0.835 | 0.481 | 3.15E-63 | NKT_UCBMC |
| ESYT2             | 4.24E-67 | 1.01432549 | 0.794 | 0.467 | 1.50E-62 | NKT_UCBMC |
| EPB41             | 5.47E-67 | 0.98042459 | 0.808 | 0.487 | 1.94E-62 | NKT_UCBMC |
| BRAF              | 1.68E-66 | 1.18660628 | 0.715 | 0.374 | 5.94E-62 | NKT_UCBMC |
| EPC1              | 3.00E-66 | 1.07122212 | 0.794 | 0.459 | 1.06E-61 | NKT_UCBMC |
| CREBRF            | 7.55E-66 | 1.29789683 | 0.667 | 0.318 | 2.68E-61 | NKT_UCBMC |
| STAG1             | 4.33E-65 | 0.89662413 | 0.856 | 0.525 | 1.53E-60 | NKT_UCBMC |
| EIF2AK3           | 2.99E-64 | 1.53732681 | 0.561 | 0.238 | 1.06E-59 | NKT_UCBMC |
| DDX5              | 3.87E-64 | 0.67881916 | 0.968 | 0.758 | 1.37E-59 | NKT_UCBMC |
| TRA2A             | 1.51E-61 | 0.88761159 | 0.868 | 0.56  | 5.36E-57 | NKT_UCBMC |
| ENSMUG00000065175 | 8.16E-61 | 1.48776969 | 0.554 | 0.242 | 2.89E-56 | NKT_UCBMC |
| ENSMUG00000047632 | 1.60E-60 | 1.37596109 | 0.551 | 0.227 | 5.68E-56 | NKT_UCBMC |
| RANBP9            | 3.15E-60 | 1.36517223 | 0.565 | 0.249 | 1.12E-55 | NKT_UCBMC |
| OSBPL9            | 3.39E-60 | 0.96621741 | 0.785 | 0.485 | 1.20E-55 | NKT_UCBMC |
| FBXO33            | 5.90E-60 | 1.33468906 | 0.603 | 0.28  | 2.09E-55 | NKT_UCBMC |
| HIVEP1            | 1.22E-59 | 1.17946327 | 0.609 | 0.291 | 4.32E-55 | NKT_UCBMC |
| CDC42SE2          | 2.14E-59 | 0.78220315 | 0.911 | 0.687 | 7.57E-55 | NKT_UCBMC |

|                    |          |            |       |       |          |           |
|--------------------|----------|------------|-------|-------|----------|-----------|
| CTDSPL2            | 5.97E-59 | 1.37599641 | 0.542 | 0.226 | 2.12E-54 | NKT_UCBMC |
| RPL27A             | 8.78E-58 | 0.57446527 | 0.95  | 0.903 | 3.11E-53 | NKT_UCBMC |
| ABLM1              | 1.25E-57 | 0.92507989 | 0.792 | 0.503 | 4.43E-53 | NKT_UCBMC |
| MBTD1              | 3.20E-57 | 1.20279106 | 0.588 | 0.271 | 1.13E-52 | NKT_UCBMC |
| CUL3               | 7.96E-57 | 1.16734807 | 0.663 | 0.361 | 2.82E-52 | NKT_UCBMC |
| SLC35A3            | 2.63E-56 | 1.34386245 | 0.582 | 0.272 | 9.31E-52 | NKT_UCBMC |
| RPL23A             | 7.74E-56 | 0.5060309  | 0.973 | 0.95  | 2.74E-51 | NKT_UCBMC |
| KLF12              | 1.58E-55 | 0.68796987 | 0.898 | 0.584 | 5.61E-51 | NKT_UCBMC |
| ATG13              | 1.51E-54 | 1.57445807 | 0.483 | 0.194 | 5.36E-50 | NKT_UCBMC |
| CDK13              | 9.52E-54 | 1.04384178 | 0.642 | 0.33  | 3.37E-49 | NKT_UCBMC |
| LMBRD1             | 1.12E-53 | 1.30329091 | 0.572 | 0.271 | 3.97E-49 | NKT_UCBMC |
| ATF2               | 1.21E-53 | 1.21964161 | 0.555 | 0.257 | 4.30E-49 | NKT_UCBMC |
| ZEB1               | 1.63E-53 | 0.98701027 | 0.725 | 0.435 | 5.77E-49 | NKT_UCBMC |
| COG5               | 1.43E-52 | 0.93298572 | 0.692 | 0.392 | 5.07E-48 | NKT_UCBMC |
| TNRC6B             | 1.86E-52 | 0.66829552 | 0.879 | 0.611 | 6.58E-48 | NKT_UCBMC |
| MTMR14             | 2.40E-52 | 1.68102168 | 0.4   | 0.127 | 8.52E-48 | NKT_UCBMC |
| ARHGEF3            | 2.67E-52 | 1.06493435 | 0.643 | 0.326 | 9.47E-48 | NKT_UCBMC |
| RBM39              | 3.41E-52 | 0.69549398 | 0.922 | 0.656 | 1.21E-47 | NKT_UCBMC |
| MARCHF6            | 4.81E-52 | 1.12679352 | 0.64  | 0.333 | 1.70E-47 | NKT_UCBMC |
| DDX6               | 1.08E-51 | 0.92548234 | 0.727 | 0.418 | 3.84E-47 | NKT_UCBMC |
| RPS6KA5            | 1.19E-51 | 1.01619587 | 0.657 | 0.337 | 4.20E-47 | NKT_UCBMC |
| KMT2C              | 2.07E-51 | 0.7381601  | 0.84  | 0.521 | 7.34E-47 | NKT_UCBMC |
| MYLIP              | 3.70E-51 | 1.02338991 | 0.62  | 0.302 | 1.31E-46 | NKT_UCBMC |
| MAPK8              | 3.93E-51 | 1.39665384 | 0.496 | 0.208 | 1.39E-46 | NKT_UCBMC |
| RASA2              | 4.33E-51 | 0.90707589 | 0.721 | 0.413 | 1.54E-46 | NKT_UCBMC |
| SETD2              | 9.43E-51 | 0.93145054 | 0.69  | 0.383 | 3.34E-46 | NKT_UCBMC |
| PTBP2              | 1.11E-50 | 1.19821382 | 0.6   | 0.3   | 3.92E-46 | NKT_UCBMC |
| PIK3CA             | 2.14E-50 | 1.45329394 | 0.485 | 0.205 | 7.58E-46 | NKT_UCBMC |
| PDE3B              | 3.61E-50 | 0.98495148 | 0.663 | 0.364 | 1.28E-45 | NKT_UCBMC |
| KMT2E              | 9.73E-50 | 0.79845967 | 0.763 | 0.457 | 3.45E-45 | NKT_UCBMC |
| SPPL3              | 1.91E-49 | 1.1403633  | 0.614 | 0.313 | 6.76E-45 | NKT_UCBMC |
| ENSMMUG00000049151 | 2.36E-49 | 0.61566431 | 0.951 | 0.869 | 8.36E-45 | NKT_UCBMC |
| SRSF11             | 2.64E-49 | 0.72426301 | 0.863 | 0.603 | 9.35E-45 | NKT_UCBMC |

|                   |          |            |       |       |          |           |
|-------------------|----------|------------|-------|-------|----------|-----------|
| ENSMUG00000011580 | 4.76E-49 | 1.17091673 | 0.631 | 0.355 | 1.69E-44 | NKT_UCBMC |
| CSNK1A1           | 8.06E-49 | 0.83307037 | 0.736 | 0.43  | 2.86E-44 | NKT_UCBMC |
| KDM6A             | 1.46E-48 | 0.8676951  | 0.727 | 0.424 | 5.16E-44 | NKT_UCBMC |
| RFX2              | 1.80E-48 | 1.87438523 | 0.346 | 0.1   | 6.38E-44 | NKT_UCBMC |
| PUM1              | 3.61E-48 | 0.93517123 | 0.743 | 0.455 | 1.28E-43 | NKT_UCBMC |
| SLC12A6           | 4.71E-48 | 1.25155379 | 0.514 | 0.232 | 1.67E-43 | NKT_UCBMC |
| TFDP2             | 1.45E-47 | 1.35054069 | 0.503 | 0.229 | 5.14E-43 | NKT_UCBMC |
| PPP1R15A          | 1.91E-47 | 1.06553289 | 0.629 | 0.337 | 6.75E-43 | NKT_UCBMC |
| INPP4B            | 2.07E-47 | 0.89453834 | 0.842 | 0.569 | 7.33E-43 | NKT_UCBMC |
| SCAPER            | 2.20E-47 | 1.01378787 | 0.632 | 0.332 | 7.81E-43 | NKT_UCBMC |
| ZNF644            | 2.42E-47 | 0.98589638 | 0.659 | 0.378 | 8.58E-43 | NKT_UCBMC |
| CCSER2            | 2.93E-47 | 1.29135909 | 0.521 | 0.238 | 1.04E-42 | NKT_UCBMC |
| CERS6             | 3.93E-47 | 0.90130824 | 0.66  | 0.352 | 1.39E-42 | NKT_UCBMC |
| RB1CC1            | 8.14E-47 | 1.25964548 | 0.485 | 0.208 | 2.89E-42 | NKT_UCBMC |
| SENP5             | 1.31E-46 | 1.27008006 | 0.5   | 0.225 | 4.66E-42 | NKT_UCBMC |
| CASP3             | 1.46E-46 | 1.24329269 | 0.492 | 0.212 | 5.18E-42 | NKT_UCBMC |
| ZNF292            | 1.83E-46 | 0.82285512 | 0.702 | 0.408 | 6.49E-42 | NKT_UCBMC |
| RAB2A             | 2.86E-46 | 0.98907876 | 0.67  | 0.388 | 1.01E-41 | NKT_UCBMC |
| DIP2B             | 4.07E-46 | 0.79617728 | 0.752 | 0.465 | 1.44E-41 | NKT_UCBMC |
| SLC38A1           | 4.30E-46 | 0.91017654 | 0.706 | 0.404 | 1.52E-41 | NKT_UCBMC |
| RPL7              | 5.56E-46 | 0.55492498 | 0.922 | 0.828 | 1.97E-41 | NKT_UCBMC |
| RPS6KB1           | 7.33E-46 | 1.07453099 | 0.582 | 0.293 | 2.60E-41 | NKT_UCBMC |
| POU2F1            | 1.09E-45 | 1.27897876 | 0.46  | 0.193 | 3.86E-41 | NKT_UCBMC |
| PIAS1             | 1.30E-45 | 1.0625428  | 0.625 | 0.343 | 4.59E-41 | NKT_UCBMC |
| WRN               | 2.21E-45 | 0.99795297 | 0.606 | 0.33  | 7.84E-41 | NKT_UCBMC |
| FBXO34            | 2.25E-45 | 0.86615261 | 0.672 | 0.372 | 7.97E-41 | NKT_UCBMC |
| BIRC6             | 3.27E-45 | 0.77196456 | 0.78  | 0.484 | 1.16E-40 | NKT_UCBMC |
| SREK1             | 4.50E-45 | 0.97499936 | 0.674 | 0.401 | 1.60E-40 | NKT_UCBMC |
| ENSMUG00000030448 | 5.25E-45 | 1.21305794 | 0.556 | 0.286 | 1.86E-40 | NKT_UCBMC |
| ELOVL5            | 5.82E-45 | 0.90090875 | 0.693 | 0.408 | 2.06E-40 | NKT_UCBMC |
| UHRF1BP1L         | 7.05E-45 | 1.25889815 | 0.49  | 0.218 | 2.50E-40 | NKT_UCBMC |
| USP15             | 7.51E-45 | 0.70814458 | 0.852 | 0.589 | 2.66E-40 | NKT_UCBMC |
| EPC2              | 1.62E-44 | 1.08848776 | 0.546 | 0.273 | 5.73E-40 | NKT_UCBMC |



|                   |          |            |       |       |          |           |
|-------------------|----------|------------|-------|-------|----------|-----------|
| BSDC1             | 2.08E-44 | 1.53992925 | 0.42  | 0.165 | 7.36E-40 | NKT_UCBMC |
| SSBP2             | 2.58E-44 | 0.74138863 | 0.823 | 0.525 | 9.13E-40 | NKT_UCBMC |
| CELF1             | 6.23E-44 | 0.89915459 | 0.657 | 0.378 | 2.21E-39 | NKT_UCBMC |
| QKI               | 6.84E-44 | 0.96847464 | 0.598 | 0.319 | 2.42E-39 | NKT_UCBMC |
| ECD               | 7.35E-44 | 1.47324433 | 0.425 | 0.172 | 2.60E-39 | NKT_UCBMC |
| SMCHD1            | 8.15E-44 | 0.76022303 | 0.752 | 0.466 | 2.89E-39 | NKT_UCBMC |
| ENSMUG00000063979 | 8.32E-44 | 1.27404901 | 0.454 | 0.194 | 2.95E-39 | NKT_UCBMC |
| AFF1              | 9.88E-44 | 0.88212765 | 0.606 | 0.315 | 3.50E-39 | NKT_UCBMC |
| PAN3              | 1.28E-43 | 0.77198902 | 0.708 | 0.414 | 4.52E-39 | NKT_UCBMC |
| SENP2             | 1.48E-43 | 1.41084347 | 0.447 | 0.191 | 5.23E-39 | NKT_UCBMC |
| WDR48             | 2.41E-43 | 1.59146887 | 0.367 | 0.128 | 8.53E-39 | NKT_UCBMC |
| LUC7L3            | 5.50E-43 | 1.02823773 | 0.636 | 0.371 | 1.95E-38 | NKT_UCBMC |
| UXS1              | 5.65E-43 | 1.05540834 | 0.571 | 0.298 | 2.00E-38 | NKT_UCBMC |
| TSC22D3           | 6.03E-43 | 0.8111963  | 0.755 | 0.478 | 2.14E-38 | NKT_UCBMC |
| YIPF5             | 7.51E-43 | 1.55100623 | 0.358 | 0.119 | 2.66E-38 | NKT_UCBMC |
| ARHGAP15          | 7.96E-43 | 0.49525477 | 0.948 | 0.726 | 2.82E-38 | NKT_UCBMC |
| FBXL20            | 1.45E-42 | 1.04026336 | 0.551 | 0.279 | 5.13E-38 | NKT_UCBMC |
| PLCL1             | 1.66E-42 | 0.87986119 | 0.559 | 0.277 | 5.89E-38 | NKT_UCBMC |
| PRKCH             | 2.15E-42 | 0.66730311 | 0.793 | 0.495 | 7.61E-38 | NKT_UCBMC |
| KLF7              | 4.26E-42 | 1.2169582  | 0.442 | 0.182 | 1.51E-37 | NKT_UCBMC |
| PRPF40A           | 4.39E-42 | 0.91295948 | 0.669 | 0.382 | 1.55E-37 | NKT_UCBMC |
| MTREX             | 1.31E-41 | 0.83947104 | 0.689 | 0.405 | 4.66E-37 | NKT_UCBMC |
| AGO3              | 1.33E-41 | 1.04958691 | 0.564 | 0.295 | 4.71E-37 | NKT_UCBMC |
| USP3              | 1.89E-41 | 1.05732764 | 0.576 | 0.311 | 6.69E-37 | NKT_UCBMC |
| DLG1              | 2.09E-41 | 0.96638322 | 0.653 | 0.369 | 7.40E-37 | NKT_UCBMC |
| SNX4              | 2.31E-41 | 1.12003878 | 0.485 | 0.226 | 8.19E-37 | NKT_UCBMC |
| RORA              | 3.21E-41 | 0.86755293 | 0.545 | 0.263 | 1.14E-36 | NKT_UCBMC |
| PITPNC1           | 4.26E-41 | 0.75496235 | 0.742 | 0.473 | 1.51E-36 | NKT_UCBMC |
| RAB1A             | 6.09E-41 | 0.98158178 | 0.618 | 0.343 | 2.16E-36 | NKT_UCBMC |
| DENND4A           | 6.23E-41 | 0.53535488 | 0.878 | 0.651 | 2.21E-36 | NKT_UCBMC |
| SS18              | 6.42E-41 | 1.12254376 | 0.525 | 0.259 | 2.28E-36 | NKT_UCBMC |
| VPS13B            | 6.73E-41 | 0.66642189 | 0.798 | 0.511 | 2.38E-36 | NKT_UCBMC |
| MBNL1             | 9.27E-41 | 0.4839991  | 0.953 | 0.789 | 3.28E-36 | NKT_UCBMC |

|                   |          |            |       |       |          |           |
|-------------------|----------|------------|-------|-------|----------|-----------|
| TAX1BP1           | 9.42E-41 | 0.90607166 | 0.648 | 0.375 | 3.34E-36 | NKT_UCBMC |
| MXI1              | 1.01E-40 | 1.25391191 | 0.435 | 0.182 | 3.57E-36 | NKT_UCBMC |
| ENSMUG00000051300 | 1.11E-40 | 0.58395335 | 0.968 | 0.652 | 3.94E-36 | NKT_UCBMC |
| ELMO1             | 1.38E-40 | 0.64322347 | 0.817 | 0.522 | 4.87E-36 | NKT_UCBMC |
| YEATS2            | 1.60E-40 | 0.9464649  | 0.627 | 0.353 | 5.66E-36 | NKT_UCBMC |
| RLF               | 2.09E-40 | 1.00360288 | 0.539 | 0.271 | 7.41E-36 | NKT_UCBMC |
| PCM1              | 2.55E-40 | 1.10217565 | 0.549 | 0.289 | 9.04E-36 | NKT_UCBMC |
| ATP8A1            | 2.55E-40 | 1.15315321 | 0.526 | 0.27  | 9.04E-36 | NKT_UCBMC |
| TP53BP1           | 2.95E-40 | 1.12831431 | 0.524 | 0.258 | 1.04E-35 | NKT_UCBMC |
| ATG14             | 3.47E-40 | 1.55761444 | 0.343 | 0.114 | 1.23E-35 | NKT_UCBMC |
| RPS14             | 4.05E-40 | 0.36454639 | 0.967 | 0.951 | 1.44E-35 | NKT_UCBMC |
| DENND5A           | 4.63E-40 | 1.40113996 | 0.389 | 0.152 | 1.64E-35 | NKT_UCBMC |
| RPS3              | 6.10E-40 | 0.44519317 | 0.952 | 0.901 | 2.16E-35 | NKT_UCBMC |
| PIK3R5            | 6.43E-40 | 1.17783119 | 0.48  | 0.226 | 2.28E-35 | NKT_UCBMC |
| HERC1             | 8.22E-40 | 0.90773521 | 0.573 | 0.305 | 2.91E-35 | NKT_UCBMC |
| CNOT1             | 8.29E-40 | 0.95098812 | 0.563 | 0.282 | 2.94E-35 | NKT_UCBMC |
| UTY               | 9.88E-40 | 1.15689098 | 0.439 | 0.181 | 3.50E-35 | NKT_UCBMC |
| ENSMUG00000031367 | 1.55E-39 | 1.32097743 | 0.414 | 0.175 | 5.50E-35 | NKT_UCBMC |
| SLMAP             | 1.76E-39 | 1.02354037 | 0.566 | 0.302 | 6.24E-35 | NKT_UCBMC |
| ATP11B            | 2.71E-39 | 0.93681734 | 0.56  | 0.291 | 9.60E-35 | NKT_UCBMC |
| CERT1             | 3.50E-39 | 1.06585548 | 0.539 | 0.286 | 1.24E-34 | NKT_UCBMC |
| FOXP1             | 3.90E-39 | 1.08109793 | 0.555 | 0.299 | 1.38E-34 | NKT_UCBMC |
| DCP1A             | 6.51E-39 | 1.12783355 | 0.472 | 0.221 | 2.31E-34 | NKT_UCBMC |
| RFC1              | 1.25E-38 | 1.04621173 | 0.545 | 0.284 | 4.42E-34 | NKT_UCBMC |
| TMEM87A           | 1.93E-38 | 0.96201478 | 0.551 | 0.288 | 6.85E-34 | NKT_UCBMC |
| BTAF1             | 2.06E-38 | 0.98023108 | 0.576 | 0.315 | 7.31E-34 | NKT_UCBMC |
| ESCO1             | 2.07E-38 | 0.98053717 | 0.548 | 0.281 | 7.35E-34 | NKT_UCBMC |
| OSBPL8            | 2.19E-38 | 0.78213432 | 0.711 | 0.428 | 7.77E-34 | NKT_UCBMC |
| JAML              | 2.70E-38 | 1.04705778 | 0.492 | 0.232 | 9.57E-34 | NKT_UCBMC |
| LYST              | 3.41E-38 | 1.44290402 | 0.362 | 0.132 | 1.21E-33 | NKT_UCBMC |
| CNOT4             | 5.60E-38 | 0.99990013 | 0.572 | 0.319 | 1.99E-33 | NKT_UCBMC |
| EIF2AK2           | 1.14E-37 | 1.48306522 | 0.373 | 0.15  | 4.05E-33 | NKT_UCBMC |
| TET2              | 1.17E-37 | 1.48973432 | 0.399 | 0.173 | 4.13E-33 | NKT_UCBMC |

|                   |          |            |       |       |          |           |
|-------------------|----------|------------|-------|-------|----------|-----------|
| RAB7A             | 1.23E-37 | 0.82465201 | 0.646 | 0.372 | 4.36E-33 | NKT_UCBMC |
| JAK1              | 1.81E-37 | 0.64594518 | 0.817 | 0.566 | 6.43E-33 | NKT_UCBMC |
| N4BP1             | 2.50E-37 | 1.243646   | 0.417 | 0.179 | 8.85E-33 | NKT_UCBMC |
| JMY               | 2.58E-37 | 0.83737443 | 0.619 | 0.342 | 9.14E-33 | NKT_UCBMC |
| CELF2             | 2.66E-37 | 0.53210409 | 0.925 | 0.665 | 9.43E-33 | NKT_UCBMC |
| SCFD1             | 3.08E-37 | 1.05351249 | 0.525 | 0.273 | 1.09E-32 | NKT_UCBMC |
| FYN               | 3.23E-37 | 0.64438146 | 0.759 | 0.468 | 1.14E-32 | NKT_UCBMC |
| ANKRD44           | 3.56E-37 | 0.47878651 | 0.875 | 0.608 | 1.26E-32 | NKT_UCBMC |
| CCDC91            | 4.73E-37 | 0.80530948 | 0.691 | 0.428 | 1.68E-32 | NKT_UCBMC |
| G3BP2             | 4.87E-37 | 0.70224333 | 0.81  | 0.583 | 1.72E-32 | NKT_UCBMC |
| SPAG9             | 6.56E-37 | 0.80016063 | 0.603 | 0.328 | 2.32E-32 | NKT_UCBMC |
| FBXW7             | 6.64E-37 | 0.78592077 | 0.638 | 0.371 | 2.35E-32 | NKT_UCBMC |
| TNKS              | 7.02E-37 | 1.08084723 | 0.509 | 0.261 | 2.49E-32 | NKT_UCBMC |
| ZFC3H1            | 9.57E-37 | 0.96093133 | 0.556 | 0.302 | 3.39E-32 | NKT_UCBMC |
| RBM5              | 9.70E-37 | 0.84962681 | 0.576 | 0.314 | 3.44E-32 | NKT_UCBMC |
| ZFAND6            | 1.09E-36 | 0.7986158  | 0.715 | 0.462 | 3.86E-32 | NKT_UCBMC |
| SLC22A18          | 1.32E-36 | 1.04209513 | 0.528 | 0.277 | 4.69E-32 | NKT_UCBMC |
| WDFY2             | 2.06E-36 | 0.83861672 | 0.591 | 0.33  | 7.29E-32 | NKT_UCBMC |
| SUCLG2            | 2.08E-36 | 0.92104232 | 0.614 | 0.364 | 7.37E-32 | NKT_UCBMC |
| PNN               | 2.59E-36 | 0.89838171 | 0.6   | 0.343 | 9.16E-32 | NKT_UCBMC |
| AKT3              | 2.75E-36 | 0.64186737 | 0.77  | 0.507 | 9.73E-32 | NKT_UCBMC |
| TUT4              | 4.35E-36 | 0.72744571 | 0.721 | 0.463 | 1.54E-31 | NKT_UCBMC |
| ENSMUG00000061038 | 5.51E-36 | 1.38646378 | 0.387 | 0.161 | 1.95E-31 | NKT_UCBMC |
| NR3C1             | 6.41E-36 | 0.63715602 | 0.721 | 0.467 | 2.27E-31 | NKT_UCBMC |
| PHF3              | 7.74E-36 | 0.99036142 | 0.53  | 0.282 | 2.74E-31 | NKT_UCBMC |
| ACTR2             | 1.66E-35 | 0.65249596 | 0.821 | 0.578 | 5.86E-31 | NKT_UCBMC |
| PELI1             | 1.69E-35 | 0.62723005 | 0.699 | 0.424 | 5.97E-31 | NKT_UCBMC |
| WDFY1             | 2.42E-35 | 1.26572609 | 0.436 | 0.207 | 8.57E-31 | NKT_UCBMC |
| RPL23             | 2.73E-35 | 0.41819724 | 0.956 | 0.886 | 9.68E-31 | NKT_UCBMC |
| APBB1IP           | 2.85E-35 | 0.56086035 | 0.899 | 0.665 | 1.01E-30 | NKT_UCBMC |
| TNRC6A            | 2.92E-35 | 0.88478611 | 0.608 | 0.349 | 1.04E-30 | NKT_UCBMC |
| STK39             | 2.97E-35 | 0.66793475 | 0.655 | 0.369 | 1.05E-30 | NKT_UCBMC |
| MSI2              | 3.90E-35 | 0.65151754 | 0.678 | 0.404 | 1.38E-30 | NKT_UCBMC |

|                    |          |            |       |       |          |           |
|--------------------|----------|------------|-------|-------|----------|-----------|
| USP47              | 5.37E-35 | 0.8816633  | 0.583 | 0.338 | 1.90E-30 | NKT_UCBMC |
| CSGALNACT2         | 5.42E-35 | 0.9799121  | 0.563 | 0.311 | 1.92E-30 | NKT_UCBMC |
| ABI1               | 6.08E-35 | 0.77626155 | 0.655 | 0.399 | 2.16E-30 | NKT_UCBMC |
| EZH2               | 6.61E-35 | 1.17850172 | 0.43  | 0.198 | 2.34E-30 | NKT_UCBMC |
| ENSMMUG00000008346 | 9.83E-35 | 0.91039318 | 0.569 | 0.325 | 3.48E-30 | NKT_UCBMC |
| NKIRAS1            | 9.91E-35 | 1.24872038 | 0.397 | 0.168 | 3.51E-30 | NKT_UCBMC |
| ENSMMUG00000006165 | 1.20E-34 | 0.55593011 | 0.85  | 0.602 | 4.25E-30 | NKT_UCBMC |
| SUCO               | 2.39E-34 | 1.01251856 | 0.51  | 0.272 | 8.48E-30 | NKT_UCBMC |
| EIF3A              | 2.52E-34 | 0.7847726  | 0.642 | 0.384 | 8.94E-30 | NKT_UCBMC |
| PPP1R12A           | 3.20E-34 | 0.6432211  | 0.727 | 0.465 | 1.13E-29 | NKT_UCBMC |
| SAP30BP            | 3.44E-34 | 1.24808299 | 0.394 | 0.169 | 1.22E-29 | NKT_UCBMC |
| ENSMMUG00000056654 | 5.05E-34 | 0.68394736 | 0.849 | 0.718 | 1.79E-29 | NKT_UCBMC |
| ARHGEF7            | 6.92E-34 | 0.73965208 | 0.661 | 0.402 | 2.45E-29 | NKT_UCBMC |
| GSK3B              | 9.84E-34 | 0.68455617 | 0.666 | 0.398 | 3.48E-29 | NKT_UCBMC |
| ATP9B              | 1.23E-33 | 1.03712126 | 0.498 | 0.262 | 4.36E-29 | NKT_UCBMC |
| YPEL5              | 1.31E-33 | 0.59676456 | 0.681 | 0.407 | 4.63E-29 | NKT_UCBMC |
| RAB5A              | 1.76E-33 | 0.97863139 | 0.497 | 0.262 | 6.22E-29 | NKT_UCBMC |
| ITCH               | 2.31E-33 | 0.67696166 | 0.712 | 0.441 | 8.18E-29 | NKT_UCBMC |
| TRIM72             | 2.38E-33 | 0.65035449 | 0.724 | 0.458 | 8.44E-29 | NKT_UCBMC |
| BNIP3L             | 2.84E-33 | 0.83172315 | 0.534 | 0.28  | 1.01E-28 | NKT_UCBMC |
| MBNL2              | 4.13E-33 | 0.9844281  | 0.49  | 0.254 | 1.46E-28 | NKT_UCBMC |
| LMBR1              | 4.13E-33 | 0.82373965 | 0.502 | 0.254 | 1.46E-28 | NKT_UCBMC |
| CYTH1              | 4.44E-33 | 0.60211721 | 0.708 | 0.436 | 1.57E-28 | NKT_UCBMC |
| IQGAP2             | 5.01E-33 | 0.63911682 | 0.699 | 0.443 | 1.77E-28 | NKT_UCBMC |
| ENSMMUG00000052127 | 5.25E-33 | 0.48348573 | 0.977 | 0.827 | 1.86E-28 | NKT_UCBMC |
| TSN                | 6.15E-33 | 1.3257057  | 0.338 | 0.132 | 2.18E-28 | NKT_UCBMC |
| PCMTD1             | 9.42E-33 | 0.80809722 | 0.495 | 0.252 | 3.34E-28 | NKT_UCBMC |
| WAC                | 1.04E-32 | 0.74392231 | 0.66  | 0.401 | 3.68E-28 | NKT_UCBMC |
| CHD2               | 1.04E-32 | 0.5751525  | 0.747 | 0.468 | 3.69E-28 | NKT_UCBMC |
| RBM33              | 1.23E-32 | 0.8351195  | 0.587 | 0.341 | 4.36E-28 | NKT_UCBMC |
| AP3B1              | 1.37E-32 | 0.86994773 | 0.56  | 0.32  | 4.87E-28 | NKT_UCBMC |
| TIMM23             | 1.49E-32 | 1.05938727 | 0.436 | 0.21  | 5.26E-28 | NKT_UCBMC |
| PTPRA              | 1.52E-32 | 0.87108414 | 0.543 | 0.303 | 5.39E-28 | NKT_UCBMC |

|         |          |            |       |       |          |           |
|---------|----------|------------|-------|-------|----------|-----------|
| SEC31A  | 1.63E-32 | 0.79047878 | 0.581 | 0.328 | 5.78E-28 | NKT_UCBMC |
| UBXN7   | 1.72E-32 | 0.91580043 | 0.481 | 0.24  | 6.09E-28 | NKT_UCBMC |
| DIS3L2  | 1.84E-32 | 0.82908818 | 0.53  | 0.285 | 6.51E-28 | NKT_UCBMC |
| LSM14A  | 2.08E-32 | 0.85411223 | 0.6   | 0.363 | 7.35E-28 | NKT_UCBMC |
| SEPTIN6 | 2.29E-32 | 0.57448501 | 0.814 | 0.576 | 8.11E-28 | NKT_UCBMC |
| DAZAP2  | 2.88E-32 | 0.86366131 | 0.567 | 0.323 | 1.02E-27 | NKT_UCBMC |
| MRTFA   | 3.09E-32 | 0.86674963 | 0.503 | 0.269 | 1.10E-27 | NKT_UCBMC |
| ZMYM5   | 3.12E-32 | 1.40725721 | 0.369 | 0.16  | 1.10E-27 | NKT_UCBMC |
| HBS1L   | 3.26E-32 | 0.88092974 | 0.574 | 0.333 | 1.15E-27 | NKT_UCBMC |
| NUP54   | 3.29E-32 | 1.32481914 | 0.359 | 0.152 | 1.17E-27 | NKT_UCBMC |
| BIN3    | 3.31E-32 | 1.08069582 | 0.447 | 0.225 | 1.17E-27 | NKT_UCBMC |
| CHD7    | 3.38E-32 | 0.73383251 | 0.574 | 0.33  | 1.20E-27 | NKT_UCBMC |
| JMJD1C  | 3.71E-32 | 0.4136058  | 0.861 | 0.596 | 1.32E-27 | NKT_UCBMC |
| KLF6    | 3.94E-32 | 0.41117573 | 0.884 | 0.532 | 1.40E-27 | NKT_UCBMC |
| YME1L1  | 4.86E-32 | 0.95763421 | 0.498 | 0.274 | 1.72E-27 | NKT_UCBMC |
| DOCK10  | 4.99E-32 | 0.71922369 | 0.699 | 0.458 | 1.77E-27 | NKT_UCBMC |
| XRN1    | 5.53E-32 | 1.00646162 | 0.51  | 0.275 | 1.96E-27 | NKT_UCBMC |
| CD247   | 6.42E-32 | 0.45828745 | 0.711 | 0.434 | 2.28E-27 | NKT_UCBMC |
| KANSL1  | 7.15E-32 | 0.66981167 | 0.66  | 0.385 | 2.53E-27 | NKT_UCBMC |
| ARIH1   | 1.04E-31 | 0.52274168 | 0.711 | 0.428 | 3.68E-27 | NKT_UCBMC |
| MAML2   | 1.14E-31 | 0.36894654 | 0.864 | 0.575 | 4.05E-27 | NKT_UCBMC |
| GAB2    | 1.42E-31 | 0.91280363 | 0.522 | 0.28  | 5.05E-27 | NKT_UCBMC |
| CCNK    | 1.81E-31 | 0.96736211 | 0.515 | 0.283 | 6.42E-27 | NKT_UCBMC |
| CDKAL1  | 1.86E-31 | 0.72548947 | 0.642 | 0.391 | 6.58E-27 | NKT_UCBMC |
| NIPBL   | 2.14E-31 | 0.7701239  | 0.617 | 0.376 | 7.59E-27 | NKT_UCBMC |
| CENPC   | 2.16E-31 | 1.06365164 | 0.433 | 0.21  | 7.67E-27 | NKT_UCBMC |
| SORL1   | 2.25E-31 | 0.86675087 | 0.538 | 0.296 | 7.96E-27 | NKT_UCBMC |
| INO80D  | 2.77E-31 | 1.11032108 | 0.4   | 0.188 | 9.82E-27 | NKT_UCBMC |
| PPM1A   | 3.12E-31 | 1.20673344 | 0.376 | 0.167 | 1.10E-26 | NKT_UCBMC |
| CHMP7   | 3.64E-31 | 0.88623673 | 0.503 | 0.264 | 1.29E-26 | NKT_UCBMC |
| ERO1B   | 3.78E-31 | 0.87543562 | 0.515 | 0.269 | 1.34E-26 | NKT_UCBMC |
| CSDE1   | 4.36E-31 | 0.68039344 | 0.656 | 0.414 | 1.54E-26 | NKT_UCBMC |
| TUBB2B  | 4.62E-31 | 1.17881378 | 0.391 | 0.178 | 1.64E-26 | NKT_UCBMC |

|           |          |            |       |       |          |           |
|-----------|----------|------------|-------|-------|----------|-----------|
| RCC1      | 5.25E-31 | 1.01957197 | 0.438 | 0.214 | 1.86E-26 | NKT_UCBMC |
| KPNA3     | 5.76E-31 | 1.03714225 | 0.457 | 0.226 | 2.04E-26 | NKT_UCBMC |
| SCAF11    | 5.99E-31 | 0.76361186 | 0.645 | 0.409 | 2.12E-26 | NKT_UCBMC |
| SECISBP2L | 6.03E-31 | 1.45770758 | 0.327 | 0.131 | 2.14E-26 | NKT_UCBMC |
| ARID1B    | 6.19E-31 | 0.66077245 | 0.702 | 0.441 | 2.19E-26 | NKT_UCBMC |
| UBR5      | 1.11E-30 | 0.71512258 | 0.607 | 0.361 | 3.94E-26 | NKT_UCBMC |
| MAP4K4    | 1.26E-30 | 0.43652694 | 0.764 | 0.494 | 4.45E-26 | NKT_UCBMC |
| UBE2H     | 1.26E-30 | 0.76628501 | 0.598 | 0.359 | 4.45E-26 | NKT_UCBMC |
| MTMR10    | 1.29E-30 | 1.25802172 | 0.322 | 0.128 | 4.56E-26 | NKT_UCBMC |
| NRIP1     | 1.47E-30 | 0.53281642 | 0.493 | 0.251 | 5.22E-26 | NKT_UCBMC |
| PSPC1     | 1.49E-30 | 0.7938935  | 0.533 | 0.303 | 5.27E-26 | NKT_UCBMC |
| SUPV3L1   | 1.70E-30 | 1.60567326 | 0.27  | 0.09  | 6.01E-26 | NKT_UCBMC |
| VPS37B    | 1.70E-30 | 0.83685125 | 0.487 | 0.257 | 6.02E-26 | NKT_UCBMC |
| TBC1D15   | 1.73E-30 | 1.09967103 | 0.45  | 0.232 | 6.15E-26 | NKT_UCBMC |
| BCL2      | 1.75E-30 | 0.85480957 | 0.468 | 0.238 | 6.19E-26 | NKT_UCBMC |
| MEMO1     | 1.86E-30 | 0.66698458 | 0.754 | 0.498 | 6.61E-26 | NKT_UCBMC |
| ARIH2     | 2.45E-30 | 0.97889284 | 0.474 | 0.25  | 8.69E-26 | NKT_UCBMC |
| FOXJ3     | 3.09E-30 | 0.97523605 | 0.495 | 0.275 | 1.09E-25 | NKT_UCBMC |
| RBM27     | 3.26E-30 | 0.95728526 | 0.517 | 0.289 | 1.16E-25 | NKT_UCBMC |
| ARID2     | 3.45E-30 | 0.65302973 | 0.628 | 0.383 | 1.22E-25 | NKT_UCBMC |
| UBE2G1    | 3.75E-30 | 0.85321622 | 0.511 | 0.283 | 1.33E-25 | NKT_UCBMC |
| BICDL1    | 4.07E-30 | 0.5144789  | 0.589 | 0.334 | 1.44E-25 | NKT_UCBMC |
| CLASP2    | 4.40E-30 | 0.82968445 | 0.575 | 0.346 | 1.56E-25 | NKT_UCBMC |
| ASH1L     | 5.51E-30 | 0.60193721 | 0.736 | 0.481 | 1.95E-25 | NKT_UCBMC |
| SCAF8     | 5.62E-30 | 0.78151266 | 0.579 | 0.342 | 1.99E-25 | NKT_UCBMC |
| NUP98     | 6.04E-30 | 0.72515417 | 0.592 | 0.346 | 2.14E-25 | NKT_UCBMC |
| PTPN1     | 6.99E-30 | 0.76891484 | 0.566 | 0.328 | 2.48E-25 | NKT_UCBMC |
| EMP3      | 8.30E-30 | 0.52140468 | 0.574 | 0.287 | 2.94E-25 | NKT_UCBMC |
| ATP10A    | 9.64E-30 | 0.6430384  | 0.603 | 0.355 | 3.42E-25 | NKT_UCBMC |
| NDST3     | 1.03E-29 | 0.71394965 | 0.579 | 0.341 | 3.66E-25 | NKT_UCBMC |
| CCNT2     | 1.09E-29 | 1.05875113 | 0.41  | 0.201 | 3.86E-25 | NKT_UCBMC |
| CNOT2     | 1.12E-29 | 0.70973518 | 0.667 | 0.418 | 3.98E-25 | NKT_UCBMC |
| IREB2     | 1.25E-29 | 1.24148539 | 0.363 | 0.16  | 4.42E-25 | NKT_UCBMC |

|                   |          |            |       |       |          |           |
|-------------------|----------|------------|-------|-------|----------|-----------|
| DNM3              | 1.26E-29 | 0.78695545 | 0.563 | 0.33  | 4.45E-25 | NKT_UCBMC |
| PDZRN3            | 1.29E-29 | 0.85907166 | 0.51  | 0.281 | 4.58E-25 | NKT_UCBMC |
| TLE4              | 1.41E-29 | 0.80977025 | 0.491 | 0.264 | 5.00E-25 | NKT_UCBMC |
| KAT7              | 1.75E-29 | 1.01885372 | 0.421 | 0.205 | 6.20E-25 | NKT_UCBMC |
| GOLGA1            | 2.83E-29 | 0.64080576 | 0.794 | 0.613 | 1.00E-24 | NKT_UCBMC |
| RELL1             | 2.86E-29 | 0.77845193 | 0.53  | 0.297 | 1.01E-24 | NKT_UCBMC |
| PPTC7             | 3.05E-29 | 1.31505139 | 0.312 | 0.124 | 1.08E-24 | NKT_UCBMC |
| NIPSNAP2          | 3.16E-29 | 1.12258185 | 0.379 | 0.171 | 1.12E-24 | NKT_UCBMC |
| RAPGEF1           | 4.11E-29 | 0.92922654 | 0.489 | 0.269 | 1.46E-24 | NKT_UCBMC |
| TGFB1             | 4.86E-29 | 0.6628207  | 0.499 | 0.275 | 1.72E-24 | NKT_UCBMC |
| TOP1              | 5.31E-29 | 0.60740462 | 0.715 | 0.455 | 1.88E-24 | NKT_UCBMC |
| LCOR              | 5.50E-29 | 0.81562188 | 0.547 | 0.313 | 1.95E-24 | NKT_UCBMC |
| UBE2E1            | 6.43E-29 | 0.99395549 | 0.404 | 0.196 | 2.28E-24 | NKT_UCBMC |
| VPS39             | 6.46E-29 | 1.31919898 | 0.323 | 0.134 | 2.29E-24 | NKT_UCBMC |
| STK38L            | 6.58E-29 | 1.44193009 | 0.279 | 0.099 | 2.33E-24 | NKT_UCBMC |
| CBLB              | 7.39E-29 | 0.50398193 | 0.772 | 0.516 | 2.62E-24 | NKT_UCBMC |
| U2SURP            | 8.29E-29 | 0.77822832 | 0.545 | 0.316 | 2.94E-24 | NKT_UCBMC |
| PDZD8             | 1.07E-28 | 1.10750241 | 0.387 | 0.182 | 3.79E-24 | NKT_UCBMC |
| PHC3              | 1.11E-28 | 0.85551347 | 0.464 | 0.244 | 3.94E-24 | NKT_UCBMC |
| EXOC6B            | 1.13E-28 | 0.834297   | 0.517 | 0.293 | 3.99E-24 | NKT_UCBMC |
| TMEM131           | 1.15E-28 | 0.68647929 | 0.544 | 0.31  | 4.08E-24 | NKT_UCBMC |
| RALGPS2           | 1.16E-28 | 1.05974641 | 0.4   | 0.19  | 4.10E-24 | NKT_UCBMC |
| XPO4              | 1.29E-28 | 1.2526337  | 0.343 | 0.149 | 4.56E-24 | NKT_UCBMC |
| RPRD1A            | 1.35E-28 | 1.10384009 | 0.385 | 0.188 | 4.77E-24 | NKT_UCBMC |
| MINDY3            | 1.53E-28 | 1.01388938 | 0.434 | 0.227 | 5.41E-24 | NKT_UCBMC |
| STAU1             | 1.68E-28 | 0.82365811 | 0.513 | 0.292 | 5.95E-24 | NKT_UCBMC |
| EDRF1             | 2.26E-28 | 1.51443926 | 0.279 | 0.104 | 8.02E-24 | NKT_UCBMC |
| AHCTF1            | 2.53E-28 | 0.91598931 | 0.452 | 0.235 | 8.97E-24 | NKT_UCBMC |
| KAT6B             | 2.63E-28 | 0.67732861 | 0.669 | 0.433 | 9.30E-24 | NKT_UCBMC |
| HECA              | 3.09E-28 | 0.85345108 | 0.443 | 0.224 | 1.10E-23 | NKT_UCBMC |
| KLHL28            | 4.52E-28 | 1.06448363 | 0.401 | 0.198 | 1.60E-23 | NKT_UCBMC |
| ENSMUG00000014862 | 4.56E-28 | 0.63059604 | 0.651 | 0.421 | 1.62E-23 | NKT_UCBMC |
| RNF38             | 5.02E-28 | 0.75601003 | 0.585 | 0.352 | 1.78E-23 | NKT_UCBMC |

|         |          |            |       |       |          |           |
|---------|----------|------------|-------|-------|----------|-----------|
| OPA1    | 5.29E-28 | 1.06498641 | 0.392 | 0.192 | 1.88E-23 | NKT_UCBMC |
| VPS54   | 5.36E-28 | 1.06447584 | 0.423 | 0.218 | 1.90E-23 | NKT_UCBMC |
| CREBBP  | 5.56E-28 | 0.66940814 | 0.612 | 0.37  | 1.97E-23 | NKT_UCBMC |
| MAN2A1  | 5.73E-28 | 0.75789645 | 0.586 | 0.354 | 2.03E-23 | NKT_UCBMC |
| BMPR1B  | 5.82E-28 | 0.73598632 | 0.524 | 0.289 | 2.06E-23 | NKT_UCBMC |
| SOS1    | 6.97E-28 | 0.62023071 | 0.672 | 0.435 | 2.47E-23 | NKT_UCBMC |
| ASAP1   | 8.16E-28 | 0.46226833 | 0.633 | 0.379 | 2.89E-23 | NKT_UCBMC |
| UBAP1   | 8.36E-28 | 0.76047506 | 0.508 | 0.286 | 2.96E-23 | NKT_UCBMC |
| TCERG1  | 8.87E-28 | 0.87128087 | 0.453 | 0.239 | 3.14E-23 | NKT_UCBMC |
| KCMF1   | 8.90E-28 | 1.07614315 | 0.379 | 0.177 | 3.15E-23 | NKT_UCBMC |
| ELL2    | 9.45E-28 | 0.82697226 | 0.412 | 0.194 | 3.35E-23 | NKT_UCBMC |
| TBC1D5  | 9.67E-28 | 0.51240928 | 0.751 | 0.495 | 3.43E-23 | NKT_UCBMC |
| COPA    | 9.99E-28 | 0.92698204 | 0.479 | 0.267 | 3.54E-23 | NKT_UCBMC |
| USP42   | 1.13E-27 | 1.67854269 | 0.257 | 0.09  | 3.99E-23 | NKT_UCBMC |
| GIT2    | 1.21E-27 | 0.88760332 | 0.47  | 0.258 | 4.28E-23 | NKT_UCBMC |
| PPP3CC  | 1.46E-27 | 0.81174208 | 0.503 | 0.279 | 5.16E-23 | NKT_UCBMC |
| FAM214A | 1.60E-27 | 1.0095253  | 0.397 | 0.196 | 5.66E-23 | NKT_UCBMC |
| FOXO1   | 1.62E-27 | 0.65576453 | 0.515 | 0.29  | 5.74E-23 | NKT_UCBMC |
| CRY1    | 1.63E-27 | 0.76188735 | 0.508 | 0.278 | 5.79E-23 | NKT_UCBMC |
| TMEM123 | 1.73E-27 | 0.56921554 | 0.794 | 0.575 | 6.15E-23 | NKT_UCBMC |
| USP34   | 1.77E-27 | 0.58256599 | 0.739 | 0.493 | 6.28E-23 | NKT_UCBMC |
| THUMPD2 | 1.80E-27 | 0.91142456 | 0.401 | 0.194 | 6.37E-23 | NKT_UCBMC |
| HELZ    | 1.83E-27 | 0.69437787 | 0.657 | 0.418 | 6.49E-23 | NKT_UCBMC |
| RBM14   | 1.86E-27 | 0.54354523 | 0.754 | 0.498 | 6.60E-23 | NKT_UCBMC |
| NCOA2   | 1.97E-27 | 0.67656934 | 0.564 | 0.328 | 6.99E-23 | NKT_UCBMC |
| CRTC3   | 2.51E-27 | 0.6865543  | 0.507 | 0.282 | 8.88E-23 | NKT_UCBMC |
| CYLD    | 2.86E-27 | 0.77485022 | 0.585 | 0.363 | 1.01E-22 | NKT_UCBMC |
| ZNF43   | 3.76E-27 | 1.26938082 | 0.363 | 0.174 | 1.33E-22 | NKT_UCBMC |
| MIER1   | 4.21E-27 | 0.66304786 | 0.638 | 0.392 | 1.49E-22 | NKT_UCBMC |
| WIPI2   | 5.35E-27 | 1.00351983 | 0.418 | 0.213 | 1.90E-22 | NKT_UCBMC |
| CCNL1   | 5.44E-27 | 0.39397036 | 0.838 | 0.576 | 1.93E-22 | NKT_UCBMC |
| RSF1    | 5.45E-27 | 0.70161934 | 0.573 | 0.35  | 1.93E-22 | NKT_UCBMC |
| TANC1   | 5.90E-27 | 0.6779636  | 0.596 | 0.36  | 2.09E-22 | NKT_UCBMC |



|                   |          |            |       |       |          |           |
|-------------------|----------|------------|-------|-------|----------|-----------|
| ATXN7             | 6.74E-27 | 0.7448736  | 0.508 | 0.294 | 2.39E-22 | NKT_UCBMC |
| TGS1              | 7.38E-27 | 1.00514757 | 0.403 | 0.207 | 2.62E-22 | NKT_UCBMC |
| RFWD3             | 7.45E-27 | 1.50272207 | 0.262 | 0.098 | 2.64E-22 | NKT_UCBMC |
| GMCL1             | 7.60E-27 | 0.90744008 | 0.4   | 0.201 | 2.69E-22 | NKT_UCBMC |
| MRPS35            | 8.51E-27 | 1.12290955 | 0.352 | 0.162 | 3.02E-22 | NKT_UCBMC |
| USP16             | 8.90E-27 | 0.94154763 | 0.432 | 0.226 | 3.15E-22 | NKT_UCBMC |
| TBC1D23           | 8.99E-27 | 0.95769726 | 0.403 | 0.2   | 3.19E-22 | NKT_UCBMC |
| GPATCH8           | 9.51E-27 | 0.70254412 | 0.567 | 0.348 | 3.37E-22 | NKT_UCBMC |
| ZNF326            | 1.04E-26 | 0.83676973 | 0.454 | 0.245 | 3.69E-22 | NKT_UCBMC |
| MAGI3             | 1.12E-26 | 1.37460598 | 0.279 | 0.106 | 3.98E-22 | NKT_UCBMC |
| ENSMUG00000014208 | 1.19E-26 | 1.28568958 | 0.287 | 0.113 | 4.22E-22 | NKT_UCBMC |
| UHRF2             | 1.36E-26 | 0.99310226 | 0.409 | 0.207 | 4.83E-22 | NKT_UCBMC |
| AMBRA1            | 1.54E-26 | 0.7170527  | 0.437 | 0.23  | 5.45E-22 | NKT_UCBMC |
| BCL7B             | 1.54E-26 | 1.14261965 | 0.343 | 0.156 | 5.46E-22 | NKT_UCBMC |
| GOLPH3            | 1.63E-26 | 0.81610846 | 0.509 | 0.296 | 5.76E-22 | NKT_UCBMC |
| RAB18             | 1.65E-26 | 0.91784089 | 0.404 | 0.197 | 5.86E-22 | NKT_UCBMC |
| EXOC4             | 1.67E-26 | 0.57508469 | 0.659 | 0.405 | 5.91E-22 | NKT_UCBMC |
| PLAA              | 1.81E-26 | 1.28425138 | 0.297 | 0.122 | 6.41E-22 | NKT_UCBMC |
| WDR43             | 2.20E-26 | 0.82800672 | 0.473 | 0.265 | 7.78E-22 | NKT_UCBMC |
| SEC23A            | 2.20E-26 | 1.12846249 | 0.361 | 0.17  | 7.81E-22 | NKT_UCBMC |
| TOGARAM1          | 2.30E-26 | 1.37586877 | 0.262 | 0.097 | 8.15E-22 | NKT_UCBMC |
| GAPVD1            | 2.50E-26 | 0.78737875 | 0.432 | 0.224 | 8.86E-22 | NKT_UCBMC |
| TXNDC11           | 2.55E-26 | 1.30287058 | 0.304 | 0.128 | 9.04E-22 | NKT_UCBMC |
| OGT               | 2.67E-26 | 0.67116892 | 0.609 | 0.379 | 9.45E-22 | NKT_UCBMC |
| TRPM7             | 3.94E-26 | 0.5998139  | 0.72  | 0.494 | 1.39E-21 | NKT_UCBMC |
| CCM2              | 4.32E-26 | 0.79569322 | 0.542 | 0.323 | 1.53E-21 | NKT_UCBMC |
| BBX               | 4.93E-26 | 0.98012055 | 0.425 | 0.223 | 1.75E-21 | NKT_UCBMC |
| CUL2              | 5.30E-26 | 1.08170382 | 0.369 | 0.18  | 1.88E-21 | NKT_UCBMC |
| GINM1             | 5.54E-26 | 0.86755101 | 0.409 | 0.205 | 1.96E-21 | NKT_UCBMC |
| AFTPH             | 6.51E-26 | 0.77458721 | 0.458 | 0.246 | 2.31E-21 | NKT_UCBMC |
| MON2              | 6.95E-26 | 0.90283069 | 0.427 | 0.228 | 2.46E-21 | NKT_UCBMC |
| ZRANB2            | 8.07E-26 | 0.72972886 | 0.521 | 0.303 | 2.86E-21 | NKT_UCBMC |
| ATP2B1            | 9.06E-26 | 0.98893942 | 0.415 | 0.212 | 3.21E-21 | NKT_UCBMC |

|                    |          |            |       |       |          |           |
|--------------------|----------|------------|-------|-------|----------|-----------|
| RASSF3             | 9.37E-26 | 0.34642735 | 0.658 | 0.398 | 3.32E-21 | NKT_UCBMC |
| RAPGEF2            | 1.25E-25 | 0.61635265 | 0.432 | 0.222 | 4.42E-21 | NKT_UCBMC |
| XPR1               | 1.26E-25 | 0.91791875 | 0.452 | 0.245 | 4.47E-21 | NKT_UCBMC |
| GNA13              | 1.43E-25 | 0.73735475 | 0.464 | 0.25  | 5.07E-21 | NKT_UCBMC |
| ENSMMUG00000056331 | 1.49E-25 | 0.77423374 | 0.345 | 0.152 | 5.27E-21 | NKT_UCBMC |
| UBR1               | 1.59E-25 | 0.6945726  | 0.525 | 0.309 | 5.64E-21 | NKT_UCBMC |
| RYBP               | 1.60E-25 | 1.10424865 | 0.353 | 0.166 | 5.66E-21 | NKT_UCBMC |
| ZFAND3             | 1.76E-25 | 0.5033627  | 0.669 | 0.426 | 6.25E-21 | NKT_UCBMC |
| ZNF92              | 1.78E-25 | 1.15963496 | 0.352 | 0.169 | 6.32E-21 | NKT_UCBMC |
| BTBD9              | 1.82E-25 | 0.61822008 | 0.494 | 0.277 | 6.44E-21 | NKT_UCBMC |
| ARHGAP12           | 1.83E-25 | 0.99527004 | 0.397 | 0.201 | 6.47E-21 | NKT_UCBMC |
| TRA2B              | 2.05E-25 | 0.45269775 | 0.915 | 0.705 | 7.26E-21 | NKT_UCBMC |
| FBXO11             | 2.10E-25 | 0.79203551 | 0.543 | 0.333 | 7.45E-21 | NKT_UCBMC |
| LONP2              | 2.30E-25 | 0.86401252 | 0.458 | 0.245 | 8.15E-21 | NKT_UCBMC |
| NUP133             | 2.39E-25 | 1.33323466 | 0.292 | 0.121 | 8.48E-21 | NKT_UCBMC |
| SLC35D1            | 2.45E-25 | 1.22614014 | 0.289 | 0.116 | 8.70E-21 | NKT_UCBMC |
| CTNNB1             | 2.70E-25 | 0.60269114 | 0.568 | 0.337 | 9.56E-21 | NKT_UCBMC |
| RRAS2              | 4.42E-25 | 0.96297516 | 0.353 | 0.168 | 1.56E-20 | NKT_UCBMC |
| DHRS3              | 4.82E-25 | 0.89446767 | 0.411 | 0.209 | 1.71E-20 | NKT_UCBMC |
| FAM172A            | 4.97E-25 | 0.51298505 | 0.673 | 0.421 | 1.76E-20 | NKT_UCBMC |
| ZFR                | 5.19E-25 | 0.68179149 | 0.49  | 0.282 | 1.84E-20 | NKT_UCBMC |
| BCLAF1             | 5.31E-25 | 0.48995717 | 0.763 | 0.514 | 1.88E-20 | NKT_UCBMC |
| DYRK2              | 6.17E-25 | 0.88535372 | 0.41  | 0.214 | 2.19E-20 | NKT_UCBMC |
| DIDO1              | 6.17E-25 | 0.9230578  | 0.346 | 0.162 | 2.19E-20 | NKT_UCBMC |
| TAPT1              | 6.51E-25 | 1.26913034 | 0.315 | 0.139 | 2.31E-20 | NKT_UCBMC |
| VTA1               | 6.55E-25 | 0.86199274 | 0.391 | 0.194 | 2.32E-20 | NKT_UCBMC |
| AP1G1              | 7.10E-25 | 1.03908446 | 0.381 | 0.196 | 2.52E-20 | NKT_UCBMC |
| SRSF5              | 7.12E-25 | 0.49528441 | 0.825 | 0.637 | 2.52E-20 | NKT_UCBMC |
| ENSMMUG00000008587 | 7.26E-25 | 0.68054589 | 0.576 | 0.361 | 2.57E-20 | NKT_UCBMC |
| RCAN3              | 7.52E-25 | 0.78492492 | 0.472 | 0.265 | 2.66E-20 | NKT_UCBMC |
| EEF2               | 7.84E-25 | 0.46235498 | 0.839 | 0.631 | 2.78E-20 | NKT_UCBMC |
| MARCHF3            | 8.39E-25 | 1.03164508 | 0.368 | 0.181 | 2.97E-20 | NKT_UCBMC |
| GPR107             | 8.63E-25 | 0.84737878 | 0.415 | 0.22  | 3.06E-20 | NKT_UCBMC |

|                    |          |            |       |       |          |           |
|--------------------|----------|------------|-------|-------|----------|-----------|
| AQR                | 9.92E-25 | 0.86795895 | 0.423 | 0.222 | 3.51E-20 | NKT_UCBMC |
| PPP3CA             | 1.07E-24 | 0.55369542 | 0.726 | 0.486 | 3.81E-20 | NKT_UCBMC |
| CAPN7              | 1.08E-24 | 1.10017735 | 0.316 | 0.141 | 3.84E-20 | NKT_UCBMC |
| MTMR3              | 1.28E-24 | 0.77401089 | 0.384 | 0.189 | 4.55E-20 | NKT_UCBMC |
| LEF1               | 1.34E-24 | 0.49521256 | 0.749 | 0.506 | 4.74E-20 | NKT_UCBMC |
| TRIM33             | 1.38E-24 | 0.80527539 | 0.442 | 0.241 | 4.88E-20 | NKT_UCBMC |
| MAML3              | 1.58E-24 | 0.7336639  | 0.386 | 0.191 | 5.59E-20 | NKT_UCBMC |
| ENSMMUG00000059977 | 1.59E-24 | 1.11333781 | 0.277 | 0.11  | 5.64E-20 | NKT_UCBMC |
| SCML4              | 1.93E-24 | 0.62281528 | 0.606 | 0.38  | 6.82E-20 | NKT_UCBMC |
| SIPA1L1            | 2.21E-24 | 0.76061082 | 0.47  | 0.26  | 7.83E-20 | NKT_UCBMC |
| RPL4               | 2.72E-24 | 0.40297211 | 0.91  | 0.815 | 9.62E-20 | NKT_UCBMC |
| RPL26              | 2.72E-24 | 0.35815931 | 0.932 | 0.829 | 9.64E-20 | NKT_UCBMC |
| SNX9               | 3.08E-24 | 0.82372945 | 0.429 | 0.231 | 1.09E-19 | NKT_UCBMC |
| AKAP13             | 3.12E-24 | 0.4967     | 0.823 | 0.622 | 1.10E-19 | NKT_UCBMC |
| USP37              | 3.12E-24 | 0.98411539 | 0.385 | 0.198 | 1.11E-19 | NKT_UCBMC |
| MED15              | 3.17E-24 | 1.17726638 | 0.314 | 0.144 | 1.12E-19 | NKT_UCBMC |
| ATP2C1             | 3.26E-24 | 1.11470182 | 0.34  | 0.162 | 1.16E-19 | NKT_UCBMC |
| DPM1               | 3.54E-24 | 1.12345993 | 0.285 | 0.118 | 1.26E-19 | NKT_UCBMC |
| KDM7A              | 3.86E-24 | 1.0246074  | 0.322 | 0.149 | 1.37E-19 | NKT_UCBMC |
| COP1               | 3.86E-24 | 0.67701328 | 0.53  | 0.316 | 1.37E-19 | NKT_UCBMC |
| BDP1               | 4.09E-24 | 0.69300509 | 0.509 | 0.294 | 1.45E-19 | NKT_UCBMC |
| ARMC8              | 4.62E-24 | 1.01618906 | 0.376 | 0.191 | 1.64E-19 | NKT_UCBMC |
| ACSL3              | 5.02E-24 | 1.13879535 | 0.318 | 0.146 | 1.78E-19 | NKT_UCBMC |
| ATG5               | 5.06E-24 | 0.80207479 | 0.447 | 0.248 | 1.79E-19 | NKT_UCBMC |
| ARL8B              | 5.08E-24 | 1.07790487 | 0.348 | 0.168 | 1.80E-19 | NKT_UCBMC |
| ZNF609             | 5.56E-24 | 0.44144279 | 0.649 | 0.407 | 1.97E-19 | NKT_UCBMC |
| ROCK1              | 7.48E-24 | 0.54987527 | 0.681 | 0.456 | 2.65E-19 | NKT_UCBMC |
| ZNF407             | 8.71E-24 | 0.67436169 | 0.501 | 0.288 | 3.09E-19 | NKT_UCBMC |
| SMG6               | 9.38E-24 | 0.61833118 | 0.585 | 0.37  | 3.32E-19 | NKT_UCBMC |
| ABCG1              | 1.03E-23 | 1.03507438 | 0.375 | 0.194 | 3.65E-19 | NKT_UCBMC |
| CNST               | 1.03E-23 | 0.84308311 | 0.448 | 0.255 | 3.66E-19 | NKT_UCBMC |
| SEC24B             | 1.08E-23 | 0.66892258 | 0.452 | 0.252 | 3.83E-19 | NKT_UCBMC |
| HNRNPUL1           | 1.16E-23 | 0.7446394  | 0.466 | 0.264 | 4.12E-19 | NKT_UCBMC |

|                   |          |            |       |       |          |           |
|-------------------|----------|------------|-------|-------|----------|-----------|
| NUP214            | 1.27E-23 | 0.94587935 | 0.42  | 0.236 | 4.51E-19 | NKT_UCBMC |
| ITSN2             | 1.34E-23 | 0.52733406 | 0.655 | 0.429 | 4.76E-19 | NKT_UCBMC |
| ANKRD11           | 1.38E-23 | 0.44483302 | 0.648 | 0.414 | 4.88E-19 | NKT_UCBMC |
| MARCHF7           | 1.40E-23 | 0.61173607 | 0.577 | 0.364 | 4.96E-19 | NKT_UCBMC |
| SFSWAP            | 1.43E-23 | 0.86393383 | 0.444 | 0.252 | 5.07E-19 | NKT_UCBMC |
| TNKS2             | 1.93E-23 | 1.12482716 | 0.353 | 0.176 | 6.84E-19 | NKT_UCBMC |
| KDM3A             | 1.95E-23 | 1.05449309 | 0.331 | 0.157 | 6.91E-19 | NKT_UCBMC |
| CHD6              | 2.21E-23 | 0.71317395 | 0.49  | 0.285 | 7.84E-19 | NKT_UCBMC |
| ZBTB20            | 2.24E-23 | 0.46570859 | 0.714 | 0.482 | 7.94E-19 | NKT_UCBMC |
| MACO1             | 2.28E-23 | 0.89207138 | 0.43  | 0.236 | 8.08E-19 | NKT_UCBMC |
| TRPS1             | 2.81E-23 | 0.65835891 | 0.437 | 0.236 | 9.96E-19 | NKT_UCBMC |
| RNGTT             | 2.88E-23 | 0.74535216 | 0.466 | 0.268 | 1.02E-18 | NKT_UCBMC |
| SDHAF4            | 3.92E-23 | 0.60278633 | 0.609 | 0.387 | 1.39E-18 | NKT_UCBMC |
| CLASP1            | 4.14E-23 | 0.7196265  | 0.471 | 0.267 | 1.47E-18 | NKT_UCBMC |
| RAB8B             | 4.19E-23 | 0.48644946 | 0.806 | 0.592 | 1.48E-18 | NKT_UCBMC |
| ENSMUG00000055457 | 4.50E-23 | 0.66181758 | 0.541 | 0.332 | 1.59E-18 | NKT_UCBMC |
| MEF2A             | 4.53E-23 | 0.63481947 | 0.484 | 0.282 | 1.60E-18 | NKT_UCBMC |
| PCED1B            | 4.59E-23 | 1.04052419 | 0.285 | 0.121 | 1.63E-18 | NKT_UCBMC |
| ENSMUG00000003412 | 4.64E-23 | 0.30777583 | 0.966 | 0.939 | 1.64E-18 | NKT_UCBMC |
| PCCA              | 4.74E-23 | 0.74750707 | 0.461 | 0.266 | 1.68E-18 | NKT_UCBMC |
| ENSMUG00000028906 | 4.93E-23 | 0.54809384 | 0.683 | 0.451 | 1.75E-18 | NKT_UCBMC |
| ENSMUG00000021425 | 4.98E-23 | 0.79862755 | 0.385 | 0.197 | 1.76E-18 | NKT_UCBMC |
| HIPK1             | 6.23E-23 | 0.83819647 | 0.435 | 0.24  | 2.21E-18 | NKT_UCBMC |
| FNDC3A            | 6.26E-23 | 0.65316718 | 0.561 | 0.342 | 2.22E-18 | NKT_UCBMC |
| UBR4              | 6.28E-23 | 0.80674555 | 0.381 | 0.196 | 2.22E-18 | NKT_UCBMC |
| ZNF654            | 6.99E-23 | 1.00358759 | 0.349 | 0.172 | 2.48E-18 | NKT_UCBMC |
| SLC30A9           | 7.19E-23 | 0.88694424 | 0.401 | 0.216 | 2.55E-18 | NKT_UCBMC |
| SLU7              | 7.32E-23 | 0.9389706  | 0.367 | 0.187 | 2.59E-18 | NKT_UCBMC |
| CAND1             | 8.81E-23 | 0.75931187 | 0.47  | 0.274 | 3.12E-18 | NKT_UCBMC |
| ITPR2             | 8.97E-23 | 0.62028545 | 0.569 | 0.36  | 3.18E-18 | NKT_UCBMC |
| TRAPPC10          | 1.05E-22 | 0.83753144 | 0.421 | 0.232 | 3.72E-18 | NKT_UCBMC |
| PSEN1             | 1.07E-22 | 0.81478884 | 0.353 | 0.171 | 3.79E-18 | NKT_UCBMC |
| FUBP1             | 1.18E-22 | 0.63974508 | 0.551 | 0.339 | 4.17E-18 | NKT_UCBMC |

|                   |          |            |       |       |          |           |
|-------------------|----------|------------|-------|-------|----------|-----------|
| AGTPBP1           | 1.18E-22 | 0.72756391 | 0.52  | 0.319 | 4.17E-18 | NKT_UCBMC |
| GSPT1             | 1.23E-22 | 1.00529708 | 0.379 | 0.199 | 4.35E-18 | NKT_UCBMC |
| RAF1              | 1.38E-22 | 0.70713041 | 0.447 | 0.252 | 4.90E-18 | NKT_UCBMC |
| GPCPD1            | 1.42E-22 | 0.6303779  | 0.443 | 0.245 | 5.01E-18 | NKT_UCBMC |
| ATXN10            | 1.46E-22 | 0.64822214 | 0.562 | 0.352 | 5.19E-18 | NKT_UCBMC |
| TCEA1             | 1.50E-22 | 0.66271319 | 0.58  | 0.372 | 5.33E-18 | NKT_UCBMC |
| DHX40             | 1.57E-22 | 1.04256981 | 0.332 | 0.158 | 5.56E-18 | NKT_UCBMC |
| CUL5              | 1.62E-22 | 0.64692669 | 0.585 | 0.373 | 5.75E-18 | NKT_UCBMC |
| SELENOT           | 1.67E-22 | 1.05976228 | 0.326 | 0.16  | 5.93E-18 | NKT_UCBMC |
| ENSMUG00000012537 | 1.69E-22 | 0.78583345 | 0.487 | 0.29  | 5.99E-18 | NKT_UCBMC |
| STK38             | 1.99E-22 | 0.56657444 | 0.629 | 0.409 | 7.03E-18 | NKT_UCBMC |
| KDM2A             | 2.02E-22 | 0.50646891 | 0.594 | 0.372 | 7.15E-18 | NKT_UCBMC |
| SERINC1           | 2.19E-22 | 0.70603996 | 0.542 | 0.341 | 7.77E-18 | NKT_UCBMC |
| PPIG              | 2.41E-22 | 0.5692743  | 0.561 | 0.339 | 8.54E-18 | NKT_UCBMC |
| VTI1A             | 2.46E-22 | 0.54522815 | 0.594 | 0.375 | 8.70E-18 | NKT_UCBMC |
| DNAJC2            | 2.63E-22 | 0.69368417 | 0.467 | 0.264 | 9.31E-18 | NKT_UCBMC |
| TLK1              | 2.79E-22 | 0.55772482 | 0.653 | 0.436 | 9.88E-18 | NKT_UCBMC |
| RNF216            | 2.84E-22 | 0.59118912 | 0.527 | 0.314 | 1.01E-17 | NKT_UCBMC |
| HTT               | 2.90E-22 | 0.78560028 | 0.412 | 0.225 | 1.03E-17 | NKT_UCBMC |
| GPR89A            | 3.66E-22 | 0.97613507 | 0.314 | 0.148 | 1.30E-17 | NKT_UCBMC |
| ENSMUG00000060545 | 3.91E-22 | 0.68020372 | 0.442 | 0.244 | 1.39E-17 | NKT_UCBMC |
| YTHDC1            | 4.13E-22 | 0.63079438 | 0.568 | 0.365 | 1.47E-17 | NKT_UCBMC |
| EXOC6             | 4.23E-22 | 0.71911191 | 0.517 | 0.32  | 1.50E-17 | NKT_UCBMC |
| DHX9              | 4.87E-22 | 0.6694717  | 0.559 | 0.357 | 1.73E-17 | NKT_UCBMC |
| CEP85L            | 4.91E-22 | 0.54732221 | 0.553 | 0.343 | 1.74E-17 | NKT_UCBMC |
| FAF1              | 4.99E-22 | 0.63663259 | 0.554 | 0.35  | 1.77E-17 | NKT_UCBMC |
| VEZT              | 5.89E-22 | 1.20388686 | 0.307 | 0.144 | 2.09E-17 | NKT_UCBMC |
| FAM241A           | 5.99E-22 | 0.84642271 | 0.298 | 0.136 | 2.12E-17 | NKT_UCBMC |
| WASL              | 6.22E-22 | 0.83282508 | 0.425 | 0.238 | 2.20E-17 | NKT_UCBMC |
| RAD21             | 6.22E-22 | 0.59229121 | 0.562 | 0.343 | 2.20E-17 | NKT_UCBMC |
| WDR70             | 7.54E-22 | 0.6956667  | 0.557 | 0.357 | 2.67E-17 | NKT_UCBMC |
| SRSF4             | 8.51E-22 | 0.6154102  | 0.536 | 0.331 | 3.02E-17 | NKT_UCBMC |
| CAMTA1            | 9.17E-22 | 0.68685891 | 0.566 | 0.359 | 3.25E-17 | NKT_UCBMC |

|                   |          |            |       |       |          |           |
|-------------------|----------|------------|-------|-------|----------|-----------|
| KLF3              | 9.65E-22 | 0.83380981 | 0.386 | 0.201 | 3.42E-17 | NKT_UCBMC |
| SREBF2            | 1.10E-21 | 1.01755402 | 0.361 | 0.188 | 3.90E-17 | NKT_UCBMC |
| EWSR1             | 1.11E-21 | 0.64086951 | 0.491 | 0.291 | 3.93E-17 | NKT_UCBMC |
| RNF4              | 1.17E-21 | 1.21117308 | 0.311 | 0.154 | 4.14E-17 | NKT_UCBMC |
| SF3B2             | 1.21E-21 | 0.86827893 | 0.399 | 0.218 | 4.30E-17 | NKT_UCBMC |
| RBM25             | 1.23E-21 | 0.62657917 | 0.575 | 0.36  | 4.36E-17 | NKT_UCBMC |
| NT5C2             | 1.57E-21 | 0.71229383 | 0.467 | 0.277 | 5.56E-17 | NKT_UCBMC |
| ENSMUG00000060229 | 1.58E-21 | 0.86781482 | 0.396 | 0.217 | 5.59E-17 | NKT_UCBMC |
| PREP              | 1.59E-21 | 0.92246742 | 0.36  | 0.186 | 5.64E-17 | NKT_UCBMC |
| SIAH1             | 1.68E-21 | 1.04199427 | 0.282 | 0.125 | 5.97E-17 | NKT_UCBMC |
| EML4              | 1.85E-21 | 0.12795506 | 0.87  | 0.66  | 6.54E-17 | NKT_UCBMC |
| VPS4B             | 1.92E-21 | 0.72464724 | 0.397 | 0.211 | 6.81E-17 | NKT_UCBMC |
| PRIM2             | 2.17E-21 | 1.1000384  | 0.316 | 0.152 | 7.68E-17 | NKT_UCBMC |
| RNF145            | 2.18E-21 | 0.68445019 | 0.516 | 0.318 | 7.71E-17 | NKT_UCBMC |
| AFF4              | 2.27E-21 | 0.91205412 | 0.376 | 0.202 | 8.03E-17 | NKT_UCBMC |
| WBP11             | 2.27E-21 | 0.83797768 | 0.419 | 0.233 | 8.03E-17 | NKT_UCBMC |
| TRAF3             | 2.74E-21 | 0.59820965 | 0.453 | 0.254 | 9.69E-17 | NKT_UCBMC |
| NBR1              | 2.96E-21 | 0.66842596 | 0.49  | 0.291 | 1.05E-16 | NKT_UCBMC |
| GABPB1            | 3.13E-21 | 0.75276816 | 0.422 | 0.239 | 1.11E-16 | NKT_UCBMC |
| ENSMUG00000022610 | 3.25E-21 | 0.55310003 | 0.515 | 0.301 | 1.15E-16 | NKT_UCBMC |
| MANBA             | 3.30E-21 | 0.6043039  | 0.546 | 0.332 | 1.17E-16 | NKT_UCBMC |
| LRBA              | 3.52E-21 | 0.39921646 | 0.724 | 0.481 | 1.25E-16 | NKT_UCBMC |
| ADNP              | 4.00E-21 | 0.8261645  | 0.402 | 0.221 | 1.42E-16 | NKT_UCBMC |
| ATP2A2            | 4.11E-21 | 0.86368676 | 0.394 | 0.219 | 1.46E-16 | NKT_UCBMC |
| CSNK1G3           | 4.25E-21 | 0.77341129 | 0.414 | 0.23  | 1.51E-16 | NKT_UCBMC |
| PLEKHB2           | 4.40E-21 | 0.75668228 | 0.386 | 0.201 | 1.56E-16 | NKT_UCBMC |
| TCF12             | 4.45E-21 | 0.41541481 | 0.724 | 0.493 | 1.58E-16 | NKT_UCBMC |
| CDC73             | 4.67E-21 | 0.68249887 | 0.458 | 0.265 | 1.65E-16 | NKT_UCBMC |
| SP3               | 4.67E-21 | 0.86460319 | 0.404 | 0.226 | 1.65E-16 | NKT_UCBMC |
| GPHN              | 5.32E-21 | 0.89666527 | 0.376 | 0.201 | 1.88E-16 | NKT_UCBMC |
| MED13L            | 5.65E-21 | 0.37097865 | 0.787 | 0.545 | 2.00E-16 | NKT_UCBMC |
| PI4K2B            | 5.93E-21 | 0.46686515 | 0.721 | 0.507 | 2.10E-16 | NKT_UCBMC |
| ITK               | 6.18E-21 | 0.40940774 | 0.736 | 0.508 | 2.19E-16 | NKT_UCBMC |

|                   |          |            |       |       |          |           |
|-------------------|----------|------------|-------|-------|----------|-----------|
| YTHDF3            | 6.42E-21 | 0.68498104 | 0.454 | 0.269 | 2.28E-16 | NKT_UCBMC |
| TAF2              | 7.41E-21 | 1.07734439 | 0.292 | 0.137 | 2.62E-16 | NKT_UCBMC |
| DNM1L             | 7.51E-21 | 0.76083261 | 0.378 | 0.199 | 2.66E-16 | NKT_UCBMC |
| DDX3Y             | 8.24E-21 | 0.42057132 | 0.509 | 0.285 | 2.92E-16 | NKT_UCBMC |
| HOOK3             | 8.56E-21 | 0.53290197 | 0.609 | 0.397 | 3.03E-16 | NKT_UCBMC |
| ASB3              | 9.70E-21 | 0.87362059 | 0.349 | 0.18  | 3.44E-16 | NKT_UCBMC |
| LDLRAD4           | 9.72E-21 | 0.82907345 | 0.373 | 0.204 | 3.44E-16 | NKT_UCBMC |
| DAAM1             | 1.01E-20 | 1.00284907 | 0.352 | 0.185 | 3.59E-16 | NKT_UCBMC |
| GALNT11           | 1.06E-20 | 0.91984475 | 0.328 | 0.165 | 3.77E-16 | NKT_UCBMC |
| KIZ               | 1.12E-20 | 0.85738509 | 0.316 | 0.153 | 3.96E-16 | NKT_UCBMC |
| ATL2              | 1.20E-20 | 0.71709484 | 0.364 | 0.189 | 4.25E-16 | NKT_UCBMC |
| C18H18orf25       | 1.21E-20 | 0.79835352 | 0.364 | 0.191 | 4.29E-16 | NKT_UCBMC |
| ENSMUG00000053384 | 1.22E-20 | 1.27137928 | 0.267 | 0.12  | 4.33E-16 | NKT_UCBMC |
| ACIN1             | 1.25E-20 | 0.62964782 | 0.539 | 0.348 | 4.43E-16 | NKT_UCBMC |
| ANKRD28           | 1.52E-20 | 0.670524   | 0.445 | 0.252 | 5.38E-16 | NKT_UCBMC |
| ERN1              | 1.55E-20 | 0.71487522 | 0.47  | 0.276 | 5.50E-16 | NKT_UCBMC |
| RAP1B             | 2.00E-20 | 0.48420377 | 0.822 | 0.612 | 7.10E-16 | NKT_UCBMC |
| HERC2             | 2.44E-20 | 0.86868409 | 0.375 | 0.206 | 8.63E-16 | NKT_UCBMC |
| MLLT3             | 2.51E-20 | 0.45305115 | 0.594 | 0.373 | 8.90E-16 | NKT_UCBMC |
| NUP153            | 2.57E-20 | 0.59699596 | 0.494 | 0.299 | 9.11E-16 | NKT_UCBMC |
| KLHL2             | 2.79E-20 | 0.82560885 | 0.324 | 0.16  | 9.88E-16 | NKT_UCBMC |
| FAM13A            | 2.83E-20 | 1.11389474 | 0.281 | 0.128 | 1.00E-15 | NKT_UCBMC |
| RASA3             | 2.94E-20 | 0.82040667 | 0.447 | 0.271 | 1.04E-15 | NKT_UCBMC |
| CIR1              | 3.13E-20 | 0.5980804  | 0.441 | 0.245 | 1.11E-15 | NKT_UCBMC |
| TXLNG             | 3.21E-20 | 0.90515791 | 0.359 | 0.192 | 1.14E-15 | NKT_UCBMC |
| C20H16orf72       | 3.22E-20 | 0.61348808 | 0.464 | 0.275 | 1.14E-15 | NKT_UCBMC |
| EFR3A             | 3.60E-20 | 0.69393649 | 0.406 | 0.225 | 1.28E-15 | NKT_UCBMC |
| TNIK              | 3.81E-20 | 0.30810637 | 0.818 | 0.565 | 1.35E-15 | NKT_UCBMC |
| SNX13             | 4.04E-20 | 0.90758904 | 0.373 | 0.203 | 1.43E-15 | NKT_UCBMC |
| DDX52             | 4.10E-20 | 0.82041331 | 0.353 | 0.187 | 1.45E-15 | NKT_UCBMC |
| ENSMUG00000046264 | 4.25E-20 | 0.63260861 | 0.419 | 0.239 | 1.51E-15 | NKT_UCBMC |
| MAPK1             | 4.36E-20 | 0.6566849  | 0.431 | 0.249 | 1.55E-15 | NKT_UCBMC |
| CMTR1             | 5.07E-20 | 0.81389883 | 0.351 | 0.183 | 1.80E-15 | NKT_UCBMC |

|                    |          |            |       |       |          |           |
|--------------------|----------|------------|-------|-------|----------|-----------|
| ENSMMUG00000051957 | 5.34E-20 | 1.08687351 | 0.311 | 0.159 | 1.89E-15 | NKT_UCBMC |
| NAA25              | 5.49E-20 | 1.00702542 | 0.318 | 0.162 | 1.94E-15 | NKT_UCBMC |
| SETD7              | 5.65E-20 | 0.92125644 | 0.329 | 0.168 | 2.00E-15 | NKT_UCBMC |
| ZNF827             | 6.60E-20 | 0.72336239 | 0.472 | 0.288 | 2.34E-15 | NKT_UCBMC |
| PPHLN1             | 7.09E-20 | 0.64612963 | 0.533 | 0.343 | 2.51E-15 | NKT_UCBMC |
| OGA                | 7.27E-20 | 0.50753644 | 0.594 | 0.379 | 2.58E-15 | NKT_UCBMC |
| DIAPH2             | 8.34E-20 | 0.42981173 | 0.55  | 0.341 | 2.96E-15 | NKT_UCBMC |
| CWC25              | 9.04E-20 | 0.75665731 | 0.337 | 0.17  | 3.20E-15 | NKT_UCBMC |
| IFT80              | 9.57E-20 | 0.72569413 | 0.385 | 0.213 | 3.39E-15 | NKT_UCBMC |
| ZNF410             | 9.81E-20 | 0.96008884 | 0.272 | 0.124 | 3.47E-15 | NKT_UCBMC |
| TTC17              | 1.10E-19 | 0.66365888 | 0.444 | 0.259 | 3.90E-15 | NKT_UCBMC |
| USP10              | 1.21E-19 | 0.58892777 | 0.521 | 0.33  | 4.30E-15 | NKT_UCBMC |
| GATAD2B            | 1.26E-19 | 0.52638703 | 0.509 | 0.315 | 4.47E-15 | NKT_UCBMC |
| KDM4C              | 1.28E-19 | 0.51179133 | 0.601 | 0.399 | 4.53E-15 | NKT_UCBMC |
| CD44               | 1.40E-19 | 0.26036557 | 0.867 | 0.667 | 4.96E-15 | NKT_UCBMC |
| LRRFIP1            | 1.48E-19 | 0.64125503 | 0.575 | 0.375 | 5.24E-15 | NKT_UCBMC |
| CASP8              | 1.62E-19 | 0.56379306 | 0.585 | 0.385 | 5.74E-15 | NKT_UCBMC |
| GGNBP2             | 1.73E-19 | 0.64860972 | 0.421 | 0.244 | 6.13E-15 | NKT_UCBMC |
| RBM23              | 1.85E-19 | 0.85941129 | 0.312 | 0.153 | 6.55E-15 | NKT_UCBMC |
| PTPN4              | 1.91E-19 | 0.61422322 | 0.443 | 0.26  | 6.76E-15 | NKT_UCBMC |
| TBL1XR1            | 2.05E-19 | 0.39549424 | 0.705 | 0.487 | 7.25E-15 | NKT_UCBMC |
| SNIP1              | 2.12E-19 | 0.95460352 | 0.292 | 0.14  | 7.51E-15 | NKT_UCBMC |
| TUT7               | 2.20E-19 | 0.60332656 | 0.542 | 0.35  | 7.80E-15 | NKT_UCBMC |
| PNPLA8             | 2.34E-19 | 0.56164386 | 0.467 | 0.279 | 8.29E-15 | NKT_UCBMC |
| DNAJC7             | 2.40E-19 | 0.68388866 | 0.39  | 0.215 | 8.51E-15 | NKT_UCBMC |
| MGAT5              | 2.53E-19 | 0.43530501 | 0.604 | 0.399 | 8.98E-15 | NKT_UCBMC |
| ZC3H7A             | 2.57E-19 | 0.93176932 | 0.279 | 0.13  | 9.10E-15 | NKT_UCBMC |
| RNF13              | 2.66E-19 | 0.72986642 | 0.458 | 0.274 | 9.41E-15 | NKT_UCBMC |
| LIMK2              | 2.95E-19 | 1.10193988 | 0.282 | 0.135 | 1.04E-14 | NKT_UCBMC |
| ZRANB1             | 2.97E-19 | 0.96317339 | 0.283 | 0.133 | 1.05E-14 | NKT_UCBMC |
| WDR44              | 3.01E-19 | 0.91680407 | 0.345 | 0.183 | 1.07E-14 | NKT_UCBMC |
| METTL16            | 3.12E-19 | 0.98502056 | 0.307 | 0.156 | 1.11E-14 | NKT_UCBMC |
| ADD3               | 3.19E-19 | 0.40191721 | 0.691 | 0.466 | 1.13E-14 | NKT_UCBMC |



|          |          |            |       |       |          |           |
|----------|----------|------------|-------|-------|----------|-----------|
| RIPOR2   | 3.47E-19 | 0.30616268 | 0.924 | 0.745 | 1.23E-14 | NKT_UCBMC |
| ILKAP    | 3.56E-19 | 0.68735903 | 0.433 | 0.258 | 1.26E-14 | NKT_UCBMC |
| CPSF3    | 3.71E-19 | 0.84946419 | 0.349 | 0.185 | 1.32E-14 | NKT_UCBMC |
| PPP4R3A  | 3.86E-19 | 0.68722143 | 0.389 | 0.213 | 1.37E-14 | NKT_UCBMC |
| BCAS3    | 4.01E-19 | 0.46319295 | 0.537 | 0.333 | 1.42E-14 | NKT_UCBMC |
| CMAH     | 4.52E-19 | 0.70858817 | 0.418 | 0.239 | 1.60E-14 | NKT_UCBMC |
| PKN2     | 4.58E-19 | 0.55390093 | 0.5   | 0.309 | 1.62E-14 | NKT_UCBMC |
| CACUL1   | 4.62E-19 | 0.85630603 | 0.282 | 0.134 | 1.64E-14 | NKT_UCBMC |
| ZNF451   | 5.02E-19 | 0.69454819 | 0.456 | 0.28  | 1.78E-14 | NKT_UCBMC |
| MAX      | 5.16E-19 | 0.57066077 | 0.524 | 0.327 | 1.83E-14 | NKT_UCBMC |
| CLINT1   | 6.74E-19 | 0.45764808 | 0.721 | 0.511 | 2.39E-14 | NKT_UCBMC |
| FXR1     | 7.01E-19 | 0.58556514 | 0.569 | 0.371 | 2.48E-14 | NKT_UCBMC |
| SRPK2    | 7.25E-19 | 0.44372434 | 0.585 | 0.384 | 2.57E-14 | NKT_UCBMC |
| CARMIL1  | 7.78E-19 | 0.70740494 | 0.394 | 0.22  | 2.76E-14 | NKT_UCBMC |
| ITGA6    | 7.80E-19 | 0.52311944 | 0.522 | 0.331 | 2.76E-14 | NKT_UCBMC |
| FBXL5    | 8.71E-19 | 0.8332948  | 0.34  | 0.176 | 3.09E-14 | NKT_UCBMC |
| PRKCQ    | 9.29E-19 | 0.53897531 | 0.56  | 0.362 | 3.29E-14 | NKT_UCBMC |
| PRKCB    | 9.81E-19 | 0.57255046 | 0.538 | 0.347 | 3.47E-14 | NKT_UCBMC |
| PLCL2    | 1.03E-18 | 0.58086158 | 0.532 | 0.34  | 3.64E-14 | NKT_UCBMC |
| RABGAP1L | 1.22E-18 | 0.26980412 | 0.779 | 0.547 | 4.34E-14 | NKT_UCBMC |
| KDM1A    | 1.30E-18 | 0.8926428  | 0.316 | 0.16  | 4.61E-14 | NKT_UCBMC |
| APPBP2   | 1.33E-18 | 0.85177207 | 0.332 | 0.177 | 4.72E-14 | NKT_UCBMC |
| LRRFIP2  | 1.36E-18 | 0.89776625 | 0.331 | 0.175 | 4.81E-14 | NKT_UCBMC |
| TAF15    | 1.76E-18 | 0.45007323 | 0.587 | 0.379 | 6.24E-14 | NKT_UCBMC |
| CHIC2    | 1.88E-18 | 0.68488418 | 0.418 | 0.242 | 6.68E-14 | NKT_UCBMC |
| PRKD3    | 1.98E-18 | 0.50697993 | 0.585 | 0.386 | 7.00E-14 | NKT_UCBMC |
| SOS2     | 1.98E-18 | 1.05664363 | 0.307 | 0.158 | 7.03E-14 | NKT_UCBMC |
| RHOH     | 2.11E-18 | 0.3566194  | 0.709 | 0.511 | 7.47E-14 | NKT_UCBMC |
| NAE1     | 2.14E-18 | 0.9120978  | 0.304 | 0.152 | 7.59E-14 | NKT_UCBMC |
| PSMD12   | 2.24E-18 | 0.52719029 | 0.584 | 0.392 | 7.92E-14 | NKT_UCBMC |
| SEC22B   | 2.53E-18 | 0.79054278 | 0.304 | 0.151 | 8.98E-14 | NKT_UCBMC |
| SMYD3    | 2.61E-18 | 0.46087079 | 0.536 | 0.341 | 9.25E-14 | NKT_UCBMC |
| WARS2    | 2.81E-18 | 1.02970462 | 0.289 | 0.143 | 9.97E-14 | NKT_UCBMC |

|                    |          |            |       |       |          |           |
|--------------------|----------|------------|-------|-------|----------|-----------|
| TMEM106B           | 2.84E-18 | 1.17504732 | 0.263 | 0.124 | 1.01E-13 | NKT_UCBMC |
| ADIPOR1            | 3.01E-18 | 0.86989328 | 0.273 | 0.127 | 1.07E-13 | NKT_UCBMC |
| LRRC8C             | 3.07E-18 | 1.00400277 | 0.28  | 0.135 | 1.09E-13 | NKT_UCBMC |
| NDUFA9             | 3.39E-18 | 0.79543649 | 0.352 | 0.189 | 1.20E-13 | NKT_UCBMC |
| PRDM2              | 3.45E-18 | 0.58513135 | 0.406 | 0.239 | 1.22E-13 | NKT_UCBMC |
| ZZZ3               | 3.45E-18 | 0.58059461 | 0.443 | 0.267 | 1.22E-13 | NKT_UCBMC |
| RPRD2              | 3.90E-18 | 0.62887522 | 0.44  | 0.267 | 1.38E-13 | NKT_UCBMC |
| FAM118A            | 4.12E-18 | 0.8084371  | 0.282 | 0.136 | 1.46E-13 | NKT_UCBMC |
| TMEM135            | 4.13E-18 | 0.79564437 | 0.319 | 0.163 | 1.46E-13 | NKT_UCBMC |
| MED25              | 4.26E-18 | 0.98390207 | 0.301 | 0.153 | 1.51E-13 | NKT_UCBMC |
| PPP1R12B           | 4.36E-18 | 1.07383553 | 0.291 | 0.147 | 1.54E-13 | NKT_UCBMC |
| ENSMUG00000006778  | 4.47E-18 | 0.4659257  | 0.529 | 0.334 | 1.58E-13 | NKT_UCBMC |
| RUNX1              | 4.49E-18 | 0.23360742 | 0.681 | 0.455 | 1.59E-13 | NKT_UCBMC |
| ATP5PB             | 4.53E-18 | 0.69743479 | 0.436 | 0.261 | 1.61E-13 | NKT_UCBMC |
| CDK17              | 4.62E-18 | 0.31048013 | 0.666 | 0.452 | 1.64E-13 | NKT_UCBMC |
| MAN1A2             | 4.79E-18 | 0.58289104 | 0.418 | 0.24  | 1.70E-13 | NKT_UCBMC |
| KPNA6              | 4.92E-18 | 0.83660263 | 0.3   | 0.151 | 1.74E-13 | NKT_UCBMC |
| HACE1              | 4.99E-18 | 0.92252845 | 0.343 | 0.188 | 1.77E-13 | NKT_UCBMC |
| SLC25A26           | 5.18E-18 | 0.81197919 | 0.361 | 0.204 | 1.84E-13 | NKT_UCBMC |
| CEP295             | 5.37E-18 | 0.83896184 | 0.293 | 0.146 | 1.90E-13 | NKT_UCBMC |
| CPSF6              | 5.40E-18 | 0.62071824 | 0.451 | 0.264 | 1.92E-13 | NKT_UCBMC |
| WDR26              | 5.59E-18 | 0.65532382 | 0.424 | 0.248 | 1.98E-13 | NKT_UCBMC |
| LPIN2              | 5.61E-18 | 0.7693255  | 0.422 | 0.252 | 1.99E-13 | NKT_UCBMC |
| ARHGAP17           | 5.87E-18 | 0.87891401 | 0.271 | 0.13  | 2.08E-13 | NKT_UCBMC |
| ENSMUG000000055687 | 6.61E-18 | 0.71520588 | 0.437 | 0.267 | 2.34E-13 | NKT_UCBMC |
| GSTT1              | 6.99E-18 | 0.87225678 | 0.279 | 0.133 | 2.48E-13 | NKT_UCBMC |
| ATG16L1            | 7.06E-18 | 1.08631704 | 0.252 | 0.117 | 2.50E-13 | NKT_UCBMC |
| CBLL1              | 7.16E-18 | 0.76451267 | 0.31  | 0.157 | 2.54E-13 | NKT_UCBMC |
| ENSMUG00000006293  | 7.27E-18 | 0.50850896 | 0.558 | 0.366 | 2.57E-13 | NKT_UCBMC |
| GALNT1             | 7.54E-18 | 0.83675005 | 0.284 | 0.139 | 2.67E-13 | NKT_UCBMC |
| ADGRE5             | 7.88E-18 | 0.2444548  | 0.614 | 0.402 | 2.79E-13 | NKT_UCBMC |
| SIN3A              | 7.91E-18 | 0.86226846 | 0.344 | 0.188 | 2.80E-13 | NKT_UCBMC |
| RLIM               | 8.14E-18 | 0.85633781 | 0.335 | 0.181 | 2.88E-13 | NKT_UCBMC |

|                    |          |            |       |       |          |           |
|--------------------|----------|------------|-------|-------|----------|-----------|
| AKAP9              | 8.53E-18 | 0.48370907 | 0.601 | 0.406 | 3.02E-13 | NKT_UCBMC |
| WDR7               | 8.54E-18 | 0.67723159 | 0.418 | 0.253 | 3.03E-13 | NKT_UCBMC |
| ENSMMUG00000065373 | 8.62E-18 | 0.1500823  | 0.955 | 0.847 | 3.05E-13 | NKT_UCBMC |
| MRTFB              | 8.97E-18 | 0.9934073  | 0.255 | 0.117 | 3.18E-13 | NKT_UCBMC |
| ENSMMUG00000059742 | 9.32E-18 | 0.49555637 | 0.494 | 0.312 | 3.30E-13 | NKT_UCBMC |
| XPO7               | 9.86E-18 | 0.95380334 | 0.312 | 0.161 | 3.49E-13 | NKT_UCBMC |
| MICU2              | 1.00E-17 | 0.61403868 | 0.412 | 0.242 | 3.55E-13 | NKT_UCBMC |
| TAB2               | 1.04E-17 | 0.68978602 | 0.427 | 0.253 | 3.69E-13 | NKT_UCBMC |
| DBF4               | 1.07E-17 | 1.000462   | 0.25  | 0.114 | 3.78E-13 | NKT_UCBMC |
| HSD17B4            | 1.08E-17 | 0.46713254 | 0.68  | 0.492 | 3.84E-13 | NKT_UCBMC |
| SMURF1             | 1.10E-17 | 1.03345728 | 0.264 | 0.125 | 3.89E-13 | NKT_UCBMC |
| QRICH1             | 1.16E-17 | 0.75429129 | 0.373 | 0.207 | 4.11E-13 | NKT_UCBMC |
| CFLAR              | 1.27E-17 | 0.50251788 | 0.519 | 0.335 | 4.52E-13 | NKT_UCBMC |
| SCMH1              | 1.29E-17 | 0.81390371 | 0.342 | 0.183 | 4.58E-13 | NKT_UCBMC |
| PSME4              | 1.37E-17 | 0.50912018 | 0.536 | 0.347 | 4.85E-13 | NKT_UCBMC |
| MED13              | 1.42E-17 | 0.77070183 | 0.399 | 0.239 | 5.04E-13 | NKT_UCBMC |
| VPS36              | 1.47E-17 | 0.7596418  | 0.316 | 0.165 | 5.22E-13 | NKT_UCBMC |
| CD96               | 1.49E-17 | 0.54942329 | 0.554 | 0.368 | 5.27E-13 | NKT_UCBMC |
| KPNA4              | 1.52E-17 | 0.87056284 | 0.316 | 0.167 | 5.39E-13 | NKT_UCBMC |
| MORF4L1            | 1.64E-17 | 0.41707972 | 0.757 | 0.558 | 5.81E-13 | NKT_UCBMC |
| PAFAH1B1           | 1.69E-17 | 0.49490023 | 0.597 | 0.403 | 5.97E-13 | NKT_UCBMC |
| DNTTIP2            | 1.72E-17 | 0.70289785 | 0.379 | 0.218 | 6.09E-13 | NKT_UCBMC |
| ATP1B3             | 1.77E-17 | 0.58969303 | 0.485 | 0.303 | 6.28E-13 | NKT_UCBMC |
| SEC14L1            | 1.94E-17 | 0.56434132 | 0.369 | 0.203 | 6.89E-13 | NKT_UCBMC |
| PRRC2C             | 1.98E-17 | 0.37617096 | 0.763 | 0.555 | 7.00E-13 | NKT_UCBMC |
| ANAPC10            | 2.01E-17 | 0.74597281 | 0.369 | 0.206 | 7.13E-13 | NKT_UCBMC |
| TAF3               | 2.07E-17 | 0.58098226 | 0.446 | 0.272 | 7.32E-13 | NKT_UCBMC |
| HERC3              | 2.08E-17 | 0.59078678 | 0.434 | 0.258 | 7.37E-13 | NKT_UCBMC |
| KAT6A              | 2.13E-17 | 0.35819871 | 0.669 | 0.475 | 7.56E-13 | NKT_UCBMC |
| CWC15              | 2.17E-17 | 0.49678878 | 0.547 | 0.351 | 7.71E-13 | NKT_UCBMC |
| NCAPD3             | 2.20E-17 | 0.74574829 | 0.327 | 0.172 | 7.81E-13 | NKT_UCBMC |
| PRKX               | 2.24E-17 | 0.39172724 | 0.597 | 0.394 | 7.94E-13 | NKT_UCBMC |
| TCP11L2            | 2.27E-17 | 0.5957262  | 0.37  | 0.201 | 8.05E-13 | NKT_UCBMC |

|                   |          |            |       |       |          |           |
|-------------------|----------|------------|-------|-------|----------|-----------|
| AAK1              | 2.36E-17 | 0.37777169 | 0.647 | 0.432 | 8.38E-13 | NKT_UCBMC |
| LNPEP             | 2.40E-17 | 0.58327269 | 0.495 | 0.318 | 8.51E-13 | NKT_UCBMC |
| RANBP2            | 2.82E-17 | 0.41536502 | 0.602 | 0.4   | 9.98E-13 | NKT_UCBMC |
| MAP2K5            | 2.95E-17 | 0.9280202  | 0.319 | 0.169 | 1.04E-12 | NKT_UCBMC |
| PDK1              | 3.00E-17 | 0.83167991 | 0.354 | 0.201 | 1.06E-12 | NKT_UCBMC |
| DOCK8             | 3.26E-17 | 0.43918541 | 0.648 | 0.439 | 1.16E-12 | NKT_UCBMC |
| CAST              | 3.60E-17 | 0.62286831 | 0.506 | 0.324 | 1.28E-12 | NKT_UCBMC |
| RABGEF1           | 3.66E-17 | 0.58003932 | 0.397 | 0.231 | 1.30E-12 | NKT_UCBMC |
| IP6K2             | 3.68E-17 | 0.72026569 | 0.345 | 0.19  | 1.30E-12 | NKT_UCBMC |
| OSER1             | 3.79E-17 | 0.66365255 | 0.328 | 0.172 | 1.34E-12 | NKT_UCBMC |
| TOX4              | 3.94E-17 | 0.80047065 | 0.366 | 0.209 | 1.40E-12 | NKT_UCBMC |
| DYM               | 4.08E-17 | 0.67544851 | 0.403 | 0.239 | 1.45E-12 | NKT_UCBMC |
| G2E3              | 4.18E-17 | 0.89423913 | 0.286 | 0.143 | 1.48E-12 | NKT_UCBMC |
| LARP4             | 4.75E-17 | 0.79942041 | 0.384 | 0.224 | 1.68E-12 | NKT_UCBMC |
| FAM168B           | 5.00E-17 | 0.87966214 | 0.313 | 0.162 | 1.77E-12 | NKT_UCBMC |
| NBEA              | 5.20E-17 | 0.90254502 | 0.332 | 0.182 | 1.84E-12 | NKT_UCBMC |
| MCM9              | 5.30E-17 | 0.82465996 | 0.301 | 0.156 | 1.88E-12 | NKT_UCBMC |
| HECTD4            | 5.54E-17 | 0.63249809 | 0.391 | 0.227 | 1.96E-12 | NKT_UCBMC |
| SELENOI           | 5.94E-17 | 0.79244298 | 0.305 | 0.16  | 2.11E-12 | NKT_UCBMC |
| NPAT              | 5.96E-17 | 0.57755657 | 0.461 | 0.293 | 2.11E-12 | NKT_UCBMC |
| PDS5B             | 6.08E-17 | 0.57962405 | 0.454 | 0.282 | 2.15E-12 | NKT_UCBMC |
| NSMCE2            | 6.12E-17 | 0.53851865 | 0.472 | 0.3   | 2.17E-12 | NKT_UCBMC |
| MED27             | 7.37E-17 | 0.75129953 | 0.361 | 0.21  | 2.61E-12 | NKT_UCBMC |
| ABCB7             | 7.46E-17 | 0.9484653  | 0.278 | 0.138 | 2.64E-12 | NKT_UCBMC |
| ELF2              | 7.63E-17 | 0.59585236 | 0.403 | 0.236 | 2.70E-12 | NKT_UCBMC |
| BTBD10            | 7.75E-17 | 0.98727875 | 0.276 | 0.136 | 2.74E-12 | NKT_UCBMC |
| ENSMUG00000062103 | 7.83E-17 | 0.30087114 | 0.564 | 0.366 | 2.77E-12 | NKT_UCBMC |
| AGO2              | 8.73E-17 | 0.55848023 | 0.415 | 0.246 | 3.09E-12 | NKT_UCBMC |
| NONO              | 8.77E-17 | 0.57982154 | 0.493 | 0.315 | 3.11E-12 | NKT_UCBMC |
| CEBPZ             | 9.08E-17 | 0.51419853 | 0.482 | 0.295 | 3.22E-12 | NKT_UCBMC |
| YLPM1             | 9.12E-17 | 0.79134545 | 0.307 | 0.162 | 3.23E-12 | NKT_UCBMC |
| C20H16orf87       | 9.30E-17 | 0.7573341  | 0.308 | 0.162 | 3.29E-12 | NKT_UCBMC |
| NAPG              | 9.39E-17 | 0.8604754  | 0.322 | 0.173 | 3.33E-12 | NKT_UCBMC |

|                   |          |            |       |       |          |           |
|-------------------|----------|------------|-------|-------|----------|-----------|
| FMC1-LUC7L2       | 9.44E-17 | 0.49490735 | 0.687 | 0.488 | 3.34E-12 | NKT_UCBMC |
| ENSMUG00000058755 | 9.68E-17 | 0.24970359 | 0.969 | 0.936 | 3.43E-12 | NKT_UCBMC |
| FNBP1             | 1.23E-16 | 0.29470283 | 0.844 | 0.619 | 4.36E-12 | NKT_UCBMC |
| ECPAS             | 1.32E-16 | 0.81144894 | 0.359 | 0.207 | 4.68E-12 | NKT_UCBMC |
| APLP2             | 1.35E-16 | 0.87713115 | 0.307 | 0.162 | 4.77E-12 | NKT_UCBMC |
| MPHOSPH8          | 1.38E-16 | 0.5416266  | 0.491 | 0.315 | 4.90E-12 | NKT_UCBMC |
| COPB1             | 1.51E-16 | 0.77379959 | 0.346 | 0.193 | 5.35E-12 | NKT_UCBMC |
| CNOT10            | 1.56E-16 | 0.74036859 | 0.308 | 0.165 | 5.52E-12 | NKT_UCBMC |
| KLHL23            | 1.63E-16 | 0.41589518 | 0.73  | 0.525 | 5.76E-12 | NKT_UCBMC |
| CSPP1             | 1.69E-16 | 0.84528683 | 0.328 | 0.181 | 5.98E-12 | NKT_UCBMC |
| RALA              | 1.72E-16 | 0.6432403  | 0.379 | 0.217 | 6.10E-12 | NKT_UCBMC |
| PIP5K1A           | 1.81E-16 | 0.67970049 | 0.393 | 0.232 | 6.41E-12 | NKT_UCBMC |
| TRIB2             | 1.87E-16 | 0.50761999 | 0.548 | 0.36  | 6.61E-12 | NKT_UCBMC |
| USP8              | 1.94E-16 | 0.76942183 | 0.31  | 0.166 | 6.89E-12 | NKT_UCBMC |
| PPP2R2A           | 2.04E-16 | 0.58485097 | 0.485 | 0.312 | 7.23E-12 | NKT_UCBMC |
| SEC22A            | 2.08E-16 | 0.90735174 | 0.263 | 0.129 | 7.36E-12 | NKT_UCBMC |
| DNAJC3            | 2.17E-16 | 0.57234927 | 0.464 | 0.291 | 7.67E-12 | NKT_UCBMC |
| UBR3              | 2.39E-16 | 0.6557828  | 0.42  | 0.259 | 8.46E-12 | NKT_UCBMC |
| YAF2              | 2.54E-16 | 0.52973632 | 0.506 | 0.327 | 9.01E-12 | NKT_UCBMC |
| APP               | 2.58E-16 | 0.61558309 | 0.413 | 0.252 | 9.13E-12 | NKT_UCBMC |
| KRAS              | 2.65E-16 | 0.69963345 | 0.421 | 0.264 | 9.38E-12 | NKT_UCBMC |
| RRM1              | 2.66E-16 | 0.52762671 | 0.394 | 0.232 | 9.43E-12 | NKT_UCBMC |
| PSMD14            | 2.81E-16 | 0.52342866 | 0.462 | 0.29  | 9.94E-12 | NKT_UCBMC |
| MED23             | 2.91E-16 | 0.82137922 | 0.335 | 0.188 | 1.03E-11 | NKT_UCBMC |
| ARFGAP3           | 3.00E-16 | 0.5037557  | 0.459 | 0.293 | 1.06E-11 | NKT_UCBMC |
| MAP4K3            | 3.00E-16 | 0.66349644 | 0.415 | 0.257 | 1.06E-11 | NKT_UCBMC |
| PDGFRA            | 3.37E-16 | 0.27737945 | 0.884 | 0.736 | 1.19E-11 | NKT_UCBMC |
| HNRNPM            | 4.03E-16 | 0.44542779 | 0.578 | 0.378 | 1.43E-11 | NKT_UCBMC |
| RNMT              | 4.48E-16 | 0.42205593 | 0.656 | 0.475 | 1.59E-11 | NKT_UCBMC |
| UVRAG             | 4.84E-16 | 0.39711937 | 0.518 | 0.338 | 1.71E-11 | NKT_UCBMC |
| PDXDC1            | 5.24E-16 | 0.78287855 | 0.298 | 0.157 | 1.86E-11 | NKT_UCBMC |
| ASCC3             | 5.36E-16 | 0.53778789 | 0.464 | 0.296 | 1.90E-11 | NKT_UCBMC |
| SNW1              | 5.53E-16 | 0.59858728 | 0.461 | 0.294 | 1.96E-11 | NKT_UCBMC |

|                    |          |            |       |       |          |           |
|--------------------|----------|------------|-------|-------|----------|-----------|
| WTAP               | 5.84E-16 | 0.41623683 | 0.591 | 0.405 | 2.07E-11 | NKT_UCBMC |
| PUM2               | 6.75E-16 | 0.40887557 | 0.607 | 0.412 | 2.39E-11 | NKT_UCBMC |
| CUX1               | 7.38E-16 | 0.32636292 | 0.521 | 0.34  | 2.61E-11 | NKT_UCBMC |
| RBPJ               | 8.05E-16 | 0.46346021 | 0.462 | 0.288 | 2.85E-11 | NKT_UCBMC |
| RPTOR              | 8.62E-16 | 0.61595823 | 0.397 | 0.243 | 3.06E-11 | NKT_UCBMC |
| ANKRD17            | 8.83E-16 | 0.45251498 | 0.559 | 0.377 | 3.13E-11 | NKT_UCBMC |
| UBAC2              | 8.92E-16 | 0.38293046 | 0.61  | 0.422 | 3.16E-11 | NKT_UCBMC |
| CYTIP              | 9.02E-16 | 0.55304974 | 0.442 | 0.277 | 3.20E-11 | NKT_UCBMC |
| FRYL               | 9.05E-16 | 0.64691945 | 0.408 | 0.245 | 3.21E-11 | NKT_UCBMC |
| FAM133B            | 1.02E-15 | 0.47093814 | 0.439 | 0.266 | 3.62E-11 | NKT_UCBMC |
| SCLT1              | 1.04E-15 | 0.6711293  | 0.413 | 0.258 | 3.69E-11 | NKT_UCBMC |
| MDM4               | 1.07E-15 | 0.58233168 | 0.401 | 0.24  | 3.78E-11 | NKT_UCBMC |
| TEC                | 1.08E-15 | 0.54980304 | 0.48  | 0.311 | 3.82E-11 | NKT_UCBMC |
| ZC3H18             | 1.09E-15 | 0.83886067 | 0.333 | 0.19  | 3.85E-11 | NKT_UCBMC |
| TBL1X              | 1.09E-15 | 0.55951767 | 0.364 | 0.211 | 3.85E-11 | NKT_UCBMC |
| TMCC1              | 1.09E-15 | 0.53779503 | 0.382 | 0.226 | 3.87E-11 | NKT_UCBMC |
| CCND3              | 1.11E-15 | 0.31333277 | 0.748 | 0.527 | 3.93E-11 | NKT_UCBMC |
| SNX29              | 1.18E-15 | 0.76893717 | 0.364 | 0.217 | 4.18E-11 | NKT_UCBMC |
| ATF7IP             | 1.32E-15 | 0.36761779 | 0.647 | 0.448 | 4.67E-11 | NKT_UCBMC |
| DTNBP1             | 1.33E-15 | 0.42729245 | 0.442 | 0.271 | 4.72E-11 | NKT_UCBMC |
| NAA15              | 1.34E-15 | 0.58939443 | 0.368 | 0.213 | 4.74E-11 | NKT_UCBMC |
| BTBD11             | 1.36E-15 | 0.15927517 | 0.429 | 0.261 | 4.82E-11 | NKT_UCBMC |
| USP36              | 1.38E-15 | 0.4055539  | 0.507 | 0.326 | 4.89E-11 | NKT_UCBMC |
| SMC4               | 1.46E-15 | 0.33974391 | 0.63  | 0.433 | 5.19E-11 | NKT_UCBMC |
| ABCE1              | 1.70E-15 | 0.61827189 | 0.396 | 0.238 | 6.03E-11 | NKT_UCBMC |
| ENSMMUG00000001894 | 1.72E-15 | 0.69829105 | 0.384 | 0.231 | 6.09E-11 | NKT_UCBMC |
| ZC3H11A            | 1.97E-15 | 0.4904386  | 0.448 | 0.285 | 6.97E-11 | NKT_UCBMC |
| LRCH3              | 2.05E-15 | 0.52817121 | 0.473 | 0.302 | 7.26E-11 | NKT_UCBMC |
| DDB1               | 2.17E-15 | 0.95786911 | 0.27  | 0.143 | 7.70E-11 | NKT_UCBMC |
| HSPA5              | 2.21E-15 | 0.48527855 | 0.563 | 0.38  | 7.83E-11 | NKT_UCBMC |
| THOC1              | 2.29E-15 | 0.88988975 | 0.298 | 0.16  | 8.13E-11 | NKT_UCBMC |
| RTF2               | 2.30E-15 | 0.67500364 | 0.346 | 0.2   | 8.17E-11 | NKT_UCBMC |
| PIK3C2A            | 2.52E-15 | 0.7496518  | 0.314 | 0.172 | 8.95E-11 | NKT_UCBMC |

|                   |          |            |       |       |          |           |
|-------------------|----------|------------|-------|-------|----------|-----------|
| KIF5B             | 2.57E-15 | 0.57404138 | 0.449 | 0.293 | 9.10E-11 | NKT_UCBMC |
| THOC2             | 2.64E-15 | 0.64556476 | 0.425 | 0.271 | 9.35E-11 | NKT_UCBMC |
| NAA16             | 2.65E-15 | 0.78715467 | 0.269 | 0.139 | 9.38E-11 | NKT_UCBMC |
| LEMD3             | 2.74E-15 | 0.56580798 | 0.355 | 0.205 | 9.72E-11 | NKT_UCBMC |
| MTR               | 2.75E-15 | 0.88876357 | 0.268 | 0.139 | 9.75E-11 | NKT_UCBMC |
| ENSMUG00000062716 | 2.77E-15 | 0.78040692 | 0.361 | 0.208 | 9.81E-11 | NKT_UCBMC |
| RNF19A            | 2.99E-15 | 0.57376886 | 0.457 | 0.29  | 1.06E-10 | NKT_UCBMC |
| KIDINS220         | 3.09E-15 | 0.64550996 | 0.378 | 0.226 | 1.09E-10 | NKT_UCBMC |
| RIOK3             | 3.27E-15 | 0.57528779 | 0.435 | 0.274 | 1.16E-10 | NKT_UCBMC |
| APC               | 3.80E-15 | 0.72503946 | 0.304 | 0.165 | 1.34E-10 | NKT_UCBMC |
| SKAP1             | 3.84E-15 | 0.22152553 | 0.953 | 0.795 | 1.36E-10 | NKT_UCBMC |
| BRWD1             | 4.00E-15 | 0.56079471 | 0.444 | 0.278 | 1.42E-10 | NKT_UCBMC |
| AHI1              | 4.02E-15 | 0.40684664 | 0.596 | 0.413 | 1.43E-10 | NKT_UCBMC |
| ENSMUG00000020316 | 4.08E-15 | 0.74688876 | 0.369 | 0.221 | 1.45E-10 | NKT_UCBMC |
| KDM5A             | 4.09E-15 | 0.55778802 | 0.426 | 0.27  | 1.45E-10 | NKT_UCBMC |
| TM9SF2            | 4.10E-15 | 0.65531764 | 0.346 | 0.198 | 1.45E-10 | NKT_UCBMC |
| RSBN1             | 4.21E-15 | 0.83957702 | 0.299 | 0.166 | 1.49E-10 | NKT_UCBMC |
| ANTXR2            | 4.28E-15 | 0.46470965 | 0.491 | 0.318 | 1.52E-10 | NKT_UCBMC |
| GTPBP10           | 4.41E-15 | 0.74669478 | 0.307 | 0.168 | 1.56E-10 | NKT_UCBMC |
| MTPN              | 4.42E-15 | 0.54825326 | 0.469 | 0.307 | 1.57E-10 | NKT_UCBMC |
| DHX29             | 4.70E-15 | 0.70553263 | 0.31  | 0.171 | 1.66E-10 | NKT_UCBMC |
| ENSMUG00000058532 | 5.04E-15 | 0.47870906 | 0.543 | 0.362 | 1.79E-10 | NKT_UCBMC |
| MATR3             | 5.21E-15 | 0.34333012 | 0.792 | 0.584 | 1.84E-10 | NKT_UCBMC |
| ICE1              | 5.22E-15 | 0.92957914 | 0.279 | 0.15  | 1.85E-10 | NKT_UCBMC |
| FAM193A           | 5.22E-15 | 0.69323484 | 0.373 | 0.223 | 1.85E-10 | NKT_UCBMC |
| DCAF1             | 5.22E-15 | 0.75775099 | 0.299 | 0.16  | 1.85E-10 | NKT_UCBMC |
| FBXO21            | 5.40E-15 | 0.86039447 | 0.262 | 0.135 | 1.91E-10 | NKT_UCBMC |
| TRMT10C           | 5.57E-15 | 0.48394885 | 0.453 | 0.285 | 1.97E-10 | NKT_UCBMC |
| REPS1             | 5.82E-15 | 0.69561187 | 0.329 | 0.188 | 2.06E-10 | NKT_UCBMC |
| CAMK1D            | 5.89E-15 | 0.29061056 | 0.505 | 0.325 | 2.09E-10 | NKT_UCBMC |
| DPYD              | 5.93E-15 | 0.87280536 | 0.311 | 0.171 | 2.10E-10 | NKT_UCBMC |
| SDHB              | 5.94E-15 | 0.63054915 | 0.316 | 0.175 | 2.10E-10 | NKT_UCBMC |
| PLEKHM1           | 5.94E-15 | 0.60938183 | 0.272 | 0.14  | 2.11E-10 | NKT_UCBMC |

|                    |          |            |       |       |          |           |
|--------------------|----------|------------|-------|-------|----------|-----------|
| RMND5A             | 6.27E-15 | 0.78860079 | 0.334 | 0.192 | 2.22E-10 | NKT_UCBMC |
| EIF3H              | 6.33E-15 | 0.39541303 | 0.771 | 0.585 | 2.24E-10 | NKT_UCBMC |
| NOL10              | 6.40E-15 | 0.90711612 | 0.282 | 0.151 | 2.27E-10 | NKT_UCBMC |
| TASP1              | 7.40E-15 | 0.67687883 | 0.312 | 0.173 | 2.62E-10 | NKT_UCBMC |
| PTPN2              | 7.53E-15 | 0.69029993 | 0.406 | 0.254 | 2.67E-10 | NKT_UCBMC |
| INPP5A             | 7.75E-15 | 0.5169797  | 0.436 | 0.277 | 2.75E-10 | NKT_UCBMC |
| SECISBP2           | 7.77E-15 | 0.61865819 | 0.337 | 0.191 | 2.75E-10 | NKT_UCBMC |
| ENSMMUG00000005482 | 7.80E-15 | 0.49730312 | 0.409 | 0.249 | 2.77E-10 | NKT_UCBMC |
| LAMTOR3            | 7.89E-15 | 0.93876992 | 0.251 | 0.128 | 2.79E-10 | NKT_UCBMC |
| SEC63              | 8.68E-15 | 0.52496704 | 0.495 | 0.332 | 3.08E-10 | NKT_UCBMC |
| ADAMTS6            | 9.40E-15 | 0.79985451 | 0.302 | 0.168 | 3.33E-10 | NKT_UCBMC |
| EP300              | 9.68E-15 | 0.46133865 | 0.506 | 0.331 | 3.43E-10 | NKT_UCBMC |
| FBXO25             | 9.79E-15 | 0.59016322 | 0.276 | 0.143 | 3.47E-10 | NKT_UCBMC |
| FRS2               | 1.08E-14 | 0.90293196 | 0.269 | 0.141 | 3.83E-10 | NKT_UCBMC |
| AUH                | 1.10E-14 | 0.63945644 | 0.349 | 0.205 | 3.91E-10 | NKT_UCBMC |
| UBQLN1             | 1.16E-14 | 0.71666823 | 0.363 | 0.219 | 4.13E-10 | NKT_UCBMC |
| ZNF207             | 1.19E-14 | 0.49130403 | 0.487 | 0.32  | 4.22E-10 | NKT_UCBMC |
| GTF2B              | 1.20E-14 | 0.33182166 | 0.636 | 0.449 | 4.24E-10 | NKT_UCBMC |
| BACH2              | 1.24E-14 | 0.48672556 | 0.332 | 0.186 | 4.40E-10 | NKT_UCBMC |
| LMTK2              | 1.28E-14 | 0.799745   | 0.317 | 0.185 | 4.54E-10 | NKT_UCBMC |
| PRRC2B             | 1.36E-14 | 0.45866887 | 0.494 | 0.328 | 4.80E-10 | NKT_UCBMC |
| UBE2D3             | 1.49E-14 | 0.29309567 | 0.858 | 0.666 | 5.27E-10 | NKT_UCBMC |
| FAXDC2             | 1.49E-14 | 0.9142413  | 0.251 | 0.129 | 5.29E-10 | NKT_UCBMC |
| MAPRE2             | 1.99E-14 | 0.45295874 | 0.474 | 0.312 | 7.05E-10 | NKT_UCBMC |
| NEDD4L             | 2.04E-14 | 0.58692632 | 0.323 | 0.182 | 7.22E-10 | NKT_UCBMC |
| MXD1               | 2.04E-14 | 0.82326969 | 0.284 | 0.154 | 7.24E-10 | NKT_UCBMC |
| WNK1               | 2.05E-14 | 0.29433374 | 0.625 | 0.429 | 7.28E-10 | NKT_UCBMC |
| EMC3               | 2.39E-14 | 0.80228423 | 0.311 | 0.177 | 8.47E-10 | NKT_UCBMC |
| PITPNB             | 2.43E-14 | 0.62960231 | 0.401 | 0.252 | 8.60E-10 | NKT_UCBMC |
| IQGAP1             | 2.45E-14 | 0.33985956 | 0.652 | 0.449 | 8.69E-10 | NKT_UCBMC |
| RBBP6              | 2.54E-14 | 0.67324944 | 0.34  | 0.201 | 8.99E-10 | NKT_UCBMC |
| PDS5A              | 2.55E-14 | 0.55981861 | 0.442 | 0.285 | 9.05E-10 | NKT_UCBMC |
| ZNFX1              | 2.60E-14 | 0.78358254 | 0.285 | 0.154 | 9.21E-10 | NKT_UCBMC |



|          |          |            |       |       |          |           |
|----------|----------|------------|-------|-------|----------|-----------|
| SF1      | 2.69E-14 | 0.37376333 | 0.58  | 0.394 | 9.52E-10 | NKT_UCBMC |
| LATS1    | 2.70E-14 | 0.69214958 | 0.268 | 0.141 | 9.55E-10 | NKT_UCBMC |
| GPBP1L1  | 2.76E-14 | 0.4052315  | 0.491 | 0.322 | 9.79E-10 | NKT_UCBMC |
| CTNBNL1  | 2.82E-14 | 0.68678336 | 0.381 | 0.236 | 9.98E-10 | NKT_UCBMC |
| CDC27    | 2.83E-14 | 0.48813591 | 0.367 | 0.22  | 1.00E-09 | NKT_UCBMC |
| USP9X    | 2.86E-14 | 0.36938863 | 0.529 | 0.355 | 1.01E-09 | NKT_UCBMC |
| EIF4EBP3 | 2.99E-14 | 0.46004773 | 0.488 | 0.324 | 1.06E-09 | NKT_UCBMC |
| PHIP     | 3.11E-14 | 0.49482058 | 0.496 | 0.328 | 1.10E-09 | NKT_UCBMC |
| SPEN     | 3.12E-14 | 0.50001825 | 0.397 | 0.249 | 1.11E-09 | NKT_UCBMC |
| ILF3     | 3.21E-14 | 0.43226498 | 0.47  | 0.303 | 1.14E-09 | NKT_UCBMC |
| MRPS9    | 3.38E-14 | 0.63840728 | 0.318 | 0.179 | 1.20E-09 | NKT_UCBMC |
| SLC38A9  | 3.57E-14 | 0.76506446 | 0.267 | 0.138 | 1.26E-09 | NKT_UCBMC |
| DCAF10   | 3.71E-14 | 0.87821436 | 0.266 | 0.14  | 1.31E-09 | NKT_UCBMC |
| MKLN1    | 3.87E-14 | 0.40722878 | 0.551 | 0.371 | 1.37E-09 | NKT_UCBMC |
| JARID2   | 3.98E-14 | 0.26800506 | 0.589 | 0.408 | 1.41E-09 | NKT_UCBMC |
| TFAM     | 4.13E-14 | 0.57228419 | 0.362 | 0.213 | 1.46E-09 | NKT_UCBMC |
| UBE3C    | 4.46E-14 | 0.41461418 | 0.389 | 0.239 | 1.58E-09 | NKT_UCBMC |
| SP100    | 4.58E-14 | 0.38749644 | 0.624 | 0.44  | 1.62E-09 | NKT_UCBMC |
| ANKIB1   | 4.67E-14 | 0.57208229 | 0.381 | 0.232 | 1.66E-09 | NKT_UCBMC |
| EFL1     | 4.68E-14 | 0.57265366 | 0.357 | 0.218 | 1.66E-09 | NKT_UCBMC |
| NARS1    | 4.82E-14 | 0.55965778 | 0.428 | 0.275 | 1.71E-09 | NKT_UCBMC |
| SCAMP1   | 5.17E-14 | 0.5940893  | 0.261 | 0.132 | 1.83E-09 | NKT_UCBMC |
| FAM126A  | 5.20E-14 | 0.73359804 | 0.295 | 0.162 | 1.84E-09 | NKT_UCBMC |
| TFG      | 5.22E-14 | 0.75014516 | 0.32  | 0.186 | 1.85E-09 | NKT_UCBMC |
| RAB3GAP1 | 5.35E-14 | 0.50480835 | 0.395 | 0.24  | 1.90E-09 | NKT_UCBMC |
| DOP1B    | 5.78E-14 | 0.44238193 | 0.348 | 0.201 | 2.05E-09 | NKT_UCBMC |
| NUMA1    | 5.79E-14 | 0.52010844 | 0.331 | 0.191 | 2.05E-09 | NKT_UCBMC |
| FUT8     | 5.97E-14 | 0.70584794 | 0.364 | 0.224 | 2.12E-09 | NKT_UCBMC |
| ITGA4    | 6.01E-14 | 0.44582725 | 0.291 | 0.154 | 2.13E-09 | NKT_UCBMC |
| PPIL4    | 6.58E-14 | 0.36647727 | 0.602 | 0.424 | 2.33E-09 | NKT_UCBMC |
| ELK3     | 7.28E-14 | 0.48743844 | 0.576 | 0.407 | 2.58E-09 | NKT_UCBMC |
| FAM168A  | 7.42E-14 | 0.81223771 | 0.286 | 0.158 | 2.63E-09 | NKT_UCBMC |
| FBXL17   | 8.02E-14 | 0.46777882 | 0.424 | 0.276 | 2.84E-09 | NKT_UCBMC |

|                   |          |            |       |       |          |           |
|-------------------|----------|------------|-------|-------|----------|-----------|
| TOX               | 8.40E-14 | 0.1658254  | 0.676 | 0.47  | 2.98E-09 | NKT_UCBMC |
| CYB5R4            | 8.50E-14 | 0.80565778 | 0.304 | 0.173 | 3.01E-09 | NKT_UCBMC |
| RSRC1             | 8.79E-14 | 0.45805283 | 0.454 | 0.294 | 3.12E-09 | NKT_UCBMC |
| EZR               | 8.88E-14 | 0.29845725 | 0.838 | 0.659 | 3.15E-09 | NKT_UCBMC |
| STK4              | 9.12E-14 | 0.344007   | 0.783 | 0.589 | 3.23E-09 | NKT_UCBMC |
| CCNT1             | 9.32E-14 | 0.77784022 | 0.313 | 0.182 | 3.30E-09 | NKT_UCBMC |
| TMEM245           | 9.56E-14 | 0.7677782  | 0.3   | 0.169 | 3.39E-09 | NKT_UCBMC |
| ENSMUG00000015583 | 9.61E-14 | 0.33987095 | 0.788 | 0.623 | 3.41E-09 | NKT_UCBMC |
| WDR33             | 9.97E-14 | 0.49044756 | 0.457 | 0.296 | 3.53E-09 | NKT_UCBMC |
| KLHL18            | 1.14E-13 | 0.93624745 | 0.257 | 0.137 | 4.04E-09 | NKT_UCBMC |
| URI1              | 1.38E-13 | 0.49838495 | 0.419 | 0.264 | 4.89E-09 | NKT_UCBMC |
| GLMN              | 1.50E-13 | 0.73064467 | 0.351 | 0.213 | 5.30E-09 | NKT_UCBMC |
| ENSMUG00000020751 | 1.51E-13 | 0.44415727 | 0.34  | 0.199 | 5.35E-09 | NKT_UCBMC |
| G3BP1             | 1.59E-13 | 0.43308295 | 0.565 | 0.393 | 5.64E-09 | NKT_UCBMC |
| INPP4A            | 1.61E-13 | 0.49246419 | 0.389 | 0.241 | 5.72E-09 | NKT_UCBMC |
| THUMPD1           | 1.62E-13 | 0.65774775 | 0.321 | 0.186 | 5.75E-09 | NKT_UCBMC |
| HERC6             | 1.98E-13 | 0.69715407 | 0.257 | 0.134 | 7.00E-09 | NKT_UCBMC |
| SENP6             | 2.06E-13 | 0.34037598 | 0.578 | 0.404 | 7.30E-09 | NKT_UCBMC |
| SEC61A2           | 2.09E-13 | 0.83688157 | 0.261 | 0.142 | 7.42E-09 | NKT_UCBMC |
| KBTBD2            | 2.13E-13 | 0.62861624 | 0.27  | 0.144 | 7.54E-09 | NKT_UCBMC |
| MORC3             | 2.15E-13 | 0.48316045 | 0.364 | 0.216 | 7.62E-09 | NKT_UCBMC |
| CAMLG             | 2.20E-13 | 0.56302308 | 0.376 | 0.232 | 7.80E-09 | NKT_UCBMC |
| ERP44             | 2.21E-13 | 0.5306112  | 0.447 | 0.291 | 7.83E-09 | NKT_UCBMC |
| SPTBN1            | 2.28E-13 | 0.37720064 | 0.556 | 0.382 | 8.08E-09 | NKT_UCBMC |
| USP33             | 2.33E-13 | 0.62848917 | 0.311 | 0.179 | 8.26E-09 | NKT_UCBMC |
| ATAD2B            | 2.37E-13 | 0.32864261 | 0.522 | 0.351 | 8.39E-09 | NKT_UCBMC |
| ALMS1             | 2.47E-13 | 0.71863575 | 0.271 | 0.144 | 8.77E-09 | NKT_UCBMC |
| ARHGAP26          | 2.50E-13 | 0.46618959 | 0.37  | 0.225 | 8.85E-09 | NKT_UCBMC |
| PICALM            | 2.86E-13 | 0.20189522 | 0.657 | 0.456 | 1.01E-08 | NKT_UCBMC |
| ARL15             | 2.86E-13 | 0.38696711 | 0.503 | 0.341 | 1.01E-08 | NKT_UCBMC |
| CCNC              | 3.22E-13 | 0.64901383 | 0.313 | 0.182 | 1.14E-08 | NKT_UCBMC |
| SFMBT1            | 3.31E-13 | 0.72164956 | 0.301 | 0.175 | 1.17E-08 | NKT_UCBMC |
| ENSMUG00000006803 | 3.34E-13 | 0.41534907 | 0.494 | 0.328 | 1.18E-08 | NKT_UCBMC |

|          |          |            |       |       |          |           |
|----------|----------|------------|-------|-------|----------|-----------|
| VPS53    | 3.41E-13 | 0.70161401 | 0.279 | 0.155 | 1.21E-08 | NKT_UCBMC |
| RHEB     | 3.47E-13 | 0.6187322  | 0.456 | 0.316 | 1.23E-08 | NKT_UCBMC |
| IVNS1ABP | 3.52E-13 | 0.37704893 | 0.493 | 0.328 | 1.25E-08 | NKT_UCBMC |
| STAG2    | 3.88E-13 | 0.36823997 | 0.616 | 0.439 | 1.37E-08 | NKT_UCBMC |
| TXNIP    | 3.96E-13 | 0.29356582 | 0.816 | 0.649 | 1.40E-08 | NKT_UCBMC |
| BPTF     | 4.06E-13 | 0.38700291 | 0.586 | 0.414 | 1.44E-08 | NKT_UCBMC |
| MAP4     | 4.29E-13 | 0.70234528 | 0.257 | 0.139 | 1.52E-08 | NKT_UCBMC |
| TNFAIP3  | 4.39E-13 | 0.19359892 | 0.675 | 0.466 | 1.55E-08 | NKT_UCBMC |
| C1GALT1  | 4.48E-13 | 0.58825194 | 0.337 | 0.202 | 1.59E-08 | NKT_UCBMC |
| TRIP12   | 4.74E-13 | 0.53618938 | 0.494 | 0.345 | 1.68E-08 | NKT_UCBMC |
| PPP1R2   | 4.95E-13 | 0.44266769 | 0.469 | 0.313 | 1.75E-08 | NKT_UCBMC |
| EPRS1    | 4.99E-13 | 0.61177664 | 0.332 | 0.199 | 1.77E-08 | NKT_UCBMC |
| CNOT6L   | 5.28E-13 | 0.28436627 | 0.593 | 0.417 | 1.87E-08 | NKT_UCBMC |
| PDCD6IP  | 5.36E-13 | 0.51344461 | 0.382 | 0.245 | 1.90E-08 | NKT_UCBMC |
| PTP4A2   | 5.51E-13 | 0.44113672 | 0.422 | 0.272 | 1.95E-08 | NKT_UCBMC |
| DOCK11   | 5.82E-13 | 0.36306855 | 0.583 | 0.408 | 2.06E-08 | NKT_UCBMC |
| ZBTB11   | 5.91E-13 | 0.71286555 | 0.287 | 0.165 | 2.10E-08 | NKT_UCBMC |
| SCAF4    | 6.11E-13 | 0.65317959 | 0.332 | 0.201 | 2.16E-08 | NKT_UCBMC |
| DCTN6    | 6.37E-13 | 0.67181154 | 0.262 | 0.14  | 2.26E-08 | NKT_UCBMC |
| TSG101   | 6.54E-13 | 0.6627308  | 0.273 | 0.151 | 2.32E-08 | NKT_UCBMC |
| CAPZA2   | 6.65E-13 | 0.42361434 | 0.581 | 0.401 | 2.36E-08 | NKT_UCBMC |
| NFATC3   | 7.00E-13 | 0.39396203 | 0.578 | 0.401 | 2.48E-08 | NKT_UCBMC |
| ATXN7L3B | 7.04E-13 | 0.65874499 | 0.332 | 0.202 | 2.49E-08 | NKT_UCBMC |
| AP2A2    | 7.06E-13 | 0.64036002 | 0.279 | 0.156 | 2.50E-08 | NKT_UCBMC |
| AP2B1    | 7.57E-13 | 0.59599321 | 0.352 | 0.216 | 2.68E-08 | NKT_UCBMC |
| UBE2E3   | 8.13E-13 | 0.62852856 | 0.3   | 0.173 | 2.88E-08 | NKT_UCBMC |
| LIMS1    | 8.36E-13 | 0.41116538 | 0.385 | 0.234 | 2.96E-08 | NKT_UCBMC |
| KCTD20   | 8.62E-13 | 0.64468653 | 0.308 | 0.179 | 3.05E-08 | NKT_UCBMC |
| RNF149   | 8.64E-13 | 0.50580201 | 0.494 | 0.346 | 3.06E-08 | NKT_UCBMC |
| CDC40    | 8.81E-13 | 0.69139549 | 0.294 | 0.169 | 3.12E-08 | NKT_UCBMC |
| SHOC2    | 8.95E-13 | 0.40154931 | 0.521 | 0.354 | 3.17E-08 | NKT_UCBMC |
| S1PR1    | 9.08E-13 | 0.35961373 | 0.336 | 0.193 | 3.22E-08 | NKT_UCBMC |
| POGZ     | 9.56E-13 | 0.60385538 | 0.385 | 0.245 | 3.39E-08 | NKT_UCBMC |

|                    |          |            |       |       |          |           |
|--------------------|----------|------------|-------|-------|----------|-----------|
| PCNX1              | 1.05E-12 | 0.39578039 | 0.428 | 0.28  | 3.71E-08 | NKT_UCBMC |
| BIRC2              | 1.09E-12 | 0.47104959 | 0.294 | 0.167 | 3.86E-08 | NKT_UCBMC |
| RSRC2              | 1.15E-12 | 0.36996128 | 0.648 | 0.472 | 4.08E-08 | NKT_UCBMC |
| SYNE2              | 1.17E-12 | 0.60436166 | 0.315 | 0.185 | 4.15E-08 | NKT_UCBMC |
| SUSD6              | 1.24E-12 | 0.5250944  | 0.343 | 0.207 | 4.40E-08 | NKT_UCBMC |
| IWS1               | 1.31E-12 | 0.63461881 | 0.307 | 0.18  | 4.65E-08 | NKT_UCBMC |
| SCFD2              | 1.32E-12 | 0.58595686 | 0.354 | 0.221 | 4.69E-08 | NKT_UCBMC |
| RBL2               | 1.32E-12 | 0.72168625 | 0.313 | 0.188 | 4.69E-08 | NKT_UCBMC |
| WWP2               | 1.35E-12 | 0.7849075  | 0.264 | 0.147 | 4.79E-08 | NKT_UCBMC |
| DCAF8              | 1.44E-12 | 0.41320287 | 0.364 | 0.224 | 5.10E-08 | NKT_UCBMC |
| XRCC6              | 1.55E-12 | 0.35804656 | 0.645 | 0.476 | 5.50E-08 | NKT_UCBMC |
| ENSMMUG00000014947 | 1.59E-12 | 0.40052108 | 0.397 | 0.245 | 5.62E-08 | NKT_UCBMC |
| NR1D2              | 1.63E-12 | 0.4159539  | 0.317 | 0.185 | 5.78E-08 | NKT_UCBMC |
| TRDMT1             | 1.65E-12 | 0.71121259 | 0.268 | 0.15  | 5.84E-08 | NKT_UCBMC |
| RIC1               | 1.72E-12 | 0.5176896  | 0.328 | 0.195 | 6.10E-08 | NKT_UCBMC |
| TTC14              | 1.75E-12 | 0.82128128 | 0.263 | 0.147 | 6.19E-08 | NKT_UCBMC |
| HNRNPU             | 1.75E-12 | 0.31834268 | 0.679 | 0.486 | 6.20E-08 | NKT_UCBMC |
| GLYR1              | 1.78E-12 | 0.63969518 | 0.297 | 0.171 | 6.32E-08 | NKT_UCBMC |
| WDR20              | 1.78E-12 | 0.68740435 | 0.277 | 0.162 | 6.32E-08 | NKT_UCBMC |
| MLXIP              | 1.90E-12 | 0.65492365 | 0.253 | 0.137 | 6.73E-08 | NKT_UCBMC |
| SMG7               | 1.96E-12 | 0.54229291 | 0.36  | 0.223 | 6.95E-08 | NKT_UCBMC |
| GOLM2              | 2.15E-12 | 0.46784107 | 0.421 | 0.274 | 7.61E-08 | NKT_UCBMC |
| PBRM1              | 2.15E-12 | 0.56389843 | 0.394 | 0.258 | 7.62E-08 | NKT_UCBMC |
| ATP6V1E1           | 2.19E-12 | 0.40005158 | 0.354 | 0.214 | 7.76E-08 | NKT_UCBMC |
| PPP2R5E            | 2.29E-12 | 0.40272518 | 0.402 | 0.258 | 8.10E-08 | NKT_UCBMC |
| PHF12              | 2.31E-12 | 0.58246213 | 0.282 | 0.159 | 8.19E-08 | NKT_UCBMC |
| HBP1               | 2.53E-12 | 0.52226962 | 0.419 | 0.27  | 8.98E-08 | NKT_UCBMC |
| OLA1               | 2.89E-12 | 0.38519175 | 0.466 | 0.31  | 1.02E-07 | NKT_UCBMC |
| MACF1              | 2.90E-12 | 0.24410986 | 0.66  | 0.473 | 1.03E-07 | NKT_UCBMC |
| IRF2BP2            | 2.93E-12 | 0.63135922 | 0.259 | 0.142 | 1.04E-07 | NKT_UCBMC |
| DNAJC1             | 2.99E-12 | 0.53755955 | 0.391 | 0.252 | 1.06E-07 | NKT_UCBMC |
| ENSMMUG00000047277 | 3.00E-12 | 0.49564854 | 0.632 | 0.475 | 1.06E-07 | NKT_UCBMC |
| RAB3GAP2           | 3.04E-12 | 0.28014591 | 0.365 | 0.222 | 1.08E-07 | NKT_UCBMC |

|                   |          |            |       |       |          |           |
|-------------------|----------|------------|-------|-------|----------|-----------|
| WVOX              | 3.10E-12 | 0.42470062 | 0.427 | 0.284 | 1.10E-07 | NKT_UCBMC |
| FNBP4             | 3.14E-12 | 0.51213399 | 0.407 | 0.267 | 1.11E-07 | NKT_UCBMC |
| TRIM24            | 3.31E-12 | 0.77663548 | 0.286 | 0.168 | 1.17E-07 | NKT_UCBMC |
| WASF2             | 3.59E-12 | 0.33840201 | 0.545 | 0.375 | 1.27E-07 | NKT_UCBMC |
| KANSL2            | 3.76E-12 | 0.3770796  | 0.355 | 0.216 | 1.33E-07 | NKT_UCBMC |
| SELL              | 3.82E-12 | 0.2046228  | 0.439 | 0.271 | 1.35E-07 | NKT_UCBMC |
| ENSMUG00000028699 | 3.84E-12 | 0.33537313 | 0.486 | 0.328 | 1.36E-07 | NKT_UCBMC |
| KDM2B             | 3.86E-12 | 0.58361754 | 0.346 | 0.219 | 1.37E-07 | NKT_UCBMC |
| UBR2              | 4.07E-12 | 0.52025171 | 0.352 | 0.22  | 1.44E-07 | NKT_UCBMC |
| DDX17             | 4.13E-12 | 0.3043942  | 0.64  | 0.457 | 1.46E-07 | NKT_UCBMC |
| MAPKAP1           | 4.17E-12 | 0.70402673 | 0.348 | 0.223 | 1.48E-07 | NKT_UCBMC |
| TMX3              | 4.22E-12 | 0.68690928 | 0.273 | 0.156 | 1.49E-07 | NKT_UCBMC |
| ASXL1             | 4.37E-12 | 0.51760755 | 0.305 | 0.181 | 1.55E-07 | NKT_UCBMC |
| DENND4C           | 4.70E-12 | 0.65660518 | 0.299 | 0.172 | 1.66E-07 | NKT_UCBMC |
| GCC2              | 5.34E-12 | 0.40178304 | 0.458 | 0.309 | 1.89E-07 | NKT_UCBMC |
| LCORL             | 5.57E-12 | 0.67189581 | 0.307 | 0.185 | 1.97E-07 | NKT_UCBMC |
| NR2C2             | 5.85E-12 | 0.8858776  | 0.261 | 0.15  | 2.07E-07 | NKT_UCBMC |
| SNX25             | 6.70E-12 | 0.50752666 | 0.256 | 0.141 | 2.37E-07 | NKT_UCBMC |
| EIF5              | 6.80E-12 | 0.40737453 | 0.51  | 0.354 | 2.41E-07 | NKT_UCBMC |
| CSNK2A1           | 6.89E-12 | 0.50022266 | 0.441 | 0.297 | 2.44E-07 | NKT_UCBMC |
| GPRIN3            | 7.19E-12 | 0.49523309 | 0.347 | 0.214 | 2.55E-07 | NKT_UCBMC |
| FOXO3             | 7.31E-12 | 0.53118041 | 0.364 | 0.231 | 2.59E-07 | NKT_UCBMC |
| H2AFY             | 7.41E-12 | 0.3734155  | 0.519 | 0.36  | 2.63E-07 | NKT_UCBMC |
| GORASP2           | 7.63E-12 | 0.71353914 | 0.27  | 0.156 | 2.70E-07 | NKT_UCBMC |
| RTN4              | 7.89E-12 | 0.59466844 | 0.346 | 0.213 | 2.80E-07 | NKT_UCBMC |
| KDM3B             | 7.99E-12 | 0.53584846 | 0.402 | 0.267 | 2.83E-07 | NKT_UCBMC |
| TRPC4AP           | 7.99E-12 | 0.65062231 | 0.317 | 0.197 | 2.83E-07 | NKT_UCBMC |
| FTO               | 8.83E-12 | 0.60744701 | 0.376 | 0.245 | 3.13E-07 | NKT_UCBMC |
| MBTPS1            | 8.96E-12 | 0.43557394 | 0.411 | 0.271 | 3.18E-07 | NKT_UCBMC |
| STAU2             | 9.41E-12 | 0.53451199 | 0.355 | 0.216 | 3.33E-07 | NKT_UCBMC |
| SMAD4             | 9.54E-12 | 0.60061156 | 0.258 | 0.143 | 3.38E-07 | NKT_UCBMC |
| SMG1              | 9.65E-12 | 0.4288002  | 0.418 | 0.279 | 3.42E-07 | NKT_UCBMC |
| SLC30A7           | 1.06E-11 | 0.42318359 | 0.489 | 0.339 | 3.74E-07 | NKT_UCBMC |

|                    |          |            |       |       |          |           |
|--------------------|----------|------------|-------|-------|----------|-----------|
| SLAIN2             | 1.08E-11 | 0.56501752 | 0.294 | 0.174 | 3.82E-07 | NKT_UCBMC |
| ENSMMUG00000054165 | 1.10E-11 | 0.37572394 | 0.387 | 0.249 | 3.88E-07 | NKT_UCBMC |
| ITFG1              | 1.12E-11 | 0.47300519 | 0.388 | 0.252 | 3.97E-07 | NKT_UCBMC |
| RNF34              | 1.13E-11 | 0.66585382 | 0.282 | 0.166 | 3.99E-07 | NKT_UCBMC |
| KIAA1143           | 1.15E-11 | 0.52172831 | 0.298 | 0.175 | 4.07E-07 | NKT_UCBMC |
| CHD1               | 1.15E-11 | 0.38855894 | 0.401 | 0.264 | 4.07E-07 | NKT_UCBMC |
| ERC1               | 1.18E-11 | 0.67467248 | 0.27  | 0.155 | 4.18E-07 | NKT_UCBMC |
| NSF                | 1.19E-11 | 0.46702946 | 0.403 | 0.267 | 4.23E-07 | NKT_UCBMC |
| SAMD4B             | 1.44E-11 | 0.6433071  | 0.285 | 0.17  | 5.11E-07 | NKT_UCBMC |
| GPBP1              | 1.50E-11 | 0.27635025 | 0.637 | 0.464 | 5.30E-07 | NKT_UCBMC |
| IMMP2L             | 1.60E-11 | 0.11486133 | 0.66  | 0.472 | 5.67E-07 | NKT_UCBMC |
| ZNF93              | 1.62E-11 | 0.43842207 | 0.358 | 0.22  | 5.75E-07 | NKT_UCBMC |
| RAB6A              | 1.63E-11 | 0.57879791 | 0.312 | 0.192 | 5.77E-07 | NKT_UCBMC |
| CYFIP2             | 1.65E-11 | 0.41233121 | 0.463 | 0.309 | 5.84E-07 | NKT_UCBMC |
| TRIM25             | 1.66E-11 | 0.70765182 | 0.256 | 0.145 | 5.87E-07 | NKT_UCBMC |
| PAFAH1B2           | 1.74E-11 | 0.61682759 | 0.276 | 0.159 | 6.16E-07 | NKT_UCBMC |
| PAIP2              | 1.75E-11 | 0.25342378 | 0.783 | 0.605 | 6.20E-07 | NKT_UCBMC |
| CSNK1G1            | 1.99E-11 | 0.42948631 | 0.4   | 0.263 | 7.04E-07 | NKT_UCBMC |
| LUC7L              | 2.07E-11 | 0.42377298 | 0.372 | 0.238 | 7.35E-07 | NKT_UCBMC |
| ENSMMUG00000041517 | 2.10E-11 | 0.30911441 | 0.284 | 0.157 | 7.44E-07 | NKT_UCBMC |
| TMEM131L           | 2.12E-11 | 0.32245318 | 0.518 | 0.357 | 7.51E-07 | NKT_UCBMC |
| TASOR2             | 2.19E-11 | 0.37928063 | 0.399 | 0.265 | 7.74E-07 | NKT_UCBMC |
| TBCE               | 2.29E-11 | 0.73407476 | 0.263 | 0.15  | 8.13E-07 | NKT_UCBMC |
| MTHFD1L            | 2.32E-11 | 0.60989794 | 0.306 | 0.19  | 8.21E-07 | NKT_UCBMC |
| NRF1               | 2.33E-11 | 0.53453202 | 0.368 | 0.239 | 8.26E-07 | NKT_UCBMC |
| DTNB               | 2.34E-11 | 0.63895803 | 0.314 | 0.192 | 8.28E-07 | NKT_UCBMC |
| ERCC6L2            | 2.35E-11 | 0.5789232  | 0.297 | 0.179 | 8.31E-07 | NKT_UCBMC |
| GRAP               | 2.36E-11 | 0.40903787 | 0.362 | 0.232 | 8.36E-07 | NKT_UCBMC |
| UBE4A              | 2.50E-11 | 0.52031069 | 0.282 | 0.165 | 8.86E-07 | NKT_UCBMC |
| MNAT1              | 2.53E-11 | 0.49008906 | 0.394 | 0.26  | 8.95E-07 | NKT_UCBMC |
| BZW2               | 2.73E-11 | 0.41365572 | 0.373 | 0.24  | 9.68E-07 | NKT_UCBMC |
| ARFGEF2            | 2.74E-11 | 0.51140478 | 0.27  | 0.153 | 9.70E-07 | NKT_UCBMC |
| SZRD1              | 2.77E-11 | 0.4459417  | 0.334 | 0.209 | 9.80E-07 | NKT_UCBMC |

|                   |          |            |       |       |          |           |
|-------------------|----------|------------|-------|-------|----------|-----------|
| HERPUD2           | 2.79E-11 | 0.43887385 | 0.342 | 0.215 | 9.88E-07 | NKT_UCBMC |
| ZCCHC7            | 3.38E-11 | 0.27513039 | 0.66  | 0.498 | 1.20E-06 | NKT_UCBMC |
| TOR1AIP1          | 3.42E-11 | 0.58655953 | 0.284 | 0.169 | 1.21E-06 | NKT_UCBMC |
| OFD1              | 3.49E-11 | 0.65393466 | 0.252 | 0.14  | 1.23E-06 | NKT_UCBMC |
| ENSMUG00000056190 | 3.50E-11 | 0.52414523 | 0.376 | 0.245 | 1.24E-06 | NKT_UCBMC |
| PPP2R5A           | 3.52E-11 | 0.44529106 | 0.383 | 0.252 | 1.25E-06 | NKT_UCBMC |
| XRN2              | 3.54E-11 | 0.32558598 | 0.585 | 0.417 | 1.25E-06 | NKT_UCBMC |
| MCUB              | 3.65E-11 | 0.35214095 | 0.494 | 0.341 | 1.29E-06 | NKT_UCBMC |
| PCF11             | 3.70E-11 | 0.73227128 | 0.303 | 0.188 | 1.31E-06 | NKT_UCBMC |
| ZNF506            | 3.72E-11 | 0.57522357 | 0.36  | 0.231 | 1.32E-06 | NKT_UCBMC |
| KIAA1109          | 3.73E-11 | 0.31910916 | 0.478 | 0.334 | 1.32E-06 | NKT_UCBMC |
| ATRX              | 4.28E-11 | 0.29178849 | 0.676 | 0.494 | 1.52E-06 | NKT_UCBMC |
| TLK2              | 4.33E-11 | 0.40124351 | 0.382 | 0.247 | 1.54E-06 | NKT_UCBMC |
| C15H9orf78        | 4.35E-11 | 0.29935745 | 0.557 | 0.394 | 1.54E-06 | NKT_UCBMC |
| KIAA0232          | 4.36E-11 | 0.46584886 | 0.345 | 0.216 | 1.55E-06 | NKT_UCBMC |
| TNPO1             | 4.54E-11 | 0.53648041 | 0.285 | 0.166 | 1.61E-06 | NKT_UCBMC |
| IGF1R             | 4.72E-11 | 0.59540292 | 0.256 | 0.145 | 1.67E-06 | NKT_UCBMC |
| CHN2              | 4.77E-11 | 0.34666029 | 0.39  | 0.252 | 1.69E-06 | NKT_UCBMC |
| TPP2              | 4.83E-11 | 0.58918513 | 0.304 | 0.186 | 1.71E-06 | NKT_UCBMC |
| ADK               | 4.89E-11 | 0.4905934  | 0.371 | 0.243 | 1.73E-06 | NKT_UCBMC |
| ERLEC1            | 4.90E-11 | 0.51297003 | 0.307 | 0.184 | 1.74E-06 | NKT_UCBMC |
| DENND1A           | 4.92E-11 | 0.54308267 | 0.319 | 0.198 | 1.74E-06 | NKT_UCBMC |
| MAP3K5            | 4.99E-11 | 0.62700285 | 0.302 | 0.185 | 1.77E-06 | NKT_UCBMC |
| EIF4H             | 5.01E-11 | 0.40701126 | 0.465 | 0.322 | 1.77E-06 | NKT_UCBMC |
| MYCBP2            | 5.11E-11 | 0.24280457 | 0.708 | 0.503 | 1.81E-06 | NKT_UCBMC |
| SUPT5H            | 5.16E-11 | 0.54718753 | 0.295 | 0.176 | 1.83E-06 | NKT_UCBMC |
| TOB1              | 5.18E-11 | 0.39658438 | 0.418 | 0.275 | 1.84E-06 | NKT_UCBMC |
| DYNC1H1           | 5.30E-11 | 0.64745353 | 0.314 | 0.2   | 1.88E-06 | NKT_UCBMC |
| ATP6V1H           | 5.47E-11 | 0.56367467 | 0.273 | 0.161 | 1.94E-06 | NKT_UCBMC |
| RPLP2             | 5.68E-11 | 0.18148176 | 0.96  | 0.932 | 2.01E-06 | NKT_UCBMC |
| NKTR              | 5.78E-11 | 0.32932087 | 0.424 | 0.28  | 2.05E-06 | NKT_UCBMC |
| BRD7              | 5.79E-11 | 0.58873952 | 0.33  | 0.209 | 2.05E-06 | NKT_UCBMC |
| AEBP2             | 6.00E-11 | 0.49783036 | 0.391 | 0.26  | 2.13E-06 | NKT_UCBMC |

|                   |          |            |       |       |          |           |
|-------------------|----------|------------|-------|-------|----------|-----------|
| ELL               | 6.69E-11 | 0.52484967 | 0.285 | 0.169 | 2.37E-06 | NKT_UCBMC |
| PPP1CB            | 7.14E-11 | 0.24765251 | 0.794 | 0.627 | 2.53E-06 | NKT_UCBMC |
| MIB1              | 7.54E-11 | 0.44169648 | 0.275 | 0.161 | 2.67E-06 | NKT_UCBMC |
| GTF2E2            | 7.66E-11 | 0.78708479 | 0.261 | 0.153 | 2.71E-06 | NKT_UCBMC |
| MYO5A             | 7.69E-11 | 0.43204205 | 0.31  | 0.188 | 2.72E-06 | NKT_UCBMC |
| XRCC5             | 7.71E-11 | 0.27804027 | 0.628 | 0.449 | 2.73E-06 | NKT_UCBMC |
| ARID1A            | 7.78E-11 | 0.34160452 | 0.48  | 0.334 | 2.76E-06 | NKT_UCBMC |
| ELF1              | 8.29E-11 | 0.21732748 | 0.803 | 0.621 | 2.94E-06 | NKT_UCBMC |
| SNRK              | 8.42E-11 | 0.27461731 | 0.549 | 0.391 | 2.98E-06 | NKT_UCBMC |
| ATP5PO            | 8.51E-11 | 0.2871139  | 0.713 | 0.548 | 3.02E-06 | NKT_UCBMC |
| MARK3             | 9.29E-11 | 0.32182273 | 0.421 | 0.283 | 3.29E-06 | NKT_UCBMC |
| TCF25             | 9.31E-11 | 0.43553452 | 0.397 | 0.263 | 3.30E-06 | NKT_UCBMC |
| CD6               | 9.86E-11 | 0.41625731 | 0.431 | 0.292 | 3.49E-06 | NKT_UCBMC |
| SMC1A             | 1.10E-10 | 0.47107032 | 0.304 | 0.185 | 3.89E-06 | NKT_UCBMC |
| RBM6              | 1.11E-10 | 0.36927361 | 0.397 | 0.265 | 3.92E-06 | NKT_UCBMC |
| NBAS              | 1.11E-10 | 0.60028852 | 0.325 | 0.208 | 3.95E-06 | NKT_UCBMC |
| WSB1              | 1.12E-10 | 0.28132729 | 0.533 | 0.369 | 3.98E-06 | NKT_UCBMC |
| TRIM22            | 1.18E-10 | 0.3872931  | 0.379 | 0.247 | 4.19E-06 | NKT_UCBMC |
| DGKA              | 1.19E-10 | 0.33890067 | 0.523 | 0.372 | 4.21E-06 | NKT_UCBMC |
| TMEM41B           | 1.24E-10 | 0.60613857 | 0.251 | 0.142 | 4.41E-06 | NKT_UCBMC |
| NFYC              | 1.26E-10 | 0.59032547 | 0.323 | 0.203 | 4.45E-06 | NKT_UCBMC |
| KIAA1328          | 1.32E-10 | 0.45325076 | 0.329 | 0.209 | 4.68E-06 | NKT_UCBMC |
| PECAM1            | 1.35E-10 | 0.28454377 | 0.404 | 0.263 | 4.80E-06 | NKT_UCBMC |
| ACAP2             | 1.43E-10 | 0.30102728 | 0.661 | 0.486 | 5.05E-06 | NKT_UCBMC |
| STRN              | 1.59E-10 | 0.67106328 | 0.258 | 0.15  | 5.64E-06 | NKT_UCBMC |
| MSH3              | 1.61E-10 | 0.58987303 | 0.282 | 0.168 | 5.69E-06 | NKT_UCBMC |
| PSIP1             | 1.69E-10 | 0.44819707 | 0.415 | 0.283 | 5.99E-06 | NKT_UCBMC |
| ZZEF1             | 1.69E-10 | 0.39297306 | 0.372 | 0.241 | 5.99E-06 | NKT_UCBMC |
| KCNQ5             | 1.70E-10 | 0.36371284 | 0.292 | 0.177 | 6.01E-06 | NKT_UCBMC |
| CEP57             | 1.70E-10 | 0.46506046 | 0.267 | 0.154 | 6.04E-06 | NKT_UCBMC |
| ENSMUG00000017113 | 1.72E-10 | 0.62532578 | 0.303 | 0.189 | 6.08E-06 | NKT_UCBMC |
| NSD3              | 1.76E-10 | 0.33721986 | 0.52  | 0.373 | 6.24E-06 | NKT_UCBMC |
| HIPK3             | 1.85E-10 | 0.69135713 | 0.291 | 0.18  | 6.56E-06 | NKT_UCBMC |



|                   |          |            |       |       |          |           |
|-------------------|----------|------------|-------|-------|----------|-----------|
| CAPZA1            | 2.04E-10 | 0.30824923 | 0.648 | 0.478 | 7.24E-06 | NKT_UCBMC |
| PNRC2             | 2.05E-10 | 0.37765224 | 0.443 | 0.307 | 7.27E-06 | NKT_UCBMC |
| ETV3              | 2.07E-10 | 0.43168611 | 0.291 | 0.176 | 7.32E-06 | NKT_UCBMC |
| PEX14             | 2.21E-10 | 0.38074487 | 0.41  | 0.278 | 7.83E-06 | NKT_UCBMC |
| PBXIP1            | 2.25E-10 | 0.29771944 | 0.447 | 0.304 | 7.99E-06 | NKT_UCBMC |
| ZNF44             | 2.32E-10 | 0.58660042 | 0.263 | 0.156 | 8.24E-06 | NKT_UCBMC |
| COPS8             | 2.45E-10 | 0.52436837 | 0.317 | 0.2   | 8.69E-06 | NKT_UCBMC |
| HSPA4             | 2.50E-10 | 0.5337214  | 0.281 | 0.173 | 8.86E-06 | NKT_UCBMC |
| PHF11             | 2.53E-10 | 0.39618496 | 0.392 | 0.263 | 8.95E-06 | NKT_UCBMC |
| PDSS2             | 2.54E-10 | 0.66017389 | 0.27  | 0.164 | 8.99E-06 | NKT_UCBMC |
| ETF1              | 2.65E-10 | 0.47880269 | 0.435 | 0.303 | 9.40E-06 | NKT_UCBMC |
| PREX1             | 2.68E-10 | 0.1222288  | 0.506 | 0.353 | 9.51E-06 | NKT_UCBMC |
| DHX8              | 2.73E-10 | 0.4994258  | 0.292 | 0.178 | 9.67E-06 | NKT_UCBMC |
| CD83              | 2.73E-10 | 0.35711447 | 0.316 | 0.194 | 9.67E-06 | NKT_UCBMC |
| TPT1              | 2.74E-10 | 0.18322384 | 0.983 | 0.969 | 9.72E-06 | NKT_UCBMC |
| STK17B            | 2.93E-10 | 0.14068118 | 0.845 | 0.625 | 1.04E-05 | NKT_UCBMC |
| MLLT10            | 2.95E-10 | 0.28585601 | 0.426 | 0.284 | 1.04E-05 | NKT_UCBMC |
| ACE               | 2.97E-10 | 0.53356713 | 0.297 | 0.182 | 1.05E-05 | NKT_UCBMC |
| RAB14             | 3.27E-10 | 0.4053354  | 0.346 | 0.229 | 1.16E-05 | NKT_UCBMC |
| ENSMUG00000049010 | 3.31E-10 | 0.47837282 | 0.307 | 0.193 | 1.17E-05 | NKT_UCBMC |
| PTEN              | 3.32E-10 | 0.41066995 | 0.391 | 0.261 | 1.18E-05 | NKT_UCBMC |
| FANCC             | 3.37E-10 | 0.59587669 | 0.337 | 0.22  | 1.19E-05 | NKT_UCBMC |
| RALGAP1           | 3.78E-10 | 0.59324228 | 0.313 | 0.196 | 1.34E-05 | NKT_UCBMC |
| CLIP1             | 3.79E-10 | 0.47254732 | 0.3   | 0.183 | 1.34E-05 | NKT_UCBMC |
| SDHC              | 3.89E-10 | 0.67160561 | 0.261 | 0.156 | 1.38E-05 | NKT_UCBMC |
| CITED1            | 3.89E-10 | 0.53372134 | 0.292 | 0.181 | 1.38E-05 | NKT_UCBMC |
| TENT2             | 3.91E-10 | 0.4361855  | 0.323 | 0.209 | 1.39E-05 | NKT_UCBMC |
| CLSTN1            | 4.01E-10 | 0.57002476 | 0.264 | 0.156 | 1.42E-05 | NKT_UCBMC |
| UBE2E2            | 4.10E-10 | 0.48757478 | 0.316 | 0.2   | 1.45E-05 | NKT_UCBMC |
| PHF14             | 4.11E-10 | 0.38629394 | 0.403 | 0.271 | 1.46E-05 | NKT_UCBMC |
| BCCIP             | 4.31E-10 | 0.44737529 | 0.329 | 0.21  | 1.53E-05 | NKT_UCBMC |
| ENSMUG00000063877 | 4.35E-10 | 0.42744403 | 0.289 | 0.178 | 1.54E-05 | NKT_UCBMC |
| STXBP5            | 4.70E-10 | 0.6122162  | 0.322 | 0.208 | 1.66E-05 | NKT_UCBMC |

|                    |          |            |       |       |          |           |
|--------------------|----------|------------|-------|-------|----------|-----------|
| PRPF8              | 4.73E-10 | 0.51149516 | 0.365 | 0.245 | 1.68E-05 | NKT_UCBMC |
| ARNT               | 4.75E-10 | 0.53645519 | 0.304 | 0.193 | 1.68E-05 | NKT_UCBMC |
| VRK1               | 4.84E-10 | 0.47567866 | 0.323 | 0.207 | 1.71E-05 | NKT_UCBMC |
| PJA2               | 4.86E-10 | 0.3670437  | 0.414 | 0.279 | 1.72E-05 | NKT_UCBMC |
| GNAQ               | 4.90E-10 | 0.30067818 | 0.529 | 0.379 | 1.74E-05 | NKT_UCBMC |
| ENSMMUG00000063316 | 5.03E-10 | 0.21447446 | 0.542 | 0.379 | 1.78E-05 | NKT_UCBMC |
| ERBIN              | 5.10E-10 | 0.19104297 | 0.6   | 0.432 | 1.81E-05 | NKT_UCBMC |
| CCDC12             | 5.15E-10 | 0.50979169 | 0.336 | 0.22  | 1.83E-05 | NKT_UCBMC |
| KPNB1              | 5.77E-10 | 0.45908363 | 0.335 | 0.217 | 2.04E-05 | NKT_UCBMC |
| SEPTIN7            | 6.24E-10 | 0.26502229 | 0.815 | 0.678 | 2.21E-05 | NKT_UCBMC |
| TRANK1             | 6.33E-10 | 0.43807707 | 0.283 | 0.172 | 2.24E-05 | NKT_UCBMC |
| FYB1               | 6.48E-10 | 0.26885908 | 0.64  | 0.475 | 2.29E-05 | NKT_UCBMC |
| EXOC2              | 6.73E-10 | 0.60381806 | 0.257 | 0.155 | 2.38E-05 | NKT_UCBMC |
| PCNP               | 6.85E-10 | 0.32456631 | 0.456 | 0.319 | 2.43E-05 | NKT_UCBMC |
| CHP1               | 6.95E-10 | 0.47189117 | 0.295 | 0.182 | 2.46E-05 | NKT_UCBMC |
| FYTTD1             | 7.00E-10 | 0.28643347 | 0.337 | 0.215 | 2.48E-05 | NKT_UCBMC |
| ZNF28              | 7.26E-10 | 0.42227281 | 0.316 | 0.2   | 2.57E-05 | NKT_UCBMC |
| MSN                | 7.65E-10 | 0.23485419 | 0.784 | 0.597 | 2.71E-05 | NKT_UCBMC |
| ARID4A             | 7.79E-10 | 0.38299377 | 0.314 | 0.197 | 2.76E-05 | NKT_UCBMC |
| PPP2R2D            | 8.25E-10 | 0.61318839 | 0.337 | 0.229 | 2.92E-05 | NKT_UCBMC |
| GRK5               | 8.40E-10 | 0.45420531 | 0.353 | 0.235 | 2.98E-05 | NKT_UCBMC |
| IMPDH2             | 8.61E-10 | 0.45337942 | 0.318 | 0.204 | 3.05E-05 | NKT_UCBMC |
| CWC22              | 8.89E-10 | 0.5024956  | 0.258 | 0.152 | 3.15E-05 | NKT_UCBMC |
| NCOA1              | 8.94E-10 | 0.471148   | 0.325 | 0.213 | 3.17E-05 | NKT_UCBMC |
| EIF2S3             | 9.00E-10 | 0.56284445 | 0.358 | 0.245 | 3.19E-05 | NKT_UCBMC |
| PFDN1              | 9.25E-10 | 0.32775184 | 0.397 | 0.259 | 3.28E-05 | NKT_UCBMC |
| LRPPRC             | 9.43E-10 | 0.37798123 | 0.373 | 0.25  | 3.34E-05 | NKT_UCBMC |
| RTN3               | 9.80E-10 | 0.34184041 | 0.413 | 0.281 | 3.47E-05 | NKT_UCBMC |
| VAPA               | 1.00E-09 | 0.35255484 | 0.529 | 0.398 | 3.56E-05 | NKT_UCBMC |
| ACTR10             | 1.05E-09 | 0.40986199 | 0.309 | 0.195 | 3.73E-05 | NKT_UCBMC |
| COPS2              | 1.08E-09 | 0.37748471 | 0.354 | 0.233 | 3.84E-05 | NKT_UCBMC |
| ARHGEF1            | 1.09E-09 | 0.28652521 | 0.507 | 0.364 | 3.85E-05 | NKT_UCBMC |
| SP110              | 1.12E-09 | 0.25163709 | 0.494 | 0.339 | 3.97E-05 | NKT_UCBMC |

|                    |          |            |       |       |          |           |
|--------------------|----------|------------|-------|-------|----------|-----------|
| DOCK2              | 1.13E-09 | 0.1771146  | 0.692 | 0.513 | 3.99E-05 | NKT_UCBMC |
| IGF2BP3            | 1.14E-09 | 0.48469334 | 0.333 | 0.218 | 4.02E-05 | NKT_UCBMC |
| VPS13D             | 1.14E-09 | 0.55718642 | 0.29  | 0.182 | 4.04E-05 | NKT_UCBMC |
| EIF3D              | 1.15E-09 | 0.30557986 | 0.431 | 0.293 | 4.09E-05 | NKT_UCBMC |
| CHD4               | 1.18E-09 | 0.38750805 | 0.431 | 0.294 | 4.18E-05 | NKT_UCBMC |
| SGMS1              | 1.19E-09 | 0.49390573 | 0.328 | 0.213 | 4.21E-05 | NKT_UCBMC |
| GLG1               | 1.19E-09 | 0.16897379 | 0.513 | 0.36  | 4.21E-05 | NKT_UCBMC |
| MAP3K3             | 1.21E-09 | 0.49500218 | 0.253 | 0.15  | 4.28E-05 | NKT_UCBMC |
| BRWD3              | 1.24E-09 | 0.64713945 | 0.251 | 0.15  | 4.38E-05 | NKT_UCBMC |
| HIF1A              | 1.24E-09 | 0.23152747 | 0.446 | 0.303 | 4.41E-05 | NKT_UCBMC |
| DLST               | 1.30E-09 | 0.58570597 | 0.304 | 0.195 | 4.60E-05 | NKT_UCBMC |
| RPAP2              | 1.33E-09 | 0.47141667 | 0.281 | 0.17  | 4.72E-05 | NKT_UCBMC |
| CD28               | 1.36E-09 | 0.3393324  | 0.537 | 0.395 | 4.80E-05 | NKT_UCBMC |
| NLRC5              | 1.36E-09 | 0.57828622 | 0.264 | 0.162 | 4.82E-05 | NKT_UCBMC |
| CRYL1              | 1.38E-09 | 0.49113308 | 0.307 | 0.194 | 4.88E-05 | NKT_UCBMC |
| ENSMMUG00000016959 | 1.39E-09 | 0.36173921 | 0.394 | 0.269 | 4.94E-05 | NKT_UCBMC |
| ZDHHC20            | 1.44E-09 | 0.40033455 | 0.373 | 0.257 | 5.11E-05 | NKT_UCBMC |
| ADAM19             | 1.51E-09 | 0.1479775  | 0.423 | 0.283 | 5.36E-05 | NKT_UCBMC |
| THEMIS             | 1.54E-09 | 0.17144585 | 0.534 | 0.376 | 5.45E-05 | NKT_UCBMC |
| ATF7IP2            | 1.62E-09 | 0.398668   | 0.358 | 0.236 | 5.74E-05 | NKT_UCBMC |
| DNAJB6             | 1.63E-09 | 0.25022647 | 0.735 | 0.557 | 5.76E-05 | NKT_UCBMC |
| NUFIP1             | 1.72E-09 | 0.21486903 | 0.259 | 0.158 | 6.11E-05 | NKT_UCBMC |
| RBMS1              | 1.78E-09 | 0.21231844 | 0.592 | 0.436 | 6.29E-05 | NKT_UCBMC |
| VPS26A             | 1.82E-09 | 0.45945487 | 0.298 | 0.188 | 6.46E-05 | NKT_UCBMC |
| FAM13B             | 1.83E-09 | 0.47972866 | 0.325 | 0.213 | 6.47E-05 | NKT_UCBMC |
| TMEM71             | 1.85E-09 | 0.27333129 | 0.346 | 0.226 | 6.55E-05 | NKT_UCBMC |
| LDLR               | 1.86E-09 | 0.59012507 | 0.259 | 0.159 | 6.59E-05 | NKT_UCBMC |
| TBC1D24            | 1.89E-09 | 0.28453755 | 0.526 | 0.373 | 6.71E-05 | NKT_UCBMC |
| SPIDR              | 1.92E-09 | 0.5485948  | 0.349 | 0.235 | 6.80E-05 | NKT_UCBMC |
| MAPRE1             | 1.93E-09 | 0.37924222 | 0.423 | 0.293 | 6.84E-05 | NKT_UCBMC |
| CDC42              | 1.96E-09 | 0.20438549 | 0.94  | 0.838 | 6.94E-05 | NKT_UCBMC |
| THADA              | 1.98E-09 | 0.46268502 | 0.431 | 0.313 | 7.01E-05 | NKT_UCBMC |
| CLK4               | 1.98E-09 | 0.4793953  | 0.293 | 0.186 | 7.02E-05 | NKT_UCBMC |

|                    |          |            |       |       |            |           |
|--------------------|----------|------------|-------|-------|------------|-----------|
| ARFGEF1            | 2.01E-09 | 0.39756507 | 0.386 | 0.266 | 7.13E-05   | NKT_UCBMC |
| WAPL               | 2.05E-09 | 0.32117562 | 0.446 | 0.305 | 7.26E-05   | NKT_UCBMC |
| ENSMMUG00000052424 | 2.05E-09 | 0.12682414 | 0.788 | 0.591 | 7.27E-05   | NKT_UCBMC |
| CUL1               | 2.17E-09 | 0.4413087  | 0.34  | 0.224 | 7.68E-05   | NKT_UCBMC |
| POC5               | 2.18E-09 | 0.24242571 | 0.505 | 0.356 | 7.71E-05   | NKT_UCBMC |
| REV3L              | 2.30E-09 | 0.25518156 | 0.529 | 0.387 | 8.16E-05   | NKT_UCBMC |
| NDEL1              | 2.31E-09 | 0.34520908 | 0.44  | 0.309 | 8.18E-05   | NKT_UCBMC |
| ABHD12             | 2.40E-09 | 0.34777647 | 0.295 | 0.186 | 8.52E-05   | NKT_UCBMC |
| USP24              | 2.49E-09 | 0.54516854 | 0.317 | 0.208 | 8.84E-05   | NKT_UCBMC |
| RC3H1              | 2.58E-09 | 0.50597909 | 0.278 | 0.174 | 9.13E-05   | NKT_UCBMC |
| C4H6orf62          | 2.60E-09 | 0.33586566 | 0.342 | 0.224 | 9.22E-05   | NKT_UCBMC |
| ENTPD4             | 2.62E-09 | 0.64964456 | 0.292 | 0.188 | 9.28E-05   | NKT_UCBMC |
| HNRNPR             | 2.71E-09 | 0.31811725 | 0.503 | 0.361 | 9.62E-05   | NKT_UCBMC |
| STIM1              | 2.77E-09 | 0.27421665 | 0.473 | 0.334 | 9.81E-05   | NKT_UCBMC |
| GNAI3              | 2.85E-09 | 0.30200792 | 0.415 | 0.282 | 0.00010104 | NKT_UCBMC |
| RPS6KC1            | 2.93E-09 | 0.52476587 | 0.318 | 0.207 | 0.00010378 | NKT_UCBMC |
| HGSNAT             | 3.01E-09 | 0.47995331 | 0.27  | 0.165 | 0.00010657 | NKT_UCBMC |
| PPP4R3B            | 3.01E-09 | 0.38076257 | 0.384 | 0.261 | 0.00010659 | NKT_UCBMC |
| FARS2              | 3.11E-09 | 0.29404224 | 0.446 | 0.309 | 0.00011028 | NKT_UCBMC |
| CRBN               | 3.23E-09 | 0.55747302 | 0.259 | 0.157 | 0.00011461 | NKT_UCBMC |
| VPS13A             | 3.27E-09 | 0.59986082 | 0.269 | 0.168 | 0.00011589 | NKT_UCBMC |
| TMTC2              | 3.30E-09 | 0.59116012 | 0.308 | 0.201 | 0.00011709 | NKT_UCBMC |
| ANKH               | 3.31E-09 | 0.41804995 | 0.349 | 0.23  | 0.00011716 | NKT_UCBMC |
| BOD1L1             | 3.55E-09 | 0.52078797 | 0.264 | 0.162 | 0.00012586 | NKT_UCBMC |
| TBC1D22A           | 3.60E-09 | 0.38212822 | 0.373 | 0.252 | 0.00012738 | NKT_UCBMC |
| REST               | 3.85E-09 | 0.61135153 | 0.251 | 0.154 | 0.00013638 | NKT_UCBMC |
| CWF19L2            | 3.86E-09 | 0.30824319 | 0.381 | 0.257 | 0.0001366  | NKT_UCBMC |
| AATF               | 4.02E-09 | 0.45655915 | 0.285 | 0.182 | 0.00014242 | NKT_UCBMC |
| DDX10              | 4.09E-09 | 0.38950403 | 0.284 | 0.182 | 0.00014483 | NKT_UCBMC |
| PACS1              | 4.09E-09 | 0.2745237  | 0.475 | 0.342 | 0.00014493 | NKT_UCBMC |
| RELCH              | 4.60E-09 | 0.40110611 | 0.373 | 0.248 | 0.00016295 | NKT_UCBMC |
| CCDC59             | 4.85E-09 | 0.21142142 | 0.313 | 0.197 | 0.0001717  | NKT_UCBMC |
| HDAC2              | 4.85E-09 | 0.39180356 | 0.328 | 0.213 | 0.00017187 | NKT_UCBMC |

|                   |          |            |       |       |            |           |
|-------------------|----------|------------|-------|-------|------------|-----------|
| PAPOLA            | 4.98E-09 | 0.28348863 | 0.636 | 0.477 | 0.00017649 | NKT_UCBMC |
| TP53BP2           | 5.31E-09 | 0.4288132  | 0.273 | 0.17  | 0.00018809 | NKT_UCBMC |
| CEP192            | 5.46E-09 | 0.48862317 | 0.338 | 0.227 | 0.0001933  | NKT_UCBMC |
| RNF103            | 5.59E-09 | 0.37669176 | 0.34  | 0.22  | 0.00019803 | NKT_UCBMC |
| SDF2              | 5.60E-09 | 0.37003949 | 0.271 | 0.166 | 0.00019834 | NKT_UCBMC |
| CDC5L             | 5.72E-09 | 0.30587391 | 0.345 | 0.228 | 0.00020275 | NKT_UCBMC |
| SAMM50            | 5.91E-09 | 0.35963648 | 0.262 | 0.157 | 0.00020939 | NKT_UCBMC |
| HNRNPA2B1         | 6.01E-09 | 0.19870089 | 0.932 | 0.774 | 0.00021287 | NKT_UCBMC |
| FO XK1            | 6.13E-09 | 0.53504644 | 0.252 | 0.152 | 0.00021726 | NKT_UCBMC |
| ARNTL             | 6.54E-09 | 0.49064563 | 0.29  | 0.186 | 0.00023163 | NKT_UCBMC |
| SH3KBP1           | 6.58E-09 | 0.12529026 | 0.85  | 0.663 | 0.00023298 | NKT_UCBMC |
| NCOR1             | 6.76E-09 | 0.30430677 | 0.527 | 0.379 | 0.00023939 | NKT_UCBMC |
| JUND              | 6.84E-09 | 0.19145392 | 0.751 | 0.597 | 0.00024231 | NKT_UCBMC |
| NUFIP2            | 7.03E-09 | 0.23615821 | 0.48  | 0.331 | 0.00024905 | NKT_UCBMC |
| ENSMUG00000061458 | 7.90E-09 | 0.41543941 | 0.29  | 0.188 | 0.00027987 | NKT_UCBMC |
| FAR1              | 8.09E-09 | 0.36654215 | 0.366 | 0.25  | 0.00028657 | NKT_UCBMC |
| SAFB2             | 8.40E-09 | 0.4133655  | 0.306 | 0.202 | 0.00029773 | NKT_UCBMC |
| FAM91A1           | 8.52E-09 | 0.39655346 | 0.255 | 0.158 | 0.00030181 | NKT_UCBMC |
| SREK1IP1          | 8.98E-09 | 0.29695782 | 0.346 | 0.229 | 0.00031818 | NKT_UCBMC |
| TC2N              | 9.04E-09 | 0.43260834 | 0.307 | 0.201 | 0.00032033 | NKT_UCBMC |
| SELENOS           | 9.13E-09 | 0.21322164 | 0.59  | 0.43  | 0.00032347 | NKT_UCBMC |
| FAM222B           | 9.16E-09 | 0.38008418 | 0.318 | 0.213 | 0.00032473 | NKT_UCBMC |
| EP400             | 9.18E-09 | 0.4707328  | 0.268 | 0.17  | 0.00032523 | NKT_UCBMC |
| PARN              | 9.36E-09 | 0.59017357 | 0.272 | 0.173 | 0.00033147 | NKT_UCBMC |
| ARHGEF6           | 9.47E-09 | 0.41377658 | 0.409 | 0.288 | 0.00033539 | NKT_UCBMC |
| LTN1              | 9.64E-09 | 0.48036133 | 0.289 | 0.186 | 0.00034153 | NKT_UCBMC |
| CNTRL             | 9.69E-09 | 0.46494344 | 0.285 | 0.179 | 0.00034351 | NKT_UCBMC |
| MBD5              | 9.85E-09 | 0.32989618 | 0.451 | 0.322 | 0.00034913 | NKT_UCBMC |
| MFF               | 9.86E-09 | 0.50680063 | 0.325 | 0.218 | 0.00034929 | NKT_UCBMC |
| CCNY              | 9.93E-09 | 0.25795991 | 0.393 | 0.276 | 0.00035182 | NKT_UCBMC |
| NASP              | 9.99E-09 | 0.30697196 | 0.526 | 0.384 | 0.0003539  | NKT_UCBMC |
| DNAJC24           | 1.02E-08 | 0.36599004 | 0.376 | 0.26  | 0.00036233 | NKT_UCBMC |
| COPS3             | 1.03E-08 | 0.63457847 | 0.251 | 0.158 | 0.00036599 | NKT_UCBMC |

|                    |          |            |       |       |            |           |
|--------------------|----------|------------|-------|-------|------------|-----------|
| RALGAPA2           | 1.04E-08 | 0.36205857 | 0.382 | 0.269 | 0.00036749 | NKT_UCBMC |
| SSR1               | 1.09E-08 | 0.42196041 | 0.336 | 0.221 | 0.00038744 | NKT_UCBMC |
| CASC3              | 1.14E-08 | 0.48166892 | 0.345 | 0.235 | 0.00040291 | NKT_UCBMC |
| EAPP               | 1.14E-08 | 0.30331726 | 0.257 | 0.156 | 0.00040437 | NKT_UCBMC |
| DCAF6              | 1.18E-08 | 0.26380691 | 0.354 | 0.239 | 0.00041866 | NKT_UCBMC |
| PRPF4B             | 1.19E-08 | 0.25950759 | 0.754 | 0.596 | 0.00042138 | NKT_UCBMC |
| XPC                | 1.20E-08 | 0.5447896  | 0.27  | 0.171 | 0.00042683 | NKT_UCBMC |
| TANK               | 1.26E-08 | 0.27283951 | 0.427 | 0.308 | 0.00044531 | NKT_UCBMC |
| ENSMUG00000012690  | 1.30E-08 | 0.38252831 | 0.262 | 0.162 | 0.00046204 | NKT_UCBMC |
| RSL1D1             | 1.31E-08 | 0.25150032 | 0.43  | 0.302 | 0.00046519 | NKT_UCBMC |
| TAOK3              | 1.40E-08 | 0.29435456 | 0.52  | 0.378 | 0.000497   | NKT_UCBMC |
| SINHCAF            | 1.48E-08 | 0.27382944 | 0.404 | 0.279 | 0.00052325 | NKT_UCBMC |
| RCOR1              | 1.50E-08 | 0.39210752 | 0.306 | 0.201 | 0.00053005 | NKT_UCBMC |
| REL                | 1.59E-08 | 0.21543901 | 0.562 | 0.408 | 0.00056231 | NKT_UCBMC |
| MAPK1IP1L          | 1.62E-08 | 0.21873152 | 0.379 | 0.259 | 0.00057513 | NKT_UCBMC |
| ENSMUG00000006343  | 1.80E-08 | 0.31066235 | 0.335 | 0.222 | 0.00063674 | NKT_UCBMC |
| APPL1              | 1.85E-08 | 0.4938059  | 0.255 | 0.159 | 0.00065532 | NKT_UCBMC |
| GMDS               | 1.92E-08 | 0.29595292 | 0.397 | 0.277 | 0.00068188 | NKT_UCBMC |
| GTF2F2             | 2.00E-08 | 0.46625572 | 0.285 | 0.184 | 0.00070971 | NKT_UCBMC |
| ATM                | 2.01E-08 | 0.31899906 | 0.527 | 0.388 | 0.00071239 | NKT_UCBMC |
| DYRK1A             | 2.09E-08 | 0.2961459  | 0.425 | 0.303 | 0.00073953 | NKT_UCBMC |
| RNF11              | 2.14E-08 | 0.59384243 | 0.279 | 0.182 | 0.00075677 | NKT_UCBMC |
| MPZL1              | 2.14E-08 | 0.20982825 | 0.39  | 0.264 | 0.00075714 | NKT_UCBMC |
| LENG8              | 2.16E-08 | 0.4848394  | 0.267 | 0.169 | 0.00076618 | NKT_UCBMC |
| EXT1               | 2.37E-08 | 0.26237813 | 0.294 | 0.191 | 0.00083827 | NKT_UCBMC |
| PALMD              | 2.46E-08 | 0.37448356 | 0.331 | 0.219 | 0.00087243 | NKT_UCBMC |
| IPO5               | 2.48E-08 | 0.44520689 | 0.258 | 0.162 | 0.0008771  | NKT_UCBMC |
| TMEM183A           | 2.64E-08 | 0.52115269 | 0.255 | 0.161 | 0.0009368  | NKT_UCBMC |
| ATE1               | 2.75E-08 | 0.26604318 | 0.303 | 0.2   | 0.0009749  | NKT_UCBMC |
| ENSMUG000000055114 | 2.79E-08 | 0.34685556 | 0.285 | 0.183 | 0.00098993 | NKT_UCBMC |
| CCDC82             | 2.81E-08 | 0.35504422 | 0.315 | 0.21  | 0.0009953  | NKT_UCBMC |
| ENSMUG000000056012 | 2.82E-08 | 0.2239139  | 0.518 | 0.385 | 0.00100067 | NKT_UCBMC |
| UBXN4              | 2.93E-08 | 0.36316715 | 0.445 | 0.324 | 0.00103704 | NKT_UCBMC |

|                    |          |            |       |       |            |           |
|--------------------|----------|------------|-------|-------|------------|-----------|
| GATAD2A            | 2.96E-08 | 0.24594093 | 0.414 | 0.294 | 0.00104902 | NKT_UCBMC |
| RASGRP1            | 3.30E-08 | 0.41899851 | 0.295 | 0.194 | 0.00117002 | NKT_UCBMC |
| SMN1               | 3.30E-08 | 0.51103692 | 0.273 | 0.175 | 0.0011708  | NKT_UCBMC |
| SMARCC1            | 3.36E-08 | 0.29657362 | 0.482 | 0.348 | 0.0011898  | NKT_UCBMC |
| MAPK6              | 3.38E-08 | 0.40642811 | 0.253 | 0.158 | 0.00119742 | NKT_UCBMC |
| USP7               | 3.49E-08 | 0.39839886 | 0.315 | 0.21  | 0.00123793 | NKT_UCBMC |
| TANGO6             | 3.53E-08 | 0.339597   | 0.305 | 0.201 | 0.00124992 | NKT_UCBMC |
| PPP6R3             | 3.63E-08 | 0.23739555 | 0.524 | 0.379 | 0.00128712 | NKT_UCBMC |
| ANKRD13C           | 3.70E-08 | 0.45408071 | 0.28  | 0.182 | 0.00131072 | NKT_UCBMC |
| CHORDC1            | 3.70E-08 | 0.30335905 | 0.415 | 0.293 | 0.00131269 | NKT_UCBMC |
| UBE2Q2             | 3.95E-08 | 0.39482006 | 0.283 | 0.183 | 0.00139901 | NKT_UCBMC |
| VPS8               | 3.96E-08 | 0.32278805 | 0.289 | 0.187 | 0.00140474 | NKT_UCBMC |
| ARRB2              | 4.02E-08 | 0.32303478 | 0.349 | 0.239 | 0.00142574 | NKT_UCBMC |
| NAA50              | 4.34E-08 | 0.4393993  | 0.325 | 0.218 | 0.00153613 | NKT_UCBMC |
| CAMKMT             | 4.36E-08 | 0.36571281 | 0.365 | 0.253 | 0.00154358 | NKT_UCBMC |
| SMU1               | 4.53E-08 | 0.48480164 | 0.335 | 0.23  | 0.00160469 | NKT_UCBMC |
| ADD1               | 4.61E-08 | 0.19173476 | 0.433 | 0.311 | 0.00163182 | NKT_UCBMC |
| HMBOX1             | 4.66E-08 | 0.44453984 | 0.281 | 0.183 | 0.0016515  | NKT_UCBMC |
| OXR1               | 4.85E-08 | 0.35980996 | 0.349 | 0.239 | 0.00172019 | NKT_UCBMC |
| AZIN1              | 4.98E-08 | 0.32583067 | 0.301 | 0.198 | 0.00176567 | NKT_UCBMC |
| ZMYM2              | 5.06E-08 | 0.20629179 | 0.448 | 0.323 | 0.00179242 | NKT_UCBMC |
| C3H21orf91         | 5.14E-08 | 0.49878085 | 0.302 | 0.207 | 0.00182033 | NKT_UCBMC |
| ENSMMUG00000015208 | 5.38E-08 | 0.27062969 | 0.382 | 0.262 | 0.00190621 | NKT_UCBMC |
| NFAT5              | 5.49E-08 | 0.28962212 | 0.4   | 0.281 | 0.00194367 | NKT_UCBMC |
| ENSMMUG00000029026 | 5.56E-08 | 0.15204899 | 0.596 | 0.441 | 0.00196971 | NKT_UCBMC |
| MED21              | 6.12E-08 | 0.37658241 | 0.304 | 0.196 | 0.00216776 | NKT_UCBMC |
| ADAR               | 6.18E-08 | 0.35362792 | 0.353 | 0.245 | 0.00219067 | NKT_UCBMC |
| RPS16              | 6.60E-08 | 0.15301682 | 0.97  | 0.949 | 0.00233866 | NKT_UCBMC |
| CTCF               | 6.67E-08 | 0.39424042 | 0.349 | 0.244 | 0.00236496 | NKT_UCBMC |
| RPL31              | 7.19E-08 | 0.20179888 | 0.718 | 0.552 | 0.00254663 | NKT_UCBMC |
| EIF4E              | 7.32E-08 | 0.48636804 | 0.276 | 0.181 | 0.0025927  | NKT_UCBMC |
| WDR13              | 7.34E-08 | 0.13700155 | 0.663 | 0.5   | 0.00260165 | NKT_UCBMC |
| DDX18              | 7.73E-08 | 0.29672472 | 0.464 | 0.341 | 0.00273874 | NKT_UCBMC |

|          |          |            |       |       |            |           |
|----------|----------|------------|-------|-------|------------|-----------|
| PRKCA    | 7.80E-08 | 0.16297463 | 0.37  | 0.257 | 0.0027653  | NKT_UCBMC |
| MAP3K1   | 8.07E-08 | 0.26927311 | 0.476 | 0.356 | 0.00285939 | NKT_UCBMC |
| SPATA5   | 8.22E-08 | 0.44920071 | 0.333 | 0.229 | 0.00291198 | NKT_UCBMC |
| RFX7     | 8.79E-08 | 0.53957612 | 0.304 | 0.207 | 0.00311598 | NKT_UCBMC |
| ARHGAP45 | 9.12E-08 | 0.22173804 | 0.46  | 0.334 | 0.00322971 | NKT_UCBMC |
| FKBP3    | 9.20E-08 | 0.27778996 | 0.376 | 0.259 | 0.00326062 | NKT_UCBMC |
| SLC39A11 | 9.24E-08 | 0.24279562 | 0.308 | 0.205 | 0.00327541 | NKT_UCBMC |
| RALY     | 9.38E-08 | 0.23338814 | 0.427 | 0.308 | 0.00332524 | NKT_UCBMC |
| SND1     | 9.69E-08 | 0.22788727 | 0.433 | 0.309 | 0.00343319 | NKT_UCBMC |
| TTC19    | 1.00E-07 | 0.47252114 | 0.318 | 0.22  | 0.00355719 | NKT_UCBMC |
| RUBCN    | 1.03E-07 | 0.39491567 | 0.278 | 0.182 | 0.00366159 | NKT_UCBMC |
| ZNF462   | 1.05E-07 | 0.15037907 | 0.373 | 0.257 | 0.00370351 | NKT_UCBMC |
| ABCG2    | 1.06E-07 | 0.34687462 | 0.305 | 0.202 | 0.00376108 | NKT_UCBMC |
| BABAM2   | 1.08E-07 | 0.2573761  | 0.422 | 0.298 | 0.00381078 | NKT_UCBMC |
| SLC44A2  | 1.10E-07 | 0.28256195 | 0.352 | 0.245 | 0.0038883  | NKT_UCBMC |
| RELB     | 1.19E-07 | 0.44811323 | 0.285 | 0.193 | 0.00420438 | NKT_UCBMC |
| USP14    | 1.20E-07 | 0.54783994 | 0.283 | 0.191 | 0.00425316 | NKT_UCBMC |
| NUP50    | 1.21E-07 | 0.34832294 | 0.288 | 0.188 | 0.00429484 | NKT_UCBMC |
| FHIT     | 1.22E-07 | 0.29432407 | 0.336 | 0.233 | 0.00432189 | NKT_UCBMC |
| DCAF5    | 1.25E-07 | 0.39168028 | 0.353 | 0.249 | 0.00443103 | NKT_UCBMC |
| ST3GAL1  | 1.26E-07 | 0.26073635 | 0.409 | 0.291 | 0.0044659  | NKT_UCBMC |
| FCHSD2   | 1.29E-07 | 0.31182407 | 0.43  | 0.309 | 0.00457261 | NKT_UCBMC |
| CRNKL1   | 1.31E-07 | 0.32574131 | 0.268 | 0.173 | 0.00462866 | NKT_UCBMC |
| YWHAZ    | 1.35E-07 | 0.18777434 | 0.855 | 0.717 | 0.00478582 | NKT_UCBMC |
| PMAIP1   | 1.35E-07 | 0.47435197 | 0.256 | 0.165 | 0.0047974  | NKT_UCBMC |
| UBAP2L   | 1.38E-07 | 0.36612023 | 0.339 | 0.236 | 0.00487416 | NKT_UCBMC |
| HNRNPA0  | 1.40E-07 | 0.35671754 | 0.451 | 0.334 | 0.00495209 | NKT_UCBMC |
| PXK      | 1.43E-07 | 0.40060472 | 0.31  | 0.211 | 0.00506374 | NKT_UCBMC |
| TM9SF4   | 1.49E-07 | 0.54304477 | 0.252 | 0.162 | 0.00529378 | NKT_UCBMC |
| BIN2     | 1.58E-07 | 0.20587869 | 0.696 | 0.54  | 0.00559059 | NKT_UCBMC |
| RAMAC    | 1.65E-07 | 0.14765522 | 0.301 | 0.193 | 0.00585014 | NKT_UCBMC |
| PIAS2    | 1.66E-07 | 0.65688808 | 0.251 | 0.163 | 0.00587104 | NKT_UCBMC |
| SUGT1    | 1.70E-07 | 0.26307889 | 0.387 | 0.274 | 0.00601895 | NKT_UCBMC |



|                   |          |            |       |       |            |           |
|-------------------|----------|------------|-------|-------|------------|-----------|
| SBN01             | 1.73E-07 | 0.37612629 | 0.29  | 0.194 | 0.0061394  | NKT_UCBMC |
| RAP1GDS1          | 1.79E-07 | 0.40912816 | 0.327 | 0.224 | 0.00635484 | NKT_UCBMC |
| ITFG2             | 1.84E-07 | 0.37824242 | 0.291 | 0.194 | 0.00653545 | NKT_UCBMC |
| NCK1              | 1.86E-07 | 0.26382216 | 0.438 | 0.313 | 0.00659528 | NKT_UCBMC |
| NFKBIB            | 1.86E-07 | 0.4966027  | 0.313 | 0.219 | 0.00660632 | NKT_UCBMC |
| PAK1IP1           | 1.88E-07 | 0.46053714 | 0.27  | 0.175 | 0.00666075 | NKT_UCBMC |
| UBB               | 1.88E-07 | 0.22119332 | 0.866 | 0.765 | 0.0066651  | NKT_UCBMC |
| NEMF              | 1.92E-07 | 0.29664935 | 0.371 | 0.26  | 0.00680071 | NKT_UCBMC |
| UGCG              | 1.96E-07 | 0.35570169 | 0.281 | 0.185 | 0.00693923 | NKT_UCBMC |
| GTF3C1            | 2.03E-07 | 0.32911976 | 0.255 | 0.163 | 0.00718068 | NKT_UCBMC |
| ARAP2             | 2.04E-07 | 0.27090289 | 0.396 | 0.277 | 0.00721431 | NKT_UCBMC |
| PRPF6             | 2.09E-07 | 0.25078498 | 0.372 | 0.261 | 0.00739941 | NKT_UCBMC |
| HSD17B11          | 2.25E-07 | 0.16823177 | 0.322 | 0.216 | 0.00795638 | NKT_UCBMC |
| FKBP5             | 2.30E-07 | 0.34373246 | 0.47  | 0.354 | 0.00816471 | NKT_UCBMC |
| HSPA9             | 2.31E-07 | 0.251579   | 0.467 | 0.341 | 0.00817938 | NKT_UCBMC |
| UFD1              | 2.32E-07 | 0.32964469 | 0.265 | 0.173 | 0.00823675 | NKT_UCBMC |
| ETNK1             | 2.38E-07 | 0.20330045 | 0.32  | 0.219 | 0.0084237  | NKT_UCBMC |
| UBAP2             | 2.55E-07 | 0.41344702 | 0.323 | 0.224 | 0.00902735 | NKT_UCBMC |
| NEK7              | 2.55E-07 | 0.37393708 | 0.358 | 0.253 | 0.00904437 | NKT_UCBMC |
| IST1              | 2.55E-07 | 0.32614638 | 0.35  | 0.243 | 0.00904804 | NKT_UCBMC |
| ATXN7L1           | 2.68E-07 | 0.41856507 | 0.264 | 0.175 | 0.00948049 | NKT_UCBMC |
| STT3B             | 2.72E-07 | 0.24007556 | 0.549 | 0.402 | 0.00963196 | NKT_UCBMC |
| ENSMUG00000018557 | 2.76E-07 | 0.3947619  | 0.326 | 0.226 | 0.00977153 | NKT_UCBMC |
| CD2AP             | 2.84E-07 | 0.30591177 | 0.359 | 0.254 | 0.01006113 | NKT_UCBMC |
| MECP2             | 2.90E-07 | 0.23490978 | 0.408 | 0.289 | 0.01026514 | NKT_UCBMC |
| HIRA              | 3.01E-07 | 0.4098869  | 0.26  | 0.169 | 0.01066686 | NKT_UCBMC |
| SNX2              | 3.12E-07 | 0.37295812 | 0.332 | 0.229 | 0.01103748 | NKT_UCBMC |
| MDN1              | 3.18E-07 | 0.25451936 | 0.292 | 0.195 | 0.01127776 | NKT_UCBMC |
| EIF2A             | 3.24E-07 | 0.33070325 | 0.321 | 0.222 | 0.01149632 | NKT_UCBMC |
| PER1              | 3.25E-07 | 0.28865593 | 0.475 | 0.35  | 0.01152651 | NKT_UCBMC |
| SYF2              | 3.27E-07 | 0.13044544 | 0.545 | 0.41  | 0.01159691 | NKT_UCBMC |
| TMED10            | 3.52E-07 | 0.25818548 | 0.456 | 0.333 | 0.01246536 | NKT_UCBMC |
| BNIP2             | 3.80E-07 | 0.30127098 | 0.279 | 0.182 | 0.01345422 | NKT_UCBMC |

|         |          |            |       |       |            |           |
|---------|----------|------------|-------|-------|------------|-----------|
| TPR     | 3.81E-07 | 0.22078808 | 0.466 | 0.339 | 0.01349933 | NKT_UCBMC |
| POLR2A  | 3.93E-07 | 0.3758806  | 0.35  | 0.247 | 0.01391358 | NKT_UCBMC |
| NUMB    | 4.11E-07 | 0.29240467 | 0.35  | 0.248 | 0.01454739 | NKT_UCBMC |
| CAB39   | 4.43E-07 | 0.11070335 | 0.577 | 0.424 | 0.01568084 | NKT_UCBMC |
| TBCC    | 4.46E-07 | 0.20267269 | 0.335 | 0.23  | 0.01581865 | NKT_UCBMC |
| MED30   | 4.47E-07 | 0.58662429 | 0.272 | 0.187 | 0.0158422  | NKT_UCBMC |
| HNRNPA3 | 4.53E-07 | 0.21119118 | 0.724 | 0.559 | 0.01604337 | NKT_UCBMC |
| ELMOD3  | 4.70E-07 | 0.27188755 | 0.34  | 0.236 | 0.01665591 | NKT_UCBMC |
| IFRD1   | 4.74E-07 | 0.12649201 | 0.456 | 0.337 | 0.01678951 | NKT_UCBMC |
| C1D     | 4.76E-07 | 0.25287829 | 0.32  | 0.218 | 0.01685805 | NKT_UCBMC |
| PPFIBP1 | 4.76E-07 | 0.23684772 | 0.361 | 0.262 | 0.01687704 | NKT_UCBMC |
| IGBP1   | 4.84E-07 | 0.22415785 | 0.369 | 0.262 | 0.01714065 | NKT_UCBMC |
| UHMK1   | 4.93E-07 | 0.40420018 | 0.253 | 0.171 | 0.01746063 | NKT_UCBMC |
| SERTAD2 | 4.99E-07 | 0.31148039 | 0.301 | 0.204 | 0.01769115 | NKT_UCBMC |
| USP25   | 5.01E-07 | 0.26236809 | 0.318 | 0.218 | 0.01775373 | NKT_UCBMC |
| ME2     | 5.28E-07 | 0.27778949 | 0.48  | 0.354 | 0.01871229 | NKT_UCBMC |
| ZFX     | 5.36E-07 | 0.39033681 | 0.261 | 0.175 | 0.0190018  | NKT_UCBMC |
| R3HDM2  | 5.38E-07 | 0.2357736  | 0.33  | 0.227 | 0.01906848 | NKT_UCBMC |
| POLR2D  | 5.78E-07 | 0.24142198 | 0.29  | 0.194 | 0.02047448 | NKT_UCBMC |
| RALGAPB | 5.90E-07 | 0.36663652 | 0.293 | 0.197 | 0.02090576 | NKT_UCBMC |
| ZNF638  | 6.15E-07 | 0.23260323 | 0.503 | 0.382 | 0.0217763  | NKT_UCBMC |
| NOP58   | 6.45E-07 | 0.22106623 | 0.442 | 0.327 | 0.0228558  | NKT_UCBMC |
| CR1     | 6.61E-07 | 0.26984887 | 0.385 | 0.271 | 0.02343136 | NKT_UCBMC |
| SYAP1   | 6.62E-07 | 0.10441489 | 0.391 | 0.278 | 0.02345417 | NKT_UCBMC |
| PSMD7   | 6.79E-07 | 0.32601184 | 0.322 | 0.224 | 0.02405391 | NKT_UCBMC |
| RTF1    | 6.82E-07 | 0.24351476 | 0.329 | 0.23  | 0.02417521 | NKT_UCBMC |
| PIK3CD  | 6.90E-07 | 0.12620106 | 0.398 | 0.284 | 0.02445311 | NKT_UCBMC |
| DHX15   | 8.13E-07 | 0.30437274 | 0.3   | 0.209 | 0.02880605 | NKT_UCBMC |
| CNOT7   | 8.14E-07 | 0.26606622 | 0.28  | 0.19  | 0.02885515 | NKT_UCBMC |
| COMMD1  | 8.25E-07 | 0.39057167 | 0.452 | 0.338 | 0.02923476 | NKT_UCBMC |
| ATP2B4  | 8.58E-07 | 0.22233152 | 0.546 | 0.408 | 0.03040976 | NKT_UCBMC |
| UBE3A   | 8.67E-07 | 0.29402469 | 0.338 | 0.245 | 0.03071853 | NKT_UCBMC |
| DDX39B  | 9.16E-07 | 0.30891831 | 0.365 | 0.266 | 0.03245678 | NKT_UCBMC |

|           |          |            |       |       |            |           |
|-----------|----------|------------|-------|-------|------------|-----------|
| SH3GL1    | 9.75E-07 | 0.43185989 | 0.302 | 0.214 | 0.03453739 | NKT_UCBMC |
| ATG3      | 1.08E-06 | 0.29830149 | 0.386 | 0.277 | 0.03826233 | NKT_UCBMC |
| TNFRSF10A | 1.08E-06 | 0.39270879 | 0.35  | 0.257 | 0.03835094 | NKT_UCBMC |
| R3HDM1    | 1.10E-06 | 0.36478269 | 0.283 | 0.194 | 0.03899527 | NKT_UCBMC |
| EIF3M     | 1.12E-06 | 0.19909842 | 0.546 | 0.406 | 0.03961859 | NKT_UCBMC |
| SEMA4D    | 1.12E-06 | 0.18083492 | 0.49  | 0.367 | 0.03984973 | NKT_UCBMC |
| UFC1      | 1.16E-06 | 0.12232669 | 0.451 | 0.328 | 0.04116002 | NKT_UCBMC |
| ACO2      | 1.18E-06 | 0.32397108 | 0.295 | 0.205 | 0.04185546 | NKT_UCBMC |
| CS        | 1.19E-06 | 0.23163599 | 0.484 | 0.362 | 0.04200342 | NKT_UCBMC |
| TRAT1     | 1.25E-06 | 0.12797522 | 0.409 | 0.298 | 0.04432778 | NKT_UCBMC |
| ZNF131    | 1.25E-06 | 0.25835372 | 0.346 | 0.245 | 0.04438665 | NKT_UCBMC |
| HM13      | 1.27E-06 | 0.34744549 | 0.3   | 0.207 | 0.04516973 | NKT_UCBMC |
| MED28     | 1.35E-06 | 0.31237445 | 0.25  | 0.165 | 0.04797733 | NKT_UCBMC |
| ADAM17    | 1.43E-06 | 0.374906   | 0.252 | 0.171 | 0.05082586 | NKT_UCBMC |
| ARF4      | 1.53E-06 | 0.16999785 | 0.576 | 0.436 | 0.05426658 | NKT_UCBMC |
| ZNF148    | 1.63E-06 | 0.21556274 | 0.437 | 0.32  | 0.05763235 | NKT_UCBMC |
| UBA2      | 1.64E-06 | 0.34988838 | 0.311 | 0.22  | 0.05800383 | NKT_UCBMC |
| TBC1D1    | 1.66E-06 | 0.19703049 | 0.394 | 0.29  | 0.05879976 | NKT_UCBMC |
| CCDC88C   | 1.72E-06 | 0.1020236  | 0.358 | 0.253 | 0.06100282 | NKT_UCBMC |
| JAZF1     | 1.79E-06 | 0.25144721 | 0.4   | 0.296 | 0.06352327 | NKT_UCBMC |
| ATP6AP2   | 1.87E-06 | 0.35451359 | 0.256 | 0.174 | 0.06631894 | NKT_UCBMC |
| HP1BP3    | 1.89E-06 | 0.21511507 | 0.464 | 0.352 | 0.06684388 | NKT_UCBMC |
| RACK1     | 1.92E-06 | 0.14545823 | 0.953 | 0.934 | 0.06810408 | NKT_UCBMC |
| GLCE      | 1.96E-06 | 0.31001457 | 0.322 | 0.228 | 0.06930204 | NKT_UCBMC |
| SYNE1     | 1.96E-06 | 0.29941998 | 0.276 | 0.186 | 0.06951558 | NKT_UCBMC |
| SENP7     | 2.08E-06 | 0.19914478 | 0.532 | 0.406 | 0.07362644 | NKT_UCBMC |
| CLTC      | 2.26E-06 | 0.31184119 | 0.313 | 0.221 | 0.08008038 | NKT_UCBMC |
| STX8      | 2.27E-06 | 0.15519588 | 0.403 | 0.295 | 0.08042759 | NKT_UCBMC |
| UBXN2A    | 2.30E-06 | 0.26479945 | 0.315 | 0.221 | 0.0813844  | NKT_UCBMC |
| N4BP2L1   | 2.33E-06 | 0.23821407 | 0.255 | 0.169 | 0.08245558 | NKT_UCBMC |
| HS2ST1    | 2.39E-06 | 0.42332688 | 0.255 | 0.173 | 0.08460265 | NKT_UCBMC |
| FBXW4     | 2.43E-06 | 0.28825261 | 0.255 | 0.171 | 0.08610689 | NKT_UCBMC |
| BTN2A2    | 2.43E-06 | 0.17668258 | 0.454 | 0.341 | 0.0862351  | NKT_UCBMC |

|          |          |            |       |       |            |           |
|----------|----------|------------|-------|-------|------------|-----------|
| CALU     | 2.45E-06 | 0.329094   | 0.256 | 0.174 | 0.08665605 | NKT_UCBMC |
| ZBED1    | 2.54E-06 | 0.38696219 | 0.264 | 0.182 | 0.08985286 | NKT_UCBMC |
| GRAMD1B  | 2.90E-06 | 0.23376322 | 0.325 | 0.229 | 0.10263643 | NKT_UCBMC |
| SLC23A2  | 2.96E-06 | 0.11945431 | 0.304 | 0.213 | 0.10481505 | NKT_UCBMC |
| PHF21A   | 3.01E-06 | 0.26083189 | 0.386 | 0.283 | 0.1065277  | NKT_UCBMC |
| SUN2     | 3.11E-06 | 0.16069647 | 0.298 | 0.206 | 0.11035042 | NKT_UCBMC |
| TMOD3    | 3.16E-06 | 0.20029407 | 0.435 | 0.327 | 0.11206548 | NKT_UCBMC |
| GMPS     | 3.29E-06 | 0.47923709 | 0.255 | 0.176 | 0.11672697 | NKT_UCBMC |
| JAK2     | 3.38E-06 | 0.37381863 | 0.264 | 0.183 | 0.11978016 | NKT_UCBMC |
| EIF2B3   | 3.46E-06 | 0.38942247 | 0.29  | 0.205 | 0.12270584 | NKT_UCBMC |
| PRKAR1A  | 3.52E-06 | 0.26075177 | 0.301 | 0.21  | 0.12463393 | NKT_UCBMC |
| PLCD4    | 3.71E-06 | 0.31403718 | 0.277 | 0.192 | 0.13161977 | NKT_UCBMC |
| OCIAD1   | 4.06E-06 | 0.17119268 | 0.379 | 0.277 | 0.14394936 | NKT_UCBMC |
| INO80    | 4.14E-06 | 0.34805256 | 0.261 | 0.18  | 0.14658279 | NKT_UCBMC |
| TARDBP   | 4.29E-06 | 0.46997546 | 0.288 | 0.206 | 0.15195321 | NKT_UCBMC |
| TAGAP    | 4.37E-06 | 0.19001004 | 0.381 | 0.272 | 0.15485361 | NKT_UCBMC |
| SRRM1    | 4.65E-06 | 0.1694178  | 0.624 | 0.482 | 0.16491793 | NKT_UCBMC |
| TOP2B    | 4.71E-06 | 0.20409559 | 0.417 | 0.312 | 0.16682275 | NKT_UCBMC |
| TMED2    | 5.09E-06 | 0.17627793 | 0.316 | 0.228 | 0.1802892  | NKT_UCBMC |
| SNRNP200 | 5.12E-06 | 0.238499   | 0.284 | 0.199 | 0.18157551 | NKT_UCBMC |
| WASHC4   | 5.39E-06 | 0.26910963 | 0.315 | 0.226 | 0.19091379 | NKT_UCBMC |
| UBE2B    | 5.73E-06 | 0.18244618 | 0.532 | 0.411 | 0.20291475 | NKT_UCBMC |
| SRSF10   | 5.73E-06 | 0.23314061 | 0.476 | 0.366 | 0.20318247 | NKT_UCBMC |
| STAT5B   | 5.86E-06 | 0.174653   | 0.48  | 0.362 | 0.20771658 | NKT_UCBMC |
| CDK12    | 6.37E-06 | 0.23981642 | 0.323 | 0.233 | 0.22553709 | NKT_UCBMC |
| ZC3H13   | 6.57E-06 | 0.24506482 | 0.335 | 0.245 | 0.23271368 | NKT_UCBMC |
| RNF115   | 6.66E-06 | 0.19583732 | 0.31  | 0.223 | 0.23611863 | NKT_UCBMC |
| FCMR     | 6.75E-06 | 0.16434376 | 0.392 | 0.284 | 0.2392521  | NKT_UCBMC |
| ANKRD10  | 6.77E-06 | 0.25426355 | 0.343 | 0.252 | 0.23996167 | NKT_UCBMC |
| SFPQ     | 6.99E-06 | 0.12608289 | 0.551 | 0.421 | 0.24761991 | NKT_UCBMC |
| PHF20    | 7.63E-06 | 0.1490621  | 0.465 | 0.353 | 0.27019945 | NKT_UCBMC |
| ARCN1    | 8.01E-06 | 0.28641145 | 0.275 | 0.193 | 0.28370683 | NKT_UCBMC |
| CD46     | 8.01E-06 | 0.13064134 | 0.529 | 0.41  | 0.28394197 | NKT_UCBMC |

|                   |          |            |       |       |            |           |
|-------------------|----------|------------|-------|-------|------------|-----------|
| BCAS2             | 8.19E-06 | 0.2000574  | 0.405 | 0.301 | 0.29025621 | NKT_UCBMC |
| RWDD1             | 8.78E-06 | 0.19150394 | 0.56  | 0.436 | 0.3110946  | NKT_UCBMC |
| MAP2K4            | 8.81E-06 | 0.36137439 | 0.287 | 0.205 | 0.31229222 | NKT_UCBMC |
| ENSMUG00000022769 | 8.87E-06 | 0.10979418 | 0.663 | 0.521 | 0.31431707 | NKT_UCBMC |
| NUB1              | 9.41E-06 | 0.23797295 | 0.282 | 0.199 | 0.33348563 | NKT_UCBMC |
| TRERF1            | 9.44E-06 | 0.22573512 | 0.432 | 0.323 | 0.33439276 | NKT_UCBMC |
| MAP2K6            | 9.59E-06 | 0.33353945 | 0.267 | 0.186 | 0.33986613 | NKT_UCBMC |
| EIF3L             | 9.81E-06 | 0.10746433 | 0.634 | 0.497 | 0.34754166 | NKT_UCBMC |
| TNPO3             | 9.86E-06 | 0.30839085 | 0.268 | 0.188 | 0.34950641 | NKT_UCBMC |
| KATNBL1           | 1.00E-05 | 0.2370102  | 0.304 | 0.216 | 0.35522037 | NKT_UCBMC |
| ATXN2             | 1.01E-05 | 0.20918229 | 0.37  | 0.276 | 0.35736683 | NKT_UCBMC |
| TSC22D2           | 1.03E-05 | 0.10640037 | 0.257 | 0.175 | 0.36481313 | NKT_UCBMC |
| CCNH              | 1.06E-05 | 0.10830293 | 0.347 | 0.247 | 0.37462351 | NKT_UCBMC |
| PRKAG2            | 1.07E-05 | 0.15902381 | 0.304 | 0.216 | 0.37932607 | NKT_UCBMC |
| HSPA14            | 1.10E-05 | 0.23203648 | 0.267 | 0.185 | 0.38848102 | NKT_UCBMC |
| EHMT1             | 1.10E-05 | 0.22303643 | 0.365 | 0.272 | 0.38990135 | NKT_UCBMC |
| NPM3              | 1.12E-05 | 0.14189743 | 0.382 | 0.279 | 0.39600373 | NKT_UCBMC |
| PTBP3             | 1.16E-05 | 0.15090278 | 0.645 | 0.5   | 0.41053824 | NKT_UCBMC |
| OGDH              | 1.19E-05 | 0.2307633  | 0.262 | 0.185 | 0.42069612 | NKT_UCBMC |
| TENT5C            | 1.21E-05 | 0.11111633 | 0.378 | 0.269 | 0.4273953  | NKT_UCBMC |
| ZBTB1             | 1.21E-05 | 0.18967239 | 0.31  | 0.223 | 0.43018901 | NKT_UCBMC |
| SCAMP2            | 1.25E-05 | 0.25810185 | 0.252 | 0.174 | 0.44130875 | NKT_UCBMC |
| RNF10             | 1.25E-05 | 0.30395115 | 0.287 | 0.203 | 0.44137131 | NKT_UCBMC |
| RAB10             | 1.31E-05 | 0.12090116 | 0.346 | 0.254 | 0.46392296 | NKT_UCBMC |
| DMTF1             | 1.33E-05 | 0.29100482 | 0.303 | 0.223 | 0.47248832 | NKT_UCBMC |
| CYRIB             | 1.37E-05 | 0.11930263 | 0.615 | 0.475 | 0.48705721 | NKT_UCBMC |
| ZCRB1             | 1.38E-05 | 0.24630668 | 0.268 | 0.19  | 0.49045639 | NKT_UCBMC |
| NSD1              | 1.40E-05 | 0.23231201 | 0.467 | 0.353 | 0.49459665 | NKT_UCBMC |
| RBBP7             | 1.50E-05 | 0.19325446 | 0.271 | 0.188 | 0.53100142 | NKT_UCBMC |
| KMT5B             | 1.53E-05 | 0.30697527 | 0.323 | 0.239 | 0.54215363 | NKT_UCBMC |
| SLC7A6            | 1.55E-05 | 0.4609438  | 0.265 | 0.19  | 0.54814945 | NKT_UCBMC |
| ARHGAP4           | 1.59E-05 | 0.15696215 | 0.366 | 0.277 | 0.56376681 | NKT_UCBMC |
| TDRD3             | 1.71E-05 | 0.18250629 | 0.3   | 0.213 | 0.60633508 | NKT_UCBMC |

|                   |          |            |       |       |            |           |
|-------------------|----------|------------|-------|-------|------------|-----------|
| ENSMUG00000040181 | 1.75E-05 | 0.29437581 | 0.264 | 0.185 | 0.62051664 | NKT_UCBMC |
| ANO6              | 1.81E-05 | 0.24674412 | 0.252 | 0.177 | 0.63956813 | NKT_UCBMC |
| RASGEF1B          | 1.81E-05 | 0.15681139 | 0.298 | 0.213 | 0.64293942 | NKT_UCBMC |
| PIGY              | 1.89E-05 | 0.3254076  | 0.284 | 0.205 | 0.66834629 | NKT_UCBMC |
| CLEC2D            | 1.97E-05 | 0.16084298 | 0.306 | 0.222 | 0.69771924 | NKT_UCBMC |
| RSL24D1           | 2.01E-05 | 0.12478688 | 0.665 | 0.527 | 0.71261781 | NKT_UCBMC |
| EIPR1             | 2.04E-05 | 0.19453058 | 0.261 | 0.183 | 0.72324396 | NKT_UCBMC |
| PHACTR4           | 2.04E-05 | 0.3227267  | 0.285 | 0.207 | 0.72420124 | NKT_UCBMC |
| GBF1              | 2.10E-05 | 0.4483005  | 0.254 | 0.183 | 0.7442861  | NKT_UCBMC |
| CCT3              | 2.10E-05 | 0.11590381 | 0.544 | 0.417 | 0.74580576 | NKT_UCBMC |
| UBE2N             | 2.33E-05 | 0.15242725 | 0.453 | 0.346 | 0.82630622 | NKT_UCBMC |
| CWC27             | 2.42E-05 | 0.20108437 | 0.325 | 0.237 | 0.85656273 | NKT_UCBMC |
| ZMYND8            | 2.42E-05 | 0.14424573 | 0.472 | 0.354 | 0.85722953 | NKT_UCBMC |
| EIF4A2            | 2.48E-05 | 0.11321445 | 0.612 | 0.469 | 0.87933896 | NKT_UCBMC |
| PPP1CA            | 2.56E-05 | 0.12777135 | 0.467 | 0.354 | 0.9073066  | NKT_UCBMC |
| IPO7              | 2.62E-05 | 0.29289668 | 0.303 | 0.225 | 0.92704932 | NKT_UCBMC |
| COMMD10           | 2.68E-05 | 0.23730869 | 0.349 | 0.264 | 0.9495363  | NKT_UCBMC |
| TIA1              | 2.90E-05 | 0.37209403 | 0.328 | 0.246 | 1          | NKT_UCBMC |
| BAZ1B             | 2.94E-05 | 0.19857644 | 0.284 | 0.206 | 1          | NKT_UCBMC |
| CHCHD3            | 3.03E-05 | 0.16898525 | 0.37  | 0.276 | 1          | NKT_UCBMC |
| HECTD1            | 3.12E-05 | 0.16619952 | 0.318 | 0.232 | 1          | NKT_UCBMC |
| OXSRI             | 3.16E-05 | 0.24676074 | 0.314 | 0.231 | 1          | NKT_UCBMC |
| CUL4A             | 3.16E-05 | 0.24542824 | 0.315 | 0.236 | 1          | NKT_UCBMC |
| RPS11             | 3.20E-05 | 0.12373478 | 0.965 | 0.948 | 1          | NKT_UCBMC |
| ENSMUG00000016009 | 3.29E-05 | 0.10648162 | 0.529 | 0.404 | 1          | NKT_UCBMC |
| ZNF514            | 3.49E-05 | 0.26657354 | 0.331 | 0.243 | 1          | NKT_UCBMC |
| RPN1              | 3.53E-05 | 0.23240953 | 0.35  | 0.262 | 1          | NKT_UCBMC |
| CDC25B            | 3.63E-05 | 0.13163551 | 0.276 | 0.197 | 1          | NKT_UCBMC |
| EIF4B             | 3.71E-05 | 0.11752109 | 0.461 | 0.356 | 1          | NKT_UCBMC |
| SCP2              | 3.73E-05 | 0.12102751 | 0.36  | 0.268 | 1          | NKT_UCBMC |
| MSL2              | 3.76E-05 | 0.20974529 | 0.272 | 0.197 | 1          | NKT_UCBMC |
| MTDH              | 3.80E-05 | 0.30062899 | 0.377 | 0.291 | 1          | NKT_UCBMC |
| CSRNP1            | 3.86E-05 | 0.29123561 | 0.293 | 0.218 | 1          | NKT_UCBMC |

|                   |            |            |       |       |             |
|-------------------|------------|------------|-------|-------|-------------|
| SF3B1             | 4.04E-05   | 0.11160757 | 0.69  | 0.555 | 1 NKT_UCBMC |
| HNRNPL            | 4.05E-05   | 0.1435028  | 0.473 | 0.365 | 1 NKT_UCBMC |
| RPS15             | 4.08E-05   | 0.10910001 | 0.973 | 0.959 | 1 NKT_UCBMC |
| UBE2L3            | 4.34E-05   | 0.1635971  | 0.418 | 0.315 | 1 NKT_UCBMC |
| DDX46             | 4.44E-05   | 0.11054525 | 0.547 | 0.432 | 1 NKT_UCBMC |
| ZMYND11           | 4.85E-05   | 0.15181363 | 0.373 | 0.282 | 1 NKT_UCBMC |
| BTF3L4            | 5.11E-05   | 0.12617935 | 0.434 | 0.331 | 1 NKT_UCBMC |
| RNF138            | 5.18E-05   | 0.20256053 | 0.36  | 0.268 | 1 NKT_UCBMC |
| TAF1              | 5.19E-05   | 0.18352289 | 0.25  | 0.176 | 1 NKT_UCBMC |
| SYNCRIP           | 5.24E-05   | 0.1807691  | 0.412 | 0.312 | 1 NKT_UCBMC |
| DDOST             | 5.38E-05   | 0.13944318 | 0.39  | 0.296 | 1 NKT_UCBMC |
| SP140             | 5.50E-05   | 0.26002022 | 0.314 | 0.234 | 1 NKT_UCBMC |
| ENSMUG00000061756 | 5.51E-05   | 0.21511791 | 0.389 | 0.298 | 1 NKT_UCBMC |
| GIGYF2            | 5.51E-05   | 0.28978077 | 0.378 | 0.298 | 1 NKT_UCBMC |
| YTHDF2            | 5.71E-05   | 0.31146575 | 0.257 | 0.189 | 1 NKT_UCBMC |
| LTV1              | 5.80E-05   | 0.29212294 | 0.282 | 0.207 | 1 NKT_UCBMC |
| SNRNP70           | 5.80E-05   | 0.19543581 | 0.391 | 0.302 | 1 NKT_UCBMC |
| ATL3              | 5.94E-05   | 0.17781874 | 0.284 | 0.206 | 1 NKT_UCBMC |
| IPCEF1            | 6.02E-05   | 0.32872249 | 0.261 | 0.19  | 1 NKT_UCBMC |
| SAR1A             | 6.04E-05   | 0.14663707 | 0.327 | 0.243 | 1 NKT_UCBMC |
| SPECC1L           | 6.53E-05   | 0.17686416 | 0.381 | 0.291 | 1 NKT_UCBMC |
| ENSMUG00000065089 | 6.69E-05   | 0.1905615  | 0.328 | 0.244 | 1 NKT_UCBMC |
| SMARCA5           | 7.30E-05   | 0.2067925  | 0.377 | 0.29  | 1 NKT_UCBMC |
| MRPL10            | 7.35E-05   | 0.12401774 | 0.308 | 0.223 | 1 NKT_UCBMC |
| KCNAB2            | 7.40E-05   | 0.14541834 | 0.355 | 0.268 | 1 NKT_UCBMC |
| CAPRIN1           | 7.90E-05   | 0.12535407 | 0.279 | 0.202 | 1 NKT_UCBMC |
| AGPS              | 9.08E-05   | 0.22490276 | 0.334 | 0.252 | 1 NKT_UCBMC |
| PTAR1             | 9.32E-05   | 0.24381298 | 0.279 | 0.206 | 1 NKT_UCBMC |
| CNBP              | 9.34E-05   | 0.10675292 | 0.642 | 0.505 | 1 NKT_UCBMC |
| DPP4              | 9.83E-05   | 0.1167119  | 0.373 | 0.279 | 1 NKT_UCBMC |
| RPL15             | 9.88E-05   | 0.11976433 | 0.925 | 0.909 | 1 NKT_UCBMC |
| SMAP2             | 0.0001046  | 0.17845111 | 0.407 | 0.322 | 1 NKT_UCBMC |
| EIF4G2            | 0.00010821 | 0.11186707 | 0.651 | 0.51  | 1 NKT_UCBMC |

|                   |            |            |       |       |             |
|-------------------|------------|------------|-------|-------|-------------|
| NAA35             | 0.00010927 | 0.18010464 | 0.262 | 0.19  | 1 NKT_UCBMC |
| STRN3             | 0.00010963 | 0.17981073 | 0.346 | 0.262 | 1 NKT_UCBMC |
| STIM2             | 0.0001097  | 0.14077606 | 0.342 | 0.257 | 1 NKT_UCBMC |
| PPP2R1A           | 0.0001144  | 0.18878727 | 0.304 | 0.228 | 1 NKT_UCBMC |
| ENSMUG00000030374 | 0.00012307 | 0.1776445  | 0.258 | 0.188 | 1 NKT_UCBMC |
| CCDC66            | 0.00012836 | 0.11208468 | 0.277 | 0.203 | 1 NKT_UCBMC |
| PPP6R1            | 0.00013138 | 0.10802694 | 0.322 | 0.242 | 1 NKT_UCBMC |
| PPM1B             | 0.00013175 | 0.16848668 | 0.276 | 0.206 | 1 NKT_UCBMC |
| HDLBP             | 0.00013183 | 0.13069581 | 0.322 | 0.241 | 1 NKT_UCBMC |
| ENSMUG00000003130 | 0.00013673 | 0.27270192 | 0.329 | 0.252 | 1 NKT_UCBMC |
| SLC35B1           | 0.00014057 | 0.11294054 | 0.433 | 0.331 | 1 NKT_UCBMC |
| COMMD3            | 0.0001436  | 0.1854427  | 0.258 | 0.188 | 1 NKT_UCBMC |
| IQSEC1            | 0.00014385 | 0.1256355  | 0.298 | 0.224 | 1 NKT_UCBMC |
| SUFU              | 0.00014613 | 0.13152556 | 0.255 | 0.187 | 1 NKT_UCBMC |
| TRAPPC9           | 0.00015453 | 0.21593686 | 0.264 | 0.194 | 1 NKT_UCBMC |
| PARD3             | 0.00016305 | 0.1623835  | 0.307 | 0.229 | 1 NKT_UCBMC |
| H1-4              | 0.00018677 | 0.18331871 | 0.313 | 0.236 | 1 NKT_UCBMC |
| DENND6A           | 0.00018869 | 0.19232996 | 0.264 | 0.195 | 1 NKT_UCBMC |
| KHDRBS1           | 0.00020901 | 0.15577721 | 0.323 | 0.245 | 1 NKT_UCBMC |
| PRKDC             | 0.00022765 | 0.12587779 | 0.451 | 0.351 | 1 NKT_UCBMC |
| PFDN4             | 0.00025261 | 0.10468272 | 0.271 | 0.2   | 1 NKT_UCBMC |
| RPS3A             | 0.0002681  | 0.11610295 | 0.965 | 0.95  | 1 NKT_UCBMC |
| RBFA              | 0.00028122 | 0.15720489 | 0.319 | 0.239 | 1 NKT_UCBMC |
| USP4              | 0.00029526 | 0.30955695 | 0.26  | 0.197 | 1 NKT_UCBMC |
| DNM2              | 0.00031829 | 0.12046429 | 0.34  | 0.262 | 1 NKT_UCBMC |
| LBR               | 0.00031905 | 0.14384961 | 0.34  | 0.262 | 1 NKT_UCBMC |
| HERC4             | 0.00032169 | 0.20218877 | 0.361 | 0.281 | 1 NKT_UCBMC |
| ATP6V0D1          | 0.00032676 | 0.3264388  | 0.255 | 0.192 | 1 NKT_UCBMC |
| POC1B             | 0.00032951 | 0.20563673 | 0.261 | 0.195 | 1 NKT_UCBMC |
| MORF4L2           | 0.00035219 | 0.19425328 | 0.31  | 0.237 | 1 NKT_UCBMC |
| RMDN1             | 0.00036576 | 0.18598519 | 0.313 | 0.239 | 1 NKT_UCBMC |
| NAP1L4            | 0.00037163 | 0.11834483 | 0.63  | 0.518 | 1 NKT_UCBMC |
| ENSMUG00000059017 | 0.00037557 | 0.10734588 | 0.476 | 0.381 | 1 NKT_UCBMC |



|             |            |            |       |       |             |
|-------------|------------|------------|-------|-------|-------------|
| SLTM        | 0.00038224 | 0.16322949 | 0.455 | 0.365 | 1 NKT_UCBMC |
| HNRNPD      | 0.0003918  | 0.10784045 | 0.555 | 0.428 | 1 NKT_UCBMC |
| RBM26       | 0.00040076 | 0.1119752  | 0.382 | 0.301 | 1 NKT_UCBMC |
| EHBP1       | 0.0004202  | 0.13601929 | 0.297 | 0.226 | 1 NKT_UCBMC |
| SPOP        | 0.00043806 | 0.15626439 | 0.301 | 0.23  | 1 NKT_UCBMC |
| BUD31       | 0.00048571 | 0.10716568 | 0.356 | 0.276 | 1 NKT_UCBMC |
| ZNF528      | 0.00055482 | 0.12978571 | 0.298 | 0.229 | 1 NKT_UCBMC |
| NADSYN1     | 0.00056323 | 0.21699823 | 0.253 | 0.19  | 1 NKT_UCBMC |
| PIBF1       | 0.00056384 | 0.21564523 | 0.258 | 0.195 | 1 NKT_UCBMC |
| SUZ12       | 0.00057312 | 0.22826949 | 0.304 | 0.235 | 1 NKT_UCBMC |
| DIP2C       | 0.00058528 | 0.37784871 | 0.253 | 0.194 | 1 NKT_UCBMC |
| HDAC4       | 0.00060775 | 0.11919754 | 0.296 | 0.23  | 1 NKT_UCBMC |
| ZNF652      | 0.00063579 | 0.17584953 | 0.258 | 0.194 | 1 NKT_UCBMC |
| ZMYM4       | 0.00067625 | 0.15010099 | 0.307 | 0.239 | 1 NKT_UCBMC |
| NDUFA10     | 0.0007298  | 0.17301706 | 0.261 | 0.198 | 1 NKT_UCBMC |
| METTL9      | 0.00073096 | 0.25799745 | 0.297 | 0.232 | 1 NKT_UCBMC |
| RBM17       | 0.00076966 | 0.18053375 | 0.317 | 0.247 | 1 NKT_UCBMC |
| RAD23B      | 0.00092374 | 0.24305215 | 0.296 | 0.233 | 1 NKT_UCBMC |
| SRSF6       | 0.0009807  | 0.13601993 | 0.354 | 0.277 | 1 NKT_UCBMC |
| HMOX2       | 0.00101105 | 0.19343935 | 0.301 | 0.236 | 1 NKT_UCBMC |
| TAOK1       | 0.00102083 | 0.19206808 | 0.344 | 0.272 | 1 NKT_UCBMC |
| LSM12       | 0.00119565 | 0.25749843 | 0.251 | 0.194 | 1 NKT_UCBMC |
| C20H16orf54 | 0.00121753 | 0.2865627  | 0.274 | 0.217 | 1 NKT_UCBMC |
| DCP2        | 0.00131842 | 0.19219751 | 0.308 | 0.246 | 1 NKT_UCBMC |
| NEDD9       | 0.00177091 | 0.12029307 | 0.402 | 0.328 | 1 NKT_UCBMC |
| UQCRB       | 0.00233014 | 0.11852143 | 0.333 | 0.265 | 1 NKT_UCBMC |
| SNX3        | 0.00255529 | 0.25588861 | 0.258 | 0.204 | 1 NKT_UCBMC |
| ARGLU1      | 0.00301979 | 0.10647979 | 0.627 | 0.511 | 1 NKT_UCBMC |
| KPNA1       | 0.00364294 | 0.10838743 | 0.271 | 0.213 | 1 NKT_UCBMC |
| RRP1B       | 0.00418849 | 0.17626559 | 0.252 | 0.2   | 1 NKT_UCBMC |
| UBE2F       | 0.00439728 | 0.10842231 | 0.378 | 0.31  | 1 NKT_UCBMC |
| ATF7        | 0.00543714 | 0.23288169 | 0.292 | 0.236 | 1 NKT_UCBMC |
| NPEPPS      | 0.0131376  | 0.1206503  | 0.272 | 0.226 | 1 NKT_UCBMC |

|                   |            |            |       |       |           |            |
|-------------------|------------|------------|-------|-------|-----------|------------|
| NCKAP1L           | 0.01404796 | 0.10757259 | 0.285 | 0.235 | 1         | NKT_UCBMC  |
| CCPG1             | 0.0166069  | 0.16823057 | 0.253 | 0.208 | 1         | NKT_UCBMC  |
| LTB               | 6.32E-161  | 2.56343347 | 0.858 | 0.391 | 2.24E-156 | NKT_spleen |
| RPL13             | 3.04E-156  | 2.08727332 | 0.942 | 0.856 | 1.08E-151 | NKT_spleen |
| JUN               | 7.99E-132  | 2.43701037 | 0.83  | 0.346 | 2.83E-127 | NKT_spleen |
| C1QBP             | 4.29E-88   | 2.49738283 | 0.414 | 0.073 | 1.52E-83  | NKT_spleen |
| NOP53             | 7.36E-88   | 1.96734386 | 0.586 | 0.171 | 2.61E-83  | NKT_spleen |
| TRAPPC5           | 1.95E-87   | 3.10224946 | 0.311 | 0.032 | 6.92E-83  | NKT_spleen |
| PM20D2            | 9.33E-84   | 1.42455626 | 0.811 | 0.426 | 3.31E-79  | NKT_spleen |
| ATP5F1D           | 1.02E-76   | 1.82526815 | 0.507 | 0.136 | 3.62E-72  | NKT_spleen |
| ENSMUG00000054358 | 1.96E-66   | 1.66930869 | 0.977 | 0.776 | 6.96E-62  | NKT_spleen |
| DUSP1             | 7.45E-66   | 1.50304073 | 0.766 | 0.402 | 2.64E-61  | NKT_spleen |
| RPS2              | 1.21E-65   | 1.21020856 | 0.85  | 0.721 | 4.30E-61  | NKT_spleen |
| TESC              | 1.65E-63   | 1.591175   | 0.649 | 0.285 | 5.86E-59  | NKT_spleen |
| TRIR              | 1.89E-63   | 1.42150851 | 0.647 | 0.267 | 6.69E-59  | NKT_spleen |
| KLF6              | 2.70E-61   | 0.99068653 | 0.941 | 0.654 | 9.56E-57  | NKT_spleen |
| RASSF1            | 5.21E-57   | 1.21276813 | 0.75  | 0.371 | 1.85E-52  | NKT_spleen |
| ENSMUG00000040065 | 1.06E-56   | 2.00574102 | 0.334 | 0.074 | 3.76E-52  | NKT_spleen |
| IL17RA            | 1.08E-56   | 2.03333985 | 0.39  | 0.106 | 3.82E-52  | NKT_spleen |
| ENSMUG00000051300 | 3.57E-56   | 0.7029336  | 0.983 | 0.773 | 1.27E-51  | NKT_spleen |
| PAK2              | 3.89E-55   | 0.97019569 | 0.843 | 0.539 | 1.38E-50  | NKT_spleen |
| IKZF1             | 5.18E-55   | 1.11956388 | 0.85  | 0.508 | 1.83E-50  | NKT_spleen |
| SRRM2             | 1.34E-54   | 1.16943005 | 0.72  | 0.367 | 4.73E-50  | NKT_spleen |
| ITM2B             | 2.27E-54   | 1.02094703 | 0.858 | 0.594 | 8.03E-50  | NKT_spleen |
| STK17A            | 4.32E-54   | 1.02216266 | 0.843 | 0.501 | 1.53E-49  | NKT_spleen |
| ENSMUG00000008417 | 1.45E-53   | 2.00569318 | 0.325 | 0.074 | 5.12E-49  | NKT_spleen |
| FOSB              | 3.93E-53   | 1.62273958 | 0.603 | 0.273 | 1.39E-48  | NKT_spleen |
| NABP1             | 2.02E-52   | 1.47037896 | 0.593 | 0.253 | 7.15E-48  | NKT_spleen |
| CLTA              | 3.48E-52   | 1.5200151  | 0.441 | 0.14  | 1.23E-47  | NKT_spleen |
| NT5C              | 1.16E-51   | 2.04738108 | 0.297 | 0.063 | 4.10E-47  | NKT_spleen |
| COX5A             | 1.81E-51   | 1.40607447 | 0.497 | 0.181 | 6.40E-47  | NKT_spleen |
| CARD11            | 7.91E-51   | 1.50608116 | 0.607 | 0.275 | 2.80E-46  | NKT_spleen |
| MZT2B             | 3.59E-50   | 1.61902502 | 0.393 | 0.116 | 1.27E-45  | NKT_spleen |

|             |          |            |       |       |          |            |
|-------------|----------|------------|-------|-------|----------|------------|
| GADD45GIP1  | 9.69E-50 | 1.79464606 | 0.32  | 0.076 | 3.43E-45 | NKT_spleen |
| SQSTM1      | 2.73E-49 | 1.50926212 | 0.559 | 0.237 | 9.66E-45 | NKT_spleen |
| NOL4L       | 4.17E-49 | 1.89032969 | 0.39  | 0.121 | 1.48E-44 | NKT_spleen |
| SRSF2       | 6.74E-49 | 1.18700774 | 0.509 | 0.193 | 2.39E-44 | NKT_spleen |
| ZBTB16      | 1.83E-48 | 1.23063646 | 0.802 | 0.51  | 6.47E-44 | NKT_spleen |
| RIN3        | 2.37E-48 | 1.48405081 | 0.556 | 0.237 | 8.39E-44 | NKT_spleen |
| GSR         | 2.62E-48 | 1.8222877  | 0.383 | 0.117 | 9.27E-44 | NKT_spleen |
| HSPH1       | 5.03E-48 | 1.93756146 | 0.545 | 0.245 | 1.78E-43 | NKT_spleen |
| PDE7A       | 7.74E-47 | 1.14146477 | 0.783 | 0.458 | 2.74E-42 | NKT_spleen |
| PFN1        | 3.42E-46 | 0.94167812 | 0.869 | 0.762 | 1.21E-41 | NKT_spleen |
| TMEM160     | 4.65E-46 | 1.87346902 | 0.295 | 0.071 | 1.65E-41 | NKT_spleen |
| C10H20orf24 | 1.20E-45 | 1.24318084 | 0.491 | 0.188 | 4.27E-41 | NKT_spleen |
| TXNL4A      | 3.51E-44 | 1.6693658  | 0.318 | 0.085 | 1.24E-39 | NKT_spleen |
| CHST11      | 1.62E-42 | 1.04531174 | 0.797 | 0.492 | 5.73E-38 | NKT_spleen |
| TTC39C      | 2.52E-42 | 1.12561977 | 0.647 | 0.326 | 8.94E-38 | NKT_spleen |
| STK10       | 4.16E-42 | 1.04936689 | 0.752 | 0.451 | 1.47E-37 | NKT_spleen |
| TPM4        | 5.00E-42 | 1.36025238 | 0.432 | 0.162 | 1.77E-37 | NKT_spleen |
| ACAP2       | 1.83E-41 | 0.87214697 | 0.829 | 0.505 | 6.50E-37 | NKT_spleen |
| INKA1       | 6.00E-41 | 1.64126477 | 0.297 | 0.078 | 2.13E-36 | NKT_spleen |
| ATF3        | 8.84E-41 | 2.42525907 | 0.26  | 0.064 | 3.13E-36 | NKT_spleen |
| MAP2K1      | 1.10E-40 | 1.44834262 | 0.481 | 0.198 | 3.91E-36 | NKT_spleen |
| IL6ST       | 1.17E-40 | 1.21612143 | 0.698 | 0.435 | 4.13E-36 | NKT_spleen |
| NFKBIA      | 2.95E-40 | 1.60565282 | 0.656 | 0.378 | 1.05E-35 | NKT_spleen |
| ZFAND5      | 6.62E-40 | 1.39382063 | 0.437 | 0.17  | 2.34E-35 | NKT_spleen |
| RAP1GAP2    | 9.92E-40 | 1.24504651 | 0.565 | 0.27  | 3.51E-35 | NKT_spleen |
| ANKRD6      | 3.76E-39 | 1.99573531 | 0.309 | 0.091 | 1.33E-34 | NKT_spleen |
| NFATC2      | 1.02E-38 | 1.3659285  | 0.517 | 0.235 | 3.62E-34 | NKT_spleen |
| TGFBR1      | 1.09E-38 | 1.38723878 | 0.416 | 0.157 | 3.85E-34 | NKT_spleen |
| COTL1       | 2.09E-38 | 1.05542064 | 0.67  | 0.384 | 7.41E-34 | NKT_spleen |
| DGKD        | 6.17E-38 | 1.72766001 | 0.369 | 0.133 | 2.19E-33 | NKT_spleen |
| ITGA1       | 1.43E-37 | 1.4414645  | 0.51  | 0.239 | 5.06E-33 | NKT_spleen |
| GTF2I       | 1.63E-37 | 1.06164962 | 0.663 | 0.364 | 5.78E-33 | NKT_spleen |
| BAZ1A       | 1.29E-36 | 0.98784738 | 0.631 | 0.325 | 4.55E-32 | NKT_spleen |

|          |          |            |       |       |          |            |
|----------|----------|------------|-------|-------|----------|------------|
| RANBP1   | 1.30E-36 | 1.32314856 | 0.393 | 0.148 | 4.60E-32 | NKT_spleen |
| FAM102A  | 1.45E-36 | 1.0835542  | 0.537 | 0.247 | 5.12E-32 | NKT_spleen |
| NME3     | 1.46E-36 | 0.86140133 | 0.608 | 0.296 | 5.18E-32 | NKT_spleen |
| VGLL4    | 2.30E-36 | 1.55355305 | 0.369 | 0.136 | 8.16E-32 | NKT_spleen |
| ARL5B    | 2.77E-36 | 1.42664588 | 0.362 | 0.128 | 9.82E-32 | NKT_spleen |
| SLFN5    | 2.81E-36 | 1.22967904 | 0.488 | 0.217 | 9.97E-32 | NKT_spleen |
| PAG1     | 3.36E-36 | 0.85597618 | 0.802 | 0.504 | 1.19E-31 | NKT_spleen |
| PTK2B    | 3.42E-36 | 2.03518964 | 0.281 | 0.082 | 1.21E-31 | NKT_spleen |
| SLA      | 3.76E-36 | 1.26901821 | 0.29  | 0.081 | 1.33E-31 | NKT_spleen |
| UBE2S    | 9.88E-36 | 1.49460285 | 0.297 | 0.087 | 3.50E-31 | NKT_spleen |
| HPCAL1   | 1.15E-35 | 1.1452415  | 0.572 | 0.286 | 4.08E-31 | NKT_spleen |
| RAP1A    | 1.76E-35 | 0.86317404 | 0.753 | 0.465 | 6.25E-31 | NKT_spleen |
| MCL1     | 5.05E-35 | 0.99746967 | 0.636 | 0.341 | 1.79E-30 | NKT_spleen |
| SH2B3    | 6.40E-35 | 1.60087099 | 0.372 | 0.141 | 2.27E-30 | NKT_spleen |
| HSBP1L1  | 9.10E-35 | 1.54654639 | 0.273 | 0.076 | 3.23E-30 | NKT_spleen |
| PPM1G    | 9.17E-35 | 1.20365377 | 0.442 | 0.184 | 3.25E-30 | NKT_spleen |
| VAV3     | 1.06E-34 | 1.69622914 | 0.439 | 0.192 | 3.75E-30 | NKT_spleen |
| ITPKB    | 1.09E-34 | 1.22604137 | 0.524 | 0.256 | 3.85E-30 | NKT_spleen |
| TNFRSF18 | 1.23E-34 | 1.28008534 | 0.29  | 0.085 | 4.35E-30 | NKT_spleen |
| NCALD    | 1.34E-34 | 1.2209253  | 0.699 | 0.435 | 4.75E-30 | NKT_spleen |
| STK17B   | 1.53E-34 | 0.75651714 | 0.913 | 0.692 | 5.43E-30 | NKT_spleen |
| SESN1    | 2.25E-34 | 1.05474753 | 0.544 | 0.268 | 7.96E-30 | NKT_spleen |
| VIM      | 2.66E-34 | 0.8169387  | 0.82  | 0.646 | 9.44E-30 | NKT_spleen |
| HNRNPAB  | 3.59E-34 | 1.26692451 | 0.358 | 0.13  | 1.27E-29 | NKT_spleen |
| PPP1R10  | 3.75E-34 | 1.28578713 | 0.509 | 0.242 | 1.33E-29 | NKT_spleen |
| LRIG1    | 6.44E-34 | 1.34477701 | 0.43  | 0.184 | 2.28E-29 | NKT_spleen |
| DENND2D  | 1.49E-33 | 1.20867935 | 0.423 | 0.175 | 5.28E-29 | NKT_spleen |
| TERF2IP  | 2.43E-33 | 1.24270248 | 0.395 | 0.157 | 8.60E-29 | NKT_spleen |
| ITGAL    | 5.24E-33 | 1.24546851 | 0.413 | 0.169 | 1.86E-28 | NKT_spleen |
| DOCK2    | 6.26E-33 | 0.8316208  | 0.825 | 0.544 | 2.22E-28 | NKT_spleen |
| PTPN22   | 6.69E-33 | 1.10457296 | 0.392 | 0.151 | 2.37E-28 | NKT_spleen |
| PPIA     | 8.03E-33 | 1.00339445 | 0.497 | 0.223 | 2.84E-28 | NKT_spleen |
| ZC3HAV1  | 1.09E-32 | 0.92012543 | 0.795 | 0.55  | 3.86E-28 | NKT_spleen |

|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| TOX                | 1.69E-32 | 0.95889971 | 0.783 | 0.52  | 5.99E-28 | NKT_spleen |
| IL27RA             | 2.05E-32 | 1.20617346 | 0.35  | 0.128 | 7.25E-28 | NKT_spleen |
| NEDD9              | 2.31E-32 | 0.99458251 | 0.584 | 0.303 | 8.18E-28 | NKT_spleen |
| ULK2               | 2.85E-32 | 1.27481693 | 0.474 | 0.223 | 1.01E-27 | NKT_spleen |
| CYRIB              | 2.95E-32 | 0.81177366 | 0.773 | 0.483 | 1.05E-27 | NKT_spleen |
| KTN1               | 3.60E-32 | 1.18771736 | 0.456 | 0.207 | 1.28E-27 | NKT_spleen |
| PHTF2              | 4.91E-32 | 1.32826535 | 0.413 | 0.175 | 1.74E-27 | NKT_spleen |
| ENSMMUG00000053918 | 5.48E-32 | 1.5527723  | 0.266 | 0.079 | 1.94E-27 | NKT_spleen |
| NCOR1              | 6.06E-32 | 0.80877165 | 0.677 | 0.392 | 2.15E-27 | NKT_spleen |
| THEMIS             | 7.47E-32 | 1.06836349 | 0.666 | 0.399 | 2.65E-27 | NKT_spleen |
| NDFIP1             | 7.48E-32 | 0.70746044 | 0.822 | 0.585 | 2.65E-27 | NKT_spleen |
| ENSMMUG00000020050 | 8.57E-32 | 1.7260667  | 0.281 | 0.091 | 3.03E-27 | NKT_spleen |
| CD40LG             | 8.64E-32 | 1.0734791  | 0.409 | 0.164 | 3.06E-27 | NKT_spleen |
| MYCBP2             | 9.70E-32 | 0.77346911 | 0.815 | 0.552 | 3.44E-27 | NKT_spleen |
| NSD1               | 9.80E-32 | 0.92054369 | 0.624 | 0.351 | 3.47E-27 | NKT_spleen |
| TTC13              | 1.13E-31 | 1.28361953 | 0.432 | 0.193 | 3.99E-27 | NKT_spleen |
| LSM4               | 1.19E-31 | 1.02856586 | 0.446 | 0.193 | 4.23E-27 | NKT_spleen |
| GRAP2              | 1.20E-31 | 1.21484561 | 0.462 | 0.218 | 4.24E-27 | NKT_spleen |
| ENSMMUG00000052424 | 1.41E-31 | 0.79111462 | 0.892 | 0.638 | 4.99E-27 | NKT_spleen |
| VAV1               | 1.73E-31 | 1.15797092 | 0.407 | 0.172 | 6.13E-27 | NKT_spleen |
| MAP3K1             | 1.92E-31 | 0.90532977 | 0.645 | 0.353 | 6.81E-27 | NKT_spleen |
| PIP4K2A            | 5.48E-31 | 0.87667584 | 0.757 | 0.483 | 1.94E-26 | NKT_spleen |
| SLC25A42           | 6.65E-31 | 1.44668081 | 0.271 | 0.085 | 2.36E-26 | NKT_spleen |
| GNAQ               | 8.47E-31 | 0.92849784 | 0.675 | 0.395 | 3.00E-26 | NKT_spleen |
| STT3B              | 1.38E-30 | 0.82369821 | 0.685 | 0.42  | 4.89E-26 | NKT_spleen |
| FOS                | 4.15E-30 | 0.72864731 | 0.928 | 0.789 | 1.47E-25 | NKT_spleen |
| LCP2               | 4.64E-30 | 1.20551324 | 0.43  | 0.193 | 1.64E-25 | NKT_spleen |
| ZHX2               | 5.77E-30 | 1.07949532 | 0.411 | 0.178 | 2.05E-25 | NKT_spleen |
| ITGB2              | 8.42E-30 | 0.89515309 | 0.514 | 0.246 | 2.98E-25 | NKT_spleen |
| TET3               | 9.41E-30 | 1.20808623 | 0.4   | 0.175 | 3.34E-25 | NKT_spleen |
| SPINT2             | 1.73E-29 | 1.07163252 | 0.392 | 0.162 | 6.14E-25 | NKT_spleen |
| ABR                | 1.97E-29 | 1.72557867 | 0.385 | 0.168 | 6.98E-25 | NKT_spleen |
| RCSD1              | 2.31E-29 | 0.85314614 | 0.682 | 0.404 | 8.19E-25 | NKT_spleen |

|            |          |            |       |       |          |            |
|------------|----------|------------|-------|-------|----------|------------|
| VPS4A      | 2.87E-29 | 1.3373279  | 0.358 | 0.147 | 1.02E-24 | NKT_spleen |
| IKZF2      | 4.32E-29 | 1.28218334 | 0.505 | 0.261 | 1.53E-24 | NKT_spleen |
| ARGLU1     | 4.98E-29 | 0.6855175  | 0.792 | 0.508 | 1.77E-24 | NKT_spleen |
| FNBP1      | 7.00E-29 | 0.66963536 | 0.913 | 0.687 | 2.48E-24 | NKT_spleen |
| AKNA       | 1.09E-28 | 0.86053762 | 0.58  | 0.314 | 3.85E-24 | NKT_spleen |
| STIM1      | 1.19E-28 | 0.96260968 | 0.61  | 0.348 | 4.20E-24 | NKT_spleen |
| SKAP1      | 1.23E-28 | 0.5599068  | 0.965 | 0.854 | 4.35E-24 | NKT_spleen |
| YWHAH      | 1.68E-28 | 1.10518769 | 0.379 | 0.159 | 5.94E-24 | NKT_spleen |
| CYC1       | 1.71E-28 | 1.2691053  | 0.308 | 0.111 | 6.06E-24 | NKT_spleen |
| MAML2      | 1.89E-28 | 0.7937309  | 0.906 | 0.677 | 6.68E-24 | NKT_spleen |
| TNIK       | 2.84E-28 | 0.69061575 | 0.876 | 0.648 | 1.01E-23 | NKT_spleen |
| RAB4A      | 3.36E-28 | 1.31182297 | 0.269 | 0.087 | 1.19E-23 | NKT_spleen |
| TESPA1     | 3.58E-28 | 0.85936256 | 0.573 | 0.312 | 1.27E-23 | NKT_spleen |
| TMEM131L   | 4.02E-28 | 0.92903559 | 0.645 | 0.383 | 1.43E-23 | NKT_spleen |
| SLC24A3    | 4.70E-28 | 1.4553438  | 0.341 | 0.137 | 1.67E-23 | NKT_spleen |
| ZMYND8     | 6.09E-28 | 0.95745119 | 0.608 | 0.36  | 2.16E-23 | NKT_spleen |
| MCC        | 6.09E-28 | 1.18911226 | 0.427 | 0.194 | 2.16E-23 | NKT_spleen |
| NXPE3      | 6.33E-28 | 1.0483091  | 0.591 | 0.336 | 2.24E-23 | NKT_spleen |
| FCHSD2     | 6.50E-28 | 0.94193191 | 0.568 | 0.315 | 2.30E-23 | NKT_spleen |
| CMTM3      | 8.04E-28 | 1.17925233 | 0.28  | 0.094 | 2.85E-23 | NKT_spleen |
| H2AZ2      | 9.25E-28 | 0.68180691 | 0.815 | 0.567 | 3.28E-23 | NKT_spleen |
| RETREG1    | 1.00E-27 | 1.21088448 | 0.442 | 0.214 | 3.56E-23 | NKT_spleen |
| PDCD6-AHRR | 1.20E-27 | 1.07442057 | 0.311 | 0.113 | 4.24E-23 | NKT_spleen |
| RBMS1      | 1.37E-27 | 0.76239955 | 0.729 | 0.457 | 4.85E-23 | NKT_spleen |
| PDIA6      | 1.40E-27 | 1.03523331 | 0.339 | 0.13  | 4.97E-23 | NKT_spleen |
| AKIRIN1    | 1.44E-27 | 1.00354844 | 0.383 | 0.162 | 5.11E-23 | NKT_spleen |
| IMMP2L     | 1.63E-27 | 0.95251223 | 0.76  | 0.517 | 5.77E-23 | NKT_spleen |
| GNB1       | 1.63E-27 | 1.03442607 | 0.617 | 0.365 | 5.79E-23 | NKT_spleen |
| PTPRC      | 2.89E-27 | 0.49333092 | 0.965 | 0.891 | 1.03E-22 | NKT_spleen |
| NOL7       | 3.29E-27 | 1.03268151 | 0.404 | 0.18  | 1.17E-22 | NKT_spleen |
| ALKBH7     | 5.23E-27 | 1.03454082 | 0.386 | 0.164 | 1.85E-22 | NKT_spleen |
| FLI1       | 6.45E-27 | 0.90027815 | 0.568 | 0.312 | 2.28E-22 | NKT_spleen |
| RUNX1      | 6.95E-27 | 0.82330693 | 0.778 | 0.515 | 2.46E-22 | NKT_spleen |

|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| PRPF38B            | 9.81E-27 | 0.87200696 | 0.53  | 0.275 | 3.47E-22 | NKT_spleen |
| PACS1              | 1.12E-26 | 0.90105881 | 0.615 | 0.353 | 3.98E-22 | NKT_spleen |
| USP44              | 1.31E-26 | 0.99747943 | 0.46  | 0.227 | 4.65E-22 | NKT_spleen |
| MED13L             | 2.60E-26 | 0.64195349 | 0.864 | 0.618 | 9.20E-22 | NKT_spleen |
| HNRNPLL            | 4.01E-26 | 1.08261823 | 0.453 | 0.226 | 1.42E-21 | NKT_spleen |
| CD38               | 4.19E-26 | 1.02172019 | 0.601 | 0.392 | 1.49E-21 | NKT_spleen |
| PTPN9              | 4.50E-26 | 1.38996491 | 0.348 | 0.15  | 1.60E-21 | NKT_spleen |
| TASOR              | 6.93E-26 | 1.08833793 | 0.379 | 0.168 | 2.45E-21 | NKT_spleen |
| P4HB               | 8.11E-26 | 1.05328196 | 0.379 | 0.168 | 2.87E-21 | NKT_spleen |
| HNRNPD             | 8.42E-26 | 0.70938882 | 0.691 | 0.438 | 2.98E-21 | NKT_spleen |
| CMIP               | 1.18E-25 | 1.31396572 | 0.348 | 0.15  | 4.19E-21 | NKT_spleen |
| TAOK1              | 1.22E-25 | 0.89724713 | 0.493 | 0.256 | 4.32E-21 | NKT_spleen |
| ME2                | 1.97E-25 | 0.82343503 | 0.614 | 0.364 | 6.99E-21 | NKT_spleen |
| CD47               | 2.14E-25 | 0.63003135 | 0.631 | 0.358 | 7.59E-21 | NKT_spleen |
| YY1                | 3.48E-25 | 1.0317696  | 0.393 | 0.18  | 1.23E-20 | NKT_spleen |
| ENSMMUG00000060287 | 3.96E-25 | 0.53221862 | 0.895 | 0.8   | 1.40E-20 | NKT_spleen |
| APBA2              | 4.58E-25 | 1.13582215 | 0.456 | 0.238 | 1.62E-20 | NKT_spleen |
| CAB39              | 4.63E-25 | 0.81252785 | 0.698 | 0.448 | 1.64E-20 | NKT_spleen |
| ERBIN              | 5.53E-25 | 0.8063649  | 0.717 | 0.463 | 1.96E-20 | NKT_spleen |
| NFKB1              | 5.89E-25 | 1.03014537 | 0.76  | 0.508 | 2.09E-20 | NKT_spleen |
| IFRD1              | 5.95E-25 | 0.96695883 | 0.594 | 0.343 | 2.11E-20 | NKT_spleen |
| PIK3R1             | 5.96E-25 | 1.02185504 | 0.402 | 0.19  | 2.11E-20 | NKT_spleen |
| XPO6               | 6.24E-25 | 0.76677899 | 0.584 | 0.328 | 2.21E-20 | NKT_spleen |
| ZNF638             | 6.84E-25 | 0.66012328 | 0.656 | 0.385 | 2.42E-20 | NKT_spleen |
| TBC1D1             | 7.57E-25 | 0.94310766 | 0.531 | 0.29  | 2.68E-20 | NKT_spleen |
| ENSMMUG00000052127 | 7.75E-25 | 0.51502056 | 0.988 | 0.884 | 2.75E-20 | NKT_spleen |
| XYLT1              | 8.52E-25 | 1.06746541 | 0.559 | 0.315 | 3.02E-20 | NKT_spleen |
| IRAK2              | 8.86E-25 | 0.94194969 | 0.579 | 0.337 | 3.14E-20 | NKT_spleen |
| CBL                | 9.98E-25 | 1.55852974 | 0.266 | 0.099 | 3.54E-20 | NKT_spleen |
| PIK3AP1            | 1.15E-24 | 0.74592395 | 0.605 | 0.36  | 4.07E-20 | NKT_spleen |
| BANP               | 1.44E-24 | 1.19576906 | 0.353 | 0.156 | 5.09E-20 | NKT_spleen |
| ZFP36L1            | 1.74E-24 | 0.77026947 | 0.684 | 0.432 | 6.16E-20 | NKT_spleen |
| TRERF1             | 2.19E-24 | 0.84160959 | 0.565 | 0.327 | 7.75E-20 | NKT_spleen |

|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| SEMA4D             | 2.39E-24 | 0.79302001 | 0.631 | 0.374 | 8.48E-20 | NKT_spleen |
| XPO1               | 2.83E-24 | 0.92455323 | 0.411 | 0.193 | 1.00E-19 | NKT_spleen |
| NFATC1             | 4.65E-24 | 1.19522723 | 0.4   | 0.191 | 1.65E-19 | NKT_spleen |
| ANP32B             | 4.67E-24 | 0.76788167 | 0.67  | 0.433 | 1.65E-19 | NKT_spleen |
| TNFAIP3            | 4.76E-24 | 0.8576717  | 0.747 | 0.528 | 1.69E-19 | NKT_spleen |
| CCNL1              | 5.42E-24 | 0.68137326 | 0.899 | 0.662 | 1.92E-19 | NKT_spleen |
| H4C15              | 5.67E-24 | 0.84995819 | 0.35  | 0.147 | 2.01E-19 | NKT_spleen |
| UVRAG              | 8.33E-24 | 0.789494   | 0.628 | 0.376 | 2.95E-19 | NKT_spleen |
| EHMT1              | 9.72E-24 | 0.96720456 | 0.498 | 0.269 | 3.44E-19 | NKT_spleen |
| MYH9               | 1.03E-23 | 0.70074546 | 0.757 | 0.522 | 3.64E-19 | NKT_spleen |
| TLN1               | 1.05E-23 | 0.78164348 | 0.544 | 0.305 | 3.73E-19 | NKT_spleen |
| CD164              | 1.11E-23 | 0.66993622 | 0.719 | 0.471 | 3.93E-19 | NKT_spleen |
| B3GNT2             | 1.12E-23 | 1.3058469  | 0.316 | 0.134 | 3.98E-19 | NKT_spleen |
| MAP2K3             | 1.72E-23 | 1.13269278 | 0.378 | 0.173 | 6.09E-19 | NKT_spleen |
| DNAJA1             | 2.49E-23 | 0.88172764 | 0.61  | 0.366 | 8.82E-19 | NKT_spleen |
| DNMT3A             | 3.30E-23 | 1.1703545  | 0.367 | 0.172 | 1.17E-18 | NKT_spleen |
| HERC4              | 3.60E-23 | 0.87378887 | 0.498 | 0.271 | 1.28E-18 | NKT_spleen |
| ENSMMUG00000008604 | 3.68E-23 | 1.05455165 | 0.278 | 0.105 | 1.30E-18 | NKT_spleen |
| HNRNPC             | 4.16E-23 | 0.60636554 | 0.829 | 0.604 | 1.48E-18 | NKT_spleen |
| SURF4              | 4.71E-23 | 0.93721349 | 0.376 | 0.173 | 1.67E-18 | NKT_spleen |
| RGCC               | 4.78E-23 | 0.89307402 | 0.566 | 0.327 | 1.69E-18 | NKT_spleen |
| ZNF831             | 4.99E-23 | 1.14934248 | 0.337 | 0.15  | 1.77E-18 | NKT_spleen |
| TCF20              | 4.99E-23 | 1.04415439 | 0.455 | 0.235 | 1.77E-18 | NKT_spleen |
| TCF12              | 5.94E-23 | 0.69544748 | 0.802 | 0.561 | 2.10E-18 | NKT_spleen |
| RABEP1             | 6.16E-23 | 1.19771294 | 0.327 | 0.143 | 2.18E-18 | NKT_spleen |
| SENP6              | 6.62E-23 | 0.66518446 | 0.703 | 0.435 | 2.35E-18 | NKT_spleen |
| RABGAP1L           | 7.81E-23 | 0.73641176 | 0.837 | 0.622 | 2.77E-18 | NKT_spleen |
| GLS                | 8.24E-23 | 0.85257662 | 0.521 | 0.295 | 2.92E-18 | NKT_spleen |
| REEP3              | 9.62E-23 | 1.11375296 | 0.294 | 0.12  | 3.41E-18 | NKT_spleen |
| TMEM87B            | 1.05E-22 | 1.26871139 | 0.295 | 0.122 | 3.71E-18 | NKT_spleen |
| EIF3F              | 1.16E-22 | 0.71133002 | 0.698 | 0.471 | 4.10E-18 | NKT_spleen |
| JMJD1C             | 1.23E-22 | 0.67166902 | 0.907 | 0.687 | 4.36E-18 | NKT_spleen |
| ZMYM4              | 1.32E-22 | 1.00788193 | 0.441 | 0.227 | 4.67E-18 | NKT_spleen |



|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| IFNAR2             | 1.32E-22 | 0.76240923 | 0.57  | 0.326 | 4.67E-18 | NKT_spleen |
| SPECC1             | 1.53E-22 | 1.34440213 | 0.29  | 0.12  | 5.42E-18 | NKT_spleen |
| ENSMMUG00000028906 | 2.06E-22 | 0.64664067 | 0.769 | 0.517 | 7.29E-18 | NKT_spleen |
| ENSMMUG00000052802 | 2.42E-22 | 1.13627159 | 0.357 | 0.167 | 8.57E-18 | NKT_spleen |
| CCDC88C            | 2.55E-22 | 1.02964706 | 0.472 | 0.26  | 9.04E-18 | NKT_spleen |
| MACF1              | 2.73E-22 | 0.6687474  | 0.767 | 0.515 | 9.66E-18 | NKT_spleen |
| TAOK3              | 2.84E-22 | 0.76257506 | 0.636 | 0.399 | 1.01E-17 | NKT_spleen |
| STAMBPL1           | 3.24E-22 | 1.08429084 | 0.402 | 0.2   | 1.15E-17 | NKT_spleen |
| FAM120A            | 3.31E-22 | 0.74421779 | 0.481 | 0.253 | 1.17E-17 | NKT_spleen |
| SETD5              | 3.33E-22 | 0.86803024 | 0.507 | 0.284 | 1.18E-17 | NKT_spleen |
| YWHAG              | 3.45E-22 | 0.91346473 | 0.423 | 0.208 | 1.22E-17 | NKT_spleen |
| USP48              | 4.04E-22 | 1.04305984 | 0.329 | 0.144 | 1.43E-17 | NKT_spleen |
| HIPK2              | 4.32E-22 | 1.2668596  | 0.355 | 0.168 | 1.53E-17 | NKT_spleen |
| IRF1               | 4.41E-22 | 1.07016265 | 0.495 | 0.282 | 1.56E-17 | NKT_spleen |
| SLCO3A1            | 4.93E-22 | 0.85178473 | 0.559 | 0.327 | 1.75E-17 | NKT_spleen |
| ENSMMUG00000049833 | 5.28E-22 | 1.49064995 | 0.332 | 0.152 | 1.87E-17 | NKT_spleen |
| ADORA2B            | 5.78E-22 | 1.5031888  | 0.285 | 0.119 | 2.05E-17 | NKT_spleen |
| ASCC1              | 6.22E-22 | 1.00962756 | 0.386 | 0.189 | 2.20E-17 | NKT_spleen |
| DECR2              | 6.38E-22 | 1.02802745 | 0.276 | 0.108 | 2.26E-17 | NKT_spleen |
| NUP210             | 8.46E-22 | 0.90980547 | 0.421 | 0.212 | 3.00E-17 | NKT_spleen |
| TBC1D5             | 1.17E-21 | 0.61596296 | 0.822 | 0.575 | 4.16E-17 | NKT_spleen |
| BRD9               | 1.24E-21 | 0.86092625 | 0.337 | 0.148 | 4.40E-17 | NKT_spleen |
| TMC8               | 1.33E-21 | 1.04615008 | 0.365 | 0.17  | 4.71E-17 | NKT_spleen |
| TFCP2              | 1.47E-21 | 1.37825823 | 0.276 | 0.113 | 5.20E-17 | NKT_spleen |
| LCP1               | 1.74E-21 | 0.57283328 | 0.843 | 0.682 | 6.18E-17 | NKT_spleen |
| DNM2               | 1.82E-21 | 0.90934067 | 0.469 | 0.255 | 6.46E-17 | NKT_spleen |
| SFMBT2             | 1.94E-21 | 1.0749068  | 0.434 | 0.231 | 6.88E-17 | NKT_spleen |
| HNRNPU             | 2.01E-21 | 0.62901315 | 0.78  | 0.532 | 7.12E-17 | NKT_spleen |
| AUTS2              | 2.14E-21 | 1.05002378 | 0.43  | 0.225 | 7.60E-17 | NKT_spleen |
| STRN3              | 2.32E-21 | 0.89487634 | 0.47  | 0.258 | 8.23E-17 | NKT_spleen |
| HUWE1              | 2.85E-21 | 0.81280072 | 0.596 | 0.375 | 1.01E-16 | NKT_spleen |
| MOB3A              | 2.99E-21 | 1.14197191 | 0.446 | 0.24  | 1.06E-16 | NKT_spleen |
| KDM6B              | 3.36E-21 | 1.33476429 | 0.322 | 0.145 | 1.19E-16 | NKT_spleen |

|                   |          |            |       |       |          |            |
|-------------------|----------|------------|-------|-------|----------|------------|
| MARK2             | 3.62E-21 | 1.01210892 | 0.372 | 0.178 | 1.28E-16 | NKT_spleen |
| GRB2              | 3.72E-21 | 0.83528352 | 0.502 | 0.285 | 1.32E-16 | NKT_spleen |
| KIF26B            | 3.92E-21 | 1.46372746 | 0.25  | 0.098 | 1.39E-16 | NKT_spleen |
| STAP1             | 3.95E-21 | 0.86546231 | 0.311 | 0.133 | 1.40E-16 | NKT_spleen |
| ARF6              | 4.06E-21 | 0.60423312 | 0.371 | 0.169 | 1.44E-16 | NKT_spleen |
| ARRDC3            | 4.52E-21 | 1.23851588 | 0.308 | 0.137 | 1.60E-16 | NKT_spleen |
| TRAPPC8           | 5.02E-21 | 1.06053545 | 0.255 | 0.099 | 1.78E-16 | NKT_spleen |
| HNRNPF            | 5.41E-21 | 0.55226803 | 0.699 | 0.445 | 1.92E-16 | NKT_spleen |
| FEZ2              | 5.83E-21 | 1.16753    | 0.28  | 0.115 | 2.06E-16 | NKT_spleen |
| AKAP10            | 5.85E-21 | 1.10525918 | 0.334 | 0.156 | 2.07E-16 | NKT_spleen |
| GLG1              | 7.32E-21 | 0.81409124 | 0.617 | 0.389 | 2.60E-16 | NKT_spleen |
| HSPA9             | 8.41E-21 | 0.70008818 | 0.587 | 0.355 | 2.98E-16 | NKT_spleen |
| GIGYF2            | 8.80E-21 | 0.65457964 | 0.524 | 0.286 | 3.12E-16 | NKT_spleen |
| CAMK1D            | 9.14E-21 | 0.97032168 | 0.589 | 0.371 | 3.24E-16 | NKT_spleen |
| GRAMD1B           | 9.30E-21 | 1.04078359 | 0.432 | 0.235 | 3.30E-16 | NKT_spleen |
| PARVB             | 9.68E-21 | 1.36197555 | 0.255 | 0.1   | 3.43E-16 | NKT_spleen |
| ENSMUG00000062086 | 1.02E-20 | 0.78179413 | 0.383 | 0.183 | 3.60E-16 | NKT_spleen |
| PUM2              | 1.13E-20 | 0.60271966 | 0.712 | 0.458 | 4.01E-16 | NKT_spleen |
| EIF4A2            | 1.17E-20 | 0.61361895 | 0.731 | 0.49  | 4.16E-16 | NKT_spleen |
| CRIM1             | 1.21E-20 | 1.44557135 | 0.266 | 0.109 | 4.30E-16 | NKT_spleen |
| PTEN              | 1.35E-20 | 0.81461483 | 0.493 | 0.282 | 4.77E-16 | NKT_spleen |
| CHD9              | 1.70E-20 | 1.30032187 | 0.283 | 0.122 | 6.03E-16 | NKT_spleen |
| COMT              | 1.80E-20 | 0.68564644 | 0.491 | 0.262 | 6.38E-16 | NKT_spleen |
| SDF2L1            | 2.05E-20 | 0.93779687 | 0.311 | 0.138 | 7.27E-16 | NKT_spleen |
| RERE              | 2.51E-20 | 0.59634192 | 0.799 | 0.55  | 8.89E-16 | NKT_spleen |
| TRAC              | 2.55E-20 | 0.50724242 | 0.921 | 0.838 | 9.03E-16 | NKT_spleen |
| R3HDM2            | 2.59E-20 | 1.12946782 | 0.43  | 0.238 | 9.17E-16 | NKT_spleen |
| CELF2             | 2.74E-20 | 0.4570334  | 0.949 | 0.76  | 9.70E-16 | NKT_spleen |
| SMURF2            | 2.98E-20 | 1.04088369 | 0.406 | 0.21  | 1.05E-15 | NKT_spleen |
| PRKCA             | 3.04E-20 | 1.03582388 | 0.476 | 0.27  | 1.08E-15 | NKT_spleen |
| ATAD2B            | 3.18E-20 | 0.7581249  | 0.621 | 0.389 | 1.13E-15 | NKT_spleen |
| LARP4B            | 3.21E-20 | 0.83582985 | 0.425 | 0.225 | 1.14E-15 | NKT_spleen |
| PLEKHG1           | 3.62E-20 | 1.33591094 | 0.32  | 0.15  | 1.28E-15 | NKT_spleen |

|           |          |            |       |       |          |            |
|-----------|----------|------------|-------|-------|----------|------------|
| ARHGAP30  | 4.62E-20 | 0.73948847 | 0.514 | 0.288 | 1.64E-15 | NKT_spleen |
| PHF21A    | 4.64E-20 | 0.81554207 | 0.5   | 0.29  | 1.65E-15 | NKT_spleen |
| RBM26     | 5.12E-20 | 0.81546803 | 0.514 | 0.294 | 1.81E-15 | NKT_spleen |
| LRRFIP1   | 5.94E-20 | 0.58455422 | 0.668 | 0.426 | 2.10E-15 | NKT_spleen |
| ZNF609    | 7.53E-20 | 0.72748391 | 0.706 | 0.486 | 2.67E-15 | NKT_spleen |
| SMARCC1   | 8.52E-20 | 0.658145   | 0.596 | 0.367 | 3.02E-15 | NKT_spleen |
| RNF149    | 8.89E-20 | 0.57849963 | 0.615 | 0.368 | 3.15E-15 | NKT_spleen |
| ARIH1     | 9.09E-20 | 0.69398303 | 0.753 | 0.528 | 3.22E-15 | NKT_spleen |
| DEF6      | 9.17E-20 | 0.92903866 | 0.26  | 0.103 | 3.25E-15 | NKT_spleen |
| ARHGAP35  | 1.07E-19 | 1.24745387 | 0.306 | 0.141 | 3.78E-15 | NKT_spleen |
| BCL11B    | 1.07E-19 | 0.68019345 | 0.668 | 0.446 | 3.81E-15 | NKT_spleen |
| HIST1H2AC | 1.10E-19 | 1.21611109 | 0.318 | 0.148 | 3.88E-15 | NKT_spleen |
| TBL1XR1   | 1.28E-19 | 0.58097903 | 0.795 | 0.546 | 4.53E-15 | NKT_spleen |
| ADGRE5    | 1.33E-19 | 0.9613058  | 0.677 | 0.467 | 4.71E-15 | NKT_spleen |
| INPP5D    | 1.34E-19 | 0.69574839 | 0.572 | 0.336 | 4.76E-15 | NKT_spleen |
| SMAD3     | 1.43E-19 | 1.26706667 | 0.341 | 0.168 | 5.07E-15 | NKT_spleen |
| ATXN2     | 2.01E-19 | 0.83921078 | 0.488 | 0.278 | 7.14E-15 | NKT_spleen |
| CD69      | 2.10E-19 | 0.60223471 | 0.928 | 0.793 | 7.45E-15 | NKT_spleen |
| MBD5      | 2.13E-19 | 0.79244783 | 0.559 | 0.341 | 7.54E-15 | NKT_spleen |
| SLC16A7   | 2.23E-19 | 0.89198449 | 0.367 | 0.181 | 7.89E-15 | NKT_spleen |
| AKAP17A   | 2.31E-19 | 1.03274778 | 0.369 | 0.185 | 8.18E-15 | NKT_spleen |
| PBX4      | 2.79E-19 | 1.15590341 | 0.266 | 0.111 | 9.87E-15 | NKT_spleen |
| LRBA      | 2.82E-19 | 0.59633251 | 0.781 | 0.56  | 9.98E-15 | NKT_spleen |
| SPN       | 2.90E-19 | 0.885204   | 0.274 | 0.115 | 1.03E-14 | NKT_spleen |
| CD247     | 3.11E-19 | 0.76629081 | 0.755 | 0.53  | 1.10E-14 | NKT_spleen |
| ZNF217    | 4.17E-19 | 0.84225574 | 0.325 | 0.15  | 1.48E-14 | NKT_spleen |
| PER1      | 4.22E-19 | 0.58236476 | 0.593 | 0.364 | 1.49E-14 | NKT_spleen |
| GALNT7    | 4.56E-19 | 0.99465736 | 0.371 | 0.189 | 1.61E-14 | NKT_spleen |
| ANKRD44   | 4.57E-19 | 0.55129119 | 0.914 | 0.702 | 1.62E-14 | NKT_spleen |
| PPP6R3    | 4.73E-19 | 0.63657351 | 0.629 | 0.404 | 1.68E-14 | NKT_spleen |
| STIM2     | 4.78E-19 | 0.88096959 | 0.455 | 0.257 | 1.69E-14 | NKT_spleen |
| TBC1D10C  | 4.86E-19 | 0.75380785 | 0.451 | 0.247 | 1.72E-14 | NKT_spleen |
| ASXL2     | 5.18E-19 | 0.92665091 | 0.322 | 0.15  | 1.84E-14 | NKT_spleen |

|                   |          |            |       |       |          |            |
|-------------------|----------|------------|-------|-------|----------|------------|
| CCND3             | 5.54E-19 | 0.69585144 | 0.797 | 0.6   | 1.96E-14 | NKT_spleen |
| ENSMUG00000062103 | 5.76E-19 | 0.7975565  | 0.642 | 0.421 | 2.04E-14 | NKT_spleen |
| SMARCA5           | 5.91E-19 | 0.61495493 | 0.503 | 0.287 | 2.09E-14 | NKT_spleen |
| SETD3             | 5.94E-19 | 1.047619   | 0.292 | 0.132 | 2.11E-14 | NKT_spleen |
| ZFP36             | 5.97E-19 | 0.59893495 | 0.853 | 0.674 | 2.11E-14 | NKT_spleen |
| PPP1CC            | 6.66E-19 | 0.65958357 | 0.512 | 0.299 | 2.36E-14 | NKT_spleen |
| REL               | 6.97E-19 | 0.67219852 | 0.663 | 0.439 | 2.47E-14 | NKT_spleen |
| NFATC3            | 6.98E-19 | 0.62734118 | 0.671 | 0.443 | 2.47E-14 | NKT_spleen |
| ETV6              | 7.22E-19 | 1.20112579 | 0.392 | 0.211 | 2.56E-14 | NKT_spleen |
| PSME4             | 7.79E-19 | 0.69469871 | 0.624 | 0.396 | 2.76E-14 | NKT_spleen |
| P4HA1             | 8.07E-19 | 1.02503958 | 0.327 | 0.159 | 2.86E-14 | NKT_spleen |
| THADA             | 8.29E-19 | 0.62813926 | 0.556 | 0.323 | 2.94E-14 | NKT_spleen |
| KDM4C             | 8.31E-19 | 0.57317645 | 0.699 | 0.45  | 2.94E-14 | NKT_spleen |
| ID2               | 8.39E-19 | 0.82806701 | 0.521 | 0.317 | 2.97E-14 | NKT_spleen |
| ATP2B4            | 9.03E-19 | 0.59795271 | 0.656 | 0.43  | 3.20E-14 | NKT_spleen |
| CTCF              | 9.73E-19 | 0.83756809 | 0.455 | 0.254 | 3.45E-14 | NKT_spleen |
| COMMD10           | 9.79E-19 | 0.89836321 | 0.465 | 0.264 | 3.47E-14 | NKT_spleen |
| DIAPH1            | 9.98E-19 | 0.64125738 | 0.705 | 0.472 | 3.54E-14 | NKT_spleen |
| EIF3B             | 1.15E-18 | 0.82263478 | 0.309 | 0.14  | 4.07E-14 | NKT_spleen |
| ARL15             | 1.19E-18 | 0.6972924  | 0.6   | 0.376 | 4.21E-14 | NKT_spleen |
| FOXN2             | 1.35E-18 | 0.84450222 | 0.458 | 0.256 | 4.77E-14 | NKT_spleen |
| ZMYM2             | 1.41E-18 | 0.7445662  | 0.558 | 0.34  | 4.98E-14 | NKT_spleen |
| CDK8              | 1.49E-18 | 0.98858834 | 0.308 | 0.142 | 5.27E-14 | NKT_spleen |
| SH3KBP1           | 1.51E-18 | 0.53356264 | 0.899 | 0.722 | 5.36E-14 | NKT_spleen |
| LRCH1             | 1.65E-18 | 1.11280512 | 0.329 | 0.162 | 5.85E-14 | NKT_spleen |
| MTDH              | 1.68E-18 | 0.70525443 | 0.503 | 0.288 | 5.96E-14 | NKT_spleen |
| INTS6             | 1.87E-18 | 0.83526265 | 0.495 | 0.293 | 6.62E-14 | NKT_spleen |
| MTO1              | 2.11E-18 | 1.17425839 | 0.25  | 0.105 | 7.49E-14 | NKT_spleen |
| STIP1             | 2.50E-18 | 0.76559784 | 0.36  | 0.179 | 8.84E-14 | NKT_spleen |
| ZNF148            | 2.60E-18 | 0.68928851 | 0.544 | 0.335 | 9.21E-14 | NKT_spleen |
| RAD23B            | 2.60E-18 | 0.77008696 | 0.418 | 0.222 | 9.23E-14 | NKT_spleen |
| SLC35E2           | 3.23E-18 | 1.10522656 | 0.259 | 0.111 | 1.14E-13 | NKT_spleen |
| ST6GAL1           | 3.33E-18 | 0.78355404 | 0.619 | 0.413 | 1.18E-13 | NKT_spleen |

|          |          |            |       |       |          |            |
|----------|----------|------------|-------|-------|----------|------------|
| TOB2     | 3.40E-18 | 1.02515583 | 0.295 | 0.135 | 1.20E-13 | NKT_spleen |
| ZFAND3   | 3.46E-18 | 0.54457968 | 0.736 | 0.502 | 1.23E-13 | NKT_spleen |
| CREB1    | 3.88E-18 | 0.83638549 | 0.451 | 0.255 | 1.38E-13 | NKT_spleen |
| HMGA1    | 3.89E-18 | 0.67811233 | 0.479 | 0.267 | 1.38E-13 | NKT_spleen |
| RBM17    | 4.63E-18 | 0.76301423 | 0.435 | 0.24  | 1.64E-13 | NKT_spleen |
| CEP170   | 4.72E-18 | 0.8343622  | 0.432 | 0.237 | 1.67E-13 | NKT_spleen |
| PPP1R16B | 5.09E-18 | 0.65242149 | 0.6   | 0.382 | 1.81E-13 | NKT_spleen |
| EDEM3    | 5.65E-18 | 1.00950648 | 0.281 | 0.128 | 2.00E-13 | NKT_spleen |
| ADAM10   | 5.78E-18 | 0.77001914 | 0.533 | 0.323 | 2.05E-13 | NKT_spleen |
| RALY     | 5.89E-18 | 0.75817374 | 0.535 | 0.323 | 2.09E-13 | NKT_spleen |
| WWP1     | 6.68E-18 | 0.78352912 | 0.428 | 0.236 | 2.37E-13 | NKT_spleen |
| KRIT1    | 6.92E-18 | 0.87353505 | 0.348 | 0.172 | 2.45E-13 | NKT_spleen |
| METTL26  | 6.95E-18 | 1.01874262 | 0.273 | 0.12  | 2.46E-13 | NKT_spleen |
| DGKZ     | 7.36E-18 | 0.74148632 | 0.427 | 0.228 | 2.61E-13 | NKT_spleen |
| GMDS     | 8.12E-18 | 0.74670448 | 0.497 | 0.295 | 2.88E-13 | NKT_spleen |
| PHACTR2  | 8.56E-18 | 1.02472491 | 0.355 | 0.182 | 3.03E-13 | NKT_spleen |
| TMPO     | 8.86E-18 | 0.91310306 | 0.316 | 0.151 | 3.14E-13 | NKT_spleen |
| TOP1     | 8.86E-18 | 0.55199228 | 0.767 | 0.542 | 3.14E-13 | NKT_spleen |
| ANKRD17  | 9.20E-18 | 0.61542237 | 0.652 | 0.421 | 3.26E-13 | NKT_spleen |
| RPS6KA3  | 1.06E-17 | 0.63949558 | 0.668 | 0.454 | 3.75E-13 | NKT_spleen |
| MSL2     | 1.22E-17 | 1.08682513 | 0.372 | 0.197 | 4.31E-13 | NKT_spleen |
| EIF4G3   | 1.35E-17 | 1.24718267 | 0.271 | 0.124 | 4.80E-13 | NKT_spleen |
| BTG2     | 1.42E-17 | 0.68950252 | 0.701 | 0.503 | 5.03E-13 | NKT_spleen |
| PHF20    | 1.49E-17 | 0.64819647 | 0.58  | 0.363 | 5.26E-13 | NKT_spleen |
| RASGEF1B | 1.74E-17 | 1.05097176 | 0.395 | 0.218 | 6.15E-13 | NKT_spleen |
| PARD3    | 1.80E-17 | 0.8905283  | 0.409 | 0.229 | 6.39E-13 | NKT_spleen |
| UBE2R2   | 1.94E-17 | 0.86797329 | 0.434 | 0.245 | 6.87E-13 | NKT_spleen |
| RREB1    | 2.05E-17 | 1.09701129 | 0.274 | 0.124 | 7.27E-13 | NKT_spleen |
| DOCK11   | 2.25E-17 | 0.56080414 | 0.677 | 0.449 | 7.99E-13 | NKT_spleen |
| NLRC3    | 2.26E-17 | 0.96831708 | 0.322 | 0.158 | 8.00E-13 | NKT_spleen |
| RALBP1   | 2.30E-17 | 0.81274929 | 0.344 | 0.172 | 8.14E-13 | NKT_spleen |
| ENO2     | 2.39E-17 | 1.05865981 | 0.262 | 0.115 | 8.48E-13 | NKT_spleen |
| FNBP1L   | 2.54E-17 | 0.60207843 | 0.399 | 0.208 | 8.98E-13 | NKT_spleen |

|         |          |            |       |       |          |            |
|---------|----------|------------|-------|-------|----------|------------|
| RANBP2  | 2.54E-17 | 0.67034708 | 0.68  | 0.457 | 8.99E-13 | NKT_spleen |
| WIPF1   | 2.55E-17 | 0.58592729 | 0.719 | 0.497 | 9.03E-13 | NKT_spleen |
| CD226   | 2.63E-17 | 0.89747347 | 0.39  | 0.213 | 9.30E-13 | NKT_spleen |
| LPP     | 2.86E-17 | 0.81354914 | 0.521 | 0.324 | 1.01E-12 | NKT_spleen |
| WDR82   | 2.89E-17 | 0.74296363 | 0.353 | 0.175 | 1.02E-12 | NKT_spleen |
| RASAL3  | 3.10E-17 | 0.97063028 | 0.253 | 0.109 | 1.10E-12 | NKT_spleen |
| GLUD1   | 3.25E-17 | 1.07093624 | 0.442 | 0.261 | 1.15E-12 | NKT_spleen |
| FAM53B  | 3.48E-17 | 1.00090111 | 0.32  | 0.159 | 1.23E-12 | NKT_spleen |
| MCUB    | 4.30E-17 | 0.67434561 | 0.589 | 0.373 | 1.53E-12 | NKT_spleen |
| METTL9  | 4.40E-17 | 0.71325584 | 0.411 | 0.223 | 1.56E-12 | NKT_spleen |
| MARK3   | 5.17E-17 | 0.7555946  | 0.51  | 0.311 | 1.83E-12 | NKT_spleen |
| ZNF652  | 5.24E-17 | 0.99798856 | 0.357 | 0.19  | 1.86E-12 | NKT_spleen |
| IP6K1   | 5.27E-17 | 0.80714895 | 0.442 | 0.249 | 1.87E-12 | NKT_spleen |
| OXSRI   | 6.09E-17 | 0.81504665 | 0.416 | 0.233 | 2.16E-12 | NKT_spleen |
| SPTAN1  | 6.53E-17 | 0.73150803 | 0.47  | 0.269 | 2.32E-12 | NKT_spleen |
| GLB1    | 6.91E-17 | 0.76282229 | 0.404 | 0.212 | 2.45E-12 | NKT_spleen |
| HSPD1   | 7.55E-17 | 0.68388943 | 0.421 | 0.232 | 2.67E-12 | NKT_spleen |
| ZBTB10  | 7.91E-17 | 1.02200338 | 0.32  | 0.161 | 2.80E-12 | NKT_spleen |
| BMT2    | 8.15E-17 | 1.3336954  | 0.385 | 0.219 | 2.89E-12 | NKT_spleen |
| KLHL6   | 1.01E-16 | 0.70464052 | 0.416 | 0.227 | 3.58E-12 | NKT_spleen |
| SMARCA2 | 1.19E-16 | 0.69433329 | 0.486 | 0.294 | 4.23E-12 | NKT_spleen |
| ST3GAL1 | 1.27E-16 | 0.73592998 | 0.507 | 0.309 | 4.50E-12 | NKT_spleen |
| PREX1   | 1.29E-16 | 0.67992917 | 0.594 | 0.387 | 4.58E-12 | NKT_spleen |
| EVI2B   | 1.41E-16 | 0.64073516 | 0.353 | 0.177 | 5.01E-12 | NKT_spleen |
| ELMO1   | 1.43E-16 | 0.46855113 | 0.858 | 0.627 | 5.06E-12 | NKT_spleen |
| ARL5A   | 1.59E-16 | 0.87307836 | 0.299 | 0.144 | 5.63E-12 | NKT_spleen |
| DEK     | 1.70E-16 | 0.74510354 | 0.434 | 0.242 | 6.03E-12 | NKT_spleen |
| EFCAB2  | 1.74E-16 | 0.74655842 | 0.503 | 0.3   | 6.17E-12 | NKT_spleen |
| UBE2D2  | 1.77E-16 | 0.58192719 | 0.367 | 0.19  | 6.27E-12 | NKT_spleen |
| TGFBR2  | 1.84E-16 | 0.72791677 | 0.509 | 0.312 | 6.54E-12 | NKT_spleen |
| AHCYL2  | 1.90E-16 | 1.14366202 | 0.274 | 0.13  | 6.72E-12 | NKT_spleen |
| UBL3    | 1.91E-16 | 0.72371814 | 0.432 | 0.246 | 6.77E-12 | NKT_spleen |
| ACTR3   | 2.06E-16 | 0.58285713 | 0.659 | 0.461 | 7.29E-12 | NKT_spleen |

|          |          |            |       |       |          |            |
|----------|----------|------------|-------|-------|----------|------------|
| HSPA8    | 2.29E-16 | 0.54084569 | 0.781 | 0.607 | 8.12E-12 | NKT_spleen |
| TMEM181  | 2.38E-16 | 0.82567895 | 0.393 | 0.218 | 8.44E-12 | NKT_spleen |
| NPLOC4   | 2.40E-16 | 1.14732436 | 0.26  | 0.119 | 8.51E-12 | NKT_spleen |
| CLK1     | 2.73E-16 | 0.55118815 | 0.636 | 0.411 | 9.68E-12 | NKT_spleen |
| MAF      | 3.17E-16 | 0.49266948 | 0.341 | 0.166 | 1.12E-11 | NKT_spleen |
| RRP1B    | 3.28E-16 | 0.79309043 | 0.358 | 0.188 | 1.16E-11 | NKT_spleen |
| YPEL3    | 3.57E-16 | 0.62962141 | 0.386 | 0.207 | 1.27E-11 | NKT_spleen |
| TRIP12   | 3.60E-16 | 0.49432528 | 0.6   | 0.373 | 1.28E-11 | NKT_spleen |
| ARID1A   | 4.25E-16 | 0.67215491 | 0.573 | 0.364 | 1.51E-11 | NKT_spleen |
| DENND1B  | 4.41E-16 | 0.99828585 | 0.35  | 0.191 | 1.56E-11 | NKT_spleen |
| GATAD2A  | 4.43E-16 | 0.70029296 | 0.512 | 0.312 | 1.57E-11 | NKT_spleen |
| KMT5B    | 4.43E-16 | 0.64496188 | 0.427 | 0.241 | 1.57E-11 | NKT_spleen |
| EHBP1    | 4.82E-16 | 0.82272554 | 0.4   | 0.223 | 1.71E-11 | NKT_spleen |
| DOCK8    | 5.13E-16 | 0.51702187 | 0.72  | 0.501 | 1.82E-11 | NKT_spleen |
| SLC9A3R1 | 5.19E-16 | 0.62361511 | 0.383 | 0.203 | 1.84E-11 | NKT_spleen |
| SF3B3    | 5.61E-16 | 0.75969048 | 0.339 | 0.174 | 1.99E-11 | NKT_spleen |
| NFAT5    | 5.62E-16 | 0.72997662 | 0.49  | 0.302 | 1.99E-11 | NKT_spleen |
| RAD51B   | 6.34E-16 | 0.96065495 | 0.371 | 0.207 | 2.25E-11 | NKT_spleen |
| NDEL1    | 6.41E-16 | 0.723328   | 0.533 | 0.333 | 2.27E-11 | NKT_spleen |
| FHIT     | 6.59E-16 | 1.01835828 | 0.423 | 0.248 | 2.33E-11 | NKT_spleen |
| NPEPPS   | 7.11E-16 | 0.65379454 | 0.39  | 0.209 | 2.52E-11 | NKT_spleen |
| SLC2A3   | 7.21E-16 | 0.499604   | 0.703 | 0.512 | 2.55E-11 | NKT_spleen |
| EXOC4    | 7.73E-16 | 0.55712381 | 0.699 | 0.494 | 2.74E-11 | NKT_spleen |
| PPP3CA   | 8.62E-16 | 0.48829911 | 0.785 | 0.563 | 3.05E-11 | NKT_spleen |
| GRK5     | 8.71E-16 | 0.81859795 | 0.439 | 0.256 | 3.09E-11 | NKT_spleen |
| MAPK14   | 9.12E-16 | 1.17309083 | 0.264 | 0.125 | 3.23E-11 | NKT_spleen |
| RNF115   | 1.02E-15 | 0.89076504 | 0.406 | 0.229 | 3.61E-11 | NKT_spleen |
| MBP      | 1.03E-15 | 0.62433444 | 0.579 | 0.375 | 3.64E-11 | NKT_spleen |
| ST7L     | 1.03E-15 | 0.93469648 | 0.255 | 0.116 | 3.67E-11 | NKT_spleen |
| PRRC2B   | 1.19E-15 | 0.62072993 | 0.582 | 0.368 | 4.23E-11 | NKT_spleen |
| FYN      | 1.21E-15 | 0.52773705 | 0.788 | 0.574 | 4.28E-11 | NKT_spleen |
| CSNK1G1  | 1.28E-15 | 0.76661112 | 0.481 | 0.293 | 4.53E-11 | NKT_spleen |
| ADCY7    | 1.42E-15 | 0.83783582 | 0.29  | 0.141 | 5.05E-11 | NKT_spleen |

|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| SPECC1L            | 1.51E-15 | 0.64609241 | 0.49  | 0.294 | 5.36E-11 | NKT_spleen |
| PIEZO1             | 1.53E-15 | 0.8912934  | 0.28  | 0.133 | 5.43E-11 | NKT_spleen |
| CD53               | 1.64E-15 | 0.38622835 | 0.717 | 0.483 | 5.83E-11 | NKT_spleen |
| AKIRIN2            | 1.76E-15 | 0.86593782 | 0.288 | 0.141 | 6.23E-11 | NKT_spleen |
| PRKCB              | 1.80E-15 | 0.55629818 | 0.615 | 0.4   | 6.37E-11 | NKT_spleen |
| SEPTIN11           | 1.91E-15 | 0.62439505 | 0.495 | 0.306 | 6.75E-11 | NKT_spleen |
| MLLT3              | 1.95E-15 | 0.65731078 | 0.638 | 0.447 | 6.90E-11 | NKT_spleen |
| EP300              | 2.04E-15 | 0.57738157 | 0.582 | 0.378 | 7.22E-11 | NKT_spleen |
| ARID1B             | 2.10E-15 | 0.48911447 | 0.747 | 0.531 | 7.44E-11 | NKT_spleen |
| AAK1               | 2.27E-15 | 0.56476146 | 0.705 | 0.5   | 8.06E-11 | NKT_spleen |
| REV3L              | 2.28E-15 | 0.570759   | 0.633 | 0.412 | 8.09E-11 | NKT_spleen |
| ENSMMUG00000003130 | 2.35E-15 | 0.65586461 | 0.434 | 0.251 | 8.32E-11 | NKT_spleen |
| ZBTB20             | 2.42E-15 | 0.56519826 | 0.767 | 0.558 | 8.56E-11 | NKT_spleen |
| VCL                | 2.55E-15 | 0.67909575 | 0.453 | 0.271 | 9.04E-11 | NKT_spleen |
| WTAP               | 2.83E-15 | 0.55948784 | 0.678 | 0.453 | 1.00E-10 | NKT_spleen |
| ZNF146             | 3.07E-15 | 0.96650149 | 0.252 | 0.116 | 1.09E-10 | NKT_spleen |
| ARHGAP15           | 3.11E-15 | 0.41925088 | 0.953 | 0.813 | 1.10E-10 | NKT_spleen |
| AGPS               | 3.27E-15 | 0.68728663 | 0.434 | 0.255 | 1.16E-10 | NKT_spleen |
| FAF1               | 3.34E-15 | 0.56841851 | 0.626 | 0.409 | 1.18E-10 | NKT_spleen |
| KLF12              | 3.63E-15 | 0.48940555 | 0.913 | 0.704 | 1.29E-10 | NKT_spleen |
| ETS1               | 4.64E-15 | 0.4672652  | 0.846 | 0.701 | 1.64E-10 | NKT_spleen |
| VPS13B             | 4.79E-15 | 0.39839798 | 0.855 | 0.608 | 1.70E-10 | NKT_spleen |
| SRSF10             | 4.86E-15 | 0.55564676 | 0.589 | 0.376 | 1.72E-10 | NKT_spleen |
| SPATA5             | 5.05E-15 | 0.74053256 | 0.418 | 0.245 | 1.79E-10 | NKT_spleen |
| CBLB               | 5.53E-15 | 0.52130097 | 0.815 | 0.604 | 1.96E-10 | NKT_spleen |
| CEP350             | 5.71E-15 | 0.75745056 | 0.414 | 0.241 | 2.02E-10 | NKT_spleen |
| NF1                | 6.89E-15 | 0.89926313 | 0.357 | 0.197 | 2.44E-10 | NKT_spleen |
| MGA                | 7.10E-15 | 1.00257688 | 0.315 | 0.166 | 2.52E-10 | NKT_spleen |
| UBE2K              | 7.30E-15 | 0.65254661 | 0.533 | 0.343 | 2.58E-10 | NKT_spleen |
| USP9X              | 7.34E-15 | 0.57591492 | 0.61  | 0.4   | 2.60E-10 | NKT_spleen |
| DYRK1A             | 7.93E-15 | 0.61083885 | 0.519 | 0.323 | 2.81E-10 | NKT_spleen |
| KIF2A              | 8.00E-15 | 0.54805936 | 0.477 | 0.284 | 2.84E-10 | NKT_spleen |
| FBXL17             | 8.27E-15 | 0.66297703 | 0.505 | 0.311 | 2.93E-10 | NKT_spleen |



|                   |          |            |       |       |          |            |
|-------------------|----------|------------|-------|-------|----------|------------|
| CCNY              | 8.40E-15 | 0.74235281 | 0.484 | 0.295 | 2.97E-10 | NKT_spleen |
| MANF              | 8.58E-15 | 0.75140504 | 0.276 | 0.132 | 3.04E-10 | NKT_spleen |
| SNX14             | 9.31E-15 | 0.5955097  | 0.455 | 0.271 | 3.30E-10 | NKT_spleen |
| SNRNP70           | 1.18E-14 | 0.59652682 | 0.502 | 0.304 | 4.16E-10 | NKT_spleen |
| CSK               | 1.21E-14 | 0.54304311 | 0.4   | 0.218 | 4.27E-10 | NKT_spleen |
| ANKRD10           | 1.42E-14 | 0.63713073 | 0.441 | 0.259 | 5.04E-10 | NKT_spleen |
| MAF1              | 1.43E-14 | 0.55613953 | 0.311 | 0.154 | 5.05E-10 | NKT_spleen |
| IQCG              | 1.43E-14 | 1.07934596 | 0.253 | 0.12  | 5.07E-10 | NKT_spleen |
| KIAA1109          | 1.67E-14 | 0.59203189 | 0.57  | 0.364 | 5.92E-10 | NKT_spleen |
| SYNRG             | 1.73E-14 | 0.72858839 | 0.346 | 0.187 | 6.14E-10 | NKT_spleen |
| DDX42             | 1.74E-14 | 0.68124842 | 0.306 | 0.154 | 6.18E-10 | NKT_spleen |
| EVL               | 1.91E-14 | 0.44141458 | 0.794 | 0.581 | 6.76E-10 | NKT_spleen |
| SUPT3H            | 1.91E-14 | 0.64058201 | 0.523 | 0.332 | 6.76E-10 | NKT_spleen |
| USP34             | 2.01E-14 | 0.44078659 | 0.797 | 0.573 | 7.11E-10 | NKT_spleen |
| NUFIP2            | 2.03E-14 | 0.699261   | 0.549 | 0.37  | 7.21E-10 | NKT_spleen |
| CRLF3             | 2.19E-14 | 0.83392982 | 0.332 | 0.177 | 7.77E-10 | NKT_spleen |
| PRKAG2            | 2.21E-14 | 0.93470917 | 0.386 | 0.227 | 7.83E-10 | NKT_spleen |
| STAT5B            | 2.23E-14 | 0.56355237 | 0.577 | 0.38  | 7.92E-10 | NKT_spleen |
| RABL6             | 2.33E-14 | 0.84686752 | 0.287 | 0.141 | 8.24E-10 | NKT_spleen |
| WBP1L             | 2.40E-14 | 0.94128217 | 0.379 | 0.217 | 8.51E-10 | NKT_spleen |
| RIPOR2            | 2.42E-14 | 0.42595814 | 0.946 | 0.809 | 8.56E-10 | NKT_spleen |
| ERO1A             | 2.42E-14 | 0.72934045 | 0.35  | 0.185 | 8.58E-10 | NKT_spleen |
| SETX              | 2.49E-14 | 0.67080974 | 0.512 | 0.331 | 8.83E-10 | NKT_spleen |
| FYB1              | 2.89E-14 | 0.54311532 | 0.72  | 0.516 | 1.02E-09 | NKT_spleen |
| ENSMUG00000053320 | 2.92E-14 | 0.66276822 | 0.269 | 0.126 | 1.04E-09 | NKT_spleen |
| SSBP3             | 2.93E-14 | 0.72858414 | 0.495 | 0.318 | 1.04E-09 | NKT_spleen |
| TFRC              | 3.00E-14 | 0.69737656 | 0.274 | 0.135 | 1.06E-09 | NKT_spleen |
| CAMKMT            | 3.13E-14 | 0.7800637  | 0.446 | 0.273 | 1.11E-09 | NKT_spleen |
| ACTN1             | 3.13E-14 | 0.78845898 | 0.341 | 0.184 | 1.11E-09 | NKT_spleen |
| TRAF5             | 3.15E-14 | 0.82254906 | 0.299 | 0.151 | 1.11E-09 | NKT_spleen |
| NLK               | 3.25E-14 | 0.95298747 | 0.283 | 0.143 | 1.15E-09 | NKT_spleen |
| MALT1             | 3.30E-14 | 0.48536724 | 0.43  | 0.255 | 1.17E-09 | NKT_spleen |
| GON4L             | 3.65E-14 | 0.72487654 | 0.371 | 0.205 | 1.29E-09 | NKT_spleen |

|          |          |            |       |       |          |            |
|----------|----------|------------|-------|-------|----------|------------|
| MAP2K4   | 3.66E-14 | 0.75198279 | 0.372 | 0.212 | 1.30E-09 | NKT_spleen |
| ASH1L    | 3.79E-14 | 0.42637035 | 0.794 | 0.565 | 1.34E-09 | NKT_spleen |
| PDS5A    | 3.84E-14 | 0.59995129 | 0.516 | 0.325 | 1.36E-09 | NKT_spleen |
| RASSF3   | 3.89E-14 | 0.69513799 | 0.677 | 0.495 | 1.38E-09 | NKT_spleen |
| CYBA     | 3.97E-14 | 0.48080758 | 0.601 | 0.396 | 1.41E-09 | NKT_spleen |
| SUFU     | 4.02E-14 | 0.87171128 | 0.341 | 0.188 | 1.42E-09 | NKT_spleen |
| PLCL2    | 4.06E-14 | 0.55362878 | 0.598 | 0.396 | 1.44E-09 | NKT_spleen |
| ARMH3    | 4.15E-14 | 0.85011404 | 0.32  | 0.171 | 1.47E-09 | NKT_spleen |
| CUL4A    | 4.24E-14 | 0.55852628 | 0.414 | 0.237 | 1.50E-09 | NKT_spleen |
| TMEM59L  | 4.46E-14 | 0.5140479  | 0.365 | 0.197 | 1.58E-09 | NKT_spleen |
| TCP1     | 4.63E-14 | 0.76690077 | 0.371 | 0.209 | 1.64E-09 | NKT_spleen |
| PICALM   | 4.68E-14 | 0.50041525 | 0.712 | 0.519 | 1.66E-09 | NKT_spleen |
| CCDC50   | 4.98E-14 | 0.71203748 | 0.33  | 0.174 | 1.76E-09 | NKT_spleen |
| MICU1    | 5.19E-14 | 0.80811976 | 0.269 | 0.13  | 1.84E-09 | NKT_spleen |
| STK24    | 5.26E-14 | 0.61168969 | 0.584 | 0.379 | 1.87E-09 | NKT_spleen |
| LCK      | 5.32E-14 | 0.4384007  | 0.673 | 0.476 | 1.88E-09 | NKT_spleen |
| SBF2     | 5.96E-14 | 0.88827552 | 0.364 | 0.213 | 2.11E-09 | NKT_spleen |
| PTPRJ    | 6.07E-14 | 1.0397893  | 0.311 | 0.169 | 2.15E-09 | NKT_spleen |
| TRAF3IP3 | 6.60E-14 | 0.55472356 | 0.538 | 0.338 | 2.34E-09 | NKT_spleen |
| MLLT10   | 6.71E-14 | 0.66305939 | 0.495 | 0.32  | 2.38E-09 | NKT_spleen |
| SLC7A6   | 7.03E-14 | 0.69463292 | 0.351 | 0.194 | 2.49E-09 | NKT_spleen |
| RELB     | 7.05E-14 | 0.84330366 | 0.365 | 0.206 | 2.50E-09 | NKT_spleen |
| SYTL3    | 7.32E-14 | 0.63354281 | 0.668 | 0.489 | 2.59E-09 | NKT_spleen |
| SND1     | 7.54E-14 | 0.63132472 | 0.517 | 0.333 | 2.67E-09 | NKT_spleen |
| PAK3     | 7.71E-14 | 0.80845124 | 0.308 | 0.163 | 2.73E-09 | NKT_spleen |
| FAM107B  | 7.86E-14 | 0.70502326 | 0.612 | 0.43  | 2.78E-09 | NKT_spleen |
| GSE1     | 7.92E-14 | 1.070668   | 0.267 | 0.133 | 2.81E-09 | NKT_spleen |
| ZNF800   | 8.05E-14 | 0.78175453 | 0.274 | 0.137 | 2.85E-09 | NKT_spleen |
| NEDD4    | 8.45E-14 | 0.84751357 | 0.257 | 0.124 | 2.99E-09 | NKT_spleen |
| TAF12    | 8.56E-14 | 0.66452989 | 0.262 | 0.124 | 3.03E-09 | NKT_spleen |
| SLC9A9   | 8.74E-14 | 0.64756289 | 0.5   | 0.325 | 3.10E-09 | NKT_spleen |
| NRROS    | 9.99E-14 | 0.64730735 | 0.502 | 0.316 | 3.54E-09 | NKT_spleen |
| BRD2     | 1.09E-13 | 0.59344799 | 0.472 | 0.29  | 3.85E-09 | NKT_spleen |

|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| ENSMMUG00000051343 | 1.15E-13 | 0.70999455 | 0.313 | 0.162 | 4.06E-09 | NKT_spleen |
| PTPN6              | 1.19E-13 | 0.59030913 | 0.283 | 0.139 | 4.23E-09 | NKT_spleen |
| HNRNPA2B1          | 1.30E-13 | 0.32994263 | 0.948 | 0.832 | 4.61E-09 | NKT_spleen |
| ENSMMUG00000064530 | 1.33E-13 | 1.27887168 | 0.266 | 0.138 | 4.72E-09 | NKT_spleen |
| ATRX               | 1.43E-13 | 0.4453678  | 0.752 | 0.544 | 5.07E-09 | NKT_spleen |
| TLK1               | 1.46E-13 | 0.42537336 | 0.726 | 0.501 | 5.16E-09 | NKT_spleen |
| ENSMMUG00000056190 | 1.46E-13 | 0.67737858 | 0.448 | 0.275 | 5.18E-09 | NKT_spleen |
| DENND6A            | 1.47E-13 | 0.86509643 | 0.35  | 0.197 | 5.21E-09 | NKT_spleen |
| RALGAPA2           | 1.49E-13 | 0.57524021 | 0.472 | 0.287 | 5.29E-09 | NKT_spleen |
| PDE7B              | 1.50E-13 | 0.85904904 | 0.255 | 0.123 | 5.30E-09 | NKT_spleen |
| ZSWIM6             | 1.75E-13 | 0.73322342 | 0.339 | 0.19  | 6.20E-09 | NKT_spleen |
| BABAM2             | 1.78E-13 | 0.67893864 | 0.495 | 0.326 | 6.32E-09 | NKT_spleen |
| SPTBN1             | 1.97E-13 | 0.55312699 | 0.628 | 0.43  | 6.98E-09 | NKT_spleen |
| MTMR12             | 2.04E-13 | 0.91078898 | 0.267 | 0.134 | 7.22E-09 | NKT_spleen |
| GPR174             | 2.10E-13 | 0.5757549  | 0.337 | 0.181 | 7.43E-09 | NKT_spleen |
| ST8SIA4            | 2.25E-13 | 0.57798693 | 0.49  | 0.306 | 7.98E-09 | NKT_spleen |
| KDELR2             | 2.28E-13 | 0.74485316 | 0.308 | 0.162 | 8.07E-09 | NKT_spleen |
| ENSMMUG00000060923 | 2.39E-13 | 0.53770336 | 0.689 | 0.503 | 8.47E-09 | NKT_spleen |
| ANKRD11            | 2.57E-13 | 0.57421654 | 0.692 | 0.494 | 9.11E-09 | NKT_spleen |
| TACC1              | 2.66E-13 | 0.50508896 | 0.46  | 0.28  | 9.43E-09 | NKT_spleen |
| LARP1              | 2.82E-13 | 0.90217756 | 0.269 | 0.136 | 1.00E-08 | NKT_spleen |
| POC1B              | 2.88E-13 | 0.69939904 | 0.348 | 0.195 | 1.02E-08 | NKT_spleen |
| CDKAL1             | 2.91E-13 | 0.43116115 | 0.692 | 0.475 | 1.03E-08 | NKT_spleen |
| KANSL1             | 2.95E-13 | 0.4450759  | 0.677 | 0.489 | 1.04E-08 | NKT_spleen |
| NUMB               | 3.07E-13 | 0.76392842 | 0.432 | 0.264 | 1.09E-08 | NKT_spleen |
| KAT6B              | 3.21E-13 | 0.40436893 | 0.733 | 0.507 | 1.14E-08 | NKT_spleen |
| PDIA3              | 3.35E-13 | 0.69425662 | 0.264 | 0.13  | 1.19E-08 | NKT_spleen |
| MYDGF              | 3.72E-13 | 0.55020996 | 0.448 | 0.273 | 1.32E-08 | NKT_spleen |
| STK39              | 3.73E-13 | 0.53932017 | 0.664 | 0.48  | 1.32E-08 | NKT_spleen |
| TRIM44             | 4.13E-13 | 0.83321139 | 0.334 | 0.186 | 1.46E-08 | NKT_spleen |
| CHM                | 4.26E-13 | 0.57044854 | 0.35  | 0.193 | 1.51E-08 | NKT_spleen |
| RBM6               | 4.33E-13 | 0.6328508  | 0.472 | 0.295 | 1.54E-08 | NKT_spleen |
| GSK3B              | 4.34E-13 | 0.47608038 | 0.698 | 0.494 | 1.54E-08 | NKT_spleen |

|                   |          |            |       |       |          |            |
|-------------------|----------|------------|-------|-------|----------|------------|
| FGD3              | 4.36E-13 | 0.44740563 | 0.572 | 0.368 | 1.54E-08 | NKT_spleen |
| SP110             | 4.40E-13 | 0.62366928 | 0.558 | 0.381 | 1.56E-08 | NKT_spleen |
| TES               | 4.42E-13 | 0.61691165 | 0.402 | 0.233 | 1.56E-08 | NKT_spleen |
| DCAF5             | 4.52E-13 | 0.61142747 | 0.437 | 0.265 | 1.60E-08 | NKT_spleen |
| VMP1              | 4.60E-13 | 0.65534511 | 0.399 | 0.236 | 1.63E-08 | NKT_spleen |
| ZDHHC20           | 4.65E-13 | 0.5432005  | 0.456 | 0.278 | 1.65E-08 | NKT_spleen |
| IGF2BP3           | 5.31E-13 | 0.68487414 | 0.404 | 0.242 | 1.88E-08 | NKT_spleen |
| IFNAR1            | 5.51E-13 | 0.41939435 | 0.372 | 0.206 | 1.95E-08 | NKT_spleen |
| BICRAL            | 5.57E-13 | 0.92900731 | 0.28  | 0.145 | 1.97E-08 | NKT_spleen |
| GLCE              | 5.86E-13 | 0.72190165 | 0.402 | 0.241 | 2.08E-08 | NKT_spleen |
| RAB21             | 5.93E-13 | 0.89860829 | 0.259 | 0.129 | 2.10E-08 | NKT_spleen |
| BAZ1B             | 6.02E-13 | 0.75436625 | 0.367 | 0.212 | 2.13E-08 | NKT_spleen |
| HDAC4             | 6.05E-13 | 0.72609196 | 0.392 | 0.228 | 2.14E-08 | NKT_spleen |
| ARFGEF1           | 6.57E-13 | 0.58207704 | 0.469 | 0.289 | 2.33E-08 | NKT_spleen |
| NSF               | 7.14E-13 | 0.62547792 | 0.476 | 0.299 | 2.53E-08 | NKT_spleen |
| MAP3K4            | 7.19E-13 | 0.81488604 | 0.283 | 0.146 | 2.55E-08 | NKT_spleen |
| SPG7              | 7.45E-13 | 0.78042956 | 0.262 | 0.133 | 2.64E-08 | NKT_spleen |
| UBE3A             | 8.23E-13 | 0.56447053 | 0.428 | 0.255 | 2.92E-08 | NKT_spleen |
| DDX17             | 8.47E-13 | 0.37416478 | 0.72  | 0.506 | 3.00E-08 | NKT_spleen |
| SFPQ              | 8.70E-13 | 0.50101477 | 0.64  | 0.446 | 3.08E-08 | NKT_spleen |
| ENSMUG00000030374 | 8.84E-13 | 0.86488625 | 0.337 | 0.193 | 3.13E-08 | NKT_spleen |
| HMBOX1            | 8.91E-13 | 0.82733463 | 0.348 | 0.202 | 3.16E-08 | NKT_spleen |
| SLTM              | 9.67E-13 | 0.41624865 | 0.568 | 0.366 | 3.43E-08 | NKT_spleen |
| PLAAT3            | 1.01E-12 | 0.78943978 | 0.503 | 0.328 | 3.58E-08 | NKT_spleen |
| SH3GL1            | 1.02E-12 | 0.62689117 | 0.386 | 0.224 | 3.63E-08 | NKT_spleen |
| PPA2              | 1.08E-12 | 0.7862591  | 0.255 | 0.126 | 3.83E-08 | NKT_spleen |
| SNX1              | 1.11E-12 | 0.6367775  | 0.292 | 0.152 | 3.93E-08 | NKT_spleen |
| GBF1              | 1.13E-12 | 0.70596095 | 0.336 | 0.187 | 4.00E-08 | NKT_spleen |
| ENSMUG00000000249 | 1.18E-12 | 0.56463043 | 0.288 | 0.148 | 4.18E-08 | NKT_spleen |
| LRRC8D            | 1.19E-12 | 0.98363079 | 0.322 | 0.178 | 4.23E-08 | NKT_spleen |
| ASAP1             | 1.23E-12 | 0.62631532 | 0.659 | 0.472 | 4.37E-08 | NKT_spleen |
| CAST              | 1.29E-12 | 0.49354584 | 0.566 | 0.378 | 4.55E-08 | NKT_spleen |
| HK1               | 1.29E-12 | 0.63242101 | 0.36  | 0.206 | 4.56E-08 | NKT_spleen |

|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| FBXW11             | 1.30E-12 | 0.79091338 | 0.304 | 0.165 | 4.62E-08 | NKT_spleen |
| TBC1D10B           | 1.38E-12 | 0.43072864 | 0.399 | 0.233 | 4.87E-08 | NKT_spleen |
| FNDC3B             | 1.44E-12 | 0.94646296 | 0.28  | 0.148 | 5.11E-08 | NKT_spleen |
| SLC35B1            | 1.44E-12 | 0.57990205 | 0.523 | 0.344 | 5.12E-08 | NKT_spleen |
| PEX14              | 1.46E-12 | 0.6326136  | 0.484 | 0.308 | 5.17E-08 | NKT_spleen |
| RNF138             | 1.50E-12 | 0.6728267  | 0.442 | 0.28  | 5.31E-08 | NKT_spleen |
| OSBPL8             | 1.55E-12 | 0.40661236 | 0.74  | 0.531 | 5.49E-08 | NKT_spleen |
| WNK1               | 1.60E-12 | 0.44211616 | 0.684 | 0.489 | 5.66E-08 | NKT_spleen |
| ATP1A1             | 1.61E-12 | 0.69422462 | 0.325 | 0.18  | 5.71E-08 | NKT_spleen |
| TNRC6C             | 1.63E-12 | 0.66934971 | 0.371 | 0.22  | 5.78E-08 | NKT_spleen |
| GNB2               | 1.69E-12 | 0.39926747 | 0.416 | 0.238 | 5.98E-08 | NKT_spleen |
| FARS2              | 1.73E-12 | 0.66669583 | 0.516 | 0.342 | 6.13E-08 | NKT_spleen |
| SP140              | 1.78E-12 | 0.63079505 | 0.4   | 0.24  | 6.32E-08 | NKT_spleen |
| AFF3               | 1.81E-12 | 0.73067035 | 0.645 | 0.473 | 6.43E-08 | NKT_spleen |
| PTBP3              | 1.83E-12 | 0.42879691 | 0.726 | 0.534 | 6.47E-08 | NKT_spleen |
| SF1                | 1.84E-12 | 0.4402806  | 0.649 | 0.447 | 6.54E-08 | NKT_spleen |
| ENSMMUG00000063549 | 2.01E-12 | 0.58081415 | 0.297 | 0.156 | 7.11E-08 | NKT_spleen |
| VCP                | 2.06E-12 | 0.50004065 | 0.364 | 0.209 | 7.32E-08 | NKT_spleen |
| USP24              | 2.12E-12 | 0.68979387 | 0.386 | 0.231 | 7.51E-08 | NKT_spleen |
| LEF1               | 2.15E-12 | 0.47014126 | 0.766 | 0.597 | 7.61E-08 | NKT_spleen |
| SUZ12              | 2.19E-12 | 0.53880296 | 0.395 | 0.235 | 7.76E-08 | NKT_spleen |
| GAK                | 2.67E-12 | 0.88052021 | 0.288 | 0.157 | 9.45E-08 | NKT_spleen |
| FOXO3              | 2.73E-12 | 0.63093481 | 0.425 | 0.265 | 9.66E-08 | NKT_spleen |
| ID3                | 2.93E-12 | 0.48202545 | 0.269 | 0.137 | 1.04E-07 | NKT_spleen |
| FBXW7              | 2.94E-12 | 0.42945292 | 0.677 | 0.465 | 1.04E-07 | NKT_spleen |
| ENSMMUG00000063859 | 2.98E-12 | 0.73439663 | 0.315 | 0.172 | 1.06E-07 | NKT_spleen |
| PRKDC              | 3.09E-12 | 0.40622628 | 0.549 | 0.361 | 1.10E-07 | NKT_spleen |
| CD3G               | 3.26E-12 | 0.48508579 | 0.434 | 0.26  | 1.16E-07 | NKT_spleen |
| PXK                | 3.27E-12 | 0.62576179 | 0.381 | 0.229 | 1.16E-07 | NKT_spleen |
| UBE2F              | 3.32E-12 | 0.48778389 | 0.486 | 0.305 | 1.17E-07 | NKT_spleen |
| PRKCH              | 3.33E-12 | 0.43517626 | 0.815 | 0.606 | 1.18E-07 | NKT_spleen |
| RASA1              | 3.44E-12 | 0.71600941 | 0.371 | 0.222 | 1.22E-07 | NKT_spleen |
| ENSMMUG00000000350 | 3.49E-12 | 0.60410813 | 0.28  | 0.146 | 1.24E-07 | NKT_spleen |

|             |          |            |       |       |          |            |
|-------------|----------|------------|-------|-------|----------|------------|
| PFKL        | 3.54E-12 | 0.52556912 | 0.269 | 0.136 | 1.26E-07 | NKT_spleen |
| ZNF131      | 3.62E-12 | 0.54548424 | 0.421 | 0.262 | 1.28E-07 | NKT_spleen |
| MSI2        | 3.63E-12 | 0.42404896 | 0.71  | 0.503 | 1.28E-07 | NKT_spleen |
| KCNAB2      | 3.80E-12 | 0.56174927 | 0.444 | 0.276 | 1.35E-07 | NKT_spleen |
| ITSN2       | 3.91E-12 | 0.42047825 | 0.71  | 0.502 | 1.38E-07 | NKT_spleen |
| SPIDR       | 3.97E-12 | 0.59149693 | 0.421 | 0.258 | 1.41E-07 | NKT_spleen |
| CAPRIN1     | 4.06E-12 | 0.73168687 | 0.355 | 0.21  | 1.44E-07 | NKT_spleen |
| CALR        | 4.20E-12 | 0.51583689 | 0.481 | 0.315 | 1.49E-07 | NKT_spleen |
| SLC16A10    | 4.21E-12 | 0.66094125 | 0.262 | 0.137 | 1.49E-07 | NKT_spleen |
| STRBP       | 4.22E-12 | 0.59645809 | 0.306 | 0.165 | 1.49E-07 | NKT_spleen |
| JAZF1       | 4.66E-12 | 0.59548189 | 0.484 | 0.312 | 1.65E-07 | NKT_spleen |
| KIAA2026    | 4.76E-12 | 0.80343196 | 0.273 | 0.148 | 1.69E-07 | NKT_spleen |
| GPRIN3      | 5.09E-12 | 0.73945615 | 0.4   | 0.251 | 1.80E-07 | NKT_spleen |
| TSC22D1     | 5.29E-12 | 0.65866754 | 0.337 | 0.191 | 1.87E-07 | NKT_spleen |
| FAM172A     | 5.37E-12 | 0.51962826 | 0.689 | 0.516 | 1.90E-07 | NKT_spleen |
| SRPK2       | 5.43E-12 | 0.57865968 | 0.635 | 0.448 | 1.92E-07 | NKT_spleen |
| SMAP2       | 5.48E-12 | 0.49900141 | 0.514 | 0.324 | 1.94E-07 | NKT_spleen |
| NEK7        | 5.80E-12 | 0.61599345 | 0.434 | 0.272 | 2.05E-07 | NKT_spleen |
| CLASP1      | 6.04E-12 | 0.60950673 | 0.505 | 0.338 | 2.14E-07 | NKT_spleen |
| PDLIM5      | 6.18E-12 | 0.57686226 | 0.337 | 0.195 | 2.19E-07 | NKT_spleen |
| TSC22D2     | 6.40E-12 | 0.94910417 | 0.322 | 0.188 | 2.27E-07 | NKT_spleen |
| DCAF6       | 6.72E-12 | 0.63102719 | 0.423 | 0.264 | 2.38E-07 | NKT_spleen |
| GALM        | 6.78E-12 | 0.80370366 | 0.297 | 0.162 | 2.40E-07 | NKT_spleen |
| C20H16orf72 | 7.00E-12 | 0.67107655 | 0.507 | 0.337 | 2.48E-07 | NKT_spleen |
| FANCC       | 7.07E-12 | 0.61269824 | 0.402 | 0.246 | 2.50E-07 | NKT_spleen |
| PARP14      | 7.16E-12 | 0.68705449 | 0.257 | 0.132 | 2.54E-07 | NKT_spleen |
| PHF14       | 7.30E-12 | 0.60944177 | 0.469 | 0.304 | 2.59E-07 | NKT_spleen |
| SPOP        | 7.30E-12 | 0.6179305  | 0.386 | 0.233 | 2.59E-07 | NKT_spleen |
| ND2         | 7.50E-12 | 0.52345295 | 0.937 | 0.819 | 2.66E-07 | NKT_spleen |
| SUPT20H     | 7.66E-12 | 0.64071762 | 0.306 | 0.168 | 2.71E-07 | NKT_spleen |
| PPP2R2D     | 8.38E-12 | 0.54356701 | 0.416 | 0.248 | 2.97E-07 | NKT_spleen |
| PPP2R5A     | 8.42E-12 | 0.58172296 | 0.451 | 0.284 | 2.98E-07 | NKT_spleen |
| VASP        | 8.85E-12 | 0.617714   | 0.365 | 0.211 | 3.13E-07 | NKT_spleen |

|                   |          |            |       |       |          |            |
|-------------------|----------|------------|-------|-------|----------|------------|
| HOOK3             | 8.98E-12 | 0.37059872 | 0.664 | 0.465 | 3.18E-07 | NKT_spleen |
| RNF213            | 9.06E-12 | 0.39284026 | 0.617 | 0.429 | 3.21E-07 | NKT_spleen |
| SAMHD1            | 9.29E-12 | 0.58016485 | 0.392 | 0.224 | 3.29E-07 | NKT_spleen |
| PHACTR4           | 9.54E-12 | 0.72327931 | 0.362 | 0.215 | 3.38E-07 | NKT_spleen |
| HP1BP3            | 9.55E-12 | 0.38729148 | 0.563 | 0.366 | 3.38E-07 | NKT_spleen |
| RSU1              | 9.86E-12 | 0.62937115 | 0.519 | 0.35  | 3.49E-07 | NKT_spleen |
| SRSF7             | 1.01E-11 | 0.40846913 | 0.715 | 0.52  | 3.57E-07 | NKT_spleen |
| MAP4K4            | 1.03E-11 | 0.45110228 | 0.783 | 0.596 | 3.67E-07 | NKT_spleen |
| CMPK1             | 1.06E-11 | 0.47787563 | 0.264 | 0.134 | 3.77E-07 | NKT_spleen |
| ACTN4             | 1.08E-11 | 0.63149702 | 0.332 | 0.185 | 3.83E-07 | NKT_spleen |
| PIBF1             | 1.11E-11 | 0.60589371 | 0.339 | 0.196 | 3.92E-07 | NKT_spleen |
| FLOT1             | 1.11E-11 | 0.49768844 | 0.269 | 0.139 | 3.92E-07 | NKT_spleen |
| GBP3              | 1.17E-11 | 0.95682425 | 0.285 | 0.158 | 4.14E-07 | NKT_spleen |
| MGAT5             | 1.22E-11 | 0.41613058 | 0.661 | 0.463 | 4.33E-07 | NKT_spleen |
| PPM1B             | 1.22E-11 | 0.70922993 | 0.357 | 0.21  | 4.34E-07 | NKT_spleen |
| MAN1A1            | 1.45E-11 | 0.56726798 | 0.493 | 0.327 | 5.12E-07 | NKT_spleen |
| RARA              | 1.47E-11 | 0.8909461  | 0.264 | 0.141 | 5.22E-07 | NKT_spleen |
| TRIP4             | 1.51E-11 | 0.7736959  | 0.269 | 0.145 | 5.36E-07 | NKT_spleen |
| WAPL              | 1.53E-11 | 0.47232409 | 0.509 | 0.342 | 5.43E-07 | NKT_spleen |
| RNF11             | 1.66E-11 | 0.6129871  | 0.343 | 0.201 | 5.89E-07 | NKT_spleen |
| ENSMUG00000058532 | 1.70E-11 | 0.53617148 | 0.593 | 0.419 | 6.02E-07 | NKT_spleen |
| MAPKAP1           | 1.72E-11 | 0.52255516 | 0.414 | 0.253 | 6.10E-07 | NKT_spleen |
| HSP90AA1          | 1.73E-11 | 0.43090638 | 0.885 | 0.763 | 6.14E-07 | NKT_spleen |
| CBFA2T2           | 1.74E-11 | 0.6351702  | 0.274 | 0.147 | 6.15E-07 | NKT_spleen |
| DIAPH2            | 1.76E-11 | 0.64278882 | 0.584 | 0.413 | 6.24E-07 | NKT_spleen |
| SKP1              | 1.82E-11 | 0.32238025 | 0.864 | 0.683 | 6.46E-07 | NKT_spleen |
| MAGT1             | 1.92E-11 | 0.58469157 | 0.288 | 0.154 | 6.81E-07 | NKT_spleen |
| ATF1              | 1.94E-11 | 0.63899655 | 0.281 | 0.151 | 6.87E-07 | NKT_spleen |
| NKTR              | 1.95E-11 | 0.61146188 | 0.481 | 0.32  | 6.91E-07 | NKT_spleen |
| ENSMUG00000058818 | 2.01E-11 | 0.79308987 | 0.29  | 0.159 | 7.11E-07 | NKT_spleen |
| EXT1              | 2.35E-11 | 0.80551647 | 0.353 | 0.214 | 8.33E-07 | NKT_spleen |
| MKLN1             | 2.43E-11 | 0.44245222 | 0.605 | 0.426 | 8.60E-07 | NKT_spleen |
| SESN3             | 2.44E-11 | 0.76155057 | 0.274 | 0.149 | 8.63E-07 | NKT_spleen |

|         |          |            |       |       |          |            |
|---------|----------|------------|-------|-------|----------|------------|
| CHD2    | 2.71E-11 | 0.40128549 | 0.764 | 0.574 | 9.60E-07 | NKT_spleen |
| CABIN1  | 2.74E-11 | 0.63174574 | 0.325 | 0.187 | 9.70E-07 | NKT_spleen |
| RASGRP1 | 2.76E-11 | 0.62701921 | 0.357 | 0.216 | 9.78E-07 | NKT_spleen |
| ATRN    | 2.83E-11 | 0.85003425 | 0.306 | 0.176 | 1.00E-06 | NKT_spleen |
| TASOR2  | 3.09E-11 | 0.58240293 | 0.467 | 0.298 | 1.09E-06 | NKT_spleen |
| EEA1    | 3.40E-11 | 0.62318322 | 0.369 | 0.222 | 1.20E-06 | NKT_spleen |
| NUP153  | 3.46E-11 | 0.5135571  | 0.537 | 0.364 | 1.23E-06 | NKT_spleen |
| RBM14   | 3.51E-11 | 0.39143753 | 0.795 | 0.587 | 1.24E-06 | NKT_spleen |
| DGKA    | 3.62E-11 | 0.41093361 | 0.6   | 0.409 | 1.28E-06 | NKT_spleen |
| TTC27   | 3.88E-11 | 0.84289517 | 0.267 | 0.145 | 1.37E-06 | NKT_spleen |
| FBXO11  | 3.88E-11 | 0.34239865 | 0.598 | 0.4   | 1.37E-06 | NKT_spleen |
| DDX50   | 3.94E-11 | 0.42337386 | 0.435 | 0.263 | 1.39E-06 | NKT_spleen |
| UPF2    | 3.96E-11 | 0.44834449 | 0.458 | 0.288 | 1.40E-06 | NKT_spleen |
| ATF7IP  | 4.15E-11 | 0.38092272 | 0.705 | 0.509 | 1.47E-06 | NKT_spleen |
| TRPM7   | 4.19E-11 | 0.3283951  | 0.787 | 0.563 | 1.48E-06 | NKT_spleen |
| ACBD6   | 4.24E-11 | 0.71098926 | 0.301 | 0.17  | 1.50E-06 | NKT_spleen |
| WDR1    | 4.31E-11 | 0.59228207 | 0.325 | 0.186 | 1.53E-06 | NKT_spleen |
| TTC19   | 4.52E-11 | 0.4189444  | 0.392 | 0.237 | 1.60E-06 | NKT_spleen |
| KHDRBS1 | 4.68E-11 | 0.51568674 | 0.406 | 0.252 | 1.66E-06 | NKT_spleen |
| NCK2    | 4.78E-11 | 0.72392631 | 0.344 | 0.209 | 1.69E-06 | NKT_spleen |
| THY1    | 4.94E-11 | 0.57356221 | 0.257 | 0.134 | 1.75E-06 | NKT_spleen |
| EHD4    | 5.14E-11 | 0.97890985 | 0.274 | 0.152 | 1.82E-06 | NKT_spleen |
| IPO7    | 5.74E-11 | 0.54526347 | 0.385 | 0.231 | 2.03E-06 | NKT_spleen |
| CLIC1   | 5.82E-11 | 0.32405194 | 0.514 | 0.328 | 2.06E-06 | NKT_spleen |
| TP53BP2 | 5.82E-11 | 0.8867889  | 0.325 | 0.196 | 2.06E-06 | NKT_spleen |
| WASF2   | 5.84E-11 | 0.42677907 | 0.608 | 0.423 | 2.07E-06 | NKT_spleen |
| RFX7    | 6.14E-11 | 0.54620292 | 0.372 | 0.225 | 2.18E-06 | NKT_spleen |
| PPP2R5E | 6.16E-11 | 0.67487444 | 0.456 | 0.299 | 2.18E-06 | NKT_spleen |
| ITCH    | 6.24E-11 | 0.40731433 | 0.736 | 0.541 | 2.21E-06 | NKT_spleen |
| MYO1F   | 6.73E-11 | 0.68655221 | 0.357 | 0.215 | 2.38E-06 | NKT_spleen |
| SCFD2   | 6.87E-11 | 0.58851152 | 0.409 | 0.257 | 2.43E-06 | NKT_spleen |
| RSBN1L  | 7.62E-11 | 0.47783768 | 0.334 | 0.195 | 2.70E-06 | NKT_spleen |
| CDK17   | 7.81E-11 | 0.53249312 | 0.706 | 0.525 | 2.77E-06 | NKT_spleen |



|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| PHF20L1            | 7.94E-11 | 0.67002318 | 0.267 | 0.146 | 2.81E-06 | NKT_spleen |
| ACTB               | 8.03E-11 | 0.34582318 | 0.953 | 0.955 | 2.84E-06 | NKT_spleen |
| CAP1               | 8.11E-11 | 0.33159987 | 0.556 | 0.372 | 2.87E-06 | NKT_spleen |
| PLIN2              | 8.65E-11 | 0.57216758 | 0.273 | 0.146 | 3.07E-06 | NKT_spleen |
| COMMD7             | 8.91E-11 | 0.38866039 | 0.544 | 0.359 | 3.16E-06 | NKT_spleen |
| MTX2               | 9.55E-11 | 0.46387086 | 0.323 | 0.185 | 3.38E-06 | NKT_spleen |
| FTO                | 9.69E-11 | 0.54660157 | 0.437 | 0.279 | 3.43E-06 | NKT_spleen |
| UBASH3B            | 1.04E-10 | 0.92593386 | 0.404 | 0.26  | 3.68E-06 | NKT_spleen |
| ZCCHC7             | 1.05E-10 | 0.49974758 | 0.729 | 0.542 | 3.72E-06 | NKT_spleen |
| PKN1               | 1.08E-10 | 0.69247927 | 0.29  | 0.162 | 3.84E-06 | NKT_spleen |
| PPP2R2A            | 1.10E-10 | 0.45231533 | 0.54  | 0.364 | 3.90E-06 | NKT_spleen |
| ENSMMUG00000010266 | 1.12E-10 | 0.38070479 | 0.809 | 0.624 | 3.97E-06 | NKT_spleen |
| STXBP5             | 1.36E-10 | 0.52905414 | 0.381 | 0.235 | 4.82E-06 | NKT_spleen |
| WDR74              | 1.42E-10 | 0.76491259 | 0.379 | 0.235 | 5.04E-06 | NKT_spleen |
| ENSMMUG00000063316 | 1.55E-10 | 0.61242605 | 0.586 | 0.431 | 5.48E-06 | NKT_spleen |
| SEPTIN9            | 1.60E-10 | 0.4828748  | 0.715 | 0.521 | 5.68E-06 | NKT_spleen |
| MIA2               | 1.63E-10 | 0.48811774 | 0.472 | 0.311 | 5.77E-06 | NKT_spleen |
| CREBBP             | 1.67E-10 | 0.44720668 | 0.643 | 0.456 | 5.91E-06 | NKT_spleen |
| COP1               | 1.76E-10 | 0.4759386  | 0.565 | 0.391 | 6.23E-06 | NKT_spleen |
| DYNC1I2            | 1.87E-10 | 0.3880584  | 0.311 | 0.172 | 6.62E-06 | NKT_spleen |
| UBE2D3             | 1.88E-10 | 0.35474432 | 0.9   | 0.73  | 6.65E-06 | NKT_spleen |
| EXOC6              | 1.88E-10 | 0.42041828 | 0.565 | 0.384 | 6.66E-06 | NKT_spleen |
| ADK                | 1.89E-10 | 0.60485972 | 0.428 | 0.277 | 6.70E-06 | NKT_spleen |
| ENSMMUG00000032231 | 1.89E-10 | 0.69292793 | 0.292 | 0.166 | 6.71E-06 | NKT_spleen |
| SLC10A7            | 1.92E-10 | 0.82045272 | 0.276 | 0.157 | 6.80E-06 | NKT_spleen |
| NSD3               | 1.94E-10 | 0.33250404 | 0.596 | 0.408 | 6.87E-06 | NKT_spleen |
| ZZZ3               | 1.94E-10 | 0.5911806  | 0.486 | 0.324 | 6.88E-06 | NKT_spleen |
| SLC39A11           | 2.02E-10 | 0.82806103 | 0.364 | 0.229 | 7.17E-06 | NKT_spleen |
| GRK6               | 2.05E-10 | 0.51530973 | 0.285 | 0.158 | 7.27E-06 | NKT_spleen |
| DDX3X              | 2.06E-10 | 0.37131476 | 0.764 | 0.578 | 7.31E-06 | NKT_spleen |
| EMC6               | 2.15E-10 | 0.45604875 | 0.304 | 0.17  | 7.60E-06 | NKT_spleen |
| DCP2               | 2.15E-10 | 0.48171649 | 0.399 | 0.244 | 7.61E-06 | NKT_spleen |
| SMG1               | 2.18E-10 | 0.4459829  | 0.483 | 0.315 | 7.71E-06 | NKT_spleen |

|          |          |            |       |       |          |            |
|----------|----------|------------|-------|-------|----------|------------|
| LASP1    | 2.23E-10 | 0.58019011 | 0.344 | 0.204 | 7.89E-06 | NKT_spleen |
| DDX39A   | 2.29E-10 | 0.44385052 | 0.491 | 0.33  | 8.12E-06 | NKT_spleen |
| VPS13D   | 2.29E-10 | 0.71817381 | 0.343 | 0.209 | 8.12E-06 | NKT_spleen |
| CUX1     | 2.35E-10 | 0.64963008 | 0.568 | 0.398 | 8.32E-06 | NKT_spleen |
| CD4      | 2.40E-10 | 0.54675259 | 0.33  | 0.192 | 8.50E-06 | NKT_spleen |
| ITFG1    | 2.43E-10 | 0.57564909 | 0.442 | 0.289 | 8.60E-06 | NKT_spleen |
| CCNI     | 2.53E-10 | 0.30697451 | 0.687 | 0.489 | 8.96E-06 | NKT_spleen |
| RPRD2    | 2.56E-10 | 0.54170031 | 0.484 | 0.322 | 9.07E-06 | NKT_spleen |
| IPCEF1   | 2.59E-10 | 0.70980061 | 0.33  | 0.198 | 9.19E-06 | NKT_spleen |
| TCF7     | 2.69E-10 | 0.71165373 | 0.306 | 0.178 | 9.53E-06 | NKT_spleen |
| AEBP2    | 2.73E-10 | 0.42383808 | 0.453 | 0.294 | 9.67E-06 | NKT_spleen |
| GNL3     | 2.79E-10 | 0.52008513 | 0.299 | 0.169 | 9.90E-06 | NKT_spleen |
| HSP90AB1 | 2.85E-10 | 0.30768871 | 0.92  | 0.838 | 1.01E-05 | NKT_spleen |
| TOPBP1   | 2.89E-10 | 0.72499014 | 0.262 | 0.145 | 1.02E-05 | NKT_spleen |
| RAC1     | 2.91E-10 | 0.57900364 | 0.297 | 0.17  | 1.03E-05 | NKT_spleen |
| SKI      | 2.94E-10 | 0.77648659 | 0.259 | 0.145 | 1.04E-05 | NKT_spleen |
| YTHDC1   | 3.07E-10 | 0.28536812 | 0.628 | 0.427 | 1.09E-05 | NKT_spleen |
| CANX     | 3.08E-10 | 0.58129366 | 0.271 | 0.15  | 1.09E-05 | NKT_spleen |
| SEC63    | 3.12E-10 | 0.42901438 | 0.558 | 0.378 | 1.10E-05 | NKT_spleen |
| USP25    | 3.14E-10 | 0.71863822 | 0.376 | 0.24  | 1.11E-05 | NKT_spleen |
| MRPL32   | 3.20E-10 | 0.44934152 | 0.264 | 0.143 | 1.13E-05 | NKT_spleen |
| ZMYND11  | 3.27E-10 | 0.52508973 | 0.451 | 0.294 | 1.16E-05 | NKT_spleen |
| D2HGDH   | 3.29E-10 | 0.34605275 | 0.29  | 0.158 | 1.17E-05 | NKT_spleen |
| KDM2A    | 3.35E-10 | 0.46331994 | 0.629 | 0.449 | 1.19E-05 | NKT_spleen |
| GATAD2B  | 3.41E-10 | 0.50461507 | 0.549 | 0.38  | 1.21E-05 | NKT_spleen |
| MSN      | 3.43E-10 | 0.326807   | 0.825 | 0.659 | 1.21E-05 | NKT_spleen |
| FOCAD    | 3.44E-10 | 0.95064041 | 0.269 | 0.151 | 1.22E-05 | NKT_spleen |
| IQSEC1   | 3.50E-10 | 0.50737087 | 0.374 | 0.231 | 1.24E-05 | NKT_spleen |
| WIPF2    | 3.54E-10 | 0.57971964 | 0.273 | 0.151 | 1.26E-05 | NKT_spleen |
| SSBP2    | 3.58E-10 | 0.34178975 | 0.825 | 0.642 | 1.27E-05 | NKT_spleen |
| GTPBP1   | 3.61E-10 | 0.82992275 | 0.26  | 0.146 | 1.28E-05 | NKT_spleen |
| NUDT4    | 3.64E-10 | 0.91133742 | 0.253 | 0.14  | 1.29E-05 | NKT_spleen |
| RAI1     | 3.81E-10 | 0.42255179 | 0.253 | 0.137 | 1.35E-05 | NKT_spleen |

|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| EIF4EBP3           | 3.85E-10 | 0.35714569 | 0.549 | 0.371 | 1.36E-05 | NKT_spleen |
| SERPINB9           | 4.00E-10 | 0.56105246 | 0.323 | 0.188 | 1.42E-05 | NKT_spleen |
| TTF1               | 4.12E-10 | 0.36988988 | 0.353 | 0.211 | 1.46E-05 | NKT_spleen |
| AKT3               | 4.20E-10 | 0.34811069 | 0.813 | 0.599 | 1.49E-05 | NKT_spleen |
| ATXN1              | 4.36E-10 | 1.01508376 | 0.301 | 0.182 | 1.55E-05 | NKT_spleen |
| NFKBIB             | 4.53E-10 | 0.44512904 | 0.383 | 0.235 | 1.61E-05 | NKT_spleen |
| PIK3CD             | 4.91E-10 | 0.60996731 | 0.463 | 0.31  | 1.74E-05 | NKT_spleen |
| PRKX               | 5.05E-10 | 0.52914753 | 0.626 | 0.466 | 1.79E-05 | NKT_spleen |
| MATR3              | 5.37E-10 | 0.32684685 | 0.834 | 0.654 | 1.90E-05 | NKT_spleen |
| CBFB               | 5.41E-10 | 0.630172   | 0.271 | 0.153 | 1.92E-05 | NKT_spleen |
| BCAS3              | 5.57E-10 | 0.48147134 | 0.565 | 0.406 | 1.97E-05 | NKT_spleen |
| DMXL1              | 5.57E-10 | 0.56712805 | 0.304 | 0.178 | 1.97E-05 | NKT_spleen |
| DNAJC1             | 5.57E-10 | 0.5050683  | 0.442 | 0.291 | 1.97E-05 | NKT_spleen |
| LARS1              | 5.75E-10 | 0.50282101 | 0.273 | 0.15  | 2.04E-05 | NKT_spleen |
| WWOX               | 5.92E-10 | 0.56666164 | 0.479 | 0.326 | 2.10E-05 | NKT_spleen |
| DEAF1              | 5.99E-10 | 0.66325487 | 0.255 | 0.141 | 2.12E-05 | NKT_spleen |
| HECTD1             | 6.04E-10 | 0.5464415  | 0.386 | 0.245 | 2.14E-05 | NKT_spleen |
| ITPR2              | 6.09E-10 | 0.34502999 | 0.615 | 0.428 | 2.16E-05 | NKT_spleen |
| RAB10              | 6.10E-10 | 0.60512192 | 0.416 | 0.27  | 2.16E-05 | NKT_spleen |
| LYPLA1             | 6.25E-10 | 0.65848395 | 0.271 | 0.153 | 2.21E-05 | NKT_spleen |
| CDK12              | 6.30E-10 | 0.50953196 | 0.392 | 0.248 | 2.23E-05 | NKT_spleen |
| CWC27              | 6.55E-10 | 0.56158959 | 0.392 | 0.252 | 2.32E-05 | NKT_spleen |
| KMT2C              | 6.61E-10 | 0.31497338 | 0.846 | 0.646 | 2.34E-05 | NKT_spleen |
| NIPA2              | 6.75E-10 | 0.38469742 | 0.257 | 0.138 | 2.39E-05 | NKT_spleen |
| TSPAN14            | 6.92E-10 | 0.66740274 | 0.266 | 0.15  | 2.45E-05 | NKT_spleen |
| KPNA1              | 7.43E-10 | 0.5091509  | 0.348 | 0.213 | 2.63E-05 | NKT_spleen |
| CTNNB1             | 7.44E-10 | 0.52670721 | 0.587 | 0.423 | 2.64E-05 | NKT_spleen |
| ENSMMUG00000015274 | 7.94E-10 | 0.48954153 | 0.395 | 0.249 | 2.81E-05 | NKT_spleen |
| WDPCP              | 8.27E-10 | 0.61136697 | 0.299 | 0.174 | 2.93E-05 | NKT_spleen |
| TAF15              | 8.64E-10 | 0.37221382 | 0.626 | 0.449 | 3.06E-05 | NKT_spleen |
| TMCO1              | 8.76E-10 | 0.43243555 | 0.304 | 0.175 | 3.10E-05 | NKT_spleen |
| DNMT1              | 9.11E-10 | 0.58235972 | 0.273 | 0.153 | 3.23E-05 | NKT_spleen |
| PAOX               | 9.15E-10 | 0.30473262 | 0.455 | 0.291 | 3.24E-05 | NKT_spleen |

|          |          |            |       |       |          |            |
|----------|----------|------------|-------|-------|----------|------------|
| GOLM2    | 9.19E-10 | 0.47209355 | 0.472 | 0.317 | 3.26E-05 | NKT_spleen |
| NCOA7    | 9.78E-10 | 0.2732982  | 0.689 | 0.493 | 3.47E-05 | NKT_spleen |
| UIMC1    | 9.99E-10 | 0.57971045 | 0.341 | 0.211 | 3.54E-05 | NKT_spleen |
| INPP4A   | 1.04E-09 | 0.53228206 | 0.432 | 0.287 | 3.67E-05 | NKT_spleen |
| ADARB2   | 1.04E-09 | 0.27084699 | 0.273 | 0.148 | 3.67E-05 | NKT_spleen |
| MRPL42   | 1.09E-09 | 0.33123028 | 0.339 | 0.2   | 3.88E-05 | NKT_spleen |
| USP4     | 1.15E-09 | 0.5201606  | 0.334 | 0.2   | 4.06E-05 | NKT_spleen |
| SMYD3    | 1.16E-09 | 0.51659294 | 0.57  | 0.409 | 4.11E-05 | NKT_spleen |
| PARG     | 1.16E-09 | 0.7887142  | 0.259 | 0.146 | 4.11E-05 | NKT_spleen |
| MORF4L2  | 1.19E-09 | 0.40185391 | 0.386 | 0.243 | 4.20E-05 | NKT_spleen |
| ZBED1    | 1.21E-09 | 0.6075288  | 0.323 | 0.197 | 4.30E-05 | NKT_spleen |
| KIAA1328 | 1.22E-09 | 0.69153129 | 0.378 | 0.242 | 4.32E-05 | NKT_spleen |
| SGMS1    | 1.24E-09 | 0.56343108 | 0.381 | 0.243 | 4.39E-05 | NKT_spleen |
| HS2ST1   | 1.24E-09 | 0.65343038 | 0.311 | 0.188 | 4.41E-05 | NKT_spleen |
| TTC37    | 1.25E-09 | 0.3531778  | 0.327 | 0.19  | 4.41E-05 | NKT_spleen |
| SYNJ1    | 1.32E-09 | 0.46740147 | 0.255 | 0.14  | 4.67E-05 | NKT_spleen |
| PIAS2    | 1.33E-09 | 0.56207674 | 0.304 | 0.182 | 4.71E-05 | NKT_spleen |
| KDM3B    | 1.36E-09 | 0.36534455 | 0.463 | 0.302 | 4.81E-05 | NKT_spleen |
| RPS19BP1 | 1.37E-09 | 0.30799092 | 0.292 | 0.162 | 4.86E-05 | NKT_spleen |
| NCKAP1L  | 1.42E-09 | 0.41908875 | 0.371 | 0.229 | 5.03E-05 | NKT_spleen |
| NRF1     | 1.43E-09 | 0.5186248  | 0.421 | 0.274 | 5.08E-05 | NKT_spleen |
| M6PR     | 1.47E-09 | 0.46456173 | 0.439 | 0.296 | 5.22E-05 | NKT_spleen |
| RMDN1    | 1.50E-09 | 0.53525605 | 0.386 | 0.246 | 5.31E-05 | NKT_spleen |
| TRAPPC9  | 1.50E-09 | 0.61356602 | 0.33  | 0.203 | 5.32E-05 | NKT_spleen |
| CNOT6L   | 1.52E-09 | 0.43850835 | 0.647 | 0.47  | 5.39E-05 | NKT_spleen |
| JARID2   | 1.53E-09 | 0.42126702 | 0.64  | 0.465 | 5.43E-05 | NKT_spleen |
| ABCF1    | 1.57E-09 | 0.40943957 | 0.35  | 0.211 | 5.55E-05 | NKT_spleen |
| MDN1     | 1.57E-09 | 0.71691299 | 0.344 | 0.218 | 5.57E-05 | NKT_spleen |
| IQGAP1   | 1.62E-09 | 0.37361631 | 0.694 | 0.517 | 5.73E-05 | NKT_spleen |
| NPAT     | 1.75E-09 | 0.4565184  | 0.514 | 0.344 | 6.19E-05 | NKT_spleen |
| NRDC     | 1.76E-09 | 0.53265987 | 0.346 | 0.212 | 6.24E-05 | NKT_spleen |
| PRKCQ    | 1.83E-09 | 0.39725016 | 0.603 | 0.428 | 6.47E-05 | NKT_spleen |
| TANGO6   | 1.94E-09 | 0.63006228 | 0.357 | 0.227 | 6.87E-05 | NKT_spleen |

|                    |          |            |       |       |            |            |
|--------------------|----------|------------|-------|-------|------------|------------|
| MAP2K6             | 2.04E-09 | 0.66367737 | 0.323 | 0.201 | 7.22E-05   | NKT_spleen |
| PRDX3              | 2.16E-09 | 0.44926851 | 0.255 | 0.139 | 7.64E-05   | NKT_spleen |
| ELF1               | 2.17E-09 | 0.39343155 | 0.858 | 0.676 | 7.68E-05   | NKT_spleen |
| ANKIB1             | 2.30E-09 | 0.5298402  | 0.42  | 0.279 | 8.14E-05   | NKT_spleen |
| MAPRE2             | 2.31E-09 | 0.41887837 | 0.526 | 0.361 | 8.17E-05   | NKT_spleen |
| EIF2AK4            | 2.35E-09 | 0.5564867  | 0.28  | 0.161 | 8.33E-05   | NKT_spleen |
| LPXN               | 2.43E-09 | 0.31210459 | 0.418 | 0.263 | 8.61E-05   | NKT_spleen |
| PIKFYVE            | 2.43E-09 | 0.55818256 | 0.264 | 0.149 | 8.62E-05   | NKT_spleen |
| RASSF5             | 2.48E-09 | 0.3582758  | 0.318 | 0.187 | 8.78E-05   | NKT_spleen |
| POLR2A             | 2.57E-09 | 0.4980417  | 0.413 | 0.269 | 9.12E-05   | NKT_spleen |
| CCNH               | 2.59E-09 | 0.58504854 | 0.404 | 0.27  | 9.19E-05   | NKT_spleen |
| CHD3               | 2.60E-09 | 0.52213623 | 0.379 | 0.242 | 9.23E-05   | NKT_spleen |
| GOLPH3             | 2.63E-09 | 0.31764329 | 0.544 | 0.37  | 9.32E-05   | NKT_spleen |
| SMCHD1             | 2.65E-09 | 0.26033092 | 0.781 | 0.57  | 9.37E-05   | NKT_spleen |
| NSMCE2             | 2.71E-09 | 0.44035791 | 0.519 | 0.354 | 9.59E-05   | NKT_spleen |
| RELCH              | 2.75E-09 | 0.48423789 | 0.421 | 0.283 | 9.73E-05   | NKT_spleen |
| ADAM17             | 2.81E-09 | 0.54836501 | 0.309 | 0.186 | 9.97E-05   | NKT_spleen |
| ENSMMUG00000011604 | 2.87E-09 | 0.47757531 | 0.281 | 0.16  | 0.00010167 | NKT_spleen |
| EPS15              | 3.07E-09 | 0.32544691 | 0.593 | 0.419 | 0.00010876 | NKT_spleen |
| CEP85L             | 3.10E-09 | 0.4846437  | 0.586 | 0.416 | 0.00010998 | NKT_spleen |
| ARFGAP3            | 3.28E-09 | 0.4897399  | 0.509 | 0.344 | 0.00011626 | NKT_spleen |
| ANO6               | 3.37E-09 | 0.69180605 | 0.311 | 0.189 | 0.00011932 | NKT_spleen |
| KRAS               | 3.41E-09 | 0.35661099 | 0.472 | 0.312 | 0.00012089 | NKT_spleen |
| PDSS2              | 3.42E-09 | 0.69966006 | 0.315 | 0.193 | 0.00012125 | NKT_spleen |
| JAK2               | 3.55E-09 | 0.61242938 | 0.323 | 0.197 | 0.00012572 | NKT_spleen |
| PDLIM2             | 3.67E-09 | 0.51519393 | 0.378 | 0.235 | 0.00012988 | NKT_spleen |
| SNX3               | 3.68E-09 | 0.40756779 | 0.336 | 0.203 | 0.00013053 | NKT_spleen |
| CCDC107            | 3.79E-09 | 0.42045561 | 0.294 | 0.173 | 0.00013434 | NKT_spleen |
| DNAJC24            | 3.89E-09 | 0.52517836 | 0.434 | 0.289 | 0.00013781 | NKT_spleen |
| PSIP1              | 3.94E-09 | 0.42536056 | 0.474 | 0.318 | 0.00013953 | NKT_spleen |
| ARHGAP4            | 4.04E-09 | 0.37464351 | 0.446 | 0.288 | 0.00014324 | NKT_spleen |
| MTHFD1L            | 4.05E-09 | 0.53863752 | 0.355 | 0.221 | 0.00014347 | NKT_spleen |
| RNASEH2C           | 4.12E-09 | 0.35570296 | 0.318 | 0.191 | 0.0001459  | NKT_spleen |

|                   |          |            |       |       |            |            |
|-------------------|----------|------------|-------|-------|------------|------------|
| TTC1              | 4.15E-09 | 0.38917015 | 0.297 | 0.173 | 0.00014718 | NKT_spleen |
| MIGA1             | 4.20E-09 | 0.70146795 | 0.266 | 0.152 | 0.00014865 | NKT_spleen |
| SACM1L            | 4.35E-09 | 0.4574753  | 0.341 | 0.206 | 0.00015423 | NKT_spleen |
| MAN2A1            | 4.52E-09 | 0.32146067 | 0.615 | 0.437 | 0.00015998 | NKT_spleen |
| H2AC20            | 4.75E-09 | 0.53150371 | 0.294 | 0.172 | 0.00016843 | NKT_spleen |
| BBS9              | 4.83E-09 | 0.65685541 | 0.26  | 0.15  | 0.0001712  | NKT_spleen |
| SPG11             | 4.93E-09 | 0.75648613 | 0.273 | 0.161 | 0.00017458 | NKT_spleen |
| SLC20A1           | 5.24E-09 | 0.52165876 | 0.308 | 0.187 | 0.00018578 | NKT_spleen |
| UCHL3             | 5.28E-09 | 0.5524946  | 0.278 | 0.162 | 0.00018715 | NKT_spleen |
| IRF2              | 5.37E-09 | 0.33528914 | 0.339 | 0.203 | 0.00019019 | NKT_spleen |
| BIRC6             | 5.38E-09 | 0.26342086 | 0.799 | 0.596 | 0.00019046 | NKT_spleen |
| PBRM1             | 5.52E-09 | 0.43677751 | 0.448 | 0.296 | 0.00019542 | NKT_spleen |
| SNX29             | 5.54E-09 | 0.44604846 | 0.404 | 0.264 | 0.00019638 | NKT_spleen |
| PCNX1             | 5.66E-09 | 0.48696898 | 0.476 | 0.325 | 0.00020051 | NKT_spleen |
| DLG1              | 5.69E-09 | 0.29859472 | 0.656 | 0.481 | 0.00020176 | NKT_spleen |
| TDRD3             | 5.71E-09 | 0.74740555 | 0.355 | 0.231 | 0.00020234 | NKT_spleen |
| ADAR              | 5.95E-09 | 0.44392617 | 0.413 | 0.27  | 0.00021084 | NKT_spleen |
| ATR               | 5.95E-09 | 0.80029018 | 0.285 | 0.176 | 0.00021097 | NKT_spleen |
| GATA3             | 5.98E-09 | 0.47964529 | 0.437 | 0.29  | 0.00021181 | NKT_spleen |
| DDX10             | 6.09E-09 | 0.71389284 | 0.332 | 0.208 | 0.00021593 | NKT_spleen |
| UGCG              | 6.29E-09 | 0.55623981 | 0.329 | 0.209 | 0.00022288 | NKT_spleen |
| YTHDF2            | 6.48E-09 | 0.44457803 | 0.325 | 0.196 | 0.00022945 | NKT_spleen |
| ATP6V0D1          | 6.49E-09 | 0.4123315  | 0.323 | 0.197 | 0.00022985 | NKT_spleen |
| PPP1R12A          | 6.55E-09 | 0.35151028 | 0.759 | 0.559 | 0.00023225 | NKT_spleen |
| ENSMUG00000062941 | 6.61E-09 | 0.79643265 | 0.257 | 0.151 | 0.00023419 | NKT_spleen |
| NSRP1             | 6.94E-09 | 0.48258025 | 0.395 | 0.258 | 0.00024592 | NKT_spleen |
| STXBP3            | 7.22E-09 | 0.51722019 | 0.316 | 0.195 | 0.00025595 | NKT_spleen |
| UBE2H             | 7.34E-09 | 0.33915942 | 0.626 | 0.445 | 0.00026023 | NKT_spleen |
| ENSMUG00000011714 | 7.37E-09 | 0.58199797 | 0.29  | 0.173 | 0.00026125 | NKT_spleen |
| HDAC7             | 7.62E-09 | 0.61033423 | 0.295 | 0.177 | 0.00027006 | NKT_spleen |
| LSM12             | 7.96E-09 | 0.43673884 | 0.322 | 0.195 | 0.0002819  | NKT_spleen |
| VPS8              | 8.74E-09 | 0.76086251 | 0.332 | 0.215 | 0.0003095  | NKT_spleen |
| RGS19             | 8.85E-09 | 0.29384454 | 0.339 | 0.202 | 0.00031346 | NKT_spleen |

|                     |          |            |       |       |            |            |
|---------------------|----------|------------|-------|-------|------------|------------|
| BMP2K               | 9.04E-09 | 0.5375108  | 0.33  | 0.208 | 0.00032034 | NKT_spleen |
| DNAJB14             | 9.06E-09 | 0.42989765 | 0.301 | 0.181 | 0.00032116 | NKT_spleen |
| SDCCAG8             | 9.08E-09 | 0.66636898 | 0.285 | 0.171 | 0.00032177 | NKT_spleen |
| EIF4G2              | 9.25E-09 | 0.31808779 | 0.726 | 0.543 | 0.00032781 | NKT_spleen |
| KDM6A               | 9.39E-09 | 0.320886   | 0.738 | 0.54  | 0.00033269 | NKT_spleen |
| ENSMMUG00000006206  | 9.90E-09 | 0.28840202 | 0.554 | 0.385 | 0.00035079 | NKT_spleen |
| JTB                 | 1.04E-08 | 0.23957359 | 0.423 | 0.266 | 0.00036796 | NKT_spleen |
| ATE1                | 1.04E-08 | 0.73208314 | 0.351 | 0.226 | 0.00036839 | NKT_spleen |
| AVL9                | 1.10E-08 | 0.69661808 | 0.281 | 0.171 | 0.00039141 | NKT_spleen |
| CD28                | 1.11E-08 | 0.38646179 | 0.601 | 0.432 | 0.00039314 | NKT_spleen |
| GPBP1               | 1.11E-08 | 0.29105296 | 0.698 | 0.515 | 0.00039465 | NKT_spleen |
| DDX5                | 1.11E-08 | 0.22350156 | 0.948 | 0.847 | 0.00039478 | NKT_spleen |
| NBAS                | 1.13E-08 | 0.5268374  | 0.372 | 0.241 | 0.00040157 | NKT_spleen |
| CACYBP              | 1.14E-08 | 0.35890426 | 0.556 | 0.395 | 0.00040459 | NKT_spleen |
| RHEB                | 1.21E-08 | 0.26580993 | 0.528 | 0.35  | 0.00042853 | NKT_spleen |
| NPTN                | 1.21E-08 | 0.52682723 | 0.309 | 0.187 | 0.00043044 | NKT_spleen |
| WDR7                | 1.22E-08 | 0.47765851 | 0.456 | 0.307 | 0.00043191 | NKT_spleen |
| INO80               | 1.22E-08 | 0.51574069 | 0.315 | 0.196 | 0.00043297 | NKT_spleen |
| PARP6               | 1.24E-08 | 0.45053737 | 0.32  | 0.199 | 0.0004381  | NKT_spleen |
| UBA2                | 1.25E-08 | 0.4564995  | 0.371 | 0.238 | 0.00044126 | NKT_spleen |
| YAF2                | 1.27E-08 | 0.37076196 | 0.545 | 0.386 | 0.0004499  | NKT_spleen |
| CHORDC1             | 1.29E-08 | 0.46289706 | 0.472 | 0.324 | 0.00045874 | NKT_spleen |
| PITPNC1             | 1.35E-08 | 0.31550578 | 0.773 | 0.57  | 0.00048006 | NKT_spleen |
| R3HCC1L             | 1.36E-08 | 0.66812838 | 0.274 | 0.162 | 0.00048155 | NKT_spleen |
| LRPPRC              | 1.36E-08 | 0.52837942 | 0.423 | 0.283 | 0.00048158 | NKT_spleen |
| MAP4K3              | 1.37E-08 | 0.37087561 | 0.456 | 0.307 | 0.00048492 | NKT_spleen |
| MBNL1               | 1.50E-08 | 0.3524963  | 0.969 | 0.849 | 0.00053183 | NKT_spleen |
| ENSMMUG000000055687 | 1.53E-08 | 0.39173268 | 0.476 | 0.323 | 0.00054204 | NKT_spleen |
| NOP56               | 1.55E-08 | 0.56292686 | 0.257 | 0.149 | 0.00055058 | NKT_spleen |
| ROCK1               | 1.58E-08 | 0.32866529 | 0.727 | 0.532 | 0.00055853 | NKT_spleen |
| RGS6                | 1.58E-08 | 0.44598949 | 0.327 | 0.21  | 0.0005593  | NKT_spleen |
| PTPN11              | 1.60E-08 | 0.53958869 | 0.294 | 0.178 | 0.00056651 | NKT_spleen |
| CAPZA1              | 1.61E-08 | 0.29691275 | 0.708 | 0.527 | 0.00057128 | NKT_spleen |

|                   |          |            |       |       |            |            |
|-------------------|----------|------------|-------|-------|------------|------------|
| FBXW4             | 1.63E-08 | 0.74868032 | 0.302 | 0.191 | 0.00057736 | NKT_spleen |
| UBE2B             | 1.70E-08 | 0.37156706 | 0.614 | 0.435 | 0.00060231 | NKT_spleen |
| SERTAD2           | 1.70E-08 | 0.52147769 | 0.35  | 0.228 | 0.0006035  | NKT_spleen |
| ATM               | 1.74E-08 | 0.33874917 | 0.589 | 0.425 | 0.00061562 | NKT_spleen |
| CCAR1             | 1.74E-08 | 0.58020243 | 0.306 | 0.19  | 0.00061818 | NKT_spleen |
| CEP192            | 1.81E-08 | 0.41902012 | 0.392 | 0.255 | 0.00064169 | NKT_spleen |
| OGT               | 1.82E-08 | 0.34941506 | 0.64  | 0.461 | 0.00064493 | NKT_spleen |
| CUL1              | 1.83E-08 | 0.41958375 | 0.388 | 0.255 | 0.00064748 | NKT_spleen |
| TNPO3             | 1.89E-08 | 0.54448186 | 0.323 | 0.204 | 0.00067053 | NKT_spleen |
| CHD4              | 1.92E-08 | 0.39166402 | 0.479 | 0.334 | 0.00068197 | NKT_spleen |
| ST3GAL3           | 1.98E-08 | 0.71005696 | 0.259 | 0.154 | 0.00070198 | NKT_spleen |
| DPH6              | 2.02E-08 | 0.43528069 | 0.318 | 0.194 | 0.00071728 | NKT_spleen |
| ENSMUG00000011711 | 2.08E-08 | 0.44820791 | 0.273 | 0.159 | 0.00073818 | NKT_spleen |
| UBE2J1            | 2.28E-08 | 0.66571502 | 0.29  | 0.177 | 0.00080883 | NKT_spleen |
| ARID5B            | 2.37E-08 | 0.38362163 | 0.724 | 0.567 | 0.00083944 | NKT_spleen |
| FBXO9             | 2.37E-08 | 0.4130804  | 0.274 | 0.163 | 0.00083958 | NKT_spleen |
| USP7              | 2.57E-08 | 0.53245658 | 0.364 | 0.237 | 0.00090913 | NKT_spleen |
| MRPL47            | 2.65E-08 | 0.33584008 | 0.26  | 0.148 | 0.00093941 | NKT_spleen |
| UBE2D1            | 2.69E-08 | 0.3077118  | 0.341 | 0.211 | 0.0009534  | NKT_spleen |
| LAMP1             | 2.69E-08 | 0.51231999 | 0.278 | 0.166 | 0.00095474 | NKT_spleen |
| ANKRD28           | 2.73E-08 | 0.51161196 | 0.455 | 0.325 | 0.00096628 | NKT_spleen |
| ILKAP             | 2.73E-08 | 0.42338845 | 0.467 | 0.317 | 0.00096869 | NKT_spleen |
| CCT5              | 2.81E-08 | 0.30153623 | 0.488 | 0.337 | 0.00099448 | NKT_spleen |
| ILF3              | 2.81E-08 | 0.40447287 | 0.507 | 0.358 | 0.00099684 | NKT_spleen |
| SPTLC2            | 2.85E-08 | 0.78411551 | 0.264 | 0.162 | 0.00100999 | NKT_spleen |
| PKN2              | 2.89E-08 | 0.47838968 | 0.526 | 0.377 | 0.00102504 | NKT_spleen |
| FKBP5             | 2.92E-08 | 0.32284912 | 0.538 | 0.38  | 0.00103378 | NKT_spleen |
| AMD1              | 2.95E-08 | 0.30791488 | 0.509 | 0.348 | 0.00104543 | NKT_spleen |
| SENP7             | 3.05E-08 | 0.33811372 | 0.603 | 0.435 | 0.00108033 | NKT_spleen |
| DLST              | 3.21E-08 | 0.44153634 | 0.35  | 0.224 | 0.00113623 | NKT_spleen |
| DIP2A             | 3.22E-08 | 0.61875925 | 0.252 | 0.149 | 0.00114072 | NKT_spleen |
| CAPN1             | 3.24E-08 | 0.40203541 | 0.25  | 0.142 | 0.0011479  | NKT_spleen |
| TNFRSF10A         | 3.28E-08 | 0.34150058 | 0.42  | 0.273 | 0.00116386 | NKT_spleen |



|                    |          |            |       |       |            |            |
|--------------------|----------|------------|-------|-------|------------|------------|
| UBR3               | 3.43E-08 | 0.38076039 | 0.458 | 0.312 | 0.00121585 | NKT_spleen |
| INPP5A             | 3.44E-08 | 0.45369771 | 0.476 | 0.328 | 0.00121774 | NKT_spleen |
| SAFB2              | 3.56E-08 | 0.46979573 | 0.357 | 0.228 | 0.00126308 | NKT_spleen |
| PSPC1              | 3.63E-08 | 0.40867808 | 0.552 | 0.388 | 0.00128774 | NKT_spleen |
| BTBD1              | 3.65E-08 | 0.57288508 | 0.264 | 0.158 | 0.00129236 | NKT_spleen |
| CGGBP1             | 3.71E-08 | 0.46500774 | 0.336 | 0.215 | 0.00131303 | NKT_spleen |
| TRIM22             | 3.72E-08 | 0.53580491 | 0.421 | 0.287 | 0.00131954 | NKT_spleen |
| UBAP2              | 3.76E-08 | 0.4377321  | 0.376 | 0.247 | 0.00133344 | NKT_spleen |
| VTI1A              | 3.91E-08 | 0.34184921 | 0.617 | 0.455 | 0.00138521 | NKT_spleen |
| ZNF528             | 4.13E-08 | 0.31886959 | 0.367 | 0.236 | 0.00146303 | NKT_spleen |
| NOP58              | 4.16E-08 | 0.44152404 | 0.507 | 0.353 | 0.00147519 | NKT_spleen |
| LCORL              | 4.32E-08 | 0.56503556 | 0.343 | 0.223 | 0.00153204 | NKT_spleen |
| TEX264             | 4.34E-08 | 0.57535268 | 0.285 | 0.173 | 0.00153741 | NKT_spleen |
| STMN3              | 4.37E-08 | 0.32433061 | 0.336 | 0.208 | 0.00154821 | NKT_spleen |
| CD6                | 4.37E-08 | 0.38779921 | 0.479 | 0.332 | 0.00155013 | NKT_spleen |
| CPNE1              | 4.39E-08 | 0.37348749 | 0.458 | 0.314 | 0.00155376 | NKT_spleen |
| ARHGEF6            | 4.44E-08 | 0.36557632 | 0.467 | 0.318 | 0.00157266 | NKT_spleen |
| DOCK10             | 4.45E-08 | 0.22464672 | 0.731 | 0.544 | 0.00157676 | NKT_spleen |
| SMARCA4            | 4.54E-08 | 0.63573543 | 0.276 | 0.17  | 0.00160894 | NKT_spleen |
| IPO11              | 4.65E-08 | 0.56039339 | 0.29  | 0.181 | 0.00164808 | NKT_spleen |
| CD2AP              | 4.69E-08 | 0.39392331 | 0.416 | 0.279 | 0.00166205 | NKT_spleen |
| BPTF               | 4.70E-08 | 0.30585998 | 0.638 | 0.467 | 0.00166368 | NKT_spleen |
| RAB8A              | 4.72E-08 | 0.30037403 | 0.264 | 0.152 | 0.00167133 | NKT_spleen |
| LNPEP              | 4.74E-08 | 0.27318119 | 0.538 | 0.375 | 0.00167788 | NKT_spleen |
| CCDC12             | 4.82E-08 | 0.41811776 | 0.383 | 0.252 | 0.00170682 | NKT_spleen |
| SBNO1              | 4.92E-08 | 0.41869806 | 0.339 | 0.218 | 0.00174405 | NKT_spleen |
| EML4               | 4.98E-08 | 0.35453813 | 0.909 | 0.732 | 0.00176573 | NKT_spleen |
| ENSMMUG00000017890 | 5.01E-08 | 0.47614388 | 0.283 | 0.17  | 0.00177738 | NKT_spleen |
| TMTC2              | 5.02E-08 | 0.50441082 | 0.353 | 0.23  | 0.0017792  | NKT_spleen |
| IKZF3              | 5.12E-08 | 0.70746068 | 0.262 | 0.159 | 0.00181282 | NKT_spleen |
| BTAF1              | 5.30E-08 | 0.2142249  | 0.589 | 0.415 | 0.00187693 | NKT_spleen |
| NOC3L              | 5.39E-08 | 0.48232564 | 0.262 | 0.154 | 0.00190906 | NKT_spleen |
| TRA2B              | 5.40E-08 | 0.24425423 | 0.918 | 0.788 | 0.00191219 | NKT_spleen |

|                    |          |            |       |       |            |            |
|--------------------|----------|------------|-------|-------|------------|------------|
| ATF7               | 5.48E-08 | 0.3191727  | 0.367 | 0.235 | 0.00194085 | NKT_spleen |
| SMG6               | 5.58E-08 | 0.37454946 | 0.619 | 0.445 | 0.00197732 | NKT_spleen |
| EP400              | 5.69E-08 | 0.53661455 | 0.311 | 0.196 | 0.0020144  | NKT_spleen |
| ENSMMUG00000061125 | 5.81E-08 | 0.65413152 | 0.617 | 0.508 | 0.00205694 | NKT_spleen |
| KCNQ5              | 6.02E-08 | 0.9293451  | 0.322 | 0.214 | 0.00213126 | NKT_spleen |
| CCPG1              | 6.15E-08 | 0.29532483 | 0.327 | 0.204 | 0.00217965 | NKT_spleen |
| UBTF               | 6.33E-08 | 0.4155519  | 0.304 | 0.186 | 0.00224205 | NKT_spleen |
| NCOA2              | 6.36E-08 | 0.4244627  | 0.57  | 0.42  | 0.00225461 | NKT_spleen |
| CMTM6              | 6.53E-08 | 0.52474227 | 0.505 | 0.362 | 0.00231485 | NKT_spleen |
| RESF1              | 6.54E-08 | 0.51820896 | 0.318 | 0.2   | 0.00231893 | NKT_spleen |
| N4BP2L2            | 6.61E-08 | 0.21046471 | 0.526 | 0.358 | 0.00234137 | NKT_spleen |
| IQGAP2             | 6.69E-08 | 0.36768243 | 0.719 | 0.539 | 0.00237115 | NKT_spleen |
| APP                | 7.15E-08 | 0.40834    | 0.442 | 0.307 | 0.00253425 | NKT_spleen |
| STX16              | 7.15E-08 | 0.55002584 | 0.266 | 0.16  | 0.00253466 | NKT_spleen |
| RPS6KC1            | 7.17E-08 | 0.47399092 | 0.36  | 0.238 | 0.00254178 | NKT_spleen |
| DENND1A            | 7.28E-08 | 0.53994699 | 0.355 | 0.235 | 0.00258082 | NKT_spleen |
| SYNCRIP            | 7.37E-08 | 0.38237642 | 0.476 | 0.333 | 0.00261178 | NKT_spleen |
| AKAP13             | 7.42E-08 | 0.2568288  | 0.878 | 0.686 | 0.00262804 | NKT_spleen |
| ANP32A             | 7.43E-08 | 0.23873962 | 0.474 | 0.318 | 0.0026314  | NKT_spleen |
| ENSMMUG00000006165 | 7.52E-08 | 0.21422767 | 0.881 | 0.691 | 0.00266393 | NKT_spleen |
| ETF1               | 7.53E-08 | 0.31839958 | 0.491 | 0.339 | 0.00266701 | NKT_spleen |
| FOXN3              | 7.75E-08 | 0.24240037 | 0.862 | 0.638 | 0.00274734 | NKT_spleen |
| ARHGEF7            | 7.97E-08 | 0.3462145  | 0.671 | 0.502 | 0.00282493 | NKT_spleen |
| KLF13              | 8.02E-08 | 0.64200189 | 0.287 | 0.178 | 0.00284184 | NKT_spleen |
| SPAG9              | 8.17E-08 | 0.40972667 | 0.593 | 0.441 | 0.00289627 | NKT_spleen |
| USO1               | 8.43E-08 | 0.53728486 | 0.255 | 0.152 | 0.00298548 | NKT_spleen |
| ENSMMUG00000063877 | 8.65E-08 | 0.57510483 | 0.325 | 0.211 | 0.00306443 | NKT_spleen |
| UBAC2              | 8.73E-08 | 0.43382913 | 0.647 | 0.485 | 0.00309193 | NKT_spleen |
| ENSMMUG00000016898 | 8.79E-08 | 0.30120019 | 0.357 | 0.226 | 0.0031139  | NKT_spleen |
| TMCC1              | 8.91E-08 | 0.65569311 | 0.404 | 0.281 | 0.00315844 | NKT_spleen |
| ENSMMUG00000012203 | 9.16E-08 | 0.81847748 | 0.416 | 0.297 | 0.00324418 | NKT_spleen |
| FNDC3A             | 9.17E-08 | 0.31762502 | 0.577 | 0.424 | 0.00324909 | NKT_spleen |
| FAR1               | 9.45E-08 | 0.43388965 | 0.414 | 0.281 | 0.00334659 | NKT_spleen |

|         |          |            |       |       |            |            |
|---------|----------|------------|-------|-------|------------|------------|
| DARS1   | 9.56E-08 | 0.36356856 | 0.385 | 0.256 | 0.00338882 | NKT_spleen |
| ATP1B3  | 9.57E-08 | 0.41484215 | 0.512 | 0.367 | 0.0033913  | NKT_spleen |
| MTF2    | 9.58E-08 | 0.53013526 | 0.273 | 0.166 | 0.00339437 | NKT_spleen |
| ZNF407  | 9.95E-08 | 0.40996699 | 0.509 | 0.37  | 0.00352569 | NKT_spleen |
| NT5DC1  | 1.07E-07 | 0.65401811 | 0.25  | 0.147 | 0.00379046 | NKT_spleen |
| HMOX2   | 1.10E-07 | 0.30143089 | 0.371 | 0.241 | 0.00388478 | NKT_spleen |
| PPP2R5C | 1.14E-07 | 0.21515491 | 0.694 | 0.516 | 0.00402643 | NKT_spleen |
| UBQLN1  | 1.18E-07 | 0.43320375 | 0.395 | 0.266 | 0.00418034 | NKT_spleen |
| MTRR    | 1.20E-07 | 0.52660287 | 0.266 | 0.164 | 0.00424855 | NKT_spleen |
| EIF2B3  | 1.24E-07 | 0.40282458 | 0.343 | 0.223 | 0.00437861 | NKT_spleen |
| RABGAP1 | 1.26E-07 | 0.39962864 | 0.276 | 0.17  | 0.00444765 | NKT_spleen |
| SRSF4   | 1.26E-07 | 0.29738574 | 0.563 | 0.404 | 0.00445549 | NKT_spleen |
| STAG2   | 1.27E-07 | 0.24986911 | 0.668 | 0.494 | 0.00450565 | NKT_spleen |
| EIF4A1  | 1.31E-07 | 0.26262029 | 0.523 | 0.368 | 0.00465308 | NKT_spleen |
| STX17   | 1.33E-07 | 0.35897443 | 0.28  | 0.171 | 0.0047113  | NKT_spleen |
| XRCC4   | 1.34E-07 | 0.47073755 | 0.259 | 0.156 | 0.00475518 | NKT_spleen |
| FUBP1   | 1.37E-07 | 0.35983697 | 0.573 | 0.416 | 0.00484629 | NKT_spleen |
| ANXA6   | 1.38E-07 | 0.35275751 | 0.369 | 0.237 | 0.00487956 | NKT_spleen |
| VAPA    | 1.43E-07 | 0.22774609 | 0.615 | 0.424 | 0.0050706  | NKT_spleen |
| ARNTL   | 1.45E-07 | 0.48468842 | 0.329 | 0.216 | 0.00512662 | NKT_spleen |
| SCAF4   | 1.53E-07 | 0.52442826 | 0.365 | 0.243 | 0.00542836 | NKT_spleen |
| CCT2    | 1.55E-07 | 0.32385285 | 0.537 | 0.394 | 0.00548233 | NKT_spleen |
| BIN2    | 1.60E-07 | 0.28206768 | 0.76  | 0.582 | 0.00566227 | NKT_spleen |
| BTN2A2  | 1.61E-07 | 0.27553714 | 0.523 | 0.365 | 0.00569061 | NKT_spleen |
| DNM3    | 1.66E-07 | 0.30192459 | 0.579 | 0.418 | 0.00588412 | NKT_spleen |
| TIA1    | 1.66E-07 | 0.26891878 | 0.393 | 0.259 | 0.0058951  | NKT_spleen |
| DHRS7B  | 1.68E-07 | 0.32788581 | 0.267 | 0.161 | 0.00594683 | NKT_spleen |
| MGAT4A  | 1.68E-07 | 0.30462441 | 0.4   | 0.264 | 0.00595803 | NKT_spleen |
| PPP2R1A | 1.68E-07 | 0.32698415 | 0.367 | 0.24  | 0.00596552 | NKT_spleen |
| ESYT1   | 1.77E-07 | 0.26072535 | 0.4   | 0.262 | 0.00625817 | NKT_spleen |
| PSMA5   | 1.81E-07 | 0.21286634 | 0.469 | 0.317 | 0.00640262 | NKT_spleen |
| RARS2   | 1.81E-07 | 0.38731884 | 0.309 | 0.193 | 0.00640553 | NKT_spleen |
| ECHDC1  | 1.82E-07 | 0.39047371 | 0.35  | 0.232 | 0.00645683 | NKT_spleen |

|                    |          |            |       |       |            |            |
|--------------------|----------|------------|-------|-------|------------|------------|
| ARHGAP25           | 1.82E-07 | 0.49304992 | 0.301 | 0.195 | 0.00646302 | NKT_spleen |
| PCF11              | 1.83E-07 | 0.3403026  | 0.343 | 0.222 | 0.00646748 | NKT_spleen |
| DTNB               | 1.85E-07 | 0.53007253 | 0.344 | 0.231 | 0.00654994 | NKT_spleen |
| HECTD4             | 1.85E-07 | 0.50421608 | 0.411 | 0.286 | 0.00655951 | NKT_spleen |
| PPP1R2             | 1.88E-07 | 0.37361079 | 0.512 | 0.362 | 0.00667377 | NKT_spleen |
| RAB6A              | 1.89E-07 | 0.44894569 | 0.348 | 0.229 | 0.00669395 | NKT_spleen |
| EIF4H              | 1.90E-07 | 0.27781444 | 0.519 | 0.362 | 0.00674654 | NKT_spleen |
| ENSMMUG00000016959 | 1.91E-07 | 0.43004698 | 0.442 | 0.304 | 0.00676551 | NKT_spleen |
| CASC3              | 1.98E-07 | 0.28241768 | 0.395 | 0.264 | 0.00699962 | NKT_spleen |
| CLTC               | 2.03E-07 | 0.48568075 | 0.364 | 0.242 | 0.00718994 | NKT_spleen |
| URI1               | 2.05E-07 | 0.39272431 | 0.446 | 0.317 | 0.00726627 | NKT_spleen |
| RAP1GDS1           | 2.06E-07 | 0.48544357 | 0.371 | 0.252 | 0.00730669 | NKT_spleen |
| CDC42SE1           | 2.07E-07 | 0.38069023 | 0.309 | 0.196 | 0.00731824 | NKT_spleen |
| RIC1               | 2.13E-07 | 0.62762252 | 0.353 | 0.24  | 0.00753382 | NKT_spleen |
| SMC4               | 2.17E-07 | 0.33455296 | 0.664 | 0.501 | 0.00770012 | NKT_spleen |
| CYTH1              | 2.19E-07 | 0.33404778 | 0.712 | 0.543 | 0.00776116 | NKT_spleen |
| FNBP4              | 2.21E-07 | 0.38159409 | 0.449 | 0.31  | 0.00781919 | NKT_spleen |
| JAK1               | 2.25E-07 | 0.21343362 | 0.867 | 0.65  | 0.00798032 | NKT_spleen |
| ENSMMUG00000065373 | 2.27E-07 | 0.51963    | 0.909 | 0.903 | 0.00802876 | NKT_spleen |
| ECE1               | 2.27E-07 | 0.36763668 | 0.283 | 0.177 | 0.00803073 | NKT_spleen |
| ITGB7              | 2.29E-07 | 0.32501156 | 0.28  | 0.17  | 0.0081128  | NKT_spleen |
| SELPLG             | 2.35E-07 | 0.42030144 | 0.271 | 0.166 | 0.00834376 | NKT_spleen |
| SRSF1              | 2.40E-07 | 0.36150121 | 0.388 | 0.257 | 0.00849677 | NKT_spleen |
| ABI1               | 2.51E-07 | 0.34304097 | 0.677 | 0.494 | 0.00889741 | NKT_spleen |
| BCLAF1             | 2.52E-07 | 0.33620063 | 0.767 | 0.611 | 0.00893435 | NKT_spleen |
| SLC25A36           | 2.56E-07 | 0.52714534 | 0.278 | 0.174 | 0.00907504 | NKT_spleen |
| ACTG1              | 2.64E-07 | 0.46496869 | 0.858 | 0.865 | 0.0093372  | NKT_spleen |
| TENT2              | 2.81E-07 | 0.34672999 | 0.365 | 0.242 | 0.00997202 | NKT_spleen |
| PTBP1              | 2.84E-07 | 0.38907841 | 0.316 | 0.203 | 0.01007424 | NKT_spleen |
| PTGES3             | 2.85E-07 | 0.25434653 | 0.843 | 0.694 | 0.01008812 | NKT_spleen |
| FAM193A            | 2.92E-07 | 0.34120728 | 0.399 | 0.275 | 0.01035432 | NKT_spleen |
| NCK1               | 3.05E-07 | 0.38644426 | 0.484 | 0.349 | 0.01079635 | NKT_spleen |
| EEF1E1             | 3.23E-07 | 0.34546629 | 0.32  | 0.205 | 0.01143551 | NKT_spleen |

|                   |          |            |       |       |            |            |
|-------------------|----------|------------|-------|-------|------------|------------|
| HNRNPH1           | 3.24E-07 | 0.27032005 | 0.701 | 0.539 | 0.01149272 | NKT_spleen |
| LTN1              | 3.29E-07 | 0.47229818 | 0.327 | 0.215 | 0.01164312 | NKT_spleen |
| R3HDM1            | 3.35E-07 | 0.46718235 | 0.329 | 0.216 | 0.01186684 | NKT_spleen |
| CDC5L             | 3.49E-07 | 0.39217364 | 0.385 | 0.263 | 0.01237287 | NKT_spleen |
| ZNF700            | 3.55E-07 | 0.50413844 | 0.262 | 0.165 | 0.01256273 | NKT_spleen |
| BTRC              | 3.70E-07 | 0.5071895  | 0.29  | 0.185 | 0.01312301 | NKT_spleen |
| SYNE1             | 3.72E-07 | 0.491086   | 0.315 | 0.21  | 0.0131826  | NKT_spleen |
| HACD2             | 3.73E-07 | 0.74635026 | 0.276 | 0.181 | 0.01321868 | NKT_spleen |
| RTN4              | 3.97E-07 | 0.38165378 | 0.372 | 0.257 | 0.01406017 | NKT_spleen |
| GPATCH8           | 3.98E-07 | 0.30425168 | 0.598 | 0.426 | 0.01410376 | NKT_spleen |
| PUM1              | 4.01E-07 | 0.19378984 | 0.76  | 0.564 | 0.01419625 | NKT_spleen |
| DHX36             | 4.07E-07 | 0.22329086 | 0.479 | 0.336 | 0.01443404 | NKT_spleen |
| FAM168A           | 4.11E-07 | 0.5970173  | 0.306 | 0.203 | 0.01454986 | NKT_spleen |
| RCOR1             | 4.22E-07 | 0.43464693 | 0.344 | 0.231 | 0.01496118 | NKT_spleen |
| RELL1             | 4.25E-07 | 0.37794954 | 0.533 | 0.389 | 0.01504981 | NKT_spleen |
| FBXO34            | 4.25E-07 | 0.33773016 | 0.657 | 0.495 | 0.01506433 | NKT_spleen |
| FUT8              | 4.36E-07 | 0.42599156 | 0.395 | 0.27  | 0.01544682 | NKT_spleen |
| DERL1             | 4.49E-07 | 0.53311872 | 0.274 | 0.173 | 0.01590807 | NKT_spleen |
| PTP4A1            | 4.55E-07 | 0.28894407 | 0.411 | 0.277 | 0.01612707 | NKT_spleen |
| TOP2B             | 4.89E-07 | 0.26015977 | 0.477 | 0.336 | 0.01731608 | NKT_spleen |
| NUP98             | 5.26E-07 | 0.29904164 | 0.598 | 0.442 | 0.01863824 | NKT_spleen |
| DAP3              | 5.27E-07 | 0.53298968 | 0.294 | 0.189 | 0.01867689 | NKT_spleen |
| RMND5A            | 5.28E-07 | 0.43769646 | 0.355 | 0.242 | 0.01870179 | NKT_spleen |
| ERGIC2            | 5.33E-07 | 0.13399305 | 0.299 | 0.185 | 0.01888963 | NKT_spleen |
| ENSMUG00000047277 | 5.44E-07 | 0.18431978 | 0.691 | 0.52  | 0.01928101 | NKT_spleen |
| ANKFY1            | 5.52E-07 | 0.24735096 | 0.329 | 0.212 | 0.01956045 | NKT_spleen |
| EIF4A3            | 5.56E-07 | 0.20482342 | 0.409 | 0.27  | 0.01971372 | NKT_spleen |
| RPS6KA1           | 5.61E-07 | 0.38095568 | 0.323 | 0.209 | 0.01986683 | NKT_spleen |
| ATP6V0E1          | 5.67E-07 | 0.1232703  | 0.556 | 0.383 | 0.02009107 | NKT_spleen |
| ZMAT2             | 5.76E-07 | 0.18072146 | 0.292 | 0.178 | 0.02039169 | NKT_spleen |
| AGO2              | 5.76E-07 | 0.40249348 | 0.434 | 0.307 | 0.02041848 | NKT_spleen |
| SLC23A2           | 5.77E-07 | 0.40813372 | 0.351 | 0.235 | 0.02045002 | NKT_spleen |
| DHX15             | 5.99E-07 | 0.35721451 | 0.35  | 0.23  | 0.02123646 | NKT_spleen |

|                   |          |            |       |       |            |            |
|-------------------|----------|------------|-------|-------|------------|------------|
| HELZ              | 6.01E-07 | 0.17827906 | 0.684 | 0.505 | 0.02128    | NKT_spleen |
| LRCH3             | 6.08E-07 | 0.26474443 | 0.5   | 0.361 | 0.02154409 | NKT_spleen |
| TBC1D22A          | 6.20E-07 | 0.35445517 | 0.413 | 0.288 | 0.02197113 | NKT_spleen |
| HNRNPL            | 6.20E-07 | 0.22467853 | 0.542 | 0.387 | 0.02198537 | NKT_spleen |
| ANKH              | 6.22E-07 | 0.46175607 | 0.383 | 0.267 | 0.02204429 | NKT_spleen |
| RPN2              | 6.32E-07 | 0.29347265 | 0.308 | 0.196 | 0.02238134 | NKT_spleen |
| ERO1B             | 6.37E-07 | 0.36685341 | 0.497 | 0.372 | 0.02258026 | NKT_spleen |
| ZZEF1             | 6.46E-07 | 0.44077508 | 0.404 | 0.283 | 0.02289978 | NKT_spleen |
| RSRP1             | 6.49E-07 | 0.19997372 | 0.818 | 0.626 | 0.02299088 | NKT_spleen |
| RPTOR             | 6.64E-07 | 0.33384534 | 0.428 | 0.294 | 0.02352938 | NKT_spleen |
| HDLBP             | 6.67E-07 | 0.41253406 | 0.378 | 0.256 | 0.02364898 | NKT_spleen |
| NFYC              | 6.80E-07 | 0.42221165 | 0.355 | 0.241 | 0.02408953 | NKT_spleen |
| WDR70             | 6.80E-07 | 0.21354809 | 0.591 | 0.426 | 0.02409604 | NKT_spleen |
| ZBTB1             | 6.86E-07 | 0.3554295  | 0.36  | 0.242 | 0.02432239 | NKT_spleen |
| FOXJ3             | 7.10E-07 | 0.26659949 | 0.509 | 0.358 | 0.02514779 | NKT_spleen |
| CLINT1            | 7.15E-07 | 0.25276903 | 0.759 | 0.582 | 0.02533123 | NKT_spleen |
| SCLT1             | 7.18E-07 | 0.35111124 | 0.446 | 0.31  | 0.02543792 | NKT_spleen |
| RNF216            | 7.19E-07 | 0.36021229 | 0.535 | 0.396 | 0.02549144 | NKT_spleen |
| USP14             | 7.23E-07 | 0.36274316 | 0.329 | 0.214 | 0.02560158 | NKT_spleen |
| GALK2             | 7.40E-07 | 0.44247079 | 0.257 | 0.161 | 0.02623555 | NKT_spleen |
| ARHGEF1           | 7.74E-07 | 0.28636324 | 0.563 | 0.404 | 0.02741365 | NKT_spleen |
| SVIL              | 7.74E-07 | 0.62336285 | 0.25  | 0.156 | 0.02743991 | NKT_spleen |
| PAFAH1B1          | 7.93E-07 | 0.29992144 | 0.631 | 0.469 | 0.0281127  | NKT_spleen |
| ENSMUG00000022610 | 7.94E-07 | 0.40501378 | 0.512 | 0.386 | 0.02812632 | NKT_spleen |
| DMTF1             | 7.98E-07 | 0.23227953 | 0.362 | 0.237 | 0.02827943 | NKT_spleen |
| ADD3              | 8.00E-07 | 0.30147611 | 0.708 | 0.55  | 0.02835677 | NKT_spleen |
| THRAP3            | 8.41E-07 | 0.25273159 | 0.631 | 0.475 | 0.02981139 | NKT_spleen |
| NCOA1             | 8.50E-07 | 0.45213321 | 0.364 | 0.246 | 0.03011291 | NKT_spleen |
| RAF1              | 9.18E-07 | 0.38176709 | 0.456 | 0.327 | 0.03253781 | NKT_spleen |
| SMG7              | 9.21E-07 | 0.41087578 | 0.386 | 0.269 | 0.03262617 | NKT_spleen |
| PIGY              | 9.59E-07 | 0.27199957 | 0.336 | 0.221 | 0.03396599 | NKT_spleen |
| ATF6              | 9.81E-07 | 0.43542804 | 0.358 | 0.245 | 0.03476341 | NKT_spleen |
| PYHIN1            | 9.87E-07 | 0.26773443 | 0.311 | 0.198 | 0.03497577 | NKT_spleen |

|                    |          |            |       |       |            |            |
|--------------------|----------|------------|-------|-------|------------|------------|
| PPFIBP1            | 9.88E-07 | 0.23179944 | 0.418 | 0.284 | 0.03501325 | NKT_spleen |
| EXOC2              | 1.07E-06 | 0.50392899 | 0.287 | 0.186 | 0.0380536  | NKT_spleen |
| FBL                | 1.09E-06 | 0.27498573 | 0.287 | 0.181 | 0.0385808  | NKT_spleen |
| GMPS               | 1.09E-06 | 0.40819248 | 0.301 | 0.194 | 0.03873003 | NKT_spleen |
| TMEM201            | 1.10E-06 | 0.63897875 | 0.267 | 0.172 | 0.03894652 | NKT_spleen |
| ENSMMUG00000018557 | 1.13E-06 | 0.38163917 | 0.371 | 0.253 | 0.04007573 | NKT_spleen |
| SRSF6              | 1.14E-06 | 0.2605138  | 0.418 | 0.289 | 0.04056356 | NKT_spleen |
| VPS29              | 1.21E-06 | 0.15769727 | 0.281 | 0.173 | 0.04284182 | NKT_spleen |
| RUBCN              | 1.24E-06 | 0.40102639 | 0.313 | 0.209 | 0.04384234 | NKT_spleen |
| TMC6               | 1.26E-06 | 0.36194866 | 0.304 | 0.199 | 0.04464163 | NKT_spleen |
| FAM13B             | 1.27E-06 | 0.40749089 | 0.362 | 0.246 | 0.04506356 | NKT_spleen |
| CNOT2              | 1.29E-06 | 0.22656014 | 0.678 | 0.514 | 0.04588258 | NKT_spleen |
| LBH                | 1.30E-06 | 0.2915178  | 0.46  | 0.33  | 0.0460329  | NKT_spleen |
| MAPK1              | 1.36E-06 | 0.42242344 | 0.444 | 0.317 | 0.04826123 | NKT_spleen |
| YWHAZ              | 1.42E-06 | 0.30060888 | 0.899 | 0.759 | 0.05023375 | NKT_spleen |
| UBE2I              | 1.42E-06 | 0.21598128 | 0.54  | 0.39  | 0.05024794 | NKT_spleen |
| SFMBT1             | 1.46E-06 | 0.50909178 | 0.325 | 0.218 | 0.05159559 | NKT_spleen |
| MAPK6              | 1.48E-06 | 0.51697461 | 0.283 | 0.187 | 0.05251076 | NKT_spleen |
| PAN3               | 1.48E-06 | 0.26997692 | 0.701 | 0.532 | 0.05257935 | NKT_spleen |
| PARK7              | 1.52E-06 | 0.13613246 | 0.388 | 0.259 | 0.05384856 | NKT_spleen |
| CLASP2             | 1.59E-06 | 0.20645509 | 0.594 | 0.431 | 0.0564878  | NKT_spleen |
| AUH                | 1.60E-06 | 0.46332725 | 0.369 | 0.256 | 0.05676796 | NKT_spleen |
| ENSMMUG00000005482 | 1.60E-06 | 0.41479311 | 0.427 | 0.307 | 0.05684499 | NKT_spleen |
| ADNP               | 1.61E-06 | 0.38288942 | 0.409 | 0.291 | 0.057057   | NKT_spleen |
| TRAF3              | 1.65E-06 | 0.43717059 | 0.449 | 0.334 | 0.05863388 | NKT_spleen |
| MMD                | 1.70E-06 | 0.36205341 | 0.276 | 0.178 | 0.06006494 | NKT_spleen |
| KIAA0232           | 1.73E-06 | 0.39429676 | 0.371 | 0.259 | 0.06124516 | NKT_spleen |
| TIAL1              | 1.73E-06 | 0.28271812 | 0.367 | 0.251 | 0.0613624  | NKT_spleen |
| CD2                | 1.84E-06 | 0.2073776  | 0.273 | 0.175 | 0.06525927 | NKT_spleen |
| LPIN2              | 1.89E-06 | 0.33813541 | 0.439 | 0.314 | 0.06713493 | NKT_spleen |
| MAP3K5             | 1.91E-06 | 0.39692493 | 0.329 | 0.223 | 0.0677997  | NKT_spleen |
| CITED1             | 1.96E-06 | 0.59995737 | 0.318 | 0.217 | 0.06934665 | NKT_spleen |
| AOPEP              | 2.00E-06 | 0.18385579 | 0.664 | 0.504 | 0.07088658 | NKT_spleen |

|                   |          |            |       |       |            |            |
|-------------------|----------|------------|-------|-------|------------|------------|
| UBR2              | 2.02E-06 | 0.35716035 | 0.379 | 0.264 | 0.0716933  | NKT_spleen |
| NR2C2             | 2.07E-06 | 0.4044836  | 0.287 | 0.187 | 0.07322616 | NKT_spleen |
| SYNE3             | 2.08E-06 | 0.36767423 | 0.351 | 0.237 | 0.0735267  | NKT_spleen |
| HTT               | 2.10E-06 | 0.34920602 | 0.416 | 0.297 | 0.07439248 | NKT_spleen |
| PCMT1             | 2.16E-06 | 0.12157204 | 0.278 | 0.172 | 0.07644182 | NKT_spleen |
| SINHCAF           | 2.19E-06 | 0.35701937 | 0.442 | 0.317 | 0.07744423 | NKT_spleen |
| SUSD6             | 2.23E-06 | 0.51726059 | 0.364 | 0.255 | 0.07914626 | NKT_spleen |
| KPNB1             | 2.25E-06 | 0.47338817 | 0.367 | 0.254 | 0.07959385 | NKT_spleen |
| SLC38A2           | 2.25E-06 | 0.15574404 | 0.414 | 0.283 | 0.07985715 | NKT_spleen |
| GABPB1            | 2.27E-06 | 0.43480845 | 0.43  | 0.309 | 0.08057176 | NKT_spleen |
| HIRA              | 2.28E-06 | 0.50654499 | 0.292 | 0.196 | 0.08066019 | NKT_spleen |
| UBE2E2            | 2.32E-06 | 0.53013671 | 0.343 | 0.237 | 0.0820756  | NKT_spleen |
| DDX39B            | 2.32E-06 | 0.20599303 | 0.421 | 0.289 | 0.08211625 | NKT_spleen |
| CDYL              | 2.32E-06 | 0.53978139 | 0.262 | 0.172 | 0.08228964 | NKT_spleen |
| TSC22D4           | 2.35E-06 | 0.34783759 | 0.25  | 0.157 | 0.08332279 | NKT_spleen |
| CHD7              | 2.36E-06 | 0.33386368 | 0.577 | 0.426 | 0.08358949 | NKT_spleen |
| MEF2A             | 2.40E-06 | 0.37100619 | 0.493 | 0.359 | 0.08500305 | NKT_spleen |
| RAB8B             | 2.42E-06 | 0.28013655 | 0.823 | 0.672 | 0.08578246 | NKT_spleen |
| RNF10             | 2.47E-06 | 0.35481218 | 0.33  | 0.223 | 0.08750611 | NKT_spleen |
| RBBP6             | 2.48E-06 | 0.42923506 | 0.362 | 0.249 | 0.08774985 | NKT_spleen |
| UBE2V2            | 2.62E-06 | 0.24791732 | 0.29  | 0.186 | 0.09280698 | NKT_spleen |
| PHIP              | 2.70E-06 | 0.26199956 | 0.523 | 0.386 | 0.09574038 | NKT_spleen |
| BRWD1             | 2.76E-06 | 0.1987285  | 0.465 | 0.338 | 0.09771365 | NKT_spleen |
| EIPR1             | 2.77E-06 | 0.52307673 | 0.302 | 0.202 | 0.0982558  | NKT_spleen |
| CSRNPI            | 2.79E-06 | 0.27609093 | 0.348 | 0.231 | 0.09876543 | NKT_spleen |
| DIP2C             | 2.86E-06 | 0.24469479 | 0.308 | 0.201 | 0.10136716 | NKT_spleen |
| DYM               | 2.91E-06 | 0.29789166 | 0.421 | 0.299 | 0.10321226 | NKT_spleen |
| SUCO              | 2.95E-06 | 0.30342895 | 0.509 | 0.367 | 0.10448453 | NKT_spleen |
| DYNLL1            | 2.95E-06 | 0.20238656 | 0.428 | 0.295 | 0.10459102 | NKT_spleen |
| MIB1              | 2.95E-06 | 0.58056867 | 0.294 | 0.2   | 0.10467097 | NKT_spleen |
| ENSMUG00000006803 | 3.08E-06 | 0.24715509 | 0.523 | 0.385 | 0.10900363 | NKT_spleen |
| ATP2A2            | 3.12E-06 | 0.2370232  | 0.406 | 0.284 | 0.11058773 | NKT_spleen |
| ITFG2             | 3.13E-06 | 0.35083257 | 0.327 | 0.222 | 0.11091314 | NKT_spleen |



|          |          |            |       |       |            |            |
|----------|----------|------------|-------|-------|------------|------------|
| ADD1     | 3.21E-06 | 0.29423312 | 0.486 | 0.343 | 0.11375166 | NKT_spleen |
| STK40    | 3.24E-06 | 0.42871097 | 0.262 | 0.169 | 0.11464036 | NKT_spleen |
| FRYL     | 3.29E-06 | 0.34576343 | 0.421 | 0.305 | 0.11660375 | NKT_spleen |
| CD81     | 3.47E-06 | 0.24247096 | 0.292 | 0.19  | 0.12283382 | NKT_spleen |
| ARID2    | 3.50E-06 | 0.21694472 | 0.633 | 0.479 | 0.12384319 | NKT_spleen |
| NONO     | 3.50E-06 | 0.24666371 | 0.519 | 0.378 | 0.12389369 | NKT_spleen |
| AARS1    | 3.51E-06 | 0.27125504 | 0.472 | 0.338 | 0.12449052 | NKT_spleen |
| SLC25A4  | 3.52E-06 | 0.31792651 | 0.29  | 0.189 | 0.12469435 | NKT_spleen |
| KIF5B    | 3.59E-06 | 0.22650661 | 0.49  | 0.342 | 0.12716941 | NKT_spleen |
| HERC3    | 3.60E-06 | 0.30542413 | 0.444 | 0.325 | 0.12748515 | NKT_spleen |
| ANTXR2   | 3.60E-06 | 0.32342977 | 0.51  | 0.38  | 0.12767112 | NKT_spleen |
| TAGAP    | 3.66E-06 | 0.3400922  | 0.418 | 0.304 | 0.12971208 | NKT_spleen |
| FOXK1    | 3.71E-06 | 0.49618289 | 0.274 | 0.185 | 0.13158524 | NKT_spleen |
| IFNGR2   | 3.75E-06 | 0.53108737 | 0.294 | 0.195 | 0.13294619 | NKT_spleen |
| TMEM131  | 3.79E-06 | 0.33992225 | 0.542 | 0.403 | 0.13437107 | NKT_spleen |
| WDR26    | 3.90E-06 | 0.3177704  | 0.432 | 0.315 | 0.13816223 | NKT_spleen |
| FAM126A  | 3.92E-06 | 0.54971917 | 0.306 | 0.211 | 0.13899334 | NKT_spleen |
| SLC4A7   | 3.95E-06 | 0.38901443 | 0.273 | 0.18  | 0.14005166 | NKT_spleen |
| RC3H1    | 3.98E-06 | 0.39810574 | 0.306 | 0.207 | 0.14099583 | NKT_spleen |
| ENTPD4   | 4.03E-06 | 0.25987112 | 0.325 | 0.219 | 0.14266989 | NKT_spleen |
| ADA      | 4.07E-06 | 0.15988375 | 0.315 | 0.205 | 0.14409696 | NKT_spleen |
| CDC73    | 4.31E-06 | 0.38435095 | 0.463 | 0.34  | 0.15257733 | NKT_spleen |
| ZNF44    | 4.44E-06 | 0.5552726  | 0.285 | 0.192 | 0.15737734 | NKT_spleen |
| R3HDM4   | 4.52E-06 | 0.32038198 | 0.267 | 0.171 | 0.16027607 | NKT_spleen |
| UQCRB    | 4.61E-06 | 0.1749458  | 0.397 | 0.273 | 0.16319301 | NKT_spleen |
| RNF38    | 4.64E-06 | 0.21372138 | 0.594 | 0.441 | 0.16446532 | NKT_spleen |
| LCOR     | 4.64E-06 | 0.23833219 | 0.544 | 0.407 | 0.16449248 | NKT_spleen |
| CYSLTR1  | 5.11E-06 | 0.17985197 | 0.441 | 0.312 | 0.18106916 | NKT_spleen |
| SNRNP200 | 5.12E-06 | 0.35830481 | 0.325 | 0.22  | 0.18125347 | NKT_spleen |
| UBE2L6   | 5.12E-06 | 0.1382483  | 0.322 | 0.211 | 0.18133476 | NKT_spleen |
| AFTPH    | 5.39E-06 | 0.38352263 | 0.451 | 0.332 | 0.19101477 | NKT_spleen |
| ZFX      | 5.47E-06 | 0.41802634 | 0.297 | 0.198 | 0.19391538 | NKT_spleen |
| NBR1     | 5.48E-06 | 0.3246061  | 0.497 | 0.368 | 0.19432078 | NKT_spleen |

|                    |          |            |       |       |            |            |
|--------------------|----------|------------|-------|-------|------------|------------|
| PTPRA              | 5.52E-06 | 0.28371916 | 0.542 | 0.398 | 0.19566312 | NKT_spleen |
| NADSYN1            | 5.66E-06 | 0.24629677 | 0.302 | 0.2   | 0.2003997  | NKT_spleen |
| EFL1               | 5.72E-06 | 0.36325488 | 0.381 | 0.266 | 0.20273841 | NKT_spleen |
| TAPBP              | 5.72E-06 | 0.20971852 | 0.442 | 0.313 | 0.20279298 | NKT_spleen |
| TRIM24             | 6.05E-06 | 0.34993819 | 0.308 | 0.208 | 0.21448033 | NKT_spleen |
| UBE3C              | 6.11E-06 | 0.43402971 | 0.406 | 0.293 | 0.21660305 | NKT_spleen |
| C3H21orf91         | 6.17E-06 | 0.34068364 | 0.344 | 0.232 | 0.21861031 | NKT_spleen |
| ASCC3              | 6.23E-06 | 0.24160638 | 0.488 | 0.355 | 0.22084072 | NKT_spleen |
| REST               | 6.24E-06 | 0.45142476 | 0.278 | 0.184 | 0.22097233 | NKT_spleen |
| SDHAF4             | 6.30E-06 | 0.26850409 | 0.621 | 0.471 | 0.22334919 | NKT_spleen |
| EIF5               | 6.55E-06 | 0.27587792 | 0.549 | 0.404 | 0.23192724 | NKT_spleen |
| MRPS33             | 6.58E-06 | 0.19145604 | 0.278 | 0.18  | 0.23300772 | NKT_spleen |
| TAF7               | 6.69E-06 | 0.19374753 | 0.376 | 0.258 | 0.23703786 | NKT_spleen |
| OXR1               | 6.79E-06 | 0.37042239 | 0.383 | 0.272 | 0.24055095 | NKT_spleen |
| CHD1               | 6.80E-06 | 0.25311576 | 0.434 | 0.308 | 0.24105591 | NKT_spleen |
| RNF125             | 6.88E-06 | 0.51485333 | 0.266 | 0.178 | 0.24378252 | NKT_spleen |
| ATP5F1B            | 7.19E-06 | 0.20903885 | 0.334 | 0.224 | 0.25479658 | NKT_spleen |
| HNRNPK             | 7.34E-06 | 0.20387159 | 0.806 | 0.688 | 0.26024678 | NKT_spleen |
| CD96               | 7.35E-06 | 0.28319225 | 0.577 | 0.435 | 0.26041358 | NKT_spleen |
| TRAPPC10           | 7.56E-06 | 0.33118426 | 0.423 | 0.306 | 0.26788911 | NKT_spleen |
| VPS13A             | 7.60E-06 | 0.42159094 | 0.295 | 0.2   | 0.2693902  | NKT_spleen |
| XPR1               | 7.63E-06 | 0.30371246 | 0.448 | 0.328 | 0.27023186 | NKT_spleen |
| SH3GLB1            | 7.69E-06 | 0.47332781 | 0.29  | 0.197 | 0.27260133 | NKT_spleen |
| ENSMMUG00000046264 | 7.86E-06 | 0.36692781 | 0.427 | 0.308 | 0.27861191 | NKT_spleen |
| TM2D1              | 8.16E-06 | 0.231192   | 0.278 | 0.182 | 0.28909129 | NKT_spleen |
| ST6GALNAC5         | 8.18E-06 | 0.55160573 | 0.264 | 0.176 | 0.28966944 | NKT_spleen |
| RASA3              | 8.41E-06 | 0.16850391 | 0.472 | 0.334 | 0.29780693 | NKT_spleen |
| UHMK1              | 8.41E-06 | 0.26061576 | 0.294 | 0.192 | 0.29805661 | NKT_spleen |
| NSD2               | 8.57E-06 | 0.26422764 | 0.26  | 0.169 | 0.3036638  | NKT_spleen |
| HIF1A              | 8.75E-06 | 0.35682104 | 0.469 | 0.353 | 0.31007012 | NKT_spleen |
| AGTPBP1            | 8.80E-06 | 0.19977297 | 0.537 | 0.394 | 0.31175118 | NKT_spleen |
| ATP6V1H            | 8.82E-06 | 0.59075347 | 0.292 | 0.199 | 0.31243577 | NKT_spleen |
| SYAP1              | 8.85E-06 | 0.45223416 | 0.427 | 0.312 | 0.31360278 | NKT_spleen |

|                     |          |            |       |       |            |            |
|---------------------|----------|------------|-------|-------|------------|------------|
| ZBTB11              | 8.88E-06 | 0.33751723 | 0.306 | 0.208 | 0.31446201 | NKT_spleen |
| AHNAK               | 8.88E-06 | 0.30983431 | 0.542 | 0.392 | 0.31459297 | NKT_spleen |
| LMAN2               | 9.01E-06 | 0.1907847  | 0.313 | 0.207 | 0.31919199 | NKT_spleen |
| ARNT                | 9.06E-06 | 0.38616933 | 0.332 | 0.229 | 0.32100502 | NKT_spleen |
| CLCN3               | 9.11E-06 | 0.36745472 | 0.255 | 0.166 | 0.32283285 | NKT_spleen |
| PRDM2               | 9.38E-06 | 0.32033761 | 0.421 | 0.3   | 0.33228392 | NKT_spleen |
| CBX3                | 9.50E-06 | 0.11269243 | 0.601 | 0.438 | 0.33674639 | NKT_spleen |
| HM13                | 9.52E-06 | 0.22354379 | 0.336 | 0.233 | 0.33738469 | NKT_spleen |
| FAM91A1             | 9.67E-06 | 0.47584288 | 0.281 | 0.188 | 0.34249029 | NKT_spleen |
| MAST4               | 9.72E-06 | 0.30678751 | 0.264 | 0.173 | 0.34434391 | NKT_spleen |
| ENSMMUG00000019238  | 1.02E-05 | 0.30508839 | 0.393 | 0.281 | 0.36058915 | NKT_spleen |
| NDST3               | 1.02E-05 | 0.43642365 | 0.558 | 0.442 | 0.36158142 | NKT_spleen |
| PDRG1               | 1.06E-05 | 0.1072716  | 0.257 | 0.162 | 0.37515612 | NKT_spleen |
| ENSMMUG00000019882  | 1.06E-05 | 0.3121757  | 0.276 | 0.183 | 0.37672163 | NKT_spleen |
| MPZL1               | 1.07E-05 | 0.32095594 | 0.414 | 0.306 | 0.37785537 | NKT_spleen |
| ENSMMUG00000011798  | 1.07E-05 | 0.17804298 | 0.358 | 0.244 | 0.37980087 | NKT_spleen |
| IGF1R               | 1.08E-05 | 0.68556966 | 0.269 | 0.185 | 0.38281787 | NKT_spleen |
| ENSMMUG00000006499  | 1.08E-05 | 0.20736127 | 0.503 | 0.361 | 0.38415442 | NKT_spleen |
| RBM33               | 1.12E-05 | 0.19722811 | 0.591 | 0.437 | 0.39579548 | NKT_spleen |
| TRRAP               | 1.14E-05 | 0.29242017 | 0.273 | 0.182 | 0.40519765 | NKT_spleen |
| RPS6KA5             | 1.16E-05 | 0.28337334 | 0.612 | 0.478 | 0.41004945 | NKT_spleen |
| SP4                 | 1.18E-05 | 0.42423144 | 0.271 | 0.181 | 0.41778491 | NKT_spleen |
| MNAT1               | 1.19E-05 | 0.25028608 | 0.423 | 0.305 | 0.42227267 | NKT_spleen |
| MLXIP               | 1.25E-05 | 0.67679451 | 0.264 | 0.18  | 0.44326754 | NKT_spleen |
| GPBP1L1             | 1.28E-05 | 0.27868399 | 0.514 | 0.383 | 0.45256806 | NKT_spleen |
| TLE4                | 1.29E-05 | 0.27325893 | 0.481 | 0.357 | 0.45672307 | NKT_spleen |
| TLK2                | 1.30E-05 | 0.39492578 | 0.404 | 0.294 | 0.45893015 | NKT_spleen |
| SMARCB1             | 1.30E-05 | 0.28649985 | 0.266 | 0.173 | 0.46111563 | NKT_spleen |
| MICU2               | 1.32E-05 | 0.36816853 | 0.42  | 0.307 | 0.46654851 | NKT_spleen |
| ENSMMUG000000061128 | 1.32E-05 | 0.12367075 | 0.549 | 0.399 | 0.46782538 | NKT_spleen |
| UBXN4               | 1.40E-05 | 0.11727365 | 0.498 | 0.356 | 0.49683693 | NKT_spleen |
| LDLR                | 1.45E-05 | 0.46815426 | 0.283 | 0.192 | 0.51210889 | NKT_spleen |
| ENSMMUG00000017113  | 1.47E-05 | 0.2339268  | 0.327 | 0.227 | 0.51924142 | NKT_spleen |

|                   |          |            |       |       |            |            |
|-------------------|----------|------------|-------|-------|------------|------------|
| FMC1-LUC7L2       | 1.47E-05 | 0.17360003 | 0.722 | 0.556 | 0.52161908 | NKT_spleen |
| OGA               | 1.49E-05 | 0.23167638 | 0.601 | 0.462 | 0.52794902 | NKT_spleen |
| ATG7              | 1.60E-05 | 0.515069   | 0.253 | 0.169 | 0.56591272 | NKT_spleen |
| KIDINS220         | 1.61E-05 | 0.33933828 | 0.39  | 0.282 | 0.57131965 | NKT_spleen |
| MAN1A2            | 1.65E-05 | 0.4015112  | 0.418 | 0.311 | 0.58638445 | NKT_spleen |
| ENSMUG00000053392 | 1.68E-05 | 0.12646583 | 0.528 | 0.386 | 0.5941465  | NKT_spleen |
| ATP10A            | 1.70E-05 | 0.3519878  | 0.589 | 0.458 | 0.6007978  | NKT_spleen |
| STK4              | 1.70E-05 | 0.21756946 | 0.808 | 0.659 | 0.60351839 | NKT_spleen |
| DYNC1H1           | 1.75E-05 | 0.26030092 | 0.344 | 0.236 | 0.6204602  | NKT_spleen |
| FOXO1             | 1.78E-05 | 0.37853529 | 0.507 | 0.381 | 0.62982963 | NKT_spleen |
| CCDC69            | 1.79E-05 | 0.25101306 | 0.385 | 0.276 | 0.63341852 | NKT_spleen |
| CHN2              | 1.81E-05 | 0.42529404 | 0.404 | 0.303 | 0.64104804 | NKT_spleen |
| DENR              | 1.84E-05 | 0.30151626 | 0.295 | 0.2   | 0.65069478 | NKT_spleen |
| ZC3H18            | 1.86E-05 | 0.29736357 | 0.346 | 0.243 | 0.66070238 | NKT_spleen |
| RALGAP1           | 1.90E-05 | 0.27044073 | 0.334 | 0.236 | 0.67281796 | NKT_spleen |
| TRIM72            | 1.97E-05 | 0.20252385 | 0.729 | 0.562 | 0.69714272 | NKT_spleen |
| THOC2             | 2.07E-05 | 0.21483247 | 0.451 | 0.324 | 0.73398978 | NKT_spleen |
| WWP2              | 2.11E-05 | 0.48980241 | 0.276 | 0.19  | 0.7481238  | NKT_spleen |
| NAP1L4            | 2.16E-05 | 0.16244537 | 0.71  | 0.538 | 0.76357522 | NKT_spleen |
| IARS1             | 2.16E-05 | 0.39530168 | 0.269 | 0.183 | 0.76366597 | NKT_spleen |
| SAR1A             | 2.17E-05 | 0.28538078 | 0.372 | 0.263 | 0.77057666 | NKT_spleen |
| SARS1             | 2.18E-05 | 0.36754057 | 0.332 | 0.229 | 0.77399386 | NKT_spleen |
| SMC1A             | 2.19E-05 | 0.26588811 | 0.322 | 0.227 | 0.77489888 | NKT_spleen |
| NR4A2             | 2.19E-05 | 0.21390659 | 0.476 | 0.352 | 0.77707807 | NKT_spleen |
| ENSMUG00000020316 | 2.23E-05 | 0.21890723 | 0.385 | 0.275 | 0.79017134 | NKT_spleen |
| PELI1             | 2.25E-05 | 0.27937355 | 0.684 | 0.538 | 0.79879067 | NKT_spleen |
| HNRNPH3           | 2.29E-05 | 0.17364321 | 0.635 | 0.496 | 0.81048375 | NKT_spleen |
| TRAM1             | 2.33E-05 | 0.16244855 | 0.425 | 0.303 | 0.82385933 | NKT_spleen |
| GTF2A2            | 2.34E-05 | 0.12250076 | 0.262 | 0.17  | 0.83055637 | NKT_spleen |
| HCLS1             | 2.36E-05 | 0.23563647 | 0.336 | 0.231 | 0.83624354 | NKT_spleen |
| ENSMUG00000058919 | 2.39E-05 | 0.11342514 | 0.337 | 0.232 | 0.84693086 | NKT_spleen |
| HMGN4             | 2.39E-05 | 0.10086792 | 0.313 | 0.208 | 0.84753785 | NKT_spleen |
| SP100             | 2.46E-05 | 0.26104544 | 0.65  | 0.505 | 0.87257989 | NKT_spleen |

|                    |          |            |       |       |            |            |
|--------------------|----------|------------|-------|-------|------------|------------|
| JMY                | 2.47E-05 | 0.27109583 | 0.589 | 0.461 | 0.87418011 | NKT_spleen |
| NEMF               | 2.52E-05 | 0.27831456 | 0.406 | 0.294 | 0.89318892 | NKT_spleen |
| DNAJC15            | 2.58E-05 | 0.16155443 | 0.322 | 0.22  | 0.91441253 | NKT_spleen |
| TIAM1              | 2.61E-05 | 0.43110573 | 0.259 | 0.175 | 0.92632613 | NKT_spleen |
| MEMO1              | 2.64E-05 | 0.16549061 | 0.752 | 0.6   | 0.93713626 | NKT_spleen |
| CELF1              | 2.69E-05 | 0.15596021 | 0.657 | 0.489 | 0.95440511 | NKT_spleen |
| BTBD9              | 2.73E-05 | 0.37691099 | 0.481 | 0.367 | 0.96605281 | NKT_spleen |
| RNGTT              | 2.75E-05 | 0.25174909 | 0.467 | 0.346 | 0.97443989 | NKT_spleen |
| VPS13C             | 2.79E-05 | 0.2540542  | 0.376 | 0.266 | 0.98838332 | NKT_spleen |
| SLC44A2            | 2.80E-05 | 0.13664368 | 0.388 | 0.276 | 0.99133107 | NKT_spleen |
| PTPMT1             | 2.80E-05 | 0.15138681 | 0.343 | 0.235 | 0.99357832 | NKT_spleen |
| PDS5B              | 2.84E-05 | 0.25307329 | 0.469 | 0.346 | 1          | NKT_spleen |
| TRIM33             | 2.91E-05 | 0.27921153 | 0.437 | 0.322 | 1          | NKT_spleen |
| PAK1IP1            | 2.92E-05 | 0.31034795 | 0.294 | 0.206 | 1          | NKT_spleen |
| ENSMMUG00000061756 | 2.94E-05 | 0.18219323 | 0.439 | 0.319 | 1          | NKT_spleen |
| H2AFY              | 3.10E-05 | 0.20560513 | 0.551 | 0.413 | 1          | NKT_spleen |
| ERC1               | 3.12E-05 | 0.46749512 | 0.281 | 0.197 | 1          | NKT_spleen |
| CRTC3              | 3.15E-05 | 0.32400679 | 0.493 | 0.375 | 1          | NKT_spleen |
| RILPL2             | 3.15E-05 | 0.18388083 | 0.453 | 0.334 | 1          | NKT_spleen |
| RNF145             | 3.18E-05 | 0.20089993 | 0.528 | 0.393 | 1          | NKT_spleen |
| ZNF506             | 3.32E-05 | 0.18739401 | 0.383 | 0.275 | 1          | NKT_spleen |
| IVNS1ABP           | 3.36E-05 | 0.26789197 | 0.514 | 0.387 | 1          | NKT_spleen |
| CLYBL              | 3.42E-05 | 0.68993862 | 0.276 | 0.194 | 1          | NKT_spleen |
| WSB1               | 3.45E-05 | 0.31532086 | 0.554 | 0.428 | 1          | NKT_spleen |
| CCT7               | 3.51E-05 | 0.12391257 | 0.348 | 0.24  | 1          | NKT_spleen |
| MED27              | 3.61E-05 | 0.2184511  | 0.376 | 0.266 | 1          | NKT_spleen |
| AKAP9              | 3.64E-05 | 0.20430915 | 0.626 | 0.476 | 1          | NKT_spleen |
| RER1               | 3.73E-05 | 0.12016914 | 0.379 | 0.265 | 1          | NKT_spleen |
| EFR3A              | 3.77E-05 | 0.3866008  | 0.4   | 0.299 | 1          | NKT_spleen |
| CHCHD3             | 3.82E-05 | 0.36078513 | 0.411 | 0.301 | 1          | NKT_spleen |
| STAG1              | 3.90E-05 | 0.14530203 | 0.834 | 0.663 | 1          | NKT_spleen |
| RSRC1              | 3.94E-05 | 0.30316905 | 0.469 | 0.353 | 1          | NKT_spleen |
| PTPN4              | 3.94E-05 | 0.31535655 | 0.444 | 0.332 | 1          | NKT_spleen |

|                   |          |            |       |       |              |
|-------------------|----------|------------|-------|-------|--------------|
| PPHLN1            | 3.94E-05 | 0.21147218 | 0.556 | 0.412 | 1 NKT_spleen |
| TOB1              | 3.95E-05 | 0.26043467 | 0.435 | 0.326 | 1 NKT_spleen |
| PMAIP1            | 3.99E-05 | 0.36655359 | 0.28  | 0.194 | 1 NKT_spleen |
| SPEN              | 4.06E-05 | 0.34548701 | 0.416 | 0.302 | 1 NKT_spleen |
| NUCKS1            | 4.25E-05 | 0.13242688 | 0.484 | 0.36  | 1 NKT_spleen |
| POGZ              | 4.29E-05 | 0.11837167 | 0.406 | 0.294 | 1 NKT_spleen |
| WAC               | 4.35E-05 | 0.13675804 | 0.659 | 0.504 | 1 NKT_spleen |
| PRDX1             | 4.41E-05 | 0.16850896 | 0.516 | 0.383 | 1 NKT_spleen |
| VPS53             | 4.49E-05 | 0.45439417 | 0.287 | 0.201 | 1 NKT_spleen |
| MAP2K5            | 4.55E-05 | 0.36365018 | 0.316 | 0.229 | 1 NKT_spleen |
| ILRUN             | 4.57E-05 | 0.35100719 | 0.264 | 0.179 | 1 NKT_spleen |
| MDM4              | 4.61E-05 | 0.22441962 | 0.409 | 0.302 | 1 NKT_spleen |
| ARAP2             | 4.62E-05 | 0.20988206 | 0.423 | 0.316 | 1 NKT_spleen |
| ARHGAP26          | 4.74E-05 | 0.26243962 | 0.378 | 0.28  | 1 NKT_spleen |
| PRKACB            | 4.82E-05 | 0.15030633 | 0.528 | 0.387 | 1 NKT_spleen |
| PPP4R3B           | 4.94E-05 | 0.20094245 | 0.413 | 0.301 | 1 NKT_spleen |
| CERS6             | 4.97E-05 | 0.30442579 | 0.617 | 0.487 | 1 NKT_spleen |
| ATXN7L1           | 5.01E-05 | 0.42948846 | 0.29  | 0.203 | 1 NKT_spleen |
| RABGEF1           | 5.11E-05 | 0.38175204 | 0.399 | 0.296 | 1 NKT_spleen |
| CD83              | 5.13E-05 | 0.50758784 | 0.325 | 0.24  | 1 NKT_spleen |
| QRICH1            | 5.15E-05 | 0.31889174 | 0.367 | 0.274 | 1 NKT_spleen |
| YTHDF3            | 5.24E-05 | 0.23946945 | 0.463 | 0.339 | 1 NKT_spleen |
| GGNBP2            | 5.29E-05 | 0.30237023 | 0.425 | 0.313 | 1 NKT_spleen |
| SCAF8             | 5.39E-05 | 0.16170979 | 0.575 | 0.437 | 1 NKT_spleen |
| CNTRL             | 5.42E-05 | 0.4126282  | 0.301 | 0.217 | 1 NKT_spleen |
| MARCHF7           | 5.48E-05 | 0.24103468 | 0.589 | 0.445 | 1 NKT_spleen |
| HIPK3             | 5.52E-05 | 0.22007599 | 0.311 | 0.218 | 1 NKT_spleen |
| COPS5             | 5.56E-05 | 0.13408604 | 0.29  | 0.194 | 1 NKT_spleen |
| MXD1              | 5.68E-05 | 0.40022603 | 0.288 | 0.204 | 1 NKT_spleen |
| BRWD3             | 5.69E-05 | 0.44941596 | 0.266 | 0.185 | 1 NKT_spleen |
| H1-4              | 5.85E-05 | 0.21371239 | 0.357 | 0.254 | 1 NKT_spleen |
| RPS20             | 5.85E-05 | 0.17327077 | 0.911 | 0.888 | 1 NKT_spleen |
| ENSMUG00000008587 | 5.99E-05 | 0.24519441 | 0.579 | 0.446 | 1 NKT_spleen |

|          |            |            |       |       |              |
|----------|------------|------------|-------|-------|--------------|
| NLRC5    | 6.31E-05   | 0.42803285 | 0.283 | 0.197 | 1 NKT_spleen |
| TMOD3    | 6.40E-05   | 0.18316737 | 0.483 | 0.355 | 1 NKT_spleen |
| BRD7     | 6.93E-05   | 0.19108394 | 0.351 | 0.251 | 1 NKT_spleen |
| CCM2     | 7.04E-05   | 0.20725693 | 0.538 | 0.411 | 1 NKT_spleen |
| ATL3     | 7.14E-05   | 0.30194775 | 0.32  | 0.226 | 1 NKT_spleen |
| LUC7L    | 7.16E-05   | 0.38603027 | 0.388 | 0.286 | 1 NKT_spleen |
| TAF1     | 7.20E-05   | 0.36217519 | 0.281 | 0.196 | 1 NKT_spleen |
| PARP8    | 7.22E-05   | 0.35243302 | 0.311 | 0.227 | 1 NKT_spleen |
| LTV1     | 7.28E-05   | 0.17971448 | 0.322 | 0.224 | 1 NKT_spleen |
| SLMAP    | 7.62E-05   | 0.19083297 | 0.544 | 0.413 | 1 NKT_spleen |
| KIAA0040 | 7.68E-05   | 0.3078429  | 0.273 | 0.187 | 1 NKT_spleen |
| LARP4    | 7.70E-05   | 0.16189352 | 0.39  | 0.285 | 1 NKT_spleen |
| GNAI2.1  | 8.05E-05   | 0.11701645 | 0.444 | 0.33  | 1 NKT_spleen |
| PLCD4    | 8.13E-05   | 0.19141217 | 0.308 | 0.217 | 1 NKT_spleen |
| CCNT1    | 8.17E-05   | 0.25919938 | 0.323 | 0.231 | 1 NKT_spleen |
| TARDBP   | 8.48E-05   | 0.1196176  | 0.327 | 0.227 | 1 NKT_spleen |
| APBB1IP  | 8.51E-05   | 0.15397678 | 0.907 | 0.755 | 1 NKT_spleen |
| SLAIN2   | 8.79E-05   | 0.25513969 | 0.306 | 0.218 | 1 NKT_spleen |
| REPS1    | 8.84E-05   | 0.31775336 | 0.334 | 0.242 | 1 NKT_spleen |
| STRN     | 9.16E-05   | 0.33872577 | 0.269 | 0.189 | 1 NKT_spleen |
| ENSA     | 9.28E-05   | 0.28471252 | 0.558 | 0.436 | 1 NKT_spleen |
| PPIG     | 9.36E-05   | 0.27610003 | 0.549 | 0.431 | 1 NKT_spleen |
| HIPK1    | 9.43E-05   | 0.31866988 | 0.425 | 0.32  | 1 NKT_spleen |
| LMTK2    | 9.60E-05   | 0.22260406 | 0.332 | 0.233 | 1 NKT_spleen |
| UTRN     | 9.93E-05   | 0.14566243 | 0.9   | 0.707 | 1 NKT_spleen |
| TASP1    | 0.00010021 | 0.48764293 | 0.313 | 0.228 | 1 NKT_spleen |
| UBAP2L   | 0.00010174 | 0.14319128 | 0.372 | 0.267 | 1 NKT_spleen |
| RHOG     | 0.00010324 | 0.12957717 | 0.29  | 0.197 | 1 NKT_spleen |
| GTF2F2   | 0.00010382 | 0.3244271  | 0.306 | 0.218 | 1 NKT_spleen |
| KATNBL1  | 0.0001064  | 0.2576155  | 0.334 | 0.242 | 1 NKT_spleen |
| NR1D2    | 0.00010807 | 0.54978355 | 0.32  | 0.236 | 1 NKT_spleen |
| ETFA     | 0.00010991 | 0.36387344 | 0.285 | 0.202 | 1 NKT_spleen |
| CYTIP    | 0.00011048 | 0.28111403 | 0.453 | 0.339 | 1 NKT_spleen |

|                   |            |            |       |       |              |
|-------------------|------------|------------|-------|-------|--------------|
| SEC31A            | 0.00011058 | 0.21525211 | 0.563 | 0.434 | 1 NKT_spleen |
| TAF3              | 0.00011602 | 0.24506616 | 0.451 | 0.34  | 1 NKT_spleen |
| HNRNPA0           | 0.00011703 | 0.16236283 | 0.497 | 0.367 | 1 NKT_spleen |
| SF3A1             | 0.00012058 | 0.25584371 | 0.271 | 0.187 | 1 NKT_spleen |
| TRA2A             | 0.00012523 | 0.12157403 | 0.876 | 0.68  | 1 NKT_spleen |
| CAND1             | 0.00012924 | 0.13358318 | 0.472 | 0.351 | 1 NKT_spleen |
| ACIN1             | 0.00013219 | 0.15164644 | 0.563 | 0.417 | 1 NKT_spleen |
| DIP2B             | 0.0001341  | 0.10505091 | 0.759 | 0.577 | 1 NKT_spleen |
| RPIA              | 0.00013506 | 0.23542759 | 0.266 | 0.184 | 1 NKT_spleen |
| CYFIP2            | 0.00013721 | 0.22076862 | 0.477 | 0.366 | 1 NKT_spleen |
| EIF4E             | 0.0001382  | 0.22520761 | 0.299 | 0.212 | 1 NKT_spleen |
| SAE1              | 0.00014077 | 0.37797921 | 0.252 | 0.173 | 1 NKT_spleen |
| ABHD12            | 0.00014346 | 0.35653083 | 0.309 | 0.224 | 1 NKT_spleen |
| GLMN              | 0.00014412 | 0.19186426 | 0.362 | 0.264 | 1 NKT_spleen |
| TUT7              | 0.00014442 | 0.1878074  | 0.554 | 0.422 | 1 NKT_spleen |
| DENND4C           | 0.00014535 | 0.32258384 | 0.301 | 0.222 | 1 NKT_spleen |
| DTNBP1            | 0.00014659 | 0.40656841 | 0.441 | 0.339 | 1 NKT_spleen |
| CAPZB             | 0.00014945 | 0.13680677 | 0.645 | 0.505 | 1 NKT_spleen |
| HECA              | 0.00015054 | 0.41142261 | 0.413 | 0.32  | 1 NKT_spleen |
| IWS1              | 0.00015501 | 0.33721112 | 0.315 | 0.228 | 1 NKT_spleen |
| RBL2              | 0.00015794 | 0.23306823 | 0.325 | 0.233 | 1 NKT_spleen |
| RAP1B             | 0.00015964 | 0.14980171 | 0.836 | 0.691 | 1 NKT_spleen |
| ZNF292            | 0.00016048 | 0.17107878 | 0.689 | 0.528 | 1 NKT_spleen |
| SAMD4B            | 0.0001609  | 0.19193823 | 0.299 | 0.212 | 1 NKT_spleen |
| DHX9              | 0.0001634  | 0.11546718 | 0.575 | 0.432 | 1 NKT_spleen |
| ADAMTS6           | 0.00016373 | 0.25517401 | 0.304 | 0.22  | 1 NKT_spleen |
| SRGN              | 0.00016408 | 0.14954791 | 0.823 | 0.752 | 1 NKT_spleen |
| EIF2S3            | 0.00016525 | 0.16781428 | 0.393 | 0.28  | 1 NKT_spleen |
| ENSMUG00000056043 | 0.00016619 | 0.25641706 | 0.262 | 0.183 | 1 NKT_spleen |
| CD44              | 0.00017753 | 0.35686842 | 0.871 | 0.745 | 1 NKT_spleen |
| ENSMUG00000055114 | 0.00017952 | 0.39650744 | 0.301 | 0.219 | 1 NKT_spleen |
| PARN              | 0.0001798  | 0.30695002 | 0.29  | 0.207 | 1 NKT_spleen |
| CCDC66            | 0.00018124 | 0.1816133  | 0.311 | 0.222 | 1 NKT_spleen |



|                   |            |            |       |       |              |
|-------------------|------------|------------|-------|-------|--------------|
| UBR5              | 0.00018427 | 0.22863728 | 0.596 | 0.462 | 1 NKT_spleen |
| AMBRA1            | 0.00018635 | 0.36165614 | 0.42  | 0.317 | 1 NKT_spleen |
| PCCA              | 0.00018745 | 0.1978631  | 0.458 | 0.344 | 1 NKT_spleen |
| MRTFA             | 0.0001888  | 0.25070417 | 0.484 | 0.367 | 1 NKT_spleen |
| YPEL5             | 0.00019183 | 0.38599148 | 0.652 | 0.525 | 1 NKT_spleen |
| OGDH              | 0.00019276 | 0.18388912 | 0.294 | 0.206 | 1 NKT_spleen |
| HSP90B1           | 0.00019546 | 0.12088295 | 0.481 | 0.364 | 1 NKT_spleen |
| SHOC2             | 0.00019707 | 0.17348174 | 0.54  | 0.414 | 1 NKT_spleen |
| ETNK1             | 0.00019755 | 0.36795757 | 0.343 | 0.252 | 1 NKT_spleen |
| RALGAPB           | 0.00019939 | 0.28878595 | 0.313 | 0.229 | 1 NKT_spleen |
| COG5              | 0.00020421 | 0.18391238 | 0.684 | 0.514 | 1 NKT_spleen |
| NAMPT             | 0.00020448 | 0.36276134 | 0.4   | 0.296 | 1 NKT_spleen |
| SCML4             | 0.00021432 | 0.23137941 | 0.596 | 0.473 | 1 NKT_spleen |
| TBCB              | 0.00021635 | 0.21083895 | 0.273 | 0.188 | 1 NKT_spleen |
| LENG8             | 0.00021664 | 0.2528011  | 0.283 | 0.203 | 1 NKT_spleen |
| SIPA1L1           | 0.00021964 | 0.27701122 | 0.448 | 0.35  | 1 NKT_spleen |
| ZNF268            | 0.00022354 | 0.15997627 | 0.269 | 0.192 | 1 NKT_spleen |
| SETD2             | 0.00022772 | 0.13540475 | 0.663 | 0.513 | 1 NKT_spleen |
| RAD21             | 0.0002302  | 0.22252954 | 0.551 | 0.433 | 1 NKT_spleen |
| ZNF207            | 0.00023068 | 0.18106946 | 0.503 | 0.381 | 1 NKT_spleen |
| RCAN3             | 0.00023113 | 0.27295774 | 0.46  | 0.351 | 1 NKT_spleen |
| MSH3              | 0.00023696 | 0.35616115 | 0.288 | 0.211 | 1 NKT_spleen |
| GTF2E2            | 0.00023815 | 0.26466715 | 0.271 | 0.193 | 1 NKT_spleen |
| MBNL2             | 0.00024103 | 0.25329733 | 0.463 | 0.355 | 1 NKT_spleen |
| HSD17B4           | 0.00025064 | 0.19725104 | 0.71  | 0.557 | 1 NKT_spleen |
| CMAH              | 0.00025091 | 0.3494924  | 0.404 | 0.315 | 1 NKT_spleen |
| SLC30A7           | 0.00025192 | 0.19970567 | 0.514 | 0.391 | 1 NKT_spleen |
| EWSR1             | 0.00025449 | 0.14837745 | 0.488 | 0.371 | 1 NKT_spleen |
| RNF13             | 0.00025489 | 0.23014373 | 0.453 | 0.349 | 1 NKT_spleen |
| PPIP5K2           | 0.00025726 | 0.18903799 | 0.271 | 0.194 | 1 NKT_spleen |
| ENSMUG00000021425 | 0.00025758 | 0.40936434 | 0.364 | 0.278 | 1 NKT_spleen |
| ZNF326            | 0.00025936 | 0.25545167 | 0.441 | 0.332 | 1 NKT_spleen |
| ELL               | 0.00026819 | 0.3186894  | 0.292 | 0.213 | 1 NKT_spleen |

|                   |            |            |       |       |              |
|-------------------|------------|------------|-------|-------|--------------|
| CARMIL1           | 0.00026858 | 0.25602814 | 0.383 | 0.292 | 1 NKT_spleen |
| CCT4              | 0.000274   | 0.15122836 | 0.549 | 0.427 | 1 NKT_spleen |
| SNX6              | 0.00027533 | 0.1285881  | 0.589 | 0.457 | 1 NKT_spleen |
| MIDN              | 0.00029092 | 0.13244902 | 0.285 | 0.201 | 1 NKT_spleen |
| NBEA              | 0.00029918 | 0.23796631 | 0.329 | 0.243 | 1 NKT_spleen |
| TMEM245           | 0.00029925 | 0.20878545 | 0.301 | 0.22  | 1 NKT_spleen |
| AHCTF1            | 0.0002999  | 0.25531643 | 0.428 | 0.328 | 1 NKT_spleen |
| RGS10             | 0.00030021 | 0.13323913 | 0.483 | 0.363 | 1 NKT_spleen |
| USP47             | 0.00030399 | 0.1025198  | 0.58  | 0.436 | 1 NKT_spleen |
| EZR               | 0.00030586 | 0.2504844  | 0.85  | 0.727 | 1 NKT_spleen |
| RPL31             | 0.00031253 | 0.21820804 | 0.713 | 0.619 | 1 NKT_spleen |
| ENSMUG00000051807 | 0.0003193  | 0.15220926 | 0.257 | 0.177 | 1 NKT_spleen |
| TMEM243           | 0.00032271 | 0.16784636 | 0.483 | 0.365 | 1 NKT_spleen |
| RTF1              | 0.000323   | 0.26136465 | 0.355 | 0.261 | 1 NKT_spleen |
| SF3B1             | 0.00032807 | 0.15452094 | 0.748 | 0.591 | 1 NKT_spleen |
| EDEM1             | 0.00034278 | 0.30206287 | 0.252 | 0.178 | 1 NKT_spleen |
| PLEKHB2           | 0.00034455 | 0.40387306 | 0.362 | 0.282 | 1 NKT_spleen |
| PDE4B             | 0.00034676 | 0.398388   | 0.509 | 0.41  | 1 NKT_spleen |
| USP1              | 0.00035593 | 0.30831567 | 0.257 | 0.183 | 1 NKT_spleen |
| WDR20             | 0.00035975 | 0.28886801 | 0.288 | 0.204 | 1 NKT_spleen |
| EPRS1             | 0.00037105 | 0.17274231 | 0.339 | 0.249 | 1 NKT_spleen |
| NASP              | 0.00037751 | 0.12967127 | 0.558 | 0.431 | 1 NKT_spleen |
| ERCC6L2           | 0.00038343 | 0.27837511 | 0.306 | 0.223 | 1 NKT_spleen |
| LSM2              | 0.00038564 | 0.10398513 | 0.311 | 0.222 | 1 NKT_spleen |
| TTC14             | 0.00038827 | 0.24970495 | 0.267 | 0.192 | 1 NKT_spleen |
| COMMD1            | 0.00039056 | 0.13084117 | 0.488 | 0.372 | 1 NKT_spleen |
| NEDD4L            | 0.00039145 | 0.43511547 | 0.316 | 0.24  | 1 NKT_spleen |
| TSNAX             | 0.00039702 | 0.23565215 | 0.257 | 0.18  | 1 NKT_spleen |
| ZC3H13            | 0.00039962 | 0.17467225 | 0.369 | 0.27  | 1 NKT_spleen |
| SNRPE             | 0.00040284 | 0.12132908 | 0.458 | 0.344 | 1 NKT_spleen |
| HACE1             | 0.00040413 | 0.17353985 | 0.339 | 0.251 | 1 NKT_spleen |
| QKI               | 0.00040446 | 0.17971758 | 0.57  | 0.438 | 1 NKT_spleen |
| DDX54             | 0.00041787 | 0.17823861 | 0.253 | 0.178 | 1 NKT_spleen |

|                   |            |            |       |       |              |
|-------------------|------------|------------|-------|-------|--------------|
| FAM222B           | 0.00041834 | 0.18745007 | 0.343 | 0.247 | 1 NKT_spleen |
| MAPRE1            | 0.00041936 | 0.12525682 | 0.449 | 0.337 | 1 NKT_spleen |
| RAPGEF1           | 0.00042747 | 0.13119183 | 0.474 | 0.361 | 1 NKT_spleen |
| ARF4              | 0.00043525 | 0.2417283  | 0.605 | 0.483 | 1 NKT_spleen |
| ENSMUG00000017297 | 0.00044147 | 0.23492484 | 0.267 | 0.187 | 1 NKT_spleen |
| PPA1              | 0.00044674 | 0.10007621 | 0.367 | 0.269 | 1 NKT_spleen |
| CSNK1G3           | 0.00045012 | 0.27697605 | 0.4   | 0.307 | 1 NKT_spleen |
| RTKN2             | 0.00045356 | 0.14567944 | 0.505 | 0.394 | 1 NKT_spleen |
| IL2RG             | 0.00045496 | 0.1185663  | 0.628 | 0.506 | 1 NKT_spleen |
| ECPAS             | 0.00046123 | 0.14870366 | 0.36  | 0.267 | 1 NKT_spleen |
| MTIF2             | 0.00046596 | 0.16907347 | 0.25  | 0.176 | 1 NKT_spleen |
| BRD4              | 0.00048319 | 0.21975478 | 0.313 | 0.23  | 1 NKT_spleen |
| DPP4              | 0.00049236 | 0.17688573 | 0.402 | 0.308 | 1 NKT_spleen |
| AFF1              | 0.00049275 | 0.28648231 | 0.558 | 0.445 | 1 NKT_spleen |
| ADAM19            | 0.00051282 | 0.31219938 | 0.425 | 0.338 | 1 NKT_spleen |
| RPL27A            | 0.00051419 | 0.13460443 | 0.92  | 0.931 | 1 NKT_spleen |
| MYO5A             | 0.00052169 | 0.35275159 | 0.313 | 0.235 | 1 NKT_spleen |
| C18H18orf25       | 0.0005506  | 0.31296909 | 0.348 | 0.264 | 1 NKT_spleen |
| PCBP1             | 0.00057061 | 0.10657505 | 0.524 | 0.405 | 1 NKT_spleen |
| RNF19A            | 0.00057207 | 0.15376073 | 0.458 | 0.355 | 1 NKT_spleen |
| AHI1              | 0.00057436 | 0.10723846 | 0.61  | 0.481 | 1 NKT_spleen |
| KDM5A             | 0.0005812  | 0.14323954 | 0.437 | 0.328 | 1 NKT_spleen |
| IFT80             | 0.00060793 | 0.33201231 | 0.374 | 0.285 | 1 NKT_spleen |
| TRPC4AP           | 0.00062611 | 0.12596286 | 0.33  | 0.241 | 1 NKT_spleen |
| TANC1             | 0.00062682 | 0.12277277 | 0.575 | 0.46  | 1 NKT_spleen |
| GSPT1             | 0.00063125 | 0.14757895 | 0.364 | 0.275 | 1 NKT_spleen |
| CALU              | 0.00063855 | 0.16999791 | 0.278 | 0.2   | 1 NKT_spleen |
| TBL1X             | 0.00065098 | 0.24914037 | 0.358 | 0.273 | 1 NKT_spleen |
| EXOC6B            | 0.00065451 | 0.22142761 | 0.498 | 0.387 | 1 NKT_spleen |
| COPS3             | 0.00065623 | 0.22267874 | 0.267 | 0.19  | 1 NKT_spleen |
| TRIB2             | 0.00066908 | 0.15223902 | 0.551 | 0.434 | 1 NKT_spleen |
| ARFGEF2           | 0.0006797  | 0.45081833 | 0.267 | 0.2   | 1 NKT_spleen |
| H1-2              | 0.00068768 | 0.17865155 | 0.35  | 0.261 | 1 NKT_spleen |

|         |            |            |       |       |              |
|---------|------------|------------|-------|-------|--------------|
| PIK3C2A | 0.00070302 | 0.32427599 | 0.306 | 0.231 | 1 NKT_spleen |
| SIK3    | 0.00070727 | 0.10006201 | 0.909 | 0.733 | 1 NKT_spleen |
| PIP5K1A | 0.0007157  | 0.21144333 | 0.39  | 0.296 | 1 NKT_spleen |
| TUBB    | 0.00072582 | 0.10720975 | 0.572 | 0.457 | 1 NKT_spleen |
| PPP6R1  | 0.00073687 | 0.12809174 | 0.357 | 0.263 | 1 NKT_spleen |
| ATP9B   | 0.00074881 | 0.18421509 | 0.47  | 0.364 | 1 NKT_spleen |
| ARID4B  | 0.00075569 | 0.18244873 | 0.844 | 0.665 | 1 NKT_spleen |
| RHOH    | 0.00075774 | 0.18275971 | 0.726 | 0.585 | 1 NKT_spleen |
| CCDC91  | 0.00076229 | 0.12395987 | 0.685 | 0.534 | 1 NKT_spleen |
| ATF4    | 0.0007725  | 0.130438   | 0.502 | 0.385 | 1 NKT_spleen |
| DCAF8   | 0.00077288 | 0.28495092 | 0.365 | 0.279 | 1 NKT_spleen |
| TMBIM4  | 0.00077798 | 0.13742804 | 0.455 | 0.352 | 1 NKT_spleen |
| ZRANB2  | 0.0007812  | 0.20659622 | 0.507 | 0.394 | 1 NKT_spleen |
| TRANK1  | 0.0007936  | 0.40349479 | 0.287 | 0.215 | 1 NKT_spleen |
| PRPF6   | 0.00080616 | 0.13022256 | 0.397 | 0.297 | 1 NKT_spleen |
| KLHL18  | 0.00080691 | 0.31298869 | 0.255 | 0.185 | 1 NKT_spleen |
| FOXP1   | 0.00081438 | 0.10826306 | 0.53  | 0.408 | 1 NKT_spleen |
| AP2A2   | 0.00082706 | 0.32183711 | 0.278 | 0.205 | 1 NKT_spleen |
| DCAF10  | 0.00084039 | 0.36528495 | 0.259 | 0.192 | 1 NKT_spleen |
| RSF1    | 0.00086283 | 0.14147363 | 0.566 | 0.441 | 1 NKT_spleen |
| ZNF514  | 0.00086574 | 0.11158197 | 0.358 | 0.269 | 1 NKT_spleen |
| SEC61A2 | 0.00086835 | 0.3257106  | 0.26  | 0.189 | 1 NKT_spleen |
| RBM39   | 0.00093692 | 0.13087302 | 0.918 | 0.763 | 1 NKT_spleen |
| RNF34   | 0.00099556 | 0.22970248 | 0.287 | 0.21  | 1 NKT_spleen |
| UBE2G1  | 0.0010315  | 0.16247053 | 0.49  | 0.38  | 1 NKT_spleen |
| ASB3    | 0.00103213 | 0.26802121 | 0.33  | 0.252 | 1 NKT_spleen |
| STK26   | 0.00103726 | 0.22894353 | 0.332 | 0.248 | 1 NKT_spleen |
| WDR44   | 0.00109378 | 0.28400308 | 0.33  | 0.252 | 1 NKT_spleen |
| HDAC2   | 0.00110549 | 0.20616915 | 0.339 | 0.255 | 1 NKT_spleen |
| RBPJ    | 0.00112614 | 0.26548709 | 0.456 | 0.359 | 1 NKT_spleen |
| PTP4A2  | 0.00113579 | 0.156844   | 0.43  | 0.329 | 1 NKT_spleen |
| PDCD6IP | 0.00114646 | 0.23868057 | 0.395 | 0.295 | 1 NKT_spleen |
| MGMT    | 0.00120076 | 0.30861973 | 0.402 | 0.313 | 1 NKT_spleen |

|                   |            |            |       |       |              |
|-------------------|------------|------------|-------|-------|--------------|
| RCOR3             | 0.00120514 | 0.11750478 | 0.266 | 0.191 | 1 NKT_spleen |
| ZNF827            | 0.00129278 | 0.13012742 | 0.467 | 0.362 | 1 NKT_spleen |
| DIABLO            | 0.00135582 | 0.16792355 | 0.311 | 0.23  | 1 NKT_spleen |
| TM9SF2            | 0.00136264 | 0.2177689  | 0.337 | 0.259 | 1 NKT_spleen |
| USP10             | 0.00136637 | 0.14070019 | 0.524 | 0.405 | 1 NKT_spleen |
| GPHN              | 0.00139697 | 0.22174212 | 0.357 | 0.277 | 1 NKT_spleen |
| TNPO1             | 0.00140574 | 0.31692444 | 0.281 | 0.214 | 1 NKT_spleen |
| ENSMUG00000017400 | 0.00141028 | 0.32466717 | 0.252 | 0.184 | 1 NKT_spleen |
| ATXN10            | 0.00141907 | 0.13608125 | 0.556 | 0.437 | 1 NKT_spleen |
| BZW2              | 0.0014277  | 0.13545165 | 0.381 | 0.291 | 1 NKT_spleen |
| ATF7IP2           | 0.00145579 | 0.15778922 | 0.367 | 0.282 | 1 NKT_spleen |
| EPC2              | 0.00145983 | 0.14118545 | 0.509 | 0.392 | 1 NKT_spleen |
| SEC24B            | 0.00146498 | 0.15757717 | 0.432 | 0.337 | 1 NKT_spleen |
| GPR107            | 0.00148296 | 0.21315153 | 0.393 | 0.304 | 1 NKT_spleen |
| UBAP1             | 0.00155159 | 0.13529311 | 0.488 | 0.38  | 1 NKT_spleen |
| PPP4R3A           | 0.00157902 | 0.19420749 | 0.369 | 0.289 | 1 NKT_spleen |
| CLIP1             | 0.00161455 | 0.24310223 | 0.301 | 0.229 | 1 NKT_spleen |
| ACO2              | 0.00161883 | 0.10415696 | 0.316 | 0.234 | 1 NKT_spleen |
| OLA1              | 0.00164108 | 0.25932751 | 0.47  | 0.371 | 1 NKT_spleen |
| PREP              | 0.0016496  | 0.185118   | 0.339 | 0.261 | 1 NKT_spleen |
| CLSTN1            | 0.00166316 | 0.31028078 | 0.266 | 0.198 | 1 NKT_spleen |
| SLC30A9           | 0.00173891 | 0.13970964 | 0.385 | 0.294 | 1 NKT_spleen |
| TANK              | 0.00179169 | 0.34089467 | 0.449 | 0.349 | 1 NKT_spleen |
| STX8              | 0.00179361 | 0.29348459 | 0.425 | 0.331 | 1 NKT_spleen |
| ENSMUG00000006608 | 0.0017963  | 0.1017149  | 0.67  | 0.535 | 1 NKT_spleen |
| TTC17             | 0.00186149 | 0.14010185 | 0.428 | 0.337 | 1 NKT_spleen |
| ELOVL5            | 0.00191451 | 0.1147514  | 0.673 | 0.527 | 1 NKT_spleen |
| LEMD3             | 0.0019513  | 0.20804017 | 0.346 | 0.267 | 1 NKT_spleen |
| RPS6KB1           | 0.00196131 | 0.17604606 | 0.53  | 0.423 | 1 NKT_spleen |
| AP2B1             | 0.00196707 | 0.13285173 | 0.353 | 0.27  | 1 NKT_spleen |
| AATF              | 0.00201458 | 0.20461592 | 0.295 | 0.22  | 1 NKT_spleen |
| PSMD12            | 0.00216285 | 0.16297844 | 0.589 | 0.466 | 1 NKT_spleen |
| LRRFIP2           | 0.00216815 | 0.21671594 | 0.316 | 0.242 | 1 NKT_spleen |

|          |            |             |       |       |              |
|----------|------------|-------------|-------|-------|--------------|
| MACO1    | 0.00218024 | 0.10976541  | 0.409 | 0.319 | 1 NKT_spleen |
| KANSL2   | 0.00219073 | 0.35781658  | 0.35  | 0.272 | 1 NKT_spleen |
| METTL16  | 0.00220901 | 0.11834808  | 0.294 | 0.22  | 1 NKT_spleen |
| SZRD1    | 0.00229482 | 0.17351227  | 0.339 | 0.257 | 1 NKT_spleen |
| SCAPER   | 0.00233269 | 0.11634643  | 0.579 | 0.467 | 1 NKT_spleen |
| ELMOD3   | 0.00239654 | 0.16216077  | 0.355 | 0.272 | 1 NKT_spleen |
| HNRNPR   | 0.00249661 | 0.10344654  | 0.526 | 0.411 | 1 NKT_spleen |
| BOD1L1   | 0.00253753 | 0.16840875  | 0.269 | 0.201 | 1 NKT_spleen |
| TRAT1    | 0.00256012 | 0.14838638  | 0.432 | 0.336 | 1 NKT_spleen |
| CNST     | 0.00256219 | 0.10684011  | 0.435 | 0.335 | 1 NKT_spleen |
| PABPC1   | 0.00261933 | 0.10854459  | 0.911 | 0.807 | 1 NKT_spleen |
| ASXL1    | 0.00269193 | 0.25310182  | 0.302 | 0.231 | 1 NKT_spleen |
| ICE1     | 0.00274566 | 0.17666287  | 0.271 | 0.204 | 1 NKT_spleen |
| TAB2     | 0.00277584 | 0.15066113  | 0.414 | 0.326 | 1 NKT_spleen |
| NAA15    | 0.00279687 | 0.18322975  | 0.355 | 0.278 | 1 NKT_spleen |
| XPO7     | 0.00295168 | 0.19421248  | 0.292 | 0.227 | 1 NKT_spleen |
| XPC      | 0.00296912 | 0.13460966  | 0.278 | 0.208 | 1 NKT_spleen |
| HERPUD2  | 0.00300751 | 0.13294588  | 0.346 | 0.264 | 1 NKT_spleen |
| ZNF462   | 0.00309462 | 0.17108504  | 0.379 | 0.301 | 1 NKT_spleen |
| RPL26    | 0.00315328 | 0.13358834  | 0.874 | 0.887 | 1 NKT_spleen |
| RAB7A    | 0.0031906  | 0.12575228  | 0.605 | 0.493 | 1 NKT_spleen |
| MAP3K3   | 0.00333067 | 0.2752415   | 0.253 | 0.191 | 1 NKT_spleen |
| TIPARP   | 0.00333551 | 0.60192026  | 0.344 | 0.278 | 1 NKT_spleen |
| MAP4     | 0.00335479 | 0.37679607  | 0.25  | 0.188 | 1 NKT_spleen |
| TCERG1   | 0.00351166 | 0.111113147 | 0.423 | 0.332 | 1 NKT_spleen |
| UBE2Q2   | 0.00352503 | 0.16887198  | 0.29  | 0.221 | 1 NKT_spleen |
| SECISBP2 | 0.00352617 | 0.21015156  | 0.323 | 0.253 | 1 NKT_spleen |
| GLYR1    | 0.00353423 | 0.17810106  | 0.29  | 0.223 | 1 NKT_spleen |
| APPL1    | 0.00370865 | 0.14946539  | 0.26  | 0.195 | 1 NKT_spleen |
| NBEAL1   | 0.0037373  | 0.16590916  | 0.259 | 0.195 | 1 NKT_spleen |
| ARID4A   | 0.00374177 | 0.20271298  | 0.315 | 0.243 | 1 NKT_spleen |
| FCMR     | 0.00383407 | 0.11469205  | 0.409 | 0.322 | 1 NKT_spleen |
| SETD7    | 0.00388401 | 0.15410301  | 0.308 | 0.238 | 1 NKT_spleen |

|                    |            |            |       |       |              |
|--------------------|------------|------------|-------|-------|--------------|
| WASL               | 0.00389003 | 0.14147654 | 0.404 | 0.318 | 1 NKT_spleen |
| SCMH1              | 0.00395664 | 0.26366597 | 0.318 | 0.253 | 1 NKT_spleen |
| RASA2              | 0.00400852 | 0.14192742 | 0.685 | 0.545 | 1 NKT_spleen |
| TRPS1              | 0.00404324 | 0.36299688 | 0.402 | 0.326 | 1 NKT_spleen |
| CDC27              | 0.00408596 | 0.12830759 | 0.362 | 0.28  | 1 NKT_spleen |
| DNAJC3             | 0.00415684 | 0.1460025  | 0.458 | 0.361 | 1 NKT_spleen |
| WDR43              | 0.00421974 | 0.19359012 | 0.453 | 0.354 | 1 NKT_spleen |
| C1GALT1            | 0.00422595 | 0.15032518 | 0.332 | 0.257 | 1 NKT_spleen |
| TP53BP1            | 0.0042695  | 0.11949162 | 0.469 | 0.38  | 1 NKT_spleen |
| NOL10              | 0.00427815 | 0.23173719 | 0.271 | 0.206 | 1 NKT_spleen |
| ARCN1              | 0.00435744 | 0.10311778 | 0.292 | 0.22  | 1 NKT_spleen |
| TNRC6B             | 0.00438095 | 0.16518157 | 0.876 | 0.718 | 1 NKT_spleen |
| DOP1B              | 0.00455064 | 0.37456221 | 0.33  | 0.264 | 1 NKT_spleen |
| ENSMMUG00000051957 | 0.00458137 | 0.1525947  | 0.297 | 0.223 | 1 NKT_spleen |
| RLIM               | 0.00465824 | 0.17109185 | 0.318 | 0.247 | 1 NKT_spleen |
| SMN1               | 0.00471714 | 0.14149952 | 0.28  | 0.212 | 1 NKT_spleen |
| MECP2              | 0.00480245 | 0.1715515  | 0.418 | 0.333 | 1 NKT_spleen |
| PPP3CC             | 0.00483114 | 0.13532038 | 0.472 | 0.377 | 1 NKT_spleen |
| YWHAE              | 0.00489893 | 0.11379943 | 0.6   | 0.473 | 1 NKT_spleen |
| APC                | 0.00493429 | 0.27865955 | 0.288 | 0.224 | 1 NKT_spleen |
| PTPN1              | 0.00509721 | 0.11189889 | 0.54  | 0.43  | 1 NKT_spleen |
| BTBD11             | 0.00510168 | 0.1427638  | 0.411 | 0.333 | 1 NKT_spleen |
| SNX13              | 0.00553281 | 0.1660113  | 0.351 | 0.277 | 1 NKT_spleen |
| VRK1               | 0.00554366 | 0.16510925 | 0.327 | 0.252 | 1 NKT_spleen |
| PDZRN3             | 0.00585213 | 0.18067966 | 0.467 | 0.385 | 1 NKT_spleen |
| AP3B1              | 0.00595138 | 0.10118174 | 0.533 | 0.423 | 1 NKT_spleen |
| LONP2              | 0.00621413 | 0.16118473 | 0.418 | 0.341 | 1 NKT_spleen |
| YLPM1              | 0.00626238 | 0.18222286 | 0.29  | 0.225 | 1 NKT_spleen |
| ENSMMUG00000012690 | 0.00643615 | 0.13870298 | 0.262 | 0.202 | 1 NKT_spleen |
| ENSMMUG00000006343 | 0.00647048 | 0.14522808 | 0.339 | 0.266 | 1 NKT_spleen |
| PPP1R12B           | 0.00647975 | 0.109211   | 0.273 | 0.209 | 1 NKT_spleen |
| MYLIP              | 0.0066322  | 0.18109088 | 0.542 | 0.451 | 1 NKT_spleen |
| SORL1              | 0.00669844 | 0.14845223 | 0.498 | 0.403 | 1 NKT_spleen |

|                    |            |            |       |       |              |
|--------------------|------------|------------|-------|-------|--------------|
| ENSMMUG00000006965 | 0.00699281 | 0.13272891 | 0.517 | 0.422 | 1 NKT_spleen |
| MCM9               | 0.00705092 | 0.20736581 | 0.281 | 0.219 | 1 NKT_spleen |
| KLHL2              | 0.00718661 | 0.39888853 | 0.294 | 0.234 | 1 NKT_spleen |
| MAML3              | 0.007608   | 0.37359686 | 0.343 | 0.281 | 1 NKT_spleen |
| WIPI2              | 0.00778348 | 0.11663655 | 0.383 | 0.305 | 1 NKT_spleen |
| STAU2              | 0.00802915 | 0.15209135 | 0.339 | 0.276 | 1 NKT_spleen |
| GNAL               | 0.0083059  | 0.14081935 | 0.25  | 0.192 | 1 NKT_spleen |
| IL4R               | 0.00847848 | 0.21815083 | 0.455 | 0.363 | 1 NKT_spleen |
| ATP11B             | 0.00853523 | 0.12942124 | 0.507 | 0.414 | 1 NKT_spleen |
| FLNA               | 0.0092254  | 0.14665084 | 0.465 | 0.376 | 1 NKT_spleen |
| ZNF28              | 0.00934212 | 0.21562347 | 0.315 | 0.246 | 1 NKT_spleen |
| TEC                | 0.00956492 | 0.11167387 | 0.474 | 0.38  | 1 NKT_spleen |
| CRY1               | 0.00995996 | 0.16046908 | 0.46  | 0.384 | 1 NKT_spleen |
| TMX3               | 0.01046278 | 0.17794339 | 0.264 | 0.205 | 1 NKT_spleen |
| ERN1               | 0.01052832 | 0.10664726 | 0.441 | 0.361 | 1 NKT_spleen |
| BNIP2              | 0.01066737 | 0.1266971  | 0.28  | 0.22  | 1 NKT_spleen |
| ITK                | 0.01078235 | 0.21859039 | 0.703 | 0.608 | 1 NKT_spleen |
| KAT7               | 0.01081115 | 0.2065045  | 0.372 | 0.305 | 1 NKT_spleen |
| UBR4               | 0.01137035 | 0.15189317 | 0.348 | 0.279 | 1 NKT_spleen |
| UHRF2              | 0.01138515 | 0.14517454 | 0.371 | 0.298 | 1 NKT_spleen |
| EZH2               | 0.01157538 | 0.19261783 | 0.376 | 0.306 | 1 NKT_spleen |
| DCAF1              | 0.01162983 | 0.26376667 | 0.276 | 0.222 | 1 NKT_spleen |
| ACE                | 0.01202636 | 0.10556622 | 0.292 | 0.229 | 1 NKT_spleen |
| DIS3L2             | 0.01278996 | 0.13104418 | 0.486 | 0.396 | 1 NKT_spleen |
| DENND4A            | 0.01282069 | 0.22326791 | 0.888 | 0.738 | 1 NKT_spleen |
| VPS26A             | 0.01345781 | 0.10155109 | 0.294 | 0.233 | 1 NKT_spleen |
| IPO5               | 0.01352325 | 0.11873077 | 0.259 | 0.2   | 1 NKT_spleen |
| RLF                | 0.01426798 | 0.10395002 | 0.484 | 0.394 | 1 NKT_spleen |
| SELENOI            | 0.01536619 | 0.21045721 | 0.281 | 0.224 | 1 NKT_spleen |
| FRS2               | 0.01556353 | 0.12346691 | 0.25  | 0.197 | 1 NKT_spleen |
| DNAJB6             | 0.01754611 | 0.17016586 | 0.733 | 0.628 | 1 NKT_spleen |
| ABCG2              | 0.01848228 | 0.18216512 | 0.302 | 0.244 | 1 NKT_spleen |
| ITGB1              | 0.01906199 | 0.18693225 | 0.295 | 0.234 | 1 NKT_spleen |



|                    |            |            |       |       |           |            |
|--------------------|------------|------------|-------|-------|-----------|------------|
| LIMS1              | 0.02217844 | 0.10915499 | 0.362 | 0.301 | 1         | NKT_spleen |
| ANAPC10            | 0.0250051  | 0.12942157 | 0.339 | 0.279 | 1         | NKT_spleen |
| PHF12              | 0.02678245 | 0.18511409 | 0.264 | 0.213 | 1         | NKT_spleen |
| FAM241A            | 0.02818818 | 0.55608346 | 0.259 | 0.211 | 1         | NKT_spleen |
| TMEM135            | 0.02929332 | 0.15762714 | 0.285 | 0.235 | 1         | NKT_spleen |
| APPBP2             | 0.03161818 | 0.18553804 | 0.306 | 0.246 | 1         | NKT_spleen |
| PNPLA8             | 0.03167068 | 0.22036473 | 0.439 | 0.362 | 1         | NKT_spleen |
| FBXL20             | 0.0321804  | 0.10282824 | 0.491 | 0.405 | 1         | NKT_spleen |
| RPAP2              | 0.04317085 | 0.14037067 | 0.266 | 0.219 | 1         | NKT_spleen |
| UBE2E1             | 0.0494217  | 0.1683409  | 0.353 | 0.294 | 1         | NKT_spleen |
| DNM1L              | 0.05867188 | 0.15392241 | 0.336 | 0.282 | 1         | NKT_spleen |
| SNIP1              | 0.05961062 | 0.18443966 | 0.255 | 0.211 | 1         | NKT_spleen |
| ENSMMUG00000054165 | 0.076857   | 0.44405671 | 0.351 | 0.314 | 1         | NKT_spleen |
| PLCL1              | 0.07893803 | 0.27256683 | 0.474 | 0.414 | 1         | NKT_spleen |
| PSEN1              | 0.07949634 | 0.20342776 | 0.301 | 0.259 | 1         | NKT_spleen |
| DPYD               | 0.07969496 | 0.11425737 | 0.276 | 0.237 | 1         | NKT_spleen |
| KDM7A              | 0.07989214 | 0.16051763 | 0.276 | 0.231 | 1         | NKT_spleen |
| RAB3GAP2           | 0.08529972 | 0.18323994 | 0.337 | 0.287 | 1         | NKT_spleen |
| PPP1CB             | 0.09756567 | 0.13602318 | 0.788 | 0.695 | 1         | NKT_spleen |
| RAPGEF2            | 0.12675414 | 0.16532308 | 0.369 | 0.324 | 1         | NKT_spleen |
| COX1               | 0.12916379 | 0.27164122 | 0.816 | 0.873 | 1         | NKT_spleen |
| ND3                | 0.21923724 | 0.11424903 | 0.603 | 0.554 | 1         | NKT_spleen |
| OSER1              | 0.27865309 | 0.13603037 | 0.278 | 0.248 | 1         | NKT_spleen |
| DDX3Y              | 0.30758967 | 0.29862584 | 0.411 | 0.403 | 1         | NKT_spleen |
| ND4                | 0.32913961 | 0.13252947 | 0.829 | 0.883 | 1         | NKT_spleen |
| COX2               | 0.36553596 | 0.13511129 | 0.832 | 0.918 | 1         | NKT_spleen |
| ATP6               | 0.43084827 | 0.15548821 | 0.801 | 0.829 | 1         | NKT_spleen |
| ENSMMUG00000056331 | 0.59531083 | 0.20861871 | 0.262 | 0.253 | 1         | NKT_spleen |
| ENSMMUG00000065362 | 0.67389823 | 0.19457303 | 1     | 0.994 | 1         | NKT_spleen |
| RPS21              | 7.79E-117  | 1.71586692 | 0.934 | 0.883 | 2.76E-112 | Treg_lung  |
| ENSMMUG00000062350 | 8.99E-114  | 1.57556597 | 0.95  | 0.93  | 3.19E-109 | Treg_lung  |
| ATP5F1E            | 1.05E-109  | 1.85350342 | 0.921 | 0.863 | 3.73E-105 | Treg_lung  |
| RPL36              | 3.13E-97   | 1.66141587 | 0.902 | 0.816 | 1.11E-92  | Treg_lung  |

|                   |          |            |       |       |          |           |
|-------------------|----------|------------|-------|-------|----------|-----------|
| ENSMUG00000064224 | 8.07E-86 | 1.82725163 | 0.894 | 0.79  | 2.86E-81 | Treg_lung |
| RPS28             | 5.71E-82 | 1.10983254 | 0.944 | 0.94  | 2.02E-77 | Treg_lung |
| ENSMUG00000013257 | 3.10E-75 | 1.72256789 | 0.876 | 0.845 | 1.10E-70 | Treg_lung |
| RPL39             | 1.19E-73 | 1.16748151 | 0.91  | 0.877 | 4.20E-69 | Treg_lung |
| TMSB10            | 1.07E-70 | 1.4267228  | 0.944 | 0.907 | 3.79E-66 | Treg_lung |
| ZC3H10            | 2.09E-63 | 1.65311716 | 0.791 | 0.723 | 7.40E-59 | Treg_lung |
| FAU               | 2.38E-63 | 1.00712997 | 0.929 | 0.9   | 8.42E-59 | Treg_lung |
| RPL18             | 6.34E-62 | 0.91640893 | 0.937 | 0.93  | 2.25E-57 | Treg_lung |
| ENSMUG00000015563 | 2.23E-61 | 0.93101321 | 0.934 | 0.932 | 7.91E-57 | Treg_lung |
| ENSMUG00000004441 | 1.13E-59 | 2.15976593 | 0.741 | 0.58  | 4.02E-55 | Treg_lung |
| ENSMUG00000005593 | 4.53E-59 | 1.20652044 | 0.926 | 0.927 | 1.60E-54 | Treg_lung |
| RPS12             | 9.94E-59 | 0.95098194 | 0.952 | 0.94  | 3.52E-54 | Treg_lung |
| RPL32             | 4.59E-58 | 0.83380175 | 0.966 | 0.948 | 1.63E-53 | Treg_lung |
| RPS26             | 4.77E-56 | 0.9130357  | 0.968 | 0.932 | 1.69E-51 | Treg_lung |
| RPS23             | 2.71E-55 | 0.91738169 | 0.95  | 0.94  | 9.60E-51 | Treg_lung |
| RPL10             | 3.89E-54 | 0.8714697  | 0.95  | 0.946 | 1.38E-49 | Treg_lung |
| RPS29             | 6.73E-54 | 0.83828429 | 0.937 | 0.933 | 2.39E-49 | Treg_lung |
| RPL24             | 6.78E-54 | 0.91538703 | 0.923 | 0.918 | 2.40E-49 | Treg_lung |
| RPLP1             | 2.55E-53 | 0.85334793 | 0.958 | 0.943 | 9.02E-49 | Treg_lung |
| RPL12             | 9.44E-53 | 0.94310995 | 0.931 | 0.909 | 3.35E-48 | Treg_lung |
| BATF              | 1.21E-52 | 3.32126885 | 0.45  | 0.179 | 4.27E-48 | Treg_lung |
| NUDT3             | 4.67E-52 | 0.90066278 | 0.95  | 0.952 | 1.66E-47 | Treg_lung |
| RPL8              | 7.19E-50 | 0.84403545 | 0.937 | 0.919 | 2.55E-45 | Treg_lung |
| RPS9              | 1.21E-49 | 0.9448796  | 0.934 | 0.919 | 4.29E-45 | Treg_lung |
| RPL35A            | 8.61E-49 | 0.83307387 | 0.923 | 0.925 | 3.05E-44 | Treg_lung |
| UBA52             | 8.95E-49 | 0.88384768 | 0.907 | 0.901 | 3.17E-44 | Treg_lung |
| ENSMUG00000056354 | 6.61E-47 | 1.32531422 | 0.815 | 0.785 | 2.34E-42 | Treg_lung |
| ELOA              | 2.47E-46 | 0.7753223  | 0.952 | 0.931 | 8.76E-42 | Treg_lung |
| RPL30             | 6.43E-45 | 0.71238945 | 0.942 | 0.945 | 2.28E-40 | Treg_lung |
| RPL34             | 2.53E-44 | 0.75018272 | 0.944 | 0.944 | 8.98E-40 | Treg_lung |
| RPS7              | 1.72E-42 | 0.74109813 | 0.934 | 0.941 | 6.09E-38 | Treg_lung |
| RPS13             | 4.21E-42 | 0.74584035 | 0.937 | 0.924 | 1.49E-37 | Treg_lung |
| ENSMUG00000060377 | 1.76E-41 | 1.74509207 | 0.68  | 0.603 | 6.23E-37 | Treg_lung |

|                   |          |            |       |       |          |           |
|-------------------|----------|------------|-------|-------|----------|-----------|
| RPL36AL           | 1.99E-40 | 1.21663974 | 0.78  | 0.761 | 7.06E-36 | Treg_lung |
| RPSA              | 2.31E-40 | 0.79953235 | 0.942 | 0.915 | 8.20E-36 | Treg_lung |
| SAMSN1            | 6.60E-40 | 2.61528913 | 0.442 | 0.206 | 2.34E-35 | Treg_lung |
| RPL28             | 5.12E-39 | 0.66678559 | 0.947 | 0.934 | 1.81E-34 | Treg_lung |
| IFI16             | 8.88E-39 | 1.72917427 | 0.64  | 0.501 | 3.15E-34 | Treg_lung |
| ELOB              | 1.02E-38 | 1.67895891 | 0.659 | 0.552 | 3.63E-34 | Treg_lung |
| BTG1              | 9.11E-38 | 1.35065498 | 0.82  | 0.805 | 3.23E-33 | Treg_lung |
| GMFG              | 1.94E-37 | 1.21230466 | 0.772 | 0.777 | 6.87E-33 | Treg_lung |
| FGL2              | 6.14E-37 | 3.57996788 | 0.265 | 0.079 | 2.17E-32 | Treg_lung |
| RPL7A             | 1.55E-35 | 0.7376449  | 0.915 | 0.919 | 5.50E-31 | Treg_lung |
| FTL               | 1.75E-35 | 1.24173196 | 0.788 | 0.767 | 6.18E-31 | Treg_lung |
| RPL22             | 2.37E-35 | 0.74320856 | 0.894 | 0.899 | 8.41E-31 | Treg_lung |
| RPL19             | 1.84E-34 | 0.88854411 | 0.886 | 0.865 | 6.50E-30 | Treg_lung |
| CREM              | 2.23E-34 | 2.06063832 | 0.561 | 0.381 | 7.89E-30 | Treg_lung |
| ENSMUG00000002320 | 1.68E-32 | 1.25303434 | 0.783 | 0.813 | 5.94E-28 | Treg_lung |
| ENSMUG00000022428 | 5.18E-32 | 2.22767916 | 0.487 | 0.313 | 1.84E-27 | Treg_lung |
| PET100            | 8.07E-32 | 2.6165185  | 0.347 | 0.151 | 2.86E-27 | Treg_lung |
| ENSMUG00000004545 | 8.74E-32 | 1.2999936  | 0.701 | 0.658 | 3.10E-27 | Treg_lung |
| ENSMUG00000003867 | 1.15E-31 | 0.57864808 | 0.96  | 0.963 | 4.07E-27 | Treg_lung |
| ENSMUG00000013429 | 1.86E-31 | 0.61576233 | 0.947 | 0.957 | 6.60E-27 | Treg_lung |
| MYL12B            | 9.77E-31 | 1.31678225 | 0.709 | 0.671 | 3.46E-26 | Treg_lung |
| RPS5              | 1.68E-30 | 0.71989923 | 0.907 | 0.909 | 5.94E-26 | Treg_lung |
| RPS24             | 1.50E-29 | 0.58615002 | 0.955 | 0.948 | 5.30E-25 | Treg_lung |
| CD3D              | 3.40E-29 | 1.22009528 | 0.725 | 0.703 | 1.20E-24 | Treg_lung |
| MAMU-E            | 5.39E-29 | 0.96869772 | 0.82  | 0.854 | 1.91E-24 | Treg_lung |
| RPL22L1           | 6.44E-29 | 1.09409468 | 0.788 | 0.778 | 2.28E-24 | Treg_lung |
| HINT1             | 4.70E-28 | 1.10141562 | 0.743 | 0.734 | 1.66E-23 | Treg_lung |
| ATP5MG            | 7.68E-28 | 1.12417646 | 0.706 | 0.713 | 2.72E-23 | Treg_lung |
| S100A4            | 4.32E-27 | 2.29878354 | 0.487 | 0.301 | 1.53E-22 | Treg_lung |
| HNRNPH2           | 1.97E-26 | 0.69924845 | 0.881 | 0.871 | 6.99E-22 | Treg_lung |
| TMA7              | 7.33E-26 | 1.312612   | 0.646 | 0.63  | 2.60E-21 | Treg_lung |
| IFI27L2           | 8.99E-26 | 1.51394993 | 0.608 | 0.551 | 3.19E-21 | Treg_lung |
| ROMO1             | 1.02E-25 | 1.6909865  | 0.556 | 0.458 | 3.60E-21 | Treg_lung |

|                     |          |            |       |       |          |           |
|---------------------|----------|------------|-------|-------|----------|-----------|
| TMSB4X              | 2.41E-25 | 0.52872345 | 0.979 | 0.97  | 8.54E-21 | Treg_lung |
| PRPF31              | 3.07E-25 | 1.79442061 | 0.524 | 0.409 | 1.09E-20 | Treg_lung |
| NDUFV2              | 4.13E-25 | 1.66852736 | 0.571 | 0.489 | 1.46E-20 | Treg_lung |
| RPL38               | 2.20E-24 | 0.60265497 | 0.921 | 0.917 | 7.78E-20 | Treg_lung |
| GPR183              | 3.53E-24 | 1.7458394  | 0.574 | 0.464 | 1.25E-19 | Treg_lung |
| RPL27               | 1.08E-23 | 0.55537083 | 0.923 | 0.914 | 3.82E-19 | Treg_lung |
| SRP14               | 1.28E-23 | 1.05089984 | 0.685 | 0.686 | 4.53E-19 | Treg_lung |
| ENSMMUG000000056793 | 5.58E-23 | 1.17288428 | 0.64  | 0.609 | 1.98E-18 | Treg_lung |
| ENSMMUG000000003073 | 9.51E-23 | 0.57825766 | 0.894 | 0.899 | 3.37E-18 | Treg_lung |
| RPL35               | 8.22E-22 | 0.57572231 | 0.907 | 0.895 | 2.91E-17 | Treg_lung |
| UBL5                | 8.52E-22 | 1.68239118 | 0.526 | 0.443 | 3.02E-17 | Treg_lung |
| RPS27A              | 1.25E-21 | 1.06656045 | 0.672 | 0.675 | 4.44E-17 | Treg_lung |
| CRIP1               | 1.36E-21 | 2.02270475 | 0.561 | 0.474 | 4.81E-17 | Treg_lung |
| MBD3                | 1.00E-20 | 1.44161771 | 0.558 | 0.514 | 3.56E-16 | Treg_lung |
| RPS4X               | 1.94E-20 | 0.58743067 | 0.915 | 0.933 | 6.87E-16 | Treg_lung |
| RPL5                | 2.15E-20 | 0.55641772 | 0.907 | 0.939 | 7.60E-16 | Treg_lung |
| EEF1A1              | 4.20E-20 | 0.59812955 | 0.881 | 0.896 | 1.49E-15 | Treg_lung |
| S100A10             | 5.72E-20 | 1.3845954  | 0.643 | 0.629 | 2.03E-15 | Treg_lung |
| TIGIT               | 6.17E-20 | 1.88268361 | 0.357 | 0.19  | 2.19E-15 | Treg_lung |
| ENSMMUG000000001210 | 1.99E-19 | 0.76920321 | 0.77  | 0.785 | 7.04E-15 | Treg_lung |
| CORO1A              | 5.51E-19 | 1.12203431 | 0.648 | 0.68  | 1.95E-14 | Treg_lung |
| GPR171              | 5.71E-19 | 2.73434368 | 0.27  | 0.13  | 2.02E-14 | Treg_lung |
| GCN1                | 1.02E-18 | 0.54811781 | 0.881 | 0.904 | 3.62E-14 | Treg_lung |
| COX7C               | 2.90E-18 | 1.01958511 | 0.677 | 0.683 | 1.03E-13 | Treg_lung |
| COMMD6              | 6.31E-18 | 1.07166689 | 0.669 | 0.689 | 2.24E-13 | Treg_lung |
| ATP5MPL             | 7.27E-18 | 1.27553913 | 0.59  | 0.569 | 2.58E-13 | Treg_lung |
| OST4                | 1.81E-17 | 1.40559159 | 0.54  | 0.502 | 6.40E-13 | Treg_lung |
| JPT1                | 2.13E-17 | 1.10489721 | 0.619 | 0.646 | 7.54E-13 | Treg_lung |
| EIF3K               | 2.44E-17 | 0.79815548 | 0.722 | 0.764 | 8.66E-13 | Treg_lung |
| TAGLN2              | 4.87E-17 | 1.54457563 | 0.563 | 0.523 | 1.72E-12 | Treg_lung |
| RPL6                | 1.96E-16 | 0.44482201 | 0.929 | 0.929 | 6.93E-12 | Treg_lung |
| NME2                | 3.91E-16 | 0.73561285 | 0.775 | 0.814 | 1.39E-11 | Treg_lung |
| ISG20               | 4.14E-16 | 1.69354726 | 0.495 | 0.416 | 1.47E-11 | Treg_lung |

|                     |          |            |       |       |          |           |
|---------------------|----------|------------|-------|-------|----------|-----------|
| ENSMMUG00000012140  | 4.82E-16 | 0.52157061 | 0.878 | 0.918 | 1.71E-11 | Treg_lung |
| MYL6                | 6.07E-16 | 1.27341565 | 0.582 | 0.587 | 2.15E-11 | Treg_lung |
| ENSMMUG000000064139 | 7.13E-16 | 1.04238026 | 0.693 | 0.759 | 2.53E-11 | Treg_lung |
| GAPDH               | 7.96E-16 | 1.13386191 | 0.624 | 0.595 | 2.82E-11 | Treg_lung |
| TGFBR2              | 9.58E-16 | 0.14583896 | 0.212 | 0.521 | 3.39E-11 | Treg_lung |
| ENSMMUG000000019505 | 1.39E-15 | 1.28378674 | 0.585 | 0.588 | 4.94E-11 | Treg_lung |
| LDHA                | 1.65E-15 | 1.71824568 | 0.429 | 0.323 | 5.84E-11 | Treg_lung |
| COX5B               | 3.62E-15 | 1.5381283  | 0.468 | 0.4   | 1.28E-10 | Treg_lung |
| ENSMMUG000000049722 | 3.79E-15 | 1.82843445 | 0.389 | 0.278 | 1.34E-10 | Treg_lung |
| ENSMMUG000000030408 | 3.86E-15 | 1.43601066 | 0.495 | 0.445 | 1.37E-10 | Treg_lung |
| RDH5                | 6.69E-14 | 1.50100539 | 0.45  | 0.379 | 2.37E-09 | Treg_lung |
| ENSMMUG000000022489 | 8.89E-14 | 1.13650771 | 0.593 | 0.621 | 3.15E-09 | Treg_lung |
| ROBO2               | 2.69E-13 | 0.99545436 | 0.635 | 0.659 | 9.53E-09 | Treg_lung |
| ATP6V1G1            | 3.01E-13 | 1.086561   | 0.598 | 0.636 | 1.07E-08 | Treg_lung |
| CD52                | 3.31E-13 | 0.57081207 | 0.828 | 0.858 | 1.17E-08 | Treg_lung |
| CLEC2B              | 6.33E-13 | 1.67916671 | 0.429 | 0.342 | 2.24E-08 | Treg_lung |
| ARPC3               | 6.48E-13 | 0.9457362  | 0.608 | 0.648 | 2.30E-08 | Treg_lung |
| ENSMMUG000000001458 | 1.20E-12 | 0.89366776 | 0.656 | 0.713 | 4.26E-08 | Treg_lung |
| EEF1D               | 1.28E-12 | 0.75404488 | 0.69  | 0.749 | 4.53E-08 | Treg_lung |
| ENSMMUG000000044585 | 5.31E-12 | 1.40216434 | 0.481 | 0.457 | 1.88E-07 | Treg_lung |
| ENSMMUG000000007657 | 6.80E-12 | 1.12889652 | 0.532 | 0.528 | 2.41E-07 | Treg_lung |
| HCST                | 6.82E-12 | 1.65125115 | 0.452 | 0.398 | 2.42E-07 | Treg_lung |
| IL2RA               | 7.26E-12 | 1.3646848  | 0.466 | 0.381 | 2.57E-07 | Treg_lung |
| PICALM              | 1.05E-11 | 0.13004109 | 0.341 | 0.659 | 3.71E-07 | Treg_lung |
| ENSMMUG000000016305 | 2.36E-11 | 1.27729725 | 0.508 | 0.496 | 8.37E-07 | Treg_lung |
| CUTA                | 3.50E-11 | 1.49316392 | 0.458 | 0.428 | 1.24E-06 | Treg_lung |
| ENSMMUG000000053146 | 4.99E-11 | 1.55892869 | 0.431 | 0.377 | 1.77E-06 | Treg_lung |
| ENSMMUG000000063637 | 5.44E-11 | 0.63740201 | 0.759 | 0.796 | 1.93E-06 | Treg_lung |
| GSTP1               | 1.30E-10 | 1.43461968 | 0.468 | 0.445 | 4.60E-06 | Treg_lung |
| SNX25               | 1.64E-10 | 0.26267431 | 0.106 | 0.282 | 5.80E-06 | Treg_lung |
| HNRNPDL             | 2.44E-10 | 0.95211936 | 0.601 | 0.668 | 8.65E-06 | Treg_lung |
| SEM1                | 2.63E-10 | 1.4360325  | 0.413 | 0.351 | 9.32E-06 | Treg_lung |
| H2AFZ               | 4.27E-10 | 1.51412552 | 0.421 | 0.367 | 1.51E-05 | Treg_lung |

|                    |          |            |       |       |            |           |
|--------------------|----------|------------|-------|-------|------------|-----------|
| NDUFA1             | 6.40E-10 | 1.23447336 | 0.484 | 0.489 | 2.27E-05   | Treg_lung |
| ENSMMUG00000053735 | 9.71E-10 | 1.26665167 | 0.46  | 0.436 | 3.44E-05   | Treg_lung |
| VAMP8              | 1.25E-09 | 1.55024482 | 0.381 | 0.321 | 4.42E-05   | Treg_lung |
| RPS4Y1             | 1.28E-09 | 0.76633814 | 0.608 | 0.555 | 4.53E-05   | Treg_lung |
| CHCHD2             | 1.63E-09 | 0.81786777 | 0.608 | 0.655 | 5.79E-05   | Treg_lung |
| RNF181             | 3.07E-09 | 1.30449286 | 0.455 | 0.432 | 0.00010862 | Treg_lung |
| SRGN               | 4.76E-09 | 0.60985017 | 0.749 | 0.806 | 0.00016874 | Treg_lung |
| SMDT1              | 5.11E-09 | 1.08139264 | 0.542 | 0.592 | 0.00018091 | Treg_lung |
| MRI1               | 8.90E-09 | 1.26345587 | 0.481 | 0.496 | 0.00031521 | Treg_lung |
| ENSMMUG00000006463 | 9.59E-09 | 0.73833664 | 0.611 | 0.663 | 0.00033978 | Treg_lung |
| NDUFB2             | 1.00E-08 | 1.10514567 | 0.492 | 0.501 | 0.00035443 | Treg_lung |
| COX6C              | 1.54E-08 | 0.99327999 | 0.574 | 0.64  | 0.00054734 | Treg_lung |
| CD2                | 1.65E-08 | 0.97491655 | 0.495 | 0.49  | 0.00058606 | Treg_lung |
| COX7B              | 2.15E-08 | 1.18377598 | 0.458 | 0.456 | 0.00076048 | Treg_lung |
| GABARAPL2          | 2.59E-08 | 1.3328047  | 0.423 | 0.389 | 0.0009164  | Treg_lung |
| COX17              | 4.52E-08 | 1.7424942  | 0.302 | 0.228 | 0.00159998 | Treg_lung |
| LSM7               | 4.76E-08 | 1.36233348 | 0.407 | 0.377 | 0.00168529 | Treg_lung |
| KRTCAP2            | 5.15E-08 | 1.06743897 | 0.532 | 0.554 | 0.00182338 | Treg_lung |
| EDEM1              | 7.52E-08 | 0.1851138  | 0.153 | 0.324 | 0.00266292 | Treg_lung |
| STMN1              | 8.38E-08 | 1.91816176 | 0.328 | 0.264 | 0.00296898 | Treg_lung |
| COX6B1             | 9.04E-08 | 1.72129509 | 0.315 | 0.251 | 0.00320254 | Treg_lung |
| NSD3               | 1.28E-07 | 0.2308666  | 0.304 | 0.569 | 0.00451938 | Treg_lung |
| NCK2               | 1.45E-07 | 0.20266374 | 0.167 | 0.345 | 0.00512416 | Treg_lung |
| SUB1               | 2.03E-07 | 0.81415297 | 0.603 | 0.726 | 0.0071984  | Treg_lung |
| ENSMMUG00000038348 | 2.12E-07 | 1.39559417 | 0.503 | 0.511 | 0.00752578 | Treg_lung |
| RPL3               | 3.09E-07 | 0.26273022 | 0.923 | 0.939 | 0.01095752 | Treg_lung |
| ARL6IP5            | 4.39E-07 | 0.12223989 | 0.246 | 0.46  | 0.01554558 | Treg_lung |
| ENSMMUG00000038373 | 4.58E-07 | 0.18138809 | 0.22  | 0.421 | 0.01621528 | Treg_lung |
| OTUD5              | 4.59E-07 | 0.129192   | 0.204 | 0.393 | 0.01625002 | Treg_lung |
| BTF3               | 4.59E-07 | 0.8269309  | 0.598 | 0.662 | 0.016257   | Treg_lung |
| CLIC1              | 4.62E-07 | 1.4339028  | 0.381 | 0.341 | 0.01636206 | Treg_lung |
| PBXIP1             | 5.54E-07 | 0.16612981 | 0.209 | 0.399 | 0.01961465 | Treg_lung |
| CPNE1              | 5.85E-07 | 0.1897024  | 0.19  | 0.368 | 0.02072283 | Treg_lung |

|                    |          |            |       |       |            |           |
|--------------------|----------|------------|-------|-------|------------|-----------|
| ENSMMUG00000052747 | 5.90E-07 | 1.14319537 | 0.524 | 0.58  | 0.02092125 | Treg_lung |
| PPP1R16B           | 7.15E-07 | 0.24020734 | 0.214 | 0.399 | 0.02532399 | Treg_lung |
| EIF3D              | 7.26E-07 | 0.11960013 | 0.188 | 0.366 | 0.02571517 | Treg_lung |
| PDE4D              | 8.76E-07 | 0.26607953 | 0.172 | 0.336 | 0.0310253  | Treg_lung |
| CCR7               | 8.95E-07 | 2.08465191 | 0.312 | 0.259 | 0.03170673 | Treg_lung |
| GNB2               | 9.29E-07 | 0.14401438 | 0.116 | 0.252 | 0.03293165 | Treg_lung |
| ENSMMUG00000014947 | 1.01E-06 | 0.15912311 | 0.14  | 0.288 | 0.03573989 | Treg_lung |
| B2M                | 1.80E-06 | 0.22014474 | 0.952 | 0.975 | 0.06364974 | Treg_lung |
| TNFRSF1B           | 1.84E-06 | 1.46789484 | 0.325 | 0.268 | 0.06532169 | Treg_lung |
| SACM1L             | 2.18E-06 | 0.10975111 | 0.146 | 0.288 | 0.07725781 | Treg_lung |
| OAZ1               | 2.32E-06 | 1.55845002 | 0.323 | 0.276 | 0.08214774 | Treg_lung |
| ENSMMUG00000065089 | 2.69E-06 | 0.11076207 | 0.127 | 0.259 | 0.09516897 | Treg_lung |
| ARHGDIB            | 2.81E-06 | 0.4453335  | 0.754 | 0.856 | 0.09967276 | Treg_lung |
| TAF9               | 3.14E-06 | 0.36336419 | 0.151 | 0.299 | 0.11123072 | Treg_lung |
| SLC2A3             | 3.59E-06 | 1.13724375 | 0.444 | 0.437 | 0.12727571 | Treg_lung |
| GHITM              | 3.73E-06 | 0.29668226 | 0.19  | 0.362 | 0.13203242 | Treg_lung |
| ARHGAP45           | 3.98E-06 | 0.10682697 | 0.198 | 0.365 | 0.14096164 | Treg_lung |
| TBC1D10C           | 4.27E-06 | 0.12669809 | 0.167 | 0.317 | 0.15135391 | Treg_lung |
| CCDC59             | 4.61E-06 | 0.11170687 | 0.143 | 0.28  | 0.16339812 | Treg_lung |
| ICOS               | 4.93E-06 | 0.72285215 | 0.587 | 0.611 | 0.17476501 | Treg_lung |
| FLI1               | 5.03E-06 | 0.18687947 | 0.169 | 0.319 | 0.17830967 | Treg_lung |
| H1-4               | 5.08E-06 | 0.13627254 | 0.127 | 0.256 | 0.18007343 | Treg_lung |
| ENSMMUG00000000983 | 5.61E-06 | 1.18233455 | 0.426 | 0.424 | 0.19872207 | Treg_lung |
| MALT1              | 5.73E-06 | 0.82394519 | 0.254 | 0.47  | 0.20288497 | Treg_lung |
| ENSMMUG00000016898 | 6.55E-06 | 0.1457692  | 0.143 | 0.278 | 0.2320865  | Treg_lung |
| CFL1               | 6.63E-06 | 0.70017822 | 0.606 | 0.692 | 0.23482565 | Treg_lung |
| ARHGAP30           | 6.71E-06 | 0.22943286 | 0.175 | 0.331 | 0.23765255 | Treg_lung |
| NPM1               | 7.19E-06 | 0.48739079 | 0.669 | 0.787 | 0.25465066 | Treg_lung |
| ARAP2              | 7.39E-06 | 0.55805834 | 0.22  | 0.395 | 0.26190946 | Treg_lung |
| URGCP              | 8.31E-06 | 0.18910858 | 0.156 | 0.298 | 0.29448538 | Treg_lung |
| ENSMMUG00000047481 | 8.39E-06 | 1.21723275 | 0.429 | 0.451 | 0.29713287 | Treg_lung |
| NDUFA4             | 9.69E-06 | 0.99200096 | 0.474 | 0.521 | 0.34338238 | Treg_lung |
| OSBPL2             | 1.02E-05 | 0.32348448 | 0.148 | 0.29  | 0.36163418 | Treg_lung |

|                    |          |            |       |       |            |           |
|--------------------|----------|------------|-------|-------|------------|-----------|
| BCAS2              | 1.14E-05 | 0.18282548 | 0.188 | 0.348 | 0.40246357 | Treg_lung |
| WDR83OS            | 1.19E-05 | 0.76337703 | 0.532 | 0.609 | 0.42069394 | Treg_lung |
| ATP5MC2            | 1.20E-05 | 1.12157334 | 0.46  | 0.502 | 0.42631306 | Treg_lung |
| EIF3L              | 1.24E-05 | 0.15740488 | 0.302 | 0.538 | 0.43800513 | Treg_lung |
| MYG1               | 1.26E-05 | 1.73419027 | 0.299 | 0.254 | 0.44804197 | Treg_lung |
| AMDHD1             | 1.30E-05 | 0.16151367 | 0.196 | 0.359 | 0.45910432 | Treg_lung |
| TCP11L2            | 1.36E-05 | 0.24290046 | 0.209 | 0.375 | 0.48124091 | Treg_lung |
| GIMAP7             | 1.38E-05 | 1.12896759 | 0.455 | 0.483 | 0.48980445 | Treg_lung |
| ITGB2              | 1.41E-05 | 0.20945707 | 0.164 | 0.311 | 0.49897698 | Treg_lung |
| SOX4               | 1.55E-05 | 0.5043037  | 0.32  | 0.533 | 0.54861626 | Treg_lung |
| ATF4               | 1.74E-05 | 0.31992074 | 0.209 | 0.381 | 0.61737849 | Treg_lung |
| CLDND1             | 1.81E-05 | 1.52860101 | 0.36  | 0.326 | 0.63988508 | Treg_lung |
| RPL37A             | 1.82E-05 | 0.42884477 | 0.889 | 0.928 | 0.64557079 | Treg_lung |
| VCP                | 1.83E-05 | 0.1557378  | 0.135 | 0.262 | 0.6486218  | Treg_lung |
| ENSMMUG00000058325 | 1.85E-05 | 0.48141829 | 0.772 | 0.848 | 0.65505258 | Treg_lung |
| NDUFB11            | 1.91E-05 | 1.58189387 | 0.299 | 0.254 | 0.67602863 | Treg_lung |
| RPS16              | 1.91E-05 | 0.20623375 | 0.929 | 0.931 | 0.6780525  | Treg_lung |
| ENSMMUG00000060439 | 2.03E-05 | 0.28849931 | 0.135 | 0.256 | 0.71887887 | Treg_lung |
| TMCO1              | 2.22E-05 | 0.16354454 | 0.13  | 0.251 | 0.7878403  | Treg_lung |
| RESF1              | 2.54E-05 | 0.16289485 | 0.14  | 0.266 | 0.90155326 | Treg_lung |
| H2AFJ              | 2.80E-05 | 1.3915991  | 0.373 | 0.363 | 0.99372099 | Treg_lung |
| ENSMMUG00000058581 | 2.97E-05 | 1.80155927 | 0.331 | 0.29  | 1          | Treg_lung |
| PTPN22             | 3.12E-05 | 0.25438529 | 0.148 | 0.275 | 1          | Treg_lung |
| REEP5              | 3.29E-05 | 0.16415188 | 0.167 | 0.3   | 1          | Treg_lung |
| ADSS2              | 3.40E-05 | 0.18613397 | 0.167 | 0.308 | 1          | Treg_lung |
| H1-2               | 3.48E-05 | 0.18243438 | 0.146 | 0.271 | 1          | Treg_lung |
| SLC25A43           | 3.72E-05 | 1.03680967 | 0.474 | 0.513 | 1          | Treg_lung |
| NECAP2             | 3.93E-05 | 0.29988913 | 0.156 | 0.289 | 1          | Treg_lung |
| ENSMMUG00000055825 | 4.08E-05 | 0.2051777  | 0.146 | 0.272 | 1          | Treg_lung |
| TMEM50A            | 4.18E-05 | 0.22465144 | 0.238 | 0.421 | 1          | Treg_lung |
| RBMX               | 4.31E-05 | 0.18582254 | 0.307 | 0.523 | 1          | Treg_lung |
| AMD1               | 4.45E-05 | 0.27990562 | 0.238 | 0.423 | 1          | Treg_lung |
| NCOA7              | 4.66E-05 | 0.12924065 | 0.249 | 0.414 | 1          | Treg_lung |



|                    |            |            |       |       |             |
|--------------------|------------|------------|-------|-------|-------------|
| SMARCE1            | 5.24E-05   | 0.21332748 | 0.169 | 0.304 | 1 Treg_lung |
| ENSMMUG00000061630 | 5.80E-05   | 0.36875774 | 0.198 | 0.354 | 1 Treg_lung |
| ACTG1              | 5.93E-05   | 0.64454957 | 0.746 | 0.814 | 1 Treg_lung |
| TOPORS             | 6.51E-05   | 0.27673001 | 0.217 | 0.38  | 1 Treg_lung |
| GLIPR1L2           | 6.54E-05   | 0.21370933 | 0.183 | 0.324 | 1 Treg_lung |
| ENSMMUG00000012419 | 7.09E-05   | 0.97082936 | 0.444 | 0.49  | 1 Treg_lung |
| ABCF1              | 7.26E-05   | 0.34022382 | 0.146 | 0.27  | 1 Treg_lung |
| CASP12             | 7.46E-05   | 0.12858105 | 0.183 | 0.322 | 1 Treg_lung |
| NDUFB9             | 7.83E-05   | 1.33137833 | 0.381 | 0.387 | 1 Treg_lung |
| IK                 | 7.90E-05   | 0.16371679 | 0.241 | 0.413 | 1 Treg_lung |
| PDLIM2             | 7.91E-05   | 0.34550018 | 0.14  | 0.26  | 1 Treg_lung |
| QARS1              | 8.05E-05   | 0.35425313 | 0.135 | 0.25  | 1 Treg_lung |
| BCL2A1             | 8.07E-05   | 1.50202448 | 0.272 | 0.224 | 1 Treg_lung |
| CCT5               | 8.18E-05   | 0.18107274 | 0.225 | 0.379 | 1 Treg_lung |
| MOB2               | 8.26E-05   | 0.29234253 | 0.225 | 0.391 | 1 Treg_lung |
| PSMB1              | 8.32E-05   | 1.04772455 | 0.442 | 0.478 | 1 Treg_lung |
| ZNHIT1             | 9.18E-05   | 1.37558417 | 0.331 | 0.311 | 1 Treg_lung |
| SYTL3              | 0.00010115 | 1.08552898 | 0.405 | 0.392 | 1 Treg_lung |
| NDUFS4             | 0.00010234 | 0.10759794 | 0.185 | 0.321 | 1 Treg_lung |
| PPP4C              | 0.00010811 | 0.3120976  | 0.151 | 0.274 | 1 Treg_lung |
| SEC11A             | 0.0001108  | 0.19539408 | 0.212 | 0.365 | 1 Treg_lung |
| RGS10              | 0.00011529 | 0.23193585 | 0.254 | 0.423 | 1 Treg_lung |
| CYBA               | 0.0001291  | 0.31860128 | 0.206 | 0.358 | 1 Treg_lung |
| ND4L               | 0.00013248 | 1.52301034 | 0.299 | 0.264 | 1 Treg_lung |
| ENSMMUG00000051392 | 0.00013269 | 0.29498879 | 0.265 | 0.458 | 1 Treg_lung |
| POC5               | 0.00015006 | 0.18471593 | 0.217 | 0.375 | 1 Treg_lung |
| SUCLG1             | 0.00016088 | 0.39538087 | 0.19  | 0.335 | 1 Treg_lung |
| FCMR               | 0.00018563 | 0.16967777 | 0.267 | 0.431 | 1 Treg_lung |
| BIRC2              | 0.00018774 | 0.30967339 | 0.161 | 0.285 | 1 Treg_lung |
| CYCS               | 0.00022009 | 0.42577923 | 0.19  | 0.333 | 1 Treg_lung |
| IGBP1              | 0.00022821 | 0.25024633 | 0.172 | 0.3   | 1 Treg_lung |
| SNRPB2             | 0.00023951 | 0.2362139  | 0.201 | 0.348 | 1 Treg_lung |
| ENSMMUG00000015270 | 0.00025151 | 0.18296109 | 0.947 | 0.961 | 1 Treg_lung |

|                    |            |            |       |       |             |
|--------------------|------------|------------|-------|-------|-------------|
| NDUFB4             | 0.00025224 | 1.11606886 | 0.418 | 0.457 | 1 Treg_lung |
| ENSMMUG00000054038 | 0.00025736 | 0.88154714 | 0.495 | 0.58  | 1 Treg_lung |
| EIF4A1             | 0.00026343 | 0.24251226 | 0.209 | 0.357 | 1 Treg_lung |
| SPCS1              | 0.00028445 | 0.30041381 | 0.22  | 0.371 | 1 Treg_lung |
| IL10RA             | 0.0003183  | 1.49973352 | 0.294 | 0.264 | 1 Treg_lung |
| ENSMMUG00000006206 | 0.00032123 | 0.22114843 | 0.222 | 0.368 | 1 Treg_lung |
| HDAC1              | 0.00032303 | 0.182781   | 0.177 | 0.299 | 1 Treg_lung |
| TUBA1A             | 0.00033743 | 0.22997061 | 0.336 | 0.549 | 1 Treg_lung |
| SYF2               | 0.00034381 | 0.20788625 | 0.283 | 0.47  | 1 Treg_lung |
| TXNL1              | 0.00039205 | 0.19011298 | 0.146 | 0.25  | 1 Treg_lung |
| C11H12orf57        | 0.0003956  | 0.83950286 | 0.495 | 0.553 | 1 Treg_lung |
| IL4R               | 0.00041218 | 0.37283739 | 0.156 | 0.268 | 1 Treg_lung |
| ENSMMUG00000017466 | 0.00041844 | 0.9272066  | 0.426 | 0.45  | 1 Treg_lung |
| NDUFA2             | 0.00043921 | 1.29849015 | 0.362 | 0.377 | 1 Treg_lung |
| TESPA1             | 0.00045162 | 0.42624484 | 0.19  | 0.323 | 1 Treg_lung |
| TKT                | 0.00045672 | 0.25682889 | 0.175 | 0.296 | 1 Treg_lung |
| UBE2I              | 0.00048884 | 0.24902936 | 0.214 | 0.355 | 1 Treg_lung |
| PSME1              | 0.00049399 | 0.85206146 | 0.481 | 0.549 | 1 Treg_lung |
| CNBP               | 0.00051701 | 0.15254065 | 0.333 | 0.547 | 1 Treg_lung |
| RBBP4              | 0.0005381  | 0.56602608 | 0.196 | 0.326 | 1 Treg_lung |
| EIF3J              | 0.00055832 | 0.34686421 | 0.233 | 0.381 | 1 Treg_lung |
| PYHIN1             | 0.00057831 | 0.47449143 | 0.175 | 0.3   | 1 Treg_lung |
| PSMB4              | 0.00060933 | 0.27247912 | 0.188 | 0.314 | 1 Treg_lung |
| TOMM7              | 0.00063423 | 0.3825714  | 0.704 | 0.797 | 1 Treg_lung |
| ATOX1              | 0.000714   | 1.3841164  | 0.323 | 0.308 | 1 Treg_lung |
| ST13               | 0.00071518 | 0.39055626 | 0.251 | 0.41  | 1 Treg_lung |
| DNAJA2             | 0.00073161 | 0.39542874 | 0.151 | 0.259 | 1 Treg_lung |
| ATP5MC3            | 0.00074815 | 0.97778595 | 0.413 | 0.461 | 1 Treg_lung |
| C16H17orf49        | 0.00075196 | 1.1459779  | 0.386 | 0.409 | 1 Treg_lung |
| TSPO               | 0.00076935 | 1.2093821  | 0.333 | 0.316 | 1 Treg_lung |
| CWC15              | 0.00079237 | 0.32371897 | 0.275 | 0.449 | 1 Treg_lung |
| UBE2L3             | 0.00086418 | 0.29009857 | 0.228 | 0.371 | 1 Treg_lung |
| PSMB6              | 0.00091989 | 1.33637548 | 0.31  | 0.299 | 1 Treg_lung |

|                     |            |            |       |       |             |
|---------------------|------------|------------|-------|-------|-------------|
| PTP4A1              | 0.00097063 | 0.45120466 | 0.209 | 0.349 | 1 Treg_lung |
| ENSMMUG000000031947 | 0.00110712 | 0.6899773  | 0.519 | 0.623 | 1 Treg_lung |
| UQCRQ               | 0.00117065 | 1.06142384 | 0.41  | 0.451 | 1 Treg_lung |
| CAP1                | 0.00119334 | 0.28829128 | 0.212 | 0.343 | 1 Treg_lung |
| SSR4                | 0.00135243 | 0.78310648 | 0.468 | 0.536 | 1 Treg_lung |
| N4BP2L2             | 0.0013716  | 0.24829372 | 0.254 | 0.401 | 1 Treg_lung |
| PSMA2               | 0.00141731 | 1.02741043 | 0.41  | 0.449 | 1 Treg_lung |
| TMEM258             | 0.00142141 | 1.23706069 | 0.386 | 0.426 | 1 Treg_lung |
| DHX36               | 0.00147268 | 0.50946314 | 0.246 | 0.401 | 1 Treg_lung |
| RGS1                | 0.00150864 | 1.18151324 | 0.407 | 0.444 | 1 Treg_lung |
| ARF5                | 0.00151323 | 0.37512754 | 0.222 | 0.361 | 1 Treg_lung |
| ANXA2               | 0.00155929 | 0.96919895 | 0.421 | 0.461 | 1 Treg_lung |
| CDC37               | 0.00160007 | 0.48657822 | 0.169 | 0.283 | 1 Treg_lung |
| PSMA1               | 0.00161504 | 0.38352799 | 0.257 | 0.414 | 1 Treg_lung |
| SCP2                | 0.0016939  | 0.37324458 | 0.206 | 0.331 | 1 Treg_lung |
| PSMA6               | 0.00186699 | 0.41218589 | 0.18  | 0.293 | 1 Treg_lung |
| CALCOCO2            | 0.00207996 | 0.39968817 | 0.198 | 0.32  | 1 Treg_lung |
| TOMM22              | 0.00208822 | 0.36335985 | 0.153 | 0.254 | 1 Treg_lung |
| WDR13               | 0.00239212 | 0.21146282 | 0.333 | 0.527 | 1 Treg_lung |
| MICOS13             | 0.00250022 | 1.42316506 | 0.286 | 0.269 | 1 Treg_lung |
| SMNDC1              | 0.00251797 | 0.37407183 | 0.206 | 0.328 | 1 Treg_lung |
| NXPE3               | 0.00252013 | 0.17804056 | 0.339 | 0.519 | 1 Treg_lung |
| HNRNPF              | 0.0025607  | 0.32551487 | 0.291 | 0.46  | 1 Treg_lung |
| PDE4B               | 0.00265481 | 0.29740274 | 0.302 | 0.459 | 1 Treg_lung |
| ENSMMUG000000006499 | 0.0028662  | 0.38123035 | 0.23  | 0.361 | 1 Treg_lung |
| SHISA5              | 0.00288215 | 0.48752713 | 0.201 | 0.322 | 1 Treg_lung |
| CD3G                | 0.00291875 | 0.35835882 | 0.233 | 0.368 | 1 Treg_lung |
| UQCRH               | 0.00299343 | 0.83637539 | 0.431 | 0.487 | 1 Treg_lung |
| RPL10A              | 0.00303296 | 0.18972043 | 0.907 | 0.914 | 1 Treg_lung |
| PSMA5               | 0.00306761 | 0.25660779 | 0.198 | 0.314 | 1 Treg_lung |
| CSNK2B              | 0.0031044  | 0.56438687 | 0.172 | 0.277 | 1 Treg_lung |
| IL7R                | 0.00332494 | 0.21759308 | 0.339 | 0.495 | 1 Treg_lung |
| TBC1D24             | 0.00337084 | 0.30955954 | 0.267 | 0.424 | 1 Treg_lung |

|                   |            |            |       |       |             |
|-------------------|------------|------------|-------|-------|-------------|
| SYNE3             | 0.00346254 | 0.42500581 | 0.175 | 0.28  | 1 Treg_lung |
| SEC61B            | 0.00373292 | 0.88592827 | 0.415 | 0.476 | 1 Treg_lung |
| SLC38A2           | 0.00375713 | 1.25140984 | 0.333 | 0.344 | 1 Treg_lung |
| ND3               | 0.00384841 | 0.22275386 | 0.397 | 0.599 | 1 Treg_lung |
| TAPBPL            | 0.00390576 | 1.31652957 | 0.354 | 0.375 | 1 Treg_lung |
| MIC1              | 0.00396325 | 0.93743783 | 0.452 | 0.519 | 1 Treg_lung |
| SEPTIN2           | 0.00400654 | 0.57538063 | 0.161 | 0.258 | 1 Treg_lung |
| SELENOK           | 0.004162   | 1.53290536 | 0.275 | 0.262 | 1 Treg_lung |
| IKZF3             | 0.00417279 | 0.38376317 | 0.243 | 0.376 | 1 Treg_lung |
| EIF3I             | 0.0041947  | 0.42250234 | 0.18  | 0.287 | 1 Treg_lung |
| COPS6             | 0.00421661 | 0.5445672  | 0.172 | 0.278 | 1 Treg_lung |
| ITGB1             | 0.00447281 | 1.03819284 | 0.392 | 0.401 | 1 Treg_lung |
| ARF1              | 0.00490325 | 0.25466219 | 0.333 | 0.528 | 1 Treg_lung |
| ENSMUG00000016009 | 0.00528927 | 0.37408033 | 0.267 | 0.415 | 1 Treg_lung |
| DBI               | 0.00536386 | 1.08017528 | 0.365 | 0.389 | 1 Treg_lung |
| LSP1              | 0.00539232 | 1.01001344 | 0.415 | 0.476 | 1 Treg_lung |
| PSMB8             | 0.00553818 | 0.98154144 | 0.418 | 0.489 | 1 Treg_lung |
| RILPL2            | 0.00569481 | 0.17108734 | 0.185 | 0.285 | 1 Treg_lung |
| RTKN2             | 0.00577608 | 1.24566293 | 0.325 | 0.327 | 1 Treg_lung |
| ATG12             | 0.00596632 | 0.41243664 | 0.27  | 0.426 | 1 Treg_lung |
| EIF5B             | 0.00606544 | 0.35086425 | 0.204 | 0.308 | 1 Treg_lung |
| CCT8              | 0.00607851 | 0.31173796 | 0.217 | 0.34  | 1 Treg_lung |
| HMGB2             | 0.00610063 | 0.42501326 | 0.228 | 0.348 | 1 Treg_lung |
| SRSF7             | 0.00643035 | 0.24829722 | 0.373 | 0.576 | 1 Treg_lung |
| RBIS              | 0.00682362 | 0.46713026 | 0.249 | 0.391 | 1 Treg_lung |
| HSPD1             | 0.00713165 | 0.39048727 | 0.188 | 0.288 | 1 Treg_lung |
| C11H12orf45       | 0.00762388 | 0.45098846 | 0.19  | 0.294 | 1 Treg_lung |
| MDH1              | 0.0078586  | 0.2980968  | 0.22  | 0.336 | 1 Treg_lung |
| NSA2              | 0.00894413 | 0.82736618 | 0.481 | 0.583 | 1 Treg_lung |
| WAS               | 0.00965731 | 0.65890864 | 0.183 | 0.287 | 1 Treg_lung |
| LIMD2             | 0.01027782 | 0.82702728 | 0.481 | 0.594 | 1 Treg_lung |
| GLRX3             | 0.01058658 | 0.64898467 | 0.193 | 0.3   | 1 Treg_lung |
| TPT1              | 0.01176095 | 0.15075662 | 0.955 | 0.963 | 1 Treg_lung |

|                    |            |            |       |       |             |
|--------------------|------------|------------|-------|-------|-------------|
| ENSMMUG00000047632 | 0.01198891 | 0.11417461 | 0.296 | 0.41  | 1 Treg_lung |
| MRPL34             | 0.01258583 | 1.31545909 | 0.259 | 0.249 | 1 Treg_lung |
| SERBP1             | 0.01308972 | 0.21714995 | 0.354 | 0.533 | 1 Treg_lung |
| CAPZB              | 0.01324506 | 0.32911184 | 0.344 | 0.539 | 1 Treg_lung |
| ISCA1              | 0.01329052 | 0.49720467 | 0.201 | 0.301 | 1 Treg_lung |
| POLR1D             | 0.01422676 | 0.49456176 | 0.288 | 0.445 | 1 Treg_lung |
| ENSMMUG00000053392 | 0.01431905 | 0.43133987 | 0.228 | 0.34  | 1 Treg_lung |
| ENSMMUG00000061824 | 0.01511259 | 0.31308074 | 0.714 | 0.825 | 1 Treg_lung |
| ZNF706             | 0.01534167 | 0.52683918 | 0.241 | 0.363 | 1 Treg_lung |
| MFNG               | 0.01608463 | 0.61668675 | 0.185 | 0.281 | 1 Treg_lung |
| EIF1B              | 0.01719274 | 0.70977384 | 0.196 | 0.298 | 1 Treg_lung |
| HSPA8              | 0.01800149 | 0.15082071 | 0.405 | 0.59  | 1 Treg_lung |
| GNG5               | 0.01919792 | 0.94216787 | 0.421 | 0.495 | 1 Treg_lung |
| EIF4A3             | 0.01925705 | 0.51196277 | 0.183 | 0.275 | 1 Treg_lung |
| S100A6             | 0.02061549 | 1.38144838 | 0.347 | 0.376 | 1 Treg_lung |
| CLEC2D             | 0.02119145 | 0.21434129 | 0.37  | 0.54  | 1 Treg_lung |
| ENSMMUG00000016665 | 0.02468195 | 1.10901137 | 0.347 | 0.39  | 1 Treg_lung |
| LCK                | 0.02500423 | 0.23510851 | 0.378 | 0.573 | 1 Treg_lung |
| ENSMMUG00000005880 | 0.02521382 | 0.79892731 | 0.228 | 0.344 | 1 Treg_lung |
| BST2               | 0.02834029 | 1.08713634 | 0.291 | 0.295 | 1 Treg_lung |
| TMEM167A           | 0.02840958 | 0.57382471 | 0.18  | 0.267 | 1 Treg_lung |
| ENSMMUG00000016894 | 0.02860285 | 0.87005044 | 0.429 | 0.519 | 1 Treg_lung |
| TDG                | 0.02874821 | 0.74084187 | 0.198 | 0.294 | 1 Treg_lung |
| SSR2               | 0.03016973 | 0.83325662 | 0.405 | 0.484 | 1 Treg_lung |
| SPCS3              | 0.0307893  | 0.60454444 | 0.243 | 0.365 | 1 Treg_lung |
| C14H11orf58        | 0.03081029 | 0.85446087 | 0.196 | 0.294 | 1 Treg_lung |
| CTSS               | 0.03155944 | 0.50167356 | 0.183 | 0.267 | 1 Treg_lung |
| MRPS6              | 0.03165865 | 0.55489424 | 0.257 | 0.377 | 1 Treg_lung |
| RABAC1             | 0.03195459 | 1.31819005 | 0.262 | 0.258 | 1 Treg_lung |
| MRPL11             | 0.03222652 | 0.53461454 | 0.185 | 0.273 | 1 Treg_lung |
| SIRPG              | 0.0330269  | 0.49244126 | 0.193 | 0.283 | 1 Treg_lung |
| ENSMMUG00000012525 | 0.03305644 | 0.57474015 | 0.267 | 0.406 | 1 Treg_lung |
| HNRNPA1            | 0.03461727 | 0.31855491 | 0.384 | 0.571 | 1 Treg_lung |

|                    |            |            |       |       |             |
|--------------------|------------|------------|-------|-------|-------------|
| ENSMMUG00000014648 | 0.035025   | 0.48273638 | 0.542 | 0.661 | 1 Treg_lung |
| PSMB9              | 0.03546701 | 1.10386067 | 0.299 | 0.317 | 1 Treg_lung |
| RER1               | 0.03559753 | 0.53674984 | 0.193 | 0.281 | 1 Treg_lung |
| KIFBP              | 0.03620348 | 0.28623859 | 0.386 | 0.576 | 1 Treg_lung |
| ENY2               | 0.03874333 | 0.49032174 | 0.254 | 0.374 | 1 Treg_lung |
| SEC61G             | 0.0416706  | 0.9727349  | 0.378 | 0.455 | 1 Treg_lung |
| SNRPD1             | 0.04210114 | 0.53391954 | 0.188 | 0.271 | 1 Treg_lung |
| CAPG               | 0.04223535 | 0.97578082 | 0.378 | 0.437 | 1 Treg_lung |
| DYNLL1             | 0.04274698 | 1.05991631 | 0.288 | 0.294 | 1 Treg_lung |
| NDUFB8             | 0.0436964  | 1.08047743 | 0.323 | 0.357 | 1 Treg_lung |
| GTF2H5             | 0.04508445 | 0.98698865 | 0.328 | 0.355 | 1 Treg_lung |
| COX16              | 0.04653602 | 0.43449734 | 0.362 | 0.551 | 1 Treg_lung |
| GNAL               | 0.0467192  | 0.71752871 | 0.188 | 0.276 | 1 Treg_lung |
| BRK1               | 0.04956695 | 0.56838812 | 0.241 | 0.358 | 1 Treg_lung |
| BUD23              | 0.05048194 | 0.43157226 | 0.257 | 0.374 | 1 Treg_lung |
| ENSMMUG00000050829 | 0.05167403 | 0.87001337 | 0.429 | 0.521 | 1 Treg_lung |
| PPIB               | 0.05255287 | 0.71624513 | 0.415 | 0.49  | 1 Treg_lung |
| MIF                | 0.05453054 | 0.59134112 | 0.27  | 0.396 | 1 Treg_lung |
| MDH2               | 0.05534592 | 0.52482991 | 0.188 | 0.268 | 1 Treg_lung |
| SNRPN              | 0.05843772 | 0.71415543 | 0.177 | 0.258 | 1 Treg_lung |
| LLPH               | 0.05925073 | 1.16357905 | 0.267 | 0.275 | 1 Treg_lung |
| EIF3G              | 0.05980086 | 0.37340338 | 0.27  | 0.386 | 1 Treg_lung |
| ENSMMUG00000065362 | 0.06150116 | 0.28900954 | 0.987 | 0.997 | 1 Treg_lung |
| YWHAB              | 0.06393779 | 0.76487133 | 0.439 | 0.555 | 1 Treg_lung |
| PRDX6              | 0.06456538 | 1.16626781 | 0.357 | 0.413 | 1 Treg_lung |
| PSMB7              | 0.06630525 | 0.36091006 | 0.368 | 0.546 | 1 Treg_lung |
| MPC2               | 0.06812825 | 0.53661525 | 0.209 | 0.3   | 1 Treg_lung |
| PRDX1              | 0.06843075 | 1.26740435 | 0.265 | 0.273 | 1 Treg_lung |
| POMP               | 0.06888918 | 1.18071798 | 0.288 | 0.307 | 1 Treg_lung |
| LAMTOR4            | 0.07045528 | 0.74717834 | 0.22  | 0.314 | 1 Treg_lung |
| TBCC               | 0.07240835 | 0.56821479 | 0.201 | 0.289 | 1 Treg_lung |
| EDF1               | 0.07391572 | 1.10073318 | 0.325 | 0.363 | 1 Treg_lung |
| ICAM3              | 0.07476137 | 0.77107001 | 0.193 | 0.277 | 1 Treg_lung |

|                    |            |            |       |       |             |
|--------------------|------------|------------|-------|-------|-------------|
| FGFR10P2           | 0.07551524 | 0.63418125 | 0.272 | 0.4   | 1 Treg_lung |
| TUBB               | 0.07764593 | 0.4276482  | 0.272 | 0.386 | 1 Treg_lung |
| UCP2               | 0.0814256  | 1.09015868 | 0.325 | 0.369 | 1 Treg_lung |
| OSTC               | 0.08413597 | 0.64060834 | 0.206 | 0.295 | 1 Treg_lung |
| TXN                | 0.08458156 | 0.932954   | 0.32  | 0.351 | 1 Treg_lung |
| ENO1               | 0.08641572 | 0.76503721 | 0.444 | 0.556 | 1 Treg_lung |
| RBX1               | 0.08710468 | 1.01526545 | 0.296 | 0.323 | 1 Treg_lung |
| ERH                | 0.08841842 | 1.01547139 | 0.317 | 0.355 | 1 Treg_lung |
| TMEM14B            | 0.08956891 | 0.73314153 | 0.413 | 0.502 | 1 Treg_lung |
| ENSMMUG00000030465 | 0.09091279 | 0.38466985 | 0.323 | 0.46  | 1 Treg_lung |
| TINF2              | 0.09429629 | 0.90352178 | 0.362 | 0.43  | 1 Treg_lung |
| RTRAF              | 0.09575874 | 0.40891769 | 0.333 | 0.478 | 1 Treg_lung |
| ETS1               | 0.09722956 | 0.26886368 | 0.614 | 0.836 | 1 Treg_lung |
| DSTN               | 0.09849502 | 0.49256127 | 0.246 | 0.344 | 1 Treg_lung |
| RAC2               | 0.10397837 | 1.00369316 | 0.349 | 0.398 | 1 Treg_lung |
| ANP32A             | 0.10805428 | 0.78019462 | 0.241 | 0.343 | 1 Treg_lung |
| TPI1               | 0.10938461 | 0.9510885  | 0.304 | 0.336 | 1 Treg_lung |
| RPS27L             | 0.10994774 | 0.92516211 | 0.373 | 0.44  | 1 Treg_lung |
| TMEM59             | 0.11200754 | 0.51644836 | 0.304 | 0.44  | 1 Treg_lung |
| CD7                | 0.11509647 | 1.21148766 | 0.294 | 0.327 | 1 Treg_lung |
| ZNF483             | 0.11688351 | 0.50162195 | 0.489 | 0.6   | 1 Treg_lung |
| VDAC2              | 0.1181565  | 0.55635186 | 0.28  | 0.399 | 1 Treg_lung |
| IGFLR1             | 0.11838016 | 0.64706303 | 0.201 | 0.279 | 1 Treg_lung |
| ANKRD12            | 0.12028864 | 0.50551887 | 0.46  | 0.673 | 1 Treg_lung |
| SNRPD3             | 0.1224077  | 0.57394907 | 0.286 | 0.415 | 1 Treg_lung |
| ENSMMUG00000055026 | 0.12332375 | 0.58803752 | 0.228 | 0.316 | 1 Treg_lung |
| ENSMMUG00000057449 | 0.12336994 | 0.802478   | 0.183 | 0.252 | 1 Treg_lung |
| ENSMMUG00000053817 | 0.1262083  | 1.03807406 | 0.304 | 0.335 | 1 Treg_lung |
| YJEFN3             | 0.13157112 | 0.960626   | 0.317 | 0.368 | 1 Treg_lung |
| ARID5B             | 0.13188813 | 0.47450796 | 0.439 | 0.617 | 1 Treg_lung |
| ATP5IF1            | 0.14365706 | 1.02445456 | 0.339 | 0.401 | 1 Treg_lung |
| ENSMMUG00000055584 | 0.14785398 | 0.155185   | 0.563 | 0.779 | 1 Treg_lung |
| ENSMMUG00000018687 | 0.14904238 | 0.72578186 | 0.193 | 0.267 | 1 Treg_lung |

|                     |            |            |       |       |             |
|---------------------|------------|------------|-------|-------|-------------|
| PARK7               | 0.1502814  | 0.36037877 | 0.222 | 0.295 | 1 Treg_lung |
| MGST3               | 0.1505159  | 1.38832994 | 0.249 | 0.263 | 1 Treg_lung |
| ENSMMUG000000018740 | 0.15263495 | 0.77411079 | 0.183 | 0.25  | 1 Treg_lung |
| ENSMMUG000000029026 | 0.15541591 | 0.47831455 | 0.312 | 0.44  | 1 Treg_lung |
| BAZ1A               | 0.15672746 | 0.85881518 | 0.317 | 0.46  | 1 Treg_lung |
| PFDN5               | 0.15938357 | 1.00317978 | 0.291 | 0.325 | 1 Treg_lung |
| DUSP16              | 0.16294409 | 0.51986246 | 0.31  | 0.414 | 1 Treg_lung |
| FLNA                | 0.1675787  | 0.73293091 | 0.241 | 0.33  | 1 Treg_lung |
| MAMU-A              | 0.16797515 | 0.24334989 | 0.545 | 0.744 | 1 Treg_lung |
| SELL                | 0.16850839 | 0.36787494 | 0.389 | 0.524 | 1 Treg_lung |
| TMEM263             | 0.16864534 | 1.1904702  | 0.249 | 0.264 | 1 Treg_lung |
| ENSMMUG000000064692 | 0.16978446 | 0.16660724 | 0.503 | 0.658 | 1 Treg_lung |
| FNTB                | 0.1706021  | 0.64972791 | 0.265 | 0.369 | 1 Treg_lung |
| COPE                | 0.17218659 | 1.11698523 | 0.27  | 0.304 | 1 Treg_lung |
| C3H7orf50           | 0.17493945 | 0.496713   | 0.341 | 0.493 | 1 Treg_lung |
| RBM8A               | 0.17856185 | 1.00967199 | 0.304 | 0.341 | 1 Treg_lung |
| LCP1                | 0.17879727 | 0.33517686 | 0.418 | 0.595 | 1 Treg_lung |
| SRI                 | 0.17992788 | 1.01830555 | 0.275 | 0.3   | 1 Treg_lung |
| COX8A               | 0.18160809 | 1.13583516 | 0.315 | 0.375 | 1 Treg_lung |
| PSMA4               | 0.18568143 | 0.63750728 | 0.209 | 0.28  | 1 Treg_lung |
| CBX3                | 0.18769833 | 0.87496575 | 0.357 | 0.424 | 1 Treg_lung |
| GLIPR2              | 0.19935831 | 1.16758763 | 0.267 | 0.292 | 1 Treg_lung |
| PSME2               | 0.20194355 | 1.22463101 | 0.235 | 0.252 | 1 Treg_lung |
| DGKB                | 0.20911406 | 1.0793534  | 0.246 | 0.261 | 1 Treg_lung |
| CDKN1B              | 0.20966551 | 0.81936536 | 0.201 | 0.272 | 1 Treg_lung |
| ZFP36               | 0.21198493 | 0.14733996 | 0.492 | 0.638 | 1 Treg_lung |
| NCL                 | 0.21872594 | 0.4652871  | 0.503 | 0.641 | 1 Treg_lung |
| CFDP1               | 0.21980777 | 0.59289508 | 0.341 | 0.485 | 1 Treg_lung |
| JUND                | 0.23321537 | 0.43656496 | 0.434 | 0.613 | 1 Treg_lung |
| CD3E                | 0.24036248 | 0.50753325 | 0.368 | 0.527 | 1 Treg_lung |
| SEC62               | 0.24143218 | 0.88986032 | 0.373 | 0.454 | 1 Treg_lung |
| LPXN                | 0.24181824 | 0.92400343 | 0.217 | 0.287 | 1 Treg_lung |
| IL2RG               | 0.24185524 | 0.38288176 | 0.378 | 0.521 | 1 Treg_lung |



|                    |            |            |       |       |             |
|--------------------|------------|------------|-------|-------|-------------|
| EEF1B2             | 0.24467468 | 0.16190711 | 0.735 | 0.814 | 1 Treg_lung |
| UBXN1              | 0.24913731 | 0.58601702 | 0.31  | 0.441 | 1 Treg_lung |
| TALDO1             | 0.25691347 | 0.53968902 | 0.283 | 0.385 | 1 Treg_lung |
| CARHSP1            | 0.26283958 | 1.22438255 | 0.243 | 0.266 | 1 Treg_lung |
| GNAI2.1            | 0.27783484 | 0.83691114 | 0.233 | 0.315 | 1 Treg_lung |
| CTLA4              | 0.293411   | 0.89915649 | 0.249 | 0.268 | 1 Treg_lung |
| DAD1               | 0.29571268 | 0.74446471 | 0.275 | 0.384 | 1 Treg_lung |
| COX20              | 0.29777507 | 0.71622525 | 0.193 | 0.25  | 1 Treg_lung |
| AIMP1              | 0.29930759 | 0.74796978 | 0.272 | 0.372 | 1 Treg_lung |
| PRDX5              | 0.30062665 | 1.17528339 | 0.233 | 0.252 | 1 Treg_lung |
| NDUFB7             | 0.30382396 | 1.21327659 | 0.233 | 0.254 | 1 Treg_lung |
| GPR174             | 0.30610225 | 1.02195471 | 0.302 | 0.352 | 1 Treg_lung |
| EIF4E2             | 0.30943206 | 0.84348325 | 0.217 | 0.29  | 1 Treg_lung |
| TENT5C             | 0.31993637 | 0.79758382 | 0.352 | 0.416 | 1 Treg_lung |
| TRMT112            | 0.32305262 | 0.57941644 | 0.294 | 0.394 | 1 Treg_lung |
| CD320              | 0.32616209 | 1.095101   | 0.27  | 0.304 | 1 Treg_lung |
| TMBIM6             | 0.3261668  | 0.65071309 | 0.344 | 0.483 | 1 Treg_lung |
| IL2RB              | 0.3323472  | 0.85042864 | 0.204 | 0.267 | 1 Treg_lung |
| SNRPB              | 0.35297691 | 0.68752136 | 0.283 | 0.388 | 1 Treg_lung |
| ENSMMUG00000061128 | 0.35906502 | 0.50774949 | 0.307 | 0.409 | 1 Treg_lung |
| NDUFS6             | 0.36830229 | 0.76416198 | 0.228 | 0.302 | 1 Treg_lung |
| P2RY8              | 0.37831593 | 1.22020575 | 0.251 | 0.283 | 1 Treg_lung |
| EEF1G              | 0.37849931 | 0.33230213 | 0.569 | 0.713 | 1 Treg_lung |
| HSP90AA1           | 0.3884977  | 0.20303848 | 0.524 | 0.717 | 1 Treg_lung |
| PGK1               | 0.39144497 | 0.80685036 | 0.304 | 0.348 | 1 Treg_lung |
| CD37               | 0.3982015  | 0.69137166 | 0.407 | 0.528 | 1 Treg_lung |
| NCBP2              | 0.39936309 | 0.98151911 | 0.291 | 0.347 | 1 Treg_lung |
| POLR1H             | 0.40187811 | 0.85956764 | 0.214 | 0.28  | 1 Treg_lung |
| TIGAR              | 0.41142784 | 0.56153331 | 0.386 | 0.523 | 1 Treg_lung |
| RASGRP2            | 0.41317775 | 0.75399567 | 0.238 | 0.31  | 1 Treg_lung |
| FTH1               | 0.41356749 | 0.57955874 | 0.489 | 0.665 | 1 Treg_lung |
| ENSMMUG00000064120 | 0.43428426 | 1.09266084 | 0.257 | 0.292 | 1 Treg_lung |
| ARPC2              | 0.43737759 | 0.78750144 | 0.296 | 0.407 | 1 Treg_lung |

|                    |            |            |       |       |             |
|--------------------|------------|------------|-------|-------|-------------|
| MAGOH              | 0.44282991 | 1.03529454 | 0.275 | 0.319 | 1 Treg_lung |
| AIP                | 0.45699502 | 1.06953023 | 0.265 | 0.309 | 1 Treg_lung |
| NDUFC2             | 0.4645953  | 1.08886413 | 0.291 | 0.346 | 1 Treg_lung |
| NHP2               | 0.46729672 | 0.76070567 | 0.212 | 0.271 | 1 Treg_lung |
| ENSMMUG00000043332 | 0.47121894 | 1.08735946 | 0.262 | 0.304 | 1 Treg_lung |
| ATP6V1FNB          | 0.47766634 | 1.08524288 | 0.251 | 0.289 | 1 Treg_lung |
| SPOCK2             | 0.48293954 | 0.43389426 | 0.447 | 0.624 | 1 Treg_lung |
| ATP5F1C            | 0.48375161 | 0.8557549  | 0.315 | 0.39  | 1 Treg_lung |
| ENSMMUG00000029987 | 0.49050953 | 0.91626916 | 0.198 | 0.251 | 1 Treg_lung |
| ABHD17B            | 0.4935361  | 0.73084831 | 0.225 | 0.281 | 1 Treg_lung |
| STAT4              | 0.51019187 | 1.00238685 | 0.257 | 0.323 | 1 Treg_lung |
| SUMO1              | 0.51461797 | 0.70969933 | 0.397 | 0.512 | 1 Treg_lung |
| ATP5PF             | 0.54768533 | 0.7474419  | 0.36  | 0.458 | 1 Treg_lung |
| TWF2               | 0.55020277 | 0.74298681 | 0.225 | 0.286 | 1 Treg_lung |
| MRPL51             | 0.56068917 | 0.86119553 | 0.307 | 0.38  | 1 Treg_lung |
| EIF2S2             | 0.56156337 | 0.64555646 | 0.317 | 0.421 | 1 Treg_lung |
| HYPK               | 0.57274117 | 0.76377717 | 0.204 | 0.252 | 1 Treg_lung |
| LEPROTL1           | 0.57431969 | 0.96272411 | 0.241 | 0.272 | 1 Treg_lung |
| ENSMMUG00000007536 | 0.57438545 | 0.79706471 | 0.286 | 0.381 | 1 Treg_lung |
| CYB5A              | 0.57590108 | 1.0066565  | 0.259 | 0.302 | 1 Treg_lung |
| PTGER4             | 0.58357945 | 1.01928679 | 0.204 | 0.256 | 1 Treg_lung |
| BCL2L11            | 0.58602984 | 0.74324554 | 0.254 | 0.322 | 1 Treg_lung |
| RPS27              | 0.61177813 | 0.11573388 | 0.868 | 0.904 | 1 Treg_lung |
| MRPL23             | 0.61990834 | 0.92163954 | 0.288 | 0.351 | 1 Treg_lung |
| SLIRP              | 0.62409713 | 0.38952611 | 0.392 | 0.523 | 1 Treg_lung |
| TMBIM4             | 0.62470349 | 0.7558437  | 0.328 | 0.412 | 1 Treg_lung |
| RNF7               | 0.6257878  | 1.14834641 | 0.233 | 0.27  | 1 Treg_lung |
| MRFAP1             | 0.64383587 | 0.84011606 | 0.212 | 0.262 | 1 Treg_lung |
| VIM                | 0.64750306 | 0.79978946 | 0.333 | 0.397 | 1 Treg_lung |
| CEMIP2             | 0.65149409 | 0.86764124 | 0.418 | 0.54  | 1 Treg_lung |
| GPSM3              | 0.65384298 | 0.74966729 | 0.336 | 0.427 | 1 Treg_lung |
| BIRC3              | 0.65490345 | 0.70909576 | 0.333 | 0.441 | 1 Treg_lung |
| SF3B6              | 0.6571206  | 0.65954341 | 0.325 | 0.447 | 1 Treg_lung |

|                     |            |            |       |       |             |
|---------------------|------------|------------|-------|-------|-------------|
| ENSMMUG00000002324  | 0.67268584 | 0.69044948 | 0.325 | 0.438 | 1 Treg_lung |
| ITM2A               | 0.67525267 | 0.87403209 | 0.265 | 0.336 | 1 Treg_lung |
| PSMC5               | 0.68045812 | 0.95956777 | 0.214 | 0.268 | 1 Treg_lung |
| SH3BGRL             | 0.68170322 | 0.98905697 | 0.259 | 0.308 | 1 Treg_lung |
| HMGB1               | 0.69193881 | 0.30289294 | 0.524 | 0.716 | 1 Treg_lung |
| LSM6                | 0.70250805 | 0.84995087 | 0.272 | 0.351 | 1 Treg_lung |
| LAPTM5              | 0.70294028 | 0.48228973 | 0.521 | 0.697 | 1 Treg_lung |
| SPCS2               | 0.70406987 | 0.81894608 | 0.251 | 0.318 | 1 Treg_lung |
| PLAAT4              | 0.71776104 | 0.94331016 | 0.23  | 0.264 | 1 Treg_lung |
| DDT                 | 0.72797339 | 1.03417559 | 0.233 | 0.276 | 1 Treg_lung |
| THYN1               | 0.73145917 | 0.96052594 | 0.222 | 0.255 | 1 Treg_lung |
| SARAF               | 0.73446211 | 0.32139647 | 0.553 | 0.738 | 1 Treg_lung |
| PDGFRA              | 0.73793262 | 0.28604209 | 0.635 | 0.812 | 1 Treg_lung |
| PRR13               | 0.73862966 | 0.88763861 | 0.278 | 0.337 | 1 Treg_lung |
| FKBP1A              | 0.74226166 | 1.02813473 | 0.27  | 0.328 | 1 Treg_lung |
| NDUFA6              | 0.75215298 | 0.86706632 | 0.278 | 0.338 | 1 Treg_lung |
| COX4I1              | 0.75781449 | 0.18505209 | 0.595 | 0.76  | 1 Treg_lung |
| TRAC                | 0.76968657 | 0.20087409 | 0.69  | 0.844 | 1 Treg_lung |
| ENSMMUG000000016278 | 0.77899398 | 0.82410371 | 0.228 | 0.278 | 1 Treg_lung |
| NCLN                | 0.7901615  | 1.03244406 | 0.233 | 0.284 | 1 Treg_lung |
| DAZAP1              | 0.80011134 | 0.61020138 | 0.452 | 0.615 | 1 Treg_lung |
| RAN                 | 0.80068172 | 0.67609927 | 0.328 | 0.405 | 1 Treg_lung |
| PDCD5               | 0.82547975 | 0.87163748 | 0.228 | 0.281 | 1 Treg_lung |
| ENSMMUG000000029973 | 0.85156874 | 0.60175052 | 0.354 | 0.469 | 1 Treg_lung |
| DCTN3               | 0.85462969 | 1.01847923 | 0.228 | 0.28  | 1 Treg_lung |
| TMEM219             | 0.87171767 | 0.98563021 | 0.225 | 0.264 | 1 Treg_lung |
| MAP1LC3B            | 0.87221881 | 0.9052898  | 0.286 | 0.364 | 1 Treg_lung |
| CD53                | 0.88603124 | 0.52167051 | 0.421 | 0.567 | 1 Treg_lung |
| GABARAP             | 0.89938139 | 0.63291773 | 0.376 | 0.506 | 1 Treg_lung |
| ENSMMUG000000012019 | 0.91362478 | 0.8270842  | 0.262 | 0.317 | 1 Treg_lung |
| NDUFB10             | 0.94096763 | 1.008192   | 0.23  | 0.284 | 1 Treg_lung |
| LSM5                | 0.95274275 | 0.94989992 | 0.217 | 0.26  | 1 Treg_lung |
| PDCD10              | 0.96374139 | 0.83780995 | 0.299 | 0.381 | 1 Treg_lung |

|                    |            |            |       |       |                      |
|--------------------|------------|------------|-------|-------|----------------------|
| COX1               | 0.96799828 | 0.15546537 | 0.786 | 0.872 | 1 Treg_lung          |
| ATP6V0E1           | 0.96873586 | 0.84937764 | 0.304 | 0.391 | 1 Treg_lung          |
| REXO2              | 0.96882994 | 0.75853251 | 0.299 | 0.373 | 1 Treg_lung          |
| SAFB               | 0.97210694 | 0.26277331 | 0.595 | 0.799 | 1 Treg_lung          |
| SNRPD2             | 0.97372278 | 0.58667458 | 0.368 | 0.49  | 1 Treg_lung          |
| SAP18              | 0.98351246 | 0.67922697 | 0.341 | 0.447 | 1 Treg_lung          |
| ENSMMUG00000065104 | 0.98626304 | 0.67775875 | 0.354 | 0.452 | 1 Treg_lung          |
| PSMB3              | 0.98752601 | 1.01773841 | 0.217 | 0.265 | 1 Treg_lung          |
| SLC25A3            | 0.9907396  | 0.81004296 | 0.347 | 0.466 | 1 Treg_lung          |
| PSMA7              | 0.99686526 | 0.38676398 | 0.455 | 0.59  | 1 Treg_lung          |
| HBA                | 1.68E-198  | 2.62698681 | 0.595 | 0.152 | 5.94E-194 Treg_UCBMC |
| HBE1               | 2.24E-182  | 2.38028739 | 0.588 | 0.166 | 7.93E-178 Treg_UCBMC |
| CAMK4              | 1.91E-138  | 1.03081357 | 0.915 | 0.711 | 6.75E-134 Treg_UCBMC |
| EPB41              | 1.25E-130  | 1.11853163 | 0.844 | 0.584 | 4.41E-126 Treg_UCBMC |
| CDC14A             | 1.74E-99   | 0.84953314 | 0.837 | 0.577 | 6.16E-95 Treg_UCBMC  |
| PNISR              | 1.68E-92   | 0.84529071 | 0.841 | 0.675 | 5.96E-88 Treg_UCBMC  |
| ENSMMUG00000056654 | 1.07E-91   | 1.1953916  | 0.75  | 0.597 | 3.78E-87 Treg_UCBMC  |
| ATP8A1             | 1.35E-91   | 1.25829395 | 0.638 | 0.368 | 4.80E-87 Treg_UCBMC  |
| MPP7               | 5.92E-87   | 1.0965982  | 0.69  | 0.435 | 2.10E-82 Treg_UCBMC  |
| ENSMMUG00000049151 | 1.28E-83   | 0.83628313 | 0.894 | 0.827 | 4.53E-79 Treg_UCBMC  |
| TXNIP              | 9.18E-83   | 1.13148965 | 0.664 | 0.414 | 3.25E-78 Treg_UCBMC  |
| RASA2              | 5.55E-78   | 0.85334595 | 0.809 | 0.637 | 1.97E-73 Treg_UCBMC  |
| RASSF3             | 4.84E-77   | 1.27728654 | 0.543 | 0.271 | 1.71E-72 Treg_UCBMC  |
| UTRN               | 7.27E-76   | 0.66797013 | 0.914 | 0.769 | 2.58E-71 Treg_UCBMC  |
| SELL               | 1.22E-75   | 0.94276585 | 0.64  | 0.35  | 4.31E-71 Treg_UCBMC  |
| COX3               | 1.51E-75   | 0.53724995 | 0.946 | 0.853 | 5.34E-71 Treg_UCBMC  |
| NRIP1              | 1.54E-74   | 0.91140371 | 0.733 | 0.504 | 5.47E-70 Treg_UCBMC  |
| STK38              | 1.61E-72   | 0.86281079 | 0.746 | 0.535 | 5.71E-68 Treg_UCBMC  |
| TM9SF3             | 9.63E-72   | 1.01722787 | 0.688 | 0.496 | 3.41E-67 Treg_UCBMC  |
| FBXO33             | 3.00E-71   | 1.22096465 | 0.613 | 0.402 | 1.06E-66 Treg_UCBMC  |
| RSRP1              | 4.33E-70   | 0.7969056  | 0.806 | 0.642 | 1.54E-65 Treg_UCBMC  |
| USP3               | 6.74E-68   | 1.06744027 | 0.664 | 0.465 | 2.39E-63 Treg_UCBMC  |
| FAM117B            | 1.14E-65   | 1.15655134 | 0.631 | 0.429 | 4.05E-61 Treg_UCBMC  |

|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| USP15              | 2.10E-65 | 0.65710953 | 0.873 | 0.762 | 7.43E-61 | Treg_UCBMC |
| CASP3              | 3.62E-65 | 1.0787555  | 0.631 | 0.422 | 1.28E-60 | Treg_UCBMC |
| CREBRF             | 1.78E-64 | 0.93160643 | 0.675 | 0.469 | 6.32E-60 | Treg_UCBMC |
| MBTD1              | 1.09E-63 | 1.14491759 | 0.58  | 0.359 | 3.87E-59 | Treg_UCBMC |
| EIF2AK3            | 2.80E-63 | 1.08789467 | 0.591 | 0.375 | 9.91E-59 | Treg_UCBMC |
| S1PR1              | 4.85E-63 | 1.90162955 | 0.324 | 0.107 | 1.72E-58 | Treg_UCBMC |
| PLCL1              | 6.92E-63 | 0.76536605 | 0.695 | 0.444 | 2.45E-58 | Treg_UCBMC |
| OSBPL9             | 1.15E-62 | 0.86690473 | 0.743 | 0.58  | 4.06E-58 | Treg_UCBMC |
| MXI1               | 5.23E-62 | 1.25368423 | 0.498 | 0.273 | 1.85E-57 | Treg_UCBMC |
| PDE3B              | 9.80E-62 | 1.0565768  | 0.573 | 0.329 | 3.47E-57 | Treg_UCBMC |
| ZEB1               | 1.75E-61 | 0.71578781 | 0.791 | 0.63  | 6.19E-57 | Treg_UCBMC |
| CDC42SE2           | 2.88E-61 | 0.62224337 | 0.88  | 0.765 | 1.02E-56 | Treg_UCBMC |
| ENSMUG00000011580  | 4.83E-61 | 0.89475639 | 0.717 | 0.561 | 1.71E-56 | Treg_UCBMC |
| FOXP1              | 1.07E-60 | 0.78771809 | 0.766 | 0.574 | 3.78E-56 | Treg_UCBMC |
| SPPL3              | 6.62E-60 | 0.92122733 | 0.703 | 0.525 | 2.35E-55 | Treg_UCBMC |
| RICTOR             | 1.03E-59 | 0.94916714 | 0.702 | 0.534 | 3.64E-55 | Treg_UCBMC |
| LEF1               | 6.84E-59 | 0.7149389  | 0.806 | 0.606 | 2.42E-54 | Treg_UCBMC |
| ENSMUG000000061038 | 2.70E-56 | 1.32060923 | 0.457 | 0.241 | 9.57E-52 | Treg_UCBMC |
| CERS6              | 9.12E-56 | 1.06034046 | 0.541 | 0.326 | 3.23E-51 | Treg_UCBMC |
| ENSMUG000000047632 | 2.77E-55 | 1.18643195 | 0.497 | 0.277 | 9.80E-51 | Treg_UCBMC |
| ITGA6              | 2.94E-55 | 0.93723612 | 0.561 | 0.342 | 1.04E-50 | Treg_UCBMC |
| TNRC6B             | 5.88E-55 | 0.58158221 | 0.88  | 0.753 | 2.08E-50 | Treg_UCBMC |
| EPC1               | 1.11E-54 | 0.63485299 | 0.809 | 0.664 | 3.92E-50 | Treg_UCBMC |
| PIK3R5             | 2.60E-54 | 1.26920977 | 0.471 | 0.26  | 9.21E-50 | Treg_UCBMC |
| HIVEP1             | 4.29E-53 | 0.75751758 | 0.702 | 0.517 | 1.52E-48 | Treg_UCBMC |
| ESYT2              | 6.40E-53 | 0.69905261 | 0.748 | 0.582 | 2.27E-48 | Treg_UCBMC |
| MTMR14             | 4.94E-52 | 1.5661048  | 0.358 | 0.161 | 1.75E-47 | Treg_UCBMC |
| PECAM1             | 2.15E-50 | 0.98143091 | 0.48  | 0.265 | 7.62E-46 | Treg_UCBMC |
| YEATS2             | 3.12E-50 | 0.89085259 | 0.621 | 0.455 | 1.10E-45 | Treg_UCBMC |
| RIPOR2             | 5.63E-50 | 0.40762232 | 0.943 | 0.828 | 2.00E-45 | Treg_UCBMC |
| TPT1               | 1.96E-49 | 0.45343058 | 0.973 | 0.949 | 6.96E-45 | Treg_UCBMC |
| DDX6               | 4.30E-49 | 0.83169352 | 0.667 | 0.52  | 1.52E-44 | Treg_UCBMC |
| ATG13              | 4.41E-49 | 1.26334411 | 0.48  | 0.294 | 1.56E-44 | Treg_UCBMC |

|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| ABLM1              | 5.37E-49 | 0.63559286 | 0.809 | 0.68  | 1.90E-44 | Treg_UCBMC |
| STAG1              | 2.26E-48 | 0.58543338 | 0.837 | 0.7   | 8.00E-44 | Treg_UCBMC |
| SRSF11             | 3.53E-48 | 0.55400328 | 0.835 | 0.732 | 1.25E-43 | Treg_UCBMC |
| TLE4               | 3.69E-48 | 1.22889588 | 0.459 | 0.259 | 1.31E-43 | Treg_UCBMC |
| ADD3               | 5.98E-48 | 0.75754641 | 0.655 | 0.467 | 2.12E-43 | Treg_UCBMC |
| COG5               | 1.19E-47 | 0.75103482 | 0.721 | 0.566 | 4.23E-43 | Treg_UCBMC |
| PTBP2              | 6.00E-47 | 0.86781883 | 0.616 | 0.439 | 2.13E-42 | Treg_UCBMC |
| RPS14              | 9.01E-47 | 0.43257645 | 0.957 | 0.916 | 3.19E-42 | Treg_UCBMC |
| IL7R               | 3.98E-46 | 0.70511088 | 0.575 | 0.361 | 1.41E-41 | Treg_UCBMC |
| GOLGA4             | 4.03E-46 | 0.83333852 | 0.649 | 0.501 | 1.43E-41 | Treg_UCBMC |
| PIK3CA             | 6.85E-46 | 1.17962097 | 0.48  | 0.295 | 2.43E-41 | Treg_UCBMC |
| PCED1B             | 1.17E-45 | 1.14155632 | 0.471 | 0.277 | 4.15E-41 | Treg_UCBMC |
| WRN                | 1.52E-45 | 0.89078062 | 0.573 | 0.396 | 5.38E-41 | Treg_UCBMC |
| MAPK8              | 1.66E-45 | 1.15889921 | 0.473 | 0.285 | 5.87E-41 | Treg_UCBMC |
| ENSMMUG00000014862 | 3.98E-45 | 1.0718584  | 0.527 | 0.373 | 1.41E-40 | Treg_UCBMC |
| CHMP7              | 8.25E-45 | 1.0487264  | 0.486 | 0.295 | 2.92E-40 | Treg_UCBMC |
| CPEB1              | 3.08E-44 | 0.4484916  | 0.931 | 0.872 | 1.09E-39 | Treg_UCBMC |
| PUM1               | 7.29E-44 | 0.65128006 | 0.77  | 0.63  | 2.58E-39 | Treg_UCBMC |
| MARCHF6            | 9.31E-44 | 0.82487904 | 0.632 | 0.47  | 3.30E-39 | Treg_UCBMC |
| RANBP9             | 1.03E-43 | 0.98497009 | 0.544 | 0.371 | 3.66E-39 | Treg_UCBMC |
| MYLIP              | 4.86E-43 | 0.96865156 | 0.539 | 0.361 | 1.72E-38 | Treg_UCBMC |
| ENSMMUG00000056331 | 1.13E-41 | 1.47947712 | 0.299 | 0.125 | 4.01E-37 | Treg_UCBMC |
| AGO3               | 1.85E-41 | 0.85435036 | 0.575 | 0.418 | 6.55E-37 | Treg_UCBMC |
| MAP4K3             | 2.08E-41 | 1.25522853 | 0.443 | 0.26  | 7.36E-37 | Treg_UCBMC |
| KLF3               | 2.32E-41 | 1.05848031 | 0.363 | 0.177 | 8.23E-37 | Treg_UCBMC |
| TFDP2              | 2.46E-41 | 1.08310121 | 0.494 | 0.322 | 8.72E-37 | Treg_UCBMC |
| CTDSPL2            | 3.20E-41 | 0.96906653 | 0.518 | 0.347 | 1.13E-36 | Treg_UCBMC |
| WDR7               | 5.06E-41 | 0.78769952 | 0.631 | 0.478 | 1.79E-36 | Treg_UCBMC |
| TMEM123            | 1.21E-39 | 0.54385216 | 0.763 | 0.651 | 4.30E-35 | Treg_UCBMC |
| KLF12              | 1.43E-38 | 0.45307088 | 0.872 | 0.744 | 5.06E-34 | Treg_UCBMC |
| TNRC6A             | 3.20E-38 | 0.81245374 | 0.606 | 0.455 | 1.13E-33 | Treg_UCBMC |
| SMCHD1             | 3.61E-38 | 0.63632847 | 0.736 | 0.609 | 1.28E-33 | Treg_UCBMC |
| CD247              | 3.80E-38 | 0.62281697 | 0.697 | 0.552 | 1.35E-33 | Treg_UCBMC |

|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| MAML3              | 5.11E-38 | 0.89037217 | 0.461 | 0.274 | 1.81E-33 | Treg_UCBMC |
| APBB1IP            | 5.94E-38 | 0.42046198 | 0.902 | 0.822 | 2.11E-33 | Treg_UCBMC |
| NUP54              | 6.06E-38 | 1.39442169 | 0.348 | 0.188 | 2.15E-33 | Treg_UCBMC |
| ATG14              | 2.88E-37 | 1.6091529  | 0.304 | 0.149 | 1.02E-32 | Treg_UCBMC |
| SNRK               | 4.11E-37 | 0.81063976 | 0.527 | 0.353 | 1.46E-32 | Treg_UCBMC |
| RPS20              | 4.57E-37 | 0.40550538 | 0.932 | 0.855 | 1.62E-32 | Treg_UCBMC |
| ENSMMUG00000053012 | 1.01E-36 | 1.36889769 | 0.284 | 0.125 | 3.57E-32 | Treg_UCBMC |
| SLC35A3            | 1.45E-36 | 0.88104735 | 0.562 | 0.417 | 5.14E-32 | Treg_UCBMC |
| ANKRD44            | 1.56E-36 | 0.385859   | 0.882 | 0.765 | 5.51E-32 | Treg_UCBMC |
| BRAF               | 7.03E-36 | 0.76660167 | 0.624 | 0.486 | 2.49E-31 | Treg_UCBMC |
| RPL13A             | 7.04E-36 | 0.36315766 | 0.953 | 0.927 | 2.49E-31 | Treg_UCBMC |
| JAK1               | 1.15E-35 | 0.51690416 | 0.819 | 0.737 | 4.07E-31 | Treg_UCBMC |
| TEC                | 2.30E-35 | 0.61227341 | 0.667 | 0.5   | 8.16E-31 | Treg_UCBMC |
| ENSMMUG00000028906 | 3.70E-35 | 0.58912053 | 0.624 | 0.45  | 1.31E-30 | Treg_UCBMC |
| SENP5              | 5.58E-35 | 0.95062397 | 0.464 | 0.305 | 1.98E-30 | Treg_UCBMC |
| RAB2A              | 6.84E-35 | 0.75553237 | 0.659 | 0.554 | 2.42E-30 | Treg_UCBMC |
| SCFD1              | 9.30E-35 | 1.03849878 | 0.487 | 0.34  | 3.30E-30 | Treg_UCBMC |
| ZNF644             | 1.55E-34 | 0.72195008 | 0.629 | 0.51  | 5.51E-30 | Treg_UCBMC |
| SECISBP2L          | 3.99E-34 | 1.39493152 | 0.331 | 0.178 | 1.42E-29 | Treg_UCBMC |
| RCAN3              | 6.20E-34 | 0.99486644 | 0.414 | 0.248 | 2.20E-29 | Treg_UCBMC |
| DIP2B              | 1.12E-33 | 0.55868997 | 0.728 | 0.599 | 3.95E-29 | Treg_UCBMC |
| CUL3               | 1.91E-33 | 0.64998317 | 0.673 | 0.551 | 6.76E-29 | Treg_UCBMC |
| ARHGEF7            | 1.95E-33 | 0.83393682 | 0.561 | 0.417 | 6.91E-29 | Treg_UCBMC |
| MARCHF7            | 2.06E-33 | 0.72015435 | 0.594 | 0.477 | 7.31E-29 | Treg_UCBMC |
| MTMR10             | 2.08E-33 | 1.17167908 | 0.326 | 0.171 | 7.38E-29 | Treg_UCBMC |
| MARCHF3            | 2.22E-33 | 0.77502796 | 0.583 | 0.429 | 7.85E-29 | Treg_UCBMC |
| DCP1A              | 4.89E-33 | 1.04082798 | 0.444 | 0.301 | 1.73E-28 | Treg_UCBMC |
| EPC2               | 5.88E-33 | 0.81070256 | 0.535 | 0.382 | 2.08E-28 | Treg_UCBMC |
| TGFB1              | 5.90E-33 | 0.94838259 | 0.476 | 0.326 | 2.09E-28 | Treg_UCBMC |
| LUC7L3             | 1.14E-32 | 0.72591736 | 0.637 | 0.523 | 4.04E-28 | Treg_UCBMC |
| FOXO1              | 1.15E-32 | 0.48188726 | 0.767 | 0.635 | 4.08E-28 | Treg_UCBMC |
| SOX4               | 1.62E-32 | 0.37958909 | 0.601 | 0.402 | 5.73E-28 | Treg_UCBMC |
| ZFAND6             | 2.19E-32 | 0.64579173 | 0.698 | 0.597 | 7.75E-28 | Treg_UCBMC |

|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| MAX                | 2.77E-32 | 0.87620651 | 0.517 | 0.388 | 9.82E-28 | Treg_UCBMC |
| FOXN3              | 7.56E-32 | 0.38124959 | 0.914 | 0.802 | 2.68E-27 | Treg_UCBMC |
| PIAS1              | 8.86E-32 | 0.65363578 | 0.65  | 0.535 | 3.14E-27 | Treg_UCBMC |
| BNIP3L             | 9.30E-32 | 0.79425894 | 0.513 | 0.371 | 3.29E-27 | Treg_UCBMC |
| UTY                | 1.35E-31 | 0.82729567 | 0.398 | 0.225 | 4.80E-27 | Treg_UCBMC |
| TSN                | 2.31E-31 | 1.21991463 | 0.334 | 0.189 | 8.19E-27 | Treg_UCBMC |
| LMBRD1             | 2.84E-31 | 0.83683105 | 0.489 | 0.339 | 1.00E-26 | Treg_UCBMC |
| CYTIP              | 2.86E-31 | 0.67487009 | 0.639 | 0.501 | 1.01E-26 | Treg_UCBMC |
| PDK1               | 5.92E-31 | 0.87763435 | 0.475 | 0.327 | 2.10E-26 | Treg_UCBMC |
| RPS6KB1            | 7.62E-31 | 0.79467056 | 0.565 | 0.431 | 2.70E-26 | Treg_UCBMC |
| TRA2A              | 9.67E-31 | 0.46463605 | 0.784 | 0.673 | 3.43E-26 | Treg_UCBMC |
| WDFY2              | 1.15E-30 | 0.93304377 | 0.479 | 0.341 | 4.09E-26 | Treg_UCBMC |
| WDR48              | 1.54E-30 | 1.1700238  | 0.354 | 0.209 | 5.47E-26 | Treg_UCBMC |
| UBE2E1             | 1.56E-30 | 1.00515358 | 0.409 | 0.263 | 5.52E-26 | Treg_UCBMC |
| PAG1               | 2.28E-30 | 0.69424905 | 0.556 | 0.404 | 8.09E-26 | Treg_UCBMC |
| ARID4B             | 2.67E-30 | 0.35199129 | 0.882 | 0.772 | 9.45E-26 | Treg_UCBMC |
| G3BP2              | 3.60E-30 | 0.68970636 | 0.659 | 0.555 | 1.28E-25 | Treg_UCBMC |
| CENPC              | 3.79E-30 | 0.99404536 | 0.427 | 0.281 | 1.34E-25 | Treg_UCBMC |
| RPL23A             | 4.55E-30 | 0.35471784 | 0.945 | 0.918 | 1.61E-25 | Treg_UCBMC |
| SAP30BP            | 5.44E-30 | 1.01757226 | 0.389 | 0.245 | 1.93E-25 | Treg_UCBMC |
| NCOA3              | 1.17E-29 | 0.30204774 | 0.875 | 0.771 | 4.14E-25 | Treg_UCBMC |
| ATF2               | 1.76E-29 | 0.86323529 | 0.51  | 0.386 | 6.24E-25 | Treg_UCBMC |
| CELF1              | 1.83E-29 | 0.6996601  | 0.63  | 0.519 | 6.48E-25 | Treg_UCBMC |
| RBM33              | 3.78E-29 | 0.69488067 | 0.579 | 0.462 | 1.34E-24 | Treg_UCBMC |
| RPL23              | 3.89E-29 | 0.35047778 | 0.92  | 0.872 | 1.38E-24 | Treg_UCBMC |
| ENSMMUG00000065175 | 7.01E-29 | 1.07878857 | 0.438 | 0.322 | 2.48E-24 | Treg_UCBMC |
| PPP3CC             | 1.00E-28 | 0.70836444 | 0.581 | 0.465 | 3.55E-24 | Treg_UCBMC |
| RBM5               | 1.19E-28 | 0.77870792 | 0.536 | 0.411 | 4.21E-24 | Treg_UCBMC |
| EDRF1              | 1.24E-28 | 1.36751226 | 0.285 | 0.152 | 4.39E-24 | Treg_UCBMC |
| PDGFRA             | 1.35E-28 | 0.42495025 | 0.828 | 0.755 | 4.77E-24 | Treg_UCBMC |
| SATB1              | 1.78E-28 | 0.43971868 | 0.612 | 0.453 | 6.31E-24 | Treg_UCBMC |
| ENSMMUG00000063979 | 1.91E-28 | 1.01962751 | 0.399 | 0.262 | 6.75E-24 | Treg_UCBMC |
| RFX3               | 2.00E-28 | 0.62520588 | 0.627 | 0.501 | 7.07E-24 | Treg_UCBMC |



|                   |          |            |       |       |          |            |
|-------------------|----------|------------|-------|-------|----------|------------|
| PPP1R12A          | 3.39E-28 | 0.55060791 | 0.72  | 0.621 | 1.20E-23 | Treg_UCBMC |
| GMCL1             | 3.91E-28 | 0.91307147 | 0.459 | 0.322 | 1.39E-23 | Treg_UCBMC |
| BSDC1             | 4.62E-28 | 1.15413408 | 0.361 | 0.225 | 1.64E-23 | Treg_UCBMC |
| ATP11B            | 5.47E-28 | 0.79977873 | 0.506 | 0.37  | 1.94E-23 | Treg_UCBMC |
| KMT2E             | 6.47E-28 | 0.48663363 | 0.706 | 0.607 | 2.29E-23 | Treg_UCBMC |
| KLF7              | 7.42E-28 | 1.08069086 | 0.379 | 0.237 | 2.63E-23 | Treg_UCBMC |
| WIPI2             | 9.09E-28 | 1.04771273 | 0.385 | 0.254 | 3.22E-23 | Treg_UCBMC |
| NKIRAS1           | 9.91E-28 | 1.04767488 | 0.347 | 0.207 | 3.51E-23 | Treg_UCBMC |
| RB1CC1            | 1.11E-27 | 0.87855975 | 0.425 | 0.289 | 3.94E-23 | Treg_UCBMC |
| ATP10A            | 1.25E-27 | 0.63096116 | 0.548 | 0.403 | 4.43E-23 | Treg_UCBMC |
| TUT4              | 1.27E-27 | 0.54046082 | 0.692 | 0.584 | 4.49E-23 | Treg_UCBMC |
| CCSER2            | 1.39E-27 | 0.93075708 | 0.425 | 0.288 | 4.91E-23 | Treg_UCBMC |
| GIT2              | 1.44E-27 | 0.85125901 | 0.487 | 0.356 | 5.09E-23 | Treg_UCBMC |
| HSD17B4           | 1.70E-27 | 0.57378514 | 0.745 | 0.634 | 6.02E-23 | Treg_UCBMC |
| SSH2              | 1.73E-27 | 0.2915026  | 0.858 | 0.762 | 6.12E-23 | Treg_UCBMC |
| SLC12A6           | 1.81E-27 | 0.6081924  | 0.588 | 0.455 | 6.42E-23 | Treg_UCBMC |
| SFSWAP            | 2.22E-27 | 0.91416582 | 0.444 | 0.312 | 7.85E-23 | Treg_UCBMC |
| CCM2              | 3.70E-27 | 0.64954811 | 0.581 | 0.464 | 1.31E-22 | Treg_UCBMC |
| PAN3              | 4.30E-27 | 0.5341651  | 0.666 | 0.536 | 1.52E-22 | Treg_UCBMC |
| RPS16             | 4.96E-27 | 0.3215659  | 0.943 | 0.915 | 1.76E-22 | Treg_UCBMC |
| IREB2             | 9.45E-27 | 0.95098525 | 0.379 | 0.245 | 3.35E-22 | Treg_UCBMC |
| ELL2              | 1.27E-26 | 0.81904337 | 0.384 | 0.241 | 4.51E-22 | Treg_UCBMC |
| FBXO3             | 1.65E-26 | 1.31756287 | 0.251 | 0.126 | 5.83E-22 | Treg_UCBMC |
| ACTR2             | 1.77E-26 | 0.51312668 | 0.767 | 0.699 | 6.26E-22 | Treg_UCBMC |
| MTREX             | 1.95E-26 | 0.61466162 | 0.639 | 0.542 | 6.93E-22 | Treg_UCBMC |
| HECA              | 2.18E-26 | 0.85947963 | 0.455 | 0.321 | 7.71E-22 | Treg_UCBMC |
| ECD               | 2.23E-26 | 1.12878768 | 0.355 | 0.225 | 7.89E-22 | Treg_UCBMC |
| BIRC6             | 4.32E-26 | 0.45690223 | 0.769 | 0.671 | 1.53E-21 | Treg_UCBMC |
| ENSMUG00000030448 | 5.55E-26 | 0.94375479 | 0.447 | 0.336 | 1.97E-21 | Treg_UCBMC |
| DNM3              | 7.45E-26 | 0.81803572 | 0.448 | 0.305 | 2.64E-21 | Treg_UCBMC |
| DYRK2             | 8.11E-26 | 0.99335923 | 0.333 | 0.198 | 2.87E-21 | Treg_UCBMC |
| EIF2AK2           | 9.92E-26 | 1.1237357  | 0.329 | 0.201 | 3.52E-21 | Treg_UCBMC |
| PAIP2             | 1.09E-25 | 0.47621463 | 0.715 | 0.632 | 3.85E-21 | Treg_UCBMC |

|                   |          |            |       |       |          |            |
|-------------------|----------|------------|-------|-------|----------|------------|
| UBXN7             | 1.22E-25 | 0.78086918 | 0.441 | 0.307 | 4.32E-21 | Treg_UCBMC |
| POU2F1            | 1.28E-25 | 0.79572779 | 0.438 | 0.3   | 4.53E-21 | Treg_UCBMC |
| TNPO1             | 1.55E-25 | 1.2308716  | 0.323 | 0.198 | 5.50E-21 | Treg_UCBMC |
| ENSMUG00000003412 | 1.57E-25 | 0.33670162 | 0.944 | 0.911 | 5.57E-21 | Treg_UCBMC |
| SENP2             | 1.57E-25 | 1.01803227 | 0.358 | 0.227 | 5.58E-21 | Treg_UCBMC |
| CASP8             | 1.82E-25 | 0.7740023  | 0.516 | 0.398 | 6.44E-21 | Treg_UCBMC |
| RCC1              | 1.97E-25 | 1.11305042 | 0.373 | 0.252 | 6.98E-21 | Treg_UCBMC |
| CERT1             | 3.52E-25 | 0.7795411  | 0.526 | 0.405 | 1.25E-20 | Treg_UCBMC |
| DDX5              | 4.59E-25 | 0.29991213 | 0.959 | 0.885 | 1.62E-20 | Treg_UCBMC |
| SETD2             | 5.01E-25 | 0.50053032 | 0.668 | 0.56  | 1.78E-20 | Treg_UCBMC |
| HERPUD2           | 6.80E-25 | 0.87121045 | 0.376 | 0.242 | 2.41E-20 | Treg_UCBMC |
| KDM6A             | 8.61E-25 | 0.471336   | 0.733 | 0.634 | 3.05E-20 | Treg_UCBMC |
| RSF1              | 1.00E-24 | 0.65291984 | 0.608 | 0.515 | 3.55E-20 | Treg_UCBMC |
| SLC38A1           | 1.19E-24 | 0.44842815 | 0.78  | 0.694 | 4.23E-20 | Treg_UCBMC |
| CAMTA1            | 1.19E-24 | 0.68711558 | 0.53  | 0.421 | 4.23E-20 | Treg_UCBMC |
| LMBR1             | 1.25E-24 | 1.0547269  | 0.372 | 0.239 | 4.44E-20 | Treg_UCBMC |
| PRPF40A           | 2.01E-24 | 0.62727309 | 0.615 | 0.509 | 7.11E-20 | Treg_UCBMC |
| KMT2C             | 2.45E-24 | 0.42734673 | 0.783 | 0.68  | 8.68E-20 | Treg_UCBMC |
| ATG5              | 2.64E-24 | 0.81290914 | 0.46  | 0.339 | 9.34E-20 | Treg_UCBMC |
| PPM1A             | 3.33E-24 | 0.96894468 | 0.362 | 0.235 | 1.18E-19 | Treg_UCBMC |
| UBAC2             | 4.82E-24 | 0.469751   | 0.713 | 0.613 | 1.71E-19 | Treg_UCBMC |
| MRPS35            | 6.65E-24 | 1.07242762 | 0.366 | 0.244 | 2.36E-19 | Treg_UCBMC |
| CNOT4             | 6.68E-24 | 0.72840229 | 0.552 | 0.453 | 2.37E-19 | Treg_UCBMC |
| U2SURP            | 7.30E-24 | 0.65640025 | 0.564 | 0.457 | 2.59E-19 | Treg_UCBMC |
| RORA              | 7.72E-24 | 0.58674573 | 0.509 | 0.368 | 2.74E-19 | Treg_UCBMC |
| VPS37B            | 7.93E-24 | 0.93038232 | 0.348 | 0.217 | 2.81E-19 | Treg_UCBMC |
| NUP133            | 8.21E-24 | 1.40515485 | 0.264 | 0.148 | 2.91E-19 | Treg_UCBMC |
| TMEM87A           | 9.47E-24 | 0.75966347 | 0.491 | 0.375 | 3.36E-19 | Treg_UCBMC |
| BTBD11            | 1.08E-23 | 0.46265399 | 0.662 | 0.535 | 3.83E-19 | Treg_UCBMC |
| ESCO1             | 1.21E-23 | 0.74368273 | 0.519 | 0.412 | 4.30E-19 | Treg_UCBMC |
| YIPF5             | 1.39E-23 | 1.20014403 | 0.311 | 0.192 | 4.91E-19 | Treg_UCBMC |
| COPA              | 1.63E-23 | 0.94823713 | 0.402 | 0.284 | 5.77E-19 | Treg_UCBMC |
| RELL1             | 1.66E-23 | 0.70301493 | 0.431 | 0.295 | 5.90E-19 | Treg_UCBMC |

|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| SCAPER             | 1.72E-23 | 0.63231587 | 0.569 | 0.454 | 6.09E-19 | Treg_UCBMC |
| ENSMMUG00000031367 | 3.57E-23 | 1.16450965 | 0.325 | 0.212 | 1.27E-18 | Treg_UCBMC |
| PDZD8              | 3.85E-23 | 1.04741957 | 0.35  | 0.226 | 1.36E-18 | Treg_UCBMC |
| RBM39              | 4.19E-23 | 0.35677879 | 0.876 | 0.789 | 1.48E-18 | Treg_UCBMC |
| BBX                | 4.64E-23 | 0.62471491 | 0.541 | 0.423 | 1.64E-18 | Treg_UCBMC |
| VPS39              | 5.56E-23 | 1.0145264  | 0.318 | 0.195 | 1.97E-18 | Treg_UCBMC |
| QKI                | 5.57E-23 | 0.63234015 | 0.523 | 0.399 | 1.97E-18 | Treg_UCBMC |
| ARIH2              | 6.27E-23 | 0.78480716 | 0.43  | 0.316 | 2.22E-18 | Treg_UCBMC |
| VTA1               | 7.69E-23 | 1.02292912 | 0.362 | 0.247 | 2.72E-18 | Treg_UCBMC |
| TAX1BP1            | 7.86E-23 | 0.56761264 | 0.625 | 0.539 | 2.78E-18 | Treg_UCBMC |
| CELF2              | 8.63E-23 | 0.31212527 | 0.893 | 0.811 | 3.06E-18 | Treg_UCBMC |
| RPS4Y1             | 1.53E-22 | 0.4192621  | 0.633 | 0.466 | 5.42E-18 | Treg_UCBMC |
| ARHGAP12           | 1.68E-22 | 0.71353235 | 0.404 | 0.269 | 5.95E-18 | Treg_UCBMC |
| BACH2              | 1.69E-22 | 0.13491569 | 0.736 | 0.571 | 5.98E-18 | Treg_UCBMC |
| RPS3A              | 2.16E-22 | 0.30212888 | 0.95  | 0.932 | 7.66E-18 | Treg_UCBMC |
| FAM172A            | 2.22E-22 | 0.49985809 | 0.684 | 0.597 | 7.86E-18 | Treg_UCBMC |
| SLC30A7            | 2.28E-22 | 0.7920515  | 0.453 | 0.336 | 8.06E-18 | Treg_UCBMC |
| MPHOSPH8           | 2.62E-22 | 0.74196785 | 0.482 | 0.371 | 9.27E-18 | Treg_UCBMC |
| OSBPL8             | 2.69E-22 | 0.42502531 | 0.696 | 0.604 | 9.54E-18 | Treg_UCBMC |
| FBXL20             | 2.79E-22 | 0.59255367 | 0.55  | 0.437 | 9.90E-18 | Treg_UCBMC |
| RAB5A              | 3.01E-22 | 0.70368247 | 0.457 | 0.343 | 1.07E-17 | Treg_UCBMC |
| FBXO34             | 3.33E-22 | 0.39731028 | 0.706 | 0.599 | 1.18E-17 | Treg_UCBMC |
| RALGPS2            | 4.47E-22 | 1.11683569 | 0.264 | 0.147 | 1.58E-17 | Treg_UCBMC |
| DNAJC2             | 4.50E-22 | 0.75433554 | 0.452 | 0.339 | 1.59E-17 | Treg_UCBMC |
| TRA2B              | 4.52E-22 | 0.33416908 | 0.884 | 0.806 | 1.60E-17 | Treg_UCBMC |
| ENSMMUG00000060545 | 4.64E-22 | 0.71723584 | 0.471 | 0.352 | 1.64E-17 | Treg_UCBMC |
| GOLGA1             | 4.90E-22 | 0.64070013 | 0.645 | 0.561 | 1.74E-17 | Treg_UCBMC |
| CRTC3              | 5.65E-22 | 0.56101008 | 0.558 | 0.438 | 2.00E-17 | Treg_UCBMC |
| TANC1              | 8.29E-22 | 1.13526522 | 0.298 | 0.18  | 2.94E-17 | Treg_UCBMC |
| CNOT2              | 8.74E-22 | 0.57086704 | 0.617 | 0.53  | 3.10E-17 | Treg_UCBMC |
| KLHL28             | 8.96E-22 | 0.91048242 | 0.364 | 0.247 | 3.18E-17 | Treg_UCBMC |
| MBNL2              | 9.13E-22 | 0.80242276 | 0.47  | 0.36  | 3.23E-17 | Treg_UCBMC |
| RNF13              | 1.02E-21 | 0.80623962 | 0.462 | 0.351 | 3.63E-17 | Treg_UCBMC |

|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| NT5C2              | 1.20E-21 | 0.77131408 | 0.467 | 0.356 | 4.26E-17 | Treg_UCBMC |
| ZFC3H1             | 1.28E-21 | 0.660896   | 0.541 | 0.439 | 4.52E-17 | Treg_UCBMC |
| ATP9B              | 1.71E-21 | 0.72220731 | 0.501 | 0.393 | 6.05E-17 | Treg_UCBMC |
| PPP3CA             | 1.76E-21 | 0.60653795 | 0.526 | 0.404 | 6.25E-17 | Treg_UCBMC |
| TXNDC11            | 1.93E-21 | 1.09177635 | 0.363 | 0.252 | 6.85E-17 | Treg_UCBMC |
| ITK                | 2.06E-21 | 0.42279437 | 0.733 | 0.646 | 7.31E-17 | Treg_UCBMC |
| RBMS3              | 2.20E-21 | 0.33209506 | 0.505 | 0.34  | 7.81E-17 | Treg_UCBMC |
| CDC25B             | 2.23E-21 | 0.73166072 | 0.27  | 0.148 | 7.90E-17 | Treg_UCBMC |
| CTNNB1             | 2.33E-21 | 0.54538961 | 0.609 | 0.51  | 8.25E-17 | Treg_UCBMC |
| TCF12              | 2.43E-21 | 0.44012478 | 0.785 | 0.707 | 8.62E-17 | Treg_UCBMC |
| RPS3               | 2.87E-21 | 0.31451669 | 0.921 | 0.88  | 1.02E-16 | Treg_UCBMC |
| BTBD10             | 2.90E-21 | 1.0203682  | 0.319 | 0.203 | 1.03E-16 | Treg_UCBMC |
| SUCLG2             | 2.97E-21 | 0.62551011 | 0.601 | 0.511 | 1.05E-16 | Treg_UCBMC |
| G2E3               | 2.98E-21 | 1.04497049 | 0.319 | 0.204 | 1.06E-16 | Treg_UCBMC |
| UXS1               | 3.34E-21 | 0.72390753 | 0.461 | 0.347 | 1.18E-16 | Treg_UCBMC |
| RPRD1A             | 3.55E-21 | 0.95997827 | 0.349 | 0.235 | 1.26E-16 | Treg_UCBMC |
| ATP2C1             | 4.84E-21 | 0.72332315 | 0.515 | 0.403 | 1.71E-16 | Treg_UCBMC |
| PHF3               | 5.42E-21 | 0.63438336 | 0.529 | 0.429 | 1.92E-16 | Treg_UCBMC |
| MBNL1              | 6.09E-21 | 0.18343728 | 0.986 | 0.934 | 2.16E-16 | Treg_UCBMC |
| STK38L             | 7.59E-21 | 1.16301502 | 0.255 | 0.144 | 2.69E-16 | Treg_UCBMC |
| PRKX               | 7.98E-21 | 0.55731025 | 0.563 | 0.45  | 2.83E-16 | Treg_UCBMC |
| LCOR               | 1.36E-20 | 0.55697241 | 0.552 | 0.444 | 4.81E-16 | Treg_UCBMC |
| CACUL1             | 1.43E-20 | 1.03620053 | 0.308 | 0.194 | 5.06E-16 | Treg_UCBMC |
| RNF38              | 1.47E-20 | 0.57608083 | 0.569 | 0.472 | 5.22E-16 | Treg_UCBMC |
| TRPM7              | 1.56E-20 | 0.43062194 | 0.695 | 0.608 | 5.54E-16 | Treg_UCBMC |
| ENSMMUG00000014648 | 1.60E-20 | 0.47814159 | 0.681 | 0.609 | 5.68E-16 | Treg_UCBMC |
| TGS1               | 2.15E-20 | 0.90931456 | 0.394 | 0.29  | 7.63E-16 | Treg_UCBMC |
| RFC1               | 2.69E-20 | 0.70176923 | 0.496 | 0.398 | 9.53E-16 | Treg_UCBMC |
| RALA               | 3.03E-20 | 0.81830086 | 0.375 | 0.261 | 1.07E-15 | Treg_UCBMC |
| MACO1              | 3.26E-20 | 0.86823394 | 0.367 | 0.25  | 1.15E-15 | Treg_UCBMC |
| CUL5               | 3.93E-20 | 0.62125148 | 0.534 | 0.44  | 1.39E-15 | Treg_UCBMC |
| THUMPD2            | 5.12E-20 | 0.87998548 | 0.376 | 0.267 | 1.82E-15 | Treg_UCBMC |
| UBE2G1             | 5.81E-20 | 0.83683293 | 0.495 | 0.411 | 2.06E-15 | Treg_UCBMC |

|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| CDK13              | 5.82E-20 | 0.47553331 | 0.616 | 0.514 | 2.06E-15 | Treg_UCBMC |
| KAT6A              | 5.90E-20 | 0.32747639 | 0.696 | 0.594 | 2.09E-15 | Treg_UCBMC |
| SEPTIN6            | 6.19E-20 | 0.38509113 | 0.778 | 0.703 | 2.19E-15 | Treg_UCBMC |
| CDC42              | 6.52E-20 | 0.31616807 | 0.86  | 0.831 | 2.31E-15 | Treg_UCBMC |
| SNX4               | 7.97E-20 | 0.80826127 | 0.423 | 0.312 | 2.82E-15 | Treg_UCBMC |
| YME1L1             | 8.15E-20 | 0.70018933 | 0.467 | 0.362 | 2.89E-15 | Treg_UCBMC |
| RNMT               | 8.28E-20 | 0.5299757  | 0.588 | 0.507 | 2.93E-15 | Treg_UCBMC |
| ENSMMUG00000006165 | 9.55E-20 | 0.27283168 | 0.846 | 0.777 | 3.38E-15 | Treg_UCBMC |
| PLEKHM1            | 1.02E-19 | 1.20078581 | 0.258 | 0.153 | 3.61E-15 | Treg_UCBMC |
| ENSMMUG00000015270 | 1.34E-19 | 0.26120699 | 0.968 | 0.949 | 4.76E-15 | Treg_UCBMC |
| CDKAL1             | 1.53E-19 | 0.44154479 | 0.643 | 0.547 | 5.41E-15 | Treg_UCBMC |
| TIMM23             | 1.57E-19 | 0.89895158 | 0.391 | 0.284 | 5.58E-15 | Treg_UCBMC |
| LYST               | 1.98E-19 | 0.56358903 | 0.384 | 0.261 | 7.00E-15 | Treg_UCBMC |
| AKAP13             | 2.08E-19 | 0.32710617 | 0.872 | 0.793 | 7.36E-15 | Treg_UCBMC |
| KDM3A              | 2.16E-19 | 0.93112159 | 0.315 | 0.201 | 7.67E-15 | Treg_UCBMC |
| TBC1D15            | 2.64E-19 | 0.75272165 | 0.443 | 0.342 | 9.34E-15 | Treg_UCBMC |
| ZBTB20             | 2.96E-19 | 0.37599609 | 0.663 | 0.558 | 1.05E-14 | Treg_UCBMC |
| DAZAP2             | 3.10E-19 | 0.64644464 | 0.511 | 0.426 | 1.10E-14 | Treg_UCBMC |
| CHD6               | 3.42E-19 | 0.6745209  | 0.471 | 0.371 | 1.21E-14 | Treg_UCBMC |
| PNN                | 3.64E-19 | 0.62736057 | 0.551 | 0.461 | 1.29E-14 | Treg_UCBMC |
| MLLT3              | 3.89E-19 | 0.28326497 | 0.727 | 0.608 | 1.38E-14 | Treg_UCBMC |
| CSDE1              | 4.55E-19 | 0.5273956  | 0.597 | 0.52  | 1.61E-14 | Treg_UCBMC |
| DHX9               | 4.76E-19 | 0.63407758 | 0.559 | 0.468 | 1.69E-14 | Treg_UCBMC |
| RAB7A              | 5.17E-19 | 0.54394244 | 0.599 | 0.525 | 1.83E-14 | Treg_UCBMC |
| AFF1               | 5.62E-19 | 0.41797077 | 0.582 | 0.478 | 1.99E-14 | Treg_UCBMC |
| OSER1              | 6.47E-19 | 0.98630352 | 0.292 | 0.187 | 2.29E-14 | Treg_UCBMC |
| MINDY3             | 8.08E-19 | 0.7672252  | 0.373 | 0.26  | 2.86E-14 | Treg_UCBMC |
| EEF2               | 8.20E-19 | 0.40388875 | 0.732 | 0.662 | 2.91E-14 | Treg_UCBMC |
| ZNF483             | 8.75E-19 | 0.53052059 | 0.62  | 0.552 | 3.10E-14 | Treg_UCBMC |
| TSC22D3            | 8.81E-19 | 0.54955068 | 0.611 | 0.525 | 3.12E-14 | Treg_UCBMC |
| ARMC8              | 9.42E-19 | 0.87134544 | 0.373 | 0.27  | 3.34E-14 | Treg_UCBMC |
| RRAS2              | 1.10E-18 | 0.99046363 | 0.288 | 0.182 | 3.89E-14 | Treg_UCBMC |
| HNRNPUL1           | 1.14E-18 | 0.76703396 | 0.421 | 0.324 | 4.04E-14 | Treg_UCBMC |

|                   |          |            |       |       |          |            |
|-------------------|----------|------------|-------|-------|----------|------------|
| PHC3              | 1.25E-18 | 0.70668167 | 0.442 | 0.339 | 4.43E-14 | Treg_UCBMC |
| PITPNC1           | 1.47E-18 | 0.21712008 | 0.886 | 0.768 | 5.23E-14 | Treg_UCBMC |
| PITPNM2           | 1.55E-18 | 1.00959597 | 0.274 | 0.166 | 5.48E-14 | Treg_UCBMC |
| MORF4L1           | 1.59E-18 | 0.41287705 | 0.706 | 0.635 | 5.62E-14 | Treg_UCBMC |
| ENSMUG00000055457 | 1.98E-18 | 0.8018805  | 0.407 | 0.315 | 7.00E-14 | Treg_UCBMC |
| CIR1              | 2.10E-18 | 0.81281145 | 0.368 | 0.262 | 7.44E-14 | Treg_UCBMC |
| EIF3A             | 2.50E-18 | 0.54714672 | 0.588 | 0.498 | 8.85E-14 | Treg_UCBMC |
| RPL7              | 2.84E-18 | 0.31403753 | 0.871 | 0.801 | 1.00E-13 | Treg_UCBMC |
| CYLD              | 3.27E-18 | 0.45624014 | 0.582 | 0.487 | 1.16E-13 | Treg_UCBMC |
| MORC3             | 4.46E-18 | 0.81088495 | 0.365 | 0.261 | 1.58E-13 | Treg_UCBMC |
| CAPN7             | 5.01E-18 | 1.05355884 | 0.305 | 0.204 | 1.77E-13 | Treg_UCBMC |
| APLP2             | 5.26E-18 | 0.81131036 | 0.366 | 0.261 | 1.86E-13 | Treg_UCBMC |
| DOP1B             | 5.63E-18 | 0.93666897 | 0.307 | 0.197 | 2.00E-13 | Treg_UCBMC |
| SLC4A7            | 5.97E-18 | 0.55662122 | 0.516 | 0.412 | 2.11E-13 | Treg_UCBMC |
| USP33             | 6.72E-18 | 0.84207999 | 0.338 | 0.233 | 2.38E-13 | Treg_UCBMC |
| DDX3Y             | 6.97E-18 | 0.42604688 | 0.455 | 0.314 | 2.47E-13 | Treg_UCBMC |
| ACIN1             | 7.13E-18 | 0.65977411 | 0.522 | 0.446 | 2.53E-13 | Treg_UCBMC |
| SEC31A            | 7.67E-18 | 0.56216977 | 0.535 | 0.449 | 2.72E-13 | Treg_UCBMC |
| LSM14A            | 9.02E-18 | 0.57353509 | 0.565 | 0.489 | 3.20E-13 | Treg_UCBMC |
| TFG               | 1.10E-17 | 0.97288493 | 0.328 | 0.226 | 3.90E-13 | Treg_UCBMC |
| UHRF1BP1L         | 1.21E-17 | 0.786628   | 0.421 | 0.326 | 4.30E-13 | Treg_UCBMC |
| RNF4              | 1.28E-17 | 0.99740461 | 0.315 | 0.218 | 4.55E-13 | Treg_UCBMC |
| ANAPC10           | 1.35E-17 | 0.93362865 | 0.353 | 0.253 | 4.77E-13 | Treg_UCBMC |
| PTPN1             | 1.36E-17 | 0.62349292 | 0.487 | 0.388 | 4.81E-13 | Treg_UCBMC |
| GOLPH3            | 1.38E-17 | 0.75817207 | 0.464 | 0.376 | 4.90E-13 | Treg_UCBMC |
| RPLP2             | 1.57E-17 | 0.26857145 | 0.928 | 0.9   | 5.56E-13 | Treg_UCBMC |
| RPL5              | 1.74E-17 | 0.22170645 | 0.949 | 0.92  | 6.15E-13 | Treg_UCBMC |
| RAB1A             | 2.04E-17 | 0.54632966 | 0.572 | 0.481 | 7.23E-13 | Treg_UCBMC |
| TCERG1            | 2.13E-17 | 0.76256905 | 0.423 | 0.328 | 7.56E-13 | Treg_UCBMC |
| GINM1             | 2.74E-17 | 0.79491783 | 0.389 | 0.293 | 9.71E-13 | Treg_UCBMC |
| TM9SF2            | 3.34E-17 | 0.83827283 | 0.362 | 0.259 | 1.18E-12 | Treg_UCBMC |
| PSEN1             | 4.26E-17 | 0.66034356 | 0.355 | 0.245 | 1.51E-12 | Treg_UCBMC |
| APC               | 4.33E-17 | 0.96592394 | 0.297 | 0.197 | 1.53E-12 | Treg_UCBMC |

|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| BIN3               | 5.19E-17 | 0.89302605 | 0.38  | 0.294 | 1.84E-12 | Treg_UCBMC |
| GAPVD1             | 5.23E-17 | 0.7636772  | 0.416 | 0.317 | 1.85E-12 | Treg_UCBMC |
| ZMYM5              | 5.28E-17 | 0.9848313  | 0.29  | 0.189 | 1.87E-12 | Treg_UCBMC |
| DHX40              | 6.06E-17 | 0.88918054 | 0.303 | 0.203 | 2.15E-12 | Treg_UCBMC |
| PPHLN1             | 6.58E-17 | 0.60979625 | 0.532 | 0.456 | 2.33E-12 | Treg_UCBMC |
| FOXJ3              | 6.82E-17 | 0.58296352 | 0.504 | 0.416 | 2.42E-12 | Treg_UCBMC |
| SREK1IP1           | 8.55E-17 | 0.85058961 | 0.35  | 0.251 | 3.03E-12 | Treg_UCBMC |
| TRIB2              | 1.07E-16 | 0.69635611 | 0.391 | 0.294 | 3.79E-12 | Treg_UCBMC |
| ZNF43              | 1.16E-16 | 0.92516908 | 0.326 | 0.23  | 4.10E-12 | Treg_UCBMC |
| SPTBN1             | 1.16E-16 | 0.46582314 | 0.529 | 0.422 | 4.12E-12 | Treg_UCBMC |
| SLC35D1            | 1.26E-16 | 0.99895329 | 0.254 | 0.157 | 4.48E-12 | Treg_UCBMC |
| AP3B1              | 1.43E-16 | 0.54145856 | 0.541 | 0.457 | 5.05E-12 | Treg_UCBMC |
| RPL4               | 1.59E-16 | 0.30253594 | 0.85  | 0.802 | 5.62E-12 | Treg_UCBMC |
| FBXO25             | 1.69E-16 | 0.86329941 | 0.303 | 0.2   | 5.98E-12 | Treg_UCBMC |
| ENSMMUG00000059742 | 1.93E-16 | 0.8278004  | 0.383 | 0.293 | 6.83E-12 | Treg_UCBMC |
| GPHN               | 1.93E-16 | 0.57468946 | 0.445 | 0.326 | 6.83E-12 | Treg_UCBMC |
| STK4               | 2.05E-16 | 0.34949334 | 0.747 | 0.671 | 7.26E-12 | Treg_UCBMC |
| CCNK               | 2.72E-16 | 0.68535655 | 0.449 | 0.364 | 9.64E-12 | Treg_UCBMC |
| PAFAH1B2           | 2.88E-16 | 0.97663897 | 0.281 | 0.187 | 1.02E-11 | Treg_UCBMC |
| GPR107             | 2.96E-16 | 0.67971425 | 0.396 | 0.302 | 1.05E-11 | Treg_UCBMC |
| CUL2               | 3.66E-16 | 0.89301173 | 0.344 | 0.248 | 1.30E-11 | Treg_UCBMC |
| ACSL3              | 4.53E-16 | 1.036191   | 0.266 | 0.172 | 1.61E-11 | Treg_UCBMC |
| CNOT1              | 4.72E-16 | 0.59875583 | 0.508 | 0.425 | 1.67E-11 | Treg_UCBMC |
| MON2               | 5.65E-16 | 0.75728523 | 0.409 | 0.321 | 2.00E-11 | Treg_UCBMC |
| TOGARAM1           | 6.44E-16 | 0.9887224  | 0.251 | 0.157 | 2.28E-11 | Treg_UCBMC |
| SREK1              | 7.34E-16 | 0.45738791 | 0.601 | 0.535 | 2.60E-11 | Treg_UCBMC |
| TRIM33             | 7.42E-16 | 0.64469099 | 0.46  | 0.366 | 2.63E-11 | Treg_UCBMC |
| CD2AP              | 9.92E-16 | 0.76409475 | 0.345 | 0.245 | 3.51E-11 | Treg_UCBMC |
| AFF3               | 1.18E-15 | 0.24434942 | 0.696 | 0.571 | 4.20E-11 | Treg_UCBMC |
| PPIG               | 1.21E-15 | 0.5946554  | 0.516 | 0.43  | 4.29E-11 | Treg_UCBMC |
| RRM1               | 1.23E-15 | 0.89219342 | 0.314 | 0.22  | 4.36E-11 | Treg_UCBMC |
| HELZ               | 1.25E-15 | 0.40872692 | 0.634 | 0.551 | 4.43E-11 | Treg_UCBMC |
| CDC40              | 1.59E-15 | 0.84580834 | 0.292 | 0.197 | 5.62E-11 | Treg_UCBMC |

|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| WDR43              | 1.64E-15 | 0.64496313 | 0.418 | 0.32  | 5.82E-11 | Treg_UCBMC |
| RAB18              | 1.76E-15 | 0.79779359 | 0.329 | 0.233 | 6.23E-11 | Treg_UCBMC |
| TMEM131            | 1.92E-15 | 0.55412696 | 0.512 | 0.425 | 6.79E-11 | Treg_UCBMC |
| TNKS2              | 2.08E-15 | 0.78807893 | 0.396 | 0.31  | 7.36E-11 | Treg_UCBMC |
| KAT7               | 2.13E-15 | 0.62062556 | 0.391 | 0.295 | 7.53E-11 | Treg_UCBMC |
| EXOC6              | 2.13E-15 | 0.45117052 | 0.513 | 0.414 | 7.54E-11 | Treg_UCBMC |
| TTC7A              | 2.21E-15 | 0.90364749 | 0.314 | 0.218 | 7.84E-11 | Treg_UCBMC |
| FBXL5              | 2.56E-15 | 0.85779871 | 0.301 | 0.205 | 9.07E-11 | Treg_UCBMC |
| SETD7              | 2.79E-15 | 0.81324296 | 0.32  | 0.22  | 9.90E-11 | Treg_UCBMC |
| GTPBP10            | 3.01E-15 | 0.84020167 | 0.323 | 0.232 | 1.07E-10 | Treg_UCBMC |
| SS18               | 3.09E-15 | 0.65130969 | 0.466 | 0.39  | 1.10E-10 | Treg_UCBMC |
| WDR33              | 3.36E-15 | 0.63853856 | 0.449 | 0.364 | 1.19E-10 | Treg_UCBMC |
| CBLL1              | 3.62E-15 | 0.93819933 | 0.28  | 0.188 | 1.28E-10 | Treg_UCBMC |
| RNF145             | 4.30E-15 | 0.54998154 | 0.522 | 0.445 | 1.53E-10 | Treg_UCBMC |
| ENSMMUG00000008346 | 4.52E-15 | 0.54503328 | 0.489 | 0.403 | 1.60E-10 | Treg_UCBMC |
| RASA3              | 5.43E-15 | 0.57344387 | 0.397 | 0.293 | 1.92E-10 | Treg_UCBMC |
| ILKAP              | 5.62E-15 | 0.62634839 | 0.465 | 0.391 | 1.99E-10 | Treg_UCBMC |
| PI4K2B             | 6.42E-15 | 0.41409625 | 0.606 | 0.541 | 2.27E-10 | Treg_UCBMC |
| TRAPPC10           | 7.03E-15 | 0.67999287 | 0.405 | 0.313 | 2.49E-10 | Treg_UCBMC |
| GALNT11            | 7.17E-15 | 0.75272543 | 0.349 | 0.257 | 2.54E-10 | Treg_UCBMC |
| ENSMMUG00000006778 | 8.15E-15 | 0.64707278 | 0.435 | 0.351 | 2.89E-10 | Treg_UCBMC |
| PTPRA              | 8.68E-15 | 0.44749697 | 0.518 | 0.431 | 3.07E-10 | Treg_UCBMC |
| NCAPD3             | 8.80E-15 | 0.86028363 | 0.289 | 0.197 | 3.12E-10 | Treg_UCBMC |
| CREBBP             | 8.88E-15 | 0.48242544 | 0.577 | 0.498 | 3.15E-10 | Treg_UCBMC |
| RBM27              | 9.63E-15 | 0.56184191 | 0.463 | 0.377 | 3.41E-10 | Treg_UCBMC |
| JMY                | 1.16E-14 | 0.38226982 | 0.539 | 0.439 | 4.10E-10 | Treg_UCBMC |
| INO80D             | 1.25E-14 | 0.62226168 | 0.42  | 0.331 | 4.45E-10 | Treg_UCBMC |
| DOCK11             | 1.29E-14 | 0.40558145 | 0.606 | 0.528 | 4.59E-10 | Treg_UCBMC |
| SORL1              | 1.37E-14 | 0.40364759 | 0.626 | 0.547 | 4.85E-10 | Treg_UCBMC |
| AKAP9              | 1.75E-14 | 0.40830625 | 0.596 | 0.519 | 6.21E-10 | Treg_UCBMC |
| NIPBL              | 1.87E-14 | 0.4419089  | 0.572 | 0.501 | 6.61E-10 | Treg_UCBMC |
| LONP2              | 2.15E-14 | 0.61693738 | 0.434 | 0.342 | 7.64E-10 | Treg_UCBMC |
| C1GALT1            | 2.22E-14 | 0.86736559 | 0.319 | 0.23  | 7.87E-10 | Treg_UCBMC |



|          |          |            |       |       |          |            |
|----------|----------|------------|-------|-------|----------|------------|
| PCCA     | 2.25E-14 | 0.46414843 | 0.517 | 0.424 | 7.96E-10 | Treg_UCBMC |
| PCM1     | 2.45E-14 | 0.54129215 | 0.512 | 0.435 | 8.68E-10 | Treg_UCBMC |
| CCNT2    | 3.39E-14 | 0.72865155 | 0.386 | 0.3   | 1.20E-09 | Treg_UCBMC |
| DDX52    | 3.73E-14 | 0.74511974 | 0.34  | 0.246 | 1.32E-09 | Treg_UCBMC |
| HERC1    | 3.92E-14 | 0.36124123 | 0.517 | 0.418 | 1.39E-09 | Treg_UCBMC |
| ZNF292   | 4.32E-14 | 0.314102   | 0.706 | 0.636 | 1.53E-09 | Treg_UCBMC |
| XPO4     | 4.50E-14 | 0.86713301 | 0.299 | 0.207 | 1.59E-09 | Treg_UCBMC |
| OGA      | 4.58E-14 | 0.45866518 | 0.549 | 0.474 | 1.62E-09 | Treg_UCBMC |
| N4BP1    | 4.97E-14 | 0.67898502 | 0.384 | 0.294 | 1.76E-09 | Treg_UCBMC |
| FCMR     | 5.01E-14 | 0.44096738 | 0.464 | 0.355 | 1.78E-09 | Treg_UCBMC |
| DUSP16   | 5.93E-14 | 0.3109831  | 0.452 | 0.344 | 2.10E-09 | Treg_UCBMC |
| BRD7     | 6.70E-14 | 0.75676452 | 0.349 | 0.262 | 2.37E-09 | Treg_UCBMC |
| TBC1D23  | 7.12E-14 | 0.65590388 | 0.38  | 0.291 | 2.52E-09 | Treg_UCBMC |
| SNX29    | 8.06E-14 | 0.72794886 | 0.369 | 0.281 | 2.86E-09 | Treg_UCBMC |
| GPCPD1   | 8.20E-14 | 0.45228769 | 0.511 | 0.421 | 2.90E-09 | Treg_UCBMC |
| SYNE1    | 8.52E-14 | 0.60058951 | 0.431 | 0.343 | 3.02E-09 | Treg_UCBMC |
| SERINC1  | 9.86E-14 | 0.57897286 | 0.505 | 0.43  | 3.49E-09 | Treg_UCBMC |
| ZNF451   | 1.03E-13 | 0.60618909 | 0.467 | 0.389 | 3.66E-09 | Treg_UCBMC |
| PIP5K1A  | 1.09E-13 | 0.77609723 | 0.366 | 0.282 | 3.87E-09 | Treg_UCBMC |
| KANSL1   | 1.13E-13 | 0.33288176 | 0.645 | 0.566 | 4.02E-09 | Treg_UCBMC |
| NUP214   | 1.23E-13 | 0.67882572 | 0.395 | 0.312 | 4.37E-09 | Treg_UCBMC |
| CTDP1    | 1.24E-13 | 0.82349445 | 0.269 | 0.181 | 4.40E-09 | Treg_UCBMC |
| CCDC91   | 1.30E-13 | 0.36324798 | 0.667 | 0.613 | 4.60E-09 | Treg_UCBMC |
| KLHL2    | 1.48E-13 | 0.68148828 | 0.318 | 0.225 | 5.23E-09 | Treg_UCBMC |
| KAT6B    | 1.50E-13 | 0.36478202 | 0.607 | 0.524 | 5.31E-09 | Treg_UCBMC |
| CHD7     | 1.53E-13 | 0.63678544 | 0.362 | 0.27  | 5.43E-09 | Treg_UCBMC |
| PPP1R2   | 1.63E-13 | 0.58051038 | 0.481 | 0.403 | 5.78E-09 | Treg_UCBMC |
| NIPSNAP2 | 1.75E-13 | 0.80951955 | 0.332 | 0.245 | 6.21E-09 | Treg_UCBMC |
| ATXN7    | 2.04E-13 | 0.3907928  | 0.549 | 0.469 | 7.23E-09 | Treg_UCBMC |
| SEC22B   | 2.30E-13 | 0.91827482 | 0.255 | 0.172 | 8.16E-09 | Treg_UCBMC |
| RPL27A   | 2.42E-13 | 0.22403608 | 0.926 | 0.873 | 8.58E-09 | Treg_UCBMC |
| DIDO1    | 2.91E-13 | 0.6869182  | 0.321 | 0.235 | 1.03E-08 | Treg_UCBMC |
| CRNKL1   | 2.96E-13 | 0.8889633  | 0.254 | 0.171 | 1.05E-08 | Treg_UCBMC |

|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| ENSMMUG00000053384 | 3.07E-13 | 0.97688    | 0.258 | 0.177 | 1.09E-08 | Treg_UCBMC |
| GALNT1             | 3.29E-13 | 0.80005538 | 0.303 | 0.215 | 1.17E-08 | Treg_UCBMC |
| TNKS               | 3.79E-13 | 0.59462176 | 0.478 | 0.403 | 1.34E-08 | Treg_UCBMC |
| USP47              | 4.22E-13 | 0.41801272 | 0.589 | 0.518 | 1.50E-08 | Treg_UCBMC |
| SEC23A             | 4.48E-13 | 0.8633557  | 0.282 | 0.2   | 1.59E-08 | Treg_UCBMC |
| KDM7A              | 4.71E-13 | 0.57516951 | 0.357 | 0.268 | 1.67E-08 | Treg_UCBMC |
| WAC                | 4.87E-13 | 0.39779914 | 0.593 | 0.535 | 1.73E-08 | Treg_UCBMC |
| APPL2              | 4.93E-13 | 0.82861506 | 0.29  | 0.203 | 1.75E-08 | Treg_UCBMC |
| ARID1B             | 5.27E-13 | 0.30837978 | 0.721 | 0.648 | 1.87E-08 | Treg_UCBMC |
| ADNP               | 5.83E-13 | 0.61592191 | 0.39  | 0.305 | 2.07E-08 | Treg_UCBMC |
| PRDM2              | 5.95E-13 | 0.55162397 | 0.409 | 0.325 | 2.11E-08 | Treg_UCBMC |
| SMG6               | 6.56E-13 | 0.44537542 | 0.533 | 0.452 | 2.32E-08 | Treg_UCBMC |
| SELENOT            | 7.75E-13 | 0.88497163 | 0.291 | 0.211 | 2.75E-08 | Treg_UCBMC |
| VPS13B             | 7.84E-13 | 0.24137098 | 0.802 | 0.725 | 2.78E-08 | Treg_UCBMC |
| CLASP2             | 8.07E-13 | 0.50459566 | 0.495 | 0.412 | 2.86E-08 | Treg_UCBMC |
| XYLT1              | 8.08E-13 | 0.40273089 | 0.585 | 0.501 | 2.86E-08 | Treg_UCBMC |
| USP10              | 1.02E-12 | 0.55315845 | 0.48  | 0.412 | 3.63E-08 | Treg_UCBMC |
| ANXA1              | 1.12E-12 | 0.39011184 | 0.272 | 0.178 | 3.95E-08 | Treg_UCBMC |
| RPL10A             | 1.26E-12 | 0.22763592 | 0.925 | 0.898 | 4.45E-08 | Treg_UCBMC |
| RACK1              | 1.47E-12 | 0.23070646 | 0.926 | 0.899 | 5.22E-08 | Treg_UCBMC |
| THUMPD1            | 1.55E-12 | 0.85965693 | 0.269 | 0.189 | 5.51E-08 | Treg_UCBMC |
| TCP11L2            | 1.61E-12 | 0.4275568  | 0.401 | 0.307 | 5.70E-08 | Treg_UCBMC |
| TUT7               | 1.67E-12 | 0.59583127 | 0.419 | 0.342 | 5.92E-08 | Treg_UCBMC |
| VEZT               | 1.74E-12 | 0.77817535 | 0.292 | 0.208 | 6.15E-08 | Treg_UCBMC |
| CDK17              | 1.85E-12 | 0.39352514 | 0.542 | 0.461 | 6.55E-08 | Treg_UCBMC |
| ELF2               | 1.92E-12 | 0.63775068 | 0.384 | 0.3   | 6.80E-08 | Treg_UCBMC |
| ZFR                | 2.11E-12 | 0.6187185  | 0.422 | 0.346 | 7.49E-08 | Treg_UCBMC |
| DAAM1              | 2.37E-12 | 0.76304663 | 0.253 | 0.169 | 8.38E-08 | Treg_UCBMC |
| ABCG1              | 2.80E-12 | 0.7804258  | 0.297 | 0.214 | 9.92E-08 | Treg_UCBMC |
| MRTFA              | 2.96E-12 | 0.50410894 | 0.477 | 0.396 | 1.05E-07 | Treg_UCBMC |
| RLF                | 3.02E-12 | 0.50225061 | 0.507 | 0.437 | 1.07E-07 | Treg_UCBMC |
| GPATCH8            | 3.15E-12 | 0.48566142 | 0.523 | 0.453 | 1.12E-07 | Treg_UCBMC |
| SLC25A26           | 3.30E-12 | 0.62472837 | 0.395 | 0.315 | 1.17E-07 | Treg_UCBMC |

|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| PREP               | 3.31E-12 | 0.71899918 | 0.367 | 0.288 | 1.17E-07 | Treg_UCBMC |
| ENSMMUG00000029026 | 3.79E-12 | 0.55181655 | 0.456 | 0.392 | 1.34E-07 | Treg_UCBMC |
| CSNK1A1            | 3.84E-12 | 0.34832871 | 0.664 | 0.609 | 1.36E-07 | Treg_UCBMC |
| ENSMMUG00000046264 | 3.86E-12 | 0.64564274 | 0.359 | 0.281 | 1.37E-07 | Treg_UCBMC |
| AKT3               | 3.89E-12 | 0.32412815 | 0.616 | 0.529 | 1.38E-07 | Treg_UCBMC |
| GNG2               | 4.49E-12 | 0.20870049 | 0.783 | 0.706 | 1.59E-07 | Treg_UCBMC |
| CHD2               | 4.57E-12 | 0.27008486 | 0.705 | 0.633 | 1.62E-07 | Treg_UCBMC |
| CMTR1              | 5.00E-12 | 0.66348505 | 0.322 | 0.242 | 1.77E-07 | Treg_UCBMC |
| MAN2A1             | 5.05E-12 | 0.27909134 | 0.617 | 0.536 | 1.79E-07 | Treg_UCBMC |
| REPS1              | 5.29E-12 | 0.73834882 | 0.301 | 0.217 | 1.88E-07 | Treg_UCBMC |
| AGTPBP1            | 5.51E-12 | 0.54651676 | 0.389 | 0.305 | 1.95E-07 | Treg_UCBMC |
| KPNA3              | 5.60E-12 | 0.636994   | 0.415 | 0.344 | 1.98E-07 | Treg_UCBMC |
| ABI1               | 5.73E-12 | 0.19283502 | 0.67  | 0.588 | 2.03E-07 | Treg_UCBMC |
| MED15              | 6.00E-12 | 0.78744898 | 0.284 | 0.206 | 2.13E-07 | Treg_UCBMC |
| NAA15              | 6.47E-12 | 0.4398549  | 0.486 | 0.408 | 2.29E-07 | Treg_UCBMC |
| ASH1L              | 6.48E-12 | 0.25665053 | 0.72  | 0.658 | 2.30E-07 | Treg_UCBMC |
| COPB1              | 9.10E-12 | 0.7468406  | 0.321 | 0.243 | 3.22E-07 | Treg_UCBMC |
| ENSMMUG00000013429 | 1.13E-11 | 0.17225008 | 0.97  | 0.94  | 4.02E-07 | Treg_UCBMC |
| ENSMMUG00000062716 | 1.19E-11 | 0.90778802 | 0.29  | 0.211 | 4.22E-07 | Treg_UCBMC |
| ZRANB2             | 1.21E-11 | 0.53952061 | 0.468 | 0.409 | 4.28E-07 | Treg_UCBMC |
| TAPT1              | 1.32E-11 | 0.76474185 | 0.311 | 0.232 | 4.69E-07 | Treg_UCBMC |
| AHCTF1             | 1.34E-11 | 0.61109377 | 0.405 | 0.328 | 4.75E-07 | Treg_UCBMC |
| TTC17              | 1.51E-11 | 0.53710326 | 0.464 | 0.397 | 5.34E-07 | Treg_UCBMC |
| KCTD20             | 1.53E-11 | 0.84604873 | 0.293 | 0.22  | 5.41E-07 | Treg_UCBMC |
| CAND1              | 1.55E-11 | 0.5776226  | 0.444 | 0.379 | 5.48E-07 | Treg_UCBMC |
| SDHAF4             | 1.71E-11 | 0.50738392 | 0.533 | 0.485 | 6.05E-07 | Treg_UCBMC |
| MBTPS1             | 1.77E-11 | 0.62574544 | 0.419 | 0.351 | 6.27E-07 | Treg_UCBMC |
| ENSMMUG00000030465 | 1.95E-11 | 0.52141867 | 0.473 | 0.414 | 6.90E-07 | Treg_UCBMC |
| SSBP2              | 2.11E-11 | 0.30514612 | 0.642 | 0.562 | 7.47E-07 | Treg_UCBMC |
| ENSMMUG00000006463 | 2.16E-11 | 0.33501718 | 0.675 | 0.637 | 7.64E-07 | Treg_UCBMC |
| MTMR3              | 2.35E-11 | 0.5377992  | 0.377 | 0.296 | 8.34E-07 | Treg_UCBMC |
| FRYL               | 3.04E-11 | 0.51686014 | 0.419 | 0.341 | 1.08E-06 | Treg_UCBMC |
| JMJD1C             | 3.09E-11 | 0.18973329 | 0.842 | 0.762 | 1.09E-06 | Treg_UCBMC |

|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| ITCH               | 3.45E-11 | 0.27509558 | 0.677 | 0.605 | 1.22E-06 | Treg_UCBMC |
| CAPZA2             | 3.48E-11 | 0.44416482 | 0.541 | 0.478 | 1.23E-06 | Treg_UCBMC |
| OGT                | 3.71E-11 | 0.34158133 | 0.584 | 0.519 | 1.31E-06 | Treg_UCBMC |
| TAF3               | 3.88E-11 | 0.51475519 | 0.444 | 0.368 | 1.37E-06 | Treg_UCBMC |
| TRAT1              | 4.18E-11 | 0.65871557 | 0.32  | 0.242 | 1.48E-06 | Treg_UCBMC |
| ANTXR2             | 4.74E-11 | 0.54742404 | 0.389 | 0.3   | 1.68E-06 | Treg_UCBMC |
| RIOK3              | 5.37E-11 | 0.63241878 | 0.372 | 0.298 | 1.90E-06 | Treg_UCBMC |
| LRRC8C             | 5.72E-11 | 0.53281719 | 0.403 | 0.322 | 2.03E-06 | Treg_UCBMC |
| PLAA               | 5.83E-11 | 0.8512616  | 0.271 | 0.196 | 2.07E-06 | Treg_UCBMC |
| RAD21              | 6.65E-11 | 0.48057821 | 0.492 | 0.434 | 2.36E-06 | Treg_UCBMC |
| MATR3              | 6.91E-11 | 0.26740127 | 0.778 | 0.732 | 2.45E-06 | Treg_UCBMC |
| MGAT4A             | 7.20E-11 | 0.75005969 | 0.283 | 0.207 | 2.55E-06 | Treg_UCBMC |
| CRY1               | 7.41E-11 | 0.40827393 | 0.384 | 0.295 | 2.62E-06 | Treg_UCBMC |
| KDM1A              | 7.81E-11 | 0.94748879 | 0.269 | 0.196 | 2.77E-06 | Treg_UCBMC |
| MAML2              | 8.15E-11 | 0.10873716 | 0.777 | 0.673 | 2.89E-06 | Treg_UCBMC |
| GTF2B              | 8.73E-11 | 0.35759665 | 0.599 | 0.537 | 3.09E-06 | Treg_UCBMC |
| CPSF3              | 8.86E-11 | 0.77742696 | 0.307 | 0.24  | 3.14E-06 | Treg_UCBMC |
| STAU1              | 8.90E-11 | 0.51509331 | 0.47  | 0.414 | 3.16E-06 | Treg_UCBMC |
| SLMAP              | 8.96E-11 | 0.42616546 | 0.541 | 0.478 | 3.18E-06 | Treg_UCBMC |
| SOS1               | 9.36E-11 | 0.31087727 | 0.557 | 0.486 | 3.32E-06 | Treg_UCBMC |
| SCML4              | 9.37E-11 | 0.32939991 | 0.57  | 0.5   | 3.32E-06 | Treg_UCBMC |
| DENND5A            | 9.37E-11 | 0.56765045 | 0.337 | 0.256 | 3.32E-06 | Treg_UCBMC |
| MED23              | 9.57E-11 | 0.75471127 | 0.323 | 0.25  | 3.39E-06 | Treg_UCBMC |
| RIC1               | 9.95E-11 | 0.61678555 | 0.364 | 0.288 | 3.52E-06 | Treg_UCBMC |
| HIPK3              | 1.04E-10 | 0.75669126 | 0.3   | 0.227 | 3.67E-06 | Treg_UCBMC |
| MRTFB              | 1.15E-10 | 0.60088725 | 0.287 | 0.208 | 4.09E-06 | Treg_UCBMC |
| APPBP2             | 1.23E-10 | 0.61754687 | 0.334 | 0.259 | 4.37E-06 | Treg_UCBMC |
| RAPGEF2            | 1.24E-10 | 0.37032133 | 0.469 | 0.385 | 4.38E-06 | Treg_UCBMC |
| SRSF5              | 1.28E-10 | 0.26773584 | 0.748 | 0.713 | 4.53E-06 | Treg_UCBMC |
| SELENOS            | 1.31E-10 | 0.41190354 | 0.521 | 0.463 | 4.63E-06 | Treg_UCBMC |
| METTL16            | 1.38E-10 | 0.90796485 | 0.302 | 0.234 | 4.89E-06 | Treg_UCBMC |
| ENSMMUG00000012525 | 1.63E-10 | 0.45306899 | 0.423 | 0.355 | 5.78E-06 | Treg_UCBMC |
| VPS54              | 1.64E-10 | 0.44723028 | 0.383 | 0.301 | 5.80E-06 | Treg_UCBMC |

|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| PPTC7              | 1.71E-10 | 0.70112575 | 0.283 | 0.209 | 6.07E-06 | Treg_UCBMC |
| RYBP               | 1.73E-10 | 0.54877381 | 0.34  | 0.264 | 6.14E-06 | Treg_UCBMC |
| MIER1              | 1.75E-10 | 0.38305126 | 0.551 | 0.498 | 6.19E-06 | Treg_UCBMC |
| ENSMMUG00000058755 | 1.92E-10 | 0.19108375 | 0.941 | 0.91  | 6.81E-06 | Treg_UCBMC |
| ZNF326             | 2.06E-10 | 0.69412182 | 0.343 | 0.277 | 7.30E-06 | Treg_UCBMC |
| CSNK2A1            | 2.08E-10 | 0.59662922 | 0.415 | 0.357 | 7.36E-06 | Treg_UCBMC |
| YTHDF3             | 2.49E-10 | 0.51219251 | 0.436 | 0.372 | 8.84E-06 | Treg_UCBMC |
| SF3B1              | 2.50E-10 | 0.3292183  | 0.669 | 0.644 | 8.87E-06 | Treg_UCBMC |
| SCAF8              | 2.51E-10 | 0.3448661  | 0.575 | 0.516 | 8.88E-06 | Treg_UCBMC |
| PRKD3              | 2.60E-10 | 0.45561458 | 0.427 | 0.353 | 9.20E-06 | Treg_UCBMC |
| TBC1D22B           | 3.90E-10 | 0.66113256 | 0.25  | 0.177 | 1.38E-05 | Treg_UCBMC |
| C18H18orf25        | 4.42E-10 | 0.52230028 | 0.363 | 0.289 | 1.57E-05 | Treg_UCBMC |
| DPM1               | 4.46E-10 | 0.95419693 | 0.254 | 0.19  | 1.58E-05 | Treg_UCBMC |
| CDC27              | 5.00E-10 | 0.54232739 | 0.37  | 0.302 | 1.77E-05 | Treg_UCBMC |
| KCNQ5              | 5.86E-10 | 0.19026713 | 0.596 | 0.506 | 2.08E-05 | Treg_UCBMC |
| PHIP               | 6.20E-10 | 0.39766696 | 0.52  | 0.455 | 2.20E-05 | Treg_UCBMC |
| INPP5A             | 6.52E-10 | 0.54682383 | 0.44  | 0.373 | 2.31E-05 | Treg_UCBMC |
| HERC3              | 6.93E-10 | 0.47569481 | 0.356 | 0.276 | 2.46E-05 | Treg_UCBMC |
| CWC15              | 8.92E-10 | 0.43317485 | 0.459 | 0.399 | 3.16E-05 | Treg_UCBMC |
| UBE2E3             | 8.98E-10 | 0.84892969 | 0.261 | 0.195 | 3.18E-05 | Treg_UCBMC |
| VPS4B              | 9.99E-10 | 0.59461252 | 0.341 | 0.274 | 3.54E-05 | Treg_UCBMC |
| NR3C1              | 1.00E-09 | 0.26458659 | 0.681 | 0.607 | 3.56E-05 | Treg_UCBMC |
| ANKH               | 1.19E-09 | 0.66942974 | 0.337 | 0.263 | 4.22E-05 | Treg_UCBMC |
| ATL2               | 1.30E-09 | 0.65909851 | 0.297 | 0.227 | 4.62E-05 | Treg_UCBMC |
| ARHGEF1            | 1.32E-09 | 0.32673539 | 0.505 | 0.452 | 4.67E-05 | Treg_UCBMC |
| MAP4K4             | 1.40E-09 | 0.19739382 | 0.616 | 0.554 | 4.98E-05 | Treg_UCBMC |
| CAMK1D             | 1.41E-09 | 0.35203992 | 0.521 | 0.444 | 4.99E-05 | Treg_UCBMC |
| RBM25              | 1.49E-09 | 0.40136845 | 0.515 | 0.454 | 5.27E-05 | Treg_UCBMC |
| PRKCQ              | 1.65E-09 | 0.3759103  | 0.582 | 0.53  | 5.85E-05 | Treg_UCBMC |
| RTN4               | 1.70E-09 | 0.54526473 | 0.402 | 0.335 | 6.03E-05 | Treg_UCBMC |
| RSRC2              | 1.70E-09 | 0.335129   | 0.594 | 0.54  | 6.03E-05 | Treg_UCBMC |
| DOCK10             | 1.73E-09 | 0.2967284  | 0.666 | 0.62  | 6.12E-05 | Treg_UCBMC |
| CWC25              | 1.75E-09 | 0.73156887 | 0.254 | 0.187 | 6.20E-05 | Treg_UCBMC |

|                    |          |            |       |       |            |            |
|--------------------|----------|------------|-------|-------|------------|------------|
| SDHB               | 1.76E-09 | 0.80159462 | 0.282 | 0.218 | 6.25E-05   | Treg_UCBMC |
| YTHDC1             | 1.96E-09 | 0.34292157 | 0.547 | 0.491 | 6.94E-05   | Treg_UCBMC |
| KDM5A              | 2.02E-09 | 0.57192388 | 0.384 | 0.317 | 7.16E-05   | Treg_UCBMC |
| ZNF654             | 2.05E-09 | 0.67239689 | 0.301 | 0.233 | 7.28E-05   | Treg_UCBMC |
| EMC3               | 2.17E-09 | 0.66397774 | 0.269 | 0.2   | 7.69E-05   | Treg_UCBMC |
| ENSMMUG00000020751 | 2.30E-09 | 0.65451221 | 0.297 | 0.228 | 8.15E-05   | Treg_UCBMC |
| CPSF6              | 2.36E-09 | 0.50400385 | 0.437 | 0.381 | 8.37E-05   | Treg_UCBMC |
| PRPF4B             | 2.45E-09 | 0.29668206 | 0.695 | 0.644 | 8.69E-05   | Treg_UCBMC |
| BIN2               | 2.89E-09 | 0.33051104 | 0.573 | 0.52  | 0.00010238 | Treg_UCBMC |
| TRIM72             | 3.74E-09 | 0.33694075 | 0.652 | 0.609 | 0.00013263 | Treg_UCBMC |
| UBR5               | 4.19E-09 | 0.31417106 | 0.56  | 0.504 | 0.00014835 | Treg_UCBMC |
| TLK1               | 4.74E-09 | 0.26289218 | 0.713 | 0.672 | 0.00016796 | Treg_UCBMC |
| AQR                | 5.02E-09 | 0.73600818 | 0.349 | 0.29  | 0.00017804 | Treg_UCBMC |
| BCL2               | 5.22E-09 | 0.15418912 | 0.634 | 0.542 | 0.00018483 | Treg_UCBMC |
| ELMO1              | 5.35E-09 | 0.16621367 | 0.798 | 0.734 | 0.00018964 | Treg_UCBMC |
| MAGI3              | 5.46E-09 | 0.57068042 | 0.251 | 0.182 | 0.00019337 | Treg_UCBMC |
| GPBP1L1            | 6.02E-09 | 0.42383996 | 0.494 | 0.44  | 0.00021321 | Treg_UCBMC |
| ZNF92              | 6.37E-09 | 0.66989391 | 0.318 | 0.255 | 0.00022578 | Treg_UCBMC |
| SUCO               | 6.53E-09 | 0.46769935 | 0.452 | 0.399 | 0.00023148 | Treg_UCBMC |
| MDM4               | 6.72E-09 | 0.50362233 | 0.41  | 0.353 | 0.00023812 | Treg_UCBMC |
| SECISBP2           | 7.77E-09 | 0.69099159 | 0.315 | 0.255 | 0.00027515 | Treg_UCBMC |
| ZC3H7A             | 8.74E-09 | 0.64232607 | 0.317 | 0.257 | 0.0003098  | Treg_UCBMC |
| WDR70              | 8.79E-09 | 0.40091133 | 0.525 | 0.476 | 0.00031143 | Treg_UCBMC |
| AAK1               | 1.01E-08 | 0.28956892 | 0.577 | 0.516 | 0.0003577  | Treg_UCBMC |
| EML4               | 1.01E-08 | 0.1136198  | 0.799 | 0.742 | 0.0003587  | Treg_UCBMC |
| ZNF506             | 1.08E-08 | 0.56819395 | 0.357 | 0.299 | 0.00038157 | Treg_UCBMC |
| EFR3A              | 1.13E-08 | 0.52457553 | 0.375 | 0.315 | 0.00039997 | Treg_UCBMC |
| ITSN2              | 1.27E-08 | 0.30402341 | 0.614 | 0.579 | 0.00045155 | Treg_UCBMC |
| FAM133B            | 1.29E-08 | 0.52515882 | 0.381 | 0.325 | 0.00045692 | Treg_UCBMC |
| NUP98              | 1.34E-08 | 0.32863511 | 0.522 | 0.475 | 0.00047462 | Treg_UCBMC |
| NFYC               | 1.57E-08 | 0.59414463 | 0.341 | 0.28  | 0.00055456 | Treg_UCBMC |
| BTA1F1             | 1.59E-08 | 0.31003685 | 0.559 | 0.512 | 0.00056211 | Treg_UCBMC |
| RPIA               | 1.76E-08 | 0.66134833 | 0.339 | 0.284 | 0.00062288 | Treg_UCBMC |

|                   |          |            |       |       |            |            |
|-------------------|----------|------------|-------|-------|------------|------------|
| IFT80             | 1.77E-08 | 0.4352316  | 0.482 | 0.423 | 0.00062819 | Treg_UCBMC |
| MXD1              | 1.78E-08 | 0.67158682 | 0.257 | 0.192 | 0.00063075 | Treg_UCBMC |
| MTR               | 1.78E-08 | 0.53421628 | 0.312 | 0.244 | 0.00063117 | Treg_UCBMC |
| ENSMUG00000014947 | 1.78E-08 | 0.58596249 | 0.301 | 0.24  | 0.00063241 | Treg_UCBMC |
| SYF2              | 2.03E-08 | 0.43167999 | 0.474 | 0.426 | 0.00071961 | Treg_UCBMC |
| ZNF93             | 2.46E-08 | 0.61110863 | 0.301 | 0.242 | 0.0008732  | Treg_UCBMC |
| FANCC             | 2.56E-08 | 0.59033674 | 0.324 | 0.258 | 0.00090764 | Treg_UCBMC |
| TNIK              | 2.77E-08 | 0.15465627 | 0.866 | 0.787 | 0.00098047 | Treg_UCBMC |
| IL10RA            | 3.35E-08 | 0.26374951 | 0.299 | 0.226 | 0.00118722 | Treg_UCBMC |
| GSK3B             | 3.45E-08 | 0.26364477 | 0.645 | 0.592 | 0.0012214  | Treg_UCBMC |
| MCM9              | 3.60E-08 | 0.66306604 | 0.319 | 0.26  | 0.00127394 | Treg_UCBMC |
| RHOH              | 3.85E-08 | 0.22103452 | 0.66  | 0.614 | 0.0013624  | Treg_UCBMC |
| C15H9orf78        | 4.34E-08 | 0.36515063 | 0.478 | 0.428 | 0.00153754 | Treg_UCBMC |
| THOC1             | 4.60E-08 | 0.72669797 | 0.268 | 0.208 | 0.00162983 | Treg_UCBMC |
| SEC24B            | 5.01E-08 | 0.45267675 | 0.423 | 0.371 | 0.00177553 | Treg_UCBMC |
| DPEP2             | 5.25E-08 | 0.36704282 | 0.253 | 0.181 | 0.00185873 | Treg_UCBMC |
| NEDD4L            | 5.46E-08 | 0.38352883 | 0.325 | 0.253 | 0.00193518 | Treg_UCBMC |
| ITPR2             | 5.53E-08 | 0.31034822 | 0.621 | 0.578 | 0.00195839 | Treg_UCBMC |
| ARIH1             | 6.24E-08 | 0.17270878 | 0.669 | 0.62  | 0.00220988 | Treg_UCBMC |
| PSMD12            | 6.46E-08 | 0.17497418 | 0.642 | 0.589 | 0.00228767 | Treg_UCBMC |
| RSBN1             | 6.86E-08 | 0.77387198 | 0.263 | 0.206 | 0.00242946 | Treg_UCBMC |
| ANKRD13C          | 7.42E-08 | 0.50220837 | 0.275 | 0.211 | 0.00263063 | Treg_UCBMC |
| XRN1              | 8.30E-08 | 0.41578048 | 0.427 | 0.375 | 0.00294019 | Treg_UCBMC |
| TRMT10C           | 8.45E-08 | 0.48478524 | 0.35  | 0.29  | 0.00299328 | Treg_UCBMC |
| WASL              | 8.58E-08 | 0.45890793 | 0.417 | 0.366 | 0.00304026 | Treg_UCBMC |
| DNAJC7            | 9.19E-08 | 0.57797478 | 0.363 | 0.314 | 0.00325652 | Treg_UCBMC |
| SCAF11            | 9.53E-08 | 0.27636532 | 0.59  | 0.553 | 0.00337694 | Treg_UCBMC |
| RMND5A            | 9.74E-08 | 0.51261208 | 0.328 | 0.264 | 0.0034523  | Treg_UCBMC |
| DNAJB6            | 9.76E-08 | 0.26092126 | 0.623 | 0.596 | 0.00345737 | Treg_UCBMC |
| IQGAP2            | 9.80E-08 | 0.245626   | 0.562 | 0.5   | 0.00347071 | Treg_UCBMC |
| NRROS             | 9.82E-08 | 0.54695947 | 0.278 | 0.213 | 0.00348016 | Treg_UCBMC |
| IWS1              | 1.01E-07 | 0.68589311 | 0.296 | 0.242 | 0.00357021 | Treg_UCBMC |
| GPR89A            | 1.11E-07 | 0.66060402 | 0.285 | 0.229 | 0.00393865 | Treg_UCBMC |

|                    |          |            |       |       |            |            |
|--------------------|----------|------------|-------|-------|------------|------------|
| ARID2              | 1.24E-07 | 0.30180218 | 0.592 | 0.555 | 0.00439155 | Treg_UCBMC |
| UBAP1              | 1.25E-07 | 0.40836631 | 0.424 | 0.37  | 0.00442002 | Treg_UCBMC |
| ZNF207             | 1.32E-07 | 0.48858173 | 0.448 | 0.408 | 0.00469353 | Treg_UCBMC |
| FGD3               | 1.36E-07 | 0.34090588 | 0.466 | 0.411 | 0.0048013  | Treg_UCBMC |
| WDR20              | 1.41E-07 | 0.6669425  | 0.272 | 0.216 | 0.00497833 | Treg_UCBMC |
| POC5               | 1.53E-07 | 0.53113965 | 0.381 | 0.334 | 0.00543573 | Treg_UCBMC |
| NECAP2             | 1.67E-07 | 0.53457571 | 0.302 | 0.245 | 0.00591139 | Treg_UCBMC |
| FAM214A            | 1.70E-07 | 0.38756667 | 0.388 | 0.332 | 0.00603886 | Treg_UCBMC |
| EZH2               | 1.74E-07 | 0.39849911 | 0.452 | 0.397 | 0.00616043 | Treg_UCBMC |
| PEX14              | 1.81E-07 | 0.49104851 | 0.29  | 0.228 | 0.0064179  | Treg_UCBMC |
| RLIM               | 1.83E-07 | 0.67345099 | 0.297 | 0.243 | 0.00650145 | Treg_UCBMC |
| HSD17B11           | 1.85E-07 | 0.46063053 | 0.266 | 0.203 | 0.00655436 | Treg_UCBMC |
| ERO1B              | 1.91E-07 | 0.35872288 | 0.485 | 0.442 | 0.00678266 | Treg_UCBMC |
| ENSMMUG00000056012 | 1.98E-07 | 0.51455534 | 0.385 | 0.339 | 0.00703319 | Treg_UCBMC |
| ANKRD11            | 2.07E-07 | 0.22352396 | 0.659 | 0.613 | 0.00733454 | Treg_UCBMC |
| RAPGEF1            | 2.07E-07 | 0.2887135  | 0.479 | 0.42  | 0.00734343 | Treg_UCBMC |
| KANSL2             | 2.10E-07 | 0.53143045 | 0.34  | 0.288 | 0.00743512 | Treg_UCBMC |
| CCNC               | 2.10E-07 | 0.6236733  | 0.279 | 0.223 | 0.00745211 | Treg_UCBMC |
| PPP1R15A           | 2.16E-07 | 0.37749964 | 0.518 | 0.475 | 0.00765788 | Treg_UCBMC |
| GLG1               | 2.18E-07 | 0.31658854 | 0.541 | 0.485 | 0.00772501 | Treg_UCBMC |
| PTPN4              | 2.45E-07 | 0.35042735 | 0.431 | 0.369 | 0.00868663 | Treg_UCBMC |
| UHRF2              | 2.52E-07 | 0.37571175 | 0.377 | 0.321 | 0.00893774 | Treg_UCBMC |
| RAF1               | 2.64E-07 | 0.47709935 | 0.406 | 0.361 | 0.0093438  | Treg_UCBMC |
| RAB3GAP1           | 2.72E-07 | 0.44474512 | 0.369 | 0.318 | 0.00963544 | Treg_UCBMC |
| BCL7B              | 3.05E-07 | 0.56626327 | 0.265 | 0.207 | 0.0108058  | Treg_UCBMC |
| BRWD1              | 3.23E-07 | 0.41284032 | 0.459 | 0.42  | 0.01143502 | Treg_UCBMC |
| QRICH1             | 3.34E-07 | 0.54610455 | 0.35  | 0.3   | 0.01182437 | Treg_UCBMC |
| GORASP2            | 3.48E-07 | 0.70592318 | 0.257 | 0.201 | 0.01234522 | Treg_UCBMC |
| MED27              | 3.51E-07 | 0.50068978 | 0.355 | 0.3   | 0.01243815 | Treg_UCBMC |
| FRS2               | 3.60E-07 | 0.67200676 | 0.251 | 0.194 | 0.01277059 | Treg_UCBMC |
| INPP4B             | 3.61E-07 | 0.14799268 | 0.73  | 0.647 | 0.01280323 | Treg_UCBMC |
| TFAM               | 3.81E-07 | 0.72450063 | 0.291 | 0.24  | 0.01348743 | Treg_UCBMC |
| TMCC1              | 3.88E-07 | 0.37289836 | 0.419 | 0.363 | 0.01376168 | Treg_UCBMC |



|                    |          |            |       |       |            |            |
|--------------------|----------|------------|-------|-------|------------|------------|
| STAM               | 3.95E-07 | 0.46889522 | 0.269 | 0.205 | 0.01400481 | Treg_UCBMC |
| LNPEP              | 3.97E-07 | 0.29234163 | 0.602 | 0.555 | 0.01407225 | Treg_UCBMC |
| FUBP1              | 4.51E-07 | 0.37551527 | 0.516 | 0.48  | 0.01597755 | Treg_UCBMC |
| PSPC1              | 4.77E-07 | 0.36218813 | 0.513 | 0.468 | 0.01690554 | Treg_UCBMC |
| TMEM245            | 4.88E-07 | 0.52067366 | 0.297 | 0.237 | 0.01728238 | Treg_UCBMC |
| TCEA1              | 4.98E-07 | 0.34739522 | 0.509 | 0.46  | 0.01764997 | Treg_UCBMC |
| MAPK1              | 5.15E-07 | 0.46712587 | 0.396 | 0.343 | 0.01825317 | Treg_UCBMC |
| ARHGAP17           | 5.33E-07 | 0.54573364 | 0.292 | 0.238 | 0.01888523 | Treg_UCBMC |
| CLIP1              | 5.67E-07 | 0.60846817 | 0.278 | 0.226 | 0.0201051  | Treg_UCBMC |
| AFF4               | 6.70E-07 | 0.54471067 | 0.302 | 0.247 | 0.02374699 | Treg_UCBMC |
| ICE1               | 6.76E-07 | 0.54333717 | 0.292 | 0.237 | 0.02393835 | Treg_UCBMC |
| CSNK1G3            | 6.80E-07 | 0.3771404  | 0.416 | 0.361 | 0.02409187 | Treg_UCBMC |
| SEC61A2            | 6.92E-07 | 0.59747546 | 0.311 | 0.259 | 0.02451677 | Treg_UCBMC |
| TET2               | 6.98E-07 | 0.3879652  | 0.385 | 0.334 | 0.02473979 | Treg_UCBMC |
| MED13              | 7.67E-07 | 0.36949468 | 0.417 | 0.371 | 0.02717861 | Treg_UCBMC |
| SHOC2              | 7.83E-07 | 0.28331159 | 0.541 | 0.503 | 0.02772929 | Treg_UCBMC |
| CHIC2              | 7.92E-07 | 0.46334982 | 0.408 | 0.361 | 0.02806503 | Treg_UCBMC |
| PNPLA8             | 8.38E-07 | 0.3314567  | 0.422 | 0.364 | 0.0296871  | Treg_UCBMC |
| DNTTIP2            | 8.52E-07 | 0.59118988 | 0.295 | 0.243 | 0.0301851  | Treg_UCBMC |
| ZRANB1             | 8.76E-07 | 0.53428407 | 0.289 | 0.234 | 0.03104851 | Treg_UCBMC |
| LAPTM5             | 8.87E-07 | 0.13327295 | 0.697 | 0.661 | 0.03141701 | Treg_UCBMC |
| ENSMMUG00000028699 | 9.00E-07 | 0.33722508 | 0.441 | 0.391 | 0.03188051 | Treg_UCBMC |
| AMBRA1             | 9.10E-07 | 0.36728495 | 0.405 | 0.354 | 0.03225202 | Treg_UCBMC |
| ENSMMUG00000063877 | 1.10E-06 | 0.5543342  | 0.317 | 0.264 | 0.03883536 | Treg_UCBMC |
| ENSMMUG00000016305 | 1.10E-06 | 0.20472427 | 0.514 | 0.476 | 0.03885132 | Treg_UCBMC |
| KRAS               | 1.10E-06 | 0.57745026 | 0.345 | 0.304 | 0.03906588 | Treg_UCBMC |
| LMTK2              | 1.15E-06 | 0.57343687 | 0.355 | 0.307 | 0.04089489 | Treg_UCBMC |
| PPP2R5A            | 1.16E-06 | 0.50807869 | 0.368 | 0.322 | 0.04100689 | Treg_UCBMC |
| ENSMMUG00000016009 | 1.18E-06 | 0.41016941 | 0.419 | 0.38  | 0.04187255 | Treg_UCBMC |
| ENSMMUG00000002324 | 1.25E-06 | 0.28858686 | 0.447 | 0.403 | 0.04446417 | Treg_UCBMC |
| COP1               | 1.43E-06 | 0.26841799 | 0.554 | 0.502 | 0.05049789 | Treg_UCBMC |
| RPS4Y2             | 1.51E-06 | 0.15122747 | 0.25  | 0.182 | 0.05333974 | Treg_UCBMC |
| MACF1              | 1.52E-06 | 0.21969759 | 0.615 | 0.573 | 0.05395938 | Treg_UCBMC |

|                     |          |            |       |       |            |            |
|---------------------|----------|------------|-------|-------|------------|------------|
| EIF3H               | 1.60E-06 | 0.22914572 | 0.692 | 0.668 | 0.05679239 | Treg_UCBMC |
| UBR1                | 1.67E-06 | 0.32706735 | 0.483 | 0.44  | 0.05933952 | Treg_UCBMC |
| CLINT1              | 1.76E-06 | 0.28234051 | 0.595 | 0.567 | 0.06236245 | Treg_UCBMC |
| KIFBP               | 1.77E-06 | 0.24486349 | 0.585 | 0.525 | 0.06287065 | Treg_UCBMC |
| ZZZ3                | 2.08E-06 | 0.34760062 | 0.433 | 0.388 | 0.07383263 | Treg_UCBMC |
| ARL8B               | 2.19E-06 | 0.6205738  | 0.314 | 0.271 | 0.07751063 | Treg_UCBMC |
| KLHL23              | 2.37E-06 | 0.24939206 | 0.634 | 0.58  | 0.08393769 | Treg_UCBMC |
| WASF2               | 2.93E-06 | 0.30404672 | 0.53  | 0.494 | 0.10365789 | Treg_UCBMC |
| PITPNB              | 2.99E-06 | 0.54436003 | 0.359 | 0.317 | 0.10577884 | Treg_UCBMC |
| NDUFA9              | 3.07E-06 | 0.65448615 | 0.26  | 0.213 | 0.10879169 | Treg_UCBMC |
| ENSMMUG00000022610  | 3.14E-06 | 0.30733541 | 0.487 | 0.444 | 0.1113751  | Treg_UCBMC |
| TTC14               | 3.28E-06 | 0.57367747 | 0.28  | 0.23  | 0.11634515 | Treg_UCBMC |
| SLC22A18            | 3.34E-06 | 0.39811999 | 0.45  | 0.413 | 0.11816708 | Treg_UCBMC |
| EXOC4               | 3.34E-06 | 0.18790657 | 0.635 | 0.584 | 0.11822162 | Treg_UCBMC |
| ENSMMUG00000005482  | 3.36E-06 | 0.31903605 | 0.444 | 0.401 | 0.11898472 | Treg_UCBMC |
| TAF2                | 3.50E-06 | 0.68153223 | 0.261 | 0.213 | 0.12403537 | Treg_UCBMC |
| ACE                 | 3.70E-06 | 0.66890118 | 0.266 | 0.22  | 0.13105751 | Treg_UCBMC |
| ZCCHC7              | 3.74E-06 | 0.22453717 | 0.628 | 0.578 | 0.13245595 | Treg_UCBMC |
| URI1                | 3.74E-06 | 0.37049233 | 0.433 | 0.389 | 0.13247371 | Treg_UCBMC |
| SLU7                | 3.87E-06 | 0.53058599 | 0.321 | 0.274 | 0.13715613 | Treg_UCBMC |
| FAR1                | 4.09E-06 | 0.39381438 | 0.379 | 0.334 | 0.14475754 | Treg_UCBMC |
| SEPTIN7             | 4.19E-06 | 0.19467591 | 0.756 | 0.731 | 0.14840967 | Treg_UCBMC |
| BCLAF1              | 4.27E-06 | 0.18703646 | 0.698 | 0.666 | 0.15136346 | Treg_UCBMC |
| RAB8B               | 4.41E-06 | 0.18066782 | 0.755 | 0.712 | 0.15635999 | Treg_UCBMC |
| WDR44               | 5.16E-06 | 0.49333488 | 0.269 | 0.216 | 0.1829627  | Treg_UCBMC |
| SNX9                | 5.42E-06 | 0.35801254 | 0.412 | 0.366 | 0.19219123 | Treg_UCBMC |
| TUBB2B              | 5.46E-06 | 0.62599551 | 0.28  | 0.234 | 0.19354342 | Treg_UCBMC |
| PIK3C2A             | 5.80E-06 | 0.51062136 | 0.298 | 0.248 | 0.20541081 | Treg_UCBMC |
| MED21               | 5.83E-06 | 0.45455462 | 0.31  | 0.265 | 0.20645485 | Treg_UCBMC |
| UBE2H               | 5.83E-06 | 0.2436964  | 0.588 | 0.551 | 0.20658211 | Treg_UCBMC |
| ENSMMUG000000061630 | 5.89E-06 | 0.44459953 | 0.356 | 0.319 | 0.2086913  | Treg_UCBMC |
| FAM168B             | 6.51E-06 | 0.51141441 | 0.295 | 0.246 | 0.23057195 | Treg_UCBMC |
| ENSMMUG000000055627 | 6.61E-06 | 0.25814231 | 0.63  | 0.613 | 0.23421821 | Treg_UCBMC |

|                     |          |            |       |       |            |            |
|---------------------|----------|------------|-------|-------|------------|------------|
| KIZ                 | 6.80E-06 | 0.58954962 | 0.269 | 0.224 | 0.24076181 | Treg_UCBMC |
| PPP4R3A             | 7.01E-06 | 0.51077515 | 0.335 | 0.291 | 0.24827047 | Treg_UCBMC |
| ENSMMUG00000006293  | 7.38E-06 | 0.37712493 | 0.464 | 0.434 | 0.26136794 | Treg_UCBMC |
| DNAJC3              | 7.62E-06 | 0.33854763 | 0.466 | 0.434 | 0.2699213  | Treg_UCBMC |
| SINHCAF             | 7.64E-06 | 0.42500167 | 0.355 | 0.305 | 0.27076186 | Treg_UCBMC |
| DAZAP1              | 8.21E-06 | 0.1588494  | 0.616 | 0.579 | 0.29093215 | Treg_UCBMC |
| ARFGAP3             | 8.27E-06 | 0.46876878 | 0.374 | 0.331 | 0.29291774 | Treg_UCBMC |
| CD6                 | 8.42E-06 | 0.26350581 | 0.464 | 0.423 | 0.29818619 | Treg_UCBMC |
| ELK3                | 9.01E-06 | 0.36609644 | 0.398 | 0.355 | 0.3192645  | Treg_UCBMC |
| PRRC2C              | 9.66E-06 | 0.15486737 | 0.72  | 0.686 | 0.34233237 | Treg_UCBMC |
| FXR1                | 1.01E-05 | 0.34655128 | 0.505 | 0.479 | 0.35637199 | Treg_UCBMC |
| ENSMMUG000000051957 | 1.02E-05 | 0.61266312 | 0.261 | 0.217 | 0.35965597 | Treg_UCBMC |
| FMC1-LUC7L2         | 1.04E-05 | 0.25754275 | 0.637 | 0.613 | 0.36827212 | Treg_UCBMC |
| ENSMMUG00000007536  | 1.04E-05 | 0.33165427 | 0.39  | 0.35  | 0.36978213 | Treg_UCBMC |
| EMP3                | 1.12E-05 | 0.12111942 | 0.309 | 0.243 | 0.3981675  | Treg_UCBMC |
| RPS27A              | 1.25E-05 | 0.16039191 | 0.682 | 0.665 | 0.44343172 | Treg_UCBMC |
| MEF2A               | 1.27E-05 | 0.40540572 | 0.398 | 0.355 | 0.44934161 | Treg_UCBMC |
| CUX1                | 1.30E-05 | 0.22836258 | 0.472 | 0.425 | 0.46005354 | Treg_UCBMC |
| SCFD2               | 1.31E-05 | 0.35063581 | 0.355 | 0.306 | 0.46243535 | Treg_UCBMC |
| PKN2                | 1.31E-05 | 0.37122859 | 0.494 | 0.461 | 0.46366274 | Treg_UCBMC |
| HACE1               | 1.40E-05 | 0.42881227 | 0.345 | 0.3   | 0.49560984 | Treg_UCBMC |
| ENSMMUG000000065104 | 1.42E-05 | 0.29618367 | 0.456 | 0.427 | 0.50438488 | Treg_UCBMC |
| NAA25               | 1.43E-05 | 0.60892017 | 0.273 | 0.229 | 0.50513605 | Treg_UCBMC |
| EIF2A               | 1.47E-05 | 0.59845029 | 0.285 | 0.245 | 0.52090987 | Treg_UCBMC |
| UBE3C               | 1.49E-05 | 0.36839853 | 0.401 | 0.361 | 0.52951778 | Treg_UCBMC |
| LEMD3               | 1.51E-05 | 0.23666404 | 0.452 | 0.408 | 0.53350838 | Treg_UCBMC |
| ENSMMUG00000006803  | 1.56E-05 | 0.3871372  | 0.44  | 0.411 | 0.55247801 | Treg_UCBMC |
| DYM                 | 1.58E-05 | 0.42450357 | 0.403 | 0.362 | 0.56029445 | Treg_UCBMC |
| GATAD2B             | 1.69E-05 | 0.31500306 | 0.474 | 0.438 | 0.59981177 | Treg_UCBMC |
| RALGAPB             | 1.72E-05 | 0.37894606 | 0.28  | 0.229 | 0.60818519 | Treg_UCBMC |
| BTBD9               | 1.85E-05 | 0.27247333 | 0.48  | 0.43  | 0.65412089 | Treg_UCBMC |
| SIN3A               | 1.95E-05 | 0.46702744 | 0.34  | 0.303 | 0.68921413 | Treg_UCBMC |
| NFATC3              | 2.01E-05 | 0.21774745 | 0.483 | 0.442 | 0.71262913 | Treg_UCBMC |

|                   |          |            |       |       |            |            |
|-------------------|----------|------------|-------|-------|------------|------------|
| NBEA              | 2.12E-05 | 0.40137823 | 0.298 | 0.248 | 0.75085446 | Treg_UCBMC |
| FOXO3             | 2.15E-05 | 0.45328403 | 0.294 | 0.248 | 0.76058793 | Treg_UCBMC |
| SF3B2             | 2.25E-05 | 0.51250536 | 0.35  | 0.314 | 0.79714579 | Treg_UCBMC |
| RBL2              | 2.28E-05 | 0.42319415 | 0.36  | 0.321 | 0.80618565 | Treg_UCBMC |
| FAM168A           | 2.32E-05 | 0.41248299 | 0.34  | 0.293 | 0.82128515 | Treg_UCBMC |
| USP8              | 2.36E-05 | 0.42212824 | 0.298 | 0.253 | 0.83533617 | Treg_UCBMC |
| GRK3              | 2.36E-05 | 0.36538169 | 0.416 | 0.368 | 0.83675666 | Treg_UCBMC |
| WDR26             | 2.39E-05 | 0.3822415  | 0.399 | 0.356 | 0.84661754 | Treg_UCBMC |
| SIPA1L1           | 2.40E-05 | 0.35138072 | 0.44  | 0.401 | 0.85065506 | Treg_UCBMC |
| CLK4              | 2.44E-05 | 0.50455764 | 0.281 | 0.236 | 0.86364801 | Treg_UCBMC |
| TRANK1            | 2.47E-05 | 0.48172352 | 0.276 | 0.232 | 0.87671323 | Treg_UCBMC |
| CNST              | 2.51E-05 | 0.32388624 | 0.425 | 0.385 | 0.88772243 | Treg_UCBMC |
| SARAF             | 2.52E-05 | 0.1593163  | 0.73  | 0.709 | 0.89171284 | Treg_UCBMC |
| ATP2B1            | 2.57E-05 | 0.39560026 | 0.323 | 0.276 | 0.91158233 | Treg_UCBMC |
| SRSF4             | 2.94E-05 | 0.31761235 | 0.487 | 0.461 | 1          | Treg_UCBMC |
| DNM2              | 2.97E-05 | 0.40699936 | 0.401 | 0.366 | 1          | Treg_UCBMC |
| NPAT              | 2.99E-05 | 0.40122235 | 0.377 | 0.339 | 1          | Treg_UCBMC |
| YLPM1             | 3.11E-05 | 0.63175722 | 0.262 | 0.223 | 1          | Treg_UCBMC |
| EXOC6B            | 3.13E-05 | 0.33372001 | 0.425 | 0.379 | 1          | Treg_UCBMC |
| RSL1D1            | 3.20E-05 | 0.39483268 | 0.361 | 0.321 | 1          | Treg_UCBMC |
| ASB3              | 3.31E-05 | 0.40533049 | 0.33  | 0.287 | 1          | Treg_UCBMC |
| MICU2             | 3.32E-05 | 0.47834384 | 0.364 | 0.334 | 1          | Treg_UCBMC |
| IRAG2             | 3.61E-05 | 0.55350912 | 0.284 | 0.239 | 1          | Treg_UCBMC |
| RPS6KA5           | 3.70E-05 | 0.25203393 | 0.504 | 0.464 | 1          | Treg_UCBMC |
| SAR1A             | 3.73E-05 | 0.4433322  | 0.311 | 0.269 | 1          | Treg_UCBMC |
| ATP6V1E1          | 3.76E-05 | 0.52727011 | 0.303 | 0.266 | 1          | Treg_UCBMC |
| RPRD2             | 3.86E-05 | 0.33577285 | 0.448 | 0.416 | 1          | Treg_UCBMC |
| AATF              | 3.96E-05 | 0.56862651 | 0.281 | 0.244 | 1          | Treg_UCBMC |
| JAZF1             | 4.12E-05 | 0.38105162 | 0.428 | 0.378 | 1          | Treg_UCBMC |
| ATP6V1H           | 4.34E-05 | 0.55877237 | 0.271 | 0.229 | 1          | Treg_UCBMC |
| VAPA              | 4.52E-05 | 0.31443235 | 0.534 | 0.519 | 1          | Treg_UCBMC |
| PPP1R12B          | 4.54E-05 | 0.58472557 | 0.25  | 0.207 | 1          | Treg_UCBMC |
| ENSMUG00000031947 | 4.74E-05 | 0.20401779 | 0.617 | 0.609 | 1          | Treg_UCBMC |

|         |            |            |       |       |              |
|---------|------------|------------|-------|-------|--------------|
| GTF2E2  | 4.95E-05   | 0.54090006 | 0.3   | 0.263 | 1 Treg_UCBMC |
| FTO     | 5.04E-05   | 0.29685794 | 0.444 | 0.401 | 1 Treg_UCBMC |
| SBF2    | 5.10E-05   | 0.41115397 | 0.263 | 0.216 | 1 Treg_UCBMC |
| UBE4A   | 5.19E-05   | 0.46391338 | 0.271 | 0.229 | 1 Treg_UCBMC |
| ANKRD28 | 5.27E-05   | 0.30818942 | 0.382 | 0.339 | 1 Treg_UCBMC |
| TLK2    | 5.77E-05   | 0.48896481 | 0.37  | 0.34  | 1 Treg_UCBMC |
| CDKN1B  | 5.85E-05   | 0.29958364 | 0.286 | 0.24  | 1 Treg_UCBMC |
| DCAF6   | 5.86E-05   | 0.37881788 | 0.366 | 0.325 | 1 Treg_UCBMC |
| PXK     | 5.93E-05   | 0.53334632 | 0.26  | 0.217 | 1 Treg_UCBMC |
| CCNT1   | 6.18E-05   | 0.6363802  | 0.257 | 0.216 | 1 Treg_UCBMC |
| FNBP4   | 6.19E-05   | 0.43933926 | 0.385 | 0.355 | 1 Treg_UCBMC |
| LRCH3   | 6.30E-05   | 0.29587651 | 0.439 | 0.4   | 1 Treg_UCBMC |
| DDX17   | 6.56E-05   | 0.2349983  | 0.652 | 0.634 | 1 Treg_UCBMC |
| SENP6   | 7.30E-05   | 0.25320406 | 0.528 | 0.496 | 1 Treg_UCBMC |
| SMC4    | 7.35E-05   | 0.16307793 | 0.634 | 0.588 | 1 Treg_UCBMC |
| SMURF1  | 7.55E-05   | 0.38571271 | 0.256 | 0.208 | 1 Treg_UCBMC |
| IP6K2   | 7.57E-05   | 0.57129407 | 0.282 | 0.244 | 1 Treg_UCBMC |
| PCMTD1  | 7.89E-05   | 0.25668318 | 0.465 | 0.434 | 1 Treg_UCBMC |
| POGZ    | 8.14E-05   | 0.46634225 | 0.332 | 0.295 | 1 Treg_UCBMC |
| UBE2E2  | 8.19E-05   | 0.1610682  | 0.441 | 0.387 | 1 Treg_UCBMC |
| TMEM50A | 8.49E-05   | 0.32692812 | 0.416 | 0.388 | 1 Treg_UCBMC |
| SNW1    | 8.51E-05   | 0.38656193 | 0.375 | 0.344 | 1 Treg_UCBMC |
| RPL27   | 9.06E-05   | 0.10256011 | 0.93  | 0.896 | 1 Treg_UCBMC |
| TARDBP  | 9.19E-05   | 0.65407857 | 0.267 | 0.232 | 1 Treg_UCBMC |
| PUM2    | 9.26E-05   | 0.19448066 | 0.602 | 0.579 | 1 Treg_UCBMC |
| SLC44A2 | 9.58E-05   | 0.3281098  | 0.33  | 0.29  | 1 Treg_UCBMC |
| CDC73   | 9.60E-05   | 0.33396561 | 0.416 | 0.39  | 1 Treg_UCBMC |
| KDM3B   | 9.83E-05   | 0.33953529 | 0.406 | 0.367 | 1 Treg_UCBMC |
| TOMM7   | 9.91E-05   | 0.13795125 | 0.806 | 0.766 | 1 Treg_UCBMC |
| NOL10   | 0.00010015 | 0.4982734  | 0.256 | 0.217 | 1 Treg_UCBMC |
| FBXO11  | 0.0001059  | 0.24576697 | 0.487 | 0.454 | 1 Treg_UCBMC |
| PRPF8   | 0.00011597 | 0.51794293 | 0.318 | 0.286 | 1 Treg_UCBMC |
| IGF2BP3 | 0.00012203 | 0.29453505 | 0.334 | 0.283 | 1 Treg_UCBMC |

|                    |            |            |       |       |              |
|--------------------|------------|------------|-------|-------|--------------|
| ZNF827             | 0.00014463 | 0.24597482 | 0.474 | 0.44  | 1 Treg_UCBMC |
| GGNBP2             | 0.00014567 | 0.43977187 | 0.376 | 0.35  | 1 Treg_UCBMC |
| DTNB               | 0.00014987 | 0.40125498 | 0.319 | 0.279 | 1 Treg_UCBMC |
| SCLT1              | 0.00015095 | 0.4208336  | 0.373 | 0.339 | 1 Treg_UCBMC |
| KIDINS220          | 0.00015212 | 0.44077636 | 0.303 | 0.265 | 1 Treg_UCBMC |
| CLASP1             | 0.00015626 | 0.31479663 | 0.415 | 0.378 | 1 Treg_UCBMC |
| STK24              | 0.00016611 | 0.25428565 | 0.404 | 0.365 | 1 Treg_UCBMC |
| ENSMMUG00000057691 | 0.00017143 | 0.41700374 | 0.261 | 0.219 | 1 Treg_UCBMC |
| NUP50              | 0.00017996 | 0.33359843 | 0.356 | 0.322 | 1 Treg_UCBMC |
| FAM241A            | 0.00019182 | 0.33881777 | 0.357 | 0.321 | 1 Treg_UCBMC |
| UGCG               | 0.00020437 | 0.48017396 | 0.256 | 0.218 | 1 Treg_UCBMC |
| SRPK2              | 0.00021164 | 0.1548261  | 0.569 | 0.521 | 1 Treg_UCBMC |
| HSPA5              | 0.00021553 | 0.23563618 | 0.523 | 0.498 | 1 Treg_UCBMC |
| PPP2R2A            | 0.0002192  | 0.35577461 | 0.449 | 0.425 | 1 Treg_UCBMC |
| MCU                | 0.00022069 | 0.40246208 | 0.259 | 0.218 | 1 Treg_UCBMC |
| USP34              | 0.00022255 | 0.10651916 | 0.694 | 0.664 | 1 Treg_UCBMC |
| KDM4C              | 0.0002291  | 0.22403697 | 0.577 | 0.558 | 1 Treg_UCBMC |
| MTPN               | 0.00024109 | 0.42478125 | 0.376 | 0.356 | 1 Treg_UCBMC |
| USP16              | 0.00025345 | 0.41534978 | 0.357 | 0.327 | 1 Treg_UCBMC |
| ENSMMUG00000008587 | 0.0002556  | 0.28491763 | 0.566 | 0.552 | 1 Treg_UCBMC |
| CWF19L2            | 0.00025752 | 0.38392603 | 0.347 | 0.312 | 1 Treg_UCBMC |
| NEMF               | 0.00027102 | 0.35092725 | 0.343 | 0.312 | 1 Treg_UCBMC |
| RPS15              | 0.00027974 | 0.11459098 | 0.955 | 0.939 | 1 Treg_UCBMC |
| RNF103             | 0.00028079 | 0.36733914 | 0.32  | 0.285 | 1 Treg_UCBMC |
| TBC1D1             | 0.00029046 | 0.2564911  | 0.486 | 0.451 | 1 Treg_UCBMC |
| UBE2Q2             | 0.00029278 | 0.53847168 | 0.256 | 0.222 | 1 Treg_UCBMC |
| SUGT1              | 0.00029525 | 0.42336262 | 0.359 | 0.331 | 1 Treg_UCBMC |
| CYB5R4             | 0.00029876 | 0.49398035 | 0.262 | 0.226 | 1 Treg_UCBMC |
| PPP2R2D            | 0.00029976 | 0.54902959 | 0.295 | 0.267 | 1 Treg_UCBMC |
| SP110              | 0.00030447 | 0.2859684  | 0.465 | 0.44  | 1 Treg_UCBMC |
| SEC63              | 0.00030533 | 0.23000838 | 0.464 | 0.445 | 1 Treg_UCBMC |
| PDS5B              | 0.00033228 | 0.28446041 | 0.407 | 0.379 | 1 Treg_UCBMC |
| APP                | 0.00037606 | 0.26519865 | 0.273 | 0.229 | 1 Treg_UCBMC |

|                   |            |            |       |       |              |
|-------------------|------------|------------|-------|-------|--------------|
| ROCK1             | 0.00038576 | 0.14713877 | 0.638 | 0.622 | 1 Treg_UCBMC |
| RNF10             | 0.00039528 | 0.47838612 | 0.272 | 0.24  | 1 Treg_UCBMC |
| CYTH1             | 0.00041755 | 0.1495345  | 0.63  | 0.602 | 1 Treg_UCBMC |
| TMX3              | 0.00043165 | 0.48590706 | 0.262 | 0.228 | 1 Treg_UCBMC |
| VTI1A             | 0.00044357 | 0.19150218 | 0.575 | 0.548 | 1 Treg_UCBMC |
| LEPROTL1          | 0.00044371 | 0.33649686 | 0.285 | 0.249 | 1 Treg_UCBMC |
| DTNBP1            | 0.0004609  | 0.42289091 | 0.352 | 0.322 | 1 Treg_UCBMC |
| PLEKHM3           | 0.00047704 | 0.47114271 | 0.281 | 0.248 | 1 Treg_UCBMC |
| ENSMUG00000001894 | 0.00048511 | 0.35873552 | 0.329 | 0.301 | 1 Treg_UCBMC |
| C20H16orf72       | 0.00049992 | 0.27204324 | 0.412 | 0.381 | 1 Treg_UCBMC |
| COPS2             | 0.00050538 | 0.37556904 | 0.309 | 0.279 | 1 Treg_UCBMC |
| CSGALNACT2        | 0.00050902 | 0.25432451 | 0.516 | 0.499 | 1 Treg_UCBMC |
| SP3               | 0.00053227 | 0.33713926 | 0.382 | 0.357 | 1 Treg_UCBMC |
| ARNTL             | 0.00060126 | 0.48349866 | 0.282 | 0.25  | 1 Treg_UCBMC |
| ZMYND11           | 0.00060386 | 0.31391291 | 0.376 | 0.338 | 1 Treg_UCBMC |
| OPA1              | 0.00061708 | 0.34797307 | 0.336 | 0.304 | 1 Treg_UCBMC |
| ATXN7L3B          | 0.00063926 | 0.45613803 | 0.294 | 0.267 | 1 Treg_UCBMC |
| STXBP5            | 0.0006415  | 0.50317856 | 0.258 | 0.222 | 1 Treg_UCBMC |
| ZNF44             | 0.00065578 | 0.50466083 | 0.256 | 0.223 | 1 Treg_UCBMC |
| ADD1              | 0.00068252 | 0.34051142 | 0.39  | 0.365 | 1 Treg_UCBMC |
| ABCE1             | 0.00068421 | 0.35177691 | 0.332 | 0.306 | 1 Treg_UCBMC |
| USP24             | 0.00068442 | 0.40394386 | 0.323 | 0.294 | 1 Treg_UCBMC |
| KCMF1             | 0.00069587 | 0.42112165 | 0.308 | 0.279 | 1 Treg_UCBMC |
| ATR               | 0.00072335 | 0.49808432 | 0.27  | 0.236 | 1 Treg_UCBMC |
| RASGRP2           | 0.00074638 | 0.18311931 | 0.322 | 0.28  | 1 Treg_UCBMC |
| ENSMUG00000029973 | 0.00076534 | 0.20635701 | 0.469 | 0.445 | 1 Treg_UCBMC |
| XPR1              | 0.00076612 | 0.28874666 | 0.415 | 0.386 | 1 Treg_UCBMC |
| PFDN1             | 0.00077393 | 0.43400662 | 0.319 | 0.294 | 1 Treg_UCBMC |
| AUH               | 0.0007768  | 0.35334999 | 0.314 | 0.284 | 1 Treg_UCBMC |
| OXR1              | 0.00086079 | 0.36495267 | 0.282 | 0.248 | 1 Treg_UCBMC |
| AP1G1             | 0.00089941 | 0.33093136 | 0.366 | 0.343 | 1 Treg_UCBMC |
| GPRIN3            | 0.00094643 | 0.28648761 | 0.413 | 0.387 | 1 Treg_UCBMC |
| HNRNPM            | 0.001013   | 0.26188512 | 0.493 | 0.481 | 1 Treg_UCBMC |

|                   |            |            |       |       |              |
|-------------------|------------|------------|-------|-------|--------------|
| WSB1              | 0.00102997 | 0.2392179  | 0.497 | 0.475 | 1 Treg_UCBMC |
| TPP2              | 0.00105431 | 0.41223413 | 0.278 | 0.247 | 1 Treg_UCBMC |
| RFTN1             | 0.00109576 | 0.41265794 | 0.311 | 0.283 | 1 Treg_UCBMC |
| KIAA1328          | 0.00114497 | 0.25178486 | 0.322 | 0.285 | 1 Treg_UCBMC |
| TAF15             | 0.00126322 | 0.19184498 | 0.511 | 0.496 | 1 Treg_UCBMC |
| ENSMUG00000055687 | 0.00141817 | 0.28977088 | 0.388 | 0.367 | 1 Treg_UCBMC |
| ATP2A2            | 0.00145286 | 0.34929309 | 0.373 | 0.35  | 1 Treg_UCBMC |
| RNGTT             | 0.00158569 | 0.18577349 | 0.433 | 0.411 | 1 Treg_UCBMC |
| PDS5A             | 0.00160739 | 0.26839052 | 0.45  | 0.442 | 1 Treg_UCBMC |
| SEMA4D            | 0.0016277  | 0.13027911 | 0.573 | 0.541 | 1 Treg_UCBMC |
| ATF7IP2           | 0.0016628  | 0.33617558 | 0.283 | 0.251 | 1 Treg_UCBMC |
| NARS1             | 0.00171904 | 0.26012002 | 0.397 | 0.378 | 1 Treg_UCBMC |
| BCAS3             | 0.00172673 | 0.15567468 | 0.496 | 0.466 | 1 Treg_UCBMC |
| BOD1L1            | 0.00184522 | 0.43331549 | 0.268 | 0.24  | 1 Treg_UCBMC |
| TNFRSF10A         | 0.00185205 | 0.50869611 | 0.265 | 0.237 | 1 Treg_UCBMC |
| SCAF4             | 0.00209436 | 0.3218084  | 0.316 | 0.288 | 1 Treg_UCBMC |
| G3BP1             | 0.00212422 | 0.22085873 | 0.493 | 0.48  | 1 Treg_UCBMC |
| MED30             | 0.00214607 | 0.5463492  | 0.267 | 0.245 | 1 Treg_UCBMC |
| PCNP              | 0.0022198  | 0.30425007 | 0.373 | 0.356 | 1 Treg_UCBMC |
| TRIM22            | 0.00224092 | 0.29315803 | 0.361 | 0.336 | 1 Treg_UCBMC |
| SF1               | 0.00225558 | 0.21799095 | 0.542 | 0.534 | 1 Treg_UCBMC |
| RALGAP2           | 0.00235075 | 0.29078035 | 0.369 | 0.345 | 1 Treg_UCBMC |
| MAP3K1            | 0.0023656  | 0.12010478 | 0.401 | 0.366 | 1 Treg_UCBMC |
| MRPS9             | 0.00243487 | 0.38057723 | 0.272 | 0.247 | 1 Treg_UCBMC |
| STAG2             | 0.0024865  | 0.18084308 | 0.554 | 0.548 | 1 Treg_UCBMC |
| RPTOR             | 0.00252874 | 0.31972607 | 0.344 | 0.318 | 1 Treg_UCBMC |
| PRRC2B            | 0.00253158 | 0.21319614 | 0.487 | 0.472 | 1 Treg_UCBMC |
| ERLEC1            | 0.00257767 | 0.39073511 | 0.264 | 0.236 | 1 Treg_UCBMC |
| ELMOD3            | 0.00268587 | 0.33755398 | 0.305 | 0.279 | 1 Treg_UCBMC |
| HOOK3             | 0.00276074 | 0.17523177 | 0.571 | 0.555 | 1 Treg_UCBMC |
| PAPOLA            | 0.00280099 | 0.16250201 | 0.577 | 0.571 | 1 Treg_UCBMC |
| UBQLN1            | 0.00299534 | 0.38709844 | 0.319 | 0.295 | 1 Treg_UCBMC |
| IRAK2             | 0.00303516 | 0.24184603 | 0.33  | 0.298 | 1 Treg_UCBMC |



|         |            |            |       |       |              |
|---------|------------|------------|-------|-------|--------------|
| HBS1L   | 0.00324449 | 0.12395772 | 0.577 | 0.556 | 1 Treg_UCBMC |
| EWSR1   | 0.00327187 | 0.36320918 | 0.414 | 0.402 | 1 Treg_UCBMC |
| SMG1    | 0.0033467  | 0.18590002 | 0.41  | 0.387 | 1 Treg_UCBMC |
| EIF3E   | 0.00342684 | 0.15280377 | 0.718 | 0.685 | 1 Treg_UCBMC |
| ELOVL5  | 0.00343473 | 0.22128654 | 0.456 | 0.445 | 1 Treg_UCBMC |
| PLEKHB2 | 0.00344604 | 0.3896659  | 0.327 | 0.307 | 1 Treg_UCBMC |
| REXO2   | 0.00345896 | 0.16354577 | 0.378 | 0.351 | 1 Treg_UCBMC |
| CD83    | 0.00349701 | 0.16955279 | 0.299 | 0.265 | 1 Treg_UCBMC |
| GCC2    | 0.00351571 | 0.23925352 | 0.334 | 0.308 | 1 Treg_UCBMC |
| CCDC59  | 0.00366184 | 0.36672349 | 0.278 | 0.253 | 1 Treg_UCBMC |
| CEBPZ   | 0.00371591 | 0.30977565 | 0.38  | 0.361 | 1 Treg_UCBMC |
| ZC3H18  | 0.00378924 | 0.38676887 | 0.295 | 0.274 | 1 Treg_UCBMC |
| ARID4A  | 0.00387754 | 0.37118543 | 0.279 | 0.249 | 1 Treg_UCBMC |
| USP9X   | 0.003885   | 0.18638315 | 0.512 | 0.498 | 1 Treg_UCBMC |
| SLAIN2  | 0.00392036 | 0.43510642 | 0.271 | 0.246 | 1 Treg_UCBMC |
| RAB14   | 0.00398321 | 0.36770832 | 0.344 | 0.327 | 1 Treg_UCBMC |
| MPZL1   | 0.00416784 | 0.27768985 | 0.353 | 0.326 | 1 Treg_UCBMC |
| HTT     | 0.00426183 | 0.40560275 | 0.361 | 0.353 | 1 Treg_UCBMC |
| HERC2   | 0.00430278 | 0.30313465 | 0.391 | 0.379 | 1 Treg_UCBMC |
| NRF1    | 0.00431537 | 0.27047866 | 0.352 | 0.327 | 1 Treg_UCBMC |
| MGMT    | 0.00432011 | 0.3549897  | 0.31  | 0.286 | 1 Treg_UCBMC |
| TRIP12  | 0.00434494 | 0.20735583 | 0.485 | 0.475 | 1 Treg_UCBMC |
| INPP5D  | 0.00437319 | 0.16643744 | 0.409 | 0.386 | 1 Treg_UCBMC |
| USP14   | 0.00437614 | 0.46477846 | 0.258 | 0.237 | 1 Treg_UCBMC |
| RPL9    | 0.00445471 | 0.10530795 | 0.917 | 0.879 | 1 Treg_UCBMC |
| PRKACB  | 0.00459192 | 0.1603266  | 0.464 | 0.446 | 1 Treg_UCBMC |
| GNAI3   | 0.00472623 | 0.28630473 | 0.31  | 0.288 | 1 Treg_UCBMC |
| BDP1    | 0.00498941 | 0.2371263  | 0.39  | 0.367 | 1 Treg_UCBMC |
| RNF216  | 0.00501026 | 0.22079379 | 0.449 | 0.435 | 1 Treg_UCBMC |
| ADAM17  | 0.00511992 | 0.39691986 | 0.262 | 0.237 | 1 Treg_UCBMC |
| TASOR2  | 0.00516586 | 0.27247848 | 0.373 | 0.354 | 1 Treg_UCBMC |
| CFLAR   | 0.00556933 | 0.28643354 | 0.477 | 0.475 | 1 Treg_UCBMC |
| SRRM1   | 0.00586847 | 0.15891853 | 0.53  | 0.525 | 1 Treg_UCBMC |

|                    |            |            |       |       |              |
|--------------------|------------|------------|-------|-------|--------------|
| ENSMMUG00000061458 | 0.00587052 | 0.40931263 | 0.305 | 0.289 | 1 Treg_UCBMC |
| LRRFIP2            | 0.00591766 | 0.41049851 | 0.31  | 0.293 | 1 Treg_UCBMC |
| PLCL2              | 0.00599392 | 0.26622843 | 0.42  | 0.402 | 1 Treg_UCBMC |
| ZFAND3             | 0.00599443 | 0.12166915 | 0.638 | 0.62  | 1 Treg_UCBMC |
| EIF4EBP3           | 0.0060511  | 0.25214288 | 0.47  | 0.465 | 1 Treg_UCBMC |
| ISCA1              | 0.00612037 | 0.30205105 | 0.301 | 0.28  | 1 Treg_UCBMC |
| TAB2               | 0.00651838 | 0.13915944 | 0.475 | 0.453 | 1 Treg_UCBMC |
| ADK                | 0.00684875 | 0.14569636 | 0.454 | 0.425 | 1 Treg_UCBMC |
| JAML               | 0.00685058 | 0.27976083 | 0.296 | 0.266 | 1 Treg_UCBMC |
| MCUB               | 0.00685092 | 0.26906363 | 0.519 | 0.511 | 1 Treg_UCBMC |
| RPL15              | 0.00703492 | 0.10077687 | 0.883 | 0.862 | 1 Treg_UCBMC |
| FYTTD1             | 0.00709226 | 0.35469465 | 0.264 | 0.242 | 1 Treg_UCBMC |
| XRCC5              | 0.00795237 | 0.207994   | 0.555 | 0.551 | 1 Treg_UCBMC |
| ZBTB1              | 0.00798168 | 0.2789575  | 0.342 | 0.325 | 1 Treg_UCBMC |
| C20H16orf87        | 0.00819053 | 0.4179698  | 0.263 | 0.241 | 1 Treg_UCBMC |
| LENG8              | 0.00828008 | 0.29811425 | 0.251 | 0.227 | 1 Treg_UCBMC |
| MAN1A2             | 0.00836913 | 0.29389504 | 0.395 | 0.377 | 1 Treg_UCBMC |
| SNX13              | 0.00860437 | 0.32284461 | 0.367 | 0.354 | 1 Treg_UCBMC |
| DDX18              | 0.00921654 | 0.24621603 | 0.405 | 0.397 | 1 Treg_UCBMC |
| RANBP2             | 0.00923869 | 0.15361297 | 0.555 | 0.546 | 1 Treg_UCBMC |
| UBR3               | 0.00950509 | 0.2872094  | 0.38  | 0.366 | 1 Treg_UCBMC |
| PPP2R5E            | 0.0098735  | 0.27739551 | 0.403 | 0.385 | 1 Treg_UCBMC |
| VRK1               | 0.00993109 | 0.32312888 | 0.276 | 0.252 | 1 Treg_UCBMC |
| AOPEP              | 0.01015882 | 0.13757659 | 0.412 | 0.386 | 1 Treg_UCBMC |
| NUCB2              | 0.01045933 | 0.39470313 | 0.257 | 0.233 | 1 Treg_UCBMC |
| C1D                | 0.01054984 | 0.4185103  | 0.264 | 0.247 | 1 Treg_UCBMC |
| MOB2               | 0.01126372 | 0.20081621 | 0.384 | 0.366 | 1 Treg_UCBMC |
| ARHGAP45           | 0.01132569 | 0.21296504 | 0.358 | 0.339 | 1 Treg_UCBMC |
| WBP11              | 0.01144522 | 0.36883004 | 0.306 | 0.291 | 1 Treg_UCBMC |
| RTN3               | 0.01144726 | 0.22886483 | 0.345 | 0.33  | 1 Treg_UCBMC |
| HDAC2              | 0.01180223 | 0.41366645 | 0.264 | 0.243 | 1 Treg_UCBMC |
| FNDC3A             | 0.01184032 | 0.12822944 | 0.504 | 0.491 | 1 Treg_UCBMC |
| LTN1               | 0.01292711 | 0.33040479 | 0.28  | 0.261 | 1 Treg_UCBMC |

|         |            |            |       |       |              |
|---------|------------|------------|-------|-------|--------------|
| GNA13   | 0.01423068 | 0.36167975 | 0.371 | 0.36  | 1 Treg_UCBMC |
| USP37   | 0.01553009 | 0.3893749  | 0.265 | 0.247 | 1 Treg_UCBMC |
| PDE7A   | 0.01578417 | 0.12174683 | 0.398 | 0.373 | 1 Treg_UCBMC |
| RBPJ    | 0.0162535  | 0.17591793 | 0.426 | 0.41  | 1 Treg_UCBMC |
| ZNF28   | 0.01662843 | 0.39021104 | 0.278 | 0.264 | 1 Treg_UCBMC |
| USP7    | 0.01707004 | 0.5210062  | 0.279 | 0.266 | 1 Treg_UCBMC |
| RASGRP1 | 0.01723735 | 0.19246169 | 0.297 | 0.272 | 1 Treg_UCBMC |
| LCORL   | 0.01724673 | 0.30987602 | 0.307 | 0.292 | 1 Treg_UCBMC |
| RETREG1 | 0.01742247 | 0.22276334 | 0.335 | 0.312 | 1 Treg_UCBMC |
| ARFGEF2 | 0.01743062 | 0.29353889 | 0.276 | 0.254 | 1 Treg_UCBMC |
| ERC1    | 0.0175347  | 0.17798974 | 0.346 | 0.326 | 1 Treg_UCBMC |
| MLLT10  | 0.01783988 | 0.16998196 | 0.445 | 0.427 | 1 Treg_UCBMC |
| ZZEF1   | 0.01820378 | 0.34046697 | 0.288 | 0.268 | 1 Treg_UCBMC |
| FAM193A | 0.01856018 | 0.22981979 | 0.34  | 0.324 | 1 Treg_UCBMC |
| BIRC2   | 0.01873461 | 0.25090739 | 0.282 | 0.263 | 1 Treg_UCBMC |
| MFNG    | 0.02067691 | 0.18455002 | 0.282 | 0.26  | 1 Treg_UCBMC |
| EIF4G2  | 0.02109254 | 0.11638205 | 0.579 | 0.574 | 1 Treg_UCBMC |
| SMC3    | 0.02129726 | 0.22392657 | 0.307 | 0.29  | 1 Treg_UCBMC |
| BTF3L4  | 0.02205646 | 0.24257488 | 0.391 | 0.385 | 1 Treg_UCBMC |
| THOC2   | 0.02275131 | 0.24889661 | 0.392 | 0.383 | 1 Treg_UCBMC |
| TENT2   | 0.02278984 | 0.30710557 | 0.319 | 0.304 | 1 Treg_UCBMC |
| NUP153  | 0.02366197 | 0.23603432 | 0.41  | 0.401 | 1 Treg_UCBMC |
| UBR4    | 0.02383205 | 0.26030188 | 0.333 | 0.32  | 1 Treg_UCBMC |
| TMOD3   | 0.02389916 | 0.26889734 | 0.381 | 0.375 | 1 Treg_UCBMC |
| DDX46   | 0.02432326 | 0.18163773 | 0.467 | 0.466 | 1 Treg_UCBMC |
| EP300   | 0.0249583  | 0.25469564 | 0.424 | 0.419 | 1 Treg_UCBMC |
| SLC30A9 | 0.02569102 | 0.3961977  | 0.355 | 0.349 | 1 Treg_UCBMC |
| EIF3L   | 0.02653636 | 0.12852861 | 0.516 | 0.515 | 1 Treg_UCBMC |
| PTEN    | 0.02723349 | 0.176138   | 0.426 | 0.413 | 1 Treg_UCBMC |
| TBCC    | 0.02740711 | 0.20381238 | 0.29  | 0.269 | 1 Treg_UCBMC |
| SP100   | 0.02756815 | 0.12184626 | 0.568 | 0.564 | 1 Treg_UCBMC |
| EIF4H   | 0.02800857 | 0.26590497 | 0.401 | 0.397 | 1 Treg_UCBMC |
| FAM13B  | 0.02860958 | 0.29414974 | 0.298 | 0.282 | 1 Treg_UCBMC |

|                    |            |            |       |       |              |
|--------------------|------------|------------|-------|-------|--------------|
| WTAP               | 0.02874299 | 0.18210316 | 0.563 | 0.566 | 1 Treg_UCBMC |
| MKLN1              | 0.02959681 | 0.17183909 | 0.513 | 0.505 | 1 Treg_UCBMC |
| SMG7               | 0.03038259 | 0.23743872 | 0.376 | 0.367 | 1 Treg_UCBMC |
| EIF3G              | 0.03059543 | 0.27214951 | 0.377 | 0.373 | 1 Treg_UCBMC |
| DIS3L2             | 0.03109842 | 0.20551108 | 0.46  | 0.458 | 1 Treg_UCBMC |
| RELCH              | 0.03111969 | 0.31318662 | 0.344 | 0.332 | 1 Treg_UCBMC |
| RPAP2              | 0.03199043 | 0.44997675 | 0.262 | 0.249 | 1 Treg_UCBMC |
| HNRNPH3            | 0.03423499 | 0.19934214 | 0.553 | 0.565 | 1 Treg_UCBMC |
| ATP2B4             | 0.0344796  | 0.14823652 | 0.46  | 0.442 | 1 Treg_UCBMC |
| COMMD7             | 0.03475899 | 0.30156336 | 0.311 | 0.304 | 1 Treg_UCBMC |
| PSMA3              | 0.03509039 | 0.31632653 | 0.366 | 0.362 | 1 Treg_UCBMC |
| KPNB1              | 0.03698315 | 0.28806355 | 0.371 | 0.371 | 1 Treg_UCBMC |
| TXLNG              | 0.04094285 | 0.26174675 | 0.333 | 0.322 | 1 Treg_UCBMC |
| SMU1               | 0.04156409 | 0.2859848  | 0.261 | 0.247 | 1 Treg_UCBMC |
| SACM1L             | 0.04240647 | 0.23562681 | 0.282 | 0.266 | 1 Treg_UCBMC |
| NAP1L4             | 0.0424177  | 0.1284197  | 0.599 | 0.603 | 1 Treg_UCBMC |
| TRPC4AP            | 0.04316526 | 0.28636803 | 0.318 | 0.311 | 1 Treg_UCBMC |
| RTF2               | 0.04664704 | 0.37077754 | 0.27  | 0.262 | 1 Treg_UCBMC |
| KIF5B              | 0.04770027 | 0.22916952 | 0.418 | 0.418 | 1 Treg_UCBMC |
| RALGAPA1           | 0.04771821 | 0.24323573 | 0.299 | 0.283 | 1 Treg_UCBMC |
| GOLM2              | 0.04818241 | 0.17548176 | 0.446 | 0.443 | 1 Treg_UCBMC |
| OLA1               | 0.0513391  | 0.22697862 | 0.401 | 0.396 | 1 Treg_UCBMC |
| ENSMMUG00000047277 | 0.05155169 | 0.25608594 | 0.511 | 0.526 | 1 Treg_UCBMC |
| ATXN10             | 0.05480113 | 0.20755231 | 0.465 | 0.48  | 1 Treg_UCBMC |
| GATAD2A            | 0.05569918 | 0.21451973 | 0.32  | 0.307 | 1 Treg_UCBMC |
| USP25              | 0.05648419 | 0.23712855 | 0.308 | 0.294 | 1 Treg_UCBMC |
| ENSMMUG00000059017 | 0.05907361 | 0.16287002 | 0.408 | 0.398 | 1 Treg_UCBMC |
| UBL3               | 0.05915352 | 0.24087685 | 0.283 | 0.268 | 1 Treg_UCBMC |
| DIAPH2             | 0.0592219  | 0.13002055 | 0.471 | 0.461 | 1 Treg_UCBMC |
| ENSMMUG00000012537 | 0.06085267 | 0.30128253 | 0.344 | 0.345 | 1 Treg_UCBMC |
| NSF                | 0.06132896 | 0.16410508 | 0.448 | 0.447 | 1 Treg_UCBMC |
| ERP44              | 0.0626587  | 0.19403186 | 0.384 | 0.38  | 1 Treg_UCBMC |
| ZNF148             | 0.06424328 | 0.21430292 | 0.417 | 0.408 | 1 Treg_UCBMC |

|                   |            |            |       |       |              |
|-------------------|------------|------------|-------|-------|--------------|
| RWDD1             | 0.06688857 | 0.21489582 | 0.455 | 0.451 | 1 Treg_UCBMC |
| ENSMUG00000065089 | 0.06746341 | 0.27928828 | 0.252 | 0.24  | 1 Treg_UCBMC |
| INPP4A            | 0.07222952 | 0.21494947 | 0.308 | 0.294 | 1 Treg_UCBMC |
| DMTF1             | 0.07315652 | 0.26637665 | 0.325 | 0.321 | 1 Treg_UCBMC |
| YAF2              | 0.07592883 | 0.17874185 | 0.464 | 0.475 | 1 Treg_UCBMC |
| SNX2              | 0.07603392 | 0.35731931 | 0.276 | 0.268 | 1 Treg_UCBMC |
| SMARCA2           | 0.07607461 | 0.13877498 | 0.348 | 0.332 | 1 Treg_UCBMC |
| ME2               | 0.07620836 | 0.27879159 | 0.393 | 0.397 | 1 Treg_UCBMC |
| FARS2             | 0.08028068 | 0.17871868 | 0.38  | 0.37  | 1 Treg_UCBMC |
| NCOA2             | 0.08031162 | 0.109632   | 0.455 | 0.448 | 1 Treg_UCBMC |
| NR2C2             | 0.08085891 | 0.26090644 | 0.257 | 0.244 | 1 Treg_UCBMC |
| FBXW8             | 0.0939378  | 0.16059777 | 0.313 | 0.302 | 1 Treg_UCBMC |
| ZDHHC20           | 0.09680909 | 0.21089108 | 0.304 | 0.295 | 1 Treg_UCBMC |
| TSG101            | 0.09907453 | 0.31018072 | 0.256 | 0.248 | 1 Treg_UCBMC |
| ZC3H11A           | 0.10462678 | 0.19821793 | 0.419 | 0.43  | 1 Treg_UCBMC |
| ENTPD4            | 0.10738597 | 0.32413591 | 0.27  | 0.268 | 1 Treg_UCBMC |
| DNM1L             | 0.10791996 | 0.21079556 | 0.3   | 0.29  | 1 Treg_UCBMC |
| ANKIB1            | 0.1090023  | 0.17425034 | 0.365 | 0.365 | 1 Treg_UCBMC |
| ARF1              | 0.10945598 | 0.1370469  | 0.502 | 0.52  | 1 Treg_UCBMC |
| OCIAD1            | 0.11144534 | 0.26876421 | 0.306 | 0.302 | 1 Treg_UCBMC |
| CEP192            | 0.11970324 | 0.33077713 | 0.305 | 0.306 | 1 Treg_UCBMC |
| STK26             | 0.1224663  | 0.25587306 | 0.313 | 0.314 | 1 Treg_UCBMC |
| PSME4             | 0.13473127 | 0.11326762 | 0.474 | 0.478 | 1 Treg_UCBMC |
| IST1              | 0.13691851 | 0.24598657 | 0.337 | 0.34  | 1 Treg_UCBMC |
| USP36             | 0.13851744 | 0.1865223  | 0.386 | 0.382 | 1 Treg_UCBMC |
| HIPK1             | 0.13977958 | 0.23477834 | 0.298 | 0.297 | 1 Treg_UCBMC |
| CITED1            | 0.14603337 | 0.23486583 | 0.25  | 0.239 | 1 Treg_UCBMC |
| SNX3              | 0.15028139 | 0.15661683 | 0.226 | 0.26  | 1 Treg_UCBMC |
| CSNK1G1           | 0.15184018 | 0.13750395 | 0.369 | 0.362 | 1 Treg_UCBMC |
| ENSMUG00000020316 | 0.15502472 | 0.29531085 | 0.286 | 0.285 | 1 Treg_UCBMC |
| RABGEF1           | 0.1553818  | 0.19973809 | 0.305 | 0.298 | 1 Treg_UCBMC |
| CAST              | 0.15644687 | 0.14611542 | 0.448 | 0.453 | 1 Treg_UCBMC |
| TBL1X             | 0.16512108 | 0.19173313 | 0.283 | 0.273 | 1 Treg_UCBMC |

|                    |            |            |       |       |              |
|--------------------|------------|------------|-------|-------|--------------|
| UBA2               | 0.16673024 | 0.11059592 | 0.259 | 0.296 | 1 Treg_UCBMC |
| RAB6A              | 0.1675968  | 0.26669604 | 0.286 | 0.283 | 1 Treg_UCBMC |
| MAN1A1             | 0.18058939 | 0.21882948 | 0.38  | 0.38  | 1 Treg_UCBMC |
| ETF1               | 0.18242128 | 0.22788771 | 0.376 | 0.387 | 1 Treg_UCBMC |
| ZNF407             | 0.18357108 | 0.1214959  | 0.433 | 0.434 | 1 Treg_UCBMC |
| ZNF280D            | 0.18753774 | 0.18654168 | 0.265 | 0.258 | 1 Treg_UCBMC |
| PHF11              | 0.19238566 | 0.22223517 | 0.325 | 0.327 | 1 Treg_UCBMC |
| FKBP3              | 0.19313569 | 0.17698312 | 0.307 | 0.304 | 1 Treg_UCBMC |
| ITFG1              | 0.19471273 | 0.19017095 | 0.38  | 0.383 | 1 Treg_UCBMC |
| RBBP6              | 0.19551124 | 0.2309925  | 0.294 | 0.293 | 1 Treg_UCBMC |
| EHBP1              | 0.20247506 | 0.18328009 | 0.312 | 0.303 | 1 Treg_UCBMC |
| AGPS               | 0.20423408 | 0.20863683 | 0.324 | 0.325 | 1 Treg_UCBMC |
| WDFY1              | 0.20536388 | 0.10165456 | 0.308 | 0.298 | 1 Treg_UCBMC |
| FAM222B            | 0.20945451 | 0.10200937 | 0.292 | 0.285 | 1 Treg_UCBMC |
| ST3GAL1            | 0.21416328 | 0.10478395 | 0.308 | 0.304 | 1 Treg_UCBMC |
| ENSMMUG00000030374 | 0.21565624 | 0.15455208 | 0.234 | 0.265 | 1 Treg_UCBMC |
| HNRNPA0            | 0.21596749 | 0.1912379  | 0.38  | 0.387 | 1 Treg_UCBMC |
| AEBP2              | 0.231227   | 0.1772141  | 0.409 | 0.416 | 1 Treg_UCBMC |
| ENSMMUG00000061913 | 0.23790769 | 0.11091253 | 0.384 | 0.384 | 1 Treg_UCBMC |
| DENND6A            | 0.23860627 | 0.26468713 | 0.276 | 0.277 | 1 Treg_UCBMC |
| RALY               | 0.24339178 | 0.2139633  | 0.411 | 0.426 | 1 Treg_UCBMC |
| MAP2K5             | 0.24374314 | 0.25076235 | 0.314 | 0.314 | 1 Treg_UCBMC |
| WDR13              | 0.24672036 | 0.12650533 | 0.505 | 0.515 | 1 Treg_UCBMC |
| SLC23A2            | 0.24909259 | 0.22647602 | 0.269 | 0.266 | 1 Treg_UCBMC |
| EIF4E              | 0.25511402 | 0.18037321 | 0.236 | 0.266 | 1 Treg_UCBMC |
| PSIP1              | 0.26422372 | 0.15052552 | 0.495 | 0.516 | 1 Treg_UCBMC |
| GLMN               | 0.270881   | 0.28638734 | 0.327 | 0.334 | 1 Treg_UCBMC |
| PSMA6              | 0.27343628 | 0.20379686 | 0.282 | 0.284 | 1 Treg_UCBMC |
| SLC7A6             | 0.2768132  | 0.23437005 | 0.267 | 0.268 | 1 Treg_UCBMC |
| PHF14              | 0.27759227 | 0.18720961 | 0.405 | 0.413 | 1 Treg_UCBMC |
| EIF2S3             | 0.27875747 | 0.25621585 | 0.308 | 0.315 | 1 Treg_UCBMC |
| ZFX                | 0.29073576 | 0.20627953 | 0.256 | 0.254 | 1 Treg_UCBMC |
| RSRC1              | 0.29584007 | 0.1548281  | 0.381 | 0.389 | 1 Treg_UCBMC |

|           |            |            |       |       |              |
|-----------|------------|------------|-------|-------|--------------|
| RBM6      | 0.30258744 | 0.12451605 | 0.37  | 0.376 | 1 Treg_UCBMC |
| ATF7      | 0.30409576 | 0.26476018 | 0.315 | 0.318 | 1 Treg_UCBMC |
| CCDC82    | 0.33862144 | 0.22807758 | 0.265 | 0.267 | 1 Treg_UCBMC |
| CAMKMT    | 0.34172874 | 0.1112618  | 0.383 | 0.384 | 1 Treg_UCBMC |
| CASC3     | 0.35496492 | 0.19948889 | 0.314 | 0.32  | 1 Treg_UCBMC |
| WWP2      | 0.36042549 | 0.19954214 | 0.255 | 0.253 | 1 Treg_UCBMC |
| NSMCE2    | 0.37277454 | 0.15908532 | 0.438 | 0.456 | 1 Treg_UCBMC |
| BCCIP     | 0.37532725 | 0.27235156 | 0.247 | 0.251 | 1 Treg_UCBMC |
| LUC7L     | 0.38692514 | 0.13697581 | 0.294 | 0.295 | 1 Treg_UCBMC |
| PSMD14    | 0.38874979 | 0.11922869 | 0.377 | 0.387 | 1 Treg_UCBMC |
| LARP4     | 0.38945048 | 0.18887048 | 0.333 | 0.345 | 1 Treg_UCBMC |
| R3HDM1    | 0.38982763 | 0.12138583 | 0.26  | 0.287 | 1 Treg_UCBMC |
| MAPRE1    | 0.39301498 | 0.14387133 | 0.35  | 0.355 | 1 Treg_UCBMC |
| SPATA5    | 0.39570931 | 0.10304021 | 0.305 | 0.305 | 1 Treg_UCBMC |
| C4H6orf62 | 0.39958699 | 0.17696258 | 0.301 | 0.305 | 1 Treg_UCBMC |
| NKTR      | 0.40384353 | 0.19940097 | 0.38  | 0.394 | 1 Treg_UCBMC |
| PSMA1     | 0.40393206 | 0.12268969 | 0.394 | 0.408 | 1 Treg_UCBMC |
| SBNO1     | 0.41227056 | 0.26913349 | 0.258 | 0.26  | 1 Treg_UCBMC |
| TPR       | 0.41517765 | 0.14073365 | 0.414 | 0.434 | 1 Treg_UCBMC |
| HP1BP3    | 0.42526494 | 0.10973996 | 0.406 | 0.42  | 1 Treg_UCBMC |
| PCF11     | 0.42707808 | 0.10874357 | 0.238 | 0.261 | 1 Treg_UCBMC |
| MFF       | 0.43773055 | 0.25874184 | 0.328 | 0.345 | 1 Treg_UCBMC |
| PIAS2     | 0.43821885 | 0.21619267 | 0.283 | 0.287 | 1 Treg_UCBMC |
| PBRM1     | 0.44106654 | 0.21670482 | 0.35  | 0.364 | 1 Treg_UCBMC |
| NCK1      | 0.44407111 | 0.11457021 | 0.311 | 0.32  | 1 Treg_UCBMC |
| RNF149    | 0.44526854 | 0.10939409 | 0.396 | 0.41  | 1 Treg_UCBMC |
| NDUFS4    | 0.454546   | 0.10857484 | 0.296 | 0.324 | 1 Treg_UCBMC |
| ZBTB11    | 0.45768934 | 0.20912952 | 0.246 | 0.25  | 1 Treg_UCBMC |
| TMEM135   | 0.46209334 | 0.13738072 | 0.274 | 0.273 | 1 Treg_UCBMC |
| KMT5B     | 0.47301205 | 0.2148999  | 0.29  | 0.296 | 1 Treg_UCBMC |
| TOX4      | 0.48141271 | 0.17047981 | 0.307 | 0.342 | 1 Treg_UCBMC |
| MNAT1     | 0.48375073 | 0.16438776 | 0.338 | 0.348 | 1 Treg_UCBMC |
| MDH1      | 0.49097948 | 0.20705079 | 0.32  | 0.331 | 1 Treg_UCBMC |

|                   |            |            |       |       |              |
|-------------------|------------|------------|-------|-------|--------------|
| ETV6              | 0.49838608 | 0.17379349 | 0.269 | 0.27  | 1 Treg_UCBMC |
| UFC1              | 0.49931251 | 0.22536015 | 0.329 | 0.344 | 1 Treg_UCBMC |
| ATE1              | 0.52289021 | 0.21587257 | 0.26  | 0.263 | 1 Treg_UCBMC |
| C3H21orf91        | 0.52444171 | 0.1353039  | 0.248 | 0.272 | 1 Treg_UCBMC |
| PJA2              | 0.53593805 | 0.21149662 | 0.381 | 0.401 | 1 Treg_UCBMC |
| PDCD6IP           | 0.53911487 | 0.20432198 | 0.332 | 0.347 | 1 Treg_UCBMC |
| CUL1              | 0.5423181  | 0.17850134 | 0.279 | 0.307 | 1 Treg_UCBMC |
| SNRNP70           | 0.55447638 | 0.12584798 | 0.373 | 0.396 | 1 Treg_UCBMC |
| CDK12             | 0.56017323 | 0.20103205 | 0.287 | 0.296 | 1 Treg_UCBMC |
| LBR               | 0.57245433 | 0.11936772 | 0.346 | 0.36  | 1 Treg_UCBMC |
| ATG3              | 0.57781104 | 0.11739342 | 0.316 | 0.347 | 1 Treg_UCBMC |
| CDC5L             | 0.57877682 | 0.22774073 | 0.28  | 0.291 | 1 Treg_UCBMC |
| RC3H1             | 0.57999713 | 0.25868564 | 0.247 | 0.256 | 1 Treg_UCBMC |
| RNF115            | 0.58728591 | 0.17029657 | 0.302 | 0.334 | 1 Treg_UCBMC |
| ITFG2             | 0.58865333 | 0.11508371 | 0.24  | 0.261 | 1 Treg_UCBMC |
| BCAS2             | 0.59346527 | 0.14497582 | 0.326 | 0.342 | 1 Treg_UCBMC |
| CUL4A             | 0.5948487  | 0.23159645 | 0.279 | 0.308 | 1 Treg_UCBMC |
| ZNF528            | 0.6003522  | 0.12807961 | 0.29  | 0.317 | 1 Treg_UCBMC |
| MRPS31            | 0.60237062 | 0.10871136 | 0.284 | 0.308 | 1 Treg_UCBMC |
| STRAP             | 0.61538637 | 0.13567927 | 0.36  | 0.377 | 1 Treg_UCBMC |
| ARHGAP4           | 0.61557881 | 0.16516885 | 0.28  | 0.289 | 1 Treg_UCBMC |
| ICOS              | 0.62021979 | 0.10820812 | 0.593 | 0.628 | 1 Treg_UCBMC |
| HBP1              | 0.63133205 | 0.16110505 | 0.387 | 0.412 | 1 Treg_UCBMC |
| ASXL1             | 0.63219759 | 0.14188028 | 0.301 | 0.309 | 1 Treg_UCBMC |
| SAFB2             | 0.65029395 | 0.11332277 | 0.276 | 0.298 | 1 Treg_UCBMC |
| SLC39A11          | 0.65053403 | 0.12196165 | 0.324 | 0.336 | 1 Treg_UCBMC |
| SYAP1             | 0.65570138 | 0.12013351 | 0.361 | 0.38  | 1 Treg_UCBMC |
| SSR1              | 0.67493418 | 0.1904844  | 0.258 | 0.284 | 1 Treg_UCBMC |
| TDRD3             | 0.6790635  | 0.1367312  | 0.272 | 0.294 | 1 Treg_UCBMC |
| DCAF5             | 0.68665258 | 0.14285647 | 0.321 | 0.334 | 1 Treg_UCBMC |
| SMC1A             | 0.68836024 | 0.22137613 | 0.234 | 0.255 | 1 Treg_UCBMC |
| ENSMUG00000060229 | 0.69492489 | 0.10843428 | 0.319 | 0.332 | 1 Treg_UCBMC |
| INO80             | 0.69996401 | 0.13118227 | 0.233 | 0.25  | 1 Treg_UCBMC |



|                    |            |            |       |       |                       |
|--------------------|------------|------------|-------|-------|-----------------------|
| HSPA4              | 0.71183556 | 0.26362819 | 0.248 | 0.26  | 1 Treg_UCBMC          |
| UIMC1              | 0.72634606 | 0.11617695 | 0.265 | 0.283 | 1 Treg_UCBMC          |
| PSMD7              | 0.72981778 | 0.20357155 | 0.252 | 0.261 | 1 Treg_UCBMC          |
| DDX39B             | 0.73254988 | 0.1492545  | 0.361 | 0.381 | 1 Treg_UCBMC          |
| KLHL6              | 0.74609485 | 0.20933723 | 0.247 | 0.257 | 1 Treg_UCBMC          |
| SZRD1              | 0.74865301 | 0.10117976 | 0.28  | 0.3   | 1 Treg_UCBMC          |
| ATP5PB             | 0.76993927 | 0.1574097  | 0.315 | 0.346 | 1 Treg_UCBMC          |
| SRSF1              | 0.7724431  | 0.17246736 | 0.289 | 0.314 | 1 Treg_UCBMC          |
| CASP12             | 0.7931613  | 0.12000755 | 0.304 | 0.315 | 1 Treg_UCBMC          |
| ZC3H13             | 0.7946975  | 0.26626212 | 0.319 | 0.337 | 1 Treg_UCBMC          |
| SPEN               | 0.83055724 | 0.10617917 | 0.342 | 0.359 | 1 Treg_UCBMC          |
| BABAM2             | 0.83119179 | 0.11621968 | 0.386 | 0.406 | 1 Treg_UCBMC          |
| GLYR1              | 0.83953256 | 0.2252472  | 0.238 | 0.25  | 1 Treg_UCBMC          |
| IK                 | 0.85299511 | 0.10559823 | 0.381 | 0.416 | 1 Treg_UCBMC          |
| ENSMMUG00000003130 | 0.85446025 | 0.11805401 | 0.243 | 0.259 | 1 Treg_UCBMC          |
| NCKAP1L            | 0.86226175 | 0.10880393 | 0.267 | 0.28  | 1 Treg_UCBMC          |
| EXOC2              | 0.87617791 | 0.13501554 | 0.281 | 0.295 | 1 Treg_UCBMC          |
| TTC19              | 0.87895661 | 0.14641778 | 0.264 | 0.282 | 1 Treg_UCBMC          |
| VPS8               | 0.92349103 | 0.15531492 | 0.251 | 0.264 | 1 Treg_UCBMC          |
| CTNBL1             | 0.92779004 | 0.12007049 | 0.335 | 0.36  | 1 Treg_UCBMC          |
| WARS2              | 0.92812256 | 0.1699125  | 0.255 | 0.266 | 1 Treg_UCBMC          |
| ENSMMUG00000015208 | 0.96225185 | 0.12975576 | 0.317 | 0.339 | 1 Treg_UCBMC          |
| PPP4R3B            | 0.97418441 | 0.18145201 | 0.335 | 0.359 | 1 Treg_UCBMC          |
| TCF25              | 0.98795046 | 0.11711093 | 0.333 | 0.36  | 1 Treg_UCBMC          |
| ATF6               | 0.99525409 | 0.16215103 | 0.244 | 0.255 | 1 Treg_UCBMC          |
| RPL13              | 2.07E-282  | 1.88436714 | 0.945 | 0.819 | 7.32E-278 Treg_spleen |
| LTB                | 1.23E-250  | 2.48499648 | 0.807 | 0.366 | 4.36E-246 Treg_spleen |
| JUN                | 2.39E-212  | 2.144573   | 0.81  | 0.37  | 8.48E-208 Treg_spleen |
| ATP5F1D            | 1.17E-167  | 2.22455612 | 0.488 | 0.098 | 4.15E-163 Treg_spleen |
| PHACTR2            | 5.31E-153  | 1.88974493 | 0.737 | 0.331 | 1.88E-148 Treg_spleen |
| PM20D2             | 1.06E-147  | 1.3493015  | 0.811 | 0.432 | 3.76E-143 Treg_spleen |
| FOSB               | 2.22E-143  | 1.92125644 | 0.573 | 0.186 | 7.88E-139 Treg_spleen |
| COX5A              | 1.57E-134  | 1.95796549 | 0.518 | 0.158 | 5.56E-130 Treg_spleen |

|                     |           |            |       |       |           |             |
|---------------------|-----------|------------|-------|-------|-----------|-------------|
| C1QBP               | 7.19E-130 | 2.89282792 | 0.337 | 0.052 | 2.55E-125 | Treg_spleen |
| ENSMMUG00000040065  | 2.14E-126 | 2.13513343 | 0.402 | 0.086 | 7.59E-122 | Treg_spleen |
| MZT2B               | 3.30E-126 | 1.96852026 | 0.422 | 0.095 | 1.17E-121 | Treg_spleen |
| TRAPPC5             | 3.53E-125 | 3.26577691 | 0.269 | 0.024 | 1.25E-120 | Treg_spleen |
| ID3                 | 6.86E-124 | 1.95851605 | 0.467 | 0.126 | 2.43E-119 | Treg_spleen |
| ICA1                | 1.37E-121 | 3.01842329 | 0.292 | 0.036 | 4.84E-117 | Treg_spleen |
| NT5C                | 6.53E-120 | 2.39010611 | 0.315 | 0.046 | 2.31E-115 | Treg_spleen |
| ENSMMUG00000008417  | 2.04E-118 | 2.34191685 | 0.326 | 0.052 | 7.21E-114 | Treg_spleen |
| NOP53               | 8.14E-116 | 1.50920833 | 0.523 | 0.174 | 2.88E-111 | Treg_spleen |
| TNFRSF18            | 8.99E-116 | 2.52856172 | 0.303 | 0.044 | 3.19E-111 | Treg_spleen |
| TRIR                | 1.65E-111 | 1.33369731 | 0.638 | 0.275 | 5.84E-107 | Treg_spleen |
| STAMBPL1            | 4.58E-109 | 1.77395677 | 0.482 | 0.153 | 1.62E-104 | Treg_spleen |
| PFN1                | 5.45E-109 | 1.14861629 | 0.837 | 0.689 | 1.93E-104 | Treg_spleen |
| RPS2                | 6.18E-108 | 1.1427912  | 0.827 | 0.658 | 2.19E-103 | Treg_spleen |
| FOS                 | 4.55E-106 | 1.18960508 | 0.869 | 0.576 | 1.61E-101 | Treg_spleen |
| STK17A              | 5.91E-106 | 1.03995716 | 0.863 | 0.579 | 2.09E-101 | Treg_spleen |
| DUSP1               | 7.55E-106 | 1.4327038  | 0.649 | 0.298 | 2.68E-101 | Treg_spleen |
| COTL1               | 3.16E-102 | 1.36964817 | 0.649 | 0.321 | 1.12E-97  | Treg_spleen |
| SLA                 | 5.18E-102 | 1.94000115 | 0.343 | 0.074 | 1.83E-97  | Treg_spleen |
| TNFRSF1B            | 4.55E-97  | 1.3723428  | 0.481 | 0.162 | 1.61E-92  | Treg_spleen |
| PPIA                | 6.70E-97  | 1.49071432 | 0.46  | 0.148 | 2.37E-92  | Treg_spleen |
| ENSMMUG000000054358 | 1.10E-96  | 1.36756339 | 0.967 | 0.832 | 3.89E-92  | Treg_spleen |
| RAP1A               | 1.05E-94  | 1.10712088 | 0.81  | 0.535 | 3.73E-90  | Treg_spleen |
| SDF4                | 5.30E-94  | 1.85584225 | 0.329 | 0.073 | 1.88E-89  | Treg_spleen |
| IL6ST               | 3.23E-93  | 1.11536904 | 0.8   | 0.51  | 1.14E-88  | Treg_spleen |
| ZFAND5              | 5.33E-92  | 1.59563852 | 0.395 | 0.113 | 1.89E-87  | Treg_spleen |
| TXNL4A              | 6.66E-92  | 1.6213024  | 0.352 | 0.088 | 2.36E-87  | Treg_spleen |
| VAV3                | 2.37E-91  | 1.74732305 | 0.495 | 0.192 | 8.41E-87  | Treg_spleen |
| TMEM160             | 7.76E-90  | 2.13052593 | 0.278 | 0.052 | 2.75E-85  | Treg_spleen |
| CLIC1               | 1.95E-88  | 1.09869264 | 0.555 | 0.232 | 6.90E-84  | Treg_spleen |
| ITGAL               | 2.49E-88  | 1.53171333 | 0.425 | 0.139 | 8.83E-84  | Treg_spleen |
| IFNAR2              | 4.97E-87  | 1.10314427 | 0.66  | 0.328 | 1.76E-82  | Treg_spleen |
| IL27RA              | 2.38E-86  | 1.72968759 | 0.357 | 0.097 | 8.42E-82  | Treg_spleen |

|                    |          |            |       |       |          |             |
|--------------------|----------|------------|-------|-------|----------|-------------|
| ENSMMUG00000058532 | 3.72E-86 | 1.4622752  | 0.472 | 0.178 | 1.32E-81 | Treg_spleen |
| ZFP36L1            | 6.99E-86 | 1.11726495 | 0.703 | 0.384 | 2.48E-81 | Treg_spleen |
| TPM4               | 9.27E-84 | 1.48240252 | 0.401 | 0.126 | 3.28E-79 | Treg_spleen |
| HSPD1              | 2.52E-83 | 1.56124864 | 0.465 | 0.178 | 8.94E-79 | Treg_spleen |
| SRSF2              | 1.78E-82 | 1.30192028 | 0.478 | 0.18  | 6.30E-78 | Treg_spleen |
| SQSTM1             | 5.89E-82 | 1.50054141 | 0.47  | 0.179 | 2.09E-77 | Treg_spleen |
| HNRNPAB            | 1.04E-81 | 1.62899915 | 0.356 | 0.104 | 3.69E-77 | Treg_spleen |
| SLC9A9             | 1.36E-81 | 1.88954944 | 0.54  | 0.26  | 4.81E-77 | Treg_spleen |
| C10H20orf24        | 3.25E-80 | 1.2605854  | 0.443 | 0.159 | 1.15E-75 | Treg_spleen |
| PTPN22             | 3.87E-80 | 1.30197671 | 0.451 | 0.163 | 1.37E-75 | Treg_spleen |
| ITGB2              | 5.57E-80 | 1.18463542 | 0.493 | 0.193 | 1.97E-75 | Treg_spleen |
| KLF6               | 7.53E-80 | 0.87786039 | 0.88  | 0.62  | 2.67E-75 | Treg_spleen |
| RAB4A              | 2.79E-79 | 1.61053479 | 0.3   | 0.072 | 9.90E-75 | Treg_spleen |
| ATXN1              | 5.71E-79 | 1.28143334 | 0.539 | 0.236 | 2.02E-74 | Treg_spleen |
| DNAJA1             | 6.13E-79 | 1.09285533 | 0.616 | 0.292 | 2.17E-74 | Treg_spleen |
| MAF                | 8.76E-79 | 1.86783616 | 0.291 | 0.07  | 3.10E-74 | Treg_spleen |
| RANBP1             | 3.00E-78 | 1.81788991 | 0.351 | 0.108 | 1.06E-73 | Treg_spleen |
| DENND2D            | 2.36E-77 | 1.30018032 | 0.449 | 0.167 | 8.36E-73 | Treg_spleen |
| PDIA6              | 1.50E-75 | 1.60888391 | 0.362 | 0.114 | 5.31E-71 | Treg_spleen |
| NEDD9              | 8.64E-75 | 1.11012965 | 0.692 | 0.394 | 3.06E-70 | Treg_spleen |
| PARP6              | 3.89E-74 | 1.40011551 | 0.417 | 0.155 | 1.38E-69 | Treg_spleen |
| GIMAP4             | 1.50E-73 | 1.44118992 | 0.315 | 0.087 | 5.33E-69 | Treg_spleen |
| GADD45GIP1         | 8.80E-73 | 1.92290981 | 0.268 | 0.063 | 3.12E-68 | Treg_spleen |
| HNRNPF             | 3.08E-72 | 0.92427973 | 0.643 | 0.337 | 1.09E-67 | Treg_spleen |
| NME3               | 3.17E-72 | 1.07887528 | 0.541 | 0.241 | 1.12E-67 | Treg_spleen |
| IKZF2              | 5.93E-72 | 0.96214394 | 0.889 | 0.702 | 2.10E-67 | Treg_spleen |
| CLTA               | 6.93E-72 | 1.23926976 | 0.434 | 0.163 | 2.45E-67 | Treg_spleen |
| SIRPG              | 2.62E-71 | 1.22040292 | 0.453 | 0.178 | 9.27E-67 | Treg_spleen |
| CLTB               | 4.93E-71 | 1.67710921 | 0.285 | 0.073 | 1.75E-66 | Treg_spleen |
| HSPA8              | 1.14E-70 | 1.00251326 | 0.746 | 0.48  | 4.04E-66 | Treg_spleen |
| SPINT2             | 2.52E-70 | 1.44869065 | 0.347 | 0.11  | 8.95E-66 | Treg_spleen |
| BTLA               | 1.61E-69 | 1.65944076 | 0.27  | 0.066 | 5.72E-65 | Treg_spleen |
| RGCC               | 2.40E-69 | 0.98288027 | 0.599 | 0.297 | 8.49E-65 | Treg_spleen |

|                    |          |            |       |       |          |             |
|--------------------|----------|------------|-------|-------|----------|-------------|
| GLCC11             | 9.43E-69 | 1.24385458 | 0.6   | 0.314 | 3.34E-64 | Treg_spleen |
| ANP32B             | 1.78E-68 | 0.97570361 | 0.666 | 0.384 | 6.31E-64 | Treg_spleen |
| TOX                | 5.11E-68 | 0.89920879 | 0.943 | 0.787 | 1.81E-63 | Treg_spleen |
| PHTF2              | 2.74E-67 | 1.39403586 | 0.415 | 0.162 | 9.71E-63 | Treg_spleen |
| PARK7              | 3.62E-67 | 1.45273096 | 0.454 | 0.199 | 1.28E-62 | Treg_spleen |
| PTPN7              | 4.02E-67 | 1.83343802 | 0.252 | 0.06  | 1.43E-62 | Treg_spleen |
| TIGIT              | 1.32E-66 | 1.44068875 | 0.355 | 0.125 | 4.69E-62 | Treg_spleen |
| ENSMMUG00000063549 | 1.90E-66 | 1.52059619 | 0.306 | 0.09  | 6.73E-62 | Treg_spleen |
| H2AZ2              | 3.98E-66 | 0.76383446 | 0.778 | 0.494 | 1.41E-61 | Treg_spleen |
| IL21R              | 4.90E-66 | 1.60678079 | 0.327 | 0.106 | 1.74E-61 | Treg_spleen |
| PPP1R10            | 1.91E-65 | 0.96318574 | 0.565 | 0.275 | 6.77E-61 | Treg_spleen |
| SRRM2              | 2.00E-65 | 0.82947327 | 0.699 | 0.389 | 7.08E-61 | Treg_spleen |
| TRAF1              | 3.43E-64 | 1.51085581 | 0.265 | 0.068 | 1.21E-59 | Treg_spleen |
| TESC               | 4.18E-64 | 1.41854163 | 0.399 | 0.156 | 1.48E-59 | Treg_spleen |
| DGKH               | 4.32E-64 | 1.5764756  | 0.423 | 0.176 | 1.53E-59 | Treg_spleen |
| LCP2               | 4.74E-64 | 1.1280306  | 0.494 | 0.221 | 1.68E-59 | Treg_spleen |
| DMAC1              | 1.82E-63 | 1.43837047 | 0.263 | 0.068 | 6.45E-59 | Treg_spleen |
| CYC1               | 1.19E-62 | 1.33493192 | 0.295 | 0.086 | 4.20E-58 | Treg_spleen |
| SEM1               | 3.20E-62 | 0.85550818 | 0.537 | 0.26  | 1.13E-57 | Treg_spleen |
| ZFP36              | 3.46E-62 | 0.8502869  | 0.788 | 0.537 | 1.23E-57 | Treg_spleen |
| TOX2               | 7.58E-62 | 2.23037725 | 0.268 | 0.078 | 2.69E-57 | Treg_spleen |
| ENSMMUG00000051300 | 9.43E-62 | 0.47238078 | 0.97  | 0.851 | 3.34E-57 | Treg_spleen |
| KDM6B              | 1.07E-61 | 1.52647588 | 0.337 | 0.118 | 3.81E-57 | Treg_spleen |
| NABP1              | 1.52E-61 | 0.87935699 | 0.652 | 0.359 | 5.39E-57 | Treg_spleen |
| B3GNT2             | 3.21E-61 | 1.15264645 | 0.457 | 0.2   | 1.14E-56 | Treg_spleen |
| CMTM3              | 6.10E-61 | 1.53428204 | 0.26  | 0.07  | 2.16E-56 | Treg_spleen |
| ANXA6              | 7.74E-61 | 1.29406899 | 0.353 | 0.128 | 2.74E-56 | Treg_spleen |
| ARF6               | 1.57E-60 | 1.0496667  | 0.378 | 0.139 | 5.58E-56 | Treg_spleen |
| ARL5B              | 4.46E-60 | 1.2515594  | 0.37  | 0.14  | 1.58E-55 | Treg_spleen |
| UBE2S              | 6.27E-60 | 1.5265646  | 0.267 | 0.075 | 2.22E-55 | Treg_spleen |
| PTK2B              | 1.45E-59 | 1.353107   | 0.356 | 0.131 | 5.13E-55 | Treg_spleen |
| INPP5F             | 1.97E-59 | 1.76150467 | 0.331 | 0.12  | 6.97E-55 | Treg_spleen |
| CD2                | 6.73E-59 | 0.888397   | 0.672 | 0.393 | 2.38E-54 | Treg_spleen |

|                    |          |            |       |       |          |             |
|--------------------|----------|------------|-------|-------|----------|-------------|
| HIST1H2AC          | 3.64E-58 | 1.50244247 | 0.35  | 0.131 | 1.29E-53 | Treg_spleen |
| CSK                | 4.99E-58 | 0.96546327 | 0.406 | 0.161 | 1.77E-53 | Treg_spleen |
| CARD11             | 3.00E-57 | 1.02747028 | 0.507 | 0.245 | 1.06E-52 | Treg_spleen |
| VCP                | 3.14E-57 | 0.9601016  | 0.41  | 0.164 | 1.11E-52 | Treg_spleen |
| PITHD1             | 2.08E-56 | 1.36372039 | 0.307 | 0.103 | 7.39E-52 | Treg_spleen |
| LSM4               | 3.11E-56 | 1.05418442 | 0.387 | 0.154 | 1.10E-51 | Treg_spleen |
| NFATC2             | 2.01E-55 | 1.21514751 | 0.42  | 0.186 | 7.11E-51 | Treg_spleen |
| CDK2AP2            | 4.42E-55 | 1.36176743 | 0.261 | 0.076 | 1.56E-50 | Treg_spleen |
| BCL6               | 7.15E-55 | 1.05583289 | 0.359 | 0.137 | 2.53E-50 | Treg_spleen |
| HSPH1              | 8.94E-55 | 1.2269402  | 0.578 | 0.316 | 3.17E-50 | Treg_spleen |
| TIAM1              | 1.97E-54 | 1.29592697 | 0.361 | 0.144 | 6.97E-50 | Treg_spleen |
| CD4                | 3.10E-54 | 0.92977582 | 0.47  | 0.215 | 1.10E-49 | Treg_spleen |
| PRKCA              | 4.22E-54 | 0.96998442 | 0.554 | 0.299 | 1.49E-49 | Treg_spleen |
| MCL1               | 6.46E-54 | 0.83548005 | 0.648 | 0.372 | 2.29E-49 | Treg_spleen |
| ENSMMUG00000053392 | 7.21E-54 | 0.9399409  | 0.494 | 0.241 | 2.56E-49 | Treg_spleen |
| LCP1               | 2.42E-53 | 0.66301972 | 0.752 | 0.486 | 8.57E-49 | Treg_spleen |
| PDCD6-AHRR         | 3.45E-53 | 1.18993292 | 0.287 | 0.093 | 1.22E-48 | Treg_spleen |
| ENSMMUG00000016898 | 5.27E-53 | 0.99660838 | 0.418 | 0.184 | 1.87E-48 | Treg_spleen |
| IRAK3              | 5.40E-53 | 1.61746354 | 0.25  | 0.075 | 1.92E-48 | Treg_spleen |
| NFKBIA             | 7.92E-53 | 1.08568022 | 0.664 | 0.432 | 2.81E-48 | Treg_spleen |
| PRDX1              | 7.93E-53 | 0.88115816 | 0.427 | 0.189 | 2.81E-48 | Treg_spleen |
| ENSMMUG00000020050 | 1.12E-52 | 1.29087399 | 0.278 | 0.09  | 3.95E-48 | Treg_spleen |
| MAP2K3             | 2.21E-52 | 1.07292629 | 0.334 | 0.125 | 7.83E-48 | Treg_spleen |
| ZNF831             | 2.28E-52 | 1.08182503 | 0.426 | 0.19  | 8.09E-48 | Treg_spleen |
| CD3G               | 2.79E-52 | 0.79248826 | 0.526 | 0.264 | 9.88E-48 | Treg_spleen |
| FAM102A            | 3.67E-52 | 0.99851107 | 0.39  | 0.163 | 1.30E-47 | Treg_spleen |
| RILPL2             | 4.98E-52 | 1.13615707 | 0.427 | 0.195 | 1.76E-47 | Treg_spleen |
| RAC2               | 9.06E-52 | 0.75750639 | 0.565 | 0.301 | 3.21E-47 | Treg_spleen |
| FRMD4B             | 2.68E-51 | 1.54523821 | 0.256 | 0.079 | 9.49E-47 | Treg_spleen |
| EIF4G3             | 2.93E-51 | 1.0117412  | 0.494 | 0.248 | 1.04E-46 | Treg_spleen |
| CREM               | 7.55E-51 | 0.47210558 | 0.58  | 0.3   | 2.68E-46 | Treg_spleen |
| NDFIP1             | 9.64E-51 | 0.66297112 | 0.77  | 0.508 | 3.42E-46 | Treg_spleen |
| DEK                | 1.26E-50 | 0.84946472 | 0.448 | 0.205 | 4.47E-46 | Treg_spleen |

|                    |          |            |       |       |          |             |
|--------------------|----------|------------|-------|-------|----------|-------------|
| PPM1G              | 1.93E-50 | 0.9346559  | 0.38  | 0.158 | 6.85E-46 | Treg_spleen |
| TMEM59L            | 2.09E-50 | 0.90653816 | 0.322 | 0.116 | 7.41E-46 | Treg_spleen |
| SRGN               | 2.19E-50 | 0.60768894 | 0.898 | 0.748 | 7.76E-46 | Treg_spleen |
| RASA1              | 3.19E-50 | 0.9214593  | 0.494 | 0.245 | 1.13E-45 | Treg_spleen |
| FAM107B            | 7.47E-50 | 0.88294823 | 0.638 | 0.368 | 2.65E-45 | Treg_spleen |
| PAK2               | 1.59E-49 | 0.64059569 | 0.76  | 0.497 | 5.64E-45 | Treg_spleen |
| ATP1A1             | 3.78E-49 | 1.00322404 | 0.345 | 0.138 | 1.34E-44 | Treg_spleen |
| ALKBH7             | 5.05E-49 | 1.07357635 | 0.327 | 0.124 | 1.79E-44 | Treg_spleen |
| DYNLL1             | 7.06E-49 | 0.91192691 | 0.443 | 0.213 | 2.50E-44 | Treg_spleen |
| IL2RG              | 8.67E-49 | 0.75938523 | 0.665 | 0.424 | 3.07E-44 | Treg_spleen |
| PTPRC              | 1.68E-48 | 0.46266911 | 0.988 | 0.948 | 5.94E-44 | Treg_spleen |
| ARRDC3             | 7.55E-48 | 1.03178224 | 0.401 | 0.182 | 2.68E-43 | Treg_spleen |
| CLEC2D             | 1.28E-47 | 0.78036739 | 0.687 | 0.437 | 4.52E-43 | Treg_spleen |
| H4C15              | 2.68E-47 | 1.09604972 | 0.301 | 0.112 | 9.50E-43 | Treg_spleen |
| ITM2B              | 2.75E-47 | 0.60827065 | 0.861 | 0.668 | 9.74E-43 | Treg_spleen |
| TRAF3IP3           | 6.08E-47 | 0.73129116 | 0.593 | 0.334 | 2.15E-42 | Treg_spleen |
| SLC6A6             | 1.09E-46 | 1.11962423 | 0.284 | 0.101 | 3.88E-42 | Treg_spleen |
| ADORA2B            | 1.22E-46 | 1.55430968 | 0.271 | 0.099 | 4.33E-42 | Treg_spleen |
| ENSMMUG00000052802 | 3.01E-46 | 1.01536893 | 0.388 | 0.175 | 1.07E-41 | Treg_spleen |
| GRAMD1B            | 4.02E-46 | 1.13421128 | 0.472 | 0.248 | 1.42E-41 | Treg_spleen |
| ENSMMUG00000053918 | 5.33E-46 | 1.17193541 | 0.3   | 0.113 | 1.89E-41 | Treg_spleen |
| TOB2               | 5.41E-46 | 1.13110226 | 0.292 | 0.107 | 1.92E-41 | Treg_spleen |
| HNRNPU             | 7.69E-46 | 0.69921243 | 0.762 | 0.528 | 2.72E-41 | Treg_spleen |
| KTN1               | 1.16E-45 | 0.71815645 | 0.456 | 0.218 | 4.10E-41 | Treg_spleen |
| TRAC               | 1.39E-45 | 0.52904043 | 0.922 | 0.781 | 4.91E-41 | Treg_spleen |
| CHST11             | 2.19E-45 | 0.69780421 | 0.73  | 0.473 | 7.76E-41 | Treg_spleen |
| WDR74              | 2.24E-45 | 0.94540479 | 0.4   | 0.184 | 7.93E-41 | Treg_spleen |
| GALNT2             | 3.10E-45 | 1.07522358 | 0.263 | 0.09  | 1.10E-40 | Treg_spleen |
| GPR174             | 3.28E-45 | 0.706281   | 0.505 | 0.262 | 1.16E-40 | Treg_spleen |
| CALR               | 4.81E-45 | 0.9766446  | 0.527 | 0.301 | 1.71E-40 | Treg_spleen |
| MRPL20             | 8.05E-45 | 0.99660687 | 0.276 | 0.099 | 2.85E-40 | Treg_spleen |
| PRKCH              | 8.60E-45 | 0.70104418 | 0.951 | 0.81  | 3.05E-40 | Treg_spleen |
| IL6R               | 1.87E-44 | 1.04757932 | 0.397 | 0.188 | 6.63E-40 | Treg_spleen |

|                    |          |            |       |       |          |             |
|--------------------|----------|------------|-------|-------|----------|-------------|
| SRP9               | 1.97E-44 | 0.7509401  | 0.32  | 0.124 | 6.97E-40 | Treg_spleen |
| TERF2IP            | 2.15E-44 | 0.91295536 | 0.399 | 0.183 | 7.63E-40 | Treg_spleen |
| YWHAH              | 6.40E-44 | 0.82548655 | 0.357 | 0.152 | 2.27E-39 | Treg_spleen |
| REL                | 6.42E-44 | 0.759036   | 0.687 | 0.447 | 2.27E-39 | Treg_spleen |
| ENSMMUG00000062086 | 1.15E-43 | 0.97556377 | 0.316 | 0.126 | 4.07E-39 | Treg_spleen |
| CD3D               | 1.41E-43 | 0.58893655 | 0.797 | 0.656 | 4.99E-39 | Treg_spleen |
| SP140              | 1.83E-43 | 0.75824877 | 0.503 | 0.262 | 6.50E-39 | Treg_spleen |
| BATF               | 3.59E-43 | 0.1549277  | 0.334 | 0.134 | 1.27E-38 | Treg_spleen |
| EIF3F              | 1.44E-42 | 0.68420067 | 0.678 | 0.452 | 5.09E-38 | Treg_spleen |
| WNK1               | 2.27E-42 | 0.62563004 | 0.767 | 0.528 | 8.04E-38 | Treg_spleen |
| VIM                | 2.30E-42 | 0.79609507 | 0.542 | 0.311 | 8.14E-38 | Treg_spleen |
| ITGA1              | 2.95E-42 | 1.66973526 | 0.259 | 0.099 | 1.05E-37 | Treg_spleen |
| RASSF1             | 3.21E-42 | 0.82257745 | 0.522 | 0.283 | 1.14E-37 | Treg_spleen |
| LRRFIP1            | 4.22E-42 | 0.68132182 | 0.597 | 0.346 | 1.50E-37 | Treg_spleen |
| TFRC               | 5.48E-42 | 1.13583253 | 0.32  | 0.134 | 1.94E-37 | Treg_spleen |
| MOB3A              | 5.75E-42 | 1.02802173 | 0.381 | 0.176 | 2.04E-37 | Treg_spleen |
| VAV1               | 7.60E-42 | 0.80305668 | 0.363 | 0.16  | 2.69E-37 | Treg_spleen |
| TAPBPL             | 9.12E-42 | 0.53236176 | 0.535 | 0.286 | 3.23E-37 | Treg_spleen |
| PDE7B              | 1.75E-41 | 1.28959775 | 0.351 | 0.163 | 6.19E-37 | Treg_spleen |
| ENSMMUG00000053089 | 2.75E-41 | 0.99465118 | 0.36  | 0.164 | 9.74E-37 | Treg_spleen |
| EVI2B              | 3.13E-41 | 1.25211398 | 0.263 | 0.098 | 1.11E-36 | Treg_spleen |
| DNMT3A             | 4.15E-41 | 0.92559751 | 0.351 | 0.156 | 1.47E-36 | Treg_spleen |
| DUSP10             | 4.87E-41 | 0.96879048 | 0.509 | 0.288 | 1.73E-36 | Treg_spleen |
| GRB2               | 5.15E-41 | 0.68268564 | 0.546 | 0.304 | 1.82E-36 | Treg_spleen |
| ATP6V0E1           | 5.34E-41 | 0.60804166 | 0.546 | 0.295 | 1.89E-36 | Treg_spleen |
| ZHX2               | 6.08E-41 | 0.79548736 | 0.416 | 0.203 | 2.16E-36 | Treg_spleen |
| IKZF3              | 7.09E-41 | 0.78208557 | 0.511 | 0.284 | 2.51E-36 | Treg_spleen |
| CD74               | 9.60E-41 | 0.93062963 | 0.387 | 0.18  | 3.40E-36 | Treg_spleen |
| CACYBP             | 1.12E-40 | 0.68817929 | 0.568 | 0.327 | 3.98E-36 | Treg_spleen |
| ENSMMUG00000018740 | 2.39E-40 | 0.69380371 | 0.378 | 0.171 | 8.46E-36 | Treg_spleen |
| TASOR              | 3.15E-40 | 0.75457269 | 0.405 | 0.195 | 1.12E-35 | Treg_spleen |
| COX17              | 4.20E-40 | 0.63748903 | 0.366 | 0.164 | 1.49E-35 | Treg_spleen |
| BRD9               | 4.52E-40 | 0.85602694 | 0.349 | 0.155 | 1.60E-35 | Treg_spleen |

|                    |          |            |       |       |          |             |
|--------------------|----------|------------|-------|-------|----------|-------------|
| SURF4              | 5.21E-40 | 0.81188162 | 0.327 | 0.139 | 1.85E-35 | Treg_spleen |
| GADD45B            | 6.75E-40 | 0.6494892  | 0.31  | 0.129 | 2.39E-35 | Treg_spleen |
| VPS4A              | 8.57E-40 | 0.89037998 | 0.308 | 0.128 | 3.04E-35 | Treg_spleen |
| ENSMMUG00000059988 | 1.40E-39 | 0.88340007 | 0.259 | 0.095 | 4.95E-35 | Treg_spleen |
| TSPAN5             | 2.91E-39 | 1.10312733 | 0.352 | 0.162 | 1.03E-34 | Treg_spleen |
| SMS                | 5.41E-39 | 1.10661667 | 0.303 | 0.129 | 1.92E-34 | Treg_spleen |
| SPAG9              | 6.42E-39 | 0.8083056  | 0.753 | 0.533 | 2.27E-34 | Treg_spleen |
| PPP1CC             | 6.63E-39 | 0.69681073 | 0.552 | 0.316 | 2.35E-34 | Treg_spleen |
| BMT2               | 7.04E-39 | 1.344751   | 0.399 | 0.216 | 2.49E-34 | Treg_spleen |
| AIM2               | 9.83E-39 | 0.86248556 | 0.284 | 0.114 | 3.48E-34 | Treg_spleen |
| ENSMMUG00000015274 | 1.08E-38 | 1.01407485 | 0.321 | 0.142 | 3.83E-34 | Treg_spleen |
| STIP1              | 1.39E-38 | 0.9031297  | 0.303 | 0.126 | 4.93E-34 | Treg_spleen |
| ABCF1              | 6.74E-38 | 0.73331747 | 0.39  | 0.187 | 2.39E-33 | Treg_spleen |
| SDF2L1             | 8.41E-38 | 0.81758458 | 0.32  | 0.137 | 2.98E-33 | Treg_spleen |
| GTF2I              | 8.76E-38 | 0.64021676 | 0.594 | 0.35  | 3.10E-33 | Treg_spleen |
| TM9SF1             | 9.16E-38 | 1.04387629 | 0.254 | 0.096 | 3.24E-33 | Treg_spleen |
| NOL7               | 9.45E-38 | 0.70651099 | 0.4   | 0.195 | 3.35E-33 | Treg_spleen |
| DARS1              | 1.07E-37 | 0.73257459 | 0.405 | 0.202 | 3.81E-33 | Treg_spleen |
| MYCBP2             | 1.54E-37 | 0.5215961  | 0.838 | 0.616 | 5.46E-33 | Treg_spleen |
| BST2               | 2.23E-37 | 0.66741003 | 0.434 | 0.22  | 7.91E-33 | Treg_spleen |
| PDIA3              | 3.33E-37 | 0.89285498 | 0.288 | 0.118 | 1.18E-32 | Treg_spleen |
| HNRNPPL            | 4.20E-37 | 0.99913213 | 0.344 | 0.163 | 1.49E-32 | Treg_spleen |
| RNASEH2C           | 7.32E-37 | 0.72890341 | 0.334 | 0.148 | 2.59E-32 | Treg_spleen |
| ADGRE5             | 1.09E-36 | 1.13335344 | 0.514 | 0.308 | 3.87E-32 | Treg_spleen |
| LSM2               | 1.41E-36 | 0.71994907 | 0.345 | 0.157 | 5.01E-32 | Treg_spleen |
| HNRNPA2B1          | 1.48E-36 | 0.38703721 | 0.936 | 0.833 | 5.25E-32 | Treg_spleen |
| RGS10              | 1.50E-36 | 0.73124846 | 0.547 | 0.332 | 5.31E-32 | Treg_spleen |
| PARP1              | 1.66E-36 | 0.91326365 | 0.282 | 0.117 | 5.88E-32 | Treg_spleen |
| ABR                | 2.33E-36 | 1.02560184 | 0.281 | 0.117 | 8.26E-32 | Treg_spleen |
| SNX5               | 3.08E-36 | 0.72634932 | 0.325 | 0.143 | 1.09E-31 | Treg_spleen |
| CHD4               | 3.77E-36 | 0.6397717  | 0.547 | 0.32  | 1.34E-31 | Treg_spleen |
| LPXN               | 4.52E-36 | 0.607237   | 0.412 | 0.21  | 1.60E-31 | Treg_spleen |
| MYDGF              | 4.55E-36 | 0.66086854 | 0.434 | 0.221 | 1.61E-31 | Treg_spleen |



|                     |          |            |       |       |          |             |
|---------------------|----------|------------|-------|-------|----------|-------------|
| CBX5                | 6.65E-36 | 0.78762301 | 0.259 | 0.1   | 2.36E-31 | Treg_spleen |
| HYPK                | 7.72E-36 | 0.91571473 | 0.369 | 0.182 | 2.74E-31 | Treg_spleen |
| ENSMMUG00000000983  | 1.03E-35 | 0.57944904 | 0.568 | 0.347 | 3.65E-31 | Treg_spleen |
| IRF2                | 1.10E-35 | 0.71503513 | 0.387 | 0.189 | 3.90E-31 | Treg_spleen |
| OAZ1                | 1.24E-35 | 0.59177307 | 0.413 | 0.209 | 4.41E-31 | Treg_spleen |
| BRD2                | 1.43E-35 | 0.66554426 | 0.51  | 0.285 | 5.06E-31 | Treg_spleen |
| NSD1                | 1.74E-35 | 0.59712298 | 0.614 | 0.375 | 6.16E-31 | Treg_spleen |
| CSRNP1              | 2.06E-35 | 0.76418297 | 0.327 | 0.148 | 7.29E-31 | Treg_spleen |
| GBP3                | 3.26E-35 | 1.13474802 | 0.252 | 0.1   | 1.16E-30 | Treg_spleen |
| COMT                | 3.60E-35 | 0.80559709 | 0.35  | 0.165 | 1.27E-30 | Treg_spleen |
| MSL2                | 3.65E-35 | 0.83143952 | 0.503 | 0.291 | 1.29E-30 | Treg_spleen |
| IQCG                | 3.67E-35 | 1.04787263 | 0.267 | 0.11  | 1.30E-30 | Treg_spleen |
| HNRNPC              | 5.08E-35 | 0.4820459  | 0.819 | 0.61  | 1.80E-30 | Treg_spleen |
| SETD5               | 5.12E-35 | 0.65564109 | 0.526 | 0.303 | 1.81E-30 | Treg_spleen |
| ARL5A               | 5.60E-35 | 0.72449357 | 0.351 | 0.164 | 1.98E-30 | Treg_spleen |
| NPEPPS              | 7.75E-35 | 0.7890106  | 0.395 | 0.197 | 2.75E-30 | Treg_spleen |
| GAPDH               | 8.00E-35 | 0.6532585  | 0.706 | 0.539 | 2.84E-30 | Treg_spleen |
| ACTB                | 8.59E-35 | 0.453705   | 0.936 | 0.915 | 3.04E-30 | Treg_spleen |
| ENSMMUG000000061128 | 1.06E-34 | 0.58576151 | 0.544 | 0.322 | 3.74E-30 | Treg_spleen |
| GLUD1               | 1.06E-34 | 0.799742   | 0.406 | 0.212 | 3.75E-30 | Treg_spleen |
| IFRD1               | 1.19E-34 | 0.6352651  | 0.638 | 0.409 | 4.21E-30 | Treg_spleen |
| ENSMMUG00000006206  | 1.28E-34 | 0.7707999  | 0.488 | 0.282 | 4.53E-30 | Treg_spleen |
| SEPTIN11            | 1.51E-34 | 0.71890595 | 0.386 | 0.193 | 5.37E-30 | Treg_spleen |
| PLEKHG1             | 1.75E-34 | 0.74056975 | 0.563 | 0.353 | 6.19E-30 | Treg_spleen |
| NDUFB5              | 3.54E-34 | 0.5156774  | 0.318 | 0.14  | 1.26E-29 | Treg_spleen |
| EIF3B               | 5.22E-34 | 0.73895582 | 0.294 | 0.127 | 1.85E-29 | Treg_spleen |
| RER1                | 6.91E-34 | 0.58886011 | 0.404 | 0.202 | 2.45E-29 | Treg_spleen |
| COX20               | 7.35E-34 | 0.70559316 | 0.366 | 0.18  | 2.60E-29 | Treg_spleen |
| IL2RB               | 7.73E-34 | 0.6138215  | 0.387 | 0.194 | 2.74E-29 | Treg_spleen |
| EIF4A1              | 7.84E-34 | 0.66727599 | 0.478 | 0.271 | 2.78E-29 | Treg_spleen |
| DAD1                | 1.24E-33 | 0.54770728 | 0.518 | 0.297 | 4.38E-29 | Treg_spleen |
| WDR1                | 1.40E-33 | 0.6048798  | 0.338 | 0.155 | 4.97E-29 | Treg_spleen |
| PPP1R18             | 1.49E-33 | 0.73057299 | 0.282 | 0.12  | 5.28E-29 | Treg_spleen |

|                    |          |            |       |       |          |             |
|--------------------|----------|------------|-------|-------|----------|-------------|
| CBL                | 1.54E-33 | 1.00049584 | 0.303 | 0.14  | 5.47E-29 | Treg_spleen |
| CBX3               | 1.61E-33 | 0.52791206 | 0.562 | 0.341 | 5.69E-29 | Treg_spleen |
| ENSMMUG00000049833 | 1.61E-33 | 0.97248853 | 0.334 | 0.159 | 5.69E-29 | Treg_spleen |
| GBF1               | 2.01E-33 | 0.82129383 | 0.383 | 0.196 | 7.11E-29 | Treg_spleen |
| YPEL3              | 2.28E-33 | 0.75335538 | 0.354 | 0.175 | 8.07E-29 | Treg_spleen |
| NIN                | 2.51E-33 | 0.90178653 | 0.328 | 0.155 | 8.88E-29 | Treg_spleen |
| RCSD1              | 2.89E-33 | 0.62424087 | 0.575 | 0.353 | 1.02E-28 | Treg_spleen |
| PHF21A             | 3.58E-33 | 0.73019507 | 0.611 | 0.393 | 1.27E-28 | Treg_spleen |
| HMGA1              | 5.71E-33 | 0.68338104 | 0.475 | 0.274 | 2.02E-28 | Treg_spleen |
| PTPN11             | 5.79E-33 | 0.79099947 | 0.376 | 0.192 | 2.05E-28 | Treg_spleen |
| CHCHD1             | 5.84E-33 | 0.63494206 | 0.259 | 0.105 | 2.07E-28 | Treg_spleen |
| BCL2A1             | 1.14E-32 | 0.64800977 | 0.345 | 0.166 | 4.04E-28 | Treg_spleen |
| ITM2A              | 1.18E-32 | 0.73643493 | 0.456 | 0.262 | 4.19E-28 | Treg_spleen |
| SRSF7              | 1.60E-32 | 0.52208549 | 0.704 | 0.479 | 5.65E-28 | Treg_spleen |
| MGRN1              | 2.18E-32 | 0.87712193 | 0.254 | 0.105 | 7.71E-28 | Treg_spleen |
| CCT7               | 2.63E-32 | 0.71372958 | 0.32  | 0.15  | 9.32E-28 | Treg_spleen |
| PCMT1              | 2.77E-32 | 0.66411144 | 0.287 | 0.125 | 9.82E-28 | Treg_spleen |
| NR4A2              | 2.95E-32 | 0.47889395 | 0.568 | 0.345 | 1.05E-27 | Treg_spleen |
| TMEM87B            | 3.88E-32 | 0.75330515 | 0.308 | 0.143 | 1.37E-27 | Treg_spleen |
| IKZF1              | 4.61E-32 | 0.52200196 | 0.756 | 0.537 | 1.63E-27 | Treg_spleen |
| UBE2D1             | 5.00E-32 | 0.71475206 | 0.328 | 0.157 | 1.77E-27 | Treg_spleen |
| ZNF609             | 7.10E-32 | 0.73348001 | 0.608 | 0.4   | 2.51E-27 | Treg_spleen |
| VGLL4              | 8.00E-32 | 0.73123395 | 0.36  | 0.18  | 2.83E-27 | Treg_spleen |
| RNASEH2B           | 8.83E-32 | 0.75388174 | 0.304 | 0.14  | 3.13E-27 | Treg_spleen |
| TBC1D10C           | 8.94E-32 | 0.58730705 | 0.434 | 0.233 | 3.17E-27 | Treg_spleen |
| NFATC1             | 9.07E-32 | 0.72297116 | 0.501 | 0.3   | 3.21E-27 | Treg_spleen |
| TMEM147            | 1.07E-31 | 0.65144053 | 0.366 | 0.184 | 3.78E-27 | Treg_spleen |
| ARHGAP10           | 1.19E-31 | 1.02625778 | 0.251 | 0.106 | 4.23E-27 | Treg_spleen |
| HSP90AA1           | 1.34E-31 | 0.58155845 | 0.808 | 0.64  | 4.74E-27 | Treg_spleen |
| ATF1               | 1.40E-31 | 0.93834507 | 0.292 | 0.134 | 4.96E-27 | Treg_spleen |
| CMPK1              | 1.40E-31 | 0.5790727  | 0.285 | 0.124 | 4.98E-27 | Treg_spleen |
| NXPE3              | 1.42E-31 | 0.66256917 | 0.637 | 0.431 | 5.03E-27 | Treg_spleen |
| TMBIM6             | 1.48E-31 | 0.50438622 | 0.621 | 0.389 | 5.25E-27 | Treg_spleen |

|          |          |            |       |       |          |             |
|----------|----------|------------|-------|-------|----------|-------------|
| HSPA9    | 2.32E-31 | 0.55722008 | 0.521 | 0.305 | 8.22E-27 | Treg_spleen |
| CAP1     | 2.32E-31 | 0.58070631 | 0.466 | 0.259 | 8.22E-27 | Treg_spleen |
| CALM3    | 2.45E-31 | 0.70614636 | 0.307 | 0.143 | 8.69E-27 | Treg_spleen |
| GLS      | 2.88E-31 | 0.64049378 | 0.516 | 0.307 | 1.02E-26 | Treg_spleen |
| BTG2     | 2.92E-31 | 0.63961912 | 0.652 | 0.446 | 1.04E-26 | Treg_spleen |
| FOXN2    | 2.97E-31 | 0.78529464 | 0.355 | 0.178 | 1.05E-26 | Treg_spleen |
| SLFN5    | 3.39E-31 | 0.81935181 | 0.352 | 0.179 | 1.20E-26 | Treg_spleen |
| ACTG1    | 4.30E-31 | 0.49803415 | 0.862 | 0.778 | 1.52E-26 | Treg_spleen |
| SREBF2   | 7.13E-31 | 0.72872481 | 0.501 | 0.3   | 2.53E-26 | Treg_spleen |
| SNRPD1   | 9.85E-31 | 0.63629357 | 0.383 | 0.199 | 3.49E-26 | Treg_spleen |
| ZNF217   | 1.15E-30 | 0.77174006 | 0.294 | 0.136 | 4.07E-26 | Treg_spleen |
| INTS6L   | 1.16E-30 | 0.60428821 | 0.43  | 0.236 | 4.10E-26 | Treg_spleen |
| OGDH     | 1.21E-30 | 0.66059066 | 0.391 | 0.206 | 4.30E-26 | Treg_spleen |
| ARAP2    | 1.54E-30 | 0.57714881 | 0.511 | 0.308 | 5.46E-26 | Treg_spleen |
| HNRNPD   | 1.58E-30 | 0.48095982 | 0.681 | 0.454 | 5.59E-26 | Treg_spleen |
| RUNX3    | 1.58E-30 | 0.8658979  | 0.284 | 0.129 | 5.62E-26 | Treg_spleen |
| ACAP2    | 1.89E-30 | 0.53019622 | 0.741 | 0.522 | 6.69E-26 | Treg_spleen |
| PTPN6    | 2.00E-30 | 0.62192449 | 0.272 | 0.118 | 7.10E-26 | Treg_spleen |
| ADAM10   | 2.48E-30 | 0.58190227 | 0.54  | 0.326 | 8.78E-26 | Treg_spleen |
| HSP90AB1 | 2.55E-30 | 0.65423174 | 0.862 | 0.739 | 9.02E-26 | Treg_spleen |
| TMEM131L | 3.11E-30 | 0.62560777 | 0.744 | 0.542 | 1.10E-25 | Treg_spleen |
| GTDC1    | 8.35E-30 | 0.74125653 | 0.342 | 0.174 | 2.96E-25 | Treg_spleen |
| NDUFAB1  | 1.00E-29 | 0.677734   | 0.308 | 0.146 | 3.56E-25 | Treg_spleen |
| NFAT5    | 1.14E-29 | 0.5954577  | 0.575 | 0.362 | 4.03E-25 | Treg_spleen |
| HPCAL1   | 1.33E-29 | 0.6626582  | 0.431 | 0.241 | 4.71E-25 | Treg_spleen |
| RABEP1   | 2.59E-29 | 0.60680575 | 0.32  | 0.155 | 9.18E-25 | Treg_spleen |
| UBE2D2   | 3.22E-29 | 0.55683321 | 0.312 | 0.147 | 1.14E-24 | Treg_spleen |
| DNAJB4   | 3.68E-29 | 0.94895485 | 0.25  | 0.11  | 1.30E-24 | Treg_spleen |
| MAF1     | 4.03E-29 | 0.71342593 | 0.283 | 0.128 | 1.43E-24 | Treg_spleen |
| SLC3A2   | 4.34E-29 | 0.75912893 | 0.284 | 0.131 | 1.54E-24 | Treg_spleen |
| STK39    | 4.98E-29 | 0.62502361 | 0.598 | 0.393 | 1.77E-24 | Treg_spleen |
| GNB2     | 5.03E-29 | 0.58390285 | 0.352 | 0.179 | 1.78E-24 | Treg_spleen |
| FNBP1L   | 5.32E-29 | 0.64649227 | 0.318 | 0.155 | 1.88E-24 | Treg_spleen |

|         |          |            |       |       |          |             |
|---------|----------|------------|-------|-------|----------|-------------|
| TET3    | 5.77E-29 | 0.79502147 | 0.416 | 0.232 | 2.05E-24 | Treg_spleen |
| CAB39   | 6.03E-29 | 0.54448863 | 0.724 | 0.499 | 2.14E-24 | Treg_spleen |
| PTPMT1  | 6.15E-29 | 0.60424979 | 0.341 | 0.171 | 2.18E-24 | Treg_spleen |
| VASP    | 6.24E-29 | 0.6172001  | 0.341 | 0.169 | 2.21E-24 | Treg_spleen |
| NCOA7   | 8.68E-29 | 0.60671872 | 0.532 | 0.328 | 3.07E-24 | Treg_spleen |
| AKIRIN2 | 9.81E-29 | 0.68045373 | 0.289 | 0.135 | 3.48E-24 | Treg_spleen |
| MAPRE2  | 1.00E-28 | 0.57075493 | 0.631 | 0.426 | 3.55E-24 | Treg_spleen |
| YWHAG   | 1.06E-28 | 0.68987327 | 0.337 | 0.17  | 3.77E-24 | Treg_spleen |
| RNF19A  | 1.40E-28 | 0.83294661 | 0.542 | 0.347 | 4.94E-24 | Treg_spleen |
| UBE2R2  | 1.40E-28 | 0.55443431 | 0.436 | 0.24  | 4.95E-24 | Treg_spleen |
| PRPF38B | 1.53E-28 | 0.50380477 | 0.509 | 0.301 | 5.42E-24 | Treg_spleen |
| SESN3   | 1.83E-28 | 0.83664346 | 0.32  | 0.162 | 6.48E-24 | Treg_spleen |
| CD200   | 1.98E-28 | 0.98821334 | 0.313 | 0.159 | 7.02E-24 | Treg_spleen |
| P4HB    | 2.43E-28 | 0.70469575 | 0.256 | 0.112 | 8.60E-24 | Treg_spleen |
| YWHAZ   | 2.49E-28 | 0.49648704 | 0.871 | 0.694 | 8.82E-24 | Treg_spleen |
| VDAC1   | 2.75E-28 | 0.59989328 | 0.323 | 0.161 | 9.76E-24 | Treg_spleen |
| SRSF10  | 3.26E-28 | 0.48108382 | 0.591 | 0.365 | 1.16E-23 | Treg_spleen |
| HEXIM1  | 3.26E-28 | 0.77006535 | 0.292 | 0.137 | 1.16E-23 | Treg_spleen |
| ATXN2   | 3.61E-28 | 0.53067537 | 0.493 | 0.296 | 1.28E-23 | Treg_spleen |
| PTPN9   | 3.88E-28 | 0.95329231 | 0.299 | 0.149 | 1.37E-23 | Treg_spleen |
| CCT2    | 4.41E-28 | 0.56560808 | 0.515 | 0.319 | 1.56E-23 | Treg_spleen |
| HDAC7   | 5.49E-28 | 0.79368792 | 0.364 | 0.196 | 1.95E-23 | Treg_spleen |
| MARK2   | 6.27E-28 | 0.63207735 | 0.334 | 0.167 | 2.22E-23 | Treg_spleen |
| UQCRH   | 6.91E-28 | 0.42366539 | 0.624 | 0.406 | 2.45E-23 | Treg_spleen |
| S100A4  | 1.03E-27 | 0.21784669 | 0.438 | 0.254 | 3.64E-23 | Treg_spleen |
| TLN1    | 1.23E-27 | 0.50640053 | 0.47  | 0.272 | 4.36E-23 | Treg_spleen |
| COX6B1  | 1.36E-27 | 0.35317638 | 0.374 | 0.194 | 4.83E-23 | Treg_spleen |
| KRIT1   | 1.43E-27 | 0.61576395 | 0.332 | 0.167 | 5.06E-23 | Treg_spleen |
| TCP1    | 2.96E-27 | 0.62513191 | 0.337 | 0.172 | 1.05E-22 | Treg_spleen |
| ATP5F1B | 3.61E-27 | 0.57086033 | 0.317 | 0.157 | 1.28E-22 | Treg_spleen |
| ACTR3   | 5.96E-27 | 0.44934493 | 0.698 | 0.487 | 2.11E-22 | Treg_spleen |
| TFCP2   | 6.55E-27 | 0.90812387 | 0.27  | 0.127 | 2.32E-22 | Treg_spleen |
| SMARCA5 | 6.60E-27 | 0.46053448 | 0.519 | 0.309 | 2.34E-22 | Treg_spleen |

|                     |          |            |       |       |          |             |
|---------------------|----------|------------|-------|-------|----------|-------------|
| TMCO1               | 8.92E-27 | 0.45278861 | 0.352 | 0.18  | 3.16E-22 | Treg_spleen |
| ENSMMUG00000011798  | 9.47E-27 | 0.56775128 | 0.357 | 0.189 | 3.36E-22 | Treg_spleen |
| ZMYM2               | 1.10E-26 | 0.49626624 | 0.581 | 0.366 | 3.89E-22 | Treg_spleen |
| ANP32A              | 1.12E-26 | 0.40080502 | 0.462 | 0.265 | 3.95E-22 | Treg_spleen |
| PPA1                | 1.16E-26 | 0.9091392  | 0.296 | 0.151 | 4.10E-22 | Treg_spleen |
| COPZ1               | 2.66E-26 | 0.54124993 | 0.263 | 0.12  | 9.43E-22 | Treg_spleen |
| ARL6IP5             | 3.30E-26 | 0.44452878 | 0.576 | 0.367 | 1.17E-21 | Treg_spleen |
| SESN1               | 3.66E-26 | 0.52279353 | 0.537 | 0.342 | 1.30E-21 | Treg_spleen |
| RAN                 | 4.09E-26 | 0.61626713 | 0.519 | 0.333 | 1.45E-21 | Treg_spleen |
| CHM                 | 4.23E-26 | 0.53815408 | 0.345 | 0.178 | 1.50E-21 | Treg_spleen |
| PSMA5               | 4.33E-26 | 0.50998667 | 0.425 | 0.238 | 1.53E-21 | Treg_spleen |
| TMC8                | 4.35E-26 | 0.67950572 | 0.261 | 0.121 | 1.54E-21 | Treg_spleen |
| PGK1                | 4.93E-26 | 0.61297507 | 0.462 | 0.28  | 1.75E-21 | Treg_spleen |
| PHF20L1             | 5.10E-26 | 0.55382755 | 0.319 | 0.159 | 1.81E-21 | Treg_spleen |
| XPO1                | 5.47E-26 | 0.60370108 | 0.393 | 0.219 | 1.94E-21 | Treg_spleen |
| EZR                 | 5.55E-26 | 0.50830444 | 0.751 | 0.536 | 1.97E-21 | Treg_spleen |
| PYHIN1              | 6.24E-26 | 0.47141777 | 0.404 | 0.225 | 2.21E-21 | Treg_spleen |
| RBM26               | 7.30E-26 | 0.50920412 | 0.536 | 0.333 | 2.59E-21 | Treg_spleen |
| CCDC6               | 7.33E-26 | 0.69525436 | 0.345 | 0.184 | 2.60E-21 | Treg_spleen |
| NF1                 | 1.04E-25 | 0.72282177 | 0.381 | 0.216 | 3.69E-21 | Treg_spleen |
| EMC6                | 1.08E-25 | 0.60445292 | 0.302 | 0.149 | 3.84E-21 | Treg_spleen |
| RHOG                | 1.13E-25 | 0.42159703 | 0.323 | 0.161 | 3.99E-21 | Treg_spleen |
| ITPKB               | 1.13E-25 | 0.53812051 | 0.559 | 0.361 | 4.02E-21 | Treg_spleen |
| MRPL57              | 1.25E-25 | 0.51274325 | 0.334 | 0.172 | 4.43E-21 | Treg_spleen |
| ENSMMUG000000062103 | 1.36E-25 | 0.47780613 | 0.703 | 0.497 | 4.83E-21 | Treg_spleen |
| EEF1E1              | 1.47E-25 | 0.5327692  | 0.352 | 0.186 | 5.21E-21 | Treg_spleen |
| CLCN3               | 1.60E-25 | 0.66811612 | 0.305 | 0.155 | 5.65E-21 | Treg_spleen |
| ENSMMUG000000053817 | 1.65E-25 | 0.41870601 | 0.453 | 0.267 | 5.83E-21 | Treg_spleen |
| MRPS33              | 1.72E-25 | 0.58121069 | 0.263 | 0.124 | 6.10E-21 | Treg_spleen |
| FEZ2                | 1.79E-25 | 0.64860742 | 0.263 | 0.124 | 6.35E-21 | Treg_spleen |
| DECR1               | 1.84E-25 | 0.68163508 | 0.256 | 0.12  | 6.51E-21 | Treg_spleen |
| ASXL2               | 1.98E-25 | 0.51399639 | 0.433 | 0.251 | 7.03E-21 | Treg_spleen |
| HUWE1               | 2.06E-25 | 0.53313188 | 0.588 | 0.38  | 7.30E-21 | Treg_spleen |

|                    |          |            |       |       |          |             |
|--------------------|----------|------------|-------|-------|----------|-------------|
| ENSMMUG00000052127 | 2.24E-25 | 0.26195774 | 0.993 | 0.928 | 7.93E-21 | Treg_spleen |
| CD53               | 2.46E-25 | 0.41147192 | 0.7   | 0.475 | 8.72E-21 | Treg_spleen |
| REEP3              | 2.74E-25 | 0.59681565 | 0.287 | 0.143 | 9.71E-21 | Treg_spleen |
| SPTAN1             | 2.82E-25 | 0.58466119 | 0.397 | 0.223 | 1.00E-20 | Treg_spleen |
| LDHA               | 2.98E-25 | 0.55187065 | 0.449 | 0.27  | 1.06E-20 | Treg_spleen |
| ANP32E             | 3.05E-25 | 0.47892386 | 0.304 | 0.152 | 1.08E-20 | Treg_spleen |
| BMP2K              | 3.16E-25 | 0.6178451  | 0.339 | 0.183 | 1.12E-20 | Treg_spleen |
| VMP1               | 3.32E-25 | 0.40004612 | 0.467 | 0.275 | 1.18E-20 | Treg_spleen |
| NRDC               | 3.69E-25 | 0.46124583 | 0.381 | 0.207 | 1.31E-20 | Treg_spleen |
| SNX1               | 3.69E-25 | 0.45622258 | 0.324 | 0.163 | 1.31E-20 | Treg_spleen |
| ADARB2             | 4.14E-25 | 0.58892582 | 0.264 | 0.125 | 1.47E-20 | Treg_spleen |
| TRMT112            | 4.82E-25 | 0.44789296 | 0.509 | 0.319 | 1.71E-20 | Treg_spleen |
| SMARCC1            | 4.92E-25 | 0.45832332 | 0.61  | 0.401 | 1.74E-20 | Treg_spleen |
| EIF2S1             | 4.99E-25 | 0.5758108  | 0.268 | 0.126 | 1.77E-20 | Treg_spleen |
| CYBA               | 5.17E-25 | 0.5271977  | 0.467 | 0.279 | 1.83E-20 | Treg_spleen |
| PFDN5              | 6.10E-25 | 0.38899414 | 0.448 | 0.253 | 2.16E-20 | Treg_spleen |
| ENSMMUG00000058919 | 6.11E-25 | 0.55268085 | 0.342 | 0.182 | 2.17E-20 | Treg_spleen |
| GTPBP1             | 6.88E-25 | 0.59422501 | 0.34  | 0.183 | 2.44E-20 | Treg_spleen |
| PRKCB              | 6.92E-25 | 0.54643476 | 0.712 | 0.514 | 2.45E-20 | Treg_spleen |
| NPTN               | 6.99E-25 | 0.60681139 | 0.37  | 0.204 | 2.48E-20 | Treg_spleen |
| PHF5A              | 8.98E-25 | 0.45235624 | 0.307 | 0.155 | 3.18E-20 | Treg_spleen |
| SERPINB9           | 1.02E-24 | 0.52810481 | 0.267 | 0.127 | 3.63E-20 | Treg_spleen |
| HERC4              | 1.03E-24 | 0.5569054  | 0.484 | 0.301 | 3.66E-20 | Treg_spleen |
| PIK3CD             | 1.59E-24 | 0.51434819 | 0.487 | 0.301 | 5.62E-20 | Treg_spleen |
| DIAPH1             | 1.60E-24 | 0.45994341 | 0.687 | 0.489 | 5.67E-20 | Treg_spleen |
| HECTD4             | 1.71E-24 | 0.57430437 | 0.49  | 0.304 | 6.07E-20 | Treg_spleen |
| SLC39A10           | 1.72E-24 | 0.53432672 | 0.294 | 0.149 | 6.10E-20 | Treg_spleen |
| MAP2K1             | 1.81E-24 | 0.69372862 | 0.28  | 0.139 | 6.40E-20 | Treg_spleen |
| NFE2L2             | 1.93E-24 | 0.6141339  | 0.255 | 0.12  | 6.85E-20 | Treg_spleen |
| THRAP3             | 1.96E-24 | 0.38100444 | 0.61  | 0.399 | 6.93E-20 | Treg_spleen |
| ENSMMUG00000064329 | 2.16E-24 | 0.58659971 | 0.259 | 0.122 | 7.65E-20 | Treg_spleen |
| GTF2A2             | 3.05E-24 | 0.50608198 | 0.308 | 0.157 | 1.08E-19 | Treg_spleen |
| OSTC               | 5.81E-24 | 0.40464884 | 0.404 | 0.225 | 2.06E-19 | Treg_spleen |

|          |          |            |       |       |          |             |
|----------|----------|------------|-------|-------|----------|-------------|
| ZMAT2    | 7.45E-24 | 0.42895199 | 0.282 | 0.139 | 2.64E-19 | Treg_spleen |
| ASCC1    | 8.97E-24 | 0.53118975 | 0.351 | 0.19  | 3.18E-19 | Treg_spleen |
| DNAJC1   | 9.26E-24 | 0.57396138 | 0.394 | 0.23  | 3.28E-19 | Treg_spleen |
| DTD1     | 1.00E-23 | 0.56195076 | 0.266 | 0.129 | 3.55E-19 | Treg_spleen |
| LGALS3   | 1.05E-23 | 0.44025196 | 0.26  | 0.125 | 3.72E-19 | Treg_spleen |
| SRI      | 1.10E-23 | 0.38115343 | 0.416 | 0.235 | 3.88E-19 | Treg_spleen |
| GNB1     | 1.19E-23 | 0.5228938  | 0.559 | 0.363 | 4.20E-19 | Treg_spleen |
| XRCC4    | 1.29E-23 | 0.53987276 | 0.313 | 0.164 | 4.56E-19 | Treg_spleen |
| RIN3     | 1.37E-23 | 0.91927094 | 0.273 | 0.14  | 4.84E-19 | Treg_spleen |
| LARS1    | 1.41E-23 | 0.63794293 | 0.274 | 0.135 | 5.00E-19 | Treg_spleen |
| LRCH1    | 1.52E-23 | 0.60878841 | 0.327 | 0.176 | 5.39E-19 | Treg_spleen |
| HMGN4    | 1.57E-23 | 0.42683191 | 0.293 | 0.146 | 5.56E-19 | Treg_spleen |
| ARF5     | 1.72E-23 | 0.42158223 | 0.47  | 0.282 | 6.08E-19 | Treg_spleen |
| LASP1    | 1.82E-23 | 0.61157418 | 0.343 | 0.186 | 6.43E-19 | Treg_spleen |
| LCK      | 1.93E-23 | 0.38050212 | 0.697 | 0.478 | 6.84E-19 | Treg_spleen |
| IGFLR1   | 1.97E-23 | 0.52359475 | 0.38  | 0.214 | 6.97E-19 | Treg_spleen |
| SLC16A7  | 2.19E-23 | 0.76442341 | 0.282 | 0.145 | 7.76E-19 | Treg_spleen |
| TPI1     | 2.21E-23 | 0.43388665 | 0.446 | 0.272 | 7.82E-19 | Treg_spleen |
| R3HDM2   | 2.60E-23 | 0.61525166 | 0.456 | 0.281 | 9.20E-19 | Treg_spleen |
| IDH2     | 2.96E-23 | 0.55204922 | 0.324 | 0.173 | 1.05E-18 | Treg_spleen |
| JAK2     | 2.99E-23 | 0.44085657 | 0.422 | 0.246 | 1.06E-18 | Treg_spleen |
| SF3B3    | 3.47E-23 | 0.51685607 | 0.328 | 0.175 | 1.23E-18 | Treg_spleen |
| NCOR1    | 3.88E-23 | 0.39504948 | 0.682 | 0.465 | 1.38E-18 | Treg_spleen |
| CD164    | 4.07E-23 | 0.39876246 | 0.655 | 0.449 | 1.44E-18 | Treg_spleen |
| SNRPD3   | 4.70E-23 | 0.48698594 | 0.519 | 0.34  | 1.67E-18 | Treg_spleen |
| CGGBP1   | 5.49E-23 | 0.52814983 | 0.327 | 0.174 | 1.95E-18 | Treg_spleen |
| SLC9A3R1 | 5.91E-23 | 0.60725039 | 0.282 | 0.143 | 2.09E-18 | Treg_spleen |
| FAM120A  | 6.51E-23 | 0.4279121  | 0.456 | 0.273 | 2.31E-18 | Treg_spleen |
| SUPT4H1  | 6.87E-23 | 0.45199887 | 0.275 | 0.135 | 2.43E-18 | Treg_spleen |
| DGKZ     | 7.95E-23 | 0.51924069 | 0.365 | 0.206 | 2.82E-18 | Treg_spleen |
| IFNAR1   | 8.49E-23 | 0.48825821 | 0.301 | 0.156 | 3.01E-18 | Treg_spleen |
| PRKAR1A  | 9.18E-23 | 0.41872538 | 0.331 | 0.176 | 3.25E-18 | Treg_spleen |
| OXSRI    | 9.52E-23 | 0.53575723 | 0.412 | 0.245 | 3.37E-18 | Treg_spleen |

|                    |          |            |       |       |          |             |
|--------------------|----------|------------|-------|-------|----------|-------------|
| PPP6R3             | 1.01E-22 | 0.40647319 | 0.618 | 0.409 | 3.56E-18 | Treg_spleen |
| CD69               | 1.06E-22 | 0.49377316 | 0.869 | 0.726 | 3.75E-18 | Treg_spleen |
| MAPKAP1            | 1.09E-22 | 0.52984755 | 0.46  | 0.28  | 3.86E-18 | Treg_spleen |
| ATP5MC3            | 1.12E-22 | 0.47133406 | 0.571 | 0.394 | 3.98E-18 | Treg_spleen |
| TTC13              | 1.17E-22 | 0.5713241  | 0.366 | 0.207 | 4.14E-18 | Treg_spleen |
| TANK               | 1.61E-22 | 0.45810593 | 0.677 | 0.484 | 5.70E-18 | Treg_spleen |
| ENSMMUG00000060923 | 1.83E-22 | 0.37800002 | 0.734 | 0.544 | 6.50E-18 | Treg_spleen |
| UBTF               | 1.85E-22 | 0.55662555 | 0.27  | 0.136 | 6.54E-18 | Treg_spleen |
| EHMT1              | 1.94E-22 | 0.51720849 | 0.467 | 0.287 | 6.89E-18 | Treg_spleen |
| AHI1               | 2.22E-22 | 0.5730344  | 0.715 | 0.543 | 7.85E-18 | Treg_spleen |
| TES                | 2.54E-22 | 0.56155623 | 0.265 | 0.131 | 8.99E-18 | Treg_spleen |
| UBE2L6             | 2.58E-22 | 0.48016113 | 0.251 | 0.12  | 9.15E-18 | Treg_spleen |
| GRK5               | 2.63E-22 | 0.49520794 | 0.484 | 0.304 | 9.32E-18 | Treg_spleen |
| TTC39C             | 3.41E-22 | 0.66120329 | 0.42  | 0.261 | 1.21E-17 | Treg_spleen |
| SNRPE              | 3.41E-22 | 0.50329926 | 0.435 | 0.265 | 1.21E-17 | Treg_spleen |
| DDX50              | 3.45E-22 | 0.35575003 | 0.427 | 0.249 | 1.22E-17 | Treg_spleen |
| ST7L               | 3.84E-22 | 0.74628348 | 0.264 | 0.136 | 1.36E-17 | Treg_spleen |
| EFCAB2             | 4.10E-22 | 0.42036159 | 0.462 | 0.281 | 1.45E-17 | Treg_spleen |
| CNIH1              | 4.12E-22 | 0.53850713 | 0.266 | 0.132 | 1.46E-17 | Treg_spleen |
| HK1                | 4.22E-22 | 0.51784794 | 0.327 | 0.177 | 1.50E-17 | Treg_spleen |
| FCHSD2             | 4.33E-22 | 0.59870531 | 0.475 | 0.303 | 1.54E-17 | Treg_spleen |
| SERTAD2            | 4.73E-22 | 0.57720546 | 0.453 | 0.283 | 1.67E-17 | Treg_spleen |
| CPNE1              | 4.86E-22 | 0.36845269 | 0.473 | 0.287 | 1.72E-17 | Treg_spleen |
| SRP54              | 4.95E-22 | 0.46283564 | 0.255 | 0.125 | 1.75E-17 | Treg_spleen |
| P4HA1              | 7.17E-22 | 0.53487423 | 0.288 | 0.151 | 2.54E-17 | Treg_spleen |
| KIF2A              | 7.35E-22 | 0.39890393 | 0.447 | 0.268 | 2.60E-17 | Treg_spleen |
| GTF3C6             | 7.40E-22 | 0.45038981 | 0.327 | 0.177 | 2.62E-17 | Treg_spleen |
| UQCRB              | 7.54E-22 | 0.41727612 | 0.413 | 0.242 | 2.67E-17 | Treg_spleen |
| SUPT16H            | 8.03E-22 | 0.49703511 | 0.373 | 0.214 | 2.85E-17 | Treg_spleen |
| ST8SIA4            | 8.12E-22 | 0.46861128 | 0.52  | 0.334 | 2.88E-17 | Treg_spleen |
| HCLS1              | 8.91E-22 | 0.35659252 | 0.414 | 0.241 | 3.16E-17 | Treg_spleen |
| OSTF1              | 1.01E-21 | 0.37580941 | 0.296 | 0.154 | 3.58E-17 | Treg_spleen |
| MTX2               | 1.11E-21 | 0.52025943 | 0.308 | 0.164 | 3.95E-17 | Treg_spleen |



|                    |          |             |       |       |          |             |
|--------------------|----------|-------------|-------|-------|----------|-------------|
| BANP               | 1.15E-21 | 0.59821687  | 0.282 | 0.145 | 4.09E-17 | Treg_spleen |
| WIPF1              | 1.28E-21 | 0.38045057  | 0.755 | 0.561 | 4.54E-17 | Treg_spleen |
| METTL9             | 1.40E-21 | 0.421111252 | 0.406 | 0.237 | 4.96E-17 | Treg_spleen |
| AKIRIN1            | 1.50E-21 | 0.35306802  | 0.348 | 0.193 | 5.31E-17 | Treg_spleen |
| TMBIM4             | 1.82E-21 | 0.3435415   | 0.533 | 0.335 | 6.45E-17 | Treg_spleen |
| ZNF706             | 1.87E-21 | 0.37103617  | 0.469 | 0.289 | 6.63E-17 | Treg_spleen |
| CYRIB              | 2.22E-21 | 0.38673885  | 0.78  | 0.577 | 7.88E-17 | Treg_spleen |
| PTPRJ              | 2.41E-21 | 0.52050679  | 0.722 | 0.537 | 8.54E-17 | Treg_spleen |
| KDELR2             | 2.69E-21 | 0.55241155  | 0.301 | 0.161 | 9.54E-17 | Treg_spleen |
| SNX14              | 2.72E-21 | 0.43322644  | 0.456 | 0.284 | 9.64E-17 | Treg_spleen |
| CEP170             | 2.84E-21 | 0.55882036  | 0.416 | 0.258 | 1.01E-16 | Treg_spleen |
| MAPK14             | 3.53E-21 | 0.71180384  | 0.266 | 0.14  | 1.25E-16 | Treg_spleen |
| BAZ1B              | 3.55E-21 | 0.51545705  | 0.364 | 0.21  | 1.26E-16 | Treg_spleen |
| ADSS2              | 3.56E-21 | 0.38749684  | 0.405 | 0.236 | 1.26E-16 | Treg_spleen |
| ENSMMUG00000043332 | 3.58E-21 | 0.40883718  | 0.405 | 0.243 | 1.27E-16 | Treg_spleen |
| DNMT1              | 3.76E-21 | 0.61437061  | 0.253 | 0.128 | 1.33E-16 | Treg_spleen |
| POC1B              | 4.04E-21 | 0.54016546  | 0.383 | 0.224 | 1.43E-16 | Treg_spleen |
| DYRK1A             | 4.32E-21 | 0.46269123  | 0.543 | 0.357 | 1.53E-16 | Treg_spleen |
| CCDC88C            | 4.67E-21 | 0.53071378  | 0.432 | 0.266 | 1.65E-16 | Treg_spleen |
| LRRC8D             | 4.92E-21 | 0.42438793  | 0.331 | 0.184 | 1.74E-16 | Treg_spleen |
| SLC2A3             | 5.34E-21 | 0.51096231  | 0.552 | 0.377 | 1.89E-16 | Treg_spleen |
| CCDC50             | 6.46E-21 | 0.64819958  | 0.323 | 0.184 | 2.29E-16 | Treg_spleen |
| CD38               | 6.55E-21 | 0.55391587  | 0.481 | 0.315 | 2.32E-16 | Treg_spleen |
| ENSMMUG00000049722 | 6.59E-21 | 0.36202475  | 0.39  | 0.234 | 2.33E-16 | Treg_spleen |
| CAPRIN1            | 7.89E-21 | 0.37418465  | 0.371 | 0.212 | 2.80E-16 | Treg_spleen |
| AKAP10             | 8.29E-21 | 0.63638851  | 0.296 | 0.159 | 2.94E-16 | Treg_spleen |
| CCDC12             | 9.02E-21 | 0.36062121  | 0.393 | 0.23  | 3.19E-16 | Treg_spleen |
| GMDS               | 9.69E-21 | 0.53422194  | 0.539 | 0.366 | 3.43E-16 | Treg_spleen |
| ARL15              | 9.69E-21 | 0.47086718  | 0.672 | 0.484 | 3.43E-16 | Treg_spleen |
| POMP               | 9.69E-21 | 0.26295428  | 0.416 | 0.245 | 3.44E-16 | Treg_spleen |
| AHCYL2             | 1.01E-20 | 0.62568189  | 0.348 | 0.204 | 3.59E-16 | Treg_spleen |
| DYNC112            | 1.05E-20 | 0.40109489  | 0.273 | 0.14  | 3.73E-16 | Treg_spleen |
| SKP1               | 1.26E-20 | 0.34178988  | 0.82  | 0.659 | 4.48E-16 | Treg_spleen |

|                    |          |            |       |       |          |             |
|--------------------|----------|------------|-------|-------|----------|-------------|
| ENSMMUG00000038373 | 1.32E-20 | 0.40883527 | 0.523 | 0.338 | 4.68E-16 | Treg_spleen |
| CSTF3              | 1.40E-20 | 0.65319641 | 0.259 | 0.135 | 4.97E-16 | Treg_spleen |
| GPD2               | 1.57E-20 | 0.53773184 | 0.276 | 0.145 | 5.56E-16 | Treg_spleen |
| BZW2               | 1.61E-20 | 0.53023618 | 0.434 | 0.275 | 5.70E-16 | Treg_spleen |
| FBXW11             | 1.63E-20 | 0.52835969 | 0.389 | 0.235 | 5.77E-16 | Treg_spleen |
| TULP4              | 1.63E-20 | 0.48156559 | 0.353 | 0.205 | 5.78E-16 | Treg_spleen |
| CLK1               | 1.70E-20 | 0.38683036 | 0.634 | 0.435 | 6.03E-16 | Treg_spleen |
| SEC11C             | 1.72E-20 | 0.43803262 | 0.265 | 0.135 | 6.09E-16 | Treg_spleen |
| GIMAP6             | 1.92E-20 | 0.37901452 | 0.291 | 0.152 | 6.79E-16 | Treg_spleen |
| NUP210             | 2.01E-20 | 0.47415295 | 0.372 | 0.217 | 7.13E-16 | Treg_spleen |
| MRPL33             | 2.18E-20 | 0.29976602 | 0.285 | 0.148 | 7.73E-16 | Treg_spleen |
| RPS19BP1           | 2.53E-20 | 0.43229465 | 0.267 | 0.138 | 8.96E-16 | Treg_spleen |
| SUPT20H            | 2.70E-20 | 0.48432688 | 0.324 | 0.181 | 9.56E-16 | Treg_spleen |
| YY1                | 2.70E-20 | 0.40621199 | 0.368 | 0.212 | 9.56E-16 | Treg_spleen |
| PRMT1              | 2.72E-20 | 0.50781086 | 0.299 | 0.163 | 9.64E-16 | Treg_spleen |
| SPCS2              | 2.77E-20 | 0.30178391 | 0.423 | 0.251 | 9.81E-16 | Treg_spleen |
| CHMP2A             | 3.36E-20 | 0.46607815 | 0.3   | 0.162 | 1.19E-15 | Treg_spleen |
| NFKB1              | 3.53E-20 | 0.49536468 | 0.686 | 0.505 | 1.25E-15 | Treg_spleen |
| LMAN2              | 3.55E-20 | 0.30279691 | 0.325 | 0.177 | 1.26E-15 | Treg_spleen |
| NUMB               | 3.56E-20 | 0.58130729 | 0.432 | 0.269 | 1.26E-15 | Treg_spleen |
| ARGLU1             | 4.16E-20 | 0.36002833 | 0.791 | 0.589 | 1.47E-15 | Treg_spleen |
| AGO2               | 4.39E-20 | 0.48159548 | 0.46  | 0.289 | 1.56E-15 | Treg_spleen |
| AKNA               | 4.44E-20 | 0.40332745 | 0.481 | 0.303 | 1.57E-15 | Treg_spleen |
| ENSMMUG00000060287 | 6.15E-20 | 0.34327199 | 0.879 | 0.766 | 2.18E-15 | Treg_spleen |
| ENSMMUG00000017466 | 6.21E-20 | 0.31476755 | 0.568 | 0.384 | 2.20E-15 | Treg_spleen |
| EFL1               | 6.98E-20 | 0.54768956 | 0.404 | 0.251 | 2.47E-15 | Treg_spleen |
| SMAD3              | 7.01E-20 | 0.60611362 | 0.413 | 0.258 | 2.49E-15 | Treg_spleen |
| BUD31              | 7.29E-20 | 0.35119279 | 0.319 | 0.175 | 2.58E-15 | Treg_spleen |
| SFMBT2             | 7.67E-20 | 0.79665383 | 0.285 | 0.159 | 2.72E-15 | Treg_spleen |
| EIF3I              | 7.99E-20 | 0.42307307 | 0.378 | 0.223 | 2.83E-15 | Treg_spleen |
| UBE2V2             | 8.23E-20 | 0.35392684 | 0.273 | 0.142 | 2.92E-15 | Treg_spleen |
| ENSMMUG00000004539 | 8.38E-20 | 0.31527895 | 0.469 | 0.283 | 2.97E-15 | Treg_spleen |
| IP6K1              | 1.05E-19 | 0.37025225 | 0.385 | 0.228 | 3.72E-15 | Treg_spleen |

|                    |          |            |       |       |          |             |
|--------------------|----------|------------|-------|-------|----------|-------------|
| CEP85L             | 1.09E-19 | 0.44793729 | 0.616 | 0.43  | 3.88E-15 | Treg_spleen |
| STIM1              | 1.12E-19 | 0.53207684 | 0.544 | 0.373 | 3.96E-15 | Treg_spleen |
| SSBP3              | 1.15E-19 | 0.48242105 | 0.427 | 0.269 | 4.06E-15 | Treg_spleen |
| ENSMMUG00000017890 | 1.19E-19 | 0.37990878 | 0.291 | 0.155 | 4.22E-15 | Treg_spleen |
| NFKBIB             | 1.53E-19 | 0.49834681 | 0.366 | 0.216 | 5.42E-15 | Treg_spleen |
| MTDH               | 1.71E-19 | 0.42556072 | 0.523 | 0.343 | 6.07E-15 | Treg_spleen |
| ID2                | 1.87E-19 | 0.49381052 | 0.434 | 0.279 | 6.63E-15 | Treg_spleen |
| POLE4              | 1.89E-19 | 0.45207837 | 0.262 | 0.137 | 6.70E-15 | Treg_spleen |
| MICU1              | 2.09E-19 | 0.5330755  | 0.292 | 0.161 | 7.39E-15 | Treg_spleen |
| JTB                | 2.36E-19 | 0.41836319 | 0.341 | 0.196 | 8.35E-15 | Treg_spleen |
| UBE2I              | 2.55E-19 | 0.34877661 | 0.455 | 0.282 | 9.03E-15 | Treg_spleen |
| TSC22D1            | 2.61E-19 | 0.65440977 | 0.282 | 0.155 | 9.26E-15 | Treg_spleen |
| TAOK1              | 2.91E-19 | 0.48078471 | 0.456 | 0.291 | 1.03E-14 | Treg_spleen |
| RAD23B             | 2.93E-19 | 0.43334834 | 0.362 | 0.213 | 1.04E-14 | Treg_spleen |
| ARHGAP9            | 3.99E-19 | 0.49472245 | 0.287 | 0.157 | 1.41E-14 | Treg_spleen |
| SLC38A2            | 4.18E-19 | 0.3303836  | 0.456 | 0.282 | 1.48E-14 | Treg_spleen |
| DDX3X              | 4.81E-19 | 0.3422168  | 0.764 | 0.557 | 1.70E-14 | Treg_spleen |
| M6PR               | 5.17E-19 | 0.47827461 | 0.31  | 0.174 | 1.83E-14 | Treg_spleen |
| MBP                | 6.04E-19 | 0.25686575 | 0.762 | 0.555 | 2.14E-14 | Treg_spleen |
| ATXN7L1            | 6.73E-19 | 0.631474   | 0.432 | 0.28  | 2.38E-14 | Treg_spleen |
| GNAI2.1            | 8.10E-19 | 0.25393666 | 0.413 | 0.25  | 2.87E-14 | Treg_spleen |
| LARP4B             | 8.12E-19 | 0.37418963 | 0.41  | 0.251 | 2.88E-14 | Treg_spleen |
| TMED9              | 8.41E-19 | 0.24197782 | 0.329 | 0.183 | 2.98E-14 | Treg_spleen |
| WAPL               | 9.62E-19 | 0.38854472 | 0.491 | 0.316 | 3.41E-14 | Treg_spleen |
| SFPQ               | 9.95E-19 | 0.34893583 | 0.651 | 0.454 | 3.53E-14 | Treg_spleen |
| DERL1              | 1.13E-18 | 0.54453542 | 0.3   | 0.169 | 4.00E-14 | Treg_spleen |
| C11H12orf57        | 1.43E-18 | 0.36873081 | 0.651 | 0.492 | 5.08E-14 | Treg_spleen |
| USP44              | 1.52E-18 | 0.55437218 | 0.322 | 0.189 | 5.40E-14 | Treg_spleen |
| WDR82              | 1.60E-18 | 0.38103645 | 0.305 | 0.169 | 5.68E-14 | Treg_spleen |
| TTC37              | 1.61E-18 | 0.59552238 | 0.278 | 0.155 | 5.72E-14 | Treg_spleen |
| SPIDR              | 1.63E-18 | 0.41127548 | 0.461 | 0.297 | 5.79E-14 | Treg_spleen |
| CCT4               | 2.76E-18 | 0.31847012 | 0.526 | 0.346 | 9.77E-14 | Treg_spleen |
| RALBP1             | 2.79E-18 | 0.4292616  | 0.312 | 0.176 | 9.88E-14 | Treg_spleen |

|                   |          |            |       |       |          |             |
|-------------------|----------|------------|-------|-------|----------|-------------|
| NAA50             | 2.80E-18 | 0.33493446 | 0.369 | 0.222 | 9.92E-14 | Treg_spleen |
| DNAJC19           | 2.95E-18 | 0.34781685 | 0.306 | 0.17  | 1.05E-13 | Treg_spleen |
| SH3BGR1           | 2.96E-18 | 0.35180728 | 0.405 | 0.248 | 1.05E-13 | Treg_spleen |
| TRAPPC4           | 3.20E-18 | 0.34288395 | 0.306 | 0.17  | 1.13E-13 | Treg_spleen |
| TMEM258           | 3.96E-18 | 0.2259433  | 0.537 | 0.36  | 1.40E-13 | Treg_spleen |
| PSMB4             | 4.36E-18 | 0.23378115 | 0.409 | 0.245 | 1.55E-13 | Treg_spleen |
| STAT5B            | 4.91E-18 | 0.34969395 | 0.654 | 0.46  | 1.74E-13 | Treg_spleen |
| STX8              | 5.17E-18 | 0.39711721 | 0.448 | 0.288 | 1.83E-13 | Treg_spleen |
| CCNI              | 5.53E-18 | 0.29552143 | 0.582 | 0.393 | 1.96E-13 | Treg_spleen |
| TCF7              | 6.16E-18 | 0.5298404  | 0.328 | 0.195 | 2.18E-13 | Treg_spleen |
| TTC1              | 6.18E-18 | 0.51907631 | 0.281 | 0.155 | 2.19E-13 | Treg_spleen |
| CREB1             | 7.41E-18 | 0.41295214 | 0.453 | 0.292 | 2.63E-13 | Treg_spleen |
| ZDHHC14           | 8.08E-18 | 0.72424028 | 0.306 | 0.181 | 2.86E-13 | Treg_spleen |
| UBXN4             | 8.67E-18 | 0.2692098  | 0.498 | 0.318 | 3.07E-13 | Treg_spleen |
| RNF11             | 8.84E-18 | 0.47876939 | 0.318 | 0.187 | 3.13E-13 | Treg_spleen |
| ENSMUG00000022874 | 8.93E-18 | 0.42520858 | 0.317 | 0.182 | 3.17E-13 | Treg_spleen |
| RAC1              | 9.47E-18 | 0.33890148 | 0.294 | 0.165 | 3.36E-13 | Treg_spleen |
| CNIH4             | 9.54E-18 | 0.27269481 | 0.252 | 0.132 | 3.38E-13 | Treg_spleen |
| EPRS1             | 1.04E-17 | 0.39094455 | 0.377 | 0.23  | 3.68E-13 | Treg_spleen |
| RAB21             | 1.15E-17 | 0.37909687 | 0.258 | 0.138 | 4.08E-13 | Treg_spleen |
| LPIN2             | 1.19E-17 | 0.50936127 | 0.367 | 0.223 | 4.23E-13 | Treg_spleen |
| SH3KBP1           | 1.22E-17 | 0.38988302 | 0.884 | 0.734 | 4.33E-13 | Treg_spleen |
| KIAA1671          | 1.25E-17 | 0.57289754 | 0.255 | 0.139 | 4.41E-13 | Treg_spleen |
| RPN2              | 1.26E-17 | 0.43838027 | 0.312 | 0.18  | 4.48E-13 | Treg_spleen |
| MRPL32            | 1.31E-17 | 0.38162819 | 0.25  | 0.132 | 4.65E-13 | Treg_spleen |
| FAM53B            | 1.32E-17 | 0.57225223 | 0.266 | 0.146 | 4.68E-13 | Treg_spleen |
| RAB10             | 1.41E-17 | 0.26883854 | 0.461 | 0.294 | 4.98E-13 | Treg_spleen |
| DBNL              | 1.47E-17 | 0.29382494 | 0.273 | 0.147 | 5.20E-13 | Treg_spleen |
| DNAJB9            | 1.63E-17 | 0.51051944 | 0.278 | 0.156 | 5.77E-13 | Treg_spleen |
| ETFA              | 1.73E-17 | 0.35293447 | 0.294 | 0.164 | 6.14E-13 | Treg_spleen |
| ENSMUG00000047481 | 1.88E-17 | 0.2401437  | 0.566 | 0.387 | 6.66E-13 | Treg_spleen |
| CLNS1A            | 1.93E-17 | 0.30741588 | 0.324 | 0.189 | 6.83E-13 | Treg_spleen |
| TBC1D10B          | 2.19E-17 | 0.36821103 | 0.354 | 0.212 | 7.77E-13 | Treg_spleen |

|                     |          |            |       |       |          |             |
|---------------------|----------|------------|-------|-------|----------|-------------|
| RPS6KA3             | 2.20E-17 | 0.3296014  | 0.531 | 0.359 | 7.79E-13 | Treg_spleen |
| FOCAD               | 2.23E-17 | 0.37472327 | 0.371 | 0.227 | 7.90E-13 | Treg_spleen |
| PSMD1               | 2.42E-17 | 0.40043985 | 0.277 | 0.154 | 8.57E-13 | Treg_spleen |
| ENSMMUG000000011714 | 2.45E-17 | 0.36513575 | 0.319 | 0.186 | 8.68E-13 | Treg_spleen |
| FAM118A             | 2.54E-17 | 0.47120693 | 0.617 | 0.44  | 8.99E-13 | Treg_spleen |
| HCST                | 2.74E-17 | 0.22700532 | 0.512 | 0.345 | 9.71E-13 | Treg_spleen |
| ERICH1              | 2.98E-17 | 0.45825548 | 0.344 | 0.208 | 1.06E-12 | Treg_spleen |
| PSMB9               | 3.01E-17 | 0.24527914 | 0.418 | 0.259 | 1.07E-12 | Treg_spleen |
| NIBAN1              | 3.05E-17 | 0.34744383 | 0.252 | 0.138 | 1.08E-12 | Treg_spleen |
| PFDN6               | 3.10E-17 | 0.32349399 | 0.27  | 0.148 | 1.10E-12 | Treg_spleen |
| TGOLN2              | 3.29E-17 | 0.34982519 | 0.258 | 0.139 | 1.17E-12 | Treg_spleen |
| ENSMMUG000000001458 | 4.47E-17 | 0.28525944 | 0.793 | 0.662 | 1.58E-12 | Treg_spleen |
| COA1                | 4.55E-17 | 0.57373386 | 0.466 | 0.317 | 1.61E-12 | Treg_spleen |
| NEK7                | 4.63E-17 | 0.37719627 | 0.486 | 0.319 | 1.64E-12 | Treg_spleen |
| BTG1                | 4.63E-17 | 0.22614415 | 0.875 | 0.77  | 1.64E-12 | Treg_spleen |
| NONO                | 4.73E-17 | 0.40049121 | 0.534 | 0.364 | 1.68E-12 | Treg_spleen |
| KPNA1               | 5.29E-17 | 0.32316553 | 0.383 | 0.233 | 1.87E-12 | Treg_spleen |
| HMGB1               | 5.59E-17 | 0.32495587 | 0.788 | 0.65  | 1.98E-12 | Treg_spleen |
| CCT6A               | 5.60E-17 | 0.36541634 | 0.515 | 0.35  | 1.98E-12 | Treg_spleen |
| SLF1                | 5.65E-17 | 0.50581125 | 0.344 | 0.21  | 2.00E-12 | Treg_spleen |
| PRDX6               | 5.73E-17 | 0.22322074 | 0.519 | 0.347 | 2.03E-12 | Treg_spleen |
| ARHGAP35            | 5.95E-17 | 0.56960502 | 0.265 | 0.149 | 2.11E-12 | Treg_spleen |
| MAPK6               | 6.01E-17 | 0.52041203 | 0.38  | 0.238 | 2.13E-12 | Treg_spleen |
| ARHGAP30            | 6.03E-17 | 0.30860991 | 0.418 | 0.263 | 2.14E-12 | Treg_spleen |
| DCTN3               | 6.32E-17 | 0.22159162 | 0.372 | 0.223 | 2.24E-12 | Treg_spleen |
| CCDC107             | 6.44E-17 | 0.36614311 | 0.268 | 0.148 | 2.28E-12 | Treg_spleen |
| TRAF3               | 6.76E-17 | 0.50728946 | 0.513 | 0.358 | 2.40E-12 | Treg_spleen |
| TBC1D5              | 6.86E-17 | 0.34172338 | 0.838 | 0.659 | 2.43E-12 | Treg_spleen |
| PNKP                | 6.92E-17 | 0.48362883 | 0.277 | 0.157 | 2.45E-12 | Treg_spleen |
| ZBTB10              | 7.90E-17 | 0.52303819 | 0.32  | 0.191 | 2.80E-12 | Treg_spleen |
| TMX4                | 8.81E-17 | 0.53497067 | 0.292 | 0.17  | 3.12E-12 | Treg_spleen |
| BICRAL              | 8.84E-17 | 0.60275179 | 0.281 | 0.161 | 3.13E-12 | Treg_spleen |
| DPH6                | 9.00E-17 | 0.3106054  | 0.3   | 0.173 | 3.19E-12 | Treg_spleen |

|         |          |            |       |       |          |             |
|---------|----------|------------|-------|-------|----------|-------------|
| TBL1XR1 | 9.28E-17 | 0.37281575 | 0.783 | 0.615 | 3.29E-12 | Treg_spleen |
| TNIP1   | 9.31E-17 | 0.45387061 | 0.321 | 0.191 | 3.30E-12 | Treg_spleen |
| SYNRG   | 1.01E-16 | 0.42224739 | 0.333 | 0.199 | 3.57E-12 | Treg_spleen |
| MRPL51  | 1.15E-16 | 0.27973921 | 0.479 | 0.317 | 4.09E-12 | Treg_spleen |
| PTBP1   | 1.20E-16 | 0.32017825 | 0.291 | 0.164 | 4.25E-12 | Treg_spleen |
| ANKRD10 | 1.50E-16 | 0.41263418 | 0.498 | 0.34  | 5.31E-12 | Treg_spleen |
| SETX    | 1.51E-16 | 0.36220142 | 0.496 | 0.328 | 5.35E-12 | Treg_spleen |
| VAMP8   | 1.53E-16 | 0.22184042 | 0.427 | 0.272 | 5.41E-12 | Treg_spleen |
| ZNF638  | 1.58E-16 | 0.32572348 | 0.614 | 0.43  | 5.59E-12 | Treg_spleen |
| DPP7    | 1.64E-16 | 0.53628181 | 0.256 | 0.141 | 5.80E-12 | Treg_spleen |
| GNL3    | 1.66E-16 | 0.45274179 | 0.259 | 0.142 | 5.90E-12 | Treg_spleen |
| USO1    | 1.87E-16 | 0.45485017 | 0.258 | 0.143 | 6.61E-12 | Treg_spleen |
| PDLIM2  | 2.14E-16 | 0.39135865 | 0.335 | 0.202 | 7.59E-12 | Treg_spleen |
| EDEM3   | 2.15E-16 | 0.40944027 | 0.28  | 0.16  | 7.62E-12 | Treg_spleen |
| CHORDC1 | 2.29E-16 | 0.36373287 | 0.496 | 0.332 | 8.10E-12 | Treg_spleen |
| TUBA1A  | 2.32E-16 | 0.32828746 | 0.635 | 0.472 | 8.21E-12 | Treg_spleen |
| NUCKS1  | 2.41E-16 | 0.30852932 | 0.542 | 0.373 | 8.55E-12 | Treg_spleen |
| HSPE1   | 2.52E-16 | 0.43231141 | 0.649 | 0.495 | 8.95E-12 | Treg_spleen |
| BCL2L13 | 2.59E-16 | 0.46085642 | 0.263 | 0.146 | 9.17E-12 | Treg_spleen |
| CD81    | 2.73E-16 | 0.26112999 | 0.275 | 0.154 | 9.67E-12 | Treg_spleen |
| ARID1A  | 2.79E-16 | 0.29378597 | 0.562 | 0.384 | 9.88E-12 | Treg_spleen |
| UVRAG   | 2.91E-16 | 0.38593838 | 0.549 | 0.377 | 1.03E-11 | Treg_spleen |
| ORC4    | 2.92E-16 | 0.56439352 | 0.25  | 0.14  | 1.03E-11 | Treg_spleen |
| PTGES3  | 2.94E-16 | 0.30834877 | 0.737 | 0.571 | 1.04E-11 | Treg_spleen |
| TASP1   | 3.01E-16 | 0.43991934 | 0.446 | 0.296 | 1.07E-11 | Treg_spleen |
| MRPL14  | 3.14E-16 | 0.32337888 | 0.287 | 0.162 | 1.11E-11 | Treg_spleen |
| PSMD4   | 3.22E-16 | 0.34238267 | 0.274 | 0.152 | 1.14E-11 | Treg_spleen |
| ADAR    | 3.24E-16 | 0.30204416 | 0.41  | 0.256 | 1.15E-11 | Treg_spleen |
| MIA2    | 3.42E-16 | 0.36893353 | 0.505 | 0.342 | 1.21E-11 | Treg_spleen |
| SYNCRIP | 3.59E-16 | 0.3328524  | 0.464 | 0.309 | 1.27E-11 | Treg_spleen |
| ERP29   | 4.57E-16 | 0.38576963 | 0.273 | 0.155 | 1.62E-11 | Treg_spleen |
| CASK    | 4.61E-16 | 0.5394544  | 0.365 | 0.232 | 1.63E-11 | Treg_spleen |
| ATP5MC2 | 4.82E-16 | 0.2441156  | 0.601 | 0.443 | 1.71E-11 | Treg_spleen |

|                    |          |            |       |       |          |             |
|--------------------|----------|------------|-------|-------|----------|-------------|
| TMPO               | 4.86E-16 | 0.28848865 | 0.3   | 0.174 | 1.72E-11 | Treg_spleen |
| HSP90B1            | 5.08E-16 | 0.52340739 | 0.452 | 0.308 | 1.80E-11 | Treg_spleen |
| NCK2               | 5.51E-16 | 0.28796793 | 0.424 | 0.277 | 1.95E-11 | Treg_spleen |
| RBM17              | 6.27E-16 | 0.41274932 | 0.49  | 0.331 | 2.22E-11 | Treg_spleen |
| CDC37              | 7.30E-16 | 0.2667265  | 0.364 | 0.224 | 2.59E-11 | Treg_spleen |
| PSME2              | 7.58E-16 | 0.26222599 | 0.338 | 0.203 | 2.68E-11 | Treg_spleen |
| MRPL10             | 8.13E-16 | 0.39301647 | 0.325 | 0.194 | 2.88E-11 | Treg_spleen |
| DBI                | 8.27E-16 | 0.4172773  | 0.487 | 0.333 | 2.93E-11 | Treg_spleen |
| RELB               | 8.47E-16 | 0.43167511 | 0.363 | 0.229 | 3.00E-11 | Treg_spleen |
| CRLF3              | 8.94E-16 | 0.35806096 | 0.354 | 0.217 | 3.17E-11 | Treg_spleen |
| LYPLA1             | 9.83E-16 | 0.46115085 | 0.252 | 0.14  | 3.48E-11 | Treg_spleen |
| ANKRD17            | 1.05E-15 | 0.40827199 | 0.617 | 0.46  | 3.72E-11 | Treg_spleen |
| ENSMMUG00000063859 | 1.10E-15 | 0.31834752 | 0.294 | 0.171 | 3.88E-11 | Treg_spleen |
| SNF8               | 1.16E-15 | 0.3592419  | 0.273 | 0.155 | 4.12E-11 | Treg_spleen |
| AMD1               | 1.17E-15 | 0.3163073  | 0.516 | 0.347 | 4.13E-11 | Treg_spleen |
| NSMCE1             | 1.18E-15 | 0.44579402 | 0.284 | 0.166 | 4.18E-11 | Treg_spleen |
| CCAR1              | 1.29E-15 | 0.4103957  | 0.324 | 0.193 | 4.58E-11 | Treg_spleen |
| NOP58              | 1.30E-15 | 0.3381791  | 0.52  | 0.354 | 4.59E-11 | Treg_spleen |
| SLC35B1            | 1.35E-15 | 0.32367247 | 0.434 | 0.279 | 4.77E-11 | Treg_spleen |
| HIKESHI            | 1.54E-15 | 0.29878396 | 0.304 | 0.176 | 5.47E-11 | Treg_spleen |
| SPG7               | 1.64E-15 | 0.22540952 | 0.253 | 0.138 | 5.82E-11 | Treg_spleen |
| SPECC1L            | 1.67E-15 | 0.32874163 | 0.445 | 0.29  | 5.93E-11 | Treg_spleen |
| RHEB               | 2.00E-15 | 0.326751   | 0.523 | 0.352 | 7.07E-11 | Treg_spleen |
| PPIL4              | 2.43E-15 | 0.33240366 | 0.734 | 0.572 | 8.59E-11 | Treg_spleen |
| ENSMMUG00000019882 | 2.60E-15 | 0.39526666 | 0.297 | 0.176 | 9.23E-11 | Treg_spleen |
| ZNF131             | 2.66E-15 | 0.34630936 | 0.454 | 0.297 | 9.43E-11 | Treg_spleen |
| MITD1              | 2.76E-15 | 0.17256842 | 0.256 | 0.141 | 9.79E-11 | Treg_spleen |
| EIF6               | 2.89E-15 | 0.11613207 | 0.253 | 0.138 | 1.03E-10 | Treg_spleen |
| PAM                | 3.04E-15 | 0.61491477 | 0.266 | 0.157 | 1.08E-10 | Treg_spleen |
| TXNL1              | 3.12E-15 | 0.25747507 | 0.325 | 0.194 | 1.11E-10 | Treg_spleen |
| ENSMMUG00000016959 | 3.61E-15 | 0.36767709 | 0.449 | 0.297 | 1.28E-10 | Treg_spleen |
| DENND1A            | 3.65E-15 | 0.38854857 | 0.437 | 0.286 | 1.29E-10 | Treg_spleen |
| TAOK3              | 3.80E-15 | 0.30957151 | 0.573 | 0.407 | 1.35E-10 | Treg_spleen |

|         |          |            |       |       |          |             |
|---------|----------|------------|-------|-------|----------|-------------|
| MIF     | 3.86E-15 | 0.37513009 | 0.481 | 0.332 | 1.37E-10 | Treg_spleen |
| UQCRC2  | 4.21E-15 | 0.35885751 | 0.298 | 0.176 | 1.49E-10 | Treg_spleen |
| MED28   | 4.22E-15 | 0.26187895 | 0.296 | 0.173 | 1.50E-10 | Treg_spleen |
| TOP1    | 4.43E-15 | 0.30713713 | 0.765 | 0.588 | 1.57E-10 | Treg_spleen |
| MEMO1   | 4.60E-15 | 0.38457218 | 0.624 | 0.464 | 1.63E-10 | Treg_spleen |
| STK17B  | 4.61E-15 | 0.3242962  | 0.912 | 0.792 | 1.63E-10 | Treg_spleen |
| SEPTIN9 | 4.94E-15 | 0.30392196 | 0.605 | 0.43  | 1.75E-10 | Treg_spleen |
| FYN     | 5.12E-15 | 0.34318462 | 0.847 | 0.682 | 1.81E-10 | Treg_spleen |
| MSI2    | 5.13E-15 | 0.38275966 | 0.739 | 0.575 | 1.82E-10 | Treg_spleen |
| CYFIP2  | 5.25E-15 | 0.30410442 | 0.524 | 0.359 | 1.86E-10 | Treg_spleen |
| TMEM156 | 5.33E-15 | 0.37249393 | 0.281 | 0.164 | 1.89E-10 | Treg_spleen |
| GAK     | 5.80E-15 | 0.5498417  | 0.252 | 0.145 | 2.06E-10 | Treg_spleen |
| PAOX    | 6.03E-15 | 0.22020043 | 0.313 | 0.186 | 2.14E-10 | Treg_spleen |
| PPP4C   | 6.45E-15 | 0.27307549 | 0.352 | 0.215 | 2.29E-10 | Treg_spleen |
| CMTM6   | 6.86E-15 | 0.33541078 | 0.404 | 0.258 | 2.43E-10 | Treg_spleen |
| SEPTIN2 | 7.28E-15 | 0.22329002 | 0.337 | 0.202 | 2.58E-10 | Treg_spleen |
| SPOP    | 8.17E-15 | 0.31578342 | 0.399 | 0.256 | 2.90E-10 | Treg_spleen |
| GON4L   | 8.22E-15 | 0.3442139  | 0.343 | 0.213 | 2.91E-10 | Treg_spleen |
| PSMB3   | 8.47E-15 | 0.25509108 | 0.348 | 0.213 | 3.00E-10 | Treg_spleen |
| MSN     | 8.66E-15 | 0.27418225 | 0.743 | 0.556 | 3.07E-10 | Treg_spleen |
| KHDRBS1 | 8.99E-15 | 0.22874124 | 0.385 | 0.241 | 3.18E-10 | Treg_spleen |
| SGMS1   | 9.09E-15 | 0.42399771 | 0.449 | 0.307 | 3.22E-10 | Treg_spleen |
| COMMD10 | 9.23E-15 | 0.3310579  | 0.464 | 0.314 | 3.27E-10 | Treg_spleen |
| YWHAB   | 9.38E-15 | 0.20730392 | 0.659 | 0.483 | 3.32E-10 | Treg_spleen |
| HADHA   | 9.67E-15 | 0.34804745 | 0.265 | 0.151 | 3.43E-10 | Treg_spleen |
| EIF4A3  | 1.04E-14 | 0.27332559 | 0.354 | 0.219 | 3.67E-10 | Treg_spleen |
| STK10   | 1.10E-14 | 0.3990158  | 0.583 | 0.42  | 3.91E-10 | Treg_spleen |
| AHNAK   | 1.14E-14 | 0.66359171 | 0.292 | 0.179 | 4.03E-10 | Treg_spleen |
| MRPS30  | 1.14E-14 | 0.50864287 | 0.27  | 0.157 | 4.05E-10 | Treg_spleen |
| EEF1A1  | 1.16E-14 | 0.22915476 | 0.912 | 0.886 | 4.12E-10 | Treg_spleen |
| PICALM  | 1.23E-14 | 0.32539354 | 0.736 | 0.573 | 4.37E-10 | Treg_spleen |
| STRN3   | 1.25E-14 | 0.37969491 | 0.418 | 0.279 | 4.44E-10 | Treg_spleen |
| SAE1    | 1.33E-14 | 0.36509072 | 0.275 | 0.161 | 4.71E-10 | Treg_spleen |



|                   |          |            |       |       |          |             |
|-------------------|----------|------------|-------|-------|----------|-------------|
| YJEFN3            | 1.34E-14 | 0.19361684 | 0.467 | 0.307 | 4.76E-10 | Treg_spleen |
| BAZ1A             | 1.58E-14 | 0.27701582 | 0.558 | 0.387 | 5.58E-10 | Treg_spleen |
| VDAC2             | 1.59E-14 | 0.26861777 | 0.488 | 0.335 | 5.64E-10 | Treg_spleen |
| MAGOH             | 1.65E-14 | 0.14678964 | 0.414 | 0.262 | 5.85E-10 | Treg_spleen |
| IPCEF1            | 2.17E-14 | 0.4530366  | 0.448 | 0.309 | 7.68E-10 | Treg_spleen |
| DSTN              | 2.31E-14 | 0.39487718 | 0.427 | 0.286 | 8.18E-10 | Treg_spleen |
| ARHGEF3           | 2.55E-14 | 0.49618621 | 0.611 | 0.473 | 9.02E-10 | Treg_spleen |
| ANKFY1            | 2.56E-14 | 0.3229934  | 0.311 | 0.19  | 9.06E-10 | Treg_spleen |
| AFTPH             | 2.63E-14 | 0.33830797 | 0.516 | 0.354 | 9.32E-10 | Treg_spleen |
| ENSMUG00000059843 | 2.90E-14 | 0.15387579 | 0.268 | 0.154 | 1.03E-09 | Treg_spleen |
| LSM7              | 3.06E-14 | 0.21288779 | 0.481 | 0.325 | 1.08E-09 | Treg_spleen |
| EIF1B             | 3.08E-14 | 0.16742344 | 0.379 | 0.239 | 1.09E-09 | Treg_spleen |
| DOCK2             | 3.17E-14 | 0.30090455 | 0.748 | 0.575 | 1.12E-09 | Treg_spleen |
| ENSMUG00000017297 | 3.45E-14 | 0.38674986 | 0.309 | 0.19  | 1.22E-09 | Treg_spleen |
| EIF5              | 3.48E-14 | 0.26725829 | 0.58  | 0.402 | 1.23E-09 | Treg_spleen |
| TUBB              | 3.60E-14 | 0.34887323 | 0.47  | 0.324 | 1.28E-09 | Treg_spleen |
| ENSMUG00000058818 | 3.66E-14 | 0.23962068 | 0.352 | 0.222 | 1.30E-09 | Treg_spleen |
| HADHB             | 3.77E-14 | 0.19468952 | 0.273 | 0.159 | 1.34E-09 | Treg_spleen |
| CCND3             | 3.81E-14 | 0.42453235 | 0.769 | 0.632 | 1.35E-09 | Treg_spleen |
| TNPO3             | 3.94E-14 | 0.20224811 | 0.379 | 0.237 | 1.40E-09 | Treg_spleen |
| ZMYM4             | 4.01E-14 | 0.43168746 | 0.412 | 0.276 | 1.42E-09 | Treg_spleen |
| BCL11B            | 4.04E-14 | 0.31006429 | 0.72  | 0.554 | 1.43E-09 | Treg_spleen |
| PSMA2             | 4.61E-14 | 0.26769704 | 0.548 | 0.391 | 1.63E-09 | Treg_spleen |
| LDLR              | 4.87E-14 | 0.62862686 | 0.259 | 0.156 | 1.73E-09 | Treg_spleen |
| ENO1              | 4.98E-14 | 0.41874991 | 0.627 | 0.502 | 1.76E-09 | Treg_spleen |
| CTCF              | 5.45E-14 | 0.29660267 | 0.449 | 0.301 | 1.93E-09 | Treg_spleen |
| EIF1AX            | 5.61E-14 | 0.26481963 | 0.44  | 0.292 | 1.99E-09 | Treg_spleen |
| MDN1              | 5.73E-14 | 0.48621468 | 0.329 | 0.21  | 2.03E-09 | Treg_spleen |
| AP2B1             | 5.74E-14 | 0.22545628 | 0.406 | 0.261 | 2.03E-09 | Treg_spleen |
| DHRS7B            | 5.76E-14 | 0.29901331 | 0.303 | 0.183 | 2.04E-09 | Treg_spleen |
| TAF1              | 5.88E-14 | 0.26412936 | 0.293 | 0.175 | 2.09E-09 | Treg_spleen |
| TRAF5             | 5.92E-14 | 0.23420757 | 0.251 | 0.142 | 2.10E-09 | Treg_spleen |
| ARF4              | 5.92E-14 | 0.30046151 | 0.565 | 0.401 | 2.10E-09 | Treg_spleen |

|                    |          |            |       |       |          |             |
|--------------------|----------|------------|-------|-------|----------|-------------|
| EIF3J              | 6.73E-14 | 0.2437442  | 0.466 | 0.314 | 2.38E-09 | Treg_spleen |
| UPF2               | 6.76E-14 | 0.27845172 | 0.413 | 0.27  | 2.39E-09 | Treg_spleen |
| TRAPPC9            | 7.02E-14 | 0.44089462 | 0.371 | 0.243 | 2.49E-09 | Treg_spleen |
| STOML2             | 7.03E-14 | 0.27778217 | 0.286 | 0.172 | 2.49E-09 | Treg_spleen |
| USP48              | 7.39E-14 | 0.32824489 | 0.325 | 0.2   | 2.62E-09 | Treg_spleen |
| ENSMMUG00000058325 | 7.61E-14 | 0.36445365 | 0.868 | 0.827 | 2.70E-09 | Treg_spleen |
| SND1               | 8.24E-14 | 0.33709494 | 0.489 | 0.341 | 2.92E-09 | Treg_spleen |
| CNTRL              | 8.58E-14 | 0.29163263 | 0.394 | 0.254 | 3.04E-09 | Treg_spleen |
| PER1               | 1.04E-13 | 0.38718232 | 0.458 | 0.318 | 3.67E-09 | Treg_spleen |
| ARID5B             | 1.25E-13 | 0.3127385  | 0.703 | 0.545 | 4.44E-09 | Treg_spleen |
| SSR3               | 1.40E-13 | 0.17623351 | 0.299 | 0.178 | 4.97E-09 | Treg_spleen |
| ZMYND8             | 1.45E-13 | 0.26330072 | 0.484 | 0.332 | 5.12E-09 | Treg_spleen |
| MYL6               | 1.45E-13 | 0.14994353 | 0.688 | 0.532 | 5.12E-09 | Treg_spleen |
| SLTM               | 1.48E-13 | 0.24021965 | 0.568 | 0.396 | 5.24E-09 | Treg_spleen |
| IQGAP1             | 1.57E-13 | 0.32556565 | 0.7   | 0.534 | 5.58E-09 | Treg_spleen |
| TWF2               | 1.59E-13 | 0.23244682 | 0.367 | 0.233 | 5.62E-09 | Treg_spleen |
| N4BP2L2            | 1.60E-13 | 0.21530143 | 0.488 | 0.333 | 5.68E-09 | Treg_spleen |
| TEX264             | 1.64E-13 | 0.29667647 | 0.291 | 0.175 | 5.81E-09 | Treg_spleen |
| PTP4A1             | 1.85E-13 | 0.17973957 | 0.436 | 0.282 | 6.55E-09 | Treg_spleen |
| ARHGAP26           | 1.91E-13 | 0.52977268 | 0.454 | 0.324 | 6.76E-09 | Treg_spleen |
| EVL                | 1.92E-13 | 0.26216476 | 0.739 | 0.577 | 6.79E-09 | Treg_spleen |
| FAF1               | 1.93E-13 | 0.2998962  | 0.645 | 0.475 | 6.85E-09 | Treg_spleen |
| CMIP               | 1.97E-13 | 0.43113369 | 0.336 | 0.221 | 6.98E-09 | Treg_spleen |
| FBXL17             | 1.99E-13 | 0.38965943 | 0.535 | 0.387 | 7.06E-09 | Treg_spleen |
| ZC3H15             | 2.02E-13 | 0.25273367 | 0.468 | 0.319 | 7.15E-09 | Treg_spleen |
| YTHDC2             | 2.03E-13 | 0.26419863 | 0.326 | 0.204 | 7.20E-09 | Treg_spleen |
| CDK6               | 2.04E-13 | 0.49777868 | 0.348 | 0.228 | 7.23E-09 | Treg_spleen |
| STT3B              | 2.08E-13 | 0.23951024 | 0.549 | 0.383 | 7.35E-09 | Treg_spleen |
| THADA              | 2.08E-13 | 0.24919629 | 0.58  | 0.408 | 7.36E-09 | Treg_spleen |
| DDX42              | 2.08E-13 | 0.24914403 | 0.283 | 0.171 | 7.37E-09 | Treg_spleen |
| CHD9               | 2.20E-13 | 0.3105593  | 0.254 | 0.148 | 7.80E-09 | Treg_spleen |
| TTC27              | 2.21E-13 | 0.50483016 | 0.265 | 0.161 | 7.84E-09 | Treg_spleen |
| PCBP1              | 2.25E-13 | 0.22333139 | 0.519 | 0.359 | 7.98E-09 | Treg_spleen |

|         |          |            |       |       |          |             |
|---------|----------|------------|-------|-------|----------|-------------|
| ARMH3   | 2.29E-13 | 0.35361638 | 0.306 | 0.191 | 8.11E-09 | Treg_spleen |
| CABIN1  | 2.34E-13 | 0.41709445 | 0.278 | 0.17  | 8.30E-09 | Treg_spleen |
| WBP1L   | 2.38E-13 | 0.29689876 | 0.364 | 0.233 | 8.44E-09 | Treg_spleen |
| CTLA4   | 2.44E-13 | 0.34306919 | 0.347 | 0.223 | 8.64E-09 | Treg_spleen |
| TSPYL1  | 2.48E-13 | 0.27355459 | 0.273 | 0.161 | 8.78E-09 | Treg_spleen |
| CCNY    | 2.53E-13 | 0.35080343 | 0.458 | 0.31  | 8.97E-09 | Treg_spleen |
| MTA3    | 2.54E-13 | 0.46440008 | 0.287 | 0.177 | 9.01E-09 | Treg_spleen |
| NDUFA2  | 2.63E-13 | 0.10112177 | 0.48  | 0.32  | 9.32E-09 | Treg_spleen |
| ITGB1   | 2.74E-13 | 0.28770566 | 0.495 | 0.349 | 9.71E-09 | Treg_spleen |
| ROS1    | 2.83E-13 | 0.31178849 | 0.251 | 0.146 | 1.00E-08 | Treg_spleen |
| H2AFJ   | 3.00E-13 | 0.14389287 | 0.461 | 0.311 | 1.06E-08 | Treg_spleen |
| CHD1    | 3.01E-13 | 0.26748359 | 0.468 | 0.316 | 1.07E-08 | Treg_spleen |
| MGA     | 3.03E-13 | 0.35713008 | 0.307 | 0.192 | 1.07E-08 | Treg_spleen |
| PHF20   | 3.20E-13 | 0.33330768 | 0.507 | 0.353 | 1.13E-08 | Treg_spleen |
| LRBA    | 3.34E-13 | 0.32759812 | 0.812 | 0.669 | 1.18E-08 | Treg_spleen |
| ASAP1   | 3.69E-13 | 0.42295068 | 0.729 | 0.577 | 1.31E-08 | Treg_spleen |
| MAP3K5  | 4.00E-13 | 0.39708733 | 0.452 | 0.315 | 1.42E-08 | Treg_spleen |
| NCBP2   | 4.11E-13 | 0.18493175 | 0.436 | 0.291 | 1.46E-08 | Treg_spleen |
| TOB1    | 4.24E-13 | 0.33782686 | 0.47  | 0.326 | 1.50E-08 | Treg_spleen |
| PSMC1   | 4.34E-13 | 0.20466629 | 0.252 | 0.145 | 1.54E-08 | Treg_spleen |
| TMEM14B | 4.36E-13 | 0.23086693 | 0.597 | 0.438 | 1.55E-08 | Treg_spleen |
| LSM8    | 5.37E-13 | 0.18780417 | 0.282 | 0.168 | 1.90E-08 | Treg_spleen |
| NUDC    | 5.53E-13 | 0.28554953 | 0.445 | 0.301 | 1.96E-08 | Treg_spleen |
| HECTD1  | 5.57E-13 | 0.27667363 | 0.364 | 0.235 | 1.97E-08 | Treg_spleen |
| STIM2   | 5.84E-13 | 0.37552613 | 0.388 | 0.259 | 2.07E-08 | Treg_spleen |
| REV3L   | 6.15E-13 | 0.33411772 | 0.506 | 0.36  | 2.18E-08 | Treg_spleen |
| MRPS12  | 6.95E-13 | 0.17931116 | 0.27  | 0.162 | 2.46E-08 | Treg_spleen |
| ENSA    | 7.22E-13 | 0.30907562 | 0.5   | 0.347 | 2.56E-08 | Treg_spleen |
| PLCD4   | 7.23E-13 | 0.33547916 | 0.308 | 0.191 | 2.56E-08 | Treg_spleen |
| BCAP31  | 7.41E-13 | 0.13111203 | 0.272 | 0.16  | 2.63E-08 | Treg_spleen |
| PPP6R1  | 7.62E-13 | 0.29927076 | 0.324 | 0.204 | 2.70E-08 | Treg_spleen |
| DGKA    | 7.77E-13 | 0.33398045 | 0.583 | 0.428 | 2.75E-08 | Treg_spleen |
| CRADD   | 7.82E-13 | 0.64458926 | 0.254 | 0.158 | 2.77E-08 | Treg_spleen |

|                    |          |            |       |       |          |             |
|--------------------|----------|------------|-------|-------|----------|-------------|
| PSMA4              | 7.99E-13 | 0.24207357 | 0.355 | 0.23  | 2.83E-08 | Treg_spleen |
| ATP1B3             | 8.47E-13 | 0.27427451 | 0.451 | 0.308 | 3.00E-08 | Treg_spleen |
| ERBIN              | 8.48E-13 | 0.2824785  | 0.718 | 0.563 | 3.01E-08 | Treg_spleen |
| MRPL42             | 8.81E-13 | 0.25177668 | 0.261 | 0.156 | 3.12E-08 | Treg_spleen |
| INTS6              | 8.81E-13 | 0.28560134 | 0.488 | 0.34  | 3.12E-08 | Treg_spleen |
| SUZ12              | 9.23E-13 | 0.18530358 | 0.376 | 0.242 | 3.27E-08 | Treg_spleen |
| ASCC3              | 9.34E-13 | 0.26781812 | 0.531 | 0.374 | 3.31E-08 | Treg_spleen |
| CFL1               | 9.38E-13 | 0.26783362 | 0.757 | 0.644 | 3.32E-08 | Treg_spleen |
| SNRNP200           | 9.46E-13 | 0.2404081  | 0.31  | 0.192 | 3.35E-08 | Treg_spleen |
| SYTL3              | 9.50E-13 | 0.4007404  | 0.481 | 0.346 | 3.36E-08 | Treg_spleen |
| MAMU-A             | 9.68E-13 | 0.31055658 | 0.815 | 0.677 | 3.43E-08 | Treg_spleen |
| TAF9               | 1.11E-12 | 0.14934682 | 0.37  | 0.24  | 3.95E-08 | Treg_spleen |
| WWOX               | 1.19E-12 | 0.23031353 | 0.444 | 0.309 | 4.21E-08 | Treg_spleen |
| ARHGAP25           | 1.26E-12 | 0.27086098 | 0.398 | 0.267 | 4.47E-08 | Treg_spleen |
| AIP                | 1.33E-12 | 0.11471772 | 0.397 | 0.256 | 4.72E-08 | Treg_spleen |
| SYPL1              | 1.46E-12 | 0.30188365 | 0.254 | 0.151 | 5.18E-08 | Treg_spleen |
| MAP2K4             | 1.58E-12 | 0.34370182 | 0.39  | 0.259 | 5.60E-08 | Treg_spleen |
| CBFA2T2            | 1.69E-12 | 0.44866699 | 0.261 | 0.161 | 5.99E-08 | Treg_spleen |
| CARMIL1            | 1.72E-12 | 0.31539873 | 0.336 | 0.217 | 6.08E-08 | Treg_spleen |
| MORF4L2            | 1.74E-12 | 0.19897522 | 0.332 | 0.209 | 6.17E-08 | Treg_spleen |
| ENSMMUG00000017113 | 1.76E-12 | 0.24224113 | 0.37  | 0.242 | 6.23E-08 | Treg_spleen |
| RCOR3              | 1.97E-12 | 0.26086627 | 0.313 | 0.196 | 6.98E-08 | Treg_spleen |
| TBC1D22A           | 2.08E-12 | 0.32007115 | 0.418 | 0.285 | 7.38E-08 | Treg_spleen |
| TP53BP1            | 2.20E-12 | 0.32607498 | 0.465 | 0.32  | 7.80E-08 | Treg_spleen |
| ESYT1              | 2.23E-12 | 0.35174065 | 0.26  | 0.157 | 7.91E-08 | Treg_spleen |
| COPE               | 2.26E-12 | 0.10192843 | 0.39  | 0.253 | 8.02E-08 | Treg_spleen |
| ZNF331             | 2.29E-12 | 0.14615127 | 0.254 | 0.152 | 8.10E-08 | Treg_spleen |
| ENSMMUG00000006499 | 2.32E-12 | 0.15919471 | 0.446 | 0.297 | 8.23E-08 | Treg_spleen |
| MPC2               | 2.33E-12 | 0.24094855 | 0.377 | 0.246 | 8.25E-08 | Treg_spleen |
| CWC27              | 2.34E-12 | 0.29304155 | 0.394 | 0.265 | 8.29E-08 | Treg_spleen |
| NCOA1              | 2.43E-12 | 0.28241619 | 0.535 | 0.39  | 8.60E-08 | Treg_spleen |
| SLIRP              | 2.53E-12 | 0.26357249 | 0.608 | 0.458 | 8.95E-08 | Treg_spleen |
| FNBP1              | 2.53E-12 | 0.24595334 | 0.915 | 0.778 | 8.97E-08 | Treg_spleen |

|                   |          |            |       |       |          |             |
|-------------------|----------|------------|-------|-------|----------|-------------|
| GTF2F2            | 2.62E-12 | 0.31819917 | 0.34  | 0.222 | 9.29E-08 | Treg_spleen |
| MBD5              | 2.66E-12 | 0.29595314 | 0.529 | 0.386 | 9.41E-08 | Treg_spleen |
| XPO6              | 2.67E-12 | 0.32462294 | 0.507 | 0.361 | 9.46E-08 | Treg_spleen |
| CCT8              | 2.69E-12 | 0.23442015 | 0.42  | 0.28  | 9.54E-08 | Treg_spleen |
| RBMX              | 2.77E-12 | 0.19020244 | 0.614 | 0.443 | 9.81E-08 | Treg_spleen |
| BRK1              | 2.77E-12 | 0.18268494 | 0.444 | 0.295 | 9.81E-08 | Treg_spleen |
| TMEM167A          | 2.81E-12 | 0.10333594 | 0.341 | 0.215 | 9.95E-08 | Treg_spleen |
| PPIP5K2           | 2.81E-12 | 0.23816107 | 0.288 | 0.179 | 9.96E-08 | Treg_spleen |
| PSME4             | 2.84E-12 | 0.28949994 | 0.581 | 0.419 | 1.01E-07 | Treg_spleen |
| MARK3             | 2.89E-12 | 0.26655713 | 0.522 | 0.368 | 1.02E-07 | Treg_spleen |
| FBXW4             | 2.96E-12 | 0.44984054 | 0.305 | 0.196 | 1.05E-07 | Treg_spleen |
| RAB11FIP1         | 3.03E-12 | 0.59307242 | 0.288 | 0.184 | 1.07E-07 | Treg_spleen |
| ENSMUG00000015583 | 3.19E-12 | 0.32667631 | 0.8   | 0.664 | 1.13E-07 | Treg_spleen |
| PPP1CA            | 3.44E-12 | 0.17362919 | 0.446 | 0.303 | 1.22E-07 | Treg_spleen |
| STAT5A            | 3.55E-12 | 0.42872359 | 0.261 | 0.161 | 1.26E-07 | Treg_spleen |
| LPP               | 3.78E-12 | 0.37899976 | 0.563 | 0.428 | 1.34E-07 | Treg_spleen |
| RNF167            | 3.85E-12 | 0.3136442  | 0.287 | 0.178 | 1.36E-07 | Treg_spleen |
| ZSWIM6            | 4.32E-12 | 0.43198041 | 0.315 | 0.207 | 1.53E-07 | Treg_spleen |
| RUBCN             | 4.50E-12 | 0.31417605 | 0.366 | 0.243 | 1.59E-07 | Treg_spleen |
| CHCHD3            | 4.61E-12 | 0.22939571 | 0.411 | 0.274 | 1.63E-07 | Treg_spleen |
| EIF2S2            | 4.65E-12 | 0.21411988 | 0.507 | 0.36  | 1.65E-07 | Treg_spleen |
| MRFAP1            | 4.83E-12 | 0.15085513 | 0.337 | 0.215 | 1.71E-07 | Treg_spleen |
| XPC               | 4.90E-12 | 0.18717352 | 0.321 | 0.203 | 1.74E-07 | Treg_spleen |
| RTF1              | 5.08E-12 | 0.2145755  | 0.386 | 0.253 | 1.80E-07 | Treg_spleen |
| P2RY10            | 5.12E-12 | 0.12736265 | 0.271 | 0.164 | 1.82E-07 | Treg_spleen |
| TRERF1            | 5.51E-12 | 0.38372362 | 0.486 | 0.355 | 1.95E-07 | Treg_spleen |
| TNFAIP3           | 5.56E-12 | 0.45870532 | 0.69  | 0.556 | 1.97E-07 | Treg_spleen |
| RSBN1L            | 5.64E-12 | 0.2682783  | 0.347 | 0.227 | 2.00E-07 | Treg_spleen |
| NDEL1             | 5.98E-12 | 0.3458179  | 0.399 | 0.271 | 2.12E-07 | Treg_spleen |
| TMC6              | 6.05E-12 | 0.33780577 | 0.26  | 0.161 | 2.14E-07 | Treg_spleen |
| DAP3              | 6.15E-12 | 0.18674673 | 0.306 | 0.193 | 2.18E-07 | Treg_spleen |
| DDOST             | 6.42E-12 | 0.14599406 | 0.434 | 0.286 | 2.27E-07 | Treg_spleen |
| GDI2              | 6.55E-12 | 0.11725858 | 0.432 | 0.284 | 2.32E-07 | Treg_spleen |

|         |          |            |       |       |          |             |
|---------|----------|------------|-------|-------|----------|-------------|
| KDM2A   | 6.58E-12 | 0.23194948 | 0.643 | 0.469 | 2.33E-07 | Treg_spleen |
| SYNE2   | 6.69E-12 | 0.54064348 | 0.257 | 0.161 | 2.37E-07 | Treg_spleen |
| NSRP1   | 6.71E-12 | 0.19741323 | 0.403 | 0.268 | 2.38E-07 | Treg_spleen |
| LTV1    | 6.83E-12 | 0.23869497 | 0.359 | 0.235 | 2.42E-07 | Treg_spleen |
| TAPBP   | 6.83E-12 | 0.2668326  | 0.417 | 0.282 | 2.42E-07 | Treg_spleen |
| PSMB8   | 7.02E-12 | 0.14489766 | 0.59  | 0.425 | 2.49E-07 | Treg_spleen |
| PSMD13  | 7.22E-12 | 0.15287021 | 0.359 | 0.233 | 2.56E-07 | Treg_spleen |
| ATP5PD  | 7.38E-12 | 0.13730491 | 0.306 | 0.192 | 2.62E-07 | Treg_spleen |
| CLIC4   | 7.60E-12 | 0.47275103 | 0.311 | 0.205 | 2.69E-07 | Treg_spleen |
| PIK3R1  | 7.62E-12 | 0.27551512 | 0.35  | 0.231 | 2.70E-07 | Treg_spleen |
| SYNE3   | 8.39E-12 | 0.23077023 | 0.347 | 0.228 | 2.97E-07 | Treg_spleen |
| PMAIP1  | 8.40E-12 | 0.28622736 | 0.404 | 0.279 | 2.98E-07 | Treg_spleen |
| FNTB    | 9.43E-12 | 0.1272165  | 0.456 | 0.308 | 3.34E-07 | Treg_spleen |
| FTH1    | 9.67E-12 | 0.16437181 | 0.741 | 0.599 | 3.43E-07 | Treg_spleen |
| CAPZA1  | 9.88E-12 | 0.1770066  | 0.732 | 0.553 | 3.50E-07 | Treg_spleen |
| CHD3    | 9.88E-12 | 0.18800974 | 0.424 | 0.284 | 3.50E-07 | Treg_spleen |
| MIB1    | 9.99E-12 | 0.41579959 | 0.348 | 0.235 | 3.54E-07 | Treg_spleen |
| ARFGEF1 | 1.02E-11 | 0.22115127 | 0.545 | 0.386 | 3.60E-07 | Treg_spleen |
| PPP1R7  | 1.06E-11 | 0.17208264 | 0.252 | 0.151 | 3.76E-07 | Treg_spleen |
| UBE3A   | 1.07E-11 | 0.21289753 | 0.413 | 0.28  | 3.80E-07 | Treg_spleen |
| CCNL1   | 1.10E-11 | 0.24805789 | 0.849 | 0.702 | 3.89E-07 | Treg_spleen |
| POLR1D  | 1.11E-11 | 0.25186147 | 0.52  | 0.382 | 3.94E-07 | Treg_spleen |
| CSNK2B  | 1.13E-11 | 0.15366554 | 0.349 | 0.224 | 4.00E-07 | Treg_spleen |
| CYCS    | 1.13E-11 | 0.20151695 | 0.406 | 0.274 | 4.02E-07 | Treg_spleen |
| PDAP1   | 1.14E-11 | 0.16866464 | 0.319 | 0.201 | 4.05E-07 | Treg_spleen |
| ILF2    | 1.17E-11 | 0.21040354 | 0.329 | 0.21  | 4.14E-07 | Treg_spleen |
| MYL12B  | 1.23E-11 | 0.15367933 | 0.752 | 0.632 | 4.36E-07 | Treg_spleen |
| LRPPRC  | 1.38E-11 | 0.302721   | 0.439 | 0.304 | 4.89E-07 | Treg_spleen |
| HDLBP   | 1.44E-11 | 0.28999986 | 0.3   | 0.191 | 5.09E-07 | Treg_spleen |
| PIGY    | 1.48E-11 | 0.13801407 | 0.27  | 0.165 | 5.25E-07 | Treg_spleen |
| PDCD4   | 1.54E-11 | 0.28095488 | 0.489 | 0.346 | 5.47E-07 | Treg_spleen |
| EIF4A2  | 1.67E-11 | 0.23397247 | 0.683 | 0.514 | 5.91E-07 | Treg_spleen |
| SERBP1  | 1.67E-11 | 0.31483956 | 0.609 | 0.466 | 5.92E-07 | Treg_spleen |

|                    |          |            |       |       |          |             |
|--------------------|----------|------------|-------|-------|----------|-------------|
| PPDPF              | 1.72E-11 | 0.24839775 | 0.27  | 0.167 | 6.08E-07 | Treg_spleen |
| CFDP1              | 1.79E-11 | 0.19259368 | 0.58  | 0.414 | 6.34E-07 | Treg_spleen |
| POLR2A             | 1.98E-11 | 0.17441039 | 0.472 | 0.317 | 7.00E-07 | Treg_spleen |
| CD28               | 2.05E-11 | 0.27798585 | 0.65  | 0.487 | 7.28E-07 | Treg_spleen |
| PIKFYVE            | 2.09E-11 | 0.33369825 | 0.277 | 0.174 | 7.41E-07 | Treg_spleen |
| SSBP1              | 2.14E-11 | 0.14271895 | 0.282 | 0.176 | 7.58E-07 | Treg_spleen |
| PPM1B              | 2.40E-11 | 0.26126122 | 0.398 | 0.269 | 8.51E-07 | Treg_spleen |
| HIPK2              | 2.48E-11 | 0.48628743 | 0.283 | 0.184 | 8.80E-07 | Treg_spleen |
| CD44               | 2.57E-11 | 0.37420817 | 0.788 | 0.651 | 9.09E-07 | Treg_spleen |
| CCT5               | 2.57E-11 | 0.26270837 | 0.453 | 0.318 | 9.09E-07 | Treg_spleen |
| IVNS1ABP           | 2.57E-11 | 0.23598273 | 0.492 | 0.35  | 9.10E-07 | Treg_spleen |
| ECPAS              | 2.70E-11 | 0.36188376 | 0.285 | 0.181 | 9.56E-07 | Treg_spleen |
| DDX10              | 3.13E-11 | 0.44455956 | 0.358 | 0.247 | 1.11E-06 | Treg_spleen |
| EPS15              | 3.34E-11 | 0.24700818 | 0.537 | 0.388 | 1.18E-06 | Treg_spleen |
| ENSMMUG00000054038 | 3.67E-11 | 0.2222482  | 0.671 | 0.518 | 1.30E-06 | Treg_spleen |
| AMDHD1             | 3.86E-11 | 0.30940551 | 0.426 | 0.3   | 1.37E-06 | Treg_spleen |
| ANO6               | 3.86E-11 | 0.40608142 | 0.259 | 0.163 | 1.37E-06 | Treg_spleen |
| CCT3               | 4.26E-11 | 0.22193985 | 0.537 | 0.386 | 1.51E-06 | Treg_spleen |
| VPS53              | 4.29E-11 | 0.35138374 | 0.301 | 0.196 | 1.52E-06 | Treg_spleen |
| RASSF5             | 4.30E-11 | 0.12978205 | 0.287 | 0.18  | 1.52E-06 | Treg_spleen |
| ENSMMUG00000065373 | 4.40E-11 | 0.54827252 | 0.913 | 0.926 | 1.56E-06 | Treg_spleen |
| PTPN2              | 4.42E-11 | 0.20541528 | 0.496 | 0.347 | 1.57E-06 | Treg_spleen |
| UBA2               | 4.48E-11 | 0.17460138 | 0.355 | 0.233 | 1.59E-06 | Treg_spleen |
| SLC20A1            | 4.54E-11 | 0.34132478 | 0.307 | 0.202 | 1.61E-06 | Treg_spleen |
| ILF3               | 4.57E-11 | 0.18134011 | 0.502 | 0.352 | 1.62E-06 | Treg_spleen |
| TRIM44             | 4.75E-11 | 0.25218822 | 0.321 | 0.21  | 1.68E-06 | Treg_spleen |
| LIMS1              | 4.77E-11 | 0.28433287 | 0.475 | 0.341 | 1.69E-06 | Treg_spleen |
| UBAP2L             | 4.92E-11 | 0.19464207 | 0.37  | 0.246 | 1.74E-06 | Treg_spleen |
| NASP               | 5.46E-11 | 0.20826149 | 0.521 | 0.375 | 1.94E-06 | Treg_spleen |
| ATF7IP             | 5.96E-11 | 0.2499518  | 0.763 | 0.612 | 2.11E-06 | Treg_spleen |
| SRSF6              | 6.23E-11 | 0.13854762 | 0.416 | 0.282 | 2.21E-06 | Treg_spleen |
| ZBED1              | 7.06E-11 | 0.26395606 | 0.315 | 0.204 | 2.50E-06 | Treg_spleen |
| HMBOX1             | 8.04E-11 | 0.31659344 | 0.33  | 0.22  | 2.85E-06 | Treg_spleen |

|                   |          |            |       |       |          |             |
|-------------------|----------|------------|-------|-------|----------|-------------|
| FBXW7             | 8.52E-11 | 0.24911065 | 0.662 | 0.506 | 3.02E-06 | Treg_spleen |
| IRF1              | 8.63E-11 | 0.52987063 | 0.372 | 0.257 | 3.06E-06 | Treg_spleen |
| PPP2R1A           | 8.79E-11 | 0.19365703 | 0.306 | 0.195 | 3.12E-06 | Treg_spleen |
| DLG1              | 1.00E-10 | 0.31958782 | 0.747 | 0.582 | 3.54E-06 | Treg_spleen |
| ENSMUG00000000478 | 1.00E-10 | 0.17383375 | 0.251 | 0.154 | 3.55E-06 | Treg_spleen |
| CEP350            | 1.03E-10 | 0.11605673 | 0.43  | 0.294 | 3.64E-06 | Treg_spleen |
| RALY              | 1.08E-10 | 0.19284    | 0.516 | 0.365 | 3.82E-06 | Treg_spleen |
| GNG5              | 1.09E-10 | 0.14112787 | 0.586 | 0.435 | 3.86E-06 | Treg_spleen |
| TXN               | 1.18E-10 | 0.2953803  | 0.431 | 0.303 | 4.17E-06 | Treg_spleen |
| PSMC4             | 1.25E-10 | 0.14052651 | 0.28  | 0.177 | 4.43E-06 | Treg_spleen |
| PHF14             | 1.28E-10 | 0.17960428 | 0.502 | 0.359 | 4.55E-06 | Treg_spleen |
| GIGYF2            | 1.32E-10 | 0.21635906 | 0.493 | 0.344 | 4.66E-06 | Treg_spleen |
| HNRNPR            | 1.32E-10 | 0.16189658 | 0.506 | 0.364 | 4.69E-06 | Treg_spleen |
| ECHDC1            | 1.36E-10 | 0.25366809 | 0.346 | 0.231 | 4.83E-06 | Treg_spleen |
| SMURF2            | 1.44E-10 | 0.42101955 | 0.269 | 0.177 | 5.12E-06 | Treg_spleen |
| RCOR1             | 1.45E-10 | 0.23171386 | 0.308 | 0.203 | 5.13E-06 | Treg_spleen |
| NDUFS8            | 1.46E-10 | 0.11955179 | 0.304 | 0.195 | 5.16E-06 | Treg_spleen |
| ASL               | 1.57E-10 | 0.18822172 | 0.266 | 0.167 | 5.56E-06 | Treg_spleen |
| SUSD6             | 1.58E-10 | 0.34870599 | 0.384 | 0.267 | 5.60E-06 | Treg_spleen |
| EIF2B3            | 1.63E-10 | 0.31854585 | 0.321 | 0.213 | 5.79E-06 | Treg_spleen |
| JPT1              | 1.64E-10 | 0.16496497 | 0.721 | 0.602 | 5.81E-06 | Treg_spleen |
| NDUFAF2           | 1.79E-10 | 0.24599616 | 0.273 | 0.173 | 6.34E-06 | Treg_spleen |
| TIAL1             | 1.86E-10 | 0.16178903 | 0.392 | 0.263 | 6.58E-06 | Treg_spleen |
| NSD2              | 2.26E-10 | 0.22863829 | 0.289 | 0.186 | 8.00E-06 | Treg_spleen |
| SPTLC2            | 2.28E-10 | 0.3923558  | 0.268 | 0.172 | 8.07E-06 | Treg_spleen |
| BRD4              | 2.51E-10 | 0.11571005 | 0.333 | 0.217 | 8.90E-06 | Treg_spleen |
| TGFB2             | 2.63E-10 | 0.19316597 | 0.591 | 0.438 | 9.31E-06 | Treg_spleen |
| R3HDM1            | 2.74E-10 | 0.22269722 | 0.345 | 0.233 | 9.70E-06 | Treg_spleen |
| AARS1             | 2.92E-10 | 0.19907982 | 0.463 | 0.321 | 1.04E-05 | Treg_spleen |
| DNAJC24           | 3.32E-10 | 0.26170714 | 0.444 | 0.317 | 1.17E-05 | Treg_spleen |
| NHP2              | 3.32E-10 | 0.23112121 | 0.336 | 0.227 | 1.18E-05 | Treg_spleen |
| RPS6KC1           | 3.65E-10 | 0.17641044 | 0.337 | 0.224 | 1.29E-05 | Treg_spleen |
| NAPG              | 3.77E-10 | 0.28146124 | 0.501 | 0.364 | 1.34E-05 | Treg_spleen |



|                    |          |            |       |       |          |             |
|--------------------|----------|------------|-------|-------|----------|-------------|
| ENSMMUG00000018557 | 4.03E-10 | 0.15440179 | 0.375 | 0.252 | 1.43E-05 | Treg_spleen |
| MIC1               | 4.12E-10 | 0.11466476 | 0.613 | 0.458 | 1.46E-05 | Treg_spleen |
| SMAP2              | 4.13E-10 | 0.16975454 | 0.575 | 0.42  | 1.46E-05 | Treg_spleen |
| EIF5B              | 4.19E-10 | 0.1617959  | 0.373 | 0.259 | 1.48E-05 | Treg_spleen |
| DCP2               | 4.42E-10 | 0.27490635 | 0.423 | 0.3   | 1.56E-05 | Treg_spleen |
| ZNF700             | 4.55E-10 | 0.26236858 | 0.257 | 0.163 | 1.61E-05 | Treg_spleen |
| HLCS               | 4.69E-10 | 0.33656443 | 0.257 | 0.166 | 1.66E-05 | Treg_spleen |
| ENSMMUG00000055584 | 4.70E-10 | 0.19452041 | 0.833 | 0.72  | 1.66E-05 | Treg_spleen |
| ENSMMUG00000052424 | 5.79E-10 | 0.32846793 | 0.836 | 0.689 | 2.05E-05 | Treg_spleen |
| CLTC               | 6.08E-10 | 0.23281608 | 0.36  | 0.248 | 2.16E-05 | Treg_spleen |
| ENSMMUG00000054743 | 6.17E-10 | 0.26145185 | 0.277 | 0.178 | 2.19E-05 | Treg_spleen |
| DNAJB14            | 6.32E-10 | 0.22056121 | 0.31  | 0.208 | 2.24E-05 | Treg_spleen |
| EED                | 6.66E-10 | 0.17462917 | 0.282 | 0.183 | 2.36E-05 | Treg_spleen |
| H1-4               | 6.73E-10 | 0.21716564 | 0.311 | 0.208 | 2.39E-05 | Treg_spleen |
| TCF20              | 6.86E-10 | 0.18585279 | 0.378 | 0.262 | 2.43E-05 | Treg_spleen |
| PHF6               | 7.02E-10 | 0.14003145 | 0.25  | 0.158 | 2.49E-05 | Treg_spleen |
| PRKDC              | 7.05E-10 | 0.20858747 | 0.519 | 0.377 | 2.50E-05 | Treg_spleen |
| ENSMMUG00000030374 | 7.22E-10 | 0.13569283 | 0.317 | 0.21  | 2.56E-05 | Treg_spleen |
| RAD51B             | 7.28E-10 | 0.47146949 | 0.338 | 0.237 | 2.58E-05 | Treg_spleen |
| KIAA0232           | 7.39E-10 | 0.34737988 | 0.334 | 0.228 | 2.62E-05 | Treg_spleen |
| RPN1               | 7.41E-10 | 0.10651169 | 0.337 | 0.222 | 2.63E-05 | Treg_spleen |
| PAFAH1B1           | 8.02E-10 | 0.22372178 | 0.626 | 0.466 | 2.84E-05 | Treg_spleen |
| RAP1GDS1           | 8.49E-10 | 0.18900964 | 0.52  | 0.383 | 3.01E-05 | Treg_spleen |
| CS                 | 8.76E-10 | 0.13247551 | 0.497 | 0.352 | 3.10E-05 | Treg_spleen |
| ATP5PB             | 8.88E-10 | 0.13662224 | 0.414 | 0.283 | 3.15E-05 | Treg_spleen |
| PIP4K2A            | 9.23E-10 | 0.26985578 | 0.648 | 0.5   | 3.27E-05 | Treg_spleen |
| CCNH               | 1.00E-09 | 0.32346888 | 0.334 | 0.227 | 3.55E-05 | Treg_spleen |
| ARHGEF6            | 1.02E-09 | 0.20547995 | 0.473 | 0.335 | 3.61E-05 | Treg_spleen |
| SARS1              | 1.11E-09 | 0.11356604 | 0.283 | 0.184 | 3.94E-05 | Treg_spleen |
| PCF11              | 1.11E-09 | 0.15567446 | 0.316 | 0.212 | 3.95E-05 | Treg_spleen |
| TDRD3              | 1.21E-09 | 0.20957959 | 0.355 | 0.242 | 4.27E-05 | Treg_spleen |
| SUFU               | 1.25E-09 | 0.46283933 | 0.292 | 0.201 | 4.43E-05 | Treg_spleen |
| APPL1              | 1.26E-09 | 0.11703674 | 0.264 | 0.167 | 4.46E-05 | Treg_spleen |

|                    |          |            |       |       |            |             |
|--------------------|----------|------------|-------|-------|------------|-------------|
| OXNAD1             | 1.37E-09 | 0.34069793 | 0.26  | 0.171 | 4.85E-05   | Treg_spleen |
| IL4R               | 1.39E-09 | 0.25578118 | 0.324 | 0.223 | 4.93E-05   | Treg_spleen |
| PPP1R16B           | 1.51E-09 | 0.26091011 | 0.46  | 0.34  | 5.37E-05   | Treg_spleen |
| ENSMMUG00000061824 | 1.59E-09 | 0.25041096 | 0.875 | 0.782 | 5.62E-05   | Treg_spleen |
| METAP2             | 1.60E-09 | 0.16202806 | 0.362 | 0.25  | 5.67E-05   | Treg_spleen |
| TERF1              | 1.62E-09 | 0.12381879 | 0.256 | 0.164 | 5.76E-05   | Treg_spleen |
| WTAP               | 1.65E-09 | 0.15359436 | 0.675 | 0.505 | 5.84E-05   | Treg_spleen |
| DOCK8              | 1.82E-09 | 0.25082752 | 0.756 | 0.61  | 6.45E-05   | Treg_spleen |
| NAMPT              | 2.20E-09 | 0.35146856 | 0.331 | 0.229 | 7.80E-05   | Treg_spleen |
| PCNX1              | 2.45E-09 | 0.26951152 | 0.413 | 0.297 | 8.68E-05   | Treg_spleen |
| THOC7              | 2.62E-09 | 0.11649349 | 0.279 | 0.181 | 9.29E-05   | Treg_spleen |
| PACS1              | 2.64E-09 | 0.20335119 | 0.557 | 0.425 | 9.34E-05   | Treg_spleen |
| SAFB2              | 2.71E-09 | 0.15137796 | 0.359 | 0.246 | 9.59E-05   | Treg_spleen |
| SPG11              | 2.83E-09 | 0.10174865 | 0.289 | 0.19  | 0.00010025 | Treg_spleen |
| PTEN               | 2.85E-09 | 0.24225649 | 0.506 | 0.374 | 0.00010094 | Treg_spleen |
| PDLIM5             | 2.90E-09 | 0.32418753 | 0.293 | 0.201 | 0.00010277 | Treg_spleen |
| PTBP3              | 2.95E-09 | 0.15829257 | 0.598 | 0.446 | 0.00010455 | Treg_spleen |
| PPP4R3B            | 3.04E-09 | 0.11728197 | 0.43  | 0.3   | 0.00010757 | Treg_spleen |
| CD3E               | 3.04E-09 | 0.11797945 | 0.621 | 0.454 | 0.00010771 | Treg_spleen |
| TMED10             | 3.17E-09 | 0.12956005 | 0.485 | 0.347 | 0.00011245 | Treg_spleen |
| RBM6               | 3.20E-09 | 0.18981237 | 0.456 | 0.328 | 0.00011333 | Treg_spleen |
| FYB1               | 3.34E-09 | 0.50901048 | 0.699 | 0.582 | 0.00011818 | Treg_spleen |
| ENSMMUG00000021425 | 3.49E-09 | 0.31863914 | 0.416 | 0.297 | 0.00012381 | Treg_spleen |
| MYO5A              | 3.79E-09 | 0.25635939 | 0.369 | 0.258 | 0.00013446 | Treg_spleen |
| ATAD2B             | 3.97E-09 | 0.21489163 | 0.528 | 0.393 | 0.00014083 | Treg_spleen |
| PELI1              | 4.44E-09 | 0.47208172 | 0.743 | 0.618 | 0.00015749 | Treg_spleen |
| BABAM2             | 4.67E-09 | 0.1626991  | 0.481 | 0.349 | 0.00016554 | Treg_spleen |
| STRBP              | 5.76E-09 | 0.25896085 | 0.274 | 0.184 | 0.00020407 | Treg_spleen |
| DENR               | 5.87E-09 | 0.18107791 | 0.283 | 0.188 | 0.000208   | Treg_spleen |
| SPOCK2             | 5.89E-09 | 0.24509339 | 0.69  | 0.563 | 0.00020884 | Treg_spleen |
| EPSTI1             | 5.91E-09 | 0.35062207 | 0.259 | 0.172 | 0.00020953 | Treg_spleen |
| TANGO6             | 6.23E-09 | 0.31706934 | 0.329 | 0.229 | 0.00022078 | Treg_spleen |
| LRIG1              | 6.41E-09 | 0.36367924 | 0.317 | 0.223 | 0.00022722 | Treg_spleen |

|                     |          |            |       |       |            |             |
|---------------------|----------|------------|-------|-------|------------|-------------|
| MECP2               | 6.62E-09 | 0.14582923 | 0.436 | 0.309 | 0.00023451 | Treg_spleen |
| APEX1               | 6.94E-09 | 0.19759357 | 0.339 | 0.236 | 0.00024583 | Treg_spleen |
| ACAP1               | 7.21E-09 | 0.12059627 | 0.266 | 0.175 | 0.00025538 | Treg_spleen |
| CCDC69              | 7.29E-09 | 0.12891863 | 0.362 | 0.249 | 0.00025844 | Treg_spleen |
| TNRC6C              | 7.30E-09 | 0.38715979 | 0.292 | 0.199 | 0.00025876 | Treg_spleen |
| ATP6V1FNB           | 7.50E-09 | 0.12881481 | 0.355 | 0.248 | 0.00026557 | Treg_spleen |
| HNRNPL              | 8.06E-09 | 0.10924327 | 0.519 | 0.37  | 0.00028559 | Treg_spleen |
| ABCC1               | 8.33E-09 | 0.2405689  | 0.31  | 0.216 | 0.00029531 | Treg_spleen |
| CAMKMT              | 8.37E-09 | 0.24752231 | 0.461 | 0.342 | 0.00029674 | Treg_spleen |
| SNX6                | 8.82E-09 | 0.15059081 | 0.53  | 0.388 | 0.00031241 | Treg_spleen |
| EEA1                | 9.02E-09 | 0.24024887 | 0.325 | 0.223 | 0.00031944 | Treg_spleen |
| ENSMMUG00000006965  | 9.12E-09 | 0.15253796 | 0.395 | 0.279 | 0.00032322 | Treg_spleen |
| INO80               | 9.13E-09 | 0.22359644 | 0.303 | 0.207 | 0.00032334 | Treg_spleen |
| RFX7                | 9.27E-09 | 0.3020645  | 0.352 | 0.259 | 0.00032861 | Treg_spleen |
| ATRX                | 9.43E-09 | 0.22491843 | 0.703 | 0.55  | 0.000334   | Treg_spleen |
| PRR14L              | 9.43E-09 | 0.33897244 | 0.254 | 0.168 | 0.00033412 | Treg_spleen |
| GABPB1              | 9.61E-09 | 0.2833034  | 0.509 | 0.379 | 0.00034066 | Treg_spleen |
| H2AFY               | 9.74E-09 | 0.13092733 | 0.481 | 0.343 | 0.00034506 | Treg_spleen |
| ENSMMUG000000060439 | 1.02E-08 | 0.2966443  | 0.306 | 0.212 | 0.00036025 | Treg_spleen |
| NSMCE2              | 1.04E-08 | 0.13666471 | 0.541 | 0.395 | 0.00036735 | Treg_spleen |
| MED13L              | 1.09E-08 | 0.30208318 | 0.793 | 0.662 | 0.00038642 | Treg_spleen |
| SNRNP70             | 1.09E-08 | 0.14582989 | 0.474 | 0.335 | 0.00038696 | Treg_spleen |
| CUL1                | 1.16E-08 | 0.10240972 | 0.365 | 0.251 | 0.00041269 | Treg_spleen |
| YPEL5               | 1.20E-08 | 0.2934246  | 0.641 | 0.493 | 0.00042615 | Treg_spleen |
| NBAS                | 1.24E-08 | 0.27034682 | 0.393 | 0.286 | 0.00044091 | Treg_spleen |
| PHACTR4             | 1.26E-08 | 0.21738526 | 0.312 | 0.215 | 0.00044514 | Treg_spleen |
| ATG7                | 1.32E-08 | 0.39693987 | 0.265 | 0.179 | 0.00046862 | Treg_spleen |
| FNDC3B              | 1.33E-08 | 0.56405033 | 0.275 | 0.19  | 0.00047114 | Treg_spleen |
| AEBP2               | 1.43E-08 | 0.15164518 | 0.498 | 0.365 | 0.00050697 | Treg_spleen |
| COX7B               | 1.44E-08 | 0.14180366 | 0.541 | 0.411 | 0.00051067 | Treg_spleen |
| CSPP1               | 1.61E-08 | 0.1018662  | 0.377 | 0.266 | 0.00057014 | Treg_spleen |
| SYAP1               | 1.62E-08 | 0.19385826 | 0.453 | 0.324 | 0.00057243 | Treg_spleen |
| RUNX1               | 1.68E-08 | 0.33253032 | 0.677 | 0.558 | 0.00059456 | Treg_spleen |

|                    |          |            |       |       |            |             |
|--------------------|----------|------------|-------|-------|------------|-------------|
| HNRNPK             | 1.68E-08 | 0.17699081 | 0.787 | 0.646 | 0.0005948  | Treg_spleen |
| TSPAN14            | 1.78E-08 | 0.22578348 | 0.283 | 0.192 | 0.00063106 | Treg_spleen |
| UBE2N              | 1.90E-08 | 0.17090169 | 0.411 | 0.294 | 0.00067294 | Treg_spleen |
| UBE2K              | 1.97E-08 | 0.10196759 | 0.502 | 0.368 | 0.00069971 | Treg_spleen |
| ENSMMUG00000064692 | 2.06E-08 | 0.36815577 | 0.68  | 0.624 | 0.00072892 | Treg_spleen |
| NKTR               | 2.23E-08 | 0.11545798 | 0.471 | 0.341 | 0.00078896 | Treg_spleen |
| DDX39A             | 2.25E-08 | 0.12440413 | 0.457 | 0.327 | 0.00079572 | Treg_spleen |
| ENSMMUG00000045425 | 2.30E-08 | 0.14633262 | 0.252 | 0.165 | 0.00081524 | Treg_spleen |
| UBAP2              | 2.42E-08 | 0.17486528 | 0.342 | 0.241 | 0.00085865 | Treg_spleen |
| IMMP2L             | 2.43E-08 | 0.29023764 | 0.533 | 0.415 | 0.00085995 | Treg_spleen |
| MTF2               | 2.43E-08 | 0.11928664 | 0.266 | 0.176 | 0.00086197 | Treg_spleen |
| COX6C              | 2.52E-08 | 0.11811911 | 0.708 | 0.595 | 0.00089225 | Treg_spleen |
| RGS1               | 2.55E-08 | 0.11976012 | 0.521 | 0.397 | 0.00090428 | Treg_spleen |
| LBH                | 2.64E-08 | 0.14676617 | 0.56  | 0.417 | 0.00093564 | Treg_spleen |
| ENSMMUG00000061125 | 2.65E-08 | 0.34251411 | 0.651 | 0.533 | 0.00094036 | Treg_spleen |
| SUPT3H             | 2.71E-08 | 0.2358164  | 0.338 | 0.243 | 0.00096173 | Treg_spleen |
| TTC19              | 2.77E-08 | 0.14834324 | 0.34  | 0.235 | 0.00097992 | Treg_spleen |
| SNRPD2             | 2.91E-08 | 0.16142468 | 0.563 | 0.434 | 0.00103105 | Treg_spleen |
| PARN               | 2.98E-08 | 0.20250565 | 0.313 | 0.214 | 0.00105447 | Treg_spleen |
| SLC39A11           | 3.22E-08 | 0.15469445 | 0.404 | 0.29  | 0.0011408  | Treg_spleen |
| HOOK3              | 3.26E-08 | 0.17632861 | 0.664 | 0.51  | 0.00115417 | Treg_spleen |
| DENND1B            | 3.45E-08 | 0.3564317  | 0.334 | 0.243 | 0.00122306 | Treg_spleen |
| AKAP17A            | 3.55E-08 | 0.30807505 | 0.272 | 0.187 | 0.00125618 | Treg_spleen |
| TRIP4              | 3.71E-08 | 0.17777921 | 0.256 | 0.171 | 0.00131477 | Treg_spleen |
| HNRNPA3            | 3.83E-08 | 0.18827702 | 0.731 | 0.603 | 0.00135845 | Treg_spleen |
| RNF149             | 4.10E-08 | 0.15770207 | 0.488 | 0.356 | 0.0014525  | Treg_spleen |
| CNOT10             | 4.56E-08 | 0.20074096 | 0.287 | 0.197 | 0.00161627 | Treg_spleen |
| EIPR1              | 4.59E-08 | 0.19854966 | 0.321 | 0.224 | 0.00162663 | Treg_spleen |
| PABPC1             | 4.91E-08 | 0.18927331 | 0.903 | 0.801 | 0.00173996 | Treg_spleen |
| MYH9               | 4.94E-08 | 0.20180314 | 0.684 | 0.537 | 0.00175109 | Treg_spleen |
| DYNC1H1            | 4.94E-08 | 0.14336438 | 0.338 | 0.235 | 0.00175191 | Treg_spleen |
| BICDL1             | 5.01E-08 | 0.25331464 | 0.749 | 0.617 | 0.00177427 | Treg_spleen |
| USP34              | 5.55E-08 | 0.20395434 | 0.784 | 0.625 | 0.00196633 | Treg_spleen |

|                    |          |            |       |       |            |             |
|--------------------|----------|------------|-------|-------|------------|-------------|
| UBR2               | 5.68E-08 | 0.15536647 | 0.378 | 0.268 | 0.00201392 | Treg_spleen |
| CLEC16A            | 5.85E-08 | 0.24499891 | 0.251 | 0.169 | 0.00207447 | Treg_spleen |
| MGAT5              | 6.03E-08 | 0.23287943 | 0.643 | 0.506 | 0.00213659 | Treg_spleen |
| HS2ST1             | 6.48E-08 | 0.21724603 | 0.297 | 0.206 | 0.0022961  | Treg_spleen |
| SNU13              | 6.63E-08 | 0.11489836 | 0.598 | 0.451 | 0.00234785 | Treg_spleen |
| ENSMMUG00000012203 | 6.81E-08 | 0.24552077 | 0.431 | 0.322 | 0.00241448 | Treg_spleen |
| VPS8               | 7.13E-08 | 0.16179627 | 0.32  | 0.223 | 0.002528   | Treg_spleen |
| WDFY1              | 7.19E-08 | 0.35970017 | 0.365 | 0.27  | 0.00254796 | Treg_spleen |
| WWP1               | 7.43E-08 | 0.20558561 | 0.377 | 0.271 | 0.00263304 | Treg_spleen |
| AVL9               | 7.99E-08 | 0.26226674 | 0.283 | 0.197 | 0.00283204 | Treg_spleen |
| RPL19              | 9.06E-08 | 0.13766876 | 0.862 | 0.87  | 0.00320986 | Treg_spleen |
| RSU1               | 9.65E-08 | 0.22462388 | 0.419 | 0.308 | 0.00342028 | Treg_spleen |
| ENSMMUG00000060229 | 9.70E-08 | 0.14878971 | 0.397 | 0.285 | 0.00343798 | Treg_spleen |
| LARP4              | 9.74E-08 | 0.10858656 | 0.416 | 0.297 | 0.0034522  | Treg_spleen |
| RMDN1              | 9.99E-08 | 0.21863912 | 0.368 | 0.264 | 0.00353833 | Treg_spleen |
| HNRNPH1            | 1.02E-07 | 0.10674459 | 0.685 | 0.532 | 0.00362804 | Treg_spleen |
| IPO7               | 1.05E-07 | 0.17257945 | 0.334 | 0.234 | 0.0037276  | Treg_spleen |
| RPL26              | 1.07E-07 | 0.16356581 | 0.86  | 0.845 | 0.0038076  | Treg_spleen |
| FNDC3A             | 1.20E-07 | 0.23421776 | 0.587 | 0.451 | 0.00425267 | Treg_spleen |
| RNF138             | 1.24E-07 | 0.19425539 | 0.421 | 0.31  | 0.00440522 | Treg_spleen |
| CMAH               | 1.39E-07 | 0.21890561 | 0.421 | 0.312 | 0.00493742 | Treg_spleen |
| BPTF               | 1.40E-07 | 0.14437275 | 0.646 | 0.509 | 0.00495013 | Treg_spleen |
| ZFAND3             | 1.42E-07 | 0.15340115 | 0.729 | 0.578 | 0.00502522 | Treg_spleen |
| NUFIP2             | 1.42E-07 | 0.23999386 | 0.516 | 0.393 | 0.00504542 | Treg_spleen |
| WARS2              | 1.60E-07 | 0.1410951  | 0.322 | 0.227 | 0.00565257 | Treg_spleen |
| RABGAP1L           | 1.61E-07 | 0.23024821 | 0.873 | 0.769 | 0.00570064 | Treg_spleen |
| SLC25A43           | 1.66E-07 | 0.1312931  | 0.582 | 0.47  | 0.00586648 | Treg_spleen |
| GATA3              | 1.66E-07 | 0.2261253  | 0.374 | 0.271 | 0.00588521 | Treg_spleen |
| CHCHD2             | 1.68E-07 | 0.20694362 | 0.711 | 0.618 | 0.00594897 | Treg_spleen |
| ENSMMUG00000003130 | 1.74E-07 | 0.15130864 | 0.311 | 0.218 | 0.00615587 | Treg_spleen |
| REEP5              | 1.77E-07 | 0.16983692 | 0.353 | 0.253 | 0.00626158 | Treg_spleen |
| SSR4               | 1.82E-07 | 0.10684603 | 0.617 | 0.483 | 0.00645561 | Treg_spleen |
| STAU2              | 1.92E-07 | 0.17812797 | 0.426 | 0.316 | 0.00680434 | Treg_spleen |

|          |          |            |       |       |            |             |
|----------|----------|------------|-------|-------|------------|-------------|
| TAGAP    | 1.98E-07 | 0.21577797 | 0.457 | 0.349 | 0.0070299  | Treg_spleen |
| CBLB     | 2.01E-07 | 0.39177899 | 0.769 | 0.653 | 0.00713691 | Treg_spleen |
| USP9X    | 2.02E-07 | 0.13675452 | 0.598 | 0.455 | 0.007144   | Treg_spleen |
| MSH3     | 2.11E-07 | 0.21911511 | 0.3   | 0.21  | 0.00746854 | Treg_spleen |
| DNAJC15  | 2.38E-07 | 0.11513317 | 0.295 | 0.206 | 0.00845052 | Treg_spleen |
| SEC61B   | 2.61E-07 | 0.12872203 | 0.549 | 0.428 | 0.00925001 | Treg_spleen |
| COX10    | 2.99E-07 | 0.14111612 | 0.302 | 0.215 | 0.01060956 | Treg_spleen |
| TRPS1    | 3.02E-07 | 0.37562442 | 0.587 | 0.479 | 0.01068612 | Treg_spleen |
| NUP153   | 3.08E-07 | 0.13649883 | 0.486 | 0.363 | 0.01090466 | Treg_spleen |
| THEMIS   | 3.41E-07 | 0.39036389 | 0.576 | 0.49  | 0.01208788 | Treg_spleen |
| MLLT10   | 3.79E-07 | 0.1604195  | 0.514 | 0.395 | 0.0134226  | Treg_spleen |
| ITFG1    | 3.80E-07 | 0.14063772 | 0.457 | 0.341 | 0.01347453 | Treg_spleen |
| EIF4EBP3 | 3.97E-07 | 0.1063927  | 0.561 | 0.418 | 0.01405793 | Treg_spleen |
| CAST     | 4.55E-07 | 0.13036574 | 0.535 | 0.405 | 0.0161137  | Treg_spleen |
| EXOC2    | 4.92E-07 | 0.11665813 | 0.352 | 0.252 | 0.01744733 | Treg_spleen |
| GOLM2    | 4.98E-07 | 0.14013041 | 0.528 | 0.4   | 0.0176372  | Treg_spleen |
| FLI1     | 5.05E-07 | 0.12254703 | 0.367 | 0.272 | 0.01788253 | Treg_spleen |
| PPP1R8   | 5.52E-07 | 0.10764114 | 0.263 | 0.182 | 0.01956169 | Treg_spleen |
| VPS13D   | 6.18E-07 | 0.27735475 | 0.376 | 0.279 | 0.02191324 | Treg_spleen |
| CALU     | 6.91E-07 | 0.14777326 | 0.254 | 0.176 | 0.02450107 | Treg_spleen |
| SLC10A7  | 7.61E-07 | 0.38384999 | 0.278 | 0.201 | 0.02695701 | Treg_spleen |
| UBE2D3   | 7.64E-07 | 0.1438304  | 0.876 | 0.761 | 0.027066   | Treg_spleen |
| ACBD6    | 8.18E-07 | 0.18398295 | 0.258 | 0.178 | 0.02899227 | Treg_spleen |
| KDM2B    | 8.22E-07 | 0.22562689 | 0.345 | 0.254 | 0.02912914 | Treg_spleen |
| TMEM181  | 8.22E-07 | 0.22391891 | 0.279 | 0.199 | 0.02913413 | Treg_spleen |
| RNF213   | 8.29E-07 | 0.19480028 | 0.462 | 0.35  | 0.02938303 | Treg_spleen |
| MRPS6    | 8.32E-07 | 0.11703547 | 0.437 | 0.327 | 0.02949199 | Treg_spleen |
| MTSS1    | 8.34E-07 | 0.32221571 | 0.272 | 0.199 | 0.02955342 | Treg_spleen |
| FUT8     | 8.66E-07 | 0.21889538 | 0.362 | 0.266 | 0.03066721 | Treg_spleen |
| ATP6V0D1 | 8.90E-07 | 0.2172606  | 0.311 | 0.224 | 0.03152748 | Treg_spleen |
| PIAS2    | 9.25E-07 | 0.13741009 | 0.346 | 0.251 | 0.0327771  | Treg_spleen |
| ATE1     | 9.37E-07 | 0.13003067 | 0.319 | 0.23  | 0.03321565 | Treg_spleen |
| ATP5F1A  | 9.45E-07 | 0.13689763 | 0.631 | 0.493 | 0.03348098 | Treg_spleen |

|                    |          |            |       |       |            |             |
|--------------------|----------|------------|-------|-------|------------|-------------|
| ST3GAL1            | 1.12E-06 | 0.22710187 | 0.368 | 0.272 | 0.03958803 | Treg_spleen |
| DDX24              | 1.15E-06 | 0.1038361  | 0.556 | 0.422 | 0.04058704 | Treg_spleen |
| KIAA1109           | 1.15E-06 | 0.2038409  | 0.441 | 0.335 | 0.04080046 | Treg_spleen |
| ENSMMUG00000056190 | 1.15E-06 | 0.16235275 | 0.528 | 0.413 | 0.04088885 | Treg_spleen |
| DENND4C            | 1.23E-06 | 0.2587682  | 0.285 | 0.206 | 0.04372283 | Treg_spleen |
| KATNBL1            | 1.35E-06 | 0.11091874 | 0.273 | 0.192 | 0.04766064 | Treg_spleen |
| SH2D1A             | 1.55E-06 | 0.22578817 | 0.277 | 0.199 | 0.05491167 | Treg_spleen |
| RANBP2             | 2.17E-06 | 0.13612434 | 0.643 | 0.501 | 0.07691041 | Treg_spleen |
| PRIM2              | 2.28E-06 | 0.11271278 | 0.292 | 0.211 | 0.08080177 | Treg_spleen |
| SMARCA4            | 2.57E-06 | 0.15545956 | 0.262 | 0.185 | 0.09107753 | Treg_spleen |
| SPATA5             | 2.58E-06 | 0.18952092 | 0.365 | 0.272 | 0.0915448  | Treg_spleen |
| RBM14              | 2.73E-06 | 0.16659593 | 0.732 | 0.587 | 0.09690048 | Treg_spleen |
| SLC7A6             | 3.38E-06 | 0.14803816 | 0.325 | 0.236 | 0.11991639 | Treg_spleen |
| EP400              | 3.39E-06 | 0.21032484 | 0.289 | 0.21  | 0.12018947 | Treg_spleen |
| VTI1A              | 3.73E-06 | 0.12467824 | 0.65  | 0.516 | 0.13206893 | Treg_spleen |
| CLYBL              | 3.97E-06 | 0.19145614 | 0.307 | 0.227 | 0.14083026 | Treg_spleen |
| UBASH3B            | 4.21E-06 | 0.16557958 | 0.409 | 0.311 | 0.14922059 | Treg_spleen |
| NPM1               | 4.25E-06 | 0.26102269 | 0.823 | 0.752 | 0.15067447 | Treg_spleen |
| SIK3               | 4.60E-06 | 0.24982707 | 0.849 | 0.732 | 0.16287434 | Treg_spleen |
| HIPK1              | 4.68E-06 | 0.12720118 | 0.36  | 0.264 | 0.16590276 | Treg_spleen |
| ZNF267             | 4.71E-06 | 0.11883438 | 0.264 | 0.189 | 0.16689187 | Treg_spleen |
| NBR1               | 4.97E-06 | 0.15997026 | 0.486 | 0.373 | 0.17616978 | Treg_spleen |
| ENSMMUG00000063316 | 5.13E-06 | 0.28327496 | 0.55  | 0.443 | 0.18185875 | Treg_spleen |
| DIAPH2             | 5.39E-06 | 0.11751481 | 0.542 | 0.426 | 0.19080493 | Treg_spleen |
| NSF                | 5.43E-06 | 0.10237794 | 0.528 | 0.404 | 0.19257185 | Treg_spleen |
| SMYD3              | 6.13E-06 | 0.20319757 | 0.559 | 0.446 | 0.2171112  | Treg_spleen |
| NCOA2              | 6.14E-06 | 0.11494352 | 0.527 | 0.411 | 0.21761936 | Treg_spleen |
| ST6GAL1            | 6.32E-06 | 0.22529405 | 0.587 | 0.463 | 0.22390171 | Treg_spleen |
| GALNT7             | 6.58E-06 | 0.13948563 | 0.331 | 0.248 | 0.23324628 | Treg_spleen |
| H1-2               | 6.65E-06 | 0.15898504 | 0.31  | 0.231 | 0.23552324 | Treg_spleen |
| DCAF8              | 7.11E-06 | 0.13137208 | 0.383 | 0.284 | 0.25177901 | Treg_spleen |
| ETS1               | 7.36E-06 | 0.13841931 | 0.877 | 0.783 | 0.26072496 | Treg_spleen |
| EXT1               | 1.06E-05 | 0.31163407 | 0.324 | 0.249 | 0.37609403 | Treg_spleen |

|             |            |            |       |       |            |             |
|-------------|------------|------------|-------|-------|------------|-------------|
| WWP2        | 1.11E-05   | 0.15189366 | 0.305 | 0.227 | 0.39416183 | Treg_spleen |
| TP53BP2     | 1.14E-05   | 0.23495161 | 0.277 | 0.204 | 0.40478889 | Treg_spleen |
| ADK         | 1.16E-05   | 0.20977099 | 0.507 | 0.406 | 0.41084871 | Treg_spleen |
| NCK1        | 1.17E-05   | 0.12793905 | 0.378 | 0.281 | 0.41365564 | Treg_spleen |
| HIF1A       | 1.22E-05   | 0.24584241 | 0.413 | 0.321 | 0.43202054 | Treg_spleen |
| DNM1L       | 1.36E-05   | 0.16021579 | 0.351 | 0.265 | 0.48117257 | Treg_spleen |
| NLRC5       | 1.46E-05   | 0.20961413 | 0.261 | 0.191 | 0.5158304  | Treg_spleen |
| RERE        | 1.48E-05   | 0.12108955 | 0.784 | 0.658 | 0.52572351 | Treg_spleen |
| TRIM24      | 1.62E-05   | 0.13001926 | 0.298 | 0.219 | 0.57483715 | Treg_spleen |
| ROCK1       | 1.72E-05   | 0.12876781 | 0.73  | 0.578 | 0.61006315 | Treg_spleen |
| VPS13A      | 1.77E-05   | 0.15229948 | 0.341 | 0.257 | 0.62706847 | Treg_spleen |
| CYTH1       | 1.78E-05   | 0.11695699 | 0.705 | 0.571 | 0.63193512 | Treg_spleen |
| TOP2B       | 2.13E-05   | 0.11837397 | 0.432 | 0.329 | 0.75561138 | Treg_spleen |
| ERC1        | 2.55E-05   | 0.16518509 | 0.395 | 0.306 | 0.90188928 | Treg_spleen |
| FARS2       | 2.61E-05   | 0.12166627 | 0.438 | 0.342 | 0.92620246 | Treg_spleen |
| TPM3        | 2.79E-05   | 0.15107986 | 0.732 | 0.634 | 0.98844946 | Treg_spleen |
| CHN2        | 2.79E-05   | 0.16653919 | 0.641 | 0.527 | 0.98993794 | Treg_spleen |
| ATM         | 3.75E-05   | 0.15602236 | 0.429 | 0.333 | 1          | Treg_spleen |
| NPM3        | 4.22E-05   | 0.13596945 | 0.31  | 0.235 | 1          | Treg_spleen |
| RAB3GAP2    | 4.73E-05   | 0.12661004 | 0.365 | 0.279 | 1          | Treg_spleen |
| PSMA7       | 5.33E-05   | 0.15351721 | 0.636 | 0.546 | 1          | Treg_spleen |
| GSPT1       | 5.98E-05   | 0.10482154 | 0.289 | 0.216 | 1          | Treg_spleen |
| RPS6KA5     | 7.78E-05   | 0.11981898 | 0.559 | 0.447 | 1          | Treg_spleen |
| RNF216      | 8.91E-05   | 0.10037194 | 0.516 | 0.403 | 1          | Treg_spleen |
| ATRN        | 9.36E-05   | 0.16484311 | 0.272 | 0.206 | 1          | Treg_spleen |
| BCAS3       | 0.00010838 | 0.13398561 | 0.551 | 0.446 | 1          | Treg_spleen |
| HBS1L       | 0.00012676 | 0.1088189  | 0.648 | 0.525 | 1          | Treg_spleen |
| LDLRAD4     | 0.00013219 | 0.23507035 | 0.642 | 0.541 | 1          | Treg_spleen |
| GLCE        | 0.0001441  | 0.19966405 | 0.274 | 0.211 | 1          | Treg_spleen |
| TBL1X       | 0.00015589 | 0.10621515 | 0.325 | 0.254 | 1          | Treg_spleen |
| ND2         | 0.00016184 | 0.22719421 | 0.922 | 0.849 | 1          | Treg_spleen |
| JARID2      | 0.00016339 | 0.2132401  | 0.716 | 0.604 | 1          | Treg_spleen |
| C20H16orf72 | 0.00020453 | 0.12746206 | 0.46  | 0.365 | 1          | Treg_spleen |



|                    |            |            |       |       |                    |
|--------------------|------------|------------|-------|-------|--------------------|
| RAB8B              | 0.00020589 | 0.12080896 | 0.814 | 0.695 | 1 Treg_spleen      |
| TNIK               | 0.00027595 | 0.12603657 | 0.899 | 0.794 | 1 Treg_spleen      |
| BTRC               | 0.00027789 | 0.19791347 | 0.28  | 0.218 | 1 Treg_spleen      |
| ARIH1              | 0.00027824 | 0.1822238  | 0.732 | 0.601 | 1 Treg_spleen      |
| PDE7A              | 0.0002933  | 0.14514195 | 0.441 | 0.358 | 1 Treg_spleen      |
| ERBB3              | 0.00040602 | 0.11546884 | 0.428 | 0.341 | 1 Treg_spleen      |
| ENSMMUG00000010266 | 0.00050201 | 0.1004428  | 0.657 | 0.542 | 1 Treg_spleen      |
| UBE2E2             | 0.00059211 | 0.18821151 | 0.467 | 0.391 | 1 Treg_spleen      |
| ENSMMUG00000055114 | 0.00063386 | 0.16487299 | 0.287 | 0.227 | 1 Treg_spleen      |
| KCNQ5              | 0.00075087 | 0.23099722 | 0.612 | 0.526 | 1 Treg_spleen      |
| PPP2R5C            | 0.0008499  | 0.11961349 | 0.8   | 0.689 | 1 Treg_spleen      |
| JMJD1C             | 0.00110692 | 0.1277611  | 0.878 | 0.768 | 1 Treg_spleen      |
| PREX1              | 0.00146689 | 0.15665743 | 0.545 | 0.457 | 1 Treg_spleen      |
| NCL                | 0.00152109 | 0.32255295 | 0.674 | 0.603 | 1 Treg_spleen      |
| SRPK2              | 0.00226781 | 0.12556516 | 0.604 | 0.518 | 1 Treg_spleen      |
| MAP3K1             | 0.00270679 | 0.13286242 | 0.434 | 0.36  | 1 Treg_spleen      |
| ELMO1              | 0.00351193 | 0.11035766 | 0.842 | 0.731 | 1 Treg_spleen      |
| ZC3HAV1            | 0.00412786 | 0.14745294 | 0.723 | 0.623 | 1 Treg_spleen      |
| SKAP1              | 0.00483708 | 0.12653979 | 0.959 | 0.882 | 1 Treg_spleen      |
| ELF1               | 0.00560811 | 0.10136027 | 0.864 | 0.757 | 1 Treg_spleen      |
| ENSMMUG00000065362 | 0.01418826 | 0.35088435 | 0.996 | 0.996 | 1 Treg_spleen      |
| MAML2              | 0.01976207 | 0.15483135 | 0.777 | 0.706 | 1 Treg_spleen      |
| ABI1               | 0.03232717 | 0.16458944 | 0.694 | 0.602 | 1 Treg_spleen      |
| ARHGAP15           | 0.03709249 | 0.12306553 | 0.96  | 0.891 | 1 Treg_spleen      |
| IL2RA              | 0.03861737 | 0.28382479 | 0.414 | 0.376 | 1 Treg_spleen      |
| PSMD12             | 0.0391814  | 0.13139697 | 0.683 | 0.584 | 1 Treg_spleen      |
| B2M                | 0.04429229 | 0.10401879 | 0.979 | 0.97  | 1 Treg_spleen      |
| RAP1B              | 0.10263888 | 0.1255297  | 0.854 | 0.767 | 1 Treg_spleen      |
| ENSMMUG00000012140 | 0.3809089  | 0.15070342 | 0.919 | 0.912 | 1 Treg_spleen      |
| COX1               | 0.45510209 | 0.14410953 | 0.835 | 0.88  | 1 Treg_spleen      |
| ENSMMUG00000062350 | 8.32E-47   | 1.45466992 | 0.995 | 0.976 | 2.95E-42 ILC2_lung |
| RPS28              | 2.16E-46   | 1.23013247 | 0.993 | 0.988 | 7.64E-42 ILC2_lung |
| RPS21              | 6.63E-44   | 1.54060104 | 0.992 | 0.951 | 2.35E-39 ILC2_lung |

|                    |          |            |       |       |          |           |
|--------------------|----------|------------|-------|-------|----------|-----------|
| GPR65              | 1.15E-41 | 4.23188153 | 0.934 | 0.329 | 4.06E-37 | ILC2_lung |
| RPL36              | 7.71E-40 | 1.66722737 | 0.982 | 0.915 | 2.73E-35 | ILC2_lung |
| ENSMMUG00000005593 | 1.36E-38 | 1.38293271 | 0.994 | 0.939 | 4.82E-34 | ILC2_lung |
| ENSMMUG00000015563 | 3.74E-37 | 0.96224484 | 0.994 | 0.976 | 1.33E-32 | ILC2_lung |
| RPL32              | 1.54E-35 | 0.90987146 | 0.993 | 0.976 | 5.47E-31 | ILC2_lung |
| RPL35A             | 5.22E-35 | 0.92223129 | 0.992 | 0.951 | 1.85E-30 | ILC2_lung |
| RPS29              | 2.11E-34 | 0.89542049 | 0.994 | 0.976 | 7.46E-30 | ILC2_lung |
| RPLP1              | 2.18E-34 | 0.90417668 | 0.993 | 0.963 | 7.71E-30 | ILC2_lung |
| RPL34              | 2.45E-34 | 0.87231638 | 0.994 | 0.951 | 8.68E-30 | ILC2_lung |
| RPL30              | 1.61E-33 | 0.77390076 | 0.994 | 0.963 | 5.69E-29 | ILC2_lung |
| ATP5F1E            | 1.00E-32 | 1.4307505  | 0.978 | 0.878 | 3.55E-28 | ILC2_lung |
| RPL10              | 6.24E-32 | 0.81415241 | 0.995 | 0.963 | 2.21E-27 | ILC2_lung |
| RPS23              | 6.49E-32 | 0.90828464 | 0.994 | 1     | 2.30E-27 | ILC2_lung |
| FAU                | 6.98E-32 | 0.90422261 | 0.992 | 0.951 | 2.47E-27 | ILC2_lung |
| RPL39              | 1.00E-31 | 0.95525178 | 0.993 | 0.927 | 3.55E-27 | ILC2_lung |
| RPL24              | 1.96E-31 | 0.87998427 | 0.992 | 0.963 | 6.93E-27 | ILC2_lung |
| RPL18              | 4.74E-31 | 0.81557217 | 0.992 | 0.988 | 1.68E-26 | ILC2_lung |
| RPS13              | 2.50E-29 | 0.80158603 | 0.992 | 0.976 | 8.84E-25 | ILC2_lung |
| RPL12              | 4.61E-29 | 0.91906988 | 0.991 | 0.976 | 1.63E-24 | ILC2_lung |
| UBA52              | 6.40E-28 | 0.83558776 | 0.991 | 0.976 | 2.27E-23 | ILC2_lung |
| ZC3H10             | 2.52E-27 | 1.56821323 | 0.933 | 0.756 | 8.93E-23 | ILC2_lung |
| RPS12              | 6.07E-27 | 0.80072794 | 0.992 | 0.976 | 2.15E-22 | ILC2_lung |
| NUDT3              | 1.58E-26 | 0.73085723 | 0.993 | 0.976 | 5.60E-22 | ILC2_lung |
| ENSMMUG00000003867 | 3.18E-25 | 0.63778722 | 0.995 | 1     | 1.13E-20 | ILC2_lung |
| SELENOK            | 4.54E-25 | 3.06236893 | 0.813 | 0.39  | 1.61E-20 | ILC2_lung |
| RPL22              | 9.95E-25 | 0.9097254  | 0.986 | 0.939 | 3.53E-20 | ILC2_lung |
| SRGN               | 1.40E-24 | 1.37934224 | 0.966 | 0.817 | 4.97E-20 | ILC2_lung |
| RPS7               | 1.01E-23 | 0.62728165 | 0.993 | 0.963 | 3.58E-19 | ILC2_lung |
| RPSA               | 3.25E-23 | 0.87883381 | 0.992 | 0.951 | 1.15E-18 | ILC2_lung |
| RPL38              | 3.77E-22 | 0.84887699 | 0.989 | 0.963 | 1.34E-17 | ILC2_lung |
| RPL27              | 6.25E-22 | 0.69632148 | 0.993 | 0.976 | 2.21E-17 | ILC2_lung |
| RPS26              | 1.52E-21 | 0.77565341 | 0.993 | 0.951 | 5.39E-17 | ILC2_lung |
| RPS9               | 1.68E-21 | 0.73826221 | 0.993 | 0.963 | 5.95E-17 | ILC2_lung |

|                    |          |            |       |       |          |           |
|--------------------|----------|------------|-------|-------|----------|-----------|
| ELOA               | 2.15E-21 | 0.70048897 | 0.994 | 0.951 | 7.63E-17 | ILC2_lung |
| ENSMMUG00000060377 | 1.83E-20 | 1.54027106 | 0.877 | 0.683 | 6.50E-16 | ILC2_lung |
| RPS4X              | 2.60E-20 | 0.74454001 | 0.991 | 1     | 9.21E-16 | ILC2_lung |
| RPS5               | 6.73E-20 | 0.6757443  | 0.989 | 0.976 | 2.38E-15 | ILC2_lung |
| ENSMMUG00000056354 | 9.03E-20 | 0.96458885 | 0.975 | 0.915 | 3.20E-15 | ILC2_lung |
| SAMSN1             | 1.93E-18 | 2.01316984 | 0.798 | 0.451 | 6.83E-14 | ILC2_lung |
| RPS27A             | 1.97E-18 | 1.35646589 | 0.887 | 0.732 | 6.98E-14 | ILC2_lung |
| RPL8               | 5.93E-18 | 0.66092012 | 0.989 | 0.963 | 2.10E-13 | ILC2_lung |
| ENSMMUG00000003073 | 1.27E-17 | 0.70393641 | 0.988 | 0.939 | 4.48E-13 | ILC2_lung |
| RPS24              | 2.86E-17 | 0.53700802 | 0.992 | 0.988 | 1.01E-12 | ILC2_lung |
| ENSMMUG00000016305 | 3.83E-17 | 1.75837776 | 0.787 | 0.476 | 1.36E-12 | ILC2_lung |
| ENSMMUG00000004545 | 3.93E-17 | 1.21190249 | 0.905 | 0.744 | 1.39E-12 | ILC2_lung |
| MYL6               | 4.26E-17 | 1.5659407  | 0.828 | 0.659 | 1.51E-12 | ILC2_lung |
| CREM               | 5.01E-17 | 2.51967186 | 0.713 | 0.366 | 1.78E-12 | ILC2_lung |
| TMSB4X             | 1.09E-16 | 0.59506184 | 0.998 | 0.988 | 3.85E-12 | ILC2_lung |
| HPGDS              | 3.73E-16 | 2.74013666 | 0.57  | 0.085 | 1.32E-11 | ILC2_lung |
| RPL28              | 5.34E-16 | 0.5327663  | 0.992 | 0.988 | 1.89E-11 | ILC2_lung |
| RPL36AL            | 3.48E-15 | 0.99419853 | 0.934 | 0.866 | 1.23E-10 | ILC2_lung |
| ENSMMUG00000013429 | 4.98E-15 | 0.45718902 | 0.995 | 1     | 1.76E-10 | ILC2_lung |
| ROMO1              | 2.23E-14 | 1.53349104 | 0.763 | 0.61  | 7.90E-10 | ILC2_lung |
| RPL5               | 2.76E-14 | 0.58724517 | 0.989 | 0.976 | 9.78E-10 | ILC2_lung |
| NDUFV2             | 2.77E-14 | 1.79351625 | 0.735 | 0.451 | 9.81E-10 | ILC2_lung |
| RPL19              | 3.95E-14 | 0.80338139 | 0.973 | 0.927 | 1.40E-09 | ILC2_lung |
| COX5B              | 4.27E-14 | 1.77078742 | 0.737 | 0.512 | 1.51E-09 | ILC2_lung |
| PRDX6              | 5.83E-14 | 2.28547526 | 0.655 | 0.341 | 2.07E-09 | ILC2_lung |
| RPL7A              | 8.10E-14 | 0.50880827 | 0.989 | 0.963 | 2.87E-09 | ILC2_lung |
| FOSL2              | 1.19E-13 | 3.49851263 | 0.524 | 0.11  | 4.23E-09 | ILC2_lung |
| STMN1              | 1.47E-13 | 1.66760107 | 0.768 | 0.451 | 5.21E-09 | ILC2_lung |
| ENSMMUG00000019505 | 1.48E-13 | 1.2994841  | 0.844 | 0.671 | 5.23E-09 | ILC2_lung |
| GAPDH              | 1.79E-13 | 1.2890513  | 0.841 | 0.683 | 6.36E-09 | ILC2_lung |
| SRP14              | 3.60E-13 | 1.07783342 | 0.877 | 0.671 | 1.27E-08 | ILC2_lung |
| ENSMMUG00000052747 | 3.74E-13 | 1.38702294 | 0.777 | 0.683 | 1.33E-08 | ILC2_lung |
| OST4               | 8.90E-13 | 1.36270557 | 0.774 | 0.646 | 3.15E-08 | ILC2_lung |

|                    |          |            |       |       |            |           |
|--------------------|----------|------------|-------|-------|------------|-----------|
| HINT1              | 1.77E-12 | 0.84942169 | 0.935 | 0.89  | 6.26E-08   | ILC2_lung |
| STAT4              | 1.14E-11 | 2.2285427  | 0.661 | 0.378 | 4.02E-07   | ILC2_lung |
| ENSMMUG00000030408 | 1.18E-11 | 1.47527065 | 0.718 | 0.512 | 4.16E-07   | ILC2_lung |
| ENSMMUG00000044585 | 1.31E-11 | 1.42299807 | 0.736 | 0.573 | 4.64E-07   | ILC2_lung |
| ENSMMUG00000004441 | 1.59E-11 | 0.85742871 | 0.928 | 0.878 | 5.62E-07   | ILC2_lung |
| ENSMMUG00000022428 | 1.92E-11 | 1.80584505 | 0.652 | 0.427 | 6.79E-07   | ILC2_lung |
| TMA7               | 2.92E-11 | 1.03437747 | 0.847 | 0.78  | 1.04E-06   | ILC2_lung |
| UBL5               | 5.36E-11 | 1.40796139 | 0.723 | 0.537 | 1.90E-06   | ILC2_lung |
| LEPROTL1           | 6.43E-11 | 2.28293261 | 0.579 | 0.293 | 2.28E-06   | ILC2_lung |
| SYTL3              | 7.00E-11 | 0.78179721 | 0.729 | 0.476 | 2.48E-06   | ILC2_lung |
| TNFSF10            | 8.54E-11 | 2.05941389 | 0.603 | 0.293 | 3.03E-06   | ILC2_lung |
| NSA2               | 9.36E-11 | 1.23039255 | 0.8   | 0.744 | 3.32E-06   | ILC2_lung |
| JPT1               | 9.88E-11 | 1.04846355 | 0.812 | 0.732 | 3.50E-06   | ILC2_lung |
| PLIN2              | 1.60E-10 | 2.83133892 | 0.487 | 0.146 | 5.69E-06   | ILC2_lung |
| ELOB               | 4.39E-10 | 1.04525268 | 0.768 | 0.683 | 1.56E-05   | ILC2_lung |
| ENSMMUG00000012140 | 5.88E-10 | 0.56966545 | 0.979 | 0.951 | 2.08E-05   | ILC2_lung |
| ENSMMUG00000056793 | 6.66E-10 | 0.9684862  | 0.822 | 0.744 | 2.36E-05   | ILC2_lung |
| VMO1               | 9.10E-10 | 2.47507863 | 0.482 | 0.134 | 3.22E-05   | ILC2_lung |
| PRPF31             | 1.19E-09 | 1.48953226 | 0.643 | 0.439 | 4.22E-05   | ILC2_lung |
| EDF1               | 1.42E-09 | 1.43935432 | 0.646 | 0.451 | 5.04E-05   | ILC2_lung |
| ENSMMUG00000016894 | 2.32E-09 | 1.44532428 | 0.674 | 0.512 | 8.24E-05   | ILC2_lung |
| SUB1               | 2.49E-09 | 0.96517622 | 0.829 | 0.732 | 8.84E-05   | ILC2_lung |
| ALOX5AP            | 3.45E-09 | 2.5881502  | 0.454 | 0.146 | 0.00012221 | ILC2_lung |
| ROBO2              | 4.08E-09 | 0.94630337 | 0.829 | 0.683 | 0.00014454 | ILC2_lung |
| H2AFJ              | 5.71E-09 | 1.54794926 | 0.649 | 0.488 | 0.00020225 | ILC2_lung |
| GADD45B            | 9.83E-09 | 2.23666837 | 0.514 | 0.232 | 0.00034847 | ILC2_lung |
| GSTP1              | 1.14E-08 | 0.95871482 | 0.786 | 0.72  | 0.00040249 | ILC2_lung |
| MBD3               | 1.17E-08 | 0.85593995 | 0.81  | 0.756 | 0.00041461 | ILC2_lung |
| COX6C              | 1.30E-08 | 0.79840605 | 0.819 | 0.78  | 0.00046213 | ILC2_lung |
| ATP5MG             | 1.55E-08 | 0.79848915 | 0.881 | 0.793 | 0.00054959 | ILC2_lung |
| ENSMMUG00000022489 | 1.96E-08 | 1.03202545 | 0.766 | 0.683 | 0.00069587 | ILC2_lung |
| NR3C1              | 2.41E-08 | 1.12843388 | 0.727 | 0.622 | 0.00085422 | ILC2_lung |
| TXNIP              | 2.44E-08 | 1.20803152 | 0.764 | 0.646 | 0.00086608 | ILC2_lung |

|                     |          |            |       |       |            |           |
|---------------------|----------|------------|-------|-------|------------|-----------|
| SARAF               | 2.46E-08 | 0.81175675 | 0.832 | 0.732 | 0.00087071 | ILC2_lung |
| ENSMMUG00000006463  | 2.85E-08 | 0.87555849 | 0.836 | 0.78  | 0.00100898 | ILC2_lung |
| CD83                | 3.16E-08 | 2.38599454 | 0.493 | 0.232 | 0.00111891 | ILC2_lung |
| FTH1                | 3.91E-08 | 1.64755672 | 0.748 | 0.683 | 0.00138554 | ILC2_lung |
| IFI27L2             | 4.54E-08 | 1.21742908 | 0.692 | 0.537 | 0.00160803 | ILC2_lung |
| EIF3K               | 5.10E-08 | 0.70772855 | 0.894 | 0.805 | 0.00180763 | ILC2_lung |
| RGS1                | 5.15E-08 | 1.56713845 | 0.649 | 0.451 | 0.00182447 | ILC2_lung |
| ENSMMUG000000047001 | 7.24E-08 | 0.59778955 | 0.444 | 0.159 | 0.00256456 | ILC2_lung |
| RPL6                | 7.50E-08 | 0.380533   | 0.99  | 0.976 | 0.00265669 | ILC2_lung |
| BCL2A1              | 8.25E-08 | 6.10015395 | 0.284 | 0.012 | 0.00292457 | ILC2_lung |
| ENSMMUG00000001210  | 9.68E-08 | 0.66352538 | 0.9   | 0.878 | 0.00342951 | ILC2_lung |
| COX7A1              | 1.18E-07 | 3.41101403 | 0.361 | 0.098 | 0.00417312 | ILC2_lung |
| MYG1                | 1.20E-07 | 1.7598068  | 0.543 | 0.378 | 0.00426241 | ILC2_lung |
| ENSMMUG000000047481 | 1.39E-07 | 0.95753965 | 0.665 | 0.488 | 0.00492921 | ILC2_lung |
| ENSMMUG000000056126 | 1.64E-07 | 2.75788406 | 0.368 | 0.098 | 0.00582168 | ILC2_lung |
| NR4A3               | 1.70E-07 | 3.4868833  | 0.3   | 0.024 | 0.00603013 | ILC2_lung |
| GMFG                | 2.03E-07 | 0.70740449 | 0.904 | 0.854 | 0.00720482 | ILC2_lung |
| OAZ1                | 2.12E-07 | 1.69404726 | 0.535 | 0.329 | 0.00752209 | ILC2_lung |
| ENSMMUG000000063637 | 2.19E-07 | 0.71558649 | 0.93  | 0.854 | 0.00776263 | ILC2_lung |
| EEF1A1              | 2.20E-07 | 0.44523978 | 0.97  | 0.951 | 0.00779232 | ILC2_lung |
| EEF1D               | 2.39E-07 | 0.66490305 | 0.894 | 0.841 | 0.00847471 | ILC2_lung |
| FTL                 | 2.46E-07 | 0.51251282 | 0.97  | 0.902 | 0.0087018  | ILC2_lung |
| SMDT1               | 2.55E-07 | 0.78546988 | 0.801 | 0.768 | 0.00902073 | ILC2_lung |
| ENSMMUG00000007657  | 2.94E-07 | 0.98754708 | 0.718 | 0.622 | 0.01041355 | ILC2_lung |
| LSM7                | 3.44E-07 | 1.37341677 | 0.6   | 0.451 | 0.01220486 | ILC2_lung |
| SLC2A3              | 3.63E-07 | 1.66519337 | 0.585 | 0.39  | 0.01285097 | ILC2_lung |
| TMEM258             | 4.54E-07 | 1.04042934 | 0.684 | 0.524 | 0.0160845  | ILC2_lung |
| ATP5MPL             | 4.91E-07 | 0.81427602 | 0.784 | 0.72  | 0.01739493 | ILC2_lung |
| SRI                 | 6.60E-07 | 1.36151191 | 0.573 | 0.366 | 0.02337079 | ILC2_lung |
| COX7C               | 7.04E-07 | 0.75796908 | 0.843 | 0.793 | 0.02495758 | ILC2_lung |
| HNRNPDL             | 8.30E-07 | 0.90253958 | 0.769 | 0.671 | 0.0294032  | ILC2_lung |
| CLEC2B              | 8.59E-07 | 1.61901026 | 0.585 | 0.427 | 0.03042848 | ILC2_lung |
| ARPC3               | 9.73E-07 | 0.71283411 | 0.84  | 0.829 | 0.03448621 | ILC2_lung |

|                     |          |            |       |       |            |           |
|---------------------|----------|------------|-------|-------|------------|-----------|
| RPL22L1             | 1.52E-06 | 0.69808108 | 0.875 | 0.829 | 0.05383597 | ILC2_lung |
| NME2                | 1.93E-06 | 0.48372824 | 0.943 | 0.939 | 0.06830784 | ILC2_lung |
| ZNF331              | 2.16E-06 | 3.33210985 | 0.304 | 0.073 | 0.07652778 | ILC2_lung |
| RPL35               | 2.24E-06 | 0.429776   | 0.98  | 0.939 | 0.07954331 | ILC2_lung |
| GPR183              | 5.33E-06 | 1.12833622 | 0.755 | 0.683 | 0.18901911 | ILC2_lung |
| IL1RL1              | 6.59E-06 | 3.1839945  | 0.315 | 0.098 | 0.23364244 | ILC2_lung |
| NDUFA2              | 6.63E-06 | 1.3882563  | 0.529 | 0.341 | 0.23498056 | ILC2_lung |
| ENSMMUG00000001458  | 8.24E-06 | 0.65128833 | 0.825 | 0.756 | 0.29180836 | ILC2_lung |
| GCN1                | 8.68E-06 | 0.36604278 | 0.983 | 0.951 | 0.30757844 | ILC2_lung |
| ENSMMUG000000051239 | 9.49E-06 | 2.15062825 | 0.367 | 0.159 | 0.33637259 | ILC2_lung |
| NUFIP1              | 1.15E-05 | 2.40125888 | 0.428 | 0.256 | 0.40770112 | ILC2_lung |
| NDUFC2              | 1.23E-05 | 1.23842262 | 0.588 | 0.5   | 0.43723324 | ILC2_lung |
| EEF1B2              | 1.32E-05 | 0.43605812 | 0.945 | 0.951 | 0.46608892 | ILC2_lung |
| PFDN5               | 1.37E-05 | 1.12484251 | 0.588 | 0.488 | 0.48580663 | ILC2_lung |
| ENSMMUG000000012419 | 1.39E-05 | 0.93582467 | 0.683 | 0.622 | 0.49156789 | ILC2_lung |
| CUTA                | 1.95E-05 | 1.1715464  | 0.59  | 0.439 | 0.69121526 | ILC2_lung |
| COX8A               | 2.12E-05 | 1.06601102 | 0.59  | 0.512 | 0.75288373 | ILC2_lung |
| ATP5F1C             | 2.24E-05 | 1.14648078 | 0.592 | 0.5   | 0.79514628 | ILC2_lung |
| TNFAIP3             | 2.86E-05 | 1.00361627 | 0.671 | 0.549 | 1          | ILC2_lung |
| NDUFA4              | 2.93E-05 | 0.67454735 | 0.801 | 0.829 | 1          | ILC2_lung |
| ATP5MC3             | 2.96E-05 | 0.96564436 | 0.627 | 0.524 | 1          | ILC2_lung |
| MRI1                | 3.16E-05 | 1.07261043 | 0.598 | 0.488 | 1          | ILC2_lung |
| ATP6V1G1            | 3.51E-05 | 0.74944935 | 0.754 | 0.634 | 1          | ILC2_lung |
| TMEM14B             | 3.52E-05 | 0.94719326 | 0.649 | 0.585 | 1          | ILC2_lung |
| ENSMMUG000000013257 | 3.92E-05 | 0.55224672 | 0.901 | 0.854 | 1          | ILC2_lung |
| BTG1                | 4.33E-05 | 0.8865776  | 0.773 | 0.768 | 1          | ILC2_lung |
| IFI16               | 4.93E-05 | 0.90035263 | 0.615 | 0.488 | 1          | ILC2_lung |
| ARL6IP5             | 6.32E-05 | 1.24001532 | 0.523 | 0.378 | 1          | ILC2_lung |
| NCL                 | 6.36E-05 | 0.90603873 | 0.699 | 0.646 | 1          | ILC2_lung |
| CHCHD2              | 6.36E-05 | 0.66916981 | 0.793 | 0.78  | 1          | ILC2_lung |
| CD63                | 7.86E-05 | 0.84031165 | 0.687 | 0.646 | 1          | ILC2_lung |
| PET100              | 7.88E-05 | 1.77688134 | 0.388 | 0.22  | 1          | ILC2_lung |
| ENSMMUG000000038348 | 8.59E-05 | 1.2739704  | 0.667 | 0.622 | 1          | ILC2_lung |

|                     |            |            |       |       |             |
|---------------------|------------|------------|-------|-------|-------------|
| ENSMMUG00000015270  | 8.87E-05   | 0.22420635 | 0.993 | 0.988 | 1 ILC2_lung |
| UQCRQ               | 0.00010852 | 0.88641181 | 0.665 | 0.671 | 1 ILC2_lung |
| COMMD6              | 0.00011824 | 0.58066341 | 0.825 | 0.817 | 1 ILC2_lung |
| SPCS1               | 0.00013314 | 1.10083285 | 0.524 | 0.415 | 1 ILC2_lung |
| SMIM4               | 0.00015126 | 2.22659714 | 0.286 | 0.11  | 1 ILC2_lung |
| RAP1A               | 0.00015139 | 1.19211284 | 0.568 | 0.5   | 1 ILC2_lung |
| C16H17orf49         | 0.00017038 | 0.90972975 | 0.591 | 0.463 | 1 ILC2_lung |
| CFDP1               | 0.0002341  | 1.04868474 | 0.548 | 0.451 | 1 ILC2_lung |
| SSR4                | 0.00023633 | 0.70073645 | 0.74  | 0.732 | 1 ILC2_lung |
| ENSMMUG00000029973  | 0.00024607 | 0.95853719 | 0.623 | 0.561 | 1 ILC2_lung |
| RPL10A              | 0.00026605 | 0.25993489 | 0.985 | 0.976 | 1 ILC2_lung |
| ENSMMUG00000000983  | 0.00027448 | 0.93985273 | 0.586 | 0.476 | 1 ILC2_lung |
| UBA7                | 0.0002953  | 1.58943151 | 0.407 | 0.268 | 1 ILC2_lung |
| ENSMMUG000000053146 | 0.00032705 | 0.98011426 | 0.594 | 0.598 | 1 ILC2_lung |
| RPL3                | 0.00035725 | 0.26300028 | 0.991 | 0.976 | 1 ILC2_lung |
| PRMT9               | 0.00038531 | 1.52140678 | 0.328 | 0.159 | 1 ILC2_lung |
| ENSMMUG00000002320  | 0.00045821 | 0.51078227 | 0.919 | 0.951 | 1 ILC2_lung |
| SKIL                | 0.00052441 | 1.56027117 | 0.323 | 0.159 | 1 ILC2_lung |
| FAM177A1            | 0.00053953 | 2.28581047 | 0.303 | 0.159 | 1 ILC2_lung |
| ENSMMUG000000017466 | 0.00057532 | 1.19521564 | 0.501 | 0.427 | 1 ILC2_lung |
| ENSMMUG000000064692 | 0.0006209  | 0.51349861 | 0.771 | 0.707 | 1 ILC2_lung |
| ENSMMUG000000053817 | 0.00072847 | 1.02269351 | 0.449 | 0.305 | 1 ILC2_lung |
| HMGB1               | 0.00073789 | 0.56467984 | 0.784 | 0.756 | 1 ILC2_lung |
| SEM1                | 0.00075256 | 1.13248247 | 0.475 | 0.354 | 1 ILC2_lung |
| PRDX1               | 0.00077115 | 0.99202775 | 0.488 | 0.341 | 1 ILC2_lung |
| PTP4A1              | 0.00084924 | 1.4815999  | 0.457 | 0.354 | 1 ILC2_lung |
| TPT1                | 0.00086402 | 0.20494971 | 0.993 | 0.976 | 1 ILC2_lung |
| MYL12B              | 0.00086802 | 0.44282723 | 0.877 | 0.841 | 1 ILC2_lung |
| RILPL2              | 0.00088647 | 1.43699018 | 0.357 | 0.22  | 1 ILC2_lung |
| HCST                | 0.00089873 | 1.38899569 | 0.504 | 0.463 | 1 ILC2_lung |
| NAMPT               | 0.00094714 | 0.89160154 | 0.462 | 0.317 | 1 ILC2_lung |
| ENSMMUG000000031947 | 0.00098361 | 0.63099594 | 0.739 | 0.78  | 1 ILC2_lung |
| COX7B               | 0.00103943 | 0.71655488 | 0.649 | 0.622 | 1 ILC2_lung |

|                     |            |            |       |       |             |
|---------------------|------------|------------|-------|-------|-------------|
| HSPE1               | 0.00106279 | 0.91429118 | 0.608 | 0.549 | 1 ILC2_lung |
| ZNF483              | 0.00108889 | 0.64300427 | 0.699 | 0.634 | 1 ILC2_lung |
| FKBP2               | 0.00111523 | 1.5226721  | 0.332 | 0.183 | 1 ILC2_lung |
| DCTN6               | 0.0011288  | 1.83796506 | 0.28  | 0.134 | 1 ILC2_lung |
| STAP1               | 0.00113789 | 1.3944547  | 0.351 | 0.207 | 1 ILC2_lung |
| KRTCAP2             | 0.00117327 | 0.58901377 | 0.785 | 0.768 | 1 ILC2_lung |
| EIF4E2              | 0.00117688 | 1.58438706 | 0.37  | 0.256 | 1 ILC2_lung |
| ENSMMUG00000014648  | 0.00125018 | 0.48390232 | 0.786 | 0.805 | 1 ILC2_lung |
| SEC61G              | 0.00139244 | 0.69824742 | 0.665 | 0.646 | 1 ILC2_lung |
| YJEFN3              | 0.00142925 | 0.96300101 | 0.489 | 0.39  | 1 ILC2_lung |
| CORO1A              | 0.00150221 | 0.65228855 | 0.7   | 0.72  | 1 ILC2_lung |
| CLIC1               | 0.0015123  | 0.83386607 | 0.608 | 0.512 | 1 ILC2_lung |
| TSPAN2              | 0.00153988 | 1.86809111 | 0.3   | 0.171 | 1 ILC2_lung |
| ENSMMUG000000062026 | 0.00160507 | 1.78914207 | 0.284 | 0.146 | 1 ILC2_lung |
| BIRC3               | 0.00163661 | 1.46314467 | 0.368 | 0.244 | 1 ILC2_lung |
| DGKB                | 0.00178314 | 1.28844415 | 0.395 | 0.268 | 1 ILC2_lung |
| PDCD4               | 0.00199679 | 0.98941924 | 0.58  | 0.512 | 1 ILC2_lung |
| PSENN               | 0.00203844 | 1.6190879  | 0.276 | 0.134 | 1 ILC2_lung |
| RAN                 | 0.00204025 | 0.8488592  | 0.537 | 0.463 | 1 ILC2_lung |
| MS4A2               | 0.00221989 | 1.04337391 | 0.316 | 0.159 | 1 ILC2_lung |
| COX6B1              | 0.00250835 | 1.0611399  | 0.455 | 0.378 | 1 ILC2_lung |
| ENSMMUG000000029026 | 0.00252021 | 0.89824955 | 0.521 | 0.488 | 1 ILC2_lung |
| NDUFA1              | 0.0027205  | 0.57962583 | 0.674 | 0.634 | 1 ILC2_lung |
| LSM5                | 0.00284801 | 1.83624955 | 0.306 | 0.195 | 1 ILC2_lung |
| RGS6                | 0.00314534 | 1.38051439 | 0.296 | 0.159 | 1 ILC2_lung |
| TNFRSF1B            | 0.00326371 | 1.57315849 | 0.315 | 0.195 | 1 ILC2_lung |
| ENSMMUG000000055026 | 0.00329672 | 0.9057783  | 0.455 | 0.341 | 1 ILC2_lung |
| RHOG                | 0.0033938  | 1.31169021 | 0.402 | 0.305 | 1 ILC2_lung |
| NPM1                | 0.00366059 | 0.35420317 | 0.837 | 0.89  | 1 ILC2_lung |
| NDUFB2              | 0.00369244 | 0.61040633 | 0.659 | 0.659 | 1 ILC2_lung |
| TPI1                | 0.00372602 | 0.99536943 | 0.524 | 0.5   | 1 ILC2_lung |
| ENSMMUG000000049722 | 0.00373679 | 1.06172725 | 0.463 | 0.402 | 1 ILC2_lung |
| ENSMMUG000000016665 | 0.00414605 | 0.64303271 | 0.61  | 0.634 | 1 ILC2_lung |



|                     |            |            |       |       |             |
|---------------------|------------|------------|-------|-------|-------------|
| P2RY8               | 0.00416707 | 1.74923027 | 0.294 | 0.183 | 1 ILC2_lung |
| NR4A2               | 0.00445764 | 1.06324362 | 0.382 | 0.256 | 1 ILC2_lung |
| LSP1                | 0.00463436 | 0.79044214 | 0.574 | 0.561 | 1 ILC2_lung |
| TENT5C              | 0.0046975  | 1.25466593 | 0.348 | 0.232 | 1 ILC2_lung |
| ND4L                | 0.00498585 | 1.31673006 | 0.356 | 0.256 | 1 ILC2_lung |
| CLDND1              | 0.00542141 | 1.2383269  | 0.388 | 0.28  | 1 ILC2_lung |
| RBM8A               | 0.00582677 | 0.87644952 | 0.493 | 0.427 | 1 ILC2_lung |
| ENSMMUG00000006283  | 0.00680868 | 1.58169161 | 0.301 | 0.207 | 1 ILC2_lung |
| SEC61B              | 0.00709372 | 0.55733604 | 0.714 | 0.805 | 1 ILC2_lung |
| ATP6V0E1            | 0.00710727 | 0.89798049 | 0.476 | 0.402 | 1 ILC2_lung |
| CAPZB               | 0.00753063 | 0.98153449 | 0.45  | 0.378 | 1 ILC2_lung |
| ICOS                | 0.0076669  | 1.91912252 | 0.255 | 0.146 | 1 ILC2_lung |
| EIF4A3              | 0.0077703  | 1.3204717  | 0.381 | 0.305 | 1 ILC2_lung |
| CD320               | 0.00795119 | 1.2147722  | 0.403 | 0.341 | 1 ILC2_lung |
| CBX3                | 0.00823631 | 0.92825046 | 0.492 | 0.476 | 1 ILC2_lung |
| WDR83OS             | 0.00841703 | 0.43048694 | 0.739 | 0.756 | 1 ILC2_lung |
| RPS27               | 0.00849149 | 0.25359763 | 0.977 | 0.976 | 1 ILC2_lung |
| COX17               | 0.00909802 | 1.04390556 | 0.444 | 0.39  | 1 ILC2_lung |
| VDAC3               | 0.00914304 | 1.4864011  | 0.309 | 0.22  | 1 ILC2_lung |
| MICOS13             | 0.00957705 | 0.87688107 | 0.472 | 0.402 | 1 ILC2_lung |
| HNRNPH2             | 0.01015603 | 0.26670215 | 0.959 | 0.902 | 1 ILC2_lung |
| RHOF                | 0.01029496 | 1.77959173 | 0.275 | 0.183 | 1 ILC2_lung |
| TIGAR               | 0.01188577 | 0.72500956 | 0.546 | 0.488 | 1 ILC2_lung |
| MMP25               | 0.01264836 | 0.93746734 | 0.251 | 0.134 | 1 ILC2_lung |
| ENSMMUG000000065104 | 0.01273142 | 0.77576189 | 0.517 | 0.488 | 1 ILC2_lung |
| ENSMMUG000000053735 | 0.01309187 | 0.67723236 | 0.564 | 0.561 | 1 ILC2_lung |
| MRPL33              | 0.01324582 | 1.13733048 | 0.362 | 0.28  | 1 ILC2_lung |
| GABARAPL2           | 0.01352922 | 0.89284365 | 0.522 | 0.549 | 1 ILC2_lung |
| ENSMMUG000000061824 | 0.01407564 | 0.25745    | 0.892 | 0.927 | 1 ILC2_lung |
| PSMB6               | 0.01409752 | 1.0906303  | 0.398 | 0.341 | 1 ILC2_lung |
| MANBA               | 0.01463058 | 0.58540604 | 0.53  | 0.451 | 1 ILC2_lung |
| ETFB                | 0.01483218 | 1.03280579 | 0.398 | 0.329 | 1 ILC2_lung |
| PSMA2               | 0.01488711 | 0.8088661  | 0.512 | 0.512 | 1 ILC2_lung |

|                     |            |            |       |       |             |
|---------------------|------------|------------|-------|-------|-------------|
| SNRPN               | 0.01581513 | 1.05010172 | 0.353 | 0.256 | 1 ILC2_lung |
| CYSLTR1             | 0.01654678 | 0.96905894 | 0.371 | 0.28  | 1 ILC2_lung |
| PPIB                | 0.0169983  | 0.58388102 | 0.636 | 0.695 | 1 ILC2_lung |
| ATP5MC2             | 0.01921405 | 0.57828783 | 0.641 | 0.659 | 1 ILC2_lung |
| VDAC1               | 0.01969524 | 1.09858967 | 0.318 | 0.22  | 1 ILC2_lung |
| POLR2I              | 0.02014983 | 1.20607412 | 0.273 | 0.183 | 1 ILC2_lung |
| ISCA1               | 0.02168474 | 1.60763863 | 0.304 | 0.232 | 1 ILC2_lung |
| ANKRD12             | 0.0216996  | 0.90408954 | 0.599 | 0.634 | 1 ILC2_lung |
| ENSMMUG00000022769  | 0.02210923 | 0.66782661 | 0.492 | 0.476 | 1 ILC2_lung |
| RBX1                | 0.02352788 | 0.99765273 | 0.405 | 0.366 | 1 ILC2_lung |
| PDCD5               | 0.02368585 | 1.06680524 | 0.367 | 0.305 | 1 ILC2_lung |
| RPS27L              | 0.02368935 | 0.93639298 | 0.47  | 0.476 | 1 ILC2_lung |
| HNRNPA1             | 0.02435735 | 0.59885918 | 0.526 | 0.463 | 1 ILC2_lung |
| NDUFB4              | 0.02441202 | 0.74136672 | 0.542 | 0.549 | 1 ILC2_lung |
| ENSMMUG00000017297  | 0.02443781 | 0.28920177 | 0.162 | 0.293 | 1 ILC2_lung |
| MRPL52              | 0.02444323 | 1.23589221 | 0.343 | 0.293 | 1 ILC2_lung |
| VPS28               | 0.02533336 | 1.27612119 | 0.322 | 0.256 | 1 ILC2_lung |
| ENSMMUG00000018740  | 0.02717017 | 1.24831974 | 0.31  | 0.232 | 1 ILC2_lung |
| ERH                 | 0.02820686 | 0.82051837 | 0.413 | 0.354 | 1 ILC2_lung |
| LCP1                | 0.02903111 | 0.38924317 | 0.706 | 0.707 | 1 ILC2_lung |
| TINF2               | 0.03065076 | 0.7151292  | 0.521 | 0.561 | 1 ILC2_lung |
| RPLP2               | 0.03221851 | 0.182846   | 0.982 | 0.963 | 1 ILC2_lung |
| ATOX1               | 0.03333134 | 0.76396988 | 0.483 | 0.463 | 1 ILC2_lung |
| TAGLN2              | 0.03417032 | 0.36014014 | 0.767 | 0.732 | 1 ILC2_lung |
| ZNHIT1              | 0.03664654 | 1.05584422 | 0.394 | 0.378 | 1 ILC2_lung |
| ANP32A              | 0.03851686 | 0.95733745 | 0.349 | 0.28  | 1 ILC2_lung |
| ENSMMUG000000064531 | 0.04038476 | 1.09570769 | 0.338 | 0.28  | 1 ILC2_lung |
| SEC11C              | 0.04226471 | 1.20926599 | 0.267 | 0.195 | 1 ILC2_lung |
| NDUFB11             | 0.04397689 | 0.64820858 | 0.428 | 0.378 | 1 ILC2_lung |
| RBBP4               | 0.04619149 | 1.19386706 | 0.312 | 0.256 | 1 ILC2_lung |
| SAFB                | 0.04619569 | 0.29113733 | 0.765 | 0.793 | 1 ILC2_lung |
| DAZAP1              | 0.04686323 | 0.4476906  | 0.613 | 0.646 | 1 ILC2_lung |
| ENSMMUG000000047632 | 0.04962421 | 0.92324117 | 0.375 | 0.317 | 1 ILC2_lung |

|                    |            |            |       |       |             |
|--------------------|------------|------------|-------|-------|-------------|
| ENSMMUG00000012525 | 0.05043635 | 0.57136735 | 0.461 | 0.451 | 1 ILC2_lung |
| NSMCE1             | 0.05055338 | 0.14642427 | 0.18  | 0.305 | 1 ILC2_lung |
| VAMP8              | 0.05216303 | 0.82760876 | 0.451 | 0.451 | 1 ILC2_lung |
| PARK7              | 0.05364842 | 0.85249388 | 0.377 | 0.341 | 1 ILC2_lung |
| POMP               | 0.05423232 | 0.86782249 | 0.346 | 0.293 | 1 ILC2_lung |
| SH3BGR1            | 0.05932951 | 0.68821891 | 0.367 | 0.305 | 1 ILC2_lung |
| C18H18orf32        | 0.06020473 | 0.1935236  | 0.974 | 0.963 | 1 ILC2_lung |
| ENSMMUG00000043332 | 0.06372285 | 0.76360098 | 0.337 | 0.268 | 1 ILC2_lung |
| NDUFB10            | 0.06566127 | 0.79510824 | 0.388 | 0.354 | 1 ILC2_lung |
| LST1               | 0.06677274 | 0.71641613 | 0.315 | 0.244 | 1 ILC2_lung |
| H2AFZ              | 0.07184234 | 0.77201876 | 0.44  | 0.415 | 1 ILC2_lung |
| NXPE3              | 0.07217538 | 0.68320169 | 0.448 | 0.415 | 1 ILC2_lung |
| SNRPB              | 0.0737416  | 0.71347522 | 0.449 | 0.427 | 1 ILC2_lung |
| ENSMMUG00000061128 | 0.07518622 | 0.7388732  | 0.401 | 0.378 | 1 ILC2_lung |
| POC5               | 0.0837486  | 0.77094614 | 0.388 | 0.366 | 1 ILC2_lung |
| ZFP36L1            | 0.08423834 | 0.49237597 | 0.614 | 0.634 | 1 ILC2_lung |
| DAD1               | 0.08511448 | 0.61172949 | 0.478 | 0.5   | 1 ILC2_lung |
| ENSMMUG00000002324 | 0.08615986 | 0.60615446 | 0.482 | 0.451 | 1 ILC2_lung |
| LDHA               | 0.09074433 | 0.85215273 | 0.482 | 0.573 | 1 ILC2_lung |
| RPS16              | 0.0909812  | 0.14675849 | 0.992 | 0.963 | 1 ILC2_lung |
| RPS3A              | 0.09152332 | 0.12164724 | 0.992 | 0.988 | 1 ILC2_lung |
| CIAO2B             | 0.09313196 | 1.07463743 | 0.29  | 0.244 | 1 ILC2_lung |
| RAC2               | 0.0960719  | 0.62143474 | 0.468 | 0.463 | 1 ILC2_lung |
| SNRPD3             | 0.09609903 | 0.6640894  | 0.487 | 0.488 | 1 ILC2_lung |
| ATP5PF             | 0.09716605 | 0.44292455 | 0.562 | 0.61  | 1 ILC2_lung |
| SSR2               | 0.09762844 | 0.42821199 | 0.591 | 0.634 | 1 ILC2_lung |
| PSMB7              | 0.10037953 | 0.52444911 | 0.526 | 0.537 | 1 ILC2_lung |
| CASP1              | 0.10266304 | 0.54181845 | 0.301 | 0.232 | 1 ILC2_lung |
| DCTN3              | 0.10829011 | 0.77895221 | 0.332 | 0.293 | 1 ILC2_lung |
| MRPL34             | 0.10939096 | 0.71371792 | 0.316 | 0.28  | 1 ILC2_lung |
| ARHGDIB            | 0.11141397 | 0.23119827 | 0.896 | 0.915 | 1 ILC2_lung |
| OSTC               | 0.11264573 | 0.65858873 | 0.422 | 0.415 | 1 ILC2_lung |
| MAPRE1             | 0.11950416 | 0.26490401 | 0.176 | 0.28  | 1 ILC2_lung |

|                     |            |            |       |       |             |
|---------------------|------------|------------|-------|-------|-------------|
| VDAC2               | 0.12248747 | 0.65417329 | 0.454 | 0.488 | 1 ILC2_lung |
| ENSMMUG00000014947  | 0.12460677 | 0.19310818 | 0.213 | 0.329 | 1 ILC2_lung |
| ENSMMUG00000005880  | 0.1249079  | 0.98518748 | 0.322 | 0.305 | 1 ILC2_lung |
| RDH5                | 0.12504594 | 0.57188874 | 0.524 | 0.549 | 1 ILC2_lung |
| TRMT112             | 0.12713768 | 0.46088943 | 0.481 | 0.463 | 1 ILC2_lung |
| ENSMMUG000000051392 | 0.13121667 | 0.55528272 | 0.495 | 0.488 | 1 ILC2_lung |
| RAB11A              | 0.13198377 | 1.12271434 | 0.288 | 0.256 | 1 ILC2_lung |
| ENSMMUG000000058389 | 0.13274989 | 0.95860086 | 0.324 | 0.305 | 1 ILC2_lung |
| LGALS3              | 0.13470318 | 0.96211348 | 0.303 | 0.268 | 1 ILC2_lung |
| ENSMMUG000000012019 | 0.13695128 | 0.66267617 | 0.394 | 0.39  | 1 ILC2_lung |
| BTF3                | 0.13847105 | 0.29898297 | 0.741 | 0.756 | 1 ILC2_lung |
| SRSF7               | 0.1393225  | 0.57151158 | 0.516 | 0.549 | 1 ILC2_lung |
| GTF2H5              | 0.14110756 | 0.65371156 | 0.448 | 0.463 | 1 ILC2_lung |
| SMNDC1              | 0.14192627 | 0.14061164 | 0.196 | 0.293 | 1 ILC2_lung |
| ENSMMUG000000056654 | 0.14254952 | 0.12099575 | 0.806 | 0.841 | 1 ILC2_lung |
| UQCRH               | 0.1443465  | 0.31534544 | 0.591 | 0.573 | 1 ILC2_lung |
| HMG3                | 0.145695   | 0.60420073 | 0.477 | 0.512 | 1 ILC2_lung |
| CHCHD1              | 0.14658535 | 0.17255327 | 0.173 | 0.268 | 1 ILC2_lung |
| TMEM147             | 0.14951365 | 0.51746174 | 0.457 | 0.439 | 1 ILC2_lung |
| MRPL57              | 0.15123203 | 0.70019051 | 0.26  | 0.207 | 1 ILC2_lung |
| LMAN2               | 0.15501281 | 0.14130812 | 0.186 | 0.28  | 1 ILC2_lung |
| ENSMMUG000000015208 | 0.15526292 | 0.89027697 | 0.295 | 0.256 | 1 ILC2_lung |
| POLR2D              | 0.15557918 | 0.32970612 | 0.165 | 0.256 | 1 ILC2_lung |
| PSME2               | 0.15651941 | 0.45844682 | 0.351 | 0.317 | 1 ILC2_lung |
| DDX24               | 0.15740545 | 0.7286937  | 0.414 | 0.415 | 1 ILC2_lung |
| ENSMMUG000000059638 | 0.15874563 | 0.33551668 | 0.183 | 0.28  | 1 ILC2_lung |
| MAGO3               | 0.16111018 | 0.83759147 | 0.363 | 0.366 | 1 ILC2_lung |
| GNG5                | 0.16465142 | 0.2723645  | 0.602 | 0.695 | 1 ILC2_lung |
| AIP                 | 0.16775572 | 0.18350835 | 0.255 | 0.378 | 1 ILC2_lung |
| COPE                | 0.16841344 | 0.7434219  | 0.378 | 0.39  | 1 ILC2_lung |
| COX20               | 0.16918697 | 0.78781759 | 0.309 | 0.28  | 1 ILC2_lung |
| ARF1                | 0.17210274 | 0.50284775 | 0.511 | 0.561 | 1 ILC2_lung |
| MRPL14              | 0.17279285 | 1.10530958 | 0.256 | 0.232 | 1 ILC2_lung |

|                    |            |            |       |       |             |
|--------------------|------------|------------|-------|-------|-------------|
| ENSMMUG00000007536 | 0.18596797 | 0.42111127 | 0.458 | 0.439 | 1 ILC2_lung |
| ARF4               | 0.19022939 | 0.12353267 | 0.383 | 0.549 | 1 ILC2_lung |
| C14H11orf58        | 0.19439509 | 0.17366615 | 0.296 | 0.439 | 1 ILC2_lung |
| SNRPD1             | 0.19621452 | 0.76772713 | 0.303 | 0.28  | 1 ILC2_lung |
| RPS11              | 0.20873763 | 0.13353863 | 0.991 | 0.976 | 1 ILC2_lung |
| NDUFA6             | 0.21345513 | 0.57002992 | 0.346 | 0.317 | 1 ILC2_lung |
| THOC7              | 0.21446752 | 0.14219031 | 0.215 | 0.317 | 1 ILC2_lung |
| GPSM3              | 0.21832136 | 0.32534898 | 0.512 | 0.549 | 1 ILC2_lung |
| MRPL51             | 0.21864937 | 0.49768952 | 0.405 | 0.402 | 1 ILC2_lung |
| HSPD1              | 0.21870929 | 0.83390383 | 0.311 | 0.293 | 1 ILC2_lung |
| CCNH               | 0.22005323 | 0.7614113  | 0.271 | 0.232 | 1 ILC2_lung |
| AHI1               | 0.22149861 | 0.82723293 | 0.372 | 0.378 | 1 ILC2_lung |
| REL                | 0.22281338 | 0.63441625 | 0.455 | 0.476 | 1 ILC2_lung |
| CPNE1              | 0.22905821 | 0.15393303 | 0.224 | 0.317 | 1 ILC2_lung |
| SPCS2              | 0.23360545 | 0.48769664 | 0.435 | 0.427 | 1 ILC2_lung |
| ENSMMUG00000038373 | 0.23663961 | 0.163807   | 0.364 | 0.524 | 1 ILC2_lung |
| LSM8               | 0.2385159  | 0.12426571 | 0.19  | 0.268 | 1 ILC2_lung |
| ENSMMUG00000064224 | 0.24363014 | 0.19834943 | 0.944 | 0.915 | 1 ILC2_lung |
| PTGES3             | 0.24418965 | 0.34618254 | 0.636 | 0.671 | 1 ILC2_lung |
| PTAR1              | 0.24842243 | 0.16472606 | 0.18  | 0.256 | 1 ILC2_lung |
| DPY30              | 0.24906207 | 0.82959822 | 0.299 | 0.28  | 1 ILC2_lung |
| PNPLA8             | 0.24970156 | 0.93096045 | 0.287 | 0.268 | 1 ILC2_lung |
| CCDC167            | 0.25222444 | 0.95186233 | 0.303 | 0.305 | 1 ILC2_lung |
| TGFBR2             | 0.25231831 | 0.68685409 | 0.302 | 0.28  | 1 ILC2_lung |
| TOMM7              | 0.25406593 | 0.12584801 | 0.864 | 0.89  | 1 ILC2_lung |
| PRMT1              | 0.25524788 | 0.57794665 | 0.298 | 0.268 | 1 ILC2_lung |
| HYPK               | 0.25562172 | 0.70457663 | 0.366 | 0.378 | 1 ILC2_lung |
| VASP               | 0.25735988 | 0.18517499 | 0.19  | 0.268 | 1 ILC2_lung |
| ENSMMUG00000059742 | 0.27465572 | 0.30939465 | 0.305 | 0.439 | 1 ILC2_lung |
| PTRHD1             | 0.27774182 | 0.11313892 | 0.193 | 0.268 | 1 ILC2_lung |
| WAS                | 0.27812957 | 0.17505259 | 0.234 | 0.329 | 1 ILC2_lung |
| LAMTOR1            | 0.27962494 | 0.1627846  | 0.207 | 0.293 | 1 ILC2_lung |
| SNU13              | 0.27974581 | 0.37355502 | 0.494 | 0.524 | 1 ILC2_lung |

|                    |            |            |       |       |             |
|--------------------|------------|------------|-------|-------|-------------|
| LAMTOR4            | 0.28269538 | 0.78953358 | 0.316 | 0.317 | 1 ILC2_lung |
| PSMB1              | 0.28442917 | 0.3119425  | 0.502 | 0.549 | 1 ILC2_lung |
| PLAAT3             | 0.28863144 | 0.17073525 | 0.423 | 0.378 | 1 ILC2_lung |
| TOMM22             | 0.29531748 | 0.16321131 | 0.256 | 0.354 | 1 ILC2_lung |
| RBMX               | 0.29938043 | 0.65622635 | 0.397 | 0.427 | 1 ILC2_lung |
| ENSMMUG00000029987 | 0.30118804 | 0.22110434 | 0.236 | 0.329 | 1 ILC2_lung |
| DNAJB6             | 0.30150628 | 0.43987117 | 0.543 | 0.61  | 1 ILC2_lung |
| ANAPC13            | 0.30286046 | 0.2028424  | 0.192 | 0.268 | 1 ILC2_lung |
| TMEM167A           | 0.30529756 | 0.61758882 | 0.313 | 0.305 | 1 ILC2_lung |
| COMT               | 0.3064888  | 0.19475588 | 0.402 | 0.585 | 1 ILC2_lung |
| CYCS               | 0.30780868 | 0.8497988  | 0.363 | 0.378 | 1 ILC2_lung |
| NDUFS8             | 0.31037391 | 0.68072819 | 0.331 | 0.341 | 1 ILC2_lung |
| ENO1               | 0.3140389  | 0.3709657  | 0.571 | 0.598 | 1 ILC2_lung |
| YWHAB              | 0.31494237 | 0.3479444  | 0.55  | 0.61  | 1 ILC2_lung |
| BCAP31             | 0.31657274 | 0.84184392 | 0.274 | 0.268 | 1 ILC2_lung |
| RBPJ               | 0.31769049 | 0.1650106  | 0.2   | 0.268 | 1 ILC2_lung |
| SLIRP              | 0.32305871 | 0.34291092 | 0.516 | 0.573 | 1 ILC2_lung |
| ENSMMUG00000052035 | 0.32431269 | 0.76573465 | 0.258 | 0.244 | 1 ILC2_lung |
| ENSMMUG00000064139 | 0.32725331 | 0.29774961 | 0.77  | 0.841 | 1 ILC2_lung |
| MRPL23             | 0.33261718 | 0.34535509 | 0.439 | 0.451 | 1 ILC2_lung |
| ENSMMUG00000064120 | 0.33960543 | 0.63428329 | 0.287 | 0.268 | 1 ILC2_lung |
| THYN1              | 0.34015011 | 0.9828177  | 0.296 | 0.317 | 1 ILC2_lung |
| N4BP2L2            | 0.3423325  | 0.8332601  | 0.309 | 0.317 | 1 ILC2_lung |
| NDUFB8             | 0.34632219 | 0.56172348 | 0.398 | 0.439 | 1 ILC2_lung |
| LSM6               | 0.34672955 | 0.61386344 | 0.37  | 0.402 | 1 ILC2_lung |
| ENSMMUG00000053392 | 0.35363312 | 0.46502659 | 0.448 | 0.463 | 1 ILC2_lung |
| RPS4Y1             | 0.35385657 | 0.39455788 | 0.549 | 0.646 | 1 ILC2_lung |
| OSTF1              | 0.36561179 | 0.24956218 | 0.604 | 0.695 | 1 ILC2_lung |
| GLRX3              | 0.36658245 | 0.2011458  | 0.216 | 0.293 | 1 ILC2_lung |
| DNAJC19            | 0.36830565 | 0.72244933 | 0.284 | 0.268 | 1 ILC2_lung |
| PGK1               | 0.37097076 | 0.25608897 | 0.511 | 0.549 | 1 ILC2_lung |
| SENP7              | 0.37145528 | 0.14865225 | 0.245 | 0.329 | 1 ILC2_lung |
| PDGFRA             | 0.38280783 | 0.26683081 | 0.714 | 0.707 | 1 ILC2_lung |

|                   |            |            |       |       |             |
|-------------------|------------|------------|-------|-------|-------------|
| ENSMUG00000042951 | 0.38323674 | 0.31780651 | 0.239 | 0.329 | 1 ILC2_lung |
| TALDO1            | 0.38572077 | 0.14821615 | 0.393 | 0.524 | 1 ILC2_lung |
| PSMD13            | 0.38712064 | 0.62776788 | 0.305 | 0.305 | 1 ILC2_lung |
| PRR13             | 0.38864282 | 0.25176091 | 0.314 | 0.427 | 1 ILC2_lung |
| TESPA1            | 0.39026483 | 0.55515244 | 0.335 | 0.341 | 1 ILC2_lung |
| COPS6             | 0.39160862 | 0.61958763 | 0.25  | 0.232 | 1 ILC2_lung |
| HMGB2             | 0.39915682 | 0.18775016 | 0.27  | 0.354 | 1 ILC2_lung |
| EIF1B             | 0.41524746 | 0.70174852 | 0.377 | 0.427 | 1 ILC2_lung |
| ENSMUG00000006499 | 0.4181375  | 0.12277289 | 0.303 | 0.39  | 1 ILC2_lung |
| PSMA1             | 0.41966319 | 0.44612602 | 0.384 | 0.402 | 1 ILC2_lung |
| LLPH              | 0.41970242 | 0.38605556 | 0.232 | 0.317 | 1 ILC2_lung |
| TRAF3IP3          | 0.42190573 | 0.12281226 | 0.267 | 0.354 | 1 ILC2_lung |
| KIFBP             | 0.42327422 | 0.15461938 | 0.441 | 0.463 | 1 ILC2_lung |
| ENSMUG00000030465 | 0.42556659 | 0.39060879 | 0.448 | 0.488 | 1 ILC2_lung |
| ZC3H15            | 0.42986351 | 0.21147863 | 0.229 | 0.305 | 1 ILC2_lung |
| ATP5PD            | 0.4365563  | 0.18885105 | 0.299 | 0.39  | 1 ILC2_lung |
| BZW1              | 0.44514339 | 0.2306113  | 0.534 | 0.598 | 1 ILC2_lung |
| ENSMUG00000056012 | 0.44658811 | 0.13263179 | 0.329 | 0.427 | 1 ILC2_lung |
| ATP5IF1           | 0.45439498 | 0.38217294 | 0.461 | 0.524 | 1 ILC2_lung |
| HP1BP3            | 0.45476403 | 0.16632692 | 0.325 | 0.427 | 1 ILC2_lung |
| ATP5F1B           | 0.46012834 | 0.4589956  | 0.24  | 0.329 | 1 ILC2_lung |
| PFDN2             | 0.46459381 | 0.50892211 | 0.316 | 0.329 | 1 ILC2_lung |
| ILF2              | 0.47177489 | 0.3509024  | 0.248 | 0.329 | 1 ILC2_lung |
| PYCARD            | 0.47414519 | 0.31519329 | 0.206 | 0.268 | 1 ILC2_lung |
| PSME1             | 0.47530627 | 0.13439066 | 0.632 | 0.671 | 1 ILC2_lung |
| REEP5             | 0.47597173 | 0.53488163 | 0.317 | 0.329 | 1 ILC2_lung |
| PLAAT4            | 0.47632924 | 0.26470463 | 0.338 | 0.329 | 1 ILC2_lung |
| BTF3L4            | 0.47989985 | 0.23555997 | 0.217 | 0.28  | 1 ILC2_lung |
| GPBP1             | 0.4802566  | 0.1384503  | 0.4   | 0.512 | 1 ILC2_lung |
| GTF3C6            | 0.48483606 | 0.24115776 | 0.262 | 0.341 | 1 ILC2_lung |
| SLC38A2           | 0.49086832 | 0.27501116 | 0.2   | 0.256 | 1 ILC2_lung |
| NMT1              | 0.49636922 | 0.24793474 | 0.199 | 0.256 | 1 ILC2_lung |
| PPDPF             | 0.5063007  | 0.21664737 | 0.227 | 0.293 | 1 ILC2_lung |

|                    |            |            |       |       |             |
|--------------------|------------|------------|-------|-------|-------------|
| PSMA5              | 0.50751475 | 0.53281021 | 0.271 | 0.268 | 1 ILC2_lung |
| COX16              | 0.50775208 | 0.185263   | 0.396 | 0.524 | 1 ILC2_lung |
| DYNLL1             | 0.51612622 | 0.66802683 | 0.329 | 0.354 | 1 ILC2_lung |
| MPC2               | 0.51650536 | 0.59411336 | 0.275 | 0.28  | 1 ILC2_lung |
| RER1               | 0.51721744 | 0.33032137 | 0.299 | 0.402 | 1 ILC2_lung |
| DDIT4              | 0.51795173 | 0.78810351 | 0.344 | 0.378 | 1 ILC2_lung |
| IFNAR2             | 0.52140461 | 0.32750767 | 0.336 | 0.354 | 1 ILC2_lung |
| BUD23              | 0.52746277 | 0.11915396 | 0.322 | 0.427 | 1 ILC2_lung |
| SRSF1              | 0.52818813 | 0.31137976 | 0.213 | 0.268 | 1 ILC2_lung |
| ENSMMUG00000055627 | 0.52914626 | 0.12585815 | 0.668 | 0.756 | 1 ILC2_lung |
| COX7A2             | 0.53476214 | 0.79973065 | 0.279 | 0.305 | 1 ILC2_lung |
| NAA38              | 0.53732359 | 0.36240621 | 0.216 | 0.28  | 1 ILC2_lung |
| PRDX5              | 0.5499108  | 0.62358975 | 0.288 | 0.305 | 1 ILC2_lung |
| STRAP              | 0.55299535 | 0.5539791  | 0.354 | 0.39  | 1 ILC2_lung |
| CD37               | 0.55403979 | 0.25006447 | 0.592 | 0.707 | 1 ILC2_lung |
| SOD1               | 0.55424068 | 0.48127209 | 0.328 | 0.341 | 1 ILC2_lung |
| C3H7orf50          | 0.5555369  | 0.39892141 | 0.46  | 0.549 | 1 ILC2_lung |
| PPA1               | 0.55932694 | 0.10887733 | 0.254 | 0.329 | 1 ILC2_lung |
| AMDHD1             | 0.56728895 | 0.24799778 | 0.303 | 0.378 | 1 ILC2_lung |
| ENSMMUG00000045959 | 0.57402622 | 0.56644896 | 0.203 | 0.268 | 1 ILC2_lung |
| GUK1               | 0.57564939 | 0.23730707 | 0.213 | 0.268 | 1 ILC2_lung |
| SKP1               | 0.57635499 | 0.22124666 | 0.683 | 0.732 | 1 ILC2_lung |
| SOX4               | 0.58132772 | 0.62930476 | 0.399 | 0.537 | 1 ILC2_lung |
| CALM3              | 0.58702927 | 0.52067446 | 0.291 | 0.317 | 1 ILC2_lung |
| ATP6V1FNB          | 0.59016664 | 0.43413078 | 0.395 | 0.439 | 1 ILC2_lung |
| EIF2S2             | 0.59185302 | 0.42254463 | 0.388 | 0.415 | 1 ILC2_lung |
| MRPL11             | 0.59401102 | 0.28197236 | 0.293 | 0.378 | 1 ILC2_lung |
| TMEM219            | 0.59412411 | 0.58704135 | 0.298 | 0.317 | 1 ILC2_lung |
| POLR1H             | 0.59702788 | 0.41863477 | 0.217 | 0.28  | 1 ILC2_lung |
| PDCD10             | 0.59970586 | 0.43743584 | 0.405 | 0.451 | 1 ILC2_lung |
| IK                 | 0.60282957 | 0.32288064 | 0.327 | 0.439 | 1 ILC2_lung |
| HSP90B1            | 0.60783465 | 0.29892175 | 0.552 | 0.561 | 1 ILC2_lung |
| SNRPB2             | 0.608809   | 0.29241597 | 0.272 | 0.341 | 1 ILC2_lung |



|                    |            |            |       |       |             |
|--------------------|------------|------------|-------|-------|-------------|
| SNRPD2             | 0.60921725 | 0.27381257 | 0.535 | 0.561 | 1 ILC2_lung |
| CAPG               | 0.61190553 | 0.13185237 | 0.627 | 0.744 | 1 ILC2_lung |
| BST2               | 0.61438292 | 0.16835184 | 0.456 | 0.488 | 1 ILC2_lung |
| NCOA7              | 0.61484981 | 0.1714601  | 0.337 | 0.427 | 1 ILC2_lung |
| ST13               | 0.61545596 | 0.47238253 | 0.441 | 0.537 | 1 ILC2_lung |
| NDUFS6             | 0.62171319 | 0.36261371 | 0.281 | 0.366 | 1 ILC2_lung |
| HNRNPH3            | 0.62306082 | 0.26008802 | 0.328 | 0.402 | 1 ILC2_lung |
| ENSMMUG00000016278 | 0.62310039 | 0.23837048 | 0.264 | 0.341 | 1 ILC2_lung |
| EID1               | 0.63303444 | 0.23855944 | 0.219 | 0.268 | 1 ILC2_lung |
| CDC37              | 0.63419607 | 0.27227736 | 0.233 | 0.293 | 1 ILC2_lung |
| SUCLG1             | 0.64323428 | 0.3836293  | 0.294 | 0.39  | 1 ILC2_lung |
| SRP9               | 0.64606588 | 0.53595796 | 0.249 | 0.268 | 1 ILC2_lung |
| ENSMMUG00000050845 | 0.64969411 | 0.74179636 | 0.238 | 0.256 | 1 ILC2_lung |
| LCK                | 0.65542206 | 0.39208411 | 0.244 | 0.305 | 1 ILC2_lung |
| TMBIM4             | 0.65574206 | 0.28574524 | 0.345 | 0.451 | 1 ILC2_lung |
| TMED9              | 0.6599553  | 0.67849698 | 0.298 | 0.341 | 1 ILC2_lung |
| CFL1               | 0.6627955  | 0.12074434 | 0.791 | 0.78  | 1 ILC2_lung |
| SLC25A3            | 0.66976989 | 0.28323506 | 0.422 | 0.463 | 1 ILC2_lung |
| NDUFB7             | 0.67386675 | 0.53033783 | 0.312 | 0.354 | 1 ILC2_lung |
| GNAL               | 0.67867866 | 0.71135164 | 0.252 | 0.268 | 1 ILC2_lung |
| TSPO               | 0.6802125  | 0.26508067 | 0.304 | 0.378 | 1 ILC2_lung |
| CD58               | 0.68327346 | 0.48347358 | 0.28  | 0.305 | 1 ILC2_lung |
| CD46               | 0.684192   | 0.50420655 | 0.281 | 0.293 | 1 ILC2_lung |
| RNF181             | 0.68548723 | 0.50697749 | 0.378 | 0.439 | 1 ILC2_lung |
| TMEM50A            | 0.68814862 | 0.37649023 | 0.349 | 0.39  | 1 ILC2_lung |
| SSBP1              | 0.68922927 | 0.40422354 | 0.216 | 0.268 | 1 ILC2_lung |
| TES                | 0.69080138 | 0.41248239 | 0.263 | 0.329 | 1 ILC2_lung |
| ARHGDIA            | 0.69323569 | 0.45723592 | 0.319 | 0.341 | 1 ILC2_lung |
| DPH2               | 0.69517807 | 0.47869616 | 0.239 | 0.305 | 1 ILC2_lung |
| GABARAP            | 0.70111766 | 0.24545869 | 0.492 | 0.585 | 1 ILC2_lung |
| ENSMMUG00000002075 | 0.70716192 | 0.33431644 | 0.312 | 0.341 | 1 ILC2_lung |
| CD164              | 0.71114842 | 0.31513699 | 0.474 | 0.573 | 1 ILC2_lung |
| RPS4Y2             | 0.71314872 | 0.31858277 | 0.213 | 0.256 | 1 ILC2_lung |

|                    |            |            |       |       |             |
|--------------------|------------|------------|-------|-------|-------------|
| RNF7               | 0.72082714 | 0.58395269 | 0.272 | 0.305 | 1 ILC2_lung |
| CIB1               | 0.7232421  | 0.55899928 | 0.239 | 0.256 | 1 ILC2_lung |
| ANP32E             | 0.72442707 | 0.43992089 | 0.274 | 0.354 | 1 ILC2_lung |
| RAB8B              | 0.72819594 | 0.19553515 | 0.566 | 0.634 | 1 ILC2_lung |
| UBXN1              | 0.73201599 | 0.41726922 | 0.381 | 0.439 | 1 ILC2_lung |
| BRK1               | 0.73674845 | 0.39160662 | 0.312 | 0.341 | 1 ILC2_lung |
| PLGRKT             | 0.74119251 | 0.7346864  | 0.216 | 0.28  | 1 ILC2_lung |
| DRAP1              | 0.76448473 | 0.39901879 | 0.28  | 0.354 | 1 ILC2_lung |
| BCAS2              | 0.76841452 | 0.44542566 | 0.227 | 0.28  | 1 ILC2_lung |
| ANXA5              | 0.77028232 | 0.31200734 | 0.287 | 0.354 | 1 ILC2_lung |
| FKBP1A             | 0.77046524 | 0.55295164 | 0.31  | 0.354 | 1 ILC2_lung |
| PSMC5              | 0.77165002 | 0.27873144 | 0.289 | 0.354 | 1 ILC2_lung |
| NDUFB5             | 0.77843308 | 0.36343767 | 0.236 | 0.293 | 1 ILC2_lung |
| NDUFA12            | 0.78358385 | 0.47345161 | 0.253 | 0.28  | 1 ILC2_lung |
| SAP18              | 0.78523928 | 0.32226116 | 0.465 | 0.549 | 1 ILC2_lung |
| ENSMMUG00000059843 | 0.78758411 | 0.14160728 | 0.237 | 0.268 | 1 ILC2_lung |
| ENSMMUG00000061630 | 0.79250818 | 0.51478649 | 0.321 | 0.366 | 1 ILC2_lung |
| EIF3I              | 0.79745895 | 0.48501117 | 0.285 | 0.305 | 1 ILC2_lung |
| CTSS               | 0.80557031 | 0.22047642 | 0.261 | 0.305 | 1 ILC2_lung |
| SEC62              | 0.80891038 | 0.30888514 | 0.382 | 0.476 | 1 ILC2_lung |
| TMBIM6             | 0.81161272 | 0.15651004 | 0.487 | 0.561 | 1 ILC2_lung |
| ENSMMUG00000016009 | 0.81307032 | 0.31025708 | 0.383 | 0.488 | 1 ILC2_lung |
| ST8SIA4            | 0.81368849 | 0.44287425 | 0.311 | 0.378 | 1 ILC2_lung |
| ANAPC16            | 0.81751782 | 0.50314219 | 0.243 | 0.305 | 1 ILC2_lung |
| IL4R               | 0.82060087 | 0.31193425 | 0.25  | 0.293 | 1 ILC2_lung |
| TAF7               | 0.82892302 | 0.36348691 | 0.258 | 0.28  | 1 ILC2_lung |
| PHF5A              | 0.83095056 | 0.67483089 | 0.253 | 0.293 | 1 ILC2_lung |
| NDUFAB1            | 0.83290013 | 0.52635989 | 0.232 | 0.256 | 1 ILC2_lung |
| CALCOCO2           | 0.83325429 | 0.32976566 | 0.242 | 0.28  | 1 ILC2_lung |
| ENSMMUG00000054038 | 0.83349146 | 0.10433987 | 0.55  | 0.646 | 1 ILC2_lung |
| PSMA4              | 0.83371226 | 0.41527989 | 0.302 | 0.378 | 1 ILC2_lung |
| WDR13              | 0.83878955 | 0.15958686 | 0.495 | 0.585 | 1 ILC2_lung |
| COA1               | 0.84419087 | 0.46537714 | 0.262 | 0.317 | 1 ILC2_lung |

|                     |            |            |       |       |             |
|---------------------|------------|------------|-------|-------|-------------|
| IL2RG               | 0.85199016 | 0.26244871 | 0.519 | 0.622 | 1 ILC2_lung |
| ENY2                | 0.85338534 | 0.4316057  | 0.368 | 0.439 | 1 ILC2_lung |
| SSR3                | 0.86655227 | 0.48150988 | 0.28  | 0.317 | 1 ILC2_lung |
| ENSMMUG00000006778  | 0.86953509 | 0.27619764 | 0.357 | 0.402 | 1 ILC2_lung |
| EIF3J               | 0.87025584 | 0.28122225 | 0.325 | 0.378 | 1 ILC2_lung |
| SF3B6               | 0.87081413 | 0.22664174 | 0.406 | 0.512 | 1 ILC2_lung |
| PDLIM5              | 0.87853047 | 0.49048529 | 0.287 | 0.341 | 1 ILC2_lung |
| AIMP1               | 0.88165789 | 0.3387515  | 0.341 | 0.427 | 1 ILC2_lung |
| RPL37A              | 0.88310068 | 0.20874022 | 0.982 | 0.963 | 1 ILC2_lung |
| NHP2                | 0.88353324 | 0.57395526 | 0.326 | 0.402 | 1 ILC2_lung |
| RBIS                | 0.88729472 | 0.35244535 | 0.349 | 0.439 | 1 ILC2_lung |
| MGST3               | 0.89727263 | 0.42052855 | 0.363 | 0.463 | 1 ILC2_lung |
| ENSMMUG000000063609 | 0.89928937 | 0.33268982 | 0.273 | 0.305 | 1 ILC2_lung |
| EIF3G               | 0.8993705  | 0.39394056 | 0.337 | 0.39  | 1 ILC2_lung |
| CSNK2B              | 0.89958707 | 0.3519876  | 0.257 | 0.305 | 1 ILC2_lung |
| XRCC6               | 0.90040001 | 0.36651861 | 0.367 | 0.451 | 1 ILC2_lung |
| PRMT2               | 0.90136265 | 0.61875192 | 0.236 | 0.268 | 1 ILC2_lung |
| YWHAE               | 0.91013871 | 0.45225812 | 0.364 | 0.463 | 1 ILC2_lung |
| LPXN                | 0.91625366 | 0.47247887 | 0.319 | 0.39  | 1 ILC2_lung |
| ZNF706              | 0.91818554 | 0.35867725 | 0.304 | 0.341 | 1 ILC2_lung |
| MRPS25              | 0.91902755 | 0.4615626  | 0.232 | 0.268 | 1 ILC2_lung |
| ENSMMUG00000006206  | 0.9218315  | 0.62891596 | 0.357 | 0.476 | 1 ILC2_lung |
| NDUFA5              | 0.93194203 | 0.20000354 | 0.249 | 0.28  | 1 ILC2_lung |
| SYF2                | 0.94025468 | 0.32440246 | 0.333 | 0.39  | 1 ILC2_lung |
| AP2M1               | 0.94184014 | 0.51649942 | 0.252 | 0.293 | 1 ILC2_lung |
| EIF1AX              | 0.94217491 | 0.47828256 | 0.319 | 0.378 | 1 ILC2_lung |
| ENSMMUG000000057449 | 0.94362952 | 0.26264124 | 0.294 | 0.341 | 1 ILC2_lung |
| TMEM59              | 0.95787828 | 0.28769384 | 0.46  | 0.561 | 1 ILC2_lung |
| HNRNPM              | 0.96502413 | 0.3213481  | 0.345 | 0.427 | 1 ILC2_lung |
| AMD1                | 0.96627224 | 0.48227346 | 0.292 | 0.341 | 1 ILC2_lung |
| ARPC2               | 0.9686295  | 0.334123   | 0.372 | 0.439 | 1 ILC2_lung |
| NCBP2               | 0.97007453 | 0.29238939 | 0.415 | 0.488 | 1 ILC2_lung |
| G3BP2               | 0.98783937 | 0.29867988 | 0.55  | 0.671 | 1 ILC2_lung |

|                    |            |            |       |       |                      |
|--------------------|------------|------------|-------|-------|----------------------|
| SERBP1             | 0.98993503 | 0.2410884  | 0.433 | 0.549 | 1 ILC2_lung          |
| HBE1               | 1.09E-113  | 5.83738904 | 0.513 | 0.005 | 3.87E-109 ILC2_UCBMC |
| HBA                | 1.22E-77   | 4.83137659 | 0.538 | 0.016 | 4.31E-73 ILC2_UCBMC  |
| ENSMMUG00000028906 | 2.52E-46   | 3.72183838 | 0.615 | 0.048 | 8.92E-42 ILC2_UCBMC  |
| ST7                | 1.57E-32   | 4.28805988 | 0.256 | 0.01  | 5.57E-28 ILC2_UCBMC  |
| PDE7A              | 1.14E-30   | 3.20809965 | 0.641 | 0.084 | 4.05E-26 ILC2_UCBMC  |
| KLF6               | 7.91E-30   | 2.72518532 | 0.949 | 0.226 | 2.80E-25 ILC2_UCBMC  |
| METTL16            | 5.65E-28   | 2.95981724 | 0.41  | 0.035 | 2.00E-23 ILC2_UCBMC  |
| NCOA3              | 1.61E-27   | 2.82799127 | 0.821 | 0.157 | 5.70E-23 ILC2_UCBMC  |
| ADD3               | 1.84E-27   | 2.83815592 | 0.59  | 0.077 | 6.52E-23 ILC2_UCBMC  |
| RSRP1              | 6.83E-27   | 2.71514371 | 0.795 | 0.154 | 2.42E-22 ILC2_UCBMC  |
| SETD7              | 2.37E-26   | 3.36204446 | 0.436 | 0.044 | 8.38E-22 ILC2_UCBMC  |
| CERS6              | 3.01E-26   | 3.6036253  | 0.41  | 0.038 | 1.07E-21 ILC2_UCBMC  |
| FAM117B            | 3.65E-26   | 3.85800739 | 0.385 | 0.034 | 1.29E-21 ILC2_UCBMC  |
| RFX3               | 9.93E-26   | 3.18236566 | 0.513 | 0.062 | 3.52E-21 ILC2_UCBMC  |
| PDS5A              | 1.16E-25   | 2.57417473 | 0.564 | 0.073 | 4.10E-21 ILC2_UCBMC  |
| RNF38              | 1.45E-25   | 3.05388006 | 0.538 | 0.07  | 5.13E-21 ILC2_UCBMC  |
| MBTD1              | 2.63E-25   | 2.99471226 | 0.538 | 0.07  | 9.32E-21 ILC2_UCBMC  |
| STK39              | 5.44E-25   | 3.0369964  | 0.513 | 0.064 | 1.93E-20 ILC2_UCBMC  |
| TMEM201            | 9.54E-25   | 3.650372   | 0.359 | 0.031 | 3.38E-20 ILC2_UCBMC  |
| SELENOI            | 2.31E-24   | 3.21425811 | 0.333 | 0.027 | 8.19E-20 ILC2_UCBMC  |
| MPP7               | 3.76E-24   | 2.84034584 | 0.487 | 0.06  | 1.33E-19 ILC2_UCBMC  |
| DDIT3              | 4.26E-24   | 2.91815534 | 0.436 | 0.046 | 1.51E-19 ILC2_UCBMC  |
| SELL               | 5.95E-24   | 3.27118248 | 0.615 | 0.099 | 2.11E-19 ILC2_UCBMC  |
| ARHGAP12           | 2.05E-23   | 2.71625324 | 0.385 | 0.037 | 7.28E-19 ILC2_UCBMC  |
| ESYT2              | 2.67E-23   | 2.82448229 | 0.59  | 0.094 | 9.44E-19 ILC2_UCBMC  |
| FBXL20             | 4.14E-23   | 3.09878404 | 0.487 | 0.063 | 1.47E-18 ILC2_UCBMC  |
| RIPOR2             | 8.58E-23   | 2.37336511 | 0.897 | 0.248 | 3.04E-18 ILC2_UCBMC  |
| GPR107             | 1.49E-22   | 3.56642718 | 0.385 | 0.041 | 5.27E-18 ILC2_UCBMC  |
| EIF2AK3            | 1.51E-22   | 3.13827102 | 0.385 | 0.04  | 5.36E-18 ILC2_UCBMC  |
| LUC7L3             | 1.62E-22   | 2.42313608 | 0.692 | 0.126 | 5.73E-18 ILC2_UCBMC  |
| KANSL1             | 2.15E-22   | 2.8538968  | 0.538 | 0.08  | 7.63E-18 ILC2_UCBMC  |
| FOXN2              | 2.23E-22   | 2.634886   | 0.487 | 0.063 | 7.89E-18 ILC2_UCBMC  |

|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| EPC2               | 3.53E-22 | 2.6343847  | 0.436 | 0.051 | 1.25E-17 | ILC2_UCBMC |
| MAP4K3             | 3.75E-22 | 2.69603998 | 0.41  | 0.045 | 1.33E-17 | ILC2_UCBMC |
| USP42              | 4.97E-22 | 3.56122761 | 0.256 | 0.017 | 1.76E-17 | ILC2_UCBMC |
| CAMK4              | 6.00E-22 | 2.32960405 | 0.641 | 0.112 | 2.13E-17 | ILC2_UCBMC |
| C20H16orf87        | 6.67E-22 | 3.09768267 | 0.359 | 0.035 | 2.36E-17 | ILC2_UCBMC |
| MYLIP              | 7.12E-22 | 2.48596693 | 0.615 | 0.103 | 2.52E-17 | ILC2_UCBMC |
| SPPL3              | 8.84E-22 | 3.01976708 | 0.41  | 0.046 | 3.13E-17 | ILC2_UCBMC |
| UBE2G1             | 1.93E-21 | 2.659778   | 0.487 | 0.066 | 6.84E-17 | ILC2_UCBMC |
| ELMO1              | 2.06E-21 | 2.46002651 | 0.692 | 0.137 | 7.31E-17 | ILC2_UCBMC |
| TCF12              | 2.07E-21 | 2.39447722 | 0.718 | 0.148 | 7.34E-17 | ILC2_UCBMC |
| ABLM1              | 2.19E-21 | 2.65743515 | 0.59  | 0.097 | 7.77E-17 | ILC2_UCBMC |
| ENSMMUG00000049539 | 3.57E-21 | 3.03746493 | 0.256 | 0.018 | 1.27E-16 | ILC2_UCBMC |
| PAN3               | 3.58E-21 | 2.54560794 | 0.641 | 0.121 | 1.27E-16 | ILC2_UCBMC |
| FOXN3              | 5.20E-21 | 2.55142026 | 0.718 | 0.147 | 1.84E-16 | ILC2_UCBMC |
| KAT6B              | 6.50E-21 | 2.49756661 | 0.667 | 0.127 | 2.30E-16 | ILC2_UCBMC |
| NUP133             | 8.79E-21 | 2.62788391 | 0.333 | 0.031 | 3.11E-16 | ILC2_UCBMC |
| SLC35A3            | 9.47E-21 | 2.79265518 | 0.538 | 0.086 | 3.35E-16 | ILC2_UCBMC |
| ENSMMUG00000056331 | 1.08E-20 | 3.45127099 | 0.256 | 0.018 | 3.81E-16 | ILC2_UCBMC |
| ASB3               | 1.35E-20 | 3.12496326 | 0.385 | 0.044 | 4.77E-16 | ILC2_UCBMC |
| ENSMMUG00000051300 | 1.64E-20 | 2.4138284  | 0.949 | 0.385 | 5.80E-16 | ILC2_UCBMC |
| ZNF618             | 2.18E-20 | 3.40131156 | 0.308 | 0.027 | 7.73E-16 | ILC2_UCBMC |
| CHMP7              | 2.76E-20 | 3.28102358 | 0.333 | 0.033 | 9.79E-16 | ILC2_UCBMC |
| DLG1               | 7.39E-20 | 3.03520677 | 0.462 | 0.067 | 2.62E-15 | ILC2_UCBMC |
| GOLPH3             | 8.16E-20 | 2.58415217 | 0.487 | 0.072 | 2.89E-15 | ILC2_UCBMC |
| UTRN               | 2.71E-19 | 2.30252039 | 0.795 | 0.225 | 9.60E-15 | ILC2_UCBMC |
| KDM6A              | 3.38E-19 | 2.49313849 | 0.615 | 0.12  | 1.20E-14 | ILC2_UCBMC |
| PPP3CA             | 3.66E-19 | 2.36630282 | 0.692 | 0.152 | 1.30E-14 | ILC2_UCBMC |
| KMT2C              | 4.48E-19 | 2.39231998 | 0.795 | 0.221 | 1.59E-14 | ILC2_UCBMC |
| PNISR              | 7.84E-19 | 2.2280755  | 0.795 | 0.211 | 2.78E-14 | ILC2_UCBMC |
| RBM43              | 1.10E-18 | 2.7020357  | 0.333 | 0.035 | 3.89E-14 | ILC2_UCBMC |
| RICTOR             | 1.23E-18 | 2.21706961 | 0.59  | 0.114 | 4.35E-14 | ILC2_UCBMC |
| TTC7A              | 1.28E-18 | 3.04593753 | 0.256 | 0.021 | 4.55E-14 | ILC2_UCBMC |
| POU2F1             | 1.47E-18 | 2.5068619  | 0.359 | 0.041 | 5.21E-14 | ILC2_UCBMC |

|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| PIK3CA             | 1.56E-18 | 2.72129771 | 0.385 | 0.047 | 5.54E-14 | ILC2_UCBMC |
| SLCO3A1            | 1.74E-18 | 2.49948221 | 0.359 | 0.042 | 6.18E-14 | ILC2_UCBMC |
| GLG1               | 2.07E-18 | 2.56587027 | 0.487 | 0.078 | 7.32E-14 | ILC2_UCBMC |
| CDK13              | 2.09E-18 | 2.48868779 | 0.538 | 0.095 | 7.40E-14 | ILC2_UCBMC |
| RPS20              | 2.12E-18 | 1.57795902 | 0.974 | 0.869 | 7.53E-14 | ILC2_UCBMC |
| ATP2B1             | 2.43E-18 | 2.70774045 | 0.41  | 0.055 | 8.62E-14 | ILC2_UCBMC |
| RCC1               | 2.61E-18 | 2.39665868 | 0.538 | 0.092 | 9.26E-14 | ILC2_UCBMC |
| WWP2               | 2.84E-18 | 2.99193307 | 0.333 | 0.037 | 1.01E-13 | ILC2_UCBMC |
| QKI                | 5.00E-18 | 2.44870814 | 0.59  | 0.118 | 1.77E-13 | ILC2_UCBMC |
| RPL13A             | 5.12E-18 | 1.16919097 | 0.974 | 0.966 | 1.81E-13 | ILC2_UCBMC |
| AVL9               | 5.32E-18 | 3.59730049 | 0.282 | 0.027 | 1.89E-13 | ILC2_UCBMC |
| TNRC6B             | 5.46E-18 | 2.24650253 | 0.846 | 0.282 | 1.94E-13 | ILC2_UCBMC |
| FAM91A1            | 6.83E-18 | 2.79913325 | 0.308 | 0.032 | 2.42E-13 | ILC2_UCBMC |
| WDPCP              | 7.02E-18 | 3.9229688  | 0.308 | 0.032 | 2.49E-13 | ILC2_UCBMC |
| ZNF420             | 7.20E-18 | 2.26750875 | 0.333 | 0.036 | 2.55E-13 | ILC2_UCBMC |
| ZNF407             | 1.08E-17 | 2.22170139 | 0.385 | 0.05  | 3.84E-13 | ILC2_UCBMC |
| ULK2               | 1.44E-17 | 3.30833364 | 0.282 | 0.027 | 5.10E-13 | ILC2_UCBMC |
| LMBRD1             | 1.52E-17 | 2.41272272 | 0.513 | 0.089 | 5.39E-13 | ILC2_UCBMC |
| SRPK2              | 1.60E-17 | 2.54185304 | 0.513 | 0.092 | 5.67E-13 | ILC2_UCBMC |
| YEATS2             | 1.74E-17 | 2.09204029 | 0.538 | 0.097 | 6.17E-13 | ILC2_UCBMC |
| CDK6               | 1.83E-17 | 3.06997902 | 0.308 | 0.033 | 6.48E-13 | ILC2_UCBMC |
| PTBP2              | 2.15E-17 | 2.43706767 | 0.513 | 0.091 | 7.63E-13 | ILC2_UCBMC |
| COG5               | 2.56E-17 | 2.32439727 | 0.59  | 0.115 | 9.05E-13 | ILC2_UCBMC |
| CERT1              | 2.69E-17 | 2.54612509 | 0.462 | 0.074 | 9.53E-13 | ILC2_UCBMC |
| VPS13B             | 2.80E-17 | 2.54727162 | 0.718 | 0.197 | 9.92E-13 | ILC2_UCBMC |
| RPS6KB1            | 2.87E-17 | 2.52742579 | 0.462 | 0.074 | 1.02E-12 | ILC2_UCBMC |
| AGO2               | 3.01E-17 | 2.45896367 | 0.385 | 0.051 | 1.07E-12 | ILC2_UCBMC |
| ENSMMUG00000008587 | 3.19E-17 | 2.42177703 | 0.436 | 0.066 | 1.13E-12 | ILC2_UCBMC |
| SLC22A18           | 3.94E-17 | 2.39753568 | 0.487 | 0.083 | 1.39E-12 | ILC2_UCBMC |
| CEP95              | 4.25E-17 | 2.94576256 | 0.282 | 0.028 | 1.51E-12 | ILC2_UCBMC |
| RLF                | 4.89E-17 | 2.63457781 | 0.487 | 0.085 | 1.73E-12 | ILC2_UCBMC |
| NCOR1              | 5.33E-17 | 2.13943839 | 0.538 | 0.098 | 1.89E-12 | ILC2_UCBMC |
| SCMH1              | 5.40E-17 | 2.84878419 | 0.41  | 0.06  | 1.91E-12 | ILC2_UCBMC |

|                   |          |            |       |       |          |            |
|-------------------|----------|------------|-------|-------|----------|------------|
| ATG13             | 5.98E-17 | 2.68678775 | 0.333 | 0.04  | 2.12E-12 | ILC2_UCBMC |
| MAN2A1            | 6.65E-17 | 2.41107799 | 0.564 | 0.114 | 2.36E-12 | ILC2_UCBMC |
| UGCG              | 7.32E-17 | 2.32759995 | 0.359 | 0.045 | 2.59E-12 | ILC2_UCBMC |
| AKT3              | 7.46E-17 | 2.6774869  | 0.513 | 0.097 | 2.64E-12 | ILC2_UCBMC |
| TLE4              | 8.88E-17 | 2.66547575 | 0.436 | 0.068 | 3.15E-12 | ILC2_UCBMC |
| EXOC4             | 1.09E-16 | 2.01102882 | 0.59  | 0.121 | 3.85E-12 | ILC2_UCBMC |
| NRROS             | 1.11E-16 | 2.46834654 | 0.41  | 0.06  | 3.94E-12 | ILC2_UCBMC |
| FBXO33            | 2.54E-16 | 2.45981985 | 0.41  | 0.063 | 9.00E-12 | ILC2_UCBMC |
| UHRF1BP1L         | 3.21E-16 | 2.82856725 | 0.436 | 0.072 | 1.14E-11 | ILC2_UCBMC |
| RNF34             | 3.52E-16 | 2.60838874 | 0.333 | 0.041 | 1.25E-11 | ILC2_UCBMC |
| RANBP9            | 3.91E-16 | 2.2435214  | 0.436 | 0.07  | 1.39E-11 | ILC2_UCBMC |
| SETD2             | 4.73E-16 | 2.66636515 | 0.538 | 0.11  | 1.68E-11 | ILC2_UCBMC |
| ATP2A2            | 4.94E-16 | 2.2674636  | 0.436 | 0.07  | 1.75E-11 | ILC2_UCBMC |
| DIP2B             | 6.18E-16 | 2.40145898 | 0.462 | 0.081 | 2.19E-11 | ILC2_UCBMC |
| ZFC3H1            | 6.60E-16 | 2.36411696 | 0.487 | 0.09  | 2.34E-11 | ILC2_UCBMC |
| FYN               | 8.85E-16 | 1.85713875 | 0.59  | 0.125 | 3.14E-11 | ILC2_UCBMC |
| ARHGEF3           | 1.48E-15 | 3.43019674 | 0.308 | 0.038 | 5.23E-11 | ILC2_UCBMC |
| HECTD4            | 1.56E-15 | 2.94433979 | 0.308 | 0.038 | 5.52E-11 | ILC2_UCBMC |
| SPRTN             | 1.99E-15 | 2.79639381 | 0.256 | 0.026 | 7.06E-11 | ILC2_UCBMC |
| ENSMUG00000046264 | 2.06E-15 | 2.58195368 | 0.333 | 0.044 | 7.32E-11 | ILC2_UCBMC |
| MTSS1             | 2.19E-15 | 3.51172996 | 0.333 | 0.046 | 7.75E-11 | ILC2_UCBMC |
| AFF1              | 2.78E-15 | 2.38487645 | 0.333 | 0.044 | 9.86E-11 | ILC2_UCBMC |
| ENSMUG00000061038 | 3.00E-15 | 3.15598214 | 0.256 | 0.027 | 1.06E-10 | ILC2_UCBMC |
| S1PR1             | 3.13E-15 | 2.77916866 | 0.333 | 0.044 | 1.11E-10 | ILC2_UCBMC |
| ABI1              | 3.97E-15 | 2.27716481 | 0.564 | 0.128 | 1.41E-10 | ILC2_UCBMC |
| NCOA2             | 4.13E-15 | 2.27356888 | 0.462 | 0.084 | 1.46E-10 | ILC2_UCBMC |
| DOP1B             | 4.64E-15 | 2.9319306  | 0.256 | 0.027 | 1.64E-10 | ILC2_UCBMC |
| CREBBP            | 5.48E-15 | 2.25865008 | 0.462 | 0.082 | 1.94E-10 | ILC2_UCBMC |
| ZNF609            | 5.66E-15 | 2.69161625 | 0.487 | 0.094 | 2.00E-10 | ILC2_UCBMC |
| FBXO11            | 5.73E-15 | 2.38609952 | 0.462 | 0.085 | 2.03E-10 | ILC2_UCBMC |
| TRPM7             | 6.22E-15 | 1.8222305  | 0.744 | 0.199 | 2.20E-10 | ILC2_UCBMC |
| SECISBP2          | 6.43E-15 | 2.30184749 | 0.41  | 0.066 | 2.28E-10 | ILC2_UCBMC |
| FAM13B            | 7.04E-15 | 2.39960075 | 0.333 | 0.045 | 2.50E-10 | ILC2_UCBMC |

|                   |          |            |       |       |          |            |
|-------------------|----------|------------|-------|-------|----------|------------|
| USP24             | 7.16E-15 | 2.87977458 | 0.308 | 0.04  | 2.54E-10 | ILC2_UCBMC |
| SREK1             | 7.23E-15 | 2.03568929 | 0.615 | 0.143 | 2.56E-10 | ILC2_UCBMC |
| WRN               | 7.55E-15 | 2.51388487 | 0.513 | 0.102 | 2.68E-10 | ILC2_UCBMC |
| REPS1             | 7.68E-15 | 2.10258409 | 0.359 | 0.051 | 2.72E-10 | ILC2_UCBMC |
| ATG14             | 8.36E-15 | 2.93769976 | 0.282 | 0.033 | 2.96E-10 | ILC2_UCBMC |
| ARID4B            | 8.87E-15 | 2.07514788 | 0.769 | 0.261 | 3.14E-10 | ILC2_UCBMC |
| KLF12             | 9.11E-15 | 1.87758735 | 0.615 | 0.149 | 3.23E-10 | ILC2_UCBMC |
| PLCL2             | 1.12E-14 | 2.67895537 | 0.308 | 0.039 | 3.96E-10 | ILC2_UCBMC |
| SIK3              | 1.15E-14 | 1.94696612 | 0.897 | 0.341 | 4.07E-10 | ILC2_UCBMC |
| IFNGR2            | 1.27E-14 | 1.77410381 | 0.436 | 0.072 | 4.51E-10 | ILC2_UCBMC |
| EPB41             | 1.28E-14 | 2.18837956 | 0.564 | 0.128 | 4.54E-10 | ILC2_UCBMC |
| SMG7              | 1.33E-14 | 2.3667517  | 0.359 | 0.053 | 4.71E-10 | ILC2_UCBMC |
| CLASP1            | 1.39E-14 | 2.23119463 | 0.436 | 0.075 | 4.93E-10 | ILC2_UCBMC |
| ST3GAL3           | 1.43E-14 | 2.52788286 | 0.256 | 0.027 | 5.05E-10 | ILC2_UCBMC |
| EPC1              | 1.48E-14 | 1.70444234 | 0.846 | 0.287 | 5.26E-10 | ILC2_UCBMC |
| EXOC2             | 1.65E-14 | 2.97523418 | 0.282 | 0.034 | 5.85E-10 | ILC2_UCBMC |
| MED15             | 1.98E-14 | 3.13983524 | 0.282 | 0.034 | 7.03E-10 | ILC2_UCBMC |
| CREBRF            | 2.27E-14 | 2.3576248  | 0.462 | 0.086 | 8.04E-10 | ILC2_UCBMC |
| CDK17             | 2.31E-14 | 1.70344054 | 0.744 | 0.212 | 8.17E-10 | ILC2_UCBMC |
| IQGAP2            | 2.58E-14 | 2.46076929 | 0.59  | 0.144 | 9.15E-10 | ILC2_UCBMC |
| GMCL1             | 2.87E-14 | 1.90014432 | 0.538 | 0.111 | 1.02E-09 | ILC2_UCBMC |
| ERO1B             | 3.00E-14 | 2.48712664 | 0.359 | 0.055 | 1.06E-09 | ILC2_UCBMC |
| CPEB1             | 3.11E-14 | 1.24550691 | 0.974 | 0.907 | 1.10E-09 | ILC2_UCBMC |
| TMEM131L          | 3.17E-14 | 2.91079818 | 0.333 | 0.048 | 1.12E-09 | ILC2_UCBMC |
| SSH2              | 3.18E-14 | 1.75210745 | 0.795 | 0.261 | 1.13E-09 | ILC2_UCBMC |
| TNIK              | 3.36E-14 | 1.76704015 | 0.718 | 0.212 | 1.19E-09 | ILC2_UCBMC |
| FBXW7             | 3.49E-14 | 2.25414197 | 0.513 | 0.108 | 1.23E-09 | ILC2_UCBMC |
| CPLANE1           | 3.62E-14 | 2.57419041 | 0.282 | 0.034 | 1.28E-09 | ILC2_UCBMC |
| SCAF8             | 3.73E-14 | 1.95810595 | 0.41  | 0.069 | 1.32E-09 | ILC2_UCBMC |
| CUL3              | 3.88E-14 | 2.61842202 | 0.487 | 0.104 | 1.38E-09 | ILC2_UCBMC |
| YTHDF3            | 4.36E-14 | 2.56378959 | 0.385 | 0.063 | 1.55E-09 | ILC2_UCBMC |
| UHRF2             | 4.77E-14 | 2.31326916 | 0.359 | 0.055 | 1.69E-09 | ILC2_UCBMC |
| ENSMUG00000062716 | 5.56E-14 | 2.47582272 | 0.385 | 0.065 | 1.97E-09 | ILC2_UCBMC |



|         |          |            |       |       |          |            |
|---------|----------|------------|-------|-------|----------|------------|
| TM9SF3  | 5.76E-14 | 2.38254397 | 0.538 | 0.125 | 2.04E-09 | ILC2_UCBMC |
| RAB1A   | 5.78E-14 | 2.45781311 | 0.513 | 0.113 | 2.05E-09 | ILC2_UCBMC |
| SLMAP   | 5.93E-14 | 2.44991936 | 0.41  | 0.072 | 2.10E-09 | ILC2_UCBMC |
| CDC14A  | 6.76E-14 | 2.0463778  | 0.744 | 0.224 | 2.39E-09 | ILC2_UCBMC |
| MFSD14B | 8.04E-14 | 2.60859907 | 0.282 | 0.035 | 2.85E-09 | ILC2_UCBMC |
| FAM241A | 8.30E-14 | 2.20774073 | 0.385 | 0.063 | 2.94E-09 | ILC2_UCBMC |
| FUT8    | 8.41E-14 | 2.56836721 | 0.308 | 0.042 | 2.98E-09 | ILC2_UCBMC |
| UBE2H   | 9.05E-14 | 2.04878862 | 0.462 | 0.089 | 3.21E-09 | ILC2_UCBMC |
| TBC1D1  | 1.10E-13 | 2.14777501 | 0.385 | 0.064 | 3.91E-09 | ILC2_UCBMC |
| RPL27A  | 1.31E-13 | 1.08086373 | 0.949 | 0.919 | 4.62E-09 | ILC2_UCBMC |
| NIPA2   | 1.35E-13 | 2.65834972 | 0.256 | 0.03  | 4.80E-09 | ILC2_UCBMC |
| RPL23A  | 1.36E-13 | 0.93581122 | 0.974 | 0.982 | 4.81E-09 | ILC2_UCBMC |
| PRRC2B  | 1.38E-13 | 1.88575029 | 0.487 | 0.098 | 4.87E-09 | ILC2_UCBMC |
| SENP5   | 1.45E-13 | 2.48323225 | 0.359 | 0.058 | 5.15E-09 | ILC2_UCBMC |
| ARIH1   | 1.63E-13 | 1.87883778 | 0.59  | 0.145 | 5.76E-09 | ILC2_UCBMC |
| MKLN1   | 1.76E-13 | 1.74143985 | 0.513 | 0.106 | 6.24E-09 | ILC2_UCBMC |
| PRIM2   | 1.77E-13 | 3.2492941  | 0.282 | 0.037 | 6.27E-09 | ILC2_UCBMC |
| ARID1B  | 1.84E-13 | 1.85087445 | 0.564 | 0.128 | 6.52E-09 | ILC2_UCBMC |
| INO80D  | 2.25E-13 | 2.00506328 | 0.41  | 0.072 | 7.97E-09 | ILC2_UCBMC |
| XYLT1   | 2.86E-13 | 2.04329038 | 0.436 | 0.084 | 1.01E-08 | ILC2_UCBMC |
| ECD     | 3.08E-13 | 2.61931876 | 0.359 | 0.059 | 1.09E-08 | ILC2_UCBMC |
| MINDY3  | 3.10E-13 | 2.47203567 | 0.256 | 0.03  | 1.10E-08 | ILC2_UCBMC |
| MYCBP2  | 3.27E-13 | 1.72017109 | 0.692 | 0.193 | 1.16E-08 | ILC2_UCBMC |
| PRPF40A | 3.37E-13 | 1.86092666 | 0.667 | 0.179 | 1.19E-08 | ILC2_UCBMC |
| KDM4C   | 4.64E-13 | 2.04718536 | 0.462 | 0.094 | 1.64E-08 | ILC2_UCBMC |
| PUM1    | 4.72E-13 | 1.98961692 | 0.564 | 0.143 | 1.67E-08 | ILC2_UCBMC |
| SEC24B  | 5.46E-13 | 2.59070714 | 0.385 | 0.069 | 1.93E-08 | ILC2_UCBMC |
| TUT4    | 5.93E-13 | 1.95048659 | 0.615 | 0.169 | 2.10E-08 | ILC2_UCBMC |
| CCM2    | 6.37E-13 | 2.05065542 | 0.462 | 0.094 | 2.26E-08 | ILC2_UCBMC |
| PIAS1   | 6.49E-13 | 1.98582215 | 0.538 | 0.124 | 2.30E-08 | ILC2_UCBMC |
| JAML    | 6.57E-13 | 2.29024927 | 0.487 | 0.113 | 2.33E-08 | ILC2_UCBMC |
| GOLGA4  | 7.03E-13 | 2.13816699 | 0.538 | 0.131 | 2.49E-08 | ILC2_UCBMC |
| BIN3    | 7.61E-13 | 1.98369416 | 0.513 | 0.112 | 2.70E-08 | ILC2_UCBMC |

|          |          |            |       |       |          |            |
|----------|----------|------------|-------|-------|----------|------------|
| EXT1     | 7.98E-13 | 2.16415264 | 0.256 | 0.031 | 2.83E-08 | ILC2_UCBMC |
| DDX5     | 8.16E-13 | 1.30762376 | 1     | 0.65  | 2.89E-08 | ILC2_UCBMC |
| PRKD3    | 8.34E-13 | 2.00862118 | 0.436 | 0.084 | 2.95E-08 | ILC2_UCBMC |
| PHACTR2  | 8.69E-13 | 2.61608196 | 0.282 | 0.04  | 3.08E-08 | ILC2_UCBMC |
| DMXL1    | 9.26E-13 | 2.16174426 | 0.282 | 0.038 | 3.28E-08 | ILC2_UCBMC |
| LMNA     | 9.42E-13 | 1.94704966 | 0.385 | 0.068 | 3.34E-08 | ILC2_UCBMC |
| ADAM19   | 1.05E-12 | 2.23307533 | 0.436 | 0.087 | 3.70E-08 | ILC2_UCBMC |
| ATP2B4   | 1.17E-12 | 2.15736555 | 0.333 | 0.052 | 4.14E-08 | ILC2_UCBMC |
| DENND5A  | 1.24E-12 | 2.3225492  | 0.359 | 0.061 | 4.40E-08 | ILC2_UCBMC |
| RPS6KA5  | 1.35E-12 | 2.23832061 | 0.436 | 0.089 | 4.80E-08 | ILC2_UCBMC |
| BACH2    | 1.42E-12 | 2.05194148 | 0.436 | 0.088 | 5.03E-08 | ILC2_UCBMC |
| RYBP     | 1.47E-12 | 2.64929734 | 0.256 | 0.032 | 5.21E-08 | ILC2_UCBMC |
| PPM1A    | 1.65E-12 | 2.79982064 | 0.256 | 0.033 | 5.84E-08 | ILC2_UCBMC |
| TCERG1   | 1.65E-12 | 1.93430415 | 0.359 | 0.061 | 5.86E-08 | ILC2_UCBMC |
| SMCHD1   | 1.71E-12 | 1.96350913 | 0.564 | 0.139 | 6.06E-08 | ILC2_UCBMC |
| ZBTB11   | 1.76E-12 | 2.57079987 | 0.282 | 0.039 | 6.22E-08 | ILC2_UCBMC |
| DIAPH1   | 1.77E-12 | 1.75545935 | 0.59  | 0.154 | 6.26E-08 | ILC2_UCBMC |
| UBAP1    | 1.82E-12 | 2.31179763 | 0.41  | 0.081 | 6.44E-08 | ILC2_UCBMC |
| ME2      | 1.90E-12 | 2.61830153 | 0.385 | 0.072 | 6.74E-08 | ILC2_UCBMC |
| USP9X    | 1.96E-12 | 1.51623386 | 0.487 | 0.101 | 6.94E-08 | ILC2_UCBMC |
| NIPSNAP2 | 2.18E-12 | 2.82798873 | 0.333 | 0.057 | 7.74E-08 | ILC2_UCBMC |
| PTEN     | 2.32E-12 | 2.64905942 | 0.282 | 0.041 | 8.23E-08 | ILC2_UCBMC |
| CASP3    | 2.34E-12 | 2.35002093 | 0.462 | 0.097 | 8.30E-08 | ILC2_UCBMC |
| ABCB7    | 2.39E-12 | 2.68322149 | 0.308 | 0.046 | 8.47E-08 | ILC2_UCBMC |
| SLC12A6  | 2.80E-12 | 2.85436487 | 0.282 | 0.041 | 9.93E-08 | ILC2_UCBMC |
| DDX6     | 2.81E-12 | 1.64365488 | 0.641 | 0.173 | 9.96E-08 | ILC2_UCBMC |
| PIK3R5   | 3.04E-12 | 2.32533285 | 0.333 | 0.055 | 1.08E-07 | ILC2_UCBMC |
| TIMM23   | 3.29E-12 | 2.40109292 | 0.385 | 0.072 | 1.17E-07 | ILC2_UCBMC |
| TRIM24   | 3.43E-12 | 2.31939158 | 0.282 | 0.04  | 1.22E-07 | ILC2_UCBMC |
| BTA1F1   | 3.57E-12 | 1.86521875 | 0.385 | 0.069 | 1.26E-07 | ILC2_UCBMC |
| MED12L   | 3.61E-12 | 2.03762228 | 0.41  | 0.081 | 1.28E-07 | ILC2_UCBMC |
| PPP2R2A  | 3.86E-12 | 2.35644979 | 0.436 | 0.089 | 1.37E-07 | ILC2_UCBMC |
| AUH      | 3.87E-12 | 2.57575234 | 0.256 | 0.034 | 1.37E-07 | ILC2_UCBMC |

|                     |          |            |       |       |          |            |
|---------------------|----------|------------|-------|-------|----------|------------|
| RASA2               | 4.18E-12 | 1.9087698  | 0.538 | 0.133 | 1.48E-07 | ILC2_UCBMC |
| ENSMMUG00000006165  | 4.67E-12 | 1.60727297 | 0.821 | 0.303 | 1.65E-07 | ILC2_UCBMC |
| MXD1                | 4.92E-12 | 2.22311245 | 0.282 | 0.04  | 1.74E-07 | ILC2_UCBMC |
| ATF6B               | 5.25E-12 | 1.8981519  | 0.359 | 0.061 | 1.86E-07 | ILC2_UCBMC |
| CAPN7               | 5.36E-12 | 2.55323479 | 0.256 | 0.034 | 1.90E-07 | ILC2_UCBMC |
| NKIRAS1             | 5.71E-12 | 2.28705118 | 0.359 | 0.065 | 2.02E-07 | ILC2_UCBMC |
| OSBPL8              | 5.88E-12 | 2.34282561 | 0.564 | 0.156 | 2.08E-07 | ILC2_UCBMC |
| SLC30A9             | 6.02E-12 | 2.69615152 | 0.359 | 0.064 | 2.13E-07 | ILC2_UCBMC |
| GTF2H1              | 6.04E-12 | 2.78273005 | 0.282 | 0.041 | 2.14E-07 | ILC2_UCBMC |
| C20H16orf72         | 6.05E-12 | 1.77197195 | 0.385 | 0.07  | 2.14E-07 | ILC2_UCBMC |
| SMARCC1             | 6.32E-12 | 1.76571806 | 0.462 | 0.098 | 2.24E-07 | ILC2_UCBMC |
| THUMPD1             | 6.37E-12 | 1.9287141  | 0.41  | 0.08  | 2.26E-07 | ILC2_UCBMC |
| LRCH3               | 6.96E-12 | 2.19590592 | 0.41  | 0.082 | 2.47E-07 | ILC2_UCBMC |
| CLINT1              | 7.08E-12 | 1.64169279 | 0.872 | 0.345 | 2.51E-07 | ILC2_UCBMC |
| ZC3H7A              | 7.10E-12 | 2.18756675 | 0.282 | 0.041 | 2.51E-07 | ILC2_UCBMC |
| YTHDF2              | 7.31E-12 | 1.99551592 | 0.333 | 0.055 | 2.59E-07 | ILC2_UCBMC |
| ZBTB16              | 7.41E-12 | 2.06258816 | 0.41  | 0.083 | 2.63E-07 | ILC2_UCBMC |
| GSK3B               | 7.56E-12 | 1.89125168 | 0.462 | 0.101 | 2.68E-07 | ILC2_UCBMC |
| HACD4               | 7.74E-12 | 2.71563559 | 0.256 | 0.035 | 2.74E-07 | ILC2_UCBMC |
| TANGO6              | 7.99E-12 | 2.15250915 | 0.256 | 0.034 | 2.83E-07 | ILC2_UCBMC |
| TNKS                | 8.13E-12 | 2.7409739  | 0.308 | 0.049 | 2.88E-07 | ILC2_UCBMC |
| MON2                | 8.63E-12 | 2.50708255 | 0.308 | 0.049 | 3.06E-07 | ILC2_UCBMC |
| WASF2               | 8.73E-12 | 2.03317465 | 0.462 | 0.104 | 3.09E-07 | ILC2_UCBMC |
| STAG1               | 9.06E-12 | 1.77417731 | 0.692 | 0.232 | 3.21E-07 | ILC2_UCBMC |
| RBM33               | 9.44E-12 | 2.21514122 | 0.436 | 0.096 | 3.35E-07 | ILC2_UCBMC |
| ENSMMUG000000061756 | 9.53E-12 | 1.98391714 | 0.359 | 0.062 | 3.38E-07 | ILC2_UCBMC |
| KAT7                | 9.78E-12 | 2.52319439 | 0.256 | 0.035 | 3.47E-07 | ILC2_UCBMC |
| ENSMMUG00000008346  | 1.07E-11 | 2.02347035 | 0.487 | 0.117 | 3.78E-07 | ILC2_UCBMC |
| TFDP2               | 1.16E-11 | 1.77161025 | 0.436 | 0.089 | 4.10E-07 | ILC2_UCBMC |
| MED1                | 1.16E-11 | 2.43785489 | 0.256 | 0.035 | 4.11E-07 | ILC2_UCBMC |
| CCDC91              | 1.23E-11 | 2.04587216 | 0.538 | 0.137 | 4.35E-07 | ILC2_UCBMC |
| SMG6                | 1.25E-11 | 1.82325265 | 0.538 | 0.135 | 4.42E-07 | ILC2_UCBMC |
| TRIM33              | 1.29E-11 | 2.54232781 | 0.333 | 0.058 | 4.58E-07 | ILC2_UCBMC |

|          |          |            |       |       |          |            |
|----------|----------|------------|-------|-------|----------|------------|
| PPM1B    | 1.31E-11 | 1.88208452 | 0.308 | 0.049 | 4.63E-07 | ILC2_UCBMC |
| NRF1     | 1.35E-11 | 2.63322499 | 0.282 | 0.042 | 4.78E-07 | ILC2_UCBMC |
| DYRK2    | 1.36E-11 | 2.27630017 | 0.308 | 0.049 | 4.83E-07 | ILC2_UCBMC |
| JMJD1C   | 1.44E-11 | 1.92223837 | 0.769 | 0.291 | 5.10E-07 | ILC2_UCBMC |
| GGNBP2   | 1.45E-11 | 2.05697525 | 0.385 | 0.074 | 5.15E-07 | ILC2_UCBMC |
| RBM14    | 1.55E-11 | 1.66777548 | 0.718 | 0.219 | 5.49E-07 | ILC2_UCBMC |
| HTT      | 1.80E-11 | 2.77361409 | 0.256 | 0.035 | 6.39E-07 | ILC2_UCBMC |
| GNG2     | 1.95E-11 | 2.05848806 | 0.59  | 0.179 | 6.90E-07 | ILC2_UCBMC |
| FBXO34   | 1.97E-11 | 1.75569567 | 0.59  | 0.166 | 6.98E-07 | ILC2_UCBMC |
| ATXN1    | 2.17E-11 | 2.26635942 | 0.385 | 0.077 | 7.69E-07 | ILC2_UCBMC |
| SRSF4    | 2.18E-11 | 2.08712008 | 0.436 | 0.097 | 7.73E-07 | ILC2_UCBMC |
| PPP2R5A  | 2.26E-11 | 2.4372     | 0.333 | 0.058 | 8.01E-07 | ILC2_UCBMC |
| COP1     | 2.27E-11 | 2.47536879 | 0.385 | 0.08  | 8.03E-07 | ILC2_UCBMC |
| GRAMD4   | 2.35E-11 | 2.43121121 | 0.282 | 0.043 | 8.34E-07 | ILC2_UCBMC |
| VPS13D   | 2.40E-11 | 2.9592237  | 0.282 | 0.044 | 8.52E-07 | ILC2_UCBMC |
| DNAJC1   | 2.51E-11 | 2.13435013 | 0.385 | 0.077 | 8.90E-07 | ILC2_UCBMC |
| ATP10A   | 2.61E-11 | 2.37506191 | 0.385 | 0.077 | 9.24E-07 | ILC2_UCBMC |
| PCCA     | 2.71E-11 | 1.90126772 | 0.41  | 0.085 | 9.61E-07 | ILC2_UCBMC |
| BSDC1    | 2.76E-11 | 2.02246377 | 0.333 | 0.058 | 9.79E-07 | ILC2_UCBMC |
| MLLT10   | 2.81E-11 | 1.7099613  | 0.385 | 0.074 | 9.94E-07 | ILC2_UCBMC |
| LCORL    | 3.02E-11 | 2.49815408 | 0.282 | 0.043 | 1.07E-06 | ILC2_UCBMC |
| RAP1GDS1 | 3.31E-11 | 2.02165482 | 0.385 | 0.075 | 1.17E-06 | ILC2_UCBMC |
| WDR26    | 3.57E-11 | 2.22624663 | 0.359 | 0.069 | 1.27E-06 | ILC2_UCBMC |
| LCOR     | 3.61E-11 | 1.56846766 | 0.436 | 0.092 | 1.28E-06 | ILC2_UCBMC |
| USP34    | 3.74E-11 | 1.78155729 | 0.564 | 0.154 | 1.32E-06 | ILC2_UCBMC |
| PPP1R12A | 3.99E-11 | 1.70499645 | 0.692 | 0.215 | 1.41E-06 | ILC2_UCBMC |
| QRICH1   | 4.01E-11 | 2.17286342 | 0.333 | 0.06  | 1.42E-06 | ILC2_UCBMC |
| CCND3    | 4.32E-11 | 2.18106501 | 0.513 | 0.141 | 1.53E-06 | ILC2_UCBMC |
| ZFAND6   | 4.59E-11 | 1.81779003 | 0.667 | 0.214 | 1.63E-06 | ILC2_UCBMC |
| PBRM1    | 4.77E-11 | 2.27153842 | 0.41  | 0.091 | 1.69E-06 | ILC2_UCBMC |
| MAPRE2   | 4.80E-11 | 1.64613021 | 0.538 | 0.139 | 1.70E-06 | ILC2_UCBMC |
| ARMC8    | 4.80E-11 | 2.23277561 | 0.308 | 0.052 | 1.70E-06 | ILC2_UCBMC |
| MARCHF6  | 4.99E-11 | 1.9652531  | 0.462 | 0.109 | 1.77E-06 | ILC2_UCBMC |

|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| CD52               | 5.16E-11 | 1.23734392 | 0.974 | 0.762 | 1.83E-06 | ILC2_UCBMC |
| TNPO1              | 5.32E-11 | 2.27319529 | 0.282 | 0.044 | 1.89E-06 | ILC2_UCBMC |
| HS2ST1             | 5.41E-11 | 2.70489673 | 0.256 | 0.038 | 1.92E-06 | ILC2_UCBMC |
| SOS2               | 5.79E-11 | 2.2065318  | 0.359 | 0.069 | 2.05E-06 | ILC2_UCBMC |
| INPP5A             | 6.01E-11 | 2.20509661 | 0.333 | 0.06  | 2.13E-06 | ILC2_UCBMC |
| SEC31A             | 6.85E-11 | 1.7633671  | 0.487 | 0.118 | 2.43E-06 | ILC2_UCBMC |
| AP3B1              | 7.00E-11 | 2.77648881 | 0.436 | 0.103 | 2.48E-06 | ILC2_UCBMC |
| GAPVD1             | 7.17E-11 | 2.51258663 | 0.333 | 0.063 | 2.54E-06 | ILC2_UCBMC |
| ZNF43              | 7.17E-11 | 1.91432348 | 0.385 | 0.077 | 2.54E-06 | ILC2_UCBMC |
| TRIM72             | 7.59E-11 | 1.56370115 | 0.692 | 0.233 | 2.69E-06 | ILC2_UCBMC |
| DDX52              | 7.69E-11 | 2.29585774 | 0.385 | 0.08  | 2.72E-06 | ILC2_UCBMC |
| WDR20              | 7.74E-11 | 2.50952708 | 0.282 | 0.045 | 2.74E-06 | ILC2_UCBMC |
| ATAD2B             | 7.76E-11 | 1.89895348 | 0.359 | 0.068 | 2.75E-06 | ILC2_UCBMC |
| XRN1               | 8.15E-11 | 1.59354263 | 0.462 | 0.106 | 2.89E-06 | ILC2_UCBMC |
| RC3H1              | 9.14E-11 | 2.05715647 | 0.282 | 0.044 | 3.24E-06 | ILC2_UCBMC |
| TBL1XR1            | 9.31E-11 | 1.67538318 | 0.59  | 0.165 | 3.30E-06 | ILC2_UCBMC |
| ADGRE5             | 9.55E-11 | 1.81845793 | 0.641 | 0.207 | 3.38E-06 | ILC2_UCBMC |
| FOXO3              | 9.58E-11 | 1.77051792 | 0.385 | 0.078 | 3.39E-06 | ILC2_UCBMC |
| CLPX               | 1.00E-10 | 2.27879729 | 0.282 | 0.045 | 3.55E-06 | ILC2_UCBMC |
| EXOC6B             | 1.05E-10 | 1.74072851 | 0.538 | 0.144 | 3.73E-06 | ILC2_UCBMC |
| GINM1              | 1.28E-10 | 1.93081392 | 0.385 | 0.079 | 4.52E-06 | ILC2_UCBMC |
| CUX1               | 1.34E-10 | 2.31082116 | 0.462 | 0.111 | 4.74E-06 | ILC2_UCBMC |
| LSM14A             | 1.42E-10 | 1.66648673 | 0.513 | 0.129 | 5.04E-06 | ILC2_UCBMC |
| ZMYM5              | 1.44E-10 | 2.28706164 | 0.282 | 0.046 | 5.11E-06 | ILC2_UCBMC |
| ZNF292             | 1.50E-10 | 2.00144897 | 0.564 | 0.173 | 5.30E-06 | ILC2_UCBMC |
| UVRAG              | 1.50E-10 | 1.92675287 | 0.462 | 0.11  | 5.32E-06 | ILC2_UCBMC |
| TGS1               | 1.58E-10 | 1.94084618 | 0.359 | 0.072 | 5.58E-06 | ILC2_UCBMC |
| RASGRP2            | 1.63E-10 | 1.40303871 | 0.41  | 0.085 | 5.77E-06 | ILC2_UCBMC |
| NDUFAF7            | 1.79E-10 | 2.12535684 | 0.282 | 0.046 | 6.33E-06 | ILC2_UCBMC |
| ENSMMUG00000017113 | 1.79E-10 | 2.30602296 | 0.256 | 0.039 | 6.35E-06 | ILC2_UCBMC |
| NR1D2              | 1.86E-10 | 2.01846196 | 0.359 | 0.072 | 6.59E-06 | ILC2_UCBMC |
| SH3GL1             | 1.86E-10 | 2.17087707 | 0.333 | 0.063 | 6.59E-06 | ILC2_UCBMC |
| RAB5A              | 1.94E-10 | 1.40620243 | 0.59  | 0.165 | 6.87E-06 | ILC2_UCBMC |

|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| SSBP3              | 2.08E-10 | 1.9918371  | 0.385 | 0.082 | 7.36E-06 | ILC2_UCBMC |
| DGKZ               | 2.18E-10 | 1.90132594 | 0.308 | 0.053 | 7.71E-06 | ILC2_UCBMC |
| ACAP2              | 2.32E-10 | 1.66231872 | 0.59  | 0.176 | 8.22E-06 | ILC2_UCBMC |
| COX3               | 2.35E-10 | 1.36212087 | 0.872 | 0.824 | 8.31E-06 | ILC2_UCBMC |
| THY1               | 2.36E-10 | 1.79361388 | 0.487 | 0.122 | 8.38E-06 | ILC2_UCBMC |
| NLRC3              | 2.40E-10 | 1.7778748  | 0.333 | 0.062 | 8.50E-06 | ILC2_UCBMC |
| ATP8A1             | 2.50E-10 | 2.23739008 | 0.333 | 0.065 | 8.85E-06 | ILC2_UCBMC |
| SUZ12              | 2.59E-10 | 1.95631393 | 0.359 | 0.073 | 9.18E-06 | ILC2_UCBMC |
| MSI2               | 2.60E-10 | 2.11294447 | 0.462 | 0.125 | 9.21E-06 | ILC2_UCBMC |
| XPO7               | 2.68E-10 | 2.79930806 | 0.256 | 0.041 | 9.51E-06 | ILC2_UCBMC |
| ZEB1               | 2.69E-10 | 1.59896942 | 0.59  | 0.176 | 9.53E-06 | ILC2_UCBMC |
| NEDD4L             | 2.73E-10 | 2.21618559 | 0.256 | 0.039 | 9.68E-06 | ILC2_UCBMC |
| GATAD2A            | 2.77E-10 | 1.65600702 | 0.333 | 0.062 | 9.80E-06 | ILC2_UCBMC |
| PSPC1              | 2.82E-10 | 2.05763792 | 0.359 | 0.075 | 9.99E-06 | ILC2_UCBMC |
| ENSMMUG00000052127 | 2.88E-10 | 1.13246846 | 1     | 0.771 | 1.02E-05 | ILC2_UCBMC |
| SYNE1              | 2.99E-10 | 2.59887871 | 0.333 | 0.066 | 1.06E-05 | ILC2_UCBMC |
| ASH1L              | 3.32E-10 | 1.87156732 | 0.59  | 0.192 | 1.18E-05 | ILC2_UCBMC |
| CAB39              | 3.34E-10 | 1.72701285 | 0.513 | 0.134 | 1.18E-05 | ILC2_UCBMC |
| DCAF5              | 3.39E-10 | 1.8245938  | 0.359 | 0.071 | 1.20E-05 | ILC2_UCBMC |
| CLASP2             | 3.44E-10 | 1.90407125 | 0.41  | 0.094 | 1.22E-05 | ILC2_UCBMC |
| JAK1               | 3.75E-10 | 1.60963545 | 0.718 | 0.255 | 1.33E-05 | ILC2_UCBMC |
| UXS1               | 4.09E-10 | 1.65081027 | 0.487 | 0.125 | 1.45E-05 | ILC2_UCBMC |
| CAMK1D             | 4.28E-10 | 2.32710999 | 0.359 | 0.077 | 1.52E-05 | ILC2_UCBMC |
| ROCK1              | 4.30E-10 | 1.57614468 | 0.667 | 0.217 | 1.52E-05 | ILC2_UCBMC |
| TRA2A              | 4.46E-10 | 1.45518125 | 0.744 | 0.294 | 1.58E-05 | ILC2_UCBMC |
| MARCHF7            | 4.49E-10 | 1.6135074  | 0.513 | 0.138 | 1.59E-05 | ILC2_UCBMC |
| EFL1               | 4.64E-10 | 2.52583215 | 0.308 | 0.055 | 1.64E-05 | ILC2_UCBMC |
| TASP1              | 4.84E-10 | 1.94912718 | 0.282 | 0.047 | 1.71E-05 | ILC2_UCBMC |
| SPTBN1             | 4.97E-10 | 2.42109127 | 0.385 | 0.089 | 1.76E-05 | ILC2_UCBMC |
| WWOX               | 5.29E-10 | 2.37191667 | 0.333 | 0.067 | 1.88E-05 | ILC2_UCBMC |
| ECPAS              | 5.63E-10 | 1.83133768 | 0.308 | 0.055 | 1.99E-05 | ILC2_UCBMC |
| CDC42SE2           | 6.05E-10 | 1.26551972 | 0.923 | 0.499 | 2.14E-05 | ILC2_UCBMC |
| NRIP1              | 6.19E-10 | 1.86087656 | 0.59  | 0.193 | 2.19E-05 | ILC2_UCBMC |

|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| PPP1R2             | 6.74E-10 | 1.68119021 | 0.41  | 0.092 | 2.39E-05 | ILC2_UCBMC |
| MED13L             | 6.97E-10 | 2.01080563 | 0.538 | 0.173 | 2.47E-05 | ILC2_UCBMC |
| ENSMMUG00000030448 | 7.22E-10 | 1.44373632 | 0.59  | 0.172 | 2.56E-05 | ILC2_UCBMC |
| CNOT4              | 7.33E-10 | 1.52587454 | 0.487 | 0.128 | 2.60E-05 | ILC2_UCBMC |
| PPP1R15A           | 7.57E-10 | 1.90679374 | 0.538 | 0.159 | 2.68E-05 | ILC2_UCBMC |
| CSPP1              | 7.60E-10 | 2.09574327 | 0.333 | 0.067 | 2.69E-05 | ILC2_UCBMC |
| CHD7               | 7.75E-10 | 1.93885279 | 0.333 | 0.066 | 2.75E-05 | ILC2_UCBMC |
| EFTUD2             | 7.77E-10 | 2.00703285 | 0.282 | 0.049 | 2.75E-05 | ILC2_UCBMC |
| DOCK8              | 8.02E-10 | 1.42781171 | 0.667 | 0.221 | 2.84E-05 | ILC2_UCBMC |
| TOR1AIP1           | 8.20E-10 | 1.78121704 | 0.385 | 0.085 | 2.90E-05 | ILC2_UCBMC |
| NOSIP              | 8.31E-10 | 2.01322605 | 0.41  | 0.096 | 2.94E-05 | ILC2_UCBMC |
| RSU1               | 8.45E-10 | 2.07694075 | 0.436 | 0.108 | 2.99E-05 | ILC2_UCBMC |
| MAML2              | 8.58E-10 | 1.47071485 | 0.641 | 0.205 | 3.04E-05 | ILC2_UCBMC |
| PPHLN1             | 8.58E-10 | 1.45640195 | 0.615 | 0.184 | 3.04E-05 | ILC2_UCBMC |
| CELF1              | 8.70E-10 | 1.82200629 | 0.41  | 0.095 | 3.08E-05 | ILC2_UCBMC |
| INPP4A             | 9.07E-10 | 2.41330841 | 0.256 | 0.041 | 3.21E-05 | ILC2_UCBMC |
| PHLPP1             | 9.42E-10 | 1.95276875 | 0.333 | 0.067 | 3.34E-05 | ILC2_UCBMC |
| TLK1               | 9.55E-10 | 1.64430223 | 0.513 | 0.142 | 3.38E-05 | ILC2_UCBMC |
| FAM214A            | 9.79E-10 | 2.20944899 | 0.256 | 0.042 | 3.47E-05 | ILC2_UCBMC |
| B2M                | 1.07E-09 | 0.70682801 | 1     | 0.991 | 3.80E-05 | ILC2_UCBMC |
| MSN                | 1.08E-09 | 1.37182065 | 0.769 | 0.28  | 3.81E-05 | ILC2_UCBMC |
| UBAC2              | 1.09E-09 | 1.92975031 | 0.487 | 0.131 | 3.87E-05 | ILC2_UCBMC |
| ANKIB1             | 1.10E-09 | 1.91975712 | 0.308 | 0.058 | 3.89E-05 | ILC2_UCBMC |
| PRDM2              | 1.10E-09 | 1.53623198 | 0.333 | 0.064 | 3.91E-05 | ILC2_UCBMC |
| DHRS7B             | 1.20E-09 | 2.38439695 | 0.256 | 0.042 | 4.27E-05 | ILC2_UCBMC |
| DHX9               | 1.31E-09 | 1.72381332 | 0.59  | 0.179 | 4.63E-05 | ILC2_UCBMC |
| ZFR                | 1.33E-09 | 1.61823758 | 0.436 | 0.106 | 4.70E-05 | ILC2_UCBMC |
| ARIH2              | 1.34E-09 | 1.93890286 | 0.385 | 0.089 | 4.76E-05 | ILC2_UCBMC |
| NKTR               | 1.43E-09 | 2.37350835 | 0.333 | 0.07  | 5.05E-05 | ILC2_UCBMC |
| GABPB1             | 1.43E-09 | 1.59240572 | 0.41  | 0.094 | 5.08E-05 | ILC2_UCBMC |
| EIF2AK2            | 1.61E-09 | 1.86663024 | 0.308 | 0.058 | 5.70E-05 | ILC2_UCBMC |
| GPHN               | 1.63E-09 | 2.21375925 | 0.308 | 0.059 | 5.76E-05 | ILC2_UCBMC |
| MARCHF3            | 1.65E-09 | 2.45764792 | 0.256 | 0.043 | 5.85E-05 | ILC2_UCBMC |

|         |          |            |       |       |            |            |
|---------|----------|------------|-------|-------|------------|------------|
| AFF3    | 1.91E-09 | 2.06879652 | 0.462 | 0.129 | 6.76E-05   | ILC2_UCBMC |
| SWT1    | 2.04E-09 | 2.1048355  | 0.308 | 0.061 | 7.24E-05   | ILC2_UCBMC |
| TXLNG   | 2.05E-09 | 2.1254112  | 0.308 | 0.059 | 7.26E-05   | ILC2_UCBMC |
| XPO6    | 2.11E-09 | 1.7073193  | 0.359 | 0.077 | 7.47E-05   | ILC2_UCBMC |
| ZBTB20  | 2.11E-09 | 1.60309595 | 0.667 | 0.232 | 7.48E-05   | ILC2_UCBMC |
| ZNF28   | 2.12E-09 | 1.65149784 | 0.385 | 0.086 | 7.51E-05   | ILC2_UCBMC |
| FBXO9   | 2.14E-09 | 1.90354372 | 0.333 | 0.068 | 7.57E-05   | ILC2_UCBMC |
| UBR5    | 2.16E-09 | 1.69164652 | 0.462 | 0.125 | 7.65E-05   | ILC2_UCBMC |
| LAPTM5  | 2.17E-09 | 1.39177184 | 0.692 | 0.268 | 7.69E-05   | ILC2_UCBMC |
| EMC3    | 2.28E-09 | 1.3937153  | 0.436 | 0.104 | 8.08E-05   | ILC2_UCBMC |
| RPL7    | 2.35E-09 | 0.89302342 | 0.949 | 0.818 | 8.32E-05   | ILC2_UCBMC |
| KHDRBS1 | 2.41E-09 | 1.82098802 | 0.385 | 0.085 | 8.54E-05   | ILC2_UCBMC |
| EYA3    | 2.59E-09 | 1.72917813 | 0.282 | 0.051 | 9.18E-05   | ILC2_UCBMC |
| FANCC   | 2.70E-09 | 1.99641462 | 0.282 | 0.051 | 9.55E-05   | ILC2_UCBMC |
| MGAT5   | 2.70E-09 | 1.35297049 | 0.564 | 0.175 | 9.58E-05   | ILC2_UCBMC |
| ANKRD17 | 2.71E-09 | 1.7932075  | 0.385 | 0.091 | 9.61E-05   | ILC2_UCBMC |
| IRF1    | 2.73E-09 | 1.92582037 | 0.333 | 0.069 | 9.69E-05   | ILC2_UCBMC |
| WDR43   | 2.75E-09 | 1.80142496 | 0.41  | 0.102 | 9.74E-05   | ILC2_UCBMC |
| ERCC6L2 | 2.81E-09 | 1.98478417 | 0.308 | 0.061 | 9.95E-05   | ILC2_UCBMC |
| WDFY2   | 2.95E-09 | 1.75000018 | 0.538 | 0.156 | 0.00010466 | ILC2_UCBMC |
| CDKAL1  | 3.10E-09 | 2.2634238  | 0.41  | 0.105 | 0.00010988 | ILC2_UCBMC |
| GLUD1   | 3.11E-09 | 2.01126445 | 0.308 | 0.061 | 0.00011016 | ILC2_UCBMC |
| MTDH    | 3.18E-09 | 1.69076794 | 0.41  | 0.099 | 0.00011274 | ILC2_UCBMC |
| RRM1    | 3.22E-09 | 1.80397968 | 0.333 | 0.069 | 0.00011403 | ILC2_UCBMC |
| SF3A3   | 3.37E-09 | 2.06056686 | 0.282 | 0.051 | 0.00011935 | ILC2_UCBMC |
| CTDSPL2 | 3.46E-09 | 2.08874549 | 0.41  | 0.107 | 0.00012259 | ILC2_UCBMC |
| CDC73   | 3.53E-09 | 2.48301885 | 0.359 | 0.084 | 0.00012512 | ILC2_UCBMC |
| OPA1    | 3.57E-09 | 2.2330289  | 0.333 | 0.071 | 0.0001265  | ILC2_UCBMC |
| MDN1    | 3.66E-09 | 1.8461898  | 0.256 | 0.044 | 0.00012986 | ILC2_UCBMC |
| AGO3    | 3.72E-09 | 1.96268908 | 0.359 | 0.081 | 0.00013193 | ILC2_UCBMC |
| RAB2A   | 3.85E-09 | 2.00309206 | 0.59  | 0.204 | 0.0001365  | ILC2_UCBMC |
| DNAJC2  | 3.98E-09 | 2.08682765 | 0.359 | 0.083 | 0.00014106 | ILC2_UCBMC |
| CYTH1   | 4.03E-09 | 1.77036301 | 0.487 | 0.144 | 0.00014296 | ILC2_UCBMC |



|                    |          |            |       |       |            |            |
|--------------------|----------|------------|-------|-------|------------|------------|
| BIRC6              | 4.04E-09 | 1.48241663 | 0.615 | 0.213 | 0.00014308 | ILC2_UCBMC |
| HERC1              | 4.04E-09 | 1.4157362  | 0.436 | 0.11  | 0.00014327 | ILC2_UCBMC |
| GAB2               | 4.16E-09 | 1.25339537 | 0.692 | 0.254 | 0.00014733 | ILC2_UCBMC |
| ARRDC3             | 4.74E-09 | 2.23424158 | 0.333 | 0.071 | 0.00016783 | ILC2_UCBMC |
| TENT2              | 4.78E-09 | 2.76694445 | 0.282 | 0.054 | 0.0001692  | ILC2_UCBMC |
| ERN1               | 4.85E-09 | 2.05458257 | 0.333 | 0.072 | 0.00017196 | ILC2_UCBMC |
| RSF1               | 4.88E-09 | 2.03682006 | 0.462 | 0.13  | 0.00017279 | ILC2_UCBMC |
| G3BP1              | 4.97E-09 | 1.27926099 | 0.641 | 0.211 | 0.00017627 | ILC2_UCBMC |
| DCAF6              | 5.26E-09 | 2.03107169 | 0.333 | 0.071 | 0.00018626 | ILC2_UCBMC |
| ATF7IP2            | 5.41E-09 | 1.83826442 | 0.385 | 0.092 | 0.00019155 | ILC2_UCBMC |
| SREBF2             | 5.49E-09 | 1.87399348 | 0.308 | 0.061 | 0.00019462 | ILC2_UCBMC |
| ANKRD44            | 5.52E-09 | 1.49087467 | 0.667 | 0.26  | 0.00019549 | ILC2_UCBMC |
| CAST               | 5.57E-09 | 1.66146309 | 0.487 | 0.142 | 0.00019746 | ILC2_UCBMC |
| ZNF326             | 5.73E-09 | 1.87139127 | 0.359 | 0.081 | 0.00020292 | ILC2_UCBMC |
| ZNF654             | 5.97E-09 | 2.2522162  | 0.256 | 0.046 | 0.00021153 | ILC2_UCBMC |
| LONP2              | 6.08E-09 | 2.44168969 | 0.282 | 0.055 | 0.00021533 | ILC2_UCBMC |
| RB1CC1             | 6.13E-09 | 1.7983091  | 0.359 | 0.082 | 0.00021729 | ILC2_UCBMC |
| ACO2               | 6.59E-09 | 1.54509598 | 0.41  | 0.099 | 0.00023335 | ILC2_UCBMC |
| FLNA               | 6.60E-09 | 1.73272853 | 0.462 | 0.125 | 0.00023379 | ILC2_UCBMC |
| MED13              | 7.14E-09 | 1.60976923 | 0.385 | 0.091 | 0.00025283 | ILC2_UCBMC |
| TMCC1              | 7.23E-09 | 2.2961319  | 0.256 | 0.046 | 0.00025615 | ILC2_UCBMC |
| KDM3B              | 7.35E-09 | 1.95884556 | 0.333 | 0.073 | 0.00026042 | ILC2_UCBMC |
| WAC                | 7.54E-09 | 1.45594461 | 0.538 | 0.167 | 0.00026709 | ILC2_UCBMC |
| ATL2               | 7.63E-09 | 1.75854698 | 0.256 | 0.044 | 0.0002704  | ILC2_UCBMC |
| ACIN1              | 7.95E-09 | 2.0382477  | 0.487 | 0.142 | 0.00028159 | ILC2_UCBMC |
| MICU2              | 8.36E-09 | 1.96387499 | 0.308 | 0.063 | 0.00029612 | ILC2_UCBMC |
| TRPS1              | 8.82E-09 | 1.98933207 | 0.436 | 0.117 | 0.00031262 | ILC2_UCBMC |
| NEMF               | 8.88E-09 | 1.83220637 | 0.359 | 0.083 | 0.00031471 | ILC2_UCBMC |
| UBR1               | 8.89E-09 | 1.58552101 | 0.41  | 0.106 | 0.00031491 | ILC2_UCBMC |
| ENSMMUG00000063979 | 9.13E-09 | 2.28946343 | 0.282 | 0.054 | 0.00032334 | ILC2_UCBMC |
| NUP98              | 9.14E-09 | 1.76526261 | 0.385 | 0.094 | 0.00032384 | ILC2_UCBMC |
| STK10              | 9.52E-09 | 1.84510847 | 0.487 | 0.14  | 0.00033714 | ILC2_UCBMC |
| ASPH               | 9.53E-09 | 2.14415849 | 0.308 | 0.065 | 0.00033756 | ILC2_UCBMC |

|                     |          |            |       |       |            |            |
|---------------------|----------|------------|-------|-------|------------|------------|
| ENSMMUG000000060229 | 9.60E-09 | 1.35557472 | 0.41  | 0.1   | 0.00034004 | ILC2_UCBMC |
| STIM2               | 9.89E-09 | 1.90508108 | 0.282 | 0.054 | 0.00035057 | ILC2_UCBMC |
| ENSMMUG000000009264 | 1.00E-08 | 2.07788142 | 0.256 | 0.046 | 0.00035417 | ILC2_UCBMC |
| MRPL44              | 1.05E-08 | 2.08712479 | 0.256 | 0.046 | 0.00037217 | ILC2_UCBMC |
| UBE2E1              | 1.07E-08 | 2.12583654 | 0.282 | 0.055 | 0.00037757 | ILC2_UCBMC |
| EIF3A               | 1.08E-08 | 1.75181628 | 0.538 | 0.175 | 0.00038428 | ILC2_UCBMC |
| MBNL2               | 1.10E-08 | 1.82537746 | 0.333 | 0.074 | 0.00039094 | ILC2_UCBMC |
| ELOVL5              | 1.17E-08 | 1.56442208 | 0.487 | 0.139 | 0.00041364 | ILC2_UCBMC |
| EIF4EBP3            | 1.25E-08 | 1.75581479 | 0.41  | 0.104 | 0.00044361 | ILC2_UCBMC |
| ZDHHC20             | 1.30E-08 | 2.02061206 | 0.256 | 0.046 | 0.00046173 | ILC2_UCBMC |
| CASP8               | 1.34E-08 | 1.43479317 | 0.436 | 0.114 | 0.00047553 | ILC2_UCBMC |
| PRKCH               | 1.35E-08 | 2.17721725 | 0.308 | 0.067 | 0.00047944 | ILC2_UCBMC |
| CNOT1               | 1.39E-08 | 1.43023639 | 0.436 | 0.113 | 0.00049275 | ILC2_UCBMC |
| ATF2                | 1.39E-08 | 1.61603507 | 0.385 | 0.094 | 0.00049289 | ILC2_UCBMC |
| MACO1               | 1.40E-08 | 1.63092144 | 0.359 | 0.086 | 0.00049668 | ILC2_UCBMC |
| SORL1               | 1.40E-08 | 1.99644853 | 0.256 | 0.046 | 0.00049685 | ILC2_UCBMC |
| EP300               | 1.49E-08 | 1.83226265 | 0.385 | 0.097 | 0.00052882 | ILC2_UCBMC |
| KMT2E               | 1.51E-08 | 1.37442192 | 0.821 | 0.356 | 0.00053468 | ILC2_UCBMC |
| R3HDM2              | 1.53E-08 | 2.20391875 | 0.256 | 0.047 | 0.00054265 | ILC2_UCBMC |
| FARS2               | 1.54E-08 | 2.40751881 | 0.256 | 0.049 | 0.00054625 | ILC2_UCBMC |
| FCHSD2              | 1.55E-08 | 1.4975237  | 0.359 | 0.082 | 0.00055035 | ILC2_UCBMC |
| MYO1F               | 1.61E-08 | 1.7227547  | 0.359 | 0.084 | 0.0005716  | ILC2_UCBMC |
| SND1                | 1.68E-08 | 2.092936   | 0.436 | 0.118 | 0.00059432 | ILC2_UCBMC |
| ZNF92               | 1.69E-08 | 1.88512401 | 0.282 | 0.056 | 0.00059924 | ILC2_UCBMC |
| ITFG1               | 1.76E-08 | 1.86297646 | 0.282 | 0.055 | 0.00062448 | ILC2_UCBMC |
| UBR3                | 1.98E-08 | 1.90057959 | 0.308 | 0.066 | 0.0007031  | ILC2_UCBMC |
| EXOC1               | 2.07E-08 | 1.49801681 | 0.308 | 0.064 | 0.00073443 | ILC2_UCBMC |
| RBM25               | 2.09E-08 | 1.43452842 | 0.538 | 0.167 | 0.00074137 | ILC2_UCBMC |
| PNN                 | 2.10E-08 | 1.73950897 | 0.564 | 0.188 | 0.00074413 | ILC2_UCBMC |
| ZNF644              | 2.15E-08 | 2.03588439 | 0.513 | 0.175 | 0.0007621  | ILC2_UCBMC |
| WWP1                | 2.27E-08 | 2.29895463 | 0.256 | 0.049 | 0.0008036  | ILC2_UCBMC |
| ATP11B              | 2.32E-08 | 1.80742873 | 0.359 | 0.086 | 0.00082331 | ILC2_UCBMC |
| CELF2               | 2.37E-08 | 1.46901048 | 0.744 | 0.321 | 0.0008384  | ILC2_UCBMC |

|                    |          |            |       |       |            |            |
|--------------------|----------|------------|-------|-------|------------|------------|
| MXI1               | 2.39E-08 | 2.00173528 | 0.256 | 0.048 | 0.00084518 | ILC2_UCBMC |
| DOCK11             | 2.53E-08 | 2.2657053  | 0.359 | 0.092 | 0.00089607 | ILC2_UCBMC |
| GNA13              | 2.54E-08 | 1.91097359 | 0.462 | 0.138 | 0.00090078 | ILC2_UCBMC |
| SPAG9              | 2.54E-08 | 1.44010541 | 0.359 | 0.085 | 0.00090146 | ILC2_UCBMC |
| CHP1               | 2.58E-08 | 1.292968   | 0.436 | 0.113 | 0.00091272 | ILC2_UCBMC |
| MAPK8              | 2.58E-08 | 1.99285706 | 0.333 | 0.076 | 0.00091313 | ILC2_UCBMC |
| MACF1              | 2.63E-08 | 1.44396604 | 0.538 | 0.171 | 0.00093219 | ILC2_UCBMC |
| TM9SF2             | 2.94E-08 | 1.87876237 | 0.308 | 0.067 | 0.00104221 | ILC2_UCBMC |
| LUC7L              | 3.31E-08 | 1.69424387 | 0.333 | 0.077 | 0.00117168 | ILC2_UCBMC |
| MARK3              | 3.35E-08 | 1.88864352 | 0.333 | 0.078 | 0.00118645 | ILC2_UCBMC |
| INPP4B             | 3.39E-08 | 1.46746438 | 0.692 | 0.289 | 0.00120261 | ILC2_UCBMC |
| MAPK1              | 3.50E-08 | 1.51143305 | 0.333 | 0.075 | 0.00123997 | ILC2_UCBMC |
| ANKRD10            | 3.65E-08 | 1.90476341 | 0.282 | 0.058 | 0.00129311 | ILC2_UCBMC |
| CAPRIN1            | 3.73E-08 | 2.31524325 | 0.282 | 0.061 | 0.00132001 | ILC2_UCBMC |
| TNRC6A             | 3.73E-08 | 1.36352762 | 0.436 | 0.119 | 0.00132295 | ILC2_UCBMC |
| ENSMMUG00000012203 | 3.81E-08 | 2.07677962 | 0.436 | 0.128 | 0.00135082 | ILC2_UCBMC |
| WDR7               | 3.83E-08 | 1.82472382 | 0.308 | 0.068 | 0.00135721 | ILC2_UCBMC |
| TSN                | 3.89E-08 | 1.69097957 | 0.308 | 0.066 | 0.00137822 | ILC2_UCBMC |
| EMP3               | 3.91E-08 | 1.48390115 | 0.641 | 0.256 | 0.00138566 | ILC2_UCBMC |
| NSMCE2             | 3.99E-08 | 2.40140617 | 0.385 | 0.099 | 0.00141469 | ILC2_UCBMC |
| JMY                | 4.04E-08 | 1.39169867 | 0.385 | 0.097 | 0.00143136 | ILC2_UCBMC |
| APPBP2             | 4.11E-08 | 2.43130056 | 0.282 | 0.058 | 0.00145736 | ILC2_UCBMC |
| FAF1               | 4.29E-08 | 2.05545541 | 0.308 | 0.069 | 0.00152006 | ILC2_UCBMC |
| AKAP13             | 4.36E-08 | 1.19273554 | 0.846 | 0.409 | 0.00154344 | ILC2_UCBMC |
| AMBRA1             | 4.46E-08 | 1.74699784 | 0.256 | 0.049 | 0.00157902 | ILC2_UCBMC |
| SSBP2              | 4.51E-08 | 1.57519808 | 0.59  | 0.235 | 0.00159783 | ILC2_UCBMC |
| RELCH              | 4.53E-08 | 1.43537152 | 0.256 | 0.048 | 0.0016039  | ILC2_UCBMC |
| ASAP1              | 4.59E-08 | 1.96036035 | 0.282 | 0.059 | 0.00162498 | ILC2_UCBMC |
| ERBIN              | 4.62E-08 | 1.5743905  | 0.462 | 0.133 | 0.00163741 | ILC2_UCBMC |
| CUL5               | 4.62E-08 | 1.75017962 | 0.538 | 0.19  | 0.00163827 | ILC2_UCBMC |
| SP3                | 4.68E-08 | 2.28490711 | 0.308 | 0.069 | 0.00165652 | ILC2_UCBMC |
| FOXO1              | 4.72E-08 | 1.1047217  | 0.436 | 0.115 | 0.00167147 | ILC2_UCBMC |
| SENP2              | 4.73E-08 | 1.84759428 | 0.282 | 0.058 | 0.00167455 | ILC2_UCBMC |

|                    |          |            |       |       |            |            |
|--------------------|----------|------------|-------|-------|------------|------------|
| CSNK1G3            | 4.86E-08 | 1.87850599 | 0.308 | 0.069 | 0.00172366 | ILC2_UCBMC |
| ARID1A             | 4.87E-08 | 1.73940883 | 0.308 | 0.068 | 0.00172561 | ILC2_UCBMC |
| EFR3A              | 5.14E-08 | 2.10492346 | 0.256 | 0.049 | 0.00182264 | ILC2_UCBMC |
| FOXP1              | 5.22E-08 | 1.73171141 | 0.359 | 0.09  | 0.00184855 | ILC2_UCBMC |
| NUP153             | 5.22E-08 | 2.20959456 | 0.308 | 0.072 | 0.00184982 | ILC2_UCBMC |
| REEP3              | 5.39E-08 | 1.43437862 | 0.282 | 0.058 | 0.00190922 | ILC2_UCBMC |
| SF1                | 5.50E-08 | 1.65725735 | 0.513 | 0.157 | 0.00194804 | ILC2_UCBMC |
| CD3D               | 5.54E-08 | 1.4463079  | 0.487 | 0.148 | 0.0019618  | ILC2_UCBMC |
| NVL                | 5.78E-08 | 2.28837012 | 0.308 | 0.069 | 0.00204971 | ILC2_UCBMC |
| CNOT6L             | 5.83E-08 | 1.29990768 | 0.538 | 0.173 | 0.00206652 | ILC2_UCBMC |
| CRTC3              | 5.87E-08 | 1.93285457 | 0.282 | 0.059 | 0.00207849 | ILC2_UCBMC |
| WTAP               | 5.88E-08 | 1.31660756 | 0.564 | 0.178 | 0.00208222 | ILC2_UCBMC |
| SPIDR              | 5.89E-08 | 1.61058059 | 0.359 | 0.089 | 0.00208657 | ILC2_UCBMC |
| FAM193A            | 5.95E-08 | 1.85915168 | 0.256 | 0.05  | 0.00210816 | ILC2_UCBMC |
| PAIP1              | 6.07E-08 | 1.88181875 | 0.256 | 0.05  | 0.00215037 | ILC2_UCBMC |
| STIM1              | 6.14E-08 | 1.79474331 | 0.333 | 0.08  | 0.00217533 | ILC2_UCBMC |
| USP47              | 6.60E-08 | 1.57911979 | 0.462 | 0.138 | 0.00233893 | ILC2_UCBMC |
| ENSMMUG00000058893 | 6.63E-08 | 1.90221726 | 0.256 | 0.05  | 0.00234737 | ILC2_UCBMC |
| CAMLG              | 6.94E-08 | 1.4632162  | 0.513 | 0.163 | 0.00245884 | ILC2_UCBMC |
| MED21              | 7.49E-08 | 1.72241381 | 0.359 | 0.089 | 0.00265542 | ILC2_UCBMC |
| EIF2S3             | 7.54E-08 | 1.51852416 | 0.385 | 0.1   | 0.00267256 | ILC2_UCBMC |
| CTNNB1             | 7.57E-08 | 1.81190225 | 0.41  | 0.114 | 0.00268195 | ILC2_UCBMC |
| UBR2               | 7.70E-08 | 2.30111602 | 0.256 | 0.052 | 0.00272784 | ILC2_UCBMC |
| CAND1              | 7.71E-08 | 1.72446775 | 0.333 | 0.079 | 0.0027312  | ILC2_UCBMC |
| ACTR2              | 7.71E-08 | 1.48753033 | 0.769 | 0.395 | 0.00273185 | ILC2_UCBMC |
| DCP1A              | 7.71E-08 | 2.20459709 | 0.282 | 0.061 | 0.00273255 | ILC2_UCBMC |
| MTREX              | 7.75E-08 | 1.49727092 | 0.513 | 0.168 | 0.00274509 | ILC2_UCBMC |
| DYRK1A             | 7.81E-08 | 1.62845476 | 0.333 | 0.078 | 0.00276708 | ILC2_UCBMC |
| AP1G1              | 8.08E-08 | 2.13058706 | 0.282 | 0.06  | 0.00286408 | ILC2_UCBMC |
| TOX                | 8.12E-08 | 1.37630865 | 0.462 | 0.136 | 0.00287849 | ILC2_UCBMC |
| BBX                | 8.33E-08 | 1.70143411 | 0.436 | 0.128 | 0.00295131 | ILC2_UCBMC |
| FXR1               | 8.43E-08 | 1.4376715  | 0.615 | 0.22  | 0.00298552 | ILC2_UCBMC |
| SP100              | 8.43E-08 | 1.35344402 | 0.615 | 0.221 | 0.0029884  | ILC2_UCBMC |

|                    |          |            |       |       |            |            |
|--------------------|----------|------------|-------|-------|------------|------------|
| PHF21A             | 9.24E-08 | 1.53637456 | 0.333 | 0.08  | 0.00327233 | ILC2_UCBMC |
| FGD3               | 9.36E-08 | 2.03510635 | 0.436 | 0.126 | 0.00331685 | ILC2_UCBMC |
| SLU7               | 9.54E-08 | 1.61226484 | 0.333 | 0.079 | 0.00338045 | ILC2_UCBMC |
| UBE2Q2             | 1.05E-07 | 1.54106988 | 0.282 | 0.059 | 0.0037124  | ILC2_UCBMC |
| TTC17              | 1.06E-07 | 1.62992286 | 0.333 | 0.082 | 0.00376033 | ILC2_UCBMC |
| MTF2               | 1.08E-07 | 1.77260103 | 0.282 | 0.06  | 0.00382586 | ILC2_UCBMC |
| SLC38A1            | 1.10E-07 | 1.65509149 | 0.487 | 0.151 | 0.00390314 | ILC2_UCBMC |
| HNRNP              | 1.11E-07 | 1.34006978 | 0.487 | 0.152 | 0.00392443 | ILC2_UCBMC |
| ATP9B              | 1.14E-07 | 1.62199009 | 0.256 | 0.051 | 0.00403013 | ILC2_UCBMC |
| MCL1               | 1.23E-07 | 1.89025695 | 0.385 | 0.106 | 0.00437152 | ILC2_UCBMC |
| UBE2R2             | 1.24E-07 | 2.07278377 | 0.308 | 0.075 | 0.00439668 | ILC2_UCBMC |
| SNX13              | 1.28E-07 | 1.59337208 | 0.282 | 0.061 | 0.00454257 | ILC2_UCBMC |
| BRAF               | 1.28E-07 | 1.52721333 | 0.462 | 0.142 | 0.00455079 | ILC2_UCBMC |
| SFSWAP             | 1.31E-07 | 1.37700316 | 0.282 | 0.059 | 0.00463448 | ILC2_UCBMC |
| STT3B              | 1.32E-07 | 1.38718891 | 0.359 | 0.089 | 0.0046609  | ILC2_UCBMC |
| ENSMMUG00000011580 | 1.35E-07 | 1.50987365 | 0.59  | 0.206 | 0.00480045 | ILC2_UCBMC |
| SCFD1              | 1.43E-07 | 1.75060371 | 0.308 | 0.072 | 0.00505938 | ILC2_UCBMC |
| TEC                | 1.47E-07 | 2.33159712 | 0.385 | 0.103 | 0.00521231 | ILC2_UCBMC |
| KRAS               | 1.52E-07 | 1.69475166 | 0.308 | 0.072 | 0.0053785  | ILC2_UCBMC |
| RNF145             | 1.52E-07 | 1.42023055 | 0.385 | 0.103 | 0.00539328 | ILC2_UCBMC |
| RABGEF1            | 1.63E-07 | 1.69507727 | 0.41  | 0.116 | 0.00577413 | ILC2_UCBMC |
| AGPS               | 1.63E-07 | 1.79454305 | 0.282 | 0.062 | 0.00579136 | ILC2_UCBMC |
| TAB2               | 1.66E-07 | 1.97968633 | 0.385 | 0.107 | 0.00587661 | ILC2_UCBMC |
| PTBP3              | 1.66E-07 | 1.10862447 | 0.692 | 0.261 | 0.00588369 | ILC2_UCBMC |
| NIPBL              | 1.66E-07 | 1.27574644 | 0.513 | 0.168 | 0.0058843  | ILC2_UCBMC |
| SP110              | 1.73E-07 | 1.43578134 | 0.41  | 0.117 | 0.00612866 | ILC2_UCBMC |
| RPS3               | 1.74E-07 | 0.65875399 | 0.974 | 0.943 | 0.00616139 | ILC2_UCBMC |
| NUP214             | 1.75E-07 | 1.90107435 | 0.256 | 0.052 | 0.00619379 | ILC2_UCBMC |
| MBNL1              | 1.77E-07 | 1.03474443 | 0.923 | 0.653 | 0.00626005 | ILC2_UCBMC |
| EZH2               | 1.94E-07 | 1.62392686 | 0.359 | 0.095 | 0.00688755 | ILC2_UCBMC |
| TAX1BP1            | 2.06E-07 | 1.22466413 | 0.692 | 0.266 | 0.0072823  | ILC2_UCBMC |
| RBMS1              | 2.11E-07 | 1.08410054 | 0.641 | 0.23  | 0.0074739  | ILC2_UCBMC |
| BCLAF1             | 2.16E-07 | 1.2277947  | 0.718 | 0.325 | 0.00766635 | ILC2_UCBMC |

|                    |          |            |       |       |            |            |
|--------------------|----------|------------|-------|-------|------------|------------|
| NCOA1              | 2.19E-07 | 1.87166374 | 0.308 | 0.073 | 0.00777072 | ILC2_UCBMC |
| CHD6               | 2.28E-07 | 1.56815075 | 0.436 | 0.135 | 0.00806373 | ILC2_UCBMC |
| DTNBP1             | 2.40E-07 | 1.19143216 | 0.436 | 0.125 | 0.00848872 | ILC2_UCBMC |
| ENSMMUG00000058581 | 2.41E-07 | 1.39725552 | 0.359 | 0.097 | 0.00855555 | ILC2_UCBMC |
| GOLGA1             | 2.43E-07 | 1.20940915 | 0.795 | 0.48  | 0.00860863 | ILC2_UCBMC |
| TLK2               | 2.44E-07 | 1.28341814 | 0.333 | 0.08  | 0.00864407 | ILC2_UCBMC |
| PDE8A              | 2.53E-07 | 1.78333886 | 0.282 | 0.063 | 0.00897883 | ILC2_UCBMC |
| RBM6               | 2.57E-07 | 1.67992889 | 0.282 | 0.063 | 0.00910881 | ILC2_UCBMC |
| PPP1R8             | 2.62E-07 | 1.64993887 | 0.282 | 0.063 | 0.00928914 | ILC2_UCBMC |
| RPL26              | 2.65E-07 | 0.84788753 | 0.949 | 0.812 | 0.00938006 | ILC2_UCBMC |
| TSC22D3            | 2.78E-07 | 1.36580417 | 0.667 | 0.293 | 0.00983254 | ILC2_UCBMC |
| TUT7               | 2.79E-07 | 1.24037211 | 0.462 | 0.142 | 0.00986902 | ILC2_UCBMC |
| TOP1               | 2.95E-07 | 1.45450018 | 0.513 | 0.176 | 0.01046605 | ILC2_UCBMC |
| PPP1CA             | 2.99E-07 | 1.01371169 | 0.538 | 0.172 | 0.01058405 | ILC2_UCBMC |
| FAM168B            | 3.05E-07 | 2.36595679 | 0.256 | 0.056 | 0.01079327 | ILC2_UCBMC |
| ENSMMUG00000011714 | 3.16E-07 | 1.39227587 | 0.282 | 0.062 | 0.01118206 | ILC2_UCBMC |
| KIAA1328           | 3.41E-07 | 1.28668119 | 0.308 | 0.072 | 0.01207717 | ILC2_UCBMC |
| ICAM2              | 3.43E-07 | 1.65121429 | 0.282 | 0.065 | 0.01213558 | ILC2_UCBMC |
| ANAPC10            | 3.52E-07 | 1.97218024 | 0.282 | 0.064 | 0.01246449 | ILC2_UCBMC |
| DHRS3              | 3.56E-07 | 1.56031138 | 0.333 | 0.085 | 0.0126252  | ILC2_UCBMC |
| PNKP               | 3.65E-07 | 1.65341859 | 0.308 | 0.075 | 0.01291529 | ILC2_UCBMC |
| ZNF638             | 3.72E-07 | 1.93738029 | 0.385 | 0.108 | 0.01318758 | ILC2_UCBMC |
| ENSMMUG00000054358 | 3.73E-07 | 0.81758157 | 0.897 | 0.549 | 0.01322063 | ILC2_UCBMC |
| PMAIP1             | 3.88E-07 | 1.45507963 | 0.308 | 0.075 | 0.01375278 | ILC2_UCBMC |
| RCOR3              | 3.98E-07 | 1.53478523 | 0.282 | 0.063 | 0.01408818 | ILC2_UCBMC |
| ZNFX1              | 4.28E-07 | 2.11605486 | 0.256 | 0.055 | 0.01516407 | ILC2_UCBMC |
| RUNX1              | 4.33E-07 | 1.14211787 | 0.59  | 0.216 | 0.01533898 | ILC2_UCBMC |
| EWSR1              | 4.36E-07 | 1.37640639 | 0.385 | 0.107 | 0.01544958 | ILC2_UCBMC |
| SNX9               | 4.50E-07 | 1.68678567 | 0.308 | 0.077 | 0.01593536 | ILC2_UCBMC |
| DPM1               | 4.74E-07 | 1.68141175 | 0.256 | 0.055 | 0.01679831 | ILC2_UCBMC |
| DOCK2              | 4.82E-07 | 1.19265002 | 0.667 | 0.275 | 0.01709397 | ILC2_UCBMC |
| KDM2B              | 4.84E-07 | 1.80855272 | 0.308 | 0.075 | 0.01714577 | ILC2_UCBMC |
| DNAJC24            | 4.84E-07 | 1.35879379 | 0.333 | 0.085 | 0.01715054 | ILC2_UCBMC |

|                    |          |            |       |       |            |            |
|--------------------|----------|------------|-------|-------|------------|------------|
| DDX39B             | 4.87E-07 | 2.06702736 | 0.41  | 0.125 | 0.01727217 | ILC2_UCBMC |
| S100A6             | 5.12E-07 | 1.24878795 | 0.769 | 0.405 | 0.01815312 | ILC2_UCBMC |
| PDE3B              | 5.22E-07 | 1.80068426 | 0.308 | 0.078 | 0.01848022 | ILC2_UCBMC |
| CEP85L             | 5.22E-07 | 1.58879587 | 0.436 | 0.137 | 0.01849777 | ILC2_UCBMC |
| DYM                | 5.22E-07 | 1.72626438 | 0.282 | 0.066 | 0.01850864 | ILC2_UCBMC |
| TET2               | 5.26E-07 | 1.51559181 | 0.308 | 0.076 | 0.01862221 | ILC2_UCBMC |
| KIAA0040           | 5.36E-07 | 2.13413538 | 0.282 | 0.066 | 0.01900763 | ILC2_UCBMC |
| ENSMMUG00000005482 | 5.94E-07 | 1.81260352 | 0.333 | 0.089 | 0.02106281 | ILC2_UCBMC |
| PECAM1             | 5.97E-07 | 1.29274488 | 0.282 | 0.064 | 0.02113978 | ILC2_UCBMC |
| BNIP2              | 5.98E-07 | 1.40309011 | 0.308 | 0.075 | 0.02117397 | ILC2_UCBMC |
| RNGTT              | 6.00E-07 | 2.03078378 | 0.256 | 0.058 | 0.02127279 | ILC2_UCBMC |
| KPNA3              | 6.03E-07 | 1.77387941 | 0.333 | 0.089 | 0.02138242 | ILC2_UCBMC |
| TRIM22             | 6.20E-07 | 2.25306052 | 0.308 | 0.078 | 0.02197998 | ILC2_UCBMC |
| CUL4A              | 6.66E-07 | 2.13783225 | 0.256 | 0.058 | 0.02360151 | ILC2_UCBMC |
| TRERF1             | 6.84E-07 | 1.75727184 | 0.359 | 0.102 | 0.02422818 | ILC2_UCBMC |
| AAK1               | 6.97E-07 | 1.19097973 | 0.59  | 0.22  | 0.02469254 | ILC2_UCBMC |
| TMEM131            | 7.17E-07 | 1.91153105 | 0.359 | 0.105 | 0.02540823 | ILC2_UCBMC |
| ZMYND8             | 7.22E-07 | 1.1609241  | 0.333 | 0.084 | 0.02556627 | ILC2_UCBMC |
| NAA15              | 7.36E-07 | 2.10680333 | 0.308 | 0.08  | 0.02606877 | ILC2_UCBMC |
| CRY1               | 7.64E-07 | 1.7824658  | 0.436 | 0.145 | 0.02706521 | ILC2_UCBMC |
| PTPN4              | 7.65E-07 | 1.71941028 | 0.256 | 0.058 | 0.02709128 | ILC2_UCBMC |
| SEPTIN6            | 7.85E-07 | 1.34611884 | 0.667 | 0.306 | 0.02780849 | ILC2_UCBMC |
| SAMHD1             | 8.00E-07 | 1.4706376  | 0.359 | 0.099 | 0.02835495 | ILC2_UCBMC |
| RTF2               | 8.01E-07 | 1.57486027 | 0.359 | 0.1   | 0.02837185 | ILC2_UCBMC |
| GMDS               | 8.11E-07 | 1.9379434  | 0.256 | 0.058 | 0.02873454 | ILC2_UCBMC |
| HBS1L              | 8.13E-07 | 1.39409161 | 0.462 | 0.154 | 0.02880724 | ILC2_UCBMC |
| RNF11              | 8.23E-07 | 1.95254498 | 0.256 | 0.058 | 0.02916012 | ILC2_UCBMC |
| DENND4C            | 8.45E-07 | 1.84508146 | 0.256 | 0.058 | 0.02995616 | ILC2_UCBMC |
| MIER1              | 8.58E-07 | 1.3141924  | 0.615 | 0.238 | 0.03040964 | ILC2_UCBMC |
| HMGA1              | 8.61E-07 | 1.30290561 | 0.41  | 0.125 | 0.0305202  | ILC2_UCBMC |
| ATG5               | 9.49E-07 | 1.63203351 | 0.41  | 0.136 | 0.03362517 | ILC2_UCBMC |
| AKAP17A            | 9.67E-07 | 2.00018736 | 0.256 | 0.059 | 0.03426674 | ILC2_UCBMC |
| ENSMMUG00000047277 | 9.67E-07 | 1.35038608 | 0.641 | 0.286 | 0.03427917 | ILC2_UCBMC |

|                   |          |            |       |       |            |            |
|-------------------|----------|------------|-------|-------|------------|------------|
| RPL4              | 1.03E-06 | 0.6928926  | 1     | 0.796 | 0.03654492 | ILC2_UCBMC |
| SENP6             | 1.06E-06 | 1.39970253 | 0.41  | 0.128 | 0.0376775  | ILC2_UCBMC |
| DENND4A           | 1.07E-06 | 0.9399028  | 0.923 | 0.501 | 0.03787596 | ILC2_UCBMC |
| DGKA              | 1.07E-06 | 2.26265548 | 0.282 | 0.071 | 0.0380721  | ILC2_UCBMC |
| AFTPH             | 1.08E-06 | 1.94412266 | 0.308 | 0.08  | 0.03823654 | ILC2_UCBMC |
| M6PR              | 1.10E-06 | 1.41317131 | 0.41  | 0.128 | 0.038858   | ILC2_UCBMC |
| FNBP4             | 1.11E-06 | 1.79447988 | 0.282 | 0.07  | 0.0393469  | ILC2_UCBMC |
| YME1L1            | 1.12E-06 | 1.09799223 | 0.487 | 0.156 | 0.03980749 | ILC2_UCBMC |
| BECN1             | 1.27E-06 | 1.53924196 | 0.256 | 0.057 | 0.04483225 | ILC2_UCBMC |
| GTPBP10           | 1.29E-06 | 1.7014573  | 0.282 | 0.069 | 0.04583499 | ILC2_UCBMC |
| FBXL17            | 1.40E-06 | 1.27520956 | 0.282 | 0.067 | 0.04946506 | ILC2_UCBMC |
| GOLM2             | 1.40E-06 | 1.68586253 | 0.359 | 0.103 | 0.04967442 | ILC2_UCBMC |
| HERC3             | 1.41E-06 | 1.86410909 | 0.282 | 0.071 | 0.05003503 | ILC2_UCBMC |
| ENSMUG00000012690 | 1.45E-06 | 1.68474562 | 0.282 | 0.069 | 0.05142717 | ILC2_UCBMC |
| CRNKL1            | 1.46E-06 | 1.27753755 | 0.333 | 0.089 | 0.05170188 | ILC2_UCBMC |
| PKN2              | 1.61E-06 | 1.73854719 | 0.308 | 0.082 | 0.0569181  | ILC2_UCBMC |
| VTI1A             | 1.62E-06 | 1.75131402 | 0.359 | 0.103 | 0.05745957 | ILC2_UCBMC |
| ZNF506            | 1.65E-06 | 2.04885728 | 0.308 | 0.081 | 0.05841502 | ILC2_UCBMC |
| SPOCK2            | 1.76E-06 | 0.62740866 | 0.333 | 0.086 | 0.06253589 | ILC2_UCBMC |
| TAF15             | 1.77E-06 | 1.37255727 | 0.436 | 0.142 | 0.06268322 | ILC2_UCBMC |
| UBXN7             | 1.78E-06 | 1.47501859 | 0.41  | 0.129 | 0.06322185 | ILC2_UCBMC |
| USP33             | 1.80E-06 | 2.25299825 | 0.256 | 0.063 | 0.06361721 | ILC2_UCBMC |
| NUMB              | 1.84E-06 | 2.21245169 | 0.256 | 0.061 | 0.06520041 | ILC2_UCBMC |
| NCOA4             | 1.85E-06 | 1.55981566 | 0.256 | 0.059 | 0.06546909 | ILC2_UCBMC |
| STK38             | 1.89E-06 | 1.78296421 | 0.308 | 0.085 | 0.06700794 | ILC2_UCBMC |
| ITGA6             | 1.91E-06 | 1.37084705 | 0.308 | 0.08  | 0.06751131 | ILC2_UCBMC |
| RHEB              | 1.97E-06 | 1.53424568 | 0.436 | 0.144 | 0.06977151 | ILC2_UCBMC |
| TP53BP1           | 1.98E-06 | 1.92662548 | 0.308 | 0.083 | 0.07025214 | ILC2_UCBMC |
| TMEM87A           | 1.99E-06 | 1.82337613 | 0.436 | 0.155 | 0.07056018 | ILC2_UCBMC |
| USP15             | 2.02E-06 | 1.2979601  | 0.667 | 0.328 | 0.07160908 | ILC2_UCBMC |
| MOB3A             | 2.04E-06 | 1.53992853 | 0.256 | 0.059 | 0.07224894 | ILC2_UCBMC |
| LEMD3             | 2.08E-06 | 1.72138668 | 0.256 | 0.061 | 0.07386151 | ILC2_UCBMC |
| ENSMUG00000000478 | 2.15E-06 | 1.64222821 | 0.308 | 0.084 | 0.07601075 | ILC2_UCBMC |



|             |          |            |       |       |            |            |
|-------------|----------|------------|-------|-------|------------|------------|
| CMAH        | 2.16E-06 | 2.26866516 | 0.308 | 0.084 | 0.07662157 | ILC2_UCBMC |
| CCSER2      | 2.18E-06 | 1.30304086 | 0.359 | 0.104 | 0.07720572 | ILC2_UCBMC |
| POGZ        | 2.19E-06 | 1.57620669 | 0.282 | 0.071 | 0.07761597 | ILC2_UCBMC |
| IQGAP1      | 2.22E-06 | 1.58566472 | 0.59  | 0.242 | 0.0786652  | ILC2_UCBMC |
| PARD3       | 2.23E-06 | 1.74587237 | 0.256 | 0.061 | 0.07914012 | ILC2_UCBMC |
| MAN1A1      | 2.31E-06 | 1.12318336 | 0.385 | 0.114 | 0.0818825  | ILC2_UCBMC |
| DYNC1H1     | 2.32E-06 | 2.42700792 | 0.256 | 0.061 | 0.08211956 | ILC2_UCBMC |
| DENND1B     | 2.38E-06 | 1.7773293  | 0.256 | 0.061 | 0.08439224 | ILC2_UCBMC |
| FAR1        | 2.48E-06 | 1.50548472 | 0.256 | 0.061 | 0.08799333 | ILC2_UCBMC |
| ATM         | 2.54E-06 | 1.59652441 | 0.385 | 0.119 | 0.09011344 | ILC2_UCBMC |
| TFAM        | 2.66E-06 | 1.41179834 | 0.41  | 0.132 | 0.09439411 | ILC2_UCBMC |
| GAS7        | 2.78E-06 | 1.27315759 | 0.308 | 0.08  | 0.09853385 | ILC2_UCBMC |
| RAD21       | 2.79E-06 | 1.22274867 | 0.487 | 0.173 | 0.09882849 | ILC2_UCBMC |
| ZC3HAV1     | 2.87E-06 | 1.12853855 | 0.462 | 0.152 | 0.10167157 | ILC2_UCBMC |
| BCAS3       | 2.94E-06 | 1.3273478  | 0.333 | 0.096 | 0.10407245 | ILC2_UCBMC |
| ESCO1       | 2.97E-06 | 1.47494778 | 0.308 | 0.082 | 0.10524075 | ILC2_UCBMC |
| NSD1        | 3.06E-06 | 1.32823102 | 0.333 | 0.093 | 0.10827876 | ILC2_UCBMC |
| DAZAP2      | 3.09E-06 | 1.28347925 | 0.487 | 0.179 | 0.10931569 | ILC2_UCBMC |
| MAP3K7      | 3.10E-06 | 1.73613858 | 0.282 | 0.075 | 0.10987409 | ILC2_UCBMC |
| PITPNC1     | 3.11E-06 | 1.2126326  | 0.385 | 0.122 | 0.11013652 | ILC2_UCBMC |
| CD247       | 3.11E-06 | 1.68114058 | 0.282 | 0.074 | 0.11015789 | ILC2_UCBMC |
| SLC9A3R1    | 3.24E-06 | 1.52377147 | 0.385 | 0.115 | 0.11480793 | ILC2_UCBMC |
| HSPA5       | 3.33E-06 | 0.85178945 | 0.615 | 0.261 | 0.11788931 | ILC2_UCBMC |
| ARL15       | 3.42E-06 | 2.04332641 | 0.333 | 0.099 | 0.12103721 | ILC2_UCBMC |
| SNRK        | 3.73E-06 | 1.26357335 | 0.41  | 0.134 | 0.13220789 | ILC2_UCBMC |
| C20H16orf54 | 3.78E-06 | 1.16570277 | 0.333 | 0.094 | 0.13378072 | ILC2_UCBMC |
| IMMP2L      | 3.78E-06 | 1.16533842 | 0.538 | 0.212 | 0.13385026 | ILC2_UCBMC |
| PTP4A2      | 3.79E-06 | 1.36993509 | 0.487 | 0.178 | 0.13440131 | ILC2_UCBMC |
| IKZF1       | 3.86E-06 | 1.27279706 | 0.564 | 0.234 | 0.13678605 | ILC2_UCBMC |
| CFLAR       | 3.87E-06 | 1.32585824 | 0.487 | 0.185 | 0.13726938 | ILC2_UCBMC |
| CHIC2       | 3.97E-06 | 1.40807912 | 0.308 | 0.083 | 0.14082641 | ILC2_UCBMC |
| PAFAH1B1    | 4.12E-06 | 1.35137551 | 0.513 | 0.199 | 0.14583415 | ILC2_UCBMC |
| PTPN1       | 4.29E-06 | 1.57745674 | 0.487 | 0.177 | 0.15198052 | ILC2_UCBMC |

|                   |          |            |       |       |            |            |
|-------------------|----------|------------|-------|-------|------------|------------|
| RAD51B            | 4.35E-06 | 1.12694554 | 0.256 | 0.061 | 0.15411681 | ILC2_UCBMC |
| NONO              | 4.41E-06 | 1.1417213  | 0.462 | 0.157 | 0.1562197  | ILC2_UCBMC |
| SMYD3             | 4.45E-06 | 1.5850058  | 0.333 | 0.103 | 0.15783125 | ILC2_UCBMC |
| ENSMUG00000060545 | 4.67E-06 | 1.19135654 | 0.41  | 0.132 | 0.16547864 | ILC2_UCBMC |
| RALA              | 4.87E-06 | 1.62863051 | 0.333 | 0.101 | 0.17258768 | ILC2_UCBMC |
| OGDH              | 4.88E-06 | 1.11339301 | 0.385 | 0.12  | 0.17283788 | ILC2_UCBMC |
| ZRANB2            | 4.96E-06 | 1.40649097 | 0.359 | 0.111 | 0.17582147 | ILC2_UCBMC |
| OSBPL9            | 5.28E-06 | 1.31816088 | 0.538 | 0.214 | 0.18708196 | ILC2_UCBMC |
| SUGT1             | 5.29E-06 | 1.41408389 | 0.41  | 0.137 | 0.18731479 | ILC2_UCBMC |
| NFAT5             | 5.38E-06 | 1.48992845 | 0.333 | 0.097 | 0.1905422  | ILC2_UCBMC |
| PSME4             | 5.38E-06 | 1.22708654 | 0.333 | 0.094 | 0.19067663 | ILC2_UCBMC |
| RPS14             | 5.38E-06 | 0.42996011 | 1     | 0.988 | 0.19077637 | ILC2_UCBMC |
| PCMTD1            | 5.40E-06 | 1.4697135  | 0.41  | 0.142 | 0.19146322 | ILC2_UCBMC |
| PEX14             | 5.44E-06 | 1.99893515 | 0.256 | 0.064 | 0.1929003  | ILC2_UCBMC |
| GNB2              | 5.48E-06 | 1.6487893  | 0.41  | 0.135 | 0.19408877 | ILC2_UCBMC |
| SUCLG2            | 6.06E-06 | 1.78139196 | 0.308 | 0.091 | 0.21478723 | ILC2_UCBMC |
| ABHD12            | 6.10E-06 | 1.73295349 | 0.359 | 0.113 | 0.21630258 | ILC2_UCBMC |
| PDZRN3            | 6.11E-06 | 1.37729111 | 0.333 | 0.097 | 0.21652811 | ILC2_UCBMC |
| RALGPS2           | 6.19E-06 | 2.09692669 | 0.282 | 0.074 | 0.21915869 | ILC2_UCBMC |
| RALGAPA2          | 6.19E-06 | 1.35160339 | 0.333 | 0.097 | 0.21942414 | ILC2_UCBMC |
| DHX29             | 6.29E-06 | 1.92434149 | 0.282 | 0.075 | 0.22294921 | ILC2_UCBMC |
| ENSMUG00000063316 | 6.35E-06 | 0.89710568 | 0.487 | 0.162 | 0.22490452 | ILC2_UCBMC |
| TLN1              | 6.46E-06 | 1.72515673 | 0.462 | 0.176 | 0.22897858 | ILC2_UCBMC |
| BTBD9             | 6.50E-06 | 1.62389729 | 0.308 | 0.091 | 0.23048069 | ILC2_UCBMC |
| SDHAF4            | 6.52E-06 | 1.09429516 | 0.564 | 0.221 | 0.2308684  | ILC2_UCBMC |
| PAG1              | 6.93E-06 | 1.42893472 | 0.359 | 0.114 | 0.24540563 | ILC2_UCBMC |
| VPS54             | 6.94E-06 | 1.64144606 | 0.282 | 0.075 | 0.24604294 | ILC2_UCBMC |
| PHF14             | 7.34E-06 | 1.8993084  | 0.256 | 0.066 | 0.26009819 | ILC2_UCBMC |
| HELZ              | 7.37E-06 | 1.15442175 | 0.487 | 0.176 | 0.26124056 | ILC2_UCBMC |
| YPEL5             | 7.38E-06 | 1.17267901 | 0.538 | 0.208 | 0.26163169 | ILC2_UCBMC |
| PUM2              | 7.47E-06 | 1.72417699 | 0.385 | 0.134 | 0.26456425 | ILC2_UCBMC |
| MED27             | 7.90E-06 | 1.36517663 | 0.308 | 0.086 | 0.27989072 | ILC2_UCBMC |
| ENSMUG00000055114 | 7.93E-06 | 1.48025262 | 0.282 | 0.077 | 0.28092853 | ILC2_UCBMC |

|                    |          |            |       |       |            |            |
|--------------------|----------|------------|-------|-------|------------|------------|
| MTPN               | 8.01E-06 | 1.02129326 | 0.487 | 0.179 | 0.28373234 | ILC2_UCBMC |
| PIBF1              | 8.12E-06 | 1.83473438 | 0.256 | 0.066 | 0.28781409 | ILC2_UCBMC |
| RNF216             | 8.13E-06 | 1.02214078 | 0.385 | 0.121 | 0.28811174 | ILC2_UCBMC |
| RACK1              | 8.32E-06 | 0.47992163 | 0.949 | 0.975 | 0.29494632 | ILC2_UCBMC |
| LRBA               | 8.39E-06 | 1.10145069 | 0.513 | 0.196 | 0.29730031 | ILC2_UCBMC |
| ITM2B              | 8.68E-06 | 1.08571595 | 0.769 | 0.382 | 0.3075318  | ILC2_UCBMC |
| ARHGAP15           | 8.89E-06 | 1.27879833 | 0.718 | 0.432 | 0.31506598 | ILC2_UCBMC |
| SNX4               | 8.90E-06 | 1.07738358 | 0.333 | 0.096 | 0.31546194 | ILC2_UCBMC |
| ITSN2              | 9.04E-06 | 1.48652817 | 0.41  | 0.154 | 0.32040193 | ILC2_UCBMC |
| ENSMMUG00000065373 | 9.66E-06 | 0.80765834 | 0.923 | 0.765 | 0.34231751 | ILC2_UCBMC |
| SRSF11             | 9.88E-06 | 0.78164789 | 0.821 | 0.465 | 0.35014049 | ILC2_UCBMC |
| SF3B3              | 1.02E-05 | 1.31227439 | 0.256 | 0.065 | 0.359916   | ILC2_UCBMC |
| YAF2               | 1.02E-05 | 1.31633669 | 0.462 | 0.161 | 0.36261943 | ILC2_UCBMC |
| SIPA1L1            | 1.03E-05 | 1.83152622 | 0.282 | 0.076 | 0.36511976 | ILC2_UCBMC |
| BCCIP              | 1.03E-05 | 1.17668388 | 0.41  | 0.134 | 0.3654885  | ILC2_UCBMC |
| CDC27              | 1.04E-05 | 1.32886419 | 0.256 | 0.065 | 0.36988804 | ILC2_UCBMC |
| LARP4              | 1.06E-05 | 1.77460008 | 0.256 | 0.068 | 0.37461122 | ILC2_UCBMC |
| RBM5               | 1.06E-05 | 1.18738399 | 0.385 | 0.125 | 0.37699249 | ILC2_UCBMC |
| FNDC3A             | 1.08E-05 | 1.36614475 | 0.385 | 0.131 | 0.38282799 | ILC2_UCBMC |
| EIF4A2             | 1.08E-05 | 0.99709565 | 0.615 | 0.274 | 0.38307193 | ILC2_UCBMC |
| PHF3               | 1.09E-05 | 0.99525483 | 0.385 | 0.121 | 0.38615867 | ILC2_UCBMC |
| ZMYM2              | 1.14E-05 | 1.4256939  | 0.359 | 0.117 | 0.40392181 | ILC2_UCBMC |
| NIFK               | 1.16E-05 | 1.30787382 | 0.359 | 0.114 | 0.41030078 | ILC2_UCBMC |
| FNBP1              | 1.16E-05 | 0.89747922 | 0.769 | 0.442 | 0.41163546 | ILC2_UCBMC |
| APBB1IP            | 1.20E-05 | 0.89059583 | 0.744 | 0.413 | 0.42492933 | ILC2_UCBMC |
| CCNK               | 1.25E-05 | 1.04447104 | 0.359 | 0.109 | 0.44183071 | ILC2_UCBMC |
| PRKAG1             | 1.26E-05 | 1.70737325 | 0.256 | 0.067 | 0.44561867 | ILC2_UCBMC |
| VPS4B              | 1.27E-05 | 1.37169777 | 0.385 | 0.126 | 0.44860179 | ILC2_UCBMC |
| DDX17              | 1.28E-05 | 1.18224949 | 0.538 | 0.233 | 0.45190708 | ILC2_UCBMC |
| CSGALNACT2         | 1.29E-05 | 1.20713154 | 0.436 | 0.157 | 0.45699138 | ILC2_UCBMC |
| SRRM2              | 1.31E-05 | 1.70193905 | 0.308 | 0.092 | 0.4651219  | ILC2_UCBMC |
| METTL9             | 1.31E-05 | 1.35068171 | 0.333 | 0.102 | 0.46534452 | ILC2_UCBMC |
| PELI1              | 1.32E-05 | 0.94476049 | 0.462 | 0.167 | 0.46659487 | ILC2_UCBMC |

|                   |          |            |       |       |            |            |
|-------------------|----------|------------|-------|-------|------------|------------|
| KLHL23            | 1.43E-05 | 0.92992173 | 0.795 | 0.452 | 0.50809544 | ILC2_UCBMC |
| CHD2              | 1.49E-05 | 0.96537259 | 0.564 | 0.229 | 0.52852277 | ILC2_UCBMC |
| RSBN1L            | 1.53E-05 | 1.17177526 | 0.282 | 0.077 | 0.54105539 | ILC2_UCBMC |
| ARHGAP45          | 1.57E-05 | 1.10030086 | 0.359 | 0.111 | 0.55614593 | ILC2_UCBMC |
| ENSMUG00000055687 | 1.58E-05 | 2.08018667 | 0.256 | 0.07  | 0.55821815 | ILC2_UCBMC |
| GLYR1             | 1.64E-05 | 1.49515962 | 0.282 | 0.077 | 0.58123358 | ILC2_UCBMC |
| DHX15             | 1.68E-05 | 1.36067676 | 0.308 | 0.09  | 0.59461983 | ILC2_UCBMC |
| WAPL              | 1.70E-05 | 1.74146412 | 0.282 | 0.081 | 0.60374946 | ILC2_UCBMC |
| CREB1             | 1.74E-05 | 1.75772674 | 0.308 | 0.092 | 0.61709873 | ILC2_UCBMC |
| MLLT3             | 1.75E-05 | 1.57330057 | 0.538 | 0.241 | 0.61887502 | ILC2_UCBMC |
| PRKCB             | 1.81E-05 | 1.52993858 | 0.385 | 0.136 | 0.64090965 | ILC2_UCBMC |
| PHIP              | 1.82E-05 | 1.33073914 | 0.41  | 0.143 | 0.64529529 | ILC2_UCBMC |
| VRK2              | 1.92E-05 | 1.53341385 | 0.256 | 0.069 | 0.67864793 | ILC2_UCBMC |
| CAMKMT            | 1.96E-05 | 1.70904091 | 0.256 | 0.072 | 0.69402697 | ILC2_UCBMC |
| LTN1              | 1.98E-05 | 1.98484005 | 0.256 | 0.07  | 0.70007457 | ILC2_UCBMC |
| EHD4              | 2.05E-05 | 1.78258003 | 0.308 | 0.096 | 0.72622246 | ILC2_UCBMC |
| AQR               | 2.08E-05 | 1.30847254 | 0.282 | 0.078 | 0.73528862 | ILC2_UCBMC |
| LBH               | 2.09E-05 | 1.39882334 | 0.308 | 0.092 | 0.74071957 | ILC2_UCBMC |
| GNAQ              | 2.13E-05 | 1.78351606 | 0.385 | 0.148 | 0.75408084 | ILC2_UCBMC |
| SUPT3H            | 2.14E-05 | 1.38443021 | 0.513 | 0.199 | 0.75722316 | ILC2_UCBMC |
| COPB1             | 2.16E-05 | 1.36905026 | 0.359 | 0.12  | 0.76645599 | ILC2_UCBMC |
| RNF13             | 2.18E-05 | 1.16419687 | 0.359 | 0.116 | 0.77200607 | ILC2_UCBMC |
| MED30             | 2.20E-05 | 1.45100108 | 0.256 | 0.069 | 0.77851879 | ILC2_UCBMC |
| MAP2K6            | 2.22E-05 | 1.98442436 | 0.256 | 0.072 | 0.78645546 | ILC2_UCBMC |
| CNOT10            | 2.25E-05 | 1.32989037 | 0.256 | 0.068 | 0.79585467 | ILC2_UCBMC |
| SLC44A2           | 2.25E-05 | 1.16218106 | 0.333 | 0.103 | 0.7986378  | ILC2_UCBMC |
| SKAP1             | 2.40E-05 | 0.84963034 | 0.821 | 0.531 | 0.85025004 | ILC2_UCBMC |
| SIN3A             | 2.47E-05 | 1.64450318 | 0.256 | 0.07  | 0.87585879 | ILC2_UCBMC |
| DNM3              | 2.84E-05 | 1.43373916 | 0.256 | 0.071 | 1          | ILC2_UCBMC |
| GATAD2B           | 2.89E-05 | 1.53932394 | 0.333 | 0.106 | 1          | ILC2_UCBMC |
| AGTPBP1           | 2.94E-05 | 1.59457209 | 0.333 | 0.108 | 1          | ILC2_UCBMC |
| RBBP6             | 2.96E-05 | 1.36770458 | 0.282 | 0.081 | 1          | ILC2_UCBMC |
| IP6K1             | 2.98E-05 | 1.34736716 | 0.256 | 0.071 | 1          | ILC2_UCBMC |

|                    |          |            |       |       |              |
|--------------------|----------|------------|-------|-------|--------------|
| TIPARP             | 2.99E-05 | 1.01886813 | 0.513 | 0.201 | 1 ILC2_UCBMC |
| IVNS1ABP           | 3.03E-05 | 0.83138368 | 0.59  | 0.253 | 1 ILC2_UCBMC |
| PRKDC              | 3.21E-05 | 1.18617488 | 0.436 | 0.172 | 1 ILC2_UCBMC |
| UPF2               | 3.46E-05 | 1.04810333 | 0.359 | 0.12  | 1 ILC2_UCBMC |
| SCML4              | 3.49E-05 | 1.45114066 | 0.385 | 0.141 | 1 ILC2_UCBMC |
| PPP1CC             | 3.55E-05 | 1.25482582 | 0.41  | 0.148 | 1 ILC2_UCBMC |
| ZFAND3             | 3.57E-05 | 1.06458592 | 0.513 | 0.204 | 1 ILC2_UCBMC |
| RBM26              | 3.58E-05 | 1.31146216 | 0.282 | 0.083 | 1 ILC2_UCBMC |
| STAT5B             | 3.59E-05 | 1.41673181 | 0.282 | 0.086 | 1 ILC2_UCBMC |
| MEF2A              | 3.60E-05 | 1.34384972 | 0.308 | 0.096 | 1 ILC2_UCBMC |
| RPIA               | 3.62E-05 | 1.78731588 | 0.256 | 0.075 | 1 ILC2_UCBMC |
| CNOT2              | 3.65E-05 | 1.08741158 | 0.462 | 0.182 | 1 ILC2_UCBMC |
| COMMD1             | 3.69E-05 | 1.14005969 | 0.41  | 0.152 | 1 ILC2_UCBMC |
| ELMOD3             | 3.87E-05 | 1.34781679 | 0.333 | 0.108 | 1 ILC2_UCBMC |
| PPP1R16B           | 3.98E-05 | 1.31439517 | 0.359 | 0.122 | 1 ILC2_UCBMC |
| ENSMMUG00000058532 | 4.10E-05 | 1.44398685 | 0.308 | 0.096 | 1 ILC2_UCBMC |
| RNF19A             | 4.11E-05 | 1.11611306 | 0.333 | 0.107 | 1 ILC2_UCBMC |
| LRRFIP1            | 4.16E-05 | 1.2280468  | 0.385 | 0.137 | 1 ILC2_UCBMC |
| MPHOSPH8           | 4.18E-05 | 1.1016387  | 0.41  | 0.148 | 1 ILC2_UCBMC |
| YTHDC1             | 4.26E-05 | 1.0215619  | 0.41  | 0.148 | 1 ILC2_UCBMC |
| UBA3               | 4.30E-05 | 1.51442201 | 0.256 | 0.072 | 1 ILC2_UCBMC |
| PTPRC              | 4.40E-05 | 0.60700771 | 0.897 | 0.601 | 1 ILC2_UCBMC |
| ANKRD11            | 4.47E-05 | 1.218971   | 0.41  | 0.154 | 1 ILC2_UCBMC |
| IFRD1              | 4.49E-05 | 1.0959865  | 0.41  | 0.151 | 1 ILC2_UCBMC |
| RABGAP1L           | 4.57E-05 | 1.16482489 | 0.538 | 0.248 | 1 ILC2_UCBMC |
| HNRNPR             | 4.71E-05 | 1.48702253 | 0.462 | 0.211 | 1 ILC2_UCBMC |
| TBC1D5             | 5.09E-05 | 1.04314453 | 0.462 | 0.186 | 1 ILC2_UCBMC |
| RNF149             | 5.10E-05 | 1.69850414 | 0.282 | 0.087 | 1 ILC2_UCBMC |
| BIN2               | 5.23E-05 | 1.02238285 | 0.59  | 0.292 | 1 ILC2_UCBMC |
| LRRFIP2            | 5.30E-05 | 1.16423297 | 0.282 | 0.083 | 1 ILC2_UCBMC |
| ATXN10             | 5.86E-05 | 1.13198238 | 0.436 | 0.168 | 1 ILC2_UCBMC |
| NUFIP2             | 5.99E-05 | 1.61246684 | 0.333 | 0.115 | 1 ILC2_UCBMC |
| ENSMMUG00000064530 | 6.18E-05 | 1.32154314 | 0.333 | 0.114 | 1 ILC2_UCBMC |

|                   |            |            |       |       |              |
|-------------------|------------|------------|-------|-------|--------------|
| CCAR1             | 6.21E-05   | 1.34862647 | 0.256 | 0.074 | 1 ILC2_UCBMC |
| ENSMUG00000049010 | 6.39E-05   | 1.24201733 | 0.333 | 0.111 | 1 ILC2_UCBMC |
| RBM39             | 6.47E-05   | 1.07487855 | 0.821 | 0.497 | 1 ILC2_UCBMC |
| PPIE              | 6.49E-05   | 1.7354209  | 0.256 | 0.075 | 1 ILC2_UCBMC |
| ENSMUG00000061125 | 6.60E-05   | 0.94241988 | 0.615 | 0.283 | 1 ILC2_UCBMC |
| KDM5A             | 6.66E-05   | 1.53159704 | 0.282 | 0.091 | 1 ILC2_UCBMC |
| ATXN7L3B          | 6.68E-05   | 1.08611769 | 0.333 | 0.109 | 1 ILC2_UCBMC |
| ADAM10            | 6.75E-05   | 1.33073719 | 0.359 | 0.123 | 1 ILC2_UCBMC |
| CRYL1             | 7.11E-05   | 1.00271986 | 0.333 | 0.107 | 1 ILC2_UCBMC |
| OXR1              | 7.21E-05   | 0.9490324  | 0.308 | 0.097 | 1 ILC2_UCBMC |
| GIT2              | 7.28E-05   | 1.04479053 | 0.282 | 0.086 | 1 ILC2_UCBMC |
| NBR1              | 7.39E-05   | 1.21041    | 0.308 | 0.099 | 1 ILC2_UCBMC |
| THUMPD2           | 7.44E-05   | 1.49661339 | 0.256 | 0.075 | 1 ILC2_UCBMC |
| EEF2              | 7.51E-05   | 0.8593761  | 0.872 | 0.522 | 1 ILC2_UCBMC |
| IGBP1             | 7.54E-05   | 1.11985257 | 0.462 | 0.189 | 1 ILC2_UCBMC |
| BMPR1B            | 7.77E-05   | 1.30498112 | 0.308 | 0.103 | 1 ILC2_UCBMC |
| WASL              | 7.99E-05   | 1.19721787 | 0.256 | 0.074 | 1 ILC2_UCBMC |
| HSD17B4           | 8.24E-05   | 1.29683957 | 0.744 | 0.43  | 1 ILC2_UCBMC |
| CAPZA2            | 8.29E-05   | 0.96604334 | 0.59  | 0.264 | 1 ILC2_UCBMC |
| RASSF3            | 8.40E-05   | 1.11619268 | 0.282 | 0.089 | 1 ILC2_UCBMC |
| ITCH              | 8.40E-05   | 1.19841889 | 0.41  | 0.157 | 1 ILC2_UCBMC |
| RPL23             | 8.54E-05   | 0.53734513 | 0.949 | 0.915 | 1 ILC2_UCBMC |
| EIF3H             | 8.54E-05   | 0.92046114 | 0.769 | 0.438 | 1 ILC2_UCBMC |
| PNPLA7            | 8.65E-05   | 1.03620248 | 0.256 | 0.072 | 1 ILC2_UCBMC |
| CENPC             | 8.69E-05   | 1.12141706 | 0.282 | 0.087 | 1 ILC2_UCBMC |
| OGT               | 8.85E-05   | 1.27420011 | 0.308 | 0.098 | 1 ILC2_UCBMC |
| HIPK3             | 8.88E-05   | 1.13129929 | 0.282 | 0.088 | 1 ILC2_UCBMC |
| ENSA              | 9.25E-05   | 0.90859233 | 0.641 | 0.303 | 1 ILC2_UCBMC |
| IL7R              | 9.38E-05   | 0.58353559 | 0.872 | 0.632 | 1 ILC2_UCBMC |
| PDCD6IP           | 9.51E-05   | 1.283349   | 0.333 | 0.117 | 1 ILC2_UCBMC |
| FKBP5             | 0.0001006  | 1.29523032 | 0.308 | 0.103 | 1 ILC2_UCBMC |
| MAZ               | 0.00010356 | 1.23085271 | 0.282 | 0.088 | 1 ILC2_UCBMC |
| UBE2D3            | 0.00010366 | 0.74876428 | 0.821 | 0.492 | 1 ILC2_UCBMC |

|                   |            |            |       |       |              |
|-------------------|------------|------------|-------|-------|--------------|
| PPP4R3A           | 0.00010454 | 0.93573098 | 0.282 | 0.085 | 1 ILC2_UCBMC |
| FMC1-LUC7L2       | 0.00010625 | 0.91755184 | 0.667 | 0.314 | 1 ILC2_UCBMC |
| EIF3M             | 0.0001068  | 0.87228703 | 0.615 | 0.286 | 1 ILC2_UCBMC |
| SERINC3           | 0.00010688 | 1.28366275 | 0.256 | 0.076 | 1 ILC2_UCBMC |
| TRAC              | 0.0001073  | 0.90014202 | 0.59  | 0.275 | 1 ILC2_UCBMC |
| ADA               | 0.00010922 | 0.95931457 | 0.282 | 0.086 | 1 ILC2_UCBMC |
| PRKX              | 0.00010941 | 1.05779655 | 0.513 | 0.225 | 1 ILC2_UCBMC |
| PTPN2             | 0.00011138 | 1.03604293 | 0.282 | 0.087 | 1 ILC2_UCBMC |
| SETD5             | 0.00011723 | 1.17679506 | 0.308 | 0.103 | 1 ILC2_UCBMC |
| OGA               | 0.000119   | 0.96337453 | 0.436 | 0.172 | 1 ILC2_UCBMC |
| ENSMUG00000045425 | 0.00011997 | 1.20279676 | 0.385 | 0.144 | 1 ILC2_UCBMC |
| ERP44             | 0.00012234 | 1.25562987 | 0.487 | 0.214 | 1 ILC2_UCBMC |
| SCAPER            | 0.00012531 | 1.61533262 | 0.282 | 0.094 | 1 ILC2_UCBMC |
| STAU1             | 0.00012601 | 1.09050136 | 0.359 | 0.125 | 1 ILC2_UCBMC |
| SEC63             | 0.00012654 | 1.66681438 | 0.308 | 0.107 | 1 ILC2_UCBMC |
| ADH5              | 0.00012669 | 1.58388159 | 0.282 | 0.09  | 1 ILC2_UCBMC |
| KIAA1143          | 0.00012696 | 1.78538031 | 0.256 | 0.08  | 1 ILC2_UCBMC |
| SUSD6             | 0.00012707 | 1.16092824 | 0.256 | 0.077 | 1 ILC2_UCBMC |
| ITGAL             | 0.00012801 | 1.03223472 | 0.333 | 0.115 | 1 ILC2_UCBMC |
| KIF5B             | 0.0001284  | 1.11785872 | 0.333 | 0.114 | 1 ILC2_UCBMC |
| GIMAP7            | 0.0001293  | 1.28933431 | 0.282 | 0.091 | 1 ILC2_UCBMC |
| HIPK1             | 0.00013202 | 1.61405503 | 0.282 | 0.091 | 1 ILC2_UCBMC |
| KLHL28            | 0.00013321 | 1.61371263 | 0.256 | 0.081 | 1 ILC2_UCBMC |
| MED23             | 0.00013468 | 0.91941041 | 0.256 | 0.076 | 1 ILC2_UCBMC |
| HDLBP             | 0.00013577 | 0.92712874 | 0.385 | 0.141 | 1 ILC2_UCBMC |
| PSMD12            | 0.0001358  | 1.18731132 | 0.385 | 0.149 | 1 ILC2_UCBMC |
| ADAR              | 0.00013954 | 0.99176702 | 0.308 | 0.101 | 1 ILC2_UCBMC |
| PBXIP1            | 0.00014204 | 1.74703951 | 0.359 | 0.137 | 1 ILC2_UCBMC |
| ARHGAP4           | 0.00014314 | 0.8813315  | 0.385 | 0.141 | 1 ILC2_UCBMC |
| CMTR1             | 0.00014635 | 1.41527646 | 0.256 | 0.08  | 1 ILC2_UCBMC |
| PHF20             | 0.00014782 | 0.64004438 | 0.359 | 0.124 | 1 ILC2_UCBMC |
| SEC61A1           | 0.00014969 | 1.65420434 | 0.256 | 0.078 | 1 ILC2_UCBMC |
| ATP5PB            | 0.0001547  | 0.97752434 | 0.436 | 0.176 | 1 ILC2_UCBMC |

|                    |            |            |       |       |              |
|--------------------|------------|------------|-------|-------|--------------|
| APPL1              | 0.00015989 | 1.10618364 | 0.333 | 0.118 | 1 ILC2_UCBMC |
| ENSMMUG00000020316 | 0.00016191 | 1.66619145 | 0.282 | 0.094 | 1 ILC2_UCBMC |
| ARID2              | 0.00016501 | 0.69639737 | 0.538 | 0.241 | 1 ILC2_UCBMC |
| EED                | 0.00016752 | 1.01045    | 0.308 | 0.102 | 1 ILC2_UCBMC |
| CALU               | 0.00016883 | 1.03550082 | 0.308 | 0.101 | 1 ILC2_UCBMC |
| RTN3               | 0.00017496 | 1.54976049 | 0.359 | 0.134 | 1 ILC2_UCBMC |
| MAML3              | 0.00017831 | 0.93406452 | 0.282 | 0.094 | 1 ILC2_UCBMC |
| PSMC2              | 0.00017942 | 1.59178204 | 0.282 | 0.094 | 1 ILC2_UCBMC |
| STK4               | 0.00018424 | 0.88686108 | 0.59  | 0.271 | 1 ILC2_UCBMC |
| DIAPH2             | 0.00018763 | 1.19780931 | 0.308 | 0.106 | 1 ILC2_UCBMC |
| MGAT4A             | 0.00018934 | 1.33064754 | 0.282 | 0.092 | 1 ILC2_UCBMC |
| RELL1              | 0.00019055 | 1.12234649 | 0.333 | 0.121 | 1 ILC2_UCBMC |
| SEPTIN9            | 0.0001954  | 0.70050562 | 0.692 | 0.323 | 1 ILC2_UCBMC |
| RFC1               | 0.00019567 | 1.17214779 | 0.41  | 0.158 | 1 ILC2_UCBMC |
| ITPR2              | 0.0001971  | 1.06037192 | 0.436 | 0.18  | 1 ILC2_UCBMC |
| TMED2              | 0.00019745 | 0.77129078 | 0.462 | 0.182 | 1 ILC2_UCBMC |
| ERLEC1             | 0.0001988  | 0.5647075  | 0.385 | 0.137 | 1 ILC2_UCBMC |
| RSRC2              | 0.00021088 | 0.94838135 | 0.538 | 0.256 | 1 ILC2_UCBMC |
| SERPIN1            | 0.00021118 | 1.15414832 | 0.256 | 0.08  | 1 ILC2_UCBMC |
| PTPRA              | 0.00021453 | 1.12267913 | 0.308 | 0.104 | 1 ILC2_UCBMC |
| CD44               | 0.00021663 | 0.79213753 | 0.897 | 0.734 | 1 ILC2_UCBMC |
| LMO4               | 0.0002211  | 1.47885746 | 0.256 | 0.084 | 1 ILC2_UCBMC |
| PCNX1              | 0.00022446 | 1.31868023 | 0.308 | 0.11  | 1 ILC2_UCBMC |
| ENSMMUG00000056190 | 0.00022922 | 1.17096141 | 0.256 | 0.081 | 1 ILC2_UCBMC |
| FUBP1              | 0.00022992 | 0.87174935 | 0.462 | 0.189 | 1 ILC2_UCBMC |
| TTF1               | 0.00023843 | 0.82754821 | 0.308 | 0.103 | 1 ILC2_UCBMC |
| DDX50              | 0.00023954 | 0.9175102  | 0.359 | 0.131 | 1 ILC2_UCBMC |
| CHST11             | 0.0002439  | 0.72345918 | 0.513 | 0.251 | 1 ILC2_UCBMC |
| SOS1               | 0.00024718 | 0.61022332 | 0.462 | 0.197 | 1 ILC2_UCBMC |
| PLCL1              | 0.00024852 | 1.2670339  | 0.385 | 0.155 | 1 ILC2_UCBMC |
| NDUFS3             | 0.00024862 | 1.01256114 | 0.41  | 0.158 | 1 ILC2_UCBMC |
| COPS2              | 0.00025121 | 1.18839017 | 0.333 | 0.12  | 1 ILC2_UCBMC |
| RPL13              | 0.00026027 | 0.51091772 | 0.897 | 0.756 | 1 ILC2_UCBMC |



|                    |            |            |       |       |              |
|--------------------|------------|------------|-------|-------|--------------|
| SPEN               | 0.00026159 | 0.93312598 | 0.256 | 0.08  | 1 ILC2_UCBMC |
| ACTB               | 0.0002687  | 0.46249993 | 0.974 | 0.964 | 1 ILC2_UCBMC |
| RANBP1             | 0.00026882 | 1.23349417 | 0.256 | 0.083 | 1 ILC2_UCBMC |
| TOP2B              | 0.00027036 | 0.89549691 | 0.385 | 0.153 | 1 ILC2_UCBMC |
| ANXA11             | 0.00027773 | 1.15906941 | 0.256 | 0.08  | 1 ILC2_UCBMC |
| SNRNP70            | 0.00027919 | 1.12260511 | 0.333 | 0.123 | 1 ILC2_UCBMC |
| CCNG1              | 0.00028198 | 1.1271724  | 0.308 | 0.107 | 1 ILC2_UCBMC |
| RAB3GAP1           | 0.00028203 | 0.68881017 | 0.385 | 0.144 | 1 ILC2_UCBMC |
| ENSMMUG00000065175 | 0.00028314 | 0.85557148 | 0.385 | 0.147 | 1 ILC2_UCBMC |
| CARD11             | 0.00030423 | 1.12027401 | 0.282 | 0.094 | 1 ILC2_UCBMC |
| HOOK3              | 0.00030442 | 0.75210982 | 0.615 | 0.303 | 1 ILC2_UCBMC |
| USP3               | 0.00030904 | 1.3927974  | 0.333 | 0.128 | 1 ILC2_UCBMC |
| SEMA4D             | 0.00030908 | 1.55639065 | 0.256 | 0.083 | 1 ILC2_UCBMC |
| TCF25              | 0.00032101 | 0.79346401 | 0.436 | 0.179 | 1 ILC2_UCBMC |
| PSMA7              | 0.00033636 | 0.70539472 | 0.821 | 0.471 | 1 ILC2_UCBMC |
| NPAT               | 0.00035404 | 1.15777962 | 0.282 | 0.099 | 1 ILC2_UCBMC |
| LCP2               | 0.00035446 | 1.31503795 | 0.256 | 0.084 | 1 ILC2_UCBMC |
| CYTIP              | 0.00035601 | 0.60752596 | 0.256 | 0.08  | 1 ILC2_UCBMC |
| NDFIP1             | 0.00035701 | 0.75697889 | 0.667 | 0.345 | 1 ILC2_UCBMC |
| EPRS1              | 0.0003576  | 1.02977014 | 0.256 | 0.083 | 1 ILC2_UCBMC |
| EIF4H              | 0.00035906 | 0.82706455 | 0.462 | 0.196 | 1 ILC2_UCBMC |
| TRA2B              | 0.0003656  | 0.82024235 | 0.769 | 0.493 | 1 ILC2_UCBMC |
| ENSMMUG00000058037 | 0.00037934 | 0.98393824 | 0.282 | 0.094 | 1 ILC2_UCBMC |
| SINHCAF            | 0.00039317 | 1.03935755 | 0.282 | 0.096 | 1 ILC2_UCBMC |
| RHOA               | 0.00041013 | 0.75292592 | 0.872 | 0.577 | 1 ILC2_UCBMC |
| ZNF827             | 0.00041914 | 1.47438498 | 0.282 | 0.097 | 1 ILC2_UCBMC |
| RAB3GAP2           | 0.00043012 | 0.98430854 | 0.359 | 0.137 | 1 ILC2_UCBMC |
| PICALM             | 0.00044785 | 1.16866391 | 0.538 | 0.282 | 1 ILC2_UCBMC |
| ZNF131             | 0.00046028 | 0.6726449  | 0.256 | 0.08  | 1 ILC2_UCBMC |
| PRRC2C             | 0.00046292 | 0.70566595 | 0.795 | 0.436 | 1 ILC2_UCBMC |
| CYFIP2             | 0.0004633  | 1.70141095 | 0.333 | 0.126 | 1 ILC2_UCBMC |
| VSIR               | 0.00047135 | 1.81641709 | 0.256 | 0.086 | 1 ILC2_UCBMC |
| SPECC1L            | 0.00047328 | 1.09903276 | 0.333 | 0.128 | 1 ILC2_UCBMC |

|                    |            |            |       |       |              |
|--------------------|------------|------------|-------|-------|--------------|
| HSD17B11           | 0.00047527 | 1.15296934 | 0.359 | 0.147 | 1 ILC2_UCBMC |
| ENSMMUG00000052424 | 0.00047822 | 1.19415759 | 0.487 | 0.248 | 1 ILC2_UCBMC |
| PPFIBP1            | 0.00050154 | 1.31115674 | 0.256 | 0.088 | 1 ILC2_UCBMC |
| BZW2               | 0.00050711 | 1.56833274 | 0.333 | 0.135 | 1 ILC2_UCBMC |
| MRPL10             | 0.00051375 | 0.94416835 | 0.282 | 0.097 | 1 ILC2_UCBMC |
| CIR1               | 0.00051822 | 0.6575775  | 0.462 | 0.196 | 1 ILC2_UCBMC |
| DDT                | 0.00051995 | 0.88171076 | 0.462 | 0.207 | 1 ILC2_UCBMC |
| ENSMMUG00000015583 | 0.00052363 | 0.67171482 | 0.923 | 0.566 | 1 ILC2_UCBMC |
| POLR2G             | 0.00053031 | 0.75659284 | 0.333 | 0.123 | 1 ILC2_UCBMC |
| SMC3               | 0.00055553 | 0.7968     | 0.359 | 0.139 | 1 ILC2_UCBMC |
| EIF4G1             | 0.00056035 | 0.8639998  | 0.256 | 0.083 | 1 ILC2_UCBMC |
| ZC3H11A            | 0.00056244 | 1.45590445 | 0.333 | 0.13  | 1 ILC2_UCBMC |
| RAPGEF2            | 0.00057005 | 0.84713735 | 0.487 | 0.228 | 1 ILC2_UCBMC |
| ZNF148             | 0.00057017 | 1.21819799 | 0.256 | 0.088 | 1 ILC2_UCBMC |
| IST1               | 0.00057381 | 1.10309797 | 0.333 | 0.131 | 1 ILC2_UCBMC |
| ANXA1              | 0.00058928 | 0.73345833 | 0.923 | 0.636 | 1 ILC2_UCBMC |
| AHNAK              | 0.00060474 | 1.11472158 | 0.513 | 0.261 | 1 ILC2_UCBMC |
| HNRNPU             | 0.00060492 | 1.01364312 | 0.615 | 0.301 | 1 ILC2_UCBMC |
| FAM172A            | 0.00062885 | 1.10062028 | 0.41  | 0.181 | 1 ILC2_UCBMC |
| KAT6A              | 0.00064219 | 0.62947332 | 0.513 | 0.233 | 1 ILC2_UCBMC |
| PSMD7              | 0.0006722  | 1.3686313  | 0.308 | 0.12  | 1 ILC2_UCBMC |
| RERE               | 0.00067761 | 0.60207573 | 0.538 | 0.255 | 1 ILC2_UCBMC |
| CLK1               | 0.00068714 | 0.76369408 | 0.462 | 0.205 | 1 ILC2_UCBMC |
| RAB18              | 0.00070559 | 0.89996166 | 0.308 | 0.114 | 1 ILC2_UCBMC |
| CMTM6              | 0.0007198  | 0.85917162 | 0.59  | 0.311 | 1 ILC2_UCBMC |
| RPS2               | 0.00072753 | 0.83020968 | 0.744 | 0.507 | 1 ILC2_UCBMC |
| CYLD               | 0.00074391 | 0.64202708 | 0.513 | 0.234 | 1 ILC2_UCBMC |
| TSPYL1             | 0.00076222 | 1.10467677 | 0.256 | 0.087 | 1 ILC2_UCBMC |
| PSMA3              | 0.00078102 | 1.01601952 | 0.462 | 0.216 | 1 ILC2_UCBMC |
| UIMC1              | 0.00078297 | 1.06385253 | 0.256 | 0.088 | 1 ILC2_UCBMC |
| SDHB               | 0.00078542 | 0.67519522 | 0.282 | 0.098 | 1 ILC2_UCBMC |
| ZNF451             | 0.00083626 | 0.97605458 | 0.308 | 0.117 | 1 ILC2_UCBMC |
| AP2B1              | 0.00084962 | 0.69708673 | 0.282 | 0.099 | 1 ILC2_UCBMC |

|                   |            |            |       |       |              |
|-------------------|------------|------------|-------|-------|--------------|
| SLC9A9            | 0.00085794 | 1.34538417 | 0.538 | 0.318 | 1 ILC2_UCBMC |
| PIH1D1            | 0.0008939  | 0.73974379 | 0.359 | 0.139 | 1 ILC2_UCBMC |
| IRAK2             | 0.00090886 | 0.89777575 | 0.41  | 0.179 | 1 ILC2_UCBMC |
| TRIP12            | 0.00098424 | 1.06104349 | 0.308 | 0.125 | 1 ILC2_UCBMC |
| NTAN1             | 0.00098762 | 1.01616397 | 0.256 | 0.089 | 1 ILC2_UCBMC |
| THOC2             | 0.00099764 | 0.83606157 | 0.282 | 0.1   | 1 ILC2_UCBMC |
| DOCK10            | 0.00102183 | 1.30603952 | 0.487 | 0.223 | 1 ILC2_UCBMC |
| ENSMUG00000028699 | 0.0010266  | 1.08148434 | 0.41  | 0.192 | 1 ILC2_UCBMC |
| MAX               | 0.00104473 | 0.72911819 | 0.385 | 0.157 | 1 ILC2_UCBMC |
| ENSMUG00000006965 | 0.00104715 | 0.68779961 | 0.462 | 0.206 | 1 ILC2_UCBMC |
| MORF4L1           | 0.00106552 | 0.68416366 | 0.718 | 0.39  | 1 ILC2_UCBMC |
| TIA1              | 0.00106802 | 1.16826478 | 0.282 | 0.106 | 1 ILC2_UCBMC |
| SS18              | 0.00109745 | 0.91141985 | 0.359 | 0.151 | 1 ILC2_UCBMC |
| ABCE1             | 0.00111849 | 0.77403675 | 0.333 | 0.132 | 1 ILC2_UCBMC |
| ENSMUG00000062821 | 0.00112898 | 0.97564725 | 0.333 | 0.137 | 1 ILC2_UCBMC |
| JUN               | 0.00116097 | 0.21342875 | 0.513 | 0.237 | 1 ILC2_UCBMC |
| RPN1              | 0.00117855 | 1.04112329 | 0.41  | 0.19  | 1 ILC2_UCBMC |
| DNAJC3            | 0.00118549 | 0.86289828 | 0.385 | 0.164 | 1 ILC2_UCBMC |
| PIP4K2A           | 0.00121426 | 0.83664287 | 0.513 | 0.258 | 1 ILC2_UCBMC |
| TMEM243           | 0.00124056 | 0.71477922 | 0.462 | 0.21  | 1 ILC2_UCBMC |
| KPNA1             | 0.0012782  | 1.35828951 | 0.256 | 0.094 | 1 ILC2_UCBMC |
| LBR               | 0.00128887 | 0.59035018 | 0.333 | 0.129 | 1 ILC2_UCBMC |
| DNTTIP2           | 0.00128909 | 0.62612491 | 0.359 | 0.146 | 1 ILC2_UCBMC |
| BABAM2            | 0.00133383 | 1.4592906  | 0.333 | 0.142 | 1 ILC2_UCBMC |
| COPA              | 0.00136376 | 0.96182215 | 0.333 | 0.14  | 1 ILC2_UCBMC |
| SSR1              | 0.00137061 | 0.81828743 | 0.359 | 0.151 | 1 ILC2_UCBMC |
| ESYT1             | 0.00138853 | 0.98957585 | 0.333 | 0.138 | 1 ILC2_UCBMC |
| BCL7B             | 0.00139238 | 0.98985719 | 0.256 | 0.094 | 1 ILC2_UCBMC |
| TAOK3             | 0.00140448 | 1.57988651 | 0.385 | 0.181 | 1 ILC2_UCBMC |
| ATRX              | 0.00142449 | 0.66111761 | 0.436 | 0.196 | 1 ILC2_UCBMC |
| ENSMUG00000060287 | 0.00147838 | 0.85470759 | 0.846 | 0.604 | 1 ILC2_UCBMC |
| COPS3             | 0.00148054 | 0.61235594 | 0.282 | 0.103 | 1 ILC2_UCBMC |
| MNAT1             | 0.00154845 | 0.69252886 | 0.282 | 0.104 | 1 ILC2_UCBMC |

|                    |            |            |       |       |              |
|--------------------|------------|------------|-------|-------|--------------|
| GLB1               | 0.00159138 | 0.49503007 | 0.282 | 0.102 | 1 ILC2_UCBMC |
| ENSMMUG00000003412 | 0.00160794 | 0.33235559 | 1     | 0.99  | 1 ILC2_UCBMC |
| CCNL1              | 0.00164834 | 0.44388804 | 0.846 | 0.516 | 1 ILC2_UCBMC |
| HIVEP1             | 0.00165574 | 0.83211041 | 0.487 | 0.247 | 1 ILC2_UCBMC |
| ZNF93              | 0.00165954 | 1.31467163 | 0.256 | 0.095 | 1 ILC2_UCBMC |
| TUBB2B             | 0.00170635 | 1.10265547 | 0.333 | 0.139 | 1 ILC2_UCBMC |
| MIA2               | 0.00170966 | 0.93981117 | 0.359 | 0.154 | 1 ILC2_UCBMC |
| ZCRB1              | 0.00177926 | 0.68160654 | 0.308 | 0.12  | 1 ILC2_UCBMC |
| CCDC90B            | 0.00183333 | 0.81281717 | 0.282 | 0.107 | 1 ILC2_UCBMC |
| VPS37B             | 0.00185004 | 0.83450813 | 0.333 | 0.142 | 1 ILC2_UCBMC |
| KIAA1109           | 0.00186275 | 1.79309099 | 0.256 | 0.097 | 1 ILC2_UCBMC |
| PLP2               | 0.00189443 | 1.18278034 | 0.256 | 0.098 | 1 ILC2_UCBMC |
| ENSMMUG00000058755 | 0.00189719 | 0.36335792 | 1     | 0.973 | 1 ILC2_UCBMC |
| TGFB1              | 0.0019035  | 1.30835491 | 0.359 | 0.176 | 1 ILC2_UCBMC |
| SCAF11             | 0.00193189 | 0.60987479 | 0.59  | 0.297 | 1 ILC2_UCBMC |
| GNB1               | 0.00196184 | 1.18512638 | 0.282 | 0.11  | 1 ILC2_UCBMC |
| NDUFA9             | 0.00204277 | 1.09830695 | 0.282 | 0.114 | 1 ILC2_UCBMC |
| TRAM1              | 0.00208958 | 0.88001418 | 0.436 | 0.219 | 1 ILC2_UCBMC |
| TBC1D25            | 0.00214919 | 0.97465298 | 0.359 | 0.15  | 1 ILC2_UCBMC |
| PXK                | 0.00221887 | 1.02078424 | 0.282 | 0.116 | 1 ILC2_UCBMC |
| NSF                | 0.00222006 | 0.79289848 | 0.256 | 0.095 | 1 ILC2_UCBMC |
| HNRNPA2B1          | 0.00225379 | 0.43688768 | 0.897 | 0.7   | 1 ILC2_UCBMC |
| EEF1E1             | 0.00225684 | 0.75090818 | 0.308 | 0.123 | 1 ILC2_UCBMC |
| SSU72              | 0.00234966 | 0.52290786 | 0.333 | 0.135 | 1 ILC2_UCBMC |
| LASP1              | 0.00237322 | 1.55585745 | 0.256 | 0.102 | 1 ILC2_UCBMC |
| ZNF528             | 0.00239201 | 0.61634239 | 0.359 | 0.151 | 1 ILC2_UCBMC |
| HNRNPC             | 0.00239915 | 0.66005893 | 0.692 | 0.43  | 1 ILC2_UCBMC |
| UFC1               | 0.00248882 | 0.63491087 | 0.564 | 0.3   | 1 ILC2_UCBMC |
| UCHL3              | 0.00260255 | 1.5284796  | 0.256 | 0.101 | 1 ILC2_UCBMC |
| ZMYND11            | 0.00265857 | 1.12726208 | 0.282 | 0.114 | 1 ILC2_UCBMC |
| NCK1               | 0.00273465 | 0.61131612 | 0.333 | 0.139 | 1 ILC2_UCBMC |
| ARFGAP3            | 0.00275602 | 0.57940611 | 0.359 | 0.152 | 1 ILC2_UCBMC |
| CCDC12             | 0.0028346  | 1.21055901 | 0.308 | 0.133 | 1 ILC2_UCBMC |

|                     |            |            |       |       |              |
|---------------------|------------|------------|-------|-------|--------------|
| TCP1                | 0.00283737 | 0.66893805 | 0.256 | 0.097 | 1 ILC2_UCBMC |
| COX2                | 0.00283856 | 0.3926787  | 0.897 | 0.83  | 1 ILC2_UCBMC |
| SLC25A4             | 0.00289227 | 1.12794716 | 0.256 | 0.1   | 1 ILC2_UCBMC |
| PSMD4               | 0.00293327 | 0.54121453 | 0.333 | 0.138 | 1 ILC2_UCBMC |
| JAZF1               | 0.00294133 | 1.55807363 | 0.359 | 0.172 | 1 ILC2_UCBMC |
| H1-3                | 0.00295615 | 0.51454875 | 0.308 | 0.124 | 1 ILC2_UCBMC |
| RSRC1               | 0.00300629 | 0.45084207 | 0.308 | 0.121 | 1 ILC2_UCBMC |
| RALY                | 0.00307194 | 0.9837437  | 0.256 | 0.101 | 1 ILC2_UCBMC |
| ANP32B              | 0.0030884  | 0.93971108 | 0.436 | 0.231 | 1 ILC2_UCBMC |
| SNW1                | 0.00309251 | 1.00774159 | 0.385 | 0.179 | 1 ILC2_UCBMC |
| SMARCA2             | 0.00311743 | 0.98200081 | 0.385 | 0.181 | 1 ILC2_UCBMC |
| AKAP9               | 0.00329424 | 0.90064875 | 0.41  | 0.198 | 1 ILC2_UCBMC |
| SLTM                | 0.00337831 | 0.58724682 | 0.41  | 0.19  | 1 ILC2_UCBMC |
| STIP1               | 0.00342695 | 0.71820024 | 0.256 | 0.097 | 1 ILC2_UCBMC |
| ENSMMUG00000006293  | 0.00343554 | 0.55213311 | 0.41  | 0.184 | 1 ILC2_UCBMC |
| WDR70               | 0.00346685 | 0.76891609 | 0.308 | 0.128 | 1 ILC2_UCBMC |
| NAE1                | 0.00346946 | 1.31747695 | 0.256 | 0.103 | 1 ILC2_UCBMC |
| MFF                 | 0.00353867 | 0.66223375 | 0.256 | 0.097 | 1 ILC2_UCBMC |
| CD3E                | 0.00358015 | 0.69993443 | 0.359 | 0.161 | 1 ILC2_UCBMC |
| RANBP2              | 0.00387339 | 0.76663754 | 0.385 | 0.179 | 1 ILC2_UCBMC |
| DDX3Y               | 0.00388953 | 0.75579401 | 0.436 | 0.218 | 1 ILC2_UCBMC |
| KLHL6               | 0.00390424 | 0.64937062 | 0.308 | 0.13  | 1 ILC2_UCBMC |
| DERL2               | 0.00401575 | 0.68541082 | 0.256 | 0.1   | 1 ILC2_UCBMC |
| EIF1AY              | 0.00402716 | 1.23039794 | 0.308 | 0.133 | 1 ILC2_UCBMC |
| RIOK3               | 0.00402998 | 0.90220038 | 0.359 | 0.168 | 1 ILC2_UCBMC |
| SF3B2               | 0.00404841 | 0.75632651 | 0.308 | 0.132 | 1 ILC2_UCBMC |
| HDAC1               | 0.00411717 | 0.90023752 | 0.462 | 0.236 | 1 ILC2_UCBMC |
| ARL6IP6             | 0.00412245 | 0.65165638 | 0.256 | 0.099 | 1 ILC2_UCBMC |
| MCTS1               | 0.00415144 | 0.54077874 | 0.333 | 0.141 | 1 ILC2_UCBMC |
| ENSMMUG000000049151 | 0.00422153 | 0.39487105 | 0.974 | 0.925 | 1 ILC2_UCBMC |
| CBLB                | 0.00425257 | 0.85536204 | 0.282 | 0.121 | 1 ILC2_UCBMC |
| INTS6               | 0.00427655 | 0.96034851 | 0.385 | 0.18  | 1 ILC2_UCBMC |
| ETS1                | 0.00429642 | 0.54251914 | 0.769 | 0.486 | 1 ILC2_UCBMC |

|                   |            |            |       |       |              |
|-------------------|------------|------------|-------|-------|--------------|
| MYO5A             | 0.00429843 | 0.94674774 | 0.256 | 0.104 | 1 ILC2_UCBMC |
| ACTR3             | 0.00432356 | 0.7305243  | 0.59  | 0.322 | 1 ILC2_UCBMC |
| CYRIB             | 0.00436601 | 0.66014806 | 0.436 | 0.224 | 1 ILC2_UCBMC |
| HNRNPA0           | 0.00437803 | 1.00915157 | 0.513 | 0.258 | 1 ILC2_UCBMC |
| NFKBIA            | 0.00444139 | 0.58273398 | 0.667 | 0.372 | 1 ILC2_UCBMC |
| UBE2L3            | 0.00448554 | 0.5698407  | 0.487 | 0.239 | 1 ILC2_UCBMC |
| CNOT7             | 0.00455262 | 0.89674765 | 0.282 | 0.118 | 1 ILC2_UCBMC |
| CCDC82            | 0.00457481 | 0.78715671 | 0.282 | 0.119 | 1 ILC2_UCBMC |
| NUB1              | 0.00459284 | 0.99070371 | 0.308 | 0.135 | 1 ILC2_UCBMC |
| XRCC5             | 0.00469987 | 0.7166017  | 0.538 | 0.295 | 1 ILC2_UCBMC |
| BDP1              | 0.00471648 | 0.90134547 | 0.256 | 0.105 | 1 ILC2_UCBMC |
| SH3KBP1           | 0.0047896  | 0.90307267 | 0.667 | 0.4   | 1 ILC2_UCBMC |
| PHF11             | 0.004798   | 0.60319322 | 0.359 | 0.161 | 1 ILC2_UCBMC |
| LSM10             | 0.00487652 | 1.45965625 | 0.282 | 0.125 | 1 ILC2_UCBMC |
| SRRM1             | 0.00493892 | 0.34986514 | 0.718 | 0.414 | 1 ILC2_UCBMC |
| PFN1              | 0.00500482 | 0.39811415 | 0.974 | 0.651 | 1 ILC2_UCBMC |
| CASP12            | 0.00503135 | 0.71132771 | 0.333 | 0.148 | 1 ILC2_UCBMC |
| CNST              | 0.00511689 | 0.72532838 | 0.333 | 0.148 | 1 ILC2_UCBMC |
| DUSP16            | 0.00525512 | 0.69148629 | 0.333 | 0.157 | 1 ILC2_UCBMC |
| TRMT10C           | 0.00528651 | 0.94218367 | 0.385 | 0.196 | 1 ILC2_UCBMC |
| SERINC1           | 0.00532997 | 0.64560377 | 0.436 | 0.225 | 1 ILC2_UCBMC |
| PSMC1             | 0.00541379 | 0.6739064  | 0.256 | 0.103 | 1 ILC2_UCBMC |
| DERL1             | 0.00543296 | 0.47117469 | 0.282 | 0.114 | 1 ILC2_UCBMC |
| CDC42SE1          | 0.00551756 | 0.4639301  | 0.282 | 0.114 | 1 ILC2_UCBMC |
| ENSMUG00000010266 | 0.00579304 | 0.66397744 | 0.641 | 0.428 | 1 ILC2_UCBMC |
| EIF5              | 0.00580529 | 0.53531896 | 0.436 | 0.213 | 1 ILC2_UCBMC |
| CEBPZ             | 0.00592396 | 0.89333481 | 0.436 | 0.225 | 1 ILC2_UCBMC |
| SELENOS           | 0.00598182 | 0.71704214 | 0.641 | 0.375 | 1 ILC2_UCBMC |
| PAK2              | 0.00621507 | 0.54864475 | 0.513 | 0.28  | 1 ILC2_UCBMC |
| NAP1L4            | 0.00626862 | 0.46461822 | 0.641 | 0.376 | 1 ILC2_UCBMC |
| ELF1              | 0.00632803 | 0.93751096 | 0.692 | 0.423 | 1 ILC2_UCBMC |
| AKNA              | 0.00641612 | 0.60840359 | 0.282 | 0.119 | 1 ILC2_UCBMC |
| UBE2D1            | 0.00646483 | 0.79631991 | 0.308 | 0.144 | 1 ILC2_UCBMC |

|                    |            |            |       |       |              |
|--------------------|------------|------------|-------|-------|--------------|
| ENSMMUG00000047001 | 0.00656686 | 0.42530983 | 0.256 | 0.432 | 1 ILC2_UCBMC |
| GLIPR1L2           | 0.00668029 | 0.56029877 | 0.436 | 0.208 | 1 ILC2_UCBMC |
| DPP4               | 0.00675944 | 0.24058432 | 0.333 | 0.146 | 1 ILC2_UCBMC |
| CSDE1              | 0.00705211 | 0.48848926 | 0.538 | 0.297 | 1 ILC2_UCBMC |
| LPP                | 0.00711098 | 0.82655319 | 0.282 | 0.125 | 1 ILC2_UCBMC |
| ENSMMUG00000053089 | 0.00716863 | 0.56702646 | 0.282 | 0.12  | 1 ILC2_UCBMC |
| HUWE1              | 0.00721266 | 0.76005965 | 0.385 | 0.187 | 1 ILC2_UCBMC |
| FLI1               | 0.0072546  | 0.97952302 | 0.256 | 0.11  | 1 ILC2_UCBMC |
| USP16              | 0.00727048 | 1.4337467  | 0.256 | 0.11  | 1 ILC2_UCBMC |
| ATP6               | 0.00728123 | 0.60424632 | 0.846 | 0.699 | 1 ILC2_UCBMC |
| KIF2A              | 0.00731134 | 0.70608856 | 0.256 | 0.108 | 1 ILC2_UCBMC |
| STK26              | 0.00756418 | 0.48395547 | 0.282 | 0.12  | 1 ILC2_UCBMC |
| HERPUD1            | 0.00761743 | 0.52853923 | 0.359 | 0.172 | 1 ILC2_UCBMC |
| THRAP3             | 0.00762704 | 0.58311479 | 0.462 | 0.248 | 1 ILC2_UCBMC |
| FAM120A            | 0.00763776 | 1.17826957 | 0.256 | 0.111 | 1 ILC2_UCBMC |
| C15H9orf78         | 0.00769651 | 0.49864474 | 0.59  | 0.328 | 1 ILC2_UCBMC |
| CD7                | 0.00772574 | 0.60498233 | 0.462 | 0.245 | 1 ILC2_UCBMC |
| NAA50              | 0.00777922 | 0.65531441 | 0.333 | 0.153 | 1 ILC2_UCBMC |
| SNX14              | 0.00783118 | 0.82948253 | 0.282 | 0.127 | 1 ILC2_UCBMC |
| C1H1orf43          | 0.00864319 | 0.50233635 | 0.256 | 0.107 | 1 ILC2_UCBMC |
| VCL                | 0.00864961 | 1.43451395 | 0.256 | 0.115 | 1 ILC2_UCBMC |
| ILF3               | 0.00868789 | 1.4237027  | 0.256 | 0.12  | 1 ILC2_UCBMC |
| MRPL47             | 0.00876277 | 0.41581493 | 0.282 | 0.121 | 1 ILC2_UCBMC |
| STK17B             | 0.00877708 | 0.59149684 | 0.821 | 0.562 | 1 ILC2_UCBMC |
| RAMAC              | 0.00884199 | 0.79205731 | 0.385 | 0.188 | 1 ILC2_UCBMC |
| JARID2             | 0.00891171 | 0.74105804 | 0.538 | 0.314 | 1 ILC2_UCBMC |
| STK24              | 0.00898295 | 0.49039847 | 0.359 | 0.175 | 1 ILC2_UCBMC |
| LAMTOR2            | 0.00901549 | 0.49727754 | 0.333 | 0.152 | 1 ILC2_UCBMC |
| XRN2               | 0.0090287  | 0.79137749 | 0.41  | 0.221 | 1 ILC2_UCBMC |
| MYH9               | 0.0091437  | 0.82148832 | 0.462 | 0.249 | 1 ILC2_UCBMC |
| SATB1              | 0.00932701 | 0.45614294 | 0.487 | 0.261 | 1 ILC2_UCBMC |
| RBM27              | 0.0094051  | 0.7710646  | 0.256 | 0.111 | 1 ILC2_UCBMC |
| EIF3F              | 0.00944191 | 0.77161029 | 0.487 | 0.268 | 1 ILC2_UCBMC |

|                    |            |            |       |       |              |
|--------------------|------------|------------|-------|-------|--------------|
| ANKRD13C           | 0.00962797 | 0.49809871 | 0.359 | 0.175 | 1 ILC2_UCBMC |
| FAM204A            | 0.00988897 | 0.29969567 | 0.308 | 0.134 | 1 ILC2_UCBMC |
| RASSF1             | 0.00995822 | 0.77963954 | 0.333 | 0.16  | 1 ILC2_UCBMC |
| STOML2             | 0.01000349 | 0.49742254 | 0.385 | 0.186 | 1 ILC2_UCBMC |
| ENSMMUG00000015217 | 0.0100285  | 0.5208638  | 0.256 | 0.107 | 1 ILC2_UCBMC |
| PCM1               | 0.01015897 | 0.58120251 | 0.282 | 0.125 | 1 ILC2_UCBMC |
| HNRNPUL1           | 0.01018001 | 1.5101365  | 0.256 | 0.122 | 1 ILC2_UCBMC |
| LARP7              | 0.01056112 | 0.805496   | 0.308 | 0.144 | 1 ILC2_UCBMC |
| NOP58              | 0.01059404 | 0.48301386 | 0.333 | 0.155 | 1 ILC2_UCBMC |
| RAB14              | 0.01072031 | 0.56220861 | 0.308 | 0.142 | 1 ILC2_UCBMC |
| SHOC2              | 0.0108681  | 0.47856755 | 0.41  | 0.207 | 1 ILC2_UCBMC |
| ZNF514             | 0.01092802 | 0.77852521 | 0.282 | 0.131 | 1 ILC2_UCBMC |
| PAK3               | 0.01097895 | 0.89044772 | 0.359 | 0.185 | 1 ILC2_UCBMC |
| RPL31              | 0.01148711 | 0.597581   | 0.667 | 0.438 | 1 ILC2_UCBMC |
| ASCC3              | 0.01153656 | 0.50601571 | 0.282 | 0.126 | 1 ILC2_UCBMC |
| PREX1              | 0.01156565 | 0.56578693 | 0.385 | 0.203 | 1 ILC2_UCBMC |
| EPS15              | 0.01161927 | 0.36686594 | 0.513 | 0.281 | 1 ILC2_UCBMC |
| HSPA9              | 0.01171828 | 1.20294228 | 0.282 | 0.136 | 1 ILC2_UCBMC |
| BCL11B             | 0.01174221 | 0.62248513 | 0.256 | 0.113 | 1 ILC2_UCBMC |
| DARS1              | 0.01207151 | 0.70506153 | 0.282 | 0.131 | 1 ILC2_UCBMC |
| ITGAE              | 0.01228717 | 0.43466294 | 0.487 | 0.249 | 1 ILC2_UCBMC |
| DDOST              | 0.0124851  | 0.40167204 | 0.538 | 0.278 | 1 ILC2_UCBMC |
| TRIB2              | 0.0127938  | 0.86909478 | 0.333 | 0.174 | 1 ILC2_UCBMC |
| ELK3               | 0.01342639 | 0.52391305 | 0.538 | 0.342 | 1 ILC2_UCBMC |
| STK17A             | 0.01361947 | 0.67486805 | 0.667 | 0.398 | 1 ILC2_UCBMC |
| CARHSP1            | 0.01387158 | 0.45099051 | 0.538 | 0.314 | 1 ILC2_UCBMC |
| TMED10             | 0.01395213 | 0.44846073 | 0.462 | 0.242 | 1 ILC2_UCBMC |
| WSB1               | 0.01415718 | 1.01738241 | 0.385 | 0.207 | 1 ILC2_UCBMC |
| ENSMMUG00000014862 | 0.0142222  | 0.48102492 | 0.692 | 0.422 | 1 ILC2_UCBMC |
| URGCP              | 0.01422419 | 0.59416263 | 0.282 | 0.131 | 1 ILC2_UCBMC |
| PPIG               | 0.0142339  | 0.60000077 | 0.359 | 0.185 | 1 ILC2_UCBMC |
| TOMM20             | 0.01426866 | 0.52999377 | 0.795 | 0.492 | 1 ILC2_UCBMC |
| DUSP1              | 0.01440039 | 0.49527122 | 0.462 | 0.267 | 1 ILC2_UCBMC |



|                   |            |            |       |       |              |
|-------------------|------------|------------|-------|-------|--------------|
| MEMO1             | 0.01472003 | 0.54986832 | 0.564 | 0.346 | 1 ILC2_UCBMC |
| CSRNP1            | 0.01487228 | 0.77853352 | 0.308 | 0.154 | 1 ILC2_UCBMC |
| EML4              | 0.01527759 | 0.31228343 | 0.846 | 0.64  | 1 ILC2_UCBMC |
| RCSD1             | 0.01537928 | 0.59877098 | 0.436 | 0.232 | 1 ILC2_UCBMC |
| UBE2K             | 0.01552607 | 0.60790275 | 0.282 | 0.131 | 1 ILC2_UCBMC |
| GPBP1L1           | 0.01577542 | 0.48974716 | 0.308 | 0.147 | 1 ILC2_UCBMC |
| FAM107B           | 0.01585746 | 0.49847623 | 0.538 | 0.292 | 1 ILC2_UCBMC |
| POLR2F            | 0.01595548 | 0.59424886 | 0.359 | 0.183 | 1 ILC2_UCBMC |
| SMC4              | 0.01616935 | 0.42163257 | 0.282 | 0.13  | 1 ILC2_UCBMC |
| ARRB2             | 0.01617085 | 0.5281875  | 0.333 | 0.17  | 1 ILC2_UCBMC |
| ETF1              | 0.0162294  | 0.73723567 | 0.333 | 0.165 | 1 ILC2_UCBMC |
| LEF1              | 0.01629506 | 0.76839807 | 0.436 | 0.258 | 1 ILC2_UCBMC |
| RPL15             | 0.01648411 | 0.30945756 | 0.974 | 0.966 | 1 ILC2_UCBMC |
| ELF2              | 0.01650623 | 0.48721157 | 0.282 | 0.131 | 1 ILC2_UCBMC |
| ENSMUG00000055457 | 0.01672615 | 0.34211747 | 0.59  | 0.339 | 1 ILC2_UCBMC |
| ATP6V1E1          | 0.01687035 | 1.48270873 | 0.282 | 0.137 | 1 ILC2_UCBMC |
| SFPQ              | 0.016979   | 0.62019025 | 0.462 | 0.252 | 1 ILC2_UCBMC |
| RORA              | 0.01759471 | 1.14596198 | 0.462 | 0.343 | 1 ILC2_UCBMC |
| COPS5             | 0.01793174 | 0.68487992 | 0.282 | 0.137 | 1 ILC2_UCBMC |
| PRKCA             | 0.01802058 | 0.83790929 | 0.256 | 0.123 | 1 ILC2_UCBMC |
| TAGAP             | 0.01815741 | 1.0524289  | 0.256 | 0.12  | 1 ILC2_UCBMC |
| ZNF207            | 0.01818112 | 1.02344032 | 0.359 | 0.189 | 1 ILC2_UCBMC |
| USP10             | 0.01868261 | 0.76228798 | 0.282 | 0.137 | 1 ILC2_UCBMC |
| REV3L             | 0.01874492 | 0.33346492 | 0.513 | 0.28  | 1 ILC2_UCBMC |
| COMMD7            | 0.01883283 | 0.26188604 | 0.333 | 0.16  | 1 ILC2_UCBMC |
| SYNCRIP           | 0.01913193 | 0.29169194 | 0.308 | 0.144 | 1 ILC2_UCBMC |
| ARAP2             | 0.01924624 | 0.44001647 | 0.256 | 0.118 | 1 ILC2_UCBMC |
| ARHGEF1           | 0.01956686 | 0.9490153  | 0.333 | 0.182 | 1 ILC2_UCBMC |
| ENSMUG00000040181 | 0.01967369 | 0.86702002 | 0.282 | 0.142 | 1 ILC2_UCBMC |
| RPS15             | 0.01970041 | 0.21256013 | 1     | 0.992 | 1 ILC2_UCBMC |
| ERBB3             | 0.01976159 | 0.63721753 | 0.487 | 0.289 | 1 ILC2_UCBMC |
| PRNP              | 0.01979136 | 0.39980618 | 0.308 | 0.147 | 1 ILC2_UCBMC |
| TAPBP             | 0.02001234 | 0.34619877 | 0.385 | 0.196 | 1 ILC2_UCBMC |

|                    |            |            |       |       |              |
|--------------------|------------|------------|-------|-------|--------------|
| CCT8               | 0.02009146 | 0.30675588 | 0.385 | 0.191 | 1 ILC2_UCBMC |
| PPP2R1A            | 0.02010684 | 1.38580632 | 0.256 | 0.117 | 1 ILC2_UCBMC |
| COTL1              | 0.02063133 | 0.62213998 | 0.256 | 0.121 | 1 ILC2_UCBMC |
| TACC1              | 0.0208117  | 0.42922044 | 0.308 | 0.152 | 1 ILC2_UCBMC |
| CGGBP1             | 0.02104966 | 0.74978651 | 0.256 | 0.12  | 1 ILC2_UCBMC |
| ND2                | 0.02114753 | 0.35209816 | 0.872 | 0.644 | 1 ILC2_UCBMC |
| ENSMMUG00000012537 | 0.02134323 | 0.48629552 | 0.333 | 0.166 | 1 ILC2_UCBMC |
| TFG                | 0.02148544 | 0.60739702 | 0.256 | 0.12  | 1 ILC2_UCBMC |
| OS9                | 0.02193595 | 0.62803486 | 0.256 | 0.121 | 1 ILC2_UCBMC |
| ZCCHC7             | 0.02206956 | 1.07113002 | 0.282 | 0.148 | 1 ILC2_UCBMC |
| CCDC69             | 0.02245396 | 0.86139408 | 0.256 | 0.125 | 1 ILC2_UCBMC |
| PTBP1              | 0.02280854 | 0.27933872 | 0.308 | 0.149 | 1 ILC2_UCBMC |
| PCNP               | 0.02307224 | 0.49905249 | 0.41  | 0.223 | 1 ILC2_UCBMC |
| BMT2               | 0.02324137 | 0.93030782 | 0.256 | 0.125 | 1 ILC2_UCBMC |
| TMSB10             | 0.02327058 | 0.24133499 | 1     | 0.954 | 1 ILC2_UCBMC |
| WBP11              | 0.02341121 | 0.29929422 | 0.359 | 0.176 | 1 ILC2_UCBMC |
| CCT3               | 0.02344197 | 0.44265349 | 0.59  | 0.365 | 1 ILC2_UCBMC |
| DNAJA2             | 0.02373448 | 0.57755008 | 0.359 | 0.19  | 1 ILC2_UCBMC |
| LSM2               | 0.02413716 | 0.34283173 | 0.359 | 0.182 | 1 ILC2_UCBMC |
| PRPF8              | 0.02449695 | 0.63364228 | 0.282 | 0.142 | 1 ILC2_UCBMC |
| FAM133B            | 0.02473531 | 0.14494144 | 0.385 | 0.192 | 1 ILC2_UCBMC |
| ITGB1BP1           | 0.02505096 | 0.50725512 | 0.256 | 0.123 | 1 ILC2_UCBMC |
| ENSMMUG00000018687 | 0.02541655 | 0.41493443 | 0.41  | 0.221 | 1 ILC2_UCBMC |
| CSNK1A1            | 0.02604629 | 0.42975079 | 0.41  | 0.224 | 1 ILC2_UCBMC |
| BPTF               | 0.02630451 | 0.63859746 | 0.333 | 0.182 | 1 ILC2_UCBMC |
| RAP1B              | 0.02640277 | 0.40611664 | 0.641 | 0.409 | 1 ILC2_UCBMC |
| NDUFB9             | 0.02672242 | 0.39034528 | 0.615 | 0.365 | 1 ILC2_UCBMC |
| EIF5B              | 0.02764753 | 0.64514783 | 0.359 | 0.188 | 1 ILC2_UCBMC |
| RNF213             | 0.0285242  | 0.34447479 | 0.462 | 0.249 | 1 ILC2_UCBMC |
| TBC1D10C           | 0.02939217 | 0.92090567 | 0.256 | 0.135 | 1 ILC2_UCBMC |
| KATNBL1            | 0.02950612 | 0.62377363 | 0.256 | 0.125 | 1 ILC2_UCBMC |
| OCIAD1             | 0.03019287 | 0.45705419 | 0.436 | 0.241 | 1 ILC2_UCBMC |
| S100A10            | 0.03025833 | 0.39087601 | 0.821 | 0.707 | 1 ILC2_UCBMC |

|                   |            |            |       |       |              |
|-------------------|------------|------------|-------|-------|--------------|
| PAPOLA            | 0.03033122 | 0.43323002 | 0.538 | 0.308 | 1 ILC2_UCBMC |
| MRPS15            | 0.03039696 | 0.37508935 | 0.359 | 0.19  | 1 ILC2_UCBMC |
| GTF2B             | 0.03144856 | 0.50280283 | 0.538 | 0.319 | 1 ILC2_UCBMC |
| TBC1D24           | 0.03171637 | 0.32336273 | 0.564 | 0.321 | 1 ILC2_UCBMC |
| POLR2D            | 0.03240567 | 0.11772163 | 0.333 | 0.165 | 1 ILC2_UCBMC |
| SAR1A             | 0.03278783 | 0.86443042 | 0.282 | 0.144 | 1 ILC2_UCBMC |
| DDX18             | 0.03293923 | 0.39756642 | 0.487 | 0.269 | 1 ILC2_UCBMC |
| LSM4              | 0.03304626 | 0.59516816 | 0.282 | 0.142 | 1 ILC2_UCBMC |
| BAX               | 0.03390159 | 0.54949609 | 0.41  | 0.232 | 1 ILC2_UCBMC |
| DDX46             | 0.03402069 | 0.34249336 | 0.538 | 0.328 | 1 ILC2_UCBMC |
| CAMTA1            | 0.03461447 | 0.46607519 | 0.41  | 0.235 | 1 ILC2_UCBMC |
| ICAM3             | 0.03473834 | 0.34813284 | 0.564 | 0.325 | 1 ILC2_UCBMC |
| PPP2R5C           | 0.03516409 | 0.5167877  | 0.538 | 0.366 | 1 ILC2_UCBMC |
| EIF4G2            | 0.0352474  | 0.63420417 | 0.538 | 0.379 | 1 ILC2_UCBMC |
| CAPZA1            | 0.03548218 | 0.46673208 | 0.462 | 0.269 | 1 ILC2_UCBMC |
| NAPA              | 0.03682669 | 0.33859091 | 0.256 | 0.125 | 1 ILC2_UCBMC |
| PRPF6             | 0.03701261 | 0.81652424 | 0.282 | 0.145 | 1 ILC2_UCBMC |
| AARS1             | 0.03709593 | 0.92223437 | 0.256 | 0.134 | 1 ILC2_UCBMC |
| ATG3              | 0.03773074 | 0.27727014 | 0.308 | 0.156 | 1 ILC2_UCBMC |
| STAG2             | 0.03774878 | 0.40364149 | 0.462 | 0.27  | 1 ILC2_UCBMC |
| ENSMUG00000065362 | 0.0378738  | 0.12626609 | 1     | 0.98  | 1 ILC2_UCBMC |
| ATP5PO            | 0.03800293 | 0.37317362 | 0.718 | 0.469 | 1 ILC2_UCBMC |
| SNX2              | 0.03813992 | 0.56920577 | 0.333 | 0.179 | 1 ILC2_UCBMC |
| NUCKS1            | 0.03852648 | 0.82990562 | 0.41  | 0.238 | 1 ILC2_UCBMC |
| TUBA1A            | 0.03863657 | 0.4421432  | 0.59  | 0.402 | 1 ILC2_UCBMC |
| MRPL40            | 0.03882439 | 0.44763421 | 0.282 | 0.144 | 1 ILC2_UCBMC |
| APEX1             | 0.03969583 | 0.79030818 | 0.308 | 0.167 | 1 ILC2_UCBMC |
| IMPDH2            | 0.0408511  | 0.2741794  | 0.282 | 0.141 | 1 ILC2_UCBMC |
| EVL               | 0.04090472 | 0.37254998 | 0.59  | 0.381 | 1 ILC2_UCBMC |
| LSM8              | 0.04098947 | 0.22208763 | 0.359 | 0.19  | 1 ILC2_UCBMC |
| GLIPR2            | 0.04111206 | 0.59857203 | 0.41  | 0.245 | 1 ILC2_UCBMC |
| VASP              | 0.04165808 | 0.23921934 | 0.359 | 0.19  | 1 ILC2_UCBMC |
| SCLT1             | 0.04245715 | 0.7455988  | 0.308 | 0.166 | 1 ILC2_UCBMC |

|                   |            |            |       |       |              |
|-------------------|------------|------------|-------|-------|--------------|
| U2SURP            | 0.04281077 | 0.44902802 | 0.359 | 0.202 | 1 ILC2_UCBMC |
| RBPJ              | 0.04299648 | 0.35535432 | 0.359 | 0.199 | 1 ILC2_UCBMC |
| COPS8             | 0.04398802 | 0.42637821 | 0.282 | 0.142 | 1 ILC2_UCBMC |
| ANAPC11           | 0.04577063 | 0.39795613 | 0.385 | 0.218 | 1 ILC2_UCBMC |
| EAPP              | 0.04581362 | 0.448895   | 0.282 | 0.151 | 1 ILC2_UCBMC |
| CCT4              | 0.04586478 | 0.28776392 | 0.41  | 0.23  | 1 ILC2_UCBMC |
| TSPO              | 0.0461662  | 0.29703147 | 0.513 | 0.303 | 1 ILC2_UCBMC |
| DGUOK             | 0.04622331 | 0.47514034 | 0.282 | 0.149 | 1 ILC2_UCBMC |
| ENSMUG00000059742 | 0.04646174 | 0.19252795 | 0.513 | 0.307 | 1 ILC2_UCBMC |
| LZIC              | 0.04750792 | 0.69962931 | 0.333 | 0.187 | 1 ILC2_UCBMC |
| POLR1D            | 0.04825716 | 0.34699323 | 0.564 | 0.347 | 1 ILC2_UCBMC |
| CSNK2A1           | 0.04840585 | 0.71425419 | 0.333 | 0.188 | 1 ILC2_UCBMC |
| HIKESHI           | 0.04841331 | 0.10849608 | 0.436 | 0.235 | 1 ILC2_UCBMC |
| SEPTIN11          | 0.04929334 | 0.59728127 | 0.385 | 0.223 | 1 ILC2_UCBMC |
| TPM3              | 0.04965662 | 0.47189478 | 0.769 | 0.581 | 1 ILC2_UCBMC |
| MAMU-A            | 0.05086515 | 0.46074738 | 0.821 | 0.608 | 1 ILC2_UCBMC |
| HBP1              | 0.05101647 | 0.55385524 | 0.308 | 0.179 | 1 ILC2_UCBMC |
| ELL2              | 0.05139583 | 0.23986487 | 0.436 | 0.261 | 1 ILC2_UCBMC |
| NUDC              | 0.05269422 | 0.24328063 | 0.513 | 0.307 | 1 ILC2_UCBMC |
| S100A4            | 0.05335742 | 0.24827772 | 0.667 | 0.477 | 1 ILC2_UCBMC |
| ARID5B            | 0.05388207 | 0.54724573 | 0.333 | 0.199 | 1 ILC2_UCBMC |
| TCEA1             | 0.05457148 | 0.16672962 | 0.41  | 0.232 | 1 ILC2_UCBMC |
| SLC24A3           | 0.05484763 | 0.6760507  | 0.282 | 0.165 | 1 ILC2_UCBMC |
| BRD2              | 0.05545811 | 0.49573189 | 0.282 | 0.157 | 1 ILC2_UCBMC |
| UBB               | 0.05555019 | 0.27273459 | 0.897 | 0.786 | 1 ILC2_UCBMC |
| ENSMUG00000014947 | 0.0573045  | 0.16645105 | 0.385 | 0.215 | 1 ILC2_UCBMC |
| PWP1              | 0.05850865 | 0.4424837  | 0.308 | 0.175 | 1 ILC2_UCBMC |
| PSMB8             | 0.05854974 | 0.32771418 | 0.462 | 0.278 | 1 ILC2_UCBMC |
| TIMM17A           | 0.05905845 | 0.50651524 | 0.256 | 0.138 | 1 ILC2_UCBMC |
| DSTN              | 0.05929247 | 0.42815011 | 0.487 | 0.3   | 1 ILC2_UCBMC |
| HDAC2             | 0.05967739 | 0.27760511 | 0.256 | 0.134 | 1 ILC2_UCBMC |
| NIBAN1            | 0.06062839 | 0.39174723 | 0.282 | 0.152 | 1 ILC2_UCBMC |
| BNIP3L            | 0.06071204 | 0.26817379 | 0.333 | 0.185 | 1 ILC2_UCBMC |

|             |            |            |       |       |              |
|-------------|------------|------------|-------|-------|--------------|
| TAF9        | 0.06081938 | 0.49705048 | 0.385 | 0.223 | 1 ILC2_UCBMC |
| CHN2        | 0.0612366  | 0.48069865 | 0.359 | 0.224 | 1 ILC2_UCBMC |
| CNBP        | 0.06129633 | 0.44327391 | 0.564 | 0.406 | 1 ILC2_UCBMC |
| CHD1        | 0.06197402 | 0.29771666 | 0.308 | 0.17  | 1 ILC2_UCBMC |
| CCNDBP1     | 0.0632845  | 0.4054688  | 0.282 | 0.155 | 1 ILC2_UCBMC |
| NSD3        | 0.06332308 | 0.47098407 | 0.359 | 0.2   | 1 ILC2_UCBMC |
| CHCHD3      | 0.06357499 | 0.1863277  | 0.308 | 0.166 | 1 ILC2_UCBMC |
| MANF        | 0.06399458 | 0.301621   | 0.256 | 0.136 | 1 ILC2_UCBMC |
| VPS13C      | 0.064067   | 0.407536   | 0.308 | 0.173 | 1 ILC2_UCBMC |
| TXNL1       | 0.06537519 | 0.43514524 | 0.308 | 0.176 | 1 ILC2_UCBMC |
| PDLIM2      | 0.0656195  | 0.28201862 | 0.308 | 0.168 | 1 ILC2_UCBMC |
| BID         | 0.06580706 | 0.77089706 | 0.282 | 0.155 | 1 ILC2_UCBMC |
| TPR         | 0.06589358 | 0.35157899 | 0.359 | 0.215 | 1 ILC2_UCBMC |
| RETN        | 0.06618399 | 0.86193075 | 0.359 | 0.221 | 1 ILC2_UCBMC |
| CWC15       | 0.06653016 | 0.32376944 | 0.487 | 0.311 | 1 ILC2_UCBMC |
| PRKACB      | 0.06727731 | 0.15970062 | 0.538 | 0.312 | 1 ILC2_UCBMC |
| ATP5F1A     | 0.06769068 | 0.36628034 | 0.564 | 0.394 | 1 ILC2_UCBMC |
| C11H12orf45 | 0.06904544 | 0.53182168 | 0.282 | 0.159 | 1 ILC2_UCBMC |
| NFATC3      | 0.07074726 | 0.73735342 | 0.256 | 0.15  | 1 ILC2_UCBMC |
| PSMB9       | 0.07086574 | 0.33833866 | 0.41  | 0.242 | 1 ILC2_UCBMC |
| PNRC2       | 0.07108868 | 0.69702002 | 0.333 | 0.199 | 1 ILC2_UCBMC |
| REXO2       | 0.0715109  | 0.5539472  | 0.256 | 0.145 | 1 ILC2_UCBMC |
| ANXA6       | 0.07207048 | 0.29546053 | 0.333 | 0.188 | 1 ILC2_UCBMC |
| SYF2        | 0.07346446 | 0.29346047 | 0.513 | 0.331 | 1 ILC2_UCBMC |
| KDM2A       | 0.07390917 | 0.34632536 | 0.256 | 0.138 | 1 ILC2_UCBMC |
| STX8        | 0.07407777 | 0.56678742 | 0.308 | 0.187 | 1 ILC2_UCBMC |
| UBE2V1      | 0.07441859 | 0.46578336 | 0.487 | 0.297 | 1 ILC2_UCBMC |
| PFDN4       | 0.07545201 | 0.74057833 | 0.256 | 0.148 | 1 ILC2_UCBMC |
| RAB7A       | 0.0763879  | 0.48327609 | 0.308 | 0.185 | 1 ILC2_UCBMC |
| PFDN1       | 0.07668356 | 0.24069042 | 0.333 | 0.19  | 1 ILC2_UCBMC |
| UBXN4       | 0.0784973  | 0.48288635 | 0.333 | 0.206 | 1 ILC2_UCBMC |
| METAP2      | 0.07878194 | 0.24480538 | 0.333 | 0.191 | 1 ILC2_UCBMC |
| PLEKHB2     | 0.07909484 | 0.2570704  | 0.256 | 0.139 | 1 ILC2_UCBMC |

|                      |            |            |       |       |              |
|----------------------|------------|------------|-------|-------|--------------|
| MOB2                 | 0.08064905 | 0.23189772 | 0.333 | 0.19  | 1 ILC2_UCBMC |
| NPM3                 | 0.08177827 | 0.2591781  | 0.385 | 0.221 | 1 ILC2_UCBMC |
| PPP6R3               | 0.08195435 | 0.15436287 | 0.256 | 0.139 | 1 ILC2_UCBMC |
| H2AFY                | 0.08253007 | 0.63210936 | 0.282 | 0.171 | 1 ILC2_UCBMC |
| ENSMMUG000000003130  | 0.08318675 | 0.64232285 | 0.256 | 0.146 | 1 ILC2_UCBMC |
| PACS1                | 0.08345222 | 0.25802774 | 0.256 | 0.142 | 1 ILC2_UCBMC |
| RASSF5               | 0.08560413 | 0.32292237 | 0.282 | 0.162 | 1 ILC2_UCBMC |
| PTGER4               | 0.08720275 | 0.18496133 | 0.462 | 0.294 | 1 ILC2_UCBMC |
| TOMM22               | 0.08959986 | 0.28898215 | 0.41  | 0.258 | 1 ILC2_UCBMC |
| COX4I1               | 0.08964401 | 0.2555494  | 0.923 | 0.817 | 1 ILC2_UCBMC |
| PDE4B                | 0.09484799 | 0.52491811 | 0.41  | 0.272 | 1 ILC2_UCBMC |
| SNF8                 | 0.09610911 | 0.14938125 | 0.256 | 0.139 | 1 ILC2_UCBMC |
| SON                  | 0.09668313 | 0.38262842 | 0.769 | 0.579 | 1 ILC2_UCBMC |
| WDR13                | 0.09684238 | 0.21347496 | 0.718 | 0.494 | 1 ILC2_UCBMC |
| MYDGF                | 0.09700514 | 0.11708579 | 0.462 | 0.277 | 1 ILC2_UCBMC |
| ENSMMUG000000002075  | 0.09830048 | 0.41483015 | 0.487 | 0.309 | 1 ILC2_UCBMC |
| SIVA1                | 0.09961252 | 0.18354965 | 0.256 | 0.139 | 1 ILC2_UCBMC |
| ACTG1                | 0.10081006 | 0.31437019 | 0.872 | 0.859 | 1 ILC2_UCBMC |
| LIMD2                | 0.10254164 | 0.22922534 | 0.667 | 0.429 | 1 ILC2_UCBMC |
| ARHGAP30             | 0.10283695 | 0.29967229 | 0.308 | 0.186 | 1 ILC2_UCBMC |
| NFKB1                | 0.10299209 | 0.37086516 | 0.692 | 0.516 | 1 ILC2_UCBMC |
| MGMT                 | 0.10354468 | 0.14419236 | 0.308 | 0.18  | 1 ILC2_UCBMC |
| PER1                 | 0.10615134 | 0.25078764 | 0.282 | 0.165 | 1 ILC2_UCBMC |
| RWDD1                | 0.10715073 | 0.29136182 | 0.59  | 0.393 | 1 ILC2_UCBMC |
| MFNG                 | 0.10957613 | 0.19750784 | 0.487 | 0.306 | 1 ILC2_UCBMC |
| QARS1                | 0.11002021 | 0.36817817 | 0.333 | 0.206 | 1 ILC2_UCBMC |
| PSMD14               | 0.11112443 | 0.15612637 | 0.333 | 0.198 | 1 ILC2_UCBMC |
| ENSMMUG0000000059017 | 0.11377709 | 0.42024641 | 0.436 | 0.277 | 1 ILC2_UCBMC |
| SYAP1                | 0.1164927  | 0.16410709 | 0.333 | 0.199 | 1 ILC2_UCBMC |
| FGFR10P2             | 0.11682    | 0.19169475 | 0.308 | 0.182 | 1 ILC2_UCBMC |
| ARF5                 | 0.11872774 | 0.3196405  | 0.41  | 0.26  | 1 ILC2_UCBMC |
| SUPT16H              | 0.12268568 | 0.52718663 | 0.282 | 0.168 | 1 ILC2_UCBMC |
| DBI                  | 0.12773003 | 0.39302811 | 0.487 | 0.339 | 1 ILC2_UCBMC |

|                   |            |            |       |       |              |
|-------------------|------------|------------|-------|-------|--------------|
| ENSMUG00000018421 | 0.12947683 | 0.904212   | 0.282 | 0.187 | 1 ILC2_UCBMC |
| ENSMUG00000055376 | 0.13232908 | 0.45740668 | 0.333 | 0.217 | 1 ILC2_UCBMC |
| MECP2             | 0.13285816 | 0.33307713 | 0.282 | 0.173 | 1 ILC2_UCBMC |
| HIF1A             | 0.13422215 | 0.8080685  | 0.41  | 0.274 | 1 ILC2_UCBMC |
| RSL1D1            | 0.13451849 | 0.26028635 | 0.308 | 0.19  | 1 ILC2_UCBMC |
| SMU1              | 0.13542132 | 0.37588045 | 0.282 | 0.176 | 1 ILC2_UCBMC |
| ARGLU1            | 0.13745668 | 0.34055273 | 0.41  | 0.267 | 1 ILC2_UCBMC |
| ENSMUG00000056654 | 0.13815609 | 0.36860858 | 0.923 | 0.805 | 1 ILC2_UCBMC |
| PPP1CB            | 0.13841794 | 0.22985603 | 0.564 | 0.407 | 1 ILC2_UCBMC |
| SF3B1             | 0.1393653  | 0.4349228  | 0.59  | 0.419 | 1 ILC2_UCBMC |
| ENSMUG00000055438 | 0.14189777 | 0.21299269 | 0.333 | 0.215 | 1 ILC2_UCBMC |
| PUF60             | 0.14220447 | 0.21979571 | 0.256 | 0.154 | 1 ILC2_UCBMC |
| SNRPE             | 0.1453572  | 0.49249987 | 0.359 | 0.25  | 1 ILC2_UCBMC |
| PSMA6             | 0.14680425 | 0.25560702 | 0.333 | 0.206 | 1 ILC2_UCBMC |
| TM2D1             | 0.15063466 | 0.47532888 | 0.256 | 0.159 | 1 ILC2_UCBMC |
| ZEB2              | 0.15388755 | 0.16412202 | 0.359 | 0.237 | 1 ILC2_UCBMC |
| FXD5              | 0.15392719 | 0.56715219 | 0.282 | 0.19  | 1 ILC2_UCBMC |
| CALR              | 0.15771783 | 0.23132071 | 0.385 | 0.255 | 1 ILC2_UCBMC |
| EIF3L             | 0.16097674 | 0.27610504 | 0.538 | 0.402 | 1 ILC2_UCBMC |
| CCNI              | 0.16260693 | 0.1080472  | 0.538 | 0.359 | 1 ILC2_UCBMC |
| NASP              | 0.16707087 | 0.26338681 | 0.359 | 0.244 | 1 ILC2_UCBMC |
| BAZ1A             | 0.16820675 | 0.64737703 | 0.333 | 0.22  | 1 ILC2_UCBMC |
| BRK1              | 0.17028368 | 0.24039056 | 0.462 | 0.31  | 1 ILC2_UCBMC |
| SEC62             | 0.17094397 | 0.14959014 | 0.564 | 0.382 | 1 ILC2_UCBMC |
| MDH1              | 0.17265021 | 0.17688686 | 0.385 | 0.252 | 1 ILC2_UCBMC |
| ATP6AP2           | 0.17582235 | 0.39831939 | 0.282 | 0.172 | 1 ILC2_UCBMC |
| HNRNP1            | 0.17677585 | 0.21341843 | 0.564 | 0.413 | 1 ILC2_UCBMC |
| UBE2B             | 0.17755984 | 0.24279992 | 0.282 | 0.18  | 1 ILC2_UCBMC |
| WIPF1             | 0.17843821 | 0.17252229 | 0.538 | 0.38  | 1 ILC2_UCBMC |
| CALCO2            | 0.1827032  | 0.23798774 | 0.359 | 0.241 | 1 ILC2_UCBMC |
| ENSMUG00000059289 | 0.18308844 | 0.39858831 | 0.359 | 0.235 | 1 ILC2_UCBMC |
| CHMP5             | 0.18388947 | 0.12093978 | 0.256 | 0.156 | 1 ILC2_UCBMC |
| ANTXR2            | 0.18447565 | 0.29692393 | 0.308 | 0.209 | 1 ILC2_UCBMC |

|                     |            |            |       |       |              |
|---------------------|------------|------------|-------|-------|--------------|
| PCBP1               | 0.18589959 | 0.20537609 | 0.462 | 0.317 | 1 ILC2_UCBMC |
| ANAPC13             | 0.18749686 | 0.10129477 | 0.308 | 0.193 | 1 ILC2_UCBMC |
| PTAR1               | 0.18756297 | 0.20618929 | 0.282 | 0.182 | 1 ILC2_UCBMC |
| ATG12               | 0.19109339 | 0.26424431 | 0.538 | 0.401 | 1 ILC2_UCBMC |
| SEPTIN7             | 0.19244607 | 0.2459639  | 0.744 | 0.59  | 1 ILC2_UCBMC |
| GLRX3               | 0.20690378 | 0.14167019 | 0.333 | 0.217 | 1 ILC2_UCBMC |
| EFCAB2              | 0.20867594 | 0.53594972 | 0.282 | 0.186 | 1 ILC2_UCBMC |
| CLNS1A              | 0.2092977  | 0.25538716 | 0.308 | 0.198 | 1 ILC2_UCBMC |
| TMOD3               | 0.21000441 | 0.60211441 | 0.256 | 0.173 | 1 ILC2_UCBMC |
| RTRAF               | 0.21574016 | 0.27000962 | 0.615 | 0.438 | 1 ILC2_UCBMC |
| IAH1                | 0.22093962 | 0.27365373 | 0.256 | 0.17  | 1 ILC2_UCBMC |
| INPP5D              | 0.22497425 | 0.23421996 | 0.256 | 0.171 | 1 ILC2_UCBMC |
| OLA1                | 0.22655606 | 0.33054645 | 0.282 | 0.195 | 1 ILC2_UCBMC |
| MRPL11              | 0.23035015 | 0.10648502 | 0.436 | 0.294 | 1 ILC2_UCBMC |
| ENSMMUG000000007536 | 0.23309915 | 0.21024308 | 0.615 | 0.452 | 1 ILC2_UCBMC |
| DIABLO              | 0.23462206 | 0.67339289 | 0.282 | 0.201 | 1 ILC2_UCBMC |
| CACYBP              | 0.23510662 | 0.27257138 | 0.462 | 0.317 | 1 ILC2_UCBMC |
| MAPK1IP1L           | 0.24336264 | 0.13287667 | 0.256 | 0.168 | 1 ILC2_UCBMC |
| SRSF5               | 0.24523139 | 0.2703823  | 0.718 | 0.581 | 1 ILC2_UCBMC |
| MRFAP1              | 0.24724982 | 0.36275111 | 0.256 | 0.174 | 1 ILC2_UCBMC |
| MAF                 | 0.25491464 | 0.33001804 | 0.359 | 0.261 | 1 ILC2_UCBMC |
| PRKAR1A             | 0.26915394 | 0.10475493 | 0.282 | 0.186 | 1 ILC2_UCBMC |
| YWHAZ               | 0.27449516 | 0.18153109 | 0.744 | 0.621 | 1 ILC2_UCBMC |
| GCC2                | 0.28361614 | 0.31879188 | 0.256 | 0.179 | 1 ILC2_UCBMC |
| EIF4B               | 0.29021851 | 0.83503706 | 0.333 | 0.234 | 1 ILC2_UCBMC |
| RPS6KA3             | 0.29482096 | 0.17585815 | 0.436 | 0.334 | 1 ILC2_UCBMC |
| HNRNPM              | 0.30157926 | 0.21165781 | 0.462 | 0.346 | 1 ILC2_UCBMC |
| PJA2                | 0.30325108 | 0.5567614  | 0.256 | 0.188 | 1 ILC2_UCBMC |
| YIPF5               | 0.31097478 | 0.40185853 | 0.282 | 0.206 | 1 ILC2_UCBMC |
| EIF3E               | 0.31655477 | 0.1436451  | 0.769 | 0.595 | 1 ILC2_UCBMC |
| RHOH                | 0.31756188 | 0.18818851 | 0.692 | 0.516 | 1 ILC2_UCBMC |
| RAB37               | 0.31914686 | 0.22509132 | 0.308 | 0.219 | 1 ILC2_UCBMC |
| ND4                 | 0.34154042 | 0.24140507 | 0.821 | 0.793 | 1 ILC2_UCBMC |



|                     |            |            |       |       |          |             |
|---------------------|------------|------------|-------|-------|----------|-------------|
| ATF6                | 0.34868048 | 0.15213692 | 0.256 | 0.179 | 1        | ILC2_UCBMC  |
| COX1                | 0.35270523 | 0.15870517 | 0.846 | 0.777 | 1        | ILC2_UCBMC  |
| WNK1                | 0.35756606 | 0.15250534 | 0.333 | 0.261 | 1        | ILC2_UCBMC  |
| GNAI2.1             | 0.36106737 | 0.33406611 | 0.359 | 0.266 | 1        | ILC2_UCBMC  |
| ST6GAL1             | 0.36398575 | 0.5472794  | 0.256 | 0.192 | 1        | ILC2_UCBMC  |
| PPIL4               | 0.37253747 | 0.19373746 | 0.308 | 0.229 | 1        | ILC2_UCBMC  |
| CSK                 | 0.38141518 | 0.14058288 | 0.256 | 0.183 | 1        | ILC2_UCBMC  |
| CDKN1B              | 0.42675358 | 0.16985572 | 0.256 | 0.185 | 1        | ILC2_UCBMC  |
| EEF1G               | 0.43761401 | 0.16227179 | 0.821 | 0.697 | 1        | ILC2_UCBMC  |
| FYB1                | 0.44815363 | 0.40767809 | 0.282 | 0.226 | 1        | ILC2_UCBMC  |
| CDC37               | 0.47181288 | 0.14747339 | 0.308 | 0.235 | 1        | ILC2_UCBMC  |
| TMBIM6              | 0.47875928 | 0.12246459 | 0.59  | 0.489 | 1        | ILC2_UCBMC  |
| FOSB                | 0.47889629 | 0.2040372  | 0.333 | 0.245 | 1        | ILC2_UCBMC  |
| VIM                 | 0.54304893 | 0.31805516 | 0.692 | 0.565 | 1        | ILC2_UCBMC  |
| EIF4A1              | 0.54446664 | 0.15097013 | 0.41  | 0.325 | 1        | ILC2_UCBMC  |
| ENSMMUG00000058325  | 0.54758703 | 0.12261767 | 0.949 | 0.87  | 1        | ILC2_UCBMC  |
| CS                  | 0.56993069 | 0.24413684 | 0.256 | 0.207 | 1        | ILC2_UCBMC  |
| PI4K2B              | 0.86506132 | 0.14296115 | 0.462 | 0.387 | 1        | ILC2_UCBMC  |
| CCDC85B             | 5.28E-46   | 3.81238267 | 0.395 | 0.018 | 1.87E-41 | ILC2_spleen |
| ATF3                | 5.04E-41   | 5.65701303 | 0.349 | 0.016 | 1.79E-36 | ILC2_spleen |
| KLF6                | 7.35E-40   | 3.40164417 | 0.977 | 0.223 | 2.60E-35 | ILC2_spleen |
| HSPH1               | 7.04E-38   | 3.93448195 | 0.581 | 0.057 | 2.49E-33 | ILC2_spleen |
| CHCHD10             | 6.75E-36   | 3.31474547 | 0.488 | 0.041 | 2.39E-31 | ILC2_spleen |
| LTB                 | 1.31E-35   | 3.97313922 | 0.837 | 0.18  | 4.65E-31 | ILC2_spleen |
| RSRP1               | 1.30E-34   | 2.75905409 | 0.86  | 0.15  | 4.60E-30 | ILC2_spleen |
| CD247               | 3.17E-34   | 2.99741465 | 0.581 | 0.064 | 1.12E-29 | ILC2_spleen |
| ENSMMUG00000008417  | 4.11E-34   | 3.34881232 | 0.419 | 0.031 | 1.46E-29 | ILC2_spleen |
| MCUB                | 1.56E-33   | 3.99330436 | 0.395 | 0.029 | 5.54E-29 | ILC2_spleen |
| SLCO3A1             | 3.54E-32   | 3.28843152 | 0.442 | 0.038 | 1.25E-27 | ILC2_spleen |
| HPCAL1              | 7.12E-32   | 3.43385704 | 0.419 | 0.034 | 2.52E-27 | ILC2_spleen |
| ENSMMUG000000061038 | 1.28E-31   | 3.55337586 | 0.349 | 0.023 | 4.52E-27 | ILC2_spleen |
| DUSP1               | 3.76E-30   | 2.79033249 | 0.93  | 0.252 | 1.33E-25 | ILC2_spleen |
| EIF2AK3             | 2.32E-29   | 3.73287632 | 0.419 | 0.038 | 8.23E-25 | ILC2_spleen |

|                     |          |            |       |       |          |             |
|---------------------|----------|------------|-------|-------|----------|-------------|
| NOP53               | 2.46E-29 | 2.69806521 | 0.628 | 0.088 | 8.72E-25 | ILC2_spleen |
| ARHGEF3             | 6.67E-29 | 3.10769746 | 0.395 | 0.034 | 2.36E-24 | ILC2_spleen |
| ENSMMUG000000051300 | 8.22E-29 | 3.25452587 | 0.977 | 0.383 | 2.91E-24 | ILC2_spleen |
| PIK3R5              | 1.21E-28 | 3.5271906  | 0.465 | 0.05  | 4.27E-24 | ILC2_spleen |
| TERF2IP             | 2.79E-28 | 3.7101972  | 0.302 | 0.019 | 9.89E-24 | ILC2_spleen |
| AFF1                | 6.85E-28 | 3.49194608 | 0.419 | 0.041 | 2.43E-23 | ILC2_spleen |
| TMEM160             | 3.90E-27 | 3.41370318 | 0.372 | 0.033 | 1.38E-22 | ILC2_spleen |
| ENSMMUG000000008587 | 1.01E-26 | 2.93685634 | 0.512 | 0.063 | 3.59E-22 | ILC2_spleen |
| JUN                 | 3.84E-26 | 3.20896364 | 0.814 | 0.226 | 1.36E-21 | ILC2_spleen |
| AFF3                | 1.77E-25 | 2.21080865 | 0.698 | 0.121 | 6.26E-21 | ILC2_spleen |
| TMEM131L            | 2.32E-25 | 3.30486322 | 0.419 | 0.044 | 8.21E-21 | ILC2_spleen |
| TRAPPC5             | 4.20E-25 | 3.32539359 | 0.302 | 0.022 | 1.49E-20 | ILC2_spleen |
| ENSMMUG000000028906 | 9.66E-25 | 3.30589391 | 0.442 | 0.052 | 3.42E-20 | ILC2_spleen |
| ZBTB16              | 1.27E-24 | 2.56416523 | 0.535 | 0.078 | 4.49E-20 | ILC2_spleen |
| NRROS               | 1.49E-24 | 2.91567855 | 0.465 | 0.057 | 5.27E-20 | ILC2_spleen |
| KLHDC2              | 2.00E-24 | 2.92740305 | 0.372 | 0.036 | 7.10E-20 | ILC2_spleen |
| NCALD               | 3.16E-24 | 3.09987074 | 0.512 | 0.071 | 1.12E-19 | ILC2_spleen |
| C10H20orf24         | 5.16E-24 | 2.54683143 | 0.558 | 0.082 | 1.83E-19 | ILC2_spleen |
| FOXN3               | 1.47E-23 | 2.47522882 | 0.721 | 0.145 | 5.22E-19 | ILC2_spleen |
| SRPK2               | 1.79E-23 | 2.91152381 | 0.558 | 0.09  | 6.33E-19 | ILC2_spleen |
| TRIR                | 6.93E-23 | 2.2418706  | 0.767 | 0.171 | 2.46E-18 | ILC2_spleen |
| RPL13               | 8.28E-23 | 2.89956272 | 0.93  | 0.754 | 2.93E-18 | ILC2_spleen |
| PRELID1             | 9.82E-23 | 3.06415823 | 0.349 | 0.034 | 3.48E-18 | ILC2_spleen |
| GLG1                | 1.48E-22 | 2.57281729 | 0.512 | 0.076 | 5.23E-18 | ILC2_spleen |
| STRN3               | 1.51E-22 | 3.27535113 | 0.372 | 0.04  | 5.34E-18 | ILC2_spleen |
| XYLT1               | 1.64E-22 | 2.57313875 | 0.535 | 0.08  | 5.81E-18 | ILC2_spleen |
| COX5A               | 6.56E-22 | 2.5302115  | 0.558 | 0.093 | 2.32E-17 | ILC2_spleen |
| KLHL2               | 6.66E-22 | 3.47470787 | 0.256 | 0.019 | 2.36E-17 | ILC2_spleen |
| ENSMMUG000000040065 | 7.84E-22 | 3.48066561 | 0.256 | 0.019 | 2.78E-17 | ILC2_spleen |
| PDE7A               | 1.02E-21 | 2.54442536 | 0.535 | 0.086 | 3.60E-17 | ILC2_spleen |
| AKT3                | 1.44E-21 | 2.69676858 | 0.558 | 0.094 | 5.11E-17 | ILC2_spleen |
| CDK6                | 1.54E-21 | 3.30135292 | 0.326 | 0.032 | 5.47E-17 | ILC2_spleen |
| HDAC7               | 2.93E-21 | 3.1269403  | 0.349 | 0.037 | 1.04E-16 | ILC2_spleen |

|                    |          |            |       |       |          |             |
|--------------------|----------|------------|-------|-------|----------|-------------|
| KCNQ5              | 5.15E-21 | 3.24899002 | 0.279 | 0.024 | 1.82E-16 | ILC2_spleen |
| PTEN               | 6.54E-21 | 3.41681313 | 0.349 | 0.038 | 2.32E-16 | ILC2_spleen |
| ARMC8              | 1.44E-20 | 2.32010184 | 0.395 | 0.048 | 5.09E-16 | ILC2_spleen |
| ENSMMUG00000053539 | 2.11E-20 | 2.99442016 | 0.326 | 0.033 | 7.47E-16 | ILC2_spleen |
| MTSS1              | 3.39E-20 | 3.12681718 | 0.372 | 0.044 | 1.20E-15 | ILC2_spleen |
| PPM1G              | 3.42E-20 | 2.85059989 | 0.419 | 0.056 | 1.21E-15 | ILC2_spleen |
| ME2                | 3.58E-20 | 2.43901243 | 0.465 | 0.068 | 1.27E-15 | ILC2_spleen |
| SLC20A1            | 3.72E-20 | 3.12193394 | 0.279 | 0.024 | 1.32E-15 | ILC2_spleen |
| CFH                | 3.75E-20 | 3.72391358 | 0.256 | 0.021 | 1.33E-15 | ILC2_spleen |
| HECA               | 6.03E-20 | 3.04987087 | 0.302 | 0.03  | 2.14E-15 | ILC2_spleen |
| UBASH3B            | 9.08E-20 | 2.54986037 | 0.395 | 0.05  | 3.22E-15 | ILC2_spleen |
| GMDS               | 1.56E-19 | 2.91185074 | 0.395 | 0.053 | 5.53E-15 | ILC2_spleen |
| SELL               | 1.91E-19 | 2.73458569 | 0.535 | 0.1   | 6.78E-15 | ILC2_spleen |
| UBE2S              | 1.94E-19 | 2.50301201 | 0.372 | 0.045 | 6.89E-15 | ILC2_spleen |
| CTNNB1             | 2.14E-19 | 2.22782243 | 0.581 | 0.107 | 7.59E-15 | ILC2_spleen |
| ENSMMUG00000061756 | 3.86E-19 | 2.5580522  | 0.419 | 0.059 | 1.37E-14 | ILC2_spleen |
| CREBBP             | 4.36E-19 | 2.5834491  | 0.488 | 0.08  | 1.54E-14 | ILC2_spleen |
| RNF149             | 4.54E-19 | 2.49349357 | 0.488 | 0.08  | 1.61E-14 | ILC2_spleen |
| ELMO1              | 5.02E-19 | 2.48593561 | 0.628 | 0.137 | 1.78E-14 | ILC2_spleen |
| TCF12              | 5.35E-19 | 2.52007444 | 0.651 | 0.149 | 1.89E-14 | ILC2_spleen |
| RFX7               | 9.09E-19 | 2.97664708 | 0.279 | 0.027 | 3.22E-14 | ILC2_spleen |
| CAMK4              | 1.27E-18 | 2.22261898 | 0.581 | 0.113 | 4.50E-14 | ILC2_spleen |
| ZBTB11             | 1.28E-18 | 2.99033651 | 0.326 | 0.037 | 4.52E-14 | ILC2_spleen |
| ACAP2              | 1.64E-18 | 2.30981008 | 0.698 | 0.171 | 5.82E-14 | ILC2_spleen |
| GLUD1              | 1.92E-18 | 3.0435024  | 0.395 | 0.057 | 6.80E-14 | ILC2_spleen |
| JMJD1C             | 3.63E-18 | 2.23313312 | 0.86  | 0.286 | 1.29E-13 | ILC2_spleen |
| PRKCH              | 4.33E-18 | 3.32632158 | 0.419 | 0.063 | 1.54E-13 | ILC2_spleen |
| ZNF407             | 5.03E-18 | 2.7743485  | 0.372 | 0.05  | 1.78E-13 | ILC2_spleen |
| RGCC               | 5.07E-18 | 2.75029054 | 0.349 | 0.044 | 1.80E-13 | ILC2_spleen |
| TM9SF3             | 6.17E-18 | 2.20360243 | 0.581 | 0.122 | 2.19E-13 | ILC2_spleen |
| NFATC2             | 6.74E-18 | 2.55270824 | 0.349 | 0.044 | 2.39E-13 | ILC2_spleen |
| EIF3F              | 7.87E-18 | 1.85439602 | 0.837 | 0.256 | 2.79E-13 | ILC2_spleen |
| CTCF               | 1.07E-17 | 2.78425381 | 0.372 | 0.05  | 3.78E-13 | ILC2_spleen |

|                   |          |            |       |       |          |             |
|-------------------|----------|------------|-------|-------|----------|-------------|
| ELOVL5            | 1.07E-17 | 2.48689342 | 0.605 | 0.134 | 3.80E-13 | ILC2_spleen |
| KLF12             | 1.16E-17 | 2.26059572 | 0.628 | 0.147 | 4.10E-13 | ILC2_spleen |
| MYLIP             | 1.51E-17 | 2.50603885 | 0.535 | 0.104 | 5.36E-13 | ILC2_spleen |
| DIP2B             | 1.69E-17 | 2.54402227 | 0.465 | 0.08  | 6.00E-13 | ILC2_spleen |
| EPC2              | 1.92E-17 | 2.62916743 | 0.372 | 0.052 | 6.82E-13 | ILC2_spleen |
| RICTOR            | 1.94E-17 | 2.28321594 | 0.558 | 0.114 | 6.86E-13 | ILC2_spleen |
| B3GNT2            | 2.09E-17 | 2.85818761 | 0.279 | 0.029 | 7.40E-13 | ILC2_spleen |
| PPP3CA            | 2.22E-17 | 2.18075797 | 0.651 | 0.152 | 7.86E-13 | ILC2_spleen |
| PRKCB             | 2.27E-17 | 2.16502343 | 0.605 | 0.128 | 8.04E-13 | ILC2_spleen |
| FBXW4             | 2.55E-17 | 2.56430552 | 0.302 | 0.034 | 9.02E-13 | ILC2_spleen |
| TNIK              | 3.97E-17 | 2.57062748 | 0.721 | 0.21  | 1.41E-12 | ILC2_spleen |
| PBX3              | 5.46E-17 | 3.02091701 | 0.256 | 0.025 | 1.93E-12 | ILC2_spleen |
| MCL1              | 6.94E-17 | 2.47940917 | 0.512 | 0.101 | 2.46E-12 | ILC2_spleen |
| RPS2              | 8.69E-17 | 1.97697212 | 0.907 | 0.501 | 3.08E-12 | ILC2_spleen |
| RASSF1            | 1.09E-16 | 2.17429911 | 0.628 | 0.15  | 3.85E-12 | ILC2_spleen |
| IPMK              | 1.18E-16 | 2.76245181 | 0.279 | 0.03  | 4.17E-12 | ILC2_spleen |
| KMT2C             | 1.77E-16 | 1.72254913 | 0.791 | 0.22  | 6.29E-12 | ILC2_spleen |
| C1QBP             | 1.78E-16 | 3.01731342 | 0.279 | 0.031 | 6.30E-12 | ILC2_spleen |
| ZBED1             | 1.81E-16 | 2.6680227  | 0.395 | 0.061 | 6.40E-12 | ILC2_spleen |
| PIK3AP1           | 1.86E-16 | 2.0071532  | 0.419 | 0.067 | 6.58E-12 | ILC2_spleen |
| SEC63             | 2.03E-16 | 2.26365433 | 0.512 | 0.1   | 7.19E-12 | ILC2_spleen |
| CDYL              | 2.07E-16 | 2.52947977 | 0.279 | 0.031 | 7.35E-12 | ILC2_spleen |
| RPS20             | 2.69E-16 | 1.63369952 | 0.953 | 0.87  | 9.52E-12 | ILC2_spleen |
| YEATS2            | 2.72E-16 | 1.81079143 | 0.512 | 0.096 | 9.65E-12 | ILC2_spleen |
| ENSMUG00000054358 | 3.49E-16 | 2.62134575 | 0.953 | 0.546 | 1.24E-11 | ILC2_spleen |
| FLI1              | 4.60E-16 | 2.35195261 | 0.512 | 0.101 | 1.63E-11 | ILC2_spleen |
| RABGAP1L          | 4.88E-16 | 1.90309488 | 0.791 | 0.239 | 1.73E-11 | ILC2_spleen |
| ADD3              | 5.51E-16 | 2.44517917 | 0.442 | 0.08  | 1.95E-11 | ILC2_spleen |
| BLK               | 6.42E-16 | 2.75952037 | 0.279 | 0.033 | 2.27E-11 | ILC2_spleen |
| TMPO              | 7.18E-16 | 2.57268788 | 0.279 | 0.032 | 2.54E-11 | ILC2_spleen |
| RFX3              | 7.22E-16 | 2.44582448 | 0.395 | 0.064 | 2.56E-11 | ILC2_spleen |
| DIDO1             | 9.65E-16 | 2.37839558 | 0.302 | 0.037 | 3.42E-11 | ILC2_spleen |
| CCND3             | 1.03E-15 | 2.41641829 | 0.581 | 0.138 | 3.64E-11 | ILC2_spleen |

|         |          |            |       |       |          |             |
|---------|----------|------------|-------|-------|----------|-------------|
| SRRM2   | 1.06E-15 | 2.19600775 | 0.465 | 0.086 | 3.76E-11 | ILC2_spleen |
| WASF2   | 1.11E-15 | 2.05282595 | 0.512 | 0.101 | 3.95E-11 | ILC2_spleen |
| RABL6   | 1.12E-15 | 2.36063252 | 0.349 | 0.05  | 3.99E-11 | ILC2_spleen |
| NCOR1   | 1.17E-15 | 2.42968716 | 0.488 | 0.098 | 4.16E-11 | ILC2_spleen |
| CDK13   | 1.17E-15 | 2.1491503  | 0.488 | 0.095 | 4.16E-11 | ILC2_spleen |
| FAM126A | 1.18E-15 | 4.04120101 | 0.256 | 0.028 | 4.19E-11 | ILC2_spleen |
| ETV6    | 1.27E-15 | 2.50389864 | 0.279 | 0.033 | 4.50E-11 | ILC2_spleen |
| ZFAND5  | 1.42E-15 | 2.06932571 | 0.488 | 0.094 | 5.04E-11 | ILC2_spleen |
| MTHFD1L | 1.52E-15 | 3.03283157 | 0.302 | 0.039 | 5.38E-11 | ILC2_spleen |
| SSBP3   | 1.78E-15 | 2.3082056  | 0.442 | 0.079 | 6.32E-11 | ILC2_spleen |
| DCP1A   | 1.96E-15 | 2.29312254 | 0.372 | 0.057 | 6.95E-11 | ILC2_spleen |
| MEF2A   | 2.15E-15 | 2.33332782 | 0.465 | 0.09  | 7.61E-11 | ILC2_spleen |
| RIC1    | 2.20E-15 | 3.15039339 | 0.279 | 0.033 | 7.81E-11 | ILC2_spleen |
| RHOB    | 2.28E-15 | 3.65845547 | 0.256 | 0.029 | 8.08E-11 | ILC2_spleen |
| ZC3HAV1 | 2.47E-15 | 2.53039949 | 0.581 | 0.147 | 8.74E-11 | ILC2_spleen |
| TXNL4A  | 2.50E-15 | 2.04129798 | 0.465 | 0.086 | 8.87E-11 | ILC2_spleen |
| FSCN1   | 2.67E-15 | 2.66140016 | 0.302 | 0.039 | 9.46E-11 | ILC2_spleen |
| COTL1   | 2.85E-15 | 2.25365705 | 0.512 | 0.113 | 1.01E-10 | ILC2_spleen |
| EXOC2   | 2.89E-15 | 2.81369009 | 0.279 | 0.033 | 1.02E-10 | ILC2_spleen |
| STIM2   | 3.44E-15 | 2.31948907 | 0.349 | 0.051 | 1.22E-10 | ILC2_spleen |
| RBM14   | 3.48E-15 | 1.83684581 | 0.744 | 0.217 | 1.23E-10 | ILC2_spleen |
| LCOR    | 4.22E-15 | 2.16454995 | 0.465 | 0.09  | 1.50E-10 | ILC2_spleen |
| CAMK1D  | 4.43E-15 | 2.50060056 | 0.419 | 0.074 | 1.57E-10 | ILC2_spleen |
| SNRNP70 | 4.50E-15 | 1.98974806 | 0.535 | 0.116 | 1.59E-10 | ILC2_spleen |
| QKI     | 4.87E-15 | 1.82345987 | 0.558 | 0.118 | 1.73E-10 | ILC2_spleen |
| ATP11B  | 4.91E-15 | 2.19705428 | 0.442 | 0.082 | 1.74E-10 | ILC2_spleen |
| STT3B   | 5.63E-15 | 2.42991593 | 0.442 | 0.086 | 2.00E-10 | ILC2_spleen |
| SYNRG   | 5.67E-15 | 2.53577834 | 0.326 | 0.046 | 2.01E-10 | ILC2_spleen |
| ARID1B  | 6.26E-15 | 2.04789006 | 0.558 | 0.127 | 2.22E-10 | ILC2_spleen |
| SPATA5  | 6.67E-15 | 3.13144246 | 0.279 | 0.035 | 2.36E-10 | ILC2_spleen |
| HSF1    | 7.56E-15 | 2.6342826  | 0.326 | 0.047 | 2.68E-10 | ILC2_spleen |
| SEC24B  | 8.00E-15 | 2.44604957 | 0.395 | 0.068 | 2.83E-10 | ILC2_spleen |
| SENPA6  | 8.32E-15 | 1.75128702 | 0.558 | 0.123 | 2.95E-10 | ILC2_spleen |

|                    |          |            |       |       |          |             |
|--------------------|----------|------------|-------|-------|----------|-------------|
| ERBIN              | 8.85E-15 | 2.02943142 | 0.558 | 0.129 | 3.14E-10 | ILC2_spleen |
| DOCK11             | 9.60E-15 | 1.71763665 | 0.465 | 0.087 | 3.40E-10 | ILC2_spleen |
| LRCH1              | 1.20E-14 | 2.69515131 | 0.279 | 0.035 | 4.25E-10 | ILC2_spleen |
| ANKRD44            | 1.23E-14 | 1.96184992 | 0.767 | 0.255 | 4.35E-10 | ILC2_spleen |
| ENSMMUG00000052127 | 1.25E-14 | 1.80545279 | 1     | 0.771 | 4.45E-10 | ILC2_spleen |
| FOXJ3              | 1.27E-14 | 2.37447623 | 0.302 | 0.041 | 4.51E-10 | ILC2_spleen |
| TRAPPC10           | 1.40E-14 | 2.25897174 | 0.302 | 0.041 | 4.97E-10 | ILC2_spleen |
| SPPL3              | 1.43E-14 | 2.59194979 | 0.326 | 0.048 | 5.08E-10 | ILC2_spleen |
| HNRNPAB            | 1.44E-14 | 2.53627232 | 0.372 | 0.061 | 5.09E-10 | ILC2_spleen |
| WAPL               | 1.47E-14 | 2.61424913 | 0.419 | 0.076 | 5.20E-10 | ILC2_spleen |
| RPL27A             | 1.47E-14 | 1.07916734 | 0.977 | 0.918 | 5.22E-10 | ILC2_spleen |
| DYRK2              | 1.51E-14 | 2.54307094 | 0.326 | 0.048 | 5.36E-10 | ILC2_spleen |
| ERO1B              | 1.53E-14 | 2.52079809 | 0.349 | 0.054 | 5.43E-10 | ILC2_spleen |
| BTAF1              | 1.54E-14 | 2.10967761 | 0.395 | 0.068 | 5.46E-10 | ILC2_spleen |
| SMCHD1             | 1.67E-14 | 1.79596152 | 0.581 | 0.138 | 5.90E-10 | ILC2_spleen |
| JMY                | 1.79E-14 | 2.27126191 | 0.465 | 0.094 | 6.35E-10 | ILC2_spleen |
| ASXL2              | 2.06E-14 | 2.73523458 | 0.279 | 0.036 | 7.31E-10 | ILC2_spleen |
| STIM1              | 2.54E-14 | 2.05751407 | 0.419 | 0.076 | 9.00E-10 | ILC2_spleen |
| METTL9             | 2.65E-14 | 2.26846922 | 0.465 | 0.097 | 9.38E-10 | ILC2_spleen |
| NCOA3              | 2.76E-14 | 2.05255524 | 0.605 | 0.162 | 9.79E-10 | ILC2_spleen |
| ENSMMUG00000046264 | 3.19E-14 | 2.88012409 | 0.302 | 0.044 | 1.13E-09 | ILC2_spleen |
| MBP                | 3.59E-14 | 2.43932624 | 0.488 | 0.109 | 1.27E-09 | ILC2_spleen |
| EPB41              | 3.76E-14 | 1.73960927 | 0.558 | 0.127 | 1.33E-09 | ILC2_spleen |
| FLNA               | 3.79E-14 | 1.75207433 | 0.535 | 0.121 | 1.34E-09 | ILC2_spleen |
| MAP2K1             | 4.45E-14 | 2.591331   | 0.326 | 0.049 | 1.58E-09 | ILC2_spleen |
| TBL1XR1            | 4.64E-14 | 1.78253375 | 0.628 | 0.163 | 1.64E-09 | ILC2_spleen |
| RAB1A              | 5.35E-14 | 2.06015281 | 0.512 | 0.112 | 1.90E-09 | ILC2_spleen |
| GSE1               | 5.38E-14 | 2.62930172 | 0.279 | 0.037 | 1.91E-09 | ILC2_spleen |
| PKN2               | 5.55E-14 | 2.18764718 | 0.419 | 0.078 | 1.97E-09 | ILC2_spleen |
| RPS6KA5            | 5.73E-14 | 2.27101061 | 0.442 | 0.088 | 2.03E-09 | ILC2_spleen |
| COP1               | 5.82E-14 | 2.25568206 | 0.419 | 0.078 | 2.06E-09 | ILC2_spleen |
| RPL23A             | 6.02E-14 | 0.92466128 | 0.953 | 0.982 | 2.13E-09 | ILC2_spleen |
| RBM26              | 6.11E-14 | 1.90685968 | 0.419 | 0.078 | 2.16E-09 | ILC2_spleen |

|                    |          |            |       |       |          |             |
|--------------------|----------|------------|-------|-------|----------|-------------|
| ICE1               | 9.88E-14 | 2.76523814 | 0.256 | 0.032 | 3.50E-09 | ILC2_spleen |
| TNFRSF10A          | 1.05E-13 | 2.96662676 | 0.256 | 0.032 | 3.72E-09 | ILC2_spleen |
| KPNB1              | 1.08E-13 | 2.20134338 | 0.395 | 0.072 | 3.81E-09 | ILC2_spleen |
| KANSL1             | 1.28E-13 | 2.13301121 | 0.419 | 0.082 | 4.54E-09 | ILC2_spleen |
| SUCO               | 1.57E-13 | 2.20262635 | 0.419 | 0.081 | 5.57E-09 | ILC2_spleen |
| VAV3               | 1.65E-13 | 3.04466257 | 0.279 | 0.038 | 5.85E-09 | ILC2_spleen |
| PHC3               | 1.72E-13 | 2.32820151 | 0.349 | 0.058 | 6.09E-09 | ILC2_spleen |
| PIP4K2A            | 1.81E-13 | 1.92184556 | 0.744 | 0.25  | 6.42E-09 | ILC2_spleen |
| UBAC2              | 2.06E-13 | 1.84520101 | 0.535 | 0.128 | 7.30E-09 | ILC2_spleen |
| ZDHHHC20           | 2.27E-13 | 2.34112481 | 0.302 | 0.044 | 8.05E-09 | ILC2_spleen |
| WDR7               | 2.41E-13 | 2.50071526 | 0.372 | 0.065 | 8.54E-09 | ILC2_spleen |
| RASA2              | 2.50E-13 | 1.97198553 | 0.535 | 0.132 | 8.86E-09 | ILC2_spleen |
| RAD23B             | 2.70E-13 | 2.59014224 | 0.302 | 0.045 | 9.58E-09 | ILC2_spleen |
| SRSF4              | 3.02E-13 | 1.47817854 | 0.465 | 0.095 | 1.07E-08 | ILC2_spleen |
| ENSMMUG00000064530 | 3.24E-13 | 2.7903025  | 0.465 | 0.11  | 1.15E-08 | ILC2_spleen |
| JAML               | 3.37E-13 | 2.28112022 | 0.488 | 0.112 | 1.19E-08 | ILC2_spleen |
| THY1               | 3.40E-13 | 1.90903137 | 0.512 | 0.12  | 1.21E-08 | ILC2_spleen |
| PGM1               | 3.63E-13 | 2.63393047 | 0.302 | 0.045 | 1.29E-08 | ILC2_spleen |
| TLE4               | 4.06E-13 | 2.33544488 | 0.372 | 0.069 | 1.44E-08 | ILC2_spleen |
| BCL11B             | 4.19E-13 | 2.37034257 | 0.465 | 0.106 | 1.49E-08 | ILC2_spleen |
| ARHGEF7            | 4.22E-13 | 2.36976754 | 0.302 | 0.046 | 1.49E-08 | ILC2_spleen |
| CD2AP              | 4.50E-13 | 2.13282306 | 0.372 | 0.067 | 1.59E-08 | ILC2_spleen |
| KDM6A              | 4.84E-13 | 2.02312585 | 0.512 | 0.122 | 1.71E-08 | ILC2_spleen |
| SLFN5              | 5.40E-13 | 1.63713813 | 0.419 | 0.08  | 1.91E-08 | ILC2_spleen |
| RLIM               | 5.63E-13 | 2.82934619 | 0.256 | 0.034 | 1.99E-08 | ILC2_spleen |
| RCOR1              | 5.65E-13 | 1.92744628 | 0.279 | 0.038 | 2.00E-08 | ILC2_spleen |
| NUP153             | 5.96E-13 | 2.640984   | 0.372 | 0.069 | 2.11E-08 | ILC2_spleen |
| LSM4               | 6.89E-13 | 1.54126324 | 0.558 | 0.132 | 2.44E-08 | ILC2_spleen |
| CDC14A             | 7.05E-13 | 1.86546775 | 0.698 | 0.224 | 2.50E-08 | ILC2_spleen |
| WIPI2              | 7.53E-13 | 2.33959518 | 0.326 | 0.053 | 2.67E-08 | ILC2_spleen |
| ATE1               | 7.63E-13 | 2.17891354 | 0.302 | 0.046 | 2.70E-08 | ILC2_spleen |
| RETREG1            | 8.11E-13 | 2.76254637 | 0.279 | 0.04  | 2.87E-08 | ILC2_spleen |
| CYC1               | 8.31E-13 | 2.05321843 | 0.372 | 0.067 | 2.94E-08 | ILC2_spleen |

|                    |          |            |       |       |          |             |
|--------------------|----------|------------|-------|-------|----------|-------------|
| FHIT               | 8.53E-13 | 2.6460728  | 0.279 | 0.041 | 3.02E-08 | ILC2_spleen |
| ITGA6              | 8.64E-13 | 2.10118323 | 0.395 | 0.077 | 3.06E-08 | ILC2_spleen |
| GLS                | 9.10E-13 | 2.0020848  | 0.488 | 0.11  | 3.23E-08 | ILC2_spleen |
| DLG1               | 9.12E-13 | 2.32584369 | 0.372 | 0.069 | 3.23E-08 | ILC2_spleen |
| EHMT1              | 1.01E-12 | 2.04548712 | 0.349 | 0.059 | 3.57E-08 | ILC2_spleen |
| BCL2L2-PABPN1      | 1.16E-12 | 2.16610983 | 0.279 | 0.04  | 4.11E-08 | ILC2_spleen |
| ENSMMUG00000060229 | 1.17E-12 | 2.19908145 | 0.442 | 0.098 | 4.13E-08 | ILC2_spleen |
| ANKRD6             | 1.17E-12 | 2.49569331 | 0.302 | 0.047 | 4.16E-08 | ILC2_spleen |
| MCPH1              | 1.23E-12 | 2.11266929 | 0.279 | 0.04  | 4.36E-08 | ILC2_spleen |
| ANKRD17            | 1.26E-12 | 2.15672672 | 0.419 | 0.089 | 4.45E-08 | ILC2_spleen |
| HACD4              | 1.28E-12 | 2.35434888 | 0.256 | 0.034 | 4.55E-08 | ILC2_spleen |
| FAM107B            | 1.36E-12 | 1.66094799 | 0.814 | 0.282 | 4.81E-08 | ILC2_spleen |
| PECAM1             | 1.37E-12 | 2.24251929 | 0.349 | 0.061 | 4.84E-08 | ILC2_spleen |
| UBE2G1             | 1.48E-12 | 1.82498302 | 0.372 | 0.068 | 5.24E-08 | ILC2_spleen |
| YPEL5              | 1.63E-12 | 1.75840322 | 0.674 | 0.203 | 5.79E-08 | ILC2_spleen |
| SETD7              | 1.66E-12 | 1.93820433 | 0.302 | 0.047 | 5.88E-08 | ILC2_spleen |
| PAK2               | 1.73E-12 | 1.96652148 | 0.721 | 0.272 | 6.12E-08 | ILC2_spleen |
| CASP8              | 1.77E-12 | 1.73811274 | 0.488 | 0.112 | 6.26E-08 | ILC2_spleen |
| IFRD1              | 1.91E-12 | 2.30562094 | 0.535 | 0.146 | 6.76E-08 | ILC2_spleen |
| ERN1               | 1.96E-12 | 2.21371818 | 0.372 | 0.07  | 6.94E-08 | ILC2_spleen |
| IQCG               | 2.01E-12 | 2.11966515 | 0.349 | 0.062 | 7.14E-08 | ILC2_spleen |
| SND1               | 2.13E-12 | 2.09015719 | 0.488 | 0.115 | 7.55E-08 | ILC2_spleen |
| HTT                | 2.21E-12 | 2.34515641 | 0.256 | 0.035 | 7.84E-08 | ILC2_spleen |
| PHF14              | 2.25E-12 | 2.19535364 | 0.349 | 0.063 | 7.98E-08 | ILC2_spleen |
| TNRC6B             | 2.25E-12 | 1.52495427 | 0.814 | 0.281 | 7.98E-08 | ILC2_spleen |
| ITSN2              | 2.59E-12 | 1.66731075 | 0.558 | 0.148 | 9.17E-08 | ILC2_spleen |
| MALT1              | 2.70E-12 | 2.0264884  | 0.326 | 0.054 | 9.56E-08 | ILC2_spleen |
| RPRD2              | 2.92E-12 | 2.20877447 | 0.326 | 0.056 | 1.04E-07 | ILC2_spleen |
| SSBP4              | 3.05E-12 | 2.68360938 | 0.256 | 0.036 | 1.08E-07 | ILC2_spleen |
| AMBRA1             | 3.12E-12 | 1.78109723 | 0.302 | 0.047 | 1.11E-07 | ILC2_spleen |
| ANP32B             | 3.22E-12 | 1.86919862 | 0.698 | 0.222 | 1.14E-07 | ILC2_spleen |
| PRKX               | 3.70E-12 | 1.99074202 | 0.651 | 0.22  | 1.31E-07 | ILC2_spleen |
| RANBP1             | 3.79E-12 | 2.18661554 | 0.395 | 0.078 | 1.34E-07 | ILC2_spleen |



|                    |          |            |       |       |          |             |
|--------------------|----------|------------|-------|-------|----------|-------------|
| ENSMMUG00000058532 | 3.88E-12 | 2.23036911 | 0.419 | 0.092 | 1.38E-07 | ILC2_spleen |
| ENSMMUG00000060287 | 3.96E-12 | 1.34884605 | 0.953 | 0.6   | 1.40E-07 | ILC2_spleen |
| JAK1               | 4.03E-12 | 1.84975078 | 0.721 | 0.254 | 1.43E-07 | ILC2_spleen |
| RIPOR2             | 4.15E-12 | 2.0275039  | 0.698 | 0.252 | 1.47E-07 | ILC2_spleen |
| MYCBP2             | 4.29E-12 | 1.50947993 | 0.674 | 0.192 | 1.52E-07 | ILC2_spleen |
| SNTB1              | 4.30E-12 | 1.89928419 | 0.326 | 0.056 | 1.52E-07 | ILC2_spleen |
| PMAIP1             | 4.32E-12 | 2.50210507 | 0.372 | 0.072 | 1.53E-07 | ILC2_spleen |
| WDFY2              | 4.96E-12 | 1.8327406  | 0.558 | 0.154 | 1.76E-07 | ILC2_spleen |
| GON4L              | 5.29E-12 | 2.01487286 | 0.395 | 0.08  | 1.87E-07 | ILC2_spleen |
| ARIH1              | 5.38E-12 | 2.09989354 | 0.535 | 0.146 | 1.91E-07 | ILC2_spleen |
| CD47               | 5.45E-12 | 1.80902154 | 0.628 | 0.195 | 1.93E-07 | ILC2_spleen |
| ASAP1              | 5.46E-12 | 2.24051207 | 0.326 | 0.057 | 1.93E-07 | ILC2_spleen |
| GOLPH3             | 6.69E-12 | 2.11180463 | 0.372 | 0.074 | 2.37E-07 | ILC2_spleen |
| ENSMMUG00000047277 | 7.01E-12 | 1.51025757 | 0.767 | 0.281 | 2.48E-07 | ILC2_spleen |
| ID3                | 7.69E-12 | 2.53578108 | 0.302 | 0.051 | 2.73E-07 | ILC2_spleen |
| GBP3               | 7.88E-12 | 2.72109528 | 0.326 | 0.056 | 2.79E-07 | ILC2_spleen |
| HOPX               | 8.09E-12 | 1.45829414 | 0.558 | 0.145 | 2.87E-07 | ILC2_spleen |
| ITM2B              | 8.23E-12 | 1.65312634 | 0.767 | 0.381 | 2.92E-07 | ILC2_spleen |
| CCNT1              | 8.31E-12 | 2.28613331 | 0.256 | 0.036 | 2.95E-07 | ILC2_spleen |
| IL27RA             | 8.57E-12 | 2.18263195 | 0.302 | 0.05  | 3.04E-07 | ILC2_spleen |
| NPEPPS             | 8.65E-12 | 2.19490365 | 0.302 | 0.05  | 3.07E-07 | ILC2_spleen |
| ADGRE5             | 8.70E-12 | 2.55682556 | 0.628 | 0.207 | 3.08E-07 | ILC2_spleen |
| CYTH1              | 8.96E-12 | 1.91719479 | 0.535 | 0.141 | 3.17E-07 | ILC2_spleen |
| ATP1A1             | 9.53E-12 | 1.87709862 | 0.442 | 0.098 | 3.38E-07 | ILC2_spleen |
| WTAP               | 1.01E-11 | 1.50169338 | 0.628 | 0.175 | 3.58E-07 | ILC2_spleen |
| IFNGR2             | 1.05E-11 | 1.84511858 | 0.372 | 0.073 | 3.71E-07 | ILC2_spleen |
| ARID1A             | 1.21E-11 | 2.14923418 | 0.349 | 0.066 | 4.30E-07 | ILC2_spleen |
| HERC3              | 1.26E-11 | 2.21333414 | 0.349 | 0.068 | 4.45E-07 | ILC2_spleen |
| IQGAP2             | 1.30E-11 | 2.4461259  | 0.512 | 0.145 | 4.60E-07 | ILC2_spleen |
| TGFBR1             | 1.34E-11 | 2.07872596 | 0.326 | 0.058 | 4.76E-07 | ILC2_spleen |
| TOX                | 1.43E-11 | 1.93136507 | 0.512 | 0.133 | 5.08E-07 | ILC2_spleen |
| ENTPD4             | 1.51E-11 | 1.87396306 | 0.302 | 0.05  | 5.34E-07 | ILC2_spleen |
| SPIDR              | 1.53E-11 | 2.65993598 | 0.395 | 0.087 | 5.43E-07 | ILC2_spleen |

|             |          |            |       |       |          |             |
|-------------|----------|------------|-------|-------|----------|-------------|
| TRPM7       | 1.63E-11 | 1.48817827 | 0.651 | 0.201 | 5.78E-07 | ILC2_spleen |
| REPS1       | 1.85E-11 | 2.23102907 | 0.302 | 0.052 | 6.55E-07 | ILC2_spleen |
| INTS11      | 1.92E-11 | 1.59539621 | 0.302 | 0.05  | 6.79E-07 | ILC2_spleen |
| FOS         | 2.08E-11 | 1.72523708 | 0.907 | 0.688 | 7.35E-07 | ILC2_spleen |
| CELF1       | 2.16E-11 | 2.15956756 | 0.419 | 0.094 | 7.65E-07 | ILC2_spleen |
| MAML2       | 2.27E-11 | 1.92226993 | 0.628 | 0.204 | 8.06E-07 | ILC2_spleen |
| SPEN        | 2.43E-11 | 1.87513575 | 0.372 | 0.076 | 8.59E-07 | ILC2_spleen |
| AGO2        | 2.43E-11 | 2.47435286 | 0.302 | 0.053 | 8.61E-07 | ILC2_spleen |
| FNBP4       | 2.47E-11 | 2.07099059 | 0.349 | 0.067 | 8.76E-07 | ILC2_spleen |
| CBLB        | 2.54E-11 | 2.12333623 | 0.465 | 0.115 | 8.98E-07 | ILC2_spleen |
| PFN1        | 2.81E-11 | 1.27903807 | 0.907 | 0.652 | 9.96E-07 | ILC2_spleen |
| SLC38A1     | 2.99E-11 | 1.83627258 | 0.535 | 0.149 | 1.06E-06 | ILC2_spleen |
| CAB39       | 3.04E-11 | 1.70398781 | 0.512 | 0.132 | 1.08E-06 | ILC2_spleen |
| CRY1        | 4.05E-11 | 1.85656799 | 0.512 | 0.141 | 1.44E-06 | ILC2_spleen |
| ABI1        | 4.21E-11 | 1.4307291  | 0.512 | 0.128 | 1.49E-06 | ILC2_spleen |
| C20H16orf72 | 4.32E-11 | 2.47268125 | 0.349 | 0.07  | 1.53E-06 | ILC2_spleen |
| KDM4C       | 5.30E-11 | 1.80483795 | 0.419 | 0.095 | 1.88E-06 | ILC2_spleen |
| PLEKHG1     | 5.62E-11 | 2.42626627 | 0.279 | 0.047 | 1.99E-06 | ILC2_spleen |
| MED12L      | 6.01E-11 | 2.51797463 | 0.372 | 0.081 | 2.13E-06 | ILC2_spleen |
| NIPBL       | 6.18E-11 | 1.35568215 | 0.581 | 0.164 | 2.19E-06 | ILC2_spleen |
| RELCH       | 6.71E-11 | 2.02758433 | 0.279 | 0.047 | 2.38E-06 | ILC2_spleen |
| ARRDC3      | 6.71E-11 | 2.0418681  | 0.349 | 0.07  | 2.38E-06 | ILC2_spleen |
| MATK        | 6.76E-11 | 1.83070705 | 0.256 | 0.038 | 2.39E-06 | ILC2_spleen |
| EP300       | 6.77E-11 | 1.73338786 | 0.419 | 0.095 | 2.40E-06 | ILC2_spleen |
| GAPVD1      | 6.81E-11 | 2.03160108 | 0.326 | 0.062 | 2.41E-06 | ILC2_spleen |
| USP34       | 6.94E-11 | 1.70017682 | 0.535 | 0.154 | 2.46E-06 | ILC2_spleen |
| PTPRA       | 7.04E-11 | 2.21265684 | 0.419 | 0.1   | 2.49E-06 | ILC2_spleen |
| PHACTR2     | 7.38E-11 | 3.56106537 | 0.256 | 0.04  | 2.62E-06 | ILC2_spleen |
| URI1        | 7.45E-11 | 2.97931211 | 0.326 | 0.064 | 2.64E-06 | ILC2_spleen |
| FCHSD2      | 7.50E-11 | 2.23552972 | 0.372 | 0.081 | 2.66E-06 | ILC2_spleen |
| PPP1R16B    | 7.57E-11 | 2.26496692 | 0.465 | 0.118 | 2.68E-06 | ILC2_spleen |
| RPL13A      | 7.79E-11 | 0.84187165 | 0.93  | 0.967 | 2.76E-06 | ILC2_spleen |
| ESYT2       | 9.37E-11 | 2.20055792 | 0.419 | 0.098 | 3.32E-06 | ILC2_spleen |

|           |          |            |       |       |          |             |
|-----------|----------|------------|-------|-------|----------|-------------|
| RRP1B     | 9.42E-11 | 2.27717698 | 0.279 | 0.047 | 3.34E-06 | ILC2_spleen |
| UBE3C     | 9.69E-11 | 2.68525733 | 0.279 | 0.048 | 3.43E-06 | ILC2_spleen |
| CELF2     | 9.79E-11 | 1.74135063 | 0.767 | 0.319 | 3.47E-06 | ILC2_spleen |
| TRIM24    | 9.90E-11 | 2.05306102 | 0.256 | 0.04  | 3.51E-06 | ILC2_spleen |
| FAM193A   | 1.05E-10 | 2.39511734 | 0.279 | 0.049 | 3.74E-06 | ILC2_spleen |
| ATP2C1    | 1.15E-10 | 1.88820397 | 0.302 | 0.053 | 4.06E-06 | ILC2_spleen |
| LRRFIP1   | 1.34E-10 | 1.65232    | 0.512 | 0.132 | 4.73E-06 | ILC2_spleen |
| TPST2     | 1.35E-10 | 2.28917392 | 0.256 | 0.041 | 4.78E-06 | ILC2_spleen |
| SLMAP     | 1.43E-10 | 2.06084522 | 0.349 | 0.073 | 5.08E-06 | ILC2_spleen |
| UHRF1BP1L | 1.49E-10 | 2.466637   | 0.349 | 0.073 | 5.26E-06 | ILC2_spleen |
| UBE2H     | 1.52E-10 | 2.04080274 | 0.395 | 0.09  | 5.40E-06 | ILC2_spleen |
| TLN1      | 1.58E-10 | 1.38236349 | 0.581 | 0.172 | 5.59E-06 | ILC2_spleen |
| MARCHF6   | 1.60E-10 | 1.9979737  | 0.442 | 0.109 | 5.68E-06 | ILC2_spleen |
| MAPKAP1   | 1.67E-10 | 2.06921055 | 0.256 | 0.041 | 5.91E-06 | ILC2_spleen |
| SLC7A6    | 1.74E-10 | 2.54103705 | 0.256 | 0.041 | 6.15E-06 | ILC2_spleen |
| RALY      | 1.77E-10 | 1.53418038 | 0.419 | 0.095 | 6.28E-06 | ILC2_spleen |
| GLCC11    | 1.97E-10 | 1.87769924 | 0.349 | 0.071 | 6.98E-06 | ILC2_spleen |
| UBR3      | 2.03E-10 | 2.33132219 | 0.326 | 0.064 | 7.20E-06 | ILC2_spleen |
| MAPK1     | 2.11E-10 | 1.99344027 | 0.349 | 0.073 | 7.46E-06 | ILC2_spleen |
| SIPA1L1   | 2.68E-10 | 1.81043202 | 0.349 | 0.073 | 9.50E-06 | ILC2_spleen |
| RALBP1    | 2.71E-10 | 1.56678786 | 0.372 | 0.079 | 9.61E-06 | ILC2_spleen |
| GTF2I     | 2.75E-10 | 1.47503591 | 0.535 | 0.154 | 9.74E-06 | ILC2_spleen |
| UBE3A     | 3.17E-10 | 1.45890134 | 0.372 | 0.079 | 1.12E-05 | ILC2_spleen |
| USP25     | 3.20E-10 | 1.98388936 | 0.279 | 0.049 | 1.13E-05 | ILC2_spleen |
| RAF1      | 3.25E-10 | 2.0516497  | 0.326 | 0.065 | 1.15E-05 | ILC2_spleen |
| ZMYND8    | 3.26E-10 | 1.87940628 | 0.372 | 0.082 | 1.16E-05 | ILC2_spleen |
| LUC7L3    | 3.27E-10 | 1.63185865 | 0.488 | 0.131 | 1.16E-05 | ILC2_spleen |
| CCDC88C   | 3.33E-10 | 2.144051   | 0.256 | 0.042 | 1.18E-05 | ILC2_spleen |
| LMNA      | 3.65E-10 | 2.26556456 | 0.326 | 0.069 | 1.29E-05 | ILC2_spleen |
| MACF1     | 3.65E-10 | 1.94609109 | 0.558 | 0.17  | 1.29E-05 | ILC2_spleen |
| XPO1      | 3.82E-10 | 2.22550191 | 0.279 | 0.05  | 1.35E-05 | ILC2_spleen |
| CRTC3     | 3.91E-10 | 1.99510127 | 0.302 | 0.058 | 1.38E-05 | ILC2_spleen |
| RASGRP2   | 3.93E-10 | 2.15539692 | 0.372 | 0.085 | 1.39E-05 | ILC2_spleen |

|                    |          |            |       |       |          |             |
|--------------------|----------|------------|-------|-------|----------|-------------|
| IQGAP1             | 4.05E-10 | 1.43154729 | 0.698 | 0.238 | 1.43E-05 | ILC2_spleen |
| XPR1               | 4.22E-10 | 2.53682734 | 0.256 | 0.044 | 1.50E-05 | ILC2_spleen |
| ENSMMUG00000055687 | 4.26E-10 | 2.25679429 | 0.326 | 0.067 | 1.51E-05 | ILC2_spleen |
| OGT                | 4.28E-10 | 2.01506318 | 0.395 | 0.095 | 1.52E-05 | ILC2_spleen |
| RPS6KB1            | 4.41E-10 | 2.22102503 | 0.349 | 0.076 | 1.56E-05 | ILC2_spleen |
| EFR3A              | 4.50E-10 | 1.5743285  | 0.279 | 0.048 | 1.60E-05 | ILC2_spleen |
| AARS1              | 4.66E-10 | 1.8971441  | 0.465 | 0.127 | 1.65E-05 | ILC2_spleen |
| PUM1               | 4.88E-10 | 1.62790414 | 0.512 | 0.144 | 1.73E-05 | ILC2_spleen |
| RELL1              | 6.06E-10 | 1.74163439 | 0.442 | 0.117 | 2.15E-05 | ILC2_spleen |
| STK39              | 6.11E-10 | 2.34175564 | 0.326 | 0.069 | 2.16E-05 | ILC2_spleen |
| YWHAH              | 6.23E-10 | 1.97938536 | 0.326 | 0.067 | 2.21E-05 | ILC2_spleen |
| INO80D             | 6.99E-10 | 1.55328725 | 0.349 | 0.073 | 2.48E-05 | ILC2_spleen |
| DIAPH1             | 7.05E-10 | 1.28786191 | 0.535 | 0.155 | 2.50E-05 | ILC2_spleen |
| ATP10A             | 7.11E-10 | 1.9105508  | 0.349 | 0.078 | 2.52E-05 | ILC2_spleen |
| TRA2B              | 7.36E-10 | 1.32555386 | 0.907 | 0.488 | 2.61E-05 | ILC2_spleen |
| NFKBIA             | 7.82E-10 | 2.12623389 | 0.744 | 0.369 | 2.77E-05 | ILC2_spleen |
| EHD4               | 8.04E-10 | 1.69918964 | 0.395 | 0.093 | 2.85E-05 | ILC2_spleen |
| CD52               | 8.13E-10 | 1.21427074 | 0.93  | 0.762 | 2.88E-05 | ILC2_spleen |
| TRAC               | 8.67E-10 | 1.52330465 | 0.721 | 0.269 | 3.07E-05 | ILC2_spleen |
| PM20D2             | 8.83E-10 | 1.4138246  | 0.767 | 0.343 | 3.13E-05 | ILC2_spleen |
| OTUD5              | 8.90E-10 | 3.01221896 | 0.256 | 0.046 | 3.15E-05 | ILC2_spleen |
| AP1G1              | 9.49E-10 | 1.79916639 | 0.302 | 0.058 | 3.36E-05 | ILC2_spleen |
| CUL3               | 1.02E-09 | 1.71155487 | 0.419 | 0.105 | 3.60E-05 | ILC2_spleen |
| FAM174C            | 1.02E-09 | 1.35023015 | 0.279 | 0.05  | 3.60E-05 | ILC2_spleen |
| XPO6               | 1.03E-09 | 1.83873563 | 0.349 | 0.076 | 3.66E-05 | ILC2_spleen |
| USP3               | 1.04E-09 | 1.4521834  | 0.465 | 0.124 | 3.68E-05 | ILC2_spleen |
| PDS5A              | 1.15E-09 | 2.18317904 | 0.349 | 0.078 | 4.08E-05 | ILC2_spleen |
| ATP2B4             | 1.17E-09 | 2.44150963 | 0.279 | 0.053 | 4.16E-05 | ILC2_spleen |
| GRAMD1A            | 1.26E-09 | 2.02140061 | 0.326 | 0.068 | 4.46E-05 | ILC2_spleen |
| SECISBP2           | 1.29E-09 | 1.89091672 | 0.326 | 0.068 | 4.56E-05 | ILC2_spleen |
| ZNF326             | 1.34E-09 | 2.03082986 | 0.349 | 0.081 | 4.74E-05 | ILC2_spleen |
| PHF3               | 1.36E-09 | 1.74765218 | 0.442 | 0.118 | 4.82E-05 | ILC2_spleen |
| RNASET2            | 1.37E-09 | 2.21687896 | 0.372 | 0.087 | 4.84E-05 | ILC2_spleen |

|         |          |            |       |       |            |             |
|---------|----------|------------|-------|-------|------------|-------------|
| DEK     | 1.44E-09 | 1.64869507 | 0.419 | 0.102 | 5.10E-05   | ILC2_spleen |
| NSD1    | 1.48E-09 | 2.28439531 | 0.372 | 0.091 | 5.25E-05   | ILC2_spleen |
| NABP1   | 1.51E-09 | 1.79017025 | 0.395 | 0.099 | 5.36E-05   | ILC2_spleen |
| DYNC1H1 | 1.52E-09 | 1.45280318 | 0.302 | 0.058 | 5.37E-05   | ILC2_spleen |
| FBXW7   | 1.55E-09 | 2.12378065 | 0.419 | 0.11  | 5.49E-05   | ILC2_spleen |
| NKTR    | 1.61E-09 | 1.7958233  | 0.326 | 0.07  | 5.71E-05   | ILC2_spleen |
| HERPUD2 | 1.66E-09 | 1.71162996 | 0.302 | 0.059 | 5.89E-05   | ILC2_spleen |
| ZFX     | 1.69E-09 | 2.07471177 | 0.256 | 0.045 | 5.98E-05   | ILC2_spleen |
| RMDN1   | 1.84E-09 | 2.00292204 | 0.302 | 0.062 | 6.51E-05   | ILC2_spleen |
| PCF11   | 1.87E-09 | 1.72481952 | 0.326 | 0.068 | 6.62E-05   | ILC2_spleen |
| PSME4   | 1.87E-09 | 2.2534487  | 0.372 | 0.093 | 6.64E-05   | ILC2_spleen |
| ABLIM1  | 1.93E-09 | 2.22829017 | 0.395 | 0.102 | 6.83E-05   | ILC2_spleen |
| NAAA    | 1.95E-09 | 1.75176284 | 0.256 | 0.044 | 6.92E-05   | ILC2_spleen |
| RNF145  | 2.07E-09 | 1.97173339 | 0.395 | 0.102 | 7.34E-05   | ILC2_spleen |
| NUP210  | 2.19E-09 | 1.7882283  | 0.279 | 0.053 | 7.74E-05   | ILC2_spleen |
| TBC1D23 | 2.19E-09 | 1.82621268 | 0.302 | 0.06  | 7.77E-05   | ILC2_spleen |
| MAP3K5  | 2.20E-09 | 1.59556146 | 0.349 | 0.077 | 7.80E-05   | ILC2_spleen |
| BRD3    | 2.30E-09 | 1.96573606 | 0.279 | 0.053 | 8.16E-05   | ILC2_spleen |
| CTSW    | 2.32E-09 | 1.96855126 | 0.279 | 0.054 | 8.23E-05   | ILC2_spleen |
| SQSTM1  | 2.34E-09 | 1.49913257 | 0.512 | 0.155 | 8.28E-05   | ILC2_spleen |
| KMT5B   | 2.34E-09 | 1.58093809 | 0.302 | 0.061 | 8.29E-05   | ILC2_spleen |
| GIT2    | 2.53E-09 | 2.60174864 | 0.349 | 0.083 | 8.95E-05   | ILC2_spleen |
| SP140   | 2.54E-09 | 2.30986822 | 0.326 | 0.073 | 8.99E-05   | ILC2_spleen |
| STK4    | 2.57E-09 | 1.2949974  | 0.698 | 0.266 | 9.12E-05   | ILC2_spleen |
| RNGTT   | 2.57E-09 | 2.43214319 | 0.279 | 0.056 | 9.12E-05   | ILC2_spleen |
| MRTFA   | 2.64E-09 | 2.14993638 | 0.256 | 0.047 | 9.36E-05   | ILC2_spleen |
| MTMR6   | 2.80E-09 | 2.36088617 | 0.279 | 0.055 | 9.91E-05   | ILC2_spleen |
| HNRNPD  | 2.87E-09 | 1.44569329 | 0.512 | 0.15  | 0.00010166 | ILC2_spleen |
| R3HDM2  | 2.94E-09 | 2.19732404 | 0.256 | 0.047 | 0.00010432 | ILC2_spleen |
| HSPA5   | 3.07E-09 | 1.61283725 | 0.651 | 0.259 | 0.00010874 | ILC2_spleen |
| LRRFIP2 | 3.11E-09 | 1.8582644  | 0.349 | 0.081 | 0.00011013 | ILC2_spleen |
| DST     | 3.19E-09 | 2.58662514 | 0.279 | 0.057 | 0.00011293 | ILC2_spleen |
| WDR74   | 3.21E-09 | 1.64192096 | 0.442 | 0.115 | 0.00011371 | ILC2_spleen |

|                   |          |            |       |       |            |             |
|-------------------|----------|------------|-------|-------|------------|-------------|
| CSNK1G1           | 3.29E-09 | 1.83076092 | 0.302 | 0.062 | 0.00011648 | ILC2_spleen |
| GATAD2A           | 3.54E-09 | 2.05679013 | 0.302 | 0.062 | 0.00012545 | ILC2_spleen |
| ZRANB2            | 3.55E-09 | 1.57542166 | 0.419 | 0.108 | 0.00012592 | ILC2_spleen |
| SETD2             | 3.68E-09 | 2.30833343 | 0.419 | 0.113 | 0.00013043 | ILC2_spleen |
| ENSMUG00000065175 | 3.70E-09 | 1.64650043 | 0.488 | 0.143 | 0.00013097 | ILC2_spleen |
| DOCK8             | 3.73E-09 | 1.33798452 | 0.628 | 0.221 | 0.000132   | ILC2_spleen |
| OXSRI             | 3.93E-09 | 2.21943545 | 0.372 | 0.09  | 0.00013911 | ILC2_spleen |
| ARHGAP45          | 4.29E-09 | 1.51825036 | 0.419 | 0.109 | 0.00015203 | ILC2_spleen |
| CPEB1             | 4.44E-09 | 0.72550293 | 0.93  | 0.908 | 0.00015737 | ILC2_spleen |
| KRAS              | 4.58E-09 | 1.83619114 | 0.326 | 0.071 | 0.00016242 | ILC2_spleen |
| UTRN              | 4.62E-09 | 1.39726457 | 0.651 | 0.228 | 0.00016375 | ILC2_spleen |
| MLLT10            | 4.67E-09 | 2.21402274 | 0.326 | 0.075 | 0.00016532 | ILC2_spleen |
| MAGT1             | 4.76E-09 | 1.68460875 | 0.372 | 0.09  | 0.0001685  | ILC2_spleen |
| TRERF1            | 5.38E-09 | 1.97625595 | 0.395 | 0.1   | 0.00019046 | ILC2_spleen |
| CHIC2             | 5.38E-09 | 1.6582654  | 0.349 | 0.081 | 0.00019047 | ILC2_spleen |
| SELPLG            | 5.45E-09 | 2.31108213 | 0.256 | 0.048 | 0.00019293 | ILC2_spleen |
| TESC              | 5.45E-09 | 1.83271396 | 0.512 | 0.174 | 0.00019327 | ILC2_spleen |
| ADORA2B           | 5.59E-09 | 2.65380877 | 0.372 | 0.101 | 0.00019821 | ILC2_spleen |
| VTI1A             | 5.76E-09 | 1.72021105 | 0.395 | 0.101 | 0.00020396 | ILC2_spleen |
| LMBR1             | 5.91E-09 | 1.94263735 | 0.256 | 0.048 | 0.00020942 | ILC2_spleen |
| TSC22D3           | 6.11E-09 | 1.17241487 | 0.744 | 0.289 | 0.00021641 | ILC2_spleen |
| CNOT1             | 6.20E-09 | 1.77136279 | 0.419 | 0.113 | 0.00021969 | ILC2_spleen |
| BRWD1             | 6.53E-09 | 2.3723637  | 0.302 | 0.066 | 0.00023151 | ILC2_spleen |
| GATAD2B           | 6.60E-09 | 1.56279912 | 0.395 | 0.104 | 0.00023377 | ILC2_spleen |
| TIMM23            | 7.33E-09 | 1.76931385 | 0.326 | 0.073 | 0.00025974 | ILC2_spleen |
| BTG2              | 7.48E-09 | 1.65298378 | 0.721 | 0.361 | 0.00026505 | ILC2_spleen |
| UBE2R2            | 7.75E-09 | 1.81233052 | 0.326 | 0.073 | 0.00027458 | ILC2_spleen |
| WWP1              | 8.05E-09 | 1.90553918 | 0.256 | 0.048 | 0.00028518 | ILC2_spleen |
| B2M               | 8.37E-09 | 0.66424554 | 0.977 | 0.992 | 0.0002964  | ILC2_spleen |
| SENP2             | 8.41E-09 | 1.85844108 | 0.279 | 0.057 | 0.00029802 | ILC2_spleen |
| CDKAL1            | 8.81E-09 | 1.56842405 | 0.395 | 0.104 | 0.00031227 | ILC2_spleen |
| RASSF3            | 8.97E-09 | 1.59723845 | 0.349 | 0.086 | 0.00031799 | ILC2_spleen |
| RASGEF1B          | 9.03E-09 | 2.91202834 | 0.302 | 0.068 | 0.00031995 | ILC2_spleen |

|                   |          |            |       |       |            |             |
|-------------------|----------|------------|-------|-------|------------|-------------|
| NUP98             | 9.16E-09 | 1.91200901 | 0.372 | 0.093 | 0.00032442 | ILC2_spleen |
| ATF2              | 9.46E-09 | 1.58950843 | 0.372 | 0.093 | 0.00033513 | ILC2_spleen |
| IRF1              | 9.89E-09 | 2.39408757 | 0.302 | 0.069 | 0.00035051 | ILC2_spleen |
| DDX5              | 1.05E-08 | 1.21311296 | 0.884 | 0.653 | 0.00037225 | ILC2_spleen |
| SRSF10            | 1.08E-08 | 1.33015084 | 0.535 | 0.17  | 0.00038207 | ILC2_spleen |
| ATXN2             | 1.09E-08 | 2.31513814 | 0.302 | 0.067 | 0.00038612 | ILC2_spleen |
| STAT5B            | 1.12E-08 | 1.55972967 | 0.349 | 0.083 | 0.00039669 | ILC2_spleen |
| UBE2D3            | 1.15E-08 | 1.136414   | 0.86  | 0.49  | 0.00040643 | ILC2_spleen |
| THADA             | 1.15E-08 | 2.45755507 | 0.302 | 0.068 | 0.00040789 | ILC2_spleen |
| KTN1              | 1.24E-08 | 1.82861788 | 0.395 | 0.11  | 0.00043999 | ILC2_spleen |
| PIK3CA            | 1.27E-08 | 2.34143279 | 0.256 | 0.05  | 0.00045023 | ILC2_spleen |
| NDEL1             | 1.32E-08 | 1.47040631 | 0.419 | 0.113 | 0.00046907 | ILC2_spleen |
| ACTR2             | 1.38E-08 | 1.21664007 | 0.814 | 0.392 | 0.00048943 | ILC2_spleen |
| RNF115            | 1.38E-08 | 2.19737584 | 0.256 | 0.05  | 0.00048981 | ILC2_spleen |
| CLK1              | 1.42E-08 | 1.37402379 | 0.581 | 0.201 | 0.00050178 | ILC2_spleen |
| ARL15             | 1.43E-08 | 1.9258625  | 0.372 | 0.097 | 0.00050744 | ILC2_spleen |
| TOP1              | 1.45E-08 | 1.5665179  | 0.512 | 0.175 | 0.00051471 | ILC2_spleen |
| PTPRC             | 1.47E-08 | 1.05444419 | 0.953 | 0.598 | 0.00051921 | ILC2_spleen |
| ANKIB1            | 1.50E-08 | 1.7297576  | 0.279 | 0.058 | 0.0005307  | ILC2_spleen |
| SPN               | 1.55E-08 | 1.84086355 | 0.256 | 0.049 | 0.00054854 | ILC2_spleen |
| POC1B             | 1.57E-08 | 1.47315747 | 0.395 | 0.104 | 0.00055662 | ILC2_spleen |
| CHD2              | 1.57E-08 | 1.31894612 | 0.628 | 0.226 | 0.00055716 | ILC2_spleen |
| FOXN2             | 1.57E-08 | 1.94904266 | 0.302 | 0.068 | 0.00055736 | ILC2_spleen |
| FAF1              | 1.60E-08 | 2.11627183 | 0.302 | 0.069 | 0.00056544 | ILC2_spleen |
| PPM1B             | 1.76E-08 | 1.57341898 | 0.256 | 0.05  | 0.00062251 | ILC2_spleen |
| DDIT3             | 1.77E-08 | 2.59359677 | 0.256 | 0.051 | 0.0006259  | ILC2_spleen |
| MBD5              | 1.77E-08 | 1.64242051 | 0.372 | 0.097 | 0.00062865 | ILC2_spleen |
| ENSMUG00000052424 | 1.83E-08 | 1.41390238 | 0.628 | 0.243 | 0.00064678 | ILC2_spleen |
| CLASP1            | 1.87E-08 | 1.75466431 | 0.326 | 0.078 | 0.0006636  | ILC2_spleen |
| KHDRBS1           | 1.88E-08 | 1.69867412 | 0.349 | 0.085 | 0.00066676 | ILC2_spleen |
| BMT2              | 1.92E-08 | 2.49789392 | 0.395 | 0.121 | 0.00067869 | ILC2_spleen |
| FBXO7             | 1.95E-08 | 1.74625173 | 0.326 | 0.076 | 0.00069158 | ILC2_spleen |
| ATP1B3            | 1.96E-08 | 1.34013697 | 0.465 | 0.136 | 0.00069323 | ILC2_spleen |

|                    |          |            |       |       |            |             |
|--------------------|----------|------------|-------|-------|------------|-------------|
| EZH2               | 1.96E-08 | 1.90708794 | 0.372 | 0.094 | 0.00069598 | ILC2_spleen |
| PAG1               | 1.96E-08 | 1.84280033 | 0.395 | 0.112 | 0.00069601 | ILC2_spleen |
| DYRK1A             | 1.98E-08 | 1.83308884 | 0.326 | 0.078 | 0.00070122 | ILC2_spleen |
| ENSMMUG00000058581 | 1.99E-08 | 1.43017098 | 0.372 | 0.096 | 0.00070637 | ILC2_spleen |
| RALGAP2            | 2.13E-08 | 1.4702356  | 0.372 | 0.095 | 0.00075537 | ILC2_spleen |
| ENSMMUG00000006165 | 2.14E-08 | 1.25484661 | 0.744 | 0.304 | 0.00075648 | ILC2_spleen |
| ATXN7              | 2.47E-08 | 1.87694729 | 0.349 | 0.088 | 0.00087442 | ILC2_spleen |
| PNISR              | 2.49E-08 | 1.27712578 | 0.605 | 0.215 | 0.0008832  | ILC2_spleen |
| SETD3              | 2.64E-08 | 1.5020124  | 0.256 | 0.05  | 0.00093499 | ILC2_spleen |
| PPP1R15A           | 2.82E-08 | 1.61239057 | 0.488 | 0.16  | 0.00099817 | ILC2_spleen |
| HYI                | 2.99E-08 | 2.19689512 | 0.256 | 0.053 | 0.00105975 | ILC2_spleen |
| YPEL3              | 3.04E-08 | 1.43167722 | 0.395 | 0.106 | 0.00107667 | ILC2_spleen |
| NDFIP1             | 3.06E-08 | 1.4131973  | 0.744 | 0.341 | 0.00108441 | ILC2_spleen |
| TTC39C             | 3.07E-08 | 1.35902177 | 0.419 | 0.115 | 0.00108696 | ILC2_spleen |
| FOSB               | 3.24E-08 | 1.94823381 | 0.581 | 0.237 | 0.00114649 | ILC2_spleen |
| MON2               | 3.25E-08 | 1.43919141 | 0.256 | 0.05  | 0.00114984 | ILC2_spleen |
| PBRM1              | 3.26E-08 | 1.91345142 | 0.349 | 0.092 | 0.00115645 | ILC2_spleen |
| RNF216             | 3.28E-08 | 1.40870138 | 0.419 | 0.119 | 0.00116219 | ILC2_spleen |
| HBS1L              | 3.39E-08 | 1.35104462 | 0.488 | 0.152 | 0.00120108 | ILC2_spleen |
| PSMD2              | 3.46E-08 | 1.50896991 | 0.349 | 0.086 | 0.0012257  | ILC2_spleen |
| DGKA               | 3.48E-08 | 1.92002067 | 0.302 | 0.07  | 0.00123417 | ILC2_spleen |
| FBXL20             | 3.82E-08 | 1.52237106 | 0.302 | 0.067 | 0.00135386 | ILC2_spleen |
| EXOC4              | 3.84E-08 | 1.66977966 | 0.419 | 0.125 | 0.00136203 | ILC2_spleen |
| LSM14A             | 3.98E-08 | 1.93318584 | 0.442 | 0.13  | 0.00141089 | ILC2_spleen |
| AGPS               | 4.43E-08 | 2.1739576  | 0.279 | 0.061 | 0.0015686  | ILC2_spleen |
| ZCCHC7             | 4.50E-08 | 1.5749085  | 0.465 | 0.142 | 0.0015945  | ILC2_spleen |
| CPSF3              | 4.51E-08 | 1.69595341 | 0.302 | 0.07  | 0.0015964  | ILC2_spleen |
| FAM172A            | 4.76E-08 | 1.56228129 | 0.535 | 0.176 | 0.00168544 | ILC2_spleen |
| DNM2               | 5.30E-08 | 1.70590878 | 0.326 | 0.08  | 0.00187736 | ILC2_spleen |
| IKZF1              | 5.35E-08 | 1.19973633 | 0.628 | 0.231 | 0.00189637 | ILC2_spleen |
| DHX15              | 5.39E-08 | 1.57445808 | 0.349 | 0.088 | 0.001911   | ILC2_spleen |
| PPP2R5E            | 5.53E-08 | 1.69540319 | 0.256 | 0.053 | 0.00195851 | ILC2_spleen |
| RIN3               | 5.68E-08 | 1.47603191 | 0.395 | 0.109 | 0.00201373 | ILC2_spleen |



|                    |          |            |       |       |            |             |
|--------------------|----------|------------|-------|-------|------------|-------------|
| DCAF5              | 6.10E-08 | 1.82375585 | 0.302 | 0.072 | 0.00216094 | ILC2_spleen |
| SMG1               | 6.11E-08 | 1.54053357 | 0.326 | 0.078 | 0.00216367 | ILC2_spleen |
| ASH1L              | 6.32E-08 | 1.30119097 | 0.558 | 0.192 | 0.00224024 | ILC2_spleen |
| DIS3L2             | 6.34E-08 | 1.91207452 | 0.302 | 0.072 | 0.00224707 | ILC2_spleen |
| RUBCN              | 6.43E-08 | 1.35853974 | 0.279 | 0.06  | 0.00227847 | ILC2_spleen |
| TRIM44             | 6.66E-08 | 1.14162195 | 0.256 | 0.051 | 0.00236084 | ILC2_spleen |
| TBC1D22A           | 6.96E-08 | 1.64764107 | 0.302 | 0.07  | 0.0024652  | ILC2_spleen |
| PIP5K1A            | 7.38E-08 | 1.79548149 | 0.256 | 0.053 | 0.00261657 | ILC2_spleen |
| ANKZF1             | 7.69E-08 | 1.52885938 | 0.279 | 0.061 | 0.00272479 | ILC2_spleen |
| BRD2               | 7.82E-08 | 1.19304006 | 0.488 | 0.15  | 0.00277138 | ILC2_spleen |
| LRPPRC             | 7.96E-08 | 1.39421779 | 0.302 | 0.07  | 0.00281955 | ILC2_spleen |
| SPTAN1             | 8.02E-08 | 1.74511638 | 0.302 | 0.071 | 0.00284053 | ILC2_spleen |
| ARHGAP26           | 8.09E-08 | 1.83724606 | 0.349 | 0.093 | 0.00286721 | ILC2_spleen |
| SPOP               | 8.13E-08 | 1.80556533 | 0.326 | 0.081 | 0.00287943 | ILC2_spleen |
| RPL23              | 8.84E-08 | 0.69589824 | 0.953 | 0.915 | 0.00313304 | ILC2_spleen |
| PTBP3              | 8.86E-08 | 1.48257898 | 0.628 | 0.262 | 0.00313956 | ILC2_spleen |
| LAMP1              | 8.88E-08 | 1.3176612  | 0.349 | 0.088 | 0.00314602 | ILC2_spleen |
| GRK2               | 9.19E-08 | 1.26895672 | 0.302 | 0.069 | 0.00325778 | ILC2_spleen |
| KRIT1              | 9.29E-08 | 1.7468463  | 0.279 | 0.064 | 0.00329041 | ILC2_spleen |
| SMYD3              | 9.64E-08 | 1.51200419 | 0.372 | 0.101 | 0.00341611 | ILC2_spleen |
| PPP1R2             | 9.72E-08 | 2.03218178 | 0.349 | 0.093 | 0.00344544 | ILC2_spleen |
| ATP5F1D            | 1.00E-07 | 1.5226399  | 0.395 | 0.114 | 0.0035495  | ILC2_spleen |
| ENSMMUG00000018557 | 1.00E-07 | 1.27618551 | 0.395 | 0.108 | 0.00355349 | ILC2_spleen |
| ARL2BP             | 1.06E-07 | 2.17914604 | 0.256 | 0.055 | 0.00374636 | ILC2_spleen |
| LRCH3              | 1.06E-07 | 1.8008607  | 0.326 | 0.084 | 0.00377286 | ILC2_spleen |
| TMEM131            | 1.09E-07 | 1.74668816 | 0.372 | 0.104 | 0.00387702 | ILC2_spleen |
| STK17B             | 1.11E-07 | 1.22036273 | 0.93  | 0.558 | 0.00393657 | ILC2_spleen |
| PRKCQ              | 1.12E-07 | 1.96158175 | 0.279 | 0.063 | 0.00395393 | ILC2_spleen |
| NEDD9              | 1.13E-07 | 1.81393056 | 0.395 | 0.116 | 0.00400028 | ILC2_spleen |
| PRDM2              | 1.19E-07 | 2.31535225 | 0.279 | 0.065 | 0.00420475 | ILC2_spleen |
| NUFIP2             | 1.20E-07 | 1.47186565 | 0.395 | 0.113 | 0.0042379  | ILC2_spleen |
| GMPS               | 1.25E-07 | 1.92967129 | 0.256 | 0.055 | 0.00443057 | ILC2_spleen |
| MPP7               | 1.27E-07 | 2.10635606 | 0.279 | 0.065 | 0.00449088 | ILC2_spleen |

|                     |          |            |       |       |            |             |
|---------------------|----------|------------|-------|-------|------------|-------------|
| CMTM3               | 1.34E-07 | 1.43440352 | 0.256 | 0.053 | 0.0047525  | ILC2_spleen |
| CREBRF              | 1.34E-07 | 1.11629961 | 0.349 | 0.089 | 0.00476391 | ILC2_spleen |
| HNRNPA0             | 1.35E-07 | 1.22044415 | 0.628 | 0.253 | 0.00478153 | ILC2_spleen |
| ND2                 | 1.38E-07 | 1.25234284 | 0.907 | 0.642 | 0.00489869 | ILC2_spleen |
| LMO4                | 1.39E-07 | 1.51012969 | 0.326 | 0.081 | 0.00491656 | ILC2_spleen |
| STK24               | 1.43E-07 | 1.11340307 | 0.512 | 0.17  | 0.00505393 | ILC2_spleen |
| ENSMMUG00000003854  | 1.50E-07 | 1.57936977 | 0.256 | 0.054 | 0.00530562 | ILC2_spleen |
| CHD7                | 1.56E-07 | 2.2767493  | 0.279 | 0.067 | 0.00552221 | ILC2_spleen |
| TAGAP               | 1.57E-07 | 1.59805733 | 0.395 | 0.115 | 0.00554581 | ILC2_spleen |
| ZFC3H1              | 1.58E-07 | 1.49664928 | 0.349 | 0.093 | 0.00558096 | ILC2_spleen |
| CNOT2               | 1.60E-07 | 1.44120927 | 0.512 | 0.18  | 0.00566649 | ILC2_spleen |
| GOLM2               | 1.67E-07 | 1.59800327 | 0.372 | 0.101 | 0.00591646 | ILC2_spleen |
| FGD3                | 1.68E-07 | 1.3779783  | 0.419 | 0.126 | 0.00593563 | ILC2_spleen |
| NT5C2               | 1.68E-07 | 1.23242965 | 0.302 | 0.071 | 0.00595436 | ILC2_spleen |
| TRANK1              | 1.69E-07 | 1.62487628 | 0.256 | 0.055 | 0.00599656 | ILC2_spleen |
| MSN                 | 1.70E-07 | 1.10504825 | 0.698 | 0.281 | 0.00601583 | ILC2_spleen |
| CCDC91              | 1.79E-07 | 1.48343161 | 0.442 | 0.139 | 0.00635679 | ILC2_spleen |
| CSNK1A1             | 1.80E-07 | 1.70646457 | 0.558 | 0.219 | 0.00638576 | ILC2_spleen |
| ADK                 | 1.91E-07 | 2.02411939 | 0.279 | 0.066 | 0.00676979 | ILC2_spleen |
| ENSMMUG000000055114 | 1.94E-07 | 2.07872827 | 0.302 | 0.076 | 0.0068779  | ILC2_spleen |
| PLP2                | 2.00E-07 | 1.49601247 | 0.349 | 0.095 | 0.00707418 | ILC2_spleen |
| ENSMMUG000000021539 | 2.07E-07 | 1.87334584 | 0.256 | 0.056 | 0.00733655 | ILC2_spleen |
| MAP3K1              | 2.14E-07 | 1.35417374 | 0.349 | 0.093 | 0.00757507 | ILC2_spleen |
| PRKD3               | 2.14E-07 | 2.18568246 | 0.326 | 0.087 | 0.00759102 | ILC2_spleen |
| S100A6              | 2.19E-07 | 1.14163066 | 0.767 | 0.404 | 0.00774276 | ILC2_spleen |
| KAT6B               | 2.36E-07 | 2.04450665 | 0.419 | 0.133 | 0.00835964 | ILC2_spleen |
| VIM                 | 2.38E-07 | 1.19012649 | 0.86  | 0.559 | 0.00841937 | ILC2_spleen |
| ENSMMUG000000020316 | 2.47E-07 | 1.047632   | 0.349 | 0.091 | 0.00873477 | ILC2_spleen |
| CNOT10              | 2.50E-07 | 2.09361682 | 0.279 | 0.067 | 0.00885717 | ILC2_spleen |
| PTPN2               | 2.57E-07 | 2.29214438 | 0.326 | 0.085 | 0.00911702 | ILC2_spleen |
| WDR70               | 2.91E-07 | 1.22908105 | 0.419 | 0.124 | 0.01030305 | ILC2_spleen |
| ARNTL               | 3.01E-07 | 1.48523053 | 0.279 | 0.065 | 0.01067518 | ILC2_spleen |
| KCTD20              | 3.04E-07 | 1.72769024 | 0.302 | 0.075 | 0.01078613 | ILC2_spleen |

|                    |          |            |       |       |            |             |
|--------------------|----------|------------|-------|-------|------------|-------------|
| CD3D               | 3.08E-07 | 1.46735592 | 0.442 | 0.148 | 0.01089804 | ILC2_spleen |
| ZMYM2              | 3.09E-07 | 1.46595876 | 0.395 | 0.115 | 0.01095657 | ILC2_spleen |
| GTPBP10            | 3.14E-07 | 1.90021007 | 0.279 | 0.069 | 0.01113056 | ILC2_spleen |
| MAN2A1             | 3.17E-07 | 1.47244806 | 0.395 | 0.118 | 0.01121723 | ILC2_spleen |
| TLK1               | 3.18E-07 | 1.36490105 | 0.442 | 0.143 | 0.01126557 | ILC2_spleen |
| RBM17              | 3.24E-07 | 1.45886132 | 0.395 | 0.12  | 0.01147189 | ILC2_spleen |
| UHRF2              | 3.31E-07 | 1.57463472 | 0.256 | 0.057 | 0.01172471 | ILC2_spleen |
| UVRAG              | 3.48E-07 | 1.75718961 | 0.372 | 0.112 | 0.01232123 | ILC2_spleen |
| ZNF638             | 3.54E-07 | 1.37232073 | 0.372 | 0.107 | 0.01255017 | ILC2_spleen |
| SP100              | 3.66E-07 | 1.17692423 | 0.581 | 0.221 | 0.01297884 | ILC2_spleen |
| PAN3               | 3.69E-07 | 1.44842971 | 0.395 | 0.127 | 0.01306181 | ILC2_spleen |
| YTHDC1             | 3.69E-07 | 1.05458778 | 0.465 | 0.146 | 0.01308624 | ILC2_spleen |
| PER1               | 3.74E-07 | 1.02949036 | 0.488 | 0.158 | 0.01324807 | ILC2_spleen |
| TEC                | 3.76E-07 | 2.03756835 | 0.349 | 0.104 | 0.01331721 | ILC2_spleen |
| SLC22A18           | 3.89E-07 | 1.62766573 | 0.326 | 0.087 | 0.01379977 | ILC2_spleen |
| VPS13B             | 4.02E-07 | 1.38100593 | 0.535 | 0.201 | 0.01423911 | ILC2_spleen |
| KCNAB2             | 4.09E-07 | 1.63859596 | 0.302 | 0.078 | 0.01448884 | ILC2_spleen |
| BIRC6              | 4.10E-07 | 1.19534383 | 0.558 | 0.213 | 0.01452749 | ILC2_spleen |
| NPTN               | 4.34E-07 | 1.2612329  | 0.302 | 0.075 | 0.01538224 | ILC2_spleen |
| CSPP1              | 4.38E-07 | 1.98282722 | 0.279 | 0.068 | 0.01551815 | ILC2_spleen |
| ENSMMUG00000008346 | 4.58E-07 | 1.24441914 | 0.395 | 0.119 | 0.01622409 | ILC2_spleen |
| SYNE1              | 4.87E-07 | 1.50579444 | 0.279 | 0.067 | 0.01725064 | ILC2_spleen |
| TLK2               | 4.91E-07 | 1.67271761 | 0.302 | 0.08  | 0.01738152 | ILC2_spleen |
| GPHN               | 4.92E-07 | 1.76042627 | 0.256 | 0.06  | 0.0174191  | ILC2_spleen |
| KDM2A              | 5.23E-07 | 1.56968945 | 0.419 | 0.132 | 0.01852988 | ILC2_spleen |
| PHACTR4            | 5.27E-07 | 1.49083687 | 0.256 | 0.058 | 0.01866568 | ILC2_spleen |
| AKAP17A            | 5.98E-07 | 1.56940058 | 0.256 | 0.058 | 0.02117615 | ILC2_spleen |
| PPP1CC             | 5.98E-07 | 1.46623803 | 0.442 | 0.146 | 0.0211837  | ILC2_spleen |
| TDRD3              | 5.99E-07 | 1.1661235  | 0.326 | 0.085 | 0.02122213 | ILC2_spleen |
| DENND1B            | 6.06E-07 | 1.9959156  | 0.256 | 0.061 | 0.0214878  | ILC2_spleen |
| ARFGEF1            | 6.13E-07 | 1.57653528 | 0.256 | 0.059 | 0.02173299 | ILC2_spleen |
| UBR4               | 6.15E-07 | 1.79902038 | 0.279 | 0.067 | 0.02179038 | ILC2_spleen |
| PFKP               | 6.54E-07 | 1.79988501 | 0.302 | 0.078 | 0.02316347 | ILC2_spleen |

|          |          |            |       |       |            |             |
|----------|----------|------------|-------|-------|------------|-------------|
| MAP2K6   | 6.54E-07 | 1.65228198 | 0.279 | 0.07  | 0.02316772 | ILC2_spleen |
| UBL3     | 6.58E-07 | 1.20900466 | 0.256 | 0.057 | 0.02330088 | ILC2_spleen |
| SMG6     | 6.68E-07 | 1.59232477 | 0.419 | 0.138 | 0.02366921 | ILC2_spleen |
| GTF3A    | 6.70E-07 | 1.60660849 | 0.256 | 0.059 | 0.02373706 | ILC2_spleen |
| FYN      | 7.04E-07 | 1.94088197 | 0.395 | 0.13  | 0.02493248 | ILC2_spleen |
| EMC6     | 7.11E-07 | 1.22242702 | 0.349 | 0.096 | 0.02519181 | ILC2_spleen |
| SLC35A3  | 7.16E-07 | 1.67872916 | 0.326 | 0.091 | 0.02535724 | ILC2_spleen |
| STAU1    | 7.16E-07 | 1.49575707 | 0.395 | 0.124 | 0.02536409 | ILC2_spleen |
| ACE      | 7.31E-07 | 1.55155494 | 0.279 | 0.068 | 0.02591448 | ILC2_spleen |
| SMARCC1  | 7.33E-07 | 1.65547623 | 0.349 | 0.101 | 0.02597189 | ILC2_spleen |
| PPP1R12A | 7.49E-07 | 1.29488961 | 0.558 | 0.218 | 0.02654509 | ILC2_spleen |
| DHRS3    | 7.58E-07 | 1.15838017 | 0.326 | 0.084 | 0.02687019 | ILC2_spleen |
| ARID4A   | 7.72E-07 | 2.0686695  | 0.256 | 0.061 | 0.02736536 | ILC2_spleen |
| PUM2     | 7.73E-07 | 1.26118625 | 0.419 | 0.132 | 0.02738579 | ILC2_spleen |
| RSU1     | 7.79E-07 | 1.25561398 | 0.372 | 0.11  | 0.02760634 | ILC2_spleen |
| ARHGEF6  | 7.84E-07 | 1.21681078 | 0.442 | 0.139 | 0.02778874 | ILC2_spleen |
| CSNK1G3  | 7.99E-07 | 1.68859236 | 0.279 | 0.069 | 0.02830677 | ILC2_spleen |
| LNPEP    | 8.07E-07 | 1.37174769 | 0.395 | 0.121 | 0.02859172 | ILC2_spleen |
| GPATCH8  | 8.08E-07 | 1.73055082 | 0.302 | 0.082 | 0.02864119 | ILC2_spleen |
| LRBA     | 8.09E-07 | 1.11845797 | 0.535 | 0.195 | 0.02867061 | ILC2_spleen |
| FOXO3    | 8.50E-07 | 1.85883495 | 0.302 | 0.08  | 0.03010759 | ILC2_spleen |
| RCSD1    | 8.91E-07 | 1.43337848 | 0.558 | 0.227 | 0.03158177 | ILC2_spleen |
| NOL7     | 9.25E-07 | 1.66064215 | 0.302 | 0.08  | 0.0327614  | ILC2_spleen |
| ARHGAP25 | 9.29E-07 | 1.59003174 | 0.256 | 0.06  | 0.03290761 | ILC2_spleen |
| FBNP1    | 9.43E-07 | 0.9925918  | 0.791 | 0.44  | 0.03341173 | ILC2_spleen |
| MNAT1    | 9.47E-07 | 1.47057229 | 0.349 | 0.101 | 0.0335505  | ILC2_spleen |
| AHNAK    | 9.81E-07 | 1.35479283 | 0.581 | 0.258 | 0.03474359 | ILC2_spleen |
| DNM3     | 9.90E-07 | 1.56265341 | 0.279 | 0.07  | 0.03508205 | ILC2_spleen |
| RLF      | 1.00E-06 | 1.44629836 | 0.326 | 0.089 | 0.03551376 | ILC2_spleen |
| PHF21A   | 1.01E-06 | 1.43930999 | 0.302 | 0.08  | 0.03585436 | ILC2_spleen |
| ANKRD11  | 1.03E-06 | 1.22505264 | 0.442 | 0.152 | 0.03633909 | ILC2_spleen |
| CSRNP1   | 1.03E-06 | 1.43181554 | 0.442 | 0.149 | 0.03665513 | ILC2_spleen |
| INPP5A   | 1.08E-06 | 1.54849893 | 0.256 | 0.061 | 0.03838944 | ILC2_spleen |

|                   |          |            |       |       |            |             |
|-------------------|----------|------------|-------|-------|------------|-------------|
| SPAG9             | 1.10E-06 | 2.03575924 | 0.302 | 0.086 | 0.03881287 | ILC2_spleen |
| CLTA              | 1.14E-06 | 1.94604372 | 0.256 | 0.063 | 0.04034636 | ILC2_spleen |
| ZBTB20            | 1.16E-06 | 1.23733062 | 0.581 | 0.234 | 0.04103003 | ILC2_spleen |
| USP15             | 1.16E-06 | 1.20062508 | 0.698 | 0.326 | 0.04120218 | ILC2_spleen |
| APBB1IP           | 1.18E-06 | 1.17323934 | 0.767 | 0.411 | 0.04164996 | ILC2_spleen |
| BTN2A2            | 1.20E-06 | 1.36344535 | 0.372 | 0.115 | 0.04264596 | ILC2_spleen |
| PITPNC1           | 1.21E-06 | 2.09335978 | 0.372 | 0.121 | 0.04293233 | ILC2_spleen |
| WIPF1             | 1.23E-06 | 0.87459509 | 0.791 | 0.372 | 0.04359613 | ILC2_spleen |
| MANF              | 1.30E-06 | 0.99632019 | 0.419 | 0.13  | 0.04601951 | ILC2_spleen |
| UBA2              | 1.39E-06 | 1.3743602  | 0.326 | 0.091 | 0.04937014 | ILC2_spleen |
| MED13             | 1.42E-06 | 1.47097943 | 0.326 | 0.092 | 0.05042793 | ILC2_spleen |
| ITCH              | 1.44E-06 | 1.98687644 | 0.442 | 0.155 | 0.05114212 | ILC2_spleen |
| ROCK1             | 1.45E-06 | 1.18320109 | 0.558 | 0.219 | 0.05130952 | ILC2_spleen |
| WASL              | 1.57E-06 | 1.69769208 | 0.279 | 0.073 | 0.05559716 | ILC2_spleen |
| TRA2A             | 1.59E-06 | 1.07397723 | 0.651 | 0.296 | 0.05630374 | ILC2_spleen |
| PRPF38B           | 1.61E-06 | 1.45422215 | 0.395 | 0.128 | 0.05702388 | ILC2_spleen |
| SPTBN1            | 1.67E-06 | 1.05375949 | 0.326 | 0.09  | 0.05911765 | ILC2_spleen |
| TIA1              | 1.80E-06 | 1.45780966 | 0.349 | 0.104 | 0.0637391  | ILC2_spleen |
| PBXIP1            | 1.94E-06 | 1.15262395 | 0.419 | 0.135 | 0.06864172 | ILC2_spleen |
| ENSMUG00000063316 | 1.95E-06 | 1.73510471 | 0.442 | 0.162 | 0.06926862 | ILC2_spleen |
| MGRN1             | 1.99E-06 | 1.33396664 | 0.256 | 0.061 | 0.0706203  | ILC2_spleen |
| ARHGAP15          | 2.00E-06 | 1.3608453  | 0.744 | 0.43  | 0.07103274 | ILC2_spleen |
| FOXP1             | 2.03E-06 | 1.21238893 | 0.326 | 0.09  | 0.07209883 | ILC2_spleen |
| MICU2             | 2.14E-06 | 1.76713122 | 0.256 | 0.064 | 0.07565025 | ILC2_spleen |
| RANBP2            | 2.34E-06 | 1.56868444 | 0.465 | 0.175 | 0.08274169 | ILC2_spleen |
| PPP1R10           | 2.34E-06 | 1.13695719 | 0.442 | 0.151 | 0.08282472 | ILC2_spleen |
| MAT2B             | 2.39E-06 | 1.25695993 | 0.256 | 0.062 | 0.08475835 | ILC2_spleen |
| ATF7IP2           | 2.53E-06 | 1.16057071 | 0.326 | 0.093 | 0.08958073 | ILC2_spleen |
| NIBAN1            | 2.59E-06 | 1.58544928 | 0.419 | 0.147 | 0.09168358 | ILC2_spleen |
| ERO1A             | 2.60E-06 | 1.3611048  | 0.302 | 0.084 | 0.09218984 | ILC2_spleen |
| EPC1              | 2.67E-06 | 1.24324    | 0.651 | 0.292 | 0.09469415 | ILC2_spleen |
| NFATC3            | 2.74E-06 | 1.33614574 | 0.419 | 0.144 | 0.09711862 | ILC2_spleen |
| COG5              | 2.75E-06 | 1.5967066  | 0.372 | 0.121 | 0.09742828 | ILC2_spleen |

|                   |          |            |       |       |            |             |
|-------------------|----------|------------|-------|-------|------------|-------------|
| CAST              | 2.83E-06 | 1.46060114 | 0.419 | 0.143 | 0.10033799 | ILC2_spleen |
| CYRIB             | 2.85E-06 | 1.23568817 | 0.558 | 0.219 | 0.10082161 | ILC2_spleen |
| RAB21             | 2.88E-06 | 1.56797791 | 0.302 | 0.085 | 0.10202383 | ILC2_spleen |
| STK38             | 2.97E-06 | 1.34074893 | 0.302 | 0.084 | 0.10529553 | ILC2_spleen |
| ATM               | 3.01E-06 | 1.26082326 | 0.372 | 0.118 | 0.10681373 | ILC2_spleen |
| ENSMUG00000012203 | 3.04E-06 | 2.10970302 | 0.372 | 0.13  | 0.10780815 | ILC2_spleen |
| SURF4             | 3.18E-06 | 1.4722714  | 0.419 | 0.144 | 0.11281738 | ILC2_spleen |
| RNF113A           | 3.30E-06 | 1.29449165 | 0.279 | 0.073 | 0.11694134 | ILC2_spleen |
| NBR1              | 3.36E-06 | 1.65342012 | 0.326 | 0.098 | 0.11911276 | ILC2_spleen |
| AKNA              | 3.43E-06 | 1.15092498 | 0.372 | 0.115 | 0.12166845 | ILC2_spleen |
| CYB5R4            | 3.53E-06 | 1.55542632 | 0.256 | 0.065 | 0.12517435 | ILC2_spleen |
| CHMP5             | 3.73E-06 | 1.22709714 | 0.442 | 0.15  | 0.13224462 | ILC2_spleen |
| SF1               | 3.82E-06 | 1.56998912 | 0.419 | 0.159 | 0.13519925 | ILC2_spleen |
| SNX4              | 3.88E-06 | 1.33322398 | 0.326 | 0.095 | 0.13732326 | ILC2_spleen |
| SLC50A1           | 3.93E-06 | 1.5417078  | 0.279 | 0.075 | 0.139105   | ILC2_spleen |
| ZNF528            | 3.99E-06 | 0.97204917 | 0.442 | 0.148 | 0.14149071 | ILC2_spleen |
| INPP4B            | 4.06E-06 | 1.51443789 | 0.581 | 0.291 | 0.14396674 | ILC2_spleen |
| P4HB              | 4.07E-06 | 0.76602224 | 0.419 | 0.135 | 0.14423932 | ILC2_spleen |
| CCDC47            | 4.07E-06 | 1.41070597 | 0.279 | 0.075 | 0.14435031 | ILC2_spleen |
| SNX14             | 4.15E-06 | 1.56547311 | 0.372 | 0.124 | 0.14700928 | ILC2_spleen |
| TET2              | 4.18E-06 | 1.36920275 | 0.279 | 0.076 | 0.14820284 | ILC2_spleen |
| PAICS             | 4.23E-06 | 1.44437049 | 0.256 | 0.065 | 0.14971816 | ILC2_spleen |
| DNAJC1            | 4.28E-06 | 2.03338984 | 0.279 | 0.079 | 0.15153467 | ILC2_spleen |
| MED13L            | 4.34E-06 | 1.10297606 | 0.465 | 0.175 | 0.15379905 | ILC2_spleen |
| STK17A            | 4.38E-06 | 1.18478804 | 0.744 | 0.395 | 0.15536309 | ILC2_spleen |
| CCNL1             | 4.39E-06 | 1.09512926 | 0.86  | 0.514 | 0.1556071  | ILC2_spleen |
| RAB6A             | 4.40E-06 | 1.28659306 | 0.256 | 0.065 | 0.15573127 | ILC2_spleen |
| RPL26             | 4.47E-06 | 0.71346109 | 0.907 | 0.813 | 0.15841075 | ILC2_spleen |
| EWSR1             | 4.52E-06 | 1.17038065 | 0.349 | 0.107 | 0.16010304 | ILC2_spleen |
| CERS2             | 4.55E-06 | 1.46062752 | 0.256 | 0.065 | 0.16130704 | ILC2_spleen |
| LUC7L             | 4.62E-06 | 1.97357707 | 0.279 | 0.078 | 0.16384348 | ILC2_spleen |
| RNF38             | 4.63E-06 | 1.71441465 | 0.279 | 0.077 | 0.16389612 | ILC2_spleen |
| CCM2              | 4.73E-06 | 1.24917457 | 0.326 | 0.097 | 0.16767988 | ILC2_spleen |

|                   |          |            |       |       |            |             |
|-------------------|----------|------------|-------|-------|------------|-------------|
| SETD5             | 4.77E-06 | 1.67783043 | 0.326 | 0.102 | 0.16885287 | ILC2_spleen |
| FCMR              | 4.87E-06 | 1.21277837 | 0.279 | 0.075 | 0.17272087 | ILC2_spleen |
| PCNX1             | 4.94E-06 | 1.56896861 | 0.349 | 0.108 | 0.17515167 | ILC2_spleen |
| H2AFY             | 5.11E-06 | 1.44310535 | 0.442 | 0.166 | 0.18123196 | ILC2_spleen |
| RSF1              | 5.19E-06 | 1.39663498 | 0.395 | 0.131 | 0.1838861  | ILC2_spleen |
| ENSMUG00000065373 | 5.41E-06 | 1.22127538 | 0.907 | 0.765 | 0.19156521 | ILC2_spleen |
| PSMD7             | 5.45E-06 | 1.02101719 | 0.372 | 0.117 | 0.19313989 | ILC2_spleen |
| DOCK2             | 5.49E-06 | 1.12669532 | 0.651 | 0.275 | 0.19440459 | ILC2_spleen |
| PICALM            | 5.52E-06 | 1.3395223  | 0.605 | 0.279 | 0.19564371 | ILC2_spleen |
| DTNBP1            | 5.59E-06 | 1.42548615 | 0.372 | 0.126 | 0.19804895 | ILC2_spleen |
| NCOA2             | 5.67E-06 | 1.25655528 | 0.302 | 0.088 | 0.20075955 | ILC2_spleen |
| PTPN6             | 5.69E-06 | 1.60390479 | 0.279 | 0.078 | 0.20165544 | ILC2_spleen |
| CHORDC1           | 5.75E-06 | 1.1644519  | 0.419 | 0.147 | 0.20360239 | ILC2_spleen |
| KDM6B             | 5.81E-06 | 1.20822901 | 0.419 | 0.147 | 0.20576128 | ILC2_spleen |
| TAF15             | 5.85E-06 | 1.13002562 | 0.419 | 0.142 | 0.20714865 | ILC2_spleen |
| HSPA8             | 5.95E-06 | 0.84247241 | 0.86  | 0.511 | 0.21068732 | ILC2_spleen |
| SRSF2             | 6.24E-06 | 1.3391789  | 0.372 | 0.125 | 0.22122783 | ILC2_spleen |
| ZFAND3            | 6.30E-06 | 0.69896614 | 0.535 | 0.203 | 0.22321065 | ILC2_spleen |
| AGTPBP1           | 6.32E-06 | 0.83739663 | 0.349 | 0.107 | 0.22397061 | ILC2_spleen |
| DECR2             | 6.37E-06 | 1.75170899 | 0.256 | 0.067 | 0.22561454 | ILC2_spleen |
| AQR               | 6.38E-06 | 1.49757461 | 0.279 | 0.078 | 0.22589766 | ILC2_spleen |
| GAS7              | 6.41E-06 | 1.94451    | 0.279 | 0.081 | 0.22728863 | ILC2_spleen |
| FBXO33            | 6.47E-06 | 2.16296813 | 0.256 | 0.067 | 0.22920633 | ILC2_spleen |
| PELI1             | 6.52E-06 | 1.53511615 | 0.442 | 0.167 | 0.23098881 | ILC2_spleen |
| FBXO11            | 6.78E-06 | 2.02795124 | 0.302 | 0.089 | 0.24030629 | ILC2_spleen |
| PPP2R2A           | 7.00E-06 | 1.45874627 | 0.302 | 0.092 | 0.2480214  | ILC2_spleen |
| NSD3              | 7.17E-06 | 0.9396811  | 0.512 | 0.195 | 0.25410218 | ILC2_spleen |
| ETS1              | 7.23E-06 | 0.91026129 | 0.814 | 0.484 | 0.25626399 | ILC2_spleen |
| CERT1             | 7.30E-06 | 1.75828614 | 0.279 | 0.078 | 0.25850688 | ILC2_spleen |
| PPP6R3            | 7.43E-06 | 1.15769181 | 0.395 | 0.134 | 0.26320798 | ILC2_spleen |
| MZT2B             | 7.49E-06 | 1.07373438 | 0.395 | 0.132 | 0.26530217 | ILC2_spleen |
| AGO3              | 7.58E-06 | 2.13871419 | 0.279 | 0.083 | 0.2686271  | ILC2_spleen |
| COX3              | 7.58E-06 | 1.33494057 | 0.814 | 0.826 | 0.26874358 | ILC2_spleen |

|                   |          |            |       |       |            |             |
|-------------------|----------|------------|-------|-------|------------|-------------|
| RAP1GDS1          | 7.68E-06 | 1.2918773  | 0.279 | 0.078 | 0.2721033  | ILC2_spleen |
| HSP90AB1          | 7.79E-06 | 0.69832608 | 0.907 | 0.802 | 0.27615864 | ILC2_spleen |
| RBM39             | 8.24E-06 | 0.9640523  | 0.86  | 0.494 | 0.29180721 | ILC2_spleen |
| BABAM2            | 8.51E-06 | 1.24747655 | 0.395 | 0.139 | 0.30143619 | ILC2_spleen |
| BTBD9             | 8.60E-06 | 1.06410802 | 0.302 | 0.09  | 0.3047708  | ILC2_spleen |
| CDC42SE1          | 8.69E-06 | 1.35000861 | 0.349 | 0.112 | 0.30792527 | ILC2_spleen |
| STK10             | 8.72E-06 | 1.38966714 | 0.395 | 0.142 | 0.30880522 | ILC2_spleen |
| SMAP2             | 8.92E-06 | 1.29142028 | 0.372 | 0.124 | 0.31607059 | ILC2_spleen |
| PRRC2B            | 9.01E-06 | 1.47135373 | 0.326 | 0.102 | 0.31915257 | ILC2_spleen |
| HECTD1            | 9.26E-06 | 1.34254523 | 0.279 | 0.078 | 0.32796853 | ILC2_spleen |
| MAPRE2            | 9.58E-06 | 1.83020193 | 0.395 | 0.143 | 0.33943882 | ILC2_spleen |
| SSBP2             | 9.59E-06 | 1.44623327 | 0.535 | 0.235 | 0.33971778 | ILC2_spleen |
| ENSMUG00000000249 | 9.94E-06 | 1.04979985 | 0.372 | 0.121 | 0.35214541 | ILC2_spleen |
| ATRX              | 1.06E-05 | 0.7245255  | 0.512 | 0.192 | 0.37404776 | ILC2_spleen |
| TRIP12            | 1.08E-05 | 0.92297094 | 0.372 | 0.122 | 0.38176895 | ILC2_spleen |
| ARGLU1            | 1.08E-05 | 0.9768874  | 0.605 | 0.261 | 0.38290775 | ILC2_spleen |
| ATXN1             | 1.12E-05 | 1.42270656 | 0.279 | 0.08  | 0.39634412 | ILC2_spleen |
| VPS4A             | 1.17E-05 | 0.90897941 | 0.279 | 0.076 | 0.41530278 | ILC2_spleen |
| GNG2              | 1.17E-05 | 1.26376004 | 0.465 | 0.181 | 0.41621819 | ILC2_spleen |
| ESYT1             | 1.18E-05 | 1.11636772 | 0.395 | 0.135 | 0.41714622 | ILC2_spleen |
| AAK1              | 1.19E-05 | 1.22338717 | 0.512 | 0.221 | 0.42135681 | ILC2_spleen |
| CMAH              | 1.19E-05 | 2.14626879 | 0.279 | 0.084 | 0.42186218 | ILC2_spleen |
| DDX52             | 1.19E-05 | 1.62958233 | 0.279 | 0.082 | 0.42323801 | ILC2_spleen |
| TMOD3             | 1.22E-05 | 1.27825583 | 0.465 | 0.167 | 0.43401479 | ILC2_spleen |
| EIF4A2            | 1.24E-05 | 1.10691105 | 0.581 | 0.274 | 0.4385524  | ILC2_spleen |
| GOLGA4            | 1.25E-05 | 1.57367155 | 0.372 | 0.135 | 0.44326386 | ILC2_spleen |
| SETX              | 1.26E-05 | 1.40673799 | 0.349 | 0.118 | 0.44525739 | ILC2_spleen |
| M6PR              | 1.26E-05 | 1.33841737 | 0.372 | 0.129 | 0.44806036 | ILC2_spleen |
| HMGA1             | 1.28E-05 | 1.1592654  | 0.372 | 0.126 | 0.45199077 | ILC2_spleen |
| MSI2              | 1.28E-05 | 0.98294331 | 0.372 | 0.127 | 0.45453274 | ILC2_spleen |
| CTNBL1            | 1.31E-05 | 0.82661525 | 0.326 | 0.095 | 0.46322192 | ILC2_spleen |
| USP47             | 1.33E-05 | 1.14279141 | 0.395 | 0.139 | 0.47110471 | ILC2_spleen |
| PRPF8             | 1.36E-05 | 1.12206745 | 0.395 | 0.138 | 0.48081314 | ILC2_spleen |



|                   |          |            |       |       |            |             |
|-------------------|----------|------------|-------|-------|------------|-------------|
| RUNX1             | 1.36E-05 | 1.32401721 | 0.512 | 0.218 | 0.48249515 | ILC2_spleen |
| FNDC3B            | 1.37E-05 | 1.16209426 | 0.256 | 0.07  | 0.48472467 | ILC2_spleen |
| GALNT1            | 1.38E-05 | 1.28776774 | 0.256 | 0.07  | 0.48722714 | ILC2_spleen |
| RHEB              | 1.40E-05 | 1.3016646  | 0.395 | 0.144 | 0.49466865 | ILC2_spleen |
| CEP85L            | 1.49E-05 | 1.01682783 | 0.395 | 0.137 | 0.52690303 | ILC2_spleen |
| GNB1              | 1.51E-05 | 1.50820605 | 0.326 | 0.108 | 0.53389606 | ILC2_spleen |
| SZRD1             | 1.54E-05 | 1.07749638 | 0.372 | 0.124 | 0.54506211 | ILC2_spleen |
| ANXA2             | 1.58E-05 | 1.19752589 | 0.349 | 0.115 | 0.56083201 | ILC2_spleen |
| VAPA              | 1.60E-05 | 0.91508967 | 0.581 | 0.246 | 0.56553642 | ILC2_spleen |
| UBR1              | 1.64E-05 | 1.28100486 | 0.326 | 0.107 | 0.58019005 | ILC2_spleen |
| RALGPS2           | 1.68E-05 | 1.52306327 | 0.256 | 0.074 | 0.59436328 | ILC2_spleen |
| PPIG              | 1.69E-05 | 1.12499242 | 0.488 | 0.18  | 0.60004565 | ILC2_spleen |
| TMC8              | 1.78E-05 | 1.25633994 | 0.256 | 0.07  | 0.62979027 | ILC2_spleen |
| WDR26             | 1.79E-05 | 1.5322031  | 0.256 | 0.072 | 0.63527265 | ILC2_spleen |
| NSF               | 1.84E-05 | 1.41969045 | 0.302 | 0.093 | 0.65269648 | ILC2_spleen |
| CARD11            | 1.86E-05 | 1.7043741  | 0.302 | 0.093 | 0.65768883 | ILC2_spleen |
| OSBPL8            | 1.87E-05 | 1.63702589 | 0.419 | 0.159 | 0.66368609 | ILC2_spleen |
| C20H16orf54       | 1.90E-05 | 1.51258417 | 0.302 | 0.095 | 0.67165578 | ILC2_spleen |
| SINHCAF           | 1.92E-05 | 1.22551478 | 0.302 | 0.095 | 0.68170766 | ILC2_spleen |
| SSH2              | 1.99E-05 | 0.87251414 | 0.605 | 0.265 | 0.70558611 | ILC2_spleen |
| KDM2B             | 2.05E-05 | 1.8103906  | 0.256 | 0.076 | 0.72505186 | ILC2_spleen |
| SCAF8             | 2.05E-05 | 1.60034012 | 0.256 | 0.073 | 0.72773714 | ILC2_spleen |
| ZNF506            | 2.06E-05 | 1.22110918 | 0.279 | 0.081 | 0.73123566 | ILC2_spleen |
| NCK1              | 2.16E-05 | 1.59160957 | 0.372 | 0.137 | 0.76613473 | ILC2_spleen |
| ARID4B            | 2.16E-05 | 1.51278031 | 0.558 | 0.266 | 0.76668584 | ILC2_spleen |
| OXR1              | 2.17E-05 | 1.51527334 | 0.302 | 0.097 | 0.76899615 | ILC2_spleen |
| ST6GAL1           | 2.17E-05 | 1.5499207  | 0.442 | 0.186 | 0.7692051  | ILC2_spleen |
| KANSL2            | 2.22E-05 | 1.5570646  | 0.256 | 0.074 | 0.78746164 | ILC2_spleen |
| ENSMUG00000022610 | 2.24E-05 | 1.1841906  | 0.302 | 0.092 | 0.79319653 | ILC2_spleen |
| CAPZA2            | 2.29E-05 | 1.06977072 | 0.581 | 0.264 | 0.81172466 | ILC2_spleen |
| SP110             | 2.33E-05 | 1.48945405 | 0.349 | 0.118 | 0.82444341 | ILC2_spleen |
| LCP2              | 2.33E-05 | 1.34591293 | 0.279 | 0.083 | 0.82648461 | ILC2_spleen |
| LBH               | 2.42E-05 | 0.95963688 | 0.302 | 0.092 | 0.85598834 | ILC2_spleen |

|                     |          |            |       |       |            |             |
|---------------------|----------|------------|-------|-------|------------|-------------|
| ARL4A               | 2.53E-05 | 0.95050281 | 0.256 | 0.07  | 0.89673278 | ILC2_spleen |
| NCLN                | 2.59E-05 | 1.33480055 | 0.372 | 0.135 | 0.91883762 | ILC2_spleen |
| DCAF6               | 2.65E-05 | 1.16807961 | 0.256 | 0.073 | 0.93888274 | ILC2_spleen |
| NSRP1               | 2.66E-05 | 0.76549207 | 0.419 | 0.147 | 0.94416265 | ILC2_spleen |
| ENSMMUG000000061125 | 2.72E-05 | 1.3835011  | 0.558 | 0.284 | 0.96471245 | ILC2_spleen |
| HERC1               | 2.81E-05 | 1.47097822 | 0.326 | 0.113 | 0.99500116 | ILC2_spleen |
| UBE2L6              | 2.90E-05 | 1.15159612 | 0.256 | 0.072 | 1          | ILC2_spleen |
| CCNY                | 2.95E-05 | 0.84277818 | 0.256 | 0.071 | 1          | ILC2_spleen |
| GTDC1               | 2.99E-05 | 1.45200817 | 0.256 | 0.074 | 1          | ILC2_spleen |
| ENSMMUG000000050862 | 3.07E-05 | 1.21569736 | 0.256 | 0.075 | 1          | ILC2_spleen |
| SIK3                | 3.15E-05 | 1.3487895  | 0.651 | 0.347 | 1          | ILC2_spleen |
| FNDC3A              | 3.22E-05 | 1.15985419 | 0.372 | 0.13  | 1          | ILC2_spleen |
| MED23               | 3.26E-05 | 1.72086609 | 0.256 | 0.075 | 1          | ILC2_spleen |
| ENSMMUG000000000478 | 3.31E-05 | 1.27234536 | 0.279 | 0.084 | 1          | ILC2_spleen |
| UBAP1               | 3.39E-05 | 1.29838823 | 0.279 | 0.084 | 1          | ILC2_spleen |
| LAPTM5              | 3.41E-05 | 0.83013872 | 0.581 | 0.27  | 1          | ILC2_spleen |
| KDM3B               | 3.46E-05 | 1.41141557 | 0.256 | 0.075 | 1          | ILC2_spleen |
| FAM50A              | 3.71E-05 | 1.46878828 | 0.256 | 0.073 | 1          | ILC2_spleen |
| SUZ12               | 3.71E-05 | 1.35127441 | 0.256 | 0.075 | 1          | ILC2_spleen |
| CAMLG               | 3.76E-05 | 0.84841909 | 0.442 | 0.164 | 1          | ILC2_spleen |
| MPHOSPH8            | 3.78E-05 | 1.12949788 | 0.395 | 0.148 | 1          | ILC2_spleen |
| TGS1                | 3.83E-05 | 1.17278256 | 0.256 | 0.074 | 1          | ILC2_spleen |
| HK1                 | 3.88E-05 | 1.28816714 | 0.302 | 0.098 | 1          | ILC2_spleen |
| SCFD1               | 4.00E-05 | 0.97010969 | 0.256 | 0.073 | 1          | ILC2_spleen |
| BNIP2               | 4.06E-05 | 1.45461154 | 0.256 | 0.075 | 1          | ILC2_spleen |
| HNRNPF              | 4.13E-05 | 1.01942376 | 0.674 | 0.355 | 1          | ILC2_spleen |
| MAP2K3              | 4.30E-05 | 0.96565829 | 0.349 | 0.121 | 1          | ILC2_spleen |
| CHD4                | 4.33E-05 | 1.12520308 | 0.349 | 0.123 | 1          | ILC2_spleen |
| HOOK3               | 4.46E-05 | 0.85974227 | 0.651 | 0.301 | 1          | ILC2_spleen |
| RAD21               | 4.47E-05 | 0.91274871 | 0.442 | 0.173 | 1          | ILC2_spleen |
| SUSD6               | 4.53E-05 | 1.35942841 | 0.256 | 0.076 | 1          | ILC2_spleen |
| ZSWIM6              | 4.56E-05 | 1.04905832 | 0.256 | 0.075 | 1          | ILC2_spleen |
| MYO1F               | 4.71E-05 | 1.20819161 | 0.279 | 0.086 | 1          | ILC2_spleen |

|                     |          |            |       |       |               |
|---------------------|----------|------------|-------|-------|---------------|
| ENSMMUG000000006803 | 4.73E-05 | 0.68621385 | 0.442 | 0.165 | 1 ILC2_spleen |
| DOCK10              | 4.91E-05 | 1.08139554 | 0.512 | 0.221 | 1 ILC2_spleen |
| SUPT5H              | 5.00E-05 | 1.17433263 | 0.302 | 0.098 | 1 ILC2_spleen |
| ATF7IP              | 5.22E-05 | 0.66933736 | 0.535 | 0.219 | 1 ILC2_spleen |
| TRPS1               | 5.22E-05 | 0.69066788 | 0.349 | 0.118 | 1 ILC2_spleen |
| SESN1               | 5.24E-05 | 1.04846616 | 0.442 | 0.175 | 1 ILC2_spleen |
| RESF1               | 5.37E-05 | 1.39571595 | 0.279 | 0.09  | 1 ILC2_spleen |
| HIPK3               | 5.48E-05 | 1.16501653 | 0.279 | 0.087 | 1 ILC2_spleen |
| RBM5                | 5.51E-05 | 1.46188583 | 0.349 | 0.126 | 1 ILC2_spleen |
| TGFB1               | 5.54E-05 | 0.98578393 | 0.442 | 0.172 | 1 ILC2_spleen |
| GLYR1               | 5.73E-05 | 1.1385322  | 0.256 | 0.077 | 1 ILC2_spleen |
| SNRK                | 5.83E-05 | 1.09029989 | 0.372 | 0.135 | 1 ILC2_spleen |
| PAFAH1B1            | 5.92E-05 | 0.89818668 | 0.488 | 0.198 | 1 ILC2_spleen |
| SDHAF4              | 5.94E-05 | 0.97232213 | 0.512 | 0.222 | 1 ILC2_spleen |
| RPS3                | 5.94E-05 | 0.5207863  | 0.953 | 0.944 | 1 ILC2_spleen |
| GNA13               | 6.14E-05 | 1.52581041 | 0.372 | 0.14  | 1 ILC2_spleen |
| BIN2                | 6.25E-05 | 0.91183042 | 0.605 | 0.291 | 1 ILC2_spleen |
| CYTIP               | 6.26E-05 | 1.75181025 | 0.256 | 0.08  | 1 ILC2_spleen |
| MTDH                | 6.28E-05 | 1.10953088 | 0.302 | 0.101 | 1 ILC2_spleen |
| AKAP13              | 6.28E-05 | 0.90620425 | 0.767 | 0.41  | 1 ILC2_spleen |
| NOP58               | 6.43E-05 | 1.35237955 | 0.395 | 0.152 | 1 ILC2_spleen |
| TRIB2               | 6.46E-05 | 1.00934718 | 0.442 | 0.17  | 1 ILC2_spleen |
| PLEKHB2             | 6.67E-05 | 0.93663333 | 0.372 | 0.135 | 1 ILC2_spleen |
| GGNBP2              | 6.68E-05 | 1.20747673 | 0.256 | 0.077 | 1 ILC2_spleen |
| NSMCE2              | 6.77E-05 | 1.12736345 | 0.302 | 0.101 | 1 ILC2_spleen |
| GPCPD1              | 6.80E-05 | 1.48466865 | 0.302 | 0.102 | 1 ILC2_spleen |
| RBM33               | 6.91E-05 | 1.05703994 | 0.302 | 0.099 | 1 ILC2_spleen |
| USP9X               | 7.18E-05 | 1.41656831 | 0.302 | 0.106 | 1 ILC2_spleen |
| RNF13               | 7.34E-05 | 1.2965691  | 0.326 | 0.116 | 1 ILC2_spleen |
| CALU                | 7.40E-05 | 1.17068162 | 0.302 | 0.101 | 1 ILC2_spleen |
| MARK3               | 7.55E-05 | 1.36988336 | 0.256 | 0.08  | 1 ILC2_spleen |
| UBE2D2              | 7.58E-05 | 0.85210436 | 0.372 | 0.133 | 1 ILC2_spleen |
| IRAK2               | 7.59E-05 | 1.44510309 | 0.419 | 0.178 | 1 ILC2_spleen |

|                    |            |            |       |       |               |
|--------------------|------------|------------|-------|-------|---------------|
| MGAT5              | 7.60E-05   | 1.12304771 | 0.419 | 0.178 | 1 ILC2_spleen |
| C4H6orf62          | 7.74E-05   | 1.51106112 | 0.279 | 0.091 | 1 ILC2_spleen |
| SUPT20H            | 7.78E-05   | 1.15580816 | 0.256 | 0.077 | 1 ILC2_spleen |
| PHF20              | 8.02E-05   | 1.15215318 | 0.349 | 0.124 | 1 ILC2_spleen |
| PDS5B              | 8.06E-05   | 1.01739977 | 0.256 | 0.077 | 1 ILC2_spleen |
| CYFIP2             | 8.48E-05   | 0.9604886  | 0.349 | 0.125 | 1 ILC2_spleen |
| TRIM22             | 8.73E-05   | 1.24590124 | 0.256 | 0.079 | 1 ILC2_spleen |
| CUX1               | 8.76E-05   | 1.07110412 | 0.326 | 0.115 | 1 ILC2_spleen |
| EIF2B3             | 8.81E-05   | 1.53315106 | 0.256 | 0.081 | 1 ILC2_spleen |
| HELZ               | 9.13E-05   | 1.43599822 | 0.419 | 0.177 | 1 ILC2_spleen |
| DDX39A             | 9.23E-05   | 0.93295642 | 0.442 | 0.183 | 1 ILC2_spleen |
| CNIH1              | 9.42E-05   | 1.32698544 | 0.256 | 0.079 | 1 ILC2_spleen |
| POLR2A             | 9.44E-05   | 1.37853435 | 0.256 | 0.081 | 1 ILC2_spleen |
| ENSMMUG00000001894 | 9.46E-05   | 1.49828974 | 0.279 | 0.09  | 1 ILC2_spleen |
| GIMAP7             | 9.58E-05   | 0.86539289 | 0.279 | 0.09  | 1 ILC2_spleen |
| SPECC1L            | 9.68E-05   | 0.96310219 | 0.349 | 0.127 | 1 ILC2_spleen |
| EIF3A              | 9.87E-05   | 1.22897566 | 0.419 | 0.178 | 1 ILC2_spleen |
| SMARCA5            | 9.90E-05   | 1.42608408 | 0.326 | 0.124 | 1 ILC2_spleen |
| ATXN7L3B           | 0.00010178 | 1.4742109  | 0.302 | 0.11  | 1 ILC2_spleen |
| LSM10              | 0.00010182 | 0.85190213 | 0.349 | 0.122 | 1 ILC2_spleen |
| DIAPH2             | 0.00010565 | 1.31221157 | 0.302 | 0.105 | 1 ILC2_spleen |
| IKZF2              | 0.00010663 | 0.97518347 | 0.605 | 0.283 | 1 ILC2_spleen |
| SUCLG2             | 0.00010786 | 1.22848693 | 0.279 | 0.091 | 1 ILC2_spleen |
| NRIP1              | 0.00011085 | 1.35351411 | 0.442 | 0.196 | 1 ILC2_spleen |
| TPM4               | 0.00011228 | 1.29857382 | 0.326 | 0.114 | 1 ILC2_spleen |
| PSPC1              | 0.00011637 | 0.74051019 | 0.256 | 0.078 | 1 ILC2_spleen |
| ZNF131             | 0.00011684 | 1.13743249 | 0.256 | 0.08  | 1 ILC2_spleen |
| CHST11             | 0.00011688 | 0.99437107 | 0.512 | 0.25  | 1 ILC2_spleen |
| RAB7A              | 0.00011903 | 1.19359192 | 0.442 | 0.181 | 1 ILC2_spleen |
| MAML3              | 0.00012225 | 1.16703348 | 0.279 | 0.093 | 1 ILC2_spleen |
| HIPK1              | 0.00012226 | 0.997907   | 0.279 | 0.09  | 1 ILC2_spleen |
| MED21              | 0.00012287 | 1.26727947 | 0.279 | 0.091 | 1 ILC2_spleen |
| IPO11              | 0.00012466 | 0.85319624 | 0.256 | 0.078 | 1 ILC2_spleen |

|            |            |            |       |       |               |
|------------|------------|------------|-------|-------|---------------|
| FBXO34     | 0.0001277  | 0.93679462 | 0.419 | 0.17  | 1 ILC2_spleen |
| UBAP2L     | 0.00013235 | 1.1002097  | 0.302 | 0.103 | 1 ILC2_spleen |
| TFAM       | 0.00013543 | 1.56801634 | 0.349 | 0.133 | 1 ILC2_spleen |
| ALKBH7     | 0.00014128 | 1.28754414 | 0.279 | 0.093 | 1 ILC2_spleen |
| CSGALNACT2 | 0.00014332 | 1.20235776 | 0.395 | 0.158 | 1 ILC2_spleen |
| PCM1       | 0.00015658 | 1.28904613 | 0.326 | 0.124 | 1 ILC2_spleen |
| PDE4B      | 0.00015981 | 1.35647792 | 0.535 | 0.267 | 1 ILC2_spleen |
| UBR5       | 0.00016519 | 0.57633506 | 0.349 | 0.128 | 1 ILC2_spleen |
| SH3KBP1    | 0.0001717  | 0.75762668 | 0.698 | 0.398 | 1 ILC2_spleen |
| SLC9A3R1   | 0.00017689 | 0.90941277 | 0.326 | 0.116 | 1 ILC2_spleen |
| LMBRD1     | 0.00018232 | 1.01728084 | 0.279 | 0.095 | 1 ILC2_spleen |
| ZNF93      | 0.00018927 | 0.89770515 | 0.279 | 0.094 | 1 ILC2_spleen |
| CHD3       | 0.00018953 | 1.19490566 | 0.279 | 0.096 | 1 ILC2_spleen |
| TFG        | 0.00019228 | 0.84961346 | 0.326 | 0.118 | 1 ILC2_spleen |
| TNRC6A     | 0.00019463 | 1.33668743 | 0.326 | 0.121 | 1 ILC2_spleen |
| PPP1CA     | 0.00019814 | 0.88399399 | 0.419 | 0.175 | 1 ILC2_spleen |
| TTC17      | 0.00019832 | 1.53969116 | 0.256 | 0.084 | 1 ILC2_spleen |
| SNX3       | 0.00020384 | 1.18902676 | 0.279 | 0.098 | 1 ILC2_spleen |
| ANAPC5     | 0.0002058  | 1.22186075 | 0.256 | 0.084 | 1 ILC2_spleen |
| ZNF609     | 0.00020927 | 1.60496351 | 0.279 | 0.099 | 1 ILC2_spleen |
| CUL1       | 0.00021341 | 1.20375047 | 0.279 | 0.098 | 1 ILC2_spleen |
| WRN        | 0.000223   | 0.92373971 | 0.302 | 0.107 | 1 ILC2_spleen |
| RNF138     | 0.0002247  | 1.42793707 | 0.256 | 0.086 | 1 ILC2_spleen |
| ZNF292     | 0.00022554 | 0.91062478 | 0.419 | 0.176 | 1 ILC2_spleen |
| PTPRCAP    | 0.00023817 | 0.97146108 | 0.279 | 0.096 | 1 ILC2_spleen |
| DUSP16     | 0.00024288 | 1.03432873 | 0.372 | 0.155 | 1 ILC2_spleen |
| ARHGAP30   | 0.00024982 | 0.75908129 | 0.442 | 0.181 | 1 ILC2_spleen |
| NPAT       | 0.00025104 | 1.40843919 | 0.279 | 0.098 | 1 ILC2_spleen |
| NEMF       | 0.00025278 | 1.16687478 | 0.256 | 0.086 | 1 ILC2_spleen |
| STAU2      | 0.0002551  | 0.84701263 | 0.279 | 0.093 | 1 ILC2_spleen |
| MGMT       | 0.00026245 | 0.84546006 | 0.419 | 0.176 | 1 ILC2_spleen |
| TMED10     | 0.00027181 | 0.93111011 | 0.512 | 0.24  | 1 ILC2_spleen |
| CAPN1      | 0.00027248 | 1.18121105 | 0.256 | 0.086 | 1 ILC2_spleen |

|                    |            |            |       |       |               |
|--------------------|------------|------------|-------|-------|---------------|
| RNF213             | 0.00028449 | 0.69890335 | 0.535 | 0.246 | 1 ILC2_spleen |
| FAM120A            | 0.00028689 | 1.10508394 | 0.302 | 0.109 | 1 ILC2_spleen |
| PNN                | 0.0002952  | 0.93990793 | 0.442 | 0.191 | 1 ILC2_spleen |
| RB1CC1             | 0.00030328 | 0.97632905 | 0.256 | 0.084 | 1 ILC2_spleen |
| EMC3               | 0.0003083  | 0.84254566 | 0.302 | 0.107 | 1 ILC2_spleen |
| ENSMMUG00000063859 | 0.00031487 | 1.39671989 | 0.256 | 0.09  | 1 ILC2_spleen |
| MAF1               | 0.00031489 | 0.54826904 | 0.256 | 0.082 | 1 ILC2_spleen |
| DNAJC2             | 0.00031767 | 1.13812421 | 0.256 | 0.086 | 1 ILC2_spleen |
| ENSMMUG00000058325 | 0.00031804 | 0.53821781 | 0.953 | 0.87  | 1 ILC2_spleen |
| RAB3GAP1           | 0.00032546 | 0.6603858  | 0.372 | 0.144 | 1 ILC2_spleen |
| MBNL1              | 0.00034585 | 0.828659   | 0.907 | 0.653 | 1 ILC2_spleen |
| PPFIBP1            | 0.0003527  | 1.17350565 | 0.256 | 0.087 | 1 ILC2_spleen |
| CDC73              | 0.00035643 | 1.23109745 | 0.256 | 0.087 | 1 ILC2_spleen |
| ST3GAL1            | 0.00037154 | 1.00855617 | 0.279 | 0.098 | 1 ILC2_spleen |
| PTPN1              | 0.00037469 | 1.19929725 | 0.395 | 0.179 | 1 ILC2_spleen |
| PPP4R3B            | 0.00037578 | 0.96661236 | 0.302 | 0.113 | 1 ILC2_spleen |
| MYO5A              | 0.00037584 | 1.80649741 | 0.279 | 0.103 | 1 ILC2_spleen |
| CUL5               | 0.00037789 | 0.71397714 | 0.442 | 0.192 | 1 ILC2_spleen |
| PACS1              | 0.00038294 | 0.80901782 | 0.349 | 0.139 | 1 ILC2_spleen |
| MRPL10             | 0.00039276 | 0.86963775 | 0.279 | 0.096 | 1 ILC2_spleen |
| SUPT3H             | 0.0003995  | 1.0347505  | 0.442 | 0.201 | 1 ILC2_spleen |
| ADAM19             | 0.00040186 | 1.34480845 | 0.256 | 0.092 | 1 ILC2_spleen |
| KDM5A              | 0.00040212 | 1.30689363 | 0.256 | 0.091 | 1 ILC2_spleen |
| ITM2C              | 0.00040438 | 0.99281107 | 0.302 | 0.113 | 1 ILC2_spleen |
| SSU72              | 0.00040841 | 0.78462144 | 0.349 | 0.134 | 1 ILC2_spleen |
| MARCHF7            | 0.00041825 | 1.44852317 | 0.349 | 0.142 | 1 ILC2_spleen |
| APEX1              | 0.00042488 | 0.82579278 | 0.395 | 0.164 | 1 ILC2_spleen |
| RBM27              | 0.00042907 | 1.0929908  | 0.302 | 0.109 | 1 ILC2_spleen |
| RBM25              | 0.000442   | 1.20921028 | 0.395 | 0.17  | 1 ILC2_spleen |
| BACH2              | 0.00044319 | 2.02180901 | 0.256 | 0.093 | 1 ILC2_spleen |
| UXS1               | 0.00044966 | 0.97982461 | 0.326 | 0.129 | 1 ILC2_spleen |
| INTS6              | 0.0004511  | 0.75051461 | 0.419 | 0.178 | 1 ILC2_spleen |
| SYNE3              | 0.00045282 | 0.54344    | 0.302 | 0.108 | 1 ILC2_spleen |

|                    |            |            |       |       |               |
|--------------------|------------|------------|-------|-------|---------------|
| VAV1               | 0.00046547 | 1.06111396 | 0.256 | 0.09  | 1 ILC2_spleen |
| FOXO1              | 0.00047442 | 1.03101385 | 0.302 | 0.118 | 1 ILC2_spleen |
| ZNF28              | 0.00050391 | 1.51546524 | 0.256 | 0.09  | 1 ILC2_spleen |
| DNAJC24            | 0.0005062  | 0.69675428 | 0.256 | 0.087 | 1 ILC2_spleen |
| BDP1               | 0.00055455 | 1.5917174  | 0.279 | 0.104 | 1 ILC2_spleen |
| TAX1BP1            | 0.00055882 | 0.8048152  | 0.535 | 0.269 | 1 ILC2_spleen |
| RBMS1              | 0.00057505 | 0.76284522 | 0.488 | 0.234 | 1 ILC2_spleen |
| PRPF4B             | 0.00058984 | 0.78579026 | 0.698 | 0.405 | 1 ILC2_spleen |
| GSK3B              | 0.00059224 | 1.2492349  | 0.279 | 0.106 | 1 ILC2_spleen |
| EZR                | 0.0006074  | 0.69276788 | 0.907 | 0.593 | 1 ILC2_spleen |
| JAK2               | 0.00061254 | 1.07972191 | 0.256 | 0.092 | 1 ILC2_spleen |
| S100A4             | 0.00062275 | 1.01844086 | 0.698 | 0.476 | 1 ILC2_spleen |
| ENSMMUG00000060923 | 0.00067248 | 0.74333105 | 0.698 | 0.421 | 1 ILC2_spleen |
| FGFR1OP2           | 0.00067412 | 0.97006908 | 0.419 | 0.178 | 1 ILC2_spleen |
| TACC1              | 0.00067523 | 0.61301221 | 0.372 | 0.15  | 1 ILC2_spleen |
| BRD4               | 0.00068239 | 0.89767174 | 0.302 | 0.115 | 1 ILC2_spleen |
| ARHGAP4            | 0.00072737 | 0.7418401  | 0.349 | 0.141 | 1 ILC2_spleen |
| CFLAR              | 0.00072971 | 0.76537552 | 0.419 | 0.186 | 1 ILC2_spleen |
| ACTR3              | 0.00073003 | 0.74568171 | 0.605 | 0.321 | 1 ILC2_spleen |
| EXOC6B             | 0.00074808 | 0.92186551 | 0.349 | 0.149 | 1 ILC2_spleen |
| ATG5               | 0.00075117 | 0.6509617  | 0.349 | 0.137 | 1 ILC2_spleen |
| DNAJA1             | 0.00076074 | 1.10247748 | 0.512 | 0.252 | 1 ILC2_spleen |
| ENSMMUG00000011580 | 0.00076114 | 0.57750424 | 0.465 | 0.209 | 1 ILC2_spleen |
| MYH9               | 0.0007628  | 1.02273734 | 0.488 | 0.248 | 1 ILC2_spleen |
| STAG2              | 0.00077451 | 0.65870163 | 0.558 | 0.266 | 1 ILC2_spleen |
| CRBN               | 0.00079554 | 1.01618878 | 0.256 | 0.091 | 1 ILC2_spleen |
| CYBA               | 0.00081658 | 0.57276747 | 0.674 | 0.378 | 1 ILC2_spleen |
| ARHGEF1            | 0.0008232  | 1.18813917 | 0.395 | 0.179 | 1 ILC2_spleen |
| SREK1              | 0.00085793 | 0.93473173 | 0.349 | 0.15  | 1 ILC2_spleen |
| SLC35B1            | 0.00087387 | 1.24225838 | 0.256 | 0.097 | 1 ILC2_spleen |
| IL7R               | 0.00087896 | 0.54976395 | 0.814 | 0.634 | 1 ILC2_spleen |
| RAPGEF2            | 0.00089414 | 0.65874069 | 0.465 | 0.228 | 1 ILC2_spleen |
| ENSMMUG00000016959 | 0.00094119 | 0.79322232 | 0.349 | 0.144 | 1 ILC2_spleen |

|         |            |            |       |       |               |
|---------|------------|------------|-------|-------|---------------|
| CCT4    | 0.00096103 | 0.8526209  | 0.465 | 0.228 | 1 ILC2_spleen |
| ARID5B  | 0.00096597 | 0.59364207 | 0.442 | 0.195 | 1 ILC2_spleen |
| DENND2D | 0.00098017 | 1.41400064 | 0.256 | 0.096 | 1 ILC2_spleen |
| RSRC1   | 0.00102692 | 0.91282326 | 0.302 | 0.121 | 1 ILC2_spleen |
| AKAP9   | 0.00103063 | 0.21261078 | 0.465 | 0.195 | 1 ILC2_spleen |
| BCL6    | 0.00103275 | 1.161768   | 0.256 | 0.096 | 1 ILC2_spleen |
| SCAF11  | 0.0010342  | 0.63598434 | 0.605 | 0.296 | 1 ILC2_spleen |
| TAOK3   | 0.00104136 | 0.85534582 | 0.395 | 0.18  | 1 ILC2_spleen |
| CHD6    | 0.00105005 | 1.18291912 | 0.326 | 0.138 | 1 ILC2_spleen |
| ZEB1    | 0.00105061 | 1.12154392 | 0.395 | 0.181 | 1 ILC2_spleen |
| PIGY    | 0.00105989 | 0.72767527 | 0.326 | 0.13  | 1 ILC2_spleen |
| CLINT1  | 0.00106055 | 0.9468047  | 0.605 | 0.352 | 1 ILC2_spleen |
| ZC3H11A | 0.00106359 | 0.87572249 | 0.326 | 0.13  | 1 ILC2_spleen |
| MTPN    | 0.00107477 | 0.46489882 | 0.419 | 0.181 | 1 ILC2_spleen |
| KIF2A   | 0.00109736 | 0.97275365 | 0.279 | 0.107 | 1 ILC2_spleen |
| ADD1    | 0.00110429 | 0.78284299 | 0.326 | 0.13  | 1 ILC2_spleen |
| LPP     | 0.00111966 | 1.04526118 | 0.302 | 0.124 | 1 ILC2_spleen |
| CSK     | 0.001156   | 1.03518914 | 0.395 | 0.178 | 1 ILC2_spleen |
| WBP11   | 0.00122671 | 0.70081418 | 0.395 | 0.174 | 1 ILC2_spleen |
| DENND4A | 0.00127462 | 0.86173591 | 0.744 | 0.506 | 1 ILC2_spleen |
| HM13    | 0.00127531 | 0.87184067 | 0.256 | 0.095 | 1 ILC2_spleen |
| BIN3    | 0.00130595 | 0.87803095 | 0.302 | 0.118 | 1 ILC2_spleen |
| ZMYND11 | 0.00134547 | 1.33914419 | 0.279 | 0.114 | 1 ILC2_spleen |
| ACIN1   | 0.0013464  | 0.78047597 | 0.349 | 0.145 | 1 ILC2_spleen |
| FBL     | 0.00136317 | 0.51145456 | 0.302 | 0.116 | 1 ILC2_spleen |
| HNRNPC  | 0.00137204 | 0.7840724  | 0.744 | 0.427 | 1 ILC2_spleen |
| AOPEP   | 0.00137569 | 0.59178268 | 0.605 | 0.353 | 1 ILC2_spleen |
| CMTM6   | 0.00137664 | 0.75532697 | 0.581 | 0.311 | 1 ILC2_spleen |
| SF3B2   | 0.00139836 | 0.67580982 | 0.326 | 0.131 | 1 ILC2_spleen |
| CDK17   | 0.00142907 | 0.8671039  | 0.442 | 0.22  | 1 ILC2_spleen |
| CCDC12  | 0.00146063 | 0.77172516 | 0.326 | 0.132 | 1 ILC2_spleen |
| IST1    | 0.00146204 | 0.85810333 | 0.326 | 0.131 | 1 ILC2_spleen |
| UBE2B   | 0.00152685 | 1.00957749 | 0.372 | 0.177 | 1 ILC2_spleen |



|                   |            |            |       |       |               |
|-------------------|------------|------------|-------|-------|---------------|
| NOSIP             | 0.00154382 | 1.24431766 | 0.256 | 0.1   | 1 ILC2_spleen |
| JAZF1             | 0.00155391 | 0.79797184 | 0.372 | 0.171 | 1 ILC2_spleen |
| OSBPL9            | 0.00156056 | 0.84313009 | 0.442 | 0.216 | 1 ILC2_spleen |
| TOP2B             | 0.00156679 | 1.39575316 | 0.349 | 0.153 | 1 ILC2_spleen |
| SNRNP200          | 0.00159214 | 0.56976704 | 0.279 | 0.106 | 1 ILC2_spleen |
| ITPR2             | 0.00160013 | 0.80737955 | 0.395 | 0.181 | 1 ILC2_spleen |
| ITGA4             | 0.00165913 | 1.34489518 | 0.256 | 0.102 | 1 ILC2_spleen |
| ASCC3             | 0.00168703 | 0.84693498 | 0.302 | 0.125 | 1 ILC2_spleen |
| HDLBP             | 0.00173141 | 0.897908   | 0.326 | 0.142 | 1 ILC2_spleen |
| NARS1             | 0.0017465  | 0.86843368 | 0.372 | 0.17  | 1 ILC2_spleen |
| PPP1CB            | 0.00178727 | 0.98383093 | 0.651 | 0.404 | 1 ILC2_spleen |
| EIF3D             | 0.0017948  | 0.74016443 | 0.395 | 0.179 | 1 ILC2_spleen |
| TUBA1A            | 0.00181106 | 0.6252317  | 0.674 | 0.399 | 1 ILC2_spleen |
| ENSMUG00000050829 | 0.00181372 | 0.61545245 | 0.698 | 0.421 | 1 ILC2_spleen |
| PTBP2             | 0.00181651 | 0.8909623  | 0.256 | 0.098 | 1 ILC2_spleen |
| GLIPR2            | 0.00185296 | 0.83004239 | 0.465 | 0.243 | 1 ILC2_spleen |
| ADAM10            | 0.00187279 | 0.81578996 | 0.302 | 0.124 | 1 ILC2_spleen |
| CALR              | 0.00187518 | 0.64593348 | 0.512 | 0.25  | 1 ILC2_spleen |
| STAG1             | 0.00188162 | 0.81090035 | 0.465 | 0.238 | 1 ILC2_spleen |
| OLA1              | 0.00191836 | 0.93937472 | 0.395 | 0.191 | 1 ILC2_spleen |
| HNRNPU            | 0.00194677 | 0.75072163 | 0.535 | 0.303 | 1 ILC2_spleen |
| TMEM243           | 0.00197155 | 0.86250503 | 0.442 | 0.209 | 1 ILC2_spleen |
| PDCD6IP           | 0.00211245 | 1.16573975 | 0.279 | 0.118 | 1 ILC2_spleen |
| RPS6KA1           | 0.00223077 | 1.22996489 | 0.256 | 0.099 | 1 ILC2_spleen |
| CTSC              | 0.00224296 | 0.52591263 | 0.326 | 0.137 | 1 ILC2_spleen |
| GLIPR1L2          | 0.00224711 | 1.05515387 | 0.419 | 0.208 | 1 ILC2_spleen |
| ELF1              | 0.00227831 | 0.50181565 | 0.698 | 0.422 | 1 ILC2_spleen |
| CNOT4             | 0.00229273 | 0.26531572 | 0.326 | 0.132 | 1 ILC2_spleen |
| FKBP5             | 0.00235136 | 1.10333426 | 0.256 | 0.104 | 1 ILC2_spleen |
| NDUFS4            | 0.00236054 | 0.45180722 | 0.488 | 0.221 | 1 ILC2_spleen |
| DDX50             | 0.00244402 | 1.02128026 | 0.302 | 0.132 | 1 ILC2_spleen |
| FMC1-LUC7L2       | 0.0025041  | 0.71049812 | 0.558 | 0.317 | 1 ILC2_spleen |
| ACTB              | 0.00252753 | 0.44140592 | 0.977 | 0.964 | 1 ILC2_spleen |

|                    |            |            |       |       |               |
|--------------------|------------|------------|-------|-------|---------------|
| BUB3               | 0.00260749 | 0.36137375 | 0.279 | 0.11  | 1 ILC2_spleen |
| WDR1               | 0.00262117 | 0.78215461 | 0.326 | 0.141 | 1 ILC2_spleen |
| RAB10              | 0.0026493  | 0.78121381 | 0.256 | 0.102 | 1 ILC2_spleen |
| KLHL6              | 0.00267729 | 0.87395139 | 0.302 | 0.13  | 1 ILC2_spleen |
| TUT7               | 0.00269622 | 0.87137616 | 0.326 | 0.146 | 1 ILC2_spleen |
| ARF5               | 0.00275247 | 0.722589   | 0.512 | 0.256 | 1 ILC2_spleen |
| ABHD12             | 0.00276265 | 0.64187553 | 0.279 | 0.115 | 1 ILC2_spleen |
| FXR1               | 0.00278946 | 0.76961046 | 0.442 | 0.224 | 1 ILC2_spleen |
| NECAP2             | 0.00280204 | 0.65285936 | 0.279 | 0.113 | 1 ILC2_spleen |
| ENSMMUG00000006965 | 0.00282659 | 0.42534976 | 0.442 | 0.206 | 1 ILC2_spleen |
| GPBP1L1            | 0.00284747 | 0.74633424 | 0.326 | 0.146 | 1 ILC2_spleen |
| NME3               | 0.00293352 | 0.82447731 | 0.419 | 0.216 | 1 ILC2_spleen |
| CCDC69             | 0.0029536  | 0.57808324 | 0.302 | 0.124 | 1 ILC2_spleen |
| SCML4              | 0.00295887 | 0.61622895 | 0.326 | 0.142 | 1 ILC2_spleen |
| CAPZA1             | 0.00299498 | 0.76142928 | 0.512 | 0.267 | 1 ILC2_spleen |
| COMMD7             | 0.00304709 | 0.74612412 | 0.349 | 0.159 | 1 ILC2_spleen |
| ING2               | 0.00305809 | 0.45966033 | 0.279 | 0.113 | 1 ILC2_spleen |
| URGCP              | 0.00313418 | 0.67328723 | 0.302 | 0.13  | 1 ILC2_spleen |
| EIF3E              | 0.00314226 | 0.49334741 | 0.86  | 0.591 | 1 ILC2_spleen |
| TYROBP             | 0.00320126 | 1.05534111 | 0.256 | 0.11  | 1 ILC2_spleen |
| ENSMMUG00000006293 | 0.00328175 | 0.64026895 | 0.395 | 0.184 | 1 ILC2_spleen |
| MRPL22             | 0.00333455 | 0.49888394 | 0.279 | 0.113 | 1 ILC2_spleen |
| DDX18              | 0.00337268 | 0.52574572 | 0.512 | 0.267 | 1 ILC2_spleen |
| WNK1               | 0.00347499 | 0.6070791  | 0.488 | 0.256 | 1 ILC2_spleen |
| TRIM72             | 0.00348428 | 0.64317789 | 0.465 | 0.239 | 1 ILC2_spleen |
| CCT8               | 0.00353306 | 0.62415203 | 0.395 | 0.19  | 1 ILC2_spleen |
| HUWE1              | 0.00354905 | 0.53401203 | 0.395 | 0.186 | 1 ILC2_spleen |
| PPIA               | 0.00357118 | 0.66438921 | 0.488 | 0.262 | 1 ILC2_spleen |
| BCLAF1             | 0.00366658 | 0.66068035 | 0.581 | 0.329 | 1 ILC2_spleen |
| KMT2E              | 0.00366858 | 0.36134893 | 0.651 | 0.36  | 1 ILC2_spleen |
| EIF2S3             | 0.00370327 | 0.77450363 | 0.256 | 0.103 | 1 ILC2_spleen |
| TCEA1              | 0.00375054 | 0.60657117 | 0.465 | 0.229 | 1 ILC2_spleen |
| PCBP1              | 0.00383588 | 0.59132178 | 0.558 | 0.313 | 1 ILC2_spleen |

|                     |            |            |       |       |               |
|---------------------|------------|------------|-------|-------|---------------|
| FLII                | 0.00389898 | 0.49209468 | 0.302 | 0.127 | 1 ILC2_spleen |
| CD74                | 0.00397499 | 0.23357739 | 0.279 | 0.118 | 1 ILC2_spleen |
| MLLT3               | 0.00408451 | 0.96454945 | 0.442 | 0.244 | 1 ILC2_spleen |
| ITGAL               | 0.004089   | 0.52112716 | 0.279 | 0.116 | 1 ILC2_spleen |
| XRN1                | 0.00414563 | 1.03032223 | 0.256 | 0.112 | 1 ILC2_spleen |
| BBX                 | 0.00418202 | 0.67499516 | 0.302 | 0.131 | 1 ILC2_spleen |
| NUMA1               | 0.00422176 | 0.33304662 | 0.256 | 0.101 | 1 ILC2_spleen |
| MED8                | 0.00422631 | 0.35662153 | 0.302 | 0.125 | 1 ILC2_spleen |
| GNAI3               | 0.00430137 | 0.54601148 | 0.372 | 0.17  | 1 ILC2_spleen |
| TBC1D10C            | 0.00430964 | 0.78838385 | 0.302 | 0.133 | 1 ILC2_spleen |
| ARFGAP3             | 0.00436585 | 1.08560313 | 0.326 | 0.152 | 1 ILC2_spleen |
| ENSMMUG00000004539  | 0.00440726 | 0.13547527 | 0.465 | 0.212 | 1 ILC2_spleen |
| PRPF40A             | 0.00441937 | 0.44841263 | 0.395 | 0.187 | 1 ILC2_spleen |
| ELF2                | 0.00454548 | 0.38838118 | 0.302 | 0.13  | 1 ILC2_spleen |
| CCT2                | 0.00464606 | 0.69757481 | 0.442 | 0.226 | 1 ILC2_spleen |
| PMPCB               | 0.00465624 | 0.67750088 | 0.256 | 0.104 | 1 ILC2_spleen |
| RPS14               | 0.00465958 | 0.17828777 | 0.977 | 0.989 | 1 ILC2_spleen |
| RTN3                | 0.004686   | 0.91647897 | 0.302 | 0.135 | 1 ILC2_spleen |
| GNAI2.1             | 0.00483505 | 0.6595113  | 0.488 | 0.261 | 1 ILC2_spleen |
| ARRB2               | 0.00485489 | 0.25634365 | 0.372 | 0.168 | 1 ILC2_spleen |
| ARAP2               | 0.00489197 | 0.28305897 | 0.279 | 0.117 | 1 ILC2_spleen |
| ENSA                | 0.00492832 | 0.71072895 | 0.535 | 0.305 | 1 ILC2_spleen |
| GNB2                | 0.00500391 | 0.87603078 | 0.302 | 0.138 | 1 ILC2_spleen |
| AP3B1               | 0.00500545 | 0.93253094 | 0.256 | 0.107 | 1 ILC2_spleen |
| TBC1D5              | 0.00509744 | 1.07822245 | 0.372 | 0.188 | 1 ILC2_spleen |
| ENSMMUG000000015274 | 0.00510656 | 0.88764671 | 0.302 | 0.141 | 1 ILC2_spleen |
| RSRC2               | 0.00516032 | 0.47610557 | 0.488 | 0.257 | 1 ILC2_spleen |
| ERP44               | 0.00526048 | 0.62340062 | 0.442 | 0.215 | 1 ILC2_spleen |
| PDLIM2              | 0.00533014 | 0.73471586 | 0.349 | 0.167 | 1 ILC2_spleen |
| PSMB4               | 0.00533958 | 0.52741868 | 0.419 | 0.2   | 1 ILC2_spleen |
| CEP350              | 0.00534013 | 1.05705474 | 0.256 | 0.107 | 1 ILC2_spleen |
| ATP5PB              | 0.00535562 | 0.55599863 | 0.372 | 0.177 | 1 ILC2_spleen |
| CNOT6L              | 0.00536691 | 0.56097182 | 0.372 | 0.178 | 1 ILC2_spleen |

|        |            |            |       |       |               |
|--------|------------|------------|-------|-------|---------------|
| EIF4G2 | 0.00541088 | 0.55948365 | 0.651 | 0.375 | 1 ILC2_spleen |
| ACAD10 | 0.00555532 | 0.62448851 | 0.256 | 0.107 | 1 ILC2_spleen |
| HSPA9  | 0.00556335 | 0.54180639 | 0.302 | 0.135 | 1 ILC2_spleen |
| ND3    | 0.00558359 | 0.7618973  | 0.651 | 0.4   | 1 ILC2_spleen |
| UBE2J1 | 0.00560032 | 0.69673249 | 0.326 | 0.153 | 1 ILC2_spleen |
| BAZ1A  | 0.00560915 | 0.53917417 | 0.442 | 0.216 | 1 ILC2_spleen |
| NRDC   | 0.00566836 | 0.53152601 | 0.256 | 0.105 | 1 ILC2_spleen |
| COMMD1 | 0.00567465 | 0.88534465 | 0.326 | 0.154 | 1 ILC2_spleen |
| USP10  | 0.00580739 | 0.63432822 | 0.302 | 0.135 | 1 ILC2_spleen |
| PSMD12 | 0.00590915 | 0.6692144  | 0.326 | 0.15  | 1 ILC2_spleen |
| EIF5   | 0.00595392 | 0.51676671 | 0.419 | 0.213 | 1 ILC2_spleen |
| PSMB9  | 0.00598276 | 0.53144202 | 0.465 | 0.24  | 1 ILC2_spleen |
| TUT4   | 0.00603495 | 0.83761684 | 0.349 | 0.176 | 1 ILC2_spleen |
| ZNF268 | 0.0060446  | 0.81935866 | 0.279 | 0.124 | 1 ILC2_spleen |
| ZFAND6 | 0.00619868 | 0.74122198 | 0.442 | 0.22  | 1 ILC2_spleen |
| VCL    | 0.00624935 | 1.09080526 | 0.256 | 0.115 | 1 ILC2_spleen |
| PARP6  | 0.00633101 | 0.7688485  | 0.279 | 0.124 | 1 ILC2_spleen |
| RPL7   | 0.00642478 | 0.55821981 | 0.93  | 0.818 | 1 ILC2_spleen |
| SEC31A | 0.0065374  | 0.72066796 | 0.279 | 0.124 | 1 ILC2_spleen |
| CHD1   | 0.0065419  | 0.71186688 | 0.349 | 0.169 | 1 ILC2_spleen |
| CNST   | 0.00659065 | 0.38537957 | 0.326 | 0.147 | 1 ILC2_spleen |
| SLC3A2 | 0.00660116 | 0.68599228 | 0.302 | 0.138 | 1 ILC2_spleen |
| EIF3M  | 0.00661013 | 0.50168259 | 0.535 | 0.288 | 1 ILC2_spleen |
| ZC3H13 | 0.00677007 | 1.17778927 | 0.279 | 0.131 | 1 ILC2_spleen |
| COX2   | 0.00681982 | 0.81899366 | 0.791 | 0.833 | 1 ILC2_spleen |
| SOS1   | 0.00715325 | 0.76339459 | 0.372 | 0.199 | 1 ILC2_spleen |
| PRXL2A | 0.00728795 | 0.19616753 | 0.256 | 0.104 | 1 ILC2_spleen |
| DAZAP2 | 0.0073336  | 0.56698112 | 0.372 | 0.182 | 1 ILC2_spleen |
| HNRNPL | 0.00736245 | 0.45443179 | 0.465 | 0.232 | 1 ILC2_spleen |
| MIC1   | 0.00736608 | 0.39015959 | 0.581 | 0.306 | 1 ILC2_spleen |
| MAP4K4 | 0.00753153 | 0.61153688 | 0.442 | 0.249 | 1 ILC2_spleen |
| UBXN4  | 0.00762178 | 1.01401798 | 0.395 | 0.204 | 1 ILC2_spleen |
| RGS10  | 0.00768413 | 0.69605011 | 0.256 | 0.112 | 1 ILC2_spleen |

|                     |            |            |       |       |               |
|---------------------|------------|------------|-------|-------|---------------|
| COPA                | 0.00773636 | 0.61198727 | 0.302 | 0.141 | 1 ILC2_spleen |
| SHISA5              | 0.00779586 | 0.51118663 | 0.488 | 0.258 | 1 ILC2_spleen |
| ENSMMUG00000010266  | 0.00783946 | 0.47749586 | 0.698 | 0.426 | 1 ILC2_spleen |
| YAF2                | 0.00789321 | 0.2794463  | 0.349 | 0.164 | 1 ILC2_spleen |
| EIF4B               | 0.00801144 | 0.52652258 | 0.442 | 0.23  | 1 ILC2_spleen |
| ZNF514              | 0.00805022 | 0.81802059 | 0.279 | 0.13  | 1 ILC2_spleen |
| ZNF644              | 0.00806832 | 0.92347555 | 0.349 | 0.179 | 1 ILC2_spleen |
| IFNAR1              | 0.00811819 | 0.72506854 | 0.395 | 0.198 | 1 ILC2_spleen |
| THRAP3              | 0.00815888 | 0.3487493  | 0.488 | 0.246 | 1 ILC2_spleen |
| KATNBL1             | 0.00822602 | 0.58624118 | 0.279 | 0.124 | 1 ILC2_spleen |
| PTP4A2              | 0.00838127 | 0.51165672 | 0.372 | 0.181 | 1 ILC2_spleen |
| SLC24A3             | 0.00856154 | 0.66540242 | 0.326 | 0.164 | 1 ILC2_spleen |
| PTPMT1              | 0.0089962  | 0.4987758  | 0.326 | 0.15  | 1 ILC2_spleen |
| TBCC                | 0.00901915 | 0.56775591 | 0.349 | 0.17  | 1 ILC2_spleen |
| SLC9A9              | 0.00909583 | 0.70336224 | 0.512 | 0.318 | 1 ILC2_spleen |
| DDX39B              | 0.00914734 | 0.89491282 | 0.279 | 0.129 | 1 ILC2_spleen |
| CACYBP              | 0.0091998  | 0.50208356 | 0.558 | 0.314 | 1 ILC2_spleen |
| ENSMMUG000000062821 | 0.00923026 | 0.45539508 | 0.302 | 0.138 | 1 ILC2_spleen |
| DHX36               | 0.00926354 | 0.46598173 | 0.488 | 0.255 | 1 ILC2_spleen |
| ITK                 | 0.00936277 | 0.71469882 | 0.628 | 0.428 | 1 ILC2_spleen |
| CGGBP1              | 0.00936298 | 1.00823136 | 0.256 | 0.12  | 1 ILC2_spleen |
| RNASEH2C            | 0.0095597  | 0.64060108 | 0.419 | 0.219 | 1 ILC2_spleen |
| BNIP3L              | 0.00957026 | 0.73585578 | 0.372 | 0.184 | 1 ILC2_spleen |
| IRF3                | 0.00957487 | 0.2090432  | 0.419 | 0.2   | 1 ILC2_spleen |
| ENSMMUG000000028699 | 0.00966225 | 0.83563144 | 0.372 | 0.192 | 1 ILC2_spleen |
| DCP2                | 0.01000172 | 0.84815129 | 0.279 | 0.134 | 1 ILC2_spleen |
| PXK                 | 0.0100591  | 0.98483522 | 0.256 | 0.116 | 1 ILC2_spleen |
| ITGB2               | 0.01025959 | 0.51076583 | 0.442 | 0.252 | 1 ILC2_spleen |
| MKLN1               | 0.0103483  | 0.39007628 | 0.256 | 0.113 | 1 ILC2_spleen |
| TRMT10C             | 0.01046323 | 0.6401901  | 0.372 | 0.196 | 1 ILC2_spleen |
| DDX17               | 0.01069155 | 0.29099698 | 0.465 | 0.235 | 1 ILC2_spleen |
| MAN1A1              | 0.01095773 | 0.72707383 | 0.256 | 0.117 | 1 ILC2_spleen |
| PSMA3               | 0.01112393 | 0.50913353 | 0.419 | 0.217 | 1 ILC2_spleen |

|                    |            |            |       |       |               |
|--------------------|------------|------------|-------|-------|---------------|
| PLCL1              | 0.0111599  | 1.02028147 | 0.302 | 0.157 | 1 ILC2_spleen |
| KIF5B              | 0.01118534 | 0.7501654  | 0.256 | 0.115 | 1 ILC2_spleen |
| PRKDC              | 0.0112062  | 0.56728548 | 0.349 | 0.174 | 1 ILC2_spleen |
| OGDH               | 0.01143074 | 0.76453282 | 0.256 | 0.123 | 1 ILC2_spleen |
| FAM102A            | 0.01150586 | 0.64812496 | 0.349 | 0.181 | 1 ILC2_spleen |
| EIF3H              | 0.01152067 | 0.64205371 | 0.628 | 0.441 | 1 ILC2_spleen |
| PIAS1              | 0.01201573 | 0.61272697 | 0.279 | 0.131 | 1 ILC2_spleen |
| BRAF               | 0.01208    | 0.8764941  | 0.302 | 0.147 | 1 ILC2_spleen |
| COX1               | 0.01230655 | 0.84736099 | 0.814 | 0.778 | 1 ILC2_spleen |
| ANXA1              | 0.01234732 | 0.42403879 | 0.837 | 0.638 | 1 ILC2_spleen |
| PHIP               | 0.01237675 | 0.78776059 | 0.302 | 0.146 | 1 ILC2_spleen |
| PFDN4              | 0.01242004 | 0.45033776 | 0.302 | 0.146 | 1 ILC2_spleen |
| LBR                | 0.01249084 | 0.93655118 | 0.279 | 0.13  | 1 ILC2_spleen |
| IRF2               | 0.01274235 | 0.4048517  | 0.349 | 0.171 | 1 ILC2_spleen |
| COMMD10            | 0.01289687 | 0.74255949 | 0.279 | 0.135 | 1 ILC2_spleen |
| ENSMMUG00000031367 | 0.01310271 | 0.75338742 | 0.256 | 0.118 | 1 ILC2_spleen |
| PHTF2              | 0.01311516 | 0.81142977 | 0.256 | 0.118 | 1 ILC2_spleen |
| CASP12             | 0.01335704 | 0.76041086 | 0.302 | 0.149 | 1 ILC2_spleen |
| HNRNPR             | 0.01367843 | 0.47593191 | 0.395 | 0.212 | 1 ILC2_spleen |
| MIER1              | 0.01388609 | 0.65329746 | 0.442 | 0.243 | 1 ILC2_spleen |
| NUCKS1             | 0.01399281 | 0.76385134 | 0.419 | 0.237 | 1 ILC2_spleen |
| BAX                | 0.0139935  | 0.28934905 | 0.442 | 0.23  | 1 ILC2_spleen |
| RUNX2              | 0.01401766 | 0.89283215 | 0.372 | 0.213 | 1 ILC2_spleen |
| RAB18              | 0.01411615 | 0.42907308 | 0.256 | 0.115 | 1 ILC2_spleen |
| NIFK               | 0.01446476 | 0.5395208  | 0.256 | 0.116 | 1 ILC2_spleen |
| RABGEF1            | 0.01478544 | 0.63387409 | 0.256 | 0.12  | 1 ILC2_spleen |
| CCT5               | 0.01478615 | 0.8254384  | 0.372 | 0.211 | 1 ILC2_spleen |
| PPP2R5C            | 0.01485023 | 0.25184482 | 0.628 | 0.363 | 1 ILC2_spleen |
| SMC4               | 0.01581865 | 1.05475707 | 0.256 | 0.13  | 1 ILC2_spleen |
| ILF3               | 0.01584803 | 0.61119134 | 0.256 | 0.12  | 1 ILC2_spleen |
| UBE2K              | 0.01603077 | 0.48062805 | 0.279 | 0.131 | 1 ILC2_spleen |
| NASP               | 0.0161286  | 0.43391009 | 0.442 | 0.241 | 1 ILC2_spleen |
| SHOC2              | 0.01631896 | 0.46537415 | 0.395 | 0.207 | 1 ILC2_spleen |

|                   |            |            |       |       |               |
|-------------------|------------|------------|-------|-------|---------------|
| U2SURP            | 0.01637472 | 0.23335488 | 0.395 | 0.201 | 1 ILC2_spleen |
| UBE2N             | 0.01668603 | 0.38286422 | 0.419 | 0.218 | 1 ILC2_spleen |
| GOLGA1            | 0.01676274 | 0.48115485 | 0.674 | 0.483 | 1 ILC2_spleen |
| SYNCRIP           | 0.01704249 | 0.94358863 | 0.279 | 0.144 | 1 ILC2_spleen |
| LAIR1             | 0.01749614 | 0.53297385 | 0.326 | 0.169 | 1 ILC2_spleen |
| EIF4H             | 0.01802097 | 0.47171674 | 0.372 | 0.198 | 1 ILC2_spleen |
| PTBP1             | 0.01818444 | 0.51223283 | 0.302 | 0.149 | 1 ILC2_spleen |
| CCPG1             | 0.01848119 | 0.19158663 | 0.279 | 0.131 | 1 ILC2_spleen |
| RPL31             | 0.01866832 | 0.31631635 | 0.721 | 0.435 | 1 ILC2_spleen |
| MRPL21            | 0.01874845 | 0.47120334 | 0.302 | 0.15  | 1 ILC2_spleen |
| REV3L             | 0.01919883 | 0.26308186 | 0.465 | 0.281 | 1 ILC2_spleen |
| RAP1B             | 0.02015664 | 0.4469813  | 0.628 | 0.409 | 1 ILC2_spleen |
| CHCHD3            | 0.02019511 | 0.385006   | 0.326 | 0.165 | 1 ILC2_spleen |
| HADHA             | 0.02060603 | 0.86273068 | 0.256 | 0.128 | 1 ILC2_spleen |
| DBNL              | 0.02079239 | 0.38316667 | 0.256 | 0.119 | 1 ILC2_spleen |
| IVNS1ABP          | 0.02087116 | 0.60860254 | 0.442 | 0.257 | 1 ILC2_spleen |
| MOB2              | 0.02144318 | 0.20138763 | 0.372 | 0.189 | 1 ILC2_spleen |
| ENSMUG00000040181 | 0.02269706 | 0.58348358 | 0.279 | 0.142 | 1 ILC2_spleen |
| SNX2              | 0.02272111 | 0.29964733 | 0.349 | 0.178 | 1 ILC2_spleen |
| TMED2             | 0.0232336  | 0.39053026 | 0.349 | 0.184 | 1 ILC2_spleen |
| PDAP1             | 0.02364082 | 0.77380537 | 0.372 | 0.204 | 1 ILC2_spleen |
| TAF9              | 0.02392412 | 0.57961727 | 0.395 | 0.222 | 1 ILC2_spleen |
| SEPTIN6           | 0.02400205 | 0.16629428 | 0.558 | 0.308 | 1 ILC2_spleen |
| C8H8orf33         | 0.02448293 | 0.19279    | 0.256 | 0.12  | 1 ILC2_spleen |
| SFPQ              | 0.0248631  | 0.96032394 | 0.419 | 0.253 | 1 ILC2_spleen |
| RAB2A             | 0.02509497 | 0.51932366 | 0.372 | 0.21  | 1 ILC2_spleen |
| GHITM             | 0.02526506 | 0.34756654 | 0.512 | 0.296 | 1 ILC2_spleen |
| CHCHD1            | 0.02546267 | 0.17080703 | 0.349 | 0.173 | 1 ILC2_spleen |
| SPINT2            | 0.02553029 | 0.70899143 | 0.302 | 0.156 | 1 ILC2_spleen |
| WAS               | 0.02650594 | 0.19510405 | 0.442 | 0.233 | 1 ILC2_spleen |
| MTX2              | 0.02667417 | 0.46254978 | 0.302 | 0.155 | 1 ILC2_spleen |
| ZNF267            | 0.02722767 | 0.55673137 | 0.256 | 0.129 | 1 ILC2_spleen |
| HSD17B11          | 0.02735847 | 0.19738918 | 0.302 | 0.148 | 1 ILC2_spleen |

|                    |            |            |       |       |               |
|--------------------|------------|------------|-------|-------|---------------|
| ERGIC2             | 0.02749171 | 0.34681098 | 0.256 | 0.125 | 1 ILC2_spleen |
| MTREX              | 0.02770412 | 0.68102165 | 0.326 | 0.172 | 1 ILC2_spleen |
| G3BP1              | 0.02833218 | 0.36539842 | 0.395 | 0.218 | 1 ILC2_spleen |
| GNAQ               | 0.02840755 | 0.86307016 | 0.279 | 0.15  | 1 ILC2_spleen |
| DDX6               | 0.02850111 | 0.75736528 | 0.326 | 0.182 | 1 ILC2_spleen |
| MEMO1              | 0.0288528  | 0.42943348 | 0.535 | 0.346 | 1 ILC2_spleen |
| SRSF1              | 0.02899944 | 0.16185444 | 0.395 | 0.211 | 1 ILC2_spleen |
| MIA2               | 0.0291345  | 0.301664   | 0.302 | 0.155 | 1 ILC2_spleen |
| XRCC5              | 0.02940639 | 0.32590915 | 0.512 | 0.295 | 1 ILC2_spleen |
| RPS6KA3            | 0.03051546 | 0.15208405 | 0.558 | 0.33  | 1 ILC2_spleen |
| ATP6               | 0.0306887  | 0.69232366 | 0.791 | 0.7   | 1 ILC2_spleen |
| DDX3Y              | 0.03173039 | 0.48267949 | 0.372 | 0.219 | 1 ILC2_spleen |
| CS                 | 0.03190769 | 0.86732225 | 0.349 | 0.204 | 1 ILC2_spleen |
| DENR               | 0.03264866 | 0.71490297 | 0.256 | 0.13  | 1 ILC2_spleen |
| ENSMMUG00000006608 | 0.03279731 | 0.25200779 | 0.628 | 0.397 | 1 ILC2_spleen |
| SUGT1              | 0.03288508 | 0.26822216 | 0.279 | 0.14  | 1 ILC2_spleen |
| TIMP1              | 0.03303482 | 0.31169046 | 0.419 | 0.238 | 1 ILC2_spleen |
| RBBP7              | 0.0334269  | 0.33314198 | 0.256 | 0.127 | 1 ILC2_spleen |
| IL2RA              | 0.03388073 | 0.67992194 | 0.349 | 0.201 | 1 ILC2_spleen |
| PREX1              | 0.03516004 | 0.34577793 | 0.372 | 0.203 | 1 ILC2_spleen |
| RFC1               | 0.03544012 | 0.45955756 | 0.302 | 0.161 | 1 ILC2_spleen |
| RNF5               | 0.03582405 | 0.22993199 | 0.279 | 0.138 | 1 ILC2_spleen |
| QARS1              | 0.03656261 | 0.33967817 | 0.372 | 0.204 | 1 ILC2_spleen |
| KAT6A              | 0.03706296 | 0.45308299 | 0.395 | 0.236 | 1 ILC2_spleen |
| GRB2               | 0.0371483  | 0.59800124 | 0.349 | 0.201 | 1 ILC2_spleen |
| CTSS               | 0.03793505 | 0.38430143 | 0.442 | 0.258 | 1 ILC2_spleen |
| SUPT16H            | 0.03797851 | 0.57296759 | 0.302 | 0.167 | 1 ILC2_spleen |
| CD7                | 0.03847899 | 0.62865608 | 0.395 | 0.246 | 1 ILC2_spleen |
| TANK               | 0.03853757 | 0.28966147 | 0.256 | 0.13  | 1 ILC2_spleen |
| SSR1               | 0.03868275 | 0.59901063 | 0.279 | 0.152 | 1 ILC2_spleen |
| MATR3              | 0.03900863 | 0.42369282 | 0.605 | 0.444 | 1 ILC2_spleen |
| ATF6               | 0.03918882 | 0.59182803 | 0.326 | 0.177 | 1 ILC2_spleen |
| TRAM1              | 0.03950028 | 0.1983589  | 0.395 | 0.22  | 1 ILC2_spleen |



|                     |            |            |       |       |               |
|---------------------|------------|------------|-------|-------|---------------|
| SERINC1             | 0.03971755 | 0.2886058  | 0.395 | 0.226 | 1 ILC2_spleen |
| DNAJB9              | 0.04081848 | 0.95024611 | 0.256 | 0.137 | 1 ILC2_spleen |
| SAR1A               | 0.04091556 | 0.32801667 | 0.279 | 0.144 | 1 ILC2_spleen |
| RASSF5              | 0.04113333 | 0.3069804  | 0.302 | 0.161 | 1 ILC2_spleen |
| SKAP1               | 0.04163453 | 0.69845819 | 0.698 | 0.534 | 1 ILC2_spleen |
| ENSMMUG00000011798  | 0.04246415 | 0.39228741 | 0.372 | 0.214 | 1 ILC2_spleen |
| CCT7                | 0.04248266 | 0.74511899 | 0.302 | 0.162 | 1 ILC2_spleen |
| PRRC2C              | 0.04355306 | 0.27006473 | 0.698 | 0.438 | 1 ILC2_spleen |
| SRSF11              | 0.04447438 | 0.40288496 | 0.698 | 0.468 | 1 ILC2_spleen |
| PPP1R18             | 0.04468419 | 0.55728563 | 0.349 | 0.206 | 1 ILC2_spleen |
| RNF167              | 0.04482472 | 0.69596577 | 0.302 | 0.165 | 1 ILC2_spleen |
| LMAN2               | 0.04484722 | 0.11634356 | 0.349 | 0.187 | 1 ILC2_spleen |
| WAC                 | 0.04497728 | 0.63139538 | 0.302 | 0.173 | 1 ILC2_spleen |
| EIF5B               | 0.0454251  | 0.59927588 | 0.326 | 0.189 | 1 ILC2_spleen |
| PCMTD1              | 0.04586429 | 0.31513437 | 0.279 | 0.145 | 1 ILC2_spleen |
| PAPOLA              | 0.04851093 | 0.38003547 | 0.488 | 0.309 | 1 ILC2_spleen |
| CSDE1               | 0.04852869 | 0.28647309 | 0.488 | 0.298 | 1 ILC2_spleen |
| RAB5A               | 0.04907667 | 0.63577407 | 0.302 | 0.172 | 1 ILC2_spleen |
| SLC38A2             | 0.04961932 | 0.34203174 | 0.349 | 0.198 | 1 ILC2_spleen |
| SS18                | 0.04980592 | 0.5254342  | 0.279 | 0.152 | 1 ILC2_spleen |
| ABCE1               | 0.0505554  | 0.32239672 | 0.256 | 0.134 | 1 ILC2_spleen |
| ENSMMUG000000063609 | 0.05070559 | 0.31793406 | 0.465 | 0.269 | 1 ILC2_spleen |
| CD53                | 0.05086552 | 0.28404292 | 0.581 | 0.403 | 1 ILC2_spleen |
| BZW2                | 0.05138221 | 0.43531941 | 0.256 | 0.137 | 1 ILC2_spleen |
| CNIH4               | 0.05182774 | 0.26474538 | 0.279 | 0.15  | 1 ILC2_spleen |
| PPIL4               | 0.05267274 | 0.21715825 | 0.395 | 0.226 | 1 ILC2_spleen |
| SRSF6               | 0.05343137 | 0.67593672 | 0.326 | 0.189 | 1 ILC2_spleen |
| ENSMMUG000000060545 | 0.05413802 | 0.67749595 | 0.256 | 0.136 | 1 ILC2_spleen |
| SMNDC1              | 0.05456855 | 0.22202355 | 0.349 | 0.197 | 1 ILC2_spleen |
| ZFP36               | 0.05549218 | 0.43408983 | 0.907 | 0.736 | 1 ILC2_spleen |
| DGUOK               | 0.05560888 | 0.35056209 | 0.279 | 0.149 | 1 ILC2_spleen |
| HERPUD1             | 0.05586751 | 0.43914587 | 0.302 | 0.173 | 1 ILC2_spleen |
| TMEM59L             | 0.05745042 | 0.56048156 | 0.302 | 0.178 | 1 ILC2_spleen |

|                    |            |            |       |       |               |
|--------------------|------------|------------|-------|-------|---------------|
| ANTXR2             | 0.05782929 | 0.59322582 | 0.349 | 0.207 | 1 ILC2_spleen |
| CD69               | 0.0585855  | 0.56147679 | 0.884 | 0.813 | 1 ILC2_spleen |
| ENSMMUG00000030448 | 0.05929295 | 0.14997923 | 0.326 | 0.179 | 1 ILC2_spleen |
| IMPDH2             | 0.05941531 | 0.52906225 | 0.256 | 0.141 | 1 ILC2_spleen |
| ETFA               | 0.05995063 | 0.36405029 | 0.256 | 0.138 | 1 ILC2_spleen |
| OGA                | 0.06046178 | 0.48187151 | 0.302 | 0.175 | 1 ILC2_spleen |
| RPL15              | 0.0616979  | 0.14938109 | 0.93  | 0.967 | 1 ILC2_spleen |
| POLR1D             | 0.06306107 | 0.65377002 | 0.535 | 0.347 | 1 ILC2_spleen |
| CD44               | 0.0632449  | 0.36741984 | 0.884 | 0.734 | 1 ILC2_spleen |
| BPTF               | 0.06326689 | 0.69863191 | 0.302 | 0.183 | 1 ILC2_spleen |
| HCLS1              | 0.06338129 | 0.40883585 | 0.256 | 0.141 | 1 ILC2_spleen |
| EFCAB2             | 0.06355601 | 0.24075208 | 0.326 | 0.184 | 1 ILC2_spleen |
| SRSF5              | 0.06530838 | 0.35222062 | 0.744 | 0.58  | 1 ILC2_spleen |
| FNTB               | 0.06576836 | 0.26983    | 0.512 | 0.316 | 1 ILC2_spleen |
| JUND               | 0.06595252 | 0.42676577 | 0.791 | 0.637 | 1 ILC2_spleen |
| LAT2               | 0.0662277  | 0.52601025 | 0.279 | 0.164 | 1 ILC2_spleen |
| TXNL1              | 0.06791771 | 0.33370252 | 0.302 | 0.176 | 1 ILC2_spleen |
| ENSMMUG00000065362 | 0.06903142 | 0.42523003 | 1     | 0.98  | 1 ILC2_spleen |
| PNRC2              | 0.07207087 | 0.43212466 | 0.326 | 0.199 | 1 ILC2_spleen |
| CHN2               | 0.07253902 | 0.42741875 | 0.349 | 0.224 | 1 ILC2_spleen |
| DHX9               | 0.07328355 | 0.14530535 | 0.326 | 0.187 | 1 ILC2_spleen |
| XRN2               | 0.077462   | 0.40678421 | 0.349 | 0.222 | 1 ILC2_spleen |
| ND4                | 0.08211587 | 0.66304293 | 0.767 | 0.794 | 1 ILC2_spleen |
| ENSMMUG00000062086 | 0.08320313 | 0.5497636  | 0.419 | 0.28  | 1 ILC2_spleen |
| COPS8              | 0.08349095 | 0.3789888  | 0.256 | 0.143 | 1 ILC2_spleen |
| CCDC107            | 0.08436321 | 0.30774474 | 0.302 | 0.178 | 1 ILC2_spleen |
| UBB                | 0.08475096 | 0.33289435 | 0.791 | 0.789 | 1 ILC2_spleen |
| HNRNPA3            | 0.08498533 | 0.22518477 | 0.767 | 0.519 | 1 ILC2_spleen |
| MFNG               | 0.08527455 | 0.2365127  | 0.488 | 0.305 | 1 ILC2_spleen |
| ENSMMUG00000012537 | 0.08538919 | 0.42144863 | 0.279 | 0.167 | 1 ILC2_spleen |
| LEF1               | 0.08609171 | 0.45100486 | 0.395 | 0.258 | 1 ILC2_spleen |
| GDI2               | 0.08738777 | 0.40172316 | 0.372 | 0.233 | 1 ILC2_spleen |
| PPDPF              | 0.08830926 | 0.27618852 | 0.372 | 0.226 | 1 ILC2_spleen |

|                    |            |            |       |       |               |
|--------------------|------------|------------|-------|-------|---------------|
| SEPTIN11           | 0.08848252 | 0.60774171 | 0.349 | 0.224 | 1 ILC2_spleen |
| SNX6               | 0.09005449 | 0.21047855 | 0.628 | 0.372 | 1 ILC2_spleen |
| GTF2B              | 0.09058422 | 0.40715131 | 0.488 | 0.32  | 1 ILC2_spleen |
| HSD17B4            | 0.09080246 | 0.27304376 | 0.628 | 0.432 | 1 ILC2_spleen |
| PSMC4              | 0.09082389 | 0.1329406  | 0.349 | 0.201 | 1 ILC2_spleen |
| PSMB8              | 0.0916121  | 0.26910715 | 0.442 | 0.278 | 1 ILC2_spleen |
| NONO               | 0.09169619 | 0.67998038 | 0.279 | 0.162 | 1 ILC2_spleen |
| CPNE1              | 0.09206248 | 0.11746822 | 0.372 | 0.225 | 1 ILC2_spleen |
| MORF4L1            | 0.0932564  | 0.26192537 | 0.581 | 0.394 | 1 ILC2_spleen |
| CCNI               | 0.09331995 | 0.41974476 | 0.535 | 0.358 | 1 ILC2_spleen |
| DPEP2              | 0.09428007 | 0.33637093 | 0.442 | 0.271 | 1 ILC2_spleen |
| MAF                | 0.09625239 | 0.1924212  | 0.419 | 0.258 | 1 ILC2_spleen |
| UCP2               | 0.09699125 | 0.22647369 | 0.372 | 0.221 | 1 ILC2_spleen |
| RERE               | 0.0982824  | 0.51642739 | 0.419 | 0.258 | 1 ILC2_spleen |
| PPP4C              | 0.09958551 | 0.14525929 | 0.302 | 0.174 | 1 ILC2_spleen |
| WSB1               | 0.09967561 | 0.14018952 | 0.349 | 0.208 | 1 ILC2_spleen |
| ATP5PO             | 0.09971609 | 0.1352945  | 0.698 | 0.469 | 1 ILC2_spleen |
| TKT                | 0.1010516  | 0.20722388 | 0.488 | 0.306 | 1 ILC2_spleen |
| PSMA7              | 0.10261953 | 0.34834689 | 0.605 | 0.477 | 1 ILC2_spleen |
| ENSMMUG00000017890 | 0.10438638 | 0.2103105  | 0.256 | 0.147 | 1 ILC2_spleen |
| ACAP1              | 0.10525776 | 0.2148483  | 0.302 | 0.18  | 1 ILC2_spleen |
| RHOA               | 0.11057672 | 0.22573273 | 0.744 | 0.58  | 1 ILC2_spleen |
| SEC11A             | 0.11095221 | 0.15371206 | 0.465 | 0.286 | 1 ILC2_spleen |
| DPP4               | 0.11288379 | 0.10478628 | 0.256 | 0.148 | 1 ILC2_spleen |
| RACK1              | 0.11511776 | 0.1333361  | 0.977 | 0.974 | 1 ILC2_spleen |
| HSP90AA1           | 0.11684876 | 0.39047685 | 0.814 | 0.681 | 1 ILC2_spleen |
| MYDGF              | 0.11755207 | 0.14014515 | 0.442 | 0.278 | 1 ILC2_spleen |
| ENSMMUG00000059017 | 0.11796874 | 0.12252265 | 0.442 | 0.277 | 1 ILC2_spleen |
| TOMM20             | 0.12646307 | 0.19087422 | 0.698 | 0.494 | 1 ILC2_spleen |
| MIF                | 0.12667223 | 0.27500542 | 0.512 | 0.369 | 1 ILC2_spleen |
| CDKN1B             | 0.12894275 | 0.11617935 | 0.302 | 0.184 | 1 ILC2_spleen |
| TWF2               | 0.12901983 | 0.22440796 | 0.326 | 0.204 | 1 ILC2_spleen |
| ATXN10             | 0.13047437 | 0.42544819 | 0.279 | 0.172 | 1 ILC2_spleen |

|                    |            |            |       |       |               |
|--------------------|------------|------------|-------|-------|---------------|
| SCP2               | 0.13220833 | 0.46979953 | 0.488 | 0.321 | 1 ILC2_spleen |
| ENSMMUG00000016898 | 0.13452057 | 0.19071882 | 0.326 | 0.203 | 1 ILC2_spleen |
| SLTM               | 0.13667373 | 0.37067036 | 0.302 | 0.192 | 1 ILC2_spleen |
| CCT6A              | 0.13696995 | 0.25101015 | 0.372 | 0.234 | 1 ILC2_spleen |
| EML4               | 0.13715227 | 0.19535589 | 0.837 | 0.64  | 1 ILC2_spleen |
| ID2                | 0.13735402 | 0.61407125 | 0.535 | 0.41  | 1 ILC2_spleen |
| YME1L1             | 0.14015273 | 0.45806469 | 0.256 | 0.162 | 1 ILC2_spleen |
| ATF4               | 0.14077853 | 0.10666977 | 0.442 | 0.282 | 1 ILC2_spleen |
| GAB2               | 0.14234176 | 0.64590738 | 0.372 | 0.263 | 1 ILC2_spleen |
| TAPBP              | 0.14666834 | 0.87147582 | 0.302 | 0.198 | 1 ILC2_spleen |
| EEF2               | 0.1468005  | 0.27294792 | 0.674 | 0.527 | 1 ILC2_spleen |
| ENSMMUG00000019238 | 0.15003749 | 0.27746253 | 0.279 | 0.174 | 1 ILC2_spleen |
| TM2D1              | 0.15630472 | 0.61357825 | 0.256 | 0.159 | 1 ILC2_spleen |
| ENSMMUG00000018687 | 0.15645679 | 0.21600038 | 0.349 | 0.223 | 1 ILC2_spleen |
| PSME1              | 0.15788171 | 0.26974462 | 0.814 | 0.628 | 1 ILC2_spleen |
| FUBP1              | 0.16607666 | 0.23598261 | 0.302 | 0.193 | 1 ILC2_spleen |
| YWHAZ              | 0.17897343 | 0.22758905 | 0.814 | 0.619 | 1 ILC2_spleen |
| TOPORS             | 0.17920854 | 0.15034407 | 0.465 | 0.315 | 1 ILC2_spleen |
| NUDC               | 0.18499374 | 0.16675179 | 0.488 | 0.307 | 1 ILC2_spleen |
| TPR                | 0.18602766 | 0.26702773 | 0.326 | 0.216 | 1 ILC2_spleen |
| HNRNPA2B1          | 0.18891045 | 0.26614766 | 0.86  | 0.701 | 1 ILC2_spleen |
| UBE2V1             | 0.19015666 | 0.18503234 | 0.442 | 0.298 | 1 ILC2_spleen |
| LAMTOR1            | 0.19324763 | 0.14961873 | 0.326 | 0.208 | 1 ILC2_spleen |
| TMEM123            | 0.19424435 | 0.19793195 | 0.581 | 0.437 | 1 ILC2_spleen |
| UQCRB              | 0.1998965  | 0.14933706 | 0.302 | 0.204 | 1 ILC2_spleen |
| KLHL23             | 0.20050796 | 0.44108273 | 0.628 | 0.456 | 1 ILC2_spleen |
| OSTF1              | 0.20518822 | 0.16962829 | 0.814 | 0.603 | 1 ILC2_spleen |
| DYNC1I2            | 0.20592721 | 0.43531052 | 0.256 | 0.167 | 1 ILC2_spleen |
| ACTN4              | 0.20612287 | 0.46652093 | 0.395 | 0.289 | 1 ILC2_spleen |
| UFC1               | 0.20660474 | 0.38247538 | 0.419 | 0.304 | 1 ILC2_spleen |
| DDX3X              | 0.21182271 | 0.26814897 | 0.558 | 0.403 | 1 ILC2_spleen |
| RPL4               | 0.21329943 | 0.15038193 | 0.86  | 0.799 | 1 ILC2_spleen |
| TRAF3IP3           | 0.21844217 | 0.13476035 | 0.395 | 0.268 | 1 ILC2_spleen |

|                    |            |            |       |       |                |
|--------------------|------------|------------|-------|-------|----------------|
| TIPARP             | 0.2223956  | 0.19399342 | 0.302 | 0.207 | 1 ILC2_spleen  |
| ENSMMUG00000054038 | 0.22836284 | 0.17563143 | 0.721 | 0.55  | 1 ILC2_spleen  |
| USP36              | 0.23638555 | 0.14310903 | 0.326 | 0.23  | 1 ILC2_spleen  |
| FNBP1L             | 0.24302513 | 0.35875886 | 0.302 | 0.213 | 1 ILC2_spleen  |
| CAMTA1             | 0.2464699  | 0.33382638 | 0.326 | 0.237 | 1 ILC2_spleen  |
| ATP6AP2            | 0.26744247 | 0.10613769 | 0.256 | 0.172 | 1 ILC2_spleen  |
| CDC42SE2           | 0.30863373 | 0.34886325 | 0.674 | 0.506 | 1 ILC2_spleen  |
| IMMP2L             | 0.31267569 | 1.13684363 | 0.279 | 0.219 | 1 ILC2_spleen  |
| C11H12orf57        | 0.32154713 | 0.16186522 | 0.628 | 0.475 | 1 ILC2_spleen  |
| RHOH               | 0.3220852  | 0.20478499 | 0.698 | 0.515 | 1 ILC2_spleen  |
| ENSMMUG00000058755 | 0.32579898 | 0.11673526 | 0.907 | 0.976 | 1 ILC2_spleen  |
| CLNS1A             | 0.33725276 | 0.28294114 | 0.279 | 0.198 | 1 ILC2_spleen  |
| CAP1               | 0.34176456 | 0.45084537 | 0.419 | 0.315 | 1 ILC2_spleen  |
| KIFBP              | 0.34640052 | 0.35505364 | 0.581 | 0.438 | 1 ILC2_spleen  |
| H2AZ2              | 0.35170802 | 0.11659246 | 0.698 | 0.547 | 1 ILC2_spleen  |
| ENSMMUG00000055438 | 0.36337478 | 0.27278788 | 0.279 | 0.216 | 1 ILC2_spleen  |
| SLA                | 0.38034528 | 0.18670854 | 0.256 | 0.184 | 1 ILC2_spleen  |
| CSNK2A1            | 0.39102893 | 0.29699861 | 0.256 | 0.19  | 1 ILC2_spleen  |
| HNRNPK             | 0.39789754 | 0.20633671 | 0.767 | 0.593 | 1 ILC2_spleen  |
| ENSMMUG00000059843 | 0.40010321 | 0.20106818 | 0.302 | 0.237 | 1 ILC2_spleen  |
| ATG12              | 0.42470461 | 0.10345353 | 0.512 | 0.402 | 1 ILC2_spleen  |
| ATP5F1A            | 0.44255619 | 0.10391492 | 0.488 | 0.396 | 1 ILC2_spleen  |
| BST2               | 0.48898022 | 0.21205675 | 0.558 | 0.454 | 1 ILC2_spleen  |
| ITGAE              | 0.50142001 | 0.16216571 | 0.302 | 0.255 | 1 ILC2_spleen  |
| ACTG1              | 0.50487825 | 0.25978895 | 0.907 | 0.858 | 1 ILC2_spleen  |
| PTGER4             | 0.51254408 | 0.13864659 | 0.372 | 0.296 | 1 ILC2_spleen  |
| NFKB1              | 0.54618217 | 0.22768172 | 0.674 | 0.516 | 1 ILC2_spleen  |
| EMP3               | 0.61966918 | 0.25378761 | 0.302 | 0.266 | 1 ILC2_spleen  |
| PGK1               | 0.62327533 | 0.12079097 | 0.628 | 0.509 | 1 ILC2_spleen  |
| DSTN               | 0.68989197 | 0.27800373 | 0.372 | 0.303 | 1 ILC2_spleen  |
| ENSMMUG00000057791 | 0.81304625 | 0.57471804 | 0.488 | 0.46  | 1 ILC2_spleen  |
| CD9                | 0          | 2.64529398 | 0.676 | 0.414 | 0 Bcell_1_lung |
| ENSMMUG00000060377 | 0          | 1.51377941 | 0.827 | 0.77  | 0 Bcell_1_lung |

|                     |   |            |       |       |                |
|---------------------|---|------------|-------|-------|----------------|
| RPL36               | 0 | 1.42802094 | 0.941 | 0.893 | 0 Bcell_1_lung |
| RPL36AL             | 0 | 0.89218474 | 0.892 | 0.932 | 0 Bcell_1_lung |
| ZC3H10              | 0 | 1.36714374 | 0.912 | 0.877 | 0 Bcell_1_lung |
| ATP5F1E             | 0 | 1.38713525 | 0.959 | 0.929 | 0 Bcell_1_lung |
| ENSMMUG000000064139 | 0 | 1.06640421 | 0.881 | 0.906 | 0 Bcell_1_lung |
| RPS21               | 0 | 1.52287948 | 0.992 | 0.968 | 0 Bcell_1_lung |
| MAMU-DRB1           | 0 | 1.01089966 | 0.989 | 0.973 | 0 Bcell_1_lung |
| RPS27A              | 0 | 0.95513061 | 0.908 | 0.924 | 0 Bcell_1_lung |
| NME2                | 0 | 0.70442782 | 0.959 | 0.974 | 0 Bcell_1_lung |
| ENSMMUG000000004545 | 0 | 1.17467435 | 0.807 | 0.793 | 0 Bcell_1_lung |
| RPL39               | 0 | 0.94660596 | 0.995 | 0.983 | 0 Bcell_1_lung |
| ENSMMUG000000056354 | 0 | 1.13252142 | 0.955 | 0.944 | 0 Bcell_1_lung |
| ELOA                | 0 | 0.61613909 | 0.996 | 0.99  | 0 Bcell_1_lung |
| RPL22L1             | 0 | 1.1131307  | 0.911 | 0.905 | 0 Bcell_1_lung |
| ENSMMUG000000012140 | 0 | 0.94664477 | 0.993 | 0.988 | 0 Bcell_1_lung |
| RPS9                | 0 | 0.76951591 | 0.996 | 0.991 | 0 Bcell_1_lung |
| RPS5                | 0 | 0.7459326  | 0.994 | 0.989 | 0 Bcell_1_lung |
| RPL5                | 0 | 0.5775839  | 0.986 | 0.99  | 0 Bcell_1_lung |
| RPL22               | 0 | 0.63409507 | 0.978 | 0.982 | 0 Bcell_1_lung |
| RPL35A              | 0 | 0.8158756  | 0.998 | 0.994 | 0 Bcell_1_lung |
| RPS4X               | 0 | 0.5676607  | 0.991 | 0.995 | 0 Bcell_1_lung |
| FAU                 | 0 | 0.85601729 | 0.998 | 0.994 | 0 Bcell_1_lung |
| RPS13               | 0 | 0.78703215 | 0.998 | 0.994 | 0 Bcell_1_lung |
| RPL12               | 0 | 0.86960438 | 0.992 | 0.988 | 0 Bcell_1_lung |
| FTL                 | 0 | 1.11646468 | 0.863 | 0.867 | 0 Bcell_1_lung |
| RPL32               | 0 | 0.76269831 | 0.999 | 0.996 | 0 Bcell_1_lung |
| RPL10               | 0 | 0.79653583 | 1     | 0.997 | 0 Bcell_1_lung |
| RPL30               | 0 | 0.60338765 | 1     | 0.997 | 0 Bcell_1_lung |
| RPS26               | 0 | 0.74149559 | 0.997 | 0.994 | 0 Bcell_1_lung |
| RPS28               | 0 | 1.01478789 | 0.999 | 0.996 | 0 Bcell_1_lung |
| RPL34               | 0 | 0.66130215 | 0.998 | 0.996 | 0 Bcell_1_lung |
| ENSMMUG000000062350 | 0 | 1.2967514  | 0.999 | 0.997 | 0 Bcell_1_lung |
| RPS12               | 0 | 0.8886899  | 0.999 | 0.997 | 0 Bcell_1_lung |

|                    |           |            |       |       |           |              |
|--------------------|-----------|------------|-------|-------|-----------|--------------|
| RPS29              | 0         | 0.60182976 | 0.998 | 0.996 | 0         | Bcell_1_lung |
| TMSB10             | 0         | 1.126269   | 0.997 | 0.995 | 0         | Bcell_1_lung |
| RPS7               | 0         | 0.67312671 | 0.999 | 0.997 | 0         | Bcell_1_lung |
| ENSMMUG00000005593 | 0         | 0.99971078 | 0.994 | 0.992 | 0         | Bcell_1_lung |
| ENSMMUG00000013429 | 0         | 0.57907525 | 0.999 | 0.997 | 0         | Bcell_1_lung |
| RPL28              | 0         | 0.50662401 | 0.994 | 0.996 | 0         | Bcell_1_lung |
| RPSA               | 0         | 0.61087995 | 0.99  | 0.991 | 0         | Bcell_1_lung |
| RPL24              | 0         | 0.7524084  | 0.989 | 0.99  | 0         | Bcell_1_lung |
| NUDT3              | 0         | 0.78077386 | 0.998 | 0.997 | 0         | Bcell_1_lung |
| ENSMMUG00000003867 | 0         | 0.41887758 | 0.998 | 0.999 | 0         | Bcell_1_lung |
| RPLP1              | 0         | 0.7281544  | 0.999 | 0.998 | 0         | Bcell_1_lung |
| RPL8               | 0         | 0.79972786 | 0.992 | 0.991 | 0         | Bcell_1_lung |
| RPS24              | 0         | 0.48877242 | 0.997 | 0.996 | 0         | Bcell_1_lung |
| ENSMMUG00000015563 | 0         | 0.80848417 | 0.999 | 0.998 | 0         | Bcell_1_lung |
| UBA52              | 0         | 0.66654993 | 0.984 | 0.985 | 0         | Bcell_1_lung |
| RPL18              | 0         | 0.73979792 | 0.998 | 0.997 | 0         | Bcell_1_lung |
| RPS23              | 0         | 0.68246783 | 0.999 | 0.999 | 0         | Bcell_1_lung |
| RPL7A              | 0         | 0.56982702 | 0.992 | 0.992 | 0         | Bcell_1_lung |
| TMA7               | 7.85E-307 | 1.24679727 | 0.764 | 0.767 | 2.78E-302 | Bcell_1_lung |
| ENSMMUG00000003073 | 3.91E-305 | 0.56585484 | 0.979 | 0.988 | 1.39E-300 | Bcell_1_lung |
| TAGLN2             | 7.11E-302 | 1.51544653 | 0.746 | 0.676 | 2.52E-297 | Bcell_1_lung |
| RPL19              | 1.88E-285 | 0.6974934  | 0.96  | 0.974 | 6.67E-281 | Bcell_1_lung |
| RPL27              | 3.23E-281 | 0.48448859 | 0.992 | 0.99  | 1.15E-276 | Bcell_1_lung |
| MYL12B             | 1.21E-273 | 1.18794062 | 0.771 | 0.781 | 4.27E-269 | Bcell_1_lung |
| ENSMMUG00000019505 | 1.77E-261 | 1.23294236 | 0.748 | 0.773 | 6.28E-257 | Bcell_1_lung |
| GPR183             | 4.51E-229 | 1.50328708 | 0.702 | 0.67  | 1.60E-224 | Bcell_1_lung |
| GCN1               | 5.08E-216 | 0.47682533 | 0.981 | 0.986 | 1.80E-211 | Bcell_1_lung |
| ARPC3              | 4.37E-205 | 0.7231969  | 0.861 | 0.921 | 1.55E-200 | Bcell_1_lung |
| GMFG               | 1.47E-195 | 0.99900133 | 0.745 | 0.796 | 5.22E-191 | Bcell_1_lung |
| RPL6               | 3.42E-194 | 0.38731713 | 0.99  | 0.994 | 1.21E-189 | Bcell_1_lung |
| ATP5MG             | 9.85E-186 | 0.82514988 | 0.794 | 0.862 | 3.49E-181 | Bcell_1_lung |
| JPT1               | 4.32E-182 | 1.00159384 | 0.721 | 0.768 | 1.53E-177 | Bcell_1_lung |
| SRP14              | 1.11E-179 | 0.89180421 | 0.768 | 0.838 | 3.94E-175 | Bcell_1_lung |

|                    |           |            |       |       |           |              |
|--------------------|-----------|------------|-------|-------|-----------|--------------|
| HINT1              | 7.04E-177 | 0.81312694 | 0.805 | 0.873 | 2.49E-172 | Bcell_1_lung |
| COMMD6             | 3.52E-166 | 0.81314296 | 0.789 | 0.864 | 1.25E-161 | Bcell_1_lung |
| IFI27L2            | 4.39E-154 | 1.1217357  | 0.675 | 0.687 | 1.56E-149 | Bcell_1_lung |
| H2AFZ              | 5.53E-154 | 2.01054399 | 0.481 | 0.36  | 1.96E-149 | Bcell_1_lung |
| EIF3K              | 2.74E-147 | 0.72221175 | 0.801 | 0.876 | 9.69E-143 | Bcell_1_lung |
| ROMO1              | 1.03E-141 | 1.41990017 | 0.575 | 0.554 | 3.64E-137 | Bcell_1_lung |
| HNRNPH2            | 2.70E-140 | 0.47225258 | 0.948 | 0.972 | 9.57E-136 | Bcell_1_lung |
| ELOB               | 3.56E-135 | 1.36393228 | 0.567 | 0.544 | 1.26E-130 | Bcell_1_lung |
| ENSMMUG00000052747 | 4.23E-127 | 0.92342292 | 0.687 | 0.767 | 1.50E-122 | Bcell_1_lung |
| MYL6               | 1.37E-124 | 1.21714599 | 0.596 | 0.607 | 4.86E-120 | Bcell_1_lung |
| MAMU-E             | 2.67E-121 | 0.57649938 | 0.858 | 0.949 | 9.47E-117 | Bcell_1_lung |
| BTG1               | 5.70E-119 | 1.10813572 | 0.707 | 0.764 | 2.02E-114 | Bcell_1_lung |
| ENSMMUG00000063637 | 6.26E-119 | 0.55602154 | 0.89  | 0.905 | 2.22E-114 | Bcell_1_lung |
| ENSMMUG0000006463  | 1.26E-118 | 0.75233699 | 0.748 | 0.828 | 4.46E-114 | Bcell_1_lung |
| SMDT1              | 1.97E-118 | 0.90037123 | 0.682 | 0.761 | 6.98E-114 | Bcell_1_lung |
| GPR65              | 1.59E-115 | 2.29402173 | 0.374 | 0.244 | 5.63E-111 | Bcell_1_lung |
| HNRNPDL            | 5.71E-115 | 0.90782392 | 0.702 | 0.794 | 2.02E-110 | Bcell_1_lung |
| HCST               | 2.67E-113 | 1.64784492 | 0.512 | 0.445 | 9.45E-109 | Bcell_1_lung |
| ATP6V1G1           | 2.93E-112 | 0.80899694 | 0.721 | 0.822 | 1.04E-107 | Bcell_1_lung |
| ENSMMUG00000054038 | 1.10E-111 | 0.79351933 | 0.743 | 0.855 | 3.90E-107 | Bcell_1_lung |
| OAZ1               | 4.62E-108 | 1.43540605 | 0.534 | 0.522 | 1.64E-103 | Bcell_1_lung |
| TXNIP              | 2.89E-104 | 1.41788529 | 0.567 | 0.564 | 1.02E-99  | Bcell_1_lung |
| ENSMMUG00000016305 | 3.52E-104 | 1.31601272 | 0.551 | 0.556 | 1.25E-99  | Bcell_1_lung |
| IGKC               | 3.91E-104 | 1.73871123 | 0.53  | 0.487 | 1.39E-99  | Bcell_1_lung |
| IFI30              | 1.07E-102 | 1.57117558 | 0.498 | 0.458 | 3.81E-98  | Bcell_1_lung |
| ENSMMUG00000022428 | 2.69E-102 | 1.83486867 | 0.436 | 0.357 | 9.53E-98  | Bcell_1_lung |
| ENSMMUG00000056183 | 2.19E-101 | 0.77479695 | 0.755 | 0.833 | 7.77E-97  | Bcell_1_lung |
| ATP5MPL            | 7.52E-101 | 1.03101459 | 0.603 | 0.653 | 2.66E-96  | Bcell_1_lung |
| RAB11A             | 1.70E-100 | 2.31844932 | 0.349 | 0.228 | 6.03E-96  | Bcell_1_lung |
| UBL5               | 3.54E-99  | 1.31924131 | 0.532 | 0.536 | 1.25E-94  | Bcell_1_lung |
| NSA2               | 3.90E-99  | 0.8569207  | 0.696 | 0.783 | 1.38E-94  | Bcell_1_lung |
| PRPF31             | 1.61E-97  | 1.55704026 | 0.472 | 0.425 | 5.70E-93  | Bcell_1_lung |
| ROBO2              | 1.32E-96  | 0.7138124  | 0.719 | 0.794 | 4.69E-92  | Bcell_1_lung |



|                     |          |            |       |       |          |              |
|---------------------|----------|------------|-------|-------|----------|--------------|
| EEF1A1              | 5.86E-95 | 0.38392821 | 0.937 | 0.963 | 2.08E-90 | Bcell_1_lung |
| RPL35               | 7.01E-90 | 0.34960752 | 0.948 | 0.976 | 2.48E-85 | Bcell_1_lung |
| ENSMMUG000000002320 | 1.62E-86 | 0.63397274 | 0.802 | 0.921 | 5.73E-82 | Bcell_1_lung |
| ENSMMUG000000001210 | 7.93E-86 | 0.52879289 | 0.818 | 0.899 | 2.81E-81 | Bcell_1_lung |
| ISG20               | 2.62E-82 | 1.46451319 | 0.509 | 0.505 | 9.29E-78 | Bcell_1_lung |
| ND4L                | 2.32E-80 | 1.5352985  | 0.479 | 0.459 | 8.22E-76 | Bcell_1_lung |
| COX6C               | 5.99E-80 | 0.73725736 | 0.679 | 0.783 | 2.12E-75 | Bcell_1_lung |
| EEF1D               | 7.38E-80 | 0.61261387 | 0.743 | 0.855 | 2.62E-75 | Bcell_1_lung |
| ENSMMUG000000044585 | 1.43E-79 | 1.37542614 | 0.487 | 0.478 | 5.08E-75 | Bcell_1_lung |
| CD79B               | 1.80E-75 | 0.70043622 | 0.808 | 0.921 | 6.38E-71 | Bcell_1_lung |
| ENSMMUG000000055584 | 4.04E-75 | 0.47510021 | 0.858 | 0.949 | 1.43E-70 | Bcell_1_lung |
| ENSMMUG000000030408 | 6.14E-74 | 1.31186043 | 0.497 | 0.515 | 2.17E-69 | Bcell_1_lung |
| IFI16               | 1.68E-72 | 0.84677725 | 0.65  | 0.73  | 5.94E-68 | Bcell_1_lung |
| ENSMMUG000000056126 | 4.49E-72 | 2.09843302 | 0.306 | 0.208 | 1.59E-67 | Bcell_1_lung |
| LDHA                | 2.48E-71 | 1.50903247 | 0.453 | 0.433 | 8.79E-67 | Bcell_1_lung |
| NDUFA1              | 7.27E-69 | 1.02539283 | 0.555 | 0.614 | 2.58E-64 | Bcell_1_lung |
| RPL38               | 3.22E-68 | 0.32116776 | 0.96  | 0.986 | 1.14E-63 | Bcell_1_lung |
| GSTP1               | 1.59E-66 | 1.02213521 | 0.564 | 0.621 | 5.62E-62 | Bcell_1_lung |
| ENSMMUG000000056793 | 1.77E-64 | 0.71317827 | 0.64  | 0.751 | 6.26E-60 | Bcell_1_lung |
| CHCHD2              | 2.67E-64 | 0.66388257 | 0.669 | 0.792 | 9.45E-60 | Bcell_1_lung |
| MBD3                | 8.71E-64 | 1.22101052 | 0.495 | 0.522 | 3.09E-59 | Bcell_1_lung |
| NDUFB2              | 2.25E-63 | 0.93964368 | 0.582 | 0.677 | 7.98E-59 | Bcell_1_lung |
| POMP                | 6.56E-63 | 1.41290366 | 0.451 | 0.446 | 2.32E-58 | Bcell_1_lung |
| LIMD2               | 9.02E-62 | 0.85568709 | 0.628 | 0.753 | 3.19E-57 | Bcell_1_lung |
| COX7C               | 4.26E-61 | 0.60889749 | 0.705 | 0.82  | 1.51E-56 | Bcell_1_lung |
| STMN1               | 1.55E-58 | 1.76592864 | 0.352 | 0.284 | 5.49E-54 | Bcell_1_lung |
| PET100              | 3.14E-58 | 2.13744608 | 0.259 | 0.168 | 1.11E-53 | Bcell_1_lung |
| SLC25A43            | 3.95E-57 | 1.00863628 | 0.551 | 0.62  | 1.40E-52 | Bcell_1_lung |
| RILPL2              | 2.45E-56 | 1.5985337  | 0.414 | 0.388 | 8.69E-52 | Bcell_1_lung |
| CORO1A              | 2.55E-56 | 0.73616667 | 0.636 | 0.757 | 9.02E-52 | Bcell_1_lung |
| SELENOK             | 3.08E-56 | 1.71578881 | 0.347 | 0.281 | 1.09E-51 | Bcell_1_lung |
| GABARAPL2           | 1.67E-55 | 1.09294482 | 0.522 | 0.577 | 5.90E-51 | Bcell_1_lung |
| IL2RG               | 1.20E-51 | 0.10080083 | 0.207 | 0.421 | 4.25E-47 | Bcell_1_lung |

|                    |          |            |       |       |          |              |
|--------------------|----------|------------|-------|-------|----------|--------------|
| SNX6               | 1.24E-50 | 0.11480376 | 0.187 | 0.383 | 4.41E-46 | Bcell_1_lung |
| GAPDH              | 1.30E-50 | 0.91380898 | 0.551 | 0.627 | 4.61E-46 | Bcell_1_lung |
| GTF2A2             | 1.99E-50 | 0.14235324 | 0.19  | 0.39  | 7.04E-46 | Bcell_1_lung |
| ACP5               | 3.79E-49 | 0.12747383 | 0.164 | 0.341 | 1.34E-44 | Bcell_1_lung |
| COX5B              | 7.13E-48 | 1.21985311 | 0.456 | 0.481 | 2.53E-43 | Bcell_1_lung |
| UBE2N              | 1.44E-47 | 0.114814   | 0.192 | 0.385 | 5.11E-43 | Bcell_1_lung |
| DDX24              | 2.25E-47 | 0.24677328 | 0.196 | 0.395 | 7.96E-43 | Bcell_1_lung |
| ENSMMUG00000049722 | 3.26E-47 | 1.46965398 | 0.393 | 0.373 | 1.16E-42 | Bcell_1_lung |
| ENSMMUG00000019238 | 2.12E-46 | 0.19476244 | 0.135 | 0.287 | 7.50E-42 | Bcell_1_lung |
| GLRX3              | 2.66E-46 | 0.11492027 | 0.142 | 0.296 | 9.43E-42 | Bcell_1_lung |
| BTF3L4             | 3.23E-46 | 0.17624297 | 0.194 | 0.388 | 1.15E-41 | Bcell_1_lung |
| VAMP8              | 1.65E-45 | 1.10541276 | 0.485 | 0.535 | 5.86E-41 | Bcell_1_lung |
| NDUFA4             | 1.81E-45 | 0.89565387 | 0.547 | 0.648 | 6.40E-41 | Bcell_1_lung |
| ARPC5L             | 4.80E-45 | 0.10414361 | 0.12  | 0.261 | 1.70E-40 | Bcell_1_lung |
| FAM133B            | 6.35E-45 | 0.20213498 | 0.188 | 0.371 | 2.25E-40 | Bcell_1_lung |
| UBE2L3             | 8.62E-45 | 0.14375947 | 0.166 | 0.336 | 3.05E-40 | Bcell_1_lung |
| ABCF1              | 1.84E-44 | 0.20646328 | 0.141 | 0.292 | 6.51E-40 | Bcell_1_lung |
| HNRNPM             | 2.23E-44 | 0.15181041 | 0.207 | 0.405 | 7.88E-40 | Bcell_1_lung |
| YWHAE              | 3.64E-44 | 0.20459686 | 0.225 | 0.435 | 1.29E-39 | Bcell_1_lung |
| STOML2             | 6.26E-44 | 0.10159354 | 0.143 | 0.295 | 2.22E-39 | Bcell_1_lung |
| GCC2               | 6.80E-44 | 0.10432165 | 0.116 | 0.25  | 2.41E-39 | Bcell_1_lung |
| ENSMMUG00000014947 | 8.52E-44 | 0.15378638 | 0.142 | 0.293 | 3.02E-39 | Bcell_1_lung |
| WAS                | 2.71E-43 | 0.15869183 | 0.15  | 0.307 | 9.59E-39 | Bcell_1_lung |
| HMGB2              | 1.05E-42 | 0.11704899 | 0.157 | 0.314 | 3.72E-38 | Bcell_1_lung |
| POLD4              | 1.47E-42 | 0.1730621  | 0.157 | 0.317 | 5.21E-38 | Bcell_1_lung |
| DDX18              | 2.18E-42 | 0.25266471 | 0.208 | 0.406 | 7.74E-38 | Bcell_1_lung |
| ITGAE              | 2.52E-42 | 0.12856586 | 0.12  | 0.254 | 8.94E-38 | Bcell_1_lung |
| SMU1               | 2.61E-42 | 0.18793928 | 0.128 | 0.268 | 9.25E-38 | Bcell_1_lung |
| DNAJC8             | 4.35E-42 | 0.17752766 | 0.171 | 0.338 | 1.54E-37 | Bcell_1_lung |
| ENSMMUG00000042951 | 5.02E-42 | 0.18192315 | 0.2   | 0.388 | 1.78E-37 | Bcell_1_lung |
| ENSMMUG00000038373 | 5.23E-42 | 0.13120002 | 0.289 | 0.537 | 1.85E-37 | Bcell_1_lung |
| ENSMMUG00000005880 | 5.94E-42 | 0.23815738 | 0.148 | 0.302 | 2.10E-37 | Bcell_1_lung |
| NUDC               | 2.33E-41 | 0.18463534 | 0.203 | 0.393 | 8.27E-37 | Bcell_1_lung |

|                    |          |            |       |       |          |              |
|--------------------|----------|------------|-------|-------|----------|--------------|
| ENSMMUG00000022489 | 5.74E-41 | 0.83433795 | 0.566 | 0.685 | 2.04E-36 | Bcell_1_lung |
| S100A6             | 7.97E-41 | 1.31022502 | 0.489 | 0.467 | 2.83E-36 | Bcell_1_lung |
| HSPD1              | 1.17E-40 | 0.13205824 | 0.17  | 0.331 | 4.13E-36 | Bcell_1_lung |
| RBM8A              | 3.80E-40 | 1.24637457 | 0.431 | 0.443 | 1.34E-35 | Bcell_1_lung |
| CIR1               | 6.87E-40 | 0.14717905 | 0.179 | 0.344 | 2.43E-35 | Bcell_1_lung |
| TCP11L2            | 9.87E-40 | 0.10810095 | 0.128 | 0.261 | 3.50E-35 | Bcell_1_lung |
| CLNS1A             | 1.22E-39 | 0.2103323  | 0.171 | 0.334 | 4.34E-35 | Bcell_1_lung |
| JTB                | 2.73E-39 | 0.26055983 | 0.164 | 0.325 | 9.67E-35 | Bcell_1_lung |
| ID3                | 4.53E-39 | 1.76100421 | 0.345 | 0.307 | 1.60E-34 | Bcell_1_lung |
| CDC37              | 6.57E-39 | 0.27606444 | 0.137 | 0.278 | 2.33E-34 | Bcell_1_lung |
| ENSMMUG00000061630 | 1.62E-38 | 0.24252512 | 0.198 | 0.38  | 5.74E-34 | Bcell_1_lung |
| SDCBP              | 2.97E-38 | 0.2127921  | 0.126 | 0.258 | 1.05E-33 | Bcell_1_lung |
| UBE2V1             | 6.99E-38 | 0.3044634  | 0.208 | 0.398 | 2.48E-33 | Bcell_1_lung |
| SLC38A2            | 9.18E-38 | 0.20563327 | 0.197 | 0.373 | 3.25E-33 | Bcell_1_lung |
| BTK                | 9.24E-38 | 0.29250832 | 0.173 | 0.338 | 3.27E-33 | Bcell_1_lung |
| ENSMMUG00000038348 | 1.35E-37 | 1.37961373 | 0.466 | 0.483 | 4.77E-33 | Bcell_1_lung |
| STRAP              | 1.42E-37 | 0.2739056  | 0.196 | 0.374 | 5.03E-33 | Bcell_1_lung |
| ENSMMUG00000058919 | 1.65E-37 | 0.1987891  | 0.187 | 0.357 | 5.84E-33 | Bcell_1_lung |
| ERBB3              | 2.87E-37 | 0.23736649 | 0.199 | 0.376 | 1.02E-32 | Bcell_1_lung |
| CCDC59             | 8.95E-37 | 0.11524305 | 0.145 | 0.284 | 3.17E-32 | Bcell_1_lung |
| CCT7               | 9.07E-37 | 0.35922594 | 0.123 | 0.251 | 3.21E-32 | Bcell_1_lung |
| SUB1               | 1.09E-36 | 0.61986792 | 0.641 | 0.784 | 3.85E-32 | Bcell_1_lung |
| PSMD13             | 1.09E-36 | 0.21344651 | 0.17  | 0.326 | 3.86E-32 | Bcell_1_lung |
| ATAD1              | 2.06E-36 | 0.22149578 | 0.157 | 0.304 | 7.31E-32 | Bcell_1_lung |
| RNMT               | 2.73E-36 | 0.13782555 | 0.33  | 0.597 | 9.68E-32 | Bcell_1_lung |
| POLR1D             | 3.07E-36 | 0.22745849 | 0.242 | 0.449 | 1.09E-31 | Bcell_1_lung |
| EIF5B              | 4.39E-36 | 0.18747838 | 0.155 | 0.297 | 1.55E-31 | Bcell_1_lung |
| LENG1              | 8.74E-36 | 0.21744974 | 0.135 | 0.267 | 3.10E-31 | Bcell_1_lung |
| NCL                | 3.40E-35 | 0.76392208 | 0.582 | 0.686 | 1.20E-30 | Bcell_1_lung |
| CYCS               | 1.14E-34 | 0.27314631 | 0.18  | 0.34  | 4.03E-30 | Bcell_1_lung |
| CFL1               | 1.37E-34 | 0.47675941 | 0.698 | 0.832 | 4.87E-30 | Bcell_1_lung |
| ZC3H15             | 2.19E-34 | 0.29978731 | 0.225 | 0.412 | 7.77E-30 | Bcell_1_lung |
| NDUFB11            | 8.28E-34 | 1.56010384 | 0.334 | 0.311 | 2.94E-29 | Bcell_1_lung |

|                     |          |            |       |       |          |              |
|---------------------|----------|------------|-------|-------|----------|--------------|
| GADD45B             | 1.44E-33 | 0.38672846 | 0.166 | 0.31  | 5.11E-29 | Bcell_1_lung |
| TXN2                | 1.65E-33 | 0.27577177 | 0.131 | 0.257 | 5.86E-29 | Bcell_1_lung |
| PSMA1               | 5.83E-33 | 0.2955734  | 0.212 | 0.391 | 2.07E-28 | Bcell_1_lung |
| MAMU-DRA            | 6.22E-33 | 0.15688425 | 0.998 | 0.999 | 2.20E-28 | Bcell_1_lung |
| ENSMMUG00000006206  | 7.20E-33 | 0.2458207  | 0.256 | 0.464 | 2.55E-28 | Bcell_1_lung |
| SEC61B              | 1.13E-32 | 0.90571676 | 0.498 | 0.581 | 3.99E-28 | Bcell_1_lung |
| ENSMMUG000000015270 | 1.30E-31 | 0.13159091 | 0.999 | 0.998 | 4.61E-27 | Bcell_1_lung |
| CCT3                | 2.32E-31 | 0.23498302 | 0.275 | 0.494 | 8.23E-27 | Bcell_1_lung |
| MGMT                | 3.94E-31 | 0.23988061 | 0.172 | 0.315 | 1.39E-26 | Bcell_1_lung |
| C11H12orf45         | 6.42E-31 | 0.27874731 | 0.206 | 0.372 | 2.28E-26 | Bcell_1_lung |
| PSMB10              | 7.43E-31 | 0.34517724 | 0.158 | 0.297 | 2.63E-26 | Bcell_1_lung |
| ENSMMUG000000012419 | 1.71E-30 | 0.7851593  | 0.539 | 0.657 | 6.05E-26 | Bcell_1_lung |
| RER1                | 2.04E-30 | 0.31126485 | 0.167 | 0.309 | 7.23E-26 | Bcell_1_lung |
| IK                  | 2.79E-30 | 0.23944029 | 0.238 | 0.425 | 9.89E-26 | Bcell_1_lung |
| HMGB1               | 6.02E-30 | 0.55906568 | 0.668 | 0.818 | 2.13E-25 | Bcell_1_lung |
| ILF2                | 6.08E-30 | 0.32770098 | 0.15  | 0.281 | 2.15E-25 | Bcell_1_lung |
| MYG1                | 7.93E-30 | 1.45055719 | 0.349 | 0.341 | 2.81E-25 | Bcell_1_lung |
| HSP90B1             | 9.19E-30 | 0.14883609 | 0.257 | 0.449 | 3.26E-25 | Bcell_1_lung |
| GHITM               | 1.41E-29 | 0.34510591 | 0.212 | 0.384 | 4.98E-25 | Bcell_1_lung |
| PPP4C               | 2.26E-29 | 0.34697951 | 0.155 | 0.289 | 8.02E-25 | Bcell_1_lung |
| CD79A               | 6.32E-29 | 0.68049151 | 0.605 | 0.762 | 2.24E-24 | Bcell_1_lung |
| CLIC1               | 7.26E-29 | 1.15750489 | 0.439 | 0.494 | 2.57E-24 | Bcell_1_lung |
| TOPORS              | 8.70E-29 | 0.28702816 | 0.231 | 0.413 | 3.08E-24 | Bcell_1_lung |
| UBE2I               | 9.62E-29 | 0.28417576 | 0.26  | 0.465 | 3.41E-24 | Bcell_1_lung |
| ENSMMUG000000020092 | 1.01E-28 | 1.71168754 | 0.361 | 0.331 | 3.59E-24 | Bcell_1_lung |
| CTSS                | 1.49E-28 | 0.70146581 | 0.604 | 0.753 | 5.29E-24 | Bcell_1_lung |
| EIF3L               | 1.53E-28 | 0.10908944 | 0.359 | 0.626 | 5.41E-24 | Bcell_1_lung |
| BTF3                | 2.16E-28 | 0.59770514 | 0.624 | 0.717 | 7.66E-24 | Bcell_1_lung |
| EZR                 | 4.94E-28 | 0.14758116 | 0.362 | 0.614 | 1.75E-23 | Bcell_1_lung |
| TMBIM4              | 1.28E-27 | 0.26916987 | 0.269 | 0.471 | 4.53E-23 | Bcell_1_lung |
| CWC15               | 1.51E-27 | 0.25524542 | 0.257 | 0.448 | 5.36E-23 | Bcell_1_lung |
| TRMT112             | 3.76E-27 | 0.3329779  | 0.247 | 0.439 | 1.33E-22 | Bcell_1_lung |
| GNAI2.1             | 3.77E-27 | 0.33164492 | 0.241 | 0.426 | 1.34E-22 | Bcell_1_lung |

|                     |          |            |       |       |          |              |
|---------------------|----------|------------|-------|-------|----------|--------------|
| BID                 | 5.55E-27 | 0.46341786 | 0.216 | 0.384 | 1.97E-22 | Bcell_1_lung |
| ENSMMUG00000007657  | 1.47E-26 | 0.97163261 | 0.467 | 0.555 | 5.22E-22 | Bcell_1_lung |
| COX16               | 3.78E-26 | 0.27453741 | 0.295 | 0.513 | 1.34E-21 | Bcell_1_lung |
| SLC25A3             | 7.66E-26 | 0.20523264 | 0.324 | 0.565 | 2.71E-21 | Bcell_1_lung |
| POC5                | 7.84E-26 | 0.27252086 | 0.252 | 0.438 | 2.78E-21 | Bcell_1_lung |
| ANAPC16             | 1.08E-25 | 0.44298311 | 0.172 | 0.308 | 3.81E-21 | Bcell_1_lung |
| OSBPL2              | 1.56E-25 | 0.41401702 | 0.16  | 0.287 | 5.52E-21 | Bcell_1_lung |
| ZNF483              | 2.00E-25 | 0.64530205 | 0.58  | 0.727 | 7.10E-21 | Bcell_1_lung |
| NCOA7               | 2.43E-25 | 0.36793168 | 0.155 | 0.278 | 8.61E-21 | Bcell_1_lung |
| PARK7               | 3.75E-25 | 0.40938197 | 0.19  | 0.336 | 1.33E-20 | Bcell_1_lung |
| RBBP4               | 3.92E-25 | 0.38175321 | 0.2   | 0.353 | 1.39E-20 | Bcell_1_lung |
| ENSMMUG00000029987  | 4.35E-25 | 0.4793162  | 0.148 | 0.267 | 1.54E-20 | Bcell_1_lung |
| ENSMMUG00000001458  | 1.03E-24 | 0.6077249  | 0.588 | 0.733 | 3.67E-20 | Bcell_1_lung |
| ANP32E              | 1.12E-24 | 0.37079808 | 0.184 | 0.322 | 3.96E-20 | Bcell_1_lung |
| EIF2S2              | 1.57E-24 | 0.29863465 | 0.264 | 0.452 | 5.57E-20 | Bcell_1_lung |
| TBC1D24             | 4.13E-24 | 0.2720947  | 0.289 | 0.497 | 1.46E-19 | Bcell_1_lung |
| IGHM                | 9.67E-24 | 0.21621691 | 0.942 | 0.989 | 3.43E-19 | Bcell_1_lung |
| EEF1B2              | 1.05E-23 | 0.26842305 | 0.856 | 0.93  | 3.73E-19 | Bcell_1_lung |
| SYF2                | 1.29E-23 | 0.29829298 | 0.309 | 0.526 | 4.57E-19 | Bcell_1_lung |
| ENSMMUG000000061128 | 1.87E-23 | 0.26751933 | 0.301 | 0.518 | 6.64E-19 | Bcell_1_lung |
| ANXA4               | 2.94E-23 | 0.35588747 | 0.171 | 0.295 | 1.04E-18 | Bcell_1_lung |
| TAF9                | 4.98E-23 | 0.33859882 | 0.252 | 0.431 | 1.77E-18 | Bcell_1_lung |
| GNG5                | 5.46E-23 | 0.79765188 | 0.508 | 0.637 | 1.94E-18 | Bcell_1_lung |
| PSMB9               | 5.81E-23 | 0.83983445 | 0.505 | 0.623 | 2.06E-18 | Bcell_1_lung |
| ENSMMUG00000016894  | 6.76E-23 | 0.81365597 | 0.494 | 0.604 | 2.40E-18 | Bcell_1_lung |
| CREM                | 1.03E-22 | 1.72671558 | 0.297 | 0.278 | 3.65E-18 | Bcell_1_lung |
| SUCLG1              | 1.62E-22 | 0.4329499  | 0.232 | 0.4   | 5.75E-18 | Bcell_1_lung |
| RBIS                | 2.08E-22 | 0.18520901 | 0.339 | 0.575 | 7.37E-18 | Bcell_1_lung |
| SRRM1               | 6.01E-22 | 0.27469658 | 0.322 | 0.544 | 2.13E-17 | Bcell_1_lung |
| CRIP1               | 8.01E-22 | 1.66605369 | 0.35  | 0.347 | 2.84E-17 | Bcell_1_lung |
| MRI1                | 1.02E-21 | 0.88598211 | 0.482 | 0.595 | 3.61E-17 | Bcell_1_lung |
| RPL3                | 1.03E-21 | 0.13945139 | 0.978 | 0.991 | 3.64E-17 | Bcell_1_lung |
| AMD1                | 1.14E-21 | 0.42631576 | 0.217 | 0.369 | 4.03E-17 | Bcell_1_lung |

|                    |          |            |       |       |          |              |
|--------------------|----------|------------|-------|-------|----------|--------------|
| EIF4E2             | 1.25E-21 | 0.41935913 | 0.166 | 0.286 | 4.41E-17 | Bcell_1_lung |
| ST13               | 1.64E-21 | 0.34097497 | 0.279 | 0.474 | 5.82E-17 | Bcell_1_lung |
| NDUFA5             | 1.70E-21 | 0.46914711 | 0.146 | 0.255 | 6.04E-17 | Bcell_1_lung |
| EIF4A3             | 3.95E-21 | 0.45531485 | 0.17  | 0.292 | 1.40E-16 | Bcell_1_lung |
| PFDN5              | 4.07E-21 | 1.24284401 | 0.378 | 0.414 | 1.44E-16 | Bcell_1_lung |
| MAMU-DMA           | 6.99E-21 | 0.35446642 | 0.737 | 0.899 | 2.48E-16 | Bcell_1_lung |
| SLIRP              | 8.72E-21 | 0.11639667 | 0.377 | 0.631 | 3.09E-16 | Bcell_1_lung |
| C1D                | 1.05E-20 | 0.44961581 | 0.151 | 0.26  | 3.71E-16 | Bcell_1_lung |
| RPS4Y1             | 1.34E-20 | 0.50616531 | 0.559 | 0.558 | 4.75E-16 | Bcell_1_lung |
| METAP2             | 1.56E-20 | 0.4539309  | 0.168 | 0.286 | 5.54E-16 | Bcell_1_lung |
| TMEM219            | 2.30E-20 | 0.49742069 | 0.159 | 0.273 | 8.16E-16 | Bcell_1_lung |
| HNRNPH1            | 2.75E-20 | 0.30151904 | 0.327 | 0.548 | 9.74E-16 | Bcell_1_lung |
| CD37               | 4.87E-20 | 0.25658184 | 0.887 | 0.974 | 1.73E-15 | Bcell_1_lung |
| C14H11orf58        | 4.90E-20 | 0.49472435 | 0.176 | 0.297 | 1.74E-15 | Bcell_1_lung |
| EIF4A1             | 5.55E-20 | 0.41370083 | 0.225 | 0.38  | 1.97E-15 | Bcell_1_lung |
| C16H17orf49        | 7.56E-20 | 0.96581397 | 0.448 | 0.537 | 2.68E-15 | Bcell_1_lung |
| LAMTOR1            | 1.04E-19 | 0.55585725 | 0.155 | 0.266 | 3.70E-15 | Bcell_1_lung |
| UFC1               | 1.52E-19 | 0.37181659 | 0.255 | 0.427 | 5.37E-15 | Bcell_1_lung |
| ARF1               | 2.93E-19 | 0.30485433 | 0.307 | 0.516 | 1.04E-14 | Bcell_1_lung |
| NFKBID             | 3.82E-19 | 0.72447331 | 0.155 | 0.258 | 1.35E-14 | Bcell_1_lung |
| ANXA1              | 4.48E-19 | 1.19340942 | 0.399 | 0.439 | 1.59E-14 | Bcell_1_lung |
| ATP5MC2            | 5.99E-19 | 0.85477111 | 0.469 | 0.575 | 2.12E-14 | Bcell_1_lung |
| IRF3               | 6.96E-19 | 0.54789338 | 0.164 | 0.28  | 2.47E-14 | Bcell_1_lung |
| MRPL11             | 8.85E-19 | 0.43656759 | 0.235 | 0.393 | 3.13E-14 | Bcell_1_lung |
| AMDHD1             | 1.04E-18 | 0.38825347 | 0.259 | 0.433 | 3.68E-14 | Bcell_1_lung |
| ENSMMUG00000017466 | 1.17E-18 | 0.9070581  | 0.461 | 0.552 | 4.16E-14 | Bcell_1_lung |
| PLGRKT             | 1.21E-18 | 0.5046262  | 0.166 | 0.28  | 4.29E-14 | Bcell_1_lung |
| PSME1              | 1.27E-18 | 0.57650724 | 0.57  | 0.724 | 4.51E-14 | Bcell_1_lung |
| TOMM22             | 1.83E-18 | 0.51699834 | 0.181 | 0.303 | 6.49E-14 | Bcell_1_lung |
| KRTCAP2            | 2.00E-18 | 0.55816034 | 0.6   | 0.761 | 7.08E-14 | Bcell_1_lung |
| SRSF7              | 2.43E-18 | 0.29156418 | 0.353 | 0.587 | 8.62E-14 | Bcell_1_lung |
| BZW1               | 2.58E-18 | 0.16165171 | 0.413 | 0.679 | 9.13E-14 | Bcell_1_lung |
| URGCP              | 2.75E-18 | 0.45183134 | 0.226 | 0.374 | 9.76E-14 | Bcell_1_lung |

|                    |          |            |       |       |          |              |
|--------------------|----------|------------|-------|-------|----------|--------------|
| AIP                | 2.88E-18 | 0.45184146 | 0.248 | 0.414 | 1.02E-13 | Bcell_1_lung |
| SNRPD2             | 3.22E-18 | 0.29087505 | 0.332 | 0.551 | 1.14E-13 | Bcell_1_lung |
| SNRPB2             | 3.96E-18 | 0.45891869 | 0.217 | 0.357 | 1.40E-13 | Bcell_1_lung |
| LSM8               | 4.50E-18 | 0.50563302 | 0.164 | 0.273 | 1.59E-13 | Bcell_1_lung |
| YWHAB              | 8.62E-18 | 0.27236643 | 0.331 | 0.548 | 3.05E-13 | Bcell_1_lung |
| RHOA               | 1.38E-17 | 0.13468494 | 0.424 | 0.692 | 4.90E-13 | Bcell_1_lung |
| DDT                | 1.75E-17 | 0.45636283 | 0.159 | 0.263 | 6.21E-13 | Bcell_1_lung |
| RBMX               | 1.86E-17 | 0.40769485 | 0.297 | 0.492 | 6.58E-13 | Bcell_1_lung |
| LSM10              | 4.06E-17 | 0.4594467  | 0.242 | 0.398 | 1.44E-12 | Bcell_1_lung |
| PAIP2              | 7.44E-17 | 0.20341052 | 0.386 | 0.629 | 2.64E-12 | Bcell_1_lung |
| EIF3J              | 8.70E-17 | 0.52544674 | 0.214 | 0.351 | 3.08E-12 | Bcell_1_lung |
| PSMB8              | 1.16E-16 | 0.58546813 | 0.574 | 0.749 | 4.10E-12 | Bcell_1_lung |
| PFDN6              | 1.21E-16 | 0.5232389  | 0.208 | 0.342 | 4.29E-12 | Bcell_1_lung |
| MIF                | 1.41E-16 | 0.46189834 | 0.246 | 0.406 | 4.99E-12 | Bcell_1_lung |
| SOX4               | 2.08E-16 | 0.48013295 | 0.303 | 0.473 | 7.35E-12 | Bcell_1_lung |
| ENSMMUG00000016009 | 2.58E-16 | 0.41317986 | 0.277 | 0.455 | 9.15E-12 | Bcell_1_lung |
| RASGRP2            | 2.83E-16 | 0.50600412 | 0.19  | 0.309 | 1.00E-11 | Bcell_1_lung |
| SEC11C             | 3.61E-16 | 0.54203979 | 0.183 | 0.299 | 1.28E-11 | Bcell_1_lung |
| ENSMMUG00000045959 | 6.46E-16 | 0.56559854 | 0.153 | 0.252 | 2.29E-11 | Bcell_1_lung |
| ANP32A             | 8.40E-16 | 0.38486215 | 0.286 | 0.469 | 2.98E-11 | Bcell_1_lung |
| ENSMMUG00000016278 | 1.46E-15 | 0.56420964 | 0.2   | 0.325 | 5.19E-11 | Bcell_1_lung |
| TMEM258            | 4.05E-15 | 1.06899204 | 0.393 | 0.457 | 1.44E-10 | Bcell_1_lung |
| ESF1               | 4.23E-15 | 0.57503481 | 0.177 | 0.284 | 1.50E-10 | Bcell_1_lung |
| ATP5MC3            | 4.67E-15 | 0.87616345 | 0.451 | 0.555 | 1.65E-10 | Bcell_1_lung |
| ENSMMUG00000053146 | 5.55E-15 | 1.12060503 | 0.386 | 0.45  | 1.97E-10 | Bcell_1_lung |
| ENSMMUG00000013257 | 1.08E-14 | 1.16207356 | 0.401 | 0.458 | 3.82E-10 | Bcell_1_lung |
| TPI1               | 1.47E-14 | 0.55868479 | 0.195 | 0.314 | 5.21E-10 | Bcell_1_lung |
| GLIPR1L2           | 1.77E-14 | 0.55142073 | 0.172 | 0.276 | 6.27E-10 | Bcell_1_lung |
| SAT2               | 1.84E-14 | 0.497376   | 0.23  | 0.371 | 6.53E-10 | Bcell_1_lung |
| BRK1               | 1.99E-14 | 0.4729461  | 0.251 | 0.405 | 7.05E-10 | Bcell_1_lung |
| CYSTM1             | 3.03E-14 | 1.45498697 | 0.254 | 0.239 | 1.07E-09 | Bcell_1_lung |
| NR4A1              | 5.26E-14 | 1.52238644 | 0.288 | 0.282 | 1.86E-09 | Bcell_1_lung |
| ENSMMUG00000044861 | 5.52E-14 | 1.53368701 | 0.434 | 0.45  | 1.96E-09 | Bcell_1_lung |

|                    |          |            |       |       |          |              |
|--------------------|----------|------------|-------|-------|----------|--------------|
| LAMTOR4            | 5.96E-14 | 0.54838851 | 0.202 | 0.32  | 2.11E-09 | Bcell_1_lung |
| UQCRQ              | 6.15E-14 | 0.99465922 | 0.39  | 0.449 | 2.18E-09 | Bcell_1_lung |
| CSNK2B             | 6.65E-14 | 0.54908605 | 0.238 | 0.383 | 2.36E-09 | Bcell_1_lung |
| ENSMMUG00000012019 | 8.21E-14 | 0.57659518 | 0.223 | 0.358 | 2.91E-09 | Bcell_1_lung |
| TMEM50A            | 8.87E-14 | 0.58395847 | 0.182 | 0.29  | 3.14E-09 | Bcell_1_lung |
| SEC61G             | 9.60E-14 | 0.88853105 | 0.429 | 0.521 | 3.40E-09 | Bcell_1_lung |
| COX17              | 1.01E-13 | 1.3321781  | 0.301 | 0.308 | 3.60E-09 | Bcell_1_lung |
| BCL10              | 1.36E-13 | 0.54892096 | 0.167 | 0.263 | 4.83E-09 | Bcell_1_lung |
| NDUFB5             | 1.55E-13 | 0.66092221 | 0.16  | 0.256 | 5.48E-09 | Bcell_1_lung |
| ENO1               | 1.81E-13 | 0.20184664 | 0.39  | 0.617 | 6.42E-09 | Bcell_1_lung |
| PFDN2              | 1.83E-13 | 0.41961101 | 0.291 | 0.469 | 6.48E-09 | Bcell_1_lung |
| NDUFB4             | 2.15E-13 | 0.95972577 | 0.428 | 0.529 | 7.62E-09 | Bcell_1_lung |
| HCK                | 2.45E-13 | 0.43427708 | 0.163 | 0.252 | 8.69E-09 | Bcell_1_lung |
| ISCA1              | 2.52E-13 | 1.54239301 | 0.3   | 0.311 | 8.91E-09 | Bcell_1_lung |
| RAC2               | 3.76E-13 | 0.45428977 | 0.289 | 0.47  | 1.33E-08 | Bcell_1_lung |
| FKBP1A             | 7.52E-13 | 0.62606797 | 0.183 | 0.29  | 2.67E-08 | Bcell_1_lung |
| MIC1               | 8.31E-13 | 0.53200968 | 0.58  | 0.745 | 2.94E-08 | Bcell_1_lung |
| OST4               | 1.20E-12 | 0.93439973 | 0.415 | 0.51  | 4.25E-08 | Bcell_1_lung |
| TYROBP             | 1.29E-12 | 1.23275125 | 0.275 | 0.257 | 4.57E-08 | Bcell_1_lung |
| RDH5               | 1.31E-12 | 1.09786645 | 0.373 | 0.432 | 4.64E-08 | Bcell_1_lung |
| CIB1               | 1.82E-12 | 1.26715433 | 0.302 | 0.316 | 6.44E-08 | Bcell_1_lung |
| NUAK2              | 2.33E-12 | 0.58466662 | 0.164 | 0.256 | 8.26E-08 | Bcell_1_lung |
| HNRNPF             | 3.49E-12 | 0.32740728 | 0.364 | 0.588 | 1.24E-07 | Bcell_1_lung |
| SHISA5             | 4.17E-12 | 0.49035672 | 0.298 | 0.475 | 1.48E-07 | Bcell_1_lung |
| HNRNPK             | 4.94E-12 | 0.14192283 | 0.464 | 0.726 | 1.75E-07 | Bcell_1_lung |
| DAZAP1             | 5.50E-12 | 0.66415539 | 0.522 | 0.676 | 1.95E-07 | Bcell_1_lung |
| EIF3I              | 5.75E-12 | 0.56671445 | 0.236 | 0.375 | 2.04E-07 | Bcell_1_lung |
| WDR83OS            | 6.90E-12 | 0.55395564 | 0.541 | 0.715 | 2.44E-07 | Bcell_1_lung |
| PSMB3              | 7.53E-12 | 0.63900286 | 0.218 | 0.342 | 2.67E-07 | Bcell_1_lung |
| PDE4B              | 1.49E-11 | 0.4098873  | 0.205 | 0.309 | 5.28E-07 | Bcell_1_lung |
| ATP6V0E1           | 1.56E-11 | 0.49473552 | 0.295 | 0.472 | 5.52E-07 | Bcell_1_lung |
| LAMTOR2            | 1.88E-11 | 0.5613953  | 0.242 | 0.379 | 6.65E-07 | Bcell_1_lung |
| EIF1B              | 2.62E-11 | 0.51374466 | 0.27  | 0.423 | 9.27E-07 | Bcell_1_lung |



|                    |          |            |       |       |            |              |
|--------------------|----------|------------|-------|-------|------------|--------------|
| FNTB               | 3.05E-11 | 0.50491136 | 0.281 | 0.444 | 1.08E-06   | Bcell_1_lung |
| MRPS25             | 3.20E-11 | 0.73039669 | 0.17  | 0.265 | 1.14E-06   | Bcell_1_lung |
| POLE4              | 3.93E-11 | 0.65461112 | 0.17  | 0.263 | 1.39E-06   | Bcell_1_lung |
| TWF2               | 4.09E-11 | 0.61587923 | 0.211 | 0.328 | 1.45E-06   | Bcell_1_lung |
| MDH1               | 4.97E-11 | 0.67244913 | 0.19  | 0.295 | 1.76E-06   | Bcell_1_lung |
| ENSMMUG00000057449 | 5.52E-11 | 0.66492188 | 0.194 | 0.301 | 1.96E-06   | Bcell_1_lung |
| RGS19              | 8.96E-11 | 0.53640493 | 0.295 | 0.466 | 3.17E-06   | Bcell_1_lung |
| BUD31              | 1.05E-10 | 0.59574958 | 0.168 | 0.257 | 3.73E-06   | Bcell_1_lung |
| HYPK               | 1.19E-10 | 0.56828275 | 0.224 | 0.347 | 4.21E-06   | Bcell_1_lung |
| JCHAIN             | 2.39E-10 | 0.82576107 | 0.357 | 0.385 | 8.47E-06   | Bcell_1_lung |
| ERP29              | 2.59E-10 | 0.5517363  | 0.295 | 0.464 | 9.17E-06   | Bcell_1_lung |
| EDF1               | 3.10E-10 | 1.0194495  | 0.369 | 0.436 | 1.10E-05   | Bcell_1_lung |
| ENSMMUG00000053392 | 3.52E-10 | 0.45888867 | 0.294 | 0.46  | 1.25E-05   | Bcell_1_lung |
| PSMA4              | 5.53E-10 | 0.64529292 | 0.209 | 0.319 | 1.96E-05   | Bcell_1_lung |
| COX7B              | 5.60E-10 | 0.91162156 | 0.41  | 0.509 | 1.99E-05   | Bcell_1_lung |
| HSPE1              | 6.53E-10 | 0.24954394 | 0.412 | 0.649 | 2.31E-05   | Bcell_1_lung |
| TMBIM6             | 7.49E-10 | 0.50905924 | 0.293 | 0.459 | 2.65E-05   | Bcell_1_lung |
| ENSMMUG00000055825 | 1.02E-09 | 0.60661441 | 0.172 | 0.258 | 3.62E-05   | Bcell_1_lung |
| HNRNPA1            | 1.10E-09 | 0.30072962 | 0.397 | 0.628 | 3.89E-05   | Bcell_1_lung |
| ENY2               | 1.28E-09 | 0.52799722 | 0.294 | 0.457 | 4.54E-05   | Bcell_1_lung |
| GPSM3              | 1.45E-09 | 0.76929936 | 0.459 | 0.594 | 5.14E-05   | Bcell_1_lung |
| LSM7               | 1.97E-09 | 1.08387943 | 0.35  | 0.408 | 6.98E-05   | Bcell_1_lung |
| ENSMMUG00000016665 | 2.15E-09 | 0.96368466 | 0.391 | 0.479 | 7.61E-05   | Bcell_1_lung |
| PRDX1              | 2.90E-09 | 0.56809797 | 0.216 | 0.325 | 0.00010277 | Bcell_1_lung |
| CAPZB              | 3.04E-09 | 0.58342485 | 0.254 | 0.392 | 0.00010765 | Bcell_1_lung |
| ENSMMUG00000019371 | 3.13E-09 | 0.73932127 | 0.489 | 0.579 | 0.00011076 | Bcell_1_lung |
| GTF3C6             | 3.38E-09 | 0.68419569 | 0.175 | 0.264 | 0.00011969 | Bcell_1_lung |
| TMEM59             | 4.65E-09 | 0.58851608 | 0.263 | 0.404 | 0.00016484 | Bcell_1_lung |
| PHF5A              | 5.30E-09 | 1.38476762 | 0.258 | 0.265 | 0.00018797 | Bcell_1_lung |
| SPCS1              | 6.83E-09 | 0.5849685  | 0.28  | 0.432 | 0.00024193 | Bcell_1_lung |
| PSMC5              | 7.85E-09 | 0.72798566 | 0.192 | 0.289 | 0.00027798 | Bcell_1_lung |
| DCTN3              | 8.72E-09 | 0.67631913 | 0.232 | 0.354 | 0.00030904 | Bcell_1_lung |
| MDH2               | 8.89E-09 | 0.70795681 | 0.207 | 0.314 | 0.00031483 | Bcell_1_lung |

|                    |          |            |       |       |            |              |
|--------------------|----------|------------|-------|-------|------------|--------------|
| PSMB6              | 9.27E-09 | 1.13199248 | 0.329 | 0.378 | 0.00032834 | Bcell_1_lung |
| AKR1A1             | 9.44E-09 | 0.7242795  | 0.221 | 0.336 | 0.00033462 | Bcell_1_lung |
| NDUFB7             | 1.94E-08 | 0.64795755 | 0.254 | 0.389 | 0.00068886 | Bcell_1_lung |
| WDR13              | 2.00E-08 | 0.21618015 | 0.462 | 0.715 | 0.00070946 | Bcell_1_lung |
| PDCD10             | 3.74E-08 | 0.69349602 | 0.242 | 0.367 | 0.00132563 | Bcell_1_lung |
| BUD23              | 6.23E-08 | 0.53022031 | 0.327 | 0.507 | 0.00220598 | Bcell_1_lung |
| ENSMMUG00000055026 | 6.50E-08 | 0.58163393 | 0.245 | 0.366 | 0.0023024  | Bcell_1_lung |
| ENSMMUG00000058325 | 7.76E-08 | 0.21187688 | 0.828 | 0.951 | 0.00275075 | Bcell_1_lung |
| NPM1               | 8.16E-08 | 0.24758846 | 0.7   | 0.86  | 0.00289261 | Bcell_1_lung |
| SAFB               | 1.00E-07 | 0.31222164 | 0.652 | 0.843 | 0.00355059 | Bcell_1_lung |
| ATP5PD             | 1.11E-07 | 0.77562244 | 0.192 | 0.285 | 0.00393648 | Bcell_1_lung |
| NHP2               | 1.18E-07 | 0.69838051 | 0.225 | 0.334 | 0.00419576 | Bcell_1_lung |
| DSTN               | 1.46E-07 | 0.63331667 | 0.253 | 0.375 | 0.00516224 | Bcell_1_lung |
| VPREB3             | 1.49E-07 | 1.17090973 | 0.291 | 0.309 | 0.00528907 | Bcell_1_lung |
| NDUFS6             | 1.54E-07 | 0.73239601 | 0.189 | 0.279 | 0.00545168 | Bcell_1_lung |
| COPS6              | 1.97E-07 | 0.58448698 | 0.274 | 0.412 | 0.00698629 | Bcell_1_lung |
| ATG12              | 2.09E-07 | 0.49956334 | 0.336 | 0.517 | 0.0074165  | Bcell_1_lung |
| FCRLA              | 2.21E-07 | 0.65891953 | 0.273 | 0.406 | 0.00783659 | Bcell_1_lung |
| PDRG1              | 2.44E-07 | 0.7465604  | 0.201 | 0.296 | 0.00865609 | Bcell_1_lung |
| ATP5PF             | 2.52E-07 | 0.80130698 | 0.42  | 0.537 | 0.00891172 | Bcell_1_lung |
| ENSMMUG00000014648 | 2.68E-07 | 0.41093948 | 0.588 | 0.775 | 0.00948154 | Bcell_1_lung |
| ENSMMUG00000047481 | 2.73E-07 | 0.8823878  | 0.404 | 0.511 | 0.00966772 | Bcell_1_lung |
| COX6B1             | 4.13E-07 | 1.28450678 | 0.273 | 0.297 | 0.01463426 | Bcell_1_lung |
| TALDO1             | 4.63E-07 | 0.58693445 | 0.3   | 0.458 | 0.01642066 | Bcell_1_lung |
| SAP18              | 5.72E-07 | 0.47699091 | 0.324 | 0.498 | 0.0202554  | Bcell_1_lung |
| PSMA2              | 5.72E-07 | 0.88654257 | 0.39  | 0.489 | 0.0202682  | Bcell_1_lung |
| SMNDC1             | 7.33E-07 | 0.73148367 | 0.193 | 0.279 | 0.02596866 | Bcell_1_lung |
| CD58               | 1.29E-06 | 0.78802142 | 0.187 | 0.271 | 0.04585473 | Bcell_1_lung |
| ANXA2              | 1.30E-06 | 0.68610707 | 0.187 | 0.267 | 0.04611397 | Bcell_1_lung |
| PTPN6              | 1.54E-06 | 0.73301566 | 0.259 | 0.385 | 0.05460396 | Bcell_1_lung |
| CASP1              | 1.99E-06 | 0.54836201 | 0.527 | 0.705 | 0.07055736 | Bcell_1_lung |
| CIAO2B             | 2.91E-06 | 0.82745852 | 0.174 | 0.25  | 0.10324498 | Bcell_1_lung |
| RPS27L             | 3.00E-06 | 0.75189353 | 0.202 | 0.291 | 0.10639383 | Bcell_1_lung |

|                    |            |            |       |       |            |              |
|--------------------|------------|------------|-------|-------|------------|--------------|
| TMEM14B            | 3.45E-06   | 0.51600753 | 0.324 | 0.493 | 0.12206935 | Bcell_1_lung |
| AIMP1              | 3.96E-06   | 0.60162321 | 0.276 | 0.409 | 0.14031259 | Bcell_1_lung |
| GTF2H5             | 5.24E-06   | 0.61320388 | 0.278 | 0.412 | 0.18576632 | Bcell_1_lung |
| ENSMMUG00000050829 | 5.70E-06   | 0.57507964 | 0.518 | 0.684 | 0.20196501 | Bcell_1_lung |
| ATOX1              | 7.26E-06   | 1.04594734 | 0.325 | 0.381 | 0.25714358 | Bcell_1_lung |
| NDUFA12            | 8.08E-06   | 0.79877387 | 0.186 | 0.266 | 0.28638581 | Bcell_1_lung |
| ATP5IF1            | 1.04E-05   | 0.63952886 | 0.29  | 0.433 | 0.36745881 | Bcell_1_lung |
| ENSMMUG00000065362 | 1.10E-05   | 0.14365999 | 0.993 | 0.999 | 0.3883784  | Bcell_1_lung |
| ENSMMUG00000030465 | 1.11E-05   | 0.41717867 | 0.36  | 0.546 | 0.39378143 | Bcell_1_lung |
| ENSMMUG00000012525 | 1.58E-05   | 0.51744291 | 0.329 | 0.496 | 0.55966099 | Bcell_1_lung |
| PGK1               | 2.16E-05   | 0.57371578 | 0.294 | 0.435 | 0.76630236 | Bcell_1_lung |
| CAPG               | 2.82E-05   | 0.94654027 | 0.336 | 0.395 | 0.99934017 | Bcell_1_lung |
| ENSMMUG00000055627 | 3.04E-05   | 0.17058293 | 0.506 | 0.751 | 1          | Bcell_1_lung |
| SH3BGRL            | 3.09E-05   | 0.76103992 | 0.43  | 0.567 | 1          | Bcell_1_lung |
| SSR2               | 4.36E-05   | 0.49885526 | 0.358 | 0.545 | 1          | Bcell_1_lung |
| UQCRH              | 7.38E-05   | 0.77065949 | 0.412 | 0.543 | 1          | Bcell_1_lung |
| ARPC2              | 7.52E-05   | 0.45305568 | 0.374 | 0.564 | 1          | Bcell_1_lung |
| SAT1               | 7.72E-05   | 1.13188734 | 0.297 | 0.343 | 1          | Bcell_1_lung |
| TMEM256            | 7.89E-05   | 0.77430475 | 0.201 | 0.283 | 1          | Bcell_1_lung |
| VDAC2              | 8.25E-05   | 0.57754983 | 0.326 | 0.49  | 1          | Bcell_1_lung |
| RNF181             | 8.56E-05   | 0.98859344 | 0.338 | 0.409 | 1          | Bcell_1_lung |
| NMT1               | 0.00013021 | 0.85843991 | 0.187 | 0.262 | 1          | Bcell_1_lung |
| RBX1               | 0.00016793 | 0.9733261  | 0.332 | 0.4   | 1          | Bcell_1_lung |
| PRMT1              | 0.00018461 | 0.78555338 | 0.247 | 0.356 | 1          | Bcell_1_lung |
| SPCS3              | 0.00023444 | 0.67770577 | 0.277 | 0.398 | 1          | Bcell_1_lung |
| CXCR4              | 0.00034474 | 1.21001924 | 0.239 | 0.256 | 1          | Bcell_1_lung |
| PTRHD1             | 0.00040092 | 0.78266506 | 0.215 | 0.299 | 1          | Bcell_1_lung |
| LSM6               | 0.00043286 | 0.72603376 | 0.253 | 0.362 | 1          | Bcell_1_lung |
| SF3B6              | 0.00047933 | 0.54371694 | 0.322 | 0.473 | 1          | Bcell_1_lung |
| PSMB1              | 0.00051509 | 0.74770775 | 0.406 | 0.537 | 1          | Bcell_1_lung |
| TXN                | 0.00056493 | 0.57335752 | 0.277 | 0.392 | 1          | Bcell_1_lung |
| SEC62              | 0.00066085 | 0.78684873 | 0.251 | 0.355 | 1          | Bcell_1_lung |
| SNRPB              | 0.00068018 | 0.87703592 | 0.375 | 0.481 | 1          | Bcell_1_lung |

|                    |            |            |       |       |                |
|--------------------|------------|------------|-------|-------|----------------|
| RNF7               | 0.00068908 | 0.85743053 | 0.218 | 0.303 | 1 Bcell_1_lung |
| NDUFB9             | 0.0007672  | 1.0658048  | 0.312 | 0.375 | 1 Bcell_1_lung |
| NDUFV2             | 0.0007779  | 0.82190533 | 0.216 | 0.302 | 1 Bcell_1_lung |
| TPM3               | 0.00083512 | 0.18589979 | 0.544 | 0.79  | 1 Bcell_1_lung |
| TUBB               | 0.00083906 | 0.68382717 | 0.286 | 0.411 | 1 Bcell_1_lung |
| SPCS2              | 0.00120008 | 0.92121028 | 0.351 | 0.442 | 1 Bcell_1_lung |
| DYNLL1             | 0.00125814 | 0.70408785 | 0.269 | 0.375 | 1 Bcell_1_lung |
| PDCD5              | 0.00139556 | 0.8558671  | 0.185 | 0.25  | 1 Bcell_1_lung |
| NDUFA6             | 0.00155311 | 0.80068101 | 0.2   | 0.272 | 1 Bcell_1_lung |
| SEM1               | 0.00160273 | 0.88435681 | 0.35  | 0.441 | 1 Bcell_1_lung |
| DBI                | 0.00177078 | 0.73364134 | 0.405 | 0.526 | 1 Bcell_1_lung |
| CD48               | 0.00207411 | 0.88190901 | 0.204 | 0.279 | 1 Bcell_1_lung |
| OSTC               | 0.00216193 | 0.70670359 | 0.278 | 0.396 | 1 Bcell_1_lung |
| MAGOH              | 0.00240202 | 1.04659966 | 0.299 | 0.36  | 1 Bcell_1_lung |
| SNRPD1             | 0.00364932 | 0.73508195 | 0.262 | 0.366 | 1 Bcell_1_lung |
| TOMM7              | 0.00400901 | 0.14600755 | 0.78  | 0.927 | 1 Bcell_1_lung |
| PSME2              | 0.004354   | 0.75345784 | 0.245 | 0.338 | 1 Bcell_1_lung |
| SNU13              | 0.00525533 | 0.55441248 | 0.472 | 0.635 | 1 Bcell_1_lung |
| ERH                | 0.00551179 | 0.98770495 | 0.298 | 0.359 | 1 Bcell_1_lung |
| PABPC1             | 0.00578033 | 0.14169568 | 0.64  | 0.872 | 1 Bcell_1_lung |
| NDUFA2             | 0.00579111 | 0.79093567 | 0.393 | 0.518 | 1 Bcell_1_lung |
| CBX3               | 0.00625744 | 0.74525408 | 0.291 | 0.415 | 1 Bcell_1_lung |
| SSR4               | 0.0066446  | 0.55158589 | 0.463 | 0.636 | 1 Bcell_1_lung |
| GABARAP            | 0.00675117 | 0.34340436 | 0.469 | 0.71  | 1 Bcell_1_lung |
| ENSMMUG00000007536 | 0.00792226 | 0.67811695 | 0.298 | 0.423 | 1 Bcell_1_lung |
| MZB1               | 0.00927324 | 0.66644493 | 0.286 | 0.398 | 1 Bcell_1_lung |
| KIFBP              | 0.00982455 | 0.44631477 | 0.418 | 0.6   | 1 Bcell_1_lung |
| NCBP2              | 0.01040962 | 0.78533396 | 0.267 | 0.375 | 1 Bcell_1_lung |
| DNAJC19            | 0.01247134 | 0.88289452 | 0.214 | 0.288 | 1 Bcell_1_lung |
| ENSMMUG00000022769 | 0.01740658 | 0.53035818 | 0.396 | 0.59  | 1 Bcell_1_lung |
| ENSMMUG00000000983 | 0.01876244 | 0.83941814 | 0.344 | 0.441 | 1 Bcell_1_lung |
| OSTF1              | 0.01917356 | 0.69074391 | 0.32  | 0.462 | 1 Bcell_1_lung |
| SRI                | 0.01961936 | 0.77641944 | 0.26  | 0.359 | 1 Bcell_1_lung |

|                    |            |            |       |       |                |
|--------------------|------------|------------|-------|-------|----------------|
| COPE               | 0.02087349 | 0.88487711 | 0.251 | 0.346 | 1 Bcell_1_lung |
| LSP1               | 0.02337802 | 0.54245641 | 0.469 | 0.647 | 1 Bcell_1_lung |
| POLR1H             | 0.02451727 | 0.91611028 | 0.325 | 0.41  | 1 Bcell_1_lung |
| LAT2               | 0.02723745 | 0.69450891 | 0.421 | 0.572 | 1 Bcell_1_lung |
| NDUFB10            | 0.030212   | 1.08938374 | 0.269 | 0.322 | 1 Bcell_1_lung |
| MICOS13            | 0.03041518 | 1.03338188 | 0.285 | 0.346 | 1 Bcell_1_lung |
| ENSMMUG00000064120 | 0.03232456 | 0.73460297 | 0.293 | 0.404 | 1 Bcell_1_lung |
| C11H12orf57        | 0.0420789  | 0.42476745 | 0.428 | 0.621 | 1 Bcell_1_lung |
| RPS4Y2             | 0.05260335 | 0.70182874 | 0.226 | 0.289 | 1 Bcell_1_lung |
| ENSMMUG00000002324 | 0.05308569 | 0.56912813 | 0.376 | 0.545 | 1 Bcell_1_lung |
| YJEFN3             | 0.05442551 | 0.80242044 | 0.264 | 0.36  | 1 Bcell_1_lung |
| LLPH               | 0.0549556  | 0.91788877 | 0.228 | 0.301 | 1 Bcell_1_lung |
| ATP5F1C            | 0.05676782 | 0.7806483  | 0.286 | 0.398 | 1 Bcell_1_lung |
| RHOG               | 0.06383328 | 1.19978138 | 0.22  | 0.252 | 1 Bcell_1_lung |
| PSMB7              | 0.06434191 | 0.52646363 | 0.395 | 0.585 | 1 Bcell_1_lung |
| MRPL34             | 0.07098953 | 1.11273915 | 0.231 | 0.268 | 1 Bcell_1_lung |
| CD83               | 0.07423217 | 0.76957884 | 0.538 | 0.741 | 1 Bcell_1_lung |
| COX8A              | 0.07533468 | 0.91231092 | 0.342 | 0.452 | 1 Bcell_1_lung |
| ND3                | 0.07691035 | 0.17242894 | 0.586 | 0.79  | 1 Bcell_1_lung |
| RTRAF              | 0.07750933 | 0.55106104 | 0.378 | 0.552 | 1 Bcell_1_lung |
| PRR13              | 0.0892104  | 0.62329941 | 0.356 | 0.511 | 1 Bcell_1_lung |
| ENSMMUG00000031947 | 0.11099387 | 0.39382504 | 0.529 | 0.743 | 1 Bcell_1_lung |
| C3H7orf50          | 0.11473625 | 0.71198432 | 0.397 | 0.544 | 1 Bcell_1_lung |
| ENSMMUG00000065104 | 0.12325106 | 0.51074296 | 0.386 | 0.555 | 1 Bcell_1_lung |
| COX20              | 0.1240641  | 0.99831318 | 0.199 | 0.255 | 1 Bcell_1_lung |
| ATP6V1FNB          | 0.14169845 | 0.74964479 | 0.364 | 0.485 | 1 Bcell_1_lung |
| ENSMMUG00000053735 | 0.16576852 | 0.76282706 | 0.365 | 0.489 | 1 Bcell_1_lung |
| H2AFJ              | 0.16675332 | 0.94421193 | 0.281 | 0.346 | 1 Bcell_1_lung |
| NDUFS8             | 0.17083097 | 1.10355313 | 0.24  | 0.287 | 1 Bcell_1_lung |
| LSM5               | 0.18249009 | 1.00548786 | 0.276 | 0.341 | 1 Bcell_1_lung |
| S100A10            | 0.18590351 | 0.89123915 | 0.32  | 0.395 | 1 Bcell_1_lung |
| MEF2C              | 0.19734484 | 0.25088529 | 0.628 | 0.79  | 1 Bcell_1_lung |
| MRPL51             | 0.21203647 | 0.68157458 | 0.316 | 0.436 | 1 Bcell_1_lung |

|                     |            |            |       |       |                         |
|---------------------|------------|------------|-------|-------|-------------------------|
| CD320               | 0.21549358 | 0.70515863 | 0.321 | 0.448 | 1 Bcell_1_lung          |
| RAN                 | 0.23667787 | 0.74382689 | 0.355 | 0.47  | 1 Bcell_1_lung          |
| NDUFB8              | 0.24919925 | 0.8102071  | 0.296 | 0.406 | 1 Bcell_1_lung          |
| ZNF706              | 0.25282487 | 0.94767646 | 0.28  | 0.348 | 1 Bcell_1_lung          |
| ENSMMUG00000029973  | 0.26718399 | 0.47466927 | 0.428 | 0.619 | 1 Bcell_1_lung          |
| ENSMMUG00000029026  | 0.27431346 | 0.58784126 | 0.373 | 0.53  | 1 Bcell_1_lung          |
| NDUFC2              | 0.30663463 | 0.92795119 | 0.301 | 0.385 | 1 Bcell_1_lung          |
| PPIB                | 0.31588007 | 0.67285449 | 0.397 | 0.547 | 1 Bcell_1_lung          |
| TINF2               | 0.34073624 | 0.52904252 | 0.397 | 0.576 | 1 Bcell_1_lung          |
| MRPL23              | 0.36316949 | 0.64924582 | 0.349 | 0.489 | 1 Bcell_1_lung          |
| DPH2                | 0.39424383 | 1.09107866 | 0.254 | 0.313 | 1 Bcell_1_lung          |
| UCP2                | 0.40112743 | 1.05082171 | 0.252 | 0.309 | 1 Bcell_1_lung          |
| SNRPD3              | 0.43089013 | 0.65995236 | 0.378 | 0.521 | 1 Bcell_1_lung          |
| SUMO1               | 0.45504077 | 0.75994265 | 0.318 | 0.439 | 1 Bcell_1_lung          |
| TUBA1A              | 0.56609853 | 0.7368119  | 0.367 | 0.512 | 1 Bcell_1_lung          |
| CUTA                | 0.59765395 | 0.93398656 | 0.302 | 0.395 | 1 Bcell_1_lung          |
| LST1                | 0.59831073 | 0.83438558 | 0.31  | 0.408 | 1 Bcell_1_lung          |
| DAD1                | 0.71897237 | 0.88603755 | 0.291 | 0.376 | 1 Bcell_1_lung          |
| ENSMMUG000000051392 | 0.72867638 | 0.6274903  | 0.4   | 0.569 | 1 Bcell_1_lung          |
| ARHGDIA             | 0.74626666 | 1.10218715 | 0.221 | 0.27  | 1 Bcell_1_lung          |
| FTH1                | 0.74754738 | 0.35829763 | 0.677 | 0.896 | 1 Bcell_1_lung          |
| CFDP1               | 0.79561443 | 0.75375615 | 0.351 | 0.472 | 1 Bcell_1_lung          |
| ENSMMUG000000053817 | 0.79962045 | 0.91675901 | 0.275 | 0.356 | 1 Bcell_1_lung          |
| UBXN1               | 0.80007995 | 0.54682513 | 0.426 | 0.607 | 1 Bcell_1_lung          |
| MAP1LC3B            | 0.82663552 | 0.78045831 | 0.327 | 0.434 | 1 Bcell_1_lung          |
| ARHGDIB             | 0.84768462 | 0.13694703 | 0.699 | 0.9   | 1 Bcell_1_lung          |
| SRGN                | 0.89512136 | 1.00142796 | 0.231 | 0.282 | 1 Bcell_1_lung          |
| RABAC1              | 0.92925048 | 0.98954844 | 0.218 | 0.264 | 1 Bcell_1_lung          |
| ZNHIT1              | 0.97344881 | 0.92452209 | 0.275 | 0.356 | 1 Bcell_1_lung          |
| HBE1                | 0          | 2.99096878 | 0.648 | 0.1   | 0 Bcell_1_UCBMC         |
| HBA                 | 0          | 3.1138791  | 0.634 | 0.093 | 0 Bcell_1_UCBMC         |
| ENSMMUG000000049151 | 0          | 0.87614057 | 0.983 | 0.903 | 0 Bcell_1_UCBMC         |
| MYLIP               | 5.72E-254  | 1.5894021  | 0.673 | 0.366 | 2.03E-249 Bcell_1_UCBMC |

|                    |           |            |       |       |           |               |
|--------------------|-----------|------------|-------|-------|-----------|---------------|
| NCOA3              | 1.20E-244 | 1.12507651 | 0.867 | 0.62  | 4.26E-240 | Bcell_1_UCBMC |
| PNISR              | 3.80E-241 | 1.25184829 | 0.773 | 0.508 | 1.35E-236 | Bcell_1_UCBMC |
| LYN                | 5.96E-215 | 1.01559253 | 0.878 | 0.66  | 2.11E-210 | Bcell_1_UCBMC |
| RPL13A             | 8.21E-213 | 0.51931413 | 0.996 | 0.956 | 2.91E-208 | Bcell_1_UCBMC |
| EIF2AK3            | 1.40E-212 | 1.22959558 | 0.765 | 0.482 | 4.96E-208 | Bcell_1_UCBMC |
| RPS20              | 3.67E-179 | 0.60908824 | 0.992 | 0.822 | 1.30E-174 | Bcell_1_UCBMC |
| TRA2A              | 3.71E-157 | 0.97997809 | 0.783 | 0.562 | 1.32E-152 | Bcell_1_UCBMC |
| ENSMMUG00000056654 | 1.08E-156 | 1.06116593 | 0.736 | 0.561 | 3.82E-152 | Bcell_1_UCBMC |
| SIK3               | 7.53E-155 | 1.29901084 | 0.639 | 0.407 | 2.67E-150 | Bcell_1_UCBMC |
| DENND4A            | 1.94E-151 | 0.8374218  | 0.867 | 0.675 | 6.86E-147 | Bcell_1_UCBMC |
| FOXO1              | 9.52E-151 | 1.29491382 | 0.628 | 0.395 | 3.37E-146 | Bcell_1_UCBMC |
| CCNL1              | 1.17E-148 | 0.915768   | 0.781 | 0.541 | 4.16E-144 | Bcell_1_UCBMC |
| COX3               | 1.35E-148 | 0.56395086 | 0.986 | 0.95  | 4.78E-144 | Bcell_1_UCBMC |
| RFX3               | 2.31E-146 | 1.65427826 | 0.492 | 0.274 | 8.20E-142 | Bcell_1_UCBMC |
| USP15              | 3.72E-145 | 0.9530625  | 0.754 | 0.549 | 1.32E-140 | Bcell_1_UCBMC |
| DDX5               | 6.29E-141 | 0.61348701 | 0.948 | 0.73  | 2.23E-136 | Bcell_1_UCBMC |
| RBM39              | 1.09E-130 | 0.81699155 | 0.808 | 0.622 | 3.86E-126 | Bcell_1_UCBMC |
| JMJD1C             | 3.25E-128 | 0.83130079 | 0.827 | 0.594 | 1.15E-123 | Bcell_1_UCBMC |
| TM9SF3             | 1.62E-127 | 1.54738942 | 0.477 | 0.276 | 5.73E-123 | Bcell_1_UCBMC |
| ELMO1              | 1.24E-126 | 1.04443717 | 0.671 | 0.467 | 4.40E-122 | Bcell_1_UCBMC |
| NFKB1              | 2.38E-123 | 1.19575477 | 0.598 | 0.392 | 8.44E-119 | Bcell_1_UCBMC |
| TRA2B              | 3.95E-123 | 0.6705545  | 0.907 | 0.741 | 1.40E-118 | Bcell_1_UCBMC |
| OSBPL8             | 6.68E-120 | 1.16224151 | 0.609 | 0.41  | 2.37E-115 | Bcell_1_UCBMC |
| EML4               | 1.30E-118 | 0.92903251 | 0.694 | 0.496 | 4.62E-114 | Bcell_1_UCBMC |
| CDC42SE2           | 2.94E-118 | 1.18977772 | 0.607 | 0.427 | 1.04E-113 | Bcell_1_UCBMC |
| TRPM7              | 5.94E-117 | 1.11541467 | 0.61  | 0.426 | 2.10E-112 | Bcell_1_UCBMC |
| EPC1               | 2.96E-116 | 0.97617372 | 0.66  | 0.47  | 1.05E-111 | Bcell_1_UCBMC |
| EBF1               | 8.21E-115 | 0.77414718 | 0.812 | 0.588 | 2.91E-110 | Bcell_1_UCBMC |
| MTSS1              | 2.29E-114 | 1.09496084 | 0.603 | 0.389 | 8.10E-110 | Bcell_1_UCBMC |
| BACH2              | 5.86E-112 | 1.05206618 | 0.682 | 0.48  | 2.08E-107 | Bcell_1_UCBMC |
| CD74               | 5.41E-111 | 0.2860233  | 1     | 0.997 | 1.92E-106 | Bcell_1_UCBMC |
| SARAF              | 1.61E-109 | 0.67889397 | 0.808 | 0.669 | 5.71E-105 | Bcell_1_UCBMC |
| PIK3CA             | 3.77E-108 | 1.5351005  | 0.416 | 0.229 | 1.34E-103 | Bcell_1_UCBMC |

|                    |           |            |       |       |           |               |
|--------------------|-----------|------------|-------|-------|-----------|---------------|
| ENSMMUG00000046264 | 2.92E-107 | 1.53495315 | 0.439 | 0.255 | 1.03E-102 | Bcell_1_UCBMC |
| STAG1              | 3.67E-106 | 1.06205773 | 0.612 | 0.43  | 1.30E-101 | Bcell_1_UCBMC |
| ARID4B             | 1.38E-105 | 0.9378141  | 0.671 | 0.486 | 4.87E-101 | Bcell_1_UCBMC |
| KLF6               | 2.49E-104 | 0.65418583 | 0.792 | 0.53  | 8.83E-100 | Bcell_1_UCBMC |
| ENSMMUG00000047632 | 2.62E-104 | 0.84654043 | 0.635 | 0.403 | 9.27E-100 | Bcell_1_UCBMC |
| RSRP1              | 2.35E-103 | 0.96984202 | 0.636 | 0.452 | 8.34E-99  | Bcell_1_UCBMC |
| GOLGA4             | 2.95E-103 | 1.34674988 | 0.487 | 0.313 | 1.05E-98  | Bcell_1_UCBMC |
| YPEL5              | 8.97E-103 | 1.12776165 | 0.552 | 0.366 | 3.18E-98  | Bcell_1_UCBMC |
| JUND               | 3.51E-102 | 0.86610035 | 0.746 | 0.584 | 1.24E-97  | Bcell_1_UCBMC |
| MARCHF6            | 6.08E-102 | 1.3651714  | 0.458 | 0.281 | 2.15E-97  | Bcell_1_UCBMC |
| TMEM131            | 8.60E-100 | 0.94881116 | 0.63  | 0.449 | 3.05E-95  | Bcell_1_UCBMC |
| ANKRD44            | 2.84E-99  | 0.82607185 | 0.713 | 0.533 | 1.01E-94  | Bcell_1_UCBMC |
| SENP5              | 3.56E-99  | 1.45504999 | 0.428 | 0.253 | 1.26E-94  | Bcell_1_UCBMC |
| DAZAP2             | 1.01E-93  | 1.08735097 | 0.536 | 0.373 | 3.56E-89  | Bcell_1_UCBMC |
| ENSMMUG00000065175 | 3.93E-93  | 1.29153078 | 0.46  | 0.303 | 1.39E-88  | Bcell_1_UCBMC |
| ENSMMUG00000006165 | 2.01E-92  | 0.98445037 | 0.604 | 0.44  | 7.13E-88  | Bcell_1_UCBMC |
| KMT2E              | 6.49E-89  | 0.83768793 | 0.657 | 0.493 | 2.30E-84  | Bcell_1_UCBMC |
| KMT2C              | 7.63E-89  | 0.84506001 | 0.674 | 0.492 | 2.70E-84  | Bcell_1_UCBMC |
| GABPB1             | 2.09E-87  | 1.45882427 | 0.397 | 0.232 | 7.41E-83  | Bcell_1_UCBMC |
| PCM1               | 7.73E-85  | 1.37165088 | 0.419 | 0.263 | 2.74E-80  | Bcell_1_UCBMC |
| RPL23A             | 3.17E-82  | 0.33890417 | 0.993 | 0.958 | 1.12E-77  | Bcell_1_UCBMC |
| GAS7               | 1.15E-81  | 1.46916436 | 0.382 | 0.223 | 4.07E-77  | Bcell_1_UCBMC |
| GGNBP2             | 1.98E-81  | 1.26718826 | 0.427 | 0.27  | 7.01E-77  | Bcell_1_UCBMC |
| CPEB1              | 2.18E-81  | 0.37968357 | 0.971 | 0.884 | 7.72E-77  | Bcell_1_UCBMC |
| TSN                | 4.27E-81  | 1.68660661 | 0.268 | 0.123 | 1.51E-76  | Bcell_1_UCBMC |
| BRAF               | 5.57E-81  | 1.34045497 | 0.436 | 0.279 | 1.97E-76  | Bcell_1_UCBMC |
| BIRC6              | 8.52E-81  | 0.90692626 | 0.592 | 0.437 | 3.02E-76  | Bcell_1_UCBMC |
| VPS13B             | 1.22E-80  | 0.85987476 | 0.604 | 0.444 | 4.33E-76  | Bcell_1_UCBMC |
| MANBA              | 1.05E-79  | 0.94242915 | 0.551 | 0.394 | 3.72E-75  | Bcell_1_UCBMC |
| PRKCB              | 3.82E-78  | 0.73536873 | 0.716 | 0.556 | 1.36E-73  | Bcell_1_UCBMC |
| UVRAG              | 1.40E-76  | 0.79966527 | 0.632 | 0.468 | 4.96E-72  | Bcell_1_UCBMC |
| RALGPS2            | 2.29E-76  | 0.5856768  | 0.819 | 0.644 | 8.13E-72  | Bcell_1_UCBMC |
| COG5               | 1.30E-75  | 1.11641257 | 0.484 | 0.335 | 4.59E-71  | Bcell_1_UCBMC |



|          |          |            |       |       |          |               |
|----------|----------|------------|-------|-------|----------|---------------|
| QKI      | 1.36E-75 | 1.32234245 | 0.419 | 0.268 | 4.82E-71 | Bcell_1_UCBMC |
| SMCHD1   | 2.37E-75 | 0.865091   | 0.592 | 0.441 | 8.40E-71 | Bcell_1_UCBMC |
| PNN      | 1.13E-74 | 0.97501321 | 0.523 | 0.377 | 3.99E-70 | Bcell_1_UCBMC |
| OSBPL10  | 1.13E-74 | 1.3314229  | 0.35  | 0.192 | 4.01E-70 | Bcell_1_UCBMC |
| BCLAF1   | 1.36E-74 | 0.8950138  | 0.578 | 0.437 | 4.83E-70 | Bcell_1_UCBMC |
| TPT1     | 6.70E-73 | 0.25830553 | 0.996 | 0.993 | 2.37E-68 | Bcell_1_UCBMC |
| ITPR1    | 2.08E-72 | 1.00500412 | 0.507 | 0.357 | 7.37E-68 | Bcell_1_UCBMC |
| LMBRD1   | 2.90E-72 | 1.14419105 | 0.453 | 0.31  | 1.03E-67 | Bcell_1_UCBMC |
| ZEB1     | 4.96E-72 | 1.09611095 | 0.482 | 0.336 | 1.76E-67 | Bcell_1_UCBMC |
| AFF3     | 1.74E-71 | 0.57190566 | 0.824 | 0.636 | 6.17E-67 | Bcell_1_UCBMC |
| CREBRF   | 8.85E-71 | 1.29147144 | 0.384 | 0.238 | 3.14E-66 | Bcell_1_UCBMC |
| YEATS2   | 1.09E-70 | 1.04376205 | 0.483 | 0.337 | 3.86E-66 | Bcell_1_UCBMC |
| TCF12    | 1.72E-70 | 0.90004919 | 0.569 | 0.422 | 6.11E-66 | Bcell_1_UCBMC |
| RPS14    | 2.25E-70 | 0.27089573 | 0.992 | 0.988 | 7.97E-66 | Bcell_1_UCBMC |
| FOXP1    | 2.79E-70 | 0.97218954 | 0.521 | 0.373 | 9.89E-66 | Bcell_1_UCBMC |
| PIAS1    | 7.68E-70 | 1.10024339 | 0.455 | 0.311 | 2.72E-65 | Bcell_1_UCBMC |
| RAB1A    | 1.27E-69 | 1.22257458 | 0.411 | 0.272 | 4.49E-65 | Bcell_1_UCBMC |
| AFTPH    | 2.21E-69 | 0.95629642 | 0.516 | 0.376 | 7.83E-65 | Bcell_1_UCBMC |
| ZEB2     | 3.11E-69 | 0.88939372 | 0.562 | 0.419 | 1.10E-64 | Bcell_1_UCBMC |
| PUM1     | 8.98E-69 | 1.01619481 | 0.495 | 0.358 | 3.18E-64 | Bcell_1_UCBMC |
| AKAP13   | 1.35E-68 | 0.61047488 | 0.752 | 0.597 | 4.78E-64 | Bcell_1_UCBMC |
| RPL27A   | 5.43E-68 | 0.33868351 | 0.983 | 0.884 | 1.92E-63 | Bcell_1_UCBMC |
| PTBP2    | 1.56E-66 | 1.24977736 | 0.388 | 0.25  | 5.53E-62 | Bcell_1_UCBMC |
| CLINT1   | 9.67E-64 | 0.94676427 | 0.498 | 0.366 | 3.43E-59 | Bcell_1_UCBMC |
| RBM5     | 1.04E-63 | 1.13228419 | 0.405 | 0.267 | 3.70E-59 | Bcell_1_UCBMC |
| SLMAP    | 2.12E-63 | 1.06013125 | 0.456 | 0.32  | 7.52E-59 | Bcell_1_UCBMC |
| DDX6     | 4.26E-63 | 0.88609096 | 0.529 | 0.402 | 1.51E-58 | Bcell_1_UCBMC |
| ITCH     | 5.58E-63 | 1.12173805 | 0.419 | 0.284 | 1.98E-58 | Bcell_1_UCBMC |
| TMEM131L | 7.17E-63 | 0.74504338 | 0.608 | 0.452 | 2.54E-58 | Bcell_1_UCBMC |
| STK17B   | 9.00E-63 | 0.54986441 | 0.777 | 0.607 | 3.19E-58 | Bcell_1_UCBMC |
| PPP1R15A | 1.01E-62 | 0.9095079  | 0.507 | 0.366 | 3.56E-58 | Bcell_1_UCBMC |
| HIVEP1   | 1.03E-62 | 1.23042278 | 0.363 | 0.225 | 3.66E-58 | Bcell_1_UCBMC |
| CMTM8    | 1.81E-62 | 1.55502051 | 0.267 | 0.138 | 6.40E-58 | Bcell_1_UCBMC |

|                   |          |            |       |       |          |               |
|-------------------|----------|------------|-------|-------|----------|---------------|
| RPS3              | 2.39E-61 | 0.30594704 | 0.98  | 0.922 | 8.48E-57 | Bcell_1_UCBMC |
| CD69              | 2.43E-61 | 0.45279502 | 0.877 | 0.719 | 8.61E-57 | Bcell_1_UCBMC |
| SSBP2             | 2.55E-61 | 0.86832636 | 0.555 | 0.416 | 9.05E-57 | Bcell_1_UCBMC |
| FBXO33            | 1.40E-60 | 1.21234451 | 0.39  | 0.253 | 4.98E-56 | Bcell_1_UCBMC |
| CBLB              | 3.36E-60 | 0.83056093 | 0.536 | 0.406 | 1.19E-55 | Bcell_1_UCBMC |
| ENSMUG00000030448 | 5.20E-60 | 1.13067296 | 0.416 | 0.296 | 1.84E-55 | Bcell_1_UCBMC |
| ABCG1             | 7.95E-60 | 1.44187673 | 0.271 | 0.145 | 2.82E-55 | Bcell_1_UCBMC |
| ZFC3H1            | 2.40E-59 | 1.17252966 | 0.391 | 0.263 | 8.50E-55 | Bcell_1_UCBMC |
| RABGAP1L          | 6.20E-59 | 0.71902436 | 0.629 | 0.493 | 2.20E-54 | Bcell_1_UCBMC |
| UTRN              | 4.65E-58 | 0.75521167 | 0.593 | 0.46  | 1.65E-53 | Bcell_1_UCBMC |
| ARID1B            | 5.48E-58 | 0.71351339 | 0.627 | 0.486 | 1.94E-53 | Bcell_1_UCBMC |
| RPL7              | 6.36E-58 | 0.34646648 | 0.939 | 0.861 | 2.25E-53 | Bcell_1_UCBMC |
| UTY               | 1.18E-57 | 1.29366743 | 0.272 | 0.144 | 4.19E-53 | Bcell_1_UCBMC |
| DCP1A             | 4.93E-57 | 1.48766465 | 0.302 | 0.181 | 1.75E-52 | Bcell_1_UCBMC |
| MAPK8             | 1.25E-56 | 1.57339686 | 0.271 | 0.15  | 4.44E-52 | Bcell_1_UCBMC |
| CELF2             | 1.38E-56 | 0.70971941 | 0.606 | 0.475 | 4.90E-52 | Bcell_1_UCBMC |
| TNRC6A            | 4.29E-56 | 1.0831522  | 0.396 | 0.268 | 1.52E-51 | Bcell_1_UCBMC |
| NIPBL             | 4.30E-56 | 1.03901206 | 0.42  | 0.293 | 1.52E-51 | Bcell_1_UCBMC |
| SRSF11            | 5.54E-56 | 0.64138933 | 0.652 | 0.54  | 1.96E-51 | Bcell_1_UCBMC |
| B2M               | 8.13E-56 | 0.20519624 | 0.998 | 0.996 | 2.88E-51 | Bcell_1_UCBMC |
| RICTOR            | 9.76E-56 | 1.15472702 | 0.377 | 0.252 | 3.46E-51 | Bcell_1_UCBMC |
| G3BP2             | 1.73E-55 | 0.99748163 | 0.442 | 0.316 | 6.14E-51 | Bcell_1_UCBMC |
| ACTR2             | 7.10E-55 | 0.57529847 | 0.723 | 0.601 | 2.51E-50 | Bcell_1_UCBMC |
| TNRC6B            | 1.14E-54 | 0.73442094 | 0.599 | 0.476 | 4.06E-50 | Bcell_1_UCBMC |
| LUC7L3            | 2.07E-54 | 0.91256404 | 0.474 | 0.355 | 7.35E-50 | Bcell_1_UCBMC |
| SETD2             | 1.13E-53 | 1.0228578  | 0.435 | 0.317 | 4.01E-49 | Bcell_1_UCBMC |
| INPP5D            | 2.41E-53 | 0.90140723 | 0.493 | 0.372 | 8.53E-49 | Bcell_1_UCBMC |
| SRSF5             | 3.22E-53 | 0.51009194 | 0.763 | 0.646 | 1.14E-48 | Bcell_1_UCBMC |
| UBB               | 5.43E-53 | 0.42485958 | 0.878 | 0.79  | 1.92E-48 | Bcell_1_UCBMC |
| RPL23             | 6.48E-53 | 0.28005266 | 0.985 | 0.916 | 2.30E-48 | Bcell_1_UCBMC |
| BANK1             | 1.65E-52 | 0.49000407 | 0.776 | 0.612 | 5.84E-48 | Bcell_1_UCBMC |
| KDM4C             | 2.27E-52 | 0.68108115 | 0.601 | 0.469 | 8.05E-48 | Bcell_1_UCBMC |
| TBC1D9            | 2.58E-52 | 1.22466212 | 0.363 | 0.239 | 9.14E-48 | Bcell_1_UCBMC |

|                    |          |            |       |       |          |               |
|--------------------|----------|------------|-------|-------|----------|---------------|
| CD44               | 4.29E-52 | 0.95497612 | 0.477 | 0.353 | 1.52E-47 | Bcell_1_UCBMC |
| CUL3               | 3.86E-51 | 1.10609079 | 0.395 | 0.279 | 1.37E-46 | Bcell_1_UCBMC |
| SLC35A3            | 6.04E-51 | 1.27442881 | 0.338 | 0.223 | 2.14E-46 | Bcell_1_UCBMC |
| ENSMMUG00000063979 | 6.38E-51 | 1.37210175 | 0.281 | 0.167 | 2.26E-46 | Bcell_1_UCBMC |
| RCC1               | 6.78E-51 | 1.0829704  | 0.373 | 0.258 | 2.40E-46 | Bcell_1_UCBMC |
| CYLD               | 7.32E-51 | 1.06451614 | 0.354 | 0.23  | 2.59E-46 | Bcell_1_UCBMC |
| TIPARP             | 8.33E-51 | 1.42355163 | 0.279 | 0.164 | 2.95E-46 | Bcell_1_UCBMC |
| ZFAND3             | 9.52E-51 | 0.86113724 | 0.502 | 0.384 | 3.37E-46 | Bcell_1_UCBMC |
| MPP7               | 1.29E-50 | 1.22844673 | 0.318 | 0.198 | 4.56E-46 | Bcell_1_UCBMC |
| ZNF292             | 1.65E-50 | 0.90553688 | 0.461 | 0.342 | 5.83E-46 | Bcell_1_UCBMC |
| MBNL2              | 2.09E-50 | 0.99365624 | 0.409 | 0.288 | 7.40E-46 | Bcell_1_UCBMC |
| CNOT1              | 2.23E-50 | 1.01974464 | 0.405 | 0.289 | 7.89E-46 | Bcell_1_UCBMC |
| SYK                | 2.43E-50 | 0.72846647 | 0.575 | 0.458 | 8.61E-46 | Bcell_1_UCBMC |
| SPPL3              | 5.70E-50 | 1.11525996 | 0.395 | 0.28  | 2.02E-45 | Bcell_1_UCBMC |
| OSBPL9             | 6.66E-50 | 1.05025055 | 0.416 | 0.305 | 2.36E-45 | Bcell_1_UCBMC |
| RAB5A              | 3.06E-49 | 1.09608598 | 0.342 | 0.223 | 1.09E-44 | Bcell_1_UCBMC |
| PHIP               | 8.63E-49 | 0.93395415 | 0.43  | 0.316 | 3.06E-44 | Bcell_1_UCBMC |
| ZNF644             | 1.09E-48 | 0.88181862 | 0.478 | 0.365 | 3.88E-44 | Bcell_1_UCBMC |
| SCAF8              | 1.37E-48 | 0.94543376 | 0.423 | 0.31  | 4.86E-44 | Bcell_1_UCBMC |
| PRPF40A            | 2.10E-48 | 0.81529371 | 0.482 | 0.371 | 7.43E-44 | Bcell_1_UCBMC |
| INO80D             | 4.93E-48 | 1.20404471 | 0.323 | 0.21  | 1.75E-43 | Bcell_1_UCBMC |
| REL                | 8.60E-48 | 0.55428683 | 0.654 | 0.535 | 3.05E-43 | Bcell_1_UCBMC |
| RAB2A              | 1.14E-47 | 0.95066299 | 0.45  | 0.345 | 4.05E-43 | Bcell_1_UCBMC |
| RAB7A              | 1.27E-47 | 0.80109918 | 0.495 | 0.383 | 4.50E-43 | Bcell_1_UCBMC |
| RPS6KA5            | 5.29E-47 | 1.06430921 | 0.398 | 0.286 | 1.88E-42 | Bcell_1_UCBMC |
| CNOT4              | 6.56E-47 | 1.06621015 | 0.377 | 0.266 | 2.33E-42 | Bcell_1_UCBMC |
| EIF5               | 7.03E-47 | 0.89441618 | 0.462 | 0.355 | 2.49E-42 | Bcell_1_UCBMC |
| EPB41              | 1.19E-46 | 0.99783525 | 0.385 | 0.271 | 4.20E-42 | Bcell_1_UCBMC |
| ENSMMUG00000014862 | 2.68E-46 | 0.69902133 | 0.541 | 0.44  | 9.49E-42 | Bcell_1_UCBMC |
| ITPR2              | 3.25E-46 | 0.74418556 | 0.54  | 0.431 | 1.15E-41 | Bcell_1_UCBMC |
| FCHSD2             | 3.97E-46 | 0.50856184 | 0.702 | 0.541 | 1.41E-41 | Bcell_1_UCBMC |
| RLF                | 6.32E-46 | 1.09282253 | 0.361 | 0.253 | 2.24E-41 | Bcell_1_UCBMC |
| WDFY2              | 1.34E-45 | 1.0930057  | 0.348 | 0.236 | 4.74E-41 | Bcell_1_UCBMC |

|           |          |            |       |       |          |               |
|-----------|----------|------------|-------|-------|----------|---------------|
| MTREX     | 1.38E-45 | 0.75419695 | 0.51  | 0.401 | 4.91E-41 | Bcell_1_UCBMC |
| UBXN7     | 1.41E-45 | 1.18376022 | 0.302 | 0.191 | 5.00E-41 | Bcell_1_UCBMC |
| SNX4      | 3.85E-45 | 1.09930833 | 0.342 | 0.23  | 1.36E-40 | Bcell_1_UCBMC |
| AGO3      | 4.20E-45 | 1.16261448 | 0.35  | 0.243 | 1.49E-40 | Bcell_1_UCBMC |
| FCRL1     | 4.37E-45 | 0.30230809 | 0.949 | 0.85  | 1.55E-40 | Bcell_1_UCBMC |
| DLG1      | 9.35E-45 | 0.99587249 | 0.408 | 0.297 | 3.31E-40 | Bcell_1_UCBMC |
| MORF4L1   | 1.03E-44 | 0.60320326 | 0.611 | 0.51  | 3.64E-40 | Bcell_1_UCBMC |
| RAB30     | 1.08E-44 | 0.60784043 | 0.589 | 0.475 | 3.81E-40 | Bcell_1_UCBMC |
| BIN3      | 1.20E-44 | 1.07213308 | 0.363 | 0.261 | 4.25E-40 | Bcell_1_UCBMC |
| SIN3A     | 2.22E-44 | 1.20976598 | 0.306 | 0.199 | 7.88E-40 | Bcell_1_UCBMC |
| ERO1B     | 2.30E-44 | 0.92202653 | 0.434 | 0.328 | 8.17E-40 | Bcell_1_UCBMC |
| CTDSPL2   | 7.47E-44 | 1.17962587 | 0.3   | 0.192 | 2.65E-39 | Bcell_1_UCBMC |
| CHD2      | 1.42E-43 | 0.79398189 | 0.496 | 0.395 | 5.04E-39 | Bcell_1_UCBMC |
| SMC4      | 1.49E-43 | 1.10953233 | 0.346 | 0.238 | 5.27E-39 | Bcell_1_UCBMC |
| ARIH1     | 1.83E-43 | 0.87223653 | 0.464 | 0.356 | 6.49E-39 | Bcell_1_UCBMC |
| NUP98     | 7.42E-43 | 1.04856304 | 0.38  | 0.277 | 2.63E-38 | Bcell_1_UCBMC |
| PAN3      | 1.08E-42 | 0.78496636 | 0.49  | 0.382 | 3.83E-38 | Bcell_1_UCBMC |
| PHLPP1    | 1.94E-42 | 1.16227553 | 0.309 | 0.199 | 6.86E-38 | Bcell_1_UCBMC |
| SLC38A1   | 2.93E-42 | 0.67471039 | 0.562 | 0.452 | 1.04E-37 | Bcell_1_UCBMC |
| PPP1R12A  | 7.18E-42 | 0.78851451 | 0.485 | 0.385 | 2.54E-37 | Bcell_1_UCBMC |
| SECISBP2L | 8.90E-42 | 1.32447545 | 0.27  | 0.168 | 3.15E-37 | Bcell_1_UCBMC |
| RAPGEF1   | 9.54E-42 | 0.87044982 | 0.43  | 0.327 | 3.38E-37 | Bcell_1_UCBMC |
| AP3B1     | 1.74E-41 | 1.00198387 | 0.36  | 0.256 | 6.16E-37 | Bcell_1_UCBMC |
| UBAP1     | 2.69E-41 | 1.24947721 | 0.298 | 0.198 | 9.52E-37 | Bcell_1_UCBMC |
| UBE2E1    | 3.00E-41 | 1.29980181 | 0.268 | 0.168 | 1.06E-36 | Bcell_1_UCBMC |
| AUTS2     | 4.94E-41 | 0.98936916 | 0.382 | 0.268 | 1.75E-36 | Bcell_1_UCBMC |
| ITSN2     | 6.69E-41 | 0.7866712  | 0.467 | 0.366 | 2.37E-36 | Bcell_1_UCBMC |
| CMTM6     | 7.18E-41 | 0.88707573 | 0.448 | 0.352 | 2.54E-36 | Bcell_1_UCBMC |
| ASH1L     | 9.41E-41 | 0.74815039 | 0.523 | 0.427 | 3.33E-36 | Bcell_1_UCBMC |
| VPS37B    | 1.06E-40 | 1.2596583  | 0.259 | 0.159 | 3.77E-36 | Bcell_1_UCBMC |
| ROCK1     | 1.10E-40 | 0.7147899  | 0.523 | 0.423 | 3.91E-36 | Bcell_1_UCBMC |
| ZBTB20    | 3.82E-40 | 0.81232269 | 0.485 | 0.377 | 1.35E-35 | Bcell_1_UCBMC |
| ESYT2     | 5.89E-40 | 1.30368148 | 0.291 | 0.194 | 2.09E-35 | Bcell_1_UCBMC |

|                   |          |            |       |       |          |               |
|-------------------|----------|------------|-------|-------|----------|---------------|
| MBTD1             | 6.15E-40 | 1.10539599 | 0.333 | 0.232 | 2.18E-35 | Bcell_1_UCBMC |
| PELI1             | 1.34E-39 | 1.00930072 | 0.336 | 0.231 | 4.75E-35 | Bcell_1_UCBMC |
| ELL2              | 1.87E-39 | 1.02569822 | 0.336 | 0.233 | 6.64E-35 | Bcell_1_UCBMC |
| YWHAZ             | 2.46E-39 | 0.42019142 | 0.813 | 0.741 | 8.71E-35 | Bcell_1_UCBMC |
| ANTXR2            | 8.57E-39 | 0.95807373 | 0.371 | 0.269 | 3.03E-34 | Bcell_1_UCBMC |
| RSF1              | 1.12E-38 | 0.89658187 | 0.396 | 0.299 | 3.97E-34 | Bcell_1_UCBMC |
| SEPTIN6           | 1.15E-38 | 0.61272135 | 0.566 | 0.473 | 4.09E-34 | Bcell_1_UCBMC |
| WAC               | 1.34E-38 | 0.82364759 | 0.435 | 0.339 | 4.73E-34 | Bcell_1_UCBMC |
| CERT1             | 1.64E-38 | 1.00431431 | 0.385 | 0.289 | 5.80E-34 | Bcell_1_UCBMC |
| ATP11B            | 5.58E-38 | 1.34387627 | 0.265 | 0.172 | 1.98E-33 | Bcell_1_UCBMC |
| RAPGEF2           | 6.45E-38 | 0.97952527 | 0.367 | 0.267 | 2.29E-33 | Bcell_1_UCBMC |
| NKIRAS1           | 1.12E-37 | 1.24030264 | 0.289 | 0.194 | 3.97E-33 | Bcell_1_UCBMC |
| MAN2A1            | 1.15E-37 | 1.06750973 | 0.333 | 0.235 | 4.06E-33 | Bcell_1_UCBMC |
| KDM6A             | 2.55E-37 | 0.84750019 | 0.428 | 0.332 | 9.02E-33 | Bcell_1_UCBMC |
| FOS               | 3.51E-37 | 0.46322509 | 0.836 | 0.686 | 1.24E-32 | Bcell_1_UCBMC |
| KAT6A             | 1.24E-36 | 0.87828168 | 0.369 | 0.268 | 4.39E-32 | Bcell_1_UCBMC |
| TFDP2             | 1.98E-36 | 1.1761458  | 0.289 | 0.194 | 7.01E-32 | Bcell_1_UCBMC |
| SYF2              | 2.44E-36 | 0.5110939  | 0.525 | 0.421 | 8.66E-32 | Bcell_1_UCBMC |
| DHX9              | 2.48E-36 | 0.8739845  | 0.405 | 0.313 | 8.77E-32 | Bcell_1_UCBMC |
| TRIM22            | 2.71E-36 | 0.74365412 | 0.469 | 0.379 | 9.61E-32 | Bcell_1_UCBMC |
| SENP2             | 4.12E-36 | 1.20393413 | 0.273 | 0.181 | 1.46E-31 | Bcell_1_UCBMC |
| PPP3CA            | 4.25E-36 | 0.54380504 | 0.623 | 0.515 | 1.51E-31 | Bcell_1_UCBMC |
| ZFAND6            | 4.43E-36 | 0.75646866 | 0.484 | 0.395 | 1.57E-31 | Bcell_1_UCBMC |
| TRAF3             | 5.02E-36 | 0.98450957 | 0.369 | 0.277 | 1.78E-31 | Bcell_1_UCBMC |
| ARHGAP15          | 1.04E-35 | 0.36099815 | 0.824 | 0.681 | 3.67E-31 | Bcell_1_UCBMC |
| ANKRD33B          | 1.35E-35 | 0.87250993 | 0.397 | 0.3   | 4.78E-31 | Bcell_1_UCBMC |
| ENSMUG00000031367 | 1.35E-35 | 1.23951828 | 0.268 | 0.178 | 4.79E-31 | Bcell_1_UCBMC |
| LCOR              | 1.37E-35 | 0.89718286 | 0.394 | 0.3   | 4.85E-31 | Bcell_1_UCBMC |
| AKT3              | 1.87E-35 | 0.7700655  | 0.439 | 0.336 | 6.63E-31 | Bcell_1_UCBMC |
| TIMM23            | 4.33E-35 | 1.19679239 | 0.289 | 0.198 | 1.53E-30 | Bcell_1_UCBMC |
| MSI2              | 4.56E-35 | 0.89428993 | 0.413 | 0.323 | 1.62E-30 | Bcell_1_UCBMC |
| ARHGAP24          | 5.09E-35 | 0.3357998  | 0.817 | 0.652 | 1.80E-30 | Bcell_1_UCBMC |
| USP3              | 5.34E-35 | 0.80694905 | 0.412 | 0.322 | 1.89E-30 | Bcell_1_UCBMC |

|         |          |            |       |       |          |               |
|---------|----------|------------|-------|-------|----------|---------------|
| NFKBIA  | 8.34E-35 | 0.35637867 | 0.574 | 0.433 | 2.96E-30 | Bcell_1_UCBMC |
| ATF2    | 8.71E-35 | 1.15990026 | 0.276 | 0.185 | 3.09E-30 | Bcell_1_UCBMC |
| UXS1    | 9.48E-35 | 1.28644612 | 0.255 | 0.164 | 3.36E-30 | Bcell_1_UCBMC |
| KANSL1  | 1.20E-34 | 0.91557895 | 0.376 | 0.284 | 4.26E-30 | Bcell_1_UCBMC |
| MARCHF7 | 1.66E-34 | 0.97812665 | 0.375 | 0.291 | 5.87E-30 | Bcell_1_UCBMC |
| AFF1    | 2.60E-34 | 0.84502131 | 0.397 | 0.304 | 9.20E-30 | Bcell_1_UCBMC |
| FAM172A | 2.94E-34 | 0.77537606 | 0.456 | 0.366 | 1.04E-29 | Bcell_1_UCBMC |
| DOP1B   | 5.04E-34 | 1.08928248 | 0.259 | 0.166 | 1.79E-29 | Bcell_1_UCBMC |
| ARID2   | 6.07E-34 | 0.96280242 | 0.377 | 0.29  | 2.15E-29 | Bcell_1_UCBMC |
| SCFD1   | 6.45E-34 | 1.10475054 | 0.301 | 0.209 | 2.28E-29 | Bcell_1_UCBMC |
| GTF2B   | 6.68E-34 | 0.57048503 | 0.565 | 0.471 | 2.37E-29 | Bcell_1_UCBMC |
| ELF1    | 7.46E-34 | 0.39005263 | 0.769 | 0.666 | 2.64E-29 | Bcell_1_UCBMC |
| GSK3B   | 9.61E-34 | 0.90311076 | 0.387 | 0.299 | 3.41E-29 | Bcell_1_UCBMC |
| ANKRD28 | 1.02E-33 | 1.08006542 | 0.323 | 0.23  | 3.62E-29 | Bcell_1_UCBMC |
| NUP153  | 1.45E-33 | 1.0269944  | 0.346 | 0.258 | 5.12E-29 | Bcell_1_UCBMC |
| PDE3B   | 2.67E-33 | 1.045791   | 0.26  | 0.166 | 9.46E-29 | Bcell_1_UCBMC |
| BNIP3L  | 2.87E-33 | 0.93461398 | 0.359 | 0.268 | 1.02E-28 | Bcell_1_UCBMC |
| SREK1   | 6.88E-33 | 0.70240818 | 0.461 | 0.375 | 2.44E-28 | Bcell_1_UCBMC |
| PTPRJ   | 9.46E-33 | 0.78924934 | 0.457 | 0.362 | 3.35E-28 | Bcell_1_UCBMC |
| ATF7IP  | 9.92E-33 | 0.58092828 | 0.523 | 0.423 | 3.51E-28 | Bcell_1_UCBMC |
| MAPK1   | 1.37E-32 | 1.11516553 | 0.303 | 0.216 | 4.85E-28 | Bcell_1_UCBMC |
| CCDC88A | 2.83E-32 | 0.70648014 | 0.438 | 0.342 | 1.00E-27 | Bcell_1_UCBMC |
| CREBBP  | 4.76E-32 | 0.99174551 | 0.36  | 0.28  | 1.69E-27 | Bcell_1_UCBMC |
| TP53BP1 | 7.88E-32 | 1.04628723 | 0.327 | 0.242 | 2.79E-27 | Bcell_1_UCBMC |
| VPS39   | 9.60E-32 | 1.12941071 | 0.274 | 0.188 | 3.40E-27 | Bcell_1_UCBMC |
| S100A6  | 1.03E-31 | 0.2376598  | 0.573 | 0.448 | 3.66E-27 | Bcell_1_UCBMC |
| WRN     | 1.50E-31 | 0.96251761 | 0.333 | 0.247 | 5.32E-27 | Bcell_1_UCBMC |
| TMEM87A | 1.61E-31 | 0.89244929 | 0.344 | 0.254 | 5.70E-27 | Bcell_1_UCBMC |
| UBE2D3  | 2.36E-31 | 0.44912039 | 0.683 | 0.592 | 8.36E-27 | Bcell_1_UCBMC |
| CSDE1   | 2.50E-31 | 0.68997451 | 0.445 | 0.365 | 8.84E-27 | Bcell_1_UCBMC |
| CAMTA1  | 2.96E-31 | 0.91352529 | 0.326 | 0.236 | 1.05E-26 | Bcell_1_UCBMC |
| DOCK8   | 5.02E-31 | 0.57869396 | 0.527 | 0.437 | 1.78E-26 | Bcell_1_UCBMC |
| APBB1IP | 5.08E-31 | 0.71457442 | 0.468 | 0.387 | 1.80E-26 | Bcell_1_UCBMC |

|                     |          |            |       |       |          |               |
|---------------------|----------|------------|-------|-------|----------|---------------|
| RPS6KB1             | 9.34E-31 | 0.9271772  | 0.337 | 0.253 | 3.31E-26 | Bcell_1_UCBMC |
| LDB2                | 1.01E-30 | 0.77982317 | 0.41  | 0.32  | 3.57E-26 | Bcell_1_UCBMC |
| TBC1D5              | 1.07E-30 | 0.51335007 | 0.584 | 0.484 | 3.79E-26 | Bcell_1_UCBMC |
| RPL4                | 1.09E-30 | 0.29085195 | 0.893 | 0.823 | 3.84E-26 | Bcell_1_UCBMC |
| PICALM              | 1.44E-30 | 0.74711453 | 0.431 | 0.353 | 5.09E-26 | Bcell_1_UCBMC |
| FBXO34              | 2.28E-30 | 0.7847197  | 0.421 | 0.339 | 8.09E-26 | Bcell_1_UCBMC |
| CUL5                | 2.31E-30 | 0.78833896 | 0.411 | 0.329 | 8.18E-26 | Bcell_1_UCBMC |
| CDYL                | 2.91E-30 | 0.9729232  | 0.333 | 0.249 | 1.03E-25 | Bcell_1_UCBMC |
| INTS6               | 3.26E-30 | 1.00164003 | 0.306 | 0.218 | 1.15E-25 | Bcell_1_UCBMC |
| PRKD3               | 3.87E-30 | 0.9627087  | 0.323 | 0.237 | 1.37E-25 | Bcell_1_UCBMC |
| OPA1                | 4.33E-30 | 1.12206939 | 0.285 | 0.202 | 1.53E-25 | Bcell_1_UCBMC |
| TSC22D3             | 8.83E-30 | 0.50394635 | 0.603 | 0.51  | 3.13E-25 | Bcell_1_UCBMC |
| ENSMMUG00000003412  | 9.27E-30 | 0.17589683 | 0.992 | 0.979 | 3.28E-25 | Bcell_1_UCBMC |
| TUT4                | 1.29E-29 | 0.7506502  | 0.427 | 0.349 | 4.56E-25 | Bcell_1_UCBMC |
| ADGRE5              | 1.63E-29 | 0.95242174 | 0.327 | 0.239 | 5.79E-25 | Bcell_1_UCBMC |
| FBXL20              | 1.70E-29 | 0.91057245 | 0.34  | 0.258 | 6.02E-25 | Bcell_1_UCBMC |
| FBXO11              | 1.97E-29 | 0.82992438 | 0.371 | 0.288 | 6.97E-25 | Bcell_1_UCBMC |
| PRDM2               | 2.80E-29 | 0.97916753 | 0.343 | 0.266 | 9.91E-25 | Bcell_1_UCBMC |
| SCAF11              | 2.92E-29 | 0.60875066 | 0.475 | 0.398 | 1.03E-24 | Bcell_1_UCBMC |
| PTPRA               | 4.38E-29 | 1.05851866 | 0.305 | 0.226 | 1.55E-24 | Bcell_1_UCBMC |
| CSNK1A1             | 5.56E-29 | 0.75454948 | 0.419 | 0.343 | 1.97E-24 | Bcell_1_UCBMC |
| POU2F1              | 6.20E-29 | 1.13232278 | 0.261 | 0.179 | 2.20E-24 | Bcell_1_UCBMC |
| POC1B               | 7.78E-29 | 0.83988333 | 0.345 | 0.26  | 2.76E-24 | Bcell_1_UCBMC |
| AHNAK               | 8.94E-29 | 0.72803747 | 0.376 | 0.282 | 3.17E-24 | Bcell_1_UCBMC |
| RNF38               | 9.74E-29 | 0.94368961 | 0.343 | 0.265 | 3.45E-24 | Bcell_1_UCBMC |
| EIF3A               | 1.02E-28 | 0.68256035 | 0.425 | 0.349 | 3.63E-24 | Bcell_1_UCBMC |
| BBX                 | 1.61E-28 | 0.75620952 | 0.391 | 0.311 | 5.69E-24 | Bcell_1_UCBMC |
| CHST11              | 2.26E-28 | 1.23361928 | 0.273 | 0.192 | 8.00E-24 | Bcell_1_UCBMC |
| ENSMMUG000000055457 | 2.89E-28 | 0.66799607 | 0.397 | 0.315 | 1.03E-23 | Bcell_1_UCBMC |
| HBS1L               | 4.36E-28 | 0.74802141 | 0.39  | 0.312 | 1.55E-23 | Bcell_1_UCBMC |
| CCDC91              | 5.92E-28 | 0.81454047 | 0.401 | 0.325 | 2.10E-23 | Bcell_1_UCBMC |
| MED13L              | 6.66E-28 | 0.4583604  | 0.579 | 0.482 | 2.36E-23 | Bcell_1_UCBMC |
| UHRF1BP1L           | 1.07E-27 | 0.90679687 | 0.333 | 0.255 | 3.79E-23 | Bcell_1_UCBMC |

|          |          |            |       |       |          |               |
|----------|----------|------------|-------|-------|----------|---------------|
| HNRNPC   | 1.09E-27 | 0.43120835 | 0.624 | 0.547 | 3.85E-23 | Bcell_1_UCBMC |
| KIAA0040 | 1.21E-27 | 0.50337514 | 0.563 | 0.478 | 4.29E-23 | Bcell_1_UCBMC |
| PPP3CC   | 1.22E-27 | 0.56610792 | 0.504 | 0.427 | 4.31E-23 | Bcell_1_UCBMC |
| USP16    | 1.74E-27 | 0.94951678 | 0.306 | 0.227 | 6.15E-23 | Bcell_1_UCBMC |
| SELENOS  | 2.64E-27 | 0.47975366 | 0.525 | 0.45  | 9.35E-23 | Bcell_1_UCBMC |
| CDC42    | 2.75E-27 | 0.3280545  | 0.801 | 0.743 | 9.74E-23 | Bcell_1_UCBMC |
| RELB     | 3.11E-27 | 0.93640523 | 0.322 | 0.244 | 1.10E-22 | Bcell_1_UCBMC |
| FOXN3    | 4.10E-27 | 0.53345691 | 0.542 | 0.453 | 1.45E-22 | Bcell_1_UCBMC |
| LSM14A   | 5.11E-27 | 0.84462391 | 0.356 | 0.282 | 1.81E-22 | Bcell_1_UCBMC |
| KIF13A   | 5.31E-27 | 0.95809453 | 0.319 | 0.24  | 1.88E-22 | Bcell_1_UCBMC |
| YME1L1   | 6.42E-27 | 0.88986888 | 0.308 | 0.228 | 2.28E-22 | Bcell_1_UCBMC |
| GNA13    | 7.03E-27 | 0.79956486 | 0.374 | 0.296 | 2.49E-22 | Bcell_1_UCBMC |
| NR3C1    | 7.35E-27 | 0.7082074  | 0.435 | 0.363 | 2.60E-22 | Bcell_1_UCBMC |
| CWC15    | 8.03E-27 | 0.53440198 | 0.443 | 0.356 | 2.84E-22 | Bcell_1_UCBMC |
| SHOC2    | 8.35E-27 | 0.65170823 | 0.445 | 0.37  | 2.96E-22 | Bcell_1_UCBMC |
| TAX1BP1  | 1.05E-26 | 0.70620772 | 0.405 | 0.327 | 3.72E-22 | Bcell_1_UCBMC |
| IQGAP2   | 1.32E-26 | 0.79694602 | 0.368 | 0.283 | 4.67E-22 | Bcell_1_UCBMC |
| RIPOR2   | 1.40E-26 | 0.3992651  | 0.64  | 0.543 | 4.96E-22 | Bcell_1_UCBMC |
| CCNT2    | 1.48E-26 | 1.06096312 | 0.265 | 0.189 | 5.23E-22 | Bcell_1_UCBMC |
| KLF12    | 1.67E-26 | 0.72570753 | 0.427 | 0.35  | 5.91E-22 | Bcell_1_UCBMC |
| MARCHF3  | 1.98E-26 | 0.95091837 | 0.305 | 0.225 | 7.00E-22 | Bcell_1_UCBMC |
| ELOVL5   | 2.10E-26 | 0.81180979 | 0.362 | 0.285 | 7.45E-22 | Bcell_1_UCBMC |
| MIER1    | 2.85E-26 | 0.74682366 | 0.379 | 0.302 | 1.01E-21 | Bcell_1_UCBMC |
| HERC1    | 3.11E-26 | 0.99531455 | 0.29  | 0.214 | 1.10E-21 | Bcell_1_UCBMC |
| NFKBID   | 3.58E-26 | 0.36768723 | 0.292 | 0.198 | 1.27E-21 | Bcell_1_UCBMC |
| MED27    | 3.82E-26 | 1.07087138 | 0.253 | 0.177 | 1.35E-21 | Bcell_1_UCBMC |
| IQGAP1   | 3.91E-26 | 0.61115795 | 0.483 | 0.411 | 1.39E-21 | Bcell_1_UCBMC |
| CHD6     | 4.51E-26 | 1.03745927 | 0.258 | 0.181 | 1.60E-21 | Bcell_1_UCBMC |
| USP47    | 6.53E-26 | 0.89270179 | 0.333 | 0.26  | 2.31E-21 | Bcell_1_UCBMC |
| CYTH1    | 6.94E-26 | 0.84103691 | 0.375 | 0.302 | 2.46E-21 | Bcell_1_UCBMC |
| MICU2    | 7.27E-26 | 1.08304629 | 0.3   | 0.228 | 2.58E-21 | Bcell_1_UCBMC |
| PPP1R2   | 9.71E-26 | 0.88090884 | 0.327 | 0.252 | 3.44E-21 | Bcell_1_UCBMC |
| EEF2     | 1.17E-25 | 0.34805343 | 0.727 | 0.637 | 4.13E-21 | Bcell_1_UCBMC |



|                   |          |            |       |       |          |               |
|-------------------|----------|------------|-------|-------|----------|---------------|
| PTPN1             | 1.35E-25 | 0.76799112 | 0.378 | 0.304 | 4.78E-21 | Bcell_1_UCBMC |
| KIZ               | 1.36E-25 | 1.02201972 | 0.264 | 0.187 | 4.83E-21 | Bcell_1_UCBMC |
| HOOK3             | 1.64E-25 | 0.66296087 | 0.446 | 0.373 | 5.79E-21 | Bcell_1_UCBMC |
| RALA              | 2.42E-25 | 0.69398045 | 0.39  | 0.31  | 8.59E-21 | Bcell_1_UCBMC |
| EPC2              | 2.77E-25 | 1.04968402 | 0.292 | 0.221 | 9.82E-21 | Bcell_1_UCBMC |
| CCNK              | 3.33E-25 | 0.91721591 | 0.33  | 0.261 | 1.18E-20 | Bcell_1_UCBMC |
| CYB5R4            | 3.37E-25 | 0.98997857 | 0.292 | 0.216 | 1.19E-20 | Bcell_1_UCBMC |
| FNDC3A            | 3.91E-25 | 0.81960499 | 0.382 | 0.311 | 1.39E-20 | Bcell_1_UCBMC |
| ZNF43             | 5.58E-25 | 1.07049962 | 0.262 | 0.188 | 1.98E-20 | Bcell_1_UCBMC |
| STAU1             | 5.68E-25 | 0.91366729 | 0.307 | 0.234 | 2.01E-20 | Bcell_1_UCBMC |
| SNX29             | 6.10E-25 | 0.24994685 | 0.728 | 0.596 | 2.16E-20 | Bcell_1_UCBMC |
| PPTC7             | 9.20E-25 | 1.01081638 | 0.274 | 0.2   | 3.26E-20 | Bcell_1_UCBMC |
| RPRD1A            | 1.55E-24 | 1.07718379 | 0.266 | 0.193 | 5.48E-20 | Bcell_1_UCBMC |
| GPATCH8           | 1.55E-24 | 0.83164593 | 0.338 | 0.267 | 5.50E-20 | Bcell_1_UCBMC |
| PMAIP1            | 1.64E-24 | 0.71446755 | 0.392 | 0.321 | 5.81E-20 | Bcell_1_UCBMC |
| MAP3K1            | 2.52E-24 | 0.90734938 | 0.336 | 0.264 | 8.94E-20 | Bcell_1_UCBMC |
| RBM27             | 4.05E-24 | 0.84456174 | 0.325 | 0.255 | 1.43E-19 | Bcell_1_UCBMC |
| WDFY4             | 5.02E-24 | 0.68334197 | 0.422 | 0.35  | 1.78E-19 | Bcell_1_UCBMC |
| CNOT2             | 5.96E-24 | 0.45925094 | 0.547 | 0.468 | 2.11E-19 | Bcell_1_UCBMC |
| BTAF1             | 9.14E-24 | 0.87317873 | 0.328 | 0.259 | 3.24E-19 | Bcell_1_UCBMC |
| CDKAL1            | 1.10E-23 | 0.8528074  | 0.342 | 0.272 | 3.88E-19 | Bcell_1_UCBMC |
| TCERG1            | 1.30E-23 | 0.99797089 | 0.28  | 0.211 | 4.59E-19 | Bcell_1_UCBMC |
| DIP2B             | 1.41E-23 | 0.7485573  | 0.385 | 0.315 | 5.00E-19 | Bcell_1_UCBMC |
| RAB3GAP1          | 3.33E-23 | 0.82056793 | 0.313 | 0.241 | 1.18E-18 | Bcell_1_UCBMC |
| FMC1-LUC7L2       | 5.36E-23 | 0.54579783 | 0.51  | 0.453 | 1.90E-18 | Bcell_1_UCBMC |
| PRRC2C            | 5.50E-23 | 0.48000683 | 0.541 | 0.479 | 1.95E-18 | Bcell_1_UCBMC |
| SUSD6             | 5.51E-23 | 1.0567188  | 0.263 | 0.194 | 1.95E-18 | Bcell_1_UCBMC |
| SF1               | 7.10E-23 | 0.68306684 | 0.434 | 0.378 | 2.52E-18 | Bcell_1_UCBMC |
| ENSMUG00000006778 | 8.53E-23 | 0.55214279 | 0.404 | 0.334 | 3.02E-18 | Bcell_1_UCBMC |
| KDM2A             | 1.06E-22 | 0.70711241 | 0.404 | 0.34  | 3.75E-18 | Bcell_1_UCBMC |
| INTS8             | 1.27E-22 | 1.07986861 | 0.251 | 0.182 | 4.49E-18 | Bcell_1_UCBMC |
| ELF2              | 1.61E-22 | 0.86779822 | 0.269 | 0.196 | 5.70E-18 | Bcell_1_UCBMC |
| TRAK1             | 2.18E-22 | 1.04371867 | 0.277 | 0.21  | 7.74E-18 | Bcell_1_UCBMC |

|                    |          |            |       |       |          |               |
|--------------------|----------|------------|-------|-------|----------|---------------|
| VAV3               | 2.32E-22 | 0.61388546 | 0.468 | 0.398 | 8.20E-18 | Bcell_1_UCBMC |
| PLEKHB2            | 2.48E-22 | 0.92512097 | 0.275 | 0.207 | 8.78E-18 | Bcell_1_UCBMC |
| ZRANB2             | 2.67E-22 | 0.81308986 | 0.356 | 0.294 | 9.45E-18 | Bcell_1_UCBMC |
| MAMU-A             | 2.80E-22 | 0.26379494 | 0.831 | 0.779 | 9.92E-18 | Bcell_1_UCBMC |
| GAB2               | 3.51E-22 | 0.88482786 | 0.275 | 0.2   | 1.24E-17 | Bcell_1_UCBMC |
| DNTTIP2            | 4.67E-22 | 0.82558511 | 0.308 | 0.239 | 1.65E-17 | Bcell_1_UCBMC |
| TTC17              | 5.08E-22 | 0.91312    | 0.293 | 0.223 | 1.80E-17 | Bcell_1_UCBMC |
| ZFR                | 6.05E-22 | 0.92753723 | 0.273 | 0.204 | 2.14E-17 | Bcell_1_UCBMC |
| GPBP1              | 6.97E-22 | 0.44474688 | 0.53  | 0.465 | 2.47E-17 | Bcell_1_UCBMC |
| SRSF4              | 7.05E-22 | 0.74253752 | 0.376 | 0.317 | 2.50E-17 | Bcell_1_UCBMC |
| TNFAIP3            | 7.11E-22 | 0.69047476 | 0.338 | 0.263 | 2.52E-17 | Bcell_1_UCBMC |
| HELZ               | 8.80E-22 | 0.89339101 | 0.305 | 0.241 | 3.12E-17 | Bcell_1_UCBMC |
| ANKRD12            | 1.46E-21 | 0.59952308 | 0.439 | 0.375 | 5.18E-17 | Bcell_1_UCBMC |
| SECISBP2           | 1.51E-21 | 0.88040072 | 0.289 | 0.223 | 5.37E-17 | Bcell_1_UCBMC |
| EHD4               | 2.25E-21 | 1.09670048 | 0.262 | 0.199 | 7.98E-17 | Bcell_1_UCBMC |
| USP34              | 2.70E-21 | 0.54974967 | 0.474 | 0.409 | 9.55E-17 | Bcell_1_UCBMC |
| SLC22A18           | 2.86E-21 | 0.90472387 | 0.289 | 0.224 | 1.01E-16 | Bcell_1_UCBMC |
| MYO5A              | 3.17E-21 | 0.9100761  | 0.299 | 0.232 | 1.12E-16 | Bcell_1_UCBMC |
| SETD5              | 3.58E-21 | 0.97176198 | 0.289 | 0.225 | 1.27E-16 | Bcell_1_UCBMC |
| WDR33              | 4.30E-21 | 0.79387116 | 0.309 | 0.242 | 1.52E-16 | Bcell_1_UCBMC |
| TNKS               | 5.02E-21 | 0.94071602 | 0.279 | 0.214 | 1.78E-16 | Bcell_1_UCBMC |
| ATP9B              | 5.96E-21 | 0.85925079 | 0.295 | 0.229 | 2.11E-16 | Bcell_1_UCBMC |
| ENSMMUG00000051300 | 7.23E-21 | 0.18319825 | 0.902 | 0.653 | 2.56E-16 | Bcell_1_UCBMC |
| RPS11              | 7.23E-21 | 0.12517685 | 0.997 | 0.992 | 2.56E-16 | Bcell_1_UCBMC |
| ELK3               | 8.38E-21 | 0.90786174 | 0.277 | 0.21  | 2.97E-16 | Bcell_1_UCBMC |
| TLE4               | 1.03E-20 | 1.00537448 | 0.272 | 0.209 | 3.66E-16 | Bcell_1_UCBMC |
| IRAG2              | 1.11E-20 | 0.75811078 | 0.329 | 0.262 | 3.95E-16 | Bcell_1_UCBMC |
| RAD21              | 1.32E-20 | 0.81825514 | 0.317 | 0.254 | 4.66E-16 | Bcell_1_UCBMC |
| ARFGAP3            | 1.40E-20 | 0.86899714 | 0.298 | 0.232 | 4.94E-16 | Bcell_1_UCBMC |
| MAPRE2             | 1.62E-20 | 0.73312972 | 0.333 | 0.266 | 5.75E-16 | Bcell_1_UCBMC |
| SEC31A             | 1.73E-20 | 0.80081497 | 0.342 | 0.282 | 6.12E-16 | Bcell_1_UCBMC |
| ATG5               | 1.96E-20 | 0.84885494 | 0.292 | 0.224 | 6.93E-16 | Bcell_1_UCBMC |
| LRBA               | 2.04E-20 | 0.71782468 | 0.366 | 0.303 | 7.23E-16 | Bcell_1_UCBMC |

|                    |          |            |       |       |          |               |
|--------------------|----------|------------|-------|-------|----------|---------------|
| DNAJC2             | 2.07E-20 | 0.77918877 | 0.327 | 0.265 | 7.34E-16 | Bcell_1_UCBMC |
| UBE2H              | 2.82E-20 | 0.874428   | 0.326 | 0.265 | 9.98E-16 | Bcell_1_UCBMC |
| CDK13              | 7.00E-20 | 0.64502002 | 0.391 | 0.329 | 2.48E-15 | Bcell_1_UCBMC |
| ARF1               | 7.52E-20 | 0.42105887 | 0.487 | 0.423 | 2.67E-15 | Bcell_1_UCBMC |
| UBR1               | 8.58E-20 | 0.86206507 | 0.293 | 0.23  | 3.04E-15 | Bcell_1_UCBMC |
| SCML4              | 8.78E-20 | 0.68822519 | 0.377 | 0.313 | 3.11E-15 | Bcell_1_UCBMC |
| VTI1A              | 1.02E-19 | 0.64297369 | 0.405 | 0.343 | 3.63E-15 | Bcell_1_UCBMC |
| ABI1               | 1.06E-19 | 0.58290131 | 0.45  | 0.393 | 3.75E-15 | Bcell_1_UCBMC |
| GOLGA1             | 1.22E-19 | 0.39224382 | 0.674 | 0.61  | 4.33E-15 | Bcell_1_UCBMC |
| RBM14              | 1.61E-19 | 0.61385231 | 0.397 | 0.342 | 5.72E-15 | Bcell_1_UCBMC |
| GIT2               | 2.15E-19 | 0.85011367 | 0.3   | 0.239 | 7.62E-15 | Bcell_1_UCBMC |
| MDM4               | 2.46E-19 | 0.76674872 | 0.332 | 0.272 | 8.73E-15 | Bcell_1_UCBMC |
| XRN1               | 3.23E-19 | 0.89990488 | 0.251 | 0.186 | 1.14E-14 | Bcell_1_UCBMC |
| NCOA2              | 3.82E-19 | 0.88008638 | 0.311 | 0.252 | 1.35E-14 | Bcell_1_UCBMC |
| MED21              | 5.10E-19 | 0.86478614 | 0.252 | 0.187 | 1.81E-14 | Bcell_1_UCBMC |
| NFKBIB             | 6.28E-19 | 0.78936233 | 0.325 | 0.265 | 2.23E-14 | Bcell_1_UCBMC |
| SH3KBP1            | 7.87E-19 | 0.67505443 | 0.36  | 0.3   | 2.79E-14 | Bcell_1_UCBMC |
| RHOH               | 8.58E-19 | 0.5189151  | 0.454 | 0.396 | 3.04E-14 | Bcell_1_UCBMC |
| JAK1               | 1.00E-18 | 0.3907992  | 0.576 | 0.504 | 3.56E-14 | Bcell_1_UCBMC |
| TBC1D24            | 1.38E-18 | 0.44060809 | 0.466 | 0.405 | 4.88E-14 | Bcell_1_UCBMC |
| EIF4H              | 1.51E-18 | 0.65832376 | 0.378 | 0.326 | 5.34E-14 | Bcell_1_UCBMC |
| CCDC59             | 1.77E-18 | 0.71438749 | 0.285 | 0.216 | 6.27E-14 | Bcell_1_UCBMC |
| YAF2               | 3.12E-18 | 0.73116901 | 0.324 | 0.263 | 1.11E-13 | Bcell_1_UCBMC |
| TMCC1              | 3.13E-18 | 0.94229768 | 0.278 | 0.218 | 1.11E-13 | Bcell_1_UCBMC |
| FKBP5              | 3.37E-18 | 0.79665836 | 0.309 | 0.246 | 1.20E-13 | Bcell_1_UCBMC |
| CLASP2             | 3.53E-18 | 0.83050315 | 0.329 | 0.272 | 1.25E-13 | Bcell_1_UCBMC |
| FAF1               | 3.69E-18 | 0.93194703 | 0.293 | 0.237 | 1.31E-13 | Bcell_1_UCBMC |
| EP300              | 4.01E-18 | 0.79129608 | 0.331 | 0.277 | 1.42E-13 | Bcell_1_UCBMC |
| YTHDF3             | 4.04E-18 | 0.8932992  | 0.275 | 0.218 | 1.43E-13 | Bcell_1_UCBMC |
| ENSMMUG00000001894 | 5.97E-18 | 0.93461331 | 0.263 | 0.205 | 2.11E-13 | Bcell_1_UCBMC |
| TANK               | 6.96E-18 | 0.50156517 | 0.496 | 0.44  | 2.47E-13 | Bcell_1_UCBMC |
| PRKAR1A            | 1.30E-17 | 0.69710432 | 0.33  | 0.27  | 4.61E-13 | Bcell_1_UCBMC |
| SLC12A6            | 1.34E-17 | 0.77756317 | 0.293 | 0.234 | 4.75E-13 | Bcell_1_UCBMC |

|            |          |            |       |       |          |               |
|------------|----------|------------|-------|-------|----------|---------------|
| SNX9       | 1.58E-17 | 0.58719409 | 0.396 | 0.337 | 5.59E-13 | Bcell_1_UCBMC |
| ACIN1      | 1.78E-17 | 0.66347088 | 0.35  | 0.297 | 6.32E-13 | Bcell_1_UCBMC |
| CTSH       | 2.07E-17 | 0.34144728 | 0.617 | 0.571 | 7.34E-13 | Bcell_1_UCBMC |
| ARFGEF1    | 2.13E-17 | 0.76473903 | 0.33  | 0.276 | 7.53E-13 | Bcell_1_UCBMC |
| ERP44      | 2.14E-17 | 0.52429848 | 0.433 | 0.379 | 7.58E-13 | Bcell_1_UCBMC |
| CAMK1D     | 2.18E-17 | 0.6977371  | 0.365 | 0.305 | 7.73E-13 | Bcell_1_UCBMC |
| TCP11L2    | 2.62E-17 | 0.63970084 | 0.263 | 0.196 | 9.29E-13 | Bcell_1_UCBMC |
| PAPOLA     | 3.41E-17 | 0.42828991 | 0.507 | 0.46  | 1.21E-12 | Bcell_1_UCBMC |
| CHD7       | 3.80E-17 | 0.80741168 | 0.311 | 0.256 | 1.35E-12 | Bcell_1_UCBMC |
| SEC24B     | 4.45E-17 | 0.88644147 | 0.265 | 0.208 | 1.58E-12 | Bcell_1_UCBMC |
| PARP8      | 4.94E-17 | 0.73065266 | 0.295 | 0.233 | 1.75E-12 | Bcell_1_UCBMC |
| MTHFD1L    | 5.36E-17 | 0.7938322  | 0.283 | 0.223 | 1.90E-12 | Bcell_1_UCBMC |
| PSME4      | 7.49E-17 | 0.90664707 | 0.259 | 0.204 | 2.65E-12 | Bcell_1_UCBMC |
| GNG2       | 1.21E-16 | 0.73761444 | 0.321 | 0.263 | 4.30E-12 | Bcell_1_UCBMC |
| ARL15      | 1.45E-16 | 0.64366707 | 0.381 | 0.326 | 5.13E-12 | Bcell_1_UCBMC |
| UBE2G1     | 1.56E-16 | 0.86050703 | 0.303 | 0.253 | 5.52E-12 | Bcell_1_UCBMC |
| BTBD9      | 1.58E-16 | 0.72829265 | 0.34  | 0.283 | 5.61E-12 | Bcell_1_UCBMC |
| PPP1R16B   | 2.07E-16 | 0.79719066 | 0.301 | 0.247 | 7.33E-12 | Bcell_1_UCBMC |
| SOX4       | 2.34E-16 | 0.2627184  | 0.467 | 0.392 | 8.30E-12 | Bcell_1_UCBMC |
| RAP1B      | 3.15E-16 | 0.47446181 | 0.493 | 0.448 | 1.11E-11 | Bcell_1_UCBMC |
| CNOT6L     | 3.79E-16 | 0.58714498 | 0.396 | 0.344 | 1.34E-11 | Bcell_1_UCBMC |
| SON        | 4.05E-16 | 0.23893783 | 0.746 | 0.696 | 1.44E-11 | Bcell_1_UCBMC |
| HMGB2      | 4.99E-16 | 0.58494993 | 0.303 | 0.241 | 1.77E-11 | Bcell_1_UCBMC |
| BDP1       | 5.51E-16 | 0.73024732 | 0.295 | 0.241 | 1.95E-11 | Bcell_1_UCBMC |
| SP110      | 5.63E-16 | 0.44813414 | 0.488 | 0.442 | 1.99E-11 | Bcell_1_UCBMC |
| ST6GALNAC3 | 5.88E-16 | 0.63753047 | 0.346 | 0.285 | 2.08E-11 | Bcell_1_UCBMC |
| DUSP1      | 6.25E-16 | 0.44611269 | 0.474 | 0.417 | 2.22E-11 | Bcell_1_UCBMC |
| PPIG       | 6.27E-16 | 0.58290432 | 0.397 | 0.349 | 2.22E-11 | Bcell_1_UCBMC |
| DTNBP1     | 9.84E-16 | 0.44947337 | 0.44  | 0.385 | 3.49E-11 | Bcell_1_UCBMC |
| RANBP9     | 1.08E-15 | 0.81232265 | 0.266 | 0.213 | 3.84E-11 | Bcell_1_UCBMC |
| CEBPZ      | 1.12E-15 | 0.63205732 | 0.32  | 0.262 | 3.97E-11 | Bcell_1_UCBMC |
| LAPTM5     | 1.12E-15 | 0.30473167 | 0.609 | 0.559 | 3.98E-11 | Bcell_1_UCBMC |
| RPS4Y1     | 1.46E-15 | 0.16941985 | 0.663 | 0.529 | 5.18E-11 | Bcell_1_UCBMC |

|                     |          |            |       |       |          |               |
|---------------------|----------|------------|-------|-------|----------|---------------|
| PPHLN1              | 1.63E-15 | 0.69410665 | 0.346 | 0.298 | 5.78E-11 | Bcell_1_UCBMC |
| LYST                | 1.70E-15 | 0.80637074 | 0.252 | 0.194 | 6.02E-11 | Bcell_1_UCBMC |
| BRD2                | 1.99E-15 | 0.53050056 | 0.424 | 0.378 | 7.04E-11 | Bcell_1_UCBMC |
| ZNF483              | 2.10E-15 | 0.20042976 | 0.695 | 0.665 | 7.45E-11 | Bcell_1_UCBMC |
| MORC3               | 2.46E-15 | 0.71474009 | 0.284 | 0.23  | 8.71E-11 | Bcell_1_UCBMC |
| SMG6                | 2.71E-15 | 0.74260768 | 0.313 | 0.264 | 9.59E-11 | Bcell_1_UCBMC |
| PTPN2               | 3.25E-15 | 0.75687063 | 0.322 | 0.275 | 1.15E-10 | Bcell_1_UCBMC |
| FUBP1               | 4.00E-15 | 0.65732328 | 0.328 | 0.279 | 1.42E-10 | Bcell_1_UCBMC |
| RBM23               | 4.07E-15 | 0.76466753 | 0.28  | 0.23  | 1.44E-10 | Bcell_1_UCBMC |
| KPNB1               | 5.00E-15 | 0.77818688 | 0.282 | 0.23  | 1.77E-10 | Bcell_1_UCBMC |
| HNRNPA2B1           | 5.31E-15 | 0.23064034 | 0.865 | 0.764 | 1.88E-10 | Bcell_1_UCBMC |
| FOXJ3               | 5.38E-15 | 0.94267858 | 0.267 | 0.22  | 1.91E-10 | Bcell_1_UCBMC |
| ENSMMUG00000008346  | 5.88E-15 | 0.8385179  | 0.258 | 0.208 | 2.08E-10 | Bcell_1_UCBMC |
| KCNQ5               | 6.12E-15 | 0.35181988 | 0.524 | 0.452 | 2.17E-10 | Bcell_1_UCBMC |
| CUX1                | 6.33E-15 | 0.58671636 | 0.399 | 0.356 | 2.24E-10 | Bcell_1_UCBMC |
| ATF7IP2             | 6.42E-15 | 0.66575354 | 0.306 | 0.251 | 2.27E-10 | Bcell_1_UCBMC |
| DAZAP1              | 6.69E-15 | 0.20498132 | 0.647 | 0.61  | 2.37E-10 | Bcell_1_UCBMC |
| ZNF326              | 7.17E-15 | 0.84527082 | 0.272 | 0.223 | 2.54E-10 | Bcell_1_UCBMC |
| EIF3H               | 7.31E-15 | 0.3090207  | 0.633 | 0.587 | 2.59E-10 | Bcell_1_UCBMC |
| PUM2                | 7.56E-15 | 0.60961641 | 0.382 | 0.338 | 2.68E-10 | Bcell_1_UCBMC |
| BZW1                | 7.71E-15 | 0.30195488 | 0.61  | 0.569 | 2.73E-10 | Bcell_1_UCBMC |
| ARF4                | 8.06E-15 | 0.41278966 | 0.491 | 0.443 | 2.86E-10 | Bcell_1_UCBMC |
| IFRD1               | 9.33E-15 | 0.49564036 | 0.436 | 0.387 | 3.31E-10 | Bcell_1_UCBMC |
| FOSB                | 1.16E-14 | 0.47151855 | 0.474 | 0.415 | 4.11E-10 | Bcell_1_UCBMC |
| ANKRD10             | 1.19E-14 | 0.72382542 | 0.327 | 0.282 | 4.21E-10 | Bcell_1_UCBMC |
| UBR5                | 1.54E-14 | 0.76403546 | 0.283 | 0.234 | 5.46E-10 | Bcell_1_UCBMC |
| OGA                 | 1.73E-14 | 0.55800273 | 0.376 | 0.331 | 6.13E-10 | Bcell_1_UCBMC |
| PTP4A2              | 2.06E-14 | 0.7019828  | 0.31  | 0.261 | 7.31E-10 | Bcell_1_UCBMC |
| PAIP2               | 2.27E-14 | 0.31208806 | 0.574 | 0.527 | 8.05E-10 | Bcell_1_UCBMC |
| ENSMMUG000000059742 | 2.87E-14 | 0.5990027  | 0.365 | 0.321 | 1.02E-09 | Bcell_1_UCBMC |
| NT5C2               | 3.02E-14 | 0.76665908 | 0.261 | 0.21  | 1.07E-09 | Bcell_1_UCBMC |
| TRIM72              | 3.09E-14 | 0.46567747 | 0.461 | 0.423 | 1.09E-09 | Bcell_1_UCBMC |
| TBL1XR1             | 3.41E-14 | 0.59440402 | 0.402 | 0.361 | 1.21E-09 | Bcell_1_UCBMC |

|                    |          |            |       |       |          |               |
|--------------------|----------|------------|-------|-------|----------|---------------|
| RIOK3              | 3.63E-14 | 0.74563804 | 0.264 | 0.213 | 1.29E-09 | Bcell_1_UCBMC |
| AKAP9              | 4.14E-14 | 0.57679239 | 0.373 | 0.324 | 1.47E-09 | Bcell_1_UCBMC |
| CAND1              | 4.27E-14 | 0.83316638 | 0.28  | 0.235 | 1.51E-09 | Bcell_1_UCBMC |
| ENSMMUG00000061125 | 6.12E-14 | 0.24967247 | 0.682 | 0.607 | 2.17E-09 | Bcell_1_UCBMC |
| ATAD2B             | 6.20E-14 | 0.78708369 | 0.307 | 0.264 | 2.20E-09 | Bcell_1_UCBMC |
| LRCH3              | 6.56E-14 | 0.74694279 | 0.312 | 0.269 | 2.32E-09 | Bcell_1_UCBMC |
| MAN1A2             | 7.30E-14 | 0.71272155 | 0.307 | 0.258 | 2.59E-09 | Bcell_1_UCBMC |
| WDR13              | 8.21E-14 | 0.24921728 | 0.653 | 0.609 | 2.91E-09 | Bcell_1_UCBMC |
| SPAG9              | 1.30E-13 | 0.69593703 | 0.309 | 0.263 | 4.61E-09 | Bcell_1_UCBMC |
| PPP2R5C            | 1.38E-13 | 0.32430483 | 0.568 | 0.517 | 4.88E-09 | Bcell_1_UCBMC |
| SNX2               | 1.59E-13 | 0.29480506 | 0.601 | 0.552 | 5.64E-09 | Bcell_1_UCBMC |
| STK38              | 1.81E-13 | 0.5993975  | 0.281 | 0.224 | 6.42E-09 | Bcell_1_UCBMC |
| UHRF2              | 2.18E-13 | 0.62072185 | 0.33  | 0.285 | 7.73E-09 | Bcell_1_UCBMC |
| ARHGAP17           | 2.36E-13 | 0.58525586 | 0.383 | 0.346 | 8.37E-09 | Bcell_1_UCBMC |
| TBC1D1             | 2.58E-13 | 0.44028862 | 0.474 | 0.429 | 9.13E-09 | Bcell_1_UCBMC |
| BTG2               | 2.88E-13 | 0.25715618 | 0.674 | 0.63  | 1.02E-08 | Bcell_1_UCBMC |
| KLHL23             | 2.96E-13 | 0.33630655 | 0.573 | 0.533 | 1.05E-08 | Bcell_1_UCBMC |
| FBXW7              | 2.99E-13 | 0.6973682  | 0.331 | 0.286 | 1.06E-08 | Bcell_1_UCBMC |
| RACK1              | 5.50E-13 | 0.11473976 | 0.99  | 0.982 | 1.95E-08 | Bcell_1_UCBMC |
| XRCC5              | 5.65E-13 | 0.4630258  | 0.441 | 0.404 | 2.00E-08 | Bcell_1_UCBMC |
| KIF5B              | 6.17E-13 | 0.72551326 | 0.286 | 0.244 | 2.19E-08 | Bcell_1_UCBMC |
| C15H9orf78         | 6.48E-13 | 0.38674638 | 0.445 | 0.406 | 2.30E-08 | Bcell_1_UCBMC |
| PPP2R2A            | 7.28E-13 | 0.74665698 | 0.289 | 0.245 | 2.58E-08 | Bcell_1_UCBMC |
| PSPC1              | 7.51E-13 | 0.81439839 | 0.281 | 0.238 | 2.66E-08 | Bcell_1_UCBMC |
| COPS8              | 8.39E-13 | 0.67958235 | 0.25  | 0.202 | 2.97E-08 | Bcell_1_UCBMC |
| WDR43              | 9.03E-13 | 0.70327421 | 0.282 | 0.236 | 3.20E-08 | Bcell_1_UCBMC |
| TAF7               | 9.59E-13 | 0.5039512  | 0.385 | 0.343 | 3.40E-08 | Bcell_1_UCBMC |
| ATP5PO             | 9.86E-13 | 0.32188224 | 0.538 | 0.505 | 3.49E-08 | Bcell_1_UCBMC |
| ZNF207             | 1.02E-12 | 0.59403476 | 0.312 | 0.267 | 3.60E-08 | Bcell_1_UCBMC |
| RNGTT              | 1.11E-12 | 0.67645426 | 0.306 | 0.263 | 3.92E-08 | Bcell_1_UCBMC |
| MATR3              | 1.21E-12 | 0.34664252 | 0.568 | 0.534 | 4.28E-08 | Bcell_1_UCBMC |
| RBM33              | 1.25E-12 | 0.77190983 | 0.278 | 0.237 | 4.42E-08 | Bcell_1_UCBMC |
| MTPN               | 1.39E-12 | 0.42824675 | 0.453 | 0.415 | 4.94E-08 | Bcell_1_UCBMC |

|                    |          |            |       |       |          |               |
|--------------------|----------|------------|-------|-------|----------|---------------|
| RFC1               | 1.94E-12 | 0.61258511 | 0.286 | 0.241 | 6.87E-08 | Bcell_1_UCBMC |
| ESCO1              | 2.08E-12 | 0.66949046 | 0.299 | 0.256 | 7.35E-08 | Bcell_1_UCBMC |
| PAX5               | 2.19E-12 | 0.30665062 | 0.494 | 0.433 | 7.75E-08 | Bcell_1_UCBMC |
| ZFP36              | 2.25E-12 | 0.1781252  | 0.766 | 0.674 | 7.96E-08 | Bcell_1_UCBMC |
| HDAC9              | 2.67E-12 | 0.45749121 | 0.453 | 0.402 | 9.47E-08 | Bcell_1_UCBMC |
| EXOC4              | 2.91E-12 | 0.49483197 | 0.393 | 0.348 | 1.03E-07 | Bcell_1_UCBMC |
| SNW1               | 3.46E-12 | 0.63213797 | 0.286 | 0.241 | 1.23E-07 | Bcell_1_UCBMC |
| POC5               | 3.56E-12 | 0.41941752 | 0.4   | 0.358 | 1.26E-07 | Bcell_1_UCBMC |
| CELF1              | 3.65E-12 | 0.69974122 | 0.323 | 0.287 | 1.29E-07 | Bcell_1_UCBMC |
| MSN                | 4.09E-12 | 0.36465953 | 0.49  | 0.457 | 1.45E-07 | Bcell_1_UCBMC |
| PHACTR1            | 4.13E-12 | 0.75781799 | 0.256 | 0.211 | 1.46E-07 | Bcell_1_UCBMC |
| ENSMMUG00000058037 | 4.26E-12 | 0.59258682 | 0.258 | 0.209 | 1.51E-07 | Bcell_1_UCBMC |
| ERBIN              | 4.28E-12 | 0.60335147 | 0.339 | 0.298 | 1.52E-07 | Bcell_1_UCBMC |
| ME2                | 4.30E-12 | 0.63515406 | 0.345 | 0.307 | 1.52E-07 | Bcell_1_UCBMC |
| SAP18              | 4.93E-12 | 0.29763118 | 0.467 | 0.422 | 1.75E-07 | Bcell_1_UCBMC |
| U2SURP             | 5.31E-12 | 0.46305406 | 0.385 | 0.345 | 1.88E-07 | Bcell_1_UCBMC |
| FBXL17             | 5.62E-12 | 0.70231114 | 0.308 | 0.266 | 1.99E-07 | Bcell_1_UCBMC |
| ENSMMUG00000052424 | 5.64E-12 | 0.41437592 | 0.486 | 0.448 | 2.00E-07 | Bcell_1_UCBMC |
| BCAS3              | 1.50E-11 | 0.6761434  | 0.303 | 0.258 | 5.30E-07 | Bcell_1_UCBMC |
| RSRC2              | 1.53E-11 | 0.37235815 | 0.478 | 0.44  | 5.44E-07 | Bcell_1_UCBMC |
| NEMF               | 1.68E-11 | 0.72839459 | 0.27  | 0.23  | 5.94E-07 | Bcell_1_UCBMC |
| TAGAP              | 1.69E-11 | 0.35959458 | 0.43  | 0.379 | 5.98E-07 | Bcell_1_UCBMC |
| ENSMMUG00000058755 | 1.77E-11 | 0.11217725 | 0.988 | 0.966 | 6.28E-07 | Bcell_1_UCBMC |
| MEMO1              | 1.81E-11 | 0.72543868 | 0.29  | 0.252 | 6.41E-07 | Bcell_1_UCBMC |
| MAP3K8             | 1.82E-11 | 0.3548668  | 0.46  | 0.406 | 6.44E-07 | Bcell_1_UCBMC |
| ENSMMUG00000029973 | 1.92E-11 | 0.24187718 | 0.567 | 0.541 | 6.79E-07 | Bcell_1_UCBMC |
| SPIDR              | 1.96E-11 | 0.59391786 | 0.338 | 0.298 | 6.96E-07 | Bcell_1_UCBMC |
| NSF                | 2.34E-11 | 0.59347188 | 0.312 | 0.27  | 8.31E-07 | Bcell_1_UCBMC |
| WDR70              | 2.59E-11 | 0.58831637 | 0.336 | 0.299 | 9.17E-07 | Bcell_1_UCBMC |
| ENSMMUG00000015583 | 2.71E-11 | 0.2579839  | 0.661 | 0.602 | 9.61E-07 | Bcell_1_UCBMC |
| RRAS2              | 2.89E-11 | 0.67233627 | 0.299 | 0.258 | 1.02E-06 | Bcell_1_UCBMC |
| RNMT               | 2.93E-11 | 0.27028433 | 0.523 | 0.488 | 1.04E-06 | Bcell_1_UCBMC |
| WASF2              | 2.98E-11 | 0.42875447 | 0.463 | 0.433 | 1.06E-06 | Bcell_1_UCBMC |

|                    |          |            |       |       |          |               |
|--------------------|----------|------------|-------|-------|----------|---------------|
| LCORL              | 3.18E-11 | 0.78321183 | 0.276 | 0.235 | 1.13E-06 | Bcell_1_UCBMC |
| GATAD2B            | 3.25E-11 | 0.70343875 | 0.295 | 0.258 | 1.15E-06 | Bcell_1_UCBMC |
| PAFAH1B1           | 3.50E-11 | 0.58972296 | 0.351 | 0.317 | 1.24E-06 | Bcell_1_UCBMC |
| PI4K2B             | 3.67E-11 | 0.40289816 | 0.438 | 0.411 | 1.30E-06 | Bcell_1_UCBMC |
| NCKAP1L            | 4.83E-11 | 0.45977525 | 0.406 | 0.371 | 1.71E-06 | Bcell_1_UCBMC |
| ATP6               | 5.36E-11 | 0.13602581 | 0.947 | 0.9   | 1.90E-06 | Bcell_1_UCBMC |
| MIA2               | 6.65E-11 | 0.66212815 | 0.281 | 0.241 | 2.36E-06 | Bcell_1_UCBMC |
| RASA2              | 7.73E-11 | 0.61185147 | 0.34  | 0.308 | 2.74E-06 | Bcell_1_UCBMC |
| ENSMMUG00000060229 | 8.07E-11 | 0.58718902 | 0.317 | 0.28  | 2.86E-06 | Bcell_1_UCBMC |
| MKLN1              | 8.63E-11 | 0.6027803  | 0.338 | 0.305 | 3.06E-06 | Bcell_1_UCBMC |
| ENSMMUG0000006293  | 1.06E-10 | 0.58176662 | 0.336 | 0.302 | 3.74E-06 | Bcell_1_UCBMC |
| SRPK2              | 1.40E-10 | 0.45030519 | 0.433 | 0.396 | 4.96E-06 | Bcell_1_UCBMC |
| CPSF6              | 1.47E-10 | 0.7317751  | 0.252 | 0.215 | 5.20E-06 | Bcell_1_UCBMC |
| TACC1              | 1.48E-10 | 0.54636158 | 0.363 | 0.333 | 5.26E-06 | Bcell_1_UCBMC |
| RPLP2              | 1.75E-10 | 0.10325781 | 0.985 | 0.974 | 6.19E-06 | Bcell_1_UCBMC |
| CLDND1             | 1.79E-10 | 0.43137684 | 0.306 | 0.261 | 6.33E-06 | Bcell_1_UCBMC |
| PIP5K1B            | 1.79E-10 | 0.43391675 | 0.382 | 0.339 | 6.35E-06 | Bcell_1_UCBMC |
| CSNK2A1            | 2.12E-10 | 0.54129135 | 0.363 | 0.333 | 7.53E-06 | Bcell_1_UCBMC |
| ATP5PB             | 2.39E-10 | 0.66629971 | 0.321 | 0.295 | 8.47E-06 | Bcell_1_UCBMC |
| CSNK1G3            | 2.43E-10 | 0.44961525 | 0.414 | 0.382 | 8.62E-06 | Bcell_1_UCBMC |
| DIAPH2             | 2.84E-10 | 0.68820659 | 0.276 | 0.237 | 1.01E-05 | Bcell_1_UCBMC |
| ARHGAP26           | 3.36E-10 | 0.55306894 | 0.344 | 0.311 | 1.19E-05 | Bcell_1_UCBMC |
| P2RY8              | 3.62E-10 | 0.4634396  | 0.326 | 0.286 | 1.28E-05 | Bcell_1_UCBMC |
| FXR1               | 3.97E-10 | 0.45009071 | 0.38  | 0.349 | 1.41E-05 | Bcell_1_UCBMC |
| SF3B2              | 4.70E-10 | 0.6177904  | 0.268 | 0.231 | 1.66E-05 | Bcell_1_UCBMC |
| CIR1               | 5.76E-10 | 0.4755174  | 0.314 | 0.272 | 2.04E-05 | Bcell_1_UCBMC |
| CDC5L              | 5.83E-10 | 0.65429353 | 0.266 | 0.229 | 2.06E-05 | Bcell_1_UCBMC |
| HNRNPA0            | 6.90E-10 | 0.50025634 | 0.375 | 0.348 | 2.45E-05 | Bcell_1_UCBMC |
| MAMU-DOB           | 7.08E-10 | 0.39649133 | 0.401 | 0.364 | 2.51E-05 | Bcell_1_UCBMC |
| WVOX               | 7.62E-10 | 0.65359314 | 0.272 | 0.229 | 2.70E-05 | Bcell_1_UCBMC |
| CAB39              | 8.21E-10 | 0.51107415 | 0.354 | 0.322 | 2.91E-05 | Bcell_1_UCBMC |
| ENSMMUG00000030465 | 8.69E-10 | 0.28776774 | 0.498 | 0.47  | 3.08E-05 | Bcell_1_UCBMC |
| USP10              | 1.08E-09 | 0.65449089 | 0.273 | 0.238 | 3.84E-05 | Bcell_1_UCBMC |



|                    |          |            |       |       |            |               |
|--------------------|----------|------------|-------|-------|------------|---------------|
| PHF3               | 1.09E-09 | 0.65100287 | 0.284 | 0.252 | 3.87E-05   | Bcell_1_UCBMC |
| KDM3B              | 1.41E-09 | 0.59682972 | 0.321 | 0.291 | 5.00E-05   | Bcell_1_UCBMC |
| DOCK2              | 1.97E-09 | 0.35663186 | 0.51  | 0.478 | 6.99E-05   | Bcell_1_UCBMC |
| TOP1               | 2.00E-09 | 0.4903549  | 0.395 | 0.372 | 7.07E-05   | Bcell_1_UCBMC |
| ANKRD11            | 2.08E-09 | 0.64937257 | 0.289 | 0.255 | 7.38E-05   | Bcell_1_UCBMC |
| KAT6B              | 2.16E-09 | 0.68943852 | 0.277 | 0.243 | 7.66E-05   | Bcell_1_UCBMC |
| ENSMMUG00000014648 | 2.23E-09 | 0.17120202 | 0.717 | 0.7   | 7.90E-05   | Bcell_1_UCBMC |
| CAPZA1             | 2.49E-09 | 0.30736181 | 0.476 | 0.445 | 8.81E-05   | Bcell_1_UCBMC |
| ENSMMUG00000011580 | 2.51E-09 | 0.56520023 | 0.32  | 0.294 | 8.88E-05   | Bcell_1_UCBMC |
| ADAM19             | 2.67E-09 | 0.50724977 | 0.349 | 0.318 | 9.46E-05   | Bcell_1_UCBMC |
| HSPA5              | 2.75E-09 | 0.46632386 | 0.337 | 0.304 | 9.73E-05   | Bcell_1_UCBMC |
| RPL26              | 3.06E-09 | 0.13774953 | 0.923 | 0.822 | 0.00010843 | Bcell_1_UCBMC |
| NUMB               | 3.26E-09 | 0.68983608 | 0.282 | 0.25  | 0.00011535 | Bcell_1_UCBMC |
| USP9X              | 3.52E-09 | 0.57009991 | 0.327 | 0.299 | 0.00012461 | Bcell_1_UCBMC |
| MED30              | 4.07E-09 | 0.72111766 | 0.25  | 0.217 | 0.00014426 | Bcell_1_UCBMC |
| ZCCHC7             | 4.27E-09 | 0.32781969 | 0.529 | 0.496 | 0.00015123 | Bcell_1_UCBMC |
| OGT                | 4.91E-09 | 0.53538414 | 0.326 | 0.297 | 0.00017408 | Bcell_1_UCBMC |
| MPHOSPH8           | 5.12E-09 | 0.60621314 | 0.272 | 0.238 | 0.00018147 | Bcell_1_UCBMC |
| SUCLG2             | 6.56E-09 | 0.53128111 | 0.339 | 0.311 | 0.00023249 | Bcell_1_UCBMC |
| NIFK               | 7.14E-09 | 0.48977218 | 0.288 | 0.25  | 0.00025304 | Bcell_1_UCBMC |
| VPS4B              | 7.21E-09 | 0.56120702 | 0.27  | 0.234 | 0.00025554 | Bcell_1_UCBMC |
| PLCL2              | 8.15E-09 | 0.73533817 | 0.261 | 0.229 | 0.00028876 | Bcell_1_UCBMC |
| ENSMMUG00000021425 | 9.59E-09 | 0.72014395 | 0.252 | 0.221 | 0.00033974 | Bcell_1_UCBMC |
| DNAJB6             | 1.17E-08 | 0.33619805 | 0.426 | 0.399 | 0.00041601 | Bcell_1_UCBMC |
| RWDD1              | 1.19E-08 | 0.41661388 | 0.408 | 0.386 | 0.00041988 | Bcell_1_UCBMC |
| PPP4R3B            | 1.31E-08 | 0.69253002 | 0.25  | 0.22  | 0.00046491 | Bcell_1_UCBMC |
| PPP6R3             | 1.38E-08 | 0.57671684 | 0.305 | 0.277 | 0.00048917 | Bcell_1_UCBMC |
| TLK1               | 1.40E-08 | 0.62584864 | 0.292 | 0.264 | 0.00049482 | Bcell_1_UCBMC |
| CSGALNACT2         | 1.71E-08 | 0.7217914  | 0.266 | 0.236 | 0.00060761 | Bcell_1_UCBMC |
| DOCK11             | 1.81E-08 | 0.46781434 | 0.371 | 0.347 | 0.00064073 | Bcell_1_UCBMC |
| SLC25A37           | 1.82E-08 | 0.48866397 | 0.34  | 0.311 | 0.00064649 | Bcell_1_UCBMC |
| CHD4               | 1.85E-08 | 0.46302355 | 0.343 | 0.314 | 0.00065679 | Bcell_1_UCBMC |
| SSH2               | 1.86E-08 | 0.32840229 | 0.458 | 0.43  | 0.00065778 | Bcell_1_UCBMC |

|                    |          |            |       |       |            |               |
|--------------------|----------|------------|-------|-------|------------|---------------|
| SCLT1              | 2.05E-08 | 0.54071756 | 0.296 | 0.265 | 0.000725   | Bcell_1_UCBMC |
| TMED10             | 2.56E-08 | 0.52759589 | 0.304 | 0.275 | 0.00090801 | Bcell_1_UCBMC |
| COP1               | 3.25E-08 | 0.7172635  | 0.261 | 0.234 | 0.00114988 | Bcell_1_UCBMC |
| PDS5B              | 4.14E-08 | 0.58980642 | 0.26  | 0.226 | 0.00146513 | Bcell_1_UCBMC |
| PITPNB             | 5.20E-08 | 0.55132132 | 0.274 | 0.244 | 0.00184078 | Bcell_1_UCBMC |
| CEP85L             | 8.67E-08 | 0.61312045 | 0.304 | 0.283 | 0.00307214 | Bcell_1_UCBMC |
| EIF3L              | 8.74E-08 | 0.2238917  | 0.535 | 0.522 | 0.00309587 | Bcell_1_UCBMC |
| DDOST              | 8.85E-08 | 0.46563231 | 0.306 | 0.28  | 0.0031365  | Bcell_1_UCBMC |
| SINHCAF            | 9.94E-08 | 0.6586481  | 0.269 | 0.242 | 0.00352035 | Bcell_1_UCBMC |
| ZNF451             | 1.01E-07 | 0.67305244 | 0.271 | 0.245 | 0.00359438 | Bcell_1_UCBMC |
| RASGEF1B           | 1.86E-07 | 0.28579109 | 0.462 | 0.428 | 0.00659883 | Bcell_1_UCBMC |
| RNF216             | 2.30E-07 | 0.67977595 | 0.261 | 0.237 | 0.0081536  | Bcell_1_UCBMC |
| ENSMMUG00000028906 | 2.46E-07 | 0.41457666 | 0.416 | 0.395 | 0.00871915 | Bcell_1_UCBMC |
| CAMLG              | 2.51E-07 | 0.50205891 | 0.284 | 0.256 | 0.00890895 | Bcell_1_UCBMC |
| CCM2               | 2.68E-07 | 0.59717847 | 0.279 | 0.254 | 0.00949932 | Bcell_1_UCBMC |
| PLCG2              | 2.74E-07 | 0.3608665  | 0.461 | 0.435 | 0.00970453 | Bcell_1_UCBMC |
| ENSMMUG00000047277 | 2.87E-07 | 0.35342242 | 0.52  | 0.507 | 0.01015931 | Bcell_1_UCBMC |
| MAML2              | 3.08E-07 | 0.30996523 | 0.454 | 0.418 | 0.01090455 | Bcell_1_UCBMC |
| YTHDC1             | 3.45E-07 | 0.50280829 | 0.334 | 0.315 | 0.01222133 | Bcell_1_UCBMC |
| SDHAF4             | 3.67E-07 | 0.65134167 | 0.26  | 0.236 | 0.0129923  | Bcell_1_UCBMC |
| EXOC6              | 4.32E-07 | 0.70381817 | 0.278 | 0.254 | 0.01530056 | Bcell_1_UCBMC |
| VPS36              | 4.53E-07 | 0.56560686 | 0.269 | 0.243 | 0.0160456  | Bcell_1_UCBMC |
| SNX3               | 5.48E-07 | 0.40185472 | 0.369 | 0.351 | 0.01942736 | Bcell_1_UCBMC |
| COMMD3             | 5.78E-07 | 0.57090049 | 0.258 | 0.231 | 0.02049044 | Bcell_1_UCBMC |
| ASCC3              | 6.28E-07 | 0.6607637  | 0.258 | 0.233 | 0.02226562 | Bcell_1_UCBMC |
| PKN2               | 9.55E-07 | 0.54574328 | 0.288 | 0.264 | 0.03384565 | Bcell_1_UCBMC |
| CYRIB              | 9.70E-07 | 0.25187493 | 0.575 | 0.553 | 0.03436666 | Bcell_1_UCBMC |
| EIF4G2             | 1.01E-06 | 0.2804657  | 0.458 | 0.444 | 0.03586195 | Bcell_1_UCBMC |
| ATF4               | 1.15E-06 | 0.25133213 | 0.445 | 0.428 | 0.04074183 | Bcell_1_UCBMC |
| RNF103             | 1.25E-06 | 0.46517419 | 0.267 | 0.238 | 0.0441708  | Bcell_1_UCBMC |
| PRRC2B             | 1.27E-06 | 0.66226487 | 0.25  | 0.23  | 0.04485682 | Bcell_1_UCBMC |
| HERPUD1            | 1.47E-06 | 0.47815147 | 0.297 | 0.273 | 0.0521031  | Bcell_1_UCBMC |
| ENSMMUG00000056012 | 1.71E-06 | 0.31537524 | 0.363 | 0.342 | 0.06051836 | Bcell_1_UCBMC |

|                    |          |            |       |       |            |               |
|--------------------|----------|------------|-------|-------|------------|---------------|
| ENSMMUG00000065104 | 2.05E-06 | 0.21932827 | 0.5   | 0.488 | 0.07279553 | Bcell_1_UCBMC |
| DDX3Y              | 2.10E-06 | 0.2948031  | 0.265 | 0.222 | 0.07448172 | Bcell_1_UCBMC |
| BPTF               | 2.70E-06 | 0.40533583 | 0.354 | 0.337 | 0.09559857 | Bcell_1_UCBMC |
| GPBP1L1            | 3.71E-06 | 0.47118442 | 0.323 | 0.306 | 0.13139955 | Bcell_1_UCBMC |
| WIPF1              | 3.88E-06 | 0.27744059 | 0.495 | 0.482 | 0.1374939  | Bcell_1_UCBMC |
| SUPT3H             | 4.15E-06 | 0.5505884  | 0.252 | 0.226 | 0.1470274  | Bcell_1_UCBMC |
| ENSMMUG00000002324 | 5.08E-06 | 0.14590514 | 0.492 | 0.478 | 0.18011122 | Bcell_1_UCBMC |
| RAB8B              | 6.97E-06 | 0.38449596 | 0.384 | 0.371 | 0.24692373 | Bcell_1_UCBMC |
| CASP12             | 7.04E-06 | 0.36989771 | 0.266 | 0.24  | 0.24952271 | Bcell_1_UCBMC |
| PHF21A             | 9.22E-06 | 0.58148932 | 0.255 | 0.235 | 0.32679656 | Bcell_1_UCBMC |
| ENSMMUG00000014947 | 9.67E-06 | 0.37741361 | 0.256 | 0.23  | 0.34256476 | Bcell_1_UCBMC |
| XYLT1              | 1.17E-05 | 0.3463334  | 0.376 | 0.358 | 0.41572598 | Bcell_1_UCBMC |
| SRRM1              | 1.33E-05 | 0.17144859 | 0.475 | 0.455 | 0.46977993 | Bcell_1_UCBMC |
| EIF4EBP3           | 1.41E-05 | 0.58549433 | 0.26  | 0.242 | 0.49864493 | Bcell_1_UCBMC |
| EIF2S3             | 1.47E-05 | 0.5001676  | 0.274 | 0.257 | 0.51946476 | Bcell_1_UCBMC |
| MEF2A              | 1.47E-05 | 0.49283526 | 0.308 | 0.294 | 0.52228589 | Bcell_1_UCBMC |
| DDX17              | 1.67E-05 | 0.39651108 | 0.386 | 0.385 | 0.59264593 | Bcell_1_UCBMC |
| DYM                | 1.80E-05 | 0.62518486 | 0.251 | 0.235 | 0.63617071 | Bcell_1_UCBMC |
| ENSMMUG00000012537 | 2.20E-05 | 0.48758634 | 0.31  | 0.302 | 0.77797076 | Bcell_1_UCBMC |
| TAF15              | 2.27E-05 | 0.36048007 | 0.376 | 0.365 | 0.80308191 | Bcell_1_UCBMC |
| PPP1CA             | 2.32E-05 | 0.42551381 | 0.315 | 0.306 | 0.82201501 | Bcell_1_UCBMC |
| STIM2              | 2.73E-05 | 0.66979836 | 0.257 | 0.242 | 0.96639403 | Bcell_1_UCBMC |
| DIS3L2             | 2.75E-05 | 0.58558444 | 0.25  | 0.233 | 0.97384754 | Bcell_1_UCBMC |
| PCNP               | 3.65E-05 | 0.44010475 | 0.276 | 0.259 | 1          | Bcell_1_UCBMC |
| RBM25              | 3.68E-05 | 0.39251517 | 0.331 | 0.321 | 1          | Bcell_1_UCBMC |
| ENSA               | 3.72E-05 | 0.25772541 | 0.484 | 0.472 | 1          | Bcell_1_UCBMC |
| RBIS               | 3.95E-05 | 0.21590099 | 0.491 | 0.484 | 1          | Bcell_1_UCBMC |
| RSL24D1            | 4.15E-05 | 0.17089169 | 0.518 | 0.507 | 1          | Bcell_1_UCBMC |
| ADK                | 4.34E-05 | 0.51160122 | 0.307 | 0.292 | 1          | Bcell_1_UCBMC |
| PLTP               | 4.70E-05 | 0.14050329 | 0.256 | 0.218 | 1          | Bcell_1_UCBMC |
| RTF1               | 5.03E-05 | 0.48284009 | 0.271 | 0.255 | 1          | Bcell_1_UCBMC |
| PFDN1              | 5.65E-05 | 0.40990491 | 0.3   | 0.285 | 1          | Bcell_1_UCBMC |
| GPHN               | 6.34E-05 | 0.58612509 | 0.25  | 0.23  | 1          | Bcell_1_UCBMC |

|                     |            |            |       |       |                 |
|---------------------|------------|------------|-------|-------|-----------------|
| TM9SF2              | 6.70E-05   | 0.47520004 | 0.272 | 0.255 | 1 Bcell_1_UCBMC |
| VPS13C              | 6.97E-05   | 0.3885983  | 0.309 | 0.296 | 1 Bcell_1_UCBMC |
| TAPBP               | 8.09E-05   | 0.34081211 | 0.34  | 0.331 | 1 Bcell_1_UCBMC |
| ARID5B              | 8.28E-05   | 0.34678639 | 0.353 | 0.336 | 1 Bcell_1_UCBMC |
| ABLM1               | 8.78E-05   | 0.14761049 | 0.567 | 0.531 | 1 Bcell_1_UCBMC |
| RERE                | 8.90E-05   | 0.23024071 | 0.506 | 0.492 | 1 Bcell_1_UCBMC |
| ENSMMUG00000008587  | 8.98E-05   | 0.44390424 | 0.319 | 0.304 | 1 Bcell_1_UCBMC |
| PPIL4               | 9.32E-05   | 0.41072037 | 0.275 | 0.26  | 1 Bcell_1_UCBMC |
| VAPA                | 9.61E-05   | 0.40820855 | 0.343 | 0.34  | 1 Bcell_1_UCBMC |
| MYCBP2              | 9.65E-05   | 0.2847287  | 0.433 | 0.422 | 1 Bcell_1_UCBMC |
| SEPTIN7             | 0.00010032 | 0.14509368 | 0.626 | 0.614 | 1 Bcell_1_UCBMC |
| ENSMMUG00000007536  | 0.0001058  | 0.15992647 | 0.391 | 0.372 | 1 Bcell_1_UCBMC |
| ATRX                | 0.00010684 | 0.31557906 | 0.38  | 0.371 | 1 Bcell_1_UCBMC |
| PTGER4              | 0.00010886 | 0.51034877 | 0.278 | 0.264 | 1 Bcell_1_UCBMC |
| SF3B1               | 0.00011192 | 0.25985759 | 0.448 | 0.444 | 1 Bcell_1_UCBMC |
| BLK                 | 0.00011253 | 0.34425653 | 0.36  | 0.347 | 1 Bcell_1_UCBMC |
| ENSMMUG000000059017 | 0.00012675 | 0.23111276 | 0.431 | 0.426 | 1 Bcell_1_UCBMC |
| MYH9                | 0.00013409 | 0.33441863 | 0.354 | 0.347 | 1 Bcell_1_UCBMC |
| CREB1               | 0.00013532 | 0.53287709 | 0.265 | 0.252 | 1 Bcell_1_UCBMC |
| THRAP3              | 0.0001615  | 0.2992395  | 0.393 | 0.389 | 1 Bcell_1_UCBMC |
| USP36               | 0.0001638  | 0.35702947 | 0.357 | 0.347 | 1 Bcell_1_UCBMC |
| BTN2A2              | 0.00016869 | 0.30104398 | 0.362 | 0.353 | 1 Bcell_1_UCBMC |
| ZNF148              | 0.00018329 | 0.46494708 | 0.255 | 0.24  | 1 Bcell_1_UCBMC |
| MBNL1               | 0.00020615 | 0.10799006 | 0.761 | 0.694 | 1 Bcell_1_UCBMC |
| THADA               | 0.00023687 | 0.55134034 | 0.272 | 0.262 | 1 Bcell_1_UCBMC |
| DDX39A              | 0.0002499  | 0.27516123 | 0.362 | 0.357 | 1 Bcell_1_UCBMC |
| ENSMMUG000000028699 | 0.00027038 | 0.19733367 | 0.455 | 0.448 | 1 Bcell_1_UCBMC |
| PCMTD1              | 0.00027202 | 0.50901799 | 0.264 | 0.254 | 1 Bcell_1_UCBMC |
| SMG1                | 0.00028349 | 0.50243038 | 0.289 | 0.283 | 1 Bcell_1_UCBMC |
| CYTIP               | 0.00029409 | 0.4169535  | 0.258 | 0.243 | 1 Bcell_1_UCBMC |
| IMMP2L              | 0.00031651 | 0.28506933 | 0.409 | 0.396 | 1 Bcell_1_UCBMC |
| ENSMMUG000000029026 | 0.00032437 | 0.13642468 | 0.476 | 0.469 | 1 Bcell_1_UCBMC |
| BCAS2               | 0.00036754 | 0.34530649 | 0.263 | 0.246 | 1 Bcell_1_UCBMC |

|         |            |            |       |       |                 |
|---------|------------|------------|-------|-------|-----------------|
| LRRFIP1 | 0.00039122 | 0.41085965 | 0.348 | 0.344 | 1 Bcell_1_UCBMC |
| PTEN    | 0.00040837 | 0.30289887 | 0.371 | 0.361 | 1 Bcell_1_UCBMC |
| PSMD14  | 0.00041886 | 0.45145649 | 0.258 | 0.246 | 1 Bcell_1_UCBMC |
| LPP     | 0.00042372 | 0.54891127 | 0.267 | 0.257 | 1 Bcell_1_UCBMC |
| RAB14   | 0.00042657 | 0.48077176 | 0.255 | 0.244 | 1 Bcell_1_UCBMC |
| OLA1    | 0.00042824 | 0.35961064 | 0.297 | 0.286 | 1 Bcell_1_UCBMC |
| FNBP1   | 0.00042832 | 0.17851044 | 0.507 | 0.482 | 1 Bcell_1_UCBMC |
| STT3B   | 0.00043277 | 0.49926649 | 0.313 | 0.312 | 1 Bcell_1_UCBMC |
| RSL1D1  | 0.000549   | 0.37123988 | 0.278 | 0.267 | 1 Bcell_1_UCBMC |
| RNF138  | 0.00055665 | 0.36501654 | 0.315 | 0.307 | 1 Bcell_1_UCBMC |
| DNAJC7  | 0.00056689 | 0.40680884 | 0.264 | 0.254 | 1 Bcell_1_UCBMC |
| TRIP12  | 0.00063155 | 0.48687474 | 0.266 | 0.26  | 1 Bcell_1_UCBMC |
| CAST    | 0.00072192 | 0.35131918 | 0.352 | 0.348 | 1 Bcell_1_UCBMC |
| EIF4A2  | 0.00074103 | 0.20641919 | 0.47  | 0.468 | 1 Bcell_1_UCBMC |
| EMP3    | 0.00075182 | 0.2384981  | 0.322 | 0.3   | 1 Bcell_1_UCBMC |
| CTNNB1  | 0.0008004  | 0.47653796 | 0.293 | 0.292 | 1 Bcell_1_UCBMC |
| JAZF1   | 0.00087987 | 0.41969808 | 0.316 | 0.307 | 1 Bcell_1_UCBMC |
| IDH2    | 0.00088418 | 0.33653189 | 0.306 | 0.299 | 1 Bcell_1_UCBMC |
| JARID2  | 0.00100699 | 0.17232212 | 0.533 | 0.523 | 1 Bcell_1_UCBMC |
| SENP6   | 0.00114722 | 0.42314939 | 0.323 | 0.32  | 1 Bcell_1_UCBMC |
| OXR1    | 0.00119594 | 0.36102582 | 0.34  | 0.339 | 1 Bcell_1_UCBMC |
| TUT7    | 0.00125322 | 0.30715889 | 0.343 | 0.341 | 1 Bcell_1_UCBMC |
| MACF1   | 0.00138262 | 0.33658642 | 0.354 | 0.35  | 1 Bcell_1_UCBMC |
| MAP4K4  | 0.00154931 | 0.25369158 | 0.389 | 0.389 | 1 Bcell_1_UCBMC |
| HNRNPA3 | 0.00185834 | 0.11962402 | 0.594 | 0.583 | 1 Bcell_1_UCBMC |
| NONO    | 0.00213161 | 0.41422863 | 0.285 | 0.283 | 1 Bcell_1_UCBMC |
| CAPZA2  | 0.00215627 | 0.16793277 | 0.462 | 0.458 | 1 Bcell_1_UCBMC |
| EIF4G3  | 0.0023089  | 0.31270945 | 0.362 | 0.361 | 1 Bcell_1_UCBMC |
| RASSF3  | 0.00234123 | 0.3743242  | 0.251 | 0.241 | 1 Bcell_1_UCBMC |
| RUNX1   | 0.00284266 | 0.35027388 | 0.316 | 0.313 | 1 Bcell_1_UCBMC |
| CNTRL   | 0.00300435 | 0.46923524 | 0.265 | 0.261 | 1 Bcell_1_UCBMC |
| SNX25   | 0.00323919 | 0.49738219 | 0.252 | 0.248 | 1 Bcell_1_UCBMC |
| UBE2N   | 0.00335826 | 0.25914114 | 0.315 | 0.311 | 1 Bcell_1_UCBMC |

|          |            |            |       |       |                 |
|----------|------------|------------|-------|-------|-----------------|
| ARHGAP25 | 0.00337412 | 0.47686773 | 0.274 | 0.27  | 1 Bcell_1_UCBMC |
| TMEM243  | 0.00359153 | 0.25572554 | 0.402 | 0.408 | 1 Bcell_1_UCBMC |
| CYFIP2   | 0.00385577 | 0.27642763 | 0.399 | 0.405 | 1 Bcell_1_UCBMC |
| ST6GAL1  | 0.00392881 | 0.17406056 | 0.235 | 0.29  | 1 Bcell_1_UCBMC |
| NFAT5    | 0.00429785 | 0.49233309 | 0.266 | 0.261 | 1 Bcell_1_UCBMC |
| EFCAB2   | 0.00458285 | 0.4198765  | 0.278 | 0.273 | 1 Bcell_1_UCBMC |
| STAG2    | 0.00484508 | 0.26381601 | 0.334 | 0.333 | 1 Bcell_1_UCBMC |
| PRKX     | 0.00503024 | 0.45023167 | 0.289 | 0.288 | 1 Bcell_1_UCBMC |
| PFDN4    | 0.00587726 | 0.27326224 | 0.253 | 0.242 | 1 Bcell_1_UCBMC |
| UBAC2    | 0.00661326 | 0.26130701 | 0.383 | 0.389 | 1 Bcell_1_UCBMC |
| PHF20    | 0.00715778 | 0.36921641 | 0.303 | 0.306 | 1 Bcell_1_UCBMC |
| TCEA1    | 0.00718143 | 0.2312832  | 0.368 | 0.372 | 1 Bcell_1_UCBMC |
| EPS15    | 0.00791253 | 0.42542698 | 0.267 | 0.264 | 1 Bcell_1_UCBMC |
| EWSR1    | 0.00812467 | 0.40914328 | 0.252 | 0.252 | 1 Bcell_1_UCBMC |
| ADD1     | 0.00838009 | 0.39852982 | 0.295 | 0.297 | 1 Bcell_1_UCBMC |
| LNPEP    | 0.00941813 | 0.46955427 | 0.258 | 0.258 | 1 Bcell_1_UCBMC |
| UBE2L3   | 0.00963396 | 0.25204989 | 0.276 | 0.27  | 1 Bcell_1_UCBMC |
| LIMS1    | 0.01184153 | 0.3132806  | 0.275 | 0.269 | 1 Bcell_1_UCBMC |
| SLTM     | 0.01215991 | 0.27729134 | 0.354 | 0.36  | 1 Bcell_1_UCBMC |
| LDLRAD4  | 0.01217057 | 0.25528521 | 0.285 | 0.277 | 1 Bcell_1_UCBMC |
| SFPQ     | 0.01252249 | 0.25372034 | 0.334 | 0.339 | 1 Bcell_1_UCBMC |
| RANBP2   | 0.01333595 | 0.31131435 | 0.34  | 0.345 | 1 Bcell_1_UCBMC |
| SEL1L3   | 0.01651584 | 0.3507724  | 0.321 | 0.328 | 1 Bcell_1_UCBMC |
| PXK      | 0.01662164 | 0.36858041 | 0.337 | 0.347 | 1 Bcell_1_UCBMC |
| RNF13    | 0.0173558  | 0.39936824 | 0.274 | 0.274 | 1 Bcell_1_UCBMC |
| RAD51B   | 0.01953629 | 0.47412958 | 0.275 | 0.276 | 1 Bcell_1_UCBMC |
| UBXN4    | 0.02062251 | 0.36168587 | 0.297 | 0.303 | 1 Bcell_1_UCBMC |
| MBP      | 0.02553678 | 0.15245484 | 0.233 | 0.28  | 1 Bcell_1_UCBMC |
| CHD9     | 0.02659366 | 0.28829386 | 0.283 | 0.285 | 1 Bcell_1_UCBMC |
| ATP1B3   | 0.02667009 | 0.3699092  | 0.309 | 0.316 | 1 Bcell_1_UCBMC |
| PHF11    | 0.02873904 | 0.26505957 | 0.285 | 0.285 | 1 Bcell_1_UCBMC |
| PNRC2    | 0.02921157 | 0.27173824 | 0.334 | 0.344 | 1 Bcell_1_UCBMC |
| CD46     | 0.0314934  | 0.10259166 | 0.218 | 0.26  | 1 Bcell_1_UCBMC |

|                   |            |            |       |       |                 |
|-------------------|------------|------------|-------|-------|-----------------|
| ATXN10            | 0.03498129 | 0.38681871 | 0.28  | 0.287 | 1 Bcell_1_UCBMC |
| HNRNPR            | 0.03627629 | 0.28776232 | 0.311 | 0.318 | 1 Bcell_1_UCBMC |
| IFNAR2            | 0.03764813 | 0.15560353 | 0.381 | 0.39  | 1 Bcell_1_UCBMC |
| STK10             | 0.0381459  | 0.15224991 | 0.232 | 0.279 | 1 Bcell_1_UCBMC |
| PSMA3             | 0.04083726 | 0.23365057 | 0.286 | 0.287 | 1 Bcell_1_UCBMC |
| ETF1              | 0.04120182 | 0.35783122 | 0.277 | 0.283 | 1 Bcell_1_UCBMC |
| ST3GAL1           | 0.04245853 | 0.29217026 | 0.263 | 0.266 | 1 Bcell_1_UCBMC |
| GLS               | 0.04741164 | 0.17528306 | 0.214 | 0.255 | 1 Bcell_1_UCBMC |
| CS                | 0.04798066 | 0.31674397 | 0.269 | 0.274 | 1 Bcell_1_UCBMC |
| UBE2E2            | 0.05676421 | 0.30979036 | 0.331 | 0.339 | 1 Bcell_1_UCBMC |
| ZNF638            | 0.05798086 | 0.133123   | 0.222 | 0.264 | 1 Bcell_1_UCBMC |
| IST1              | 0.05798966 | 0.33450351 | 0.25  | 0.252 | 1 Bcell_1_UCBMC |
| TCF4              | 0.05837017 | 0.13681855 | 0.409 | 0.416 | 1 Bcell_1_UCBMC |
| OSBPL11           | 0.0624408  | 0.39934399 | 0.249 | 0.254 | 1 Bcell_1_UCBMC |
| SRSF10            | 0.06374834 | 0.24504145 | 0.344 | 0.36  | 1 Bcell_1_UCBMC |
| RBM26             | 0.07084724 | 0.16401337 | 0.22  | 0.259 | 1 Bcell_1_UCBMC |
| ENSMUG00000012525 | 0.07187073 | 0.10752799 | 0.419 | 0.436 | 1 Bcell_1_UCBMC |
| XRCC6             | 0.0777613  | 0.13056114 | 0.425 | 0.442 | 1 Bcell_1_UCBMC |
| DDX3X             | 0.08220621 | 0.15774078 | 0.451 | 0.469 | 1 Bcell_1_UCBMC |
| HNRNPU            | 0.08467427 | 0.15997335 | 0.426 | 0.441 | 1 Bcell_1_UCBMC |
| ENSMUG00000010266 | 0.08481038 | 0.13090452 | 0.473 | 0.491 | 1 Bcell_1_UCBMC |
| ENSMUG00000012690 | 0.09011921 | 0.28222652 | 0.271 | 0.275 | 1 Bcell_1_UCBMC |
| FAM133B           | 0.09082868 | 0.13182235 | 0.298 | 0.302 | 1 Bcell_1_UCBMC |
| ATP6V0D1          | 0.09137599 | 0.19989714 | 0.233 | 0.275 | 1 Bcell_1_UCBMC |
| GNB1              | 0.09608045 | 0.19082156 | 0.227 | 0.268 | 1 Bcell_1_UCBMC |
| SMARCC1           | 0.1023782  | 0.15597693 | 0.259 | 0.305 | 1 Bcell_1_UCBMC |
| STK4              | 0.1075591  | 0.12845897 | 0.427 | 0.443 | 1 Bcell_1_UCBMC |
| SRSF6             | 0.10773816 | 0.26438022 | 0.286 | 0.298 | 1 Bcell_1_UCBMC |
| ATG3              | 0.10849395 | 0.13333698 | 0.253 | 0.296 | 1 Bcell_1_UCBMC |
| COMMD10           | 0.10933042 | 0.15011109 | 0.253 | 0.294 | 1 Bcell_1_UCBMC |
| RTN4              | 0.1115022  | 0.3924652  | 0.247 | 0.254 | 1 Bcell_1_UCBMC |
| PER1              | 0.11370228 | 0.38537988 | 0.241 | 0.25  | 1 Bcell_1_UCBMC |
| CCDC12            | 0.11628537 | 0.37511308 | 0.247 | 0.256 | 1 Bcell_1_UCBMC |

|                    |            |            |       |       |                 |
|--------------------|------------|------------|-------|-------|-----------------|
| NSD1               | 0.12766641 | 0.37785813 | 0.256 | 0.267 | 1 Bcell_1_UCBMC |
| NIN                | 0.12932777 | 0.22323136 | 0.292 | 0.301 | 1 Bcell_1_UCBMC |
| EIF3D              | 0.13193095 | 0.22544871 | 0.292 | 0.303 | 1 Bcell_1_UCBMC |
| MTDH               | 0.13510631 | 0.21812916 | 0.252 | 0.298 | 1 Bcell_1_UCBMC |
| HUWE1              | 0.13606065 | 0.16325887 | 0.237 | 0.277 | 1 Bcell_1_UCBMC |
| CXCR5              | 0.13856323 | 0.23569022 | 0.253 | 0.258 | 1 Bcell_1_UCBMC |
| PRPF38B            | 0.13859359 | 0.26936565 | 0.278 | 0.288 | 1 Bcell_1_UCBMC |
| ATF6               | 0.14813751 | 0.31640996 | 0.257 | 0.265 | 1 Bcell_1_UCBMC |
| NSD3               | 0.14872989 | 0.37658498 | 0.257 | 0.27  | 1 Bcell_1_UCBMC |
| ACTR3              | 0.16711805 | 0.10135503 | 0.496 | 0.502 | 1 Bcell_1_UCBMC |
| H2AFY              | 0.16777292 | 0.17833217 | 0.353 | 0.372 | 1 Bcell_1_UCBMC |
| IGF2BP3            | 0.16906985 | 0.28886708 | 0.283 | 0.295 | 1 Bcell_1_UCBMC |
| MAPK1IP1L          | 0.17146219 | 0.26176674 | 0.255 | 0.263 | 1 Bcell_1_UCBMC |
| TPD52              | 0.17339018 | 0.25663066 | 0.249 | 0.255 | 1 Bcell_1_UCBMC |
| TPR                | 0.19470021 | 0.12582375 | 0.253 | 0.288 | 1 Bcell_1_UCBMC |
| ST8SIA4            | 0.20122033 | 0.13444888 | 0.224 | 0.256 | 1 Bcell_1_UCBMC |
| ARHGAP30           | 0.20433431 | 0.1649003  | 0.226 | 0.259 | 1 Bcell_1_UCBMC |
| DBNL               | 0.20573166 | 0.10433575 | 0.425 | 0.449 | 1 Bcell_1_UCBMC |
| PTBP3              | 0.21325575 | 0.21391652 | 0.368 | 0.392 | 1 Bcell_1_UCBMC |
| GNB2               | 0.21788347 | 0.12771153 | 0.245 | 0.284 | 1 Bcell_1_UCBMC |
| XRN2               | 0.21825466 | 0.20568104 | 0.327 | 0.344 | 1 Bcell_1_UCBMC |
| XPO6               | 0.22083695 | 0.21350757 | 0.218 | 0.255 | 1 Bcell_1_UCBMC |
| TCF25              | 0.22167394 | 0.23731833 | 0.26  | 0.27  | 1 Bcell_1_UCBMC |
| HNRNPH3            | 0.22213774 | 0.12843141 | 0.364 | 0.381 | 1 Bcell_1_UCBMC |
| ANGPTL1            | 0.22280587 | 0.39969233 | 0.243 | 0.254 | 1 Bcell_1_UCBMC |
| ENSMMUG00000055687 | 0.22757538 | 0.20333136 | 0.249 | 0.289 | 1 Bcell_1_UCBMC |
| RCSD1              | 0.23075176 | 0.14996966 | 0.426 | 0.447 | 1 Bcell_1_UCBMC |
| TRAM1              | 0.23497829 | 0.26057033 | 0.278 | 0.291 | 1 Bcell_1_UCBMC |
| HSPA9              | 0.2378843  | 0.14313325 | 0.244 | 0.28  | 1 Bcell_1_UCBMC |
| SUGT1              | 0.245722   | 0.283437   | 0.245 | 0.254 | 1 Bcell_1_UCBMC |
| RUBCNL             | 0.25620546 | 0.19749312 | 0.29  | 0.302 | 1 Bcell_1_UCBMC |
| TAOK3              | 0.26041139 | 0.11419669 | 0.297 | 0.338 | 1 Bcell_1_UCBMC |
| ZMYM2              | 0.26275157 | 0.33401744 | 0.25  | 0.262 | 1 Bcell_1_UCBMC |



|                   |            |            |       |       |                 |
|-------------------|------------|------------|-------|-------|-----------------|
| PTPMT1            | 0.2718216  | 0.32096641 | 0.241 | 0.253 | 1 Bcell_1_UCBMC |
| DDX39B            | 0.27779256 | 0.28040553 | 0.261 | 0.277 | 1 Bcell_1_UCBMC |
| PSMA1             | 0.28624676 | 0.12536572 | 0.312 | 0.326 | 1 Bcell_1_UCBMC |
| NR4A2             | 0.29056386 | 0.18145636 | 0.302 | 0.311 | 1 Bcell_1_UCBMC |
| RUFY3             | 0.29580577 | 0.11629133 | 0.297 | 0.336 | 1 Bcell_1_UCBMC |
| CARD11            | 0.30009988 | 0.27835708 | 0.219 | 0.252 | 1 Bcell_1_UCBMC |
| TMEM123           | 0.30163749 | 0.26417658 | 0.326 | 0.348 | 1 Bcell_1_UCBMC |
| NUCKS1            | 0.30590749 | 0.2362799  | 0.308 | 0.327 | 1 Bcell_1_UCBMC |
| C10H20orf24       | 0.33224701 | 0.30522788 | 0.225 | 0.262 | 1 Bcell_1_UCBMC |
| PPP1CB            | 0.3512837  | 0.11143862 | 0.346 | 0.362 | 1 Bcell_1_UCBMC |
| RSRC1             | 0.37401169 | 0.30239251 | 0.25  | 0.264 | 1 Bcell_1_UCBMC |
| NAP1L4            | 0.37775562 | 0.14972834 | 0.354 | 0.377 | 1 Bcell_1_UCBMC |
| NCOR1             | 0.42535482 | 0.3377154  | 0.303 | 0.331 | 1 Bcell_1_UCBMC |
| BAZ1A             | 0.43826513 | 0.20735907 | 0.279 | 0.315 | 1 Bcell_1_UCBMC |
| MAPRE1            | 0.45450466 | 0.24893966 | 0.254 | 0.27  | 1 Bcell_1_UCBMC |
| CEPT1             | 0.4834779  | 0.21141105 | 0.245 | 0.276 | 1 Bcell_1_UCBMC |
| KATNBL1           | 0.50051172 | 0.13865346 | 0.232 | 0.258 | 1 Bcell_1_UCBMC |
| SMYD3             | 0.50082988 | 0.27726901 | 0.242 | 0.269 | 1 Bcell_1_UCBMC |
| EID1              | 0.50618962 | 0.16402746 | 0.254 | 0.285 | 1 Bcell_1_UCBMC |
| G3BP1             | 0.51164559 | 0.18403989 | 0.306 | 0.328 | 1 Bcell_1_UCBMC |
| PHF14             | 0.57901377 | 0.24895264 | 0.24  | 0.27  | 1 Bcell_1_UCBMC |
| HP1BP3            | 0.58798954 | 0.30167007 | 0.244 | 0.263 | 1 Bcell_1_UCBMC |
| NPAT              | 0.5898722  | 0.23674986 | 0.25  | 0.281 | 1 Bcell_1_UCBMC |
| MCUB              | 0.5948254  | 0.18018311 | 0.318 | 0.343 | 1 Bcell_1_UCBMC |
| NOP58             | 0.6334803  | 0.23551283 | 0.247 | 0.276 | 1 Bcell_1_UCBMC |
| WNK1              | 0.63854049 | 0.17645903 | 0.256 | 0.287 | 1 Bcell_1_UCBMC |
| ENSMUG00000061630 | 0.69408225 | 0.10175142 | 0.295 | 0.315 | 1 Bcell_1_UCBMC |
| EIF3M             | 0.69749617 | 0.12353506 | 0.393 | 0.425 | 1 Bcell_1_UCBMC |
| CHCHD3            | 0.71351379 | 0.21125871 | 0.238 | 0.255 | 1 Bcell_1_UCBMC |
| TOP2B             | 0.72288645 | 0.2213347  | 0.287 | 0.308 | 1 Bcell_1_UCBMC |
| ZNF528            | 0.75035332 | 0.23196509 | 0.281 | 0.306 | 1 Bcell_1_UCBMC |
| CNPY3             | 0.79091698 | 0.13543506 | 0.243 | 0.267 | 1 Bcell_1_UCBMC |
| ANKRD17           | 0.79646944 | 0.17803414 | 0.27  | 0.296 | 1 Bcell_1_UCBMC |

|                     |            |            |       |       |                  |
|---------------------|------------|------------|-------|-------|------------------|
| PSMD13              | 0.80500768 | 0.15650201 | 0.254 | 0.27  | 1 Bcell_1_UCBMC  |
| TMOD3               | 0.81142369 | 0.27508959 | 0.237 | 0.257 | 1 Bcell_1_UCBMC  |
| ENSMMUG00000006965  | 0.84143941 | 0.20464783 | 0.262 | 0.291 | 1 Bcell_1_UCBMC  |
| CHP1                | 0.84839497 | 0.17659496 | 0.227 | 0.25  | 1 Bcell_1_UCBMC  |
| BABAM2              | 0.88906249 | 0.25234593 | 0.248 | 0.272 | 1 Bcell_1_UCBMC  |
| BMP2K               | 0.89034671 | 0.24452281 | 0.294 | 0.318 | 1 Bcell_1_UCBMC  |
| ENSMMUG000000041688 | 0.89799592 | 0.21865211 | 0.238 | 0.255 | 1 Bcell_1_UCBMC  |
| FLI1                | 0.92091455 | 0.23487111 | 0.249 | 0.274 | 1 Bcell_1_UCBMC  |
| CALCOCO2            | 0.93075584 | 0.10153053 | 0.283 | 0.307 | 1 Bcell_1_UCBMC  |
| MTIF2               | 0.93758721 | 0.18938182 | 0.266 | 0.294 | 1 Bcell_1_UCBMC  |
| UBE2K               | 0.94507671 | 0.18582061 | 0.297 | 0.329 | 1 Bcell_1_UCBMC  |
| CHD1                | 0.9554963  | 0.22480622 | 0.244 | 0.266 | 1 Bcell_1_UCBMC  |
| ARHGEF1             | 0.98978732 | 0.17021135 | 0.25  | 0.274 | 1 Bcell_1_UCBMC  |
| LTB                 | 0          | 2.86962375 | 0.897 | 0.213 | 0 Bcell_1_spleen |
| PM20D2              | 0          | 1.72408638 | 0.879 | 0.26  | 0 Bcell_1_spleen |
| RNASET2             | 0          | 1.66653403 | 0.774 | 0.21  | 0 Bcell_1_spleen |
| KLF6                | 0          | 1.40073198 | 0.918 | 0.364 | 0 Bcell_1_spleen |
| TRIR                | 0          | 1.41484714 | 0.746 | 0.195 | 0 Bcell_1_spleen |
| EIF3F               | 0          | 1.25630904 | 0.838 | 0.293 | 0 Bcell_1_spleen |
| JUN                 | 0          | 2.23834455 | 0.696 | 0.16  | 0 Bcell_1_spleen |
| SRRM2               | 0          | 1.82755048 | 0.667 | 0.136 | 0 Bcell_1_spleen |
| C1QBP               | 0          | 3.33902026 | 0.564 | 0.036 | 0 Bcell_1_spleen |
| NOP53               | 0          | 2.18571939 | 0.608 | 0.081 | 0 Bcell_1_spleen |
| ACAP2               | 0          | 1.318352   | 0.781 | 0.259 | 0 Bcell_1_spleen |
| FCHSD2              | 0          | 1.22657705 | 0.884 | 0.368 | 0 Bcell_1_spleen |
| IKZF1               | 0          | 1.71504574 | 0.685 | 0.17  | 0 Bcell_1_spleen |
| PLCG2               | 0          | 1.26162833 | 0.747 | 0.233 | 0 Bcell_1_spleen |
| TGFBR2              | 0          | 1.44570478 | 0.719 | 0.21  | 0 Bcell_1_spleen |
| JAK1                | 0          | 1.03904492 | 0.819 | 0.318 | 0 Bcell_1_spleen |
| ANP32B              | 0          | 1.2892168  | 0.706 | 0.207 | 0 Bcell_1_spleen |
| CD47                | 0          | 1.05564534 | 0.768 | 0.272 | 0 Bcell_1_spleen |
| ITM2B               | 0          | 1.23488834 | 0.711 | 0.216 | 0 Bcell_1_spleen |
| PAK2                | 0          | 1.13348019 | 0.706 | 0.214 | 0 Bcell_1_spleen |

|                    |   |            |       |       |                  |
|--------------------|---|------------|-------|-------|------------------|
| COTL1              | 0 | 1.14944608 | 0.727 | 0.235 | 0 Bcell_1_spleen |
| CHCHD10            | 0 | 2.73456201 | 0.54  | 0.05  | 0 Bcell_1_spleen |
| BCL11A             | 0 | 1.43492076 | 0.654 | 0.164 | 0 Bcell_1_spleen |
| PAX5               | 0 | 1.27592972 | 0.736 | 0.251 | 0 Bcell_1_spleen |
| NT5C               | 0 | 2.32599518 | 0.544 | 0.06  | 0 Bcell_1_spleen |
| COX5A              | 0 | 2.09769495 | 0.571 | 0.089 | 0 Bcell_1_spleen |
| ENSMMUG00000051300 | 0 | 1.68586485 | 0.995 | 0.513 | 0 Bcell_1_spleen |
| SNX29              | 0 | 1.15908819 | 0.91  | 0.432 | 0 Bcell_1_spleen |
| MED13L             | 0 | 1.00413626 | 0.788 | 0.311 | 0 Bcell_1_spleen |
| KCNQ5              | 0 | 1.30792491 | 0.753 | 0.276 | 0 Bcell_1_spleen |
| SMC6               | 0 | 1.23610205 | 0.727 | 0.251 | 0 Bcell_1_spleen |
| GPCPD1             | 0 | 1.37921531 | 0.68  | 0.205 | 0 Bcell_1_spleen |
| HNRNPD             | 0 | 1.12894839 | 0.668 | 0.193 | 0 Bcell_1_spleen |
| STK17A             | 0 | 1.37928182 | 0.653 | 0.179 | 0 Bcell_1_spleen |
| TBC1D5             | 0 | 0.98220878 | 0.787 | 0.316 | 0 Bcell_1_spleen |
| TMEM131L           | 0 | 0.96883179 | 0.767 | 0.296 | 0 Bcell_1_spleen |
| GTF2I              | 0 | 1.30142634 | 0.639 | 0.17  | 0 Bcell_1_spleen |
| SRSF2              | 0 | 1.38937481 | 0.609 | 0.14  | 0 Bcell_1_spleen |
| NFKBIA             | 0 | 1.40479571 | 0.74  | 0.278 | 0 Bcell_1_spleen |
| FOXN3              | 0 | 0.98791047 | 0.745 | 0.288 | 0 Bcell_1_spleen |
| SQSTM1             | 0 | 1.50616739 | 0.609 | 0.152 | 0 Bcell_1_spleen |
| JMJD1C             | 0 | 0.86902937 | 0.917 | 0.461 | 0 Bcell_1_spleen |
| HSD17B4            | 0 | 0.99245763 | 0.705 | 0.249 | 0 Bcell_1_spleen |
| VAV3               | 0 | 1.04022166 | 0.685 | 0.23  | 0 Bcell_1_spleen |
| HDAC9              | 0 | 1.26346709 | 0.684 | 0.23  | 0 Bcell_1_spleen |
| PIK3AP1            | 0 | 1.13500246 | 0.647 | 0.194 | 0 Bcell_1_spleen |
| DUSP1              | 0 | 1.10055212 | 0.7   | 0.247 | 0 Bcell_1_spleen |
| TLN1               | 0 | 1.0295122  | 0.665 | 0.215 | 0 Bcell_1_spleen |
| RPS2               | 0 | 1.68996319 | 0.972 | 0.522 | 0 Bcell_1_spleen |
| MCL1               | 0 | 1.40005041 | 0.616 | 0.168 | 0 Bcell_1_spleen |
| BANK1              | 0 | 1.03192534 | 0.913 | 0.468 | 0 Bcell_1_spleen |
| PTPRJ              | 0 | 1.17397041 | 0.648 | 0.204 | 0 Bcell_1_spleen |
| NEDD9              | 0 | 1.41288837 | 0.615 | 0.176 | 0 Bcell_1_spleen |

|                    |   |            |       |       |                  |
|--------------------|---|------------|-------|-------|------------------|
| MAML2              | 0 | 1.16094694 | 0.682 | 0.253 | 0 Bcell_1_spleen |
| CLTA               | 0 | 1.25750224 | 0.561 | 0.137 | 0 Bcell_1_spleen |
| AFF3               | 0 | 0.87583026 | 0.93  | 0.506 | 0 Bcell_1_spleen |
| ARHGAP24           | 0 | 1.1428218  | 0.941 | 0.517 | 0 Bcell_1_spleen |
| NCOR1              | 0 | 1.18860387 | 0.578 | 0.155 | 0 Bcell_1_spleen |
| XYLT1              | 0 | 1.17886319 | 0.614 | 0.192 | 0 Bcell_1_spleen |
| RUFY3              | 0 | 1.24853833 | 0.578 | 0.159 | 0 Bcell_1_spleen |
| PIKFYVE            | 0 | 1.35896211 | 0.583 | 0.165 | 0 Bcell_1_spleen |
| SEL1L3             | 0 | 1.28164742 | 0.575 | 0.158 | 0 Bcell_1_spleen |
| CCDC50             | 0 | 1.08142316 | 0.575 | 0.166 | 0 Bcell_1_spleen |
| BMP2K              | 0 | 1.40792325 | 0.556 | 0.148 | 0 Bcell_1_spleen |
| ADAM19             | 0 | 1.22064834 | 0.568 | 0.161 | 0 Bcell_1_spleen |
| PPP1CC             | 0 | 1.1368856  | 0.536 | 0.132 | 0 Bcell_1_spleen |
| ZC3HAV1            | 0 | 1.30537117 | 0.548 | 0.146 | 0 Bcell_1_spleen |
| MTDH               | 0 | 1.26432276 | 0.526 | 0.128 | 0 Bcell_1_spleen |
| ENSMMUG00000054358 | 0 | 1.92053232 | 0.974 | 0.577 | 0 Bcell_1_spleen |
| SMARCA5            | 0 | 1.16738469 | 0.536 | 0.14  | 0 Bcell_1_spleen |
| ATP5F1D            | 0 | 1.86908844 | 0.458 | 0.062 | 0 Bcell_1_spleen |
| ARL5A              | 0 | 1.71706869 | 0.47  | 0.077 | 0 Bcell_1_spleen |
| ARHGAP15           | 0 | 0.8788991  | 0.947 | 0.554 | 0 Bcell_1_spleen |
| RUNX1              | 0 | 1.19100782 | 0.547 | 0.157 | 0 Bcell_1_spleen |
| ST6GAL1            | 0 | 1.26197581 | 0.505 | 0.126 | 0 Bcell_1_spleen |
| CR2                | 0 | 2.00823703 | 0.452 | 0.079 | 0 Bcell_1_spleen |
| RBM17              | 0 | 1.25931751 | 0.492 | 0.121 | 0 Bcell_1_spleen |
| ANGPTL1            | 0 | 1.55883276 | 0.471 | 0.103 | 0 Bcell_1_spleen |
| NOL7               | 0 | 1.28500966 | 0.465 | 0.103 | 0 Bcell_1_spleen |
| PARP1              | 0 | 1.29309639 | 0.463 | 0.106 | 0 Bcell_1_spleen |
| TMEM160            | 0 | 2.41804128 | 0.392 | 0.036 | 0 Bcell_1_spleen |
| DDX5               | 0 | 0.88619127 | 0.985 | 0.638 | 0 Bcell_1_spleen |
| MYO1E              | 0 | 1.89668656 | 0.429 | 0.086 | 0 Bcell_1_spleen |
| DEXI               | 0 | 1.45002925 | 0.432 | 0.093 | 0 Bcell_1_spleen |
| UBE2S              | 0 | 1.85857845 | 0.39  | 0.059 | 0 Bcell_1_spleen |
| MZT2B              | 0 | 1.67072108 | 0.389 | 0.06  | 0 Bcell_1_spleen |

|                     |           |            |       |       |           |                |
|---------------------|-----------|------------|-------|-------|-----------|----------------|
| HSPH1               | 0         | 2.33182459 | 0.4   | 0.072 | 0         | Bcell_1_spleen |
| TRAPPC5             | 0         | 3.11934487 | 0.333 | 0.016 | 0         | Bcell_1_spleen |
| ARL5B               | 0         | 1.72798728 | 0.373 | 0.067 | 0         | Bcell_1_spleen |
| RPL13               | 0         | 2.54818889 | 0.998 | 0.695 | 0         | Bcell_1_spleen |
| HNRNPAB             | 0         | 1.80493388 | 0.355 | 0.052 | 0         | Bcell_1_spleen |
| ENSMMUG00000008417  | 0         | 2.42864947 | 0.318 | 0.03  | 0         | Bcell_1_spleen |
| ENSMMUG000000050770 | 0         | 2.13981478 | 0.319 | 0.039 | 0         | Bcell_1_spleen |
| TXNL4A              | 0         | 2.43568531 | 0.299 | 0.024 | 0         | Bcell_1_spleen |
| ENSMMUG000000052127 | 0         | 1.35248768 | 0.995 | 0.75  | 0         | Bcell_1_spleen |
| RPS20               | 0         | 1.0725644  | 0.996 | 0.766 | 0         | Bcell_1_spleen |
| RPL26               | 0         | 0.78586037 | 0.98  | 0.752 | 0         | Bcell_1_spleen |
| RPL27A              | 0         | 0.9853828  | 0.994 | 0.847 | 0         | Bcell_1_spleen |
| RPL23               | 0         | 0.63230824 | 0.992 | 0.889 | 0         | Bcell_1_spleen |
| ENSMMUG000000065373 | 0         | 0.84350105 | 0.976 | 0.914 | 0         | Bcell_1_spleen |
| RPL13A              | 0         | 0.53832919 | 0.996 | 0.944 | 0         | Bcell_1_spleen |
| RPL23A              | 0         | 0.72694971 | 0.996 | 0.945 | 0         | Bcell_1_spleen |
| FNBP1               | 5.35E-308 | 0.92665795 | 0.763 | 0.301 | 1.90E-303 | Bcell_1_spleen |
| MYCBP2              | 1.25E-307 | 0.96970552 | 0.692 | 0.243 | 4.41E-303 | Bcell_1_spleen |
| UBE2E2              | 2.06E-307 | 1.15529899 | 0.576 | 0.176 | 7.29E-303 | Bcell_1_spleen |
| STT3B               | 9.29E-305 | 1.08533467 | 0.546 | 0.154 | 3.29E-300 | Bcell_1_spleen |
| CYC1                | 3.92E-303 | 1.65231693 | 0.345 | 0.055 | 1.39E-298 | Bcell_1_spleen |
| ZMYND8              | 1.11E-300 | 1.28586921 | 0.425 | 0.092 | 3.92E-296 | Bcell_1_spleen |
| UVRAG               | 1.90E-300 | 0.88839395 | 0.783 | 0.315 | 6.74E-296 | Bcell_1_spleen |
| BRD9                | 7.23E-300 | 1.23024964 | 0.442 | 0.1   | 2.56E-295 | Bcell_1_spleen |
| FOSB                | 2.75E-299 | 1.0243771  | 0.684 | 0.255 | 9.75E-295 | Bcell_1_spleen |
| SMARCC1             | 2.38E-298 | 1.08437726 | 0.521 | 0.143 | 8.42E-294 | Bcell_1_spleen |
| FOS                 | 3.95E-298 | 0.92104389 | 0.931 | 0.575 | 1.40E-293 | Bcell_1_spleen |
| IMMP2L              | 2.51E-297 | 1.12831417 | 0.646 | 0.231 | 8.90E-293 | Bcell_1_spleen |
| EIF4G3              | 9.18E-295 | 1.00748797 | 0.607 | 0.195 | 3.25E-290 | Bcell_1_spleen |
| RANBP1              | 6.68E-294 | 1.34640238 | 0.399 | 0.081 | 2.37E-289 | Bcell_1_spleen |
| ARHGAP26            | 1.03E-293 | 1.10889484 | 0.548 | 0.163 | 3.64E-289 | Bcell_1_spleen |
| PTEN                | 4.39E-293 | 1.0288798  | 0.607 | 0.199 | 1.56E-288 | Bcell_1_spleen |
| WTAP                | 1.56E-292 | 0.91572502 | 0.711 | 0.256 | 5.51E-288 | Bcell_1_spleen |

|                    |           |            |       |       |           |                |
|--------------------|-----------|------------|-------|-------|-----------|----------------|
| HNRNPU             | 1.44E-290 | 0.88690748 | 0.707 | 0.256 | 5.09E-286 | Bcell_1_spleen |
| HOOK3              | 2.60E-290 | 0.96273345 | 0.642 | 0.218 | 9.22E-286 | Bcell_1_spleen |
| GADD45GIP1         | 1.04E-289 | 1.42427989 | 0.345 | 0.058 | 3.69E-285 | Bcell_1_spleen |
| TERF2IP            | 3.32E-289 | 1.97673583 | 0.293 | 0.037 | 1.17E-284 | Bcell_1_spleen |
| EBF1               | 4.57E-288 | 0.85146386 | 0.892 | 0.465 | 1.62E-283 | Bcell_1_spleen |
| GMDS               | 4.65E-288 | 1.30677085 | 0.431 | 0.102 | 1.65E-283 | Bcell_1_spleen |
| PXK                | 1.03E-286 | 0.96894135 | 0.586 | 0.183 | 3.64E-282 | Bcell_1_spleen |
| RSRP1              | 1.76E-286 | 0.80784966 | 0.773 | 0.303 | 6.25E-282 | Bcell_1_spleen |
| DGKD               | 2.95E-286 | 0.94795259 | 0.571 | 0.175 | 1.05E-281 | Bcell_1_spleen |
| PIK3R1             | 4.13E-286 | 1.81331136 | 0.3   | 0.041 | 1.46E-281 | Bcell_1_spleen |
| GGA2               | 2.39E-285 | 1.56736441 | 0.338 | 0.057 | 8.47E-281 | Bcell_1_spleen |
| ARGLU1             | 3.68E-284 | 0.80625418 | 0.756 | 0.289 | 1.30E-279 | Bcell_1_spleen |
| PPM1G              | 9.36E-284 | 1.56710472 | 0.349 | 0.063 | 3.32E-279 | Bcell_1_spleen |
| FOXO1              | 2.12E-283 | 0.77066751 | 0.711 | 0.266 | 7.51E-279 | Bcell_1_spleen |
| SRPK2              | 3.73E-283 | 0.9369489  | 0.656 | 0.234 | 1.32E-278 | Bcell_1_spleen |
| PIP4K2A            | 1.36E-282 | 1.13490053 | 0.464 | 0.119 | 4.81E-278 | Bcell_1_spleen |
| ZBED1              | 4.69E-282 | 1.18489649 | 0.431 | 0.102 | 1.66E-277 | Bcell_1_spleen |
| ENSMMUG00000047277 | 1.54E-280 | 0.79075169 | 0.793 | 0.319 | 5.46E-276 | Bcell_1_spleen |
| CAST               | 1.87E-280 | 0.99161347 | 0.585 | 0.189 | 6.61E-276 | Bcell_1_spleen |
| EIF4A2             | 3.89E-280 | 0.80768518 | 0.746 | 0.281 | 1.38E-275 | Bcell_1_spleen |
| CTCF               | 1.85E-278 | 1.28520051 | 0.401 | 0.089 | 6.55E-274 | Bcell_1_spleen |
| RASA1              | 2.44E-278 | 1.58174074 | 0.369 | 0.075 | 8.65E-274 | Bcell_1_spleen |
| KTN1               | 7.48E-278 | 1.33127238 | 0.386 | 0.082 | 2.65E-273 | Bcell_1_spleen |
| TOP1               | 1.01E-276 | 0.87397748 | 0.626 | 0.209 | 3.57E-272 | Bcell_1_spleen |
| PPP3CA             | 2.19E-276 | 0.82945154 | 0.813 | 0.353 | 7.78E-272 | Bcell_1_spleen |
| B3GNT2             | 3.87E-275 | 1.64452715 | 0.327 | 0.056 | 1.37E-270 | Bcell_1_spleen |
| PAG1               | 7.49E-275 | 1.12029133 | 0.519 | 0.156 | 2.65E-270 | Bcell_1_spleen |
| PALM2AKAP2         | 1.09E-274 | 1.12447322 | 0.499 | 0.142 | 3.85E-270 | Bcell_1_spleen |
| STK10              | 4.09E-274 | 1.03987361 | 0.477 | 0.128 | 1.45E-269 | Bcell_1_spleen |
| C10H20orf24        | 8.53E-274 | 1.05987497 | 0.457 | 0.117 | 3.02E-269 | Bcell_1_spleen |
| RPS15              | 1.78E-272 | 0.43329211 | 0.997 | 0.98  | 6.30E-268 | Bcell_1_spleen |
| SORL1              | 2.01E-270 | 1.50129354 | 0.361 | 0.073 | 7.13E-266 | Bcell_1_spleen |
| SLC38A1            | 2.29E-270 | 0.82589969 | 0.742 | 0.296 | 8.13E-266 | Bcell_1_spleen |

|                    |           |            |       |       |           |                |
|--------------------|-----------|------------|-------|-------|-----------|----------------|
| LRRFIP1            | 2.46E-269 | 0.92494243 | 0.579 | 0.187 | 8.71E-265 | Bcell_1_spleen |
| ARID1B             | 1.08E-268 | 0.79260697 | 0.786 | 0.334 | 3.84E-264 | Bcell_1_spleen |
| CD22               | 1.09E-268 | 0.94582648 | 0.519 | 0.151 | 3.87E-264 | Bcell_1_spleen |
| KDM4C              | 1.37E-268 | 0.79512765 | 0.767 | 0.316 | 4.85E-264 | Bcell_1_spleen |
| CSNK1G3            | 2.59E-268 | 0.85623331 | 0.636 | 0.222 | 9.19E-264 | Bcell_1_spleen |
| ENSMMUG00000028906 | 2.65E-267 | 0.87809836 | 0.647 | 0.233 | 9.39E-263 | Bcell_1_spleen |
| FBXO34             | 2.94E-267 | 0.92753786 | 0.592 | 0.198 | 1.04E-262 | Bcell_1_spleen |
| YTHDC1             | 4.43E-267 | 0.95217388 | 0.544 | 0.168 | 1.57E-262 | Bcell_1_spleen |
| ENSMMUG00000052424 | 1.28E-266 | 0.81897957 | 0.72  | 0.278 | 4.52E-262 | Bcell_1_spleen |
| CCNL1              | 3.06E-266 | 0.75548593 | 0.872 | 0.405 | 1.08E-261 | Bcell_1_spleen |
| BLNK               | 6.70E-266 | 1.09647802 | 0.425 | 0.104 | 2.37E-261 | Bcell_1_spleen |
| STK17B             | 1.60E-265 | 0.80921664 | 0.902 | 0.47  | 5.68E-261 | Bcell_1_spleen |
| MACF1              | 4.80E-265 | 0.93480839 | 0.584 | 0.194 | 1.70E-260 | Bcell_1_spleen |
| RANBP2             | 1.09E-264 | 0.9319452  | 0.576 | 0.188 | 3.87E-260 | Bcell_1_spleen |
| ZFAND5             | 1.55E-264 | 1.44292584 | 0.341 | 0.065 | 5.50E-260 | Bcell_1_spleen |
| DDX17              | 2.36E-264 | 0.81996545 | 0.635 | 0.216 | 8.36E-260 | Bcell_1_spleen |
| RPS3               | 9.55E-264 | 0.50969071 | 0.99  | 0.897 | 3.38E-259 | Bcell_1_spleen |
| ARHGAP17           | 3.12E-263 | 0.90277158 | 0.59  | 0.195 | 1.10E-258 | Bcell_1_spleen |
| HMGA1              | 3.82E-263 | 0.96089723 | 0.493 | 0.139 | 1.35E-258 | Bcell_1_spleen |
| PTK2B              | 5.33E-263 | 1.20777944 | 0.409 | 0.098 | 1.89E-258 | Bcell_1_spleen |
| LPCAT1             | 2.34E-262 | 1.34290113 | 0.357 | 0.073 | 8.31E-258 | Bcell_1_spleen |
| CPEB1              | 5.17E-262 | 0.55231655 | 0.988 | 0.846 | 1.83E-257 | Bcell_1_spleen |
| TBL1XR1            | 1.38E-260 | 0.85174072 | 0.609 | 0.208 | 4.89E-256 | Bcell_1_spleen |
| PFN1               | 4.14E-259 | 0.67725538 | 0.963 | 0.64  | 1.47E-254 | Bcell_1_spleen |
| ERO1B              | 1.79E-258 | 0.90198284 | 0.582 | 0.195 | 6.33E-254 | Bcell_1_spleen |
| ATP1B3             | 1.89E-258 | 0.9382615  | 0.534 | 0.167 | 6.71E-254 | Bcell_1_spleen |
| HTT                | 1.40E-257 | 1.23667353 | 0.379 | 0.085 | 4.98E-253 | Bcell_1_spleen |
| METTL9             | 1.07E-256 | 1.3041204  | 0.372 | 0.081 | 3.81E-252 | Bcell_1_spleen |
| IFRD1              | 1.39E-255 | 0.88557243 | 0.64  | 0.234 | 4.91E-251 | Bcell_1_spleen |
| GRK5               | 4.94E-255 | 1.19446624 | 0.416 | 0.106 | 1.75E-250 | Bcell_1_spleen |
| ANKRD17            | 4.98E-255 | 1.01945064 | 0.498 | 0.15  | 1.76E-250 | Bcell_1_spleen |
| ENSMMUG00000063316 | 1.18E-254 | 0.88530616 | 0.667 | 0.258 | 4.17E-250 | Bcell_1_spleen |
| CCNG2              | 1.77E-254 | 1.48169689 | 0.345 | 0.071 | 6.28E-250 | Bcell_1_spleen |

|                   |           |            |       |       |           |                |
|-------------------|-----------|------------|-------|-------|-----------|----------------|
| TBC1D1            | 4.20E-254 | 0.79328194 | 0.694 | 0.267 | 1.49E-249 | Bcell_1_spleen |
| RCSD1             | 1.15E-253 | 0.78960856 | 0.702 | 0.268 | 4.07E-249 | Bcell_1_spleen |
| HHEX              | 2.90E-253 | 1.12087857 | 0.405 | 0.099 | 1.03E-248 | Bcell_1_spleen |
| DENND5B           | 1.07E-252 | 1.48012298 | 0.361 | 0.08  | 3.78E-248 | Bcell_1_spleen |
| DOCK11            | 4.33E-252 | 0.87202122 | 0.583 | 0.197 | 1.53E-247 | Bcell_1_spleen |
| CRTC3             | 4.36E-252 | 1.14488439 | 0.403 | 0.099 | 1.55E-247 | Bcell_1_spleen |
| CARD11            | 2.72E-251 | 1.07366792 | 0.436 | 0.116 | 9.65E-247 | Bcell_1_spleen |
| NFATC3            | 8.78E-251 | 1.25214221 | 0.4   | 0.1   | 3.11E-246 | Bcell_1_spleen |
| IL27RA            | 1.04E-250 | 1.59246344 | 0.292 | 0.047 | 3.69E-246 | Bcell_1_spleen |
| CELF2             | 2.99E-250 | 0.74485794 | 0.771 | 0.323 | 1.06E-245 | Bcell_1_spleen |
| ANKRD44           | 3.93E-250 | 0.7121534  | 0.846 | 0.388 | 1.39E-245 | Bcell_1_spleen |
| INPP5F            | 2.62E-249 | 1.80869335 | 0.282 | 0.044 | 9.29E-245 | Bcell_1_spleen |
| PPIA              | 1.23E-246 | 0.77480512 | 0.507 | 0.15  | 4.36E-242 | Bcell_1_spleen |
| XPO6              | 1.41E-246 | 0.97332501 | 0.439 | 0.118 | 5.01E-242 | Bcell_1_spleen |
| RAD51B            | 2.74E-246 | 1.07329886 | 0.472 | 0.143 | 9.72E-242 | Bcell_1_spleen |
| ENSMUG00000055687 | 3.62E-246 | 0.92256765 | 0.486 | 0.142 | 1.28E-241 | Bcell_1_spleen |
| AFF1              | 1.66E-245 | 0.97603097 | 0.539 | 0.179 | 5.88E-241 | Bcell_1_spleen |
| MAP3K5            | 2.38E-245 | 1.24203803 | 0.384 | 0.094 | 8.44E-241 | Bcell_1_spleen |
| MEF2A             | 3.44E-245 | 0.95350773 | 0.505 | 0.156 | 1.22E-240 | Bcell_1_spleen |
| CCDC88C           | 7.78E-245 | 1.18361    | 0.383 | 0.092 | 2.76E-240 | Bcell_1_spleen |
| UNC119            | 2.09E-244 | 1.1163668  | 0.372 | 0.086 | 7.40E-240 | Bcell_1_spleen |
| ABLIM1            | 2.70E-244 | 0.81335297 | 0.793 | 0.367 | 9.57E-240 | Bcell_1_spleen |
| DENND1A           | 3.89E-244 | 1.17592329 | 0.391 | 0.096 | 1.38E-239 | Bcell_1_spleen |
| PRKX              | 1.05E-243 | 0.99675893 | 0.492 | 0.151 | 3.71E-239 | Bcell_1_spleen |
| IKZF3             | 1.71E-243 | 0.80648242 | 0.708 | 0.283 | 6.05E-239 | Bcell_1_spleen |
| RNF145            | 4.04E-243 | 1.13463476 | 0.382 | 0.091 | 1.43E-238 | Bcell_1_spleen |
| CEP85L            | 7.28E-243 | 0.91339224 | 0.493 | 0.149 | 2.58E-238 | Bcell_1_spleen |
| RERE              | 8.01E-243 | 0.77288289 | 0.755 | 0.319 | 2.84E-238 | Bcell_1_spleen |
| SMYD3             | 1.71E-242 | 1.08976297 | 0.455 | 0.134 | 6.06E-238 | Bcell_1_spleen |
| ATF7IP            | 9.31E-242 | 0.83794901 | 0.691 | 0.278 | 3.30E-237 | Bcell_1_spleen |
| ZHX2              | 8.08E-241 | 1.07726802 | 0.409 | 0.106 | 2.86E-236 | Bcell_1_spleen |
| EIF2AK3           | 8.65E-241 | 0.64460515 | 0.814 | 0.361 | 3.07E-236 | Bcell_1_spleen |
| GRB2              | 1.53E-240 | 0.76802993 | 0.788 | 0.348 | 5.42E-236 | Bcell_1_spleen |



|                   |           |            |       |       |           |                |
|-------------------|-----------|------------|-------|-------|-----------|----------------|
| GLS               | 1.76E-240 | 1.02370605 | 0.434 | 0.119 | 6.22E-236 | Bcell_1_spleen |
| EXOC4             | 2.24E-240 | 0.87876154 | 0.581 | 0.207 | 7.95E-236 | Bcell_1_spleen |
| KDM6A             | 6.39E-240 | 0.83861342 | 0.577 | 0.201 | 2.26E-235 | Bcell_1_spleen |
| FBXW11            | 2.22E-239 | 0.86604102 | 0.513 | 0.161 | 7.88E-235 | Bcell_1_spleen |
| CR1               | 3.87E-239 | 1.01431041 | 0.529 | 0.178 | 1.37E-234 | Bcell_1_spleen |
| CTNNB1            | 5.86E-239 | 0.88775065 | 0.499 | 0.153 | 2.08E-234 | Bcell_1_spleen |
| MCUB              | 5.98E-239 | 0.81515436 | 0.561 | 0.188 | 2.12E-234 | Bcell_1_spleen |
| NPAT              | 6.33E-239 | 0.94319031 | 0.472 | 0.14  | 2.24E-234 | Bcell_1_spleen |
| IQSEC1            | 6.70E-239 | 0.91247768 | 0.542 | 0.181 | 2.37E-234 | Bcell_1_spleen |
| MARCKSL1          | 8.06E-239 | 1.23411378 | 0.34  | 0.073 | 2.86E-234 | Bcell_1_spleen |
| CIITA             | 9.32E-239 | 1.01327559 | 0.423 | 0.113 | 3.30E-234 | Bcell_1_spleen |
| PLEKHG1           | 2.18E-238 | 0.7710168  | 0.853 | 0.43  | 7.74E-234 | Bcell_1_spleen |
| PHF14             | 5.72E-238 | 1.00634078 | 0.457 | 0.133 | 2.03E-233 | Bcell_1_spleen |
| NSD3              | 6.82E-238 | 0.92862075 | 0.463 | 0.135 | 2.42E-233 | Bcell_1_spleen |
| VAV1              | 1.14E-237 | 1.28714794 | 0.344 | 0.076 | 4.05E-233 | Bcell_1_spleen |
| RASA2             | 4.72E-237 | 0.85595616 | 0.528 | 0.171 | 1.67E-232 | Bcell_1_spleen |
| ENSMUG00000041688 | 5.40E-237 | 1.11253811 | 0.438 | 0.126 | 1.91E-232 | Bcell_1_spleen |
| FNBP4             | 7.96E-237 | 1.02418809 | 0.429 | 0.118 | 2.82E-232 | Bcell_1_spleen |
| DOCK2             | 8.24E-237 | 0.72517398 | 0.746 | 0.309 | 2.92E-232 | Bcell_1_spleen |
| SENP6             | 9.71E-237 | 0.83365973 | 0.535 | 0.176 | 3.44E-232 | Bcell_1_spleen |
| HUWE1             | 1.19E-236 | 0.91089859 | 0.465 | 0.136 | 4.23E-232 | Bcell_1_spleen |
| RBM26             | 4.74E-236 | 1.00928027 | 0.438 | 0.124 | 1.68E-231 | Bcell_1_spleen |
| CTSZ              | 1.47E-232 | 0.8310314  | 0.457 | 0.131 | 5.20E-228 | Bcell_1_spleen |
| KMT2C             | 2.23E-232 | 0.67211183 | 0.794 | 0.355 | 7.91E-228 | Bcell_1_spleen |
| NCKAP5            | 2.67E-232 | 1.5875757  | 0.364 | 0.095 | 9.45E-228 | Bcell_1_spleen |
| TMPO              | 1.09E-231 | 1.68247764 | 0.267 | 0.042 | 3.87E-227 | Bcell_1_spleen |
| ARIH1             | 1.27E-231 | 0.76789903 | 0.609 | 0.225 | 4.50E-227 | Bcell_1_spleen |
| JMY               | 1.09E-230 | 1.40479105 | 0.352 | 0.084 | 3.87E-226 | Bcell_1_spleen |
| RAPGEF1           | 1.19E-230 | 0.83769877 | 0.569 | 0.201 | 4.20E-226 | Bcell_1_spleen |
| YY1               | 1.45E-230 | 1.15834842 | 0.332 | 0.072 | 5.14E-226 | Bcell_1_spleen |
| RRP36             | 4.55E-230 | 1.56772442 | 0.271 | 0.044 | 1.61E-225 | Bcell_1_spleen |
| STRBP             | 4.96E-230 | 1.09274455 | 0.365 | 0.088 | 1.76E-225 | Bcell_1_spleen |
| DIP2B             | 5.82E-230 | 0.86416258 | 0.544 | 0.186 | 2.06E-225 | Bcell_1_spleen |

|                   |           |            |       |       |           |                |
|-------------------|-----------|------------|-------|-------|-----------|----------------|
| GNB1              | 9.95E-230 | 0.91141118 | 0.45  | 0.131 | 3.53E-225 | Bcell_1_spleen |
| DECR2             | 1.18E-229 | 1.14667965 | 0.33  | 0.07  | 4.20E-225 | Bcell_1_spleen |
| TRIM22            | 2.87E-229 | 0.74810319 | 0.636 | 0.238 | 1.02E-224 | Bcell_1_spleen |
| DEK               | 4.16E-229 | 1.16346308 | 0.343 | 0.077 | 1.48E-224 | Bcell_1_spleen |
| RALY              | 8.75E-229 | 1.10973512 | 0.38  | 0.096 | 3.10E-224 | Bcell_1_spleen |
| ENSMUG00000008587 | 1.13E-228 | 0.91508327 | 0.51  | 0.17  | 4.01E-224 | Bcell_1_spleen |
| SNRNP70           | 8.01E-228 | 0.86086984 | 0.435 | 0.122 | 2.84E-223 | Bcell_1_spleen |
| NCF1              | 1.38E-227 | 0.7793135  | 0.526 | 0.171 | 4.89E-223 | Bcell_1_spleen |
| BAZ1A             | 6.33E-227 | 0.82265364 | 0.514 | 0.168 | 2.24E-222 | Bcell_1_spleen |
| R3HDM2            | 1.09E-226 | 1.21905533 | 0.362 | 0.09  | 3.86E-222 | Bcell_1_spleen |
| UBE2J1            | 4.10E-225 | 0.76436538 | 0.507 | 0.162 | 1.45E-220 | Bcell_1_spleen |
| ATM               | 6.08E-225 | 0.91127745 | 0.433 | 0.125 | 2.16E-220 | Bcell_1_spleen |
| MSI2              | 1.07E-224 | 0.74421348 | 0.559 | 0.197 | 3.80E-220 | Bcell_1_spleen |
| CD1C              | 1.18E-224 | 0.7566897  | 0.754 | 0.333 | 4.18E-220 | Bcell_1_spleen |
| PAN3              | 1.75E-224 | 0.69997646 | 0.641 | 0.247 | 6.20E-220 | Bcell_1_spleen |
| ZCCHC7            | 6.47E-224 | 0.72219022 | 0.757 | 0.331 | 2.29E-219 | Bcell_1_spleen |
| PPP2R5E           | 9.11E-224 | 1.0426596  | 0.387 | 0.102 | 3.23E-219 | Bcell_1_spleen |
| ARID5B            | 1.84E-223 | 0.89834506 | 0.55  | 0.198 | 6.51E-219 | Bcell_1_spleen |
| ALKBH7            | 4.05E-223 | 0.90412103 | 0.373 | 0.092 | 1.43E-218 | Bcell_1_spleen |
| ME2               | 1.12E-222 | 0.78484882 | 0.523 | 0.175 | 3.98E-218 | Bcell_1_spleen |
| IRF1              | 5.10E-222 | 1.26833076 | 0.378 | 0.101 | 1.81E-217 | Bcell_1_spleen |
| MBP               | 5.84E-222 | 0.82557765 | 0.461 | 0.14  | 2.07E-217 | Bcell_1_spleen |
| BIRC3             | 9.73E-222 | 0.70775382 | 0.587 | 0.216 | 3.45E-217 | Bcell_1_spleen |
| SRSF4             | 1.32E-221 | 0.74625008 | 0.544 | 0.185 | 4.69E-217 | Bcell_1_spleen |
| FARS2             | 7.81E-221 | 1.19690059 | 0.343 | 0.081 | 2.77E-216 | Bcell_1_spleen |
| LNPEP             | 6.55E-220 | 0.91387165 | 0.443 | 0.133 | 2.32E-215 | Bcell_1_spleen |
| ABHD17A           | 6.63E-220 | 1.45775463 | 0.276 | 0.05  | 2.35E-215 | Bcell_1_spleen |
| USP34             | 1.46E-219 | 0.67162346 | 0.665 | 0.261 | 5.17E-215 | Bcell_1_spleen |
| MBD5              | 5.07E-219 | 1.01075395 | 0.423 | 0.125 | 1.80E-214 | Bcell_1_spleen |
| DOCK10            | 6.33E-219 | 0.96651918 | 0.416 | 0.119 | 2.24E-214 | Bcell_1_spleen |
| MAF1              | 7.66E-219 | 1.15106351 | 0.308 | 0.063 | 2.71E-214 | Bcell_1_spleen |
| MBNL1             | 1.10E-218 | 0.68569104 | 0.928 | 0.561 | 3.89E-214 | Bcell_1_spleen |
| CAMK1D            | 1.24E-218 | 0.88346654 | 0.519 | 0.182 | 4.38E-214 | Bcell_1_spleen |

|                    |           |            |       |       |           |                |
|--------------------|-----------|------------|-------|-------|-----------|----------------|
| TTC13              | 2.09E-218 | 1.55616804 | 0.269 | 0.047 | 7.42E-214 | Bcell_1_spleen |
| DOCK8              | 7.89E-218 | 0.69820139 | 0.704 | 0.29  | 2.79E-213 | Bcell_1_spleen |
| RPL31              | 8.17E-218 | 0.70356693 | 0.803 | 0.38  | 2.89E-213 | Bcell_1_spleen |
| FLI1               | 1.02E-217 | 0.83532216 | 0.458 | 0.141 | 3.63E-213 | Bcell_1_spleen |
| WASF2              | 4.40E-217 | 0.65605974 | 0.687 | 0.273 | 1.56E-212 | Bcell_1_spleen |
| NME3               | 5.72E-217 | 0.68458153 | 0.506 | 0.163 | 2.03E-212 | Bcell_1_spleen |
| ENSMMUG00000058755 | 1.18E-216 | 0.41113827 | 0.992 | 0.957 | 4.18E-212 | Bcell_1_spleen |
| WIPF1              | 2.67E-216 | 0.69937089 | 0.738 | 0.313 | 9.45E-212 | Bcell_1_spleen |
| PACS1              | 5.48E-216 | 1.06235544 | 0.389 | 0.107 | 1.94E-211 | Bcell_1_spleen |
| IRAG2              | 5.71E-216 | 1.00914572 | 0.464 | 0.15  | 2.02E-211 | Bcell_1_spleen |
| CUX1               | 1.02E-215 | 0.70695444 | 0.587 | 0.215 | 3.62E-211 | Bcell_1_spleen |
| TRIM44             | 1.03E-215 | 1.02528505 | 0.38  | 0.102 | 3.65E-211 | Bcell_1_spleen |
| TAOK1              | 1.56E-215 | 1.05786919 | 0.371 | 0.097 | 5.53E-211 | Bcell_1_spleen |
| CDYL               | 1.75E-214 | 0.93797356 | 0.453 | 0.143 | 6.20E-210 | Bcell_1_spleen |
| AKIRIN1            | 2.90E-214 | 1.11732503 | 0.314 | 0.068 | 1.03E-209 | Bcell_1_spleen |
| ARL15              | 3.15E-214 | 0.79949559 | 0.547 | 0.197 | 1.11E-209 | Bcell_1_spleen |
| TLK1               | 4.17E-214 | 0.84139083 | 0.458 | 0.143 | 1.48E-209 | Bcell_1_spleen |
| GSK3B              | 5.58E-214 | 0.80799897 | 0.523 | 0.18  | 1.98E-209 | Bcell_1_spleen |
| ITGA4              | 6.86E-214 | 0.88057789 | 0.435 | 0.131 | 2.43E-209 | Bcell_1_spleen |
| MAP4K4             | 1.34E-213 | 0.67353131 | 0.617 | 0.235 | 4.74E-209 | Bcell_1_spleen |
| LRPPRC             | 1.86E-213 | 0.96075518 | 0.415 | 0.121 | 6.59E-209 | Bcell_1_spleen |
| ATXN2              | 2.84E-213 | 1.09180758 | 0.363 | 0.094 | 1.00E-208 | Bcell_1_spleen |
| JAZF1              | 7.69E-213 | 0.86337605 | 0.507 | 0.175 | 2.72E-208 | Bcell_1_spleen |
| IGF2BP3            | 2.14E-212 | 0.85682877 | 0.487 | 0.161 | 7.57E-208 | Bcell_1_spleen |
| WNK1               | 2.21E-212 | 0.78816013 | 0.473 | 0.15  | 7.82E-208 | Bcell_1_spleen |
| PTBP3              | 7.77E-212 | 0.6611878  | 0.617 | 0.231 | 2.75E-207 | Bcell_1_spleen |
| CD164              | 9.13E-212 | 0.63149081 | 0.634 | 0.239 | 3.23E-207 | Bcell_1_spleen |
| TAF15              | 2.55E-211 | 0.69190598 | 0.589 | 0.217 | 9.05E-207 | Bcell_1_spleen |
| LPP                | 2.95E-211 | 0.90805605 | 0.442 | 0.137 | 1.04E-206 | Bcell_1_spleen |
| ZMYM4              | 7.34E-211 | 1.09178993 | 0.337 | 0.082 | 2.60E-206 | Bcell_1_spleen |
| SLMAP              | 1.76E-210 | 0.74219315 | 0.562 | 0.206 | 6.23E-206 | Bcell_1_spleen |
| NIPA2              | 2.54E-210 | 1.06002049 | 0.344 | 0.085 | 9.02E-206 | Bcell_1_spleen |
| SLC15A2            | 2.77E-210 | 1.53785641 | 0.284 | 0.058 | 9.83E-206 | Bcell_1_spleen |

|                   |           |            |       |       |           |                |
|-------------------|-----------|------------|-------|-------|-----------|----------------|
| LSM4              | 9.92E-210 | 0.91598649 | 0.352 | 0.087 | 3.51E-205 | Bcell_1_spleen |
| SNX5              | 3.00E-209 | 0.68017694 | 0.721 | 0.304 | 1.06E-204 | Bcell_1_spleen |
| TSPAN3            | 6.66E-209 | 0.75051045 | 0.426 | 0.125 | 2.36E-204 | Bcell_1_spleen |
| SEC63             | 6.69E-208 | 0.87214159 | 0.409 | 0.119 | 2.37E-203 | Bcell_1_spleen |
| FBXL17            | 1.04E-206 | 0.8796176  | 0.459 | 0.15  | 3.70E-202 | Bcell_1_spleen |
| RRAS2             | 1.27E-206 | 0.92373178 | 0.448 | 0.145 | 4.51E-202 | Bcell_1_spleen |
| STRN3             | 2.23E-206 | 1.05288953 | 0.331 | 0.081 | 7.90E-202 | Bcell_1_spleen |
| TMEM87B           | 4.56E-206 | 1.42961526 | 0.271 | 0.052 | 1.62E-201 | Bcell_1_spleen |
| HIST1H2AC         | 7.32E-206 | 1.25886287 | 0.397 | 0.118 | 2.59E-201 | Bcell_1_spleen |
| PPP1R10           | 8.33E-206 | 0.75524783 | 0.481 | 0.158 | 2.95E-201 | Bcell_1_spleen |
| CELF1             | 8.52E-206 | 0.74526932 | 0.49  | 0.163 | 3.02E-201 | Bcell_1_spleen |
| USP9X             | 1.01E-205 | 0.79377803 | 0.503 | 0.171 | 3.57E-201 | Bcell_1_spleen |
| SLC2A3            | 1.91E-205 | 0.81168652 | 0.566 | 0.212 | 6.76E-201 | Bcell_1_spleen |
| SPIDR             | 7.56E-205 | 0.83051941 | 0.502 | 0.175 | 2.68E-200 | Bcell_1_spleen |
| MAP3K1            | 9.82E-205 | 0.85023075 | 0.466 | 0.154 | 3.48E-200 | Bcell_1_spleen |
| FCMR              | 2.03E-204 | 0.72372796 | 0.724 | 0.328 | 7.21E-200 | Bcell_1_spleen |
| NFATC2            | 2.42E-204 | 1.25537365 | 0.308 | 0.071 | 8.57E-200 | Bcell_1_spleen |
| MLLT10            | 3.88E-204 | 0.83215607 | 0.414 | 0.123 | 1.38E-199 | Bcell_1_spleen |
| ADK               | 7.05E-204 | 0.78339993 | 0.486 | 0.166 | 2.50E-199 | Bcell_1_spleen |
| VPS13B            | 1.91E-203 | 0.62790827 | 0.725 | 0.313 | 6.76E-199 | Bcell_1_spleen |
| BTAF1             | 4.52E-203 | 0.86267986 | 0.458 | 0.149 | 1.60E-198 | Bcell_1_spleen |
| SESN3             | 7.72E-203 | 1.06083744 | 0.356 | 0.095 | 2.73E-198 | Bcell_1_spleen |
| TPM4              | 9.54E-203 | 0.83351862 | 0.353 | 0.091 | 3.38E-198 | Bcell_1_spleen |
| ZFAND3            | 1.25E-202 | 0.61724095 | 0.639 | 0.255 | 4.44E-198 | Bcell_1_spleen |
| NSD1              | 2.15E-202 | 0.756752   | 0.447 | 0.141 | 7.60E-198 | Bcell_1_spleen |
| H1-2              | 3.12E-202 | 0.81157853 | 0.4   | 0.116 | 1.11E-197 | Bcell_1_spleen |
| AHCYL2            | 3.85E-202 | 1.34336084 | 0.283 | 0.059 | 1.36E-197 | Bcell_1_spleen |
| RALGPS2           | 1.48E-201 | 0.72120705 | 0.906 | 0.531 | 5.24E-197 | Bcell_1_spleen |
| SNX25             | 1.65E-201 | 0.79870781 | 0.425 | 0.13  | 5.86E-197 | Bcell_1_spleen |
| RAP1A             | 3.16E-201 | 0.61148391 | 0.551 | 0.197 | 1.12E-196 | Bcell_1_spleen |
| STIM2             | 4.14E-201 | 0.85124528 | 0.42  | 0.128 | 1.47E-196 | Bcell_1_spleen |
| ENSMUG00000016898 | 7.49E-201 | 0.67933774 | 0.433 | 0.131 | 2.66E-196 | Bcell_1_spleen |
| STAP1             | 8.84E-201 | 0.66555787 | 0.523 | 0.182 | 3.13E-196 | Bcell_1_spleen |

|          |           |            |       |       |           |                |
|----------|-----------|------------|-------|-------|-----------|----------------|
| MAP3K8   | 1.10E-200 | 0.83124154 | 0.635 | 0.271 | 3.88E-196 | Bcell_1_spleen |
| SLC4A7   | 1.29E-200 | 1.08072715 | 0.333 | 0.084 | 4.57E-196 | Bcell_1_spleen |
| RRBP1    | 1.49E-200 | 1.41003117 | 0.269 | 0.053 | 5.29E-196 | Bcell_1_spleen |
| COMMD10  | 3.45E-200 | 0.80962492 | 0.472 | 0.158 | 1.22E-195 | Bcell_1_spleen |
| FBXW7    | 4.13E-200 | 0.7635081  | 0.486 | 0.168 | 1.46E-195 | Bcell_1_spleen |
| KANSL1   | 9.15E-200 | 0.76404738 | 0.498 | 0.173 | 3.24E-195 | Bcell_1_spleen |
| RALBP1   | 4.43E-199 | 1.34532303 | 0.258 | 0.048 | 1.57E-194 | Bcell_1_spleen |
| TBL1X    | 4.78E-199 | 1.1161745  | 0.331 | 0.084 | 1.69E-194 | Bcell_1_spleen |
| CMIP     | 5.96E-199 | 0.9579416  | 0.355 | 0.095 | 2.11E-194 | Bcell_1_spleen |
| RHEB     | 6.63E-199 | 0.79203486 | 0.411 | 0.123 | 2.35E-194 | Bcell_1_spleen |
| MEMO1    | 1.46E-198 | 0.81663938 | 0.439 | 0.14  | 5.17E-194 | Bcell_1_spleen |
| SPATA5   | 1.86E-198 | 1.26507535 | 0.296 | 0.067 | 6.59E-194 | Bcell_1_spleen |
| ABI1     | 3.78E-198 | 0.59921541 | 0.634 | 0.251 | 1.34E-193 | Bcell_1_spleen |
| THADA    | 4.59E-198 | 0.79407372 | 0.444 | 0.143 | 1.63E-193 | Bcell_1_spleen |
| ETS1     | 8.51E-198 | 0.63897124 | 0.634 | 0.252 | 3.01E-193 | Bcell_1_spleen |
| RAD23B   | 1.03E-197 | 1.27299058 | 0.269 | 0.053 | 3.65E-193 | Bcell_1_spleen |
| CREBBP   | 1.87E-197 | 0.70176716 | 0.49  | 0.167 | 6.62E-193 | Bcell_1_spleen |
| BCL2     | 5.75E-197 | 1.04381808 | 0.415 | 0.135 | 2.04E-192 | Bcell_1_spleen |
| ATP8A1   | 6.81E-197 | 0.94195501 | 0.38  | 0.11  | 2.41E-192 | Bcell_1_spleen |
| DNM2     | 8.67E-197 | 0.93687462 | 0.36  | 0.098 | 3.07E-192 | Bcell_1_spleen |
| RABEP1   | 1.07E-196 | 1.1014189  | 0.296 | 0.066 | 3.78E-192 | Bcell_1_spleen |
| SP140    | 1.27E-196 | 0.7265014  | 0.512 | 0.183 | 4.50E-192 | Bcell_1_spleen |
| KDELRL2  | 1.87E-196 | 1.27607389 | 0.299 | 0.068 | 6.64E-192 | Bcell_1_spleen |
| NR3C1    | 2.91E-196 | 0.62870303 | 0.599 | 0.23  | 1.03E-191 | Bcell_1_spleen |
| TMEM201  | 4.31E-196 | 1.11926202 | 0.324 | 0.081 | 1.53E-191 | Bcell_1_spleen |
| PHF20    | 5.35E-196 | 0.68622307 | 0.5   | 0.173 | 1.90E-191 | Bcell_1_spleen |
| SCAF4    | 1.25E-195 | 1.0413787  | 0.344 | 0.091 | 4.43E-191 | Bcell_1_spleen |
| SKAP2    | 1.44E-195 | 0.61968444 | 0.549 | 0.199 | 5.10E-191 | Bcell_1_spleen |
| RNASEH2B | 1.73E-195 | 0.803649   | 0.389 | 0.112 | 6.12E-191 | Bcell_1_spleen |
| PPP3CC   | 2.64E-195 | 0.55780243 | 0.682 | 0.282 | 9.34E-191 | Bcell_1_spleen |
| FAM81A   | 2.80E-195 | 1.17697212 | 0.317 | 0.078 | 9.91E-191 | Bcell_1_spleen |
| AKNA     | 3.36E-195 | 0.95562838 | 0.333 | 0.085 | 1.19E-190 | Bcell_1_spleen |
| CYFIP2   | 5.08E-195 | 0.55875427 | 0.633 | 0.249 | 1.80E-190 | Bcell_1_spleen |

|                   |           |            |       |       |           |                |
|-------------------|-----------|------------|-------|-------|-----------|----------------|
| SF1               | 8.01E-195 | 0.55494974 | 0.618 | 0.236 | 2.84E-190 | Bcell_1_spleen |
| UBE2D2            | 8.54E-195 | 0.78341742 | 0.372 | 0.103 | 3.02E-190 | Bcell_1_spleen |
| SETBP1            | 1.12E-194 | 1.12801543 | 0.324 | 0.082 | 3.97E-190 | Bcell_1_spleen |
| ITSN2             | 1.90E-194 | 0.62812675 | 0.608 | 0.239 | 6.72E-190 | Bcell_1_spleen |
| ITPKB             | 2.48E-194 | 0.9999949  | 0.304 | 0.071 | 8.80E-190 | Bcell_1_spleen |
| SWAP70            | 4.81E-194 | 0.61948817 | 0.871 | 0.457 | 1.70E-189 | Bcell_1_spleen |
| ITPR1             | 5.02E-194 | 0.64202032 | 0.607 | 0.242 | 1.78E-189 | Bcell_1_spleen |
| GOLPH3            | 5.13E-194 | 0.91288541 | 0.378 | 0.109 | 1.82E-189 | Bcell_1_spleen |
| PRKDC             | 5.75E-194 | 0.65737828 | 0.495 | 0.169 | 2.04E-189 | Bcell_1_spleen |
| TRAF3             | 6.08E-194 | 0.78887335 | 0.485 | 0.169 | 2.15E-189 | Bcell_1_spleen |
| SELENOT           | 8.42E-194 | 1.04701353 | 0.363 | 0.102 | 2.98E-189 | Bcell_1_spleen |
| SPTBN1            | 8.57E-194 | 0.89052438 | 0.392 | 0.117 | 3.04E-189 | Bcell_1_spleen |
| PLEK              | 1.72E-193 | 0.8315775  | 0.384 | 0.112 | 6.11E-189 | Bcell_1_spleen |
| SND1              | 3.50E-193 | 0.81257412 | 0.395 | 0.118 | 1.24E-188 | Bcell_1_spleen |
| HPS3              | 4.06E-193 | 1.05263705 | 0.329 | 0.085 | 1.44E-188 | Bcell_1_spleen |
| EXOC6             | 1.06E-192 | 0.7647283  | 0.434 | 0.141 | 3.76E-188 | Bcell_1_spleen |
| LIMD1             | 1.10E-192 | 1.02265727 | 0.311 | 0.076 | 3.90E-188 | Bcell_1_spleen |
| ENSMUG00000063859 | 1.32E-192 | 0.75622659 | 0.387 | 0.113 | 4.68E-188 | Bcell_1_spleen |
| CUL4A             | 4.38E-192 | 1.0929019  | 0.296 | 0.068 | 1.55E-187 | Bcell_1_spleen |
| TASOR2            | 3.23E-191 | 0.92208905 | 0.364 | 0.103 | 1.15E-186 | Bcell_1_spleen |
| SLC7A6            | 5.29E-191 | 1.15188128 | 0.288 | 0.065 | 1.87E-186 | Bcell_1_spleen |
| LRCH3             | 1.29E-190 | 0.76992832 | 0.462 | 0.155 | 4.56E-186 | Bcell_1_spleen |
| CALR              | 1.34E-190 | 0.59542276 | 0.589 | 0.226 | 4.73E-186 | Bcell_1_spleen |
| CYRIB             | 1.49E-190 | 0.59907891 | 0.812 | 0.386 | 5.28E-186 | Bcell_1_spleen |
| FAM120A           | 2.58E-190 | 0.90533269 | 0.339 | 0.09  | 9.13E-186 | Bcell_1_spleen |
| PRKCB             | 3.18E-190 | 0.58940612 | 0.842 | 0.422 | 1.13E-185 | Bcell_1_spleen |
| SCAF8             | 3.67E-190 | 0.6751435  | 0.536 | 0.198 | 1.30E-185 | Bcell_1_spleen |
| ZNF638            | 5.84E-190 | 0.68125927 | 0.431 | 0.137 | 2.07E-185 | Bcell_1_spleen |
| RABGAP1L          | 5.95E-190 | 0.59516307 | 0.764 | 0.359 | 2.11E-185 | Bcell_1_spleen |
| ARFGEF1           | 7.35E-190 | 0.72594655 | 0.473 | 0.162 | 2.60E-185 | Bcell_1_spleen |
| YWHAH             | 8.61E-190 | 0.69640967 | 0.365 | 0.102 | 3.05E-185 | Bcell_1_spleen |
| HSPD1             | 1.04E-189 | 0.66522157 | 0.45  | 0.147 | 3.69E-185 | Bcell_1_spleen |
| PRRC2B            | 1.07E-189 | 0.80441447 | 0.401 | 0.122 | 3.77E-185 | Bcell_1_spleen |

|                   |           |            |       |       |           |                |
|-------------------|-----------|------------|-------|-------|-----------|----------------|
| VTI1A             | 1.16E-189 | 0.63401944 | 0.564 | 0.217 | 4.11E-185 | Bcell_1_spleen |
| RPS6KA5           | 2.73E-189 | 0.71055243 | 0.502 | 0.181 | 9.68E-185 | Bcell_1_spleen |
| PUM1              | 4.03E-189 | 0.57475374 | 0.608 | 0.239 | 1.43E-184 | Bcell_1_spleen |
| NXPE3             | 4.66E-189 | 0.82423178 | 0.41  | 0.129 | 1.65E-184 | Bcell_1_spleen |
| RASGEF1B          | 6.56E-189 | 0.70829567 | 0.657 | 0.286 | 2.33E-184 | Bcell_1_spleen |
| RTN4              | 6.80E-189 | 0.77885252 | 0.425 | 0.137 | 2.41E-184 | Bcell_1_spleen |
| ZFP36L1           | 8.81E-189 | 0.60115717 | 0.799 | 0.405 | 3.12E-184 | Bcell_1_spleen |
| ASAP1             | 1.21E-188 | 1.09072305 | 0.329 | 0.087 | 4.28E-184 | Bcell_1_spleen |
| UBE2H             | 1.30E-188 | 0.7579821  | 0.459 | 0.156 | 4.61E-184 | Bcell_1_spleen |
| PCNX1             | 1.98E-188 | 0.90724303 | 0.372 | 0.109 | 7.00E-184 | Bcell_1_spleen |
| PTGER4            | 4.20E-188 | 0.84890863 | 0.442 | 0.149 | 1.49E-183 | Bcell_1_spleen |
| TCF12             | 1.34E-187 | 0.58921609 | 0.686 | 0.297 | 4.76E-183 | Bcell_1_spleen |
| USP48             | 2.74E-187 | 1.10070712 | 0.276 | 0.06  | 9.69E-183 | Bcell_1_spleen |
| DMXL1             | 2.83E-187 | 0.9311154  | 0.336 | 0.09  | 1.00E-182 | Bcell_1_spleen |
| OGA               | 3.83E-187 | 0.62884939 | 0.544 | 0.203 | 1.36E-182 | Bcell_1_spleen |
| CHD7              | 4.53E-187 | 0.76747538 | 0.444 | 0.149 | 1.61E-182 | Bcell_1_spleen |
| WDFY4             | 4.60E-187 | 0.62432467 | 0.575 | 0.224 | 1.63E-182 | Bcell_1_spleen |
| GRK3              | 8.72E-187 | 1.0419035  | 0.357 | 0.104 | 3.09E-182 | Bcell_1_spleen |
| PLCL2             | 1.08E-186 | 0.80026347 | 0.401 | 0.125 | 3.82E-182 | Bcell_1_spleen |
| ARID1A            | 7.54E-186 | 0.83730988 | 0.381 | 0.114 | 2.67E-181 | Bcell_1_spleen |
| MARK3             | 7.65E-186 | 0.84846911 | 0.356 | 0.101 | 2.71E-181 | Bcell_1_spleen |
| KLF12             | 1.68E-185 | 0.60522475 | 0.575 | 0.227 | 5.97E-181 | Bcell_1_spleen |
| MDM4              | 1.69E-185 | 0.68365242 | 0.469 | 0.162 | 5.99E-181 | Bcell_1_spleen |
| ZNF217            | 2.01E-185 | 1.19324672 | 0.256 | 0.052 | 7.13E-181 | Bcell_1_spleen |
| GNB2              | 2.25E-185 | 0.62191846 | 0.459 | 0.152 | 7.96E-181 | Bcell_1_spleen |
| CMPK1             | 4.71E-185 | 0.82711492 | 0.297 | 0.07  | 1.67E-180 | Bcell_1_spleen |
| CAP1              | 6.26E-185 | 0.52508203 | 0.586 | 0.223 | 2.22E-180 | Bcell_1_spleen |
| USP6NL            | 1.76E-184 | 0.99717565 | 0.335 | 0.091 | 6.23E-180 | Bcell_1_spleen |
| INPP5D            | 2.18E-184 | 0.58350746 | 0.618 | 0.251 | 7.73E-180 | Bcell_1_spleen |
| ARHGAP25          | 2.25E-184 | 0.72577446 | 0.447 | 0.151 | 7.97E-180 | Bcell_1_spleen |
| DIS3L2            | 2.31E-184 | 0.84049308 | 0.401 | 0.126 | 8.20E-180 | Bcell_1_spleen |
| ENSMUG00000011711 | 2.48E-184 | 0.6835904  | 0.499 | 0.181 | 8.79E-180 | Bcell_1_spleen |
| LCP1              | 2.56E-184 | 0.59666677 | 0.788 | 0.379 | 9.08E-180 | Bcell_1_spleen |

|                   |           |            |       |       |           |                |
|-------------------|-----------|------------|-------|-------|-----------|----------------|
| ATP5PB            | 3.45E-184 | 0.55979984 | 0.493 | 0.171 | 1.22E-179 | Bcell_1_spleen |
| ERC1              | 3.50E-184 | 0.96105747 | 0.342 | 0.095 | 1.24E-179 | Bcell_1_spleen |
| SRSF10            | 5.17E-184 | 0.53491792 | 0.568 | 0.214 | 1.83E-179 | Bcell_1_spleen |
| DENND6A           | 7.55E-184 | 0.95300624 | 0.33  | 0.089 | 2.68E-179 | Bcell_1_spleen |
| TRIP12            | 8.10E-184 | 0.71449071 | 0.437 | 0.144 | 2.87E-179 | Bcell_1_spleen |
| COP1              | 1.84E-183 | 0.8109984  | 0.405 | 0.128 | 6.54E-179 | Bcell_1_spleen |
| CEP170            | 2.94E-183 | 0.62126542 | 0.519 | 0.192 | 1.04E-178 | Bcell_1_spleen |
| CYBB              | 4.64E-183 | 0.65377608 | 0.409 | 0.128 | 1.64E-178 | Bcell_1_spleen |
| PHF21A            | 6.17E-183 | 0.81903967 | 0.403 | 0.128 | 2.19E-178 | Bcell_1_spleen |
| MAPKAP1           | 6.29E-183 | 0.99985327 | 0.322 | 0.085 | 2.23E-178 | Bcell_1_spleen |
| KDM4B             | 9.18E-183 | 0.75914137 | 0.362 | 0.104 | 3.25E-178 | Bcell_1_spleen |
| TLE4              | 1.14E-182 | 0.8940379  | 0.38  | 0.116 | 4.05E-178 | Bcell_1_spleen |
| AKAP13            | 2.63E-182 | 0.58940538 | 0.875 | 0.466 | 9.30E-178 | Bcell_1_spleen |
| MALT1             | 3.47E-182 | 0.85044787 | 0.346 | 0.097 | 1.23E-177 | Bcell_1_spleen |
| UTRN              | 4.00E-182 | 0.56724749 | 0.728 | 0.328 | 1.42E-177 | Bcell_1_spleen |
| CNOT2             | 4.91E-182 | 0.61950249 | 0.72  | 0.327 | 1.74E-177 | Bcell_1_spleen |
| ATAD2B            | 8.96E-182 | 0.64839649 | 0.452 | 0.153 | 3.17E-177 | Bcell_1_spleen |
| PUM2              | 9.17E-182 | 0.57713384 | 0.553 | 0.209 | 3.25E-177 | Bcell_1_spleen |
| MSL2              | 9.40E-182 | 1.09131393 | 0.306 | 0.078 | 3.33E-177 | Bcell_1_spleen |
| OXSRI             | 2.55E-181 | 0.90901427 | 0.358 | 0.104 | 9.03E-177 | Bcell_1_spleen |
| CCDC91            | 2.75E-181 | 0.5538654  | 0.544 | 0.206 | 9.76E-177 | Bcell_1_spleen |
| UBE2G1            | 3.32E-181 | 0.72568822 | 0.438 | 0.146 | 1.18E-176 | Bcell_1_spleen |
| H2AZ2             | 4.19E-181 | 0.53240578 | 0.743 | 0.324 | 1.49E-176 | Bcell_1_spleen |
| CAPRIN1           | 7.91E-181 | 0.941241   | 0.31  | 0.079 | 2.80E-176 | Bcell_1_spleen |
| ENSMUG00000012537 | 1.01E-180 | 0.56490254 | 0.497 | 0.174 | 3.57E-176 | Bcell_1_spleen |
| SH3BP5            | 1.14E-180 | 0.545095   | 0.808 | 0.389 | 4.05E-176 | Bcell_1_spleen |
| GSAP              | 1.52E-180 | 0.92218494 | 0.352 | 0.101 | 5.38E-176 | Bcell_1_spleen |
| NFAT5             | 1.62E-180 | 0.71756625 | 0.434 | 0.146 | 5.73E-176 | Bcell_1_spleen |
| NEDD4L            | 2.26E-180 | 0.80299466 | 0.405 | 0.13  | 8.01E-176 | Bcell_1_spleen |
| OSBPL11           | 4.29E-180 | 0.72619433 | 0.422 | 0.138 | 1.52E-175 | Bcell_1_spleen |
| BABAM2            | 4.95E-180 | 0.69551291 | 0.441 | 0.149 | 1.75E-175 | Bcell_1_spleen |
| ENSMUG00000010266 | 6.22E-180 | 0.49101221 | 0.736 | 0.32  | 2.20E-175 | Bcell_1_spleen |
| SPTAN1            | 8.41E-180 | 0.96059023 | 0.311 | 0.08  | 2.98E-175 | Bcell_1_spleen |



|                    |           |            |       |       |           |                |
|--------------------|-----------|------------|-------|-------|-----------|----------------|
| CAMKMT             | 9.05E-180 | 1.08953801 | 0.339 | 0.098 | 3.21E-175 | Bcell_1_spleen |
| LUC7L3             | 1.19E-179 | 0.54083237 | 0.597 | 0.236 | 4.22E-175 | Bcell_1_spleen |
| TRAF3IP3           | 1.35E-179 | 0.64330492 | 0.448 | 0.151 | 4.79E-175 | Bcell_1_spleen |
| ATRX               | 1.46E-179 | 0.5952056  | 0.584 | 0.231 | 5.17E-175 | Bcell_1_spleen |
| DIPK1A             | 2.98E-179 | 1.0176946  | 0.34  | 0.098 | 1.05E-174 | Bcell_1_spleen |
| KDM3B              | 3.62E-179 | 0.61758073 | 0.484 | 0.172 | 1.28E-174 | Bcell_1_spleen |
| PRDM2              | 1.28E-178 | 0.61544142 | 0.464 | 0.161 | 4.54E-174 | Bcell_1_spleen |
| KAT6B              | 1.48E-178 | 0.75977315 | 0.418 | 0.138 | 5.25E-174 | Bcell_1_spleen |
| OXR1               | 4.47E-178 | 0.60145473 | 0.539 | 0.204 | 1.58E-173 | Bcell_1_spleen |
| FNDC3A             | 6.02E-178 | 0.62870116 | 0.52  | 0.196 | 2.13E-173 | Bcell_1_spleen |
| SUCLG2             | 7.10E-178 | 0.65445085 | 0.509 | 0.188 | 2.52E-173 | Bcell_1_spleen |
| ROCK1              | 9.46E-178 | 0.54405981 | 0.676 | 0.289 | 3.35E-173 | Bcell_1_spleen |
| UBAC2              | 9.62E-178 | 0.56825278 | 0.605 | 0.242 | 3.41E-173 | Bcell_1_spleen |
| FAM172A            | 1.12E-177 | 0.57989772 | 0.597 | 0.243 | 3.97E-173 | Bcell_1_spleen |
| SPAG9              | 2.28E-177 | 0.743177   | 0.448 | 0.155 | 8.08E-173 | Bcell_1_spleen |
| TMEM131            | 2.91E-177 | 0.52410394 | 0.727 | 0.327 | 1.03E-172 | Bcell_1_spleen |
| ILKAP              | 4.46E-177 | 0.92827879 | 0.319 | 0.085 | 1.58E-172 | Bcell_1_spleen |
| NDFIP1             | 5.49E-177 | 0.84065209 | 0.336 | 0.093 | 1.94E-172 | Bcell_1_spleen |
| CCDC6              | 1.02E-176 | 1.18840803 | 0.259 | 0.056 | 3.63E-172 | Bcell_1_spleen |
| HSPA8              | 1.38E-176 | 0.56862229 | 0.772 | 0.364 | 4.89E-172 | Bcell_1_spleen |
| SH3KBP1            | 1.70E-176 | 0.66145766 | 0.501 | 0.186 | 6.01E-172 | Bcell_1_spleen |
| ENSMMUG00000056190 | 2.04E-176 | 1.08133897 | 0.283 | 0.068 | 7.23E-172 | Bcell_1_spleen |
| ARID4B             | 4.62E-176 | 0.54107028 | 0.768 | 0.363 | 1.64E-171 | Bcell_1_spleen |
| ERBIN              | 5.14E-176 | 0.62491661 | 0.493 | 0.181 | 1.82E-171 | Bcell_1_spleen |
| PRPF38B            | 5.24E-176 | 0.64331289 | 0.466 | 0.164 | 1.86E-171 | Bcell_1_spleen |
| ILF3               | 5.93E-176 | 0.74802615 | 0.398 | 0.126 | 2.10E-171 | Bcell_1_spleen |
| CDKAL1             | 8.86E-176 | 0.69329926 | 0.465 | 0.166 | 3.14E-171 | Bcell_1_spleen |
| BIRC6              | 1.05E-175 | 0.53968808 | 0.706 | 0.312 | 3.71E-171 | Bcell_1_spleen |
| RGS1               | 1.32E-175 | 0.80915064 | 0.458 | 0.169 | 4.69E-171 | Bcell_1_spleen |
| BLK                | 2.94E-175 | 0.6245514  | 0.55  | 0.215 | 1.04E-170 | Bcell_1_spleen |
| ARF6               | 7.70E-175 | 0.55032585 | 0.393 | 0.122 | 2.73E-170 | Bcell_1_spleen |
| PDCD6-AHRR         | 9.96E-175 | 0.78538194 | 0.289 | 0.07  | 3.53E-170 | Bcell_1_spleen |
| LRCH1              | 1.18E-174 | 0.91244968 | 0.341 | 0.099 | 4.17E-170 | Bcell_1_spleen |

|                    |           |            |       |       |           |                |
|--------------------|-----------|------------|-------|-------|-----------|----------------|
| RFTN1              | 1.63E-174 | 0.90947544 | 0.322 | 0.088 | 5.79E-170 | Bcell_1_spleen |
| TPD52              | 1.68E-174 | 0.80816392 | 0.419 | 0.142 | 5.96E-170 | Bcell_1_spleen |
| TAOK3              | 1.69E-174 | 0.57721644 | 0.524 | 0.197 | 5.99E-170 | Bcell_1_spleen |
| ZZZ3               | 1.85E-174 | 0.88909466 | 0.35  | 0.103 | 6.56E-170 | Bcell_1_spleen |
| CLASP1             | 1.98E-174 | 1.06235771 | 0.301 | 0.078 | 7.00E-170 | Bcell_1_spleen |
| CEPT1              | 2.40E-174 | 0.62816802 | 0.444 | 0.152 | 8.51E-170 | Bcell_1_spleen |
| KHDRBS1            | 2.72E-174 | 0.77790429 | 0.355 | 0.104 | 9.62E-170 | Bcell_1_spleen |
| PICALM             | 7.46E-174 | 0.56571301 | 0.579 | 0.229 | 2.64E-169 | Bcell_1_spleen |
| GPHN               | 9.54E-174 | 0.89479716 | 0.39  | 0.129 | 3.38E-169 | Bcell_1_spleen |
| PARVB              | 1.38E-173 | 0.76494074 | 0.337 | 0.095 | 4.89E-169 | Bcell_1_spleen |
| PDS5A              | 4.56E-173 | 0.75839959 | 0.381 | 0.12  | 1.62E-168 | Bcell_1_spleen |
| CYTIP              | 8.25E-173 | 0.86534326 | 0.408 | 0.137 | 2.92E-168 | Bcell_1_spleen |
| ZDHHHC20           | 9.80E-173 | 0.90782808 | 0.336 | 0.097 | 3.47E-168 | Bcell_1_spleen |
| SMG1               | 1.05E-172 | 0.61337626 | 0.463 | 0.163 | 3.72E-168 | Bcell_1_spleen |
| LRBA               | 1.33E-172 | 0.6279201  | 0.505 | 0.19  | 4.72E-168 | Bcell_1_spleen |
| SMARCA2            | 1.69E-172 | 0.74483178 | 0.383 | 0.121 | 5.98E-168 | Bcell_1_spleen |
| ANKRD10            | 2.47E-172 | 0.5860709  | 0.474 | 0.17  | 8.74E-168 | Bcell_1_spleen |
| SPPL3              | 4.60E-172 | 0.59025508 | 0.489 | 0.181 | 1.63E-167 | Bcell_1_spleen |
| SLC39A11           | 4.77E-172 | 0.83068811 | 0.33  | 0.094 | 1.69E-167 | Bcell_1_spleen |
| ZNF407             | 6.18E-172 | 0.9160416  | 0.348 | 0.105 | 2.19E-167 | Bcell_1_spleen |
| ENSMMUG00000021425 | 6.49E-172 | 0.76078558 | 0.384 | 0.122 | 2.30E-167 | Bcell_1_spleen |
| FAM107B            | 8.79E-172 | 0.5499378  | 0.535 | 0.205 | 3.12E-167 | Bcell_1_spleen |
| STIM1              | 1.06E-171 | 1.21772076 | 0.256 | 0.057 | 3.77E-167 | Bcell_1_spleen |
| UBL3               | 1.55E-171 | 1.0085368  | 0.289 | 0.073 | 5.49E-167 | Bcell_1_spleen |
| BPTF               | 2.99E-171 | 0.52765591 | 0.539 | 0.208 | 1.06E-166 | Bcell_1_spleen |
| EHMT1              | 3.41E-171 | 0.94929111 | 0.299 | 0.078 | 1.21E-166 | Bcell_1_spleen |
| AKAP17A            | 4.23E-171 | 1.09440492 | 0.27  | 0.064 | 1.50E-166 | Bcell_1_spleen |
| IPMK               | 8.10E-171 | 1.03267684 | 0.274 | 0.066 | 2.87E-166 | Bcell_1_spleen |
| ZBTB10             | 2.68E-170 | 1.12064232 | 0.284 | 0.071 | 9.50E-166 | Bcell_1_spleen |
| NCOA2              | 4.67E-170 | 0.67645895 | 0.434 | 0.15  | 1.66E-165 | Bcell_1_spleen |
| CTDNEP1            | 6.91E-170 | 1.01461356 | 0.256 | 0.057 | 2.45E-165 | Bcell_1_spleen |
| ENSMMUG00000006165 | 7.65E-170 | 0.48522707 | 0.712 | 0.316 | 2.71E-165 | Bcell_1_spleen |
| SUCO               | 1.12E-169 | 0.84556211 | 0.347 | 0.104 | 3.96E-165 | Bcell_1_spleen |

|                   |           |            |       |       |           |                |
|-------------------|-----------|------------|-------|-------|-----------|----------------|
| ACTR3             | 1.17E-169 | 0.55611605 | 0.737 | 0.342 | 4.13E-165 | Bcell_1_spleen |
| PRKCA             | 1.35E-169 | 0.92638728 | 0.354 | 0.109 | 4.77E-165 | Bcell_1_spleen |
| PPM1B             | 1.51E-169 | 0.99196553 | 0.304 | 0.082 | 5.33E-165 | Bcell_1_spleen |
| FAF1              | 1.68E-169 | 0.69163477 | 0.413 | 0.139 | 5.94E-165 | Bcell_1_spleen |
| PSPC1             | 2.14E-169 | 0.67752666 | 0.41  | 0.137 | 7.60E-165 | Bcell_1_spleen |
| SLC9A7            | 2.72E-169 | 0.96014287 | 0.333 | 0.098 | 9.64E-165 | Bcell_1_spleen |
| SP110             | 2.81E-169 | 0.49381874 | 0.685 | 0.296 | 9.96E-165 | Bcell_1_spleen |
| RNF115            | 2.97E-169 | 0.92505832 | 0.311 | 0.085 | 1.05E-164 | Bcell_1_spleen |
| FBXW4             | 4.04E-169 | 1.03431632 | 0.283 | 0.07  | 1.43E-164 | Bcell_1_spleen |
| NIN               | 4.20E-169 | 0.63469964 | 0.48  | 0.177 | 1.49E-164 | Bcell_1_spleen |
| SAMD8             | 1.76E-168 | 0.89382237 | 0.35  | 0.107 | 6.25E-164 | Bcell_1_spleen |
| CLASP2            | 3.76E-168 | 0.59189976 | 0.461 | 0.166 | 1.33E-163 | Bcell_1_spleen |
| ANKRD11           | 4.13E-168 | 0.64140729 | 0.43  | 0.15  | 1.46E-163 | Bcell_1_spleen |
| SETX              | 1.87E-167 | 0.66011682 | 0.381 | 0.121 | 6.63E-163 | Bcell_1_spleen |
| RNF216            | 2.09E-167 | 0.69327231 | 0.403 | 0.134 | 7.39E-163 | Bcell_1_spleen |
| VCP               | 3.28E-167 | 0.7088022  | 0.311 | 0.084 | 1.16E-162 | Bcell_1_spleen |
| HSPA9             | 3.68E-167 | 0.61031121 | 0.445 | 0.156 | 1.30E-162 | Bcell_1_spleen |
| RNF38             | 4.49E-167 | 0.62455632 | 0.457 | 0.164 | 1.59E-162 | Bcell_1_spleen |
| VAV2              | 7.75E-167 | 0.69554049 | 0.361 | 0.111 | 2.75E-162 | Bcell_1_spleen |
| NONO              | 9.45E-167 | 0.54879475 | 0.461 | 0.163 | 3.35E-162 | Bcell_1_spleen |
| ENSMUG00000042157 | 1.38E-166 | 0.90079167 | 0.305 | 0.082 | 4.89E-162 | Bcell_1_spleen |
| CCNY              | 2.02E-166 | 1.03596368 | 0.287 | 0.074 | 7.17E-162 | Bcell_1_spleen |
| MACO1             | 2.28E-166 | 0.83914319 | 0.37  | 0.118 | 8.09E-162 | Bcell_1_spleen |
| SYNGR2            | 2.94E-166 | 0.65572103 | 0.367 | 0.114 | 1.04E-161 | Bcell_1_spleen |
| SEPTIN11          | 3.27E-166 | 0.64507642 | 0.414 | 0.14  | 1.16E-161 | Bcell_1_spleen |
| ENSMUG00000060229 | 5.29E-166 | 0.57544222 | 0.466 | 0.168 | 1.87E-161 | Bcell_1_spleen |
| CXXC5             | 5.77E-166 | 0.9850258  | 0.261 | 0.061 | 2.04E-161 | Bcell_1_spleen |
| SIPA1L3           | 9.19E-166 | 0.82183372 | 0.36  | 0.113 | 3.26E-161 | Bcell_1_spleen |
| DLG1              | 1.08E-165 | 0.56086847 | 0.507 | 0.196 | 3.83E-161 | Bcell_1_spleen |
| PER1              | 1.51E-165 | 0.57970982 | 0.412 | 0.137 | 5.36E-161 | Bcell_1_spleen |
| ARMH3             | 1.66E-165 | 1.04813195 | 0.271 | 0.066 | 5.89E-161 | Bcell_1_spleen |
| XPO1              | 1.99E-165 | 0.7832459  | 0.326 | 0.093 | 7.05E-161 | Bcell_1_spleen |
| SSH2              | 2.07E-165 | 0.5522256  | 0.654 | 0.288 | 7.33E-161 | Bcell_1_spleen |

|          |           |            |       |       |           |                |
|----------|-----------|------------|-------|-------|-----------|----------------|
| ARID2    | 3.66E-165 | 0.53274851 | 0.493 | 0.185 | 1.30E-160 | Bcell_1_spleen |
| DARS1    | 3.87E-165 | 0.72289145 | 0.361 | 0.112 | 1.37E-160 | Bcell_1_spleen |
| AARS1    | 4.07E-165 | 0.63543088 | 0.4   | 0.132 | 1.44E-160 | Bcell_1_spleen |
| SUZ12    | 4.08E-165 | 0.79704711 | 0.351 | 0.107 | 1.45E-160 | Bcell_1_spleen |
| SETD2    | 4.33E-165 | 0.52475856 | 0.539 | 0.211 | 1.54E-160 | Bcell_1_spleen |
| PDK1     | 4.45E-165 | 1.17088746 | 0.258 | 0.06  | 1.58E-160 | Bcell_1_spleen |
| NUP153   | 4.77E-165 | 0.63011567 | 0.449 | 0.162 | 1.69E-160 | Bcell_1_spleen |
| SCFD2    | 5.74E-165 | 0.93764008 | 0.333 | 0.099 | 2.04E-160 | Bcell_1_spleen |
| SBF2     | 5.93E-165 | 0.98643312 | 0.313 | 0.09  | 2.10E-160 | Bcell_1_spleen |
| MTHFD2   | 7.56E-165 | 1.03199549 | 0.25  | 0.056 | 2.68E-160 | Bcell_1_spleen |
| SMAD3    | 1.16E-164 | 1.01881914 | 0.298 | 0.081 | 4.13E-160 | Bcell_1_spleen |
| EP300    | 1.17E-164 | 0.59295523 | 0.466 | 0.169 | 4.15E-160 | Bcell_1_spleen |
| CAND1    | 1.65E-164 | 0.67038532 | 0.405 | 0.136 | 5.83E-160 | Bcell_1_spleen |
| FCER2    | 3.01E-164 | 0.55045416 | 0.574 | 0.24  | 1.07E-159 | Bcell_1_spleen |
| SMG7     | 3.20E-164 | 0.69008721 | 0.388 | 0.127 | 1.13E-159 | Bcell_1_spleen |
| BRWD1    | 3.24E-164 | 0.69659857 | 0.368 | 0.116 | 1.15E-159 | Bcell_1_spleen |
| UBTF     | 5.92E-164 | 0.68584538 | 0.343 | 0.102 | 2.10E-159 | Bcell_1_spleen |
| PSIP1    | 5.94E-164 | 1.0994419  | 0.26  | 0.062 | 2.10E-159 | Bcell_1_spleen |
| ZBTB20   | 6.88E-164 | 0.55213759 | 0.605 | 0.262 | 2.44E-159 | Bcell_1_spleen |
| CCNH     | 8.55E-164 | 0.80685731 | 0.292 | 0.076 | 3.03E-159 | Bcell_1_spleen |
| ANKRD33B | 1.35E-163 | 0.64039954 | 0.504 | 0.198 | 4.78E-159 | Bcell_1_spleen |
| CLK1     | 1.99E-163 | 0.4386236  | 0.6   | 0.242 | 7.06E-159 | Bcell_1_spleen |
| CCNK     | 2.32E-163 | 0.57075604 | 0.449 | 0.159 | 8.23E-159 | Bcell_1_spleen |
| GALNT2   | 3.13E-163 | 0.76879462 | 0.323 | 0.093 | 1.11E-158 | Bcell_1_spleen |
| H1-4     | 3.28E-163 | 0.54707452 | 0.477 | 0.176 | 1.16E-158 | Bcell_1_spleen |
| TRAPPC8  | 4.36E-163 | 1.02567559 | 0.256 | 0.059 | 1.54E-158 | Bcell_1_spleen |
| DDX10    | 8.02E-163 | 1.03700862 | 0.3   | 0.083 | 2.84E-158 | Bcell_1_spleen |
| PIK3CD   | 8.57E-163 | 0.80873936 | 0.301 | 0.082 | 3.04E-158 | Bcell_1_spleen |
| DYM      | 1.13E-162 | 0.63521062 | 0.396 | 0.132 | 3.99E-158 | Bcell_1_spleen |
| FAM76B   | 1.49E-162 | 0.8618297  | 0.297 | 0.08  | 5.27E-158 | Bcell_1_spleen |
| CHD2     | 1.50E-162 | 0.47005342 | 0.634 | 0.27  | 5.31E-158 | Bcell_1_spleen |
| FOXJ3    | 1.57E-162 | 0.679115   | 0.384 | 0.126 | 5.58E-158 | Bcell_1_spleen |
| UGCG     | 1.68E-162 | 1.22519257 | 0.253 | 0.059 | 5.95E-158 | Bcell_1_spleen |

|                     |           |            |       |       |           |                |
|---------------------|-----------|------------|-------|-------|-----------|----------------|
| RC3H1               | 2.10E-162 | 0.89451925 | 0.288 | 0.076 | 7.44E-158 | Bcell_1_spleen |
| MDN1                | 2.88E-162 | 0.94318369 | 0.277 | 0.07  | 1.02E-157 | Bcell_1_spleen |
| ENSMMUG000000061038 | 3.81E-162 | 1.0893263  | 0.291 | 0.078 | 1.35E-157 | Bcell_1_spleen |
| EIF4EBP3            | 4.76E-162 | 0.64770662 | 0.406 | 0.138 | 1.69E-157 | Bcell_1_spleen |
| RNGTT               | 5.08E-162 | 0.62488014 | 0.441 | 0.158 | 1.80E-157 | Bcell_1_spleen |
| CAPZA1              | 6.09E-162 | 0.48757731 | 0.679 | 0.298 | 2.16E-157 | Bcell_1_spleen |
| LYN                 | 6.58E-162 | 0.49406849 | 0.925 | 0.561 | 2.33E-157 | Bcell_1_spleen |
| NUMB                | 7.88E-162 | 0.65237459 | 0.42  | 0.147 | 2.79E-157 | Bcell_1_spleen |
| RAB7A               | 8.12E-162 | 0.54227968 | 0.619 | 0.264 | 2.88E-157 | Bcell_1_spleen |
| CHORDC1             | 9.18E-162 | 0.6932055  | 0.381 | 0.124 | 3.25E-157 | Bcell_1_spleen |
| PCCA                | 1.55E-161 | 0.75427876 | 0.376 | 0.124 | 5.51E-157 | Bcell_1_spleen |
| ASH1L               | 2.13E-161 | 0.45632017 | 0.673 | 0.295 | 7.53E-157 | Bcell_1_spleen |
| RNF138              | 3.14E-161 | 0.52804557 | 0.492 | 0.185 | 1.11E-156 | Bcell_1_spleen |
| ENSMMUG000000011714 | 4.68E-161 | 0.85952761 | 0.292 | 0.078 | 1.66E-156 | Bcell_1_spleen |
| ENSMMUG000000005482 | 7.83E-161 | 0.68979911 | 0.37  | 0.119 | 2.77E-156 | Bcell_1_spleen |
| DST                 | 9.25E-161 | 0.88672505 | 0.311 | 0.089 | 3.28E-156 | Bcell_1_spleen |
| ASXL2               | 9.36E-161 | 0.79711582 | 0.328 | 0.097 | 3.32E-156 | Bcell_1_spleen |
| CDK6                | 1.30E-160 | 0.90173163 | 0.34  | 0.105 | 4.60E-156 | Bcell_1_spleen |
| USP24               | 2.02E-160 | 0.98024174 | 0.289 | 0.078 | 7.14E-156 | Bcell_1_spleen |
| UHMK1               | 3.62E-160 | 0.68357707 | 0.334 | 0.099 | 1.28E-155 | Bcell_1_spleen |
| ELMO1               | 3.68E-160 | 0.47777495 | 0.744 | 0.354 | 1.30E-155 | Bcell_1_spleen |
| LCOR                | 3.87E-160 | 0.56444801 | 0.505 | 0.196 | 1.37E-155 | Bcell_1_spleen |
| LCORL               | 7.57E-160 | 0.68170142 | 0.401 | 0.138 | 2.68E-155 | Bcell_1_spleen |
| NOP58               | 8.22E-160 | 0.51393919 | 0.439 | 0.156 | 2.91E-155 | Bcell_1_spleen |
| MSN                 | 8.93E-160 | 0.46317879 | 0.697 | 0.307 | 3.17E-155 | Bcell_1_spleen |
| PPP2R5A             | 1.06E-159 | 0.955134   | 0.272 | 0.069 | 3.75E-155 | Bcell_1_spleen |
| SLC9A9              | 1.42E-159 | 1.02525415 | 0.3   | 0.085 | 5.02E-155 | Bcell_1_spleen |
| OGT                 | 1.46E-159 | 0.50714771 | 0.485 | 0.181 | 5.17E-155 | Bcell_1_spleen |
| TASP1               | 1.46E-159 | 0.84519466 | 0.321 | 0.095 | 5.19E-155 | Bcell_1_spleen |
| CSNK1G1             | 1.47E-159 | 0.79438962 | 0.344 | 0.107 | 5.21E-155 | Bcell_1_spleen |
| CRYBG1              | 1.93E-159 | 0.81034585 | 0.316 | 0.091 | 6.83E-155 | Bcell_1_spleen |
| SLTM                | 1.94E-159 | 0.50781327 | 0.558 | 0.225 | 6.87E-155 | Bcell_1_spleen |
| DIAPH1              | 3.74E-159 | 0.5896469  | 0.386 | 0.128 | 1.32E-154 | Bcell_1_spleen |

|            |           |            |       |       |           |                |
|------------|-----------|------------|-------|-------|-----------|----------------|
| PHTF2      | 4.23E-159 | 0.6571947  | 0.36  | 0.114 | 1.50E-154 | Bcell_1_spleen |
| IRF2       | 5.22E-159 | 0.43650113 | 0.452 | 0.161 | 1.85E-154 | Bcell_1_spleen |
| UHRF1BP1L  | 6.85E-159 | 0.62593915 | 0.439 | 0.159 | 2.43E-154 | Bcell_1_spleen |
| INKA1      | 7.70E-159 | 0.56934686 | 0.347 | 0.106 | 2.73E-154 | Bcell_1_spleen |
| ZRANB2     | 8.50E-159 | 0.50327077 | 0.49  | 0.184 | 3.01E-154 | Bcell_1_spleen |
| EWSR1      | 9.55E-159 | 0.53759688 | 0.414 | 0.142 | 3.38E-154 | Bcell_1_spleen |
| FOXP1      | 1.20E-158 | 0.50755838 | 0.614 | 0.265 | 4.26E-154 | Bcell_1_spleen |
| TNRC6B     | 1.34E-158 | 0.43863717 | 0.74  | 0.342 | 4.74E-154 | Bcell_1_spleen |
| NSMCE2     | 1.70E-158 | 0.71574402 | 0.383 | 0.128 | 6.02E-154 | Bcell_1_spleen |
| OSBPL8     | 1.82E-158 | 0.49584166 | 0.672 | 0.306 | 6.46E-154 | Bcell_1_spleen |
| RAB8B      | 2.70E-158 | 0.51922441 | 0.576 | 0.237 | 9.57E-154 | Bcell_1_spleen |
| APPL2      | 5.30E-158 | 0.93030376 | 0.265 | 0.066 | 1.88E-153 | Bcell_1_spleen |
| KIF2A      | 5.49E-158 | 0.5985977  | 0.321 | 0.094 | 1.95E-153 | Bcell_1_spleen |
| NABP1      | 6.20E-158 | 0.80683021 | 0.307 | 0.087 | 2.20E-153 | Bcell_1_spleen |
| YTHDC2     | 7.99E-158 | 1.00866019 | 0.272 | 0.07  | 2.83E-153 | Bcell_1_spleen |
| ZMYM2      | 8.40E-158 | 0.56023779 | 0.424 | 0.149 | 2.98E-153 | Bcell_1_spleen |
| MTREX      | 1.09E-157 | 0.48665095 | 0.64  | 0.279 | 3.86E-153 | Bcell_1_spleen |
| CERT1      | 1.78E-157 | 0.49197008 | 0.491 | 0.188 | 6.29E-153 | Bcell_1_spleen |
| RPS6KB1    | 2.04E-157 | 0.61270616 | 0.438 | 0.159 | 7.21E-153 | Bcell_1_spleen |
| TACC1      | 2.11E-157 | 0.43617008 | 0.534 | 0.209 | 7.46E-153 | Bcell_1_spleen |
| PCMTD1     | 2.34E-157 | 0.62964362 | 0.418 | 0.147 | 8.29E-153 | Bcell_1_spleen |
| LRRK2      | 2.41E-157 | 0.88840514 | 0.322 | 0.097 | 8.53E-153 | Bcell_1_spleen |
| RSRC1      | 3.52E-157 | 0.62373705 | 0.424 | 0.151 | 1.25E-152 | Bcell_1_spleen |
| RCOR1      | 4.68E-157 | 1.01109075 | 0.283 | 0.076 | 1.66E-152 | Bcell_1_spleen |
| RABEP2     | 7.29E-157 | 0.89006738 | 0.263 | 0.065 | 2.58E-152 | Bcell_1_spleen |
| MTHFD1L    | 9.36E-157 | 0.79438116 | 0.388 | 0.134 | 3.32E-152 | Bcell_1_spleen |
| ASCC3      | 1.02E-156 | 0.67371654 | 0.392 | 0.135 | 3.61E-152 | Bcell_1_spleen |
| ACBD3      | 1.56E-156 | 1.08442896 | 0.251 | 0.06  | 5.52E-152 | Bcell_1_spleen |
| UBE3A      | 1.62E-156 | 0.79283991 | 0.327 | 0.099 | 5.75E-152 | Bcell_1_spleen |
| CSGALNACT2 | 1.72E-156 | 0.60053522 | 0.399 | 0.137 | 6.08E-152 | Bcell_1_spleen |
| YPEL3      | 2.67E-156 | 0.68006707 | 0.315 | 0.091 | 9.47E-152 | Bcell_1_spleen |
| TTC19      | 4.40E-156 | 0.70520571 | 0.316 | 0.092 | 1.56E-151 | Bcell_1_spleen |
| ARFGEF2    | 5.64E-156 | 0.84437453 | 0.275 | 0.072 | 2.00E-151 | Bcell_1_spleen |

|                    |           |            |       |       |           |                |
|--------------------|-----------|------------|-------|-------|-----------|----------------|
| RASSF3             | 8.29E-156 | 0.74109838 | 0.397 | 0.139 | 2.94E-151 | Bcell_1_spleen |
| B4GALT1            | 1.26E-155 | 0.95382668 | 0.251 | 0.06  | 4.45E-151 | Bcell_1_spleen |
| RBM6               | 1.63E-155 | 0.73739746 | 0.323 | 0.097 | 5.77E-151 | Bcell_1_spleen |
| EIF3M              | 1.88E-155 | 0.45533683 | 0.635 | 0.272 | 6.67E-151 | Bcell_1_spleen |
| UBQLN1             | 3.30E-155 | 0.76367873 | 0.323 | 0.096 | 1.17E-150 | Bcell_1_spleen |
| PKN2               | 3.42E-155 | 0.62508185 | 0.433 | 0.158 | 1.21E-150 | Bcell_1_spleen |
| RUBCN              | 4.92E-155 | 0.6858379  | 0.327 | 0.099 | 1.74E-150 | Bcell_1_spleen |
| GLG1               | 5.89E-155 | 0.88930723 | 0.309 | 0.091 | 2.09E-150 | Bcell_1_spleen |
| HP1BP3             | 6.62E-155 | 0.54466616 | 0.422 | 0.149 | 2.35E-150 | Bcell_1_spleen |
| PLEKHO1            | 6.90E-155 | 0.64154511 | 0.293 | 0.08  | 2.45E-150 | Bcell_1_spleen |
| BRD2               | 6.97E-155 | 0.43925374 | 0.595 | 0.248 | 2.47E-150 | Bcell_1_spleen |
| DSE                | 1.61E-154 | 0.95306033 | 0.3   | 0.086 | 5.71E-150 | Bcell_1_spleen |
| UBA2               | 2.51E-154 | 0.70820488 | 0.325 | 0.097 | 8.91E-150 | Bcell_1_spleen |
| LPXN               | 3.93E-154 | 0.61500448 | 0.362 | 0.117 | 1.39E-149 | Bcell_1_spleen |
| FAM117B            | 4.30E-154 | 0.75673709 | 0.36  | 0.119 | 1.52E-149 | Bcell_1_spleen |
| LPGAT1             | 4.57E-154 | 0.7468764  | 0.334 | 0.104 | 1.62E-149 | Bcell_1_spleen |
| UBE2B              | 4.65E-154 | 0.48078282 | 0.484 | 0.183 | 1.65E-149 | Bcell_1_spleen |
| DDX50              | 5.12E-154 | 0.49372611 | 0.389 | 0.13  | 1.81E-149 | Bcell_1_spleen |
| PTPRC              | 5.52E-154 | 0.52296925 | 0.926 | 0.576 | 1.96E-149 | Bcell_1_spleen |
| RAP1GDS1           | 5.89E-154 | 0.57495611 | 0.39  | 0.134 | 2.09E-149 | Bcell_1_spleen |
| ENSMMUG00000065175 | 6.16E-154 | 0.41124696 | 0.532 | 0.206 | 2.18E-149 | Bcell_1_spleen |
| RB1                | 7.31E-154 | 0.54741207 | 0.364 | 0.118 | 2.59E-149 | Bcell_1_spleen |
| LARP4B             | 7.46E-154 | 0.98536944 | 0.269 | 0.071 | 2.64E-149 | Bcell_1_spleen |
| KRAS               | 9.43E-154 | 0.913809   | 0.321 | 0.098 | 3.34E-149 | Bcell_1_spleen |
| SFPQ               | 9.81E-154 | 0.47503163 | 0.528 | 0.21  | 3.48E-149 | Bcell_1_spleen |
| NT5C3A             | 1.01E-153 | 0.55758616 | 0.432 | 0.156 | 3.57E-149 | Bcell_1_spleen |
| KDM2A              | 1.17E-153 | 0.46828169 | 0.548 | 0.222 | 4.13E-149 | Bcell_1_spleen |
| MARCHF7            | 1.19E-153 | 0.46844411 | 0.49  | 0.187 | 4.21E-149 | Bcell_1_spleen |
| TGFB1              | 1.21E-153 | 0.74339187 | 0.317 | 0.094 | 4.27E-149 | Bcell_1_spleen |
| KIF13A             | 1.21E-153 | 0.58766804 | 0.417 | 0.15  | 4.30E-149 | Bcell_1_spleen |
| CCNI               | 1.80E-153 | 0.45364695 | 0.698 | 0.313 | 6.38E-149 | Bcell_1_spleen |
| RELB               | 5.64E-153 | 0.6521443  | 0.421 | 0.153 | 2.00E-148 | Bcell_1_spleen |
| KIF5B              | 6.16E-153 | 0.57462854 | 0.413 | 0.145 | 2.18E-148 | Bcell_1_spleen |

|                   |           |            |       |       |           |                |
|-------------------|-----------|------------|-------|-------|-----------|----------------|
| HNRNPL            | 7.66E-153 | 0.36360462 | 0.557 | 0.22  | 2.71E-148 | Bcell_1_spleen |
| BEND5             | 1.04E-152 | 0.85133628 | 0.272 | 0.072 | 3.68E-148 | Bcell_1_spleen |
| CEP192            | 1.28E-152 | 0.66731423 | 0.36  | 0.118 | 4.52E-148 | Bcell_1_spleen |
| EML4              | 1.45E-152 | 0.42277061 | 0.774 | 0.38  | 5.12E-148 | Bcell_1_spleen |
| CUL3              | 2.16E-152 | 0.54202706 | 0.48  | 0.186 | 7.64E-148 | Bcell_1_spleen |
| HSPA5             | 3.85E-152 | 0.64200747 | 0.488 | 0.192 | 1.36E-147 | Bcell_1_spleen |
| UBE2R2            | 4.13E-152 | 0.73104513 | 0.321 | 0.098 | 1.46E-147 | Bcell_1_spleen |
| APP               | 5.11E-152 | 0.71099592 | 0.353 | 0.116 | 1.81E-147 | Bcell_1_spleen |
| C20H16orf72       | 6.28E-152 | 0.68425274 | 0.338 | 0.106 | 2.23E-147 | Bcell_1_spleen |
| NUP98             | 9.23E-152 | 0.52400771 | 0.474 | 0.181 | 3.27E-147 | Bcell_1_spleen |
| SMG6              | 1.38E-151 | 0.54099913 | 0.442 | 0.162 | 4.89E-147 | Bcell_1_spleen |
| SERTAD2           | 1.73E-151 | 0.78864736 | 0.321 | 0.098 | 6.15E-147 | Bcell_1_spleen |
| SESN1             | 1.77E-151 | 1.07729309 | 0.254 | 0.064 | 6.29E-147 | Bcell_1_spleen |
| CHST11            | 1.79E-151 | 0.72343568 | 0.349 | 0.115 | 6.35E-147 | Bcell_1_spleen |
| NKIRAS1           | 2.05E-151 | 0.77446809 | 0.356 | 0.119 | 7.26E-147 | Bcell_1_spleen |
| ATXN10            | 2.55E-151 | 0.4982241  | 0.458 | 0.17  | 9.02E-147 | Bcell_1_spleen |
| EIF2B3            | 2.76E-151 | 0.86858705 | 0.287 | 0.081 | 9.77E-147 | Bcell_1_spleen |
| ENSMUG00000062086 | 3.44E-151 | 0.50039698 | 0.372 | 0.122 | 1.22E-146 | Bcell_1_spleen |
| ELOVL5            | 3.51E-151 | 0.57414046 | 0.476 | 0.184 | 1.24E-146 | Bcell_1_spleen |
| LDB2              | 6.01E-151 | 0.58398058 | 0.522 | 0.216 | 2.13E-146 | Bcell_1_spleen |
| NCOA3             | 8.12E-151 | 0.42570153 | 0.911 | 0.514 | 2.88E-146 | Bcell_1_spleen |
| ACTR2             | 1.30E-150 | 0.48875187 | 0.875 | 0.46  | 4.60E-146 | Bcell_1_spleen |
| BTBD9             | 1.55E-150 | 0.54631942 | 0.465 | 0.181 | 5.51E-146 | Bcell_1_spleen |
| CEP350            | 2.00E-150 | 0.76496262 | 0.306 | 0.09  | 7.08E-146 | Bcell_1_spleen |
| HNRNPA2B1         | 4.31E-150 | 0.47919387 | 0.961 | 0.668 | 1.53E-145 | Bcell_1_spleen |
| SLC12A6           | 5.87E-150 | 0.69024914 | 0.401 | 0.143 | 2.08E-145 | Bcell_1_spleen |
| RPTOR             | 5.91E-150 | 0.80263735 | 0.294 | 0.084 | 2.10E-145 | Bcell_1_spleen |
| NUFIP2            | 5.93E-150 | 0.54575474 | 0.368 | 0.123 | 2.10E-145 | Bcell_1_spleen |
| VASP              | 6.50E-150 | 0.42841351 | 0.48  | 0.181 | 2.30E-145 | Bcell_1_spleen |
| EIF3A             | 1.08E-149 | 0.45360847 | 0.564 | 0.233 | 3.81E-145 | Bcell_1_spleen |
| CHD1              | 1.19E-149 | 0.53916553 | 0.422 | 0.153 | 4.23E-145 | Bcell_1_spleen |
| MAN1A2            | 1.21E-149 | 0.57771588 | 0.431 | 0.16  | 4.29E-145 | Bcell_1_spleen |
| CNTRL             | 1.24E-149 | 0.49081576 | 0.424 | 0.153 | 4.39E-145 | Bcell_1_spleen |



|         |           |            |       |       |           |                |
|---------|-----------|------------|-------|-------|-----------|----------------|
| ERGIC1  | 1.47E-149 | 0.38068796 | 0.479 | 0.181 | 5.21E-145 | Bcell_1_spleen |
| FDX1    | 1.52E-149 | 0.88635805 | 0.289 | 0.082 | 5.39E-145 | Bcell_1_spleen |
| SREBF2  | 1.54E-149 | 0.71290956 | 0.351 | 0.115 | 5.47E-145 | Bcell_1_spleen |
| VGLL4   | 2.36E-149 | 0.89775764 | 0.265 | 0.07  | 8.38E-145 | Bcell_1_spleen |
| WIPI2   | 2.66E-149 | 0.58038669 | 0.344 | 0.11  | 9.41E-145 | Bcell_1_spleen |
| ZSWIM6  | 3.24E-149 | 0.69157332 | 0.336 | 0.107 | 1.15E-144 | Bcell_1_spleen |
| FUBP1   | 1.17E-148 | 0.53898563 | 0.46  | 0.175 | 4.15E-144 | Bcell_1_spleen |
| ASCC1   | 1.72E-148 | 0.78342126 | 0.296 | 0.086 | 6.08E-144 | Bcell_1_spleen |
| CAB39   | 1.74E-148 | 0.51242727 | 0.512 | 0.206 | 6.16E-144 | Bcell_1_spleen |
| ADAM10  | 2.56E-148 | 0.55211883 | 0.326 | 0.101 | 9.08E-144 | Bcell_1_spleen |
| KRIT1   | 2.61E-148 | 0.9508627  | 0.261 | 0.069 | 9.23E-144 | Bcell_1_spleen |
| ANXA6   | 3.93E-148 | 0.68478654 | 0.33  | 0.103 | 1.39E-143 | Bcell_1_spleen |
| NASP    | 4.03E-148 | 0.4194769  | 0.481 | 0.184 | 1.43E-143 | Bcell_1_spleen |
| MICU2   | 1.42E-147 | 0.54380583 | 0.397 | 0.14  | 5.04E-143 | Bcell_1_spleen |
| YEATS2  | 1.46E-147 | 0.45303362 | 0.564 | 0.237 | 5.17E-143 | Bcell_1_spleen |
| SYNCRIP | 1.46E-147 | 0.48613872 | 0.403 | 0.141 | 5.18E-143 | Bcell_1_spleen |
| TM9SF3  | 2.02E-147 | 0.45678151 | 0.499 | 0.199 | 7.17E-143 | Bcell_1_spleen |
| SNX9    | 2.40E-147 | 0.48825548 | 0.536 | 0.224 | 8.52E-143 | Bcell_1_spleen |
| EEA1    | 3.00E-147 | 0.80032218 | 0.291 | 0.084 | 1.06E-142 | Bcell_1_spleen |
| PDE7A   | 3.88E-147 | 0.62299088 | 0.389 | 0.138 | 1.38E-142 | Bcell_1_spleen |
| TMEM59L | 3.95E-147 | 0.64391444 | 0.277 | 0.075 | 1.40E-142 | Bcell_1_spleen |
| YTHDF3  | 4.25E-147 | 0.60370002 | 0.379 | 0.13  | 1.51E-142 | Bcell_1_spleen |
| MFF     | 8.40E-147 | 0.58424236 | 0.381 | 0.129 | 2.98E-142 | Bcell_1_spleen |
| ZNF148  | 8.40E-147 | 0.55885094 | 0.397 | 0.14  | 2.98E-142 | Bcell_1_spleen |
| SIK3    | 1.67E-146 | 0.35176651 | 0.676 | 0.311 | 5.92E-142 | Bcell_1_spleen |
| ZMYND11 | 1.88E-146 | 0.66137238 | 0.337 | 0.109 | 6.67E-142 | Bcell_1_spleen |
| HS2ST1  | 2.95E-146 | 0.89814844 | 0.26  | 0.069 | 1.05E-141 | Bcell_1_spleen |
| ARMC2   | 3.10E-146 | 1.04695081 | 0.285 | 0.083 | 1.10E-141 | Bcell_1_spleen |
| USP36   | 4.95E-146 | 0.46686463 | 0.537 | 0.222 | 1.76E-141 | Bcell_1_spleen |
| POLR2A  | 5.40E-146 | 0.53727561 | 0.328 | 0.102 | 1.91E-141 | Bcell_1_spleen |
| GTF3A   | 6.98E-146 | 0.70162218 | 0.278 | 0.077 | 2.47E-141 | Bcell_1_spleen |
| MKLN1   | 7.95E-146 | 0.44796771 | 0.49  | 0.193 | 2.82E-141 | Bcell_1_spleen |
| EPC2    | 1.01E-145 | 0.58357626 | 0.386 | 0.135 | 3.58E-141 | Bcell_1_spleen |

|            |           |            |       |       |           |                |
|------------|-----------|------------|-------|-------|-----------|----------------|
| ATG3       | 1.80E-145 | 0.45471523 | 0.457 | 0.172 | 6.37E-141 | Bcell_1_spleen |
| TRIM72     | 2.51E-145 | 0.40068393 | 0.649 | 0.284 | 8.89E-141 | Bcell_1_spleen |
| TRAK1      | 4.73E-145 | 0.61861238 | 0.369 | 0.127 | 1.68E-140 | Bcell_1_spleen |
| ITGB2      | 5.21E-145 | 0.54917485 | 0.329 | 0.104 | 1.85E-140 | Bcell_1_spleen |
| SF3B3      | 5.71E-145 | 0.73901553 | 0.269 | 0.073 | 2.02E-140 | Bcell_1_spleen |
| HIF1A      | 9.03E-145 | 0.66111734 | 0.314 | 0.097 | 3.20E-140 | Bcell_1_spleen |
| SPEN       | 1.26E-144 | 0.69976174 | 0.327 | 0.104 | 4.47E-140 | Bcell_1_spleen |
| PAFAH1B1   | 1.63E-144 | 0.46883025 | 0.506 | 0.202 | 5.79E-140 | Bcell_1_spleen |
| SLC22A18   | 2.13E-144 | 0.60923665 | 0.388 | 0.137 | 7.56E-140 | Bcell_1_spleen |
| SMCHD1     | 2.96E-144 | 0.39681332 | 0.697 | 0.324 | 1.05E-139 | Bcell_1_spleen |
| LONP2      | 3.16E-144 | 0.78140941 | 0.313 | 0.097 | 1.12E-139 | Bcell_1_spleen |
| AGO2       | 4.53E-144 | 0.66163138 | 0.355 | 0.12  | 1.60E-139 | Bcell_1_spleen |
| UBE3C      | 6.44E-144 | 0.69477656 | 0.324 | 0.102 | 2.28E-139 | Bcell_1_spleen |
| PDCD4      | 6.70E-144 | 0.42152164 | 0.569 | 0.242 | 2.37E-139 | Bcell_1_spleen |
| FKBP15     | 7.49E-144 | 0.8340863  | 0.25  | 0.064 | 2.65E-139 | Bcell_1_spleen |
| NUCKS1     | 7.54E-144 | 0.42388333 | 0.504 | 0.201 | 2.67E-139 | Bcell_1_spleen |
| IFNGR1     | 1.34E-143 | 0.56622646 | 0.34  | 0.11  | 4.75E-139 | Bcell_1_spleen |
| BZW2       | 1.45E-143 | 0.53166859 | 0.411 | 0.15  | 5.15E-139 | Bcell_1_spleen |
| SNX1       | 1.51E-143 | 0.66370971 | 0.275 | 0.077 | 5.33E-139 | Bcell_1_spleen |
| ZEB2       | 1.76E-143 | 0.45704546 | 0.663 | 0.306 | 6.25E-139 | Bcell_1_spleen |
| ST6GALNAC3 | 2.01E-143 | 0.62099807 | 0.462 | 0.187 | 7.11E-139 | Bcell_1_spleen |
| TAF3       | 2.65E-143 | 0.74152694 | 0.321 | 0.103 | 9.40E-139 | Bcell_1_spleen |
| RABGEF1    | 3.85E-143 | 0.61807755 | 0.366 | 0.126 | 1.36E-138 | Bcell_1_spleen |
| TRIM33     | 3.92E-143 | 0.82193381 | 0.288 | 0.085 | 1.39E-138 | Bcell_1_spleen |
| AKT3       | 5.10E-143 | 0.54523334 | 0.541 | 0.235 | 1.81E-138 | Bcell_1_spleen |
| ZFAND6     | 6.77E-143 | 0.41027214 | 0.624 | 0.273 | 2.40E-138 | Bcell_1_spleen |
| FBXL20     | 7.72E-143 | 0.51262002 | 0.438 | 0.166 | 2.73E-138 | Bcell_1_spleen |
| PIBF1      | 9.15E-143 | 0.94210394 | 0.273 | 0.078 | 3.24E-138 | Bcell_1_spleen |
| HSPA4      | 9.60E-143 | 0.67437587 | 0.323 | 0.102 | 3.40E-138 | Bcell_1_spleen |
| CCND3      | 1.04E-142 | 0.62929404 | 0.39  | 0.14  | 3.68E-138 | Bcell_1_spleen |
| MPZL1      | 1.29E-142 | 0.70823714 | 0.292 | 0.086 | 4.58E-138 | Bcell_1_spleen |
| PSME4      | 1.30E-142 | 0.6593438  | 0.356 | 0.121 | 4.62E-138 | Bcell_1_spleen |
| GOLGA4     | 1.31E-142 | 0.38357388 | 0.541 | 0.223 | 4.63E-138 | Bcell_1_spleen |

|                    |           |            |       |       |           |                |
|--------------------|-----------|------------|-------|-------|-----------|----------------|
| FAM91A1            | 1.86E-142 | 0.84072753 | 0.259 | 0.069 | 6.58E-138 | Bcell_1_spleen |
| ATP6V0D1           | 1.91E-142 | 0.42548167 | 0.427 | 0.157 | 6.75E-138 | Bcell_1_spleen |
| ENSMMUG00000058818 | 2.19E-142 | 0.72906181 | 0.306 | 0.094 | 7.78E-138 | Bcell_1_spleen |
| PPP6R3             | 2.59E-142 | 0.50472441 | 0.449 | 0.171 | 9.18E-138 | Bcell_1_spleen |
| EHD4               | 2.88E-142 | 0.63935134 | 0.352 | 0.119 | 1.02E-137 | Bcell_1_spleen |
| COG5               | 4.37E-142 | 0.40434476 | 0.561 | 0.237 | 1.55E-137 | Bcell_1_spleen |
| EFL1               | 4.47E-142 | 0.88263392 | 0.272 | 0.077 | 1.58E-137 | Bcell_1_spleen |
| SMC1A              | 5.26E-142 | 0.83617845 | 0.257 | 0.069 | 1.86E-137 | Bcell_1_spleen |
| TNKS               | 1.06E-141 | 0.63083347 | 0.372 | 0.131 | 3.75E-137 | Bcell_1_spleen |
| RBMS1              | 1.64E-141 | 0.77687162 | 0.293 | 0.088 | 5.82E-137 | Bcell_1_spleen |
| MCTP2              | 1.69E-141 | 0.56798496 | 0.383 | 0.136 | 5.98E-137 | Bcell_1_spleen |
| ZNF451             | 1.74E-141 | 0.5228771  | 0.404 | 0.147 | 6.17E-137 | Bcell_1_spleen |
| AKIRIN2            | 1.79E-141 | 0.75991227 | 0.288 | 0.085 | 6.33E-137 | Bcell_1_spleen |
| ENSMMUG00000017297 | 2.41E-141 | 0.74765203 | 0.287 | 0.085 | 8.54E-137 | Bcell_1_spleen |
| FBXO11             | 3.39E-141 | 0.45029547 | 0.478 | 0.19  | 1.20E-136 | Bcell_1_spleen |
| RBM33              | 3.51E-141 | 0.53746893 | 0.398 | 0.143 | 1.25E-136 | Bcell_1_spleen |
| TCERG1             | 4.47E-141 | 0.62342007 | 0.37  | 0.129 | 1.59E-136 | Bcell_1_spleen |
| TBC1D10B           | 5.17E-141 | 0.57683229 | 0.269 | 0.074 | 1.83E-136 | Bcell_1_spleen |
| CDK13              | 7.76E-141 | 0.45368645 | 0.526 | 0.219 | 2.75E-136 | Bcell_1_spleen |
| ITFG1              | 7.98E-141 | 0.63890644 | 0.349 | 0.119 | 2.83E-136 | Bcell_1_spleen |
| RMND5A             | 1.14E-140 | 0.72009775 | 0.311 | 0.098 | 4.05E-136 | Bcell_1_spleen |
| MTIF2              | 1.32E-140 | 0.41534981 | 0.456 | 0.174 | 4.66E-136 | Bcell_1_spleen |
| PTPRA              | 1.77E-140 | 0.55308156 | 0.392 | 0.142 | 6.27E-136 | Bcell_1_spleen |
| IQCG               | 2.22E-140 | 0.72329192 | 0.326 | 0.106 | 7.86E-136 | Bcell_1_spleen |
| DIAPH2             | 2.85E-140 | 0.61462563 | 0.394 | 0.145 | 1.01E-135 | Bcell_1_spleen |
| SDHAF4             | 4.84E-140 | 0.49973167 | 0.391 | 0.14  | 1.72E-135 | Bcell_1_spleen |
| ZNF581             | 5.34E-140 | 0.72404373 | 0.27  | 0.076 | 1.89E-135 | Bcell_1_spleen |
| RLIM               | 7.53E-140 | 0.77308954 | 0.299 | 0.092 | 2.67E-135 | Bcell_1_spleen |
| CNOT6L             | 7.96E-140 | 0.43888414 | 0.542 | 0.229 | 2.82E-135 | Bcell_1_spleen |
| GPATCH8            | 9.37E-140 | 0.47377787 | 0.446 | 0.172 | 3.32E-135 | Bcell_1_spleen |
| IRF8               | 1.49E-139 | 0.65118007 | 0.289 | 0.086 | 5.29E-135 | Bcell_1_spleen |
| ENSMMUG00000020316 | 1.81E-139 | 0.57762259 | 0.355 | 0.121 | 6.42E-135 | Bcell_1_spleen |
| GIGYF2             | 2.55E-139 | 0.72045148 | 0.301 | 0.093 | 9.04E-135 | Bcell_1_spleen |

|          |           |            |       |       |           |                |
|----------|-----------|------------|-------|-------|-----------|----------------|
| AFTPH    | 4.61E-139 | 0.41138721 | 0.608 | 0.27  | 1.63E-134 | Bcell_1_spleen |
| GATAD2B  | 5.76E-139 | 0.50189531 | 0.424 | 0.159 | 2.04E-134 | Bcell_1_spleen |
| CD46     | 6.55E-139 | 0.41784834 | 0.404 | 0.147 | 2.32E-134 | Bcell_1_spleen |
| IQGAP1   | 1.32E-138 | 0.43074782 | 0.636 | 0.286 | 4.69E-134 | Bcell_1_spleen |
| ZFP36    | 2.29E-138 | 0.58899797 | 0.881 | 0.568 | 8.12E-134 | Bcell_1_spleen |
| TP53BP1  | 2.35E-138 | 0.51064476 | 0.416 | 0.156 | 8.34E-134 | Bcell_1_spleen |
| STAG1    | 3.70E-138 | 0.40171074 | 0.686 | 0.324 | 1.31E-133 | Bcell_1_spleen |
| ZDHHC14  | 5.30E-138 | 0.95046729 | 0.255 | 0.07  | 1.88E-133 | Bcell_1_spleen |
| SEC31A   | 5.70E-138 | 0.40928224 | 0.464 | 0.181 | 2.02E-133 | Bcell_1_spleen |
| ESCO1    | 7.33E-138 | 0.5146026  | 0.422 | 0.159 | 2.60E-133 | Bcell_1_spleen |
| SP3      | 7.83E-138 | 0.60809054 | 0.332 | 0.109 | 2.77E-133 | Bcell_1_spleen |
| REV3L    | 1.34E-137 | 0.63338447 | 0.34  | 0.116 | 4.74E-133 | Bcell_1_spleen |
| SLC25A4  | 1.48E-137 | 0.60537009 | 0.3   | 0.092 | 5.23E-133 | Bcell_1_spleen |
| CYTH1    | 1.95E-137 | 0.39844955 | 0.493 | 0.2   | 6.92E-133 | Bcell_1_spleen |
| SMARCA4  | 2.13E-137 | 0.65301276 | 0.328 | 0.108 | 7.56E-133 | Bcell_1_spleen |
| GNG7     | 2.52E-137 | 0.44525339 | 0.399 | 0.146 | 8.92E-133 | Bcell_1_spleen |
| CLIC4    | 2.71E-137 | 0.84602543 | 0.289 | 0.088 | 9.59E-133 | Bcell_1_spleen |
| UBE2K    | 5.83E-137 | 0.36937728 | 0.5   | 0.202 | 2.07E-132 | Bcell_1_spleen |
| GAPVD1   | 6.33E-137 | 0.62219222 | 0.32  | 0.103 | 2.24E-132 | Bcell_1_spleen |
| DNAJC24  | 7.10E-137 | 0.67316478 | 0.333 | 0.112 | 2.51E-132 | Bcell_1_spleen |
| RAB10    | 1.07E-136 | 0.48612483 | 0.354 | 0.121 | 3.78E-132 | Bcell_1_spleen |
| PPP1R12A | 1.07E-136 | 0.36893943 | 0.609 | 0.27  | 3.78E-132 | Bcell_1_spleen |
| CFLAR    | 1.26E-136 | 0.59674486 | 0.342 | 0.116 | 4.47E-132 | Bcell_1_spleen |
| OSBPL9   | 1.30E-136 | 0.39223833 | 0.509 | 0.208 | 4.61E-132 | Bcell_1_spleen |
| CWC27    | 1.58E-136 | 0.73368044 | 0.288 | 0.087 | 5.59E-132 | Bcell_1_spleen |
| URI1     | 1.91E-136 | 0.62218044 | 0.316 | 0.102 | 6.75E-132 | Bcell_1_spleen |
| HERC4    | 2.31E-136 | 0.54612367 | 0.367 | 0.131 | 8.20E-132 | Bcell_1_spleen |
| DLST     | 2.47E-136 | 0.70516919 | 0.295 | 0.091 | 8.75E-132 | Bcell_1_spleen |
| ZNF292   | 3.14E-136 | 0.42584392 | 0.557 | 0.241 | 1.11E-131 | Bcell_1_spleen |
| PBRM1    | 4.12E-136 | 0.52790712 | 0.355 | 0.123 | 1.46E-131 | Bcell_1_spleen |
| DNAJA1   | 4.61E-136 | 0.44980393 | 0.524 | 0.219 | 1.63E-131 | Bcell_1_spleen |
| VAPA     | 6.57E-136 | 0.35779188 | 0.527 | 0.215 | 2.33E-131 | Bcell_1_spleen |
| ALCAM    | 8.53E-136 | 0.7492497  | 0.279 | 0.084 | 3.02E-131 | Bcell_1_spleen |

|          |           |            |       |       |           |                |
|----------|-----------|------------|-------|-------|-----------|----------------|
| H2AFY    | 1.19E-135 | 0.36019175 | 0.562 | 0.236 | 4.22E-131 | Bcell_1_spleen |
| CASC3    | 1.47E-135 | 0.70474947 | 0.276 | 0.08  | 5.19E-131 | Bcell_1_spleen |
| BCAS3    | 3.11E-135 | 0.58218799 | 0.421 | 0.165 | 1.10E-130 | Bcell_1_spleen |
| DAZAP2   | 3.21E-135 | 0.32276331 | 0.617 | 0.268 | 1.14E-130 | Bcell_1_spleen |
| SDF2L1   | 3.34E-135 | 0.7252493  | 0.266 | 0.076 | 1.18E-130 | Bcell_1_spleen |
| DENR     | 3.42E-135 | 0.39311921 | 0.464 | 0.183 | 1.21E-130 | Bcell_1_spleen |
| MSH3     | 5.17E-135 | 0.68558079 | 0.3   | 0.094 | 1.83E-130 | Bcell_1_spleen |
| PPP1R8   | 5.56E-135 | 0.54002908 | 0.365 | 0.129 | 1.97E-130 | Bcell_1_spleen |
| PHF3     | 8.04E-135 | 0.44802881 | 0.413 | 0.155 | 2.85E-130 | Bcell_1_spleen |
| KMT5B    | 8.98E-135 | 0.73008064 | 0.287 | 0.087 | 3.18E-130 | Bcell_1_spleen |
| TRPC4AP  | 9.86E-135 | 0.679955   | 0.282 | 0.085 | 3.50E-130 | Bcell_1_spleen |
| LMTK2    | 1.04E-134 | 0.71631574 | 0.278 | 0.083 | 3.68E-130 | Bcell_1_spleen |
| RNF10    | 1.22E-134 | 0.72313139 | 0.259 | 0.073 | 4.31E-130 | Bcell_1_spleen |
| ARL6IP5  | 1.49E-134 | 0.43068193 | 0.373 | 0.131 | 5.30E-130 | Bcell_1_spleen |
| FAM13B   | 1.72E-134 | 0.53932942 | 0.34  | 0.115 | 6.09E-130 | Bcell_1_spleen |
| COMT     | 1.75E-134 | 0.36526736 | 0.364 | 0.126 | 6.20E-130 | Bcell_1_spleen |
| VPS8     | 1.91E-134 | 0.8244927  | 0.277 | 0.083 | 6.77E-130 | Bcell_1_spleen |
| GALNT7   | 2.84E-134 | 0.74985931 | 0.276 | 0.083 | 1.01E-129 | Bcell_1_spleen |
| PPP1R16B | 3.79E-134 | 0.48875701 | 0.411 | 0.156 | 1.34E-129 | Bcell_1_spleen |
| RPS27    | 4.28E-134 | 0.29484974 | 0.99  | 0.952 | 1.51E-129 | Bcell_1_spleen |
| HSP90AB1 | 4.46E-134 | 0.51398953 | 0.954 | 0.708 | 1.58E-129 | Bcell_1_spleen |
| NFKBIB   | 8.83E-134 | 0.52890298 | 0.437 | 0.171 | 3.13E-129 | Bcell_1_spleen |
| PHKB     | 1.66E-133 | 0.54668194 | 0.306 | 0.097 | 5.87E-129 | Bcell_1_spleen |
| IPO7     | 1.73E-133 | 0.6717802  | 0.278 | 0.083 | 6.14E-129 | Bcell_1_spleen |
| LRRFIP2  | 2.13E-133 | 0.73222882 | 0.306 | 0.099 | 7.54E-129 | Bcell_1_spleen |
| HVCN1    | 2.39E-133 | 0.34780482 | 0.632 | 0.286 | 8.46E-129 | Bcell_1_spleen |
| GPBP1L1  | 2.55E-133 | 0.3747616  | 0.482 | 0.194 | 9.03E-129 | Bcell_1_spleen |
| LRIF1    | 2.79E-133 | 0.32386331 | 0.544 | 0.228 | 9.90E-129 | Bcell_1_spleen |
| ITFG2    | 3.32E-133 | 0.55731986 | 0.325 | 0.108 | 1.18E-128 | Bcell_1_spleen |
| ZNF268   | 4.43E-133 | 0.92102034 | 0.258 | 0.074 | 1.57E-128 | Bcell_1_spleen |
| DHX36    | 6.55E-133 | 0.39970869 | 0.415 | 0.156 | 2.32E-128 | Bcell_1_spleen |
| SUPT20H  | 1.15E-132 | 0.80642299 | 0.256 | 0.072 | 4.07E-128 | Bcell_1_spleen |
| SETD5    | 1.37E-132 | 0.47202852 | 0.384 | 0.141 | 4.86E-128 | Bcell_1_spleen |

|                    |           |            |       |       |           |                |
|--------------------|-----------|------------|-------|-------|-----------|----------------|
| NBEA               | 1.47E-132 | 0.82507239 | 0.261 | 0.076 | 5.20E-128 | Bcell_1_spleen |
| RANBP9             | 1.94E-132 | 0.63268398 | 0.362 | 0.131 | 6.86E-128 | Bcell_1_spleen |
| MAPK1              | 2.39E-132 | 0.55098889 | 0.377 | 0.138 | 8.46E-128 | Bcell_1_spleen |
| IGF1R              | 3.41E-132 | 0.79911462 | 0.34  | 0.122 | 1.21E-127 | Bcell_1_spleen |
| ENSMMUG00000063549 | 6.30E-132 | 0.59717023 | 0.304 | 0.097 | 2.23E-127 | Bcell_1_spleen |
| BIN2               | 8.77E-132 | 0.53385693 | 0.373 | 0.135 | 3.11E-127 | Bcell_1_spleen |
| RAB2A              | 9.88E-132 | 0.34278817 | 0.56  | 0.239 | 3.50E-127 | Bcell_1_spleen |
| FAM193A            | 9.92E-132 | 0.74958229 | 0.262 | 0.076 | 3.51E-127 | Bcell_1_spleen |
| CCDC12             | 1.09E-131 | 0.38383437 | 0.406 | 0.151 | 3.85E-127 | Bcell_1_spleen |
| APBB1IP            | 1.28E-131 | 0.36536674 | 0.606 | 0.269 | 4.52E-127 | Bcell_1_spleen |
| CD19               | 1.28E-131 | 0.29781211 | 0.492 | 0.196 | 4.55E-127 | Bcell_1_spleen |
| TRPM7              | 2.30E-131 | 0.32064268 | 0.687 | 0.317 | 8.16E-127 | Bcell_1_spleen |
| UBE2Q2             | 2.35E-131 | 0.69935476 | 0.299 | 0.096 | 8.33E-127 | Bcell_1_spleen |
| SRSF1              | 3.04E-131 | 0.46009126 | 0.351 | 0.122 | 1.08E-126 | Bcell_1_spleen |
| GOLM2              | 3.24E-131 | 0.68916942 | 0.292 | 0.091 | 1.15E-126 | Bcell_1_spleen |
| APLP2              | 3.83E-131 | 0.79197848 | 0.253 | 0.071 | 1.36E-126 | Bcell_1_spleen |
| ZFC3H1             | 4.51E-131 | 0.4405792  | 0.453 | 0.182 | 1.60E-126 | Bcell_1_spleen |
| STK26              | 5.21E-131 | 0.55869569 | 0.298 | 0.094 | 1.85E-126 | Bcell_1_spleen |
| TBC1D22A           | 5.41E-131 | 0.59161972 | 0.297 | 0.094 | 1.92E-126 | Bcell_1_spleen |
| RIPOR2             | 7.29E-131 | 0.48990229 | 0.78  | 0.419 | 2.58E-126 | Bcell_1_spleen |
| ZNF146             | 8.73E-131 | 0.5934613  | 0.264 | 0.076 | 3.09E-126 | Bcell_1_spleen |
| WDFY1              | 9.71E-131 | 0.82540143 | 0.271 | 0.082 | 3.44E-126 | Bcell_1_spleen |
| ANKIB1             | 1.03E-130 | 0.73244821 | 0.3   | 0.097 | 3.66E-126 | Bcell_1_spleen |
| ADAR               | 1.10E-130 | 0.57764153 | 0.308 | 0.1   | 3.89E-126 | Bcell_1_spleen |
| MIA2               | 1.20E-130 | 0.47912467 | 0.398 | 0.15  | 4.26E-126 | Bcell_1_spleen |
| RBM25              | 1.49E-130 | 0.29499347 | 0.5   | 0.204 | 5.29E-126 | Bcell_1_spleen |
| EAF2               | 1.60E-130 | 0.44878604 | 0.619 | 0.292 | 5.66E-126 | Bcell_1_spleen |
| IP6K1              | 2.43E-130 | 0.74085593 | 0.259 | 0.075 | 8.60E-126 | Bcell_1_spleen |
| MGA                | 3.23E-130 | 0.70025263 | 0.264 | 0.077 | 1.14E-125 | Bcell_1_spleen |
| EPRS1              | 3.88E-130 | 0.69337345 | 0.254 | 0.072 | 1.38E-125 | Bcell_1_spleen |
| ARHGAP30           | 4.57E-130 | 0.36611495 | 0.402 | 0.15  | 1.62E-125 | Bcell_1_spleen |
| UBR3               | 6.05E-130 | 0.64387284 | 0.295 | 0.094 | 2.14E-125 | Bcell_1_spleen |
| SNRPE              | 7.47E-130 | 0.3391184  | 0.478 | 0.191 | 2.65E-125 | Bcell_1_spleen |

|                    |           |            |       |       |           |                |
|--------------------|-----------|------------|-------|-------|-----------|----------------|
| MNAT1              | 7.91E-130 | 0.61086169 | 0.307 | 0.101 | 2.80E-125 | Bcell_1_spleen |
| FTO                | 8.59E-130 | 0.810856   | 0.26  | 0.076 | 3.04E-125 | Bcell_1_spleen |
| RNASEH2C           | 1.08E-129 | 0.40124675 | 0.418 | 0.158 | 3.81E-125 | Bcell_1_spleen |
| RAF1               | 1.12E-129 | 0.58945904 | 0.325 | 0.11  | 3.97E-125 | Bcell_1_spleen |
| WDR70              | 1.22E-129 | 0.38621264 | 0.476 | 0.193 | 4.31E-125 | Bcell_1_spleen |
| PTPN2              | 1.27E-129 | 0.3827556  | 0.446 | 0.176 | 4.50E-125 | Bcell_1_spleen |
| ENSMMUG00000015583 | 1.52E-129 | 0.45192961 | 0.84  | 0.463 | 5.38E-125 | Bcell_1_spleen |
| PPP2R2D            | 1.66E-129 | 0.8266774  | 0.257 | 0.075 | 5.89E-125 | Bcell_1_spleen |
| AKR7A2             | 1.77E-129 | 0.3883662  | 0.303 | 0.096 | 6.28E-125 | Bcell_1_spleen |
| BTLA               | 1.80E-129 | 0.68480874 | 0.255 | 0.073 | 6.38E-125 | Bcell_1_spleen |
| ZNF326             | 2.24E-129 | 0.4510058  | 0.376 | 0.137 | 7.92E-125 | Bcell_1_spleen |
| GNG2               | 2.25E-129 | 0.51968754 | 0.43  | 0.172 | 7.99E-125 | Bcell_1_spleen |
| CREB1              | 3.73E-129 | 0.4026972  | 0.405 | 0.154 | 1.32E-124 | Bcell_1_spleen |
| IFNAR1             | 5.73E-129 | 0.51479904 | 0.306 | 0.1   | 2.03E-124 | Bcell_1_spleen |
| NUP210             | 7.64E-129 | 0.66086222 | 0.251 | 0.071 | 2.71E-124 | Bcell_1_spleen |
| ASXL1              | 8.94E-129 | 0.84534487 | 0.253 | 0.073 | 3.17E-124 | Bcell_1_spleen |
| SUPT16H            | 9.34E-129 | 0.36323882 | 0.401 | 0.15  | 3.31E-124 | Bcell_1_spleen |
| EFCAB2             | 9.44E-129 | 0.41581693 | 0.429 | 0.169 | 3.34E-124 | Bcell_1_spleen |
| ACBD6              | 9.70E-129 | 0.68772002 | 0.288 | 0.091 | 3.44E-124 | Bcell_1_spleen |
| FKBP5              | 1.07E-128 | 0.51420765 | 0.408 | 0.16  | 3.78E-124 | Bcell_1_spleen |
| TPR                | 1.07E-128 | 0.36702123 | 0.439 | 0.173 | 3.80E-124 | Bcell_1_spleen |
| PAOX               | 1.14E-128 | 0.40371051 | 0.325 | 0.108 | 4.03E-124 | Bcell_1_spleen |
| ANKRD28            | 1.29E-128 | 0.48321873 | 0.395 | 0.153 | 4.58E-124 | Bcell_1_spleen |
| AMBRA1             | 1.63E-128 | 0.65956608 | 0.306 | 0.101 | 5.77E-124 | Bcell_1_spleen |
| ENSMMUG00000012690 | 1.88E-128 | 0.50400624 | 0.428 | 0.17  | 6.65E-124 | Bcell_1_spleen |
| BBX                | 1.88E-128 | 0.39719539 | 0.502 | 0.212 | 6.68E-124 | Bcell_1_spleen |
| HERC2              | 2.39E-128 | 0.5907221  | 0.317 | 0.106 | 8.48E-124 | Bcell_1_spleen |
| THOC2              | 2.51E-128 | 0.4719572  | 0.37  | 0.135 | 8.88E-124 | Bcell_1_spleen |
| VPS41              | 2.66E-128 | 0.54576614 | 0.308 | 0.101 | 9.42E-124 | Bcell_1_spleen |
| DCAF5              | 3.14E-128 | 0.70360249 | 0.278 | 0.086 | 1.11E-123 | Bcell_1_spleen |
| RBM14              | 4.35E-128 | 0.32863368 | 0.54  | 0.228 | 1.54E-123 | Bcell_1_spleen |
| CDC73              | 4.86E-128 | 0.50738572 | 0.342 | 0.12  | 1.72E-123 | Bcell_1_spleen |
| ENSMMUG00000011580 | 7.28E-128 | 0.36740999 | 0.467 | 0.187 | 2.58E-123 | Bcell_1_spleen |

|             |           |            |       |       |           |                |
|-------------|-----------|------------|-------|-------|-----------|----------------|
| LSM14A      | 8.49E-128 | 0.36873932 | 0.464 | 0.186 | 3.01E-123 | Bcell_1_spleen |
| CDK17       | 1.00E-127 | 0.5982845  | 0.327 | 0.114 | 3.55E-123 | Bcell_1_spleen |
| CCT2        | 1.23E-127 | 0.29101036 | 0.569 | 0.245 | 4.34E-123 | Bcell_1_spleen |
| UHRF2       | 3.55E-127 | 0.3609172  | 0.457 | 0.185 | 1.26E-122 | Bcell_1_spleen |
| PMAIP1      | 4.26E-127 | 0.37945578 | 0.512 | 0.218 | 1.51E-122 | Bcell_1_spleen |
| TDRD3       | 5.48E-127 | 0.68504254 | 0.299 | 0.098 | 1.94E-122 | Bcell_1_spleen |
| FRYL        | 9.17E-127 | 0.5839972  | 0.289 | 0.092 | 3.25E-122 | Bcell_1_spleen |
| PRPF40A     | 1.47E-126 | 0.35254761 | 0.592 | 0.263 | 5.21E-122 | Bcell_1_spleen |
| TCP1        | 1.51E-126 | 0.64328918 | 0.273 | 0.083 | 5.36E-122 | Bcell_1_spleen |
| NRDC        | 1.60E-126 | 0.53705932 | 0.306 | 0.101 | 5.67E-122 | Bcell_1_spleen |
| G3BP1       | 1.66E-126 | 0.33194552 | 0.496 | 0.206 | 5.88E-122 | Bcell_1_spleen |
| TBC1D9      | 2.08E-126 | 0.53879941 | 0.414 | 0.167 | 7.38E-122 | Bcell_1_spleen |
| FMC1-LUC7L2 | 2.71E-126 | 0.35168036 | 0.685 | 0.318 | 9.59E-122 | Bcell_1_spleen |
| IQGAP2      | 3.04E-126 | 0.47951398 | 0.46  | 0.195 | 1.08E-121 | Bcell_1_spleen |
| EIF2A       | 3.35E-126 | 0.41990447 | 0.357 | 0.128 | 1.19E-121 | Bcell_1_spleen |
| TMEM123     | 3.36E-126 | 0.32066326 | 0.523 | 0.222 | 1.19E-121 | Bcell_1_spleen |
| CCT5        | 3.39E-126 | 0.25253701 | 0.46  | 0.182 | 1.20E-121 | Bcell_1_spleen |
| MCM9        | 3.64E-126 | 0.64897602 | 0.299 | 0.099 | 1.29E-121 | Bcell_1_spleen |
| MARCHF6     | 4.61E-126 | 0.38594882 | 0.49  | 0.205 | 1.63E-121 | Bcell_1_spleen |
| CCNT1       | 5.04E-126 | 0.7481519  | 0.268 | 0.082 | 1.78E-121 | Bcell_1_spleen |
| IL2RG       | 6.84E-126 | 0.256944   | 0.522 | 0.217 | 2.42E-121 | Bcell_1_spleen |
| TUT7        | 6.89E-126 | 0.35677574 | 0.52  | 0.221 | 2.44E-121 | Bcell_1_spleen |
| ST8SIA4     | 7.79E-126 | 0.41128333 | 0.395 | 0.15  | 2.76E-121 | Bcell_1_spleen |
| NAA10       | 1.01E-125 | 0.45094645 | 0.303 | 0.098 | 3.59E-121 | Bcell_1_spleen |
| WASHC4      | 1.46E-125 | 0.29030699 | 0.518 | 0.218 | 5.17E-121 | Bcell_1_spleen |
| TIA1        | 1.88E-125 | 0.51329933 | 0.314 | 0.106 | 6.65E-121 | Bcell_1_spleen |
| HNRNPR      | 2.56E-125 | 0.34343692 | 0.487 | 0.201 | 9.07E-121 | Bcell_1_spleen |
| GON4L       | 3.18E-125 | 0.47110169 | 0.291 | 0.093 | 1.13E-120 | Bcell_1_spleen |
| CACYBP      | 3.30E-125 | 0.31486318 | 0.524 | 0.222 | 1.17E-120 | Bcell_1_spleen |
| CCM2        | 3.36E-125 | 0.41885226 | 0.409 | 0.159 | 1.19E-120 | Bcell_1_spleen |
| H1-3        | 3.71E-125 | 0.77226679 | 0.284 | 0.093 | 1.32E-120 | Bcell_1_spleen |
| RNASE6      | 4.05E-125 | 0.37737399 | 0.327 | 0.112 | 1.43E-120 | Bcell_1_spleen |
| SCPEP1      | 5.20E-125 | 0.35473269 | 0.414 | 0.16  | 1.84E-120 | Bcell_1_spleen |



|                    |           |            |       |       |           |                |
|--------------------|-----------|------------|-------|-------|-----------|----------------|
| DYRK1A             | 5.21E-125 | 0.45928941 | 0.353 | 0.127 | 1.85E-120 | Bcell_1_spleen |
| DDX39B             | 6.93E-125 | 0.29801629 | 0.431 | 0.168 | 2.46E-120 | Bcell_1_spleen |
| UBR2               | 7.64E-125 | 0.62277758 | 0.275 | 0.085 | 2.71E-120 | Bcell_1_spleen |
| MBTD1              | 8.11E-125 | 0.48414319 | 0.399 | 0.156 | 2.87E-120 | Bcell_1_spleen |
| EPB41L2            | 9.78E-125 | 0.48335409 | 0.355 | 0.129 | 3.46E-120 | Bcell_1_spleen |
| HCLS1              | 1.04E-124 | 0.32037345 | 0.422 | 0.163 | 3.68E-120 | Bcell_1_spleen |
| ENSMMUG00000056043 | 1.06E-124 | 0.59255953 | 0.267 | 0.081 | 3.74E-120 | Bcell_1_spleen |
| PPIG               | 1.17E-124 | 0.31938404 | 0.544 | 0.235 | 4.13E-120 | Bcell_1_spleen |
| PNN                | 1.31E-124 | 0.32322748 | 0.607 | 0.274 | 4.63E-120 | Bcell_1_spleen |
| NGLY1              | 2.88E-124 | 0.50703716 | 0.311 | 0.105 | 1.02E-119 | Bcell_1_spleen |
| NRF1               | 4.55E-124 | 0.6154091  | 0.268 | 0.082 | 1.61E-119 | Bcell_1_spleen |
| CD200              | 5.50E-124 | 0.5903095  | 0.304 | 0.102 | 1.95E-119 | Bcell_1_spleen |
| RICTOR             | 6.19E-124 | 0.39590306 | 0.434 | 0.175 | 2.19E-119 | Bcell_1_spleen |
| MYH9               | 6.70E-124 | 0.27795351 | 0.53  | 0.227 | 2.37E-119 | Bcell_1_spleen |
| AEBP2              | 1.17E-123 | 0.51667794 | 0.319 | 0.11  | 4.13E-119 | Bcell_1_spleen |
| TOP2B              | 1.26E-123 | 0.30503871 | 0.468 | 0.193 | 4.45E-119 | Bcell_1_spleen |
| XRN2               | 1.31E-123 | 0.31548077 | 0.518 | 0.22  | 4.66E-119 | Bcell_1_spleen |
| ENSMMUG00000030448 | 1.70E-123 | 0.26142022 | 0.497 | 0.204 | 6.01E-119 | Bcell_1_spleen |
| ETNK1              | 1.86E-123 | 0.49632056 | 0.329 | 0.115 | 6.60E-119 | Bcell_1_spleen |
| C1GALT1            | 2.31E-123 | 0.55873063 | 0.287 | 0.092 | 8.19E-119 | Bcell_1_spleen |
| NKTR               | 2.36E-123 | 0.51121355 | 0.323 | 0.112 | 8.35E-119 | Bcell_1_spleen |
| FBL                | 3.91E-123 | 0.34429438 | 0.336 | 0.116 | 1.38E-118 | Bcell_1_spleen |
| BCL7A              | 4.48E-123 | 0.39810511 | 0.34  | 0.121 | 1.59E-118 | Bcell_1_spleen |
| ZNF514             | 9.30E-123 | 0.50304871 | 0.325 | 0.113 | 3.30E-118 | Bcell_1_spleen |
| NAA50              | 9.93E-123 | 0.36000361 | 0.382 | 0.143 | 3.52E-118 | Bcell_1_spleen |
| NADSYN1            | 1.06E-122 | 0.39788259 | 0.328 | 0.113 | 3.76E-118 | Bcell_1_spleen |
| EMP3               | 1.18E-122 | 0.60959817 | 0.46  | 0.201 | 4.19E-118 | Bcell_1_spleen |
| AVL9               | 1.61E-122 | 0.81440099 | 0.251 | 0.074 | 5.70E-118 | Bcell_1_spleen |
| PTP4A1             | 2.33E-122 | 0.31398459 | 0.442 | 0.178 | 8.25E-118 | Bcell_1_spleen |
| SDCCAG8            | 2.41E-122 | 0.42701234 | 0.402 | 0.156 | 8.55E-118 | Bcell_1_spleen |
| LIMS1              | 2.66E-122 | 0.45046277 | 0.42  | 0.169 | 9.42E-118 | Bcell_1_spleen |
| SCAND1             | 2.82E-122 | 0.55034585 | 0.265 | 0.08  | 9.98E-118 | Bcell_1_spleen |
| CSRNP1             | 4.50E-122 | 0.54016391 | 0.294 | 0.096 | 1.60E-117 | Bcell_1_spleen |

|                    |           |            |       |       |           |                |
|--------------------|-----------|------------|-------|-------|-----------|----------------|
| HERC1              | 4.54E-122 | 0.45793674 | 0.367 | 0.138 | 1.61E-117 | Bcell_1_spleen |
| PPP2R2A            | 4.61E-122 | 0.40824961 | 0.4   | 0.156 | 1.63E-117 | Bcell_1_spleen |
| FAR1               | 6.50E-122 | 0.50713496 | 0.301 | 0.1   | 2.30E-117 | Bcell_1_spleen |
| H4C15              | 6.80E-122 | 0.26552412 | 0.366 | 0.135 | 2.41E-117 | Bcell_1_spleen |
| GRAMD1B            | 7.13E-122 | 0.7625609  | 0.278 | 0.09  | 2.53E-117 | Bcell_1_spleen |
| UBAP2L             | 1.32E-121 | 0.47485536 | 0.314 | 0.107 | 4.69E-117 | Bcell_1_spleen |
| CDK12              | 1.48E-121 | 0.60301843 | 0.283 | 0.091 | 5.26E-117 | Bcell_1_spleen |
| SLC30A9            | 1.56E-121 | 0.51762054 | 0.312 | 0.107 | 5.52E-117 | Bcell_1_spleen |
| ANO6               | 1.72E-121 | 0.55068847 | 0.338 | 0.123 | 6.10E-117 | Bcell_1_spleen |
| TMCC1              | 1.93E-121 | 0.47637076 | 0.367 | 0.14  | 6.83E-117 | Bcell_1_spleen |
| CAT                | 1.98E-121 | 0.27460965 | 0.468 | 0.19  | 7.00E-117 | Bcell_1_spleen |
| RGCC               | 2.31E-121 | 0.65909863 | 0.275 | 0.088 | 8.18E-117 | Bcell_1_spleen |
| AUTS2              | 2.52E-121 | 0.58210476 | 0.441 | 0.193 | 8.93E-117 | Bcell_1_spleen |
| RBBP6              | 2.87E-121 | 0.51317831 | 0.309 | 0.105 | 1.02E-116 | Bcell_1_spleen |
| DPH6               | 3.85E-121 | 0.52673287 | 0.305 | 0.104 | 1.36E-116 | Bcell_1_spleen |
| C18H18orf25        | 4.93E-121 | 0.75643467 | 0.251 | 0.075 | 1.75E-116 | Bcell_1_spleen |
| DIRAS2             | 5.33E-121 | 0.61872682 | 0.302 | 0.103 | 1.89E-116 | Bcell_1_spleen |
| SUPT3H             | 5.36E-121 | 0.54944254 | 0.367 | 0.141 | 1.90E-116 | Bcell_1_spleen |
| CCT4               | 7.84E-121 | 0.27408802 | 0.502 | 0.21  | 2.78E-116 | Bcell_1_spleen |
| MBNL2              | 8.61E-121 | 0.41284302 | 0.477 | 0.204 | 3.05E-116 | Bcell_1_spleen |
| MARCHF3            | 1.11E-120 | 0.52330149 | 0.381 | 0.149 | 3.94E-116 | Bcell_1_spleen |
| HBS1L              | 1.29E-120 | 0.31200991 | 0.502 | 0.213 | 4.58E-116 | Bcell_1_spleen |
| SECISBP2           | 1.87E-120 | 0.42655385 | 0.377 | 0.143 | 6.63E-116 | Bcell_1_spleen |
| CUL1               | 2.03E-120 | 0.59041542 | 0.283 | 0.092 | 7.21E-116 | Bcell_1_spleen |
| CYB561A3           | 2.18E-120 | 0.29401606 | 0.665 | 0.308 | 7.73E-116 | Bcell_1_spleen |
| DDX39A             | 2.24E-120 | 0.36216655 | 0.54  | 0.235 | 7.93E-116 | Bcell_1_spleen |
| RNF13              | 2.75E-120 | 0.33622262 | 0.426 | 0.171 | 9.75E-116 | Bcell_1_spleen |
| STK24              | 5.29E-120 | 0.43360575 | 0.35  | 0.129 | 1.87E-115 | Bcell_1_spleen |
| ADD3               | 5.29E-120 | 0.48799862 | 0.337 | 0.122 | 1.87E-115 | Bcell_1_spleen |
| HNRNPC             | 5.49E-120 | 0.38104283 | 0.795 | 0.408 | 1.95E-115 | Bcell_1_spleen |
| SUSD6              | 2.07E-119 | 0.55194072 | 0.336 | 0.123 | 7.33E-115 | Bcell_1_spleen |
| ENSMMUG00000016959 | 2.41E-119 | 0.40547193 | 0.335 | 0.12  | 8.53E-115 | Bcell_1_spleen |
| PIP5K1B            | 3.11E-119 | 0.39910997 | 0.518 | 0.234 | 1.10E-114 | Bcell_1_spleen |

|                     |           |            |       |       |           |                |
|---------------------|-----------|------------|-------|-------|-----------|----------------|
| RPS6KC1             | 3.55E-119 | 0.64717592 | 0.288 | 0.095 | 1.26E-114 | Bcell_1_spleen |
| PPA2                | 3.72E-119 | 0.58938325 | 0.277 | 0.09  | 1.32E-114 | Bcell_1_spleen |
| ACTB                | 4.17E-119 | 0.33439936 | 0.996 | 0.962 | 1.48E-114 | Bcell_1_spleen |
| UBR5                | 6.25E-119 | 0.32605672 | 0.386 | 0.149 | 2.21E-114 | Bcell_1_spleen |
| HMCES               | 6.58E-119 | 0.50859146 | 0.294 | 0.099 | 2.33E-114 | Bcell_1_spleen |
| WRN                 | 9.71E-119 | 0.42305148 | 0.414 | 0.166 | 3.44E-114 | Bcell_1_spleen |
| AGO3                | 1.02E-118 | 0.40839194 | 0.414 | 0.166 | 3.61E-114 | Bcell_1_spleen |
| ADGRE5              | 1.08E-118 | 0.54392284 | 0.399 | 0.163 | 3.83E-114 | Bcell_1_spleen |
| TUT4                | 1.64E-118 | 0.30844706 | 0.55  | 0.242 | 5.83E-114 | Bcell_1_spleen |
| ANKRD12             | 1.83E-118 | 0.31921709 | 0.577 | 0.262 | 6.47E-114 | Bcell_1_spleen |
| WAC                 | 2.18E-118 | 0.30459654 | 0.54  | 0.238 | 7.72E-114 | Bcell_1_spleen |
| CHD4                | 2.68E-118 | 0.37497976 | 0.486 | 0.208 | 9.50E-114 | Bcell_1_spleen |
| EIF4G2              | 4.06E-118 | 0.26703187 | 0.658 | 0.305 | 1.44E-113 | Bcell_1_spleen |
| ENTPD4              | 5.21E-118 | 0.47278762 | 0.29  | 0.097 | 1.85E-113 | Bcell_1_spleen |
| SAFB2               | 5.33E-118 | 0.43685254 | 0.326 | 0.115 | 1.89E-113 | Bcell_1_spleen |
| WBP1L               | 5.89E-118 | 0.42895565 | 0.278 | 0.09  | 2.09E-113 | Bcell_1_spleen |
| RAB1A               | 6.62E-118 | 0.34341617 | 0.464 | 0.194 | 2.35E-113 | Bcell_1_spleen |
| GIT2                | 7.00E-118 | 0.40031005 | 0.396 | 0.156 | 2.48E-113 | Bcell_1_spleen |
| GAB1                | 7.55E-118 | 0.88247528 | 0.253 | 0.08  | 2.68E-113 | Bcell_1_spleen |
| TNPO3               | 8.79E-118 | 0.49516078 | 0.275 | 0.089 | 3.11E-113 | Bcell_1_spleen |
| CCDC69              | 9.38E-118 | 0.53875499 | 0.29  | 0.097 | 3.32E-113 | Bcell_1_spleen |
| ENSMMUG00000006965  | 1.01E-117 | 0.28605758 | 0.442 | 0.179 | 3.59E-113 | Bcell_1_spleen |
| ENSMMUG00000003130  | 1.04E-117 | 0.64577516 | 0.253 | 0.078 | 3.69E-113 | Bcell_1_spleen |
| APC                 | 1.14E-117 | 0.55617585 | 0.296 | 0.101 | 4.05E-113 | Bcell_1_spleen |
| C4H6orf62           | 1.23E-117 | 0.40123927 | 0.33  | 0.118 | 4.37E-113 | Bcell_1_spleen |
| SPOP                | 1.50E-117 | 0.37534398 | 0.312 | 0.109 | 5.31E-113 | Bcell_1_spleen |
| NAA15               | 1.74E-117 | 0.467146   | 0.33  | 0.12  | 6.16E-113 | Bcell_1_spleen |
| ENSMMUG000000061125 | 1.75E-117 | 0.47906803 | 0.827 | 0.486 | 6.19E-113 | Bcell_1_spleen |
| ITPR2               | 1.78E-117 | 0.25827424 | 0.661 | 0.315 | 6.31E-113 | Bcell_1_spleen |
| ARL8B               | 1.80E-117 | 0.69586441 | 0.272 | 0.088 | 6.37E-113 | Bcell_1_spleen |
| CTNBL1              | 2.00E-117 | 0.42754979 | 0.294 | 0.098 | 7.07E-113 | Bcell_1_spleen |
| POU2F2              | 3.27E-117 | 0.57562823 | 0.253 | 0.078 | 1.16E-112 | Bcell_1_spleen |
| ZNF131              | 3.49E-117 | 0.67999467 | 0.269 | 0.087 | 1.24E-112 | Bcell_1_spleen |

|          |           |            |       |       |           |                |
|----------|-----------|------------|-------|-------|-----------|----------------|
| CCAR1    | 3.98E-117 | 0.58346923 | 0.253 | 0.077 | 1.41E-112 | Bcell_1_spleen |
| RESF1    | 4.21E-117 | 0.40071183 | 0.317 | 0.111 | 1.49E-112 | Bcell_1_spleen |
| TGS1     | 4.95E-117 | 0.42283122 | 0.324 | 0.115 | 1.75E-112 | Bcell_1_spleen |
| HELZ     | 5.44E-117 | 0.34435183 | 0.4   | 0.157 | 1.93E-112 | Bcell_1_spleen |
| RBM27    | 7.27E-117 | 0.34572747 | 0.42  | 0.169 | 2.58E-112 | Bcell_1_spleen |
| APPL1    | 7.46E-117 | 0.41272517 | 0.362 | 0.137 | 2.64E-112 | Bcell_1_spleen |
| CCT6A    | 7.85E-117 | 0.29066877 | 0.55  | 0.243 | 2.78E-112 | Bcell_1_spleen |
| ARRDC3   | 8.89E-117 | 0.46990822 | 0.257 | 0.08  | 3.15E-112 | Bcell_1_spleen |
| SNX14    | 1.07E-116 | 0.50233268 | 0.29  | 0.097 | 3.80E-112 | Bcell_1_spleen |
| HECTD4   | 1.31E-116 | 0.69819783 | 0.256 | 0.08  | 4.64E-112 | Bcell_1_spleen |
| ARHGAP4  | 1.92E-116 | 0.37746109 | 0.362 | 0.136 | 6.79E-112 | Bcell_1_spleen |
| CSNK1A1  | 3.60E-116 | 0.26936178 | 0.541 | 0.238 | 1.27E-111 | Bcell_1_spleen |
| RPRD2    | 4.54E-116 | 0.5944568  | 0.29  | 0.099 | 1.61E-111 | Bcell_1_spleen |
| RAD21    | 5.71E-116 | 0.37638846 | 0.416 | 0.168 | 2.02E-111 | Bcell_1_spleen |
| AP2B1    | 6.69E-116 | 0.44887027 | 0.33  | 0.12  | 2.37E-111 | Bcell_1_spleen |
| NEK7     | 6.95E-116 | 0.57618242 | 0.25  | 0.077 | 2.46E-111 | Bcell_1_spleen |
| USP47    | 7.42E-116 | 0.30841613 | 0.427 | 0.173 | 2.63E-111 | Bcell_1_spleen |
| EIF2S3   | 9.74E-116 | 0.3471422  | 0.407 | 0.161 | 3.45E-111 | Bcell_1_spleen |
| AP1G1    | 1.17E-115 | 0.43743231 | 0.332 | 0.121 | 4.16E-111 | Bcell_1_spleen |
| CCDC66   | 1.41E-115 | 0.45644394 | 0.292 | 0.099 | 4.99E-111 | Bcell_1_spleen |
| XPC      | 1.61E-115 | 0.56202816 | 0.257 | 0.08  | 5.71E-111 | Bcell_1_spleen |
| COPA     | 1.64E-115 | 0.47422361 | 0.318 | 0.113 | 5.81E-111 | Bcell_1_spleen |
| CMTM6    | 1.76E-115 | 0.28332186 | 0.556 | 0.249 | 6.23E-111 | Bcell_1_spleen |
| UBE2D1   | 1.79E-115 | 0.36424358 | 0.289 | 0.097 | 6.35E-111 | Bcell_1_spleen |
| PDCD6IP  | 3.37E-115 | 0.37134096 | 0.348 | 0.129 | 1.19E-110 | Bcell_1_spleen |
| ATP10D   | 4.69E-115 | 0.47169739 | 0.303 | 0.105 | 1.66E-110 | Bcell_1_spleen |
| KDM5A    | 5.51E-115 | 0.44553316 | 0.322 | 0.116 | 1.95E-110 | Bcell_1_spleen |
| PRPSAP2  | 5.64E-115 | 0.4991953  | 0.282 | 0.094 | 2.00E-110 | Bcell_1_spleen |
| PPP1R2   | 7.57E-115 | 0.40199117 | 0.415 | 0.169 | 2.68E-110 | Bcell_1_spleen |
| ZFX      | 7.60E-115 | 0.52994225 | 0.292 | 0.1   | 2.69E-110 | Bcell_1_spleen |
| SLC25A36 | 8.01E-115 | 0.49179311 | 0.254 | 0.079 | 2.84E-110 | Bcell_1_spleen |
| LMBRD1   | 8.95E-115 | 0.27570271 | 0.513 | 0.225 | 3.17E-110 | Bcell_1_spleen |
| TAPT1    | 1.27E-114 | 0.6503733  | 0.287 | 0.098 | 4.50E-110 | Bcell_1_spleen |

|                    |           |            |       |       |           |                |
|--------------------|-----------|------------|-------|-------|-----------|----------------|
| KDM2B              | 1.60E-114 | 0.49886006 | 0.33  | 0.123 | 5.65E-110 | Bcell_1_spleen |
| RSF1               | 1.97E-114 | 0.27442922 | 0.486 | 0.209 | 6.97E-110 | Bcell_1_spleen |
| DCAF6              | 3.27E-114 | 0.67044508 | 0.256 | 0.081 | 1.16E-109 | Bcell_1_spleen |
| HIPK3              | 3.45E-114 | 0.57240609 | 0.283 | 0.096 | 1.22E-109 | Bcell_1_spleen |
| TTC14              | 3.69E-114 | 0.69422095 | 0.253 | 0.08  | 1.31E-109 | Bcell_1_spleen |
| NCKAP1L            | 3.96E-114 | 0.29828839 | 0.563 | 0.254 | 1.40E-109 | Bcell_1_spleen |
| ARHGEF1            | 4.15E-114 | 0.29095651 | 0.418 | 0.168 | 1.47E-109 | Bcell_1_spleen |
| STAG2              | 4.47E-114 | 0.31439472 | 0.502 | 0.219 | 1.58E-109 | Bcell_1_spleen |
| PRCP               | 4.53E-114 | 0.36054879 | 0.331 | 0.12  | 1.60E-109 | Bcell_1_spleen |
| PPP2R5C            | 6.60E-114 | 0.35760807 | 0.743 | 0.383 | 2.34E-109 | Bcell_1_spleen |
| PNISR              | 6.79E-114 | 0.27353942 | 0.804 | 0.404 | 2.41E-109 | Bcell_1_spleen |
| ZBTB1              | 7.46E-114 | 0.60957951 | 0.271 | 0.089 | 2.64E-109 | Bcell_1_spleen |
| ARHGEF6            | 8.10E-114 | 0.48150071 | 0.283 | 0.095 | 2.87E-109 | Bcell_1_spleen |
| ACP5               | 8.27E-114 | 0.22259077 | 0.425 | 0.171 | 2.93E-109 | Bcell_1_spleen |
| RSBN1L             | 9.24E-114 | 0.4087946  | 0.303 | 0.106 | 3.27E-109 | Bcell_1_spleen |
| POU2F1             | 1.45E-113 | 0.6284392  | 0.317 | 0.116 | 5.13E-109 | Bcell_1_spleen |
| GATAD2A            | 1.49E-113 | 0.62312429 | 0.263 | 0.085 | 5.28E-109 | Bcell_1_spleen |
| CBLB               | 1.63E-113 | 0.30007062 | 0.632 | 0.301 | 5.78E-109 | Bcell_1_spleen |
| PTPMT1             | 1.88E-113 | 0.34091446 | 0.393 | 0.155 | 6.66E-109 | Bcell_1_spleen |
| TAPBP              | 1.90E-113 | 0.23799048 | 0.505 | 0.217 | 6.73E-109 | Bcell_1_spleen |
| ATP2A3             | 2.11E-113 | 0.34066328 | 0.352 | 0.133 | 7.49E-109 | Bcell_1_spleen |
| USP25              | 4.06E-113 | 0.54173382 | 0.264 | 0.086 | 1.44E-108 | Bcell_1_spleen |
| NRGN               | 4.64E-113 | 0.68820516 | 0.262 | 0.085 | 1.64E-108 | Bcell_1_spleen |
| LARP4              | 6.02E-113 | 0.47083009 | 0.298 | 0.104 | 2.13E-108 | Bcell_1_spleen |
| PARP8              | 6.12E-113 | 0.53640623 | 0.382 | 0.155 | 2.17E-108 | Bcell_1_spleen |
| SEC24B             | 6.38E-113 | 0.4699738  | 0.35  | 0.133 | 2.26E-108 | Bcell_1_spleen |
| PCF11              | 6.58E-113 | 0.46613598 | 0.297 | 0.103 | 2.33E-108 | Bcell_1_spleen |
| ZC3H11A            | 7.62E-113 | 0.27409801 | 0.376 | 0.145 | 2.70E-108 | Bcell_1_spleen |
| WSB1               | 9.36E-113 | 0.30578737 | 0.511 | 0.225 | 3.31E-108 | Bcell_1_spleen |
| ZC3H13             | 1.39E-112 | 0.44287396 | 0.323 | 0.118 | 4.93E-108 | Bcell_1_spleen |
| ENSMMUG00000008346 | 1.63E-112 | 0.41243282 | 0.347 | 0.132 | 5.78E-108 | Bcell_1_spleen |
| R3HDM1             | 1.75E-112 | 0.63106496 | 0.252 | 0.08  | 6.19E-108 | Bcell_1_spleen |
| SSBP1              | 1.82E-112 | 0.20654274 | 0.413 | 0.164 | 6.46E-108 | Bcell_1_spleen |

|                    |           |            |       |       |           |                |
|--------------------|-----------|------------|-------|-------|-----------|----------------|
| NOTCH2             | 2.07E-112 | 0.46425956 | 0.321 | 0.117 | 7.32E-108 | Bcell_1_spleen |
| RNF34              | 2.16E-112 | 0.60852729 | 0.253 | 0.08  | 7.64E-108 | Bcell_1_spleen |
| SASH3              | 2.20E-112 | 0.42446534 | 0.335 | 0.124 | 7.80E-108 | Bcell_1_spleen |
| CLTC               | 2.24E-112 | 0.35788602 | 0.328 | 0.12  | 7.95E-108 | Bcell_1_spleen |
| ENSMMUG00000046264 | 2.27E-112 | 0.31096333 | 0.448 | 0.192 | 8.03E-108 | Bcell_1_spleen |
| IVNS1ABP           | 2.71E-112 | 0.39867812 | 0.325 | 0.119 | 9.60E-108 | Bcell_1_spleen |
| ZNF644             | 4.42E-112 | 0.26422145 | 0.575 | 0.264 | 1.57E-107 | Bcell_1_spleen |
| NEMF               | 4.83E-112 | 0.37168076 | 0.374 | 0.147 | 1.71E-107 | Bcell_1_spleen |
| DHX9               | 5.23E-112 | 0.30832613 | 0.501 | 0.22  | 1.85E-107 | Bcell_1_spleen |
| PTPN1              | 6.05E-112 | 0.31169659 | 0.483 | 0.21  | 2.14E-107 | Bcell_1_spleen |
| SMAP2              | 6.76E-112 | 0.27916075 | 0.669 | 0.321 | 2.40E-107 | Bcell_1_spleen |
| RFX7               | 1.04E-111 | 0.62435097 | 0.26  | 0.085 | 3.68E-107 | Bcell_1_spleen |
| MAN2A1             | 1.14E-111 | 0.40095887 | 0.397 | 0.162 | 4.04E-107 | Bcell_1_spleen |
| MYO5A              | 2.00E-111 | 0.40060285 | 0.384 | 0.154 | 7.07E-107 | Bcell_1_spleen |
| NUP62CL            | 2.46E-111 | 0.73512151 | 0.282 | 0.098 | 8.72E-107 | Bcell_1_spleen |
| TMOD3              | 4.12E-111 | 0.22564618 | 0.395 | 0.157 | 1.46E-106 | Bcell_1_spleen |
| ST3GAL1            | 4.68E-111 | 0.31755486 | 0.411 | 0.167 | 1.66E-106 | Bcell_1_spleen |
| ETF1               | 5.06E-111 | 0.22013661 | 0.435 | 0.179 | 1.79E-106 | Bcell_1_spleen |
| PPIL4              | 5.13E-111 | 0.30041352 | 0.408 | 0.166 | 1.82E-106 | Bcell_1_spleen |
| SLC44A2            | 5.21E-111 | 0.3421747  | 0.352 | 0.134 | 1.85E-106 | Bcell_1_spleen |
| PPTC7              | 7.54E-111 | 0.46817868 | 0.342 | 0.131 | 2.67E-106 | Bcell_1_spleen |
| H2AC20             | 1.32E-110 | 0.47590445 | 0.294 | 0.104 | 4.67E-106 | Bcell_1_spleen |
| HIPK2              | 1.58E-110 | 0.64471822 | 0.266 | 0.089 | 5.61E-106 | Bcell_1_spleen |
| SAMHD1             | 1.79E-110 | 0.4918879  | 0.288 | 0.1   | 6.36E-106 | Bcell_1_spleen |
| EPS15              | 1.80E-110 | 0.30038371 | 0.409 | 0.167 | 6.39E-106 | Bcell_1_spleen |
| XPR1               | 2.13E-110 | 0.60684743 | 0.282 | 0.097 | 7.55E-106 | Bcell_1_spleen |
| WWOX               | 3.14E-110 | 0.59714268 | 0.367 | 0.151 | 1.11E-105 | Bcell_1_spleen |
| ENSMMUG00000020721 | 3.63E-110 | 0.54752701 | 0.303 | 0.109 | 1.29E-105 | Bcell_1_spleen |
| OLA1               | 3.79E-110 | 0.32441416 | 0.44  | 0.186 | 1.34E-105 | Bcell_1_spleen |
| DNAJC2             | 6.03E-110 | 0.30114277 | 0.427 | 0.178 | 2.14E-105 | Bcell_1_spleen |
| AHI1               | 6.57E-110 | 0.5466105  | 0.297 | 0.107 | 2.33E-105 | Bcell_1_spleen |
| RELCH              | 7.12E-110 | 0.52982303 | 0.303 | 0.109 | 2.52E-105 | Bcell_1_spleen |
| CRLF3              | 7.80E-110 | 0.47347113 | 0.261 | 0.085 | 2.76E-105 | Bcell_1_spleen |

|                     |           |            |       |       |           |                |
|---------------------|-----------|------------|-------|-------|-----------|----------------|
| USP3                | 1.28E-109 | 0.27253473 | 0.513 | 0.226 | 4.55E-105 | Bcell_1_spleen |
| PPP4R3B             | 1.29E-109 | 0.35002818 | 0.358 | 0.138 | 4.57E-105 | Bcell_1_spleen |
| ENSMMUG000000004539 | 1.84E-109 | 0.17745004 | 0.491 | 0.21  | 6.52E-105 | Bcell_1_spleen |
| SCLT1               | 3.18E-109 | 0.32602732 | 0.416 | 0.174 | 1.13E-104 | Bcell_1_spleen |
| TCOF1               | 5.92E-109 | 0.6338056  | 0.258 | 0.085 | 2.10E-104 | Bcell_1_spleen |
| RPRD1A              | 7.05E-109 | 0.44059599 | 0.332 | 0.126 | 2.50E-104 | Bcell_1_spleen |
| RPS11               | 7.63E-109 | 0.22707154 | 0.997 | 0.991 | 2.70E-104 | Bcell_1_spleen |
| INO80               | 8.52E-109 | 0.60030624 | 0.252 | 0.082 | 3.02E-104 | Bcell_1_spleen |
| ATXN7L3B            | 1.05E-108 | 0.36808456 | 0.323 | 0.119 | 3.72E-104 | Bcell_1_spleen |
| SYPL1               | 1.18E-108 | 0.18254296 | 0.528 | 0.233 | 4.19E-104 | Bcell_1_spleen |
| ADARB1              | 1.22E-108 | 0.50352982 | 0.33  | 0.126 | 4.31E-104 | Bcell_1_spleen |
| PIGY                | 1.42E-108 | 0.20703962 | 0.397 | 0.158 | 5.03E-104 | Bcell_1_spleen |
| HECTD1              | 1.75E-108 | 0.54297731 | 0.258 | 0.085 | 6.19E-104 | Bcell_1_spleen |
| CD38                | 2.11E-108 | 0.32444878 | 0.674 | 0.334 | 7.48E-104 | Bcell_1_spleen |
| SOS1                | 2.26E-108 | 0.4449969  | 0.331 | 0.126 | 8.01E-104 | Bcell_1_spleen |
| BTK                 | 2.40E-108 | 0.11084644 | 0.427 | 0.173 | 8.51E-104 | Bcell_1_spleen |
| IFT57               | 2.57E-108 | 0.44554131 | 0.331 | 0.125 | 9.11E-104 | Bcell_1_spleen |
| EVI5                | 3.17E-108 | 0.48589078 | 0.307 | 0.113 | 1.12E-103 | Bcell_1_spleen |
| TOX4                | 3.28E-108 | 0.54246859 | 0.264 | 0.088 | 1.16E-103 | Bcell_1_spleen |
| DUSP2               | 5.75E-108 | 0.39074904 | 0.294 | 0.106 | 2.04E-103 | Bcell_1_spleen |
| PTBP2               | 6.36E-108 | 0.34229133 | 0.426 | 0.181 | 2.25E-103 | Bcell_1_spleen |
| PDLIM2              | 7.60E-108 | 0.16531314 | 0.409 | 0.165 | 2.69E-103 | Bcell_1_spleen |
| PHACTR4             | 7.93E-108 | 0.37618219 | 0.325 | 0.122 | 2.81E-103 | Bcell_1_spleen |
| YTHDF2              | 1.24E-107 | 0.4757826  | 0.262 | 0.087 | 4.40E-103 | Bcell_1_spleen |
| BTN2A2              | 1.25E-107 | 0.26378621 | 0.53  | 0.237 | 4.42E-103 | Bcell_1_spleen |
| STX7                | 1.56E-107 | 0.29798837 | 0.366 | 0.143 | 5.54E-103 | Bcell_1_spleen |
| APOBEC3F            | 2.00E-107 | 0.3630405  | 0.303 | 0.11  | 7.09E-103 | Bcell_1_spleen |
| SINHCAF             | 2.17E-107 | 0.25324969 | 0.386 | 0.155 | 7.69E-103 | Bcell_1_spleen |
| CCNT2               | 2.37E-107 | 0.45093366 | 0.326 | 0.123 | 8.39E-103 | Bcell_1_spleen |
| TMCO1               | 2.65E-107 | 0.33866656 | 0.301 | 0.108 | 9.39E-103 | Bcell_1_spleen |
| PSMA5               | 2.82E-107 | 0.22892119 | 0.323 | 0.119 | 9.99E-103 | Bcell_1_spleen |
| ENSMMUG000000060287 | 2.89E-107 | 0.38017492 | 0.88  | 0.531 | 1.02E-102 | Bcell_1_spleen |
| VPS53               | 3.46E-107 | 0.4713789  | 0.267 | 0.09  | 1.23E-102 | Bcell_1_spleen |

|         |           |            |       |       |           |                |
|---------|-----------|------------|-------|-------|-----------|----------------|
| UIMC1   | 4.67E-107 | 0.38051359 | 0.3   | 0.108 | 1.66E-102 | Bcell_1_spleen |
| PRPF8   | 4.95E-107 | 0.43424793 | 0.306 | 0.111 | 1.75E-102 | Bcell_1_spleen |
| RLF     | 6.61E-107 | 0.28909589 | 0.423 | 0.177 | 2.34E-102 | Bcell_1_spleen |
| TMEM147 | 8.56E-107 | 0.28819641 | 0.334 | 0.125 | 3.03E-102 | Bcell_1_spleen |
| SCML4   | 8.95E-107 | 0.29266739 | 0.488 | 0.219 | 3.17E-102 | Bcell_1_spleen |
| MGME1   | 1.10E-106 | 0.4941655  | 0.264 | 0.089 | 3.88E-102 | Bcell_1_spleen |
| PDS5B   | 1.19E-106 | 0.35597108 | 0.364 | 0.145 | 4.20E-102 | Bcell_1_spleen |
| EIF3D   | 1.71E-106 | 0.22081396 | 0.458 | 0.195 | 6.05E-102 | Bcell_1_spleen |
| NFATC1  | 1.71E-106 | 0.3104395  | 0.287 | 0.1   | 6.08E-102 | Bcell_1_spleen |
| WASL    | 1.74E-106 | 0.51660576 | 0.294 | 0.106 | 6.17E-102 | Bcell_1_spleen |
| ACIN1   | 1.93E-106 | 0.18096773 | 0.468 | 0.201 | 6.82E-102 | Bcell_1_spleen |
| MYLIP   | 1.94E-106 | 0.23462617 | 0.625 | 0.303 | 6.89E-102 | Bcell_1_spleen |
| NRROS   | 2.13E-106 | 0.38429829 | 0.333 | 0.127 | 7.56E-102 | Bcell_1_spleen |
| ARFGAP3 | 2.20E-106 | 0.39021105 | 0.381 | 0.156 | 7.80E-102 | Bcell_1_spleen |
| SLC35A3 | 3.15E-106 | 0.33453947 | 0.385 | 0.156 | 1.12E-101 | Bcell_1_spleen |
| CD69    | 4.22E-106 | 0.33014601 | 0.931 | 0.634 | 1.50E-101 | Bcell_1_spleen |
| HNRNPA0 | 4.43E-106 | 0.21372013 | 0.529 | 0.235 | 1.57E-101 | Bcell_1_spleen |
| VMP1    | 4.92E-106 | 0.39429269 | 0.286 | 0.101 | 1.74E-101 | Bcell_1_spleen |
| ANXA7   | 5.40E-106 | 0.39459396 | 0.289 | 0.102 | 1.91E-101 | Bcell_1_spleen |
| RAPGEF2 | 5.94E-106 | 0.35442435 | 0.435 | 0.19  | 2.10E-101 | Bcell_1_spleen |
| NOC3L   | 6.84E-106 | 0.3172787  | 0.314 | 0.115 | 2.43E-101 | Bcell_1_spleen |
| PARP6   | 7.36E-106 | 0.20809317 | 0.415 | 0.171 | 2.61E-101 | Bcell_1_spleen |
| DNAJC7  | 7.67E-106 | 0.27236092 | 0.396 | 0.162 | 2.72E-101 | Bcell_1_spleen |
| PAPSS1  | 1.59E-105 | 0.3149593  | 0.328 | 0.124 | 5.64E-101 | Bcell_1_spleen |
| GTF2F2  | 2.15E-105 | 0.5051444  | 0.275 | 0.095 | 7.60E-101 | Bcell_1_spleen |
| QKI     | 3.06E-105 | 0.26681858 | 0.452 | 0.199 | 1.08E-100 | Bcell_1_spleen |
| MAML3   | 4.53E-105 | 0.65358462 | 0.295 | 0.111 | 1.60E-100 | Bcell_1_spleen |
| P4HA1   | 5.12E-105 | 0.30142602 | 0.311 | 0.115 | 1.81E-100 | Bcell_1_spleen |
| CPSF6   | 5.25E-105 | 0.28654734 | 0.351 | 0.136 | 1.86E-100 | Bcell_1_spleen |
| KBTBD2  | 6.47E-105 | 0.5365903  | 0.276 | 0.097 | 2.29E-100 | Bcell_1_spleen |
| LTV1    | 1.09E-104 | 0.26953975 | 0.337 | 0.128 | 3.85E-100 | Bcell_1_spleen |
| TRIM38  | 1.49E-104 | 0.28567208 | 0.383 | 0.155 | 5.26E-100 | Bcell_1_spleen |
| TNPO1   | 1.57E-104 | 0.48439788 | 0.269 | 0.093 | 5.55E-100 | Bcell_1_spleen |



|                   |           |            |       |       |           |                |
|-------------------|-----------|------------|-------|-------|-----------|----------------|
| TCF4              | 2.22E-104 | 0.23271285 | 0.601 | 0.289 | 7.87E-100 | Bcell_1_spleen |
| HSP90AA1          | 2.41E-104 | 0.44890615 | 0.804 | 0.453 | 8.53E-100 | Bcell_1_spleen |
| TANK              | 2.42E-104 | 0.34128856 | 0.645 | 0.322 | 8.57E-100 | Bcell_1_spleen |
| ATL2              | 2.52E-104 | 0.56033807 | 0.265 | 0.091 | 8.92E-100 | Bcell_1_spleen |
| ND2               | 2.84E-104 | 0.37532244 | 0.969 | 0.818 | 1.01E-99  | Bcell_1_spleen |
| TLK2              | 2.84E-104 | 0.4229245  | 0.271 | 0.094 | 1.01E-99  | Bcell_1_spleen |
| INO80D            | 2.86E-104 | 0.42236555 | 0.364 | 0.147 | 1.01E-99  | Bcell_1_spleen |
| CGGBP1            | 4.66E-104 | 0.17193444 | 0.33  | 0.124 | 1.65E-99  | Bcell_1_spleen |
| AOPEP             | 4.74E-104 | 0.55417581 | 0.265 | 0.092 | 1.68E-99  | Bcell_1_spleen |
| SRSF6             | 5.61E-104 | 0.1865291  | 0.449 | 0.191 | 1.99E-99  | Bcell_1_spleen |
| TRIM25            | 7.05E-104 | 0.5013215  | 0.252 | 0.084 | 2.50E-99  | Bcell_1_spleen |
| NDEL1             | 9.62E-104 | 0.44109275 | 0.279 | 0.098 | 3.41E-99  | Bcell_1_spleen |
| SMC4              | 9.70E-104 | 0.36471945 | 0.4   | 0.169 | 3.44E-99  | Bcell_1_spleen |
| TENT2             | 1.11E-103 | 0.40228318 | 0.298 | 0.109 | 3.92E-99  | Bcell_1_spleen |
| UBXN4             | 1.66E-103 | 0.1805103  | 0.457 | 0.197 | 5.88E-99  | Bcell_1_spleen |
| MYDGF             | 1.70E-103 | 0.1213558  | 0.478 | 0.205 | 6.02E-99  | Bcell_1_spleen |
| ATXN7             | 1.75E-103 | 0.52491904 | 0.254 | 0.085 | 6.20E-99  | Bcell_1_spleen |
| QRSL1             | 2.39E-103 | 0.4193079  | 0.258 | 0.087 | 8.47E-99  | Bcell_1_spleen |
| ITCH              | 2.78E-103 | 0.23900433 | 0.469 | 0.208 | 9.83E-99  | Bcell_1_spleen |
| TSC22D2           | 5.70E-103 | 0.6231247  | 0.25  | 0.084 | 2.02E-98  | Bcell_1_spleen |
| CREBRF            | 7.86E-103 | 0.33726599 | 0.41  | 0.175 | 2.79E-98  | Bcell_1_spleen |
| ADD1              | 8.01E-103 | 0.18297462 | 0.45  | 0.193 | 2.84E-98  | Bcell_1_spleen |
| AGTPBP1           | 8.76E-103 | 0.472415   | 0.314 | 0.12  | 3.10E-98  | Bcell_1_spleen |
| HPS5              | 9.20E-103 | 0.4333603  | 0.271 | 0.095 | 3.26E-98  | Bcell_1_spleen |
| YAF2              | 1.53E-102 | 0.28195858 | 0.419 | 0.18  | 5.42E-98  | Bcell_1_spleen |
| MAPRE1            | 1.77E-102 | 0.22264209 | 0.409 | 0.171 | 6.25E-98  | Bcell_1_spleen |
| NT5DC1            | 1.83E-102 | 0.39989205 | 0.288 | 0.104 | 6.48E-98  | Bcell_1_spleen |
| MTCH2             | 1.84E-102 | 0.25931723 | 0.424 | 0.179 | 6.52E-98  | Bcell_1_spleen |
| CSPP1             | 2.02E-102 | 0.35370451 | 0.299 | 0.111 | 7.17E-98  | Bcell_1_spleen |
| TSNAX             | 2.93E-102 | 0.36297024 | 0.252 | 0.084 | 1.04E-97  | Bcell_1_spleen |
| PPP1CA            | 3.25E-102 | 0.16442947 | 0.467 | 0.2   | 1.15E-97  | Bcell_1_spleen |
| EIF4B             | 3.67E-102 | 0.18043582 | 0.521 | 0.233 | 1.30E-97  | Bcell_1_spleen |
| ENSMUG00000001894 | 4.28E-102 | 0.31582245 | 0.342 | 0.134 | 1.52E-97  | Bcell_1_spleen |

|                   |           |            |       |       |          |                |
|-------------------|-----------|------------|-------|-------|----------|----------------|
| DENND4A           | 5.73E-102 | 0.38091184 | 0.902 | 0.591 | 2.03E-97 | Bcell_1_spleen |
| VRK1              | 7.41E-102 | 0.41607391 | 0.3   | 0.111 | 2.63E-97 | Bcell_1_spleen |
| MGAT5             | 8.57E-102 | 0.49637868 | 0.28  | 0.102 | 3.04E-97 | Bcell_1_spleen |
| SOD1              | 9.35E-102 | 0.15811689 | 0.438 | 0.186 | 3.31E-97 | Bcell_1_spleen |
| NPM3              | 9.79E-102 | 0.3318614  | 0.349 | 0.139 | 3.47E-97 | Bcell_1_spleen |
| VPS13C            | 1.18E-101 | 0.23116241 | 0.451 | 0.196 | 4.19E-97 | Bcell_1_spleen |
| GTF2H1            | 1.25E-101 | 0.42402999 | 0.278 | 0.099 | 4.43E-97 | Bcell_1_spleen |
| JARID2            | 1.75E-101 | 0.31938323 | 0.729 | 0.388 | 6.21E-97 | Bcell_1_spleen |
| GNA13             | 2.23E-101 | 0.28675307 | 0.467 | 0.209 | 7.90E-97 | Bcell_1_spleen |
| OPA1              | 2.35E-101 | 0.3905506  | 0.343 | 0.137 | 8.33E-97 | Bcell_1_spleen |
| M6PR              | 3.62E-101 | 0.22951008 | 0.32  | 0.121 | 1.28E-96 | Bcell_1_spleen |
| MS4A1             | 5.35E-101 | 0.32613172 | 0.985 | 0.853 | 1.90E-96 | Bcell_1_spleen |
| XRCC4             | 5.56E-101 | 0.32825679 | 0.314 | 0.12  | 1.97E-96 | Bcell_1_spleen |
| CCDC88A           | 6.22E-101 | 0.32156974 | 0.528 | 0.252 | 2.21E-96 | Bcell_1_spleen |
| SNX13             | 6.59E-101 | 0.4110662  | 0.309 | 0.118 | 2.34E-96 | Bcell_1_spleen |
| DMTF1             | 7.13E-101 | 0.21468608 | 0.359 | 0.144 | 2.53E-96 | Bcell_1_spleen |
| ADNP              | 7.13E-101 | 0.46185606 | 0.279 | 0.101 | 2.53E-96 | Bcell_1_spleen |
| PPP1R18           | 7.32E-101 | 0.2358449  | 0.288 | 0.103 | 2.59E-96 | Bcell_1_spleen |
| BDP1              | 7.95E-101 | 0.31717067 | 0.388 | 0.162 | 2.82E-96 | Bcell_1_spleen |
| UBR1              | 1.14E-100 | 0.26741212 | 0.375 | 0.154 | 4.06E-96 | Bcell_1_spleen |
| ERP44             | 1.44E-100 | 0.27474185 | 0.569 | 0.27  | 5.10E-96 | Bcell_1_spleen |
| STX8              | 1.89E-100 | 0.33885318 | 0.341 | 0.135 | 6.69E-96 | Bcell_1_spleen |
| IKKB              | 1.94E-100 | 0.44059462 | 0.253 | 0.086 | 6.86E-96 | Bcell_1_spleen |
| RBM23             | 1.95E-100 | 0.27267508 | 0.373 | 0.152 | 6.90E-96 | Bcell_1_spleen |
| SNRNP200          | 2.27E-100 | 0.35995695 | 0.287 | 0.105 | 8.06E-96 | Bcell_1_spleen |
| ENSMUG00000006608 | 3.43E-100 | 0.16450224 | 0.638 | 0.303 | 1.22E-95 | Bcell_1_spleen |
| ENSMUG00000030317 | 3.64E-100 | 0.27268631 | 0.259 | 0.089 | 1.29E-95 | Bcell_1_spleen |
| MOB3A             | 3.69E-100 | 0.46477445 | 0.275 | 0.098 | 1.31E-95 | Bcell_1_spleen |
| UBR4              | 3.81E-100 | 0.39156333 | 0.297 | 0.111 | 1.35E-95 | Bcell_1_spleen |
| LANCL2            | 4.17E-100 | 0.57835269 | 0.252 | 0.086 | 1.48E-95 | Bcell_1_spleen |
| USP8              | 5.50E-100 | 0.39646135 | 0.29  | 0.107 | 1.95E-95 | Bcell_1_spleen |
| CLINT1            | 5.54E-100 | 0.18643978 | 0.577 | 0.272 | 1.96E-95 | Bcell_1_spleen |
| KPNB1             | 7.06E-100 | 0.30335805 | 0.371 | 0.153 | 2.50E-95 | Bcell_1_spleen |

|                    |           |            |       |       |          |                |
|--------------------|-----------|------------|-------|-------|----------|----------------|
| SLC25A37           | 7.95E-100 | 0.22630132 | 0.474 | 0.211 | 2.82E-95 | Bcell_1_spleen |
| IMPDH2             | 1.40E-99  | 0.19552364 | 0.526 | 0.239 | 4.96E-95 | Bcell_1_spleen |
| KCMF1              | 1.89E-99  | 0.42827774 | 0.298 | 0.112 | 6.70E-95 | Bcell_1_spleen |
| FER                | 2.58E-99  | 0.56801922 | 0.263 | 0.093 | 9.15E-95 | Bcell_1_spleen |
| ASB3               | 2.66E-99  | 0.52246031 | 0.264 | 0.094 | 9.43E-95 | Bcell_1_spleen |
| EFR3A              | 3.22E-99  | 0.5008038  | 0.272 | 0.098 | 1.14E-94 | Bcell_1_spleen |
| RIC1               | 3.38E-99  | 0.32894849 | 0.335 | 0.133 | 1.20E-94 | Bcell_1_spleen |
| TARDBP             | 3.46E-99  | 0.3577418  | 0.294 | 0.109 | 1.23E-94 | Bcell_1_spleen |
| CNST               | 3.52E-99  | 0.43409359 | 0.295 | 0.11  | 1.25E-94 | Bcell_1_spleen |
| DDX6               | 3.57E-99  | 0.21703371 | 0.624 | 0.298 | 1.26E-94 | Bcell_1_spleen |
| ATP9B              | 4.35E-99  | 0.28945903 | 0.374 | 0.156 | 1.54E-94 | Bcell_1_spleen |
| CNOT1              | 5.01E-99  | 0.23314429 | 0.469 | 0.209 | 1.78E-94 | Bcell_1_spleen |
| EEF2               | 5.20E-99  | 0.35668513 | 0.871 | 0.512 | 1.84E-94 | Bcell_1_spleen |
| CHP1               | 6.55E-99  | 0.13705478 | 0.379 | 0.155 | 2.32E-94 | Bcell_1_spleen |
| DHX15              | 7.17E-99  | 0.30562426 | 0.272 | 0.097 | 2.54E-94 | Bcell_1_spleen |
| ENSMMUG00000058919 | 7.55E-99  | 0.19330684 | 0.442 | 0.192 | 2.68E-94 | Bcell_1_spleen |
| FXR1               | 8.79E-99  | 0.21424638 | 0.525 | 0.241 | 3.11E-94 | Bcell_1_spleen |
| MTPN               | 1.00E-98  | 0.23394885 | 0.614 | 0.295 | 3.55E-94 | Bcell_1_spleen |
| VPS26A             | 1.05E-98  | 0.47411918 | 0.264 | 0.093 | 3.71E-94 | Bcell_1_spleen |
| PHIP               | 1.49E-98  | 0.19012122 | 0.505 | 0.23  | 5.26E-94 | Bcell_1_spleen |
| RPIA               | 1.50E-98  | 0.42711479 | 0.265 | 0.094 | 5.31E-94 | Bcell_1_spleen |
| DBNL               | 1.72E-98  | 0.22647703 | 0.645 | 0.308 | 6.08E-94 | Bcell_1_spleen |
| DIDO1              | 2.15E-98  | 0.48180446 | 0.254 | 0.088 | 7.64E-94 | Bcell_1_spleen |
| SEPTIN6            | 3.09E-98  | 0.25940853 | 0.701 | 0.353 | 1.10E-93 | Bcell_1_spleen |
| FAM214A            | 3.45E-98  | 0.54608753 | 0.253 | 0.088 | 1.22E-93 | Bcell_1_spleen |
| TBC1D23            | 4.01E-98  | 0.42249094 | 0.292 | 0.109 | 1.42E-93 | Bcell_1_spleen |
| DTNBP1             | 4.64E-98  | 0.24450109 | 0.576 | 0.276 | 1.64E-93 | Bcell_1_spleen |
| LUC7L              | 5.59E-98  | 0.30260468 | 0.305 | 0.116 | 1.98E-93 | Bcell_1_spleen |
| SLC38A2            | 5.96E-98  | 0.12713678 | 0.461 | 0.202 | 2.11E-93 | Bcell_1_spleen |
| POLR2G             | 7.57E-98  | 0.16453145 | 0.31  | 0.117 | 2.68E-93 | Bcell_1_spleen |
| TUFM               | 8.44E-98  | 0.2930556  | 0.258 | 0.089 | 2.99E-93 | Bcell_1_spleen |
| KPNA1              | 9.45E-98  | 0.36760017 | 0.275 | 0.099 | 3.35E-93 | Bcell_1_spleen |
| BIN3               | 9.80E-98  | 0.17046378 | 0.43  | 0.184 | 3.47E-93 | Bcell_1_spleen |

|                   |          |            |       |       |          |                |
|-------------------|----------|------------|-------|-------|----------|----------------|
| RAB8A             | 1.12E-97 | 0.24569545 | 0.264 | 0.092 | 3.98E-93 | Bcell_1_spleen |
| SCAPER            | 1.13E-97 | 0.43090356 | 0.283 | 0.105 | 3.99E-93 | Bcell_1_spleen |
| DDX3X             | 1.27E-97 | 0.25372951 | 0.666 | 0.33  | 4.49E-93 | Bcell_1_spleen |
| CXCR5             | 1.50E-97 | 0.21587068 | 0.393 | 0.166 | 5.31E-93 | Bcell_1_spleen |
| ATP6V0A1          | 1.68E-97 | 0.42364667 | 0.292 | 0.11  | 5.94E-93 | Bcell_1_spleen |
| MILR1             | 2.10E-97 | 0.26356827 | 0.326 | 0.128 | 7.46E-93 | Bcell_1_spleen |
| USP16             | 2.15E-97 | 0.23051292 | 0.375 | 0.156 | 7.63E-93 | Bcell_1_spleen |
| NSRP1             | 2.73E-97 | 0.18345122 | 0.409 | 0.175 | 9.69E-93 | Bcell_1_spleen |
| CCT8              | 3.22E-97 | 0.13666294 | 0.467 | 0.205 | 1.14E-92 | Bcell_1_spleen |
| LMAN2             | 3.43E-97 | 0.19210039 | 0.322 | 0.124 | 1.21E-92 | Bcell_1_spleen |
| UBAP1             | 3.62E-97 | 0.36070659 | 0.342 | 0.138 | 1.28E-92 | Bcell_1_spleen |
| NRIP1             | 5.71E-97 | 0.5431099  | 0.264 | 0.095 | 2.02E-92 | Bcell_1_spleen |
| EPC1              | 5.86E-97 | 0.24080701 | 0.726 | 0.367 | 2.08E-92 | Bcell_1_spleen |
| DDX54             | 6.32E-97 | 0.32264251 | 0.282 | 0.103 | 2.24E-92 | Bcell_1_spleen |
| POGZ              | 7.02E-97 | 0.34398373 | 0.29  | 0.108 | 2.49E-92 | Bcell_1_spleen |
| ZNF506            | 7.10E-97 | 0.34590903 | 0.302 | 0.115 | 2.51E-92 | Bcell_1_spleen |
| CLEC17A           | 8.87E-97 | 0.53836305 | 0.258 | 0.092 | 3.14E-92 | Bcell_1_spleen |
| EMC6              | 9.10E-97 | 0.16230883 | 0.359 | 0.144 | 3.23E-92 | Bcell_1_spleen |
| MAPRE2            | 2.07E-96 | 0.35699899 | 0.421 | 0.186 | 7.33E-92 | Bcell_1_spleen |
| EIF4H             | 2.07E-96 | 0.15353396 | 0.502 | 0.226 | 7.35E-92 | Bcell_1_spleen |
| BRD7              | 2.22E-96 | 0.33289528 | 0.272 | 0.098 | 7.87E-92 | Bcell_1_spleen |
| RHOH              | 2.64E-96 | 0.22795785 | 0.591 | 0.285 | 9.35E-92 | Bcell_1_spleen |
| ENSMUG00000006803 | 3.29E-96 | 0.23541621 | 0.344 | 0.138 | 1.17E-91 | Bcell_1_spleen |
| PTP4A2            | 3.29E-96 | 0.21071427 | 0.412 | 0.177 | 1.17E-91 | Bcell_1_spleen |
| ARHGEF7           | 3.57E-96 | 0.42115208 | 0.283 | 0.106 | 1.26E-91 | Bcell_1_spleen |
| MORF4L2           | 4.49E-96 | 0.31298449 | 0.312 | 0.121 | 1.59E-91 | Bcell_1_spleen |
| WDR43             | 4.61E-96 | 0.25989372 | 0.377 | 0.158 | 1.63E-91 | Bcell_1_spleen |
| LBH               | 4.71E-96 | 0.37530014 | 0.274 | 0.1   | 1.67E-91 | Bcell_1_spleen |
| TTC17             | 5.25E-96 | 0.28378211 | 0.366 | 0.153 | 1.86E-91 | Bcell_1_spleen |
| ZNF92             | 5.82E-96 | 0.33024447 | 0.312 | 0.122 | 2.06E-91 | Bcell_1_spleen |
| FBXO21            | 5.86E-96 | 0.46133696 | 0.26  | 0.093 | 2.08E-91 | Bcell_1_spleen |
| CUL5              | 6.11E-96 | 0.22310481 | 0.511 | 0.236 | 2.17E-91 | Bcell_1_spleen |
| ARMC8             | 6.21E-96 | 0.42299512 | 0.289 | 0.109 | 2.20E-91 | Bcell_1_spleen |

|                    |          |            |       |       |          |                |
|--------------------|----------|------------|-------|-------|----------|----------------|
| SF3B2              | 7.90E-96 | 0.23290209 | 0.368 | 0.152 | 2.80E-91 | Bcell_1_spleen |
| AP3B1              | 8.82E-96 | 0.27976945 | 0.42  | 0.184 | 3.13E-91 | Bcell_1_spleen |
| BRAF               | 8.88E-96 | 0.20623222 | 0.464 | 0.212 | 3.15E-91 | Bcell_1_spleen |
| USP15              | 1.07E-95 | 0.25864331 | 0.821 | 0.441 | 3.78E-91 | Bcell_1_spleen |
| VIM                | 1.46E-95 | 0.42734355 | 0.61  | 0.324 | 5.18E-91 | Bcell_1_spleen |
| ATF6               | 2.04E-95 | 0.17508188 | 0.4   | 0.17  | 7.22E-91 | Bcell_1_spleen |
| MAMU-DOB           | 2.25E-95 | 0.2519648  | 0.542 | 0.258 | 7.98E-91 | Bcell_1_spleen |
| HDAC2              | 2.47E-95 | 0.35494202 | 0.26  | 0.092 | 8.76E-91 | Bcell_1_spleen |
| RNF213             | 5.27E-95 | 0.37837266 | 0.28  | 0.104 | 1.87E-90 | Bcell_1_spleen |
| FAM53B             | 5.57E-95 | 0.24244969 | 0.361 | 0.15  | 1.97E-90 | Bcell_1_spleen |
| PPP2R1A            | 6.26E-95 | 0.31404031 | 0.292 | 0.11  | 2.22E-90 | Bcell_1_spleen |
| CYBA               | 8.28E-95 | 0.23882077 | 0.788 | 0.413 | 2.93E-90 | Bcell_1_spleen |
| LTN1               | 1.06E-94 | 0.47426228 | 0.256 | 0.091 | 3.74E-90 | Bcell_1_spleen |
| GDI2               | 2.31E-94 | 0.21120214 | 0.678 | 0.336 | 8.19E-90 | Bcell_1_spleen |
| UBE4A              | 3.25E-94 | 0.32426139 | 0.271 | 0.099 | 1.15E-89 | Bcell_1_spleen |
| EVI2B              | 3.60E-94 | 0.15791833 | 0.575 | 0.273 | 1.28E-89 | Bcell_1_spleen |
| USP10              | 4.07E-94 | 0.20223564 | 0.375 | 0.158 | 1.44E-89 | Bcell_1_spleen |
| ZNF28              | 5.24E-94 | 0.17472753 | 0.335 | 0.134 | 1.86E-89 | Bcell_1_spleen |
| MON2               | 8.38E-94 | 0.38950817 | 0.29  | 0.111 | 2.97E-89 | Bcell_1_spleen |
| RAP1B              | 8.72E-94 | 0.19070077 | 0.656 | 0.324 | 3.09E-89 | Bcell_1_spleen |
| ATF7               | 9.66E-94 | 0.34067651 | 0.275 | 0.102 | 3.42E-89 | Bcell_1_spleen |
| ENSMMUG00000018557 | 1.06E-93 | 0.34419736 | 0.281 | 0.105 | 3.74E-89 | Bcell_1_spleen |
| SMN1               | 1.33E-93 | 0.32888552 | 0.265 | 0.096 | 4.71E-89 | Bcell_1_spleen |
| KAT6A              | 1.41E-93 | 0.28194818 | 0.431 | 0.194 | 4.98E-89 | Bcell_1_spleen |
| EPS15L1            | 1.50E-93 | 0.29906418 | 0.279 | 0.104 | 5.31E-89 | Bcell_1_spleen |
| RFX3               | 1.94E-93 | 0.12118793 | 0.475 | 0.218 | 6.87E-89 | Bcell_1_spleen |
| TRAM1              | 2.01E-93 | 0.14987994 | 0.433 | 0.19  | 7.14E-89 | Bcell_1_spleen |
| PSMB4              | 2.02E-93 | 0.10469184 | 0.45  | 0.197 | 7.16E-89 | Bcell_1_spleen |
| SBNO1              | 2.14E-93 | 0.41616666 | 0.279 | 0.105 | 7.57E-89 | Bcell_1_spleen |
| CEP135             | 2.18E-93 | 0.32372446 | 0.26  | 0.093 | 7.73E-89 | Bcell_1_spleen |
| MAPK1IP1L          | 2.24E-93 | 0.17414282 | 0.396 | 0.17  | 7.94E-89 | Bcell_1_spleen |
| QRICH1             | 2.76E-93 | 0.33765706 | 0.294 | 0.113 | 9.78E-89 | Bcell_1_spleen |
| EVL                | 2.86E-93 | 0.20652241 | 0.353 | 0.145 | 1.01E-88 | Bcell_1_spleen |

|                   |          |            |       |       |          |                |
|-------------------|----------|------------|-------|-------|----------|----------------|
| MED30             | 3.16E-93 | 0.21651262 | 0.347 | 0.142 | 1.12E-88 | Bcell_1_spleen |
| PPHLN1            | 3.96E-93 | 0.14214724 | 0.461 | 0.206 | 1.40E-88 | Bcell_1_spleen |
| RPN1              | 5.56E-93 | 0.21698267 | 0.334 | 0.134 | 1.97E-88 | Bcell_1_spleen |
| L3MBTL3           | 5.72E-93 | 0.3529819  | 0.275 | 0.103 | 2.03E-88 | Bcell_1_spleen |
| PPIP5K2           | 7.38E-93 | 0.31373098 | 0.267 | 0.098 | 2.61E-88 | Bcell_1_spleen |
| CSKMT             | 8.69E-93 | 0.20489067 | 0.273 | 0.1   | 3.08E-88 | Bcell_1_spleen |
| SNX3              | 9.46E-93 | 0.14110482 | 0.524 | 0.242 | 3.35E-88 | Bcell_1_spleen |
| PRKCE             | 9.67E-93 | 0.44580928 | 0.277 | 0.105 | 3.43E-88 | Bcell_1_spleen |
| NR4A2             | 9.78E-93 | 0.26874583 | 0.454 | 0.211 | 3.47E-88 | Bcell_1_spleen |
| MRTFA             | 1.06E-92 | 0.36019574 | 0.292 | 0.113 | 3.77E-88 | Bcell_1_spleen |
| RCC1              | 1.26E-92 | 0.19109632 | 0.425 | 0.187 | 4.46E-88 | Bcell_1_spleen |
| STAU1             | 1.88E-92 | 0.20522449 | 0.38  | 0.162 | 6.67E-88 | Bcell_1_spleen |
| ZNF736            | 2.38E-92 | 0.39227536 | 0.275 | 0.103 | 8.42E-88 | Bcell_1_spleen |
| SNIP1             | 2.64E-92 | 0.49461783 | 0.262 | 0.096 | 9.36E-88 | Bcell_1_spleen |
| ATP11B            | 3.19E-92 | 0.34074629 | 0.302 | 0.118 | 1.13E-87 | Bcell_1_spleen |
| INTS8             | 3.41E-92 | 0.33688743 | 0.308 | 0.122 | 1.21E-87 | Bcell_1_spleen |
| GINM1             | 4.68E-92 | 0.39224001 | 0.278 | 0.105 | 1.66E-87 | Bcell_1_spleen |
| ADAM17            | 4.89E-92 | 0.40792337 | 0.271 | 0.101 | 1.73E-87 | Bcell_1_spleen |
| ERGIC2            | 5.58E-92 | 0.18957266 | 0.32  | 0.127 | 1.98E-87 | Bcell_1_spleen |
| SATB1             | 5.82E-92 | 0.14652789 | 0.383 | 0.164 | 2.06E-87 | Bcell_1_spleen |
| ENSMUG00000011798 | 7.33E-92 | 0.14358135 | 0.332 | 0.133 | 2.60E-87 | Bcell_1_spleen |
| LEMD3             | 8.20E-92 | 0.45160765 | 0.273 | 0.103 | 2.91E-87 | Bcell_1_spleen |
| PTP4A3            | 8.70E-92 | 0.33886905 | 0.285 | 0.109 | 3.08E-87 | Bcell_1_spleen |
| PNKP              | 1.25E-91 | 0.2421184  | 0.324 | 0.13  | 4.43E-87 | Bcell_1_spleen |
| HNRNPUL1          | 3.05E-91 | 0.3350465  | 0.275 | 0.103 | 1.08E-86 | Bcell_1_spleen |
| GABPB1            | 3.08E-91 | 0.25645219 | 0.401 | 0.179 | 1.09E-86 | Bcell_1_spleen |
| RAB14             | 3.25E-91 | 0.17517672 | 0.376 | 0.159 | 1.15E-86 | Bcell_1_spleen |
| HSH2D             | 3.42E-91 | 0.35479014 | 0.261 | 0.095 | 1.21E-86 | Bcell_1_spleen |
| UQCRB             | 4.23E-91 | 0.1432538  | 0.364 | 0.152 | 1.50E-86 | Bcell_1_spleen |
| DNM1L             | 4.36E-91 | 0.2587806  | 0.293 | 0.113 | 1.55E-86 | Bcell_1_spleen |
| UBE2E1            | 5.52E-91 | 0.44411444 | 0.297 | 0.118 | 1.96E-86 | Bcell_1_spleen |
| GMCL1             | 6.01E-91 | 0.38864309 | 0.267 | 0.1   | 2.13E-86 | Bcell_1_spleen |
| CDC5L             | 6.39E-91 | 0.17542299 | 0.363 | 0.153 | 2.26E-86 | Bcell_1_spleen |

|         |          |            |       |       |          |                |
|---------|----------|------------|-------|-------|----------|----------------|
| TBC1D15 | 6.48E-91 | 0.33768581 | 0.297 | 0.117 | 2.29E-86 | Bcell_1_spleen |
| KLHL18  | 7.13E-91 | 0.47856493 | 0.256 | 0.094 | 2.52E-86 | Bcell_1_spleen |
| NCK1    | 1.08E-90 | 0.19828965 | 0.298 | 0.116 | 3.82E-86 | Bcell_1_spleen |
| WDFY2   | 1.28E-90 | 0.27138019 | 0.391 | 0.172 | 4.54E-86 | Bcell_1_spleen |
| APEX1   | 1.73E-90 | 0.13660795 | 0.46  | 0.206 | 6.13E-86 | Bcell_1_spleen |
| PSMD14  | 2.26E-90 | 0.19339357 | 0.378 | 0.162 | 7.99E-86 | Bcell_1_spleen |
| TCEA1   | 2.53E-90 | 0.1108051  | 0.542 | 0.256 | 8.95E-86 | Bcell_1_spleen |
| EIF5    | 2.74E-90 | 0.15419015 | 0.551 | 0.261 | 9.70E-86 | Bcell_1_spleen |
| COA1    | 3.81E-90 | 0.13134793 | 0.342 | 0.14  | 1.35E-85 | Bcell_1_spleen |
| TRIB2   | 4.19E-90 | 0.56204152 | 0.26  | 0.098 | 1.48E-85 | Bcell_1_spleen |
| CHD9    | 4.41E-90 | 0.12749511 | 0.425 | 0.19  | 1.56E-85 | Bcell_1_spleen |
| DCP2    | 1.12E-89 | 0.23011277 | 0.302 | 0.119 | 3.97E-85 | Bcell_1_spleen |
| PCBP1   | 1.19E-89 | 0.12915822 | 0.471 | 0.214 | 4.23E-85 | Bcell_1_spleen |
| CS      | 1.61E-89 | 0.18485809 | 0.411 | 0.18  | 5.69E-85 | Bcell_1_spleen |
| PNO1    | 2.43E-89 | 0.22974815 | 0.252 | 0.091 | 8.60E-85 | Bcell_1_spleen |
| DYNC112 | 2.89E-89 | 0.21939871 | 0.272 | 0.102 | 1.02E-84 | Bcell_1_spleen |
| PRRC2C  | 2.92E-89 | 0.18946407 | 0.697 | 0.354 | 1.04E-84 | Bcell_1_spleen |
| EIPR1   | 3.35E-89 | 0.19797206 | 0.289 | 0.111 | 1.19E-84 | Bcell_1_spleen |
| PRKD3   | 3.78E-89 | 0.22969881 | 0.384 | 0.168 | 1.34E-84 | Bcell_1_spleen |
| TRIM13  | 3.84E-89 | 0.34544729 | 0.283 | 0.109 | 1.36E-84 | Bcell_1_spleen |
| TTC1    | 5.65E-89 | 0.30107546 | 0.251 | 0.091 | 2.00E-84 | Bcell_1_spleen |
| CHCHD3  | 5.87E-89 | 0.17669666 | 0.381 | 0.164 | 2.08E-84 | Bcell_1_spleen |
| CNOT4   | 8.67E-89 | 0.12415605 | 0.432 | 0.194 | 3.07E-84 | Bcell_1_spleen |
| ESYT2   | 1.15E-88 | 0.2284908  | 0.331 | 0.137 | 4.06E-84 | Bcell_1_spleen |
| MATR3   | 1.22E-88 | 0.22796128 | 0.758 | 0.395 | 4.34E-84 | Bcell_1_spleen |
| KATNBL1 | 1.35E-88 | 0.15503965 | 0.383 | 0.165 | 4.79E-84 | Bcell_1_spleen |
| VPS36   | 1.41E-88 | 0.17533408 | 0.377 | 0.162 | 4.99E-84 | Bcell_1_spleen |
| SERINC1 | 1.52E-88 | 0.24431444 | 0.337 | 0.14  | 5.40E-84 | Bcell_1_spleen |
| NFYC    | 1.59E-88 | 0.30401313 | 0.27  | 0.102 | 5.64E-84 | Bcell_1_spleen |
| RETREG1 | 1.98E-88 | 0.39262924 | 0.281 | 0.109 | 7.01E-84 | Bcell_1_spleen |
| TNFAIP3 | 2.29E-88 | 0.33539111 | 0.411 | 0.19  | 8.12E-84 | Bcell_1_spleen |
| ADSS2   | 4.06E-88 | 0.23914024 | 0.258 | 0.095 | 1.44E-83 | Bcell_1_spleen |
| COX3    | 6.87E-88 | 0.28170371 | 0.969 | 0.951 | 2.43E-83 | Bcell_1_spleen |

|          |          |            |       |       |          |                |
|----------|----------|------------|-------|-------|----------|----------------|
| AQR      | 7.07E-88 | 0.27143214 | 0.306 | 0.123 | 2.50E-83 | Bcell_1_spleen |
| FBXO33   | 7.53E-88 | 0.24089132 | 0.417 | 0.192 | 2.67E-83 | Bcell_1_spleen |
| STAU2    | 9.62E-88 | 0.32426476 | 0.293 | 0.116 | 3.41E-83 | Bcell_1_spleen |
| ICAM3    | 9.94E-88 | 0.15272962 | 0.298 | 0.117 | 3.52E-83 | Bcell_1_spleen |
| CD2AP    | 1.10E-87 | 0.23470061 | 0.29  | 0.114 | 3.89E-83 | Bcell_1_spleen |
| NFKB1    | 1.29E-87 | 0.1778639  | 0.614 | 0.317 | 4.58E-83 | Bcell_1_spleen |
| SPECC1L  | 1.46E-87 | 0.30829835 | 0.271 | 0.104 | 5.18E-83 | Bcell_1_spleen |
| WDR1     | 1.73E-87 | 0.11577985 | 0.254 | 0.092 | 6.14E-83 | Bcell_1_spleen |
| BCLAF1   | 2.10E-87 | 0.14990169 | 0.666 | 0.334 | 7.43E-83 | Bcell_1_spleen |
| KAT7     | 3.18E-87 | 0.40060438 | 0.25  | 0.092 | 1.13E-82 | Bcell_1_spleen |
| SREK1    | 4.46E-87 | 0.16854228 | 0.57  | 0.275 | 1.58E-82 | Bcell_1_spleen |
| ABCE1    | 4.64E-87 | 0.13998078 | 0.336 | 0.14  | 1.64E-82 | Bcell_1_spleen |
| SCAF11   | 5.60E-87 | 0.16599255 | 0.597 | 0.292 | 1.98E-82 | Bcell_1_spleen |
| GGNBP2   | 7.37E-87 | 0.14042186 | 0.45  | 0.206 | 2.61E-82 | Bcell_1_spleen |
| CRYL1    | 1.03E-86 | 0.28321152 | 0.277 | 0.107 | 3.63E-82 | Bcell_1_spleen |
| SETDB2   | 1.26E-86 | 0.20986824 | 0.278 | 0.108 | 4.45E-82 | Bcell_1_spleen |
| ELK3     | 2.64E-86 | 0.23544044 | 0.342 | 0.145 | 9.36E-82 | Bcell_1_spleen |
| EPB41    | 3.69E-86 | 0.18501706 | 0.436 | 0.201 | 1.31E-81 | Bcell_1_spleen |
| DNAJC3   | 7.04E-86 | 0.41436718 | 0.267 | 0.103 | 2.49E-81 | Bcell_1_spleen |
| SLU7     | 8.99E-86 | 0.28789697 | 0.284 | 0.112 | 3.18E-81 | Bcell_1_spleen |
| ECHDC1   | 2.00E-85 | 0.17106928 | 0.276 | 0.107 | 7.08E-81 | Bcell_1_spleen |
| POC1B    | 2.02E-85 | 0.18764972 | 0.413 | 0.188 | 7.15E-81 | Bcell_1_spleen |
| REL      | 3.02E-85 | 0.27380914 | 0.767 | 0.422 | 1.07E-80 | Bcell_1_spleen |
| TM9SF2   | 3.46E-85 | 0.15260525 | 0.387 | 0.171 | 1.23E-80 | Bcell_1_spleen |
| GPR107   | 3.61E-85 | 0.38671146 | 0.258 | 0.098 | 1.28E-80 | Bcell_1_spleen |
| NT5C2    | 5.64E-85 | 0.17146261 | 0.337 | 0.143 | 2.00E-80 | Bcell_1_spleen |
| SLC30A7  | 9.05E-85 | 0.34403604 | 0.268 | 0.104 | 3.21E-80 | Bcell_1_spleen |
| KIAA1328 | 1.12E-84 | 0.43913968 | 0.256 | 0.099 | 3.96E-80 | Bcell_1_spleen |
| MED13    | 1.25E-84 | 0.24804826 | 0.305 | 0.125 | 4.43E-80 | Bcell_1_spleen |
| U2SURP   | 1.35E-84 | 0.10619222 | 0.514 | 0.245 | 4.78E-80 | Bcell_1_spleen |
| TIAL1    | 1.71E-84 | 0.14003715 | 0.307 | 0.124 | 6.07E-80 | Bcell_1_spleen |
| IWS1     | 1.96E-84 | 0.29551146 | 0.25  | 0.093 | 6.93E-80 | Bcell_1_spleen |
| ZFR      | 2.00E-84 | 0.22769899 | 0.334 | 0.141 | 7.10E-80 | Bcell_1_spleen |



|                    |          |            |       |       |          |                |
|--------------------|----------|------------|-------|-------|----------|----------------|
| NUP214             | 2.46E-84 | 0.2573251  | 0.275 | 0.108 | 8.70E-80 | Bcell_1_spleen |
| PHACTR1            | 2.65E-84 | 0.23787918 | 0.336 | 0.143 | 9.38E-80 | Bcell_1_spleen |
| DCAF8              | 2.92E-84 | 0.24792198 | 0.27  | 0.104 | 1.04E-79 | Bcell_1_spleen |
| NF1                | 3.62E-84 | 0.12033291 | 0.539 | 0.266 | 1.28E-79 | Bcell_1_spleen |
| SMIM14             | 6.20E-84 | 0.27692771 | 0.744 | 0.412 | 2.20E-79 | Bcell_1_spleen |
| AKAP9              | 6.85E-84 | 0.14589636 | 0.487 | 0.232 | 2.43E-79 | Bcell_1_spleen |
| NBR1               | 1.49E-83 | 0.33315147 | 0.277 | 0.11  | 5.29E-79 | Bcell_1_spleen |
| PELI1              | 1.63E-83 | 0.30159051 | 0.377 | 0.171 | 5.77E-79 | Bcell_1_spleen |
| HERC3              | 2.07E-83 | 0.38665475 | 0.265 | 0.104 | 7.34E-79 | Bcell_1_spleen |
| NSF                | 8.75E-83 | 0.12049483 | 0.412 | 0.189 | 3.10E-78 | Bcell_1_spleen |
| BRD4               | 1.17E-82 | 0.11520886 | 0.262 | 0.101 | 4.14E-78 | Bcell_1_spleen |
| ENSMMUG00000060923 | 1.64E-82 | 0.10237483 | 0.585 | 0.286 | 5.80E-78 | Bcell_1_spleen |
| PLEKHB2            | 1.97E-82 | 0.16644707 | 0.338 | 0.144 | 6.99E-78 | Bcell_1_spleen |
| WDR26              | 2.89E-82 | 0.34175122 | 0.263 | 0.102 | 1.03E-77 | Bcell_1_spleen |
| UBE2D3             | 3.24E-82 | 0.27765377 | 0.826 | 0.468 | 1.15E-77 | Bcell_1_spleen |
| CCNC               | 4.75E-82 | 0.27535538 | 0.275 | 0.11  | 1.68E-77 | Bcell_1_spleen |
| SYK                | 7.12E-82 | 0.14867388 | 0.677 | 0.353 | 2.52E-77 | Bcell_1_spleen |
| POLR3GL            | 7.64E-82 | 0.10709963 | 0.333 | 0.141 | 2.71E-77 | Bcell_1_spleen |
| CASP8              | 1.04E-81 | 0.14864638 | 0.305 | 0.126 | 3.70E-77 | Bcell_1_spleen |
| CENPC              | 1.51E-81 | 0.28969561 | 0.294 | 0.122 | 5.35E-77 | Bcell_1_spleen |
| TIMM23             | 1.52E-81 | 0.20808761 | 0.331 | 0.142 | 5.37E-77 | Bcell_1_spleen |
| KLHL23             | 1.58E-81 | 0.22178857 | 0.749 | 0.402 | 5.61E-77 | Bcell_1_spleen |
| SFSWAP             | 1.66E-81 | 0.32667643 | 0.263 | 0.103 | 5.89E-77 | Bcell_1_spleen |
| COMMD1             | 2.73E-81 | 0.15021172 | 0.35  | 0.153 | 9.68E-77 | Bcell_1_spleen |
| RBM39              | 3.05E-81 | 0.25202848 | 0.883 | 0.514 | 1.08E-76 | Bcell_1_spleen |
| SIN3A              | 1.48E-80 | 0.21477803 | 0.336 | 0.146 | 5.24E-76 | Bcell_1_spleen |
| WARS2              | 1.92E-80 | 0.32554177 | 0.281 | 0.114 | 6.80E-76 | Bcell_1_spleen |
| TMED10             | 2.42E-80 | 0.11436689 | 0.416 | 0.19  | 8.58E-76 | Bcell_1_spleen |
| GRAMD4             | 2.67E-80 | 0.24278036 | 0.296 | 0.123 | 9.46E-76 | Bcell_1_spleen |
| IP6K2              | 3.21E-80 | 0.19386375 | 0.264 | 0.103 | 1.14E-75 | Bcell_1_spleen |
| CDC27              | 3.62E-80 | 0.27628184 | 0.284 | 0.116 | 1.28E-75 | Bcell_1_spleen |
| RPL9               | 3.76E-80 | 0.23377719 | 0.991 | 0.939 | 1.33E-75 | Bcell_1_spleen |
| DNPH1              | 5.07E-80 | 0.10027241 | 0.28  | 0.112 | 1.80E-75 | Bcell_1_spleen |

|                    |          |            |       |       |          |                |
|--------------------|----------|------------|-------|-------|----------|----------------|
| ZNF43              | 1.58E-79 | 0.1952711  | 0.311 | 0.132 | 5.60E-75 | Bcell_1_spleen |
| OGDH               | 2.03E-79 | 0.1756451  | 0.308 | 0.129 | 7.20E-75 | Bcell_1_spleen |
| MRPL42             | 3.34E-79 | 0.10398546 | 0.25  | 0.096 | 1.19E-74 | Bcell_1_spleen |
| DCP1A              | 4.08E-79 | 0.17171737 | 0.316 | 0.134 | 1.45E-74 | Bcell_1_spleen |
| SENP2              | 4.66E-79 | 0.1887827  | 0.307 | 0.129 | 1.65E-74 | Bcell_1_spleen |
| PPP4R3A            | 5.95E-79 | 0.2832353  | 0.258 | 0.101 | 2.11E-74 | Bcell_1_spleen |
| TAF1D              | 1.27E-78 | 0.20642968 | 0.273 | 0.11  | 4.51E-74 | Bcell_1_spleen |
| ELL2               | 1.52E-78 | 0.22273212 | 0.377 | 0.173 | 5.39E-74 | Bcell_1_spleen |
| ARIH2              | 1.93E-78 | 0.20538157 | 0.295 | 0.123 | 6.85E-74 | Bcell_1_spleen |
| WBP11              | 9.04E-78 | 0.14279558 | 0.302 | 0.127 | 3.20E-73 | Bcell_1_spleen |
| KANSL2             | 1.19E-77 | 0.22304579 | 0.269 | 0.108 | 4.20E-73 | Bcell_1_spleen |
| KIAA0040           | 1.38E-77 | 0.18447624 | 0.686 | 0.369 | 4.89E-73 | Bcell_1_spleen |
| SSBP2              | 1.89E-77 | 0.18987877 | 0.618 | 0.33  | 6.68E-73 | Bcell_1_spleen |
| COMMD3             | 2.48E-77 | 0.10953443 | 0.355 | 0.158 | 8.79E-73 | Bcell_1_spleen |
| ENSMMUG00000061913 | 2.98E-77 | 0.16253512 | 0.62  | 0.319 | 1.05E-72 | Bcell_1_spleen |
| VPS39              | 3.61E-77 | 0.16141253 | 0.314 | 0.135 | 1.28E-72 | Bcell_1_spleen |
| SECISBP2L          | 4.05E-77 | 0.28835883 | 0.29  | 0.122 | 1.44E-72 | Bcell_1_spleen |
| OS9                | 1.09E-76 | 0.15122479 | 0.277 | 0.114 | 3.87E-72 | Bcell_1_spleen |
| TSC22D3            | 4.75E-76 | 0.26899738 | 0.716 | 0.405 | 1.68E-71 | Bcell_1_spleen |
| IRF4               | 5.33E-76 | 0.18609825 | 0.255 | 0.101 | 1.89E-71 | Bcell_1_spleen |
| TFDP2              | 5.63E-76 | 0.20726987 | 0.322 | 0.142 | 1.99E-71 | Bcell_1_spleen |
| ZMAT2              | 5.81E-76 | 0.1080184  | 0.267 | 0.108 | 2.06E-71 | Bcell_1_spleen |
| ELF1               | 1.98E-75 | 0.28489687 | 0.894 | 0.55  | 7.01E-71 | Bcell_1_spleen |
| GAS7               | 3.35E-75 | 0.14988914 | 0.376 | 0.177 | 1.19E-70 | Bcell_1_spleen |
| PHC3               | 7.09E-75 | 0.2768886  | 0.267 | 0.11  | 2.51E-70 | Bcell_1_spleen |
| MTSS1              | 9.73E-75 | 0.3088201  | 0.592 | 0.33  | 3.45E-70 | Bcell_1_spleen |
| INTS6              | 1.24E-74 | 0.20463685 | 0.351 | 0.161 | 4.40E-70 | Bcell_1_spleen |
| TET2               | 2.55E-74 | 0.27252605 | 0.277 | 0.117 | 9.03E-70 | Bcell_1_spleen |
| SENP7              | 3.72E-74 | 0.11055867 | 0.278 | 0.116 | 1.32E-69 | Bcell_1_spleen |
| ELMOD3             | 7.23E-73 | 0.11133014 | 0.315 | 0.138 | 2.56E-68 | Bcell_1_spleen |
| MED27              | 9.15E-73 | 0.21325767 | 0.293 | 0.126 | 3.24E-68 | Bcell_1_spleen |
| PIP5K1A            | 1.40E-72 | 0.26222949 | 0.266 | 0.111 | 4.97E-68 | Bcell_1_spleen |
| LYST               | 1.81E-72 | 0.2414193  | 0.308 | 0.138 | 6.42E-68 | Bcell_1_spleen |

|                    |          |            |       |       |          |                |
|--------------------|----------|------------|-------|-------|----------|----------------|
| SYAP1              | 2.25E-72 | 0.11617412 | 0.294 | 0.127 | 7.97E-68 | Bcell_1_spleen |
| PMPCB              | 3.03E-72 | 0.15390921 | 0.27  | 0.112 | 1.07E-67 | Bcell_1_spleen |
| MBTPS1             | 4.02E-72 | 0.12605147 | 0.258 | 0.105 | 1.42E-67 | Bcell_1_spleen |
| BORCS5             | 9.87E-72 | 0.14774875 | 0.298 | 0.13  | 3.50E-67 | Bcell_1_spleen |
| GOLGA1             | 1.12E-71 | 0.27024045 | 0.795 | 0.508 | 3.98E-67 | Bcell_1_spleen |
| ANAPC10            | 1.60E-71 | 0.17970174 | 0.276 | 0.116 | 5.67E-67 | Bcell_1_spleen |
| OSBPL10            | 1.71E-71 | 0.35534183 | 0.33  | 0.157 | 6.05E-67 | Bcell_1_spleen |
| AFF4               | 1.84E-71 | 0.2181127  | 0.281 | 0.12  | 6.53E-67 | Bcell_1_spleen |
| CD40               | 2.37E-71 | 0.18150346 | 0.272 | 0.114 | 8.39E-67 | Bcell_1_spleen |
| PAK1IP1            | 4.02E-71 | 0.20263779 | 0.25  | 0.102 | 1.42E-66 | Bcell_1_spleen |
| TRA2A              | 1.90E-69 | 0.12821866 | 0.826 | 0.464 | 6.74E-65 | Bcell_1_spleen |
| MRPS35             | 3.29E-69 | 0.19493195 | 0.259 | 0.108 | 1.17E-64 | Bcell_1_spleen |
| SRSF11             | 8.33E-69 | 0.15717474 | 0.772 | 0.423 | 2.95E-64 | Bcell_1_spleen |
| XRN1               | 3.51E-68 | 0.12142654 | 0.299 | 0.134 | 1.24E-63 | Bcell_1_spleen |
| RPL37A             | 2.23E-67 | 0.17163013 | 0.992 | 0.939 | 7.90E-63 | Bcell_1_spleen |
| DDX3Y              | 2.26E-67 | 0.49778622 | 0.331 | 0.165 | 8.02E-63 | Bcell_1_spleen |
| KLHL28             | 5.30E-67 | 0.24849767 | 0.276 | 0.121 | 1.88E-62 | Bcell_1_spleen |
| KPNA3              | 2.24E-66 | 0.11540864 | 0.272 | 0.119 | 7.94E-62 | Bcell_1_spleen |
| IREB2              | 2.86E-66 | 0.15445846 | 0.271 | 0.117 | 1.01E-61 | Bcell_1_spleen |
| UXS1               | 3.71E-66 | 0.11396768 | 0.276 | 0.121 | 1.31E-61 | Bcell_1_spleen |
| RPL7               | 3.43E-65 | 0.26651389 | 0.973 | 0.814 | 1.22E-60 | Bcell_1_spleen |
| EIF3E              | 1.49E-64 | 0.22579344 | 0.842 | 0.497 | 5.28E-60 | Bcell_1_spleen |
| ENSMMUG00000022874 | 1.31E-63 | 0.12646834 | 0.295 | 0.135 | 4.64E-59 | Bcell_1_spleen |
| SLIRP              | 1.37E-62 | 0.12249262 | 0.735 | 0.4   | 4.84E-58 | Bcell_1_spleen |
| KLF3               | 6.89E-61 | 0.14042615 | 0.25  | 0.11  | 2.44E-56 | Bcell_1_spleen |
| EEF1G              | 1.14E-60 | 0.22547077 | 0.874 | 0.566 | 4.05E-56 | Bcell_1_spleen |
| TTC39C             | 1.55E-60 | 0.1458589  | 0.266 | 0.12  | 5.48E-56 | Bcell_1_spleen |
| ENSMMUG00000003412 | 1.84E-60 | 0.19299179 | 0.994 | 0.974 | 6.52E-56 | Bcell_1_spleen |
| SKP1               | 6.49E-57 | 0.15414469 | 0.787 | 0.453 | 2.30E-52 | Bcell_1_spleen |
| EIF3H              | 1.71E-53 | 0.1353324  | 0.798 | 0.461 | 6.05E-49 | Bcell_1_spleen |
| SP100              | 2.15E-53 | 0.19476966 | 0.877 | 0.57  | 7.62E-49 | Bcell_1_spleen |
| HNRNPA3            | 5.37E-52 | 0.1159203  | 0.777 | 0.456 | 1.90E-47 | Bcell_1_spleen |
| FCRL1              | 7.17E-52 | 0.24561218 | 0.971 | 0.805 | 2.54E-47 | Bcell_1_spleen |

|                    |          |            |       |       |          |                |
|--------------------|----------|------------|-------|-------|----------|----------------|
| ACTG1              | 5.74E-50 | 0.22084921 | 0.94  | 0.725 | 2.03E-45 | Bcell_1_spleen |
| RPL4               | 1.48E-47 | 0.20383657 | 0.964 | 0.754 | 5.25E-43 | Bcell_1_spleen |
| MEF2C              | 2.69E-43 | 0.19954861 | 0.88  | 0.626 | 9.53E-39 | Bcell_1_spleen |
| SRSF5              | 5.02E-41 | 0.1215142  | 0.866 | 0.54  | 1.78E-36 | Bcell_1_spleen |
| TRA2B              | 1.09E-37 | 0.12088135 | 0.945 | 0.664 | 3.86E-33 | Bcell_1_spleen |
| RPLP2              | 5.64E-37 | 0.13041047 | 0.993 | 0.965 | 2.00E-32 | Bcell_1_spleen |
| TMSB4X             | 1.58E-34 | 0.17018088 | 0.998 | 0.991 | 5.60E-30 | Bcell_1_spleen |
| RPS14              | 2.95E-29 | 0.10889254 | 0.997 | 0.984 | 1.05E-24 | Bcell_1_spleen |
| ENSMMUG00000064692 | 1.02E-21 | 0.13667301 | 0.869 | 0.685 | 3.60E-17 | Bcell_1_spleen |
| CD52               | 1.21E-15 | 0.13916454 | 0.972 | 0.907 | 4.29E-11 | Bcell_1_spleen |
| ENSMMUG00000062350 | 1.29E-94 | 1.40944203 | 1     | 0.985 | 4.58E-90 | Bcell_2_lung   |
| RPS21              | 4.80E-81 | 1.46166422 | 0.984 | 0.967 | 1.70E-76 | Bcell_2_lung   |
| RPS28              | 3.89E-75 | 1.15105237 | 0.995 | 0.982 | 1.38E-70 | Bcell_2_lung   |
| ENSMMUG00000005593 | 8.13E-68 | 1.08457746 | 1     | 0.99  | 2.88E-63 | Bcell_2_lung   |
| RPL10              | 7.90E-67 | 0.81795343 | 0.995 | 0.988 | 2.80E-62 | Bcell_2_lung   |
| RPL35A             | 3.78E-65 | 0.95261051 | 0.995 | 0.987 | 1.34E-60 | Bcell_2_lung   |
| TMSB10             | 3.33E-63 | 1.23130076 | 1     | 0.983 | 1.18E-58 | Bcell_2_lung   |
| RPL32              | 7.15E-63 | 0.88070036 | 1     | 0.987 | 2.54E-58 | Bcell_2_lung   |
| FAU                | 3.35E-61 | 0.96950039 | 0.989 | 0.974 | 1.19E-56 | Bcell_2_lung   |
| RPS26              | 2.08E-59 | 0.80796711 | 1     | 0.985 | 7.35E-55 | Bcell_2_lung   |
| RPL37A             | 7.18E-59 | 1.00121876 | 0.989 | 0.98  | 2.54E-54 | Bcell_2_lung   |
| RPS13              | 1.35E-58 | 0.81535706 | 0.995 | 0.982 | 4.77E-54 | Bcell_2_lung   |
| RPL34              | 8.67E-57 | 0.81598402 | 1     | 0.985 | 3.07E-52 | Bcell_2_lung   |
| RPL18              | 6.70E-56 | 0.79770786 | 0.995 | 0.986 | 2.37E-51 | Bcell_2_lung   |
| RPS12              | 1.05E-55 | 0.92122492 | 1     | 0.982 | 3.72E-51 | Bcell_2_lung   |
| RPLP1              | 1.53E-55 | 0.73879992 | 1     | 0.986 | 5.43E-51 | Bcell_2_lung   |
| RPL12              | 3.01E-55 | 0.94315849 | 0.989 | 0.974 | 1.07E-50 | Bcell_2_lung   |
| RPL39              | 6.45E-54 | 0.93100104 | 1     | 0.978 | 2.29E-49 | Bcell_2_lung   |
| RPS23              | 8.40E-54 | 0.72822007 | 0.995 | 0.985 | 2.98E-49 | Bcell_2_lung   |
| NUDT3              | 2.91E-53 | 0.81420797 | 1     | 0.992 | 1.03E-48 | Bcell_2_lung   |
| ATP5F1E            | 3.66E-53 | 1.49015556 | 0.945 | 0.942 | 1.30E-48 | Bcell_2_lung   |
| ENSMMUG00000015563 | 7.50E-53 | 0.75878875 | 1     | 0.991 | 2.66E-48 | Bcell_2_lung   |
| RPS29              | 7.97E-53 | 0.83313714 | 1     | 0.981 | 2.83E-48 | Bcell_2_lung   |

|                    |          |            |       |       |          |              |
|--------------------|----------|------------|-------|-------|----------|--------------|
| ENSMMUG00000012140 | 1.13E-52 | 1.18583891 | 0.989 | 0.981 | 4.02E-48 | Bcell_2_lung |
| RPL19              | 2.33E-52 | 0.96360881 | 1     | 0.973 | 8.25E-48 | Bcell_2_lung |
| RPS27A             | 1.26E-50 | 1.49213864 | 0.934 | 0.921 | 4.47E-46 | Bcell_2_lung |
| RPL30              | 4.93E-50 | 0.72242022 | 0.995 | 0.982 | 1.75E-45 | Bcell_2_lung |
| ZC3H10             | 8.56E-50 | 1.53478134 | 0.885 | 0.896 | 3.03E-45 | Bcell_2_lung |
| RPS9               | 7.91E-49 | 0.84201499 | 0.984 | 0.982 | 2.80E-44 | Bcell_2_lung |
| RPL36              | 4.53E-48 | 1.27370756 | 0.934 | 0.945 | 1.61E-43 | Bcell_2_lung |
| RPS5               | 3.21E-45 | 0.76840593 | 0.995 | 0.976 | 1.14E-40 | Bcell_2_lung |
| RPS24              | 3.20E-42 | 0.66376862 | 1     | 0.986 | 1.13E-37 | Bcell_2_lung |
| ENSMMUG00000060377 | 9.45E-42 | 1.93606467 | 0.819 | 0.772 | 3.35E-37 | Bcell_2_lung |
| RPS7               | 9.44E-41 | 0.66463568 | 0.995 | 0.987 | 3.35E-36 | Bcell_2_lung |
| ENSMMUG00000056354 | 8.60E-37 | 1.04388956 | 0.951 | 0.953 | 3.05E-32 | Bcell_2_lung |
| ENSMMUG00000013429 | 6.98E-36 | 0.62341121 | 1     | 0.988 | 2.47E-31 | Bcell_2_lung |
| RPL24              | 8.30E-35 | 0.70161159 | 0.978 | 0.975 | 2.94E-30 | Bcell_2_lung |
| ENSMMUG00000052747 | 1.72E-33 | 1.7043793  | 0.797 | 0.773 | 6.11E-29 | Bcell_2_lung |
| RPL22L1            | 2.82E-33 | 1.26036139 | 0.89  | 0.903 | 9.99E-29 | Bcell_2_lung |
| MAMU-DRB1          | 6.71E-33 | 0.73724376 | 0.989 | 0.997 | 2.38E-28 | Bcell_2_lung |
| ENSMMUG00000019505 | 3.56E-32 | 1.50666576 | 0.808 | 0.832 | 1.26E-27 | Bcell_2_lung |
| RPL28              | 4.28E-32 | 0.59220724 | 0.995 | 0.987 | 1.52E-27 | Bcell_2_lung |
| ELOA               | 8.77E-32 | 0.63556809 | 1     | 0.979 | 3.11E-27 | Bcell_2_lung |
| UBA52              | 3.39E-31 | 0.69946301 | 0.995 | 0.977 | 1.20E-26 | Bcell_2_lung |
| RPL8               | 4.66E-31 | 0.65341502 | 0.989 | 0.979 | 1.65E-26 | Bcell_2_lung |
| ATP5MG             | 4.58E-28 | 1.15246348 | 0.841 | 0.88  | 1.62E-23 | Bcell_2_lung |
| RPL5               | 4.74E-28 | 0.60747388 | 0.989 | 0.983 | 1.68E-23 | Bcell_2_lung |
| RPL27              | 7.23E-28 | 0.59575699 | 0.989 | 0.98  | 2.56E-23 | Bcell_2_lung |
| RPL22              | 2.17E-27 | 0.70904157 | 0.962 | 0.973 | 7.70E-23 | Bcell_2_lung |
| RPL36AL            | 6.07E-26 | 1.05365686 | 0.901 | 0.935 | 2.15E-21 | Bcell_2_lung |
| GPR183             | 6.16E-26 | 1.695856   | 0.797 | 0.775 | 2.18E-21 | Bcell_2_lung |
| RPSA               | 7.61E-26 | 0.63118414 | 0.984 | 0.981 | 2.70E-21 | Bcell_2_lung |
| RPS4X              | 2.70E-24 | 0.50610596 | 1     | 0.981 | 9.57E-20 | Bcell_2_lung |
| ENSMMUG00000003073 | 4.33E-23 | 0.61293595 | 0.962 | 0.977 | 1.54E-18 | Bcell_2_lung |
| RPL38              | 4.54E-23 | 0.63715169 | 0.989 | 0.972 | 1.61E-18 | Bcell_2_lung |
| COMMD6             | 1.19E-21 | 1.03908003 | 0.835 | 0.878 | 4.20E-17 | Bcell_2_lung |

|                    |          |            |       |       |            |              |
|--------------------|----------|------------|-------|-------|------------|--------------|
| HINT1              | 1.79E-20 | 0.93913109 | 0.863 | 0.912 | 6.34E-16   | Bcell_2_lung |
| NME2               | 2.65E-20 | 0.75307232 | 0.94  | 0.964 | 9.40E-16   | Bcell_2_lung |
| ENSMMUG00000006463 | 8.12E-20 | 1.16674687 | 0.78  | 0.847 | 2.88E-15   | Bcell_2_lung |
| ENSMMUG00000003867 | 2.56E-19 | 0.38552488 | 1     | 0.991 | 9.07E-15   | Bcell_2_lung |
| NSA2               | 7.32E-19 | 1.10767545 | 0.786 | 0.853 | 2.59E-14   | Bcell_2_lung |
| CD9                | 4.82E-18 | 2.80674944 | 0.495 | 0.306 | 1.71E-13   | Bcell_2_lung |
| FTL                | 4.91E-17 | 1.18412516 | 0.78  | 0.867 | 1.74E-12   | Bcell_2_lung |
| RPL35              | 5.78E-17 | 0.58903494 | 0.967 | 0.977 | 2.05E-12   | Bcell_2_lung |
| RPL7A              | 4.71E-16 | 0.46525075 | 0.989 | 0.983 | 1.67E-11   | Bcell_2_lung |
| GPR65              | 1.04E-15 | 2.75031256 | 0.473 | 0.305 | 3.69E-11   | Bcell_2_lung |
| ENSMMUG00000038348 | 3.88E-15 | 1.02830171 | 0.753 | 0.9   | 1.37E-10   | Bcell_2_lung |
| ENSMMUG00000016305 | 6.30E-15 | 2.00859049 | 0.582 | 0.53  | 2.23E-10   | Bcell_2_lung |
| HNRNPH2            | 1.89E-14 | 0.55279682 | 0.962 | 0.976 | 6.68E-10   | Bcell_2_lung |
| TMA7               | 4.21E-14 | 1.21644058 | 0.692 | 0.801 | 1.49E-09   | Bcell_2_lung |
| ENSMMUG00000022489 | 1.60E-13 | 1.376005   | 0.659 | 0.737 | 5.66E-09   | Bcell_2_lung |
| ENSMMUG00000056183 | 1.80E-13 | 0.63078822 | 0.89  | 0.969 | 6.39E-09   | Bcell_2_lung |
| SRP14              | 3.56E-13 | 0.96142668 | 0.731 | 0.864 | 1.26E-08   | Bcell_2_lung |
| ENSMMUG00000064139 | 1.26E-12 | 1.08457219 | 0.747 | 0.879 | 4.47E-08   | Bcell_2_lung |
| MYL12B             | 3.92E-12 | 1.00719692 | 0.709 | 0.833 | 1.39E-07   | Bcell_2_lung |
| IFI16              | 5.72E-12 | 1.27958589 | 0.67  | 0.749 | 2.03E-07   | Bcell_2_lung |
| IFI27L2            | 7.72E-12 | 1.66554323 | 0.582 | 0.569 | 2.74E-07   | Bcell_2_lung |
| ENSMMUG00000002320 | 4.81E-11 | 0.7948861  | 0.802 | 0.929 | 1.70E-06   | Bcell_2_lung |
| TXNIP              | 6.41E-11 | 1.69838097 | 0.582 | 0.579 | 2.27E-06   | Bcell_2_lung |
| ARPC3              | 1.72E-10 | 0.68237649 | 0.791 | 0.938 | 6.11E-06   | Bcell_2_lung |
| ENSMMUG00000004545 | 2.97E-10 | 0.7386744  | 0.758 | 0.897 | 1.05E-05   | Bcell_2_lung |
| ENSMMUG00000063637 | 3.34E-10 | 0.86567849 | 0.758 | 0.907 | 1.18E-05   | Bcell_2_lung |
| GCN1               | 3.51E-10 | 0.38463992 | 0.973 | 0.978 | 1.24E-05   | Bcell_2_lung |
| TAGLN2             | 4.21E-10 | 1.77901197 | 0.599 | 0.61  | 1.49E-05   | Bcell_2_lung |
| ROMO1              | 4.43E-10 | 1.58619475 | 0.566 | 0.575 | 1.57E-05   | Bcell_2_lung |
| ENSMMUG00000054038 | 4.86E-10 | 0.77317938 | 0.813 | 0.955 | 1.72E-05   | Bcell_2_lung |
| ENSMMUG00000015270 | 1.12E-09 | 0.25818047 | 1     | 0.991 | 3.95E-05   | Bcell_2_lung |
| CHCHD2             | 2.85E-09 | 0.8556091  | 0.692 | 0.858 | 0.00010106 | Bcell_2_lung |
| ELOB               | 3.40E-09 | 1.51085296 | 0.555 | 0.579 | 0.0001205  | Bcell_2_lung |

|                    |          |            |       |       |            |              |
|--------------------|----------|------------|-------|-------|------------|--------------|
| TAGAP              | 5.27E-09 | 0.15567253 | 0.203 | 0.537 | 0.00018667 | Bcell_2_lung |
| HCST               | 1.00E-08 | 2.19827229 | 0.445 | 0.366 | 0.00035487 | Bcell_2_lung |
| ATP6V1G1           | 1.73E-08 | 0.90258924 | 0.692 | 0.845 | 0.00061193 | Bcell_2_lung |
| COX6C              | 2.34E-08 | 0.88983105 | 0.681 | 0.839 | 0.00083014 | Bcell_2_lung |
| EIF3K              | 3.00E-08 | 0.75000804 | 0.736 | 0.907 | 0.00106228 | Bcell_2_lung |
| ZNF267             | 3.34E-08 | 0.18170932 | 0.066 | 0.27  | 0.00118444 | Bcell_2_lung |
| ATP5MPL            | 6.29E-08 | 1.17702621 | 0.593 | 0.676 | 0.00222743 | Bcell_2_lung |
| OGDH               | 7.75E-08 | 0.21722037 | 0.115 | 0.356 | 0.00274666 | Bcell_2_lung |
| IGKC               | 9.03E-08 | 1.4914671  | 0.489 | 0.399 | 0.00319888 | Bcell_2_lung |
| GNAI2.1            | 9.13E-08 | 0.14095093 | 0.176 | 0.468 | 0.00323507 | Bcell_2_lung |
| ENSMMUG00000030408 | 1.81E-07 | 1.53319812 | 0.505 | 0.513 | 0.00640158 | Bcell_2_lung |
| SAFB               | 2.48E-07 | 0.610385   | 0.758 | 0.909 | 0.00880411 | Bcell_2_lung |
| CD79B              | 3.05E-07 | 0.79792327 | 0.791 | 0.92  | 0.010805   | Bcell_2_lung |
| YWHAE              | 3.23E-07 | 0.20954897 | 0.214 | 0.519 | 0.0114386  | Bcell_2_lung |
| PRPF31             | 3.62E-07 | 1.70631864 | 0.478 | 0.46  | 0.01281056 | Bcell_2_lung |
| CALCOCO2           | 3.71E-07 | 0.25999342 | 0.165 | 0.429 | 0.01313639 | Bcell_2_lung |
| GTF2A2             | 4.43E-07 | 0.22359389 | 0.176 | 0.443 | 0.01570994 | Bcell_2_lung |
| ENSMMUG00000044585 | 4.95E-07 | 1.73066661 | 0.495 | 0.502 | 0.01754641 | Bcell_2_lung |
| DDOST              | 5.17E-07 | 0.21065367 | 0.159 | 0.417 | 0.01831203 | Bcell_2_lung |
| CYCS               | 5.34E-07 | 0.10465452 | 0.143 | 0.384 | 0.0189136  | Bcell_2_lung |
| ATP6V0E1           | 5.36E-07 | 0.12367768 | 0.242 | 0.565 | 0.01899687 | Bcell_2_lung |
| ATF4               | 6.70E-07 | 0.17985562 | 0.242 | 0.566 | 0.02373506 | Bcell_2_lung |
| ROBO2              | 6.72E-07 | 0.99732852 | 0.626 | 0.767 | 0.02382243 | Bcell_2_lung |
| PPP1CB             | 7.31E-07 | 0.12794226 | 0.214 | 0.511 | 0.02589643 | Bcell_2_lung |
| ATP5F1A            | 7.51E-07 | 0.12184779 | 0.247 | 0.58  | 0.02662313 | Bcell_2_lung |
| ENSMMUG00000001210 | 7.90E-07 | 0.6737843  | 0.747 | 0.879 | 0.02799351 | Bcell_2_lung |
| MAMU-E             | 8.61E-07 | 0.58175594 | 0.819 | 0.956 | 0.03049839 | Bcell_2_lung |
| SYNGR2             | 9.53E-07 | 0.1427792  | 0.126 | 0.351 | 0.03375606 | Bcell_2_lung |
| EEF1D              | 9.60E-07 | 0.68613768 | 0.736 | 0.893 | 0.03401879 | Bcell_2_lung |
| IFI30              | 9.78E-07 | 1.35577513 | 0.533 | 0.594 | 0.03465795 | Bcell_2_lung |
| GMFG               | 1.04E-06 | 1.01478446 | 0.648 | 0.813 | 0.03678676 | Bcell_2_lung |
| AKR7A2             | 1.04E-06 | 0.18829304 | 0.099 | 0.299 | 0.03698832 | Bcell_2_lung |
| STMN1              | 1.05E-06 | 2.20150864 | 0.363 | 0.278 | 0.03712627 | Bcell_2_lung |

|                    |          |            |       |       |            |              |
|--------------------|----------|------------|-------|-------|------------|--------------|
| AMDHD1             | 1.09E-06 | 0.24117143 | 0.225 | 0.524 | 0.03866888 | Bcell_2_lung |
| NDUFAB1            | 1.14E-06 | 0.2162427  | 0.093 | 0.289 | 0.04044125 | Bcell_2_lung |
| MAMU-DRA           | 1.38E-06 | 0.23910769 | 1     | 0.998 | 0.04880393 | Bcell_2_lung |
| IL2RG              | 1.46E-06 | 0.104214   | 0.214 | 0.504 | 0.05157308 | Bcell_2_lung |
| ENSMMUG00000014648 | 1.57E-06 | 0.96342367 | 0.643 | 0.835 | 0.05565392 | Bcell_2_lung |
| HNRNPDL            | 1.83E-06 | 1.1028094  | 0.632 | 0.798 | 0.06489391 | Bcell_2_lung |
| UQCRB              | 1.86E-06 | 0.11008957 | 0.137 | 0.362 | 0.06592534 | Bcell_2_lung |
| H4C15              | 1.97E-06 | 0.45466843 | 0.11  | 0.311 | 0.06969587 | Bcell_2_lung |
| RPN1               | 2.19E-06 | 0.13244865 | 0.11  | 0.312 | 0.07774982 | Bcell_2_lung |
| ENSMMUG00000019238 | 2.23E-06 | 0.24723514 | 0.126 | 0.345 | 0.0788673  | Bcell_2_lung |
| HDAC1              | 2.31E-06 | 0.24490579 | 0.137 | 0.362 | 0.08170674 | Bcell_2_lung |
| RPL6               | 2.32E-06 | 0.25119801 | 0.978 | 0.981 | 0.08222565 | Bcell_2_lung |
| PHF11              | 2.40E-06 | 0.15274337 | 0.154 | 0.393 | 0.084943   | Bcell_2_lung |
| MAMU-DMA           | 2.50E-06 | 0.67068342 | 0.72  | 0.91  | 0.08850108 | Bcell_2_lung |
| CCT5               | 2.77E-06 | 0.25811958 | 0.192 | 0.462 | 0.09804312 | Bcell_2_lung |
| H2AC20             | 2.79E-06 | 0.30640428 | 0.082 | 0.261 | 0.09880815 | Bcell_2_lung |
| LSM10              | 2.88E-06 | 0.27679703 | 0.181 | 0.439 | 0.10215739 | Bcell_2_lung |
| EIF1AX             | 2.91E-06 | 0.16782746 | 0.236 | 0.529 | 0.10301712 | Bcell_2_lung |
| NDUFA1             | 3.11E-06 | 1.32793598 | 0.544 | 0.635 | 0.11021994 | Bcell_2_lung |
| PRPSAP2            | 3.17E-06 | 0.13956429 | 0.099 | 0.287 | 0.11248509 | Bcell_2_lung |
| WAS                | 3.30E-06 | 0.26112062 | 0.148 | 0.378 | 0.11682557 | Bcell_2_lung |
| H2AFZ              | 3.33E-06 | 1.93139604 | 0.418 | 0.381 | 0.11797841 | Bcell_2_lung |
| ABCF1              | 3.37E-06 | 0.33891206 | 0.143 | 0.364 | 0.11949946 | Bcell_2_lung |
| LTV1               | 3.65E-06 | 0.22507416 | 0.137 | 0.356 | 0.12917223 | Bcell_2_lung |
| N4BP2L2            | 4.15E-06 | 0.24336079 | 0.198 | 0.458 | 0.1469578  | Bcell_2_lung |
| BRK1               | 4.45E-06 | 0.32307736 | 0.209 | 0.485 | 0.15775465 | Bcell_2_lung |
| HIGD2A             | 4.55E-06 | 0.17254801 | 0.093 | 0.278 | 0.16127692 | Bcell_2_lung |
| PGK1               | 4.72E-06 | 0.33259691 | 0.231 | 0.531 | 0.16706842 | Bcell_2_lung |
| ENSMMUG00000056012 | 5.56E-06 | 0.14886335 | 0.198 | 0.466 | 0.19697463 | Bcell_2_lung |
| DNAJC8             | 6.22E-06 | 0.21030013 | 0.154 | 0.377 | 0.22028908 | Bcell_2_lung |
| ZNF483             | 6.24E-06 | 1.04591786 | 0.61  | 0.737 | 0.22096718 | Bcell_2_lung |
| CWC15              | 6.29E-06 | 0.42624933 | 0.198 | 0.462 | 0.2228324  | Bcell_2_lung |
| RSL1D1             | 6.66E-06 | 0.13304191 | 0.137 | 0.349 | 0.23607208 | Bcell_2_lung |



|                     |          |            |       |       |            |              |
|---------------------|----------|------------|-------|-------|------------|--------------|
| ENSMMUG000000061128 | 6.88E-06 | 0.11576943 | 0.275 | 0.601 | 0.24378852 | Bcell_2_lung |
| ERLEC1              | 7.41E-06 | 0.318662   | 0.099 | 0.281 | 0.26269522 | Bcell_2_lung |
| ATP5IF1             | 8.63E-06 | 0.34245495 | 0.225 | 0.51  | 0.30570627 | Bcell_2_lung |
| CYSLTR1             | 9.31E-06 | 0.29859022 | 0.115 | 0.303 | 0.32998002 | Bcell_2_lung |
| ENSMMUG000000004539 | 9.33E-06 | 0.26918802 | 0.181 | 0.43  | 0.33050226 | Bcell_2_lung |
| TRMT10C             | 1.05E-05 | 0.12559172 | 0.093 | 0.266 | 0.37285681 | Bcell_2_lung |
| RBBP4               | 1.12E-05 | 0.13350467 | 0.165 | 0.389 | 0.39670609 | Bcell_2_lung |
| COX7C               | 1.28E-05 | 0.67758089 | 0.692 | 0.887 | 0.4531071  | Bcell_2_lung |
| GOLGA1              | 1.28E-05 | 0.25609934 | 0.148 | 0.356 | 0.45512887 | Bcell_2_lung |
| KRTCAP2             | 1.41E-05 | 0.7482436  | 0.659 | 0.825 | 0.49804797 | Bcell_2_lung |
| UBL5                | 1.58E-05 | 1.33054541 | 0.527 | 0.619 | 0.56003026 | Bcell_2_lung |
| PSMA1               | 1.62E-05 | 0.37003123 | 0.181 | 0.417 | 0.57480571 | Bcell_2_lung |
| PSMB4               | 1.75E-05 | 0.30597803 | 0.176 | 0.402 | 0.61931921 | Bcell_2_lung |
| AKR1B1              | 1.96E-05 | 0.1786018  | 0.088 | 0.253 | 0.69444399 | Bcell_2_lung |
| RBMX                | 2.04E-05 | 0.3870267  | 0.242 | 0.528 | 0.72279672 | Bcell_2_lung |
| ANAPC13             | 2.12E-05 | 0.38656262 | 0.121 | 0.309 | 0.75278505 | Bcell_2_lung |
| EIF2S2              | 2.22E-05 | 0.12723259 | 0.236 | 0.505 | 0.78719286 | Bcell_2_lung |
| TM2D1               | 2.22E-05 | 0.31308055 | 0.088 | 0.252 | 0.78723119 | Bcell_2_lung |
| NFKBID              | 2.22E-05 | 0.13724833 | 0.104 | 0.277 | 0.78764687 | Bcell_2_lung |
| NDUFA5              | 2.49E-05 | 0.20022478 | 0.132 | 0.323 | 0.88228062 | Bcell_2_lung |
| DDT                 | 2.58E-05 | 0.2108318  | 0.126 | 0.312 | 0.91502545 | Bcell_2_lung |
| EIF3I               | 2.66E-05 | 0.27850536 | 0.187 | 0.422 | 0.94321859 | Bcell_2_lung |
| TMEM50A             | 2.68E-05 | 0.24410981 | 0.137 | 0.333 | 0.94947058 | Bcell_2_lung |
| TMED4               | 2.71E-05 | 0.25227694 | 0.11  | 0.284 | 0.9608827  | Bcell_2_lung |
| NCOA7               | 2.71E-05 | 0.15919377 | 0.176 | 0.392 | 0.96161008 | Bcell_2_lung |
| POLD4               | 2.84E-05 | 0.14461578 | 0.137 | 0.332 | 1          | Bcell_2_lung |
| TAF7                | 2.86E-05 | 0.22475729 | 0.22  | 0.479 | 1          | Bcell_2_lung |
| AMD1                | 3.32E-05 | 0.32636647 | 0.181 | 0.409 | 1          | Bcell_2_lung |
| PRPF4B              | 3.42E-05 | 0.1033545  | 0.341 | 0.703 | 1          | Bcell_2_lung |
| UFC1                | 3.48E-05 | 0.11436747 | 0.214 | 0.471 | 1          | Bcell_2_lung |
| ACTN4               | 3.49E-05 | 0.10988248 | 0.099 | 0.265 | 1          | Bcell_2_lung |
| ENSMMUG000000056793 | 3.50E-05 | 0.77910712 | 0.621 | 0.789 | 1          | Bcell_2_lung |
| NF1                 | 3.57E-05 | 0.26637888 | 0.275 | 0.569 | 1          | Bcell_2_lung |

|                     |            |            |       |       |                |
|---------------------|------------|------------|-------|-------|----------------|
| DCP2                | 3.73E-05   | 0.27028518 | 0.121 | 0.3   | 1 Bcell_2_lung |
| TDG                 | 3.87E-05   | 0.27958533 | 0.099 | 0.264 | 1 Bcell_2_lung |
| TOPORS              | 4.06E-05   | 0.25450432 | 0.22  | 0.47  | 1 Bcell_2_lung |
| CLNS1A              | 4.09E-05   | 0.44172491 | 0.165 | 0.384 | 1 Bcell_2_lung |
| TRMT112             | 4.59E-05   | 0.14715868 | 0.247 | 0.532 | 1 Bcell_2_lung |
| JPT1                | 4.64E-05   | 0.7639716  | 0.648 | 0.827 | 1 Bcell_2_lung |
| BTK                 | 5.10E-05   | 0.19380689 | 0.176 | 0.394 | 1 Bcell_2_lung |
| OSTC                | 5.69E-05   | 0.41714166 | 0.231 | 0.497 | 1 Bcell_2_lung |
| BCL2A1              | 5.98E-05   | 2.83306606 | 0.275 | 0.198 | 1 Bcell_2_lung |
| TMEM219             | 5.99E-05   | 0.50681528 | 0.137 | 0.327 | 1 Bcell_2_lung |
| HMGB1               | 6.42E-05   | 0.94041232 | 0.643 | 0.839 | 1 Bcell_2_lung |
| MDH1                | 6.43E-05   | 0.51890946 | 0.137 | 0.327 | 1 Bcell_2_lung |
| ENSMMUG00000006499  | 6.60E-05   | 0.24334    | 0.231 | 0.497 | 1 Bcell_2_lung |
| RSBN1L              | 6.95E-05   | 0.13339379 | 0.11  | 0.276 | 1 Bcell_2_lung |
| MRPS31              | 7.05E-05   | 0.12101169 | 0.115 | 0.286 | 1 Bcell_2_lung |
| ENSMMUG000000055457 | 7.28E-05   | 0.14529604 | 0.198 | 0.426 | 1 Bcell_2_lung |
| PSMD12              | 7.30E-05   | 0.33736274 | 0.137 | 0.325 | 1 Bcell_2_lung |
| ST13                | 7.35E-05   | 0.16064617 | 0.253 | 0.53  | 1 Bcell_2_lung |
| ESYT1               | 7.37E-05   | 0.27695345 | 0.11  | 0.275 | 1 Bcell_2_lung |
| SMU1                | 7.47E-05   | 0.47301388 | 0.121 | 0.296 | 1 Bcell_2_lung |
| TOMM22              | 7.58E-05   | 0.20525366 | 0.148 | 0.339 | 1 Bcell_2_lung |
| IKBKB               | 7.98E-05   | 0.10187868 | 0.104 | 0.264 | 1 Bcell_2_lung |
| ENSMMUG000000018740 | 7.99E-05   | 0.29900054 | 0.11  | 0.275 | 1 Bcell_2_lung |
| ENSMMUG000000045425 | 8.16E-05   | 0.52069559 | 0.11  | 0.276 | 1 Bcell_2_lung |
| ENSMMUG000000042951 | 8.37E-05   | 0.21141642 | 0.225 | 0.474 | 1 Bcell_2_lung |
| IRF3                | 8.97E-05   | 0.39996006 | 0.143 | 0.333 | 1 Bcell_2_lung |
| GTF3C6              | 9.01E-05   | 0.31595736 | 0.126 | 0.302 | 1 Bcell_2_lung |
| RBM8A               | 9.01E-05   | 1.66976955 | 0.429 | 0.434 | 1 Bcell_2_lung |
| CLCN3               | 9.27E-05   | 0.39062883 | 0.192 | 0.411 | 1 Bcell_2_lung |
| ITPA                | 9.69E-05   | 0.1535626  | 0.115 | 0.278 | 1 Bcell_2_lung |
| TM9SF1              | 0.00010413 | 0.30766564 | 0.099 | 0.251 | 1 Bcell_2_lung |
| RWDD1               | 0.00010811 | 0.25037654 | 0.264 | 0.538 | 1 Bcell_2_lung |
| SSBP1               | 0.00011085 | 0.32312715 | 0.176 | 0.384 | 1 Bcell_2_lung |

|                   |            |            |       |       |                |
|-------------------|------------|------------|-------|-------|----------------|
| PTGES3            | 0.00011397 | 0.13271617 | 0.357 | 0.71  | 1 Bcell_2_lung |
| HIKESHI           | 0.0001154  | 0.2741784  | 0.115 | 0.278 | 1 Bcell_2_lung |
| CLDND1            | 0.0001161  | 0.24737441 | 0.165 | 0.362 | 1 Bcell_2_lung |
| CNBP              | 0.00011616 | 0.20250225 | 0.313 | 0.636 | 1 Bcell_2_lung |
| PPA1              | 0.00011879 | 0.26230096 | 0.104 | 0.261 | 1 Bcell_2_lung |
| ENSMUG00000031947 | 0.0001216  | 0.99698223 | 0.577 | 0.753 | 1 Bcell_2_lung |
| ENO1              | 0.00012456 | 0.25254495 | 0.335 | 0.657 | 1 Bcell_2_lung |
| UBE2V2            | 0.00012806 | 0.2772292  | 0.104 | 0.259 | 1 Bcell_2_lung |
| NDUFA4            | 0.00013545 | 1.00236178 | 0.566 | 0.723 | 1 Bcell_2_lung |
| SLC25A43          | 0.00014718 | 1.13882234 | 0.549 | 0.702 | 1 Bcell_2_lung |
| TXN2              | 0.00014932 | 0.5587093  | 0.115 | 0.278 | 1 Bcell_2_lung |
| CKS2              | 0.0001497  | 0.52378434 | 0.121 | 0.285 | 1 Bcell_2_lung |
| ZC3H15            | 0.00015332 | 0.31823664 | 0.225 | 0.468 | 1 Bcell_2_lung |
| NR4A1             | 0.00015711 | 1.90157415 | 0.379 | 0.345 | 1 Bcell_2_lung |
| TBCC              | 0.00016284 | 0.47765789 | 0.104 | 0.259 | 1 Bcell_2_lung |
| DDX46             | 0.00016375 | 0.34132043 | 0.22  | 0.46  | 1 Bcell_2_lung |
| POLR1D            | 0.0001669  | 0.4173668  | 0.258 | 0.538 | 1 Bcell_2_lung |
| TENT5C            | 0.00017062 | 0.16814174 | 0.187 | 0.39  | 1 Bcell_2_lung |
| KATNBL1           | 0.00017533 | 0.15635329 | 0.176 | 0.374 | 1 Bcell_2_lung |
| PSMA7             | 0.00017914 | 0.11138746 | 0.308 | 0.622 | 1 Bcell_2_lung |
| ENSMUG00000022769 | 0.0001803  | 0.27567768 | 0.319 | 0.642 | 1 Bcell_2_lung |
| DTD1              | 0.00019071 | 0.18949314 | 0.11  | 0.265 | 1 Bcell_2_lung |
| P2RY8             | 0.00019435 | 0.2826962  | 0.214 | 0.437 | 1 Bcell_2_lung |
| BCCIP             | 0.00019572 | 0.20377052 | 0.137 | 0.31  | 1 Bcell_2_lung |
| PI4K2B            | 0.00019788 | 0.27429749 | 0.28  | 0.567 | 1 Bcell_2_lung |
| BUD31             | 0.00020664 | 0.13058475 | 0.132 | 0.298 | 1 Bcell_2_lung |
| SEC61G            | 0.00021137 | 1.41958763 | 0.495 | 0.58  | 1 Bcell_2_lung |
| SELENOS           | 0.00021934 | 0.27117781 | 0.297 | 0.597 | 1 Bcell_2_lung |
| CAPZB             | 0.00022299 | 0.34611237 | 0.214 | 0.448 | 1 Bcell_2_lung |
| BRD4              | 0.00022373 | 0.40420457 | 0.11  | 0.261 | 1 Bcell_2_lung |
| YWHAB             | 0.00022433 | 0.25315687 | 0.308 | 0.624 | 1 Bcell_2_lung |
| SMNDC1            | 0.00022601 | 0.6845608  | 0.154 | 0.337 | 1 Bcell_2_lung |
| BTG1              | 0.00022923 | 0.71931159 | 0.681 | 0.851 | 1 Bcell_2_lung |

|                     |            |            |       |       |                |
|---------------------|------------|------------|-------|-------|----------------|
| NDUFS6              | 0.00023406 | 0.68737142 | 0.11  | 0.264 | 1 Bcell_2_lung |
| OAZ1                | 0.00023466 | 1.39736097 | 0.5   | 0.584 | 1 Bcell_2_lung |
| TXNL1               | 0.00023951 | 0.48263028 | 0.143 | 0.322 | 1 Bcell_2_lung |
| PCMT1               | 0.00026775 | 0.34771202 | 0.115 | 0.27  | 1 Bcell_2_lung |
| GADD45B             | 0.00027182 | 0.17451306 | 0.203 | 0.417 | 1 Bcell_2_lung |
| SCP2                | 0.00028649 | 0.21029448 | 0.198 | 0.405 | 1 Bcell_2_lung |
| MAMU-A              | 0.00030033 | 0.27402508 | 0.385 | 0.759 | 1 Bcell_2_lung |
| PSMB10              | 0.00030254 | 0.40190137 | 0.137 | 0.308 | 1 Bcell_2_lung |
| ENSMMUG000000002324 | 0.00030971 | 1.19232244 | 0.495 | 0.589 | 1 Bcell_2_lung |
| BZW1                | 0.00031308 | 0.16232571 | 0.368 | 0.721 | 1 Bcell_2_lung |
| CEBPZ               | 0.00031838 | 0.41363329 | 0.154 | 0.333 | 1 Bcell_2_lung |
| SNRPB2              | 0.0003497  | 0.30662634 | 0.198 | 0.403 | 1 Bcell_2_lung |
| IGHM                | 0.00035109 | 0.28483781 | 0.94  | 0.992 | 1 Bcell_2_lung |
| MGMT                | 0.00036454 | 0.1565887  | 0.143 | 0.305 | 1 Bcell_2_lung |
| HSPD1               | 0.00036558 | 0.28533516 | 0.203 | 0.416 | 1 Bcell_2_lung |
| ARF1                | 0.00037045 | 0.28611617 | 0.264 | 0.532 | 1 Bcell_2_lung |
| ANP32E              | 0.00040181 | 0.2069789  | 0.154 | 0.323 | 1 Bcell_2_lung |
| SMDT1               | 0.00042971 | 0.70812668 | 0.643 | 0.851 | 1 Bcell_2_lung |
| DPY30               | 0.00043008 | 0.53178091 | 0.115 | 0.265 | 1 Bcell_2_lung |
| BTF3                | 0.0004651  | 0.52935532 | 0.714 | 0.901 | 1 Bcell_2_lung |
| TCF3                | 0.00046979 | 0.3418364  | 0.154 | 0.325 | 1 Bcell_2_lung |
| ADARB2              | 0.00047785 | 0.52159858 | 0.11  | 0.251 | 1 Bcell_2_lung |
| ENSMMUG000000028699 | 0.00048997 | 0.67129853 | 0.154 | 0.327 | 1 Bcell_2_lung |
| REEP5               | 0.00050134 | 0.52806325 | 0.165 | 0.35  | 1 Bcell_2_lung |
| TMBIM4              | 0.0005028  | 0.39570978 | 0.275 | 0.548 | 1 Bcell_2_lung |
| ENSMMUG000000007657 | 0.00051187 | 1.1176196  | 0.511 | 0.629 | 1 Bcell_2_lung |
| SRSF7               | 0.00053087 | 0.28981061 | 0.341 | 0.672 | 1 Bcell_2_lung |
| LAMTOR2             | 0.00055916 | 0.25829385 | 0.231 | 0.452 | 1 Bcell_2_lung |
| SSR3                | 0.00059562 | 0.39826597 | 0.132 | 0.284 | 1 Bcell_2_lung |
| MCTS1               | 0.00061718 | 0.46738404 | 0.11  | 0.252 | 1 Bcell_2_lung |
| SATB1               | 0.00061804 | 0.35668238 | 0.181 | 0.369 | 1 Bcell_2_lung |
| ZMAT2               | 0.00061924 | 0.36517451 | 0.121 | 0.267 | 1 Bcell_2_lung |
| RAC2                | 0.00064147 | 0.54981902 | 0.258 | 0.514 | 1 Bcell_2_lung |

|                    |            |            |       |       |                |
|--------------------|------------|------------|-------|-------|----------------|
| SEC14L2            | 0.00068161 | 0.25288481 | 0.115 | 0.255 | 1 Bcell_2_lung |
| TWF2               | 0.00069749 | 0.64459021 | 0.165 | 0.347 | 1 Bcell_2_lung |
| FAM133B            | 0.00072258 | 0.28870311 | 0.214 | 0.417 | 1 Bcell_2_lung |
| CD72               | 0.00073501 | 0.28951847 | 0.275 | 0.525 | 1 Bcell_2_lung |
| UPF2               | 0.00074504 | 0.70318352 | 0.165 | 0.34  | 1 Bcell_2_lung |
| ARF6               | 0.00075549 | 0.42037855 | 0.17  | 0.351 | 1 Bcell_2_lung |
| ENSMMUG00000059017 | 0.00078363 | 0.34386001 | 0.269 | 0.532 | 1 Bcell_2_lung |
| PFDN4              | 0.00082103 | 0.65607511 | 0.176 | 0.356 | 1 Bcell_2_lung |
| NIBAN3             | 0.00083065 | 0.40460825 | 0.17  | 0.347 | 1 Bcell_2_lung |
| PWP1               | 0.0008379  | 0.2898133  | 0.121 | 0.265 | 1 Bcell_2_lung |
| ANAPC16            | 0.00083842 | 0.46613012 | 0.159 | 0.333 | 1 Bcell_2_lung |
| S100A10            | 0.00084549 | 0.49060528 | 0.187 | 0.37  | 1 Bcell_2_lung |
| COPS6              | 0.00085725 | 0.48171123 | 0.203 | 0.408 | 1 Bcell_2_lung |
| MRFAP1             | 0.00088196 | 0.31295002 | 0.137 | 0.294 | 1 Bcell_2_lung |
| KRR1               | 0.00088446 | 0.50833777 | 0.115 | 0.254 | 1 Bcell_2_lung |
| ENSMMUG00000061913 | 0.00089955 | 0.24436283 | 0.313 | 0.601 | 1 Bcell_2_lung |
| SAP18              | 0.00090193 | 0.2370111  | 0.253 | 0.487 | 1 Bcell_2_lung |
| PSMB3              | 0.00093877 | 0.63749839 | 0.192 | 0.387 | 1 Bcell_2_lung |
| ILF2               | 0.00095996 | 0.4788249  | 0.143 | 0.301 | 1 Bcell_2_lung |
| COX16              | 0.00098181 | 0.41144083 | 0.291 | 0.556 | 1 Bcell_2_lung |
| SUB1               | 0.00099531 | 0.76018925 | 0.648 | 0.843 | 1 Bcell_2_lung |
| BAX                | 0.00101648 | 0.46886265 | 0.121 | 0.265 | 1 Bcell_2_lung |
| HMGB2              | 0.00102305 | 0.5684941  | 0.165 | 0.333 | 1 Bcell_2_lung |
| MYL6               | 0.00102351 | 0.98409697 | 0.522 | 0.646 | 1 Bcell_2_lung |
| SPCS1              | 0.00112278 | 0.47909335 | 0.236 | 0.459 | 1 Bcell_2_lung |
| PRMT2              | 0.00114464 | 0.32350204 | 0.115 | 0.25  | 1 Bcell_2_lung |
| LENG1              | 0.00118447 | 0.50956638 | 0.154 | 0.31  | 1 Bcell_2_lung |
| PSMC4              | 0.00118639 | 0.77652109 | 0.132 | 0.281 | 1 Bcell_2_lung |
| TMEM167A           | 0.00120286 | 0.37819484 | 0.143 | 0.296 | 1 Bcell_2_lung |
| MANBA              | 0.00120932 | 0.33460786 | 0.324 | 0.594 | 1 Bcell_2_lung |
| POMP               | 0.00121703 | 1.54831583 | 0.434 | 0.485 | 1 Bcell_2_lung |
| LSM2               | 0.00122073 | 0.55785217 | 0.121 | 0.261 | 1 Bcell_2_lung |
| EIF3L              | 0.00125518 | 0.20754336 | 0.357 | 0.693 | 1 Bcell_2_lung |

|                     |            |            |       |       |                |
|---------------------|------------|------------|-------|-------|----------------|
| PTPN6               | 0.00130615 | 0.44837826 | 0.203 | 0.403 | 1 Bcell_2_lung |
| BUD23               | 0.00137124 | 0.51712491 | 0.297 | 0.579 | 1 Bcell_2_lung |
| ENSMMUG00000022428  | 0.00138385 | 1.64953779 | 0.385 | 0.398 | 1 Bcell_2_lung |
| NDUFA12             | 0.00142682 | 0.43546863 | 0.126 | 0.266 | 1 Bcell_2_lung |
| TMEM230             | 0.00145895 | 0.49330494 | 0.148 | 0.303 | 1 Bcell_2_lung |
| ENSMMUG000000061824 | 0.00153269 | 0.3435294  | 0.83  | 0.952 | 1 Bcell_2_lung |
| STRAP               | 0.00156582 | 0.49211982 | 0.225 | 0.432 | 1 Bcell_2_lung |
| NDUFB4              | 0.00160326 | 1.31907429 | 0.473 | 0.567 | 1 Bcell_2_lung |
| DYNLL1              | 0.00166601 | 0.34539319 | 0.225 | 0.427 | 1 Bcell_2_lung |
| SEC11C              | 0.00174164 | 0.46744166 | 0.198 | 0.38  | 1 Bcell_2_lung |
| PSMB6               | 0.00181948 | 1.64307291 | 0.374 | 0.377 | 1 Bcell_2_lung |
| CD48                | 0.00182948 | 0.7012691  | 0.17  | 0.337 | 1 Bcell_2_lung |
| MRPL11              | 0.00184218 | 0.40393153 | 0.236 | 0.454 | 1 Bcell_2_lung |
| ENSMMUG000000056332 | 0.00185886 | 0.57113935 | 0.137 | 0.28  | 1 Bcell_2_lung |
| CLEC2B              | 0.00193406 | 0.60358507 | 0.148 | 0.301 | 1 Bcell_2_lung |
| GHITM               | 0.00193638 | 0.41746676 | 0.214 | 0.414 | 1 Bcell_2_lung |
| RGS19               | 0.00197696 | 0.51377222 | 0.253 | 0.481 | 1 Bcell_2_lung |
| ENSMMUG000000064531 | 0.00201576 | 0.52063335 | 0.137 | 0.283 | 1 Bcell_2_lung |
| ESF1                | 0.00212481 | 0.54665412 | 0.159 | 0.314 | 1 Bcell_2_lung |
| PRDX1               | 0.00217607 | 0.63553395 | 0.203 | 0.394 | 1 Bcell_2_lung |
| PSMA6               | 0.00218076 | 0.28134607 | 0.121 | 0.25  | 1 Bcell_2_lung |
| RPS19BP1            | 0.00230896 | 0.57038148 | 0.121 | 0.25  | 1 Bcell_2_lung |
| CSNK2B              | 0.00232256 | 0.59200662 | 0.203 | 0.392 | 1 Bcell_2_lung |
| ERP29               | 0.00237628 | 0.6799498  | 0.253 | 0.487 | 1 Bcell_2_lung |
| WDR13               | 0.00240862 | 0.34754984 | 0.363 | 0.684 | 1 Bcell_2_lung |
| ZNF749              | 0.002553   | 0.51549985 | 0.132 | 0.266 | 1 Bcell_2_lung |
| PRMT1               | 0.00256305 | 0.5740789  | 0.214 | 0.407 | 1 Bcell_2_lung |
| RPS16               | 0.00272928 | 0.17813333 | 0.984 | 0.983 | 1 Bcell_2_lung |
| FCER2               | 0.00279001 | 0.38986677 | 0.258 | 0.487 | 1 Bcell_2_lung |
| CREM                | 0.00289038 | 1.80277793 | 0.368 | 0.373 | 1 Bcell_2_lung |
| NDUFB2              | 0.00289073 | 1.19345712 | 0.516 | 0.674 | 1 Bcell_2_lung |
| ENSMMUG000000038373 | 0.0029081  | 0.3696181  | 0.319 | 0.598 | 1 Bcell_2_lung |
| C1D                 | 0.00292235 | 0.64758319 | 0.159 | 0.313 | 1 Bcell_2_lung |

|                     |            |            |       |       |                |
|---------------------|------------|------------|-------|-------|----------------|
| TMEM59              | 0.00293885 | 0.32605541 | 0.242 | 0.443 | 1 Bcell_2_lung |
| EIF3J               | 0.00301647 | 0.57538787 | 0.198 | 0.378 | 1 Bcell_2_lung |
| CCDC59              | 0.0031103  | 0.48493583 | 0.165 | 0.32  | 1 Bcell_2_lung |
| SEPTIN7             | 0.00312103 | 0.15783284 | 0.423 | 0.788 | 1 Bcell_2_lung |
| DSTN                | 0.00320632 | 0.67946612 | 0.22  | 0.408 | 1 Bcell_2_lung |
| PSMA4               | 0.0032325  | 0.65392086 | 0.176 | 0.341 | 1 Bcell_2_lung |
| ARPC2               | 0.00351565 | 0.62380673 | 0.264 | 0.497 | 1 Bcell_2_lung |
| HSP90B1             | 0.0035183  | 0.6313238  | 0.269 | 0.497 | 1 Bcell_2_lung |
| ENSMMUG00000019371  | 0.00353152 | 0.68035984 | 0.236 | 0.448 | 1 Bcell_2_lung |
| MRPS21              | 0.00387356 | 0.34393836 | 0.154 | 0.295 | 1 Bcell_2_lung |
| CIR1                | 0.00388165 | 0.66699595 | 0.209 | 0.386 | 1 Bcell_2_lung |
| RHOG                | 0.00388955 | 0.60945999 | 0.137 | 0.273 | 1 Bcell_2_lung |
| BCL10               | 0.00389001 | 0.70066246 | 0.154 | 0.298 | 1 Bcell_2_lung |
| ENSMMUG000000061630 | 0.00392757 | 0.54353433 | 0.214 | 0.409 | 1 Bcell_2_lung |
| CORO1A              | 0.00394662 | 0.75588549 | 0.588 | 0.792 | 1 Bcell_2_lung |
| ARHGDIA             | 0.0039888  | 0.82926593 | 0.148 | 0.292 | 1 Bcell_2_lung |
| VPS4B               | 0.00398911 | 0.44323454 | 0.181 | 0.343 | 1 Bcell_2_lung |
| BST2                | 0.00435401 | 0.6268283  | 0.22  | 0.416 | 1 Bcell_2_lung |
| RPS27L              | 0.00440906 | 0.6430908  | 0.176 | 0.333 | 1 Bcell_2_lung |
| NDUFV2              | 0.00449858 | 0.75481723 | 0.181 | 0.348 | 1 Bcell_2_lung |
| HNRNPA1             | 0.00461159 | 0.23978183 | 0.341 | 0.626 | 1 Bcell_2_lung |
| PDCD10              | 0.00462583 | 0.61520203 | 0.22  | 0.405 | 1 Bcell_2_lung |
| VDAC2               | 0.00463203 | 0.50738688 | 0.297 | 0.551 | 1 Bcell_2_lung |
| ATG12               | 0.00468284 | 0.46107474 | 0.28  | 0.513 | 1 Bcell_2_lung |
| METAP2              | 0.00473906 | 0.80207938 | 0.159 | 0.299 | 1 Bcell_2_lung |
| LSP1                | 0.00481303 | 0.36371037 | 0.396 | 0.716 | 1 Bcell_2_lung |
| PSMB7               | 0.00494703 | 0.3810086  | 0.335 | 0.632 | 1 Bcell_2_lung |
| UBXN1               | 0.00515381 | 0.32889541 | 0.335 | 0.634 | 1 Bcell_2_lung |
| TUBB                | 0.00515725 | 0.50594334 | 0.225 | 0.42  | 1 Bcell_2_lung |
| PDRG1               | 0.00519217 | 0.41745087 | 0.198 | 0.364 | 1 Bcell_2_lung |
| RSL24D1             | 0.00520602 | 0.16164925 | 0.368 | 0.677 | 1 Bcell_2_lung |
| RPL10A              | 0.00544118 | 0.14891134 | 0.973 | 0.978 | 1 Bcell_2_lung |
| ENSMMUG000000055825 | 0.00582159 | 0.6502658  | 0.159 | 0.302 | 1 Bcell_2_lung |

|                     |            |            |       |       |                |
|---------------------|------------|------------|-------|-------|----------------|
| DGKB                | 0.00616844 | 0.59602659 | 0.165 | 0.31  | 1 Bcell_2_lung |
| COX7B               | 0.0062784  | 1.13873104 | 0.456 | 0.553 | 1 Bcell_2_lung |
| TCP11L2             | 0.00632593 | 0.64826384 | 0.137 | 0.261 | 1 Bcell_2_lung |
| CD320               | 0.0063812  | 0.61093693 | 0.253 | 0.473 | 1 Bcell_2_lung |
| ENSMMUG000000055376 | 0.0065066  | 0.61989462 | 0.154 | 0.292 | 1 Bcell_2_lung |
| COX3                | 0.00657735 | 0.36835566 | 0.269 | 0.446 | 1 Bcell_2_lung |
| NDUFA6              | 0.00706077 | 0.58657706 | 0.154 | 0.287 | 1 Bcell_2_lung |
| ENSMMUG000000006206 | 0.00707613 | 0.56306792 | 0.264 | 0.489 | 1 Bcell_2_lung |
| EEF1B2              | 0.00712596 | 0.26026842 | 0.89  | 0.949 | 1 Bcell_2_lung |
| ENSMMUG000000012019 | 0.00784209 | 0.56250768 | 0.236 | 0.427 | 1 Bcell_2_lung |
| NUAK2               | 0.00816098 | 0.45004757 | 0.132 | 0.25  | 1 Bcell_2_lung |
| HSPE1               | 0.00848367 | 0.22398977 | 0.412 | 0.742 | 1 Bcell_2_lung |
| CCT7                | 0.00856234 | 0.61507611 | 0.17  | 0.312 | 1 Bcell_2_lung |
| COA1                | 0.00861786 | 0.61188242 | 0.181 | 0.329 | 1 Bcell_2_lung |
| SELENOK             | 0.00866097 | 1.84768157 | 0.33  | 0.331 | 1 Bcell_2_lung |
| TPI1                | 0.00892014 | 0.77793914 | 0.209 | 0.382 | 1 Bcell_2_lung |
| RTRAF               | 0.00922104 | 0.35933334 | 0.335 | 0.616 | 1 Bcell_2_lung |
| SEC62               | 0.00961929 | 0.53633651 | 0.214 | 0.382 | 1 Bcell_2_lung |
| DCTN3               | 0.00967823 | 0.9094781  | 0.203 | 0.375 | 1 Bcell_2_lung |
| COX6B1              | 0.00974065 | 0.61077424 | 0.231 | 0.418 | 1 Bcell_2_lung |
| ENSMMUG000000049722 | 0.00995494 | 1.53241038 | 0.385 | 0.427 | 1 Bcell_2_lung |
| GCC2                | 0.01018526 | 0.74010445 | 0.137 | 0.254 | 1 Bcell_2_lung |
| ENSMMUG000000012419 | 0.01032022 | 0.85530279 | 0.533 | 0.715 | 1 Bcell_2_lung |
| LAMTOR4             | 0.01040734 | 0.51032702 | 0.181 | 0.328 | 1 Bcell_2_lung |
| RAB11A              | 0.01066921 | 1.94325815 | 0.28  | 0.26  | 1 Bcell_2_lung |
| MDH2                | 0.01098831 | 0.70649576 | 0.181 | 0.327 | 1 Bcell_2_lung |
| MRI1                | 0.01107621 | 0.98231791 | 0.5   | 0.653 | 1 Bcell_2_lung |
| ATAD1               | 0.01124129 | 0.39288542 | 0.192 | 0.343 | 1 Bcell_2_lung |
| ENSMMUG000000016009 | 0.01143675 | 0.54837974 | 0.247 | 0.446 | 1 Bcell_2_lung |
| PTRHD1              | 0.01149633 | 0.74933469 | 0.192 | 0.35  | 1 Bcell_2_lung |
| MS4A1               | 0.01158758 | 0.31449288 | 0.863 | 0.975 | 1 Bcell_2_lung |
| RILPL2              | 0.01265862 | 1.42185518 | 0.423 | 0.499 | 1 Bcell_2_lung |
| ENSMMUG000000051392 | 0.01289754 | 0.59330692 | 0.313 | 0.565 | 1 Bcell_2_lung |



|                     |            |            |       |       |                |
|---------------------|------------|------------|-------|-------|----------------|
| AIP                 | 0.01333119 | 0.76728964 | 0.242 | 0.437 | 1 Bcell_2_lung |
| RABAC1              | 0.01339307 | 0.80245424 | 0.154 | 0.278 | 1 Bcell_2_lung |
| HSBP1               | 0.01342589 | 0.87349908 | 0.137 | 0.251 | 1 Bcell_2_lung |
| SYF2                | 0.01404843 | 0.58147748 | 0.297 | 0.526 | 1 Bcell_2_lung |
| NDUFB5              | 0.01444789 | 0.60253718 | 0.181 | 0.32  | 1 Bcell_2_lung |
| ZNF706              | 0.01484169 | 0.75730914 | 0.231 | 0.413 | 1 Bcell_2_lung |
| PFDN2               | 0.01484795 | 0.66358791 | 0.291 | 0.521 | 1 Bcell_2_lung |
| EIF5B               | 0.01512091 | 0.66460893 | 0.176 | 0.312 | 1 Bcell_2_lung |
| DNAJC19             | 0.015467   | 0.68663637 | 0.176 | 0.314 | 1 Bcell_2_lung |
| ENSMMUG00000055026  | 0.01602191 | 0.57500338 | 0.253 | 0.444 | 1 Bcell_2_lung |
| RNF7                | 0.01613513 | 0.9509871  | 0.181 | 0.327 | 1 Bcell_2_lung |
| NDUFS8              | 0.01630815 | 0.44657    | 0.198 | 0.351 | 1 Bcell_2_lung |
| GSTP1               | 0.01631525 | 1.01578617 | 0.505 | 0.654 | 1 Bcell_2_lung |
| LAT2                | 0.01776995 | 0.48755848 | 0.352 | 0.629 | 1 Bcell_2_lung |
| GABARAPL2           | 0.01782555 | 1.11814722 | 0.467 | 0.594 | 1 Bcell_2_lung |
| ENSMMUG00000014947  | 0.01807613 | 0.63783739 | 0.159 | 0.28  | 1 Bcell_2_lung |
| ENSMMUG00000057449  | 0.01884096 | 0.70486637 | 0.225 | 0.399 | 1 Bcell_2_lung |
| SPCS3               | 0.01897806 | 0.67403607 | 0.253 | 0.44  | 1 Bcell_2_lung |
| CIAO2B              | 0.01943066 | 0.76972975 | 0.17  | 0.301 | 1 Bcell_2_lung |
| MRPS33              | 0.01956792 | 0.79056171 | 0.154 | 0.271 | 1 Bcell_2_lung |
| ENSMMUG000000064120 | 0.01971277 | 1.14487036 | 0.484 | 0.632 | 1 Bcell_2_lung |
| NDUFB7              | 0.01975514 | 0.69865951 | 0.225 | 0.4   | 1 Bcell_2_lung |
| C11H12orf45         | 0.0199645  | 0.5337054  | 0.225 | 0.388 | 1 Bcell_2_lung |
| LSM8                | 0.0215237  | 0.81720238 | 0.192 | 0.331 | 1 Bcell_2_lung |
| GAPDH               | 0.02190514 | 0.86607127 | 0.516 | 0.685 | 1 Bcell_2_lung |
| ENSMMUG00000053735  | 0.02237211 | 0.652666   | 0.308 | 0.545 | 1 Bcell_2_lung |
| SH3BGR1             | 0.02267352 | 0.61808203 | 0.352 | 0.627 | 1 Bcell_2_lung |
| PAIP2               | 0.02268677 | 0.34971838 | 0.385 | 0.673 | 1 Bcell_2_lung |
| NHP2                | 0.02369052 | 0.86800381 | 0.225 | 0.398 | 1 Bcell_2_lung |
| DUSP2               | 0.02431611 | 0.38193539 | 0.203 | 0.338 | 1 Bcell_2_lung |
| C14H11orf58         | 0.02589255 | 0.78633507 | 0.198 | 0.339 | 1 Bcell_2_lung |
| RBX1                | 0.02665993 | 0.52839875 | 0.269 | 0.467 | 1 Bcell_2_lung |
| ENSMMUG00000052293  | 0.02803425 | 0.82476624 | 0.17  | 0.296 | 1 Bcell_2_lung |

|                    |            |            |       |       |                |
|--------------------|------------|------------|-------|-------|----------------|
| TXN                | 0.02860056 | 0.32299874 | 0.275 | 0.455 | 1 Bcell_2_lung |
| ATP6               | 0.0288012  | 0.96229416 | 0.187 | 0.304 | 1 Bcell_2_lung |
| ANXA1              | 0.02957047 | 0.45549423 | 0.242 | 0.401 | 1 Bcell_2_lung |
| SUMO1              | 0.03013013 | 0.70830785 | 0.269 | 0.47  | 1 Bcell_2_lung |
| ERBB3              | 0.03057562 | 0.68055556 | 0.236 | 0.406 | 1 Bcell_2_lung |
| HNRNPH1            | 0.03138621 | 0.56479659 | 0.341 | 0.585 | 1 Bcell_2_lung |
| AP2M1              | 0.03290035 | 1.05485574 | 0.187 | 0.32  | 1 Bcell_2_lung |
| LIMD2              | 0.03379197 | 0.97102426 | 0.522 | 0.735 | 1 Bcell_2_lung |
| AKR1A1             | 0.03517397 | 0.80815173 | 0.203 | 0.347 | 1 Bcell_2_lung |
| STAR               | 0.03645394 | 0.90950386 | 0.148 | 0.255 | 1 Bcell_2_lung |
| CD37               | 0.0371411  | 0.27110258 | 0.868 | 0.985 | 1 Bcell_2_lung |
| MAGOH              | 0.03943592 | 0.76929381 | 0.231 | 0.392 | 1 Bcell_2_lung |
| NDUFS4             | 0.04053991 | 0.70360322 | 0.154 | 0.259 | 1 Bcell_2_lung |
| ENSMMUG00000029973 | 0.04108675 | 0.94830212 | 0.511 | 0.706 | 1 Bcell_2_lung |
| DDX18              | 0.04187114 | 0.7997884  | 0.269 | 0.46  | 1 Bcell_2_lung |
| SRP9               | 0.04299127 | 0.98533454 | 0.154 | 0.261 | 1 Bcell_2_lung |
| PDE4B              | 0.0437149  | 0.48663088 | 0.209 | 0.339 | 1 Bcell_2_lung |
| CD53               | 0.04372131 | 0.13230358 | 0.484 | 0.82  | 1 Bcell_2_lung |
| NPM1               | 0.04393753 | 0.23134575 | 0.725 | 0.911 | 1 Bcell_2_lung |
| SRRM1              | 0.04466572 | 0.62219664 | 0.33  | 0.565 | 1 Bcell_2_lung |
| ENSMMUG00000055627 | 0.04507729 | 0.35270861 | 0.473 | 0.798 | 1 Bcell_2_lung |
| ENSMMUG00000016278 | 0.04592361 | 0.81541187 | 0.225 | 0.382 | 1 Bcell_2_lung |
| ENSMMUG00000020092 | 0.04615361 | 1.56025247 | 0.418 | 0.476 | 1 Bcell_2_lung |
| DPH2               | 0.04684863 | 1.01740204 | 0.203 | 0.344 | 1 Bcell_2_lung |
| NDUFB8             | 0.04765582 | 0.71206794 | 0.247 | 0.414 | 1 Bcell_2_lung |
| OSTF1              | 0.0479376  | 0.79797609 | 0.286 | 0.501 | 1 Bcell_2_lung |
| SNRPD1             | 0.04827803 | 0.78649081 | 0.236 | 0.396 | 1 Bcell_2_lung |
| SRI                | 0.04894491 | 0.81148397 | 0.247 | 0.413 | 1 Bcell_2_lung |
| RNMT               | 0.05061279 | 0.37397241 | 0.385 | 0.652 | 1 Bcell_2_lung |
| YJEFN3             | 0.05091466 | 0.70041315 | 0.242 | 0.407 | 1 Bcell_2_lung |
| RDH5               | 0.05674416 | 1.25824768 | 0.39  | 0.468 | 1 Bcell_2_lung |
| VPS28              | 0.05862803 | 1.00627315 | 0.154 | 0.251 | 1 Bcell_2_lung |
| ERH                | 0.05885064 | 0.91433472 | 0.253 | 0.419 | 1 Bcell_2_lung |

|                     |            |            |       |       |                |
|---------------------|------------|------------|-------|-------|----------------|
| PSME1               | 0.0615339  | 0.60825947 | 0.56  | 0.763 | 1 Bcell_2_lung |
| ZNF493              | 0.06185313 | 0.74458721 | 0.159 | 0.258 | 1 Bcell_2_lung |
| RHOF                | 0.06308653 | 1.01876247 | 0.154 | 0.255 | 1 Bcell_2_lung |
| COPZ1               | 0.06330359 | 0.92832406 | 0.159 | 0.261 | 1 Bcell_2_lung |
| ENSMMUG000000055584 | 0.06504293 | 0.35130015 | 0.758 | 0.957 | 1 Bcell_2_lung |
| SSR2                | 0.06519194 | 0.53254563 | 0.341 | 0.598 | 1 Bcell_2_lung |
| SLC38A2             | 0.06660568 | 0.83095784 | 0.214 | 0.343 | 1 Bcell_2_lung |
| FNTB                | 0.06821414 | 0.57052897 | 0.28  | 0.47  | 1 Bcell_2_lung |
| NCL                 | 0.06858188 | 1.0118426  | 0.538 | 0.741 | 1 Bcell_2_lung |
| SNRPN               | 0.06973003 | 0.94474599 | 0.176 | 0.286 | 1 Bcell_2_lung |
| COX8A               | 0.07005545 | 1.37940927 | 0.374 | 0.457 | 1 Bcell_2_lung |
| ENSMMUG000000006778 | 0.07070289 | 0.61060246 | 0.264 | 0.436 | 1 Bcell_2_lung |
| EIF4A1              | 0.07172983 | 0.77432717 | 0.275 | 0.462 | 1 Bcell_2_lung |
| TMEM14B             | 0.07208278 | 0.74685899 | 0.297 | 0.507 | 1 Bcell_2_lung |
| MRPL51              | 0.07347298 | 0.8206559  | 0.28  | 0.477 | 1 Bcell_2_lung |
| BIRC2               | 0.07539453 | 0.85410099 | 0.159 | 0.254 | 1 Bcell_2_lung |
| ATP5PD              | 0.07939205 | 0.77722164 | 0.214 | 0.345 | 1 Bcell_2_lung |
| ANP32A              | 0.08267988 | 0.61219085 | 0.324 | 0.552 | 1 Bcell_2_lung |
| NMT1                | 0.08319966 | 0.95805345 | 0.181 | 0.291 | 1 Bcell_2_lung |
| NDUFB9              | 0.08477409 | 1.41790588 | 0.341 | 0.391 | 1 Bcell_2_lung |
| PFDN6               | 0.08601104 | 1.02056064 | 0.192 | 0.311 | 1 Bcell_2_lung |
| NDUFB11             | 0.08755776 | 1.33567847 | 0.319 | 0.348 | 1 Bcell_2_lung |
| DRAP1               | 0.08854007 | 0.89932008 | 0.165 | 0.265 | 1 Bcell_2_lung |
| CTSS                | 0.09065046 | 0.80893351 | 0.538 | 0.771 | 1 Bcell_2_lung |
| ENSMMUG000000000983 | 0.09382483 | 0.85678701 | 0.286 | 0.485 | 1 Bcell_2_lung |
| NDUFC2              | 0.09711458 | 1.46452076 | 0.341 | 0.39  | 1 Bcell_2_lung |
| FCRLA               | 0.09880905 | 0.61210159 | 0.275 | 0.438 | 1 Bcell_2_lung |
| LLPH                | 0.10056132 | 0.86239541 | 0.209 | 0.333 | 1 Bcell_2_lung |
| ENSMMUG000000059289 | 0.10290985 | 1.17617218 | 0.159 | 0.253 | 1 Bcell_2_lung |
| ZNHIT1              | 0.10921327 | 0.69629056 | 0.264 | 0.426 | 1 Bcell_2_lung |
| SOX4                | 0.11111775 | 0.71749608 | 0.242 | 0.37  | 1 Bcell_2_lung |
| TMEM256             | 0.11526472 | 1.02697389 | 0.187 | 0.294 | 1 Bcell_2_lung |
| GLIPR1L2            | 0.1195527  | 0.76064722 | 0.214 | 0.332 | 1 Bcell_2_lung |

|                    |            |            |       |       |                |
|--------------------|------------|------------|-------|-------|----------------|
| MBD3               | 0.13150644 | 1.2609912  | 0.412 | 0.54  | 1 Bcell_2_lung |
| ATP6V1FNB          | 0.13960015 | 0.77765063 | 0.33  | 0.536 | 1 Bcell_2_lung |
| CD83               | 0.14961404 | 0.87198261 | 0.544 | 0.768 | 1 Bcell_2_lung |
| ENSMMUG00000053146 | 0.15272199 | 1.18608632 | 0.401 | 0.53  | 1 Bcell_2_lung |
| TAF9               | 0.15428247 | 0.77512338 | 0.291 | 0.459 | 1 Bcell_2_lung |
| PSMB9              | 0.15687242 | 1.14285743 | 0.423 | 0.574 | 1 Bcell_2_lung |
| ENSMMUG00000047481 | 0.15731694 | 1.09580102 | 0.429 | 0.587 | 1 Bcell_2_lung |
| COX4I1             | 0.15831865 | 0.33732159 | 0.637 | 0.888 | 1 Bcell_2_lung |
| SEC61B             | 0.16096147 | 0.81166608 | 0.473 | 0.663 | 1 Bcell_2_lung |
| ENSMMUG00000056126 | 0.16374019 | 1.76122529 | 0.253 | 0.267 | 1 Bcell_2_lung |
| P2RY10             | 0.16533438 | 0.95134311 | 0.165 | 0.251 | 1 Bcell_2_lung |
| MICOS13            | 0.17395114 | 1.32249188 | 0.357 | 0.437 | 1 Bcell_2_lung |
| SNRPB              | 0.17559847 | 1.00902142 | 0.423 | 0.567 | 1 Bcell_2_lung |
| COX5B              | 0.18174804 | 1.13516435 | 0.412 | 0.562 | 1 Bcell_2_lung |
| MRPL57             | 0.18586992 | 1.01731475 | 0.181 | 0.274 | 1 Bcell_2_lung |
| ZNF331             | 0.19117225 | 1.22390819 | 0.181 | 0.269 | 1 Bcell_2_lung |
| COX17              | 0.19180315 | 1.32239896 | 0.313 | 0.362 | 1 Bcell_2_lung |
| ENSMMUG00000050829 | 0.19223409 | 1.13403798 | 0.313 | 0.501 | 1 Bcell_2_lung |
| NDUFB10            | 0.2002824  | 0.98176361 | 0.242 | 0.371 | 1 Bcell_2_lung |
| CUTA               | 0.20541647 | 0.87724356 | 0.28  | 0.44  | 1 Bcell_2_lung |
| LSM7               | 0.20670405 | 0.8030179  | 0.302 | 0.475 | 1 Bcell_2_lung |
| SNRPD3             | 0.20764657 | 0.59727072 | 0.368 | 0.608 | 1 Bcell_2_lung |
| CD58               | 0.20824616 | 1.3143388  | 0.214 | 0.326 | 1 Bcell_2_lung |
| C16H17orf49        | 0.21288464 | 1.00170862 | 0.412 | 0.557 | 1 Bcell_2_lung |
| CAPG               | 0.21421512 | 0.76569518 | 0.286 | 0.444 | 1 Bcell_2_lung |
| MRPL23             | 0.2173144  | 0.74783693 | 0.335 | 0.54  | 1 Bcell_2_lung |
| LAMTOR1            | 0.22325705 | 1.027779   | 0.198 | 0.294 | 1 Bcell_2_lung |
| ATP5PF             | 0.22402717 | 0.52111098 | 0.352 | 0.564 | 1 Bcell_2_lung |
| RPLP2              | 0.22855017 | 0.11892043 | 0.984 | 0.976 | 1 Bcell_2_lung |
| CLIC1              | 0.2341484  | 1.13285471 | 0.412 | 0.566 | 1 Bcell_2_lung |
| VAMP8              | 0.23495987 | 1.04053773 | 0.429 | 0.589 | 1 Bcell_2_lung |
| COPE               | 0.23936871 | 0.99213495 | 0.242 | 0.364 | 1 Bcell_2_lung |
| MIC1               | 0.2454017  | 0.39599932 | 0.626 | 0.876 | 1 Bcell_2_lung |

|                     |            |            |       |       |                |
|---------------------|------------|------------|-------|-------|----------------|
| PRR13               | 0.24970154 | 0.93121301 | 0.341 | 0.551 | 1 Bcell_2_lung |
| HYPK                | 0.25224417 | 0.87714578 | 0.264 | 0.397 | 1 Bcell_2_lung |
| ENSMMUG00000007536  | 0.25773726 | 1.28630469 | 0.341 | 0.428 | 1 Bcell_2_lung |
| JUND                | 0.26012687 | 0.24194188 | 0.505 | 0.787 | 1 Bcell_2_lung |
| LSM6                | 0.27158729 | 0.87099354 | 0.286 | 0.444 | 1 Bcell_2_lung |
| EIF1B               | 0.2742358  | 0.94933617 | 0.286 | 0.438 | 1 Bcell_2_lung |
| DAD1                | 0.28681155 | 0.97373962 | 0.291 | 0.454 | 1 Bcell_2_lung |
| CASP1               | 0.28889803 | 0.53720352 | 0.527 | 0.734 | 1 Bcell_2_lung |
| ATOX1               | 0.2926912  | 0.95027046 | 0.275 | 0.42  | 1 Bcell_2_lung |
| ENSMMUG00000001458  | 0.29529578 | 0.33769897 | 0.505 | 0.802 | 1 Bcell_2_lung |
| H2AFJ               | 0.30000446 | 1.34174134 | 0.324 | 0.398 | 1 Bcell_2_lung |
| ENSMMUG000000058389 | 0.30658077 | 1.12947177 | 0.209 | 0.302 | 1 Bcell_2_lung |
| SLIRP               | 0.31402909 | 0.4052471  | 0.445 | 0.722 | 1 Bcell_2_lung |
| ATP5F1C             | 0.3265146  | 0.96988177 | 0.291 | 0.45  | 1 Bcell_2_lung |
| ENSMMUG000000016665 | 0.34096074 | 0.88760369 | 0.33  | 0.511 | 1 Bcell_2_lung |
| NCBP2               | 0.34161923 | 0.98509932 | 0.28  | 0.421 | 1 Bcell_2_lung |
| COX2                | 0.34397034 | 0.86994729 | 0.286 | 0.288 | 1 Bcell_2_lung |
| ENSMMUG000000058325 | 0.34397287 | 0.21885241 | 0.885 | 0.987 | 1 Bcell_2_lung |
| GNG5                | 0.34619024 | 0.6773904  | 0.478 | 0.683 | 1 Bcell_2_lung |
| SUCLG1              | 0.35319277 | 0.99139732 | 0.286 | 0.431 | 1 Bcell_2_lung |
| SNRPD2              | 0.35564244 | 0.50506819 | 0.396 | 0.641 | 1 Bcell_2_lung |
| ENSMMUG000000064692 | 0.35834343 | 0.1233538  | 0.824 | 0.954 | 1 Bcell_2_lung |
| SAT2                | 0.36613515 | 0.99813434 | 0.264 | 0.387 | 1 Bcell_2_lung |
| S100A6              | 0.38113789 | 1.38256469 | 0.297 | 0.335 | 1 Bcell_2_lung |
| CXCR4               | 0.39586082 | 1.36397486 | 0.242 | 0.267 | 1 Bcell_2_lung |
| CFDP1               | 0.39695592 | 0.65566135 | 0.346 | 0.53  | 1 Bcell_2_lung |
| ENSMMUG000000029987 | 0.40267417 | 0.97449243 | 0.242 | 0.345 | 1 Bcell_2_lung |
| ISCA1               | 0.40994201 | 1.64775761 | 0.302 | 0.366 | 1 Bcell_2_lung |
| ISG20               | 0.41668841 | 1.13629853 | 0.401 | 0.562 | 1 Bcell_2_lung |
| MYG1                | 0.42945319 | 1.3185849  | 0.28  | 0.339 | 1 Bcell_2_lung |
| AIMP1               | 0.44059745 | 1.19764848 | 0.335 | 0.421 | 1 Bcell_2_lung |
| LST1                | 0.44656072 | 1.06035756 | 0.346 | 0.442 | 1 Bcell_2_lung |
| MRPL33              | 0.46222453 | 1.21590077 | 0.203 | 0.28  | 1 Bcell_2_lung |

|                    |            |            |       |       |                |
|--------------------|------------|------------|-------|-------|----------------|
| SPCS2              | 0.47142161 | 0.88502976 | 0.33  | 0.504 | 1 Bcell_2_lung |
| C11H12orf57        | 0.47157962 | 0.6044516  | 0.429 | 0.678 | 1 Bcell_2_lung |
| ENSMMUG00000014862 | 0.47424476 | 0.76078282 | 0.368 | 0.576 | 1 Bcell_2_lung |
| ENSMMUG00000029026 | 0.47627407 | 0.70723706 | 0.352 | 0.544 | 1 Bcell_2_lung |
| GTF2H5             | 0.48201897 | 0.88527659 | 0.324 | 0.491 | 1 Bcell_2_lung |
| NR4A3              | 0.49087169 | 1.13081573 | 0.247 | 0.274 | 1 Bcell_2_lung |
| ENSMMUG00000017466 | 0.49543735 | 0.87044536 | 0.445 | 0.635 | 1 Bcell_2_lung |
| TIGAR              | 0.49880806 | 0.89699982 | 0.236 | 0.325 | 1 Bcell_2_lung |
| SNU13              | 0.50650769 | 0.48229707 | 0.44  | 0.685 | 1 Bcell_2_lung |
| ENSMMUG00000044861 | 0.50825487 | 1.42879963 | 0.324 | 0.427 | 1 Bcell_2_lung |
| SEM1               | 0.51299575 | 1.06290415 | 0.379 | 0.527 | 1 Bcell_2_lung |
| CD79A              | 0.51833945 | 0.56645323 | 0.478 | 0.763 | 1 Bcell_2_lung |
| DAZAP1             | 0.52047419 | 0.88612888 | 0.445 | 0.648 | 1 Bcell_2_lung |
| PPIB               | 0.52324495 | 0.84061977 | 0.412 | 0.595 | 1 Bcell_2_lung |
| UQCRH              | 0.53011722 | 0.55511952 | 0.407 | 0.64  | 1 Bcell_2_lung |
| MEF2C              | 0.53243367 | 0.21935162 | 0.637 | 0.87  | 1 Bcell_2_lung |
| PRDX6              | 0.53345246 | 1.07265391 | 0.209 | 0.282 | 1 Bcell_2_lung |
| OST4               | 0.53507182 | 1.00767771 | 0.401 | 0.568 | 1 Bcell_2_lung |
| JCHAIN             | 0.54856615 | 0.52132736 | 0.225 | 0.303 | 1 Bcell_2_lung |
| CYSTM1             | 0.55800478 | 1.43622792 | 0.247 | 0.294 | 1 Bcell_2_lung |
| COX20              | 0.56146935 | 1.37622833 | 0.231 | 0.266 | 1 Bcell_2_lung |
| GPSM3              | 0.57914967 | 0.74694251 | 0.412 | 0.651 | 1 Bcell_2_lung |
| SF3B6              | 0.58716853 | 0.98813948 | 0.379 | 0.528 | 1 Bcell_2_lung |
| ENSMMUG00000012525 | 0.58794464 | 0.9507774  | 0.385 | 0.538 | 1 Bcell_2_lung |
| RPS27              | 0.59825745 | 0.11572386 | 0.934 | 0.976 | 1 Bcell_2_lung |
| COX1               | 0.59985079 | 1.04339659 | 0.28  | 0.365 | 1 Bcell_2_lung |
| ENY2               | 0.6009588  | 0.99415709 | 0.33  | 0.485 | 1 Bcell_2_lung |
| WDR83OS            | 0.60554928 | 0.3728339  | 0.495 | 0.772 | 1 Bcell_2_lung |
| SSR4               | 0.60613997 | 0.69292675 | 0.462 | 0.687 | 1 Bcell_2_lung |
| PFDN5              | 0.61547011 | 0.9289014  | 0.357 | 0.548 | 1 Bcell_2_lung |
| CDC42              | 0.61827154 | 0.32243143 | 0.632 | 0.895 | 1 Bcell_2_lung |
| ARHGDIB            | 0.61863968 | 0.13421625 | 0.698 | 0.927 | 1 Bcell_2_lung |
| PHF5A              | 0.64340388 | 1.49986147 | 0.264 | 0.323 | 1 Bcell_2_lung |

|                     |            |            |       |       |                |
|---------------------|------------|------------|-------|-------|----------------|
| ENSMMUG00000013257  | 0.64986154 | 0.88678678 | 0.407 | 0.571 | 1 Bcell_2_lung |
| MRPS25              | 0.65069095 | 1.27229249 | 0.214 | 0.284 | 1 Bcell_2_lung |
| PSME2               | 0.65362986 | 1.19241565 | 0.302 | 0.387 | 1 Bcell_2_lung |
| PSMB8               | 0.65797792 | 0.62107451 | 0.451 | 0.714 | 1 Bcell_2_lung |
| ENSMMUG000000063609 | 0.65991074 | 1.54274096 | 0.22  | 0.257 | 1 Bcell_2_lung |
| SAT1                | 0.66757569 | 1.24485206 | 0.286 | 0.354 | 1 Bcell_2_lung |
| EDF1                | 0.6698909  | 1.08302844 | 0.313 | 0.46  | 1 Bcell_2_lung |
| ENSMMUG000000053817 | 0.66999031 | 1.01074826 | 0.297 | 0.418 | 1 Bcell_2_lung |
| ENSMMUG000000030465 | 0.67227983 | 0.88680099 | 0.385 | 0.585 | 1 Bcell_2_lung |
| ENSMMUG000000016894 | 0.67282345 | 0.54855227 | 0.445 | 0.706 | 1 Bcell_2_lung |
| PSMC5               | 0.67426094 | 1.14456906 | 0.214 | 0.286 | 1 Bcell_2_lung |
| TPM3                | 0.67856459 | 0.29866626 | 0.533 | 0.816 | 1 Bcell_2_lung |
| ATP5MC2             | 0.71189543 | 0.84029106 | 0.434 | 0.656 | 1 Bcell_2_lung |
| MZB1                | 0.7135775  | 1.08681556 | 0.269 | 0.333 | 1 Bcell_2_lung |
| TALDO1              | 0.71908633 | 1.01565223 | 0.341 | 0.509 | 1 Bcell_2_lung |
| TOMM7               | 0.74727946 | 0.12269844 | 0.753 | 0.944 | 1 Bcell_2_lung |
| DBI                 | 0.74988104 | 0.892926   | 0.401 | 0.58  | 1 Bcell_2_lung |
| SON                 | 0.75211533 | 0.3089414  | 0.577 | 0.862 | 1 Bcell_2_lung |
| ND4                 | 0.76384628 | 1.27843911 | 0.28  | 0.36  | 1 Bcell_2_lung |
| PSMA2               | 0.76694485 | 1.05296993 | 0.368 | 0.532 | 1 Bcell_2_lung |
| KIFBP               | 0.78329819 | 0.6123711  | 0.429 | 0.646 | 1 Bcell_2_lung |
| POLR1H              | 0.79185886 | 1.32328179 | 0.297 | 0.392 | 1 Bcell_2_lung |
| ENSMMUG000000065104 | 0.79362961 | 0.77709284 | 0.418 | 0.625 | 1 Bcell_2_lung |
| ENSMMUG000000049151 | 0.79584906 | 0.14434365 | 0.808 | 0.989 | 1 Bcell_2_lung |
| CFL1                | 0.79598604 | 0.16448821 | 0.61  | 0.875 | 1 Bcell_2_lung |
| TUBA1A              | 0.7997569  | 0.79824131 | 0.368 | 0.538 | 1 Bcell_2_lung |
| LDHA                | 0.79984857 | 1.29812927 | 0.324 | 0.434 | 1 Bcell_2_lung |
| ID3                 | 0.80141618 | 1.61421355 | 0.264 | 0.352 | 1 Bcell_2_lung |
| SUPT4H1             | 0.82457352 | 1.06423298 | 0.231 | 0.299 | 1 Bcell_2_lung |
| PSMB1               | 0.82564543 | 0.90983944 | 0.39  | 0.561 | 1 Bcell_2_lung |
| MRPL34              | 0.8364313  | 1.29599034 | 0.214 | 0.274 | 1 Bcell_2_lung |
| LSM5                | 0.8534253  | 1.27391595 | 0.302 | 0.404 | 1 Bcell_2_lung |
| UQCRC               | 0.85580926 | 1.01787763 | 0.357 | 0.505 | 1 Bcell_2_lung |

|                    |            |            |       |       |          |               |
|--------------------|------------|------------|-------|-------|----------|---------------|
| RBIS               | 0.87160365 | 0.70739346 | 0.412 | 0.602 | 1        | Bcell_2_lung  |
| BOLA2B             | 0.91768372 | 1.34012911 | 0.225 | 0.286 | 1        | Bcell_2_lung  |
| TINF2              | 0.92485936 | 0.7149019  | 0.423 | 0.638 | 1        | Bcell_2_lung  |
| VPREB3             | 0.92779714 | 1.20947096 | 0.231 | 0.284 | 1        | Bcell_2_lung  |
| RNF181             | 0.92901129 | 1.06470064 | 0.319 | 0.437 | 1        | Bcell_2_lung  |
| ATP5MC3            | 0.93829219 | 0.72208113 | 0.412 | 0.623 | 1        | Bcell_2_lung  |
| PDCD5              | 0.95662407 | 1.37707014 | 0.225 | 0.278 | 1        | Bcell_2_lung  |
| TMEM258            | 0.95747728 | 1.03136353 | 0.357 | 0.522 | 1        | Bcell_2_lung  |
| RAN                | 0.97522801 | 0.98942512 | 0.363 | 0.522 | 1        | Bcell_2_lung  |
| CIB1               | 0.98006917 | 1.30499688 | 0.275 | 0.362 | 1        | Bcell_2_lung  |
| CRIP1              | 0.98505816 | 1.64187317 | 0.291 | 0.385 | 1        | Bcell_2_lung  |
| NDUFA2             | 0.98747893 | 0.94644438 | 0.385 | 0.578 | 1        | Bcell_2_lung  |
| COX7A2             | 0.99859469 | 1.40731506 | 0.214 | 0.269 | 1        | Bcell_2_lung  |
| RBPM5              | 0.9991313  | 1.07726402 | 0.39  | 0.585 | 1        | Bcell_2_lung  |
| HBA                | 1.43E-33   | 2.06427423 | 0.453 | 0.174 | 5.08E-29 | Bcell_2_UCBMC |
| EMP3               | 1.26E-30   | 2.24067924 | 0.296 | 0.075 | 4.46E-26 | Bcell_2_UCBMC |
| HBE1               | 5.83E-29   | 2.27639035 | 0.401 | 0.153 | 2.07E-24 | Bcell_2_UCBMC |
| ENSMMUG00000049151 | 7.23E-27   | 0.56807965 | 0.98  | 0.967 | 2.56E-22 | Bcell_2_UCBMC |
| NCOA3              | 1.55E-17   | 0.66583587 | 0.889 | 0.839 | 5.48E-13 | Bcell_2_UCBMC |
| MTSS1              | 2.38E-16   | 0.95813714 | 0.687 | 0.512 | 8.44E-12 | Bcell_2_UCBMC |
| CDC42SE2           | 7.83E-16   | 0.96172686 | 0.739 | 0.656 | 2.77E-11 | Bcell_2_UCBMC |
| PNISR              | 3.86E-15   | 0.65060094 | 0.827 | 0.767 | 1.37E-10 | Bcell_2_UCBMC |
| MYLIP              | 5.74E-15   | 0.81232225 | 0.71  | 0.589 | 2.04E-10 | Bcell_2_UCBMC |
| OSBPL10            | 6.69E-15   | 1.13527245 | 0.482 | 0.288 | 2.37E-10 | Bcell_2_UCBMC |
| SIK3               | 1.13E-14   | 0.74863591 | 0.814 | 0.691 | 3.99E-10 | Bcell_2_UCBMC |
| FOXO1              | 1.19E-14   | 0.90577347 | 0.723 | 0.621 | 4.22E-10 | Bcell_2_UCBMC |
| PRKCB              | 3.37E-14   | 0.69735285 | 0.873 | 0.795 | 1.19E-09 | Bcell_2_UCBMC |
| EBF1               | 1.81E-13   | 0.63863181 | 0.909 | 0.843 | 6.40E-09 | Bcell_2_UCBMC |
| PIK3CA             | 7.36E-13   | 1.25935984 | 0.489 | 0.336 | 2.61E-08 | Bcell_2_UCBMC |
| FCRL1              | 7.51E-13   | 0.44185989 | 0.964 | 0.927 | 2.66E-08 | Bcell_2_UCBMC |
| LYN                | 9.56E-13   | 0.51452923 | 0.919 | 0.877 | 3.39E-08 | Bcell_2_UCBMC |
| USP15              | 1.36E-12   | 0.55211369 | 0.844 | 0.784 | 4.82E-08 | Bcell_2_UCBMC |
| EIF2AK3            | 3.28E-12   | 0.60713391 | 0.814 | 0.735 | 1.16E-07 | Bcell_2_UCBMC |



|         |          |            |       |       |            |               |
|---------|----------|------------|-------|-------|------------|---------------|
| BACH2   | 4.30E-12 | 0.79139273 | 0.736 | 0.62  | 1.52E-07   | Bcell_2_UCBMC |
| DAZAP2  | 2.06E-10 | 0.73667765 | 0.642 | 0.565 | 7.30E-06   | Bcell_2_UCBMC |
| TRA2A   | 2.24E-10 | 0.52916101 | 0.831 | 0.782 | 7.92E-06   | Bcell_2_UCBMC |
| MPP7    | 2.96E-10 | 1.3369653  | 0.394 | 0.262 | 1.05E-05   | Bcell_2_UCBMC |
| TXNIP   | 5.26E-10 | 0.5424915  | 0.671 | 0.559 | 1.86E-05   | Bcell_2_UCBMC |
| HIVEP1  | 9.10E-10 | 1.03228587 | 0.476 | 0.359 | 3.22E-05   | Bcell_2_UCBMC |
| ITCH    | 1.02E-09 | 0.9862952  | 0.547 | 0.456 | 3.60E-05   | Bcell_2_UCBMC |
| SARAF   | 1.43E-09 | 0.45924496 | 0.857 | 0.815 | 5.08E-05   | Bcell_2_UCBMC |
| EML4    | 1.64E-09 | 0.62264038 | 0.779 | 0.744 | 5.81E-05   | Bcell_2_UCBMC |
| RSRP1   | 4.15E-09 | 0.57360054 | 0.765 | 0.702 | 0.00014702 | Bcell_2_UCBMC |
| B2M     | 6.07E-09 | 0.20348587 | 0.997 | 0.997 | 0.00021523 | Bcell_2_UCBMC |
| TRPM7   | 6.87E-09 | 0.66845536 | 0.687 | 0.644 | 0.00024334 | Bcell_2_UCBMC |
| PHLPP1  | 1.29E-08 | 0.99669321 | 0.45  | 0.322 | 0.000457   | Bcell_2_UCBMC |
| PDE3B   | 1.54E-08 | 1.12297377 | 0.391 | 0.266 | 0.00054554 | Bcell_2_UCBMC |
| CTDSPL2 | 2.05E-08 | 1.11073729 | 0.401 | 0.288 | 0.00072644 | Bcell_2_UCBMC |
| PUM1    | 3.01E-08 | 0.71608856 | 0.635 | 0.565 | 0.00106576 | Bcell_2_UCBMC |
| MANBA   | 3.11E-08 | 0.73795807 | 0.606 | 0.556 | 0.0011027  | Bcell_2_UCBMC |
| ELMO1   | 5.97E-08 | 0.5409955  | 0.769 | 0.704 | 0.0021165  | Bcell_2_UCBMC |
| RAB1A   | 8.53E-08 | 0.85642238 | 0.518 | 0.43  | 0.00302134 | Bcell_2_UCBMC |
| AFF3    | 9.21E-08 | 0.39677033 | 0.893 | 0.857 | 0.00326422 | Bcell_2_UCBMC |
| ITPR1   | 1.14E-07 | 0.75376111 | 0.619 | 0.568 | 0.00403759 | Bcell_2_UCBMC |
| CMTM6   | 1.40E-07 | 0.66637435 | 0.622 | 0.55  | 0.00495646 | Bcell_2_UCBMC |
| NFKBID  | 1.49E-07 | 1.05008761 | 0.349 | 0.239 | 0.00528449 | Bcell_2_UCBMC |
| OSBPL9  | 1.76E-07 | 0.69726762 | 0.573 | 0.505 | 0.00622958 | Bcell_2_UCBMC |
| STAG1   | 1.79E-07 | 0.57266077 | 0.713 | 0.672 | 0.00633608 | Bcell_2_UCBMC |
| G2E3    | 1.87E-07 | 1.1062079  | 0.332 | 0.226 | 0.00662493 | Bcell_2_UCBMC |
| CAMTA1  | 1.93E-07 | 0.92736374 | 0.443 | 0.354 | 0.00682442 | Bcell_2_UCBMC |
| PNN     | 2.22E-07 | 0.66685771 | 0.599 | 0.539 | 0.00787247 | Bcell_2_UCBMC |
| RAB30   | 2.65E-07 | 0.58363106 | 0.642 | 0.575 | 0.00938369 | Bcell_2_UCBMC |
| STK38   | 2.87E-07 | 0.97619552 | 0.446 | 0.344 | 0.01016252 | Bcell_2_UCBMC |
| WDFY2   | 3.64E-07 | 0.95488209 | 0.453 | 0.354 | 0.01288697 | Bcell_2_UCBMC |
| ATF2    | 3.65E-07 | 0.99964252 | 0.404 | 0.309 | 0.0129239  | Bcell_2_UCBMC |
| SSBP2   | 4.38E-07 | 0.56298443 | 0.674 | 0.583 | 0.01551832 | Bcell_2_UCBMC |

|                    |          |            |       |       |            |               |
|--------------------|----------|------------|-------|-------|------------|---------------|
| SNX4               | 4.83E-07 | 1.01120513 | 0.423 | 0.34  | 0.01712655 | Bcell_2_UCBMC |
| ENSMMUG00000063979 | 4.85E-07 | 1.06111614 | 0.371 | 0.275 | 0.01717439 | Bcell_2_UCBMC |
| ENSMMUG00000052127 | 5.26E-07 | 0.58027012 | 0.98  | 0.936 | 0.01862356 | Bcell_2_UCBMC |
| EPB41              | 5.91E-07 | 0.77283578 | 0.495 | 0.415 | 0.02094626 | Bcell_2_UCBMC |
| KMT2E              | 6.04E-07 | 0.52773842 | 0.681 | 0.646 | 0.02141749 | Bcell_2_UCBMC |
| TM9SF3             | 7.08E-07 | 0.72510331 | 0.564 | 0.504 | 0.02509063 | Bcell_2_UCBMC |
| TNRC6A             | 7.41E-07 | 0.92075485 | 0.466 | 0.379 | 0.02624352 | Bcell_2_UCBMC |
| RFX3               | 7.98E-07 | 0.71089994 | 0.544 | 0.472 | 0.02826174 | Bcell_2_UCBMC |
| GABPB1             | 8.46E-07 | 0.84720639 | 0.505 | 0.425 | 0.02996189 | Bcell_2_UCBMC |
| BCLAF1             | 8.69E-07 | 0.48998267 | 0.697 | 0.661 | 0.03078675 | Bcell_2_UCBMC |
| NUP54              | 9.06E-07 | 1.16648631 | 0.309 | 0.212 | 0.0321105  | Bcell_2_UCBMC |
| SMCHD1             | 1.04E-06 | 0.5387318  | 0.72  | 0.691 | 0.03675655 | Bcell_2_UCBMC |
| TMEM87A            | 1.09E-06 | 0.85253897 | 0.446 | 0.362 | 0.03858016 | Bcell_2_UCBMC |
| ANKRD44            | 1.18E-06 | 0.46722598 | 0.857 | 0.812 | 0.0418064  | Bcell_2_UCBMC |
| AP3B1              | 1.54E-06 | 0.84172788 | 0.466 | 0.379 | 0.05455608 | Bcell_2_UCBMC |
| WDR48              | 2.18E-06 | 1.19468296 | 0.303 | 0.208 | 0.07711539 | Bcell_2_UCBMC |
| CLINT1             | 2.55E-06 | 0.69238766 | 0.603 | 0.569 | 0.09025377 | Bcell_2_UCBMC |
| MARCHF6            | 2.57E-06 | 0.79050805 | 0.528 | 0.485 | 0.09114751 | Bcell_2_UCBMC |
| UTRN               | 2.64E-06 | 0.54646792 | 0.723 | 0.702 | 0.09343542 | Bcell_2_UCBMC |
| SREK1              | 2.70E-06 | 0.66360249 | 0.567 | 0.526 | 0.09573797 | Bcell_2_UCBMC |
| AHNAK              | 3.31E-06 | 0.70650377 | 0.433 | 0.342 | 0.11719955 | Bcell_2_UCBMC |
| TAX1BP1            | 3.57E-06 | 0.71330016 | 0.518 | 0.466 | 0.1266455  | Bcell_2_UCBMC |
| NFKB1              | 3.67E-06 | 0.61175719 | 0.707 | 0.706 | 0.13019462 | Bcell_2_UCBMC |
| FOXP1              | 4.44E-06 | 0.48956605 | 0.681 | 0.628 | 0.15747123 | Bcell_2_UCBMC |
| AKAP13             | 4.52E-06 | 0.37168324 | 0.844 | 0.826 | 0.16010276 | Bcell_2_UCBMC |
| MORF4L1            | 5.70E-06 | 0.4567783  | 0.7   | 0.701 | 0.20201066 | Bcell_2_UCBMC |
| TRA2B              | 5.75E-06 | 0.3004267  | 0.941 | 0.901 | 0.2036717  | Bcell_2_UCBMC |
| VPS13B             | 6.23E-06 | 0.38298259 | 0.733 | 0.698 | 0.22064729 | Bcell_2_UCBMC |
| UBB                | 6.35E-06 | 0.30936743 | 0.902 | 0.899 | 0.22512712 | Bcell_2_UCBMC |
| TAGLN2             | 7.03E-06 | 0.34683199 | 0.642 | 0.602 | 0.24906592 | Bcell_2_UCBMC |
| DHX9               | 8.45E-06 | 0.66833716 | 0.534 | 0.482 | 0.29948073 | Bcell_2_UCBMC |
| ENSMMUG00000006165 | 8.79E-06 | 0.62166695 | 0.684 | 0.66  | 0.31142925 | Bcell_2_UCBMC |
| INTS6              | 1.05E-05 | 0.98060128 | 0.41  | 0.34  | 0.37375359 | Bcell_2_UCBMC |

|          |          |            |       |       |            |               |
|----------|----------|------------|-------|-------|------------|---------------|
| SRSF11   | 1.20E-05 | 0.42788919 | 0.694 | 0.676 | 0.42582259 | Bcell_2_UCBMC |
| OSBPL8   | 1.51E-05 | 0.50905056 | 0.678 | 0.657 | 0.53579157 | Bcell_2_UCBMC |
| KDM6A    | 1.53E-05 | 0.55645105 | 0.648 | 0.61  | 0.5429547  | Bcell_2_UCBMC |
| GPR155   | 1.58E-05 | 1.06327501 | 0.349 | 0.266 | 0.56093558 | Bcell_2_UCBMC |
| TMEM131  | 1.69E-05 | 0.50494461 | 0.71  | 0.704 | 0.59930479 | Bcell_2_UCBMC |
| KIAA0040 | 2.38E-05 | 0.55102727 | 0.645 | 0.621 | 0.84261271 | Bcell_2_UCBMC |
| LDB2     | 2.45E-05 | 0.56087168 | 0.593 | 0.532 | 0.86984719 | Bcell_2_UCBMC |
| UBXN7    | 2.96E-05 | 0.88303976 | 0.342 | 0.262 | 1          | Bcell_2_UCBMC |
| LMBRD1   | 3.19E-05 | 0.55786889 | 0.554 | 0.505 | 1          | Bcell_2_UCBMC |
| CYTH1    | 3.26E-05 | 0.66318504 | 0.531 | 0.483 | 1          | Bcell_2_UCBMC |
| DDX6     | 3.35E-05 | 0.56691532 | 0.567 | 0.546 | 1          | Bcell_2_UCBMC |
| RAPGEF2  | 3.49E-05 | 0.70460686 | 0.495 | 0.446 | 1          | Bcell_2_UCBMC |
| AMBRA1   | 3.68E-05 | 0.97087166 | 0.378 | 0.298 | 1          | Bcell_2_UCBMC |
| PREX1    | 4.03E-05 | 0.94340024 | 0.309 | 0.224 | 1          | Bcell_2_UCBMC |
| NRIP1    | 4.26E-05 | 0.91003768 | 0.316 | 0.234 | 1          | Bcell_2_UCBMC |
| GOLGA4   | 4.44E-05 | 0.5725279  | 0.573 | 0.537 | 1          | Bcell_2_UCBMC |
| CDYL     | 4.67E-05 | 0.75689052 | 0.489 | 0.445 | 1          | Bcell_2_UCBMC |
| AKT3     | 4.89E-05 | 0.65899298 | 0.557 | 0.513 | 1          | Bcell_2_UCBMC |
| PLEKHM2  | 4.91E-05 | 1.00829804 | 0.309 | 0.227 | 1          | Bcell_2_UCBMC |
| TIMM23   | 5.13E-05 | 0.92901737 | 0.414 | 0.358 | 1          | Bcell_2_UCBMC |
| YEATS2   | 5.21E-05 | 0.55267585 | 0.557 | 0.507 | 1          | Bcell_2_UCBMC |
| MIER1    | 5.55E-05 | 0.71888111 | 0.466 | 0.431 | 1          | Bcell_2_UCBMC |
| ARID4B   | 5.78E-05 | 0.42812292 | 0.749 | 0.751 | 1          | Bcell_2_UCBMC |
| TSC22D3  | 5.99E-05 | 0.46546254 | 0.713 | 0.69  | 1          | Bcell_2_UCBMC |
| CD69     | 6.00E-05 | 0.4103455  | 0.922 | 0.898 | 1          | Bcell_2_UCBMC |
| ZFC3H1   | 6.05E-05 | 0.59405654 | 0.534 | 0.503 | 1          | Bcell_2_UCBMC |
| PPP1R12A | 6.23E-05 | 0.4309469  | 0.612 | 0.579 | 1          | Bcell_2_UCBMC |
| CD74     | 7.01E-05 | 0.11599056 | 0.997 | 0.999 | 1          | Bcell_2_UCBMC |
| CMTM8    | 7.26E-05 | 1.04110597 | 0.319 | 0.24  | 1          | Bcell_2_UCBMC |
| JUND     | 7.77E-05 | 0.40634923 | 0.759 | 0.756 | 1          | Bcell_2_UCBMC |
| ESYT2    | 8.28E-05 | 0.891677   | 0.375 | 0.309 | 1          | Bcell_2_UCBMC |
| BRAF     | 8.39E-05 | 0.70049165 | 0.521 | 0.488 | 1          | Bcell_2_UCBMC |
| RALA     | 9.94E-05 | 0.73131511 | 0.463 | 0.414 | 1          | Bcell_2_UCBMC |

|                    |            |            |       |       |                 |
|--------------------|------------|------------|-------|-------|-----------------|
| ARID1B             | 0.00011099 | 0.45892138 | 0.743 | 0.725 | 1 Bcell_2_UCBMC |
| CNOT1              | 0.00011446 | 0.62023828 | 0.495 | 0.463 | 1 Bcell_2_UCBMC |
| ZNF92              | 0.00011634 | 0.8142118  | 0.329 | 0.255 | 1 Bcell_2_UCBMC |
| DENND4A            | 0.00012203 | 0.3146213  | 0.925 | 0.891 | 1 Bcell_2_UCBMC |
| TBC1D24            | 0.00012253 | 0.5991803  | 0.534 | 0.495 | 1 Bcell_2_UCBMC |
| NUP62CL            | 0.00013119 | 0.87218704 | 0.384 | 0.316 | 1 Bcell_2_UCBMC |
| FUBP1              | 0.00013326 | 0.60165042 | 0.524 | 0.482 | 1 Bcell_2_UCBMC |
| RAP1B              | 0.00014038 | 0.44131742 | 0.645 | 0.624 | 1 Bcell_2_UCBMC |
| ZNF644             | 0.00014135 | 0.4997141  | 0.606 | 0.587 | 1 Bcell_2_UCBMC |
| DCP1A              | 0.00015215 | 1.01648872 | 0.365 | 0.303 | 1 Bcell_2_UCBMC |
| GPBP1              | 0.00016744 | 0.48656431 | 0.635 | 0.629 | 1 Bcell_2_UCBMC |
| MAPK1              | 0.00017146 | 0.76774274 | 0.407 | 0.351 | 1 Bcell_2_UCBMC |
| FKBP5              | 0.00018876 | 0.73100542 | 0.443 | 0.377 | 1 Bcell_2_UCBMC |
| ENSMMUG00000028906 | 0.00019132 | 0.4900236  | 0.596 | 0.562 | 1 Bcell_2_UCBMC |
| ANTXR2             | 0.0002169  | 0.66862727 | 0.463 | 0.413 | 1 Bcell_2_UCBMC |
| TNRC6B             | 0.00021776 | 0.55911443 | 0.678 | 0.678 | 1 Bcell_2_UCBMC |
| SETD2              | 0.0002318  | 0.61225758 | 0.541 | 0.525 | 1 Bcell_2_UCBMC |
| SYK                | 0.00025105 | 0.45716859 | 0.625 | 0.601 | 1 Bcell_2_UCBMC |
| SAP18              | 0.0002543  | 0.55499035 | 0.492 | 0.456 | 1 Bcell_2_UCBMC |
| CDC42              | 0.00026144 | 0.21295176 | 0.863 | 0.867 | 1 Bcell_2_UCBMC |
| IQGAP2             | 0.00026147 | 0.56221887 | 0.515 | 0.471 | 1 Bcell_2_UCBMC |
| NIPSNAP2           | 0.00026733 | 0.93886456 | 0.293 | 0.221 | 1 Bcell_2_UCBMC |
| MAMU-DMA           | 0.00027531 | 0.19573132 | 0.87  | 0.894 | 1 Bcell_2_UCBMC |
| PFDN1              | 0.00028339 | 0.69317559 | 0.423 | 0.376 | 1 Bcell_2_UCBMC |
| RABGAP1L           | 0.00028697 | 0.46195705 | 0.723 | 0.712 | 1 Bcell_2_UCBMC |
| TBC1D9             | 0.0003021  | 0.49779522 | 0.57  | 0.505 | 1 Bcell_2_UCBMC |
| ARID2              | 0.00031462 | 0.55876612 | 0.511 | 0.47  | 1 Bcell_2_UCBMC |
| MTREX              | 0.00037101 | 0.46755097 | 0.616 | 0.624 | 1 Bcell_2_UCBMC |
| PIAS1              | 0.00037449 | 0.52360925 | 0.534 | 0.512 | 1 Bcell_2_UCBMC |
| BBX                | 0.0003756  | 0.50258725 | 0.55  | 0.513 | 1 Bcell_2_UCBMC |
| SENP5              | 0.00038758 | 0.74689735 | 0.469 | 0.449 | 1 Bcell_2_UCBMC |
| ENSMMUG00000020643 | 0.00042695 | 0.73094742 | 0.322 | 0.256 | 1 Bcell_2_UCBMC |
| ABCG1              | 0.00044012 | 0.79256364 | 0.29  | 0.218 | 1 Bcell_2_UCBMC |

|                    |            |            |       |       |                 |
|--------------------|------------|------------|-------|-------|-----------------|
| HNRNPC             | 0.00045111 | 0.33188114 | 0.772 | 0.766 | 1 Bcell_2_UCBMC |
| QKI                | 0.00046896 | 0.64551907 | 0.511 | 0.493 | 1 Bcell_2_UCBMC |
| CASP1              | 0.00047511 | 0.31797549 | 0.707 | 0.713 | 1 Bcell_2_UCBMC |
| RBM23              | 0.00047602 | 0.75796216 | 0.352 | 0.295 | 1 Bcell_2_UCBMC |
| SPPL3              | 0.00051102 | 0.58130059 | 0.537 | 0.514 | 1 Bcell_2_UCBMC |
| PIK3R5             | 0.00057106 | 1.03920697 | 0.3   | 0.238 | 1 Bcell_2_UCBMC |
| DIP2B              | 0.00060533 | 0.54123595 | 0.547 | 0.536 | 1 Bcell_2_UCBMC |
| IRAK2              | 0.00064052 | 0.88518221 | 0.257 | 0.19  | 1 Bcell_2_UCBMC |
| WAC                | 0.00069408 | 0.6623042  | 0.482 | 0.483 | 1 Bcell_2_UCBMC |
| TSN                | 0.00071204 | 0.95521777 | 0.27  | 0.208 | 1 Bcell_2_UCBMC |
| PCM1               | 0.00075047 | 0.70387803 | 0.482 | 0.453 | 1 Bcell_2_UCBMC |
| RHOH               | 0.0007604  | 0.51048891 | 0.55  | 0.517 | 1 Bcell_2_UCBMC |
| RICTOR             | 0.00077366 | 0.59142013 | 0.485 | 0.466 | 1 Bcell_2_UCBMC |
| ENSMMUG00000013491 | 0.00077487 | 1.12373382 | 0.251 | 0.191 | 1 Bcell_2_UCBMC |
| NDUFAF4            | 0.00077724 | 0.82160699 | 0.283 | 0.218 | 1 Bcell_2_UCBMC |
| ZNF207             | 0.00079283 | 0.66113735 | 0.423 | 0.382 | 1 Bcell_2_UCBMC |
| NFKBIB             | 0.00080069 | 0.56411434 | 0.482 | 0.451 | 1 Bcell_2_UCBMC |
| PICALM             | 0.00097944 | 0.43749162 | 0.557 | 0.534 | 1 Bcell_2_UCBMC |
| RIPOR2             | 0.00101366 | 0.24819338 | 0.814 | 0.783 | 1 Bcell_2_UCBMC |
| CCDC88A            | 0.00102352 | 0.46571658 | 0.502 | 0.458 | 1 Bcell_2_UCBMC |
| JMJD1C             | 0.00109682 | 0.27565164 | 0.906 | 0.863 | 1 Bcell_2_UCBMC |
| RBM39              | 0.00114202 | 0.32765569 | 0.85  | 0.84  | 1 Bcell_2_UCBMC |
| COG5               | 0.00115466 | 0.58435345 | 0.56  | 0.56  | 1 Bcell_2_UCBMC |
| ZNF292             | 0.00118123 | 0.40908384 | 0.583 | 0.584 | 1 Bcell_2_UCBMC |
| FAM172A            | 0.00122726 | 0.41084777 | 0.599 | 0.6   | 1 Bcell_2_UCBMC |
| AQR                | 0.00123239 | 0.76065214 | 0.329 | 0.275 | 1 Bcell_2_UCBMC |
| GABARAPL2          | 0.0013518  | 0.32359743 | 0.593 | 0.578 | 1 Bcell_2_UCBMC |
| RPL13A             | 0.00141226 | 0.10420148 | 0.964 | 0.982 | 1 Bcell_2_UCBMC |
| BSDC1              | 0.00141638 | 0.87282692 | 0.3   | 0.246 | 1 Bcell_2_UCBMC |
| ENSMMUG00000056654 | 0.00145984 | 0.40159664 | 0.687 | 0.717 | 1 Bcell_2_UCBMC |
| PTBP2              | 0.00146363 | 0.53224391 | 0.482 | 0.442 | 1 Bcell_2_UCBMC |
| TCP11L2            | 0.00146574 | 0.69661459 | 0.296 | 0.237 | 1 Bcell_2_UCBMC |
| CYLD               | 0.00152109 | 0.72454784 | 0.41  | 0.384 | 1 Bcell_2_UCBMC |

|                    |            |            |       |       |                 |
|--------------------|------------|------------|-------|-------|-----------------|
| XRN1               | 0.0015258  | 0.78249631 | 0.358 | 0.304 | 1 Bcell_2_UCBMC |
| SENP2              | 0.0015327  | 0.90804754 | 0.332 | 0.288 | 1 Bcell_2_UCBMC |
| PBXIP1             | 0.00156639 | 0.72791371 | 0.365 | 0.317 | 1 Bcell_2_UCBMC |
| ENSMMUG00000054038 | 0.00166338 | 0.15216858 | 0.935 | 0.941 | 1 Bcell_2_UCBMC |
| SMURF1             | 0.00166442 | 0.67726929 | 0.303 | 0.239 | 1 Bcell_2_UCBMC |
| RNMT               | 0.00167989 | 0.46782648 | 0.609 | 0.627 | 1 Bcell_2_UCBMC |
| PAN3               | 0.00171796 | 0.45812155 | 0.599 | 0.612 | 1 Bcell_2_UCBMC |
| TBL1XR1            | 0.00174626 | 0.35608416 | 0.596 | 0.583 | 1 Bcell_2_UCBMC |
| TP53BP1            | 0.00180428 | 0.67756551 | 0.479 | 0.462 | 1 Bcell_2_UCBMC |
| EZH2               | 0.0019253  | 0.77544917 | 0.296 | 0.239 | 1 Bcell_2_UCBMC |
| SNX29              | 0.00197541 | 0.13671288 | 0.879 | 0.829 | 1 Bcell_2_UCBMC |
| G3BP2              | 0.00198923 | 0.66556988 | 0.505 | 0.487 | 1 Bcell_2_UCBMC |
| CREBRF             | 0.00201536 | 0.65631761 | 0.443 | 0.413 | 1 Bcell_2_UCBMC |
| DERL1              | 0.00205978 | 0.82069485 | 0.316 | 0.266 | 1 Bcell_2_UCBMC |
| GAB2               | 0.00207148 | 0.80928939 | 0.316 | 0.261 | 1 Bcell_2_UCBMC |
| ENSMMUG00000014648 | 0.00213318 | 0.19134184 | 0.831 | 0.811 | 1 Bcell_2_UCBMC |
| CDC5L              | 0.00214448 | 0.69809    | 0.339 | 0.291 | 1 Bcell_2_UCBMC |
| SHOC2              | 0.00214707 | 0.56036149 | 0.508 | 0.5   | 1 Bcell_2_UCBMC |
| CCNL1              | 0.00218457 | 0.293241   | 0.834 | 0.834 | 1 Bcell_2_UCBMC |
| PSMA3              | 0.00221465 | 0.68318354 | 0.404 | 0.364 | 1 Bcell_2_UCBMC |
| ENSMMUG00000002320 | 0.00226208 | 0.18409004 | 0.896 | 0.919 | 1 Bcell_2_UCBMC |
| CELF2              | 0.00241969 | 0.28371155 | 0.723 | 0.739 | 1 Bcell_2_UCBMC |
| SETD7              | 0.00245855 | 0.99173272 | 0.261 | 0.205 | 1 Bcell_2_UCBMC |
| CYB5R4             | 0.00251992 | 0.77865463 | 0.381 | 0.342 | 1 Bcell_2_UCBMC |
| MAP3K1             | 0.00262422 | 0.52648603 | 0.479 | 0.453 | 1 Bcell_2_UCBMC |
| AFF1               | 0.00275897 | 0.52433311 | 0.485 | 0.466 | 1 Bcell_2_UCBMC |
| INO80D             | 0.00275969 | 0.68451345 | 0.401 | 0.366 | 1 Bcell_2_UCBMC |
| YME1L1             | 0.00276455 | 0.75317805 | 0.384 | 0.353 | 1 Bcell_2_UCBMC |
| CSDE1              | 0.00278769 | 0.46794956 | 0.524 | 0.52  | 1 Bcell_2_UCBMC |
| UVRAG              | 0.00287124 | 0.25393357 | 0.788 | 0.777 | 1 Bcell_2_UCBMC |
| MOB3A              | 0.00294228 | 0.83240006 | 0.336 | 0.287 | 1 Bcell_2_UCBMC |
| LUC7L3             | 0.00299034 | 0.44450986 | 0.541 | 0.549 | 1 Bcell_2_UCBMC |
| LYST               | 0.00307493 | 0.60826079 | 0.368 | 0.322 | 1 Bcell_2_UCBMC |

|                    |            |            |       |       |                 |
|--------------------|------------|------------|-------|-------|-----------------|
| SLU7               | 0.0033763  | 0.81272719 | 0.313 | 0.27  | 1 Bcell_2_UCBMC |
| SYF2               | 0.0033826  | 0.49675087 | 0.502 | 0.501 | 1 Bcell_2_UCBMC |
| SLC35A3            | 0.00342213 | 0.65573424 | 0.397 | 0.367 | 1 Bcell_2_UCBMC |
| SCFD1              | 0.00358125 | 0.7942903  | 0.378 | 0.351 | 1 Bcell_2_UCBMC |
| GAS7               | 0.00361835 | 0.59676955 | 0.443 | 0.413 | 1 Bcell_2_UCBMC |
| ELF2               | 0.00364244 | 0.75469894 | 0.306 | 0.256 | 1 Bcell_2_UCBMC |
| MBNL2              | 0.00372459 | 0.50707615 | 0.472 | 0.456 | 1 Bcell_2_UCBMC |
| RAF1               | 0.00374089 | 0.85759559 | 0.326 | 0.288 | 1 Bcell_2_UCBMC |
| PRKD3              | 0.0038247  | 0.661619   | 0.371 | 0.332 | 1 Bcell_2_UCBMC |
| ENSMMUG00000046264 | 0.00414706 | 0.7150112  | 0.469 | 0.453 | 1 Bcell_2_UCBMC |
| SEC31A             | 0.00424834 | 0.51867254 | 0.45  | 0.433 | 1 Bcell_2_UCBMC |
| FAM135A            | 0.00425081 | 0.75397324 | 0.283 | 0.234 | 1 Bcell_2_UCBMC |
| TET2               | 0.00449536 | 0.95564032 | 0.332 | 0.299 | 1 Bcell_2_UCBMC |
| DDX5               | 0.00469236 | 0.1286589  | 0.977 | 0.92  | 1 Bcell_2_UCBMC |
| CNOT4              | 0.00469562 | 0.54262954 | 0.463 | 0.451 | 1 Bcell_2_UCBMC |
| STK24              | 0.00472631 | 0.55622586 | 0.417 | 0.384 | 1 Bcell_2_UCBMC |
| FBXL20             | 0.00473329 | 0.52485291 | 0.466 | 0.45  | 1 Bcell_2_UCBMC |
| ZEB2               | 0.00484138 | 0.37301272 | 0.635 | 0.629 | 1 Bcell_2_UCBMC |
| CREBBP             | 0.00508275 | 0.5003896  | 0.505 | 0.485 | 1 Bcell_2_UCBMC |
| GLIPR1L2           | 0.00517151 | 0.50037183 | 0.358 | 0.311 | 1 Bcell_2_UCBMC |
| BNIP3L             | 0.00520929 | 0.53356672 | 0.41  | 0.385 | 1 Bcell_2_UCBMC |
| MON2               | 0.00527507 | 0.76233933 | 0.332 | 0.294 | 1 Bcell_2_UCBMC |
| KAT6A              | 0.00546098 | 0.59080294 | 0.45  | 0.431 | 1 Bcell_2_UCBMC |
| TMED10             | 0.00547612 | 0.63729118 | 0.394 | 0.375 | 1 Bcell_2_UCBMC |
| LAPTM5             | 0.00552876 | 0.29908398 | 0.7   | 0.736 | 1 Bcell_2_UCBMC |
| WRN                | 0.00580489 | 0.59317287 | 0.417 | 0.387 | 1 Bcell_2_UCBMC |
| MORC3              | 0.00588139 | 0.72842468 | 0.352 | 0.318 | 1 Bcell_2_UCBMC |
| TAPT1              | 0.00589543 | 0.82699614 | 0.27  | 0.221 | 1 Bcell_2_UCBMC |
| ENSMMUG00000058325 | 0.00591762 | 0.12692385 | 0.98  | 0.975 | 1 Bcell_2_UCBMC |
| MTPN               | 0.00600724 | 0.39932782 | 0.58  | 0.588 | 1 Bcell_2_UCBMC |
| IREB2              | 0.0061512  | 0.83983832 | 0.293 | 0.247 | 1 Bcell_2_UCBMC |
| ATP11B             | 0.00623204 | 0.71797973 | 0.362 | 0.331 | 1 Bcell_2_UCBMC |
| YWHAZ              | 0.00625685 | 0.21713306 | 0.847 | 0.896 | 1 Bcell_2_UCBMC |

|         |            |            |       |       |                 |
|---------|------------|------------|-------|-------|-----------------|
| CD44    | 0.00632699 | 0.46254386 | 0.59  | 0.59  | 1 Bcell_2_UCBMC |
| CSNK1G1 | 0.0063273  | 0.10473454 | 0.235 | 0.35  | 1 Bcell_2_UCBMC |
| KANSL2  | 0.00666144 | 0.70105966 | 0.274 | 0.224 | 1 Bcell_2_UCBMC |
| VPS36   | 0.00677584 | 0.6528882  | 0.368 | 0.34  | 1 Bcell_2_UCBMC |
| MYO5A   | 0.00690392 | 0.61133928 | 0.466 | 0.453 | 1 Bcell_2_UCBMC |
| FUT8    | 0.00692408 | 0.9799613  | 0.254 | 0.207 | 1 Bcell_2_UCBMC |
| BIN3    | 0.0069708  | 0.55967256 | 0.456 | 0.459 | 1 Bcell_2_UCBMC |
| KLHL28  | 0.00706091 | 0.85289768 | 0.283 | 0.237 | 1 Bcell_2_UCBMC |
| CAB39   | 0.00714565 | 0.55751931 | 0.479 | 0.479 | 1 Bcell_2_UCBMC |
| CCDC59  | 0.00723584 | 0.65301717 | 0.336 | 0.296 | 1 Bcell_2_UCBMC |
| SNX2    | 0.00749034 | 0.2828357  | 0.684 | 0.7   | 1 Bcell_2_UCBMC |
| NIPBL   | 0.00795146 | 0.53628085 | 0.463 | 0.453 | 1 Bcell_2_UCBMC |
| GPR107  | 0.00800811 | 0.93747376 | 0.29  | 0.252 | 1 Bcell_2_UCBMC |
| TCEA1   | 0.00862644 | 0.40554487 | 0.505 | 0.51  | 1 Bcell_2_UCBMC |
| POC1B   | 0.008636   | 0.44055469 | 0.489 | 0.466 | 1 Bcell_2_UCBMC |
| GGNBP2  | 0.00865174 | 0.43966132 | 0.469 | 0.461 | 1 Bcell_2_UCBMC |
| DLG1    | 0.00893653 | 0.47695792 | 0.495 | 0.494 | 1 Bcell_2_UCBMC |
| PIK3C2A | 0.00898673 | 0.96520309 | 0.283 | 0.246 | 1 Bcell_2_UCBMC |
| YAF2    | 0.00907293 | 0.52764261 | 0.45  | 0.42  | 1 Bcell_2_UCBMC |
| FBXO33  | 0.00918657 | 0.4967973  | 0.45  | 0.433 | 1 Bcell_2_UCBMC |
| EPC1    | 0.00964387 | 0.27384691 | 0.678 | 0.693 | 1 Bcell_2_UCBMC |
| MYH9    | 0.00999377 | 0.3882498  | 0.521 | 0.522 | 1 Bcell_2_UCBMC |
| UBE2D3  | 0.01022523 | 0.20883709 | 0.805 | 0.802 | 1 Bcell_2_UCBMC |
| CHD7    | 0.01057177 | 0.58716485 | 0.45  | 0.435 | 1 Bcell_2_UCBMC |
| CHD2    | 0.01062796 | 0.31476665 | 0.606 | 0.601 | 1 Bcell_2_UCBMC |
| DOCK2   | 0.01082225 | 0.36408542 | 0.668 | 0.702 | 1 Bcell_2_UCBMC |
| CSNK1A1 | 0.01097924 | 0.55465672 | 0.505 | 0.515 | 1 Bcell_2_UCBMC |
| ZFAND3  | 0.01098673 | 0.3482891  | 0.606 | 0.621 | 1 Bcell_2_UCBMC |
| ARMC8   | 0.0111963  | 0.8357446  | 0.313 | 0.279 | 1 Bcell_2_UCBMC |
| DDX3X   | 0.01172241 | 0.22172381 | 0.668 | 0.706 | 1 Bcell_2_UCBMC |
| RAB18   | 0.01179462 | 0.69695998 | 0.29  | 0.249 | 1 Bcell_2_UCBMC |
| TXNDC11 | 0.01216488 | 0.87132899 | 0.257 | 0.216 | 1 Bcell_2_UCBMC |
| MARCHF3 | 0.0122985  | 0.60263625 | 0.423 | 0.409 | 1 Bcell_2_UCBMC |



|          |            |            |       |       |                 |
|----------|------------|------------|-------|-------|-----------------|
| RLF      | 0.01249623 | 0.53238687 | 0.446 | 0.423 | 1 Bcell_2_UCBMC |
| EPC2     | 0.01262396 | 0.56431558 | 0.417 | 0.407 | 1 Bcell_2_UCBMC |
| SRSF5    | 0.01294632 | 0.21933869 | 0.824 | 0.843 | 1 Bcell_2_UCBMC |
| RBM5     | 0.01318329 | 0.5353798  | 0.456 | 0.44  | 1 Bcell_2_UCBMC |
| KLHL18   | 0.01321907 | 0.71798446 | 0.339 | 0.309 | 1 Bcell_2_UCBMC |
| SLC22A18 | 0.0132874  | 0.61374683 | 0.375 | 0.354 | 1 Bcell_2_UCBMC |
| ELOVL5   | 0.01336523 | 0.41585431 | 0.524 | 0.516 | 1 Bcell_2_UCBMC |
| CNBP     | 0.01370562 | 0.29706447 | 0.59  | 0.604 | 1 Bcell_2_UCBMC |
| NRAS     | 0.01400846 | 0.87640501 | 0.257 | 0.219 | 1 Bcell_2_UCBMC |
| RBM14    | 0.01437997 | 0.37617014 | 0.502 | 0.51  | 1 Bcell_2_UCBMC |
| SAP30BP  | 0.01441916 | 0.68329075 | 0.309 | 0.284 | 1 Bcell_2_UCBMC |
| NUMB     | 0.01466204 | 0.64807349 | 0.436 | 0.433 | 1 Bcell_2_UCBMC |
| SNX9     | 0.01517887 | 0.40768988 | 0.541 | 0.533 | 1 Bcell_2_UCBMC |
| TUT4     | 0.01551906 | 0.58591569 | 0.485 | 0.504 | 1 Bcell_2_UCBMC |
| TFDP2    | 0.01564498 | 0.90626503 | 0.345 | 0.323 | 1 Bcell_2_UCBMC |
| EHD4     | 0.0160886  | 0.70633209 | 0.342 | 0.321 | 1 Bcell_2_UCBMC |
| CWC15    | 0.01618287 | 0.51797034 | 0.44  | 0.432 | 1 Bcell_2_UCBMC |
| RAB2A    | 0.01626923 | 0.49631942 | 0.498 | 0.513 | 1 Bcell_2_UCBMC |
| SUSD6    | 0.01639121 | 0.63159582 | 0.342 | 0.307 | 1 Bcell_2_UCBMC |
| PRKAR1A  | 0.01645742 | 0.63595409 | 0.397 | 0.384 | 1 Bcell_2_UCBMC |
| PPTC7    | 0.01664546 | 0.61503407 | 0.391 | 0.369 | 1 Bcell_2_UCBMC |
| UBR5     | 0.01686862 | 0.62990708 | 0.397 | 0.376 | 1 Bcell_2_UCBMC |
| KIZ      | 0.01687116 | 0.78613177 | 0.332 | 0.309 | 1 Bcell_2_UCBMC |
| HNRNPUL1 | 0.01701998 | 0.75920439 | 0.28  | 0.247 | 1 Bcell_2_UCBMC |
| PRPF40A  | 0.01705582 | 0.39248987 | 0.544 | 0.557 | 1 Bcell_2_UCBMC |
| ARID5B   | 0.01715399 | 0.3828738  | 0.577 | 0.589 | 1 Bcell_2_UCBMC |
| ELF1     | 0.01737329 | 0.16653707 | 0.834 | 0.845 | 1 Bcell_2_UCBMC |
| KDM4C    | 0.01739176 | 0.26401108 | 0.71  | 0.738 | 1 Bcell_2_UCBMC |
| POU2F1   | 0.01761719 | 0.68673769 | 0.336 | 0.308 | 1 Bcell_2_UCBMC |
| RBM27    | 0.0177396  | 0.5127014  | 0.417 | 0.402 | 1 Bcell_2_UCBMC |
| DNAJC2   | 0.01778709 | 0.62802774 | 0.417 | 0.412 | 1 Bcell_2_UCBMC |
| SEPTIN6  | 0.01847424 | 0.29224583 | 0.616 | 0.65  | 1 Bcell_2_UCBMC |
| MDM4     | 0.01859438 | 0.54138835 | 0.43  | 0.43  | 1 Bcell_2_UCBMC |

|                   |            |            |       |       |                 |
|-------------------|------------|------------|-------|-------|-----------------|
| ELL2              | 0.0189054  | 0.57133135 | 0.45  | 0.447 | 1 Bcell_2_UCBMC |
| ECD               | 0.01903954 | 0.79457658 | 0.29  | 0.26  | 1 Bcell_2_UCBMC |
| PSEN1             | 0.01954081 | 0.6887557  | 0.283 | 0.249 | 1 Bcell_2_UCBMC |
| DAZAP1            | 0.01979741 | 0.22351531 | 0.606 | 0.631 | 1 Bcell_2_UCBMC |
| SCAF8             | 0.0198024  | 0.39542553 | 0.521 | 0.52  | 1 Bcell_2_UCBMC |
| KMT2C             | 0.01993872 | 0.20792272 | 0.723 | 0.734 | 1 Bcell_2_UCBMC |
| HERC1             | 0.01995702 | 0.68410563 | 0.371 | 0.362 | 1 Bcell_2_UCBMC |
| TENT2             | 0.02014206 | 0.61453036 | 0.306 | 0.274 | 1 Bcell_2_UCBMC |
| ACTR2             | 0.02017059 | 0.33441153 | 0.73  | 0.81  | 1 Bcell_2_UCBMC |
| RSRC2             | 0.02069301 | 0.35093919 | 0.56  | 0.572 | 1 Bcell_2_UCBMC |
| HERC3             | 0.02081983 | 0.69416773 | 0.296 | 0.262 | 1 Bcell_2_UCBMC |
| TRAF3             | 0.02126759 | 0.35851681 | 0.544 | 0.551 | 1 Bcell_2_UCBMC |
| TCF12             | 0.02128428 | 0.30007021 | 0.625 | 0.65  | 1 Bcell_2_UCBMC |
| CERT1             | 0.02129216 | 0.45335227 | 0.456 | 0.447 | 1 Bcell_2_UCBMC |
| WDFY4             | 0.02224011 | 0.45547602 | 0.577 | 0.606 | 1 Bcell_2_UCBMC |
| CAMK1D            | 0.02292639 | 0.51794029 | 0.479 | 0.479 | 1 Bcell_2_UCBMC |
| TAF3              | 0.02338644 | 0.84310045 | 0.313 | 0.282 | 1 Bcell_2_UCBMC |
| BTBD9             | 0.02343735 | 0.54508851 | 0.456 | 0.44  | 1 Bcell_2_UCBMC |
| GNAL              | 0.02352615 | 0.63389968 | 0.319 | 0.294 | 1 Bcell_2_UCBMC |
| SECISBP2L         | 0.0247813  | 0.70368872 | 0.29  | 0.258 | 1 Bcell_2_UCBMC |
| UBR1              | 0.02559656 | 0.54394587 | 0.401 | 0.394 | 1 Bcell_2_UCBMC |
| DOP1B             | 0.02566669 | 0.72678585 | 0.303 | 0.27  | 1 Bcell_2_UCBMC |
| S100A6            | 0.02615846 | 0.4305517  | 0.365 | 0.324 | 1 Bcell_2_UCBMC |
| GTF2B             | 0.02639532 | 0.22639692 | 0.632 | 0.667 | 1 Bcell_2_UCBMC |
| VPS39             | 0.02678778 | 0.72043867 | 0.296 | 0.271 | 1 Bcell_2_UCBMC |
| SOS1              | 0.02723221 | 0.55481048 | 0.362 | 0.342 | 1 Bcell_2_UCBMC |
| ATF7IP            | 0.02737453 | 0.3330701  | 0.648 | 0.676 | 1 Bcell_2_UCBMC |
| ATG5              | 0.02745471 | 0.52396801 | 0.381 | 0.371 | 1 Bcell_2_UCBMC |
| LDLRAD4           | 0.02807257 | 0.64903114 | 0.336 | 0.313 | 1 Bcell_2_UCBMC |
| TRIM22            | 0.0292958  | 0.52247057 | 0.531 | 0.562 | 1 Bcell_2_UCBMC |
| ZEB1              | 0.02937935 | 0.47959375 | 0.524 | 0.52  | 1 Bcell_2_UCBMC |
| MIA2              | 0.02981438 | 0.53562214 | 0.378 | 0.353 | 1 Bcell_2_UCBMC |
| ENSMUG00000051300 | 0.02984393 | 0.14079617 | 0.971 | 0.893 | 1 Bcell_2_UCBMC |

|                   |            |            |       |       |                 |
|-------------------|------------|------------|-------|-------|-----------------|
| SIN3A             | 0.02988971 | 0.62928418 | 0.326 | 0.306 | 1 Bcell_2_UCBMC |
| IQGAP1            | 0.03070255 | 0.33701301 | 0.547 | 0.571 | 1 Bcell_2_UCBMC |
| APBB1IP           | 0.03072938 | 0.41505994 | 0.57  | 0.621 | 1 Bcell_2_UCBMC |
| PPM1A             | 0.03079353 | 0.74354499 | 0.27  | 0.241 | 1 Bcell_2_UCBMC |
| MAMU-E            | 0.0312737  | 0.10177514 | 0.925 | 0.944 | 1 Bcell_2_UCBMC |
| NKIRAS1           | 0.03173146 | 0.59033497 | 0.365 | 0.349 | 1 Bcell_2_UCBMC |
| TOGARAM1          | 0.03199461 | 0.79929377 | 0.28  | 0.252 | 1 Bcell_2_UCBMC |
| KCMF1             | 0.03240471 | 0.67738336 | 0.316 | 0.292 | 1 Bcell_2_UCBMC |
| SMG6              | 0.03293364 | 0.54449175 | 0.404 | 0.404 | 1 Bcell_2_UCBMC |
| SRRM1             | 0.03345175 | 0.37783444 | 0.515 | 0.545 | 1 Bcell_2_UCBMC |
| TXLNG             | 0.03431673 | 0.46406635 | 0.322 | 0.294 | 1 Bcell_2_UCBMC |
| ANAPC10           | 0.03451424 | 0.91940634 | 0.287 | 0.268 | 1 Bcell_2_UCBMC |
| ENSMUG00000064120 | 0.03508948 | 0.24507228 | 0.596 | 0.62  | 1 Bcell_2_UCBMC |
| DTNBP1            | 0.03515717 | 0.43515468 | 0.498 | 0.523 | 1 Bcell_2_UCBMC |
| RPS6KB1           | 0.03518216 | 0.62812277 | 0.404 | 0.411 | 1 Bcell_2_UCBMC |
| ZRANB2            | 0.03584164 | 0.49553786 | 0.42  | 0.417 | 1 Bcell_2_UCBMC |
| SELENOS           | 0.03593544 | 0.42990979 | 0.537 | 0.57  | 1 Bcell_2_UCBMC |
| ROCK1             | 0.03608516 | 0.35882903 | 0.599 | 0.63  | 1 Bcell_2_UCBMC |
| CTNNB1            | 0.03615276 | 0.1300441  | 0.355 | 0.484 | 1 Bcell_2_UCBMC |
| SS18              | 0.03616923 | 0.55338784 | 0.326 | 0.297 | 1 Bcell_2_UCBMC |
| PHC3              | 0.03647278 | 0.85281275 | 0.28  | 0.261 | 1 Bcell_2_UCBMC |
| NUP214            | 0.03671683 | 0.89518622 | 0.296 | 0.28  | 1 Bcell_2_UCBMC |
| CSNK2A1           | 0.03733103 | 0.49994427 | 0.436 | 0.449 | 1 Bcell_2_UCBMC |
| MTMR3             | 0.03861282 | 0.72754943 | 0.267 | 0.242 | 1 Bcell_2_UCBMC |
| ZNFX1             | 0.03877089 | 0.69617834 | 0.27  | 0.247 | 1 Bcell_2_UCBMC |
| FAR1              | 0.03896247 | 0.13487481 | 0.205 | 0.29  | 1 Bcell_2_UCBMC |
| JARID2            | 0.03902278 | 0.2213141  | 0.687 | 0.709 | 1 Bcell_2_UCBMC |
| HELZ              | 0.03929564 | 0.54821938 | 0.391 | 0.394 | 1 Bcell_2_UCBMC |
| PRDM2             | 0.0394797  | 0.39894243 | 0.456 | 0.448 | 1 Bcell_2_UCBMC |
| SBF2              | 0.04014587 | 0.10763384 | 0.228 | 0.311 | 1 Bcell_2_UCBMC |
| COX3              | 0.04059376 | 0.98227115 | 0.42  | 0.428 | 1 Bcell_2_UCBMC |
| BIRC6             | 0.04126163 | 0.28164395 | 0.645 | 0.678 | 1 Bcell_2_UCBMC |
| ARHGAP25          | 0.04153515 | 0.10304264 | 0.345 | 0.466 | 1 Bcell_2_UCBMC |

|         |            |            |       |       |                 |
|---------|------------|------------|-------|-------|-----------------|
| VTA1    | 0.04221055 | 0.90528729 | 0.267 | 0.244 | 1 Bcell_2_UCBMC |
| MGAT5   | 0.04224944 | 0.7372832  | 0.326 | 0.307 | 1 Bcell_2_UCBMC |
| NR3C1   | 0.04310835 | 0.38481439 | 0.544 | 0.562 | 1 Bcell_2_UCBMC |
| MCM9    | 0.04345945 | 0.78757593 | 0.342 | 0.324 | 1 Bcell_2_UCBMC |
| THRAP3  | 0.04430381 | 0.34747423 | 0.498 | 0.523 | 1 Bcell_2_UCBMC |
| FXR1    | 0.04507931 | 0.47459403 | 0.479 | 0.496 | 1 Bcell_2_UCBMC |
| SFSWAP  | 0.04550379 | 0.7856741  | 0.277 | 0.259 | 1 Bcell_2_UCBMC |
| MED21   | 0.04570927 | 0.65395242 | 0.261 | 0.234 | 1 Bcell_2_UCBMC |
| PDS5B   | 0.04853724 | 0.57145869 | 0.362 | 0.347 | 1 Bcell_2_UCBMC |
| GALNT1  | 0.04885926 | 0.68454207 | 0.306 | 0.286 | 1 Bcell_2_UCBMC |
| ZNF749  | 0.0488682  | 0.62293919 | 0.27  | 0.247 | 1 Bcell_2_UCBMC |
| TMCC1   | 0.04903295 | 0.77013373 | 0.345 | 0.33  | 1 Bcell_2_UCBMC |
| KLF12   | 0.05089758 | 0.33449004 | 0.583 | 0.581 | 1 Bcell_2_UCBMC |
| PLCD4   | 0.05115588 | 0.68361189 | 0.29  | 0.262 | 1 Bcell_2_UCBMC |
| TCERG1  | 0.05130608 | 0.61103785 | 0.345 | 0.338 | 1 Bcell_2_UCBMC |
| CENPC   | 0.05139008 | 0.57413547 | 0.313 | 0.291 | 1 Bcell_2_UCBMC |
| TIPARP  | 0.05142073 | 0.66877135 | 0.3   | 0.278 | 1 Bcell_2_UCBMC |
| ATG13   | 0.0515677  | 0.6481726  | 0.267 | 0.238 | 1 Bcell_2_UCBMC |
| CPSF6   | 0.05231041 | 0.56063755 | 0.336 | 0.322 | 1 Bcell_2_UCBMC |
| CTSH    | 0.05312605 | 0.32476025 | 0.645 | 0.69  | 1 Bcell_2_UCBMC |
| RBMS1   | 0.05338452 | 0.11224149 | 0.179 | 0.251 | 1 Bcell_2_UCBMC |
| EIF2S3  | 0.05424492 | 0.41415179 | 0.417 | 0.425 | 1 Bcell_2_UCBMC |
| PHIP    | 0.05457945 | 0.39379283 | 0.508 | 0.529 | 1 Bcell_2_UCBMC |
| PSMA6   | 0.0561013  | 0.73098423 | 0.254 | 0.232 | 1 Bcell_2_UCBMC |
| RPS6KA5 | 0.05685196 | 0.44784351 | 0.498 | 0.505 | 1 Bcell_2_UCBMC |
| RLIM    | 0.05748437 | 0.60555183 | 0.319 | 0.304 | 1 Bcell_2_UCBMC |
| AUTS2   | 0.05924154 | 0.57906417 | 0.368 | 0.347 | 1 Bcell_2_UCBMC |
| HINT1   | 0.05949797 | 0.14228101 | 0.87  | 0.915 | 1 Bcell_2_UCBMC |
| ABCC1   | 0.05973662 | 0.70523836 | 0.277 | 0.255 | 1 Bcell_2_UCBMC |
| ZNF506  | 0.0601871  | 0.5406538  | 0.345 | 0.334 | 1 Bcell_2_UCBMC |
| CYTIP   | 0.06138594 | 0.67935643 | 0.306 | 0.285 | 1 Bcell_2_UCBMC |
| GPBP1L1 | 0.06160637 | 0.42589528 | 0.427 | 0.446 | 1 Bcell_2_UCBMC |
| ARF1    | 0.06169035 | 0.28132413 | 0.492 | 0.506 | 1 Bcell_2_UCBMC |

|                    |            |            |       |       |                 |
|--------------------|------------|------------|-------|-------|-----------------|
| SRPK2              | 0.06187469 | 0.35823996 | 0.593 | 0.628 | 1 Bcell_2_UCBMC |
| CMIP               | 0.06234279 | 0.15578171 | 0.257 | 0.352 | 1 Bcell_2_UCBMC |
| CNOT2              | 0.06258178 | 0.18941304 | 0.691 | 0.698 | 1 Bcell_2_UCBMC |
| RETREG1            | 0.06267523 | 0.11264675 | 0.225 | 0.306 | 1 Bcell_2_UCBMC |
| FAM204A            | 0.06267943 | 0.76279984 | 0.277 | 0.262 | 1 Bcell_2_UCBMC |
| CIB1               | 0.06287935 | 0.25673381 | 0.365 | 0.35  | 1 Bcell_2_UCBMC |
| AFF4               | 0.06342752 | 0.70958009 | 0.274 | 0.252 | 1 Bcell_2_UCBMC |
| MEMO1              | 0.06418377 | 0.46533988 | 0.417 | 0.416 | 1 Bcell_2_UCBMC |
| PITPNB             | 0.06440607 | 0.66841256 | 0.362 | 0.363 | 1 Bcell_2_UCBMC |
| USP47              | 0.06503891 | 0.54169492 | 0.407 | 0.412 | 1 Bcell_2_UCBMC |
| TAF7               | 0.06506503 | 0.45233452 | 0.44  | 0.453 | 1 Bcell_2_UCBMC |
| ZBTB20             | 0.06544058 | 0.27783616 | 0.537 | 0.545 | 1 Bcell_2_UCBMC |
| CSPP1              | 0.06577697 | 0.70194555 | 0.3   | 0.283 | 1 Bcell_2_UCBMC |
| SON                | 0.06797726 | 0.16449072 | 0.769 | 0.846 | 1 Bcell_2_UCBMC |
| HCK                | 0.06808964 | 0.54398112 | 0.257 | 0.228 | 1 Bcell_2_UCBMC |
| INPP5D             | 0.0688827  | 0.35225266 | 0.55  | 0.58  | 1 Bcell_2_UCBMC |
| PAPOLA             | 0.07084485 | 0.28539284 | 0.596 | 0.653 | 1 Bcell_2_UCBMC |
| BCCIP              | 0.07122037 | 0.13476955 | 0.218 | 0.308 | 1 Bcell_2_UCBMC |
| NUP98              | 0.07136114 | 0.47291678 | 0.459 | 0.49  | 1 Bcell_2_UCBMC |
| ZFR                | 0.0715477  | 0.51919094 | 0.349 | 0.341 | 1 Bcell_2_UCBMC |
| RNF13              | 0.07172778 | 0.47776671 | 0.407 | 0.412 | 1 Bcell_2_UCBMC |
| GSK3B              | 0.07248421 | 0.4239573  | 0.521 | 0.546 | 1 Bcell_2_UCBMC |
| STAU1              | 0.07392617 | 0.57307548 | 0.381 | 0.39  | 1 Bcell_2_UCBMC |
| WDR26              | 0.07527857 | 0.33051584 | 0.329 | 0.311 | 1 Bcell_2_UCBMC |
| PTPN1              | 0.07583598 | 0.42056984 | 0.436 | 0.453 | 1 Bcell_2_UCBMC |
| RTF2               | 0.07631394 | 0.64721174 | 0.251 | 0.227 | 1 Bcell_2_UCBMC |
| LCOR               | 0.076551   | 0.30249823 | 0.492 | 0.517 | 1 Bcell_2_UCBMC |
| DOCK11             | 0.07905451 | 0.32596456 | 0.534 | 0.563 | 1 Bcell_2_UCBMC |
| MAMU-A             | 0.07990502 | 0.15238164 | 0.678 | 0.727 | 1 Bcell_2_UCBMC |
| ENSMMUG00000011580 | 0.07992862 | 0.39472564 | 0.43  | 0.457 | 1 Bcell_2_UCBMC |
| TTC14              | 0.0800184  | 0.56826572 | 0.264 | 0.239 | 1 Bcell_2_UCBMC |
| UBAP1              | 0.08013014 | 0.53823112 | 0.358 | 0.36  | 1 Bcell_2_UCBMC |
| TMEM201            | 0.08162145 | 0.10986561 | 0.251 | 0.336 | 1 Bcell_2_UCBMC |

|                    |            |            |       |       |                 |
|--------------------|------------|------------|-------|-------|-----------------|
| HBP1               | 0.08166515 | 0.51435185 | 0.342 | 0.336 | 1 Bcell_2_UCBMC |
| KDM3B              | 0.08317399 | 0.34563129 | 0.446 | 0.448 | 1 Bcell_2_UCBMC |
| ENSMMUG00000042951 | 0.08374202 | 0.41300245 | 0.43  | 0.451 | 1 Bcell_2_UCBMC |
| MAP4K4             | 0.08395091 | 0.33661491 | 0.564 | 0.587 | 1 Bcell_2_UCBMC |
| TGS1               | 0.08477334 | 0.53513845 | 0.296 | 0.287 | 1 Bcell_2_UCBMC |
| PIP5K1B            | 0.08501607 | 0.45110227 | 0.482 | 0.503 | 1 Bcell_2_UCBMC |
| CELF1              | 0.08545186 | 0.52706619 | 0.433 | 0.458 | 1 Bcell_2_UCBMC |
| CBLB               | 0.08571233 | 0.2992953  | 0.616 | 0.633 | 1 Bcell_2_UCBMC |
| HNRNPA2B1          | 0.08587741 | 0.11224168 | 0.925 | 0.911 | 1 Bcell_2_UCBMC |
| QRICH1             | 0.08610764 | 0.56146186 | 0.3   | 0.283 | 1 Bcell_2_UCBMC |
| PKN2               | 0.08620265 | 0.11003359 | 0.326 | 0.432 | 1 Bcell_2_UCBMC |
| RFC1               | 0.08640319 | 0.42303192 | 0.342 | 0.334 | 1 Bcell_2_UCBMC |
| PPP3CA             | 0.08640535 | 0.21195443 | 0.73  | 0.736 | 1 Bcell_2_UCBMC |
| CNST               | 0.08660752 | 0.59365754 | 0.257 | 0.239 | 1 Bcell_2_UCBMC |
| ADGRE5             | 0.08693909 | 0.39678092 | 0.463 | 0.461 | 1 Bcell_2_UCBMC |
| IGF1R              | 0.08834046 | 0.40972832 | 0.355 | 0.336 | 1 Bcell_2_UCBMC |
| TPD52              | 0.08957629 | 0.3654153  | 0.443 | 0.443 | 1 Bcell_2_UCBMC |
| ASAP1              | 0.09000336 | 0.11858774 | 0.29  | 0.386 | 1 Bcell_2_UCBMC |
| ADNP               | 0.0900513  | 0.46798606 | 0.332 | 0.317 | 1 Bcell_2_UCBMC |
| MPHOSPH8           | 0.09173518 | 0.57368351 | 0.336 | 0.335 | 1 Bcell_2_UCBMC |
| RAB3GAP2           | 0.09193119 | 0.757327   | 0.296 | 0.291 | 1 Bcell_2_UCBMC |
| ENSMMUG00000022769 | 0.09280855 | 0.2452805  | 0.583 | 0.613 | 1 Bcell_2_UCBMC |
| MAML2              | 0.09290032 | 0.17210684 | 0.635 | 0.645 | 1 Bcell_2_UCBMC |
| TAOK1              | 0.09356631 | 0.15920092 | 0.277 | 0.37  | 1 Bcell_2_UCBMC |
| CCNT2              | 0.09421094 | 0.64580818 | 0.316 | 0.307 | 1 Bcell_2_UCBMC |
| NSF                | 0.09512577 | 0.3666603  | 0.456 | 0.465 | 1 Bcell_2_UCBMC |
| YTHDF3             | 0.09541631 | 0.45548162 | 0.375 | 0.373 | 1 Bcell_2_UCBMC |
| MAML3              | 0.0958935  | 0.48759043 | 0.27  | 0.239 | 1 Bcell_2_UCBMC |
| IPMK               | 0.09612641 | 0.28577219 | 0.192 | 0.263 | 1 Bcell_2_UCBMC |
| TRANK1             | 0.09639522 | 0.15411005 | 0.192 | 0.267 | 1 Bcell_2_UCBMC |
| AKNA               | 0.09733169 | 0.11306033 | 0.231 | 0.311 | 1 Bcell_2_UCBMC |
| MED13              | 0.09798742 | 0.65096773 | 0.319 | 0.316 | 1 Bcell_2_UCBMC |
| PTPRJ              | 0.09998428 | 0.41766741 | 0.606 | 0.629 | 1 Bcell_2_UCBMC |

|                   |            |            |       |       |                 |
|-------------------|------------|------------|-------|-------|-----------------|
| GALNT2            | 0.10026254 | 0.10676098 | 0.215 | 0.284 | 1 Bcell_2_UCBMC |
| IKBKB             | 0.10065254 | 0.11010507 | 0.192 | 0.259 | 1 Bcell_2_UCBMC |
| SLC12A6           | 0.1014759  | 0.54995912 | 0.397 | 0.401 | 1 Bcell_2_UCBMC |
| GPATCH8           | 0.10151269 | 0.59916141 | 0.391 | 0.407 | 1 Bcell_2_UCBMC |
| TET3              | 0.10346059 | 0.6034093  | 0.251 | 0.229 | 1 Bcell_2_UCBMC |
| FAM214A           | 0.10389178 | 0.51871355 | 0.3   | 0.283 | 1 Bcell_2_UCBMC |
| STAG2             | 0.1044571  | 0.35149661 | 0.482 | 0.5   | 1 Bcell_2_UCBMC |
| INTS8             | 0.1049941  | 0.17445479 | 0.231 | 0.311 | 1 Bcell_2_UCBMC |
| MTMR6             | 0.10596536 | 0.63379228 | 0.264 | 0.242 | 1 Bcell_2_UCBMC |
| ZFX               | 0.10604997 | 0.42912251 | 0.342 | 0.342 | 1 Bcell_2_UCBMC |
| ENSMUG00000022874 | 0.1060955  | 0.39970464 | 0.349 | 0.345 | 1 Bcell_2_UCBMC |
| PRKCE             | 0.10615155 | 0.47727986 | 0.267 | 0.244 | 1 Bcell_2_UCBMC |
| DHX40             | 0.10797179 | 0.66659723 | 0.28  | 0.271 | 1 Bcell_2_UCBMC |
| THUMPD1           | 0.10819032 | 0.66728202 | 0.254 | 0.238 | 1 Bcell_2_UCBMC |
| ARL15             | 0.10847257 | 0.22376733 | 0.534 | 0.538 | 1 Bcell_2_UCBMC |
| ZNF451            | 0.10873989 | 0.44432631 | 0.368 | 0.366 | 1 Bcell_2_UCBMC |
| NEMF              | 0.10935115 | 0.50861875 | 0.342 | 0.333 | 1 Bcell_2_UCBMC |
| IVNS1ABP          | 0.10957802 | 0.53226022 | 0.296 | 0.283 | 1 Bcell_2_UCBMC |
| ATP6              | 0.10989894 | 0.60854211 | 0.306 | 0.288 | 1 Bcell_2_UCBMC |
| SCAPER            | 0.111441   | 0.6197952  | 0.316 | 0.31  | 1 Bcell_2_UCBMC |
| SPTBN1            | 0.11204779 | 0.62923229 | 0.371 | 0.383 | 1 Bcell_2_UCBMC |
| RFTN1             | 0.11214441 | 0.2205558  | 0.186 | 0.251 | 1 Bcell_2_UCBMC |
| MAP2K4            | 0.11404297 | 0.29977282 | 0.208 | 0.282 | 1 Bcell_2_UCBMC |
| AFTPH             | 0.11443756 | 0.32896502 | 0.564 | 0.615 | 1 Bcell_2_UCBMC |
| WDR70             | 0.11469362 | 0.3290804  | 0.456 | 0.474 | 1 Bcell_2_UCBMC |
| UBE2E1            | 0.11571274 | 0.62067507 | 0.303 | 0.301 | 1 Bcell_2_UCBMC |
| HBS1L             | 0.11729423 | 0.31367256 | 0.466 | 0.49  | 1 Bcell_2_UCBMC |
| ASB3              | 0.11780726 | 0.72249788 | 0.277 | 0.265 | 1 Bcell_2_UCBMC |
| YWHAE             | 0.11958395 | 0.4233527  | 0.459 | 0.492 | 1 Bcell_2_UCBMC |
| NAA15             | 0.1198968  | 0.63081192 | 0.352 | 0.353 | 1 Bcell_2_UCBMC |
| RNGTT             | 0.12093947 | 0.50235146 | 0.43  | 0.451 | 1 Bcell_2_UCBMC |
| MRFAP1            | 0.1238043  | 0.13049509 | 0.218 | 0.29  | 1 Bcell_2_UCBMC |
| USP16             | 0.12399104 | 0.41516169 | 0.391 | 0.401 | 1 Bcell_2_UCBMC |

|                    |            |            |       |       |                 |
|--------------------|------------|------------|-------|-------|-----------------|
| CHD6               | 0.12417108 | 0.6813405  | 0.287 | 0.286 | 1 Bcell_2_UCBMC |
| TIAL1              | 0.12637078 | 0.22844996 | 0.212 | 0.286 | 1 Bcell_2_UCBMC |
| EVI5               | 0.12692957 | 0.45277689 | 0.339 | 0.33  | 1 Bcell_2_UCBMC |
| TRIM13             | 0.12844796 | 0.53927815 | 0.283 | 0.271 | 1 Bcell_2_UCBMC |
| LSM14A             | 0.1295597  | 0.32159972 | 0.44  | 0.456 | 1 Bcell_2_UCBMC |
| UBAP2L             | 0.12987194 | 0.22370826 | 0.228 | 0.313 | 1 Bcell_2_UCBMC |
| FBXO34             | 0.13007273 | 0.23421585 | 0.567 | 0.585 | 1 Bcell_2_UCBMC |
| GOLGA1             | 0.13033861 | 0.54619038 | 0.329 | 0.335 | 1 Bcell_2_UCBMC |
| WDR13              | 0.13186471 | 0.27053217 | 0.593 | 0.662 | 1 Bcell_2_UCBMC |
| PSMD7              | 0.13238534 | 0.21515194 | 0.202 | 0.274 | 1 Bcell_2_UCBMC |
| ANKRD12            | 0.13283021 | 0.36771961 | 0.508 | 0.54  | 1 Bcell_2_UCBMC |
| DDIT3              | 0.13315773 | 0.10353082 | 0.241 | 0.319 | 1 Bcell_2_UCBMC |
| MRPS31             | 0.13366096 | 0.58600132 | 0.28  | 0.265 | 1 Bcell_2_UCBMC |
| TASP1              | 0.13427797 | 0.11277471 | 0.287 | 0.362 | 1 Bcell_2_UCBMC |
| ATAD1              | 0.13448444 | 0.13954224 | 0.257 | 0.342 | 1 Bcell_2_UCBMC |
| WDR33              | 0.13565544 | 0.48123135 | 0.349 | 0.35  | 1 Bcell_2_UCBMC |
| UXS1               | 0.13599154 | 0.52087594 | 0.342 | 0.348 | 1 Bcell_2_UCBMC |
| KANSL1             | 0.13613262 | 0.45091977 | 0.463 | 0.497 | 1 Bcell_2_UCBMC |
| NUP210             | 0.13639969 | 0.13226827 | 0.225 | 0.294 | 1 Bcell_2_UCBMC |
| ST6GALNAC3         | 0.13799939 | 0.46701162 | 0.42  | 0.433 | 1 Bcell_2_UCBMC |
| ACO2               | 0.13832627 | 0.53358844 | 0.267 | 0.253 | 1 Bcell_2_UCBMC |
| NBR1               | 0.13868132 | 0.57280513 | 0.322 | 0.33  | 1 Bcell_2_UCBMC |
| ZNF43              | 0.14200107 | 0.62915191 | 0.309 | 0.309 | 1 Bcell_2_UCBMC |
| EFR3A              | 0.14237681 | 0.74445296 | 0.277 | 0.272 | 1 Bcell_2_UCBMC |
| RBIS               | 0.14245279 | 0.20829708 | 0.564 | 0.585 | 1 Bcell_2_UCBMC |
| ENSMMUG00000006293 | 0.14308467 | 0.43527583 | 0.394 | 0.402 | 1 Bcell_2_UCBMC |
| CXCR4              | 0.14331838 | 0.54769688 | 0.274 | 0.262 | 1 Bcell_2_UCBMC |
| NDUFA12            | 0.14340114 | 0.13277654 | 0.195 | 0.263 | 1 Bcell_2_UCBMC |
| CDK17              | 0.14493043 | 0.55402518 | 0.345 | 0.353 | 1 Bcell_2_UCBMC |
| UBE2H              | 0.145833   | 0.31625911 | 0.459 | 0.485 | 1 Bcell_2_UCBMC |
| FLII               | 0.1465721  | 0.17114124 | 0.195 | 0.261 | 1 Bcell_2_UCBMC |
| PSMA1              | 0.14735861 | 0.38130521 | 0.384 | 0.393 | 1 Bcell_2_UCBMC |
| SLC9A7             | 0.1473791  | 0.17062889 | 0.274 | 0.36  | 1 Bcell_2_UCBMC |



|                   |            |            |       |       |                 |
|-------------------|------------|------------|-------|-------|-----------------|
| PRRC2C            | 0.14986652 | 0.18602005 | 0.619 | 0.66  | 1 Bcell_2_UCBMC |
| SAR1A             | 0.15047885 | 0.53245914 | 0.29  | 0.288 | 1 Bcell_2_UCBMC |
| SNX25             | 0.15144276 | 0.37533777 | 0.463 | 0.484 | 1 Bcell_2_UCBMC |
| POLE4             | 0.1531342  | 0.17070651 | 0.218 | 0.289 | 1 Bcell_2_UCBMC |
| RAPGEF1           | 0.15595111 | 0.34022405 | 0.56  | 0.601 | 1 Bcell_2_UCBMC |
| ZFAND6            | 0.15681725 | 0.32066389 | 0.567 | 0.614 | 1 Bcell_2_UCBMC |
| MAPK8             | 0.15852554 | 0.56516385 | 0.29  | 0.273 | 1 Bcell_2_UCBMC |
| COMMD3            | 0.15948393 | 0.45826279 | 0.296 | 0.296 | 1 Bcell_2_UCBMC |
| ARIH1             | 0.15949873 | 0.17359495 | 0.625 | 0.64  | 1 Bcell_2_UCBMC |
| ANKRD33B          | 0.16054977 | 0.31130128 | 0.511 | 0.533 | 1 Bcell_2_UCBMC |
| TUBA1A            | 0.16238783 | 0.26122624 | 0.492 | 0.526 | 1 Bcell_2_UCBMC |
| SLC39A11          | 0.16240887 | 0.28752968 | 0.235 | 0.301 | 1 Bcell_2_UCBMC |
| NKTR              | 0.16373275 | 0.68367083 | 0.296 | 0.299 | 1 Bcell_2_UCBMC |
| GNG2              | 0.16441709 | 0.52193584 | 0.423 | 0.45  | 1 Bcell_2_UCBMC |
| MARCHF7           | 0.1646425  | 0.35662207 | 0.463 | 0.495 | 1 Bcell_2_UCBMC |
| ITPR2             | 0.16466267 | 0.23836445 | 0.567 | 0.618 | 1 Bcell_2_UCBMC |
| SZRD1             | 0.16471467 | 0.4701126  | 0.319 | 0.319 | 1 Bcell_2_UCBMC |
| PPP2R2A           | 0.16595205 | 0.51023385 | 0.375 | 0.402 | 1 Bcell_2_UCBMC |
| CDC73             | 0.16606471 | 0.49302463 | 0.358 | 0.364 | 1 Bcell_2_UCBMC |
| WARS2             | 0.16799687 | 0.64536455 | 0.309 | 0.315 | 1 Bcell_2_UCBMC |
| PPP4R3B           | 0.16944343 | 0.47421589 | 0.329 | 0.333 | 1 Bcell_2_UCBMC |
| ENSMUG00000055584 | 0.17030157 | 0.12256113 | 0.922 | 0.939 | 1 Bcell_2_UCBMC |
| NCOA2             | 0.17032192 | 0.41031853 | 0.417 | 0.438 | 1 Bcell_2_UCBMC |
| AEBP2             | 0.17125205 | 0.1392657  | 0.261 | 0.337 | 1 Bcell_2_UCBMC |
| CUX1              | 0.17198102 | 0.41790233 | 0.482 | 0.531 | 1 Bcell_2_UCBMC |
| RUBCN             | 0.17399672 | 0.11286871 | 0.251 | 0.317 | 1 Bcell_2_UCBMC |
| EEA1              | 0.1767608  | 0.16453944 | 0.212 | 0.277 | 1 Bcell_2_UCBMC |
| ATAD2B            | 0.17933103 | 0.37145476 | 0.407 | 0.435 | 1 Bcell_2_UCBMC |
| ARHGAP45          | 0.18023447 | 0.45858572 | 0.293 | 0.289 | 1 Bcell_2_UCBMC |
| PIP5K1A           | 0.18077864 | 0.54495624 | 0.27  | 0.265 | 1 Bcell_2_UCBMC |
| AGO3              | 0.18129773 | 0.51807296 | 0.423 | 0.45  | 1 Bcell_2_UCBMC |
| PSMD14            | 0.18328891 | 0.42685888 | 0.355 | 0.368 | 1 Bcell_2_UCBMC |
| TBC1D1            | 0.18329018 | 0.12713211 | 0.606 | 0.65  | 1 Bcell_2_UCBMC |

|                    |            |            |       |       |                 |
|--------------------|------------|------------|-------|-------|-----------------|
| GIT2               | 0.18430403 | 0.48287082 | 0.358 | 0.371 | 1 Bcell_2_UCBMC |
| PAIP2              | 0.18503434 | 0.25113116 | 0.593 | 0.653 | 1 Bcell_2_UCBMC |
| ARIH2              | 0.18568167 | 0.68503027 | 0.27  | 0.265 | 1 Bcell_2_UCBMC |
| EPS15              | 0.18719533 | 0.32459201 | 0.388 | 0.406 | 1 Bcell_2_UCBMC |
| RELB               | 0.1873823  | 0.3051476  | 0.404 | 0.425 | 1 Bcell_2_UCBMC |
| DIS3L2             | 0.18849613 | 0.20066691 | 0.355 | 0.443 | 1 Bcell_2_UCBMC |
| ADD3               | 0.18881709 | 0.34737798 | 0.365 | 0.367 | 1 Bcell_2_UCBMC |
| REEP3              | 0.19100494 | 0.21639041 | 0.199 | 0.26  | 1 Bcell_2_UCBMC |
| FNDC3A             | 0.19131833 | 0.42713599 | 0.482 | 0.517 | 1 Bcell_2_UCBMC |
| ENSMMUG00000031367 | 0.19186416 | 0.22519551 | 0.215 | 0.286 | 1 Bcell_2_UCBMC |
| BRWD1              | 0.19238286 | 0.12056002 | 0.287 | 0.369 | 1 Bcell_2_UCBMC |
| BCL7B              | 0.19267039 | 0.69975794 | 0.251 | 0.249 | 1 Bcell_2_UCBMC |
| P2RY8              | 0.19289071 | 0.3033419  | 0.407 | 0.415 | 1 Bcell_2_UCBMC |
| TNPO1              | 0.19401636 | 0.46022628 | 0.27  | 0.259 | 1 Bcell_2_UCBMC |
| PDAP1              | 0.19427226 | 0.15720588 | 0.215 | 0.277 | 1 Bcell_2_UCBMC |
| COX2               | 0.19453363 | 0.82537442 | 0.296 | 0.286 | 1 Bcell_2_UCBMC |
| RBM25              | 0.19497671 | 0.41909725 | 0.391 | 0.407 | 1 Bcell_2_UCBMC |
| SIPA1L1            | 0.19592942 | 0.13163593 | 0.208 | 0.267 | 1 Bcell_2_UCBMC |
| DDX10              | 0.19648305 | 0.11016959 | 0.202 | 0.259 | 1 Bcell_2_UCBMC |
| U2SURP             | 0.19833247 | 0.28934763 | 0.446 | 0.461 | 1 Bcell_2_UCBMC |
| RCOR1              | 0.19964451 | 0.12960619 | 0.208 | 0.269 | 1 Bcell_2_UCBMC |
| ANO6               | 0.20221792 | 0.35782991 | 0.339 | 0.335 | 1 Bcell_2_UCBMC |
| IST1               | 0.20228472 | 0.42175356 | 0.329 | 0.331 | 1 Bcell_2_UCBMC |
| RAB5A              | 0.20365911 | 0.61426347 | 0.309 | 0.317 | 1 Bcell_2_UCBMC |
| SASH3              | 0.20477973 | 0.12819372 | 0.238 | 0.305 | 1 Bcell_2_UCBMC |
| BLK                | 0.20531967 | 0.27653674 | 0.498 | 0.544 | 1 Bcell_2_UCBMC |
| KLHL2              | 0.20619817 | 0.55163313 | 0.251 | 0.241 | 1 Bcell_2_UCBMC |
| TBL1X              | 0.20654563 | 0.17586226 | 0.248 | 0.314 | 1 Bcell_2_UCBMC |
| IPO7               | 0.20732737 | 0.1144276  | 0.221 | 0.284 | 1 Bcell_2_UCBMC |
| TBC1D23            | 0.20839186 | 0.55476819 | 0.3   | 0.312 | 1 Bcell_2_UCBMC |
| MNAT1              | 0.20892943 | 0.19087621 | 0.238 | 0.302 | 1 Bcell_2_UCBMC |
| MICU2              | 0.21223185 | 0.30937803 | 0.391 | 0.402 | 1 Bcell_2_UCBMC |
| KPNA1              | 0.21857794 | 0.11759107 | 0.205 | 0.26  | 1 Bcell_2_UCBMC |

|                    |            |            |       |       |                 |
|--------------------|------------|------------|-------|-------|-----------------|
| IFI27L2            | 0.21883324 | 0.10119324 | 0.541 | 0.577 | 1 Bcell_2_UCBMC |
| STRN3              | 0.21890949 | 0.21071844 | 0.244 | 0.31  | 1 Bcell_2_UCBMC |
| CCT4               | 0.21933345 | 0.30782797 | 0.436 | 0.469 | 1 Bcell_2_UCBMC |
| COX4I1             | 0.21938351 | 0.16807304 | 0.84  | 0.865 | 1 Bcell_2_UCBMC |
| TARDBP             | 0.2195917  | 0.45539178 | 0.267 | 0.262 | 1 Bcell_2_UCBMC |
| DPH3               | 0.21989494 | 0.49995026 | 0.251 | 0.244 | 1 Bcell_2_UCBMC |
| HIGD2A             | 0.22023993 | 0.10211953 | 0.208 | 0.27  | 1 Bcell_2_UCBMC |
| BIRC2              | 0.22108029 | 0.46210988 | 0.251 | 0.242 | 1 Bcell_2_UCBMC |
| SDHB               | 0.22195401 | 0.50623126 | 0.261 | 0.252 | 1 Bcell_2_UCBMC |
| PARP8              | 0.22262245 | 0.49603774 | 0.313 | 0.317 | 1 Bcell_2_UCBMC |
| CDK12              | 0.22266655 | 0.11603496 | 0.225 | 0.283 | 1 Bcell_2_UCBMC |
| PPP2R3C            | 0.22526221 | 0.14124655 | 0.208 | 0.265 | 1 Bcell_2_UCBMC |
| YPEL5              | 0.22559708 | 0.20890852 | 0.57  | 0.609 | 1 Bcell_2_UCBMC |
| RPRD2              | 0.22704115 | 0.52378473 | 0.303 | 0.309 | 1 Bcell_2_UCBMC |
| LSM10              | 0.22802936 | 0.34485776 | 0.397 | 0.415 | 1 Bcell_2_UCBMC |
| EWSR1              | 0.22853585 | 0.49981465 | 0.322 | 0.327 | 1 Bcell_2_UCBMC |
| ENSMMUG00000050829 | 0.23146443 | 0.15069965 | 0.456 | 0.486 | 1 Bcell_2_UCBMC |
| SCFD2              | 0.23198509 | 0.30199755 | 0.293 | 0.371 | 1 Bcell_2_UCBMC |
| SEC14L2            | 0.23400165 | 0.12209995 | 0.195 | 0.25  | 1 Bcell_2_UCBMC |
| FRYL               | 0.23608115 | 0.20465407 | 0.248 | 0.312 | 1 Bcell_2_UCBMC |
| SLC44A2            | 0.23705321 | 0.53449582 | 0.306 | 0.311 | 1 Bcell_2_UCBMC |
| POGZ               | 0.23828827 | 0.54773795 | 0.267 | 0.26  | 1 Bcell_2_UCBMC |
| C3H21orf91         | 0.23885589 | 0.1705363  | 0.205 | 0.259 | 1 Bcell_2_UCBMC |
| DOCK8              | 0.23996154 | 0.23833347 | 0.648 | 0.692 | 1 Bcell_2_UCBMC |
| PLEKHJ1            | 0.24032089 | 0.25207972 | 0.195 | 0.252 | 1 Bcell_2_UCBMC |
| ASH1L              | 0.24043254 | 0.24734256 | 0.59  | 0.64  | 1 Bcell_2_UCBMC |
| DLST               | 0.24133283 | 0.15783709 | 0.208 | 0.267 | 1 Bcell_2_UCBMC |
| PSPC1              | 0.24182422 | 0.3446637  | 0.404 | 0.43  | 1 Bcell_2_UCBMC |
| TAGAP              | 0.24277883 | 0.21974533 | 0.482 | 0.505 | 1 Bcell_2_UCBMC |
| KIF13A             | 0.24344559 | 0.20956414 | 0.277 | 0.348 | 1 Bcell_2_UCBMC |
| AP1G1              | 0.24373028 | 0.50625485 | 0.309 | 0.317 | 1 Bcell_2_UCBMC |
| SNX13              | 0.24388159 | 0.54870172 | 0.316 | 0.334 | 1 Bcell_2_UCBMC |
| DCP2               | 0.24435323 | 0.25098384 | 0.228 | 0.293 | 1 Bcell_2_UCBMC |

|                   |            |            |       |       |                 |
|-------------------|------------|------------|-------|-------|-----------------|
| CLTC              | 0.24461623 | 0.11379882 | 0.254 | 0.319 | 1 Bcell_2_UCBMC |
| TNKS              | 0.24537466 | 0.38757322 | 0.365 | 0.382 | 1 Bcell_2_UCBMC |
| ARFGAP3           | 0.24685281 | 0.37335522 | 0.397 | 0.416 | 1 Bcell_2_UCBMC |
| CRTC3             | 0.24724022 | 0.53397703 | 0.391 | 0.411 | 1 Bcell_2_UCBMC |
| RNF38             | 0.24807602 | 0.30108183 | 0.41  | 0.437 | 1 Bcell_2_UCBMC |
| ST3GAL1           | 0.24831939 | 0.45570532 | 0.339 | 0.354 | 1 Bcell_2_UCBMC |
| NUP153            | 0.25059516 | 0.35606906 | 0.44  | 0.467 | 1 Bcell_2_UCBMC |
| FOXJ3             | 0.25138865 | 0.2192974  | 0.293 | 0.375 | 1 Bcell_2_UCBMC |
| C20H16orf72       | 0.25173049 | 0.10967445 | 0.261 | 0.324 | 1 Bcell_2_UCBMC |
| ADD1              | 0.25200783 | 0.32810388 | 0.391 | 0.411 | 1 Bcell_2_UCBMC |
| LARGE1            | 0.25414051 | 0.47343738 | 0.293 | 0.286 | 1 Bcell_2_UCBMC |
| CWC27             | 0.25481452 | 0.15867189 | 0.225 | 0.283 | 1 Bcell_2_UCBMC |
| KLHL23            | 0.25558291 | 0.14295333 | 0.691 | 0.753 | 1 Bcell_2_UCBMC |
| PTP4A2            | 0.25573363 | 0.54573255 | 0.349 | 0.365 | 1 Bcell_2_UCBMC |
| KRAS              | 0.25597166 | 0.15741625 | 0.254 | 0.314 | 1 Bcell_2_UCBMC |
| WDR7              | 0.25660197 | 0.55716512 | 0.254 | 0.249 | 1 Bcell_2_UCBMC |
| PDCD6IP           | 0.25669792 | 0.39897783 | 0.329 | 0.335 | 1 Bcell_2_UCBMC |
| PJA2              | 0.25757485 | 0.6260486  | 0.28  | 0.291 | 1 Bcell_2_UCBMC |
| ELMOD3            | 0.2576289  | 0.45147869 | 0.287 | 0.284 | 1 Bcell_2_UCBMC |
| UHRF1BP1L         | 0.25971346 | 0.41833791 | 0.41  | 0.428 | 1 Bcell_2_UCBMC |
| PPP1CA            | 0.26138366 | 0.30137177 | 0.404 | 0.435 | 1 Bcell_2_UCBMC |
| SUGT1             | 0.26304211 | 0.12856987 | 0.287 | 0.357 | 1 Bcell_2_UCBMC |
| NAP1L4            | 0.2634969  | 0.28391275 | 0.45  | 0.484 | 1 Bcell_2_UCBMC |
| VPS37B            | 0.26647298 | 0.5462694  | 0.28  | 0.28  | 1 Bcell_2_UCBMC |
| NIN               | 0.26726127 | 0.24952057 | 0.436 | 0.449 | 1 Bcell_2_UCBMC |
| RASGEF1B          | 0.26827957 | 0.19013444 | 0.619 | 0.652 | 1 Bcell_2_UCBMC |
| ENSMUG00000017113 | 0.26844248 | 0.20787915 | 0.274 | 0.334 | 1 Bcell_2_UCBMC |
| RPRD1A            | 0.26847788 | 0.48646989 | 0.29  | 0.291 | 1 Bcell_2_UCBMC |
| DMTF1             | 0.26863401 | 0.41912972 | 0.339 | 0.348 | 1 Bcell_2_UCBMC |
| ENSMUG00000064531 | 0.26914068 | 0.24350738 | 0.215 | 0.279 | 1 Bcell_2_UCBMC |
| CCM2              | 0.27065705 | 0.45592848 | 0.371 | 0.386 | 1 Bcell_2_UCBMC |
| FBXW7             | 0.27096521 | 0.27266139 | 0.472 | 0.513 | 1 Bcell_2_UCBMC |
| ANKRD11           | 0.27115778 | 0.388333   | 0.401 | 0.415 | 1 Bcell_2_UCBMC |

|                    |            |            |       |       |                 |
|--------------------|------------|------------|-------|-------|-----------------|
| PRPF6              | 0.27146724 | 0.11310357 | 0.215 | 0.272 | 1 Bcell_2_UCBMC |
| FAM117B            | 0.27221514 | 0.52945954 | 0.352 | 0.362 | 1 Bcell_2_UCBMC |
| CDK6               | 0.27375043 | 0.10081616 | 0.238 | 0.293 | 1 Bcell_2_UCBMC |
| MECP2              | 0.27662553 | 0.46994752 | 0.277 | 0.275 | 1 Bcell_2_UCBMC |
| ZNF131             | 0.27725143 | 0.11365099 | 0.205 | 0.257 | 1 Bcell_2_UCBMC |
| VMP1               | 0.2784746  | 0.49512384 | 0.267 | 0.273 | 1 Bcell_2_UCBMC |
| PPIL4              | 0.27905181 | 0.29661634 | 0.391 | 0.411 | 1 Bcell_2_UCBMC |
| LCORL              | 0.28004888 | 0.44812573 | 0.365 | 0.377 | 1 Bcell_2_UCBMC |
| ATR                | 0.28466304 | 0.5824055  | 0.254 | 0.254 | 1 Bcell_2_UCBMC |
| ANXA4              | 0.28521473 | 0.1250203  | 0.27  | 0.341 | 1 Bcell_2_UCBMC |
| FAM241A            | 0.28527988 | 0.6996236  | 0.27  | 0.263 | 1 Bcell_2_UCBMC |
| RIOK3              | 0.28674077 | 0.58332524 | 0.306 | 0.318 | 1 Bcell_2_UCBMC |
| RNF145             | 0.29032889 | 0.10083096 | 0.254 | 0.317 | 1 Bcell_2_UCBMC |
| PUM2               | 0.29072766 | 0.29348219 | 0.505 | 0.554 | 1 Bcell_2_UCBMC |
| TLK2               | 0.29188858 | 0.64514847 | 0.264 | 0.27  | 1 Bcell_2_UCBMC |
| SLC25A26           | 0.29266837 | 0.38300566 | 0.28  | 0.279 | 1 Bcell_2_UCBMC |
| ATP5PO             | 0.29402565 | 0.18278579 | 0.655 | 0.732 | 1 Bcell_2_UCBMC |
| NONO               | 0.29478349 | 0.1033176  | 0.349 | 0.438 | 1 Bcell_2_UCBMC |
| ENSMMUG00000020316 | 0.29527456 | 0.3269553  | 0.349 | 0.366 | 1 Bcell_2_UCBMC |
| BTN2A2             | 0.2972453  | 0.32332944 | 0.453 | 0.508 | 1 Bcell_2_UCBMC |
| BPTF               | 0.30371816 | 0.29564005 | 0.492 | 0.54  | 1 Bcell_2_UCBMC |
| ATP6V1E1           | 0.30691128 | 0.45294163 | 0.28  | 0.283 | 1 Bcell_2_UCBMC |
| XRCC6              | 0.30837687 | 0.11741035 | 0.456 | 0.583 | 1 Bcell_2_UCBMC |
| EIF3A              | 0.30908549 | 0.29899587 | 0.472 | 0.524 | 1 Bcell_2_UCBMC |
| KPNB1              | 0.31045578 | 0.36927375 | 0.306 | 0.309 | 1 Bcell_2_UCBMC |
| TMOD3              | 0.3109487  | 0.25633511 | 0.319 | 0.404 | 1 Bcell_2_UCBMC |
| ENSA               | 0.31179662 | 0.11191086 | 0.619 | 0.663 | 1 Bcell_2_UCBMC |
| DHX15              | 0.31414269 | 0.36046607 | 0.202 | 0.258 | 1 Bcell_2_UCBMC |
| BCAS3              | 0.31427303 | 0.33805289 | 0.417 | 0.434 | 1 Bcell_2_UCBMC |
| KPNA3              | 0.31453549 | 0.52030786 | 0.274 | 0.273 | 1 Bcell_2_UCBMC |
| CNOT6L             | 0.31455853 | 0.29594365 | 0.508 | 0.536 | 1 Bcell_2_UCBMC |
| CASP8              | 0.31560061 | 0.56918903 | 0.274 | 0.284 | 1 Bcell_2_UCBMC |
| ENSMMUG00000030448 | 0.31574307 | 0.13050247 | 0.404 | 0.509 | 1 Bcell_2_UCBMC |

|                    |            |            |       |       |                 |
|--------------------|------------|------------|-------|-------|-----------------|
| LRCH3              | 0.31832063 | 0.33401926 | 0.417 | 0.453 | 1 Bcell_2_UCBMC |
| ENSMMUG00000056012 | 0.31956885 | 0.32238391 | 0.414 | 0.442 | 1 Bcell_2_UCBMC |
| ENSMMUG00000065373 | 0.31995307 | 0.42381891 | 0.557 | 0.608 | 1 Bcell_2_UCBMC |
| ZNF706             | 0.32017954 | 0.1115482  | 0.322 | 0.41  | 1 Bcell_2_UCBMC |
| RAB7A              | 0.32174545 | 0.14735826 | 0.58  | 0.628 | 1 Bcell_2_UCBMC |
| USP34              | 0.32180975 | 0.16397708 | 0.606 | 0.644 | 1 Bcell_2_UCBMC |
| CNPY3              | 0.32759182 | 0.13195063 | 0.274 | 0.337 | 1 Bcell_2_UCBMC |
| CEP192             | 0.33037111 | 0.13492772 | 0.241 | 0.301 | 1 Bcell_2_UCBMC |
| STAU2              | 0.33204617 | 0.21692469 | 0.231 | 0.283 | 1 Bcell_2_UCBMC |
| SUPT3H             | 0.33349944 | 0.47715584 | 0.336 | 0.352 | 1 Bcell_2_UCBMC |
| C1GALT1            | 0.33449824 | 0.17980416 | 0.251 | 0.301 | 1 Bcell_2_UCBMC |
| SCML4              | 0.33516073 | 0.29155368 | 0.495 | 0.528 | 1 Bcell_2_UCBMC |
| STK4               | 0.33561922 | 0.28298104 | 0.524 | 0.578 | 1 Bcell_2_UCBMC |
| PPP6R3             | 0.33570142 | 0.28176736 | 0.397 | 0.42  | 1 Bcell_2_UCBMC |
| BCL10              | 0.33697032 | 0.39611998 | 0.277 | 0.283 | 1 Bcell_2_UCBMC |
| POLR1D             | 0.33856562 | 0.20732967 | 0.469 | 0.516 | 1 Bcell_2_UCBMC |
| ZMYM2              | 0.33898155 | 0.17842411 | 0.336 | 0.409 | 1 Bcell_2_UCBMC |
| NOTCH2             | 0.34017607 | 0.29182378 | 0.365 | 0.384 | 1 Bcell_2_UCBMC |
| SERINC1            | 0.34068872 | 0.50471014 | 0.303 | 0.318 | 1 Bcell_2_UCBMC |
| CALCOCO2           | 0.34234167 | 0.24432694 | 0.381 | 0.404 | 1 Bcell_2_UCBMC |
| ENSMMUG00000017297 | 0.34563295 | 0.23220978 | 0.225 | 0.278 | 1 Bcell_2_UCBMC |
| PHF20              | 0.3459014  | 0.3711777  | 0.443 | 0.497 | 1 Bcell_2_UCBMC |
| VPS41              | 0.34635217 | 0.23642579 | 0.254 | 0.312 | 1 Bcell_2_UCBMC |
| LUC7L              | 0.35218961 | 0.37697036 | 0.28  | 0.291 | 1 Bcell_2_UCBMC |
| PFDN2              | 0.35352337 | 0.29337131 | 0.459 | 0.504 | 1 Bcell_2_UCBMC |
| DCAF5              | 0.3562085  | 0.3380311  | 0.221 | 0.277 | 1 Bcell_2_UCBMC |
| FOS                | 0.357177   | 0.20299852 | 0.932 | 0.928 | 1 Bcell_2_UCBMC |
| MED27              | 0.35740363 | 0.38579571 | 0.309 | 0.324 | 1 Bcell_2_UCBMC |
| ZCCHC7             | 0.36095617 | 0.22090135 | 0.674 | 0.717 | 1 Bcell_2_UCBMC |
| BRD7               | 0.36177077 | 0.52142976 | 0.274 | 0.285 | 1 Bcell_2_UCBMC |
| RAB3GAP1           | 0.36206607 | 0.45324735 | 0.322 | 0.332 | 1 Bcell_2_UCBMC |
| SMARCA4            | 0.36267189 | 0.1496996  | 0.235 | 0.289 | 1 Bcell_2_UCBMC |
| NASP               | 0.36294321 | 0.11707069 | 0.355 | 0.438 | 1 Bcell_2_UCBMC |

|                     |            |            |       |       |                 |
|---------------------|------------|------------|-------|-------|-----------------|
| CHP1                | 0.36346618 | 0.10734892 | 0.254 | 0.311 | 1 Bcell_2_UCBMC |
| MKLN1               | 0.3653592  | 0.25627948 | 0.45  | 0.491 | 1 Bcell_2_UCBMC |
| KDM2A               | 0.36855988 | 0.14959545 | 0.518 | 0.549 | 1 Bcell_2_UCBMC |
| ATP6V0D1            | 0.36856339 | 0.53011444 | 0.349 | 0.385 | 1 Bcell_2_UCBMC |
| DOP1A               | 0.36859976 | 0.52921735 | 0.28  | 0.286 | 1 Bcell_2_UCBMC |
| ENSMMUG00000001894  | 0.37048742 | 0.45023361 | 0.293 | 0.304 | 1 Bcell_2_UCBMC |
| ATF6                | 0.37170347 | 0.14839755 | 0.345 | 0.425 | 1 Bcell_2_UCBMC |
| ZNF22               | 0.37643888 | 0.4691798  | 0.28  | 0.292 | 1 Bcell_2_UCBMC |
| DCAF6               | 0.37670194 | 0.54361233 | 0.202 | 0.254 | 1 Bcell_2_UCBMC |
| ARHGAP15            | 0.37711543 | 0.10137244 | 0.909 | 0.895 | 1 Bcell_2_UCBMC |
| AGO2                | 0.37830231 | 0.34363385 | 0.336 | 0.349 | 1 Bcell_2_UCBMC |
| ESCO1               | 0.37868478 | 0.45107835 | 0.391 | 0.43  | 1 Bcell_2_UCBMC |
| MAN2A1              | 0.37988753 | 0.35686297 | 0.365 | 0.392 | 1 Bcell_2_UCBMC |
| EP300               | 0.38038539 | 0.37764914 | 0.397 | 0.438 | 1 Bcell_2_UCBMC |
| ITSN2               | 0.38121872 | 0.29541211 | 0.55  | 0.618 | 1 Bcell_2_UCBMC |
| TOP2B               | 0.38279964 | 0.1223167  | 0.365 | 0.451 | 1 Bcell_2_UCBMC |
| KIAA1328            | 0.38319271 | 0.51095573 | 0.277 | 0.283 | 1 Bcell_2_UCBMC |
| CUL3                | 0.38379254 | 0.32235728 | 0.456 | 0.496 | 1 Bcell_2_UCBMC |
| BABAM2              | 0.38584379 | 0.15784365 | 0.391 | 0.468 | 1 Bcell_2_UCBMC |
| FARS2               | 0.38777111 | 0.16959866 | 0.293 | 0.362 | 1 Bcell_2_UCBMC |
| ZSWIM6              | 0.38934585 | 0.42012943 | 0.306 | 0.32  | 1 Bcell_2_UCBMC |
| BDP1                | 0.39183503 | 0.375272   | 0.388 | 0.421 | 1 Bcell_2_UCBMC |
| LAMTOR2             | 0.3929606  | 0.11108963 | 0.355 | 0.444 | 1 Bcell_2_UCBMC |
| TAPBP               | 0.39378729 | 0.33562654 | 0.414 | 0.461 | 1 Bcell_2_UCBMC |
| ACTR10              | 0.39765533 | 0.67089004 | 0.248 | 0.256 | 1 Bcell_2_UCBMC |
| MAP2K5              | 0.39971618 | 0.22011501 | 0.238 | 0.286 | 1 Bcell_2_UCBMC |
| RCC1                | 0.40045506 | 0.33143101 | 0.388 | 0.416 | 1 Bcell_2_UCBMC |
| ENSMMUG000000029026 | 0.400585   | 0.21846478 | 0.479 | 0.534 | 1 Bcell_2_UCBMC |
| PACS1               | 0.40068042 | 0.38248481 | 0.368 | 0.391 | 1 Bcell_2_UCBMC |
| GNG5                | 0.40141331 | 0.1520652  | 0.612 | 0.671 | 1 Bcell_2_UCBMC |
| TCF3                | 0.40184345 | 0.15474571 | 0.264 | 0.316 | 1 Bcell_2_UCBMC |
| HCLS1               | 0.40291095 | 0.18125378 | 0.322 | 0.407 | 1 Bcell_2_UCBMC |
| CAMLG               | 0.40314427 | 0.21164201 | 0.296 | 0.363 | 1 Bcell_2_UCBMC |

|         |            |            |       |       |                 |
|---------|------------|------------|-------|-------|-----------------|
| SMC1A   | 0.40623575 | 0.30653433 | 0.218 | 0.267 | 1 Bcell_2_UCBMC |
| TLK1    | 0.40653357 | 0.39074176 | 0.404 | 0.434 | 1 Bcell_2_UCBMC |
| UBE2N   | 0.40668774 | 0.16308676 | 0.342 | 0.423 | 1 Bcell_2_UCBMC |
| UBQLN1  | 0.40865687 | 0.28511422 | 0.248 | 0.302 | 1 Bcell_2_UCBMC |
| TRAM1   | 0.41035238 | 0.14572035 | 0.303 | 0.38  | 1 Bcell_2_UCBMC |
| ARID1A  | 0.41080048 | 0.27069818 | 0.287 | 0.36  | 1 Bcell_2_UCBMC |
| MAPRE1  | 0.41221279 | 0.16364689 | 0.329 | 0.404 | 1 Bcell_2_UCBMC |
| SOX4    | 0.41646309 | 0.36186134 | 0.345 | 0.359 | 1 Bcell_2_UCBMC |
| HERC2   | 0.42111154 | 0.11861485 | 0.283 | 0.342 | 1 Bcell_2_UCBMC |
| UBE2B   | 0.42155594 | 0.10764387 | 0.303 | 0.36  | 1 Bcell_2_UCBMC |
| TTC39C  | 0.42233908 | 0.48749501 | 0.261 | 0.267 | 1 Bcell_2_UCBMC |
| PIK3CD  | 0.42311614 | 0.3005492  | 0.215 | 0.267 | 1 Bcell_2_UCBMC |
| LEMD3   | 0.42330389 | 0.54432814 | 0.287 | 0.301 | 1 Bcell_2_UCBMC |
| MRTFA   | 0.42423569 | 0.1655063  | 0.244 | 0.292 | 1 Bcell_2_UCBMC |
| USP6NL  | 0.42496163 | 0.44532279 | 0.303 | 0.319 | 1 Bcell_2_UCBMC |
| RAD51B  | 0.42547167 | 0.26518839 | 0.407 | 0.5   | 1 Bcell_2_UCBMC |
| IDH2    | 0.42836369 | 0.13567153 | 0.264 | 0.327 | 1 Bcell_2_UCBMC |
| VRK1    | 0.43111405 | 0.15648457 | 0.257 | 0.307 | 1 Bcell_2_UCBMC |
| CWF19L2 | 0.43153558 | 0.12080859 | 0.261 | 0.314 | 1 Bcell_2_UCBMC |
| ATF4    | 0.4338513  | 0.23696759 | 0.476 | 0.544 | 1 Bcell_2_UCBMC |
| TDRD3   | 0.43401461 | 0.28071446 | 0.254 | 0.311 | 1 Bcell_2_UCBMC |
| DDX46   | 0.43567354 | 0.21386773 | 0.41  | 0.44  | 1 Bcell_2_UCBMC |
| TOX4    | 0.43711813 | 0.39247753 | 0.248 | 0.3   | 1 Bcell_2_UCBMC |
| LNPEP   | 0.43877458 | 0.13389278 | 0.345 | 0.406 | 1 Bcell_2_UCBMC |
| PPP3CC  | 0.43993421 | 0.15844001 | 0.593 | 0.645 | 1 Bcell_2_UCBMC |
| RASSF3  | 0.44018918 | 0.18477137 | 0.332 | 0.391 | 1 Bcell_2_UCBMC |
| CD2AP   | 0.44307268 | 0.4550293  | 0.283 | 0.288 | 1 Bcell_2_UCBMC |
| C1D     | 0.44384995 | 0.1777902  | 0.251 | 0.306 | 1 Bcell_2_UCBMC |
| UBE4A   | 0.448094   | 0.39222275 | 0.251 | 0.253 | 1 Bcell_2_UCBMC |
| P4HA1   | 0.45023002 | 0.23671288 | 0.238 | 0.29  | 1 Bcell_2_UCBMC |
| LRCH1   | 0.4504422  | 0.40557596 | 0.283 | 0.349 | 1 Bcell_2_UCBMC |
| GPSM3   | 0.45078555 | 0.15418299 | 0.57  | 0.638 | 1 Bcell_2_UCBMC |
| RNF213  | 0.45445467 | 0.11905891 | 0.241 | 0.288 | 1 Bcell_2_UCBMC |



|            |            |            |       |       |                 |
|------------|------------|------------|-------|-------|-----------------|
| POC5       | 0.45447855 | 0.1410732  | 0.388 | 0.478 | 1 Bcell_2_UCBMC |
| ZNF326     | 0.4547402  | 0.34615254 | 0.336 | 0.357 | 1 Bcell_2_UCBMC |
| SENP6      | 0.45558683 | 0.30824795 | 0.456 | 0.497 | 1 Bcell_2_UCBMC |
| DNM1L      | 0.4557303  | 0.45881604 | 0.277 | 0.29  | 1 Bcell_2_UCBMC |
| PMPCB      | 0.45608544 | 0.32729975 | 0.208 | 0.259 | 1 Bcell_2_UCBMC |
| ZNF528     | 0.45655709 | 0.16404487 | 0.332 | 0.406 | 1 Bcell_2_UCBMC |
| SF3B2      | 0.46148731 | 0.1425218  | 0.29  | 0.353 | 1 Bcell_2_UCBMC |
| OLA1       | 0.46333694 | 0.26340924 | 0.378 | 0.469 | 1 Bcell_2_UCBMC |
| LONP2      | 0.46430684 | 0.55510432 | 0.309 | 0.329 | 1 Bcell_2_UCBMC |
| SELL       | 0.46467499 | 0.2237416  | 0.489 | 0.51  | 1 Bcell_2_UCBMC |
| SP110      | 0.46568208 | 0.16147939 | 0.59  | 0.66  | 1 Bcell_2_UCBMC |
| TMEM131L   | 0.46729241 | 0.10597139 | 0.7   | 0.74  | 1 Bcell_2_UCBMC |
| C15H9orf78 | 0.46790111 | 0.17114372 | 0.502 | 0.564 | 1 Bcell_2_UCBMC |
| RMND5A     | 0.46832416 | 0.11941546 | 0.221 | 0.26  | 1 Bcell_2_UCBMC |
| FGFR1OP2   | 0.46911195 | 0.43088552 | 0.332 | 0.359 | 1 Bcell_2_UCBMC |
| SAFB2      | 0.47239105 | 0.27491549 | 0.257 | 0.317 | 1 Bcell_2_UCBMC |
| CEBPZ      | 0.47272134 | 0.15849027 | 0.27  | 0.323 | 1 Bcell_2_UCBMC |
| NFATC3     | 0.47291301 | 0.26037212 | 0.355 | 0.425 | 1 Bcell_2_UCBMC |
| SCAF11     | 0.47451802 | 0.31694699 | 0.508 | 0.564 | 1 Bcell_2_UCBMC |
| EPB41L2    | 0.47653528 | 0.42288165 | 0.329 | 0.353 | 1 Bcell_2_UCBMC |
| WBP11      | 0.47696577 | 0.46053471 | 0.274 | 0.288 | 1 Bcell_2_UCBMC |
| TTC17      | 0.47807367 | 0.49708212 | 0.355 | 0.394 | 1 Bcell_2_UCBMC |
| TBC1D22A   | 0.47809169 | 0.29042825 | 0.267 | 0.329 | 1 Bcell_2_UCBMC |
| SPOP       | 0.47905578 | 0.31943778 | 0.248 | 0.301 | 1 Bcell_2_UCBMC |
| MRPS9      | 0.47940162 | 0.46933017 | 0.251 | 0.264 | 1 Bcell_2_UCBMC |
| ARFGEF2    | 0.48124095 | 0.19149341 | 0.235 | 0.275 | 1 Bcell_2_UCBMC |
| WASL       | 0.48199356 | 0.14758129 | 0.238 | 0.284 | 1 Bcell_2_UCBMC |
| ZC3H11A    | 0.48296758 | 0.44181136 | 0.339 | 0.373 | 1 Bcell_2_UCBMC |
| MAX        | 0.483502   | 0.41848962 | 0.283 | 0.298 | 1 Bcell_2_UCBMC |
| CHST11     | 0.48651036 | 0.25120639 | 0.309 | 0.37  | 1 Bcell_2_UCBMC |
| SRSF4      | 0.48652774 | 0.25427051 | 0.472 | 0.544 | 1 Bcell_2_UCBMC |
| MGMT       | 0.48661581 | 0.20703924 | 0.251 | 0.296 | 1 Bcell_2_UCBMC |
| KDM5A      | 0.48754108 | 0.57998353 | 0.277 | 0.301 | 1 Bcell_2_UCBMC |

|                    |            |            |       |       |                 |
|--------------------|------------|------------|-------|-------|-----------------|
| ANKIB1             | 0.48809915 | 0.21882107 | 0.29  | 0.348 | 1 Bcell_2_UCBMC |
| ANKRD28            | 0.48832046 | 0.16358643 | 0.352 | 0.426 | 1 Bcell_2_UCBMC |
| MED13L             | 0.4909359  | 0.198246   | 0.681 | 0.74  | 1 Bcell_2_UCBMC |
| CCNK               | 0.49313036 | 0.18611434 | 0.362 | 0.445 | 1 Bcell_2_UCBMC |
| LPGAT1             | 0.49331906 | 0.20024225 | 0.28  | 0.335 | 1 Bcell_2_UCBMC |
| FKBP3              | 0.49719783 | 0.33141409 | 0.316 | 0.345 | 1 Bcell_2_UCBMC |
| ILF3               | 0.49922004 | 0.20841348 | 0.319 | 0.392 | 1 Bcell_2_UCBMC |
| ENSMMUG00000061038 | 0.50265491 | 0.47282007 | 0.287 | 0.306 | 1 Bcell_2_UCBMC |
| PPP1R15A           | 0.50469973 | 0.11384734 | 0.508 | 0.542 | 1 Bcell_2_UCBMC |
| BTF3L4             | 0.50743799 | 0.20034389 | 0.394 | 0.429 | 1 Bcell_2_UCBMC |
| ARHGAP17           | 0.50841539 | 0.14909988 | 0.492 | 0.606 | 1 Bcell_2_UCBMC |
| COPA               | 0.50896083 | 0.40414487 | 0.264 | 0.276 | 1 Bcell_2_UCBMC |
| CD40               | 0.50932883 | 0.37923138 | 0.28  | 0.286 | 1 Bcell_2_UCBMC |
| ZBTB11             | 0.50972659 | 0.20947081 | 0.218 | 0.26  | 1 Bcell_2_UCBMC |
| TMED4              | 0.51050856 | 0.15477665 | 0.228 | 0.273 | 1 Bcell_2_UCBMC |
| ZNF410             | 0.51052784 | 0.55456965 | 0.264 | 0.274 | 1 Bcell_2_UCBMC |
| SDHAF4             | 0.51116381 | 0.52054327 | 0.316 | 0.356 | 1 Bcell_2_UCBMC |
| HNRNPH3            | 0.51280933 | 0.18511268 | 0.459 | 0.506 | 1 Bcell_2_UCBMC |
| PPM1B              | 0.51342307 | 0.16087665 | 0.251 | 0.291 | 1 Bcell_2_UCBMC |
| KMT5B              | 0.51435802 | 0.13345567 | 0.215 | 0.252 | 1 Bcell_2_UCBMC |
| TLE4               | 0.51519874 | 0.18395949 | 0.303 | 0.37  | 1 Bcell_2_UCBMC |
| CAMKMT             | 0.51582102 | 0.25270031 | 0.316 | 0.372 | 1 Bcell_2_UCBMC |
| GLRX3              | 0.5161558  | 0.50513202 | 0.296 | 0.32  | 1 Bcell_2_UCBMC |
| USP3               | 0.51766217 | 0.3170159  | 0.469 | 0.532 | 1 Bcell_2_UCBMC |
| ATP5PB             | 0.51833292 | 0.18451776 | 0.355 | 0.433 | 1 Bcell_2_UCBMC |
| DTD1               | 0.52200563 | 0.23548912 | 0.215 | 0.255 | 1 Bcell_2_UCBMC |
| HPS5               | 0.52231511 | 0.23590355 | 0.212 | 0.258 | 1 Bcell_2_UCBMC |
| UBE2Q2             | 0.52272757 | 0.30204075 | 0.277 | 0.288 | 1 Bcell_2_UCBMC |
| JAK1               | 0.52620349 | 0.12687703 | 0.736 | 0.781 | 1 Bcell_2_UCBMC |
| MAP1LC3B           | 0.52642823 | 0.16372784 | 0.391 | 0.469 | 1 Bcell_2_UCBMC |
| SMYD3              | 0.52703359 | 0.18507459 | 0.336 | 0.401 | 1 Bcell_2_UCBMC |
| ZNF148             | 0.52843962 | 0.33581865 | 0.384 | 0.417 | 1 Bcell_2_UCBMC |
| SBNO1              | 0.530826   | 0.54559757 | 0.267 | 0.288 | 1 Bcell_2_UCBMC |

|                     |            |            |       |       |                 |
|---------------------|------------|------------|-------|-------|-----------------|
| FCHSD2              | 0.53092575 | 0.11975111 | 0.814 | 0.833 | 1 Bcell_2_UCBMC |
| TAF15               | 0.53119048 | 0.17873429 | 0.495 | 0.539 | 1 Bcell_2_UCBMC |
| TP53BP2             | 0.53405789 | 0.19852821 | 0.257 | 0.304 | 1 Bcell_2_UCBMC |
| ADAM19              | 0.53547834 | 0.25060345 | 0.459 | 0.55  | 1 Bcell_2_UCBMC |
| ENSMMUG00000007536  | 0.53585839 | 0.13548251 | 0.349 | 0.434 | 1 Bcell_2_UCBMC |
| PTPRA               | 0.53588268 | 0.43162589 | 0.355 | 0.393 | 1 Bcell_2_UCBMC |
| OPA1                | 0.5371007  | 0.4486847  | 0.332 | 0.368 | 1 Bcell_2_UCBMC |
| ENSMMUG000000040181 | 0.5376875  | 0.3162686  | 0.261 | 0.318 | 1 Bcell_2_UCBMC |
| MAPK1IP1L           | 0.54061502 | 0.30030756 | 0.342 | 0.367 | 1 Bcell_2_UCBMC |
| DYRK1A              | 0.54180955 | 0.11444396 | 0.296 | 0.35  | 1 Bcell_2_UCBMC |
| CCDC91              | 0.54348137 | 0.23682263 | 0.508 | 0.558 | 1 Bcell_2_UCBMC |
| EIF2A               | 0.54461492 | 0.12646512 | 0.293 | 0.345 | 1 Bcell_2_UCBMC |
| ENSMMUG000000029973 | 0.54534595 | 0.11898941 | 0.625 | 0.698 | 1 Bcell_2_UCBMC |
| ABCF1               | 0.54560853 | 0.22474199 | 0.322 | 0.345 | 1 Bcell_2_UCBMC |
| RAB14               | 0.54624796 | 0.26282417 | 0.257 | 0.311 | 1 Bcell_2_UCBMC |
| TIGAR               | 0.5478855  | 0.1120605  | 0.274 | 0.324 | 1 Bcell_2_UCBMC |
| ENSMMUG000000065362 | 0.5484384  | 0.15040801 | 0.99  | 0.991 | 1 Bcell_2_UCBMC |
| MAMU-DOB            | 0.54853375 | 0.12730593 | 0.316 | 0.371 | 1 Bcell_2_UCBMC |
| ACIN1               | 0.54855148 | 0.22130108 | 0.42  | 0.457 | 1 Bcell_2_UCBMC |
| STIM1               | 0.54931469 | 0.35890588 | 0.218 | 0.26  | 1 Bcell_2_UCBMC |
| RBX1                | 0.55001396 | 0.14757637 | 0.381 | 0.46  | 1 Bcell_2_UCBMC |
| ZCRB1               | 0.55024583 | 0.26454962 | 0.212 | 0.252 | 1 Bcell_2_UCBMC |
| RBM33               | 0.55117426 | 0.42552713 | 0.336 | 0.373 | 1 Bcell_2_UCBMC |
| URI1                | 0.55118337 | 0.56286935 | 0.277 | 0.3   | 1 Bcell_2_UCBMC |
| SENP7               | 0.55169147 | 0.41194351 | 0.254 | 0.263 | 1 Bcell_2_UCBMC |
| XPR1                | 0.55230413 | 0.43483973 | 0.264 | 0.275 | 1 Bcell_2_UCBMC |
| CYSLTR1             | 0.55353672 | 0.15168111 | 0.28  | 0.283 | 1 Bcell_2_UCBMC |
| NCKAP1L             | 0.55536804 | 0.26755787 | 0.485 | 0.549 | 1 Bcell_2_UCBMC |
| UPF2                | 0.55622736 | 0.18523149 | 0.28  | 0.33  | 1 Bcell_2_UCBMC |
| NSD1                | 0.55867249 | 0.20309924 | 0.345 | 0.415 | 1 Bcell_2_UCBMC |
| KBTBD2              | 0.5588938  | 0.3761923  | 0.264 | 0.278 | 1 Bcell_2_UCBMC |
| UFC1                | 0.56510087 | 0.11592433 | 0.381 | 0.457 | 1 Bcell_2_UCBMC |
| BRK1                | 0.56786913 | 0.2131476  | 0.414 | 0.465 | 1 Bcell_2_UCBMC |

|            |            |            |       |       |                 |
|------------|------------|------------|-------|-------|-----------------|
| RIC1       | 0.57325992 | 0.2344869  | 0.3   | 0.357 | 1 Bcell_2_UCBMC |
| USP8       | 0.57396895 | 0.15566167 | 0.264 | 0.311 | 1 Bcell_2_UCBMC |
| NAMPT      | 0.57416303 | 0.1031099  | 0.238 | 0.275 | 1 Bcell_2_UCBMC |
| PHF21A     | 0.57441014 | 0.22801226 | 0.349 | 0.404 | 1 Bcell_2_UCBMC |
| RHEB       | 0.57462922 | 0.26595508 | 0.326 | 0.411 | 1 Bcell_2_UCBMC |
| RELCH      | 0.57513462 | 0.61653293 | 0.287 | 0.311 | 1 Bcell_2_UCBMC |
| STAR       | 0.57565446 | 0.16576206 | 0.212 | 0.25  | 1 Bcell_2_UCBMC |
| ZDHHC20    | 0.57595515 | 0.37831672 | 0.261 | 0.272 | 1 Bcell_2_UCBMC |
| NT5C3A     | 0.5772253  | 0.16986201 | 0.329 | 0.396 | 1 Bcell_2_UCBMC |
| SMARCA2    | 0.57737379 | 0.11092983 | 0.322 | 0.379 | 1 Bcell_2_UCBMC |
| ZNF93      | 0.5774205  | 0.36276648 | 0.257 | 0.27  | 1 Bcell_2_UCBMC |
| MRPS15     | 0.57885661 | 0.16765225 | 0.274 | 0.323 | 1 Bcell_2_UCBMC |
| RAD21      | 0.58090037 | 0.14127928 | 0.322 | 0.385 | 1 Bcell_2_UCBMC |
| EIF4G3     | 0.5822381  | 0.12831928 | 0.534 | 0.625 | 1 Bcell_2_UCBMC |
| ETF1       | 0.5832947  | 0.25917624 | 0.401 | 0.44  | 1 Bcell_2_UCBMC |
| NFU1       | 0.58336124 | 0.17019444 | 0.225 | 0.268 | 1 Bcell_2_UCBMC |
| SEPTIN7    | 0.58378158 | 0.12507901 | 0.687 | 0.762 | 1 Bcell_2_UCBMC |
| GOLPH3     | 0.58437471 | 0.46808852 | 0.349 | 0.386 | 1 Bcell_2_UCBMC |
| PCF11      | 0.58596812 | 0.46448984 | 0.28  | 0.303 | 1 Bcell_2_UCBMC |
| NEDD4L     | 0.58665772 | 0.26517011 | 0.381 | 0.412 | 1 Bcell_2_UCBMC |
| RASA2      | 0.5872889  | 0.20647854 | 0.414 | 0.504 | 1 Bcell_2_UCBMC |
| ARHGAP4    | 0.59001851 | 0.16630632 | 0.274 | 0.328 | 1 Bcell_2_UCBMC |
| IK         | 0.59133992 | 0.2111019  | 0.391 | 0.474 | 1 Bcell_2_UCBMC |
| PFDN4      | 0.59421917 | 0.2867942  | 0.283 | 0.349 | 1 Bcell_2_UCBMC |
| COMMD1     | 0.59426193 | 0.31959381 | 0.283 | 0.335 | 1 Bcell_2_UCBMC |
| KLF3       | 0.59587084 | 0.26642292 | 0.254 | 0.258 | 1 Bcell_2_UCBMC |
| ASCC3      | 0.59590758 | 0.11290165 | 0.358 | 0.419 | 1 Bcell_2_UCBMC |
| CREB1      | 0.59864221 | 0.37216644 | 0.358 | 0.41  | 1 Bcell_2_UCBMC |
| NUDC       | 0.60388657 | 0.18356586 | 0.368 | 0.44  | 1 Bcell_2_UCBMC |
| VPS13C     | 0.60582681 | 0.23496927 | 0.332 | 0.389 | 1 Bcell_2_UCBMC |
| NFYC       | 0.60647422 | 0.2848484  | 0.218 | 0.253 | 1 Bcell_2_UCBMC |
| PALM2AKAP2 | 0.60769142 | 0.28730158 | 0.404 | 0.433 | 1 Bcell_2_UCBMC |
| UGCG       | 0.6090008  | 0.5265715  | 0.257 | 0.313 | 1 Bcell_2_UCBMC |

|                    |            |            |       |       |                 |
|--------------------|------------|------------|-------|-------|-----------------|
| IGBP1              | 0.61187509 | 0.26493362 | 0.296 | 0.365 | 1 Bcell_2_UCBMC |
| TACC1              | 0.61374335 | 0.11541666 | 0.417 | 0.506 | 1 Bcell_2_UCBMC |
| ENSMMUG00000058818 | 0.61449557 | 0.25969192 | 0.225 | 0.265 | 1 Bcell_2_UCBMC |
| VPREB3             | 0.61473765 | 0.20176995 | 0.251 | 0.285 | 1 Bcell_2_UCBMC |
| NUCKS1             | 0.61575263 | 0.15660098 | 0.41  | 0.49  | 1 Bcell_2_UCBMC |
| TRIM33             | 0.61618779 | 0.33001366 | 0.28  | 0.3   | 1 Bcell_2_UCBMC |
| ZZZ3               | 0.61914478 | 0.31022688 | 0.274 | 0.321 | 1 Bcell_2_UCBMC |
| NT5C2              | 0.62021655 | 0.43177771 | 0.29  | 0.311 | 1 Bcell_2_UCBMC |
| ENSMMUG00000016959 | 0.62059067 | 0.37212032 | 0.283 | 0.306 | 1 Bcell_2_UCBMC |
| HIPK3              | 0.62081619 | 0.20579965 | 0.218 | 0.251 | 1 Bcell_2_UCBMC |
| CCDC66             | 0.62135275 | 0.48895322 | 0.244 | 0.26  | 1 Bcell_2_UCBMC |
| NIFK               | 0.62378926 | 0.26093991 | 0.27  | 0.314 | 1 Bcell_2_UCBMC |
| MAN1A2             | 0.62717284 | 0.3607061  | 0.394 | 0.432 | 1 Bcell_2_UCBMC |
| CRYL1              | 0.62787936 | 0.18598575 | 0.248 | 0.29  | 1 Bcell_2_UCBMC |
| SEC61B             | 0.62830153 | 0.16753493 | 0.573 | 0.658 | 1 Bcell_2_UCBMC |
| SYAP1              | 0.62926449 | 0.34868223 | 0.274 | 0.324 | 1 Bcell_2_UCBMC |
| TBC1D25            | 0.63239928 | 0.5375974  | 0.241 | 0.262 | 1 Bcell_2_UCBMC |
| DNAJC24            | 0.63481201 | 0.21648025 | 0.313 | 0.328 | 1 Bcell_2_UCBMC |
| TRIM38             | 0.63571495 | 0.15523584 | 0.28  | 0.327 | 1 Bcell_2_UCBMC |
| DNAJC3             | 0.63624812 | 0.19589142 | 0.225 | 0.26  | 1 Bcell_2_UCBMC |
| MATR3              | 0.63693905 | 0.17408491 | 0.658 | 0.72  | 1 Bcell_2_UCBMC |
| PCNP               | 0.63847581 | 0.25688392 | 0.306 | 0.364 | 1 Bcell_2_UCBMC |
| TRAK1              | 0.63858388 | 0.45369593 | 0.322 | 0.348 | 1 Bcell_2_UCBMC |
| ARHGEF7            | 0.63974743 | 0.35389013 | 0.257 | 0.273 | 1 Bcell_2_UCBMC |
| PDCD10             | 0.6426391  | 0.15506881 | 0.362 | 0.391 | 1 Bcell_2_UCBMC |
| ACTR3              | 0.64355054 | 0.11777787 | 0.609 | 0.684 | 1 Bcell_2_UCBMC |
| ENSMMUG00000010266 | 0.64402633 | 0.1016465  | 0.564 | 0.675 | 1 Bcell_2_UCBMC |
| PRKCA              | 0.64444379 | 0.13306255 | 0.316 | 0.366 | 1 Bcell_2_UCBMC |
| PDS5A              | 0.64450042 | 0.28721167 | 0.339 | 0.372 | 1 Bcell_2_UCBMC |
| APBB2              | 0.64482843 | 0.16705201 | 0.283 | 0.319 | 1 Bcell_2_UCBMC |
| TAOK3              | 0.64529443 | 0.33117557 | 0.456 | 0.501 | 1 Bcell_2_UCBMC |
| WDR43              | 0.64658911 | 0.29314303 | 0.332 | 0.359 | 1 Bcell_2_UCBMC |
| CSNK1G3            | 0.64875303 | 0.13840329 | 0.567 | 0.618 | 1 Bcell_2_UCBMC |

|                     |            |            |       |       |                 |
|---------------------|------------|------------|-------|-------|-----------------|
| ME2                 | 0.65047799 | 0.13339645 | 0.414 | 0.477 | 1 Bcell_2_UCBMC |
| DIRAS2              | 0.65069772 | 0.42432982 | 0.257 | 0.27  | 1 Bcell_2_UCBMC |
| ENSMMUG000000005482 | 0.65448353 | 0.17768736 | 0.293 | 0.345 | 1 Bcell_2_UCBMC |
| PDGFRA              | 0.65748974 | 0.12930587 | 0.648 | 0.714 | 1 Bcell_2_UCBMC |
| VPS4B               | 0.65791378 | 0.28998068 | 0.309 | 0.329 | 1 Bcell_2_UCBMC |
| OSBPL2              | 0.65892294 | 0.21123672 | 0.261 | 0.31  | 1 Bcell_2_UCBMC |
| EIF3H               | 0.65994839 | 0.13224036 | 0.678 | 0.753 | 1 Bcell_2_UCBMC |
| TM9SF2              | 0.66125249 | 0.1731688  | 0.322 | 0.394 | 1 Bcell_2_UCBMC |
| ATF7IP2             | 0.66170421 | 0.19668142 | 0.322 | 0.384 | 1 Bcell_2_UCBMC |
| SETDB2              | 0.66223361 | 0.29740876 | 0.231 | 0.275 | 1 Bcell_2_UCBMC |
| RAP1GDS1            | 0.66555715 | 0.34250345 | 0.316 | 0.376 | 1 Bcell_2_UCBMC |
| BORCS5              | 0.66705654 | 0.36887825 | 0.267 | 0.322 | 1 Bcell_2_UCBMC |
| RRAS2               | 0.66965409 | 0.23050242 | 0.498 | 0.547 | 1 Bcell_2_UCBMC |
| JAZF1               | 0.67152328 | 0.16608777 | 0.541 | 0.594 | 1 Bcell_2_UCBMC |
| RPTOR               | 0.67260369 | 0.44233313 | 0.261 | 0.283 | 1 Bcell_2_UCBMC |
| ARHGEF6             | 0.67291078 | 0.40530317 | 0.267 | 0.285 | 1 Bcell_2_UCBMC |
| FBXO11              | 0.67530383 | 0.23054087 | 0.427 | 0.487 | 1 Bcell_2_UCBMC |
| BZW1                | 0.67721106 | 0.10501524 | 0.612 | 0.699 | 1 Bcell_2_UCBMC |
| NSRP1               | 0.6774553  | 0.14531162 | 0.349 | 0.409 | 1 Bcell_2_UCBMC |
| TASOR2              | 0.67816703 | 0.42941615 | 0.3   | 0.329 | 1 Bcell_2_UCBMC |
| BUD31               | 0.67829177 | 0.30365589 | 0.248 | 0.288 | 1 Bcell_2_UCBMC |
| UBE2L3              | 0.67835287 | 0.19372845 | 0.293 | 0.342 | 1 Bcell_2_UCBMC |
| SLC30A7             | 0.68013271 | 0.38113102 | 0.248 | 0.262 | 1 Bcell_2_UCBMC |
| TRIP12              | 0.68031439 | 0.45076452 | 0.375 | 0.432 | 1 Bcell_2_UCBMC |
| CCNT1               | 0.68352652 | 0.137229   | 0.238 | 0.272 | 1 Bcell_2_UCBMC |
| FER                 | 0.68373728 | 0.31452941 | 0.345 | 0.376 | 1 Bcell_2_UCBMC |
| PPP6R1              | 0.68375403 | 0.28466966 | 0.228 | 0.265 | 1 Bcell_2_UCBMC |
| UBE2G1              | 0.68915072 | 0.14086959 | 0.358 | 0.415 | 1 Bcell_2_UCBMC |
| CITED1              | 0.6915096  | 0.11964924 | 0.27  | 0.298 | 1 Bcell_2_UCBMC |
| OGT                 | 0.69424137 | 0.36013103 | 0.394 | 0.438 | 1 Bcell_2_UCBMC |
| CUL5                | 0.69502027 | 0.36867441 | 0.43  | 0.496 | 1 Bcell_2_UCBMC |
| HERC4               | 0.69548977 | 0.28653117 | 0.313 | 0.337 | 1 Bcell_2_UCBMC |
| HNRNPR              | 0.69713336 | 0.11760305 | 0.391 | 0.46  | 1 Bcell_2_UCBMC |

|                   |            |            |       |       |                 |
|-------------------|------------|------------|-------|-------|-----------------|
| NARS1             | 0.6974799  | 0.11383368 | 0.29  | 0.337 | 1 Bcell_2_UCBMC |
| USP10             | 0.69752202 | 0.33336573 | 0.319 | 0.352 | 1 Bcell_2_UCBMC |
| XRCC5             | 0.69896372 | 0.10567702 | 0.492 | 0.55  | 1 Bcell_2_UCBMC |
| CDC27             | 0.69989348 | 0.46062199 | 0.261 | 0.272 | 1 Bcell_2_UCBMC |
| PRRC2B            | 0.70185941 | 0.31594915 | 0.339 | 0.384 | 1 Bcell_2_UCBMC |
| CHD4              | 0.70197821 | 0.23806318 | 0.417 | 0.477 | 1 Bcell_2_UCBMC |
| SEC24B            | 0.70240308 | 0.20925821 | 0.309 | 0.37  | 1 Bcell_2_UCBMC |
| SMU1              | 0.70681951 | 0.23453936 | 0.264 | 0.28  | 1 Bcell_2_UCBMC |
| ATE1              | 0.70724411 | 0.44044829 | 0.225 | 0.262 | 1 Bcell_2_UCBMC |
| ENSMUG00000008346 | 0.70797387 | 0.21636266 | 0.3   | 0.36  | 1 Bcell_2_UCBMC |
| SHISA5            | 0.7084871  | 0.15292903 | 0.42  | 0.509 | 1 Bcell_2_UCBMC |
| MTHFD1L           | 0.70893764 | 0.27724213 | 0.332 | 0.363 | 1 Bcell_2_UCBMC |
| LRBA              | 0.7100502  | 0.31858541 | 0.466 | 0.525 | 1 Bcell_2_UCBMC |
| LIMS1             | 0.71037129 | 0.12095548 | 0.316 | 0.358 | 1 Bcell_2_UCBMC |
| CNOT7             | 0.71143512 | 0.27244731 | 0.225 | 0.26  | 1 Bcell_2_UCBMC |
| SP3               | 0.71674295 | 0.18938087 | 0.293 | 0.342 | 1 Bcell_2_UCBMC |
| ARF4              | 0.71679636 | 0.25255776 | 0.567 | 0.646 | 1 Bcell_2_UCBMC |
| PPIG              | 0.71703829 | 0.22752438 | 0.472 | 0.526 | 1 Bcell_2_UCBMC |
| RSL1D1            | 0.71829467 | 0.18024376 | 0.283 | 0.335 | 1 Bcell_2_UCBMC |
| RBBP4             | 0.71893139 | 0.24650294 | 0.319 | 0.375 | 1 Bcell_2_UCBMC |
| NT5DC1            | 0.71988707 | 0.2712125  | 0.251 | 0.282 | 1 Bcell_2_UCBMC |
| NPAT              | 0.72220546 | 0.22392267 | 0.43  | 0.477 | 1 Bcell_2_UCBMC |
| PPP1R8            | 0.72336854 | 0.18931111 | 0.27  | 0.317 | 1 Bcell_2_UCBMC |
| ZC3H13            | 0.72444806 | 0.27432964 | 0.251 | 0.293 | 1 Bcell_2_UCBMC |
| EIF4E             | 0.72644261 | 0.24325927 | 0.228 | 0.258 | 1 Bcell_2_UCBMC |
| LAMTOR4           | 0.72706309 | 0.33390472 | 0.29  | 0.317 | 1 Bcell_2_UCBMC |
| RABAC1            | 0.73080845 | 0.28395868 | 0.251 | 0.268 | 1 Bcell_2_UCBMC |
| PSMD12            | 0.73089054 | 0.42777312 | 0.287 | 0.309 | 1 Bcell_2_UCBMC |
| SCAMP2            | 0.73120239 | 0.60260428 | 0.235 | 0.257 | 1 Bcell_2_UCBMC |
| USP9X             | 0.73326482 | 0.16632401 | 0.485 | 0.549 | 1 Bcell_2_UCBMC |
| KHDRBS1           | 0.73397126 | 0.28686801 | 0.264 | 0.315 | 1 Bcell_2_UCBMC |
| RNF216            | 0.73931817 | 0.2170042  | 0.368 | 0.422 | 1 Bcell_2_UCBMC |
| BTA1              | 0.73993668 | 0.15812168 | 0.44  | 0.483 | 1 Bcell_2_UCBMC |

|         |            |            |       |       |                 |
|---------|------------|------------|-------|-------|-----------------|
| CAPZA2  | 0.74079734 | 0.14544528 | 0.498 | 0.58  | 1 Bcell_2_UCBMC |
| DNAJC7  | 0.74093577 | 0.35744089 | 0.339 | 0.387 | 1 Bcell_2_UCBMC |
| DIAPH2  | 0.7410411  | 0.31662657 | 0.349 | 0.392 | 1 Bcell_2_UCBMC |
| RNF103  | 0.75003322 | 0.2592361  | 0.28  | 0.333 | 1 Bcell_2_UCBMC |
| CLASP1  | 0.75013986 | 0.19103408 | 0.29  | 0.338 | 1 Bcell_2_UCBMC |
| STX8    | 0.75098668 | 0.46560989 | 0.306 | 0.342 | 1 Bcell_2_UCBMC |
| EIF2B3  | 0.75238685 | 0.3483951  | 0.235 | 0.27  | 1 Bcell_2_UCBMC |
| C2CD5   | 0.7539671  | 0.29905741 | 0.241 | 0.253 | 1 Bcell_2_UCBMC |
| NDUFA6  | 0.75467287 | 0.26006655 | 0.241 | 0.28  | 1 Bcell_2_UCBMC |
| SMARCE1 | 0.75559658 | 0.36826606 | 0.264 | 0.291 | 1 Bcell_2_UCBMC |
| CCDC12  | 0.75569159 | 0.31349306 | 0.349 | 0.394 | 1 Bcell_2_UCBMC |
| MPZL1   | 0.75588774 | 0.53315255 | 0.238 | 0.259 | 1 Bcell_2_UCBMC |
| COPS8   | 0.75667218 | 0.36205425 | 0.235 | 0.281 | 1 Bcell_2_UCBMC |
| PRPF38B | 0.75680625 | 0.11479198 | 0.352 | 0.41  | 1 Bcell_2_UCBMC |
| SUCO    | 0.75728569 | 0.1447553  | 0.336 | 0.395 | 1 Bcell_2_UCBMC |
| ERC1    | 0.75811075 | 0.33427255 | 0.283 | 0.307 | 1 Bcell_2_UCBMC |
| ARHGDIA | 0.75985343 | 0.30021501 | 0.257 | 0.28  | 1 Bcell_2_UCBMC |
| UBE3C   | 0.76015946 | 0.44845919 | 0.3   | 0.326 | 1 Bcell_2_UCBMC |
| RUNX1   | 0.76075236 | 0.15627603 | 0.446 | 0.531 | 1 Bcell_2_UCBMC |
| NSMCE2  | 0.76130619 | 0.2747856  | 0.326 | 0.377 | 1 Bcell_2_UCBMC |
| IQSEC1  | 0.76315112 | 0.17789083 | 0.472 | 0.525 | 1 Bcell_2_UCBMC |
| TFAM    | 0.76638498 | 0.31671059 | 0.218 | 0.251 | 1 Bcell_2_UCBMC |
| DSTN    | 0.76915467 | 0.20224011 | 0.352 | 0.396 | 1 Bcell_2_UCBMC |
| GLG1    | 0.77340008 | 0.43751266 | 0.261 | 0.282 | 1 Bcell_2_UCBMC |
| UBR2    | 0.77349774 | 0.36230056 | 0.244 | 0.268 | 1 Bcell_2_UCBMC |
| S100A10 | 0.77455018 | 0.1786153  | 0.319 | 0.357 | 1 Bcell_2_UCBMC |
| IMPDH2  | 0.77624131 | 0.11090594 | 0.485 | 0.536 | 1 Bcell_2_UCBMC |
| CAND1   | 0.77658302 | 0.36120842 | 0.336 | 0.381 | 1 Bcell_2_UCBMC |
| EIF4H   | 0.776937   | 0.26609776 | 0.433 | 0.492 | 1 Bcell_2_UCBMC |
| DYM     | 0.77761073 | 0.23283604 | 0.375 | 0.412 | 1 Bcell_2_UCBMC |
| TTC19   | 0.78124554 | 0.40614817 | 0.28  | 0.307 | 1 Bcell_2_UCBMC |
| THOC2   | 0.78345078 | 0.22907477 | 0.303 | 0.351 | 1 Bcell_2_UCBMC |
| XPO6    | 0.78699003 | 0.12170902 | 0.391 | 0.459 | 1 Bcell_2_UCBMC |



|                    |            |            |       |       |                 |
|--------------------|------------|------------|-------|-------|-----------------|
| EIF3G              | 0.78821103 | 0.20995103 | 0.41  | 0.474 | 1 Bcell_2_UCBMC |
| IWS1               | 0.78847416 | 0.23421469 | 0.228 | 0.259 | 1 Bcell_2_UCBMC |
| MRPL51             | 0.78859303 | 0.16183532 | 0.388 | 0.471 | 1 Bcell_2_UCBMC |
| PPHLN1             | 0.79055827 | 0.38087794 | 0.404 | 0.464 | 1 Bcell_2_UCBMC |
| ENSMMUG00000042157 | 0.79173729 | 0.27311454 | 0.238 | 0.272 | 1 Bcell_2_UCBMC |
| KDM2B              | 0.79297574 | 0.33060918 | 0.336 | 0.375 | 1 Bcell_2_UCBMC |
| SNW1               | 0.79413385 | 0.45304273 | 0.296 | 0.33  | 1 Bcell_2_UCBMC |
| ABI1               | 0.79476305 | 0.18125754 | 0.515 | 0.581 | 1 Bcell_2_UCBMC |
| COPS2              | 0.79585601 | 0.30756565 | 0.267 | 0.311 | 1 Bcell_2_UCBMC |
| MAPRE2             | 0.79715636 | 0.12271149 | 0.394 | 0.419 | 1 Bcell_2_UCBMC |
| MSI2               | 0.79794036 | 0.16280269 | 0.469 | 0.549 | 1 Bcell_2_UCBMC |
| PHACTR4            | 0.79883171 | 0.45872057 | 0.29  | 0.342 | 1 Bcell_2_UCBMC |
| LARP4              | 0.79923259 | 0.38458021 | 0.261 | 0.286 | 1 Bcell_2_UCBMC |
| ATXN2              | 0.80151442 | 0.22074451 | 0.303 | 0.353 | 1 Bcell_2_UCBMC |
| CCND3              | 0.80396767 | 0.25257665 | 0.329 | 0.375 | 1 Bcell_2_UCBMC |
| CDKAL1             | 0.80416969 | 0.14561072 | 0.41  | 0.458 | 1 Bcell_2_UCBMC |
| ABCE1              | 0.80823711 | 0.36754556 | 0.306 | 0.344 | 1 Bcell_2_UCBMC |
| MDH2               | 0.80977643 | 0.25758192 | 0.29  | 0.317 | 1 Bcell_2_UCBMC |
| FAM193A            | 0.81136135 | 0.35812876 | 0.244 | 0.27  | 1 Bcell_2_UCBMC |
| SH3KBP1            | 0.81210176 | 0.24469073 | 0.443 | 0.513 | 1 Bcell_2_UCBMC |
| AKAP9              | 0.81406546 | 0.29091163 | 0.404 | 0.457 | 1 Bcell_2_UCBMC |
| EXOC6              | 0.81571997 | 0.11201207 | 0.362 | 0.386 | 1 Bcell_2_UCBMC |
| ENSMMUG00000049833 | 0.81729337 | 0.10777053 | 0.586 | 0.654 | 1 Bcell_2_UCBMC |
| PHKB               | 0.81746762 | 0.29341877 | 0.296 | 0.325 | 1 Bcell_2_UCBMC |
| CD38               | 0.81896441 | 0.11514631 | 0.557 | 0.637 | 1 Bcell_2_UCBMC |
| PCNX1              | 0.82026669 | 0.21450304 | 0.332 | 0.38  | 1 Bcell_2_UCBMC |
| LENG1              | 0.82182743 | 0.21073575 | 0.261 | 0.301 | 1 Bcell_2_UCBMC |
| C14H11orf58        | 0.82574923 | 0.43498648 | 0.29  | 0.332 | 1 Bcell_2_UCBMC |
| LANCL2             | 0.82639327 | 0.45419884 | 0.228 | 0.256 | 1 Bcell_2_UCBMC |
| ITFG2              | 0.82720851 | 0.30774321 | 0.261 | 0.304 | 1 Bcell_2_UCBMC |
| NBEA               | 0.82745768 | 0.22677525 | 0.293 | 0.332 | 1 Bcell_2_UCBMC |
| RTRAF              | 0.83062661 | 0.14655633 | 0.511 | 0.603 | 1 Bcell_2_UCBMC |
| AHI1               | 0.83206993 | 0.44109018 | 0.29  | 0.329 | 1 Bcell_2_UCBMC |

|                    |            |            |       |       |                 |
|--------------------|------------|------------|-------|-------|-----------------|
| KAT6B              | 0.8345207  | 0.34679664 | 0.355 | 0.394 | 1 Bcell_2_UCBMC |
| CLIC4              | 0.83466796 | 0.37304388 | 0.257 | 0.28  | 1 Bcell_2_UCBMC |
| TMBIM6             | 0.83564354 | 0.11573408 | 0.43  | 0.51  | 1 Bcell_2_UCBMC |
| NRROS              | 0.83973078 | 0.29322386 | 0.296 | 0.348 | 1 Bcell_2_UCBMC |
| GAPVD1             | 0.84058682 | 0.32133607 | 0.274 | 0.3   | 1 Bcell_2_UCBMC |
| SRSF1              | 0.84367015 | 0.31739723 | 0.287 | 0.329 | 1 Bcell_2_UCBMC |
| EID1               | 0.84480631 | 0.25176177 | 0.342 | 0.397 | 1 Bcell_2_UCBMC |
| GRAMD4             | 0.84596379 | 0.31017085 | 0.251 | 0.273 | 1 Bcell_2_UCBMC |
| PHF11              | 0.85067627 | 0.22087835 | 0.329 | 0.376 | 1 Bcell_2_UCBMC |
| SMC4               | 0.85273087 | 0.30889947 | 0.381 | 0.438 | 1 Bcell_2_UCBMC |
| DIAPH1             | 0.8530904  | 0.30462004 | 0.326 | 0.373 | 1 Bcell_2_UCBMC |
| ENSMMUG00000058389 | 0.86090107 | 0.16661255 | 0.261 | 0.298 | 1 Bcell_2_UCBMC |
| COX16              | 0.86362183 | 0.12458622 | 0.466 | 0.541 | 1 Bcell_2_UCBMC |
| TSC22D2            | 0.86388513 | 0.44773859 | 0.228 | 0.26  | 1 Bcell_2_UCBMC |
| FAM53B             | 0.86507428 | 0.29187419 | 0.248 | 0.268 | 1 Bcell_2_UCBMC |
| TCOF1              | 0.86712827 | 0.53060834 | 0.228 | 0.25  | 1 Bcell_2_UCBMC |
| ENSMMUG00000060229 | 0.86816187 | 0.18029686 | 0.463 | 0.516 | 1 Bcell_2_UCBMC |
| PSMD13             | 0.87032037 | 0.10090832 | 0.342 | 0.394 | 1 Bcell_2_UCBMC |
| CIR1               | 0.87466344 | 0.20598516 | 0.326 | 0.376 | 1 Bcell_2_UCBMC |
| UBXN1              | 0.87576412 | 0.13035393 | 0.521 | 0.619 | 1 Bcell_2_UCBMC |
| CLDND1             | 0.87926307 | 0.25224614 | 0.306 | 0.349 | 1 Bcell_2_UCBMC |
| AGTPBP1            | 0.87953413 | 0.4949708  | 0.254 | 0.286 | 1 Bcell_2_UCBMC |
| USP25              | 0.88026739 | 0.23051213 | 0.264 | 0.298 | 1 Bcell_2_UCBMC |
| FTO                | 0.88148503 | 0.42449556 | 0.235 | 0.26  | 1 Bcell_2_UCBMC |
| DDX52              | 0.88178172 | 0.45484701 | 0.261 | 0.285 | 1 Bcell_2_UCBMC |
| LST1               | 0.88296395 | 0.25177663 | 0.391 | 0.441 | 1 Bcell_2_UCBMC |
| ENSMMUG00000018557 | 0.88338927 | 0.50541603 | 0.244 | 0.274 | 1 Bcell_2_UCBMC |
| GINM1              | 0.88444514 | 0.44037006 | 0.254 | 0.278 | 1 Bcell_2_UCBMC |
| VTI1A              | 0.88511786 | 0.20861078 | 0.472 | 0.545 | 1 Bcell_2_UCBMC |
| RNF7               | 0.88713891 | 0.28801563 | 0.274 | 0.319 | 1 Bcell_2_UCBMC |
| ATL2               | 0.88933323 | 0.54632627 | 0.231 | 0.27  | 1 Bcell_2_UCBMC |
| EIF5               | 0.89100706 | 0.15235107 | 0.476 | 0.566 | 1 Bcell_2_UCBMC |
| HNRNPM             | 0.89382311 | 0.13450195 | 0.42  | 0.484 | 1 Bcell_2_UCBMC |

|           |            |            |       |       |                 |
|-----------|------------|------------|-------|-------|-----------------|
| PLEKHB2   | 0.89391283 | 0.27789611 | 0.371 | 0.422 | 1 Bcell_2_UCBMC |
| ELK3      | 0.8949249  | 0.1922891  | 0.296 | 0.321 | 1 Bcell_2_UCBMC |
| VPS8      | 0.89722185 | 0.23597953 | 0.267 | 0.288 | 1 Bcell_2_UCBMC |
| MACO1     | 0.89873436 | 0.33932555 | 0.326 | 0.371 | 1 Bcell_2_UCBMC |
| UBAC2     | 0.89881313 | 0.16120076 | 0.469 | 0.556 | 1 Bcell_2_UCBMC |
| SAT1      | 0.89903468 | 0.10577042 | 0.322 | 0.352 | 1 Bcell_2_UCBMC |
| PCMTD1    | 0.90070247 | 0.24290051 | 0.339 | 0.393 | 1 Bcell_2_UCBMC |
| ATXN7L3B  | 0.90234652 | 0.25425619 | 0.293 | 0.333 | 1 Bcell_2_UCBMC |
| DDX39B    | 0.90394106 | 0.23305909 | 0.309 | 0.36  | 1 Bcell_2_UCBMC |
| CAPG      | 0.90524729 | 0.17147397 | 0.397 | 0.434 | 1 Bcell_2_UCBMC |
| KATNBL1   | 0.90709105 | 0.21937168 | 0.316 | 0.36  | 1 Bcell_2_UCBMC |
| CSNK2B    | 0.91245468 | 0.27575305 | 0.322 | 0.383 | 1 Bcell_2_UCBMC |
| UBE3A     | 0.91250856 | 0.35703844 | 0.287 | 0.336 | 1 Bcell_2_UCBMC |
| STT3B     | 0.91367395 | 0.24033948 | 0.443 | 0.504 | 1 Bcell_2_UCBMC |
| DCAF8     | 0.9141384  | 0.30530237 | 0.231 | 0.262 | 1 Bcell_2_UCBMC |
| UBR4      | 0.91519817 | 0.27333161 | 0.303 | 0.34  | 1 Bcell_2_UCBMC |
| DNTTIP2   | 0.9152608  | 0.17879825 | 0.322 | 0.366 | 1 Bcell_2_UCBMC |
| GATAD2B   | 0.92115118 | 0.27718104 | 0.365 | 0.425 | 1 Bcell_2_UCBMC |
| SECISBP2  | 0.92249002 | 0.30478084 | 0.319 | 0.362 | 1 Bcell_2_UCBMC |
| ATF7      | 0.92481746 | 0.35546781 | 0.248 | 0.273 | 1 Bcell_2_UCBMC |
| GTF2H1    | 0.92676561 | 0.4392593  | 0.235 | 0.266 | 1 Bcell_2_UCBMC |
| COX1      | 0.92733264 | 0.33743887 | 0.332 | 0.361 | 1 Bcell_2_UCBMC |
| SAMD8     | 0.92809861 | 0.42814174 | 0.342 | 0.394 | 1 Bcell_2_UCBMC |
| AP2B1     | 0.92902222 | 0.39670163 | 0.264 | 0.301 | 1 Bcell_2_UCBMC |
| C4H6orf62 | 0.93139334 | 0.38359492 | 0.261 | 0.287 | 1 Bcell_2_UCBMC |
| TMEM59    | 0.931686   | 0.24869475 | 0.378 | 0.431 | 1 Bcell_2_UCBMC |
| ERLEC1    | 0.93205555 | 0.26886293 | 0.241 | 0.266 | 1 Bcell_2_UCBMC |
| RANBP9    | 0.93213031 | 0.31984477 | 0.29  | 0.328 | 1 Bcell_2_UCBMC |
| ND4       | 0.93220665 | 0.36976689 | 0.319 | 0.358 | 1 Bcell_2_UCBMC |
| SLC25A37  | 0.93265997 | 0.33004522 | 0.319 | 0.364 | 1 Bcell_2_UCBMC |
| HSPA14    | 0.93425399 | 0.37627532 | 0.254 | 0.285 | 1 Bcell_2_UCBMC |
| PHF3      | 0.93606828 | 0.37745068 | 0.355 | 0.407 | 1 Bcell_2_UCBMC |
| PRKX      | 0.9361359  | 0.18580384 | 0.485 | 0.571 | 1 Bcell_2_UCBMC |

|         |            |            |       |       |                 |
|---------|------------|------------|-------|-------|-----------------|
| TBC1D5  | 0.93654842 | 0.13521182 | 0.707 | 0.758 | 1 Bcell_2_UCBMC |
| CIAO2B  | 0.94006888 | 0.26972538 | 0.261 | 0.293 | 1 Bcell_2_UCBMC |
| MBTD1   | 0.94690194 | 0.43822468 | 0.362 | 0.413 | 1 Bcell_2_UCBMC |
| LRRFIP2 | 0.94915279 | 0.42568639 | 0.251 | 0.283 | 1 Bcell_2_UCBMC |
| UBE2R2  | 0.9534898  | 0.44912504 | 0.29  | 0.333 | 1 Bcell_2_UCBMC |
| ATXN10  | 0.95777767 | 0.19133409 | 0.365 | 0.417 | 1 Bcell_2_UCBMC |
| SELENOT | 0.95984152 | 0.33680855 | 0.339 | 0.39  | 1 Bcell_2_UCBMC |
| PELI1   | 0.96002383 | 0.11871237 | 0.355 | 0.391 | 1 Bcell_2_UCBMC |
| SMN1    | 0.96112585 | 0.34621755 | 0.241 | 0.272 | 1 Bcell_2_UCBMC |
| SETD5   | 0.96141356 | 0.4277781  | 0.329 | 0.377 | 1 Bcell_2_UCBMC |
| RSL24D1 | 0.96148122 | 0.11273755 | 0.583 | 0.658 | 1 Bcell_2_UCBMC |
| SUCLG2  | 0.96175171 | 0.13638325 | 0.44  | 0.506 | 1 Bcell_2_UCBMC |
| SLTM    | 0.96210251 | 0.1770669  | 0.44  | 0.5   | 1 Bcell_2_UCBMC |
| CYFIP2  | 0.96747892 | 0.13539793 | 0.544 | 0.63  | 1 Bcell_2_UCBMC |
| CEP85L  | 0.96760753 | 0.12638542 | 0.423 | 0.472 | 1 Bcell_2_UCBMC |
| CAPZA1  | 0.96806926 | 0.10168409 | 0.554 | 0.638 | 1 Bcell_2_UCBMC |
| MORF4L2 | 0.96816656 | 0.35143319 | 0.267 | 0.304 | 1 Bcell_2_UCBMC |
| COP1    | 0.96871586 | 0.29667654 | 0.352 | 0.396 | 1 Bcell_2_UCBMC |
| ARL8B   | 0.9717407  | 0.39505386 | 0.248 | 0.28  | 1 Bcell_2_UCBMC |
| WWP2    | 0.97254597 | 0.56354653 | 0.225 | 0.254 | 1 Bcell_2_UCBMC |
| RSF1    | 0.97393333 | 0.16966476 | 0.417 | 0.479 | 1 Bcell_2_UCBMC |
| ADAM17  | 0.97414982 | 0.35178151 | 0.225 | 0.251 | 1 Bcell_2_UCBMC |
| SLMAP   | 0.97418397 | 0.26074052 | 0.436 | 0.517 | 1 Bcell_2_UCBMC |
| GOLM2   | 0.97515023 | 0.27191147 | 0.267 | 0.292 | 1 Bcell_2_UCBMC |
| UBR3    | 0.97696597 | 0.2060398  | 0.293 | 0.32  | 1 Bcell_2_UCBMC |
| POLR2A  | 0.9814317  | 0.3487041  | 0.254 | 0.293 | 1 Bcell_2_UCBMC |
| HSPA9   | 0.98218061 | 0.24298615 | 0.371 | 0.438 | 1 Bcell_2_UCBMC |
| NUFIP2  | 0.98247516 | 0.23620586 | 0.365 | 0.422 | 1 Bcell_2_UCBMC |
| SPECC1L | 0.98389478 | 0.46805559 | 0.251 | 0.287 | 1 Bcell_2_UCBMC |
| GNAI3   | 0.98605642 | 0.33258031 | 0.241 | 0.273 | 1 Bcell_2_UCBMC |
| ZBTB1   | 0.98633218 | 0.33387983 | 0.254 | 0.284 | 1 Bcell_2_UCBMC |
| URGCP   | 0.98819808 | 0.36518227 | 0.316 | 0.369 | 1 Bcell_2_UCBMC |
| TBC1D15 | 0.98835219 | 0.43896306 | 0.274 | 0.309 | 1 Bcell_2_UCBMC |

|                    |            |            |       |       |           |                |
|--------------------|------------|------------|-------|-------|-----------|----------------|
| NRF1               | 0.98858839 | 0.32605432 | 0.241 | 0.269 | 1         | Bcell_2_UCBMC  |
| SIPA1L3            | 0.98985478 | 0.3894008  | 0.287 | 0.325 | 1         | Bcell_2_UCBMC  |
| ATXN7              | 0.99369581 | 0.36165372 | 0.257 | 0.285 | 1         | Bcell_2_UCBMC  |
| GHITM              | 0.99445202 | 0.27893646 | 0.345 | 0.403 | 1         | Bcell_2_UCBMC  |
| PTPN2              | 0.9993095  | 0.42582856 | 0.358 | 0.427 | 1         | Bcell_2_UCBMC  |
| L3MBTL3            | 0.99934912 | 0.44168968 | 0.251 | 0.285 | 1         | Bcell_2_UCBMC  |
| RPL13              | 6.58E-215  | 3.4828334  | 0.99  | 0.681 | 2.33E-210 | Bcell_2_spleen |
| LTB                | 1.60E-181  | 3.92813061 | 0.933 | 0.188 | 5.68E-177 | Bcell_2_spleen |
| RPS2               | 2.06E-171  | 2.42633866 | 0.968 | 0.513 | 7.30E-167 | Bcell_2_spleen |
| PFN1               | 4.79E-125  | 1.6895309  | 0.964 | 0.554 | 1.70E-120 | Bcell_2_spleen |
| RNASET2            | 1.70E-105  | 2.6754367  | 0.782 | 0.145 | 6.03E-101 | Bcell_2_spleen |
| FTH1               | 1.08E-89   | 1.38402818 | 0.967 | 0.609 | 3.84E-85  | Bcell_2_spleen |
| TRIR               | 1.04E-86   | 2.11562332 | 0.774 | 0.178 | 3.69E-82  | Bcell_2_spleen |
| EIF3F              | 2.95E-84   | 1.86846032 | 0.821 | 0.266 | 1.05E-79  | Bcell_2_spleen |
| C1QBP              | 1.04E-81   | 3.17226238 | 0.59  | 0.047 | 3.69E-77  | Bcell_2_spleen |
| ENSMMUG00000047277 | 3.41E-77   | 1.77709741 | 0.793 | 0.239 | 1.21E-72  | Bcell_2_spleen |
| COX5A              | 1.03E-76   | 3.30414181 | 0.575 | 0.059 | 3.66E-72  | Bcell_2_spleen |
| PM20D2             | 1.02E-74   | 1.35992183 | 0.913 | 0.405 | 3.60E-70  | Bcell_2_spleen |
| NOP53              | 1.54E-74   | 2.58632856 | 0.622 | 0.09  | 5.47E-70  | Bcell_2_spleen |
| ATP5F1D            | 1.15E-72   | 2.8148951  | 0.573 | 0.063 | 4.06E-68  | Bcell_2_spleen |
| NFKBIA             | 3.79E-71   | 1.58333449 | 0.89  | 0.434 | 1.34E-66  | Bcell_2_spleen |
| CHCHD10            | 1.45E-70   | 3.79968887 | 0.5   | 0.022 | 5.13E-66  | Bcell_2_spleen |
| CLTA               | 1.12E-62   | 2.4654585  | 0.551 | 0.08  | 3.96E-58  | Bcell_2_spleen |
| UBE2S              | 1.75E-59   | 3.0696049  | 0.476 | 0.039 | 6.21E-55  | Bcell_2_spleen |
| RPL27A             | 7.71E-59   | 0.62742777 | 0.985 | 0.912 | 2.73E-54  | Bcell_2_spleen |
| NT5C               | 1.31E-55   | 2.52659587 | 0.474 | 0.049 | 4.64E-51  | Bcell_2_spleen |
| ANP32B             | 2.23E-55   | 1.58077098 | 0.715 | 0.241 | 7.91E-51  | Bcell_2_spleen |
| ITM2B              | 1.21E-54   | 1.34273243 | 0.778 | 0.297 | 4.30E-50  | Bcell_2_spleen |
| CD47               | 3.17E-53   | 1.32781381 | 0.778 | 0.292 | 1.12E-48  | Bcell_2_spleen |
| CYBA               | 3.80E-53   | 1.31440131 | 0.746 | 0.254 | 1.34E-48  | Bcell_2_spleen |
| SQSTM1             | 4.35E-52   | 1.71233067 | 0.642 | 0.192 | 1.54E-47  | Bcell_2_spleen |
| ENSMMUG00000060287 | 6.22E-52   | 1.08140437 | 0.898 | 0.46  | 2.20E-47  | Bcell_2_spleen |
| SRRM2              | 4.81E-50   | 1.24929697 | 0.757 | 0.284 | 1.70E-45  | Bcell_2_spleen |

|                     |          |            |       |       |          |                |
|---------------------|----------|------------|-------|-------|----------|----------------|
| CR2                 | 5.04E-49 | 2.60846479 | 0.479 | 0.082 | 1.78E-44 | Bcell_2_spleen |
| KLF6                | 1.10E-48 | 0.96986361 | 0.946 | 0.573 | 3.91E-44 | Bcell_2_spleen |
| TLN1                | 1.90E-48 | 1.33401994 | 0.716 | 0.268 | 6.73E-44 | Bcell_2_spleen |
| JUN                 | 1.92E-48 | 1.47261087 | 0.798 | 0.368 | 6.79E-44 | Bcell_2_spleen |
| RPL23A              | 1.24E-47 | 0.49199009 | 0.983 | 0.971 | 4.39E-43 | Bcell_2_spleen |
| MZT2B               | 2.27E-47 | 2.75494688 | 0.41  | 0.041 | 8.05E-43 | Bcell_2_spleen |
| SRSF2               | 2.94E-47 | 1.63766813 | 0.555 | 0.129 | 1.04E-42 | Bcell_2_spleen |
| NME3                | 4.41E-46 | 1.91827958 | 0.519 | 0.11  | 1.56E-41 | Bcell_2_spleen |
| NOL7                | 1.75E-45 | 2.23624906 | 0.451 | 0.067 | 6.20E-41 | Bcell_2_spleen |
| NEDD9               | 1.38E-44 | 1.48764442 | 0.724 | 0.317 | 4.89E-40 | Bcell_2_spleen |
| PPP1CC              | 2.29E-44 | 1.46547989 | 0.546 | 0.135 | 8.13E-40 | Bcell_2_spleen |
| ACTB                | 1.31E-42 | 0.57831893 | 0.995 | 0.939 | 4.65E-38 | Bcell_2_spleen |
| VIM                 | 1.82E-42 | 1.36519362 | 0.695 | 0.288 | 6.44E-38 | Bcell_2_spleen |
| ENSMMUG00000008417  | 8.07E-42 | 3.484698   | 0.347 | 0.025 | 2.86E-37 | Bcell_2_spleen |
| RPS20               | 9.95E-42 | 0.54983804 | 0.983 | 0.881 | 3.53E-37 | Bcell_2_spleen |
| TRAPPC5             | 2.35E-41 | 4.12496822 | 0.319 | 0.01  | 8.31E-37 | Bcell_2_spleen |
| ARL5A               | 2.60E-41 | 1.7221476  | 0.507 | 0.123 | 9.20E-37 | Bcell_2_spleen |
| BCL11A              | 2.02E-40 | 1.13268604 | 0.665 | 0.241 | 7.17E-36 | Bcell_2_spleen |
| TMEM160             | 5.81E-39 | 2.5711441  | 0.334 | 0.025 | 2.06E-34 | Bcell_2_spleen |
| BMP2K               | 1.14E-38 | 1.14625386 | 0.709 | 0.303 | 4.03E-34 | Bcell_2_spleen |
| RANBP1              | 3.52E-38 | 2.1025383  | 0.411 | 0.072 | 1.25E-33 | Bcell_2_spleen |
| MCL1                | 1.58E-37 | 1.21557243 | 0.672 | 0.26  | 5.60E-33 | Bcell_2_spleen |
| ENSMMUG000000011711 | 3.83E-37 | 1.33347197 | 0.622 | 0.231 | 1.36E-32 | Bcell_2_spleen |
| PAK2                | 5.65E-37 | 1.00897766 | 0.726 | 0.294 | 2.00E-32 | Bcell_2_spleen |
| SH3BP5              | 6.83E-37 | 0.76918578 | 0.823 | 0.403 | 2.42E-32 | Bcell_2_spleen |
| ARL5B               | 3.69E-36 | 1.58068188 | 0.51  | 0.147 | 1.31E-31 | Bcell_2_spleen |
| UNC119              | 7.73E-36 | 1.68181487 | 0.441 | 0.098 | 2.74E-31 | Bcell_2_spleen |
| ENSMMUG000000054358 | 8.19E-36 | 1.11778066 | 0.96  | 0.64  | 2.90E-31 | Bcell_2_spleen |
| PPIA                | 2.47E-35 | 1.06904036 | 0.541 | 0.16  | 8.76E-31 | Bcell_2_spleen |
| HPS3                | 5.30E-35 | 1.73169516 | 0.441 | 0.104 | 1.88E-30 | Bcell_2_spleen |
| ZFP36L1             | 6.91E-35 | 0.93254684 | 0.794 | 0.401 | 2.45E-30 | Bcell_2_spleen |
| MYO1E               | 8.07E-35 | 1.46413163 | 0.522 | 0.17  | 2.86E-30 | Bcell_2_spleen |
| COTL1               | 9.89E-35 | 0.91047018 | 0.734 | 0.333 | 3.50E-30 | Bcell_2_spleen |

|                    |          |            |       |       |          |                |
|--------------------|----------|------------|-------|-------|----------|----------------|
| ALKBH7             | 1.04E-34 | 1.80191506 | 0.424 | 0.092 | 3.67E-30 | Bcell_2_spleen |
| ACAP2              | 1.44E-34 | 0.80303974 | 0.842 | 0.438 | 5.12E-30 | Bcell_2_spleen |
| HSD17B4            | 3.07E-34 | 0.84915616 | 0.767 | 0.376 | 1.09E-29 | Bcell_2_spleen |
| PIK3AP1            | 3.20E-34 | 1.02276642 | 0.666 | 0.27  | 1.13E-29 | Bcell_2_spleen |
| STK17A             | 3.71E-34 | 1.03249763 | 0.715 | 0.323 | 1.31E-29 | Bcell_2_spleen |
| LSM4               | 1.71E-33 | 1.97092379 | 0.361 | 0.059 | 6.06E-29 | Bcell_2_spleen |
| RCSD1              | 2.28E-33 | 0.86653552 | 0.729 | 0.321 | 8.08E-29 | Bcell_2_spleen |
| CALR               | 3.19E-33 | 1.16493264 | 0.585 | 0.209 | 1.13E-28 | Bcell_2_spleen |
| UBE2D2             | 4.04E-33 | 1.82836657 | 0.377 | 0.067 | 1.43E-28 | Bcell_2_spleen |
| ARHGAP24           | 5.53E-33 | 0.7155323  | 0.968 | 0.699 | 1.96E-28 | Bcell_2_spleen |
| ENSMMUG00000051300 | 1.08E-32 | 0.61788301 | 0.996 | 0.687 | 3.82E-28 | Bcell_2_spleen |
| H2AZ2              | 1.57E-32 | 0.85421032 | 0.825 | 0.411 | 5.57E-28 | Bcell_2_spleen |
| GTF2I              | 2.02E-32 | 1.02260472 | 0.661 | 0.288 | 7.17E-28 | Bcell_2_spleen |
| GADD45GIP1         | 2.07E-32 | 1.91560006 | 0.33  | 0.043 | 7.35E-28 | Bcell_2_spleen |
| CCNI               | 4.35E-32 | 0.8242924  | 0.767 | 0.36  | 1.54E-27 | Bcell_2_spleen |
| EIF4A2             | 1.30E-31 | 0.65963654 | 0.801 | 0.38  | 4.62E-27 | Bcell_2_spleen |
| TOP1               | 1.49E-31 | 0.97309818 | 0.7   | 0.313 | 5.29E-27 | Bcell_2_spleen |
| PIKFYVE            | 1.60E-31 | 1.10558921 | 0.649 | 0.294 | 5.66E-27 | Bcell_2_spleen |
| HMGA1              | 1.64E-31 | 1.30421772 | 0.519 | 0.172 | 5.81E-27 | Bcell_2_spleen |
| SLC2A3             | 3.54E-31 | 1.04441928 | 0.607 | 0.231 | 1.25E-26 | Bcell_2_spleen |
| RNASEH2C           | 6.78E-31 | 1.21360932 | 0.467 | 0.131 | 2.40E-26 | Bcell_2_spleen |
| IKZF1              | 8.86E-31 | 0.99935555 | 0.741 | 0.376 | 3.14E-26 | Bcell_2_spleen |
| KTN1               | 8.89E-31 | 1.46237142 | 0.393 | 0.084 | 3.15E-26 | Bcell_2_spleen |
| TXNL4A             | 9.15E-31 | 2.80795753 | 0.289 | 0.031 | 3.24E-26 | Bcell_2_spleen |
| ATP1B3             | 2.09E-30 | 1.03407153 | 0.589 | 0.227 | 7.40E-26 | Bcell_2_spleen |
| CTSZ               | 3.32E-30 | 1.34140823 | 0.457 | 0.129 | 1.18E-25 | Bcell_2_spleen |
| RPL23              | 5.73E-30 | 0.40377573 | 0.983 | 0.943 | 2.03E-25 | Bcell_2_spleen |
| PARP1              | 7.77E-30 | 1.19085787 | 0.465 | 0.137 | 2.75E-25 | Bcell_2_spleen |
| RHOB               | 8.50E-30 | 2.54117946 | 0.325 | 0.057 | 3.01E-25 | Bcell_2_spleen |
| PIK3R1             | 1.10E-29 | 2.02148234 | 0.354 | 0.074 | 3.91E-25 | Bcell_2_spleen |
| RPL26              | 3.79E-29 | 0.45805423 | 0.973 | 0.843 | 1.34E-24 | Bcell_2_spleen |
| CYC1               | 3.89E-29 | 1.8868369  | 0.316 | 0.049 | 1.38E-24 | Bcell_2_spleen |
| RPS3               | 3.97E-29 | 0.39594672 | 0.976 | 0.928 | 1.41E-24 | Bcell_2_spleen |

|             |          |            |       |       |          |                |
|-------------|----------|------------|-------|-------|----------|----------------|
| METTL9      | 5.05E-29 | 1.28411233 | 0.419 | 0.11  | 1.79E-24 | Bcell_2_spleen |
| KCNQ5       | 5.57E-29 | 0.80658428 | 0.837 | 0.479 | 1.97E-24 | Bcell_2_spleen |
| HNRNPA0     | 5.92E-29 | 1.05699173 | 0.556 | 0.207 | 2.10E-24 | Bcell_2_spleen |
| GRB2        | 2.06E-28 | 0.75675695 | 0.805 | 0.427 | 7.30E-24 | Bcell_2_spleen |
| GPCPD1      | 2.68E-28 | 0.92057794 | 0.682 | 0.319 | 9.51E-24 | Bcell_2_spleen |
| FNBP1       | 4.00E-28 | 0.66706503 | 0.803 | 0.411 | 1.42E-23 | Bcell_2_spleen |
| MYCBP2      | 4.03E-28 | 0.79352792 | 0.763 | 0.391 | 1.43E-23 | Bcell_2_spleen |
| C10H20orf24 | 7.20E-28 | 0.87151358 | 0.5   | 0.166 | 2.55E-23 | Bcell_2_spleen |
| RUFY3       | 1.28E-27 | 0.88903138 | 0.651 | 0.292 | 4.52E-23 | Bcell_2_spleen |
| ZFAND5      | 1.38E-27 | 1.31264378 | 0.403 | 0.104 | 4.87E-23 | Bcell_2_spleen |
| IFRD1       | 3.58E-27 | 0.75298397 | 0.74  | 0.352 | 1.27E-22 | Bcell_2_spleen |
| SP140       | 4.65E-27 | 1.0529619  | 0.575 | 0.243 | 1.65E-22 | Bcell_2_spleen |
| CCDC50      | 4.67E-27 | 0.87394526 | 0.626 | 0.268 | 1.66E-22 | Bcell_2_spleen |
| AKIRIN2     | 6.51E-27 | 1.70443936 | 0.349 | 0.078 | 2.31E-22 | Bcell_2_spleen |
| RRP36       | 8.94E-27 | 1.92458419 | 0.289 | 0.043 | 3.17E-22 | Bcell_2_spleen |
| MTDH        | 9.44E-27 | 0.82237158 | 0.579 | 0.231 | 3.34E-22 | Bcell_2_spleen |
| UBE2E2      | 1.05E-26 | 0.94454424 | 0.617 | 0.27  | 3.73E-22 | Bcell_2_spleen |
| PTEN        | 1.09E-26 | 0.7574724  | 0.681 | 0.321 | 3.85E-22 | Bcell_2_spleen |
| B3GNT2      | 1.16E-26 | 1.35399272 | 0.374 | 0.094 | 4.12E-22 | Bcell_2_spleen |
| PLCG2       | 1.17E-26 | 0.71058924 | 0.78  | 0.393 | 4.15E-22 | Bcell_2_spleen |
| STAP1       | 1.43E-26 | 0.79091202 | 0.603 | 0.249 | 5.06E-22 | Bcell_2_spleen |
| NAA10       | 1.66E-26 | 1.56502152 | 0.334 | 0.07  | 5.89E-22 | Bcell_2_spleen |
| HSPA8       | 1.76E-26 | 0.71652036 | 0.834 | 0.479 | 6.22E-22 | Bcell_2_spleen |
| BANK1       | 1.76E-26 | 0.64532666 | 0.953 | 0.654 | 6.24E-22 | Bcell_2_spleen |
| NCF1        | 2.24E-26 | 1.02156501 | 0.581 | 0.237 | 7.93E-22 | Bcell_2_spleen |
| MACF1       | 2.99E-26 | 0.81460079 | 0.673 | 0.311 | 1.06E-21 | Bcell_2_spleen |
| TGFB2       | 4.08E-26 | 0.9082099  | 0.656 | 0.303 | 1.44E-21 | Bcell_2_spleen |
| SLC38A1     | 4.65E-26 | 0.69576907 | 0.841 | 0.485 | 1.65E-21 | Bcell_2_spleen |
| RBM17       | 4.81E-26 | 1.03118586 | 0.511 | 0.186 | 1.71E-21 | Bcell_2_spleen |
| ARGLU1      | 6.20E-26 | 0.64857122 | 0.736 | 0.346 | 2.20E-21 | Bcell_2_spleen |
| DECR2       | 6.40E-26 | 1.63690907 | 0.346 | 0.08  | 2.27E-21 | Bcell_2_spleen |
| IRF1        | 1.13E-25 | 1.28229527 | 0.484 | 0.176 | 3.99E-21 | Bcell_2_spleen |
| WTAP        | 1.18E-25 | 0.7102124  | 0.738 | 0.358 | 4.17E-21 | Bcell_2_spleen |



|                   |          |            |       |       |          |                |
|-------------------|----------|------------|-------|-------|----------|----------------|
| IL27RA            | 2.34E-25 | 1.69679153 | 0.339 | 0.08  | 8.30E-21 | Bcell_2_spleen |
| DUSP1             | 2.50E-25 | 0.69901239 | 0.811 | 0.464 | 8.85E-21 | Bcell_2_spleen |
| OSBPL11           | 4.14E-25 | 1.14987455 | 0.493 | 0.182 | 1.47E-20 | Bcell_2_spleen |
| MARCKSL1          | 4.18E-25 | 1.16447374 | 0.339 | 0.078 | 1.48E-20 | Bcell_2_spleen |
| FAM81A            | 6.48E-25 | 1.42708289 | 0.315 | 0.067 | 2.30E-20 | Bcell_2_spleen |
| MCUB              | 8.38E-25 | 0.74526385 | 0.584 | 0.241 | 2.97E-20 | Bcell_2_spleen |
| PPM1G             | 1.49E-24 | 1.08391193 | 0.35  | 0.086 | 5.27E-20 | Bcell_2_spleen |
| SEL1L3            | 1.55E-24 | 0.71168957 | 0.746 | 0.397 | 5.48E-20 | Bcell_2_spleen |
| HNRNPD            | 2.25E-24 | 0.68773468 | 0.665 | 0.297 | 7.97E-20 | Bcell_2_spleen |
| HNRNPU            | 2.40E-24 | 0.6279893  | 0.701 | 0.346 | 8.49E-20 | Bcell_2_spleen |
| LCP1              | 2.83E-24 | 0.60330293 | 0.828 | 0.476 | 1.00E-19 | Bcell_2_spleen |
| PIGY              | 3.03E-24 | 1.10510941 | 0.403 | 0.119 | 1.07E-19 | Bcell_2_spleen |
| ZNF608            | 3.34E-24 | 1.8829226  | 0.292 | 0.057 | 1.18E-19 | Bcell_2_spleen |
| PDLIM2            | 3.38E-24 | 1.0109654  | 0.44  | 0.141 | 1.20E-19 | Bcell_2_spleen |
| FCHSD2            | 3.65E-24 | 0.54919653 | 0.929 | 0.587 | 1.29E-19 | Bcell_2_spleen |
| PLEK              | 4.41E-24 | 0.94060527 | 0.451 | 0.153 | 1.56E-19 | Bcell_2_spleen |
| RALBP1            | 8.54E-24 | 1.60298366 | 0.303 | 0.063 | 3.03E-19 | Bcell_2_spleen |
| ZNF217            | 8.71E-24 | 1.58803247 | 0.277 | 0.049 | 3.09E-19 | Bcell_2_spleen |
| MGRN1             | 9.23E-24 | 2.31354631 | 0.25  | 0.035 | 3.27E-19 | Bcell_2_spleen |
| HHEX              | 1.09E-23 | 1.1630274  | 0.383 | 0.11  | 3.86E-19 | Bcell_2_spleen |
| PIP4K2A           | 1.86E-23 | 0.85393409 | 0.55  | 0.227 | 6.60E-19 | Bcell_2_spleen |
| ENSMUG00000012690 | 1.93E-23 | 0.95614932 | 0.543 | 0.233 | 6.84E-19 | Bcell_2_spleen |
| ZBED1             | 2.62E-23 | 1.00017351 | 0.472 | 0.176 | 9.28E-19 | Bcell_2_spleen |
| SNRNP70           | 3.70E-23 | 1.11731615 | 0.402 | 0.133 | 1.31E-18 | Bcell_2_spleen |
| EMC6              | 6.50E-23 | 1.23360326 | 0.317 | 0.074 | 2.30E-18 | Bcell_2_spleen |
| PTPMT1            | 1.04E-22 | 1.04378251 | 0.402 | 0.129 | 3.69E-18 | Bcell_2_spleen |
| PDCD6-AHRR        | 1.32E-22 | 1.31602994 | 0.3   | 0.065 | 4.69E-18 | Bcell_2_spleen |
| JAK1              | 1.45E-22 | 0.55889394 | 0.875 | 0.521 | 5.13E-18 | Bcell_2_spleen |
| PTPRCAP           | 1.52E-22 | 1.28769843 | 0.272 | 0.049 | 5.40E-18 | Bcell_2_spleen |
| GMDS              | 1.60E-22 | 0.92275969 | 0.471 | 0.18  | 5.66E-18 | Bcell_2_spleen |
| HDAC9             | 1.94E-22 | 0.76752618 | 0.769 | 0.436 | 6.88E-18 | Bcell_2_spleen |
| FOXN3             | 2.13E-22 | 0.63020756 | 0.792 | 0.448 | 7.55E-18 | Bcell_2_spleen |
| SLC25A4           | 2.59E-22 | 1.05636124 | 0.334 | 0.084 | 9.19E-18 | Bcell_2_spleen |

|                    |          |            |       |       |          |                |
|--------------------|----------|------------|-------|-------|----------|----------------|
| TBC1D5             | 3.11E-22 | 0.50774204 | 0.848 | 0.505 | 1.10E-17 | Bcell_2_spleen |
| MYDGF              | 3.33E-22 | 0.75380304 | 0.5   | 0.19  | 1.18E-17 | Bcell_2_spleen |
| MAF1               | 4.22E-22 | 1.38372983 | 0.31  | 0.076 | 1.50E-17 | Bcell_2_spleen |
| ENSMMUG00000041688 | 4.58E-22 | 0.85902278 | 0.529 | 0.227 | 1.62E-17 | Bcell_2_spleen |
| PAOX               | 4.77E-22 | 0.7710075  | 0.348 | 0.092 | 1.69E-17 | Bcell_2_spleen |
| PLEKHG1            | 4.99E-22 | 0.54888439 | 0.896 | 0.599 | 1.77E-17 | Bcell_2_spleen |
| DDX17              | 5.15E-22 | 0.6713438  | 0.677 | 0.327 | 1.82E-17 | Bcell_2_spleen |
| VAPA               | 5.21E-22 | 0.63188455 | 0.571 | 0.239 | 1.85E-17 | Bcell_2_spleen |
| TMEM131L           | 7.12E-22 | 0.61133793 | 0.834 | 0.485 | 2.52E-17 | Bcell_2_spleen |
| SMC6               | 7.75E-22 | 0.60537532 | 0.768 | 0.434 | 2.74E-17 | Bcell_2_spleen |
| TMEM147            | 9.01E-22 | 0.90942776 | 0.381 | 0.119 | 3.19E-17 | Bcell_2_spleen |
| ARHGAP26           | 1.27E-21 | 0.67483767 | 0.616 | 0.288 | 4.49E-17 | Bcell_2_spleen |
| AKIRIN1            | 1.39E-21 | 1.30165157 | 0.344 | 0.098 | 4.94E-17 | Bcell_2_spleen |
| CD22               | 1.45E-21 | 0.71723058 | 0.489 | 0.188 | 5.15E-17 | Bcell_2_spleen |
| LRPPRC             | 1.47E-21 | 1.07294836 | 0.447 | 0.17  | 5.21E-17 | Bcell_2_spleen |
| WASF2              | 1.60E-21 | 0.65278887 | 0.693 | 0.344 | 5.67E-17 | Bcell_2_spleen |
| CARD11             | 1.64E-21 | 0.77693233 | 0.505 | 0.211 | 5.81E-17 | Bcell_2_spleen |
| ARHGAP15           | 1.80E-21 | 0.48866595 | 0.972 | 0.714 | 6.39E-17 | Bcell_2_spleen |
| NSD3               | 2.02E-21 | 0.91607223 | 0.482 | 0.194 | 7.17E-17 | Bcell_2_spleen |
| ENSMMUG00000062086 | 2.29E-21 | 1.18690119 | 0.295 | 0.067 | 8.10E-17 | Bcell_2_spleen |
| CPA6               | 2.56E-21 | 1.40153664 | 0.328 | 0.094 | 9.05E-17 | Bcell_2_spleen |
| YPEL3              | 2.89E-21 | 0.92107214 | 0.335 | 0.092 | 1.02E-16 | Bcell_2_spleen |
| ENSMMUG00000050770 | 3.30E-21 | 1.34133576 | 0.329 | 0.092 | 1.17E-16 | Bcell_2_spleen |
| NCOR1              | 3.35E-21 | 0.68442832 | 0.649 | 0.315 | 1.19E-16 | Bcell_2_spleen |
| ENSMMUG00000016898 | 4.13E-21 | 0.88687362 | 0.448 | 0.164 | 1.46E-16 | Bcell_2_spleen |
| HSP90AB1           | 5.02E-21 | 0.48257687 | 0.982 | 0.836 | 1.78E-16 | Bcell_2_spleen |
| RASA1              | 5.70E-21 | 1.20643926 | 0.42  | 0.157 | 2.02E-16 | Bcell_2_spleen |
| INKA1              | 6.05E-21 | 1.203608   | 0.34  | 0.096 | 2.14E-16 | Bcell_2_spleen |
| RNASE6             | 6.27E-21 | 0.70260551 | 0.481 | 0.184 | 2.22E-16 | Bcell_2_spleen |
| RAD23B             | 6.90E-21 | 1.43285537 | 0.305 | 0.08  | 2.44E-16 | Bcell_2_spleen |
| BRD9               | 7.07E-21 | 1.04328819 | 0.389 | 0.129 | 2.51E-16 | Bcell_2_spleen |
| JMY                | 7.39E-21 | 0.97475715 | 0.453 | 0.176 | 2.62E-16 | Bcell_2_spleen |
| UBE2J1             | 8.23E-21 | 0.92389732 | 0.455 | 0.174 | 2.92E-16 | Bcell_2_spleen |

|                    |          |            |       |       |          |                |
|--------------------|----------|------------|-------|-------|----------|----------------|
| GTF3A              | 1.37E-20 | 1.39248436 | 0.28  | 0.063 | 4.86E-16 | Bcell_2_spleen |
| SMARCA5            | 1.49E-20 | 0.74852083 | 0.509 | 0.213 | 5.27E-16 | Bcell_2_spleen |
| ENSMMUG00000028689 | 1.97E-20 | 0.65153839 | 0.673 | 0.339 | 6.98E-16 | Bcell_2_spleen |
| RANBP2             | 2.00E-20 | 0.6649886  | 0.628 | 0.309 | 7.08E-16 | Bcell_2_spleen |
| ENSMMUG00000049833 | 2.03E-20 | 0.58711971 | 0.738 | 0.405 | 7.18E-16 | Bcell_2_spleen |
| UHMK1              | 2.15E-20 | 0.91847807 | 0.399 | 0.139 | 7.63E-16 | Bcell_2_spleen |
| SF1                | 2.35E-20 | 0.75357709 | 0.621 | 0.299 | 8.33E-16 | Bcell_2_spleen |
| HTT                | 3.18E-20 | 0.88781142 | 0.407 | 0.143 | 1.13E-15 | Bcell_2_spleen |
| IFNGR1             | 3.73E-20 | 1.05430593 | 0.377 | 0.127 | 1.32E-15 | Bcell_2_spleen |
| SNN                | 3.95E-20 | 1.18234615 | 0.256 | 0.051 | 1.40E-15 | Bcell_2_spleen |
| RRBP1              | 4.17E-20 | 1.76012353 | 0.263 | 0.057 | 1.48E-15 | Bcell_2_spleen |
| SUPT16H            | 4.85E-20 | 0.71955751 | 0.425 | 0.155 | 1.72E-15 | Bcell_2_spleen |
| MEF2A              | 5.47E-20 | 0.68413045 | 0.559 | 0.247 | 1.94E-15 | Bcell_2_spleen |
| ARF5               | 6.36E-20 | 0.54295068 | 0.467 | 0.174 | 2.26E-15 | Bcell_2_spleen |
| CFAP299            | 6.60E-20 | 1.17635063 | 0.256 | 0.051 | 2.34E-15 | Bcell_2_spleen |
| DDX5               | 7.19E-20 | 0.46654955 | 0.993 | 0.777 | 2.55E-15 | Bcell_2_spleen |
| CR1                | 9.37E-20 | 0.79752311 | 0.559 | 0.272 | 3.32E-15 | Bcell_2_spleen |
| HSPD1              | 1.14E-19 | 0.63354343 | 0.476 | 0.19  | 4.03E-15 | Bcell_2_spleen |
| TERF2IP            | 1.28E-19 | 1.32835603 | 0.271 | 0.061 | 4.53E-15 | Bcell_2_spleen |
| ST6GAL1            | 1.42E-19 | 0.74798103 | 0.583 | 0.282 | 5.03E-15 | Bcell_2_spleen |
| SNX5               | 1.45E-19 | 0.49501796 | 0.667 | 0.335 | 5.14E-15 | Bcell_2_spleen |
| PAX5               | 1.50E-19 | 0.56518214 | 0.818 | 0.491 | 5.30E-15 | Bcell_2_spleen |
| BLNK               | 1.59E-19 | 0.74392341 | 0.441 | 0.17  | 5.64E-15 | Bcell_2_spleen |
| BCL2               | 1.61E-19 | 0.74704443 | 0.596 | 0.301 | 5.72E-15 | Bcell_2_spleen |
| CCR6               | 1.63E-19 | 1.5048267  | 0.289 | 0.076 | 5.77E-15 | Bcell_2_spleen |
| KDM4B              | 1.64E-19 | 0.95048944 | 0.42  | 0.155 | 5.82E-15 | Bcell_2_spleen |
| HUWE1              | 1.72E-19 | 0.71675134 | 0.546 | 0.245 | 6.10E-15 | Bcell_2_spleen |
| HNRNPAB            | 1.75E-19 | 1.42656166 | 0.271 | 0.063 | 6.19E-15 | Bcell_2_spleen |
| LMAN2              | 1.77E-19 | 1.09382459 | 0.308 | 0.084 | 6.26E-15 | Bcell_2_spleen |
| MAP3K5             | 1.99E-19 | 0.81144296 | 0.478 | 0.196 | 7.05E-15 | Bcell_2_spleen |
| ADAM19             | 2.12E-19 | 0.4919681  | 0.627 | 0.305 | 7.53E-15 | Bcell_2_spleen |
| STIM2              | 2.17E-19 | 0.84338151 | 0.489 | 0.209 | 7.68E-15 | Bcell_2_spleen |
| STK10              | 2.32E-19 | 0.62164056 | 0.547 | 0.239 | 8.21E-15 | Bcell_2_spleen |

|                    |          |            |       |       |          |                |
|--------------------|----------|------------|-------|-------|----------|----------------|
| ZMYND8             | 2.56E-19 | 0.76070933 | 0.475 | 0.194 | 9.06E-15 | Bcell_2_spleen |
| CCDC88C            | 2.59E-19 | 0.75945085 | 0.436 | 0.168 | 9.19E-15 | Bcell_2_spleen |
| SUZ12              | 2.92E-19 | 0.92896034 | 0.384 | 0.135 | 1.03E-14 | Bcell_2_spleen |
| LITAF              | 2.99E-19 | 1.62628463 | 0.264 | 0.061 | 1.06E-14 | Bcell_2_spleen |
| UBL3               | 3.06E-19 | 1.17111975 | 0.334 | 0.104 | 1.09E-14 | Bcell_2_spleen |
| GLCCI1             | 3.13E-19 | 1.13603591 | 0.354 | 0.119 | 1.11E-14 | Bcell_2_spleen |
| CD164              | 4.05E-19 | 0.60369053 | 0.645 | 0.325 | 1.43E-14 | Bcell_2_spleen |
| MAP3K8             | 4.07E-19 | 0.68437994 | 0.617 | 0.305 | 1.44E-14 | Bcell_2_spleen |
| FNBP4              | 4.76E-19 | 0.85815237 | 0.436 | 0.17  | 1.69E-14 | Bcell_2_spleen |
| ARHGAP17           | 4.86E-19 | 0.50023549 | 0.685 | 0.337 | 1.72E-14 | Bcell_2_spleen |
| CAST               | 5.05E-19 | 0.53984877 | 0.641 | 0.317 | 1.79E-14 | Bcell_2_spleen |
| ENSMMUG00000052424 | 5.71E-19 | 0.59281408 | 0.751 | 0.417 | 2.02E-14 | Bcell_2_spleen |
| TNS3               | 5.73E-19 | 1.56879298 | 0.265 | 0.063 | 2.03E-14 | Bcell_2_spleen |
| DENND1A            | 7.89E-19 | 0.92235442 | 0.497 | 0.229 | 2.79E-14 | Bcell_2_spleen |
| ATG3               | 8.13E-19 | 0.60559807 | 0.451 | 0.178 | 2.88E-14 | Bcell_2_spleen |
| SKP1               | 8.61E-19 | 0.39777151 | 0.857 | 0.536 | 3.05E-14 | Bcell_2_spleen |
| DNM2               | 8.79E-19 | 0.90380183 | 0.42  | 0.164 | 3.12E-14 | Bcell_2_spleen |
| FAF1               | 1.06E-18 | 0.73052229 | 0.491 | 0.215 | 3.74E-14 | Bcell_2_spleen |
| COMT               | 1.06E-18 | 0.68700562 | 0.4   | 0.149 | 3.76E-14 | Bcell_2_spleen |
| HSPH1              | 1.08E-18 | 1.22979085 | 0.355 | 0.123 | 3.81E-14 | Bcell_2_spleen |
| HOOK3              | 1.17E-18 | 0.58740813 | 0.699 | 0.366 | 4.16E-14 | Bcell_2_spleen |
| SMARCC1            | 1.36E-18 | 0.63417656 | 0.588 | 0.28  | 4.81E-14 | Bcell_2_spleen |
| ENSMMUG00000062894 | 1.61E-18 | 0.49424109 | 0.741 | 0.393 | 5.69E-14 | Bcell_2_spleen |
| VASP               | 1.62E-18 | 0.71946078 | 0.48  | 0.202 | 5.73E-14 | Bcell_2_spleen |
| MED13L             | 1.82E-18 | 0.44917793 | 0.829 | 0.485 | 6.45E-14 | Bcell_2_spleen |
| PLEKHO1            | 2.03E-18 | 0.77011498 | 0.345 | 0.112 | 7.20E-14 | Bcell_2_spleen |
| DGKD               | 2.07E-18 | 0.68803228 | 0.505 | 0.225 | 7.33E-14 | Bcell_2_spleen |
| NXPE3              | 2.32E-18 | 0.80343091 | 0.436 | 0.18  | 8.23E-14 | Bcell_2_spleen |
| FAM174C            | 2.51E-18 | 1.09219256 | 0.269 | 0.065 | 8.90E-14 | Bcell_2_spleen |
| RUNX1              | 2.55E-18 | 0.61557569 | 0.607 | 0.292 | 9.03E-14 | Bcell_2_spleen |
| LRRFIP1            | 2.70E-18 | 0.55786413 | 0.605 | 0.299 | 9.55E-14 | Bcell_2_spleen |
| SESN3              | 2.91E-18 | 0.88674451 | 0.363 | 0.127 | 1.03E-13 | Bcell_2_spleen |
| DMXL1              | 3.22E-18 | 1.07411496 | 0.343 | 0.117 | 1.14E-13 | Bcell_2_spleen |

|                    |          |            |       |       |          |                |
|--------------------|----------|------------|-------|-------|----------|----------------|
| EIF3B              | 3.23E-18 | 1.0469464  | 0.266 | 0.067 | 1.14E-13 | Bcell_2_spleen |
| PDK1               | 3.71E-18 | 1.03517354 | 0.33  | 0.106 | 1.32E-13 | Bcell_2_spleen |
| ITGA4              | 3.84E-18 | 0.82932584 | 0.524 | 0.249 | 1.36E-13 | Bcell_2_spleen |
| SNX3               | 4.20E-18 | 0.65042725 | 0.537 | 0.247 | 1.49E-13 | Bcell_2_spleen |
| NFAT5              | 4.39E-18 | 0.7848765  | 0.524 | 0.247 | 1.55E-13 | Bcell_2_spleen |
| DENND5B            | 4.61E-18 | 0.76277177 | 0.504 | 0.235 | 1.63E-13 | Bcell_2_spleen |
| ITPKB              | 5.46E-18 | 0.87680848 | 0.324 | 0.102 | 1.94E-13 | Bcell_2_spleen |
| WNK1               | 5.66E-18 | 0.60334384 | 0.536 | 0.243 | 2.01E-13 | Bcell_2_spleen |
| FBXW11             | 6.26E-18 | 0.68882209 | 0.546 | 0.266 | 2.22E-13 | Bcell_2_spleen |
| PRDX1              | 6.48E-18 | 0.36575556 | 0.451 | 0.18  | 2.30E-13 | Bcell_2_spleen |
| VAV3               | 6.54E-18 | 0.58003284 | 0.761 | 0.442 | 2.32E-13 | Bcell_2_spleen |
| SUDS3              | 6.63E-18 | 1.35728061 | 0.267 | 0.067 | 2.35E-13 | Bcell_2_spleen |
| FAM107B            | 6.87E-18 | 0.65836418 | 0.564 | 0.282 | 2.43E-13 | Bcell_2_spleen |
| GGA2               | 7.69E-18 | 1.04058453 | 0.353 | 0.123 | 2.72E-13 | Bcell_2_spleen |
| PDE7A              | 9.48E-18 | 0.74510742 | 0.543 | 0.272 | 3.36E-13 | Bcell_2_spleen |
| TPM4               | 1.11E-17 | 0.82610418 | 0.351 | 0.117 | 3.92E-13 | Bcell_2_spleen |
| H1-2               | 1.13E-17 | 0.89964484 | 0.408 | 0.157 | 3.99E-13 | Bcell_2_spleen |
| RTN4               | 1.22E-17 | 0.85555914 | 0.432 | 0.18  | 4.33E-13 | Bcell_2_spleen |
| CCNG2              | 1.45E-17 | 1.14618925 | 0.32  | 0.104 | 5.15E-13 | Bcell_2_spleen |
| STRBP              | 1.52E-17 | 1.01657689 | 0.366 | 0.135 | 5.38E-13 | Bcell_2_spleen |
| VWA8               | 1.65E-17 | 1.32685822 | 0.274 | 0.076 | 5.86E-13 | Bcell_2_spleen |
| OXSRI              | 1.81E-17 | 0.77639769 | 0.481 | 0.217 | 6.40E-13 | Bcell_2_spleen |
| CMPK1              | 1.93E-17 | 0.96271341 | 0.304 | 0.092 | 6.86E-13 | Bcell_2_spleen |
| ENSMMUG00000056190 | 1.94E-17 | 1.06973279 | 0.35  | 0.125 | 6.88E-13 | Bcell_2_spleen |
| NCKAP5             | 2.11E-17 | 0.85699128 | 0.435 | 0.196 | 7.47E-13 | Bcell_2_spleen |
| NPM3               | 2.43E-17 | 0.62363808 | 0.469 | 0.202 | 8.60E-13 | Bcell_2_spleen |
| TMEM87B            | 2.52E-17 | 1.08975665 | 0.327 | 0.11  | 8.93E-13 | Bcell_2_spleen |
| PXK                | 2.87E-17 | 0.66448566 | 0.588 | 0.292 | 1.02E-12 | Bcell_2_spleen |
| PLCL2              | 3.03E-17 | 0.73401326 | 0.466 | 0.204 | 1.07E-12 | Bcell_2_spleen |
| SRSF10             | 3.07E-17 | 0.4662452  | 0.594 | 0.284 | 1.09E-12 | Bcell_2_spleen |
| RBM26              | 3.08E-17 | 0.5404098  | 0.516 | 0.229 | 1.09E-12 | Bcell_2_spleen |
| VCP                | 3.43E-17 | 0.83948025 | 0.343 | 0.119 | 1.22E-12 | Bcell_2_spleen |
| HS3ST1             | 3.87E-17 | 1.3247828  | 0.274 | 0.078 | 1.37E-12 | Bcell_2_spleen |

|               |          |            |       |       |          |                |
|---------------|----------|------------|-------|-------|----------|----------------|
| GDI2          | 4.01E-17 | 0.4179122  | 0.713 | 0.38  | 1.42E-12 | Bcell_2_spleen |
| RNASEH2B      | 4.46E-17 | 0.66134616 | 0.386 | 0.145 | 1.58E-12 | Bcell_2_spleen |
| YTHDC1        | 5.06E-17 | 0.53089326 | 0.577 | 0.276 | 1.79E-12 | Bcell_2_spleen |
| EXOC4         | 5.95E-17 | 0.62641912 | 0.66  | 0.364 | 2.11E-12 | Bcell_2_spleen |
| GRK5          | 6.30E-17 | 0.72735527 | 0.43  | 0.178 | 2.23E-12 | Bcell_2_spleen |
| FAM120A       | 6.78E-17 | 0.87461791 | 0.383 | 0.147 | 2.40E-12 | Bcell_2_spleen |
| BCL2L2-PABPN1 | 6.80E-17 | 1.27495578 | 0.259 | 0.067 | 2.41E-12 | Bcell_2_spleen |
| GLS           | 7.42E-17 | 0.56262482 | 0.446 | 0.188 | 2.63E-12 | Bcell_2_spleen |
| KIF2A         | 7.56E-17 | 0.73157989 | 0.328 | 0.11  | 2.68E-12 | Bcell_2_spleen |
| ABLIM1        | 7.65E-17 | 0.5466723  | 0.809 | 0.499 | 2.71E-12 | Bcell_2_spleen |
| PTK2B         | 7.72E-17 | 0.65389097 | 0.478 | 0.217 | 2.73E-12 | Bcell_2_spleen |
| LPCAT1        | 9.23E-17 | 0.72833273 | 0.398 | 0.16  | 3.27E-12 | Bcell_2_spleen |
| SMG1          | 9.43E-17 | 0.71939767 | 0.506 | 0.239 | 3.34E-12 | Bcell_2_spleen |
| CYRIB         | 1.03E-16 | 0.40976391 | 0.871 | 0.526 | 3.63E-12 | Bcell_2_spleen |
| TMPO          | 1.22E-16 | 1.41225518 | 0.251 | 0.065 | 4.33E-12 | Bcell_2_spleen |
| PARVB         | 1.27E-16 | 0.74545144 | 0.388 | 0.151 | 4.51E-12 | Bcell_2_spleen |
| SLC9A9        | 1.46E-16 | 0.59199696 | 0.516 | 0.247 | 5.17E-12 | Bcell_2_spleen |
| CD1C          | 1.73E-16 | 0.41161503 | 0.739 | 0.423 | 6.13E-12 | Bcell_2_spleen |
| STIP1         | 1.90E-16 | 0.66322597 | 0.29  | 0.086 | 6.73E-12 | Bcell_2_spleen |
| LRIF1         | 2.01E-16 | 0.43203411 | 0.575 | 0.278 | 7.12E-12 | Bcell_2_spleen |
| TRIM44        | 2.17E-16 | 0.86223178 | 0.384 | 0.155 | 7.70E-12 | Bcell_2_spleen |
| RAD51B        | 2.28E-16 | 0.45157725 | 0.567 | 0.276 | 8.09E-12 | Bcell_2_spleen |
| DEK           | 2.41E-16 | 0.88324163 | 0.302 | 0.098 | 8.54E-12 | Bcell_2_spleen |
| SND1          | 2.41E-16 | 0.49590594 | 0.467 | 0.204 | 8.54E-12 | Bcell_2_spleen |
| TMEM59L       | 2.46E-16 | 0.85841323 | 0.284 | 0.084 | 8.71E-12 | Bcell_2_spleen |
| EIF5          | 2.70E-16 | 0.46674244 | 0.641 | 0.323 | 9.58E-12 | Bcell_2_spleen |
| SPATA5        | 2.71E-16 | 0.94214284 | 0.343 | 0.127 | 9.61E-12 | Bcell_2_spleen |
| SERTAD2       | 2.80E-16 | 0.9626165  | 0.371 | 0.145 | 9.91E-12 | Bcell_2_spleen |
| PDCD4         | 2.82E-16 | 0.51509345 | 0.638 | 0.337 | 9.99E-12 | Bcell_2_spleen |
| IGF2BP3       | 2.96E-16 | 0.67341678 | 0.543 | 0.262 | 1.05E-11 | Bcell_2_spleen |
| PLEKHF2       | 3.38E-16 | 1.28054864 | 0.26  | 0.074 | 1.20E-11 | Bcell_2_spleen |
| FCMR          | 3.51E-16 | 0.56228461 | 0.768 | 0.487 | 1.24E-11 | Bcell_2_spleen |
| LRRK2         | 3.65E-16 | 0.87421158 | 0.472 | 0.221 | 1.29E-11 | Bcell_2_spleen |

|                    |          |            |       |       |          |                |
|--------------------|----------|------------|-------|-------|----------|----------------|
| DOCK8              | 4.00E-16 | 0.38110646 | 0.779 | 0.45  | 1.42E-11 | Bcell_2_spleen |
| ENSMMUG00000052802 | 4.08E-16 | 1.00637343 | 0.269 | 0.08  | 1.45E-11 | Bcell_2_spleen |
| ARPC5L             | 4.25E-16 | 0.76707335 | 0.305 | 0.098 | 1.51E-11 | Bcell_2_spleen |
| IRAG2              | 4.28E-16 | 0.75440634 | 0.499 | 0.235 | 1.52E-11 | Bcell_2_spleen |
| CHD1               | 4.72E-16 | 0.4422227  | 0.476 | 0.209 | 1.67E-11 | Bcell_2_spleen |
| CSNK1G1            | 4.99E-16 | 0.46063418 | 0.398 | 0.16  | 1.77E-11 | Bcell_2_spleen |
| AIM2               | 5.00E-16 | 1.20791056 | 0.257 | 0.074 | 1.77E-11 | Bcell_2_spleen |
| GNAI2.1            | 5.01E-16 | 0.3633348  | 0.52  | 0.233 | 1.77E-11 | Bcell_2_spleen |
| CTCF               | 5.19E-16 | 0.74843278 | 0.425 | 0.182 | 1.84E-11 | Bcell_2_spleen |
| EFL1               | 5.21E-16 | 0.85349297 | 0.321 | 0.112 | 1.85E-11 | Bcell_2_spleen |
| ETS1               | 5.32E-16 | 0.38391454 | 0.601 | 0.301 | 1.88E-11 | Bcell_2_spleen |
| BIN2               | 5.61E-16 | 0.69561438 | 0.422 | 0.178 | 1.99E-11 | Bcell_2_spleen |
| CPEB1              | 5.70E-16 | 0.31521575 | 0.98  | 0.902 | 2.02E-11 | Bcell_2_spleen |
| IKZF3              | 5.73E-16 | 0.5912701  | 0.751 | 0.448 | 2.03E-11 | Bcell_2_spleen |
| INPP5F             | 5.80E-16 | 1.24737249 | 0.286 | 0.092 | 2.05E-11 | Bcell_2_spleen |
| FNBP1L             | 6.18E-16 | 1.06944507 | 0.275 | 0.084 | 2.19E-11 | Bcell_2_spleen |
| PTP4A1             | 7.27E-16 | 0.42099522 | 0.568 | 0.276 | 2.57E-11 | Bcell_2_spleen |
| LPXN               | 8.50E-16 | 0.7435136  | 0.409 | 0.174 | 3.01E-11 | Bcell_2_spleen |
| HSP90AA1           | 8.79E-16 | 0.51785827 | 0.844 | 0.56  | 3.12E-11 | Bcell_2_spleen |
| CSNK1G3            | 8.82E-16 | 0.49577458 | 0.697 | 0.391 | 3.12E-11 | Bcell_2_spleen |
| MFF                | 9.04E-16 | 0.6453517  | 0.408 | 0.17  | 3.20E-11 | Bcell_2_spleen |
| JMJD1C             | 9.19E-16 | 0.39983559 | 0.95  | 0.675 | 3.26E-11 | Bcell_2_spleen |
| ANGPTL1            | 9.81E-16 | 0.59541734 | 0.618 | 0.331 | 3.47E-11 | Bcell_2_spleen |
| MAPKAP1            | 1.07E-15 | 0.76038647 | 0.383 | 0.155 | 3.79E-11 | Bcell_2_spleen |
| AKR7A2             | 1.19E-15 | 0.48318349 | 0.34  | 0.123 | 4.23E-11 | Bcell_2_spleen |
| HSPA5              | 1.20E-15 | 0.61062881 | 0.491 | 0.231 | 4.26E-11 | Bcell_2_spleen |
| CEP170             | 1.22E-15 | 0.50625828 | 0.517 | 0.247 | 4.33E-11 | Bcell_2_spleen |
| MSL2               | 1.23E-15 | 0.79852368 | 0.385 | 0.155 | 4.34E-11 | Bcell_2_spleen |
| GTPBP1             | 1.32E-15 | 0.96445098 | 0.305 | 0.102 | 4.69E-11 | Bcell_2_spleen |
| PTPRJ              | 1.33E-15 | 0.3470624  | 0.714 | 0.407 | 4.72E-11 | Bcell_2_spleen |
| RAB8B              | 1.48E-15 | 0.32966516 | 0.637 | 0.327 | 5.23E-11 | Bcell_2_spleen |
| OGA                | 1.52E-15 | 0.47212612 | 0.596 | 0.297 | 5.37E-11 | Bcell_2_spleen |
| ABHD17B            | 1.57E-15 | 0.92683222 | 0.263 | 0.078 | 5.58E-11 | Bcell_2_spleen |

|                    |          |            |       |       |          |                |
|--------------------|----------|------------|-------|-------|----------|----------------|
| EIF4G3             | 1.58E-15 | 0.37021266 | 0.7   | 0.384 | 5.59E-11 | Bcell_2_spleen |
| DOCK10             | 1.62E-15 | 0.60714367 | 0.5   | 0.235 | 5.73E-11 | Bcell_2_spleen |
| RPL9               | 1.71E-15 | 0.25855663 | 0.986 | 0.965 | 6.06E-11 | Bcell_2_spleen |
| TASOR              | 1.85E-15 | 1.19826243 | 0.261 | 0.078 | 6.54E-11 | Bcell_2_spleen |
| FLI1               | 1.85E-15 | 0.55287699 | 0.532 | 0.256 | 6.56E-11 | Bcell_2_spleen |
| ENSMMUG00000021425 | 1.91E-15 | 0.60375217 | 0.476 | 0.227 | 6.77E-11 | Bcell_2_spleen |
| SORL1              | 2.04E-15 | 0.80064715 | 0.378 | 0.155 | 7.24E-11 | Bcell_2_spleen |
| HIST1H2AC          | 2.10E-15 | 0.89347462 | 0.378 | 0.151 | 7.44E-11 | Bcell_2_spleen |
| SRSF6              | 2.17E-15 | 0.47660423 | 0.481 | 0.215 | 7.69E-11 | Bcell_2_spleen |
| UBA2               | 2.18E-15 | 0.78322621 | 0.338 | 0.125 | 7.74E-11 | Bcell_2_spleen |
| FBXO34             | 2.36E-15 | 0.47355933 | 0.667 | 0.372 | 8.38E-11 | Bcell_2_spleen |
| IMMP2L             | 2.44E-15 | 0.72153546 | 0.64  | 0.362 | 8.65E-11 | Bcell_2_spleen |
| FAM3C              | 2.53E-15 | 0.77391766 | 0.332 | 0.125 | 8.96E-11 | Bcell_2_spleen |
| ERO1B              | 2.54E-15 | 0.56652661 | 0.617 | 0.331 | 8.99E-11 | Bcell_2_spleen |
| MED30              | 2.86E-15 | 0.86119275 | 0.363 | 0.143 | 1.01E-10 | Bcell_2_spleen |
| ARHGAP25           | 3.08E-15 | 0.42346624 | 0.523 | 0.249 | 1.09E-10 | Bcell_2_spleen |
| KIF5B              | 3.46E-15 | 0.62696309 | 0.416 | 0.176 | 1.23E-10 | Bcell_2_spleen |
| DUSP2              | 3.60E-15 | 0.59559071 | 0.389 | 0.162 | 1.28E-10 | Bcell_2_spleen |
| ITGB2              | 3.68E-15 | 0.74874863 | 0.331 | 0.121 | 1.30E-10 | Bcell_2_spleen |
| CD19               | 3.87E-15 | 0.40266238 | 0.505 | 0.229 | 1.37E-10 | Bcell_2_spleen |
| RBFA               | 4.13E-15 | 0.58191323 | 0.346 | 0.127 | 1.46E-10 | Bcell_2_spleen |
| TNFAIP3            | 4.29E-15 | 0.64186153 | 0.583 | 0.309 | 1.52E-10 | Bcell_2_spleen |
| ARF6               | 4.37E-15 | 0.35655545 | 0.401 | 0.16  | 1.55E-10 | Bcell_2_spleen |
| BTG1               | 4.50E-15 | 0.23497614 | 0.913 | 0.634 | 1.59E-10 | Bcell_2_spleen |
| R3HDM2             | 4.80E-15 | 0.72972579 | 0.427 | 0.188 | 1.70E-10 | Bcell_2_spleen |
| THADA              | 5.25E-15 | 0.6174925  | 0.52  | 0.262 | 1.86E-10 | Bcell_2_spleen |
| ZHX2               | 5.59E-15 | 0.48121096 | 0.467 | 0.213 | 1.98E-10 | Bcell_2_spleen |
| ENSMMUG00000008587 | 5.67E-15 | 0.53577342 | 0.607 | 0.325 | 2.01E-10 | Bcell_2_spleen |
| SPTAN1             | 5.73E-15 | 0.64111182 | 0.349 | 0.135 | 2.03E-10 | Bcell_2_spleen |
| FMC1-LUC7L2        | 6.05E-15 | 0.4456389  | 0.714 | 0.391 | 2.14E-10 | Bcell_2_spleen |
| CCDC6              | 6.09E-15 | 0.84213948 | 0.314 | 0.115 | 2.16E-10 | Bcell_2_spleen |
| MBD5               | 6.87E-15 | 0.59426511 | 0.495 | 0.249 | 2.43E-10 | Bcell_2_spleen |
| HP1BP3             | 7.16E-15 | 0.60948832 | 0.479 | 0.219 | 2.54E-10 | Bcell_2_spleen |



|                   |          |            |       |       |          |                |
|-------------------|----------|------------|-------|-------|----------|----------------|
| ZMYM4             | 7.40E-15 | 0.8272308  | 0.383 | 0.162 | 2.62E-10 | Bcell_2_spleen |
| GNB2              | 7.62E-15 | 0.4333641  | 0.452 | 0.198 | 2.70E-10 | Bcell_2_spleen |
| VAV2              | 7.63E-15 | 0.58340295 | 0.403 | 0.17  | 2.70E-10 | Bcell_2_spleen |
| RALY              | 7.80E-15 | 0.61584947 | 0.438 | 0.194 | 2.77E-10 | Bcell_2_spleen |
| ACTG1             | 7.98E-15 | 0.43820983 | 0.924 | 0.718 | 2.83E-10 | Bcell_2_spleen |
| UBXN4             | 9.00E-15 | 0.55903916 | 0.476 | 0.223 | 3.19E-10 | Bcell_2_spleen |
| RNF138            | 9.12E-15 | 0.44034565 | 0.539 | 0.262 | 3.23E-10 | Bcell_2_spleen |
| COMMD10           | 9.48E-15 | 0.60097228 | 0.49  | 0.237 | 3.36E-10 | Bcell_2_spleen |
| TTC13             | 1.00E-14 | 0.97664811 | 0.304 | 0.108 | 3.54E-10 | Bcell_2_spleen |
| TSPAN3            | 1.03E-14 | 0.58981056 | 0.439 | 0.192 | 3.65E-10 | Bcell_2_spleen |
| RUBCNL            | 1.03E-14 | 0.35617734 | 0.539 | 0.258 | 3.65E-10 | Bcell_2_spleen |
| DENR              | 1.06E-14 | 0.35183206 | 0.511 | 0.239 | 3.75E-10 | Bcell_2_spleen |
| ANKRD17           | 1.07E-14 | 0.45659987 | 0.548 | 0.278 | 3.80E-10 | Bcell_2_spleen |
| NOP56             | 1.09E-14 | 0.93067515 | 0.277 | 0.09  | 3.85E-10 | Bcell_2_spleen |
| HSPA4             | 1.10E-14 | 0.67891529 | 0.365 | 0.147 | 3.90E-10 | Bcell_2_spleen |
| SESN1             | 1.13E-14 | 0.86065836 | 0.317 | 0.121 | 4.02E-10 | Bcell_2_spleen |
| PTPN22            | 1.14E-14 | 0.93877664 | 0.28  | 0.096 | 4.02E-10 | Bcell_2_spleen |
| PHF14             | 1.20E-14 | 0.61583285 | 0.5   | 0.241 | 4.25E-10 | Bcell_2_spleen |
| CTNNB1            | 1.27E-14 | 0.2949391  | 0.542 | 0.262 | 4.50E-10 | Bcell_2_spleen |
| PSME4             | 1.31E-14 | 0.5573955  | 0.417 | 0.182 | 4.63E-10 | Bcell_2_spleen |
| ATM               | 1.42E-14 | 0.49994858 | 0.534 | 0.262 | 5.03E-10 | Bcell_2_spleen |
| ENSMUG00000012537 | 1.42E-14 | 0.45022309 | 0.481 | 0.219 | 5.05E-10 | Bcell_2_spleen |
| ERBIN             | 1.43E-14 | 0.45683272 | 0.548 | 0.274 | 5.05E-10 | Bcell_2_spleen |
| SNX1              | 1.47E-14 | 0.86594163 | 0.29  | 0.098 | 5.23E-10 | Bcell_2_spleen |
| CCNY              | 1.52E-14 | 0.8557308  | 0.33  | 0.129 | 5.37E-10 | Bcell_2_spleen |
| FBXL17            | 1.52E-14 | 0.63422598 | 0.536 | 0.276 | 5.38E-10 | Bcell_2_spleen |
| ASXL2             | 1.55E-14 | 0.64388448 | 0.393 | 0.168 | 5.49E-10 | Bcell_2_spleen |
| XYLT1             | 1.65E-14 | 0.53818808 | 0.657 | 0.387 | 5.83E-10 | Bcell_2_spleen |
| ENSMUG00000055687 | 1.65E-14 | 0.45539838 | 0.515 | 0.243 | 5.86E-10 | Bcell_2_spleen |
| YWHAH             | 1.71E-14 | 0.63601339 | 0.345 | 0.133 | 6.05E-10 | Bcell_2_spleen |
| CXXC5             | 1.78E-14 | 1.01682046 | 0.308 | 0.112 | 6.29E-10 | Bcell_2_spleen |
| CIITA             | 1.87E-14 | 0.43902879 | 0.445 | 0.198 | 6.62E-10 | Bcell_2_spleen |
| CCDC107           | 1.91E-14 | 0.90865396 | 0.307 | 0.112 | 6.75E-10 | Bcell_2_spleen |

|                    |          |            |       |       |          |                |
|--------------------|----------|------------|-------|-------|----------|----------------|
| SREBF2             | 2.03E-14 | 0.76070649 | 0.366 | 0.153 | 7.19E-10 | Bcell_2_spleen |
| TKT                | 2.03E-14 | 0.48203477 | 0.44  | 0.194 | 7.20E-10 | Bcell_2_spleen |
| DST                | 2.11E-14 | 0.67909477 | 0.362 | 0.147 | 7.49E-10 | Bcell_2_spleen |
| PRKX               | 2.18E-14 | 0.46647487 | 0.643 | 0.339 | 7.73E-10 | Bcell_2_spleen |
| MBP                | 2.24E-14 | 0.49508117 | 0.49  | 0.237 | 7.94E-10 | Bcell_2_spleen |
| MDN1               | 2.45E-14 | 0.69057057 | 0.31  | 0.108 | 8.67E-10 | Bcell_2_spleen |
| EEF1A1             | 2.58E-14 | 0.28881345 | 0.978 | 0.945 | 9.14E-10 | Bcell_2_spleen |
| ME2                | 2.71E-14 | 0.54455516 | 0.54  | 0.28  | 9.61E-10 | Bcell_2_spleen |
| TOB1               | 2.81E-14 | 1.10674059 | 0.266 | 0.088 | 9.95E-10 | Bcell_2_spleen |
| CMIP               | 2.97E-14 | 0.48234155 | 0.401 | 0.172 | 1.05E-09 | Bcell_2_spleen |
| RAP1A              | 3.13E-14 | 0.37165026 | 0.617 | 0.317 | 1.11E-09 | Bcell_2_spleen |
| CHORDC1            | 3.14E-14 | 0.69960207 | 0.472 | 0.225 | 1.11E-09 | Bcell_2_spleen |
| SLMAP              | 3.15E-14 | 0.41102985 | 0.585 | 0.299 | 1.11E-09 | Bcell_2_spleen |
| SNX29              | 3.35E-14 | 0.4723804  | 0.92  | 0.638 | 1.19E-09 | Bcell_2_spleen |
| AHSA1              | 3.69E-14 | 0.66830665 | 0.263 | 0.082 | 1.31E-09 | Bcell_2_spleen |
| ENSMMUG00000011776 | 3.94E-14 | 0.82241564 | 0.266 | 0.086 | 1.40E-09 | Bcell_2_spleen |
| EIF4A3             | 4.00E-14 | 0.44973509 | 0.377 | 0.155 | 1.42E-09 | Bcell_2_spleen |
| ARFGEF1            | 4.21E-14 | 0.41379557 | 0.562 | 0.278 | 1.49E-09 | Bcell_2_spleen |
| DDX39A             | 4.42E-14 | 0.43825629 | 0.549 | 0.276 | 1.56E-09 | Bcell_2_spleen |
| SLC30A9            | 4.55E-14 | 0.78278171 | 0.362 | 0.151 | 1.61E-09 | Bcell_2_spleen |
| RAB7A              | 4.70E-14 | 0.49853659 | 0.706 | 0.405 | 1.67E-09 | Bcell_2_spleen |
| SYNRG              | 4.75E-14 | 0.87862625 | 0.284 | 0.098 | 1.68E-09 | Bcell_2_spleen |
| VTI1A              | 5.00E-14 | 0.44977979 | 0.615 | 0.327 | 1.77E-09 | Bcell_2_spleen |
| USP24              | 5.02E-14 | 0.83554132 | 0.33  | 0.131 | 1.78E-09 | Bcell_2_spleen |
| MCTP2              | 5.35E-14 | 0.53058824 | 0.44  | 0.207 | 1.90E-09 | Bcell_2_spleen |
| IRF8               | 5.46E-14 | 0.5733933  | 0.28  | 0.096 | 1.94E-09 | Bcell_2_spleen |
| USP48              | 5.49E-14 | 0.87502244 | 0.277 | 0.096 | 1.95E-09 | Bcell_2_spleen |
| STT3B              | 5.83E-14 | 0.42874435 | 0.572 | 0.299 | 2.07E-09 | Bcell_2_spleen |
| SYPL1              | 6.09E-14 | 0.3282503  | 0.554 | 0.282 | 2.16E-09 | Bcell_2_spleen |
| TRIM72             | 6.11E-14 | 0.43300869 | 0.66  | 0.354 | 2.17E-09 | Bcell_2_spleen |
| UBAC2              | 6.24E-14 | 0.40583075 | 0.627 | 0.325 | 2.21E-09 | Bcell_2_spleen |
| RAB10              | 6.28E-14 | 0.41982128 | 0.407 | 0.178 | 2.23E-09 | Bcell_2_spleen |
| RABGEF1            | 6.32E-14 | 0.52794437 | 0.422 | 0.192 | 2.24E-09 | Bcell_2_spleen |

|                     |          |            |       |       |          |                |
|---------------------|----------|------------|-------|-------|----------|----------------|
| FCER2               | 6.36E-14 | 0.30206491 | 0.542 | 0.268 | 2.25E-09 | Bcell_2_spleen |
| ENSMMUG00000030448  | 6.40E-14 | 0.38976087 | 0.573 | 0.286 | 2.27E-09 | Bcell_2_spleen |
| PAFAH1B1            | 6.50E-14 | 0.38764691 | 0.57  | 0.292 | 2.30E-09 | Bcell_2_spleen |
| RALGPS2             | 6.58E-14 | 0.48275134 | 0.933 | 0.679 | 2.33E-09 | Bcell_2_spleen |
| DARS1               | 6.89E-14 | 0.40425846 | 0.407 | 0.174 | 2.44E-09 | Bcell_2_spleen |
| ACP5                | 7.41E-14 | 0.54589986 | 0.365 | 0.149 | 2.62E-09 | Bcell_2_spleen |
| BTAF1               | 7.48E-14 | 0.59429801 | 0.55  | 0.29  | 2.65E-09 | Bcell_2_spleen |
| RERE                | 7.59E-14 | 0.46897238 | 0.787 | 0.491 | 2.69E-09 | Bcell_2_spleen |
| VAV1                | 7.71E-14 | 0.5638144  | 0.359 | 0.147 | 2.73E-09 | Bcell_2_spleen |
| IL2RG               | 8.08E-14 | 0.28691722 | 0.554 | 0.272 | 2.86E-09 | Bcell_2_spleen |
| SLC7A6              | 8.28E-14 | 0.73630652 | 0.288 | 0.1   | 2.93E-09 | Bcell_2_spleen |
| ATP8A1              | 8.61E-14 | 0.74725154 | 0.393 | 0.176 | 3.05E-09 | Bcell_2_spleen |
| DEXI                | 8.63E-14 | 0.53125843 | 0.508 | 0.262 | 3.06E-09 | Bcell_2_spleen |
| MARK3               | 8.84E-14 | 0.46659899 | 0.421 | 0.19  | 3.13E-09 | Bcell_2_spleen |
| SUSD1               | 9.39E-14 | 0.71049587 | 0.295 | 0.108 | 3.33E-09 | Bcell_2_spleen |
| STK17B              | 9.55E-14 | 0.46312881 | 0.909 | 0.642 | 3.39E-09 | Bcell_2_spleen |
| RAPGEF1             | 1.03E-13 | 0.33828683 | 0.68  | 0.38  | 3.65E-09 | Bcell_2_spleen |
| KLHL14              | 1.04E-13 | 0.8731208  | 0.282 | 0.102 | 3.69E-09 | Bcell_2_spleen |
| MSI2                | 1.10E-13 | 0.39397483 | 0.617 | 0.329 | 3.88E-09 | Bcell_2_spleen |
| ZCCHC7              | 1.15E-13 | 0.36120534 | 0.796 | 0.495 | 4.07E-09 | Bcell_2_spleen |
| YY1                 | 1.18E-13 | 0.74213721 | 0.297 | 0.106 | 4.19E-09 | Bcell_2_spleen |
| DBNL                | 1.19E-13 | 0.41488365 | 0.602 | 0.307 | 4.20E-09 | Bcell_2_spleen |
| POLR2F              | 1.19E-13 | 0.46950681 | 0.308 | 0.11  | 4.21E-09 | Bcell_2_spleen |
| PARN                | 1.19E-13 | 0.8885044  | 0.266 | 0.09  | 4.22E-09 | Bcell_2_spleen |
| SLC9A7              | 1.25E-13 | 0.54302598 | 0.411 | 0.182 | 4.42E-09 | Bcell_2_spleen |
| RTF1                | 1.31E-13 | 0.46350287 | 0.388 | 0.164 | 4.65E-09 | Bcell_2_spleen |
| ENSMMUG000000061128 | 1.34E-13 | 0.25657427 | 0.655 | 0.348 | 4.73E-09 | Bcell_2_spleen |
| ASAP1               | 1.38E-13 | 0.45314675 | 0.437 | 0.2   | 4.89E-09 | Bcell_2_spleen |
| WDR47               | 1.48E-13 | 0.69631111 | 0.295 | 0.108 | 5.26E-09 | Bcell_2_spleen |
| PPP2R5E             | 1.56E-13 | 0.45101695 | 0.441 | 0.204 | 5.53E-09 | Bcell_2_spleen |
| AHCYL2              | 1.75E-13 | 0.70895251 | 0.339 | 0.141 | 6.20E-09 | Bcell_2_spleen |
| SERPINB9            | 1.81E-13 | 0.7677235  | 0.276 | 0.096 | 6.43E-09 | Bcell_2_spleen |
| NIPA2               | 1.90E-13 | 0.63413854 | 0.359 | 0.151 | 6.73E-09 | Bcell_2_spleen |

|         |          |            |       |       |          |                |
|---------|----------|------------|-------|-------|----------|----------------|
| TPR     | 1.96E-13 | 0.54450093 | 0.479 | 0.233 | 6.96E-09 | Bcell_2_spleen |
| SPAG9   | 2.11E-13 | 0.49125274 | 0.544 | 0.286 | 7.49E-09 | Bcell_2_spleen |
| TMEM201 | 2.11E-13 | 0.58095586 | 0.383 | 0.168 | 7.49E-09 | Bcell_2_spleen |
| ZFP36   | 2.15E-13 | 0.37140304 | 0.943 | 0.738 | 7.62E-09 | Bcell_2_spleen |
| FDX1    | 2.20E-13 | 0.51021316 | 0.349 | 0.143 | 7.78E-09 | Bcell_2_spleen |
| PARP6   | 2.21E-13 | 0.51654117 | 0.432 | 0.204 | 7.81E-09 | Bcell_2_spleen |
| CLASP2  | 2.22E-13 | 0.46375237 | 0.539 | 0.28  | 7.88E-09 | Bcell_2_spleen |
| FAM76B  | 2.26E-13 | 0.8245882  | 0.293 | 0.108 | 8.00E-09 | Bcell_2_spleen |
| SETBP1  | 2.26E-13 | 0.67006503 | 0.409 | 0.188 | 8.01E-09 | Bcell_2_spleen |
| BZW2    | 2.31E-13 | 0.40887444 | 0.433 | 0.198 | 8.19E-09 | Bcell_2_spleen |
| SLC4A7  | 2.42E-13 | 0.7423146  | 0.38  | 0.168 | 8.58E-09 | Bcell_2_spleen |
| KDEL2   | 2.45E-13 | 0.86271234 | 0.306 | 0.121 | 8.69E-09 | Bcell_2_spleen |
| UBE2G1  | 2.46E-13 | 0.55918354 | 0.473 | 0.235 | 8.73E-09 | Bcell_2_spleen |
| ZNF638  | 2.71E-13 | 0.58129216 | 0.464 | 0.229 | 9.59E-09 | Bcell_2_spleen |
| DIS3L2  | 2.85E-13 | 0.39864969 | 0.499 | 0.252 | 1.01E-08 | Bcell_2_spleen |
| FOXJ3   | 2.87E-13 | 0.52469356 | 0.427 | 0.196 | 1.02E-08 | Bcell_2_spleen |
| PTPRC   | 2.98E-13 | 0.35655477 | 0.951 | 0.72  | 1.05E-08 | Bcell_2_spleen |
| ANXA6   | 2.99E-13 | 0.48005881 | 0.353 | 0.145 | 1.06E-08 | Bcell_2_spleen |
| YTHDC2  | 3.17E-13 | 0.73418854 | 0.292 | 0.11  | 1.12E-08 | Bcell_2_spleen |
| PAPSS1  | 3.30E-13 | 0.47122167 | 0.342 | 0.139 | 1.17E-08 | Bcell_2_spleen |
| SWAP70  | 3.60E-13 | 0.42019992 | 0.88  | 0.595 | 1.28E-08 | Bcell_2_spleen |
| CYBB    | 3.71E-13 | 0.45984694 | 0.427 | 0.196 | 1.31E-08 | Bcell_2_spleen |
| CCNL1   | 4.16E-13 | 0.34634225 | 0.923 | 0.616 | 1.47E-08 | Bcell_2_spleen |
| MIF     | 4.37E-13 | 0.49428729 | 0.457 | 0.217 | 1.55E-08 | Bcell_2_spleen |
| RASGRP3 | 4.48E-13 | 0.61404991 | 0.368 | 0.162 | 1.59E-08 | Bcell_2_spleen |
| EEF2    | 4.70E-13 | 0.337895   | 0.92  | 0.63  | 1.67E-08 | Bcell_2_spleen |
| HECTD4  | 4.85E-13 | 0.64371906 | 0.357 | 0.155 | 1.72E-08 | Bcell_2_spleen |
| ARIH1   | 4.87E-13 | 0.41746845 | 0.72  | 0.434 | 1.73E-08 | Bcell_2_spleen |
| EIF3M   | 4.90E-13 | 0.3756283  | 0.667 | 0.374 | 1.73E-08 | Bcell_2_spleen |
| SETX    | 5.25E-13 | 0.33140629 | 0.468 | 0.217 | 1.86E-08 | Bcell_2_spleen |
| NFATC3  | 5.32E-13 | 0.42499459 | 0.482 | 0.241 | 1.89E-08 | Bcell_2_spleen |
| CEP85L  | 5.36E-13 | 0.5765647  | 0.534 | 0.286 | 1.90E-08 | Bcell_2_spleen |
| GPHN    | 5.45E-13 | 0.58816164 | 0.541 | 0.307 | 1.93E-08 | Bcell_2_spleen |

|          |          |            |       |       |          |                |
|----------|----------|------------|-------|-------|----------|----------------|
| UBAP2    | 5.51E-13 | 0.62239748 | 0.276 | 0.098 | 1.95E-08 | Bcell_2_spleen |
| SNRPE    | 5.52E-13 | 0.36127645 | 0.53  | 0.268 | 1.96E-08 | Bcell_2_spleen |
| PPP3CC   | 5.67E-13 | 0.37767337 | 0.723 | 0.421 | 2.01E-08 | Bcell_2_spleen |
| PPP2R5A  | 5.77E-13 | 0.67417122 | 0.327 | 0.133 | 2.05E-08 | Bcell_2_spleen |
| RASA2    | 5.86E-13 | 0.35014389 | 0.567 | 0.292 | 2.08E-08 | Bcell_2_spleen |
| VDAC1    | 6.14E-13 | 0.57342889 | 0.323 | 0.127 | 2.18E-08 | Bcell_2_spleen |
| USP9X    | 6.16E-13 | 0.44696113 | 0.618 | 0.337 | 2.18E-08 | Bcell_2_spleen |
| LNPEP    | 6.18E-13 | 0.56754365 | 0.461 | 0.233 | 2.19E-08 | Bcell_2_spleen |
| EIPR1    | 6.50E-13 | 0.57045402 | 0.323 | 0.131 | 2.30E-08 | Bcell_2_spleen |
| SMG7     | 6.81E-13 | 0.50721138 | 0.44  | 0.209 | 2.41E-08 | Bcell_2_spleen |
| KDM4C    | 6.93E-13 | 0.36703991 | 0.825 | 0.505 | 2.45E-08 | Bcell_2_spleen |
| PSMA5    | 7.41E-13 | 0.37969347 | 0.368 | 0.157 | 2.63E-08 | Bcell_2_spleen |
| CCT8     | 7.57E-13 | 0.29338185 | 0.517 | 0.252 | 2.68E-08 | Bcell_2_spleen |
| BAZ1A    | 7.76E-13 | 0.43595293 | 0.549 | 0.29  | 2.75E-08 | Bcell_2_spleen |
| MSN      | 7.89E-13 | 0.36294031 | 0.729 | 0.429 | 2.80E-08 | Bcell_2_spleen |
| LIMD1    | 8.36E-13 | 0.64778484 | 0.359 | 0.153 | 2.96E-08 | Bcell_2_spleen |
| RPS11    | 9.07E-13 | 0.18762162 | 0.989 | 0.98  | 3.21E-08 | Bcell_2_spleen |
| SCFD2    | 9.11E-13 | 0.4161452  | 0.421 | 0.198 | 3.23E-08 | Bcell_2_spleen |
| NGLY1    | 9.24E-13 | 0.51832127 | 0.311 | 0.123 | 3.27E-08 | Bcell_2_spleen |
| DNAJB14  | 1.01E-12 | 0.82165329 | 0.259 | 0.09  | 3.58E-08 | Bcell_2_spleen |
| CSRNP1   | 1.11E-12 | 0.50600801 | 0.337 | 0.141 | 3.94E-08 | Bcell_2_spleen |
| GBF1     | 1.13E-12 | 0.8447851  | 0.257 | 0.09  | 3.99E-08 | Bcell_2_spleen |
| EHMT1    | 1.15E-12 | 0.57199635 | 0.365 | 0.162 | 4.06E-08 | Bcell_2_spleen |
| SNRNP200 | 1.16E-12 | 0.478942   | 0.364 | 0.155 | 4.10E-08 | Bcell_2_spleen |
| LRBA     | 1.28E-12 | 0.32220894 | 0.593 | 0.321 | 4.53E-08 | Bcell_2_spleen |
| GSAP     | 1.32E-12 | 0.68950771 | 0.351 | 0.151 | 4.69E-08 | Bcell_2_spleen |
| TOP2B    | 1.37E-12 | 0.3866839  | 0.508 | 0.256 | 4.84E-08 | Bcell_2_spleen |
| EPS15L1  | 1.38E-12 | 0.52863558 | 0.356 | 0.155 | 4.87E-08 | Bcell_2_spleen |
| UBTF     | 1.38E-12 | 0.6752545  | 0.378 | 0.172 | 4.89E-08 | Bcell_2_spleen |
| GNB1     | 1.49E-12 | 0.4394692  | 0.471 | 0.235 | 5.28E-08 | Bcell_2_spleen |
| NRDC     | 1.58E-12 | 0.53599774 | 0.331 | 0.137 | 5.60E-08 | Bcell_2_spleen |
| PHTF2    | 1.60E-12 | 0.65263035 | 0.399 | 0.186 | 5.66E-08 | Bcell_2_spleen |
| ANKRD10  | 1.61E-12 | 0.44725968 | 0.461 | 0.225 | 5.71E-08 | Bcell_2_spleen |

|                     |          |            |       |       |          |                |
|---------------------|----------|------------|-------|-------|----------|----------------|
| PER1                | 1.63E-12 | 0.42778284 | 0.446 | 0.215 | 5.79E-08 | Bcell_2_spleen |
| PSIP1               | 1.64E-12 | 0.5237631  | 0.322 | 0.133 | 5.81E-08 | Bcell_2_spleen |
| CDKAL1              | 1.76E-12 | 0.46829    | 0.518 | 0.28  | 6.25E-08 | Bcell_2_spleen |
| TLE4                | 1.82E-12 | 0.56512167 | 0.422 | 0.198 | 6.44E-08 | Bcell_2_spleen |
| NFATC2              | 1.85E-12 | 0.79611308 | 0.302 | 0.123 | 6.57E-08 | Bcell_2_spleen |
| SUMO3               | 1.88E-12 | 0.47299789 | 0.363 | 0.157 | 6.66E-08 | Bcell_2_spleen |
| SBF2                | 1.90E-12 | 0.57254136 | 0.353 | 0.157 | 6.74E-08 | Bcell_2_spleen |
| STK26               | 1.97E-12 | 0.57574974 | 0.319 | 0.129 | 6.98E-08 | Bcell_2_spleen |
| PHACTR1             | 2.00E-12 | 0.40842654 | 0.432 | 0.204 | 7.08E-08 | Bcell_2_spleen |
| DYNC1H1             | 2.03E-12 | 0.45013845 | 0.261 | 0.092 | 7.18E-08 | Bcell_2_spleen |
| ZNF407              | 2.05E-12 | 0.63223317 | 0.42  | 0.207 | 7.25E-08 | Bcell_2_spleen |
| FOSB                | 2.13E-12 | 0.41260389 | 0.796 | 0.499 | 7.54E-08 | Bcell_2_spleen |
| HIF1A               | 2.16E-12 | 0.41902854 | 0.345 | 0.147 | 7.65E-08 | Bcell_2_spleen |
| ENSMMUG00000006206  | 2.17E-12 | 0.17465007 | 0.544 | 0.27  | 7.69E-08 | Bcell_2_spleen |
| ETNK1               | 2.17E-12 | 0.60418076 | 0.398 | 0.184 | 7.70E-08 | Bcell_2_spleen |
| RNF216              | 2.19E-12 | 0.47148194 | 0.479 | 0.247 | 7.75E-08 | Bcell_2_spleen |
| ADK                 | 2.21E-12 | 0.3827605  | 0.524 | 0.278 | 7.85E-08 | Bcell_2_spleen |
| GMCL1               | 2.23E-12 | 0.63586481 | 0.31  | 0.129 | 7.90E-08 | Bcell_2_spleen |
| ST8SIA4             | 2.40E-12 | 0.39040356 | 0.451 | 0.217 | 8.50E-08 | Bcell_2_spleen |
| TASP1               | 2.46E-12 | 0.52702039 | 0.409 | 0.198 | 8.70E-08 | Bcell_2_spleen |
| ZMYM2               | 2.48E-12 | 0.40095242 | 0.462 | 0.231 | 8.80E-08 | Bcell_2_spleen |
| GNA13               | 2.50E-12 | 0.45938475 | 0.515 | 0.27  | 8.85E-08 | Bcell_2_spleen |
| FBXW4               | 2.70E-12 | 0.72483839 | 0.346 | 0.151 | 9.56E-08 | Bcell_2_spleen |
| LRCH1               | 2.70E-12 | 0.39526953 | 0.399 | 0.184 | 9.57E-08 | Bcell_2_spleen |
| SPIDR               | 2.87E-12 | 0.51951162 | 0.593 | 0.339 | 1.02E-07 | Bcell_2_spleen |
| ENSMMUG00000006965  | 2.88E-12 | 0.37531632 | 0.481 | 0.237 | 1.02E-07 | Bcell_2_spleen |
| CD46                | 3.02E-12 | 0.31189513 | 0.413 | 0.192 | 1.07E-07 | Bcell_2_spleen |
| SMAP2               | 3.10E-12 | 0.30517932 | 0.734 | 0.427 | 1.10E-07 | Bcell_2_spleen |
| ARID1A              | 3.18E-12 | 0.46995572 | 0.41  | 0.19  | 1.13E-07 | Bcell_2_spleen |
| ENSMMUG000000056043 | 3.62E-12 | 0.5670245  | 0.294 | 0.115 | 1.28E-07 | Bcell_2_spleen |
| PGK1                | 3.64E-12 | 0.1861772  | 0.578 | 0.305 | 1.29E-07 | Bcell_2_spleen |
| SPTLC2              | 3.67E-12 | 0.60178971 | 0.266 | 0.096 | 1.30E-07 | Bcell_2_spleen |
| BCL7A               | 3.70E-12 | 0.52554885 | 0.348 | 0.151 | 1.31E-07 | Bcell_2_spleen |

|                    |          |            |       |       |          |                |
|--------------------|----------|------------|-------|-------|----------|----------------|
| RAP1GDS1           | 3.78E-12 | 0.40453679 | 0.429 | 0.207 | 1.34E-07 | Bcell_2_spleen |
| WIPF1              | 3.78E-12 | 0.34651479 | 0.809 | 0.509 | 1.34E-07 | Bcell_2_spleen |
| PKN2               | 3.85E-12 | 0.27964918 | 0.483 | 0.239 | 1.37E-07 | Bcell_2_spleen |
| ENSMMUG00000058532 | 4.03E-12 | 0.51167358 | 0.327 | 0.139 | 1.43E-07 | Bcell_2_spleen |
| AEBP2              | 4.30E-12 | 0.44705651 | 0.383 | 0.176 | 1.52E-07 | Bcell_2_spleen |
| ADAR               | 4.38E-12 | 0.54573277 | 0.338 | 0.145 | 1.55E-07 | Bcell_2_spleen |
| BABAM2             | 4.51E-12 | 0.38346066 | 0.524 | 0.28  | 1.60E-07 | Bcell_2_spleen |
| ILF3               | 4.53E-12 | 0.39792165 | 0.446 | 0.215 | 1.61E-07 | Bcell_2_spleen |
| PPP3CA             | 4.62E-12 | 0.32034694 | 0.818 | 0.53  | 1.64E-07 | Bcell_2_spleen |
| FARS2              | 4.68E-12 | 0.54964299 | 0.412 | 0.196 | 1.66E-07 | Bcell_2_spleen |
| XPO6               | 4.81E-12 | 0.4386132  | 0.518 | 0.27  | 1.70E-07 | Bcell_2_spleen |
| PBRM1              | 4.88E-12 | 0.4186511  | 0.441 | 0.217 | 1.73E-07 | Bcell_2_spleen |
| ITFG1              | 5.02E-12 | 0.5386035  | 0.422 | 0.207 | 1.78E-07 | Bcell_2_spleen |
| ERO1A              | 5.13E-12 | 0.78891675 | 0.251 | 0.09  | 1.82E-07 | Bcell_2_spleen |
| TANK               | 5.13E-12 | 0.42648745 | 0.763 | 0.483 | 1.82E-07 | Bcell_2_spleen |
| SUPT20H            | 5.19E-12 | 0.66338533 | 0.272 | 0.1   | 1.84E-07 | Bcell_2_spleen |
| RAC2               | 5.38E-12 | 0.12891361 | 0.564 | 0.294 | 1.90E-07 | Bcell_2_spleen |
| CAP1               | 5.42E-12 | 0.3344246  | 0.572 | 0.305 | 1.92E-07 | Bcell_2_spleen |
| IQCG               | 5.76E-12 | 0.32580599 | 0.424 | 0.204 | 2.04E-07 | Bcell_2_spleen |
| RABEP1             | 5.77E-12 | 0.78716839 | 0.292 | 0.117 | 2.04E-07 | Bcell_2_spleen |
| YPEL5              | 5.78E-12 | 0.32765162 | 0.685 | 0.399 | 2.05E-07 | Bcell_2_spleen |
| EEF1G              | 6.00E-12 | 0.30022361 | 0.908 | 0.669 | 2.13E-07 | Bcell_2_spleen |
| TAOK1              | 6.02E-12 | 0.35988483 | 0.417 | 0.196 | 2.13E-07 | Bcell_2_spleen |
| ZNF268             | 6.14E-12 | 0.81259943 | 0.332 | 0.147 | 2.17E-07 | Bcell_2_spleen |
| ENO1               | 6.25E-12 | 0.21410359 | 0.711 | 0.405 | 2.21E-07 | Bcell_2_spleen |
| PPP1R16B           | 6.31E-12 | 0.53032649 | 0.461 | 0.241 | 2.24E-07 | Bcell_2_spleen |
| ATP10D             | 6.38E-12 | 0.57403889 | 0.302 | 0.123 | 2.26E-07 | Bcell_2_spleen |
| RPL13A             | 6.40E-12 | 0.23118283 | 0.984 | 0.965 | 2.27E-07 | Bcell_2_spleen |
| RETREG1            | 6.50E-12 | 0.54595359 | 0.348 | 0.153 | 2.30E-07 | Bcell_2_spleen |
| SMYD3              | 6.52E-12 | 0.50166668 | 0.454 | 0.229 | 2.31E-07 | Bcell_2_spleen |
| CELF2              | 6.58E-12 | 0.35640892 | 0.827 | 0.511 | 2.33E-07 | Bcell_2_spleen |
| CUL4A              | 6.72E-12 | 0.61164353 | 0.292 | 0.121 | 2.38E-07 | Bcell_2_spleen |
| SUCLG2             | 6.72E-12 | 0.39325657 | 0.57  | 0.307 | 2.38E-07 | Bcell_2_spleen |

|          |          |            |       |       |          |                |
|----------|----------|------------|-------|-------|----------|----------------|
| PUM2     | 6.91E-12 | 0.34213172 | 0.626 | 0.348 | 2.45E-07 | Bcell_2_spleen |
| ITSN2    | 6.92E-12 | 0.23666396 | 0.692 | 0.393 | 2.45E-07 | Bcell_2_spleen |
| RRAS2    | 6.96E-12 | 0.36693019 | 0.614 | 0.35  | 2.47E-07 | Bcell_2_spleen |
| CACYBP   | 7.00E-12 | 0.25696777 | 0.544 | 0.276 | 2.48E-07 | Bcell_2_spleen |
| INTS8    | 7.21E-12 | 0.49926341 | 0.354 | 0.155 | 2.56E-07 | Bcell_2_spleen |
| ACBD6    | 7.58E-12 | 0.62128882 | 0.3   | 0.123 | 2.68E-07 | Bcell_2_spleen |
| RNF115   | 7.71E-12 | 0.47935121 | 0.339 | 0.147 | 2.73E-07 | Bcell_2_spleen |
| USP3     | 8.27E-12 | 0.28975318 | 0.6   | 0.325 | 2.93E-07 | Bcell_2_spleen |
| CHIC2    | 8.28E-12 | 0.70446038 | 0.258 | 0.096 | 2.94E-07 | Bcell_2_spleen |
| UVRAG    | 8.95E-12 | 0.33243573 | 0.866 | 0.566 | 3.17E-07 | Bcell_2_spleen |
| CD72     | 8.95E-12 | 0.20942503 | 0.578 | 0.303 | 3.17E-07 | Bcell_2_spleen |
| CCDC91   | 9.38E-12 | 0.32406238 | 0.627 | 0.356 | 3.32E-07 | Bcell_2_spleen |
| SLC20A1  | 9.43E-12 | 0.69101703 | 0.296 | 0.121 | 3.34E-07 | Bcell_2_spleen |
| DNMBP    | 9.76E-12 | 0.63634455 | 0.257 | 0.094 | 3.46E-07 | Bcell_2_spleen |
| PPP1R2   | 1.00E-11 | 0.49340732 | 0.456 | 0.233 | 3.54E-07 | Bcell_2_spleen |
| NDEL1    | 1.02E-11 | 0.50774766 | 0.393 | 0.186 | 3.61E-07 | Bcell_2_spleen |
| CHST11   | 1.03E-11 | 0.41719563 | 0.421 | 0.207 | 3.65E-07 | Bcell_2_spleen |
| ASCC1    | 1.05E-11 | 0.61551516 | 0.315 | 0.133 | 3.72E-07 | Bcell_2_spleen |
| TBC1D10C | 1.05E-11 | 0.61204285 | 0.293 | 0.119 | 3.72E-07 | Bcell_2_spleen |
| UBE2I    | 1.06E-11 | 0.26682569 | 0.559 | 0.288 | 3.76E-07 | Bcell_2_spleen |
| USP34    | 1.08E-11 | 0.36170684 | 0.72  | 0.434 | 3.83E-07 | Bcell_2_spleen |
| RHEB     | 1.10E-11 | 0.35816016 | 0.466 | 0.223 | 3.88E-07 | Bcell_2_spleen |
| SNIP1    | 1.11E-11 | 0.83572723 | 0.291 | 0.119 | 3.92E-07 | Bcell_2_spleen |
| UBE2D1   | 1.12E-11 | 0.45890871 | 0.293 | 0.117 | 3.98E-07 | Bcell_2_spleen |
| CLEC17A  | 1.17E-11 | 0.52900997 | 0.351 | 0.157 | 4.13E-07 | Bcell_2_spleen |
| IP6K1    | 1.22E-11 | 0.89409966 | 0.264 | 0.102 | 4.34E-07 | Bcell_2_spleen |
| ERGIC1   | 1.28E-11 | 0.2722714  | 0.528 | 0.276 | 4.54E-07 | Bcell_2_spleen |
| FAR1     | 1.30E-11 | 0.4353583  | 0.329 | 0.141 | 4.61E-07 | Bcell_2_spleen |
| PRKDC    | 1.31E-11 | 0.35099504 | 0.475 | 0.243 | 4.64E-07 | Bcell_2_spleen |
| CCPG1    | 1.37E-11 | 0.55061032 | 0.255 | 0.094 | 4.86E-07 | Bcell_2_spleen |
| BIRC3    | 1.39E-11 | 0.33308808 | 0.729 | 0.442 | 4.91E-07 | Bcell_2_spleen |
| MRPL20   | 1.42E-11 | 0.38550799 | 0.281 | 0.106 | 5.02E-07 | Bcell_2_spleen |
| STX7     | 1.43E-11 | 0.56900787 | 0.422 | 0.209 | 5.05E-07 | Bcell_2_spleen |



|                    |          |            |       |       |          |                |
|--------------------|----------|------------|-------|-------|----------|----------------|
| SF3A1              | 1.56E-11 | 0.79208861 | 0.27  | 0.106 | 5.52E-07 | Bcell_2_spleen |
| KRAS               | 1.58E-11 | 0.55652079 | 0.359 | 0.168 | 5.61E-07 | Bcell_2_spleen |
| ARID1B             | 1.60E-11 | 0.2488249  | 0.818 | 0.507 | 5.67E-07 | Bcell_2_spleen |
| TMEM243            | 1.64E-11 | 0.25297273 | 0.569 | 0.309 | 5.81E-07 | Bcell_2_spleen |
| PMAIP1             | 1.65E-11 | 0.28190844 | 0.524 | 0.274 | 5.86E-07 | Bcell_2_spleen |
| EVL                | 1.66E-11 | 0.28036014 | 0.421 | 0.2   | 5.89E-07 | Bcell_2_spleen |
| SPG11              | 1.69E-11 | 0.64364357 | 0.278 | 0.11  | 6.00E-07 | Bcell_2_spleen |
| APLP2              | 1.70E-11 | 0.53032294 | 0.339 | 0.145 | 6.01E-07 | Bcell_2_spleen |
| ALCAM              | 1.82E-11 | 0.470853   | 0.415 | 0.202 | 6.43E-07 | Bcell_2_spleen |
| BRD2               | 1.83E-11 | 0.35929497 | 0.591 | 0.327 | 6.50E-07 | Bcell_2_spleen |
| RPS6KC1            | 1.86E-11 | 0.72182828 | 0.332 | 0.149 | 6.60E-07 | Bcell_2_spleen |
| ND2                | 1.89E-11 | 0.28404537 | 0.977 | 0.74  | 6.71E-07 | Bcell_2_spleen |
| DSE                | 1.90E-11 | 0.58998339 | 0.34  | 0.153 | 6.72E-07 | Bcell_2_spleen |
| C20H16orf72        | 1.92E-11 | 0.55941731 | 0.368 | 0.174 | 6.80E-07 | Bcell_2_spleen |
| PIBF1              | 1.94E-11 | 0.52040528 | 0.326 | 0.143 | 6.87E-07 | Bcell_2_spleen |
| SFPQ               | 2.01E-11 | 0.21409553 | 0.614 | 0.331 | 7.13E-07 | Bcell_2_spleen |
| CUL1               | 2.22E-11 | 0.62943826 | 0.349 | 0.155 | 7.86E-07 | Bcell_2_spleen |
| ENSMMUG00000011714 | 2.25E-11 | 0.6266573  | 0.321 | 0.139 | 7.96E-07 | Bcell_2_spleen |
| ZNF581             | 2.25E-11 | 0.74502256 | 0.281 | 0.112 | 7.97E-07 | Bcell_2_spleen |
| PTP4A3             | 2.35E-11 | 0.64794087 | 0.273 | 0.108 | 8.34E-07 | Bcell_2_spleen |
| RGS1               | 2.38E-11 | 0.53030616 | 0.406 | 0.202 | 8.44E-07 | Bcell_2_spleen |
| ENSMMUG00000049951 | 2.40E-11 | 0.61567898 | 0.272 | 0.104 | 8.52E-07 | Bcell_2_spleen |
| TCP1               | 2.41E-11 | 0.63893789 | 0.281 | 0.11  | 8.53E-07 | Bcell_2_spleen |
| STAMBPL1           | 2.41E-11 | 0.73898795 | 0.281 | 0.115 | 8.55E-07 | Bcell_2_spleen |
| EIF3D              | 2.42E-11 | 0.17535874 | 0.497 | 0.243 | 8.58E-07 | Bcell_2_spleen |
| CYFIP2             | 2.43E-11 | 0.2985774  | 0.7   | 0.403 | 8.61E-07 | Bcell_2_spleen |
| RASSF5             | 2.48E-11 | 0.73058548 | 0.256 | 0.096 | 8.78E-07 | Bcell_2_spleen |
| CCNH               | 2.63E-11 | 0.58387548 | 0.334 | 0.149 | 9.31E-07 | Bcell_2_spleen |
| SYNGR2             | 2.63E-11 | 0.205129   | 0.388 | 0.176 | 9.32E-07 | Bcell_2_spleen |
| OGT                | 2.69E-11 | 0.3153676  | 0.498 | 0.264 | 9.54E-07 | Bcell_2_spleen |
| PFKL               | 2.79E-11 | 0.61569029 | 0.251 | 0.092 | 9.88E-07 | Bcell_2_spleen |
| PNPLA8             | 3.00E-11 | 0.53417491 | 0.32  | 0.141 | 1.06E-06 | Bcell_2_spleen |
| MALT1              | 3.05E-11 | 0.39535534 | 0.441 | 0.219 | 1.08E-06 | Bcell_2_spleen |

|                    |          |            |       |       |          |                |
|--------------------|----------|------------|-------|-------|----------|----------------|
| ENSMMUG00000020721 | 3.07E-11 | 0.54348578 | 0.352 | 0.16  | 1.09E-06 | Bcell_2_spleen |
| PHF21A             | 3.10E-11 | 0.34420723 | 0.457 | 0.239 | 1.10E-06 | Bcell_2_spleen |
| ILKAP              | 3.12E-11 | 0.44911077 | 0.378 | 0.178 | 1.10E-06 | Bcell_2_spleen |
| PCNX1              | 3.30E-11 | 0.53004138 | 0.432 | 0.221 | 1.17E-06 | Bcell_2_spleen |
| TBL1X              | 3.43E-11 | 0.4462233  | 0.358 | 0.166 | 1.22E-06 | Bcell_2_spleen |
| TSNAX              | 3.47E-11 | 0.74945919 | 0.256 | 0.098 | 1.23E-06 | Bcell_2_spleen |
| GRK3               | 3.49E-11 | 0.56233455 | 0.379 | 0.184 | 1.24E-06 | Bcell_2_spleen |
| ENSMMUG00000059742 | 3.59E-11 | 0.28312283 | 0.332 | 0.141 | 1.27E-06 | Bcell_2_spleen |
| TTC27              | 3.73E-11 | 0.57726953 | 0.269 | 0.108 | 1.32E-06 | Bcell_2_spleen |
| NSD1               | 3.85E-11 | 0.29254572 | 0.469 | 0.239 | 1.37E-06 | Bcell_2_spleen |
| KIF13A             | 3.93E-11 | 0.41173652 | 0.394 | 0.19  | 1.39E-06 | Bcell_2_spleen |
| BIRC6              | 3.98E-11 | 0.33756724 | 0.759 | 0.458 | 1.41E-06 | Bcell_2_spleen |
| WDR1               | 4.13E-11 | 0.28435417 | 0.262 | 0.1   | 1.46E-06 | Bcell_2_spleen |
| TRAF3IP3           | 4.18E-11 | 0.32275005 | 0.476 | 0.245 | 1.48E-06 | Bcell_2_spleen |
| H4C15              | 4.26E-11 | 0.17014952 | 0.344 | 0.153 | 1.51E-06 | Bcell_2_spleen |
| SAMHD1             | 4.29E-11 | 0.52308505 | 0.295 | 0.123 | 1.52E-06 | Bcell_2_spleen |
| MTHFD2             | 4.44E-11 | 0.58875938 | 0.253 | 0.096 | 1.57E-06 | Bcell_2_spleen |
| GSK3B              | 4.52E-11 | 0.27110566 | 0.618 | 0.352 | 1.60E-06 | Bcell_2_spleen |
| RBMS1              | 4.69E-11 | 0.62031781 | 0.286 | 0.119 | 1.66E-06 | Bcell_2_spleen |
| CDK13              | 4.72E-11 | 0.35440665 | 0.603 | 0.342 | 1.67E-06 | Bcell_2_spleen |
| SDCCAG8            | 4.76E-11 | 0.33090564 | 0.441 | 0.219 | 1.69E-06 | Bcell_2_spleen |
| PTBP3              | 4.81E-11 | 0.30596367 | 0.626 | 0.358 | 1.70E-06 | Bcell_2_spleen |
| SRRT               | 4.85E-11 | 0.82518643 | 0.257 | 0.1   | 1.72E-06 | Bcell_2_spleen |
| MED28              | 4.89E-11 | 0.24164653 | 0.354 | 0.16  | 1.73E-06 | Bcell_2_spleen |
| NPAT               | 5.27E-11 | 0.26747922 | 0.539 | 0.294 | 1.87E-06 | Bcell_2_spleen |
| ATRX               | 5.42E-11 | 0.39974525 | 0.64  | 0.368 | 1.92E-06 | Bcell_2_spleen |
| SRSF4              | 5.59E-11 | 0.28039097 | 0.612 | 0.331 | 1.98E-06 | Bcell_2_spleen |
| USP36              | 5.65E-11 | 0.23710796 | 0.661 | 0.384 | 2.00E-06 | Bcell_2_spleen |
| NDFIP1             | 5.71E-11 | 0.47065625 | 0.354 | 0.166 | 2.02E-06 | Bcell_2_spleen |
| CCNK               | 6.08E-11 | 0.32882687 | 0.5   | 0.258 | 2.16E-06 | Bcell_2_spleen |
| ARMC2              | 6.22E-11 | 0.56789801 | 0.341 | 0.157 | 2.20E-06 | Bcell_2_spleen |
| CUX1               | 6.31E-11 | 0.24648033 | 0.6   | 0.329 | 2.23E-06 | Bcell_2_spleen |
| H2AC20             | 6.84E-11 | 0.12963097 | 0.291 | 0.121 | 2.42E-06 | Bcell_2_spleen |

|                    |          |            |       |       |          |                |
|--------------------|----------|------------|-------|-------|----------|----------------|
| RAB21              | 7.00E-11 | 0.69617727 | 0.285 | 0.119 | 2.48E-06 | Bcell_2_spleen |
| PCMT1              | 7.16E-11 | 0.23453063 | 0.305 | 0.127 | 2.54E-06 | Bcell_2_spleen |
| ATP5PB             | 7.16E-11 | 0.30677361 | 0.486 | 0.252 | 2.54E-06 | Bcell_2_spleen |
| CAPRIN1            | 7.33E-11 | 0.50013641 | 0.31  | 0.135 | 2.60E-06 | Bcell_2_spleen |
| XRCC4              | 7.35E-11 | 0.52325563 | 0.336 | 0.155 | 2.60E-06 | Bcell_2_spleen |
| POU2F2             | 7.43E-11 | 0.65035921 | 0.271 | 0.108 | 2.63E-06 | Bcell_2_spleen |
| CEP350             | 7.74E-11 | 0.63169367 | 0.355 | 0.166 | 2.74E-06 | Bcell_2_spleen |
| FKBP15             | 7.99E-11 | 0.36153563 | 0.285 | 0.119 | 2.83E-06 | Bcell_2_spleen |
| NR4A2              | 8.66E-11 | 0.33464221 | 0.53  | 0.297 | 3.07E-06 | Bcell_2_spleen |
| PPA2               | 8.75E-11 | 0.41091061 | 0.314 | 0.135 | 3.10E-06 | Bcell_2_spleen |
| JTB                | 9.09E-11 | 0.25808285 | 0.516 | 0.266 | 3.22E-06 | Bcell_2_spleen |
| NSUN6              | 9.11E-11 | 0.60799634 | 0.261 | 0.102 | 3.23E-06 | Bcell_2_spleen |
| PSPC1              | 9.22E-11 | 0.44819454 | 0.492 | 0.262 | 3.27E-06 | Bcell_2_spleen |
| PPP1R18            | 9.34E-11 | 0.48461084 | 0.273 | 0.108 | 3.31E-06 | Bcell_2_spleen |
| DIPK1A             | 9.74E-11 | 0.54374566 | 0.422 | 0.223 | 3.45E-06 | Bcell_2_spleen |
| B4GALT1            | 9.80E-11 | 0.53646865 | 0.28  | 0.117 | 3.47E-06 | Bcell_2_spleen |
| SKAP2              | 1.00E-10 | 0.27916029 | 0.616 | 0.352 | 3.55E-06 | Bcell_2_spleen |
| ANXA7              | 1.01E-10 | 0.57196843 | 0.291 | 0.123 | 3.56E-06 | Bcell_2_spleen |
| AKAP17A            | 1.02E-10 | 0.63355361 | 0.256 | 0.1   | 3.62E-06 | Bcell_2_spleen |
| FBXW7              | 1.06E-10 | 0.38763823 | 0.579 | 0.323 | 3.77E-06 | Bcell_2_spleen |
| RPS6KA5            | 1.07E-10 | 0.33261878 | 0.574 | 0.331 | 3.78E-06 | Bcell_2_spleen |
| ADARB2             | 1.08E-10 | 0.24678915 | 0.284 | 0.117 | 3.84E-06 | Bcell_2_spleen |
| SENP6              | 1.10E-10 | 0.31017488 | 0.561 | 0.315 | 3.89E-06 | Bcell_2_spleen |
| ENSMMUG00000011798 | 1.14E-10 | 0.25883237 | 0.355 | 0.162 | 4.06E-06 | Bcell_2_spleen |
| PTPN2              | 1.16E-10 | 0.21949481 | 0.483 | 0.245 | 4.13E-06 | Bcell_2_spleen |
| NDUFAB1            | 1.20E-10 | 0.22488998 | 0.32  | 0.141 | 4.26E-06 | Bcell_2_spleen |
| ABI1               | 1.23E-10 | 0.32092691 | 0.646 | 0.378 | 4.37E-06 | Bcell_2_spleen |
| TRAF3              | 1.26E-10 | 0.36224902 | 0.625 | 0.364 | 4.47E-06 | Bcell_2_spleen |
| CXCR5              | 1.30E-10 | 0.2858569  | 0.504 | 0.264 | 4.60E-06 | Bcell_2_spleen |
| ENSMMUG00000015208 | 1.32E-10 | 0.27169441 | 0.578 | 0.321 | 4.68E-06 | Bcell_2_spleen |
| HMBOX1             | 1.34E-10 | 0.39194583 | 0.296 | 0.127 | 4.76E-06 | Bcell_2_spleen |
| FRYL               | 1.36E-10 | 0.38619897 | 0.354 | 0.168 | 4.80E-06 | Bcell_2_spleen |
| TP53BP2            | 1.36E-10 | 0.56170248 | 0.348 | 0.166 | 4.81E-06 | Bcell_2_spleen |

|           |          |            |       |       |          |                |
|-----------|----------|------------|-------|-------|----------|----------------|
| ENTPD4    | 1.36E-10 | 0.61943153 | 0.303 | 0.133 | 4.81E-06 | Bcell_2_spleen |
| NFATC1    | 1.36E-10 | 0.37407788 | 0.349 | 0.164 | 4.83E-06 | Bcell_2_spleen |
| PPP2R2D   | 1.39E-10 | 0.66234744 | 0.293 | 0.125 | 4.94E-06 | Bcell_2_spleen |
| BRWD1     | 1.40E-10 | 0.37197215 | 0.415 | 0.204 | 4.97E-06 | Bcell_2_spleen |
| ASH1L     | 1.46E-10 | 0.2750088  | 0.714 | 0.427 | 5.16E-06 | Bcell_2_spleen |
| ZC3HAV1   | 1.49E-10 | 0.40906639 | 0.52  | 0.286 | 5.29E-06 | Bcell_2_spleen |
| SELENOT   | 1.49E-10 | 0.32739657 | 0.443 | 0.227 | 5.29E-06 | Bcell_2_spleen |
| CLASP1    | 1.49E-10 | 0.5728595  | 0.386 | 0.19  | 5.30E-06 | Bcell_2_spleen |
| UBE2K     | 1.50E-10 | 0.24397131 | 0.521 | 0.282 | 5.30E-06 | Bcell_2_spleen |
| ERGIC2    | 1.50E-10 | 0.24945601 | 0.357 | 0.162 | 5.31E-06 | Bcell_2_spleen |
| ACAD10    | 1.51E-10 | 0.34618257 | 0.413 | 0.211 | 5.33E-06 | Bcell_2_spleen |
| GRAMD1B   | 1.53E-10 | 0.57702883 | 0.31  | 0.139 | 5.41E-06 | Bcell_2_spleen |
| REV3L     | 1.54E-10 | 0.36308689 | 0.413 | 0.209 | 5.44E-06 | Bcell_2_spleen |
| IRF2      | 1.56E-10 | 0.23761104 | 0.479 | 0.245 | 5.53E-06 | Bcell_2_spleen |
| EHBP1     | 1.57E-10 | 0.74108422 | 0.295 | 0.133 | 5.58E-06 | Bcell_2_spleen |
| TMOD3     | 1.60E-10 | 0.26426301 | 0.453 | 0.229 | 5.68E-06 | Bcell_2_spleen |
| EEF1E1    | 1.66E-10 | 0.29322493 | 0.337 | 0.151 | 5.89E-06 | Bcell_2_spleen |
| DENND11   | 1.70E-10 | 0.65568941 | 0.267 | 0.108 | 6.02E-06 | Bcell_2_spleen |
| CXHXorf38 | 1.71E-10 | 0.75650164 | 0.252 | 0.1   | 6.05E-06 | Bcell_2_spleen |
| H2AFY     | 1.71E-10 | 0.18638714 | 0.599 | 0.331 | 6.07E-06 | Bcell_2_spleen |
| XPC       | 1.78E-10 | 0.62313003 | 0.3   | 0.133 | 6.31E-06 | Bcell_2_spleen |
| HNRNPR    | 1.78E-10 | 0.25337339 | 0.516 | 0.278 | 6.32E-06 | Bcell_2_spleen |
| ARHGEF2   | 1.85E-10 | 0.45495639 | 0.275 | 0.112 | 6.55E-06 | Bcell_2_spleen |
| CCDC69    | 1.87E-10 | 0.73591126 | 0.275 | 0.117 | 6.63E-06 | Bcell_2_spleen |
| EIF2S2    | 1.90E-10 | 0.1647451  | 0.549 | 0.297 | 6.74E-06 | Bcell_2_spleen |
| ITGB1     | 1.93E-10 | 0.75114254 | 0.255 | 0.102 | 6.85E-06 | Bcell_2_spleen |
| RAD21     | 1.97E-10 | 0.39601962 | 0.435 | 0.223 | 6.97E-06 | Bcell_2_spleen |
| RNF145    | 1.98E-10 | 0.47479922 | 0.36  | 0.172 | 7.03E-06 | Bcell_2_spleen |
| MBTD1     | 2.11E-10 | 0.19607209 | 0.467 | 0.247 | 7.48E-06 | Bcell_2_spleen |
| SRSF7     | 2.21E-10 | 0.12334902 | 0.726 | 0.415 | 7.83E-06 | Bcell_2_spleen |
| CNOT2     | 2.23E-10 | 0.369845   | 0.776 | 0.501 | 7.89E-06 | Bcell_2_spleen |
| ADAM10    | 2.37E-10 | 0.40621584 | 0.363 | 0.174 | 8.40E-06 | Bcell_2_spleen |
| PRNP      | 2.38E-10 | 0.63794473 | 0.289 | 0.127 | 8.42E-06 | Bcell_2_spleen |

|            |          |            |       |       |          |                |
|------------|----------|------------|-------|-------|----------|----------------|
| APPL2      | 2.38E-10 | 0.34290357 | 0.285 | 0.121 | 8.43E-06 | Bcell_2_spleen |
| LARP4B     | 2.44E-10 | 0.61396272 | 0.306 | 0.139 | 8.63E-06 | Bcell_2_spleen |
| ICAM3      | 2.44E-10 | 0.43686561 | 0.276 | 0.112 | 8.65E-06 | Bcell_2_spleen |
| H1-4       | 2.45E-10 | 0.39259848 | 0.438 | 0.223 | 8.68E-06 | Bcell_2_spleen |
| RPS15      | 2.49E-10 | 0.1817816  | 0.988 | 0.973 | 8.84E-06 | Bcell_2_spleen |
| XPO1       | 2.62E-10 | 0.4950961  | 0.32  | 0.145 | 9.28E-06 | Bcell_2_spleen |
| PPP2R5C    | 2.62E-10 | 0.31942113 | 0.799 | 0.493 | 9.29E-06 | Bcell_2_spleen |
| ABHD12     | 2.73E-10 | 0.50695076 | 0.257 | 0.104 | 9.66E-06 | Bcell_2_spleen |
| SMIM14     | 2.73E-10 | 0.24455363 | 0.808 | 0.519 | 9.67E-06 | Bcell_2_spleen |
| WASHC4     | 2.79E-10 | 0.25242315 | 0.512 | 0.268 | 9.88E-06 | Bcell_2_spleen |
| MGA        | 2.84E-10 | 0.45570104 | 0.325 | 0.149 | 1.01E-05 | Bcell_2_spleen |
| USO1       | 2.87E-10 | 0.56888732 | 0.271 | 0.112 | 1.02E-05 | Bcell_2_spleen |
| CSGALNACT2 | 2.93E-10 | 0.35957747 | 0.442 | 0.235 | 1.04E-05 | Bcell_2_spleen |
| BAZ1B      | 3.05E-10 | 0.63715363 | 0.31  | 0.143 | 1.08E-05 | Bcell_2_spleen |
| SYNCRIP    | 3.07E-10 | 0.30764161 | 0.422 | 0.211 | 1.09E-05 | Bcell_2_spleen |
| SCLT1      | 3.08E-10 | 0.34164225 | 0.521 | 0.297 | 1.09E-05 | Bcell_2_spleen |
| SSH2       | 3.17E-10 | 0.32313139 | 0.666 | 0.411 | 1.12E-05 | Bcell_2_spleen |
| CGGBP1     | 3.21E-10 | 0.30570532 | 0.348 | 0.16  | 1.14E-05 | Bcell_2_spleen |
| SCAF4      | 3.40E-10 | 0.54934242 | 0.357 | 0.174 | 1.20E-05 | Bcell_2_spleen |
| PPA1       | 3.49E-10 | 0.29454413 | 0.293 | 0.125 | 1.24E-05 | Bcell_2_spleen |
| MCU        | 3.51E-10 | 0.31376778 | 0.285 | 0.125 | 1.24E-05 | Bcell_2_spleen |
| BID        | 3.52E-10 | 0.2121411  | 0.44  | 0.225 | 1.25E-05 | Bcell_2_spleen |
| JAZF1      | 3.52E-10 | 0.33948747 | 0.66  | 0.399 | 1.25E-05 | Bcell_2_spleen |
| MAML2      | 3.58E-10 | 0.41961621 | 0.716 | 0.464 | 1.27E-05 | Bcell_2_spleen |
| CCT2       | 3.68E-10 | 0.20649221 | 0.636 | 0.372 | 1.30E-05 | Bcell_2_spleen |
| RNF10      | 3.69E-10 | 0.29170652 | 0.299 | 0.129 | 1.31E-05 | Bcell_2_spleen |
| ZBTB10     | 3.71E-10 | 0.47447181 | 0.324 | 0.153 | 1.32E-05 | Bcell_2_spleen |
| MRTFA      | 3.72E-10 | 0.53851065 | 0.334 | 0.16  | 1.32E-05 | Bcell_2_spleen |
| RBM6       | 3.87E-10 | 0.51708184 | 0.389 | 0.202 | 1.37E-05 | Bcell_2_spleen |
| SLC15A2    | 3.88E-10 | 0.54558847 | 0.354 | 0.172 | 1.38E-05 | Bcell_2_spleen |
| ARID4B     | 4.29E-10 | 0.21483934 | 0.844 | 0.521 | 1.52E-05 | Bcell_2_spleen |
| ASCC3      | 4.30E-10 | 0.40416662 | 0.471 | 0.254 | 1.52E-05 | Bcell_2_spleen |
| DYRK1A     | 4.31E-10 | 0.41387467 | 0.397 | 0.202 | 1.53E-05 | Bcell_2_spleen |

|                    |          |            |       |       |          |                |
|--------------------|----------|------------|-------|-------|----------|----------------|
| SPOPL              | 4.31E-10 | 0.57583482 | 0.279 | 0.119 | 1.53E-05 | Bcell_2_spleen |
| ETV6               | 4.36E-10 | 0.59507726 | 0.276 | 0.121 | 1.54E-05 | Bcell_2_spleen |
| PLEKHA1            | 4.36E-10 | 0.60573497 | 0.251 | 0.102 | 1.55E-05 | Bcell_2_spleen |
| CEPT1              | 4.37E-10 | 0.36132268 | 0.455 | 0.243 | 1.55E-05 | Bcell_2_spleen |
| SSBP1              | 4.44E-10 | 0.12930915 | 0.423 | 0.211 | 1.57E-05 | Bcell_2_spleen |
| DYM                | 4.56E-10 | 0.44223776 | 0.466 | 0.254 | 1.61E-05 | Bcell_2_spleen |
| HIPK2              | 4.66E-10 | 0.5749607  | 0.329 | 0.155 | 1.65E-05 | Bcell_2_spleen |
| SAMD8              | 4.79E-10 | 0.22499831 | 0.447 | 0.231 | 1.70E-05 | Bcell_2_spleen |
| ATP2A3             | 5.10E-10 | 0.35068734 | 0.342 | 0.16  | 1.81E-05 | Bcell_2_spleen |
| ZNF514             | 5.11E-10 | 0.19663332 | 0.34  | 0.155 | 1.81E-05 | Bcell_2_spleen |
| PDS5A              | 5.55E-10 | 0.46456133 | 0.425 | 0.221 | 1.97E-05 | Bcell_2_spleen |
| HS2ST1             | 5.59E-10 | 0.78215589 | 0.278 | 0.125 | 1.98E-05 | Bcell_2_spleen |
| ENSMMUG00000065175 | 5.59E-10 | 0.27311735 | 0.565 | 0.311 | 1.98E-05 | Bcell_2_spleen |
| APOBEC3F           | 5.65E-10 | 0.46495628 | 0.323 | 0.147 | 2.00E-05 | Bcell_2_spleen |
| KLF12              | 5.71E-10 | 0.31072612 | 0.653 | 0.405 | 2.02E-05 | Bcell_2_spleen |
| RUBCN              | 5.73E-10 | 0.44441144 | 0.358 | 0.176 | 2.03E-05 | Bcell_2_spleen |
| EIF4EBP3           | 5.85E-10 | 0.35049179 | 0.461 | 0.247 | 2.07E-05 | Bcell_2_spleen |
| ENSMMUG00000005482 | 5.86E-10 | 0.4516301  | 0.391 | 0.198 | 2.08E-05 | Bcell_2_spleen |
| NIBAN3             | 5.90E-10 | 0.13550722 | 0.385 | 0.186 | 2.09E-05 | Bcell_2_spleen |
| SLC39A11           | 6.00E-10 | 0.18456193 | 0.34  | 0.164 | 2.13E-05 | Bcell_2_spleen |
| KAT6B              | 6.05E-10 | 0.29494683 | 0.446 | 0.239 | 2.14E-05 | Bcell_2_spleen |
| TCF12              | 6.08E-10 | 0.34865179 | 0.726 | 0.446 | 2.15E-05 | Bcell_2_spleen |
| KMT2C              | 6.10E-10 | 0.33406045 | 0.814 | 0.53  | 2.16E-05 | Bcell_2_spleen |
| ATXN10             | 6.15E-10 | 0.37983966 | 0.471 | 0.254 | 2.18E-05 | Bcell_2_spleen |
| IQSEC1             | 6.27E-10 | 0.32720374 | 0.586 | 0.342 | 2.22E-05 | Bcell_2_spleen |
| DDX50              | 6.36E-10 | 0.23746099 | 0.38  | 0.182 | 2.25E-05 | Bcell_2_spleen |
| DDX10              | 6.39E-10 | 0.57062681 | 0.295 | 0.133 | 2.26E-05 | Bcell_2_spleen |
| NUP153             | 6.42E-10 | 0.32797963 | 0.529 | 0.297 | 2.27E-05 | Bcell_2_spleen |
| COP1               | 6.50E-10 | 0.2932383  | 0.448 | 0.239 | 2.30E-05 | Bcell_2_spleen |
| FNDC3A             | 6.60E-10 | 0.24616699 | 0.583 | 0.333 | 2.34E-05 | Bcell_2_spleen |
| UGCG               | 6.63E-10 | 0.2072614  | 0.357 | 0.17  | 2.35E-05 | Bcell_2_spleen |
| EFCAB2             | 6.67E-10 | 0.1836192  | 0.556 | 0.313 | 2.36E-05 | Bcell_2_spleen |
| RPL7               | 6.68E-10 | 0.24847325 | 0.962 | 0.857 | 2.37E-05 | Bcell_2_spleen |

|                    |          |            |       |       |          |                |
|--------------------|----------|------------|-------|-------|----------|----------------|
| WBP1L              | 6.75E-10 | 0.32116804 | 0.329 | 0.155 | 2.39E-05 | Bcell_2_spleen |
| ANKRD33B           | 6.87E-10 | 0.33388533 | 0.599 | 0.356 | 2.44E-05 | Bcell_2_spleen |
| SRPK2              | 7.04E-10 | 0.26746966 | 0.701 | 0.425 | 2.50E-05 | Bcell_2_spleen |
| ENSMMUG00000063549 | 7.05E-10 | 0.28102076 | 0.271 | 0.112 | 2.50E-05 | Bcell_2_spleen |
| RSRC1              | 7.40E-10 | 0.32395609 | 0.434 | 0.225 | 2.62E-05 | Bcell_2_spleen |
| GALNT2             | 7.47E-10 | 0.39622035 | 0.32  | 0.151 | 2.65E-05 | Bcell_2_spleen |
| MRPS21             | 7.53E-10 | 0.20279054 | 0.333 | 0.149 | 2.67E-05 | Bcell_2_spleen |
| OPA1               | 7.64E-10 | 0.34019869 | 0.421 | 0.215 | 2.71E-05 | Bcell_2_spleen |
| WVOX               | 7.71E-10 | 0.45672478 | 0.339 | 0.166 | 2.73E-05 | Bcell_2_spleen |
| ENSMMUG00000060923 | 7.71E-10 | 0.2860638  | 0.67  | 0.395 | 2.73E-05 | Bcell_2_spleen |
| NSMCE2             | 8.01E-10 | 0.36694807 | 0.426 | 0.225 | 2.84E-05 | Bcell_2_spleen |
| MTIF2              | 8.14E-10 | 0.19745962 | 0.466 | 0.237 | 2.89E-05 | Bcell_2_spleen |
| EIF4H              | 8.38E-10 | 0.20427391 | 0.553 | 0.307 | 2.97E-05 | Bcell_2_spleen |
| IFNAR1             | 8.45E-10 | 0.41084295 | 0.368 | 0.18  | 2.99E-05 | Bcell_2_spleen |
| ENSMMUG00000038373 | 8.61E-10 | 0.13814814 | 0.65  | 0.366 | 3.05E-05 | Bcell_2_spleen |
| MAP2K5             | 8.62E-10 | 0.52279362 | 0.326 | 0.157 | 3.05E-05 | Bcell_2_spleen |
| FCRLA              | 8.69E-10 | 0.10493796 | 0.488 | 0.254 | 3.08E-05 | Bcell_2_spleen |
| UBQLN1             | 8.92E-10 | 0.39803345 | 0.344 | 0.166 | 3.16E-05 | Bcell_2_spleen |
| SUCO               | 8.92E-10 | 0.30896765 | 0.446 | 0.233 | 3.16E-05 | Bcell_2_spleen |
| ROCK1              | 9.43E-10 | 0.19369576 | 0.706 | 0.423 | 3.34E-05 | Bcell_2_spleen |
| RPN1               | 9.48E-10 | 0.15796405 | 0.343 | 0.16  | 3.36E-05 | Bcell_2_spleen |
| TAF15              | 9.49E-10 | 0.23336656 | 0.602 | 0.354 | 3.36E-05 | Bcell_2_spleen |
| TRAPPC8            | 9.81E-10 | 0.48454426 | 0.261 | 0.11  | 3.48E-05 | Bcell_2_spleen |
| XRCC6              | 1.01E-09 | 0.16322132 | 0.642 | 0.356 | 3.58E-05 | Bcell_2_spleen |
| KDM2A              | 1.03E-09 | 0.32889062 | 0.614 | 0.368 | 3.66E-05 | Bcell_2_spleen |
| RER1               | 1.05E-09 | 0.18548605 | 0.367 | 0.174 | 3.72E-05 | Bcell_2_spleen |
| APEX1              | 1.07E-09 | 0.25398863 | 0.48  | 0.258 | 3.78E-05 | Bcell_2_spleen |
| UHRF1BP1L          | 1.10E-09 | 0.27865849 | 0.486 | 0.272 | 3.90E-05 | Bcell_2_spleen |
| HELQ               | 1.10E-09 | 0.43893447 | 0.269 | 0.115 | 3.91E-05 | Bcell_2_spleen |
| APP                | 1.13E-09 | 0.53045272 | 0.39  | 0.209 | 4.02E-05 | Bcell_2_spleen |
| EXOC6              | 1.14E-09 | 0.55714185 | 0.437 | 0.243 | 4.02E-05 | Bcell_2_spleen |
| ATP5F1A            | 1.21E-09 | 0.13691681 | 0.622 | 0.354 | 4.30E-05 | Bcell_2_spleen |
| BPTF               | 1.23E-09 | 0.25715085 | 0.606 | 0.348 | 4.35E-05 | Bcell_2_spleen |

|                    |          |            |       |       |          |                |
|--------------------|----------|------------|-------|-------|----------|----------------|
| UQCRC2             | 1.27E-09 | 0.43346153 | 0.258 | 0.106 | 4.51E-05 | Bcell_2_spleen |
| GIGYF2             | 1.31E-09 | 0.37039789 | 0.351 | 0.174 | 4.66E-05 | Bcell_2_spleen |
| CEP192             | 1.33E-09 | 0.41059118 | 0.342 | 0.164 | 4.71E-05 | Bcell_2_spleen |
| MARCHF7            | 1.33E-09 | 0.30398004 | 0.56  | 0.315 | 4.73E-05 | Bcell_2_spleen |
| PAG1               | 1.34E-09 | 0.27140452 | 0.456 | 0.249 | 4.74E-05 | Bcell_2_spleen |
| IL4R               | 1.34E-09 | 0.71243752 | 0.27  | 0.119 | 4.76E-05 | Bcell_2_spleen |
| FBL                | 1.41E-09 | 0.30297643 | 0.349 | 0.166 | 5.00E-05 | Bcell_2_spleen |
| PABPC1             | 1.42E-09 | 0.27401098 | 0.935 | 0.73  | 5.03E-05 | Bcell_2_spleen |
| TMEM123            | 1.44E-09 | 0.22843926 | 0.508 | 0.28  | 5.09E-05 | Bcell_2_spleen |
| PNO1               | 1.45E-09 | 0.49190943 | 0.277 | 0.123 | 5.15E-05 | Bcell_2_spleen |
| PHF6               | 1.47E-09 | 0.38169646 | 0.25  | 0.102 | 5.20E-05 | Bcell_2_spleen |
| PELI1              | 1.48E-09 | 0.50058849 | 0.441 | 0.245 | 5.25E-05 | Bcell_2_spleen |
| LPP                | 1.49E-09 | 0.42986499 | 0.471 | 0.266 | 5.29E-05 | Bcell_2_spleen |
| CLTC               | 1.51E-09 | 0.33267805 | 0.36  | 0.178 | 5.34E-05 | Bcell_2_spleen |
| ACTR3              | 1.53E-09 | 0.25947506 | 0.756 | 0.46  | 5.41E-05 | Bcell_2_spleen |
| TDRD3              | 1.55E-09 | 0.43073821 | 0.352 | 0.174 | 5.49E-05 | Bcell_2_spleen |
| UAP1               | 1.56E-09 | 0.41821327 | 0.341 | 0.166 | 5.52E-05 | Bcell_2_spleen |
| MAP2K4             | 1.58E-09 | 0.30991097 | 0.318 | 0.147 | 5.61E-05 | Bcell_2_spleen |
| DOCK2              | 1.60E-09 | 0.21701128 | 0.783 | 0.483 | 5.66E-05 | Bcell_2_spleen |
| ECHDC1             | 1.63E-09 | 0.12954962 | 0.297 | 0.133 | 5.77E-05 | Bcell_2_spleen |
| GTDC1              | 1.65E-09 | 0.52587628 | 0.256 | 0.108 | 5.83E-05 | Bcell_2_spleen |
| FAM13B             | 1.72E-09 | 0.32710349 | 0.366 | 0.182 | 6.08E-05 | Bcell_2_spleen |
| PSMD4              | 1.73E-09 | 0.29002246 | 0.273 | 0.119 | 6.12E-05 | Bcell_2_spleen |
| NCOA2              | 1.73E-09 | 0.31707587 | 0.498 | 0.276 | 6.14E-05 | Bcell_2_spleen |
| RFTN1              | 1.78E-09 | 0.36611012 | 0.285 | 0.127 | 6.30E-05 | Bcell_2_spleen |
| MSH3               | 1.78E-09 | 0.44370482 | 0.338 | 0.168 | 6.31E-05 | Bcell_2_spleen |
| ATP5F1B            | 1.80E-09 | 0.25692817 | 0.266 | 0.115 | 6.36E-05 | Bcell_2_spleen |
| TNPO3              | 1.84E-09 | 0.31154792 | 0.32  | 0.147 | 6.51E-05 | Bcell_2_spleen |
| SP110              | 1.86E-09 | 0.26019745 | 0.732 | 0.44  | 6.59E-05 | Bcell_2_spleen |
| MBNL1              | 1.86E-09 | 0.32927669 | 0.95  | 0.742 | 6.60E-05 | Bcell_2_spleen |
| PNKP               | 1.90E-09 | 0.25126599 | 0.378 | 0.186 | 6.72E-05 | Bcell_2_spleen |
| ENSMMUG00000060229 | 1.96E-09 | 0.28798824 | 0.576 | 0.335 | 6.93E-05 | Bcell_2_spleen |
| SEC24B             | 1.99E-09 | 0.34617448 | 0.417 | 0.215 | 7.04E-05 | Bcell_2_spleen |



|            |          |            |       |       |            |                |
|------------|----------|------------|-------|-------|------------|----------------|
| ARID5B     | 2.07E-09 | 0.26991277 | 0.662 | 0.401 | 7.33E-05   | Bcell_2_spleen |
| WSB1       | 2.09E-09 | 0.14922301 | 0.503 | 0.27  | 7.42E-05   | Bcell_2_spleen |
| RNGTT      | 2.12E-09 | 0.19848028 | 0.513 | 0.284 | 7.52E-05   | Bcell_2_spleen |
| DHX36      | 2.20E-09 | 0.3767398  | 0.437 | 0.231 | 7.80E-05   | Bcell_2_spleen |
| PRRC2B     | 2.21E-09 | 0.33877507 | 0.436 | 0.227 | 7.82E-05   | Bcell_2_spleen |
| RMDN1      | 2.29E-09 | 0.51689209 | 0.254 | 0.108 | 8.13E-05   | Bcell_2_spleen |
| PPP1R10    | 2.30E-09 | 0.32841231 | 0.485 | 0.27  | 8.14E-05   | Bcell_2_spleen |
| GALNT7     | 2.46E-09 | 0.36849391 | 0.341 | 0.168 | 8.71E-05   | Bcell_2_spleen |
| RBM33      | 2.54E-09 | 0.31196709 | 0.425 | 0.221 | 9.00E-05   | Bcell_2_spleen |
| HERC2      | 2.55E-09 | 0.42281279 | 0.386 | 0.198 | 9.03E-05   | Bcell_2_spleen |
| ANKRD44    | 2.58E-09 | 0.19514777 | 0.901 | 0.62  | 9.15E-05   | Bcell_2_spleen |
| NAA50      | 2.63E-09 | 0.19357907 | 0.392 | 0.196 | 9.34E-05   | Bcell_2_spleen |
| RAB6A      | 2.70E-09 | 0.36082144 | 0.277 | 0.123 | 9.56E-05   | Bcell_2_spleen |
| GATAD2B    | 2.74E-09 | 0.21952699 | 0.477 | 0.258 | 9.69E-05   | Bcell_2_spleen |
| RSF1       | 2.74E-09 | 0.23012006 | 0.535 | 0.301 | 9.72E-05   | Bcell_2_spleen |
| DIAPH1     | 2.77E-09 | 0.29750205 | 0.422 | 0.225 | 9.81E-05   | Bcell_2_spleen |
| C3H21orf91 | 2.82E-09 | 0.49130478 | 0.295 | 0.137 | 9.98E-05   | Bcell_2_spleen |
| CHMP5      | 2.83E-09 | 0.20504592 | 0.252 | 0.104 | 0.0001002  | Bcell_2_spleen |
| CTDNEP1    | 2.86E-09 | 0.4117552  | 0.253 | 0.106 | 0.00010134 | Bcell_2_spleen |
| MILR1      | 2.86E-09 | 0.3544805  | 0.342 | 0.164 | 0.00010145 | Bcell_2_spleen |
| UIMC1      | 2.93E-09 | 0.35299468 | 0.292 | 0.133 | 0.00010379 | Bcell_2_spleen |
| SAFB2      | 2.94E-09 | 0.27197153 | 0.359 | 0.176 | 0.00010416 | Bcell_2_spleen |
| SOD1       | 2.94E-09 | 0.27848825 | 0.473 | 0.256 | 0.00010426 | Bcell_2_spleen |
| CCT3       | 2.96E-09 | 0.15318502 | 0.601 | 0.35  | 0.00010497 | Bcell_2_spleen |
| RCOR1      | 3.05E-09 | 0.49391014 | 0.305 | 0.143 | 0.00010797 | Bcell_2_spleen |
| SH3KBP1    | 3.09E-09 | 0.21501945 | 0.572 | 0.323 | 0.00010934 | Bcell_2_spleen |
| FBXO11     | 3.12E-09 | 0.22302748 | 0.545 | 0.305 | 0.00011053 | Bcell_2_spleen |
| CEMIP2     | 3.12E-09 | 0.6945297  | 0.257 | 0.115 | 0.00011072 | Bcell_2_spleen |
| INPP5D     | 3.13E-09 | 0.22213446 | 0.651 | 0.387 | 0.00011075 | Bcell_2_spleen |
| ASXL1      | 3.13E-09 | 0.6586183  | 0.271 | 0.123 | 0.00011078 | Bcell_2_spleen |
| TMCO1      | 3.13E-09 | 0.44124804 | 0.304 | 0.141 | 0.00011099 | Bcell_2_spleen |
| NT5C3A     | 3.21E-09 | 0.23824701 | 0.444 | 0.235 | 0.00011379 | Bcell_2_spleen |
| ATAD2B     | 3.30E-09 | 0.29119072 | 0.495 | 0.27  | 0.00011698 | Bcell_2_spleen |

|            |          |            |       |       |            |                |
|------------|----------|------------|-------|-------|------------|----------------|
| LRCH3      | 3.31E-09 | 0.29206214 | 0.513 | 0.284 | 0.00011733 | Bcell_2_spleen |
| UHRF2      | 3.36E-09 | 0.27360156 | 0.511 | 0.284 | 0.00011896 | Bcell_2_spleen |
| TRIP12     | 3.37E-09 | 0.12355088 | 0.487 | 0.26  | 0.00011942 | Bcell_2_spleen |
| ANKIB1     | 3.45E-09 | 0.22188948 | 0.392 | 0.204 | 0.00012239 | Bcell_2_spleen |
| PHF3       | 3.47E-09 | 0.14309952 | 0.459 | 0.247 | 0.00012295 | Bcell_2_spleen |
| SINHCAF    | 3.47E-09 | 0.47675337 | 0.387 | 0.204 | 0.00012295 | Bcell_2_spleen |
| CAMKMT     | 3.50E-09 | 0.29159762 | 0.417 | 0.225 | 0.00012387 | Bcell_2_spleen |
| ARMH3      | 3.51E-09 | 0.3120167  | 0.315 | 0.149 | 0.00012442 | Bcell_2_spleen |
| MTCH2      | 3.56E-09 | 0.15825705 | 0.475 | 0.256 | 0.00012606 | Bcell_2_spleen |
| MACO1      | 3.56E-09 | 0.32578369 | 0.42  | 0.221 | 0.0001261  | Bcell_2_spleen |
| EIF4G2     | 3.66E-09 | 0.26736305 | 0.699 | 0.419 | 0.00012971 | Bcell_2_spleen |
| PALM2AKAP2 | 3.69E-09 | 0.27928285 | 0.488 | 0.28  | 0.00013088 | Bcell_2_spleen |
| DIAPH2     | 3.82E-09 | 0.3265351  | 0.444 | 0.237 | 0.00013548 | Bcell_2_spleen |
| KANSL1     | 3.89E-09 | 0.1105678  | 0.561 | 0.317 | 0.00013794 | Bcell_2_spleen |
| OLA1       | 3.99E-09 | 0.11542875 | 0.52  | 0.284 | 0.00014151 | Bcell_2_spleen |
| EIF4B      | 4.00E-09 | 0.14602557 | 0.538 | 0.299 | 0.00014188 | Bcell_2_spleen |
| BCAS3      | 4.07E-09 | 0.2499437  | 0.491 | 0.282 | 0.00014424 | Bcell_2_spleen |
| LTN1       | 4.35E-09 | 0.46128377 | 0.28  | 0.127 | 0.00015412 | Bcell_2_spleen |
| CDK12      | 4.38E-09 | 0.33217632 | 0.32  | 0.155 | 0.00015534 | Bcell_2_spleen |
| EEA1       | 4.39E-09 | 0.30611168 | 0.313 | 0.147 | 0.00015559 | Bcell_2_spleen |
| CHCHD3     | 4.40E-09 | 0.20039047 | 0.425 | 0.221 | 0.00015583 | Bcell_2_spleen |
| CLK1       | 4.48E-09 | 0.22878426 | 0.615 | 0.354 | 0.00015877 | Bcell_2_spleen |
| DDX24      | 4.63E-09 | 0.10641423 | 0.504 | 0.274 | 0.00016417 | Bcell_2_spleen |
| CAPZA1     | 4.70E-09 | 0.1938942  | 0.704 | 0.423 | 0.00016662 | Bcell_2_spleen |
| SPOP       | 4.81E-09 | 0.29129153 | 0.341 | 0.168 | 0.00017026 | Bcell_2_spleen |
| LMTK2      | 4.91E-09 | 0.64481639 | 0.261 | 0.117 | 0.00017407 | Bcell_2_spleen |
| CAT        | 5.07E-09 | 0.21273301 | 0.47  | 0.254 | 0.0001795  | Bcell_2_spleen |
| PRPF38B    | 5.10E-09 | 0.3220362  | 0.46  | 0.252 | 0.00018076 | Bcell_2_spleen |
| SYNE1      | 5.12E-09 | 0.47073668 | 0.271 | 0.121 | 0.00018142 | Bcell_2_spleen |
| STRN3      | 5.14E-09 | 0.26873889 | 0.349 | 0.174 | 0.00018225 | Bcell_2_spleen |
| SNX25      | 5.20E-09 | 0.23292667 | 0.547 | 0.317 | 0.00018423 | Bcell_2_spleen |
| ANKRD28    | 5.26E-09 | 0.25514612 | 0.475 | 0.26  | 0.00018637 | Bcell_2_spleen |
| KRIT1      | 5.33E-09 | 0.28906688 | 0.284 | 0.129 | 0.00018879 | Bcell_2_spleen |

|                    |          |            |       |       |            |                |
|--------------------|----------|------------|-------|-------|------------|----------------|
| TRANK1             | 5.33E-09 | 0.36173472 | 0.3   | 0.137 | 0.00018882 | Bcell_2_spleen |
| MLLT10             | 5.35E-09 | 0.38811561 | 0.461 | 0.264 | 0.00018958 | Bcell_2_spleen |
| RNF34              | 5.52E-09 | 0.47127914 | 0.257 | 0.115 | 0.00019563 | Bcell_2_spleen |
| AFTPH              | 5.59E-09 | 0.1933968  | 0.686 | 0.407 | 0.00019815 | Bcell_2_spleen |
| RGCC               | 5.64E-09 | 0.45919735 | 0.321 | 0.162 | 0.00019991 | Bcell_2_spleen |
| ATXN2              | 5.76E-09 | 0.35872037 | 0.398 | 0.209 | 0.00020406 | Bcell_2_spleen |
| TBC1D1             | 5.97E-09 | 0.31310133 | 0.722 | 0.446 | 0.00021151 | Bcell_2_spleen |
| PCCA               | 6.01E-09 | 0.41866193 | 0.428 | 0.233 | 0.00021297 | Bcell_2_spleen |
| SMARCA2            | 6.07E-09 | 0.29719282 | 0.425 | 0.229 | 0.00021498 | Bcell_2_spleen |
| PAN3               | 6.21E-09 | 0.19807458 | 0.69  | 0.411 | 0.00022017 | Bcell_2_spleen |
| LSM14A             | 6.49E-09 | 0.36273191 | 0.517 | 0.297 | 0.00022989 | Bcell_2_spleen |
| LCOR               | 6.55E-09 | 0.33482491 | 0.583 | 0.337 | 0.00023193 | Bcell_2_spleen |
| EVI2B              | 6.61E-09 | 0.2202607  | 0.626 | 0.374 | 0.0002343  | Bcell_2_spleen |
| NUP210             | 6.67E-09 | 0.20276465 | 0.33  | 0.162 | 0.00023627 | Bcell_2_spleen |
| RASGEF1B           | 7.04E-09 | 0.29154336 | 0.721 | 0.462 | 0.00024945 | Bcell_2_spleen |
| HNRNPL             | 7.06E-09 | 0.15309184 | 0.553 | 0.313 | 0.0002502  | Bcell_2_spleen |
| NPTN               | 7.10E-09 | 0.6720899  | 0.272 | 0.127 | 0.00025157 | Bcell_2_spleen |
| UBR4               | 7.12E-09 | 0.42745871 | 0.386 | 0.202 | 0.0002522  | Bcell_2_spleen |
| ZFAND6             | 7.23E-09 | 0.17983335 | 0.683 | 0.415 | 0.00025622 | Bcell_2_spleen |
| SNX14              | 7.44E-09 | 0.40043969 | 0.331 | 0.164 | 0.00026362 | Bcell_2_spleen |
| INO80              | 7.54E-09 | 0.24800399 | 0.273 | 0.125 | 0.00026727 | Bcell_2_spleen |
| HSPA9              | 7.55E-09 | 0.21821344 | 0.491 | 0.266 | 0.00026761 | Bcell_2_spleen |
| MICU1              | 7.60E-09 | 0.1764272  | 0.275 | 0.123 | 0.00026939 | Bcell_2_spleen |
| CSK                | 7.72E-09 | 0.14567294 | 0.514 | 0.284 | 0.00027364 | Bcell_2_spleen |
| IPMK               | 7.73E-09 | 0.15948691 | 0.296 | 0.137 | 0.00027399 | Bcell_2_spleen |
| PRCP               | 7.88E-09 | 0.37198457 | 0.257 | 0.115 | 0.00027928 | Bcell_2_spleen |
| ENSMMUG00000006803 | 7.94E-09 | 0.15960366 | 0.402 | 0.213 | 0.00028132 | Bcell_2_spleen |
| BMT2               | 7.99E-09 | 0.23441033 | 0.987 | 0.904 | 0.00028306 | Bcell_2_spleen |
| RC3H1              | 7.99E-09 | 0.29059579 | 0.265 | 0.117 | 0.00028317 | Bcell_2_spleen |
| AKNA               | 8.46E-09 | 0.1097266  | 0.347 | 0.172 | 0.00029989 | Bcell_2_spleen |
| ATP9B              | 8.96E-09 | 0.26733147 | 0.442 | 0.239 | 0.00031737 | Bcell_2_spleen |
| PRKCA              | 9.02E-09 | 0.39290807 | 0.412 | 0.223 | 0.0003195  | Bcell_2_spleen |
| CLIC4              | 9.11E-09 | 0.50148657 | 0.323 | 0.162 | 0.00032263 | Bcell_2_spleen |

|          |          |            |       |       |            |                |
|----------|----------|------------|-------|-------|------------|----------------|
| NADSYN1  | 9.20E-09 | 0.22170048 | 0.367 | 0.188 | 0.00032592 | Bcell_2_spleen |
| MAN1A2   | 9.49E-09 | 0.23271459 | 0.485 | 0.276 | 0.00033632 | Bcell_2_spleen |
| UBR3     | 9.64E-09 | 0.49863082 | 0.364 | 0.194 | 0.00034152 | Bcell_2_spleen |
| ERP44    | 9.65E-09 | 0.301456   | 0.641 | 0.403 | 0.00034187 | Bcell_2_spleen |
| FOS      | 9.94E-09 | 0.2467947  | 0.972 | 0.822 | 0.00035237 | Bcell_2_spleen |
| CAMK1D   | 1.05E-08 | 0.19468146 | 0.545 | 0.317 | 0.00037282 | Bcell_2_spleen |
| AARS1    | 1.06E-08 | 0.22522279 | 0.452 | 0.245 | 0.00037413 | Bcell_2_spleen |
| SP3      | 1.06E-08 | 0.21911175 | 0.386 | 0.202 | 0.00037638 | Bcell_2_spleen |
| SAMSN1   | 1.08E-08 | 0.34563511 | 0.251 | 0.11  | 0.00038092 | Bcell_2_spleen |
| SYAP1    | 1.08E-08 | 0.18448103 | 0.366 | 0.188 | 0.00038163 | Bcell_2_spleen |
| HECTD1   | 1.08E-08 | 0.4244805  | 0.317 | 0.157 | 0.00038319 | Bcell_2_spleen |
| ZMYND11  | 1.09E-08 | 0.30040819 | 0.383 | 0.204 | 0.00038662 | Bcell_2_spleen |
| CUL3     | 1.10E-08 | 0.23577438 | 0.555 | 0.325 | 0.00038877 | Bcell_2_spleen |
| AP1B1    | 1.11E-08 | 0.16657481 | 0.317 | 0.153 | 0.00039202 | Bcell_2_spleen |
| M6PR     | 1.14E-08 | 0.24299171 | 0.349 | 0.18  | 0.00040508 | Bcell_2_spleen |
| CRYBG1   | 1.16E-08 | 0.48413631 | 0.324 | 0.164 | 0.00040973 | Bcell_2_spleen |
| CWC27    | 1.16E-08 | 0.39941797 | 0.32  | 0.157 | 0.00041081 | Bcell_2_spleen |
| ZFAND3   | 1.21E-08 | 0.26489216 | 0.695 | 0.427 | 0.00042696 | Bcell_2_spleen |
| SEC63    | 1.22E-08 | 0.34589355 | 0.428 | 0.233 | 0.00043165 | Bcell_2_spleen |
| UBE2H    | 1.22E-08 | 0.32457274 | 0.547 | 0.317 | 0.00043225 | Bcell_2_spleen |
| ARHGAP30 | 1.24E-08 | 0.14132164 | 0.402 | 0.211 | 0.00043926 | Bcell_2_spleen |
| XRN2     | 1.26E-08 | 0.17668044 | 0.585 | 0.342 | 0.00044645 | Bcell_2_spleen |
| ARL8B    | 1.28E-08 | 0.43395406 | 0.321 | 0.16  | 0.00045183 | Bcell_2_spleen |
| MTHFD1L  | 1.29E-08 | 0.39003588 | 0.412 | 0.225 | 0.00045614 | Bcell_2_spleen |
| TBC1D15  | 1.29E-08 | 0.22308428 | 0.352 | 0.18  | 0.00045743 | Bcell_2_spleen |
| ACBD3    | 1.31E-08 | 0.17311372 | 0.274 | 0.129 | 0.00046557 | Bcell_2_spleen |
| CRYL1    | 1.32E-08 | 0.4592661  | 0.329 | 0.166 | 0.00046795 | Bcell_2_spleen |
| SLC12A6  | 1.33E-08 | 0.21455462 | 0.458 | 0.258 | 0.00047111 | Bcell_2_spleen |
| OXR1     | 1.34E-08 | 0.29613088 | 0.583 | 0.348 | 0.00047404 | Bcell_2_spleen |
| RAB2A    | 1.38E-08 | 0.15703934 | 0.581 | 0.335 | 0.00048721 | Bcell_2_spleen |
| EIF3I    | 1.38E-08 | 0.11677958 | 0.457 | 0.247 | 0.00048827 | Bcell_2_spleen |
| DENND6A  | 1.38E-08 | 0.55629173 | 0.333 | 0.172 | 0.00048865 | Bcell_2_spleen |
| AHI1     | 1.38E-08 | 0.27572226 | 0.374 | 0.192 | 0.00048895 | Bcell_2_spleen |

|         |          |            |       |       |            |                |
|---------|----------|------------|-------|-------|------------|----------------|
| ARL15   | 1.38E-08 | 0.2840242  | 0.603 | 0.374 | 0.00049005 | Bcell_2_spleen |
| PPP1R8  | 1.41E-08 | 0.30422056 | 0.359 | 0.184 | 0.00049961 | Bcell_2_spleen |
| ANXA11  | 1.51E-08 | 0.23048859 | 0.275 | 0.125 | 0.00053633 | Bcell_2_spleen |
| PTPRA   | 1.54E-08 | 0.14744723 | 0.445 | 0.241 | 0.00054516 | Bcell_2_spleen |
| NONO    | 1.60E-08 | 0.10337896 | 0.485 | 0.266 | 0.00056661 | Bcell_2_spleen |
| TNKS    | 1.62E-08 | 0.34312905 | 0.436 | 0.239 | 0.00057228 | Bcell_2_spleen |
| CHD4    | 1.65E-08 | 0.23259122 | 0.532 | 0.303 | 0.00058296 | Bcell_2_spleen |
| UBE2W   | 1.67E-08 | 0.14239824 | 0.342 | 0.17  | 0.00059082 | Bcell_2_spleen |
| GOLPH3  | 1.67E-08 | 0.13262125 | 0.437 | 0.237 | 0.00059163 | Bcell_2_spleen |
| ADGRE5  | 1.68E-08 | 0.31143873 | 0.52  | 0.315 | 0.00059491 | Bcell_2_spleen |
| RASSF2  | 1.74E-08 | 0.38040303 | 0.261 | 0.119 | 0.00061809 | Bcell_2_spleen |
| SF3B3   | 1.78E-08 | 0.36669206 | 0.281 | 0.131 | 0.00063111 | Bcell_2_spleen |
| AFF3    | 1.78E-08 | 0.24478503 | 0.938 | 0.681 | 0.00063139 | Bcell_2_spleen |
| ESCO1   | 1.82E-08 | 0.16301322 | 0.485 | 0.27  | 0.00064516 | Bcell_2_spleen |
| DPH6    | 1.84E-08 | 0.36075053 | 0.309 | 0.155 | 0.00065145 | Bcell_2_spleen |
| CUL5    | 1.88E-08 | 0.10258576 | 0.554 | 0.313 | 0.00066446 | Bcell_2_spleen |
| CBLB    | 1.92E-08 | 0.17858074 | 0.704 | 0.448 | 0.00068168 | Bcell_2_spleen |
| SMARCA4 | 1.95E-08 | 0.37176169 | 0.326 | 0.164 | 0.00069135 | Bcell_2_spleen |
| SDCBP   | 1.96E-08 | 0.15111114 | 0.324 | 0.16  | 0.00069286 | Bcell_2_spleen |
| APBB2   | 1.97E-08 | 0.45895186 | 0.359 | 0.196 | 0.00069718 | Bcell_2_spleen |
| PBX3    | 1.98E-08 | 0.57223044 | 0.279 | 0.137 | 0.00070247 | Bcell_2_spleen |
| CELF1   | 1.98E-08 | 0.1511542  | 0.519 | 0.292 | 0.00070258 | Bcell_2_spleen |
| ETFA    | 2.04E-08 | 0.1677786  | 0.257 | 0.115 | 0.00072252 | Bcell_2_spleen |
| LANCL2  | 2.08E-08 | 0.37592954 | 0.294 | 0.145 | 0.00073751 | Bcell_2_spleen |
| ATF6    | 2.11E-08 | 0.16025981 | 0.471 | 0.262 | 0.0007475  | Bcell_2_spleen |
| PIK3CD  | 2.14E-08 | 0.29188127 | 0.304 | 0.145 | 0.0007567  | Bcell_2_spleen |
| ERC1    | 2.15E-08 | 0.39877586 | 0.351 | 0.184 | 0.00076202 | Bcell_2_spleen |
| APC     | 2.15E-08 | 0.27209273 | 0.331 | 0.17  | 0.00076293 | Bcell_2_spleen |
| ZZZ3    | 2.16E-08 | 0.22388052 | 0.362 | 0.19  | 0.00076502 | Bcell_2_spleen |
| PACS1   | 2.22E-08 | 0.31866378 | 0.442 | 0.249 | 0.00078504 | Bcell_2_spleen |
| CAPN7   | 2.22E-08 | 0.31732284 | 0.261 | 0.123 | 0.00078765 | Bcell_2_spleen |
| R3HDM1  | 2.23E-08 | 0.43051073 | 0.262 | 0.123 | 0.00078879 | Bcell_2_spleen |
| LRRFIP2 | 2.25E-08 | 0.37746691 | 0.324 | 0.162 | 0.00079795 | Bcell_2_spleen |

|          |          |            |       |       |            |                |
|----------|----------|------------|-------|-------|------------|----------------|
| DDIT3    | 2.27E-08 | 0.21017956 | 0.355 | 0.18  | 0.00080411 | Bcell_2_spleen |
| CRTC3    | 2.52E-08 | 0.15984795 | 0.466 | 0.264 | 0.00089126 | Bcell_2_spleen |
| SCPEP1   | 2.55E-08 | 0.25785754 | 0.38  | 0.2   | 0.00090398 | Bcell_2_spleen |
| CNOT6L   | 2.55E-08 | 0.16180659 | 0.597 | 0.368 | 0.00090489 | Bcell_2_spleen |
| NR3C1    | 2.58E-08 | 0.24235159 | 0.63  | 0.382 | 0.00091244 | Bcell_2_spleen |
| PPP4R3A  | 2.60E-08 | 0.35157729 | 0.309 | 0.151 | 0.00092024 | Bcell_2_spleen |
| UBE3A    | 2.64E-08 | 0.20424603 | 0.38  | 0.196 | 0.00093711 | Bcell_2_spleen |
| VPS41    | 2.77E-08 | 0.20881401 | 0.35  | 0.182 | 0.00098301 | Bcell_2_spleen |
| CITED1   | 2.80E-08 | 0.52976005 | 0.337 | 0.184 | 0.00099035 | Bcell_2_spleen |
| PSMD7    | 2.90E-08 | 0.15498609 | 0.307 | 0.147 | 0.00102646 | Bcell_2_spleen |
| ZNF131   | 2.91E-08 | 0.32123685 | 0.291 | 0.141 | 0.00103129 | Bcell_2_spleen |
| TLK1     | 3.05E-08 | 0.17464211 | 0.489 | 0.28  | 0.0010795  | Bcell_2_spleen |
| CRLF3    | 3.10E-08 | 0.18462775 | 0.271 | 0.125 | 0.00109711 | Bcell_2_spleen |
| TMEM167A | 3.15E-08 | 0.10736335 | 0.327 | 0.162 | 0.00111507 | Bcell_2_spleen |
| ZEB2     | 3.27E-08 | 0.25651373 | 0.704 | 0.45  | 0.00115687 | Bcell_2_spleen |
| TIA1     | 3.38E-08 | 0.24222187 | 0.321 | 0.164 | 0.0011967  | Bcell_2_spleen |
| MTR      | 3.59E-08 | 0.45370313 | 0.271 | 0.129 | 0.00127138 | Bcell_2_spleen |
| MNAT1    | 3.61E-08 | 0.26862073 | 0.338 | 0.174 | 0.00128022 | Bcell_2_spleen |
| XKRX     | 3.65E-08 | 0.59118432 | 0.256 | 0.121 | 0.00129407 | Bcell_2_spleen |
| ARFGEF2  | 3.69E-08 | 0.28749121 | 0.311 | 0.16  | 0.00130619 | Bcell_2_spleen |
| HNRNPF   | 3.70E-08 | 0.17920593 | 0.7   | 0.423 | 0.00131134 | Bcell_2_spleen |
| RELB     | 3.76E-08 | 0.36157598 | 0.48  | 0.274 | 0.00133165 | Bcell_2_spleen |
| SLTM     | 3.81E-08 | 0.22780308 | 0.554 | 0.327 | 0.00135155 | Bcell_2_spleen |
| USP8     | 3.85E-08 | 0.35776555 | 0.35  | 0.184 | 0.00136263 | Bcell_2_spleen |
| GAPVD1   | 3.87E-08 | 0.42150935 | 0.342 | 0.18  | 0.0013712  | Bcell_2_spleen |
| STIM1    | 3.93E-08 | 0.31673186 | 0.295 | 0.145 | 0.00139357 | Bcell_2_spleen |
| SMC1A    | 4.03E-08 | 0.31157235 | 0.302 | 0.149 | 0.00142902 | Bcell_2_spleen |
| HDAC2    | 4.04E-08 | 0.22513057 | 0.251 | 0.115 | 0.00143069 | Bcell_2_spleen |
| CAND1    | 4.06E-08 | 0.17493275 | 0.43  | 0.233 | 0.00144017 | Bcell_2_spleen |
| SIPA1L1  | 4.35E-08 | 0.3564656  | 0.3   | 0.149 | 0.00154042 | Bcell_2_spleen |
| TRAM1    | 4.45E-08 | 0.12077339 | 0.423 | 0.225 | 0.00157728 | Bcell_2_spleen |
| LPGAT1   | 4.47E-08 | 0.21819877 | 0.375 | 0.2   | 0.00158467 | Bcell_2_spleen |
| SGMS1    | 4.54E-08 | 0.42920607 | 0.252 | 0.115 | 0.00160961 | Bcell_2_spleen |

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|---------------------|----------|------------|-------|-------|------------|----------------|
| HVCN1               | 4.56E-08 | 0.26425409 | 0.661 | 0.407 | 0.0016145  | Bcell_2_spleen |
| CFLAR               | 4.63E-08 | 0.25835868 | 0.364 | 0.192 | 0.00163888 | Bcell_2_spleen |
| ENSMMUG000000058919 | 4.69E-08 | 0.17634212 | 0.392 | 0.204 | 0.00166104 | Bcell_2_spleen |
| GON4L               | 4.71E-08 | 0.14318922 | 0.279 | 0.131 | 0.00166837 | Bcell_2_spleen |
| PVRIG               | 4.74E-08 | 0.16020483 | 0.313 | 0.155 | 0.00167827 | Bcell_2_spleen |
| PPIG                | 4.80E-08 | 0.150475   | 0.583 | 0.35  | 0.00170169 | Bcell_2_spleen |
| MICU2               | 4.89E-08 | 0.36592885 | 0.456 | 0.264 | 0.00173435 | Bcell_2_spleen |
| FTO                 | 4.95E-08 | 0.33360821 | 0.297 | 0.151 | 0.00175555 | Bcell_2_spleen |
| H1-3                | 5.11E-08 | 0.5233008  | 0.303 | 0.157 | 0.00181019 | Bcell_2_spleen |
| RAC1                | 5.21E-08 | 0.35413032 | 0.283 | 0.137 | 0.00184658 | Bcell_2_spleen |
| ENSMMUG000000017297 | 5.27E-08 | 0.2387649  | 0.314 | 0.157 | 0.00186593 | Bcell_2_spleen |
| PPP1R15A            | 5.29E-08 | 0.25696339 | 0.602 | 0.372 | 0.0018746  | Bcell_2_spleen |
| ENSMMUG000000058755 | 5.38E-08 | 0.18254166 | 0.984 | 0.957 | 0.00190746 | Bcell_2_spleen |
| SECISBP2            | 5.40E-08 | 0.1908587  | 0.407 | 0.223 | 0.00191183 | Bcell_2_spleen |
| CS                  | 5.55E-08 | 0.16328193 | 0.429 | 0.235 | 0.00196656 | Bcell_2_spleen |
| NRROS               | 5.64E-08 | 0.26398914 | 0.392 | 0.209 | 0.00199801 | Bcell_2_spleen |
| ENSMMUG000000008346 | 5.66E-08 | 0.19384844 | 0.404 | 0.215 | 0.00200719 | Bcell_2_spleen |
| UBE3C               | 5.75E-08 | 0.22291556 | 0.37  | 0.2   | 0.00203821 | Bcell_2_spleen |
| FYTTD1              | 5.83E-08 | 0.24119245 | 0.266 | 0.125 | 0.00206653 | Bcell_2_spleen |
| TACC1               | 5.87E-08 | 0.11445472 | 0.559 | 0.319 | 0.00208161 | Bcell_2_spleen |
| ENSMMUG000000005880 | 5.92E-08 | 0.15604493 | 0.362 | 0.188 | 0.00209722 | Bcell_2_spleen |
| LONP2               | 5.96E-08 | 0.20937224 | 0.376 | 0.202 | 0.00211336 | Bcell_2_spleen |
| RFX7                | 5.97E-08 | 0.45946006 | 0.271 | 0.133 | 0.00211536 | Bcell_2_spleen |
| CDK6                | 6.02E-08 | 0.2380816  | 0.329 | 0.172 | 0.00213453 | Bcell_2_spleen |
| REL                 | 6.19E-08 | 0.26027196 | 0.887 | 0.613 | 0.0021928  | Bcell_2_spleen |
| SIK2                | 6.29E-08 | 0.2346009  | 0.259 | 0.125 | 0.00222889 | Bcell_2_spleen |
| SCAF8               | 6.32E-08 | 0.22020494 | 0.587 | 0.356 | 0.00224049 | Bcell_2_spleen |
| ZBTB20              | 6.42E-08 | 0.26753236 | 0.611 | 0.378 | 0.00227385 | Bcell_2_spleen |
| AGTPBP1             | 6.54E-08 | 0.2160586  | 0.325 | 0.17  | 0.00231814 | Bcell_2_spleen |
| APPL1               | 6.61E-08 | 0.19056651 | 0.418 | 0.233 | 0.00234339 | Bcell_2_spleen |
| PHF20               | 6.63E-08 | 0.1418077  | 0.556 | 0.319 | 0.00234851 | Bcell_2_spleen |
| DCAF5               | 6.68E-08 | 0.22931816 | 0.312 | 0.155 | 0.00236758 | Bcell_2_spleen |
| RPL4                | 6.80E-08 | 0.21146277 | 0.956 | 0.826 | 0.00241062 | Bcell_2_spleen |

|                     |          |            |       |       |            |                |
|---------------------|----------|------------|-------|-------|------------|----------------|
| CALU                | 6.86E-08 | 0.41083409 | 0.259 | 0.121 | 0.00243152 | Bcell_2_spleen |
| MTREX               | 6.89E-08 | 0.17491764 | 0.702 | 0.425 | 0.00244261 | Bcell_2_spleen |
| SASH3               | 6.93E-08 | 0.2398991  | 0.34  | 0.176 | 0.00245616 | Bcell_2_spleen |
| GNL3                | 6.95E-08 | 0.36777441 | 0.251 | 0.117 | 0.00246365 | Bcell_2_spleen |
| DOCK11              | 6.97E-08 | 0.18757167 | 0.63  | 0.38  | 0.00246909 | Bcell_2_spleen |
| ZBTB1               | 7.09E-08 | 0.38610352 | 0.324 | 0.168 | 0.00251225 | Bcell_2_spleen |
| BTLA                | 7.14E-08 | 0.38391545 | 0.293 | 0.145 | 0.00253157 | Bcell_2_spleen |
| VGLL4               | 7.20E-08 | 0.52842073 | 0.252 | 0.121 | 0.00255139 | Bcell_2_spleen |
| NUP98               | 7.20E-08 | 0.14950772 | 0.552 | 0.317 | 0.00255214 | Bcell_2_spleen |
| TBL1XR1             | 7.26E-08 | 0.30011811 | 0.656 | 0.409 | 0.00257374 | Bcell_2_spleen |
| ETF1                | 7.55E-08 | 0.21609837 | 0.492 | 0.286 | 0.00267345 | Bcell_2_spleen |
| POLR3GL             | 7.76E-08 | 0.17942183 | 0.359 | 0.19  | 0.00274899 | Bcell_2_spleen |
| KHDRBS1             | 7.99E-08 | 0.2257821  | 0.355 | 0.184 | 0.00283063 | Bcell_2_spleen |
| SPEN                | 8.19E-08 | 0.24588396 | 0.377 | 0.204 | 0.00290045 | Bcell_2_spleen |
| ACTR2               | 8.37E-08 | 0.1454129  | 0.89  | 0.564 | 0.00296585 | Bcell_2_spleen |
| RAB14               | 8.59E-08 | 0.20793355 | 0.35  | 0.182 | 0.00304504 | Bcell_2_spleen |
| KDM2B               | 8.63E-08 | 0.22399642 | 0.422 | 0.235 | 0.00305888 | Bcell_2_spleen |
| DCAF6               | 8.75E-08 | 0.11051414 | 0.287 | 0.139 | 0.00310158 | Bcell_2_spleen |
| RGS9                | 9.17E-08 | 0.14154815 | 0.301 | 0.149 | 0.0032493  | Bcell_2_spleen |
| EPB41L2             | 9.66E-08 | 0.2025696  | 0.401 | 0.221 | 0.00342152 | Bcell_2_spleen |
| MKLN1               | 9.73E-08 | 0.23064375 | 0.548 | 0.325 | 0.00344799 | Bcell_2_spleen |
| NR1H2               | 9.86E-08 | 0.15248994 | 0.256 | 0.121 | 0.00349255 | Bcell_2_spleen |
| VPS13C              | 1.04E-07 | 0.15234836 | 0.432 | 0.245 | 0.00369983 | Bcell_2_spleen |
| ENSMMUG00000019882  | 1.05E-07 | 0.23721244 | 0.354 | 0.186 | 0.00372999 | Bcell_2_spleen |
| KPNA1               | 1.05E-07 | 0.34540307 | 0.292 | 0.147 | 0.00373137 | Bcell_2_spleen |
| CD38                | 1.10E-07 | 0.13595991 | 0.697 | 0.438 | 0.00388146 | Bcell_2_spleen |
| CBX3                | 1.11E-07 | 0.13464346 | 0.506 | 0.297 | 0.0039186  | Bcell_2_spleen |
| RB1                 | 1.12E-07 | 0.31683667 | 0.3   | 0.153 | 0.00396046 | Bcell_2_spleen |
| ENSMMUG000000061913 | 1.16E-07 | 0.11282222 | 0.64  | 0.399 | 0.00411053 | Bcell_2_spleen |
| SIPA1L3             | 1.17E-07 | 0.19087173 | 0.367 | 0.198 | 0.00414179 | Bcell_2_spleen |
| P4HA1               | 1.18E-07 | 0.14133171 | 0.326 | 0.168 | 0.00419276 | Bcell_2_spleen |
| RNF38               | 1.18E-07 | 0.23667479 | 0.492 | 0.284 | 0.00419551 | Bcell_2_spleen |
| C1GALT1             | 1.21E-07 | 0.19696494 | 0.337 | 0.182 | 0.0042953  | Bcell_2_spleen |



|                    |          |            |       |       |            |                |
|--------------------|----------|------------|-------|-------|------------|----------------|
| SUPT3H             | 1.24E-07 | 0.24781318 | 0.4   | 0.223 | 0.00440985 | Bcell_2_spleen |
| PPM1B              | 1.27E-07 | 0.17338927 | 0.327 | 0.176 | 0.0045092  | Bcell_2_spleen |
| STX17              | 1.28E-07 | 0.23982966 | 0.266 | 0.131 | 0.00454964 | Bcell_2_spleen |
| WDR74              | 1.29E-07 | 0.24493104 | 0.378 | 0.207 | 0.00455446 | Bcell_2_spleen |
| SMAD3              | 1.29E-07 | 0.42243558 | 0.322 | 0.168 | 0.00457115 | Bcell_2_spleen |
| PHIP               | 1.29E-07 | 0.15964106 | 0.593 | 0.358 | 0.0045807  | Bcell_2_spleen |
| RBBP6              | 1.31E-07 | 0.32093432 | 0.341 | 0.186 | 0.00465891 | Bcell_2_spleen |
| PCBP1              | 1.35E-07 | 0.1482319  | 0.491 | 0.278 | 0.00476897 | Bcell_2_spleen |
| NASP               | 1.42E-07 | 0.10247584 | 0.483 | 0.274 | 0.00504813 | Bcell_2_spleen |
| SMC4               | 1.44E-07 | 0.1094571  | 0.488 | 0.278 | 0.00511002 | Bcell_2_spleen |
| TMEM38B            | 1.44E-07 | 0.34669732 | 0.256 | 0.123 | 0.00511541 | Bcell_2_spleen |
| ENSMMUG00000042157 | 1.48E-07 | 0.33718407 | 0.309 | 0.16  | 0.00523062 | Bcell_2_spleen |
| DNPH1              | 1.51E-07 | 0.23957508 | 0.32  | 0.166 | 0.00535177 | Bcell_2_spleen |
| ZNF326             | 1.52E-07 | 0.27725314 | 0.404 | 0.227 | 0.00537379 | Bcell_2_spleen |
| TNKS2              | 1.57E-07 | 0.30695958 | 0.272 | 0.135 | 0.00555983 | Bcell_2_spleen |
| ATF7IP             | 1.59E-07 | 0.17306081 | 0.748 | 0.483 | 0.00562324 | Bcell_2_spleen |
| NBEA               | 1.60E-07 | 0.27088673 | 0.373 | 0.207 | 0.00567245 | Bcell_2_spleen |
| BORCS5             | 1.61E-07 | 0.17738495 | 0.362 | 0.19  | 0.00572097 | Bcell_2_spleen |
| MAN2A1             | 1.62E-07 | 0.18901525 | 0.442 | 0.252 | 0.0057241  | Bcell_2_spleen |
| USP6NL             | 1.63E-07 | 0.29228287 | 0.364 | 0.198 | 0.00577554 | Bcell_2_spleen |
| NEDD4L             | 1.64E-07 | 0.27153743 | 0.462 | 0.27  | 0.00582767 | Bcell_2_spleen |
| PLEKHB2            | 1.76E-07 | 0.12555605 | 0.471 | 0.27  | 0.00624998 | Bcell_2_spleen |
| ATE1               | 1.84E-07 | 0.2016151  | 0.298 | 0.151 | 0.006516   | Bcell_2_spleen |
| MPZL1              | 1.87E-07 | 0.29309145 | 0.297 | 0.151 | 0.00663531 | Bcell_2_spleen |
| BCL2L13            | 1.88E-07 | 0.15672763 | 0.251 | 0.119 | 0.00666436 | Bcell_2_spleen |
| NIN                | 1.94E-07 | 0.1723803  | 0.504 | 0.307 | 0.00686964 | Bcell_2_spleen |
| ELK3               | 1.95E-07 | 0.28767769 | 0.363 | 0.202 | 0.00690288 | Bcell_2_spleen |
| ACTN4              | 1.98E-07 | 0.16363307 | 0.29  | 0.143 | 0.00702138 | Bcell_2_spleen |
| VPS8               | 1.99E-07 | 0.42399921 | 0.328 | 0.178 | 0.0070354  | Bcell_2_spleen |
| SPTBN1             | 2.03E-07 | 0.11590366 | 0.436 | 0.245 | 0.00720533 | Bcell_2_spleen |
| TRIM38             | 2.04E-07 | 0.23977452 | 0.367 | 0.2   | 0.00724488 | Bcell_2_spleen |
| EIF3A              | 2.05E-07 | 0.15907704 | 0.584 | 0.344 | 0.00728026 | Bcell_2_spleen |
| TRAK1              | 2.08E-07 | 0.11606654 | 0.393 | 0.221 | 0.00737669 | Bcell_2_spleen |

|                    |          |            |       |       |            |                |
|--------------------|----------|------------|-------|-------|------------|----------------|
| SF3B1              | 2.12E-07 | 0.16175397 | 0.673 | 0.417 | 0.00749398 | Bcell_2_spleen |
| SF3B2              | 2.15E-07 | 0.12804359 | 0.393 | 0.215 | 0.00763331 | Bcell_2_spleen |
| NAA25              | 2.16E-07 | 0.39729045 | 0.263 | 0.129 | 0.0076449  | Bcell_2_spleen |
| GNG7               | 2.25E-07 | 0.21941668 | 0.395 | 0.219 | 0.00797126 | Bcell_2_spleen |
| TBC1D9             | 2.26E-07 | 0.26256195 | 0.574 | 0.374 | 0.0079946  | Bcell_2_spleen |
| HIPK3              | 2.30E-07 | 0.48820145 | 0.285 | 0.147 | 0.00816572 | Bcell_2_spleen |
| NCKAP1L            | 2.34E-07 | 0.14366486 | 0.607 | 0.364 | 0.00827948 | Bcell_2_spleen |
| UBE2B              | 2.36E-07 | 0.21699126 | 0.4   | 0.227 | 0.00836152 | Bcell_2_spleen |
| CTNBL1             | 2.40E-07 | 0.18641499 | 0.332 | 0.172 | 0.00851231 | Bcell_2_spleen |
| REEP3              | 2.42E-07 | 0.15269033 | 0.29  | 0.145 | 0.00856982 | Bcell_2_spleen |
| HNRNPA3            | 2.52E-07 | 0.216251   | 0.798 | 0.524 | 0.00892093 | Bcell_2_spleen |
| ENSMMUG00000053392 | 2.52E-07 | 0.14481605 | 0.648 | 0.397 | 0.00893926 | Bcell_2_spleen |
| RPS6KB1            | 2.65E-07 | 0.11798926 | 0.468 | 0.266 | 0.00938464 | Bcell_2_spleen |
| ENSMMUG00000028906 | 2.75E-07 | 0.22127583 | 0.635 | 0.403 | 0.00975325 | Bcell_2_spleen |
| TRIM25             | 2.82E-07 | 0.18763425 | 0.267 | 0.131 | 0.00998075 | Bcell_2_spleen |
| DCAF1              | 2.84E-07 | 0.17389089 | 0.25  | 0.121 | 0.01005196 | Bcell_2_spleen |
| DNAJC7             | 2.88E-07 | 0.17129907 | 0.434 | 0.241 | 0.01020891 | Bcell_2_spleen |
| PPP6R3             | 2.94E-07 | 0.16322767 | 0.472 | 0.278 | 0.01040547 | Bcell_2_spleen |
| TASOR2             | 2.94E-07 | 0.1524676  | 0.372 | 0.204 | 0.01040548 | Bcell_2_spleen |
| ST6GALNAC3         | 2.95E-07 | 0.2013465  | 0.488 | 0.29  | 0.01044067 | Bcell_2_spleen |
| TMEM245            | 3.01E-07 | 0.26397956 | 0.268 | 0.135 | 0.01065837 | Bcell_2_spleen |
| ARL6IP5            | 3.12E-07 | 0.1295191  | 0.384 | 0.209 | 0.01105415 | Bcell_2_spleen |
| RALGAPA2           | 3.13E-07 | 0.22517812 | 0.273 | 0.139 | 0.01108416 | Bcell_2_spleen |
| PICALM             | 3.18E-07 | 0.21671025 | 0.605 | 0.374 | 0.01126309 | Bcell_2_spleen |
| NFYC               | 3.21E-07 | 0.34077507 | 0.286 | 0.149 | 0.01136632 | Bcell_2_spleen |
| CCDC12             | 3.21E-07 | 0.19864696 | 0.441 | 0.249 | 0.01139108 | Bcell_2_spleen |
| USP25              | 3.30E-07 | 0.14110149 | 0.337 | 0.182 | 0.01170874 | Bcell_2_spleen |
| AFF1               | 3.31E-07 | 0.22012754 | 0.531 | 0.319 | 0.01171076 | Bcell_2_spleen |
| KDM6A              | 3.34E-07 | 0.11790987 | 0.69  | 0.438 | 0.01182582 | Bcell_2_spleen |
| RPS6KA3            | 3.41E-07 | 0.28976477 | 0.292 | 0.153 | 0.01207954 | Bcell_2_spleen |
| TANGO6             | 3.46E-07 | 0.39192423 | 0.273 | 0.141 | 0.01225385 | Bcell_2_spleen |
| MS4A1              | 3.46E-07 | 0.15090145 | 0.988 | 0.9   | 0.01226378 | Bcell_2_spleen |
| ENSMMUG00000058818 | 3.56E-07 | 0.25655367 | 0.299 | 0.155 | 0.01260455 | Bcell_2_spleen |

|          |          |            |       |       |            |                |
|----------|----------|------------|-------|-------|------------|----------------|
| ALG13    | 3.63E-07 | 0.13452386 | 0.266 | 0.129 | 0.01287732 | Bcell_2_spleen |
| MAP3K1   | 3.66E-07 | 0.2333873  | 0.517 | 0.313 | 0.0129658  | Bcell_2_spleen |
| SLC25A36 | 3.66E-07 | 0.22032372 | 0.251 | 0.121 | 0.01297851 | Bcell_2_spleen |
| PRPF40A  | 3.77E-07 | 0.15401758 | 0.624 | 0.382 | 0.01334311 | Bcell_2_spleen |
| AKAP13   | 3.84E-07 | 0.19572271 | 0.91  | 0.632 | 0.01361607 | Bcell_2_spleen |
| WIPI2    | 3.91E-07 | 0.10667416 | 0.358 | 0.2   | 0.01385188 | Bcell_2_spleen |
| PCF11    | 3.91E-07 | 0.25335622 | 0.344 | 0.186 | 0.0138704  | Bcell_2_spleen |
| WWP2     | 4.17E-07 | 0.1294984  | 0.29  | 0.147 | 0.01478083 | Bcell_2_spleen |
| GGA3     | 4.35E-07 | 0.31292938 | 0.268 | 0.133 | 0.01540411 | Bcell_2_spleen |
| NDUFS3   | 4.36E-07 | 0.11541058 | 0.286 | 0.145 | 0.01545231 | Bcell_2_spleen |
| PRDM2    | 4.85E-07 | 0.20848743 | 0.506 | 0.309 | 0.01720199 | Bcell_2_spleen |
| CREBBP   | 4.90E-07 | 0.12281567 | 0.549 | 0.339 | 0.01736657 | Bcell_2_spleen |
| TMED2    | 4.91E-07 | 0.15670871 | 0.267 | 0.133 | 0.01740832 | Bcell_2_spleen |
| DIRAS2   | 4.92E-07 | 0.37073666 | 0.308 | 0.168 | 0.0174295  | Bcell_2_spleen |
| CNPY3    | 4.93E-07 | 0.14778626 | 0.373 | 0.207 | 0.0174518  | Bcell_2_spleen |
| PRPF8    | 4.93E-07 | 0.20753801 | 0.34  | 0.186 | 0.0174694  | Bcell_2_spleen |
| RMND5A   | 5.07E-07 | 0.34672399 | 0.293 | 0.155 | 0.01795135 | Bcell_2_spleen |
| PRMT2    | 5.08E-07 | 0.1067158  | 0.276 | 0.137 | 0.01799787 | Bcell_2_spleen |
| MEMO1    | 5.09E-07 | 0.19168382 | 0.471 | 0.28  | 0.01804242 | Bcell_2_spleen |
| RCOR3    | 5.14E-07 | 0.223988   | 0.274 | 0.139 | 0.01820054 | Bcell_2_spleen |
| TSC22D2  | 5.32E-07 | 0.18383171 | 0.295 | 0.153 | 0.01885883 | Bcell_2_spleen |
| EXOC2    | 5.59E-07 | 0.41351714 | 0.256 | 0.129 | 0.01980272 | Bcell_2_spleen |
| PPP2R3C  | 5.78E-07 | 0.13052423 | 0.295 | 0.153 | 0.02046617 | Bcell_2_spleen |
| STAU1    | 5.82E-07 | 0.11992592 | 0.443 | 0.254 | 0.02063386 | Bcell_2_spleen |
| RSU1     | 5.84E-07 | 0.2357376  | 0.277 | 0.143 | 0.02070638 | Bcell_2_spleen |
| SERBP1   | 6.02E-07 | 0.10719786 | 0.721 | 0.466 | 0.02134131 | Bcell_2_spleen |
| PHKB     | 6.17E-07 | 0.32180081 | 0.366 | 0.207 | 0.02185033 | Bcell_2_spleen |
| BLK      | 6.53E-07 | 0.16515103 | 0.603 | 0.368 | 0.02313559 | Bcell_2_spleen |
| NAMPT    | 6.60E-07 | 0.3927109  | 0.309 | 0.168 | 0.0233929  | Bcell_2_spleen |
| PDGFRA   | 6.73E-07 | 0.10417996 | 0.781 | 0.509 | 0.02383492 | Bcell_2_spleen |
| RPL31    | 6.82E-07 | 0.19602234 | 0.807 | 0.581 | 0.02417594 | Bcell_2_spleen |
| THOC2    | 6.85E-07 | 0.1739055  | 0.392 | 0.221 | 0.02428052 | Bcell_2_spleen |
| VRK1     | 7.02E-07 | 0.20971892 | 0.342 | 0.19  | 0.02487758 | Bcell_2_spleen |

|                    |          |            |       |       |            |                |
|--------------------|----------|------------|-------|-------|------------|----------------|
| ZBTB11             | 7.03E-07 | 0.23224871 | 0.293 | 0.153 | 0.02490725 | Bcell_2_spleen |
| TM9SF2             | 7.08E-07 | 0.11386171 | 0.437 | 0.243 | 0.02508133 | Bcell_2_spleen |
| RUNX3              | 7.24E-07 | 0.3282896  | 0.276 | 0.143 | 0.02565364 | Bcell_2_spleen |
| HNRNPA2B1          | 7.31E-07 | 0.22164448 | 0.969 | 0.777 | 0.0258889  | Bcell_2_spleen |
| COMMD7             | 7.54E-07 | 0.30961294 | 0.26  | 0.131 | 0.02670917 | Bcell_2_spleen |
| PTBP2              | 7.71E-07 | 0.23799535 | 0.505 | 0.313 | 0.02730492 | Bcell_2_spleen |
| IFT57              | 7.71E-07 | 0.24158868 | 0.321 | 0.174 | 0.02732946 | Bcell_2_spleen |
| ELMO1              | 7.76E-07 | 0.15071536 | 0.791 | 0.532 | 0.02750368 | Bcell_2_spleen |
| VEZT               | 8.36E-07 | 0.48255244 | 0.262 | 0.135 | 0.0296339  | Bcell_2_spleen |
| ENSMMUG00000028695 | 8.62E-07 | 0.16411953 | 0.287 | 0.149 | 0.03052938 | Bcell_2_spleen |
| GOLM2              | 8.65E-07 | 0.3251505  | 0.329 | 0.184 | 0.03066449 | Bcell_2_spleen |
| SP100              | 8.73E-07 | 0.15126613 | 0.906 | 0.652 | 0.03093858 | Bcell_2_spleen |
| TCOF1              | 8.79E-07 | 0.19968396 | 0.285 | 0.149 | 0.03114339 | Bcell_2_spleen |
| CERT1              | 8.83E-07 | 0.2055776  | 0.505 | 0.309 | 0.03128358 | Bcell_2_spleen |
| WASL               | 9.10E-07 | 0.20624586 | 0.318 | 0.172 | 0.03223353 | Bcell_2_spleen |
| TRIM33             | 9.12E-07 | 0.32197009 | 0.34  | 0.188 | 0.03232808 | Bcell_2_spleen |
| MAN1A1             | 9.57E-07 | 0.19680938 | 0.267 | 0.141 | 0.03392167 | Bcell_2_spleen |
| SDHAF4             | 9.78E-07 | 0.10800973 | 0.401 | 0.221 | 0.03466128 | Bcell_2_spleen |
| VPS53              | 9.85E-07 | 0.2046361  | 0.283 | 0.147 | 0.03489677 | Bcell_2_spleen |
| DLST               | 1.01E-06 | 0.17846123 | 0.298 | 0.155 | 0.03573862 | Bcell_2_spleen |
| ZNF410             | 1.03E-06 | 0.24226127 | 0.313 | 0.172 | 0.03655382 | Bcell_2_spleen |
| ELOVL5             | 1.08E-06 | 0.21198924 | 0.578 | 0.366 | 0.03825863 | Bcell_2_spleen |
| SETD2              | 1.09E-06 | 0.1038493  | 0.595 | 0.362 | 0.03846887 | Bcell_2_spleen |
| ENSMMUG00000061038 | 1.14E-06 | 0.1692421  | 0.348 | 0.192 | 0.04055366 | Bcell_2_spleen |
| CLIP1              | 1.15E-06 | 0.21158802 | 0.285 | 0.149 | 0.04071808 | Bcell_2_spleen |
| GAB1               | 1.15E-06 | 0.33370156 | 0.251 | 0.129 | 0.04082531 | Bcell_2_spleen |
| PPP2R1A            | 1.16E-06 | 0.12279134 | 0.29  | 0.153 | 0.04104701 | Bcell_2_spleen |
| ZNF292             | 1.16E-06 | 0.15300485 | 0.656 | 0.405 | 0.0411252  | Bcell_2_spleen |
| SYK                | 1.21E-06 | 0.12860687 | 0.676 | 0.434 | 0.04298968 | Bcell_2_spleen |
| C2CD5              | 1.22E-06 | 0.44235933 | 0.289 | 0.157 | 0.04311134 | Bcell_2_spleen |
| ZNF148             | 1.24E-06 | 0.16066859 | 0.465 | 0.278 | 0.04398282 | Bcell_2_spleen |
| THOC7              | 1.29E-06 | 0.13289146 | 0.271 | 0.139 | 0.04556853 | Bcell_2_spleen |
| ENSMMUG00000020316 | 1.32E-06 | 0.23057628 | 0.412 | 0.239 | 0.0466533  | Bcell_2_spleen |

|                    |          |            |       |       |            |                |
|--------------------|----------|------------|-------|-------|------------|----------------|
| FER                | 1.32E-06 | 0.17091973 | 0.421 | 0.247 | 0.04668767 | Bcell_2_spleen |
| EPC2               | 1.36E-06 | 0.15495413 | 0.463 | 0.274 | 0.04813741 | Bcell_2_spleen |
| TMSB4X             | 1.42E-06 | 0.20810809 | 0.992 | 0.98  | 0.05022056 | Bcell_2_spleen |
| KBTBD2             | 1.45E-06 | 0.29077477 | 0.316 | 0.174 | 0.05136197 | Bcell_2_spleen |
| NCLN               | 1.46E-06 | 0.13816656 | 0.336 | 0.188 | 0.05183591 | Bcell_2_spleen |
| INPP5A             | 1.47E-06 | 0.48363482 | 0.253 | 0.135 | 0.05192923 | Bcell_2_spleen |
| TOMM20             | 1.50E-06 | 0.14237542 | 0.777 | 0.528 | 0.05323214 | Bcell_2_spleen |
| IWS1               | 1.57E-06 | 0.25027349 | 0.292 | 0.157 | 0.05569302 | Bcell_2_spleen |
| RANBP9             | 1.60E-06 | 0.1471008  | 0.368 | 0.207 | 0.05664278 | Bcell_2_spleen |
| SPPL3              | 1.64E-06 | 0.11412627 | 0.582 | 0.362 | 0.05812884 | Bcell_2_spleen |
| HPS5               | 1.66E-06 | 0.1051345  | 0.29  | 0.151 | 0.05864897 | Bcell_2_spleen |
| CHD2               | 1.66E-06 | 0.17032751 | 0.669 | 0.438 | 0.05876226 | Bcell_2_spleen |
| NT5DC1             | 1.69E-06 | 0.23129324 | 0.316 | 0.178 | 0.06000739 | Bcell_2_spleen |
| CCNT1              | 1.70E-06 | 0.26109521 | 0.305 | 0.168 | 0.06027104 | Bcell_2_spleen |
| TAF1               | 1.72E-06 | 0.16651424 | 0.271 | 0.139 | 0.06080631 | Bcell_2_spleen |
| LCORL              | 1.77E-06 | 0.20606082 | 0.424 | 0.254 | 0.06259451 | Bcell_2_spleen |
| ENSMMUG00000049855 | 1.77E-06 | 0.19284537 | 0.276 | 0.147 | 0.06271631 | Bcell_2_spleen |
| SCML4              | 1.80E-06 | 0.11169929 | 0.584 | 0.368 | 0.06369785 | Bcell_2_spleen |
| ENSMMUG00000030374 | 1.88E-06 | 0.24307319 | 0.254 | 0.131 | 0.06667283 | Bcell_2_spleen |
| TULP4              | 1.93E-06 | 0.43093059 | 0.255 | 0.137 | 0.0683649  | Bcell_2_spleen |
| EIF2B3             | 1.96E-06 | 0.21709508 | 0.304 | 0.166 | 0.06941685 | Bcell_2_spleen |
| EVI5               | 2.01E-06 | 0.27164505 | 0.376 | 0.223 | 0.07111631 | Bcell_2_spleen |
| EPC1               | 2.07E-06 | 0.1931439  | 0.767 | 0.501 | 0.07320754 | Bcell_2_spleen |
| ITFG2              | 2.25E-06 | 0.13575156 | 0.34  | 0.188 | 0.079686   | Bcell_2_spleen |
| DENND4A            | 2.36E-06 | 0.19082703 | 0.946 | 0.777 | 0.0835495  | Bcell_2_spleen |
| TPP2               | 2.45E-06 | 0.28536411 | 0.26  | 0.139 | 0.08685632 | Bcell_2_spleen |
| ATP6V0A1           | 2.46E-06 | 0.22212977 | 0.274 | 0.147 | 0.08710725 | Bcell_2_spleen |
| ATXN7              | 2.57E-06 | 0.18440939 | 0.32  | 0.18  | 0.09096845 | Bcell_2_spleen |
| DNAJC3             | 2.61E-06 | 0.23754052 | 0.291 | 0.16  | 0.09263237 | Bcell_2_spleen |
| KMT5B              | 2.72E-06 | 0.11601873 | 0.283 | 0.153 | 0.09649257 | Bcell_2_spleen |
| ZSWIM6             | 2.76E-06 | 0.22008465 | 0.362 | 0.209 | 0.09785891 | Bcell_2_spleen |
| LRP2BP             | 2.91E-06 | 0.12029657 | 0.269 | 0.141 | 0.10297543 | Bcell_2_spleen |
| TTC19              | 3.02E-06 | 0.17146003 | 0.345 | 0.196 | 0.10699277 | Bcell_2_spleen |

|             |          |            |       |       |            |                |
|-------------|----------|------------|-------|-------|------------|----------------|
| YTHDF3      | 3.14E-06 | 0.1746132  | 0.422 | 0.254 | 0.11137221 | Bcell_2_spleen |
| RNF213      | 3.17E-06 | 0.18151447 | 0.32  | 0.18  | 0.11246637 | Bcell_2_spleen |
| RABGAP1L    | 3.24E-06 | 0.11112746 | 0.785 | 0.538 | 0.11493001 | Bcell_2_spleen |
| DNAJA1      | 3.31E-06 | 0.16717211 | 0.546 | 0.337 | 0.11720158 | Bcell_2_spleen |
| ADAM17      | 3.50E-06 | 0.25634031 | 0.284 | 0.153 | 0.12384909 | Bcell_2_spleen |
| CASC3       | 3.50E-06 | 0.16174471 | 0.263 | 0.139 | 0.12403322 | Bcell_2_spleen |
| KIAA1109    | 3.56E-06 | 0.14513842 | 0.28  | 0.151 | 0.12598592 | Bcell_2_spleen |
| IQGAP1      | 3.63E-06 | 0.12596447 | 0.635 | 0.399 | 0.12866551 | Bcell_2_spleen |
| RPL15       | 3.97E-06 | 0.14838353 | 0.978 | 0.959 | 0.14058548 | Bcell_2_spleen |
| SMCHD1      | 4.02E-06 | 0.11490203 | 0.773 | 0.507 | 0.14258735 | Bcell_2_spleen |
| GLG1        | 4.27E-06 | 0.16262634 | 0.318 | 0.18  | 0.15131    | Bcell_2_spleen |
| TCF25       | 4.33E-06 | 0.11904765 | 0.405 | 0.241 | 0.15332519 | Bcell_2_spleen |
| MATR3       | 4.49E-06 | 0.1061212  | 0.784 | 0.524 | 0.15904169 | Bcell_2_spleen |
| SLC44A2     | 4.53E-06 | 0.11793746 | 0.353 | 0.204 | 0.16043432 | Bcell_2_spleen |
| HECA        | 4.79E-06 | 0.13998176 | 0.278 | 0.151 | 0.16983875 | Bcell_2_spleen |
| FANCC       | 4.82E-06 | 0.29738019 | 0.276 | 0.153 | 0.17062801 | Bcell_2_spleen |
| DDX39B      | 4.88E-06 | 0.10972603 | 0.4   | 0.231 | 0.17275414 | Bcell_2_spleen |
| GOLGA4      | 5.08E-06 | 0.13065679 | 0.607 | 0.387 | 0.1800175  | Bcell_2_spleen |
| FAM91A1     | 5.20E-06 | 0.46871202 | 0.276 | 0.153 | 0.18415287 | Bcell_2_spleen |
| PTPN1       | 5.21E-06 | 0.13240306 | 0.507 | 0.309 | 0.18444661 | Bcell_2_spleen |
| FAM172A     | 5.33E-06 | 0.12028513 | 0.67  | 0.427 | 0.18899268 | Bcell_2_spleen |
| SMARCB1     | 5.91E-06 | 0.10964552 | 0.263 | 0.139 | 0.20944193 | Bcell_2_spleen |
| WDFY1       | 5.94E-06 | 0.28273976 | 0.263 | 0.143 | 0.21038858 | Bcell_2_spleen |
| TBC1D23     | 6.19E-06 | 0.11982992 | 0.354 | 0.2   | 0.21918031 | Bcell_2_spleen |
| FGD2        | 6.19E-06 | 0.22903873 | 0.251 | 0.133 | 0.21942737 | Bcell_2_spleen |
| MAPRE2      | 6.35E-06 | 0.16211684 | 0.463 | 0.294 | 0.22497989 | Bcell_2_spleen |
| C18H18orf25 | 6.50E-06 | 0.29996238 | 0.281 | 0.155 | 0.23033285 | Bcell_2_spleen |
| ZDHHC20     | 6.84E-06 | 0.30656869 | 0.308 | 0.176 | 0.24237408 | Bcell_2_spleen |
| RPTOR       | 7.10E-06 | 0.14508159 | 0.32  | 0.18  | 0.25167145 | Bcell_2_spleen |
| AP1G1       | 7.20E-06 | 0.11877403 | 0.359 | 0.209 | 0.25505008 | Bcell_2_spleen |
| LDB2        | 7.33E-06 | 0.15761808 | 0.602 | 0.399 | 0.25964142 | Bcell_2_spleen |
| EIF2AK3     | 8.01E-06 | 0.13953724 | 0.827 | 0.558 | 0.28387619 | Bcell_2_spleen |
| PDCD6IP     | 8.26E-06 | 0.11207683 | 0.378 | 0.225 | 0.29256873 | Bcell_2_spleen |

|                    |          |            |       |       |            |                |
|--------------------|----------|------------|-------|-------|------------|----------------|
| VPS13B             | 8.27E-06 | 0.19937587 | 0.778 | 0.524 | 0.29285778 | Bcell_2_spleen |
| SLC30A7            | 8.51E-06 | 0.18822154 | 0.297 | 0.168 | 0.30154121 | Bcell_2_spleen |
| UBE2D3             | 8.96E-06 | 0.17834785 | 0.876 | 0.62  | 0.3176198  | Bcell_2_spleen |
| CEP135             | 9.17E-06 | 0.18883882 | 0.265 | 0.145 | 0.32495618 | Bcell_2_spleen |
| FBXL20             | 9.18E-06 | 0.10719272 | 0.509 | 0.315 | 0.32533029 | Bcell_2_spleen |
| NARS1              | 1.01E-05 | 0.11273467 | 0.373 | 0.219 | 0.35762612 | Bcell_2_spleen |
| SNF8               | 1.01E-05 | 0.13705961 | 0.319 | 0.18  | 0.35851679 | Bcell_2_spleen |
| GTF2F2             | 1.10E-05 | 0.10385718 | 0.28  | 0.157 | 0.3912372  | Bcell_2_spleen |
| RABGAP1            | 1.11E-05 | 0.19325904 | 0.256 | 0.139 | 0.39201112 | Bcell_2_spleen |
| ATP2B1             | 1.14E-05 | 0.11471368 | 0.252 | 0.137 | 0.40359556 | Bcell_2_spleen |
| LARP4              | 1.33E-05 | 0.16744544 | 0.32  | 0.184 | 0.4718686  | Bcell_2_spleen |
| ENSMMUG00000015583 | 1.34E-05 | 0.13467203 | 0.872 | 0.611 | 0.47597424 | Bcell_2_spleen |
| XPR1               | 1.42E-05 | 0.16269693 | 0.31  | 0.18  | 0.50430387 | Bcell_2_spleen |
| YTHDF2             | 1.43E-05 | 0.17610907 | 0.27  | 0.147 | 0.50744452 | Bcell_2_spleen |
| RALGAP1            | 1.45E-05 | 0.25670783 | 0.254 | 0.143 | 0.51525331 | Bcell_2_spleen |
| DNM1L              | 1.50E-05 | 0.15250007 | 0.327 | 0.19  | 0.53186466 | Bcell_2_spleen |
| ARHGEF6            | 1.50E-05 | 0.13064711 | 0.32  | 0.186 | 0.53191546 | Bcell_2_spleen |
| KIAA1328           | 1.54E-05 | 0.19807037 | 0.32  | 0.188 | 0.5445698  | Bcell_2_spleen |
| UBR2               | 1.54E-05 | 0.1541276  | 0.302 | 0.17  | 0.54713786 | Bcell_2_spleen |
| TNPO1              | 1.63E-05 | 0.3428449  | 0.296 | 0.174 | 0.57776538 | Bcell_2_spleen |
| NOL8               | 1.63E-05 | 0.11588659 | 0.257 | 0.141 | 0.57895838 | Bcell_2_spleen |
| FKBP5              | 1.65E-05 | 0.14352503 | 0.434 | 0.278 | 0.58457678 | Bcell_2_spleen |
| RLIM               | 1.70E-05 | 0.14817174 | 0.348 | 0.207 | 0.60313069 | Bcell_2_spleen |
| DOP1A              | 1.72E-05 | 0.11828904 | 0.323 | 0.19  | 0.60801332 | Bcell_2_spleen |
| HMCES              | 1.76E-05 | 0.11457356 | 0.263 | 0.145 | 0.62523868 | Bcell_2_spleen |
| ENSMMUG00000003412 | 1.87E-05 | 0.12201229 | 0.983 | 0.973 | 0.66242871 | Bcell_2_spleen |
| U2.106             | 1.93E-05 | 0.18458103 | 0.263 | 0.145 | 0.68324104 | Bcell_2_spleen |
| FOXP1              | 1.98E-05 | 0.15646068 | 0.703 | 0.476 | 0.7030764  | Bcell_2_spleen |
| RSRP1              | 2.01E-05 | 0.11823783 | 0.787 | 0.532 | 0.71176625 | Bcell_2_spleen |
| PDE8A              | 2.05E-05 | 0.24606356 | 0.255 | 0.141 | 0.72551186 | Bcell_2_spleen |
| UBE2E1             | 2.07E-05 | 0.12943034 | 0.342 | 0.2   | 0.73495004 | Bcell_2_spleen |
| NOTCH2             | 2.21E-05 | 0.12200021 | 0.428 | 0.264 | 0.78162186 | Bcell_2_spleen |
| TPD52              | 2.21E-05 | 0.10499447 | 0.495 | 0.317 | 0.78298917 | Bcell_2_spleen |

|                    |            |            |       |       |            |                |
|--------------------|------------|------------|-------|-------|------------|----------------|
| LARGE1             | 2.25E-05   | 0.17543264 | 0.324 | 0.196 | 0.79865582 | Bcell_2_spleen |
| SAMD4B             | 2.42E-05   | 0.21172525 | 0.266 | 0.151 | 0.85792418 | Bcell_2_spleen |
| GGNBP2             | 2.61E-05   | 0.10683843 | 0.518 | 0.325 | 0.92620779 | Bcell_2_spleen |
| MBNL2              | 2.69E-05   | 0.10938713 | 0.514 | 0.323 | 0.95368648 | Bcell_2_spleen |
| USP7               | 3.23E-05   | 0.12799277 | 0.254 | 0.143 | 1          | Bcell_2_spleen |
| TXLNG              | 3.29E-05   | 0.32880038 | 0.337 | 0.207 | 1          | Bcell_2_spleen |
| OSBPL8             | 3.66E-05   | 0.11366407 | 0.73  | 0.489 | 1          | Bcell_2_spleen |
| RESF1              | 3.85E-05   | 0.11660273 | 0.305 | 0.178 | 1          | Bcell_2_spleen |
| FLNA               | 3.98E-05   | 0.10670462 | 0.276 | 0.16  | 1          | Bcell_2_spleen |
| DNAJC24            | 4.14E-05   | 0.1194542  | 0.365 | 0.227 | 1          | Bcell_2_spleen |
| SLC35A3            | 4.25E-05   | 0.12358577 | 0.418 | 0.26  | 1          | Bcell_2_spleen |
| MAX                | 4.43E-05   | 0.127519   | 0.334 | 0.2   | 1          | Bcell_2_spleen |
| SEC23A             | 4.71E-05   | 0.10182158 | 0.254 | 0.145 | 1          | Bcell_2_spleen |
| SUN2               | 5.18E-05   | 0.16375027 | 0.256 | 0.145 | 1          | Bcell_2_spleen |
| POGZ               | 5.61E-05   | 0.19286014 | 0.295 | 0.178 | 1          | Bcell_2_spleen |
| EZR                | 5.71E-05   | 0.10919594 | 0.73  | 0.483 | 1          | Bcell_2_spleen |
| WDR7               | 6.42E-05   | 0.11229142 | 0.284 | 0.168 | 1          | Bcell_2_spleen |
| ADD3               | 6.99E-05   | 0.10928014 | 0.41  | 0.26  | 1          | Bcell_2_spleen |
| TRPS1              | 7.48E-05   | 0.11427208 | 0.25  | 0.145 | 1          | Bcell_2_spleen |
| UBE2Q2             | 7.81E-05   | 0.19132087 | 0.323 | 0.196 | 1          | Bcell_2_spleen |
| MEF2C              | 8.90E-05   | 0.15830353 | 0.896 | 0.72  | 1          | Bcell_2_spleen |
| UBE4A              | 9.38E-05   | 0.13833863 | 0.285 | 0.172 | 1          | Bcell_2_spleen |
| METTL16            | 0.00010937 | 0.17214983 | 0.261 | 0.155 | 1          | Bcell_2_spleen |
| ANO6               | 0.00011358 | 0.15291454 | 0.375 | 0.239 | 1          | Bcell_2_spleen |
| IGF1R              | 0.00012044 | 0.15380535 | 0.378 | 0.245 | 1          | Bcell_2_spleen |
| AVL9               | 0.00016906 | 0.10166678 | 0.273 | 0.164 | 1          | Bcell_2_spleen |
| ENSMMUG00000055718 | 0.00023775 | 0.1001322  | 0.255 | 0.153 | 1          | Bcell_2_spleen |
| FAM214A            | 0.00024968 | 0.10698515 | 0.32  | 0.202 | 1          | Bcell_2_spleen |
| NPM1               | 0.00028831 | 0.15101089 | 0.935 | 0.781 | 1          | Bcell_2_spleen |
| NEK7               | 0.00033184 | 0.25826793 | 0.258 | 0.162 | 1          | Bcell_2_spleen |
| TET3               | 0.00050874 | 0.10101949 | 0.261 | 0.164 | 1          | Bcell_2_spleen |
| ENSMMUG00000061824 | 0.00051572 | 0.16848166 | 0.968 | 0.867 | 1          | Bcell_2_spleen |
| PRKCE              | 0.00061541 | 0.20316744 | 0.277 | 0.178 | 1          | Bcell_2_spleen |



|                    |            |            |       |       |            |                |
|--------------------|------------|------------|-------|-------|------------|----------------|
| KATNA1             | 0.00063041 | 0.2287417  | 0.255 | 0.16  | 1          | Bcell_2_spleen |
| EIF3E              | 0.00067842 | 0.12140019 | 0.852 | 0.646 | 1          | Bcell_2_spleen |
| MAML3              | 0.00123461 | 0.23550781 | 0.271 | 0.182 | 1          | Bcell_2_spleen |
| RIPOR2             | 0.00168726 | 0.13231485 | 0.847 | 0.644 | 1          | Bcell_2_spleen |
| ADORA2B            | 0.01330522 | 0.10465703 | 0.994 | 0.93  | 1          | Bcell_2_spleen |
| CD52               | 0.0140882  | 0.11924262 | 0.977 | 0.916 | 1          | Bcell_2_spleen |
| ENSMMUG00000065362 | 1.16E-20   | 1.00623599 | 1     | 0.999 | 4.10E-16   | Bcell_3_lung   |
| ND4L               | 3.64E-15   | 2.4147289  | 0.661 | 0.518 | 1.29E-10   | Bcell_3_lung   |
| MEF2C              | 4.57E-10   | 1.0843407  | 0.848 | 0.85  | 1.62E-05   | Bcell_3_lung   |
| JARID2             | 1.35E-09   | 1.49169462 | 0.777 | 0.829 | 4.79E-05   | Bcell_3_lung   |
| ND4                | 1.28E-08   | 0.84626381 | 0.955 | 0.964 | 0.00045489 | Bcell_3_lung   |
| COX1               | 2.01E-08   | 0.76857894 | 0.938 | 0.957 | 0.00071268 | Bcell_3_lung   |
| MAN1A1             | 1.36E-07   | 2.55542981 | 0.446 | 0.307 | 0.00481623 | Bcell_3_lung   |
| GSAP               | 3.77E-07   | 0.13626463 | 0.161 | 0.464 | 0.01334708 | Bcell_3_lung   |
| USP10              | 4.38E-07   | 0.17471962 | 0.161 | 0.451 | 0.01552931 | Bcell_3_lung   |
| COX2               | 8.80E-07   | 0.86016279 | 0.982 | 0.968 | 0.03116949 | Bcell_3_lung   |
| DENND1A            | 1.09E-06   | 0.12170593 | 0.223 | 0.555 | 0.03870593 | Bcell_3_lung   |
| MCUB               | 1.21E-06   | 0.21883469 | 0.205 | 0.535 | 0.04280501 | Bcell_3_lung   |
| STK10              | 1.54E-06   | 0.11657198 | 0.241 | 0.564 | 0.05457013 | Bcell_3_lung   |
| GAPVD1             | 2.40E-06   | 0.1123204  | 0.17  | 0.441 | 0.08520743 | Bcell_3_lung   |
| VAV2               | 2.67E-06   | 0.12963667 | 0.205 | 0.505 | 0.09477761 | Bcell_3_lung   |
| RBM27              | 2.80E-06   | 0.22438883 | 0.205 | 0.51  | 0.09938276 | Bcell_3_lung   |
| VPS13D             | 4.86E-06   | 0.16094228 | 0.107 | 0.351 | 0.17231413 | Bcell_3_lung   |
| RAF1               | 5.29E-06   | 0.10263695 | 0.17  | 0.454 | 0.18758924 | Bcell_3_lung   |
| TNKS2              | 5.46E-06   | 0.10506477 | 0.116 | 0.367 | 0.19361615 | Bcell_3_lung   |
| WBP1L              | 5.62E-06   | 0.23483337 | 0.089 | 0.318 | 0.19911538 | Bcell_3_lung   |
| ATL2               | 6.13E-06   | 0.2915712  | 0.116 | 0.371 | 0.21705295 | Bcell_3_lung   |
| PAFAH1B1           | 6.34E-06   | 0.12375152 | 0.295 | 0.626 | 0.2247472  | Bcell_3_lung   |
| PPP4R3B            | 6.39E-06   | 0.14921131 | 0.152 | 0.411 | 0.22636934 | Bcell_3_lung   |
| DDX39B             | 7.12E-06   | 0.46159756 | 0.179 | 0.455 | 0.25231491 | Bcell_3_lung   |
| SPG11              | 7.20E-06   | 0.25811344 | 0.116 | 0.356 | 0.2552733  | Bcell_3_lung   |
| EWSR1              | 8.27E-06   | 0.15482761 | 0.196 | 0.477 | 0.29306006 | Bcell_3_lung   |
| TNRC6A             | 9.35E-06   | 0.17349317 | 0.25  | 0.586 | 0.33128737 | Bcell_3_lung   |

|                    |          |            |       |       |            |              |
|--------------------|----------|------------|-------|-------|------------|--------------|
| SOS1               | 1.05E-05 | 0.44277283 | 0.223 | 0.527 | 0.3708109  | Bcell_3_lung |
| GRK5               | 1.26E-05 | 0.27134507 | 0.223 | 0.505 | 0.44639313 | Bcell_3_lung |
| MARCHF3            | 1.35E-05 | 0.21867491 | 0.223 | 0.531 | 0.4795155  | Bcell_3_lung |
| SPEN               | 1.47E-05 | 0.16972612 | 0.196 | 0.46  | 0.51957108 | Bcell_3_lung |
| TMSB10             | 1.49E-05 | 1.03255546 | 0.768 | 0.85  | 0.52789806 | Bcell_3_lung |
| CD19               | 1.52E-05 | 0.37912603 | 0.161 | 0.407 | 0.53695796 | Bcell_3_lung |
| PIK3R1             | 1.53E-05 | 0.27130285 | 0.089 | 0.304 | 0.5434228  | Bcell_3_lung |
| KDM2B              | 1.68E-05 | 0.14315004 | 0.188 | 0.459 | 0.5937364  | Bcell_3_lung |
| URI1               | 1.71E-05 | 0.20330718 | 0.17  | 0.439 | 0.60625889 | Bcell_3_lung |
| DIDO1              | 1.71E-05 | 0.26362004 | 0.098 | 0.317 | 0.60693123 | Bcell_3_lung |
| HERC3              | 1.72E-05 | 0.32689219 | 0.17  | 0.429 | 0.60862764 | Bcell_3_lung |
| RAB1A              | 1.82E-05 | 0.13976781 | 0.295 | 0.643 | 0.64334553 | Bcell_3_lung |
| TRIM33             | 1.88E-05 | 0.14983422 | 0.179 | 0.433 | 0.66445004 | Bcell_3_lung |
| PSME4              | 1.96E-05 | 0.4163328  | 0.214 | 0.511 | 0.69447248 | Bcell_3_lung |
| SMARCC1            | 2.11E-05 | 0.1751989  | 0.286 | 0.616 | 0.74784867 | Bcell_3_lung |
| ATF4               | 2.15E-05 | 0.28656453 | 0.188 | 0.443 | 0.76267668 | Bcell_3_lung |
| FBXL20             | 2.15E-05 | 0.14330552 | 0.33  | 0.639 | 0.76327418 | Bcell_3_lung |
| OGT                | 2.34E-05 | 0.21205174 | 0.295 | 0.627 | 0.82960451 | Bcell_3_lung |
| CNTRL              | 2.34E-05 | 0.14451483 | 0.232 | 0.508 | 0.83028772 | Bcell_3_lung |
| SLC44A2            | 2.43E-05 | 0.14830316 | 0.17  | 0.423 | 0.8605255  | Bcell_3_lung |
| PDS5A              | 2.49E-05 | 0.14006335 | 0.241 | 0.554 | 0.88237054 | Bcell_3_lung |
| HIF1A              | 2.56E-05 | 0.35407045 | 0.152 | 0.395 | 0.90854609 | Bcell_3_lung |
| CDC27              | 2.62E-05 | 0.12616797 | 0.17  | 0.404 | 0.92677742 | Bcell_3_lung |
| INPP5F             | 2.78E-05 | 0.11306313 | 0.125 | 0.344 | 0.98473794 | Bcell_3_lung |
| BTBD1              | 2.97E-05 | 0.20618692 | 0.08  | 0.277 | 1          | Bcell_3_lung |
| KDM2A              | 2.98E-05 | 0.17767903 | 0.357 | 0.692 | 1          | Bcell_3_lung |
| MED13              | 3.05E-05 | 0.24010574 | 0.196 | 0.463 | 1          | Bcell_3_lung |
| ENSMMUG00000006499 | 3.17E-05 | 0.31219231 | 0.232 | 0.52  | 1          | Bcell_3_lung |
| AMBRA1             | 3.22E-05 | 0.17695166 | 0.196 | 0.482 | 1          | Bcell_3_lung |
| PSIP1              | 3.29E-05 | 0.20297462 | 0.107 | 0.319 | 1          | Bcell_3_lung |
| ZBTB11             | 3.33E-05 | 0.14357571 | 0.098 | 0.309 | 1          | Bcell_3_lung |
| SEC31A             | 3.35E-05 | 0.1846065  | 0.259 | 0.557 | 1          | Bcell_3_lung |
| PLEKHM2            | 3.37E-05 | 0.30205973 | 0.134 | 0.377 | 1          | Bcell_3_lung |

|                    |          |            |       |       |                |
|--------------------|----------|------------|-------|-------|----------------|
| PARVB              | 3.51E-05 | 0.18639451 | 0.125 | 0.349 | 1 Bcell_3_lung |
| MTIF2              | 3.77E-05 | 0.167195   | 0.161 | 0.402 | 1 Bcell_3_lung |
| LENG8              | 3.81E-05 | 0.32655518 | 0.089 | 0.289 | 1 Bcell_3_lung |
| ARFGEF2            | 4.06E-05 | 0.30346701 | 0.161 | 0.407 | 1 Bcell_3_lung |
| CYTB               | 4.26E-05 | 2.70582305 | 0.312 | 0.209 | 1 Bcell_3_lung |
| SETBP1             | 4.27E-05 | 0.12709703 | 0.241 | 0.517 | 1 Bcell_3_lung |
| TASOR              | 4.41E-05 | 0.10614233 | 0.107 | 0.31  | 1 Bcell_3_lung |
| INPP5D             | 4.44E-05 | 0.51097541 | 0.402 | 0.772 | 1 Bcell_3_lung |
| PPM1G              | 4.47E-05 | 0.14194677 | 0.089 | 0.281 | 1 Bcell_3_lung |
| ATP6V0A1           | 4.68E-05 | 0.33450299 | 0.143 | 0.367 | 1 Bcell_3_lung |
| UBR4               | 4.99E-05 | 0.11753204 | 0.188 | 0.434 | 1 Bcell_3_lung |
| SLC15A4            | 5.28E-05 | 0.26801329 | 0.098 | 0.305 | 1 Bcell_3_lung |
| MIB1               | 5.62E-05 | 0.40946633 | 0.098 | 0.305 | 1 Bcell_3_lung |
| ATP6V1E1           | 5.75E-05 | 0.34762343 | 0.125 | 0.331 | 1 Bcell_3_lung |
| BTLA               | 5.76E-05 | 0.27562997 | 0.071 | 0.251 | 1 Bcell_3_lung |
| VPS53              | 5.84E-05 | 0.47077604 | 0.143 | 0.371 | 1 Bcell_3_lung |
| HERC2              | 5.88E-05 | 0.19340088 | 0.196 | 0.449 | 1 Bcell_3_lung |
| ENSMMUG00000020721 | 6.05E-05 | 0.26772256 | 0.179 | 0.427 | 1 Bcell_3_lung |
| FGD3               | 6.18E-05 | 0.43874989 | 0.116 | 0.335 | 1 Bcell_3_lung |
| CD200              | 6.39E-05 | 0.18648688 | 0.116 | 0.311 | 1 Bcell_3_lung |
| CD22               | 6.58E-05 | 0.14592487 | 0.232 | 0.508 | 1 Bcell_3_lung |
| M6PR               | 6.80E-05 | 0.17902993 | 0.116 | 0.314 | 1 Bcell_3_lung |
| USP8               | 7.07E-05 | 0.13698007 | 0.17  | 0.413 | 1 Bcell_3_lung |
| BTG1               | 7.15E-05 | 1.07285642 | 0.643 | 0.738 | 1 Bcell_3_lung |
| AFF4               | 7.17E-05 | 0.1104367  | 0.196 | 0.439 | 1 Bcell_3_lung |
| RABEP2             | 7.43E-05 | 0.14954415 | 0.089 | 0.28  | 1 Bcell_3_lung |
| MTMR1              | 7.61E-05 | 0.17730668 | 0.125 | 0.347 | 1 Bcell_3_lung |
| STAU2              | 7.81E-05 | 0.13448119 | 0.161 | 0.391 | 1 Bcell_3_lung |
| DOCK9              | 8.03E-05 | 0.13331599 | 0.098 | 0.286 | 1 Bcell_3_lung |
| ATF2               | 8.14E-05 | 0.15914848 | 0.196 | 0.44  | 1 Bcell_3_lung |
| PHTF2              | 8.29E-05 | 0.16696903 | 0.179 | 0.422 | 1 Bcell_3_lung |
| SMARCA4            | 8.36E-05 | 0.23135569 | 0.196 | 0.461 | 1 Bcell_3_lung |
| STIM1              | 8.48E-05 | 0.22325091 | 0.143 | 0.361 | 1 Bcell_3_lung |

|                    |            |            |       |       |                |
|--------------------|------------|------------|-------|-------|----------------|
| NFKB1              | 8.56E-05   | 0.28884384 | 0.455 | 0.795 | 1 Bcell_3_lung |
| KIF13A             | 8.71E-05   | 0.17003479 | 0.286 | 0.598 | 1 Bcell_3_lung |
| LARP1              | 9.32E-05   | 0.40213652 | 0.071 | 0.251 | 1 Bcell_3_lung |
| ATP6               | 9.60E-05   | 0.48271205 | 0.964 | 0.958 | 1 Bcell_3_lung |
| SCAPER             | 9.70E-05   | 0.1310705  | 0.214 | 0.465 | 1 Bcell_3_lung |
| SESN3              | 9.82E-05   | 0.28501634 | 0.223 | 0.485 | 1 Bcell_3_lung |
| ATXN7              | 9.84E-05   | 0.46605693 | 0.17  | 0.419 | 1 Bcell_3_lung |
| CTSZ               | 9.88E-05   | 0.28281744 | 0.125 | 0.322 | 1 Bcell_3_lung |
| HMCES              | 0.00010069 | 0.1783682  | 0.089 | 0.277 | 1 Bcell_3_lung |
| TACC1              | 0.00010098 | 0.43727819 | 0.295 | 0.581 | 1 Bcell_3_lung |
| DDX52              | 0.00010177 | 0.24914887 | 0.134 | 0.34  | 1 Bcell_3_lung |
| IST1               | 0.00010288 | 0.12641081 | 0.196 | 0.447 | 1 Bcell_3_lung |
| MAP4               | 0.00010429 | 0.20468947 | 0.098 | 0.291 | 1 Bcell_3_lung |
| NCOA1              | 0.00010521 | 0.15294063 | 0.107 | 0.303 | 1 Bcell_3_lung |
| KDM4B              | 0.00010592 | 0.19997563 | 0.17  | 0.416 | 1 Bcell_3_lung |
| TBL1X              | 0.00010674 | 0.15737219 | 0.223 | 0.497 | 1 Bcell_3_lung |
| WASHC4             | 0.00010891 | 0.42313183 | 0.312 | 0.619 | 1 Bcell_3_lung |
| KIDINS220          | 0.00011102 | 0.14778255 | 0.107 | 0.303 | 1 Bcell_3_lung |
| TM9SF2             | 0.00011277 | 0.23890905 | 0.232 | 0.505 | 1 Bcell_3_lung |
| YWHAH              | 0.00013043 | 0.22550369 | 0.161 | 0.37  | 1 Bcell_3_lung |
| SEMA4D             | 0.00013148 | 0.23612299 | 0.08  | 0.258 | 1 Bcell_3_lung |
| ATP2C1             | 0.00013443 | 0.11614554 | 0.098 | 0.281 | 1 Bcell_3_lung |
| CAPRIN1            | 0.00014036 | 0.35961367 | 0.134 | 0.347 | 1 Bcell_3_lung |
| MIGA1              | 0.00014462 | 0.32254533 | 0.098 | 0.279 | 1 Bcell_3_lung |
| RESF1              | 0.0001467  | 0.2834198  | 0.143 | 0.353 | 1 Bcell_3_lung |
| TRANK1             | 0.00015361 | 0.16258191 | 0.116 | 0.311 | 1 Bcell_3_lung |
| IFI16              | 0.00015439 | 1.17275428 | 0.598 | 0.705 | 1 Bcell_3_lung |
| SYK                | 0.00015498 | 0.14782606 | 0.455 | 0.795 | 1 Bcell_3_lung |
| PLEKHG1            | 0.00015663 | 0.92390282 | 0.786 | 0.9   | 1 Bcell_3_lung |
| DNM2               | 0.0001592  | 0.33505925 | 0.196 | 0.45  | 1 Bcell_3_lung |
| PCF11              | 0.00015978 | 0.54358165 | 0.134 | 0.337 | 1 Bcell_3_lung |
| ENSMMUG00000053735 | 0.00016191 | 0.12495345 | 0.161 | 0.385 | 1 Bcell_3_lung |
| BTBD3              | 0.00016791 | 0.2632728  | 0.116 | 0.31  | 1 Bcell_3_lung |

|                    |            |            |       |       |                |
|--------------------|------------|------------|-------|-------|----------------|
| SF3B3              | 0.00017979 | 0.15088366 | 0.116 | 0.302 | 1 Bcell_3_lung |
| PRKCE              | 0.00018054 | 0.33300745 | 0.205 | 0.473 | 1 Bcell_3_lung |
| LUC7L              | 0.00018077 | 0.27958167 | 0.17  | 0.389 | 1 Bcell_3_lung |
| WIPI2              | 0.00018137 | 0.22824854 | 0.143 | 0.36  | 1 Bcell_3_lung |
| DCAF5              | 0.00019206 | 0.20356529 | 0.161 | 0.365 | 1 Bcell_3_lung |
| PICALM             | 0.00019535 | 0.17040237 | 0.402 | 0.733 | 1 Bcell_3_lung |
| THOC1              | 0.00019568 | 0.47065208 | 0.116 | 0.303 | 1 Bcell_3_lung |
| SNX6               | 0.00019818 | 0.48108107 | 0.188 | 0.432 | 1 Bcell_3_lung |
| ERCC6L2            | 0.00020321 | 0.29559877 | 0.089 | 0.258 | 1 Bcell_3_lung |
| NKTR               | 0.0002141  | 0.57245109 | 0.188 | 0.425 | 1 Bcell_3_lung |
| FKBP15             | 0.00021751 | 0.20989823 | 0.125 | 0.322 | 1 Bcell_3_lung |
| RPRD2              | 0.00022176 | 0.28025178 | 0.214 | 0.439 | 1 Bcell_3_lung |
| ENSMMUG00000019238 | 0.00022733 | 0.44407986 | 0.116 | 0.309 | 1 Bcell_3_lung |
| GOLM2              | 0.00024262 | 0.18930635 | 0.161 | 0.379 | 1 Bcell_3_lung |
| GIT2               | 0.00024788 | 0.42744681 | 0.259 | 0.535 | 1 Bcell_3_lung |
| DDX17              | 0.00025334 | 0.15607879 | 0.375 | 0.714 | 1 Bcell_3_lung |
| KDM3B              | 0.00025477 | 0.16870115 | 0.304 | 0.619 | 1 Bcell_3_lung |
| ZFAND6             | 0.00025975 | 0.11642752 | 0.42  | 0.743 | 1 Bcell_3_lung |
| COPB1              | 0.00026609 | 0.13070995 | 0.116 | 0.304 | 1 Bcell_3_lung |
| ITGB1              | 0.00026771 | 0.31726712 | 0.107 | 0.292 | 1 Bcell_3_lung |
| RERE               | 0.0002753  | 0.89357037 | 0.723 | 0.87  | 1 Bcell_3_lung |
| GRAMD4             | 0.00028138 | 0.11935126 | 0.17  | 0.388 | 1 Bcell_3_lung |
| NUFIP2             | 0.00028329 | 0.11518302 | 0.223 | 0.454 | 1 Bcell_3_lung |
| SMC1A              | 0.0002841  | 0.363282   | 0.098 | 0.275 | 1 Bcell_3_lung |
| BRWD1              | 0.00028759 | 0.3289469  | 0.232 | 0.49  | 1 Bcell_3_lung |
| GPR89A             | 0.00029975 | 0.1966579  | 0.116 | 0.304 | 1 Bcell_3_lung |
| RAB3GAP2           | 0.00030321 | 0.17021654 | 0.161 | 0.367 | 1 Bcell_3_lung |
| ZNF708             | 0.00030737 | 0.27560181 | 0.098 | 0.279 | 1 Bcell_3_lung |
| ABHD12             | 0.00030914 | 0.18265998 | 0.134 | 0.327 | 1 Bcell_3_lung |
| EVL                | 0.00031658 | 0.33441388 | 0.17  | 0.388 | 1 Bcell_3_lung |
| ZNF638             | 0.00032348 | 0.30012652 | 0.286 | 0.569 | 1 Bcell_3_lung |
| ENSMMUG00000010266 | 0.0003278  | 0.19586211 | 0.384 | 0.727 | 1 Bcell_3_lung |
| RASSF3             | 0.00034651 | 0.41475518 | 0.25  | 0.529 | 1 Bcell_3_lung |

|                    |            |            |       |       |                |
|--------------------|------------|------------|-------|-------|----------------|
| PLEK               | 0.00034673 | 0.38307157 | 0.134 | 0.322 | 1 Bcell_3_lung |
| SMAD4              | 0.00035052 | 0.33756894 | 0.098 | 0.276 | 1 Bcell_3_lung |
| TAX1BP1            | 0.00035603 | 0.22106885 | 0.295 | 0.58  | 1 Bcell_3_lung |
| YAF2               | 0.00035717 | 0.10746883 | 0.286 | 0.562 | 1 Bcell_3_lung |
| G3BP1              | 0.00036112 | 0.42555119 | 0.259 | 0.518 | 1 Bcell_3_lung |
| ENSMMUG00000004539 | 0.00037737 | 0.1329853  | 0.179 | 0.397 | 1 Bcell_3_lung |
| BTN2A2             | 0.00038581 | 0.288971   | 0.277 | 0.569 | 1 Bcell_3_lung |
| NABP1              | 0.00038776 | 0.33262304 | 0.125 | 0.314 | 1 Bcell_3_lung |
| CDCA7L             | 0.00038782 | 0.1000198  | 0.098 | 0.272 | 1 Bcell_3_lung |
| BRAF               | 0.00039953 | 0.21034996 | 0.357 | 0.666 | 1 Bcell_3_lung |
| TAF7               | 0.00040359 | 0.29882421 | 0.188 | 0.411 | 1 Bcell_3_lung |
| BDP1               | 0.00040765 | 0.24231268 | 0.25  | 0.518 | 1 Bcell_3_lung |
| PBRM1              | 0.00041809 | 0.19282834 | 0.232 | 0.459 | 1 Bcell_3_lung |
| ZNF331             | 0.00041906 | 2.41015579 | 0.357 | 0.273 | 1 Bcell_3_lung |
| GPR65              | 0.00042031 | 2.29122285 | 0.33  | 0.251 | 1 Bcell_3_lung |
| WAC                | 0.00042151 | 0.13308877 | 0.384 | 0.706 | 1 Bcell_3_lung |
| BPTF               | 0.00042296 | 0.11789849 | 0.357 | 0.654 | 1 Bcell_3_lung |
| TRPC4AP            | 0.00044183 | 0.27323279 | 0.152 | 0.361 | 1 Bcell_3_lung |
| DNM1L              | 0.00044414 | 0.26806195 | 0.179 | 0.387 | 1 Bcell_3_lung |
| KPNA1              | 0.00044495 | 0.37267661 | 0.17  | 0.378 | 1 Bcell_3_lung |
| NR4A2              | 0.00046681 | 0.46520138 | 0.241 | 0.477 | 1 Bcell_3_lung |
| RCOR3              | 0.00047957 | 0.32474094 | 0.134 | 0.33  | 1 Bcell_3_lung |
| CUX1               | 0.00048284 | 0.26268978 | 0.411 | 0.734 | 1 Bcell_3_lung |
| KATNBL1            | 0.00050793 | 0.2828923  | 0.196 | 0.417 | 1 Bcell_3_lung |
| FRYL               | 0.00050866 | 0.20890901 | 0.214 | 0.45  | 1 Bcell_3_lung |
| TIAL1              | 0.00051684 | 0.32042464 | 0.125 | 0.307 | 1 Bcell_3_lung |
| UBE2E3             | 0.00051824 | 0.11315129 | 0.116 | 0.288 | 1 Bcell_3_lung |
| KPNA4              | 0.00053025 | 0.20173026 | 0.134 | 0.319 | 1 Bcell_3_lung |
| CRLF3              | 0.00053065 | 0.31849191 | 0.098 | 0.267 | 1 Bcell_3_lung |
| SCAMP2             | 0.00053286 | 0.11689913 | 0.107 | 0.271 | 1 Bcell_3_lung |
| HECTD1             | 0.00054166 | 0.21227731 | 0.179 | 0.394 | 1 Bcell_3_lung |
| ATF7IP2            | 0.0005418  | 0.14789034 | 0.205 | 0.433 | 1 Bcell_3_lung |
| CCDC91             | 0.00054247 | 0.22929297 | 0.384 | 0.707 | 1 Bcell_3_lung |

|                     |            |            |       |       |                |
|---------------------|------------|------------|-------|-------|----------------|
| TOX4                | 0.00054941 | 0.64051004 | 0.125 | 0.306 | 1 Bcell_3_lung |
| DCAF1               | 0.00056278 | 0.16689498 | 0.116 | 0.294 | 1 Bcell_3_lung |
| TCEA1               | 0.00056934 | 0.23096174 | 0.259 | 0.509 | 1 Bcell_3_lung |
| CAST                | 0.00057306 | 0.20184109 | 0.33  | 0.63  | 1 Bcell_3_lung |
| LPCAT1              | 0.00058108 | 0.46204849 | 0.188 | 0.406 | 1 Bcell_3_lung |
| USO1                | 0.00058466 | 0.31804579 | 0.116 | 0.286 | 1 Bcell_3_lung |
| PPP1R8              | 0.00058928 | 0.30014804 | 0.188 | 0.4   | 1 Bcell_3_lung |
| SH3BGRL             | 0.00059226 | 0.17925417 | 0.241 | 0.494 | 1 Bcell_3_lung |
| MKLN1               | 0.00059647 | 0.21048218 | 0.357 | 0.649 | 1 Bcell_3_lung |
| ENSMMUG00000006965  | 0.0006209  | 0.36397505 | 0.196 | 0.405 | 1 Bcell_3_lung |
| HNRNPC              | 0.000625   | 0.10542484 | 0.473 | 0.791 | 1 Bcell_3_lung |
| GNA13               | 0.00063931 | 0.20645423 | 0.321 | 0.592 | 1 Bcell_3_lung |
| RMND5A              | 0.00064265 | 0.3061115  | 0.196 | 0.431 | 1 Bcell_3_lung |
| NFATC1              | 0.00066163 | 0.52869455 | 0.17  | 0.364 | 1 Bcell_3_lung |
| ENSMMUG00000011714  | 0.00067809 | 0.32760818 | 0.143 | 0.336 | 1 Bcell_3_lung |
| IL2RG               | 0.00068748 | 0.19682111 | 0.179 | 0.371 | 1 Bcell_3_lung |
| MDN1                | 0.00070704 | 0.64176203 | 0.17  | 0.381 | 1 Bcell_3_lung |
| NFYC                | 0.00073923 | 0.49554    | 0.152 | 0.346 | 1 Bcell_3_lung |
| TMOD3               | 0.0007498  | 0.29246638 | 0.196 | 0.398 | 1 Bcell_3_lung |
| OGDH                | 0.00076569 | 0.37300272 | 0.17  | 0.368 | 1 Bcell_3_lung |
| GALNT11             | 0.00076761 | 0.35446783 | 0.107 | 0.275 | 1 Bcell_3_lung |
| DNAJB14             | 0.00076893 | 0.3511433  | 0.125 | 0.287 | 1 Bcell_3_lung |
| DOCK11              | 0.0007719  | 0.19158081 | 0.402 | 0.716 | 1 Bcell_3_lung |
| ENSMMUG00000017466  | 0.00077797 | 0.10810818 | 0.277 | 0.52  | 1 Bcell_3_lung |
| ENSMMUG000000051392 | 0.00077934 | 0.23945385 | 0.232 | 0.478 | 1 Bcell_3_lung |
| C2CD5               | 0.00078878 | 0.23774437 | 0.152 | 0.338 | 1 Bcell_3_lung |
| EIF3J               | 0.00079271 | 0.37412614 | 0.188 | 0.41  | 1 Bcell_3_lung |
| EYA3                | 0.00080275 | 0.22400945 | 0.107 | 0.269 | 1 Bcell_3_lung |
| PITPNB              | 0.00080492 | 0.43370921 | 0.232 | 0.476 | 1 Bcell_3_lung |
| DCAF6               | 0.00081707 | 0.35434374 | 0.161 | 0.367 | 1 Bcell_3_lung |
| TMEM123             | 0.00081879 | 0.36611216 | 0.286 | 0.549 | 1 Bcell_3_lung |
| TGFB1               | 0.00081929 | 0.19506368 | 0.152 | 0.341 | 1 Bcell_3_lung |
| TPM3                | 0.00081937 | 0.15776486 | 0.366 | 0.713 | 1 Bcell_3_lung |

|                    |            |            |       |       |                |
|--------------------|------------|------------|-------|-------|----------------|
| PPP1R10            | 0.00082899 | 0.23853251 | 0.214 | 0.427 | 1 Bcell_3_lung |
| SLC25A37           | 0.00082997 | 0.38018761 | 0.241 | 0.481 | 1 Bcell_3_lung |
| UBR2               | 0.00083519 | 0.4596591  | 0.179 | 0.374 | 1 Bcell_3_lung |
| ENSMMUG00000012419 | 0.00084978 | 0.21761037 | 0.241 | 0.483 | 1 Bcell_3_lung |
| MGA                | 0.00085649 | 0.45171534 | 0.152 | 0.346 | 1 Bcell_3_lung |
| NOTCH2             | 0.0008968  | 0.29917105 | 0.25  | 0.5   | 1 Bcell_3_lung |
| CUL4A              | 0.00092444 | 0.21167486 | 0.161 | 0.347 | 1 Bcell_3_lung |
| SNX9               | 0.00092804 | 0.35802826 | 0.357 | 0.664 | 1 Bcell_3_lung |
| MED23              | 0.00094215 | 0.37091406 | 0.152 | 0.344 | 1 Bcell_3_lung |
| POLH               | 0.00094644 | 0.25626426 | 0.107 | 0.271 | 1 Bcell_3_lung |
| HECTD4             | 0.00095304 | 0.40733625 | 0.196 | 0.406 | 1 Bcell_3_lung |
| IFNAR2             | 0.00097253 | 0.25694139 | 0.268 | 0.525 | 1 Bcell_3_lung |
| CLIC4              | 0.00100024 | 0.11525679 | 0.205 | 0.417 | 1 Bcell_3_lung |
| KIF2A              | 0.00101055 | 0.16066762 | 0.152 | 0.33  | 1 Bcell_3_lung |
| ANKRD33B           | 0.00103237 | 0.10426769 | 0.429 | 0.695 | 1 Bcell_3_lung |
| EPS15L1            | 0.00103856 | 0.45460963 | 0.152 | 0.339 | 1 Bcell_3_lung |
| KCNMB4             | 0.00104854 | 0.18649588 | 0.107 | 0.264 | 1 Bcell_3_lung |
| ENSMMUG00000038348 | 0.00108045 | 0.3503377  | 0.17  | 0.356 | 1 Bcell_3_lung |
| OXR1               | 0.001082   | 0.44574728 | 0.348 | 0.652 | 1 Bcell_3_lung |
| PIAS2              | 0.00108537 | 0.12503316 | 0.125 | 0.292 | 1 Bcell_3_lung |
| DENND4A            | 0.00109135 | 0.59920661 | 0.875 | 0.935 | 1 Bcell_3_lung |
| RNF13              | 0.00109723 | 0.29850617 | 0.286 | 0.556 | 1 Bcell_3_lung |
| SIPA1L3            | 0.00110964 | 0.59633469 | 0.259 | 0.514 | 1 Bcell_3_lung |
| LARP4B             | 0.0011289  | 0.17659816 | 0.179 | 0.375 | 1 Bcell_3_lung |
| ANO6               | 0.00115336 | 0.37311347 | 0.241 | 0.462 | 1 Bcell_3_lung |
| SNX25              | 0.00116973 | 0.57137002 | 0.33  | 0.613 | 1 Bcell_3_lung |
| USP48              | 0.00117127 | 0.29560798 | 0.161 | 0.338 | 1 Bcell_3_lung |
| SMAD2              | 0.00117438 | 0.23206537 | 0.107 | 0.263 | 1 Bcell_3_lung |
| COTL1              | 0.00118332 | 0.11224757 | 0.277 | 0.547 | 1 Bcell_3_lung |
| ARMC8              | 0.00119804 | 0.15930748 | 0.188 | 0.388 | 1 Bcell_3_lung |
| ABCC1              | 0.0012036  | 0.49440312 | 0.214 | 0.407 | 1 Bcell_3_lung |
| NRROS              | 0.00122045 | 0.22270539 | 0.196 | 0.393 | 1 Bcell_3_lung |
| TBC1D22A           | 0.00125673 | 0.120217   | 0.223 | 0.435 | 1 Bcell_3_lung |



|          |            |            |       |       |                |
|----------|------------|------------|-------|-------|----------------|
| EEFSEC   | 0.00125825 | 0.2644665  | 0.098 | 0.25  | 1 Bcell_3_lung |
| ASXL2    | 0.00129225 | 0.10540257 | 0.232 | 0.441 | 1 Bcell_3_lung |
| MSN      | 0.00130287 | 0.35151163 | 0.348 | 0.63  | 1 Bcell_3_lung |
| SMAD3    | 0.00133274 | 0.40050548 | 0.232 | 0.471 | 1 Bcell_3_lung |
| ZBTB18   | 0.00133308 | 0.13131198 | 0.098 | 0.25  | 1 Bcell_3_lung |
| CASK     | 0.00133519 | 0.21573611 | 0.125 | 0.288 | 1 Bcell_3_lung |
| R3HDM1   | 0.00134355 | 0.4912029  | 0.152 | 0.344 | 1 Bcell_3_lung |
| PHIP     | 0.00135437 | 0.16467565 | 0.375 | 0.701 | 1 Bcell_3_lung |
| RABGAP1  | 0.00136778 | 0.37140899 | 0.143 | 0.321 | 1 Bcell_3_lung |
| ZC3HAV1  | 0.0013757  | 0.23537952 | 0.33  | 0.602 | 1 Bcell_3_lung |
| TCF25    | 0.00137977 | 0.22565782 | 0.214 | 0.433 | 1 Bcell_3_lung |
| RIC1     | 0.00138385 | 0.30243266 | 0.25  | 0.482 | 1 Bcell_3_lung |
| ICE1     | 0.00138553 | 0.38845323 | 0.107 | 0.268 | 1 Bcell_3_lung |
| SRSF7    | 0.00140176 | 0.38511053 | 0.348 | 0.611 | 1 Bcell_3_lung |
| ZNF700   | 0.0014383  | 0.43934729 | 0.116 | 0.274 | 1 Bcell_3_lung |
| ARHGEF7  | 0.00144247 | 0.52980437 | 0.214 | 0.419 | 1 Bcell_3_lung |
| FAM193A  | 0.00144963 | 0.22699317 | 0.205 | 0.403 | 1 Bcell_3_lung |
| BABAM2   | 0.00145812 | 0.30563076 | 0.286 | 0.554 | 1 Bcell_3_lung |
| NUP133   | 0.00146613 | 0.52447051 | 0.107 | 0.261 | 1 Bcell_3_lung |
| MPP7     | 0.00146857 | 0.38625877 | 0.259 | 0.482 | 1 Bcell_3_lung |
| SPAG9    | 0.00146928 | 0.54083854 | 0.339 | 0.62  | 1 Bcell_3_lung |
| AKIRIN2  | 0.0014722  | 0.41766151 | 0.143 | 0.309 | 1 Bcell_3_lung |
| TANGO6   | 0.00150316 | 0.10059267 | 0.17  | 0.348 | 1 Bcell_3_lung |
| PJA2     | 0.00154014 | 0.1973929  | 0.205 | 0.4   | 1 Bcell_3_lung |
| PAOX     | 0.00154621 | 0.37175522 | 0.116 | 0.273 | 1 Bcell_3_lung |
| MORF4L2  | 0.00156523 | 0.43261378 | 0.161 | 0.347 | 1 Bcell_3_lung |
| XRCC5    | 0.00159486 | 0.16220109 | 0.339 | 0.629 | 1 Bcell_3_lung |
| CD46     | 0.00160985 | 0.35612703 | 0.25  | 0.478 | 1 Bcell_3_lung |
| OS9      | 0.001632   | 0.54066539 | 0.116 | 0.265 | 1 Bcell_3_lung |
| PCNP     | 0.0016385  | 0.42400712 | 0.179 | 0.36  | 1 Bcell_3_lung |
| SLC39A11 | 0.00163955 | 0.19045689 | 0.241 | 0.47  | 1 Bcell_3_lung |
| CNPY3    | 0.00164561 | 0.25722751 | 0.17  | 0.362 | 1 Bcell_3_lung |
| BTBD7    | 0.00165793 | 0.38692389 | 0.116 | 0.278 | 1 Bcell_3_lung |

|                    |            |            |       |       |                |
|--------------------|------------|------------|-------|-------|----------------|
| ENSMMUG00000022489 | 0.00166816 | 0.19659933 | 0.268 | 0.516 | 1 Bcell_3_lung |
| ZRANB1             | 0.00170386 | 0.26357175 | 0.098 | 0.251 | 1 Bcell_3_lung |
| TPR                | 0.00170459 | 0.22388085 | 0.25  | 0.471 | 1 Bcell_3_lung |
| PELI1              | 0.00171149 | 0.40486182 | 0.295 | 0.543 | 1 Bcell_3_lung |
| WDFY4              | 0.00171606 | 0.29473659 | 0.446 | 0.766 | 1 Bcell_3_lung |
| UBAP2L             | 0.0017559  | 0.68980999 | 0.17  | 0.37  | 1 Bcell_3_lung |
| USP24              | 0.00176234 | 0.51889248 | 0.205 | 0.435 | 1 Bcell_3_lung |
| PHF20L1            | 0.00176845 | 0.50959123 | 0.116 | 0.279 | 1 Bcell_3_lung |
| AZIN1              | 0.00177169 | 0.11259301 | 0.161 | 0.332 | 1 Bcell_3_lung |
| TRIM25             | 0.00181988 | 0.58711334 | 0.116 | 0.277 | 1 Bcell_3_lung |
| ATP5F1A            | 0.00190404 | 0.10240142 | 0.241 | 0.46  | 1 Bcell_3_lung |
| SEC63              | 0.00191535 | 0.36446011 | 0.259 | 0.492 | 1 Bcell_3_lung |
| CCNH               | 0.00194082 | 0.21052119 | 0.152 | 0.318 | 1 Bcell_3_lung |
| ARHGEF6            | 0.00196187 | 0.53935224 | 0.205 | 0.397 | 1 Bcell_3_lung |
| CCDC82             | 0.00198679 | 0.24016808 | 0.107 | 0.252 | 1 Bcell_3_lung |
| MFHAS1             | 0.00199317 | 0.41581862 | 0.134 | 0.3   | 1 Bcell_3_lung |
| RHEB               | 0.00202254 | 0.50296796 | 0.241 | 0.485 | 1 Bcell_3_lung |
| INTS6              | 0.00204161 | 0.20440959 | 0.277 | 0.509 | 1 Bcell_3_lung |
| UBA6               | 0.00204704 | 0.19997072 | 0.143 | 0.306 | 1 Bcell_3_lung |
| SAMD4B             | 0.00208651 | 0.3354305  | 0.143 | 0.312 | 1 Bcell_3_lung |
| TFCP2              | 0.00208659 | 0.6762799  | 0.107 | 0.253 | 1 Bcell_3_lung |
| FCRLA              | 0.00211621 | 0.22889812 | 0.205 | 0.41  | 1 Bcell_3_lung |
| GLS                | 0.00214908 | 0.17854588 | 0.295 | 0.556 | 1 Bcell_3_lung |
| ARHGAP45           | 0.00214995 | 0.6978649  | 0.125 | 0.289 | 1 Bcell_3_lung |
| PRR14L             | 0.00215029 | 0.22984704 | 0.134 | 0.282 | 1 Bcell_3_lung |
| CAPZB              | 0.0021509  | 0.3833365  | 0.232 | 0.448 | 1 Bcell_3_lung |
| UIMC1              | 0.00215796 | 0.43174093 | 0.205 | 0.395 | 1 Bcell_3_lung |
| SCLT1              | 0.00216659 | 0.34345962 | 0.286 | 0.535 | 1 Bcell_3_lung |
| STK38L             | 0.00217117 | 0.24756302 | 0.107 | 0.256 | 1 Bcell_3_lung |
| VCP                | 0.00217765 | 0.41579722 | 0.143 | 0.308 | 1 Bcell_3_lung |
| DAZAP1             | 0.00219645 | 0.28816932 | 0.33  | 0.598 | 1 Bcell_3_lung |
| GLRX3              | 0.00219717 | 0.32506256 | 0.161 | 0.336 | 1 Bcell_3_lung |
| BACH1              | 0.00219947 | 0.34718978 | 0.116 | 0.265 | 1 Bcell_3_lung |

|                    |            |            |       |       |                |
|--------------------|------------|------------|-------|-------|----------------|
| CHD6               | 0.00220223 | 0.46472076 | 0.214 | 0.422 | 1 Bcell_3_lung |
| CSNK2A1            | 0.0022085  | 0.36109178 | 0.277 | 0.524 | 1 Bcell_3_lung |
| THRAP3             | 0.00222102 | 0.58347212 | 0.295 | 0.541 | 1 Bcell_3_lung |
| MON2               | 0.00224056 | 0.43636485 | 0.223 | 0.434 | 1 Bcell_3_lung |
| ABHD17B            | 0.00225387 | 0.29769822 | 0.116 | 0.266 | 1 Bcell_3_lung |
| PTEN               | 0.00225474 | 0.26199876 | 0.446 | 0.74  | 1 Bcell_3_lung |
| ILRUN              | 0.00225501 | 0.46396139 | 0.125 | 0.275 | 1 Bcell_3_lung |
| CHP1               | 0.00227416 | 0.43663986 | 0.179 | 0.36  | 1 Bcell_3_lung |
| ACP5               | 0.00228618 | 0.25742061 | 0.134 | 0.299 | 1 Bcell_3_lung |
| NPTN               | 0.00228651 | 0.18126053 | 0.143 | 0.302 | 1 Bcell_3_lung |
| OSTF1              | 0.0022952  | 0.21309967 | 0.196 | 0.394 | 1 Bcell_3_lung |
| SPECC1L            | 0.00229585 | 0.32203718 | 0.179 | 0.355 | 1 Bcell_3_lung |
| FOXP1              | 0.00230937 | 0.14451602 | 0.482 | 0.788 | 1 Bcell_3_lung |
| SPOPL              | 0.00231677 | 0.2533336  | 0.179 | 0.364 | 1 Bcell_3_lung |
| MED21              | 0.00234636 | 0.39911691 | 0.152 | 0.32  | 1 Bcell_3_lung |
| ITFG2              | 0.00237991 | 0.37442128 | 0.179 | 0.369 | 1 Bcell_3_lung |
| NAP1L4             | 0.00239466 | 0.17521272 | 0.33  | 0.579 | 1 Bcell_3_lung |
| C3H7orf50          | 0.00240712 | 0.28703639 | 0.268 | 0.486 | 1 Bcell_3_lung |
| ND3                | 0.00240802 | 0.74026127 | 0.705 | 0.832 | 1 Bcell_3_lung |
| GPBP1              | 0.00243682 | 0.22981368 | 0.455 | 0.771 | 1 Bcell_3_lung |
| CCNG1              | 0.00246138 | 0.2954941  | 0.17  | 0.328 | 1 Bcell_3_lung |
| CDK6               | 0.00251823 | 0.41674946 | 0.223 | 0.426 | 1 Bcell_3_lung |
| RALGAPB            | 0.00252216 | 0.52749413 | 0.134 | 0.29  | 1 Bcell_3_lung |
| RANBP9             | 0.00253954 | 0.31049106 | 0.286 | 0.52  | 1 Bcell_3_lung |
| ITPKB              | 0.0025593  | 0.55255582 | 0.17  | 0.359 | 1 Bcell_3_lung |
| ARIH2              | 0.00257599 | 0.35126857 | 0.196 | 0.396 | 1 Bcell_3_lung |
| VPS36              | 0.00260578 | 0.13288356 | 0.214 | 0.401 | 1 Bcell_3_lung |
| MTMR3              | 0.0026303  | 0.37670099 | 0.179 | 0.365 | 1 Bcell_3_lung |
| UBR1               | 0.00267575 | 0.34076987 | 0.295 | 0.55  | 1 Bcell_3_lung |
| ATG7               | 0.0026915  | 0.87125012 | 0.125 | 0.279 | 1 Bcell_3_lung |
| ISCA1              | 0.00274637 | 0.13705674 | 0.152 | 0.32  | 1 Bcell_3_lung |
| NARS2              | 0.00275078 | 0.28931286 | 0.116 | 0.261 | 1 Bcell_3_lung |
| ENSMMUG00000016959 | 0.00276609 | 0.5024957  | 0.205 | 0.402 | 1 Bcell_3_lung |

|          |            |            |       |       |                |
|----------|------------|------------|-------|-------|----------------|
| SLC25A36 | 0.0028228  | 0.74901176 | 0.116 | 0.27  | 1 Bcell_3_lung |
| SLC25A3  | 0.00284284 | 0.42987522 | 0.223 | 0.441 | 1 Bcell_3_lung |
| PPP6R1   | 0.00287655 | 0.24906869 | 0.134 | 0.285 | 1 Bcell_3_lung |
| UBE2G1   | 0.00288007 | 0.40504742 | 0.304 | 0.569 | 1 Bcell_3_lung |
| BIRC3    | 0.00289959 | 0.19410223 | 0.286 | 0.507 | 1 Bcell_3_lung |
| COPS6    | 0.00300195 | 0.56252201 | 0.17  | 0.361 | 1 Bcell_3_lung |
| UBE2K    | 0.00303607 | 0.53210933 | 0.33  | 0.6   | 1 Bcell_3_lung |
| XPO1     | 0.00307486 | 0.27321811 | 0.188 | 0.373 | 1 Bcell_3_lung |
| CNOT10   | 0.00311415 | 0.65690976 | 0.116 | 0.264 | 1 Bcell_3_lung |
| IKBKB    | 0.00314893 | 0.46306865 | 0.161 | 0.318 | 1 Bcell_3_lung |
| CPNE1    | 0.0032107  | 0.43328405 | 0.223 | 0.425 | 1 Bcell_3_lung |
| CD72     | 0.00322192 | 0.18776777 | 0.259 | 0.467 | 1 Bcell_3_lung |
| ZNF706   | 0.00322784 | 0.21486037 | 0.143 | 0.309 | 1 Bcell_3_lung |
| ADD3     | 0.00330281 | 0.3300462  | 0.214 | 0.407 | 1 Bcell_3_lung |
| KIZ      | 0.00333246 | 0.32444929 | 0.205 | 0.402 | 1 Bcell_3_lung |
| DOP1B    | 0.00333566 | 0.3902453  | 0.188 | 0.37  | 1 Bcell_3_lung |
| SND1     | 0.00335249 | 0.1764111  | 0.277 | 0.506 | 1 Bcell_3_lung |
| GATAD2B  | 0.00336022 | 0.36942297 | 0.339 | 0.607 | 1 Bcell_3_lung |
| FAM133B  | 0.0033694  | 0.61077166 | 0.232 | 0.449 | 1 Bcell_3_lung |
| TAB2     | 0.00339529 | 0.33957825 | 0.205 | 0.386 | 1 Bcell_3_lung |
| HIRA     | 0.00341935 | 0.49089567 | 0.17  | 0.334 | 1 Bcell_3_lung |
| TUBB     | 0.00345836 | 0.34055735 | 0.152 | 0.315 | 1 Bcell_3_lung |
| TAF1     | 0.00349083 | 0.30707896 | 0.143 | 0.3   | 1 Bcell_3_lung |
| SEC62    | 0.00349999 | 0.53758727 | 0.188 | 0.374 | 1 Bcell_3_lung |
| GNG5     | 0.00350481 | 0.33904462 | 0.25  | 0.477 | 1 Bcell_3_lung |
| PARD3    | 0.00358934 | 0.43643769 | 0.134 | 0.292 | 1 Bcell_3_lung |
| CASP8    | 0.00368737 | 0.44825969 | 0.179 | 0.356 | 1 Bcell_3_lung |
| HNRNPUL1 | 0.0037385  | 0.48073725 | 0.152 | 0.323 | 1 Bcell_3_lung |
| UBE2R2   | 0.00375162 | 0.3641684  | 0.223 | 0.418 | 1 Bcell_3_lung |
| FNBP1L   | 0.00385842 | 0.19118221 | 0.116 | 0.255 | 1 Bcell_3_lung |
| PECAM1   | 0.00388383 | 0.19657492 | 0.152 | 0.305 | 1 Bcell_3_lung |
| SSBP2    | 0.00393108 | 0.26122459 | 0.455 | 0.736 | 1 Bcell_3_lung |
| ZNF44    | 0.00395793 | 0.48437766 | 0.125 | 0.269 | 1 Bcell_3_lung |

|          |            |            |       |       |                |
|----------|------------|------------|-------|-------|----------------|
| MYO5A    | 0.00398584 | 0.23421609 | 0.321 | 0.571 | 1 Bcell_3_lung |
| ZFAND3   | 0.00398703 | 0.14665717 | 0.527 | 0.807 | 1 Bcell_3_lung |
| HMGB2    | 0.00406162 | 0.20122246 | 0.17  | 0.33  | 1 Bcell_3_lung |
| UBL3     | 0.00406273 | 0.31673094 | 0.179 | 0.346 | 1 Bcell_3_lung |
| TBCE     | 0.00412171 | 0.11677808 | 0.116 | 0.253 | 1 Bcell_3_lung |
| CCPG1    | 0.00412455 | 0.46210585 | 0.134 | 0.28  | 1 Bcell_3_lung |
| SMG1     | 0.00413346 | 0.43246972 | 0.321 | 0.588 | 1 Bcell_3_lung |
| APPL1    | 0.00416921 | 0.25082941 | 0.205 | 0.383 | 1 Bcell_3_lung |
| MAP1LC3B | 0.00422322 | 0.30223241 | 0.205 | 0.392 | 1 Bcell_3_lung |
| ELMOD3   | 0.00426357 | 0.36104329 | 0.188 | 0.366 | 1 Bcell_3_lung |
| CCT5     | 0.00438028 | 0.45103739 | 0.161 | 0.321 | 1 Bcell_3_lung |
| GLG1     | 0.00440638 | 0.33825727 | 0.232 | 0.427 | 1 Bcell_3_lung |
| PPP2R5C  | 0.00441123 | 1.03616028 | 0.679 | 0.794 | 1 Bcell_3_lung |
| SNRPB2   | 0.00442982 | 0.35210614 | 0.134 | 0.285 | 1 Bcell_3_lung |
| SUPT20H  | 0.00456615 | 0.4469586  | 0.134 | 0.285 | 1 Bcell_3_lung |
| ZZEF1    | 0.00460979 | 0.22029908 | 0.125 | 0.265 | 1 Bcell_3_lung |
| CASP1    | 0.00460983 | 0.23090829 | 0.286 | 0.523 | 1 Bcell_3_lung |
| ACO2     | 0.00461962 | 0.57027901 | 0.125 | 0.278 | 1 Bcell_3_lung |
| RNF149   | 0.00473709 | 0.52917372 | 0.116 | 0.254 | 1 Bcell_3_lung |
| RRBP1    | 0.00479052 | 0.50081672 | 0.152 | 0.31  | 1 Bcell_3_lung |
| SMARCA2  | 0.00479657 | 0.73271645 | 0.268 | 0.479 | 1 Bcell_3_lung |
| RB1CC1   | 0.00479991 | 0.71671885 | 0.152 | 0.32  | 1 Bcell_3_lung |
| MAP4K4   | 0.00480933 | 1.33779562 | 0.625 | 0.767 | 1 Bcell_3_lung |
| FKBP1A   | 0.00481144 | 0.11163481 | 0.125 | 0.261 | 1 Bcell_3_lung |
| HMGB1    | 0.00489504 | 0.11588223 | 0.446 | 0.753 | 1 Bcell_3_lung |
| OSBPL10  | 0.00492221 | 0.20031223 | 0.295 | 0.507 | 1 Bcell_3_lung |
| XRN1     | 0.00495356 | 0.51411401 | 0.223 | 0.438 | 1 Bcell_3_lung |
| MORC3    | 0.00495438 | 0.42819048 | 0.25  | 0.441 | 1 Bcell_3_lung |
| TRRAP    | 0.00499233 | 0.7685989  | 0.134 | 0.287 | 1 Bcell_3_lung |
| MILR1    | 0.00507655 | 0.44853816 | 0.17  | 0.336 | 1 Bcell_3_lung |
| DMTF1    | 0.0050779  | 0.89111691 | 0.241 | 0.468 | 1 Bcell_3_lung |
| SEC14L1  | 0.00507797 | 0.39704289 | 0.116 | 0.25  | 1 Bcell_3_lung |
| RASGEF1B | 0.00522447 | 0.22913105 | 0.446 | 0.735 | 1 Bcell_3_lung |

|                    |            |            |       |       |                |
|--------------------|------------|------------|-------|-------|----------------|
| GTF2H5             | 0.00524688 | 0.10664827 | 0.179 | 0.348 | 1 Bcell_3_lung |
| POLK               | 0.00529835 | 0.5522625  | 0.161 | 0.324 | 1 Bcell_3_lung |
| PECR               | 0.0055438  | 0.4437356  | 0.134 | 0.277 | 1 Bcell_3_lung |
| AP1G1              | 0.00565169 | 0.70380129 | 0.25  | 0.483 | 1 Bcell_3_lung |
| RASA3              | 0.00565345 | 0.57860935 | 0.179 | 0.331 | 1 Bcell_3_lung |
| CSPP1              | 0.00568394 | 0.27492501 | 0.205 | 0.388 | 1 Bcell_3_lung |
| RTN4               | 0.0057009  | 0.13554728 | 0.286 | 0.503 | 1 Bcell_3_lung |
| FRS2               | 0.00576249 | 0.39372506 | 0.143 | 0.282 | 1 Bcell_3_lung |
| ITGB2              | 0.00582466 | 0.28811342 | 0.134 | 0.269 | 1 Bcell_3_lung |
| ERLEC1             | 0.00592979 | 0.27901697 | 0.152 | 0.302 | 1 Bcell_3_lung |
| EP400              | 0.00593186 | 0.37944927 | 0.125 | 0.259 | 1 Bcell_3_lung |
| TPP2               | 0.00594529 | 0.58477689 | 0.17  | 0.338 | 1 Bcell_3_lung |
| RUFY1              | 0.00595845 | 0.78421196 | 0.134 | 0.282 | 1 Bcell_3_lung |
| PRPF4B             | 0.00598274 | 0.25152189 | 0.42  | 0.76  | 1 Bcell_3_lung |
| ENSMMUG00000059742 | 0.00600209 | 0.29288633 | 0.161 | 0.318 | 1 Bcell_3_lung |
| CLK4               | 0.0060117  | 0.47658988 | 0.143 | 0.292 | 1 Bcell_3_lung |
| RAB30              | 0.00606732 | 0.24827654 | 0.464 | 0.749 | 1 Bcell_3_lung |
| DHX8               | 0.00611647 | 0.11185491 | 0.143 | 0.28  | 1 Bcell_3_lung |
| OST4               | 0.00620248 | 0.36150832 | 0.196 | 0.378 | 1 Bcell_3_lung |
| PPP4R3A            | 0.00622436 | 0.57865844 | 0.196 | 0.384 | 1 Bcell_3_lung |
| ENSMMUG00000050829 | 0.00635123 | 0.26008966 | 0.348 | 0.614 | 1 Bcell_3_lung |
| NDUFB4             | 0.00647095 | 0.5273494  | 0.214 | 0.396 | 1 Bcell_3_lung |
| HUWE1              | 0.00654367 | 0.48979187 | 0.312 | 0.571 | 1 Bcell_3_lung |
| ELL2               | 0.00662991 | 0.34017126 | 0.304 | 0.53  | 1 Bcell_3_lung |
| FOXN2              | 0.00663115 | 0.45333992 | 0.152 | 0.298 | 1 Bcell_3_lung |
| NFAT5              | 0.00674182 | 0.28095126 | 0.339 | 0.582 | 1 Bcell_3_lung |
| TMEM131            | 0.00676471 | 0.11025541 | 0.58  | 0.897 | 1 Bcell_3_lung |
| HERC4              | 0.00676471 | 0.67884592 | 0.259 | 0.473 | 1 Bcell_3_lung |
| CLCN3              | 0.00678826 | 0.65172846 | 0.196 | 0.385 | 1 Bcell_3_lung |
| RBX1               | 0.00679138 | 0.28685594 | 0.188 | 0.361 | 1 Bcell_3_lung |
| FTO                | 0.00679508 | 0.28432193 | 0.214 | 0.383 | 1 Bcell_3_lung |
| ARHGAP30           | 0.00685794 | 0.48319247 | 0.196 | 0.368 | 1 Bcell_3_lung |
| KAT6A              | 0.00686172 | 0.50727824 | 0.348 | 0.627 | 1 Bcell_3_lung |

|                     |            |            |       |       |                |
|---------------------|------------|------------|-------|-------|----------------|
| BTBD9               | 0.00686663 | 0.144123   | 0.393 | 0.629 | 1 Bcell_3_lung |
| DBI                 | 0.0068718  | 0.20157899 | 0.214 | 0.393 | 1 Bcell_3_lung |
| QRICH1              | 0.00688768 | 0.78214428 | 0.223 | 0.432 | 1 Bcell_3_lung |
| PIK3C3              | 0.00700861 | 0.63624702 | 0.116 | 0.256 | 1 Bcell_3_lung |
| MRPS31              | 0.00702584 | 0.12888227 | 0.125 | 0.257 | 1 Bcell_3_lung |
| GPSM3               | 0.00704788 | 0.29483042 | 0.25  | 0.455 | 1 Bcell_3_lung |
| BOD1L1              | 0.00724805 | 0.27996675 | 0.17  | 0.325 | 1 Bcell_3_lung |
| PPIL4               | 0.00745286 | 0.45669328 | 0.259 | 0.455 | 1 Bcell_3_lung |
| ENSMMUG00000006778  | 0.00757259 | 0.41348793 | 0.232 | 0.417 | 1 Bcell_3_lung |
| USP37               | 0.00764352 | 0.7900696  | 0.161 | 0.322 | 1 Bcell_3_lung |
| POU2F2              | 0.00764874 | 0.49076919 | 0.134 | 0.276 | 1 Bcell_3_lung |
| BTK                 | 0.00784702 | 0.32020258 | 0.196 | 0.369 | 1 Bcell_3_lung |
| CREM                | 0.00791506 | 2.14680475 | 0.357 | 0.335 | 1 Bcell_3_lung |
| SUMO1               | 0.00797082 | 0.42633151 | 0.205 | 0.379 | 1 Bcell_3_lung |
| PIP5K1A             | 0.00800674 | 0.38138628 | 0.205 | 0.384 | 1 Bcell_3_lung |
| PPA2                | 0.00801537 | 0.45264497 | 0.17  | 0.32  | 1 Bcell_3_lung |
| SMC3                | 0.00801944 | 0.40814647 | 0.134 | 0.268 | 1 Bcell_3_lung |
| DBNL                | 0.00802026 | 0.53833058 | 0.304 | 0.54  | 1 Bcell_3_lung |
| UBR5                | 0.00802192 | 0.40059954 | 0.348 | 0.588 | 1 Bcell_3_lung |
| FBL                 | 0.00808596 | 0.38883879 | 0.125 | 0.252 | 1 Bcell_3_lung |
| RBBP4               | 0.00813466 | 0.33020278 | 0.232 | 0.413 | 1 Bcell_3_lung |
| IP6K1               | 0.00821726 | 0.79464238 | 0.17  | 0.339 | 1 Bcell_3_lung |
| ENSMMUG000000011798 | 0.00833342 | 0.32346019 | 0.125 | 0.251 | 1 Bcell_3_lung |
| GGA3                | 0.00848349 | 1.061608   | 0.125 | 0.266 | 1 Bcell_3_lung |
| IRF4                | 0.00867997 | 0.11790039 | 0.152 | 0.289 | 1 Bcell_3_lung |
| DYNC1H1             | 0.00871699 | 0.66999122 | 0.152 | 0.29  | 1 Bcell_3_lung |
| SAP18               | 0.00872025 | 0.23768796 | 0.214 | 0.39  | 1 Bcell_3_lung |
| NDUFC2              | 0.00875561 | 0.11398061 | 0.152 | 0.29  | 1 Bcell_3_lung |
| ZEB1                | 0.00895177 | 0.16421347 | 0.455 | 0.729 | 1 Bcell_3_lung |
| NSRP1               | 0.00920796 | 0.45433054 | 0.25  | 0.44  | 1 Bcell_3_lung |
| PARK7               | 0.00921372 | 0.26298278 | 0.143 | 0.275 | 1 Bcell_3_lung |
| USP4                | 0.00939708 | 0.79247721 | 0.125 | 0.257 | 1 Bcell_3_lung |
| ACTR10              | 0.00942052 | 0.28571597 | 0.134 | 0.265 | 1 Bcell_3_lung |

|                    |            |            |       |       |                |
|--------------------|------------|------------|-------|-------|----------------|
| ADD1               | 0.009716   | 0.56070584 | 0.295 | 0.532 | 1 Bcell_3_lung |
| ENSMMUG00000007657 | 0.00977387 | 0.39571756 | 0.214 | 0.408 | 1 Bcell_3_lung |
| RALGAP1            | 0.00981551 | 0.50295219 | 0.161 | 0.303 | 1 Bcell_3_lung |
| CCDC66             | 0.01005028 | 0.2070604  | 0.161 | 0.298 | 1 Bcell_3_lung |
| ENSMMUG00000059017 | 0.01015055 | 0.11030082 | 0.223 | 0.389 | 1 Bcell_3_lung |
| POGZ               | 0.0102011  | 0.37388426 | 0.223 | 0.39  | 1 Bcell_3_lung |
| STRN3              | 0.01020564 | 0.63661752 | 0.25  | 0.455 | 1 Bcell_3_lung |
| KIAA0232           | 0.01022491 | 0.32882061 | 0.125 | 0.255 | 1 Bcell_3_lung |
| SNRPD2             | 0.01026931 | 0.22896851 | 0.232 | 0.417 | 1 Bcell_3_lung |
| ERICH1             | 0.01032975 | 0.40672137 | 0.143 | 0.283 | 1 Bcell_3_lung |
| TNPO1              | 0.01077105 | 1.0243445  | 0.196 | 0.376 | 1 Bcell_3_lung |
| RAB10              | 0.01090233 | 0.93658867 | 0.223 | 0.415 | 1 Bcell_3_lung |
| DCTN3              | 0.0111513  | 0.29965162 | 0.134 | 0.268 | 1 Bcell_3_lung |
| FGFR10P2           | 0.0111811  | 0.31992116 | 0.17  | 0.316 | 1 Bcell_3_lung |
| RB1                | 0.01119038 | 0.30580745 | 0.17  | 0.321 | 1 Bcell_3_lung |
| FLI1               | 0.01122713 | 0.4533442  | 0.321 | 0.565 | 1 Bcell_3_lung |
| PIK3AP1            | 0.01130742 | 0.40119207 | 0.402 | 0.691 | 1 Bcell_3_lung |
| PIP5K1B            | 0.01156347 | 0.18119578 | 0.375 | 0.643 | 1 Bcell_3_lung |
| YY1                | 0.01161373 | 0.70090142 | 0.17  | 0.327 | 1 Bcell_3_lung |
| SRP14              | 0.01174905 | 0.11013873 | 0.357 | 0.637 | 1 Bcell_3_lung |
| ZNF146             | 0.01179885 | 0.34424391 | 0.143 | 0.272 | 1 Bcell_3_lung |
| COX5B              | 0.01187054 | 0.19894322 | 0.179 | 0.336 | 1 Bcell_3_lung |
| QSOX2              | 0.01194638 | 1.10745246 | 0.179 | 0.34  | 1 Bcell_3_lung |
| DYNLL1             | 0.01201441 | 0.22738454 | 0.161 | 0.291 | 1 Bcell_3_lung |
| CCT2               | 0.01229263 | 0.34092919 | 0.295 | 0.511 | 1 Bcell_3_lung |
| SRI                | 0.01230715 | 0.2504703  | 0.17  | 0.319 | 1 Bcell_3_lung |
| ANXA4              | 0.01231008 | 0.19167643 | 0.161 | 0.295 | 1 Bcell_3_lung |
| NEDD4L             | 0.01233315 | 0.490116   | 0.33  | 0.56  | 1 Bcell_3_lung |
| ESYT1              | 0.01245301 | 0.25024584 | 0.152 | 0.286 | 1 Bcell_3_lung |
| SYNE2              | 0.01259614 | 0.32743777 | 0.161 | 0.308 | 1 Bcell_3_lung |
| PPP1CC             | 0.01260056 | 0.51286299 | 0.205 | 0.378 | 1 Bcell_3_lung |
| AOPEP              | 0.01277187 | 0.4352938  | 0.214 | 0.388 | 1 Bcell_3_lung |
| PRR13              | 0.01280643 | 0.6354625  | 0.223 | 0.407 | 1 Bcell_3_lung |



|                    |            |            |       |       |                |
|--------------------|------------|------------|-------|-------|----------------|
| ZCCHC10            | 0.01317707 | 0.51284771 | 0.152 | 0.285 | 1 Bcell_3_lung |
| MAPK14             | 0.01318845 | 0.53754347 | 0.143 | 0.278 | 1 Bcell_3_lung |
| NF1                | 0.01321188 | 0.35832062 | 0.321 | 0.536 | 1 Bcell_3_lung |
| DENR               | 0.01322572 | 0.13444819 | 0.188 | 0.337 | 1 Bcell_3_lung |
| ABLIM1             | 0.01324895 | 0.19589397 | 0.545 | 0.826 | 1 Bcell_3_lung |
| BRWD3              | 0.01326324 | 0.77463578 | 0.134 | 0.273 | 1 Bcell_3_lung |
| TCF3               | 0.01354276 | 0.3087748  | 0.179 | 0.319 | 1 Bcell_3_lung |
| NDUFA1             | 0.01354559 | 0.13489283 | 0.259 | 0.475 | 1 Bcell_3_lung |
| CSNK2B             | 0.01363066 | 0.6367484  | 0.152 | 0.284 | 1 Bcell_3_lung |
| NPEPPS             | 0.01365297 | 0.38574257 | 0.152 | 0.292 | 1 Bcell_3_lung |
| STX16              | 0.01375361 | 0.5826456  | 0.152 | 0.286 | 1 Bcell_3_lung |
| EXOC5              | 0.01377663 | 0.46676872 | 0.134 | 0.258 | 1 Bcell_3_lung |
| ATP10D             | 0.01383291 | 0.69694923 | 0.196 | 0.356 | 1 Bcell_3_lung |
| MAP4K5             | 0.01392524 | 0.56709637 | 0.152 | 0.283 | 1 Bcell_3_lung |
| ENSMMUG00000052424 | 0.01403601 | 0.1022074  | 0.58  | 0.869 | 1 Bcell_3_lung |
| HNRNPA1            | 0.01411156 | 0.41284176 | 0.339 | 0.582 | 1 Bcell_3_lung |
| SERBP1             | 0.01430725 | 0.30948646 | 0.312 | 0.532 | 1 Bcell_3_lung |
| ENSMMUG00000063859 | 0.01441689 | 0.12427074 | 0.223 | 0.373 | 1 Bcell_3_lung |
| ENSMMUG00000061128 | 0.01446205 | 0.23077407 | 0.25  | 0.446 | 1 Bcell_3_lung |
| BIRC2              | 0.01470552 | 0.59510925 | 0.161 | 0.296 | 1 Bcell_3_lung |
| ZC3H7A             | 0.01470882 | 0.27327214 | 0.152 | 0.285 | 1 Bcell_3_lung |
| ZNF800             | 0.01485641 | 0.7718591  | 0.134 | 0.261 | 1 Bcell_3_lung |
| STAP1              | 0.01505399 | 0.73746535 | 0.259 | 0.452 | 1 Bcell_3_lung |
| RGS19              | 0.01510504 | 0.34217933 | 0.188 | 0.349 | 1 Bcell_3_lung |
| GNAI2.1            | 0.01531442 | 0.17288161 | 0.259 | 0.423 | 1 Bcell_3_lung |
| SNRPD3             | 0.01532172 | 0.47103595 | 0.214 | 0.391 | 1 Bcell_3_lung |
| RSBN1L             | 0.0153369  | 0.38427951 | 0.196 | 0.338 | 1 Bcell_3_lung |
| CEP135             | 0.01537777 | 0.56835488 | 0.17  | 0.312 | 1 Bcell_3_lung |
| TRAM1              | 0.01537874 | 0.3996343  | 0.241 | 0.414 | 1 Bcell_3_lung |
| CYB5R3             | 0.01542819 | 0.49826612 | 0.134 | 0.257 | 1 Bcell_3_lung |
| ABCG1              | 0.01557595 | 0.67446422 | 0.205 | 0.367 | 1 Bcell_3_lung |
| COMT               | 0.01558954 | 0.67545742 | 0.179 | 0.321 | 1 Bcell_3_lung |
| LAPTM5             | 0.01566299 | 0.31910066 | 0.429 | 0.702 | 1 Bcell_3_lung |

|                    |            |            |       |       |                |
|--------------------|------------|------------|-------|-------|----------------|
| TMEM14B            | 0.01570458 | 0.46258985 | 0.232 | 0.408 | 1 Bcell_3_lung |
| REL                | 0.01572181 | 0.10289685 | 0.509 | 0.805 | 1 Bcell_3_lung |
| C4H6orf62          | 0.01574089 | 0.75044159 | 0.196 | 0.366 | 1 Bcell_3_lung |
| PTPN9              | 0.01581703 | 0.81503066 | 0.143 | 0.274 | 1 Bcell_3_lung |
| COMMD6             | 0.01589371 | 0.12448064 | 0.357 | 0.631 | 1 Bcell_3_lung |
| ETS1               | 0.01597447 | 0.40068406 | 0.375 | 0.609 | 1 Bcell_3_lung |
| ENSMMUG00000053392 | 0.01602861 | 0.32201504 | 0.196 | 0.344 | 1 Bcell_3_lung |
| ATP6V0E1           | 0.01618586 | 0.64629119 | 0.232 | 0.396 | 1 Bcell_3_lung |
| UQCRQ              | 0.01621885 | 0.13053076 | 0.196 | 0.351 | 1 Bcell_3_lung |
| BACH2              | 0.01639707 | 0.46376081 | 0.741 | 0.799 | 1 Bcell_3_lung |
| RTN3               | 0.01670965 | 1.01562328 | 0.152 | 0.279 | 1 Bcell_3_lung |
| FHIT               | 0.01672173 | 0.42450164 | 0.161 | 0.281 | 1 Bcell_3_lung |
| HMBOX1             | 0.01677945 | 0.76798039 | 0.188 | 0.347 | 1 Bcell_3_lung |
| C11H12orf57        | 0.01683106 | 0.27983484 | 0.277 | 0.479 | 1 Bcell_3_lung |
| MALT1              | 0.01686421 | 0.99661176 | 0.259 | 0.475 | 1 Bcell_3_lung |
| JUND               | 0.01687048 | 0.48844133 | 0.42  | 0.701 | 1 Bcell_3_lung |
| MTF2               | 0.01701592 | 0.38361369 | 0.143 | 0.271 | 1 Bcell_3_lung |
| SRSF2              | 0.01726439 | 0.60532733 | 0.232 | 0.407 | 1 Bcell_3_lung |
| ENSMMUG00000002320 | 0.01745094 | 0.18719297 | 0.464 | 0.767 | 1 Bcell_3_lung |
| BUD23              | 0.0174734  | 0.32808484 | 0.232 | 0.404 | 1 Bcell_3_lung |
| SEC61B             | 0.01758034 | 0.51336297 | 0.25  | 0.452 | 1 Bcell_3_lung |
| WDR74              | 0.01782347 | 0.48333641 | 0.179 | 0.319 | 1 Bcell_3_lung |
| SSR4               | 0.01830521 | 0.20456759 | 0.277 | 0.458 | 1 Bcell_3_lung |
| PPIB               | 0.01889143 | 0.39344683 | 0.259 | 0.44  | 1 Bcell_3_lung |
| LST1               | 0.01893436 | 0.36452462 | 0.143 | 0.27  | 1 Bcell_3_lung |
| SS18               | 0.01898132 | 0.45225101 | 0.223 | 0.391 | 1 Bcell_3_lung |
| WDR20              | 0.01944179 | 0.49313638 | 0.134 | 0.253 | 1 Bcell_3_lung |
| CSNK1D             | 0.019915   | 0.64838991 | 0.134 | 0.258 | 1 Bcell_3_lung |
| AMD1               | 0.02010078 | 0.5327754  | 0.25  | 0.44  | 1 Bcell_3_lung |
| CFL1               | 0.02017347 | 0.17588808 | 0.357 | 0.628 | 1 Bcell_3_lung |
| ASH1L              | 0.02057618 | 0.23748656 | 0.509 | 0.823 | 1 Bcell_3_lung |
| SEM1               | 0.02057933 | 0.40675294 | 0.205 | 0.362 | 1 Bcell_3_lung |
| VMP1               | 0.02065994 | 0.92383799 | 0.188 | 0.344 | 1 Bcell_3_lung |

|                     |            |            |       |       |                |
|---------------------|------------|------------|-------|-------|----------------|
| PSMB1               | 0.02071766 | 0.4249832  | 0.25  | 0.417 | 1 Bcell_3_lung |
| PRKDC               | 0.02094871 | 0.31119398 | 0.295 | 0.495 | 1 Bcell_3_lung |
| NDUFAF2             | 0.02110247 | 0.48180475 | 0.143 | 0.253 | 1 Bcell_3_lung |
| ARID4A              | 0.02110523 | 0.6059436  | 0.179 | 0.32  | 1 Bcell_3_lung |
| NAA50               | 0.0212237  | 0.38972017 | 0.25  | 0.426 | 1 Bcell_3_lung |
| ENSMMUG00000005880  | 0.02149241 | 0.12804455 | 0.152 | 0.27  | 1 Bcell_3_lung |
| POMP                | 0.02222126 | 0.14037158 | 0.223 | 0.382 | 1 Bcell_3_lung |
| ENSMMUG00000006206  | 0.02247893 | 0.2358512  | 0.223 | 0.379 | 1 Bcell_3_lung |
| CEP350              | 0.02269831 | 0.80667041 | 0.232 | 0.403 | 1 Bcell_3_lung |
| PHLPP1              | 0.02293873 | 0.19112509 | 0.321 | 0.515 | 1 Bcell_3_lung |
| SMNDC1              | 0.02300126 | 0.62481897 | 0.17  | 0.308 | 1 Bcell_3_lung |
| CD79B               | 0.02308353 | 0.7611193  | 0.607 | 0.771 | 1 Bcell_3_lung |
| YWHAB               | 0.02330794 | 0.21334668 | 0.304 | 0.512 | 1 Bcell_3_lung |
| JPT1                | 0.02352003 | 0.30390165 | 0.348 | 0.631 | 1 Bcell_3_lung |
| ZNF280D             | 0.02359513 | 0.32784439 | 0.143 | 0.262 | 1 Bcell_3_lung |
| SNRPB               | 0.02371331 | 0.28553951 | 0.223 | 0.371 | 1 Bcell_3_lung |
| WNK1                | 0.02403562 | 0.31567978 | 0.384 | 0.587 | 1 Bcell_3_lung |
| UBE2W               | 0.02437876 | 0.6365713  | 0.241 | 0.403 | 1 Bcell_3_lung |
| ERH                 | 0.02460204 | 0.48195517 | 0.188 | 0.317 | 1 Bcell_3_lung |
| LSM10               | 0.02461753 | 0.54240719 | 0.152 | 0.288 | 1 Bcell_3_lung |
| WBP11               | 0.02467216 | 0.26878619 | 0.188 | 0.309 | 1 Bcell_3_lung |
| RASSF2              | 0.02533684 | 0.42075094 | 0.152 | 0.268 | 1 Bcell_3_lung |
| BTF3                | 0.02607688 | 0.18865681 | 0.33  | 0.55  | 1 Bcell_3_lung |
| DDX24               | 0.02633597 | 0.84241247 | 0.259 | 0.451 | 1 Bcell_3_lung |
| RCOR1               | 0.02639376 | 0.69799168 | 0.241 | 0.422 | 1 Bcell_3_lung |
| SSR2                | 0.02823061 | 0.40042322 | 0.241 | 0.387 | 1 Bcell_3_lung |
| IPO7                | 0.0282537  | 0.84894425 | 0.188 | 0.326 | 1 Bcell_3_lung |
| ETV6                | 0.02825591 | 0.32436397 | 0.205 | 0.346 | 1 Bcell_3_lung |
| ENSMMUG000000012690 | 0.02862319 | 0.73421709 | 0.25  | 0.406 | 1 Bcell_3_lung |
| ENSMMUG000000065089 | 0.02862541 | 0.60042576 | 0.143 | 0.256 | 1 Bcell_3_lung |
| PRPF31              | 0.02862802 | 1.53367089 | 0.339 | 0.327 | 1 Bcell_3_lung |
| NSF                 | 0.02890975 | 0.52245983 | 0.339 | 0.568 | 1 Bcell_3_lung |
| AP1B1               | 0.02987318 | 0.65130357 | 0.188 | 0.324 | 1 Bcell_3_lung |

|                    |            |            |       |       |                |
|--------------------|------------|------------|-------|-------|----------------|
| PWP1               | 0.02991986 | 0.4949869  | 0.143 | 0.251 | 1 Bcell_3_lung |
| CALCOCO2           | 0.03004003 | 0.37296383 | 0.25  | 0.416 | 1 Bcell_3_lung |
| YJEFN3             | 0.03005168 | 0.76675203 | 0.17  | 0.298 | 1 Bcell_3_lung |
| UQCRH              | 0.03022309 | 0.30908096 | 0.277 | 0.457 | 1 Bcell_3_lung |
| DDX50              | 0.0302585  | 0.80234149 | 0.223 | 0.393 | 1 Bcell_3_lung |
| TRIM38             | 0.03063698 | 0.68095256 | 0.241 | 0.406 | 1 Bcell_3_lung |
| CD79A              | 0.03078654 | 0.32852643 | 0.366 | 0.619 | 1 Bcell_3_lung |
| OTULIN             | 0.03090861 | 0.79385347 | 0.134 | 0.25  | 1 Bcell_3_lung |
| RAPGEF2            | 0.0316668  | 0.51634035 | 0.42  | 0.661 | 1 Bcell_3_lung |
| RAP1A              | 0.03175468 | 0.5857561  | 0.33  | 0.557 | 1 Bcell_3_lung |
| CHM                | 0.03203808 | 0.53251778 | 0.152 | 0.263 | 1 Bcell_3_lung |
| CS                 | 0.03207046 | 0.69247285 | 0.241 | 0.408 | 1 Bcell_3_lung |
| KIFBP              | 0.03247282 | 0.440523   | 0.411 | 0.677 | 1 Bcell_3_lung |
| AGTPBP1            | 0.03250978 | 0.67910608 | 0.268 | 0.453 | 1 Bcell_3_lung |
| SAMHD1             | 0.03306687 | 0.53172586 | 0.17  | 0.293 | 1 Bcell_3_lung |
| SEC61G             | 0.03316247 | 0.40569701 | 0.232 | 0.394 | 1 Bcell_3_lung |
| SAT2               | 0.03359346 | 0.20782125 | 0.179 | 0.3   | 1 Bcell_3_lung |
| MTR                | 0.0338933  | 0.92327814 | 0.161 | 0.29  | 1 Bcell_3_lung |
| CORO1A             | 0.0339925  | 1.05705387 | 0.482 | 0.605 | 1 Bcell_3_lung |
| CLEC2B             | 0.03421267 | 0.55102013 | 0.179 | 0.309 | 1 Bcell_3_lung |
| PPM1B              | 0.03495686 | 0.77243616 | 0.25  | 0.439 | 1 Bcell_3_lung |
| IGF1R              | 0.03560385 | 0.73618967 | 0.277 | 0.474 | 1 Bcell_3_lung |
| SLC39A10           | 0.03582844 | 0.28212703 | 0.152 | 0.262 | 1 Bcell_3_lung |
| JAK2               | 0.03583244 | 0.74568147 | 0.179 | 0.311 | 1 Bcell_3_lung |
| ENSMMUG00000022769 | 0.03593694 | 0.26955557 | 0.375 | 0.62  | 1 Bcell_3_lung |
| ENSMMUG00000058919 | 0.03618185 | 0.35801949 | 0.196 | 0.32  | 1 Bcell_3_lung |
| IFNAR1             | 0.0362691  | 0.83575163 | 0.179 | 0.308 | 1 Bcell_3_lung |
| HINT1              | 0.03629751 | 0.30615383 | 0.375 | 0.653 | 1 Bcell_3_lung |
| PAFAH1B2           | 0.03631823 | 0.4005655  | 0.161 | 0.274 | 1 Bcell_3_lung |
| NDUFB2             | 0.03730068 | 0.56195089 | 0.312 | 0.527 | 1 Bcell_3_lung |
| APLP2              | 0.03762576 | 0.77712784 | 0.17  | 0.295 | 1 Bcell_3_lung |
| MECP2              | 0.03771393 | 0.68978975 | 0.223 | 0.39  | 1 Bcell_3_lung |
| TTF1               | 0.03803282 | 0.8279432  | 0.17  | 0.289 | 1 Bcell_3_lung |

|                     |            |            |       |       |                |
|---------------------|------------|------------|-------|-------|----------------|
| MOB2                | 0.03805808 | 0.6328516  | 0.152 | 0.266 | 1 Bcell_3_lung |
| ITGAE               | 0.03809299 | 0.52504631 | 0.152 | 0.263 | 1 Bcell_3_lung |
| FCER2               | 0.03824744 | 0.30038429 | 0.286 | 0.465 | 1 Bcell_3_lung |
| KLF3                | 0.03836509 | 0.84922355 | 0.161 | 0.291 | 1 Bcell_3_lung |
| PSMB7               | 0.0386796  | 0.49800605 | 0.304 | 0.528 | 1 Bcell_3_lung |
| ITPR2               | 0.03876535 | 0.66071642 | 0.473 | 0.83  | 1 Bcell_3_lung |
| FNTB                | 0.03901068 | 0.39302832 | 0.214 | 0.367 | 1 Bcell_3_lung |
| HSP90B1             | 0.03901202 | 0.3122344  | 0.286 | 0.466 | 1 Bcell_3_lung |
| ENSMMUG00000005593  | 0.03904679 | 0.13836729 | 0.634 | 0.903 | 1 Bcell_3_lung |
| AGPAT3              | 0.03970804 | 0.78728253 | 0.143 | 0.25  | 1 Bcell_3_lung |
| MYL12B              | 0.04126321 | 0.29895598 | 0.357 | 0.59  | 1 Bcell_3_lung |
| RPS6KA3             | 0.04197153 | 0.83216589 | 0.205 | 0.346 | 1 Bcell_3_lung |
| EIF3I               | 0.04247043 | 0.42631274 | 0.17  | 0.287 | 1 Bcell_3_lung |
| ENSMMUG000000065104 | 0.04257756 | 0.33075822 | 0.241 | 0.403 | 1 Bcell_3_lung |
| CDK13               | 0.04270009 | 0.31354765 | 0.438 | 0.703 | 1 Bcell_3_lung |
| LDLRAD4             | 0.04356377 | 1.66656453 | 0.455 | 0.497 | 1 Bcell_3_lung |
| SIK2                | 0.04360235 | 1.21412606 | 0.179 | 0.312 | 1 Bcell_3_lung |
| NARS1               | 0.04397468 | 0.61617245 | 0.214 | 0.351 | 1 Bcell_3_lung |
| UBE2V1              | 0.04415798 | 0.41759445 | 0.259 | 0.429 | 1 Bcell_3_lung |
| ATF6                | 0.04438329 | 0.75976636 | 0.312 | 0.505 | 1 Bcell_3_lung |
| PTPN6               | 0.0444631  | 0.69270847 | 0.214 | 0.354 | 1 Bcell_3_lung |
| ENO1                | 0.04512381 | 0.53985711 | 0.321 | 0.541 | 1 Bcell_3_lung |
| FAM13B              | 0.04555662 | 0.72909909 | 0.295 | 0.479 | 1 Bcell_3_lung |
| TAPT1               | 0.04588789 | 0.6539157  | 0.259 | 0.445 | 1 Bcell_3_lung |
| SETX                | 0.04596773 | 0.42690446 | 0.312 | 0.507 | 1 Bcell_3_lung |
| RCSD1               | 0.0463611  | 0.35640528 | 0.446 | 0.706 | 1 Bcell_3_lung |
| GON4L               | 0.04677026 | 0.72978019 | 0.188 | 0.314 | 1 Bcell_3_lung |
| CD320               | 0.04726652 | 0.32147943 | 0.205 | 0.333 | 1 Bcell_3_lung |
| SLC25A43            | 0.04821684 | 0.42179465 | 0.286 | 0.468 | 1 Bcell_3_lung |
| NDUFA2              | 0.04934833 | 0.43821459 | 0.259 | 0.412 | 1 Bcell_3_lung |
| DDX54               | 0.04947005 | 0.3747575  | 0.161 | 0.273 | 1 Bcell_3_lung |
| TXN                 | 0.05007129 | 0.2962     | 0.188 | 0.305 | 1 Bcell_3_lung |
| IGF2BP3             | 0.05038227 | 0.37173819 | 0.375 | 0.599 | 1 Bcell_3_lung |

|                   |            |            |       |       |                |
|-------------------|------------|------------|-------|-------|----------------|
| PI4KA             | 0.05097274 | 0.68174792 | 0.161 | 0.278 | 1 Bcell_3_lung |
| COPE              | 0.05154403 | 0.49440166 | 0.17  | 0.275 | 1 Bcell_3_lung |
| GABARAPL2         | 0.05274897 | 0.6390114  | 0.25  | 0.419 | 1 Bcell_3_lung |
| SGMS1             | 0.0531717  | 0.79890196 | 0.196 | 0.324 | 1 Bcell_3_lung |
| SELENOK           | 0.05383294 | 0.56475404 | 0.152 | 0.256 | 1 Bcell_3_lung |
| OSBPL2            | 0.05458316 | 0.36398446 | 0.179 | 0.292 | 1 Bcell_3_lung |
| GADD45B           | 0.05688488 | 0.70091599 | 0.161 | 0.271 | 1 Bcell_3_lung |
| TTC37             | 0.05726947 | 0.50784379 | 0.17  | 0.272 | 1 Bcell_3_lung |
| HCLS1             | 0.05743859 | 0.85058602 | 0.241 | 0.386 | 1 Bcell_3_lung |
| URGCP             | 0.05753209 | 0.44712146 | 0.223 | 0.347 | 1 Bcell_3_lung |
| SSBP1             | 0.05776834 | 0.43580377 | 0.17  | 0.278 | 1 Bcell_3_lung |
| SAMSN1            | 0.05797495 | 0.40576207 | 0.161 | 0.266 | 1 Bcell_3_lung |
| ATP5PF            | 0.05803204 | 0.43010555 | 0.241 | 0.398 | 1 Bcell_3_lung |
| COX7C             | 0.05839883 | 0.23344816 | 0.384 | 0.622 | 1 Bcell_3_lung |
| TRAPPC8           | 0.05868486 | 0.76965392 | 0.196 | 0.335 | 1 Bcell_3_lung |
| AKT3              | 0.05954843 | 0.31114213 | 0.473 | 0.723 | 1 Bcell_3_lung |
| MDH1              | 0.05983644 | 0.4231934  | 0.161 | 0.263 | 1 Bcell_3_lung |
| CCAR1             | 0.06046353 | 0.57822104 | 0.196 | 0.324 | 1 Bcell_3_lung |
| RFX7              | 0.06054422 | 0.6368138  | 0.25  | 0.398 | 1 Bcell_3_lung |
| NDUFB7            | 0.06081791 | 0.3789879  | 0.17  | 0.278 | 1 Bcell_3_lung |
| NDUFA4            | 0.06153736 | 0.29121161 | 0.295 | 0.491 | 1 Bcell_3_lung |
| ENSMUG00000062350 | 0.06167699 | 0.70579665 | 0.696 | 0.872 | 1 Bcell_3_lung |
| EIF3D             | 0.06338892 | 0.6843468  | 0.232 | 0.382 | 1 Bcell_3_lung |
| SCML4             | 0.06358912 | 0.58724935 | 0.366 | 0.583 | 1 Bcell_3_lung |
| ANKRD12           | 0.06482986 | 0.27372034 | 0.429 | 0.666 | 1 Bcell_3_lung |
| NFE2L2            | 0.06511706 | 0.881399   | 0.152 | 0.25  | 1 Bcell_3_lung |
| C1D               | 0.06517074 | 0.45914598 | 0.179 | 0.291 | 1 Bcell_3_lung |
| ECHDC1            | 0.06554618 | 0.15071258 | 0.17  | 0.263 | 1 Bcell_3_lung |
| ERGIC1            | 0.06595786 | 0.66779991 | 0.321 | 0.523 | 1 Bcell_3_lung |
| ARPC3             | 0.06725489 | 0.21593234 | 0.455 | 0.738 | 1 Bcell_3_lung |
| RPL36             | 0.06730198 | 0.9032789  | 0.536 | 0.686 | 1 Bcell_3_lung |
| TET3              | 0.06781252 | 0.94122969 | 0.223 | 0.351 | 1 Bcell_3_lung |
| N4BP2L2           | 0.06797634 | 0.60745912 | 0.312 | 0.502 | 1 Bcell_3_lung |

|                    |            |            |       |       |                |
|--------------------|------------|------------|-------|-------|----------------|
| TBC1D1             | 0.06800131 | 0.3342945  | 0.518 | 0.814 | 1 Bcell_3_lung |
| POC5               | 0.06824056 | 0.70230797 | 0.214 | 0.35  | 1 Bcell_3_lung |
| GNB1               | 0.06863214 | 0.55060709 | 0.366 | 0.576 | 1 Bcell_3_lung |
| RPS27A             | 0.06881578 | 0.25816912 | 0.402 | 0.681 | 1 Bcell_3_lung |
| ENSMMUG00000022874 | 0.06889899 | 0.55228246 | 0.232 | 0.374 | 1 Bcell_3_lung |
| PSMA4              | 0.06922902 | 0.43233723 | 0.17  | 0.271 | 1 Bcell_3_lung |
| IGKC               | 0.07006868 | 0.83366567 | 0.232 | 0.383 | 1 Bcell_3_lung |
| CUTA               | 0.07012148 | 0.61428848 | 0.179 | 0.295 | 1 Bcell_3_lung |
| ENSMMUG00000055026 | 0.07075911 | 0.47815413 | 0.17  | 0.273 | 1 Bcell_3_lung |
| LSM5               | 0.07174845 | 0.37630008 | 0.161 | 0.267 | 1 Bcell_3_lung |
| ENSMMUG00000053146 | 0.07208968 | 0.31509817 | 0.223 | 0.361 | 1 Bcell_3_lung |
| STK24              | 0.07227852 | 0.69164101 | 0.321 | 0.521 | 1 Bcell_3_lung |
| ATP5MC2            | 0.07253995 | 0.21225343 | 0.268 | 0.422 | 1 Bcell_3_lung |
| OSTC               | 0.07392736 | 0.41666614 | 0.196 | 0.315 | 1 Bcell_3_lung |
| TENT2              | 0.07486868 | 0.61146742 | 0.268 | 0.432 | 1 Bcell_3_lung |
| POLD4              | 0.07547661 | 0.5000108  | 0.161 | 0.257 | 1 Bcell_3_lung |
| TSG101             | 0.07562322 | 0.74196663 | 0.161 | 0.267 | 1 Bcell_3_lung |
| ARHGEF2            | 0.07600905 | 1.096229   | 0.17  | 0.288 | 1 Bcell_3_lung |
| ENSMMUG00000061125 | 0.07655912 | 0.10250451 | 0.571 | 0.841 | 1 Bcell_3_lung |
| HIVEP3             | 0.07661142 | 0.51063714 | 0.179 | 0.274 | 1 Bcell_3_lung |
| AHNAK              | 0.07666362 | 0.5027589  | 0.33  | 0.491 | 1 Bcell_3_lung |
| SRGN               | 0.07673745 | 0.68324637 | 0.17  | 0.274 | 1 Bcell_3_lung |
| ENSMMUG00000019505 | 0.07850575 | 0.68042925 | 0.321 | 0.552 | 1 Bcell_3_lung |
| SPCS3              | 0.07862155 | 0.67936299 | 0.232 | 0.392 | 1 Bcell_3_lung |
| ERBB3              | 0.07895162 | 0.43711819 | 0.196 | 0.315 | 1 Bcell_3_lung |
| ENSMMUG00000056793 | 0.08002105 | 0.22986832 | 0.339 | 0.564 | 1 Bcell_3_lung |
| PRMT1              | 0.08023212 | 0.50898057 | 0.161 | 0.266 | 1 Bcell_3_lung |
| UBAP2              | 0.08030339 | 1.01491294 | 0.188 | 0.309 | 1 Bcell_3_lung |
| PPP4C              | 0.08092366 | 0.51194053 | 0.17  | 0.27  | 1 Bcell_3_lung |
| TALDO1             | 0.08147897 | 0.9011777  | 0.232 | 0.372 | 1 Bcell_3_lung |
| AKAP13             | 0.08285239 | 0.14108259 | 0.696 | 0.938 | 1 Bcell_3_lung |
| GATAD2A            | 0.08339784 | 0.96210324 | 0.223 | 0.376 | 1 Bcell_3_lung |
| RHOH               | 0.08344974 | 0.1879019  | 0.482 | 0.722 | 1 Bcell_3_lung |

|                   |            |            |       |       |                |
|-------------------|------------|------------|-------|-------|----------------|
| PAG1              | 0.08383482 | 1.049384   | 0.509 | 0.577 | 1 Bcell_3_lung |
| DPH2              | 0.08417293 | 0.76951397 | 0.152 | 0.251 | 1 Bcell_3_lung |
| SIPA1L1           | 0.08491595 | 0.79442436 | 0.205 | 0.324 | 1 Bcell_3_lung |
| RABEP1            | 0.08501285 | 1.05139986 | 0.205 | 0.336 | 1 Bcell_3_lung |
| AKR1A1            | 0.08515886 | 0.60381382 | 0.188 | 0.298 | 1 Bcell_3_lung |
| FAM107B           | 0.08645326 | 0.59973561 | 0.375 | 0.577 | 1 Bcell_3_lung |
| ATP11A            | 0.0868153  | 0.68741429 | 0.152 | 0.25  | 1 Bcell_3_lung |
| EIF2S2            | 0.08796801 | 0.58886017 | 0.241 | 0.392 | 1 Bcell_3_lung |
| SNRK              | 0.09011797 | 0.55291506 | 0.188 | 0.304 | 1 Bcell_3_lung |
| UBE3A             | 0.09072783 | 0.61848881 | 0.304 | 0.462 | 1 Bcell_3_lung |
| HNRNPH1           | 0.09080134 | 0.6221107  | 0.411 | 0.659 | 1 Bcell_3_lung |
| GAPDH             | 0.0972122  | 0.39413728 | 0.304 | 0.47  | 1 Bcell_3_lung |
| DAD1              | 0.09780076 | 0.46262126 | 0.188 | 0.297 | 1 Bcell_3_lung |
| WSB1              | 0.09979985 | 0.59769278 | 0.33  | 0.525 | 1 Bcell_3_lung |
| RPS21             | 0.10187701 | 0.9358722  | 0.58  | 0.784 | 1 Bcell_3_lung |
| SAFB              | 0.10206884 | 0.15356843 | 0.464 | 0.756 | 1 Bcell_3_lung |
| SNRPD1            | 0.10217168 | 0.34624759 | 0.214 | 0.32  | 1 Bcell_3_lung |
| RPS28             | 0.10257372 | 0.17461255 | 0.625 | 0.875 | 1 Bcell_3_lung |
| HNRNPDL           | 0.10328166 | 0.56074064 | 0.455 | 0.712 | 1 Bcell_3_lung |
| MTA3              | 0.10393072 | 1.35945654 | 0.161 | 0.27  | 1 Bcell_3_lung |
| RDH5              | 0.10445292 | 0.52328206 | 0.214 | 0.34  | 1 Bcell_3_lung |
| IGHM              | 0.10465389 | 0.26796061 | 0.795 | 0.922 | 1 Bcell_3_lung |
| KMT2E             | 0.10638542 | 0.80772751 | 0.616 | 0.779 | 1 Bcell_3_lung |
| RILPL2            | 0.1092008  | 1.27519471 | 0.393 | 0.44  | 1 Bcell_3_lung |
| ENSMUG00000054038 | 0.10960521 | 0.73315456 | 0.58  | 0.8   | 1 Bcell_3_lung |
| MZB1              | 0.11078834 | 0.59787478 | 0.223 | 0.338 | 1 Bcell_3_lung |
| ZDHHC14           | 0.11111687 | 0.7833826  | 0.223 | 0.345 | 1 Bcell_3_lung |
| RETREG1           | 0.11179173 | 0.65532497 | 0.25  | 0.395 | 1 Bcell_3_lung |
| IFI27L2           | 0.11390758 | 0.69629779 | 0.312 | 0.497 | 1 Bcell_3_lung |
| NOC3L             | 0.11559263 | 0.45161492 | 0.196 | 0.298 | 1 Bcell_3_lung |
| NR4A3             | 0.11704758 | 2.06077024 | 0.259 | 0.235 | 1 Bcell_3_lung |
| ANXA1             | 0.11746415 | 0.78660549 | 0.259 | 0.4   | 1 Bcell_3_lung |
| PSMB9             | 0.1191117  | 0.57657649 | 0.286 | 0.445 | 1 Bcell_3_lung |



|                    |            |            |       |       |                |
|--------------------|------------|------------|-------|-------|----------------|
| ENSMMUG00000038373 | 0.11988841 | 0.54104798 | 0.321 | 0.493 | 1 Bcell_3_lung |
| ERP29              | 0.12021294 | 0.62189281 | 0.241 | 0.37  | 1 Bcell_3_lung |
| OCIAD1             | 0.12021937 | 0.56970799 | 0.214 | 0.328 | 1 Bcell_3_lung |
| STAU1              | 0.12160395 | 0.49175444 | 0.357 | 0.55  | 1 Bcell_3_lung |
| LARGE1             | 0.12465644 | 0.91869761 | 0.259 | 0.399 | 1 Bcell_3_lung |
| ENSMMUG00000044861 | 0.12678209 | 0.86815544 | 0.277 | 0.394 | 1 Bcell_3_lung |
| RAC2               | 0.1275532  | 0.44755802 | 0.232 | 0.37  | 1 Bcell_3_lung |
| FNBP1              | 0.12980111 | 0.43317172 | 0.518 | 0.794 | 1 Bcell_3_lung |
| RGS9               | 0.12988244 | 0.91288866 | 0.214 | 0.329 | 1 Bcell_3_lung |
| LIMD2              | 0.13049955 | 0.48823165 | 0.384 | 0.623 | 1 Bcell_3_lung |
| EIF5B              | 0.13080734 | 0.53250073 | 0.223 | 0.328 | 1 Bcell_3_lung |
| SMDT1              | 0.1312867  | 0.44992274 | 0.357 | 0.557 | 1 Bcell_3_lung |
| SLC2A3             | 0.13148458 | 0.35667156 | 0.375 | 0.532 | 1 Bcell_3_lung |
| MTIF3              | 0.13168981 | 0.75220967 | 0.196 | 0.297 | 1 Bcell_3_lung |
| TTC39C             | 0.13220478 | 0.6517775  | 0.286 | 0.442 | 1 Bcell_3_lung |
| RPS13              | 0.13299679 | 0.11443654 | 0.625 | 0.861 | 1 Bcell_3_lung |
| COX7B              | 0.13314857 | 0.37403312 | 0.25  | 0.386 | 1 Bcell_3_lung |
| AIM2               | 0.13399513 | 0.62502201 | 0.179 | 0.266 | 1 Bcell_3_lung |
| BCL2               | 0.13404958 | 0.48681766 | 0.357 | 0.502 | 1 Bcell_3_lung |
| WDR83OS            | 0.13475193 | 0.38138794 | 0.375 | 0.608 | 1 Bcell_3_lung |
| H2AFJ              | 0.13684724 | 0.59803976 | 0.188 | 0.287 | 1 Bcell_3_lung |
| TAGAP              | 0.13765545 | 0.537163   | 0.348 | 0.532 | 1 Bcell_3_lung |
| BID                | 0.13801441 | 0.94566199 | 0.259 | 0.394 | 1 Bcell_3_lung |
| NIBAN3             | 0.13843578 | 0.65199685 | 0.179 | 0.269 | 1 Bcell_3_lung |
| PLGRKT             | 0.13996188 | 0.87660888 | 0.161 | 0.251 | 1 Bcell_3_lung |
| PABPC1             | 0.14071384 | 0.45469706 | 0.679 | 0.868 | 1 Bcell_3_lung |
| SLC43A2            | 0.1447976  | 1.14119498 | 0.17  | 0.265 | 1 Bcell_3_lung |
| IQSEC1             | 0.14524747 | 0.6054324  | 0.411 | 0.621 | 1 Bcell_3_lung |
| SLC38A2            | 0.14808205 | 0.6145589  | 0.268 | 0.402 | 1 Bcell_3_lung |
| AKAP9              | 0.15117726 | 0.5682205  | 0.384 | 0.595 | 1 Bcell_3_lung |
| ATP5F1E            | 0.15289025 | 0.84870017 | 0.545 | 0.733 | 1 Bcell_3_lung |
| S100A6             | 0.15431469 | 1.33337733 | 0.348 | 0.348 | 1 Bcell_3_lung |
| RBMX               | 0.15590621 | 0.57451949 | 0.339 | 0.544 | 1 Bcell_3_lung |

|                    |            |            |       |       |                |
|--------------------|------------|------------|-------|-------|----------------|
| ENSMMUG00000016305 | 0.15625591 | 0.50784388 | 0.259 | 0.4   | 1 Bcell_3_lung |
| FTL                | 0.15870168 | 0.57176571 | 0.402 | 0.638 | 1 Bcell_3_lung |
| DIAPH1             | 0.1591281  | 0.8322703  | 0.304 | 0.464 | 1 Bcell_3_lung |
| NFX1               | 0.16163427 | 0.98233074 | 0.196 | 0.297 | 1 Bcell_3_lung |
| PDRG1              | 0.16559285 | 0.41343207 | 0.17  | 0.256 | 1 Bcell_3_lung |
| CLNS1A             | 0.16659157 | 0.59740597 | 0.205 | 0.304 | 1 Bcell_3_lung |
| CHD4               | 0.17160573 | 0.56093448 | 0.375 | 0.551 | 1 Bcell_3_lung |
| LSP1               | 0.17197612 | 0.33710912 | 0.357 | 0.543 | 1 Bcell_3_lung |
| NHP2               | 0.17232755 | 0.52271926 | 0.17  | 0.255 | 1 Bcell_3_lung |
| ENSMMUG00000047481 | 0.17246299 | 0.53760081 | 0.259 | 0.385 | 1 Bcell_3_lung |
| HCK                | 0.17511377 | 0.42696477 | 0.205 | 0.293 | 1 Bcell_3_lung |
| MIF                | 0.17705021 | 0.65252724 | 0.214 | 0.316 | 1 Bcell_3_lung |
| PITPNC1            | 0.17765155 | 1.05103944 | 0.214 | 0.303 | 1 Bcell_3_lung |
| ST8SIA4            | 0.17826896 | 0.8003961  | 0.321 | 0.477 | 1 Bcell_3_lung |
| RNMT               | 0.17831884 | 1.04424198 | 0.509 | 0.653 | 1 Bcell_3_lung |
| ENSMMUG00000028699 | 0.17976233 | 1.02604494 | 0.42  | 0.642 | 1 Bcell_3_lung |
| RNF7               | 0.1808983  | 0.7427734  | 0.179 | 0.263 | 1 Bcell_3_lung |
| UBXN1              | 0.18297463 | 0.66275968 | 0.33  | 0.5   | 1 Bcell_3_lung |
| NIPBL              | 0.18334215 | 0.6348734  | 0.393 | 0.615 | 1 Bcell_3_lung |
| HIVEP1             | 0.18408271 | 0.75433049 | 0.366 | 0.57  | 1 Bcell_3_lung |
| SRRM1              | 0.1874993  | 0.64593054 | 0.366 | 0.547 | 1 Bcell_3_lung |
| ATP5MC3            | 0.19110244 | 0.53891348 | 0.277 | 0.418 | 1 Bcell_3_lung |
| LPIN2              | 0.19194704 | 0.88109611 | 0.223 | 0.335 | 1 Bcell_3_lung |
| MRPL23             | 0.19210954 | 0.75623766 | 0.241 | 0.359 | 1 Bcell_3_lung |
| CAPG               | 0.19396693 | 0.89206217 | 0.188 | 0.28  | 1 Bcell_3_lung |
| EXOC2              | 0.19661051 | 0.90520284 | 0.232 | 0.345 | 1 Bcell_3_lung |
| ENSMMUG00000052747 | 0.19710428 | 0.45640237 | 0.348 | 0.553 | 1 Bcell_3_lung |
| CHD9               | 0.19765635 | 0.95249749 | 0.348 | 0.539 | 1 Bcell_3_lung |
| MS4A1              | 0.19784391 | 0.32158755 | 0.777 | 0.895 | 1 Bcell_3_lung |
| HYPK               | 0.20246316 | 0.63436219 | 0.179 | 0.254 | 1 Bcell_3_lung |
| NSA2               | 0.20281623 | 0.31219471 | 0.402 | 0.611 | 1 Bcell_3_lung |
| ZBTB1              | 0.21380729 | 0.96019109 | 0.25  | 0.38  | 1 Bcell_3_lung |
| RPL24              | 0.21506661 | 0.13605528 | 0.554 | 0.847 | 1 Bcell_3_lung |

|         |            |            |       |       |                |
|---------|------------|------------|-------|-------|----------------|
| NCLN    | 0.22293551 | 0.90882987 | 0.179 | 0.251 | 1 Bcell_3_lung |
| SMURF2  | 0.22382319 | 0.88874042 | 0.188 | 0.273 | 1 Bcell_3_lung |
| RNF213  | 0.2249097  | 1.11528385 | 0.241 | 0.361 | 1 Bcell_3_lung |
| TXNIP   | 0.225353   | 1.175362   | 0.438 | 0.544 | 1 Bcell_3_lung |
| MYL6    | 0.22581263 | 1.22429152 | 0.375 | 0.461 | 1 Bcell_3_lung |
| PRRC2C  | 0.2266884  | 0.59248525 | 0.491 | 0.753 | 1 Bcell_3_lung |
| ITGA6   | 0.22752114 | 1.2498357  | 0.188 | 0.278 | 1 Bcell_3_lung |
| CD48    | 0.22801353 | 0.51416456 | 0.214 | 0.308 | 1 Bcell_3_lung |
| GSTP1   | 0.23624262 | 0.54957847 | 0.304 | 0.459 | 1 Bcell_3_lung |
| SEMA3A  | 0.23871577 | 0.62491445 | 0.196 | 0.277 | 1 Bcell_3_lung |
| DNAJC19 | 0.24028249 | 0.70097964 | 0.188 | 0.262 | 1 Bcell_3_lung |
| IKZF2   | 0.24191084 | 0.54262075 | 0.205 | 0.294 | 1 Bcell_3_lung |
| DDX3X   | 0.24215217 | 0.50273602 | 0.491 | 0.718 | 1 Bcell_3_lung |
| NCL     | 0.24281925 | 0.46083031 | 0.42  | 0.664 | 1 Bcell_3_lung |
| GRAP    | 0.2437175  | 1.10617127 | 0.188 | 0.268 | 1 Bcell_3_lung |
| ZNF736  | 0.24579652 | 1.04715993 | 0.232 | 0.341 | 1 Bcell_3_lung |
| IFI30   | 0.2478506  | 0.99569772 | 0.25  | 0.373 | 1 Bcell_3_lung |
| TCF4    | 0.25325898 | 0.99707244 | 0.571 | 0.729 | 1 Bcell_3_lung |
| RPL18   | 0.2600473  | 0.15078086 | 0.634 | 0.872 | 1 Bcell_3_lung |
| SON     | 0.26048677 | 0.6343068  | 0.625 | 0.816 | 1 Bcell_3_lung |
| VAMP8   | 0.26072156 | 0.75180477 | 0.259 | 0.388 | 1 Bcell_3_lung |
| CBLB    | 0.26182806 | 0.33023357 | 0.562 | 0.802 | 1 Bcell_3_lung |
| DHX36   | 0.26272027 | 1.02373794 | 0.304 | 0.462 | 1 Bcell_3_lung |
| LAMTOR2 | 0.26434185 | 0.65805673 | 0.205 | 0.291 | 1 Bcell_3_lung |
| ST3GAL1 | 0.26928983 | 0.79998952 | 0.321 | 0.471 | 1 Bcell_3_lung |
| TCP11L2 | 0.27071641 | 1.02150741 | 0.268 | 0.38  | 1 Bcell_3_lung |
| CLTC    | 0.27299627 | 0.63398399 | 0.312 | 0.451 | 1 Bcell_3_lung |
| ZNHIT1  | 0.28143614 | 0.74958027 | 0.196 | 0.269 | 1 Bcell_3_lung |
| UPF3A   | 0.28435809 | 1.43528883 | 0.179 | 0.251 | 1 Bcell_3_lung |
| HIP1R   | 0.28681052 | 1.11874315 | 0.214 | 0.307 | 1 Bcell_3_lung |
| ATOX1   | 0.28698761 | 0.7790849  | 0.205 | 0.29  | 1 Bcell_3_lung |
| UCP2    | 0.2877078  | 0.89350735 | 0.196 | 0.281 | 1 Bcell_3_lung |
| CD44    | 0.29327495 | 0.69381603 | 0.438 | 0.605 | 1 Bcell_3_lung |

|                    |            |            |       |       |                |
|--------------------|------------|------------|-------|-------|----------------|
| PPP1R16B           | 0.29559251 | 0.65489864 | 0.384 | 0.586 | 1 Bcell_3_lung |
| EEF1D              | 0.30044887 | 0.41285353 | 0.438 | 0.662 | 1 Bcell_3_lung |
| ST13               | 0.30104969 | 0.42958524 | 0.286 | 0.403 | 1 Bcell_3_lung |
| ATP2A3             | 0.30130034 | 1.20898766 | 0.277 | 0.406 | 1 Bcell_3_lung |
| NAA35              | 0.30254789 | 1.13260488 | 0.188 | 0.269 | 1 Bcell_3_lung |
| TOP2B              | 0.30305344 | 0.46797087 | 0.402 | 0.591 | 1 Bcell_3_lung |
| EPS15              | 0.30468502 | 0.59251769 | 0.348 | 0.512 | 1 Bcell_3_lung |
| TET2               | 0.30478178 | 1.02426895 | 0.286 | 0.423 | 1 Bcell_3_lung |
| SMU1               | 0.30776137 | 0.69875682 | 0.214 | 0.298 | 1 Bcell_3_lung |
| SMAP2              | 0.30846816 | 0.89432555 | 0.518 | 0.7   | 1 Bcell_3_lung |
| LAT2               | 0.31065494 | 0.79292157 | 0.33  | 0.496 | 1 Bcell_3_lung |
| GLIPR1L2           | 0.31613523 | 0.83807912 | 0.214 | 0.304 | 1 Bcell_3_lung |
| NIN                | 0.32249958 | 0.88170119 | 0.402 | 0.614 | 1 Bcell_3_lung |
| ATP5MPL            | 0.32311769 | 0.61806608 | 0.321 | 0.479 | 1 Bcell_3_lung |
| RPL35              | 0.32316768 | 0.11163563 | 0.589 | 0.815 | 1 Bcell_3_lung |
| RPL39              | 0.3295251  | 0.35645537 | 0.571 | 0.818 | 1 Bcell_3_lung |
| RPS29              | 0.33406084 | 0.13716665 | 0.696 | 0.887 | 1 Bcell_3_lung |
| METAP2             | 0.3395126  | 1.03769443 | 0.232 | 0.326 | 1 Bcell_3_lung |
| MRPL51             | 0.3465577  | 0.69755621 | 0.232 | 0.316 | 1 Bcell_3_lung |
| ENSMMUG00000054743 | 0.3500489  | 1.38062531 | 0.188 | 0.268 | 1 Bcell_3_lung |
| PDE7A              | 0.35467072 | 1.08527238 | 0.464 | 0.56  | 1 Bcell_3_lung |
| ISG20              | 0.35766582 | 0.99341724 | 0.286 | 0.42  | 1 Bcell_3_lung |
| ND2                | 0.36114024 | 0.30502574 | 0.83  | 0.961 | 1 Bcell_3_lung |
| COX8A              | 0.3663358  | 0.6477544  | 0.232 | 0.326 | 1 Bcell_3_lung |
| PDCD10             | 0.37675541 | 0.72262003 | 0.268 | 0.373 | 1 Bcell_3_lung |
| DTNBP1             | 0.37883455 | 0.73533599 | 0.438 | 0.648 | 1 Bcell_3_lung |
| ENSMMUG00000020092 | 0.38031997 | 1.29118674 | 0.196 | 0.264 | 1 Bcell_3_lung |
| CRIP1              | 0.38261209 | 1.71567549 | 0.196 | 0.27  | 1 Bcell_3_lung |
| TAF1D              | 0.38739479 | 0.99986056 | 0.196 | 0.268 | 1 Bcell_3_lung |
| YWHAG              | 0.38957651 | 0.83048949 | 0.188 | 0.254 | 1 Bcell_3_lung |
| ZSWIM6             | 0.39556656 | 0.78825623 | 0.339 | 0.48  | 1 Bcell_3_lung |
| RPL12              | 0.39691957 | 0.2087744  | 0.589 | 0.828 | 1 Bcell_3_lung |
| TRAPPC9            | 0.4056335  | 1.09260818 | 0.223 | 0.307 | 1 Bcell_3_lung |

|                    |            |            |       |       |                |
|--------------------|------------|------------|-------|-------|----------------|
| ENSMMUG00000049722 | 0.40635241 | 1.08959938 | 0.214 | 0.298 | 1 Bcell_3_lung |
| ENSMMUG00000057691 | 0.40795016 | 1.25847701 | 0.179 | 0.253 | 1 Bcell_3_lung |
| ENSMMUG00000053817 | 0.41163351 | 0.59167051 | 0.241 | 0.324 | 1 Bcell_3_lung |
| SSH2               | 0.41604835 | 0.90515967 | 0.598 | 0.787 | 1 Bcell_3_lung |
| MAMU-E             | 0.41725309 | 0.1685712  | 0.571 | 0.855 | 1 Bcell_3_lung |
| CD83               | 0.42157642 | 0.34879317 | 0.562 | 0.806 | 1 Bcell_3_lung |
| RPS9               | 0.42219098 | 0.14261041 | 0.652 | 0.856 | 1 Bcell_3_lung |
| PFDN6              | 0.4388517  | 0.70739203 | 0.205 | 0.273 | 1 Bcell_3_lung |
| CLIC1              | 0.43987934 | 0.95304901 | 0.25  | 0.355 | 1 Bcell_3_lung |
| MBD3               | 0.44905783 | 0.84211769 | 0.277 | 0.398 | 1 Bcell_3_lung |
| GALNT2             | 0.45003286 | 1.04021829 | 0.286 | 0.414 | 1 Bcell_3_lung |
| LLPH               | 0.45073878 | 0.93981567 | 0.196 | 0.259 | 1 Bcell_3_lung |
| SP100              | 0.45599549 | 0.32065568 | 0.616 | 0.873 | 1 Bcell_3_lung |
| MAGOH              | 0.45939617 | 0.68381461 | 0.241 | 0.315 | 1 Bcell_3_lung |
| BRD4               | 0.46655992 | 1.38373438 | 0.196 | 0.274 | 1 Bcell_3_lung |
| ATAD1              | 0.46701563 | 0.89047312 | 0.286 | 0.398 | 1 Bcell_3_lung |
| GAB2               | 0.46960081 | 0.81985452 | 0.339 | 0.46  | 1 Bcell_3_lung |
| SLC2A13            | 0.47633335 | 0.90729983 | 0.205 | 0.274 | 1 Bcell_3_lung |
| CMIP               | 0.47664501 | 0.93701861 | 0.375 | 0.555 | 1 Bcell_3_lung |
| ENSMMUG00000056354 | 0.49583214 | 0.57158343 | 0.473 | 0.722 | 1 Bcell_3_lung |
| ENSMMUG00000064120 | 0.50772637 | 0.99800752 | 0.268 | 0.361 | 1 Bcell_3_lung |
| SATB1              | 0.51840626 | 1.17178126 | 0.33  | 0.463 | 1 Bcell_3_lung |
| CD53               | 0.51945657 | 0.6317858  | 0.571 | 0.775 | 1 Bcell_3_lung |
| RPL36AL            | 0.54513767 | 0.40946557 | 0.446 | 0.695 | 1 Bcell_3_lung |
| SOX4               | 0.554917   | 0.86440462 | 0.33  | 0.441 | 1 Bcell_3_lung |
| ROMO1              | 0.55586057 | 0.77704602 | 0.304 | 0.435 | 1 Bcell_3_lung |
| NUAK2              | 0.56589038 | 0.86708822 | 0.25  | 0.315 | 1 Bcell_3_lung |
| CFDP1              | 0.56641043 | 0.88629766 | 0.348 | 0.488 | 1 Bcell_3_lung |
| EDF1               | 0.58026347 | 0.95778829 | 0.25  | 0.334 | 1 Bcell_3_lung |
| S100A10            | 0.58034767 | 0.77764124 | 0.223 | 0.298 | 1 Bcell_3_lung |
| EZR                | 0.58099876 | 0.53482585 | 0.491 | 0.7   | 1 Bcell_3_lung |
| TMA7               | 0.58133592 | 0.72828762 | 0.411 | 0.598 | 1 Bcell_3_lung |
| ZHX2               | 0.58146059 | 1.07798578 | 0.446 | 0.55  | 1 Bcell_3_lung |

|                    |            |            |       |       |                |
|--------------------|------------|------------|-------|-------|----------------|
| ENSMMUG00000031947 | 0.58233333 | 0.51335437 | 0.393 | 0.547 | 1 Bcell_3_lung |
| NDUFB10            | 0.58821417 | 1.04826397 | 0.196 | 0.256 | 1 Bcell_3_lung |
| TINF2              | 0.58903847 | 0.71348409 | 0.33  | 0.448 | 1 Bcell_3_lung |
| AIP                | 0.58960699 | 1.22443847 | 0.241 | 0.324 | 1 Bcell_3_lung |
| MTSS1              | 0.59432577 | 0.49933511 | 0.518 | 0.672 | 1 Bcell_3_lung |
| RPL19              | 0.60221674 | 0.21338394 | 0.571 | 0.784 | 1 Bcell_3_lung |
| CD58               | 0.60347085 | 1.12374006 | 0.241 | 0.319 | 1 Bcell_3_lung |
| CDC37              | 0.60367945 | 1.18272175 | 0.214 | 0.282 | 1 Bcell_3_lung |
| DGKD               | 0.60635344 | 0.84040181 | 0.429 | 0.617 | 1 Bcell_3_lung |
| RUBCN              | 0.61681932 | 0.79059562 | 0.33  | 0.441 | 1 Bcell_3_lung |
| GMFG               | 0.62163434 | 0.61316141 | 0.411 | 0.609 | 1 Bcell_3_lung |
| AGO2               | 0.62281228 | 1.11224832 | 0.42  | 0.536 | 1 Bcell_3_lung |
| TIGAR              | 0.63471322 | 0.92037163 | 0.241 | 0.304 | 1 Bcell_3_lung |
| TUT7               | 0.63739051 | 0.97581635 | 0.446 | 0.617 | 1 Bcell_3_lung |
| ENSMMUG00000012140 | 0.63788586 | 0.28909647 | 0.643 | 0.877 | 1 Bcell_3_lung |
| GNG7               | 0.64055842 | 1.12453037 | 0.339 | 0.476 | 1 Bcell_3_lung |
| ENSMMUG00000044585 | 0.64169545 | 0.90338966 | 0.295 | 0.396 | 1 Bcell_3_lung |
| ATP6V1G1           | 0.64355764 | 0.5190868  | 0.42  | 0.613 | 1 Bcell_3_lung |
| ATP2B1             | 0.64485669 | 0.99755874 | 0.25  | 0.322 | 1 Bcell_3_lung |
| EEF1A1             | 0.65250746 | 0.19058401 | 0.598 | 0.81  | 1 Bcell_3_lung |
| NUDT3              | 0.67646109 | 0.15852306 | 0.732 | 0.92  | 1 Bcell_3_lung |
| BCL10              | 0.67686018 | 0.90036727 | 0.232 | 0.286 | 1 Bcell_3_lung |
| PRDX1              | 0.67929591 | 1.11340611 | 0.214 | 0.272 | 1 Bcell_3_lung |
| ENSMMUG00000022428 | 0.68169862 | 1.46033038 | 0.205 | 0.267 | 1 Bcell_3_lung |
| NFKBID             | 0.68349244 | 1.02525942 | 0.295 | 0.371 | 1 Bcell_3_lung |
| PSMB8              | 0.69369512 | 0.72593246 | 0.411 | 0.575 | 1 Bcell_3_lung |
| H2AFZ              | 0.70150858 | 1.15742761 | 0.214 | 0.275 | 1 Bcell_3_lung |
| RBM8A              | 0.70505678 | 0.96682635 | 0.25  | 0.329 | 1 Bcell_3_lung |
| SP140              | 0.71427156 | 0.56832034 | 0.42  | 0.576 | 1 Bcell_3_lung |
| POLR1H             | 0.71950753 | 0.9845652  | 0.259 | 0.324 | 1 Bcell_3_lung |
| ACTN4              | 0.71990968 | 1.27267906 | 0.214 | 0.274 | 1 Bcell_3_lung |
| HCST               | 0.72525619 | 1.20071722 | 0.295 | 0.341 | 1 Bcell_3_lung |
| GPR183             | 0.73034076 | 0.86498796 | 0.482 | 0.664 | 1 Bcell_3_lung |

|                     |            |            |       |       |                |
|---------------------|------------|------------|-------|-------|----------------|
| CEP170              | 0.73648709 | 0.75376776 | 0.446 | 0.617 | 1 Bcell_3_lung |
| UPF2                | 0.74868674 | 1.27749973 | 0.312 | 0.393 | 1 Bcell_3_lung |
| RPL22L1             | 0.7487242  | 0.35386257 | 0.491 | 0.699 | 1 Bcell_3_lung |
| RPL8                | 0.75447853 | 0.33641629 | 0.679 | 0.843 | 1 Bcell_3_lung |
| ENSMMUG00000017113  | 0.75908162 | 1.26512969 | 0.357 | 0.445 | 1 Bcell_3_lung |
| MYH9                | 0.76204802 | 0.98441692 | 0.429 | 0.589 | 1 Bcell_3_lung |
| BAZ1A               | 0.76578457 | 0.90834913 | 0.438 | 0.582 | 1 Bcell_3_lung |
| ENSMMUG000000064139 | 0.7699733  | 0.38468088 | 0.536 | 0.808 | 1 Bcell_3_lung |
| NR4A1               | 0.78057898 | 1.15016763 | 0.25  | 0.313 | 1 Bcell_3_lung |
| FAU                 | 0.78145807 | 0.20448465 | 0.634 | 0.834 | 1 Bcell_3_lung |
| ENSMMUG000000001458 | 0.78503497 | 0.72320549 | 0.429 | 0.619 | 1 Bcell_3_lung |
| NDUFV2              | 0.78606542 | 1.04726739 | 0.25  | 0.281 | 1 Bcell_3_lung |
| PFDN5               | 0.78688181 | 1.00631882 | 0.259 | 0.306 | 1 Bcell_3_lung |
| SMARCE1             | 0.79441106 | 1.27648005 | 0.223 | 0.275 | 1 Bcell_3_lung |
| ENSMMUG000000060377 | 0.79443476 | 0.86392182 | 0.366 | 0.561 | 1 Bcell_3_lung |
| XYLT1               | 0.80040952 | 0.74329479 | 0.562 | 0.768 | 1 Bcell_3_lung |
| UBL5                | 0.80075381 | 0.93527847 | 0.295 | 0.387 | 1 Bcell_3_lung |
| ENSMMUG000000008587 | 0.80196962 | 0.82073752 | 0.464 | 0.635 | 1 Bcell_3_lung |
| FCRL1               | 0.81453078 | 0.16562045 | 0.902 | 0.962 | 1 Bcell_3_lung |
| NMT1                | 0.81516682 | 0.91500429 | 0.223 | 0.273 | 1 Bcell_3_lung |
| RNF181              | 0.82712411 | 1.26940191 | 0.241 | 0.304 | 1 Bcell_3_lung |
| STK4                | 0.83452099 | 0.75243376 | 0.482 | 0.679 | 1 Bcell_3_lung |
| RUBCNL              | 0.83581767 | 0.9626317  | 0.393 | 0.521 | 1 Bcell_3_lung |
| TAGLN2              | 0.863098   | 0.86966163 | 0.393 | 0.519 | 1 Bcell_3_lung |
| CD9                 | 0.86711757 | 1.16382432 | 0.286 | 0.351 | 1 Bcell_3_lung |
| MAMU-DRB1           | 0.86961895 | 0.23763008 | 0.768 | 0.937 | 1 Bcell_3_lung |
| LDHA                | 0.88583533 | 0.95786306 | 0.268 | 0.339 | 1 Bcell_3_lung |
| C16H17orf49         | 0.89190785 | 0.9303815  | 0.312 | 0.402 | 1 Bcell_3_lung |
| ADARB1              | 0.89375212 | 1.13856928 | 0.357 | 0.452 | 1 Bcell_3_lung |
| ESF1                | 0.89676381 | 1.22334199 | 0.25  | 0.299 | 1 Bcell_3_lung |
| ANTXR2              | 0.90533331 | 1.05779762 | 0.429 | 0.571 | 1 Bcell_3_lung |
| UBA52               | 0.90807391 | 0.17534686 | 0.607 | 0.824 | 1 Bcell_3_lung |
| RPL10               | 0.91035035 | 0.25478489 | 0.768 | 0.896 | 1 Bcell_3_lung |

|                     |            |            |       |       |                         |
|---------------------|------------|------------|-------|-------|-------------------------|
| ELOB                | 0.91038395 | 1.07333745 | 0.312 | 0.409 | 1 Bcell_3_lung          |
| RPS12               | 0.91849547 | 0.36344586 | 0.75  | 0.889 | 1 Bcell_3_lung          |
| ZC3H10              | 0.94234593 | 0.71515118 | 0.446 | 0.653 | 1 Bcell_3_lung          |
| RASGRP2             | 0.94525052 | 1.26693082 | 0.232 | 0.283 | 1 Bcell_3_lung          |
| OAZ1                | 0.94607093 | 0.8774088  | 0.295 | 0.378 | 1 Bcell_3_lung          |
| P2RY8               | 0.95600326 | 0.94638398 | 0.402 | 0.521 | 1 Bcell_3_lung          |
| ENSMMUG000000004545 | 0.95939536 | 0.5439252  | 0.411 | 0.566 | 1 Bcell_3_lung          |
| ENSMMUG000000030408 | 0.97534692 | 1.16698616 | 0.295 | 0.372 | 1 Bcell_3_lung          |
| ENSMMUG000000000983 | 0.98541706 | 1.10264293 | 0.259 | 0.323 | 1 Bcell_3_lung          |
| PDE4B               | 0.99206697 | 1.13177081 | 0.339 | 0.424 | 1 Bcell_3_lung          |
| HBA                 | 0          | 2.76975876 | 0.684 | 0.187 | 0 Bcell_3_UCBMC         |
| HBE1                | 0          | 2.49275496 | 0.702 | 0.21  | 0 Bcell_3_UCBMC         |
| ENSMMUG000000049151 | 6.08E-239  | 1.06276222 | 0.898 | 0.832 | 2.16E-234 Bcell_3_UCBMC |
| ENSMMUG000000047632 | 4.09E-118  | 1.52973417 | 0.531 | 0.296 | 1.45E-113 Bcell_3_UCBMC |
| S100A6              | 1.21E-108  | 1.78490387 | 0.496 | 0.277 | 4.30E-104 Bcell_3_UCBMC |
| ENSMMUG000000056654 | 8.79E-103  | 1.235961   | 0.638 | 0.508 | 3.11E-98 Bcell_3_UCBMC  |
| MYLIP               | 3.34E-94   | 0.75863488 | 0.813 | 0.709 | 1.18E-89 Bcell_3_UCBMC  |
| TM9SF3              | 1.87E-92   | 0.92305826 | 0.752 | 0.646 | 6.62E-88 Bcell_3_UCBMC  |
| TMSB10              | 1.56E-91   | 0.54872671 | 0.888 | 0.829 | 5.51E-87 Bcell_3_UCBMC  |
| TAGLN2              | 2.20E-86   | 1.18792708 | 0.605 | 0.474 | 7.81E-82 Bcell_3_UCBMC  |
| OSBPL10             | 7.06E-81   | 0.86193842 | 0.65  | 0.432 | 2.50E-76 Bcell_3_UCBMC  |
| NCOA3               | 1.13E-76   | 0.46183611 | 0.974 | 0.959 | 4.02E-72 Bcell_3_UCBMC  |
| NFKB1               | 2.74E-76   | 0.65373191 | 0.835 | 0.767 | 9.69E-72 Bcell_3_UCBMC  |
| MTSS1               | 1.04E-74   | 0.65524958 | 0.783 | 0.614 | 3.70E-70 Bcell_3_UCBMC  |
| PNISR               | 2.62E-74   | 0.58145829 | 0.861 | 0.83  | 9.28E-70 Bcell_3_UCBMC  |
| PIK3CA              | 6.37E-73   | 1.01514228 | 0.648 | 0.53  | 2.26E-68 Bcell_3_UCBMC  |
| SIK3                | 3.46E-68   | 0.5661485  | 0.892 | 0.84  | 1.23E-63 Bcell_3_UCBMC  |
| CDC42SE2            | 7.09E-66   | 0.75763482 | 0.79  | 0.765 | 2.51E-61 Bcell_3_UCBMC  |
| BACH2               | 1.30E-63   | 0.49587987 | 0.87  | 0.763 | 4.59E-59 Bcell_3_UCBMC  |
| TRPM7               | 2.65E-63   | 0.62464849 | 0.831 | 0.814 | 9.37E-59 Bcell_3_UCBMC  |
| HINT1               | 1.41E-62   | 0.70519167 | 0.713 | 0.618 | 4.99E-58 Bcell_3_UCBMC  |
| JUND                | 1.89E-62   | 0.76803247 | 0.738 | 0.677 | 6.69E-58 Bcell_3_UCBMC  |
| LYN                 | 2.56E-59   | 0.34475291 | 0.981 | 0.968 | 9.06E-55 Bcell_3_UCBMC  |



|                    |          |            |       |       |          |               |
|--------------------|----------|------------|-------|-------|----------|---------------|
| SENP5              | 5.59E-59 | 0.83464949 | 0.673 | 0.596 | 1.98E-54 | Bcell_3_UCBMC |
| ZNF483             | 4.64E-58 | 0.95320844 | 0.585 | 0.497 | 1.64E-53 | Bcell_3_UCBMC |
| MANBA              | 1.55E-57 | 0.72890735 | 0.728 | 0.664 | 5.49E-53 | Bcell_3_UCBMC |
| ENSMMUG00000006463 | 1.72E-53 | 0.77867811 | 0.66  | 0.574 | 6.10E-49 | Bcell_3_UCBMC |
| GABPB1             | 4.40E-53 | 0.94342575 | 0.613 | 0.524 | 1.56E-48 | Bcell_3_UCBMC |
| OSBPL8             | 9.29E-53 | 0.53181028 | 0.851 | 0.809 | 3.29E-48 | Bcell_3_UCBMC |
| PCM1               | 7.90E-52 | 0.82114422 | 0.644 | 0.578 | 2.80E-47 | Bcell_3_UCBMC |
| USP15              | 2.77E-51 | 0.43493349 | 0.902 | 0.9   | 9.82E-47 | Bcell_3_UCBMC |
| GOLGA4             | 4.96E-51 | 0.67549472 | 0.726 | 0.693 | 1.76E-46 | Bcell_3_UCBMC |
| SNED1              | 4.73E-50 | 1.22305575 | 0.285 | 0.14  | 1.67E-45 | Bcell_3_UCBMC |
| RPS16              | 1.83E-49 | 0.38616256 | 0.916 | 0.834 | 6.48E-45 | Bcell_3_UCBMC |
| HIVEP1             | 3.40E-49 | 0.78436316 | 0.626 | 0.538 | 1.21E-44 | Bcell_3_UCBMC |
| CYLD               | 4.71E-49 | 0.92666957 | 0.57  | 0.489 | 1.67E-44 | Bcell_3_UCBMC |
| B2M                | 5.96E-49 | 0.31516356 | 0.956 | 0.946 | 2.11E-44 | Bcell_3_UCBMC |
| MPP7               | 7.08E-49 | 0.94463026 | 0.551 | 0.443 | 2.51E-44 | Bcell_3_UCBMC |
| RFX3               | 2.37E-48 | 0.76722571 | 0.718 | 0.674 | 8.38E-44 | Bcell_3_UCBMC |
| CMTM8              | 1.83E-47 | 0.94284896 | 0.517 | 0.384 | 6.48E-43 | Bcell_3_UCBMC |
| ENSMMUG00000003073 | 1.11E-46 | 0.41036853 | 0.879 | 0.789 | 3.92E-42 | Bcell_3_UCBMC |
| KMT2E              | 2.39E-46 | 0.49360604 | 0.797 | 0.767 | 8.47E-42 | Bcell_3_UCBMC |
| DCP1A              | 4.30E-46 | 0.99223534 | 0.519 | 0.43  | 1.52E-41 | Bcell_3_UCBMC |
| ACTR2              | 3.16E-45 | 0.48285661 | 0.849 | 0.837 | 1.12E-40 | Bcell_3_UCBMC |
| SMCHD1             | 3.45E-45 | 0.45918986 | 0.862 | 0.845 | 1.22E-40 | Bcell_3_UCBMC |
| RPL13A             | 3.51E-45 | 0.36573829 | 0.919 | 0.855 | 1.24E-40 | Bcell_3_UCBMC |
| WDR48              | 1.17E-44 | 1.20587781 | 0.418 | 0.307 | 4.14E-40 | Bcell_3_UCBMC |
| RBM39              | 1.10E-43 | 0.40276106 | 0.909 | 0.892 | 3.89E-39 | Bcell_3_UCBMC |
| STAG1              | 3.34E-43 | 0.44242031 | 0.856 | 0.837 | 1.18E-38 | Bcell_3_UCBMC |
| ENSMMUG00000012140 | 3.46E-43 | 0.42070184 | 0.887 | 0.867 | 1.23E-38 | Bcell_3_UCBMC |
| ITCH               | 6.91E-42 | 0.67419599 | 0.688 | 0.646 | 2.45E-37 | Bcell_3_UCBMC |
| QKI                | 1.05E-41 | 0.63796168 | 0.692 | 0.645 | 3.73E-37 | Bcell_3_UCBMC |
| ENSMMUG00000046264 | 2.14E-41 | 0.71502374 | 0.703 | 0.654 | 7.60E-37 | Bcell_3_UCBMC |
| RPS14              | 5.38E-41 | 0.36363297 | 0.919 | 0.853 | 1.91E-36 | Bcell_3_UCBMC |
| RPL27              | 6.58E-41 | 0.37138113 | 0.883 | 0.805 | 2.33E-36 | Bcell_3_UCBMC |
| EIF2AK3            | 1.40E-39 | 0.29010276 | 0.939 | 0.903 | 4.96E-35 | Bcell_3_UCBMC |

|                     |          |            |       |       |          |               |
|---------------------|----------|------------|-------|-------|----------|---------------|
| RPS27A              | 2.03E-39 | 0.58388022 | 0.733 | 0.649 | 7.19E-35 | Bcell_3_UCBMC |
| EPB41               | 3.31E-39 | 0.68131635 | 0.639 | 0.574 | 1.17E-34 | Bcell_3_UCBMC |
| MAPK8               | 3.86E-39 | 0.97613536 | 0.509 | 0.416 | 1.37E-34 | Bcell_3_UCBMC |
| TRA2A               | 1.42E-38 | 0.39861905 | 0.883 | 0.866 | 5.03E-34 | Bcell_3_UCBMC |
| MARCHF6             | 1.44E-38 | 0.58123616 | 0.711 | 0.656 | 5.09E-34 | Bcell_3_UCBMC |
| RPS4Y1              | 8.92E-38 | 0.66917645 | 0.545 | 0.4   | 3.16E-33 | Bcell_3_UCBMC |
| TPT1                | 2.64E-37 | 0.31734448 | 0.937 | 0.89  | 9.34E-33 | Bcell_3_UCBMC |
| ENSMMUG00000002320  | 4.36E-37 | 0.47147917 | 0.777 | 0.755 | 1.55E-32 | Bcell_3_UCBMC |
| FOXO1               | 5.12E-37 | 0.39706707 | 0.883 | 0.849 | 1.81E-32 | Bcell_3_UCBMC |
| RACK1               | 9.42E-37 | 0.35375457 | 0.887 | 0.825 | 3.34E-32 | Bcell_3_UCBMC |
| PTBP2               | 2.04E-36 | 0.68065728 | 0.653 | 0.615 | 7.21E-32 | Bcell_3_UCBMC |
| ENSMMUG000000014648 | 2.15E-36 | 0.72133518 | 0.609 | 0.549 | 7.63E-32 | Bcell_3_UCBMC |
| IFI27L2             | 2.17E-36 | 0.79968619 | 0.543 | 0.47  | 7.69E-32 | Bcell_3_UCBMC |
| TSN                 | 2.23E-36 | 1.33216395 | 0.306 | 0.198 | 7.90E-32 | Bcell_3_UCBMC |
| TMEM131             | 3.89E-36 | 0.36000612 | 0.901 | 0.887 | 1.38E-31 | Bcell_3_UCBMC |
| GAS7                | 1.28E-35 | 1.01313475 | 0.492 | 0.401 | 4.53E-31 | Bcell_3_UCBMC |
| OSBPL9              | 1.44E-35 | 0.64863431 | 0.677 | 0.643 | 5.08E-31 | Bcell_3_UCBMC |
| RPL30               | 3.83E-35 | 0.31363529 | 0.933 | 0.861 | 1.36E-30 | Bcell_3_UCBMC |
| SELENOS             | 8.89E-35 | 0.66433265 | 0.612 | 0.573 | 3.15E-30 | Bcell_3_UCBMC |
| CLINT1              | 9.45E-35 | 0.5750013  | 0.725 | 0.7   | 3.35E-30 | Bcell_3_UCBMC |
| FTL                 | 3.49E-34 | 0.48404004 | 0.683 | 0.611 | 1.24E-29 | Bcell_3_UCBMC |
| SNX4                | 3.93E-34 | 0.81987351 | 0.547 | 0.489 | 1.39E-29 | Bcell_3_UCBMC |
| CYB5R4              | 5.81E-34 | 0.83843456 | 0.528 | 0.458 | 2.06E-29 | Bcell_3_UCBMC |
| CAPG                | 5.90E-34 | 1.111848   | 0.347 | 0.246 | 2.09E-29 | Bcell_3_UCBMC |
| RBM5                | 1.21E-33 | 0.65817682 | 0.606 | 0.565 | 4.30E-29 | Bcell_3_UCBMC |
| GGNBP2              | 4.48E-33 | 0.67971665 | 0.585 | 0.539 | 1.59E-28 | Bcell_3_UCBMC |
| ENSMMUG000000006165 | 4.95E-33 | 0.40943968 | 0.85  | 0.845 | 1.75E-28 | Bcell_3_UCBMC |
| TCP11L2             | 5.63E-33 | 0.95644971 | 0.438 | 0.349 | 1.99E-28 | Bcell_3_UCBMC |
| RALA                | 9.69E-33 | 0.66293545 | 0.542 | 0.465 | 3.43E-28 | Bcell_3_UCBMC |
| ARID4B              | 2.54E-32 | 0.39846107 | 0.874 | 0.873 | 9.00E-28 | Bcell_3_UCBMC |
| RPL5                | 1.71E-31 | 0.32119643 | 0.908 | 0.858 | 6.06E-27 | Bcell_3_UCBMC |
| UBB                 | 2.32E-31 | 0.40696317 | 0.74  | 0.691 | 8.22E-27 | Bcell_3_UCBMC |
| ENSMMUG000000014862 | 5.05E-31 | 1.05219468 | 0.428 | 0.365 | 1.79E-26 | Bcell_3_UCBMC |

|                    |          |            |       |       |          |               |
|--------------------|----------|------------|-------|-------|----------|---------------|
| NUP54              | 1.45E-30 | 1.12161666 | 0.355 | 0.262 | 5.14E-26 | Bcell_3_UCBMC |
| ATG14              | 1.61E-30 | 1.18487207 | 0.312 | 0.216 | 5.69E-26 | Bcell_3_UCBMC |
| RPL36AL            | 1.83E-30 | 0.44722055 | 0.738 | 0.668 | 6.50E-26 | Bcell_3_UCBMC |
| SCFD1              | 8.44E-30 | 0.78669664 | 0.512 | 0.445 | 2.99E-25 | Bcell_3_UCBMC |
| SYF2               | 1.94E-29 | 0.72148246 | 0.528 | 0.485 | 6.87E-25 | Bcell_3_UCBMC |
| MTMR14             | 2.74E-29 | 1.07780156 | 0.388 | 0.305 | 9.70E-25 | Bcell_3_UCBMC |
| ENSMMUG00000015270 | 4.03E-29 | 0.28160614 | 0.94  | 0.899 | 1.43E-24 | Bcell_3_UCBMC |
| RPS23              | 4.48E-29 | 0.27538027 | 0.928 | 0.86  | 1.59E-24 | Bcell_3_UCBMC |
| DAZAP2             | 1.16E-28 | 0.65434158 | 0.601 | 0.572 | 4.12E-24 | Bcell_3_UCBMC |
| STK38              | 2.17E-28 | 0.83114969 | 0.484 | 0.41  | 7.68E-24 | Bcell_3_UCBMC |
| SARAF              | 4.33E-28 | 0.41262781 | 0.801 | 0.816 | 1.53E-23 | Bcell_3_UCBMC |
| CDC42              | 5.69E-28 | 0.33195435 | 0.831 | 0.833 | 2.02E-23 | Bcell_3_UCBMC |
| COG5               | 6.14E-28 | 0.50266845 | 0.741 | 0.741 | 2.18E-23 | Bcell_3_UCBMC |
| CNOT4              | 1.20E-27 | 0.61881645 | 0.61  | 0.587 | 4.24E-23 | Bcell_3_UCBMC |
| NME2               | 1.52E-27 | 0.34512345 | 0.808 | 0.734 | 5.40E-23 | Bcell_3_UCBMC |
| CAMTA1             | 1.59E-27 | 0.72271511 | 0.525 | 0.473 | 5.63E-23 | Bcell_3_UCBMC |
| SYK                | 1.82E-27 | 0.37926139 | 0.797 | 0.786 | 6.45E-23 | Bcell_3_UCBMC |
| RPS13              | 2.68E-27 | 0.27704929 | 0.91  | 0.832 | 9.51E-23 | Bcell_3_UCBMC |
| RPL4               | 8.95E-27 | 0.38370275 | 0.78  | 0.732 | 3.17E-22 | Bcell_3_UCBMC |
| CTDSPL2            | 1.10E-26 | 0.80509859 | 0.486 | 0.426 | 3.91E-22 | Bcell_3_UCBMC |
| FCHO2              | 1.12E-26 | 1.01810132 | 0.28  | 0.183 | 3.96E-22 | Bcell_3_UCBMC |
| RPL7               | 1.21E-26 | 0.34418572 | 0.794 | 0.719 | 4.29E-22 | Bcell_3_UCBMC |
| ENSMMUG00000029973 | 1.42E-26 | 0.80758926 | 0.488 | 0.441 | 5.05E-22 | Bcell_3_UCBMC |
| ANTXR2             | 1.86E-26 | 0.52081397 | 0.604 | 0.552 | 6.59E-22 | Bcell_3_UCBMC |
| CWC15              | 2.09E-26 | 0.91948601 | 0.436 | 0.38  | 7.41E-22 | Bcell_3_UCBMC |
| ABCG1              | 2.59E-26 | 0.8911607  | 0.417 | 0.338 | 9.19E-22 | Bcell_3_UCBMC |
| ENSMMUG00000055584 | 3.40E-26 | 0.32948974 | 0.852 | 0.846 | 1.20E-21 | Bcell_3_UCBMC |
| CNOT1              | 3.52E-26 | 0.63208292 | 0.627 | 0.616 | 1.25E-21 | Bcell_3_UCBMC |
| S100A10            | 4.78E-26 | 1.08707183 | 0.353 | 0.269 | 1.69E-21 | Bcell_3_UCBMC |
| LMBRD1             | 5.17E-26 | 0.57384739 | 0.66  | 0.645 | 1.83E-21 | Bcell_3_UCBMC |
| ATRNL1             | 1.06E-25 | 0.94963613 | 0.255 | 0.156 | 3.77E-21 | Bcell_3_UCBMC |
| ENSMMUG00000003412 | 1.40E-25 | 0.27620305 | 0.904 | 0.842 | 4.97E-21 | Bcell_3_UCBMC |
| PDE3B              | 1.50E-25 | 0.67260247 | 0.475 | 0.391 | 5.32E-21 | Bcell_3_UCBMC |

|                    |          |            |       |       |          |               |
|--------------------|----------|------------|-------|-------|----------|---------------|
| RAB2A              | 1.81E-25 | 0.54498593 | 0.678 | 0.672 | 6.42E-21 | Bcell_3_UCBMC |
| RPL18              | 2.30E-25 | 0.26692403 | 0.916 | 0.844 | 8.15E-21 | Bcell_3_UCBMC |
| EIF2AK2            | 2.76E-25 | 1.15953795 | 0.304 | 0.219 | 9.78E-21 | Bcell_3_UCBMC |
| CD74               | 3.14E-25 | 0.16960265 | 0.991 | 0.977 | 1.11E-20 | Bcell_3_UCBMC |
| MED25              | 3.15E-25 | 1.25876442 | 0.293 | 0.208 | 1.12E-20 | Bcell_3_UCBMC |
| SECISBP2L          | 3.19E-25 | 0.80364175 | 0.481 | 0.418 | 1.13E-20 | Bcell_3_UCBMC |
| RPS5               | 4.95E-25 | 0.28086058 | 0.882 | 0.797 | 1.76E-20 | Bcell_3_UCBMC |
| EML4               | 1.43E-24 | 0.29115069 | 0.905 | 0.896 | 5.07E-20 | Bcell_3_UCBMC |
| RFC1               | 1.72E-24 | 0.77389362 | 0.491 | 0.442 | 6.09E-20 | Bcell_3_UCBMC |
| DAZAP1             | 2.10E-24 | 0.61250915 | 0.594 | 0.592 | 7.43E-20 | Bcell_3_UCBMC |
| ZFC3H1             | 4.95E-24 | 0.59842305 | 0.617 | 0.614 | 1.75E-19 | Bcell_3_UCBMC |
| AHNAK              | 5.71E-24 | 0.51321293 | 0.542 | 0.462 | 2.02E-19 | Bcell_3_UCBMC |
| MAMU-E             | 7.85E-24 | 0.32224432 | 0.855 | 0.848 | 2.78E-19 | Bcell_3_UCBMC |
| PNN                | 8.51E-24 | 0.54560365 | 0.631 | 0.627 | 3.01E-19 | Bcell_3_UCBMC |
| FAU                | 9.73E-24 | 0.2705909  | 0.877 | 0.809 | 3.45E-19 | Bcell_3_UCBMC |
| RPS7               | 1.62E-23 | 0.25277386 | 0.926 | 0.861 | 5.73E-19 | Bcell_3_UCBMC |
| ENSMMUG00000055457 | 8.11E-23 | 1.02864281 | 0.376 | 0.323 | 2.87E-18 | Bcell_3_UCBMC |
| SRSF11             | 9.21E-23 | 0.39414695 | 0.768 | 0.789 | 3.26E-18 | Bcell_3_UCBMC |
| BSDC1              | 2.03E-22 | 0.94419247 | 0.376 | 0.309 | 7.18E-18 | Bcell_3_UCBMC |
| EZH2               | 2.25E-22 | 0.72974904 | 0.432 | 0.358 | 7.98E-18 | Bcell_3_UCBMC |
| NFKBID             | 7.58E-22 | 0.74942385 | 0.42  | 0.345 | 2.69E-17 | Bcell_3_UCBMC |
| RPL10              | 9.81E-22 | 0.23776481 | 0.928 | 0.878 | 3.48E-17 | Bcell_3_UCBMC |
| RPL35A             | 1.24E-21 | 0.24539104 | 0.905 | 0.84  | 4.39E-17 | Bcell_3_UCBMC |
| RPL8               | 1.44E-21 | 0.25766043 | 0.88  | 0.82  | 5.09E-17 | Bcell_3_UCBMC |
| PHLPP1             | 1.78E-21 | 0.55749467 | 0.551 | 0.492 | 6.32E-17 | Bcell_3_UCBMC |
| SSBP2              | 2.80E-21 | 0.3796376  | 0.753 | 0.72  | 9.91E-17 | Bcell_3_UCBMC |
| BRAF               | 3.29E-21 | 0.50595851 | 0.667 | 0.659 | 1.17E-16 | Bcell_3_UCBMC |
| FBXO33             | 4.12E-21 | 0.63423764 | 0.589 | 0.574 | 1.46E-16 | Bcell_3_UCBMC |
| MORF4L1            | 5.23E-21 | 0.396237   | 0.748 | 0.755 | 1.85E-16 | Bcell_3_UCBMC |
| ELMO1              | 8.29E-21 | 0.30099364 | 0.883 | 0.888 | 2.94E-16 | Bcell_3_UCBMC |
| ENSMMUG00000058037 | 9.00E-21 | 1.30200158 | 0.255 | 0.186 | 3.19E-16 | Bcell_3_UCBMC |
| SREK1              | 1.08E-20 | 0.45185811 | 0.692 | 0.697 | 3.84E-16 | Bcell_3_UCBMC |
| RICTOR             | 1.41E-20 | 0.45474132 | 0.66  | 0.647 | 4.99E-16 | Bcell_3_UCBMC |

|                    |          |            |       |       |          |               |
|--------------------|----------|------------|-------|-------|----------|---------------|
| RPS3A              | 2.71E-20 | 0.22866734 | 0.925 | 0.858 | 9.60E-16 | Bcell_3_UCBMC |
| DHX9               | 2.95E-20 | 0.55029072 | 0.621 | 0.62  | 1.05E-15 | Bcell_3_UCBMC |
| CCNL1              | 3.14E-20 | 0.23885143 | 0.897 | 0.894 | 1.11E-15 | Bcell_3_UCBMC |
| ENSMMUG00000016305 | 3.22E-20 | 0.81916493 | 0.425 | 0.385 | 1.14E-15 | Bcell_3_UCBMC |
| SEMA3A             | 8.14E-20 | 0.82616588 | 0.336 | 0.247 | 2.88E-15 | Bcell_3_UCBMC |
| CD52               | 9.36E-20 | 0.29479432 | 0.823 | 0.747 | 3.32E-15 | Bcell_3_UCBMC |
| CMTM6              | 1.07E-19 | 0.5201529  | 0.615 | 0.604 | 3.78E-15 | Bcell_3_UCBMC |
| BIN3               | 1.07E-19 | 0.85719424 | 0.403 | 0.36  | 3.81E-15 | Bcell_3_UCBMC |
| TNRC6A             | 2.17E-19 | 0.52527075 | 0.588 | 0.577 | 7.70E-15 | Bcell_3_UCBMC |
| BCLAF1             | 2.34E-19 | 0.36188451 | 0.754 | 0.789 | 8.28E-15 | Bcell_3_UCBMC |
| RPLP2              | 2.46E-19 | 0.24660408 | 0.89  | 0.806 | 8.73E-15 | Bcell_3_UCBMC |
| ATP5MG             | 3.05E-19 | 0.39610678 | 0.677 | 0.635 | 1.08E-14 | Bcell_3_UCBMC |
| PGM2L1             | 4.12E-19 | 0.77617233 | 0.339 | 0.261 | 1.46E-14 | Bcell_3_UCBMC |
| WDFY2              | 5.91E-19 | 0.52475787 | 0.576 | 0.552 | 2.09E-14 | Bcell_3_UCBMC |
| RAP1B              | 7.42E-19 | 0.38045325 | 0.734 | 0.746 | 2.63E-14 | Bcell_3_UCBMC |
| NIPBL              | 7.68E-19 | 0.50234691 | 0.611 | 0.612 | 2.72E-14 | Bcell_3_UCBMC |
| ZFAND6             | 8.58E-19 | 0.40396182 | 0.734 | 0.739 | 3.04E-14 | Bcell_3_UCBMC |
| ENSMMUG00000022769 | 1.09E-18 | 0.47711964 | 0.613 | 0.618 | 3.85E-14 | Bcell_3_UCBMC |
| CEBPZ              | 1.44E-18 | 0.73200581 | 0.468 | 0.434 | 5.09E-14 | Bcell_3_UCBMC |
| INO80D             | 1.51E-18 | 0.60485903 | 0.532 | 0.504 | 5.36E-14 | Bcell_3_UCBMC |
| MAMU-A             | 1.67E-18 | 0.31823827 | 0.817 | 0.828 | 5.90E-14 | Bcell_3_UCBMC |
| RPL7A              | 1.75E-18 | 0.22117839 | 0.887 | 0.809 | 6.21E-14 | Bcell_3_UCBMC |
| RPLP1              | 1.90E-18 | 0.19393179 | 0.926 | 0.887 | 6.73E-14 | Bcell_3_UCBMC |
| ITPR2              | 1.96E-18 | 0.35980813 | 0.811 | 0.83  | 6.94E-14 | Bcell_3_UCBMC |
| GTF3C4             | 2.10E-18 | 0.93358251 | 0.255 | 0.182 | 7.45E-14 | Bcell_3_UCBMC |
| EIF3L              | 2.96E-18 | 0.57119556 | 0.57  | 0.569 | 1.05E-13 | Bcell_3_UCBMC |
| TIMM23             | 3.00E-18 | 0.74676173 | 0.462 | 0.423 | 1.06E-13 | Bcell_3_UCBMC |
| GALNT1             | 3.30E-18 | 0.70262936 | 0.46  | 0.415 | 1.17E-13 | Bcell_3_UCBMC |
| ENSMMUG00000031367 | 3.43E-18 | 1.1804464  | 0.285 | 0.227 | 1.22E-13 | Bcell_3_UCBMC |
| PPP1R15A           | 4.25E-18 | 0.65610725 | 0.554 | 0.538 | 1.51E-13 | Bcell_3_UCBMC |
| RPL10A             | 9.60E-18 | 0.23687164 | 0.879 | 0.805 | 3.40E-13 | Bcell_3_UCBMC |
| RPL15              | 1.01E-17 | 0.25108287 | 0.847 | 0.779 | 3.59E-13 | Bcell_3_UCBMC |
| RAB1A              | 1.20E-17 | 0.4139431  | 0.634 | 0.638 | 4.26E-13 | Bcell_3_UCBMC |

|                     |          |            |       |       |          |               |
|---------------------|----------|------------|-------|-------|----------|---------------|
| SIN3A               | 1.29E-17 | 0.69748584 | 0.473 | 0.439 | 4.56E-13 | Bcell_3_UCBMC |
| ATP11B              | 1.30E-17 | 0.64218126 | 0.49  | 0.456 | 4.60E-13 | Bcell_3_UCBMC |
| CIR1                | 1.55E-17 | 0.70672506 | 0.455 | 0.419 | 5.48E-13 | Bcell_3_UCBMC |
| MAMU-DMA            | 1.60E-17 | 0.28261122 | 0.835 | 0.842 | 5.66E-13 | Bcell_3_UCBMC |
| PIAS1               | 1.95E-17 | 0.41265282 | 0.658 | 0.653 | 6.92E-13 | Bcell_3_UCBMC |
| ENSMMUG00000002324  | 2.83E-17 | 0.83828534 | 0.414 | 0.382 | 1.00E-12 | Bcell_3_UCBMC |
| ZEB1                | 3.71E-17 | 0.44533961 | 0.708 | 0.733 | 1.32E-12 | Bcell_3_UCBMC |
| RPS4X               | 5.01E-17 | 0.20395416 | 0.891 | 0.838 | 1.78E-12 | Bcell_3_UCBMC |
| DDX5                | 7.43E-17 | 0.17784004 | 0.952 | 0.933 | 2.63E-12 | Bcell_3_UCBMC |
| SHOC2               | 9.15E-17 | 0.4661693  | 0.659 | 0.668 | 3.24E-12 | Bcell_3_UCBMC |
| TOMM7               | 1.03E-16 | 0.30146722 | 0.732 | 0.674 | 3.64E-12 | Bcell_3_UCBMC |
| ZNF410              | 1.21E-16 | 0.76952787 | 0.39  | 0.338 | 4.29E-12 | Bcell_3_UCBMC |
| WDR13               | 1.58E-16 | 0.50920985 | 0.593 | 0.598 | 5.60E-12 | Bcell_3_UCBMC |
| ENSMMUG000000052747 | 1.64E-16 | 0.51063649 | 0.565 | 0.543 | 5.81E-12 | Bcell_3_UCBMC |
| ENSMMUG000000003867 | 2.15E-16 | 0.19939174 | 0.955 | 0.913 | 7.62E-12 | Bcell_3_UCBMC |
| FRY                 | 3.61E-16 | 0.81075508 | 0.286 | 0.213 | 1.28E-11 | Bcell_3_UCBMC |
| PRKD3               | 5.11E-16 | 0.58658282 | 0.534 | 0.516 | 1.81E-11 | Bcell_3_UCBMC |
| ZNF644              | 7.27E-16 | 0.36801082 | 0.712 | 0.724 | 2.58E-11 | Bcell_3_UCBMC |
| RSRP1               | 7.37E-16 | 0.32197366 | 0.778 | 0.794 | 2.61E-11 | Bcell_3_UCBMC |
| CERT1               | 7.49E-16 | 0.45746395 | 0.649 | 0.663 | 2.65E-11 | Bcell_3_UCBMC |
| ENSMMUG000000030465 | 8.60E-16 | 0.83185912 | 0.408 | 0.385 | 3.05E-11 | Bcell_3_UCBMC |
| ECD                 | 9.25E-16 | 0.88853777 | 0.375 | 0.329 | 3.28E-11 | Bcell_3_UCBMC |
| IQGAP2              | 9.65E-16 | 0.3984001  | 0.649 | 0.606 | 3.42E-11 | Bcell_3_UCBMC |
| TXNIP               | 1.00E-15 | 0.5127767  | 0.55  | 0.539 | 3.54E-11 | Bcell_3_UCBMC |
| ITPR1               | 1.32E-15 | 0.26860468 | 0.79  | 0.783 | 4.69E-11 | Bcell_3_UCBMC |
| RPL32               | 1.52E-15 | 0.19836755 | 0.915 | 0.861 | 5.37E-11 | Bcell_3_UCBMC |
| CWC25               | 1.57E-15 | 0.79450454 | 0.334 | 0.28  | 5.55E-11 | Bcell_3_UCBMC |
| GTF2B               | 1.61E-15 | 0.34061215 | 0.717 | 0.71  | 5.69E-11 | Bcell_3_UCBMC |
| ENSMMUG000000029026 | 2.25E-15 | 0.83248229 | 0.398 | 0.371 | 7.98E-11 | Bcell_3_UCBMC |
| BZW1                | 2.33E-15 | 0.46915262 | 0.607 | 0.614 | 8.27E-11 | Bcell_3_UCBMC |
| RNMT                | 3.04E-15 | 0.42745218 | 0.64  | 0.655 | 1.08E-10 | Bcell_3_UCBMC |
| CPEB1               | 3.69E-15 | 0.21795807 | 0.87  | 0.805 | 1.31E-10 | Bcell_3_UCBMC |
| CD44                | 3.71E-15 | 0.50431411 | 0.609 | 0.598 | 1.31E-10 | Bcell_3_UCBMC |

|                    |          |            |       |       |          |               |
|--------------------|----------|------------|-------|-------|----------|---------------|
| ENSMMUG00000030448 | 3.78E-15 | 0.83962222 | 0.397 | 0.374 | 1.34E-10 | Bcell_3_UCBMC |
| UXS1               | 4.13E-15 | 0.66965755 | 0.449 | 0.411 | 1.46E-10 | Bcell_3_UCBMC |
| CSDE1              | 4.24E-15 | 0.49358304 | 0.581 | 0.586 | 1.50E-10 | Bcell_3_UCBMC |
| RPL12              | 4.57E-15 | 0.21018759 | 0.875 | 0.799 | 1.62E-10 | Bcell_3_UCBMC |
| TMEM87A            | 5.44E-15 | 0.5843559  | 0.51  | 0.489 | 1.93E-10 | Bcell_3_UCBMC |
| MARCHF7            | 5.51E-15 | 0.44436418 | 0.613 | 0.632 | 1.95E-10 | Bcell_3_UCBMC |
| RB1CC1             | 7.12E-15 | 0.80044238 | 0.35  | 0.301 | 2.52E-10 | Bcell_3_UCBMC |
| BTG2               | 8.69E-15 | 0.32331529 | 0.699 | 0.7   | 3.08E-10 | Bcell_3_UCBMC |
| ATP6V1G1           | 1.24E-14 | 0.43036184 | 0.621 | 0.605 | 4.40E-10 | Bcell_3_UCBMC |
| YME1L1             | 1.27E-14 | 0.66404768 | 0.462 | 0.45  | 4.50E-10 | Bcell_3_UCBMC |
| SLMAP              | 1.80E-14 | 0.38781739 | 0.72  | 0.74  | 6.39E-10 | Bcell_3_UCBMC |
| TAX1BP1            | 1.86E-14 | 0.48153844 | 0.57  | 0.578 | 6.60E-10 | Bcell_3_UCBMC |
| PRPF40A            | 1.88E-14 | 0.39315489 | 0.648 | 0.661 | 6.65E-10 | Bcell_3_UCBMC |
| COX4I1             | 1.95E-14 | 0.31994449 | 0.685 | 0.637 | 6.92E-10 | Bcell_3_UCBMC |
| CASP1              | 2.45E-14 | 0.53071064 | 0.528 | 0.515 | 8.70E-10 | Bcell_3_UCBMC |
| CD37               | 3.06E-14 | 0.22983773 | 0.87  | 0.872 | 1.08E-09 | Bcell_3_UCBMC |
| GPBP1              | 3.27E-14 | 0.28420542 | 0.749 | 0.774 | 1.16E-09 | Bcell_3_UCBMC |
| LSM14A             | 4.08E-14 | 0.51426771 | 0.564 | 0.567 | 1.45E-09 | Bcell_3_UCBMC |
| MIER1              | 4.31E-14 | 0.51887859 | 0.551 | 0.558 | 1.53E-09 | Bcell_3_UCBMC |
| ENSMMUG00000065175 | 4.35E-14 | 0.80479429 | 0.411 | 0.392 | 1.54E-09 | Bcell_3_UCBMC |
| TBC1D9             | 4.53E-14 | 0.40238821 | 0.665 | 0.638 | 1.60E-09 | Bcell_3_UCBMC |
| ENSMMUG00000059742 | 4.67E-14 | 1.05708184 | 0.336 | 0.305 | 1.65E-09 | Bcell_3_UCBMC |
| PUM1               | 4.68E-14 | 0.34331304 | 0.743 | 0.765 | 1.66E-09 | Bcell_3_UCBMC |
| ENSMMUG00000001210 | 6.23E-14 | 0.35178825 | 0.714 | 0.672 | 2.21E-09 | Bcell_3_UCBMC |
| PRKCE              | 6.47E-14 | 0.50843253 | 0.5   | 0.453 | 2.29E-09 | Bcell_3_UCBMC |
| SRP14              | 6.71E-14 | 0.37763969 | 0.652 | 0.623 | 2.38E-09 | Bcell_3_UCBMC |
| LUC7L3             | 7.05E-14 | 0.37626733 | 0.688 | 0.707 | 2.50E-09 | Bcell_3_UCBMC |
| ENSMMUG00000006778 | 7.65E-14 | 0.64353347 | 0.43  | 0.407 | 2.71E-09 | Bcell_3_UCBMC |
| CTSH               | 1.34E-13 | 0.43574678 | 0.629 | 0.652 | 4.75E-09 | Bcell_3_UCBMC |
| RPS28              | 1.35E-13 | 0.15422222 | 0.905 | 0.854 | 4.79E-09 | Bcell_3_UCBMC |
| RPSA               | 1.74E-13 | 0.19956304 | 0.881 | 0.853 | 6.16E-09 | Bcell_3_UCBMC |
| RALGPS2            | 1.92E-13 | 0.11703438 | 0.949 | 0.936 | 6.79E-09 | Bcell_3_UCBMC |
| YEATS2             | 2.16E-13 | 0.32985766 | 0.701 | 0.716 | 7.64E-09 | Bcell_3_UCBMC |

|                    |          |            |       |       |          |               |
|--------------------|----------|------------|-------|-------|----------|---------------|
| PLEKHM2            | 2.49E-13 | 0.6227683  | 0.4   | 0.36  | 8.82E-09 | Bcell_3_UCBMC |
| TP53BP1            | 2.55E-13 | 0.5321273  | 0.542 | 0.54  | 9.02E-09 | Bcell_3_UCBMC |
| BIRC6              | 2.55E-13 | 0.27184137 | 0.841 | 0.858 | 9.04E-09 | Bcell_3_UCBMC |
| ZFR                | 2.66E-13 | 0.62234323 | 0.484 | 0.47  | 9.44E-09 | Bcell_3_UCBMC |
| ENSMMUG00000065104 | 2.72E-13 | 0.68980512 | 0.412 | 0.395 | 9.65E-09 | Bcell_3_UCBMC |
| FOXP1              | 3.11E-13 | 0.28393763 | 0.769 | 0.789 | 1.10E-08 | Bcell_3_UCBMC |
| PPP4R1             | 4.45E-13 | 0.74403031 | 0.364 | 0.321 | 1.58E-08 | Bcell_3_UCBMC |
| RPL28              | 4.91E-13 | 0.16271626 | 0.907 | 0.855 | 1.74E-08 | Bcell_3_UCBMC |
| ELOVL5             | 4.97E-13 | 0.37472777 | 0.612 | 0.612 | 1.76E-08 | Bcell_3_UCBMC |
| SMURF1             | 5.93E-13 | 0.65913526 | 0.417 | 0.371 | 2.10E-08 | Bcell_3_UCBMC |
| KLHL23             | 6.68E-13 | 0.45312496 | 0.596 | 0.601 | 2.37E-08 | Bcell_3_UCBMC |
| RIOK3              | 9.99E-13 | 0.76125687 | 0.385 | 0.357 | 3.54E-08 | Bcell_3_UCBMC |
| RELB               | 1.06E-12 | 0.45428957 | 0.541 | 0.526 | 3.76E-08 | Bcell_3_UCBMC |
| STAU1              | 1.13E-12 | 0.51137073 | 0.546 | 0.548 | 4.01E-08 | Bcell_3_UCBMC |
| GABARAPL2          | 1.14E-12 | 0.67125678 | 0.427 | 0.411 | 4.03E-08 | Bcell_3_UCBMC |
| ENSMMUG00000007536 | 1.17E-12 | 0.88413979 | 0.328 | 0.293 | 4.15E-08 | Bcell_3_UCBMC |
| RAB18              | 1.19E-12 | 0.73120508 | 0.364 | 0.326 | 4.21E-08 | Bcell_3_UCBMC |
| PHIP               | 1.25E-12 | 0.36567476 | 0.693 | 0.697 | 4.44E-08 | Bcell_3_UCBMC |
| LIMD2              | 1.37E-12 | 0.37922663 | 0.613 | 0.622 | 4.85E-08 | Bcell_3_UCBMC |
| IQGAP1             | 1.43E-12 | 0.32901926 | 0.691 | 0.712 | 5.08E-08 | Bcell_3_UCBMC |
| RSF1               | 1.44E-12 | 0.35230087 | 0.66  | 0.68  | 5.09E-08 | Bcell_3_UCBMC |
| NUP98              | 1.65E-12 | 0.41356558 | 0.612 | 0.619 | 5.86E-08 | Bcell_3_UCBMC |
| SAP18              | 1.87E-12 | 0.72201404 | 0.399 | 0.381 | 6.63E-08 | Bcell_3_UCBMC |
| SYNE2              | 2.01E-12 | 0.56960879 | 0.344 | 0.286 | 7.12E-08 | Bcell_3_UCBMC |
| RPL34              | 2.07E-12 | 0.18181019 | 0.918 | 0.873 | 7.34E-08 | Bcell_3_UCBMC |
| JCHAIN             | 2.13E-12 | 0.41551227 | 0.364 | 0.311 | 7.54E-08 | Bcell_3_UCBMC |
| COMMD6             | 2.55E-12 | 0.35316035 | 0.65  | 0.615 | 9.03E-08 | Bcell_3_UCBMC |
| ATF2               | 2.82E-12 | 0.60057083 | 0.45  | 0.43  | 1.00E-07 | Bcell_3_UCBMC |
| EPC2               | 3.51E-12 | 0.47270005 | 0.548 | 0.552 | 1.24E-07 | Bcell_3_UCBMC |
| RPS11              | 3.77E-12 | 0.17829809 | 0.916 | 0.871 | 1.34E-07 | Bcell_3_UCBMC |
| XRCC5              | 5.13E-12 | 0.45146198 | 0.602 | 0.635 | 1.82E-07 | Bcell_3_UCBMC |
| POU2F1             | 5.50E-12 | 0.62609675 | 0.474 | 0.45  | 1.95E-07 | Bcell_3_UCBMC |
| PRDM2              | 7.28E-12 | 0.35066364 | 0.615 | 0.622 | 2.58E-07 | Bcell_3_UCBMC |



|                   |          |            |       |       |          |               |
|-------------------|----------|------------|-------|-------|----------|---------------|
| ZNFX1             | 7.61E-12 | 0.76733156 | 0.369 | 0.333 | 2.70E-07 | Bcell_3_UCBMC |
| UTRN              | 7.91E-12 | 0.22797786 | 0.89  | 0.892 | 2.80E-07 | Bcell_3_UCBMC |
| RPS3              | 8.15E-12 | 0.18150917 | 0.868 | 0.802 | 2.89E-07 | Bcell_3_UCBMC |
| PPP1R12A          | 1.12E-11 | 0.3424469  | 0.723 | 0.754 | 3.97E-07 | Bcell_3_UCBMC |
| ARID2             | 1.46E-11 | 0.35258996 | 0.661 | 0.667 | 5.16E-07 | Bcell_3_UCBMC |
| VPS54             | 1.48E-11 | 0.810937   | 0.313 | 0.263 | 5.23E-07 | Bcell_3_UCBMC |
| USP3              | 1.49E-11 | 0.34891543 | 0.654 | 0.677 | 5.29E-07 | Bcell_3_UCBMC |
| ELF2              | 1.54E-11 | 0.70186783 | 0.398 | 0.371 | 5.47E-07 | Bcell_3_UCBMC |
| RNF4              | 1.65E-11 | 0.79627012 | 0.329 | 0.29  | 5.85E-07 | Bcell_3_UCBMC |
| CCDC59            | 1.65E-11 | 0.91646723 | 0.301 | 0.261 | 5.86E-07 | Bcell_3_UCBMC |
| ENSMUG00000006293 | 1.79E-11 | 0.5942382  | 0.477 | 0.475 | 6.33E-07 | Bcell_3_UCBMC |
| SETD2             | 2.03E-11 | 0.35943059 | 0.7   | 0.737 | 7.19E-07 | Bcell_3_UCBMC |
| SUB1              | 2.33E-11 | 0.28795888 | 0.723 | 0.752 | 8.26E-07 | Bcell_3_UCBMC |
| DOP1B             | 2.50E-11 | 0.55621722 | 0.395 | 0.353 | 8.85E-07 | Bcell_3_UCBMC |
| AKT3              | 2.63E-11 | 0.29235206 | 0.726 | 0.715 | 9.33E-07 | Bcell_3_UCBMC |
| G2E3              | 2.86E-11 | 0.72671066 | 0.365 | 0.334 | 1.01E-06 | Bcell_3_UCBMC |
| DENND5A           | 3.03E-11 | 0.66923711 | 0.341 | 0.296 | 1.08E-06 | Bcell_3_UCBMC |
| ATG13             | 3.04E-11 | 0.77920816 | 0.375 | 0.352 | 1.08E-06 | Bcell_3_UCBMC |
| WAC               | 3.23E-11 | 0.32209475 | 0.677 | 0.711 | 1.15E-06 | Bcell_3_UCBMC |
| RAB30             | 3.99E-11 | 0.19573583 | 0.745 | 0.743 | 1.41E-06 | Bcell_3_UCBMC |
| RBIS              | 4.10E-11 | 0.54424479 | 0.48  | 0.476 | 1.45E-06 | Bcell_3_UCBMC |
| DLG1              | 5.01E-11 | 0.37717694 | 0.655 | 0.684 | 1.78E-06 | Bcell_3_UCBMC |
| MBNL2             | 5.06E-11 | 0.35337818 | 0.667 | 0.666 | 1.79E-06 | Bcell_3_UCBMC |
| UBXN7             | 5.71E-11 | 0.62266869 | 0.43  | 0.414 | 2.02E-06 | Bcell_3_UCBMC |
| PIK3R5            | 6.64E-11 | 0.65316674 | 0.381 | 0.338 | 2.35E-06 | Bcell_3_UCBMC |
| RPL3              | 6.67E-11 | 0.15292443 | 0.882 | 0.842 | 2.36E-06 | Bcell_3_UCBMC |
| AUTS2             | 7.29E-11 | 0.28746209 | 0.583 | 0.535 | 2.58E-06 | Bcell_3_UCBMC |
| MAN2A1            | 8.62E-11 | 0.35570564 | 0.611 | 0.625 | 3.05E-06 | Bcell_3_UCBMC |
| NUDT3             | 9.23E-11 | 0.14314993 | 0.935 | 0.908 | 3.27E-06 | Bcell_3_UCBMC |
| TRA2B             | 9.69E-11 | 0.15843748 | 0.933 | 0.926 | 3.43E-06 | Bcell_3_UCBMC |
| VPS39             | 1.03E-10 | 0.5969813  | 0.448 | 0.439 | 3.65E-06 | Bcell_3_UCBMC |
| THOC1             | 1.17E-10 | 0.93090537 | 0.322 | 0.29  | 4.15E-06 | Bcell_3_UCBMC |
| WASHC5            | 1.29E-10 | 0.88721145 | 0.281 | 0.241 | 4.56E-06 | Bcell_3_UCBMC |

|                    |          |            |       |       |            |               |
|--------------------|----------|------------|-------|-------|------------|---------------|
| CREBRF             | 1.40E-10 | 0.49297282 | 0.553 | 0.559 | 4.96E-06   | Bcell_3_UCBMC |
| COX7C              | 1.44E-10 | 0.33574695 | 0.634 | 0.61  | 5.10E-06   | Bcell_3_UCBMC |
| C15H9orf78         | 1.49E-10 | 0.5833746  | 0.472 | 0.48  | 5.27E-06   | Bcell_3_UCBMC |
| MTREX              | 1.65E-10 | 0.30061554 | 0.71  | 0.741 | 5.85E-06   | Bcell_3_UCBMC |
| EMC3               | 1.84E-10 | 0.93455258 | 0.255 | 0.213 | 6.54E-06   | Bcell_3_UCBMC |
| UTY                | 1.85E-10 | 0.52547289 | 0.383 | 0.329 | 6.55E-06   | Bcell_3_UCBMC |
| EEF2               | 1.92E-10 | 0.30379297 | 0.689 | 0.669 | 6.79E-06   | Bcell_3_UCBMC |
| SRRM1              | 2.15E-10 | 0.48428383 | 0.532 | 0.55  | 7.60E-06   | Bcell_3_UCBMC |
| ENSMMUG00000058325 | 2.70E-10 | 0.17367694 | 0.827 | 0.798 | 9.57E-06   | Bcell_3_UCBMC |
| SRSF4              | 3.09E-10 | 0.385373   | 0.621 | 0.655 | 1.09E-05   | Bcell_3_UCBMC |
| ENSMMUG00000013491 | 3.36E-10 | 0.89366186 | 0.274 | 0.233 | 1.19E-05   | Bcell_3_UCBMC |
| ANXA2              | 3.50E-10 | 0.78717318 | 0.26  | 0.215 | 1.24E-05   | Bcell_3_UCBMC |
| SCAF11             | 4.24E-10 | 0.32843832 | 0.672 | 0.72  | 1.50E-05   | Bcell_3_UCBMC |
| EPC1               | 4.47E-10 | 0.28498227 | 0.705 | 0.753 | 1.58E-05   | Bcell_3_UCBMC |
| SREK1IP1           | 4.67E-10 | 0.84440515 | 0.278 | 0.24  | 1.65E-05   | Bcell_3_UCBMC |
| ARF1               | 5.16E-10 | 0.51703012 | 0.486 | 0.499 | 1.83E-05   | Bcell_3_UCBMC |
| NKIRAS1            | 5.49E-10 | 0.48356901 | 0.436 | 0.413 | 1.94E-05   | Bcell_3_UCBMC |
| DERL1              | 5.49E-10 | 0.70201122 | 0.375 | 0.35  | 1.95E-05   | Bcell_3_UCBMC |
| CUL5               | 5.56E-10 | 0.46749145 | 0.586 | 0.606 | 1.97E-05   | Bcell_3_UCBMC |
| USP47              | 6.81E-10 | 0.43259119 | 0.575 | 0.592 | 2.41E-05   | Bcell_3_UCBMC |
| WARS2              | 6.81E-10 | 0.73218988 | 0.37  | 0.343 | 2.41E-05   | Bcell_3_UCBMC |
| DNAJC2             | 8.45E-10 | 0.57757046 | 0.462 | 0.459 | 2.99E-05   | Bcell_3_UCBMC |
| HBS1L              | 8.71E-10 | 0.36579426 | 0.588 | 0.605 | 3.09E-05   | Bcell_3_UCBMC |
| STK38L             | 9.28E-10 | 0.79962358 | 0.282 | 0.239 | 3.29E-05   | Bcell_3_UCBMC |
| GAB2               | 1.09E-09 | 0.51244883 | 0.472 | 0.451 | 3.88E-05   | Bcell_3_UCBMC |
| ENSMMUG00000063979 | 1.15E-09 | 0.73873954 | 0.338 | 0.309 | 4.09E-05   | Bcell_3_UCBMC |
| SRSF5              | 1.95E-09 | 0.27526478 | 0.71  | 0.742 | 6.92E-05   | Bcell_3_UCBMC |
| PRKCB              | 2.01E-09 | 0.1520409  | 0.934 | 0.935 | 7.10E-05   | Bcell_3_UCBMC |
| EIF3K              | 2.06E-09 | 0.2587252  | 0.68  | 0.649 | 7.30E-05   | Bcell_3_UCBMC |
| LEPROTL1           | 2.28E-09 | 0.83881042 | 0.253 | 0.215 | 8.07E-05   | Bcell_3_UCBMC |
| SEN2               | 3.04E-09 | 0.60806285 | 0.427 | 0.42  | 0.00010764 | Bcell_3_UCBMC |
| ENSMMUG00000019505 | 3.66E-09 | 0.33414167 | 0.562 | 0.542 | 0.0001298  | Bcell_3_UCBMC |
| LANCL2             | 3.69E-09 | 0.70690501 | 0.369 | 0.347 | 0.00013068 | Bcell_3_UCBMC |

|                    |          |            |       |       |            |               |
|--------------------|----------|------------|-------|-------|------------|---------------|
| RPL23              | 4.06E-09 | 0.14343123 | 0.894 | 0.819 | 0.00014383 | Bcell_3_UCBMC |
| TFDP2              | 4.27E-09 | 0.57938651 | 0.446 | 0.436 | 0.00015137 | Bcell_3_UCBMC |
| RPL9               | 5.39E-09 | 0.17541163 | 0.864 | 0.817 | 0.00019102 | Bcell_3_UCBMC |
| ENSMMUG00000012525 | 5.60E-09 | 0.71647372 | 0.365 | 0.356 | 0.00019837 | Bcell_3_UCBMC |
| PECAM1             | 5.96E-09 | 0.66708635 | 0.327 | 0.29  | 0.00021112 | Bcell_3_UCBMC |
| SNW1               | 6.67E-09 | 0.66706441 | 0.388 | 0.378 | 0.00023633 | Bcell_3_UCBMC |
| MORC3              | 7.22E-09 | 0.52787796 | 0.442 | 0.436 | 0.00025586 | Bcell_3_UCBMC |
| DBF4               | 7.64E-09 | 0.80384808 | 0.272 | 0.234 | 0.00027077 | Bcell_3_UCBMC |
| ZNF92              | 8.95E-09 | 0.70212202 | 0.364 | 0.347 | 0.00031713 | Bcell_3_UCBMC |
| ROCK1              | 1.07E-08 | 0.28010641 | 0.749 | 0.8   | 0.00037761 | Bcell_3_UCBMC |
| ZNF292             | 1.21E-08 | 0.293073   | 0.694 | 0.732 | 0.00042984 | Bcell_3_UCBMC |
| CYTH1              | 1.57E-08 | 0.2864904  | 0.649 | 0.668 | 0.00055751 | Bcell_3_UCBMC |
| RAB5A              | 1.85E-08 | 0.6394989  | 0.377 | 0.363 | 0.00065716 | Bcell_3_UCBMC |
| GPR155             | 1.86E-08 | 0.52711839 | 0.402 | 0.377 | 0.00065814 | Bcell_3_UCBMC |
| YAF2               | 1.95E-08 | 0.42548303 | 0.543 | 0.564 | 0.00069025 | Bcell_3_UCBMC |
| ADAM17             | 1.98E-08 | 0.55761106 | 0.432 | 0.425 | 0.00070034 | Bcell_3_UCBMC |
| AP3B1              | 2.20E-08 | 0.3859649  | 0.576 | 0.592 | 0.00078034 | Bcell_3_UCBMC |
| TOGARAM1           | 2.22E-08 | 0.65212234 | 0.36  | 0.335 | 0.00078682 | Bcell_3_UCBMC |
| DDX6               | 2.23E-08 | 0.30691525 | 0.635 | 0.678 | 0.0007914  | Bcell_3_UCBMC |
| RAPGEF2            | 2.34E-08 | 0.28420223 | 0.651 | 0.66  | 0.00083061 | Bcell_3_UCBMC |
| ENSMMUG00000057542 | 2.45E-08 | 0.67814101 | 0.313 | 0.276 | 0.0008672  | Bcell_3_UCBMC |
| ENSMMUG00000015583 | 2.68E-08 | 0.24978572 | 0.739 | 0.753 | 0.00094923 | Bcell_3_UCBMC |
| WDFY4              | 2.73E-08 | 0.21223001 | 0.746 | 0.768 | 0.00096886 | Bcell_3_UCBMC |
| ANAPC10            | 2.74E-08 | 0.57669386 | 0.386 | 0.369 | 0.00097229 | Bcell_3_UCBMC |
| GABARAP            | 2.80E-08 | 0.38295248 | 0.519 | 0.517 | 0.00099278 | Bcell_3_UCBMC |
| ATP5F1E            | 2.88E-08 | 0.16117327 | 0.763 | 0.714 | 0.00101893 | Bcell_3_UCBMC |
| HNRNPDL            | 3.54E-08 | 0.27736427 | 0.68  | 0.721 | 0.00125397 | Bcell_3_UCBMC |
| HERC1              | 3.76E-08 | 0.37725068 | 0.524 | 0.527 | 0.00133323 | Bcell_3_UCBMC |
| ELOA               | 3.79E-08 | 0.14585349 | 0.878 | 0.833 | 0.00134246 | Bcell_3_UCBMC |
| RTRAF              | 4.73E-08 | 0.48404365 | 0.453 | 0.465 | 0.00167736 | Bcell_3_UCBMC |
| AFTPH              | 5.19E-08 | 0.2522783  | 0.735 | 0.768 | 0.00184055 | Bcell_3_UCBMC |
| TBK1               | 5.30E-08 | 0.90649314 | 0.264 | 0.232 | 0.00187895 | Bcell_3_UCBMC |
| VTA1               | 5.46E-08 | 0.66526931 | 0.336 | 0.313 | 0.00193498 | Bcell_3_UCBMC |

|                    |          |            |       |       |            |               |
|--------------------|----------|------------|-------|-------|------------|---------------|
| ELL2               | 5.92E-08 | 0.4057062  | 0.525 | 0.527 | 0.00209624 | Bcell_3_UCBMC |
| ARPC3              | 6.04E-08 | 0.20447927 | 0.75  | 0.725 | 0.00213864 | Bcell_3_UCBMC |
| PSMB9              | 6.14E-08 | 0.53164892 | 0.439 | 0.444 | 0.00217702 | Bcell_3_UCBMC |
| RAB7A              | 6.90E-08 | 0.209063   | 0.731 | 0.75  | 0.0024439  | Bcell_3_UCBMC |
| RPL23A             | 7.40E-08 | 0.13195025 | 0.904 | 0.858 | 0.00262374 | Bcell_3_UCBMC |
| TCERG1             | 7.77E-08 | 0.48974265 | 0.486 | 0.5   | 0.0027541  | Bcell_3_UCBMC |
| RBM8A              | 7.85E-08 | 0.71421943 | 0.335 | 0.324 | 0.00278211 | Bcell_3_UCBMC |
| CPSF3              | 8.79E-08 | 0.72984546 | 0.322 | 0.3   | 0.00311405 | Bcell_3_UCBMC |
| ZNF207             | 9.58E-08 | 0.52490137 | 0.468 | 0.485 | 0.00339614 | Bcell_3_UCBMC |
| TBC1D24            | 9.80E-08 | 0.5381093  | 0.422 | 0.429 | 0.00347294 | Bcell_3_UCBMC |
| BBX                | 1.05E-07 | 0.30072548 | 0.662 | 0.69  | 0.00372412 | Bcell_3_UCBMC |
| CCNK               | 1.14E-07 | 0.40197276 | 0.507 | 0.526 | 0.00405486 | Bcell_3_UCBMC |
| GCN1               | 1.18E-07 | 0.11573422 | 0.856 | 0.819 | 0.00418471 | Bcell_3_UCBMC |
| RBM34              | 1.21E-07 | 0.75744021 | 0.264 | 0.233 | 0.00430337 | Bcell_3_UCBMC |
| RASGRP1            | 1.28E-07 | 0.67312824 | 0.301 | 0.269 | 0.00452315 | Bcell_3_UCBMC |
| OPA1               | 1.42E-07 | 0.4698729  | 0.473 | 0.48  | 0.00504464 | Bcell_3_UCBMC |
| FMC1-LUC7L2        | 1.44E-07 | 0.2785989  | 0.685 | 0.729 | 0.00510872 | Bcell_3_UCBMC |
| ENSMMUG00000013429 | 1.51E-07 | 0.10558376 | 0.935 | 0.888 | 0.00535385 | Bcell_3_UCBMC |
| PAIP2              | 1.96E-07 | 0.3045356  | 0.644 | 0.679 | 0.0069596  | Bcell_3_UCBMC |
| ENSMMUG00000056012 | 2.40E-07 | 0.8144986  | 0.313 | 0.304 | 0.00852091 | Bcell_3_UCBMC |
| SAP30BP            | 2.44E-07 | 0.66621713 | 0.358 | 0.351 | 0.00863738 | Bcell_3_UCBMC |
| ENSMMUG00000054038 | 2.57E-07 | 0.2113719  | 0.77  | 0.81  | 0.00909644 | Bcell_3_UCBMC |
| KDM7A              | 3.08E-07 | 0.68639259 | 0.291 | 0.261 | 0.01090216 | Bcell_3_UCBMC |
| CUL3               | 3.17E-07 | 0.25830694 | 0.656 | 0.692 | 0.01124908 | Bcell_3_UCBMC |
| WDR26              | 3.29E-07 | 0.50789933 | 0.427 | 0.422 | 0.01166196 | Bcell_3_UCBMC |
| KLHL18             | 3.35E-07 | 0.6183855  | 0.374 | 0.359 | 0.01185722 | Bcell_3_UCBMC |
| NRAS               | 3.35E-07 | 0.88038484 | 0.25  | 0.223 | 0.0118808  | Bcell_3_UCBMC |
| RNF103             | 3.61E-07 | 0.64293001 | 0.369 | 0.36  | 0.01280193 | Bcell_3_UCBMC |
| MICU2              | 3.69E-07 | 0.52072322 | 0.503 | 0.522 | 0.01307264 | Bcell_3_UCBMC |
| RPS24              | 3.93E-07 | 0.12066652 | 0.911 | 0.876 | 0.01391392 | Bcell_3_UCBMC |
| ITSN2              | 3.99E-07 | 0.22709065 | 0.726 | 0.763 | 0.01413541 | Bcell_3_UCBMC |
| ENSMMUG00000031947 | 4.05E-07 | 0.37008161 | 0.537 | 0.548 | 0.01436277 | Bcell_3_UCBMC |
| RLF                | 4.07E-07 | 0.35812011 | 0.557 | 0.59  | 0.01441735 | Bcell_3_UCBMC |

|                   |          |            |       |       |            |               |
|-------------------|----------|------------|-------|-------|------------|---------------|
| FBXL5             | 4.08E-07 | 0.70960674 | 0.251 | 0.217 | 0.01446766 | Bcell_3_UCBMC |
| ATG5              | 4.16E-07 | 0.48389373 | 0.442 | 0.446 | 0.01475038 | Bcell_3_UCBMC |
| SLC35A3           | 4.56E-07 | 0.48319664 | 0.493 | 0.512 | 0.01614925 | Bcell_3_UCBMC |
| ATP5PO            | 4.59E-07 | 0.46962854 | 0.47  | 0.489 | 0.01626018 | Bcell_3_UCBMC |
| HMGB1             | 5.08E-07 | 0.22261266 | 0.722 | 0.76  | 0.01799033 | Bcell_3_UCBMC |
| GOLGA1            | 5.19E-07 | 0.37469724 | 0.579 | 0.584 | 0.01840246 | Bcell_3_UCBMC |
| RO60              | 5.51E-07 | 0.79862858 | 0.261 | 0.235 | 0.01953917 | Bcell_3_UCBMC |
| YPEL5             | 6.73E-07 | 0.24470374 | 0.683 | 0.716 | 0.02383119 | Bcell_3_UCBMC |
| CTNBNBL1          | 6.80E-07 | 0.12463344 | 0.255 | 0.351 | 0.02407868 | Bcell_3_UCBMC |
| BCL7B             | 7.15E-07 | 0.69836373 | 0.331 | 0.315 | 0.02534109 | Bcell_3_UCBMC |
| THUMPD1           | 7.61E-07 | 0.7502484  | 0.268 | 0.243 | 0.02697992 | Bcell_3_UCBMC |
| CSNK1A1           | 7.87E-07 | 0.32156493 | 0.623 | 0.671 | 0.0278851  | Bcell_3_UCBMC |
| ZNF749            | 8.12E-07 | 0.12300333 | 0.174 | 0.25  | 0.02875974 | Bcell_3_UCBMC |
| ARHGDI1           | 8.31E-07 | 0.21034029 | 0.745 | 0.745 | 0.02946055 | Bcell_3_UCBMC |
| FKBP5             | 8.35E-07 | 0.43428406 | 0.506 | 0.504 | 0.02960111 | Bcell_3_UCBMC |
| ENSMUG00000020643 | 8.75E-07 | 0.66048623 | 0.333 | 0.311 | 0.03099914 | Bcell_3_UCBMC |
| MTMR1             | 9.10E-07 | 0.64092736 | 0.355 | 0.338 | 0.0322364  | Bcell_3_UCBMC |
| KPNB1             | 9.30E-07 | 0.58477968 | 0.421 | 0.426 | 0.03294235 | Bcell_3_UCBMC |
| CD79B             | 9.40E-07 | 0.20889744 | 0.757 | 0.774 | 0.03330615 | Bcell_3_UCBMC |
| SEPTIN7           | 1.09E-06 | 0.25117849 | 0.751 | 0.798 | 0.03867004 | Bcell_3_UCBMC |
| ZEB2              | 1.60E-06 | 0.16183562 | 0.802 | 0.823 | 0.05662961 | Bcell_3_UCBMC |
| ZRANB2            | 1.65E-06 | 0.42011588 | 0.498 | 0.518 | 0.05856226 | Bcell_3_UCBMC |
| MON2              | 1.70E-06 | 0.506429   | 0.426 | 0.433 | 0.06037056 | Bcell_3_UCBMC |
| PPM1A             | 2.10E-06 | 0.560168   | 0.389 | 0.381 | 0.0743725  | Bcell_3_UCBMC |
| WDR33             | 2.24E-06 | 0.43973845 | 0.457 | 0.474 | 0.07952376 | Bcell_3_UCBMC |
| CHD4              | 2.36E-06 | 0.40348903 | 0.53  | 0.557 | 0.08359337 | Bcell_3_UCBMC |
| ABCC1             | 2.53E-06 | 0.52249669 | 0.406 | 0.402 | 0.08949101 | Bcell_3_UCBMC |
| PRRC2C            | 2.58E-06 | 0.21252921 | 0.715 | 0.765 | 0.09138504 | Bcell_3_UCBMC |
| TTC7A             | 2.76E-06 | 0.53408189 | 0.37  | 0.354 | 0.09775609 | Bcell_3_UCBMC |
| MTPN              | 2.90E-06 | 0.35871808 | 0.542 | 0.577 | 0.10282771 | Bcell_3_UCBMC |
| ENSMUG00000038348 | 3.21E-06 | 0.45886698 | 0.367 | 0.347 | 0.11363022 | Bcell_3_UCBMC |
| MARCHF3           | 3.38E-06 | 0.29697377 | 0.527 | 0.526 | 0.11969708 | Bcell_3_UCBMC |
| TUT4              | 3.56E-06 | 0.25807584 | 0.666 | 0.708 | 0.12600587 | Bcell_3_UCBMC |

|                    |          |            |       |       |            |               |
|--------------------|----------|------------|-------|-------|------------|---------------|
| UHRF1BP1L          | 4.12E-06 | 0.37536258 | 0.556 | 0.59  | 0.14591142 | Bcell_3_UCBMC |
| MAX                | 4.30E-06 | 0.61540763 | 0.365 | 0.365 | 0.15221164 | Bcell_3_UCBMC |
| SMC4               | 5.02E-06 | 0.43260873 | 0.458 | 0.467 | 0.1778282  | Bcell_3_UCBMC |
| SMDT1              | 5.22E-06 | 0.25377834 | 0.565 | 0.548 | 0.1848224  | Bcell_3_UCBMC |
| PTPN1              | 5.26E-06 | 0.28923892 | 0.58  | 0.617 | 0.18647938 | Bcell_3_UCBMC |
| PTPRA              | 5.32E-06 | 0.32332382 | 0.55  | 0.577 | 0.18857304 | Bcell_3_UCBMC |
| PSME1              | 5.60E-06 | 0.34929694 | 0.535 | 0.544 | 0.19835791 | Bcell_3_UCBMC |
| UBE2E1             | 5.68E-06 | 0.43774634 | 0.467 | 0.479 | 0.20125615 | Bcell_3_UCBMC |
| TPM3               | 6.35E-06 | 0.21722032 | 0.694 | 0.715 | 0.22505868 | Bcell_3_UCBMC |
| LAPTM5             | 6.45E-06 | 0.19725093 | 0.677 | 0.707 | 0.22856585 | Bcell_3_UCBMC |
| XRN1               | 6.69E-06 | 0.49956647 | 0.431 | 0.436 | 0.23714426 | Bcell_3_UCBMC |
| AGO3               | 6.85E-06 | 0.35846999 | 0.551 | 0.573 | 0.24259036 | Bcell_3_UCBMC |
| WDPCP              | 7.51E-06 | 0.11584309 | 0.272 | 0.355 | 0.26602837 | Bcell_3_UCBMC |
| RPL37A             | 8.44E-06 | 0.1034196  | 0.886 | 0.832 | 0.29901924 | Bcell_3_UCBMC |
| ENSMMUG00000008346 | 9.69E-06 | 0.3697776  | 0.473 | 0.492 | 0.34335144 | Bcell_3_UCBMC |
| ENSMMUG00000056043 | 1.03E-05 | 0.11455243 | 0.197 | 0.272 | 0.3636063  | Bcell_3_UCBMC |
| PSMB7              | 1.05E-05 | 0.35243769 | 0.505 | 0.533 | 0.37227424 | Bcell_3_UCBMC |
| ZNF160             | 1.07E-05 | 0.11748757 | 0.202 | 0.274 | 0.38043204 | Bcell_3_UCBMC |
| INTS6              | 1.34E-05 | 0.46230254 | 0.489 | 0.513 | 0.47598148 | Bcell_3_UCBMC |
| P2RY8              | 1.35E-05 | 0.36646402 | 0.506 | 0.525 | 0.47868039 | Bcell_3_UCBMC |
| SCAF8              | 1.36E-05 | 0.27850847 | 0.645 | 0.691 | 0.48249285 | Bcell_3_UCBMC |
| PHF11              | 1.45E-05 | 0.46664178 | 0.42  | 0.435 | 0.51511076 | Bcell_3_UCBMC |
| TMEM248            | 1.49E-05 | 0.17393677 | 0.207 | 0.284 | 0.52731378 | Bcell_3_UCBMC |
| RSRC2              | 1.54E-05 | 0.32582741 | 0.619 | 0.668 | 0.54469905 | Bcell_3_UCBMC |
| IP6K2              | 1.58E-05 | 0.16027581 | 0.201 | 0.273 | 0.56116276 | Bcell_3_UCBMC |
| ATF4               | 1.62E-05 | 0.51310073 | 0.421 | 0.448 | 0.57481557 | Bcell_3_UCBMC |
| IREB2              | 1.69E-05 | 0.54292498 | 0.352 | 0.349 | 0.59931014 | Bcell_3_UCBMC |
| FGFR1OP2           | 1.69E-05 | 0.13711935 | 0.252 | 0.343 | 0.60051629 | Bcell_3_UCBMC |
| RPL6               | 1.86E-05 | 0.10924362 | 0.888 | 0.833 | 0.66036842 | Bcell_3_UCBMC |
| AHCTF1             | 2.03E-05 | 0.13295675 | 0.276 | 0.365 | 0.71895134 | Bcell_3_UCBMC |
| UBR5               | 2.05E-05 | 0.36132503 | 0.559 | 0.596 | 0.72541698 | Bcell_3_UCBMC |
| MBTD1              | 2.07E-05 | 0.3458589  | 0.544 | 0.574 | 0.73216316 | Bcell_3_UCBMC |
| EFR3A              | 2.09E-05 | 0.4883176  | 0.425 | 0.433 | 0.74084248 | Bcell_3_UCBMC |

|                   |          |            |       |       |            |               |
|-------------------|----------|------------|-------|-------|------------|---------------|
| SLC35D1           | 2.19E-05 | 0.67420249 | 0.258 | 0.233 | 0.77648894 | Bcell_3_UCBMC |
| TAF7              | 2.44E-05 | 0.56946906 | 0.399 | 0.411 | 0.86317166 | Bcell_3_UCBMC |
| DDX52             | 2.50E-05 | 0.60099606 | 0.338 | 0.336 | 0.88429526 | Bcell_3_UCBMC |
| RBPJ              | 2.62E-05 | 0.40415866 | 0.336 | 0.318 | 0.9284585  | Bcell_3_UCBMC |
| KDM6A             | 2.76E-05 | 0.2122833  | 0.731 | 0.775 | 0.97627111 | Bcell_3_UCBMC |
| COPS8             | 2.80E-05 | 0.78013851 | 0.268 | 0.257 | 0.99124839 | Bcell_3_UCBMC |
| PRMT1             | 2.84E-05 | 0.10423964 | 0.213 | 0.289 | 1          | Bcell_3_UCBMC |
| CSPP1             | 2.90E-05 | 0.13089288 | 0.319 | 0.417 | 1          | Bcell_3_UCBMC |
| CHCHD2            | 3.43E-05 | 0.23886011 | 0.589 | 0.593 | 1          | Bcell_3_UCBMC |
| PLAA              | 3.47E-05 | 0.64336507 | 0.288 | 0.273 | 1          | Bcell_3_UCBMC |
| PWP1              | 3.59E-05 | 0.13859569 | 0.201 | 0.273 | 1          | Bcell_3_UCBMC |
| TET2              | 3.72E-05 | 0.50152819 | 0.418 | 0.421 | 1          | Bcell_3_UCBMC |
| NHP2              | 3.84E-05 | 0.14248661 | 0.203 | 0.278 | 1          | Bcell_3_UCBMC |
| FNDC3A            | 3.88E-05 | 0.24585912 | 0.65  | 0.686 | 1          | Bcell_3_UCBMC |
| RWDD1             | 3.99E-05 | 0.56211079 | 0.371 | 0.377 | 1          | Bcell_3_UCBMC |
| RNF38             | 4.16E-05 | 0.32914549 | 0.577 | 0.614 | 1          | Bcell_3_UCBMC |
| CYSTM1            | 4.31E-05 | 0.68696492 | 0.297 | 0.288 | 1          | Bcell_3_UCBMC |
| CLDND1            | 4.31E-05 | 0.60520354 | 0.364 | 0.374 | 1          | Bcell_3_UCBMC |
| ENSMUG00000021539 | 4.32E-05 | 0.12527273 | 0.184 | 0.25  | 1          | Bcell_3_UCBMC |
| GNA13             | 4.74E-05 | 0.20781235 | 0.572 | 0.595 | 1          | Bcell_3_UCBMC |
| ERO1B             | 5.01E-05 | 0.23800384 | 0.669 | 0.719 | 1          | Bcell_3_UCBMC |
| NIPSNAP2          | 5.38E-05 | 0.73242084 | 0.307 | 0.299 | 1          | Bcell_3_UCBMC |
| CRNKL1            | 5.41E-05 | 0.76482231 | 0.251 | 0.237 | 1          | Bcell_3_UCBMC |
| SF3B1             | 5.63E-05 | 0.26223855 | 0.622 | 0.682 | 1          | Bcell_3_UCBMC |
| LYST              | 5.78E-05 | 0.36097775 | 0.439 | 0.435 | 1          | Bcell_3_UCBMC |
| PSMB3             | 6.09E-05 | 0.1576477  | 0.205 | 0.28  | 1          | Bcell_3_UCBMC |
| GPR107            | 6.17E-05 | 0.50517288 | 0.396 | 0.403 | 1          | Bcell_3_UCBMC |
| SELENOK           | 6.33E-05 | 0.19771315 | 0.204 | 0.278 | 1          | Bcell_3_UCBMC |
| U2SURP            | 6.60E-05 | 0.31696696 | 0.533 | 0.571 | 1          | Bcell_3_UCBMC |
| SLU7              | 7.10E-05 | 0.53394434 | 0.344 | 0.34  | 1          | Bcell_3_UCBMC |
| CEP57             | 7.22E-05 | 0.12833999 | 0.234 | 0.31  | 1          | Bcell_3_UCBMC |
| KIZ               | 7.50E-05 | 0.49696604 | 0.393 | 0.401 | 1          | Bcell_3_UCBMC |
| MCM9              | 7.52E-05 | 0.42444503 | 0.426 | 0.434 | 1          | Bcell_3_UCBMC |

|                    |            |            |       |       |                 |
|--------------------|------------|------------|-------|-------|-----------------|
| POGZ               | 7.63E-05   | 0.12443665 | 0.321 | 0.419 | 1 Bcell_3_UCBMC |
| GMFG               | 8.65E-05   | 0.26351608 | 0.589 | 0.614 | 1 Bcell_3_UCBMC |
| SF3A1              | 8.71E-05   | 0.12364253 | 0.187 | 0.252 | 1 Bcell_3_UCBMC |
| ARIH2              | 9.12E-05   | 0.51129265 | 0.385 | 0.396 | 1 Bcell_3_UCBMC |
| GNB2               | 9.65E-05   | 0.13013194 | 0.272 | 0.364 | 1 Bcell_3_UCBMC |
| ANXA7              | 9.75E-05   | 0.17315137 | 0.209 | 0.279 | 1 Bcell_3_UCBMC |
| LDB2               | 0.00010056 | 0.21025801 | 0.643 | 0.658 | 1 Bcell_3_UCBMC |
| ENSMMUG00000016278 | 0.00010181 | 0.12655893 | 0.198 | 0.268 | 1 Bcell_3_UCBMC |
| CNOT8              | 0.00010342 | 0.13380808 | 0.226 | 0.3   | 1 Bcell_3_UCBMC |
| TMA7               | 0.00010793 | 0.24416611 | 0.583 | 0.601 | 1 Bcell_3_UCBMC |
| TAF1D              | 0.00011028 | 0.14438369 | 0.219 | 0.29  | 1 Bcell_3_UCBMC |
| USP16              | 0.00011138 | 0.48135821 | 0.434 | 0.462 | 1 Bcell_3_UCBMC |
| ENSMMUG00000061630 | 0.00011191 | 0.70081152 | 0.286 | 0.283 | 1 Bcell_3_UCBMC |
| EIF3I              | 0.00011384 | 0.12628344 | 0.233 | 0.31  | 1 Bcell_3_UCBMC |
| RBM27              | 0.00011524 | 0.38891925 | 0.485 | 0.515 | 1 Bcell_3_UCBMC |
| MDH1               | 0.00011571 | 0.14854815 | 0.212 | 0.285 | 1 Bcell_3_UCBMC |
| HNRNPA3            | 0.00011758 | 0.20622444 | 0.694 | 0.736 | 1 Bcell_3_UCBMC |
| LPIN2              | 0.00011852 | 0.50775305 | 0.336 | 0.331 | 1 Bcell_3_UCBMC |
| FAM118A            | 0.00012266 | 0.72504449 | 0.255 | 0.239 | 1 Bcell_3_UCBMC |
| TCF12              | 0.00012395 | 0.12411034 | 0.814 | 0.851 | 1 Bcell_3_UCBMC |
| MTMR12             | 0.00013542 | 0.10716232 | 0.22  | 0.287 | 1 Bcell_3_UCBMC |
| PRPF4B             | 0.00013847 | 0.19610713 | 0.715 | 0.774 | 1 Bcell_3_UCBMC |
| RPS6KB1            | 0.00014208 | 0.32129373 | 0.54  | 0.58  | 1 Bcell_3_UCBMC |
| NUP133             | 0.00014629 | 0.63392961 | 0.268 | 0.254 | 1 Bcell_3_UCBMC |
| PPP1R12B           | 0.00014814 | 0.11295464 | 0.21  | 0.273 | 1 Bcell_3_UCBMC |
| NUP62CL            | 0.00015354 | 0.30780256 | 0.413 | 0.407 | 1 Bcell_3_UCBMC |
| WRN                | 0.00015412 | 0.33998352 | 0.533 | 0.566 | 1 Bcell_3_UCBMC |
| TAF2               | 0.00015438 | 0.66635144 | 0.284 | 0.276 | 1 Bcell_3_UCBMC |
| SOX4               | 0.00015791 | 0.24769736 | 0.436 | 0.441 | 1 Bcell_3_UCBMC |
| SEC23A             | 0.00015883 | 0.61430443 | 0.309 | 0.301 | 1 Bcell_3_UCBMC |
| PANK3              | 0.00016581 | 0.11089731 | 0.199 | 0.261 | 1 Bcell_3_UCBMC |
| TRIM25             | 0.00016875 | 0.10166155 | 0.227 | 0.298 | 1 Bcell_3_UCBMC |
| MTMR6              | 0.0001855  | 0.6021192  | 0.327 | 0.323 | 1 Bcell_3_UCBMC |



|                     |            |            |       |       |                 |
|---------------------|------------|------------|-------|-------|-----------------|
| ENSMMUG000000001894 | 0.00018711 | 0.58702532 | 0.37  | 0.389 | 1 Bcell_3_UCBMC |
| PSMD13              | 0.00019467 | 0.64650862 | 0.317 | 0.321 | 1 Bcell_3_UCBMC |
| PMPCB               | 0.0001965  | 0.20759464 | 0.216 | 0.287 | 1 Bcell_3_UCBMC |
| ATP5F1C             | 0.00020554 | 0.11121239 | 0.242 | 0.321 | 1 Bcell_3_UCBMC |
| SLC38A9             | 0.00020954 | 0.13996172 | 0.257 | 0.33  | 1 Bcell_3_UCBMC |
| RCC1                | 0.00022142 | 0.55193844 | 0.346 | 0.352 | 1 Bcell_3_UCBMC |
| TXNDC11             | 0.00023736 | 0.43377324 | 0.351 | 0.344 | 1 Bcell_3_UCBMC |
| CCNT2               | 0.00024342 | 0.41453776 | 0.458 | 0.486 | 1 Bcell_3_UCBMC |
| CENPC               | 0.00025013 | 0.48105255 | 0.413 | 0.432 | 1 Bcell_3_UCBMC |
| NFKBIB              | 0.00025206 | 0.4715033  | 0.402 | 0.415 | 1 Bcell_3_UCBMC |
| GGA3                | 0.00025393 | 0.16664121 | 0.216 | 0.286 | 1 Bcell_3_UCBMC |
| RAD21               | 0.00025899 | 0.40126085 | 0.466 | 0.5   | 1 Bcell_3_UCBMC |
| MORF4L2             | 0.00026003 | 0.11201007 | 0.285 | 0.373 | 1 Bcell_3_UCBMC |
| NUP153              | 0.00026313 | 0.29786403 | 0.58  | 0.628 | 1 Bcell_3_UCBMC |
| ZNF706              | 0.0002675  | 0.10200068 | 0.252 | 0.332 | 1 Bcell_3_UCBMC |
| DNTTIP2             | 0.00027336 | 0.50930056 | 0.371 | 0.379 | 1 Bcell_3_UCBMC |
| SNRK                | 0.00028207 | 0.56769741 | 0.308 | 0.298 | 1 Bcell_3_UCBMC |
| WDR43               | 0.00028902 | 0.36452282 | 0.448 | 0.464 | 1 Bcell_3_UCBMC |
| FNTB                | 0.0002899  | 0.1215979  | 0.302 | 0.395 | 1 Bcell_3_UCBMC |
| CCNC                | 0.00031354 | 0.57661286 | 0.335 | 0.338 | 1 Bcell_3_UCBMC |
| EIF5                | 0.00031376 | 0.31978554 | 0.556 | 0.617 | 1 Bcell_3_UCBMC |
| GNG5                | 0.00032509 | 0.39530144 | 0.452 | 0.483 | 1 Bcell_3_UCBMC |
| SON                 | 0.00032607 | 0.14206765 | 0.776 | 0.831 | 1 Bcell_3_UCBMC |
| PPTC7               | 0.00032974 | 0.35334704 | 0.481 | 0.509 | 1 Bcell_3_UCBMC |
| SFSWAP              | 0.00033111 | 0.52101291 | 0.376 | 0.392 | 1 Bcell_3_UCBMC |
| KRTCAP2             | 0.00033303 | 0.26856504 | 0.547 | 0.563 | 1 Bcell_3_UCBMC |
| ZNF326              | 0.00034438 | 0.37736829 | 0.438 | 0.456 | 1 Bcell_3_UCBMC |
| ESYT2               | 0.00035489 | 0.33642264 | 0.495 | 0.522 | 1 Bcell_3_UCBMC |
| EIF1AX              | 0.0003629  | 0.12125232 | 0.367 | 0.473 | 1 Bcell_3_UCBMC |
| LSM5                | 0.00036973 | 0.18428064 | 0.218 | 0.288 | 1 Bcell_3_UCBMC |
| APPL1               | 0.00037815 | 0.12346313 | 0.314 | 0.412 | 1 Bcell_3_UCBMC |
| RPN1                | 0.00041928 | 0.17357803 | 0.237 | 0.311 | 1 Bcell_3_UCBMC |
| SNX3                | 0.00042189 | 0.36550014 | 0.462 | 0.496 | 1 Bcell_3_UCBMC |

|                   |            |            |       |       |                 |
|-------------------|------------|------------|-------|-------|-----------------|
| ACIN1             | 0.000435   | 0.35871203 | 0.508 | 0.564 | 1 Bcell_3_UCBMC |
| ENSMUG00000016009 | 0.0004477  | 0.62592544 | 0.31  | 0.315 | 1 Bcell_3_UCBMC |
| TMF1              | 0.00045628 | 0.13875618 | 0.191 | 0.25  | 1 Bcell_3_UCBMC |
| MOB3A             | 0.00045847 | 0.55768438 | 0.369 | 0.376 | 1 Bcell_3_UCBMC |
| TNRC6B            | 0.00046297 | 0.12501481 | 0.848 | 0.873 | 1 Bcell_3_UCBMC |
| MIS18BP1          | 0.00046437 | 0.5900109  | 0.294 | 0.287 | 1 Bcell_3_UCBMC |
| POU2AF1           | 0.00046791 | 0.10649787 | 0.281 | 0.358 | 1 Bcell_3_UCBMC |
| NDUFB9            | 0.00050983 | 0.64480955 | 0.299 | 0.304 | 1 Bcell_3_UCBMC |
| LRRFIP2           | 0.0005195  | 0.45267142 | 0.393 | 0.404 | 1 Bcell_3_UCBMC |
| ENSMUG00000022489 | 0.00053043 | 0.2944175  | 0.496 | 0.52  | 1 Bcell_3_UCBMC |
| NDUFC2            | 0.00054763 | 0.13294514 | 0.237 | 0.312 | 1 Bcell_3_UCBMC |
| NDUFB8            | 0.0005534  | 0.14084439 | 0.252 | 0.333 | 1 Bcell_3_UCBMC |
| PTP4A2            | 0.00056926 | 0.35905419 | 0.43  | 0.455 | 1 Bcell_3_UCBMC |
| SS18              | 0.0005856  | 0.50713882 | 0.379 | 0.392 | 1 Bcell_3_UCBMC |
| FDX1              | 0.00060243 | 0.11705872 | 0.268 | 0.339 | 1 Bcell_3_UCBMC |
| BCL10             | 0.00060244 | 0.66353272 | 0.286 | 0.284 | 1 Bcell_3_UCBMC |
| ATP9B             | 0.0006072  | 0.38341353 | 0.506 | 0.543 | 1 Bcell_3_UCBMC |
| QARS1             | 0.00060761 | 0.22628516 | 0.205 | 0.273 | 1 Bcell_3_UCBMC |
| GIT2              | 0.00061227 | 0.35247962 | 0.499 | 0.546 | 1 Bcell_3_UCBMC |
| APBB1IP           | 0.0006329  | 0.24177867 | 0.662 | 0.722 | 1 Bcell_3_UCBMC |
| CD320             | 0.00063366 | 0.13871484 | 0.272 | 0.359 | 1 Bcell_3_UCBMC |
| CD40              | 0.00064291 | 0.46699905 | 0.371 | 0.384 | 1 Bcell_3_UCBMC |
| VEZT              | 0.00065209 | 0.51271629 | 0.332 | 0.33  | 1 Bcell_3_UCBMC |
| BRWD3             | 0.00065814 | 0.10548005 | 0.229 | 0.291 | 1 Bcell_3_UCBMC |
| CREBBP            | 0.00066051 | 0.18860638 | 0.666 | 0.711 | 1 Bcell_3_UCBMC |
| ZNF43             | 0.00066506 | 0.4636946  | 0.387 | 0.404 | 1 Bcell_3_UCBMC |
| TMCC1             | 0.00066891 | 0.36166775 | 0.509 | 0.527 | 1 Bcell_3_UCBMC |
| NEMF              | 0.00067281 | 0.36858412 | 0.446 | 0.472 | 1 Bcell_3_UCBMC |
| GMPS              | 0.0006792  | 0.10881848 | 0.197 | 0.255 | 1 Bcell_3_UCBMC |
| SF3B2             | 0.0006867  | 0.57052127 | 0.326 | 0.336 | 1 Bcell_3_UCBMC |
| ACE               | 0.00069875 | 0.21891269 | 0.195 | 0.255 | 1 Bcell_3_UCBMC |
| ARHGAP12          | 0.0007053  | 0.11553251 | 0.264 | 0.337 | 1 Bcell_3_UCBMC |
| AQR               | 0.00072717 | 0.42271419 | 0.395 | 0.408 | 1 Bcell_3_UCBMC |

|                    |            |            |       |       |                 |
|--------------------|------------|------------|-------|-------|-----------------|
| CCDC88A            | 0.0007324  | 0.16998407 | 0.636 | 0.647 | 1 Bcell_3_UCBMC |
| UVRAG              | 0.00077593 | 0.1161538  | 0.86  | 0.892 | 1 Bcell_3_UCBMC |
| ENSMMUG00000020751 | 0.00079055 | 0.11088515 | 0.238 | 0.305 | 1 Bcell_3_UCBMC |
| SUN1               | 0.00079781 | 0.11713994 | 0.202 | 0.261 | 1 Bcell_3_UCBMC |
| SNU13              | 0.00087698 | 0.29208391 | 0.541 | 0.591 | 1 Bcell_3_UCBMC |
| PSMA4              | 0.00088001 | 0.164064   | 0.224 | 0.291 | 1 Bcell_3_UCBMC |
| C2CD5              | 0.00088735 | 0.13694326 | 0.285 | 0.36  | 1 Bcell_3_UCBMC |
| VPS4B              | 0.00089515 | 0.44974177 | 0.378 | 0.394 | 1 Bcell_3_UCBMC |
| DHX40              | 0.00091363 | 0.66701893 | 0.311 | 0.313 | 1 Bcell_3_UCBMC |
| NCKAP1L            | 0.00095739 | 0.25362638 | 0.602 | 0.668 | 1 Bcell_3_UCBMC |
| TAGAP              | 0.00096292 | 0.2472068  | 0.511 | 0.538 | 1 Bcell_3_UCBMC |
| TMED4              | 0.00099128 | 0.19407465 | 0.204 | 0.265 | 1 Bcell_3_UCBMC |
| CCDC186            | 0.00105486 | 0.17903234 | 0.199 | 0.256 | 1 Bcell_3_UCBMC |
| SMN1               | 0.00111507 | 0.13261272 | 0.259 | 0.331 | 1 Bcell_3_UCBMC |
| OSBPL2             | 0.00115001 | 0.19241278 | 0.242 | 0.314 | 1 Bcell_3_UCBMC |
| GINM1              | 0.00116347 | 0.45182862 | 0.371 | 0.38  | 1 Bcell_3_UCBMC |
| HSH2D              | 0.00120617 | 0.19685506 | 0.257 | 0.334 | 1 Bcell_3_UCBMC |
| POLR3GL            | 0.00121834 | 0.2148846  | 0.204 | 0.264 | 1 Bcell_3_UCBMC |
| NSA2               | 0.00128199 | 0.17830702 | 0.616 | 0.603 | 1 Bcell_3_UCBMC |
| SCP2               | 0.0012882  | 0.19085294 | 0.332 | 0.428 | 1 Bcell_3_UCBMC |
| RBX1               | 0.00128864 | 0.11426559 | 0.3   | 0.386 | 1 Bcell_3_UCBMC |
| NDUFB2             | 0.00130432 | 0.31120627 | 0.494 | 0.537 | 1 Bcell_3_UCBMC |
| STK40              | 0.00139735 | 0.20800954 | 0.195 | 0.252 | 1 Bcell_3_UCBMC |
| PEX14              | 0.00142165 | 0.50766457 | 0.317 | 0.31  | 1 Bcell_3_UCBMC |
| ZMYM5              | 0.00145611 | 0.49069224 | 0.29  | 0.285 | 1 Bcell_3_UCBMC |
| NDUFB4             | 0.00152562 | 0.46872928 | 0.374 | 0.402 | 1 Bcell_3_UCBMC |
| ORC2               | 0.00156322 | 0.22430799 | 0.196 | 0.253 | 1 Bcell_3_UCBMC |
| UBXN1              | 0.00158492 | 0.27579583 | 0.475 | 0.508 | 1 Bcell_3_UCBMC |
| SUCLG1             | 0.00159134 | 0.17688919 | 0.285 | 0.369 | 1 Bcell_3_UCBMC |
| VIM                | 0.00166253 | 0.22556779 | 0.452 | 0.454 | 1 Bcell_3_UCBMC |
| LSP1               | 0.00167467 | 0.25683964 | 0.516 | 0.552 | 1 Bcell_3_UCBMC |
| PLCD4              | 0.00171865 | 0.19133324 | 0.252 | 0.327 | 1 Bcell_3_UCBMC |
| ACO2               | 0.00178485 | 0.12948873 | 0.231 | 0.296 | 1 Bcell_3_UCBMC |

|                    |            |            |       |       |                 |
|--------------------|------------|------------|-------|-------|-----------------|
| RNF34              | 0.00180827 | 0.15548574 | 0.237 | 0.303 | 1 Bcell_3_UCBMC |
| ARF5               | 0.00184539 | 0.2282306  | 0.24  | 0.316 | 1 Bcell_3_UCBMC |
| MAPK1              | 0.00196508 | 0.29947433 | 0.526 | 0.573 | 1 Bcell_3_UCBMC |
| QSOX2              | 0.00197743 | 0.44084013 | 0.333 | 0.339 | 1 Bcell_3_UCBMC |
| SAFB               | 0.00202532 | 0.16858971 | 0.726 | 0.763 | 1 Bcell_3_UCBMC |
| CD2AP              | 0.00210189 | 0.41913681 | 0.384 | 0.395 | 1 Bcell_3_UCBMC |
| HMGB2              | 0.00215829 | 0.48469915 | 0.322 | 0.331 | 1 Bcell_3_UCBMC |
| WAS                | 0.00224858 | 0.21891988 | 0.229 | 0.295 | 1 Bcell_3_UCBMC |
| UBE2G1             | 0.00226201 | 0.34116515 | 0.532 | 0.581 | 1 Bcell_3_UCBMC |
| LAMTOR2            | 0.00227305 | 0.56384537 | 0.286 | 0.292 | 1 Bcell_3_UCBMC |
| PFDN1              | 0.00230742 | 0.42116058 | 0.383 | 0.405 | 1 Bcell_3_UCBMC |
| BTBD3              | 0.00234576 | 0.13132121 | 0.261 | 0.33  | 1 Bcell_3_UCBMC |
| HELZ               | 0.0024083  | 0.2819706  | 0.522 | 0.565 | 1 Bcell_3_UCBMC |
| ENSMMUG00000060229 | 0.00250935 | 0.11243886 | 0.306 | 0.388 | 1 Bcell_3_UCBMC |
| PSMA1              | 0.00267165 | 0.48963564 | 0.375 | 0.399 | 1 Bcell_3_UCBMC |
| PLEKHB2            | 0.0026951  | 0.39477607 | 0.443 | 0.476 | 1 Bcell_3_UCBMC |
| SNRPD1             | 0.00273712 | 0.11213074 | 0.271 | 0.341 | 1 Bcell_3_UCBMC |
| NRIP1              | 0.00275134 | 0.37202455 | 0.402 | 0.415 | 1 Bcell_3_UCBMC |
| GPR89A             | 0.00279841 | 0.6259224  | 0.297 | 0.302 | 1 Bcell_3_UCBMC |
| LSM6               | 0.00291532 | 0.20095142 | 0.256 | 0.332 | 1 Bcell_3_UCBMC |
| MED27              | 0.00296616 | 0.40802563 | 0.397 | 0.419 | 1 Bcell_3_UCBMC |
| TMX3               | 0.00300079 | 0.11048841 | 0.208 | 0.262 | 1 Bcell_3_UCBMC |
| RPS6KA5            | 0.00300827 | 0.22976809 | 0.619 | 0.657 | 1 Bcell_3_UCBMC |
| SEC31A             | 0.00312429 | 0.26213759 | 0.519 | 0.567 | 1 Bcell_3_UCBMC |
| SEC11A             | 0.003157   | 0.12696658 | 0.266 | 0.34  | 1 Bcell_3_UCBMC |
| SETD7              | 0.00322713 | 0.4856242  | 0.358 | 0.369 | 1 Bcell_3_UCBMC |
| TIPARP             | 0.00331841 | 0.26229843 | 0.397 | 0.408 | 1 Bcell_3_UCBMC |
| CEP135             | 0.00342855 | 0.14123435 | 0.263 | 0.332 | 1 Bcell_3_UCBMC |
| RGS19              | 0.00349479 | 0.17089894 | 0.29  | 0.374 | 1 Bcell_3_UCBMC |
| ENSMMUG00000055627 | 0.00371787 | 0.21819112 | 0.541 | 0.561 | 1 Bcell_3_UCBMC |
| ME2                | 0.00374227 | 0.2863254  | 0.551 | 0.61  | 1 Bcell_3_UCBMC |
| H2AFJ              | 0.00379189 | 0.22888976 | 0.24  | 0.308 | 1 Bcell_3_UCBMC |
| POC1B              | 0.00382353 | 0.32906889 | 0.5   | 0.545 | 1 Bcell_3_UCBMC |

|                    |            |            |       |       |                 |
|--------------------|------------|------------|-------|-------|-----------------|
| ACBD3              | 0.00392019 | 0.16027668 | 0.258 | 0.326 | 1 Bcell_3_UCBMC |
| LBR                | 0.00392655 | 0.11510189 | 0.384 | 0.483 | 1 Bcell_3_UCBMC |
| SAT1               | 0.00402579 | 0.1430194  | 0.256 | 0.322 | 1 Bcell_3_UCBMC |
| GBE1               | 0.00407943 | 0.10117094 | 0.204 | 0.252 | 1 Bcell_3_UCBMC |
| SUZ12              | 0.00409303 | 0.13328623 | 0.367 | 0.463 | 1 Bcell_3_UCBMC |
| TRIM37             | 0.00414743 | 0.63988444 | 0.261 | 0.257 | 1 Bcell_3_UCBMC |
| SEC61B             | 0.00430622 | 0.3425257  | 0.43  | 0.458 | 1 Bcell_3_UCBMC |
| ENTPD4             | 0.00436198 | 0.15208309 | 0.323 | 0.41  | 1 Bcell_3_UCBMC |
| SIAH1              | 0.00439674 | 0.53222639 | 0.285 | 0.283 | 1 Bcell_3_UCBMC |
| ENSMMUG00000021153 | 0.00458408 | 0.13168492 | 0.29  | 0.355 | 1 Bcell_3_UCBMC |
| PFDN2              | 0.00463879 | 0.40759997 | 0.419 | 0.456 | 1 Bcell_3_UCBMC |
| CHD6               | 0.00467619 | 0.42472012 | 0.402 | 0.426 | 1 Bcell_3_UCBMC |
| NIFK               | 0.00471902 | 0.61561637 | 0.295 | 0.302 | 1 Bcell_3_UCBMC |
| EID1               | 0.00485375 | 0.23642368 | 0.235 | 0.304 | 1 Bcell_3_UCBMC |
| FAM172A            | 0.00491552 | 0.14704026 | 0.717 | 0.766 | 1 Bcell_3_UCBMC |
| ENSMMUG00000015274 | 0.00502934 | 0.27969565 | 0.215 | 0.271 | 1 Bcell_3_UCBMC |
| KIAA0040           | 0.00504414 | 0.18498853 | 0.654 | 0.688 | 1 Bcell_3_UCBMC |
| GPSM3              | 0.00509316 | 0.37446631 | 0.429 | 0.463 | 1 Bcell_3_UCBMC |
| AFF4               | 0.0052918  | 0.40621774 | 0.416 | 0.445 | 1 Bcell_3_UCBMC |
| MTMR10             | 0.00531881 | 0.41424052 | 0.359 | 0.368 | 1 Bcell_3_UCBMC |
| PI4K2B             | 0.00558306 | 0.29336379 | 0.483 | 0.529 | 1 Bcell_3_UCBMC |
| SF3B6              | 0.00562138 | 0.51781016 | 0.381 | 0.411 | 1 Bcell_3_UCBMC |
| ERICH1             | 0.00577553 | 0.16925781 | 0.238 | 0.301 | 1 Bcell_3_UCBMC |
| EIF3A              | 0.00593717 | 0.2282571  | 0.575 | 0.628 | 1 Bcell_3_UCBMC |
| CLK4               | 0.00601023 | 0.17309708 | 0.246 | 0.311 | 1 Bcell_3_UCBMC |
| TNKS               | 0.00609783 | 0.30119929 | 0.537 | 0.584 | 1 Bcell_3_UCBMC |
| RALY               | 0.00619472 | 0.11478709 | 0.375 | 0.47  | 1 Bcell_3_UCBMC |
| TRAF3              | 0.00619966 | 0.13719099 | 0.637 | 0.68  | 1 Bcell_3_UCBMC |
| ATF6B              | 0.0062521  | 0.19568997 | 0.204 | 0.258 | 1 Bcell_3_UCBMC |
| PITPNB             | 0.00635003 | 0.324673   | 0.453 | 0.481 | 1 Bcell_3_UCBMC |
| EMP3               | 0.00636153 | 0.30451673 | 0.285 | 0.273 | 1 Bcell_3_UCBMC |
| UBXN4              | 0.00641566 | 0.11156068 | 0.376 | 0.48  | 1 Bcell_3_UCBMC |
| CPSF6              | 0.00650054 | 0.37937109 | 0.43  | 0.464 | 1 Bcell_3_UCBMC |

|           |            |            |       |       |                 |
|-----------|------------|------------|-------|-------|-----------------|
| PRPF8     | 0.00662175 | 0.1338177  | 0.279 | 0.351 | 1 Bcell_3_UCBMC |
| MED21     | 0.00668746 | 0.5320466  | 0.311 | 0.321 | 1 Bcell_3_UCBMC |
| TRDMT1    | 0.00678424 | 0.6374616  | 0.257 | 0.255 | 1 Bcell_3_UCBMC |
| CLNS1A    | 0.00678575 | 0.23212954 | 0.254 | 0.326 | 1 Bcell_3_UCBMC |
| ACSL4     | 0.00688243 | 0.213399   | 0.225 | 0.281 | 1 Bcell_3_UCBMC |
| LMTK2     | 0.00691994 | 0.14474211 | 0.312 | 0.391 | 1 Bcell_3_UCBMC |
| METTL16   | 0.00702527 | 0.19776205 | 0.24  | 0.299 | 1 Bcell_3_UCBMC |
| ATP6V1FNB | 0.00714672 | 0.52126735 | 0.329 | 0.35  | 1 Bcell_3_UCBMC |
| ANKRD13A  | 0.00731472 | 0.2376944  | 0.203 | 0.255 | 1 Bcell_3_UCBMC |
| TRPC4AP   | 0.00732352 | 0.17360763 | 0.305 | 0.383 | 1 Bcell_3_UCBMC |
| KDM1A     | 0.00738338 | 0.4745235  | 0.311 | 0.316 | 1 Bcell_3_UCBMC |
| WDR44     | 0.00739255 | 0.14143179 | 0.224 | 0.276 | 1 Bcell_3_UCBMC |
| EIF2S3    | 0.00741376 | 0.45201355 | 0.366 | 0.392 | 1 Bcell_3_UCBMC |
| IKZF2     | 0.00749224 | 0.29779329 | 0.302 | 0.288 | 1 Bcell_3_UCBMC |
| RNF19A    | 0.00757348 | 0.15942058 | 0.287 | 0.358 | 1 Bcell_3_UCBMC |
| PPHLN1    | 0.00760979 | 0.30840427 | 0.509 | 0.555 | 1 Bcell_3_UCBMC |
| CCDC91    | 0.00766372 | 0.17577414 | 0.656 | 0.723 | 1 Bcell_3_UCBMC |
| RCL1      | 0.0077947  | 0.15730616 | 0.22  | 0.272 | 1 Bcell_3_UCBMC |
| CCDC90B   | 0.0078982  | 0.31576124 | 0.2   | 0.253 | 1 Bcell_3_UCBMC |
| CHIC2     | 0.00798564 | 0.20061674 | 0.256 | 0.321 | 1 Bcell_3_UCBMC |
| EIF3G     | 0.00813188 | 0.45926947 | 0.368 | 0.395 | 1 Bcell_3_UCBMC |
| CCSER2    | 0.00828952 | 0.54848762 | 0.273 | 0.268 | 1 Bcell_3_UCBMC |
| COMMD1    | 0.00839853 | 0.10890838 | 0.354 | 0.428 | 1 Bcell_3_UCBMC |
| RAPGEF1   | 0.0086575  | 0.16325276 | 0.729 | 0.786 | 1 Bcell_3_UCBMC |
| NAA35     | 0.00886331 | 0.14458495 | 0.232 | 0.285 | 1 Bcell_3_UCBMC |
| KCMF1     | 0.00909938 | 0.39537619 | 0.411 | 0.44  | 1 Bcell_3_UCBMC |
| UBE2E3    | 0.00931526 | 0.12195313 | 0.248 | 0.303 | 1 Bcell_3_UCBMC |
| CBLB      | 0.00937908 | 0.10431651 | 0.77  | 0.812 | 1 Bcell_3_UCBMC |
| G3BP2     | 0.00947687 | 0.24023356 | 0.552 | 0.602 | 1 Bcell_3_UCBMC |
| SNX9      | 0.00971578 | 0.18014679 | 0.622 | 0.677 | 1 Bcell_3_UCBMC |
| OS9       | 0.00984322 | 0.11513229 | 0.224 | 0.281 | 1 Bcell_3_UCBMC |
| UBA6      | 0.01019845 | 0.18090972 | 0.262 | 0.324 | 1 Bcell_3_UCBMC |
| CDC14A    | 0.0102721  | 0.49108823 | 0.271 | 0.265 | 1 Bcell_3_UCBMC |

|                    |            |            |       |       |                 |
|--------------------|------------|------------|-------|-------|-----------------|
| TTC39C             | 0.01032287 | 0.33823511 | 0.425 | 0.446 | 1 Bcell_3_UCBMC |
| DYRK2              | 0.0103607  | 0.30172015 | 0.209 | 0.259 | 1 Bcell_3_UCBMC |
| SEC61G             | 0.01040997 | 0.3876728  | 0.376 | 0.399 | 1 Bcell_3_UCBMC |
| ELK3               | 0.01047988 | 0.39784965 | 0.407 | 0.438 | 1 Bcell_3_UCBMC |
| SERINC1            | 0.01057025 | 0.40252734 | 0.387 | 0.416 | 1 Bcell_3_UCBMC |
| PDZD8              | 0.01099501 | 0.15759951 | 0.25  | 0.305 | 1 Bcell_3_UCBMC |
| IPO5               | 0.01137692 | 0.26865039 | 0.201 | 0.252 | 1 Bcell_3_UCBMC |
| NCLN               | 0.01151445 | 0.1644572  | 0.215 | 0.267 | 1 Bcell_3_UCBMC |
| GLRX3              | 0.01172577 | 0.4514444  | 0.325 | 0.337 | 1 Bcell_3_UCBMC |
| ERLEC1             | 0.01175618 | 0.22978329 | 0.255 | 0.32  | 1 Bcell_3_UCBMC |
| TAPT1              | 0.01184572 | 0.31468905 | 0.43  | 0.448 | 1 Bcell_3_UCBMC |
| TFG                | 0.01187283 | 0.50897091 | 0.32  | 0.331 | 1 Bcell_3_UCBMC |
| SPPL3              | 0.01194971 | 0.18978698 | 0.658 | 0.706 | 1 Bcell_3_UCBMC |
| SNAP23             | 0.01226066 | 0.21727092 | 0.206 | 0.258 | 1 Bcell_3_UCBMC |
| PAIP1              | 0.01245641 | 0.25815656 | 0.209 | 0.26  | 1 Bcell_3_UCBMC |
| TWF2               | 0.01247221 | 0.27944207 | 0.197 | 0.25  | 1 Bcell_3_UCBMC |
| UBE2L3             | 0.01260711 | 0.55644156 | 0.333 | 0.358 | 1 Bcell_3_UCBMC |
| KPNA3              | 0.01289932 | 0.40074402 | 0.361 | 0.374 | 1 Bcell_3_UCBMC |
| PCBP1              | 0.01315446 | 0.18389169 | 0.316 | 0.396 | 1 Bcell_3_UCBMC |
| ENSMMUG00000011580 | 0.0132769  | 0.31630367 | 0.451 | 0.498 | 1 Bcell_3_UCBMC |
| ATP6V1E1           | 0.01342908 | 0.15527019 | 0.281 | 0.351 | 1 Bcell_3_UCBMC |
| EHD4               | 0.0134851  | 0.46158757 | 0.403 | 0.444 | 1 Bcell_3_UCBMC |
| RABGEF1            | 0.01363555 | 0.13679999 | 0.382 | 0.472 | 1 Bcell_3_UCBMC |
| PSMA3              | 0.01414221 | 0.42573572 | 0.371 | 0.396 | 1 Bcell_3_UCBMC |
| PPM1D              | 0.01423566 | 0.11561848 | 0.211 | 0.256 | 1 Bcell_3_UCBMC |
| KDM1B              | 0.01430512 | 0.15131388 | 0.215 | 0.263 | 1 Bcell_3_UCBMC |
| ROMO1              | 0.01469879 | 0.12753535 | 0.372 | 0.462 | 1 Bcell_3_UCBMC |
| CMTR1              | 0.0149823  | 0.24912669 | 0.21  | 0.262 | 1 Bcell_3_UCBMC |
| TARDBP             | 0.01576591 | 0.19628306 | 0.319 | 0.402 | 1 Bcell_3_UCBMC |
| DDIT3              | 0.01630776 | 0.23364134 | 0.218 | 0.27  | 1 Bcell_3_UCBMC |
| SBNO1              | 0.01640139 | 0.10372904 | 0.352 | 0.435 | 1 Bcell_3_UCBMC |
| ENSMMUG00000012019 | 0.01648688 | 0.2961229  | 0.224 | 0.285 | 1 Bcell_3_UCBMC |
| THUMPD2            | 0.01656696 | 0.62478363 | 0.266 | 0.269 | 1 Bcell_3_UCBMC |

|                    |            |            |       |       |                 |
|--------------------|------------|------------|-------|-------|-----------------|
| SDHAF4             | 0.01718253 | 0.36385376 | 0.43  | 0.467 | 1 Bcell_3_UCBMC |
| SP4                | 0.0171988  | 0.58651678 | 0.254 | 0.252 | 1 Bcell_3_UCBMC |
| RHOH               | 0.01721099 | 0.12478943 | 0.688 | 0.732 | 1 Bcell_3_UCBMC |
| TCEA1              | 0.01783408 | 0.3300238  | 0.47  | 0.522 | 1 Bcell_3_UCBMC |
| AMMECR1            | 0.01802275 | 0.12152811 | 0.24  | 0.288 | 1 Bcell_3_UCBMC |
| MED23              | 0.01805825 | 0.42503342 | 0.33  | 0.346 | 1 Bcell_3_UCBMC |
| APPBP2             | 0.01813824 | 0.22596189 | 0.254 | 0.313 | 1 Bcell_3_UCBMC |
| MAML3              | 0.01887116 | 0.23018822 | 0.425 | 0.421 | 1 Bcell_3_UCBMC |
| DDHD1              | 0.01903934 | 0.19360516 | 0.219 | 0.266 | 1 Bcell_3_UCBMC |
| KIF13A             | 0.01910746 | 0.25078459 | 0.564 | 0.606 | 1 Bcell_3_UCBMC |
| ARHGAP45           | 0.01927265 | 0.16779913 | 0.248 | 0.306 | 1 Bcell_3_UCBMC |
| SETD5              | 0.01934318 | 0.32507927 | 0.495 | 0.55  | 1 Bcell_3_UCBMC |
| MDH2               | 0.01954078 | 0.33973066 | 0.21  | 0.265 | 1 Bcell_3_UCBMC |
| GAPVD1             | 0.0198232  | 0.10356058 | 0.378 | 0.465 | 1 Bcell_3_UCBMC |
| SUN2               | 0.01992594 | 0.24005817 | 0.213 | 0.266 | 1 Bcell_3_UCBMC |
| ENSMMUG00000056793 | 0.02070764 | 0.18366411 | 0.548 | 0.566 | 1 Bcell_3_UCBMC |
| ZDHHC17            | 0.02071037 | 0.12391623 | 0.222 | 0.27  | 1 Bcell_3_UCBMC |
| CLASP2             | 0.0209621  | 0.22416569 | 0.572 | 0.621 | 1 Bcell_3_UCBMC |
| FBXO11             | 0.02146961 | 0.24790402 | 0.6   | 0.662 | 1 Bcell_3_UCBMC |
| MTMR3              | 0.02151882 | 0.34090301 | 0.354 | 0.365 | 1 Bcell_3_UCBMC |
| GPATCH8            | 0.02201613 | 0.26711368 | 0.544 | 0.598 | 1 Bcell_3_UCBMC |
| ENY2               | 0.02239174 | 0.41669924 | 0.406 | 0.448 | 1 Bcell_3_UCBMC |
| ENSMMUG00000020316 | 0.02271699 | 0.1728975  | 0.355 | 0.442 | 1 Bcell_3_UCBMC |
| WASL               | 0.02301156 | 0.14853333 | 0.354 | 0.435 | 1 Bcell_3_UCBMC |
| GNAL               | 0.02343061 | 0.63952711 | 0.253 | 0.26  | 1 Bcell_3_UCBMC |
| C18H18orf25        | 0.02411272 | 0.12598293 | 0.313 | 0.376 | 1 Bcell_3_UCBMC |
| KIF13B             | 0.02425935 | 0.17810192 | 0.229 | 0.275 | 1 Bcell_3_UCBMC |
| KIF5B              | 0.02510739 | 0.36503101 | 0.427 | 0.472 | 1 Bcell_3_UCBMC |
| MAP1LC3B           | 0.02521685 | 0.16631774 | 0.332 | 0.417 | 1 Bcell_3_UCBMC |
| CRIP1              | 0.0255802  | 0.50967036 | 0.265 | 0.27  | 1 Bcell_3_UCBMC |
| ENSMMUG00000049010 | 0.0255965  | 0.60428687 | 0.255 | 0.263 | 1 Bcell_3_UCBMC |
| ENSMMUG00000060545 | 0.02624662 | 0.23417395 | 0.226 | 0.279 | 1 Bcell_3_UCBMC |
| TAB2               | 0.02656219 | 0.44239438 | 0.364 | 0.393 | 1 Bcell_3_UCBMC |



|                    |            |            |       |       |                 |
|--------------------|------------|------------|-------|-------|-----------------|
| ENSMMUG00000050829 | 0.02672103 | 0.20211224 | 0.563 | 0.631 | 1 Bcell_3_UCBMC |
| SELENOI            | 0.0273912  | 0.23881332 | 0.206 | 0.251 | 1 Bcell_3_UCBMC |
| ZNRF2              | 0.02747718 | 0.21504763 | 0.229 | 0.277 | 1 Bcell_3_UCBMC |
| NCOA1              | 0.02848832 | 0.1327016  | 0.264 | 0.317 | 1 Bcell_3_UCBMC |
| BTAF1              | 0.02876815 | 0.15439151 | 0.584 | 0.636 | 1 Bcell_3_UCBMC |
| AKAP8L             | 0.02878743 | 0.18870387 | 0.206 | 0.252 | 1 Bcell_3_UCBMC |
| DNAJC1             | 0.02894386 | 0.46898815 | 0.262 | 0.259 | 1 Bcell_3_UCBMC |
| ICE1               | 0.02902901 | 0.32662649 | 0.229 | 0.283 | 1 Bcell_3_UCBMC |
| RLIM               | 0.02951802 | 0.43463275 | 0.336 | 0.355 | 1 Bcell_3_UCBMC |
| WDR74              | 0.02951823 | 0.17465525 | 0.276 | 0.337 | 1 Bcell_3_UCBMC |
| EFCAB2             | 0.02969589 | 0.13291616 | 0.408 | 0.495 | 1 Bcell_3_UCBMC |
| KANSL1L            | 0.02977282 | 0.23191913 | 0.255 | 0.309 | 1 Bcell_3_UCBMC |
| ITGAE              | 0.03015724 | 0.24855267 | 0.224 | 0.279 | 1 Bcell_3_UCBMC |
| TOX4               | 0.03042931 | 0.17941344 | 0.263 | 0.323 | 1 Bcell_3_UCBMC |
| ENSMMUG00000064120 | 0.03112219 | 0.44572878 | 0.341 | 0.369 | 1 Bcell_3_UCBMC |
| SOS1               | 0.03113925 | 0.27820491 | 0.492 | 0.537 | 1 Bcell_3_UCBMC |
| ERH                | 0.03142827 | 0.24382204 | 0.269 | 0.337 | 1 Bcell_3_UCBMC |
| VAMP8              | 0.03169758 | 0.42429254 | 0.365 | 0.396 | 1 Bcell_3_UCBMC |
| CASP8              | 0.03189419 | 0.13213756 | 0.306 | 0.376 | 1 Bcell_3_UCBMC |
| ANXA1              | 0.03205417 | 0.34409495 | 0.383 | 0.406 | 1 Bcell_3_UCBMC |
| EIF3D              | 0.03222166 | 0.13265185 | 0.325 | 0.406 | 1 Bcell_3_UCBMC |
| RAB6A              | 0.03236402 | 0.19872264 | 0.274 | 0.333 | 1 Bcell_3_UCBMC |
| FXR1               | 0.03262246 | 0.3001079  | 0.518 | 0.583 | 1 Bcell_3_UCBMC |
| ENSMMUG00000064139 | 0.03268382 | 0.11200002 | 0.79  | 0.811 | 1 Bcell_3_UCBMC |
| ATP5PF             | 0.0327467  | 0.37690884 | 0.374 | 0.406 | 1 Bcell_3_UCBMC |
| TMOD3              | 0.03386173 | 0.13376396 | 0.342 | 0.42  | 1 Bcell_3_UCBMC |
| MACO1              | 0.03399712 | 0.30923425 | 0.458 | 0.498 | 1 Bcell_3_UCBMC |
| ENSMMUG00000012419 | 0.03414476 | 0.27244647 | 0.454 | 0.491 | 1 Bcell_3_UCBMC |
| SMNDC1             | 0.03428508 | 0.19440764 | 0.265 | 0.325 | 1 Bcell_3_UCBMC |
| COPB1              | 0.03564267 | 0.5368831  | 0.292 | 0.305 | 1 Bcell_3_UCBMC |
| EDF1               | 0.03565513 | 0.18114876 | 0.286 | 0.355 | 1 Bcell_3_UCBMC |
| RSL1D1             | 0.03609685 | 0.55738705 | 0.309 | 0.333 | 1 Bcell_3_UCBMC |
| PSEN1              | 0.03632797 | 0.36598141 | 0.35  | 0.367 | 1 Bcell_3_UCBMC |

|                    |            |            |       |       |                 |
|--------------------|------------|------------|-------|-------|-----------------|
| RTF2               | 0.03656981 | 0.5272493  | 0.274 | 0.284 | 1 Bcell_3_UCBMC |
| PSMA2              | 0.03727677 | 0.43625561 | 0.36  | 0.395 | 1 Bcell_3_UCBMC |
| LARP4              | 0.03897889 | 0.10887309 | 0.339 | 0.412 | 1 Bcell_3_UCBMC |
| SAFB2              | 0.04037543 | 0.19758938 | 0.342 | 0.422 | 1 Bcell_3_UCBMC |
| ZNF22              | 0.0405964  | 0.2957359  | 0.223 | 0.274 | 1 Bcell_3_UCBMC |
| CALCOCO2           | 0.04098328 | 0.13831076 | 0.355 | 0.441 | 1 Bcell_3_UCBMC |
| SEPTIN6            | 0.04183053 | 0.10667138 | 0.703 | 0.759 | 1 Bcell_3_UCBMC |
| ENSMMUG00000065089 | 0.04201554 | 0.28386806 | 0.22  | 0.271 | 1 Bcell_3_UCBMC |
| RBM23              | 0.04246947 | 0.37640106 | 0.4   | 0.432 | 1 Bcell_3_UCBMC |
| BCAS2              | 0.04272238 | 0.12424315 | 0.303 | 0.367 | 1 Bcell_3_UCBMC |
| ZC3H15             | 0.04292491 | 0.15271069 | 0.412 | 0.511 | 1 Bcell_3_UCBMC |
| TTF1               | 0.0432495  | 0.26613336 | 0.25  | 0.305 | 1 Bcell_3_UCBMC |
| PTPN2              | 0.0434247  | 0.31064165 | 0.497 | 0.556 | 1 Bcell_3_UCBMC |
| PSMB1              | 0.04554296 | 0.38895848 | 0.384 | 0.429 | 1 Bcell_3_UCBMC |
| EEF1D              | 0.04637261 | 0.12509289 | 0.649 | 0.664 | 1 Bcell_3_UCBMC |
| HIPK3              | 0.04772428 | 0.20157546 | 0.345 | 0.424 | 1 Bcell_3_UCBMC |
| KPNA4              | 0.04812911 | 0.2445258  | 0.276 | 0.335 | 1 Bcell_3_UCBMC |
| HOOK3              | 0.04899999 | 0.17566544 | 0.658 | 0.727 | 1 Bcell_3_UCBMC |
| PAK1IP1            | 0.04904102 | 0.21750395 | 0.22  | 0.265 | 1 Bcell_3_UCBMC |
| SDHB               | 0.04950834 | 0.69047866 | 0.255 | 0.268 | 1 Bcell_3_UCBMC |
| PJA2               | 0.05018598 | 0.44501129 | 0.37  | 0.41  | 1 Bcell_3_UCBMC |
| TPR                | 0.05022759 | 0.11234301 | 0.411 | 0.495 | 1 Bcell_3_UCBMC |
| POC5               | 0.05083136 | 0.55556726 | 0.323 | 0.36  | 1 Bcell_3_UCBMC |
| DHX8               | 0.05151121 | 0.519138   | 0.271 | 0.281 | 1 Bcell_3_UCBMC |
| EIF3H              | 0.05162212 | 0.17517018 | 0.611 | 0.674 | 1 Bcell_3_UCBMC |
| ATR                | 0.05163029 | 0.17531643 | 0.306 | 0.365 | 1 Bcell_3_UCBMC |
| ABCE1              | 0.05347168 | 0.43061997 | 0.349 | 0.378 | 1 Bcell_3_UCBMC |
| PCMTD1             | 0.05354084 | 0.12628792 | 0.431 | 0.529 | 1 Bcell_3_UCBMC |
| PELI1              | 0.05395762 | 0.10621366 | 0.518 | 0.549 | 1 Bcell_3_UCBMC |
| CDC73              | 0.05396265 | 0.33374471 | 0.449 | 0.489 | 1 Bcell_3_UCBMC |
| UBAP1              | 0.05406923 | 0.33531155 | 0.433 | 0.475 | 1 Bcell_3_UCBMC |
| CD58               | 0.05447741 | 0.16467675 | 0.277 | 0.337 | 1 Bcell_3_UCBMC |
| PSMD12             | 0.05657269 | 0.44511663 | 0.336 | 0.364 | 1 Bcell_3_UCBMC |

|                    |            |            |       |       |                 |
|--------------------|------------|------------|-------|-------|-----------------|
| PSMB8              | 0.05691733 | 0.1873758  | 0.539 | 0.589 | 1 Bcell_3_UCBMC |
| ENSMMUG00000057449 | 0.05996762 | 0.31877944 | 0.219 | 0.27  | 1 Bcell_3_UCBMC |
| KIFBP              | 0.06017527 | 0.11175543 | 0.64  | 0.689 | 1 Bcell_3_UCBMC |
| HNRNPA0            | 0.06058952 | 0.45296711 | 0.358 | 0.399 | 1 Bcell_3_UCBMC |
| ACTR10             | 0.06176475 | 0.48707002 | 0.257 | 0.266 | 1 Bcell_3_UCBMC |
| PDCD6IP            | 0.06203883 | 0.21243097 | 0.371 | 0.456 | 1 Bcell_3_UCBMC |
| ZCCHC10            | 0.06239842 | 0.48750944 | 0.276 | 0.287 | 1 Bcell_3_UCBMC |
| ENSMMUG00000051392 | 0.06344425 | 0.29659787 | 0.439 | 0.491 | 1 Bcell_3_UCBMC |
| MED13              | 0.06344522 | 0.27399269 | 0.431 | 0.472 | 1 Bcell_3_UCBMC |
| FAM204A            | 0.06359172 | 0.61279311 | 0.243 | 0.25  | 1 Bcell_3_UCBMC |
| ZNHIT1             | 0.06427777 | 0.28794165 | 0.231 | 0.285 | 1 Bcell_3_UCBMC |
| CORO1A             | 0.06539688 | 0.14163772 | 0.57  | 0.619 | 1 Bcell_3_UCBMC |
| GSK3B              | 0.06598134 | 0.12717149 | 0.684 | 0.741 | 1 Bcell_3_UCBMC |
| GATAD2A            | 0.06802884 | 0.16270447 | 0.33  | 0.395 | 1 Bcell_3_UCBMC |
| DCTN3              | 0.06965822 | 0.32274985 | 0.229 | 0.284 | 1 Bcell_3_UCBMC |
| TTC17              | 0.0699141  | 0.17326076 | 0.461 | 0.558 | 1 Bcell_3_UCBMC |
| HERC3              | 0.07104827 | 0.29753269 | 0.406 | 0.433 | 1 Bcell_3_UCBMC |
| CCT3               | 0.07287189 | 0.15774581 | 0.347 | 0.427 | 1 Bcell_3_UCBMC |
| ATP6V1H            | 0.0733234  | 0.1607168  | 0.261 | 0.31  | 1 Bcell_3_UCBMC |
| MAP4               | 0.07340961 | 0.16813761 | 0.257 | 0.303 | 1 Bcell_3_UCBMC |
| BNIP3L             | 0.07346711 | 0.26874156 | 0.438 | 0.48  | 1 Bcell_3_UCBMC |
| FAM133B            | 0.07459477 | 0.34116184 | 0.412 | 0.461 | 1 Bcell_3_UCBMC |
| ATXN7L3B           | 0.07545668 | 0.48659449 | 0.293 | 0.312 | 1 Bcell_3_UCBMC |
| KBTBD2             | 0.07548379 | 0.18545607 | 0.332 | 0.402 | 1 Bcell_3_UCBMC |
| ENSMMUG00000017400 | 0.07751005 | 0.21340073 | 0.232 | 0.278 | 1 Bcell_3_UCBMC |
| ZNF395             | 0.0786231  | 0.22112082 | 0.222 | 0.264 | 1 Bcell_3_UCBMC |
| MICOS13            | 0.07936267 | 0.33853107 | 0.213 | 0.26  | 1 Bcell_3_UCBMC |
| SLC30A9            | 0.07963471 | 0.48919701 | 0.378 | 0.419 | 1 Bcell_3_UCBMC |
| PRKAR1A            | 0.0802468  | 0.44448798 | 0.384 | 0.428 | 1 Bcell_3_UCBMC |
| KLHL2              | 0.08027558 | 0.30522395 | 0.386 | 0.408 | 1 Bcell_3_UCBMC |
| USP33              | 0.08107501 | 0.35650639 | 0.322 | 0.341 | 1 Bcell_3_UCBMC |
| RTF1               | 0.0820871  | 0.17416225 | 0.32  | 0.39  | 1 Bcell_3_UCBMC |
| TSG101             | 0.08239525 | 0.27852298 | 0.234 | 0.28  | 1 Bcell_3_UCBMC |

|                    |            |            |       |       |                 |
|--------------------|------------|------------|-------|-------|-----------------|
| ILRUN              | 0.08251272 | 0.18313145 | 0.241 | 0.288 | 1 Bcell_3_UCBMC |
| ENSMMUG00000061458 | 0.08367175 | 0.25873957 | 0.305 | 0.372 | 1 Bcell_3_UCBMC |
| ESCO1              | 0.08408835 | 0.19104972 | 0.529 | 0.585 | 1 Bcell_3_UCBMC |
| HCST               | 0.08413344 | 0.17158567 | 0.3   | 0.36  | 1 Bcell_3_UCBMC |
| RPRD1A             | 0.08461087 | 0.29585105 | 0.415 | 0.46  | 1 Bcell_3_UCBMC |
| ENSMMUG00000055718 | 0.08489149 | 0.32465968 | 0.266 | 0.273 | 1 Bcell_3_UCBMC |
| BOD1L1             | 0.08532509 | 0.43304133 | 0.31  | 0.329 | 1 Bcell_3_UCBMC |
| TMEM50A            | 0.08536638 | 0.548202   | 0.28  | 0.3   | 1 Bcell_3_UCBMC |
| TXN                | 0.08540502 | 0.19526733 | 0.267 | 0.32  | 1 Bcell_3_UCBMC |
| ENSA               | 0.08633656 | 0.19604154 | 0.548 | 0.594 | 1 Bcell_3_UCBMC |
| AMFR               | 0.08643036 | 0.20124733 | 0.254 | 0.303 | 1 Bcell_3_UCBMC |
| C4H6orf62          | 0.08657651 | 0.15996971 | 0.318 | 0.386 | 1 Bcell_3_UCBMC |
| RAF1               | 0.08929531 | 0.27965367 | 0.424 | 0.461 | 1 Bcell_3_UCBMC |
| JPT1               | 0.08959171 | 0.15471071 | 0.6   | 0.638 | 1 Bcell_3_UCBMC |
| FBXO21             | 0.08969451 | 0.19694325 | 0.302 | 0.366 | 1 Bcell_3_UCBMC |
| C16H17orf49        | 0.09021018 | 0.37947042 | 0.373 | 0.414 | 1 Bcell_3_UCBMC |
| CCDC82             | 0.09045143 | 0.37019112 | 0.218 | 0.265 | 1 Bcell_3_UCBMC |
| EIF2A              | 0.09060057 | 0.17596563 | 0.313 | 0.379 | 1 Bcell_3_UCBMC |
| TRIM22             | 0.0907768  | 0.16629824 | 0.62  | 0.691 | 1 Bcell_3_UCBMC |
| ZNF528             | 0.09090533 | 0.17433025 | 0.374 | 0.456 | 1 Bcell_3_UCBMC |
| EIF1B              | 0.09172482 | 0.40450773 | 0.363 | 0.399 | 1 Bcell_3_UCBMC |
| ARFGAP3            | 0.09289301 | 0.22826807 | 0.5   | 0.551 | 1 Bcell_3_UCBMC |
| HEXA               | 0.09318726 | 0.58709412 | 0.248 | 0.257 | 1 Bcell_3_UCBMC |
| SSR2               | 0.09444726 | 0.16937789 | 0.335 | 0.409 | 1 Bcell_3_UCBMC |
| ARMC8              | 0.09516178 | 0.14798774 | 0.341 | 0.406 | 1 Bcell_3_UCBMC |
| SINHCAF            | 0.09553228 | 0.11285737 | 0.376 | 0.447 | 1 Bcell_3_UCBMC |
| BAZ2B              | 0.09563886 | 0.38959474 | 0.299 | 0.304 | 1 Bcell_3_UCBMC |
| CUL2               | 0.09642244 | 0.46190892 | 0.312 | 0.333 | 1 Bcell_3_UCBMC |
| ENSMMUG00000060576 | 0.09726512 | 0.27955813 | 0.222 | 0.267 | 1 Bcell_3_UCBMC |
| GTPBP10            | 0.09762481 | 0.37026507 | 0.231 | 0.277 | 1 Bcell_3_UCBMC |
| ENSMMUG00000061038 | 0.09815663 | 0.12895548 | 0.289 | 0.34  | 1 Bcell_3_UCBMC |
| EIF3E              | 0.09859091 | 0.13389578 | 0.617 | 0.664 | 1 Bcell_3_UCBMC |
| PPP4R3B            | 0.09893257 | 0.17590464 | 0.356 | 0.431 | 1 Bcell_3_UCBMC |

|                    |            |            |       |       |                 |
|--------------------|------------|------------|-------|-------|-----------------|
| MPHOSPH8           | 0.09921366 | 0.35767076 | 0.356 | 0.385 | 1 Bcell_3_UCBMC |
| GLYR1              | 0.09926381 | 0.48279813 | 0.279 | 0.294 | 1 Bcell_3_UCBMC |
| ATP2B1             | 0.09957128 | 0.11907039 | 0.284 | 0.339 | 1 Bcell_3_UCBMC |
| URGCP              | 0.09972223 | 0.25496184 | 0.301 | 0.367 | 1 Bcell_3_UCBMC |
| NCAPD3             | 0.1001592  | 0.45133554 | 0.271 | 0.282 | 1 Bcell_3_UCBMC |
| SMU1               | 0.10088706 | 0.24745749 | 0.26  | 0.314 | 1 Bcell_3_UCBMC |
| MRPS9              | 0.10183034 | 0.56251296 | 0.244 | 0.257 | 1 Bcell_3_UCBMC |
| MAN1A2             | 0.10373381 | 0.24893405 | 0.548 | 0.617 | 1 Bcell_3_UCBMC |
| NDUFA2             | 0.10467549 | 0.33500736 | 0.383 | 0.423 | 1 Bcell_3_UCBMC |
| DSE                | 0.10496986 | 0.19593787 | 0.301 | 0.358 | 1 Bcell_3_UCBMC |
| IDH2               | 0.10510099 | 0.27338682 | 0.284 | 0.348 | 1 Bcell_3_UCBMC |
| RBM33              | 0.10528109 | 0.24611772 | 0.489 | 0.546 | 1 Bcell_3_UCBMC |
| CEP120             | 0.1061928  | 0.19120969 | 0.282 | 0.336 | 1 Bcell_3_UCBMC |
| RBM25              | 0.10621687 | 0.23708312 | 0.505 | 0.576 | 1 Bcell_3_UCBMC |
| ARF4               | 0.10840069 | 0.19046763 | 0.58  | 0.645 | 1 Bcell_3_UCBMC |
| ATG2B              | 0.10872087 | 0.25986005 | 0.215 | 0.256 | 1 Bcell_3_UCBMC |
| USP25              | 0.10888094 | 0.16297171 | 0.368 | 0.435 | 1 Bcell_3_UCBMC |
| PIK3C2A            | 0.11195856 | 0.41311571 | 0.351 | 0.383 | 1 Bcell_3_UCBMC |
| FKBP3              | 0.11302896 | 0.49428459 | 0.287 | 0.309 | 1 Bcell_3_UCBMC |
| ENSMMUG00000007657 | 0.11396818 | 0.14526541 | 0.352 | 0.43  | 1 Bcell_3_UCBMC |
| RNGTT              | 0.11459659 | 0.16808413 | 0.561 | 0.617 | 1 Bcell_3_UCBMC |
| TOPORS             | 0.1153615  | 0.43469223 | 0.353 | 0.395 | 1 Bcell_3_UCBMC |
| ZDHHC20            | 0.11656941 | 0.14309481 | 0.396 | 0.475 | 1 Bcell_3_UCBMC |
| FUT8               | 0.11681719 | 0.15160072 | 0.293 | 0.341 | 1 Bcell_3_UCBMC |
| LEMD3              | 0.11719908 | 0.28777801 | 0.398 | 0.426 | 1 Bcell_3_UCBMC |
| DIABLO             | 0.11729222 | 0.34802958 | 0.244 | 0.293 | 1 Bcell_3_UCBMC |
| FUBP1              | 0.11739474 | 0.17066735 | 0.558 | 0.629 | 1 Bcell_3_UCBMC |
| ARAP2              | 0.11819381 | 0.17819636 | 0.281 | 0.33  | 1 Bcell_3_UCBMC |
| SECISBP2           | 0.11912246 | 0.3772216  | 0.394 | 0.437 | 1 Bcell_3_UCBMC |
| BRD7               | 0.12012457 | 0.21423094 | 0.303 | 0.365 | 1 Bcell_3_UCBMC |
| HAT1               | 0.1204808  | 0.32144281 | 0.233 | 0.279 | 1 Bcell_3_UCBMC |
| DNAJC3             | 0.12127911 | 0.19548109 | 0.306 | 0.364 | 1 Bcell_3_UCBMC |
| TIGAR              | 0.12170103 | 0.17562096 | 0.271 | 0.319 | 1 Bcell_3_UCBMC |

|                    |            |            |       |       |                 |
|--------------------|------------|------------|-------|-------|-----------------|
| RPS6KA3            | 0.1237422  | 0.19392935 | 0.306 | 0.362 | 1 Bcell_3_UCBMC |
| PSMD14             | 0.12682356 | 0.32730561 | 0.395 | 0.434 | 1 Bcell_3_UCBMC |
| RAN                | 0.12782253 | 0.1949221  | 0.326 | 0.397 | 1 Bcell_3_UCBMC |
| FCRL2              | 0.12872853 | 0.52201778 | 0.265 | 0.276 | 1 Bcell_3_UCBMC |
| TMEM243            | 0.13267287 | 0.15564339 | 0.441 | 0.536 | 1 Bcell_3_UCBMC |
| AP1G1              | 0.13445236 | 0.14507322 | 0.419 | 0.508 | 1 Bcell_3_UCBMC |
| PNKP               | 0.13681774 | 0.28845764 | 0.287 | 0.35  | 1 Bcell_3_UCBMC |
| GNG2               | 0.13734214 | 0.30624624 | 0.487 | 0.54  | 1 Bcell_3_UCBMC |
| YTHDF3             | 0.13774365 | 0.23988661 | 0.47  | 0.525 | 1 Bcell_3_UCBMC |
| TNPO1              | 0.13962654 | 0.18366118 | 0.327 | 0.395 | 1 Bcell_3_UCBMC |
| NUDC               | 0.14063159 | 0.1861871  | 0.331 | 0.4   | 1 Bcell_3_UCBMC |
| MDM2               | 0.14260952 | 0.16435197 | 0.239 | 0.281 | 1 Bcell_3_UCBMC |
| CASK               | 0.14279942 | 0.21075295 | 0.258 | 0.299 | 1 Bcell_3_UCBMC |
| ENSMMUG00000022874 | 0.14386496 | 0.42570523 | 0.349 | 0.383 | 1 Bcell_3_UCBMC |
| SNRNP200           | 0.14396864 | 0.28657429 | 0.257 | 0.307 | 1 Bcell_3_UCBMC |
| TRPS1              | 0.14672139 | 0.20606156 | 0.401 | 0.426 | 1 Bcell_3_UCBMC |
| MED15              | 0.15041264 | 0.43627295 | 0.264 | 0.275 | 1 Bcell_3_UCBMC |
| TNFAIP3            | 0.1504161  | 0.17797996 | 0.439 | 0.465 | 1 Bcell_3_UCBMC |
| TBC1D23            | 0.15861861 | 0.25242202 | 0.403 | 0.442 | 1 Bcell_3_UCBMC |
| TRIM72             | 0.16037006 | 0.11941184 | 0.643 | 0.715 | 1 Bcell_3_UCBMC |
| ATP5MC3            | 0.16162072 | 0.12269772 | 0.37  | 0.438 | 1 Bcell_3_UCBMC |
| ENSMMUG00000059017 | 0.16279883 | 0.39312168 | 0.361 | 0.399 | 1 Bcell_3_UCBMC |
| AP2B1              | 0.16432706 | 0.16069027 | 0.361 | 0.431 | 1 Bcell_3_UCBMC |
| MOB2               | 0.16639419 | 0.29522806 | 0.235 | 0.278 | 1 Bcell_3_UCBMC |
| VPS36              | 0.16668824 | 0.3997979  | 0.37  | 0.411 | 1 Bcell_3_UCBMC |
| ENSMMUG00000055026 | 0.16771345 | 0.20432995 | 0.241 | 0.286 | 1 Bcell_3_UCBMC |
| DIDO1              | 0.16962655 | 0.2682179  | 0.276 | 0.331 | 1 Bcell_3_UCBMC |
| SYMPK              | 0.17205057 | 0.26292403 | 0.22  | 0.261 | 1 Bcell_3_UCBMC |
| SMG6               | 0.17381963 | 0.18021447 | 0.541 | 0.611 | 1 Bcell_3_UCBMC |
| STAG2              | 0.17500015 | 0.12306276 | 0.525 | 0.636 | 1 Bcell_3_UCBMC |
| CWF19L2            | 0.17642444 | 0.24622592 | 0.35  | 0.42  | 1 Bcell_3_UCBMC |
| LTN1               | 0.17786102 | 0.25264127 | 0.291 | 0.349 | 1 Bcell_3_UCBMC |
| GNAI3              | 0.17870801 | 0.24967305 | 0.276 | 0.329 | 1 Bcell_3_UCBMC |

|         |            |            |       |       |                 |
|---------|------------|------------|-------|-------|-----------------|
| LAT2    | 0.17931811 | 0.11563658 | 0.43  | 0.524 | 1 Bcell_3_UCBMC |
| DBI     | 0.18045149 | 0.26595608 | 0.367 | 0.401 | 1 Bcell_3_UCBMC |
| MBTPS1  | 0.18113657 | 0.32774611 | 0.289 | 0.348 | 1 Bcell_3_UCBMC |
| TRIM33  | 0.18208409 | 0.15016163 | 0.38  | 0.453 | 1 Bcell_3_UCBMC |
| SP3     | 0.18297266 | 0.18061976 | 0.401 | 0.488 | 1 Bcell_3_UCBMC |
| DCAF10  | 0.18304939 | 0.2852317  | 0.258 | 0.303 | 1 Bcell_3_UCBMC |
| KLHL28  | 0.18384263 | 0.33391998 | 0.351 | 0.383 | 1 Bcell_3_UCBMC |
| PFDN4   | 0.18815344 | 0.53287938 | 0.238 | 0.252 | 1 Bcell_3_UCBMC |
| TUBA1A  | 0.18965399 | 0.20575334 | 0.36  | 0.432 | 1 Bcell_3_UCBMC |
| NFYC    | 0.19407812 | 0.21436002 | 0.304 | 0.361 | 1 Bcell_3_UCBMC |
| ATP5MPL | 0.19646593 | 0.2087773  | 0.448 | 0.489 | 1 Bcell_3_UCBMC |
| ATG12   | 0.19717705 | 0.3407364  | 0.411 | 0.459 | 1 Bcell_3_UCBMC |
| DNAJC8  | 0.20260503 | 0.39704452 | 0.271 | 0.33  | 1 Bcell_3_UCBMC |
| SEC14L1 | 0.20657862 | 0.31186649 | 0.222 | 0.26  | 1 Bcell_3_UCBMC |
| SCAI    | 0.20683187 | 0.19014702 | 0.236 | 0.271 | 1 Bcell_3_UCBMC |
| RTN3    | 0.20694174 | 0.1890841  | 0.249 | 0.29  | 1 Bcell_3_UCBMC |
| MYG1    | 0.20896868 | 0.40718562 | 0.211 | 0.255 | 1 Bcell_3_UCBMC |
| TCOF1   | 0.21187597 | 0.16092899 | 0.263 | 0.308 | 1 Bcell_3_UCBMC |
| SH3KBP1 | 0.21377004 | 0.16624266 | 0.592 | 0.656 | 1 Bcell_3_UCBMC |
| FBXL20  | 0.21379247 | 0.10267686 | 0.598 | 0.651 | 1 Bcell_3_UCBMC |
| TBC1D25 | 0.21501753 | 0.22952929 | 0.258 | 0.305 | 1 Bcell_3_UCBMC |
| POLR1D  | 0.21630951 | 0.19345789 | 0.318 | 0.382 | 1 Bcell_3_UCBMC |
| ARPC2   | 0.21710903 | 0.32942398 | 0.386 | 0.428 | 1 Bcell_3_UCBMC |
| RCOR3   | 0.22135831 | 0.24190466 | 0.291 | 0.344 | 1 Bcell_3_UCBMC |
| UFC1    | 0.22257113 | 0.44473693 | 0.319 | 0.356 | 1 Bcell_3_UCBMC |
| SUMO1   | 0.22508924 | 0.36932682 | 0.349 | 0.39  | 1 Bcell_3_UCBMC |
| USP10   | 0.22509292 | 0.15583619 | 0.394 | 0.471 | 1 Bcell_3_UCBMC |
| VPS13D  | 0.22799203 | 0.24771588 | 0.31  | 0.365 | 1 Bcell_3_UCBMC |
| RRM1    | 0.2282043  | 0.44405212 | 0.246 | 0.256 | 1 Bcell_3_UCBMC |
| DDOST   | 0.22892615 | 0.44215669 | 0.309 | 0.344 | 1 Bcell_3_UCBMC |
| SCAPER  | 0.22962251 | 0.32477031 | 0.43  | 0.476 | 1 Bcell_3_UCBMC |
| NARS1   | 0.22964914 | 0.45778176 | 0.323 | 0.362 | 1 Bcell_3_UCBMC |
| TAF3    | 0.23060713 | 0.13742077 | 0.366 | 0.422 | 1 Bcell_3_UCBMC |

|                    |            |            |       |       |                 |
|--------------------|------------|------------|-------|-------|-----------------|
| ENSMMUG00000053735 | 0.23187064 | 0.24420614 | 0.336 | 0.404 | 1 Bcell_3_UCBMC |
| TMED10             | 0.23310325 | 0.27004547 | 0.397 | 0.486 | 1 Bcell_3_UCBMC |
| KAT7               | 0.23340594 | 0.3658401  | 0.34  | 0.374 | 1 Bcell_3_UCBMC |
| FOXJ3              | 0.23719556 | 0.27334864 | 0.474 | 0.541 | 1 Bcell_3_UCBMC |
| ENSMMUG00000042951 | 0.23849881 | 0.24114368 | 0.321 | 0.384 | 1 Bcell_3_UCBMC |
| MAP3K1             | 0.23900574 | 0.15176401 | 0.607 | 0.673 | 1 Bcell_3_UCBMC |
| ABCB7              | 0.24164281 | 0.5279755  | 0.258 | 0.276 | 1 Bcell_3_UCBMC |
| NEPRO              | 0.24176873 | 0.27230402 | 0.219 | 0.257 | 1 Bcell_3_UCBMC |
| ENSMMUG00000060377 | 0.24231423 | 0.11441477 | 0.539 | 0.567 | 1 Bcell_3_UCBMC |
| ENSMMUG00000015208 | 0.24331477 | 0.12178318 | 0.486 | 0.572 | 1 Bcell_3_UCBMC |
| MFSD14B            | 0.2433384  | 0.31465011 | 0.29  | 0.307 | 1 Bcell_3_UCBMC |
| BUD23              | 0.2444164  | 0.32076869 | 0.371 | 0.416 | 1 Bcell_3_UCBMC |
| XPO7               | 0.2480645  | 0.21850647 | 0.255 | 0.295 | 1 Bcell_3_UCBMC |
| TTC14              | 0.25115594 | 0.24935493 | 0.287 | 0.337 | 1 Bcell_3_UCBMC |
| GHITM              | 0.25250371 | 0.37256607 | 0.361 | 0.407 | 1 Bcell_3_UCBMC |
| ABCF1              | 0.25349986 | 0.31238509 | 0.314 | 0.378 | 1 Bcell_3_UCBMC |
| MRPL51             | 0.25421198 | 0.2915154  | 0.278 | 0.333 | 1 Bcell_3_UCBMC |
| NR1D2              | 0.25473209 | 0.26578435 | 0.279 | 0.326 | 1 Bcell_3_UCBMC |
| LST1               | 0.25530356 | 0.4383066  | 0.257 | 0.273 | 1 Bcell_3_UCBMC |
| GOLPH3             | 0.25690109 | 0.32577313 | 0.431 | 0.49  | 1 Bcell_3_UCBMC |
| PPIG               | 0.25695339 | 0.13517124 | 0.518 | 0.622 | 1 Bcell_3_UCBMC |
| INTS8              | 0.26396628 | 0.43350755 | 0.344 | 0.382 | 1 Bcell_3_UCBMC |
| C3H21orf91         | 0.26397321 | 0.33731415 | 0.23  | 0.269 | 1 Bcell_3_UCBMC |
| ZBTB21             | 0.2691409  | 0.46599008 | 0.246 | 0.259 | 1 Bcell_3_UCBMC |
| TAPBP              | 0.27237844 | 0.24954894 | 0.463 | 0.525 | 1 Bcell_3_UCBMC |
| CASP12             | 0.27526885 | 0.4833551  | 0.235 | 0.252 | 1 Bcell_3_UCBMC |
| PIP5K1A            | 0.27551098 | 0.36345952 | 0.356 | 0.394 | 1 Bcell_3_UCBMC |
| KANSL2             | 0.27690204 | 0.35203548 | 0.305 | 0.33  | 1 Bcell_3_UCBMC |
| GRAMD4             | 0.27902208 | 0.17525772 | 0.345 | 0.404 | 1 Bcell_3_UCBMC |
| KIAA0232           | 0.2794485  | 0.29500446 | 0.231 | 0.264 | 1 Bcell_3_UCBMC |
| BCCIP              | 0.27947161 | 0.41299867 | 0.21  | 0.25  | 1 Bcell_3_UCBMC |
| ATP5IF1            | 0.2804875  | 0.20007898 | 0.299 | 0.355 | 1 Bcell_3_UCBMC |
| SLC25A3            | 0.28461423 | 0.16998844 | 0.385 | 0.463 | 1 Bcell_3_UCBMC |



|                   |            |            |       |       |                 |
|-------------------|------------|------------|-------|-------|-----------------|
| CEP295            | 0.28547925 | 0.38888633 | 0.237 | 0.25  | 1 Bcell_3_UCBMC |
| CSNK1D            | 0.28701175 | 0.36217312 | 0.229 | 0.269 | 1 Bcell_3_UCBMC |
| UBA3              | 0.28837236 | 0.30350643 | 0.245 | 0.287 | 1 Bcell_3_UCBMC |
| MDM4              | 0.28842082 | 0.16553086 | 0.541 | 0.614 | 1 Bcell_3_UCBMC |
| FAM241A           | 0.2893867  | 0.32648507 | 0.327 | 0.34  | 1 Bcell_3_UCBMC |
| DOP1A             | 0.28946498 | 0.39250978 | 0.346 | 0.38  | 1 Bcell_3_UCBMC |
| HCK               | 0.29172908 | 0.15000836 | 0.268 | 0.302 | 1 Bcell_3_UCBMC |
| PHC3              | 0.29218027 | 0.25599877 | 0.362 | 0.426 | 1 Bcell_3_UCBMC |
| IWS1              | 0.29358898 | 0.30276341 | 0.282 | 0.332 | 1 Bcell_3_UCBMC |
| LUC7L             | 0.29841948 | 0.2708735  | 0.343 | 0.407 | 1 Bcell_3_UCBMC |
| NDUFB7            | 0.30143647 | 0.26507408 | 0.244 | 0.291 | 1 Bcell_3_UCBMC |
| SNX6              | 0.30455084 | 0.1895948  | 0.374 | 0.454 | 1 Bcell_3_UCBMC |
| CDC5L             | 0.30462192 | 0.39422166 | 0.346 | 0.39  | 1 Bcell_3_UCBMC |
| BDP1              | 0.30509359 | 0.20357714 | 0.474 | 0.533 | 1 Bcell_3_UCBMC |
| AIP               | 0.30632363 | 0.23843289 | 0.285 | 0.342 | 1 Bcell_3_UCBMC |
| HNRNPR            | 0.30823644 | 0.23131894 | 0.385 | 0.469 | 1 Bcell_3_UCBMC |
| NRROS             | 0.31041487 | 0.17545866 | 0.351 | 0.409 | 1 Bcell_3_UCBMC |
| CAMLG             | 0.31105838 | 0.33502177 | 0.296 | 0.355 | 1 Bcell_3_UCBMC |
| PRNP              | 0.31199055 | 0.29882721 | 0.238 | 0.279 | 1 Bcell_3_UCBMC |
| SHISA5            | 0.31305623 | 0.37720047 | 0.343 | 0.388 | 1 Bcell_3_UCBMC |
| SLC25A26          | 0.3148961  | 0.36342432 | 0.348 | 0.38  | 1 Bcell_3_UCBMC |
| UPF3A             | 0.31822552 | 0.19671331 | 0.228 | 0.26  | 1 Bcell_3_UCBMC |
| BID               | 0.32696575 | 0.23653253 | 0.344 | 0.415 | 1 Bcell_3_UCBMC |
| PPP2R3C           | 0.32855206 | 0.32588822 | 0.248 | 0.29  | 1 Bcell_3_UCBMC |
| PDXDC1            | 0.32913112 | 0.30907072 | 0.312 | 0.337 | 1 Bcell_3_UCBMC |
| FAM135A           | 0.32918188 | 0.24851582 | 0.344 | 0.37  | 1 Bcell_3_UCBMC |
| SF1               | 0.32975607 | 0.16341413 | 0.56  | 0.638 | 1 Bcell_3_UCBMC |
| DNAJC7            | 0.33061356 | 0.38433937 | 0.385 | 0.438 | 1 Bcell_3_UCBMC |
| MYO5A             | 0.33066559 | 0.16258782 | 0.526 | 0.587 | 1 Bcell_3_UCBMC |
| RDH5              | 0.33105782 | 0.25134746 | 0.301 | 0.356 | 1 Bcell_3_UCBMC |
| WBP11             | 0.33414008 | 0.32721855 | 0.272 | 0.324 | 1 Bcell_3_UCBMC |
| ENSMUG00000013257 | 0.33435837 | 0.34418151 | 0.347 | 0.38  | 1 Bcell_3_UCBMC |
| HIPK2             | 0.33502522 | 0.13519279 | 0.374 | 0.43  | 1 Bcell_3_UCBMC |

|          |            |            |       |       |                 |
|----------|------------|------------|-------|-------|-----------------|
| MIC1     | 0.33895389 | 0.12751019 | 0.589 | 0.638 | 1 Bcell_3_UCBMC |
| PCNP     | 0.34094385 | 0.42043886 | 0.329 | 0.371 | 1 Bcell_3_UCBMC |
| IMPDH2   | 0.34106969 | 0.30300097 | 0.294 | 0.347 | 1 Bcell_3_UCBMC |
| ARNTL    | 0.3422158  | 0.25098069 | 0.279 | 0.325 | 1 Bcell_3_UCBMC |
| TGS1     | 0.34359905 | 0.24485201 | 0.332 | 0.395 | 1 Bcell_3_UCBMC |
| CCPG1    | 0.34389649 | 0.32997784 | 0.25  | 0.291 | 1 Bcell_3_UCBMC |
| RASGRP2  | 0.34454168 | 0.21889989 | 0.255 | 0.296 | 1 Bcell_3_UCBMC |
| CAPZA1   | 0.34546062 | 0.14019322 | 0.632 | 0.714 | 1 Bcell_3_UCBMC |
| RPAP2    | 0.3465249  | 0.52965275 | 0.28  | 0.306 | 1 Bcell_3_UCBMC |
| OCIAD1   | 0.34811081 | 0.44770807 | 0.302 | 0.338 | 1 Bcell_3_UCBMC |
| MINDY3   | 0.35125568 | 0.43403322 | 0.286 | 0.308 | 1 Bcell_3_UCBMC |
| HNRNPUL1 | 0.3517241  | 0.40627718 | 0.301 | 0.329 | 1 Bcell_3_UCBMC |
| MRPS35   | 0.35322736 | 0.51044147 | 0.245 | 0.26  | 1 Bcell_3_UCBMC |
| RAB3GAP1 | 0.35953591 | 0.31464602 | 0.399 | 0.449 | 1 Bcell_3_UCBMC |
| COPS6    | 0.36277299 | 0.3050439  | 0.314 | 0.379 | 1 Bcell_3_UCBMC |
| SRI      | 0.36456316 | 0.32105382 | 0.281 | 0.334 | 1 Bcell_3_UCBMC |
| KDM5A    | 0.36473181 | 0.35947568 | 0.327 | 0.394 | 1 Bcell_3_UCBMC |
| KLF3     | 0.36769665 | 0.2425025  | 0.279 | 0.294 | 1 Bcell_3_UCBMC |
| TGFB1    | 0.36787522 | 0.30758019 | 0.301 | 0.355 | 1 Bcell_3_UCBMC |
| PHF3     | 0.37749445 | 0.19880172 | 0.498 | 0.562 | 1 Bcell_3_UCBMC |
| ATP5PB   | 0.37942676 | 0.30040073 | 0.305 | 0.367 | 1 Bcell_3_UCBMC |
| SLC22A18 | 0.38200111 | 0.21975874 | 0.408 | 0.461 | 1 Bcell_3_UCBMC |
| LSM10    | 0.38326789 | 0.51424061 | 0.265 | 0.296 | 1 Bcell_3_UCBMC |
| SNRPB2   | 0.38833277 | 0.34646474 | 0.252 | 0.297 | 1 Bcell_3_UCBMC |
| ADNP     | 0.39000241 | 0.18596922 | 0.417 | 0.461 | 1 Bcell_3_UCBMC |
| PPIB     | 0.39483682 | 0.15410679 | 0.39  | 0.46  | 1 Bcell_3_UCBMC |
| GCC2     | 0.40031772 | 0.28423293 | 0.306 | 0.355 | 1 Bcell_3_UCBMC |
| AIMP1    | 0.40340949 | 0.33887541 | 0.332 | 0.37  | 1 Bcell_3_UCBMC |
| PNRC2    | 0.40355171 | 0.20566153 | 0.383 | 0.457 | 1 Bcell_3_UCBMC |
| CAPN7    | 0.40538002 | 0.50171487 | 0.284 | 0.314 | 1 Bcell_3_UCBMC |
| PSMD7    | 0.40624365 | 0.37251977 | 0.232 | 0.27  | 1 Bcell_3_UCBMC |
| UBE2Q2   | 0.40827177 | 0.30111748 | 0.338 | 0.366 | 1 Bcell_3_UCBMC |
| NBR1     | 0.41033361 | 0.47067344 | 0.331 | 0.373 | 1 Bcell_3_UCBMC |

|                   |            |            |       |       |                 |
|-------------------|------------|------------|-------|-------|-----------------|
| EPB41L2           | 0.4106858  | 0.19677779 | 0.442 | 0.481 | 1 Bcell_3_UCBMC |
| SUGT1             | 0.41428454 | 0.33357147 | 0.338 | 0.381 | 1 Bcell_3_UCBMC |
| EVI5              | 0.41593811 | 0.19409171 | 0.449 | 0.494 | 1 Bcell_3_UCBMC |
| PAFAH1B2          | 0.41602895 | 0.37764596 | 0.259 | 0.278 | 1 Bcell_3_UCBMC |
| DCP2              | 0.41768994 | 0.26672777 | 0.322 | 0.379 | 1 Bcell_3_UCBMC |
| SNRPD2            | 0.41801567 | 0.28395431 | 0.383 | 0.429 | 1 Bcell_3_UCBMC |
| MED30             | 0.41931325 | 0.34889981 | 0.291 | 0.348 | 1 Bcell_3_UCBMC |
| DSTN              | 0.42055958 | 0.22797035 | 0.358 | 0.422 | 1 Bcell_3_UCBMC |
| CMAH              | 0.42073802 | 0.35166241 | 0.267 | 0.303 | 1 Bcell_3_UCBMC |
| ENSMUG00000012537 | 0.42165706 | 0.40731516 | 0.298 | 0.333 | 1 Bcell_3_UCBMC |
| TM9SF2            | 0.42289716 | 0.13278669 | 0.45  | 0.525 | 1 Bcell_3_UCBMC |
| ZC3H11A           | 0.42605492 | 0.24256272 | 0.43  | 0.493 | 1 Bcell_3_UCBMC |
| ATP2C1            | 0.42751866 | 0.28068285 | 0.253 | 0.29  | 1 Bcell_3_UCBMC |
| VPS37B            | 0.43026465 | 0.22943255 | 0.318 | 0.369 | 1 Bcell_3_UCBMC |
| PPP1R2            | 0.43074258 | 0.30028881 | 0.416 | 0.48  | 1 Bcell_3_UCBMC |
| BTBD10            | 0.43247627 | 0.4375173  | 0.237 | 0.251 | 1 Bcell_3_UCBMC |
| SMARCE1           | 0.43308951 | 0.35017477 | 0.247 | 0.287 | 1 Bcell_3_UCBMC |
| ZNF451            | 0.43935469 | 0.22156127 | 0.471 | 0.533 | 1 Bcell_3_UCBMC |
| GTF2A2            | 0.43992567 | 0.4292924  | 0.281 | 0.314 | 1 Bcell_3_UCBMC |
| YTHDC1            | 0.44182806 | 0.11765492 | 0.574 | 0.668 | 1 Bcell_3_UCBMC |
| PHACTR1           | 0.44252732 | 0.30150128 | 0.327 | 0.36  | 1 Bcell_3_UCBMC |
| UBE2I             | 0.44490156 | 0.33940274 | 0.383 | 0.439 | 1 Bcell_3_UCBMC |
| CDCA7L            | 0.44738349 | 0.30339107 | 0.244 | 0.281 | 1 Bcell_3_UCBMC |
| LONP2             | 0.44785262 | 0.18438795 | 0.378 | 0.44  | 1 Bcell_3_UCBMC |
| TFAM              | 0.4485028  | 0.43888462 | 0.247 | 0.292 | 1 Bcell_3_UCBMC |
| CCDC12            | 0.45137278 | 0.22855176 | 0.36  | 0.429 | 1 Bcell_3_UCBMC |
| TOMM20            | 0.45750216 | 0.12390488 | 0.575 | 0.634 | 1 Bcell_3_UCBMC |
| SLC43A2           | 0.45991294 | 0.19106181 | 0.243 | 0.273 | 1 Bcell_3_UCBMC |
| SNIP1             | 0.46055624 | 0.33213103 | 0.278 | 0.302 | 1 Bcell_3_UCBMC |
| CTNNA1            | 0.46359078 | 0.30254648 | 0.241 | 0.25  | 1 Bcell_3_UCBMC |
| OLA1              | 0.46708659 | 0.11201154 | 0.458 | 0.532 | 1 Bcell_3_UCBMC |
| NAA15             | 0.47164499 | 0.2010171  | 0.428 | 0.482 | 1 Bcell_3_UCBMC |
| KIAA1328          | 0.47172343 | 0.18005365 | 0.336 | 0.379 | 1 Bcell_3_UCBMC |

|          |            |            |       |       |                 |
|----------|------------|------------|-------|-------|-----------------|
| KAT6A    | 0.4721381  | 0.1170474  | 0.572 | 0.646 | 1 Bcell_3_UCBMC |
| TRAK1    | 0.47387749 | 0.18481039 | 0.489 | 0.55  | 1 Bcell_3_UCBMC |
| NLRC5    | 0.47761687 | 0.35812573 | 0.228 | 0.256 | 1 Bcell_3_UCBMC |
| PMAIP1   | 0.47920322 | 0.18975941 | 0.424 | 0.5   | 1 Bcell_3_UCBMC |
| RIC1     | 0.48137076 | 0.22174423 | 0.444 | 0.495 | 1 Bcell_3_UCBMC |
| UBR1     | 0.48557939 | 0.21407678 | 0.5   | 0.568 | 1 Bcell_3_UCBMC |
| SCAMP2   | 0.4932152  | 0.4166874  | 0.253 | 0.276 | 1 Bcell_3_UCBMC |
| CSNK2B   | 0.49386534 | 0.43780328 | 0.262 | 0.291 | 1 Bcell_3_UCBMC |
| TBC1D15  | 0.49498976 | 0.27719014 | 0.397 | 0.451 | 1 Bcell_3_UCBMC |
| SMARCB1  | 0.49585775 | 0.30239257 | 0.247 | 0.287 | 1 Bcell_3_UCBMC |
| ULK4     | 0.49954023 | 0.17156947 | 0.248 | 0.274 | 1 Bcell_3_UCBMC |
| NDUFA5   | 0.50039956 | 0.40386337 | 0.237 | 0.276 | 1 Bcell_3_UCBMC |
| BORCS5   | 0.50433637 | 0.20156487 | 0.391 | 0.457 | 1 Bcell_3_UCBMC |
| PPP2R2A  | 0.50756294 | 0.20961969 | 0.478 | 0.549 | 1 Bcell_3_UCBMC |
| HNRNPM   | 0.51105897 | 0.18618071 | 0.478 | 0.554 | 1 Bcell_3_UCBMC |
| NSF      | 0.51616215 | 0.16860056 | 0.505 | 0.593 | 1 Bcell_3_UCBMC |
| COMMD3   | 0.51757472 | 0.40974613 | 0.29  | 0.322 | 1 Bcell_3_UCBMC |
| COPS2    | 0.52213139 | 0.45451651 | 0.306 | 0.347 | 1 Bcell_3_UCBMC |
| RAB3GAP2 | 0.52462484 | 0.32545443 | 0.341 | 0.375 | 1 Bcell_3_UCBMC |
| PECR     | 0.5271234  | 0.18056957 | 0.256 | 0.284 | 1 Bcell_3_UCBMC |
| ZC3H7A   | 0.5273611  | 0.42219501 | 0.265 | 0.291 | 1 Bcell_3_UCBMC |
| CNOT7    | 0.53108525 | 0.46012215 | 0.258 | 0.283 | 1 Bcell_3_UCBMC |
| SYAP1    | 0.53125909 | 0.2840224  | 0.355 | 0.395 | 1 Bcell_3_UCBMC |
| LCORL    | 0.53218748 | 0.17729216 | 0.516 | 0.59  | 1 Bcell_3_UCBMC |
| SPCS1    | 0.53870501 | 0.44126003 | 0.301 | 0.344 | 1 Bcell_3_UCBMC |
| RNF7     | 0.54119487 | 0.41986292 | 0.246 | 0.269 | 1 Bcell_3_UCBMC |
| STK24    | 0.54230815 | 0.12646949 | 0.464 | 0.544 | 1 Bcell_3_UCBMC |
| ATOX1    | 0.54432807 | 0.34712039 | 0.259 | 0.303 | 1 Bcell_3_UCBMC |
| NT5C2    | 0.54748659 | 0.17339086 | 0.39  | 0.457 | 1 Bcell_3_UCBMC |
| HNRNPH3  | 0.55673469 | 0.13467165 | 0.476 | 0.563 | 1 Bcell_3_UCBMC |
| GALNT11  | 0.55962638 | 0.33276933 | 0.257 | 0.28  | 1 Bcell_3_UCBMC |
| COPA     | 0.56818711 | 0.42048132 | 0.364 | 0.418 | 1 Bcell_3_UCBMC |
| XRCC6    | 0.57083068 | 0.1458632  | 0.549 | 0.629 | 1 Bcell_3_UCBMC |

|           |            |            |       |       |                 |
|-----------|------------|------------|-------|-------|-----------------|
| IK        | 0.5729543  | 0.34393742 | 0.355 | 0.406 | 1 Bcell_3_UCBMC |
| KIDINS220 | 0.57572719 | 0.26793539 | 0.274 | 0.312 | 1 Bcell_3_UCBMC |
| ZNF654    | 0.57589703 | 0.34062221 | 0.307 | 0.335 | 1 Bcell_3_UCBMC |
| IGBP1     | 0.57882348 | 0.37130292 | 0.241 | 0.278 | 1 Bcell_3_UCBMC |
| HECA      | 0.58004529 | 0.26118997 | 0.358 | 0.398 | 1 Bcell_3_UCBMC |
| CAPZA2    | 0.58197774 | 0.12095887 | 0.587 | 0.693 | 1 Bcell_3_UCBMC |
| AHI1      | 0.59249807 | 0.24292033 | 0.328 | 0.375 | 1 Bcell_3_UCBMC |
| DNM1L     | 0.59395148 | 0.20675129 | 0.346 | 0.403 | 1 Bcell_3_UCBMC |
| ANKRD28   | 0.594093   | 0.16086458 | 0.48  | 0.534 | 1 Bcell_3_UCBMC |
| BTF3L4    | 0.59659608 | 0.21324055 | 0.39  | 0.462 | 1 Bcell_3_UCBMC |
| RNF13     | 0.60126469 | 0.16257592 | 0.493 | 0.58  | 1 Bcell_3_UCBMC |
| SUSD6     | 0.60432952 | 0.20933051 | 0.481 | 0.539 | 1 Bcell_3_UCBMC |
| FAF2      | 0.60795054 | 0.43253142 | 0.232 | 0.254 | 1 Bcell_3_UCBMC |
| ILKAP     | 0.60832205 | 0.26946318 | 0.353 | 0.409 | 1 Bcell_3_UCBMC |
| LAMTOR4   | 0.61270399 | 0.40844774 | 0.225 | 0.261 | 1 Bcell_3_UCBMC |
| KCNQ1     | 0.61513577 | 0.31060478 | 0.274 | 0.294 | 1 Bcell_3_UCBMC |
| GLIPR1L2  | 0.617053   | 0.25071329 | 0.277 | 0.315 | 1 Bcell_3_UCBMC |
| PDS5B     | 0.61726147 | 0.16464282 | 0.47  | 0.547 | 1 Bcell_3_UCBMC |
| NR3C1     | 0.61823598 | 0.10608406 | 0.675 | 0.755 | 1 Bcell_3_UCBMC |
| BNIP2     | 0.61919834 | 0.44829078 | 0.239 | 0.262 | 1 Bcell_3_UCBMC |
| CWC22     | 0.61945031 | 0.41553454 | 0.238 | 0.258 | 1 Bcell_3_UCBMC |
| LDLRAD4   | 0.62194858 | 0.1796765  | 0.461 | 0.514 | 1 Bcell_3_UCBMC |
| UQCRQ     | 0.62350334 | 0.28774393 | 0.312 | 0.367 | 1 Bcell_3_UCBMC |
| GMCL1     | 0.62989509 | 0.27482214 | 0.336 | 0.372 | 1 Bcell_3_UCBMC |
| VCPKMT    | 0.63436186 | 0.41849544 | 0.23  | 0.262 | 1 Bcell_3_UCBMC |
| EIF4H     | 0.63644806 | 0.20021903 | 0.461 | 0.536 | 1 Bcell_3_UCBMC |
| CYSLTR1   | 0.63693344 | 0.11925131 | 0.29  | 0.32  | 1 Bcell_3_UCBMC |
| TNKS2     | 0.63918155 | 0.36982387 | 0.333 | 0.378 | 1 Bcell_3_UCBMC |
| SSR1      | 0.64646453 | 0.35137365 | 0.248 | 0.285 | 1 Bcell_3_UCBMC |
| RNF181    | 0.65599733 | 0.42432252 | 0.278 | 0.315 | 1 Bcell_3_UCBMC |
| TINF2     | 0.66310432 | 0.20136909 | 0.397 | 0.47  | 1 Bcell_3_UCBMC |
| KRAS      | 0.66754754 | 0.28821767 | 0.346 | 0.406 | 1 Bcell_3_UCBMC |
| VOPP1     | 0.67141481 | 0.3509435  | 0.258 | 0.293 | 1 Bcell_3_UCBMC |

|          |            |            |       |       |                 |
|----------|------------|------------|-------|-------|-----------------|
| NUP214   | 0.67191218 | 0.31492315 | 0.35  | 0.395 | 1 Bcell_3_UCBMC |
| MYL6     | 0.68057114 | 0.18429949 | 0.421 | 0.478 | 1 Bcell_3_UCBMC |
| CHP1     | 0.69345227 | 0.34558186 | 0.319 | 0.376 | 1 Bcell_3_UCBMC |
| COX16    | 0.69715653 | 0.23704674 | 0.424 | 0.498 | 1 Bcell_3_UCBMC |
| UCP2     | 0.69798448 | 0.31207195 | 0.256 | 0.292 | 1 Bcell_3_UCBMC |
| ARID4A   | 0.69856444 | 0.32114039 | 0.289 | 0.331 | 1 Bcell_3_UCBMC |
| QRICH1   | 0.69907392 | 0.23310514 | 0.393 | 0.445 | 1 Bcell_3_UCBMC |
| OSER1    | 0.70125055 | 0.35395442 | 0.257 | 0.281 | 1 Bcell_3_UCBMC |
| TALDO1   | 0.71135384 | 0.23993277 | 0.331 | 0.389 | 1 Bcell_3_UCBMC |
| POLR1H   | 0.71200489 | 0.48597139 | 0.293 | 0.338 | 1 Bcell_3_UCBMC |
| ELOB     | 0.71230525 | 0.18741375 | 0.37  | 0.425 | 1 Bcell_3_UCBMC |
| SAR1A    | 0.71251772 | 0.38198686 | 0.325 | 0.373 | 1 Bcell_3_UCBMC |
| PITPNC1  | 0.71676616 | 0.21722936 | 0.283 | 0.311 | 1 Bcell_3_UCBMC |
| PSMB6    | 0.71810103 | 0.44450874 | 0.228 | 0.266 | 1 Bcell_3_UCBMC |
| ZNF506   | 0.71878082 | 0.30855762 | 0.352 | 0.413 | 1 Bcell_3_UCBMC |
| BTBD1    | 0.71925754 | 0.38968295 | 0.252 | 0.285 | 1 Bcell_3_UCBMC |
| MRPL11   | 0.72063392 | 0.45809788 | 0.244 | 0.286 | 1 Bcell_3_UCBMC |
| PPP1CA   | 0.72125723 | 0.42811169 | 0.281 | 0.321 | 1 Bcell_3_UCBMC |
| MTHFD1L  | 0.7217194  | 0.1051189  | 0.495 | 0.537 | 1 Bcell_3_UCBMC |
| AMBRA1   | 0.72983086 | 0.1684606  | 0.44  | 0.496 | 1 Bcell_3_UCBMC |
| MRPS15   | 0.73242508 | 0.49796973 | 0.221 | 0.255 | 1 Bcell_3_UCBMC |
| CAND1    | 0.7365627  | 0.19867446 | 0.439 | 0.519 | 1 Bcell_3_UCBMC |
| FAM168B  | 0.73760387 | 0.33186789 | 0.287 | 0.33  | 1 Bcell_3_UCBMC |
| CDC40    | 0.73978293 | 0.47543949 | 0.261 | 0.293 | 1 Bcell_3_UCBMC |
| PPP4R3A  | 0.74488709 | 0.28731262 | 0.35  | 0.396 | 1 Bcell_3_UCBMC |
| UBE2N    | 0.7549378  | 0.16727288 | 0.364 | 0.42  | 1 Bcell_3_UCBMC |
| AGPAT3   | 0.75623714 | 0.31941557 | 0.23  | 0.256 | 1 Bcell_3_UCBMC |
| ATXN7    | 0.75683067 | 0.20571274 | 0.385 | 0.43  | 1 Bcell_3_UCBMC |
| MTA3     | 0.7581451  | 0.21865659 | 0.251 | 0.276 | 1 Bcell_3_UCBMC |
| PAFAH1B1 | 0.75893976 | 0.17121706 | 0.561 | 0.649 | 1 Bcell_3_UCBMC |
| PRR13    | 0.76345606 | 0.23607251 | 0.362 | 0.424 | 1 Bcell_3_UCBMC |
| EDEM1    | 0.76606839 | 0.2124431  | 0.299 | 0.341 | 1 Bcell_3_UCBMC |
| STXBP5   | 0.77065546 | 0.2861113  | 0.261 | 0.287 | 1 Bcell_3_UCBMC |

|          |            |            |       |       |                 |
|----------|------------|------------|-------|-------|-----------------|
| ITGA6    | 0.77280421 | 0.13396296 | 0.265 | 0.283 | 1 Bcell_3_UCBMC |
| RPS27L   | 0.77445035 | 0.47680936 | 0.233 | 0.268 | 1 Bcell_3_UCBMC |
| ZNF93    | 0.77448442 | 0.28311879 | 0.298 | 0.334 | 1 Bcell_3_UCBMC |
| C1D      | 0.78246823 | 0.3567825  | 0.262 | 0.302 | 1 Bcell_3_UCBMC |
| HBP1     | 0.78452648 | 0.27327898 | 0.409 | 0.484 | 1 Bcell_3_UCBMC |
| NOL10    | 0.7892504  | 0.37285169 | 0.27  | 0.305 | 1 Bcell_3_UCBMC |
| SIRT1    | 0.79000096 | 0.24631339 | 0.287 | 0.322 | 1 Bcell_3_UCBMC |
| SLC35A5  | 0.79180793 | 0.49134222 | 0.238 | 0.265 | 1 Bcell_3_UCBMC |
| TSC22D2  | 0.79338143 | 0.1904276  | 0.345 | 0.38  | 1 Bcell_3_UCBMC |
| REPS1    | 0.793688   | 0.2333822  | 0.242 | 0.266 | 1 Bcell_3_UCBMC |
| WWP2     | 0.79438672 | 0.22844097 | 0.346 | 0.392 | 1 Bcell_3_UCBMC |
| YWHAЕ    | 0.79480496 | 0.1221508  | 0.53  | 0.616 | 1 Bcell_3_UCBMC |
| CMTM7    | 0.79743525 | 0.25446953 | 0.269 | 0.299 | 1 Bcell_3_UCBMC |
| CAB39    | 0.80335891 | 0.10680224 | 0.614 | 0.687 | 1 Bcell_3_UCBMC |
| SPCS3    | 0.8058251  | 0.28267652 | 0.347 | 0.41  | 1 Bcell_3_UCBMC |
| MRPS31   | 0.80614798 | 0.41492133 | 0.234 | 0.265 | 1 Bcell_3_UCBMC |
| PSMA7    | 0.80794257 | 0.20436843 | 0.402 | 0.463 | 1 Bcell_3_UCBMC |
| CNBP     | 0.81759121 | 0.19303319 | 0.478 | 0.563 | 1 Bcell_3_UCBMC |
| BIRC2    | 0.81828072 | 0.33715273 | 0.272 | 0.303 | 1 Bcell_3_UCBMC |
| CAST     | 0.81864971 | 0.19100265 | 0.558 | 0.658 | 1 Bcell_3_UCBMC |
| MRPL23   | 0.82764489 | 0.33058004 | 0.324 | 0.373 | 1 Bcell_3_UCBMC |
| ZNF708   | 0.83461227 | 0.37907871 | 0.257 | 0.285 | 1 Bcell_3_UCBMC |
| SNX13    | 0.8375142  | 0.21919454 | 0.431 | 0.488 | 1 Bcell_3_UCBMC |
| AGTPBP1  | 0.83841654 | 0.1647958  | 0.412 | 0.468 | 1 Bcell_3_UCBMC |
| NDUFA4   | 0.84006252 | 0.18094534 | 0.449 | 0.506 | 1 Bcell_3_UCBMC |
| RAB14    | 0.84763961 | 0.29196475 | 0.344 | 0.4   | 1 Bcell_3_UCBMC |
| DIP2B    | 0.85030009 | 0.11084731 | 0.678 | 0.749 | 1 Bcell_3_UCBMC |
| SEC24B   | 0.85305821 | 0.16315333 | 0.466 | 0.54  | 1 Bcell_3_UCBMC |
| FOXN2    | 0.8572444  | 0.20380849 | 0.276 | 0.305 | 1 Bcell_3_UCBMC |
| EIF4E    | 0.85844315 | 0.33541014 | 0.301 | 0.341 | 1 Bcell_3_UCBMC |
| AP3S1    | 0.86058141 | 0.33516448 | 0.256 | 0.285 | 1 Bcell_3_UCBMC |
| TSC22D3  | 0.86459329 | 0.13025554 | 0.552 | 0.633 | 1 Bcell_3_UCBMC |
| MAMU-DOB | 0.86564443 | 0.23142514 | 0.466 | 0.546 | 1 Bcell_3_UCBMC |

|                    |            |            |       |       |                 |
|--------------------|------------|------------|-------|-------|-----------------|
| XPO4               | 0.86618125 | 0.36064833 | 0.262 | 0.288 | 1 Bcell_3_UCBMC |
| C14H11orf58        | 0.8744684  | 0.46369834 | 0.224 | 0.252 | 1 Bcell_3_UCBMC |
| SMC3               | 0.87698053 | 0.38517952 | 0.243 | 0.277 | 1 Bcell_3_UCBMC |
| ATP5F1A            | 0.87706028 | 0.18869162 | 0.414 | 0.477 | 1 Bcell_3_UCBMC |
| AKAP9              | 0.88933291 | 0.19285216 | 0.532 | 0.62  | 1 Bcell_3_UCBMC |
| CDC27              | 0.88988847 | 0.23884273 | 0.364 | 0.417 | 1 Bcell_3_UCBMC |
| CNPY3              | 0.90196881 | 0.29777912 | 0.327 | 0.374 | 1 Bcell_3_UCBMC |
| PHF8               | 0.90292126 | 0.38435712 | 0.227 | 0.25  | 1 Bcell_3_UCBMC |
| TRAPPC10           | 0.91255396 | 0.32005334 | 0.301 | 0.339 | 1 Bcell_3_UCBMC |
| RBBP4              | 0.91560789 | 0.33872536 | 0.366 | 0.431 | 1 Bcell_3_UCBMC |
| EIF3M              | 0.91693244 | 0.22415895 | 0.439 | 0.509 | 1 Bcell_3_UCBMC |
| PBXIP1             | 0.92130852 | 0.3864944  | 0.348 | 0.41  | 1 Bcell_3_UCBMC |
| TMEM123            | 0.92218971 | 0.15968965 | 0.494 | 0.569 | 1 Bcell_3_UCBMC |
| EIF4EBP3           | 0.93270032 | 0.1899216  | 0.497 | 0.574 | 1 Bcell_3_UCBMC |
| BRK1               | 0.93405586 | 0.26345835 | 0.303 | 0.348 | 1 Bcell_3_UCBMC |
| IFNAR2             | 0.93484099 | 0.1687186  | 0.473 | 0.544 | 1 Bcell_3_UCBMC |
| SNRPB              | 0.93927409 | 0.29933343 | 0.332 | 0.386 | 1 Bcell_3_UCBMC |
| AEBP2              | 0.93969983 | 0.15396604 | 0.426 | 0.484 | 1 Bcell_3_UCBMC |
| CSNK2A1            | 0.94096308 | 0.20331135 | 0.461 | 0.548 | 1 Bcell_3_UCBMC |
| TMEM59             | 0.94361207 | 0.44246732 | 0.313 | 0.366 | 1 Bcell_3_UCBMC |
| KPNA6              | 0.94621223 | 0.39504677 | 0.268 | 0.303 | 1 Bcell_3_UCBMC |
| NDUFA1             | 0.94705649 | 0.16394242 | 0.428 | 0.493 | 1 Bcell_3_UCBMC |
| ISG20              | 0.9501111  | 0.1931106  | 0.38  | 0.436 | 1 Bcell_3_UCBMC |
| ENSMMUG00000047277 | 0.95378    | 0.20769996 | 0.467 | 0.532 | 1 Bcell_3_UCBMC |
| ENSMMUG00000053384 | 0.9585829  | 0.35211286 | 0.227 | 0.252 | 1 Bcell_3_UCBMC |
| TACC1              | 0.95884004 | 0.16320608 | 0.518 | 0.605 | 1 Bcell_3_UCBMC |
| MRTFA              | 0.96331308 | 0.20901371 | 0.417 | 0.472 | 1 Bcell_3_UCBMC |
| RSL24D1            | 0.96444458 | 0.19591945 | 0.467 | 0.548 | 1 Bcell_3_UCBMC |
| TM7SF3             | 0.96447396 | 0.36494346 | 0.282 | 0.316 | 1 Bcell_3_UCBMC |
| ENSMMUG00000012690 | 0.96480665 | 0.14416815 | 0.372 | 0.418 | 1 Bcell_3_UCBMC |
| RANBP9             | 0.97042478 | 0.16513155 | 0.475 | 0.536 | 1 Bcell_3_UCBMC |
| CDK17              | 0.97207116 | 0.14872368 | 0.45  | 0.516 | 1 Bcell_3_UCBMC |
| UBR4               | 0.97534068 | 0.2360866  | 0.391 | 0.449 | 1 Bcell_3_UCBMC |



|                    |            |            |       |       |           |                |
|--------------------|------------|------------|-------|-------|-----------|----------------|
| MAPRE1             | 0.97805619 | 0.25744025 | 0.411 | 0.484 | 1         | Bcell_3_UCBMC  |
| ELL                | 0.98175769 | 0.35853545 | 0.253 | 0.282 | 1         | Bcell_3_UCBMC  |
| ESYT1              | 0.98293809 | 0.31005262 | 0.263 | 0.294 | 1         | Bcell_3_UCBMC  |
| XPR1               | 0.98343773 | 0.237271   | 0.386 | 0.441 | 1         | Bcell_3_UCBMC  |
| C3H7orf50          | 0.9938779  | 0.22549533 | 0.429 | 0.508 | 1         | Bcell_3_UCBMC  |
| FASTKD2            | 0.99944293 | 0.44527541 | 0.229 | 0.257 | 1         | Bcell_3_UCBMC  |
| LTB                | 7.23E-290  | 2.47207761 | 0.69  | 0.286 | 2.56E-285 | Bcell_3_spleen |
| ENSMMUG00000054358 | 5.54E-278  | 1.62112094 | 0.98  | 0.843 | 1.96E-273 | Bcell_3_spleen |
| CR2                | 9.19E-276  | 3.46533021 | 0.559 | 0.115 | 3.26E-271 | Bcell_3_spleen |
| RPL13              | 2.16E-265  | 1.63208109 | 0.883 | 0.779 | 7.67E-261 | Bcell_3_spleen |
| BCL11A             | 2.12E-204  | 1.44241716 | 0.751 | 0.36  | 7.53E-200 | Bcell_3_spleen |
| PM20D2             | 1.24E-193  | 1.16491045 | 0.807 | 0.478 | 4.41E-189 | Bcell_3_spleen |
| NEDD9              | 6.79E-186  | 1.56354454 | 0.776 | 0.434 | 2.41E-181 | Bcell_3_spleen |
| C1QBP              | 1.20E-179  | 2.60024297 | 0.393 | 0.056 | 4.24E-175 | Bcell_3_spleen |
| CHCHD10            | 2.85E-171  | 2.55601825 | 0.388 | 0.059 | 1.01E-166 | Bcell_3_spleen |
| PIK3AP1            | 2.39E-160  | 1.03344737 | 0.802 | 0.464 | 8.48E-156 | Bcell_3_spleen |
| HIST1H2AC          | 3.89E-151  | 2.32963481 | 0.478 | 0.146 | 1.38E-146 | Bcell_3_spleen |
| HSPH1              | 6.77E-151  | 2.38885379 | 0.518 | 0.184 | 2.40E-146 | Bcell_3_spleen |
| HSPD1              | 9.18E-151  | 2.04548153 | 0.47  | 0.138 | 3.25E-146 | Bcell_3_spleen |
| SH3BP5             | 1.87E-149  | 1.1267747  | 0.81  | 0.515 | 6.61E-145 | Bcell_3_spleen |
| PIKFYVE            | 8.43E-147  | 1.1735458  | 0.764 | 0.448 | 2.99E-142 | Bcell_3_spleen |
| RNASET2            | 1.28E-146  | 1.23607796 | 0.662 | 0.322 | 4.53E-142 | Bcell_3_spleen |
| IKZF1              | 4.43E-145  | 0.9682947  | 0.832 | 0.529 | 1.57E-140 | Bcell_3_spleen |
| ENSMMUG00000063859 | 8.03E-143  | 1.76432332 | 0.484 | 0.153 | 2.84E-138 | Bcell_3_spleen |
| NT5C               | 2.70E-138  | 1.85684576 | 0.381 | 0.079 | 9.57E-134 | Bcell_3_spleen |
| ENSMMUG00000050770 | 4.26E-130  | 1.29916741 | 0.514 | 0.183 | 1.51E-125 | Bcell_3_spleen |
| SLC2A3             | 9.66E-130  | 1.2796356  | 0.639 | 0.319 | 3.42E-125 | Bcell_3_spleen |
| ENSMMUG00000052127 | 1.38E-123  | 0.70876248 | 0.987 | 0.946 | 4.89E-119 | Bcell_3_spleen |
| NOP53              | 1.34E-121  | 1.27138477 | 0.458 | 0.145 | 4.76E-117 | Bcell_3_spleen |
| ENSMMUG00000051300 | 1.44E-120  | 0.58654136 | 0.956 | 0.884 | 5.11E-116 | Bcell_3_spleen |
| CCR6               | 2.48E-120  | 1.85693794 | 0.381 | 0.102 | 8.79E-116 | Bcell_3_spleen |
| JUN                | 3.23E-116  | 1.37499075 | 0.647 | 0.357 | 1.14E-111 | Bcell_3_spleen |
| ATP5F1D            | 1.25E-113  | 1.72224812 | 0.339 | 0.075 | 4.44E-109 | Bcell_3_spleen |

|           |           |            |       |       |           |                |
|-----------|-----------|------------|-------|-------|-----------|----------------|
| MYO1E     | 1.87E-113 | 1.30232226 | 0.599 | 0.298 | 6.63E-109 | Bcell_3_spleen |
| ITPKB     | 1.97E-113 | 1.32214486 | 0.459 | 0.159 | 6.98E-109 | Bcell_3_spleen |
| GTF2I     | 7.23E-113 | 0.86199351 | 0.752 | 0.43  | 2.56E-108 | Bcell_3_spleen |
| SRSF2     | 1.92E-112 | 1.11477708 | 0.513 | 0.196 | 6.79E-108 | Bcell_3_spleen |
| HSD17B4   | 1.01E-111 | 0.88517667 | 0.775 | 0.493 | 3.56E-107 | Bcell_3_spleen |
| MAMU-DRB1 | 3.75E-110 | 0.58360973 | 0.944 | 0.917 | 1.33E-105 | Bcell_3_spleen |
| BLNK      | 5.08E-110 | 1.07916052 | 0.58  | 0.265 | 1.80E-105 | Bcell_3_spleen |
| GPCPD1    | 2.24E-104 | 0.87893796 | 0.79  | 0.525 | 7.94E-100 | Bcell_3_spleen |
| B3GNT2    | 1.64E-103 | 1.16847135 | 0.466 | 0.174 | 5.82E-99  | Bcell_3_spleen |
| COX5A     | 1.13E-101 | 1.39913923 | 0.399 | 0.13  | 4.01E-97  | Bcell_3_spleen |
| LPCAT1    | 8.76E-101 | 0.99424867 | 0.507 | 0.204 | 3.10E-96  | Bcell_3_spleen |
| STAP1     | 2.22E-100 | 1.03287027 | 0.551 | 0.253 | 7.85E-96  | Bcell_3_spleen |
| TMEM160   | 3.04E-100 | 1.79614152 | 0.284 | 0.056 | 1.08E-95  | Bcell_3_spleen |
| MEF2C     | 3.16E-100 | 0.75162665 | 0.9   | 0.754 | 1.12E-95  | Bcell_3_spleen |
| RASA1     | 7.09E-99  | 1.14288701 | 0.55  | 0.253 | 2.51E-94  | Bcell_3_spleen |
| INPP5F    | 2.07E-98  | 1.17187244 | 0.435 | 0.16  | 7.34E-94  | Bcell_3_spleen |
| ZNF608    | 1.95E-97  | 1.42029653 | 0.373 | 0.118 | 6.91E-93  | Bcell_3_spleen |
| PPIA      | 4.58E-97  | 1.01603093 | 0.5   | 0.205 | 1.62E-92  | Bcell_3_spleen |
| RUFY3     | 4.29E-96  | 0.83509944 | 0.742 | 0.459 | 1.52E-91  | Bcell_3_spleen |
| SAMSN1    | 5.49E-96  | 1.57420861 | 0.349 | 0.104 | 1.95E-91  | Bcell_3_spleen |
| CD22      | 1.99E-94  | 0.89923447 | 0.607 | 0.304 | 7.06E-90  | Bcell_3_spleen |
| FCER2     | 2.13E-94  | 1.12275719 | 0.557 | 0.279 | 7.56E-90  | Bcell_3_spleen |
| DEXI      | 3.57E-94  | 1.12921203 | 0.502 | 0.216 | 1.26E-89  | Bcell_3_spleen |
| ZC3HAV1   | 6.17E-94  | 0.98534616 | 0.699 | 0.403 | 2.19E-89  | Bcell_3_spleen |
| SQSTM1    | 2.52E-92  | 0.93633099 | 0.67  | 0.399 | 8.92E-88  | Bcell_3_spleen |
| ARL5B     | 4.07E-92  | 1.19043103 | 0.494 | 0.218 | 1.44E-87  | Bcell_3_spleen |
| LCP1      | 6.77E-92  | 0.7185863  | 0.771 | 0.525 | 2.40E-87  | Bcell_3_spleen |
| BMP2K     | 9.92E-91  | 0.88982175 | 0.779 | 0.541 | 3.52E-86  | Bcell_3_spleen |
| PTK2B     | 1.30E-90  | 0.93837194 | 0.592 | 0.294 | 4.61E-86  | Bcell_3_spleen |
| BTG1      | 1.13E-89  | 0.67731673 | 0.81  | 0.596 | 4.02E-85  | Bcell_3_spleen |
| NABP1     | 3.19E-89  | 1.19115159 | 0.398 | 0.143 | 1.13E-84  | Bcell_3_spleen |
| CD47      | 4.64E-89  | 0.67313699 | 0.798 | 0.525 | 1.64E-84  | Bcell_3_spleen |
| CIITA     | 9.67E-89  | 0.94733908 | 0.552 | 0.258 | 3.43E-84  | Bcell_3_spleen |

|                   |          |            |       |       |          |                |
|-------------------|----------|------------|-------|-------|----------|----------------|
| VAV1              | 1.11E-88 | 0.93680513 | 0.535 | 0.245 | 3.93E-84 | Bcell_3_spleen |
| PLEKHG1           | 2.47E-87 | 0.54266905 | 0.94  | 0.819 | 8.74E-83 | Bcell_3_spleen |
| HS3ST1            | 3.18E-86 | 1.31480705 | 0.359 | 0.12  | 1.13E-81 | Bcell_3_spleen |
| CREM              | 1.69E-85 | 0.81782103 | 0.425 | 0.164 | 5.97E-81 | Bcell_3_spleen |
| FAM81A            | 4.90E-85 | 1.28235296 | 0.415 | 0.166 | 1.74E-80 | Bcell_3_spleen |
| ENSMUG00000065373 | 4.94E-85 | 0.72219769 | 0.974 | 0.986 | 1.75E-80 | Bcell_3_spleen |
| RPS2              | 2.11E-84 | 0.93516596 | 0.717 | 0.613 | 7.49E-80 | Bcell_3_spleen |
| IFNGR1            | 1.94E-83 | 1.21581579 | 0.45  | 0.198 | 6.86E-79 | Bcell_3_spleen |
| UBE2S             | 4.22E-83 | 1.20473634 | 0.359 | 0.121 | 1.49E-78 | Bcell_3_spleen |
| TTC13             | 1.85E-82 | 0.97984043 | 0.45  | 0.187 | 6.56E-78 | Bcell_3_spleen |
| SNX5              | 7.72E-82 | 0.7819884  | 0.717 | 0.445 | 2.73E-77 | Bcell_3_spleen |
| KTN1              | 8.81E-82 | 0.89273696 | 0.463 | 0.196 | 3.12E-77 | Bcell_3_spleen |
| LITAF             | 5.47E-81 | 1.5692844  | 0.299 | 0.086 | 1.94E-76 | Bcell_3_spleen |
| RAP1A             | 6.69E-81 | 0.74983908 | 0.652 | 0.364 | 2.37E-76 | Bcell_3_spleen |
| ZMYND8            | 7.10E-81 | 0.79533983 | 0.614 | 0.33  | 2.51E-76 | Bcell_3_spleen |
| PIK3CD            | 1.09E-80 | 1.02291743 | 0.441 | 0.184 | 3.87E-76 | Bcell_3_spleen |
| HNRNPAB           | 2.86E-80 | 1.36608136 | 0.3   | 0.087 | 1.01E-75 | Bcell_3_spleen |
| ENSMUG00000008417 | 1.12E-79 | 1.50603422 | 0.263 | 0.063 | 3.96E-75 | Bcell_3_spleen |
| BRD9              | 1.15E-79 | 0.91441941 | 0.493 | 0.218 | 4.07E-75 | Bcell_3_spleen |
| MZT2B             | 1.16E-79 | 1.4774241  | 0.272 | 0.068 | 4.10E-75 | Bcell_3_spleen |
| CBL               | 1.51E-79 | 1.38535843 | 0.31  | 0.094 | 5.34E-75 | Bcell_3_spleen |
| DGKD              | 4.81E-79 | 0.72153352 | 0.713 | 0.426 | 1.71E-74 | Bcell_3_spleen |
| SNX30             | 8.43E-77 | 1.88386311 | 0.265 | 0.072 | 2.99E-72 | Bcell_3_spleen |
| AIM2              | 3.81E-76 | 1.26673462 | 0.339 | 0.122 | 1.35E-71 | Bcell_3_spleen |
| ACAP2             | 6.11E-76 | 0.54633874 | 0.9   | 0.713 | 2.17E-71 | Bcell_3_spleen |
| FNBP1             | 1.48E-75 | 0.53955118 | 0.861 | 0.653 | 5.24E-71 | Bcell_3_spleen |
| PIP4K2A           | 1.90E-75 | 0.77468021 | 0.645 | 0.378 | 6.72E-71 | Bcell_3_spleen |
| TGFBR2            | 2.08E-75 | 0.70242577 | 0.818 | 0.577 | 7.36E-71 | Bcell_3_spleen |
| ARMC2             | 2.84E-75 | 1.27331847 | 0.374 | 0.149 | 1.00E-70 | Bcell_3_spleen |
| NCF1              | 6.46E-75 | 0.78781405 | 0.535 | 0.262 | 2.29E-70 | Bcell_3_spleen |
| CR1               | 2.17E-74 | 0.85904586 | 0.662 | 0.411 | 7.69E-70 | Bcell_3_spleen |
| ITGA4             | 6.24E-74 | 0.72477477 | 0.635 | 0.367 | 2.21E-69 | Bcell_3_spleen |
| KBTBD8            | 3.84E-73 | 1.17053391 | 0.327 | 0.113 | 1.36E-68 | Bcell_3_spleen |

|                    |          |            |       |       |          |                |
|--------------------|----------|------------|-------|-------|----------|----------------|
| PAG1               | 1.06E-72 | 0.71206778 | 0.666 | 0.405 | 3.76E-68 | Bcell_3_spleen |
| CD19               | 2.26E-72 | 0.73450749 | 0.493 | 0.231 | 8.00E-68 | Bcell_3_spleen |
| SMC6               | 4.46E-72 | 0.68000741 | 0.797 | 0.578 | 1.58E-67 | Bcell_3_spleen |
| PYHIN1             | 6.49E-72 | 1.24256278 | 0.283 | 0.085 | 2.30E-67 | Bcell_3_spleen |
| ENSMMUG00000059145 | 1.88E-71 | 1.34933742 | 0.29  | 0.09  | 6.66E-67 | Bcell_3_spleen |
| CYBB               | 4.74E-71 | 0.91118895 | 0.442 | 0.199 | 1.68E-66 | Bcell_3_spleen |
| TNS3               | 5.82E-71 | 1.04211499 | 0.427 | 0.187 | 2.06E-66 | Bcell_3_spleen |
| ZFAND5             | 1.01E-70 | 0.8632336  | 0.409 | 0.169 | 3.57E-66 | Bcell_3_spleen |
| FGD6               | 2.10E-70 | 1.25955742 | 0.356 | 0.142 | 7.43E-66 | Bcell_3_spleen |
| ARL5A              | 3.57E-70 | 0.78619788 | 0.474 | 0.22  | 1.26E-65 | Bcell_3_spleen |
| ZFP36L1            | 7.78E-70 | 0.66515272 | 0.783 | 0.579 | 2.76E-65 | Bcell_3_spleen |
| ZHX2               | 9.10E-70 | 0.61322362 | 0.644 | 0.365 | 3.23E-65 | Bcell_3_spleen |
| PIK3R1             | 1.77E-69 | 0.8481835  | 0.38  | 0.149 | 6.27E-65 | Bcell_3_spleen |
| GGA2               | 5.21E-69 | 0.87966278 | 0.403 | 0.17  | 1.85E-64 | Bcell_3_spleen |
| IKZF3              | 7.29E-69 | 0.6686631  | 0.823 | 0.593 | 2.58E-64 | Bcell_3_spleen |
| MS4A1              | 6.00E-68 | 0.47469366 | 0.908 | 0.864 | 2.13E-63 | Bcell_3_spleen |
| DUSP2              | 7.15E-68 | 1.2658607  | 0.284 | 0.092 | 2.53E-63 | Bcell_3_spleen |
| IRF2               | 4.95E-67 | 0.84546746 | 0.474 | 0.226 | 1.75E-62 | Bcell_3_spleen |
| ENSMMUG00000052802 | 2.58E-66 | 1.0913866  | 0.325 | 0.119 | 9.13E-62 | Bcell_3_spleen |
| PPP1R10            | 4.90E-66 | 0.6951975  | 0.511 | 0.255 | 1.74E-61 | Bcell_3_spleen |
| SLC25A25           | 5.26E-66 | 0.91271    | 0.383 | 0.16  | 1.87E-61 | Bcell_3_spleen |
| SP140              | 6.75E-66 | 0.69003952 | 0.655 | 0.416 | 2.39E-61 | Bcell_3_spleen |
| CPA6               | 6.84E-66 | 1.66504622 | 0.255 | 0.078 | 2.42E-61 | Bcell_3_spleen |
| ST6GAL1            | 5.60E-64 | 0.62261276 | 0.69  | 0.432 | 1.98E-59 | Bcell_3_spleen |
| PTPN22             | 3.25E-63 | 1.01826236 | 0.313 | 0.116 | 1.15E-58 | Bcell_3_spleen |
| HVCN1              | 3.50E-63 | 0.67722783 | 0.642 | 0.39  | 1.24E-58 | Bcell_3_spleen |
| IL21R              | 3.90E-63 | 1.39167674 | 0.281 | 0.097 | 1.38E-58 | Bcell_3_spleen |
| TRIR               | 6.10E-63 | 0.71163321 | 0.55  | 0.296 | 2.16E-58 | Bcell_3_spleen |
| GPR65              | 9.30E-63 | 0.76179214 | 0.322 | 0.12  | 3.30E-58 | Bcell_3_spleen |
| HSP90AA1           | 1.43E-62 | 0.86585427 | 0.754 | 0.535 | 5.07E-58 | Bcell_3_spleen |
| CPPED1             | 4.45E-62 | 1.08432792 | 0.314 | 0.118 | 1.58E-57 | Bcell_3_spleen |
| CLTA               | 5.11E-61 | 0.75547294 | 0.451 | 0.214 | 1.81E-56 | Bcell_3_spleen |
| HSPA8              | 8.00E-61 | 0.76063318 | 0.613 | 0.383 | 2.83E-56 | Bcell_3_spleen |

|          |          |            |       |       |          |                |
|----------|----------|------------|-------|-------|----------|----------------|
| CARD11   | 8.95E-61 | 0.65035292 | 0.63  | 0.37  | 3.17E-56 | Bcell_3_spleen |
| ATF1     | 1.13E-60 | 0.99675183 | 0.31  | 0.116 | 4.02E-56 | Bcell_3_spleen |
| TPM4     | 2.02E-60 | 0.74076975 | 0.406 | 0.183 | 7.14E-56 | Bcell_3_spleen |
| PPP1CC   | 2.04E-60 | 0.73571187 | 0.456 | 0.219 | 7.23E-56 | Bcell_3_spleen |
| BCL2     | 3.26E-60 | 0.73815705 | 0.578 | 0.349 | 1.15E-55 | Bcell_3_spleen |
| CCNH     | 4.03E-60 | 0.75111179 | 0.39  | 0.172 | 1.43E-55 | Bcell_3_spleen |
| MTHFD2   | 6.85E-60 | 1.00413559 | 0.285 | 0.1   | 2.43E-55 | Bcell_3_spleen |
| PIK3C2B  | 1.70E-58 | 0.91834494 | 0.312 | 0.12  | 6.01E-54 | Bcell_3_spleen |
| NXPE3    | 2.16E-58 | 0.77483196 | 0.562 | 0.325 | 7.65E-54 | Bcell_3_spleen |
| DENND5B  | 2.29E-58 | 0.68909568 | 0.566 | 0.324 | 8.13E-54 | Bcell_3_spleen |
| GRK5     | 5.60E-58 | 0.63164364 | 0.583 | 0.342 | 1.99E-53 | Bcell_3_spleen |
| RANBP1   | 6.09E-58 | 1.02520578 | 0.29  | 0.105 | 2.16E-53 | Bcell_3_spleen |
| PPM1L    | 7.91E-58 | 1.24675703 | 0.3   | 0.118 | 2.80E-53 | Bcell_3_spleen |
| SLC15A2  | 9.97E-58 | 0.80754744 | 0.446 | 0.226 | 3.53E-53 | Bcell_3_spleen |
| EIF3B    | 3.92E-57 | 1.00750895 | 0.265 | 0.089 | 1.39E-52 | Bcell_3_spleen |
| ND2      | 4.57E-57 | 0.50027016 | 0.974 | 0.931 | 1.62E-52 | Bcell_3_spleen |
| UBE2J1   | 8.13E-57 | 0.68390941 | 0.551 | 0.306 | 2.88E-52 | Bcell_3_spleen |
| ANXA6    | 1.26E-56 | 0.78164288 | 0.378 | 0.168 | 4.48E-52 | Bcell_3_spleen |
| ABHD17B  | 1.64E-56 | 0.97074521 | 0.33  | 0.136 | 5.80E-52 | Bcell_3_spleen |
| PAX5     | 2.20E-56 | 0.50958402 | 0.911 | 0.764 | 7.78E-52 | Bcell_3_spleen |
| CCDC50   | 2.49E-56 | 0.58374436 | 0.653 | 0.402 | 8.84E-52 | Bcell_3_spleen |
| ZNF217   | 1.44E-55 | 0.73576416 | 0.324 | 0.128 | 5.11E-51 | Bcell_3_spleen |
| COMT     | 1.65E-55 | 0.66902214 | 0.393 | 0.176 | 5.85E-51 | Bcell_3_spleen |
| IL27RA   | 2.42E-55 | 0.97284351 | 0.269 | 0.094 | 8.58E-51 | Bcell_3_spleen |
| CEMIP2   | 2.74E-55 | 1.15900206 | 0.338 | 0.149 | 9.73E-51 | Bcell_3_spleen |
| NME3     | 4.24E-55 | 0.70994501 | 0.409 | 0.19  | 1.50E-50 | Bcell_3_spleen |
| KLF6     | 8.68E-55 | 0.50900584 | 0.9   | 0.809 | 3.07E-50 | Bcell_3_spleen |
| MARK2    | 8.81E-55 | 0.95162343 | 0.341 | 0.147 | 3.12E-50 | Bcell_3_spleen |
| H1-2     | 1.64E-54 | 0.9580044  | 0.388 | 0.181 | 5.81E-50 | Bcell_3_spleen |
| PRCP     | 1.74E-54 | 0.7927123  | 0.375 | 0.17  | 6.18E-50 | Bcell_3_spleen |
| ND4L     | 1.84E-54 | 0.43338468 | 0.604 | 0.361 | 6.53E-50 | Bcell_3_spleen |
| GNG7     | 2.43E-54 | 0.54998539 | 0.557 | 0.315 | 8.62E-50 | Bcell_3_spleen |
| TRAF3IP3 | 3.19E-54 | 0.62187298 | 0.461 | 0.23  | 1.13E-49 | Bcell_3_spleen |

|                    |          |            |       |       |          |                |
|--------------------|----------|------------|-------|-------|----------|----------------|
| SDCBP              | 5.88E-54 | 0.77233681 | 0.426 | 0.208 | 2.08E-49 | Bcell_3_spleen |
| LRRK1              | 1.40E-53 | 0.83321998 | 0.364 | 0.164 | 4.97E-49 | Bcell_3_spleen |
| PLPP3              | 2.79E-53 | 1.19518828 | 0.293 | 0.119 | 9.89E-49 | Bcell_3_spleen |
| MCL1               | 3.83E-53 | 0.61929609 | 0.626 | 0.391 | 1.36E-48 | Bcell_3_spleen |
| NCKAP5             | 3.96E-53 | 0.94382206 | 0.515 | 0.319 | 1.40E-48 | Bcell_3_spleen |
| TERF2IP            | 5.06E-53 | 0.73513064 | 0.319 | 0.13  | 1.79E-48 | Bcell_3_spleen |
| PALM2AKAP2         | 5.67E-53 | 0.73109426 | 0.664 | 0.447 | 2.01E-48 | Bcell_3_spleen |
| MBNL1              | 5.77E-53 | 0.40018339 | 0.968 | 0.914 | 2.04E-48 | Bcell_3_spleen |
| CD48               | 6.33E-53 | 0.81593354 | 0.376 | 0.173 | 2.24E-48 | Bcell_3_spleen |
| IRF8               | 1.12E-52 | 0.87508277 | 0.321 | 0.133 | 3.98E-48 | Bcell_3_spleen |
| ENSMMUG00000056190 | 2.31E-52 | 0.69889228 | 0.472 | 0.246 | 8.18E-48 | Bcell_3_spleen |
| ATM                | 1.32E-51 | 0.53047749 | 0.626 | 0.384 | 4.67E-47 | Bcell_3_spleen |
| ENSMMUG00000041688 | 2.13E-51 | 0.60971256 | 0.62  | 0.395 | 7.54E-47 | Bcell_3_spleen |
| PLEK               | 4.14E-51 | 0.69206128 | 0.39  | 0.184 | 1.47E-46 | Bcell_3_spleen |
| RABEP1             | 4.16E-51 | 0.57056326 | 0.406 | 0.194 | 1.47E-46 | Bcell_3_spleen |
| ZBED1              | 6.90E-51 | 0.60631376 | 0.581 | 0.349 | 2.44E-46 | Bcell_3_spleen |
| HUWE1              | 2.98E-50 | 0.52093621 | 0.651 | 0.406 | 1.06E-45 | Bcell_3_spleen |
| TASOR              | 4.30E-50 | 0.72647677 | 0.375 | 0.177 | 1.52E-45 | Bcell_3_spleen |
| NFATC1             | 9.26E-50 | 0.62502616 | 0.434 | 0.221 | 3.28E-45 | Bcell_3_spleen |
| H4C15              | 1.13E-49 | 0.94471206 | 0.325 | 0.142 | 4.01E-45 | Bcell_3_spleen |
| BIRC3              | 2.09E-49 | 0.62940392 | 0.577 | 0.362 | 7.40E-45 | Bcell_3_spleen |
| STRN3              | 3.55E-49 | 0.52113077 | 0.531 | 0.299 | 1.26E-44 | Bcell_3_spleen |
| ENSMMUG00000019087 | 3.96E-49 | 1.14017931 | 0.266 | 0.107 | 1.40E-44 | Bcell_3_spleen |
| PLCG2              | 4.03E-49 | 0.45542812 | 0.898 | 0.732 | 1.43E-44 | Bcell_3_spleen |
| ARHGAP24           | 4.36E-49 | 0.43689427 | 0.978 | 0.954 | 1.54E-44 | Bcell_3_spleen |
| ZNF268             | 5.65E-49 | 0.83782639 | 0.34  | 0.157 | 2.00E-44 | Bcell_3_spleen |
| LIMD1              | 1.08E-48 | 0.57564399 | 0.477 | 0.253 | 3.82E-44 | Bcell_3_spleen |
| STK10              | 1.16E-48 | 0.49205198 | 0.643 | 0.396 | 4.10E-44 | Bcell_3_spleen |
| ASCC1              | 3.32E-48 | 0.67642085 | 0.392 | 0.191 | 1.18E-43 | Bcell_3_spleen |
| ATXN1              | 4.59E-48 | 1.03150497 | 0.285 | 0.121 | 1.63E-43 | Bcell_3_spleen |
| SPCS2              | 5.64E-48 | 0.56770034 | 0.456 | 0.237 | 2.00E-43 | Bcell_3_spleen |
| YWHAH              | 6.56E-48 | 0.51650736 | 0.441 | 0.224 | 2.33E-43 | Bcell_3_spleen |
| ZDHHC14            | 6.63E-48 | 0.73710008 | 0.41  | 0.215 | 2.35E-43 | Bcell_3_spleen |

|                    |          |            |       |       |          |                |
|--------------------|----------|------------|-------|-------|----------|----------------|
| BTLA               | 8.19E-48 | 0.87938503 | 0.307 | 0.134 | 2.90E-43 | Bcell_3_spleen |
| DOCK10             | 1.04E-47 | 0.56529896 | 0.622 | 0.386 | 3.69E-43 | Bcell_3_spleen |
| VWA8               | 1.93E-47 | 0.84312688 | 0.341 | 0.161 | 6.84E-43 | Bcell_3_spleen |
| DNAJA1             | 1.99E-47 | 0.69121367 | 0.562 | 0.331 | 7.06E-43 | Bcell_3_spleen |
| KRIT1              | 2.08E-47 | 0.6576175  | 0.344 | 0.156 | 7.36E-43 | Bcell_3_spleen |
| ACP5               | 2.20E-47 | 0.79724548 | 0.361 | 0.173 | 7.80E-43 | Bcell_3_spleen |
| NFE2L2             | 2.45E-47 | 0.74687809 | 0.308 | 0.135 | 8.68E-43 | Bcell_3_spleen |
| ENSMMUG00000053012 | 2.61E-47 | 0.78991202 | 0.262 | 0.101 | 9.26E-43 | Bcell_3_spleen |
| DNM2               | 2.65E-47 | 0.48088618 | 0.526 | 0.292 | 9.40E-43 | Bcell_3_spleen |
| ENSMMUG00000011588 | 2.67E-47 | 0.8765707  | 0.315 | 0.138 | 9.46E-43 | Bcell_3_spleen |
| ITGB2              | 7.41E-47 | 0.62375013 | 0.33  | 0.145 | 2.63E-42 | Bcell_3_spleen |
| CD164              | 1.15E-46 | 0.51971305 | 0.68  | 0.45  | 4.08E-42 | Bcell_3_spleen |
| GRB2               | 1.36E-46 | 0.45122862 | 0.826 | 0.634 | 4.83E-42 | Bcell_3_spleen |
| SLC7A6             | 1.62E-46 | 0.5446033  | 0.462 | 0.244 | 5.72E-42 | Bcell_3_spleen |
| STAT6              | 2.13E-46 | 0.88496978 | 0.254 | 0.096 | 7.53E-42 | Bcell_3_spleen |
| MGA                | 2.49E-46 | 0.58596075 | 0.413 | 0.209 | 8.83E-42 | Bcell_3_spleen |
| DNMBP              | 2.65E-46 | 0.70758496 | 0.359 | 0.172 | 9.41E-42 | Bcell_3_spleen |
| GMDS               | 4.43E-46 | 0.54065633 | 0.625 | 0.397 | 1.57E-41 | Bcell_3_spleen |
| TMC8               | 7.84E-45 | 0.89265264 | 0.251 | 0.096 | 2.78E-40 | Bcell_3_spleen |
| HTT                | 9.10E-45 | 0.57413807 | 0.501 | 0.28  | 3.22E-40 | Bcell_3_spleen |
| CALR               | 1.17E-44 | 0.61152005 | 0.479 | 0.273 | 4.13E-40 | Bcell_3_spleen |
| PPM1G              | 1.98E-44 | 0.59632114 | 0.341 | 0.159 | 7.02E-40 | Bcell_3_spleen |
| PAK2               | 2.24E-44 | 0.45281971 | 0.727 | 0.494 | 7.95E-40 | Bcell_3_spleen |
| EDEM3              | 2.51E-44 | 0.85356053 | 0.277 | 0.116 | 8.89E-40 | Bcell_3_spleen |
| STAMBPL1           | 3.94E-44 | 0.70017787 | 0.324 | 0.15  | 1.40E-39 | Bcell_3_spleen |
| ARRDC3             | 3.94E-44 | 0.84955725 | 0.323 | 0.151 | 1.40E-39 | Bcell_3_spleen |
| CCDC6              | 5.36E-44 | 0.53033927 | 0.42  | 0.22  | 1.90E-39 | Bcell_3_spleen |
| PTP4A1             | 5.59E-44 | 0.63026043 | 0.537 | 0.316 | 1.98E-39 | Bcell_3_spleen |
| NOL7               | 6.30E-44 | 0.5370569  | 0.403 | 0.201 | 2.23E-39 | Bcell_3_spleen |
| AKIRIN2            | 7.15E-44 | 0.59638744 | 0.371 | 0.184 | 2.53E-39 | Bcell_3_spleen |
| MSL2               | 1.11E-43 | 0.6426284  | 0.525 | 0.314 | 3.94E-39 | Bcell_3_spleen |
| ZBTB10             | 1.43E-43 | 0.65151137 | 0.514 | 0.304 | 5.06E-39 | Bcell_3_spleen |
| ENSMMUG00000049833 | 1.64E-43 | 0.78680497 | 0.421 | 0.225 | 5.81E-39 | Bcell_3_spleen |

|          |          |            |       |       |          |                |
|----------|----------|------------|-------|-------|----------|----------------|
| DAP      | 1.93E-43 | 0.76432021 | 0.273 | 0.115 | 6.82E-39 | Bcell_3_spleen |
| UBE2D1   | 2.68E-43 | 0.73041266 | 0.307 | 0.137 | 9.49E-39 | Bcell_3_spleen |
| PARP1    | 2.73E-43 | 0.47878128 | 0.479 | 0.262 | 9.66E-39 | Bcell_3_spleen |
| B4GALT1  | 3.55E-43 | 0.70575532 | 0.309 | 0.138 | 1.26E-38 | Bcell_3_spleen |
| RRP36    | 7.33E-43 | 0.7420487  | 0.255 | 0.101 | 2.60E-38 | Bcell_3_spleen |
| XPO1     | 7.92E-43 | 0.54099796 | 0.44  | 0.237 | 2.81E-38 | Bcell_3_spleen |
| ETS1     | 9.37E-43 | 0.46549188 | 0.682 | 0.459 | 3.32E-38 | Bcell_3_spleen |
| LARP4B   | 1.05E-42 | 0.56931245 | 0.441 | 0.239 | 3.71E-38 | Bcell_3_spleen |
| CTSZ     | 1.41E-42 | 0.50947503 | 0.384 | 0.192 | 5.01E-38 | Bcell_3_spleen |
| BAZ1A    | 1.91E-42 | 0.39463723 | 0.662 | 0.421 | 6.76E-38 | Bcell_3_spleen |
| GPR174   | 2.02E-42 | 0.6906404  | 0.28  | 0.12  | 7.16E-38 | Bcell_3_spleen |
| PRDX1    | 2.04E-42 | 0.6649081  | 0.331 | 0.157 | 7.22E-38 | Bcell_3_spleen |
| ERO1A    | 2.77E-42 | 0.64278974 | 0.301 | 0.134 | 9.83E-38 | Bcell_3_spleen |
| PSAP     | 2.89E-42 | 0.75459391 | 0.25  | 0.099 | 1.02E-37 | Bcell_3_spleen |
| R3HDM2   | 2.89E-42 | 0.48340885 | 0.564 | 0.345 | 1.03E-37 | Bcell_3_spleen |
| ATP1A1   | 5.45E-42 | 0.71897421 | 0.293 | 0.13  | 1.93E-37 | Bcell_3_spleen |
| SEMA4D   | 5.60E-42 | 0.62199199 | 0.313 | 0.144 | 1.98E-37 | Bcell_3_spleen |
| STX7     | 1.22E-41 | 0.60452051 | 0.469 | 0.263 | 4.32E-37 | Bcell_3_spleen |
| SRRM2    | 1.37E-41 | 0.42456217 | 0.747 | 0.518 | 4.85E-37 | Bcell_3_spleen |
| DMXL1    | 1.43E-41 | 0.48407228 | 0.528 | 0.31  | 5.07E-37 | Bcell_3_spleen |
| RNASEH2B | 1.62E-41 | 0.57636932 | 0.411 | 0.215 | 5.75E-37 | Bcell_3_spleen |
| UCK2     | 1.71E-41 | 0.85814704 | 0.27  | 0.117 | 6.07E-37 | Bcell_3_spleen |
| ZMYM4    | 1.76E-41 | 0.52195176 | 0.51  | 0.3   | 6.24E-37 | Bcell_3_spleen |
| CMPK1    | 1.77E-41 | 0.69538897 | 0.266 | 0.11  | 6.28E-37 | Bcell_3_spleen |
| ADAM10   | 2.00E-41 | 0.46896159 | 0.478 | 0.266 | 7.10E-37 | Bcell_3_spleen |
| AKNA     | 2.02E-41 | 0.48393964 | 0.45  | 0.241 | 7.17E-37 | Bcell_3_spleen |
| FARS2    | 2.50E-41 | 0.55688996 | 0.536 | 0.326 | 8.87E-37 | Bcell_3_spleen |
| RNASE6   | 2.58E-41 | 0.7045408  | 0.285 | 0.124 | 9.15E-37 | Bcell_3_spleen |
| ZNF146   | 3.25E-41 | 0.63772038 | 0.329 | 0.156 | 1.15E-36 | Bcell_3_spleen |
| WAPL     | 4.50E-41 | 0.44779383 | 0.298 | 0.134 | 1.60E-36 | Bcell_3_spleen |
| CCNG2    | 5.36E-41 | 0.67436837 | 0.426 | 0.227 | 1.90E-36 | Bcell_3_spleen |
| ORC4     | 5.43E-41 | 0.90266582 | 0.253 | 0.106 | 1.92E-36 | Bcell_3_spleen |
| SLC9A9   | 6.58E-41 | 0.51163253 | 0.508 | 0.304 | 2.33E-36 | Bcell_3_spleen |



|                    |          |            |       |       |          |                |
|--------------------|----------|------------|-------|-------|----------|----------------|
| INSYN2B            | 6.87E-41 | 0.90653325 | 0.298 | 0.138 | 2.43E-36 | Bcell_3_spleen |
| GLS                | 6.93E-41 | 0.54972066 | 0.627 | 0.407 | 2.45E-36 | Bcell_3_spleen |
| CBFA2T3            | 7.48E-41 | 0.86188235 | 0.265 | 0.114 | 2.65E-36 | Bcell_3_spleen |
| HMGXB3             | 1.08E-40 | 0.63681585 | 0.269 | 0.115 | 3.81E-36 | Bcell_3_spleen |
| ST8SIA4            | 1.36E-40 | 0.47821707 | 0.549 | 0.333 | 4.81E-36 | Bcell_3_spleen |
| SLC38A2            | 1.42E-40 | 0.51105642 | 0.471 | 0.262 | 5.03E-36 | Bcell_3_spleen |
| CMIP               | 1.78E-40 | 0.47033488 | 0.629 | 0.404 | 6.30E-36 | Bcell_3_spleen |
| RC3H2              | 1.90E-40 | 0.67503666 | 0.276 | 0.121 | 6.74E-36 | Bcell_3_spleen |
| ENSMMUG00000055687 | 2.19E-40 | 0.51554553 | 0.603 | 0.383 | 7.78E-36 | Bcell_3_spleen |
| RRBP1              | 3.29E-40 | 0.64015189 | 0.369 | 0.189 | 1.16E-35 | Bcell_3_spleen |
| MAML2              | 3.77E-40 | 0.47819771 | 0.825 | 0.67  | 1.34E-35 | Bcell_3_spleen |
| FAM120A            | 3.92E-40 | 0.44737024 | 0.5   | 0.287 | 1.39E-35 | Bcell_3_spleen |
| RBM26              | 6.00E-40 | 0.41164865 | 0.639 | 0.411 | 2.13E-35 | Bcell_3_spleen |
| ISCA1              | 6.16E-40 | 0.61654137 | 0.379 | 0.198 | 2.18E-35 | Bcell_3_spleen |
| PRKD2              | 7.92E-40 | 0.7817499  | 0.25  | 0.104 | 2.81E-35 | Bcell_3_spleen |
| DPP7               | 9.29E-40 | 0.51808127 | 0.3   | 0.136 | 3.29E-35 | Bcell_3_spleen |
| ALCAM              | 9.83E-40 | 0.51135268 | 0.358 | 0.184 | 3.48E-35 | Bcell_3_spleen |
| ZNF331             | 1.15E-39 | 0.49733152 | 0.332 | 0.165 | 4.08E-35 | Bcell_3_spleen |
| FCMR               | 1.69E-39 | 0.56924598 | 0.688 | 0.501 | 5.97E-35 | Bcell_3_spleen |
| ITM2B              | 2.07E-39 | 0.40861871 | 0.702 | 0.485 | 7.35E-35 | Bcell_3_spleen |
| ABLIM1             | 2.08E-39 | 0.45539797 | 0.864 | 0.739 | 7.36E-35 | Bcell_3_spleen |
| SERPINB9           | 2.37E-39 | 0.81504092 | 0.286 | 0.131 | 8.40E-35 | Bcell_3_spleen |
| VCP                | 3.06E-39 | 0.34330214 | 0.369 | 0.182 | 1.08E-34 | Bcell_3_spleen |
| SF3B3              | 3.11E-39 | 0.53026101 | 0.361 | 0.181 | 1.10E-34 | Bcell_3_spleen |
| STIM1              | 3.39E-39 | 0.5677593  | 0.421 | 0.234 | 1.20E-34 | Bcell_3_spleen |
| BCL7A              | 3.51E-39 | 0.52948844 | 0.424 | 0.227 | 1.24E-34 | Bcell_3_spleen |
| FOSB               | 3.88E-39 | 0.44991807 | 0.729 | 0.521 | 1.37E-34 | Bcell_3_spleen |
| FBXO31.1           | 4.09E-39 | 0.65817967 | 0.27  | 0.117 | 1.45E-34 | Bcell_3_spleen |
| RABEP2             | 4.41E-39 | 0.50129353 | 0.336 | 0.163 | 1.56E-34 | Bcell_3_spleen |
| SIPA1L1            | 5.27E-39 | 0.5275357  | 0.384 | 0.204 | 1.87E-34 | Bcell_3_spleen |
| ATP6V0E1           | 5.71E-39 | 0.45361839 | 0.463 | 0.258 | 2.02E-34 | Bcell_3_spleen |
| TBC1D10B           | 6.20E-39 | 0.67163043 | 0.273 | 0.12  | 2.20E-34 | Bcell_3_spleen |
| UBL3               | 6.41E-39 | 0.48886952 | 0.408 | 0.221 | 2.27E-34 | Bcell_3_spleen |

|                   |          |             |       |       |          |                |
|-------------------|----------|-------------|-------|-------|----------|----------------|
| GLCC11            | 7.17E-39 | 0.63867146  | 0.427 | 0.244 | 2.54E-34 | Bcell_3_spleen |
| IL2RG             | 7.43E-39 | 0.48010859  | 0.436 | 0.237 | 2.63E-34 | Bcell_3_spleen |
| ARF6              | 8.83E-39 | 0.58202541  | 0.329 | 0.159 | 3.13E-34 | Bcell_3_spleen |
| MFHAS1            | 1.01E-38 | 0.66374437  | 0.356 | 0.185 | 3.59E-34 | Bcell_3_spleen |
| LARP1             | 1.10E-38 | 0.621111232 | 0.303 | 0.141 | 3.91E-34 | Bcell_3_spleen |
| UBAP2             | 1.21E-38 | 0.45462549  | 0.368 | 0.189 | 4.27E-34 | Bcell_3_spleen |
| SEM1              | 1.21E-38 | 0.5392759   | 0.426 | 0.233 | 4.29E-34 | Bcell_3_spleen |
| SORL1             | 1.31E-38 | 0.61075351  | 0.495 | 0.305 | 4.64E-34 | Bcell_3_spleen |
| ATXN2             | 1.50E-38 | 0.49329918  | 0.55  | 0.337 | 5.30E-34 | Bcell_3_spleen |
| ENSMUG00000065362 | 1.58E-38 | 0.50918647  | 0.999 | 1     | 5.61E-34 | Bcell_3_spleen |
| ROCK2             | 1.67E-38 | 0.74474648  | 0.258 | 0.112 | 5.92E-34 | Bcell_3_spleen |
| TAOK1             | 1.79E-38 | 0.49845018  | 0.582 | 0.367 | 6.33E-34 | Bcell_3_spleen |
| GNB1              | 2.16E-38 | 0.42073486  | 0.651 | 0.422 | 7.64E-34 | Bcell_3_spleen |
| KDM4B             | 2.92E-38 | 0.44921753  | 0.485 | 0.274 | 1.03E-33 | Bcell_3_spleen |
| PLEKHO1           | 3.10E-38 | 0.6007729   | 0.332 | 0.162 | 1.10E-33 | Bcell_3_spleen |
| ATG4C             | 3.54E-38 | 0.82130456  | 0.276 | 0.126 | 1.25E-33 | Bcell_3_spleen |
| NFATC3            | 3.89E-38 | 0.43108551  | 0.597 | 0.377 | 1.38E-33 | Bcell_3_spleen |
| KDM6B             | 3.98E-38 | 0.56494569  | 0.27  | 0.12  | 1.41E-33 | Bcell_3_spleen |
| SMARCA2           | 4.03E-38 | 0.42891925  | 0.55  | 0.332 | 1.43E-33 | Bcell_3_spleen |
| ANP32B            | 4.60E-38 | 0.46689301  | 0.58  | 0.37  | 1.63E-33 | Bcell_3_spleen |
| HIF1A             | 5.58E-38 | 0.49558054  | 0.458 | 0.263 | 1.98E-33 | Bcell_3_spleen |
| ADARB2            | 5.88E-38 | 0.54784087  | 0.329 | 0.158 | 2.08E-33 | Bcell_3_spleen |
| RCSD1             | 6.35E-38 | 0.40988872  | 0.772 | 0.567 | 2.25E-33 | Bcell_3_spleen |
| USP48             | 6.36E-38 | 0.49220081  | 0.398 | 0.216 | 2.25E-33 | Bcell_3_spleen |
| GIGYF2            | 6.38E-38 | 0.48784525  | 0.5   | 0.295 | 2.26E-33 | Bcell_3_spleen |
| RGS1              | 1.11E-37 | 0.72427537  | 0.444 | 0.265 | 3.95E-33 | Bcell_3_spleen |
| GALNT2            | 1.18E-37 | 0.3923615   | 0.482 | 0.278 | 4.19E-33 | Bcell_3_spleen |
| PVRIG             | 1.19E-37 | 0.5786778   | 0.276 | 0.123 | 4.23E-33 | Bcell_3_spleen |
| SLC35E2           | 1.34E-37 | 0.54150794  | 0.283 | 0.128 | 4.76E-33 | Bcell_3_spleen |
| AKAP10            | 1.37E-37 | 0.54643947  | 0.338 | 0.17  | 4.86E-33 | Bcell_3_spleen |
| POLR2A            | 1.74E-37 | 0.49166877  | 0.416 | 0.226 | 6.16E-33 | Bcell_3_spleen |
| SCPEP1            | 1.98E-37 | 0.54314233  | 0.471 | 0.272 | 7.02E-33 | Bcell_3_spleen |
| PFDN5             | 2.32E-37 | 0.44617422  | 0.367 | 0.185 | 8.20E-33 | Bcell_3_spleen |

|                    |          |            |       |       |          |                |
|--------------------|----------|------------|-------|-------|----------|----------------|
| MBD5               | 2.34E-37 | 0.49364197 | 0.641 | 0.431 | 8.29E-33 | Bcell_3_spleen |
| RAC2               | 2.54E-37 | 0.52238156 | 0.432 | 0.243 | 9.02E-33 | Bcell_3_spleen |
| TSPAN33            | 3.17E-37 | 0.72389546 | 0.324 | 0.163 | 1.12E-32 | Bcell_3_spleen |
| DAD1               | 3.64E-37 | 0.55046915 | 0.355 | 0.18  | 1.29E-32 | Bcell_3_spleen |
| KIF2A              | 3.81E-37 | 0.52102059 | 0.388 | 0.209 | 1.35E-32 | Bcell_3_spleen |
| PHF14              | 4.17E-37 | 0.4578585  | 0.598 | 0.387 | 1.48E-32 | Bcell_3_spleen |
| ETV6               | 8.54E-37 | 0.54884661 | 0.406 | 0.224 | 3.03E-32 | Bcell_3_spleen |
| ENSMMUG00000052424 | 1.20E-36 | 0.40393317 | 0.909 | 0.78  | 4.25E-32 | Bcell_3_spleen |
| LRIF1              | 1.26E-36 | 0.40159377 | 0.552 | 0.335 | 4.48E-32 | Bcell_3_spleen |
| SND1               | 1.79E-36 | 0.42319153 | 0.577 | 0.359 | 6.34E-32 | Bcell_3_spleen |
| BANP               | 1.87E-36 | 0.68918329 | 0.296 | 0.142 | 6.64E-32 | Bcell_3_spleen |
| EAF2               | 1.88E-36 | 0.59757296 | 0.602 | 0.408 | 6.66E-32 | Bcell_3_spleen |
| SLC39A10           | 2.00E-36 | 0.61966494 | 0.314 | 0.155 | 7.07E-32 | Bcell_3_spleen |
| SLAMF6             | 2.62E-36 | 0.73054189 | 0.258 | 0.115 | 9.28E-32 | Bcell_3_spleen |
| SKAP2              | 3.60E-36 | 0.36243965 | 0.676 | 0.461 | 1.28E-31 | Bcell_3_spleen |
| GBF1               | 3.62E-36 | 0.57302177 | 0.364 | 0.193 | 1.28E-31 | Bcell_3_spleen |
| EEA1               | 4.09E-36 | 0.57461977 | 0.393 | 0.216 | 1.45E-31 | Bcell_3_spleen |
| ASXL2              | 4.37E-36 | 0.38170546 | 0.508 | 0.302 | 1.55E-31 | Bcell_3_spleen |
| SPATA5             | 4.96E-36 | 0.53047222 | 0.464 | 0.275 | 1.76E-31 | Bcell_3_spleen |
| ARHGAP35           | 5.27E-36 | 0.69689337 | 0.277 | 0.131 | 1.87E-31 | Bcell_3_spleen |
| PDE4B              | 6.12E-36 | 0.50527478 | 0.487 | 0.299 | 2.17E-31 | Bcell_3_spleen |
| TCP1               | 6.74E-36 | 0.57406628 | 0.332 | 0.167 | 2.39E-31 | Bcell_3_spleen |
| TMEM87B            | 7.10E-36 | 0.4772139  | 0.392 | 0.212 | 2.52E-31 | Bcell_3_spleen |
| SLC15A4            | 7.57E-36 | 0.52623867 | 0.36  | 0.19  | 2.68E-31 | Bcell_3_spleen |
| ND3                | 7.97E-36 | 0.4799307  | 0.871 | 0.751 | 2.82E-31 | Bcell_3_spleen |
| DPH6               | 8.31E-36 | 0.37739771 | 0.427 | 0.239 | 2.94E-31 | Bcell_3_spleen |
| BMT2               | 1.48E-35 | 1.43862525 | 0.282 | 0.141 | 5.23E-31 | Bcell_3_spleen |
| NLK                | 1.62E-35 | 0.70552188 | 0.282 | 0.136 | 5.75E-31 | Bcell_3_spleen |
| MAPKAP1            | 2.10E-35 | 0.46292598 | 0.513 | 0.312 | 7.43E-31 | Bcell_3_spleen |
| CD72               | 2.13E-35 | 0.45553481 | 0.536 | 0.325 | 7.56E-31 | Bcell_3_spleen |
| SETX               | 2.46E-35 | 0.43752771 | 0.577 | 0.365 | 8.72E-31 | Bcell_3_spleen |
| DENND6A            | 2.72E-35 | 0.42106269 | 0.48  | 0.284 | 9.63E-31 | Bcell_3_spleen |
| NARS2              | 2.75E-35 | 0.53795079 | 0.312 | 0.157 | 9.73E-31 | Bcell_3_spleen |

|                   |          |            |       |       |          |                |
|-------------------|----------|------------|-------|-------|----------|----------------|
| LPXN              | 3.07E-35 | 0.52798881 | 0.433 | 0.248 | 1.09E-30 | Bcell_3_spleen |
| PAOX              | 3.31E-35 | 0.51192876 | 0.327 | 0.162 | 1.17E-30 | Bcell_3_spleen |
| FBXW11            | 3.88E-35 | 0.42937952 | 0.699 | 0.488 | 1.37E-30 | Bcell_3_spleen |
| TRAPPC8           | 4.04E-35 | 0.46182454 | 0.394 | 0.214 | 1.43E-30 | Bcell_3_spleen |
| ASPH              | 4.12E-35 | 0.54510734 | 0.338 | 0.175 | 1.46E-30 | Bcell_3_spleen |
| PCMT1             | 5.80E-35 | 0.58371997 | 0.296 | 0.142 | 2.05E-30 | Bcell_3_spleen |
| SETBP1            | 5.90E-35 | 0.44771813 | 0.58  | 0.383 | 2.09E-30 | Bcell_3_spleen |
| RUNX1             | 6.06E-35 | 0.38636009 | 0.75  | 0.551 | 2.15E-30 | Bcell_3_spleen |
| ERI3              | 7.19E-35 | 0.67138893 | 0.254 | 0.114 | 2.55E-30 | Bcell_3_spleen |
| USP22             | 8.41E-35 | 0.6504991  | 0.27  | 0.127 | 2.98E-30 | Bcell_3_spleen |
| CDK8              | 1.07E-34 | 0.51349107 | 0.297 | 0.143 | 3.80E-30 | Bcell_3_spleen |
| DARS1             | 1.18E-34 | 0.41705088 | 0.446 | 0.253 | 4.17E-30 | Bcell_3_spleen |
| MACF1             | 1.22E-34 | 0.39046625 | 0.758 | 0.561 | 4.32E-30 | Bcell_3_spleen |
| CYTB              | 1.31E-34 | 0.23644666 | 0.26  | 0.117 | 4.62E-30 | Bcell_3_spleen |
| SNX1              | 1.43E-34 | 0.45074713 | 0.315 | 0.155 | 5.06E-30 | Bcell_3_spleen |
| SH3GL1            | 1.77E-34 | 0.57775864 | 0.289 | 0.139 | 6.29E-30 | Bcell_3_spleen |
| CCNY              | 3.51E-34 | 0.49947998 | 0.469 | 0.281 | 1.25E-29 | Bcell_3_spleen |
| CTCF              | 3.89E-34 | 0.40315418 | 0.52  | 0.317 | 1.38E-29 | Bcell_3_spleen |
| TFCP2             | 3.89E-34 | 0.44554742 | 0.303 | 0.15  | 1.38E-29 | Bcell_3_spleen |
| PDE7A             | 4.56E-34 | 0.39874239 | 0.63  | 0.422 | 1.61E-29 | Bcell_3_spleen |
| ENSMUG00000016898 | 5.09E-34 | 0.52375293 | 0.35  | 0.184 | 1.80E-29 | Bcell_3_spleen |
| VGLL4             | 5.50E-34 | 0.46446202 | 0.396 | 0.219 | 1.95E-29 | Bcell_3_spleen |
| ARMH3             | 5.80E-34 | 0.36405352 | 0.459 | 0.268 | 2.05E-29 | Bcell_3_spleen |
| ASAP1             | 5.91E-34 | 0.45798013 | 0.534 | 0.337 | 2.09E-29 | Bcell_3_spleen |
| MTO1              | 6.24E-34 | 0.78885043 | 0.301 | 0.151 | 2.21E-29 | Bcell_3_spleen |
| GPR183            | 8.06E-34 | 0.43786437 | 0.719 | 0.55  | 2.86E-29 | Bcell_3_spleen |
| IFNAR1            | 8.39E-34 | 0.38106981 | 0.365 | 0.192 | 2.97E-29 | Bcell_3_spleen |
| AHCYL2            | 1.04E-33 | 0.50796185 | 0.437 | 0.259 | 3.68E-29 | Bcell_3_spleen |
| EIF4A1            | 1.20E-33 | 0.38129095 | 0.419 | 0.235 | 4.25E-29 | Bcell_3_spleen |
| ZCCHC7            | 1.37E-33 | 0.35521252 | 0.884 | 0.739 | 4.84E-29 | Bcell_3_spleen |
| BICRAL            | 1.40E-33 | 0.59045701 | 0.307 | 0.153 | 4.95E-29 | Bcell_3_spleen |
| SMURF2            | 1.47E-33 | 0.51536818 | 0.325 | 0.17  | 5.19E-29 | Bcell_3_spleen |
| HSPA9             | 1.50E-33 | 0.41934814 | 0.57  | 0.358 | 5.30E-29 | Bcell_3_spleen |

|                   |          |            |       |       |          |                |
|-------------------|----------|------------|-------|-------|----------|----------------|
| IMMP2L            | 2.58E-33 | 0.47829702 | 0.805 | 0.635 | 9.16E-29 | Bcell_3_spleen |
| ENSMUG00000030317 | 2.84E-33 | 0.63039803 | 0.292 | 0.144 | 1.01E-28 | Bcell_3_spleen |
| ST3GAL3           | 3.16E-33 | 0.540972   | 0.338 | 0.179 | 1.12E-28 | Bcell_3_spleen |
| MAP3K4            | 3.47E-33 | 0.51031945 | 0.327 | 0.169 | 1.23E-28 | Bcell_3_spleen |
| ALG13             | 3.82E-33 | 0.51936464 | 0.291 | 0.143 | 1.35E-28 | Bcell_3_spleen |
| TTC37             | 3.94E-33 | 0.47302476 | 0.325 | 0.167 | 1.40E-28 | Bcell_3_spleen |
| NUP210            | 4.18E-33 | 0.42897403 | 0.374 | 0.202 | 1.48E-28 | Bcell_3_spleen |
| IQSEC1            | 4.38E-33 | 0.45739675 | 0.689 | 0.481 | 1.55E-28 | Bcell_3_spleen |
| FLI1              | 5.05E-33 | 0.37572329 | 0.632 | 0.425 | 1.79E-28 | Bcell_3_spleen |
| REEP3             | 5.08E-33 | 0.60769131 | 0.335 | 0.18  | 1.80E-28 | Bcell_3_spleen |
| CEP170            | 5.58E-33 | 0.39677104 | 0.681 | 0.485 | 1.98E-28 | Bcell_3_spleen |
| NDUFB5            | 7.61E-33 | 0.61869334 | 0.26  | 0.12  | 2.69E-28 | Bcell_3_spleen |
| XRCC4             | 8.53E-33 | 0.40994201 | 0.449 | 0.263 | 3.02E-28 | Bcell_3_spleen |
| MARK3             | 9.49E-33 | 0.3925268  | 0.548 | 0.345 | 3.36E-28 | Bcell_3_spleen |
| UBE2E2            | 1.08E-32 | 0.46310897 | 0.746 | 0.575 | 3.83E-28 | Bcell_3_spleen |
| HNRNPH1           | 1.08E-32 | 0.31405811 | 0.729 | 0.513 | 3.84E-28 | Bcell_3_spleen |
| CLK1              | 1.11E-32 | 0.3854197  | 0.674 | 0.459 | 3.93E-28 | Bcell_3_spleen |
| RBM6              | 1.13E-32 | 0.37797586 | 0.525 | 0.323 | 4.01E-28 | Bcell_3_spleen |
| GDI2              | 1.44E-32 | 0.35600511 | 0.676 | 0.458 | 5.10E-28 | Bcell_3_spleen |
| CUL4A             | 1.66E-32 | 0.41487255 | 0.404 | 0.227 | 5.89E-28 | Bcell_3_spleen |
| WNK1              | 1.75E-32 | 0.39498026 | 0.653 | 0.452 | 6.20E-28 | Bcell_3_spleen |
| TMPO              | 1.89E-32 | 0.44865013 | 0.303 | 0.15  | 6.68E-28 | Bcell_3_spleen |
| FCHSD2            | 2.50E-32 | 0.34750239 | 0.951 | 0.881 | 8.87E-28 | Bcell_3_spleen |
| PDCD6-AHRR        | 3.27E-32 | 0.49743913 | 0.254 | 0.116 | 1.16E-27 | Bcell_3_spleen |
| YWHAG             | 3.35E-32 | 0.53620305 | 0.304 | 0.153 | 1.19E-27 | Bcell_3_spleen |
| EEF1A1            | 3.84E-32 | 0.41241594 | 0.814 | 0.793 | 1.36E-27 | Bcell_3_spleen |
| OTULIN            | 5.52E-32 | 0.49494635 | 0.299 | 0.151 | 1.95E-27 | Bcell_3_spleen |
| FAM53C            | 6.00E-32 | 0.52905037 | 0.276 | 0.135 | 2.13E-27 | Bcell_3_spleen |
| COX1              | 6.41E-32 | 0.3530955  | 0.951 | 0.968 | 2.27E-27 | Bcell_3_spleen |
| FBXW4             | 6.69E-32 | 0.39380028 | 0.483 | 0.291 | 2.37E-27 | Bcell_3_spleen |
| NT5C3A            | 8.43E-32 | 0.45649891 | 0.414 | 0.239 | 2.99E-27 | Bcell_3_spleen |
| BTK               | 9.43E-32 | 0.35744757 | 0.431 | 0.243 | 3.34E-27 | Bcell_3_spleen |
| RASGRP3           | 9.72E-32 | 0.57506444 | 0.401 | 0.235 | 3.44E-27 | Bcell_3_spleen |

|                    |          |            |       |       |          |                |
|--------------------|----------|------------|-------|-------|----------|----------------|
| TMCO1              | 9.97E-32 | 0.45542983 | 0.299 | 0.149 | 3.53E-27 | Bcell_3_spleen |
| MED13L             | 1.17E-31 | 0.38495472 | 0.934 | 0.825 | 4.13E-27 | Bcell_3_spleen |
| MTX2               | 1.24E-31 | 0.54349347 | 0.251 | 0.118 | 4.39E-27 | Bcell_3_spleen |
| PHF20L1            | 1.27E-31 | 0.37511623 | 0.331 | 0.172 | 4.50E-27 | Bcell_3_spleen |
| EIPR1              | 1.41E-31 | 0.39381071 | 0.404 | 0.226 | 5.01E-27 | Bcell_3_spleen |
| SIK2               | 1.42E-31 | 0.45252265 | 0.365 | 0.204 | 5.02E-27 | Bcell_3_spleen |
| NCOR2              | 1.68E-31 | 0.51873497 | 0.254 | 0.12  | 5.96E-27 | Bcell_3_spleen |
| FAM3C              | 1.71E-31 | 0.55319352 | 0.347 | 0.19  | 6.06E-27 | Bcell_3_spleen |
| ARHGAP15           | 2.90E-31 | 0.29843472 | 0.979 | 0.952 | 1.03E-26 | Bcell_3_spleen |
| PAPSS1             | 3.11E-31 | 0.39559186 | 0.447 | 0.265 | 1.10E-26 | Bcell_3_spleen |
| SMYD3              | 3.66E-31 | 0.49890418 | 0.628 | 0.451 | 1.30E-26 | Bcell_3_spleen |
| UNC119             | 4.26E-31 | 0.5259281  | 0.3   | 0.152 | 1.51E-26 | Bcell_3_spleen |
| CHM                | 4.32E-31 | 0.41983837 | 0.313 | 0.163 | 1.53E-26 | Bcell_3_spleen |
| CAMKMT             | 4.37E-31 | 0.43201823 | 0.497 | 0.321 | 1.55E-26 | Bcell_3_spleen |
| EVL                | 4.74E-31 | 0.32646861 | 0.449 | 0.259 | 1.68E-26 | Bcell_3_spleen |
| LSM4               | 5.16E-31 | 0.50325024 | 0.25  | 0.116 | 1.83E-26 | Bcell_3_spleen |
| APBB2              | 5.59E-31 | 0.65895505 | 0.371 | 0.219 | 1.98E-26 | Bcell_3_spleen |
| HPS3               | 6.98E-31 | 0.42295371 | 0.436 | 0.256 | 2.47E-26 | Bcell_3_spleen |
| PPP3CB             | 7.71E-31 | 0.56955199 | 0.278 | 0.138 | 2.73E-26 | Bcell_3_spleen |
| AKIRIN1            | 8.91E-31 | 0.4176133  | 0.349 | 0.185 | 3.16E-26 | Bcell_3_spleen |
| HDLBP              | 1.10E-30 | 0.59824691 | 0.267 | 0.131 | 3.89E-26 | Bcell_3_spleen |
| NCOA7              | 1.12E-30 | 0.38930822 | 0.412 | 0.237 | 3.98E-26 | Bcell_3_spleen |
| IKBKB              | 1.34E-30 | 0.3328251  | 0.372 | 0.206 | 4.76E-26 | Bcell_3_spleen |
| TOB2               | 1.48E-30 | 0.50258965 | 0.276 | 0.137 | 5.25E-26 | Bcell_3_spleen |
| GTPBP1             | 1.66E-30 | 0.39843956 | 0.347 | 0.188 | 5.89E-26 | Bcell_3_spleen |
| CRLF3              | 1.96E-30 | 0.43669963 | 0.316 | 0.165 | 6.95E-26 | Bcell_3_spleen |
| KIF16B             | 2.04E-30 | 0.52788794 | 0.33  | 0.18  | 7.24E-26 | Bcell_3_spleen |
| ENSMMUG00000016894 | 2.05E-30 | 0.44629343 | 0.512 | 0.332 | 7.25E-26 | Bcell_3_spleen |
| HLCS               | 2.80E-30 | 0.67549127 | 0.257 | 0.128 | 9.92E-26 | Bcell_3_spleen |
| ENSMMUG00000049951 | 3.06E-30 | 0.72367475 | 0.256 | 0.126 | 1.08E-25 | Bcell_3_spleen |
| SERTAD2            | 3.43E-30 | 0.4069533  | 0.465 | 0.284 | 1.21E-25 | Bcell_3_spleen |
| RSU1               | 3.47E-30 | 0.54373578 | 0.343 | 0.192 | 1.23E-25 | Bcell_3_spleen |
| PXK                | 3.64E-30 | 0.37022716 | 0.715 | 0.522 | 1.29E-25 | Bcell_3_spleen |

|          |          |            |       |       |          |                |
|----------|----------|------------|-------|-------|----------|----------------|
| FKBP15   | 4.87E-30 | 0.43907551 | 0.375 | 0.211 | 1.72E-25 | Bcell_3_spleen |
| ARHGEF2  | 5.27E-30 | 0.3754904  | 0.341 | 0.182 | 1.87E-25 | Bcell_3_spleen |
| PCMTD2   | 5.99E-30 | 0.57939154 | 0.254 | 0.123 | 2.12E-25 | Bcell_3_spleen |
| SNRNP70  | 6.28E-30 | 0.32538428 | 0.502 | 0.301 | 2.23E-25 | Bcell_3_spleen |
| NR4A1    | 6.39E-30 | 0.52122171 | 0.367 | 0.207 | 2.27E-25 | Bcell_3_spleen |
| TBL1X    | 7.04E-30 | 0.40438288 | 0.558 | 0.366 | 2.49E-25 | Bcell_3_spleen |
| ETV5     | 7.37E-30 | 0.48802178 | 0.271 | 0.135 | 2.61E-25 | Bcell_3_spleen |
| CSNK1G1  | 8.44E-30 | 0.35729211 | 0.534 | 0.341 | 2.99E-25 | Bcell_3_spleen |
| RCOR1    | 9.51E-30 | 0.34986356 | 0.482 | 0.297 | 3.37E-25 | Bcell_3_spleen |
| CD1C     | 9.56E-30 | 0.47020709 | 0.626 | 0.453 | 3.39E-25 | Bcell_3_spleen |
| TTC27    | 1.03E-29 | 0.44124479 | 0.347 | 0.194 | 3.64E-25 | Bcell_3_spleen |
| SRBD1    | 1.28E-29 | 0.43152836 | 0.307 | 0.162 | 4.52E-25 | Bcell_3_spleen |
| NRDC     | 1.38E-29 | 0.41897155 | 0.395 | 0.223 | 4.88E-25 | Bcell_3_spleen |
| UBE2R2   | 1.48E-29 | 0.42003853 | 0.477 | 0.297 | 5.25E-25 | Bcell_3_spleen |
| SEL1L3   | 1.55E-29 | 0.33222932 | 0.775 | 0.592 | 5.50E-25 | Bcell_3_spleen |
| VMP1     | 1.56E-29 | 0.32320965 | 0.399 | 0.23  | 5.54E-25 | Bcell_3_spleen |
| PARG     | 1.86E-29 | 0.47844688 | 0.3   | 0.159 | 6.57E-25 | Bcell_3_spleen |
| STX16    | 1.92E-29 | 0.42250996 | 0.336 | 0.183 | 6.81E-25 | Bcell_3_spleen |
| EPS15L1  | 2.24E-29 | 0.3910997  | 0.395 | 0.224 | 7.93E-25 | Bcell_3_spleen |
| WDR82    | 2.88E-29 | 0.52754736 | 0.273 | 0.138 | 1.02E-24 | Bcell_3_spleen |
| THADA    | 3.46E-29 | 0.411545   | 0.664 | 0.465 | 1.23E-24 | Bcell_3_spleen |
| PTEN     | 3.86E-29 | 0.35435585 | 0.796 | 0.619 | 1.37E-24 | Bcell_3_spleen |
| PPM1B    | 4.15E-29 | 0.33480113 | 0.5   | 0.312 | 1.47E-24 | Bcell_3_spleen |
| CYB561A3 | 4.17E-29 | 0.30334917 | 0.625 | 0.42  | 1.48E-24 | Bcell_3_spleen |
| GAK      | 4.17E-29 | 0.40018866 | 0.279 | 0.141 | 1.48E-24 | Bcell_3_spleen |
| PER1     | 4.27E-29 | 0.41774827 | 0.514 | 0.323 | 1.51E-24 | Bcell_3_spleen |
| HHEX     | 5.33E-29 | 0.38840127 | 0.323 | 0.17  | 1.89E-24 | Bcell_3_spleen |
| CYFIP2   | 5.65E-29 | 0.30129824 | 0.767 | 0.579 | 2.00E-24 | Bcell_3_spleen |
| SLX4IP   | 5.95E-29 | 0.55422603 | 0.265 | 0.134 | 2.11E-24 | Bcell_3_spleen |
| SPEN     | 7.58E-29 | 0.33753419 | 0.522 | 0.33  | 2.68E-24 | Bcell_3_spleen |
| RNF149   | 9.68E-29 | 0.40597335 | 0.3   | 0.158 | 3.43E-24 | Bcell_3_spleen |
| ERGIC1   | 1.08E-28 | 0.30078508 | 0.59  | 0.386 | 3.83E-24 | Bcell_3_spleen |
| CAPRIN1  | 1.39E-28 | 0.35783678 | 0.401 | 0.232 | 4.92E-24 | Bcell_3_spleen |

|                   |          |            |       |       |          |                |
|-------------------|----------|------------|-------|-------|----------|----------------|
| ERGIC2            | 1.46E-28 | 0.35118455 | 0.378 | 0.216 | 5.18E-24 | Bcell_3_spleen |
| EIF4G3            | 1.68E-28 | 0.30148623 | 0.81  | 0.63  | 5.96E-24 | Bcell_3_spleen |
| SPTAN1            | 1.83E-28 | 0.45597269 | 0.386 | 0.222 | 6.47E-24 | Bcell_3_spleen |
| FBXW8             | 1.90E-28 | 0.4866989  | 0.279 | 0.142 | 6.75E-24 | Bcell_3_spleen |
| OTUD4             | 1.93E-28 | 0.62603002 | 0.282 | 0.146 | 6.82E-24 | Bcell_3_spleen |
| EIF4A3            | 2.05E-28 | 0.35759831 | 0.383 | 0.216 | 7.25E-24 | Bcell_3_spleen |
| COMMD10           | 2.05E-28 | 0.35674299 | 0.622 | 0.435 | 7.28E-24 | Bcell_3_spleen |
| MAPK14            | 2.18E-28 | 0.42693313 | 0.325 | 0.181 | 7.73E-24 | Bcell_3_spleen |
| TANGO6            | 2.35E-28 | 0.35090804 | 0.403 | 0.236 | 8.32E-24 | Bcell_3_spleen |
| XPO6              | 2.95E-28 | 0.24878484 | 0.588 | 0.377 | 1.05E-23 | Bcell_3_spleen |
| CAP1              | 2.98E-28 | 0.3618932  | 0.486 | 0.305 | 1.05E-23 | Bcell_3_spleen |
| BABAM2            | 3.02E-28 | 0.28528599 | 0.619 | 0.418 | 1.07E-23 | Bcell_3_spleen |
| ETFA              | 3.41E-28 | 0.42730684 | 0.283 | 0.145 | 1.21E-23 | Bcell_3_spleen |
| ARL6IP5           | 3.92E-28 | 0.38219709 | 0.337 | 0.184 | 1.39E-23 | Bcell_3_spleen |
| CWC27             | 3.92E-28 | 0.41140931 | 0.389 | 0.234 | 1.39E-23 | Bcell_3_spleen |
| ZMYM2             | 6.04E-28 | 0.35878587 | 0.637 | 0.436 | 2.14E-23 | Bcell_3_spleen |
| CBX3              | 6.78E-28 | 0.28565693 | 0.408 | 0.237 | 2.40E-23 | Bcell_3_spleen |
| VPS35L            | 7.42E-28 | 0.44093188 | 0.282 | 0.147 | 2.63E-23 | Bcell_3_spleen |
| EHMT1             | 8.00E-28 | 0.31065434 | 0.486 | 0.304 | 2.83E-23 | Bcell_3_spleen |
| FCRLA             | 8.29E-28 | 0.34892885 | 0.469 | 0.288 | 2.94E-23 | Bcell_3_spleen |
| HELQ              | 9.03E-28 | 0.35279206 | 0.283 | 0.146 | 3.20E-23 | Bcell_3_spleen |
| PTPN9             | 9.18E-28 | 0.43617935 | 0.32  | 0.179 | 3.25E-23 | Bcell_3_spleen |
| ND6               | 1.22E-27 | 0.56124689 | 0.296 | 0.156 | 4.31E-23 | Bcell_3_spleen |
| LRRK2             | 1.25E-27 | 0.42413112 | 0.555 | 0.371 | 4.42E-23 | Bcell_3_spleen |
| ENSMUG00000004545 | 1.35E-27 | 0.40533107 | 0.611 | 0.471 | 4.80E-23 | Bcell_3_spleen |
| GNL3              | 1.48E-27 | 0.41997472 | 0.268 | 0.136 | 5.24E-23 | Bcell_3_spleen |
| PACS1             | 1.75E-27 | 0.38404071 | 0.591 | 0.405 | 6.21E-23 | Bcell_3_spleen |
| SMAD3             | 1.95E-27 | 0.35272176 | 0.532 | 0.343 | 6.90E-23 | Bcell_3_spleen |
| SRGN              | 1.97E-27 | 0.51599905 | 0.32  | 0.18  | 6.97E-23 | Bcell_3_spleen |
| ZNF609            | 2.00E-27 | 0.44425532 | 0.33  | 0.187 | 7.07E-23 | Bcell_3_spleen |
| ND5               | 2.37E-27 | 0.45296002 | 0.303 | 0.163 | 8.41E-23 | Bcell_3_spleen |
| DENR              | 3.18E-27 | 0.34797662 | 0.391 | 0.227 | 1.13E-22 | Bcell_3_spleen |
| MIDEAS            | 3.37E-27 | 0.44123061 | 0.287 | 0.15  | 1.19E-22 | Bcell_3_spleen |



|                   |          |            |       |       |          |                |
|-------------------|----------|------------|-------|-------|----------|----------------|
| SUPT20H           | 3.41E-27 | 0.35464625 | 0.334 | 0.183 | 1.21E-22 | Bcell_3_spleen |
| UBR2              | 3.58E-27 | 0.29852155 | 0.43  | 0.258 | 1.27E-22 | Bcell_3_spleen |
| SPTLC2            | 3.95E-27 | 0.3964555  | 0.344 | 0.194 | 1.40E-22 | Bcell_3_spleen |
| YY1               | 4.69E-27 | 0.30213022 | 0.38  | 0.218 | 1.66E-22 | Bcell_3_spleen |
| MICU1             | 5.12E-27 | 0.31702802 | 0.359 | 0.206 | 1.81E-22 | Bcell_3_spleen |
| SMARCC1           | 5.13E-27 | 0.31532012 | 0.681 | 0.476 | 1.82E-22 | Bcell_3_spleen |
| SSH2              | 5.49E-27 | 0.33632518 | 0.832 | 0.691 | 1.95E-22 | Bcell_3_spleen |
| TASP1             | 5.80E-27 | 0.41562227 | 0.521 | 0.34  | 2.05E-22 | Bcell_3_spleen |
| CPNE1             | 7.57E-27 | 0.34698424 | 0.484 | 0.302 | 2.68E-22 | Bcell_3_spleen |
| RB1               | 8.48E-27 | 0.3107767  | 0.374 | 0.213 | 3.00E-22 | Bcell_3_spleen |
| GPHN              | 8.57E-27 | 0.32864325 | 0.566 | 0.384 | 3.04E-22 | Bcell_3_spleen |
| NSD1              | 1.07E-26 | 0.2974006  | 0.628 | 0.426 | 3.78E-22 | Bcell_3_spleen |
| RNF144A           | 1.16E-26 | 0.36776586 | 0.319 | 0.176 | 4.11E-22 | Bcell_3_spleen |
| SDCCAG8           | 1.43E-26 | 0.36227231 | 0.541 | 0.356 | 5.05E-22 | Bcell_3_spleen |
| ARID5B            | 1.68E-26 | 0.44968553 | 0.685 | 0.521 | 5.94E-22 | Bcell_3_spleen |
| IFRD1             | 2.09E-26 | 0.3268803  | 0.698 | 0.523 | 7.41E-22 | Bcell_3_spleen |
| MYCBP2            | 2.51E-26 | 0.28910099 | 0.853 | 0.702 | 8.91E-22 | Bcell_3_spleen |
| IPO11             | 4.12E-26 | 0.38829185 | 0.337 | 0.192 | 1.46E-21 | Bcell_3_spleen |
| PIK3CG            | 4.30E-26 | 0.38176843 | 0.292 | 0.16  | 1.52E-21 | Bcell_3_spleen |
| RSBN1L            | 4.64E-26 | 0.33395621 | 0.391 | 0.23  | 1.64E-21 | Bcell_3_spleen |
| SESN1             | 4.97E-26 | 0.34525427 | 0.405 | 0.246 | 1.76E-21 | Bcell_3_spleen |
| VPS4A             | 6.00E-26 | 0.34766897 | 0.276 | 0.146 | 2.13E-21 | Bcell_3_spleen |
| PGK1              | 6.84E-26 | 0.37637076 | 0.374 | 0.218 | 2.42E-21 | Bcell_3_spleen |
| SLC4A7            | 7.18E-26 | 0.38477331 | 0.532 | 0.356 | 2.54E-21 | Bcell_3_spleen |
| ARGLU1            | 7.86E-26 | 0.28904741 | 0.804 | 0.617 | 2.78E-21 | Bcell_3_spleen |
| ANAPC1            | 8.17E-26 | 0.37175183 | 0.255 | 0.13  | 2.89E-21 | Bcell_3_spleen |
| EFL1              | 8.72E-26 | 0.35557842 | 0.436 | 0.275 | 3.09E-21 | Bcell_3_spleen |
| DYNC1I2           | 9.71E-26 | 0.42287649 | 0.276 | 0.146 | 3.44E-21 | Bcell_3_spleen |
| TM9SF4            | 9.96E-26 | 0.39102909 | 0.288 | 0.154 | 3.53E-21 | Bcell_3_spleen |
| ENSMUG00000020092 | 1.14E-25 | 0.91837089 | 0.303 | 0.188 | 4.04E-21 | Bcell_3_spleen |
| ZNF638            | 1.14E-25 | 0.2941406  | 0.629 | 0.439 | 4.05E-21 | Bcell_3_spleen |
| INVS              | 1.22E-25 | 0.42163289 | 0.299 | 0.167 | 4.31E-21 | Bcell_3_spleen |
| BZW2              | 1.28E-25 | 0.44849895 | 0.438 | 0.273 | 4.54E-21 | Bcell_3_spleen |

|                     |          |            |       |       |          |                |
|---------------------|----------|------------|-------|-------|----------|----------------|
| MAT2A               | 1.33E-25 | 0.43447143 | 0.277 | 0.147 | 4.71E-21 | Bcell_3_spleen |
| EEFSEC              | 1.45E-25 | 0.4297162  | 0.293 | 0.162 | 5.15E-21 | Bcell_3_spleen |
| H2AC20              | 1.51E-25 | 0.5087188  | 0.275 | 0.146 | 5.36E-21 | Bcell_3_spleen |
| DYNLL1              | 1.51E-25 | 0.43649746 | 0.338 | 0.195 | 5.37E-21 | Bcell_3_spleen |
| JMY                 | 1.52E-25 | 0.4410798  | 0.511 | 0.34  | 5.40E-21 | Bcell_3_spleen |
| USO1                | 1.82E-25 | 0.27773309 | 0.333 | 0.188 | 6.46E-21 | Bcell_3_spleen |
| IP6K1               | 2.43E-25 | 0.28532949 | 0.389 | 0.234 | 8.59E-21 | Bcell_3_spleen |
| NADSYN1             | 2.43E-25 | 0.34826038 | 0.39  | 0.229 | 8.60E-21 | Bcell_3_spleen |
| FGD2                | 2.81E-25 | 0.38187152 | 0.275 | 0.146 | 9.96E-21 | Bcell_3_spleen |
| CBFA2T2             | 3.77E-25 | 0.53529703 | 0.264 | 0.141 | 1.33E-20 | Bcell_3_spleen |
| IRF4                | 3.78E-25 | 0.4583327  | 0.336 | 0.193 | 1.34E-20 | Bcell_3_spleen |
| ENSMMUG00000000350  | 3.85E-25 | 0.25263686 | 0.265 | 0.137 | 1.36E-20 | Bcell_3_spleen |
| NSD3                | 4.75E-25 | 0.28023189 | 0.578 | 0.383 | 1.68E-20 | Bcell_3_spleen |
| CD38                | 4.95E-25 | 0.36116721 | 0.721 | 0.546 | 1.75E-20 | Bcell_3_spleen |
| CLYBL               | 5.65E-25 | 0.4650111  | 0.271 | 0.146 | 2.00E-20 | Bcell_3_spleen |
| CLCN3               | 6.24E-25 | 0.30991015 | 0.439 | 0.272 | 2.21E-20 | Bcell_3_spleen |
| RC3H1               | 6.50E-25 | 0.28927809 | 0.423 | 0.256 | 2.30E-20 | Bcell_3_spleen |
| LRPPRC              | 6.86E-25 | 0.38517916 | 0.54  | 0.362 | 2.43E-20 | Bcell_3_spleen |
| GLUD1               | 6.88E-25 | 0.36286732 | 0.286 | 0.154 | 2.44E-20 | Bcell_3_spleen |
| ENSMMUG000000042157 | 8.74E-25 | 0.34421793 | 0.361 | 0.209 | 3.10E-20 | Bcell_3_spleen |
| HSPA4               | 8.94E-25 | 0.37783863 | 0.376 | 0.223 | 3.17E-20 | Bcell_3_spleen |
| TRIO                | 9.09E-25 | 0.54086091 | 0.281 | 0.156 | 3.22E-20 | Bcell_3_spleen |
| H1-3                | 9.17E-25 | 0.5947789  | 0.28  | 0.153 | 3.25E-20 | Bcell_3_spleen |
| P2RY10              | 9.22E-25 | 0.33397303 | 0.277 | 0.149 | 3.27E-20 | Bcell_3_spleen |
| BCL2L13             | 1.12E-24 | 0.33783965 | 0.316 | 0.178 | 3.97E-20 | Bcell_3_spleen |
| CYBA                | 1.23E-24 | 0.31164696 | 0.619 | 0.433 | 4.36E-20 | Bcell_3_spleen |
| TMEM258             | 1.27E-24 | 0.32335105 | 0.388 | 0.229 | 4.50E-20 | Bcell_3_spleen |
| PPP5C               | 1.47E-24 | 0.35416999 | 0.29  | 0.158 | 5.21E-20 | Bcell_3_spleen |
| UBE2K               | 1.52E-24 | 0.28544252 | 0.664 | 0.466 | 5.40E-20 | Bcell_3_spleen |
| CCT7                | 1.59E-24 | 0.28952004 | 0.261 | 0.135 | 5.63E-20 | Bcell_3_spleen |
| TIA1                | 1.83E-24 | 0.29280228 | 0.414 | 0.25  | 6.47E-20 | Bcell_3_spleen |
| AVL9                | 2.08E-24 | 0.37460125 | 0.426 | 0.266 | 7.37E-20 | Bcell_3_spleen |
| HCLS1               | 2.60E-24 | 0.2556096  | 0.442 | 0.27  | 9.20E-20 | Bcell_3_spleen |

|                    |          |            |       |       |          |                |
|--------------------|----------|------------|-------|-------|----------|----------------|
| PARVB              | 2.87E-24 | 0.30279766 | 0.4   | 0.242 | 1.02E-19 | Bcell_3_spleen |
| RASGEF1B           | 3.25E-24 | 0.36891688 | 0.779 | 0.638 | 1.15E-19 | Bcell_3_spleen |
| CCDC66             | 3.31E-24 | 0.32682263 | 0.346 | 0.2   | 1.17E-19 | Bcell_3_spleen |
| CLEC16A            | 3.36E-24 | 0.53889178 | 0.268 | 0.146 | 1.19E-19 | Bcell_3_spleen |
| DDX10              | 3.53E-24 | 0.41933785 | 0.462 | 0.3   | 1.25E-19 | Bcell_3_spleen |
| CHORDC1            | 4.18E-24 | 0.41412454 | 0.512 | 0.337 | 1.48E-19 | Bcell_3_spleen |
| NFAT5              | 4.77E-24 | 0.23807818 | 0.644 | 0.45  | 1.69E-19 | Bcell_3_spleen |
| ETNK1              | 5.28E-24 | 0.26681021 | 0.502 | 0.323 | 1.87E-19 | Bcell_3_spleen |
| FOXN3              | 5.57E-24 | 0.34108718 | 0.869 | 0.76  | 1.97E-19 | Bcell_3_spleen |
| TRIM44             | 6.49E-24 | 0.2302748  | 0.509 | 0.333 | 2.30E-19 | Bcell_3_spleen |
| ACBD6              | 6.59E-24 | 0.28210956 | 0.397 | 0.245 | 2.34E-19 | Bcell_3_spleen |
| ENSMMUG00000053392 | 7.41E-24 | 0.3182918  | 0.395 | 0.239 | 2.63E-19 | Bcell_3_spleen |
| ENSMMUG00000039874 | 8.25E-24 | 0.20818244 | 0.272 | 0.146 | 2.92E-19 | Bcell_3_spleen |
| UIMC1              | 1.02E-23 | 0.24736991 | 0.449 | 0.282 | 3.62E-19 | Bcell_3_spleen |
| LRCH1              | 1.17E-23 | 0.38670176 | 0.542 | 0.371 | 4.14E-19 | Bcell_3_spleen |
| TRAPPC9            | 1.18E-23 | 0.31324943 | 0.355 | 0.212 | 4.19E-19 | Bcell_3_spleen |
| PARP6              | 1.27E-23 | 0.23792562 | 0.473 | 0.294 | 4.51E-19 | Bcell_3_spleen |
| ATP10D             | 1.29E-23 | 0.25787914 | 0.408 | 0.251 | 4.56E-19 | Bcell_3_spleen |
| ZMYND11            | 1.50E-23 | 0.25670998 | 0.508 | 0.337 | 5.30E-19 | Bcell_3_spleen |
| ENSMMUG00000018740 | 1.59E-23 | 0.31045005 | 0.268 | 0.142 | 5.62E-19 | Bcell_3_spleen |
| RAD23B             | 1.63E-23 | 0.36501923 | 0.325 | 0.187 | 5.79E-19 | Bcell_3_spleen |
| ATP2A2             | 1.74E-23 | 0.30493492 | 0.33  | 0.191 | 6.16E-19 | Bcell_3_spleen |
| TXNRD1             | 1.88E-23 | 0.39882321 | 0.255 | 0.137 | 6.65E-19 | Bcell_3_spleen |
| RNF138             | 1.89E-23 | 0.33323786 | 0.618 | 0.433 | 6.69E-19 | Bcell_3_spleen |
| PCCA               | 1.90E-23 | 0.26626146 | 0.593 | 0.405 | 6.73E-19 | Bcell_3_spleen |
| AMD1               | 2.01E-23 | 0.27521415 | 0.497 | 0.32  | 7.11E-19 | Bcell_3_spleen |
| ENSMMUG00000063316 | 2.54E-23 | 0.391672   | 0.77  | 0.611 | 9.01E-19 | Bcell_3_spleen |
| NMT1               | 2.98E-23 | 0.22334473 | 0.321 | 0.181 | 1.05E-18 | Bcell_3_spleen |
| LNPEP              | 3.29E-23 | 0.28490352 | 0.662 | 0.476 | 1.17E-18 | Bcell_3_spleen |
| IFI30              | 3.82E-23 | 0.26219354 | 0.427 | 0.264 | 1.35E-18 | Bcell_3_spleen |
| NSRP1              | 3.89E-23 | 0.17574588 | 0.498 | 0.319 | 1.38E-18 | Bcell_3_spleen |
| FBL                | 5.75E-23 | 0.24780552 | 0.296 | 0.163 | 2.04E-18 | Bcell_3_spleen |
| RERE               | 7.05E-23 | 0.25674514 | 0.904 | 0.799 | 2.50E-18 | Bcell_3_spleen |

|                   |          |            |       |       |          |                |
|-------------------|----------|------------|-------|-------|----------|----------------|
| ALKBH7            | 7.18E-23 | 0.31198647 | 0.261 | 0.138 | 2.54E-18 | Bcell_3_spleen |
| IQCG              | 7.25E-23 | 0.42064106 | 0.329 | 0.195 | 2.57E-18 | Bcell_3_spleen |
| ARPC5L            | 7.28E-23 | 0.24896225 | 0.333 | 0.192 | 2.58E-18 | Bcell_3_spleen |
| POU2F2            | 8.40E-23 | 0.40564639 | 0.319 | 0.187 | 2.98E-18 | Bcell_3_spleen |
| SWAP70            | 9.12E-23 | 0.28686302 | 0.877 | 0.77  | 3.23E-18 | Bcell_3_spleen |
| CLIC1             | 9.44E-23 | 0.29191183 | 0.407 | 0.25  | 3.35E-18 | Bcell_3_spleen |
| SEC11C            | 1.02E-22 | 0.39057282 | 0.299 | 0.168 | 3.60E-18 | Bcell_3_spleen |
| MNAT1             | 1.14E-22 | 0.30052973 | 0.446 | 0.288 | 4.05E-18 | Bcell_3_spleen |
| PDSS2             | 1.15E-22 | 0.28421385 | 0.354 | 0.213 | 4.08E-18 | Bcell_3_spleen |
| NDEL1             | 1.19E-22 | 0.35491617 | 0.42  | 0.264 | 4.23E-18 | Bcell_3_spleen |
| FOCAD             | 1.24E-22 | 0.40730067 | 0.256 | 0.139 | 4.40E-18 | Bcell_3_spleen |
| ERC1              | 1.26E-22 | 0.30061309 | 0.551 | 0.379 | 4.48E-18 | Bcell_3_spleen |
| AGPS              | 1.27E-22 | 0.2860762  | 0.35  | 0.209 | 4.50E-18 | Bcell_3_spleen |
| XPC               | 1.29E-22 | 0.17677145 | 0.334 | 0.192 | 4.56E-18 | Bcell_3_spleen |
| SPOP              | 1.40E-22 | 0.29560691 | 0.427 | 0.27  | 4.96E-18 | Bcell_3_spleen |
| MTF2              | 1.56E-22 | 0.40183783 | 0.314 | 0.182 | 5.53E-18 | Bcell_3_spleen |
| MAP3K8            | 1.71E-22 | 0.39821171 | 0.626 | 0.48  | 6.07E-18 | Bcell_3_spleen |
| NVL               | 1.75E-22 | 0.39020994 | 0.283 | 0.16  | 6.20E-18 | Bcell_3_spleen |
| ECHDC1            | 1.80E-22 | 0.28015967 | 0.307 | 0.175 | 6.37E-18 | Bcell_3_spleen |
| RAB10             | 2.79E-22 | 0.17259436 | 0.469 | 0.301 | 9.88E-18 | Bcell_3_spleen |
| VASP              | 2.81E-22 | 0.26341216 | 0.392 | 0.236 | 9.94E-18 | Bcell_3_spleen |
| ENSMUG00000016959 | 2.89E-22 | 0.2250518  | 0.458 | 0.287 | 1.02E-17 | Bcell_3_spleen |
| TAF1              | 3.53E-22 | 0.17445189 | 0.347 | 0.204 | 1.25E-17 | Bcell_3_spleen |
| NPAT              | 3.55E-22 | 0.27687274 | 0.622 | 0.438 | 1.26E-17 | Bcell_3_spleen |
| FAM120B           | 3.63E-22 | 0.40446223 | 0.272 | 0.152 | 1.29E-17 | Bcell_3_spleen |
| SNX14             | 3.75E-22 | 0.2740403  | 0.442 | 0.282 | 1.33E-17 | Bcell_3_spleen |
| ANAPC5            | 3.90E-22 | 0.31137041 | 0.265 | 0.144 | 1.38E-17 | Bcell_3_spleen |
| ARHGAP17          | 4.82E-22 | 0.29623232 | 0.776 | 0.601 | 1.71E-17 | Bcell_3_spleen |
| SUPT16H           | 4.92E-22 | 0.29959178 | 0.383 | 0.232 | 1.74E-17 | Bcell_3_spleen |
| STX8              | 5.00E-22 | 0.31629999 | 0.463 | 0.301 | 1.77E-17 | Bcell_3_spleen |
| SYNCRIP           | 5.18E-22 | 0.25581175 | 0.466 | 0.294 | 1.84E-17 | Bcell_3_spleen |
| RFX5              | 5.45E-22 | 0.26363721 | 0.254 | 0.135 | 1.93E-17 | Bcell_3_spleen |
| IBTK              | 5.63E-22 | 0.31344262 | 0.308 | 0.179 | 2.00E-17 | Bcell_3_spleen |

|                    |          |            |       |       |          |                |
|--------------------|----------|------------|-------|-------|----------|----------------|
| PTBP3              | 6.63E-22 | 0.26752296 | 0.709 | 0.526 | 2.35E-17 | Bcell_3_spleen |
| WBP1L              | 6.66E-22 | 0.15778002 | 0.365 | 0.218 | 2.36E-17 | Bcell_3_spleen |
| CRTC3              | 7.09E-22 | 0.23847982 | 0.594 | 0.41  | 2.51E-17 | Bcell_3_spleen |
| CXXC5              | 7.74E-22 | 0.19183649 | 0.266 | 0.144 | 2.74E-17 | Bcell_3_spleen |
| HMBOX1             | 8.04E-22 | 0.27418911 | 0.394 | 0.248 | 2.85E-17 | Bcell_3_spleen |
| ACTN4              | 8.39E-22 | 0.28127092 | 0.318 | 0.185 | 2.97E-17 | Bcell_3_spleen |
| TMEM201            | 1.29E-21 | 0.29782786 | 0.486 | 0.322 | 4.57E-17 | Bcell_3_spleen |
| GRAP               | 1.37E-21 | 0.18424449 | 0.312 | 0.179 | 4.87E-17 | Bcell_3_spleen |
| TBC1D22A           | 1.39E-21 | 0.21142552 | 0.49  | 0.319 | 4.93E-17 | Bcell_3_spleen |
| PFN1               | 1.40E-21 | 0.37003146 | 0.708 | 0.646 | 4.95E-17 | Bcell_3_spleen |
| NIPA2              | 1.41E-21 | 0.19012456 | 0.466 | 0.296 | 4.98E-17 | Bcell_3_spleen |
| MTM1               | 1.43E-21 | 0.30823115 | 0.254 | 0.138 | 5.07E-17 | Bcell_3_spleen |
| DNAJC10            | 1.45E-21 | 0.35255172 | 0.257 | 0.14  | 5.13E-17 | Bcell_3_spleen |
| TLN1               | 1.46E-21 | 0.29677736 | 0.579 | 0.416 | 5.19E-17 | Bcell_3_spleen |
| ZCCHC17            | 1.62E-21 | 0.31963388 | 0.257 | 0.141 | 5.74E-17 | Bcell_3_spleen |
| COX2               | 1.63E-21 | 0.30004688 | 0.958 | 0.987 | 5.79E-17 | Bcell_3_spleen |
| TMEM38B            | 1.65E-21 | 0.26642342 | 0.331 | 0.197 | 5.86E-17 | Bcell_3_spleen |
| CCT2               | 1.83E-21 | 0.23330235 | 0.572 | 0.384 | 6.48E-17 | Bcell_3_spleen |
| SHPRH              | 1.97E-21 | 0.33443574 | 0.267 | 0.149 | 7.00E-17 | Bcell_3_spleen |
| ENSMMUG00000058216 | 1.98E-21 | 0.26810461 | 0.26  | 0.142 | 7.03E-17 | Bcell_3_spleen |
| ENSMMUG00000011711 | 2.32E-21 | 0.3309632  | 0.606 | 0.42  | 8.23E-17 | Bcell_3_spleen |
| UBE2G2             | 2.48E-21 | 0.36006643 | 0.279 | 0.157 | 8.78E-17 | Bcell_3_spleen |
| RAB21              | 2.67E-21 | 0.18267537 | 0.331 | 0.193 | 9.46E-17 | Bcell_3_spleen |
| IL4R               | 2.73E-21 | 0.52084584 | 0.309 | 0.187 | 9.67E-17 | Bcell_3_spleen |
| ENSMMUG00000022428 | 3.04E-21 | 0.14924078 | 0.312 | 0.177 | 1.08E-16 | Bcell_3_spleen |
| DUSP1              | 3.10E-21 | 0.30494635 | 0.669 | 0.494 | 1.10E-16 | Bcell_3_spleen |
| RUBCN              | 3.59E-21 | 0.16436408 | 0.498 | 0.325 | 1.27E-16 | Bcell_3_spleen |
| KDEL2              | 3.77E-21 | 0.26854043 | 0.339 | 0.2   | 1.34E-16 | Bcell_3_spleen |
| PDLIM2             | 3.81E-21 | 0.22289984 | 0.308 | 0.176 | 1.35E-16 | Bcell_3_spleen |
| GLG1               | 4.54E-21 | 0.2019205  | 0.481 | 0.313 | 1.61E-16 | Bcell_3_spleen |
| ARNT               | 4.54E-21 | 0.17930671 | 0.289 | 0.165 | 1.61E-16 | Bcell_3_spleen |
| EIF4A2             | 5.53E-21 | 0.2333571  | 0.666 | 0.474 | 1.96E-16 | Bcell_3_spleen |
| ENSMMUG00000019371 | 6.02E-21 | 0.33259884 | 0.566 | 0.406 | 2.13E-16 | Bcell_3_spleen |

|                    |          |            |       |       |          |                |
|--------------------|----------|------------|-------|-------|----------|----------------|
| IFT80              | 6.48E-21 | 0.32735085 | 0.321 | 0.19  | 2.30E-16 | Bcell_3_spleen |
| SNX8               | 7.26E-21 | 0.40055366 | 0.252 | 0.14  | 2.57E-16 | Bcell_3_spleen |
| MARCHF8            | 7.86E-21 | 0.42961455 | 0.28  | 0.163 | 2.79E-16 | Bcell_3_spleen |
| CCT5               | 8.22E-21 | 0.284658   | 0.368 | 0.224 | 2.91E-16 | Bcell_3_spleen |
| FAM107B            | 8.42E-21 | 0.33706493 | 0.63  | 0.465 | 2.98E-16 | Bcell_3_spleen |
| UGCG               | 8.55E-21 | 0.32770245 | 0.376 | 0.234 | 3.03E-16 | Bcell_3_spleen |
| METTL9             | 9.99E-21 | 0.2585242  | 0.382 | 0.234 | 3.54E-16 | Bcell_3_spleen |
| HMGA1              | 1.18E-20 | 0.25767833 | 0.381 | 0.233 | 4.18E-16 | Bcell_3_spleen |
| NPTN               | 1.19E-20 | 0.29087454 | 0.346 | 0.209 | 4.20E-16 | Bcell_3_spleen |
| M6PR               | 1.23E-20 | 0.2448634  | 0.361 | 0.216 | 4.35E-16 | Bcell_3_spleen |
| PHTF2              | 1.30E-20 | 0.26092654 | 0.472 | 0.316 | 4.61E-16 | Bcell_3_spleen |
| SETDB2             | 1.38E-20 | 0.2469781  | 0.388 | 0.24  | 4.89E-16 | Bcell_3_spleen |
| SEC63              | 1.45E-20 | 0.28270905 | 0.549 | 0.374 | 5.13E-16 | Bcell_3_spleen |
| SNX29              | 1.55E-20 | 0.43356999 | 0.954 | 0.932 | 5.48E-16 | Bcell_3_spleen |
| ERP29              | 1.58E-20 | 0.29230025 | 0.421 | 0.266 | 5.59E-16 | Bcell_3_spleen |
| COX17              | 1.67E-20 | 0.25378849 | 0.274 | 0.154 | 5.90E-16 | Bcell_3_spleen |
| PRR14L             | 1.85E-20 | 0.3212379  | 0.323 | 0.196 | 6.56E-16 | Bcell_3_spleen |
| RRP1B              | 2.22E-20 | 0.2276206  | 0.302 | 0.176 | 7.85E-16 | Bcell_3_spleen |
| YPEL3              | 2.26E-20 | 0.24192659 | 0.279 | 0.159 | 7.99E-16 | Bcell_3_spleen |
| CEP85L             | 2.43E-20 | 0.28673675 | 0.675 | 0.497 | 8.61E-16 | Bcell_3_spleen |
| SACM1L             | 2.67E-20 | 0.27018531 | 0.277 | 0.158 | 9.44E-16 | Bcell_3_spleen |
| FAM76B             | 2.70E-20 | 0.21656902 | 0.358 | 0.218 | 9.56E-16 | Bcell_3_spleen |
| AARS1              | 2.75E-20 | 0.26301728 | 0.488 | 0.321 | 9.76E-16 | Bcell_3_spleen |
| DGLUCY             | 2.81E-20 | 0.35585096 | 0.261 | 0.149 | 9.97E-16 | Bcell_3_spleen |
| FAM53B             | 3.03E-20 | 0.32249172 | 0.523 | 0.359 | 1.07E-15 | Bcell_3_spleen |
| ENSMMUG00000062941 | 3.75E-20 | 0.33429443 | 0.306 | 0.183 | 1.33E-15 | Bcell_3_spleen |
| PRKDC              | 3.83E-20 | 0.29222447 | 0.55  | 0.378 | 1.36E-15 | Bcell_3_spleen |
| MTCH2              | 4.20E-20 | 0.22706067 | 0.459 | 0.296 | 1.49E-15 | Bcell_3_spleen |
| OXR1               | 4.21E-20 | 0.21851117 | 0.71  | 0.528 | 1.49E-15 | Bcell_3_spleen |
| UBA2               | 4.24E-20 | 0.2027097  | 0.361 | 0.218 | 1.50E-15 | Bcell_3_spleen |
| SMIM14             | 4.38E-20 | 0.22004996 | 0.783 | 0.632 | 1.55E-15 | Bcell_3_spleen |
| STK17B             | 4.41E-20 | 0.32657226 | 0.934 | 0.87  | 1.56E-15 | Bcell_3_spleen |
| ABHD12             | 4.49E-20 | 0.30031459 | 0.372 | 0.233 | 1.59E-15 | Bcell_3_spleen |

|                    |          |             |       |       |          |                |
|--------------------|----------|-------------|-------|-------|----------|----------------|
| SLC10A7            | 4.52E-20 | 0.34323532  | 0.278 | 0.163 | 1.60E-15 | Bcell_3_spleen |
| MPZL1              | 4.65E-20 | 0.2651808   | 0.386 | 0.243 | 1.65E-15 | Bcell_3_spleen |
| PTPN6              | 5.03E-20 | 0.17136289  | 0.404 | 0.25  | 1.78E-15 | Bcell_3_spleen |
| WDR47              | 5.14E-20 | 0.45598171  | 0.339 | 0.212 | 1.82E-15 | Bcell_3_spleen |
| ATP1B3             | 5.51E-20 | 0.321111064 | 0.636 | 0.469 | 1.95E-15 | Bcell_3_spleen |
| RFTN1              | 5.81E-20 | 0.31631133  | 0.462 | 0.307 | 2.06E-15 | Bcell_3_spleen |
| SYNGR2             | 6.38E-20 | 0.22582032  | 0.32  | 0.19  | 2.26E-15 | Bcell_3_spleen |
| GON4L              | 6.80E-20 | 0.2126126   | 0.36  | 0.221 | 2.41E-15 | Bcell_3_spleen |
| PTGER4             | 6.90E-20 | 0.33870945  | 0.497 | 0.341 | 2.45E-15 | Bcell_3_spleen |
| PLEKHA1            | 7.26E-20 | 0.37211838  | 0.311 | 0.187 | 2.57E-15 | Bcell_3_spleen |
| EZR                | 7.33E-20 | 0.29250452  | 0.75  | 0.595 | 2.60E-15 | Bcell_3_spleen |
| NCOR1              | 8.59E-20 | 0.23145714  | 0.734 | 0.549 | 3.04E-15 | Bcell_3_spleen |
| TMEM167A           | 9.75E-20 | 0.2099495   | 0.27  | 0.15  | 3.45E-15 | Bcell_3_spleen |
| AKR1A1             | 1.03E-19 | 0.24396648  | 0.343 | 0.206 | 3.66E-15 | Bcell_3_spleen |
| AP1B1              | 1.05E-19 | 0.18388147  | 0.371 | 0.229 | 3.72E-15 | Bcell_3_spleen |
| PRPSAP2            | 1.05E-19 | 0.27321074  | 0.371 | 0.23  | 3.73E-15 | Bcell_3_spleen |
| ENSMMUG00000058919 | 1.06E-19 | 0.30363564  | 0.365 | 0.23  | 3.77E-15 | Bcell_3_spleen |
| CMSS1              | 1.10E-19 | 0.51676432  | 0.301 | 0.187 | 3.88E-15 | Bcell_3_spleen |
| CRTC1              | 1.16E-19 | 0.4483894   | 0.262 | 0.152 | 4.10E-15 | Bcell_3_spleen |
| DENND1A            | 1.18E-19 | 0.18239078  | 0.61  | 0.432 | 4.16E-15 | Bcell_3_spleen |
| PARN               | 1.22E-19 | 0.25472458  | 0.326 | 0.199 | 4.33E-15 | Bcell_3_spleen |
| PTPN11             | 1.26E-19 | 0.16319453  | 0.308 | 0.181 | 4.47E-15 | Bcell_3_spleen |
| FBXO42             | 1.37E-19 | 0.30212255  | 0.258 | 0.147 | 4.85E-15 | Bcell_3_spleen |
| MAP3K5             | 1.46E-19 | 0.24219973  | 0.604 | 0.43  | 5.17E-15 | Bcell_3_spleen |
| ENSMMUG00000019882 | 1.62E-19 | 0.19670151  | 0.344 | 0.206 | 5.75E-15 | Bcell_3_spleen |
| PREPL              | 1.72E-19 | 0.27067174  | 0.259 | 0.147 | 6.11E-15 | Bcell_3_spleen |
| HECTD1             | 1.81E-19 | 0.20386373  | 0.445 | 0.286 | 6.42E-15 | Bcell_3_spleen |
| MALT1              | 2.08E-19 | 0.18939668  | 0.528 | 0.363 | 7.36E-15 | Bcell_3_spleen |
| ENSMMUG00000054064 | 2.18E-19 | 0.46041332  | 0.274 | 0.162 | 7.72E-15 | Bcell_3_spleen |
| WIPF1              | 2.20E-19 | 0.25992579  | 0.819 | 0.686 | 7.81E-15 | Bcell_3_spleen |
| HNRNPF             | 2.29E-19 | 0.21295001  | 0.601 | 0.421 | 8.10E-15 | Bcell_3_spleen |
| SESN3              | 2.34E-19 | 0.15934711  | 0.541 | 0.365 | 8.30E-15 | Bcell_3_spleen |
| SEPTIN2            | 2.62E-19 | 0.17973734  | 0.279 | 0.16  | 9.29E-15 | Bcell_3_spleen |

|                   |          |            |       |       |          |                |
|-------------------|----------|------------|-------|-------|----------|----------------|
| CCND3             | 2.90E-19 | 0.32888395 | 0.492 | 0.344 | 1.03E-14 | Bcell_3_spleen |
| PDK1              | 2.93E-19 | 0.22162599 | 0.383 | 0.241 | 1.04E-14 | Bcell_3_spleen |
| SCAF4             | 2.95E-19 | 0.22875996 | 0.523 | 0.354 | 1.05E-14 | Bcell_3_spleen |
| STRBP             | 3.03E-19 | 0.19131583 | 0.49  | 0.328 | 1.07E-14 | Bcell_3_spleen |
| KLHL14            | 3.19E-19 | 0.33896321 | 0.404 | 0.265 | 1.13E-14 | Bcell_3_spleen |
| COA1              | 3.58E-19 | 0.24623366 | 0.356 | 0.223 | 1.27E-14 | Bcell_3_spleen |
| EIF2B3            | 3.86E-19 | 0.25701861 | 0.4   | 0.261 | 1.37E-14 | Bcell_3_spleen |
| CHCHD3            | 3.87E-19 | 0.29512173 | 0.493 | 0.333 | 1.37E-14 | Bcell_3_spleen |
| TBC1D14           | 4.27E-19 | 0.34427615 | 0.277 | 0.163 | 1.51E-14 | Bcell_3_spleen |
| DST               | 5.02E-19 | 0.27024832 | 0.516 | 0.355 | 1.78E-14 | Bcell_3_spleen |
| IPMK              | 5.04E-19 | 0.22998567 | 0.394 | 0.252 | 1.79E-14 | Bcell_3_spleen |
| SUDS3             | 5.09E-19 | 0.24089535 | 0.266 | 0.15  | 1.80E-14 | Bcell_3_spleen |
| STK26             | 5.10E-19 | 0.23293425 | 0.385 | 0.24  | 1.81E-14 | Bcell_3_spleen |
| ENSMUG00000063877 | 6.60E-19 | 0.33813887 | 0.303 | 0.184 | 2.34E-14 | Bcell_3_spleen |
| ARHGAP4           | 6.61E-19 | 0.22161474 | 0.438 | 0.282 | 2.34E-14 | Bcell_3_spleen |
| DEK               | 6.63E-19 | 0.29653737 | 0.297 | 0.178 | 2.35E-14 | Bcell_3_spleen |
| TRIP11            | 6.72E-19 | 0.20465757 | 0.27  | 0.156 | 2.38E-14 | Bcell_3_spleen |
| DLST              | 6.84E-19 | 0.24799159 | 0.377 | 0.239 | 2.42E-14 | Bcell_3_spleen |
| VAV2              | 7.26E-19 | 0.20297629 | 0.557 | 0.389 | 2.57E-14 | Bcell_3_spleen |
| PARK7             | 7.39E-19 | 0.26981132 | 0.317 | 0.189 | 2.62E-14 | Bcell_3_spleen |
| OSBPL11           | 7.65E-19 | 0.24790488 | 0.497 | 0.333 | 2.71E-14 | Bcell_3_spleen |
| ATP6V0D1          | 9.69E-19 | 0.2166544  | 0.532 | 0.362 | 3.43E-14 | Bcell_3_spleen |
| RPN2              | 9.75E-19 | 0.26834157 | 0.266 | 0.154 | 3.45E-14 | Bcell_3_spleen |
| NOP58             | 1.06E-18 | 0.25478901 | 0.54  | 0.37  | 3.75E-14 | Bcell_3_spleen |
| RUFY1             | 1.16E-18 | 0.22878274 | 0.322 | 0.197 | 4.10E-14 | Bcell_3_spleen |
| SAT2              | 1.21E-18 | 0.26105562 | 0.343 | 0.211 | 4.29E-14 | Bcell_3_spleen |
| PHF20             | 1.21E-18 | 0.21625919 | 0.679 | 0.502 | 4.29E-14 | Bcell_3_spleen |
| WASHC4            | 1.29E-18 | 0.17558249 | 0.679 | 0.491 | 4.57E-14 | Bcell_3_spleen |
| COX6B1            | 1.49E-18 | 0.1457845  | 0.269 | 0.152 | 5.27E-14 | Bcell_3_spleen |
| GRK3              | 1.63E-18 | 0.35226094 | 0.522 | 0.372 | 5.77E-14 | Bcell_3_spleen |
| DHX36             | 1.68E-18 | 0.16652695 | 0.517 | 0.349 | 5.94E-14 | Bcell_3_spleen |
| OGA               | 1.68E-18 | 0.27229739 | 0.732 | 0.555 | 5.95E-14 | Bcell_3_spleen |
| STK17A            | 1.75E-18 | 0.25089633 | 0.717 | 0.558 | 6.19E-14 | Bcell_3_spleen |



|                    |          |            |       |       |          |                |
|--------------------|----------|------------|-------|-------|----------|----------------|
| CLEC2B             | 1.82E-18 | 0.24495486 | 0.352 | 0.221 | 6.45E-14 | Bcell_3_spleen |
| ATF7               | 1.83E-18 | 0.28650498 | 0.371 | 0.236 | 6.49E-14 | Bcell_3_spleen |
| VPS41              | 2.00E-18 | 0.16847191 | 0.455 | 0.3   | 7.09E-14 | Bcell_3_spleen |
| MAP2K4             | 2.15E-18 | 0.21275295 | 0.389 | 0.248 | 7.61E-14 | Bcell_3_spleen |
| NPEPPS             | 2.17E-18 | 0.26894256 | 0.333 | 0.207 | 7.68E-14 | Bcell_3_spleen |
| CSTF3              | 2.36E-18 | 0.22654124 | 0.264 | 0.154 | 8.37E-14 | Bcell_3_spleen |
| YTHDC2             | 2.51E-18 | 0.22638008 | 0.391 | 0.251 | 8.90E-14 | Bcell_3_spleen |
| FAM193A            | 2.54E-18 | 0.20350797 | 0.453 | 0.299 | 8.98E-14 | Bcell_3_spleen |
| NOP14              | 2.83E-18 | 0.20238667 | 0.266 | 0.153 | 1.00E-13 | Bcell_3_spleen |
| KCNQ5              | 2.92E-18 | 0.33085794 | 0.875 | 0.769 | 1.03E-13 | Bcell_3_spleen |
| SRSF7              | 2.97E-18 | 0.22157199 | 0.668 | 0.488 | 1.05E-13 | Bcell_3_spleen |
| GALNT7             | 3.14E-18 | 0.21685613 | 0.434 | 0.29  | 1.11E-13 | Bcell_3_spleen |
| WDR1               | 3.59E-18 | 0.20652647 | 0.258 | 0.147 | 1.27E-13 | Bcell_3_spleen |
| ENSMMUG00000061128 | 3.62E-18 | 0.24689271 | 0.495 | 0.342 | 1.28E-13 | Bcell_3_spleen |
| MAPK1IP1L          | 3.76E-18 | 0.20326548 | 0.507 | 0.339 | 1.33E-13 | Bcell_3_spleen |
| APOBEC3F           | 4.54E-18 | 0.23527488 | 0.256 | 0.147 | 1.61E-13 | Bcell_3_spleen |
| SAMHD1             | 4.56E-18 | 0.26192173 | 0.334 | 0.208 | 1.62E-13 | Bcell_3_spleen |
| DNAJC24            | 4.97E-18 | 0.24647745 | 0.467 | 0.318 | 1.76E-13 | Bcell_3_spleen |
| NDFIP1             | 5.27E-18 | 0.1842439  | 0.4   | 0.255 | 1.87E-13 | Bcell_3_spleen |
| SLC25A4            | 5.99E-18 | 0.24986116 | 0.271 | 0.159 | 2.12E-13 | Bcell_3_spleen |
| GPD2               | 6.21E-18 | 0.2279686  | 0.312 | 0.193 | 2.20E-13 | Bcell_3_spleen |
| TDRD3              | 6.27E-18 | 0.13144822 | 0.43  | 0.279 | 2.22E-13 | Bcell_3_spleen |
| RNASEH2C           | 6.37E-18 | 0.31526377 | 0.28  | 0.165 | 2.26E-13 | Bcell_3_spleen |
| MAP4K4             | 6.41E-18 | 0.22934052 | 0.817 | 0.666 | 2.27E-13 | Bcell_3_spleen |
| KYNU               | 6.45E-18 | 0.20534423 | 0.286 | 0.173 | 2.29E-13 | Bcell_3_spleen |
| MAD1L1             | 6.91E-18 | 0.18546443 | 0.277 | 0.164 | 2.45E-13 | Bcell_3_spleen |
| NR4A3              | 7.03E-18 | 0.32511695 | 0.271 | 0.166 | 2.49E-13 | Bcell_3_spleen |
| CAPZB              | 7.63E-18 | 0.20157629 | 0.502 | 0.336 | 2.70E-13 | Bcell_3_spleen |
| SBF2               | 8.27E-18 | 0.3089741  | 0.493 | 0.347 | 2.93E-13 | Bcell_3_spleen |
| TNPO3              | 8.47E-18 | 0.18175886 | 0.407 | 0.263 | 3.00E-13 | Bcell_3_spleen |
| FER                | 9.48E-18 | 0.25321139 | 0.463 | 0.317 | 3.36E-13 | Bcell_3_spleen |
| STRN               | 1.00E-17 | 0.27876527 | 0.262 | 0.156 | 3.56E-13 | Bcell_3_spleen |
| TRIM24             | 1.12E-17 | 0.28244826 | 0.278 | 0.167 | 3.97E-13 | Bcell_3_spleen |

|                     |          |            |       |       |          |                |
|---------------------|----------|------------|-------|-------|----------|----------------|
| CD200               | 1.13E-17 | 0.32158625 | 0.351 | 0.225 | 4.01E-13 | Bcell_3_spleen |
| SNX25               | 1.13E-17 | 0.2522463  | 0.666 | 0.497 | 4.02E-13 | Bcell_3_spleen |
| UBE4A               | 1.34E-17 | 0.21954315 | 0.365 | 0.232 | 4.73E-13 | Bcell_3_spleen |
| DDX50               | 1.43E-17 | 0.11102445 | 0.443 | 0.288 | 5.07E-13 | Bcell_3_spleen |
| EPRS1               | 1.48E-17 | 0.24219431 | 0.288 | 0.172 | 5.23E-13 | Bcell_3_spleen |
| NIBAN3              | 1.51E-17 | 0.23723446 | 0.308 | 0.189 | 5.34E-13 | Bcell_3_spleen |
| HEATR5B             | 1.59E-17 | 0.16715579 | 0.272 | 0.161 | 5.63E-13 | Bcell_3_spleen |
| UBE2W               | 1.68E-17 | 0.14901196 | 0.453 | 0.301 | 5.97E-13 | Bcell_3_spleen |
| WTAP                | 1.70E-17 | 0.24100751 | 0.731 | 0.558 | 6.04E-13 | Bcell_3_spleen |
| ENSMMUG00000003130  | 1.94E-17 | 0.19054983 | 0.342 | 0.213 | 6.88E-13 | Bcell_3_spleen |
| MBP                 | 2.14E-17 | 0.13942164 | 0.585 | 0.412 | 7.57E-13 | Bcell_3_spleen |
| EHBP1               | 2.19E-17 | 0.19218306 | 0.4   | 0.264 | 7.75E-13 | Bcell_3_spleen |
| METTL15             | 2.22E-17 | 0.26843567 | 0.25  | 0.148 | 7.86E-13 | Bcell_3_spleen |
| CEPT1               | 2.26E-17 | 0.23938652 | 0.577 | 0.411 | 8.01E-13 | Bcell_3_spleen |
| ATE1                | 2.28E-17 | 0.27690656 | 0.385 | 0.254 | 8.07E-13 | Bcell_3_spleen |
| NFATC2              | 2.58E-17 | 0.18708773 | 0.403 | 0.262 | 9.14E-13 | Bcell_3_spleen |
| RHOQ                | 2.73E-17 | 0.12705678 | 0.262 | 0.153 | 9.67E-13 | Bcell_3_spleen |
| CYRIA               | 2.83E-17 | 0.29755439 | 0.268 | 0.161 | 1.00E-12 | Bcell_3_spleen |
| EIF3J               | 3.00E-17 | 0.12184066 | 0.46  | 0.302 | 1.06E-12 | Bcell_3_spleen |
| ENSMMUG000000063549 | 3.01E-17 | 0.22174713 | 0.264 | 0.155 | 1.06E-12 | Bcell_3_spleen |
| SGMS1               | 3.02E-17 | 0.19119398 | 0.367 | 0.235 | 1.07E-12 | Bcell_3_spleen |
| STIM2               | 3.08E-17 | 0.19386357 | 0.63  | 0.455 | 1.09E-12 | Bcell_3_spleen |
| COTL1               | 3.13E-17 | 0.23347904 | 0.6   | 0.433 | 1.11E-12 | Bcell_3_spleen |
| TSNAX               | 3.15E-17 | 0.16908762 | 0.268 | 0.158 | 1.12E-12 | Bcell_3_spleen |
| NASP                | 3.28E-17 | 0.22965894 | 0.469 | 0.317 | 1.16E-12 | Bcell_3_spleen |
| BLK                 | 3.28E-17 | 0.22152163 | 0.694 | 0.523 | 1.16E-12 | Bcell_3_spleen |
| NF1                 | 3.39E-17 | 0.2277475  | 0.589 | 0.423 | 1.20E-12 | Bcell_3_spleen |
| MIB1                | 3.63E-17 | 0.19787288 | 0.344 | 0.22  | 1.29E-12 | Bcell_3_spleen |
| SKP1                | 4.00E-17 | 0.21109386 | 0.812 | 0.662 | 1.42E-12 | Bcell_3_spleen |
| PPP2R5E             | 4.09E-17 | 0.18365603 | 0.553 | 0.388 | 1.45E-12 | Bcell_3_spleen |
| SATB1               | 4.16E-17 | 0.1619042  | 0.515 | 0.357 | 1.47E-12 | Bcell_3_spleen |
| MSH3                | 4.67E-17 | 0.22938743 | 0.464 | 0.315 | 1.65E-12 | Bcell_3_spleen |
| TMBIM6              | 5.00E-17 | 0.17446178 | 0.482 | 0.322 | 1.77E-12 | Bcell_3_spleen |

|                   |          |            |       |       |          |                |
|-------------------|----------|------------|-------|-------|----------|----------------|
| SAMD8             | 5.09E-17 | 0.15828777 | 0.526 | 0.362 | 1.80E-12 | Bcell_3_spleen |
| ZNF514            | 5.18E-17 | 0.13117562 | 0.34  | 0.211 | 1.84E-12 | Bcell_3_spleen |
| NAA50             | 5.40E-17 | 0.12958734 | 0.478 | 0.318 | 1.91E-12 | Bcell_3_spleen |
| SEPTIN11          | 5.50E-17 | 0.16251587 | 0.488 | 0.329 | 1.95E-12 | Bcell_3_spleen |
| FBNP4             | 5.64E-17 | 0.20057613 | 0.559 | 0.388 | 2.00E-12 | Bcell_3_spleen |
| AKAP17A           | 6.28E-17 | 0.17446359 | 0.302 | 0.183 | 2.22E-12 | Bcell_3_spleen |
| EIF4B             | 7.77E-17 | 0.17193747 | 0.465 | 0.312 | 2.75E-12 | Bcell_3_spleen |
| ZSWIM6            | 7.94E-17 | 0.29633507 | 0.528 | 0.382 | 2.81E-12 | Bcell_3_spleen |
| RHOA              | 8.08E-17 | 0.21527269 | 0.727 | 0.56  | 2.86E-12 | Bcell_3_spleen |
| ATP11A            | 8.11E-17 | 0.18776316 | 0.286 | 0.175 | 2.87E-12 | Bcell_3_spleen |
| USP6NL            | 8.23E-17 | 0.22346097 | 0.547 | 0.386 | 2.91E-12 | Bcell_3_spleen |
| SDHA              | 8.34E-17 | 0.15867867 | 0.321 | 0.198 | 2.96E-12 | Bcell_3_spleen |
| TCF20             | 8.38E-17 | 0.25802762 | 0.293 | 0.183 | 2.97E-12 | Bcell_3_spleen |
| PPIP5K2           | 1.06E-16 | 0.30726906 | 0.388 | 0.258 | 3.74E-12 | Bcell_3_spleen |
| KIAA2026          | 1.19E-16 | 0.18160877 | 0.261 | 0.156 | 4.22E-12 | Bcell_3_spleen |
| PTPRC             | 1.19E-16 | 0.18391229 | 0.953 | 0.911 | 4.22E-12 | Bcell_3_spleen |
| TAOK3             | 1.21E-16 | 0.14624985 | 0.668 | 0.489 | 4.28E-12 | Bcell_3_spleen |
| PTBP1             | 1.21E-16 | 0.15090398 | 0.257 | 0.15  | 4.29E-12 | Bcell_3_spleen |
| ARID1A            | 1.39E-16 | 0.25333702 | 0.582 | 0.411 | 4.94E-12 | Bcell_3_spleen |
| NAPG              | 1.45E-16 | 0.25723037 | 0.327 | 0.206 | 5.15E-12 | Bcell_3_spleen |
| ENSMUG00000058532 | 1.47E-16 | 0.50482853 | 0.274 | 0.172 | 5.22E-12 | Bcell_3_spleen |
| LENG8             | 1.71E-16 | 0.18088916 | 0.328 | 0.205 | 6.07E-12 | Bcell_3_spleen |
| RMDN1             | 1.82E-16 | 0.31205944 | 0.269 | 0.162 | 6.46E-12 | Bcell_3_spleen |
| UBE2V2            | 2.04E-16 | 0.2034804  | 0.279 | 0.167 | 7.22E-12 | Bcell_3_spleen |
| ANKRD17           | 2.05E-16 | 0.24805049 | 0.692 | 0.528 | 7.25E-12 | Bcell_3_spleen |
| ZNF652            | 2.14E-16 | 0.2180366  | 0.296 | 0.185 | 7.57E-12 | Bcell_3_spleen |
| RILPL2            | 2.30E-16 | 0.18923763 | 0.492 | 0.337 | 8.13E-12 | Bcell_3_spleen |
| RESF1             | 2.32E-16 | 0.17475514 | 0.397 | 0.26  | 8.22E-12 | Bcell_3_spleen |
| NPM1              | 2.37E-16 | 0.28651966 | 0.753 | 0.668 | 8.40E-12 | Bcell_3_spleen |
| ADAR              | 2.44E-16 | 0.13857077 | 0.391 | 0.252 | 8.65E-12 | Bcell_3_spleen |
| MAP2K1            | 2.46E-16 | 0.16112874 | 0.251 | 0.15  | 8.71E-12 | Bcell_3_spleen |
| TMEM165           | 2.49E-16 | 0.23099112 | 0.277 | 0.168 | 8.81E-12 | Bcell_3_spleen |
| ENSMUG00000053142 | 2.55E-16 | 0.19308767 | 0.25  | 0.147 | 9.04E-12 | Bcell_3_spleen |

|                   |          |            |       |       |          |                |
|-------------------|----------|------------|-------|-------|----------|----------------|
| ATXN10            | 2.58E-16 | 0.16794049 | 0.574 | 0.402 | 9.13E-12 | Bcell_3_spleen |
| SYNRG             | 2.78E-16 | 0.22010624 | 0.311 | 0.194 | 9.84E-12 | Bcell_3_spleen |
| SDF2L1            | 2.79E-16 | 0.19408738 | 0.296 | 0.182 | 9.90E-12 | Bcell_3_spleen |
| NT5DC1            | 3.02E-16 | 0.36188199 | 0.396 | 0.27  | 1.07E-11 | Bcell_3_spleen |
| ND4               | 3.05E-16 | 0.24117929 | 0.957 | 0.977 | 1.08E-11 | Bcell_3_spleen |
| HDAC9             | 3.74E-16 | 0.26701032 | 0.834 | 0.715 | 1.33E-11 | Bcell_3_spleen |
| PIAS2             | 3.87E-16 | 0.14226679 | 0.331 | 0.208 | 1.37E-11 | Bcell_3_spleen |
| ABHD6             | 4.26E-16 | 0.32584104 | 0.267 | 0.167 | 1.51E-11 | Bcell_3_spleen |
| PLCL2             | 4.28E-16 | 0.23603758 | 0.602 | 0.44  | 1.52E-11 | Bcell_3_spleen |
| BANK1             | 4.28E-16 | 0.2102826  | 0.96  | 0.942 | 1.52E-11 | Bcell_3_spleen |
| ARHGAP26          | 4.51E-16 | 0.17651186 | 0.779 | 0.613 | 1.60E-11 | Bcell_3_spleen |
| RCHY1             | 4.56E-16 | 0.12507567 | 0.258 | 0.155 | 1.61E-11 | Bcell_3_spleen |
| UQCRH             | 4.60E-16 | 0.17565372 | 0.508 | 0.352 | 1.63E-11 | Bcell_3_spleen |
| HNRNPD            | 4.72E-16 | 0.17680659 | 0.698 | 0.521 | 1.67E-11 | Bcell_3_spleen |
| EEF1E1            | 4.78E-16 | 0.19225031 | 0.289 | 0.177 | 1.69E-11 | Bcell_3_spleen |
| ENSMUG00000055376 | 4.83E-16 | 0.11795003 | 0.256 | 0.15  | 1.71E-11 | Bcell_3_spleen |
| RAD51B            | 4.88E-16 | 0.2926236  | 0.65  | 0.506 | 1.73E-11 | Bcell_3_spleen |
| RNF115            | 5.44E-16 | 0.19276733 | 0.406 | 0.269 | 1.93E-11 | Bcell_3_spleen |
| COX20             | 5.86E-16 | 0.15990905 | 0.255 | 0.151 | 2.08E-11 | Bcell_3_spleen |
| OST4              | 7.04E-16 | 0.188002   | 0.423 | 0.282 | 2.50E-11 | Bcell_3_spleen |
| SPG11             | 7.30E-16 | 0.13108889 | 0.399 | 0.263 | 2.59E-11 | Bcell_3_spleen |
| REEP5             | 8.09E-16 | 0.1550497  | 0.35  | 0.222 | 2.87E-11 | Bcell_3_spleen |
| NUFIP2            | 9.58E-16 | 0.19109452 | 0.503 | 0.35  | 3.39E-11 | Bcell_3_spleen |
| PBX3              | 9.69E-16 | 0.2662006  | 0.389 | 0.268 | 3.43E-11 | Bcell_3_spleen |
| FAM168A           | 1.01E-15 | 0.20948205 | 0.31  | 0.2   | 3.57E-11 | Bcell_3_spleen |
| NEDD4L            | 1.12E-15 | 0.2410825  | 0.61  | 0.455 | 3.96E-11 | Bcell_3_spleen |
| LRCH3             | 1.13E-15 | 0.18268111 | 0.667 | 0.488 | 4.00E-11 | Bcell_3_spleen |
| BTRC              | 1.49E-15 | 0.18917606 | 0.338 | 0.22  | 5.28E-11 | Bcell_3_spleen |
| NOC3L             | 1.51E-15 | 0.13136693 | 0.338 | 0.216 | 5.34E-11 | Bcell_3_spleen |
| LMAN2             | 1.53E-15 | 0.1103542  | 0.269 | 0.16  | 5.42E-11 | Bcell_3_spleen |
| HNRNPL            | 1.75E-15 | 0.16092528 | 0.607 | 0.429 | 6.20E-11 | Bcell_3_spleen |
| LAP3              | 1.76E-15 | 0.12504861 | 0.262 | 0.157 | 6.23E-11 | Bcell_3_spleen |
| RNF145            | 1.84E-15 | 0.15773172 | 0.536 | 0.375 | 6.53E-11 | Bcell_3_spleen |

|                    |          |            |       |       |          |                |
|--------------------|----------|------------|-------|-------|----------|----------------|
| MLLT10             | 1.88E-15 | 0.18670333 | 0.631 | 0.458 | 6.66E-11 | Bcell_3_spleen |
| APPL2              | 1.94E-15 | 0.11226162 | 0.393 | 0.257 | 6.86E-11 | Bcell_3_spleen |
| HYPK               | 1.94E-15 | 0.18877616 | 0.292 | 0.18  | 6.88E-11 | Bcell_3_spleen |
| CCDC88C            | 2.07E-15 | 0.11812637 | 0.555 | 0.387 | 7.33E-11 | Bcell_3_spleen |
| RER1               | 2.10E-15 | 0.16880149 | 0.323 | 0.202 | 7.43E-11 | Bcell_3_spleen |
| EXOC4              | 2.39E-15 | 0.22791485 | 0.794 | 0.64  | 8.48E-11 | Bcell_3_spleen |
| ENSMMUG00000053817 | 2.40E-15 | 0.22292621 | 0.367 | 0.239 | 8.50E-11 | Bcell_3_spleen |
| IRF1               | 2.65E-15 | 0.28288829 | 0.373 | 0.252 | 9.38E-11 | Bcell_3_spleen |
| SYNE1              | 2.76E-15 | 0.10616105 | 0.39  | 0.255 | 9.77E-11 | Bcell_3_spleen |
| TCF4               | 2.96E-15 | 0.19140706 | 0.777 | 0.63  | 1.05E-10 | Bcell_3_spleen |
| CLNK               | 3.07E-15 | 0.41004078 | 0.25  | 0.157 | 1.09E-10 | Bcell_3_spleen |
| UBE2B              | 3.14E-15 | 0.14576205 | 0.547 | 0.383 | 1.11E-10 | Bcell_3_spleen |
| CTNNB1             | 3.14E-15 | 0.25569838 | 0.666 | 0.502 | 1.11E-10 | Bcell_3_spleen |
| NPM3               | 3.37E-15 | 0.16555473 | 0.274 | 0.167 | 1.19E-10 | Bcell_3_spleen |
| CSK                | 3.74E-15 | 0.15832894 | 0.418 | 0.279 | 1.33E-10 | Bcell_3_spleen |
| OGDH               | 4.02E-15 | 0.13937021 | 0.412 | 0.272 | 1.43E-10 | Bcell_3_spleen |
| CCAR1              | 4.08E-15 | 0.12385026 | 0.366 | 0.238 | 1.45E-10 | Bcell_3_spleen |
| PRMT3              | 4.30E-15 | 0.17719744 | 0.319 | 0.203 | 1.52E-10 | Bcell_3_spleen |
| PLEKHF2            | 4.62E-15 | 0.19081701 | 0.291 | 0.181 | 1.64E-10 | Bcell_3_spleen |
| EIF3F              | 5.04E-15 | 0.27503635 | 0.569 | 0.433 | 1.79E-10 | Bcell_3_spleen |
| CLASP1             | 5.35E-15 | 0.21731717 | 0.513 | 0.365 | 1.89E-10 | Bcell_3_spleen |
| DUSP10             | 5.42E-15 | 0.29026802 | 0.316 | 0.208 | 1.92E-10 | Bcell_3_spleen |
| IFT57              | 6.17E-15 | 0.16370589 | 0.395 | 0.265 | 2.19E-10 | Bcell_3_spleen |
| SLC25A13           | 7.92E-15 | 0.11018084 | 0.276 | 0.171 | 2.81E-10 | Bcell_3_spleen |
| MARCHF5            | 8.12E-15 | 0.14105676 | 0.278 | 0.172 | 2.88E-10 | Bcell_3_spleen |
| NRF1               | 8.26E-15 | 0.13772965 | 0.439 | 0.303 | 2.93E-10 | Bcell_3_spleen |
| CALU               | 8.29E-15 | 0.14172958 | 0.298 | 0.188 | 2.94E-10 | Bcell_3_spleen |
| DDX42              | 8.50E-15 | 0.10335345 | 0.3   | 0.187 | 3.01E-10 | Bcell_3_spleen |
| DPP8               | 9.01E-15 | 0.17082856 | 0.259 | 0.16  | 3.19E-10 | Bcell_3_spleen |
| NAA25              | 9.05E-15 | 0.13861909 | 0.381 | 0.253 | 3.21E-10 | Bcell_3_spleen |
| CFDP1              | 9.39E-15 | 0.19305695 | 0.539 | 0.385 | 3.33E-10 | Bcell_3_spleen |
| RANBP2             | 9.66E-15 | 0.22038551 | 0.698 | 0.543 | 3.42E-10 | Bcell_3_spleen |
| ENSMMUG00000056332 | 1.19E-14 | 0.25392905 | 0.257 | 0.157 | 4.22E-10 | Bcell_3_spleen |

|                   |          |            |       |       |          |                |
|-------------------|----------|------------|-------|-------|----------|----------------|
| CACYBP            | 1.34E-14 | 0.16648049 | 0.425 | 0.289 | 4.74E-10 | Bcell_3_spleen |
| KPNA1             | 1.37E-14 | 0.12231208 | 0.421 | 0.285 | 4.84E-10 | Bcell_3_spleen |
| CSNK1G3           | 1.51E-14 | 0.237824   | 0.776 | 0.62  | 5.36E-10 | Bcell_3_spleen |
| RALGAPB           | 1.53E-14 | 0.125833   | 0.327 | 0.211 | 5.43E-10 | Bcell_3_spleen |
| ATRN              | 1.54E-14 | 0.10886704 | 0.341 | 0.224 | 5.44E-10 | Bcell_3_spleen |
| EXOC5             | 1.58E-14 | 0.113643   | 0.294 | 0.184 | 5.59E-10 | Bcell_3_spleen |
| HNRNPU            | 1.67E-14 | 0.17811898 | 0.776 | 0.62  | 5.91E-10 | Bcell_3_spleen |
| UBQLN1            | 1.78E-14 | 0.17170423 | 0.418 | 0.28  | 6.31E-10 | Bcell_3_spleen |
| TPI1              | 1.95E-14 | 0.17706507 | 0.277 | 0.173 | 6.93E-10 | Bcell_3_spleen |
| CGGBP1            | 2.01E-14 | 0.14418396 | 0.295 | 0.184 | 7.13E-10 | Bcell_3_spleen |
| CYB5R3            | 2.70E-14 | 0.16244255 | 0.292 | 0.184 | 9.55E-10 | Bcell_3_spleen |
| ZZZ3              | 2.70E-14 | 0.16527249 | 0.514 | 0.367 | 9.58E-10 | Bcell_3_spleen |
| NUP205            | 2.76E-14 | 0.14083197 | 0.254 | 0.156 | 9.77E-10 | Bcell_3_spleen |
| PREP              | 3.04E-14 | 0.12391454 | 0.301 | 0.193 | 1.08E-09 | Bcell_3_spleen |
| OXSRI             | 3.07E-14 | 0.13752125 | 0.515 | 0.36  | 1.09E-09 | Bcell_3_spleen |
| MDN1              | 3.19E-14 | 0.16633481 | 0.423 | 0.29  | 1.13E-09 | Bcell_3_spleen |
| ILF3              | 3.23E-14 | 0.19181663 | 0.504 | 0.352 | 1.14E-09 | Bcell_3_spleen |
| DCAF5             | 3.38E-14 | 0.16611683 | 0.407 | 0.276 | 1.20E-09 | Bcell_3_spleen |
| UBE3A             | 3.44E-14 | 0.10049101 | 0.513 | 0.356 | 1.22E-09 | Bcell_3_spleen |
| HSP90AB1          | 3.68E-14 | 0.2640943  | 0.831 | 0.758 | 1.30E-09 | Bcell_3_spleen |
| DOCK9             | 3.89E-14 | 0.16456229 | 0.32  | 0.211 | 1.38E-09 | Bcell_3_spleen |
| ENSMUG00000031594 | 4.16E-14 | 0.19615353 | 0.254 | 0.16  | 1.47E-09 | Bcell_3_spleen |
| NOL8              | 4.20E-14 | 0.18628584 | 0.25  | 0.152 | 1.49E-09 | Bcell_3_spleen |
| EVI2B             | 4.43E-14 | 0.16057409 | 0.514 | 0.36  | 1.57E-09 | Bcell_3_spleen |
| ADAM19            | 4.44E-14 | 0.18273685 | 0.752 | 0.59  | 1.57E-09 | Bcell_3_spleen |
| SRPK2             | 4.45E-14 | 0.24187935 | 0.807 | 0.682 | 1.58E-09 | Bcell_3_spleen |
| UBP1              | 4.79E-14 | 0.17706664 | 0.32  | 0.206 | 1.70E-09 | Bcell_3_spleen |
| NUP160            | 5.08E-14 | 0.23715871 | 0.285 | 0.182 | 1.80E-09 | Bcell_3_spleen |
| NBEA              | 5.33E-14 | 0.11886964 | 0.469 | 0.331 | 1.89E-09 | Bcell_3_spleen |
| IDE               | 5.78E-14 | 0.23738062 | 0.257 | 0.161 | 2.05E-09 | Bcell_3_spleen |
| ZNF700            | 5.89E-14 | 0.10050008 | 0.309 | 0.2   | 2.09E-09 | Bcell_3_spleen |
| PTPRJ             | 6.82E-14 | 0.23480439 | 0.817 | 0.69  | 2.42E-09 | Bcell_3_spleen |
| POT1              | 7.43E-14 | 0.18907518 | 0.25  | 0.155 | 2.63E-09 | Bcell_3_spleen |

|                    |          |            |       |       |          |                |
|--------------------|----------|------------|-------|-------|----------|----------------|
| IQCB1              | 8.17E-14 | 0.19889698 | 0.295 | 0.19  | 2.89E-09 | Bcell_3_spleen |
| TPD52              | 8.17E-14 | 0.24175817 | 0.543 | 0.405 | 2.89E-09 | Bcell_3_spleen |
| ENSMMUG00000057079 | 8.21E-14 | 0.29327263 | 0.271 | 0.175 | 2.91E-09 | Bcell_3_spleen |
| SFPQ               | 8.59E-14 | 0.18041369 | 0.692 | 0.526 | 3.04E-09 | Bcell_3_spleen |
| PPP2R2D            | 8.83E-14 | 0.13140274 | 0.377 | 0.251 | 3.13E-09 | Bcell_3_spleen |
| ST13               | 8.96E-14 | 0.15045895 | 0.45  | 0.307 | 3.17E-09 | Bcell_3_spleen |
| NSMCE2             | 8.99E-14 | 0.17303295 | 0.542 | 0.392 | 3.18E-09 | Bcell_3_spleen |
| CYTIP              | 9.34E-14 | 0.35579051 | 0.549 | 0.42  | 3.31E-09 | Bcell_3_spleen |
| ENSMMUG00000028906 | 1.02E-13 | 0.20876553 | 0.807 | 0.663 | 3.60E-09 | Bcell_3_spleen |
| EEF1G              | 1.03E-13 | 0.2469636  | 0.629 | 0.521 | 3.64E-09 | Bcell_3_spleen |
| H1-4               | 1.06E-13 | 0.22656598 | 0.442 | 0.31  | 3.75E-09 | Bcell_3_spleen |
| CCT4               | 1.08E-13 | 0.12919296 | 0.498 | 0.343 | 3.82E-09 | Bcell_3_spleen |
| RPL39              | 1.10E-13 | 0.27512712 | 0.804 | 0.832 | 3.89E-09 | Bcell_3_spleen |
| CEP192             | 1.29E-13 | 0.13104767 | 0.498 | 0.346 | 4.58E-09 | Bcell_3_spleen |
| NCK2               | 1.31E-13 | 0.22026218 | 0.263 | 0.169 | 4.65E-09 | Bcell_3_spleen |
| PPP1R16B           | 1.43E-13 | 0.20369547 | 0.634 | 0.485 | 5.05E-09 | Bcell_3_spleen |
| ATP6V0A1           | 1.47E-13 | 0.23619835 | 0.406 | 0.283 | 5.22E-09 | Bcell_3_spleen |
| SETD3              | 1.51E-13 | 0.15575887 | 0.265 | 0.166 | 5.36E-09 | Bcell_3_spleen |
| CERS6              | 1.55E-13 | 0.10093282 | 0.349 | 0.236 | 5.48E-09 | Bcell_3_spleen |
| SH2B3              | 2.03E-13 | 0.12714941 | 0.258 | 0.163 | 7.20E-09 | Bcell_3_spleen |
| PDCD4              | 2.06E-13 | 0.15344006 | 0.585 | 0.439 | 7.32E-09 | Bcell_3_spleen |
| LRRC8D             | 2.13E-13 | 0.22795212 | 0.26  | 0.166 | 7.54E-09 | Bcell_3_spleen |
| MAPK6              | 2.37E-13 | 0.18003367 | 0.322 | 0.215 | 8.38E-09 | Bcell_3_spleen |
| PIBF1              | 2.40E-13 | 0.18663327 | 0.364 | 0.248 | 8.50E-09 | Bcell_3_spleen |
| FBXL17             | 2.45E-13 | 0.19771454 | 0.684 | 0.536 | 8.68E-09 | Bcell_3_spleen |
| FAM222B            | 2.48E-13 | 0.34766708 | 0.263 | 0.169 | 8.79E-09 | Bcell_3_spleen |
| ADK                | 2.58E-13 | 0.19934779 | 0.635 | 0.494 | 9.14E-09 | Bcell_3_spleen |
| CASC3              | 2.61E-13 | 0.12552103 | 0.358 | 0.237 | 9.26E-09 | Bcell_3_spleen |
| RPS6KC1            | 2.74E-13 | 0.13761611 | 0.461 | 0.327 | 9.72E-09 | Bcell_3_spleen |
| SH3BGR1            | 2.75E-13 | 0.18110625 | 0.54  | 0.393 | 9.74E-09 | Bcell_3_spleen |
| SENP6              | 2.78E-13 | 0.1800096  | 0.722 | 0.556 | 9.85E-09 | Bcell_3_spleen |
| GTDC1              | 2.96E-13 | 0.23605625 | 0.334 | 0.227 | 1.05E-08 | Bcell_3_spleen |
| ENSMMUG00000061125 | 3.19E-13 | 0.32994334 | 0.867 | 0.777 | 1.13E-08 | Bcell_3_spleen |

|                     |          |            |       |       |          |                |
|---------------------|----------|------------|-------|-------|----------|----------------|
| TPP2                | 3.24E-13 | 0.14524358 | 0.378 | 0.255 | 1.15E-08 | Bcell_3_spleen |
| JTB                 | 3.35E-13 | 0.12519072 | 0.289 | 0.183 | 1.19E-08 | Bcell_3_spleen |
| DOCK2               | 3.43E-13 | 0.22278071 | 0.886 | 0.761 | 1.22E-08 | Bcell_3_spleen |
| HS2ST1              | 4.14E-13 | 0.14487402 | 0.378 | 0.262 | 1.47E-08 | Bcell_3_spleen |
| CCNI                | 4.18E-13 | 0.16077075 | 0.578 | 0.426 | 1.48E-08 | Bcell_3_spleen |
| FOS                 | 4.44E-13 | 0.23191128 | 0.835 | 0.757 | 1.57E-08 | Bcell_3_spleen |
| RTN4                | 4.88E-13 | 0.12959139 | 0.553 | 0.398 | 1.73E-08 | Bcell_3_spleen |
| VPS8                | 5.16E-13 | 0.16660075 | 0.477 | 0.338 | 1.83E-08 | Bcell_3_spleen |
| ANKRD11             | 6.22E-13 | 0.1472279  | 0.668 | 0.495 | 2.20E-08 | Bcell_3_spleen |
| LPP                 | 7.25E-13 | 0.13282914 | 0.655 | 0.5   | 2.57E-08 | Bcell_3_spleen |
| ENSMMUG00000018557  | 7.39E-13 | 0.14142551 | 0.365 | 0.245 | 2.62E-08 | Bcell_3_spleen |
| CHD1                | 7.79E-13 | 0.10736205 | 0.589 | 0.427 | 2.76E-08 | Bcell_3_spleen |
| SPIDR               | 1.26E-12 | 0.14349834 | 0.719 | 0.558 | 4.45E-08 | Bcell_3_spleen |
| ZFP36               | 1.78E-12 | 0.30574661 | 0.788 | 0.705 | 6.32E-08 | Bcell_3_spleen |
| ENSMMUG000000061824 | 1.79E-12 | 0.34552373 | 0.873 | 0.792 | 6.34E-08 | Bcell_3_spleen |
| SUCO                | 1.84E-12 | 0.14917575 | 0.565 | 0.412 | 6.53E-08 | Bcell_3_spleen |
| RBMX                | 1.94E-12 | 0.13025242 | 0.595 | 0.434 | 6.89E-08 | Bcell_3_spleen |
| GFPT1               | 2.25E-12 | 0.15889796 | 0.267 | 0.174 | 7.98E-08 | Bcell_3_spleen |
| UBR3                | 2.49E-12 | 0.11582451 | 0.52  | 0.371 | 8.81E-08 | Bcell_3_spleen |
| PPP6R3              | 2.52E-12 | 0.14437433 | 0.684 | 0.521 | 8.92E-08 | Bcell_3_spleen |
| KLF12               | 2.52E-12 | 0.21390222 | 0.787 | 0.669 | 8.94E-08 | Bcell_3_spleen |
| MTDH                | 3.03E-12 | 0.1107998  | 0.592 | 0.435 | 1.08E-07 | Bcell_3_spleen |
| POLH                | 3.15E-12 | 0.10325003 | 0.303 | 0.201 | 1.12E-07 | Bcell_3_spleen |
| KLF13               | 3.30E-12 | 0.15176343 | 0.265 | 0.171 | 1.17E-07 | Bcell_3_spleen |
| ADAM9               | 4.25E-12 | 0.2574393  | 0.273 | 0.18  | 1.51E-07 | Bcell_3_spleen |
| CDK19               | 4.34E-12 | 0.14282763 | 0.301 | 0.205 | 1.54E-07 | Bcell_3_spleen |
| PHF21A              | 4.48E-12 | 0.11917708 | 0.602 | 0.447 | 1.59E-07 | Bcell_3_spleen |
| FANCC               | 4.87E-12 | 0.10592487 | 0.396 | 0.274 | 1.73E-07 | Bcell_3_spleen |
| TBC1D10C            | 6.46E-12 | 0.11568567 | 0.255 | 0.163 | 2.29E-07 | Bcell_3_spleen |
| DIPK1A              | 6.52E-12 | 0.12389161 | 0.493 | 0.362 | 2.31E-07 | Bcell_3_spleen |
| RASSF3              | 6.79E-12 | 0.19449335 | 0.574 | 0.429 | 2.41E-07 | Bcell_3_spleen |
| ARHGEF7             | 6.82E-12 | 0.14346032 | 0.462 | 0.327 | 2.42E-07 | Bcell_3_spleen |
| ENSMMUG000000030374 | 6.84E-12 | 0.15310788 | 0.35  | 0.242 | 2.42E-07 | Bcell_3_spleen |



|                    |          |            |       |       |          |                |
|--------------------|----------|------------|-------|-------|----------|----------------|
| BCAS3              | 8.69E-12 | 0.17431948 | 0.634 | 0.492 | 3.08E-07 | Bcell_3_spleen |
| ENSMMUG00000056183 | 1.06E-11 | 0.34058989 | 0.721 | 0.623 | 3.74E-07 | Bcell_3_spleen |
| ZNF148             | 1.09E-11 | 0.12231031 | 0.61  | 0.452 | 3.87E-07 | Bcell_3_spleen |
| ARHGEF6            | 1.31E-11 | 0.11079814 | 0.439 | 0.308 | 4.63E-07 | Bcell_3_spleen |
| XIAP               | 1.37E-11 | 0.11459362 | 0.25  | 0.162 | 4.85E-07 | Bcell_3_spleen |
| NGLY1              | 1.57E-11 | 0.1059899  | 0.403 | 0.277 | 5.56E-07 | Bcell_3_spleen |
| RPL36              | 1.59E-11 | 0.22625627 | 0.696 | 0.659 | 5.64E-07 | Bcell_3_spleen |
| WDR36              | 1.68E-11 | 0.11932712 | 0.282 | 0.187 | 5.96E-07 | Bcell_3_spleen |
| TMEM131L           | 1.79E-11 | 0.19380997 | 0.911 | 0.801 | 6.33E-07 | Bcell_3_spleen |
| GLMN               | 1.90E-11 | 0.12631102 | 0.282 | 0.189 | 6.73E-07 | Bcell_3_spleen |
| SCFD2              | 2.04E-11 | 0.14566937 | 0.536 | 0.401 | 7.22E-07 | Bcell_3_spleen |
| SMAP2              | 2.04E-11 | 0.1025952  | 0.749 | 0.597 | 7.22E-07 | Bcell_3_spleen |
| TBC1D5             | 2.79E-11 | 0.15907644 | 0.913 | 0.825 | 9.89E-07 | Bcell_3_spleen |
| CD46               | 3.10E-11 | 0.13109863 | 0.525 | 0.377 | 1.10E-06 | Bcell_3_spleen |
| SIPA1L3            | 3.19E-11 | 0.13181979 | 0.558 | 0.418 | 1.13E-06 | Bcell_3_spleen |
| MCUB               | 3.28E-11 | 0.12005177 | 0.581 | 0.429 | 1.16E-06 | Bcell_3_spleen |
| SLTM               | 3.51E-11 | 0.15911276 | 0.612 | 0.456 | 1.24E-06 | Bcell_3_spleen |
| ZNF236             | 3.76E-11 | 0.1798257  | 0.266 | 0.177 | 1.33E-06 | Bcell_3_spleen |
| BBS9               | 3.85E-11 | 0.2332771  | 0.259 | 0.173 | 1.37E-06 | Bcell_3_spleen |
| CYRIB              | 4.03E-11 | 0.17976227 | 0.894 | 0.774 | 1.43E-06 | Bcell_3_spleen |
| ASXL1              | 4.49E-11 | 0.13540429 | 0.381 | 0.267 | 1.59E-06 | Bcell_3_spleen |
| USP9X              | 4.96E-11 | 0.16400698 | 0.71  | 0.565 | 1.76E-06 | Bcell_3_spleen |
| FBXW7              | 5.78E-11 | 0.14778908 | 0.705 | 0.552 | 2.05E-06 | Bcell_3_spleen |
| MBD2               | 6.44E-11 | 0.11948525 | 0.252 | 0.166 | 2.28E-06 | Bcell_3_spleen |
| PPFIA1             | 6.56E-11 | 0.14600478 | 0.252 | 0.165 | 2.32E-06 | Bcell_3_spleen |
| MGME1              | 6.72E-11 | 0.17120897 | 0.324 | 0.225 | 2.38E-06 | Bcell_3_spleen |
| NIN                | 7.00E-11 | 0.13362108 | 0.661 | 0.515 | 2.48E-06 | Bcell_3_spleen |
| CCT6A              | 8.20E-11 | 0.10342667 | 0.451 | 0.32  | 2.91E-06 | Bcell_3_spleen |
| ENSMMUG00000028699 | 9.95E-11 | 0.18990298 | 0.69  | 0.54  | 3.53E-06 | Bcell_3_spleen |
| BPTF               | 1.07E-10 | 0.14778388 | 0.705 | 0.542 | 3.78E-06 | Bcell_3_spleen |
| NR4A2              | 1.18E-10 | 0.1041007  | 0.518 | 0.387 | 4.17E-06 | Bcell_3_spleen |
| FHIT               | 1.46E-10 | 0.25701538 | 0.308 | 0.223 | 5.16E-06 | Bcell_3_spleen |
| IGF2BP3            | 1.50E-10 | 0.19290969 | 0.642 | 0.505 | 5.31E-06 | Bcell_3_spleen |

|                    |          |            |       |       |            |                |
|--------------------|----------|------------|-------|-------|------------|----------------|
| TBC1D1             | 1.53E-10 | 0.19409672 | 0.85  | 0.732 | 5.42E-06   | Bcell_3_spleen |
| MAPRE2             | 1.62E-10 | 0.16972838 | 0.524 | 0.396 | 5.74E-06   | Bcell_3_spleen |
| ATRX               | 1.66E-10 | 0.1038439  | 0.74  | 0.585 | 5.89E-06   | Bcell_3_spleen |
| IRAG2              | 1.69E-10 | 0.223398   | 0.659 | 0.515 | 5.97E-06   | Bcell_3_spleen |
| ARL15              | 1.93E-10 | 0.18998493 | 0.748 | 0.611 | 6.85E-06   | Bcell_3_spleen |
| ENSMMUG00000055825 | 2.16E-10 | 0.12438999 | 0.314 | 0.215 | 7.65E-06   | Bcell_3_spleen |
| ZNF407             | 2.21E-10 | 0.21781122 | 0.557 | 0.43  | 7.81E-06   | Bcell_3_spleen |
| DDX3X              | 2.38E-10 | 0.15231283 | 0.763 | 0.621 | 8.42E-06   | Bcell_3_spleen |
| IPO9               | 2.84E-10 | 0.1297189  | 0.272 | 0.184 | 1.01E-05   | Bcell_3_spleen |
| TXNDC16            | 3.73E-10 | 0.10071366 | 0.272 | 0.185 | 1.32E-05   | Bcell_3_spleen |
| BMPR2              | 3.88E-10 | 0.15358693 | 0.35  | 0.252 | 1.38E-05   | Bcell_3_spleen |
| TLK1               | 4.14E-10 | 0.11779718 | 0.662 | 0.506 | 1.47E-05   | Bcell_3_spleen |
| TRIP12             | 4.44E-10 | 0.12447388 | 0.648 | 0.496 | 1.57E-05   | Bcell_3_spleen |
| SLIRP              | 4.72E-10 | 0.18074609 | 0.524 | 0.406 | 1.67E-05   | Bcell_3_spleen |
| ENSMMUG00000008587 | 8.24E-10 | 0.10907291 | 0.683 | 0.536 | 2.92E-05   | Bcell_3_spleen |
| TBL1XR1            | 8.89E-10 | 0.16409537 | 0.81  | 0.672 | 3.15E-05   | Bcell_3_spleen |
| DGKA               | 9.36E-10 | 0.11395162 | 0.263 | 0.178 | 3.32E-05   | Bcell_3_spleen |
| ATP5MC2            | 9.58E-10 | 0.11783596 | 0.46  | 0.34  | 3.40E-05   | Bcell_3_spleen |
| SPTBN1             | 1.01E-09 | 0.19278667 | 0.555 | 0.431 | 3.58E-05   | Bcell_3_spleen |
| TAF15              | 1.35E-09 | 0.10770147 | 0.707 | 0.549 | 4.78E-05   | Bcell_3_spleen |
| RPL31              | 1.42E-09 | 0.22693158 | 0.615 | 0.534 | 5.02E-05   | Bcell_3_spleen |
| SLC9A7             | 1.99E-09 | 0.16336711 | 0.554 | 0.422 | 7.03E-05   | Bcell_3_spleen |
| GSTP1              | 2.59E-09 | 0.15236922 | 0.496 | 0.38  | 9.17E-05   | Bcell_3_spleen |
| SLC39A11           | 4.05E-09 | 0.11768156 | 0.509 | 0.386 | 0.00014342 | Bcell_3_spleen |
| CDK6               | 4.09E-09 | 0.1612622  | 0.458 | 0.353 | 0.00014504 | Bcell_3_spleen |
| ATP6               | 4.84E-09 | 0.26748927 | 0.95  | 0.975 | 0.00017157 | Bcell_3_spleen |
| ENSMMUG00000063637 | 6.23E-09 | 0.30029981 | 0.737 | 0.702 | 0.00022085 | Bcell_3_spleen |
| CUL1               | 6.87E-09 | 0.10381573 | 0.41  | 0.298 | 0.0002433  | Bcell_3_spleen |
| HSPA5              | 7.13E-09 | 0.10287109 | 0.484 | 0.359 | 0.00025247 | Bcell_3_spleen |
| ENSMMUG00000020721 | 7.47E-09 | 0.10696761 | 0.464 | 0.343 | 0.00026459 | Bcell_3_spleen |
| PRKX               | 7.69E-09 | 0.16873477 | 0.671 | 0.532 | 0.00027232 | Bcell_3_spleen |
| H2AZ2              | 8.28E-09 | 0.10294051 | 0.659 | 0.514 | 0.00029335 | Bcell_3_spleen |
| HSP90B1            | 9.24E-09 | 0.14342016 | 0.506 | 0.381 | 0.00032756 | Bcell_3_spleen |

|                    |            |            |       |       |            |                |
|--------------------|------------|------------|-------|-------|------------|----------------|
| DISP1              | 1.07E-08   | 0.12866693 | 0.267 | 0.19  | 0.00037752 | Bcell_3_spleen |
| TP53INP1           | 2.04E-08   | 0.15694235 | 0.341 | 0.249 | 0.00072245 | Bcell_3_spleen |
| ENSMMUG00000056016 | 2.21E-08   | 0.15743765 | 0.29  | 0.208 | 0.00078236 | Bcell_3_spleen |
| USP36              | 2.81E-08   | 0.10398022 | 0.673 | 0.528 | 0.00099646 | Bcell_3_spleen |
| UBAC2              | 3.19E-08   | 0.14176293 | 0.733 | 0.594 | 0.00113156 | Bcell_3_spleen |
| XYLT1              | 4.67E-08   | 0.13170817 | 0.803 | 0.691 | 0.00165592 | Bcell_3_spleen |
| VTI1A              | 4.95E-08   | 0.12457561 | 0.767 | 0.624 | 0.00175343 | Bcell_3_spleen |
| GAB1               | 6.80E-08   | 0.25535609 | 0.369 | 0.287 | 0.00241027 | Bcell_3_spleen |
| DNAJB6             | 9.32E-08   | 0.20700052 | 0.638 | 0.499 | 0.00330211 | Bcell_3_spleen |
| PRKCA              | 9.71E-08   | 0.16424234 | 0.534 | 0.418 | 0.003439   | Bcell_3_spleen |
| WWOX               | 1.70E-07   | 0.13146271 | 0.467 | 0.368 | 0.00602589 | Bcell_3_spleen |
| ETF1               | 1.80E-07   | 0.1040127  | 0.57  | 0.436 | 0.00637227 | Bcell_3_spleen |
| RIPOR2             | 2.87E-07   | 0.20431958 | 0.839 | 0.768 | 0.01015353 | Bcell_3_spleen |
| KDM2B              | 3.70E-07   | 0.12227699 | 0.494 | 0.38  | 0.01309686 | Bcell_3_spleen |
| FBXO34             | 3.96E-07   | 0.11016559 | 0.775 | 0.651 | 0.01403917 | Bcell_3_spleen |
| TMSB4X             | 4.44E-07   | 0.3583655  | 0.927 | 0.926 | 0.01573394 | Bcell_3_spleen |
| JAZF1              | 9.80E-07   | 0.15018563 | 0.711 | 0.594 | 0.0347237  | Bcell_3_spleen |
| ACTG1              | 1.72E-06   | 0.18524863 | 0.704 | 0.64  | 0.06079228 | Bcell_3_spleen |
| RPS21              | 1.92E-06   | 0.13220356 | 0.772 | 0.798 | 0.06812986 | Bcell_3_spleen |
| ANGPTL1            | 5.99E-06   | 0.16922907 | 0.474 | 0.374 | 0.21235346 | Bcell_3_spleen |
| USP34              | 6.78E-06   | 0.102983   | 0.845 | 0.721 | 0.24019127 | Bcell_3_spleen |
| JMJD1C             | 7.05E-06   | 0.13822312 | 0.967 | 0.938 | 0.24980631 | Bcell_3_spleen |
| ATF7IP             | 7.42E-06   | 0.10487429 | 0.806 | 0.696 | 0.26295588 | Bcell_3_spleen |
| VAV3               | 1.72E-05   | 0.18056876 | 0.853 | 0.77  | 0.60890156 | Bcell_3_spleen |
| HIVEP3             | 2.82E-05   | 0.17038851 | 0.292 | 0.234 | 0.99838781 | Bcell_3_spleen |
| RPL19              | 5.27E-05   | 0.17036459 | 0.769 | 0.801 | 1          | Bcell_3_spleen |
| SLC38A1            | 9.20E-05   | 0.12620027 | 0.871 | 0.801 | 1          | Bcell_3_spleen |
| DDX3Y              | 9.24E-05   | 0.29266063 | 0.371 | 0.325 | 1          | Bcell_3_spleen |
| CUX1               | 9.66E-05   | 0.11931787 | 0.774 | 0.642 | 1          | Bcell_3_spleen |
| AFF3               | 0.00063301 | 0.11287467 | 0.977 | 0.97  | 1          | Bcell_3_spleen |
| MSI2               | 0.001183   | 0.11063822 | 0.794 | 0.681 | 1          | Bcell_3_spleen |
| TOP2B              | 0.00157448 | 0.10308875 | 0.624 | 0.52  | 1          | Bcell_3_spleen |
| ADGRE5             | 0.00802891 | 0.17943632 | 0.531 | 0.459 | 1          | Bcell_3_spleen |

|                     |            |            |       |       |                  |
|---------------------|------------|------------|-------|-------|------------------|
| RPS27               | 0.01061253 | 0.10353773 | 0.811 | 0.848 | 1 Bcell_3_spleen |
| HNRNPH2             | 0.2533348  | 0.11565184 | 0.79  | 0.825 | 1 Bcell_3_spleen |
| ENSMMUG000000054210 | 0          | 6.98123594 | 0.618 | 0.072 | 0 Mono_lung      |
| APOBEC3A            | 0          | 5.33375939 | 0.638 | 0.114 | 0 Mono_lung      |
| CCL4L1              | 0          | 5.13681    | 0.784 | 0.296 | 0 Mono_lung      |
| CXCL3               | 0          | 6.73445662 | 0.548 | 0.087 | 0 Mono_lung      |
| PTGS2               | 0          | 2.74157483 | 0.798 | 0.458 | 0 Mono_lung      |
| TIMP1               | 0          | 4.14157099 | 0.831 | 0.53  | 0 Mono_lung      |
| BCL2A1              | 0          | 3.68750555 | 0.934 | 0.648 | 0 Mono_lung      |
| ENSMMUG000000042343 | 0          | 3.6014837  | 0.803 | 0.562 | 0 Mono_lung      |
| MT2A                | 0          | 3.75752853 | 0.705 | 0.47  | 0 Mono_lung      |
| GADD45B             | 0          | 2.40972123 | 0.729 | 0.506 | 0 Mono_lung      |
| CCL3                | 0          | 2.98561573 | 0.766 | 0.55  | 0 Mono_lung      |
| IL1B                | 0          | 3.95698849 | 0.967 | 0.772 | 0 Mono_lung      |
| G0S2                | 0          | 2.97896019 | 0.858 | 0.69  | 0 Mono_lung      |
| SOD2                | 0          | 2.35979019 | 0.906 | 0.783 | 0 Mono_lung      |
| BTG1                | 0          | 1.87944082 | 0.851 | 0.777 | 0 Mono_lung      |
| RPL36               | 0          | 1.74227521 | 0.899 | 0.839 | 0 Mono_lung      |
| RPS21               | 0          | 1.89387151 | 0.927 | 0.887 | 0 Mono_lung      |
| NUDT3               | 0          | 0.8448131  | 0.942 | 0.958 | 0 Mono_lung      |
| S100A4              | 0          | 0.8786492  | 0.954 | 0.94  | 0 Mono_lung      |
| ATP5F1E             | 0          | 1.40360404 | 0.934 | 0.921 | 0 Mono_lung      |
| ENSMMUG000000005593 | 0          | 1.29381326 | 0.931 | 0.944 | 0 Mono_lung      |
| ENSMMUG000000056354 | 0          | 1.29542402 | 0.881 | 0.869 | 0 Mono_lung      |
| TMSB10              | 0          | 1.15900478 | 0.974 | 0.962 | 0 Mono_lung      |
| RPS29               | 0          | 0.85083369 | 0.941 | 0.952 | 0 Mono_lung      |
| ENSMMUG000000062350 | 0          | 1.45235263 | 0.956 | 0.946 | 0 Mono_lung      |
| RPS13               | 0          | 0.82555611 | 0.943 | 0.952 | 0 Mono_lung      |
| RPS28               | 0          | 1.09208637 | 0.948 | 0.957 | 0 Mono_lung      |
| RPL35A              | 0          | 0.88569099 | 0.939 | 0.946 | 0 Mono_lung      |
| RPL34               | 0          | 0.84734962 | 0.951 | 0.957 | 0 Mono_lung      |
| RPS23               | 0          | 0.7824409  | 0.956 | 0.961 | 0 Mono_lung      |
| RPS12               | 0          | 1.10132143 | 0.957 | 0.962 | 0 Mono_lung      |

|                     |           |            |       |       |           |           |
|---------------------|-----------|------------|-------|-------|-----------|-----------|
| RPLP1               | 0         | 0.87526341 | 0.959 | 0.964 | 0         | Mono_lung |
| RPS26               | 0         | 0.85164556 | 0.956 | 0.951 | 0         | Mono_lung |
| ENSMMUG000000015563 | 0         | 1.0618383  | 0.942 | 0.947 | 0         | Mono_lung |
| RPL24               | 0         | 0.88120653 | 0.934 | 0.939 | 0         | Mono_lung |
| UBA52               | 0         | 0.85743049 | 0.953 | 0.949 | 0         | Mono_lung |
| RPL28               | 0         | 0.78642034 | 0.964 | 0.96  | 0         | Mono_lung |
| RPL32               | 0         | 0.96070412 | 0.95  | 0.953 | 0         | Mono_lung |
| FAU                 | 0         | 0.8775767  | 0.941 | 0.938 | 0         | Mono_lung |
| RPL39               | 0         | 1.237402   | 0.927 | 0.925 | 0         | Mono_lung |
| RPL10               | 0         | 0.74272386 | 0.961 | 0.962 | 0         | Mono_lung |
| ENSMMUG000000013429 | 0         | 0.85038963 | 0.959 | 0.96  | 0         | Mono_lung |
| RPL18               | 0         | 0.77137744 | 0.95  | 0.951 | 0         | Mono_lung |
| RPS9                | 0         | 0.86964254 | 0.956 | 0.955 | 0         | Mono_lung |
| RPL12               | 0         | 0.93580366 | 0.938 | 0.937 | 0         | Mono_lung |
| RPL19               | 1.07E-297 | 1.10195212 | 0.892 | 0.89  | 3.79E-293 | Mono_lung |
| ENSMMUG000000004441 | 1.43E-290 | 0.97946993 | 0.914 | 0.911 | 5.06E-286 | Mono_lung |
| ZC3H10              | 2.55E-289 | 1.52564273 | 0.795 | 0.766 | 9.04E-285 | Mono_lung |
| GPR65               | 1.09E-286 | 3.20403166 | 0.596 | 0.264 | 3.86E-282 | Mono_lung |
| RPL8                | 9.43E-281 | 0.7889629  | 0.944 | 0.951 | 3.34E-276 | Mono_lung |
| ENSMMUG000000003867 | 5.95E-280 | 0.6496657  | 0.962 | 0.972 | 2.11E-275 | Mono_lung |
| MBD3                | 5.24E-279 | 1.32436503 | 0.835 | 0.826 | 1.86E-274 | Mono_lung |
| RPL30               | 1.47E-277 | 0.63554423 | 0.949 | 0.958 | 5.20E-273 | Mono_lung |
| RPS24               | 9.85E-256 | 0.66093691 | 0.946 | 0.959 | 3.49E-251 | Mono_lung |
| IER3                | 1.21E-255 | 3.74505391 | 0.482 | 0.105 | 4.30E-251 | Mono_lung |
| AREG                | 1.18E-254 | 7.96126814 | 0.391 | 0.013 | 4.17E-250 | Mono_lung |
| RPS7                | 4.57E-253 | 0.6929758  | 0.94  | 0.949 | 1.62E-248 | Mono_lung |
| FTL                 | 4.20E-252 | 0.74893695 | 0.952 | 0.942 | 1.49E-247 | Mono_lung |
| HNRNPH2             | 2.11E-250 | 0.83123353 | 0.919 | 0.923 | 7.46E-246 | Mono_lung |
| ENSMMUG000000022428 | 8.23E-245 | 1.91594442 | 0.686 | 0.54  | 2.91E-240 | Mono_lung |
| RPL22               | 8.64E-238 | 0.80954662 | 0.915 | 0.92  | 3.06E-233 | Mono_lung |
| RPL38               | 1.22E-235 | 0.78456128 | 0.93  | 0.937 | 4.31E-231 | Mono_lung |
| FTH1                | 4.96E-225 | 1.42604867 | 0.91  | 0.934 | 1.76E-220 | Mono_lung |
| ELOA                | 3.95E-224 | 0.64932539 | 0.941 | 0.951 | 1.40E-219 | Mono_lung |

|                     |           |            |       |       |           |           |
|---------------------|-----------|------------|-------|-------|-----------|-----------|
| BIRC3               | 4.05E-221 | 3.64821588 | 0.462 | 0.128 | 1.44E-216 | Mono_lung |
| NLRP3               | 4.44E-218 | 2.86459096 | 0.541 | 0.247 | 1.57E-213 | Mono_lung |
| S100A6              | 1.86E-217 | 0.7296473  | 0.948 | 0.935 | 6.58E-213 | Mono_lung |
| KYNU                | 1.45E-214 | 2.17350205 | 0.712 | 0.592 | 5.15E-210 | Mono_lung |
| ENSMMUG00000060377  | 1.31E-213 | 1.66911008 | 0.703 | 0.624 | 4.65E-209 | Mono_lung |
| CXCL8               | 1.62E-213 | 3.4885028  | 0.471 | 0.138 | 5.75E-209 | Mono_lung |
| ENSMMUG00000044585  | 3.68E-209 | 1.57449329 | 0.711 | 0.65  | 1.30E-204 | Mono_lung |
| IL1RN               | 1.90E-206 | 4.18533762 | 0.441 | 0.125 | 6.74E-202 | Mono_lung |
| IDO1                | 6.52E-205 | 2.16308581 | 0.667 | 0.47  | 2.31E-200 | Mono_lung |
| SAMSN1              | 6.76E-201 | 2.38928548 | 0.562 | 0.296 | 2.40E-196 | Mono_lung |
| ENSMMUG00000019505  | 1.08E-199 | 1.10314154 | 0.805 | 0.835 | 3.84E-195 | Mono_lung |
| RPL27               | 1.19E-199 | 0.62730352 | 0.932 | 0.944 | 4.22E-195 | Mono_lung |
| THBS1               | 2.01E-199 | 2.08836985 | 0.668 | 0.433 | 7.12E-195 | Mono_lung |
| PPP1R15A            | 9.93E-199 | 1.22997658 | 0.822 | 0.833 | 3.52E-194 | Mono_lung |
| CD83                | 3.07E-197 | 2.0261181  | 0.69  | 0.562 | 1.09E-192 | Mono_lung |
| UBL5                | 4.95E-191 | 1.44080333 | 0.719 | 0.679 | 1.75E-186 | Mono_lung |
| ACOD1               | 1.01E-190 | 6.90124454 | 0.309 | 0.007 | 3.59E-186 | Mono_lung |
| OAZ1                | 3.02E-187 | 0.91278822 | 0.853 | 0.884 | 1.07E-182 | Mono_lung |
| RPL7A               | 7.81E-181 | 0.58741032 | 0.938 | 0.941 | 2.77E-176 | Mono_lung |
| TNFAIP3             | 3.45E-179 | 1.37211709 | 0.751 | 0.661 | 1.22E-174 | Mono_lung |
| GMFG                | 4.63E-179 | 0.82117049 | 0.871 | 0.897 | 1.64E-174 | Mono_lung |
| ENSMMUG00000004545  | 1.64E-176 | 1.50611664 | 0.69  | 0.626 | 5.81E-172 | Mono_lung |
| GSTP1               | 2.62E-164 | 0.84900836 | 0.881 | 0.895 | 9.29E-160 | Mono_lung |
| SOCS3               | 7.56E-164 | 3.70152414 | 0.365 | 0.086 | 2.68E-159 | Mono_lung |
| ENSMMUG000000061824 | 4.23E-163 | 0.77237792 | 0.892 | 0.935 | 1.50E-158 | Mono_lung |
| ELOB                | 3.97E-162 | 1.21441189 | 0.739 | 0.744 | 1.41E-157 | Mono_lung |
| GK                  | 3.01E-160 | 2.68702868 | 0.501 | 0.268 | 1.07E-155 | Mono_lung |
| IL1A                | 4.49E-159 | 6.22519175 | 0.276 | 0.013 | 1.59E-154 | Mono_lung |
| BATF                | 6.15E-159 | 4.01088105 | 0.349 | 0.077 | 2.18E-154 | Mono_lung |
| SAT1                | 8.39E-158 | 1.18181494 | 0.822 | 0.856 | 2.97E-153 | Mono_lung |
| ROMO1               | 4.73E-157 | 1.49082747 | 0.668 | 0.624 | 1.68E-152 | Mono_lung |
| RPS5                | 6.33E-156 | 0.67529209 | 0.903 | 0.929 | 2.24E-151 | Mono_lung |
| COX5B               | 1.29E-155 | 1.48077507 | 0.674 | 0.636 | 4.55E-151 | Mono_lung |

|                    |           |            |       |       |           |           |
|--------------------|-----------|------------|-------|-------|-----------|-----------|
| TYROBP             | 2.56E-148 | 0.63882449 | 0.92  | 0.926 | 9.07E-144 | Mono_lung |
| PRPF31             | 3.14E-148 | 1.77132863 | 0.594 | 0.488 | 1.11E-143 | Mono_lung |
| SLC2A3             | 1.08E-146 | 1.77790601 | 0.608 | 0.439 | 3.83E-142 | Mono_lung |
| TNFRSF1B           | 4.71E-146 | 1.91849017 | 0.622 | 0.526 | 1.67E-141 | Mono_lung |
| RPL35              | 9.50E-146 | 0.72649638 | 0.88  | 0.911 | 3.37E-141 | Mono_lung |
| MRPL33             | 1.36E-143 | 1.61542135 | 0.632 | 0.556 | 4.82E-139 | Mono_lung |
| MAMU-DRB1          | 8.94E-137 | 0.85026424 | 0.916 | 0.923 | 3.17E-132 | Mono_lung |
| AIF1               | 1.94E-136 | 0.81142155 | 0.843 | 0.878 | 6.86E-132 | Mono_lung |
| ENSMMUG00000012419 | 2.02E-134 | 0.87360684 | 0.807 | 0.859 | 7.17E-130 | Mono_lung |
| PLEK               | 1.51E-133 | 1.61317625 | 0.655 | 0.59  | 5.35E-129 | Mono_lung |
| STEAP4             | 1.22E-132 | 2.82147    | 0.384 | 0.142 | 4.33E-128 | Mono_lung |
| CD14               | 3.75E-132 | 1.63356229 | 0.66  | 0.586 | 1.33E-127 | Mono_lung |
| RPSA               | 7.04E-130 | 0.59682435 | 0.921 | 0.942 | 2.50E-125 | Mono_lung |
| ATP5MPL            | 4.26E-128 | 0.98549162 | 0.746 | 0.791 | 1.51E-123 | Mono_lung |
| RPS4X              | 2.51E-122 | 0.54275855 | 0.927 | 0.948 | 8.89E-118 | Mono_lung |
| ICAM1              | 3.43E-120 | 2.72640544 | 0.387 | 0.162 | 1.21E-115 | Mono_lung |
| TMA7               | 4.97E-119 | 1.05825768 | 0.717 | 0.753 | 1.76E-114 | Mono_lung |
| RPL36AL            | 1.41E-115 | 0.73942439 | 0.813 | 0.871 | 5.00E-111 | Mono_lung |
| MYL6               | 6.74E-112 | 0.92918678 | 0.757 | 0.809 | 2.39E-107 | Mono_lung |
| GCN1               | 1.29E-110 | 0.51165486 | 0.923 | 0.949 | 4.57E-106 | Mono_lung |
| PET100             | 2.07E-110 | 2.26524066 | 0.423 | 0.238 | 7.34E-106 | Mono_lung |
| OLR1               | 4.69E-110 | 2.82577165 | 0.412 | 0.216 | 1.66E-105 | Mono_lung |
| COX17              | 2.32E-108 | 1.57523389 | 0.574 | 0.493 | 8.22E-104 | Mono_lung |
| COMMD6             | 7.70E-108 | 0.8769222  | 0.769 | 0.825 | 2.73E-103 | Mono_lung |
| NINJ1              | 2.58E-104 | 2.05766924 | 0.503 | 0.384 | 9.14E-100 | Mono_lung |
| ISG20              | 7.33E-104 | 2.40803454 | 0.454 | 0.299 | 2.60E-99  | Mono_lung |
| NME2               | 3.00E-102 | 0.67644205 | 0.827 | 0.88  | 1.06E-97  | Mono_lung |
| RPS27A             | 5.32E-102 | 0.99589997 | 0.708 | 0.745 | 1.88E-97  | Mono_lung |
| NFKB1              | 1.92E-100 | 1.53879919 | 0.741 | 0.765 | 6.80E-96  | Mono_lung |
| ENSMMUG00000030408 | 1.23E-99  | 1.35392204 | 0.597 | 0.568 | 4.35E-95  | Mono_lung |
| EEF1A1             | 1.02E-97  | 0.56660216 | 0.879 | 0.922 | 3.63E-93  | Mono_lung |
| SEM1               | 1.85E-97  | 1.33742236 | 0.602 | 0.574 | 6.54E-93  | Mono_lung |
| SLC39A8            | 5.13E-95  | 3.58277406 | 0.272 | 0.08  | 1.82E-90  | Mono_lung |

|                    |          |            |       |       |          |           |
|--------------------|----------|------------|-------|-------|----------|-----------|
| GAPDH              | 1.38E-94 | 0.72263547 | 0.835 | 0.886 | 4.88E-90 | Mono_lung |
| NDUFA2             | 2.80E-93 | 1.00606167 | 0.695 | 0.738 | 9.92E-89 | Mono_lung |
| EIF3K              | 1.45E-91 | 0.83604352 | 0.737 | 0.811 | 5.14E-87 | Mono_lung |
| ENSMMUG00000056793 | 1.74E-90 | 0.87170189 | 0.724 | 0.776 | 6.18E-86 | Mono_lung |
| RPL6               | 1.63E-89 | 0.43754583 | 0.925 | 0.938 | 5.77E-85 | Mono_lung |
| NDUFA1             | 3.89E-88 | 1.12513343 | 0.642 | 0.669 | 1.38E-83 | Mono_lung |
| RPL22L1            | 3.03E-87 | 1.22224879 | 0.643 | 0.648 | 1.07E-82 | Mono_lung |
| ATP5MG             | 6.56E-87 | 0.64248078 | 0.813 | 0.879 | 2.33E-82 | Mono_lung |
| PM20D2             | 1.51E-85 | 1.15306113 | 0.635 | 0.593 | 5.36E-81 | Mono_lung |
| MYD88              | 1.01E-83 | 2.86862939 | 0.308 | 0.138 | 3.57E-79 | Mono_lung |
| NR4A1              | 1.29E-83 | 2.91439262 | 0.308 | 0.134 | 4.56E-79 | Mono_lung |
| C5AR1              | 4.89E-82 | 1.43457445 | 0.58  | 0.534 | 1.73E-77 | Mono_lung |
| ENSMMUG00000051239 | 5.42E-80 | 2.08632346 | 0.389 | 0.242 | 1.92E-75 | Mono_lung |
| ENSMMUG00000063637 | 7.12E-79 | 0.79668262 | 0.767 | 0.82  | 2.52E-74 | Mono_lung |
| ROBO2              | 1.94E-78 | 1.01224877 | 0.646 | 0.654 | 6.88E-74 | Mono_lung |
| TNFAIP2            | 7.88E-77 | 2.95863076 | 0.272 | 0.105 | 2.79E-72 | Mono_lung |
| CRIP1              | 4.28E-76 | 1.34673547 | 0.686 | 0.707 | 1.52E-71 | Mono_lung |
| COX6B1             | 4.89E-76 | 1.36592799 | 0.545 | 0.511 | 1.73E-71 | Mono_lung |
| NR4A3              | 7.71E-76 | 2.53094837 | 0.318 | 0.154 | 2.73E-71 | Mono_lung |
| C16H17orf49        | 2.80E-75 | 0.91629066 | 0.711 | 0.79  | 9.90E-71 | Mono_lung |
| IFI27L2            | 1.17E-72 | 0.89294819 | 0.696 | 0.746 | 4.13E-68 | Mono_lung |
| NDUFB2             | 2.26E-72 | 0.89612406 | 0.679 | 0.751 | 8.00E-68 | Mono_lung |
| IL7R               | 2.71E-69 | 2.99639177 | 0.251 | 0.094 | 9.61E-65 | Mono_lung |
| PTX3               | 4.22E-68 | 2.37653023 | 0.321 | 0.17  | 1.50E-63 | Mono_lung |
| IFI30              | 5.91E-68 | 1.43598762 | 0.51  | 0.459 | 2.09E-63 | Mono_lung |
| GPR183             | 7.40E-68 | 1.51187332 | 0.561 | 0.51  | 2.62E-63 | Mono_lung |
| SLC11A2            | 8.34E-68 | 2.31886248 | 0.335 | 0.189 | 2.96E-63 | Mono_lung |
| ENSMMUG00000049722 | 1.08E-67 | 1.63972372 | 0.459 | 0.376 | 3.83E-63 | Mono_lung |
| ENSMMUG00000052747 | 2.94E-67 | 1.07329398 | 0.607 | 0.631 | 1.04E-62 | Mono_lung |
| PLIN2              | 8.63E-64 | 1.95519498 | 0.423 | 0.322 | 3.06E-59 | Mono_lung |
| NFKBIA             | 3.59E-63 | 0.74176734 | 0.759 | 0.789 | 1.27E-58 | Mono_lung |
| OST4               | 8.45E-63 | 0.99032684 | 0.64  | 0.7   | 3.00E-58 | Mono_lung |
| ENSMMUG00000003073 | 4.48E-62 | 0.35474442 | 0.916 | 0.938 | 1.59E-57 | Mono_lung |



|                    |          |            |       |       |          |           |
|--------------------|----------|------------|-------|-------|----------|-----------|
| RPL5               | 6.29E-61 | 0.41383775 | 0.903 | 0.935 | 2.23E-56 | Mono_lung |
| COX8A              | 2.78E-60 | 1.09852936 | 0.588 | 0.631 | 9.85E-56 | Mono_lung |
| NFE2L2             | 1.29E-59 | 1.27634579 | 0.547 | 0.523 | 4.57E-55 | Mono_lung |
| C3AR1              | 4.24E-59 | 2.07741307 | 0.339 | 0.212 | 1.50E-54 | Mono_lung |
| ND4L               | 1.28E-58 | 1.56071259 | 0.464 | 0.391 | 4.54E-54 | Mono_lung |
| ELOC               | 9.38E-58 | 1.9469459  | 0.387 | 0.289 | 3.32E-53 | Mono_lung |
| COX6C              | 1.15E-56 | 0.86559254 | 0.65  | 0.725 | 4.09E-52 | Mono_lung |
| ATOX1              | 6.16E-56 | 0.98663424 | 0.611 | 0.655 | 2.18E-51 | Mono_lung |
| CLEC4A             | 9.58E-56 | 1.74411081 | 0.424 | 0.341 | 3.39E-51 | Mono_lung |
| EEF1D              | 7.81E-55 | 0.66934337 | 0.73  | 0.824 | 2.77E-50 | Mono_lung |
| GNG5               | 1.07E-54 | 0.68618424 | 0.728 | 0.817 | 3.80E-50 | Mono_lung |
| ARID5B             | 1.60E-54 | 1.99361627 | 0.423 | 0.336 | 5.68E-50 | Mono_lung |
| GLUL               | 5.88E-53 | 1.60892598 | 0.457 | 0.399 | 2.08E-48 | Mono_lung |
| CASP1              | 9.69E-53 | 0.5817017  | 0.789 | 0.859 | 3.43E-48 | Mono_lung |
| CLIC1              | 1.18E-52 | 0.75432041 | 0.697 | 0.791 | 4.17E-48 | Mono_lung |
| LDHA               | 3.15E-52 | 0.98682848 | 0.62  | 0.683 | 1.12E-47 | Mono_lung |
| ENSMMUG00000016305 | 9.88E-52 | 1.33422975 | 0.487 | 0.454 | 3.50E-47 | Mono_lung |
| CFL1               | 3.25E-51 | 0.41905491 | 0.864 | 0.909 | 1.15E-46 | Mono_lung |
| HINT1              | 1.40E-49 | 0.4279483  | 0.849 | 0.899 | 4.97E-45 | Mono_lung |
| PIK3AP1            | 1.94E-48 | 1.67375833 | 0.475 | 0.433 | 6.86E-44 | Mono_lung |
| COX7C              | 3.60E-48 | 0.67189255 | 0.712 | 0.789 | 1.28E-43 | Mono_lung |
| CHCHD2             | 1.39E-47 | 0.66124845 | 0.704 | 0.811 | 4.92E-43 | Mono_lung |
| ARHGAP4            | 3.25E-47 | 0.1009779  | 0.165 | 0.349 | 1.15E-42 | Mono_lung |
| HCST               | 3.94E-47 | 1.9509904  | 0.358 | 0.265 | 1.40E-42 | Mono_lung |
| ENSMMUG00000007657 | 5.76E-47 | 0.80875947 | 0.643 | 0.728 | 2.04E-42 | Mono_lung |
| ENSMMUG00000011714 | 6.27E-47 | 0.11644297 | 0.128 | 0.282 | 2.22E-42 | Mono_lung |
| EHD1               | 8.55E-47 | 2.01303457 | 0.341 | 0.243 | 3.03E-42 | Mono_lung |
| DOCK4              | 1.17E-46 | 0.16170941 | 0.305 | 0.552 | 4.14E-42 | Mono_lung |
| POMP               | 1.20E-45 | 1.2987631  | 0.501 | 0.511 | 4.24E-41 | Mono_lung |
| SEC61B             | 1.04E-44 | 0.78846558 | 0.656 | 0.755 | 3.68E-40 | Mono_lung |
| COX7B              | 3.04E-44 | 0.96965221 | 0.584 | 0.638 | 1.08E-39 | Mono_lung |
| ENSMMUG00000012140 | 6.24E-44 | 0.39882617 | 0.886 | 0.938 | 2.21E-39 | Mono_lung |
| SRI                | 6.74E-44 | 0.78146584 | 0.677 | 0.787 | 2.39E-39 | Mono_lung |

|                     |          |            |       |       |          |           |
|---------------------|----------|------------|-------|-------|----------|-----------|
| ATP5MC2             | 2.56E-43 | 1.11829395 | 0.534 | 0.57  | 9.07E-39 | Mono_lung |
| DMXL2               | 1.25E-42 | 0.14369341 | 0.269 | 0.504 | 4.41E-38 | Mono_lung |
| RAB10               | 4.67E-42 | 0.11094381 | 0.293 | 0.547 | 1.66E-37 | Mono_lung |
| ENSMMUG000000047481 | 3.41E-41 | 0.83437967 | 0.629 | 0.723 | 1.21E-36 | Mono_lung |
| CD44                | 4.21E-41 | 0.75506205 | 0.935 | 0.969 | 1.49E-36 | Mono_lung |
| UQCRQ               | 7.97E-41 | 0.90346942 | 0.583 | 0.651 | 2.83E-36 | Mono_lung |
| PFDN5               | 1.52E-40 | 1.40726736 | 0.413 | 0.363 | 5.39E-36 | Mono_lung |
| SP4                 | 6.67E-39 | 0.23235795 | 0.177 | 0.346 | 2.36E-34 | Mono_lung |
| SELENOK             | 2.50E-37 | 1.40120352 | 0.446 | 0.433 | 8.86E-33 | Mono_lung |
| DHX15               | 2.66E-37 | 0.14388587 | 0.133 | 0.274 | 9.41E-33 | Mono_lung |
| IFNAR2              | 7.94E-37 | 0.7447688  | 0.705 | 0.808 | 2.81E-32 | Mono_lung |
| TPP1                | 1.00E-36 | 0.13512658 | 0.166 | 0.328 | 3.55E-32 | Mono_lung |
| ENSMMUG000000016665 | 1.23E-36 | 0.97390786 | 0.547 | 0.604 | 4.34E-32 | Mono_lung |
| ALCAM               | 3.61E-36 | 0.2598626  | 0.238 | 0.424 | 1.28E-31 | Mono_lung |
| ST3GAL1             | 5.41E-36 | 0.17994641 | 0.164 | 0.321 | 1.92E-31 | Mono_lung |
| MID1IP1             | 5.59E-36 | 0.13634036 | 0.125 | 0.258 | 1.98E-31 | Mono_lung |
| ZFAND5              | 6.50E-36 | 0.13505461 | 0.167 | 0.327 | 2.30E-31 | Mono_lung |
| MXD1                | 1.12E-35 | 0.11121802 | 0.153 | 0.302 | 3.95E-31 | Mono_lung |
| RIN2                | 1.55E-35 | 2.05237401 | 0.31  | 0.228 | 5.51E-31 | Mono_lung |
| CSTB                | 2.11E-35 | 1.83747091 | 0.287 | 0.2   | 7.49E-31 | Mono_lung |
| ENSMMUG000000008604 | 2.63E-35 | 0.1137145  | 0.204 | 0.388 | 9.33E-31 | Mono_lung |
| BTF3                | 4.55E-35 | 0.63034215 | 0.689 | 0.744 | 1.61E-30 | Mono_lung |
| ENSMMUG000000064224 | 2.31E-34 | 0.98406951 | 0.605 | 0.67  | 8.18E-30 | Mono_lung |
| SMDT1               | 5.33E-34 | 0.71498918 | 0.634 | 0.74  | 1.89E-29 | Mono_lung |
| SRP14               | 5.79E-34 | 0.53276721 | 0.718 | 0.838 | 2.05E-29 | Mono_lung |
| CREM                | 1.18E-33 | 1.85656051 | 0.288 | 0.203 | 4.18E-29 | Mono_lung |
| IL13RA1             | 1.41E-33 | 0.10740056 | 0.222 | 0.41  | 4.98E-29 | Mono_lung |
| TAGLN2              | 1.69E-33 | 0.60484591 | 0.758 | 0.85  | 5.99E-29 | Mono_lung |
| LITAF               | 2.09E-33 | 1.87667795 | 0.318 | 0.242 | 7.39E-29 | Mono_lung |
| MLF2                | 3.11E-33 | 0.11824953 | 0.146 | 0.288 | 1.10E-28 | Mono_lung |
| ARPC3               | 1.03E-32 | 0.35663878 | 0.832 | 0.9   | 3.66E-28 | Mono_lung |
| NUCB1               | 2.12E-32 | 0.1870346  | 0.164 | 0.318 | 7.50E-28 | Mono_lung |
| NDUFB11             | 2.94E-32 | 1.36988712 | 0.398 | 0.371 | 1.04E-27 | Mono_lung |

|                     |          |            |       |       |          |           |
|---------------------|----------|------------|-------|-------|----------|-----------|
| MAPK6               | 4.41E-32 | 0.19140137 | 0.215 | 0.397 | 1.56E-27 | Mono_lung |
| NFKBID              | 5.23E-32 | 2.07667226 | 0.251 | 0.164 | 1.85E-27 | Mono_lung |
| ERBB3               | 7.00E-32 | 0.10957589 | 0.177 | 0.332 | 2.48E-27 | Mono_lung |
| CORO1A              | 8.46E-32 | 0.56970311 | 0.722 | 0.85  | 3.00E-27 | Mono_lung |
| ITGAV               | 9.15E-32 | 0.33967374 | 0.248 | 0.445 | 3.24E-27 | Mono_lung |
| TRAPPC4             | 1.47E-31 | 0.11228914 | 0.152 | 0.293 | 5.20E-27 | Mono_lung |
| CTSC                | 1.73E-31 | 0.27646101 | 0.249 | 0.44  | 6.13E-27 | Mono_lung |
| ENSMMUG00000000983  | 2.45E-31 | 0.56514258 | 0.76  | 0.867 | 8.66E-27 | Mono_lung |
| TGFB1               | 4.69E-31 | 0.10154876 | 0.241 | 0.436 | 1.66E-26 | Mono_lung |
| SEPTIN2             | 5.60E-31 | 0.10954577 | 0.247 | 0.449 | 1.99E-26 | Mono_lung |
| ENSMMUG000000017113 | 5.91E-31 | 0.19016111 | 0.416 | 0.691 | 2.09E-26 | Mono_lung |
| ENSMMUG00000000249  | 6.11E-31 | 0.1578985  | 0.264 | 0.478 | 2.17E-26 | Mono_lung |
| EMD                 | 6.19E-31 | 0.24867634 | 0.143 | 0.28  | 2.19E-26 | Mono_lung |
| MRI1                | 6.60E-31 | 0.84871964 | 0.575 | 0.662 | 2.34E-26 | Mono_lung |
| WDR1                | 7.61E-31 | 0.19324518 | 0.224 | 0.412 | 2.70E-26 | Mono_lung |
| RB1                 | 7.99E-31 | 0.13668573 | 0.181 | 0.337 | 2.83E-26 | Mono_lung |
| C14H11orf58         | 3.46E-30 | 0.10564789 | 0.187 | 0.346 | 1.23E-25 | Mono_lung |
| NXPE3               | 5.45E-30 | 0.83593658 | 0.595 | 0.636 | 1.93E-25 | Mono_lung |
| EDF1                | 1.05E-29 | 1.10226434 | 0.474 | 0.5   | 3.71E-25 | Mono_lung |
| ATP6V1G1            | 1.24E-29 | 0.62710697 | 0.674 | 0.791 | 4.38E-25 | Mono_lung |
| RAB11A              | 1.48E-29 | 0.10056455 | 0.223 | 0.404 | 5.26E-25 | Mono_lung |
| CARS1               | 1.78E-29 | 0.14179175 | 0.174 | 0.325 | 6.32E-25 | Mono_lung |
| POLR2F              | 3.14E-29 | 0.11950708 | 0.169 | 0.317 | 1.11E-24 | Mono_lung |
| PTPN1               | 3.24E-29 | 0.11289536 | 0.39  | 0.64  | 1.15E-24 | Mono_lung |
| UQCRH               | 3.36E-29 | 0.98515136 | 0.513 | 0.567 | 1.19E-24 | Mono_lung |
| ACTG1               | 4.10E-29 | 0.39921267 | 0.835 | 0.894 | 1.45E-24 | Mono_lung |
| EAF2                | 5.19E-29 | 0.11019749 | 0.227 | 0.404 | 1.84E-24 | Mono_lung |
| MRPS15              | 9.46E-29 | 0.16761749 | 0.167 | 0.312 | 3.35E-24 | Mono_lung |
| ENSMMUG000000006463 | 9.99E-29 | 0.69130602 | 0.638 | 0.75  | 3.54E-24 | Mono_lung |
| ENSMMUG000000061630 | 1.00E-28 | 0.19173428 | 0.185 | 0.343 | 3.54E-24 | Mono_lung |
| SUB1                | 1.77E-28 | 0.47626808 | 0.743 | 0.871 | 6.27E-24 | Mono_lung |
| MGST2               | 6.38E-28 | 0.13377399 | 0.207 | 0.376 | 2.26E-23 | Mono_lung |
| EIF3G               | 6.38E-28 | 0.13253978 | 0.292 | 0.512 | 2.26E-23 | Mono_lung |

|                    |          |            |       |       |          |           |
|--------------------|----------|------------|-------|-------|----------|-----------|
| ENSMMUG00000001210 | 7.91E-28 | 0.45217316 | 0.758 | 0.833 | 2.80E-23 | Mono_lung |
| LST1               | 2.09E-27 | 0.70511712 | 0.66  | 0.767 | 7.41E-23 | Mono_lung |
| TMEM258            | 2.17E-27 | 1.1375844  | 0.445 | 0.454 | 7.68E-23 | Mono_lung |
| MYG1               | 2.41E-27 | 1.32183681 | 0.385 | 0.363 | 8.55E-23 | Mono_lung |
| ENSMMUG00000014947 | 2.68E-27 | 0.17815327 | 0.149 | 0.28  | 9.49E-23 | Mono_lung |
| ANTXR2             | 3.15E-27 | 0.19356176 | 0.595 | 0.861 | 1.11E-22 | Mono_lung |
| PSMA3              | 4.17E-27 | 0.13564954 | 0.166 | 0.306 | 1.48E-22 | Mono_lung |
| ERGIC1             | 4.31E-27 | 0.13760047 | 0.133 | 0.251 | 1.53E-22 | Mono_lung |
| ENSMMUG00000022489 | 7.51E-27 | 0.91759736 | 0.525 | 0.601 | 2.66E-22 | Mono_lung |
| TMED9              | 9.35E-27 | 0.18408892 | 0.163 | 0.302 | 3.31E-22 | Mono_lung |
| TMEM219            | 1.38E-26 | 0.16236416 | 0.244 | 0.436 | 4.91E-22 | Mono_lung |
| EEF1B2             | 2.09E-26 | 0.34534431 | 0.819 | 0.892 | 7.42E-22 | Mono_lung |
| STING1             | 2.57E-26 | 0.26124862 | 0.223 | 0.399 | 9.12E-22 | Mono_lung |
| CD68               | 3.62E-26 | 0.15250379 | 0.243 | 0.425 | 1.28E-21 | Mono_lung |
| ENSMMUG00000016894 | 4.08E-26 | 1.20185008 | 0.428 | 0.44  | 1.44E-21 | Mono_lung |
| CD163              | 7.66E-26 | 0.13822421 | 0.307 | 0.526 | 2.71E-21 | Mono_lung |
| MSRB1              | 9.60E-26 | 0.21431326 | 0.203 | 0.362 | 3.40E-21 | Mono_lung |
| C10H20orf27        | 1.51E-25 | 0.15008989 | 0.194 | 0.347 | 5.35E-21 | Mono_lung |
| RAB8A              | 1.70E-25 | 0.28637019 | 0.135 | 0.255 | 6.02E-21 | Mono_lung |
| NSA2               | 1.70E-25 | 0.73487086 | 0.613 | 0.73  | 6.03E-21 | Mono_lung |
| GRK2               | 1.94E-25 | 0.34230247 | 0.165 | 0.303 | 6.86E-21 | Mono_lung |
| ANP32E             | 2.82E-25 | 0.11707116 | 0.153 | 0.279 | 9.97E-21 | Mono_lung |
| CTSA               | 3.37E-25 | 0.24973091 | 0.152 | 0.279 | 1.19E-20 | Mono_lung |
| HIVEP1             | 6.57E-25 | 0.33601639 | 0.311 | 0.522 | 2.33E-20 | Mono_lung |
| ATG3               | 7.42E-25 | 0.15109066 | 0.268 | 0.464 | 2.63E-20 | Mono_lung |
| LILRA3             | 7.66E-25 | 0.26511973 | 0.18  | 0.326 | 2.71E-20 | Mono_lung |
| PSMB5              | 8.30E-25 | 0.15583868 | 0.186 | 0.331 | 2.94E-20 | Mono_lung |
| IRF3               | 9.05E-25 | 0.27153946 | 0.173 | 0.313 | 3.21E-20 | Mono_lung |
| MVB12A             | 1.41E-24 | 0.21958593 | 0.209 | 0.369 | 5.01E-20 | Mono_lung |
| GHITM              | 1.52E-24 | 0.14054518 | 0.24  | 0.418 | 5.37E-20 | Mono_lung |
| PPP1R18            | 1.82E-24 | 0.16725036 | 0.228 | 0.399 | 6.43E-20 | Mono_lung |
| BST2               | 2.07E-24 | 0.10236393 | 0.307 | 0.511 | 7.35E-20 | Mono_lung |
| ENSMMUG00000063299 | 2.08E-24 | 0.2334295  | 0.191 | 0.341 | 7.38E-20 | Mono_lung |

|                   |          |            |       |       |          |           |
|-------------------|----------|------------|-------|-------|----------|-----------|
| FBXO10            | 2.75E-24 | 0.15648374 | 0.164 | 0.295 | 9.76E-20 | Mono_lung |
| HNRNPDL           | 3.55E-24 | 0.60055575 | 0.651 | 0.781 | 1.26E-19 | Mono_lung |
| IL6ST             | 4.21E-24 | 0.25450823 | 0.14  | 0.257 | 1.49E-19 | Mono_lung |
| PSMD4             | 4.85E-24 | 0.18303403 | 0.173 | 0.31  | 1.72E-19 | Mono_lung |
| CCNH              | 4.99E-24 | 0.27260704 | 0.15  | 0.271 | 1.77E-19 | Mono_lung |
| ANXA6             | 7.38E-24 | 0.26477562 | 0.169 | 0.304 | 2.61E-19 | Mono_lung |
| COX7A2            | 9.21E-24 | 1.63764406 | 0.276 | 0.216 | 3.26E-19 | Mono_lung |
| MT1M              | 1.15E-23 | 1.24151986 | 0.533 | 0.558 | 4.09E-19 | Mono_lung |
| BUD23             | 1.75E-23 | 0.17727326 | 0.227 | 0.394 | 6.22E-19 | Mono_lung |
| ARL5B             | 1.83E-23 | 0.10787561 | 0.157 | 0.278 | 6.49E-19 | Mono_lung |
| NAA20             | 1.87E-23 | 0.18112225 | 0.202 | 0.353 | 6.62E-19 | Mono_lung |
| RPS16             | 2.53E-23 | 0.19738763 | 0.937 | 0.951 | 8.95E-19 | Mono_lung |
| GTF2A2            | 2.59E-23 | 0.22718713 | 0.183 | 0.324 | 9.18E-19 | Mono_lung |
| NDUFA8            | 2.82E-23 | 0.24125458 | 0.14  | 0.258 | 9.99E-19 | Mono_lung |
| MRPS12            | 3.07E-23 | 0.23218844 | 0.177 | 0.316 | 1.09E-18 | Mono_lung |
| SPCS2             | 3.87E-23 | 0.19309347 | 0.196 | 0.342 | 1.37E-18 | Mono_lung |
| MVP               | 4.05E-23 | 0.31707201 | 0.195 | 0.344 | 1.43E-18 | Mono_lung |
| ATP6V1FNB         | 4.96E-23 | 0.86821192 | 0.529 | 0.61  | 1.76E-18 | Mono_lung |
| LILRAB            | 5.40E-23 | 0.26732483 | 0.18  | 0.317 | 1.91E-18 | Mono_lung |
| PTPN6             | 6.19E-23 | 0.26579152 | 0.223 | 0.387 | 2.19E-18 | Mono_lung |
| ENSMUG00000053146 | 6.41E-23 | 1.08133591 | 0.468 | 0.519 | 2.27E-18 | Mono_lung |
| AKR1B1            | 8.36E-23 | 0.28674543 | 0.193 | 0.337 | 2.96E-18 | Mono_lung |
| SERPINB10         | 1.04E-22 | 1.3548779  | 0.397 | 0.374 | 3.69E-18 | Mono_lung |
| SEMA4A            | 2.17E-22 | 0.29580693 | 0.223 | 0.385 | 7.70E-18 | Mono_lung |
| SEC11C            | 2.86E-22 | 0.24813624 | 0.147 | 0.265 | 1.01E-17 | Mono_lung |
| GSTM4             | 2.94E-22 | 0.28263566 | 0.142 | 0.258 | 1.04E-17 | Mono_lung |
| RDH5              | 3.46E-22 | 0.94422023 | 0.509 | 0.575 | 1.23E-17 | Mono_lung |
| GPX1              | 4.38E-22 | 1.64157051 | 0.262 | 0.203 | 1.55E-17 | Mono_lung |
| EXOC3             | 7.96E-22 | 0.3717082  | 0.153 | 0.273 | 2.82E-17 | Mono_lung |
| SLC3A2            | 8.24E-22 | 0.25145332 | 0.141 | 0.254 | 2.92E-17 | Mono_lung |
| NDUFA5            | 8.36E-22 | 0.18152636 | 0.14  | 0.251 | 2.96E-17 | Mono_lung |
| ACTN4             | 8.41E-22 | 0.31257815 | 0.144 | 0.258 | 2.98E-17 | Mono_lung |
| MRPL11            | 1.12E-21 | 0.15384215 | 0.225 | 0.386 | 3.98E-17 | Mono_lung |

|                   |          |            |       |       |          |           |
|-------------------|----------|------------|-------|-------|----------|-----------|
| CLDND1            | 1.13E-21 | 0.14177554 | 0.168 | 0.291 | 4.02E-17 | Mono_lung |
| DBI               | 2.73E-21 | 0.73390736 | 0.574 | 0.682 | 9.66E-17 | Mono_lung |
| URGCP             | 3.16E-21 | 0.32358147 | 0.205 | 0.355 | 1.12E-16 | Mono_lung |
| ENSMUG00000053089 | 3.37E-21 | 0.36736753 | 0.297 | 0.484 | 1.19E-16 | Mono_lung |
| SUMO1             | 5.24E-21 | 0.12603235 | 0.323 | 0.547 | 1.86E-16 | Mono_lung |
| DENND5A           | 5.33E-21 | 0.28444812 | 0.464 | 0.715 | 1.89E-16 | Mono_lung |
| LAMTOR4           | 6.56E-21 | 0.63333244 | 0.628 | 0.752 | 2.32E-16 | Mono_lung |
| NDUFAB1           | 6.82E-21 | 0.21656901 | 0.164 | 0.288 | 2.42E-16 | Mono_lung |
| DYNLL1            | 8.07E-21 | 0.94857828 | 0.507 | 0.562 | 2.86E-16 | Mono_lung |
| ATP6V1B2          | 1.08E-20 | 0.31453348 | 0.189 | 0.326 | 3.84E-16 | Mono_lung |
| UBE2V1            | 1.76E-20 | 0.14853593 | 0.274 | 0.459 | 6.24E-16 | Mono_lung |
| MRPL51            | 1.96E-20 | 0.20296165 | 0.232 | 0.395 | 6.95E-16 | Mono_lung |
| MYL12B            | 2.07E-20 | 0.41451307 | 0.741 | 0.858 | 7.34E-16 | Mono_lung |
| ND3               | 2.54E-20 | 0.43305971 | 0.734 | 0.829 | 8.99E-16 | Mono_lung |
| CALCOCO2          | 3.46E-20 | 0.18494779 | 0.259 | 0.433 | 1.22E-15 | Mono_lung |
| COMT              | 3.69E-20 | 0.40321419 | 0.151 | 0.266 | 1.31E-15 | Mono_lung |
| FES               | 3.83E-20 | 0.41372528 | 0.16  | 0.28  | 1.36E-15 | Mono_lung |
| AGTRAP            | 5.08E-20 | 0.2269778  | 0.218 | 0.368 | 1.80E-15 | Mono_lung |
| PTBP1             | 5.56E-20 | 0.33577219 | 0.156 | 0.274 | 1.97E-15 | Mono_lung |
| SEC61G            | 5.88E-20 | 0.70377037 | 0.573 | 0.678 | 2.08E-15 | Mono_lung |
| LSM7              | 6.03E-20 | 1.10892375 | 0.414 | 0.429 | 2.14E-15 | Mono_lung |
| RPL10A            | 8.76E-20 | 0.21937676 | 0.898 | 0.934 | 3.10E-15 | Mono_lung |
| POR               | 1.14E-19 | 0.33562429 | 0.145 | 0.253 | 4.06E-15 | Mono_lung |
| SNRPB2            | 1.24E-19 | 0.23933501 | 0.214 | 0.362 | 4.39E-15 | Mono_lung |
| TMSB4X            | 1.31E-19 | 0.18101885 | 0.971 | 0.98  | 4.66E-15 | Mono_lung |
| RAB27A            | 1.41E-19 | 0.34902054 | 0.178 | 0.305 | 4.98E-15 | Mono_lung |
| MS4A6A            | 1.97E-19 | 0.18835536 | 0.187 | 0.314 | 6.99E-15 | Mono_lung |
| FNIP2             | 2.00E-19 | 0.7605859  | 0.21  | 0.354 | 7.08E-15 | Mono_lung |
| MTHFD2            | 2.05E-19 | 1.56403664 | 0.297 | 0.259 | 7.27E-15 | Mono_lung |
| MGST3             | 2.21E-19 | 0.6095454  | 0.614 | 0.732 | 7.83E-15 | Mono_lung |
| NDUFS2            | 3.84E-19 | 0.28125917 | 0.152 | 0.265 | 1.36E-14 | Mono_lung |
| WDR83OS           | 5.18E-19 | 0.43199809 | 0.726 | 0.852 | 1.83E-14 | Mono_lung |
| ENSMUG00000015270 | 5.31E-19 | 0.16087367 | 0.95  | 0.967 | 1.88E-14 | Mono_lung |

|                    |          |            |       |       |                    |
|--------------------|----------|------------|-------|-------|--------------------|
| ENSMMUG00000041688 | 8.68E-19 | 1.309104   | 0.448 | 0.47  | 3.08E-14 Mono_lung |
| ENSMMUG00000057449 | 9.84E-19 | 0.27618681 | 0.183 | 0.31  | 3.49E-14 Mono_lung |
| SLC16A3            | 1.13E-18 | 0.43703208 | 0.156 | 0.272 | 4.01E-14 Mono_lung |
| ENSMMUG00000064139 | 1.14E-18 | 0.46209145 | 0.721 | 0.835 | 4.05E-14 Mono_lung |
| PDCD10             | 1.94E-18 | 0.20581139 | 0.191 | 0.319 | 6.87E-14 Mono_lung |
| SRSF2              | 2.19E-18 | 0.34447399 | 0.179 | 0.305 | 7.78E-14 Mono_lung |
| CIAO2A             | 2.42E-18 | 0.24658874 | 0.186 | 0.313 | 8.59E-14 Mono_lung |
| RIPK2              | 2.82E-18 | 0.41755242 | 0.254 | 0.412 | 1.00E-13 Mono_lung |
| CAPG               | 4.63E-18 | 0.48384076 | 0.694 | 0.822 | 1.64E-13 Mono_lung |
| ATP5F1D            | 4.65E-18 | 0.39194968 | 0.159 | 0.271 | 1.65E-13 Mono_lung |
| ENSMMUG00000063609 | 4.95E-18 | 1.55363323 | 0.258 | 0.211 | 1.75E-13 Mono_lung |
| TMEM205            | 5.36E-18 | 0.39954922 | 0.159 | 0.275 | 1.90E-13 Mono_lung |
| TNIP1              | 5.47E-18 | 1.90829505 | 0.256 | 0.21  | 1.94E-13 Mono_lung |
| COX7A1             | 6.42E-18 | 1.51837543 | 0.292 | 0.258 | 2.27E-13 Mono_lung |
| MRPL34             | 7.95E-18 | 0.3361722  | 0.206 | 0.348 | 2.82E-13 Mono_lung |
| NUFIP1             | 1.19E-17 | 0.16179308 | 0.317 | 0.491 | 4.23E-13 Mono_lung |
| PSMA4              | 1.48E-17 | 0.20758602 | 0.241 | 0.397 | 5.24E-13 Mono_lung |
| ENSMMUG00000056183 | 1.64E-17 | 0.49964186 | 0.73  | 0.802 | 5.82E-13 Mono_lung |
| PSMB8              | 1.86E-17 | 0.11804282 | 0.377 | 0.605 | 6.58E-13 Mono_lung |
| DDX3Y              | 4.88E-17 | 0.28190563 | 0.215 | 0.343 | 1.73E-12 Mono_lung |
| LGALS3             | 5.37E-17 | 0.39478726 | 0.802 | 0.893 | 1.90E-12 Mono_lung |
| EIF2S2             | 8.45E-17 | 0.18151125 | 0.329 | 0.529 | 2.99E-12 Mono_lung |
| PSMA1              | 8.89E-17 | 0.16148976 | 0.328 | 0.531 | 3.15E-12 Mono_lung |
| CNIH4              | 9.19E-17 | 0.28415976 | 0.263 | 0.43  | 3.26E-12 Mono_lung |
| BRK1               | 9.36E-17 | 0.16304103 | 0.389 | 0.628 | 3.32E-12 Mono_lung |
| ENSMMUG00000038348 | 1.47E-16 | 1.11352073 | 0.449 | 0.47  | 5.19E-12 Mono_lung |
| HNMT               | 1.58E-16 | 0.26895473 | 0.275 | 0.446 | 5.60E-12 Mono_lung |
| AP1B1              | 1.62E-16 | 0.31622354 | 0.189 | 0.311 | 5.74E-12 Mono_lung |
| COX2               | 1.66E-16 | 0.19952116 | 0.926 | 0.936 | 5.89E-12 Mono_lung |
| PLCB2              | 1.67E-16 | 0.42875363 | 0.166 | 0.276 | 5.93E-12 Mono_lung |
| ENSMMUG00000053735 | 1.87E-16 | 0.72955811 | 0.529 | 0.63  | 6.63E-12 Mono_lung |
| HIKESHI            | 1.92E-16 | 0.2891592  | 0.159 | 0.268 | 6.81E-12 Mono_lung |
| ENSMMUG00000058919 | 2.06E-16 | 0.2981805  | 0.237 | 0.39  | 7.31E-12 Mono_lung |

|                    |          |            |       |       |          |           |
|--------------------|----------|------------|-------|-------|----------|-----------|
| PRMT2              | 2.08E-16 | 0.3914115  | 0.157 | 0.264 | 7.38E-12 | Mono_lung |
| NDUFS3             | 2.17E-16 | 0.25153477 | 0.163 | 0.272 | 7.70E-12 | Mono_lung |
| ATF6               | 2.23E-16 | 0.44452152 | 0.301 | 0.488 | 7.89E-12 | Mono_lung |
| KRTCAP2            | 2.24E-16 | 0.55292186 | 0.628 | 0.761 | 7.95E-12 | Mono_lung |
| ATP6V1A            | 2.79E-16 | 0.18365414 | 0.401 | 0.615 | 9.87E-12 | Mono_lung |
| WBP2               | 3.18E-16 | 0.39971092 | 0.171 | 0.286 | 1.13E-11 | Mono_lung |
| ATP6AP1            | 4.03E-16 | 0.43308941 | 0.16  | 0.27  | 1.43E-11 | Mono_lung |
| EIF4E2             | 4.17E-16 | 0.2872076  | 0.25  | 0.411 | 1.48E-11 | Mono_lung |
| H2AFJ              | 6.16E-16 | 0.867555   | 0.514 | 0.611 | 2.18E-11 | Mono_lung |
| AMDHD1             | 7.89E-16 | 0.31101175 | 0.229 | 0.373 | 2.79E-11 | Mono_lung |
| ENSMMUG00000005880 | 8.99E-16 | 0.36431624 | 0.255 | 0.418 | 3.18E-11 | Mono_lung |
| ENSMMUG00000037684 | 1.19E-15 | 0.40476877 | 0.168 | 0.279 | 4.21E-11 | Mono_lung |
| METRNL             | 1.42E-15 | 1.59102463 | 0.26  | 0.22  | 5.02E-11 | Mono_lung |
| PELI1              | 1.62E-15 | 0.87243906 | 0.591 | 0.652 | 5.73E-11 | Mono_lung |
| CSRNP1             | 1.75E-15 | 0.23588153 | 0.273 | 0.434 | 6.21E-11 | Mono_lung |
| RPL37A             | 1.97E-15 | 0.3883544  | 0.868 | 0.934 | 6.98E-11 | Mono_lung |
| FNBP1              | 3.44E-15 | 0.32590859 | 0.415 | 0.654 | 1.22E-10 | Mono_lung |
| ST13               | 3.65E-15 | 0.29506515 | 0.211 | 0.341 | 1.29E-10 | Mono_lung |
| TNFSF13            | 4.45E-15 | 0.42102309 | 0.182 | 0.302 | 1.58E-10 | Mono_lung |
| ERGIC3             | 4.49E-15 | 0.38712732 | 0.174 | 0.287 | 1.59E-10 | Mono_lung |
| SMNDC1             | 4.53E-15 | 0.34984531 | 0.163 | 0.268 | 1.60E-10 | Mono_lung |
| FKBP1A             | 5.09E-15 | 0.20629338 | 0.344 | 0.553 | 1.80E-10 | Mono_lung |
| SERTAD3            | 5.86E-15 | 0.30431735 | 0.207 | 0.334 | 2.08E-10 | Mono_lung |
| ENSMMUG00000029987 | 6.27E-15 | 0.47974428 | 0.16  | 0.266 | 2.22E-10 | Mono_lung |
| MAP3K8             | 6.81E-15 | 0.20410629 | 0.307 | 0.479 | 2.41E-10 | Mono_lung |
| B4GALT1            | 6.91E-15 | 0.35960212 | 0.163 | 0.266 | 2.45E-10 | Mono_lung |
| COPS6              | 6.91E-15 | 0.3797899  | 0.173 | 0.285 | 2.45E-10 | Mono_lung |
| RPS4Y2             | 9.69E-15 | 0.19636593 | 0.194 | 0.308 | 3.43E-10 | Mono_lung |
| ENSMMUG00000004539 | 1.08E-14 | 0.19753669 | 0.402 | 0.636 | 3.83E-10 | Mono_lung |
| LPXN               | 1.10E-14 | 1.57912799 | 0.286 | 0.257 | 3.89E-10 | Mono_lung |
| S100A10            | 1.12E-14 | 0.33681737 | 0.863 | 0.908 | 3.96E-10 | Mono_lung |
| SSBP1              | 1.29E-14 | 0.35755034 | 0.153 | 0.252 | 4.57E-10 | Mono_lung |
| RASSF4             | 1.48E-14 | 0.3665093  | 0.19  | 0.31  | 5.26E-10 | Mono_lung |



|                    |          |            |       |       |          |           |
|--------------------|----------|------------|-------|-------|----------|-----------|
| MICOS13            | 1.74E-14 | 0.99532522 | 0.423 | 0.47  | 6.18E-10 | Mono_lung |
| EIF3I              | 2.11E-14 | 0.37376842 | 0.195 | 0.318 | 7.48E-10 | Mono_lung |
| H2AFZ              | 2.24E-14 | 1.01558932 | 0.44  | 0.492 | 7.93E-10 | Mono_lung |
| ENSMMUG00000030465 | 2.35E-14 | 0.23299139 | 0.303 | 0.483 | 8.34E-10 | Mono_lung |
| UFC1               | 2.39E-14 | 0.27508026 | 0.242 | 0.387 | 8.48E-10 | Mono_lung |
| PIH1D1             | 2.62E-14 | 0.3993325  | 0.154 | 0.254 | 9.30E-10 | Mono_lung |
| MDH2               | 2.66E-14 | 0.3052823  | 0.247 | 0.4   | 9.41E-10 | Mono_lung |
| RPL3               | 3.05E-14 | 0.17845305 | 0.901 | 0.948 | 1.08E-09 | Mono_lung |
| PSMC4              | 3.44E-14 | 0.29767461 | 0.162 | 0.265 | 1.22E-09 | Mono_lung |
| PPT1               | 3.49E-14 | 0.30289386 | 0.308 | 0.498 | 1.24E-09 | Mono_lung |
| HIGD2A             | 3.57E-14 | 0.40030254 | 0.172 | 0.28  | 1.26E-09 | Mono_lung |
| ENSMMUG00000022334 | 4.23E-14 | 0.47795113 | 0.202 | 0.329 | 1.50E-09 | Mono_lung |
| SPECC1L            | 5.36E-14 | 0.57967443 | 0.161 | 0.262 | 1.90E-09 | Mono_lung |
| MIC1               | 9.74E-14 | 0.34533158 | 0.252 | 0.401 | 3.45E-09 | Mono_lung |
| CYBB               | 1.09E-13 | 0.14771133 | 0.439 | 0.675 | 3.88E-09 | Mono_lung |
| ENSMMUG00000059988 | 1.23E-13 | 0.44553528 | 0.154 | 0.251 | 4.37E-09 | Mono_lung |
| ARHGAP31           | 1.25E-13 | 1.82882494 | 0.25  | 0.217 | 4.42E-09 | Mono_lung |
| RAD23A             | 1.90E-13 | 0.41025209 | 0.163 | 0.263 | 6.73E-09 | Mono_lung |
| MAGOH              | 1.95E-13 | 1.15823218 | 0.352 | 0.359 | 6.93E-09 | Mono_lung |
| PSMB6              | 2.19E-13 | 0.95960671 | 0.433 | 0.491 | 7.78E-09 | Mono_lung |
| ENSMMUG00000016009 | 2.50E-13 | 0.33354779 | 0.268 | 0.43  | 8.86E-09 | Mono_lung |
| SERTAD1            | 3.20E-13 | 1.26193121 | 0.363 | 0.379 | 1.13E-08 | Mono_lung |
| FGL2               | 3.39E-13 | 0.76377423 | 0.527 | 0.608 | 1.20E-08 | Mono_lung |
| ENSMMUG00000013289 | 3.63E-13 | 0.36037629 | 0.3   | 0.474 | 1.29E-08 | Mono_lung |
| INSIG1             | 5.19E-13 | 1.0237966  | 0.45  | 0.487 | 1.84E-08 | Mono_lung |
| CDC37              | 6.49E-13 | 0.44827595 | 0.191 | 0.306 | 2.30E-08 | Mono_lung |
| TOPORS             | 8.79E-13 | 0.34015403 | 0.265 | 0.419 | 3.11E-08 | Mono_lung |
| PPIB               | 9.94E-13 | 0.15002613 | 0.394 | 0.614 | 3.52E-08 | Mono_lung |
| NR4A2              | 1.33E-12 | 0.31741171 | 0.251 | 0.384 | 4.72E-08 | Mono_lung |
| POLD4              | 2.25E-12 | 0.38396093 | 0.23  | 0.362 | 7.97E-08 | Mono_lung |
| WARS1.1            | 2.27E-12 | 0.60911354 | 0.288 | 0.447 | 8.05E-08 | Mono_lung |
| TCIRG1             | 2.62E-12 | 0.5175962  | 0.204 | 0.324 | 9.27E-08 | Mono_lung |
| EIF1B              | 2.84E-12 | 0.31104816 | 0.262 | 0.412 | 1.01E-07 | Mono_lung |

|                    |          |            |       |       |          |           |
|--------------------|----------|------------|-------|-------|----------|-----------|
| CFLAR              | 2.85E-12 | 1.07492638 | 0.462 | 0.538 | 1.01E-07 | Mono_lung |
| PMAIP1             | 4.05E-12 | 0.44527312 | 0.293 | 0.455 | 1.43E-07 | Mono_lung |
| HSBP1              | 4.60E-12 | 0.58285465 | 0.594 | 0.725 | 1.63E-07 | Mono_lung |
| ATP5MC3            | 4.69E-12 | 0.77349697 | 0.498 | 0.598 | 1.66E-07 | Mono_lung |
| ARHGEF2            | 5.77E-12 | 0.54381652 | 0.166 | 0.262 | 2.05E-07 | Mono_lung |
| HSD17B4            | 7.66E-12 | 1.17826974 | 0.42  | 0.469 | 2.71E-07 | Mono_lung |
| PPDPF              | 8.05E-12 | 0.35263013 | 0.389 | 0.623 | 2.85E-07 | Mono_lung |
| ENSMMUG00000054038 | 8.49E-12 | 0.60166968 | 0.585 | 0.721 | 3.01E-07 | Mono_lung |
| FCGR2B             | 1.06E-11 | 1.28791744 | 0.317 | 0.312 | 3.74E-07 | Mono_lung |
| PIN1               | 1.07E-11 | 0.46707197 | 0.176 | 0.281 | 3.81E-07 | Mono_lung |
| CORO1C             | 1.56E-11 | 0.67034201 | 0.186 | 0.291 | 5.53E-07 | Mono_lung |
| NAPA               | 1.64E-11 | 0.42468136 | 0.186 | 0.29  | 5.81E-07 | Mono_lung |
| SYTL3              | 2.28E-11 | 0.246855   | 0.234 | 0.35  | 8.07E-07 | Mono_lung |
| PSME2              | 2.50E-11 | 1.0009724  | 0.408 | 0.44  | 8.85E-07 | Mono_lung |
| REV3L              | 2.77E-11 | 0.88012319 | 0.234 | 0.365 | 9.82E-07 | Mono_lung |
| CD58               | 2.93E-11 | 0.37195959 | 0.302 | 0.467 | 1.04E-06 | Mono_lung |
| RABAC1             | 3.81E-11 | 0.29168488 | 0.313 | 0.485 | 1.35E-06 | Mono_lung |
| BCL6               | 5.13E-11 | 0.34636826 | 0.307 | 0.47  | 1.82E-06 | Mono_lung |
| RBMX               | 6.39E-11 | 0.29405249 | 0.265 | 0.409 | 2.26E-06 | Mono_lung |
| GBE1               | 1.12E-10 | 0.76368343 | 0.262 | 0.399 | 3.97E-06 | Mono_lung |
| RAB24              | 1.52E-10 | 0.50210049 | 0.196 | 0.304 | 5.39E-06 | Mono_lung |
| POLE4              | 1.76E-10 | 0.36428687 | 0.228 | 0.35  | 6.23E-06 | Mono_lung |
| PSMB10             | 2.05E-10 | 0.36159011 | 0.264 | 0.406 | 7.28E-06 | Mono_lung |
| PSMB7              | 2.46E-10 | 0.1276472  | 0.434 | 0.66  | 8.73E-06 | Mono_lung |
| NOD2               | 2.55E-10 | 0.63066316 | 0.161 | 0.25  | 9.03E-06 | Mono_lung |
| ENSMMUG00000055026 | 2.64E-10 | 0.36606427 | 0.21  | 0.321 | 9.36E-06 | Mono_lung |
| RETN               | 2.80E-10 | 0.17698574 | 0.332 | 0.476 | 9.91E-06 | Mono_lung |
| EIF3J              | 2.95E-10 | 0.45600683 | 0.255 | 0.393 | 1.05E-05 | Mono_lung |
| ENSMMUG00000064120 | 3.01E-10 | 0.33634103 | 0.276 | 0.42  | 1.07E-05 | Mono_lung |
| ECHS1              | 3.72E-10 | 0.47306452 | 0.194 | 0.299 | 1.32E-05 | Mono_lung |
| MAPK1IP1L          | 3.98E-10 | 0.49385122 | 0.215 | 0.331 | 1.41E-05 | Mono_lung |
| RPS3A              | 4.84E-10 | 0.15264989 | 0.937 | 0.955 | 1.72E-05 | Mono_lung |
| NDUFB5             | 5.93E-10 | 0.49459598 | 0.168 | 0.26  | 2.10E-05 | Mono_lung |

|                     |          |            |       |       |            |           |
|---------------------|----------|------------|-------|-------|------------|-----------|
| SKIL                | 7.47E-10 | 1.29482604 | 0.25  | 0.228 | 2.65E-05   | Mono_lung |
| PTPN2               | 7.70E-10 | 0.4200062  | 0.397 | 0.61  | 2.73E-05   | Mono_lung |
| MRPL52              | 8.60E-10 | 1.18945775 | 0.315 | 0.322 | 3.05E-05   | Mono_lung |
| POLR1H              | 1.03E-09 | 0.45807277 | 0.204 | 0.312 | 3.64E-05   | Mono_lung |
| NAA38               | 1.16E-09 | 1.16085136 | 0.318 | 0.326 | 4.10E-05   | Mono_lung |
| MRPL57              | 1.23E-09 | 0.50069897 | 0.166 | 0.255 | 4.37E-05   | Mono_lung |
| AIP                 | 1.26E-09 | 0.41939917 | 0.211 | 0.321 | 4.46E-05   | Mono_lung |
| VMO1                | 1.29E-09 | 0.92314571 | 0.388 | 0.398 | 4.58E-05   | Mono_lung |
| NDUFA4              | 1.41E-09 | 0.73041073 | 0.491 | 0.595 | 5.00E-05   | Mono_lung |
| RPS6KA3             | 1.91E-09 | 0.76077207 | 0.185 | 0.279 | 6.76E-05   | Mono_lung |
| NRROS               | 2.11E-09 | 0.31135138 | 0.367 | 0.548 | 7.49E-05   | Mono_lung |
| MAP4K4              | 2.63E-09 | 1.17882117 | 0.588 | 0.736 | 9.31E-05   | Mono_lung |
| PSMA6               | 3.37E-09 | 0.51793331 | 0.217 | 0.329 | 0.00011955 | Mono_lung |
| OSTC                | 3.45E-09 | 0.35774239 | 0.273 | 0.415 | 0.00012213 | Mono_lung |
| TLR4                | 3.61E-09 | 1.06275045 | 0.346 | 0.358 | 0.00012792 | Mono_lung |
| STAC3               | 3.74E-09 | 0.33114543 | 0.325 | 0.495 | 0.00013265 | Mono_lung |
| ENSMMUG00000002075  | 5.01E-09 | 0.41375586 | 0.694 | 0.813 | 0.00017756 | Mono_lung |
| JPT1                | 5.56E-09 | 0.52897204 | 0.588 | 0.742 | 0.00019708 | Mono_lung |
| SERPINB1            | 5.69E-09 | 0.57685403 | 0.621 | 0.745 | 0.00020152 | Mono_lung |
| RBBP4               | 6.29E-09 | 0.46095123 | 0.208 | 0.315 | 0.00022298 | Mono_lung |
| SSR2                | 6.75E-09 | 0.23282057 | 0.417 | 0.63  | 0.00023916 | Mono_lung |
| PSMC5               | 7.46E-09 | 0.52585414 | 0.207 | 0.315 | 0.00026435 | Mono_lung |
| ATP5F1C             | 7.51E-09 | 0.3108182  | 0.326 | 0.5   | 0.00026606 | Mono_lung |
| ENSMMUG000000058644 | 9.55E-09 | 0.49285602 | 0.209 | 0.312 | 0.00033841 | Mono_lung |
| ENSMMUG000000015274 | 1.22E-08 | 0.52518403 | 0.216 | 0.323 | 0.00043206 | Mono_lung |
| ARF1                | 1.37E-08 | 0.14966446 | 0.506 | 0.757 | 0.00048621 | Mono_lung |
| GSTK1               | 1.38E-08 | 0.5084442  | 0.22  | 0.334 | 0.00048799 | Mono_lung |
| DAZAP1              | 1.70E-08 | 0.216209   | 0.427 | 0.651 | 0.00060267 | Mono_lung |
| C18H18orf32         | 1.82E-08 | 0.20188057 | 0.887 | 0.932 | 0.00064363 | Mono_lung |
| GPR141              | 1.85E-08 | 1.06829621 | 0.438 | 0.519 | 0.00065425 | Mono_lung |
| PSMB1               | 2.14E-08 | 0.19115017 | 0.45  | 0.68  | 0.00075849 | Mono_lung |
| DPYSL2              | 3.43E-08 | 0.48063376 | 0.215 | 0.322 | 0.00121522 | Mono_lung |
| ENSMMUG000000061128 | 4.09E-08 | 0.11757495 | 0.512 | 0.755 | 0.00144879 | Mono_lung |

|                    |          |            |       |       |            |           |
|--------------------|----------|------------|-------|-------|------------|-----------|
| RALGAPA2           | 4.64E-08 | 0.58181952 | 0.384 | 0.558 | 0.00164578 | Mono_lung |
| SAP18              | 5.46E-08 | 0.31346198 | 0.384 | 0.591 | 0.00193302 | Mono_lung |
| CYCS               | 5.49E-08 | 1.29191794 | 0.27  | 0.267 | 0.00194585 | Mono_lung |
| ENSMMUG00000011711 | 5.50E-08 | 0.57160082 | 0.246 | 0.365 | 0.00195038 | Mono_lung |
| ATP5F1B            | 6.49E-08 | 0.54838713 | 0.22  | 0.33  | 0.00229913 | Mono_lung |
| GBP3               | 6.88E-08 | 1.10486803 | 0.263 | 0.244 | 0.00243901 | Mono_lung |
| HNRNPH1            | 8.06E-08 | 0.44194134 | 0.324 | 0.488 | 0.00285524 | Mono_lung |
| COPE               | 8.08E-08 | 0.83236959 | 0.44  | 0.533 | 0.0028626  | Mono_lung |
| FOSL2              | 9.36E-08 | 1.09526104 | 0.352 | 0.384 | 0.00331637 | Mono_lung |
| WDR45B             | 9.54E-08 | 0.59668392 | 0.177 | 0.261 | 0.00338099 | Mono_lung |
| PRDX1              | 9.78E-08 | 1.04855377 | 0.342 | 0.375 | 0.00346392 | Mono_lung |
| ENSMMUG00000031947 | 1.11E-07 | 0.72338042 | 0.476 | 0.587 | 0.00392247 | Mono_lung |
| NDUFB4             | 1.11E-07 | 0.85346365 | 0.413 | 0.487 | 0.00393352 | Mono_lung |
| COMMD4             | 1.28E-07 | 0.54325134 | 0.202 | 0.303 | 0.00454117 | Mono_lung |
| RNF19B             | 1.98E-07 | 0.28162839 | 0.315 | 0.441 | 0.00700123 | Mono_lung |
| TRAPPC2L           | 2.42E-07 | 0.59688701 | 0.175 | 0.258 | 0.00858743 | Mono_lung |
| TOMM22             | 2.62E-07 | 0.58557218 | 0.202 | 0.301 | 0.00929572 | Mono_lung |
| ZNF267             | 2.67E-07 | 0.5225416  | 0.3   | 0.444 | 0.00945426 | Mono_lung |
| FKBP8              | 2.86E-07 | 0.68173122 | 0.21  | 0.313 | 0.01013376 | Mono_lung |
| ENSMMUG00000018740 | 6.33E-07 | 0.43185852 | 0.324 | 0.487 | 0.02243465 | Mono_lung |
| CAMP               | 6.76E-07 | 0.41524501 | 0.672 | 0.794 | 0.0239437  | Mono_lung |
| ENSMMUG00000016278 | 6.98E-07 | 0.47172697 | 0.264 | 0.393 | 0.02473322 | Mono_lung |
| BAZ1A              | 9.08E-07 | 0.56249135 | 0.377 | 0.554 | 0.03218388 | Mono_lung |
| NCBP2              | 9.19E-07 | 0.91854436 | 0.39  | 0.456 | 0.0325547  | Mono_lung |
| RNF181             | 1.00E-06 | 0.72124731 | 0.47  | 0.582 | 0.03553965 | Mono_lung |
| NMT1               | 1.10E-06 | 0.61792147 | 0.173 | 0.252 | 0.03915022 | Mono_lung |
| FKBP2              | 1.22E-06 | 1.26427097 | 0.25  | 0.248 | 0.04328816 | Mono_lung |
| LAMTOR2            | 1.32E-06 | 0.24958976 | 0.444 | 0.659 | 0.04668152 | Mono_lung |
| UFM1               | 1.36E-06 | 0.56383916 | 0.197 | 0.287 | 0.0482753  | Mono_lung |
| ANAPC11            | 1.41E-06 | 0.58456433 | 0.228 | 0.334 | 0.05011865 | Mono_lung |
| PFDN2              | 1.44E-06 | 0.63219086 | 0.503 | 0.64  | 0.05115747 | Mono_lung |
| ENSMMUG00000017890 | 1.82E-06 | 0.53673498 | 0.224 | 0.325 | 0.06432473 | Mono_lung |
| FNTB               | 2.21E-06 | 0.36710661 | 0.336 | 0.496 | 0.07824222 | Mono_lung |

|                   |          |            |       |       |            |           |
|-------------------|----------|------------|-------|-------|------------|-----------|
| SNRPD2            | 2.36E-06 | 0.44441934 | 0.3   | 0.447 | 0.08370558 | Mono_lung |
| MRPL23            | 2.91E-06 | 0.70058598 | 0.459 | 0.559 | 0.10295991 | Mono_lung |
| MRPL20            | 3.08E-06 | 0.61407422 | 0.216 | 0.316 | 0.1090266  | Mono_lung |
| CIAO2B            | 3.36E-06 | 1.13915202 | 0.279 | 0.293 | 0.11905537 | Mono_lung |
| ENSMUG00000050829 | 3.47E-06 | 0.21189984 | 0.494 | 0.712 | 0.12306936 | Mono_lung |
| ARHGDI            | 3.76E-06 | 0.86727419 | 0.419 | 0.505 | 0.13317101 | Mono_lung |
| NPM1              | 3.84E-06 | 0.16164498 | 0.503 | 0.726 | 0.13589738 | Mono_lung |
| AZIN1             | 4.20E-06 | 1.10907557 | 0.334 | 0.368 | 0.14888252 | Mono_lung |
| GPSM3             | 5.03E-06 | 0.24750249 | 0.46  | 0.686 | 0.17815709 | Mono_lung |
| RASGRP2           | 7.01E-06 | 0.52769752 | 0.282 | 0.411 | 0.2485473  | Mono_lung |
| S100A9            | 7.68E-06 | 0.44847368 | 0.383 | 0.511 | 0.27222509 | Mono_lung |
| NAGK              | 8.19E-06 | 0.71979128 | 0.178 | 0.255 | 0.29006228 | Mono_lung |
| TANK              | 9.17E-06 | 0.30512939 | 0.486 | 0.696 | 0.32493509 | Mono_lung |
| PRDX5             | 9.41E-06 | 0.52341961 | 0.564 | 0.71  | 0.33343474 | Mono_lung |
| C11H12orf45       | 1.01E-05 | 0.52688532 | 0.239 | 0.341 | 0.3590245  | Mono_lung |
| GTF2H5            | 1.20E-05 | 0.89055369 | 0.358 | 0.406 | 0.42389393 | Mono_lung |
| GTF3C6            | 1.47E-05 | 0.49042014 | 0.229 | 0.324 | 0.52198426 | Mono_lung |
| GLIPR2            | 1.48E-05 | 0.12973244 | 0.576 | 0.804 | 0.52562116 | Mono_lung |
| PARP6             | 1.49E-05 | 0.44331558 | 0.325 | 0.474 | 0.52746151 | Mono_lung |
| RHOG              | 1.61E-05 | 0.45471074 | 0.359 | 0.537 | 0.57190953 | Mono_lung |
| SUPT4H1           | 1.82E-05 | 0.67230397 | 0.191 | 0.273 | 0.64427121 | Mono_lung |
| ETV3              | 1.82E-05 | 1.25058974 | 0.292 | 0.312 | 0.64451239 | Mono_lung |
| MTHFD2L           | 1.85E-05 | 0.46118867 | 0.298 | 0.429 | 0.65388581 | Mono_lung |
| TLR2              | 2.04E-05 | 0.98859614 | 0.299 | 0.314 | 0.72259114 | Mono_lung |
| DRAP1             | 2.32E-05 | 0.44940224 | 0.306 | 0.447 | 0.82074846 | Mono_lung |
| CD81              | 2.75E-05 | 0.6714439  | 0.217 | 0.309 | 0.97490682 | Mono_lung |
| SDCBP             | 3.09E-05 | 0.17919096 | 0.5   | 0.71  | 1          | Mono_lung |
| CD63              | 3.61E-05 | 0.32227191 | 0.414 | 0.587 | 1          | Mono_lung |
| PSTPIP1           | 3.77E-05 | 0.57898034 | 0.219 | 0.312 | 1          | Mono_lung |
| ZNF706            | 4.00E-05 | 0.42971144 | 0.347 | 0.51  | 1          | Mono_lung |
| ENSMUG00000065104 | 4.68E-05 | 0.36175667 | 0.366 | 0.532 | 1          | Mono_lung |
| C11H12orf57       | 4.78E-05 | 0.42737277 | 0.351 | 0.512 | 1          | Mono_lung |
| LAT2              | 6.51E-05 | 0.89187689 | 0.393 | 0.471 | 1          | Mono_lung |

|                    |            |            |       |       |             |
|--------------------|------------|------------|-------|-------|-------------|
| CD74               | 7.49E-05   | 0.18407607 | 0.961 | 0.972 | 1 Mono_lung |
| GABARAPL2          | 7.83E-05   | 0.60807816 | 0.503 | 0.637 | 1 Mono_lung |
| PFDN6              | 8.20E-05   | 0.60446285 | 0.202 | 0.284 | 1 Mono_lung |
| HNRNPC             | 8.28E-05   | 0.36052796 | 0.518 | 0.749 | 1 Mono_lung |
| ANAPC13            | 8.86E-05   | 0.68672235 | 0.187 | 0.261 | 1 Mono_lung |
| ZNHIT1             | 8.95E-05   | 0.84086165 | 0.398 | 0.485 | 1 Mono_lung |
| GNG10              | 0.00010553 | 0.86733784 | 0.383 | 0.456 | 1 Mono_lung |
| ENY2               | 0.00010902 | 0.74121722 | 0.441 | 0.549 | 1 Mono_lung |
| NHSL1              | 0.00011113 | 0.63333593 | 0.22  | 0.294 | 1 Mono_lung |
| TXN                | 0.00011373 | 0.43451994 | 0.643 | 0.806 | 1 Mono_lung |
| KIFBP              | 0.00013006 | 0.34830498 | 0.4   | 0.58  | 1 Mono_lung |
| SSR4               | 0.00014558 | 0.54657225 | 0.51  | 0.652 | 1 Mono_lung |
| BLVRB              | 0.00015261 | 0.89484573 | 0.354 | 0.409 | 1 Mono_lung |
| CHMP2A             | 0.00016042 | 0.46523652 | 0.327 | 0.475 | 1 Mono_lung |
| AIMP1              | 0.00020411 | 0.58169343 | 0.259 | 0.367 | 1 Mono_lung |
| ENSMMUG00000029973 | 0.00020766 | 0.51374084 | 0.539 | 0.678 | 1 Mono_lung |
| NHP2               | 0.00022506 | 0.5963274  | 0.219 | 0.306 | 1 Mono_lung |
| EIF4A3             | 0.0002317  | 1.13023527 | 0.29  | 0.321 | 1 Mono_lung |
| ENSMMUG00000012525 | 0.00023526 | 0.51686741 | 0.292 | 0.416 | 1 Mono_lung |
| NDUFA12            | 0.00024267 | 0.55058863 | 0.247 | 0.349 | 1 Mono_lung |
| FGR                | 0.00027977 | 0.18777574 | 0.577 | 0.795 | 1 Mono_lung |
| ENSMMUG00000012019 | 0.00029211 | 0.41392131 | 0.38  | 0.557 | 1 Mono_lung |
| CAPZB              | 0.00031175 | 0.2243467  | 0.497 | 0.717 | 1 Mono_lung |
| RBM8A              | 0.0003183  | 0.93274975 | 0.357 | 0.426 | 1 Mono_lung |
| SH3BGRL            | 0.00032604 | 0.3307766  | 0.658 | 0.832 | 1 Mono_lung |
| ETFB               | 0.00034415 | 0.57663218 | 0.221 | 0.306 | 1 Mono_lung |
| ENSMMUG00000017466 | 0.00034781 | 0.32412664 | 0.672 | 0.818 | 1 Mono_lung |
| PSMB2              | 0.00036339 | 0.62175392 | 0.194 | 0.268 | 1 Mono_lung |
| RAC2               | 0.0003767  | 0.55085989 | 0.268 | 0.376 | 1 Mono_lung |
| NCF4               | 0.00042577 | 0.56143859 | 0.249 | 0.347 | 1 Mono_lung |
| TMEM167A           | 0.00046723 | 0.57723294 | 0.284 | 0.405 | 1 Mono_lung |
| LLPH               | 0.00051365 | 0.68219418 | 0.233 | 0.325 | 1 Mono_lung |
| CSNK2B             | 0.00059291 | 0.52109111 | 0.344 | 0.499 | 1 Mono_lung |

|                     |            |            |       |       |             |
|---------------------|------------|------------|-------|-------|-------------|
| MANBA               | 0.00059662 | 0.43218573 | 0.48  | 0.683 | 1 Mono_lung |
| IFNAR1              | 0.00062024 | 0.89146272 | 0.391 | 0.473 | 1 Mono_lung |
| RPLP2               | 0.00063089 | 0.10782243 | 0.921 | 0.941 | 1 Mono_lung |
| TOMM7               | 0.00068195 | 0.31690374 | 0.637 | 0.802 | 1 Mono_lung |
| AK2                 | 0.0007636  | 0.60495456 | 0.226 | 0.311 | 1 Mono_lung |
| DCTN3               | 0.00077183 | 0.53561833 | 0.312 | 0.448 | 1 Mono_lung |
| STXBP2              | 0.000808   | 1.01282776 | 0.324 | 0.375 | 1 Mono_lung |
| ENSMMUG000000053817 | 0.00081002 | 0.94647739 | 0.335 | 0.391 | 1 Mono_lung |
| ENSMMUG000000019371 | 0.00085608 | 0.43686638 | 0.332 | 0.443 | 1 Mono_lung |
| GNAI2.1             | 0.00085907 | 0.25249884 | 0.513 | 0.731 | 1 Mono_lung |
| BAX                 | 0.00091406 | 0.62272954 | 0.247 | 0.347 | 1 Mono_lung |
| GUK1                | 0.00099096 | 0.62080539 | 0.26  | 0.363 | 1 Mono_lung |
| CDKN1A              | 0.00099652 | 0.21965792 | 0.518 | 0.71  | 1 Mono_lung |
| ERCC1               | 0.0010608  | 0.67330875 | 0.198 | 0.272 | 1 Mono_lung |
| RNF7                | 0.00110149 | 0.54436729 | 0.299 | 0.425 | 1 Mono_lung |
| HCK                 | 0.00115444 | 0.66148649 | 0.497 | 0.625 | 1 Mono_lung |
| S100A8              | 0.00176246 | 0.89140385 | 0.521 | 0.604 | 1 Mono_lung |
| COX19               | 0.00181906 | 1.12826265 | 0.237 | 0.251 | 1 Mono_lung |
| TXNRD1              | 0.00193768 | 0.96461159 | 0.377 | 0.442 | 1 Mono_lung |
| ATP5PF              | 0.00223169 | 0.53248617 | 0.499 | 0.653 | 1 Mono_lung |
| ENSMMUG000000002320 | 0.00226996 | 0.22800317 | 0.851 | 0.938 | 1 Mono_lung |
| ENSMMUG000000064692 | 0.00231351 | 0.19553303 | 0.539 | 0.721 | 1 Mono_lung |
| FGD4                | 0.00259753 | 1.36846384 | 0.263 | 0.285 | 1 Mono_lung |
| ENO1                | 0.00323744 | 0.29639133 | 0.68  | 0.848 | 1 Mono_lung |
| NDUFS8              | 0.00332844 | 0.80684522 | 0.392 | 0.491 | 1 Mono_lung |
| AIM2                | 0.00348345 | 0.47584855 | 0.348 | 0.486 | 1 Mono_lung |
| PTRHD1              | 0.00378001 | 0.72275043 | 0.192 | 0.259 | 1 Mono_lung |
| ZNF483              | 0.00445288 | 0.45803437 | 0.54  | 0.697 | 1 Mono_lung |
| CFP                 | 0.00473671 | 0.46052694 | 0.589 | 0.77  | 1 Mono_lung |
| SLC25A43            | 0.00522525 | 0.23674429 | 0.503 | 0.706 | 1 Mono_lung |
| ANG                 | 0.00719991 | 0.66698358 | 0.247 | 0.329 | 1 Mono_lung |
| ID2                 | 0.00794503 | 1.02045993 | 0.256 | 0.266 | 1 Mono_lung |
| ENSMMUG000000051392 | 0.00835142 | 0.54884445 | 0.359 | 0.514 | 1 Mono_lung |

|                   |            |            |       |       |             |
|-------------------|------------|------------|-------|-------|-------------|
| PSENN             | 0.0084468  | 0.89203773 | 0.338 | 0.406 | 1 Mono_lung |
| PGK1              | 0.00874175 | 0.4707707  | 0.355 | 0.498 | 1 Mono_lung |
| CD320             | 0.00971769 | 0.71779949 | 0.39  | 0.489 | 1 Mono_lung |
| CBX3              | 0.01377702 | 0.54705059 | 0.328 | 0.458 | 1 Mono_lung |
| NDUFB8            | 0.01443484 | 0.80214964 | 0.348 | 0.428 | 1 Mono_lung |
| ANXA5             | 0.01478427 | 0.21236016 | 0.716 | 0.861 | 1 Mono_lung |
| CYSTM1            | 0.01557825 | 0.65913914 | 0.2   | 0.259 | 1 Mono_lung |
| ZFP36L1           | 0.01635885 | 0.27297358 | 0.561 | 0.756 | 1 Mono_lung |
| RBIS              | 0.01663381 | 0.5081269  | 0.347 | 0.488 | 1 Mono_lung |
| VPS29             | 0.01903222 | 0.67600008 | 0.269 | 0.366 | 1 Mono_lung |
| OSTF1             | 0.02002755 | 0.34718848 | 0.446 | 0.636 | 1 Mono_lung |
| EFHD2             | 0.02049035 | 0.41540167 | 0.423 | 0.603 | 1 Mono_lung |
| ENSMUG00000053392 | 0.02394007 | 0.64155764 | 0.434 | 0.56  | 1 Mono_lung |
| ENSMUG00000029026 | 0.02434451 | 0.58994211 | 0.319 | 0.44  | 1 Mono_lung |
| DAD1              | 0.02529184 | 0.53535699 | 0.288 | 0.388 | 1 Mono_lung |
| CMTM1             | 0.02553441 | 0.62657876 | 0.271 | 0.361 | 1 Mono_lung |
| TINF2             | 0.02579552 | 0.4948481  | 0.508 | 0.67  | 1 Mono_lung |
| UQCRC1            | 0.0264626  | 0.69941905 | 0.258 | 0.346 | 1 Mono_lung |
| LSM6              | 0.02706981 | 0.64373888 | 0.263 | 0.356 | 1 Mono_lung |
| NDUFB9            | 0.03545328 | 0.55568952 | 0.354 | 0.501 | 1 Mono_lung |
| PHF5A             | 0.03694875 | 1.05429094 | 0.244 | 0.275 | 1 Mono_lung |
| CFDP1             | 0.03738894 | 0.49202399 | 0.36  | 0.495 | 1 Mono_lung |
| ENSMUG00000022874 | 0.03861796 | 0.82440213 | 0.378 | 0.455 | 1 Mono_lung |
| EEF1G             | 0.03864628 | 0.25004816 | 0.508 | 0.709 | 1 Mono_lung |
| IRAK2             | 0.03879794 | 0.54173366 | 0.346 | 0.446 | 1 Mono_lung |
| VAMP8             | 0.04004333 | 0.8647237  | 0.311 | 0.369 | 1 Mono_lung |
| ABCA1             | 0.04843653 | 0.92775785 | 0.206 | 0.258 | 1 Mono_lung |
| LCP1              | 0.05511821 | 0.11558585 | 0.713 | 0.894 | 1 Mono_lung |
| RAN               | 0.05635662 | 0.55525205 | 0.335 | 0.464 | 1 Mono_lung |
| TMEM14B           | 0.06438429 | 0.28918274 | 0.487 | 0.679 | 1 Mono_lung |
| TRMT112           | 0.06443536 | 0.56232645 | 0.353 | 0.491 | 1 Mono_lung |
| YJEFN3            | 0.06570941 | 0.53666382 | 0.347 | 0.481 | 1 Mono_lung |
| PSMB9             | 0.07147602 | 0.54915008 | 0.359 | 0.494 | 1 Mono_lung |



|                    |            |            |       |       |             |
|--------------------|------------|------------|-------|-------|-------------|
| UBXN1              | 0.07150061 | 0.41833722 | 0.444 | 0.64  | 1 Mono_lung |
| HSPE1              | 0.0720847  | 0.4735641  | 0.393 | 0.551 | 1 Mono_lung |
| MIF                | 0.07769065 | 0.60539954 | 0.326 | 0.441 | 1 Mono_lung |
| SNRPB              | 0.07788248 | 0.62810465 | 0.31  | 0.422 | 1 Mono_lung |
| DPH2               | 0.08042702 | 0.50256953 | 0.509 | 0.683 | 1 Mono_lung |
| ERH                | 0.08181759 | 0.63612707 | 0.315 | 0.433 | 1 Mono_lung |
| TREM1              | 0.09488363 | 0.71061167 | 0.246 | 0.314 | 1 Mono_lung |
| EIF4A1             | 0.09500743 | 0.57172761 | 0.438 | 0.568 | 1 Mono_lung |
| CSF1R              | 0.09582467 | 0.65173019 | 0.378 | 0.527 | 1 Mono_lung |
| WTAP               | 0.09955808 | 0.59636442 | 0.504 | 0.655 | 1 Mono_lung |
| MAMU-E             | 0.10377598 | 0.16222298 | 0.773 | 0.904 | 1 Mono_lung |
| SERPINA1           | 0.107027   | 0.44156145 | 0.436 | 0.608 | 1 Mono_lung |
| ENSMMUG00000055627 | 0.10794001 | 0.31438852 | 0.48  | 0.662 | 1 Mono_lung |
| PSMB3              | 0.10946987 | 0.51921143 | 0.368 | 0.513 | 1 Mono_lung |
| HYPK               | 0.11087117 | 0.76745145 | 0.357 | 0.451 | 1 Mono_lung |
| TPI1               | 0.13239012 | 0.39245332 | 0.454 | 0.646 | 1 Mono_lung |
| SAFB               | 0.13718865 | 0.26094846 | 0.534 | 0.735 | 1 Mono_lung |
| NDUFV2             | 0.14390494 | 0.69656438 | 0.276 | 0.37  | 1 Mono_lung |
| BUD31              | 0.15238464 | 0.84510146 | 0.201 | 0.257 | 1 Mono_lung |
| CSTA               | 0.15371508 | 0.4212985  | 0.497 | 0.681 | 1 Mono_lung |
| PRR13              | 0.15790901 | 0.36426948 | 0.486 | 0.687 | 1 Mono_lung |
| PSMA2              | 0.19315447 | 0.4184819  | 0.423 | 0.591 | 1 Mono_lung |
| RPS27L             | 0.19405969 | 0.52335292 | 0.414 | 0.576 | 1 Mono_lung |
| ENSMMUG00000014648 | 0.19753933 | 0.46557026 | 0.483 | 0.637 | 1 Mono_lung |
| NDUFV3             | 0.2408708  | 0.6374889  | 0.333 | 0.447 | 1 Mono_lung |
| PDE4B              | 0.25462537 | 0.24941314 | 0.641 | 0.754 | 1 Mono_lung |
| YWHAE              | 0.25487948 | 0.55120338 | 0.461 | 0.622 | 1 Mono_lung |
| SLIRP              | 0.26026419 | 0.38741569 | 0.458 | 0.636 | 1 Mono_lung |
| ENSMMUG00000006206 | 0.27112944 | 0.80274923 | 0.318 | 0.43  | 1 Mono_lung |
| SRSF7              | 0.27882121 | 0.55512087 | 0.365 | 0.493 | 1 Mono_lung |
| ETS2               | 0.28442002 | 0.79267983 | 0.347 | 0.432 | 1 Mono_lung |
| AP2S1              | 0.30739648 | 0.59110393 | 0.43  | 0.577 | 1 Mono_lung |
| ENSMMUG00000002324 | 0.32520207 | 0.61754204 | 0.396 | 0.51  | 1 Mono_lung |

|                   |            |            |       |       |             |
|-------------------|------------|------------|-------|-------|-------------|
| CASP4             | 0.32741157 | 1.03993085 | 0.231 | 0.269 | 1 Mono_lung |
| PARK7             | 0.33664945 | 0.70905268 | 0.307 | 0.412 | 1 Mono_lung |
| RPS4Y1            | 0.34232953 | 0.19245538 | 0.559 | 0.62  | 1 Mono_lung |
| IL10RA            | 0.34561022 | 0.50702712 | 0.413 | 0.565 | 1 Mono_lung |
| NDUFS6            | 0.36400288 | 0.58886118 | 0.344 | 0.463 | 1 Mono_lung |
| VPS28             | 0.37074928 | 0.79714475 | 0.265 | 0.343 | 1 Mono_lung |
| SNRPD3            | 0.37465838 | 0.50577767 | 0.414 | 0.582 | 1 Mono_lung |
| ATP5PD            | 0.37566897 | 0.6970422  | 0.306 | 0.407 | 1 Mono_lung |
| AKR1A1            | 0.37781662 | 0.8004838  | 0.306 | 0.38  | 1 Mono_lung |
| GABARAP           | 0.41322102 | 0.10542514 | 0.817 | 0.915 | 1 Mono_lung |
| KDM6B             | 0.42650777 | 0.7853322  | 0.338 | 0.421 | 1 Mono_lung |
| EIF6              | 0.43242307 | 0.86575892 | 0.207 | 0.255 | 1 Mono_lung |
| LSP1              | 0.43723039 | 0.28104373 | 0.621 | 0.799 | 1 Mono_lung |
| ATP5IF1           | 0.44732955 | 0.59905314 | 0.368 | 0.497 | 1 Mono_lung |
| PDCD5             | 0.45006363 | 0.53117475 | 0.418 | 0.57  | 1 Mono_lung |
| P2RY8             | 0.46512581 | 1.0007994  | 0.303 | 0.39  | 1 Mono_lung |
| RGS2              | 0.46964811 | 0.52294892 | 0.346 | 0.432 | 1 Mono_lung |
| MAP2K3            | 0.51508388 | 0.80119992 | 0.365 | 0.474 | 1 Mono_lung |
| SNRPD1            | 0.52108194 | 0.82761399 | 0.213 | 0.261 | 1 Mono_lung |
| LIMS1             | 0.52673712 | 0.74369765 | 0.485 | 0.626 | 1 Mono_lung |
| ENSMUG00000059843 | 0.53884878 | 0.84121484 | 0.25  | 0.316 | 1 Mono_lung |
| RGS18             | 0.59212308 | 0.58192933 | 0.261 | 0.316 | 1 Mono_lung |
| CIB1              | 0.61390537 | 0.79669171 | 0.269 | 0.341 | 1 Mono_lung |
| RBX1              | 0.62179017 | 0.5008804  | 0.433 | 0.578 | 1 Mono_lung |
| OXSRI             | 0.62972896 | 0.87409338 | 0.383 | 0.512 | 1 Mono_lung |
| PSME1             | 0.66126427 | 0.37483393 | 0.52  | 0.693 | 1 Mono_lung |
| NDUFC2            | 0.66331746 | 0.57415016 | 0.402 | 0.529 | 1 Mono_lung |
| CLEC2B            | 0.70985792 | 0.70772998 | 0.394 | 0.539 | 1 Mono_lung |
| NDUFB7            | 0.73457635 | 0.40609681 | 0.489 | 0.676 | 1 Mono_lung |
| NDUFA6            | 0.77461463 | 0.70844487 | 0.335 | 0.436 | 1 Mono_lung |
| RILPL2            | 0.77744246 | 0.32800003 | 0.557 | 0.732 | 1 Mono_lung |
| DGKB              | 0.80025682 | 0.68228737 | 0.334 | 0.438 | 1 Mono_lung |
| PRDX6             | 0.80044118 | 0.65814442 | 0.337 | 0.437 | 1 Mono_lung |

|                    |            |            |       |       |              |
|--------------------|------------|------------|-------|-------|--------------|
| ENSMMUG00000015208 | 0.82795134 | 0.53710639 | 0.424 | 0.567 | 1 Mono_lung  |
| NDUFB10            | 0.84423994 | 0.61523632 | 0.362 | 0.485 | 1 Mono_lung  |
| PFKFB3             | 0.9091566  | 0.83397945 | 0.278 | 0.333 | 1 Mono_lung  |
| PICALM             | 0.91120863 | 0.70206925 | 0.588 | 0.819 | 1 Mono_lung  |
| ENSMMUG00000007536 | 0.91156955 | 0.66860256 | 0.334 | 0.432 | 1 Mono_lung  |
| LIMD2              | 0.92840183 | 0.52498901 | 0.463 | 0.631 | 1 Mono_lung  |
| PYCARD             | 0.94788327 | 0.14688042 | 0.697 | 0.855 | 1 Mono_lung  |
| FOXO3              | 0          | 2.36172982 | 0.913 | 0.222 | 0 Mono_UCBMC |
| HBE1               | 0          | 7.36476884 | 0.672 | 0.017 | 0 Mono_UCBMC |
| STK17B             | 0          | 2.40166112 | 0.928 | 0.277 | 0 Mono_UCBMC |
| FOXO1              | 0          | 2.24470167 | 0.805 | 0.174 | 0 Mono_UCBMC |
| FBXW7              | 0          | 1.9918834  | 0.889 | 0.262 | 0 Mono_UCBMC |
| BIRC6              | 0          | 2.01611932 | 0.867 | 0.267 | 0 Mono_UCBMC |
| CERT1              | 0          | 2.10058231 | 0.79  | 0.193 | 0 Mono_UCBMC |
| FBXO34             | 0          | 2.12597873 | 0.763 | 0.168 | 0 Mono_UCBMC |
| NRIP1              | 0          | 2.4410964  | 0.742 | 0.148 | 0 Mono_UCBMC |
| TXNIP              | 0          | 1.9691823  | 0.816 | 0.223 | 0 Mono_UCBMC |
| NR3C1              | 0          | 1.98695001 | 0.85  | 0.259 | 0 Mono_UCBMC |
| LRRFIP1            | 0          | 1.98086854 | 0.892 | 0.303 | 0 Mono_UCBMC |
| TLE4               | 0          | 2.33513765 | 0.72  | 0.133 | 0 Mono_UCBMC |
| MARCHF6            | 0          | 2.1438438  | 0.753 | 0.175 | 0 Mono_UCBMC |
| AAK1               | 0          | 2.24902749 | 0.743 | 0.165 | 0 Mono_UCBMC |
| ELOVL5             | 0          | 1.94401025 | 0.842 | 0.265 | 0 Mono_UCBMC |
| SLMAP              | 0          | 2.16820359 | 0.731 | 0.155 | 0 Mono_UCBMC |
| RICTOR             | 0          | 2.39817224 | 0.701 | 0.127 | 0 Mono_UCBMC |
| CAB39              | 0          | 2.25705783 | 0.777 | 0.204 | 0 Mono_UCBMC |
| TMEM131            | 0          | 1.76570865 | 0.85  | 0.279 | 0 Mono_UCBMC |
| ENSMMUG00000046264 | 0          | 2.3212148  | 0.693 | 0.124 | 0 Mono_UCBMC |
| RAB2A              | 0          | 1.90791409 | 0.891 | 0.323 | 0 Mono_UCBMC |
| PAN3               | 0          | 1.77883846 | 0.785 | 0.22  | 0 Mono_UCBMC |
| SH3KBP1            | 0          | 1.98178335 | 0.806 | 0.242 | 0 Mono_UCBMC |
| RSRP1              | 0          | 2.01119178 | 0.732 | 0.168 | 0 Mono_UCBMC |
| OSBPL8             | 0          | 1.54713144 | 0.9   | 0.337 | 0 Mono_UCBMC |

|          |   |            |       |       |              |
|----------|---|------------|-------|-------|--------------|
| ZNF644   | 0 | 2.08465207 | 0.728 | 0.167 | 0 Mono_UCBMC |
| ZNF292   | 0 | 2.08811448 | 0.726 | 0.165 | 0 Mono_UCBMC |
| SLC38A1  | 0 | 1.70475725 | 0.791 | 0.233 | 0 Mono_UCBMC |
| NCOA3    | 0 | 1.92165709 | 0.951 | 0.394 | 0 Mono_UCBMC |
| PNISR    | 0 | 1.99544786 | 0.734 | 0.178 | 0 Mono_UCBMC |
| CDC42SE2 | 0 | 2.13635708 | 0.913 | 0.362 | 0 Mono_UCBMC |
| SPPL3    | 0 | 2.27934201 | 0.666 | 0.118 | 0 Mono_UCBMC |
| KLF4     | 0 | 1.54908865 | 0.76  | 0.212 | 0 Mono_UCBMC |
| CUL3     | 0 | 2.01677934 | 0.706 | 0.159 | 0 Mono_UCBMC |
| STAG1    | 0 | 1.60976292 | 0.853 | 0.307 | 0 Mono_UCBMC |
| KDM6A    | 0 | 1.69079724 | 0.746 | 0.208 | 0 Mono_UCBMC |
| YPEL5    | 0 | 1.90975297 | 0.718 | 0.18  | 0 Mono_UCBMC |
| RFX3     | 0 | 2.15099535 | 0.681 | 0.144 | 0 Mono_UCBMC |
| ITCH     | 0 | 1.46165195 | 0.778 | 0.241 | 0 Mono_UCBMC |
| RAPGEF1  | 0 | 1.56998679 | 0.864 | 0.327 | 0 Mono_UCBMC |
| DOCK8    | 0 | 1.51611742 | 0.889 | 0.353 | 0 Mono_UCBMC |
| YEATS2   | 0 | 2.19278192 | 0.663 | 0.129 | 0 Mono_UCBMC |
| ANKRD44  | 0 | 1.4424326  | 0.886 | 0.352 | 0 Mono_UCBMC |
| PIK3R5   | 0 | 1.65716698 | 0.842 | 0.308 | 0 Mono_UCBMC |
| TM9SF3   | 0 | 1.59304742 | 0.776 | 0.243 | 0 Mono_UCBMC |
| NEDD9    | 0 | 1.7103718  | 0.723 | 0.19  | 0 Mono_UCBMC |
| OSBPL9   | 0 | 1.88408372 | 0.718 | 0.186 | 0 Mono_UCBMC |
| ADAM17   | 0 | 1.58166855 | 0.842 | 0.312 | 0 Mono_UCBMC |
| KLF10    | 0 | 1.82451991 | 0.742 | 0.213 | 0 Mono_UCBMC |
| PPP1R12A | 0 | 1.56053678 | 0.804 | 0.275 | 0 Mono_UCBMC |
| COP1     | 0 | 1.56977801 | 0.735 | 0.207 | 0 Mono_UCBMC |
| RAF1     | 0 | 1.8349718  | 0.691 | 0.163 | 0 Mono_UCBMC |
| MTMR3    | 0 | 1.56510003 | 0.747 | 0.22  | 0 Mono_UCBMC |
| USP3     | 0 | 1.42824151 | 0.824 | 0.298 | 0 Mono_UCBMC |
| SREK1    | 0 | 1.8186084  | 0.707 | 0.183 | 0 Mono_UCBMC |
| KMT2C    | 0 | 1.56565003 | 0.92  | 0.399 | 0 Mono_UCBMC |
| MEF2A    | 0 | 1.52718184 | 0.832 | 0.311 | 0 Mono_UCBMC |
| IL1RAP   | 0 | 1.42955524 | 0.766 | 0.246 | 0 Mono_UCBMC |

|                    |   |            |       |       |              |
|--------------------|---|------------|-------|-------|--------------|
| ZFAND6             | 0 | 1.60403311 | 0.836 | 0.317 | 0 Mono_UCBMC |
| EIF5               | 0 | 1.36654479 | 0.84  | 0.321 | 0 Mono_UCBMC |
| FAR1               | 0 | 2.05144312 | 0.661 | 0.143 | 0 Mono_UCBMC |
| TRA2A              | 0 | 1.39552581 | 0.845 | 0.328 | 0 Mono_UCBMC |
| STK24              | 0 | 1.66423647 | 0.794 | 0.278 | 0 Mono_UCBMC |
| SETD2              | 0 | 2.11985239 | 0.643 | 0.128 | 0 Mono_UCBMC |
| DLG1               | 0 | 1.8916212  | 0.673 | 0.162 | 0 Mono_UCBMC |
| MEMO1              | 0 | 2.14822196 | 0.651 | 0.141 | 0 Mono_UCBMC |
| MED13L             | 0 | 1.62445972 | 0.937 | 0.429 | 0 Mono_UCBMC |
| DENND1A            | 0 | 1.33850237 | 0.742 | 0.234 | 0 Mono_UCBMC |
| PSME4              | 0 | 1.6886222  | 0.685 | 0.178 | 0 Mono_UCBMC |
| ATP1B3             | 0 | 1.42022497 | 0.866 | 0.359 | 0 Mono_UCBMC |
| GNG2               | 0 | 2.24110472 | 0.661 | 0.154 | 0 Mono_UCBMC |
| ELMO1              | 0 | 1.47854687 | 0.941 | 0.437 | 0 Mono_UCBMC |
| GAB2               | 0 | 1.53788984 | 0.93  | 0.426 | 0 Mono_UCBMC |
| DOCK5              | 0 | 1.33056612 | 0.707 | 0.205 | 0 Mono_UCBMC |
| STK38L             | 0 | 2.66888127 | 0.592 | 0.09  | 0 Mono_UCBMC |
| FBXO11             | 0 | 1.61400819 | 0.732 | 0.23  | 0 Mono_UCBMC |
| CREBBP             | 0 | 1.56238949 | 0.681 | 0.18  | 0 Mono_UCBMC |
| CMIP               | 0 | 1.3119921  | 0.685 | 0.184 | 0 Mono_UCBMC |
| POU2F1             | 0 | 2.78667737 | 0.572 | 0.071 | 0 Mono_UCBMC |
| PIAS1              | 0 | 1.37918883 | 0.726 | 0.225 | 0 Mono_UCBMC |
| CELF1              | 0 | 1.95354036 | 0.633 | 0.133 | 0 Mono_UCBMC |
| SCFD1              | 0 | 2.19108276 | 0.624 | 0.125 | 0 Mono_UCBMC |
| KLF6               | 0 | 1.55594891 | 0.935 | 0.437 | 0 Mono_UCBMC |
| TMEM87A            | 0 | 1.62698481 | 0.68  | 0.186 | 0 Mono_UCBMC |
| SARAF              | 0 | 1.43757318 | 0.901 | 0.407 | 0 Mono_UCBMC |
| CREBRF             | 0 | 2.25393261 | 0.6   | 0.106 | 0 Mono_UCBMC |
| BCLAF1             | 0 | 1.50626217 | 0.714 | 0.22  | 0 Mono_UCBMC |
| ENSMMUG00000051300 | 0 | 1.62896689 | 0.971 | 0.478 | 0 Mono_UCBMC |
| COG5               | 0 | 1.92068851 | 0.631 | 0.139 | 0 Mono_UCBMC |
| HOOK3              | 0 | 1.50047041 | 0.692 | 0.201 | 0 Mono_UCBMC |
| NUP98              | 0 | 1.42499448 | 0.68  | 0.19  | 0 Mono_UCBMC |

|                     |   |            |       |       |              |
|---------------------|---|------------|-------|-------|--------------|
| ITSN2               | 0 | 1.48816269 | 0.695 | 0.205 | 0 Mono_UCBMC |
| RBM39               | 0 | 1.32161535 | 0.908 | 0.419 | 0 Mono_UCBMC |
| ENSMMUG000000006165 | 0 | 1.2630247  | 0.904 | 0.417 | 0 Mono_UCBMC |
| EPC1                | 0 | 1.86530947 | 0.634 | 0.147 | 0 Mono_UCBMC |
| KIF1B               | 0 | 2.17683968 | 0.587 | 0.101 | 0 Mono_UCBMC |
| RASA2               | 0 | 1.53212908 | 0.699 | 0.214 | 0 Mono_UCBMC |
| TBC1D1              | 0 | 1.45562238 | 0.68  | 0.198 | 0 Mono_UCBMC |
| OPA1                | 0 | 2.09917505 | 0.604 | 0.122 | 0 Mono_UCBMC |
| FCHO2               | 0 | 1.74237029 | 0.629 | 0.149 | 0 Mono_UCBMC |
| ASAP1               | 0 | 1.92632944 | 0.61  | 0.131 | 0 Mono_UCBMC |
| EP300               | 0 | 1.49390731 | 0.656 | 0.178 | 0 Mono_UCBMC |
| FOS                 | 0 | 2.23598624 | 0.966 | 0.488 | 0 Mono_UCBMC |
| PPM1A               | 0 | 2.49791863 | 0.554 | 0.08  | 0 Mono_UCBMC |
| JMJD1C              | 0 | 1.86117428 | 0.962 | 0.489 | 0 Mono_UCBMC |
| SENP5               | 0 | 1.97478988 | 0.584 | 0.116 | 0 Mono_UCBMC |
| WDFY2               | 0 | 1.71596397 | 0.623 | 0.157 | 0 Mono_UCBMC |
| LMBRD1              | 0 | 1.92220167 | 0.598 | 0.134 | 0 Mono_UCBMC |
| AGO3                | 0 | 1.65544324 | 0.615 | 0.152 | 0 Mono_UCBMC |
| USP47               | 0 | 1.79790256 | 0.603 | 0.143 | 0 Mono_UCBMC |
| UBE2G1              | 0 | 2.06964547 | 0.573 | 0.115 | 0 Mono_UCBMC |
| CEP170              | 0 | 1.7936052  | 0.61  | 0.153 | 0 Mono_UCBMC |
| QKI                 | 0 | 1.41651822 | 0.94  | 0.483 | 0 Mono_UCBMC |
| GGNBP2              | 0 | 1.82926328 | 0.598 | 0.141 | 0 Mono_UCBMC |
| ZDHHC20             | 0 | 2.04311048 | 0.564 | 0.108 | 0 Mono_UCBMC |
| TSC22D3             | 0 | 1.81465396 | 0.581 | 0.129 | 0 Mono_UCBMC |
| SIK3                | 0 | 1.33720088 | 0.951 | 0.501 | 0 Mono_UCBMC |
| PTBP2               | 0 | 1.77505835 | 0.583 | 0.134 | 0 Mono_UCBMC |
| CEP85L              | 0 | 1.55717759 | 0.598 | 0.149 | 0 Mono_UCBMC |
| SMCHD1              | 0 | 1.6668552  | 0.592 | 0.143 | 0 Mono_UCBMC |
| C20H16orf72         | 0 | 1.80043421 | 0.57  | 0.126 | 0 Mono_UCBMC |
| PTPRA               | 0 | 2.1539795  | 0.536 | 0.093 | 0 Mono_UCBMC |
| PRDM2               | 0 | 1.78009827 | 0.556 | 0.114 | 0 Mono_UCBMC |
| TNKS                | 0 | 1.95421366 | 0.559 | 0.117 | 0 Mono_UCBMC |

|                   |   |            |       |       |              |
|-------------------|---|------------|-------|-------|--------------|
| EFL1              | 0 | 1.81435922 | 0.587 | 0.145 | 0 Mono_UCBMC |
| UHRF1BP1L         | 0 | 1.64339608 | 0.585 | 0.143 | 0 Mono_UCBMC |
| EPC2              | 0 | 1.95427262 | 0.545 | 0.106 | 0 Mono_UCBMC |
| CNOT4             | 0 | 1.73986781 | 0.576 | 0.137 | 0 Mono_UCBMC |
| KLHL2             | 0 | 2.37800405 | 0.513 | 0.077 | 0 Mono_UCBMC |
| KANSL1            | 0 | 1.82488088 | 0.539 | 0.105 | 0 Mono_UCBMC |
| TNRC6A            | 0 | 2.10061212 | 0.541 | 0.107 | 0 Mono_UCBMC |
| EFR3A             | 0 | 2.176906   | 0.525 | 0.093 | 0 Mono_UCBMC |
| CSNK1G3           | 0 | 2.03143423 | 0.536 | 0.105 | 0 Mono_UCBMC |
| RAB11FIP1         | 0 | 1.86085862 | 0.559 | 0.128 | 0 Mono_UCBMC |
| ATP11B            | 0 | 2.11160105 | 0.519 | 0.089 | 0 Mono_UCBMC |
| GIT2              | 0 | 1.74639028 | 0.563 | 0.133 | 0 Mono_UCBMC |
| UBE2E1            | 0 | 2.22588246 | 0.518 | 0.089 | 0 Mono_UCBMC |
| BTAF1             | 0 | 2.13328324 | 0.524 | 0.095 | 0 Mono_UCBMC |
| CYB5R4            | 0 | 1.77004261 | 0.563 | 0.135 | 0 Mono_UCBMC |
| HERC3             | 0 | 2.1672619  | 0.515 | 0.09  | 0 Mono_UCBMC |
| INPP5D            | 0 | 1.59221815 | 0.549 | 0.125 | 0 Mono_UCBMC |
| DNAJC3            | 0 | 1.85166624 | 0.543 | 0.119 | 0 Mono_UCBMC |
| ABCC4             | 0 | 2.22295195 | 0.513 | 0.092 | 0 Mono_UCBMC |
| TGFB1             | 0 | 2.451111   | 0.529 | 0.108 | 0 Mono_UCBMC |
| SLC4A7            | 0 | 2.00577084 | 0.53  | 0.11  | 0 Mono_UCBMC |
| ABCC1             | 0 | 2.07068949 | 0.51  | 0.09  | 0 Mono_UCBMC |
| SLC12A6           | 0 | 1.60636172 | 0.541 | 0.122 | 0 Mono_UCBMC |
| HERC1             | 0 | 1.74745487 | 0.533 | 0.114 | 0 Mono_UCBMC |
| DOP1A             | 0 | 2.4241332  | 0.495 | 0.078 | 0 Mono_UCBMC |
| PDZD8             | 0 | 2.03757527 | 0.515 | 0.099 | 0 Mono_UCBMC |
| TBC1D23           | 0 | 1.92935914 | 0.512 | 0.097 | 0 Mono_UCBMC |
| SOS2              | 0 | 2.08179344 | 0.509 | 0.096 | 0 Mono_UCBMC |
| EIF2AK3           | 0 | 2.26469029 | 0.493 | 0.08  | 0 Mono_UCBMC |
| RBM33             | 0 | 1.73639681 | 0.529 | 0.118 | 0 Mono_UCBMC |
| ENSMUG00000058532 | 0 | 1.33926306 | 0.941 | 0.532 | 0 Mono_UCBMC |
| FOXJ3             | 0 | 1.93636223 | 0.497 | 0.089 | 0 Mono_UCBMC |
| SMURF1            | 0 | 2.11130466 | 0.499 | 0.091 | 0 Mono_UCBMC |

|          |           |            |       |       |                      |
|----------|-----------|------------|-------|-------|----------------------|
| ARHGAP26 | 0         | 1.64195093 | 0.964 | 0.557 | 0 Mono_UCBMC         |
| XPR1     | 0         | 1.7524251  | 0.514 | 0.109 | 0 Mono_UCBMC         |
| RYBP     | 0         | 1.7659795  | 0.502 | 0.099 | 0 Mono_UCBMC         |
| SNRK     | 0         | 2.10978728 | 0.495 | 0.095 | 0 Mono_UCBMC         |
| HECA     | 0         | 2.4198359  | 0.466 | 0.068 | 0 Mono_UCBMC         |
| GALNT11  | 0         | 1.83511758 | 0.501 | 0.104 | 0 Mono_UCBMC         |
| FLVCR2   | 0         | 1.86746297 | 0.5   | 0.104 | 0 Mono_UCBMC         |
| PTGER4   | 0         | 1.97767766 | 0.487 | 0.093 | 0 Mono_UCBMC         |
| SMG6     | 0         | 1.77922648 | 0.496 | 0.103 | 0 Mono_UCBMC         |
| SLC35A3  | 0         | 1.91498208 | 0.495 | 0.103 | 0 Mono_UCBMC         |
| MAPK8    | 0         | 1.92366986 | 0.49  | 0.098 | 0 Mono_UCBMC         |
| MACO1    | 0         | 2.20005859 | 0.466 | 0.078 | 0 Mono_UCBMC         |
| KIF13A   | 0         | 1.98424747 | 0.484 | 0.098 | 0 Mono_UCBMC         |
| PIK3R1   | 0         | 2.20379832 | 0.449 | 0.075 | 0 Mono_UCBMC         |
| CDYL     | 0         | 2.17614937 | 0.438 | 0.068 | 0 Mono_UCBMC         |
| PXK      | 0         | 2.08976618 | 0.449 | 0.081 | 0 Mono_UCBMC         |
| CHD7     | 0         | 2.84747593 | 0.41  | 0.044 | 0 Mono_UCBMC         |
| GPAT3    | 0         | 2.6561353  | 0.424 | 0.06  | 0 Mono_UCBMC         |
| ELF4     | 0         | 2.17524827 | 0.437 | 0.074 | 0 Mono_UCBMC         |
| ZNF326   | 0         | 2.05300863 | 0.437 | 0.077 | 0 Mono_UCBMC         |
| NUP214   | 0         | 2.07540417 | 0.429 | 0.071 | 0 Mono_UCBMC         |
| ZSWIM4   | 0         | 2.35328007 | 0.408 | 0.06  | 0 Mono_UCBMC         |
| PIK3CA   | 0         | 2.213678   | 0.41  | 0.065 | 0 Mono_UCBMC         |
| RPS6KA5  | 0         | 2.16510375 | 0.413 | 0.07  | 0 Mono_UCBMC         |
| TRAPPC10 | 0         | 2.2770015  | 0.38  | 0.052 | 0 Mono_UCBMC         |
| MTMR10   | 0         | 2.41378003 | 0.377 | 0.052 | 0 Mono_UCBMC         |
| PI4K2A   | 0         | 2.93629784 | 0.352 | 0.041 | 0 Mono_UCBMC         |
| NKIRAS1  | 0         | 3.25724696 | 0.334 | 0.03  | 0 Mono_UCBMC         |
| RPS20    | 0         | 1.60223566 | 0.96  | 0.657 | 0 Mono_UCBMC         |
| ATG14    | 0         | 3.09000605 | 0.285 | 0.024 | 0 Mono_UCBMC         |
| RPL27A   | 0         | 0.95708082 | 0.965 | 0.832 | 0 Mono_UCBMC         |
| RPL13A   | 0         | 0.89200359 | 0.971 | 0.866 | 0 Mono_UCBMC         |
| CNOT2    | 1.02E-307 | 1.74691976 | 0.571 | 0.14  | 3.60E-303 Mono_UCBMC |



|                   |           |            |       |       |           |            |
|-------------------|-----------|------------|-------|-------|-----------|------------|
| TMCC1             | 1.35E-307 | 1.74724664 | 0.555 | 0.132 | 4.80E-303 | Mono_UCBMC |
| MFSD14B           | 2.78E-307 | 2.09006417 | 0.435 | 0.079 | 9.83E-303 | Mono_UCBMC |
| KAT6B             | 1.57E-306 | 1.88539646 | 0.458 | 0.088 | 5.56E-302 | Mono_UCBMC |
| SRGAP2            | 3.10E-306 | 1.49594709 | 0.602 | 0.155 | 1.10E-301 | Mono_UCBMC |
| PHF3              | 8.36E-306 | 1.86218158 | 0.502 | 0.109 | 2.96E-301 | Mono_UCBMC |
| RNGTT             | 1.07E-305 | 1.53696523 | 0.61  | 0.161 | 3.80E-301 | Mono_UCBMC |
| RNF138            | 1.42E-305 | 1.89382264 | 0.482 | 0.099 | 5.02E-301 | Mono_UCBMC |
| WWP2              | 1.05E-303 | 1.88792469 | 0.452 | 0.086 | 3.73E-299 | Mono_UCBMC |
| IREB2             | 3.30E-303 | 2.07233391 | 0.425 | 0.076 | 1.17E-298 | Mono_UCBMC |
| EML4              | 1.18E-302 | 1.36607702 | 0.775 | 0.275 | 4.16E-298 | Mono_UCBMC |
| LCOR              | 7.52E-302 | 1.40797109 | 0.667 | 0.194 | 2.66E-297 | Mono_UCBMC |
| KIAA0232          | 2.66E-301 | 1.74243927 | 0.481 | 0.099 | 9.43E-297 | Mono_UCBMC |
| ABI1              | 3.96E-301 | 1.40024258 | 0.757 | 0.258 | 1.40E-296 | Mono_UCBMC |
| ENSMUG00000012203 | 6.02E-301 | 1.61708709 | 0.72  | 0.244 | 2.13E-296 | Mono_UCBMC |
| ESCO1             | 6.77E-301 | 1.56490443 | 0.601 | 0.159 | 2.40E-296 | Mono_UCBMC |
| EPB41             | 7.31E-301 | 1.53087329 | 0.627 | 0.175 | 2.59E-296 | Mono_UCBMC |
| MAP3K1            | 1.27E-300 | 1.87725009 | 0.463 | 0.092 | 4.50E-296 | Mono_UCBMC |
| USP9X             | 2.13E-300 | 1.50255224 | 0.6   | 0.156 | 7.55E-296 | Mono_UCBMC |
| VCL               | 1.39E-299 | 1.53441281 | 0.719 | 0.239 | 4.94E-295 | Mono_UCBMC |
| PRPF40A           | 1.59E-299 | 1.47996268 | 0.691 | 0.212 | 5.64E-295 | Mono_UCBMC |
| LUC7L3            | 9.15E-299 | 1.62104065 | 0.578 | 0.146 | 3.24E-294 | Mono_UCBMC |
| ACVR2A            | 3.96E-298 | 2.0305004  | 0.464 | 0.095 | 1.40E-293 | Mono_UCBMC |
| MRTFA             | 4.12E-298 | 1.76780234 | 0.49  | 0.105 | 1.46E-293 | Mono_UCBMC |
| SP3               | 4.31E-298 | 1.76701642 | 0.49  | 0.104 | 1.53E-293 | Mono_UCBMC |
| RBPJ              | 5.57E-297 | 1.41273993 | 0.817 | 0.334 | 1.97E-292 | Mono_UCBMC |
| PIK3CB            | 1.20E-296 | 1.50076409 | 0.615 | 0.168 | 4.25E-292 | Mono_UCBMC |
| WASHC5            | 3.21E-295 | 2.41014026 | 0.334 | 0.044 | 1.14E-290 | Mono_UCBMC |
| CERS6             | 5.18E-295 | 1.613526   | 0.563 | 0.142 | 1.84E-290 | Mono_UCBMC |
| CAPN7             | 1.41E-294 | 2.22799121 | 0.361 | 0.053 | 5.00E-290 | Mono_UCBMC |
| SNX29             | 1.89E-294 | 1.4711355  | 0.592 | 0.154 | 6.71E-290 | Mono_UCBMC |
| VPS13B            | 2.53E-294 | 1.20612296 | 0.9   | 0.42  | 8.97E-290 | Mono_UCBMC |
| ATG13             | 2.08E-293 | 2.21956419 | 0.379 | 0.06  | 7.38E-289 | Mono_UCBMC |
| SPOPL             | 5.57E-293 | 2.04157694 | 0.427 | 0.08  | 1.97E-288 | Mono_UCBMC |

|                    |           |            |       |       |           |            |
|--------------------|-----------|------------|-------|-------|-----------|------------|
| RAP1B              | 7.98E-293 | 1.26436332 | 0.943 | 0.586 | 2.83E-288 | Mono_UCBMC |
| SDHAF4             | 1.08E-292 | 1.81781515 | 0.503 | 0.114 | 3.83E-288 | Mono_UCBMC |
| LRRFIP2            | 6.45E-292 | 1.95523244 | 0.427 | 0.08  | 2.28E-287 | Mono_UCBMC |
| AGPAT3             | 7.17E-292 | 1.88049273 | 0.415 | 0.074 | 2.54E-287 | Mono_UCBMC |
| WASL               | 8.07E-292 | 1.81194879 | 0.455 | 0.09  | 2.86E-287 | Mono_UCBMC |
| KDM2A              | 1.01E-291 | 1.35833555 | 0.654 | 0.19  | 3.56E-287 | Mono_UCBMC |
| MICU2              | 2.45E-291 | 2.10806057 | 0.42  | 0.078 | 8.67E-287 | Mono_UCBMC |
| GATAD2B            | 6.84E-290 | 1.55085979 | 0.574 | 0.149 | 2.42E-285 | Mono_UCBMC |
| EIF2AK2            | 8.16E-290 | 2.67685347 | 0.313 | 0.038 | 2.89E-285 | Mono_UCBMC |
| SORL1              | 1.33E-289 | 1.47840495 | 0.553 | 0.137 | 4.70E-285 | Mono_UCBMC |
| RNF24              | 3.37E-289 | 2.31827204 | 0.401 | 0.072 | 1.20E-284 | Mono_UCBMC |
| LSM14A             | 4.16E-289 | 1.61637635 | 0.57  | 0.147 | 1.47E-284 | Mono_UCBMC |
| GPATCH8            | 6.13E-289 | 1.81448858 | 0.461 | 0.096 | 2.17E-284 | Mono_UCBMC |
| SP100              | 9.20E-289 | 1.46162997 | 0.691 | 0.219 | 3.26E-284 | Mono_UCBMC |
| ACTR2              | 1.07E-287 | 1.07893241 | 0.963 | 0.64  | 3.78E-283 | Mono_UCBMC |
| CHKA               | 1.44E-287 | 2.42464444 | 0.313 | 0.039 | 5.11E-283 | Mono_UCBMC |
| TRPS1              | 2.00E-287 | 1.21544818 | 0.882 | 0.412 | 7.08E-283 | Mono_UCBMC |
| ARID2              | 2.91E-286 | 1.51508747 | 0.588 | 0.159 | 1.03E-281 | Mono_UCBMC |
| MAPKAPK2           | 1.96E-285 | 1.55011304 | 0.47  | 0.097 | 6.95E-281 | Mono_UCBMC |
| ENSMMUG00000065175 | 2.44E-285 | 1.83796659 | 0.448 | 0.09  | 8.65E-281 | Mono_UCBMC |
| UBR3               | 7.82E-285 | 1.60684274 | 0.51  | 0.118 | 2.77E-280 | Mono_UCBMC |
| APBB1IP            | 7.98E-285 | 1.22423241 | 0.811 | 0.309 | 2.83E-280 | Mono_UCBMC |
| SDC2               | 1.18E-284 | 3.41280008 | 0.263 | 0.024 | 4.17E-280 | Mono_UCBMC |
| EVI5               | 1.86E-284 | 1.3470952  | 0.711 | 0.226 | 6.58E-280 | Mono_UCBMC |
| PDS5A              | 2.80E-284 | 1.68376114 | 0.473 | 0.101 | 9.91E-280 | Mono_UCBMC |
| TBC1D12            | 8.59E-284 | 2.01290418 | 0.404 | 0.073 | 3.04E-279 | Mono_UCBMC |
| ABHD2              | 1.34E-283 | 1.64732148 | 0.495 | 0.111 | 4.74E-279 | Mono_UCBMC |
| DNAJC1             | 5.85E-283 | 1.77983407 | 0.504 | 0.119 | 2.07E-278 | Mono_UCBMC |
| DDX6               | 7.54E-283 | 1.72616535 | 0.5   | 0.115 | 2.67E-278 | Mono_UCBMC |
| TRIM33             | 1.12E-282 | 1.98284419 | 0.398 | 0.071 | 3.96E-278 | Mono_UCBMC |
| SRSF4              | 2.16E-282 | 1.49554205 | 0.585 | 0.156 | 7.64E-278 | Mono_UCBMC |
| PRKCE              | 2.27E-282 | 2.04762093 | 0.379 | 0.063 | 8.03E-278 | Mono_UCBMC |
| MAPK1              | 5.08E-282 | 1.71251326 | 0.48  | 0.107 | 1.80E-277 | Mono_UCBMC |

|         |           |            |       |       |           |            |
|---------|-----------|------------|-------|-------|-----------|------------|
| FBXO33  | 5.98E-282 | 2.4471673  | 0.332 | 0.046 | 2.12E-277 | Mono_UCBMC |
| PUM2    | 3.03E-281 | 1.45580255 | 0.628 | 0.18  | 1.07E-276 | Mono_UCBMC |
| CDC73   | 3.73E-281 | 1.67914045 | 0.499 | 0.114 | 1.32E-276 | Mono_UCBMC |
| RCOR1   | 5.21E-281 | 1.38086673 | 0.649 | 0.197 | 1.85E-276 | Mono_UCBMC |
| GDAP2   | 5.53E-281 | 2.29066978 | 0.366 | 0.059 | 1.96E-276 | Mono_UCBMC |
| RPRD2   | 1.90E-280 | 2.19800297 | 0.372 | 0.061 | 6.73E-276 | Mono_UCBMC |
| RAB1A   | 6.01E-280 | 1.27252064 | 0.839 | 0.341 | 2.13E-275 | Mono_UCBMC |
| GATAD2A | 2.53E-279 | 1.47179243 | 0.535 | 0.131 | 8.95E-275 | Mono_UCBMC |
| TRA2B   | 3.38E-279 | 1.16512419 | 0.902 | 0.437 | 1.20E-274 | Mono_UCBMC |
| RPRD1A  | 7.59E-279 | 2.12631049 | 0.356 | 0.055 | 2.69E-274 | Mono_UCBMC |
| SEC63   | 1.01E-278 | 1.54626335 | 0.555 | 0.141 | 3.58E-274 | Mono_UCBMC |
| HECTD4  | 1.67E-277 | 2.03946315 | 0.37  | 0.061 | 5.91E-273 | Mono_UCBMC |
| ECPAS   | 1.85E-277 | 1.80242612 | 0.463 | 0.1   | 6.55E-273 | Mono_UCBMC |
| CELF2   | 2.64E-277 | 1.18805052 | 0.869 | 0.401 | 9.36E-273 | Mono_UCBMC |
| LMTK2   | 5.75E-277 | 2.09038026 | 0.385 | 0.068 | 2.04E-272 | Mono_UCBMC |
| CCNK    | 1.06E-276 | 1.77632456 | 0.486 | 0.111 | 3.76E-272 | Mono_UCBMC |
| PUM1    | 1.95E-276 | 1.35331246 | 0.638 | 0.188 | 6.90E-272 | Mono_UCBMC |
| PPP3CA  | 8.92E-276 | 1.21903034 | 0.811 | 0.316 | 3.16E-271 | Mono_UCBMC |
| SCAF8   | 1.14E-275 | 1.57084527 | 0.501 | 0.116 | 4.03E-271 | Mono_UCBMC |
| PITPNA  | 2.42E-275 | 1.86342691 | 0.403 | 0.075 | 8.58E-271 | Mono_UCBMC |
| MARK3   | 2.92E-275 | 1.55876806 | 0.533 | 0.132 | 1.03E-270 | Mono_UCBMC |
| PDS5B   | 7.96E-275 | 1.76180952 | 0.477 | 0.108 | 2.82E-270 | Mono_UCBMC |
| AGTPBP1 | 8.78E-275 | 1.42089321 | 0.603 | 0.17  | 3.11E-270 | Mono_UCBMC |
| MTSS1   | 3.80E-274 | 1.13246417 | 0.877 | 0.434 | 1.35E-269 | Mono_UCBMC |
| RIC1    | 7.93E-274 | 1.47793874 | 0.522 | 0.127 | 2.81E-269 | Mono_UCBMC |
| RUNX2   | 5.28E-273 | 1.99053903 | 0.464 | 0.107 | 1.87E-268 | Mono_UCBMC |
| PHIP    | 1.03E-272 | 1.30039386 | 0.683 | 0.217 | 3.65E-268 | Mono_UCBMC |
| CLASP2  | 1.76E-272 | 1.43423766 | 0.589 | 0.164 | 6.24E-268 | Mono_UCBMC |
| RC3H1   | 2.77E-272 | 1.6370933  | 0.499 | 0.118 | 9.82E-268 | Mono_UCBMC |
| NCOA2   | 5.92E-272 | 1.51104665 | 0.586 | 0.162 | 2.10E-267 | Mono_UCBMC |
| SGMS1   | 7.76E-272 | 1.43116515 | 0.595 | 0.167 | 2.75E-267 | Mono_UCBMC |
| IQGAP1  | 9.77E-272 | 1.16264724 | 0.918 | 0.484 | 3.46E-267 | Mono_UCBMC |
| ROCK1   | 1.73E-271 | 1.33680952 | 0.762 | 0.279 | 6.12E-267 | Mono_UCBMC |

|                   |           |            |       |       |           |            |
|-------------------|-----------|------------|-------|-------|-----------|------------|
| MED23             | 6.06E-271 | 2.09974977 | 0.37  | 0.063 | 2.15E-266 | Mono_UCBMC |
| PLAA              | 1.53E-270 | 1.73486732 | 0.421 | 0.082 | 5.44E-266 | Mono_UCBMC |
| NCOR1             | 2.28E-270 | 1.49996731 | 0.541 | 0.137 | 8.09E-266 | Mono_UCBMC |
| RNF216            | 2.55E-270 | 1.40328482 | 0.533 | 0.133 | 9.02E-266 | Mono_UCBMC |
| SUCO              | 1.16E-269 | 1.75693852 | 0.455 | 0.098 | 4.12E-265 | Mono_UCBMC |
| USP42             | 2.77E-268 | 2.70510205 | 0.28  | 0.032 | 9.80E-264 | Mono_UCBMC |
| DCP1A             | 3.27E-268 | 1.68218486 | 0.43  | 0.087 | 1.16E-263 | Mono_UCBMC |
| RFX2              | 1.50E-267 | 2.27661258 | 0.337 | 0.052 | 5.31E-263 | Mono_UCBMC |
| FYN               | 1.76E-267 | 1.55313247 | 0.515 | 0.127 | 6.25E-263 | Mono_UCBMC |
| AAGAB             | 3.72E-267 | 2.5664744  | 0.307 | 0.041 | 1.32E-262 | Mono_UCBMC |
| B2M               | 4.18E-267 | 0.6996439  | 0.989 | 0.962 | 1.48E-262 | Mono_UCBMC |
| YTHDF3            | 3.81E-266 | 1.34708438 | 0.608 | 0.172 | 1.35E-261 | Mono_UCBMC |
| ATXN7             | 6.69E-266 | 1.64822533 | 0.455 | 0.1   | 2.37E-261 | Mono_UCBMC |
| WDR47             | 1.28E-264 | 2.39398696 | 0.341 | 0.054 | 4.53E-260 | Mono_UCBMC |
| USP15             | 8.57E-264 | 1.14382209 | 0.882 | 0.412 | 3.04E-259 | Mono_UCBMC |
| SYNJ1             | 9.96E-264 | 1.62149282 | 0.458 | 0.102 | 3.53E-259 | Mono_UCBMC |
| HPS3              | 4.83E-263 | 1.89073339 | 0.403 | 0.078 | 1.71E-258 | Mono_UCBMC |
| GPR89A            | 9.87E-263 | 2.09026575 | 0.34  | 0.053 | 3.50E-258 | Mono_UCBMC |
| HELZ              | 8.58E-262 | 1.47567341 | 0.569 | 0.157 | 3.04E-257 | Mono_UCBMC |
| ARFGEF1           | 1.35E-261 | 1.50114235 | 0.476 | 0.109 | 4.78E-257 | Mono_UCBMC |
| CDC42EP3          | 6.63E-261 | 1.99913252 | 0.392 | 0.075 | 2.35E-256 | Mono_UCBMC |
| RELL1             | 1.71E-260 | 1.84379935 | 0.416 | 0.084 | 6.06E-256 | Mono_UCBMC |
| INO80D            | 2.35E-260 | 1.85023235 | 0.371 | 0.066 | 8.32E-256 | Mono_UCBMC |
| LANCL2            | 2.55E-260 | 2.42748232 | 0.288 | 0.036 | 9.05E-256 | Mono_UCBMC |
| CDK13             | 2.70E-260 | 1.42139358 | 0.533 | 0.138 | 9.56E-256 | Mono_UCBMC |
| UBP1              | 3.38E-260 | 1.87659751 | 0.373 | 0.066 | 1.20E-255 | Mono_UCBMC |
| CSGALNACT2        | 5.53E-260 | 1.20232885 | 0.826 | 0.335 | 1.96E-255 | Mono_UCBMC |
| USP34             | 7.07E-260 | 1.17162843 | 0.727 | 0.249 | 2.51E-255 | Mono_UCBMC |
| AP3B1             | 1.18E-259 | 1.29069622 | 0.666 | 0.213 | 4.19E-255 | Mono_UCBMC |
| CUL5              | 1.21E-259 | 1.61372546 | 0.521 | 0.137 | 4.30E-255 | Mono_UCBMC |
| UBL3              | 1.78E-259 | 1.31836779 | 0.729 | 0.258 | 6.31E-255 | Mono_UCBMC |
| GOLGA4            | 2.58E-259 | 1.30854395 | 0.6   | 0.172 | 9.13E-255 | Mono_UCBMC |
| ENSMUG00000017297 | 4.03E-259 | 2.42700619 | 0.338 | 0.055 | 1.43E-254 | Mono_UCBMC |

|                   |           |            |       |       |           |            |
|-------------------|-----------|------------|-------|-------|-----------|------------|
| RLF               | 9.45E-259 | 1.39895822 | 0.572 | 0.158 | 3.35E-254 | Mono_UCBMC |
| TAOK3             | 1.62E-258 | 1.23183959 | 0.762 | 0.292 | 5.74E-254 | Mono_UCBMC |
| RBM27             | 2.31E-258 | 1.80571212 | 0.421 | 0.088 | 8.19E-254 | Mono_UCBMC |
| AMBRA1            | 2.79E-258 | 1.6754364  | 0.4   | 0.078 | 9.87E-254 | Mono_UCBMC |
| DIAPH1            | 3.00E-258 | 1.25379682 | 0.781 | 0.302 | 1.06E-253 | Mono_UCBMC |
| CWC25             | 6.22E-258 | 1.71470932 | 0.431 | 0.092 | 2.20E-253 | Mono_UCBMC |
| INPP4A            | 2.88E-257 | 1.56516378 | 0.437 | 0.094 | 1.02E-252 | Mono_UCBMC |
| SOS1              | 3.25E-257 | 1.65334822 | 0.491 | 0.121 | 1.15E-252 | Mono_UCBMC |
| PCM1              | 1.80E-255 | 1.57402724 | 0.477 | 0.113 | 6.38E-251 | Mono_UCBMC |
| PID1              | 2.07E-255 | 1.12565383 | 0.882 | 0.458 | 7.34E-251 | Mono_UCBMC |
| RANBP2            | 3.22E-255 | 1.42797873 | 0.552 | 0.149 | 1.14E-250 | Mono_UCBMC |
| ANKRD28           | 3.96E-255 | 1.43224563 | 0.584 | 0.171 | 1.40E-250 | Mono_UCBMC |
| XPO6              | 1.36E-254 | 1.23663979 | 0.627 | 0.191 | 4.81E-250 | Mono_UCBMC |
| MCM9              | 1.11E-253 | 2.21525054 | 0.329 | 0.052 | 3.92E-249 | Mono_UCBMC |
| NCKAP5L           | 2.38E-253 | 2.87374938 | 0.251 | 0.026 | 8.45E-249 | Mono_UCBMC |
| ZNRF2             | 2.85E-252 | 2.30800943 | 0.316 | 0.048 | 1.01E-247 | Mono_UCBMC |
| RNF2              | 3.93E-252 | 2.02789572 | 0.379 | 0.072 | 1.39E-247 | Mono_UCBMC |
| SEC14L1           | 5.11E-252 | 1.41623125 | 0.535 | 0.143 | 1.81E-247 | Mono_UCBMC |
| ELL               | 6.76E-252 | 1.26485893 | 0.602 | 0.176 | 2.39E-247 | Mono_UCBMC |
| ENSMUG00000030448 | 2.90E-251 | 1.48013821 | 0.522 | 0.136 | 1.03E-246 | Mono_UCBMC |
| TBC1D14           | 4.22E-251 | 1.99350492 | 0.354 | 0.062 | 1.49E-246 | Mono_UCBMC |
| TIPARP            | 8.77E-251 | 1.52788111 | 0.743 | 0.32  | 3.11E-246 | Mono_UCBMC |
| PTEN              | 3.96E-250 | 1.51776783 | 0.521 | 0.138 | 1.40E-245 | Mono_UCBMC |
| LIN54             | 7.99E-250 | 2.42596563 | 0.287 | 0.038 | 2.83E-245 | Mono_UCBMC |
| GSK3B             | 9.21E-250 | 1.18136787 | 0.688 | 0.23  | 3.26E-245 | Mono_UCBMC |
| RANBP9            | 1.86E-249 | 1.46220496 | 0.466 | 0.11  | 6.59E-245 | Mono_UCBMC |
| RBM47             | 3.56E-249 | 0.98993832 | 0.852 | 0.377 | 1.26E-244 | Mono_UCBMC |
| SLCO3A1           | 4.85E-249 | 1.32711889 | 0.586 | 0.171 | 1.72E-244 | Mono_UCBMC |
| SOAT1             | 5.84E-249 | 1.38179054 | 0.545 | 0.148 | 2.07E-244 | Mono_UCBMC |
| DENND4A           | 7.21E-249 | 0.99812899 | 0.92  | 0.509 | 2.56E-244 | Mono_UCBMC |
| TOP1              | 7.37E-249 | 1.22581403 | 0.77  | 0.293 | 2.61E-244 | Mono_UCBMC |
| RNF38             | 1.01E-248 | 1.54612151 | 0.449 | 0.103 | 3.58E-244 | Mono_UCBMC |
| ZC3H7A            | 1.06E-248 | 1.67063335 | 0.41  | 0.085 | 3.76E-244 | Mono_UCBMC |

|          |           |            |       |       |           |            |
|----------|-----------|------------|-------|-------|-----------|------------|
| ZNFX1    | 2.30E-248 | 1.2503113  | 0.637 | 0.2   | 8.17E-244 | Mono_UCBMC |
| RNF130   | 3.12E-248 | 1.22418133 | 0.771 | 0.305 | 1.11E-243 | Mono_UCBMC |
| PNN      | 2.48E-247 | 1.84856775 | 0.392 | 0.079 | 8.79E-243 | Mono_UCBMC |
| PPP1R12B | 3.40E-247 | 2.21707816 | 0.323 | 0.052 | 1.20E-242 | Mono_UCBMC |
| STT3B    | 3.48E-247 | 1.53982391 | 0.487 | 0.121 | 1.23E-242 | Mono_UCBMC |
| LYST     | 4.82E-247 | 1.25698205 | 0.661 | 0.217 | 1.71E-242 | Mono_UCBMC |
| MAN1A2   | 7.15E-247 | 1.6798188  | 0.449 | 0.104 | 2.53E-242 | Mono_UCBMC |
| MON2     | 9.85E-247 | 1.54581072 | 0.473 | 0.115 | 3.49E-242 | Mono_UCBMC |
| TXNDC11  | 1.62E-245 | 1.90881587 | 0.37  | 0.07  | 5.73E-241 | Mono_UCBMC |
| HERPUD1  | 2.17E-245 | 1.3062661  | 0.575 | 0.164 | 7.69E-241 | Mono_UCBMC |
| MARCHF7  | 2.55E-245 | 1.17330383 | 0.685 | 0.231 | 9.03E-241 | Mono_UCBMC |
| GAPVD1   | 1.03E-244 | 1.53704179 | 0.48  | 0.118 | 3.64E-240 | Mono_UCBMC |
| KLF7     | 1.75E-244 | 1.06931832 | 0.718 | 0.253 | 6.22E-240 | Mono_UCBMC |
| CCNT2    | 1.81E-244 | 1.73374475 | 0.392 | 0.079 | 6.43E-240 | Mono_UCBMC |
| ERO1B    | 1.29E-243 | 1.65444286 | 0.413 | 0.089 | 4.57E-239 | Mono_UCBMC |
| AQR      | 2.24E-243 | 1.56029868 | 0.428 | 0.094 | 7.94E-239 | Mono_UCBMC |
| CAPZA2   | 5.35E-243 | 1.17780207 | 0.872 | 0.425 | 1.90E-238 | Mono_UCBMC |
| LMNA     | 5.45E-243 | 1.7223412  | 0.461 | 0.114 | 1.93E-238 | Mono_UCBMC |
| MSI2     | 1.25E-242 | 1.58336412 | 0.42  | 0.092 | 4.43E-238 | Mono_UCBMC |
| ARIH1    | 3.11E-242 | 1.15605036 | 0.684 | 0.231 | 1.10E-237 | Mono_UCBMC |
| GINM1    | 6.70E-242 | 1.89368546 | 0.372 | 0.072 | 2.37E-237 | Mono_UCBMC |
| PLCL2    | 9.52E-242 | 1.71188246 | 0.401 | 0.084 | 3.37E-237 | Mono_UCBMC |
| TMEM170B | 1.76E-241 | 2.19632986 | 0.309 | 0.048 | 6.25E-237 | Mono_UCBMC |
| DENND1B  | 1.41E-240 | 1.94042861 | 0.36  | 0.068 | 4.99E-236 | Mono_UCBMC |
| MICAL2   | 1.50E-240 | 1.52960159 | 0.435 | 0.098 | 5.30E-236 | Mono_UCBMC |
| KPNA6    | 2.05E-240 | 1.86464266 | 0.359 | 0.067 | 7.26E-236 | Mono_UCBMC |
| CAMTA1   | 2.26E-240 | 1.36192744 | 0.643 | 0.212 | 8.02E-236 | Mono_UCBMC |
| AFF4     | 2.31E-240 | 1.18753985 | 0.565 | 0.161 | 8.18E-236 | Mono_UCBMC |
| PITPNC1  | 8.24E-240 | 1.32358057 | 0.675 | 0.243 | 2.92E-235 | Mono_UCBMC |
| TBC1D5   | 1.26E-239 | 1.19660915 | 0.777 | 0.311 | 4.47E-235 | Mono_UCBMC |
| GALNT7   | 6.30E-239 | 1.84178877 | 0.429 | 0.1   | 2.23E-234 | Mono_UCBMC |
| CTCF     | 6.87E-239 | 2.10768083 | 0.336 | 0.059 | 2.44E-234 | Mono_UCBMC |
| RUNX3    | 1.87E-238 | 1.34791062 | 0.585 | 0.179 | 6.64E-234 | Mono_UCBMC |

|                    |           |            |       |       |           |            |
|--------------------|-----------|------------|-------|-------|-----------|------------|
| GNAQ               | 2.11E-238 | 1.19647568 | 0.728 | 0.271 | 7.48E-234 | Mono_UCBMC |
| PI4KA              | 2.13E-238 | 1.88101499 | 0.351 | 0.065 | 7.54E-234 | Mono_UCBMC |
| ATF7IP             | 2.55E-238 | 1.09802935 | 0.799 | 0.329 | 9.05E-234 | Mono_UCBMC |
| BRAF               | 4.36E-238 | 1.17969992 | 0.706 | 0.258 | 1.54E-233 | Mono_UCBMC |
| HIPK3              | 1.40E-237 | 1.34903494 | 0.628 | 0.208 | 4.95E-233 | Mono_UCBMC |
| TNRC6B             | 1.93E-237 | 1.289757   | 0.568 | 0.168 | 6.84E-233 | Mono_UCBMC |
| LCORL              | 3.40E-237 | 1.50659235 | 0.479 | 0.123 | 1.21E-232 | Mono_UCBMC |
| RCSD1              | 5.39E-236 | 1.35813341 | 0.597 | 0.183 | 1.91E-231 | Mono_UCBMC |
| KCMF1              | 8.31E-236 | 1.57272401 | 0.477 | 0.121 | 2.94E-231 | Mono_UCBMC |
| AKAP13             | 8.67E-236 | 1.04826978 | 0.854 | 0.384 | 3.07E-231 | Mono_UCBMC |
| MYLIP              | 1.09E-235 | 1.60860901 | 0.401 | 0.086 | 3.86E-231 | Mono_UCBMC |
| SUSD6              | 1.15E-235 | 1.3506062  | 0.599 | 0.19  | 4.09E-231 | Mono_UCBMC |
| ZSWIM6             | 1.69E-235 | 1.0572533  | 0.757 | 0.29  | 5.97E-231 | Mono_UCBMC |
| CUX1               | 2.30E-235 | 1.1160944  | 0.757 | 0.291 | 8.16E-231 | Mono_UCBMC |
| KPNA3              | 3.92E-235 | 1.70224028 | 0.414 | 0.091 | 1.39E-230 | Mono_UCBMC |
| USP10              | 4.39E-235 | 1.36787209 | 0.503 | 0.133 | 1.55E-230 | Mono_UCBMC |
| TSC22D2            | 4.20E-234 | 1.3539116  | 0.445 | 0.104 | 1.49E-229 | Mono_UCBMC |
| NFATC3             | 5.09E-234 | 1.86434035 | 0.377 | 0.077 | 1.80E-229 | Mono_UCBMC |
| NEK7               | 9.11E-234 | 1.52006316 | 0.48  | 0.124 | 3.23E-229 | Mono_UCBMC |
| KRAS               | 3.35E-233 | 1.60644376 | 0.442 | 0.105 | 1.19E-228 | Mono_UCBMC |
| JARID2             | 3.38E-233 | 1.12315159 | 0.887 | 0.502 | 1.20E-228 | Mono_UCBMC |
| ZFYVE16            | 4.68E-233 | 1.28577624 | 0.619 | 0.201 | 1.66E-228 | Mono_UCBMC |
| ENSMMUG00000021425 | 5.21E-233 | 1.28690115 | 0.505 | 0.134 | 1.85E-228 | Mono_UCBMC |
| WDR20              | 6.75E-233 | 2.04493999 | 0.316 | 0.053 | 2.39E-228 | Mono_UCBMC |
| TUT7               | 7.08E-233 | 1.03279465 | 0.895 | 0.466 | 2.51E-228 | Mono_UCBMC |
| MIER1              | 1.59E-232 | 1.36340614 | 0.592 | 0.187 | 5.65E-228 | Mono_UCBMC |
| IRF2BP2            | 2.25E-232 | 1.41453789 | 0.511 | 0.139 | 7.98E-228 | Mono_UCBMC |
| SECISBP2L          | 2.26E-232 | 2.35388755 | 0.271 | 0.036 | 8.02E-228 | Mono_UCBMC |
| CASK               | 2.63E-232 | 1.4593522  | 0.458 | 0.113 | 9.33E-228 | Mono_UCBMC |
| CNST               | 4.62E-232 | 1.28926088 | 0.548 | 0.159 | 1.64E-227 | Mono_UCBMC |
| MORC3              | 5.32E-231 | 1.3611292  | 0.508 | 0.137 | 1.88E-226 | Mono_UCBMC |
| FAM172A            | 9.39E-231 | 1.25693618 | 0.604 | 0.192 | 3.33E-226 | Mono_UCBMC |
| QRICH1             | 2.00E-230 | 1.6154918  | 0.404 | 0.089 | 7.07E-226 | Mono_UCBMC |

|         |           |            |       |       |           |            |
|---------|-----------|------------|-------|-------|-----------|------------|
| ARFGAP3 | 2.92E-230 | 1.11340341 | 0.752 | 0.292 | 1.03E-225 | Mono_UCBMC |
| ATXN2   | 3.10E-230 | 1.55480518 | 0.457 | 0.115 | 1.10E-225 | Mono_UCBMC |
| RAB31   | 4.26E-230 | 1.20928736 | 0.703 | 0.259 | 1.51E-225 | Mono_UCBMC |
| FBXL20  | 7.26E-230 | 1.57827503 | 0.431 | 0.102 | 2.57E-225 | Mono_UCBMC |
| INO80   | 1.77E-229 | 1.71989997 | 0.382 | 0.08  | 6.26E-225 | Mono_UCBMC |
| UBE2E2  | 4.45E-229 | 1.08339862 | 0.792 | 0.331 | 1.58E-224 | Mono_UCBMC |
| CTNNB1  | 6.31E-229 | 1.37733558 | 0.522 | 0.147 | 2.24E-224 | Mono_UCBMC |
| GOLPH3  | 7.53E-229 | 1.43979043 | 0.46  | 0.115 | 2.67E-224 | Mono_UCBMC |
| CDKAL1  | 2.79E-228 | 1.41630091 | 0.479 | 0.125 | 9.90E-224 | Mono_UCBMC |
| UVRAG   | 3.52E-228 | 1.10291881 | 0.679 | 0.234 | 1.25E-223 | Mono_UCBMC |
| DIP2B   | 3.57E-228 | 1.37382169 | 0.524 | 0.15  | 1.27E-223 | Mono_UCBMC |
| NCOA1   | 4.07E-228 | 1.43468511 | 0.482 | 0.126 | 1.44E-223 | Mono_UCBMC |
| BHLHE40 | 6.44E-228 | 1.16862172 | 0.773 | 0.32  | 2.28E-223 | Mono_UCBMC |
| CTNNA1  | 6.49E-228 | 1.38475057 | 0.579 | 0.184 | 2.30E-223 | Mono_UCBMC |
| RLIM    | 8.91E-228 | 1.65081336 | 0.386 | 0.082 | 3.16E-223 | Mono_UCBMC |
| IGF2BP2 | 1.14E-227 | 1.87153959 | 0.352 | 0.069 | 4.03E-223 | Mono_UCBMC |
| FAM117B | 1.98E-227 | 2.31929897 | 0.285 | 0.043 | 7.03E-223 | Mono_UCBMC |
| CPSF6   | 5.75E-227 | 1.65105465 | 0.405 | 0.09  | 2.04E-222 | Mono_UCBMC |
| SNX13   | 8.12E-227 | 1.62220437 | 0.434 | 0.105 | 2.88E-222 | Mono_UCBMC |
| PHF21A  | 1.61E-226 | 1.25872353 | 0.61  | 0.198 | 5.70E-222 | Mono_UCBMC |
| ARID1B  | 1.84E-226 | 1.10425957 | 0.642 | 0.211 | 6.51E-222 | Mono_UCBMC |
| RB1CC1  | 7.25E-226 | 1.49218351 | 0.441 | 0.108 | 2.57E-221 | Mono_UCBMC |
| PLEKHO2 | 7.30E-226 | 2.03774565 | 0.303 | 0.049 | 2.59E-221 | Mono_UCBMC |
| MAP3K5  | 2.18E-225 | 1.56853421 | 0.426 | 0.101 | 7.71E-221 | Mono_UCBMC |
| HACD2   | 2.39E-225 | 2.32406745 | 0.267 | 0.037 | 8.48E-221 | Mono_UCBMC |
| YTHDC1  | 4.67E-225 | 1.22669548 | 0.568 | 0.17  | 1.66E-220 | Mono_UCBMC |
| HTT     | 4.86E-225 | 1.95032788 | 0.324 | 0.058 | 1.72E-220 | Mono_UCBMC |
| DENND3  | 7.80E-225 | 1.31659133 | 0.49  | 0.131 | 2.76E-220 | Mono_UCBMC |
| TUT4    | 2.21E-224 | 1.58522845 | 0.462 | 0.12  | 7.83E-220 | Mono_UCBMC |
| CCDC88C | 5.68E-224 | 1.67551224 | 0.39  | 0.086 | 2.01E-219 | Mono_UCBMC |
| ZFAND3  | 7.84E-224 | 0.98938103 | 0.881 | 0.437 | 2.78E-219 | Mono_UCBMC |
| RPL23A  | 8.21E-224 | 0.75643156 | 0.97  | 0.861 | 2.91E-219 | Mono_UCBMC |
| PTPN9   | 9.46E-224 | 1.67376191 | 0.427 | 0.104 | 3.35E-219 | Mono_UCBMC |



|          |           |            |       |       |           |            |
|----------|-----------|------------|-------|-------|-----------|------------|
| PLXNC1   | 1.39E-223 | 1.10901541 | 0.679 | 0.238 | 4.94E-219 | Mono_UCBMC |
| BIN3     | 9.21E-223 | 1.34511471 | 0.504 | 0.138 | 3.26E-218 | Mono_UCBMC |
| ATF2     | 1.46E-222 | 1.48558993 | 0.421 | 0.099 | 5.19E-218 | Mono_UCBMC |
| TCERG1   | 1.80E-222 | 1.56343366 | 0.418 | 0.098 | 6.37E-218 | Mono_UCBMC |
| KDM7A    | 1.80E-222 | 1.21406643 | 0.606 | 0.193 | 6.37E-218 | Mono_UCBMC |
| USP38    | 4.67E-222 | 1.69591528 | 0.41  | 0.096 | 1.65E-217 | Mono_UCBMC |
| ZFX      | 1.02E-221 | 1.29739963 | 0.428 | 0.102 | 3.60E-217 | Mono_UCBMC |
| TASOR2   | 1.06E-221 | 1.86273196 | 0.334 | 0.063 | 3.76E-217 | Mono_UCBMC |
| ATL2     | 1.30E-221 | 2.0190688  | 0.295 | 0.047 | 4.62E-217 | Mono_UCBMC |
| IVNS1ABP | 1.96E-221 | 1.47435272 | 0.466 | 0.121 | 6.94E-217 | Mono_UCBMC |
| ADIPOR1  | 2.82E-221 | 1.40680816 | 0.475 | 0.124 | 9.98E-217 | Mono_UCBMC |
| NIPBL    | 1.03E-220 | 1.10082409 | 0.716 | 0.268 | 3.67E-216 | Mono_UCBMC |
| TAX1BP1  | 2.33E-220 | 1.22308825 | 0.681 | 0.248 | 8.24E-216 | Mono_UCBMC |
| KLHL18   | 2.51E-220 | 1.90442171 | 0.319 | 0.057 | 8.88E-216 | Mono_UCBMC |
| JAK1     | 2.67E-220 | 0.86133889 | 0.927 | 0.539 | 9.45E-216 | Mono_UCBMC |
| TACC1    | 6.84E-220 | 1.15765686 | 0.637 | 0.215 | 2.42E-215 | Mono_UCBMC |
| CTDSPL2  | 7.30E-220 | 1.89806715 | 0.349 | 0.07  | 2.59E-215 | Mono_UCBMC |
| APP      | 1.81E-219 | 1.38607806 | 0.518 | 0.151 | 6.40E-215 | Mono_UCBMC |
| SCAF11   | 2.68E-219 | 1.15427137 | 0.706 | 0.269 | 9.50E-215 | Mono_UCBMC |
| RBM25    | 2.80E-219 | 1.21329284 | 0.555 | 0.166 | 9.93E-215 | Mono_UCBMC |
| PREX1    | 4.33E-219 | 1.33423215 | 0.543 | 0.165 | 1.53E-214 | Mono_UCBMC |
| UBR5     | 1.06E-218 | 1.07852264 | 0.594 | 0.188 | 3.76E-214 | Mono_UCBMC |
| TRAK1    | 1.59E-218 | 1.22644407 | 0.502 | 0.14  | 5.64E-214 | Mono_UCBMC |
| ARID4B   | 3.70E-218 | 0.99015093 | 0.697 | 0.254 | 1.31E-213 | Mono_UCBMC |
| DIAPH2   | 4.90E-218 | 1.06242646 | 0.827 | 0.376 | 1.74E-213 | Mono_UCBMC |
| SPIDR    | 1.08E-217 | 1.22942456 | 0.595 | 0.194 | 3.83E-213 | Mono_UCBMC |
| RBM5     | 1.13E-217 | 1.13198199 | 0.551 | 0.163 | 4.00E-213 | Mono_UCBMC |
| MDM2     | 1.17E-217 | 1.44781184 | 0.455 | 0.119 | 4.14E-213 | Mono_UCBMC |
| PSPC1    | 1.56E-217 | 1.2776915  | 0.502 | 0.14  | 5.54E-213 | Mono_UCBMC |
| SCAF4    | 2.45E-217 | 1.59962578 | 0.385 | 0.086 | 8.68E-213 | Mono_UCBMC |
| FOXN3    | 3.21E-217 | 0.99476456 | 0.743 | 0.298 | 1.14E-212 | Mono_UCBMC |
| BTBD9    | 3.93E-217 | 1.2499539  | 0.551 | 0.168 | 1.39E-212 | Mono_UCBMC |
| DDX5     | 4.27E-217 | 0.84698337 | 0.97  | 0.706 | 1.51E-212 | Mono_UCBMC |

|                   |           |            |       |       |           |            |
|-------------------|-----------|------------|-------|-------|-----------|------------|
| PHLPP1            | 5.68E-217 | 1.63357338 | 0.4   | 0.093 | 2.01E-212 | Mono_UCBMC |
| GAS7              | 1.26E-215 | 0.94629774 | 0.84  | 0.401 | 4.45E-211 | Mono_UCBMC |
| SRRM2             | 1.33E-215 | 1.31499079 | 0.489 | 0.134 | 4.71E-211 | Mono_UCBMC |
| RRBP1             | 7.76E-215 | 1.25296228 | 0.476 | 0.127 | 2.75E-210 | Mono_UCBMC |
| ZNF407            | 2.79E-214 | 1.33469424 | 0.49  | 0.137 | 9.89E-210 | Mono_UCBMC |
| HBA               | 2.93E-214 | 3.17533068 | 0.793 | 0.331 | 1.04E-209 | Mono_UCBMC |
| FBXL17            | 3.50E-214 | 1.3166158  | 0.514 | 0.15  | 1.24E-209 | Mono_UCBMC |
| THUMPD2           | 5.18E-214 | 2.271391   | 0.263 | 0.038 | 1.83E-209 | Mono_UCBMC |
| FNDC3B            | 5.47E-214 | 0.74829579 | 0.852 | 0.388 | 1.94E-209 | Mono_UCBMC |
| LATS1             | 9.09E-214 | 2.35838958 | 0.25  | 0.033 | 3.22E-209 | Mono_UCBMC |
| SENP2             | 1.38E-213 | 1.35075746 | 0.46  | 0.12  | 4.89E-209 | Mono_UCBMC |
| MBTD1             | 2.02E-213 | 2.12095721 | 0.29  | 0.048 | 7.15E-209 | Mono_UCBMC |
| SEPTIN6           | 2.06E-213 | 1.55399404 | 0.412 | 0.1   | 7.31E-209 | Mono_UCBMC |
| SAP30BP           | 6.27E-213 | 1.63086686 | 0.375 | 0.083 | 2.22E-208 | Mono_UCBMC |
| ZBTB43            | 8.30E-213 | 2.13370099 | 0.277 | 0.043 | 2.94E-208 | Mono_UCBMC |
| MITF              | 1.00E-212 | 1.59177032 | 0.398 | 0.094 | 3.55E-208 | Mono_UCBMC |
| ZNF703            | 1.38E-212 | 1.15165764 | 0.503 | 0.14  | 4.88E-208 | Mono_UCBMC |
| KLF13             | 1.41E-212 | 2.16337211 | 0.263 | 0.038 | 5.00E-208 | Mono_UCBMC |
| GPRIN3            | 2.39E-212 | 2.12888223 | 0.278 | 0.043 | 8.48E-208 | Mono_UCBMC |
| ZRANB1            | 5.28E-212 | 1.91426975 | 0.285 | 0.046 | 1.87E-207 | Mono_UCBMC |
| CYTH1             | 5.60E-212 | 1.28905647 | 0.526 | 0.157 | 1.98E-207 | Mono_UCBMC |
| PIP5K1A           | 6.83E-212 | 1.50366977 | 0.368 | 0.079 | 2.42E-207 | Mono_UCBMC |
| ZFR               | 6.90E-212 | 1.39081675 | 0.471 | 0.129 | 2.44E-207 | Mono_UCBMC |
| KMT5B             | 2.39E-211 | 1.55103523 | 0.385 | 0.087 | 8.48E-207 | Mono_UCBMC |
| ENSMUG00000042837 | 3.04E-211 | 1.90528096 | 0.299 | 0.052 | 1.08E-206 | Mono_UCBMC |
| KDM3A             | 7.45E-211 | 2.04448074 | 0.297 | 0.051 | 2.64E-206 | Mono_UCBMC |
| C18H18orf25       | 1.14E-210 | 1.83301461 | 0.321 | 0.061 | 4.02E-206 | Mono_UCBMC |
| ARL15             | 4.85E-210 | 1.20252441 | 0.579 | 0.19  | 1.72E-205 | Mono_UCBMC |
| RABGAP1L          | 5.71E-210 | 1.06925541 | 0.778 | 0.34  | 2.02E-205 | Mono_UCBMC |
| EIF4EBP3          | 7.66E-210 | 1.09804438 | 0.602 | 0.198 | 2.71E-205 | Mono_UCBMC |
| JAK2              | 1.11E-209 | 1.02604653 | 0.683 | 0.247 | 3.92E-205 | Mono_UCBMC |
| USP8              | 1.20E-209 | 1.34281873 | 0.449 | 0.118 | 4.23E-205 | Mono_UCBMC |
| CSF3R             | 1.90E-209 | 1.14221191 | 0.677 | 0.252 | 6.72E-205 | Mono_UCBMC |

|                    |           |            |       |       |           |            |
|--------------------|-----------|------------|-------|-------|-----------|------------|
| RSF1               | 3.23E-209 | 1.31982904 | 0.462 | 0.124 | 1.14E-204 | Mono_UCBMC |
| CASP3              | 5.35E-209 | 1.94003471 | 0.343 | 0.071 | 1.89E-204 | Mono_UCBMC |
| ENSMMUG00000008346 | 5.77E-209 | 1.39993261 | 0.409 | 0.098 | 2.04E-204 | Mono_UCBMC |
| STIM1              | 9.61E-209 | 1.95970514 | 0.322 | 0.063 | 3.40E-204 | Mono_UCBMC |
| WDR7               | 1.08E-208 | 1.59028144 | 0.382 | 0.087 | 3.82E-204 | Mono_UCBMC |
| CYRIB              | 1.29E-208 | 1.0009366  | 0.871 | 0.436 | 4.56E-204 | Mono_UCBMC |
| TRAF3              | 1.81E-208 | 1.08249065 | 0.674 | 0.255 | 6.40E-204 | Mono_UCBMC |
| GRAMD4             | 4.30E-208 | 1.61536977 | 0.374 | 0.084 | 1.52E-203 | Mono_UCBMC |
| SHOC2              | 8.32E-208 | 1.11225439 | 0.712 | 0.275 | 2.95E-203 | Mono_UCBMC |
| ITPR2              | 1.78E-207 | 1.13170201 | 0.616 | 0.211 | 6.29E-203 | Mono_UCBMC |
| MTHFD1L            | 3.72E-207 | 2.00772455 | 0.279 | 0.045 | 1.32E-202 | Mono_UCBMC |
| CAST               | 3.85E-207 | 1.126072   | 0.769 | 0.332 | 1.37E-202 | Mono_UCBMC |
| SEC24B             | 4.11E-207 | 1.12550725 | 0.583 | 0.19  | 1.46E-202 | Mono_UCBMC |
| FAM193A            | 1.15E-206 | 1.28191315 | 0.413 | 0.101 | 4.08E-202 | Mono_UCBMC |
| SNX9               | 1.51E-206 | 1.04691797 | 0.672 | 0.25  | 5.36E-202 | Mono_UCBMC |
| ADNP               | 3.06E-206 | 1.70672851 | 0.345 | 0.072 | 1.08E-201 | Mono_UCBMC |
| HSPA5              | 3.31E-206 | 0.97926517 | 0.691 | 0.262 | 1.17E-201 | Mono_UCBMC |
| ILKAP              | 3.37E-206 | 1.75918154 | 0.337 | 0.069 | 1.19E-201 | Mono_UCBMC |
| UBAC2              | 5.84E-206 | 1.11714357 | 0.71  | 0.276 | 2.07E-201 | Mono_UCBMC |
| ZC3H18             | 7.63E-206 | 1.76231017 | 0.325 | 0.064 | 2.70E-201 | Mono_UCBMC |
| COG3               | 2.65E-205 | 2.08271102 | 0.275 | 0.044 | 9.39E-201 | Mono_UCBMC |
| NT5C2              | 3.26E-205 | 1.42122169 | 0.491 | 0.143 | 1.16E-200 | Mono_UCBMC |
| EPS8               | 4.51E-205 | 1.51639814 | 0.437 | 0.117 | 1.60E-200 | Mono_UCBMC |
| WIPI2              | 1.66E-204 | 1.70280093 | 0.348 | 0.075 | 5.88E-200 | Mono_UCBMC |
| FOXN2              | 4.02E-204 | 1.47919502 | 0.466 | 0.131 | 1.42E-199 | Mono_UCBMC |
| SMAD3              | 8.85E-204 | 1.20024872 | 0.534 | 0.167 | 3.14E-199 | Mono_UCBMC |
| PLEKHM1            | 1.18E-203 | 1.66688182 | 0.325 | 0.064 | 4.17E-199 | Mono_UCBMC |
| PPP1R2             | 1.77E-203 | 1.48622792 | 0.422 | 0.108 | 6.26E-199 | Mono_UCBMC |
| FCAR               | 2.07E-203 | 1.51087012 | 0.533 | 0.173 | 7.32E-199 | Mono_UCBMC |
| ANKRD11            | 2.36E-203 | 0.99824779 | 0.538 | 0.165 | 8.37E-199 | Mono_UCBMC |
| RIOK3              | 2.37E-203 | 1.15198434 | 0.577 | 0.189 | 8.40E-199 | Mono_UCBMC |
| RAB7A              | 3.51E-203 | 0.98971834 | 0.828 | 0.382 | 1.24E-198 | Mono_UCBMC |
| CNOT1              | 4.23E-203 | 1.13923066 | 0.549 | 0.171 | 1.50E-198 | Mono_UCBMC |

|                    |           |            |       |       |           |            |
|--------------------|-----------|------------|-------|-------|-----------|------------|
| MKLN1              | 9.25E-203 | 1.27428332 | 0.49  | 0.142 | 3.28E-198 | Mono_UCBMC |
| GPR107             | 1.42E-202 | 1.27347851 | 0.408 | 0.1   | 5.02E-198 | Mono_UCBMC |
| ZNF92              | 1.81E-202 | 1.8302658  | 0.303 | 0.056 | 6.40E-198 | Mono_UCBMC |
| GALNT1             | 1.85E-202 | 1.10076803 | 0.608 | 0.215 | 6.55E-198 | Mono_UCBMC |
| SLC24A3            | 2.82E-202 | 1.28900923 | 0.486 | 0.141 | 9.99E-198 | Mono_UCBMC |
| TLK1               | 3.06E-202 | 1.60082852 | 0.388 | 0.093 | 1.08E-197 | Mono_UCBMC |
| PPP3CC             | 3.59E-202 | 1.67071293 | 0.347 | 0.074 | 1.27E-197 | Mono_UCBMC |
| ARHGAP17           | 4.04E-202 | 1.26133924 | 0.489 | 0.14  | 1.43E-197 | Mono_UCBMC |
| ADIPOR2            | 5.96E-202 | 1.33116695 | 0.437 | 0.115 | 2.11E-197 | Mono_UCBMC |
| ENSMMUG00000051957 | 9.89E-202 | 1.4182238  | 0.435 | 0.114 | 3.51E-197 | Mono_UCBMC |
| MTREX              | 2.06E-201 | 1.21662085 | 0.502 | 0.148 | 7.31E-197 | Mono_UCBMC |
| TGFBR2             | 2.68E-201 | 1.08311849 | 0.672 | 0.258 | 9.50E-197 | Mono_UCBMC |
| PRRC2B             | 4.06E-201 | 1.43445983 | 0.393 | 0.095 | 1.44E-196 | Mono_UCBMC |
| PPHLN1             | 7.30E-201 | 1.32375533 | 0.536 | 0.171 | 2.59E-196 | Mono_UCBMC |
| PREP               | 1.35E-200 | 2.11634687 | 0.272 | 0.045 | 4.79E-196 | Mono_UCBMC |
| CPEB2              | 1.75E-200 | 1.79887991 | 0.306 | 0.058 | 6.19E-196 | Mono_UCBMC |
| ZNF654             | 2.65E-200 | 1.63390909 | 0.335 | 0.069 | 9.38E-196 | Mono_UCBMC |
| SLC8A1             | 3.94E-200 | 1.07232814 | 0.688 | 0.278 | 1.39E-195 | Mono_UCBMC |
| SEC23A             | 5.37E-200 | 1.6363686  | 0.321 | 0.063 | 1.90E-195 | Mono_UCBMC |
| PRKAG2             | 1.05E-199 | 1.08800358 | 0.546 | 0.172 | 3.70E-195 | Mono_UCBMC |
| PCMTD1             | 1.06E-199 | 1.32120022 | 0.487 | 0.142 | 3.75E-195 | Mono_UCBMC |
| ZZZ3               | 1.50E-199 | 1.8576207  | 0.3   | 0.056 | 5.33E-195 | Mono_UCBMC |
| PPP4R1             | 3.40E-199 | 1.82765262 | 0.287 | 0.05  | 1.20E-194 | Mono_UCBMC |
| CUL2               | 3.95E-199 | 1.80858581 | 0.316 | 0.062 | 1.40E-194 | Mono_UCBMC |
| SNIP1              | 4.09E-199 | 2.09393509 | 0.261 | 0.041 | 1.45E-194 | Mono_UCBMC |
| PLEKHM2            | 4.95E-199 | 1.39661007 | 0.345 | 0.073 | 1.75E-194 | Mono_UCBMC |
| SENP6              | 1.00E-198 | 1.22361196 | 0.509 | 0.154 | 3.55E-194 | Mono_UCBMC |
| DHRS3              | 1.95E-198 | 1.98096308 | 0.258 | 0.039 | 6.92E-194 | Mono_UCBMC |
| WDR70              | 2.09E-198 | 1.17737803 | 0.494 | 0.145 | 7.42E-194 | Mono_UCBMC |
| SEC31A             | 2.86E-198 | 1.0793246  | 0.6   | 0.203 | 1.01E-193 | Mono_UCBMC |
| PHF8               | 6.39E-198 | 1.78299619 | 0.281 | 0.048 | 2.27E-193 | Mono_UCBMC |
| DNAJC2             | 1.51E-197 | 1.6394448  | 0.363 | 0.084 | 5.34E-193 | Mono_UCBMC |
| RTN4               | 1.91E-197 | 1.1638031  | 0.703 | 0.284 | 6.76E-193 | Mono_UCBMC |

|                    |           |            |       |       |           |            |
|--------------------|-----------|------------|-------|-------|-----------|------------|
| TCF12              | 2.10E-197 | 1.14138146 | 0.597 | 0.205 | 7.43E-193 | Mono_UCBMC |
| FRY                | 3.64E-197 | 1.36605435 | 0.397 | 0.099 | 1.29E-192 | Mono_UCBMC |
| FN1                | 4.43E-197 | 1.3069949  | 0.791 | 0.444 | 1.57E-192 | Mono_UCBMC |
| TTC17              | 6.09E-197 | 1.48273905 | 0.405 | 0.103 | 2.16E-192 | Mono_UCBMC |
| ARHGAP24           | 6.31E-197 | 1.11299559 | 0.72  | 0.301 | 2.24E-192 | Mono_UCBMC |
| WASF2              | 7.11E-197 | 0.99645826 | 0.609 | 0.206 | 2.52E-192 | Mono_UCBMC |
| ANKRD10            | 1.05E-196 | 1.05639411 | 0.539 | 0.168 | 3.71E-192 | Mono_UCBMC |
| ASH1L              | 1.05E-196 | 0.94660642 | 0.757 | 0.313 | 3.73E-192 | Mono_UCBMC |
| PPTC7              | 2.17E-196 | 1.49081098 | 0.379 | 0.09  | 7.71E-192 | Mono_UCBMC |
| DOCK2              | 4.52E-196 | 0.9336611  | 0.81  | 0.363 | 1.60E-191 | Mono_UCBMC |
| MYCBP2             | 5.48E-196 | 1.09543619 | 0.607 | 0.211 | 1.94E-191 | Mono_UCBMC |
| ENSMMUG00000050385 | 5.56E-196 | 1.70520607 | 0.331 | 0.07  | 1.97E-191 | Mono_UCBMC |
| BCL7B              | 5.60E-196 | 1.38346476 | 0.391 | 0.094 | 1.98E-191 | Mono_UCBMC |
| PIK3C2A            | 5.60E-196 | 1.31597488 | 0.421 | 0.11  | 1.98E-191 | Mono_UCBMC |
| HIPK2              | 8.59E-196 | 1.20660519 | 0.409 | 0.103 | 3.04E-191 | Mono_UCBMC |
| PAFAH1B2           | 1.00E-195 | 1.60293543 | 0.358 | 0.081 | 3.55E-191 | Mono_UCBMC |
| REPS1              | 1.05E-195 | 2.07163548 | 0.256 | 0.04  | 3.72E-191 | Mono_UCBMC |
| MINK1              | 1.06E-195 | 1.32146957 | 0.39  | 0.095 | 3.76E-191 | Mono_UCBMC |
| DYRK1A             | 1.07E-195 | 1.16552388 | 0.511 | 0.154 | 3.80E-191 | Mono_UCBMC |
| GMCL1              | 1.10E-195 | 2.03709616 | 0.305 | 0.059 | 3.90E-191 | Mono_UCBMC |
| DNM2               | 2.23E-194 | 1.20680438 | 0.464 | 0.131 | 7.89E-190 | Mono_UCBMC |
| TMEM131L           | 2.40E-194 | 1.44096991 | 0.44  | 0.121 | 8.49E-190 | Mono_UCBMC |
| NOTCH2             | 3.09E-194 | 0.95170292 | 0.739 | 0.298 | 1.09E-189 | Mono_UCBMC |
| STIM2              | 3.41E-194 | 1.73130779 | 0.344 | 0.077 | 1.21E-189 | Mono_UCBMC |
| ASCC3              | 3.46E-194 | 1.14823354 | 0.535 | 0.17  | 1.23E-189 | Mono_UCBMC |
| CSNK1A1            | 4.38E-194 | 0.93164152 | 0.846 | 0.417 | 1.55E-189 | Mono_UCBMC |
| YAF2               | 2.75E-193 | 1.3558494  | 0.445 | 0.125 | 9.74E-189 | Mono_UCBMC |
| ENSMMUG00000058818 | 9.39E-193 | 1.94143272 | 0.3   | 0.058 | 3.33E-188 | Mono_UCBMC |
| ACAP2              | 1.96E-192 | 1.00348376 | 0.708 | 0.281 | 6.95E-188 | Mono_UCBMC |
| USP24              | 3.45E-192 | 1.60291554 | 0.342 | 0.076 | 1.22E-187 | Mono_UCBMC |
| CNOT6L             | 3.96E-192 | 1.19825173 | 0.48  | 0.142 | 1.40E-187 | Mono_UCBMC |
| SFSWAP             | 3.99E-192 | 1.40847987 | 0.353 | 0.08  | 1.41E-187 | Mono_UCBMC |
| TLN1               | 4.10E-192 | 1.03069365 | 0.781 | 0.354 | 1.45E-187 | Mono_UCBMC |

|         |           |            |       |       |           |            |
|---------|-----------|------------|-------|-------|-----------|------------|
| SETD7   | 4.75E-192 | 1.68985793 | 0.334 | 0.072 | 1.68E-187 | Mono_UCBMC |
| ATP9B   | 5.71E-192 | 0.99858642 | 0.619 | 0.221 | 2.02E-187 | Mono_UCBMC |
| ESYT2   | 6.73E-192 | 1.06664642 | 0.56  | 0.189 | 2.38E-187 | Mono_UCBMC |
| ZRANB2  | 8.60E-192 | 1.37815451 | 0.379 | 0.091 | 3.05E-187 | Mono_UCBMC |
| SAMD4B  | 1.68E-191 | 1.23062163 | 0.447 | 0.123 | 5.96E-187 | Mono_UCBMC |
| AGO4    | 1.92E-191 | 1.78013763 | 0.284 | 0.052 | 6.81E-187 | Mono_UCBMC |
| IPMK    | 1.97E-191 | 1.13125255 | 0.541 | 0.176 | 6.97E-187 | Mono_UCBMC |
| ATAD2B  | 2.51E-191 | 1.01182758 | 0.634 | 0.232 | 8.91E-187 | Mono_UCBMC |
| VAPA    | 2.64E-191 | 1.11906691 | 0.632 | 0.229 | 9.35E-187 | Mono_UCBMC |
| PLEKHM3 | 3.05E-191 | 1.76861195 | 0.304 | 0.06  | 1.08E-186 | Mono_UCBMC |
| LRCH3   | 3.46E-191 | 1.21504852 | 0.433 | 0.118 | 1.23E-186 | Mono_UCBMC |
| MTDH    | 3.50E-191 | 1.32362869 | 0.456 | 0.129 | 1.24E-186 | Mono_UCBMC |
| MCL1    | 3.71E-191 | 1.03731736 | 0.775 | 0.339 | 1.31E-186 | Mono_UCBMC |
| CHST11  | 9.07E-191 | 0.74583668 | 0.725 | 0.291 | 3.21E-186 | Mono_UCBMC |
| UTRN    | 1.84E-190 | 1.11736091 | 0.56  | 0.188 | 6.53E-186 | Mono_UCBMC |
| MCU     | 3.61E-190 | 1.51457602 | 0.37  | 0.09  | 1.28E-185 | Mono_UCBMC |
| RELCH   | 5.28E-190 | 1.50587989 | 0.346 | 0.078 | 1.87E-185 | Mono_UCBMC |
| CDK17   | 2.29E-189 | 1.34264054 | 0.388 | 0.097 | 8.11E-185 | Mono_UCBMC |
| ME2     | 3.09E-189 | 1.47353892 | 0.409 | 0.108 | 1.10E-184 | Mono_UCBMC |
| RPS6KB1 | 3.29E-189 | 1.39620501 | 0.373 | 0.089 | 1.16E-184 | Mono_UCBMC |
| XPO7    | 6.68E-189 | 1.88799934 | 0.285 | 0.053 | 2.37E-184 | Mono_UCBMC |
| ERP44   | 7.00E-189 | 1.06864666 | 0.568 | 0.19  | 2.48E-184 | Mono_UCBMC |
| DYNC1H1 | 8.13E-189 | 1.33286384 | 0.403 | 0.104 | 2.88E-184 | Mono_UCBMC |
| PSMD12  | 1.07E-188 | 1.22959612 | 0.597 | 0.215 | 3.78E-184 | Mono_UCBMC |
| UTY     | 1.28E-188 | 1.52444104 | 0.339 | 0.075 | 4.54E-184 | Mono_UCBMC |
| SBNO1   | 2.03E-188 | 1.75272398 | 0.296 | 0.057 | 7.20E-184 | Mono_UCBMC |
| IGF2R   | 2.38E-188 | 1.05461505 | 0.601 | 0.221 | 8.44E-184 | Mono_UCBMC |
| PPP1CB  | 6.37E-188 | 1.0090352  | 0.844 | 0.422 | 2.26E-183 | Mono_UCBMC |
| AP1G1   | 1.33E-187 | 1.24576745 | 0.403 | 0.104 | 4.70E-183 | Mono_UCBMC |
| ARNTL   | 2.47E-187 | 1.5889996  | 0.342 | 0.078 | 8.76E-183 | Mono_UCBMC |
| MYO5A   | 3.06E-187 | 1.44835669 | 0.413 | 0.111 | 1.08E-182 | Mono_UCBMC |
| STAU1   | 7.95E-187 | 1.22464044 | 0.472 | 0.14  | 2.82E-182 | Mono_UCBMC |
| CLINT1  | 8.62E-187 | 1.06984386 | 0.656 | 0.249 | 3.05E-182 | Mono_UCBMC |

|          |           |            |       |       |           |            |
|----------|-----------|------------|-------|-------|-----------|------------|
| VTI1A    | 1.01E-186 | 1.00151442 | 0.629 | 0.231 | 3.59E-182 | Mono_UCBMC |
| MAP2K5   | 1.35E-186 | 1.59278123 | 0.345 | 0.08  | 4.78E-182 | Mono_UCBMC |
| TAF2     | 2.99E-186 | 1.82655313 | 0.282 | 0.052 | 1.06E-181 | Mono_UCBMC |
| KLF11    | 3.68E-186 | 1.8119581  | 0.285 | 0.054 | 1.30E-181 | Mono_UCBMC |
| PELI2    | 3.76E-186 | 1.50359625 | 0.32  | 0.068 | 1.33E-181 | Mono_UCBMC |
| ZMYM2    | 4.50E-186 | 1.10990993 | 0.459 | 0.132 | 1.60E-181 | Mono_UCBMC |
| ZNF44    | 7.60E-186 | 1.90448273 | 0.276 | 0.05  | 2.69E-181 | Mono_UCBMC |
| MGAT5    | 9.12E-186 | 1.04016387 | 0.506 | 0.158 | 3.23E-181 | Mono_UCBMC |
| TRIP12   | 1.11E-185 | 1.07818302 | 0.576 | 0.198 | 3.94E-181 | Mono_UCBMC |
| THADA    | 1.18E-185 | 1.2453073  | 0.448 | 0.129 | 4.17E-181 | Mono_UCBMC |
| DUSP10   | 1.25E-185 | 2.12414757 | 0.264 | 0.046 | 4.42E-181 | Mono_UCBMC |
| RPL23    | 1.81E-185 | 0.62313387 | 0.954 | 0.865 | 6.40E-181 | Mono_UCBMC |
| URI1     | 2.33E-185 | 1.87598049 | 0.303 | 0.062 | 8.26E-181 | Mono_UCBMC |
| DHX9     | 2.71E-185 | 1.20471493 | 0.512 | 0.161 | 9.61E-181 | Mono_UCBMC |
| THOC1    | 3.98E-185 | 1.47672858 | 0.332 | 0.073 | 1.41E-180 | Mono_UCBMC |
| AFF1     | 4.91E-185 | 1.32864144 | 0.387 | 0.098 | 1.74E-180 | Mono_UCBMC |
| UBE2Q2   | 8.73E-185 | 1.56888124 | 0.351 | 0.083 | 3.09E-180 | Mono_UCBMC |
| CREB5    | 1.41E-184 | 1.3422516  | 0.454 | 0.136 | 4.99E-180 | Mono_UCBMC |
| RCC1     | 2.26E-184 | 1.72952837 | 0.317 | 0.067 | 8.01E-180 | Mono_UCBMC |
| MIDEAS   | 2.53E-184 | 1.42356958 | 0.429 | 0.121 | 8.97E-180 | Mono_UCBMC |
| DAZAP2   | 2.85E-184 | 0.99049143 | 0.735 | 0.307 | 1.01E-179 | Mono_UCBMC |
| VAV3     | 3.20E-184 | 0.87245995 | 0.676 | 0.261 | 1.13E-179 | Mono_UCBMC |
| CHD6     | 3.55E-184 | 1.35732223 | 0.375 | 0.093 | 1.26E-179 | Mono_UCBMC |
| ADK      | 5.05E-184 | 1.09409617 | 0.631 | 0.24  | 1.79E-179 | Mono_UCBMC |
| CCDC12   | 6.87E-184 | 1.20863765 | 0.454 | 0.13  | 2.44E-179 | Mono_UCBMC |
| LONRF3   | 8.15E-184 | 1.13445072 | 0.525 | 0.173 | 2.89E-179 | Mono_UCBMC |
| FAM168B  | 1.39E-183 | 1.55843246 | 0.326 | 0.071 | 4.93E-179 | Mono_UCBMC |
| TUBB2B   | 1.82E-183 | 1.17994616 | 0.491 | 0.151 | 6.45E-179 | Mono_UCBMC |
| SLC25A26 | 2.18E-183 | 1.55613343 | 0.345 | 0.079 | 7.73E-179 | Mono_UCBMC |
| DUSP18   | 3.78E-183 | 1.28430818 | 0.439 | 0.125 | 1.34E-178 | Mono_UCBMC |
| ARIH2    | 4.38E-183 | 1.23659353 | 0.374 | 0.092 | 1.55E-178 | Mono_UCBMC |
| ERCC6    | 9.69E-183 | 1.40983828 | 0.337 | 0.076 | 3.43E-178 | Mono_UCBMC |
| PPM1H    | 1.25E-182 | 1.51906598 | 0.329 | 0.074 | 4.43E-178 | Mono_UCBMC |

|                   |           |            |       |       |           |            |
|-------------------|-----------|------------|-------|-------|-----------|------------|
| MED27             | 1.37E-182 | 1.33858275 | 0.378 | 0.094 | 4.87E-178 | Mono_UCBMC |
| MTMR6             | 1.92E-182 | 1.55346987 | 0.367 | 0.091 | 6.82E-178 | Mono_UCBMC |
| ASL               | 2.25E-182 | 1.43196352 | 0.359 | 0.086 | 7.98E-178 | Mono_UCBMC |
| CCDC91            | 2.68E-182 | 1.24585061 | 0.456 | 0.135 | 9.51E-178 | Mono_UCBMC |
| PRKCB             | 2.87E-182 | 1.0078704  | 0.578 | 0.201 | 1.02E-177 | Mono_UCBMC |
| ENSMUG00000055687 | 5.40E-182 | 1.4767312  | 0.355 | 0.085 | 1.91E-177 | Mono_UCBMC |
| BBX               | 8.75E-182 | 1.54843943 | 0.371 | 0.094 | 3.10E-177 | Mono_UCBMC |
| FMNL1             | 1.00E-181 | 1.59581077 | 0.274 | 0.05  | 3.55E-177 | Mono_UCBMC |
| C1GALT1           | 1.33E-181 | 1.42113583 | 0.41  | 0.111 | 4.72E-177 | Mono_UCBMC |
| ENSMUG00000001894 | 1.37E-181 | 1.28927954 | 0.398 | 0.104 | 4.85E-177 | Mono_UCBMC |
| PLA2G6            | 3.35E-181 | 1.60710933 | 0.328 | 0.074 | 1.19E-176 | Mono_UCBMC |
| DOCK11            | 4.56E-181 | 1.00582973 | 0.543 | 0.179 | 1.61E-176 | Mono_UCBMC |
| C2CD5             | 4.56E-181 | 1.80893969 | 0.292 | 0.058 | 1.61E-176 | Mono_UCBMC |
| SMG7              | 5.36E-181 | 1.33540966 | 0.401 | 0.107 | 1.90E-176 | Mono_UCBMC |
| TIMM23            | 8.61E-181 | 1.4675953  | 0.366 | 0.091 | 3.05E-176 | Mono_UCBMC |
| RAP1GDS1          | 2.96E-180 | 1.61745753 | 0.351 | 0.085 | 1.05E-175 | Mono_UCBMC |
| RBMS1             | 5.86E-180 | 1.08216786 | 0.556 | 0.189 | 2.08E-175 | Mono_UCBMC |
| TRPC4AP           | 5.88E-180 | 1.31609936 | 0.374 | 0.094 | 2.08E-175 | Mono_UCBMC |
| NIPSNAP2          | 2.28E-179 | 1.59918316 | 0.339 | 0.079 | 8.07E-175 | Mono_UCBMC |
| ATP11A            | 5.13E-179 | 0.98182506 | 0.425 | 0.118 | 1.82E-174 | Mono_UCBMC |
| KIF13B            | 6.45E-179 | 1.06135536 | 0.448 | 0.13  | 2.28E-174 | Mono_UCBMC |
| SPAG9             | 1.09E-178 | 0.81073232 | 0.83  | 0.393 | 3.88E-174 | Mono_UCBMC |
| UBE2E3            | 1.17E-178 | 1.51381396 | 0.369 | 0.094 | 4.16E-174 | Mono_UCBMC |
| SLC49A4           | 2.14E-178 | 1.97915769 | 0.253 | 0.043 | 7.57E-174 | Mono_UCBMC |
| RNF11             | 2.33E-178 | 1.48664048 | 0.371 | 0.094 | 8.25E-174 | Mono_UCBMC |
| ECD               | 4.18E-178 | 1.89317091 | 0.258 | 0.045 | 1.48E-173 | Mono_UCBMC |
| LDLRAD3           | 4.61E-178 | 1.02492378 | 0.573 | 0.199 | 1.63E-173 | Mono_UCBMC |
| KIDINS220         | 6.93E-178 | 1.24205024 | 0.408 | 0.11  | 2.45E-173 | Mono_UCBMC |
| WDR48             | 8.18E-178 | 1.59003455 | 0.29  | 0.058 | 2.90E-173 | Mono_UCBMC |
| SLC22A18          | 1.12E-177 | 1.55725977 | 0.324 | 0.073 | 3.96E-173 | Mono_UCBMC |
| SIN3A             | 1.23E-177 | 1.35610527 | 0.378 | 0.097 | 4.37E-173 | Mono_UCBMC |
| ARL8B             | 1.32E-177 | 0.99051158 | 0.575 | 0.199 | 4.67E-173 | Mono_UCBMC |
| ABCB7             | 2.96E-177 | 1.77384014 | 0.303 | 0.065 | 1.05E-172 | Mono_UCBMC |



|          |           |            |       |       |           |            |
|----------|-----------|------------|-------|-------|-----------|------------|
| USP25    | 3.18E-177 | 1.23821704 | 0.451 | 0.135 | 1.13E-172 | Mono_UCBMC |
| CCPG1    | 6.62E-177 | 1.13651479 | 0.543 | 0.185 | 2.35E-172 | Mono_UCBMC |
| HBEGF    | 7.64E-177 | 1.27414954 | 0.426 | 0.12  | 2.71E-172 | Mono_UCBMC |
| LGMN     | 8.19E-177 | 1.23427019 | 0.592 | 0.224 | 2.90E-172 | Mono_UCBMC |
| PPP2R2A  | 1.34E-176 | 1.14340758 | 0.494 | 0.158 | 4.74E-172 | Mono_UCBMC |
| EWSR1    | 1.48E-176 | 1.02525671 | 0.549 | 0.185 | 5.24E-172 | Mono_UCBMC |
| PPIG     | 1.65E-176 | 1.08691844 | 0.498 | 0.158 | 5.85E-172 | Mono_UCBMC |
| PHTF1    | 3.07E-176 | 1.71500617 | 0.277 | 0.054 | 1.09E-171 | Mono_UCBMC |
| IQGAP2   | 3.07E-176 | 1.24156286 | 0.449 | 0.135 | 1.09E-171 | Mono_UCBMC |
| MAP2K4   | 3.40E-176 | 1.52632294 | 0.322 | 0.073 | 1.20E-171 | Mono_UCBMC |
| PPP2R5E  | 7.37E-176 | 1.55123954 | 0.352 | 0.087 | 2.61E-171 | Mono_UCBMC |
| OGA      | 8.45E-176 | 1.12295496 | 0.47  | 0.142 | 2.99E-171 | Mono_UCBMC |
| CHN2     | 1.03E-175 | 1.4773132  | 0.387 | 0.107 | 3.64E-171 | Mono_UCBMC |
| DCAF1    | 1.19E-175 | 1.49521367 | 0.322 | 0.073 | 4.21E-171 | Mono_UCBMC |
| ARID1A   | 1.31E-175 | 1.22690444 | 0.387 | 0.102 | 4.65E-171 | Mono_UCBMC |
| CSDE1    | 2.29E-175 | 0.98435825 | 0.722 | 0.3   | 8.12E-171 | Mono_UCBMC |
| DNAJB6   | 2.75E-175 | 0.99023265 | 0.746 | 0.331 | 9.73E-171 | Mono_UCBMC |
| LRRC8D   | 4.30E-175 | 1.75362557 | 0.302 | 0.065 | 1.52E-170 | Mono_UCBMC |
| SIAH1    | 4.34E-175 | 1.98773711 | 0.255 | 0.046 | 1.54E-170 | Mono_UCBMC |
| TMX4     | 7.39E-175 | 1.44680674 | 0.358 | 0.089 | 2.62E-170 | Mono_UCBMC |
| CIR1     | 1.20E-174 | 1.30542105 | 0.437 | 0.128 | 4.25E-170 | Mono_UCBMC |
| WDR43    | 1.26E-174 | 1.46784967 | 0.348 | 0.084 | 4.45E-170 | Mono_UCBMC |
| ENTPD4   | 6.61E-174 | 1.27656512 | 0.366 | 0.093 | 2.34E-169 | Mono_UCBMC |
| UHMK1    | 9.67E-174 | 1.18585272 | 0.436 | 0.127 | 3.43E-169 | Mono_UCBMC |
| ATP6V0A1 | 9.77E-174 | 0.86262043 | 0.645 | 0.246 | 3.46E-169 | Mono_UCBMC |
| RAP1GAP2 | 1.83E-173 | 0.84991537 | 0.505 | 0.161 | 6.48E-169 | Mono_UCBMC |
| SCARB2   | 5.67E-173 | 1.4739281  | 0.359 | 0.091 | 2.01E-168 | Mono_UCBMC |
| RALGPS2  | 1.16E-172 | 1.72212639 | 0.286 | 0.059 | 4.11E-168 | Mono_UCBMC |
| FOSB     | 4.04E-172 | 0.85091745 | 0.856 | 0.447 | 1.43E-167 | Mono_UCBMC |
| WAC      | 5.73E-172 | 0.9062703  | 0.642 | 0.247 | 2.03E-167 | Mono_UCBMC |
| ASPH     | 1.32E-171 | 1.44423134 | 0.344 | 0.084 | 4.68E-167 | Mono_UCBMC |
| RFC1     | 1.45E-171 | 1.61075255 | 0.305 | 0.067 | 5.13E-167 | Mono_UCBMC |
| FAM107B  | 1.55E-171 | 0.95334482 | 0.765 | 0.358 | 5.49E-167 | Mono_UCBMC |

|         |           |            |       |       |           |            |
|---------|-----------|------------|-------|-------|-----------|------------|
| MALT1   | 1.58E-171 | 1.01606055 | 0.528 | 0.179 | 5.61E-167 | Mono_UCBMC |
| KLF12   | 2.26E-171 | 0.94238007 | 0.674 | 0.285 | 8.01E-167 | Mono_UCBMC |
| SLC66A2 | 2.35E-171 | 1.27090898 | 0.354 | 0.088 | 8.33E-167 | Mono_UCBMC |
| AUH     | 3.03E-171 | 1.51238137 | 0.327 | 0.076 | 1.07E-166 | Mono_UCBMC |
| SPEN    | 5.69E-171 | 0.997763   | 0.514 | 0.169 | 2.02E-166 | Mono_UCBMC |
| STK17A  | 6.81E-171 | 1.31856924 | 0.437 | 0.132 | 2.41E-166 | Mono_UCBMC |
| RPL7    | 1.93E-170 | 0.69820378 | 0.942 | 0.784 | 6.85E-166 | Mono_UCBMC |
| ADGRE5  | 2.08E-170 | 0.8458965  | 0.785 | 0.367 | 7.37E-166 | Mono_UCBMC |
| PRSS55  | 2.16E-170 | 1.24690615 | 0.404 | 0.114 | 7.65E-166 | Mono_UCBMC |
| INPP5A  | 4.92E-170 | 1.1849621  | 0.348 | 0.085 | 1.74E-165 | Mono_UCBMC |
| WDR33   | 9.82E-170 | 1.11324878 | 0.448 | 0.134 | 3.48E-165 | Mono_UCBMC |
| XYLT1   | 9.99E-170 | 0.56609398 | 0.622 | 0.23  | 3.54E-165 | Mono_UCBMC |
| TPK1    | 1.21E-169 | 1.35681035 | 0.433 | 0.132 | 4.29E-165 | Mono_UCBMC |
| KLF3    | 1.98E-169 | 1.06973146 | 0.455 | 0.138 | 7.03E-165 | Mono_UCBMC |
| VPS36   | 3.64E-169 | 1.20122989 | 0.457 | 0.141 | 1.29E-164 | Mono_UCBMC |
| UBE2R2  | 6.31E-169 | 1.02734173 | 0.573 | 0.207 | 2.24E-164 | Mono_UCBMC |
| E2F3    | 7.64E-169 | 1.26136948 | 0.379 | 0.101 | 2.71E-164 | Mono_UCBMC |
| MAP3K7  | 1.03E-168 | 1.49193309 | 0.291 | 0.061 | 3.64E-164 | Mono_UCBMC |
| MBNL2   | 1.12E-168 | 1.40742915 | 0.331 | 0.079 | 3.95E-164 | Mono_UCBMC |
| EZR     | 1.29E-168 | 0.98301399 | 0.789 | 0.379 | 4.58E-164 | Mono_UCBMC |
| MAP3K3  | 1.63E-168 | 1.08280509 | 0.424 | 0.122 | 5.77E-164 | Mono_UCBMC |
| SRSF11  | 1.66E-168 | 0.89138026 | 0.732 | 0.307 | 5.88E-164 | Mono_UCBMC |
| WRN     | 2.02E-168 | 1.93553087 | 0.256 | 0.048 | 7.14E-164 | Mono_UCBMC |
| DYM     | 8.19E-168 | 0.99406748 | 0.498 | 0.163 | 2.90E-163 | Mono_UCBMC |
| LARP4   | 1.07E-167 | 1.58187775 | 0.284 | 0.059 | 3.78E-163 | Mono_UCBMC |
| CAND1   | 2.35E-167 | 1.37258785 | 0.327 | 0.078 | 8.31E-163 | Mono_UCBMC |
| WDFY1   | 2.56E-167 | 1.68948635 | 0.253 | 0.046 | 9.08E-163 | Mono_UCBMC |
| NUP153  | 2.68E-167 | 1.1520177  | 0.411 | 0.117 | 9.49E-163 | Mono_UCBMC |
| AFTPH   | 4.70E-167 | 0.89234373 | 0.637 | 0.249 | 1.67E-162 | Mono_UCBMC |
| MYH9    | 6.89E-167 | 1.04771242 | 0.651 | 0.266 | 2.44E-162 | Mono_UCBMC |
| ARHGAP6 | 2.79E-166 | 1.3093875  | 0.352 | 0.09  | 9.89E-162 | Mono_UCBMC |
| SNX4    | 3.12E-166 | 1.27613388 | 0.402 | 0.115 | 1.10E-161 | Mono_UCBMC |
| SERTAD2 | 6.00E-166 | 1.29624205 | 0.368 | 0.098 | 2.13E-161 | Mono_UCBMC |

|          |           |            |       |       |           |            |
|----------|-----------|------------|-------|-------|-----------|------------|
| TP53BP1  | 6.91E-166 | 2.01974695 | 0.255 | 0.049 | 2.45E-161 | Mono_UCBMC |
| RHEB     | 7.03E-166 | 1.04533468 | 0.706 | 0.316 | 2.49E-161 | Mono_UCBMC |
| VPS39    | 1.67E-165 | 1.46764309 | 0.307 | 0.069 | 5.91E-161 | Mono_UCBMC |
| ARFGEF2  | 2.33E-165 | 1.61716847 | 0.275 | 0.056 | 8.27E-161 | Mono_UCBMC |
| TMEM201  | 2.47E-165 | 1.76045619 | 0.265 | 0.053 | 8.76E-161 | Mono_UCBMC |
| MAML2    | 4.74E-165 | 0.969303   | 0.632 | 0.252 | 1.68E-160 | Mono_UCBMC |
| RBM23    | 1.06E-164 | 1.3460605  | 0.338 | 0.083 | 3.77E-160 | Mono_UCBMC |
| WDR26    | 1.07E-164 | 0.99660972 | 0.485 | 0.156 | 3.78E-160 | Mono_UCBMC |
| DUSP6    | 1.97E-164 | 0.7940952  | 0.801 | 0.37  | 6.99E-160 | Mono_UCBMC |
| IRAG2    | 2.04E-164 | 1.88408391 | 0.251 | 0.047 | 7.24E-160 | Mono_UCBMC |
| TGFBR1   | 2.33E-164 | 1.34211177 | 0.366 | 0.099 | 8.24E-160 | Mono_UCBMC |
| CLK1     | 2.80E-164 | 0.98150748 | 0.522 | 0.176 | 9.92E-160 | Mono_UCBMC |
| KDM4C    | 6.72E-164 | 1.03309109 | 0.515 | 0.175 | 2.38E-159 | Mono_UCBMC |
| PSEN1    | 8.74E-164 | 0.86535111 | 0.688 | 0.29  | 3.10E-159 | Mono_UCBMC |
| RBM14    | 1.43E-163 | 1.08472671 | 0.503 | 0.167 | 5.06E-159 | Mono_UCBMC |
| CRYBG1   | 1.95E-163 | 1.38531251 | 0.344 | 0.088 | 6.91E-159 | Mono_UCBMC |
| SEPTIN7  | 3.99E-163 | 0.92602376 | 0.775 | 0.365 | 1.41E-158 | Mono_UCBMC |
| MLLT10   | 5.40E-163 | 1.18157419 | 0.385 | 0.106 | 1.91E-158 | Mono_UCBMC |
| USP16    | 5.61E-163 | 1.06385318 | 0.433 | 0.129 | 1.99E-158 | Mono_UCBMC |
| SATB1    | 6.94E-163 | 1.22237357 | 0.479 | 0.161 | 2.46E-158 | Mono_UCBMC |
| ITM2B    | 8.05E-163 | 0.8023289  | 0.878 | 0.467 | 2.85E-158 | Mono_UCBMC |
| IFT57    | 1.03E-162 | 1.09813893 | 0.534 | 0.188 | 3.65E-158 | Mono_UCBMC |
| MED15    | 1.46E-162 | 1.18689441 | 0.374 | 0.101 | 5.17E-158 | Mono_UCBMC |
| MDM4     | 1.60E-162 | 1.20365608 | 0.358 | 0.093 | 5.66E-158 | Mono_UCBMC |
| SLC17A5  | 1.64E-162 | 1.62976727 | 0.276 | 0.058 | 5.80E-158 | Mono_UCBMC |
| PAFAH1B1 | 1.68E-162 | 0.90907422 | 0.669 | 0.279 | 5.97E-158 | Mono_UCBMC |
| EEPD1    | 2.10E-162 | 1.36125048 | 0.326 | 0.08  | 7.44E-158 | Mono_UCBMC |
| RPTOR    | 2.52E-162 | 1.41566028 | 0.3   | 0.068 | 8.93E-158 | Mono_UCBMC |
| DCAF10   | 3.14E-162 | 1.6209905  | 0.268 | 0.054 | 1.11E-157 | Mono_UCBMC |
| THUMPD1  | 4.40E-162 | 1.75508457 | 0.27  | 0.056 | 1.56E-157 | Mono_UCBMC |
| RNF115   | 7.34E-162 | 1.64923857 | 0.296 | 0.067 | 2.60E-157 | Mono_UCBMC |
| PPM1L    | 7.58E-162 | 0.84201723 | 0.509 | 0.174 | 2.69E-157 | Mono_UCBMC |
| SLC39A11 | 8.38E-162 | 1.2455706  | 0.366 | 0.098 | 2.97E-157 | Mono_UCBMC |

|                     |           |            |       |       |           |            |
|---------------------|-----------|------------|-------|-------|-----------|------------|
| TAF3                | 1.29E-161 | 1.49085879 | 0.349 | 0.093 | 4.56E-157 | Mono_UCBMC |
| PAM                 | 1.48E-161 | 1.38799479 | 0.378 | 0.107 | 5.24E-157 | Mono_UCBMC |
| MKRN1               | 3.36E-161 | 1.33209129 | 0.317 | 0.075 | 1.19E-156 | Mono_UCBMC |
| PIP4K2A             | 4.59E-161 | 0.87836306 | 0.635 | 0.248 | 1.63E-156 | Mono_UCBMC |
| TBK1                | 5.99E-161 | 1.2401775  | 0.348 | 0.089 | 2.12E-156 | Mono_UCBMC |
| NSF                 | 6.49E-161 | 1.50195062 | 0.33  | 0.083 | 2.30E-156 | Mono_UCBMC |
| NCOR2               | 1.02E-160 | 1.21863145 | 0.297 | 0.066 | 3.63E-156 | Mono_UCBMC |
| CLASP1              | 1.29E-160 | 1.35610713 | 0.311 | 0.073 | 4.59E-156 | Mono_UCBMC |
| SLC25A13            | 2.01E-160 | 1.55481847 | 0.289 | 0.064 | 7.12E-156 | Mono_UCBMC |
| KDM5A               | 4.70E-160 | 1.30969861 | 0.354 | 0.094 | 1.67E-155 | Mono_UCBMC |
| ENSMMUG00000011580  | 5.82E-160 | 1.21224148 | 0.426 | 0.129 | 2.06E-155 | Mono_UCBMC |
| USP4                | 1.57E-159 | 1.23248484 | 0.4   | 0.116 | 5.56E-155 | Mono_UCBMC |
| TENT2               | 1.63E-159 | 1.20869371 | 0.396 | 0.115 | 5.78E-155 | Mono_UCBMC |
| PPP2R5A             | 3.58E-159 | 1.40100132 | 0.346 | 0.09  | 1.27E-154 | Mono_UCBMC |
| EXOC4               | 5.38E-159 | 0.92092622 | 0.579 | 0.218 | 1.91E-154 | Mono_UCBMC |
| ZNF148              | 7.14E-159 | 1.17262403 | 0.394 | 0.113 | 2.53E-154 | Mono_UCBMC |
| PAG1                | 2.20E-158 | 1.2504098  | 0.33  | 0.083 | 7.80E-154 | Mono_UCBMC |
| ANKRD12             | 2.26E-158 | 0.94156414 | 0.68  | 0.298 | 8.00E-154 | Mono_UCBMC |
| ENSMMUG000000051870 | 2.84E-158 | 1.92657484 | 0.254 | 0.051 | 1.01E-153 | Mono_UCBMC |
| PPP6R3              | 3.28E-158 | 0.97253923 | 0.52  | 0.181 | 1.16E-153 | Mono_UCBMC |
| ENSMMUG000000052127 | 6.03E-158 | 0.76082566 | 0.988 | 0.808 | 2.14E-153 | Mono_UCBMC |
| OGT                 | 6.62E-158 | 0.86408228 | 0.476 | 0.154 | 2.34E-153 | Mono_UCBMC |
| ZNF506              | 3.68E-157 | 1.1170372  | 0.381 | 0.106 | 1.30E-152 | Mono_UCBMC |
| EIF3A               | 4.23E-157 | 0.9246811  | 0.566 | 0.209 | 1.50E-152 | Mono_UCBMC |
| CLIP1               | 4.77E-157 | 0.89234159 | 0.497 | 0.167 | 1.69E-152 | Mono_UCBMC |
| LPIN2               | 4.95E-157 | 1.29590608 | 0.341 | 0.089 | 1.75E-152 | Mono_UCBMC |
| DNAJC7              | 1.47E-156 | 1.14624738 | 0.392 | 0.112 | 5.20E-152 | Mono_UCBMC |
| UBR4                | 2.39E-156 | 0.93353114 | 0.431 | 0.132 | 8.46E-152 | Mono_UCBMC |
| NUMA1               | 3.07E-156 | 1.23533231 | 0.368 | 0.102 | 1.09E-151 | Mono_UCBMC |
| DUSP1               | 4.82E-156 | 0.86785809 | 0.899 | 0.565 | 1.71E-151 | Mono_UCBMC |
| LRPPRC              | 1.18E-155 | 1.17255884 | 0.393 | 0.115 | 4.19E-151 | Mono_UCBMC |
| MCUB                | 1.27E-155 | 1.18856948 | 0.435 | 0.136 | 4.49E-151 | Mono_UCBMC |
| ATP5PB              | 1.42E-155 | 0.96242431 | 0.54  | 0.191 | 5.02E-151 | Mono_UCBMC |

|                   |           |            |       |       |           |            |
|-------------------|-----------|------------|-------|-------|-----------|------------|
| ENSMUG00000021153 | 1.90E-155 | 1.28340307 | 0.381 | 0.11  | 6.74E-151 | Mono_UCBMC |
| ENSMUG00000006803 | 2.41E-155 | 1.00303853 | 0.497 | 0.168 | 8.56E-151 | Mono_UCBMC |
| CCDC6             | 2.69E-155 | 1.68075651 | 0.289 | 0.066 | 9.52E-151 | Mono_UCBMC |
| VPS13D            | 3.99E-155 | 0.79105026 | 0.497 | 0.167 | 1.41E-150 | Mono_UCBMC |
| TLK2              | 5.09E-155 | 1.20987549 | 0.346 | 0.091 | 1.80E-150 | Mono_UCBMC |
| ARHGAP21          | 5.96E-155 | 1.55547788 | 0.27  | 0.057 | 2.11E-150 | Mono_UCBMC |
| ENSMUG00000051505 | 1.17E-154 | 1.44691431 | 0.284 | 0.064 | 4.14E-150 | Mono_UCBMC |
| BDP1              | 1.18E-154 | 1.00195889 | 0.377 | 0.106 | 4.17E-150 | Mono_UCBMC |
| PPP2R5C           | 1.62E-154 | 0.89066062 | 0.552 | 0.201 | 5.73E-150 | Mono_UCBMC |
| CMTM6             | 2.28E-154 | 0.92895215 | 0.673 | 0.283 | 8.08E-150 | Mono_UCBMC |
| ZMYM4             | 2.44E-154 | 1.22613847 | 0.39  | 0.115 | 8.65E-150 | Mono_UCBMC |
| KDM1A             | 3.06E-154 | 1.39611623 | 0.308 | 0.075 | 1.09E-149 | Mono_UCBMC |
| MACF1             | 3.30E-154 | 0.98460772 | 0.459 | 0.151 | 1.17E-149 | Mono_UCBMC |
| FAF1              | 5.92E-154 | 1.21301817 | 0.356 | 0.097 | 2.10E-149 | Mono_UCBMC |
| ARMC8             | 1.22E-153 | 1.76351239 | 0.272 | 0.059 | 4.32E-149 | Mono_UCBMC |
| TRPM7             | 3.32E-153 | 0.83976805 | 0.609 | 0.238 | 1.18E-148 | Mono_UCBMC |
| FAM13B            | 3.58E-153 | 1.37974724 | 0.336 | 0.089 | 1.27E-148 | Mono_UCBMC |
| KPNA4             | 4.29E-153 | 1.02118622 | 0.421 | 0.13  | 1.52E-148 | Mono_UCBMC |
| VPS8              | 4.50E-153 | 1.30836569 | 0.329 | 0.085 | 1.59E-148 | Mono_UCBMC |
| NECAP1            | 5.64E-153 | 1.0217099  | 0.426 | 0.131 | 2.00E-148 | Mono_UCBMC |
| UBXN7             | 6.03E-153 | 1.09986584 | 0.427 | 0.133 | 2.13E-148 | Mono_UCBMC |
| ANP32B            | 7.41E-153 | 1.07141913 | 0.49  | 0.167 | 2.63E-148 | Mono_UCBMC |
| ATG5              | 1.07E-152 | 1.1056043  | 0.463 | 0.154 | 3.80E-148 | Mono_UCBMC |
| TMEM127           | 1.40E-152 | 1.06531373 | 0.437 | 0.138 | 4.95E-148 | Mono_UCBMC |
| DGCR2             | 2.37E-152 | 1.22852308 | 0.389 | 0.114 | 8.39E-148 | Mono_UCBMC |
| STXBP5            | 3.61E-152 | 1.45378252 | 0.297 | 0.07  | 1.28E-147 | Mono_UCBMC |
| STK4              | 4.53E-152 | 0.90721602 | 0.637 | 0.254 | 1.60E-147 | Mono_UCBMC |
| EMP3              | 1.18E-151 | 0.91472324 | 0.719 | 0.323 | 4.20E-147 | Mono_UCBMC |
| PKN2              | 1.84E-151 | 1.0438696  | 0.421 | 0.13  | 6.52E-147 | Mono_UCBMC |
| RAD21             | 1.92E-151 | 0.9949869  | 0.469 | 0.155 | 6.79E-147 | Mono_UCBMC |
| ANO6              | 2.27E-151 | 1.12101094 | 0.454 | 0.149 | 8.04E-147 | Mono_UCBMC |
| ERBIN             | 3.94E-151 | 0.77978865 | 0.726 | 0.323 | 1.40E-146 | Mono_UCBMC |
| DAAM1             | 5.45E-151 | 1.67483329 | 0.263 | 0.056 | 1.93E-146 | Mono_UCBMC |

|         |           |            |       |       |           |            |
|---------|-----------|------------|-------|-------|-----------|------------|
| BNIP3L  | 5.91E-151 | 0.90835372 | 0.645 | 0.263 | 2.10E-146 | Mono_UCBMC |
| MAGI3   | 2.04E-150 | 1.41500419 | 0.343 | 0.095 | 7.22E-146 | Mono_UCBMC |
| COX3    | 2.16E-150 | 0.5741598  | 0.971 | 0.929 | 7.66E-146 | Mono_UCBMC |
| NIN     | 2.47E-150 | 1.08142594 | 0.406 | 0.124 | 8.75E-146 | Mono_UCBMC |
| KBTBD2  | 2.56E-150 | 1.1433938  | 0.353 | 0.096 | 9.09E-146 | Mono_UCBMC |
| MLXIP   | 2.87E-150 | 1.46603131 | 0.251 | 0.051 | 1.02E-145 | Mono_UCBMC |
| APPBP2  | 3.25E-150 | 1.26654914 | 0.328 | 0.085 | 1.15E-145 | Mono_UCBMC |
| FRS2    | 5.01E-150 | 1.64154537 | 0.263 | 0.057 | 1.77E-145 | Mono_UCBMC |
| YWHAZ   | 6.65E-150 | 0.75935387 | 0.937 | 0.665 | 2.36E-145 | Mono_UCBMC |
| CDC14A  | 6.99E-150 | 1.43523917 | 0.303 | 0.074 | 2.48E-145 | Mono_UCBMC |
| AHCTF1  | 8.80E-150 | 1.33228496 | 0.3   | 0.073 | 3.12E-145 | Mono_UCBMC |
| ILF3    | 8.86E-150 | 0.94993598 | 0.425 | 0.132 | 3.14E-145 | Mono_UCBMC |
| SETD5   | 1.39E-149 | 0.91192545 | 0.489 | 0.169 | 4.91E-145 | Mono_UCBMC |
| MSN     | 1.55E-149 | 0.7872687  | 0.869 | 0.492 | 5.48E-145 | Mono_UCBMC |
| STK40   | 1.99E-149 | 0.89566544 | 0.471 | 0.157 | 7.04E-145 | Mono_UCBMC |
| NAIP    | 3.21E-149 | 0.93071926 | 0.505 | 0.18  | 1.14E-144 | Mono_UCBMC |
| WDFY3   | 3.83E-149 | 0.83728829 | 0.519 | 0.186 | 1.36E-144 | Mono_UCBMC |
| AMFR    | 5.45E-149 | 1.49950521 | 0.273 | 0.06  | 1.93E-144 | Mono_UCBMC |
| TMED10  | 1.20E-148 | 1.08530093 | 0.481 | 0.165 | 4.26E-144 | Mono_UCBMC |
| MIDN    | 2.34E-148 | 0.78682051 | 0.614 | 0.242 | 8.30E-144 | Mono_UCBMC |
| AGPS    | 3.63E-148 | 1.33842334 | 0.347 | 0.097 | 1.29E-143 | Mono_UCBMC |
| DIDO1   | 4.07E-148 | 1.60351511 | 0.254 | 0.053 | 1.44E-143 | Mono_UCBMC |
| UBQLN1  | 4.21E-148 | 1.40909956 | 0.297 | 0.072 | 1.49E-143 | Mono_UCBMC |
| USP6NL  | 9.69E-148 | 1.52837574 | 0.268 | 0.06  | 3.43E-143 | Mono_UCBMC |
| CUL4A   | 1.60E-147 | 1.35122347 | 0.302 | 0.074 | 5.66E-143 | Mono_UCBMC |
| HERC2   | 1.69E-147 | 1.04931244 | 0.347 | 0.095 | 5.99E-143 | Mono_UCBMC |
| JUN     | 1.76E-147 | 0.90587921 | 0.575 | 0.229 | 6.22E-143 | Mono_UCBMC |
| POGZ    | 1.80E-147 | 1.13327957 | 0.362 | 0.103 | 6.36E-143 | Mono_UCBMC |
| AP3S1   | 2.91E-147 | 1.01098571 | 0.506 | 0.181 | 1.03E-142 | Mono_UCBMC |
| KCNQ1   | 4.77E-147 | 0.84515508 | 0.574 | 0.219 | 1.69E-142 | Mono_UCBMC |
| FAM91A1 | 7.11E-147 | 1.38711681 | 0.298 | 0.072 | 2.52E-142 | Mono_UCBMC |
| IKZF1   | 1.02E-146 | 0.89640638 | 0.477 | 0.162 | 3.60E-142 | Mono_UCBMC |
| CAMK1D  | 1.18E-146 | 0.79028257 | 0.524 | 0.193 | 4.19E-142 | Mono_UCBMC |

|                   |           |            |       |       |           |            |
|-------------------|-----------|------------|-------|-------|-----------|------------|
| LYN               | 1.25E-146 | 0.56307395 | 0.954 | 0.674 | 4.42E-142 | Mono_UCBMC |
| ENSMUG00000011588 | 1.28E-146 | 1.45002215 | 0.262 | 0.057 | 4.55E-142 | Mono_UCBMC |
| NOL10             | 2.23E-146 | 1.39925031 | 0.281 | 0.065 | 7.89E-142 | Mono_UCBMC |
| RSRC2             | 2.86E-146 | 0.98339013 | 0.525 | 0.193 | 1.01E-141 | Mono_UCBMC |
| CHST15            | 4.15E-146 | 1.29221882 | 0.284 | 0.067 | 1.47E-141 | Mono_UCBMC |
| AKIRIN2           | 4.43E-146 | 0.97259364 | 0.541 | 0.203 | 1.57E-141 | Mono_UCBMC |
| AP2B1             | 6.07E-146 | 0.93903197 | 0.44  | 0.142 | 2.15E-141 | Mono_UCBMC |
| CLTC              | 6.22E-146 | 0.86838083 | 0.548 | 0.204 | 2.20E-141 | Mono_UCBMC |
| NKTR              | 1.09E-145 | 1.29175169 | 0.3   | 0.075 | 3.85E-141 | Mono_UCBMC |
| INPP5K            | 1.62E-145 | 1.51256962 | 0.257 | 0.055 | 5.73E-141 | Mono_UCBMC |
| SMC4              | 1.69E-145 | 1.44657773 | 0.289 | 0.07  | 5.98E-141 | Mono_UCBMC |
| ILRUN             | 2.28E-145 | 1.2231606  | 0.302 | 0.075 | 8.09E-141 | Mono_UCBMC |
| GPBP1L1           | 2.89E-145 | 1.12350462 | 0.4   | 0.123 | 1.03E-140 | Mono_UCBMC |
| PRKD3             | 3.36E-145 | 1.36234503 | 0.312 | 0.08  | 1.19E-140 | Mono_UCBMC |
| SESTD1            | 3.65E-145 | 1.15071589 | 0.371 | 0.109 | 1.29E-140 | Mono_UCBMC |
| TBC1D15           | 4.56E-145 | 1.20909022 | 0.336 | 0.091 | 1.61E-140 | Mono_UCBMC |
| STAU2             | 4.71E-145 | 1.28502169 | 0.348 | 0.098 | 1.67E-140 | Mono_UCBMC |
| MTPN              | 5.69E-145 | 0.90900494 | 0.621 | 0.252 | 2.02E-140 | Mono_UCBMC |
| EXOC6             | 6.48E-145 | 1.66865379 | 0.27  | 0.062 | 2.30E-140 | Mono_UCBMC |
| KDM3B             | 6.50E-145 | 1.2481481  | 0.343 | 0.096 | 2.30E-140 | Mono_UCBMC |
| SLAIN2            | 7.35E-145 | 1.46009845 | 0.278 | 0.065 | 2.60E-140 | Mono_UCBMC |
| ADAP1             | 1.58E-144 | 1.066082   | 0.38  | 0.113 | 5.59E-140 | Mono_UCBMC |
| NUFIP2            | 2.52E-144 | 0.93429224 | 0.511 | 0.184 | 8.93E-140 | Mono_UCBMC |
| ENSMUG00000052424 | 4.50E-144 | 0.72187924 | 0.878 | 0.485 | 1.60E-139 | Mono_UCBMC |
| FXR1              | 4.86E-144 | 0.97834487 | 0.523 | 0.192 | 1.72E-139 | Mono_UCBMC |
| CYLD              | 6.32E-144 | 0.82358868 | 0.615 | 0.248 | 2.24E-139 | Mono_UCBMC |
| XRN1              | 1.74E-143 | 0.98144837 | 0.423 | 0.136 | 6.16E-139 | Mono_UCBMC |
| RERE              | 3.23E-143 | 0.92145811 | 0.479 | 0.169 | 1.14E-138 | Mono_UCBMC |
| LDLR              | 7.17E-143 | 1.08346895 | 0.332 | 0.09  | 2.54E-138 | Mono_UCBMC |
| ANKIB1            | 8.24E-143 | 1.66691124 | 0.271 | 0.063 | 2.92E-138 | Mono_UCBMC |
| PER1              | 8.84E-143 | 0.90632067 | 0.451 | 0.149 | 3.13E-138 | Mono_UCBMC |
| GAB1              | 1.59E-142 | 1.62538537 | 0.26  | 0.058 | 5.62E-138 | Mono_UCBMC |
| ERC1              | 1.94E-142 | 0.86778266 | 0.49  | 0.174 | 6.87E-138 | Mono_UCBMC |

|            |           |            |       |       |           |            |
|------------|-----------|------------|-------|-------|-----------|------------|
| ATXN1      | 2.22E-142 | 0.97754011 | 0.472 | 0.167 | 7.87E-138 | Mono_UCBMC |
| OLA1       | 2.80E-142 | 0.94856399 | 0.587 | 0.235 | 9.92E-138 | Mono_UCBMC |
| SF3B2      | 3.20E-142 | 1.11096624 | 0.386 | 0.117 | 1.13E-137 | Mono_UCBMC |
| RNF149     | 8.67E-142 | 0.75362646 | 0.791 | 0.39  | 3.07E-137 | Mono_UCBMC |
| ZNF609     | 1.21E-141 | 1.04739645 | 0.421 | 0.138 | 4.28E-137 | Mono_UCBMC |
| ATP10A     | 1.23E-141 | 1.30692217 | 0.289 | 0.071 | 4.36E-137 | Mono_UCBMC |
| IQSEC1     | 1.42E-141 | 0.61309019 | 0.573 | 0.219 | 5.04E-137 | Mono_UCBMC |
| BTBD7      | 1.81E-141 | 1.41375586 | 0.274 | 0.064 | 6.40E-137 | Mono_UCBMC |
| LRRC8B     | 3.38E-141 | 1.16614586 | 0.321 | 0.086 | 1.20E-136 | Mono_UCBMC |
| ATP2B1     | 3.66E-141 | 0.70672268 | 0.751 | 0.351 | 1.30E-136 | Mono_UCBMC |
| SBF2       | 4.12E-141 | 0.76549078 | 0.545 | 0.206 | 1.46E-136 | Mono_UCBMC |
| SMG1       | 5.25E-141 | 0.85794064 | 0.434 | 0.143 | 1.86E-136 | Mono_UCBMC |
| PARP8      | 8.62E-141 | 0.99638306 | 0.423 | 0.138 | 3.05E-136 | Mono_UCBMC |
| RUBCN      | 1.04E-140 | 1.18196288 | 0.308 | 0.08  | 3.67E-136 | Mono_UCBMC |
| SPTLC2     | 2.78E-140 | 1.54353303 | 0.288 | 0.072 | 9.84E-136 | Mono_UCBMC |
| ZNF207     | 3.99E-140 | 0.9311142  | 0.521 | 0.19  | 1.41E-135 | Mono_UCBMC |
| UHRF2      | 8.14E-140 | 1.23274238 | 0.294 | 0.074 | 2.88E-135 | Mono_UCBMC |
| CENPC      | 8.59E-140 | 1.19566522 | 0.308 | 0.08  | 3.04E-135 | Mono_UCBMC |
| ZBTB20     | 1.11E-139 | 1.01861017 | 0.428 | 0.143 | 3.94E-135 | Mono_UCBMC |
| IDS        | 1.13E-139 | 1.0064462  | 0.421 | 0.136 | 4.00E-135 | Mono_UCBMC |
| PPP4R3A    | 1.33E-139 | 1.19174144 | 0.313 | 0.083 | 4.70E-135 | Mono_UCBMC |
| VPS37B     | 1.37E-139 | 0.76895629 | 0.424 | 0.135 | 4.86E-135 | Mono_UCBMC |
| MAP4K3     | 1.46E-139 | 1.4280173  | 0.271 | 0.064 | 5.16E-135 | Mono_UCBMC |
| AGO2       | 1.48E-139 | 0.59889812 | 0.632 | 0.26  | 5.24E-135 | Mono_UCBMC |
| DDHD2      | 2.55E-139 | 1.22103895 | 0.278 | 0.067 | 9.04E-135 | Mono_UCBMC |
| ATXN10     | 2.85E-139 | 1.2307885  | 0.378 | 0.116 | 1.01E-134 | Mono_UCBMC |
| DPYD       | 4.47E-139 | 0.88245946 | 0.762 | 0.402 | 1.58E-134 | Mono_UCBMC |
| HIPK1      | 6.40E-139 | 1.32549907 | 0.304 | 0.079 | 2.27E-134 | Mono_UCBMC |
| MINDY3     | 8.48E-139 | 1.27137882 | 0.289 | 0.072 | 3.00E-134 | Mono_UCBMC |
| C7H15orf39 | 9.71E-139 | 0.85991394 | 0.432 | 0.139 | 3.44E-134 | Mono_UCBMC |
| RTF2       | 9.99E-139 | 1.02504048 | 0.423 | 0.139 | 3.54E-134 | Mono_UCBMC |
| MIEF1      | 1.94E-138 | 1.36999231 | 0.263 | 0.06  | 6.89E-134 | Mono_UCBMC |
| TMEM123    | 3.10E-138 | 1.11401314 | 0.447 | 0.155 | 1.10E-133 | Mono_UCBMC |



|                   |           |            |       |       |           |            |
|-------------------|-----------|------------|-------|-------|-----------|------------|
| ENSMUG00000060229 | 3.19E-138 | 1.22563159 | 0.303 | 0.078 | 1.13E-133 | Mono_UCBMC |
| UBA6              | 5.41E-138 | 1.31506328 | 0.277 | 0.067 | 1.92E-133 | Mono_UCBMC |
| PHF6              | 6.33E-138 | 1.47180784 | 0.265 | 0.062 | 2.24E-133 | Mono_UCBMC |
| TOP2B             | 9.61E-138 | 0.95529414 | 0.415 | 0.134 | 3.41E-133 | Mono_UCBMC |
| LRCH1             | 1.86E-137 | 1.15008396 | 0.378 | 0.118 | 6.57E-133 | Mono_UCBMC |
| CTBP2             | 1.92E-137 | 0.89989196 | 0.373 | 0.113 | 6.79E-133 | Mono_UCBMC |
| THOC2             | 1.93E-137 | 1.02297495 | 0.352 | 0.103 | 6.84E-133 | Mono_UCBMC |
| NSD1              | 2.88E-137 | 1.02216141 | 0.392 | 0.123 | 1.02E-132 | Mono_UCBMC |
| ENSMUG00000020721 | 2.98E-137 | 0.97180536 | 0.479 | 0.171 | 1.06E-132 | Mono_UCBMC |
| NUS1              | 3.50E-137 | 1.20817119 | 0.396 | 0.128 | 1.24E-132 | Mono_UCBMC |
| MAN2A1            | 1.64E-136 | 0.96457147 | 0.398 | 0.127 | 5.80E-132 | Mono_UCBMC |
| TM9SF2            | 1.67E-136 | 1.24661252 | 0.319 | 0.087 | 5.93E-132 | Mono_UCBMC |
| ENSMUG00000031367 | 1.77E-136 | 1.13198728 | 0.33  | 0.09  | 6.26E-132 | Mono_UCBMC |
| EHD4              | 1.97E-136 | 1.16989506 | 0.359 | 0.108 | 6.98E-132 | Mono_UCBMC |
| UBAP1             | 3.99E-136 | 0.78554492 | 0.547 | 0.21  | 1.42E-131 | Mono_UCBMC |
| MATR3             | 4.34E-136 | 0.8168821  | 0.687 | 0.302 | 1.54E-131 | Mono_UCBMC |
| EIF4E             | 4.61E-136 | 1.07882744 | 0.362 | 0.108 | 1.63E-131 | Mono_UCBMC |
| SLC6A6            | 4.79E-136 | 0.86154206 | 0.49  | 0.177 | 1.70E-131 | Mono_UCBMC |
| PRKX              | 7.10E-136 | 0.95347385 | 0.39  | 0.123 | 2.51E-131 | Mono_UCBMC |
| MAP4              | 8.70E-136 | 1.43459408 | 0.277 | 0.069 | 3.08E-131 | Mono_UCBMC |
| IRF8              | 8.80E-136 | 1.18381679 | 0.41  | 0.14  | 3.12E-131 | Mono_UCBMC |
| CCNY              | 1.10E-135 | 1.11918    | 0.356 | 0.106 | 3.91E-131 | Mono_UCBMC |
| PARVB             | 1.39E-135 | 1.05928614 | 0.392 | 0.125 | 4.93E-131 | Mono_UCBMC |
| MAPKAP1           | 1.73E-135 | 1.34576019 | 0.321 | 0.09  | 6.14E-131 | Mono_UCBMC |
| ENSMUG00000058037 | 3.10E-135 | 1.07228744 | 0.387 | 0.12  | 1.10E-130 | Mono_UCBMC |
| BMP2K             | 3.51E-135 | 1.21072686 | 0.339 | 0.099 | 1.24E-130 | Mono_UCBMC |
| CDC40             | 3.77E-135 | 1.30822377 | 0.308 | 0.082 | 1.34E-130 | Mono_UCBMC |
| EXOC6B            | 4.72E-135 | 1.17128291 | 0.382 | 0.121 | 1.67E-130 | Mono_UCBMC |
| ZNF410            | 7.10E-135 | 1.26032224 | 0.286 | 0.072 | 2.51E-130 | Mono_UCBMC |
| PCCA              | 9.67E-135 | 1.24226723 | 0.334 | 0.097 | 3.43E-130 | Mono_UCBMC |
| CASC3             | 2.80E-134 | 1.43990739 | 0.255 | 0.059 | 9.93E-130 | Mono_UCBMC |
| TMED5             | 3.37E-134 | 0.96069175 | 0.435 | 0.147 | 1.19E-129 | Mono_UCBMC |
| MSL2              | 4.58E-134 | 1.22590168 | 0.312 | 0.085 | 1.62E-129 | Mono_UCBMC |

|                   |           |            |       |       |           |            |
|-------------------|-----------|------------|-------|-------|-----------|------------|
| ATG7              | 6.82E-134 | 0.95302329 | 0.437 | 0.15  | 2.42E-129 | Mono_UCBMC |
| ACER3             | 8.38E-134 | 1.27748878 | 0.315 | 0.087 | 2.97E-129 | Mono_UCBMC |
| PLCB1             | 1.59E-133 | 0.61157738 | 0.855 | 0.496 | 5.63E-129 | Mono_UCBMC |
| LUC7L             | 1.84E-133 | 1.09898161 | 0.329 | 0.093 | 6.50E-129 | Mono_UCBMC |
| MFF               | 5.77E-133 | 1.15490651 | 0.354 | 0.106 | 2.04E-128 | Mono_UCBMC |
| TBL1X             | 2.19E-132 | 0.73474317 | 0.436 | 0.149 | 7.74E-128 | Mono_UCBMC |
| SLTM              | 3.04E-132 | 0.95695821 | 0.418 | 0.14  | 1.08E-127 | Mono_UCBMC |
| MPHOSPH8          | 3.29E-132 | 1.29349778 | 0.293 | 0.077 | 1.16E-127 | Mono_UCBMC |
| CAMLG             | 3.37E-132 | 0.87068136 | 0.468 | 0.166 | 1.19E-127 | Mono_UCBMC |
| ZFC3H1            | 3.50E-132 | 0.69997733 | 0.615 | 0.257 | 1.24E-127 | Mono_UCBMC |
| JAZF1             | 4.15E-132 | 1.04533157 | 0.426 | 0.147 | 1.47E-127 | Mono_UCBMC |
| NFYC              | 6.15E-132 | 1.13710142 | 0.343 | 0.101 | 2.18E-127 | Mono_UCBMC |
| VEZF1             | 6.67E-132 | 1.30037327 | 0.268 | 0.065 | 2.36E-127 | Mono_UCBMC |
| RAB18             | 7.14E-132 | 1.06624823 | 0.359 | 0.108 | 2.53E-127 | Mono_UCBMC |
| ENSMUG00000061044 | 7.72E-132 | 1.09198565 | 0.312 | 0.085 | 2.73E-127 | Mono_UCBMC |
| PSMD14            | 1.14E-131 | 1.02700311 | 0.414 | 0.139 | 4.06E-127 | Mono_UCBMC |
| VTA1              | 1.47E-131 | 1.37327738 | 0.276 | 0.069 | 5.21E-127 | Mono_UCBMC |
| CRTC3             | 1.57E-131 | 1.17497235 | 0.275 | 0.069 | 5.55E-127 | Mono_UCBMC |
| UBE3A             | 1.65E-131 | 0.8039204  | 0.47  | 0.169 | 5.86E-127 | Mono_UCBMC |
| MORF4L1           | 2.17E-131 | 0.707976   | 0.768 | 0.368 | 7.68E-127 | Mono_UCBMC |
| FGD3              | 2.30E-131 | 1.00783274 | 0.342 | 0.101 | 8.14E-127 | Mono_UCBMC |
| ENTPD1            | 3.42E-131 | 0.7754163  | 0.619 | 0.27  | 1.21E-126 | Mono_UCBMC |
| TSPAN3            | 3.42E-131 | 1.48076829 | 0.258 | 0.062 | 1.21E-126 | Mono_UCBMC |
| SLU7              | 3.76E-131 | 1.14384935 | 0.302 | 0.081 | 1.33E-126 | Mono_UCBMC |
| EMC3              | 4.08E-131 | 1.20110082 | 0.322 | 0.091 | 1.45E-126 | Mono_UCBMC |
| PPP2R2D           | 6.07E-131 | 1.0891984  | 0.301 | 0.081 | 2.15E-126 | Mono_UCBMC |
| SUCLG2            | 7.78E-131 | 0.94976266 | 0.422 | 0.144 | 2.76E-126 | Mono_UCBMC |
| SNX2              | 8.51E-131 | 0.77583804 | 0.737 | 0.345 | 3.01E-126 | Mono_UCBMC |
| UBASH3B           | 9.20E-131 | 1.08138975 | 0.33  | 0.095 | 3.26E-126 | Mono_UCBMC |
| MXI1              | 9.47E-131 | 1.41790571 | 0.27  | 0.067 | 3.35E-126 | Mono_UCBMC |
| HBP1              | 1.05E-130 | 0.9102435  | 0.496 | 0.186 | 3.71E-126 | Mono_UCBMC |
| DIS3L2            | 1.20E-130 | 1.1547266  | 0.305 | 0.084 | 4.24E-126 | Mono_UCBMC |
| LRBA              | 2.88E-130 | 1.27779452 | 0.329 | 0.096 | 1.02E-125 | Mono_UCBMC |

|                   |           |            |       |       |           |            |
|-------------------|-----------|------------|-------|-------|-----------|------------|
| CPEB4             | 3.34E-130 | 1.15166348 | 0.351 | 0.107 | 1.18E-125 | Mono_UCBMC |
| ANAPC10           | 3.83E-130 | 1.36230225 | 0.26  | 0.062 | 1.36E-125 | Mono_UCBMC |
| RAB6A             | 5.30E-130 | 1.04866223 | 0.377 | 0.121 | 1.88E-125 | Mono_UCBMC |
| USP7              | 6.06E-130 | 1.05931513 | 0.309 | 0.085 | 2.15E-125 | Mono_UCBMC |
| PSMD1             | 9.22E-130 | 1.14546983 | 0.328 | 0.094 | 3.27E-125 | Mono_UCBMC |
| DNAJB12           | 9.69E-130 | 1.10353442 | 0.322 | 0.09  | 3.43E-125 | Mono_UCBMC |
| GTF2F2            | 1.21E-129 | 1.31329286 | 0.308 | 0.086 | 4.27E-125 | Mono_UCBMC |
| MEGF9             | 1.89E-129 | 0.7328492  | 0.491 | 0.184 | 6.71E-125 | Mono_UCBMC |
| AEBP2             | 2.30E-129 | 0.9226836  | 0.384 | 0.123 | 8.15E-125 | Mono_UCBMC |
| KAT6A             | 2.39E-129 | 0.93681432 | 0.397 | 0.131 | 8.47E-125 | Mono_UCBMC |
| ENSMUG00000059977 | 3.64E-129 | 1.15762287 | 0.293 | 0.076 | 1.29E-124 | Mono_UCBMC |
| HP1BP3            | 3.85E-129 | 0.7850726  | 0.522 | 0.199 | 1.36E-124 | Mono_UCBMC |
| HBS1L             | 3.98E-129 | 0.81033115 | 0.471 | 0.17  | 1.41E-124 | Mono_UCBMC |
| EPS15             | 4.10E-129 | 0.78129274 | 0.606 | 0.252 | 1.45E-124 | Mono_UCBMC |
| LAPTM5            | 4.11E-129 | 0.65817582 | 0.909 | 0.578 | 1.46E-124 | Mono_UCBMC |
| SLC30A9           | 7.03E-129 | 1.24755336 | 0.308 | 0.087 | 2.49E-124 | Mono_UCBMC |
| ELF2              | 8.03E-129 | 0.85083557 | 0.45  | 0.161 | 2.84E-124 | Mono_UCBMC |
| VRK1              | 1.33E-128 | 1.35374971 | 0.293 | 0.079 | 4.70E-124 | Mono_UCBMC |
| DNM1L             | 2.05E-128 | 1.03200205 | 0.345 | 0.104 | 7.27E-124 | Mono_UCBMC |
| FNDC3A            | 2.20E-128 | 0.61872495 | 0.645 | 0.279 | 7.79E-124 | Mono_UCBMC |
| TRAM1             | 2.34E-128 | 0.77778663 | 0.59  | 0.239 | 8.31E-124 | Mono_UCBMC |
| MED13             | 2.48E-128 | 0.75069109 | 0.461 | 0.164 | 8.79E-124 | Mono_UCBMC |
| SAFB2             | 3.61E-128 | 1.12360957 | 0.316 | 0.089 | 1.28E-123 | Mono_UCBMC |
| NAV1              | 5.14E-128 | 0.92474313 | 0.345 | 0.104 | 1.82E-123 | Mono_UCBMC |
| CSNK1G1           | 6.11E-128 | 1.17076963 | 0.32  | 0.093 | 2.16E-123 | Mono_UCBMC |
| SND1              | 6.35E-128 | 0.68722346 | 0.677 | 0.3   | 2.25E-123 | Mono_UCBMC |
| DDOST             | 6.55E-128 | 0.81397771 | 0.537 | 0.21  | 2.32E-123 | Mono_UCBMC |
| DERL1             | 9.22E-128 | 1.20099495 | 0.331 | 0.097 | 3.27E-123 | Mono_UCBMC |
| BCAS3             | 1.27E-127 | 0.96822651 | 0.465 | 0.174 | 4.48E-123 | Mono_UCBMC |
| APLP2             | 1.90E-127 | 0.62399061 | 0.889 | 0.517 | 6.74E-123 | Mono_UCBMC |
| RRP12             | 1.96E-127 | 0.99015059 | 0.402 | 0.135 | 6.94E-123 | Mono_UCBMC |
| FTO               | 3.09E-127 | 1.1437388  | 0.293 | 0.079 | 1.09E-122 | Mono_UCBMC |
| CHMP4B            | 4.05E-127 | 0.95400007 | 0.427 | 0.147 | 1.43E-122 | Mono_UCBMC |

|                    |           |            |       |       |           |            |
|--------------------|-----------|------------|-------|-------|-----------|------------|
| PDE3B              | 4.62E-127 | 1.26510916 | 0.258 | 0.063 | 1.64E-122 | Mono_UCBMC |
| MAML3              | 5.15E-127 | 0.63504088 | 0.704 | 0.332 | 1.82E-122 | Mono_UCBMC |
| NEMF               | 5.21E-127 | 0.94994469 | 0.346 | 0.105 | 1.85E-122 | Mono_UCBMC |
| GNAL               | 6.94E-127 | 0.94157755 | 0.53  | 0.212 | 2.46E-122 | Mono_UCBMC |
| TBL1XR1            | 7.03E-127 | 0.70441606 | 0.553 | 0.222 | 2.49E-122 | Mono_UCBMC |
| VPS54              | 7.26E-127 | 0.97943947 | 0.365 | 0.115 | 2.57E-122 | Mono_UCBMC |
| FUBP1              | 2.05E-126 | 0.86184232 | 0.437 | 0.153 | 7.28E-122 | Mono_UCBMC |
| PTP4A1             | 2.20E-126 | 0.73873295 | 0.536 | 0.207 | 7.80E-122 | Mono_UCBMC |
| LRMDA              | 3.92E-126 | 0.99884333 | 0.405 | 0.14  | 1.39E-121 | Mono_UCBMC |
| DDA1               | 1.04E-125 | 0.98572418 | 0.364 | 0.113 | 3.68E-121 | Mono_UCBMC |
| PLBD1              | 1.91E-125 | 0.80789083 | 0.796 | 0.426 | 6.78E-121 | Mono_UCBMC |
| ENSMMUG00000056654 | 2.25E-125 | 0.79046544 | 0.821 | 0.483 | 7.96E-121 | Mono_UCBMC |
| LBR                | 3.21E-125 | 0.98305068 | 0.405 | 0.138 | 1.14E-120 | Mono_UCBMC |
| CDK14              | 3.40E-125 | 1.23775601 | 0.3   | 0.084 | 1.21E-120 | Mono_UCBMC |
| LRRK2              | 3.77E-125 | 0.65658098 | 0.596 | 0.249 | 1.34E-120 | Mono_UCBMC |
| RELB               | 3.83E-125 | 0.82467772 | 0.432 | 0.151 | 1.36E-120 | Mono_UCBMC |
| EHMT1              | 5.45E-125 | 1.10098269 | 0.286 | 0.077 | 1.93E-120 | Mono_UCBMC |
| ACIN1              | 5.47E-125 | 0.97083976 | 0.385 | 0.126 | 1.94E-120 | Mono_UCBMC |
| IGF2BP3            | 5.67E-125 | 0.84325723 | 0.434 | 0.154 | 2.01E-120 | Mono_UCBMC |
| ZNF451             | 6.65E-125 | 0.90407831 | 0.373 | 0.119 | 2.36E-120 | Mono_UCBMC |
| FOXP1              | 8.39E-125 | 0.77031082 | 0.459 | 0.167 | 2.97E-120 | Mono_UCBMC |
| YTHDF2             | 1.08E-124 | 1.16600986 | 0.294 | 0.08  | 3.83E-120 | Mono_UCBMC |
| UXS1               | 1.23E-124 | 1.38150256 | 0.26  | 0.065 | 4.36E-120 | Mono_UCBMC |
| VPS4B              | 2.37E-124 | 0.96480131 | 0.399 | 0.133 | 8.38E-120 | Mono_UCBMC |
| EIF2S3             | 2.81E-124 | 0.91844467 | 0.412 | 0.141 | 9.94E-120 | Mono_UCBMC |
| C15H9orf78         | 5.71E-124 | 0.89536532 | 0.48  | 0.181 | 2.02E-119 | Mono_UCBMC |
| SH3GLB1            | 1.09E-123 | 0.89878333 | 0.451 | 0.163 | 3.85E-119 | Mono_UCBMC |
| ACTR10             | 1.17E-123 | 0.96513917 | 0.41  | 0.141 | 4.13E-119 | Mono_UCBMC |
| TULP4              | 1.27E-123 | 1.28079085 | 0.25  | 0.061 | 4.51E-119 | Mono_UCBMC |
| SH3GL1             | 1.49E-123 | 1.22237114 | 0.25  | 0.06  | 5.28E-119 | Mono_UCBMC |
| ENSMMUG00000063316 | 2.09E-123 | 0.86725682 | 0.463 | 0.171 | 7.41E-119 | Mono_UCBMC |
| LNPEP              | 2.33E-123 | 1.08437297 | 0.344 | 0.107 | 8.25E-119 | Mono_UCBMC |
| MBNL1              | 8.20E-123 | 0.71809841 | 0.866 | 0.516 | 2.90E-118 | Mono_UCBMC |

|                   |           |            |       |       |           |            |
|-------------------|-----------|------------|-------|-------|-----------|------------|
| ATRX              | 8.58E-123 | 0.80801108 | 0.462 | 0.171 | 3.04E-118 | Mono_UCBMC |
| WDFY4             | 8.89E-123 | 1.01441863 | 0.316 | 0.092 | 3.15E-118 | Mono_UCBMC |
| DCTN4             | 1.05E-122 | 1.12191664 | 0.317 | 0.093 | 3.72E-118 | Mono_UCBMC |
| KMT2E             | 1.86E-122 | 0.60621308 | 0.659 | 0.292 | 6.60E-118 | Mono_UCBMC |
| CCNL1             | 2.27E-122 | 0.58396168 | 0.916 | 0.593 | 8.05E-118 | Mono_UCBMC |
| SECISBP2          | 3.51E-122 | 1.29203775 | 0.273 | 0.073 | 1.24E-117 | Mono_UCBMC |
| TPP2              | 4.36E-122 | 1.21429361 | 0.288 | 0.079 | 1.54E-117 | Mono_UCBMC |
| GOLM2             | 1.49E-121 | 1.08803617 | 0.32  | 0.095 | 5.29E-117 | Mono_UCBMC |
| ANXA11            | 1.83E-121 | 0.83774701 | 0.501 | 0.193 | 6.50E-117 | Mono_UCBMC |
| GNAI3             | 2.16E-121 | 0.92877862 | 0.447 | 0.163 | 7.67E-117 | Mono_UCBMC |
| TCF25             | 2.73E-121 | 0.72998166 | 0.512 | 0.199 | 9.69E-117 | Mono_UCBMC |
| LPGAT1            | 4.29E-121 | 0.90293016 | 0.429 | 0.153 | 1.52E-116 | Mono_UCBMC |
| UBE3C             | 4.68E-121 | 1.21229033 | 0.281 | 0.076 | 1.66E-116 | Mono_UCBMC |
| SESN1             | 6.35E-121 | 1.29699111 | 0.267 | 0.07  | 2.25E-116 | Mono_UCBMC |
| PHACTR4           | 6.40E-121 | 0.98050234 | 0.325 | 0.099 | 2.27E-116 | Mono_UCBMC |
| GALNT3            | 6.82E-121 | 0.92541967 | 0.31  | 0.09  | 2.42E-116 | Mono_UCBMC |
| RBM7              | 8.63E-121 | 1.29415197 | 0.257 | 0.064 | 3.06E-116 | Mono_UCBMC |
| KIF5B             | 8.65E-121 | 0.79211884 | 0.536 | 0.215 | 3.07E-116 | Mono_UCBMC |
| RTN1              | 1.00E-120 | 0.97855093 | 0.399 | 0.14  | 3.56E-116 | Mono_UCBMC |
| ENSMUG00000062103 | 1.12E-120 | 1.12289889 | 0.302 | 0.087 | 3.97E-116 | Mono_UCBMC |
| DLST              | 1.16E-120 | 1.17633338 | 0.294 | 0.083 | 4.13E-116 | Mono_UCBMC |
| SYK               | 1.56E-120 | 0.62493352 | 0.699 | 0.325 | 5.52E-116 | Mono_UCBMC |
| ADPGK             | 2.42E-120 | 1.13853582 | 0.28  | 0.076 | 8.56E-116 | Mono_UCBMC |
| TRIM25            | 3.34E-120 | 1.12929577 | 0.278 | 0.075 | 1.18E-115 | Mono_UCBMC |
| AHNAK             | 5.57E-120 | 0.61174243 | 0.878 | 0.517 | 1.97E-115 | Mono_UCBMC |
| EIF3M             | 6.77E-120 | 0.74978253 | 0.619 | 0.265 | 2.40E-115 | Mono_UCBMC |
| SMARCC1           | 7.09E-120 | 1.02193893 | 0.354 | 0.114 | 2.51E-115 | Mono_UCBMC |
| NPEPPS            | 7.60E-120 | 0.98599309 | 0.325 | 0.098 | 2.69E-115 | Mono_UCBMC |
| CTNBL1            | 7.93E-120 | 1.04920331 | 0.341 | 0.106 | 2.81E-115 | Mono_UCBMC |
| CYRIA             | 9.94E-120 | 0.65170944 | 0.781 | 0.396 | 3.52E-115 | Mono_UCBMC |
| SREBF2            | 1.42E-119 | 0.74094536 | 0.524 | 0.209 | 5.04E-115 | Mono_UCBMC |
| RABGEF1           | 1.67E-119 | 0.62301804 | 0.732 | 0.351 | 5.91E-115 | Mono_UCBMC |
| ATP2A2            | 2.08E-119 | 0.88217959 | 0.401 | 0.138 | 7.38E-115 | Mono_UCBMC |

|           |           |            |       |       |           |            |
|-----------|-----------|------------|-------|-------|-----------|------------|
| FNBP4     | 2.11E-119 | 1.11695008 | 0.278 | 0.076 | 7.46E-115 | Mono_UCBMC |
| RNF19A    | 5.05E-119 | 1.04017901 | 0.306 | 0.089 | 1.79E-114 | Mono_UCBMC |
| TRIO      | 5.88E-119 | 0.86888114 | 0.37  | 0.123 | 2.08E-114 | Mono_UCBMC |
| ATP6AP2   | 2.27E-118 | 0.75991781 | 0.556 | 0.226 | 8.05E-114 | Mono_UCBMC |
| CDK12     | 3.08E-118 | 0.92432238 | 0.342 | 0.108 | 1.09E-113 | Mono_UCBMC |
| PISD      | 4.32E-118 | 0.80062046 | 0.392 | 0.132 | 1.53E-113 | Mono_UCBMC |
| U2SURP    | 5.45E-118 | 0.8786293  | 0.444 | 0.162 | 1.93E-113 | Mono_UCBMC |
| ZEB2      | 8.22E-118 | 0.53722898 | 0.956 | 0.727 | 2.91E-113 | Mono_UCBMC |
| MED25     | 1.10E-117 | 0.95438869 | 0.323 | 0.097 | 3.91E-113 | Mono_UCBMC |
| RAB3GAP1  | 1.19E-117 | 0.83129413 | 0.396 | 0.136 | 4.20E-113 | Mono_UCBMC |
| RPS6KC1   | 1.80E-117 | 0.89486401 | 0.368 | 0.122 | 6.38E-113 | Mono_UCBMC |
| NAMPT     | 1.83E-117 | 0.7371823  | 0.749 | 0.382 | 6.49E-113 | Mono_UCBMC |
| TFDP2     | 2.31E-117 | 1.33778335 | 0.251 | 0.064 | 8.18E-113 | Mono_UCBMC |
| CDC27     | 2.51E-117 | 1.02594001 | 0.35  | 0.113 | 8.88E-113 | Mono_UCBMC |
| ASAH1     | 2.70E-117 | 0.70880841 | 0.535 | 0.213 | 9.55E-113 | Mono_UCBMC |
| TBC1D8    | 3.35E-117 | 0.68548326 | 0.526 | 0.215 | 1.19E-112 | Mono_UCBMC |
| GABARAPL1 | 3.70E-117 | 1.19812131 | 0.32  | 0.098 | 1.31E-112 | Mono_UCBMC |
| EXT1      | 1.66E-116 | 1.05517676 | 0.312 | 0.094 | 5.89E-112 | Mono_UCBMC |
| WIPF2     | 5.09E-116 | 0.93503887 | 0.283 | 0.079 | 1.80E-111 | Mono_UCBMC |
| SINHCAF   | 6.62E-116 | 1.25608008 | 0.294 | 0.086 | 2.35E-111 | Mono_UCBMC |
| GTDC1     | 7.40E-116 | 1.08900286 | 0.301 | 0.089 | 2.62E-111 | Mono_UCBMC |
| ARMH3     | 7.41E-116 | 1.15529987 | 0.288 | 0.083 | 2.62E-111 | Mono_UCBMC |
| CSNK2A1   | 1.10E-115 | 0.9323831  | 0.374 | 0.126 | 3.91E-111 | Mono_UCBMC |
| HS2ST1    | 8.58E-115 | 1.08081329 | 0.322 | 0.101 | 3.04E-110 | Mono_UCBMC |
| UBR1      | 9.19E-115 | 1.01134441 | 0.283 | 0.08  | 3.26E-110 | Mono_UCBMC |
| MYO1E     | 9.48E-115 | 0.8626687  | 0.324 | 0.101 | 3.36E-110 | Mono_UCBMC |
| RBM26     | 1.02E-114 | 1.10504703 | 0.301 | 0.089 | 3.62E-110 | Mono_UCBMC |
| RUNX1     | 1.06E-114 | 0.52258388 | 0.72  | 0.349 | 3.76E-110 | Mono_UCBMC |
| LRRC8C    | 1.28E-114 | 1.26289458 | 0.258 | 0.068 | 4.52E-110 | Mono_UCBMC |
| IRAK3     | 2.08E-114 | 0.84777365 | 0.389 | 0.135 | 7.38E-110 | Mono_UCBMC |
| BRD7      | 2.49E-114 | 1.12802929 | 0.269 | 0.074 | 8.84E-110 | Mono_UCBMC |
| CYTIP     | 2.96E-114 | 0.94072022 | 0.338 | 0.108 | 1.05E-109 | Mono_UCBMC |
| RASSF3    | 4.72E-114 | 1.06892816 | 0.277 | 0.078 | 1.67E-109 | Mono_UCBMC |

|             |           |            |       |       |           |            |
|-------------|-----------|------------|-------|-------|-----------|------------|
| SS18        | 5.19E-114 | 1.06924368 | 0.307 | 0.093 | 1.84E-109 | Mono_UCBMC |
| NDEL1       | 5.80E-114 | 0.65717244 | 0.5   | 0.195 | 2.06E-109 | Mono_UCBMC |
| DHRS7       | 5.89E-114 | 0.68116187 | 0.637 | 0.283 | 2.09E-109 | Mono_UCBMC |
| UBE2H       | 6.28E-114 | 0.59957783 | 0.544 | 0.228 | 2.23E-109 | Mono_UCBMC |
| PPIL4       | 8.35E-114 | 1.12310663 | 0.269 | 0.073 | 2.96E-109 | Mono_UCBMC |
| ZDHHHC14    | 1.35E-113 | 0.70896937 | 0.505 | 0.201 | 4.80E-109 | Mono_UCBMC |
| EDEM1       | 1.47E-113 | 0.83288271 | 0.359 | 0.118 | 5.19E-109 | Mono_UCBMC |
| GLYR1       | 1.60E-113 | 0.99211523 | 0.324 | 0.101 | 5.68E-109 | Mono_UCBMC |
| RHOB        | 2.13E-113 | 1.2767507  | 0.251 | 0.066 | 7.53E-109 | Mono_UCBMC |
| XRN2        | 2.88E-113 | 0.73945245 | 0.605 | 0.269 | 1.02E-108 | Mono_UCBMC |
| NABP1       | 3.27E-113 | 0.77221473 | 0.469 | 0.182 | 1.16E-108 | Mono_UCBMC |
| LEMD3       | 3.56E-113 | 1.01258723 | 0.29  | 0.084 | 1.26E-108 | Mono_UCBMC |
| BRD2        | 4.94E-113 | 0.69072539 | 0.557 | 0.234 | 1.75E-108 | Mono_UCBMC |
| ADD3        | 5.62E-113 | 0.90919301 | 0.4   | 0.143 | 1.99E-108 | Mono_UCBMC |
| FMC1-LUC7L2 | 5.91E-113 | 0.70951281 | 0.651 | 0.301 | 2.10E-108 | Mono_UCBMC |
| CDC5L       | 6.29E-113 | 1.03295039 | 0.294 | 0.086 | 2.23E-108 | Mono_UCBMC |
| AATF        | 6.39E-113 | 1.11764497 | 0.306 | 0.093 | 2.27E-108 | Mono_UCBMC |
| EIF3F       | 6.51E-113 | 0.72574351 | 0.648 | 0.295 | 2.31E-108 | Mono_UCBMC |
| STK10       | 8.86E-113 | 0.54784112 | 0.635 | 0.28  | 3.14E-108 | Mono_UCBMC |
| GMDS        | 9.17E-113 | 0.93811521 | 0.304 | 0.093 | 3.25E-108 | Mono_UCBMC |
| SPATA6      | 1.31E-112 | 1.11446222 | 0.299 | 0.089 | 4.65E-108 | Mono_UCBMC |
| C10H20orf24 | 1.39E-112 | 0.73300257 | 0.465 | 0.176 | 4.93E-108 | Mono_UCBMC |
| PAPOLA      | 1.58E-112 | 0.69944111 | 0.601 | 0.264 | 5.58E-108 | Mono_UCBMC |
| TOM1        | 1.94E-112 | 0.72084978 | 0.416 | 0.149 | 6.87E-108 | Mono_UCBMC |
| STK3        | 3.50E-112 | 1.17207871 | 0.287 | 0.084 | 1.24E-107 | Mono_UCBMC |
| COPA        | 4.13E-112 | 0.75591545 | 0.409 | 0.147 | 1.46E-107 | Mono_UCBMC |
| PLEKHB2     | 4.67E-112 | 0.67957123 | 0.573 | 0.248 | 1.65E-107 | Mono_UCBMC |
| TARDBP      | 5.86E-112 | 1.10388075 | 0.282 | 0.081 | 2.08E-107 | Mono_UCBMC |
| TMOD3       | 1.76E-111 | 0.69713414 | 0.607 | 0.266 | 6.25E-107 | Mono_UCBMC |
| GRB2        | 2.03E-111 | 0.69192838 | 0.736 | 0.385 | 7.21E-107 | Mono_UCBMC |
| ITFG1       | 2.35E-111 | 1.15792369 | 0.309 | 0.096 | 8.33E-107 | Mono_UCBMC |
| SMN1        | 8.19E-111 | 0.83313603 | 0.401 | 0.143 | 2.90E-106 | Mono_UCBMC |
| EIF4A2      | 1.04E-110 | 0.72075061 | 0.482 | 0.19  | 3.70E-106 | Mono_UCBMC |

|                   |           |            |       |       |           |            |
|-------------------|-----------|------------|-------|-------|-----------|------------|
| ARL2BP            | 1.27E-110 | 0.91838551 | 0.34  | 0.11  | 4.51E-106 | Mono_UCBMC |
| TAOK1             | 1.89E-110 | 0.75043313 | 0.398 | 0.142 | 6.69E-106 | Mono_UCBMC |
| TAF15             | 2.94E-110 | 0.78112983 | 0.44  | 0.166 | 1.04E-105 | Mono_UCBMC |
| TET2              | 3.00E-110 | 0.49860159 | 0.676 | 0.32  | 1.06E-105 | Mono_UCBMC |
| ENSMUG00000021539 | 5.74E-110 | 1.10514334 | 0.261 | 0.071 | 2.03E-105 | Mono_UCBMC |
| MBTPS1            | 7.46E-110 | 1.15904794 | 0.272 | 0.077 | 2.64E-105 | Mono_UCBMC |
| CPPED1            | 8.10E-110 | 0.72603956 | 0.563 | 0.239 | 2.87E-105 | Mono_UCBMC |
| KIAA1328          | 8.84E-110 | 1.06679203 | 0.251 | 0.067 | 3.13E-105 | Mono_UCBMC |
| TRERF1            | 1.03E-109 | 0.961357   | 0.301 | 0.091 | 3.64E-105 | Mono_UCBMC |
| ZBTB1             | 1.08E-109 | 0.87333565 | 0.318 | 0.099 | 3.81E-105 | Mono_UCBMC |
| SNX3              | 1.31E-109 | 0.66789401 | 0.547 | 0.223 | 4.65E-105 | Mono_UCBMC |
| PTBP3             | 1.39E-109 | 0.64332847 | 0.703 | 0.333 | 4.94E-105 | Mono_UCBMC |
| NUMB              | 2.00E-109 | 0.57575488 | 0.726 | 0.36  | 7.10E-105 | Mono_UCBMC |
| EIF4G2            | 2.64E-109 | 0.64769345 | 0.733 | 0.36  | 9.36E-105 | Mono_UCBMC |
| TRIB1             | 3.01E-109 | 0.84662582 | 0.348 | 0.115 | 1.07E-104 | Mono_UCBMC |
| RNF145            | 4.84E-109 | 0.97553171 | 0.307 | 0.095 | 1.71E-104 | Mono_UCBMC |
| SP110             | 5.17E-109 | 0.70890104 | 0.521 | 0.216 | 1.83E-104 | Mono_UCBMC |
| TRIM44            | 6.23E-109 | 1.00150191 | 0.289 | 0.086 | 2.21E-104 | Mono_UCBMC |
| ARNT              | 1.95E-108 | 0.81938239 | 0.446 | 0.173 | 6.92E-104 | Mono_UCBMC |
| PTP4A2            | 3.72E-108 | 0.62751402 | 0.77  | 0.397 | 1.32E-103 | Mono_UCBMC |
| CD164             | 3.99E-108 | 0.65463688 | 0.588 | 0.256 | 1.41E-103 | Mono_UCBMC |
| NCK1              | 5.83E-108 | 1.07057277 | 0.312 | 0.099 | 2.07E-103 | Mono_UCBMC |
| PHF20             | 6.40E-108 | 0.70666714 | 0.417 | 0.154 | 2.27E-103 | Mono_UCBMC |
| ADAM9             | 6.43E-108 | 1.00035197 | 0.301 | 0.093 | 2.28E-103 | Mono_UCBMC |
| RAD51B            | 6.90E-108 | 0.96249107 | 0.391 | 0.148 | 2.45E-103 | Mono_UCBMC |
| KCNAB2            | 6.91E-108 | 0.69002052 | 0.416 | 0.151 | 2.45E-103 | Mono_UCBMC |
| AKAP9             | 7.71E-108 | 0.74252963 | 0.425 | 0.16  | 2.73E-103 | Mono_UCBMC |
| BAZ2B             | 1.21E-107 | 0.69088101 | 0.497 | 0.202 | 4.30E-103 | Mono_UCBMC |
| PPP1CA            | 1.67E-107 | 0.6487229  | 0.621 | 0.277 | 5.93E-103 | Mono_UCBMC |
| NONO              | 1.74E-107 | 0.77164148 | 0.423 | 0.158 | 6.17E-103 | Mono_UCBMC |
| MTMR14            | 2.60E-107 | 0.81074012 | 0.32  | 0.101 | 9.20E-103 | Mono_UCBMC |
| G3BP2             | 3.10E-107 | 0.79795312 | 0.47  | 0.187 | 1.10E-102 | Mono_UCBMC |
| TRIM22            | 3.65E-107 | 0.77962598 | 0.392 | 0.139 | 1.29E-102 | Mono_UCBMC |



|                    |           |            |       |       |           |            |
|--------------------|-----------|------------|-------|-------|-----------|------------|
| SPECC1             | 3.65E-107 | 1.20386557 | 0.28  | 0.084 | 1.29E-102 | Mono_UCBMC |
| CUL1               | 4.38E-107 | 0.64769968 | 0.445 | 0.17  | 1.55E-102 | Mono_UCBMC |
| IST1               | 9.29E-107 | 0.74125716 | 0.386 | 0.138 | 3.29E-102 | Mono_UCBMC |
| ERCC8              | 1.01E-106 | 0.97926649 | 0.309 | 0.097 | 3.57E-102 | Mono_UCBMC |
| LARP4B             | 1.03E-106 | 0.68208667 | 0.421 | 0.156 | 3.66E-102 | Mono_UCBMC |
| SPI1               | 2.34E-106 | 0.86394012 | 0.329 | 0.107 | 8.29E-102 | Mono_UCBMC |
| RPS3               | 3.21E-106 | 0.48702218 | 0.956 | 0.833 | 1.14E-101 | Mono_UCBMC |
| SMYD3              | 4.19E-106 | 0.86722341 | 0.383 | 0.14  | 1.48E-101 | Mono_UCBMC |
| EIF4H              | 4.28E-106 | 0.55443825 | 0.565 | 0.239 | 1.52E-101 | Mono_UCBMC |
| TOR1AIP1           | 8.17E-106 | 1.18083928 | 0.265 | 0.076 | 2.89E-101 | Mono_UCBMC |
| NSMCE2             | 9.74E-106 | 0.86099704 | 0.367 | 0.129 | 3.45E-101 | Mono_UCBMC |
| C4H6orf62          | 1.05E-105 | 0.65140515 | 0.433 | 0.163 | 3.72E-101 | Mono_UCBMC |
| PTAFR              | 1.48E-105 | 0.9925054  | 0.291 | 0.089 | 5.24E-101 | Mono_UCBMC |
| CEP192             | 1.50E-105 | 0.83623433 | 0.348 | 0.118 | 5.33E-101 | Mono_UCBMC |
| CWC15              | 2.74E-105 | 0.65783772 | 0.51  | 0.208 | 9.70E-101 | Mono_UCBMC |
| RTF1               | 3.19E-105 | 1.15647841 | 0.288 | 0.088 | 1.13E-100 | Mono_UCBMC |
| RNMT               | 4.41E-105 | 0.63384925 | 0.452 | 0.174 | 1.56E-100 | Mono_UCBMC |
| CPEB1              | 5.21E-105 | 0.48695617 | 0.949 | 0.83  | 1.85E-100 | Mono_UCBMC |
| ATP8B4             | 5.65E-105 | 1.21792008 | 0.309 | 0.101 | 2.00E-100 | Mono_UCBMC |
| ATP6V1H            | 6.62E-105 | 1.04011869 | 0.284 | 0.085 | 2.35E-100 | Mono_UCBMC |
| RAB5A              | 1.63E-104 | 0.68219975 | 0.508 | 0.21  | 5.78E-100 | Mono_UCBMC |
| IL6R               | 1.66E-104 | 0.64266028 | 0.551 | 0.236 | 5.88E-100 | Mono_UCBMC |
| HGSNAT             | 2.04E-104 | 0.86605806 | 0.329 | 0.109 | 7.22E-100 | Mono_UCBMC |
| HNRNPU             | 2.48E-104 | 0.59033401 | 0.813 | 0.436 | 8.79E-100 | Mono_UCBMC |
| MBD5               | 2.87E-104 | 1.00806095 | 0.359 | 0.128 | 1.02E-99  | Mono_UCBMC |
| GLG1               | 2.90E-104 | 1.24346117 | 0.253 | 0.071 | 1.03E-99  | Mono_UCBMC |
| WNK1               | 7.60E-104 | 0.57252419 | 0.569 | 0.244 | 2.69E-99  | Mono_UCBMC |
| ENSMMUG00000028906 | 9.24E-104 | 1.0851857  | 0.259 | 0.075 | 3.27E-99  | Mono_UCBMC |
| FKBP5              | 1.95E-103 | 0.92295799 | 0.359 | 0.128 | 6.89E-99  | Mono_UCBMC |
| GLB1               | 2.13E-103 | 1.11795444 | 0.262 | 0.075 | 7.55E-99  | Mono_UCBMC |
| NRF1               | 3.34E-103 | 1.09658992 | 0.265 | 0.077 | 1.18E-98  | Mono_UCBMC |
| STX3               | 5.28E-103 | 1.02803842 | 0.266 | 0.078 | 1.87E-98  | Mono_UCBMC |
| BABAM2             | 5.37E-103 | 0.78886908 | 0.579 | 0.27  | 1.90E-98  | Mono_UCBMC |

|                   |           |            |       |       |          |            |
|-------------------|-----------|------------|-------|-------|----------|------------|
| SDF2              | 6.13E-103 | 0.94850173 | 0.304 | 0.096 | 2.17E-98 | Mono_UCBMC |
| WVOX              | 1.43E-102 | 0.85786308 | 0.404 | 0.158 | 5.07E-98 | Mono_UCBMC |
| FYB1              | 1.74E-102 | 0.59565876 | 0.694 | 0.34  | 6.16E-98 | Mono_UCBMC |
| NBR1              | 2.14E-102 | 1.00769361 | 0.305 | 0.098 | 7.59E-98 | Mono_UCBMC |
| LPP               | 5.35E-102 | 0.51109366 | 0.712 | 0.36  | 1.89E-97 | Mono_UCBMC |
| ENSMUG00000012537 | 9.67E-102 | 0.7059541  | 0.401 | 0.149 | 3.43E-97 | Mono_UCBMC |
| NPTN              | 1.06E-101 | 0.72654988 | 0.489 | 0.202 | 3.76E-97 | Mono_UCBMC |
| TCEA1             | 2.08E-101 | 0.7570715  | 0.438 | 0.171 | 7.38E-97 | Mono_UCBMC |
| DISC1             | 2.40E-101 | 1.13201074 | 0.253 | 0.073 | 8.49E-97 | Mono_UCBMC |
| HSPA14            | 4.06E-101 | 1.07543064 | 0.292 | 0.092 | 1.44E-96 | Mono_UCBMC |
| OGFRL1            | 5.39E-101 | 0.72625023 | 0.49  | 0.203 | 1.91E-96 | Mono_UCBMC |
| BOD1L1            | 5.54E-101 | 1.04526411 | 0.259 | 0.075 | 1.96E-96 | Mono_UCBMC |
| EXOC2             | 6.16E-101 | 0.96030255 | 0.274 | 0.082 | 2.18E-96 | Mono_UCBMC |
| PRRC2C            | 8.08E-101 | 0.53144611 | 0.651 | 0.303 | 2.86E-96 | Mono_UCBMC |
| APPL1             | 8.78E-101 | 0.98753398 | 0.303 | 0.098 | 3.11E-96 | Mono_UCBMC |
| RAB14             | 1.18E-100 | 0.79407593 | 0.396 | 0.147 | 4.17E-96 | Mono_UCBMC |
| FKBP15            | 1.72E-100 | 0.87936053 | 0.342 | 0.118 | 6.10E-96 | Mono_UCBMC |
| SDHB              | 4.50E-100 | 0.76067912 | 0.404 | 0.151 | 1.59E-95 | Mono_UCBMC |
| ARHGEF7           | 5.30E-100 | 0.75742018 | 0.263 | 0.077 | 1.88E-95 | Mono_UCBMC |
| RAD23B            | 5.49E-100 | 0.9565913  | 0.323 | 0.109 | 1.95E-95 | Mono_UCBMC |
| MAP3K2            | 8.92E-100 | 0.79409511 | 0.279 | 0.085 | 3.16E-95 | Mono_UCBMC |
| POLK              | 9.85E-100 | 1.03302274 | 0.271 | 0.082 | 3.49E-95 | Mono_UCBMC |
| SNX14             | 1.32E-99  | 0.8366356  | 0.332 | 0.114 | 4.67E-95 | Mono_UCBMC |
| ADAM10            | 1.98E-99  | 0.73725031 | 0.414 | 0.16  | 7.01E-95 | Mono_UCBMC |
| RBBP6             | 2.29E-99  | 0.91382889 | 0.286 | 0.09  | 8.10E-95 | Mono_UCBMC |
| CHD4              | 2.79E-99  | 0.66333127 | 0.447 | 0.177 | 9.88E-95 | Mono_UCBMC |
| FBXL5             | 2.85E-99  | 0.72892235 | 0.363 | 0.13  | 1.01E-94 | Mono_UCBMC |
| KPNB1             | 2.97E-99  | 0.93594277 | 0.346 | 0.123 | 1.05E-94 | Mono_UCBMC |
| RTN3              | 5.88E-99  | 0.56888573 | 0.542 | 0.234 | 2.08E-94 | Mono_UCBMC |
| EVI2B             | 1.21E-98  | 0.66665107 | 0.464 | 0.186 | 4.29E-94 | Mono_UCBMC |
| SRSF10            | 1.22E-98  | 0.80692876 | 0.312 | 0.103 | 4.31E-94 | Mono_UCBMC |
| FRYL              | 2.27E-98  | 0.92316399 | 0.319 | 0.109 | 8.05E-94 | Mono_UCBMC |
| BLVRA             | 2.71E-98  | 0.76537302 | 0.378 | 0.138 | 9.59E-94 | Mono_UCBMC |

|          |          |            |       |       |          |            |
|----------|----------|------------|-------|-------|----------|------------|
| GAK      | 6.06E-98 | 0.84205279 | 0.257 | 0.075 | 2.15E-93 | Mono_UCBMC |
| MICU1    | 7.28E-98 | 1.08216133 | 0.318 | 0.11  | 2.58E-93 | Mono_UCBMC |
| TTC19    | 7.34E-98 | 0.95265023 | 0.257 | 0.076 | 2.60E-93 | Mono_UCBMC |
| WIPF1    | 2.12E-97 | 0.68489401 | 0.447 | 0.18  | 7.50E-93 | Mono_UCBMC |
| H2AFY    | 3.56E-97 | 0.57892708 | 0.714 | 0.349 | 1.26E-92 | Mono_UCBMC |
| ARF5     | 3.65E-97 | 0.64991333 | 0.8   | 0.456 | 1.29E-92 | Mono_UCBMC |
| G3BP1    | 4.59E-97 | 0.78417277 | 0.417 | 0.164 | 1.63E-92 | Mono_UCBMC |
| SLC9A9   | 5.44E-97 | 0.64213101 | 0.476 | 0.205 | 1.93E-92 | Mono_UCBMC |
| RNF103   | 5.92E-97 | 0.65935057 | 0.5   | 0.211 | 2.10E-92 | Mono_UCBMC |
| NDRG1    | 6.30E-97 | 0.67451772 | 0.49  | 0.211 | 2.23E-92 | Mono_UCBMC |
| IGSF6    | 7.35E-97 | 0.66679808 | 0.681 | 0.338 | 2.60E-92 | Mono_UCBMC |
| R3HDM2   | 9.24E-97 | 0.91753686 | 0.303 | 0.1   | 3.27E-92 | Mono_UCBMC |
| MAP3K20  | 9.83E-97 | 0.5938983  | 0.49  | 0.209 | 3.48E-92 | Mono_UCBMC |
| GABPB1   | 1.25E-96 | 0.72769959 | 0.351 | 0.125 | 4.42E-92 | Mono_UCBMC |
| PDCD6IP  | 1.28E-96 | 0.668039   | 0.417 | 0.162 | 4.55E-92 | Mono_UCBMC |
| SP140    | 1.50E-96 | 0.85820449 | 0.307 | 0.102 | 5.30E-92 | Mono_UCBMC |
| SIGLEC5  | 1.80E-96 | 0.69743528 | 0.359 | 0.127 | 6.39E-92 | Mono_UCBMC |
| GIGYF2   | 1.85E-96 | 0.78266825 | 0.339 | 0.12  | 6.55E-92 | Mono_UCBMC |
| VPS13C   | 1.86E-96 | 0.5574426  | 0.565 | 0.253 | 6.57E-92 | Mono_UCBMC |
| ASCC2    | 1.90E-96 | 0.83107633 | 0.276 | 0.085 | 6.73E-92 | Mono_UCBMC |
| RPL26    | 2.44E-96 | 0.52844044 | 0.925 | 0.708 | 8.66E-92 | Mono_UCBMC |
| USP36    | 3.82E-96 | 0.47611753 | 0.537 | 0.234 | 1.35E-91 | Mono_UCBMC |
| IWS1     | 3.85E-96 | 0.70099671 | 0.375 | 0.138 | 1.37E-91 | Mono_UCBMC |
| HNRNPD   | 4.77E-96 | 0.56018337 | 0.597 | 0.267 | 1.69E-91 | Mono_UCBMC |
| ATF3     | 6.29E-96 | 0.64537051 | 0.459 | 0.189 | 2.23E-91 | Mono_UCBMC |
| LIPA     | 6.48E-96 | 0.79351035 | 0.38  | 0.142 | 2.29E-91 | Mono_UCBMC |
| ANKRD17  | 7.68E-96 | 0.492119   | 0.5   | 0.212 | 2.72E-91 | Mono_UCBMC |
| EMB      | 1.05E-95 | 0.65248752 | 0.475 | 0.197 | 3.71E-91 | Mono_UCBMC |
| UBXN4    | 1.10E-95 | 0.63574592 | 0.486 | 0.202 | 3.90E-91 | Mono_UCBMC |
| ZBTB7A   | 1.49E-95 | 0.79314611 | 0.304 | 0.101 | 5.29E-91 | Mono_UCBMC |
| ZBED1    | 2.58E-95 | 0.68548488 | 0.427 | 0.17  | 9.12E-91 | Mono_UCBMC |
| ATP2B4   | 2.83E-95 | 0.89438955 | 0.325 | 0.113 | 1.00E-90 | Mono_UCBMC |
| ARHGAP30 | 5.09E-95 | 0.59622977 | 0.471 | 0.194 | 1.80E-90 | Mono_UCBMC |

|                   |          |            |       |       |          |            |
|-------------------|----------|------------|-------|-------|----------|------------|
| DCP2              | 6.08E-95 | 0.74911329 | 0.331 | 0.116 | 2.15E-90 | Mono_UCBMC |
| PRKCH             | 6.46E-95 | 0.83987418 | 0.341 | 0.123 | 2.29E-90 | Mono_UCBMC |
| SMAD2             | 7.77E-95 | 0.95686901 | 0.252 | 0.075 | 2.75E-90 | Mono_UCBMC |
| SYNCRIP           | 1.13E-94 | 0.63566921 | 0.439 | 0.177 | 3.99E-90 | Mono_UCBMC |
| UBAP2             | 1.51E-94 | 0.82839142 | 0.371 | 0.14  | 5.36E-90 | Mono_UCBMC |
| SH2B3             | 2.66E-94 | 0.76275584 | 0.355 | 0.13  | 9.41E-90 | Mono_UCBMC |
| ZC3H11A           | 4.63E-94 | 0.68120044 | 0.411 | 0.161 | 1.64E-89 | Mono_UCBMC |
| HNRNPUL1          | 5.78E-94 | 0.91887535 | 0.307 | 0.104 | 2.05E-89 | Mono_UCBMC |
| ENSMUG00000065373 | 1.47E-93 | 0.45690193 | 0.98  | 0.902 | 5.20E-89 | Mono_UCBMC |
| YME1L1            | 1.79E-93 | 0.70326731 | 0.393 | 0.151 | 6.33E-89 | Mono_UCBMC |
| BSDC1             | 2.24E-93 | 0.86721449 | 0.263 | 0.081 | 7.95E-89 | Mono_UCBMC |
| UBE2D3            | 2.35E-93 | 0.52940791 | 0.93  | 0.663 | 8.33E-89 | Mono_UCBMC |
| ACTR3             | 2.41E-93 | 0.56234986 | 0.879 | 0.557 | 8.55E-89 | Mono_UCBMC |
| MYO1F             | 2.52E-93 | 0.48285411 | 0.689 | 0.332 | 8.94E-89 | Mono_UCBMC |
| ENSMUG00000016959 | 2.86E-93 | 0.6090555  | 0.415 | 0.163 | 1.01E-88 | Mono_UCBMC |
| CCDC69            | 4.04E-93 | 0.72881303 | 0.355 | 0.13  | 1.43E-88 | Mono_UCBMC |
| CPD               | 4.53E-93 | 0.84738686 | 0.258 | 0.078 | 1.61E-88 | Mono_UCBMC |
| TOX4              | 5.15E-93 | 0.75492716 | 0.351 | 0.128 | 1.82E-88 | Mono_UCBMC |
| PCYT1A            | 7.41E-93 | 1.06995964 | 0.255 | 0.078 | 2.62E-88 | Mono_UCBMC |
| PAIP2             | 8.40E-93 | 0.56242763 | 0.7   | 0.348 | 2.98E-88 | Mono_UCBMC |
| PSMD2             | 8.86E-93 | 0.92381381 | 0.284 | 0.092 | 3.14E-88 | Mono_UCBMC |
| FAM241A           | 1.27E-92 | 0.97884216 | 0.269 | 0.085 | 4.52E-88 | Mono_UCBMC |
| GPATCH2L          | 1.80E-92 | 0.80391464 | 0.292 | 0.096 | 6.37E-88 | Mono_UCBMC |
| SNW1              | 2.33E-92 | 0.71996571 | 0.382 | 0.146 | 8.26E-88 | Mono_UCBMC |
| FAM120A           | 4.07E-92 | 0.58417719 | 0.433 | 0.173 | 1.44E-87 | Mono_UCBMC |
| H2AZ2             | 4.75E-92 | 0.67479974 | 0.599 | 0.285 | 1.68E-87 | Mono_UCBMC |
| AP2A1             | 4.88E-92 | 0.84911827 | 0.267 | 0.083 | 1.73E-87 | Mono_UCBMC |
| HNRNPR            | 5.60E-92 | 0.70280584 | 0.349 | 0.127 | 1.98E-87 | Mono_UCBMC |
| SF1               | 1.84E-91 | 0.563596   | 0.473 | 0.195 | 6.52E-87 | Mono_UCBMC |
| SLC43A2           | 1.91E-91 | 0.51646674 | 0.44  | 0.182 | 6.78E-87 | Mono_UCBMC |
| HDAC5             | 3.87E-91 | 0.73549063 | 0.267 | 0.083 | 1.37E-86 | Mono_UCBMC |
| RASSF5            | 4.10E-91 | 0.6706767  | 0.351 | 0.129 | 1.45E-86 | Mono_UCBMC |
| VPS26A            | 6.45E-91 | 0.66780449 | 0.378 | 0.144 | 2.28E-86 | Mono_UCBMC |

|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| CALU               | 9.66E-91 | 1.07723502 | 0.255 | 0.079 | 3.42E-86 | Mono_UCBMC |
| C15H9orf72         | 1.18E-90 | 0.6764946  | 0.379 | 0.145 | 4.17E-86 | Mono_UCBMC |
| UBR2               | 2.40E-90 | 0.84537447 | 0.312 | 0.11  | 8.51E-86 | Mono_UCBMC |
| METTL9             | 3.12E-90 | 0.89979361 | 0.289 | 0.097 | 1.11E-85 | Mono_UCBMC |
| ENSMMUG00000020316 | 3.38E-90 | 0.92253522 | 0.283 | 0.094 | 1.20E-85 | Mono_UCBMC |
| ELK3               | 3.45E-90 | 0.70763338 | 0.347 | 0.128 | 1.22E-85 | Mono_UCBMC |
| ENSMMUG00000055457 | 3.79E-90 | 0.58709302 | 0.503 | 0.218 | 1.34E-85 | Mono_UCBMC |
| CAT                | 6.20E-90 | 0.56990031 | 0.494 | 0.211 | 2.20E-85 | Mono_UCBMC |
| ZNF28              | 6.72E-90 | 0.72262154 | 0.317 | 0.112 | 2.38E-85 | Mono_UCBMC |
| HPCAL1             | 1.25E-89 | 0.50942686 | 0.413 | 0.165 | 4.42E-85 | Mono_UCBMC |
| ARHGAP15           | 1.28E-89 | 0.46555744 | 0.868 | 0.533 | 4.55E-85 | Mono_UCBMC |
| CD47               | 1.30E-89 | 0.54109513 | 0.488 | 0.207 | 4.60E-85 | Mono_UCBMC |
| CDK19              | 1.45E-89 | 0.86495342 | 0.276 | 0.091 | 5.13E-85 | Mono_UCBMC |
| ACSL1              | 2.45E-89 | 0.23771758 | 0.65  | 0.308 | 8.69E-85 | Mono_UCBMC |
| WWP1               | 2.96E-89 | 0.94578482 | 0.267 | 0.086 | 1.05E-84 | Mono_UCBMC |
| RSL1D1             | 3.82E-89 | 0.74365386 | 0.343 | 0.126 | 1.35E-84 | Mono_UCBMC |
| PLCG2              | 4.44E-89 | 0.97849824 | 0.254 | 0.08  | 1.57E-84 | Mono_UCBMC |
| CEP350             | 8.03E-89 | 0.59921077 | 0.374 | 0.143 | 2.84E-84 | Mono_UCBMC |
| ENSMMUG00000061125 | 8.13E-89 | 0.47911716 | 0.861 | 0.537 | 2.88E-84 | Mono_UCBMC |
| NDUFA9             | 1.73E-88 | 0.78354551 | 0.319 | 0.113 | 6.13E-84 | Mono_UCBMC |
| SON                | 2.00E-88 | 0.49357062 | 0.772 | 0.416 | 7.08E-84 | Mono_UCBMC |
| TDRD3              | 2.28E-88 | 1.06128613 | 0.263 | 0.085 | 8.07E-84 | Mono_UCBMC |
| TBXAS1             | 6.13E-88 | 0.62812987 | 0.385 | 0.152 | 2.17E-83 | Mono_UCBMC |
| CLTA               | 1.03E-87 | 0.65942068 | 0.488 | 0.211 | 3.63E-83 | Mono_UCBMC |
| ENSMMUG00000054358 | 1.41E-87 | 0.19076831 | 0.916 | 0.563 | 4.99E-83 | Mono_UCBMC |
| TSPAN14            | 1.96E-87 | 0.83038925 | 0.312 | 0.111 | 6.93E-83 | Mono_UCBMC |
| ITPR1              | 2.14E-87 | 0.91037411 | 0.263 | 0.085 | 7.59E-83 | Mono_UCBMC |
| WAPL               | 2.35E-87 | 0.67393367 | 0.392 | 0.157 | 8.33E-83 | Mono_UCBMC |
| BIN2               | 4.53E-87 | 0.5040797  | 0.641 | 0.305 | 1.60E-82 | Mono_UCBMC |
| UBE2J1             | 4.72E-87 | 0.830625   | 0.297 | 0.103 | 1.67E-82 | Mono_UCBMC |
| PCNP               | 4.98E-87 | 0.57890941 | 0.428 | 0.175 | 1.77E-82 | Mono_UCBMC |
| NDFIP1             | 5.49E-87 | 0.84539253 | 0.319 | 0.115 | 1.94E-82 | Mono_UCBMC |
| CD86               | 5.49E-87 | 0.52372784 | 0.754 | 0.428 | 1.95E-82 | Mono_UCBMC |

|                   |          |            |       |       |          |            |
|-------------------|----------|------------|-------|-------|----------|------------|
| IFNGR1            | 7.25E-87 | 0.48904147 | 0.595 | 0.278 | 2.57E-82 | Mono_UCBMC |
| NIPA2             | 8.92E-87 | 0.65312049 | 0.327 | 0.119 | 3.16E-82 | Mono_UCBMC |
| COPS8             | 9.23E-87 | 0.69011215 | 0.365 | 0.139 | 3.27E-82 | Mono_UCBMC |
| LSM12             | 1.35E-86 | 0.83055026 | 0.281 | 0.094 | 4.78E-82 | Mono_UCBMC |
| GLIPR1L2          | 1.77E-86 | 0.56958499 | 0.584 | 0.274 | 6.28E-82 | Mono_UCBMC |
| EEF2              | 2.09E-86 | 0.5310203  | 0.839 | 0.505 | 7.40E-82 | Mono_UCBMC |
| ENSMUG00000056043 | 2.25E-86 | 0.72415129 | 0.348 | 0.132 | 7.98E-82 | Mono_UCBMC |
| CWC22             | 3.57E-86 | 0.82249703 | 0.268 | 0.087 | 1.26E-81 | Mono_UCBMC |
| OSBPL1A           | 4.76E-86 | 0.84500954 | 0.27  | 0.088 | 1.69E-81 | Mono_UCBMC |
| STK38             | 7.29E-86 | 0.64198495 | 0.403 | 0.163 | 2.58E-81 | Mono_UCBMC |
| DHX8              | 8.22E-86 | 0.86749388 | 0.262 | 0.084 | 2.91E-81 | Mono_UCBMC |
| SMC1A             | 9.91E-86 | 0.78107571 | 0.261 | 0.084 | 3.51E-81 | Mono_UCBMC |
| PSMD13            | 1.06E-85 | 0.60874783 | 0.455 | 0.192 | 3.75E-81 | Mono_UCBMC |
| ARHGEF6           | 1.08E-85 | 0.74445913 | 0.279 | 0.094 | 3.82E-81 | Mono_UCBMC |
| DNTTIP2           | 1.22E-85 | 0.54279688 | 0.518 | 0.231 | 4.31E-81 | Mono_UCBMC |
| BRWD1             | 1.80E-85 | 0.76910925 | 0.276 | 0.092 | 6.39E-81 | Mono_UCBMC |
| CEBPZ             | 1.93E-85 | 0.81923356 | 0.285 | 0.097 | 6.84E-81 | Mono_UCBMC |
| ACAD10            | 2.57E-85 | 0.58496687 | 0.436 | 0.182 | 9.11E-81 | Mono_UCBMC |
| NSD3              | 3.98E-85 | 0.64353884 | 0.325 | 0.119 | 1.41E-80 | Mono_UCBMC |
| HACD4             | 5.04E-85 | 0.63181475 | 0.543 | 0.254 | 1.79E-80 | Mono_UCBMC |
| PRCP              | 7.26E-85 | 0.58517594 | 0.594 | 0.288 | 2.57E-80 | Mono_UCBMC |
| ATP2C1            | 1.00E-84 | 0.30408027 | 0.419 | 0.172 | 3.55E-80 | Mono_UCBMC |
| AOPEP             | 1.10E-84 | 0.56344634 | 0.347 | 0.133 | 3.90E-80 | Mono_UCBMC |
| SZRD1             | 1.17E-84 | 0.57492789 | 0.397 | 0.159 | 4.14E-80 | Mono_UCBMC |
| CAMKMT            | 2.47E-84 | 0.82212809 | 0.323 | 0.122 | 8.77E-80 | Mono_UCBMC |
| PRPF38B           | 3.24E-84 | 0.67414557 | 0.304 | 0.108 | 1.15E-79 | Mono_UCBMC |
| ST8SIA4           | 3.81E-84 | 0.38075362 | 0.64  | 0.315 | 1.35E-79 | Mono_UCBMC |
| TRIM72            | 4.78E-84 | 0.50372193 | 0.496 | 0.219 | 1.69E-79 | Mono_UCBMC |
| RBM6              | 5.79E-84 | 0.906585   | 0.252 | 0.082 | 2.05E-79 | Mono_UCBMC |
| PJA2              | 6.40E-84 | 0.71627533 | 0.396 | 0.161 | 2.27E-79 | Mono_UCBMC |
| ATF4              | 8.19E-84 | 0.49478985 | 0.731 | 0.384 | 2.90E-79 | Mono_UCBMC |
| OSBPL11           | 8.23E-84 | 0.41286441 | 0.572 | 0.267 | 2.92E-79 | Mono_UCBMC |
| MAGT1             | 1.05E-83 | 0.62077696 | 0.33  | 0.121 | 3.72E-79 | Mono_UCBMC |

|                   |          |            |       |       |          |            |
|-------------------|----------|------------|-------|-------|----------|------------|
| TNRC18            | 1.40E-83 | 0.89381958 | 0.262 | 0.087 | 4.96E-79 | Mono_UCBMC |
| TMED2             | 2.65E-83 | 0.70446987 | 0.342 | 0.129 | 9.37E-79 | Mono_UCBMC |
| EIF3H             | 4.89E-83 | 0.5376731  | 0.839 | 0.513 | 1.73E-78 | Mono_UCBMC |
| RHOQ              | 5.35E-83 | 0.67808957 | 0.332 | 0.125 | 1.89E-78 | Mono_UCBMC |
| ANXA7             | 7.63E-83 | 0.55112411 | 0.515 | 0.23  | 2.70E-78 | Mono_UCBMC |
| ACO2              | 8.28E-83 | 0.59238965 | 0.342 | 0.129 | 2.94E-78 | Mono_UCBMC |
| CNTRL             | 8.98E-83 | 0.75443339 | 0.305 | 0.11  | 3.18E-78 | Mono_UCBMC |
| ITGAM             | 1.19E-82 | 0.52973586 | 0.59  | 0.283 | 4.22E-78 | Mono_UCBMC |
| KLHL23            | 1.19E-82 | 0.551176   | 0.594 | 0.29  | 4.22E-78 | Mono_UCBMC |
| PECAM1            | 1.25E-82 | 0.5548326  | 0.53  | 0.245 | 4.44E-78 | Mono_UCBMC |
| MAX               | 1.59E-82 | 0.64507776 | 0.365 | 0.143 | 5.64E-78 | Mono_UCBMC |
| SSBP2             | 1.77E-82 | 0.3887218  | 0.712 | 0.382 | 6.27E-78 | Mono_UCBMC |
| SRRM1             | 2.34E-82 | 0.53539034 | 0.666 | 0.339 | 8.27E-78 | Mono_UCBMC |
| CBLB              | 2.37E-82 | 0.85640289 | 0.25  | 0.082 | 8.40E-78 | Mono_UCBMC |
| EFCAB2            | 3.24E-82 | 0.93774717 | 0.258 | 0.087 | 1.15E-77 | Mono_UCBMC |
| PHF11             | 3.71E-82 | 0.63425985 | 0.384 | 0.155 | 1.31E-77 | Mono_UCBMC |
| RAP1A             | 5.07E-82 | 0.51871591 | 0.742 | 0.404 | 1.80E-77 | Mono_UCBMC |
| EAPP              | 5.81E-82 | 0.96883256 | 0.279 | 0.097 | 2.06E-77 | Mono_UCBMC |
| ENSMUG00000058755 | 5.87E-82 | 0.36418959 | 0.968 | 0.9   | 2.08E-77 | Mono_UCBMC |
| KDEL2             | 8.18E-82 | 0.61259487 | 0.332 | 0.126 | 2.90E-77 | Mono_UCBMC |
| BRWD3             | 1.06E-81 | 0.83511764 | 0.252 | 0.082 | 3.74E-77 | Mono_UCBMC |
| ADORA2B           | 1.41E-81 | 0.3620611  | 0.417 | 0.175 | 5.01E-77 | Mono_UCBMC |
| PRNP              | 1.48E-81 | 0.55248537 | 0.371 | 0.146 | 5.25E-77 | Mono_UCBMC |
| LASP1             | 1.90E-81 | 0.68473474 | 0.323 | 0.12  | 6.74E-77 | Mono_UCBMC |
| MBP               | 2.88E-81 | 0.34546476 | 0.772 | 0.414 | 1.02E-76 | Mono_UCBMC |
| ACSL4             | 3.04E-81 | 0.30565373 | 0.537 | 0.249 | 1.08E-76 | Mono_UCBMC |
| ENSMUG00000020643 | 3.41E-81 | 0.90275899 | 0.252 | 0.083 | 1.21E-76 | Mono_UCBMC |
| KPNA1             | 7.66E-81 | 0.86533522 | 0.267 | 0.091 | 2.71E-76 | Mono_UCBMC |
| UPF2              | 1.03E-80 | 0.4640693  | 0.42  | 0.178 | 3.64E-76 | Mono_UCBMC |
| TFG               | 1.72E-80 | 0.9952397  | 0.253 | 0.085 | 6.09E-76 | Mono_UCBMC |
| RNF13             | 1.90E-80 | 0.45731268 | 0.652 | 0.332 | 6.75E-76 | Mono_UCBMC |
| F13A1             | 2.30E-80 | 0.79283727 | 0.335 | 0.13  | 8.16E-76 | Mono_UCBMC |
| ITGA4             | 2.54E-80 | 0.49618911 | 0.664 | 0.34  | 8.99E-76 | Mono_UCBMC |

|            |          |            |       |       |          |            |
|------------|----------|------------|-------|-------|----------|------------|
| PRKDC      | 3.00E-80 | 0.70473712 | 0.35  | 0.138 | 1.06E-75 | Mono_UCBMC |
| PDCD6-AHRR | 3.05E-80 | 0.53719635 | 0.415 | 0.175 | 1.08E-75 | Mono_UCBMC |
| SMARCA5    | 3.09E-80 | 0.51132062 | 0.402 | 0.165 | 1.09E-75 | Mono_UCBMC |
| MAT2A      | 3.45E-80 | 0.76511582 | 0.312 | 0.115 | 1.22E-75 | Mono_UCBMC |
| YY1        | 4.35E-80 | 0.82237903 | 0.281 | 0.099 | 1.54E-75 | Mono_UCBMC |
| HNRNPL     | 4.94E-80 | 0.49683671 | 0.596 | 0.285 | 1.75E-75 | Mono_UCBMC |
| VCAN       | 5.09E-80 | 0.33961164 | 0.959 | 0.798 | 1.80E-75 | Mono_UCBMC |
| DEDD2      | 8.45E-80 | 0.72314786 | 0.268 | 0.091 | 2.99E-75 | Mono_UCBMC |
| RALY       | 1.19E-79 | 0.52656147 | 0.431 | 0.183 | 4.20E-75 | Mono_UCBMC |
| PLA2G4A    | 1.52E-79 | 0.77704876 | 0.268 | 0.093 | 5.38E-75 | Mono_UCBMC |
| PTPRJ      | 1.91E-79 | 0.20605482 | 0.648 | 0.325 | 6.75E-75 | Mono_UCBMC |
| CTSZ       | 2.63E-79 | 0.57351473 | 0.496 | 0.224 | 9.32E-75 | Mono_UCBMC |
| ADD1       | 2.86E-79 | 0.7342127  | 0.314 | 0.118 | 1.01E-74 | Mono_UCBMC |
| WBP11      | 4.19E-79 | 0.72947134 | 0.309 | 0.114 | 1.49E-74 | Mono_UCBMC |
| ZNF638     | 5.42E-79 | 0.46877042 | 0.39  | 0.16  | 1.92E-74 | Mono_UCBMC |
| GPCPD1     | 6.11E-79 | 0.31350227 | 0.545 | 0.253 | 2.16E-74 | Mono_UCBMC |
| CYBRD1     | 7.30E-79 | 0.70478355 | 0.33  | 0.127 | 2.59E-74 | Mono_UCBMC |
| CCT4       | 7.50E-79 | 0.61523626 | 0.389 | 0.16  | 2.66E-74 | Mono_UCBMC |
| WASHC4     | 8.51E-79 | 0.68131297 | 0.355 | 0.143 | 3.02E-74 | Mono_UCBMC |
| STRN3      | 1.07E-78 | 0.55711726 | 0.351 | 0.14  | 3.80E-74 | Mono_UCBMC |
| PNRC2      | 1.08E-78 | 0.51563932 | 0.435 | 0.185 | 3.82E-74 | Mono_UCBMC |
| ZC3H13     | 1.17E-78 | 0.58576789 | 0.34  | 0.132 | 4.15E-74 | Mono_UCBMC |
| SDCCAG8    | 1.42E-78 | 0.66067611 | 0.356 | 0.144 | 5.02E-74 | Mono_UCBMC |
| TPR        | 1.75E-78 | 0.6495467  | 0.352 | 0.139 | 6.22E-74 | Mono_UCBMC |
| NAA15      | 2.36E-78 | 0.72918817 | 0.293 | 0.107 | 8.35E-74 | Mono_UCBMC |
| AKR1C1     | 2.82E-78 | 0.83392926 | 0.267 | 0.093 | 9.99E-74 | Mono_UCBMC |
| FLI1       | 3.34E-78 | 0.46249101 | 0.35  | 0.137 | 1.18E-73 | Mono_UCBMC |
| SLC35E1    | 3.52E-78 | 0.80054887 | 0.252 | 0.084 | 1.25E-73 | Mono_UCBMC |
| NFKBIB     | 4.98E-78 | 0.64403079 | 0.32  | 0.121 | 1.77E-73 | Mono_UCBMC |
| LEPROTL1   | 5.35E-78 | 0.56396225 | 0.353 | 0.138 | 1.89E-73 | Mono_UCBMC |
| ARHGAP32   | 5.83E-78 | 0.54933951 | 0.381 | 0.155 | 2.07E-73 | Mono_UCBMC |
| MAP1LC3B   | 7.03E-78 | 0.53312167 | 0.757 | 0.42  | 2.49E-73 | Mono_UCBMC |
| L3MBTL3    | 7.40E-78 | 0.67161688 | 0.326 | 0.126 | 2.62E-73 | Mono_UCBMC |



|                   |          |            |       |       |          |            |
|-------------------|----------|------------|-------|-------|----------|------------|
| SUPT5H            | 8.14E-78 | 0.70901158 | 0.281 | 0.099 | 2.88E-73 | Mono_UCBMC |
| ENSMUG00000006965 | 9.33E-78 | 0.69114129 | 0.398 | 0.17  | 3.31E-73 | Mono_UCBMC |
| SPTSSA            | 1.10E-77 | 0.51049376 | 0.441 | 0.191 | 3.91E-73 | Mono_UCBMC |
| ENSMUG00000015583 | 1.16E-77 | 0.50409807 | 0.739 | 0.405 | 4.11E-73 | Mono_UCBMC |
| RP2               | 1.28E-77 | 0.57837099 | 0.411 | 0.175 | 4.52E-73 | Mono_UCBMC |
| SERINC3           | 1.39E-77 | 0.77002687 | 0.288 | 0.104 | 4.94E-73 | Mono_UCBMC |
| SMARCA2           | 2.28E-77 | 0.63219823 | 0.302 | 0.112 | 8.08E-73 | Mono_UCBMC |
| CERK              | 3.04E-77 | 0.5560928  | 0.387 | 0.161 | 1.08E-72 | Mono_UCBMC |
| MAPRE1            | 3.71E-77 | 0.53321698 | 0.492 | 0.224 | 1.31E-72 | Mono_UCBMC |
| ATL3              | 3.81E-77 | 0.58369498 | 0.321 | 0.122 | 1.35E-72 | Mono_UCBMC |
| RARA              | 4.37E-77 | 0.53188798 | 0.373 | 0.153 | 1.55E-72 | Mono_UCBMC |
| CAPZA1            | 9.69E-77 | 0.44318199 | 0.686 | 0.358 | 3.43E-72 | Mono_UCBMC |
| ENSMUG00000006293 | 1.15E-76 | 0.5788106  | 0.551 | 0.266 | 4.08E-72 | Mono_UCBMC |
| SCPEP1            | 1.27E-76 | 0.67681857 | 0.317 | 0.12  | 4.50E-72 | Mono_UCBMC |
| IGBP1             | 4.04E-76 | 0.60443356 | 0.416 | 0.179 | 1.43E-71 | Mono_UCBMC |
| HNRNPA0           | 4.43E-76 | 0.64854101 | 0.394 | 0.167 | 1.57E-71 | Mono_UCBMC |
| PPP4R3B           | 4.44E-76 | 0.58033086 | 0.305 | 0.114 | 1.57E-71 | Mono_UCBMC |
| CCT6A             | 6.51E-76 | 0.59452849 | 0.394 | 0.167 | 2.30E-71 | Mono_UCBMC |
| ADA2              | 7.19E-76 | 0.54839679 | 0.44  | 0.193 | 2.55E-71 | Mono_UCBMC |
| CCSER1            | 8.09E-76 | 0.85973791 | 0.304 | 0.119 | 2.87E-71 | Mono_UCBMC |
| IFRD1             | 9.72E-76 | 0.70448372 | 0.36  | 0.149 | 3.45E-71 | Mono_UCBMC |
| MFSD1             | 9.99E-76 | 0.6144535  | 0.313 | 0.119 | 3.54E-71 | Mono_UCBMC |
| HERPUD2           | 1.08E-75 | 0.85357819 | 0.251 | 0.085 | 3.81E-71 | Mono_UCBMC |
| SMAP2             | 1.38E-75 | 0.48003096 | 0.664 | 0.345 | 4.90E-71 | Mono_UCBMC |
| ENSMUG00000047277 | 1.82E-75 | 0.61399389 | 0.483 | 0.227 | 6.45E-71 | Mono_UCBMC |
| OXR1              | 3.80E-75 | 0.62176194 | 0.315 | 0.12  | 1.34E-70 | Mono_UCBMC |
| IMMP2L            | 4.49E-75 | 0.85693614 | 0.341 | 0.142 | 1.59E-70 | Mono_UCBMC |
| PAK2              | 4.52E-75 | 0.4204817  | 0.626 | 0.309 | 1.60E-70 | Mono_UCBMC |
| DDX17             | 8.76E-75 | 0.43585147 | 0.594 | 0.286 | 3.10E-70 | Mono_UCBMC |
| COPS2             | 9.35E-75 | 0.67041444 | 0.332 | 0.131 | 3.31E-70 | Mono_UCBMC |
| KCTD20            | 9.74E-75 | 0.80611967 | 0.251 | 0.086 | 3.45E-70 | Mono_UCBMC |
| PBRM1             | 1.13E-74 | 0.55524322 | 0.363 | 0.15  | 3.99E-70 | Mono_UCBMC |
| TNFRSF10A         | 3.24E-74 | 0.56454822 | 0.326 | 0.127 | 1.15E-69 | Mono_UCBMC |

|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| ASXL2              | 3.89E-74 | 0.60267847 | 0.308 | 0.119 | 1.38E-69 | Mono_UCBMC |
| FYTTD1             | 5.39E-74 | 0.77300369 | 0.25  | 0.086 | 1.91E-69 | Mono_UCBMC |
| PGD                | 7.36E-74 | 0.41218999 | 0.573 | 0.276 | 2.61E-69 | Mono_UCBMC |
| RPN1               | 1.16E-73 | 0.4732891  | 0.384 | 0.16  | 4.11E-69 | Mono_UCBMC |
| DPH3               | 1.24E-73 | 0.62373342 | 0.323 | 0.126 | 4.38E-69 | Mono_UCBMC |
| TMEM9B             | 1.28E-73 | 0.83507536 | 0.28  | 0.103 | 4.53E-69 | Mono_UCBMC |
| ERO1A              | 2.26E-73 | 0.54968444 | 0.336 | 0.135 | 8.02E-69 | Mono_UCBMC |
| SYAP1              | 2.32E-73 | 0.53736207 | 0.404 | 0.174 | 8.23E-69 | Mono_UCBMC |
| MAPRE2             | 3.25E-73 | 0.75635331 | 0.299 | 0.115 | 1.15E-68 | Mono_UCBMC |
| PXN                | 3.93E-73 | 0.48496324 | 0.343 | 0.136 | 1.39E-68 | Mono_UCBMC |
| TBC1D4             | 6.50E-73 | 0.45760187 | 0.303 | 0.117 | 2.30E-68 | Mono_UCBMC |
| NFAT5              | 6.58E-73 | 0.245176   | 0.582 | 0.287 | 2.33E-68 | Mono_UCBMC |
| GOLGA5             | 7.76E-73 | 0.69571549 | 0.291 | 0.109 | 2.75E-68 | Mono_UCBMC |
| PDLIM5             | 8.00E-73 | 0.54284554 | 0.368 | 0.156 | 2.84E-68 | Mono_UCBMC |
| RALB               | 8.25E-73 | 0.60097637 | 0.291 | 0.108 | 2.92E-68 | Mono_UCBMC |
| TIAM1              | 8.25E-73 | 0.50002687 | 0.31  | 0.121 | 2.92E-68 | Mono_UCBMC |
| SSR1               | 8.29E-73 | 0.51288346 | 0.519 | 0.249 | 2.94E-68 | Mono_UCBMC |
| EIF3E              | 8.69E-73 | 0.47772149 | 0.758 | 0.421 | 3.08E-68 | Mono_UCBMC |
| LAMP1              | 9.00E-73 | 0.42614846 | 0.557 | 0.265 | 3.19E-68 | Mono_UCBMC |
| ENSMMUG00000010266 | 1.12E-72 | 0.41773767 | 0.712 | 0.382 | 3.99E-68 | Mono_UCBMC |
| PRPF4B             | 1.38E-72 | 0.37676494 | 0.508 | 0.238 | 4.88E-68 | Mono_UCBMC |
| AKNA               | 2.34E-72 | 0.51331432 | 0.315 | 0.122 | 8.31E-68 | Mono_UCBMC |
| SLC7A7             | 2.62E-72 | 0.44098743 | 0.444 | 0.197 | 9.29E-68 | Mono_UCBMC |
| TXNL1              | 3.17E-72 | 0.65446243 | 0.347 | 0.142 | 1.12E-67 | Mono_UCBMC |
| HMOX2              | 3.45E-72 | 0.473495   | 0.602 | 0.308 | 1.22E-67 | Mono_UCBMC |
| BNIP2              | 3.69E-72 | 0.6554131  | 0.327 | 0.13  | 1.31E-67 | Mono_UCBMC |
| GTF2B              | 5.82E-72 | 0.51714325 | 0.637 | 0.33  | 2.06E-67 | Mono_UCBMC |
| NDUFA10            | 7.44E-72 | 0.70664722 | 0.289 | 0.109 | 2.64E-67 | Mono_UCBMC |
| P4HB               | 8.63E-72 | 0.53342056 | 0.461 | 0.214 | 3.06E-67 | Mono_UCBMC |
| SWAP70             | 1.14E-71 | 0.45055809 | 0.384 | 0.163 | 4.02E-67 | Mono_UCBMC |
| RBM17              | 1.57E-71 | 0.70311609 | 0.271 | 0.099 | 5.55E-67 | Mono_UCBMC |
| ARRB2              | 1.78E-71 | 0.36147936 | 0.623 | 0.308 | 6.29E-67 | Mono_UCBMC |
| HSPA9              | 2.49E-71 | 0.47857365 | 0.402 | 0.174 | 8.84E-67 | Mono_UCBMC |

|                   |          |            |       |       |          |            |
|-------------------|----------|------------|-------|-------|----------|------------|
| RPIA              | 3.54E-71 | 0.65884386 | 0.32  | 0.127 | 1.25E-66 | Mono_UCBMC |
| POC1B             | 6.03E-71 | 0.50121755 | 0.441 | 0.201 | 2.14E-66 | Mono_UCBMC |
| RNF213            | 6.42E-71 | 0.48753934 | 0.303 | 0.117 | 2.27E-66 | Mono_UCBMC |
| KTN1              | 8.19E-71 | 0.56144605 | 0.356 | 0.149 | 2.90E-66 | Mono_UCBMC |
| GNA13             | 9.87E-71 | 0.31773741 | 0.482 | 0.223 | 3.50E-66 | Mono_UCBMC |
| SYNE3             | 1.04E-70 | 0.47608387 | 0.308 | 0.119 | 3.70E-66 | Mono_UCBMC |
| ENSMUG00000000478 | 1.05E-70 | 0.52643789 | 0.322 | 0.126 | 3.73E-66 | Mono_UCBMC |
| GLTP              | 3.32E-70 | 0.38194076 | 0.546 | 0.264 | 1.18E-65 | Mono_UCBMC |
| ARGLU1            | 3.80E-70 | 0.41591313 | 0.46  | 0.212 | 1.35E-65 | Mono_UCBMC |
| FCHSD2            | 5.09E-70 | 0.68519005 | 0.281 | 0.108 | 1.80E-65 | Mono_UCBMC |
| EAF1              | 6.89E-70 | 0.51909287 | 0.348 | 0.144 | 2.44E-65 | Mono_UCBMC |
| EIF4G3            | 7.11E-70 | 0.58095109 | 0.275 | 0.102 | 2.52E-65 | Mono_UCBMC |
| HNRNPA3           | 8.94E-70 | 0.44124117 | 0.784 | 0.447 | 3.17E-65 | Mono_UCBMC |
| TMEM179B          | 1.02E-69 | 0.64483573 | 0.292 | 0.111 | 3.60E-65 | Mono_UCBMC |
| EMC7              | 1.07E-69 | 0.82932594 | 0.251 | 0.089 | 3.81E-65 | Mono_UCBMC |
| NAP1L4            | 1.43E-69 | 0.43878914 | 0.553 | 0.271 | 5.07E-65 | Mono_UCBMC |
| XRCC5             | 2.52E-69 | 0.45832833 | 0.64  | 0.332 | 8.91E-65 | Mono_UCBMC |
| PDIA3             | 2.94E-69 | 0.71033763 | 0.251 | 0.089 | 1.04E-64 | Mono_UCBMC |
| DTNBP1            | 3.22E-69 | 0.69381453 | 0.28  | 0.107 | 1.14E-64 | Mono_UCBMC |
| FAM133B           | 8.11E-69 | 0.67399478 | 0.277 | 0.104 | 2.87E-64 | Mono_UCBMC |
| NCKAP1L           | 1.34E-68 | 0.42810332 | 0.526 | 0.254 | 4.74E-64 | Mono_UCBMC |
| RSRC1             | 1.40E-68 | 0.78619617 | 0.28  | 0.108 | 4.94E-64 | Mono_UCBMC |
| TBC1D22A          | 1.53E-68 | 0.38030193 | 0.431 | 0.194 | 5.42E-64 | Mono_UCBMC |
| NUCKS1            | 3.71E-68 | 0.59676167 | 0.332 | 0.137 | 1.32E-63 | Mono_UCBMC |
| PPP2R1A           | 6.19E-68 | 0.32891593 | 0.409 | 0.178 | 2.19E-63 | Mono_UCBMC |
| SCP2              | 6.34E-68 | 0.48331846 | 0.48  | 0.226 | 2.25E-63 | Mono_UCBMC |
| TMEM59            | 8.28E-68 | 0.41939592 | 0.573 | 0.282 | 2.94E-63 | Mono_UCBMC |
| ELL2              | 8.92E-68 | 0.21995687 | 0.792 | 0.469 | 3.16E-63 | Mono_UCBMC |
| SRSF5             | 1.33E-67 | 0.45668449 | 0.858 | 0.554 | 4.71E-63 | Mono_UCBMC |
| EID1              | 2.00E-67 | 0.47004409 | 0.502 | 0.24  | 7.09E-63 | Mono_UCBMC |
| EYA3              | 2.78E-67 | 0.51801042 | 0.268 | 0.1   | 9.85E-63 | Mono_UCBMC |
| FCRL6             | 3.31E-67 | 0.66337124 | 0.294 | 0.115 | 1.17E-62 | Mono_UCBMC |
| NCF1              | 4.74E-67 | 0.58344366 | 0.34  | 0.142 | 1.68E-62 | Mono_UCBMC |

|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| ATP5F1A            | 5.22E-67 | 0.41888819 | 0.589 | 0.295 | 1.85E-62 | Mono_UCBMC |
| CYBA               | 5.52E-67 | 0.43355726 | 0.914 | 0.656 | 1.96E-62 | Mono_UCBMC |
| MYDGF              | 5.95E-67 | 0.37570941 | 0.517 | 0.246 | 2.11E-62 | Mono_UCBMC |
| DNAJA2             | 7.84E-67 | 0.63196955 | 0.3   | 0.119 | 2.78E-62 | Mono_UCBMC |
| BPTF               | 9.20E-67 | 0.40919787 | 0.386 | 0.168 | 3.26E-62 | Mono_UCBMC |
| ETF1               | 1.01E-66 | 0.40813084 | 0.595 | 0.302 | 3.57E-62 | Mono_UCBMC |
| HDAC4              | 1.06E-66 | 0.29390575 | 0.317 | 0.127 | 3.76E-62 | Mono_UCBMC |
| P2RX4              | 1.24E-66 | 0.27875462 | 0.4   | 0.176 | 4.41E-62 | Mono_UCBMC |
| ATP1A1             | 1.35E-66 | 0.32361181 | 0.52  | 0.25  | 4.77E-62 | Mono_UCBMC |
| IDH2               | 2.00E-66 | 0.45068819 | 0.401 | 0.176 | 7.09E-62 | Mono_UCBMC |
| CACYBP             | 2.53E-66 | 0.46219059 | 0.406 | 0.181 | 8.95E-62 | Mono_UCBMC |
| TRIR               | 2.63E-66 | 0.42746402 | 0.481 | 0.223 | 9.32E-62 | Mono_UCBMC |
| YWHAG              | 4.36E-66 | 0.47344787 | 0.509 | 0.249 | 1.55E-61 | Mono_UCBMC |
| ITGB1              | 4.54E-66 | 0.46673802 | 0.441 | 0.202 | 1.61E-61 | Mono_UCBMC |
| CTDNEP1            | 1.05E-65 | 0.48977137 | 0.306 | 0.123 | 3.72E-61 | Mono_UCBMC |
| BACH1              | 1.14E-65 | 0.30293082 | 0.513 | 0.246 | 4.04E-61 | Mono_UCBMC |
| CHORDC1            | 1.79E-65 | 0.67131069 | 0.274 | 0.106 | 6.33E-61 | Mono_UCBMC |
| PDLIM2             | 1.87E-65 | 0.61063376 | 0.315 | 0.128 | 6.64E-61 | Mono_UCBMC |
| TM6SF1             | 1.88E-65 | 0.47023848 | 0.369 | 0.16  | 6.65E-61 | Mono_UCBMC |
| CHD1               | 2.25E-65 | 0.32000422 | 0.501 | 0.246 | 7.96E-61 | Mono_UCBMC |
| CCSER2             | 2.86E-65 | 0.50513197 | 0.27  | 0.103 | 1.01E-60 | Mono_UCBMC |
| HIF1A              | 3.01E-65 | 0.43528313 | 0.705 | 0.402 | 1.07E-60 | Mono_UCBMC |
| AKT3               | 3.76E-65 | 0.71083421 | 0.257 | 0.097 | 1.33E-60 | Mono_UCBMC |
| SERINC1            | 3.81E-65 | 0.446153   | 0.437 | 0.203 | 1.35E-60 | Mono_UCBMC |
| COMMD7             | 4.55E-65 | 0.53047693 | 0.29  | 0.114 | 1.61E-60 | Mono_UCBMC |
| CCM2               | 4.92E-65 | 0.43310772 | 0.361 | 0.159 | 1.74E-60 | Mono_UCBMC |
| ABR                | 1.28E-64 | 0.28358899 | 0.389 | 0.173 | 4.53E-60 | Mono_UCBMC |
| BCL2L13            | 2.59E-64 | 0.54883423 | 0.295 | 0.119 | 9.19E-60 | Mono_UCBMC |
| RPN2               | 2.63E-64 | 0.48664687 | 0.334 | 0.139 | 9.32E-60 | Mono_UCBMC |
| ENSMMUG00000006499 | 2.98E-64 | 0.31245187 | 0.594 | 0.303 | 1.06E-59 | Mono_UCBMC |
| PI4K2B             | 6.99E-64 | 0.39295357 | 0.468 | 0.222 | 2.48E-59 | Mono_UCBMC |
| EPRS1              | 8.37E-64 | 0.65343629 | 0.269 | 0.104 | 2.97E-59 | Mono_UCBMC |
| TAB2               | 8.49E-64 | 0.25819045 | 0.476 | 0.225 | 3.01E-59 | Mono_UCBMC |

|                     |          |            |       |       |          |            |
|---------------------|----------|------------|-------|-------|----------|------------|
| HERC4               | 8.61E-64 | 0.61775877 | 0.284 | 0.113 | 3.05E-59 | Mono_UCBMC |
| CCDC50              | 1.32E-63 | 0.65305818 | 0.259 | 0.099 | 4.69E-59 | Mono_UCBMC |
| PLEC                | 2.51E-63 | 0.58869443 | 0.262 | 0.1   | 8.88E-59 | Mono_UCBMC |
| TMEM50A             | 3.07E-63 | 0.39301706 | 0.492 | 0.236 | 1.09E-58 | Mono_UCBMC |
| HNRNPA2B1           | 4.73E-63 | 0.4182397  | 0.887 | 0.611 | 1.68E-58 | Mono_UCBMC |
| HM13                | 8.14E-63 | 0.48953996 | 0.34  | 0.145 | 2.88E-58 | Mono_UCBMC |
| SEPTIN9             | 8.29E-63 | 0.33556494 | 0.541 | 0.265 | 2.94E-58 | Mono_UCBMC |
| RBM22               | 8.32E-63 | 0.6131442  | 0.257 | 0.097 | 2.95E-58 | Mono_UCBMC |
| RESF1               | 8.56E-63 | 0.37949039 | 0.302 | 0.123 | 3.03E-58 | Mono_UCBMC |
| EIF3B               | 1.05E-62 | 0.4633473  | 0.262 | 0.1   | 3.71E-58 | Mono_UCBMC |
| PRKACA              | 1.30E-62 | 0.33981091 | 0.397 | 0.178 | 4.61E-58 | Mono_UCBMC |
| PPP1CC              | 1.56E-62 | 0.59027568 | 0.294 | 0.119 | 5.52E-58 | Mono_UCBMC |
| ZC3H15              | 1.66E-62 | 0.42741108 | 0.431 | 0.202 | 5.88E-58 | Mono_UCBMC |
| EXOC1               | 2.07E-62 | 0.60313102 | 0.267 | 0.104 | 7.34E-58 | Mono_UCBMC |
| NFX1                | 2.43E-62 | 0.41172029 | 0.266 | 0.103 | 8.62E-58 | Mono_UCBMC |
| ENSMMUG00000014862  | 2.90E-62 | 0.44171925 | 0.509 | 0.252 | 1.03E-57 | Mono_UCBMC |
| UBE2B               | 5.28E-62 | 0.3990663  | 0.492 | 0.239 | 1.87E-57 | Mono_UCBMC |
| SCAMP2              | 7.30E-62 | 0.41240191 | 0.43  | 0.2   | 2.59E-57 | Mono_UCBMC |
| WSB1                | 9.56E-62 | 0.38939781 | 0.63  | 0.336 | 3.39E-57 | Mono_UCBMC |
| ENSMMUG00000018474  | 1.38E-61 | 0.42079147 | 0.353 | 0.153 | 4.88E-57 | Mono_UCBMC |
| NFIL3               | 1.43E-61 | 0.27045839 | 0.498 | 0.239 | 5.08E-57 | Mono_UCBMC |
| CCNG1               | 1.77E-61 | 0.54826891 | 0.304 | 0.125 | 6.26E-57 | Mono_UCBMC |
| SF3B1               | 1.89E-61 | 0.40355584 | 0.684 | 0.375 | 6.71E-57 | Mono_UCBMC |
| MYO1G               | 2.13E-61 | 0.34281463 | 0.279 | 0.11  | 7.56E-57 | Mono_UCBMC |
| RAB8B               | 2.20E-61 | 0.43188329 | 0.502 | 0.254 | 7.81E-57 | Mono_UCBMC |
| WWC2                | 2.58E-61 | 0.60669678 | 0.251 | 0.096 | 9.13E-57 | Mono_UCBMC |
| CS                  | 2.77E-61 | 0.30066923 | 0.506 | 0.245 | 9.81E-57 | Mono_UCBMC |
| PLEKHO1             | 4.71E-61 | 0.37142167 | 0.334 | 0.142 | 1.67E-56 | Mono_UCBMC |
| ENSMMUG00000006608  | 8.40E-61 | 0.32467821 | 0.587 | 0.302 | 2.98E-56 | Mono_UCBMC |
| GPR132              | 1.10E-60 | 0.41282759 | 0.428 | 0.201 | 3.91E-56 | Mono_UCBMC |
| RNF10               | 1.19E-60 | 0.42638127 | 0.293 | 0.12  | 4.22E-56 | Mono_UCBMC |
| ENSMMUG000000060287 | 1.35E-60 | 0.43502506 | 0.832 | 0.518 | 4.77E-56 | Mono_UCBMC |
| DDX46               | 1.70E-60 | 0.36666067 | 0.429 | 0.2   | 6.03E-56 | Mono_UCBMC |

|                   |          |            |       |       |          |            |
|-------------------|----------|------------|-------|-------|----------|------------|
| CNBP              | 1.93E-60 | 0.38768015 | 0.65  | 0.35  | 6.84E-56 | Mono_UCBMC |
| PRKCA             | 2.15E-60 | 0.45920248 | 0.359 | 0.164 | 7.61E-56 | Mono_UCBMC |
| DYNC1LI1          | 3.22E-60 | 0.52352135 | 0.279 | 0.112 | 1.14E-55 | Mono_UCBMC |
| AFF3              | 4.11E-60 | 0.65552793 | 0.276 | 0.114 | 1.45E-55 | Mono_UCBMC |
| PLA2G7            | 4.53E-60 | 0.55039847 | 0.304 | 0.127 | 1.60E-55 | Mono_UCBMC |
| HSP90B1           | 1.07E-59 | 0.41478743 | 0.592 | 0.318 | 3.78E-55 | Mono_UCBMC |
| DDX54             | 1.09E-59 | 0.47045395 | 0.267 | 0.105 | 3.85E-55 | Mono_UCBMC |
| SH3BP5            | 1.34E-59 | 0.30485568 | 0.53  | 0.272 | 4.76E-55 | Mono_UCBMC |
| SAMD8             | 1.45E-59 | 0.28225078 | 0.298 | 0.122 | 5.15E-55 | Mono_UCBMC |
| SNX6              | 1.46E-59 | 0.40720042 | 0.467 | 0.229 | 5.16E-55 | Mono_UCBMC |
| ELF1              | 2.22E-59 | 0.27041262 | 0.823 | 0.504 | 7.87E-55 | Mono_UCBMC |
| COMMD10           | 2.23E-59 | 0.56444659 | 0.365 | 0.168 | 7.89E-55 | Mono_UCBMC |
| EIF2A             | 2.62E-59 | 0.37447869 | 0.313 | 0.132 | 9.30E-55 | Mono_UCBMC |
| CAPN1             | 2.88E-59 | 0.41630263 | 0.328 | 0.141 | 1.02E-54 | Mono_UCBMC |
| SLC20A1           | 3.36E-59 | 0.43638911 | 0.26  | 0.102 | 1.19E-54 | Mono_UCBMC |
| TSG101            | 3.47E-59 | 0.49044657 | 0.329 | 0.143 | 1.23E-54 | Mono_UCBMC |
| GNB1              | 3.47E-59 | 0.15063923 | 0.539 | 0.271 | 1.23E-54 | Mono_UCBMC |
| CPM               | 3.58E-59 | 0.41274114 | 0.269 | 0.108 | 1.27E-54 | Mono_UCBMC |
| KHDRBS1           | 3.84E-59 | 0.39974875 | 0.304 | 0.127 | 1.36E-54 | Mono_UCBMC |
| EIF3L             | 3.86E-59 | 0.418413   | 0.772 | 0.455 | 1.37E-54 | Mono_UCBMC |
| ENSMUG00000020751 | 4.19E-59 | 0.60189828 | 0.278 | 0.114 | 1.48E-54 | Mono_UCBMC |
| PFDN1             | 4.73E-59 | 0.45173886 | 0.338 | 0.146 | 1.68E-54 | Mono_UCBMC |
| SLC25A37          | 5.38E-59 | 0.20956004 | 0.538 | 0.272 | 1.91E-54 | Mono_UCBMC |
| PTK2B             | 6.12E-59 | 0.43969999 | 0.256 | 0.1   | 2.17E-54 | Mono_UCBMC |
| TIAL1             | 7.03E-59 | 0.46770225 | 0.296 | 0.123 | 2.49E-54 | Mono_UCBMC |
| TNFSF13B          | 1.12E-58 | 0.48590312 | 0.378 | 0.174 | 3.96E-54 | Mono_UCBMC |
| RELT              | 1.55E-58 | 0.41291576 | 0.265 | 0.105 | 5.48E-54 | Mono_UCBMC |
| VCP               | 3.25E-58 | 0.41493895 | 0.443 | 0.212 | 1.15E-53 | Mono_UCBMC |
| GRK3              | 4.48E-58 | 0.11890739 | 0.552 | 0.278 | 1.59E-53 | Mono_UCBMC |
| POLR2A            | 6.49E-58 | 0.57855742 | 0.259 | 0.103 | 2.30E-53 | Mono_UCBMC |
| MAFF              | 9.04E-58 | 0.46032611 | 0.378 | 0.176 | 3.20E-53 | Mono_UCBMC |
| CAP1              | 1.06E-57 | 0.36311931 | 0.74  | 0.422 | 3.77E-53 | Mono_UCBMC |
| SNF8              | 1.11E-57 | 0.45608925 | 0.344 | 0.151 | 3.92E-53 | Mono_UCBMC |

|          |          |            |       |       |          |            |
|----------|----------|------------|-------|-------|----------|------------|
| MTCH1    | 1.14E-57 | 0.39433448 | 0.329 | 0.144 | 4.03E-53 | Mono_UCBMC |
| REEP3    | 1.22E-57 | 0.5683351  | 0.287 | 0.121 | 4.33E-53 | Mono_UCBMC |
| KATNBL1  | 1.65E-57 | 0.43150634 | 0.36  | 0.163 | 5.85E-53 | Mono_UCBMC |
| CCDC88A  | 2.34E-57 | 0.27827438 | 0.564 | 0.297 | 8.30E-53 | Mono_UCBMC |
| SLC11A1  | 2.64E-57 | 0.34310621 | 0.742 | 0.44  | 9.34E-53 | Mono_UCBMC |
| HMGA1    | 3.42E-57 | 0.35498737 | 0.329 | 0.142 | 1.21E-52 | Mono_UCBMC |
| OS9      | 4.73E-57 | 0.33830981 | 0.357 | 0.16  | 1.67E-52 | Mono_UCBMC |
| ADAR     | 8.05E-57 | 0.4751115  | 0.255 | 0.101 | 2.85E-52 | Mono_UCBMC |
| ETNK1    | 1.03E-56 | 0.27802186 | 0.375 | 0.172 | 3.65E-52 | Mono_UCBMC |
| XRCC6    | 1.72E-56 | 0.32190957 | 0.594 | 0.309 | 6.09E-52 | Mono_UCBMC |
| RWDD1    | 1.76E-56 | 0.34251295 | 0.424 | 0.201 | 6.23E-52 | Mono_UCBMC |
| ARHGAP45 | 2.25E-56 | 0.25740588 | 0.389 | 0.178 | 7.97E-52 | Mono_UCBMC |
| FAM204A  | 2.97E-56 | 0.57537672 | 0.267 | 0.109 | 1.05E-51 | Mono_UCBMC |
| CEPT1    | 4.27E-56 | 0.63236266 | 0.263 | 0.108 | 1.51E-51 | Mono_UCBMC |
| SETX     | 5.83E-56 | 0.38781794 | 0.275 | 0.114 | 2.06E-51 | Mono_UCBMC |
| ZCCHC7   | 5.90E-56 | 0.38219122 | 0.319 | 0.141 | 2.09E-51 | Mono_UCBMC |
| UBE2K    | 5.96E-56 | 0.35687248 | 0.413 | 0.197 | 2.11E-51 | Mono_UCBMC |
| ICAM3    | 7.86E-56 | 0.29787413 | 0.595 | 0.315 | 2.79E-51 | Mono_UCBMC |
| CPVL     | 9.65E-56 | 0.43245775 | 0.847 | 0.619 | 3.42E-51 | Mono_UCBMC |
| EIF3D    | 1.37E-55 | 0.31288612 | 0.381 | 0.175 | 4.84E-51 | Mono_UCBMC |
| AGPAT4   | 1.37E-55 | 0.22694769 | 0.338 | 0.151 | 4.87E-51 | Mono_UCBMC |
| RALA     | 1.81E-55 | 0.24255513 | 0.479 | 0.241 | 6.40E-51 | Mono_UCBMC |
| COMMD1   | 1.92E-55 | 0.48291059 | 0.369 | 0.174 | 6.79E-51 | Mono_UCBMC |
| SDHC     | 2.26E-55 | 0.39403887 | 0.318 | 0.138 | 8.00E-51 | Mono_UCBMC |
| STX8     | 2.66E-55 | 0.50078466 | 0.377 | 0.179 | 9.43E-51 | Mono_UCBMC |
| SIPA1L1  | 2.94E-55 | 0.21280598 | 0.598 | 0.329 | 1.04E-50 | Mono_UCBMC |
| MOB2     | 5.38E-55 | 0.46273002 | 0.281 | 0.118 | 1.91E-50 | Mono_UCBMC |
| NASP     | 6.37E-55 | 0.46433189 | 0.33  | 0.148 | 2.26E-50 | Mono_UCBMC |
| LIMK2    | 8.95E-55 | 0.26594428 | 0.572 | 0.31  | 3.17E-50 | Mono_UCBMC |
| PTTG1IP  | 9.05E-55 | 0.34194542 | 0.358 | 0.163 | 3.21E-50 | Mono_UCBMC |
| YWHAH    | 1.80E-54 | 0.41712847 | 0.28  | 0.118 | 6.39E-50 | Mono_UCBMC |
| ALKBH7   | 1.85E-54 | 0.50489547 | 0.274 | 0.115 | 6.54E-50 | Mono_UCBMC |
| DIABLO   | 2.18E-54 | 0.42240307 | 0.359 | 0.166 | 7.72E-50 | Mono_UCBMC |

|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| CD9                | 2.79E-54 | 0.5551828  | 0.418 | 0.205 | 9.90E-50 | Mono_UCBMC |
| COTL1              | 2.80E-54 | 0.34512488 | 0.898 | 0.645 | 9.91E-50 | Mono_UCBMC |
| ARL6IP5            | 3.31E-54 | 0.38437766 | 0.328 | 0.146 | 1.17E-49 | Mono_UCBMC |
| SYF2               | 4.16E-54 | 0.2754529  | 0.524 | 0.266 | 1.47E-49 | Mono_UCBMC |
| M6PR               | 4.41E-54 | 0.32089575 | 0.41  | 0.195 | 1.56E-49 | Mono_UCBMC |
| IPCEF1             | 4.97E-54 | 0.36587916 | 0.358 | 0.167 | 1.76E-49 | Mono_UCBMC |
| SAR1A              | 5.97E-54 | 0.48043161 | 0.321 | 0.143 | 2.12E-49 | Mono_UCBMC |
| MAP2K1             | 1.57E-53 | 0.27111546 | 0.4   | 0.192 | 5.57E-49 | Mono_UCBMC |
| DDX24              | 2.10E-53 | 0.35702482 | 0.336 | 0.152 | 7.44E-49 | Mono_UCBMC |
| ENSMMUG00000056012 | 5.75E-53 | 0.37603027 | 0.381 | 0.178 | 2.04E-48 | Mono_UCBMC |
| TPM3               | 2.40E-52 | 0.38287662 | 0.901 | 0.68  | 8.51E-48 | Mono_UCBMC |
| RSU1               | 3.41E-52 | 0.39062073 | 0.387 | 0.186 | 1.21E-47 | Mono_UCBMC |
| OCIAD1             | 3.46E-52 | 0.32975979 | 0.344 | 0.159 | 1.23E-47 | Mono_UCBMC |
| DERA               | 3.97E-52 | 0.54426792 | 0.25  | 0.103 | 1.41E-47 | Mono_UCBMC |
| CAPN2              | 2.56E-51 | 0.37605732 | 0.27  | 0.114 | 9.06E-47 | Mono_UCBMC |
| RPL4               | 2.61E-51 | 0.35750925 | 0.921 | 0.732 | 9.25E-47 | Mono_UCBMC |
| ENSMMUG00000058165 | 3.65E-51 | 0.49996045 | 0.299 | 0.134 | 1.29E-46 | Mono_UCBMC |
| BZW2               | 3.93E-51 | 0.27820273 | 0.569 | 0.308 | 1.39E-46 | Mono_UCBMC |
| ENSMMUG00000049010 | 6.70E-51 | 0.52677941 | 0.269 | 0.115 | 2.37E-46 | Mono_UCBMC |
| RASSF2             | 1.21E-50 | 0.26254315 | 0.331 | 0.15  | 4.27E-46 | Mono_UCBMC |
| CDC42SE1           | 1.37E-50 | 0.29335421 | 0.421 | 0.207 | 4.86E-46 | Mono_UCBMC |
| TIGAR              | 1.79E-50 | 0.3718182  | 0.268 | 0.114 | 6.33E-46 | Mono_UCBMC |
| HEXA               | 1.86E-50 | 0.37732054 | 0.317 | 0.144 | 6.59E-46 | Mono_UCBMC |
| GTF2I              | 2.83E-50 | 0.4754116  | 0.259 | 0.111 | 1.00E-45 | Mono_UCBMC |
| UFD1               | 2.84E-50 | 0.32162233 | 0.3   | 0.132 | 1.01E-45 | Mono_UCBMC |
| WFS1               | 3.19E-50 | 0.36194429 | 0.295 | 0.129 | 1.13E-45 | Mono_UCBMC |
| SKP1               | 4.68E-50 | 0.32669695 | 0.854 | 0.537 | 1.66E-45 | Mono_UCBMC |
| HSP90AB1           | 4.85E-50 | 0.38567399 | 0.845 | 0.576 | 1.72E-45 | Mono_UCBMC |
| LRP1               | 5.69E-50 | 0.22842955 | 0.479 | 0.242 | 2.02E-45 | Mono_UCBMC |
| PITPNB             | 7.56E-50 | 0.22750228 | 0.4   | 0.196 | 2.68E-45 | Mono_UCBMC |
| ENSMMUG00000018687 | 1.01E-49 | 0.3544105  | 0.717 | 0.421 | 3.57E-45 | Mono_UCBMC |
| RSL24D1            | 1.20E-49 | 0.31769367 | 0.645 | 0.357 | 4.27E-45 | Mono_UCBMC |
| GPD2               | 1.24E-49 | 0.4099711  | 0.299 | 0.135 | 4.40E-45 | Mono_UCBMC |



|                   |          |            |       |       |          |            |
|-------------------|----------|------------|-------|-------|----------|------------|
| CASP12            | 1.46E-49 | 0.32967697 | 0.346 | 0.162 | 5.17E-45 | Mono_UCBMC |
| SELPLG            | 1.63E-49 | 0.24635212 | 0.321 | 0.147 | 5.77E-45 | Mono_UCBMC |
| MTCH2             | 1.76E-49 | 0.28094547 | 0.546 | 0.291 | 6.24E-45 | Mono_UCBMC |
| HNRNPH3           | 2.30E-49 | 0.25835506 | 0.506 | 0.261 | 8.14E-45 | Mono_UCBMC |
| LYZ               | 3.10E-49 | 0.41782059 | 0.954 | 0.909 | 1.10E-44 | Mono_UCBMC |
| BZW1              | 4.00E-49 | 0.36428034 | 0.825 | 0.537 | 1.42E-44 | Mono_UCBMC |
| RPL31             | 6.59E-49 | 0.29109309 | 0.633 | 0.348 | 2.34E-44 | Mono_UCBMC |
| ENSMUG00000003412 | 1.01E-48 | 0.2862103  | 0.971 | 0.924 | 3.56E-44 | Mono_UCBMC |
| PTPN12            | 1.23E-48 | 0.23197902 | 0.425 | 0.216 | 4.36E-44 | Mono_UCBMC |
| SPOP              | 1.28E-48 | 0.53253323 | 0.251 | 0.107 | 4.53E-44 | Mono_UCBMC |
| VMP1              | 2.40E-48 | 0.15748799 | 0.526 | 0.278 | 8.50E-44 | Mono_UCBMC |
| C19H19orf38       | 3.91E-48 | 0.22816976 | 0.52  | 0.272 | 1.38E-43 | Mono_UCBMC |
| PCF11             | 6.72E-48 | 0.20536705 | 0.309 | 0.14  | 2.38E-43 | Mono_UCBMC |
| FBXW11            | 8.60E-48 | 0.22451408 | 0.348 | 0.167 | 3.05E-43 | Mono_UCBMC |
| TKT               | 1.18E-47 | 0.34065218 | 0.899 | 0.664 | 4.19E-43 | Mono_UCBMC |
| ARL5A             | 1.49E-47 | 0.42845015 | 0.258 | 0.111 | 5.28E-43 | Mono_UCBMC |
| RIN3              | 2.16E-47 | 0.25883595 | 0.393 | 0.195 | 7.64E-43 | Mono_UCBMC |
| HEXB              | 2.95E-47 | 0.25009325 | 0.414 | 0.205 | 1.05E-42 | Mono_UCBMC |
| QARS1             | 3.43E-47 | 0.2651948  | 0.361 | 0.173 | 1.22E-42 | Mono_UCBMC |
| UBE2W             | 3.53E-47 | 0.27530882 | 0.423 | 0.216 | 1.25E-42 | Mono_UCBMC |
| PLP2              | 5.72E-47 | 0.28159757 | 0.681 | 0.404 | 2.03E-42 | Mono_UCBMC |
| CCT3              | 7.23E-47 | 0.25034836 | 0.487 | 0.252 | 2.56E-42 | Mono_UCBMC |
| TUBB              | 7.28E-47 | 0.26802556 | 0.389 | 0.192 | 2.58E-42 | Mono_UCBMC |
| CLCN5             | 8.66E-47 | 0.43471908 | 0.254 | 0.11  | 3.07E-42 | Mono_UCBMC |
| ATP6V0D1          | 9.75E-47 | 0.24872101 | 0.478 | 0.248 | 3.45E-42 | Mono_UCBMC |
| CANX              | 9.85E-47 | 0.27002469 | 0.289 | 0.129 | 3.49E-42 | Mono_UCBMC |
| MAF1              | 9.88E-47 | 0.33668755 | 0.266 | 0.117 | 3.50E-42 | Mono_UCBMC |
| RHOH              | 1.01E-46 | 0.24384239 | 0.48  | 0.255 | 3.58E-42 | Mono_UCBMC |
| PRPF6             | 1.09E-46 | 0.33752737 | 0.29  | 0.131 | 3.87E-42 | Mono_UCBMC |
| PSMD7             | 1.50E-46 | 0.38511073 | 0.286 | 0.129 | 5.31E-42 | Mono_UCBMC |
| ABCE1             | 1.51E-46 | 0.30872429 | 0.285 | 0.128 | 5.36E-42 | Mono_UCBMC |
| MECP2             | 1.53E-46 | 0.27917396 | 0.343 | 0.167 | 5.42E-42 | Mono_UCBMC |
| RER1              | 1.60E-46 | 0.27252402 | 0.483 | 0.25  | 5.66E-42 | Mono_UCBMC |

|                   |          |            |       |       |          |            |
|-------------------|----------|------------|-------|-------|----------|------------|
| HNRNPM            | 1.80E-46 | 0.22581257 | 0.429 | 0.218 | 6.38E-42 | Mono_UCBMC |
| DDX18             | 1.80E-46 | 0.44687196 | 0.276 | 0.125 | 6.39E-42 | Mono_UCBMC |
| SNRNP70           | 2.19E-46 | 0.28067346 | 0.268 | 0.118 | 7.77E-42 | Mono_UCBMC |
| HDAC2             | 2.36E-46 | 0.36778704 | 0.252 | 0.109 | 8.37E-42 | Mono_UCBMC |
| RPS14             | 3.71E-46 | 0.24168669 | 0.975 | 0.932 | 1.31E-41 | Mono_UCBMC |
| LENG8             | 5.22E-46 | 0.1650215  | 0.285 | 0.128 | 1.85E-41 | Mono_UCBMC |
| ENSMUG00000047632 | 9.77E-46 | 0.36015254 | 0.608 | 0.366 | 3.46E-41 | Mono_UCBMC |
| GNB2              | 1.01E-45 | 0.13826673 | 0.632 | 0.343 | 3.59E-41 | Mono_UCBMC |
| FGD2              | 1.67E-45 | 0.18184406 | 0.449 | 0.231 | 5.90E-41 | Mono_UCBMC |
| TAGAP             | 1.71E-45 | 0.22887927 | 0.379 | 0.19  | 6.06E-41 | Mono_UCBMC |
| CDC42             | 2.20E-45 | 0.32783768 | 0.927 | 0.708 | 7.79E-41 | Mono_UCBMC |
| DCAF8             | 2.29E-45 | 0.31713761 | 0.25  | 0.109 | 8.11E-41 | Mono_UCBMC |
| CCT8              | 2.54E-45 | 0.28060853 | 0.424 | 0.217 | 9.01E-41 | Mono_UCBMC |
| CNPY3             | 2.79E-45 | 0.15718858 | 0.444 | 0.225 | 9.89E-41 | Mono_UCBMC |
| SNX5              | 5.67E-45 | 0.32794131 | 0.277 | 0.124 | 2.01E-40 | Mono_UCBMC |
| TMEM147           | 6.00E-45 | 0.46989778 | 0.302 | 0.142 | 2.13E-40 | Mono_UCBMC |
| TOMM20            | 7.23E-45 | 0.31281775 | 0.7   | 0.413 | 2.56E-40 | Mono_UCBMC |
| RGS19             | 7.25E-45 | 0.25287476 | 0.6   | 0.332 | 2.57E-40 | Mono_UCBMC |
| EIF4B             | 1.02E-44 | 0.23836933 | 0.465 | 0.242 | 3.60E-40 | Mono_UCBMC |
| BID               | 1.12E-44 | 0.27183919 | 0.583 | 0.327 | 3.98E-40 | Mono_UCBMC |
| ANXA2             | 1.33E-44 | 0.31681422 | 0.944 | 0.77  | 4.70E-40 | Mono_UCBMC |
| SFPQ              | 1.52E-44 | 0.22249905 | 0.63  | 0.354 | 5.39E-40 | Mono_UCBMC |
| CD1C              | 1.57E-44 | 0.34533367 | 0.315 | 0.149 | 5.58E-40 | Mono_UCBMC |
| ENSMUG00000022610 | 2.16E-44 | 0.12206854 | 0.521 | 0.279 | 7.64E-40 | Mono_UCBMC |
| NCF2              | 2.64E-44 | 0.24024075 | 0.462 | 0.243 | 9.35E-40 | Mono_UCBMC |
| MFNG              | 2.88E-44 | 0.19141298 | 0.396 | 0.196 | 1.02E-39 | Mono_UCBMC |
| TP53BP2           | 2.93E-44 | 0.15020115 | 0.406 | 0.206 | 1.04E-39 | Mono_UCBMC |
| CCDC59            | 7.66E-44 | 0.2892804  | 0.32  | 0.152 | 2.71E-39 | Mono_UCBMC |
| ENSMUG00000008587 | 8.28E-44 | 0.33920072 | 0.255 | 0.114 | 2.93E-39 | Mono_UCBMC |
| PPP6R1            | 1.35E-43 | 0.18945461 | 0.3   | 0.139 | 4.77E-39 | Mono_UCBMC |
| SYNGR2            | 1.75E-43 | 0.18208014 | 0.369 | 0.182 | 6.19E-39 | Mono_UCBMC |
| TM9SF4            | 2.78E-43 | 0.19361641 | 0.365 | 0.181 | 9.86E-39 | Mono_UCBMC |
| HCLS1             | 4.79E-43 | 0.24042057 | 0.531 | 0.289 | 1.70E-38 | Mono_UCBMC |

|                   |          |            |       |       |          |            |
|-------------------|----------|------------|-------|-------|----------|------------|
| CSNK1D            | 6.59E-43 | 0.27845431 | 0.346 | 0.17  | 2.33E-38 | Mono_UCBMC |
| PRDX3             | 7.64E-43 | 0.4222613  | 0.271 | 0.125 | 2.71E-38 | Mono_UCBMC |
| HADHA             | 1.45E-42 | 0.27721334 | 0.297 | 0.139 | 5.14E-38 | Mono_UCBMC |
| FLII              | 1.55E-42 | 0.24535724 | 0.338 | 0.164 | 5.51E-38 | Mono_UCBMC |
| ENSMUG00000045425 | 1.64E-42 | 0.23314864 | 0.299 | 0.139 | 5.82E-38 | Mono_UCBMC |
| UBAP2L            | 1.87E-42 | 0.33067262 | 0.257 | 0.117 | 6.61E-38 | Mono_UCBMC |
| ALDH1A1           | 2.44E-42 | 0.19637665 | 0.495 | 0.264 | 8.65E-38 | Mono_UCBMC |
| SDHA              | 2.77E-42 | 0.23263423 | 0.288 | 0.134 | 9.80E-38 | Mono_UCBMC |
| ZYX               | 2.86E-42 | 0.13885555 | 0.639 | 0.36  | 1.01E-37 | Mono_UCBMC |
| DDIT4             | 3.92E-42 | 0.18527507 | 0.467 | 0.247 | 1.39E-37 | Mono_UCBMC |
| TBC1D25           | 4.22E-42 | 0.25270292 | 0.324 | 0.157 | 1.50E-37 | Mono_UCBMC |
| TPT1              | 6.60E-42 | 0.21331901 | 0.984 | 0.96  | 2.34E-37 | Mono_UCBMC |
| RTRAF             | 8.69E-42 | 0.20708821 | 0.548 | 0.298 | 3.08E-37 | Mono_UCBMC |
| POC5              | 8.77E-42 | 0.2445447  | 0.369 | 0.186 | 3.11E-37 | Mono_UCBMC |
| NECAP2            | 1.36E-41 | 0.27027344 | 0.301 | 0.144 | 4.83E-37 | Mono_UCBMC |
| PRELID1           | 1.70E-41 | 0.17288186 | 0.416 | 0.212 | 6.03E-37 | Mono_UCBMC |
| REEP5             | 2.02E-41 | 0.23361264 | 0.555 | 0.305 | 7.15E-37 | Mono_UCBMC |
| SERBP1            | 2.30E-41 | 0.26882653 | 0.575 | 0.324 | 8.16E-37 | Mono_UCBMC |
| ARRB1             | 2.50E-41 | 0.20441254 | 0.253 | 0.114 | 8.85E-37 | Mono_UCBMC |
| COMMD3            | 3.11E-41 | 0.27925185 | 0.304 | 0.146 | 1.10E-36 | Mono_UCBMC |
| UCHL3             | 5.69E-41 | 0.2860469  | 0.31  | 0.15  | 2.02E-36 | Mono_UCBMC |
| DOCK10            | 7.39E-41 | 0.12785789 | 0.541 | 0.304 | 2.62E-36 | Mono_UCBMC |
| LAMP2             | 7.47E-41 | 0.14733836 | 0.338 | 0.166 | 2.65E-36 | Mono_UCBMC |
| CD46              | 9.03E-41 | 0.12215881 | 0.412 | 0.214 | 3.20E-36 | Mono_UCBMC |
| ENSA              | 1.11E-40 | 0.24077552 | 0.554 | 0.316 | 3.94E-36 | Mono_UCBMC |
| MORF4L2           | 1.25E-40 | 0.21047906 | 0.288 | 0.137 | 4.42E-36 | Mono_UCBMC |
| ERP29             | 1.27E-40 | 0.24489507 | 0.584 | 0.329 | 4.50E-36 | Mono_UCBMC |
| DSTN              | 2.21E-40 | 0.27017116 | 0.753 | 0.467 | 7.82E-36 | Mono_UCBMC |
| SUGT1             | 2.32E-40 | 0.35539279 | 0.28  | 0.132 | 8.23E-36 | Mono_UCBMC |
| CALR              | 2.98E-40 | 0.18192136 | 0.499 | 0.271 | 1.06E-35 | Mono_UCBMC |
| CCT5              | 3.56E-40 | 0.20075532 | 0.423 | 0.221 | 1.26E-35 | Mono_UCBMC |
| CCNI              | 3.74E-40 | 0.1969942  | 0.567 | 0.314 | 1.33E-35 | Mono_UCBMC |
| SURF4             | 4.36E-40 | 0.11810044 | 0.389 | 0.198 | 1.54E-35 | Mono_UCBMC |

|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| PEPD               | 5.34E-40 | 0.17891159 | 0.397 | 0.203 | 1.89E-35 | Mono_UCBMC |
| FKBP3              | 6.16E-40 | 0.29233865 | 0.311 | 0.152 | 2.18E-35 | Mono_UCBMC |
| PCBP1              | 8.55E-40 | 0.20457027 | 0.623 | 0.355 | 3.03E-35 | Mono_UCBMC |
| FDX1               | 9.32E-40 | 0.15197007 | 0.335 | 0.167 | 3.30E-35 | Mono_UCBMC |
| SAMHD1             | 1.02E-39 | 0.18690064 | 0.52  | 0.286 | 3.63E-35 | Mono_UCBMC |
| GLRX               | 1.33E-39 | 0.23837669 | 0.421 | 0.222 | 4.70E-35 | Mono_UCBMC |
| PHACTR1            | 1.45E-39 | 0.29423051 | 0.253 | 0.118 | 5.14E-35 | Mono_UCBMC |
| PPARD              | 1.76E-39 | 0.11781486 | 0.256 | 0.117 | 6.23E-35 | Mono_UCBMC |
| ENSMMUG00000059742 | 3.43E-39 | 0.23452597 | 0.308 | 0.151 | 1.22E-34 | Mono_UCBMC |
| NCOA4              | 5.53E-39 | 0.12214702 | 0.433 | 0.228 | 1.96E-34 | Mono_UCBMC |
| SARS1              | 6.79E-39 | 0.33869544 | 0.273 | 0.13  | 2.41E-34 | Mono_UCBMC |
| SMIM14             | 7.15E-39 | 0.22995969 | 0.308 | 0.152 | 2.53E-34 | Mono_UCBMC |
| REL                | 7.77E-39 | 0.18814756 | 0.793 | 0.52  | 2.75E-34 | Mono_UCBMC |
| LMAN2              | 1.11E-38 | 0.19559225 | 0.39  | 0.204 | 3.94E-34 | Mono_UCBMC |
| COX5A              | 1.63E-38 | 0.38762017 | 0.27  | 0.128 | 5.77E-34 | Mono_UCBMC |
| KDEL1              | 1.68E-38 | 0.18134801 | 0.462 | 0.25  | 5.97E-34 | Mono_UCBMC |
| ARPC2              | 1.74E-38 | 0.24750584 | 0.726 | 0.44  | 6.16E-34 | Mono_UCBMC |
| EMC6               | 2.81E-38 | 0.39673386 | 0.251 | 0.117 | 9.94E-34 | Mono_UCBMC |
| PSMB4              | 3.75E-38 | 0.12843585 | 0.405 | 0.211 | 1.33E-33 | Mono_UCBMC |
| BRI3               | 5.92E-38 | 0.18822329 | 0.346 | 0.176 | 2.10E-33 | Mono_UCBMC |
| CHIC2              | 7.05E-38 | 0.17997951 | 0.32  | 0.16  | 2.50E-33 | Mono_UCBMC |
| METAP2             | 8.28E-38 | 0.26185355 | 0.309 | 0.154 | 2.93E-33 | Mono_UCBMC |
| PRPF8              | 8.56E-38 | 0.15265793 | 0.279 | 0.133 | 3.03E-33 | Mono_UCBMC |
| CD93               | 1.16E-37 | 0.11388712 | 0.369 | 0.189 | 4.12E-33 | Mono_UCBMC |
| NME3               | 1.21E-37 | 0.24530736 | 0.308 | 0.153 | 4.28E-33 | Mono_UCBMC |
| ENSMMUG00000011798 | 1.21E-37 | 0.13182896 | 0.356 | 0.181 | 4.30E-33 | Mono_UCBMC |
| TUBA1A             | 1.88E-37 | 0.19767264 | 0.786 | 0.508 | 6.67E-33 | Mono_UCBMC |
| TAX1BP3            | 2.88E-37 | 0.22060174 | 0.271 | 0.129 | 1.02E-32 | Mono_UCBMC |
| HDAC1              | 3.35E-37 | 0.31806854 | 0.253 | 0.12  | 1.19E-32 | Mono_UCBMC |
| PRKAR1A            | 4.51E-37 | 0.2046268  | 0.367 | 0.191 | 1.60E-32 | Mono_UCBMC |
| MEF2C              | 5.22E-37 | 0.13818522 | 0.601 | 0.355 | 1.85E-32 | Mono_UCBMC |
| IK                 | 5.48E-37 | 0.16898452 | 0.513 | 0.286 | 1.94E-32 | Mono_UCBMC |
| ENSMMUG00000006778 | 7.71E-37 | 0.16347234 | 0.329 | 0.166 | 2.73E-32 | Mono_UCBMC |

|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| ENSMMUG00000028699 | 7.74E-37 | 0.1660731  | 0.684 | 0.409 | 2.74E-32 | Mono_UCBMC |
| ATP5PO             | 7.75E-37 | 0.24503373 | 0.782 | 0.502 | 2.75E-32 | Mono_UCBMC |
| PSMA7              | 9.70E-37 | 0.27685335 | 0.77  | 0.492 | 3.44E-32 | Mono_UCBMC |
| ENSMMUG00000049151 | 1.24E-36 | 0.24000167 | 0.963 | 0.856 | 4.39E-32 | Mono_UCBMC |
| NADK               | 1.96E-36 | 0.22244802 | 0.313 | 0.159 | 6.93E-32 | Mono_UCBMC |
| RASA3              | 2.16E-36 | 0.23229797 | 0.258 | 0.123 | 7.66E-32 | Mono_UCBMC |
| ATF7               | 2.18E-36 | 0.43427946 | 0.264 | 0.129 | 7.73E-32 | Mono_UCBMC |
| LSM4               | 2.47E-36 | 0.31763848 | 0.265 | 0.127 | 8.74E-32 | Mono_UCBMC |
| POLR1D             | 2.63E-36 | 0.16723526 | 0.531 | 0.298 | 9.31E-32 | Mono_UCBMC |
| ALOX5AP            | 2.76E-36 | 0.14487084 | 0.67  | 0.41  | 9.76E-32 | Mono_UCBMC |
| SKAP2              | 4.29E-36 | 0.19858276 | 0.688 | 0.412 | 1.52E-31 | Mono_UCBMC |
| BCAP31             | 4.85E-36 | 0.2214367  | 0.282 | 0.139 | 1.72E-31 | Mono_UCBMC |
| ENSMMUG00000022769 | 5.22E-36 | 0.23094992 | 0.803 | 0.512 | 1.85E-31 | Mono_UCBMC |
| NSRP1              | 7.70E-36 | 0.25193522 | 0.302 | 0.154 | 2.73E-31 | Mono_UCBMC |
| SVBP               | 1.09E-35 | 0.22579581 | 0.253 | 0.12  | 3.86E-31 | Mono_UCBMC |
| ENSMMUG00000042951 | 2.25E-35 | 0.22117466 | 0.346 | 0.18  | 7.96E-31 | Mono_UCBMC |
| GRPEL1             | 3.19E-35 | 0.134982   | 0.359 | 0.187 | 1.13E-30 | Mono_UCBMC |
| TPM4               | 9.13E-35 | 0.1182507  | 0.524 | 0.295 | 3.23E-30 | Mono_UCBMC |
| COX16              | 1.04E-34 | 0.14656694 | 0.558 | 0.32  | 3.67E-30 | Mono_UCBMC |
| ADCY7              | 1.22E-34 | 0.21756957 | 0.277 | 0.137 | 4.31E-30 | Mono_UCBMC |
| UBE2L3             | 1.64E-34 | 0.13922845 | 0.476 | 0.263 | 5.83E-30 | Mono_UCBMC |
| NOP58              | 1.99E-34 | 0.10681571 | 0.285 | 0.142 | 7.06E-30 | Mono_UCBMC |
| PSAP               | 4.04E-34 | 0.18640004 | 0.967 | 0.894 | 1.43E-29 | Mono_UCBMC |
| NDUFS4             | 5.63E-34 | 0.3307032  | 0.309 | 0.161 | 1.99E-29 | Mono_UCBMC |
| RNASE4             | 8.34E-34 | 0.11614827 | 0.38  | 0.205 | 2.95E-29 | Mono_UCBMC |
| LZIC               | 1.56E-33 | 0.23507159 | 0.259 | 0.127 | 5.54E-29 | Mono_UCBMC |
| JAML               | 1.75E-33 | 0.10595717 | 0.546 | 0.313 | 6.21E-29 | Mono_UCBMC |
| CLEC7A             | 2.55E-33 | 0.20285884 | 0.268 | 0.134 | 9.05E-29 | Mono_UCBMC |
| SNAP23             | 3.12E-33 | 0.17016342 | 0.28  | 0.141 | 1.10E-28 | Mono_UCBMC |
| SMU1               | 3.46E-33 | 0.23350072 | 0.297 | 0.152 | 1.23E-28 | Mono_UCBMC |
| ARF6               | 5.04E-33 | 0.17216912 | 0.305 | 0.158 | 1.79E-28 | Mono_UCBMC |
| UBE2V2             | 5.90E-33 | 0.1618325  | 0.261 | 0.129 | 2.09E-28 | Mono_UCBMC |
| DEK                | 6.46E-33 | 0.14449718 | 0.287 | 0.146 | 2.29E-28 | Mono_UCBMC |

|         |          |            |       |       |          |            |
|---------|----------|------------|-------|-------|----------|------------|
| ACTB    | 8.12E-33 | 0.18189007 | 0.972 | 0.959 | 2.88E-28 | Mono_UCBMC |
| SNX10   | 1.01E-32 | 0.14354182 | 0.26  | 0.128 | 3.59E-28 | Mono_UCBMC |
| CSF2RB  | 1.29E-32 | 0.15400997 | 0.277 | 0.139 | 4.56E-28 | Mono_UCBMC |
| CHCHD3  | 3.56E-32 | 0.1354977  | 0.282 | 0.144 | 1.26E-27 | Mono_UCBMC |
| UQCRB   | 4.38E-32 | 0.12130264 | 0.439 | 0.245 | 1.55E-27 | Mono_UCBMC |
| TWF2    | 5.33E-32 | 0.14101187 | 0.626 | 0.372 | 1.89E-27 | Mono_UCBMC |
| HSPA8   | 9.57E-32 | 0.13777901 | 0.608 | 0.363 | 3.39E-27 | Mono_UCBMC |
| SLC25A3 | 9.71E-32 | 0.18180387 | 0.712 | 0.439 | 3.44E-27 | Mono_UCBMC |
| PCMT1   | 1.01E-31 | 0.26944989 | 0.275 | 0.141 | 3.57E-27 | Mono_UCBMC |
| UBE2N   | 1.13E-31 | 0.16506452 | 0.46  | 0.261 | 4.00E-27 | Mono_UCBMC |
| ARF4    | 1.49E-31 | 0.24760548 | 0.788 | 0.522 | 5.29E-27 | Mono_UCBMC |
| STAT1   | 1.75E-31 | 0.23284623 | 0.318 | 0.171 | 6.22E-27 | Mono_UCBMC |
| PSMA5   | 2.08E-31 | 0.10283741 | 0.373 | 0.199 | 7.36E-27 | Mono_UCBMC |
| ANP32A  | 4.17E-31 | 0.133874   | 0.626 | 0.374 | 1.48E-26 | Mono_UCBMC |
| UBE2D1  | 5.90E-31 | 0.14345445 | 0.325 | 0.174 | 2.09E-26 | Mono_UCBMC |
| DARS1   | 8.57E-31 | 0.12612222 | 0.334 | 0.179 | 3.04E-26 | Mono_UCBMC |
| SELENOS | 9.91E-31 | 0.10886968 | 0.575 | 0.342 | 3.51E-26 | Mono_UCBMC |
| CREG1   | 4.31E-30 | 0.12008624 | 0.269 | 0.137 | 1.53E-25 | Mono_UCBMC |
| GOLGA1  | 4.46E-30 | 0.31766308 | 0.657 | 0.462 | 1.58E-25 | Mono_UCBMC |
| PTGES3  | 7.07E-30 | 0.15837656 | 0.665 | 0.4   | 2.51E-25 | Mono_UCBMC |
| NUDC    | 7.96E-30 | 0.13343819 | 0.393 | 0.219 | 2.82E-25 | Mono_UCBMC |
| CCT2    | 1.09E-29 | 0.16960478 | 0.331 | 0.181 | 3.86E-25 | Mono_UCBMC |
| STX7    | 1.28E-29 | 0.11363201 | 0.336 | 0.181 | 4.52E-25 | Mono_UCBMC |
| TMBIM6  | 1.79E-29 | 0.19040079 | 0.741 | 0.468 | 6.35E-25 | Mono_UCBMC |
| FIBP    | 1.82E-29 | 0.11315168 | 0.322 | 0.172 | 6.45E-25 | Mono_UCBMC |
| MAMU-A  | 4.34E-29 | 0.19272601 | 0.808 | 0.557 | 1.54E-24 | Mono_UCBMC |
| SSR3    | 6.79E-29 | 0.12411427 | 0.458 | 0.265 | 2.40E-24 | Mono_UCBMC |
| BTF3L4  | 7.11E-29 | 0.117126   | 0.367 | 0.202 | 2.52E-24 | Mono_UCBMC |
| CLDND1  | 8.79E-29 | 0.10214884 | 0.317 | 0.171 | 3.11E-24 | Mono_UCBMC |
| TMCO1   | 1.16E-28 | 0.21697279 | 0.274 | 0.144 | 4.12E-24 | Mono_UCBMC |
| MPEG1   | 1.37E-28 | 0.13269739 | 0.732 | 0.458 | 4.87E-24 | Mono_UCBMC |
| FCN1    | 1.65E-28 | 0.23112032 | 0.773 | 0.537 | 5.86E-24 | Mono_UCBMC |
| ZMAT2   | 1.66E-28 | 0.18640799 | 0.262 | 0.135 | 5.89E-24 | Mono_UCBMC |

|                    |           |            |       |       |           |             |
|--------------------|-----------|------------|-------|-------|-----------|-------------|
| DPH6               | 1.73E-28  | 0.21224838 | 0.254 | 0.133 | 6.12E-24  | Mono_UCBMC  |
| ENSMMUG00000019238 | 1.89E-28  | 0.10586832 | 0.266 | 0.138 | 6.68E-24  | Mono_UCBMC  |
| C1D                | 4.42E-28  | 0.17981019 | 0.296 | 0.159 | 1.57E-23  | Mono_UCBMC  |
| TAF7               | 5.85E-28  | 0.11802628 | 0.336 | 0.185 | 2.07E-23  | Mono_UCBMC  |
| HADHB              | 1.41E-27  | 0.10552465 | 0.273 | 0.145 | 4.99E-23  | Mono_UCBMC  |
| ATP6V0E1           | 2.39E-27  | 0.12058669 | 0.737 | 0.457 | 8.47E-23  | Mono_UCBMC  |
| RPL9               | 3.35E-27  | 0.22819057 | 0.958 | 0.853 | 1.19E-22  | Mono_UCBMC  |
| XRCC4              | 2.51E-26  | 0.17206164 | 0.269 | 0.146 | 8.91E-22  | Mono_UCBMC  |
| ATP6V1E1           | 2.93E-26  | 0.10961942 | 0.301 | 0.166 | 1.04E-21  | Mono_UCBMC  |
| RACK1              | 5.70E-26  | 0.19835156 | 0.963 | 0.914 | 2.02E-21  | Mono_UCBMC  |
| BTG2               | 1.42E-25  | 0.19624491 | 0.865 | 0.623 | 5.04E-21  | Mono_UCBMC  |
| STOML2             | 3.88E-25  | 0.14531656 | 0.255 | 0.136 | 1.37E-20  | Mono_UCBMC  |
| APEX1              | 5.85E-25  | 0.11732753 | 0.305 | 0.169 | 2.07E-20  | Mono_UCBMC  |
| TIMM17A            | 1.65E-24  | 0.13220284 | 0.273 | 0.149 | 5.85E-20  | Mono_UCBMC  |
| RPS11              | 4.24E-24  | 0.19135533 | 0.967 | 0.91  | 1.50E-19  | Mono_UCBMC  |
| CCND3              | 3.09E-23  | 0.14626002 | 0.25  | 0.138 | 1.09E-18  | Mono_UCBMC  |
| PTPRC              | 4.19E-23  | 0.12501406 | 0.934 | 0.74  | 1.48E-18  | Mono_UCBMC  |
| HNRNPK             | 9.16E-23  | 0.17752755 | 0.776 | 0.523 | 3.25E-18  | Mono_UCBMC  |
| RHOA               | 3.48E-22  | 0.18503342 | 0.879 | 0.638 | 1.23E-17  | Mono_UCBMC  |
| VIM                | 1.12E-21  | 0.19714913 | 0.962 | 0.909 | 3.99E-17  | Mono_UCBMC  |
| HMGB1              | 5.48E-21  | 0.14742286 | 0.862 | 0.618 | 1.94E-16  | Mono_UCBMC  |
| CD37               | 6.53E-21  | 0.10827329 | 0.808 | 0.55  | 2.31E-16  | Mono_UCBMC  |
| TBC1D24            | 1.05E-20  | 0.14925164 | 0.891 | 0.666 | 3.71E-16  | Mono_UCBMC  |
| ENSMMUG00000055584 | 3.21E-20  | 0.18151434 | 0.936 | 0.767 | 1.14E-15  | Mono_UCBMC  |
| TSPO               | 4.51E-20  | 0.17391593 | 0.923 | 0.75  | 1.60E-15  | Mono_UCBMC  |
| YWHAB              | 1.94E-19  | 0.10629844 | 0.78  | 0.518 | 6.89E-15  | Mono_UCBMC  |
| RNASE6             | 7.42E-19  | 0.14369422 | 0.903 | 0.719 | 2.63E-14  | Mono_UCBMC  |
| RPL15              | 6.55E-16  | 0.17493669 | 0.944 | 0.848 | 2.32E-11  | Mono_UCBMC  |
| SRGN               | 9.73E-11  | 0.10174893 | 0.965 | 0.878 | 3.45E-06  | Mono_UCBMC  |
| CD52               | 1.14E-09  | 0.12446983 | 0.95  | 0.885 | 4.03E-05  | Mono_UCBMC  |
| TRAPPC5            | 1.32E-297 | 2.30194883 | 0.534 | 0.06  | 4.67E-293 | Mono_spleen |
| ENSMMUG00000051300 | 1.29E-259 | 2.42876228 | 0.991 | 0.542 | 4.56E-255 | Mono_spleen |
| SRRM2              | 1.49E-238 | 2.05708286 | 0.765 | 0.164 | 5.30E-234 | Mono_spleen |

|                    |           |            |       |       |           |             |
|--------------------|-----------|------------|-------|-------|-----------|-------------|
| RHOB               | 7.12E-234 | 2.80572171 | 0.51  | 0.075 | 2.52E-229 | Mono_spleen |
| RAB11FIP1          | 8.28E-228 | 2.23225938 | 0.75  | 0.173 | 2.93E-223 | Mono_spleen |
| ENSMMUG00000046264 | 1.11E-226 | 2.2261848  | 0.782 | 0.193 | 3.93E-222 | Mono_spleen |
| MAP3K1             | 2.85E-220 | 2.31745928 | 0.644 | 0.13  | 1.01E-215 | Mono_spleen |
| H1FX               | 6.12E-202 | 2.59804608 | 0.334 | 0.034 | 2.17E-197 | Mono_spleen |
| CFD                | 8.12E-198 | 2.27179853 | 0.925 | 0.597 | 2.88E-193 | Mono_spleen |
| ENSMMUG00000040065 | 5.69E-195 | 2.78357002 | 0.275 | 0.023 | 2.02E-190 | Mono_spleen |
| ENSMMUG00000054358 | 6.02E-194 | 2.73941711 | 0.985 | 0.605 | 2.13E-189 | Mono_spleen |
| RPL13              | 2.61E-191 | 1.9073254  | 0.919 | 0.725 | 9.24E-187 | Mono_spleen |
| JUN                | 5.28E-190 | 2.39887789 | 0.798 | 0.261 | 1.87E-185 | Mono_spleen |
| TMEM131L           | 1.15E-188 | 2.08642063 | 0.655 | 0.151 | 4.09E-184 | Mono_spleen |
| FOXO3              | 4.93E-184 | 1.89663859 | 0.886 | 0.314 | 1.75E-179 | Mono_spleen |
| KLF6               | 4.57E-177 | 1.82873346 | 0.941 | 0.502 | 1.62E-172 | Mono_spleen |
| FOS                | 2.90E-176 | 1.85159806 | 0.961 | 0.551 | 1.03E-171 | Mono_spleen |
| OSBPL8             | 7.94E-173 | 1.91259069 | 0.928 | 0.409 | 2.81E-168 | Mono_spleen |
| DOCK5              | 1.61E-172 | 1.81538096 | 0.837 | 0.263 | 5.71E-168 | Mono_spleen |
| ACAP2              | 3.81E-172 | 1.84534158 | 0.875 | 0.327 | 1.35E-167 | Mono_spleen |
| RAP1GAP2           | 8.43E-172 | 1.82238397 | 0.717 | 0.194 | 2.99E-167 | Mono_spleen |
| INPP5D             | 2.91E-171 | 1.94789184 | 0.677 | 0.173 | 1.03E-166 | Mono_spleen |
| CREBRF             | 4.96E-170 | 1.98141698 | 0.668 | 0.167 | 1.76E-165 | Mono_spleen |
| RNF24              | 1.93E-165 | 2.34907144 | 0.527 | 0.108 | 6.83E-161 | Mono_spleen |
| RASSF3             | 1.86E-163 | 2.3477198  | 0.481 | 0.092 | 6.60E-159 | Mono_spleen |
| IKZF1              | 1.19E-161 | 1.88677723 | 0.69  | 0.191 | 4.20E-157 | Mono_spleen |
| SORL1              | 1.51E-161 | 2.35433763 | 0.679 | 0.184 | 5.35E-157 | Mono_spleen |
| ANKRD44            | 1.35E-160 | 1.61402896 | 0.941 | 0.419 | 4.78E-156 | Mono_spleen |
| NCOA3              | 2.15E-160 | 1.64264627 | 0.95  | 0.467 | 7.63E-156 | Mono_spleen |
| TMEM160            | 7.72E-159 | 2.056558   | 0.294 | 0.034 | 2.73E-154 | Mono_spleen |
| FBXW7              | 7.20E-158 | 1.69233876 | 0.892 | 0.345 | 2.55E-153 | Mono_spleen |
| RSRP1              | 1.10E-155 | 1.63586762 | 0.791 | 0.239 | 3.90E-151 | Mono_spleen |
| COP1               | 3.25E-155 | 1.63449918 | 0.829 | 0.271 | 1.15E-150 | Mono_spleen |
| TTC7A              | 1.78E-154 | 2.28280955 | 0.36  | 0.054 | 6.32E-150 | Mono_spleen |
| KLF4               | 3.57E-154 | 1.81123724 | 0.806 | 0.281 | 1.26E-149 | Mono_spleen |
| DOCK8              | 7.73E-154 | 1.60891016 | 0.936 | 0.421 | 2.74E-149 | Mono_spleen |



|                    |           |            |       |       |           |             |
|--------------------|-----------|------------|-------|-------|-----------|-------------|
| TRAK1              | 1.38E-153 | 1.78320507 | 0.661 | 0.178 | 4.89E-149 | Mono_spleen |
| RC3H1              | 2.89E-153 | 1.84831478 | 0.635 | 0.16  | 1.02E-148 | Mono_spleen |
| ZMYND8             | 3.24E-153 | 2.35472591 | 0.361 | 0.055 | 1.15E-148 | Mono_spleen |
| SLMAP              | 5.64E-151 | 1.75096754 | 0.749 | 0.23  | 2.00E-146 | Mono_spleen |
| STK17B             | 1.98E-149 | 1.54516815 | 0.91  | 0.363 | 7.00E-145 | Mono_spleen |
| RFX3               | 3.58E-149 | 1.6808451  | 0.719 | 0.213 | 1.27E-144 | Mono_spleen |
| TXNL4A             | 5.55E-149 | 1.96084457 | 0.332 | 0.046 | 1.97E-144 | Mono_spleen |
| SQSTM1             | 2.65E-148 | 1.81000367 | 0.69  | 0.194 | 9.39E-144 | Mono_spleen |
| ENSMMUG00000052127 | 3.76E-148 | 1.78860224 | 1     | 0.831 | 1.33E-143 | Mono_spleen |
| NUDT8              | 4.31E-148 | 1.93840858 | 0.297 | 0.037 | 1.53E-143 | Mono_spleen |
| JMY                | 1.76E-147 | 2.20943245 | 0.393 | 0.067 | 6.23E-143 | Mono_spleen |
| JMJD1C             | 8.03E-147 | 1.62334458 | 0.95  | 0.552 | 2.84E-142 | Mono_spleen |
| ANKS1A             | 2.48E-146 | 2.22792198 | 0.336 | 0.05  | 8.77E-142 | Mono_spleen |
| DENND1A            | 4.22E-145 | 1.51564323 | 0.831 | 0.296 | 1.50E-140 | Mono_spleen |
| MYLIP              | 6.28E-145 | 2.18536679 | 0.525 | 0.12  | 2.23E-140 | Mono_spleen |
| FCHO2              | 8.71E-145 | 1.77514536 | 0.705 | 0.208 | 3.09E-140 | Mono_spleen |
| RPS6KA5            | 8.80E-145 | 2.14369068 | 0.503 | 0.11  | 3.12E-140 | Mono_spleen |
| ENSMMUG00000051957 | 9.58E-145 | 1.90332485 | 0.587 | 0.147 | 3.39E-140 | Mono_spleen |
| MAP3K5             | 2.96E-143 | 1.8910834  | 0.56  | 0.136 | 1.05E-138 | Mono_spleen |
| CMIP               | 8.58E-143 | 1.4532723  | 0.78  | 0.245 | 3.04E-138 | Mono_spleen |
| ARIH1              | 8.87E-143 | 1.59779288 | 0.807 | 0.283 | 3.14E-138 | Mono_spleen |
| MAPK14             | 1.58E-142 | 1.9564171  | 0.45  | 0.089 | 5.60E-138 | Mono_spleen |
| PAN3               | 1.91E-142 | 1.57009226 | 0.824 | 0.292 | 6.78E-138 | Mono_spleen |
| CHCHD10            | 2.69E-142 | 1.71228876 | 0.415 | 0.074 | 9.52E-138 | Mono_spleen |
| MLLT10             | 3.19E-142 | 1.68791677 | 0.558 | 0.133 | 1.13E-137 | Mono_spleen |
| YEATS2             | 1.92E-141 | 1.63281396 | 0.688 | 0.197 | 6.79E-137 | Mono_spleen |
| RCSD1              | 3.18E-141 | 1.5903275  | 0.741 | 0.228 | 1.13E-136 | Mono_spleen |
| AFF1               | 4.19E-141 | 1.91822954 | 0.536 | 0.127 | 1.48E-136 | Mono_spleen |
| ENSMMUG00000042837 | 5.86E-141 | 2.48515928 | 0.411 | 0.078 | 2.08E-136 | Mono_spleen |
| FLI1               | 9.88E-140 | 1.69131084 | 0.596 | 0.15  | 3.50E-135 | Mono_spleen |
| KDM6A              | 1.39E-139 | 1.49857065 | 0.806 | 0.275 | 4.94E-135 | Mono_spleen |
| IPMK               | 3.19E-139 | 1.61367399 | 0.717 | 0.213 | 1.13E-134 | Mono_spleen |
| CCDC88C            | 1.22E-138 | 1.78209124 | 0.519 | 0.118 | 4.33E-134 | Mono_spleen |

|                    |           |            |       |       |           |             |
|--------------------|-----------|------------|-------|-------|-----------|-------------|
| UVRAG              | 4.25E-138 | 1.53381824 | 0.802 | 0.286 | 1.51E-133 | Mono_spleen |
| TNRC18             | 2.82E-137 | 1.86071916 | 0.468 | 0.098 | 1.00E-132 | Mono_spleen |
| MTDH               | 3.32E-137 | 1.61072569 | 0.615 | 0.162 | 1.18E-132 | Mono_spleen |
| WDFY2              | 4.92E-137 | 1.6924948  | 0.705 | 0.213 | 1.74E-132 | Mono_spleen |
| PI4K2A             | 1.61E-136 | 2.04836184 | 0.413 | 0.079 | 5.72E-132 | Mono_spleen |
| IL17RA             | 2.76E-136 | 1.77536727 | 0.428 | 0.082 | 9.79E-132 | Mono_spleen |
| MED13L             | 1.26E-134 | 1.39777446 | 0.95  | 0.495 | 4.45E-130 | Mono_spleen |
| ENSMMUG00000051870 | 6.04E-134 | 1.94911515 | 0.385 | 0.07  | 2.14E-129 | Mono_spleen |
| APBB1IP            | 6.46E-134 | 1.46340847 | 0.877 | 0.371 | 2.29E-129 | Mono_spleen |
| CTBP2              | 9.07E-134 | 1.48681751 | 0.558 | 0.136 | 3.21E-129 | Mono_spleen |
| ZSWIM6             | 6.21E-133 | 1.45512072 | 0.851 | 0.346 | 2.20E-128 | Mono_spleen |
| ENSMMUG00000049833 | 8.05E-133 | 2.91341853 | 0.299 | 0.044 | 2.85E-128 | Mono_spleen |
| VPS8               | 6.88E-131 | 1.70432044 | 0.481 | 0.108 | 2.44E-126 | Mono_spleen |
| ELMO1              | 2.22E-130 | 1.3412998  | 0.963 | 0.502 | 7.86E-126 | Mono_spleen |
| PRKAG2             | 2.64E-130 | 1.50499827 | 0.697 | 0.212 | 9.34E-126 | Mono_spleen |
| AKAP13             | 6.77E-130 | 1.39599459 | 0.916 | 0.442 | 2.40E-125 | Mono_spleen |
| ELL                | 1.05E-129 | 1.70832755 | 0.714 | 0.226 | 3.72E-125 | Mono_spleen |
| ARID1B             | 1.16E-129 | 1.38886148 | 0.765 | 0.26  | 4.11E-125 | Mono_spleen |
| DOCK11             | 9.51E-129 | 1.50137976 | 0.701 | 0.218 | 3.37E-124 | Mono_spleen |
| ATF7IP             | 1.39E-128 | 1.53978604 | 0.868 | 0.387 | 4.93E-124 | Mono_spleen |
| ST6GAL1            | 1.66E-128 | 2.19930692 | 0.42  | 0.087 | 5.87E-124 | Mono_spleen |
| ENSMMUG00000028906 | 1.71E-128 | 1.92131348 | 0.428 | 0.089 | 6.06E-124 | Mono_spleen |
| SLCO3A1            | 7.87E-128 | 1.4993374  | 0.699 | 0.219 | 2.79E-123 | Mono_spleen |
| PPP3CA             | 8.50E-128 | 1.47204065 | 0.881 | 0.377 | 3.01E-123 | Mono_spleen |
| GNAQ               | 1.13E-127 | 1.68403097 | 0.822 | 0.326 | 3.99E-123 | Mono_spleen |
| MAPK1              | 1.65E-127 | 1.66676417 | 0.578 | 0.15  | 5.85E-123 | Mono_spleen |
| RELCH              | 1.14E-126 | 1.76803302 | 0.47  | 0.106 | 4.03E-122 | Mono_spleen |
| YPEL5              | 1.86E-126 | 1.56180917 | 0.747 | 0.249 | 6.59E-122 | Mono_spleen |
| ZNF609             | 8.34E-126 | 1.76274866 | 0.596 | 0.165 | 2.95E-121 | Mono_spleen |
| SUCO               | 8.70E-126 | 1.78688178 | 0.543 | 0.14  | 3.08E-121 | Mono_spleen |
| PHF21A             | 1.57E-125 | 1.47268482 | 0.727 | 0.246 | 5.57E-121 | Mono_spleen |
| HECA               | 3.12E-125 | 1.71037652 | 0.501 | 0.118 | 1.10E-120 | Mono_spleen |
| NSD1               | 8.26E-125 | 1.53554438 | 0.569 | 0.148 | 2.93E-120 | Mono_spleen |

|             |           |            |       |       |           |             |
|-------------|-----------|------------|-------|-------|-----------|-------------|
| FBXO34      | 1.40E-124 | 1.65802981 | 0.725 | 0.249 | 4.97E-120 | Mono_spleen |
| FBXL20      | 2.52E-124 | 1.71263876 | 0.539 | 0.138 | 8.93E-120 | Mono_spleen |
| TLE4        | 2.92E-124 | 1.53014348 | 0.686 | 0.212 | 1.03E-119 | Mono_spleen |
| UBR2        | 4.28E-124 | 1.81882351 | 0.51  | 0.125 | 1.52E-119 | Mono_spleen |
| ATRN        | 5.05E-124 | 1.95289437 | 0.347 | 0.061 | 1.79E-119 | Mono_spleen |
| USP24       | 9.28E-124 | 1.66263598 | 0.462 | 0.103 | 3.29E-119 | Mono_spleen |
| TMEM170B    | 1.36E-123 | 2.03826045 | 0.391 | 0.077 | 4.84E-119 | Mono_spleen |
| LYST        | 6.47E-123 | 1.55792382 | 0.761 | 0.269 | 2.29E-118 | Mono_spleen |
| PPP2R5E     | 7.12E-123 | 1.66419956 | 0.484 | 0.114 | 2.52E-118 | Mono_spleen |
| TOP1        | 8.46E-123 | 1.43028964 | 0.853 | 0.351 | 3.00E-118 | Mono_spleen |
| SPPL3       | 9.22E-123 | 1.62992351 | 0.639 | 0.192 | 3.27E-118 | Mono_spleen |
| TRIR        | 1.28E-122 | 1.43102114 | 0.725 | 0.243 | 4.54E-118 | Mono_spleen |
| MZT2B       | 1.62E-122 | 1.50898733 | 0.528 | 0.13  | 5.75E-118 | Mono_spleen |
| PLCL2       | 2.23E-122 | 1.77205198 | 0.494 | 0.12  | 7.91E-118 | Mono_spleen |
| SOS1        | 5.54E-122 | 1.51467245 | 0.593 | 0.164 | 1.96E-117 | Mono_spleen |
| IFRD1       | 9.01E-122 | 1.76445594 | 0.582 | 0.163 | 3.19E-117 | Mono_spleen |
| C1QBP       | 1.03E-121 | 1.89266666 | 0.268 | 0.037 | 3.65E-117 | Mono_spleen |
| TMCC1       | 1.87E-121 | 1.6680991  | 0.618 | 0.184 | 6.64E-117 | Mono_spleen |
| TBC1D5      | 5.85E-121 | 1.36949829 | 0.866 | 0.367 | 2.07E-116 | Mono_spleen |
| MGAT5       | 6.02E-121 | 1.39608071 | 0.653 | 0.195 | 2.13E-116 | Mono_spleen |
| NCOR1       | 7.90E-121 | 1.42377269 | 0.631 | 0.184 | 2.80E-116 | Mono_spleen |
| SGMS1       | 1.06E-120 | 1.62425213 | 0.688 | 0.218 | 3.75E-116 | Mono_spleen |
| KIF13A      | 1.16E-120 | 1.79501194 | 0.543 | 0.145 | 4.12E-116 | Mono_spleen |
| LRRC8D      | 2.32E-120 | 1.86678551 | 0.417 | 0.089 | 8.21E-116 | Mono_spleen |
| MAML2       | 2.41E-120 | 1.62599522 | 0.767 | 0.294 | 8.54E-116 | Mono_spleen |
| KDM2A       | 3.98E-120 | 1.44184334 | 0.738 | 0.246 | 1.41E-115 | Mono_spleen |
| FAM117B     | 6.62E-120 | 2.28351839 | 0.361 | 0.07  | 2.35E-115 | Mono_spleen |
| HSPH1       | 1.12E-119 | 1.86396808 | 0.407 | 0.086 | 3.96E-115 | Mono_spleen |
| SPECC1      | 5.26E-119 | 1.88378249 | 0.44  | 0.1   | 1.86E-114 | Mono_spleen |
| BMP2K       | 5.63E-119 | 1.57598024 | 0.494 | 0.121 | 2.00E-114 | Mono_spleen |
| C10H20orf24 | 7.53E-119 | 1.36867317 | 0.664 | 0.202 | 2.67E-114 | Mono_spleen |
| OSBPL9      | 1.61E-118 | 1.39391007 | 0.734 | 0.255 | 5.71E-114 | Mono_spleen |
| C20H16orf72 | 1.65E-118 | 1.42247437 | 0.628 | 0.181 | 5.86E-114 | Mono_spleen |

|                    |           |            |       |       |           |             |
|--------------------|-----------|------------|-------|-------|-----------|-------------|
| ATF3               | 6.53E-118 | 1.55539444 | 0.664 | 0.212 | 2.31E-113 | Mono_spleen |
| ABCC1              | 1.30E-117 | 1.50828127 | 0.541 | 0.143 | 4.59E-113 | Mono_spleen |
| KLF7               | 1.86E-117 | 1.51647299 | 0.789 | 0.31  | 6.58E-113 | Mono_spleen |
| HERC1              | 3.47E-117 | 1.51719809 | 0.589 | 0.166 | 1.23E-112 | Mono_spleen |
| NOP53              | 3.89E-117 | 1.18462068 | 0.556 | 0.142 | 1.38E-112 | Mono_spleen |
| PRKCB              | 7.48E-117 | 1.51415712 | 0.716 | 0.242 | 2.65E-112 | Mono_spleen |
| CPEB3              | 1.24E-116 | 1.89949377 | 0.336 | 0.06  | 4.39E-112 | Mono_spleen |
| NFATC3             | 1.70E-116 | 1.73471948 | 0.466 | 0.111 | 6.04E-112 | Mono_spleen |
| NCOA2              | 1.81E-116 | 1.46998414 | 0.664 | 0.213 | 6.40E-112 | Mono_spleen |
| MBNL1              | 6.18E-116 | 1.34721052 | 0.945 | 0.557 | 2.19E-111 | Mono_spleen |
| TCF12              | 1.28E-115 | 1.41091069 | 0.721 | 0.249 | 4.55E-111 | Mono_spleen |
| RABGAP1L           | 2.15E-115 | 1.38979336 | 0.875 | 0.392 | 7.61E-111 | Mono_spleen |
| MKLN1              | 4.17E-115 | 1.58064738 | 0.606 | 0.181 | 1.48E-110 | Mono_spleen |
| COX5A              | 5.80E-115 | 1.3715319  | 0.523 | 0.132 | 2.05E-110 | Mono_spleen |
| TCOF1              | 1.16E-114 | 2.13138013 | 0.35  | 0.067 | 4.09E-110 | Mono_spleen |
| SCAF4              | 2.34E-114 | 1.53466872 | 0.486 | 0.119 | 8.29E-110 | Mono_spleen |
| PI4KA              | 3.10E-114 | 1.5882179  | 0.431 | 0.097 | 1.10E-109 | Mono_spleen |
| SLC15A2            | 3.14E-113 | 1.98824285 | 0.262 | 0.038 | 1.11E-108 | Mono_spleen |
| SYNJ1              | 5.37E-113 | 1.48507292 | 0.539 | 0.144 | 1.90E-108 | Mono_spleen |
| ATXN2              | 1.67E-112 | 1.48756945 | 0.558 | 0.154 | 5.91E-108 | Mono_spleen |
| PTGER4             | 2.85E-112 | 1.68367334 | 0.527 | 0.143 | 1.01E-107 | Mono_spleen |
| IP6K1              | 3.60E-112 | 1.72441665 | 0.418 | 0.093 | 1.27E-107 | Mono_spleen |
| RNF145             | 8.78E-112 | 1.67692801 | 0.466 | 0.113 | 3.11E-107 | Mono_spleen |
| CEP85L             | 9.81E-112 | 1.59348076 | 0.65  | 0.205 | 3.48E-107 | Mono_spleen |
| DGCR2              | 1.26E-111 | 1.5957166  | 0.527 | 0.142 | 4.47E-107 | Mono_spleen |
| SMCHD1             | 1.27E-111 | 1.65538527 | 0.639 | 0.199 | 4.50E-107 | Mono_spleen |
| ENSMMUG00000011588 | 2.74E-111 | 1.74816656 | 0.376 | 0.077 | 9.70E-107 | Mono_spleen |
| SETD7              | 4.06E-111 | 1.78472802 | 0.431 | 0.1   | 1.44E-106 | Mono_spleen |
| EVI5               | 4.22E-111 | 1.31660559 | 0.767 | 0.286 | 1.49E-106 | Mono_spleen |
| DENND6A            | 5.57E-111 | 1.82804455 | 0.371 | 0.076 | 1.97E-106 | Mono_spleen |
| STXBP6             | 5.93E-111 | 1.8654556  | 0.391 | 0.084 | 2.10E-106 | Mono_spleen |
| LRRFIP1            | 9.05E-111 | 1.31848236 | 0.87  | 0.382 | 3.21E-106 | Mono_spleen |
| ERO1B              | 2.30E-110 | 1.63062625 | 0.494 | 0.126 | 8.14E-106 | Mono_spleen |

|                     |           |            |       |       |           |             |
|---------------------|-----------|------------|-------|-------|-----------|-------------|
| DLG1                | 2.34E-110 | 1.37504201 | 0.686 | 0.229 | 8.30E-106 | Mono_spleen |
| JAK2                | 3.24E-110 | 1.36012335 | 0.794 | 0.298 | 1.15E-105 | Mono_spleen |
| PLCG2               | 3.30E-110 | 1.80824599 | 0.415 | 0.093 | 1.17E-105 | Mono_spleen |
| AURKAIP1            | 4.09E-110 | 1.30547019 | 0.321 | 0.056 | 1.45E-105 | Mono_spleen |
| WASL                | 4.53E-110 | 1.64599305 | 0.508 | 0.135 | 1.61E-105 | Mono_spleen |
| SESN1               | 1.47E-109 | 1.75089354 | 0.398 | 0.088 | 5.22E-105 | Mono_spleen |
| CREBBP              | 1.65E-109 | 1.3254477  | 0.716 | 0.244 | 5.84E-105 | Mono_spleen |
| PRDM2               | 3.22E-109 | 1.53315042 | 0.582 | 0.17  | 1.14E-104 | Mono_spleen |
| RBMS1               | 3.25E-109 | 1.53019926 | 0.677 | 0.23  | 1.15E-104 | Mono_spleen |
| CLASP1              | 5.38E-109 | 1.57844971 | 0.426 | 0.098 | 1.91E-104 | Mono_spleen |
| RANBP2              | 6.20E-109 | 1.48888149 | 0.622 | 0.198 | 2.20E-104 | Mono_spleen |
| QKI                 | 6.59E-109 | 1.31974009 | 0.947 | 0.543 | 2.34E-104 | Mono_spleen |
| KLF12               | 8.96E-109 | 1.52569299 | 0.782 | 0.33  | 3.18E-104 | Mono_spleen |
| LCORL               | 9.05E-109 | 1.43770346 | 0.569 | 0.164 | 3.21E-104 | Mono_spleen |
| ADGRE5              | 1.13E-108 | 1.78826267 | 0.879 | 0.416 | 4.02E-104 | Mono_spleen |
| PKN2                | 1.23E-108 | 1.42511873 | 0.56  | 0.16  | 4.35E-104 | Mono_spleen |
| RFX2                | 1.55E-108 | 1.94099406 | 0.391 | 0.086 | 5.51E-104 | Mono_spleen |
| ANKRD13A            | 2.27E-108 | 2.11551827 | 0.29  | 0.049 | 8.03E-104 | Mono_spleen |
| SNX29               | 6.90E-108 | 1.44302045 | 0.64  | 0.209 | 2.45E-103 | Mono_spleen |
| TACC1               | 1.32E-107 | 1.49752599 | 0.727 | 0.265 | 4.67E-103 | Mono_spleen |
| DUSP10              | 1.50E-107 | 1.90271927 | 0.349 | 0.07  | 5.33E-103 | Mono_spleen |
| ENSMMUG00000052424  | 2.12E-107 | 1.20437575 | 0.941 | 0.533 | 7.53E-103 | Mono_spleen |
| WASF2               | 2.16E-107 | 1.30131315 | 0.725 | 0.252 | 7.65E-103 | Mono_spleen |
| IGF1R               | 2.20E-107 | 2.22400334 | 0.284 | 0.048 | 7.80E-103 | Mono_spleen |
| TAOK1               | 2.28E-107 | 1.31022615 | 0.571 | 0.166 | 8.09E-103 | Mono_spleen |
| ENSMMUG00000008417  | 2.81E-107 | 1.57827899 | 0.319 | 0.058 | 9.95E-103 | Mono_spleen |
| DIP2B               | 3.21E-107 | 1.35638457 | 0.626 | 0.193 | 1.14E-102 | Mono_spleen |
| ENSMMUG000000021153 | 3.36E-107 | 1.59966448 | 0.505 | 0.138 | 1.19E-102 | Mono_spleen |
| XPR1                | 7.56E-107 | 1.53500938 | 0.552 | 0.16  | 2.68E-102 | Mono_spleen |
| UBR3                | 7.87E-107 | 1.31402364 | 0.574 | 0.166 | 2.79E-102 | Mono_spleen |
| SP3                 | 8.93E-107 | 1.47794992 | 0.545 | 0.152 | 3.16E-102 | Mono_spleen |
| CERT1               | 1.25E-106 | 1.29904304 | 0.752 | 0.274 | 4.41E-102 | Mono_spleen |
| ME2                 | 1.96E-106 | 1.41971426 | 0.523 | 0.141 | 6.93E-102 | Mono_spleen |

|          |           |            |       |       |           |             |
|----------|-----------|------------|-------|-------|-----------|-------------|
| FAM189A1 | 2.88E-106 | 1.93007838 | 0.259 | 0.039 | 1.02E-101 | Mono_spleen |
| SETD2    | 3.18E-106 | 1.3768853  | 0.629 | 0.196 | 1.13E-101 | Mono_spleen |
| ARL15    | 3.23E-106 | 1.41687965 | 0.675 | 0.235 | 1.15E-101 | Mono_spleen |
| STIM2    | 6.28E-106 | 1.67796096 | 0.439 | 0.106 | 2.23E-101 | Mono_spleen |
| FOXN3    | 1.77E-105 | 1.23009817 | 0.829 | 0.351 | 6.26E-101 | Mono_spleen |
| ESCO1    | 2.08E-105 | 1.39638925 | 0.653 | 0.214 | 7.36E-101 | Mono_spleen |
| RERE     | 2.17E-105 | 1.36121882 | 0.631 | 0.2   | 7.70E-101 | Mono_spleen |
| RBM26    | 4.68E-105 | 1.45646815 | 0.448 | 0.108 | 1.66E-100 | Mono_spleen |
| MTMR3    | 5.60E-105 | 1.39048453 | 0.763 | 0.288 | 1.99E-100 | Mono_spleen |
| CLTA     | 7.20E-105 | 1.37485488 | 0.679 | 0.236 | 2.55E-100 | Mono_spleen |
| FAM168A  | 7.78E-105 | 1.90033448 | 0.325 | 0.063 | 2.76E-100 | Mono_spleen |
| AGPS     | 9.28E-105 | 1.46655352 | 0.477 | 0.122 | 3.29E-100 | Mono_spleen |
| LRRC8B   | 9.30E-105 | 1.54722116 | 0.446 | 0.11  | 3.30E-100 | Mono_spleen |
| GIT2     | 1.17E-104 | 1.34692677 | 0.613 | 0.187 | 4.13E-100 | Mono_spleen |
| KDM3B    | 1.30E-104 | 1.36699484 | 0.475 | 0.121 | 4.61E-100 | Mono_spleen |
| ZNF516   | 1.71E-104 | 1.73250328 | 0.336 | 0.066 | 6.08E-100 | Mono_spleen |
| AGTPBP1  | 2.27E-104 | 1.33227864 | 0.673 | 0.223 | 8.04E-100 | Mono_spleen |
| ARMH3    | 2.68E-104 | 1.53597328 | 0.428 | 0.101 | 9.50E-100 | Mono_spleen |
| FOXN2    | 2.85E-104 | 1.39521227 | 0.572 | 0.169 | 1.01E-99  | Mono_spleen |
| PHLPP1   | 3.90E-104 | 1.66694961 | 0.479 | 0.129 | 1.38E-99  | Mono_spleen |
| RNF149   | 4.13E-104 | 1.25114292 | 0.892 | 0.437 | 1.46E-99  | Mono_spleen |
| ELOVL5   | 8.68E-104 | 1.46030777 | 0.802 | 0.343 | 3.07E-99  | Mono_spleen |
| TSC22D3  | 1.53E-103 | 1.48517562 | 0.591 | 0.188 | 5.42E-99  | Mono_spleen |
| KMT2C    | 2.28E-103 | 1.17155711 | 0.917 | 0.467 | 8.07E-99  | Mono_spleen |
| MARK3    | 2.82E-103 | 1.34255821 | 0.593 | 0.181 | 9.99E-99  | Mono_spleen |
| KANSL1   | 3.23E-103 | 1.41800324 | 0.55  | 0.162 | 1.14E-98  | Mono_spleen |
| RAB1A    | 4.68E-103 | 1.22147048 | 0.879 | 0.404 | 1.66E-98  | Mono_spleen |
| INPP4A   | 6.78E-103 | 1.47442666 | 0.497 | 0.136 | 2.40E-98  | Mono_spleen |
| LDLRAD3  | 7.23E-103 | 1.246958   | 0.69  | 0.242 | 2.56E-98  | Mono_spleen |
| TMPO     | 7.26E-103 | 1.65325585 | 0.33  | 0.064 | 2.57E-98  | Mono_spleen |
| ATG7     | 7.43E-103 | 1.44759638 | 0.578 | 0.179 | 2.63E-98  | Mono_spleen |
| TMEM201  | 1.27E-102 | 1.76453478 | 0.356 | 0.075 | 4.51E-98  | Mono_spleen |
| BCAS3    | 1.91E-102 | 1.42255669 | 0.624 | 0.203 | 6.75E-98  | Mono_spleen |

|                   |           |            |       |       |          |             |
|-------------------|-----------|------------|-------|-------|----------|-------------|
| NOTCH2            | 4.53E-102 | 1.17720735 | 0.837 | 0.351 | 1.61E-97 | Mono_spleen |
| PARP8             | 4.81E-102 | 1.54908578 | 0.561 | 0.167 | 1.70E-97 | Mono_spleen |
| C2CD5             | 8.09E-102 | 1.8203027  | 0.378 | 0.084 | 2.87E-97 | Mono_spleen |
| ZC3HAV1           | 8.63E-102 | 1.58577624 | 0.45  | 0.114 | 3.06E-97 | Mono_spleen |
| ATE1              | 1.13E-101 | 1.76869983 | 0.356 | 0.076 | 3.99E-97 | Mono_spleen |
| FNDC3B            | 1.34E-101 | 1.32307187 | 0.906 | 0.446 | 4.76E-97 | Mono_spleen |
| TBC1D14           | 1.47E-101 | 1.72299526 | 0.411 | 0.097 | 5.19E-97 | Mono_spleen |
| FOSB              | 1.51E-101 | 1.27833861 | 0.921 | 0.497 | 5.34E-97 | Mono_spleen |
| SLC12A6           | 1.63E-101 | 1.39851452 | 0.58  | 0.175 | 5.79E-97 | Mono_spleen |
| TNRC6B            | 2.47E-101 | 1.44171831 | 0.642 | 0.216 | 8.75E-97 | Mono_spleen |
| STUB1             | 2.79E-101 | 1.63817512 | 0.255 | 0.04  | 9.88E-97 | Mono_spleen |
| ZSWIM4            | 3.14E-101 | 1.98418673 | 0.42  | 0.105 | 1.11E-96 | Mono_spleen |
| SPOPL             | 4.55E-101 | 1.43786788 | 0.472 | 0.123 | 1.61E-96 | Mono_spleen |
| CLK1              | 5.89E-101 | 1.36084075 | 0.651 | 0.214 | 2.09E-96 | Mono_spleen |
| ZNF148            | 6.11E-101 | 1.46457423 | 0.51  | 0.143 | 2.17E-96 | Mono_spleen |
| NEK7              | 6.22E-101 | 1.49832664 | 0.558 | 0.166 | 2.20E-96 | Mono_spleen |
| ZMYM4             | 6.53E-101 | 1.33013416 | 0.516 | 0.144 | 2.32E-96 | Mono_spleen |
| PHACTR4           | 8.21E-101 | 1.58351484 | 0.459 | 0.12  | 2.91E-96 | Mono_spleen |
| ITCH              | 1.36E-100 | 1.19336902 | 0.798 | 0.311 | 4.81E-96 | Mono_spleen |
| ARHGAP26          | 2.37E-100 | 1.18899089 | 0.958 | 0.611 | 8.40E-96 | Mono_spleen |
| MFSD14B           | 2.47E-100 | 1.42895224 | 0.472 | 0.124 | 8.76E-96 | Mono_spleen |
| CEP350            | 2.81E-100 | 1.40053776 | 0.554 | 0.163 | 9.96E-96 | Mono_spleen |
| MAP2K5            | 3.14E-100 | 1.49207324 | 0.437 | 0.109 | 1.11E-95 | Mono_spleen |
| ASAP1             | 3.80E-100 | 1.39490983 | 0.607 | 0.195 | 1.35E-95 | Mono_spleen |
| FRY               | 4.92E-100 | 2.17038156 | 0.483 | 0.133 | 1.74E-95 | Mono_spleen |
| SLC8A1            | 6.54E-100 | 1.36795885 | 0.774 | 0.327 | 2.32E-95 | Mono_spleen |
| PITPNA            | 1.95E-99  | 1.43065801 | 0.453 | 0.115 | 6.89E-95 | Mono_spleen |
| HOOK3             | 3.16E-99  | 1.20911599 | 0.732 | 0.264 | 1.12E-94 | Mono_spleen |
| ENSMUG00000012203 | 3.69E-99  | 1.67991577 | 0.736 | 0.306 | 1.31E-94 | Mono_spleen |
| YBX3              | 7.54E-99  | 1.97453491 | 0.297 | 0.056 | 2.67E-94 | Mono_spleen |
| RAF1              | 9.70E-99  | 1.33227579 | 0.679 | 0.233 | 3.44E-94 | Mono_spleen |
| NAV1              | 1.01E-98  | 1.30406521 | 0.475 | 0.128 | 3.59E-94 | Mono_spleen |
| LMTK2             | 2.11E-98  | 1.80599035 | 0.426 | 0.107 | 7.47E-94 | Mono_spleen |

|                    |          |            |       |       |          |             |
|--------------------|----------|------------|-------|-------|----------|-------------|
| TRAPPC8            | 2.51E-98 | 1.58657699 | 0.328 | 0.066 | 8.88E-94 | Mono_spleen |
| MCUB               | 3.06E-98 | 1.34721876 | 0.558 | 0.168 | 1.08E-93 | Mono_spleen |
| R3HDM2             | 3.10E-98 | 1.47071996 | 0.455 | 0.118 | 1.10E-93 | Mono_spleen |
| PPM1L              | 3.26E-98 | 1.27112192 | 0.626 | 0.211 | 1.16E-93 | Mono_spleen |
| ARNTL              | 3.88E-98 | 1.4823086  | 0.431 | 0.107 | 1.38E-93 | Mono_spleen |
| NR3C1              | 4.85E-98 | 1.15271821 | 0.828 | 0.338 | 1.72E-93 | Mono_spleen |
| KDM3A              | 7.31E-98 | 1.8653557  | 0.36  | 0.08  | 2.59E-93 | Mono_spleen |
| ENSMMUG00000041076 | 9.39E-98 | 2.07118469 | 0.288 | 0.052 | 3.33E-93 | Mono_spleen |
| ANO6               | 1.01E-97 | 1.33503296 | 0.582 | 0.182 | 3.59E-93 | Mono_spleen |
| SRGAP2             | 1.04E-97 | 1.28189054 | 0.631 | 0.212 | 3.70E-93 | Mono_spleen |
| MEF2A              | 1.23E-97 | 1.17561554 | 0.848 | 0.379 | 4.35E-93 | Mono_spleen |
| VPS13B             | 1.41E-97 | 1.14821374 | 0.919 | 0.482 | 5.00E-93 | Mono_spleen |
| MBP                | 1.53E-97 | 1.05154543 | 0.912 | 0.453 | 5.42E-93 | Mono_spleen |
| TFCP2              | 1.92E-97 | 1.70370246 | 0.349 | 0.074 | 6.81E-93 | Mono_spleen |
| MARK2              | 2.35E-97 | 1.77591786 | 0.332 | 0.068 | 8.33E-93 | Mono_spleen |
| NCOA1              | 2.64E-97 | 1.33724113 | 0.56  | 0.169 | 9.35E-93 | Mono_spleen |
| ARHGAP42           | 3.88E-97 | 2.05932265 | 0.255 | 0.043 | 1.38E-92 | Mono_spleen |
| MBOAT1             | 4.13E-97 | 2.00382303 | 0.294 | 0.056 | 1.46E-92 | Mono_spleen |
| ITM2B              | 4.16E-97 | 1.26857821 | 0.868 | 0.522 | 1.48E-92 | Mono_spleen |
| ZZEF1              | 4.53E-97 | 1.56824278 | 0.349 | 0.075 | 1.60E-92 | Mono_spleen |
| RFX7               | 5.89E-97 | 1.88373973 | 0.323 | 0.066 | 2.09E-92 | Mono_spleen |
| FAR1               | 6.28E-97 | 1.25048592 | 0.637 | 0.213 | 2.23E-92 | Mono_spleen |
| ENSMMUG00000056190 | 6.68E-97 | 1.92946926 | 0.295 | 0.056 | 2.37E-92 | Mono_spleen |
| UBE2E2             | 8.50E-97 | 1.33737731 | 0.829 | 0.39  | 3.01E-92 | Mono_spleen |
| ARFGEF1            | 1.59E-96 | 1.36343018 | 0.53  | 0.154 | 5.63E-92 | Mono_spleen |
| MBNL2              | 3.38E-96 | 1.65702508 | 0.42  | 0.107 | 1.20E-91 | Mono_spleen |
| EFL1               | 3.64E-96 | 1.40535018 | 0.613 | 0.202 | 1.29E-91 | Mono_spleen |
| KRAS               | 4.52E-96 | 1.30323804 | 0.508 | 0.145 | 1.60E-91 | Mono_spleen |
| ABI1               | 5.25E-96 | 1.21618712 | 0.798 | 0.321 | 1.86E-91 | Mono_spleen |
| CHST11             | 5.45E-96 | 1.21985673 | 0.796 | 0.344 | 1.93E-91 | Mono_spleen |
| DGLUCY             | 6.01E-96 | 1.56552476 | 0.284 | 0.052 | 2.13E-91 | Mono_spleen |
| PPP2R2A            | 7.90E-96 | 1.18034565 | 0.615 | 0.195 | 2.80E-91 | Mono_spleen |
| WIPI2              | 1.32E-95 | 1.4679906  | 0.426 | 0.106 | 4.67E-91 | Mono_spleen |



|                    |          |            |       |       |          |             |
|--------------------|----------|------------|-------|-------|----------|-------------|
| PHF20L1            | 1.34E-95 | 1.54382893 | 0.367 | 0.081 | 4.75E-91 | Mono_spleen |
| RALBP1             | 1.59E-95 | 1.29209255 | 0.387 | 0.089 | 5.65E-91 | Mono_spleen |
| CCNK               | 1.66E-95 | 1.24206435 | 0.541 | 0.157 | 5.87E-91 | Mono_spleen |
| MXI1               | 2.06E-95 | 1.70733712 | 0.376 | 0.087 | 7.30E-91 | Mono_spleen |
| PTPRA              | 2.84E-95 | 1.38816337 | 0.519 | 0.152 | 1.00E-90 | Mono_spleen |
| PPP2R5A            | 2.95E-95 | 1.46199712 | 0.448 | 0.118 | 1.05E-90 | Mono_spleen |
| GLG1               | 3.30E-95 | 1.62002464 | 0.38  | 0.087 | 1.17E-90 | Mono_spleen |
| UBAP2              | 3.63E-95 | 1.2442937  | 0.539 | 0.16  | 1.29E-90 | Mono_spleen |
| MAPKAP1            | 5.81E-95 | 1.44314484 | 0.439 | 0.113 | 2.06E-90 | Mono_spleen |
| CAMKMT             | 9.93E-95 | 1.67201185 | 0.481 | 0.139 | 3.52E-90 | Mono_spleen |
| MSL2               | 1.45E-94 | 1.68764201 | 0.424 | 0.109 | 5.14E-90 | Mono_spleen |
| RBM6               | 1.84E-94 | 1.5083702  | 0.396 | 0.096 | 6.52E-90 | Mono_spleen |
| IRAG2              | 2.02E-94 | 1.89809348 | 0.328 | 0.07  | 7.17E-90 | Mono_spleen |
| MSI2               | 2.24E-94 | 1.37772994 | 0.475 | 0.132 | 7.92E-90 | Mono_spleen |
| CHMP4B             | 2.29E-94 | 1.2008669  | 0.574 | 0.175 | 8.11E-90 | Mono_spleen |
| SPTLC2             | 2.64E-94 | 1.56912427 | 0.394 | 0.094 | 9.35E-90 | Mono_spleen |
| KDM4C              | 3.28E-94 | 1.1949932  | 0.631 | 0.213 | 1.16E-89 | Mono_spleen |
| EIF2AK3            | 1.02E-93 | 1.53473466 | 0.481 | 0.135 | 3.61E-89 | Mono_spleen |
| CAMK1D             | 1.17E-93 | 1.34559499 | 0.64  | 0.229 | 4.16E-89 | Mono_spleen |
| CEP170             | 1.62E-93 | 1.32016545 | 0.626 | 0.212 | 5.75E-89 | Mono_spleen |
| WDFY3              | 2.44E-93 | 1.14335401 | 0.657 | 0.222 | 8.63E-89 | Mono_spleen |
| CCNL1              | 6.25E-93 | 1.08003179 | 0.974 | 0.632 | 2.21E-88 | Mono_spleen |
| PHIP               | 1.46E-92 | 1.22552739 | 0.73  | 0.275 | 5.18E-88 | Mono_spleen |
| TRIM33             | 1.62E-92 | 1.47757777 | 0.433 | 0.112 | 5.73E-88 | Mono_spleen |
| SIPA1L3            | 1.76E-92 | 1.76464865 | 0.288 | 0.056 | 6.25E-88 | Mono_spleen |
| ULK2               | 2.01E-92 | 1.60728437 | 0.352 | 0.079 | 7.13E-88 | Mono_spleen |
| ARHGAP25           | 2.12E-92 | 1.66289739 | 0.347 | 0.077 | 7.51E-88 | Mono_spleen |
| RNF38              | 2.42E-92 | 1.45767742 | 0.497 | 0.145 | 8.59E-88 | Mono_spleen |
| TAOK3              | 7.34E-92 | 1.08621561 | 0.815 | 0.35  | 2.60E-87 | Mono_spleen |
| CELF2              | 7.63E-92 | 1.09764365 | 0.919 | 0.459 | 2.70E-87 | Mono_spleen |
| CPEB2              | 9.99E-92 | 1.57677065 | 0.369 | 0.087 | 3.54E-87 | Mono_spleen |
| ENSMMUG00000012564 | 1.02E-91 | 1.70147205 | 0.283 | 0.053 | 3.62E-87 | Mono_spleen |
| JAZF1              | 1.24E-91 | 1.26445361 | 0.554 | 0.176 | 4.40E-87 | Mono_spleen |

|          |          |            |       |       |          |             |
|----------|----------|------------|-------|-------|----------|-------------|
| PER2     | 1.25E-91 | 1.92823347 | 0.277 | 0.052 | 4.43E-87 | Mono_spleen |
| STK10    | 4.38E-91 | 1.05027427 | 0.783 | 0.318 | 1.55E-86 | Mono_spleen |
| CSNK1G1  | 5.15E-91 | 1.46515153 | 0.435 | 0.116 | 1.83E-86 | Mono_spleen |
| KIF1B    | 5.73E-91 | 1.35498623 | 0.541 | 0.167 | 2.03E-86 | Mono_spleen |
| TBC1D12  | 6.39E-91 | 1.75148119 | 0.428 | 0.115 | 2.26E-86 | Mono_spleen |
| DGKD     | 6.63E-91 | 1.83891308 | 0.292 | 0.058 | 2.35E-86 | Mono_spleen |
| NSD3     | 8.34E-91 | 1.40136982 | 0.483 | 0.137 | 2.96E-86 | Mono_spleen |
| RSF1     | 9.62E-91 | 1.36720075 | 0.534 | 0.164 | 3.41E-86 | Mono_spleen |
| UBE2R2   | 9.70E-91 | 1.20531779 | 0.686 | 0.248 | 3.44E-86 | Mono_spleen |
| TRA2A    | 9.95E-91 | 1.09633079 | 0.859 | 0.396 | 3.53E-86 | Mono_spleen |
| ANKRD28  | 2.24E-90 | 1.56706807 | 0.622 | 0.223 | 7.93E-86 | Mono_spleen |
| STT3B    | 2.43E-90 | 1.41876021 | 0.539 | 0.166 | 8.59E-86 | Mono_spleen |
| RNF138   | 2.73E-90 | 1.4508317  | 0.503 | 0.148 | 9.68E-86 | Mono_spleen |
| SLC35A3  | 3.47E-90 | 1.30484322 | 0.517 | 0.153 | 1.23E-85 | Mono_spleen |
| KIAA0232 | 3.78E-90 | 1.43273354 | 0.499 | 0.148 | 1.34E-85 | Mono_spleen |
| RBM47    | 5.07E-90 | 1.08740752 | 0.872 | 0.439 | 1.80E-85 | Mono_spleen |
| KLF11    | 5.76E-90 | 1.65044443 | 0.35  | 0.08  | 2.04E-85 | Mono_spleen |
| GSK3B    | 7.18E-90 | 1.14630089 | 0.745 | 0.287 | 2.55E-85 | Mono_spleen |
| CDK13    | 8.82E-90 | 1.31702045 | 0.576 | 0.187 | 3.12E-85 | Mono_spleen |
| DUSP1    | 1.07E-89 | 1.15846431 | 0.921 | 0.607 | 3.79E-85 | Mono_spleen |
| STRN3    | 1.19E-89 | 1.06217991 | 0.527 | 0.157 | 4.21E-85 | Mono_spleen |
| SMG7     | 1.54E-89 | 1.32301009 | 0.488 | 0.14  | 5.46E-85 | Mono_spleen |
| ASH1L    | 1.85E-89 | 1.14557683 | 0.833 | 0.367 | 6.56E-85 | Mono_spleen |
| SIAH1    | 2.08E-89 | 1.72705303 | 0.321 | 0.069 | 7.38E-85 | Mono_spleen |
| PPM1H    | 2.50E-89 | 1.49632064 | 0.406 | 0.103 | 8.85E-85 | Mono_spleen |
| CAST     | 4.34E-89 | 1.06616412 | 0.84  | 0.385 | 1.54E-84 | Mono_spleen |
| TP53INP1 | 5.18E-89 | 1.63467386 | 0.334 | 0.074 | 1.84E-84 | Mono_spleen |
| DENND4A  | 5.46E-89 | 1.28494205 | 0.921 | 0.563 | 1.93E-84 | Mono_spleen |
| FRYL     | 6.78E-89 | 1.2666365  | 0.462 | 0.128 | 2.40E-84 | Mono_spleen |
| NUMB     | 1.02E-88 | 1.11471438 | 0.859 | 0.4   | 3.61E-84 | Mono_spleen |
| EXOC4    | 1.06E-88 | 1.10245868 | 0.692 | 0.259 | 3.75E-84 | Mono_spleen |
| ASXL2    | 1.06E-88 | 1.31127642 | 0.475 | 0.134 | 3.75E-84 | Mono_spleen |
| ITSN2    | 1.70E-88 | 1.09987625 | 0.717 | 0.268 | 6.03E-84 | Mono_spleen |

|             |          |            |       |       |          |             |
|-------------|----------|------------|-------|-------|----------|-------------|
| PTPN18      | 1.94E-88 | 1.2097751  | 0.343 | 0.075 | 6.89E-84 | Mono_spleen |
| RASA1       | 1.95E-88 | 1.55571995 | 0.319 | 0.069 | 6.90E-84 | Mono_spleen |
| ATP1B3      | 2.31E-88 | 1.14504361 | 0.851 | 0.427 | 8.19E-84 | Mono_spleen |
| EHMT1       | 3.41E-88 | 1.23443437 | 0.393 | 0.098 | 1.21E-83 | Mono_spleen |
| BTAF1       | 4.43E-88 | 1.34508039 | 0.506 | 0.152 | 1.57E-83 | Mono_spleen |
| UBASH3B     | 5.15E-88 | 1.60741584 | 0.433 | 0.12  | 1.83E-83 | Mono_spleen |
| YY1         | 5.59E-88 | 1.3303303  | 0.431 | 0.114 | 1.98E-83 | Mono_spleen |
| NT5C2       | 5.81E-88 | 1.23862985 | 0.571 | 0.184 | 2.06E-83 | Mono_spleen |
| CSNK1G3     | 6.38E-88 | 1.33672886 | 0.525 | 0.162 | 2.26E-83 | Mono_spleen |
| ATP8B4      | 7.23E-88 | 1.5273328  | 0.437 | 0.12  | 2.56E-83 | Mono_spleen |
| MARCHF6     | 7.39E-88 | 1.10757271 | 0.697 | 0.254 | 2.62E-83 | Mono_spleen |
| TPK1        | 9.23E-88 | 1.43990916 | 0.523 | 0.166 | 3.27E-83 | Mono_spleen |
| SMYD3       | 9.62E-88 | 1.33005986 | 0.525 | 0.164 | 3.41E-83 | Mono_spleen |
| TBL1X       | 1.08E-87 | 1.18051736 | 0.556 | 0.18  | 3.83E-83 | Mono_spleen |
| IPCEF1      | 1.26E-87 | 1.33179836 | 0.55  | 0.181 | 4.48E-83 | Mono_spleen |
| ATP11A      | 1.32E-87 | 1.29066195 | 0.505 | 0.153 | 4.68E-83 | Mono_spleen |
| RNGTT       | 1.46E-87 | 1.17405079 | 0.628 | 0.219 | 5.19E-83 | Mono_spleen |
| PRKX        | 1.72E-87 | 1.30530875 | 0.506 | 0.151 | 6.09E-83 | Mono_spleen |
| TRIP4       | 1.89E-87 | 1.60990893 | 0.327 | 0.072 | 6.69E-83 | Mono_spleen |
| GAB2        | 1.93E-87 | 1.02295381 | 0.914 | 0.493 | 6.85E-83 | Mono_spleen |
| SMURF1      | 2.03E-87 | 1.39417224 | 0.488 | 0.146 | 7.20E-83 | Mono_spleen |
| MBD5        | 2.21E-87 | 1.43848127 | 0.494 | 0.15  | 7.84E-83 | Mono_spleen |
| PIP4K2A     | 2.29E-87 | 1.09206628 | 0.745 | 0.292 | 8.11E-83 | Mono_spleen |
| SLC24A3     | 2.31E-87 | 1.32466453 | 0.554 | 0.182 | 8.17E-83 | Mono_spleen |
| MYCBP2      | 2.55E-87 | 1.08190538 | 0.69  | 0.258 | 9.04E-83 | Mono_spleen |
| CYTH1       | 3.80E-87 | 1.25651672 | 0.594 | 0.201 | 1.35E-82 | Mono_spleen |
| DOCK2       | 4.02E-87 | 1.08216959 | 0.857 | 0.419 | 1.42E-82 | Mono_spleen |
| C18H18orf25 | 4.62E-87 | 1.55000844 | 0.372 | 0.092 | 1.64E-82 | Mono_spleen |
| ARGLU1      | 4.85E-87 | 1.02194293 | 0.668 | 0.232 | 1.72E-82 | Mono_spleen |
| FOXO1       | 4.91E-87 | 1.25754587 | 0.688 | 0.264 | 1.74E-82 | Mono_spleen |
| RSBN1L      | 5.50E-87 | 1.83945257 | 0.286 | 0.057 | 1.95E-82 | Mono_spleen |
| EP300       | 6.54E-87 | 1.15044442 | 0.668 | 0.24  | 2.32E-82 | Mono_spleen |
| CDYL        | 7.54E-87 | 1.34246287 | 0.431 | 0.117 | 2.67E-82 | Mono_spleen |

|         |          |            |       |       |          |             |
|---------|----------|------------|-------|-------|----------|-------------|
| PCCA    | 9.39E-87 | 1.18625573 | 0.446 | 0.122 | 3.33E-82 | Mono_spleen |
| YTHDC1  | 1.29E-86 | 1.15974772 | 0.628 | 0.218 | 4.57E-82 | Mono_spleen |
| ARID1A  | 1.30E-86 | 1.33692806 | 0.47  | 0.134 | 4.61E-82 | Mono_spleen |
| NEDD9   | 1.35E-86 | 1.24620468 | 0.694 | 0.262 | 4.78E-82 | Mono_spleen |
| RAB6A   | 1.45E-86 | 1.58034251 | 0.495 | 0.147 | 5.13E-82 | Mono_spleen |
| D2HGDH  | 1.75E-86 | 1.24786443 | 0.303 | 0.061 | 6.21E-82 | Mono_spleen |
| IRS2    | 2.14E-86 | 1.93987706 | 0.319 | 0.072 | 7.59E-82 | Mono_spleen |
| RASA3   | 2.60E-86 | 1.2462348  | 0.459 | 0.129 | 9.20E-82 | Mono_spleen |
| ANKFY1  | 3.71E-86 | 1.31008206 | 0.367 | 0.087 | 1.31E-81 | Mono_spleen |
| SENP6   | 5.28E-86 | 1.20346585 | 0.587 | 0.196 | 1.87E-81 | Mono_spleen |
| MITF    | 5.83E-86 | 1.35240104 | 0.455 | 0.131 | 2.06E-81 | Mono_spleen |
| PPM1B   | 6.34E-86 | 1.64868514 | 0.376 | 0.094 | 2.24E-81 | Mono_spleen |
| TNKS    | 6.53E-86 | 1.2388173  | 0.552 | 0.176 | 2.32E-81 | Mono_spleen |
| RICTOR  | 1.02E-85 | 1.1097521  | 0.615 | 0.207 | 3.62E-81 | Mono_spleen |
| LRCH1   | 1.78E-85 | 1.25836936 | 0.488 | 0.145 | 6.32E-81 | Mono_spleen |
| PIKFYVE | 1.89E-85 | 1.55345799 | 0.341 | 0.079 | 6.69E-81 | Mono_spleen |
| ADAM17  | 2.56E-85 | 1.28082213 | 0.804 | 0.384 | 9.06E-81 | Mono_spleen |
| FAM172A | 2.74E-85 | 1.11739752 | 0.664 | 0.243 | 9.71E-81 | Mono_spleen |
| NRIP1   | 3.46E-85 | 1.10251576 | 0.653 | 0.231 | 1.22E-80 | Mono_spleen |
| PNISR   | 3.64E-85 | 1.04939293 | 0.699 | 0.253 | 1.29E-80 | Mono_spleen |
| BIRC6   | 3.98E-85 | 1.02975271 | 0.815 | 0.349 | 1.41E-80 | Mono_spleen |
| USP9X   | 4.02E-85 | 1.15565463 | 0.618 | 0.214 | 1.42E-80 | Mono_spleen |
| CERS6   | 4.10E-85 | 1.32390246 | 0.58  | 0.197 | 1.45E-80 | Mono_spleen |
| SH3KBP1 | 4.79E-85 | 1.00517187 | 0.78  | 0.317 | 1.70E-80 | Mono_spleen |
| THADA   | 5.34E-85 | 1.15044414 | 0.528 | 0.166 | 1.89E-80 | Mono_spleen |
| SCAF8   | 5.44E-85 | 1.2216006  | 0.525 | 0.165 | 1.93E-80 | Mono_spleen |
| TP53BP1 | 5.72E-85 | 1.81250015 | 0.321 | 0.072 | 2.03E-80 | Mono_spleen |
| ZBTB20  | 5.98E-85 | 1.35361974 | 0.532 | 0.174 | 2.12E-80 | Mono_spleen |
| ITSN1   | 6.12E-85 | 1.47042521 | 0.328 | 0.074 | 2.17E-80 | Mono_spleen |
| PIK3C2A | 1.03E-84 | 1.27081223 | 0.492 | 0.146 | 3.66E-80 | Mono_spleen |
| TRERF1  | 1.34E-84 | 1.38869521 | 0.415 | 0.112 | 4.73E-80 | Mono_spleen |
| NUFIP2  | 1.36E-84 | 1.17173527 | 0.626 | 0.22  | 4.81E-80 | Mono_spleen |
| INSR    | 1.41E-84 | 1.64733359 | 0.284 | 0.058 | 5.01E-80 | Mono_spleen |

|                    |          |            |       |       |          |             |
|--------------------|----------|------------|-------|-------|----------|-------------|
| ENSMMUG00000058532 | 1.70E-84 | 0.97634236 | 0.956 | 0.585 | 6.01E-80 | Mono_spleen |
| ITPK1              | 1.94E-84 | 1.41926562 | 0.391 | 0.101 | 6.86E-80 | Mono_spleen |
| OSBPL11            | 1.97E-84 | 1.16669902 | 0.738 | 0.298 | 6.97E-80 | Mono_spleen |
| GAB1               | 2.10E-84 | 1.73820927 | 0.338 | 0.08  | 7.44E-80 | Mono_spleen |
| ROCK1              | 2.13E-84 | 1.09043497 | 0.798 | 0.34  | 7.53E-80 | Mono_spleen |
| EFCAB2             | 2.23E-84 | 1.44433505 | 0.393 | 0.101 | 7.89E-80 | Mono_spleen |
| SPAST              | 2.43E-84 | 2.29367749 | 0.261 | 0.05  | 8.61E-80 | Mono_spleen |
| PPP1R12A           | 3.54E-84 | 1.15328439 | 0.793 | 0.345 | 1.25E-79 | Mono_spleen |
| ABCC4              | 3.61E-84 | 1.27584064 | 0.49  | 0.149 | 1.28E-79 | Mono_spleen |
| MVB12B             | 6.03E-84 | 1.49673023 | 0.297 | 0.063 | 2.14E-79 | Mono_spleen |
| PTEN               | 7.06E-84 | 1.13370315 | 0.569 | 0.186 | 2.50E-79 | Mono_spleen |
| RTN1               | 1.27E-83 | 1.2552151  | 0.523 | 0.167 | 4.51E-79 | Mono_spleen |
| GALNT7             | 1.28E-83 | 1.39809587 | 0.475 | 0.14  | 4.55E-79 | Mono_spleen |
| RNASEH2B           | 1.38E-83 | 1.11768481 | 0.464 | 0.131 | 4.88E-79 | Mono_spleen |
| ATP2B4             | 2.03E-83 | 1.23849603 | 0.461 | 0.133 | 7.20E-79 | Mono_spleen |
| TXNIP              | 2.32E-83 | 1.12266687 | 0.745 | 0.306 | 8.22E-79 | Mono_spleen |
| B3GNT2             | 2.43E-83 | 1.5835185  | 0.343 | 0.082 | 8.62E-79 | Mono_spleen |
| PDS5A              | 2.53E-83 | 1.0621292  | 0.497 | 0.149 | 8.96E-79 | Mono_spleen |
| ARFGAP3            | 3.12E-83 | 1.18906576 | 0.798 | 0.35  | 1.11E-78 | Mono_spleen |
| ERC1               | 3.22E-83 | 1.06004    | 0.604 | 0.209 | 1.14E-78 | Mono_spleen |
| KANSL1L            | 3.60E-83 | 1.4909699  | 0.323 | 0.073 | 1.28E-78 | Mono_spleen |
| KLF13              | 4.40E-83 | 1.99539016 | 0.301 | 0.066 | 1.56E-78 | Mono_spleen |
| CYRIB              | 4.96E-83 | 1.09646022 | 0.899 | 0.492 | 1.76E-78 | Mono_spleen |
| PIK3R1             | 5.39E-83 | 1.4448367  | 0.44  | 0.125 | 1.91E-78 | Mono_spleen |
| UBE2S              | 6.54E-83 | 1.59619726 | 0.303 | 0.065 | 2.32E-78 | Mono_spleen |
| ABL1               | 6.95E-83 | 1.63218798 | 0.31  | 0.069 | 2.46E-78 | Mono_spleen |
| GTF2I              | 7.44E-83 | 1.14951649 | 0.437 | 0.12  | 2.64E-78 | Mono_spleen |
| WWP1               | 7.90E-83 | 1.37954503 | 0.391 | 0.102 | 2.80E-78 | Mono_spleen |
| CTNNB1             | 8.07E-83 | 1.24757999 | 0.576 | 0.193 | 2.86E-78 | Mono_spleen |
| YPEL3              | 8.29E-83 | 1.0979231  | 0.545 | 0.171 | 2.94E-78 | Mono_spleen |
| USP48              | 9.84E-83 | 1.57663108 | 0.286 | 0.059 | 3.49E-78 | Mono_spleen |
| RALY               | 1.29E-82 | 1.16650768 | 0.604 | 0.206 | 4.58E-78 | Mono_spleen |
| PPP1CB             | 1.60E-82 | 1.19985166 | 0.875 | 0.475 | 5.68E-78 | Mono_spleen |

|          |          |            |       |       |          |             |
|----------|----------|------------|-------|-------|----------|-------------|
| IQGAP1   | 1.63E-82 | 1.06356675 | 0.905 | 0.542 | 5.78E-78 | Mono_spleen |
| SPATA6   | 1.76E-82 | 1.30424289 | 0.411 | 0.11  | 6.22E-78 | Mono_spleen |
| HERC3    | 2.48E-82 | 1.52179485 | 0.484 | 0.148 | 8.80E-78 | Mono_spleen |
| FYB1     | 3.28E-82 | 1.24167261 | 0.811 | 0.38  | 1.16E-77 | Mono_spleen |
| GPATCH8  | 3.35E-82 | 1.3301197  | 0.477 | 0.143 | 1.19E-77 | Mono_spleen |
| PUM1     | 4.09E-82 | 1.03073512 | 0.673 | 0.245 | 1.45E-77 | Mono_spleen |
| GBF1     | 4.60E-82 | 1.41883042 | 0.345 | 0.083 | 1.63E-77 | Mono_spleen |
| SESTD1   | 5.89E-82 | 1.20633173 | 0.466 | 0.137 | 2.09E-77 | Mono_spleen |
| TMEM131  | 6.42E-82 | 1.01175193 | 0.818 | 0.356 | 2.27E-77 | Mono_spleen |
| VAPA     | 1.05E-81 | 1.19891716 | 0.694 | 0.278 | 3.71E-77 | Mono_spleen |
| SEC63    | 1.51E-81 | 1.26223501 | 0.569 | 0.194 | 5.34E-77 | Mono_spleen |
| VTI1A    | 1.94E-81 | 1.13097836 | 0.697 | 0.279 | 6.86E-77 | Mono_spleen |
| CLTB     | 2.25E-81 | 1.19479136 | 0.338 | 0.078 | 7.97E-77 | Mono_spleen |
| ATP5F1D  | 2.51E-81 | 0.86208448 | 0.536 | 0.165 | 8.90E-77 | Mono_spleen |
| NUP153   | 3.83E-81 | 1.33073566 | 0.488 | 0.151 | 1.36E-76 | Mono_spleen |
| CPPED1   | 3.93E-81 | 1.14433057 | 0.701 | 0.274 | 1.39E-76 | Mono_spleen |
| BAZ2B    | 3.93E-81 | 1.19743035 | 0.626 | 0.233 | 1.39E-76 | Mono_spleen |
| RBM33    | 4.29E-81 | 1.26944431 | 0.536 | 0.172 | 1.52E-76 | Mono_spleen |
| FKBP15   | 4.84E-81 | 1.23355264 | 0.47  | 0.139 | 1.72E-76 | Mono_spleen |
| USP34    | 4.96E-81 | 0.98386755 | 0.76  | 0.31  | 1.76E-76 | Mono_spleen |
| FAM193A  | 7.39E-81 | 1.27059318 | 0.468 | 0.139 | 2.62E-76 | Mono_spleen |
| AKAP17A  | 7.66E-81 | 1.37234515 | 0.378 | 0.096 | 2.71E-76 | Mono_spleen |
| PCMTD1   | 8.02E-81 | 1.12247073 | 0.56  | 0.183 | 2.84E-76 | Mono_spleen |
| XPO6     | 8.46E-81 | 1.37386126 | 0.662 | 0.246 | 3.00E-76 | Mono_spleen |
| ADD3     | 1.09E-80 | 1.36471085 | 0.523 | 0.17  | 3.88E-76 | Mono_spleen |
| YTHDF3   | 1.16E-80 | 1.20227274 | 0.629 | 0.228 | 4.10E-76 | Mono_spleen |
| ARHGAP24 | 1.52E-80 | 1.20799518 | 0.767 | 0.353 | 5.40E-76 | Mono_spleen |
| MICAL2   | 1.92E-80 | 1.30668313 | 0.466 | 0.14  | 6.79E-76 | Mono_spleen |
| PKNOX1   | 2.06E-80 | 1.49717313 | 0.306 | 0.068 | 7.31E-76 | Mono_spleen |
| CDC42SE2 | 2.55E-80 | 1.004858   | 0.872 | 0.437 | 9.02E-76 | Mono_spleen |
| NR1D2    | 3.37E-80 | 1.61876738 | 0.299 | 0.066 | 1.19E-75 | Mono_spleen |
| SMC4     | 3.48E-80 | 1.63247616 | 0.365 | 0.094 | 1.23E-75 | Mono_spleen |
| LNPEP    | 3.63E-80 | 1.17965366 | 0.455 | 0.132 | 1.29E-75 | Mono_spleen |

|         |          |            |       |       |          |             |
|---------|----------|------------|-------|-------|----------|-------------|
| ITPR2   | 3.87E-80 | 1.06949214 | 0.681 | 0.26  | 1.37E-75 | Mono_spleen |
| ITFG1   | 3.98E-80 | 1.29257319 | 0.42  | 0.118 | 1.41E-75 | Mono_spleen |
| TSC22D1 | 4.94E-80 | 1.8126859  | 0.268 | 0.055 | 1.75E-75 | Mono_spleen |
| SERTAD2 | 6.13E-80 | 1.21603765 | 0.448 | 0.129 | 2.17E-75 | Mono_spleen |
| ARID4B  | 6.21E-80 | 1.16779874 | 0.738 | 0.31  | 2.20E-75 | Mono_spleen |
| MAP4    | 8.82E-80 | 1.37051625 | 0.36  | 0.091 | 3.12E-75 | Mono_spleen |
| STX3    | 9.23E-80 | 1.42545387 | 0.372 | 0.096 | 3.27E-75 | Mono_spleen |
| NSF     | 9.58E-80 | 1.38395741 | 0.406 | 0.111 | 3.39E-75 | Mono_spleen |
| MACO1   | 1.03E-79 | 1.21437308 | 0.446 | 0.13  | 3.66E-75 | Mono_spleen |
| ATXN7   | 1.03E-79 | 1.13925914 | 0.481 | 0.145 | 3.66E-75 | Mono_spleen |
| SH2D3C  | 1.22E-79 | 1.71816463 | 0.261 | 0.051 | 4.32E-75 | Mono_spleen |
| WDFY4   | 1.29E-79 | 1.47136487 | 0.413 | 0.116 | 4.58E-75 | Mono_spleen |
| WDR47   | 1.51E-79 | 1.66855891 | 0.354 | 0.091 | 5.36E-75 | Mono_spleen |
| RAD23B  | 1.88E-79 | 1.2071388  | 0.45  | 0.13  | 6.66E-75 | Mono_spleen |
| SENP2   | 2.41E-79 | 1.2458174  | 0.506 | 0.162 | 8.53E-75 | Mono_spleen |
| PPP3CC  | 2.51E-79 | 1.54917261 | 0.393 | 0.107 | 8.91E-75 | Mono_spleen |
| ZDHHC14 | 2.54E-79 | 1.15487474 | 0.635 | 0.234 | 8.99E-75 | Mono_spleen |
| RAD51B  | 2.63E-79 | 1.63949645 | 0.51  | 0.173 | 9.33E-75 | Mono_spleen |
| RASSF1  | 2.74E-79 | 1.06149703 | 0.439 | 0.123 | 9.71E-75 | Mono_spleen |
| TICAM2  | 2.79E-79 | 1.10859343 | 0.365 | 0.091 | 9.89E-75 | Mono_spleen |
| PRKCA   | 3.12E-79 | 1.20598719 | 0.532 | 0.179 | 1.11E-74 | Mono_spleen |
| IQGAP2  | 3.48E-79 | 1.31601501 | 0.521 | 0.172 | 1.23E-74 | Mono_spleen |
| SNX13   | 3.78E-79 | 1.28375072 | 0.475 | 0.146 | 1.34E-74 | Mono_spleen |
| CUX1    | 4.76E-79 | 1.04853565 | 0.787 | 0.351 | 1.69E-74 | Mono_spleen |
| KDM1B   | 5.72E-79 | 1.68894554 | 0.264 | 0.054 | 2.03E-74 | Mono_spleen |
| PAK2    | 5.85E-79 | 1.06922403 | 0.767 | 0.342 | 2.07E-74 | Mono_spleen |
| MEGF9   | 7.21E-79 | 1.60268714 | 0.585 | 0.219 | 2.56E-74 | Mono_spleen |
| TMX4    | 8.61E-79 | 1.61825295 | 0.418 | 0.121 | 3.05E-74 | Mono_spleen |
| BPTF    | 9.12E-79 | 1.20531715 | 0.556 | 0.187 | 3.23E-74 | Mono_spleen |
| DNA2    | 9.94E-79 | 1.85162333 | 0.266 | 0.054 | 3.52E-74 | Mono_spleen |
| YWHAH   | 1.07E-78 | 1.13196855 | 0.448 | 0.129 | 3.78E-74 | Mono_spleen |
| SMARCA2 | 1.10E-78 | 1.13316863 | 0.444 | 0.129 | 3.91E-74 | Mono_spleen |
| CDK19   | 1.22E-78 | 1.55364041 | 0.394 | 0.108 | 4.34E-74 | Mono_spleen |

|          |          |            |       |       |          |             |
|----------|----------|------------|-------|-------|----------|-------------|
| PACS1    | 1.23E-78 | 1.32273105 | 0.363 | 0.094 | 4.36E-74 | Mono_spleen |
| SPEN     | 1.27E-78 | 1.13110714 | 0.602 | 0.209 | 4.51E-74 | Mono_spleen |
| REEP3    | 1.54E-78 | 1.24336423 | 0.455 | 0.133 | 5.46E-74 | Mono_spleen |
| EXT1     | 1.97E-78 | 1.52562513 | 0.407 | 0.117 | 7.00E-74 | Mono_spleen |
| KIAA1109 | 2.69E-78 | 2.18295979 | 0.29  | 0.064 | 9.54E-74 | Mono_spleen |
| DIAPH1   | 2.87E-78 | 1.06358591 | 0.809 | 0.364 | 1.02E-73 | Mono_spleen |
| WWP2     | 2.92E-78 | 1.26700947 | 0.45  | 0.134 | 1.03E-73 | Mono_spleen |
| UTRN     | 3.49E-78 | 1.1027942  | 0.626 | 0.233 | 1.24E-73 | Mono_spleen |
| SMG6     | 3.78E-78 | 1.32150064 | 0.492 | 0.155 | 1.34E-73 | Mono_spleen |
| LRRK2    | 4.50E-78 | 1.16424965 | 0.705 | 0.288 | 1.59E-73 | Mono_spleen |
| PHF3     | 4.50E-78 | 1.12508162 | 0.51  | 0.161 | 1.59E-73 | Mono_spleen |
| SLC39A11 | 4.54E-78 | 1.35115121 | 0.437 | 0.129 | 1.61E-73 | Mono_spleen |
| MAT2B    | 4.82E-78 | 1.38876995 | 0.257 | 0.05  | 1.71E-73 | Mono_spleen |
| TBC1D1   | 5.02E-78 | 1.02868725 | 0.688 | 0.261 | 1.78E-73 | Mono_spleen |
| ARHGAP17 | 5.34E-78 | 1.16721487 | 0.549 | 0.183 | 1.89E-73 | Mono_spleen |
| MAP4K3   | 5.42E-78 | 1.48850852 | 0.345 | 0.087 | 1.92E-73 | Mono_spleen |
| HERC2    | 6.36E-78 | 1.20857142 | 0.429 | 0.123 | 2.25E-73 | Mono_spleen |
| CNOT2    | 8.22E-78 | 1.15629322 | 0.569 | 0.197 | 2.91E-73 | Mono_spleen |
| KTN1     | 8.48E-78 | 1.01463604 | 0.525 | 0.166 | 3.01E-73 | Mono_spleen |
| CRLF3    | 9.09E-78 | 1.29755945 | 0.413 | 0.114 | 3.22E-73 | Mono_spleen |
| FBXL17   | 1.07E-77 | 1.17868274 | 0.56  | 0.195 | 3.78E-73 | Mono_spleen |
| RNF216   | 1.11E-77 | 1.06838031 | 0.552 | 0.184 | 3.94E-73 | Mono_spleen |
| VPS53    | 1.13E-77 | 1.3636358  | 0.321 | 0.076 | 4.00E-73 | Mono_spleen |
| PUM2     | 1.28E-77 | 0.99152088 | 0.648 | 0.238 | 4.54E-73 | Mono_spleen |
| GIGYF2   | 1.51E-77 | 1.12084951 | 0.47  | 0.141 | 5.33E-73 | Mono_spleen |
| AKIRIN2  | 1.52E-77 | 1.11895462 | 0.644 | 0.241 | 5.38E-73 | Mono_spleen |
| UBE3C    | 2.31E-77 | 1.21024308 | 0.374 | 0.098 | 8.18E-73 | Mono_spleen |
| APP      | 2.42E-77 | 1.25241378 | 0.565 | 0.196 | 8.59E-73 | Mono_spleen |
| PDSS2    | 2.43E-77 | 1.64097488 | 0.321 | 0.077 | 8.61E-73 | Mono_spleen |
| SBF2     | 2.60E-77 | 1.09779602 | 0.642 | 0.245 | 9.22E-73 | Mono_spleen |
| VPS35L   | 3.29E-77 | 1.78268786 | 0.25  | 0.05  | 1.17E-72 | Mono_spleen |
| GOLPH3   | 3.56E-77 | 1.14681899 | 0.499 | 0.158 | 1.26E-72 | Mono_spleen |
| RYBP     | 4.55E-77 | 1.33590451 | 0.483 | 0.153 | 1.61E-72 | Mono_spleen |



|                   |          |            |       |       |          |             |
|-------------------|----------|------------|-------|-------|----------|-------------|
| KIAA0513          | 4.63E-77 | 1.67996822 | 0.314 | 0.074 | 1.64E-72 | Mono_spleen |
| MTMR10            | 5.06E-77 | 1.55303508 | 0.363 | 0.095 | 1.79E-72 | Mono_spleen |
| VCL               | 8.40E-77 | 1.20554411 | 0.725 | 0.302 | 2.98E-72 | Mono_spleen |
| CUL3              | 1.11E-76 | 1.10483684 | 0.635 | 0.236 | 3.92E-72 | Mono_spleen |
| ATXN1             | 1.11E-76 | 1.27896304 | 0.563 | 0.201 | 3.93E-72 | Mono_spleen |
| BRWD1             | 1.20E-76 | 1.44025486 | 0.394 | 0.109 | 4.24E-72 | Mono_spleen |
| TBC1D4            | 1.21E-76 | 1.16208386 | 0.442 | 0.133 | 4.27E-72 | Mono_spleen |
| EPB41             | 1.50E-76 | 1.06662699 | 0.635 | 0.234 | 5.33E-72 | Mono_spleen |
| ENSMUG00000014831 | 1.74E-76 | 1.30062746 | 0.33  | 0.08  | 6.16E-72 | Mono_spleen |
| CBL               | 1.87E-76 | 1.61456805 | 0.275 | 0.059 | 6.63E-72 | Mono_spleen |
| FNBP4             | 2.22E-76 | 1.36402239 | 0.369 | 0.097 | 7.87E-72 | Mono_spleen |
| TRPM7             | 2.38E-76 | 0.95763354 | 0.714 | 0.281 | 8.42E-72 | Mono_spleen |
| RNF115            | 2.55E-76 | 1.4122063  | 0.36  | 0.093 | 9.05E-72 | Mono_spleen |
| ZNF292            | 2.77E-76 | 1.05761336 | 0.644 | 0.244 | 9.80E-72 | Mono_spleen |
| CNOT6L            | 3.48E-76 | 1.24153872 | 0.539 | 0.183 | 1.23E-71 | Mono_spleen |
| CYB5R4            | 3.68E-76 | 1.17487107 | 0.565 | 0.191 | 1.31E-71 | Mono_spleen |
| NUDT4             | 6.14E-76 | 1.81676488 | 0.259 | 0.053 | 2.17E-71 | Mono_spleen |
| PLXNC1            | 6.30E-76 | 1.01579108 | 0.717 | 0.294 | 2.23E-71 | Mono_spleen |
| HELZ              | 8.28E-76 | 1.14907967 | 0.589 | 0.21  | 2.93E-71 | Mono_spleen |
| IKBIP             | 8.59E-76 | 1.3101152  | 0.338 | 0.082 | 3.04E-71 | Mono_spleen |
| SETX              | 9.07E-76 | 1.02651135 | 0.435 | 0.126 | 3.21E-71 | Mono_spleen |
| EFR3A             | 9.08E-76 | 1.12682181 | 0.486 | 0.152 | 3.22E-71 | Mono_spleen |
| EDEM3             | 1.09E-75 | 1.47256929 | 0.279 | 0.06  | 3.86E-71 | Mono_spleen |
| MRTFA             | 1.14E-75 | 1.19826671 | 0.49  | 0.156 | 4.04E-71 | Mono_spleen |
| OXR1              | 1.36E-75 | 1.19602965 | 0.453 | 0.138 | 4.81E-71 | Mono_spleen |
| RBM14             | 1.51E-75 | 1.08605555 | 0.582 | 0.206 | 5.35E-71 | Mono_spleen |
| ARRB1             | 1.51E-75 | 1.27307309 | 0.422 | 0.122 | 5.36E-71 | Mono_spleen |
| SIK3              | 2.04E-75 | 0.95852872 | 0.934 | 0.561 | 7.22E-71 | Mono_spleen |
| FAM214A           | 2.08E-75 | 2.03838801 | 0.277 | 0.061 | 7.38E-71 | Mono_spleen |
| PLCB1             | 2.15E-75 | 0.9594858  | 0.908 | 0.54  | 7.61E-71 | Mono_spleen |
| MLXIP             | 2.20E-75 | 1.47968022 | 0.31  | 0.074 | 7.78E-71 | Mono_spleen |
| SLC7A5            | 2.65E-75 | 1.58715865 | 0.295 | 0.068 | 9.38E-71 | Mono_spleen |
| DNAJC1            | 3.06E-75 | 1.28206344 | 0.506 | 0.169 | 1.08E-70 | Mono_spleen |

|                    |          |            |       |       |          |             |
|--------------------|----------|------------|-------|-------|----------|-------------|
| FOXP1              | 3.68E-75 | 1.2654163  | 0.554 | 0.2   | 1.30E-70 | Mono_spleen |
| SPG11              | 3.95E-75 | 1.47723743 | 0.327 | 0.08  | 1.40E-70 | Mono_spleen |
| ENSMMUG00000055687 | 4.60E-75 | 1.58247964 | 0.407 | 0.117 | 1.63E-70 | Mono_spleen |
| BAZ1B              | 5.71E-75 | 1.5587026  | 0.292 | 0.066 | 2.02E-70 | Mono_spleen |
| EPS15L1            | 7.02E-75 | 1.46650344 | 0.321 | 0.077 | 2.49E-70 | Mono_spleen |
| OGA                | 7.04E-75 | 1.19525861 | 0.534 | 0.182 | 2.50E-70 | Mono_spleen |
| CELF1              | 7.40E-75 | 1.11860724 | 0.578 | 0.202 | 2.62E-70 | Mono_spleen |
| SKAP2              | 9.47E-75 | 1.06903688 | 0.844 | 0.439 | 3.35E-70 | Mono_spleen |
| STIM1              | 1.00E-74 | 1.34161108 | 0.358 | 0.095 | 3.56E-70 | Mono_spleen |
| MEMO1              | 1.04E-74 | 1.00786736 | 0.593 | 0.212 | 3.67E-70 | Mono_spleen |
| SLC38A1            | 1.45E-74 | 1.09285689 | 0.727 | 0.311 | 5.13E-70 | Mono_spleen |
| PPM1G              | 1.47E-74 | 1.13587307 | 0.347 | 0.087 | 5.21E-70 | Mono_spleen |
| ILKAP              | 1.51E-74 | 1.32975367 | 0.374 | 0.102 | 5.35E-70 | Mono_spleen |
| EIF4A2             | 1.98E-74 | 1.00863389 | 0.622 | 0.22  | 7.00E-70 | Mono_spleen |
| CSGALNACT2         | 2.03E-74 | 1.06858547 | 0.818 | 0.4   | 7.20E-70 | Mono_spleen |
| EDEM1              | 2.05E-74 | 1.18304581 | 0.466 | 0.144 | 7.28E-70 | Mono_spleen |
| STK17A             | 2.07E-74 | 1.30446207 | 0.505 | 0.168 | 7.35E-70 | Mono_spleen |
| H2AZ2              | 2.11E-74 | 1.02779345 | 0.752 | 0.317 | 7.47E-70 | Mono_spleen |
| EXOC6              | 2.16E-74 | 1.78197393 | 0.332 | 0.086 | 7.66E-70 | Mono_spleen |
| RAP1GDS1           | 2.31E-74 | 1.32737061 | 0.406 | 0.117 | 8.20E-70 | Mono_spleen |
| MTMR6              | 2.40E-74 | 1.19322692 | 0.424 | 0.124 | 8.49E-70 | Mono_spleen |
| L3MBTL3            | 2.47E-74 | 0.96263542 | 0.472 | 0.144 | 8.74E-70 | Mono_spleen |
| PPP1R12B           | 2.50E-74 | 1.64390877 | 0.336 | 0.086 | 8.84E-70 | Mono_spleen |
| ZBED1              | 3.88E-74 | 1.23326344 | 0.552 | 0.196 | 1.37E-69 | Mono_spleen |
| ZNF217             | 3.90E-74 | 1.0836867  | 0.371 | 0.098 | 1.38E-69 | Mono_spleen |
| SMARCC1            | 4.58E-74 | 1.16444072 | 0.457 | 0.14  | 1.62E-69 | Mono_spleen |
| MYO1F              | 4.60E-74 | 1.12483214 | 0.806 | 0.372 | 1.63E-69 | Mono_spleen |
| SRSF4              | 4.66E-74 | 1.07611281 | 0.594 | 0.212 | 1.65E-69 | Mono_spleen |
| DPYD               | 5.00E-74 | 1.10069761 | 0.831 | 0.445 | 1.77E-69 | Mono_spleen |
| ENSMMUG00000006165 | 5.13E-74 | 0.906381   | 0.903 | 0.481 | 1.82E-69 | Mono_spleen |
| NRF1               | 5.41E-74 | 1.28563418 | 0.361 | 0.096 | 1.92E-69 | Mono_spleen |
| DYM                | 6.52E-74 | 0.97950882 | 0.578 | 0.203 | 2.31E-69 | Mono_spleen |
| IQSEC1             | 7.35E-74 | 0.98885341 | 0.673 | 0.259 | 2.60E-69 | Mono_spleen |

|          |          |            |       |       |          |             |
|----------|----------|------------|-------|-------|----------|-------------|
| PCNX1    | 8.46E-74 | 1.42000192 | 0.305 | 0.072 | 3.00E-69 | Mono_spleen |
| STK4     | 8.88E-74 | 1.06119994 | 0.734 | 0.299 | 3.15E-69 | Mono_spleen |
| STAG1    | 1.06E-73 | 0.95902199 | 0.817 | 0.381 | 3.75E-69 | Mono_spleen |
| RPS20    | 1.06E-73 | 0.97037444 | 0.879 | 0.702 | 3.77E-69 | Mono_spleen |
| PPP6R3   | 1.07E-73 | 1.00872065 | 0.606 | 0.221 | 3.78E-69 | Mono_spleen |
| SLC25A24 | 1.15E-73 | 1.18064011 | 0.277 | 0.06  | 4.08E-69 | Mono_spleen |
| RLF      | 1.16E-73 | 1.07426977 | 0.585 | 0.212 | 4.10E-69 | Mono_spleen |
| NAMPT    | 1.16E-73 | 1.14297737 | 0.829 | 0.425 | 4.11E-69 | Mono_spleen |
| BMT2     | 1.38E-73 | 2.23623201 | 0.417 | 0.129 | 4.88E-69 | Mono_spleen |
| WIPF1    | 1.59E-73 | 1.19732616 | 0.582 | 0.207 | 5.64E-69 | Mono_spleen |
| ZNRF2    | 1.60E-73 | 1.43316956 | 0.328 | 0.083 | 5.66E-69 | Mono_spleen |
| LARP4B   | 1.74E-73 | 1.02261211 | 0.539 | 0.183 | 6.17E-69 | Mono_spleen |
| ABR      | 2.27E-73 | 0.82437549 | 0.563 | 0.191 | 8.03E-69 | Mono_spleen |
| LRMDA    | 2.41E-73 | 1.28225694 | 0.499 | 0.17  | 8.54E-69 | Mono_spleen |
| ERN1     | 2.54E-73 | 1.35304802 | 0.317 | 0.078 | 8.99E-69 | Mono_spleen |
| ALKBH7   | 2.61E-73 | 0.90465271 | 0.437 | 0.126 | 9.24E-69 | Mono_spleen |
| FDX1     | 3.46E-73 | 0.9971511  | 0.53  | 0.177 | 1.23E-68 | Mono_spleen |
| RNF13    | 4.06E-73 | 0.9596049  | 0.798 | 0.365 | 1.44E-68 | Mono_spleen |
| SEC14L1  | 4.76E-73 | 1.24446749 | 0.554 | 0.193 | 1.69E-68 | Mono_spleen |
| CD47     | 5.17E-73 | 0.9519215  | 0.631 | 0.235 | 1.83E-68 | Mono_spleen |
| WWC2     | 7.94E-73 | 1.25061426 | 0.387 | 0.109 | 2.81E-68 | Mono_spleen |
| STK38    | 8.11E-73 | 1.07982472 | 0.541 | 0.186 | 2.87E-68 | Mono_spleen |
| HECTD4   | 8.20E-73 | 1.36538621 | 0.372 | 0.102 | 2.90E-68 | Mono_spleen |
| BANP     | 8.23E-73 | 1.40548035 | 0.341 | 0.088 | 2.92E-68 | Mono_spleen |
| PANK2    | 8.38E-73 | 1.46215415 | 0.262 | 0.055 | 2.97E-68 | Mono_spleen |
| ZNF407   | 8.40E-73 | 1.15441525 | 0.528 | 0.181 | 2.98E-68 | Mono_spleen |
| CX3CR1   | 8.75E-73 | 1.02664375 | 0.319 | 0.076 | 3.10E-68 | Mono_spleen |
| EMILIN2  | 9.85E-73 | 1.086203   | 0.389 | 0.109 | 3.49E-68 | Mono_spleen |
| IGF2BP3  | 1.14E-72 | 1.10561792 | 0.538 | 0.185 | 4.03E-68 | Mono_spleen |
| RAB2A    | 1.51E-72 | 0.92733089 | 0.84  | 0.401 | 5.34E-68 | Mono_spleen |
| C1GALT1  | 1.92E-72 | 1.19218239 | 0.466 | 0.147 | 6.80E-68 | Mono_spleen |
| ARHGAP15 | 2.16E-72 | 0.98102452 | 0.921 | 0.574 | 7.64E-68 | Mono_spleen |
| MCM9     | 2.52E-72 | 1.43392303 | 0.339 | 0.088 | 8.94E-68 | Mono_spleen |

|           |          |            |       |       |          |             |
|-----------|----------|------------|-------|-------|----------|-------------|
| MICU1     | 2.53E-72 | 1.41081191 | 0.428 | 0.131 | 8.95E-68 | Mono_spleen |
| AGO4      | 2.85E-72 | 1.45512366 | 0.319 | 0.08  | 1.01E-67 | Mono_spleen |
| TNPO3     | 3.21E-72 | 1.35119317 | 0.323 | 0.081 | 1.14E-67 | Mono_spleen |
| NIN       | 3.22E-72 | 1.12337318 | 0.484 | 0.156 | 1.14E-67 | Mono_spleen |
| PHF14     | 3.95E-72 | 1.75983523 | 0.305 | 0.074 | 1.40E-67 | Mono_spleen |
| PELI2     | 4.46E-72 | 1.67769844 | 0.36  | 0.099 | 1.58E-67 | Mono_spleen |
| RREB1     | 5.03E-72 | 1.46681341 | 0.286 | 0.066 | 1.78E-67 | Mono_spleen |
| METTL9    | 6.03E-72 | 1.08756536 | 0.406 | 0.115 | 2.14E-67 | Mono_spleen |
| SP140     | 8.03E-72 | 1.17989617 | 0.417 | 0.123 | 2.84E-67 | Mono_spleen |
| CCNG2     | 8.94E-72 | 1.55094368 | 0.286 | 0.066 | 3.17E-67 | Mono_spleen |
| ZDHHC20   | 1.13E-71 | 1.10825733 | 0.512 | 0.171 | 4.01E-67 | Mono_spleen |
| LPGAT1    | 1.91E-71 | 1.10309679 | 0.536 | 0.183 | 6.78E-67 | Mono_spleen |
| DIAPH2    | 1.97E-71 | 0.94316153 | 0.846 | 0.434 | 6.99E-67 | Mono_spleen |
| ATP10A    | 2.85E-71 | 1.39103833 | 0.352 | 0.096 | 1.01E-66 | Mono_spleen |
| INPP5A    | 3.43E-71 | 1.05944925 | 0.402 | 0.117 | 1.22E-66 | Mono_spleen |
| KMT5B     | 3.83E-71 | 1.22108808 | 0.417 | 0.125 | 1.36E-66 | Mono_spleen |
| RBM39     | 4.51E-71 | 0.97770048 | 0.892 | 0.484 | 1.60E-66 | Mono_spleen |
| APC       | 5.02E-71 | 1.28565234 | 0.319 | 0.08  | 1.78E-66 | Mono_spleen |
| ESYT2     | 6.66E-71 | 0.94902052 | 0.617 | 0.235 | 2.36E-66 | Mono_spleen |
| SPOP      | 1.93E-70 | 1.32321366 | 0.4   | 0.117 | 6.86E-66 | Mono_spleen |
| UBE2G1    | 2.16E-70 | 0.97980293 | 0.525 | 0.178 | 7.64E-66 | Mono_spleen |
| KDM7A     | 2.27E-70 | 0.9620622  | 0.64  | 0.246 | 8.03E-66 | Mono_spleen |
| UHRF1BP1L | 2.28E-70 | 1.11514447 | 0.56  | 0.203 | 8.07E-66 | Mono_spleen |
| CSPP1     | 2.51E-70 | 1.28083686 | 0.332 | 0.086 | 8.89E-66 | Mono_spleen |
| RAP1B     | 2.84E-70 | 1.06769112 | 0.917 | 0.634 | 1.01E-65 | Mono_spleen |
| PRRC2B    | 3.76E-70 | 1.0391011  | 0.435 | 0.131 | 1.33E-65 | Mono_spleen |
| DIS3L2    | 4.25E-70 | 1.13345255 | 0.382 | 0.108 | 1.51E-65 | Mono_spleen |
| SSH2      | 4.37E-70 | 0.91531321 | 0.824 | 0.411 | 1.55E-65 | Mono_spleen |
| WIPF2     | 5.16E-70 | 1.24644112 | 0.365 | 0.101 | 1.83E-65 | Mono_spleen |
| XPO1      | 5.28E-70 | 1.2892055  | 0.317 | 0.079 | 1.87E-65 | Mono_spleen |
| KLHL18    | 6.42E-70 | 1.69727137 | 0.336 | 0.09  | 2.28E-65 | Mono_spleen |
| NADK      | 7.58E-70 | 0.99011399 | 0.51  | 0.167 | 2.68E-65 | Mono_spleen |
| FAF1      | 8.10E-70 | 1.34576176 | 0.415 | 0.128 | 2.87E-65 | Mono_spleen |

|         |          |            |       |       |          |             |
|---------|----------|------------|-------|-------|----------|-------------|
| MACF1   | 9.69E-70 | 0.91002996 | 0.541 | 0.187 | 3.43E-65 | Mono_spleen |
| MON2    | 1.40E-69 | 1.19932539 | 0.484 | 0.161 | 4.95E-65 | Mono_spleen |
| GNG2    | 1.59E-69 | 1.31604339 | 0.587 | 0.225 | 5.63E-65 | Mono_spleen |
| RNF130  | 1.82E-69 | 0.94329888 | 0.794 | 0.365 | 6.46E-65 | Mono_spleen |
| GATAD2B | 1.84E-69 | 1.02274914 | 0.569 | 0.205 | 6.54E-65 | Mono_spleen |
| RPTOR   | 2.20E-69 | 1.36537522 | 0.35  | 0.095 | 7.80E-65 | Mono_spleen |
| AOPEP   | 2.42E-69 | 0.92371579 | 0.475 | 0.154 | 8.59E-65 | Mono_spleen |
| SUSD6   | 2.67E-69 | 1.1470584  | 0.624 | 0.242 | 9.44E-65 | Mono_spleen |
| ANP32B  | 2.82E-69 | 1.06373568 | 0.561 | 0.206 | 1.00E-64 | Mono_spleen |
| AKAP9   | 2.90E-69 | 1.13531209 | 0.539 | 0.188 | 1.03E-64 | Mono_spleen |
| CLASP2  | 3.17E-69 | 0.95831727 | 0.593 | 0.22  | 1.12E-64 | Mono_spleen |
| LRCH3   | 8.29E-69 | 1.06477527 | 0.477 | 0.157 | 2.94E-64 | Mono_spleen |
| KIF5B   | 1.40E-68 | 0.89868617 | 0.653 | 0.25  | 4.96E-64 | Mono_spleen |
| WNK1    | 1.46E-68 | 0.91723836 | 0.688 | 0.28  | 5.17E-64 | Mono_spleen |
| RAB31   | 1.55E-68 | 0.85043529 | 0.743 | 0.315 | 5.49E-64 | Mono_spleen |
| CASK    | 1.60E-68 | 1.00693153 | 0.479 | 0.157 | 5.68E-64 | Mono_spleen |
| HS2ST1  | 1.78E-68 | 1.24138278 | 0.409 | 0.125 | 6.32E-64 | Mono_spleen |
| UBE2K   | 1.94E-68 | 1.03775821 | 0.585 | 0.215 | 6.87E-64 | Mono_spleen |
| PIAS1   | 2.12E-68 | 0.94170914 | 0.706 | 0.292 | 7.52E-64 | Mono_spleen |
| ZC3H13  | 2.45E-68 | 1.07693427 | 0.468 | 0.152 | 8.67E-64 | Mono_spleen |
| ATP11B  | 2.51E-68 | 1.10149635 | 0.461 | 0.149 | 8.88E-64 | Mono_spleen |
| IRF2    | 3.22E-68 | 1.1319788  | 0.462 | 0.15  | 1.14E-63 | Mono_spleen |
| NUS1    | 3.28E-68 | 1.1565394  | 0.481 | 0.158 | 1.16E-63 | Mono_spleen |
| FBXO11  | 3.91E-68 | 0.87466616 | 0.714 | 0.297 | 1.39E-63 | Mono_spleen |
| ARID2   | 4.72E-68 | 0.99735247 | 0.58  | 0.216 | 1.67E-63 | Mono_spleen |
| DIRAS2  | 5.52E-68 | 1.22788918 | 0.402 | 0.121 | 1.96E-63 | Mono_spleen |
| CCDC50  | 7.61E-68 | 0.91965586 | 0.393 | 0.112 | 2.69E-63 | Mono_spleen |
| RRP12   | 7.90E-68 | 1.08731969 | 0.494 | 0.165 | 2.80E-63 | Mono_spleen |
| SMURF2  | 8.16E-68 | 1.36732315 | 0.306 | 0.077 | 2.89E-63 | Mono_spleen |
| LPIN2   | 1.03E-67 | 1.25219693 | 0.402 | 0.119 | 3.65E-63 | Mono_spleen |
| CRYBG1  | 1.04E-67 | 1.31810575 | 0.398 | 0.118 | 3.70E-63 | Mono_spleen |
| ATF7    | 1.19E-67 | 1.12360501 | 0.439 | 0.136 | 4.21E-63 | Mono_spleen |
| PSPC1   | 1.40E-67 | 1.0378659  | 0.528 | 0.186 | 4.95E-63 | Mono_spleen |

|          |          |            |       |       |          |             |
|----------|----------|------------|-------|-------|----------|-------------|
| SPATA5   | 1.86E-67 | 1.6830349  | 0.25  | 0.055 | 6.61E-63 | Mono_spleen |
| EPS8     | 1.95E-67 | 1.26333679 | 0.466 | 0.157 | 6.91E-63 | Mono_spleen |
| QRICH1   | 2.01E-67 | 1.16054146 | 0.418 | 0.129 | 7.11E-63 | Mono_spleen |
| TAF10    | 2.31E-67 | 1.01865333 | 0.292 | 0.069 | 8.20E-63 | Mono_spleen |
| ATXN7L1  | 2.70E-67 | 1.54950331 | 0.284 | 0.068 | 9.57E-63 | Mono_spleen |
| XYLT1    | 2.91E-67 | 0.77041973 | 0.675 | 0.278 | 1.03E-62 | Mono_spleen |
| PDZD8    | 3.02E-67 | 1.32012403 | 0.466 | 0.157 | 1.07E-62 | Mono_spleen |
| ZCCHC7   | 3.15E-67 | 1.2723783  | 0.457 | 0.156 | 1.12E-62 | Mono_spleen |
| LIN54    | 3.50E-67 | 1.44686346 | 0.29  | 0.071 | 1.24E-62 | Mono_spleen |
| TNFRSF21 | 5.39E-67 | 1.35732484 | 0.35  | 0.097 | 1.91E-62 | Mono_spleen |
| VPS37A   | 5.46E-67 | 1.12811882 | 0.356 | 0.098 | 1.93E-62 | Mono_spleen |
| PPTC7    | 5.58E-67 | 1.11966584 | 0.413 | 0.126 | 1.98E-62 | Mono_spleen |
| CDC14A   | 5.78E-67 | 1.35701019 | 0.356 | 0.101 | 2.05E-62 | Mono_spleen |
| VPS13C   | 6.20E-67 | 1.00268044 | 0.69  | 0.287 | 2.20E-62 | Mono_spleen |
| PTPN9    | 6.71E-67 | 0.98834594 | 0.453 | 0.145 | 2.38E-62 | Mono_spleen |
| ATRX     | 6.92E-67 | 0.96957325 | 0.56  | 0.203 | 2.45E-62 | Mono_spleen |
| AHNAK    | 6.94E-67 | 1.2051171  | 0.895 | 0.563 | 2.46E-62 | Mono_spleen |
| PARN     | 7.20E-67 | 1.32323604 | 0.341 | 0.094 | 2.55E-62 | Mono_spleen |
| CAMKK2   | 7.84E-67 | 1.4208917  | 0.266 | 0.061 | 2.78E-62 | Mono_spleen |
| NKTR     | 8.04E-67 | 1.19476101 | 0.358 | 0.101 | 2.85E-62 | Mono_spleen |
| FKBP5    | 8.53E-67 | 1.24754897 | 0.455 | 0.152 | 3.02E-62 | Mono_spleen |
| AGGF1    | 9.43E-67 | 1.31480675 | 0.31  | 0.08  | 3.34E-62 | Mono_spleen |
| UBE2B    | 9.51E-67 | 0.94328265 | 0.666 | 0.262 | 3.37E-62 | Mono_spleen |
| NR2C2    | 9.78E-67 | 1.4450257  | 0.266 | 0.061 | 3.46E-62 | Mono_spleen |
| FGD3     | 1.22E-66 | 1.02801407 | 0.42  | 0.128 | 4.32E-62 | Mono_spleen |
| ZBTB11   | 1.24E-66 | 1.62728032 | 0.275 | 0.066 | 4.39E-62 | Mono_spleen |
| TANGO6   | 1.30E-66 | 1.24081435 | 0.325 | 0.086 | 4.60E-62 | Mono_spleen |
| ZNF326   | 1.61E-66 | 1.17747233 | 0.411 | 0.126 | 5.69E-62 | Mono_spleen |
| RNF11    | 2.11E-66 | 1.23772178 | 0.417 | 0.128 | 7.48E-62 | Mono_spleen |
| LRRFIP2  | 2.35E-66 | 1.36432214 | 0.409 | 0.126 | 8.34E-62 | Mono_spleen |
| FOXJ3    | 2.93E-66 | 1.04865054 | 0.448 | 0.146 | 1.04E-61 | Mono_spleen |
| TBC1D23  | 3.14E-66 | 1.06712553 | 0.468 | 0.154 | 1.11E-61 | Mono_spleen |
| NCK1     | 3.70E-66 | 1.19247509 | 0.404 | 0.122 | 1.31E-61 | Mono_spleen |

|                   |          |            |       |       |          |             |
|-------------------|----------|------------|-------|-------|----------|-------------|
| TAF3              | 4.36E-66 | 1.14171086 | 0.406 | 0.123 | 1.54E-61 | Mono_spleen |
| ETV6              | 4.66E-66 | 0.69777776 | 0.765 | 0.343 | 1.65E-61 | Mono_spleen |
| ZNF638            | 4.90E-66 | 1.104045   | 0.514 | 0.183 | 1.73E-61 | Mono_spleen |
| KCNQ1             | 5.08E-66 | 0.92636394 | 0.648 | 0.261 | 1.80E-61 | Mono_spleen |
| ADK               | 5.10E-66 | 1.03605231 | 0.672 | 0.289 | 1.81E-61 | Mono_spleen |
| ARID4A            | 5.16E-66 | 1.43909187 | 0.266 | 0.061 | 1.83E-61 | Mono_spleen |
| SLC30A5           | 5.78E-66 | 1.48706145 | 0.286 | 0.07  | 2.05E-61 | Mono_spleen |
| CTCF              | 5.99E-66 | 1.33049951 | 0.343 | 0.095 | 2.12E-61 | Mono_spleen |
| PHACTR1           | 6.58E-66 | 1.41434489 | 0.406 | 0.127 | 2.33E-61 | Mono_spleen |
| GIMAP4            | 8.08E-66 | 1.40448761 | 0.261 | 0.059 | 2.86E-61 | Mono_spleen |
| ZMIZ1             | 1.03E-65 | 1.3615477  | 0.299 | 0.076 | 3.64E-61 | Mono_spleen |
| TDRD3             | 1.27E-65 | 1.26043964 | 0.36  | 0.103 | 4.51E-61 | Mono_spleen |
| KIF13B            | 1.31E-65 | 0.9741297  | 0.492 | 0.169 | 4.64E-61 | Mono_spleen |
| HIP1              | 1.63E-65 | 1.2022133  | 0.429 | 0.138 | 5.77E-61 | Mono_spleen |
| CDKAL1            | 2.17E-65 | 1.08893331 | 0.49  | 0.171 | 7.67E-61 | Mono_spleen |
| PTPRJ             | 2.26E-65 | 0.77259619 | 0.778 | 0.359 | 8.01E-61 | Mono_spleen |
| ENSMUG00000062103 | 3.47E-65 | 1.28389758 | 0.372 | 0.111 | 1.23E-60 | Mono_spleen |
| TBL1XR1           | 3.92E-65 | 0.95322368 | 0.639 | 0.26  | 1.39E-60 | Mono_spleen |
| DYRK1A            | 4.52E-65 | 0.96198389 | 0.547 | 0.199 | 1.60E-60 | Mono_spleen |
| ARL8B             | 5.02E-65 | 0.9802157  | 0.62  | 0.246 | 1.78E-60 | Mono_spleen |
| CAPN7             | 5.60E-65 | 1.31937887 | 0.339 | 0.095 | 1.98E-60 | Mono_spleen |
| MORC3             | 5.73E-65 | 1.00202758 | 0.525 | 0.185 | 2.03E-60 | Mono_spleen |
| DUSP18            | 6.36E-65 | 0.91382849 | 0.486 | 0.163 | 2.25E-60 | Mono_spleen |
| WDR26             | 6.62E-65 | 1.01465921 | 0.543 | 0.196 | 2.34E-60 | Mono_spleen |
| FEM1C             | 6.79E-65 | 1.52879845 | 0.288 | 0.072 | 2.41E-60 | Mono_spleen |
| ATP7A             | 7.82E-65 | 1.67440742 | 0.314 | 0.085 | 2.77E-60 | Mono_spleen |
| RNASET2           | 9.27E-65 | 0.99933497 | 0.763 | 0.362 | 3.28E-60 | Mono_spleen |
| CFAP20            | 1.02E-64 | 1.71956    | 0.25  | 0.057 | 3.63E-60 | Mono_spleen |
| NBR1              | 1.10E-64 | 1.17158257 | 0.394 | 0.12  | 3.90E-60 | Mono_spleen |
| SNIP1             | 1.21E-64 | 1.4685973  | 0.281 | 0.069 | 4.30E-60 | Mono_spleen |
| CREB5             | 1.52E-64 | 1.48114808 | 0.495 | 0.176 | 5.37E-60 | Mono_spleen |
| BRD9              | 1.67E-64 | 1.41902565 | 0.262 | 0.061 | 5.93E-60 | Mono_spleen |
| DENND3            | 1.77E-64 | 1.146515   | 0.503 | 0.177 | 6.27E-60 | Mono_spleen |

|               |          |            |       |       |          |             |
|---------------|----------|------------|-------|-------|----------|-------------|
| OGT           | 1.78E-64 | 0.9877893  | 0.532 | 0.193 | 6.30E-60 | Mono_spleen |
| USP6NL        | 1.95E-64 | 1.29040888 | 0.316 | 0.084 | 6.92E-60 | Mono_spleen |
| CCPG1         | 3.00E-64 | 1.07152752 | 0.593 | 0.229 | 1.06E-59 | Mono_spleen |
| UBR4          | 3.77E-64 | 1.02342909 | 0.488 | 0.168 | 1.34E-59 | Mono_spleen |
| FAM174C       | 4.04E-64 | 0.95426672 | 0.253 | 0.056 | 1.43E-59 | Mono_spleen |
| ZNF644        | 4.20E-64 | 0.98809183 | 0.611 | 0.248 | 1.49E-59 | Mono_spleen |
| YAF2          | 4.25E-64 | 1.05415614 | 0.483 | 0.165 | 1.50E-59 | Mono_spleen |
| SMAP2         | 4.48E-64 | 0.95607752 | 0.789 | 0.38  | 1.59E-59 | Mono_spleen |
| HDAC4         | 4.73E-64 | 0.91483094 | 0.444 | 0.145 | 1.68E-59 | Mono_spleen |
| LMBRD1        | 4.99E-64 | 0.9504139  | 0.541 | 0.198 | 1.77E-59 | Mono_spleen |
| HPCAL1        | 5.12E-64 | 0.7704055  | 0.539 | 0.19  | 1.81E-59 | Mono_spleen |
| KDM2B         | 5.97E-64 | 1.32157436 | 0.33  | 0.091 | 2.12E-59 | Mono_spleen |
| MAF1          | 6.31E-64 | 0.76540185 | 0.418 | 0.127 | 2.24E-59 | Mono_spleen |
| UBE2J1        | 6.35E-64 | 1.17932897 | 0.4   | 0.122 | 2.25E-59 | Mono_spleen |
| SDHAF4        | 6.73E-64 | 1.01280725 | 0.49  | 0.166 | 2.38E-59 | Mono_spleen |
| NUAK2         | 6.82E-64 | 1.55933842 | 0.277 | 0.068 | 2.42E-59 | Mono_spleen |
| ZNF131        | 7.08E-64 | 1.24127747 | 0.316 | 0.084 | 2.51E-59 | Mono_spleen |
| DYNC1LI2      | 7.55E-64 | 1.21836724 | 0.334 | 0.091 | 2.68E-59 | Mono_spleen |
| NCOR2         | 7.96E-64 | 1.34962347 | 0.334 | 0.094 | 2.82E-59 | Mono_spleen |
| ERBIN         | 8.39E-64 | 0.85413525 | 0.787 | 0.372 | 2.97E-59 | Mono_spleen |
| ADAM10        | 1.15E-63 | 0.91886461 | 0.528 | 0.186 | 4.07E-59 | Mono_spleen |
| TUT7          | 1.18E-63 | 0.99873423 | 0.905 | 0.522 | 4.19E-59 | Mono_spleen |
| REPS2         | 1.30E-63 | 1.498596   | 0.308 | 0.081 | 4.60E-59 | Mono_spleen |
| DOP1B         | 1.72E-63 | 1.34542377 | 0.31  | 0.082 | 6.10E-59 | Mono_spleen |
| STXBP5        | 2.06E-63 | 1.29754423 | 0.343 | 0.097 | 7.31E-59 | Mono_spleen |
| MTO1          | 2.09E-63 | 1.58981906 | 0.284 | 0.072 | 7.42E-59 | Mono_spleen |
| USP15         | 2.51E-63 | 0.91513318 | 0.879 | 0.474 | 8.89E-59 | Mono_spleen |
| CHORDC1       | 2.96E-63 | 0.89626989 | 0.4   | 0.121 | 1.05E-58 | Mono_spleen |
| BCL2L2-PABPN1 | 3.76E-63 | 0.90309515 | 0.286 | 0.07  | 1.33E-58 | Mono_spleen |
| TBXAS1        | 4.19E-63 | 1.16254962 | 0.499 | 0.176 | 1.48E-58 | Mono_spleen |
| CEP135        | 4.29E-63 | 1.36628232 | 0.339 | 0.096 | 1.52E-58 | Mono_spleen |
| LUC7L3        | 4.77E-63 | 0.99096886 | 0.549 | 0.204 | 1.69E-58 | Mono_spleen |
| KLF3          | 4.87E-63 | 0.93372243 | 0.505 | 0.177 | 1.73E-58 | Mono_spleen |



|                    |          |            |       |       |          |             |
|--------------------|----------|------------|-------|-------|----------|-------------|
| FAM13B             | 6.45E-63 | 1.04570963 | 0.387 | 0.118 | 2.29E-58 | Mono_spleen |
| BABAM2             | 6.91E-63 | 0.94898501 | 0.697 | 0.303 | 2.45E-58 | Mono_spleen |
| TCF20              | 7.09E-63 | 1.83798089 | 0.257 | 0.062 | 2.51E-58 | Mono_spleen |
| AMBRA1             | 7.36E-63 | 1.18103785 | 0.391 | 0.121 | 2.61E-58 | Mono_spleen |
| IL6R               | 8.06E-63 | 0.90137047 | 0.672 | 0.27  | 2.86E-58 | Mono_spleen |
| SREK1              | 8.90E-63 | 0.95656902 | 0.644 | 0.256 | 3.15E-58 | Mono_spleen |
| SNTB1              | 9.59E-63 | 1.38683974 | 0.25  | 0.057 | 3.40E-58 | Mono_spleen |
| ZC3H7A             | 1.13E-62 | 0.92062348 | 0.409 | 0.128 | 4.01E-58 | Mono_spleen |
| TTC17              | 1.17E-62 | 1.07557519 | 0.433 | 0.141 | 4.14E-58 | Mono_spleen |
| TRIM22             | 1.20E-62 | 1.1836159  | 0.477 | 0.167 | 4.25E-58 | Mono_spleen |
| EYA3               | 1.32E-62 | 1.17186568 | 0.382 | 0.116 | 4.67E-58 | Mono_spleen |
| MIA2               | 2.03E-62 | 1.38068989 | 0.327 | 0.09  | 7.20E-58 | Mono_spleen |
| WAC                | 2.17E-62 | 0.87094941 | 0.701 | 0.296 | 7.69E-58 | Mono_spleen |
| COG5               | 2.25E-62 | 0.93325374 | 0.554 | 0.208 | 7.98E-58 | Mono_spleen |
| UBE2Q2             | 2.58E-62 | 1.32745901 | 0.378 | 0.116 | 9.15E-58 | Mono_spleen |
| GAK                | 2.81E-62 | 1.26555414 | 0.334 | 0.094 | 9.97E-58 | Mono_spleen |
| RTN4               | 2.99E-62 | 0.89990285 | 0.741 | 0.337 | 1.06E-57 | Mono_spleen |
| ENSMMUG00000050385 | 2.99E-62 | 1.50691467 | 0.35  | 0.103 | 1.06E-57 | Mono_spleen |
| ZFX                | 3.49E-62 | 1.01227811 | 0.437 | 0.144 | 1.23E-57 | Mono_spleen |
| SIK2               | 3.55E-62 | 1.16319641 | 0.299 | 0.078 | 1.26E-57 | Mono_spleen |
| TLK2               | 4.70E-62 | 1.18927006 | 0.393 | 0.122 | 1.67E-57 | Mono_spleen |
| USP8               | 4.80E-62 | 1.01040331 | 0.47  | 0.16  | 1.70E-57 | Mono_spleen |
| MGA                | 4.84E-62 | 1.36893293 | 0.264 | 0.064 | 1.72E-57 | Mono_spleen |
| HIPK3              | 4.96E-62 | 0.92804143 | 0.642 | 0.263 | 1.76E-57 | Mono_spleen |
| PPM1A              | 5.69E-62 | 1.05998039 | 0.446 | 0.149 | 2.02E-57 | Mono_spleen |
| GGNBP2             | 5.93E-62 | 0.89529919 | 0.552 | 0.203 | 2.10E-57 | Mono_spleen |
| BRD2               | 6.18E-62 | 0.89019625 | 0.67  | 0.27  | 2.19E-57 | Mono_spleen |
| ZNF438             | 6.94E-62 | 1.53268567 | 0.253 | 0.06  | 2.46E-57 | Mono_spleen |
| NABP1              | 7.60E-62 | 1.21254964 | 0.552 | 0.215 | 2.69E-57 | Mono_spleen |
| FYN                | 7.70E-62 | 0.87088837 | 0.505 | 0.179 | 2.73E-57 | Mono_spleen |
| ENSMMUG00000005482 | 7.84E-62 | 1.25577744 | 0.275 | 0.069 | 2.78E-57 | Mono_spleen |
| SPIDR              | 9.35E-62 | 0.93491813 | 0.604 | 0.246 | 3.31E-57 | Mono_spleen |
| EPC2               | 9.45E-62 | 1.01952942 | 0.479 | 0.167 | 3.35E-57 | Mono_spleen |

|         |          |            |       |       |          |             |
|---------|----------|------------|-------|-------|----------|-------------|
| FCAR    | 9.70E-62 | 1.26344499 | 0.549 | 0.219 | 3.44E-57 | Mono_spleen |
| CAPRIN1 | 1.15E-61 | 1.090153   | 0.36  | 0.105 | 4.06E-57 | Mono_spleen |
| PTBP3   | 1.18E-61 | 0.83866659 | 0.787 | 0.376 | 4.17E-57 | Mono_spleen |
| POLK    | 1.48E-61 | 1.18414861 | 0.349 | 0.102 | 5.26E-57 | Mono_spleen |
| NOL7    | 1.59E-61 | 1.28854196 | 0.284 | 0.072 | 5.62E-57 | Mono_spleen |
| CPEB4   | 1.71E-61 | 1.22030231 | 0.418 | 0.135 | 6.07E-57 | Mono_spleen |
| PPIG    | 1.85E-61 | 0.92596423 | 0.539 | 0.2   | 6.54E-57 | Mono_spleen |
| BCLAF1  | 2.06E-61 | 0.93343337 | 0.692 | 0.287 | 7.30E-57 | Mono_spleen |
| WASHC4  | 2.45E-61 | 0.93517917 | 0.479 | 0.164 | 8.69E-57 | Mono_spleen |
| TULP4   | 2.57E-61 | 1.10004486 | 0.306 | 0.082 | 9.10E-57 | Mono_spleen |
| SNRNP70 | 2.71E-61 | 1.0279868  | 0.407 | 0.129 | 9.60E-57 | Mono_spleen |
| FTO     | 2.94E-61 | 1.21604394 | 0.349 | 0.104 | 1.04E-56 | Mono_spleen |
| GAS7    | 3.10E-61 | 0.87124875 | 0.846 | 0.459 | 1.10E-56 | Mono_spleen |
| AGO3    | 3.37E-61 | 1.05628671 | 0.565 | 0.216 | 1.19E-56 | Mono_spleen |
| PPP1R10 | 5.06E-61 | 1.20486134 | 0.501 | 0.178 | 1.79E-56 | Mono_spleen |
| CNOT4   | 5.27E-61 | 0.90358018 | 0.534 | 0.197 | 1.87E-56 | Mono_spleen |
| MCU     | 6.90E-61 | 1.19307488 | 0.394 | 0.125 | 2.44E-56 | Mono_spleen |
| RDX     | 7.35E-61 | 1.24380722 | 0.299 | 0.08  | 2.60E-56 | Mono_spleen |
| GAPVD1  | 7.46E-61 | 0.9270779  | 0.481 | 0.166 | 2.64E-56 | Mono_spleen |
| WDR7    | 7.59E-61 | 1.08032076 | 0.394 | 0.125 | 2.69E-56 | Mono_spleen |
| CAB39   | 8.19E-61 | 0.77487372 | 0.69  | 0.285 | 2.90E-56 | Mono_spleen |
| NT5DC1  | 8.42E-61 | 1.48059378 | 0.347 | 0.103 | 2.98E-56 | Mono_spleen |
| BTBD9   | 8.75E-61 | 0.94697645 | 0.556 | 0.218 | 3.10E-56 | Mono_spleen |
| USP25   | 9.32E-61 | 0.90372248 | 0.494 | 0.174 | 3.30E-56 | Mono_spleen |
| SLC9A1  | 9.33E-61 | 1.4254021  | 0.268 | 0.066 | 3.30E-56 | Mono_spleen |
| TRA2B   | 9.41E-61 | 0.90265188 | 0.881 | 0.499 | 3.33E-56 | Mono_spleen |
| PPP2R5C | 9.50E-61 | 1.02856824 | 0.611 | 0.243 | 3.37E-56 | Mono_spleen |
| CYRIA   | 1.14E-60 | 0.91961707 | 0.828 | 0.444 | 4.04E-56 | Mono_spleen |
| MTREX   | 1.57E-60 | 0.88629917 | 0.528 | 0.193 | 5.57E-56 | Mono_spleen |
| BDP1    | 1.57E-60 | 1.16419525 | 0.42  | 0.139 | 5.57E-56 | Mono_spleen |
| ANKRD11 | 1.63E-60 | 0.80995855 | 0.572 | 0.212 | 5.77E-56 | Mono_spleen |
| LARGE1  | 1.75E-60 | 1.18372164 | 0.292 | 0.077 | 6.21E-56 | Mono_spleen |
| ITGA4   | 2.01E-60 | 0.93971339 | 0.767 | 0.376 | 7.12E-56 | Mono_spleen |

|                    |          |            |       |       |          |             |
|--------------------|----------|------------|-------|-------|----------|-------------|
| CTSZ               | 3.22E-60 | 0.88397992 | 0.622 | 0.252 | 1.14E-55 | Mono_spleen |
| TSC22D2            | 3.28E-60 | 1.10800528 | 0.439 | 0.149 | 1.16E-55 | Mono_spleen |
| UBL3               | 3.33E-60 | 0.91738021 | 0.71  | 0.321 | 1.18E-55 | Mono_spleen |
| CCDC91             | 3.51E-60 | 1.01468579 | 0.486 | 0.176 | 1.24E-55 | Mono_spleen |
| SSBP3              | 3.97E-60 | 1.19019636 | 0.323 | 0.09  | 1.41E-55 | Mono_spleen |
| MAPRE2             | 4.26E-60 | 1.24874499 | 0.409 | 0.133 | 1.51E-55 | Mono_spleen |
| ENSMMUG00000063316 | 4.28E-60 | 1.35354293 | 0.53  | 0.206 | 1.52E-55 | Mono_spleen |
| EIF4G3             | 5.02E-60 | 1.30229098 | 0.376 | 0.119 | 1.78E-55 | Mono_spleen |
| AUH                | 5.58E-60 | 1.15073244 | 0.356 | 0.107 | 1.98E-55 | Mono_spleen |
| HIRA               | 5.66E-60 | 1.33989178 | 0.279 | 0.072 | 2.00E-55 | Mono_spleen |
| XPC                | 1.14E-59 | 1.41526374 | 0.279 | 0.072 | 4.05E-55 | Mono_spleen |
| VRK2               | 1.17E-59 | 1.54329012 | 0.297 | 0.08  | 4.15E-55 | Mono_spleen |
| RPRD1A             | 1.68E-59 | 1.37313108 | 0.33  | 0.096 | 5.96E-55 | Mono_spleen |
| USP3               | 1.86E-59 | 0.94453317 | 0.767 | 0.371 | 6.60E-55 | Mono_spleen |
| USP42              | 2.23E-59 | 1.60222771 | 0.261 | 0.065 | 7.90E-55 | Mono_spleen |
| DNAJC3             | 2.27E-59 | 1.08538136 | 0.492 | 0.178 | 8.06E-55 | Mono_spleen |
| PTAFR              | 2.45E-59 | 1.24389888 | 0.365 | 0.111 | 8.69E-55 | Mono_spleen |
| VAV3               | 2.47E-59 | 0.75924117 | 0.71  | 0.314 | 8.75E-55 | Mono_spleen |
| ANKRD10            | 2.56E-59 | 0.84578404 | 0.56  | 0.215 | 9.07E-55 | Mono_spleen |
| CHN2               | 2.97E-59 | 1.33144629 | 0.415 | 0.142 | 1.05E-54 | Mono_spleen |
| RPS2               | 3.17E-59 | 0.92627016 | 0.807 | 0.47  | 1.12E-54 | Mono_spleen |
| KIF16B             | 4.04E-59 | 1.2204718  | 0.266 | 0.067 | 1.43E-54 | Mono_spleen |
| MIER1              | 5.86E-59 | 0.82327331 | 0.607 | 0.24  | 2.08E-54 | Mono_spleen |
| PREP               | 6.82E-59 | 1.27804678 | 0.283 | 0.074 | 2.42E-54 | Mono_spleen |
| TLK1               | 6.95E-59 | 1.14865299 | 0.4   | 0.131 | 2.46E-54 | Mono_spleen |
| RSRC2              | 7.11E-59 | 0.83214968 | 0.594 | 0.232 | 2.52E-54 | Mono_spleen |
| RNF19A             | 7.17E-59 | 1.12556617 | 0.371 | 0.114 | 2.54E-54 | Mono_spleen |
| UBAC2              | 7.43E-59 | 0.82892813 | 0.734 | 0.331 | 2.63E-54 | Mono_spleen |
| PTPRC              | 8.54E-59 | 0.65664311 | 0.963 | 0.764 | 3.03E-54 | Mono_spleen |
| SLAIN2             | 1.02E-58 | 1.22227577 | 0.319 | 0.09  | 3.60E-54 | Mono_spleen |
| EIF4EBP3           | 1.03E-58 | 0.92689486 | 0.611 | 0.25  | 3.63E-54 | Mono_spleen |
| ARHGEF6            | 1.14E-58 | 1.06983092 | 0.367 | 0.113 | 4.04E-54 | Mono_spleen |
| KAT6A              | 1.25E-58 | 0.95978218 | 0.466 | 0.162 | 4.44E-54 | Mono_spleen |

|                    |          |            |       |       |          |             |
|--------------------|----------|------------|-------|-------|----------|-------------|
| SUDS3              | 1.33E-58 | 1.44939083 | 0.251 | 0.061 | 4.73E-54 | Mono_spleen |
| EIF5               | 1.43E-58 | 0.89500859 | 0.818 | 0.391 | 5.08E-54 | Mono_spleen |
| KATNBL1            | 1.46E-58 | 1.06547838 | 0.494 | 0.181 | 5.18E-54 | Mono_spleen |
| RPS6KC1            | 1.64E-58 | 0.86047528 | 0.442 | 0.15  | 5.82E-54 | Mono_spleen |
| PBRM1              | 1.78E-58 | 0.85174783 | 0.483 | 0.171 | 6.30E-54 | Mono_spleen |
| CCNY               | 1.79E-58 | 0.95183583 | 0.413 | 0.135 | 6.33E-54 | Mono_spleen |
| DISC1              | 2.00E-58 | 1.28116854 | 0.321 | 0.093 | 7.09E-54 | Mono_spleen |
| KDM5A              | 2.18E-58 | 0.85937902 | 0.398 | 0.125 | 7.73E-54 | Mono_spleen |
| PPP1CC             | 2.99E-58 | 0.85109873 | 0.417 | 0.135 | 1.06E-53 | Mono_spleen |
| DDX5               | 3.02E-58 | 0.70520154 | 0.939 | 0.742 | 1.07E-53 | Mono_spleen |
| ARL2BP             | 3.83E-58 | 0.91352371 | 0.415 | 0.136 | 1.36E-53 | Mono_spleen |
| HP1BP3             | 3.84E-58 | 0.80108565 | 0.604 | 0.237 | 1.36E-53 | Mono_spleen |
| ZBTB44             | 3.94E-58 | 1.27700741 | 0.262 | 0.065 | 1.40E-53 | Mono_spleen |
| ZFAND6             | 4.29E-58 | 0.78693868 | 0.811 | 0.386 | 1.52E-53 | Mono_spleen |
| CHSY1              | 4.98E-58 | 1.39392    | 0.257 | 0.064 | 1.76E-53 | Mono_spleen |
| URI1               | 5.34E-58 | 1.16580212 | 0.321 | 0.092 | 1.89E-53 | Mono_spleen |
| TMED5              | 5.42E-58 | 0.98852615 | 0.494 | 0.181 | 1.92E-53 | Mono_spleen |
| MDM2               | 6.58E-58 | 1.13056664 | 0.459 | 0.163 | 2.33E-53 | Mono_spleen |
| EIF2AK4            | 6.61E-58 | 1.16551134 | 0.312 | 0.087 | 2.34E-53 | Mono_spleen |
| GLUD1              | 7.08E-58 | 0.90781523 | 0.338 | 0.097 | 2.51E-53 | Mono_spleen |
| ADNP               | 7.51E-58 | 1.08043862 | 0.354 | 0.108 | 2.66E-53 | Mono_spleen |
| ADPGK              | 8.09E-58 | 0.98463892 | 0.339 | 0.099 | 2.87E-53 | Mono_spleen |
| CSF3R              | 8.22E-58 | 1.1256855  | 0.694 | 0.307 | 2.91E-53 | Mono_spleen |
| SHOC2              | 8.65E-58 | 0.84388445 | 0.725 | 0.332 | 3.06E-53 | Mono_spleen |
| HERPUD1            | 9.18E-58 | 0.95411808 | 0.554 | 0.219 | 3.25E-53 | Mono_spleen |
| MBTD1              | 1.00E-57 | 1.44487868 | 0.292 | 0.08  | 3.56E-53 | Mono_spleen |
| ZNF92              | 1.07E-57 | 1.48334457 | 0.308 | 0.088 | 3.80E-53 | Mono_spleen |
| TASOR2             | 1.07E-57 | 1.2817038  | 0.334 | 0.098 | 3.80E-53 | Mono_spleen |
| ECPAS              | 1.12E-57 | 0.97566046 | 0.437 | 0.149 | 3.95E-53 | Mono_spleen |
| AAK1               | 1.14E-57 | 0.75816679 | 0.615 | 0.249 | 4.05E-53 | Mono_spleen |
| PPP2R2D            | 1.32E-57 | 0.9691711  | 0.354 | 0.107 | 4.68E-53 | Mono_spleen |
| LYN                | 1.33E-57 | 0.74632885 | 0.954 | 0.711 | 4.71E-53 | Mono_spleen |
| ENSMMUG00000021425 | 1.38E-57 | 0.91755753 | 0.494 | 0.183 | 4.91E-53 | Mono_spleen |

|                    |          |            |       |       |          |             |
|--------------------|----------|------------|-------|-------|----------|-------------|
| UXS1               | 1.54E-57 | 1.22311426 | 0.312 | 0.088 | 5.46E-53 | Mono_spleen |
| PCM1               | 1.60E-57 | 0.88671208 | 0.462 | 0.162 | 5.68E-53 | Mono_spleen |
| USP7               | 1.93E-57 | 1.07952391 | 0.361 | 0.111 | 6.83E-53 | Mono_spleen |
| HBP1               | 2.10E-57 | 0.87140024 | 0.574 | 0.222 | 7.43E-53 | Mono_spleen |
| PRELID1            | 2.17E-57 | 0.80366945 | 0.585 | 0.229 | 7.68E-53 | Mono_spleen |
| PIK3CA             | 2.24E-57 | 1.37800522 | 0.36  | 0.114 | 7.95E-53 | Mono_spleen |
| UBE3A              | 2.27E-57 | 0.70706376 | 0.547 | 0.204 | 8.04E-53 | Mono_spleen |
| PER1               | 2.38E-57 | 0.85970461 | 0.51  | 0.185 | 8.44E-53 | Mono_spleen |
| PAG1               | 2.59E-57 | 1.0296825  | 0.361 | 0.113 | 9.16E-53 | Mono_spleen |
| WVOX               | 2.89E-57 | 1.2724197  | 0.479 | 0.186 | 1.02E-52 | Mono_spleen |
| XPO7               | 2.92E-57 | 1.39855802 | 0.299 | 0.083 | 1.03E-52 | Mono_spleen |
| ZEB2               | 3.16E-57 | 0.68842552 | 0.963 | 0.757 | 1.12E-52 | Mono_spleen |
| UBR5               | 3.42E-57 | 0.68868898 | 0.602 | 0.241 | 1.21E-52 | Mono_spleen |
| CUL2               | 4.71E-57 | 1.29315946 | 0.325 | 0.095 | 1.67E-52 | Mono_spleen |
| ENSMMUG00000020721 | 4.74E-57 | 0.92322312 | 0.538 | 0.208 | 1.68E-52 | Mono_spleen |
| ANKIB1             | 4.86E-57 | 1.23205366 | 0.31  | 0.088 | 1.72E-52 | Mono_spleen |
| TAF15              | 6.56E-57 | 0.81407966 | 0.527 | 0.197 | 2.32E-52 | Mono_spleen |
| ARL5A              | 6.81E-57 | 0.82384746 | 0.391 | 0.123 | 2.41E-52 | Mono_spleen |
| GOLGA4             | 6.95E-57 | 0.85732901 | 0.572 | 0.23  | 2.46E-52 | Mono_spleen |
| SEC31A             | 8.82E-57 | 0.92786004 | 0.613 | 0.255 | 3.13E-52 | Mono_spleen |
| AP3B1              | 9.16E-57 | 0.8018929  | 0.648 | 0.274 | 3.25E-52 | Mono_spleen |
| ENSMMUG00000008587 | 1.98E-56 | 1.03440551 | 0.383 | 0.125 | 7.01E-52 | Mono_spleen |
| POLR2A             | 2.25E-56 | 1.27220415 | 0.371 | 0.117 | 7.97E-52 | Mono_spleen |
| SMG1               | 2.43E-56 | 0.74647408 | 0.492 | 0.177 | 8.62E-52 | Mono_spleen |
| RBM25              | 2.44E-56 | 0.84703776 | 0.556 | 0.217 | 8.65E-52 | Mono_spleen |
| GINM1              | 2.59E-56 | 1.10612815 | 0.361 | 0.112 | 9.19E-52 | Mono_spleen |
| ERO1A              | 3.09E-56 | 0.80118793 | 0.451 | 0.154 | 1.09E-51 | Mono_spleen |
| MCL1               | 3.13E-56 | 0.85608522 | 0.789 | 0.396 | 1.11E-51 | Mono_spleen |
| MYOF               | 3.82E-56 | 1.14647493 | 0.323 | 0.095 | 1.35E-51 | Mono_spleen |
| RIPOR2             | 3.86E-56 | 0.94298252 | 0.804 | 0.408 | 1.37E-51 | Mono_spleen |
| ADAR               | 4.36E-56 | 0.93104944 | 0.369 | 0.115 | 1.54E-51 | Mono_spleen |
| PRPF38B            | 5.56E-56 | 0.93475294 | 0.394 | 0.128 | 1.97E-51 | Mono_spleen |
| SETD3              | 5.90E-56 | 1.04532464 | 0.319 | 0.093 | 2.09E-51 | Mono_spleen |

|          |          |            |       |       |          |             |
|----------|----------|------------|-------|-------|----------|-------------|
| COPG2    | 5.95E-56 | 1.24966231 | 0.275 | 0.073 | 2.11E-51 | Mono_spleen |
| SAMD4B   | 7.55E-56 | 0.80113694 | 0.466 | 0.165 | 2.67E-51 | Mono_spleen |
| PDS5B    | 8.54E-56 | 1.10903442 | 0.448 | 0.158 | 3.03E-51 | Mono_spleen |
| RCOR3    | 9.88E-56 | 1.20296216 | 0.301 | 0.084 | 3.50E-51 | Mono_spleen |
| HIPK1    | 1.09E-55 | 1.06488218 | 0.347 | 0.106 | 3.86E-51 | Mono_spleen |
| DNM1     | 1.12E-55 | 1.10341125 | 0.292 | 0.081 | 3.95E-51 | Mono_spleen |
| LPP      | 1.15E-55 | 0.78453539 | 0.789 | 0.402 | 4.06E-51 | Mono_spleen |
| RANBP9   | 1.17E-55 | 1.16340541 | 0.444 | 0.158 | 4.13E-51 | Mono_spleen |
| RMND5A   | 1.18E-55 | 1.45259341 | 0.257 | 0.066 | 4.19E-51 | Mono_spleen |
| MAPKAPK2 | 1.31E-55 | 0.91086455 | 0.429 | 0.149 | 4.64E-51 | Mono_spleen |
| SDCCAG8  | 1.42E-55 | 1.01564526 | 0.457 | 0.166 | 5.04E-51 | Mono_spleen |
| SPAG9    | 1.46E-55 | 0.83252376 | 0.842 | 0.45  | 5.16E-51 | Mono_spleen |
| RARA     | 1.56E-55 | 0.91595764 | 0.488 | 0.175 | 5.51E-51 | Mono_spleen |
| ATAD2B   | 1.75E-55 | 0.74272889 | 0.657 | 0.283 | 6.19E-51 | Mono_spleen |
| GNPTAB   | 2.09E-55 | 1.13179153 | 0.281 | 0.075 | 7.39E-51 | Mono_spleen |
| ZZZ3     | 2.14E-55 | 1.23707369 | 0.303 | 0.087 | 7.59E-51 | Mono_spleen |
| TIAM1    | 2.19E-55 | 0.84074961 | 0.413 | 0.139 | 7.76E-51 | Mono_spleen |
| IQCG     | 2.22E-55 | 1.44215507 | 0.273 | 0.074 | 7.86E-51 | Mono_spleen |
| PPP1R2   | 2.50E-55 | 1.02243258 | 0.433 | 0.149 | 8.87E-51 | Mono_spleen |
| CCAR1    | 2.53E-55 | 1.0023073  | 0.328 | 0.097 | 8.97E-51 | Mono_spleen |
| TGFB1    | 2.62E-55 | 0.85619093 | 0.4   | 0.132 | 9.29E-51 | Mono_spleen |
| AKNA     | 2.72E-55 | 0.81484743 | 0.42  | 0.141 | 9.64E-51 | Mono_spleen |
| BICRAL   | 3.01E-55 | 1.27139589 | 0.255 | 0.064 | 1.07E-50 | Mono_spleen |
| KMT2E    | 3.02E-55 | 0.73384839 | 0.725 | 0.336 | 1.07E-50 | Mono_spleen |
| CAPZA2   | 3.14E-55 | 0.84503052 | 0.846 | 0.485 | 1.11E-50 | Mono_spleen |
| WDR82    | 3.35E-55 | 0.96978528 | 0.303 | 0.084 | 1.19E-50 | Mono_spleen |
| FAM120A  | 3.79E-55 | 0.85490845 | 0.525 | 0.202 | 1.34E-50 | Mono_spleen |
| GOLM2    | 4.03E-55 | 1.02725251 | 0.378 | 0.122 | 1.43E-50 | Mono_spleen |
| P2RY13   | 4.28E-55 | 1.21889759 | 0.283 | 0.077 | 1.52E-50 | Mono_spleen |
| RPIA     | 4.39E-55 | 0.93756817 | 0.424 | 0.147 | 1.56E-50 | Mono_spleen |
| SNX2     | 7.09E-55 | 0.83376669 | 0.776 | 0.394 | 2.51E-50 | Mono_spleen |
| UHMK1    | 7.18E-55 | 0.86880798 | 0.466 | 0.166 | 2.55E-50 | Mono_spleen |
| SUN1     | 7.70E-55 | 1.08951802 | 0.284 | 0.078 | 2.73E-50 | Mono_spleen |

|          |          |            |       |       |          |             |
|----------|----------|------------|-------|-------|----------|-------------|
| THOC2    | 8.32E-55 | 0.98320489 | 0.398 | 0.133 | 2.95E-50 | Mono_spleen |
| CREB1    | 8.39E-55 | 1.11637394 | 0.367 | 0.118 | 2.97E-50 | Mono_spleen |
| ASCC3    | 8.45E-55 | 0.8280786  | 0.549 | 0.217 | 3.00E-50 | Mono_spleen |
| FAM135A  | 8.72E-55 | 1.21890752 | 0.295 | 0.085 | 3.09E-50 | Mono_spleen |
| SEC24B   | 1.09E-54 | 0.78472808 | 0.594 | 0.241 | 3.88E-50 | Mono_spleen |
| RPRD2    | 1.10E-54 | 1.35600535 | 0.336 | 0.104 | 3.91E-50 | Mono_spleen |
| ADGRE2   | 1.21E-54 | 0.88197034 | 0.582 | 0.235 | 4.29E-50 | Mono_spleen |
| RAPGEF1  | 1.29E-54 | 0.71101552 | 0.815 | 0.4   | 4.58E-50 | Mono_spleen |
| STK24    | 1.29E-54 | 0.68520767 | 0.752 | 0.349 | 4.58E-50 | Mono_spleen |
| DLST     | 1.33E-54 | 1.24567209 | 0.345 | 0.108 | 4.73E-50 | Mono_spleen |
| DYNC1H1  | 1.36E-54 | 0.89531626 | 0.417 | 0.142 | 4.82E-50 | Mono_spleen |
| KBTBD2   | 1.41E-54 | 1.05777163 | 0.387 | 0.128 | 4.99E-50 | Mono_spleen |
| SOS2     | 1.42E-54 | 0.9160061  | 0.439 | 0.154 | 5.04E-50 | Mono_spleen |
| WDR74    | 1.48E-54 | 1.20605084 | 0.477 | 0.176 | 5.24E-50 | Mono_spleen |
| SH3GLB1  | 1.60E-54 | 0.73561027 | 0.525 | 0.197 | 5.66E-50 | Mono_spleen |
| CUL4A    | 1.62E-54 | 1.05579165 | 0.336 | 0.102 | 5.73E-50 | Mono_spleen |
| DCAF6    | 1.65E-54 | 1.03650137 | 0.299 | 0.085 | 5.84E-50 | Mono_spleen |
| HECW2    | 1.80E-54 | 1.48448503 | 0.25  | 0.064 | 6.36E-50 | Mono_spleen |
| CCNT2    | 1.81E-54 | 1.02164047 | 0.374 | 0.121 | 6.41E-50 | Mono_spleen |
| IRF1     | 1.86E-54 | 1.18930237 | 0.484 | 0.186 | 6.59E-50 | Mono_spleen |
| TENT2    | 2.06E-54 | 0.83922895 | 0.433 | 0.149 | 7.31E-50 | Mono_spleen |
| ASPH     | 2.92E-54 | 1.22311684 | 0.36  | 0.117 | 1.03E-49 | Mono_spleen |
| IGF2R    | 3.00E-54 | 0.75431871 | 0.631 | 0.269 | 1.06E-49 | Mono_spleen |
| CD2AP    | 3.01E-54 | 1.08697396 | 0.262 | 0.068 | 1.07E-49 | Mono_spleen |
| CDC42EP3 | 3.40E-54 | 1.07615219 | 0.365 | 0.118 | 1.20E-49 | Mono_spleen |
| MARCHF7  | 3.52E-54 | 0.727587   | 0.672 | 0.292 | 1.25E-49 | Mono_spleen |
| AHCTF1   | 4.48E-54 | 1.20029264 | 0.328 | 0.101 | 1.59E-49 | Mono_spleen |
| ARFIP1   | 5.18E-54 | 1.21506865 | 0.25  | 0.064 | 1.83E-49 | Mono_spleen |
| SVIL     | 5.21E-54 | 1.16963952 | 0.264 | 0.07  | 1.85E-49 | Mono_spleen |
| HNRNPAB  | 5.37E-54 | 0.63752973 | 0.361 | 0.11  | 1.90E-49 | Mono_spleen |
| PCYT1A   | 6.71E-54 | 1.11160251 | 0.325 | 0.097 | 2.38E-49 | Mono_spleen |
| CLINT1   | 7.08E-54 | 0.77722273 | 0.683 | 0.301 | 2.51E-49 | Mono_spleen |
| HERC4    | 8.99E-54 | 0.94450029 | 0.389 | 0.129 | 3.19E-49 | Mono_spleen |

|          |          |            |       |       |          |             |
|----------|----------|------------|-------|-------|----------|-------------|
| PRPF40A  | 1.22E-53 | 0.75567771 | 0.661 | 0.277 | 4.32E-49 | Mono_spleen |
| TNFRSF1A | 1.26E-53 | 0.78006057 | 0.354 | 0.108 | 4.46E-49 | Mono_spleen |
| ZNF703   | 1.34E-53 | 0.76879596 | 0.501 | 0.188 | 4.74E-49 | Mono_spleen |
| PLEKHM2  | 1.36E-53 | 0.91607179 | 0.349 | 0.109 | 4.81E-49 | Mono_spleen |
| MSH3     | 1.40E-53 | 1.36652598 | 0.288 | 0.082 | 4.96E-49 | Mono_spleen |
| BMPR2    | 1.44E-53 | 1.3443494  | 0.261 | 0.07  | 5.09E-49 | Mono_spleen |
| SECISBP2 | 1.51E-53 | 0.99798353 | 0.323 | 0.096 | 5.34E-49 | Mono_spleen |
| OPA1     | 1.54E-53 | 0.82460545 | 0.506 | 0.192 | 5.46E-49 | Mono_spleen |
| ILF3     | 1.59E-53 | 0.84631701 | 0.464 | 0.168 | 5.64E-49 | Mono_spleen |
| EPS15    | 1.82E-53 | 0.78764165 | 0.67  | 0.295 | 6.46E-49 | Mono_spleen |
| PREX1    | 1.98E-53 | 0.86976193 | 0.545 | 0.215 | 7.02E-49 | Mono_spleen |
| RELB     | 2.28E-53 | 0.85929925 | 0.488 | 0.185 | 8.07E-49 | Mono_spleen |
| ZFAND3   | 2.30E-53 | 0.75023885 | 0.877 | 0.496 | 8.14E-49 | Mono_spleen |
| POU2F1   | 2.46E-53 | 1.10749579 | 0.415 | 0.147 | 8.71E-49 | Mono_spleen |
| EIF3F    | 2.55E-53 | 0.81584828 | 0.71  | 0.338 | 9.03E-49 | Mono_spleen |
| SINHCAF  | 2.58E-53 | 1.01550297 | 0.35  | 0.11  | 9.15E-49 | Mono_spleen |
| TRPS1    | 2.84E-53 | 0.7825734  | 0.848 | 0.475 | 1.01E-48 | Mono_spleen |
| GPR107   | 3.10E-53 | 0.83553965 | 0.409 | 0.14  | 1.10E-48 | Mono_spleen |
| SFSWAP   | 3.91E-53 | 0.85496756 | 0.363 | 0.116 | 1.39E-48 | Mono_spleen |
| LRRC8C   | 3.97E-53 | 1.13892384 | 0.306 | 0.09  | 1.41E-48 | Mono_spleen |
| AP1G1    | 4.96E-53 | 1.08931165 | 0.409 | 0.143 | 1.76E-48 | Mono_spleen |
| DNM2     | 5.31E-53 | 0.98178353 | 0.472 | 0.174 | 1.88E-48 | Mono_spleen |
| RANBP1   | 5.34E-53 | 1.00779801 | 0.301 | 0.086 | 1.89E-48 | Mono_spleen |
| BANK1    | 5.48E-53 | 1.43568777 | 0.303 | 0.091 | 1.94E-48 | Mono_spleen |
| CNTRL    | 5.52E-53 | 1.02952793 | 0.391 | 0.13  | 1.96E-48 | Mono_spleen |
| MAP3K3   | 6.13E-53 | 0.77025671 | 0.45  | 0.16  | 2.17E-48 | Mono_spleen |
| GMDS     | 6.33E-53 | 0.98500999 | 0.361 | 0.117 | 2.24E-48 | Mono_spleen |
| ST7L     | 6.66E-53 | 1.18729672 | 0.253 | 0.066 | 2.36E-48 | Mono_spleen |
| FRS2     | 6.91E-53 | 1.21663848 | 0.288 | 0.083 | 2.45E-48 | Mono_spleen |
| MGRN1    | 6.95E-53 | 0.86218997 | 0.354 | 0.11  | 2.46E-48 | Mono_spleen |
| ZC3H18   | 7.20E-53 | 1.33678704 | 0.321 | 0.098 | 2.55E-48 | Mono_spleen |
| SAMD9L   | 7.53E-53 | 1.08829736 | 0.361 | 0.116 | 2.67E-48 | Mono_spleen |
| GMCL1    | 9.89E-53 | 1.24589249 | 0.308 | 0.092 | 3.50E-48 | Mono_spleen |



|                   |          |            |       |       |          |             |
|-------------------|----------|------------|-------|-------|----------|-------------|
| CBLB              | 1.30E-52 | 1.0343394  | 0.325 | 0.099 | 4.62E-48 | Mono_spleen |
| SUZ12             | 1.91E-52 | 1.03898106 | 0.292 | 0.083 | 6.75E-48 | Mono_spleen |
| DYRK2             | 1.94E-52 | 1.26890776 | 0.266 | 0.072 | 6.87E-48 | Mono_spleen |
| CMTM3             | 1.96E-52 | 0.94820982 | 0.31  | 0.091 | 6.95E-48 | Mono_spleen |
| PAM               | 2.07E-52 | 1.04641926 | 0.402 | 0.141 | 7.34E-48 | Mono_spleen |
| DEK               | 2.13E-52 | 0.76152484 | 0.44  | 0.155 | 7.53E-48 | Mono_spleen |
| AKIRIN1           | 2.28E-52 | 0.66772698 | 0.387 | 0.126 | 8.06E-48 | Mono_spleen |
| PRMT3             | 2.55E-52 | 1.1222594  | 0.255 | 0.067 | 9.02E-48 | Mono_spleen |
| HNRNPU            | 2.65E-52 | 0.89241415 | 0.831 | 0.485 | 9.40E-48 | Mono_spleen |
| IST1              | 3.13E-52 | 0.87256349 | 0.461 | 0.166 | 1.11E-47 | Mono_spleen |
| NUP210            | 3.65E-52 | 1.14534422 | 0.257 | 0.068 | 1.29E-47 | Mono_spleen |
| ACER3             | 3.90E-52 | 1.08279508 | 0.352 | 0.115 | 1.38E-47 | Mono_spleen |
| MAML3             | 4.64E-52 | 0.77205348 | 0.747 | 0.379 | 1.65E-47 | Mono_spleen |
| ATP9B             | 5.09E-52 | 0.65556322 | 0.644 | 0.272 | 1.80E-47 | Mono_spleen |
| GRK3              | 5.43E-52 | 0.68741889 | 0.677 | 0.307 | 1.92E-47 | Mono_spleen |
| TRAPPC9           | 7.15E-52 | 0.94364788 | 0.299 | 0.087 | 2.53E-47 | Mono_spleen |
| TBC1D9            | 7.42E-52 | 0.62577271 | 0.53  | 0.211 | 2.63E-47 | Mono_spleen |
| KDEL2             | 8.92E-52 | 0.78228655 | 0.424 | 0.147 | 3.16E-47 | Mono_spleen |
| CYFIP1            | 1.02E-51 | 0.70491277 | 0.501 | 0.188 | 3.60E-47 | Mono_spleen |
| TRIO              | 1.02E-51 | 0.72113982 | 0.428 | 0.152 | 3.63E-47 | Mono_spleen |
| KCMF1             | 1.04E-51 | 0.8583407  | 0.457 | 0.169 | 3.70E-47 | Mono_spleen |
| CACUL1            | 1.08E-51 | 1.13006834 | 0.314 | 0.095 | 3.83E-47 | Mono_spleen |
| ENSMUG00000020643 | 1.32E-51 | 1.20277196 | 0.323 | 0.101 | 4.69E-47 | Mono_spleen |
| BBX               | 1.41E-51 | 1.01145116 | 0.382 | 0.13  | 5.00E-47 | Mono_spleen |
| DPH6              | 1.47E-51 | 0.99378289 | 0.402 | 0.14  | 5.20E-47 | Mono_spleen |
| CUL5              | 1.53E-51 | 0.86038083 | 0.494 | 0.189 | 5.42E-47 | Mono_spleen |
| COMMD10           | 1.60E-51 | 0.97261096 | 0.477 | 0.187 | 5.68E-47 | Mono_spleen |
| NDEL1             | 1.63E-51 | 0.80705489 | 0.565 | 0.231 | 5.76E-47 | Mono_spleen |
| WDR44             | 1.68E-51 | 1.54961906 | 0.251 | 0.067 | 5.96E-47 | Mono_spleen |
| ZC3H11A           | 1.68E-51 | 0.69505273 | 0.497 | 0.188 | 5.97E-47 | Mono_spleen |
| APPBP2            | 1.87E-51 | 1.02663415 | 0.356 | 0.116 | 6.63E-47 | Mono_spleen |
| KDM1A             | 1.92E-51 | 0.97326627 | 0.332 | 0.104 | 6.81E-47 | Mono_spleen |
| RELL1             | 1.96E-51 | 1.31893425 | 0.376 | 0.13  | 6.94E-47 | Mono_spleen |

|                    |          |            |       |       |          |             |
|--------------------|----------|------------|-------|-------|----------|-------------|
| CDC27              | 2.02E-51 | 0.96945076 | 0.407 | 0.141 | 7.15E-47 | Mono_spleen |
| PAFAH1B1           | 2.21E-51 | 0.67474247 | 0.73  | 0.326 | 7.81E-47 | Mono_spleen |
| LDLR               | 2.22E-51 | 1.07965491 | 0.36  | 0.12  | 7.85E-47 | Mono_spleen |
| DNM1L              | 2.37E-51 | 0.85024309 | 0.391 | 0.133 | 8.38E-47 | Mono_spleen |
| ENTPD4             | 2.42E-51 | 0.8993049  | 0.382 | 0.127 | 8.57E-47 | Mono_spleen |
| PARD3              | 2.58E-51 | 1.77660143 | 0.261 | 0.074 | 9.15E-47 | Mono_spleen |
| TENT4B             | 2.60E-51 | 1.26708845 | 0.27  | 0.076 | 9.21E-47 | Mono_spleen |
| GADD45GIP1         | 2.64E-51 | 0.74862354 | 0.288 | 0.081 | 9.35E-47 | Mono_spleen |
| TET3               | 2.97E-51 | 0.86916807 | 0.295 | 0.087 | 1.05E-46 | Mono_spleen |
| BNIP3L             | 3.36E-51 | 0.80484242 | 0.686 | 0.311 | 1.19E-46 | Mono_spleen |
| PLA2G7             | 3.49E-51 | 0.84161254 | 0.415 | 0.144 | 1.24E-46 | Mono_spleen |
| SOAT1              | 3.53E-51 | 0.79550369 | 0.514 | 0.202 | 1.25E-46 | Mono_spleen |
| FAM107B            | 3.77E-51 | 0.95307048 | 0.771 | 0.411 | 1.34E-46 | Mono_spleen |
| FCHSD2             | 4.08E-51 | 1.01981089 | 0.371 | 0.125 | 1.45E-46 | Mono_spleen |
| SCAMP1             | 5.73E-51 | 1.07029519 | 0.261 | 0.07  | 2.03E-46 | Mono_spleen |
| ENSMMUG00000058818 | 5.80E-51 | 1.14319378 | 0.303 | 0.09  | 2.06E-46 | Mono_spleen |
| ENSMMUG00000006803 | 5.96E-51 | 0.75697427 | 0.528 | 0.21  | 2.11E-46 | Mono_spleen |
| EPC1               | 6.03E-51 | 0.86630791 | 0.543 | 0.217 | 2.14E-46 | Mono_spleen |
| SMAD3              | 6.43E-51 | 0.86451535 | 0.532 | 0.216 | 2.28E-46 | Mono_spleen |
| PTK2B              | 7.74E-51 | 0.79710208 | 0.354 | 0.114 | 2.74E-46 | Mono_spleen |
| HK2                | 8.46E-51 | 0.71932333 | 0.306 | 0.089 | 3.00E-46 | Mono_spleen |
| HGSNAT             | 8.86E-51 | 0.86584163 | 0.394 | 0.134 | 3.14E-46 | Mono_spleen |
| VRK1               | 9.23E-51 | 0.98731022 | 0.334 | 0.105 | 3.27E-46 | Mono_spleen |
| SLC17A5            | 9.40E-51 | 1.10326194 | 0.292 | 0.086 | 3.33E-46 | Mono_spleen |
| RCOR1              | 1.01E-50 | 0.54438527 | 0.622 | 0.258 | 3.56E-46 | Mono_spleen |
| TGFB1              | 1.23E-50 | 0.59786334 | 0.464 | 0.167 | 4.35E-46 | Mono_spleen |
| CD164              | 1.69E-50 | 0.82326174 | 0.666 | 0.295 | 6.00E-46 | Mono_spleen |
| INO80              | 1.73E-50 | 0.9032418  | 0.365 | 0.121 | 6.14E-46 | Mono_spleen |
| DOP1A              | 1.86E-50 | 0.9911154  | 0.394 | 0.139 | 6.58E-46 | Mono_spleen |
| PLEKHM3            | 1.97E-50 | 1.10981802 | 0.305 | 0.092 | 6.96E-46 | Mono_spleen |
| TBC1D15            | 1.97E-50 | 0.89252484 | 0.367 | 0.121 | 6.97E-46 | Mono_spleen |
| WDR70              | 2.11E-50 | 0.83079144 | 0.492 | 0.191 | 7.47E-46 | Mono_spleen |
| BCL2L13            | 3.08E-50 | 0.7869377  | 0.396 | 0.136 | 1.09E-45 | Mono_spleen |

|            |          |            |       |       |          |             |
|------------|----------|------------|-------|-------|----------|-------------|
| DAPK1      | 3.17E-50 | 0.49433374 | 0.756 | 0.372 | 1.12E-45 | Mono_spleen |
| RP2        | 3.20E-50 | 0.75957262 | 0.512 | 0.2   | 1.14E-45 | Mono_spleen |
| AATF       | 3.31E-50 | 0.94722138 | 0.358 | 0.118 | 1.17E-45 | Mono_spleen |
| STAT5B     | 4.89E-50 | 1.14320765 | 0.327 | 0.103 | 1.73E-45 | Mono_spleen |
| ZFAND5     | 5.03E-50 | 0.60589314 | 0.499 | 0.188 | 1.78E-45 | Mono_spleen |
| FAM110A    | 5.40E-50 | 0.84520985 | 0.297 | 0.088 | 1.91E-45 | Mono_spleen |
| RPS6KB1    | 5.93E-50 | 0.95976534 | 0.374 | 0.127 | 2.10E-45 | Mono_spleen |
| CCSER1     | 7.27E-50 | 1.23551661 | 0.383 | 0.138 | 2.58E-45 | Mono_spleen |
| GNB1       | 7.40E-50 | 0.62406323 | 0.673 | 0.298 | 2.62E-45 | Mono_spleen |
| PHTF2      | 7.58E-50 | 1.03537541 | 0.316 | 0.098 | 2.69E-45 | Mono_spleen |
| PLBD1      | 7.79E-50 | 1.00930076 | 0.787 | 0.475 | 2.76E-45 | Mono_spleen |
| TRIP12     | 8.03E-50 | 0.66128738 | 0.593 | 0.247 | 2.85E-45 | Mono_spleen |
| NCF2       | 8.18E-50 | 0.85753535 | 0.615 | 0.263 | 2.90E-45 | Mono_spleen |
| RAD21      | 8.62E-50 | 0.73685863 | 0.505 | 0.194 | 3.05E-45 | Mono_spleen |
| MICU2      | 8.71E-50 | 1.06731538 | 0.371 | 0.126 | 3.08E-45 | Mono_spleen |
| TSPAN3     | 9.22E-50 | 0.98011562 | 0.292 | 0.086 | 3.27E-45 | Mono_spleen |
| SYK        | 1.05E-49 | 0.78177789 | 0.756 | 0.37  | 3.73E-45 | Mono_spleen |
| PHF20      | 1.27E-49 | 0.70452581 | 0.479 | 0.185 | 4.50E-45 | Mono_spleen |
| EXOC6B     | 1.27E-49 | 0.95953739 | 0.417 | 0.154 | 4.52E-45 | Mono_spleen |
| LMO4       | 1.36E-49 | 1.00154531 | 0.251 | 0.067 | 4.81E-45 | Mono_spleen |
| SP110      | 1.43E-49 | 0.7097124  | 0.596 | 0.252 | 5.07E-45 | Mono_spleen |
| FAM168B    | 1.94E-49 | 1.1306813  | 0.328 | 0.105 | 6.88E-45 | Mono_spleen |
| TRIM44     | 2.02E-49 | 0.94028367 | 0.339 | 0.11  | 7.14E-45 | Mono_spleen |
| RB1CC1     | 2.22E-49 | 0.77072976 | 0.424 | 0.153 | 7.88E-45 | Mono_spleen |
| MAP2K4     | 2.31E-49 | 0.95148136 | 0.328 | 0.105 | 8.17E-45 | Mono_spleen |
| CEPT1      | 2.34E-49 | 0.90506481 | 0.365 | 0.122 | 8.28E-45 | Mono_spleen |
| LIMD1      | 2.62E-49 | 0.98854133 | 0.264 | 0.074 | 9.28E-45 | Mono_spleen |
| ABHD2      | 2.76E-49 | 1.12953957 | 0.444 | 0.165 | 9.79E-45 | Mono_spleen |
| TIMM23     | 2.97E-49 | 1.04345562 | 0.371 | 0.127 | 1.05E-44 | Mono_spleen |
| NSMCE2     | 3.08E-49 | 0.95963935 | 0.42  | 0.157 | 1.09E-44 | Mono_spleen |
| ANKRD17    | 3.75E-49 | 0.68126645 | 0.576 | 0.245 | 1.33E-44 | Mono_spleen |
| C15H9orf72 | 3.81E-49 | 0.82784693 | 0.457 | 0.171 | 1.35E-44 | Mono_spleen |
| SLC6A6     | 4.35E-49 | 0.78105346 | 0.539 | 0.215 | 1.54E-44 | Mono_spleen |

|          |          |            |       |       |          |             |
|----------|----------|------------|-------|-------|----------|-------------|
| PIK3C3   | 5.11E-49 | 1.16907364 | 0.25  | 0.068 | 1.81E-44 | Mono_spleen |
| PPHLN1   | 5.50E-49 | 0.771614   | 0.541 | 0.218 | 1.95E-44 | Mono_spleen |
| MINDY3   | 5.56E-49 | 1.10341726 | 0.314 | 0.099 | 1.97E-44 | Mono_spleen |
| CASC3    | 5.89E-49 | 1.23323628 | 0.283 | 0.083 | 2.09E-44 | Mono_spleen |
| DNAJA1   | 6.35E-49 | 1.00573417 | 0.572 | 0.242 | 2.25E-44 | Mono_spleen |
| ELF4     | 7.63E-49 | 0.99944875 | 0.371 | 0.126 | 2.70E-44 | Mono_spleen |
| CYBRD1   | 7.75E-49 | 0.77966129 | 0.418 | 0.148 | 2.75E-44 | Mono_spleen |
| CLCN5    | 8.07E-49 | 0.88284522 | 0.363 | 0.122 | 2.86E-44 | Mono_spleen |
| RSRC1    | 9.62E-49 | 0.97788589 | 0.365 | 0.125 | 3.41E-44 | Mono_spleen |
| TRAPPC10 | 9.87E-49 | 1.11854793 | 0.314 | 0.099 | 3.50E-44 | Mono_spleen |
| SENP5    | 1.08E-48 | 0.63987957 | 0.486 | 0.184 | 3.82E-44 | Mono_spleen |
| MTCH1    | 1.16E-48 | 0.68068431 | 0.446 | 0.162 | 4.12E-44 | Mono_spleen |
| MFSD1    | 1.19E-48 | 0.80226056 | 0.4   | 0.139 | 4.23E-44 | Mono_spleen |
| KAT6B    | 1.21E-48 | 0.9271153  | 0.393 | 0.14  | 4.30E-44 | Mono_spleen |
| HECTD1   | 1.39E-48 | 0.91845205 | 0.321 | 0.1   | 4.93E-44 | Mono_spleen |
| SNRK     | 1.52E-48 | 0.86310822 | 0.422 | 0.152 | 5.40E-44 | Mono_spleen |
| HNRNPD   | 1.58E-48 | 0.70893302 | 0.672 | 0.306 | 5.59E-44 | Mono_spleen |
| UBAP1    | 1.65E-48 | 0.73261798 | 0.594 | 0.252 | 5.85E-44 | Mono_spleen |
| SCAND1   | 1.67E-48 | 0.83680565 | 0.305 | 0.091 | 5.93E-44 | Mono_spleen |
| SIN3A    | 2.07E-48 | 0.92311102 | 0.383 | 0.134 | 7.34E-44 | Mono_spleen |
| SLC9A9   | 2.09E-48 | 0.8562086  | 0.547 | 0.236 | 7.40E-44 | Mono_spleen |
| PHC3     | 2.18E-48 | 1.35971303 | 0.253 | 0.07  | 7.71E-44 | Mono_spleen |
| BRD7     | 2.30E-48 | 0.86202281 | 0.314 | 0.097 | 8.14E-44 | Mono_spleen |
| CDV3     | 2.39E-48 | 1.20022997 | 0.253 | 0.07  | 8.46E-44 | Mono_spleen |
| TNRC6A   | 2.48E-48 | 0.86136936 | 0.453 | 0.17  | 8.78E-44 | Mono_spleen |
| SUCLG2   | 2.69E-48 | 0.80903344 | 0.462 | 0.178 | 9.54E-44 | Mono_spleen |
| SNX14    | 2.83E-48 | 0.8818721  | 0.394 | 0.139 | 1.00E-43 | Mono_spleen |
| FARS2    | 3.40E-48 | 1.18127756 | 0.279 | 0.084 | 1.20E-43 | Mono_spleen |
| TBC1D22A | 3.55E-48 | 0.77781059 | 0.534 | 0.219 | 1.26E-43 | Mono_spleen |
| SPTAN1   | 3.59E-48 | 1.25860019 | 0.266 | 0.077 | 1.27E-43 | Mono_spleen |
| CTNNA1   | 3.82E-48 | 0.79242475 | 0.561 | 0.237 | 1.36E-43 | Mono_spleen |
| GDAP2    | 4.33E-48 | 1.23324897 | 0.317 | 0.102 | 1.53E-43 | Mono_spleen |
| TXLNG    | 4.41E-48 | 1.17130744 | 0.251 | 0.07  | 1.56E-43 | Mono_spleen |

|         |          |            |       |       |          |             |
|---------|----------|------------|-------|-------|----------|-------------|
| ITPR1   | 5.08E-48 | 1.10658754 | 0.323 | 0.105 | 1.80E-43 | Mono_spleen |
| NEDD4L  | 7.10E-48 | 0.59620409 | 0.477 | 0.186 | 2.52E-43 | Mono_spleen |
| RAB14   | 7.95E-48 | 0.66261944 | 0.468 | 0.175 | 2.82E-43 | Mono_spleen |
| ADRB1   | 8.45E-48 | 1.16328053 | 0.253 | 0.07  | 3.00E-43 | Mono_spleen |
| TM9SF3  | 8.47E-48 | 0.67194864 | 0.697 | 0.318 | 3.00E-43 | Mono_spleen |
| NIPBL   | 8.74E-48 | 0.66809686 | 0.708 | 0.328 | 3.10E-43 | Mono_spleen |
| PSME4   | 9.12E-48 | 0.78476393 | 0.587 | 0.251 | 3.23E-43 | Mono_spleen |
| PARVB   | 9.28E-48 | 0.83383221 | 0.428 | 0.157 | 3.29E-43 | Mono_spleen |
| FUBP1   | 1.16E-47 | 0.69946456 | 0.484 | 0.187 | 4.12E-43 | Mono_spleen |
| ITGAL   | 1.37E-47 | 0.92108778 | 0.506 | 0.208 | 4.84E-43 | Mono_spleen |
| HMBOX1  | 1.41E-47 | 1.01122208 | 0.288 | 0.087 | 4.99E-43 | Mono_spleen |
| RBM17   | 1.48E-47 | 0.67471311 | 0.354 | 0.117 | 5.25E-43 | Mono_spleen |
| RBM5    | 1.66E-47 | 0.71733844 | 0.534 | 0.215 | 5.89E-43 | Mono_spleen |
| DMXL1   | 1.80E-47 | 1.20157693 | 0.257 | 0.073 | 6.38E-43 | Mono_spleen |
| ARMC8   | 2.14E-47 | 1.03210965 | 0.288 | 0.086 | 7.56E-43 | Mono_spleen |
| AFF3    | 2.40E-47 | 1.16294057 | 0.365 | 0.13  | 8.50E-43 | Mono_spleen |
| MYO1E   | 2.51E-47 | 0.957501   | 0.367 | 0.127 | 8.88E-43 | Mono_spleen |
| NDFIP1  | 2.53E-47 | 0.84350228 | 0.393 | 0.138 | 8.96E-43 | Mono_spleen |
| UHRF2   | 2.60E-47 | 1.09009297 | 0.319 | 0.102 | 9.21E-43 | Mono_spleen |
| TFG     | 2.63E-47 | 0.92419155 | 0.323 | 0.103 | 9.31E-43 | Mono_spleen |
| GON4L   | 2.89E-47 | 0.76643659 | 0.321 | 0.102 | 1.02E-42 | Mono_spleen |
| MAPK8   | 3.09E-47 | 0.86444855 | 0.413 | 0.154 | 1.09E-42 | Mono_spleen |
| MTMR14  | 3.32E-47 | 0.9588595  | 0.367 | 0.127 | 1.18E-42 | Mono_spleen |
| SAFB2   | 3.38E-47 | 0.96458021 | 0.349 | 0.117 | 1.20E-42 | Mono_spleen |
| SP100   | 3.42E-47 | 0.91512454 | 0.633 | 0.285 | 1.21E-42 | Mono_spleen |
| INTS6   | 3.51E-47 | 0.66333032 | 0.481 | 0.185 | 1.24E-42 | Mono_spleen |
| RAP1A   | 4.70E-47 | 0.74442863 | 0.813 | 0.444 | 1.67E-42 | Mono_spleen |
| PLEKHB2 | 5.80E-47 | 0.72556674 | 0.651 | 0.286 | 2.05E-42 | Mono_spleen |
| PHF8    | 6.03E-47 | 1.21169936 | 0.27  | 0.08  | 2.14E-42 | Mono_spleen |
| PRR14L  | 6.07E-47 | 1.34638819 | 0.268 | 0.079 | 2.15E-42 | Mono_spleen |
| SCFD2   | 6.39E-47 | 1.14887274 | 0.29  | 0.09  | 2.27E-42 | Mono_spleen |
| RRBP1   | 6.52E-47 | 0.89327179 | 0.453 | 0.175 | 2.31E-42 | Mono_spleen |
| ICE1    | 6.88E-47 | 1.15218174 | 0.257 | 0.073 | 2.44E-42 | Mono_spleen |

|           |          |            |       |       |          |             |
|-----------|----------|------------|-------|-------|----------|-------------|
| C4H6orf62 | 8.74E-47 | 0.69428487 | 0.495 | 0.195 | 3.10E-42 | Mono_spleen |
| CDC73     | 8.75E-47 | 0.93282536 | 0.44  | 0.168 | 3.10E-42 | Mono_spleen |
| SNX4      | 9.91E-47 | 0.81356477 | 0.415 | 0.152 | 3.51E-42 | Mono_spleen |
| TRIM38    | 1.04E-46 | 0.74100939 | 0.332 | 0.107 | 3.68E-42 | Mono_spleen |
| PDLIM5    | 1.12E-46 | 0.87205622 | 0.457 | 0.178 | 3.97E-42 | Mono_spleen |
| CHD9      | 1.16E-46 | 1.00701511 | 0.279 | 0.083 | 4.12E-42 | Mono_spleen |
| ARHGAP30  | 1.19E-46 | 0.64866246 | 0.55  | 0.225 | 4.22E-42 | Mono_spleen |
| RNASEH2C  | 1.28E-46 | 0.69257998 | 0.402 | 0.141 | 4.52E-42 | Mono_spleen |
| ZNF44     | 1.28E-46 | 1.02661707 | 0.273 | 0.08  | 4.55E-42 | Mono_spleen |
| SLC35E1   | 1.48E-46 | 1.10985046 | 0.317 | 0.102 | 5.26E-42 | Mono_spleen |
| PRKDC     | 1.52E-46 | 0.8231103  | 0.433 | 0.161 | 5.39E-42 | Mono_spleen |
| ARHGEF7   | 1.59E-46 | 0.99884426 | 0.308 | 0.099 | 5.63E-42 | Mono_spleen |
| UBE2E3    | 1.65E-46 | 0.82687425 | 0.374 | 0.13  | 5.84E-42 | Mono_spleen |
| BOD1L1    | 1.66E-46 | 1.27332093 | 0.305 | 0.097 | 5.89E-42 | Mono_spleen |
| CCDC6     | 2.18E-46 | 1.258873   | 0.299 | 0.095 | 7.71E-42 | Mono_spleen |
| UBQLN1    | 2.21E-46 | 0.82920474 | 0.316 | 0.1   | 7.84E-42 | Mono_spleen |
| ACIN1     | 2.22E-46 | 0.73766062 | 0.428 | 0.158 | 7.87E-42 | Mono_spleen |
| RAB7A     | 2.52E-46 | 0.7138353  | 0.818 | 0.441 | 8.92E-42 | Mono_spleen |
| TPP2      | 2.67E-46 | 0.97576677 | 0.323 | 0.105 | 9.45E-42 | Mono_spleen |
| MEFV      | 2.85E-46 | 0.70705106 | 0.338 | 0.11  | 1.01E-41 | Mono_spleen |
| VPS4A     | 3.09E-46 | 0.85051312 | 0.268 | 0.078 | 1.09E-41 | Mono_spleen |
| DAP       | 3.10E-46 | 0.66417388 | 0.316 | 0.1   | 1.10E-41 | Mono_spleen |
| ZMYM2     | 3.60E-46 | 0.88258605 | 0.45  | 0.176 | 1.27E-41 | Mono_spleen |
| GPD2      | 4.00E-46 | 0.78454292 | 0.409 | 0.15  | 1.42E-41 | Mono_spleen |
| RPL27A    | 4.15E-46 | 0.64359035 | 0.901 | 0.853 | 1.47E-41 | Mono_spleen |
| OGFRL1    | 4.32E-46 | 0.78205079 | 0.563 | 0.236 | 1.53E-41 | Mono_spleen |
| RALB      | 5.20E-46 | 0.99290418 | 0.369 | 0.128 | 1.84E-41 | Mono_spleen |
| ZMYM5     | 5.58E-46 | 1.35803974 | 0.253 | 0.074 | 1.98E-41 | Mono_spleen |
| ADD1      | 6.43E-46 | 0.64036571 | 0.396 | 0.139 | 2.28E-41 | Mono_spleen |
| ZNF800    | 7.02E-46 | 0.91133983 | 0.286 | 0.087 | 2.49E-41 | Mono_spleen |
| NAIP      | 8.40E-46 | 0.79308435 | 0.532 | 0.221 | 2.98E-41 | Mono_spleen |
| KLHL6     | 8.45E-46 | 0.87081463 | 0.268 | 0.079 | 2.99E-41 | Mono_spleen |
| UBE2E1    | 8.70E-46 | 0.81157785 | 0.409 | 0.152 | 3.08E-41 | Mono_spleen |

|                     |          |            |       |       |          |             |
|---------------------|----------|------------|-------|-------|----------|-------------|
| ZNF581              | 8.96E-46 | 0.77407109 | 0.268 | 0.077 | 3.17E-41 | Mono_spleen |
| ENSMMUG000000001764 | 1.03E-45 | 0.70597572 | 0.328 | 0.107 | 3.63E-41 | Mono_spleen |
| ENSMMUG000000065373 | 1.07E-45 | 1.35095017 | 0.954 | 0.913 | 3.80E-41 | Mono_spleen |
| SYNE3               | 1.38E-45 | 0.70312701 | 0.389 | 0.139 | 4.88E-41 | Mono_spleen |
| EIF3B               | 1.47E-45 | 0.73025939 | 0.347 | 0.117 | 5.20E-41 | Mono_spleen |
| ENSMMUG000000001894 | 1.65E-45 | 0.88958076 | 0.391 | 0.143 | 5.83E-41 | Mono_spleen |
| LSM14A              | 1.72E-45 | 0.69742839 | 0.512 | 0.206 | 6.10E-41 | Mono_spleen |
| CWF19L2             | 1.75E-45 | 1.18745132 | 0.279 | 0.085 | 6.19E-41 | Mono_spleen |
| HEXIM1              | 2.08E-45 | 1.0426337  | 0.356 | 0.123 | 7.36E-41 | Mono_spleen |
| NPEPPS              | 2.24E-45 | 0.92246463 | 0.361 | 0.126 | 7.94E-41 | Mono_spleen |
| LARP4               | 2.27E-45 | 0.97988533 | 0.286 | 0.089 | 8.03E-41 | Mono_spleen |
| MATR3               | 2.30E-45 | 0.73105959 | 0.716 | 0.351 | 8.14E-41 | Mono_spleen |
| SH2B3               | 2.55E-45 | 0.80699107 | 0.417 | 0.156 | 9.03E-41 | Mono_spleen |
| CDK12               | 2.78E-45 | 0.7855961  | 0.383 | 0.136 | 9.84E-41 | Mono_spleen |
| PCF11               | 3.12E-45 | 0.73725622 | 0.42  | 0.156 | 1.11E-40 | Mono_spleen |
| MED30               | 3.14E-45 | 0.91636478 | 0.292 | 0.089 | 1.11E-40 | Mono_spleen |
| CHD1                | 3.78E-45 | 0.57629572 | 0.62  | 0.272 | 1.34E-40 | Mono_spleen |
| NME3                | 4.07E-45 | 0.68186772 | 0.442 | 0.165 | 1.44E-40 | Mono_spleen |
| FNBP1L              | 4.73E-45 | 0.87564663 | 0.316 | 0.101 | 1.68E-40 | Mono_spleen |
| ARHGAP21            | 5.06E-45 | 1.11728553 | 0.277 | 0.085 | 1.79E-40 | Mono_spleen |
| STX16               | 6.26E-45 | 0.92513979 | 0.27  | 0.08  | 2.22E-40 | Mono_spleen |
| ENSMMUG000000032231 | 6.62E-45 | 0.89000652 | 0.272 | 0.081 | 2.35E-40 | Mono_spleen |
| ZFHX3               | 6.85E-45 | 0.8379152  | 0.314 | 0.102 | 2.43E-40 | Mono_spleen |
| EIF3A               | 8.24E-45 | 0.67906542 | 0.582 | 0.255 | 2.92E-40 | Mono_spleen |
| SMARCA4             | 1.20E-44 | 1.13461633 | 0.253 | 0.074 | 4.25E-40 | Mono_spleen |
| CDK17               | 1.45E-44 | 0.90292728 | 0.374 | 0.136 | 5.12E-40 | Mono_spleen |
| OSBPL1A             | 1.50E-44 | 1.07071575 | 0.321 | 0.109 | 5.30E-40 | Mono_spleen |
| RMDN1               | 1.60E-44 | 1.04491455 | 0.275 | 0.084 | 5.67E-40 | Mono_spleen |
| UBE2D2              | 1.62E-44 | 0.71740147 | 0.283 | 0.085 | 5.75E-40 | Mono_spleen |
| PIK3CB              | 1.66E-44 | 0.56343671 | 0.552 | 0.23  | 5.87E-40 | Mono_spleen |
| LRBA                | 1.68E-44 | 1.07399302 | 0.352 | 0.126 | 5.95E-40 | Mono_spleen |
| KCTD12              | 1.78E-44 | 0.55732442 | 0.514 | 0.206 | 6.32E-40 | Mono_spleen |
| SCARB2              | 2.08E-44 | 0.81711206 | 0.36  | 0.126 | 7.38E-40 | Mono_spleen |

|           |          |            |       |       |          |             |
|-----------|----------|------------|-------|-------|----------|-------------|
| RABEP1    | 2.15E-44 | 0.7113732  | 0.277 | 0.084 | 7.61E-40 | Mono_spleen |
| CRTC3     | 2.58E-44 | 0.86225135 | 0.297 | 0.095 | 9.15E-40 | Mono_spleen |
| LCOR      | 2.69E-44 | 0.70341666 | 0.598 | 0.261 | 9.54E-40 | Mono_spleen |
| ADORA2B   | 2.79E-44 | 2.05354    | 0.466 | 0.204 | 9.87E-40 | Mono_spleen |
| WDR20     | 2.91E-44 | 1.1011142  | 0.284 | 0.089 | 1.03E-39 | Mono_spleen |
| ADAM9     | 3.15E-44 | 0.84620066 | 0.343 | 0.118 | 1.12E-39 | Mono_spleen |
| ZFC3H1    | 3.21E-44 | 0.7967694  | 0.65  | 0.302 | 1.14E-39 | Mono_spleen |
| DDX17     | 3.23E-44 | 0.65009407 | 0.686 | 0.321 | 1.14E-39 | Mono_spleen |
| RUFY1     | 3.49E-44 | 0.81004418 | 0.283 | 0.086 | 1.24E-39 | Mono_spleen |
| AEBP2     | 3.88E-44 | 0.74233127 | 0.415 | 0.156 | 1.37E-39 | Mono_spleen |
| YWHAZ     | 4.92E-44 | 0.66037526 | 0.925 | 0.702 | 1.74E-39 | Mono_spleen |
| PNN       | 5.24E-44 | 0.99376545 | 0.35  | 0.122 | 1.86E-39 | Mono_spleen |
| DERL1     | 5.25E-44 | 0.8650486  | 0.36  | 0.126 | 1.86E-39 | Mono_spleen |
| RBPJ      | 5.26E-44 | 0.64076623 | 0.787 | 0.4   | 1.86E-39 | Mono_spleen |
| WBP1L     | 5.61E-44 | 0.79349455 | 0.393 | 0.145 | 1.99E-39 | Mono_spleen |
| PRAM1     | 7.84E-44 | 0.93808926 | 0.266 | 0.08  | 2.78E-39 | Mono_spleen |
| MKRN1     | 7.93E-44 | 0.75371972 | 0.323 | 0.106 | 2.81E-39 | Mono_spleen |
| GPCPD1    | 8.16E-44 | 0.5654615  | 0.629 | 0.286 | 2.89E-39 | Mono_spleen |
| DCAF5     | 8.75E-44 | 0.92929554 | 0.268 | 0.081 | 3.10E-39 | Mono_spleen |
| ARHGAP18  | 1.02E-43 | 1.12640122 | 0.273 | 0.085 | 3.62E-39 | Mono_spleen |
| PRRC2C    | 1.10E-43 | 0.68112402 | 0.723 | 0.345 | 3.90E-39 | Mono_spleen |
| DNAJB14   | 1.14E-43 | 0.97043608 | 0.284 | 0.089 | 4.06E-39 | Mono_spleen |
| UNC93B1   | 1.15E-43 | 0.56838783 | 0.251 | 0.072 | 4.07E-39 | Mono_spleen |
| GALNT11   | 1.20E-43 | 0.81448373 | 0.422 | 0.161 | 4.26E-39 | Mono_spleen |
| OSTM1     | 1.28E-43 | 0.82720949 | 0.261 | 0.076 | 4.54E-39 | Mono_spleen |
| DERA      | 1.30E-43 | 0.77933539 | 0.341 | 0.117 | 4.62E-39 | Mono_spleen |
| MOB3A     | 1.48E-43 | 0.8494959  | 0.29  | 0.091 | 5.26E-39 | Mono_spleen |
| KIDINS220 | 1.59E-43 | 0.8467215  | 0.398 | 0.15  | 5.62E-39 | Mono_spleen |
| ANXA11    | 1.72E-43 | 0.77094919 | 0.539 | 0.231 | 6.08E-39 | Mono_spleen |
| KPNA1     | 1.72E-43 | 0.64810889 | 0.332 | 0.111 | 6.11E-39 | Mono_spleen |
| FAM241A   | 1.88E-43 | 0.88843561 | 0.317 | 0.106 | 6.66E-39 | Mono_spleen |
| CDKN1B    | 2.04E-43 | 0.82302645 | 0.31  | 0.1   | 7.22E-39 | Mono_spleen |
| DCK       | 2.05E-43 | 0.99217922 | 0.305 | 0.1   | 7.28E-39 | Mono_spleen |



|          |          |            |       |       |          |             |
|----------|----------|------------|-------|-------|----------|-------------|
| HDAC9    | 2.08E-43 | 1.18347015 | 0.347 | 0.127 | 7.37E-39 | Mono_spleen |
| RESF1    | 2.09E-43 | 0.75513175 | 0.387 | 0.142 | 7.40E-39 | Mono_spleen |
| STAU1    | 2.13E-43 | 0.70569021 | 0.462 | 0.184 | 7.56E-39 | Mono_spleen |
| FAM53B   | 2.20E-43 | 0.96948482 | 0.251 | 0.074 | 7.80E-39 | Mono_spleen |
| EZR      | 2.52E-43 | 0.73702539 | 0.793 | 0.433 | 8.93E-39 | Mono_spleen |
| STXBP3   | 2.54E-43 | 0.84106126 | 0.303 | 0.098 | 9.01E-39 | Mono_spleen |
| SLTM     | 3.20E-43 | 0.67200402 | 0.448 | 0.175 | 1.13E-38 | Mono_spleen |
| ZNF28    | 3.46E-43 | 0.76003684 | 0.376 | 0.135 | 1.23E-38 | Mono_spleen |
| MDM4     | 3.86E-43 | 0.88240844 | 0.356 | 0.128 | 1.37E-38 | Mono_spleen |
| ACSL1    | 4.00E-43 | 0.75971464 | 0.69  | 0.351 | 1.42E-38 | Mono_spleen |
| EIF2S3   | 4.68E-43 | 0.72536668 | 0.451 | 0.175 | 1.66E-38 | Mono_spleen |
| NT5C3A   | 4.85E-43 | 1.05688275 | 0.277 | 0.086 | 1.72E-38 | Mono_spleen |
| SCFD1    | 4.86E-43 | 0.66900404 | 0.488 | 0.199 | 1.72E-38 | Mono_spleen |
| NIPA2    | 5.10E-43 | 0.59438803 | 0.393 | 0.142 | 1.81E-38 | Mono_spleen |
| USP16    | 5.79E-43 | 0.99369514 | 0.431 | 0.17  | 2.05E-38 | Mono_spleen |
| TRPC4AP  | 7.07E-43 | 0.6703984  | 0.367 | 0.131 | 2.51E-38 | Mono_spleen |
| ATP2A2   | 7.09E-43 | 0.70280662 | 0.439 | 0.17  | 2.51E-38 | Mono_spleen |
| EVI2B    | 7.38E-43 | 0.65240323 | 0.527 | 0.219 | 2.62E-38 | Mono_spleen |
| KCNE3    | 8.06E-43 | 0.84199689 | 0.259 | 0.077 | 2.86E-38 | Mono_spleen |
| TACC3    | 9.41E-43 | 1.02551791 | 0.257 | 0.077 | 3.33E-38 | Mono_spleen |
| CREG1    | 9.53E-43 | 0.70942711 | 0.4   | 0.147 | 3.38E-38 | Mono_spleen |
| GSR      | 1.01E-42 | 0.87452271 | 0.279 | 0.087 | 3.59E-38 | Mono_spleen |
| HTT      | 1.18E-42 | 0.94638138 | 0.292 | 0.095 | 4.18E-38 | Mono_spleen |
| ARFGEF2  | 1.20E-42 | 0.90607803 | 0.273 | 0.085 | 4.24E-38 | Mono_spleen |
| PPP4R3A  | 1.20E-42 | 0.88778533 | 0.328 | 0.112 | 4.25E-38 | Mono_spleen |
| HSPA9    | 1.20E-42 | 0.63408725 | 0.49  | 0.199 | 4.25E-38 | Mono_spleen |
| ATXN7L3B | 1.38E-42 | 0.83794662 | 0.277 | 0.086 | 4.90E-38 | Mono_spleen |
| USP4     | 1.39E-42 | 0.64053632 | 0.409 | 0.153 | 4.94E-38 | Mono_spleen |
| SAP30BP  | 1.48E-42 | 0.74101103 | 0.35  | 0.123 | 5.25E-38 | Mono_spleen |
| RBM27    | 1.52E-42 | 0.83640664 | 0.371 | 0.134 | 5.39E-38 | Mono_spleen |
| CEBPG    | 1.53E-42 | 0.69016748 | 0.272 | 0.082 | 5.41E-38 | Mono_spleen |
| SLC22A18 | 1.54E-42 | 0.87909733 | 0.317 | 0.106 | 5.45E-38 | Mono_spleen |
| POU2F2   | 1.59E-42 | 0.59575102 | 0.396 | 0.145 | 5.65E-38 | Mono_spleen |

|                    |          |            |       |       |          |             |
|--------------------|----------|------------|-------|-------|----------|-------------|
| PPIP5K2            | 1.71E-42 | 0.96572648 | 0.277 | 0.087 | 6.07E-38 | Mono_spleen |
| RBBP6              | 1.80E-42 | 0.90604079 | 0.33  | 0.113 | 6.39E-38 | Mono_spleen |
| TCP11L2            | 1.85E-42 | 1.06124485 | 0.253 | 0.076 | 6.54E-38 | Mono_spleen |
| NCLN               | 1.93E-42 | 0.8380817  | 0.277 | 0.086 | 6.84E-38 | Mono_spleen |
| CCM2               | 2.40E-42 | 0.80509377 | 0.455 | 0.18  | 8.49E-38 | Mono_spleen |
| IRAK3              | 2.40E-42 | 0.65180279 | 0.428 | 0.166 | 8.49E-38 | Mono_spleen |
| LONP2              | 2.46E-42 | 1.23096981 | 0.255 | 0.077 | 8.70E-38 | Mono_spleen |
| GLS                | 2.73E-42 | 0.66355578 | 0.428 | 0.165 | 9.67E-38 | Mono_spleen |
| YTHDF2             | 2.81E-42 | 0.72159886 | 0.319 | 0.107 | 9.97E-38 | Mono_spleen |
| RLIM               | 2.87E-42 | 0.97176647 | 0.35  | 0.124 | 1.02E-37 | Mono_spleen |
| STAG2              | 2.94E-42 | 0.63252501 | 0.697 | 0.343 | 1.04E-37 | Mono_spleen |
| TOB2               | 2.95E-42 | 0.92521231 | 0.284 | 0.09  | 1.05E-37 | Mono_spleen |
| USP38              | 3.77E-42 | 0.83678285 | 0.378 | 0.139 | 1.34E-37 | Mono_spleen |
| VPS41              | 4.26E-42 | 0.93118784 | 0.27  | 0.084 | 1.51E-37 | Mono_spleen |
| ENSMMUG00000020751 | 4.81E-42 | 0.77630259 | 0.363 | 0.13  | 1.70E-37 | Mono_spleen |
| DDHD2              | 4.84E-42 | 0.8558259  | 0.29  | 0.094 | 1.71E-37 | Mono_spleen |
| TP53BP2            | 5.39E-42 | 0.56861595 | 0.527 | 0.225 | 1.91E-37 | Mono_spleen |
| CENPC              | 5.41E-42 | 0.74330942 | 0.321 | 0.109 | 1.92E-37 | Mono_spleen |
| PLEKHO1            | 5.89E-42 | 0.52778603 | 0.426 | 0.162 | 2.09E-37 | Mono_spleen |
| FXR1               | 6.19E-42 | 0.67654894 | 0.547 | 0.234 | 2.19E-37 | Mono_spleen |
| CHKA               | 6.50E-42 | 1.18824892 | 0.255 | 0.078 | 2.30E-37 | Mono_spleen |
| USP47              | 6.99E-42 | 0.72958304 | 0.495 | 0.21  | 2.48E-37 | Mono_spleen |
| XRN1               | 7.51E-42 | 0.74425671 | 0.44  | 0.173 | 2.66E-37 | Mono_spleen |
| AGPAT3             | 7.60E-42 | 0.71699846 | 0.349 | 0.123 | 2.69E-37 | Mono_spleen |
| POC1B              | 9.17E-42 | 0.74122589 | 0.521 | 0.227 | 3.25E-37 | Mono_spleen |
| EXOC1              | 9.17E-42 | 0.76088122 | 0.345 | 0.121 | 3.25E-37 | Mono_spleen |
| WDR33              | 9.40E-42 | 0.71463579 | 0.444 | 0.175 | 3.33E-37 | Mono_spleen |
| KIAA2026           | 9.52E-42 | 0.79154388 | 0.294 | 0.095 | 3.37E-37 | Mono_spleen |
| RSU1               | 9.61E-42 | 0.68332791 | 0.497 | 0.206 | 3.40E-37 | Mono_spleen |
| SMAD2              | 1.30E-41 | 1.00933161 | 0.292 | 0.096 | 4.60E-37 | Mono_spleen |
| RTN3               | 1.35E-41 | 0.53253641 | 0.617 | 0.27  | 4.77E-37 | Mono_spleen |
| TPR                | 1.39E-41 | 0.81693818 | 0.418 | 0.163 | 4.92E-37 | Mono_spleen |
| TNPO1              | 1.56E-41 | 1.03555156 | 0.268 | 0.083 | 5.54E-37 | Mono_spleen |

|                   |          |            |       |       |          |             |
|-------------------|----------|------------|-------|-------|----------|-------------|
| PDCD6IP           | 1.59E-41 | 0.52394045 | 0.477 | 0.192 | 5.65E-37 | Mono_spleen |
| DCP2              | 1.67E-41 | 0.76071503 | 0.38  | 0.141 | 5.93E-37 | Mono_spleen |
| VGLL4             | 1.80E-41 | 0.75254328 | 0.27  | 0.083 | 6.39E-37 | Mono_spleen |
| SIRT1             | 1.97E-41 | 0.88470776 | 0.25  | 0.074 | 6.99E-37 | Mono_spleen |
| NASP              | 2.01E-41 | 0.86604453 | 0.426 | 0.167 | 7.13E-37 | Mono_spleen |
| TM9SF2            | 2.93E-41 | 0.88059361 | 0.332 | 0.117 | 1.04E-36 | Mono_spleen |
| RALGAPB           | 3.96E-41 | 0.66625353 | 0.288 | 0.093 | 1.40E-36 | Mono_spleen |
| APPL1             | 4.37E-41 | 0.71644363 | 0.347 | 0.122 | 1.55E-36 | Mono_spleen |
| DYNC1LI1          | 4.44E-41 | 0.75093501 | 0.361 | 0.129 | 1.57E-36 | Mono_spleen |
| ARRDC3            | 4.87E-41 | 1.38775372 | 0.288 | 0.098 | 1.73E-36 | Mono_spleen |
| DNAJC2            | 5.57E-41 | 0.73877433 | 0.343 | 0.122 | 1.97E-36 | Mono_spleen |
| GNAI3             | 5.61E-41 | 0.85237334 | 0.477 | 0.198 | 1.99E-36 | Mono_spleen |
| KIAA1328          | 6.33E-41 | 1.13218872 | 0.275 | 0.09  | 2.24E-36 | Mono_spleen |
| ATF2              | 6.51E-41 | 0.83105236 | 0.382 | 0.144 | 2.31E-36 | Mono_spleen |
| ATXN10            | 7.03E-41 | 0.83708169 | 0.393 | 0.15  | 2.49E-36 | Mono_spleen |
| SND1              | 7.06E-41 | 0.67684329 | 0.694 | 0.348 | 2.50E-36 | Mono_spleen |
| PIGA              | 7.38E-41 | 0.90458106 | 0.27  | 0.086 | 2.61E-36 | Mono_spleen |
| ENTPD1            | 7.44E-41 | 0.82106701 | 0.637 | 0.315 | 2.64E-36 | Mono_spleen |
| SBNO1             | 8.29E-41 | 0.98572769 | 0.277 | 0.089 | 2.94E-36 | Mono_spleen |
| YWHAG             | 9.11E-41 | 0.65364036 | 0.604 | 0.277 | 3.23E-36 | Mono_spleen |
| RALGPS2           | 9.68E-41 | 1.47195895 | 0.272 | 0.09  | 3.43E-36 | Mono_spleen |
| IFNGR1            | 9.94E-41 | 0.69715585 | 0.662 | 0.316 | 3.52E-36 | Mono_spleen |
| LUC7L             | 1.01E-40 | 0.69497102 | 0.345 | 0.123 | 3.58E-36 | Mono_spleen |
| ATL2              | 1.15E-40 | 1.05210308 | 0.261 | 0.082 | 4.07E-36 | Mono_spleen |
| TMEM248           | 1.19E-40 | 0.78259715 | 0.277 | 0.088 | 4.22E-36 | Mono_spleen |
| AGPAT4            | 1.22E-40 | 0.53856909 | 0.433 | 0.17  | 4.34E-36 | Mono_spleen |
| DARS1             | 1.26E-40 | 0.65437707 | 0.47  | 0.191 | 4.47E-36 | Mono_spleen |
| DECR2             | 1.27E-40 | 0.65622552 | 0.316 | 0.106 | 4.50E-36 | Mono_spleen |
| ND2               | 1.39E-40 | 0.90476265 | 0.967 | 0.869 | 4.92E-36 | Mono_spleen |
| DTNBP1            | 1.60E-40 | 0.8119408  | 0.345 | 0.125 | 5.66E-36 | Mono_spleen |
| SLC4A7            | 2.33E-40 | 0.62198582 | 0.431 | 0.172 | 8.25E-36 | Mono_spleen |
| TOR1AIP1          | 2.60E-40 | 0.76769562 | 0.297 | 0.099 | 9.23E-36 | Mono_spleen |
| ENSMUG00000003130 | 2.86E-40 | 0.91817756 | 0.303 | 0.102 | 1.01E-35 | Mono_spleen |

|                    |          |            |       |       |          |             |
|--------------------|----------|------------|-------|-------|----------|-------------|
| PXK                | 3.24E-40 | 0.82791443 | 0.365 | 0.135 | 1.15E-35 | Mono_spleen |
| XRN2               | 3.35E-40 | 0.59529359 | 0.657 | 0.31  | 1.19E-35 | Mono_spleen |
| SGK1               | 3.52E-40 | 0.65500656 | 0.666 | 0.333 | 1.25E-35 | Mono_spleen |
| MYO5A              | 3.78E-40 | 0.75909676 | 0.393 | 0.152 | 1.34E-35 | Mono_spleen |
| CLIP1              | 3.85E-40 | 0.53624915 | 0.499 | 0.21  | 1.36E-35 | Mono_spleen |
| OLA1               | 4.11E-40 | 0.62414326 | 0.602 | 0.281 | 1.46E-35 | Mono_spleen |
| ZRANB2             | 4.17E-40 | 0.92251926 | 0.354 | 0.131 | 1.48E-35 | Mono_spleen |
| RHOQ               | 4.80E-40 | 0.6737081  | 0.396 | 0.149 | 1.70E-35 | Mono_spleen |
| THUMPD1            | 4.90E-40 | 1.06994069 | 0.266 | 0.084 | 1.73E-35 | Mono_spleen |
| LACTB              | 5.25E-40 | 0.67198569 | 0.272 | 0.085 | 1.86E-35 | Mono_spleen |
| UBE2F              | 5.63E-40 | 0.64776897 | 0.306 | 0.103 | 1.99E-35 | Mono_spleen |
| BRAF               | 6.56E-40 | 0.6572736  | 0.672 | 0.319 | 2.32E-35 | Mono_spleen |
| TXNDC11            | 6.88E-40 | 0.8127544  | 0.321 | 0.112 | 2.44E-35 | Mono_spleen |
| CGGBP1             | 6.90E-40 | 0.6454212  | 0.363 | 0.132 | 2.44E-35 | Mono_spleen |
| RIN3               | 6.99E-40 | 0.56990481 | 0.505 | 0.215 | 2.48E-35 | Mono_spleen |
| PRDX3              | 7.66E-40 | 0.47809075 | 0.378 | 0.137 | 2.71E-35 | Mono_spleen |
| MAP2K1             | 8.23E-40 | 0.60487034 | 0.506 | 0.213 | 2.91E-35 | Mono_spleen |
| SLU7               | 8.52E-40 | 0.72078962 | 0.317 | 0.109 | 3.02E-35 | Mono_spleen |
| GATAD2A            | 1.02E-39 | 0.74567091 | 0.459 | 0.189 | 3.62E-35 | Mono_spleen |
| TCERG1             | 1.05E-39 | 0.80898425 | 0.374 | 0.143 | 3.70E-35 | Mono_spleen |
| ENSMMUG00000011580 | 1.14E-39 | 0.67704378 | 0.426 | 0.168 | 4.03E-35 | Mono_spleen |
| STK38L             | 1.17E-39 | 0.87465189 | 0.417 | 0.167 | 4.13E-35 | Mono_spleen |
| ZNF106             | 1.18E-39 | 1.07918225 | 0.261 | 0.082 | 4.16E-35 | Mono_spleen |
| AP2A2              | 1.24E-39 | 0.80189251 | 0.292 | 0.097 | 4.39E-35 | Mono_spleen |
| PRPF4B             | 1.31E-39 | 0.59979706 | 0.589 | 0.269 | 4.65E-35 | Mono_spleen |
| MYO1G              | 1.44E-39 | 0.65490643 | 0.35  | 0.128 | 5.11E-35 | Mono_spleen |
| PRKCH              | 2.01E-39 | 0.9757936  | 0.382 | 0.149 | 7.14E-35 | Mono_spleen |
| CYTIP              | 2.11E-39 | 0.72768743 | 0.365 | 0.137 | 7.47E-35 | Mono_spleen |
| RNF213             | 2.18E-39 | 0.70921651 | 0.367 | 0.137 | 7.73E-35 | Mono_spleen |
| SERINC3            | 2.23E-39 | 0.65305238 | 0.349 | 0.125 | 7.89E-35 | Mono_spleen |
| PIGY               | 2.23E-39 | 0.68243877 | 0.29  | 0.095 | 7.91E-35 | Mono_spleen |
| IDH1               | 2.29E-39 | 0.65180633 | 0.361 | 0.132 | 8.13E-35 | Mono_spleen |
| TUT4               | 2.52E-39 | 0.74432904 | 0.418 | 0.168 | 8.92E-35 | Mono_spleen |

|                   |          |            |       |       |          |             |
|-------------------|----------|------------|-------|-------|----------|-------------|
| MECP2             | 3.10E-39 | 0.3636481  | 0.461 | 0.183 | 1.10E-34 | Mono_spleen |
| RTF2              | 3.35E-39 | 0.65769031 | 0.44  | 0.175 | 1.19E-34 | Mono_spleen |
| TRIM5             | 3.66E-39 | 1.0233105  | 0.261 | 0.082 | 1.30E-34 | Mono_spleen |
| DIDO1             | 3.86E-39 | 0.95019139 | 0.253 | 0.08  | 1.37E-34 | Mono_spleen |
| CCDC12            | 5.41E-39 | 0.61970803 | 0.433 | 0.174 | 1.92E-34 | Mono_spleen |
| CITED1            | 5.69E-39 | 1.03176421 | 0.264 | 0.086 | 2.02E-34 | Mono_spleen |
| SMN1              | 5.75E-39 | 0.66540294 | 0.433 | 0.175 | 2.04E-34 | Mono_spleen |
| PPP4R3B           | 5.88E-39 | 0.66136356 | 0.367 | 0.136 | 2.08E-34 | Mono_spleen |
| ZNF506            | 6.42E-39 | 0.70484449 | 0.376 | 0.143 | 2.27E-34 | Mono_spleen |
| MALT1             | 8.15E-39 | 0.53639245 | 0.519 | 0.225 | 2.89E-34 | Mono_spleen |
| NONO              | 8.23E-39 | 0.49569778 | 0.472 | 0.19  | 2.92E-34 | Mono_spleen |
| NFKBIB            | 8.84E-39 | 0.72999321 | 0.38  | 0.144 | 3.13E-34 | Mono_spleen |
| CPSF6             | 8.89E-39 | 0.84430411 | 0.358 | 0.134 | 3.15E-34 | Mono_spleen |
| NCF1              | 9.62E-39 | 0.77078636 | 0.413 | 0.164 | 3.41E-34 | Mono_spleen |
| LSM4              | 1.04E-38 | 0.75969561 | 0.369 | 0.139 | 3.69E-34 | Mono_spleen |
| ARF6              | 1.04E-38 | 0.44910327 | 0.433 | 0.169 | 3.70E-34 | Mono_spleen |
| HPS3              | 1.38E-38 | 0.88649006 | 0.338 | 0.125 | 4.88E-34 | Mono_spleen |
| FAM91A1           | 1.55E-38 | 0.81390689 | 0.297 | 0.102 | 5.49E-34 | Mono_spleen |
| HSF1              | 1.77E-38 | 0.89892351 | 0.259 | 0.083 | 6.26E-34 | Mono_spleen |
| INO80D            | 1.86E-38 | 0.96540438 | 0.306 | 0.11  | 6.58E-34 | Mono_spleen |
| DMXL2             | 1.86E-38 | 0.4612839  | 0.635 | 0.306 | 6.59E-34 | Mono_spleen |
| CSNK1A1           | 2.10E-38 | 0.57394843 | 0.826 | 0.475 | 7.45E-34 | Mono_spleen |
| NLRP1             | 2.42E-38 | 0.65872767 | 0.327 | 0.116 | 8.58E-34 | Mono_spleen |
| NUP98             | 2.57E-38 | 0.6489956  | 0.567 | 0.261 | 9.10E-34 | Mono_spleen |
| CWC25             | 2.75E-38 | 0.72872346 | 0.371 | 0.14  | 9.75E-34 | Mono_spleen |
| RNF2              | 3.21E-38 | 0.85789651 | 0.323 | 0.116 | 1.14E-33 | Mono_spleen |
| GPBP1L1           | 3.26E-38 | 0.5689799  | 0.406 | 0.159 | 1.16E-33 | Mono_spleen |
| WDR48             | 3.54E-38 | 0.85368525 | 0.272 | 0.09  | 1.26E-33 | Mono_spleen |
| ENSMUG00000056043 | 3.56E-38 | 0.52770195 | 0.407 | 0.157 | 1.26E-33 | Mono_spleen |
| SH3GL1            | 3.78E-38 | 1.09461009 | 0.259 | 0.084 | 1.34E-33 | Mono_spleen |
| CCT4              | 3.92E-38 | 0.48147014 | 0.461 | 0.186 | 1.39E-33 | Mono_spleen |
| F13A1             | 3.95E-38 | 0.6939032  | 0.393 | 0.153 | 1.40E-33 | Mono_spleen |
| LONRF3            | 4.01E-38 | 0.778061   | 0.499 | 0.221 | 1.42E-33 | Mono_spleen |

|                    |          |            |       |       |          |             |
|--------------------|----------|------------|-------|-------|----------|-------------|
| CHD6               | 4.06E-38 | 0.85324957 | 0.35  | 0.132 | 1.44E-33 | Mono_spleen |
| MAX                | 4.27E-38 | 0.54958318 | 0.424 | 0.169 | 1.51E-33 | Mono_spleen |
| PPIA               | 4.38E-38 | 0.68712916 | 0.413 | 0.163 | 1.55E-33 | Mono_spleen |
| CNOT8              | 5.07E-38 | 1.04166496 | 0.259 | 0.084 | 1.80E-33 | Mono_spleen |
| GABPB1             | 5.34E-38 | 0.90985385 | 0.383 | 0.153 | 1.89E-33 | Mono_spleen |
| CAND1              | 5.36E-38 | 0.88847936 | 0.314 | 0.111 | 1.90E-33 | Mono_spleen |
| ENSMMUG00000061125 | 5.64E-38 | 1.1181353  | 0.815 | 0.582 | 2.00E-33 | Mono_spleen |
| G3BP2              | 5.81E-38 | 0.71513237 | 0.505 | 0.222 | 2.06E-33 | Mono_spleen |
| BSDC1              | 5.95E-38 | 0.68308164 | 0.299 | 0.103 | 2.11E-33 | Mono_spleen |
| DNAJC10            | 6.42E-38 | 0.88210256 | 0.259 | 0.083 | 2.28E-33 | Mono_spleen |
| USP10              | 6.54E-38 | 0.610237   | 0.45  | 0.185 | 2.32E-33 | Mono_spleen |
| IRF8               | 6.90E-38 | 0.69875214 | 0.426 | 0.174 | 2.44E-33 | Mono_spleen |
| SNX1               | 7.38E-38 | 0.60402217 | 0.33  | 0.117 | 2.62E-33 | Mono_spleen |
| CCND3              | 7.56E-38 | 0.38892474 | 0.385 | 0.144 | 2.68E-33 | Mono_spleen |
| NXF1               | 8.02E-38 | 0.91154263 | 0.288 | 0.098 | 2.84E-33 | Mono_spleen |
| AQR                | 8.13E-38 | 0.6988741  | 0.369 | 0.141 | 2.88E-33 | Mono_spleen |
| ATG13              | 9.98E-38 | 1.01785885 | 0.303 | 0.107 | 3.54E-33 | Mono_spleen |
| RUNX1              | 1.03E-37 | 0.54129683 | 0.738 | 0.397 | 3.66E-33 | Mono_spleen |
| TARDBP             | 1.08E-37 | 0.67701575 | 0.305 | 0.106 | 3.83E-33 | Mono_spleen |
| CMTM6              | 1.21E-37 | 0.62795255 | 0.679 | 0.334 | 4.27E-33 | Mono_spleen |
| ZFYVE16            | 1.22E-37 | 0.65540771 | 0.561 | 0.26  | 4.34E-33 | Mono_spleen |
| DNAJC7             | 1.25E-37 | 0.54286866 | 0.389 | 0.149 | 4.44E-33 | Mono_spleen |
| SWAP70             | 1.26E-37 | 0.63352654 | 0.446 | 0.188 | 4.45E-33 | Mono_spleen |
| SLC7A7             | 1.39E-37 | 0.55562579 | 0.519 | 0.225 | 4.92E-33 | Mono_spleen |
| NMI                | 1.54E-37 | 0.62325808 | 0.295 | 0.099 | 5.47E-33 | Mono_spleen |
| RABGEF1            | 1.63E-37 | 0.6518989  | 0.732 | 0.402 | 5.78E-33 | Mono_spleen |
| SYNCRIP            | 1.68E-37 | 0.55840017 | 0.49  | 0.208 | 5.96E-33 | Mono_spleen |
| PLEKHO2            | 1.87E-37 | 1.08592858 | 0.259 | 0.085 | 6.61E-33 | Mono_spleen |
| LRPPRC             | 1.97E-37 | 0.68012394 | 0.387 | 0.151 | 6.99E-33 | Mono_spleen |
| SLC30A9            | 2.27E-37 | 0.67918819 | 0.321 | 0.115 | 8.03E-33 | Mono_spleen |
| TEX14              | 3.13E-37 | 1.12062568 | 0.275 | 0.094 | 1.11E-32 | Mono_spleen |
| PECAM1             | 3.74E-37 | 0.57137733 | 0.598 | 0.279 | 1.32E-32 | Mono_spleen |
| PIK3R5             | 4.35E-37 | 0.43916885 | 0.752 | 0.384 | 1.54E-32 | Mono_spleen |

|                    |          |            |       |       |          |             |
|--------------------|----------|------------|-------|-------|----------|-------------|
| SLC36A4            | 4.63E-37 | 0.48811539 | 0.345 | 0.126 | 1.64E-32 | Mono_spleen |
| KCNAB2             | 5.00E-37 | 0.82625995 | 0.439 | 0.184 | 1.77E-32 | Mono_spleen |
| VPS36              | 5.29E-37 | 0.59411549 | 0.45  | 0.183 | 1.87E-32 | Mono_spleen |
| FBXO33             | 5.65E-37 | 1.25762494 | 0.261 | 0.088 | 2.00E-32 | Mono_spleen |
| XRCC4              | 5.81E-37 | 0.68436127 | 0.391 | 0.155 | 2.06E-32 | Mono_spleen |
| DCAF8              | 5.99E-37 | 0.75399771 | 0.334 | 0.122 | 2.12E-32 | Mono_spleen |
| CCDC88A            | 6.05E-37 | 0.61023054 | 0.65  | 0.327 | 2.14E-32 | Mono_spleen |
| MED13              | 6.15E-37 | 0.53551273 | 0.475 | 0.202 | 2.18E-32 | Mono_spleen |
| UBAP2L             | 6.32E-37 | 0.48284217 | 0.35  | 0.13  | 2.24E-32 | Mono_spleen |
| KPNA3              | 6.43E-37 | 0.97690485 | 0.352 | 0.138 | 2.28E-32 | Mono_spleen |
| ZFR                | 7.11E-37 | 0.54822813 | 0.431 | 0.176 | 2.52E-32 | Mono_spleen |
| DCP1A              | 7.30E-37 | 0.65292788 | 0.358 | 0.137 | 2.59E-32 | Mono_spleen |
| SMARCA5            | 7.76E-37 | 0.59818627 | 0.461 | 0.193 | 2.75E-32 | Mono_spleen |
| LOXHD1             | 8.26E-37 | 0.46705726 | 0.305 | 0.106 | 2.93E-32 | Mono_spleen |
| SNX3               | 8.37E-37 | 0.61233332 | 0.569 | 0.264 | 2.97E-32 | Mono_spleen |
| ZNFX1              | 9.58E-37 | 0.59594553 | 0.574 | 0.261 | 3.39E-32 | Mono_spleen |
| SLC43A2            | 1.31E-36 | 0.63939974 | 0.494 | 0.212 | 4.66E-32 | Mono_spleen |
| USO1               | 1.41E-36 | 0.72376697 | 0.294 | 0.102 | 5.01E-32 | Mono_spleen |
| NPTN               | 1.51E-36 | 0.51177034 | 0.536 | 0.237 | 5.34E-32 | Mono_spleen |
| FGFR1OP2           | 1.62E-36 | 0.68551066 | 0.284 | 0.097 | 5.74E-32 | Mono_spleen |
| EMB                | 1.73E-36 | 0.75301739 | 0.508 | 0.231 | 6.13E-32 | Mono_spleen |
| ZNFB654            | 1.87E-36 | 0.83240804 | 0.299 | 0.106 | 6.62E-32 | Mono_spleen |
| NADSYN1            | 2.12E-36 | 0.6832363  | 0.325 | 0.117 | 7.51E-32 | Mono_spleen |
| ENSMMUG00000058165 | 2.22E-36 | 0.82450917 | 0.378 | 0.151 | 7.87E-32 | Mono_spleen |
| SENP7              | 2.44E-36 | 0.60601099 | 0.36  | 0.136 | 8.66E-32 | Mono_spleen |
| SRSF11             | 2.86E-36 | 0.54498747 | 0.719 | 0.363 | 1.01E-31 | Mono_spleen |
| SRSF10             | 3.10E-36 | 0.8438923  | 0.339 | 0.128 | 1.10E-31 | Mono_spleen |
| ITFG2              | 3.23E-36 | 0.66859692 | 0.283 | 0.097 | 1.14E-31 | Mono_spleen |
| PRSS55             | 3.34E-36 | 0.92216255 | 0.382 | 0.154 | 1.18E-31 | Mono_spleen |
| KPNA4              | 3.70E-36 | 0.59311692 | 0.413 | 0.169 | 1.31E-31 | Mono_spleen |
| RHEB               | 3.95E-36 | 0.54260566 | 0.714 | 0.367 | 1.40E-31 | Mono_spleen |
| VPS26A             | 3.98E-36 | 0.60573793 | 0.422 | 0.172 | 1.41E-31 | Mono_spleen |
| LAMP2              | 4.50E-36 | 0.57490446 | 0.444 | 0.182 | 1.59E-31 | Mono_spleen |

|             |          |            |       |       |          |             |
|-------------|----------|------------|-------|-------|----------|-------------|
| FMC1-LUC7L2 | 4.54E-36 | 0.614122   | 0.69  | 0.345 | 1.61E-31 | Mono_spleen |
| DNAJB1      | 4.66E-36 | 0.88770183 | 0.262 | 0.089 | 1.65E-31 | Mono_spleen |
| CHST15      | 5.18E-36 | 0.95883482 | 0.277 | 0.096 | 1.84E-31 | Mono_spleen |
| MYH9        | 5.34E-36 | 0.59631285 | 0.659 | 0.317 | 1.89E-31 | Mono_spleen |
| KPNB1       | 6.40E-36 | 0.54207899 | 0.385 | 0.15  | 2.27E-31 | Mono_spleen |
| ACTR2       | 6.54E-36 | 0.54195881 | 0.927 | 0.684 | 2.32E-31 | Mono_spleen |
| PHF11       | 7.30E-36 | 0.49944413 | 0.44  | 0.182 | 2.59E-31 | Mono_spleen |
| RBM23       | 7.35E-36 | 0.85172063 | 0.321 | 0.118 | 2.61E-31 | Mono_spleen |
| DENR        | 7.86E-36 | 0.57850487 | 0.345 | 0.127 | 2.79E-31 | Mono_spleen |
| MED15       | 7.94E-36 | 0.57432607 | 0.358 | 0.138 | 2.81E-31 | Mono_spleen |
| TSNAX       | 8.37E-36 | 0.70832546 | 0.281 | 0.095 | 2.97E-31 | Mono_spleen |
| EIPR1       | 8.99E-36 | 0.80931181 | 0.292 | 0.102 | 3.18E-31 | Mono_spleen |
| RTF1        | 9.16E-36 | 0.80064099 | 0.312 | 0.113 | 3.25E-31 | Mono_spleen |
| SRSF2       | 1.12E-35 | 0.46174231 | 0.464 | 0.194 | 3.98E-31 | Mono_spleen |
| SETD5       | 1.15E-35 | 0.43820117 | 0.492 | 0.211 | 4.08E-31 | Mono_spleen |
| KPNA6       | 1.50E-35 | 0.59485043 | 0.305 | 0.109 | 5.30E-31 | Mono_spleen |
| SLC25A13    | 1.58E-35 | 0.84319593 | 0.273 | 0.095 | 5.59E-31 | Mono_spleen |
| SIL1        | 1.68E-35 | 0.70515166 | 0.286 | 0.1   | 5.94E-31 | Mono_spleen |
| SERINC1     | 2.02E-35 | 0.42670919 | 0.527 | 0.228 | 7.15E-31 | Mono_spleen |
| IFI16       | 2.09E-35 | 0.45288713 | 0.967 | 0.874 | 7.40E-31 | Mono_spleen |
| TMEM165     | 2.62E-35 | 0.60151647 | 0.305 | 0.109 | 9.29E-31 | Mono_spleen |
| KHDRBS1     | 2.81E-35 | 0.73820462 | 0.372 | 0.146 | 9.95E-31 | Mono_spleen |
| CCT6A       | 2.93E-35 | 0.52746605 | 0.461 | 0.193 | 1.04E-30 | Mono_spleen |
| MAN2A1      | 3.04E-35 | 0.52703649 | 0.4   | 0.163 | 1.08E-30 | Mono_spleen |
| WAPL        | 3.85E-35 | 0.53270168 | 0.44  | 0.185 | 1.36E-30 | Mono_spleen |
| POGZ        | 4.02E-35 | 0.69928944 | 0.354 | 0.137 | 1.43E-30 | Mono_spleen |
| STK40       | 4.12E-35 | 0.5170809  | 0.468 | 0.198 | 1.46E-30 | Mono_spleen |
| TCF25       | 4.65E-35 | 0.60759006 | 0.53  | 0.239 | 1.65E-30 | Mono_spleen |
| BIN2        | 5.07E-35 | 0.51412769 | 0.694 | 0.346 | 1.80E-30 | Mono_spleen |
| NCOA4       | 5.27E-35 | 0.54264599 | 0.547 | 0.248 | 1.87E-30 | Mono_spleen |
| SMIM14      | 5.62E-35 | 0.68773166 | 0.407 | 0.166 | 1.99E-30 | Mono_spleen |
| SCLT1       | 6.75E-35 | 0.50582546 | 0.391 | 0.158 | 2.39E-30 | Mono_spleen |
| RNF10       | 7.07E-35 | 0.54887138 | 0.36  | 0.138 | 2.50E-30 | Mono_spleen |



|                    |          |            |       |       |          |             |
|--------------------|----------|------------|-------|-------|----------|-------------|
| ECHDC1             | 7.09E-35 | 0.54048604 | 0.352 | 0.133 | 2.51E-30 | Mono_spleen |
| ADIPOR1            | 7.68E-35 | 0.60588106 | 0.42  | 0.173 | 2.72E-30 | Mono_spleen |
| SSBP2              | 7.68E-35 | 0.43054735 | 0.769 | 0.422 | 2.72E-30 | Mono_spleen |
| PDCD6-AHRR         | 8.52E-35 | 0.39013213 | 0.479 | 0.203 | 3.02E-30 | Mono_spleen |
| ATP5PB             | 8.80E-35 | 0.47259859 | 0.539 | 0.237 | 3.12E-30 | Mono_spleen |
| NEMF               | 9.29E-35 | 0.79690438 | 0.349 | 0.136 | 3.29E-30 | Mono_spleen |
| ADCY7              | 9.39E-35 | 0.44293323 | 0.383 | 0.149 | 3.33E-30 | Mono_spleen |
| NUMA1              | 9.43E-35 | 0.66671719 | 0.354 | 0.138 | 3.34E-30 | Mono_spleen |
| SLC9A3R1           | 1.01E-34 | 0.67696089 | 0.31  | 0.112 | 3.57E-30 | Mono_spleen |
| AHCYL1             | 1.04E-34 | 0.66996051 | 0.281 | 0.097 | 3.70E-30 | Mono_spleen |
| ATG5               | 1.05E-34 | 0.4870527  | 0.462 | 0.194 | 3.73E-30 | Mono_spleen |
| FNDC3A             | 1.09E-34 | 0.56156886 | 0.655 | 0.327 | 3.88E-30 | Mono_spleen |
| INPP5K             | 1.10E-34 | 0.69659699 | 0.25  | 0.082 | 3.90E-30 | Mono_spleen |
| CUL1               | 1.36E-34 | 0.48230466 | 0.473 | 0.204 | 4.83E-30 | Mono_spleen |
| CIR1               | 1.46E-34 | 0.59070899 | 0.413 | 0.17  | 5.16E-30 | Mono_spleen |
| PCMT1              | 1.73E-34 | 0.44888378 | 0.387 | 0.152 | 6.12E-30 | Mono_spleen |
| MPST               | 1.94E-34 | 0.54829088 | 0.345 | 0.13  | 6.87E-30 | Mono_spleen |
| KLHL2              | 2.07E-34 | 0.68344027 | 0.363 | 0.144 | 7.33E-30 | Mono_spleen |
| ZNF451             | 2.20E-34 | 0.66681312 | 0.376 | 0.152 | 7.80E-30 | Mono_spleen |
| ADGRB3             | 2.76E-34 | 1.40939005 | 0.257 | 0.092 | 9.77E-30 | Mono_spleen |
| MPHOSPH8           | 3.74E-34 | 0.81170179 | 0.292 | 0.106 | 1.32E-29 | Mono_spleen |
| SAMHD1             | 3.76E-34 | 0.61566119 | 0.613 | 0.311 | 1.33E-29 | Mono_spleen |
| SLA                | 4.01E-34 | 0.72636838 | 0.283 | 0.099 | 1.42E-29 | Mono_spleen |
| SREBF2             | 4.10E-34 | 0.58849326 | 0.539 | 0.249 | 1.45E-29 | Mono_spleen |
| SHTN1              | 4.23E-34 | 0.584349   | 0.323 | 0.121 | 1.50E-29 | Mono_spleen |
| MGAT1              | 4.27E-34 | 0.57247207 | 0.312 | 0.114 | 1.51E-29 | Mono_spleen |
| ATG10              | 4.35E-34 | 0.9237265  | 0.257 | 0.089 | 1.54E-29 | Mono_spleen |
| UBXN4              | 4.75E-34 | 0.5583555  | 0.525 | 0.237 | 1.68E-29 | Mono_spleen |
| ZNF410             | 4.89E-34 | 0.72166034 | 0.283 | 0.101 | 1.73E-29 | Mono_spleen |
| ENSMMUG00000018474 | 5.33E-34 | 0.49878249 | 0.424 | 0.175 | 1.89E-29 | Mono_spleen |
| CNOT1              | 6.10E-34 | 0.6068728  | 0.495 | 0.224 | 2.16E-29 | Mono_spleen |
| TMOD3              | 6.29E-34 | 0.55655495 | 0.629 | 0.31  | 2.23E-29 | Mono_spleen |
| CRYL1              | 6.87E-34 | 0.72924004 | 0.277 | 0.097 | 2.43E-29 | Mono_spleen |

|                    |          |            |       |       |          |             |
|--------------------|----------|------------|-------|-------|----------|-------------|
| OGDH               | 6.96E-34 | 0.56429017 | 0.464 | 0.2   | 2.47E-29 | Mono_spleen |
| TRAF3              | 7.27E-34 | 0.41144119 | 0.639 | 0.312 | 2.57E-29 | Mono_spleen |
| EXOC2              | 7.35E-34 | 0.69213581 | 0.292 | 0.106 | 2.61E-29 | Mono_spleen |
| HSPA5              | 7.61E-34 | 0.50118413 | 0.655 | 0.321 | 2.70E-29 | Mono_spleen |
| ILRUN              | 7.63E-34 | 0.71692344 | 0.29  | 0.105 | 2.71E-29 | Mono_spleen |
| MINK1              | 7.76E-34 | 0.71204152 | 0.345 | 0.137 | 2.75E-29 | Mono_spleen |
| BZW2               | 8.24E-34 | 0.87624824 | 0.635 | 0.339 | 2.92E-29 | Mono_spleen |
| DNAJB6             | 8.43E-34 | 0.63318817 | 0.734 | 0.386 | 2.99E-29 | Mono_spleen |
| GLB1               | 9.22E-34 | 0.68750051 | 0.281 | 0.099 | 3.27E-29 | Mono_spleen |
| BRWD3              | 1.02E-33 | 0.87774961 | 0.284 | 0.103 | 3.60E-29 | Mono_spleen |
| WASHC5             | 1.03E-33 | 1.01034391 | 0.253 | 0.087 | 3.66E-29 | Mono_spleen |
| ENSMMUG00000060229 | 1.07E-33 | 0.55150794 | 0.299 | 0.108 | 3.80E-29 | Mono_spleen |
| ENSMMUG00000016959 | 1.20E-33 | 0.63959978 | 0.45  | 0.194 | 4.25E-29 | Mono_spleen |
| TCEA1              | 1.33E-33 | 0.62990189 | 0.468 | 0.204 | 4.72E-29 | Mono_spleen |
| CHCHD3             | 1.40E-33 | 0.52505264 | 0.385 | 0.156 | 4.96E-29 | Mono_spleen |
| ENSMMUG00000006965 | 1.51E-33 | 0.51117318 | 0.459 | 0.196 | 5.34E-29 | Mono_spleen |
| CTDNBP1            | 1.52E-33 | 0.42793127 | 0.367 | 0.143 | 5.39E-29 | Mono_spleen |
| SF1                | 1.69E-33 | 0.51314211 | 0.51  | 0.23  | 6.00E-29 | Mono_spleen |
| TCP1               | 1.74E-33 | 0.49878499 | 0.279 | 0.097 | 6.16E-29 | Mono_spleen |
| TMEM147            | 1.76E-33 | 0.29581776 | 0.398 | 0.157 | 6.22E-29 | Mono_spleen |
| IMMP2L             | 1.92E-33 | 0.88739353 | 0.382 | 0.166 | 6.82E-29 | Mono_spleen |
| MORF4L2            | 1.97E-33 | 0.55376553 | 0.378 | 0.151 | 6.99E-29 | Mono_spleen |
| MTSS1              | 2.06E-33 | 0.58216034 | 0.818 | 0.496 | 7.29E-29 | Mono_spleen |
| PPIL4              | 2.11E-33 | 0.88864587 | 0.275 | 0.099 | 7.48E-29 | Mono_spleen |
| VIM                | 2.32E-33 | 0.54040294 | 0.952 | 0.916 | 8.23E-29 | Mono_spleen |
| SELPLG             | 2.53E-33 | 0.50087701 | 0.402 | 0.165 | 8.95E-29 | Mono_spleen |
| LAMP1              | 2.64E-33 | 0.40745824 | 0.629 | 0.299 | 9.34E-29 | Mono_spleen |
| LENG8              | 2.65E-33 | 0.43226353 | 0.367 | 0.144 | 9.38E-29 | Mono_spleen |
| GSK3A              | 2.94E-33 | 0.6171067  | 0.257 | 0.086 | 1.04E-28 | Mono_spleen |
| SIPA1L1            | 2.99E-33 | 0.44517276 | 0.683 | 0.359 | 1.06E-28 | Mono_spleen |
| ELF2               | 3.02E-33 | 0.53071373 | 0.451 | 0.199 | 1.07E-28 | Mono_spleen |
| RASSF5             | 3.03E-33 | 0.48753485 | 0.387 | 0.156 | 1.07E-28 | Mono_spleen |
| ADIPOR2            | 3.37E-33 | 0.57904168 | 0.387 | 0.161 | 1.20E-28 | Mono_spleen |

|                   |          |            |       |       |          |             |
|-------------------|----------|------------|-------|-------|----------|-------------|
| PRKD3             | 4.07E-33 | 0.83165561 | 0.297 | 0.112 | 1.44E-28 | Mono_spleen |
| P4HA1             | 4.11E-33 | 0.60087415 | 0.343 | 0.133 | 1.46E-28 | Mono_spleen |
| AARS1             | 4.12E-33 | 0.69984255 | 0.292 | 0.106 | 1.46E-28 | Mono_spleen |
| UPF2              | 4.13E-33 | 0.59626697 | 0.468 | 0.207 | 1.47E-28 | Mono_spleen |
| ENSMUG00000051358 | 4.27E-33 | 0.73929479 | 0.275 | 0.098 | 1.51E-28 | Mono_spleen |
| MAN1A2            | 4.35E-33 | 0.71073818 | 0.372 | 0.154 | 1.54E-28 | Mono_spleen |
| PDIA3             | 4.57E-33 | 0.67566862 | 0.295 | 0.108 | 1.62E-28 | Mono_spleen |
| SNX10             | 5.06E-33 | 0.53301863 | 0.356 | 0.14  | 1.79E-28 | Mono_spleen |
| SDF2L1            | 6.30E-33 | 0.66657232 | 0.266 | 0.092 | 2.23E-28 | Mono_spleen |
| ATL3              | 6.44E-33 | 0.55681408 | 0.363 | 0.146 | 2.28E-28 | Mono_spleen |
| BTN2A2            | 6.64E-33 | 0.7310329  | 0.345 | 0.135 | 2.35E-28 | Mono_spleen |
| BTBD7             | 6.83E-33 | 0.79196452 | 0.262 | 0.093 | 2.42E-28 | Mono_spleen |
| ZNF655            | 7.07E-33 | 0.59381625 | 0.275 | 0.097 | 2.50E-28 | Mono_spleen |
| LEMD3             | 7.12E-33 | 0.77607569 | 0.295 | 0.111 | 2.52E-28 | Mono_spleen |
| TRIM25            | 7.24E-33 | 0.78198783 | 0.281 | 0.101 | 2.57E-28 | Mono_spleen |
| TSPAN14           | 7.53E-33 | 0.63124832 | 0.343 | 0.135 | 2.67E-28 | Mono_spleen |
| PLA2G6            | 1.12E-32 | 0.63821645 | 0.295 | 0.109 | 3.99E-28 | Mono_spleen |
| SASH3             | 1.14E-32 | 0.96039734 | 0.261 | 0.091 | 4.03E-28 | Mono_spleen |
| STAU2             | 1.24E-32 | 0.7426447  | 0.332 | 0.132 | 4.41E-28 | Mono_spleen |
| LTV1              | 1.28E-32 | 0.65951795 | 0.279 | 0.099 | 4.54E-28 | Mono_spleen |
| PLAA              | 1.29E-32 | 0.86377803 | 0.332 | 0.132 | 4.58E-28 | Mono_spleen |
| ATP6V0D1          | 1.54E-32 | 0.42910744 | 0.58  | 0.272 | 5.45E-28 | Mono_spleen |
| MTPN              | 1.60E-32 | 0.4437408  | 0.624 | 0.3   | 5.66E-28 | Mono_spleen |
| ABCB7             | 1.62E-32 | 0.73356507 | 0.273 | 0.098 | 5.74E-28 | Mono_spleen |
| ARHGAP45          | 1.63E-32 | 0.47085037 | 0.464 | 0.201 | 5.78E-28 | Mono_spleen |
| R3HDM4            | 1.67E-32 | 0.51357626 | 0.288 | 0.104 | 5.90E-28 | Mono_spleen |
| TTC1              | 1.87E-32 | 0.56924746 | 0.268 | 0.093 | 6.63E-28 | Mono_spleen |
| N4BP2L2           | 2.02E-32 | 0.26430101 | 0.455 | 0.193 | 7.17E-28 | Mono_spleen |
| TTC19             | 2.13E-32 | 0.60003633 | 0.275 | 0.098 | 7.55E-28 | Mono_spleen |
| CACYBP            | 3.25E-32 | 0.531827   | 0.468 | 0.207 | 1.15E-27 | Mono_spleen |
| CDC5L             | 3.62E-32 | 0.63236624 | 0.301 | 0.113 | 1.28E-27 | Mono_spleen |
| LEPROT            | 4.14E-32 | 0.56761714 | 0.295 | 0.109 | 1.47E-27 | Mono_spleen |
| CAMTA1            | 4.58E-32 | 0.49735117 | 0.571 | 0.273 | 1.62E-27 | Mono_spleen |

|                    |          |            |       |       |          |             |
|--------------------|----------|------------|-------|-------|----------|-------------|
| CAMLG              | 4.75E-32 | 0.52082394 | 0.468 | 0.206 | 1.68E-27 | Mono_spleen |
| VEZF1              | 5.33E-32 | 0.7783137  | 0.262 | 0.092 | 1.89E-27 | Mono_spleen |
| ENSMMUG00000051505 | 5.46E-32 | 0.91710076 | 0.262 | 0.094 | 1.93E-27 | Mono_spleen |
| AFF4               | 6.61E-32 | 0.4658378  | 0.486 | 0.219 | 2.34E-27 | Mono_spleen |
| CLTC               | 7.54E-32 | 0.52063879 | 0.536 | 0.25  | 2.67E-27 | Mono_spleen |
| MED25              | 8.21E-32 | 0.93665327 | 0.323 | 0.126 | 2.91E-27 | Mono_spleen |
| HDLBP              | 8.64E-32 | 0.36327053 | 0.345 | 0.134 | 3.06E-27 | Mono_spleen |
| EWSR1              | 8.82E-32 | 0.45971492 | 0.516 | 0.235 | 3.12E-27 | Mono_spleen |
| RFC1               | 9.18E-32 | 0.76717921 | 0.275 | 0.1   | 3.25E-27 | Mono_spleen |
| TAX1BP1            | 9.57E-32 | 0.44825007 | 0.633 | 0.308 | 3.39E-27 | Mono_spleen |
| PIP5K1A            | 9.70E-32 | 0.77835206 | 0.31  | 0.121 | 3.44E-27 | Mono_spleen |
| SLC20A1            | 9.81E-32 | 0.71339197 | 0.31  | 0.12  | 3.48E-27 | Mono_spleen |
| ABHD12             | 1.05E-31 | 0.7199037  | 0.255 | 0.089 | 3.73E-27 | Mono_spleen |
| C15H9orf78         | 1.13E-31 | 0.43661644 | 0.495 | 0.219 | 3.99E-27 | Mono_spleen |
| EPRS1              | 1.24E-31 | 0.55401615 | 0.319 | 0.122 | 4.40E-27 | Mono_spleen |
| SARAF              | 1.31E-31 | 0.51888513 | 0.815 | 0.478 | 4.66E-27 | Mono_spleen |
| MAP1LC3A           | 1.51E-31 | 0.35257287 | 0.262 | 0.091 | 5.34E-27 | Mono_spleen |
| DOCK10             | 1.51E-31 | 0.5912102  | 0.631 | 0.329 | 5.36E-27 | Mono_spleen |
| ACTR3              | 1.58E-31 | 0.61679377 | 0.895 | 0.599 | 5.59E-27 | Mono_spleen |
| AATK               | 1.68E-31 | 0.58488369 | 0.29  | 0.108 | 5.96E-27 | Mono_spleen |
| AGO2               | 1.70E-31 | 0.47204934 | 0.615 | 0.31  | 6.01E-27 | Mono_spleen |
| TOP2B              | 1.75E-31 | 0.58313892 | 0.402 | 0.172 | 6.19E-27 | Mono_spleen |
| DHX9               | 1.96E-31 | 0.50922065 | 0.464 | 0.21  | 6.93E-27 | Mono_spleen |
| HNRNPUL1           | 2.02E-31 | 0.46490067 | 0.332 | 0.129 | 7.17E-27 | Mono_spleen |
| PSTPIP2            | 2.10E-31 | 0.48983686 | 0.308 | 0.117 | 7.42E-27 | Mono_spleen |
| VPS4B              | 2.22E-31 | 0.5791988  | 0.398 | 0.168 | 7.85E-27 | Mono_spleen |
| PTP4A1             | 2.27E-31 | 0.51776903 | 0.528 | 0.25  | 8.03E-27 | Mono_spleen |
| SCAF11             | 2.28E-31 | 0.46170055 | 0.661 | 0.329 | 8.09E-27 | Mono_spleen |
| BRI3               | 2.47E-31 | 0.38517256 | 0.446 | 0.192 | 8.75E-27 | Mono_spleen |
| UBE2W              | 3.31E-31 | 0.42138093 | 0.514 | 0.237 | 1.17E-26 | Mono_spleen |
| ARNT               | 3.32E-31 | 0.46295916 | 0.464 | 0.208 | 1.18E-26 | Mono_spleen |
| BIN3               | 3.44E-31 | 0.32246405 | 0.444 | 0.19  | 1.22E-26 | Mono_spleen |
| MED23              | 3.70E-31 | 0.83197248 | 0.288 | 0.108 | 1.31E-26 | Mono_spleen |

|                   |          |            |       |       |          |             |
|-------------------|----------|------------|-------|-------|----------|-------------|
| MAP3K2            | 3.98E-31 | 0.81523697 | 0.288 | 0.11  | 1.41E-26 | Mono_spleen |
| BLVRA             | 4.42E-31 | 0.4542219  | 0.4   | 0.169 | 1.57E-26 | Mono_spleen |
| MFF               | 4.91E-31 | 0.4360161  | 0.35  | 0.139 | 1.74E-26 | Mono_spleen |
| E2F3              | 5.15E-31 | 0.66930715 | 0.343 | 0.14  | 1.82E-26 | Mono_spleen |
| ZNF787            | 5.57E-31 | 0.82459695 | 0.259 | 0.093 | 1.97E-26 | Mono_spleen |
| UBP1              | 5.61E-31 | 0.70662896 | 0.292 | 0.111 | 1.99E-26 | Mono_spleen |
| H2AFY             | 5.63E-31 | 0.48350714 | 0.732 | 0.396 | 1.99E-26 | Mono_spleen |
| LYPLA1            | 5.86E-31 | 0.65581864 | 0.312 | 0.12  | 2.08E-26 | Mono_spleen |
| ELAVL1            | 6.21E-31 | 0.51943679 | 0.284 | 0.104 | 2.20E-26 | Mono_spleen |
| FBXW11            | 6.22E-31 | 0.26883774 | 0.429 | 0.186 | 2.20E-26 | Mono_spleen |
| RAPGEF2           | 6.33E-31 | 0.25095925 | 0.653 | 0.339 | 2.24E-26 | Mono_spleen |
| SEC23A            | 7.65E-31 | 0.94472607 | 0.27  | 0.1   | 2.71E-26 | Mono_spleen |
| VPS37B            | 8.09E-31 | 0.63210927 | 0.4   | 0.174 | 2.87E-26 | Mono_spleen |
| COPS2             | 1.22E-30 | 0.51628329 | 0.374 | 0.155 | 4.32E-26 | Mono_spleen |
| TMEM183A          | 1.41E-30 | 0.82606765 | 0.261 | 0.094 | 4.99E-26 | Mono_spleen |
| ITGAM             | 1.56E-30 | 0.52092633 | 0.633 | 0.32  | 5.52E-26 | Mono_spleen |
| NUP214            | 1.68E-30 | 0.64433719 | 0.317 | 0.125 | 5.96E-26 | Mono_spleen |
| TNFSF13B          | 2.03E-30 | 0.46683796 | 0.442 | 0.197 | 7.21E-26 | Mono_spleen |
| EEA1              | 2.21E-30 | 0.59604051 | 0.305 | 0.117 | 7.85E-26 | Mono_spleen |
| HERPUD2           | 2.94E-30 | 0.43614447 | 0.284 | 0.105 | 1.04E-25 | Mono_spleen |
| BCL7B             | 3.14E-30 | 0.69512511 | 0.336 | 0.137 | 1.11E-25 | Mono_spleen |
| LMO2              | 3.22E-30 | 0.39308345 | 0.303 | 0.114 | 1.14E-25 | Mono_spleen |
| ASAH1             | 3.28E-30 | 0.53881367 | 0.532 | 0.256 | 1.16E-25 | Mono_spleen |
| PITPNC1           | 3.43E-30 | 0.41353811 | 0.602 | 0.304 | 1.22E-25 | Mono_spleen |
| HPS5              | 3.49E-30 | 0.75486746 | 0.272 | 0.101 | 1.24E-25 | Mono_spleen |
| CHIC2             | 3.61E-30 | 0.31237656 | 0.413 | 0.176 | 1.28E-25 | Mono_spleen |
| ENSMUG00000060287 | 3.94E-30 | 0.56596869 | 0.822 | 0.56  | 1.40E-25 | Mono_spleen |
| ARHGAP1           | 4.07E-30 | 0.53761437 | 0.264 | 0.096 | 1.44E-25 | Mono_spleen |
| RASGEF1B          | 4.29E-30 | 0.53214964 | 0.783 | 0.465 | 1.52E-25 | Mono_spleen |
| CEP192            | 4.78E-30 | 0.43279322 | 0.358 | 0.147 | 1.69E-25 | Mono_spleen |
| TTC39C            | 4.84E-30 | 0.65935877 | 0.262 | 0.097 | 1.71E-25 | Mono_spleen |
| IWS1              | 4.92E-30 | 0.54404509 | 0.394 | 0.168 | 1.74E-25 | Mono_spleen |
| CYC1              | 5.63E-30 | 0.33328458 | 0.358 | 0.144 | 2.00E-25 | Mono_spleen |

|                    |          |            |       |       |          |             |
|--------------------|----------|------------|-------|-------|----------|-------------|
| AP2B1              | 5.76E-30 | 0.56020337 | 0.415 | 0.183 | 2.04E-25 | Mono_spleen |
| VCP                | 6.14E-30 | 0.42598936 | 0.514 | 0.238 | 2.18E-25 | Mono_spleen |
| MAGI3              | 6.98E-30 | 0.7632752  | 0.317 | 0.129 | 2.47E-25 | Mono_spleen |
| UBE2H              | 7.82E-30 | 0.28800278 | 0.569 | 0.268 | 2.77E-25 | Mono_spleen |
| PSEN1              | 7.98E-30 | 0.46361635 | 0.659 | 0.344 | 2.83E-25 | Mono_spleen |
| SLC35A5            | 8.05E-30 | 0.64182722 | 0.25  | 0.089 | 2.85E-25 | Mono_spleen |
| PDIA6              | 8.49E-30 | 0.47727537 | 0.25  | 0.088 | 3.01E-25 | Mono_spleen |
| ADAP1              | 8.79E-30 | 0.41957956 | 0.361 | 0.149 | 3.11E-25 | Mono_spleen |
| GTF2H1             | 9.30E-30 | 0.77476688 | 0.255 | 0.093 | 3.30E-25 | Mono_spleen |
| SPI1               | 1.09E-29 | 0.54608739 | 0.338 | 0.136 | 3.87E-25 | Mono_spleen |
| HM13               | 1.14E-29 | 0.56774819 | 0.393 | 0.168 | 4.03E-25 | Mono_spleen |
| SH3BP5             | 1.18E-29 | 0.41711988 | 0.607 | 0.301 | 4.20E-25 | Mono_spleen |
| SEPTIN9            | 1.20E-29 | 0.5277832  | 0.589 | 0.298 | 4.27E-25 | Mono_spleen |
| GNAL               | 1.22E-29 | 0.40825723 | 0.538 | 0.253 | 4.33E-25 | Mono_spleen |
| ZNF277             | 1.23E-29 | 0.25965193 | 0.448 | 0.198 | 4.37E-25 | Mono_spleen |
| CTNBL1             | 1.26E-29 | 0.45656338 | 0.339 | 0.137 | 4.47E-25 | Mono_spleen |
| PRKACB             | 1.50E-29 | 0.55302382 | 0.361 | 0.15  | 5.32E-25 | Mono_spleen |
| CNST               | 1.62E-29 | 0.59619784 | 0.464 | 0.215 | 5.76E-25 | Mono_spleen |
| EMC6               | 1.73E-29 | 0.41816055 | 0.33  | 0.13  | 6.14E-25 | Mono_spleen |
| ENSMMUG00000019882 | 2.05E-29 | 0.48443748 | 0.297 | 0.113 | 7.27E-25 | Mono_spleen |
| CCDC69             | 2.21E-29 | 0.45187641 | 0.38  | 0.158 | 7.83E-25 | Mono_spleen |
| MAPRE1             | 2.24E-29 | 0.40535226 | 0.543 | 0.256 | 7.92E-25 | Mono_spleen |
| CAPZA1             | 2.64E-29 | 0.45940707 | 0.728 | 0.398 | 9.36E-25 | Mono_spleen |
| G3BP1              | 2.77E-29 | 0.4331983  | 0.44  | 0.196 | 9.81E-25 | Mono_spleen |
| PRKAR1A            | 2.78E-29 | 0.34252766 | 0.468 | 0.208 | 9.86E-25 | Mono_spleen |
| COPA               | 3.23E-29 | 0.35124424 | 0.418 | 0.181 | 1.15E-24 | Mono_spleen |
| BTK                | 3.27E-29 | 0.38468836 | 0.292 | 0.109 | 1.16E-24 | Mono_spleen |
| WSB1               | 3.69E-29 | 0.48752558 | 0.694 | 0.371 | 1.31E-24 | Mono_spleen |
| HEXB               | 3.97E-29 | 0.37478347 | 0.494 | 0.227 | 1.41E-24 | Mono_spleen |
| PRNP               | 4.01E-29 | 0.37408767 | 0.404 | 0.174 | 1.42E-24 | Mono_spleen |
| TGFB2              | 4.15E-29 | 0.41729437 | 0.622 | 0.315 | 1.47E-24 | Mono_spleen |
| ENSMMUG00000021539 | 4.53E-29 | 0.59293243 | 0.262 | 0.096 | 1.61E-24 | Mono_spleen |
| CTDSPL2            | 4.55E-29 | 0.63281089 | 0.286 | 0.11  | 1.61E-24 | Mono_spleen |

|                   |          |            |       |       |          |             |
|-------------------|----------|------------|-------|-------|----------|-------------|
| PSMD11            | 4.68E-29 | 0.67346579 | 0.264 | 0.097 | 1.66E-24 | Mono_spleen |
| CIITA             | 5.19E-29 | 0.36019981 | 0.288 | 0.109 | 1.84E-24 | Mono_spleen |
| DEGS1             | 5.26E-29 | 0.49550705 | 0.25  | 0.089 | 1.86E-24 | Mono_spleen |
| GTDC1             | 5.31E-29 | 0.94827044 | 0.292 | 0.117 | 1.88E-24 | Mono_spleen |
| RAB4A             | 5.56E-29 | 0.44633554 | 0.268 | 0.098 | 1.97E-24 | Mono_spleen |
| SNAP23            | 6.01E-29 | 0.39184089 | 0.369 | 0.154 | 2.13E-24 | Mono_spleen |
| DCAF1             | 6.44E-29 | 0.60048487 | 0.283 | 0.108 | 2.28E-24 | Mono_spleen |
| DENND4C           | 6.78E-29 | 0.67860404 | 0.253 | 0.093 | 2.40E-24 | Mono_spleen |
| UBA2              | 6.92E-29 | 0.58506002 | 0.253 | 0.092 | 2.45E-24 | Mono_spleen |
| FGD2              | 7.40E-29 | 0.28380372 | 0.543 | 0.255 | 2.62E-24 | Mono_spleen |
| JAK1              | 7.78E-29 | 0.40739094 | 0.881 | 0.593 | 2.76E-24 | Mono_spleen |
| SARS1             | 8.06E-29 | 0.46499376 | 0.349 | 0.144 | 2.86E-24 | Mono_spleen |
| COTL1             | 8.20E-29 | 0.4931387  | 0.866 | 0.681 | 2.90E-24 | Mono_spleen |
| AFTPH             | 9.15E-29 | 0.42887928 | 0.604 | 0.302 | 3.24E-24 | Mono_spleen |
| SCPEP1            | 9.35E-29 | 0.49729787 | 0.352 | 0.144 | 3.31E-24 | Mono_spleen |
| NIPSNAP2          | 1.19E-28 | 0.58823956 | 0.295 | 0.116 | 4.20E-24 | Mono_spleen |
| IVNS1ABP          | 1.20E-28 | 0.50235971 | 0.393 | 0.171 | 4.24E-24 | Mono_spleen |
| HNRNPA2B1         | 1.27E-28 | 0.53458328 | 0.906 | 0.646 | 4.49E-24 | Mono_spleen |
| EML4              | 1.29E-28 | 0.42445593 | 0.661 | 0.348 | 4.58E-24 | Mono_spleen |
| LBR               | 1.30E-28 | 0.71058962 | 0.396 | 0.173 | 4.61E-24 | Mono_spleen |
| CCT2              | 1.30E-28 | 0.26445603 | 0.442 | 0.194 | 4.61E-24 | Mono_spleen |
| HIPK2             | 1.33E-28 | 0.54605366 | 0.347 | 0.147 | 4.72E-24 | Mono_spleen |
| ESYT1             | 1.36E-28 | 0.50422246 | 0.259 | 0.095 | 4.82E-24 | Mono_spleen |
| TMEM127           | 1.40E-28 | 0.34155257 | 0.411 | 0.179 | 4.97E-24 | Mono_spleen |
| ASXL1             | 1.53E-28 | 0.54774289 | 0.255 | 0.094 | 5.44E-24 | Mono_spleen |
| HMGB2             | 1.55E-28 | 0.55138828 | 0.468 | 0.218 | 5.48E-24 | Mono_spleen |
| SEPTIN7           | 1.57E-28 | 0.48805193 | 0.754 | 0.42  | 5.58E-24 | Mono_spleen |
| SPTSSA            | 1.62E-28 | 0.34453666 | 0.483 | 0.221 | 5.74E-24 | Mono_spleen |
| ENSMUG00000065175 | 2.31E-28 | 0.44013555 | 0.349 | 0.143 | 8.18E-24 | Mono_spleen |
| HNRNPF            | 3.48E-28 | 0.44928192 | 0.703 | 0.378 | 1.23E-23 | Mono_spleen |
| RGS2              | 3.53E-28 | 0.60962278 | 0.651 | 0.349 | 1.25E-23 | Mono_spleen |
| ATP6V1H           | 3.55E-28 | 0.60286004 | 0.284 | 0.111 | 1.26E-23 | Mono_spleen |
| RNF103            | 4.17E-28 | 0.52185671 | 0.516 | 0.248 | 1.48E-23 | Mono_spleen |

|                    |          |            |       |       |          |             |
|--------------------|----------|------------|-------|-------|----------|-------------|
| NUB1               | 4.36E-28 | 0.37905644 | 0.286 | 0.11  | 1.54E-23 | Mono_spleen |
| GALNS              | 4.41E-28 | 0.50941817 | 0.262 | 0.097 | 1.56E-23 | Mono_spleen |
| RAB3GAP2           | 4.44E-28 | 0.52738101 | 0.259 | 0.096 | 1.57E-23 | Mono_spleen |
| ENSMMUG00000012537 | 5.51E-28 | 0.30851658 | 0.418 | 0.181 | 1.95E-23 | Mono_spleen |
| CDK14              | 5.85E-28 | 0.69395427 | 0.283 | 0.113 | 2.07E-23 | Mono_spleen |
| ENSMMUG00000060933 | 7.30E-28 | 0.6589301  | 0.27  | 0.104 | 2.59E-23 | Mono_spleen |
| ENSMMUG00000049010 | 7.37E-28 | 0.48150398 | 0.323 | 0.132 | 2.61E-23 | Mono_spleen |
| RAB10              | 8.21E-28 | 0.25163382 | 0.659 | 0.335 | 2.91E-23 | Mono_spleen |
| NAGK               | 8.79E-28 | 0.18251505 | 0.42  | 0.183 | 3.12E-23 | Mono_spleen |
| UCKL1              | 8.94E-28 | 0.44369017 | 0.259 | 0.096 | 3.17E-23 | Mono_spleen |
| IDS                | 1.05E-27 | 0.42756783 | 0.396 | 0.175 | 3.73E-23 | Mono_spleen |
| CAT                | 1.07E-27 | 0.41478082 | 0.521 | 0.246 | 3.80E-23 | Mono_spleen |
| MORF4L1            | 1.16E-27 | 0.40995629 | 0.758 | 0.421 | 4.10E-23 | Mono_spleen |
| SNX6               | 1.20E-27 | 0.36005241 | 0.539 | 0.256 | 4.27E-23 | Mono_spleen |
| VTA1               | 1.31E-27 | 0.53907531 | 0.261 | 0.098 | 4.64E-23 | Mono_spleen |
| HSD17B11           | 1.39E-27 | 0.67412496 | 0.328 | 0.135 | 4.91E-23 | Mono_spleen |
| TRIM72             | 1.55E-27 | 0.35063928 | 0.534 | 0.254 | 5.50E-23 | Mono_spleen |
| FBXL5              | 2.08E-27 | 0.29465785 | 0.372 | 0.16  | 7.37E-23 | Mono_spleen |
| MBTPS1             | 2.08E-27 | 0.56877586 | 0.268 | 0.103 | 7.37E-23 | Mono_spleen |
| EEF1E1             | 2.30E-27 | 0.47671002 | 0.262 | 0.098 | 8.16E-23 | Mono_spleen |
| ERCC6              | 3.15E-27 | 0.66803088 | 0.286 | 0.114 | 1.12E-22 | Mono_spleen |
| PAFAH1B2           | 3.30E-27 | 0.52094663 | 0.301 | 0.121 | 1.17E-22 | Mono_spleen |
| COPB2              | 3.33E-27 | 0.2836971  | 0.266 | 0.1   | 1.18E-22 | Mono_spleen |
| RO60               | 3.56E-27 | 0.23817983 | 0.303 | 0.119 | 1.26E-22 | Mono_spleen |
| TOX4               | 4.49E-27 | 0.48304432 | 0.361 | 0.157 | 1.59E-22 | Mono_spleen |
| GLYR1              | 4.68E-27 | 0.48527698 | 0.319 | 0.131 | 1.66E-22 | Mono_spleen |
| CLEC7A             | 5.49E-27 | 0.27728349 | 0.349 | 0.146 | 1.94E-22 | Mono_spleen |
| PDCD4              | 5.81E-27 | 0.47891875 | 0.29  | 0.115 | 2.06E-22 | Mono_spleen |
| NPL                | 6.23E-27 | 0.64979485 | 0.257 | 0.097 | 2.21E-22 | Mono_spleen |
| PITPNB             | 6.83E-27 | 0.23757425 | 0.473 | 0.218 | 2.42E-22 | Mono_spleen |
| RPS6KA1            | 6.86E-27 | 0.30012615 | 0.292 | 0.115 | 2.43E-22 | Mono_spleen |
| CD46               | 6.90E-27 | 0.28344609 | 0.503 | 0.234 | 2.45E-22 | Mono_spleen |
| HSPA4              | 6.97E-27 | 0.47977133 | 0.262 | 0.1   | 2.47E-22 | Mono_spleen |



|                    |          |            |       |       |          |             |
|--------------------|----------|------------|-------|-------|----------|-------------|
| BRD4               | 7.18E-27 | 0.34198744 | 0.431 | 0.196 | 2.54E-22 | Mono_spleen |
| AGK                | 7.58E-27 | 0.88419504 | 0.336 | 0.146 | 2.69E-22 | Mono_spleen |
| HUWE1              | 8.41E-27 | 0.44359382 | 0.402 | 0.18  | 2.98E-22 | Mono_spleen |
| UGP2               | 8.45E-27 | 0.47678814 | 0.257 | 0.096 | 2.99E-22 | Mono_spleen |
| ATP2C1             | 1.02E-26 | 0.12237121 | 0.442 | 0.203 | 3.63E-22 | Mono_spleen |
| STX8               | 1.06E-26 | 0.52744444 | 0.429 | 0.202 | 3.76E-22 | Mono_spleen |
| DDX39A             | 1.13E-26 | 0.4585609  | 0.338 | 0.144 | 4.01E-22 | Mono_spleen |
| ZBTB7A             | 1.19E-26 | 0.34546623 | 0.31  | 0.127 | 4.20E-22 | Mono_spleen |
| PPP1R8             | 1.21E-26 | 0.36329762 | 0.47  | 0.222 | 4.28E-22 | Mono_spleen |
| GTF2F2             | 1.21E-26 | 0.61533272 | 0.288 | 0.116 | 4.28E-22 | Mono_spleen |
| LMAN2              | 1.23E-26 | 0.20426346 | 0.488 | 0.223 | 4.36E-22 | Mono_spleen |
| DEDD2              | 1.38E-26 | 0.56426566 | 0.286 | 0.113 | 4.90E-22 | Mono_spleen |
| RIC1               | 1.58E-26 | 0.35971153 | 0.406 | 0.186 | 5.61E-22 | Mono_spleen |
| GLIPR1L2           | 1.63E-26 | 0.37148126 | 0.617 | 0.313 | 5.79E-22 | Mono_spleen |
| P4HB               | 1.69E-26 | 0.29368875 | 0.508 | 0.243 | 5.99E-22 | Mono_spleen |
| TMED10             | 1.78E-26 | 0.33372311 | 0.451 | 0.208 | 6.30E-22 | Mono_spleen |
| TRAM1              | 1.80E-26 | 0.32534221 | 0.578 | 0.286 | 6.38E-22 | Mono_spleen |
| NECAP2             | 1.93E-26 | 0.42382489 | 0.371 | 0.16  | 6.83E-22 | Mono_spleen |
| HDAC5              | 2.15E-26 | 0.69702388 | 0.27  | 0.107 | 7.62E-22 | Mono_spleen |
| RUNX3              | 2.68E-26 | 0.34934905 | 0.497 | 0.237 | 9.49E-22 | Mono_spleen |
| UBR1               | 2.74E-26 | 0.60621863 | 0.27  | 0.107 | 9.71E-22 | Mono_spleen |
| PTPN12             | 2.96E-26 | 0.30552365 | 0.495 | 0.239 | 1.05E-21 | Mono_spleen |
| GNS                | 3.05E-26 | 0.37721132 | 0.268 | 0.104 | 1.08E-21 | Mono_spleen |
| ENSMMUG00000006608 | 3.08E-26 | 0.31138092 | 0.657 | 0.335 | 1.09E-21 | Mono_spleen |
| SLC9A8             | 3.14E-26 | 0.46498402 | 0.286 | 0.115 | 1.11E-21 | Mono_spleen |
| SFPQ               | 3.38E-26 | 0.27145265 | 0.721 | 0.385 | 1.20E-21 | Mono_spleen |
| EAPP               | 4.00E-26 | 0.44241754 | 0.297 | 0.12  | 1.42E-21 | Mono_spleen |
| HSPA14             | 4.05E-26 | 0.48542078 | 0.294 | 0.118 | 1.44E-21 | Mono_spleen |
| SYAP1              | 4.39E-26 | 0.51358706 | 0.429 | 0.203 | 1.56E-21 | Mono_spleen |
| COA1               | 4.64E-26 | 0.31306646 | 0.283 | 0.111 | 1.64E-21 | Mono_spleen |
| WDR43              | 5.02E-26 | 0.57725898 | 0.297 | 0.122 | 1.78E-21 | Mono_spleen |
| FNBP1              | 5.34E-26 | 0.29065577 | 0.776 | 0.453 | 1.89E-21 | Mono_spleen |
| NRDC               | 6.74E-26 | 0.19721682 | 0.35  | 0.148 | 2.39E-21 | Mono_spleen |

|                    |          |            |       |       |          |             |
|--------------------|----------|------------|-------|-------|----------|-------------|
| ARL5B              | 7.19E-26 | 0.48690306 | 0.387 | 0.173 | 2.55E-21 | Mono_spleen |
| ENSMMUG00000010266 | 7.34E-26 | 0.3733581  | 0.75  | 0.423 | 2.60E-21 | Mono_spleen |
| ENSMMUG00000042951 | 7.42E-26 | 0.32389348 | 0.431 | 0.197 | 2.63E-21 | Mono_spleen |
| GNA13              | 7.45E-26 | 0.3568685  | 0.51  | 0.256 | 2.64E-21 | Mono_spleen |
| NUCKS1             | 8.32E-26 | 0.41459743 | 0.363 | 0.16  | 2.95E-21 | Mono_spleen |
| RAB21              | 9.76E-26 | 0.47412968 | 0.295 | 0.12  | 3.46E-21 | Mono_spleen |
| CSDE1              | 1.01E-25 | 0.34676388 | 0.686 | 0.358 | 3.59E-21 | Mono_spleen |
| NAA15              | 1.05E-25 | 0.35291586 | 0.312 | 0.13  | 3.71E-21 | Mono_spleen |
| THRAP3             | 1.05E-25 | 0.21783175 | 0.53  | 0.253 | 3.72E-21 | Mono_spleen |
| SNW1               | 1.05E-25 | 0.4387443  | 0.393 | 0.177 | 3.74E-21 | Mono_spleen |
| BHLHE40            | 1.21E-25 | 0.49380776 | 0.69  | 0.385 | 4.29E-21 | Mono_spleen |
| UBE2D3             | 1.27E-25 | 0.47047261 | 0.916 | 0.699 | 4.49E-21 | Mono_spleen |
| EMC3               | 1.46E-25 | 0.4917736  | 0.299 | 0.123 | 5.19E-21 | Mono_spleen |
| CCNG1              | 1.47E-25 | 0.31887648 | 0.345 | 0.146 | 5.20E-21 | Mono_spleen |
| NFIL3              | 1.59E-25 | 0.50424149 | 0.527 | 0.271 | 5.64E-21 | Mono_spleen |
| CALU               | 1.60E-25 | 0.62936645 | 0.259 | 0.102 | 5.66E-21 | Mono_spleen |
| SF3B2              | 1.63E-25 | 0.51211717 | 0.354 | 0.154 | 5.77E-21 | Mono_spleen |
| CHD4               | 1.64E-25 | 0.55353251 | 0.44  | 0.212 | 5.81E-21 | Mono_spleen |
| PCYOX1             | 1.73E-25 | 0.54324973 | 0.279 | 0.112 | 6.14E-21 | Mono_spleen |
| NDRG1              | 1.91E-25 | 0.23932128 | 0.512 | 0.246 | 6.77E-21 | Mono_spleen |
| ATF6B              | 2.08E-25 | 0.58444207 | 0.259 | 0.101 | 7.35E-21 | Mono_spleen |
| IREB2              | 2.31E-25 | 0.44080384 | 0.308 | 0.129 | 8.18E-21 | Mono_spleen |
| MIDEAS             | 2.32E-25 | 0.41263095 | 0.371 | 0.165 | 8.23E-21 | Mono_spleen |
| ENSMMUG00000020316 | 2.93E-25 | 0.42258438 | 0.29  | 0.118 | 1.04E-20 | Mono_spleen |
| MAP3K20            | 3.27E-25 | 0.20108452 | 0.506 | 0.245 | 1.16E-20 | Mono_spleen |
| APH1B              | 3.30E-25 | 0.33532144 | 0.277 | 0.11  | 1.17E-20 | Mono_spleen |
| IGSF6              | 3.51E-25 | 0.46693318 | 0.672 | 0.384 | 1.24E-20 | Mono_spleen |
| CDK6               | 3.63E-25 | 0.35992751 | 0.29  | 0.121 | 1.29E-20 | Mono_spleen |
| NFAT5              | 3.64E-25 | 0.20131381 | 0.62  | 0.323 | 1.29E-20 | Mono_spleen |
| TMEM50B            | 4.05E-25 | 0.50966204 | 0.255 | 0.099 | 1.43E-20 | Mono_spleen |
| HNRNPR             | 4.20E-25 | 0.30735605 | 0.356 | 0.156 | 1.49E-20 | Mono_spleen |
| STK3               | 5.37E-25 | 0.68630076 | 0.273 | 0.112 | 1.90E-20 | Mono_spleen |
| BAIAP2             | 5.80E-25 | 0.58916269 | 0.294 | 0.122 | 2.05E-20 | Mono_spleen |

|                    |          |            |       |       |          |             |
|--------------------|----------|------------|-------|-------|----------|-------------|
| HNRNPL             | 6.34E-25 | 0.38949765 | 0.62  | 0.324 | 2.25E-20 | Mono_spleen |
| CERS2              | 6.56E-25 | 0.16837641 | 0.288 | 0.115 | 2.32E-20 | Mono_spleen |
| SCP2               | 6.88E-25 | 0.36030114 | 0.523 | 0.257 | 2.44E-20 | Mono_spleen |
| PLA2G4A            | 7.21E-25 | 0.42674924 | 0.279 | 0.115 | 2.55E-20 | Mono_spleen |
| RUBCN              | 7.24E-25 | 0.46165308 | 0.277 | 0.112 | 2.57E-20 | Mono_spleen |
| ETNK1              | 7.63E-25 | 0.49341888 | 0.415 | 0.197 | 2.70E-20 | Mono_spleen |
| CCT5               | 8.05E-25 | 0.26769709 | 0.51  | 0.243 | 2.85E-20 | Mono_spleen |
| NSRP1              | 8.16E-25 | 0.381155   | 0.376 | 0.169 | 2.89E-20 | Mono_spleen |
| TAF7               | 8.37E-25 | 0.42092989 | 0.428 | 0.2   | 2.97E-20 | Mono_spleen |
| ARHGAP6            | 8.41E-25 | 0.52460781 | 0.299 | 0.128 | 2.98E-20 | Mono_spleen |
| CHD7               | 9.41E-25 | 0.87425954 | 0.251 | 0.102 | 3.33E-20 | Mono_spleen |
| ENSMMUG00000016898 | 9.76E-25 | 0.35023256 | 0.404 | 0.182 | 3.46E-20 | Mono_spleen |
| IPO7               | 1.01E-24 | 0.25407067 | 0.382 | 0.17  | 3.58E-20 | Mono_spleen |
| STAT2              | 1.15E-24 | 0.23550146 | 0.261 | 0.102 | 4.08E-20 | Mono_spleen |
| IFT57              | 1.21E-24 | 0.52548551 | 0.472 | 0.238 | 4.30E-20 | Mono_spleen |
| SURF4              | 1.26E-24 | 0.25102231 | 0.462 | 0.219 | 4.46E-20 | Mono_spleen |
| SZRD1              | 1.31E-24 | 0.32653252 | 0.409 | 0.189 | 4.63E-20 | Mono_spleen |
| ENSA               | 1.31E-24 | 0.54855537 | 0.628 | 0.343 | 4.63E-20 | Mono_spleen |
| DDX6               | 1.48E-24 | 0.49032484 | 0.38  | 0.173 | 5.23E-20 | Mono_spleen |
| ARL8A              | 1.72E-24 | 0.4031112  | 0.253 | 0.098 | 6.09E-20 | Mono_spleen |
| PLEKHM1            | 1.92E-24 | 0.40877151 | 0.259 | 0.102 | 6.80E-20 | Mono_spleen |
| CNBP               | 1.95E-24 | 0.42177    | 0.705 | 0.386 | 6.92E-20 | Mono_spleen |
| MANF               | 2.05E-24 | 0.4238039  | 0.281 | 0.114 | 7.25E-20 | Mono_spleen |
| ENSMMUG00000047277 | 2.12E-24 | 0.35882133 | 0.521 | 0.258 | 7.50E-20 | Mono_spleen |
| PTBP2              | 2.35E-24 | 0.3892449  | 0.424 | 0.202 | 8.31E-20 | Mono_spleen |
| IFNGR2             | 2.45E-24 | 0.42685767 | 0.743 | 0.437 | 8.69E-20 | Mono_spleen |
| DGKZ               | 2.46E-24 | 0.43359842 | 0.262 | 0.105 | 8.71E-20 | Mono_spleen |
| MRFAP1             | 2.46E-24 | 0.23900098 | 0.536 | 0.262 | 8.72E-20 | Mono_spleen |
| SSR1               | 2.64E-24 | 0.36773007 | 0.556 | 0.282 | 9.34E-20 | Mono_spleen |
| MED28              | 3.40E-24 | 0.32191041 | 0.264 | 0.105 | 1.20E-19 | Mono_spleen |
| ATP6V1E1           | 3.49E-24 | 0.34287666 | 0.393 | 0.178 | 1.24E-19 | Mono_spleen |
| GCC2               | 3.93E-24 | 0.51510885 | 0.292 | 0.123 | 1.39E-19 | Mono_spleen |
| SDHA               | 3.94E-24 | 0.3053304  | 0.345 | 0.151 | 1.40E-19 | Mono_spleen |

|          |          |            |       |       |          |             |
|----------|----------|------------|-------|-------|----------|-------------|
| U2SURP   | 4.10E-24 | 0.41643849 | 0.422 | 0.201 | 1.45E-19 | Mono_spleen |
| EIF4B    | 4.10E-24 | 0.25008019 | 0.547 | 0.266 | 1.45E-19 | Mono_spleen |
| TMEM87A  | 4.25E-24 | 0.34249312 | 0.525 | 0.26  | 1.51E-19 | Mono_spleen |
| STAT6    | 4.62E-24 | 0.22953496 | 0.371 | 0.165 | 1.64E-19 | Mono_spleen |
| ZBTB1    | 5.15E-24 | 0.66936028 | 0.297 | 0.129 | 1.82E-19 | Mono_spleen |
| SSU72    | 5.48E-24 | 0.35448203 | 0.283 | 0.116 | 1.94E-19 | Mono_spleen |
| COPB1    | 5.92E-24 | 0.49479269 | 0.251 | 0.099 | 2.10E-19 | Mono_spleen |
| PANK3    | 6.12E-24 | 0.2492847  | 0.29  | 0.12  | 2.17E-19 | Mono_spleen |
| HNMT     | 7.03E-24 | 0.29034229 | 0.589 | 0.299 | 2.49E-19 | Mono_spleen |
| SUGT1    | 7.86E-24 | 0.48015946 | 0.336 | 0.148 | 2.79E-19 | Mono_spleen |
| RXRA     | 8.51E-24 | 0.54724364 | 0.299 | 0.128 | 3.01E-19 | Mono_spleen |
| YME1L1   | 1.12E-23 | 0.26029632 | 0.396 | 0.182 | 3.98E-19 | Mono_spleen |
| CEBPZ    | 1.13E-23 | 0.55771283 | 0.288 | 0.122 | 3.99E-19 | Mono_spleen |
| EHD4     | 1.17E-23 | 0.40471767 | 0.327 | 0.143 | 4.15E-19 | Mono_spleen |
| CSNK2A1  | 1.32E-23 | 0.39913028 | 0.356 | 0.16  | 4.68E-19 | Mono_spleen |
| HNRNPA0  | 1.47E-23 | 0.23569169 | 0.42  | 0.195 | 5.21E-19 | Mono_spleen |
| STX7     | 1.52E-23 | 0.33760856 | 0.418 | 0.197 | 5.40E-19 | Mono_spleen |
| EIF4H    | 1.54E-23 | 0.34728597 | 0.565 | 0.282 | 5.45E-19 | Mono_spleen |
| SYNGR2   | 1.55E-23 | 0.17435041 | 0.439 | 0.203 | 5.47E-19 | Mono_spleen |
| CLCN3    | 1.74E-23 | 0.30903997 | 0.262 | 0.107 | 6.15E-19 | Mono_spleen |
| IGF2BP2  | 2.00E-23 | 0.68643089 | 0.264 | 0.111 | 7.09E-19 | Mono_spleen |
| KCTD20   | 2.07E-23 | 0.43475888 | 0.262 | 0.107 | 7.34E-19 | Mono_spleen |
| ZNF207   | 2.09E-23 | 0.31902883 | 0.483 | 0.236 | 7.42E-19 | Mono_spleen |
| RIOK3    | 2.23E-23 | 0.2765013  | 0.497 | 0.245 | 7.90E-19 | Mono_spleen |
| EIF4E    | 2.26E-23 | 0.36410339 | 0.327 | 0.143 | 8.02E-19 | Mono_spleen |
| THOC1    | 2.31E-23 | 0.70522433 | 0.264 | 0.111 | 8.20E-19 | Mono_spleen |
| ERP44    | 2.45E-23 | 0.4328791  | 0.486 | 0.245 | 8.70E-19 | Mono_spleen |
| GRB2     | 2.52E-23 | 0.29609922 | 0.765 | 0.43  | 8.94E-19 | Mono_spleen |
| GLTP     | 2.60E-23 | 0.23531677 | 0.587 | 0.299 | 9.23E-19 | Mono_spleen |
| MED27    | 2.61E-23 | 0.50945095 | 0.308 | 0.136 | 9.24E-19 | Mono_spleen |
| KIAA0930 | 2.70E-23 | 0.17017059 | 0.255 | 0.101 | 9.58E-19 | Mono_spleen |
| ASCC2    | 3.11E-23 | 0.42647295 | 0.268 | 0.111 | 1.10E-18 | Mono_spleen |
| ZNRF1    | 3.39E-23 | 0.22980667 | 0.259 | 0.104 | 1.20E-18 | Mono_spleen |

|                   |          |            |       |       |          |             |
|-------------------|----------|------------|-------|-------|----------|-------------|
| ELMOD3            | 3.51E-23 | 0.50677438 | 0.255 | 0.105 | 1.24E-18 | Mono_spleen |
| CAPN2             | 3.58E-23 | 0.19357622 | 0.31  | 0.132 | 1.27E-18 | Mono_spleen |
| HBS1L             | 3.86E-23 | 0.4338778  | 0.431 | 0.212 | 1.37E-18 | Mono_spleen |
| TIPARP            | 4.37E-23 | 0.47487354 | 0.657 | 0.381 | 1.55E-18 | Mono_spleen |
| SPG21             | 4.43E-23 | 0.41647273 | 0.279 | 0.115 | 1.57E-18 | Mono_spleen |
| AP1M1             | 4.84E-23 | 0.33945579 | 0.251 | 0.1   | 1.72E-18 | Mono_spleen |
| CYBA              | 5.15E-23 | 0.38683307 | 0.866 | 0.693 | 1.83E-18 | Mono_spleen |
| DDX18             | 5.21E-23 | 0.17954954 | 0.327 | 0.141 | 1.85E-18 | Mono_spleen |
| SNX5              | 5.58E-23 | 0.40466449 | 0.323 | 0.142 | 1.98E-18 | Mono_spleen |
| TBK1              | 5.78E-23 | 0.31515459 | 0.295 | 0.126 | 2.05E-18 | Mono_spleen |
| ETF1              | 6.09E-23 | 0.43197271 | 0.624 | 0.339 | 2.16E-18 | Mono_spleen |
| CDC40             | 7.27E-23 | 0.54410185 | 0.272 | 0.114 | 2.57E-18 | Mono_spleen |
| TM9SF4            | 7.28E-23 | 0.1908163  | 0.426 | 0.201 | 2.58E-18 | Mono_spleen |
| USP36             | 7.47E-23 | 0.15219694 | 0.543 | 0.274 | 2.65E-18 | Mono_spleen |
| HSPA8             | 8.74E-23 | 0.44347843 | 0.67  | 0.392 | 3.10E-18 | Mono_spleen |
| IL16              | 1.09E-22 | 0.4472929  | 0.251 | 0.102 | 3.88E-18 | Mono_spleen |
| ENSMUG00000054052 | 1.24E-22 | 0.17964343 | 0.547 | 0.277 | 4.40E-18 | Mono_spleen |
| DPP7              | 1.26E-22 | 0.20019445 | 0.297 | 0.126 | 4.46E-18 | Mono_spleen |
| EIF3M             | 1.33E-22 | 0.33417158 | 0.598 | 0.313 | 4.71E-18 | Mono_spleen |
| NCKAP1L           | 1.55E-22 | 0.34225067 | 0.556 | 0.288 | 5.51E-18 | Mono_spleen |
| ARIH2             | 1.80E-22 | 0.61460944 | 0.301 | 0.133 | 6.39E-18 | Mono_spleen |
| TM6SF1            | 1.82E-22 | 0.46315917 | 0.396 | 0.186 | 6.44E-18 | Mono_spleen |
| UBE2D1            | 1.89E-22 | 0.44665095 | 0.396 | 0.19  | 6.69E-18 | Mono_spleen |
| HK1               | 2.00E-22 | 0.22592431 | 0.38  | 0.176 | 7.08E-18 | Mono_spleen |
| GMPR2             | 2.01E-22 | 0.2847985  | 0.253 | 0.101 | 7.11E-18 | Mono_spleen |
| RAC1              | 2.10E-22 | 0.27915176 | 0.727 | 0.414 | 7.43E-18 | Mono_spleen |
| ANP32A            | 2.11E-22 | 0.38230516 | 0.716 | 0.402 | 7.49E-18 | Mono_spleen |
| ASL               | 2.16E-22 | 0.483237   | 0.29  | 0.126 | 7.64E-18 | Mono_spleen |
| PGD               | 2.40E-22 | 0.42018163 | 0.578 | 0.315 | 8.49E-18 | Mono_spleen |
| SMC1A             | 2.52E-22 | 0.47147395 | 0.259 | 0.107 | 8.94E-18 | Mono_spleen |
| RELT              | 2.55E-22 | 0.39753274 | 0.29  | 0.124 | 9.03E-18 | Mono_spleen |
| TGOLN2            | 2.83E-22 | 0.13625876 | 0.277 | 0.115 | 1.00E-17 | Mono_spleen |
| TPM4              | 3.19E-22 | 0.29463284 | 0.602 | 0.32  | 1.13E-17 | Mono_spleen |

|          |          |            |       |       |                      |
|----------|----------|------------|-------|-------|----------------------|
| ANKRD12  | 3.25E-22 | 0.19141909 | 0.651 | 0.35  | 1.15E-17 Mono_spleen |
| NDUFA10  | 3.25E-22 | 0.222739   | 0.306 | 0.131 | 1.15E-17 Mono_spleen |
| PTPN6    | 3.44E-22 | 0.18085412 | 0.503 | 0.247 | 1.22E-17 Mono_spleen |
| JAML     | 3.62E-22 | 0.41771612 | 0.635 | 0.338 | 1.28E-17 Mono_spleen |
| DPH3     | 3.81E-22 | 0.38046488 | 0.336 | 0.151 | 1.35E-17 Mono_spleen |
| ATP6V0A1 | 3.83E-22 | 0.27599364 | 0.567 | 0.303 | 1.36E-17 Mono_spleen |
| ZNF514   | 3.89E-22 | 0.10850795 | 0.365 | 0.164 | 1.38E-17 Mono_spleen |
| ERLIN2   | 4.85E-22 | 0.2942336  | 0.268 | 0.112 | 1.72E-17 Mono_spleen |
| MOB2     | 5.60E-22 | 0.38651402 | 0.312 | 0.137 | 1.98E-17 Mono_spleen |
| CS       | 5.78E-22 | 0.31992779 | 0.532 | 0.278 | 2.05E-17 Mono_spleen |
| STIP1    | 5.81E-22 | 0.167692   | 0.275 | 0.114 | 2.06E-17 Mono_spleen |
| CANX     | 6.45E-22 | 0.25916474 | 0.33  | 0.148 | 2.29E-17 Mono_spleen |
| BNIP2    | 9.27E-22 | 0.248684   | 0.343 | 0.155 | 3.28E-17 Mono_spleen |
| AKT3     | 1.18E-21 | 0.78323124 | 0.266 | 0.117 | 4.17E-17 Mono_spleen |
| PGM2     | 1.27E-21 | 0.41728584 | 0.272 | 0.115 | 4.51E-17 Mono_spleen |
| SLC38A9  | 1.38E-21 | 0.51439244 | 0.259 | 0.11  | 4.90E-17 Mono_spleen |
| DAZAP2   | 1.41E-21 | 0.23365996 | 0.695 | 0.366 | 5.00E-17 Mono_spleen |
| LRIF1    | 1.57E-21 | 0.34421546 | 0.374 | 0.176 | 5.58E-17 Mono_spleen |
| DECR1    | 1.58E-21 | 0.46813738 | 0.264 | 0.111 | 5.61E-17 Mono_spleen |
| RPN2     | 1.62E-21 | 0.24196378 | 0.356 | 0.163 | 5.73E-17 Mono_spleen |
| ST8SIA4  | 1.70E-21 | 0.51121896 | 0.626 | 0.359 | 6.02E-17 Mono_spleen |
| GTF2B    | 1.78E-21 | 0.51485699 | 0.659 | 0.369 | 6.29E-17 Mono_spleen |
| CCNI     | 2.05E-21 | 0.30601669 | 0.628 | 0.344 | 7.25E-17 Mono_spleen |
| NUDC     | 2.14E-21 | 0.19459217 | 0.484 | 0.236 | 7.58E-17 Mono_spleen |
| CCNH     | 2.21E-21 | 0.23921659 | 0.36  | 0.168 | 7.83E-17 Mono_spleen |
| TOM1     | 2.79E-21 | 0.34273283 | 0.387 | 0.186 | 9.87E-17 Mono_spleen |
| JARID2   | 3.26E-21 | 0.38664173 | 0.824 | 0.557 | 1.15E-16 Mono_spleen |
| SIGLEC5  | 3.95E-21 | 0.32844669 | 0.343 | 0.159 | 1.40E-16 Mono_spleen |
| FYTTD1   | 4.24E-21 | 0.33212021 | 0.257 | 0.107 | 1.50E-16 Mono_spleen |
| LSM12    | 4.41E-21 | 0.3087855  | 0.277 | 0.119 | 1.56E-16 Mono_spleen |
| NFYC     | 5.34E-21 | 0.36659569 | 0.305 | 0.135 | 1.89E-16 Mono_spleen |
| DDX46    | 6.16E-21 | 0.24395154 | 0.457 | 0.228 | 2.18E-16 Mono_spleen |
| PAPOLA   | 6.31E-21 | 0.29152003 | 0.583 | 0.309 | 2.23E-16 Mono_spleen |

|                    |          |            |       |       |          |             |
|--------------------|----------|------------|-------|-------|----------|-------------|
| EIF2A              | 6.49E-21 | 0.21098759 | 0.338 | 0.154 | 2.30E-16 | Mono_spleen |
| CCNDBP1            | 7.04E-21 | 0.17216144 | 0.314 | 0.138 | 2.49E-16 | Mono_spleen |
| PFN1               | 7.30E-21 | 0.42428771 | 0.861 | 0.745 | 2.59E-16 | Mono_spleen |
| GRAMD4             | 7.70E-21 | 0.45374965 | 0.288 | 0.127 | 2.73E-16 | Mono_spleen |
| PTPRE              | 8.11E-21 | 0.32154289 | 0.705 | 0.412 | 2.87E-16 | Mono_spleen |
| EAF1               | 8.14E-21 | 0.35119449 | 0.358 | 0.17  | 2.88E-16 | Mono_spleen |
| DNAJB12            | 9.37E-21 | 0.48810376 | 0.279 | 0.123 | 3.32E-16 | Mono_spleen |
| AMD1               | 1.05E-20 | 0.54012425 | 0.428 | 0.215 | 3.72E-16 | Mono_spleen |
| PJA2               | 1.11E-20 | 0.29867576 | 0.394 | 0.192 | 3.93E-16 | Mono_spleen |
| RAB18              | 1.13E-20 | 0.62151392 | 0.312 | 0.144 | 4.02E-16 | Mono_spleen |
| CSK                | 1.14E-20 | 0.19077567 | 0.402 | 0.192 | 4.06E-16 | Mono_spleen |
| WBP11              | 1.21E-20 | 0.30373487 | 0.31  | 0.14  | 4.28E-16 | Mono_spleen |
| RAB3GAP1           | 1.22E-20 | 0.20686395 | 0.365 | 0.172 | 4.31E-16 | Mono_spleen |
| PLEC               | 1.28E-20 | 0.63320422 | 0.273 | 0.12  | 4.54E-16 | Mono_spleen |
| LIPA               | 1.28E-20 | 0.27651393 | 0.367 | 0.174 | 4.54E-16 | Mono_spleen |
| PLEKHJ1            | 1.45E-20 | 0.30389573 | 0.294 | 0.129 | 5.14E-16 | Mono_spleen |
| PRKCE              | 1.50E-20 | 0.61421186 | 0.257 | 0.112 | 5.33E-16 | Mono_spleen |
| MID1IP1            | 1.59E-20 | 0.35328712 | 0.319 | 0.147 | 5.62E-16 | Mono_spleen |
| ENSMMUG00000013492 | 1.72E-20 | 0.15936654 | 0.266 | 0.113 | 6.10E-16 | Mono_spleen |
| CASP3              | 2.04E-20 | 0.4704828  | 0.259 | 0.112 | 7.22E-16 | Mono_spleen |
| ENSMMUG00000008346 | 2.05E-20 | 0.30040315 | 0.314 | 0.145 | 7.25E-16 | Mono_spleen |
| RPL26              | 2.06E-20 | 0.39110017 | 0.848 | 0.741 | 7.31E-16 | Mono_spleen |
| ATP6AP2            | 2.36E-20 | 0.27146934 | 0.523 | 0.272 | 8.36E-16 | Mono_spleen |
| SUPT16H            | 2.41E-20 | 0.28257386 | 0.262 | 0.112 | 8.55E-16 | Mono_spleen |
| SON                | 2.62E-20 | 0.35374595 | 0.776 | 0.462 | 9.29E-16 | Mono_spleen |
| TXNL1              | 2.69E-20 | 0.25453045 | 0.358 | 0.168 | 9.54E-16 | Mono_spleen |
| HEXA               | 3.24E-20 | 0.27276349 | 0.35  | 0.165 | 1.15E-15 | Mono_spleen |
| CCSER2             | 3.32E-20 | 0.18701107 | 0.281 | 0.124 | 1.18E-15 | Mono_spleen |
| ENSMMUG00000006293 | 3.36E-20 | 0.13698372 | 0.58  | 0.302 | 1.19E-15 | Mono_spleen |
| LASP1              | 3.42E-20 | 0.30512994 | 0.323 | 0.147 | 1.21E-15 | Mono_spleen |
| ENSMMUG00000015946 | 3.46E-20 | 0.21152625 | 0.262 | 0.112 | 1.23E-15 | Mono_spleen |
| SELL               | 3.85E-20 | 0.96194695 | 0.27  | 0.122 | 1.37E-15 | Mono_spleen |
| PPP1CA             | 3.87E-20 | 0.21240342 | 0.602 | 0.323 | 1.37E-15 | Mono_spleen |

|          |          |            |       |       |          |             |
|----------|----------|------------|-------|-------|----------|-------------|
| IL1RAP   | 4.68E-20 | 0.19764507 | 0.593 | 0.325 | 1.66E-15 | Mono_spleen |
| DCTN4    | 4.80E-20 | 0.30263024 | 0.281 | 0.125 | 1.70E-15 | Mono_spleen |
| ACO2     | 5.31E-20 | 0.28684524 | 0.336 | 0.158 | 1.88E-15 | Mono_spleen |
| ANXA7    | 6.08E-20 | 0.25817803 | 0.512 | 0.268 | 2.16E-15 | Mono_spleen |
| PILRA    | 6.27E-20 | 0.30004156 | 0.356 | 0.167 | 2.22E-15 | Mono_spleen |
| ANXA3    | 6.71E-20 | 0.14991313 | 0.314 | 0.142 | 2.38E-15 | Mono_spleen |
| ARAP1    | 6.84E-20 | 0.1189254  | 0.31  | 0.14  | 2.42E-15 | Mono_spleen |
| PSMD14   | 7.28E-20 | 0.35641961 | 0.367 | 0.178 | 2.58E-15 | Mono_spleen |
| SLC39A10 | 7.99E-20 | 0.20111227 | 0.323 | 0.149 | 2.83E-15 | Mono_spleen |
| AIM2     | 8.14E-20 | 0.19794706 | 0.653 | 0.364 | 2.89E-15 | Mono_spleen |
| COMMD7   | 8.42E-20 | 0.31405162 | 0.301 | 0.136 | 2.98E-15 | Mono_spleen |
| TLN1     | 8.84E-20 | 0.28269363 | 0.714 | 0.415 | 3.13E-15 | Mono_spleen |
| PPA2     | 9.98E-20 | 0.25780899 | 0.273 | 0.12  | 3.54E-15 | Mono_spleen |
| MSN      | 9.99E-20 | 0.40236793 | 0.818 | 0.545 | 3.54E-15 | Mono_spleen |
| EIF5B    | 1.09E-19 | 0.4545724  | 0.297 | 0.137 | 3.86E-15 | Mono_spleen |
| TIAL1    | 1.12E-19 | 0.25438796 | 0.316 | 0.144 | 3.98E-15 | Mono_spleen |
| RGS18    | 1.45E-19 | 0.14253654 | 0.506 | 0.26  | 5.12E-15 | Mono_spleen |
| HNRNPA3  | 1.51E-19 | 0.34441182 | 0.789 | 0.491 | 5.34E-15 | Mono_spleen |
| DENND1B  | 1.73E-19 | 0.66620316 | 0.253 | 0.113 | 6.11E-15 | Mono_spleen |
| SYTL3    | 1.79E-19 | 0.52065209 | 0.468 | 0.249 | 6.33E-15 | Mono_spleen |
| CHD2     | 2.08E-19 | 0.1624381  | 0.607 | 0.338 | 7.37E-15 | Mono_spleen |
| RASA2    | 2.10E-19 | 0.24276598 | 0.541 | 0.287 | 7.45E-15 | Mono_spleen |
| GPAT3    | 2.46E-19 | 0.52449009 | 0.262 | 0.118 | 8.73E-15 | Mono_spleen |
| ATP1A1   | 2.62E-19 | 0.29037219 | 0.525 | 0.285 | 9.28E-15 | Mono_spleen |
| AP2A1    | 2.74E-19 | 0.24171264 | 0.251 | 0.108 | 9.72E-15 | Mono_spleen |
| GLRX     | 2.80E-19 | 0.25830549 | 0.477 | 0.245 | 9.93E-15 | Mono_spleen |
| ELF1     | 2.94E-19 | 0.31762562 | 0.835 | 0.546 | 1.04E-14 | Mono_spleen |
| PSMD1    | 3.09E-19 | 0.58436463 | 0.279 | 0.128 | 1.09E-14 | Mono_spleen |
| PKN1     | 3.16E-19 | 0.35886706 | 0.286 | 0.129 | 1.12E-14 | Mono_spleen |
| HSPD1    | 3.24E-19 | 0.28095874 | 0.35  | 0.169 | 1.15E-14 | Mono_spleen |
| COMMD3   | 3.26E-19 | 0.21318256 | 0.347 | 0.164 | 1.16E-14 | Mono_spleen |
| EAF2     | 3.47E-19 | 0.10590711 | 0.503 | 0.255 | 1.23E-14 | Mono_spleen |
| SS18     | 3.67E-19 | 0.41831764 | 0.272 | 0.123 | 1.30E-14 | Mono_spleen |



|           |          |            |       |       |          |             |
|-----------|----------|------------|-------|-------|----------|-------------|
| MKNK1     | 4.01E-19 | 0.30132499 | 0.303 | 0.139 | 1.42E-14 | Mono_spleen |
| ATG3      | 4.14E-19 | 0.23124809 | 0.571 | 0.299 | 1.47E-14 | Mono_spleen |
| PDCD10    | 4.73E-19 | 0.14095974 | 0.422 | 0.209 | 1.68E-14 | Mono_spleen |
| TMED4     | 4.81E-19 | 0.19866423 | 0.264 | 0.116 | 1.71E-14 | Mono_spleen |
| PSMD12    | 4.96E-19 | 0.21273995 | 0.514 | 0.27  | 1.76E-14 | Mono_spleen |
| STAMBPL1  | 5.16E-19 | 0.50946831 | 0.257 | 0.114 | 1.83E-14 | Mono_spleen |
| ELK3      | 5.70E-19 | 0.25370018 | 0.332 | 0.157 | 2.02E-14 | Mono_spleen |
| GNA15     | 5.96E-19 | 0.16958797 | 0.288 | 0.132 | 2.11E-14 | Mono_spleen |
| VMP1      | 6.02E-19 | 0.24819285 | 0.56  | 0.309 | 2.13E-14 | Mono_spleen |
| TMEM179B  | 6.88E-19 | 0.23142846 | 0.297 | 0.134 | 2.44E-14 | Mono_spleen |
| CYSLTR1   | 6.91E-19 | 0.26215903 | 0.306 | 0.142 | 2.45E-14 | Mono_spleen |
| TMEM123   | 9.31E-19 | 0.22295634 | 0.396 | 0.196 | 3.30E-14 | Mono_spleen |
| BACH1     | 1.05E-18 | 0.15205155 | 0.525 | 0.28  | 3.74E-14 | Mono_spleen |
| DUSP6     | 1.10E-18 | 0.39446209 | 0.701 | 0.433 | 3.89E-14 | Mono_spleen |
| RPL23     | 1.16E-18 | 0.31141234 | 0.905 | 0.879 | 4.12E-14 | Mono_spleen |
| PLCB2     | 1.22E-18 | 0.27498405 | 0.369 | 0.181 | 4.32E-14 | Mono_spleen |
| ABCF1     | 1.24E-18 | 0.45154348 | 0.374 | 0.186 | 4.39E-14 | Mono_spleen |
| TM2D1     | 1.25E-18 | 0.11498766 | 0.372 | 0.179 | 4.41E-14 | Mono_spleen |
| NFAM1     | 1.38E-18 | 0.19362027 | 0.451 | 0.23  | 4.90E-14 | Mono_spleen |
| PRPF6     | 1.47E-18 | 0.12966747 | 0.321 | 0.15  | 5.19E-14 | Mono_spleen |
| IRF2BP2   | 1.53E-18 | 0.25515335 | 0.393 | 0.195 | 5.41E-14 | Mono_spleen |
| ACAD10    | 1.60E-18 | 0.14250228 | 0.429 | 0.216 | 5.65E-14 | Mono_spleen |
| ARL6IP5   | 1.66E-18 | 0.22736701 | 0.349 | 0.168 | 5.89E-14 | Mono_spleen |
| RSL1D1    | 2.20E-18 | 0.14823363 | 0.33  | 0.156 | 7.80E-14 | Mono_spleen |
| GABARAPL1 | 2.20E-18 | 0.24143479 | 0.284 | 0.13  | 7.81E-14 | Mono_spleen |
| NOP58     | 2.47E-18 | 0.20289786 | 0.33  | 0.158 | 8.74E-14 | Mono_spleen |
| DIABLO    | 2.51E-18 | 0.27924347 | 0.382 | 0.19  | 8.91E-14 | Mono_spleen |
| PDLIM2    | 2.69E-18 | 0.21530136 | 0.325 | 0.152 | 9.54E-14 | Mono_spleen |
| MED8      | 2.89E-18 | 0.25693191 | 0.284 | 0.129 | 1.02E-13 | Mono_spleen |
| UBE2V2    | 3.26E-18 | 0.10028885 | 0.31  | 0.144 | 1.16E-13 | Mono_spleen |
| RPL13A    | 3.47E-18 | 0.30697041 | 0.921 | 0.883 | 1.23E-13 | Mono_spleen |
| CPQ       | 3.55E-18 | 0.24818278 | 0.27  | 0.123 | 1.26E-13 | Mono_spleen |
| PRCP      | 3.78E-18 | 0.20452267 | 0.598 | 0.328 | 1.34E-13 | Mono_spleen |

|          |          |            |       |       |          |             |
|----------|----------|------------|-------|-------|----------|-------------|
| MYDGF    | 5.62E-18 | 0.12730215 | 0.536 | 0.281 | 1.99E-13 | Mono_spleen |
| SEC11A   | 5.87E-18 | 0.16440369 | 0.47  | 0.242 | 2.08E-13 | Mono_spleen |
| NAA50    | 6.31E-18 | 0.16080491 | 0.492 | 0.258 | 2.24E-13 | Mono_spleen |
| GNB2     | 6.38E-18 | 0.15453735 | 0.675 | 0.379 | 2.26E-13 | Mono_spleen |
| TMED2    | 6.59E-18 | 0.14606953 | 0.332 | 0.157 | 2.33E-13 | Mono_spleen |
| TSG101   | 7.56E-18 | 0.393926   | 0.341 | 0.167 | 2.68E-13 | Mono_spleen |
| UBXN7    | 9.01E-18 | 0.29840558 | 0.358 | 0.176 | 3.19E-13 | Mono_spleen |
| SKP1     | 9.33E-18 | 0.32945178 | 0.85  | 0.579 | 3.31E-13 | Mono_spleen |
| MXD1     | 1.25E-17 | 0.39550647 | 0.358 | 0.178 | 4.43E-13 | Mono_spleen |
| ZMAT2    | 1.26E-17 | 0.16790984 | 0.314 | 0.149 | 4.45E-13 | Mono_spleen |
| TAGAP    | 1.26E-17 | 0.27104835 | 0.411 | 0.213 | 4.48E-13 | Mono_spleen |
| PLXNB2   | 1.30E-17 | 0.16022858 | 0.44  | 0.229 | 4.60E-13 | Mono_spleen |
| MAT2A    | 1.35E-17 | 0.290391   | 0.297 | 0.141 | 4.78E-13 | Mono_spleen |
| EIF4G2   | 1.47E-17 | 0.2735536  | 0.712 | 0.41  | 5.19E-13 | Mono_spleen |
| GPBP1    | 1.56E-17 | 0.18765854 | 0.679 | 0.384 | 5.51E-13 | Mono_spleen |
| ZC3H15   | 2.00E-17 | 0.20439967 | 0.448 | 0.231 | 7.08E-13 | Mono_spleen |
| PISD     | 2.54E-17 | 0.40735171 | 0.339 | 0.169 | 9.00E-13 | Mono_spleen |
| HSP90AA1 | 2.72E-17 | 0.49290471 | 0.796 | 0.58  | 9.63E-13 | Mono_spleen |
| AP3S1    | 3.29E-17 | 0.11154824 | 0.442 | 0.228 | 1.17E-12 | Mono_spleen |
| HIF1A    | 3.33E-17 | 0.27245273 | 0.712 | 0.442 | 1.18E-12 | Mono_spleen |
| PNRC2    | 3.71E-17 | 0.15392864 | 0.424 | 0.219 | 1.32E-12 | Mono_spleen |
| TBC1D25  | 3.92E-17 | 0.15366305 | 0.358 | 0.177 | 1.39E-12 | Mono_spleen |
| PIEZO1   | 4.22E-17 | 0.23831587 | 0.251 | 0.114 | 1.50E-12 | Mono_spleen |
| NECAP1   | 4.24E-17 | 0.21518017 | 0.349 | 0.174 | 1.50E-12 | Mono_spleen |
| COMMD1   | 4.30E-17 | 0.3161531  | 0.382 | 0.199 | 1.52E-12 | Mono_spleen |
| CNPPD1   | 4.36E-17 | 0.19084098 | 0.272 | 0.125 | 1.55E-12 | Mono_spleen |
| SLC66A2  | 4.42E-17 | 0.36725727 | 0.272 | 0.128 | 1.56E-12 | Mono_spleen |
| RNMT     | 4.51E-17 | 0.1627766  | 0.413 | 0.213 | 1.60E-12 | Mono_spleen |
| MAPKAPK3 | 4.75E-17 | 0.17172742 | 0.257 | 0.116 | 1.68E-12 | Mono_spleen |
| NDUFS4   | 4.85E-17 | 0.19728479 | 0.36  | 0.178 | 1.72E-12 | Mono_spleen |
| SDF2     | 7.09E-17 | 0.19465476 | 0.272 | 0.126 | 2.51E-12 | Mono_spleen |
| TBCB     | 7.09E-17 | 0.19245964 | 0.251 | 0.113 | 2.51E-12 | Mono_spleen |
| VAMP3    | 7.42E-17 | 0.18800858 | 0.279 | 0.13  | 2.63E-12 | Mono_spleen |

|          |          |            |       |       |          |             |
|----------|----------|------------|-------|-------|----------|-------------|
| XRCC6    | 8.44E-17 | 0.22063035 | 0.617 | 0.345 | 2.99E-12 | Mono_spleen |
| DDX24    | 9.93E-17 | 0.16959471 | 0.35  | 0.175 | 3.52E-12 | Mono_spleen |
| ADA2     | 1.24E-16 | 0.1416299  | 0.433 | 0.226 | 4.41E-12 | Mono_spleen |
| SEPTIN6  | 1.24E-16 | 0.13359484 | 0.303 | 0.148 | 4.41E-12 | Mono_spleen |
| CSF2RB   | 1.27E-16 | 0.25811106 | 0.317 | 0.155 | 4.49E-12 | Mono_spleen |
| LMNA     | 1.42E-16 | 0.41238978 | 0.328 | 0.167 | 5.04E-12 | Mono_spleen |
| DNAJA2   | 1.58E-16 | 0.12687924 | 0.299 | 0.143 | 5.60E-12 | Mono_spleen |
| SF3B1    | 1.58E-16 | 0.24554802 | 0.706 | 0.414 | 5.61E-12 | Mono_spleen |
| RAB27A   | 2.03E-16 | 0.1300531  | 0.387 | 0.197 | 7.20E-12 | Mono_spleen |
| ALDH1A1  | 2.23E-16 | 0.18737881 | 0.521 | 0.293 | 7.90E-12 | Mono_spleen |
| FAM133B  | 2.41E-16 | 0.25888516 | 0.27  | 0.127 | 8.54E-12 | Mono_spleen |
| CD4      | 3.12E-16 | 0.20077791 | 0.253 | 0.118 | 1.10E-11 | Mono_spleen |
| BCCIP    | 3.19E-16 | 0.11224278 | 0.251 | 0.115 | 1.13E-11 | Mono_spleen |
| TMBIM4   | 3.77E-16 | 0.23871514 | 0.626 | 0.363 | 1.34E-11 | Mono_spleen |
| NAP1L4   | 3.80E-16 | 0.21967111 | 0.556 | 0.308 | 1.35E-11 | Mono_spleen |
| PTP4A2   | 3.90E-16 | 0.21177679 | 0.732 | 0.448 | 1.38E-11 | Mono_spleen |
| NARS1    | 4.81E-16 | 0.22093613 | 0.266 | 0.124 | 1.70E-11 | Mono_spleen |
| SLC25A26 | 4.88E-16 | 0.45742592 | 0.253 | 0.12  | 1.73E-11 | Mono_spleen |
| LDLRAD4  | 6.84E-16 | 0.30208641 | 0.255 | 0.121 | 2.43E-11 | Mono_spleen |
| P2RX4    | 9.12E-16 | 0.11090044 | 0.393 | 0.206 | 3.23E-11 | Mono_spleen |
| ERGIC1   | 9.70E-16 | 0.15731285 | 0.308 | 0.152 | 3.44E-11 | Mono_spleen |
| PCBP1    | 1.03E-15 | 0.15411814 | 0.673 | 0.387 | 3.66E-11 | Mono_spleen |
| NF1      | 1.05E-15 | 0.21453594 | 0.451 | 0.248 | 3.72E-11 | Mono_spleen |
| GOLGA5   | 1.55E-15 | 0.10540224 | 0.279 | 0.134 | 5.50E-11 | Mono_spleen |
| RPL23A   | 1.68E-15 | 0.30199457 | 0.903 | 0.879 | 5.94E-11 | Mono_spleen |
| HNRNPM   | 2.04E-15 | 0.19572476 | 0.45  | 0.244 | 7.23E-11 | Mono_spleen |
| TAF9     | 2.32E-15 | 0.27085317 | 0.457 | 0.25  | 8.23E-11 | Mono_spleen |
| HCLS1    | 2.58E-15 | 0.12289909 | 0.571 | 0.318 | 9.15E-11 | Mono_spleen |
| VPS54    | 3.86E-15 | 0.18431378 | 0.299 | 0.152 | 1.37E-10 | Mono_spleen |
| JUND     | 4.41E-15 | 0.29522296 | 0.866 | 0.61  | 1.56E-10 | Mono_spleen |
| RALGAPA2 | 6.67E-15 | 0.1465615  | 0.657 | 0.412 | 2.36E-10 | Mono_spleen |
| STX11    | 7.22E-15 | 0.34135738 | 0.71  | 0.441 | 2.56E-10 | Mono_spleen |
| UAP1     | 7.61E-15 | 0.4459819  | 0.259 | 0.126 | 2.70E-10 | Mono_spleen |

|                    |          |            |       |       |          |             |
|--------------------|----------|------------|-------|-------|----------|-------------|
| CSNK1D             | 8.18E-15 | 0.15976545 | 0.367 | 0.192 | 2.90E-10 | Mono_spleen |
| CXHXorf21          | 8.33E-15 | 0.41647411 | 0.273 | 0.133 | 2.95E-10 | Mono_spleen |
| ENSMMUG00000028699 | 1.42E-14 | 0.36978079 | 0.714 | 0.443 | 5.01E-10 | Mono_spleen |
| PSMD7              | 3.27E-14 | 0.15640218 | 0.297 | 0.149 | 1.16E-09 | Mono_spleen |
| FAM204A            | 3.36E-14 | 0.19962607 | 0.264 | 0.13  | 1.19E-09 | Mono_spleen |
| CAP1               | 4.97E-14 | 0.24425972 | 0.73  | 0.464 | 1.76E-09 | Mono_spleen |
| ENSMMUG00000062821 | 5.41E-14 | 0.11774303 | 0.27  | 0.133 | 1.92E-09 | Mono_spleen |
| ENSMMUG00000060923 | 5.76E-14 | 0.25113125 | 0.596 | 0.342 | 2.04E-09 | Mono_spleen |
| PFDN1              | 6.45E-14 | 0.25775303 | 0.327 | 0.172 | 2.28E-09 | Mono_spleen |
| PTGES3             | 7.05E-14 | 0.19015247 | 0.71  | 0.433 | 2.50E-09 | Mono_spleen |
| RPL31              | 8.20E-14 | 0.14473373 | 0.644 | 0.385 | 2.90E-09 | Mono_spleen |
| SUPT5H             | 8.43E-14 | 0.12332058 | 0.255 | 0.125 | 2.99E-09 | Mono_spleen |
| APLP2              | 8.52E-14 | 0.23136615 | 0.818 | 0.57  | 3.02E-09 | Mono_spleen |
| ARHGEF1            | 8.70E-14 | 0.15208479 | 0.316 | 0.164 | 3.08E-09 | Mono_spleen |
| SLC11A1            | 8.84E-14 | 0.25680829 | 0.747 | 0.479 | 3.13E-09 | Mono_spleen |
| HNRNPH3            | 1.08E-13 | 0.20602755 | 0.516 | 0.292 | 3.82E-09 | Mono_spleen |
| B2M                | 1.29E-13 | 0.27915953 | 0.974 | 0.967 | 4.59E-09 | Mono_spleen |
| LIMK2              | 1.45E-13 | 0.27743525 | 0.578 | 0.344 | 5.13E-09 | Mono_spleen |
| ZYX                | 1.73E-13 | 0.12433186 | 0.657 | 0.396 | 6.14E-09 | Mono_spleen |
| B4GALT1            | 2.74E-13 | 0.19560799 | 0.334 | 0.179 | 9.71E-09 | Mono_spleen |
| DHRS7              | 1.10E-12 | 0.1788117  | 0.578 | 0.333 | 3.91E-08 | Mono_spleen |
| REEP5              | 1.97E-12 | 0.14729542 | 0.563 | 0.337 | 7.00E-08 | Mono_spleen |
| IKBK               | 2.24E-12 | 0.13987491 | 0.253 | 0.13  | 7.93E-08 | Mono_spleen |
| REL                | 3.52E-12 | 0.27605048 | 0.809 | 0.555 | 1.25E-07 | Mono_spleen |
| CPVL               | 4.57E-12 | 0.32492917 | 0.826 | 0.651 | 1.62E-07 | Mono_spleen |
| RASSF2             | 5.94E-12 | 0.11693457 | 0.321 | 0.174 | 2.10E-07 | Mono_spleen |
| SDCBP              | 6.52E-12 | 0.23635111 | 0.78  | 0.536 | 2.31E-07 | Mono_spleen |
| LGMN               | 1.01E-11 | 0.17127792 | 0.466 | 0.28  | 3.59E-07 | Mono_spleen |
| ZFP36              | 1.62E-11 | 0.25574228 | 0.928 | 0.837 | 5.73E-07 | Mono_spleen |
| HBEGF              | 2.50E-11 | 0.35333943 | 0.297 | 0.168 | 8.87E-07 | Mono_spleen |
| TNFRSF10A          | 3.51E-11 | 0.15965791 | 0.284 | 0.156 | 1.24E-06 | Mono_spleen |
| HSP90AB1           | 3.86E-11 | 0.34858624 | 0.806 | 0.614 | 1.37E-06 | Mono_spleen |
| TCF7L2             | 1.31E-10 | 0.328848   | 0.295 | 0.17  | 4.65E-06 | Mono_spleen |

|                    |            |            |       |       |            |                 |
|--------------------|------------|------------|-------|-------|------------|-----------------|
| LPTM5              | 1.70E-10   | 0.18213265 | 0.881 | 0.624 | 6.01E-06   | Mono_spleen     |
| DDX3X              | 2.56E-10   | 0.18031547 | 0.683 | 0.441 | 9.09E-06   | Mono_spleen     |
| ANXA1              | 4.13E-10   | 0.39002084 | 0.868 | 0.73  | 1.46E-05   | Mono_spleen     |
| MAMU-A             | 7.74E-10   | 0.27927341 | 0.791 | 0.591 | 2.74E-05   | Mono_spleen     |
| COX3               | 1.26E-09   | 0.73633633 | 0.901 | 0.939 | 4.47E-05   | Mono_spleen     |
| SRSF5              | 7.18E-09   | 0.15172919 | 0.846 | 0.595 | 0.00025455 | Mono_spleen     |
| AOAH               | 9.81E-09   | 0.13318557 | 0.741 | 0.526 | 0.00034764 | Mono_spleen     |
| MAP1LC3B           | 1.87E-08   | 0.10097021 | 0.706 | 0.468 | 0.0006633  | Mono_spleen     |
| PXN                | 8.01E-08   | 0.11448426 | 0.279 | 0.167 | 0.00283719 | Mono_spleen     |
| ARF4               | 1.53E-07   | 0.20124512 | 0.793 | 0.556 | 0.00541334 | Mono_spleen     |
| ND4                | 1.76E-07   | 0.60697034 | 0.866 | 0.895 | 0.00625162 | Mono_spleen     |
| BTG2               | 1.72E-06   | 0.17789319 | 0.846 | 0.655 | 0.06099051 | Mono_spleen     |
| EMP3               | 2.14E-05   | 0.49352932 | 0.479 | 0.389 | 0.75854285 | Mono_spleen     |
| CST3               | 2.93E-05   | 0.14361415 | 0.844 | 0.79  | 1          | Mono_spleen     |
| ENSMMUG00000065362 | 5.99E-05   | 0.74287968 | 0.998 | 0.993 | 1          | Mono_spleen     |
| NFKBIA             | 7.98E-05   | 0.16893953 | 0.899 | 0.758 | 1          | Mono_spleen     |
| COX1               | 0.00032188 | 0.50671607 | 0.875 | 0.912 | 1          | Mono_spleen     |
| ATP6               | 0.03140642 | 0.48528978 | 0.855 | 0.918 | 1          | Mono_spleen     |
| LYZ                | 0.07468092 | 0.13997204 | 0.884 | 0.919 | 1          | Mono_spleen     |
| COX2               | 0.12643533 | 0.21523135 | 0.855 | 0.933 | 1          | Mono_spleen     |
| ND3                | 0.28009039 | 0.17267216 | 0.813 | 0.753 | 1          | Mono_spleen     |
| IL1B               | 1.67E-204  | 6.39564459 | 0.972 | 0.155 | 5.91E-200  | Macrophage_lung |
| GPR183             | 2.76E-196  | 5.75752571 | 0.958 | 0.134 | 9.77E-192  | Macrophage_lung |
| CD83               | 2.33E-194  | 3.88116047 | 0.978 | 0.343 | 8.25E-190  | Macrophage_lung |
| S100A6             | 1.62E-193  | 5.75031702 | 0.952 | 0.127 | 5.74E-189  | Macrophage_lung |
| GADD45B            | 4.36E-192  | 4.46529628 | 0.964 | 0.251 | 1.54E-187  | Macrophage_lung |
| MAMU-DRB1          | 1.77E-189  | 2.62463721 | 0.999 | 0.923 | 6.29E-185  | Macrophage_lung |
| BCL2A1             | 1.71E-183  | 5.52508667 | 0.936 | 0.183 | 6.07E-179  | Macrophage_lung |
| ENSMMUG00000062350 | 1.64E-172  | 1.46914614 | 0.998 | 0.967 | 5.82E-168  | Macrophage_lung |
| TYROBP             | 2.70E-160  | 1.77844624 | 0.992 | 0.822 | 9.55E-156  | Macrophage_lung |
| MAMU-DRA           | 1.18E-157  | 1.78430606 | 1     | 0.962 | 4.17E-153  | Macrophage_lung |
| ENSMMUG00000004441 | 1.96E-150  | 2.17520617 | 0.973 | 0.573 | 6.95E-146  | Macrophage_lung |
| CPVL               | 1.11E-148  | 2.63147381 | 0.957 | 0.366 | 3.93E-144  | Macrophage_lung |

|                     |           |            |       |       |           |                 |
|---------------------|-----------|------------|-------|-------|-----------|-----------------|
| RPL32               | 9.71E-148 | 1.25592247 | 0.999 | 0.948 | 3.44E-143 | Macrophage_lung |
| RPLP1               | 1.90E-146 | 0.96485901 | 1     | 0.993 | 6.72E-142 | Macrophage_lung |
| RPL34               | 6.31E-144 | 1.23713305 | 0.999 | 0.948 | 2.24E-139 | Macrophage_lung |
| RPL10               | 2.19E-143 | 1.07876017 | 0.997 | 0.988 | 7.77E-139 | Macrophage_lung |
| FAU                 | 2.77E-142 | 1.26632202 | 0.994 | 0.925 | 9.82E-138 | Macrophage_lung |
| GPR65               | 3.83E-140 | 4.05374787 | 0.855 | 0.204 | 1.36E-135 | Macrophage_lung |
| RPS21               | 7.17E-140 | 1.41574174 | 0.99  | 0.873 | 2.54E-135 | Macrophage_lung |
| ENSMMUG00000005593  | 7.54E-139 | 1.26106431 | 0.996 | 0.955 | 2.67E-134 | Macrophage_lung |
| S100A4              | 2.19E-138 | 4.69557781 | 0.827 | 0.092 | 7.75E-134 | Macrophage_lung |
| NUDT3               | 3.15E-138 | 1.19493516 | 0.996 | 0.937 | 1.12E-133 | Macrophage_lung |
| SRGN                | 5.20E-135 | 2.37382418 | 0.953 | 0.38  | 1.84E-130 | Macrophage_lung |
| RPS12               | 6.42E-135 | 1.22205729 | 0.996 | 0.955 | 2.27E-130 | Macrophage_lung |
| RPS28               | 1.44E-133 | 0.9401772  | 0.996 | 0.998 | 5.09E-129 | Macrophage_lung |
| RPS23               | 4.14E-129 | 0.94059461 | 0.999 | 0.991 | 1.47E-124 | Macrophage_lung |
| ENSMMUG000000056183 | 1.46E-128 | 2.03122711 | 0.98  | 0.662 | 5.19E-124 | Macrophage_lung |
| PPP1R15A            | 1.55E-121 | 3.52828704 | 0.827 | 0.237 | 5.51E-117 | Macrophage_lung |
| ENSMMUG000000015563 | 4.48E-121 | 0.9445121  | 0.997 | 0.995 | 1.59E-116 | Macrophage_lung |
| TNFAIP3             | 8.61E-121 | 2.89231301 | 0.866 | 0.277 | 3.05E-116 | Macrophage_lung |
| CD74                | 5.88E-120 | 1.0604042  | 1     | 0.995 | 2.08E-115 | Macrophage_lung |
| RPL18               | 1.16E-119 | 1.01748308 | 0.996 | 0.969 | 4.11E-115 | Macrophage_lung |
| RPS9                | 2.24E-117 | 1.06170104 | 0.992 | 0.944 | 7.94E-113 | Macrophage_lung |
| RPL30               | 1.12E-115 | 0.93921237 | 0.998 | 0.981 | 3.97E-111 | Macrophage_lung |
| BTG1                | 8.25E-115 | 2.77620129 | 0.877 | 0.329 | 2.92E-110 | Macrophage_lung |
| RPS24               | 1.00E-112 | 0.95511142 | 0.997 | 0.965 | 3.55E-108 | Macrophage_lung |
| RPS5                | 1.28E-112 | 1.25763557 | 0.985 | 0.84  | 4.53E-108 | Macrophage_lung |
| HNRNPH2             | 5.66E-111 | 1.20394085 | 0.988 | 0.871 | 2.01E-106 | Macrophage_lung |
| SOD2                | 7.18E-108 | 3.82399067 | 0.785 | 0.214 | 2.54E-103 | Macrophage_lung |
| NR4A3               | 9.05E-105 | 4.39301237 | 0.706 | 0.092 | 3.21E-100 | Macrophage_lung |
| ENSMMUG000000003867 | 1.09E-104 | 0.82084724 | 0.999 | 0.998 | 3.86E-100 | Macrophage_lung |
| PKIB                | 9.61E-104 | 4.44477796 | 0.702 | 0.099 | 3.40E-99  | Macrophage_lung |
| RPS7                | 2.33E-103 | 0.96071782 | 0.994 | 0.953 | 8.24E-99  | Macrophage_lung |
| CDKN1A              | 4.49E-103 | 4.40895873 | 0.696 | 0.082 | 1.59E-98  | Macrophage_lung |
| IER3                | 3.52E-102 | 4.98926475 | 0.682 | 0.068 | 1.25E-97  | Macrophage_lung |

|          |           |            |       |       |          |                 |
|----------|-----------|------------|-------|-------|----------|-----------------|
| CAMP     | 4.54E-102 | 6.06426512 | 0.653 | 0.023 | 1.61E-97 | Macrophage_lung |
| ALCAM    | 1.11E-101 | 4.17477081 | 0.713 | 0.103 | 3.92E-97 | Macrophage_lung |
| LSP1     | 1.91E-100 | 2.81352764 | 0.775 | 0.204 | 6.77E-96 | Macrophage_lung |
| PTGS2    | 8.93E-100 | 6.06623635 | 0.65  | 0.035 | 3.16E-95 | Macrophage_lung |
| RPS29    | 5.66E-99  | 0.87465228 | 0.996 | 0.969 | 2.01E-94 | Macrophage_lung |
| SLC2A3   | 3.52E-98  | 3.93495748 | 0.7   | 0.103 | 1.25E-93 | Macrophage_lung |
| IL7R     | 1.02E-97  | 4.368204   | 0.688 | 0.087 | 3.62E-93 | Macrophage_lung |
| MAMU-DMA | 6.07E-97  | 1.53089902 | 0.95  | 0.622 | 2.15E-92 | Macrophage_lung |
| RGS1     | 6.52E-97  | 2.94658823 | 0.784 | 0.232 | 2.31E-92 | Macrophage_lung |
| FCGR2B   | 3.74E-96  | 4.55879992 | 0.663 | 0.063 | 1.32E-91 | Macrophage_lung |
| SAMSN1   | 9.19E-96  | 3.64512694 | 0.706 | 0.141 | 3.26E-91 | Macrophage_lung |
| RPL36    | 1.22E-95  | 1.16857571 | 0.975 | 0.768 | 4.31E-91 | Macrophage_lung |
| VIM      | 5.49E-95  | 1.78120534 | 0.907 | 0.345 | 1.95E-90 | Macrophage_lung |
| RPL35A   | 1.62E-93  | 0.87325147 | 0.995 | 0.965 | 5.73E-89 | Macrophage_lung |
| RPL12    | 4.29E-93  | 0.95379558 | 0.989 | 0.925 | 1.52E-88 | Macrophage_lung |
| ANXA1    | 4.62E-93  | 2.73061445 | 0.757 | 0.167 | 1.64E-88 | Macrophage_lung |
| RPL8     | 3.06E-92  | 0.98670348 | 0.988 | 0.941 | 1.08E-87 | Macrophage_lung |
| MS4A7    | 4.72E-92  | 2.63507781 | 0.767 | 0.202 | 1.67E-87 | Macrophage_lung |
| TIMP1    | 4.19E-91  | 7.13037708 | 0.616 | 0.042 | 1.48E-86 | Macrophage_lung |
| RPS26    | 1.56E-90  | 0.9015746  | 0.997 | 0.962 | 5.51E-86 | Macrophage_lung |
| ALOX5AP  | 1.61E-90  | 4.95969285 | 0.626 | 0.047 | 5.70E-86 | Macrophage_lung |
| CCL4L1   | 4.55E-90  | 3.74541539 | 0.757 | 0.216 | 1.61E-85 | Macrophage_lung |
| CORO1A   | 9.36E-90  | 2.63542257 | 0.751 | 0.185 | 3.32E-85 | Macrophage_lung |
| UBA52    | 1.95E-89  | 0.89151598 | 0.994 | 0.925 | 6.92E-85 | Macrophage_lung |
| RPL27    | 2.22E-89  | 0.86021053 | 0.986 | 0.944 | 7.87E-85 | Macrophage_lung |
| S100A10  | 1.33E-88  | 2.97502659 | 0.731 | 0.185 | 4.70E-84 | Macrophage_lung |
| RPL28    | 2.26E-87  | 0.81771068 | 0.995 | 0.962 | 8.00E-83 | Macrophage_lung |
| G0S2     | 5.46E-86  | 6.04341602 | 0.61  | 0.054 | 1.93E-81 | Macrophage_lung |
| LDHA     | 3.44E-85  | 2.84192525 | 0.719 | 0.192 | 1.22E-80 | Macrophage_lung |
| ZFP36    | 5.02E-85  | 1.66677619 | 0.938 | 0.472 | 1.78E-80 | Macrophage_lung |
| RPL24    | 6.87E-84  | 0.8190995  | 0.989 | 0.946 | 2.43E-79 | Macrophage_lung |
| PDE4B    | 1.69E-83  | 2.69606249 | 0.72  | 0.183 | 5.97E-79 | Macrophage_lung |
| COMMD6   | 8.07E-82  | 1.29237815 | 0.949 | 0.627 | 2.86E-77 | Macrophage_lung |

|                    |          |            |       |       |          |                 |
|--------------------|----------|------------|-------|-------|----------|-----------------|
| BHLHE40            | 1.06E-81 | 3.08031932 | 0.673 | 0.138 | 3.76E-77 | Macrophage_lung |
| ELOA               | 1.46E-81 | 0.8653143  | 0.987 | 0.925 | 5.17E-77 | Macrophage_lung |
| ENSMMUG00000049151 | 2.48E-79 | 1.11989685 | 0.964 | 0.721 | 8.79E-75 | Macrophage_lung |
| PLXDC2             | 3.24E-79 | 8.67223143 | 0.537 | 0.005 | 1.15E-74 | Macrophage_lung |
| NFKB1              | 7.17E-79 | 2.76531292 | 0.733 | 0.261 | 2.54E-74 | Macrophage_lung |
| RPL35              | 9.88E-78 | 0.96916783 | 0.977 | 0.829 | 3.50E-73 | Macrophage_lung |
| RPL22              | 1.25E-77 | 0.87798137 | 0.984 | 0.899 | 4.45E-73 | Macrophage_lung |
| CXCL8              | 5.74E-77 | 10.1948561 | 0.525 | 0.002 | 2.03E-72 | Macrophage_lung |
| RPS27A             | 8.78E-76 | 1.46031061 | 0.89  | 0.514 | 3.11E-71 | Macrophage_lung |
| IFI16              | 7.81E-75 | 1.57708387 | 0.839 | 0.357 | 2.77E-70 | Macrophage_lung |
| FOSL2              | 1.32E-74 | 4.47160574 | 0.579 | 0.085 | 4.68E-70 | Macrophage_lung |
| CCL3               | 6.42E-74 | 3.08550848 | 0.705 | 0.202 | 2.27E-69 | Macrophage_lung |
| IFI30              | 6.38E-72 | 2.04704125 | 0.761 | 0.315 | 2.26E-67 | Macrophage_lung |
| IL1RN              | 2.23E-71 | 8.04538234 | 0.506 | 0.012 | 7.91E-67 | Macrophage_lung |
| OLR1               | 1.07E-70 | 7.90036077 | 0.5   | 0.009 | 3.79E-66 | Macrophage_lung |
| RPL5               | 1.16E-70 | 0.87779787 | 0.981 | 0.899 | 4.11E-66 | Macrophage_lung |
| MT2A               | 1.92E-70 | 3.38674285 | 0.746 | 0.362 | 6.80E-66 | Macrophage_lung |
| RPS13              | 1.02E-69 | 0.6475072  | 0.995 | 0.979 | 3.63E-65 | Macrophage_lung |
| FCGR1A             | 1.68E-69 | 2.94320507 | 0.616 | 0.134 | 5.97E-65 | Macrophage_lung |
| MEF2C              | 2.93E-69 | 2.19452123 | 0.712 | 0.237 | 1.04E-64 | Macrophage_lung |
| RPL39              | 2.89E-68 | 0.6767764  | 0.994 | 0.969 | 1.03E-63 | Macrophage_lung |
| ENSMMUG00000019371 | 3.68E-68 | 2.44496653 | 0.811 | 0.408 | 1.31E-63 | Macrophage_lung |
| ENSMMUG00000003073 | 4.29E-68 | 0.75498759 | 0.99  | 0.93  | 1.52E-63 | Macrophage_lung |
| MANBA              | 1.39E-67 | 2.92890088 | 0.642 | 0.2   | 4.94E-63 | Macrophage_lung |
| ENSMMUG00000013429 | 2.09E-67 | 0.60099452 | 0.997 | 0.993 | 7.41E-63 | Macrophage_lung |
| ENSMMUG00000019505 | 3.33E-67 | 1.14533259 | 0.936 | 0.707 | 1.18E-62 | Macrophage_lung |
| KRTCAP2            | 8.89E-67 | 1.32154662 | 0.875 | 0.5   | 3.15E-62 | Macrophage_lung |
| ENSMMUG00000050829 | 8.97E-67 | 1.74889699 | 0.814 | 0.439 | 3.18E-62 | Macrophage_lung |
| RPL38              | 1.67E-66 | 0.76044981 | 0.983 | 0.913 | 5.93E-62 | Macrophage_lung |
| SRI                | 2.30E-66 | 1.97931923 | 0.757 | 0.338 | 8.16E-62 | Macrophage_lung |
| TMEM176B           | 8.68E-66 | 2.83661065 | 0.61  | 0.127 | 3.08E-61 | Macrophage_lung |
| MYL6               | 1.60E-65 | 1.31700079 | 0.89  | 0.559 | 5.67E-61 | Macrophage_lung |
| RB1                | 1.76E-65 | 2.63616771 | 0.629 | 0.169 | 6.24E-61 | Macrophage_lung |



|                    |          |            |       |       |          |                 |
|--------------------|----------|------------|-------|-------|----------|-----------------|
| RPSA               | 2.70E-64 | 0.82555226 | 0.986 | 0.906 | 9.57E-60 | Macrophage_lung |
| SOCS3              | 6.99E-64 | 5.26387947 | 0.495 | 0.04  | 2.48E-59 | Macrophage_lung |
| ENSMMUG00000052747 | 8.53E-64 | 1.62523575 | 0.803 | 0.411 | 3.02E-59 | Macrophage_lung |
| IDO1               | 2.04E-63 | 4.58237344 | 0.5   | 0.04  | 7.23E-59 | Macrophage_lung |
| ENSMMUG00000054210 | 2.20E-63 | 5.52500867 | 0.557 | 0.122 | 7.80E-59 | Macrophage_lung |
| NR4A1              | 2.93E-62 | 3.27339078 | 0.555 | 0.108 | 1.04E-57 | Macrophage_lung |
| ID2                | 4.81E-62 | 1.7620416  | 0.807 | 0.434 | 1.70E-57 | Macrophage_lung |
| DUSP2              | 1.53E-61 | 3.82107442 | 0.53  | 0.082 | 5.41E-57 | Macrophage_lung |
| AREG               | 1.71E-61 | 9.23530915 | 0.454 | 0.009 | 6.04E-57 | Macrophage_lung |
| NFKBID             | 2.61E-61 | 4.96775233 | 0.493 | 0.054 | 9.26E-57 | Macrophage_lung |
| CD37               | 3.49E-61 | 1.71062781 | 0.716 | 0.268 | 1.24E-56 | Macrophage_lung |
| RPS4X              | 4.54E-60 | 0.76457195 | 0.99  | 0.955 | 1.61E-55 | Macrophage_lung |
| ENSMMUG00000058644 | 1.31E-59 | 6.35635602 | 0.452 | 0.016 | 4.64E-55 | Macrophage_lung |
| RPL19              | 4.45E-59 | 0.8106058  | 0.975 | 0.847 | 1.58E-54 | Macrophage_lung |
| TPT1               | 1.08E-58 | 0.55615079 | 0.999 | 0.995 | 3.81E-54 | Macrophage_lung |
| ENSMMUG00000016305 | 8.96E-58 | 1.82703969 | 0.713 | 0.317 | 3.17E-53 | Macrophage_lung |
| CAPG               | 1.30E-57 | 2.18788639 | 0.631 | 0.204 | 4.60E-53 | Macrophage_lung |
| ZC3H10             | 2.30E-57 | 1.06383946 | 0.918 | 0.648 | 8.16E-53 | Macrophage_lung |
| REL                | 2.38E-57 | 1.8262772  | 0.735 | 0.3   | 8.44E-53 | Macrophage_lung |
| ABCA6              | 1.41E-56 | 6.20758172 | 0.433 | 0.014 | 5.00E-52 | Macrophage_lung |
| ENSMMUG00000063637 | 2.26E-56 | 1.12204156 | 0.93  | 0.664 | 8.02E-52 | Macrophage_lung |
| MRPL33             | 7.51E-56 | 1.60600811 | 0.73  | 0.3   | 2.66E-51 | Macrophage_lung |
| HERPUD1            | 1.47E-55 | 2.35794024 | 0.644 | 0.237 | 5.19E-51 | Macrophage_lung |
| NFKBIA             | 5.08E-55 | 1.37165156 | 0.816 | 0.383 | 1.80E-50 | Macrophage_lung |
| ENSMMUG00000060377 | 8.51E-55 | 1.21243269 | 0.854 | 0.516 | 3.01E-50 | Macrophage_lung |
| BTG2               | 1.38E-54 | 1.62372714 | 0.775 | 0.387 | 4.89E-50 | Macrophage_lung |
| GSN                | 5.76E-54 | 3.44581086 | 0.48  | 0.066 | 2.04E-49 | Macrophage_lung |
| LGALS3             | 6.19E-54 | 2.66123658 | 0.641 | 0.237 | 2.19E-49 | Macrophage_lung |
| ENSMMUG00000006463 | 8.94E-54 | 1.32994932 | 0.812 | 0.437 | 3.17E-49 | Macrophage_lung |
| PLEK               | 1.01E-53 | 2.23143567 | 0.66  | 0.282 | 3.59E-49 | Macrophage_lung |
| TSPO               | 1.12E-53 | 2.19792472 | 0.6   | 0.181 | 3.97E-49 | Macrophage_lung |
| UPK3A              | 9.37E-53 | 6.33678298 | 0.411 | 0.014 | 3.32E-48 | Macrophage_lung |
| SKIL               | 2.28E-52 | 3.36809277 | 0.506 | 0.117 | 8.07E-48 | Macrophage_lung |

|                    |          |            |       |       |          |                 |
|--------------------|----------|------------|-------|-------|----------|-----------------|
| GPX1               | 4.25E-52 | 4.55699099 | 0.423 | 0.023 | 1.50E-47 | Macrophage_lung |
| KYNU               | 1.14E-51 | 2.47182826 | 0.622 | 0.249 | 4.03E-47 | Macrophage_lung |
| LAT2               | 1.53E-51 | 3.25610905 | 0.487 | 0.092 | 5.41E-47 | Macrophage_lung |
| CSRP2              | 5.76E-51 | 7.87776477 | 0.398 | 0.012 | 2.04E-46 | Macrophage_lung |
| ATP5F1E            | 8.86E-51 | 0.64670253 | 0.988 | 0.925 | 3.14E-46 | Macrophage_lung |
| EIF4A3             | 8.91E-51 | 2.26599409 | 0.591 | 0.207 | 3.16E-46 | Macrophage_lung |
| ICAM1              | 1.06E-50 | 2.24380028 | 0.622 | 0.237 | 3.77E-46 | Macrophage_lung |
| ENSMMUG00000063346 | 1.56E-50 | 4.08247023 | 0.445 | 0.054 | 5.53E-46 | Macrophage_lung |
| SH3BGRL            | 2.68E-50 | 1.22136809 | 0.825 | 0.477 | 9.50E-46 | Macrophage_lung |
| ANXA2              | 9.87E-50 | 2.09474094 | 0.589 | 0.188 | 3.50E-45 | Macrophage_lung |
| ATP13A3            | 1.08E-48 | 2.51964842 | 0.53  | 0.138 | 3.84E-44 | Macrophage_lung |
| RGS2               | 1.65E-48 | 1.5808551  | 0.772 | 0.43  | 5.83E-44 | Macrophage_lung |
| ENSMMUG00000061824 | 4.86E-48 | 0.81289789 | 0.965 | 0.763 | 1.72E-43 | Macrophage_lung |
| RPL7A              | 5.62E-48 | 0.57164412 | 0.99  | 0.969 | 1.99E-43 | Macrophage_lung |
| ENSMMUG00000004545 | 6.42E-48 | 1.07072126 | 0.875 | 0.573 | 2.28E-43 | Macrophage_lung |
| FCER1A             | 3.76E-47 | 7.50200843 | 0.367 | 0.002 | 1.33E-42 | Macrophage_lung |
| CSTA               | 3.93E-47 | 3.70370538 | 0.424 | 0.049 | 1.39E-42 | Macrophage_lung |
| ARF4               | 4.08E-47 | 1.43209142 | 0.753 | 0.369 | 1.44E-42 | Macrophage_lung |
| RPL22L1            | 4.14E-47 | 1.23772817 | 0.825 | 0.477 | 1.47E-42 | Macrophage_lung |
| NUFIP1             | 6.06E-47 | 3.49370718 | 0.485 | 0.124 | 2.15E-42 | Macrophage_lung |
| NXPE3              | 7.23E-47 | 1.50774046 | 0.674 | 0.282 | 2.56E-42 | Macrophage_lung |
| VAMP8              | 7.92E-47 | 1.41166    | 0.683 | 0.279 | 2.81E-42 | Macrophage_lung |
| PLAU               | 3.20E-46 | 6.85296067 | 0.364 | 0.005 | 1.13E-41 | Macrophage_lung |
| PRMT9              | 4.47E-46 | 3.30558855 | 0.441 | 0.075 | 1.58E-41 | Macrophage_lung |
| CFL1               | 9.99E-46 | 0.80789407 | 0.946 | 0.754 | 3.54E-41 | Macrophage_lung |
| MAP4K4             | 1.06E-45 | 2.74036637 | 0.525 | 0.16  | 3.74E-41 | Macrophage_lung |
| ENSMMUG00000031947 | 1.36E-45 | 1.26800108 | 0.75  | 0.404 | 4.81E-41 | Macrophage_lung |
| ETV3               | 1.41E-45 | 2.30693586 | 0.559 | 0.197 | 4.99E-41 | Macrophage_lung |
| GK                 | 6.71E-45 | 4.58298193 | 0.411 | 0.059 | 2.38E-40 | Macrophage_lung |
| CXCL3              | 7.23E-45 | 9.6718878  | 0.357 | 0.007 | 2.56E-40 | Macrophage_lung |
| LITAF              | 7.32E-45 | 1.3922797  | 0.761 | 0.423 | 2.59E-40 | Macrophage_lung |
| EIF3K              | 2.48E-44 | 0.91269917 | 0.886 | 0.61  | 8.80E-40 | Macrophage_lung |
| PPT1               | 2.86E-44 | 1.55449033 | 0.665 | 0.291 | 1.01E-39 | Macrophage_lung |

|                     |          |            |       |       |          |                 |
|---------------------|----------|------------|-------|-------|----------|-----------------|
| ENSMMUG00000001210  | 6.26E-44 | 0.90753884 | 0.897 | 0.631 | 2.22E-39 | Macrophage_lung |
| JAML                | 1.35E-43 | 1.99222898 | 0.567 | 0.192 | 4.79E-39 | Macrophage_lung |
| BIRC3               | 3.91E-43 | 2.36277205 | 0.498 | 0.134 | 1.39E-38 | Macrophage_lung |
| NR4A2               | 2.83E-42 | 2.57772195 | 0.496 | 0.146 | 1.00E-37 | Macrophage_lung |
| RPL3                | 3.20E-42 | 0.56276483 | 0.987 | 0.946 | 1.14E-37 | Macrophage_lung |
| ENSMMUG000000054038 | 3.63E-42 | 1.11317027 | 0.874 | 0.594 | 1.29E-37 | Macrophage_lung |
| METRNL              | 2.08E-41 | 4.07161718 | 0.382 | 0.045 | 7.35E-37 | Macrophage_lung |
| RBPJ                | 2.61E-41 | 1.73134465 | 0.615 | 0.277 | 9.23E-37 | Macrophage_lung |
| DENND4A             | 3.14E-41 | 1.33982356 | 0.708 | 0.331 | 1.11E-36 | Macrophage_lung |
| SERTAD1             | 4.16E-40 | 2.76588253 | 0.454 | 0.115 | 1.47E-35 | Macrophage_lung |
| VMO1                | 6.46E-40 | 0.96847696 | 0.886 | 0.615 | 2.29E-35 | Macrophage_lung |
| TBC1D4              | 8.18E-40 | 3.64271693 | 0.509 | 0.197 | 2.90E-35 | Macrophage_lung |
| EEF1D               | 9.62E-40 | 0.88010547 | 0.875 | 0.575 | 3.41E-35 | Macrophage_lung |
| RPS16               | 1.15E-39 | 0.54023899 | 0.991 | 0.944 | 4.06E-35 | Macrophage_lung |
| SYTL3               | 1.97E-39 | 2.00912073 | 0.506 | 0.153 | 6.99E-35 | Macrophage_lung |
| BATF                | 2.05E-39 | 3.13400931 | 0.421 | 0.085 | 7.27E-35 | Macrophage_lung |
| OAZ1                | 1.08E-38 | 0.82605952 | 0.902 | 0.66  | 3.84E-34 | Macrophage_lung |
| ACTG1               | 2.58E-38 | 0.69502133 | 0.967 | 0.833 | 9.12E-34 | Macrophage_lung |
| ROBO2               | 3.39E-38 | 0.91333952 | 0.851 | 0.563 | 1.20E-33 | Macrophage_lung |
| C18H18orf32         | 4.35E-38 | 0.64895336 | 0.977 | 0.906 | 1.54E-33 | Macrophage_lung |
| COX17               | 1.10E-37 | 0.98185826 | 0.762 | 0.434 | 3.89E-33 | Macrophage_lung |
| AMZ2                | 2.27E-37 | 3.22546542 | 0.401 | 0.089 | 8.03E-33 | Macrophage_lung |
| LIMS1               | 2.41E-37 | 2.23943446 | 0.531 | 0.223 | 8.55E-33 | Macrophage_lung |
| IL10                | 3.26E-37 | 4.29792774 | 0.385 | 0.068 | 1.16E-32 | Macrophage_lung |
| ENSMMUG000000046482 | 6.04E-37 | 3.24493095 | 0.419 | 0.11  | 2.14E-32 | Macrophage_lung |
| ENSMMUG000000064139 | 8.76E-37 | 0.83103408 | 0.919 | 0.711 | 3.10E-32 | Macrophage_lung |
| ENSMMUG000000042343 | 1.89E-36 | 2.59229025 | 0.584 | 0.258 | 6.70E-32 | Macrophage_lung |
| ENSMMUG000000002320 | 3.93E-36 | 0.71186915 | 0.966 | 0.864 | 1.39E-31 | Macrophage_lung |
| C3AR1               | 6.79E-36 | 1.92858152 | 0.501 | 0.171 | 2.40E-31 | Macrophage_lung |
| RALA                | 1.79E-35 | 2.01300681 | 0.506 | 0.197 | 6.35E-31 | Macrophage_lung |
| ANTXR2              | 3.39E-35 | 2.53152478 | 0.444 | 0.127 | 1.20E-30 | Macrophage_lung |
| NFE2L2              | 4.57E-35 | 1.17048393 | 0.685 | 0.359 | 1.62E-30 | Macrophage_lung |
| RETN                | 8.11E-35 | 6.14043884 | 0.291 | 0.005 | 2.88E-30 | Macrophage_lung |

|                    |          |            |       |       |          |                 |
|--------------------|----------|------------|-------|-------|----------|-----------------|
| SLC11A2            | 8.34E-35 | 2.68052189 | 0.446 | 0.141 | 2.96E-30 | Macrophage_lung |
| CCNL1              | 1.37E-34 | 1.02830497 | 0.743 | 0.369 | 4.86E-30 | Macrophage_lung |
| OSM                | 3.69E-34 | 5.9528623  | 0.308 | 0.023 | 1.31E-29 | Macrophage_lung |
| HCST               | 3.99E-34 | 1.2935717  | 0.629 | 0.308 | 1.42E-29 | Macrophage_lung |
| MTHFD2             | 4.81E-34 | 2.07431413 | 0.503 | 0.204 | 1.71E-29 | Macrophage_lung |
| TRAF1              | 1.71E-33 | 4.74098456 | 0.326 | 0.042 | 6.04E-29 | Macrophage_lung |
| ENSMMUG00000049722 | 1.89E-33 | 1.25634229 | 0.61  | 0.298 | 6.70E-29 | Macrophage_lung |
| NSA2               | 2.32E-33 | 0.80788762 | 0.86  | 0.587 | 8.21E-29 | Macrophage_lung |
| ENSMMUG00000016894 | 1.32E-32 | 1.09279094 | 0.681 | 0.385 | 4.66E-28 | Macrophage_lung |
| NLRP3              | 1.62E-32 | 2.5116114  | 0.413 | 0.12  | 5.76E-28 | Macrophage_lung |
| CD86               | 3.30E-32 | 0.80270093 | 0.795 | 0.43  | 1.17E-27 | Macrophage_lung |
| CD58               | 3.50E-32 | 1.74660016 | 0.505 | 0.211 | 1.24E-27 | Macrophage_lung |
| ENSMMUG00000038348 | 4.20E-32 | 1.4210095  | 0.615 | 0.3   | 1.49E-27 | Macrophage_lung |
| JUND               | 6.15E-32 | 1.25670715 | 0.676 | 0.366 | 2.18E-27 | Macrophage_lung |
| RPL36AL            | 8.30E-32 | 0.59376399 | 0.938 | 0.758 | 2.94E-27 | Macrophage_lung |
| ENSMMUG00000015270 | 1.24E-31 | 0.39820097 | 0.995 | 0.986 | 4.38E-27 | Macrophage_lung |
| LYZ                | 2.68E-31 | 0.52606677 | 0.97  | 0.901 | 9.49E-27 | Macrophage_lung |
| GCNT2              | 4.02E-31 | 6.41099622 | 0.276 | 0.014 | 1.42E-26 | Macrophage_lung |
| ENSMMUG00000014648 | 4.24E-31 | 0.99955057 | 0.716 | 0.415 | 1.50E-26 | Macrophage_lung |
| EMP3               | 4.67E-31 | 2.62340993 | 0.365 | 0.077 | 1.66E-26 | Macrophage_lung |
| CTSS               | 1.08E-30 | 0.72446313 | 0.91  | 0.678 | 3.81E-26 | Macrophage_lung |
| LCP1               | 1.65E-30 | 0.7970488  | 0.851 | 0.554 | 5.84E-26 | Macrophage_lung |
| ENSMMUG00000012140 | 2.77E-30 | 0.46236717 | 0.988 | 0.939 | 9.82E-26 | Macrophage_lung |
| CD44               | 4.28E-30 | 0.85192815 | 0.853 | 0.533 | 1.52E-25 | Macrophage_lung |
| C15orf48           | 7.97E-30 | 7.27456556 | 0.251 | 0.002 | 2.82E-25 | Macrophage_lung |
| TNFAIP2            | 8.66E-30 | 3.13009713 | 0.335 | 0.066 | 3.07E-25 | Macrophage_lung |
| NME2               | 9.53E-30 | 0.53676913 | 0.947 | 0.803 | 3.38E-25 | Macrophage_lung |
| RPL10A             | 9.55E-30 | 0.50001922 | 0.973 | 0.901 | 3.38E-25 | Macrophage_lung |
| MS4A6A             | 1.12E-29 | 1.509416   | 0.489 | 0.178 | 3.95E-25 | Macrophage_lung |
| ELOC               | 3.14E-29 | 1.61073842 | 0.516 | 0.239 | 1.11E-24 | Macrophage_lung |
| HNRNPDL            | 4.24E-29 | 0.85866289 | 0.758 | 0.491 | 1.50E-24 | Macrophage_lung |
| SELENOK            | 6.06E-29 | 1.51382244 | 0.5   | 0.216 | 2.15E-24 | Macrophage_lung |
| TLR2               | 7.83E-29 | 3.07736425 | 0.347 | 0.085 | 2.78E-24 | Macrophage_lung |

|                     |          |            |       |       |          |                 |
|---------------------|----------|------------|-------|-------|----------|-----------------|
| FGL2                | 1.78E-28 | 0.80514975 | 0.839 | 0.545 | 6.30E-24 | Macrophage_lung |
| CKS2                | 2.33E-28 | 1.91965743 | 0.467 | 0.192 | 8.27E-24 | Macrophage_lung |
| KDM6B               | 3.51E-28 | 1.83557619 | 0.48  | 0.202 | 1.24E-23 | Macrophage_lung |
| MYD88               | 4.83E-28 | 2.64908567 | 0.33  | 0.07  | 1.71E-23 | Macrophage_lung |
| RAPGEF1             | 1.01E-27 | 1.37279704 | 0.567 | 0.279 | 3.58E-23 | Macrophage_lung |
| ENSMMUG00000008604  | 1.36E-27 | 2.27414405 | 0.385 | 0.12  | 4.81E-23 | Macrophage_lung |
| PET100              | 3.17E-27 | 1.57165116 | 0.452 | 0.171 | 1.12E-22 | Macrophage_lung |
| PID1                | 6.28E-27 | 2.44884285 | 0.339 | 0.08  | 2.23E-22 | Macrophage_lung |
| AHNAK               | 7.16E-27 | 2.31565074 | 0.359 | 0.096 | 2.54E-22 | Macrophage_lung |
| CLEC10A             | 1.71E-26 | 4.50007419 | 0.255 | 0.021 | 6.07E-22 | Macrophage_lung |
| ENSMMUG000000029026 | 3.63E-26 | 1.22574722 | 0.5   | 0.228 | 1.29E-21 | Macrophage_lung |
| REEP5               | 4.50E-26 | 1.62847225 | 0.456 | 0.197 | 1.60E-21 | Macrophage_lung |
| ENSMMUG000000015274 | 4.91E-26 | 2.56710738 | 0.376 | 0.134 | 1.74E-21 | Macrophage_lung |
| ENSMMUG000000029973 | 5.10E-26 | 0.84115251 | 0.742 | 0.472 | 1.81E-21 | Macrophage_lung |
| SGK1                | 7.69E-26 | 1.76130745 | 0.487 | 0.225 | 2.72E-21 | Macrophage_lung |
| CMTM1               | 1.14E-25 | 0.9107639  | 0.666 | 0.39  | 4.02E-21 | Macrophage_lung |
| HACD4               | 1.30E-25 | 2.00575952 | 0.375 | 0.113 | 4.62E-21 | Macrophage_lung |
| NIBAN1              | 2.02E-25 | 4.0360749  | 0.257 | 0.028 | 7.15E-21 | Macrophage_lung |
| MYG1                | 2.37E-25 | 1.06107928 | 0.549 | 0.265 | 8.38E-21 | Macrophage_lung |
| ENSMMUG000000022489 | 2.45E-25 | 0.73033855 | 0.726 | 0.469 | 8.70E-21 | Macrophage_lung |
| TMA7                | 2.48E-25 | 0.6221326  | 0.838 | 0.617 | 8.77E-21 | Macrophage_lung |
| LPXN                | 2.56E-25 | 1.9921381  | 0.422 | 0.174 | 9.06E-21 | Macrophage_lung |
| INSIG1              | 3.59E-25 | 4.00593678 | 0.278 | 0.047 | 1.27E-20 | Macrophage_lung |
| RPS3A               | 3.97E-25 | 0.37898524 | 0.992 | 0.972 | 1.41E-20 | Macrophage_lung |
| NDUFB2              | 4.63E-25 | 0.67462525 | 0.809 | 0.561 | 1.64E-20 | Macrophage_lung |
| DPYSL2              | 7.44E-25 | 1.49320435 | 0.438 | 0.19  | 2.64E-20 | Macrophage_lung |
| SUB1                | 7.62E-25 | 0.62225912 | 0.861 | 0.624 | 2.70E-20 | Macrophage_lung |
| PRPF31              | 1.18E-24 | 0.54611142 | 0.761 | 0.507 | 4.19E-20 | Macrophage_lung |
| TMEM258             | 1.20E-24 | 0.799001   | 0.685 | 0.42  | 4.26E-20 | Macrophage_lung |
| SMDT1               | 1.43E-24 | 0.62687568 | 0.804 | 0.533 | 5.08E-20 | Macrophage_lung |
| GNPNAT1             | 2.58E-24 | 2.44004874 | 0.347 | 0.106 | 9.15E-20 | Macrophage_lung |
| ZNF483              | 3.20E-24 | 0.72726419 | 0.733 | 0.479 | 1.13E-19 | Macrophage_lung |
| KIFBP               | 3.57E-24 | 1.51397294 | 0.516 | 0.282 | 1.27E-19 | Macrophage_lung |

|                    |          |            |       |       |          |                 |
|--------------------|----------|------------|-------|-------|----------|-----------------|
| CREM               | 4.00E-24 | 1.39574133 | 0.538 | 0.291 | 1.42E-19 | Macrophage_lung |
| DGKB               | 4.39E-24 | 1.27384976 | 0.487 | 0.214 | 1.56E-19 | Macrophage_lung |
| SCIMP              | 8.29E-24 | 2.3849649  | 0.33  | 0.092 | 2.94E-19 | Macrophage_lung |
| LYAR               | 1.53E-23 | 2.30504864 | 0.337 | 0.101 | 5.41E-19 | Macrophage_lung |
| IL1R2              | 2.71E-23 | 3.81286041 | 0.265 | 0.047 | 9.59E-19 | Macrophage_lung |
| SRSF5              | 3.14E-23 | 0.76278306 | 0.718 | 0.408 | 1.11E-18 | Macrophage_lung |
| BZW1               | 3.28E-23 | 0.7718295  | 0.689 | 0.43  | 1.16E-18 | Macrophage_lung |
| ENSMMUG00000016665 | 3.64E-23 | 0.61355124 | 0.677 | 0.415 | 1.29E-18 | Macrophage_lung |
| PIM3               | 4.97E-23 | 3.21815783 | 0.26  | 0.042 | 1.76E-18 | Macrophage_lung |
| ENSMMUG00000012525 | 5.01E-23 | 1.57287521 | 0.432 | 0.19  | 1.77E-18 | Macrophage_lung |
| SEC61B             | 5.73E-23 | 0.68058162 | 0.812 | 0.582 | 2.03E-18 | Macrophage_lung |
| BCL6               | 5.90E-23 | 2.25530254 | 0.391 | 0.164 | 2.09E-18 | Macrophage_lung |
| ATP5MG             | 6.20E-23 | 0.47929263 | 0.908 | 0.723 | 2.20E-18 | Macrophage_lung |
| DUSP1              | 6.34E-23 | 0.36661986 | 0.736 | 0.352 | 2.25E-18 | Macrophage_lung |
| GPALPP1            | 1.24E-22 | 2.7389512  | 0.306 | 0.082 | 4.40E-18 | Macrophage_lung |
| ENSMMUG00000065104 | 1.25E-22 | 1.07872193 | 0.525 | 0.268 | 4.45E-18 | Macrophage_lung |
| MAMU-E             | 2.01E-22 | 0.52085682 | 0.932 | 0.756 | 7.11E-18 | Macrophage_lung |
| ENSMMUG00000056793 | 2.66E-22 | 0.49301386 | 0.855 | 0.603 | 9.41E-18 | Macrophage_lung |
| ENSMMUG00000064120 | 1.28E-21 | 1.08813583 | 0.588 | 0.35  | 4.53E-17 | Macrophage_lung |
| PRDX6              | 1.47E-21 | 1.13107443 | 0.564 | 0.312 | 5.20E-17 | Macrophage_lung |
| ARPC3              | 1.92E-21 | 0.41641053 | 0.934 | 0.838 | 6.79E-17 | Macrophage_lung |
| CSRNP1             | 3.25E-21 | 1.8582166  | 0.37  | 0.15  | 1.15E-16 | Macrophage_lung |
| RNF7               | 3.36E-21 | 1.30005167 | 0.433 | 0.204 | 1.19E-16 | Macrophage_lung |
| ISG20              | 4.17E-21 | 2.99514804 | 0.263 | 0.056 | 1.48E-16 | Macrophage_lung |
| ENSMMUG00000002324 | 6.84E-21 | 1.05057407 | 0.526 | 0.286 | 2.42E-16 | Macrophage_lung |
| ENSMMUG00000018687 | 7.08E-21 | 2.31412261 | 0.286 | 0.075 | 2.51E-16 | Macrophage_lung |
| KLF10              | 7.39E-21 | 2.54604386 | 0.311 | 0.099 | 2.62E-16 | Macrophage_lung |
| WDR45B             | 1.03E-20 | 2.02341421 | 0.333 | 0.11  | 3.65E-16 | Macrophage_lung |
| WDR13              | 1.62E-20 | 0.73675223 | 0.702 | 0.467 | 5.73E-16 | Macrophage_lung |
| SDCBP              | 2.81E-20 | 0.77081845 | 0.703 | 0.437 | 9.96E-16 | Macrophage_lung |
| NRROS              | 5.07E-20 | 1.26672233 | 0.472 | 0.242 | 1.80E-15 | Macrophage_lung |
| MAP3K8             | 7.12E-20 | 0.91504445 | 0.535 | 0.254 | 2.52E-15 | Macrophage_lung |
| CYP27A1            | 1.11E-19 | 2.33453775 | 0.25  | 0.049 | 3.94E-15 | Macrophage_lung |

|                    |          |            |       |       |          |                 |
|--------------------|----------|------------|-------|-------|----------|-----------------|
| GLIPR2             | 1.24E-19 | 0.98651024 | 0.472 | 0.242 | 4.39E-15 | Macrophage_lung |
| HSD17B4            | 1.56E-19 | 1.05813497 | 0.699 | 0.502 | 5.52E-15 | Macrophage_lung |
| MRC1               | 2.77E-19 | 0.99205999 | 0.568 | 0.319 | 9.82E-15 | Macrophage_lung |
| MRI1               | 3.09E-19 | 0.62949417 | 0.652 | 0.404 | 1.09E-14 | Macrophage_lung |
| PZP                | 3.50E-19 | 2.66416001 | 0.254 | 0.059 | 1.24E-14 | Macrophage_lung |
| IL13RA1            | 5.01E-19 | 1.33065627 | 0.411 | 0.192 | 1.78E-14 | Macrophage_lung |
| ENSMMUG00000007536 | 6.39E-19 | 1.02037345 | 0.474 | 0.246 | 2.26E-14 | Macrophage_lung |
| ENSMMUG00000058165 | 6.74E-19 | 2.75495186 | 0.258 | 0.066 | 2.39E-14 | Macrophage_lung |
| EEF1B2             | 1.02E-18 | 0.378219   | 0.954 | 0.831 | 3.62E-14 | Macrophage_lung |
| SRP14              | 1.20E-18 | 0.39859676 | 0.91  | 0.758 | 4.25E-14 | Macrophage_lung |
| EEF1A1             | 1.24E-18 | 0.3686848  | 0.973 | 0.897 | 4.40E-14 | Macrophage_lung |
| CD80               | 1.31E-18 | 1.85593162 | 0.313 | 0.113 | 4.63E-14 | Macrophage_lung |
| ENSMMUG00000012203 | 1.42E-18 | 1.49144903 | 0.417 | 0.204 | 5.02E-14 | Macrophage_lung |
| SRSF7              | 1.71E-18 | 0.89102737 | 0.622 | 0.373 | 6.07E-14 | Macrophage_lung |
| TM6SF1             | 1.78E-18 | 2.04759737 | 0.278 | 0.08  | 6.31E-14 | Macrophage_lung |
| CHCHD7             | 1.94E-18 | 1.72485067 | 0.321 | 0.113 | 6.88E-14 | Macrophage_lung |
| ZNF267             | 2.04E-18 | 1.85962588 | 0.385 | 0.195 | 7.24E-14 | Macrophage_lung |
| ENSMMUG00000055584 | 2.22E-18 | 0.47569467 | 0.909 | 0.756 | 7.85E-14 | Macrophage_lung |
| TENT5C             | 2.59E-18 | 2.40800454 | 0.261 | 0.07  | 9.17E-14 | Macrophage_lung |
| PTPN1              | 2.78E-18 | 1.37679955 | 0.43  | 0.223 | 9.86E-14 | Macrophage_lung |
| ENSMMUG00000055627 | 3.51E-18 | 0.6429841  | 0.705 | 0.465 | 1.24E-13 | Macrophage_lung |
| CARS1              | 3.53E-18 | 1.77394935 | 0.325 | 0.127 | 1.25E-13 | Macrophage_lung |
| OXSRI              | 4.36E-18 | 1.57541959 | 0.395 | 0.197 | 1.54E-13 | Macrophage_lung |
| SSR4               | 4.62E-18 | 0.61715822 | 0.703 | 0.451 | 1.64E-13 | Macrophage_lung |
| CCNH               | 5.01E-18 | 1.80722333 | 0.384 | 0.188 | 1.77E-13 | Macrophage_lung |
| COX5B              | 5.98E-18 | 0.47224856 | 0.775 | 0.545 | 2.12E-13 | Macrophage_lung |
| PTPRE              | 7.59E-18 | 1.31048009 | 0.467 | 0.256 | 2.69E-13 | Macrophage_lung |
| GPR141             | 8.13E-18 | 2.11738166 | 0.309 | 0.115 | 2.88E-13 | Macrophage_lung |
| PFDN5              | 1.09E-17 | 0.66096217 | 0.585 | 0.364 | 3.86E-13 | Macrophage_lung |
| CD14               | 1.10E-17 | 1.31086499 | 0.456 | 0.244 | 3.90E-13 | Macrophage_lung |
| ENSMMUG00000022874 | 1.11E-17 | 1.78105146 | 0.368 | 0.174 | 3.92E-13 | Macrophage_lung |
| MAFF               | 1.20E-17 | 2.56977007 | 0.289 | 0.101 | 4.24E-13 | Macrophage_lung |
| CRIP1              | 1.25E-17 | 0.94463811 | 0.542 | 0.305 | 4.44E-13 | Macrophage_lung |

|                     |          |            |       |       |          |                 |
|---------------------|----------|------------|-------|-------|----------|-----------------|
| ENSMMUG00000016009  | 1.60E-17 | 1.10685493 | 0.418 | 0.209 | 5.67E-13 | Macrophage_lung |
| PABPC1              | 2.03E-17 | 0.5461847  | 0.898 | 0.657 | 7.18E-13 | Macrophage_lung |
| MBP                 | 2.09E-17 | 0.98449026 | 0.574 | 0.359 | 7.40E-13 | Macrophage_lung |
| P2RY8               | 2.65E-17 | 2.23493387 | 0.297 | 0.108 | 9.39E-13 | Macrophage_lung |
| IFI27L2             | 2.68E-17 | 0.58110154 | 0.652 | 0.411 | 9.50E-13 | Macrophage_lung |
| GLIPR1L2            | 4.68E-17 | 0.75211147 | 0.536 | 0.315 | 1.66E-12 | Macrophage_lung |
| CLDND1              | 4.72E-17 | 1.69176221 | 0.31  | 0.124 | 1.67E-12 | Macrophage_lung |
| FOSB                | 5.16E-17 | 0.55133468 | 0.626 | 0.326 | 1.83E-12 | Macrophage_lung |
| ROMO1               | 6.58E-17 | 0.31877104 | 0.741 | 0.5   | 2.33E-12 | Macrophage_lung |
| ENSMMUG000000051239 | 6.67E-17 | 1.05649987 | 0.446 | 0.23  | 2.36E-12 | Macrophage_lung |
| ELL2                | 1.25E-16 | 1.2761477  | 0.478 | 0.277 | 4.45E-12 | Macrophage_lung |
| ENSMMUG000000022428 | 1.45E-16 | 0.38937158 | 0.8   | 0.58  | 5.13E-12 | Macrophage_lung |
| ZFP36L1             | 1.61E-16 | 0.63418608 | 0.753 | 0.484 | 5.69E-12 | Macrophage_lung |
| ENSA                | 1.62E-16 | 0.60929619 | 0.632 | 0.387 | 5.75E-12 | Macrophage_lung |
| MYL12B              | 1.62E-16 | 0.47320926 | 0.87  | 0.697 | 5.76E-12 | Macrophage_lung |
| MAP2K3              | 1.69E-16 | 2.18771761 | 0.294 | 0.11  | 6.01E-12 | Macrophage_lung |
| ENSMMUG000000056354 | 1.81E-16 | 0.30758549 | 0.977 | 0.901 | 6.43E-12 | Macrophage_lung |
| NCF4                | 2.51E-16 | 0.90256631 | 0.472 | 0.251 | 8.90E-12 | Macrophage_lung |
| PRR13               | 2.53E-16 | 0.74208812 | 0.574 | 0.364 | 8.97E-12 | Macrophage_lung |
| PAK1                | 5.95E-16 | 1.89524161 | 0.296 | 0.115 | 2.11E-11 | Macrophage_lung |
| SAMHD1              | 6.24E-16 | 1.04802945 | 0.419 | 0.214 | 2.21E-11 | Macrophage_lung |
| RPS27               | 6.29E-16 | 0.35621016 | 0.981 | 0.944 | 2.23E-11 | Macrophage_lung |
| DOCK4               | 6.33E-16 | 1.42070435 | 0.364 | 0.162 | 2.24E-11 | Macrophage_lung |
| PTPN2               | 7.46E-16 | 1.21063883 | 0.432 | 0.246 | 2.64E-11 | Macrophage_lung |
| ENSMMUG000000056126 | 1.11E-15 | 1.52754733 | 0.304 | 0.124 | 3.93E-11 | Macrophage_lung |
| SARAF               | 1.30E-15 | 0.68243807 | 0.714 | 0.469 | 4.61E-11 | Macrophage_lung |
| MICOS13             | 1.35E-15 | 0.7029834  | 0.544 | 0.345 | 4.80E-11 | Macrophage_lung |
| TUBA1A              | 1.85E-15 | 0.44178199 | 0.855 | 0.685 | 6.55E-11 | Macrophage_lung |
| RPS4Y1              | 1.89E-15 | 1.02923048 | 0.537 | 0.364 | 6.69E-11 | Macrophage_lung |
| CDK6                | 2.13E-15 | 2.04088948 | 0.269 | 0.096 | 7.53E-11 | Macrophage_lung |
| RASGEF1B            | 2.51E-15 | 0.48624519 | 0.56  | 0.284 | 8.88E-11 | Macrophage_lung |
| ERCC1               | 2.65E-15 | 0.92940274 | 0.373 | 0.174 | 9.39E-11 | Macrophage_lung |
| ENSMMUG000000056654 | 3.09E-15 | 0.46574615 | 0.78  | 0.575 | 1.10E-10 | Macrophage_lung |



|                     |          |            |       |       |          |                 |
|---------------------|----------|------------|-------|-------|----------|-----------------|
| SLC38A2             | 4.67E-15 | 1.51141909 | 0.336 | 0.153 | 1.66E-10 | Macrophage_lung |
| ENSMMUG000000041688 | 4.89E-15 | 1.41908008 | 0.428 | 0.242 | 1.73E-10 | Macrophage_lung |
| CDC42               | 5.12E-15 | 0.44977691 | 0.835 | 0.61  | 1.81E-10 | Macrophage_lung |
| IFNAR1              | 5.43E-15 | 1.01847    | 0.484 | 0.293 | 1.92E-10 | Macrophage_lung |
| PSMB6               | 5.70E-15 | 0.6091076  | 0.575 | 0.35  | 2.02E-10 | Macrophage_lung |
| CD48                | 6.47E-15 | 1.37058158 | 0.34  | 0.164 | 2.29E-10 | Macrophage_lung |
| BLOC1S6             | 6.85E-15 | 1.56066509 | 0.313 | 0.134 | 2.43E-10 | Macrophage_lung |
| OSTC                | 9.29E-15 | 0.70795452 | 0.523 | 0.315 | 3.29E-10 | Macrophage_lung |
| PTRHD1              | 9.71E-15 | 1.29119605 | 0.331 | 0.146 | 3.44E-10 | Macrophage_lung |
| H2AFJ               | 1.03E-14 | 0.62674853 | 0.666 | 0.469 | 3.65E-10 | Macrophage_lung |
| FCER1G              | 1.05E-14 | 1.08386815 | 0.356 | 0.169 | 3.71E-10 | Macrophage_lung |
| RPL6                | 1.08E-14 | 0.27495963 | 0.984 | 0.96  | 3.82E-10 | Macrophage_lung |
| AKR1B1              | 1.25E-14 | 0.82877377 | 0.463 | 0.256 | 4.42E-10 | Macrophage_lung |
| ARHGDI1             | 1.31E-14 | 0.84173012 | 0.417 | 0.216 | 4.63E-10 | Macrophage_lung |
| RPL15               | 1.44E-14 | 0.31451779 | 0.977 | 0.894 | 5.09E-10 | Macrophage_lung |
| LSM6                | 1.61E-14 | 0.89678604 | 0.426 | 0.242 | 5.71E-10 | Macrophage_lung |
| HMG1                | 2.09E-14 | 0.78355341 | 0.509 | 0.308 | 7.42E-10 | Macrophage_lung |
| U4.62               | 3.55E-14 | 2.17981815 | 0.27  | 0.103 | 1.26E-09 | Macrophage_lung |
| RUNX3               | 3.61E-14 | 1.50551653 | 0.389 | 0.223 | 1.28E-09 | Macrophage_lung |
| ETF1                | 5.35E-14 | 1.32374149 | 0.406 | 0.239 | 1.90E-09 | Macrophage_lung |
| RBM8A               | 5.81E-14 | 0.69966669 | 0.463 | 0.27  | 2.06E-09 | Macrophage_lung |
| ARHGAP31            | 7.15E-14 | 1.93553553 | 0.289 | 0.127 | 2.53E-09 | Macrophage_lung |
| GAS7                | 8.44E-14 | 1.62882376 | 0.293 | 0.122 | 2.99E-09 | Macrophage_lung |
| DDIT4               | 9.82E-14 | 1.7214898  | 0.302 | 0.138 | 3.48E-09 | Macrophage_lung |
| RABAC1              | 1.01E-13 | 1.09988323 | 0.388 | 0.209 | 3.57E-09 | Macrophage_lung |
| DOCK10              | 1.37E-13 | 0.89307921 | 0.491 | 0.3   | 4.84E-09 | Macrophage_lung |
| PFKFB3              | 1.58E-13 | 1.98991616 | 0.258 | 0.101 | 5.59E-09 | Macrophage_lung |
| UBL5                | 1.70E-13 | 0.31064385 | 0.788 | 0.58  | 6.03E-09 | Macrophage_lung |
| RUNX1               | 2.29E-13 | 1.11242384 | 0.442 | 0.258 | 8.11E-09 | Macrophage_lung |
| SMNDC1              | 2.55E-13 | 1.20600707 | 0.311 | 0.148 | 9.04E-09 | Macrophage_lung |
| ENSMMUG00000006778  | 3.50E-13 | 1.43417698 | 0.309 | 0.148 | 1.24E-08 | Macrophage_lung |
| ENSMMUG000000058389 | 3.51E-13 | 1.36751596 | 0.296 | 0.134 | 1.24E-08 | Macrophage_lung |
| ENSMMUG00000003412  | 4.24E-13 | 0.24473666 | 0.989 | 0.967 | 1.50E-08 | Macrophage_lung |

|                    |          |            |       |       |          |                 |
|--------------------|----------|------------|-------|-------|----------|-----------------|
| ELOB               | 4.42E-13 | 0.26776674 | 0.807 | 0.61  | 1.57E-08 | Macrophage_lung |
| COPE               | 4.93E-13 | 0.61053032 | 0.525 | 0.331 | 1.75E-08 | Macrophage_lung |
| NDUFB11            | 5.54E-13 | 0.6309642  | 0.507 | 0.315 | 1.96E-08 | Macrophage_lung |
| NAP1L4             | 1.02E-12 | 1.01502767 | 0.408 | 0.246 | 3.62E-08 | Macrophage_lung |
| PRDX5              | 1.15E-12 | 0.54271632 | 0.539 | 0.34  | 4.06E-08 | Macrophage_lung |
| CLEC4A             | 1.19E-12 | 0.46522226 | 0.66  | 0.458 | 4.20E-08 | Macrophage_lung |
| TAGAP              | 1.36E-12 | 1.67557713 | 0.278 | 0.124 | 4.81E-08 | Macrophage_lung |
| CHCHD2             | 1.51E-12 | 0.30810495 | 0.883 | 0.723 | 5.36E-08 | Macrophage_lung |
| GABARAPL2          | 1.80E-12 | 0.47002231 | 0.724 | 0.509 | 6.39E-08 | Macrophage_lung |
| DDX3X              | 1.92E-12 | 0.67307552 | 0.535 | 0.324 | 6.81E-08 | Macrophage_lung |
| GNG5               | 1.96E-12 | 0.29316541 | 0.914 | 0.775 | 6.94E-08 | Macrophage_lung |
| SERPINB1           | 2.05E-12 | 0.86355774 | 0.468 | 0.296 | 7.28E-08 | Macrophage_lung |
| RAB11A             | 2.57E-12 | 0.82316567 | 0.348 | 0.183 | 9.09E-08 | Macrophage_lung |
| GCN1               | 2.70E-12 | 0.25241676 | 0.984 | 0.979 | 9.56E-08 | Macrophage_lung |
| ENSMMUG00000030408 | 3.16E-12 | 0.29371681 | 0.787 | 0.585 | 1.12E-07 | Macrophage_lung |
| XYLT1              | 3.17E-12 | 1.41582856 | 0.315 | 0.16  | 1.12E-07 | Macrophage_lung |
| SERTAD3            | 3.51E-12 | 1.47188518 | 0.313 | 0.162 | 1.24E-07 | Macrophage_lung |
| RFTN1              | 4.57E-12 | 2.07727593 | 0.274 | 0.134 | 1.62E-07 | Macrophage_lung |
| GMFG               | 5.62E-12 | 0.23936502 | 0.89  | 0.739 | 1.99E-07 | Macrophage_lung |
| SPCS3              | 5.95E-12 | 0.56870042 | 0.53  | 0.35  | 2.11E-07 | Macrophage_lung |
| ENSMMUG00000015208 | 6.16E-12 | 0.49259559 | 0.612 | 0.415 | 2.18E-07 | Macrophage_lung |
| SERPINA1           | 6.77E-12 | 1.04193304 | 0.295 | 0.131 | 2.40E-07 | Macrophage_lung |
| ARHGAP24           | 8.90E-12 | 0.8949805  | 0.39  | 0.214 | 3.15E-07 | Macrophage_lung |
| C11H12orf57        | 1.05E-11 | 0.53235915 | 0.608 | 0.42  | 3.71E-07 | Macrophage_lung |
| ENO1               | 1.13E-11 | 0.58255056 | 0.667 | 0.491 | 4.00E-07 | Macrophage_lung |
| ATP5MPL            | 1.47E-11 | 0.28845809 | 0.86  | 0.685 | 5.20E-07 | Macrophage_lung |
| YWHAE              | 1.56E-11 | 0.57920539 | 0.605 | 0.448 | 5.53E-07 | Macrophage_lung |
| CTSH               | 2.23E-11 | 0.44304253 | 0.625 | 0.418 | 7.90E-07 | Macrophage_lung |
| RPS11              | 2.73E-11 | 0.23169629 | 0.992 | 0.955 | 9.68E-07 | Macrophage_lung |
| TPI1               | 3.05E-11 | 0.5076408  | 0.574 | 0.399 | 1.08E-06 | Macrophage_lung |
| PTPRC              | 3.51E-11 | 0.2762689  | 0.753 | 0.441 | 1.24E-06 | Macrophage_lung |
| EIF3J              | 4.62E-11 | 0.74965829 | 0.429 | 0.272 | 1.64E-06 | Macrophage_lung |
| ENSMMUG00000030465 | 5.04E-11 | 0.57222944 | 0.434 | 0.261 | 1.78E-06 | Macrophage_lung |

|                    |          |            |       |       |            |                 |
|--------------------|----------|------------|-------|-------|------------|-----------------|
| GNA13              | 6.07E-11 | 0.77969412 | 0.442 | 0.27  | 2.15E-06   | Macrophage_lung |
| ATP6V1FNB          | 6.74E-11 | 0.39265556 | 0.687 | 0.5   | 2.39E-06   | Macrophage_lung |
| GPR132             | 7.59E-11 | 1.80365335 | 0.252 | 0.12  | 2.69E-06   | Macrophage_lung |
| U3.99              | 7.69E-11 | 1.20573985 | 0.29  | 0.146 | 2.73E-06   | Macrophage_lung |
| RGS10              | 8.37E-11 | 0.38222754 | 0.592 | 0.394 | 2.97E-06   | Macrophage_lung |
| COX19              | 9.58E-11 | 0.98572502 | 0.322 | 0.169 | 3.39E-06   | Macrophage_lung |
| MCL1               | 1.03E-10 | 0.52977011 | 0.53  | 0.34  | 3.65E-06   | Macrophage_lung |
| ENSMMUG00000014862 | 1.11E-10 | 0.92831986 | 0.374 | 0.223 | 3.92E-06   | Macrophage_lung |
| CSGALNACT2         | 1.27E-10 | 1.25903059 | 0.341 | 0.195 | 4.49E-06   | Macrophage_lung |
| RPS4Y2             | 1.47E-10 | 1.29007095 | 0.274 | 0.134 | 5.20E-06   | Macrophage_lung |
| SMAP2              | 2.20E-10 | 1.03984386 | 0.388 | 0.239 | 7.79E-06   | Macrophage_lung |
| ATG12              | 2.61E-10 | 0.68933254 | 0.432 | 0.279 | 9.23E-06   | Macrophage_lung |
| UBXN1              | 2.66E-10 | 0.48297367 | 0.55  | 0.371 | 9.42E-06   | Macrophage_lung |
| ST8SIA4            | 2.82E-10 | 1.01517824 | 0.366 | 0.223 | 9.99E-06   | Macrophage_lung |
| BTF3               | 3.38E-10 | 0.37010811 | 0.802 | 0.599 | 1.20E-05   | Macrophage_lung |
| NDUFB4             | 4.07E-10 | 0.3428936  | 0.581 | 0.394 | 1.44E-05   | Macrophage_lung |
| FKBP2              | 5.18E-10 | 0.49578105 | 0.479 | 0.315 | 1.84E-05   | Macrophage_lung |
| EEF1G              | 5.57E-10 | 0.3917791  | 0.705 | 0.5   | 1.97E-05   | Macrophage_lung |
| TIGAR              | 5.59E-10 | 0.85748238 | 0.337 | 0.192 | 1.98E-05   | Macrophage_lung |
| NDUFC2             | 6.44E-10 | 0.30280782 | 0.561 | 0.404 | 2.28E-05   | Macrophage_lung |
| RHOH               | 7.67E-10 | 1.00303301 | 0.389 | 0.246 | 2.72E-05   | Macrophage_lung |
| GLTP               | 8.04E-10 | 1.21369706 | 0.284 | 0.148 | 2.85E-05   | Macrophage_lung |
| C16H17orf49        | 8.89E-10 | 0.22189346 | 0.875 | 0.735 | 3.15E-05   | Macrophage_lung |
| USP36              | 1.26E-09 | 0.95058931 | 0.365 | 0.221 | 4.45E-05   | Macrophage_lung |
| HNRNPC             | 1.43E-09 | 0.45937466 | 0.622 | 0.434 | 5.07E-05   | Macrophage_lung |
| SEMA4A             | 1.48E-09 | 1.08797448 | 0.293 | 0.162 | 5.25E-05   | Macrophage_lung |
| ENSMMUG00000047632 | 1.63E-09 | 0.73521855 | 0.45  | 0.293 | 5.77E-05   | Macrophage_lung |
| UQCRH              | 1.77E-09 | 0.27804649 | 0.659 | 0.491 | 6.28E-05   | Macrophage_lung |
| ANP32A             | 1.89E-09 | 0.67847178 | 0.463 | 0.329 | 6.70E-05   | Macrophage_lung |
| ENSMMUG00000022769 | 2.63E-09 | 0.50951231 | 0.585 | 0.427 | 9.31E-05   | Macrophage_lung |
| ENSMMUG00000012419 | 3.64E-09 | 0.31082538 | 0.787 | 0.627 | 0.00012913 | Macrophage_lung |
| HINT1              | 3.80E-09 | 0.22496346 | 0.92  | 0.786 | 0.00013466 | Macrophage_lung |
| ENSMMUG00000044585 | 3.90E-09 | 0.22696169 | 0.829 | 0.692 | 0.00013804 | Macrophage_lung |

|                    |          |            |       |       |            |                 |
|--------------------|----------|------------|-------|-------|------------|-----------------|
| ENSMMUG00000055773 | 4.15E-09 | 0.48182478 | 0.363 | 0.214 | 0.00014709 | Macrophage_lung |
| STING1             | 4.24E-09 | 1.12067776 | 0.252 | 0.129 | 0.00015036 | Macrophage_lung |
| CYCS               | 4.51E-09 | 1.05112192 | 0.334 | 0.2   | 0.00015968 | Macrophage_lung |
| EFHD2              | 4.65E-09 | 0.76130358 | 0.415 | 0.279 | 0.00016467 | Macrophage_lung |
| VDAC2              | 5.39E-09 | 0.42588462 | 0.6   | 0.439 | 0.00019103 | Macrophage_lung |
| ENSMMUG00000061913 | 6.34E-09 | 0.58159917 | 0.404 | 0.265 | 0.0002247  | Macrophage_lung |
| U8.13              | 6.71E-09 | 1.60544038 | 0.27  | 0.15  | 0.0002376  | Macrophage_lung |
| SEM1               | 8.17E-09 | 0.26508313 | 0.718 | 0.552 | 0.00028965 | Macrophage_lung |
| SNRPD3             | 1.04E-08 | 0.33483468 | 0.581 | 0.42  | 0.00036998 | Macrophage_lung |
| SMIM4              | 1.48E-08 | 0.92822836 | 0.271 | 0.146 | 0.00052403 | Macrophage_lung |
| FNTB               | 1.82E-08 | 0.43017077 | 0.472 | 0.333 | 0.0006447  | Macrophage_lung |
| ENY2               | 2.09E-08 | 0.39208103 | 0.543 | 0.408 | 0.00073903 | Macrophage_lung |
| ENSMMUG00000055026 | 2.64E-08 | 0.68373367 | 0.376 | 0.237 | 0.00093581 | Macrophage_lung |
| NAA38              | 3.08E-08 | 0.255193   | 0.393 | 0.239 | 0.00109102 | Macrophage_lung |
| ADA2               | 3.19E-08 | 0.91456217 | 0.294 | 0.171 | 0.00113057 | Macrophage_lung |
| COX6B1             | 3.45E-08 | 0.17891276 | 0.665 | 0.479 | 0.00122145 | Macrophage_lung |
| IL10RA             | 3.75E-08 | 0.5205367  | 0.505 | 0.352 | 0.00133018 | Macrophage_lung |
| AP2S1              | 4.15E-08 | 0.34604164 | 0.417 | 0.265 | 0.00147178 | Macrophage_lung |
| POLE4              | 4.23E-08 | 0.6524029  | 0.267 | 0.141 | 0.00149775 | Macrophage_lung |
| SATB1              | 4.39E-08 | 0.71203782 | 0.317 | 0.197 | 0.00155403 | Macrophage_lung |
| MTSS1              | 4.54E-08 | 0.10141441 | 0.518 | 0.308 | 0.00160831 | Macrophage_lung |
| C11H12orf45        | 5.74E-08 | 0.50413526 | 0.411 | 0.272 | 0.00203444 | Macrophage_lung |
| COX7A2             | 6.54E-08 | 0.45782986 | 0.358 | 0.223 | 0.00231629 | Macrophage_lung |
| ETS2               | 6.75E-08 | 1.02828338 | 0.313 | 0.202 | 0.00239027 | Macrophage_lung |
| ATF3               | 9.27E-08 | 0.60540441 | 0.379 | 0.239 | 0.00328422 | Macrophage_lung |
| POLR1H             | 9.39E-08 | 0.83650748 | 0.276 | 0.157 | 0.00332664 | Macrophage_lung |
| ANP32E             | 1.01E-07 | 1.08580164 | 0.284 | 0.174 | 0.00358236 | Macrophage_lung |
| MRPL52             | 1.12E-07 | 0.32176101 | 0.4   | 0.258 | 0.00396282 | Macrophage_lung |
| POC5               | 1.30E-07 | 0.61768086 | 0.328 | 0.207 | 0.00459607 | Macrophage_lung |
| GAPDH              | 1.43E-07 | 0.22804831 | 0.87  | 0.768 | 0.00504983 | Macrophage_lung |
| ENSMMUG00000051392 | 1.85E-07 | 0.31043573 | 0.665 | 0.505 | 0.00654414 | Macrophage_lung |
| UBAC2              | 2.08E-07 | 0.65606281 | 0.377 | 0.256 | 0.00735684 | Macrophage_lung |
| ELF1               | 2.23E-07 | 0.41323819 | 0.543 | 0.371 | 0.00790522 | Macrophage_lung |

|                    |          |            |       |       |            |                 |
|--------------------|----------|------------|-------|-------|------------|-----------------|
| CDC123             | 2.27E-07 | 0.79049831 | 0.261 | 0.143 | 0.00804906 | Macrophage_lung |
| EIF4E2             | 2.32E-07 | 0.54795406 | 0.3   | 0.183 | 0.00822343 | Macrophage_lung |
| LAIR1              | 2.32E-07 | 0.66981107 | 0.31  | 0.188 | 0.00823261 | Macrophage_lung |
| BAZ2B              | 2.37E-07 | 1.40333988 | 0.251 | 0.148 | 0.00840115 | Macrophage_lung |
| VMP1               | 2.98E-07 | 1.13622664 | 0.322 | 0.216 | 0.01055652 | Macrophage_lung |
| VPS28              | 3.01E-07 | 0.2367499  | 0.411 | 0.263 | 0.01066847 | Macrophage_lung |
| WAS                | 3.58E-07 | 0.69221951 | 0.35  | 0.237 | 0.01268048 | Macrophage_lung |
| RIPK2              | 3.60E-07 | 0.46016165 | 0.323 | 0.195 | 0.01275044 | Macrophage_lung |
| ATP6V0A1           | 4.65E-07 | 0.83584177 | 0.335 | 0.223 | 0.01647158 | Macrophage_lung |
| LSM7               | 4.67E-07 | 0.26284579 | 0.531 | 0.394 | 0.01655671 | Macrophage_lung |
| TMEM167A           | 5.88E-07 | 0.4986441  | 0.348 | 0.23  | 0.02081766 | Macrophage_lung |
| BUD23              | 6.17E-07 | 0.6389825  | 0.309 | 0.202 | 0.02186935 | Macrophage_lung |
| PHF5A              | 6.37E-07 | 0.59145375 | 0.319 | 0.204 | 0.02255456 | Macrophage_lung |
| ENSMMUG00000059843 | 6.40E-07 | 0.33002848 | 0.316 | 0.192 | 0.02268685 | Macrophage_lung |
| ELOVL5             | 7.52E-07 | 1.11831693 | 0.254 | 0.15  | 0.02665512 | Macrophage_lung |
| ENSMMUG00000055457 | 7.56E-07 | 0.69714247 | 0.333 | 0.221 | 0.02678201 | Macrophage_lung |
| KLF7               | 8.37E-07 | 1.24480665 | 0.26  | 0.16  | 0.02964519 | Macrophage_lung |
| PDGFRA             | 8.90E-07 | 0.3536274  | 0.69  | 0.566 | 0.03151796 | Macrophage_lung |
| HNRNPM             | 9.39E-07 | 0.66105308 | 0.352 | 0.244 | 0.03327514 | Macrophage_lung |
| POLD4              | 9.43E-07 | 0.16921273 | 0.396 | 0.261 | 0.03341635 | Macrophage_lung |
| CLEC2B             | 9.99E-07 | 0.31774938 | 0.658 | 0.502 | 0.0354108  | Macrophage_lung |
| PIK3R5             | 1.03E-06 | 1.1980112  | 0.288 | 0.19  | 0.0365054  | Macrophage_lung |
| SNRPB              | 1.04E-06 | 0.2038284  | 0.451 | 0.324 | 0.03696578 | Macrophage_lung |
| BOLA2B             | 1.16E-06 | 0.46323689 | 0.286 | 0.169 | 0.04126807 | Macrophage_lung |
| PGK1               | 1.18E-06 | 0.37896392 | 0.396 | 0.258 | 0.04182302 | Macrophage_lung |
| EDF1               | 1.18E-06 | 0.27915323 | 0.605 | 0.467 | 0.04187284 | Macrophage_lung |
| ENSMMUG00000029987 | 1.23E-06 | 0.76575568 | 0.254 | 0.15  | 0.04365524 | Macrophage_lung |
| PSMB7              | 1.29E-06 | 0.25815465 | 0.578 | 0.427 | 0.04558629 | Macrophage_lung |
| TANK               | 1.30E-06 | 0.45364156 | 0.453 | 0.312 | 0.04620981 | Macrophage_lung |
| CHD2               | 1.42E-06 | 0.7622433  | 0.363 | 0.251 | 0.05025187 | Macrophage_lung |
| CDC37              | 1.43E-06 | 0.72854696 | 0.291 | 0.183 | 0.05053141 | Macrophage_lung |
| ENSMMUG00000064531 | 1.73E-06 | 0.61221672 | 0.371 | 0.261 | 0.06125707 | Macrophage_lung |
| ENSMMUG00000063288 | 1.74E-06 | 0.77589157 | 0.252 | 0.148 | 0.0616114  | Macrophage_lung |

|                    |          |            |       |       |            |                 |
|--------------------|----------|------------|-------|-------|------------|-----------------|
| ENSMMUG00000016278 | 1.75E-06 | 0.28481545 | 0.38  | 0.258 | 0.06198476 | Macrophage_lung |
| UQCRQ              | 1.83E-06 | 0.13964899 | 0.671 | 0.521 | 0.06473135 | Macrophage_lung |
| JPT1               | 1.84E-06 | 0.16084408 | 0.873 | 0.723 | 0.06527583 | Macrophage_lung |
| UPF2               | 1.92E-06 | 0.90339962 | 0.299 | 0.207 | 0.06816305 | Macrophage_lung |
| MFNG               | 2.17E-06 | 0.69483194 | 0.25  | 0.15  | 0.0769686  | Macrophage_lung |
| HNRNPH1            | 2.19E-06 | 0.59851664 | 0.441 | 0.34  | 0.07746147 | Macrophage_lung |
| ZNHIT1             | 2.40E-06 | 0.20418837 | 0.486 | 0.345 | 0.08493447 | Macrophage_lung |
| TPM4               | 2.41E-06 | 0.80377086 | 0.264 | 0.169 | 0.08547789 | Macrophage_lung |
| ENSMMUG00000039070 | 2.61E-06 | 0.58249776 | 0.295 | 0.188 | 0.0924848  | Macrophage_lung |
| MAGOH              | 2.61E-06 | 0.43706453 | 0.43  | 0.324 | 0.09258442 | Macrophage_lung |
| NF1                | 2.84E-06 | 0.90240491 | 0.327 | 0.228 | 0.10079803 | Macrophage_lung |
| ENSMMUG00000006499 | 2.93E-06 | 0.41631396 | 0.446 | 0.336 | 0.10390464 | Macrophage_lung |
| CIAO2B             | 3.50E-06 | 0.28713548 | 0.388 | 0.268 | 0.12412099 | Macrophage_lung |
| MAPK1IP1L          | 3.56E-06 | 0.78451834 | 0.287 | 0.192 | 0.12599085 | Macrophage_lung |
| EIF3L              | 3.64E-06 | 0.31359661 | 0.532 | 0.413 | 0.12892824 | Macrophage_lung |
| SNRPN              | 4.30E-06 | 0.57439369 | 0.271 | 0.171 | 0.15218728 | Macrophage_lung |
| AK2                | 4.35E-06 | 0.69751117 | 0.3   | 0.202 | 0.15429338 | Macrophage_lung |
| P2RX4              | 5.01E-06 | 1.0224274  | 0.261 | 0.171 | 0.17742749 | Macrophage_lung |
| ATP6V1G1           | 5.04E-06 | 0.13019193 | 0.822 | 0.676 | 0.17858079 | Macrophage_lung |
| COPZ1              | 5.31E-06 | 0.5629909  | 0.308 | 0.204 | 0.18816716 | Macrophage_lung |
| MAP1LC3B           | 5.82E-06 | 0.3320187  | 0.442 | 0.329 | 0.20620069 | Macrophage_lung |
| SLC39A10           | 6.87E-06 | 0.40861875 | 0.451 | 0.326 | 0.24332105 | Macrophage_lung |
| ATP6AP2            | 7.10E-06 | 0.51428653 | 0.365 | 0.263 | 0.25143422 | Macrophage_lung |
| TWF2               | 7.18E-06 | 0.25332258 | 0.425 | 0.298 | 0.25451495 | Macrophage_lung |
| SNX9               | 7.26E-06 | 0.40117358 | 0.38  | 0.27  | 0.25719613 | Macrophage_lung |
| CMTM6              | 7.27E-06 | 0.27270946 | 0.459 | 0.326 | 0.25764596 | Macrophage_lung |
| ENSMMUG00000058755 | 7.52E-06 | 0.13728756 | 0.975 | 0.934 | 0.26643516 | Macrophage_lung |
| RPS14              | 7.52E-06 | 0.13914773 | 0.991 | 0.974 | 0.26653977 | Macrophage_lung |
| DPH2               | 7.96E-06 | 0.20448274 | 0.612 | 0.481 | 0.28188048 | Macrophage_lung |
| SF3B1              | 9.43E-06 | 0.50059617 | 0.429 | 0.326 | 0.33416721 | Macrophage_lung |
| ENSMMUG00000053392 | 9.80E-06 | 0.14891174 | 0.605 | 0.472 | 0.34724639 | Macrophage_lung |
| TXNRD1             | 9.80E-06 | 0.7956773  | 0.266 | 0.167 | 0.34733466 | Macrophage_lung |
| STXBP2             | 1.15E-05 | 0.2084731  | 0.293 | 0.185 | 0.4086402  | Macrophage_lung |

|                    |          |            |       |       |            |                 |
|--------------------|----------|------------|-------|-------|------------|-----------------|
| ND4L               | 1.17E-05 | 0.31847017 | 0.446 | 0.315 | 0.41433734 | Macrophage_lung |
| ARRB2              | 1.23E-05 | 0.78009955 | 0.261 | 0.169 | 0.43601139 | Macrophage_lung |
| NDUFS8             | 1.29E-05 | 0.1382701  | 0.557 | 0.434 | 0.45738301 | Macrophage_lung |
| CFLAR              | 1.37E-05 | 0.45025394 | 0.504 | 0.387 | 0.48461306 | Macrophage_lung |
| RAN                | 1.47E-05 | 0.23561647 | 0.505 | 0.38  | 0.51926388 | Macrophage_lung |
| SWAP70             | 1.55E-05 | 0.46396665 | 0.341 | 0.244 | 0.54950933 | Macrophage_lung |
| ENSMMUG00000056012 | 1.57E-05 | 0.54288185 | 0.324 | 0.237 | 0.55796015 | Macrophage_lung |
| SSR1               | 1.61E-05 | 0.59794201 | 0.337 | 0.254 | 0.5695005  | Macrophage_lung |
| TMBIM4             | 1.74E-05 | 0.30246415 | 0.481 | 0.373 | 0.61781469 | Macrophage_lung |
| TIPARP             | 1.75E-05 | 0.89660631 | 0.273 | 0.183 | 0.6200221  | Macrophage_lung |
| STRAP              | 1.80E-05 | 0.77261127 | 0.284 | 0.197 | 0.63883057 | Macrophage_lung |
| PSMB3              | 1.82E-05 | 0.25255757 | 0.371 | 0.261 | 0.64574738 | Macrophage_lung |
| DNTTIP2            | 1.99E-05 | 0.64902218 | 0.297 | 0.211 | 0.70366824 | Macrophage_lung |
| JARID2             | 2.59E-05 | 0.47487414 | 0.406 | 0.289 | 0.91798171 | Macrophage_lung |
| SYNGR2             | 2.72E-05 | 0.666357   | 0.295 | 0.209 | 0.96551723 | Macrophage_lung |
| BRK1               | 3.15E-05 | 0.11317722 | 0.424 | 0.312 | 1          | Macrophage_lung |
| VPS29              | 3.28E-05 | 0.43181969 | 0.349 | 0.251 | 1          | Macrophage_lung |
| PPP1CB             | 3.50E-05 | 0.33099349 | 0.5   | 0.378 | 1          | Macrophage_lung |
| SLC25A43           | 3.56E-05 | 0.15760739 | 0.681 | 0.526 | 1          | Macrophage_lung |
| ERGIC3             | 3.64E-05 | 0.38945442 | 0.263 | 0.176 | 1          | Macrophage_lung |
| CDC42SE1           | 3.81E-05 | 0.64374467 | 0.254 | 0.174 | 1          | Macrophage_lung |
| IFNAR2             | 3.92E-05 | 0.28357782 | 0.623 | 0.477 | 1          | Macrophage_lung |
| RNASE6             | 4.03E-05 | 0.14590811 | 0.799 | 0.667 | 1          | Macrophage_lung |
| MED29              | 4.15E-05 | 0.63311502 | 0.26  | 0.174 | 1          | Macrophage_lung |
| MIC1               | 4.18E-05 | 0.32566209 | 0.43  | 0.319 | 1          | Macrophage_lung |
| UFC1               | 4.23E-05 | 0.29210061 | 0.391 | 0.293 | 1          | Macrophage_lung |
| GNAI2.1            | 4.25E-05 | 0.24399691 | 0.626 | 0.484 | 1          | Macrophage_lung |
| GPX4               | 4.44E-05 | 0.5914977  | 0.252 | 0.167 | 1          | Macrophage_lung |
| SPAG9              | 4.69E-05 | 0.86746768 | 0.334 | 0.254 | 1          | Macrophage_lung |
| ENSMMUG00000063609 | 4.71E-05 | 0.31733205 | 0.35  | 0.251 | 1          | Macrophage_lung |
| ENSMMUG00000061630 | 4.77E-05 | 0.68879615 | 0.277 | 0.188 | 1          | Macrophage_lung |
| SERPINB9           | 5.32E-05 | 0.70772028 | 0.341 | 0.254 | 1          | Macrophage_lung |
| RSL24D1            | 5.45E-05 | 0.23502152 | 0.482 | 0.376 | 1          | Macrophage_lung |

|                    |            |            |       |       |                   |
|--------------------|------------|------------|-------|-------|-------------------|
| ENSMMUG00000055825 | 5.58E-05   | 0.21308113 | 0.435 | 0.329 | 1 Macrophage_lung |
| RAC1               | 5.59E-05   | 0.31081509 | 0.438 | 0.343 | 1 Macrophage_lung |
| CALCRL             | 5.88E-05   | 0.94000301 | 0.285 | 0.2   | 1 Macrophage_lung |
| RPS15              | 6.07E-05   | 0.13115861 | 0.99  | 0.974 | 1 Macrophage_lung |
| ENSMMUG00000058919 | 6.13E-05   | 0.32360072 | 0.289 | 0.195 | 1 Macrophage_lung |
| BAZ1A              | 6.20E-05   | 0.43223243 | 0.435 | 0.326 | 1 Macrophage_lung |
| SUMO1              | 6.27E-05   | 0.30634062 | 0.441 | 0.343 | 1 Macrophage_lung |
| ENSMMUG00000059742 | 6.33E-05   | 0.63255275 | 0.294 | 0.209 | 1 Macrophage_lung |
| RTRAF              | 7.31E-05   | 0.1599773  | 0.459 | 0.35  | 1 Macrophage_lung |
| ENSMMUG00000012019 | 7.88E-05   | 0.17082724 | 0.488 | 0.39  | 1 Macrophage_lung |
| AIM2               | 9.15E-05   | 0.28166057 | 0.447 | 0.338 | 1 Macrophage_lung |
| STX11              | 0.00010796 | 0.77830526 | 0.268 | 0.192 | 1 Macrophage_lung |
| UBE2W              | 0.00010905 | 0.88761984 | 0.263 | 0.192 | 1 Macrophage_lung |
| MIDN               | 0.00011238 | 0.96035007 | 0.257 | 0.185 | 1 Macrophage_lung |
| DENND5A            | 0.00011359 | 0.77726603 | 0.262 | 0.181 | 1 Macrophage_lung |
| CAMTA1             | 0.00012876 | 0.19197152 | 0.465 | 0.35  | 1 Macrophage_lung |
| PDCD5              | 0.00013696 | 0.17832669 | 0.378 | 0.275 | 1 Macrophage_lung |
| RAB5A              | 0.00014186 | 0.61809458 | 0.287 | 0.209 | 1 Macrophage_lung |
| PNPLA8             | 0.00015644 | 0.78513163 | 0.25  | 0.181 | 1 Macrophage_lung |
| ARHGAP15           | 0.0001654  | 0.12037618 | 0.545 | 0.394 | 1 Macrophage_lung |
| SAFB               | 0.00017667 | 0.11481233 | 0.698 | 0.559 | 1 Macrophage_lung |
| SSR3               | 0.00018797 | 0.15259588 | 0.515 | 0.413 | 1 Macrophage_lung |
| CD69               | 0.00018856 | 0.14292701 | 0.371 | 0.265 | 1 Macrophage_lung |
| TNFRSF1B           | 0.00021154 | 0.36674539 | 0.457 | 0.362 | 1 Macrophage_lung |
| AZIN1              | 0.00021187 | 0.51890687 | 0.267 | 0.195 | 1 Macrophage_lung |
| LSM5               | 0.00021459 | 0.33535308 | 0.325 | 0.239 | 1 Macrophage_lung |
| PRPF4B             | 0.00021471 | 0.55236928 | 0.37  | 0.293 | 1 Macrophage_lung |
| CIAO2A             | 0.00022383 | 0.21414848 | 0.345 | 0.256 | 1 Macrophage_lung |
| MTHFD2L            | 0.0002258  | 0.42704504 | 0.282 | 0.202 | 1 Macrophage_lung |
| COX7C              | 0.00023403 | 0.12590363 | 0.864 | 0.749 | 1 Macrophage_lung |
| MKKS               | 0.00024325 | 0.16634731 | 0.252 | 0.171 | 1 Macrophage_lung |
| PI4K2B             | 0.00025645 | 0.42095283 | 0.355 | 0.277 | 1 Macrophage_lung |
| PLSCR1             | 0.00027225 | 0.40850538 | 0.346 | 0.263 | 1 Macrophage_lung |



|                    |            |            |       |       |                   |
|--------------------|------------|------------|-------|-------|-------------------|
| GNAQ               | 0.00027443 | 0.84549116 | 0.27  | 0.197 | 1 Macrophage_lung |
| NAA20              | 0.00027822 | 0.24046621 | 0.27  | 0.192 | 1 Macrophage_lung |
| NMT1               | 0.00029131 | 0.50202673 | 0.273 | 0.202 | 1 Macrophage_lung |
| CNPY3              | 0.00029834 | 0.33706531 | 0.295 | 0.221 | 1 Macrophage_lung |
| STX7               | 0.0003087  | 0.36679995 | 0.284 | 0.209 | 1 Macrophage_lung |
| TPM3               | 0.00030996 | 0.10610144 | 0.766 | 0.629 | 1 Macrophage_lung |
| SNU13              | 0.00039582 | 0.24696116 | 0.444 | 0.357 | 1 Macrophage_lung |
| LAMTOR3            | 0.0004088  | 0.55591118 | 0.267 | 0.197 | 1 Macrophage_lung |
| CAPZB              | 0.00046832 | 0.13703211 | 0.55  | 0.444 | 1 Macrophage_lung |
| GNAL               | 0.00046915 | 0.65371961 | 0.295 | 0.228 | 1 Macrophage_lung |
| KMT2E              | 0.00047106 | 0.95867266 | 0.322 | 0.272 | 1 Macrophage_lung |
| ARPC2              | 0.00047866 | 0.10146715 | 0.639 | 0.512 | 1 Macrophage_lung |
| PHPT1              | 0.00048096 | 0.25893357 | 0.28  | 0.195 | 1 Macrophage_lung |
| DYNC1I2            | 0.00049644 | 0.34515344 | 0.286 | 0.209 | 1 Macrophage_lung |
| GDI2               | 0.00064172 | 0.37206176 | 0.427 | 0.359 | 1 Macrophage_lung |
| PSMA1              | 0.00067323 | 0.18561012 | 0.376 | 0.296 | 1 Macrophage_lung |
| NCBP2              | 0.00091666 | 0.17873457 | 0.484 | 0.397 | 1 Macrophage_lung |
| BAX                | 0.00092488 | 0.4361794  | 0.274 | 0.207 | 1 Macrophage_lung |
| XRCC6              | 0.00093866 | 0.250739   | 0.384 | 0.305 | 1 Macrophage_lung |
| ENSMMUG00000060923 | 0.00097739 | 0.18885305 | 0.492 | 0.394 | 1 Macrophage_lung |
| PDCD4              | 0.00111054 | 0.4549519  | 0.279 | 0.211 | 1 Macrophage_lung |
| SELENOS            | 0.00112981 | 0.10600935 | 0.423 | 0.343 | 1 Macrophage_lung |
| WSB1               | 0.00119072 | 0.23483424 | 0.431 | 0.329 | 1 Macrophage_lung |
| PLIN2              | 0.00119833 | 0.68909225 | 0.287 | 0.221 | 1 Macrophage_lung |
| ARF1               | 0.00125197 | 0.14993604 | 0.602 | 0.505 | 1 Macrophage_lung |
| SH3BP5             | 0.00128878 | 0.39877629 | 0.313 | 0.235 | 1 Macrophage_lung |
| CCDC88A            | 0.00142084 | 0.23906705 | 0.387 | 0.293 | 1 Macrophage_lung |
| SNRPD1             | 0.0014388  | 0.2522067  | 0.352 | 0.284 | 1 Macrophage_lung |
| IGFLR1             | 0.00148401 | 0.50205121 | 0.269 | 0.204 | 1 Macrophage_lung |
| EIF3I              | 0.00165893 | 0.37463219 | 0.306 | 0.242 | 1 Macrophage_lung |
| PICALM             | 0.00204679 | 0.21637671 | 0.571 | 0.458 | 1 Macrophage_lung |
| HNRNPK             | 0.00209055 | 0.10888363 | 0.631 | 0.519 | 1 Macrophage_lung |
| NCOA7              | 0.00211364 | 0.29557097 | 0.33  | 0.263 | 1 Macrophage_lung |

|                    |            |            |       |       |                   |
|--------------------|------------|------------|-------|-------|-------------------|
| LLPH               | 0.00214718 | 0.26714614 | 0.281 | 0.221 | 1 Macrophage_lung |
| GPBP1              | 0.00225888 | 0.28716141 | 0.421 | 0.359 | 1 Macrophage_lung |
| NDUFS2             | 0.00232576 | 0.29817472 | 0.276 | 0.211 | 1 Macrophage_lung |
| CIB1               | 0.00236093 | 0.21860501 | 0.279 | 0.221 | 1 Macrophage_lung |
| DNAJB6             | 0.00240901 | 0.29296583 | 0.408 | 0.347 | 1 Macrophage_lung |
| SRP9               | 0.00251357 | 0.11651714 | 0.33  | 0.258 | 1 Macrophage_lung |
| ATF6               | 0.00268961 | 0.46331053 | 0.337 | 0.284 | 1 Macrophage_lung |
| SON                | 0.00270653 | 0.18033304 | 0.567 | 0.446 | 1 Macrophage_lung |
| PDCD6-AHRR         | 0.0028898  | 0.26656299 | 0.265 | 0.204 | 1 Macrophage_lung |
| CD9                | 0.00291505 | 0.24452847 | 0.324 | 0.256 | 1 Macrophage_lung |
| GHITM              | 0.00295742 | 0.41634631 | 0.328 | 0.277 | 1 Macrophage_lung |
| SUPT4H1            | 0.00304941 | 0.10805209 | 0.269 | 0.209 | 1 Macrophage_lung |
| ARHGAP26           | 0.0031883  | 0.3970312  | 0.335 | 0.27  | 1 Macrophage_lung |
| UBE2N              | 0.00356621 | 0.24111833 | 0.369 | 0.308 | 1 Macrophage_lung |
| PFDN6              | 0.00356757 | 0.41966519 | 0.291 | 0.232 | 1 Macrophage_lung |
| M6PR               | 0.00366185 | 0.28241528 | 0.38  | 0.317 | 1 Macrophage_lung |
| TXN                | 0.00367999 | 0.45310923 | 0.65  | 0.549 | 1 Macrophage_lung |
| NABP1              | 0.00371472 | 0.25557309 | 0.325 | 0.256 | 1 Macrophage_lung |
| DNAJC19            | 0.00401893 | 0.24296299 | 0.284 | 0.225 | 1 Macrophage_lung |
| EIF1AX             | 0.00407193 | 0.20024794 | 0.386 | 0.322 | 1 Macrophage_lung |
| ATP6V1A            | 0.00414384 | 0.78605713 | 0.262 | 0.214 | 1 Macrophage_lung |
| FAM162A            | 0.00415482 | 0.39375759 | 0.254 | 0.197 | 1 Macrophage_lung |
| ENSMMUG00000017113 | 0.00469523 | 0.4684948  | 0.31  | 0.251 | 1 Macrophage_lung |
| SEC11C             | 0.00532617 | 0.44343542 | 0.252 | 0.197 | 1 Macrophage_lung |
| SHISA5             | 0.00538353 | 0.12639525 | 0.317 | 0.261 | 1 Macrophage_lung |
| GOLGA1             | 0.0095668  | 0.10144756 | 0.53  | 0.444 | 1 Macrophage_lung |
| EIF4H              | 0.01029872 | 0.36947242 | 0.267 | 0.225 | 1 Macrophage_lung |
| C10H20orf27        | 0.01086111 | 0.18333843 | 0.311 | 0.256 | 1 Macrophage_lung |
| SYF2               | 0.01213255 | 0.19393009 | 0.297 | 0.246 | 1 Macrophage_lung |
| RILPL2             | 0.0123209  | 0.51994969 | 0.345 | 0.303 | 1 Macrophage_lung |
| CTSA               | 0.01240447 | 0.35087147 | 0.264 | 0.214 | 1 Macrophage_lung |
| HNRNPA1            | 0.01258047 | 0.13238074 | 0.496 | 0.427 | 1 Macrophage_lung |
| PMAIP1             | 0.01325181 | 0.34206276 | 0.311 | 0.261 | 1 Macrophage_lung |

|                    |            |            |       |       |                   |
|--------------------|------------|------------|-------|-------|-------------------|
| NBN                | 0.01358404 | 0.4350869  | 0.277 | 0.232 | 1 Macrophage_lung |
| SFPQ               | 0.01359591 | 0.4389363  | 0.365 | 0.317 | 1 Macrophage_lung |
| BZW2               | 0.01603564 | 0.5483599  | 0.25  | 0.204 | 1 Macrophage_lung |
| POLR1D             | 0.01658422 | 0.13106422 | 0.336 | 0.284 | 1 Macrophage_lung |
| RBBP4              | 0.01659435 | 0.23758972 | 0.286 | 0.239 | 1 Macrophage_lung |
| PARP6              | 0.01691473 | 0.5097963  | 0.252 | 0.211 | 1 Macrophage_lung |
| ENSMMUG00000038373 | 0.01699595 | 0.17473348 | 0.432 | 0.371 | 1 Macrophage_lung |
| ETV6               | 0.01878068 | 0.313968   | 0.324 | 0.268 | 1 Macrophage_lung |
| PTP4A1             | 0.02165401 | 0.32431597 | 0.287 | 0.246 | 1 Macrophage_lung |
| AMD1               | 0.02570085 | 0.56044221 | 0.262 | 0.225 | 1 Macrophage_lung |
| BABAM2             | 0.02900873 | 0.36461169 | 0.299 | 0.256 | 1 Macrophage_lung |
| BUD31              | 0.03107064 | 0.22166056 | 0.273 | 0.23  | 1 Macrophage_lung |
| TRPS1              | 0.03528566 | 0.27783188 | 0.303 | 0.249 | 1 Macrophage_lung |
| RNMT               | 0.03604986 | 0.5026041  | 0.251 | 0.225 | 1 Macrophage_lung |
| HIKESHI            | 0.03696724 | 0.17437271 | 0.26  | 0.221 | 1 Macrophage_lung |
| RAPGEF2            | 0.03809677 | 0.36285826 | 0.306 | 0.265 | 1 Macrophage_lung |
| USP15              | 0.03921765 | 0.12595684 | 0.438 | 0.369 | 1 Macrophage_lung |
| TXN2               | 0.04164547 | 0.20700394 | 0.273 | 0.232 | 1 Macrophage_lung |
| ARID5B             | 0.04168818 | 0.53932739 | 0.256 | 0.228 | 1 Macrophage_lung |
| IFNGR2             | 0.04560074 | 0.22839726 | 0.258 | 0.218 | 1 Macrophage_lung |
| ENSMMUG00000018740 | 0.04901019 | 0.17113648 | 0.342 | 0.305 | 1 Macrophage_lung |
| PPP1R10            | 0.05254878 | 0.1863628  | 0.296 | 0.256 | 1 Macrophage_lung |
| TAOK3              | 0.05619257 | 0.25593682 | 0.327 | 0.293 | 1 Macrophage_lung |
| RPL37A             | 0.05776297 | 0.13854672 | 0.958 | 0.951 | 1 Macrophage_lung |
| PRMT2              | 0.05947376 | 0.1767364  | 0.257 | 0.223 | 1 Macrophage_lung |
| RBMX               | 0.07130541 | 0.13498964 | 0.391 | 0.347 | 1 Macrophage_lung |
| USP3               | 0.0794223  | 0.37220255 | 0.253 | 0.221 | 1 Macrophage_lung |
| PREX1              | 0.09559423 | 0.18484983 | 0.337 | 0.312 | 1 Macrophage_lung |
| HNRNPU             | 0.10239196 | 0.11771975 | 0.541 | 0.472 | 1 Macrophage_lung |
| TAF7               | 0.13750526 | 0.12349283 | 0.251 | 0.225 | 1 Macrophage_lung |
| TCF4               | 0.15139676 | 0.24756229 | 0.271 | 0.242 | 1 Macrophage_lung |
| TUT7               | 0.17340301 | 0.22808027 | 0.299 | 0.268 | 1 Macrophage_lung |
| AIP                | 0.18285827 | 0.1133621  | 0.252 | 0.23  | 1 Macrophage_lung |

|                    |            |            |       |       |           |                   |
|--------------------|------------|------------|-------|-------|-----------|-------------------|
| ZFAND5             | 0.20682964 | 0.44021425 | 0.274 | 0.258 | 1         | Macrophage_lung   |
| WTAP               | 0.22204201 | 0.24996344 | 0.33  | 0.31  | 1         | Macrophage_lung   |
| THRAP3             | 0.23080317 | 0.25324623 | 0.295 | 0.286 | 1         | Macrophage_lung   |
| ZNF207             | 0.60967893 | 0.20547926 | 0.248 | 0.256 | 1         | Macrophage_lung   |
| HUWE1              | 0.61159321 | 0.25535165 | 0.245 | 0.256 | 1         | Macrophage_lung   |
| HMOX1              | 0          | 7.63416652 | 0.932 | 0.051 | 0         | Macrophage_spleen |
| SLC40A1            | 5.72E-307  | 5.85315137 | 0.915 | 0.061 | 2.03E-302 | Macrophage_spleen |
| VCAM1              | 1.51E-295  | 9.70219936 | 0.759 | 0.005 | 5.37E-291 | Macrophage_spleen |
| ENSMMUG00000061260 | 4.01E-293  | 8.28744541 | 0.752 | 0.004 | 1.42E-288 | Macrophage_spleen |
| CFD                | 9.27E-256  | 5.44035337 | 0.953 | 0.192 | 3.29E-251 | Macrophage_spleen |
| ENSMMUG00000051300 | 1.21E-221  | 4.33108381 | 0.981 | 0.416 | 4.27E-217 | Macrophage_spleen |
| CREG1              | 1.34E-220  | 5.04389289 | 0.825 | 0.116 | 4.73E-216 | Macrophage_spleen |
| CTSD               | 1.82E-219  | 4.61594795 | 0.901 | 0.174 | 6.45E-215 | Macrophage_spleen |
| FCGR3              | 1.82E-214  | 4.7683428  | 0.781 | 0.087 | 6.46E-210 | Macrophage_spleen |
| C1QB               | 1.97E-204  | 3.98368026 | 0.986 | 0.42  | 6.98E-200 | Macrophage_spleen |
| APOE               | 3.47E-203  | 4.57910142 | 0.95  | 0.354 | 1.23E-198 | Macrophage_spleen |
| GATM               | 4.03E-199  | 4.98560678 | 0.696 | 0.06  | 1.43E-194 | Macrophage_spleen |
| RPL13              | 7.98E-197  | 2.84815104 | 0.991 | 0.778 | 2.83E-192 | Macrophage_spleen |
| C1QC               | 3.43E-192  | 3.44752658 | 0.993 | 0.532 | 1.21E-187 | Macrophage_spleen |
| ENSMMUG00000063725 | 8.09E-187  | 3.31596963 | 0.995 | 0.672 | 2.87E-182 | Macrophage_spleen |
| ENSMMUG00000054358 | 2.97E-178  | 3.82579346 | 0.955 | 0.494 | 1.05E-173 | Macrophage_spleen |
| ASPH               | 4.63E-163  | 5.12079723 | 0.604 | 0.058 | 1.64E-158 | Macrophage_spleen |
| ENSMMUG00000052127 | 1.37E-161  | 2.95015328 | 0.981 | 0.811 | 4.84E-157 | Macrophage_spleen |
| ENSMMUG00000030144 | 7.08E-159  | 3.73321014 | 0.807 | 0.204 | 2.51E-154 | Macrophage_spleen |
| RPS20              | 5.45E-155  | 2.01991425 | 0.981 | 0.859 | 1.93E-150 | Macrophage_spleen |
| DNASE1L3           | 1.97E-151  | 5.47197687 | 0.495 | 0.023 | 6.99E-147 | Macrophage_spleen |
| CTSL               | 4.14E-149  | 3.54986868 | 0.828 | 0.249 | 1.47E-144 | Macrophage_spleen |
| ITM2B              | 1.03E-145  | 2.7638795  | 0.915 | 0.568 | 3.64E-141 | Macrophage_spleen |
| TSPAN4             | 6.37E-139  | 4.27617296 | 0.561 | 0.059 | 2.26E-134 | Macrophage_spleen |
| BCAM               | 5.64E-135  | 6.52277795 | 0.384 | 0.004 | 2.00E-130 | Macrophage_spleen |
| LIPA               | 6.70E-133  | 3.6259503  | 0.698 | 0.156 | 2.37E-128 | Macrophage_spleen |
| CLTA               | 2.43E-132  | 3.33252082 | 0.745 | 0.195 | 8.59E-128 | Macrophage_spleen |
| BLVRB              | 2.69E-131  | 3.36358896 | 0.797 | 0.253 | 9.54E-127 | Macrophage_spleen |

|                      |           |            |       |       |           |                   |
|----------------------|-----------|------------|-------|-------|-----------|-------------------|
| RNASET2              | 1.38E-129 | 2.66859126 | 0.901 | 0.561 | 4.89E-125 | Macrophage_spleen |
| IFT74                | 9.27E-127 | 6.09798541 | 0.413 | 0.017 | 3.29E-122 | Macrophage_spleen |
| TGFBI                | 2.40E-121 | 3.34267414 | 0.663 | 0.144 | 8.52E-117 | Macrophage_spleen |
| CD68                 | 2.61E-121 | 2.8943537  | 0.792 | 0.263 | 9.26E-117 | Macrophage_spleen |
| BLVRA                | 1.55E-113 | 3.84699655 | 0.521 | 0.069 | 5.49E-109 | Macrophage_spleen |
| NRP1                 | 1.33E-110 | 4.54234865 | 0.469 | 0.054 | 4.71E-106 | Macrophage_spleen |
| ENSMMUG000000017466  | 5.64E-109 | 2.25507791 | 0.95  | 0.76  | 2.00E-104 | Macrophage_spleen |
| AKR7A2               | 1.07E-106 | 3.7779463  | 0.557 | 0.099 | 3.79E-102 | Macrophage_spleen |
| MCOLN1               | 2.80E-104 | 4.69344101 | 0.356 | 0.017 | 9.91E-100 | Macrophage_spleen |
| APOL2                | 3.06E-104 | 4.57868299 | 0.394 | 0.029 | 1.08E-99  | Macrophage_spleen |
| FABP4                | 1.68E-103 | 7.63976124 | 0.3   | 0.003 | 5.94E-99  | Macrophage_spleen |
| CFP                  | 1.46E-99  | 2.73240081 | 0.8   | 0.359 | 5.18E-95  | Macrophage_spleen |
| HBE1                 | 3.07E-99  | 10.1885555 | 0.285 | 0.003 | 1.09E-94  | Macrophage_spleen |
| CEACAM5              | 1.02E-97  | 4.46257796 | 0.342 | 0.017 | 3.63E-93  | Macrophage_spleen |
| TNFRSF21             | 1.55E-97  | 4.90449893 | 0.373 | 0.029 | 5.49E-93  | Macrophage_spleen |
| RPS2                 | 4.99E-92  | 2.0609118  | 0.84  | 0.555 | 1.77E-87  | Macrophage_spleen |
| SLAMF9               | 5.22E-91  | 3.22153406 | 0.578 | 0.138 | 1.85E-86  | Macrophage_spleen |
| ND2                  | 3.43E-90  | 1.9257585  | 0.922 | 0.821 | 1.21E-85  | Macrophage_spleen |
| ENSMMUG000000000729  | 1.14E-89  | 6.1809573  | 0.285 | 0.008 | 4.03E-85  | Macrophage_spleen |
| TRAPPC5              | 3.55E-89  | 3.81568631 | 0.441 | 0.062 | 1.26E-84  | Macrophage_spleen |
| CXCL12               | 4.76E-88  | 7.59492244 | 0.25  | 0.001 | 1.69E-83  | Macrophage_spleen |
| PMP22                | 3.31E-87  | 4.96514406 | 0.316 | 0.018 | 1.17E-82  | Macrophage_spleen |
| HACD1                | 4.90E-87  | 4.60065403 | 0.335 | 0.025 | 1.74E-82  | Macrophage_spleen |
| PPARG                | 8.01E-85  | 5.3647857  | 0.304 | 0.017 | 2.84E-80  | Macrophage_spleen |
| TIMD4                | 4.23E-84  | 6.50461907 | 0.259 | 0.006 | 1.50E-79  | Macrophage_spleen |
| RGL1                 | 2.59E-83  | 3.89370358 | 0.368 | 0.041 | 9.18E-79  | Macrophage_spleen |
| ENSMMUG0000000049833 | 7.30E-83  | 5.5026726  | 0.307 | 0.019 | 2.59E-78  | Macrophage_spleen |
| CHCHD10              | 7.02E-80  | 3.31180053 | 0.479 | 0.095 | 2.49E-75  | Macrophage_spleen |
| VSIG4                | 9.36E-79  | 5.0852364  | 0.278 | 0.014 | 3.32E-74  | Macrophage_spleen |
| DNASE2B              | 1.67E-78  | 6.1040131  | 0.252 | 0.008 | 5.91E-74  | Macrophage_spleen |
| EPB41L2              | 3.71E-78  | 3.03930168 | 0.542 | 0.145 | 1.31E-73  | Macrophage_spleen |
| CD63                 | 4.92E-78  | 1.64788496 | 0.917 | 0.691 | 1.74E-73  | Macrophage_spleen |
| CD300LG              | 1.92E-75  | 4.94366643 | 0.292 | 0.021 | 6.82E-71  | Macrophage_spleen |

|                    |          |            |       |       |          |                   |
|--------------------|----------|------------|-------|-------|----------|-------------------|
| SHMT1              | 3.18E-74 | 5.00311474 | 0.269 | 0.015 | 1.13E-69 | Macrophage_spleen |
| FTL                | 4.26E-74 | 1.47095639 | 1     | 0.997 | 1.51E-69 | Macrophage_spleen |
| PRELID1            | 7.20E-73 | 3.01660528 | 0.524 | 0.137 | 2.55E-68 | Macrophage_spleen |
| APOC1              | 8.34E-72 | 1.66831707 | 0.825 | 0.382 | 2.96E-67 | Macrophage_spleen |
| ATP13A2            | 3.30E-71 | 4.1792644  | 0.281 | 0.021 | 1.17E-66 | Macrophage_spleen |
| RPL27A             | 9.48E-70 | 0.94802407 | 0.983 | 0.962 | 3.36E-65 | Macrophage_spleen |
| AIF1               | 3.33E-68 | 1.32207542 | 0.986 | 0.954 | 1.18E-63 | Macrophage_spleen |
| C10H20orf24        | 1.68E-66 | 3.11662359 | 0.458 | 0.108 | 5.94E-62 | Macrophage_spleen |
| ENSMMUG00000040065 | 7.33E-66 | 3.98601236 | 0.285 | 0.027 | 2.60E-61 | Macrophage_spleen |
| SPATS2L            | 1.09E-65 | 3.80697341 | 0.304 | 0.034 | 3.87E-61 | Macrophage_spleen |
| B2M                | 1.43E-65 | 0.7863259  | 1     | 0.999 | 5.08E-61 | Macrophage_spleen |
| ITSN1              | 9.78E-63 | 3.82295003 | 0.255 | 0.02  | 3.47E-58 | Macrophage_spleen |
| PECAM1             | 2.61E-62 | 2.60803827 | 0.509 | 0.156 | 9.26E-58 | Macrophage_spleen |
| UXS1               | 1.77E-61 | 3.656212   | 0.368 | 0.071 | 6.28E-57 | Macrophage_spleen |
| PHACTR2            | 6.87E-61 | 3.77286176 | 0.292 | 0.035 | 2.43E-56 | Macrophage_spleen |
| ATP1B1             | 1.02E-60 | 3.61447951 | 0.274 | 0.028 | 3.62E-56 | Macrophage_spleen |
| ENSMMUG00000065373 | 2.44E-60 | 2.06358304 | 0.887 | 0.848 | 8.64E-56 | Macrophage_spleen |
| ULK2               | 3.32E-58 | 3.71006527 | 0.285 | 0.036 | 1.18E-53 | Macrophage_spleen |
| HEBP1              | 5.91E-58 | 3.17433179 | 0.399 | 0.088 | 2.10E-53 | Macrophage_spleen |
| TCF7L2             | 9.23E-58 | 3.09158678 | 0.335 | 0.056 | 3.27E-53 | Macrophage_spleen |
| TMEM160            | 2.30E-57 | 4.0627656  | 0.25  | 0.023 | 8.16E-53 | Macrophage_spleen |
| VOPP1              | 1.11E-56 | 3.68466808 | 0.283 | 0.036 | 3.93E-52 | Macrophage_spleen |
| SCARB2             | 1.74E-56 | 3.1184473  | 0.297 | 0.041 | 6.15E-52 | Macrophage_spleen |
| CCL24              | 2.10E-55 | 4.3792872  | 0.297 | 0.045 | 7.44E-51 | Macrophage_spleen |
| GPNMB              | 3.12E-55 | 2.35823796 | 0.349 | 0.063 | 1.11E-50 | Macrophage_spleen |
| UNC93B1            | 1.50E-53 | 3.52765926 | 0.285 | 0.041 | 5.33E-49 | Macrophage_spleen |
| ENSMMUG00000013289 | 2.71E-53 | 2.86977225 | 0.363 | 0.077 | 9.60E-49 | Macrophage_spleen |
| COX3               | 6.62E-53 | 2.08239576 | 0.854 | 0.896 | 2.34E-48 | Macrophage_spleen |
| SESN3              | 6.35E-51 | 2.93911314 | 0.37  | 0.088 | 2.25E-46 | Macrophage_spleen |
| BST2               | 1.72E-50 | 1.59179454 | 0.84  | 0.651 | 6.09E-46 | Macrophage_spleen |
| TRIR               | 4.48E-50 | 2.37145283 | 0.483 | 0.161 | 1.59E-45 | Macrophage_spleen |
| SLC7A8             | 5.95E-50 | 2.88420864 | 0.373 | 0.091 | 2.11E-45 | Macrophage_spleen |
| ENSMMUG00000065362 | 7.91E-50 | 1.33787654 | 0.993 | 0.99  | 2.80E-45 | Macrophage_spleen |

|                    |          |            |       |       |          |                   |
|--------------------|----------|------------|-------|-------|----------|-------------------|
| LAMP1              | 2.48E-49 | 2.4327727  | 0.443 | 0.128 | 8.78E-45 | Macrophage_spleen |
| FTH1               | 6.71E-49 | 1.1453396  | 0.995 | 0.966 | 2.38E-44 | Macrophage_spleen |
| CD72               | 4.37E-48 | 2.51352427 | 0.396 | 0.106 | 1.55E-43 | Macrophage_spleen |
| DAB2               | 2.15E-46 | 2.71915388 | 0.399 | 0.117 | 7.61E-42 | Macrophage_spleen |
| RPL23A             | 3.27E-46 | 0.79505101 | 0.972 | 0.97  | 1.16E-41 | Macrophage_spleen |
| COX5A              | 3.91E-46 | 2.93478153 | 0.377 | 0.1   | 1.39E-41 | Macrophage_spleen |
| FYB1               | 7.82E-46 | 2.20818316 | 0.601 | 0.343 | 2.77E-41 | Macrophage_spleen |
| DBNDD2             | 2.32E-45 | 3.3938106  | 0.252 | 0.038 | 8.20E-41 | Macrophage_spleen |
| GLUL               | 2.47E-45 | 1.83144136 | 0.691 | 0.397 | 8.74E-41 | Macrophage_spleen |
| NDFIP1             | 2.74E-45 | 2.34638579 | 0.472 | 0.164 | 9.71E-41 | Macrophage_spleen |
| HINT2              | 1.12E-44 | 3.51431917 | 0.259 | 0.042 | 3.96E-40 | Macrophage_spleen |
| WWP1               | 2.16E-44 | 2.69373546 | 0.351 | 0.091 | 7.67E-40 | Macrophage_spleen |
| C1QBP              | 2.50E-44 | 3.12763087 | 0.257 | 0.041 | 8.86E-40 | Macrophage_spleen |
| ENSMMUG00000055687 | 2.95E-44 | 2.7005061  | 0.344 | 0.083 | 1.04E-39 | Macrophage_spleen |
| MAF                | 5.82E-44 | 2.37382772 | 0.462 | 0.164 | 2.06E-39 | Macrophage_spleen |
| LIMCH1             | 9.58E-44 | 3.50017133 | 0.257 | 0.044 | 3.40E-39 | Macrophage_spleen |
| RRBP1              | 1.07E-43 | 2.51467177 | 0.406 | 0.124 | 3.80E-39 | Macrophage_spleen |
| TNFAIP8L2          | 3.12E-43 | 2.94738767 | 0.311 | 0.069 | 1.11E-38 | Macrophage_spleen |
| FMNL2              | 2.93E-42 | 3.62839309 | 0.314 | 0.076 | 1.04E-37 | Macrophage_spleen |
| LPL                | 1.12E-41 | 2.46702111 | 0.37  | 0.104 | 3.98E-37 | Macrophage_spleen |
| TNFRSF1A           | 1.21E-41 | 2.6322964  | 0.358 | 0.098 | 4.28E-37 | Macrophage_spleen |
| ATP11C             | 1.49E-41 | 2.84620341 | 0.281 | 0.055 | 5.30E-37 | Macrophage_spleen |
| ENSMMUG00000061125 | 1.54E-41 | 2.25817147 | 0.651 | 0.438 | 5.46E-37 | Macrophage_spleen |
| APBB1IP            | 2.87E-41 | 2.01639756 | 0.547 | 0.29  | 1.02E-36 | Macrophage_spleen |
| ENSMMUG00000002075 | 6.27E-41 | 1.3280284  | 0.908 | 0.828 | 2.22E-36 | Macrophage_spleen |
| FABP5              | 7.56E-41 | 1.49215901 | 0.634 | 0.339 | 2.68E-36 | Macrophage_spleen |
| ENSMMUG00000001458 | 2.03E-40 | 1.03721692 | 0.925 | 0.869 | 7.19E-36 | Macrophage_spleen |
| DNAJC3             | 1.54E-39 | 2.32313647 | 0.413 | 0.138 | 5.47E-35 | Macrophage_spleen |
| NOL7               | 4.82E-39 | 2.67467161 | 0.311 | 0.076 | 1.71E-34 | Macrophage_spleen |
| LGMN               | 6.95E-39 | 1.78478462 | 0.601 | 0.314 | 2.46E-34 | Macrophage_spleen |
| MYDGF              | 1.05E-38 | 1.98536954 | 0.564 | 0.276 | 3.72E-34 | Macrophage_spleen |
| CEPT1              | 1.58E-38 | 2.35653124 | 0.396 | 0.134 | 5.61E-34 | Macrophage_spleen |
| ADA                | 3.18E-38 | 2.79111427 | 0.269 | 0.056 | 1.13E-33 | Macrophage_spleen |

|                    |          |            |       |       |          |                   |
|--------------------|----------|------------|-------|-------|----------|-------------------|
| CTSC               | 3.85E-38 | 1.12438365 | 0.844 | 0.666 | 1.36E-33 | Macrophage_spleen |
| GNPDA1             | 9.75E-38 | 2.86013094 | 0.3   | 0.074 | 3.45E-33 | Macrophage_spleen |
| D2HGDH             | 1.21E-37 | 2.95497817 | 0.262 | 0.054 | 4.30E-33 | Macrophage_spleen |
| SDC2               | 1.53E-37 | 2.60365265 | 0.354 | 0.113 | 5.42E-33 | Macrophage_spleen |
| CPEB1              | 2.29E-37 | 0.75634358 | 0.934 | 0.921 | 8.11E-33 | Macrophage_spleen |
| ENSMMUG00000063316 | 5.06E-37 | 2.54359567 | 0.42  | 0.156 | 1.79E-32 | Macrophage_spleen |
| ACAP2              | 6.47E-37 | 2.05023803 | 0.465 | 0.203 | 2.29E-32 | Macrophage_spleen |
| UCP2               | 7.64E-37 | 2.02720586 | 0.514 | 0.232 | 2.71E-32 | Macrophage_spleen |
| HBA                | 1.33E-36 | 4.84510858 | 0.34  | 0.101 | 4.71E-32 | Macrophage_spleen |
| PARVB              | 1.45E-36 | 2.21503779 | 0.264 | 0.054 | 5.15E-32 | Macrophage_spleen |
| SRRM2              | 2.89E-36 | 2.05992829 | 0.387 | 0.131 | 1.02E-31 | Macrophage_spleen |
| SLCO2B1            | 3.65E-36 | 2.48710732 | 0.259 | 0.054 | 1.29E-31 | Macrophage_spleen |
| PRNP               | 9.46E-36 | 2.22779831 | 0.432 | 0.165 | 3.35E-31 | Macrophage_spleen |
| ANO6               | 1.19E-35 | 2.60235455 | 0.307 | 0.081 | 4.20E-31 | Macrophage_spleen |
| ME2                | 3.90E-35 | 2.36699735 | 0.333 | 0.095 | 1.38E-30 | Macrophage_spleen |
| PCBD1              | 1.01E-34 | 2.74898509 | 0.292 | 0.075 | 3.56E-30 | Macrophage_spleen |
| CR1L               | 1.07E-34 | 1.52142117 | 0.653 | 0.384 | 3.78E-30 | Macrophage_spleen |
| FOLR2              | 1.51E-34 | 1.81600691 | 0.526 | 0.245 | 5.33E-30 | Macrophage_spleen |
| ATP5F1D            | 1.74E-34 | 2.02913051 | 0.425 | 0.156 | 6.18E-30 | Macrophage_spleen |
| COTL1              | 5.28E-34 | 1.34184824 | 0.71  | 0.518 | 1.87E-29 | Macrophage_spleen |
| PFN1               | 4.63E-33 | 1.02636422 | 0.828 | 0.705 | 1.64E-28 | Macrophage_spleen |
| ADK                | 5.84E-33 | 2.1960819  | 0.41  | 0.165 | 2.07E-28 | Macrophage_spleen |
| ACAD10             | 1.45E-32 | 1.76794719 | 0.5   | 0.23  | 5.12E-28 | Macrophage_spleen |
| TICAM2             | 4.51E-32 | 2.65866116 | 0.278 | 0.072 | 1.60E-27 | Macrophage_spleen |
| FAM107B            | 4.73E-32 | 2.34405574 | 0.479 | 0.238 | 1.68E-27 | Macrophage_spleen |
| SLMAP              | 1.31E-31 | 2.08533075 | 0.255 | 0.059 | 4.63E-27 | Macrophage_spleen |
| SPPL3              | 5.19E-31 | 2.08885566 | 0.271 | 0.07  | 1.84E-26 | Macrophage_spleen |
| CCDC57             | 7.74E-31 | 2.45625396 | 0.285 | 0.079 | 2.74E-26 | Macrophage_spleen |
| MYOF               | 8.21E-31 | 2.59597639 | 0.255 | 0.064 | 2.91E-26 | Macrophage_spleen |
| AXL                | 1.90E-30 | 2.19725995 | 0.408 | 0.167 | 6.74E-26 | Macrophage_spleen |
| HSP90B1            | 2.43E-30 | 1.43411835 | 0.712 | 0.563 | 8.62E-26 | Macrophage_spleen |
| SCAMP1             | 3.09E-30 | 2.01896261 | 0.316 | 0.096 | 1.10E-25 | Macrophage_spleen |
| HSBP1              | 3.58E-30 | 1.35467853 | 0.769 | 0.657 | 1.27E-25 | Macrophage_spleen |



|         |          |            |       |       |          |                   |
|---------|----------|------------|-------|-------|----------|-------------------|
| COX1    | 5.31E-30 | 1.46024719 | 0.818 | 0.87  | 1.88E-25 | Macrophage_spleen |
| CTSZ    | 3.97E-29 | 1.82705076 | 0.467 | 0.216 | 1.41E-24 | Macrophage_spleen |
| SNX5    | 5.89E-29 | 1.9008466  | 0.458 | 0.215 | 2.09E-24 | Macrophage_spleen |
| ZBED1   | 1.74E-28 | 1.79314545 | 0.429 | 0.191 | 6.18E-24 | Macrophage_spleen |
| EIF4A2  | 2.88E-28 | 1.73589655 | 0.519 | 0.28  | 1.02E-23 | Macrophage_spleen |
| MRPL17  | 2.92E-28 | 2.21063552 | 0.29  | 0.088 | 1.03E-23 | Macrophage_spleen |
| WASF2   | 3.33E-28 | 1.71992807 | 0.436 | 0.2   | 1.18E-23 | Macrophage_spleen |
| GOLIM4  | 5.83E-28 | 2.15881673 | 0.257 | 0.069 | 2.06E-23 | Macrophage_spleen |
| CD2AP   | 6.00E-28 | 2.32869186 | 0.271 | 0.078 | 2.13E-23 | Macrophage_spleen |
| RPL13A  | 6.69E-28 | 0.6474496  | 0.958 | 0.968 | 2.37E-23 | Macrophage_spleen |
| TTC3    | 7.03E-28 | 2.36790233 | 0.259 | 0.07  | 2.49E-23 | Macrophage_spleen |
| PDIA6   | 9.14E-28 | 2.09388037 | 0.382 | 0.152 | 3.24E-23 | Macrophage_spleen |
| ND4     | 3.16E-27 | 1.28856233 | 0.823 | 0.864 | 1.12E-22 | Macrophage_spleen |
| DSE     | 6.85E-27 | 2.16849644 | 0.351 | 0.135 | 2.43E-22 | Macrophage_spleen |
| COX2    | 8.09E-27 | 1.27563936 | 0.814 | 0.895 | 2.87E-22 | Macrophage_spleen |
| LRIF1   | 8.28E-27 | 1.70435903 | 0.483 | 0.237 | 2.94E-22 | Macrophage_spleen |
| RNF149  | 1.03E-26 | 1.72136043 | 0.429 | 0.197 | 3.64E-22 | Macrophage_spleen |
| ITGAX   | 1.90E-26 | 2.05476628 | 0.304 | 0.101 | 6.74E-22 | Macrophage_spleen |
| CYC1    | 1.97E-26 | 2.11186429 | 0.344 | 0.128 | 6.98E-22 | Macrophage_spleen |
| ATP6    | 2.20E-26 | 1.4977456  | 0.807 | 0.857 | 7.79E-22 | Macrophage_spleen |
| ENPP2   | 4.32E-26 | 2.31153277 | 0.257 | 0.075 | 1.53E-21 | Macrophage_spleen |
| RPL23   | 9.43E-26 | 0.59557376 | 0.955 | 0.949 | 3.34E-21 | Macrophage_spleen |
| ARRDC3  | 1.65E-25 | 1.85617287 | 0.281 | 0.088 | 5.84E-21 | Macrophage_spleen |
| BMT2    | 2.19E-25 | 3.16887284 | 0.34  | 0.136 | 7.75E-21 | Macrophage_spleen |
| TMEM147 | 4.64E-25 | 1.99472748 | 0.349 | 0.136 | 1.65E-20 | Macrophage_spleen |
| NUDT16  | 5.12E-25 | 2.36986408 | 0.267 | 0.083 | 1.81E-20 | Macrophage_spleen |
| APH1B   | 7.97E-25 | 1.92819715 | 0.281 | 0.088 | 2.83E-20 | Macrophage_spleen |
| YEATS2  | 8.44E-25 | 1.85432575 | 0.271 | 0.084 | 2.99E-20 | Macrophage_spleen |
| UBB     | 9.19E-25 | 0.88206694 | 0.844 | 0.806 | 3.26E-20 | Macrophage_spleen |
| CMTM3   | 1.00E-24 | 2.02588895 | 0.281 | 0.09  | 3.55E-20 | Macrophage_spleen |
| PYCARD  | 1.60E-24 | 1.02866226 | 0.767 | 0.601 | 5.67E-20 | Macrophage_spleen |
| PPP1CC  | 1.94E-24 | 2.01997028 | 0.3   | 0.103 | 6.88E-20 | Macrophage_spleen |
| GOLM2   | 2.12E-24 | 1.93505733 | 0.288 | 0.095 | 7.52E-20 | Macrophage_spleen |

|                     |          |            |       |       |          |                   |
|---------------------|----------|------------|-------|-------|----------|-------------------|
| FKBP5               | 2.29E-24 | 1.91378662 | 0.309 | 0.111 | 8.13E-20 | Macrophage_spleen |
| HEXB                | 2.39E-24 | 1.86467384 | 0.425 | 0.2   | 8.47E-20 | Macrophage_spleen |
| ARL5A               | 2.64E-24 | 1.91285445 | 0.316 | 0.115 | 9.35E-20 | Macrophage_spleen |
| ADAP2               | 3.48E-24 | 2.01390288 | 0.285 | 0.097 | 1.23E-19 | Macrophage_spleen |
| ASAH1               | 5.12E-24 | 1.53828503 | 0.45  | 0.224 | 1.81E-19 | Macrophage_spleen |
| PTPMT1              | 5.69E-24 | 2.04650635 | 0.318 | 0.117 | 2.02E-19 | Macrophage_spleen |
| DBNL                | 6.23E-24 | 1.45191419 | 0.552 | 0.312 | 2.21E-19 | Macrophage_spleen |
| CNDP1               | 6.59E-24 | 1.93501699 | 0.342 | 0.134 | 2.34E-19 | Macrophage_spleen |
| SRSF4               | 6.90E-24 | 1.54838453 | 0.304 | 0.104 | 2.45E-19 | Macrophage_spleen |
| CAPRIN1             | 7.31E-24 | 2.0102319  | 0.262 | 0.081 | 2.59E-19 | Macrophage_spleen |
| ALKBH7              | 7.68E-24 | 1.98533686 | 0.288 | 0.098 | 2.72E-19 | Macrophage_spleen |
| FBXW7               | 8.02E-24 | 2.34539947 | 0.3   | 0.113 | 2.84E-19 | Macrophage_spleen |
| NBR1                | 8.93E-24 | 1.99943849 | 0.285 | 0.095 | 3.16E-19 | Macrophage_spleen |
| VAPA                | 9.70E-24 | 1.58855319 | 0.483 | 0.266 | 3.44E-19 | Macrophage_spleen |
| PSAP                | 1.33E-23 | 0.80444335 | 0.844 | 0.784 | 4.70E-19 | Macrophage_spleen |
| DUSP6               | 1.67E-23 | 1.57208405 | 0.3   | 0.105 | 5.93E-19 | Macrophage_spleen |
| HSPH1               | 1.79E-23 | 1.99870788 | 0.344 | 0.145 | 6.36E-19 | Macrophage_spleen |
| ENSMMUG00000008587  | 1.80E-23 | 1.79995249 | 0.269 | 0.089 | 6.39E-19 | Macrophage_spleen |
| SEL1L               | 2.44E-23 | 1.95425458 | 0.333 | 0.132 | 8.63E-19 | Macrophage_spleen |
| TTYH3               | 2.56E-23 | 1.77857555 | 0.285 | 0.095 | 9.09E-19 | Macrophage_spleen |
| C19H19orf38         | 2.64E-23 | 1.99696077 | 0.285 | 0.097 | 9.34E-19 | Macrophage_spleen |
| NCOR1               | 3.14E-23 | 1.66141421 | 0.278 | 0.091 | 1.11E-18 | Macrophage_spleen |
| ENSMMUG000000054052 | 3.92E-23 | 1.94915483 | 0.283 | 0.097 | 1.39E-18 | Macrophage_spleen |
| PLBD1               | 4.47E-23 | 1.69928695 | 0.429 | 0.209 | 1.58E-18 | Macrophage_spleen |
| UTRN                | 5.80E-23 | 2.05034738 | 0.318 | 0.13  | 2.05E-18 | Macrophage_spleen |
| RNASEH2C            | 6.52E-23 | 2.0131233  | 0.354 | 0.149 | 2.31E-18 | Macrophage_spleen |
| HNRNPAB             | 9.82E-23 | 2.01866589 | 0.262 | 0.084 | 3.48E-18 | Macrophage_spleen |
| SNX2                | 1.08E-22 | 1.54806067 | 0.542 | 0.34  | 3.83E-18 | Macrophage_spleen |
| FRMD4B              | 1.23E-22 | 2.86464675 | 0.274 | 0.106 | 4.34E-18 | Macrophage_spleen |
| DOCK11              | 1.23E-22 | 1.97995446 | 0.292 | 0.105 | 4.36E-18 | Macrophage_spleen |
| RANBP1              | 1.75E-22 | 2.15360539 | 0.281 | 0.101 | 6.21E-18 | Macrophage_spleen |
| BRI3                | 1.80E-22 | 1.99051506 | 0.37  | 0.163 | 6.39E-18 | Macrophage_spleen |
| TMCC1               | 2.04E-22 | 2.24059628 | 0.269 | 0.093 | 7.21E-18 | Macrophage_spleen |

|                    |          |            |       |       |          |                   |
|--------------------|----------|------------|-------|-------|----------|-------------------|
| ZNF148             | 2.22E-22 | 1.75411333 | 0.25  | 0.076 | 7.85E-18 | Macrophage_spleen |
| ITGAL              | 2.33E-22 | 1.93972505 | 0.25  | 0.078 | 8.27E-18 | Macrophage_spleen |
| GALNT1             | 2.75E-22 | 1.66445766 | 0.33  | 0.131 | 9.76E-18 | Macrophage_spleen |
| SNX6               | 3.31E-22 | 1.48538978 | 0.517 | 0.307 | 1.17E-17 | Macrophage_spleen |
| ADGRE5             | 3.36E-22 | 2.07801854 | 0.417 | 0.23  | 1.19E-17 | Macrophage_spleen |
| PSME4              | 4.53E-22 | 1.79434679 | 0.274 | 0.094 | 1.60E-17 | Macrophage_spleen |
| RNF130             | 4.65E-22 | 1.68519007 | 0.443 | 0.238 | 1.65E-17 | Macrophage_spleen |
| MOSPD2             | 6.95E-22 | 2.07794742 | 0.262 | 0.087 | 2.46E-17 | Macrophage_spleen |
| CALR               | 7.60E-22 | 1.30772029 | 0.627 | 0.432 | 2.69E-17 | Macrophage_spleen |
| ARHGAP25           | 7.90E-22 | 1.82230071 | 0.262 | 0.087 | 2.80E-17 | Macrophage_spleen |
| ENSMMUG00000003130 | 7.99E-22 | 1.68609756 | 0.297 | 0.109 | 2.83E-17 | Macrophage_spleen |
| ATP5PB             | 8.10E-22 | 1.78293593 | 0.41  | 0.199 | 2.87E-17 | Macrophage_spleen |
| RALBP1             | 1.08E-21 | 2.06313343 | 0.257 | 0.085 | 3.82E-17 | Macrophage_spleen |
| NRIP1              | 1.39E-21 | 2.52373366 | 0.314 | 0.135 | 4.91E-17 | Macrophage_spleen |
| MSR1               | 5.57E-21 | 1.80227048 | 0.281 | 0.106 | 1.97E-16 | Macrophage_spleen |
| ARHGAP17           | 6.35E-21 | 1.60742959 | 0.311 | 0.123 | 2.25E-16 | Macrophage_spleen |
| ENSMMUG00000028699 | 6.75E-21 | 1.50547318 | 0.517 | 0.319 | 2.39E-16 | Macrophage_spleen |
| CBLB               | 1.26E-20 | 1.81003148 | 0.302 | 0.119 | 4.48E-16 | Macrophage_spleen |
| CYRIA              | 1.36E-20 | 1.61730496 | 0.458 | 0.283 | 4.82E-16 | Macrophage_spleen |
| EIF3F              | 1.42E-20 | 1.51278977 | 0.505 | 0.315 | 5.05E-16 | Macrophage_spleen |
| PDLIM2             | 1.76E-20 | 2.15072965 | 0.276 | 0.102 | 6.22E-16 | Macrophage_spleen |
| GNB2               | 2.98E-20 | 1.45038306 | 0.481 | 0.261 | 1.06E-15 | Macrophage_spleen |
| PRKCB              | 2.98E-20 | 1.90396659 | 0.29  | 0.113 | 1.06E-15 | Macrophage_spleen |
| NME3               | 3.15E-20 | 1.47975952 | 0.427 | 0.22  | 1.12E-15 | Macrophage_spleen |
| COP1               | 4.27E-20 | 1.84686185 | 0.267 | 0.099 | 1.51E-15 | Macrophage_spleen |
| SCARB1             | 4.58E-20 | 1.76536884 | 0.255 | 0.086 | 1.62E-15 | Macrophage_spleen |
| ATP5PO             | 5.55E-20 | 1.15173315 | 0.656 | 0.549 | 1.97E-15 | Macrophage_spleen |
| FRMD4A             | 5.66E-20 | 1.90445484 | 0.29  | 0.118 | 2.01E-15 | Macrophage_spleen |
| SEC63              | 6.68E-20 | 1.73814737 | 0.259 | 0.091 | 2.37E-15 | Macrophage_spleen |
| RNF213             | 7.65E-20 | 1.65130352 | 0.259 | 0.091 | 2.71E-15 | Macrophage_spleen |
| ATG3               | 7.72E-20 | 1.35339119 | 0.554 | 0.36  | 2.74E-15 | Macrophage_spleen |
| RABGAP1L           | 9.30E-20 | 1.68189602 | 0.377 | 0.187 | 3.30E-15 | Macrophage_spleen |
| ENSMMUG00000047277 | 1.01E-19 | 1.44850562 | 0.505 | 0.308 | 3.59E-15 | Macrophage_spleen |

|                   |          |            |       |       |          |                   |
|-------------------|----------|------------|-------|-------|----------|-------------------|
| GUCY1A1           | 1.03E-19 | 1.79670382 | 0.257 | 0.091 | 3.66E-15 | Macrophage_spleen |
| DIP2B             | 1.68E-19 | 2.00142563 | 0.29  | 0.121 | 5.96E-15 | Macrophage_spleen |
| LRBA              | 1.89E-19 | 1.63044474 | 0.318 | 0.137 | 6.71E-15 | Macrophage_spleen |
| SEC14L1           | 2.73E-19 | 1.47466932 | 0.328 | 0.142 | 9.66E-15 | Macrophage_spleen |
| MTCH1             | 2.99E-19 | 1.82660626 | 0.309 | 0.126 | 1.06E-14 | Macrophage_spleen |
| TOP1              | 3.87E-19 | 1.78725643 | 0.406 | 0.232 | 1.37E-14 | Macrophage_spleen |
| TMSB10            | 4.00E-19 | 0.44730612 | 0.998 | 0.998 | 1.42E-14 | Macrophage_spleen |
| FCHO2             | 4.61E-19 | 1.73579204 | 0.276 | 0.108 | 1.63E-14 | Macrophage_spleen |
| CKS1B             | 6.77E-19 | 1.99703636 | 0.309 | 0.133 | 2.40E-14 | Macrophage_spleen |
| EIF3D             | 1.24E-18 | 1.77151113 | 0.399 | 0.203 | 4.38E-14 | Macrophage_spleen |
| CYBA              | 1.32E-18 | 0.81478762 | 0.733 | 0.592 | 4.68E-14 | Macrophage_spleen |
| HPCAL1            | 1.73E-18 | 1.39977491 | 0.267 | 0.099 | 6.12E-14 | Macrophage_spleen |
| TLN1              | 1.74E-18 | 1.38347695 | 0.524 | 0.34  | 6.16E-14 | Macrophage_spleen |
| STK17A            | 2.09E-18 | 1.74723212 | 0.276 | 0.109 | 7.39E-14 | Macrophage_spleen |
| MARK3             | 2.09E-18 | 1.45174686 | 0.25  | 0.088 | 7.41E-14 | Macrophage_spleen |
| ACTN1             | 2.65E-18 | 1.49986775 | 0.415 | 0.226 | 9.39E-14 | Macrophage_spleen |
| HDLBP             | 3.27E-18 | 1.85130222 | 0.316 | 0.135 | 1.16E-13 | Macrophage_spleen |
| YWHAH             | 3.55E-18 | 1.7199325  | 0.425 | 0.238 | 1.26E-13 | Macrophage_spleen |
| PIK3R1            | 4.63E-18 | 1.46694246 | 0.267 | 0.102 | 1.64E-13 | Macrophage_spleen |
| HVCN1             | 5.36E-18 | 1.83355601 | 0.323 | 0.146 | 1.90E-13 | Macrophage_spleen |
| SLC39A1           | 5.60E-18 | 1.84043043 | 0.314 | 0.137 | 1.98E-13 | Macrophage_spleen |
| FOXO3             | 5.95E-18 | 1.91074425 | 0.267 | 0.104 | 2.11E-13 | Macrophage_spleen |
| OXR1              | 6.61E-18 | 1.5901005  | 0.285 | 0.115 | 2.34E-13 | Macrophage_spleen |
| PDIA3             | 7.01E-18 | 1.7095269  | 0.262 | 0.099 | 2.48E-13 | Macrophage_spleen |
| RERE              | 7.79E-18 | 1.68222612 | 0.356 | 0.188 | 2.76E-13 | Macrophage_spleen |
| ENSMUG00000065175 | 1.13E-17 | 1.74399706 | 0.292 | 0.121 | 4.02E-13 | Macrophage_spleen |
| TCF12             | 1.19E-17 | 1.82492939 | 0.351 | 0.183 | 4.23E-13 | Macrophage_spleen |
| RPL26             | 1.86E-17 | 0.64338086 | 0.868 | 0.869 | 6.60E-13 | Macrophage_spleen |
| ENSMUG00000020721 | 1.86E-17 | 1.66594686 | 0.469 | 0.277 | 6.60E-13 | Macrophage_spleen |
| TLR1              | 1.91E-17 | 1.66247863 | 0.262 | 0.1   | 6.78E-13 | Macrophage_spleen |
| MPST              | 2.20E-17 | 1.98272425 | 0.25  | 0.094 | 7.80E-13 | Macrophage_spleen |
| RAB2A             | 2.46E-17 | 1.34069658 | 0.417 | 0.229 | 8.73E-13 | Macrophage_spleen |
| HELZ              | 2.47E-17 | 1.49503582 | 0.285 | 0.117 | 8.74E-13 | Macrophage_spleen |

|         |          |            |       |       |          |                   |
|---------|----------|------------|-------|-------|----------|-------------------|
| MAML2   | 2.56E-17 | 2.06849925 | 0.257 | 0.105 | 9.09E-13 | Macrophage_spleen |
| NCOA1   | 2.66E-17 | 1.49151543 | 0.267 | 0.104 | 9.43E-13 | Macrophage_spleen |
| MTDH    | 4.34E-17 | 1.41670188 | 0.29  | 0.12  | 1.54E-12 | Macrophage_spleen |
| SETD2   | 4.68E-17 | 1.32784539 | 0.274 | 0.108 | 1.66E-12 | Macrophage_spleen |
| MZT2B   | 6.68E-17 | 1.80914571 | 0.304 | 0.133 | 2.37E-12 | Macrophage_spleen |
| ADH5    | 7.16E-17 | 1.82877081 | 0.33  | 0.157 | 2.54E-12 | Macrophage_spleen |
| PHF20   | 8.98E-17 | 1.25809493 | 0.29  | 0.12  | 3.18E-12 | Macrophage_spleen |
| ARAP2   | 1.16E-16 | 1.60362196 | 0.257 | 0.102 | 4.10E-12 | Macrophage_spleen |
| BMP2K   | 1.21E-16 | 1.34213465 | 0.278 | 0.114 | 4.29E-12 | Macrophage_spleen |
| CD4     | 1.42E-16 | 1.24527267 | 0.542 | 0.384 | 5.04E-12 | Macrophage_spleen |
| WDFY2   | 1.69E-16 | 1.48927792 | 0.267 | 0.109 | 5.99E-12 | Macrophage_spleen |
| SUMO3   | 1.88E-16 | 1.99117977 | 0.257 | 0.103 | 6.65E-12 | Macrophage_spleen |
| TENT2   | 2.02E-16 | 1.66292736 | 0.259 | 0.106 | 7.15E-12 | Macrophage_spleen |
| MDH1    | 3.68E-16 | 1.36164382 | 0.512 | 0.327 | 1.30E-11 | Macrophage_spleen |
| UBASH3B | 4.34E-16 | 1.44984313 | 0.255 | 0.103 | 1.54E-11 | Macrophage_spleen |
| RAB10   | 4.38E-16 | 1.34363019 | 0.38  | 0.191 | 1.55E-11 | Macrophage_spleen |
| RCSD1   | 4.43E-16 | 1.47981885 | 0.271 | 0.112 | 1.57E-11 | Macrophage_spleen |
| MARCHF6 | 5.30E-16 | 1.25223922 | 0.288 | 0.124 | 1.88E-11 | Macrophage_spleen |
| TBXAS1  | 8.16E-16 | 1.69804085 | 0.252 | 0.106 | 2.89E-11 | Macrophage_spleen |
| YPEL5   | 8.73E-16 | 1.32766167 | 0.309 | 0.146 | 3.09E-11 | Macrophage_spleen |
| MRFAP1  | 1.02E-15 | 1.55611734 | 0.446 | 0.271 | 3.61E-11 | Macrophage_spleen |
| PUM1    | 1.36E-15 | 1.51810142 | 0.295 | 0.135 | 4.80E-11 | Macrophage_spleen |
| FGD2    | 1.88E-15 | 1.47844694 | 0.368 | 0.211 | 6.67E-11 | Macrophage_spleen |
| PIGS    | 2.09E-15 | 1.67338758 | 0.255 | 0.104 | 7.41E-11 | Macrophage_spleen |
| ADORA2B | 2.09E-15 | 2.92790724 | 0.269 | 0.13  | 7.42E-11 | Macrophage_spleen |
| GSK3B   | 2.28E-15 | 1.42278149 | 0.271 | 0.117 | 8.09E-11 | Macrophage_spleen |
| TSC22D3 | 4.00E-15 | 1.58026921 | 0.264 | 0.113 | 1.42E-10 | Macrophage_spleen |
| SQSTM1  | 4.26E-15 | 1.33773764 | 0.434 | 0.266 | 1.51E-10 | Macrophage_spleen |
| RSRP1   | 4.89E-15 | 1.37165841 | 0.366 | 0.194 | 1.73E-10 | Macrophage_spleen |
| PIP4K2A | 6.35E-15 | 1.43771822 | 0.413 | 0.26  | 2.25E-10 | Macrophage_spleen |
| MPC1    | 6.52E-15 | 1.75069803 | 0.363 | 0.2   | 2.31E-10 | Macrophage_spleen |
| CAT     | 8.68E-15 | 1.44211786 | 0.474 | 0.303 | 3.08E-10 | Macrophage_spleen |
| GRB2    | 9.36E-15 | 1.26694074 | 0.483 | 0.335 | 3.32E-10 | Macrophage_spleen |

|        |          |            |       |       |          |                   |
|--------|----------|------------|-------|-------|----------|-------------------|
| SCP2   | 1.17E-14 | 1.18109256 | 0.54  | 0.38  | 4.15E-10 | Macrophage_spleen |
| EMC6   | 1.75E-14 | 1.70657908 | 0.25  | 0.104 | 6.22E-10 | Macrophage_spleen |
| CNOT6L | 1.77E-14 | 1.45772616 | 0.271 | 0.122 | 6.28E-10 | Macrophage_spleen |
| NOP53  | 1.79E-14 | 1.30235446 | 0.285 | 0.128 | 6.34E-10 | Macrophage_spleen |
| CTNND1 | 1.85E-14 | 1.54034234 | 0.3   | 0.145 | 6.57E-10 | Macrophage_spleen |
| PTEN   | 1.95E-14 | 1.06500136 | 0.278 | 0.121 | 6.92E-10 | Macrophage_spleen |
| PAN3   | 2.77E-14 | 1.22145367 | 0.3   | 0.139 | 9.82E-10 | Macrophage_spleen |
| MED13L | 3.38E-14 | 1.68614826 | 0.377 | 0.237 | 1.20E-09 | Macrophage_spleen |
| NEDD9  | 3.59E-14 | 1.50650656 | 0.255 | 0.112 | 1.27E-09 | Macrophage_spleen |
| UBE2E2 | 4.90E-14 | 1.83589412 | 0.358 | 0.222 | 1.74E-09 | Macrophage_spleen |
| PEPD   | 5.16E-14 | 1.24840887 | 0.417 | 0.241 | 1.83E-09 | Macrophage_spleen |
| PAOX   | 6.65E-14 | 1.68416473 | 0.252 | 0.109 | 2.36E-09 | Macrophage_spleen |
| ATP2A2 | 7.53E-14 | 1.28993036 | 0.262 | 0.116 | 2.67E-09 | Macrophage_spleen |
| APP    | 8.50E-14 | 1.39195988 | 0.344 | 0.185 | 3.01E-09 | Macrophage_spleen |
| RAB14  | 8.95E-14 | 1.26137582 | 0.351 | 0.185 | 3.17E-09 | Macrophage_spleen |
| ETNK1  | 9.23E-14 | 1.37820158 | 0.34  | 0.178 | 3.27E-09 | Macrophage_spleen |
| GRN    | 9.65E-14 | 1.07455319 | 0.618 | 0.493 | 3.42E-09 | Macrophage_spleen |
| ANP32B | 9.73E-14 | 1.49940402 | 0.392 | 0.23  | 3.45E-09 | Macrophage_spleen |
| SP140  | 9.89E-14 | 1.33042832 | 0.349 | 0.188 | 3.50E-09 | Macrophage_spleen |
| ZNF609 | 1.03E-13 | 1.45913172 | 0.274 | 0.129 | 3.66E-09 | Macrophage_spleen |
| SNX3   | 1.54E-13 | 1.46848741 | 0.443 | 0.277 | 5.45E-09 | Macrophage_spleen |
| KDM2A  | 1.72E-13 | 1.26082263 | 0.292 | 0.142 | 6.08E-09 | Macrophage_spleen |
| CDKAL1 | 1.78E-13 | 1.315469   | 0.252 | 0.11  | 6.29E-09 | Macrophage_spleen |
| NAGK   | 1.78E-13 | 1.24764361 | 0.408 | 0.231 | 6.31E-09 | Macrophage_spleen |
| TAF15  | 1.92E-13 | 1.2136632  | 0.311 | 0.15  | 6.82E-09 | Macrophage_spleen |
| VDAC3  | 2.11E-13 | 1.38454171 | 0.276 | 0.128 | 7.49E-09 | Macrophage_spleen |
| CAPZA2 | 2.17E-13 | 1.02548066 | 0.583 | 0.472 | 7.68E-09 | Macrophage_spleen |
| SENP6  | 2.58E-13 | 1.3849019  | 0.264 | 0.121 | 9.15E-09 | Macrophage_spleen |
| CASP12 | 2.59E-13 | 1.43009504 | 0.347 | 0.192 | 9.16E-09 | Macrophage_spleen |
| AFF1   | 2.64E-13 | 1.23462112 | 0.285 | 0.134 | 9.35E-09 | Macrophage_spleen |
| TBC1D5 | 2.84E-13 | 1.56393093 | 0.401 | 0.274 | 1.01E-08 | Macrophage_spleen |
| PPP3CA | 3.15E-13 | 1.29081006 | 0.375 | 0.229 | 1.12E-08 | Macrophage_spleen |
| VTI1A  | 3.24E-13 | 1.30964926 | 0.285 | 0.139 | 1.15E-08 | Macrophage_spleen |

|         |          |            |       |       |          |                   |
|---------|----------|------------|-------|-------|----------|-------------------|
| ZFAND6  | 3.49E-13 | 1.27430651 | 0.384 | 0.223 | 1.24E-08 | Macrophage_spleen |
| PAK2    | 4.33E-13 | 1.1865499  | 0.443 | 0.289 | 1.54E-08 | Macrophage_spleen |
| UQCRB   | 4.94E-13 | 1.44763641 | 0.42  | 0.26  | 1.75E-08 | Macrophage_spleen |
| PLD3    | 4.95E-13 | 1.34023031 | 0.354 | 0.194 | 1.75E-08 | Macrophage_spleen |
| MYCBP2  | 6.23E-13 | 1.36495303 | 0.325 | 0.176 | 2.21E-08 | Macrophage_spleen |
| KLF12   | 7.59E-13 | 1.35952338 | 0.325 | 0.177 | 2.69E-08 | Macrophage_spleen |
| PLEKHB2 | 8.40E-13 | 1.2357865  | 0.351 | 0.189 | 2.98E-08 | Macrophage_spleen |
| VASP    | 1.01E-12 | 1.16077987 | 0.528 | 0.378 | 3.58E-08 | Macrophage_spleen |
| INPP5D  | 1.06E-12 | 1.42162133 | 0.281 | 0.139 | 3.77E-08 | Macrophage_spleen |
| PUM2    | 1.09E-12 | 1.23714701 | 0.288 | 0.143 | 3.85E-08 | Macrophage_spleen |
| TGOLN2  | 1.16E-12 | 1.51294789 | 0.276 | 0.131 | 4.10E-08 | Macrophage_spleen |
| ANXA4   | 1.24E-12 | 1.32148338 | 0.45  | 0.29  | 4.38E-08 | Macrophage_spleen |
| P2RY13  | 1.29E-12 | 1.39098873 | 0.377 | 0.229 | 4.56E-08 | Macrophage_spleen |
| CERS6   | 1.54E-12 | 1.30999073 | 0.262 | 0.119 | 5.45E-08 | Macrophage_spleen |
| STAU1   | 1.95E-12 | 1.4470081  | 0.304 | 0.153 | 6.90E-08 | Macrophage_spleen |
| ARID1B  | 2.81E-12 | 1.12958936 | 0.295 | 0.149 | 9.96E-08 | Macrophage_spleen |
| SEPTIN9 | 3.09E-12 | 1.2781997  | 0.342 | 0.187 | 1.09E-07 | Macrophage_spleen |
| PPDPF   | 3.32E-12 | 1.50615809 | 0.392 | 0.244 | 1.17E-07 | Macrophage_spleen |
| ANXA7   | 3.51E-12 | 1.16886781 | 0.384 | 0.222 | 1.24E-07 | Macrophage_spleen |
| GNAI3   | 3.84E-12 | 1.38146355 | 0.328 | 0.176 | 1.36E-07 | Macrophage_spleen |
| SNRNP70 | 4.26E-12 | 1.22688433 | 0.259 | 0.12  | 1.51E-07 | Macrophage_spleen |
| TGFBR1  | 4.28E-12 | 1.23737842 | 0.274 | 0.134 | 1.52E-07 | Macrophage_spleen |
| RAP1B   | 5.90E-12 | 0.89922053 | 0.554 | 0.452 | 2.09E-07 | Macrophage_spleen |
| FOXO1   | 1.00E-11 | 1.91823448 | 0.264 | 0.137 | 3.56E-07 | Macrophage_spleen |
| KTN1    | 1.08E-11 | 1.29029497 | 0.288 | 0.144 | 3.84E-07 | Macrophage_spleen |
| CASP1   | 1.15E-11 | 0.64312696 | 0.851 | 0.85  | 4.08E-07 | Macrophage_spleen |
| RHEB    | 1.27E-11 | 1.0277278  | 0.375 | 0.21  | 4.51E-07 | Macrophage_spleen |
| PSME2   | 1.32E-11 | 1.07647162 | 0.505 | 0.353 | 4.67E-07 | Macrophage_spleen |
| PRKCA   | 1.39E-11 | 1.91442235 | 0.288 | 0.163 | 4.91E-07 | Macrophage_spleen |
| GOLGA4  | 1.78E-11 | 1.09168232 | 0.281 | 0.138 | 6.29E-07 | Macrophage_spleen |
| NCK1    | 2.06E-11 | 1.17767487 | 0.274 | 0.133 | 7.32E-07 | Macrophage_spleen |
| GTF2I   | 2.12E-11 | 1.17037725 | 0.297 | 0.153 | 7.52E-07 | Macrophage_spleen |
| SLC3A2  | 2.17E-11 | 1.20242562 | 0.363 | 0.211 | 7.70E-07 | Macrophage_spleen |

|           |          |            |       |       |          |                   |
|-----------|----------|------------|-------|-------|----------|-------------------|
| CREBBP    | 2.25E-11 | 1.02379392 | 0.252 | 0.117 | 7.98E-07 | Macrophage_spleen |
| IDH2      | 2.58E-11 | 1.42019283 | 0.401 | 0.25  | 9.14E-07 | Macrophage_spleen |
| ITGB2     | 3.03E-11 | 1.1217401  | 0.458 | 0.31  | 1.07E-06 | Macrophage_spleen |
| UBE2H     | 3.50E-11 | 0.92383345 | 0.283 | 0.14  | 1.24E-06 | Macrophage_spleen |
| SDHB      | 3.57E-11 | 1.4191265  | 0.323 | 0.18  | 1.27E-06 | Macrophage_spleen |
| AKAP9     | 4.69E-11 | 1.68842748 | 0.351 | 0.219 | 1.66E-06 | Macrophage_spleen |
| ATP6V1D   | 5.50E-11 | 1.31559521 | 0.274 | 0.137 | 1.95E-06 | Macrophage_spleen |
| FAM120A   | 6.10E-11 | 1.4266205  | 0.278 | 0.144 | 2.16E-06 | Macrophage_spleen |
| LARP4B    | 1.25E-10 | 1.07855947 | 0.259 | 0.127 | 4.42E-06 | Macrophage_spleen |
| TRIP12    | 1.29E-10 | 1.06818982 | 0.285 | 0.15  | 4.55E-06 | Macrophage_spleen |
| STK10     | 1.41E-10 | 1.38263135 | 0.335 | 0.198 | 5.00E-06 | Macrophage_spleen |
| PCMTD1    | 1.44E-10 | 1.3111183  | 0.262 | 0.135 | 5.10E-06 | Macrophage_spleen |
| ARIH1     | 1.65E-10 | 1.31320063 | 0.3   | 0.164 | 5.85E-06 | Macrophage_spleen |
| SPRED1    | 1.90E-10 | 1.31171287 | 0.262 | 0.139 | 6.72E-06 | Macrophage_spleen |
| ND3       | 2.12E-10 | 1.0869754  | 0.649 | 0.624 | 7.51E-06 | Macrophage_spleen |
| ZSWIM6    | 2.13E-10 | 1.75739399 | 0.288 | 0.166 | 7.54E-06 | Macrophage_spleen |
| CD163     | 2.34E-10 | 1.37207396 | 0.33  | 0.202 | 8.29E-06 | Macrophage_spleen |
| ECHS1     | 2.71E-10 | 1.23701869 | 0.422 | 0.272 | 9.59E-06 | Macrophage_spleen |
| HNRNPA2B1 | 2.81E-10 | 0.54713143 | 0.705 | 0.765 | 9.94E-06 | Macrophage_spleen |
| NCOA4     | 3.03E-10 | 1.12556921 | 0.33  | 0.184 | 1.07E-05 | Macrophage_spleen |
| H2AZ2     | 4.28E-10 | 0.94153665 | 0.547 | 0.462 | 1.51E-05 | Macrophage_spleen |
| CUL5      | 4.41E-10 | 1.05423115 | 0.309 | 0.169 | 1.56E-05 | Macrophage_spleen |
| KDM6A     | 6.73E-10 | 1.27527217 | 0.255 | 0.131 | 2.38E-05 | Macrophage_spleen |
| CTNBL1    | 7.95E-10 | 1.15488109 | 0.259 | 0.131 | 2.82E-05 | Macrophage_spleen |
| CACYBP    | 8.49E-10 | 1.29352903 | 0.361 | 0.224 | 3.01E-05 | Macrophage_spleen |
| HOOK3     | 8.73E-10 | 1.10718372 | 0.316 | 0.179 | 3.09E-05 | Macrophage_spleen |
| ATP6AP1   | 9.27E-10 | 1.4927265  | 0.271 | 0.143 | 3.29E-05 | Macrophage_spleen |
| SPTSSA    | 9.97E-10 | 1.55722279 | 0.269 | 0.146 | 3.53E-05 | Macrophage_spleen |
| NONO      | 1.09E-09 | 1.15660413 | 0.309 | 0.172 | 3.85E-05 | Macrophage_spleen |
| PBRM1     | 1.20E-09 | 1.189678   | 0.257 | 0.134 | 4.23E-05 | Macrophage_spleen |
| CANX      | 1.31E-09 | 1.15614905 | 0.337 | 0.195 | 4.65E-05 | Macrophage_spleen |
| ZCCHC7    | 1.38E-09 | 1.17277485 | 0.259 | 0.138 | 4.90E-05 | Macrophage_spleen |
| DNAJA1    | 1.43E-09 | 1.20261529 | 0.46  | 0.34  | 5.05E-05 | Macrophage_spleen |



|          |          |            |       |       |            |                   |
|----------|----------|------------|-------|-------|------------|-------------------|
| EPC1     | 1.46E-09 | 0.96995517 | 0.297 | 0.163 | 5.17E-05   | Macrophage_spleen |
| TRIM22   | 1.48E-09 | 0.92935581 | 0.349 | 0.21  | 5.25E-05   | Macrophage_spleen |
| FNBP1    | 1.53E-09 | 0.87793824 | 0.533 | 0.461 | 5.43E-05   | Macrophage_spleen |
| IRF2     | 2.16E-09 | 1.19012136 | 0.304 | 0.17  | 7.67E-05   | Macrophage_spleen |
| GBP3     | 2.28E-09 | 1.18557684 | 0.271 | 0.149 | 8.08E-05   | Macrophage_spleen |
| PITPNC1  | 2.35E-09 | 1.89934233 | 0.259 | 0.145 | 8.32E-05   | Macrophage_spleen |
| AP3B1    | 2.40E-09 | 1.2125112  | 0.323 | 0.196 | 8.51E-05   | Macrophage_spleen |
| OST4     | 2.47E-09 | 0.7565282  | 0.804 | 0.804 | 8.75E-05   | Macrophage_spleen |
| TMEM131L | 3.55E-09 | 0.86225333 | 0.252 | 0.129 | 0.00012571 | Macrophage_spleen |
| PNN      | 4.04E-09 | 1.02449859 | 0.264 | 0.138 | 0.00014304 | Macrophage_spleen |
| DOCK2    | 4.79E-09 | 1.0214913  | 0.425 | 0.308 | 0.00016957 | Macrophage_spleen |
| ACTB     | 4.99E-09 | 0.26650407 | 0.991 | 0.989 | 0.00017697 | Macrophage_spleen |
| CD47     | 5.46E-09 | 1.25349446 | 0.318 | 0.187 | 0.00019356 | Macrophage_spleen |
| MYLIP    | 6.19E-09 | 1.12537064 | 0.278 | 0.158 | 0.00021939 | Macrophage_spleen |
| SUSD6    | 7.93E-09 | 1.28407023 | 0.292 | 0.173 | 0.00028103 | Macrophage_spleen |
| ITGAM    | 8.09E-09 | 1.31489857 | 0.283 | 0.162 | 0.00028669 | Macrophage_spleen |
| NIPA2    | 8.32E-09 | 0.98841907 | 0.25  | 0.13  | 0.00029486 | Macrophage_spleen |
| BBX      | 9.16E-09 | 1.01412212 | 0.257 | 0.136 | 0.00032444 | Macrophage_spleen |
| CPPED1   | 1.04E-08 | 1.04890477 | 0.259 | 0.141 | 0.00036986 | Macrophage_spleen |
| RALY     | 1.18E-08 | 0.89894075 | 0.267 | 0.143 | 0.0004194  | Macrophage_spleen |
| COA1     | 1.22E-08 | 1.22162795 | 0.311 | 0.187 | 0.00043381 | Macrophage_spleen |
| ARID2    | 1.42E-08 | 0.92820294 | 0.257 | 0.139 | 0.00050289 | Macrophage_spleen |
| POLR2A   | 1.46E-08 | 0.854438   | 0.274 | 0.15  | 0.0005174  | Macrophage_spleen |
| ASH1L    | 1.47E-08 | 1.00355467 | 0.377 | 0.252 | 0.00052045 | Macrophage_spleen |
| CCT2     | 1.48E-08 | 0.93607748 | 0.354 | 0.213 | 0.00052271 | Macrophage_spleen |
| RAB31    | 1.61E-08 | 1.06546961 | 0.399 | 0.279 | 0.00057209 | Macrophage_spleen |
| PRPF38B  | 1.64E-08 | 0.84533132 | 0.255 | 0.132 | 0.00057974 | Macrophage_spleen |
| ACIN1    | 2.12E-08 | 0.95883436 | 0.257 | 0.137 | 0.00075166 | Macrophage_spleen |
| FDX1     | 2.25E-08 | 0.94792702 | 0.259 | 0.144 | 0.00079739 | Macrophage_spleen |
| SP110    | 2.54E-08 | 1.13961621 | 0.358 | 0.237 | 0.00090046 | Macrophage_spleen |
| USP10    | 2.84E-08 | 1.02175844 | 0.25  | 0.133 | 0.00100634 | Macrophage_spleen |
| PSMA3    | 2.94E-08 | 1.16735623 | 0.34  | 0.211 | 0.00104276 | Macrophage_spleen |
| OSBPL9   | 3.82E-08 | 0.94542223 | 0.29  | 0.172 | 0.00135223 | Macrophage_spleen |

|          |          |            |       |       |            |                   |
|----------|----------|------------|-------|-------|------------|-------------------|
| CLEC12A  | 4.02E-08 | 1.17035371 | 0.441 | 0.327 | 0.00142297 | Macrophage_spleen |
| BIRC6    | 4.35E-08 | 1.15603448 | 0.302 | 0.193 | 0.00154087 | Macrophage_spleen |
| IFNGR1   | 4.43E-08 | 0.90928644 | 0.458 | 0.359 | 0.00156837 | Macrophage_spleen |
| CNOT2    | 4.51E-08 | 1.03811381 | 0.257 | 0.141 | 0.00159717 | Macrophage_spleen |
| EXOC4    | 5.46E-08 | 0.92684223 | 0.311 | 0.194 | 0.00193479 | Macrophage_spleen |
| LCP2     | 6.23E-08 | 0.73906755 | 0.285 | 0.162 | 0.00220648 | Macrophage_spleen |
| DDX24    | 7.22E-08 | 1.04999614 | 0.363 | 0.238 | 0.00255725 | Macrophage_spleen |
| IRF8     | 7.88E-08 | 0.73212944 | 0.472 | 0.367 | 0.00279258 | Macrophage_spleen |
| CERT1    | 8.24E-08 | 0.740062   | 0.25  | 0.137 | 0.0029203  | Macrophage_spleen |
| ARHGAP30 | 8.43E-08 | 1.10454492 | 0.271 | 0.155 | 0.00298664 | Macrophage_spleen |
| IVNS1ABP | 8.51E-08 | 1.11008094 | 0.267 | 0.153 | 0.00301618 | Macrophage_spleen |
| TMEM59L  | 9.85E-08 | 1.30191512 | 0.358 | 0.237 | 0.00349061 | Macrophage_spleen |
| CLASP2   | 1.02E-07 | 0.89726601 | 0.255 | 0.144 | 0.00361585 | Macrophage_spleen |
| EPB41    | 1.07E-07 | 1.07277077 | 0.255 | 0.146 | 0.00379802 | Macrophage_spleen |
| NUCKS1   | 1.08E-07 | 1.1265334  | 0.436 | 0.327 | 0.00384335 | Macrophage_spleen |
| HSP90AB1 | 1.21E-07 | 0.48076312 | 0.762 | 0.816 | 0.00429276 | Macrophage_spleen |
| KCTD12   | 1.28E-07 | 1.11071123 | 0.321 | 0.198 | 0.0045304  | Macrophage_spleen |
| ERBIN    | 1.53E-07 | 0.87279971 | 0.358 | 0.251 | 0.00542868 | Macrophage_spleen |
| PSMA5    | 1.76E-07 | 1.04635803 | 0.366 | 0.242 | 0.00624439 | Macrophage_spleen |
| RNASEH2B | 2.17E-07 | 1.0576833  | 0.25  | 0.143 | 0.00769205 | Macrophage_spleen |
| SH3GLB1  | 2.26E-07 | 1.246765   | 0.278 | 0.166 | 0.00799241 | Macrophage_spleen |
| CCPG1    | 2.46E-07 | 1.08733997 | 0.252 | 0.145 | 0.00870652 | Macrophage_spleen |
| ANKRD17  | 2.52E-07 | 0.83113695 | 0.278 | 0.161 | 0.00891543 | Macrophage_spleen |
| MPEG1    | 2.53E-07 | 0.83439721 | 0.571 | 0.498 | 0.00896299 | Macrophage_spleen |
| PSMB4    | 2.57E-07 | 0.92184119 | 0.356 | 0.231 | 0.0091134  | Macrophage_spleen |
| ITM2C    | 2.69E-07 | 1.21740869 | 0.413 | 0.309 | 0.00952839 | Macrophage_spleen |
| GNG2     | 3.13E-07 | 1.10787249 | 0.274 | 0.167 | 0.01110225 | Macrophage_spleen |
| USP34    | 3.14E-07 | 0.8262016  | 0.288 | 0.177 | 0.01112208 | Macrophage_spleen |
| WNK1     | 3.29E-07 | 0.85119566 | 0.344 | 0.22  | 0.01164004 | Macrophage_spleen |
| CLTC     | 3.50E-07 | 0.88893417 | 0.342 | 0.22  | 0.01240807 | Macrophage_spleen |
| SNX1     | 3.85E-07 | 1.1282069  | 0.262 | 0.156 | 0.01365837 | Macrophage_spleen |
| HNMT     | 3.90E-07 | 0.89966614 | 0.469 | 0.366 | 0.01381312 | Macrophage_spleen |
| HNRNPR   | 3.91E-07 | 0.96603929 | 0.307 | 0.19  | 0.01385015 | Macrophage_spleen |

|         |          |            |       |       |            |                   |
|---------|----------|------------|-------|-------|------------|-------------------|
| SSH2    | 4.67E-07 | 0.91741918 | 0.309 | 0.205 | 0.01656079 | Macrophage_spleen |
| CYBB    | 4.73E-07 | 0.87411573 | 0.486 | 0.383 | 0.01675737 | Macrophage_spleen |
| LUC7L3  | 4.84E-07 | 0.63705105 | 0.278 | 0.162 | 0.017161   | Macrophage_spleen |
| NINJ1   | 4.98E-07 | 0.88306773 | 0.453 | 0.343 | 0.01765255 | Macrophage_spleen |
| EIF3M   | 7.71E-07 | 0.95719049 | 0.396 | 0.283 | 0.02731888 | Macrophage_spleen |
| CAB39   | 8.01E-07 | 0.84707994 | 0.311 | 0.196 | 0.02838112 | Macrophage_spleen |
| CSF1R   | 9.94E-07 | 0.69679575 | 0.568 | 0.5   | 0.03520501 | Macrophage_spleen |
| EHD1    | 9.98E-07 | 0.82414457 | 0.264 | 0.156 | 0.03536491 | Macrophage_spleen |
| TNRC6B  | 1.00E-06 | 0.94772586 | 0.302 | 0.196 | 0.03560753 | Macrophage_spleen |
| RBM14   | 1.06E-06 | 0.85398385 | 0.302 | 0.192 | 0.03758696 | Macrophage_spleen |
| MACF1   | 1.13E-06 | 1.00047405 | 0.281 | 0.179 | 0.0402107  | Macrophage_spleen |
| ZBTB20  | 1.20E-06 | 1.23989741 | 0.257 | 0.162 | 0.04248479 | Macrophage_spleen |
| PPP1CA  | 1.36E-06 | 0.92033117 | 0.361 | 0.246 | 0.04811144 | Macrophage_spleen |
| NECAP2  | 1.58E-06 | 1.23144485 | 0.269 | 0.167 | 0.05609279 | Macrophage_spleen |
| IRF1    | 1.66E-06 | 0.96769482 | 0.304 | 0.192 | 0.05887921 | Macrophage_spleen |
| SEC31A  | 1.77E-06 | 0.67854825 | 0.278 | 0.166 | 0.06282547 | Macrophage_spleen |
| PPIG    | 2.34E-06 | 0.82010951 | 0.318 | 0.202 | 0.08294924 | Macrophage_spleen |
| HSPA5   | 2.76E-06 | 0.8991227  | 0.434 | 0.336 | 0.09792978 | Macrophage_spleen |
| FCHSD2  | 3.04E-06 | 0.85064581 | 0.278 | 0.177 | 0.10785867 | Macrophage_spleen |
| AIG1    | 3.07E-06 | 1.14596672 | 0.288 | 0.185 | 0.10871527 | Macrophage_spleen |
| MICU1   | 3.08E-06 | 0.93108202 | 0.285 | 0.183 | 0.10912916 | Macrophage_spleen |
| SMARCA5 | 3.14E-06 | 0.74444979 | 0.269 | 0.164 | 0.111145   | Macrophage_spleen |
| FAM172A | 3.35E-06 | 1.00894161 | 0.285 | 0.185 | 0.11882481 | Macrophage_spleen |
| NUMB    | 3.59E-06 | 0.78664114 | 0.255 | 0.154 | 0.12735493 | Macrophage_spleen |
| SNF8    | 3.83E-06 | 1.11058158 | 0.281 | 0.181 | 0.13553963 | Macrophage_spleen |
| ITSN2   | 3.89E-06 | 0.85607459 | 0.33  | 0.234 | 0.13799443 | Macrophage_spleen |
| SRSF2   | 4.43E-06 | 0.7506951  | 0.314 | 0.206 | 0.15707554 | Macrophage_spleen |
| FXR1    | 4.66E-06 | 0.9010855  | 0.328 | 0.216 | 0.16522133 | Macrophage_spleen |
| WDR70   | 5.33E-06 | 0.83689217 | 0.257 | 0.156 | 0.18878817 | Macrophage_spleen |
| TBL1XR1 | 5.94E-06 | 0.73312144 | 0.283 | 0.182 | 0.21063002 | Macrophage_spleen |
| P4HB    | 7.04E-06 | 0.8832461  | 0.271 | 0.17  | 0.24942708 | Macrophage_spleen |
| ATP2C1  | 7.17E-06 | 0.86846029 | 0.297 | 0.201 | 0.2539877  | Macrophage_spleen |
| CCNG1   | 8.78E-06 | 1.11522876 | 0.276 | 0.18  | 0.31108588 | Macrophage_spleen |

|                    |          |            |       |       |            |                   |
|--------------------|----------|------------|-------|-------|------------|-------------------|
| MRPS33             | 8.92E-06 | 1.17865946 | 0.252 | 0.162 | 0.31604606 | Macrophage_spleen |
| LILRA3             | 9.67E-06 | 1.38876393 | 0.252 | 0.169 | 0.34277687 | Macrophage_spleen |
| ENSMMUG00000016898 | 1.10E-05 | 1.02618814 | 0.375 | 0.272 | 0.39101555 | Macrophage_spleen |
| PPP1R8             | 1.27E-05 | 0.76017639 | 0.304 | 0.203 | 0.44983758 | Macrophage_spleen |
| CYSTM1             | 1.42E-05 | 0.76423444 | 0.441 | 0.34  | 0.50461152 | Macrophage_spleen |
| FBXW11             | 1.65E-05 | 0.69505956 | 0.259 | 0.161 | 0.58475054 | Macrophage_spleen |
| ARID4B             | 1.68E-05 | 0.79413074 | 0.342 | 0.244 | 0.59419865 | Macrophage_spleen |
| BCAP31             | 1.70E-05 | 1.13018143 | 0.309 | 0.214 | 0.60373462 | Macrophage_spleen |
| RAB24              | 1.72E-05 | 0.87794135 | 0.295 | 0.189 | 0.60865418 | Macrophage_spleen |
| COX4I1             | 1.91E-05 | 0.45629742 | 0.856 | 0.895 | 0.67838065 | Macrophage_spleen |
| TRAPPC4            | 1.96E-05 | 1.21002812 | 0.252 | 0.163 | 0.6957037  | Macrophage_spleen |
| ABI1               | 2.12E-05 | 0.9069611  | 0.382 | 0.285 | 0.74985377 | Macrophage_spleen |
| PPP1R12A           | 2.14E-05 | 0.79255825 | 0.316 | 0.221 | 0.75897491 | Macrophage_spleen |
| ZNF644             | 2.22E-05 | 0.78003076 | 0.264 | 0.169 | 0.78814469 | Macrophage_spleen |
| KIF5B              | 2.52E-05 | 0.97211717 | 0.321 | 0.22  | 0.89280069 | Macrophage_spleen |
| TRPM7              | 2.58E-05 | 0.64339075 | 0.318 | 0.215 | 0.91521538 | Macrophage_spleen |
| HSPA8              | 2.80E-05 | 0.61763852 | 0.639 | 0.641 | 0.99360059 | Macrophage_spleen |
| RPL31              | 3.07E-05 | 0.87959823 | 0.505 | 0.448 | 1          | Macrophage_spleen |
| NCKAP5             | 3.24E-05 | 1.68411921 | 0.252 | 0.185 | 1          | Macrophage_spleen |
| MANF               | 3.41E-05 | 1.09393231 | 0.269 | 0.181 | 1          | Macrophage_spleen |
| ABI3               | 3.81E-05 | 1.01647831 | 0.259 | 0.17  | 1          | Macrophage_spleen |
| CTNNB1             | 3.84E-05 | 0.67245502 | 0.25  | 0.156 | 1          | Macrophage_spleen |
| LMAN2              | 3.88E-05 | 0.82076855 | 0.321 | 0.222 | 1          | Macrophage_spleen |
| EVI2B              | 4.05E-05 | 1.07783269 | 0.347 | 0.25  | 1          | Macrophage_spleen |
| PIAS1              | 4.07E-05 | 0.73663212 | 0.264 | 0.171 | 1          | Macrophage_spleen |
| G3BP1              | 4.17E-05 | 0.85560255 | 0.325 | 0.224 | 1          | Macrophage_spleen |
| MRPS6              | 4.44E-05 | 0.85724621 | 0.307 | 0.208 | 1          | Macrophage_spleen |
| RPL7               | 4.97E-05 | 0.37283209 | 0.802 | 0.87  | 1          | Macrophage_spleen |
| CD164              | 5.32E-05 | 0.74494247 | 0.498 | 0.424 | 1          | Macrophage_spleen |
| POLR2F             | 5.33E-05 | 1.13689105 | 0.325 | 0.237 | 1          | Macrophage_spleen |
| SUCLG2             | 6.46E-05 | 0.76263207 | 0.255 | 0.165 | 1          | Macrophage_spleen |
| COMMD10            | 6.70E-05 | 0.9636883  | 0.25  | 0.167 | 1          | Macrophage_spleen |
| TUBB               | 6.86E-05 | 0.64887385 | 0.517 | 0.435 | 1          | Macrophage_spleen |

|                    |            |            |       |       |                     |
|--------------------|------------|------------|-------|-------|---------------------|
| HNRNPD             | 6.88E-05   | 0.75514647 | 0.34  | 0.244 | 1 Macrophage_spleen |
| CCT4               | 7.10E-05   | 0.72415584 | 0.33  | 0.227 | 1 Macrophage_spleen |
| MRPL14             | 7.28E-05   | 1.09225335 | 0.311 | 0.217 | 1 Macrophage_spleen |
| RPN1               | 7.72E-05   | 0.98160514 | 0.304 | 0.215 | 1 Macrophage_spleen |
| LRRFIP1            | 8.29E-05   | 0.7074824  | 0.281 | 0.191 | 1 Macrophage_spleen |
| VCP                | 9.54E-05   | 0.69659425 | 0.295 | 0.199 | 1 Macrophage_spleen |
| FMC1-LUC7L2        | 0.00010303 | 0.65128446 | 0.394 | 0.302 | 1 Macrophage_spleen |
| PSME1              | 0.00010947 | 0.64663114 | 0.618 | 0.58  | 1 Macrophage_spleen |
| AP2M1              | 0.00011047 | 0.90510632 | 0.467 | 0.38  | 1 Macrophage_spleen |
| HIPK3              | 0.00012741 | 0.75591438 | 0.257 | 0.172 | 1 Macrophage_spleen |
| FNDC3B             | 0.00013471 | 1.05753156 | 0.274 | 0.196 | 1 Macrophage_spleen |
| PTTG1IP            | 0.00013597 | 0.76842955 | 0.292 | 0.203 | 1 Macrophage_spleen |
| APPL1              | 0.00014537 | 0.87113703 | 0.302 | 0.209 | 1 Macrophage_spleen |
| STAG1              | 0.00014594 | 0.79547611 | 0.354 | 0.285 | 1 Macrophage_spleen |
| ITCH               | 0.0001599  | 0.71338019 | 0.257 | 0.176 | 1 Macrophage_spleen |
| KATNBL1            | 0.00018173 | 0.75766764 | 0.264 | 0.182 | 1 Macrophage_spleen |
| CPQ                | 0.00018384 | 0.83855827 | 0.335 | 0.262 | 1 Macrophage_spleen |
| URGCP              | 0.00019066 | 1.04438423 | 0.252 | 0.17  | 1 Macrophage_spleen |
| ENSMMUG00000058325 | 0.00019803 | 0.28541716 | 0.828 | 0.884 | 1 Macrophage_spleen |
| IKZF1              | 0.00021841 | 0.54817167 | 0.361 | 0.268 | 1 Macrophage_spleen |
| C1D                | 0.00022049 | 0.66925967 | 0.292 | 0.2   | 1 Macrophage_spleen |
| PSMD12             | 0.00024388 | 0.8720386  | 0.271 | 0.187 | 1 Macrophage_spleen |
| ENSMMUG00000006803 | 0.00025964 | 0.75553815 | 0.269 | 0.187 | 1 Macrophage_spleen |
| CASP4              | 0.00026642 | 1.12024828 | 0.337 | 0.257 | 1 Macrophage_spleen |
| APLP2              | 0.00027118 | 0.70975147 | 0.42  | 0.34  | 1 Macrophage_spleen |
| DHX9               | 0.00027179 | 0.50688713 | 0.264 | 0.176 | 1 Macrophage_spleen |
| UBE2B              | 0.00027971 | 0.63002301 | 0.311 | 0.22  | 1 Macrophage_spleen |
| SNW1               | 0.00029133 | 0.60980725 | 0.25  | 0.165 | 1 Macrophage_spleen |
| SEC62              | 0.00029648 | 0.91209394 | 0.358 | 0.269 | 1 Macrophage_spleen |
| PRPF40A            | 0.00032883 | 0.68282966 | 0.316 | 0.228 | 1 Macrophage_spleen |
| MTREX              | 0.00034024 | 0.66019807 | 0.262 | 0.178 | 1 Macrophage_spleen |
| NUFIP2             | 0.00039187 | 0.72480881 | 0.285 | 0.205 | 1 Macrophage_spleen |
| MKLN1              | 0.00041991 | 0.76984859 | 0.252 | 0.176 | 1 Macrophage_spleen |

|                    |            |            |       |       |                     |
|--------------------|------------|------------|-------|-------|---------------------|
| TRAM1              | 0.00046595 | 0.67428991 | 0.377 | 0.292 | 1 Macrophage_spleen |
| VPS13B             | 0.00047443 | 0.70478887 | 0.328 | 0.264 | 1 Macrophage_spleen |
| HNRNPA0            | 0.00052831 | 0.61525861 | 0.285 | 0.196 | 1 Macrophage_spleen |
| EEF2               | 0.0005533  | 0.58261183 | 0.54  | 0.514 | 1 Macrophage_spleen |
| SERINC1            | 0.0006519  | 0.61330925 | 0.309 | 0.221 | 1 Macrophage_spleen |
| NCKAP1L            | 0.00074996 | 0.66695223 | 0.42  | 0.354 | 1 Macrophage_spleen |
| PNISR              | 0.00079326 | 0.60707174 | 0.311 | 0.237 | 1 Macrophage_spleen |
| ENSMMUG00000006965 | 0.0008208  | 0.76556203 | 0.255 | 0.178 | 1 Macrophage_spleen |
| TBC1D9             | 0.00093173 | 1.43672146 | 0.259 | 0.21  | 1 Macrophage_spleen |
| TRIM72             | 0.00093995 | 0.52175074 | 0.363 | 0.283 | 1 Macrophage_spleen |
| RNF13              | 0.00095634 | 0.84072263 | 0.368 | 0.303 | 1 Macrophage_spleen |
| RTF2               | 0.00096954 | 0.66987879 | 0.264 | 0.184 | 1 Macrophage_spleen |
| HEXA               | 0.00097643 | 0.82904858 | 0.328 | 0.249 | 1 Macrophage_spleen |
| FBXO11             | 0.00105707 | 0.61865608 | 0.257 | 0.184 | 1 Macrophage_spleen |
| SF1                | 0.00106497 | 0.54814038 | 0.259 | 0.177 | 1 Macrophage_spleen |
| FOXN3              | 0.0013107  | 1.09745673 | 0.347 | 0.321 | 1 Macrophage_spleen |
| WAC                | 0.00144586 | 0.48857147 | 0.304 | 0.222 | 1 Macrophage_spleen |
| CLINT1             | 0.00145154 | 0.53235814 | 0.276 | 0.197 | 1 Macrophage_spleen |
| PSMA7              | 0.00171396 | 0.75567308 | 0.559 | 0.529 | 1 Macrophage_spleen |
| ROCK1              | 0.00175951 | 0.71864472 | 0.325 | 0.25  | 1 Macrophage_spleen |
| CHCHD1             | 0.00191467 | 0.99360943 | 0.267 | 0.201 | 1 Macrophage_spleen |
| TMEM123            | 0.00201005 | 0.79765926 | 0.25  | 0.182 | 1 Macrophage_spleen |
| SLC9A9             | 0.00210638 | 1.24179536 | 0.382 | 0.371 | 1 Macrophage_spleen |
| UBXN4              | 0.00238957 | 0.70140984 | 0.307 | 0.237 | 1 Macrophage_spleen |
| TACC1              | 0.00272167 | 0.48869873 | 0.34  | 0.272 | 1 Macrophage_spleen |
| SH2B3              | 0.00276771 | 0.61520001 | 0.302 | 0.227 | 1 Macrophage_spleen |
| UBE2I              | 0.00285445 | 0.76867445 | 0.351 | 0.277 | 1 Macrophage_spleen |
| ATP5IF1            | 0.00293038 | 0.70110253 | 0.585 | 0.561 | 1 Macrophage_spleen |
| PRKX               | 0.00302687 | 0.5371755  | 0.278 | 0.207 | 1 Macrophage_spleen |
| KLHL23             | 0.00303506 | 0.76276593 | 0.436 | 0.375 | 1 Macrophage_spleen |
| ARGLU1             | 0.00310871 | 0.43776052 | 0.314 | 0.237 | 1 Macrophage_spleen |
| BIN2               | 0.00324139 | 0.59049181 | 0.285 | 0.216 | 1 Macrophage_spleen |
| MTPN               | 0.0033549  | 0.63536007 | 0.342 | 0.267 | 1 Macrophage_spleen |

|                    |            |            |       |       |                     |
|--------------------|------------|------------|-------|-------|---------------------|
| GRK3               | 0.00339542 | 1.289372   | 0.276 | 0.236 | 1 Macrophage_spleen |
| LPP                | 0.00343005 | 0.57555377 | 0.307 | 0.246 | 1 Macrophage_spleen |
| OLA1               | 0.00349585 | 0.54039722 | 0.29  | 0.219 | 1 Macrophage_spleen |
| LAPTM5             | 0.00357307 | 0.53624255 | 0.545 | 0.533 | 1 Macrophage_spleen |
| TPP1               | 0.00374664 | 0.76309684 | 0.309 | 0.238 | 1 Macrophage_spleen |
| PTPN6              | 0.00377582 | 0.79150653 | 0.33  | 0.261 | 1 Macrophage_spleen |
| SLTM               | 0.00391903 | 0.40060689 | 0.262 | 0.186 | 1 Macrophage_spleen |
| SEPTIN6            | 0.00397205 | 0.63514764 | 0.252 | 0.185 | 1 Macrophage_spleen |
| STK17B             | 0.00400029 | 1.14056564 | 0.382 | 0.386 | 1 Macrophage_spleen |
| NDUFS6             | 0.00402796 | 0.14734561 | 0.335 | 0.427 | 1 Macrophage_spleen |
| FBXO10             | 0.00419736 | 0.94959403 | 0.3   | 0.237 | 1 Macrophage_spleen |
| JUN                | 0.00426595 | 1.39283309 | 0.314 | 0.283 | 1 Macrophage_spleen |
| UBE2K              | 0.00466109 | 0.43183457 | 0.292 | 0.218 | 1 Macrophage_spleen |
| SEC11A             | 0.00478921 | 0.7560144  | 0.344 | 0.283 | 1 Macrophage_spleen |
| CDC42SE2           | 0.00480493 | 0.88998086 | 0.396 | 0.373 | 1 Macrophage_spleen |
| DIAPH2             | 0.00500537 | 0.87059768 | 0.295 | 0.249 | 1 Macrophage_spleen |
| ANKRD44            | 0.00521639 | 0.91342853 | 0.337 | 0.285 | 1 Macrophage_spleen |
| ENSMMUG00000057449 | 0.00533186 | 0.15811663 | 0.276 | 0.349 | 1 Macrophage_spleen |
| PSMB5              | 0.0055487  | 0.83953777 | 0.347 | 0.279 | 1 Macrophage_spleen |
| SLC8A1             | 0.00600521 | 1.95379091 | 0.29  | 0.27  | 1 Macrophage_spleen |
| CCT6A              | 0.00618096 | 0.80402651 | 0.354 | 0.292 | 1 Macrophage_spleen |
| C4H6orf62          | 0.00618491 | 0.58757254 | 0.285 | 0.218 | 1 Macrophage_spleen |
| FNDC3A             | 0.00639104 | 0.3809567  | 0.271 | 0.202 | 1 Macrophage_spleen |
| ENSMMUG00000030448 | 0.0066058  | 0.68933285 | 0.325 | 0.259 | 1 Macrophage_spleen |
| ITPR2              | 0.00702006 | 0.60201518 | 0.307 | 0.249 | 1 Macrophage_spleen |
| SAT1               | 0.00703015 | 0.1688741  | 0.894 | 0.898 | 1 Macrophage_spleen |
| BTF3L4             | 0.007035   | 0.66540141 | 0.318 | 0.257 | 1 Macrophage_spleen |
| ERP29              | 0.00745974 | 0.66888139 | 0.519 | 0.472 | 1 Macrophage_spleen |
| PAFAH1B1           | 0.00751343 | 0.50929706 | 0.307 | 0.244 | 1 Macrophage_spleen |
| COMMD1             | 0.00821419 | 0.64022595 | 0.276 | 0.217 | 1 Macrophage_spleen |
| EIF1B              | 0.00837538 | 0.66253839 | 0.42  | 0.36  | 1 Macrophage_spleen |
| DDX17              | 0.00885178 | 0.39224857 | 0.37  | 0.306 | 1 Macrophage_spleen |
| PPP2R5C            | 0.00886647 | 0.51456341 | 0.271 | 0.209 | 1 Macrophage_spleen |

|                    |            |            |       |       |                     |
|--------------------|------------|------------|-------|-------|---------------------|
| SREK1              | 0.00914912 | 0.37100789 | 0.25  | 0.182 | 1 Macrophage_spleen |
| EIF3A              | 0.00924453 | 0.34366656 | 0.264 | 0.196 | 1 Macrophage_spleen |
| SIK3               | 0.00925025 | 0.75718738 | 0.358 | 0.321 | 1 Macrophage_spleen |
| CAMLG              | 0.00944568 | 0.7976054  | 0.281 | 0.218 | 1 Macrophage_spleen |
| MIER1              | 0.0094493  | 0.40581297 | 0.257 | 0.189 | 1 Macrophage_spleen |
| PPHLN1             | 0.0098399  | 0.29991772 | 0.257 | 0.187 | 1 Macrophage_spleen |
| ATP5F1B            | 0.00992195 | 0.81003142 | 0.295 | 0.233 | 1 Macrophage_spleen |
| CYFIP1             | 0.01020268 | 0.61044742 | 0.281 | 0.216 | 1 Macrophage_spleen |
| TMED2              | 0.01058853 | 0.71173385 | 0.257 | 0.195 | 1 Macrophage_spleen |
| RSRC2              | 0.0110438  | 0.67182739 | 0.307 | 0.24  | 1 Macrophage_spleen |
| CUTA               | 0.01111708 | 0.68325927 | 0.255 | 0.198 | 1 Macrophage_spleen |
| ENSMMUG00000045425 | 0.01127249 | 0.7460979  | 0.269 | 0.211 | 1 Macrophage_spleen |
| ENSMMUG00000011798 | 0.01215868 | 0.72459754 | 0.288 | 0.226 | 1 Macrophage_spleen |
| TAPBP              | 0.01262402 | 0.48035187 | 0.309 | 0.242 | 1 Macrophage_spleen |
| CAPZA1             | 0.01276714 | 0.45590523 | 0.401 | 0.34  | 1 Macrophage_spleen |
| GNB1               | 0.0130082  | 0.38142162 | 0.288 | 0.219 | 1 Macrophage_spleen |
| SF3B6              | 0.01320304 | 0.25728883 | 0.366 | 0.453 | 1 Macrophage_spleen |
| PSMA2              | 0.01358549 | 0.13371936 | 0.458 | 0.552 | 1 Macrophage_spleen |
| PARK7              | 0.013752   | 0.12242909 | 0.425 | 0.518 | 1 Macrophage_spleen |
| ITGA4              | 0.01398687 | 0.58170175 | 0.304 | 0.248 | 1 Macrophage_spleen |
| HNRNPL             | 0.01405211 | 0.51011565 | 0.375 | 0.311 | 1 Macrophage_spleen |
| TCEA1              | 0.01423559 | 0.83772477 | 0.29  | 0.23  | 1 Macrophage_spleen |
| CAST               | 0.01564356 | 0.42915912 | 0.335 | 0.261 | 1 Macrophage_spleen |
| CSDE1              | 0.01571493 | 0.55406683 | 0.436 | 0.386 | 1 Macrophage_spleen |
| LIMD2              | 0.01608003 | 0.58454686 | 0.399 | 0.358 | 1 Macrophage_spleen |
| SH3KBP1            | 0.01726458 | 0.6307749  | 0.283 | 0.229 | 1 Macrophage_spleen |
| HSPD1              | 0.01881294 | 0.66861778 | 0.358 | 0.31  | 1 Macrophage_spleen |
| RPN2               | 0.01888446 | 0.71242437 | 0.25  | 0.197 | 1 Macrophage_spleen |
| ACTR3              | 0.0189511  | 0.40899672 | 0.547 | 0.581 | 1 Macrophage_spleen |
| RPS3               | 0.01964886 | 0.21612753 | 0.889 | 0.944 | 1 Macrophage_spleen |
| PER1               | 0.01976264 | 0.23107348 | 0.252 | 0.189 | 1 Macrophage_spleen |
| SYNCRIP            | 0.02018354 | 0.44711159 | 0.264 | 0.202 | 1 Macrophage_spleen |
| NR3C1              | 0.0204177  | 0.46599534 | 0.347 | 0.302 | 1 Macrophage_spleen |



|         |            |            |       |       |                     |
|---------|------------|------------|-------|-------|---------------------|
| DDOST   | 0.02041797 | 0.55407483 | 0.358 | 0.296 | 1 Macrophage_spleen |
| PTPRJ   | 0.02070736 | 1.59650844 | 0.283 | 0.267 | 1 Macrophage_spleen |
| PIK3AP1 | 0.02147264 | 0.62006661 | 0.394 | 0.371 | 1 Macrophage_spleen |
| STAG2   | 0.02193042 | 0.53941007 | 0.358 | 0.306 | 1 Macrophage_spleen |
| CCT5    | 0.02274681 | 0.70894042 | 0.295 | 0.246 | 1 Macrophage_spleen |
| TM9SF3  | 0.02495021 | 0.20035354 | 0.283 | 0.224 | 1 Macrophage_spleen |
| KMT2C   | 0.02501373 | 0.69157365 | 0.356 | 0.338 | 1 Macrophage_spleen |
| NCOA3   | 0.02519649 | 0.61716208 | 0.295 | 0.248 | 1 Macrophage_spleen |
| OSBPL11 | 0.0259352  | 0.73124863 | 0.288 | 0.251 | 1 Macrophage_spleen |
| TAX1BP1 | 0.02614963 | 0.6216641  | 0.292 | 0.242 | 1 Macrophage_spleen |
| EIF5    | 0.02629755 | 0.50565486 | 0.399 | 0.372 | 1 Macrophage_spleen |
| IQGAP1  | 0.02716984 | 0.58435296 | 0.42  | 0.423 | 1 Macrophage_spleen |
| CSNK2B  | 0.02753955 | 0.1134555  | 0.33  | 0.394 | 1 Macrophage_spleen |
| MAT2A   | 0.02925476 | 0.40096592 | 0.288 | 0.229 | 1 Macrophage_spleen |
| SOD1    | 0.02976505 | 0.75933156 | 0.389 | 0.343 | 1 Macrophage_spleen |
| RBM25   | 0.02994817 | 0.24153999 | 0.255 | 0.195 | 1 Macrophage_spleen |
| DTD1    | 0.03022699 | 0.65773943 | 0.351 | 0.301 | 1 Macrophage_spleen |
| ETFB    | 0.0314215  | 0.94234064 | 0.396 | 0.367 | 1 Macrophage_spleen |
| CWC15   | 0.03151342 | 0.85453116 | 0.368 | 0.324 | 1 Macrophage_spleen |
| UVRAG   | 0.03209053 | 0.57958759 | 0.304 | 0.259 | 1 Macrophage_spleen |
| SAT2    | 0.03301167 | 0.78319218 | 0.25  | 0.203 | 1 Macrophage_spleen |
| RAP1A   | 0.03392934 | 0.49681114 | 0.467 | 0.455 | 1 Macrophage_spleen |
| BCLAF1  | 0.03405231 | 0.66011156 | 0.307 | 0.27  | 1 Macrophage_spleen |
| MRPL57  | 0.03438892 | 0.8141879  | 0.316 | 0.27  | 1 Macrophage_spleen |
| NDUFB9  | 0.0382976  | 0.1681493  | 0.358 | 0.43  | 1 Macrophage_spleen |
| NDUFS4  | 0.03842133 | 0.53980801 | 0.297 | 0.243 | 1 Macrophage_spleen |
| ERH     | 0.03872253 | 0.14635893 | 0.38  | 0.452 | 1 Macrophage_spleen |
| WDR83OS | 0.03941935 | 0.40729466 | 0.726 | 0.795 | 1 Macrophage_spleen |
| AKIRIN2 | 0.04139229 | 0.16588919 | 0.262 | 0.207 | 1 Macrophage_spleen |
| JTB     | 0.04174203 | 0.71118359 | 0.288 | 0.239 | 1 Macrophage_spleen |
| COMT    | 0.04185704 | 0.52480274 | 0.328 | 0.273 | 1 Macrophage_spleen |
| ATP5F1A | 0.0436735  | 0.64902304 | 0.401 | 0.374 | 1 Macrophage_spleen |
| ARL8B   | 0.04420609 | 0.33766861 | 0.252 | 0.196 | 1 Macrophage_spleen |

|                    |            |            |       |       |                     |
|--------------------|------------|------------|-------|-------|---------------------|
| G3BP2              | 0.04430619 | 0.48237893 | 0.285 | 0.247 | 1 Macrophage_spleen |
| CEP170             | 0.04488163 | 0.48960417 | 0.269 | 0.222 | 1 Macrophage_spleen |
| XRCC5              | 0.04490338 | 0.40666679 | 0.429 | 0.392 | 1 Macrophage_spleen |
| ATRX               | 0.04549478 | 0.33661496 | 0.276 | 0.227 | 1 Macrophage_spleen |
| RTN3               | 0.04557426 | 0.46735108 | 0.34  | 0.294 | 1 Macrophage_spleen |
| PRKACB             | 0.04670461 | 0.53838363 | 0.377 | 0.333 | 1 Macrophage_spleen |
| LSM10              | 0.04751543 | 0.65518852 | 0.257 | 0.209 | 1 Macrophage_spleen |
| COX6C              | 0.04928334 | 0.14660467 | 0.757 | 0.87  | 1 Macrophage_spleen |
| RPS19BP1           | 0.05005849 | 0.60939193 | 0.34  | 0.29  | 1 Macrophage_spleen |
| ATP5MC3            | 0.05013681 | 0.13558264 | 0.557 | 0.679 | 1 Macrophage_spleen |
| ENSMMUG00000042951 | 0.05045846 | 0.50723821 | 0.271 | 0.222 | 1 Macrophage_spleen |
| LYN                | 0.05256402 | 0.4761232  | 0.434 | 0.598 | 1 Macrophage_spleen |
| CLK1               | 0.05376179 | 0.38484492 | 0.307 | 0.251 | 1 Macrophage_spleen |
| C15H9orf78         | 0.05434977 | 0.46366571 | 0.297 | 0.244 | 1 Macrophage_spleen |
| RBM39              | 0.05444207 | 0.4362425  | 0.462 | 0.498 | 1 Macrophage_spleen |
| NDUFA2             | 0.05946201 | 0.22469662 | 0.653 | 0.752 | 1 Macrophage_spleen |
| ZFAND3             | 0.05946982 | 0.5444385  | 0.361 | 0.342 | 1 Macrophage_spleen |
| SNRNPB2            | 0.06047216 | 0.13376923 | 0.278 | 0.32  | 1 Macrophage_spleen |
| LAP3               | 0.06097571 | 0.11654449 | 0.462 | 0.528 | 1 Macrophage_spleen |
| TMED10             | 0.06455972 | 0.43572516 | 0.295 | 0.242 | 1 Macrophage_spleen |
| GTF2B              | 0.06487696 | 0.13938903 | 0.394 | 0.469 | 1 Macrophage_spleen |
| ENSMMUG00000061128 | 0.0673073  | 0.12118446 | 0.592 | 0.677 | 1 Macrophage_spleen |
| CD46               | 0.06751163 | 0.41135467 | 0.33  | 0.289 | 1 Macrophage_spleen |
| ENSMMUG00000063172 | 0.07146537 | 0.6442491  | 0.361 | 0.34  | 1 Macrophage_spleen |
| CS                 | 0.07434248 | 0.52247593 | 0.328 | 0.281 | 1 Macrophage_spleen |
| MRPL34             | 0.07492513 | 0.16052052 | 0.245 | 0.294 | 1 Macrophage_spleen |
| EIF3H              | 0.0757543  | 0.10505379 | 0.467 | 0.548 | 1 Macrophage_spleen |
| NUDC               | 0.07842139 | 0.52644487 | 0.33  | 0.281 | 1 Macrophage_spleen |
| ATOX1              | 0.0792814  | 0.18662948 | 0.63  | 0.739 | 1 Macrophage_spleen |
| COMMD4             | 0.08117897 | 0.75335115 | 0.281 | 0.243 | 1 Macrophage_spleen |
| NPM1               | 0.08159381 | 0.30089148 | 0.755 | 0.804 | 1 Macrophage_spleen |
| ENSMMUG00000012537 | 0.08809099 | 0.61383252 | 0.271 | 0.229 | 1 Macrophage_spleen |
| SKP1               | 0.0890352  | 0.33110242 | 0.613 | 0.67  | 1 Macrophage_spleen |

|                    |            |            |       |       |                     |
|--------------------|------------|------------|-------|-------|---------------------|
| ARL6IP5            | 0.09078016 | 0.5444627  | 0.347 | 0.307 | 1 Macrophage_spleen |
| DCTN3              | 0.09155309 | 0.19099757 | 0.373 | 0.424 | 1 Macrophage_spleen |
| MAPRE1             | 0.09177    | 0.55580636 | 0.337 | 0.292 | 1 Macrophage_spleen |
| RTN4               | 0.09445539 | 0.33765054 | 0.318 | 0.264 | 1 Macrophage_spleen |
| QKI                | 0.09607692 | 1.01234431 | 0.396 | 0.426 | 1 Macrophage_spleen |
| TRA2A              | 0.09789728 | 0.41930262 | 0.366 | 0.358 | 1 Macrophage_spleen |
| COX16              | 0.09813703 | 0.47661101 | 0.493 | 0.485 | 1 Macrophage_spleen |
| ENSMMUG00000017231 | 0.09816172 | 0.77800866 | 0.314 | 0.276 | 1 Macrophage_spleen |
| RANBP2             | 0.09817044 | 0.21809022 | 0.276 | 0.223 | 1 Macrophage_spleen |
| ZNF706             | 0.10013966 | 0.23636407 | 0.422 | 0.484 | 1 Macrophage_spleen |
| TMEM59             | 0.10064131 | 0.53017858 | 0.46  | 0.428 | 1 Macrophage_spleen |
| TMEM131            | 0.11108194 | 0.44515162 | 0.314 | 0.288 | 1 Macrophage_spleen |
| TRAPPC2L           | 0.11134523 | 0.63533547 | 0.269 | 0.226 | 1 Macrophage_spleen |
| ENSMMUG00000052424 | 0.11228446 | 0.73935251 | 0.356 | 0.367 | 1 Macrophage_spleen |
| HYPK               | 0.11431024 | 0.16999806 | 0.392 | 0.444 | 1 Macrophage_spleen |
| TGFBR2             | 0.1146918  | 0.12089053 | 0.267 | 0.219 | 1 Macrophage_spleen |
| PHF11              | 0.11562247 | 0.254432   | 0.257 | 0.211 | 1 Macrophage_spleen |
| LAMP2              | 0.11718321 | 0.41980148 | 0.278 | 0.236 | 1 Macrophage_spleen |
| ZC3H15             | 0.11934834 | 0.73267285 | 0.321 | 0.282 | 1 Macrophage_spleen |
| ARHGEF2            | 0.12380143 | 0.22888406 | 0.267 | 0.218 | 1 Macrophage_spleen |
| HCK                | 0.13042599 | 0.4593195  | 0.401 | 0.374 | 1 Macrophage_spleen |
| VDAC1              | 0.13110231 | 0.13721592 | 0.325 | 0.357 | 1 Macrophage_spleen |
| GLRX               | 0.13114183 | 0.5242481  | 0.274 | 0.24  | 1 Macrophage_spleen |
| LAMTOR4            | 0.13184761 | 0.17087715 | 0.571 | 0.658 | 1 Macrophage_spleen |
| MDH2               | 0.13591988 | 0.53394588 | 0.328 | 0.292 | 1 Macrophage_spleen |
| RPL9               | 0.1397637  | 0.12742969 | 0.925 | 0.961 | 1 Macrophage_spleen |
| ENSMMUG00000006206 | 0.14002464 | 0.5072946  | 0.344 | 0.312 | 1 Macrophage_spleen |
| PTGES3             | 0.14185885 | 0.42139055 | 0.585 | 0.604 | 1 Macrophage_spleen |
| NDUFA12            | 0.14237042 | 0.72226209 | 0.366 | 0.344 | 1 Macrophage_spleen |
| EIF3G              | 0.14307289 | 0.12414613 | 0.292 | 0.328 | 1 Macrophage_spleen |
| ST13               | 0.14395651 | 0.17324694 | 0.354 | 0.394 | 1 Macrophage_spleen |
| FKBP3              | 0.14552844 | 0.47741365 | 0.271 | 0.231 | 1 Macrophage_spleen |
| SSR2               | 0.14710107 | 0.20652386 | 0.488 | 0.556 | 1 Macrophage_spleen |

|                   |            |            |       |       |                     |
|-------------------|------------|------------|-------|-------|---------------------|
| RAB1A             | 0.14751489 | 0.31333441 | 0.318 | 0.286 | 1 Macrophage_spleen |
| GSTK1             | 0.15130614 | 0.57085354 | 0.25  | 0.219 | 1 Macrophage_spleen |
| PDRG1             | 0.15196499 | 0.60380509 | 0.252 | 0.218 | 1 Macrophage_spleen |
| NDUFV2            | 0.15244535 | 0.19877773 | 0.392 | 0.445 | 1 Macrophage_spleen |
| TMEM219           | 0.15372053 | 0.18768768 | 0.344 | 0.386 | 1 Macrophage_spleen |
| OSBPL8            | 0.15406767 | 0.38494386 | 0.335 | 0.312 | 1 Macrophage_spleen |
| CNBP              | 0.15606705 | 0.14093084 | 0.432 | 0.499 | 1 Macrophage_spleen |
| ENSMUG00000059017 | 0.1640724  | 0.2357108  | 0.285 | 0.321 | 1 Macrophage_spleen |
| EID1              | 0.16562309 | 0.56094974 | 0.354 | 0.317 | 1 Macrophage_spleen |
| N4BP2L2           | 0.16682675 | 0.31630768 | 0.288 | 0.247 | 1 Macrophage_spleen |
| TMOD3             | 0.17211457 | 0.50192791 | 0.274 | 0.234 | 1 Macrophage_spleen |
| DOCK8             | 0.17574127 | 0.48907596 | 0.375 | 0.38  | 1 Macrophage_spleen |
| ELMO1             | 0.18371822 | 0.5913921  | 0.382 | 0.519 | 1 Macrophage_spleen |
| DAZAP2            | 0.18539485 | 0.43720617 | 0.321 | 0.284 | 1 Macrophage_spleen |
| TXNL1             | 0.1941142  | 0.39772623 | 0.267 | 0.227 | 1 Macrophage_spleen |
| IL18              | 0.1956278  | 0.52440455 | 0.342 | 0.325 | 1 Macrophage_spleen |
| SKAP2             | 0.19646414 | 0.50165517 | 0.505 | 0.551 | 1 Macrophage_spleen |
| GTF2A2            | 0.1994668  | 0.73091474 | 0.321 | 0.297 | 1 Macrophage_spleen |
| CUX1              | 0.20038005 | 0.16100765 | 0.3   | 0.261 | 1 Macrophage_spleen |
| PSMB9             | 0.21027301 | 0.41126491 | 0.425 | 0.408 | 1 Macrophage_spleen |
| PRRC2C            | 0.21041515 | 0.15621148 | 0.396 | 0.44  | 1 Macrophage_spleen |
| NDUFA5            | 0.21299474 | 0.11708278 | 0.226 | 0.254 | 1 Macrophage_spleen |
| TKT               | 0.21412396 | 0.4052859  | 0.498 | 0.493 | 1 Macrophage_spleen |
| PSMC5             | 0.22060796 | 0.20642895 | 0.264 | 0.295 | 1 Macrophage_spleen |
| ATP5PD            | 0.22166813 | 0.33687902 | 0.38  | 0.431 | 1 Macrophage_spleen |
| NDUFAB1           | 0.2247383  | 0.61196338 | 0.295 | 0.27  | 1 Macrophage_spleen |
| HSP90AA1          | 0.22920259 | 0.25540432 | 0.672 | 0.774 | 1 Macrophage_spleen |
| NASP              | 0.23012616 | 0.42595261 | 0.264 | 0.224 | 1 Macrophage_spleen |
| PSMB10            | 0.24518099 | 0.60951849 | 0.307 | 0.281 | 1 Macrophage_spleen |
| RPS27L            | 0.24521401 | 0.23061226 | 0.45  | 0.5   | 1 Macrophage_spleen |
| ATP1B3            | 0.24642743 | 0.34790708 | 0.311 | 0.281 | 1 Macrophage_spleen |
| BID               | 0.25126686 | 0.37254218 | 0.406 | 0.38  | 1 Macrophage_spleen |
| JAK1              | 0.25256953 | 0.29105605 | 0.455 | 0.445 | 1 Macrophage_spleen |

|          |            |            |       |       |                     |
|----------|------------|------------|-------|-------|---------------------|
| TIMM8B   | 0.25287018 | 0.59330888 | 0.262 | 0.24  | 1 Macrophage_spleen |
| EVL      | 0.2530515  | 0.38585001 | 0.259 | 0.229 | 1 Macrophage_spleen |
| CYB5A    | 0.25597273 | 0.15616997 | 0.304 | 0.331 | 1 Macrophage_spleen |
| RER1     | 0.25815964 | 0.51616505 | 0.394 | 0.37  | 1 Macrophage_spleen |
| ATP6V0D1 | 0.25830771 | 0.13494571 | 0.295 | 0.252 | 1 Macrophage_spleen |
| ERBB3    | 0.26012738 | 0.62283955 | 0.323 | 0.296 | 1 Macrophage_spleen |
| MRPS15   | 0.26198876 | 0.3772473  | 0.297 | 0.264 | 1 Macrophage_spleen |
| PLAC8    | 0.26338752 | 0.47619865 | 0.356 | 0.421 | 1 Macrophage_spleen |
| PFDN2    | 0.26421851 | 0.23139389 | 0.608 | 0.697 | 1 Macrophage_spleen |
| SERBP1   | 0.27346761 | 0.4449233  | 0.425 | 0.399 | 1 Macrophage_spleen |
| SNRPE    | 0.28539726 | 0.50848155 | 0.344 | 0.316 | 1 Macrophage_spleen |
| BNIP3L   | 0.28889612 | 0.23280491 | 0.302 | 0.266 | 1 Macrophage_spleen |
| DARS1    | 0.29177462 | 0.51068346 | 0.259 | 0.23  | 1 Macrophage_spleen |
| PRCP     | 0.29603329 | 0.12830092 | 0.415 | 0.463 | 1 Macrophage_spleen |
| CALCOCO2 | 0.30150114 | 0.47145523 | 0.323 | 0.303 | 1 Macrophage_spleen |
| POMP     | 0.30394488 | 0.26626043 | 0.557 | 0.627 | 1 Macrophage_spleen |
| CD59     | 0.30696056 | 0.18409166 | 0.281 | 0.305 | 1 Macrophage_spleen |
| MRPL51   | 0.30840545 | 0.21767367 | 0.354 | 0.391 | 1 Macrophage_spleen |
| PSMA4    | 0.31048473 | 0.63460381 | 0.356 | 0.338 | 1 Macrophage_spleen |
| UBE2D3   | 0.31079569 | 0.24934991 | 0.597 | 0.697 | 1 Macrophage_spleen |
| MRPL20   | 0.31840172 | 0.34544929 | 0.274 | 0.297 | 1 Macrophage_spleen |
| ENTPD1   | 0.32410671 | 0.75991621 | 0.361 | 0.388 | 1 Macrophage_spleen |
| HNRNPA3  | 0.32606887 | 0.3367045  | 0.568 | 0.601 | 1 Macrophage_spleen |
| ABR      | 0.32886851 | 0.15263744 | 0.262 | 0.232 | 1 Macrophage_spleen |
| PLGRKT   | 0.33060253 | 0.13186506 | 0.283 | 0.299 | 1 Macrophage_spleen |
| EZR      | 0.33065391 | 0.1985425  | 0.387 | 0.366 | 1 Macrophage_spleen |
| P4HA1    | 0.33391512 | 0.25621298 | 0.314 | 0.279 | 1 Macrophage_spleen |
| TBC1D24  | 0.3343387  | 0.30049409 | 0.715 | 0.774 | 1 Macrophage_spleen |
| AMDHD1   | 0.3369165  | 0.48713651 | 0.337 | 0.314 | 1 Macrophage_spleen |
| TXNIP    | 0.34312988 | 0.30611079 | 0.304 | 0.286 | 1 Macrophage_spleen |
| CTSB     | 0.3524967  | 0.24855805 | 0.613 | 0.637 | 1 Macrophage_spleen |
| MGST2    | 0.35790654 | 0.33657598 | 0.342 | 0.371 | 1 Macrophage_spleen |
| YWHAB    | 0.3582301  | 0.17244986 | 0.528 | 0.599 | 1 Macrophage_spleen |

|                    |            |            |       |       |                     |
|--------------------|------------|------------|-------|-------|---------------------|
| PSMB8              | 0.36318277 | 0.1496174  | 0.394 | 0.426 | 1 Macrophage_spleen |
| TMBIM6             | 0.37369043 | 0.32911056 | 0.632 | 0.713 | 1 Macrophage_spleen |
| ENSMMUG00000059988 | 0.37434777 | 0.58275722 | 0.25  | 0.228 | 1 Macrophage_spleen |
| RGS19              | 0.37535763 | 0.42519518 | 0.422 | 0.401 | 1 Macrophage_spleen |
| OCIAD1             | 0.3798771  | 0.34540106 | 0.262 | 0.234 | 1 Macrophage_spleen |
| PAPOLA             | 0.38349731 | 0.33702972 | 0.349 | 0.329 | 1 Macrophage_spleen |
| ARFGAP3            | 0.3858     | 0.18529374 | 0.302 | 0.291 | 1 Macrophage_spleen |
| SNRPD2             | 0.38627272 | 0.14447159 | 0.42  | 0.457 | 1 Macrophage_spleen |
| PLXNC1             | 0.39092292 | 0.30737212 | 0.33  | 0.312 | 1 Macrophage_spleen |
| ERP44              | 0.39907134 | 0.27038547 | 0.285 | 0.254 | 1 Macrophage_spleen |
| AP1B1              | 0.40248514 | 0.33531558 | 0.401 | 0.384 | 1 Macrophage_spleen |
| JMJD1C             | 0.4032394  | 0.70817896 | 0.384 | 0.498 | 1 Macrophage_spleen |
| RNF181             | 0.40474974 | 0.22924076 | 0.514 | 0.564 | 1 Macrophage_spleen |
| MAMU-A             | 0.40493524 | 0.34572878 | 0.665 | 0.727 | 1 Macrophage_spleen |
| LAMTOR1            | 0.4092914  | 0.34968148 | 0.389 | 0.43  | 1 Macrophage_spleen |
| RAB7A              | 0.42042451 | 0.16551777 | 0.394 | 0.442 | 1 Macrophage_spleen |
| EPS15              | 0.42196035 | 0.34567731 | 0.264 | 0.246 | 1 Macrophage_spleen |
| SP100              | 0.42611122 | 0.33992082 | 0.271 | 0.248 | 1 Macrophage_spleen |
| RWDD1              | 0.43703938 | 0.60092399 | 0.335 | 0.377 | 1 Macrophage_spleen |
| ANXA5              | 0.43721917 | 0.17037012 | 0.649 | 0.714 | 1 Macrophage_spleen |
| TALDO1             | 0.4437135  | 0.33091937 | 0.568 | 0.587 | 1 Macrophage_spleen |
| GTF3C6             | 0.44422692 | 0.28304754 | 0.281 | 0.303 | 1 Macrophage_spleen |
| ENSMMUG00000005880 | 0.44517468 | 0.2878591  | 0.252 | 0.268 | 1 Macrophage_spleen |
| BRD2               | 0.4534721  | 0.24535482 | 0.302 | 0.283 | 1 Macrophage_spleen |
| PSMB1              | 0.45959449 | 0.19446492 | 0.493 | 0.539 | 1 Macrophage_spleen |
| PSMD4              | 0.46206671 | 0.24982419 | 0.25  | 0.222 | 1 Macrophage_spleen |
| IGBP1              | 0.467815   | 0.52750244 | 0.255 | 0.24  | 1 Macrophage_spleen |
| ENSMMUG00000060287 | 0.4767223  | 0.19628074 | 0.627 | 0.666 | 1 Macrophage_spleen |
| PFDN1              | 0.47903113 | 0.34531194 | 0.262 | 0.241 | 1 Macrophage_spleen |
| DRAP1              | 0.49641098 | 0.37672454 | 0.3   | 0.325 | 1 Macrophage_spleen |
| CCNI               | 0.49827214 | 0.17774108 | 0.441 | 0.479 | 1 Macrophage_spleen |
| PRDX1              | 0.50144019 | 0.36844892 | 0.521 | 0.577 | 1 Macrophage_spleen |
| ATF7IP             | 0.5014952  | 0.15694544 | 0.309 | 0.296 | 1 Macrophage_spleen |

|                   |            |            |       |       |                     |
|-------------------|------------|------------|-------|-------|---------------------|
| TMEM50A           | 0.51224408 | 0.27138455 | 0.318 | 0.327 | 1 Macrophage_spleen |
| XRN2              | 0.51231974 | 0.27849478 | 0.302 | 0.281 | 1 Macrophage_spleen |
| SCAF11            | 0.51894167 | 0.23710242 | 0.34  | 0.312 | 1 Macrophage_spleen |
| TMED9             | 0.52420699 | 0.1955334  | 0.318 | 0.33  | 1 Macrophage_spleen |
| PJA2              | 0.52562571 | 0.32922731 | 0.281 | 0.257 | 1 Macrophage_spleen |
| STX8              | 0.52695937 | 0.21613082 | 0.262 | 0.235 | 1 Macrophage_spleen |
| MATR3             | 0.53312321 | 0.35924769 | 0.396 | 0.405 | 1 Macrophage_spleen |
| CHMP5             | 0.53985165 | 0.4809534  | 0.264 | 0.255 | 1 Macrophage_spleen |
| GPSM3             | 0.55245423 | 0.21812901 | 0.512 | 0.55  | 1 Macrophage_spleen |
| SPCS2             | 0.55427499 | 0.25467008 | 0.42  | 0.436 | 1 Macrophage_spleen |
| ENSMUG00000006293 | 0.56753486 | 0.14180025 | 0.318 | 0.326 | 1 Macrophage_spleen |
| H2AFY             | 0.56764012 | 0.32555331 | 0.375 | 0.356 | 1 Macrophage_spleen |
| ARF5              | 0.56773103 | 0.35262693 | 0.38  | 0.375 | 1 Macrophage_spleen |
| MCTS1             | 0.58070604 | 0.50425923 | 0.236 | 0.261 | 1 Macrophage_spleen |
| RBM47             | 0.58275643 | 0.92162204 | 0.274 | 0.333 | 1 Macrophage_spleen |
| PHACTR1           | 0.58309372 | 0.59627214 | 0.264 | 0.274 | 1 Macrophage_spleen |
| ZEB2              | 0.59608968 | 0.8301141  | 0.399 | 0.491 | 1 Macrophage_spleen |
| MBNL1             | 0.60602822 | 0.45759488 | 0.561 | 0.728 | 1 Macrophage_spleen |
| COMMD3            | 0.60844665 | 0.36963511 | 0.264 | 0.246 | 1 Macrophage_spleen |
| TOPORS            | 0.60918098 | 0.36356511 | 0.366 | 0.363 | 1 Macrophage_spleen |
| NCL               | 0.61038955 | 0.20822066 | 0.583 | 0.641 | 1 Macrophage_spleen |
| PCBP1             | 0.62057099 | 0.33622847 | 0.427 | 0.458 | 1 Macrophage_spleen |
| CD53              | 0.62064024 | 0.22610659 | 0.533 | 0.575 | 1 Macrophage_spleen |
| SHTN1             | 0.62124116 | 0.22969484 | 0.318 | 0.331 | 1 Macrophage_spleen |
| PARVG             | 0.64066005 | 0.31766038 | 0.285 | 0.277 | 1 Macrophage_spleen |
| CYRIB             | 0.64525805 | 0.30939477 | 0.5   | 0.555 | 1 Macrophage_spleen |
| STAC3             | 0.64541003 | 0.51046125 | 0.356 | 0.355 | 1 Macrophage_spleen |
| NDUFA4            | 0.64564125 | 0.21551926 | 0.748 | 0.829 | 1 Macrophage_spleen |
| KLF6              | 0.64811301 | 1.04378549 | 0.361 | 0.485 | 1 Macrophage_spleen |
| HMGB2             | 0.65744891 | 0.24826125 | 0.255 | 0.235 | 1 Macrophage_spleen |
| PTP4A2            | 0.66318966 | 0.26971659 | 0.311 | 0.298 | 1 Macrophage_spleen |
| DNAJC8            | 0.66734239 | 0.30184199 | 0.281 | 0.285 | 1 Macrophage_spleen |
| HSPA9             | 0.66882339 | 0.19641952 | 0.25  | 0.234 | 1 Macrophage_spleen |

|                   |            |            |       |       |                     |
|-------------------|------------|------------|-------|-------|---------------------|
| NDUFAF3           | 0.68563915 | 0.31609314 | 0.248 | 0.261 | 1 Macrophage_spleen |
| WIPF1             | 0.68983719 | 0.26652095 | 0.366 | 0.373 | 1 Macrophage_spleen |
| GSTP1             | 0.69413385 | 0.11457058 | 0.861 | 0.903 | 1 Macrophage_spleen |
| EML4              | 0.69945463 | 0.10938379 | 0.363 | 0.374 | 1 Macrophage_spleen |
| TRMT112           | 0.70530668 | 0.27286326 | 0.524 | 0.571 | 1 Macrophage_spleen |
| TMEM256           | 0.70544124 | 0.18712703 | 0.25  | 0.253 | 1 Macrophage_spleen |
| IGSF6             | 0.70809878 | 0.27219803 | 0.54  | 0.606 | 1 Macrophage_spleen |
| TMCO1             | 0.71920429 | 0.46115848 | 0.257 | 0.242 | 1 Macrophage_spleen |
| CAMK1D            | 0.73130247 | 0.41918379 | 0.321 | 0.325 | 1 Macrophage_spleen |
| SAP18             | 0.73410102 | 0.39163313 | 0.488 | 0.505 | 1 Macrophage_spleen |
| ANAPC13           | 0.73600843 | 0.42881478 | 0.288 | 0.298 | 1 Macrophage_spleen |
| TAGLN2            | 0.73680557 | 0.10052571 | 0.625 | 0.677 | 1 Macrophage_spleen |
| PM20D2            | 0.73836183 | 0.24280198 | 0.561 | 0.654 | 1 Macrophage_spleen |
| DAPK1             | 0.74169024 | 0.44372978 | 0.323 | 0.353 | 1 Macrophage_spleen |
| RAB8B             | 0.75653978 | 0.11938708 | 0.316 | 0.32  | 1 Macrophage_spleen |
| AKR1A1            | 0.76689499 | 0.43394977 | 0.439 | 0.442 | 1 Macrophage_spleen |
| ATP6V0E1          | 0.77254723 | 0.36487841 | 0.618 | 0.686 | 1 Macrophage_spleen |
| ANAPC11           | 0.77575246 | 0.26903393 | 0.321 | 0.332 | 1 Macrophage_spleen |
| SHOC2             | 0.78219273 | 0.16483474 | 0.252 | 0.231 | 1 Macrophage_spleen |
| ATF4              | 0.78775427 | 0.17122033 | 0.394 | 0.38  | 1 Macrophage_spleen |
| CNIH4             | 0.79195731 | 0.29164155 | 0.325 | 0.34  | 1 Macrophage_spleen |
| ENSMUG00000011711 | 0.79937583 | 0.39044261 | 0.25  | 0.242 | 1 Macrophage_spleen |
| PSMA6             | 0.8026543  | 0.19056641 | 0.304 | 0.288 | 1 Macrophage_spleen |
| MIF               | 0.80396669 | 0.38349839 | 0.278 | 0.288 | 1 Macrophage_spleen |
| UBE2L3            | 0.82288187 | 0.28236085 | 0.347 | 0.337 | 1 Macrophage_spleen |
| FOS               | 0.82601537 | 1.20611162 | 0.455 | 0.62  | 1 Macrophage_spleen |
| PDCD10            | 0.82894874 | 0.25163291 | 0.271 | 0.269 | 1 Macrophage_spleen |
| ITGB1             | 0.83368652 | 0.20132818 | 0.413 | 0.436 | 1 Macrophage_spleen |
| CISD2             | 0.837848   | 0.32094405 | 0.29  | 0.278 | 1 Macrophage_spleen |
| ATP2B1            | 0.8403597  | 0.23931197 | 0.276 | 0.28  | 1 Macrophage_spleen |
| DDX5              | 0.8410768  | 0.27705149 | 0.587 | 0.781 | 1 Macrophage_spleen |
| HCLS1             | 0.84471209 | 0.18973692 | 0.347 | 0.332 | 1 Macrophage_spleen |
| RDH5              | 0.84571507 | 0.34155782 | 0.571 | 0.613 | 1 Macrophage_spleen |



|                    |            |            |       |       |           |                   |
|--------------------|------------|------------|-------|-------|-----------|-------------------|
| TXNDC17            | 0.85575093 | 0.60897265 | 0.283 | 0.288 | 1         | Macrophage_spleen |
| MORF4L1            | 0.86270765 | 0.16414484 | 0.5   | 0.54  | 1         | Macrophage_spleen |
| C14H11orf58        | 0.86818645 | 0.56737796 | 0.283 | 0.286 | 1         | Macrophage_spleen |
| ENSMMUG00000006608 | 0.86965728 | 0.10792544 | 0.434 | 0.448 | 1         | Macrophage_spleen |
| LST1               | 0.87235637 | 0.17073194 | 0.748 | 0.808 | 1         | Macrophage_spleen |
| MVB12A             | 0.90780906 | 0.25793244 | 0.297 | 0.293 | 1         | Macrophage_spleen |
| SLIRP              | 0.9252329  | 0.28765092 | 0.594 | 0.669 | 1         | Macrophage_spleen |
| PSMB2              | 0.94754879 | 0.387817   | 0.259 | 0.259 | 1         | Macrophage_spleen |
| CSNK1A1            | 0.95158688 | 0.11987709 | 0.389 | 0.389 | 1         | Macrophage_spleen |
| CD320              | 0.95595038 | 0.27380181 | 0.46  | 0.483 | 1         | Macrophage_spleen |
| RAC2               | 0.95818342 | 0.42134931 | 0.368 | 0.369 | 1         | Macrophage_spleen |
| HSPE1              | 0.95958604 | 0.15758095 | 0.533 | 0.563 | 1         | Macrophage_spleen |
| CST3               | 0.9601921  | 0.10646644 | 0.972 | 0.968 | 1         | Macrophage_spleen |
| WDR74              | 0.96337352 | 0.28479867 | 0.25  | 0.251 | 1         | Macrophage_spleen |
| EIF4B              | 0.99320775 | 0.29923341 | 0.311 | 0.314 | 1         | Macrophage_spleen |
| ENSMMUG00000015583 | 0.9973341  | 0.22244411 | 0.542 | 0.618 | 1         | Macrophage_spleen |
| ENSMMUG00000062350 | 1.59E-152  | 1.32670105 | 0.94  | 0.974 | 5.65E-148 | mDC_lung          |
| RPS21              | 5.78E-146  | 1.49135194 | 0.916 | 0.948 | 2.05E-141 | mDC_lung          |
| ATP5F1E            | 2.49E-140  | 1.40561035 | 0.917 | 0.948 | 8.81E-136 | mDC_lung          |
| RPL36              | 5.17E-136  | 1.41375602 | 0.91  | 0.956 | 1.83E-131 | mDC_lung          |
| RPS28              | 4.83E-135  | 1.03883573 | 0.93  | 0.98  | 1.71E-130 | mDC_lung          |
| TMSB10             | 1.76E-125  | 1.13851602 | 0.966 | 0.989 | 6.23E-121 | mDC_lung          |
| FAU                | 6.80E-112  | 0.86471192 | 0.932 | 0.977 | 2.41E-107 | mDC_lung          |
| RPL32              | 2.34E-108  | 0.84052282 | 0.94  | 0.979 | 8.29E-104 | mDC_lung          |
| RPL39              | 3.00E-107  | 0.96403057 | 0.916 | 0.964 | 1.06E-102 | mDC_lung          |
| RPL35A             | 6.08E-106  | 0.84080563 | 0.937 | 0.976 | 2.15E-101 | mDC_lung          |
| ENSMMUG00000005593 | 1.09E-104  | 1.10096483 | 0.926 | 0.985 | 3.85E-100 | mDC_lung          |
| RPS12              | 1.91E-103  | 0.89674679 | 0.936 | 0.98  | 6.78E-99  | mDC_lung          |
| RPL34              | 4.00E-103  | 0.77170699 | 0.934 | 0.976 | 1.42E-98  | mDC_lung          |
| RPLP1              | 3.58E-101  | 0.80845386 | 0.941 | 0.99  | 1.27E-96  | mDC_lung          |
| RPL12              | 2.29E-98   | 0.90320332 | 0.929 | 0.964 | 8.10E-94  | mDC_lung          |
| NUDT3              | 6.75E-97   | 0.77723432 | 0.938 | 0.99  | 2.39E-92  | mDC_lung          |
| RPS23              | 1.34E-96   | 0.6856143  | 0.946 | 0.984 | 4.74E-92  | mDC_lung          |

|                    |          |            |       |       |          |          |
|--------------------|----------|------------|-------|-------|----------|----------|
| RPS13              | 4.35E-94 | 0.76039242 | 0.926 | 0.972 | 1.54E-89 | mDC_lung |
| ZC3H10             | 4.05E-91 | 1.39734883 | 0.86  | 0.904 | 1.44E-86 | mDC_lung |
| RPL10              | 9.25E-91 | 0.7140652  | 0.945 | 0.987 | 3.28E-86 | mDC_lung |
| ENSMMUG00000015563 | 9.88E-91 | 0.7527856  | 0.934 | 0.985 | 3.50E-86 | mDC_lung |
| RPL30              | 2.54E-87 | 0.62984751 | 0.943 | 0.974 | 9.02E-83 | mDC_lung |
| RPL8               | 2.84E-87 | 0.75386794 | 0.955 | 0.979 | 1.01E-82 | mDC_lung |
| ENSMMUG00000056354 | 5.90E-87 | 0.95733117 | 0.903 | 0.959 | 2.09E-82 | mDC_lung |
| RPL24              | 3.74E-86 | 0.71870236 | 0.923 | 0.972 | 1.33E-81 | mDC_lung |
| ENSMMUG00000004441 | 2.10E-85 | 1.2595344  | 0.886 | 0.917 | 7.44E-81 | mDC_lung |
| RPS9               | 1.31E-83 | 0.74451083 | 0.943 | 0.982 | 4.64E-79 | mDC_lung |
| RPL18              | 4.34E-83 | 0.66890075 | 0.93  | 0.976 | 1.54E-78 | mDC_lung |
| RPS29              | 8.76E-83 | 0.67299483 | 0.936 | 0.984 | 3.11E-78 | mDC_lung |
| ENSMMUG00000013429 | 1.04E-81 | 0.6205056  | 0.952 | 0.985 | 3.69E-77 | mDC_lung |
| UBA52              | 1.46E-81 | 0.70405353 | 0.935 | 0.974 | 5.17E-77 | mDC_lung |
| RPL28              | 1.03E-79 | 0.64652571 | 0.954 | 0.982 | 3.64E-75 | mDC_lung |
| RPS7               | 2.10E-78 | 0.62578026 | 0.927 | 0.972 | 7.43E-74 | mDC_lung |
| ENSMMUG00000060377 | 4.44E-77 | 1.53348776 | 0.817 | 0.816 | 1.57E-72 | mDC_lung |
| ENSMMUG00000044585 | 6.89E-77 | 1.49242169 | 0.823 | 0.834 | 2.44E-72 | mDC_lung |
| MBD3               | 2.06E-75 | 1.379478   | 0.845 | 0.884 | 7.29E-71 | mDC_lung |
| ENSMMUG00000003867 | 1.23E-73 | 0.5280685  | 0.957 | 0.984 | 4.36E-69 | mDC_lung |
| RPS5               | 4.73E-72 | 0.69396097 | 0.92  | 0.969 | 1.68E-67 | mDC_lung |
| ELOA               | 5.17E-72 | 0.61231934 | 0.94  | 0.976 | 1.83E-67 | mDC_lung |
| GPR65              | 5.93E-72 | 2.15670538 | 0.769 | 0.645 | 2.10E-67 | mDC_lung |
| RPS26              | 9.08E-72 | 0.69374814 | 0.938 | 0.982 | 3.22E-67 | mDC_lung |
| RPL22              | 6.68E-71 | 0.71113266 | 0.926 | 0.969 | 2.37E-66 | mDC_lung |
| HNRNPH2            | 1.02E-66 | 0.6754714  | 0.92  | 0.961 | 3.61E-62 | mDC_lung |
| ENSMMUG00000022428 | 8.58E-66 | 1.63840186 | 0.78  | 0.806 | 3.04E-61 | mDC_lung |
| MYL6               | 1.87E-65 | 0.9859821  | 0.891 | 0.935 | 6.64E-61 | mDC_lung |
| RPS24              | 2.31E-64 | 0.56412947 | 0.936 | 0.977 | 8.18E-60 | mDC_lung |
| PRPF31             | 1.83E-62 | 1.59144708 | 0.773 | 0.777 | 6.48E-58 | mDC_lung |
| TIMP1              | 7.36E-61 | 3.73988929 | 0.624 | 0.363 | 2.61E-56 | mDC_lung |
| RPL7A              | 5.42E-60 | 0.564018   | 0.929 | 0.971 | 1.92E-55 | mDC_lung |
| RPL27              | 3.19E-58 | 0.54063276 | 0.926 | 0.966 | 1.13E-53 | mDC_lung |

|                     |          |            |       |       |          |          |
|---------------------|----------|------------|-------|-------|----------|----------|
| ENSMMUG000000012140 | 1.73E-57 | 0.69554076 | 0.95  | 0.989 | 6.14E-53 | mDC_lung |
| RPL19               | 3.02E-57 | 0.72111351 | 0.912 | 0.961 | 1.07E-52 | mDC_lung |
| ENSMMUG000000019505 | 4.14E-57 | 1.00590543 | 0.854 | 0.901 | 1.47E-52 | mDC_lung |
| RPL22L1             | 1.17E-55 | 1.21326398 | 0.852 | 0.906 | 4.13E-51 | mDC_lung |
| ATP5MPL             | 1.35E-55 | 1.06811367 | 0.835 | 0.91  | 4.79E-51 | mDC_lung |
| ELOB                | 6.84E-55 | 1.2373975  | 0.8   | 0.875 | 2.42E-50 | mDC_lung |
| GSTP1               | 3.67E-54 | 0.90978857 | 0.887 | 0.941 | 1.30E-49 | mDC_lung |
| OAZ1                | 7.91E-54 | 1.11588365 | 0.829 | 0.894 | 2.80E-49 | mDC_lung |
| UBL5                | 3.70E-53 | 1.23574771 | 0.786 | 0.84  | 1.31E-48 | mDC_lung |
| RPL5                | 1.79E-52 | 0.54682849 | 0.937 | 0.977 | 6.34E-48 | mDC_lung |
| GAPDH               | 8.68E-51 | 0.97267143 | 0.862 | 0.92  | 3.08E-46 | mDC_lung |
| RPSA                | 1.66E-50 | 0.60312019 | 0.935 | 0.974 | 5.87E-46 | mDC_lung |
| AREG                | 8.00E-50 | 5.84048673 | 0.366 | 0.054 | 2.84E-45 | mDC_lung |
| GMFG                | 9.24E-50 | 1.03549802 | 0.824 | 0.897 | 3.28E-45 | mDC_lung |
| RPL36AL             | 1.06E-49 | 0.77490157 | 0.868 | 0.928 | 3.75E-45 | mDC_lung |
| RPS27A              | 2.80E-49 | 1.08177799 | 0.819 | 0.893 | 9.91E-45 | mDC_lung |
| TMA7                | 2.42E-48 | 0.94355365 | 0.824 | 0.907 | 8.57E-44 | mDC_lung |
| IFI30               | 5.41E-48 | 1.96402369 | 0.677 | 0.59  | 1.92E-43 | mDC_lung |
| ENSMMUG000000004545 | 1.15E-46 | 1.09176361 | 0.814 | 0.866 | 4.09E-42 | mDC_lung |
| ROMO1               | 1.16E-46 | 1.38551283 | 0.744 | 0.775 | 4.11E-42 | mDC_lung |
| ENSMMUG000000003073 | 1.43E-46 | 0.487235   | 0.927 | 0.974 | 5.05E-42 | mDC_lung |
| S100A6              | 2.79E-46 | 1.03771901 | 0.912 | 0.811 | 9.89E-42 | mDC_lung |
| NME2                | 4.26E-46 | 0.63972185 | 0.901 | 0.954 | 1.51E-41 | mDC_lung |
| RPL38               | 9.87E-45 | 0.55005347 | 0.933 | 0.969 | 3.50E-40 | mDC_lung |
| BCL2A1              | 3.35E-44 | 2.44929907 | 0.655 | 0.51  | 1.19E-39 | mDC_lung |
| XYLT1               | 7.86E-44 | 0.12440048 | 0.315 | 0.772 | 2.79E-39 | mDC_lung |
| ENSMMUG000000030408 | 3.57E-43 | 1.2071108  | 0.764 | 0.844 | 1.26E-38 | mDC_lung |
| ENSMMUG000000052747 | 3.13E-41 | 1.09956522 | 0.768 | 0.839 | 1.11E-36 | mDC_lung |
| RPL35               | 7.48E-40 | 0.53029039 | 0.927 | 0.966 | 2.65E-35 | mDC_lung |
| ATP5MG              | 4.35E-39 | 0.72691517 | 0.861 | 0.938 | 1.54E-34 | mDC_lung |
| TAGLN2              | 6.21E-39 | 0.93145146 | 0.883 | 0.94  | 2.20E-34 | mDC_lung |
| GCN1                | 2.03E-38 | 0.47821078 | 0.925 | 0.977 | 7.18E-34 | mDC_lung |
| FTL                 | 6.18E-38 | 0.68354405 | 0.904 | 0.966 | 2.19E-33 | mDC_lung |

|                     |          |            |       |       |          |          |
|---------------------|----------|------------|-------|-------|----------|----------|
| COMMD6              | 7.20E-38 | 0.81139874 | 0.846 | 0.92  | 2.55E-33 | mDC_lung |
| ENSMMUG00000016305  | 9.31E-38 | 1.48662065 | 0.685 | 0.681 | 3.30E-33 | mDC_lung |
| SRP14               | 2.51E-37 | 0.7617459  | 0.838 | 0.941 | 8.88E-33 | mDC_lung |
| NDUFA1              | 7.12E-37 | 1.00297788 | 0.783 | 0.858 | 2.52E-32 | mDC_lung |
| COX5B               | 1.44E-36 | 1.07041802 | 0.77  | 0.865 | 5.12E-32 | mDC_lung |
| MYL12B              | 2.09E-36 | 0.73672901 | 0.856 | 0.928 | 7.39E-32 | mDC_lung |
| ROBO2               | 2.68E-36 | 0.9397189  | 0.802 | 0.86  | 9.49E-32 | mDC_lung |
| CRIP1               | 3.31E-35 | 1.40128754 | 0.804 | 0.811 | 1.17E-30 | mDC_lung |
| IL1B                | 6.04E-35 | 1.96078988 | 0.743 | 0.707 | 2.14E-30 | mDC_lung |
| SLC2A3              | 1.54E-34 | 1.83819711 | 0.625 | 0.471 | 5.47E-30 | mDC_lung |
| CLIC1               | 6.42E-34 | 1.0118431  | 0.788 | 0.865 | 2.27E-29 | mDC_lung |
| S100A10             | 6.60E-34 | 0.82212994 | 0.896 | 0.832 | 2.34E-29 | mDC_lung |
| NDUFB2              | 7.64E-34 | 0.92487401 | 0.798 | 0.915 | 2.71E-29 | mDC_lung |
| TNPO1               | 3.96E-33 | 0.2045505  | 0.11  | 0.393 | 1.40E-28 | mDC_lung |
| SMDT1               | 5.14E-33 | 0.86441132 | 0.795 | 0.886 | 1.82E-28 | mDC_lung |
| RPS4X               | 7.18E-33 | 0.45605956 | 0.931 | 0.972 | 2.54E-28 | mDC_lung |
| INPP5A              | 3.64E-32 | 0.11881036 | 0.119 | 0.401 | 1.29E-27 | mDC_lung |
| EIF3K               | 3.81E-32 | 0.70957718 | 0.833 | 0.938 | 1.35E-27 | mDC_lung |
| SRI                 | 3.92E-32 | 0.95308021 | 0.8   | 0.902 | 1.39E-27 | mDC_lung |
| COX6C               | 2.65E-31 | 0.69781481 | 0.849 | 0.932 | 9.38E-27 | mDC_lung |
| LDHA                | 2.74E-31 | 1.12207872 | 0.741 | 0.831 | 9.70E-27 | mDC_lung |
| ENSMMUG00000007657  | 1.08E-30 | 0.89035986 | 0.781 | 0.886 | 3.84E-26 | mDC_lung |
| ENSMMUG00000006463  | 1.66E-29 | 0.87937968 | 0.788 | 0.878 | 5.87E-25 | mDC_lung |
| MALT1               | 3.58E-29 | 0.10078576 | 0.159 | 0.458 | 1.27E-24 | mDC_lung |
| NSA2                | 3.64E-29 | 0.88981506 | 0.803 | 0.897 | 1.29E-24 | mDC_lung |
| AIF1                | 4.23E-29 | 0.9126142  | 0.811 | 0.853 | 1.50E-24 | mDC_lung |
| GNG5                | 7.24E-29 | 0.64197439 | 0.849 | 0.935 | 2.57E-24 | mDC_lung |
| NLRP1               | 3.47E-28 | 0.15366108 | 0.182 | 0.495 | 1.23E-23 | mDC_lung |
| ENSMMUG000000056793 | 6.95E-28 | 0.75865247 | 0.798 | 0.891 | 2.46E-23 | mDC_lung |
| C16H17orf49         | 2.76E-27 | 0.89560541 | 0.806 | 0.888 | 9.77E-23 | mDC_lung |
| ARPC3               | 1.86E-26 | 0.50293113 | 0.878 | 0.953 | 6.57E-22 | mDC_lung |
| PIK3AP1             | 1.87E-26 | 0.12471478 | 0.316 | 0.708 | 6.64E-22 | mDC_lung |
| CAPG                | 3.39E-26 | 0.91461551 | 0.777 | 0.819 | 1.20E-21 | mDC_lung |

|                     |          |            |       |       |          |          |
|---------------------|----------|------------|-------|-------|----------|----------|
| NCK2                | 1.54E-25 | 0.2416255  | 0.066 | 0.259 | 5.47E-21 | mDC_lung |
| YTHDC2              | 1.57E-25 | 0.12257222 | 0.125 | 0.381 | 5.55E-21 | mDC_lung |
| COX6B1              | 2.43E-25 | 1.27827905 | 0.66  | 0.746 | 8.62E-21 | mDC_lung |
| TYROBP              | 1.30E-24 | 0.85345856 | 0.858 | 0.897 | 4.60E-20 | mDC_lung |
| S100A4              | 1.48E-24 | 1.35086618 | 0.75  | 0.614 | 5.25E-20 | mDC_lung |
| RFTN1               | 1.68E-24 | 0.15836185 | 0.315 | 0.674 | 5.94E-20 | mDC_lung |
| UQCRQ               | 1.70E-24 | 0.94067901 | 0.748 | 0.86  | 6.01E-20 | mDC_lung |
| ETV6                | 1.78E-24 | 0.42234272 | 0.44  | 0.813 | 6.31E-20 | mDC_lung |
| EEF1D               | 2.20E-24 | 0.69040772 | 0.821 | 0.917 | 7.80E-20 | mDC_lung |
| ENSMMUG00000049722  | 2.48E-24 | 1.25598407 | 0.649 | 0.704 | 8.79E-20 | mDC_lung |
| CAMP                | 4.64E-24 | 1.12462775 | 0.737 | 0.735 | 1.64E-19 | mDC_lung |
| ARHGAP5             | 5.23E-24 | 0.16410742 | 0.183 | 0.474 | 1.85E-19 | mDC_lung |
| HINT1               | 7.42E-24 | 0.52104689 | 0.864 | 0.943 | 2.63E-19 | mDC_lung |
| SAT1                | 1.37E-23 | 1.21989975 | 0.761 | 0.853 | 4.85E-19 | mDC_lung |
| KCNK13              | 1.54E-23 | 0.26560514 | 0.149 | 0.406 | 5.46E-19 | mDC_lung |
| NDUFA4              | 1.85E-23 | 0.78675569 | 0.773 | 0.886 | 6.56E-19 | mDC_lung |
| GPR183              | 3.29E-23 | 0.97776595 | 0.832 | 0.876 | 1.17E-18 | mDC_lung |
| ENSMMUG000000062941 | 3.98E-22 | 0.16527739 | 0.097 | 0.3   | 1.41E-17 | mDC_lung |
| PSMB6               | 5.17E-22 | 1.09309677 | 0.662 | 0.749 | 1.83E-17 | mDC_lung |
| ENSMMUG000000000983 | 1.09E-21 | 0.98427738 | 0.715 | 0.822 | 3.86E-17 | mDC_lung |
| SEM1                | 1.45E-21 | 0.84519605 | 0.744 | 0.849 | 5.14E-17 | mDC_lung |
| ATOX1               | 1.77E-21 | 0.77674389 | 0.744 | 0.845 | 6.29E-17 | mDC_lung |
| COX8A               | 3.51E-21 | 0.95855173 | 0.712 | 0.834 | 1.24E-16 | mDC_lung |
| ARHGAP31            | 4.24E-21 | 0.60551773 | 0.204 | 0.498 | 1.50E-16 | mDC_lung |
| MRI1                | 7.99E-21 | 0.88053436 | 0.708 | 0.816 | 2.83E-16 | mDC_lung |
| IFI27L2             | 1.62E-20 | 0.99038102 | 0.694 | 0.792 | 5.73E-16 | mDC_lung |
| ENSMMUG000000063637 | 1.80E-20 | 0.65397549 | 0.869 | 0.932 | 6.39E-16 | mDC_lung |
| ENSMMUG000000012419 | 2.49E-20 | 0.73631255 | 0.769 | 0.886 | 8.83E-16 | mDC_lung |
| CORO1A              | 4.31E-20 | 0.61368363 | 0.833 | 0.917 | 1.53E-15 | mDC_lung |
| PET100              | 5.04E-20 | 2.01519827 | 0.461 | 0.375 | 1.79E-15 | mDC_lung |
| NDUFA2              | 5.06E-20 | 0.85566077 | 0.723 | 0.836 | 1.79E-15 | mDC_lung |
| MECP2               | 7.10E-20 | 0.2082579  | 0.153 | 0.396 | 2.52E-15 | mDC_lung |
| ENSMMUG000000047481 | 7.64E-20 | 0.66646911 | 0.782 | 0.896 | 2.71E-15 | mDC_lung |

|                    |          |            |       |       |          |          |
|--------------------|----------|------------|-------|-------|----------|----------|
| GADD45B            | 1.24E-19 | 1.95032077 | 0.607 | 0.617 | 4.38E-15 | mDC_lung |
| MBP                | 1.33E-19 | 0.1966434  | 0.577 | 0.907 | 4.72E-15 | mDC_lung |
| COX7B              | 1.53E-19 | 0.78169605 | 0.747 | 0.878 | 5.40E-15 | mDC_lung |
| ENSMMUG00000053146 | 1.62E-19 | 1.0188598  | 0.681 | 0.788 | 5.74E-15 | mDC_lung |
| MRPL33             | 2.29E-19 | 1.25429696 | 0.635 | 0.695 | 8.13E-15 | mDC_lung |
| RNF144B            | 3.19E-19 | 0.37321182 | 0.079 | 0.251 | 1.13E-14 | mDC_lung |
| ENSMMUG00000022489 | 3.27E-19 | 0.90417592 | 0.7   | 0.813 | 1.16E-14 | mDC_lung |
| UQCRH              | 4.49E-19 | 0.94405763 | 0.674 | 0.795 | 1.59E-14 | mDC_lung |
| PTPN1              | 6.59E-19 | 0.26373377 | 0.304 | 0.642 | 2.34E-14 | mDC_lung |
| TMEM258            | 1.01E-18 | 1.07154683 | 0.65  | 0.738 | 3.57E-14 | mDC_lung |
| MINK1              | 1.14E-18 | 0.55025685 | 0.139 | 0.363 | 4.03E-14 | mDC_lung |
| MAMU-DRB1          | 1.65E-18 | 0.47136789 | 0.984 | 0.997 | 5.84E-14 | mDC_lung |
| VAMP8              | 1.65E-18 | 0.8618566  | 0.737 | 0.858 | 5.85E-14 | mDC_lung |
| LONRF3             | 1.91E-18 | 0.25803258 | 0.133 | 0.345 | 6.78E-14 | mDC_lung |
| OST4               | 1.92E-18 | 0.81280673 | 0.735 | 0.858 | 6.81E-14 | mDC_lung |
| ENSMMUG00000001210 | 1.96E-18 | 0.58158117 | 0.844 | 0.917 | 6.96E-14 | mDC_lung |
| ND4L               | 3.42E-18 | 1.74590212 | 0.558 | 0.529 | 1.21E-13 | mDC_lung |
| GPCPD1             | 3.67E-18 | 0.23883149 | 0.209 | 0.48  | 1.30E-13 | mDC_lung |
| MICOS13            | 3.96E-18 | 1.14588464 | 0.618 | 0.681 | 1.40E-13 | mDC_lung |
| JPT1               | 5.14E-18 | 0.55141268 | 0.811 | 0.92  | 1.82E-13 | mDC_lung |
| SEC61B             | 6.46E-18 | 0.58754019 | 0.799 | 0.912 | 2.29E-13 | mDC_lung |
| CFL1               | 8.71E-18 | 0.39377602 | 0.907 | 0.963 | 3.09E-13 | mDC_lung |
| GALC               | 9.68E-18 | 0.45216031 | 0.102 | 0.285 | 3.43E-13 | mDC_lung |
| COX7C              | 1.02E-17 | 0.57266394 | 0.807 | 0.901 | 3.61E-13 | mDC_lung |
| ATF6               | 2.21E-17 | 0.35121126 | 0.306 | 0.663 | 7.83E-13 | mDC_lung |
| MIDEAS             | 2.86E-17 | 0.13519283 | 0.208 | 0.469 | 1.01E-12 | mDC_lung |
| BCL11A             | 4.16E-17 | 0.28251622 | 0.291 | 0.604 | 1.48E-12 | mDC_lung |
| GALNT3             | 5.72E-17 | 0.34414087 | 0.195 | 0.43  | 2.03E-12 | mDC_lung |
| CHCHD2             | 8.07E-17 | 0.51369179 | 0.81  | 0.919 | 2.86E-12 | mDC_lung |
| ENSMMUG00000016894 | 9.26E-17 | 0.92030359 | 0.668 | 0.777 | 3.28E-12 | mDC_lung |
| RPL6               | 9.52E-17 | 0.27397918 | 0.92  | 0.974 | 3.37E-12 | mDC_lung |
| COX17              | 1.41E-16 | 0.83233735 | 0.704 | 0.793 | 5.01E-12 | mDC_lung |
| MGST3              | 1.51E-16 | 0.89176148 | 0.706 | 0.831 | 5.35E-12 | mDC_lung |

|                     |          |            |       |       |          |          |
|---------------------|----------|------------|-------|-------|----------|----------|
| RDH5                | 1.62E-16 | 1.01116449 | 0.648 | 0.749 | 5.73E-12 | mDC_lung |
| ENSMMUG00000016665  | 2.07E-16 | 0.89321644 | 0.672 | 0.796 | 7.32E-12 | mDC_lung |
| PPP1R9B             | 2.39E-16 | 0.30750041 | 0.093 | 0.264 | 8.47E-12 | mDC_lung |
| ANXA11              | 4.08E-16 | 0.12513048 | 0.24  | 0.524 | 1.45E-11 | mDC_lung |
| PKIB                | 6.28E-16 | 1.47756784 | 0.667 | 0.7   | 2.22E-11 | mDC_lung |
| ENSMMUG000000051239 | 6.87E-16 | 1.63523199 | 0.481 | 0.445 | 2.43E-11 | mDC_lung |
| UBE2W               | 9.22E-16 | 0.36363967 | 0.257 | 0.559 | 3.27E-11 | mDC_lung |
| SIPA1L1             | 1.01E-15 | 0.60236351 | 0.168 | 0.391 | 3.59E-11 | mDC_lung |
| CCNH                | 1.10E-15 | 0.37192813 | 0.259 | 0.544 | 3.90E-11 | mDC_lung |
| SAMSN1              | 1.11E-15 | 1.84678114 | 0.41  | 0.288 | 3.93E-11 | mDC_lung |
| MAN1A1              | 1.12E-15 | 0.49630988 | 0.371 | 0.713 | 3.98E-11 | mDC_lung |
| NDUFB11             | 1.22E-15 | 1.27698676 | 0.569 | 0.625 | 4.31E-11 | mDC_lung |
| ENSMMUG000000002320 | 1.54E-15 | 0.48607942 | 0.903 | 0.98  | 5.47E-11 | mDC_lung |
| RASSF1              | 1.56E-15 | 0.12917406 | 0.166 | 0.393 | 5.51E-11 | mDC_lung |
| NBEAL1              | 2.14E-15 | 0.26654992 | 0.189 | 0.432 | 7.60E-11 | mDC_lung |
| RTCB                | 2.25E-15 | 0.27787008 | 0.121 | 0.309 | 7.97E-11 | mDC_lung |
| SEC61G              | 2.29E-15 | 0.77279515 | 0.714 | 0.845 | 8.10E-11 | mDC_lung |
| ENSMMUG000000031947 | 2.52E-15 | 0.75839048 | 0.721 | 0.852 | 8.92E-11 | mDC_lung |
| HNRNPDL             | 3.65E-15 | 0.64458251 | 0.771 | 0.897 | 1.29E-10 | mDC_lung |
| CERK                | 3.84E-15 | 0.43897751 | 0.179 | 0.414 | 1.36E-10 | mDC_lung |
| FAM177A1            | 4.35E-15 | 0.20296155 | 0.12  | 0.303 | 1.54E-10 | mDC_lung |
| MMP25               | 4.92E-15 | 0.2461928  | 0.105 | 0.277 | 1.74E-10 | mDC_lung |
| GOLGA5              | 5.72E-15 | 0.2131305  | 0.144 | 0.349 | 2.02E-10 | mDC_lung |
| ENSMMUG000000014648 | 6.79E-15 | 0.71338524 | 0.731 | 0.839 | 2.40E-10 | mDC_lung |
| ENSMMUG000000015217 | 7.43E-15 | 0.15823479 | 0.143 | 0.345 | 2.63E-10 | mDC_lung |
| H2AFJ               | 7.57E-15 | 0.84599008 | 0.696 | 0.824 | 2.68E-10 | mDC_lung |
| TUBA1A              | 7.83E-15 | 0.6960486  | 0.811 | 0.914 | 2.78E-10 | mDC_lung |
| MRPL23              | 8.05E-15 | 0.89379706 | 0.676 | 0.796 | 2.85E-10 | mDC_lung |
| TRMT10B             | 1.24E-14 | 0.19877022 | 0.097 | 0.259 | 4.40E-10 | mDC_lung |
| SNRNP40             | 1.29E-14 | 0.17187749 | 0.125 | 0.309 | 4.58E-10 | mDC_lung |
| TRIM38              | 1.83E-14 | 0.16216156 | 0.201 | 0.443 | 6.49E-10 | mDC_lung |
| MAP2K3              | 2.65E-14 | 0.28681673 | 0.21  | 0.453 | 9.38E-10 | mDC_lung |
| LPXN                | 2.96E-14 | 0.30375583 | 0.236 | 0.503 | 1.05E-09 | mDC_lung |

|                    |          |            |       |       |          |          |
|--------------------|----------|------------|-------|-------|----------|----------|
| ERICH1             | 3.85E-14 | 0.11557488 | 0.139 | 0.329 | 1.36E-09 | mDC_lung |
| ELOC               | 3.96E-14 | 1.7512568  | 0.491 | 0.492 | 1.40E-09 | mDC_lung |
| GK                 | 4.04E-14 | 2.88091113 | 0.408 | 0.331 | 1.43E-09 | mDC_lung |
| MAP2K2             | 4.94E-14 | 0.24212048 | 0.125 | 0.305 | 1.75E-09 | mDC_lung |
| COPS8              | 5.88E-14 | 0.17725606 | 0.261 | 0.56  | 2.08E-09 | mDC_lung |
| TMEM120B           | 7.94E-14 | 0.15609414 | 0.122 | 0.3   | 2.81E-09 | mDC_lung |
| SUB1               | 1.07E-13 | 0.45868757 | 0.829 | 0.954 | 3.80E-09 | mDC_lung |
| KRTCAP2            | 1.17E-13 | 0.54502981 | 0.801 | 0.917 | 4.15E-09 | mDC_lung |
| RNF114             | 1.31E-13 | 0.10476078 | 0.151 | 0.349 | 4.63E-09 | mDC_lung |
| DNAJC8             | 1.39E-13 | 0.11665897 | 0.274 | 0.573 | 4.93E-09 | mDC_lung |
| SEMA4A             | 1.57E-13 | 0.3393844  | 0.267 | 0.554 | 5.56E-09 | mDC_lung |
| C1H1orf43          | 1.64E-13 | 0.14072788 | 0.174 | 0.389 | 5.80E-09 | mDC_lung |
| ERGIC1             | 1.74E-13 | 0.24826217 | 0.208 | 0.454 | 6.15E-09 | mDC_lung |
| TRIM28             | 2.19E-13 | 0.20348927 | 0.144 | 0.334 | 7.75E-09 | mDC_lung |
| DEAF1              | 2.64E-13 | 0.1912068  | 0.109 | 0.272 | 9.34E-09 | mDC_lung |
| ENSMMUG00000029973 | 2.69E-13 | 0.76905257 | 0.702 | 0.834 | 9.52E-09 | mDC_lung |
| COX7A1             | 2.83E-13 | 1.38296275 | 0.516 | 0.534 | 1.00E-08 | mDC_lung |
| LAMTOR4            | 3.42E-13 | 0.83649099 | 0.656 | 0.785 | 1.21E-08 | mDC_lung |
| FAM102B            | 3.62E-13 | 0.34350547 | 0.181 | 0.391 | 1.28E-08 | mDC_lung |
| MRPL22             | 3.78E-13 | 0.12158118 | 0.156 | 0.358 | 1.34E-08 | mDC_lung |
| ERGIC2             | 4.17E-13 | 0.22246115 | 0.237 | 0.495 | 1.48E-08 | mDC_lung |
| MEAF6              | 4.27E-13 | 0.14702703 | 0.147 | 0.339 | 1.51E-08 | mDC_lung |
| C5H4orf33          | 4.69E-13 | 0.19891515 | 0.12  | 0.288 | 1.66E-08 | mDC_lung |
| ATP5MC2            | 4.78E-13 | 0.7493571  | 0.683 | 0.831 | 1.70E-08 | mDC_lung |
| VAC14              | 5.08E-13 | 0.64542479 | 0.119 | 0.285 | 1.80E-08 | mDC_lung |
| STAT3              | 5.32E-13 | 0.10562846 | 0.11  | 0.27  | 1.88E-08 | mDC_lung |
| LARP7              | 6.24E-13 | 0.14112931 | 0.146 | 0.329 | 2.21E-08 | mDC_lung |
| PTPN2              | 7.15E-13 | 0.29639562 | 0.396 | 0.746 | 2.53E-08 | mDC_lung |
| NAXE               | 7.28E-13 | 0.13490505 | 0.139 | 0.322 | 2.58E-08 | mDC_lung |
| ATP5PF             | 7.65E-13 | 0.74892964 | 0.685 | 0.849 | 2.71E-08 | mDC_lung |
| ARRB2              | 7.96E-13 | 0.24180276 | 0.208 | 0.443 | 2.82E-08 | mDC_lung |
| ADCY7              | 8.01E-13 | 0.11047248 | 0.166 | 0.368 | 2.84E-08 | mDC_lung |
| GBE1               | 8.45E-13 | 0.8028575  | 0.171 | 0.375 | 2.99E-08 | mDC_lung |



|                     |          |            |       |       |          |          |
|---------------------|----------|------------|-------|-------|----------|----------|
| IPCEF1              | 8.83E-13 | 0.35957679 | 0.18  | 0.383 | 3.13E-08 | mDC_lung |
| MED28               | 1.00E-12 | 0.15480105 | 0.149 | 0.339 | 3.55E-08 | mDC_lung |
| PCMT1               | 1.06E-12 | 0.13368369 | 0.228 | 0.482 | 3.74E-08 | mDC_lung |
| AP1B1               | 1.07E-12 | 0.27702893 | 0.231 | 0.484 | 3.78E-08 | mDC_lung |
| ALG13               | 1.07E-12 | 0.14643264 | 0.13  | 0.305 | 3.78E-08 | mDC_lung |
| ZNF483              | 1.21E-12 | 0.72820985 | 0.704 | 0.834 | 4.29E-08 | mDC_lung |
| ENSMMUG00000013492  | 1.69E-12 | 0.17189668 | 0.155 | 0.345 | 5.98E-08 | mDC_lung |
| CHM                 | 1.74E-12 | 0.10828435 | 0.121 | 0.283 | 6.16E-08 | mDC_lung |
| ZNF516              | 1.89E-12 | 1.01340106 | 0.102 | 0.252 | 6.69E-08 | mDC_lung |
| MYG1                | 2.30E-12 | 1.40899743 | 0.493 | 0.513 | 8.17E-08 | mDC_lung |
| CIITA               | 2.31E-12 | 0.40992428 | 0.282 | 0.567 | 8.18E-08 | mDC_lung |
| ENSMMUG000000061824 | 2.44E-12 | 0.28361014 | 0.916 | 0.974 | 8.63E-08 | mDC_lung |
| H2AFZ               | 2.44E-12 | 0.96564682 | 0.655 | 0.787 | 8.65E-08 | mDC_lung |
| MX2                 | 2.51E-12 | 0.24645658 | 0.174 | 0.381 | 8.90E-08 | mDC_lung |
| ENSMMUG000000053735 | 2.81E-12 | 0.73057196 | 0.69  | 0.85  | 9.97E-08 | mDC_lung |
| LENG1               | 2.84E-12 | 0.11870067 | 0.168 | 0.365 | 1.01E-07 | mDC_lung |
| MAP3K11             | 3.15E-12 | 0.46029366 | 0.118 | 0.282 | 1.11E-07 | mDC_lung |
| MAPK9               | 3.29E-12 | 0.89931725 | 0.111 | 0.267 | 1.16E-07 | mDC_lung |
| TMEM50B             | 3.92E-12 | 0.17567783 | 0.172 | 0.373 | 1.39E-07 | mDC_lung |
| BAIAP2              | 4.89E-12 | 0.28394763 | 0.197 | 0.407 | 1.73E-07 | mDC_lung |
| IGKC                | 4.99E-12 | 0.53941459 | 0.143 | 0.321 | 1.77E-07 | mDC_lung |
| G0S2                | 5.36E-12 | 3.06867892 | 0.299 | 0.184 | 1.90E-07 | mDC_lung |
| ACTN4               | 5.39E-12 | 0.30471019 | 0.168 | 0.366 | 1.91E-07 | mDC_lung |
| TUBA1C              | 5.51E-12 | 0.22751236 | 0.142 | 0.318 | 1.95E-07 | mDC_lung |
| ENSMMUG000000047496 | 5.57E-12 | 0.10266623 | 0.17  | 0.37  | 1.97E-07 | mDC_lung |
| ENSMMUG000000041688 | 6.35E-12 | 0.5334261  | 0.401 | 0.721 | 2.25E-07 | mDC_lung |
| HCST                | 7.68E-12 | 1.7466587  | 0.469 | 0.451 | 2.72E-07 | mDC_lung |
| ENSMMUG000000015274 | 8.50E-12 | 0.31444741 | 0.239 | 0.485 | 3.01E-07 | mDC_lung |
| ATP6V1A             | 8.76E-12 | 0.15026325 | 0.217 | 0.432 | 3.10E-07 | mDC_lung |
| PSMD4               | 9.03E-12 | 0.138367   | 0.242 | 0.498 | 3.20E-07 | mDC_lung |
| GRK2                | 1.29E-11 | 0.46979649 | 0.115 | 0.27  | 4.58E-07 | mDC_lung |
| COMMD9              | 1.62E-11 | 0.12113016 | 0.126 | 0.287 | 5.74E-07 | mDC_lung |
| CHAC1               | 1.76E-11 | 0.2319297  | 0.152 | 0.334 | 6.25E-07 | mDC_lung |

|                    |          |            |       |       |          |          |
|--------------------|----------|------------|-------|-------|----------|----------|
| HPRT1              | 1.80E-11 | 0.12447391 | 0.169 | 0.362 | 6.36E-07 | mDC_lung |
| BCL6               | 1.81E-11 | 0.33074784 | 0.269 | 0.521 | 6.41E-07 | mDC_lung |
| RAB1B              | 1.94E-11 | 0.55065418 | 0.141 | 0.319 | 6.88E-07 | mDC_lung |
| ENSMMUG00000020643 | 1.95E-11 | 0.28980098 | 0.189 | 0.394 | 6.92E-07 | mDC_lung |
| PFDN1              | 2.36E-11 | 0.1924258  | 0.274 | 0.547 | 8.35E-07 | mDC_lung |
| ATG101             | 2.67E-11 | 0.24672676 | 0.139 | 0.308 | 9.48E-07 | mDC_lung |
| UBE2V2             | 2.71E-11 | 0.18094121 | 0.234 | 0.471 | 9.61E-07 | mDC_lung |
| FLOT1              | 3.81E-11 | 0.18780663 | 0.223 | 0.451 | 1.35E-06 | mDC_lung |
| ENSMMUG00000015270 | 4.54E-11 | 0.17889935 | 0.941 | 0.99  | 1.61E-06 | mDC_lung |
| ENSMMUG00000011798 | 5.23E-11 | 0.1421018  | 0.295 | 0.577 | 1.85E-06 | mDC_lung |
| TNFRSF1B           | 5.32E-11 | 1.98367531 | 0.4   | 0.35  | 1.89E-06 | mDC_lung |
| CD46               | 5.57E-11 | 0.50593052 | 0.328 | 0.642 | 1.97E-06 | mDC_lung |
| FGL2               | 5.75E-11 | 0.60992204 | 0.794 | 0.86  | 2.04E-06 | mDC_lung |
| PLCB2              | 6.62E-11 | 0.46749491 | 0.216 | 0.44  | 2.34E-06 | mDC_lung |
| ITPA               | 7.02E-11 | 0.26626218 | 0.198 | 0.415 | 2.49E-06 | mDC_lung |
| ENSMMUG00000064531 | 7.19E-11 | 0.16348961 | 0.23  | 0.464 | 2.55E-06 | mDC_lung |
| TADA3              | 7.90E-11 | 0.19068783 | 0.113 | 0.261 | 2.80E-06 | mDC_lung |
| ZCCHC10            | 8.32E-11 | 0.33879345 | 0.152 | 0.327 | 2.95E-06 | mDC_lung |
| ENSMMUG00000048973 | 8.35E-11 | 0.23346861 | 0.174 | 0.366 | 2.96E-06 | mDC_lung |
| STX3.1             | 9.13E-11 | 0.21957439 | 0.144 | 0.313 | 3.23E-06 | mDC_lung |
| RAD23A             | 1.01E-10 | 0.19075942 | 0.242 | 0.484 | 3.59E-06 | mDC_lung |
| WDR83OS            | 1.05E-10 | 0.42242577 | 0.806 | 0.945 | 3.72E-06 | mDC_lung |
| FBXO6              | 1.08E-10 | 0.1894996  | 0.116 | 0.262 | 3.83E-06 | mDC_lung |
| INSIG1             | 1.08E-10 | 1.83512432 | 0.433 | 0.393 | 3.84E-06 | mDC_lung |
| FES                | 1.10E-10 | 0.18718025 | 0.245 | 0.484 | 3.89E-06 | mDC_lung |
| NELFCD             | 1.11E-10 | 0.11889498 | 0.116 | 0.264 | 3.92E-06 | mDC_lung |
| CLEC12A            | 1.17E-10 | 0.20219001 | 0.23  | 0.456 | 4.14E-06 | mDC_lung |
| MTIF3              | 1.21E-10 | 0.25276048 | 0.144 | 0.311 | 4.29E-06 | mDC_lung |
| LSM7               | 1.34E-10 | 0.94913677 | 0.6   | 0.739 | 4.75E-06 | mDC_lung |
| GABARAPL1          | 1.36E-10 | 0.32862137 | 0.193 | 0.397 | 4.81E-06 | mDC_lung |
| EIF2S1             | 1.36E-10 | 0.1566836  | 0.231 | 0.461 | 4.83E-06 | mDC_lung |
| HMGCS1             | 1.64E-10 | 0.49188033 | 0.144 | 0.313 | 5.81E-06 | mDC_lung |
| SLC39A10           | 1.71E-10 | 0.11661387 | 0.313 | 0.567 | 6.05E-06 | mDC_lung |

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|--------------------|----------|------------|-------|-------|----------|----------|
| USF1               | 1.78E-10 | 0.16487098 | 0.113 | 0.256 | 6.32E-06 | mDC_lung |
| PTBP1              | 1.90E-10 | 0.2011827  | 0.229 | 0.459 | 6.74E-06 | mDC_lung |
| PPP4C              | 1.92E-10 | 0.19346518 | 0.275 | 0.546 | 6.81E-06 | mDC_lung |
| PPP1R18            | 1.92E-10 | 0.34201987 | 0.226 | 0.458 | 6.82E-06 | mDC_lung |
| AKR1B1             | 2.22E-10 | 0.10231004 | 0.357 | 0.668 | 7.85E-06 | mDC_lung |
| ENSMMUG00000039070 | 2.68E-10 | 0.12345583 | 0.231 | 0.451 | 9.51E-06 | mDC_lung |
| MEF2B              | 2.73E-10 | 0.25437866 | 0.156 | 0.331 | 9.67E-06 | mDC_lung |
| NDUFA8             | 2.86E-10 | 0.17200716 | 0.259 | 0.515 | 1.01E-05 | mDC_lung |
| CTSB               | 2.86E-10 | 0.1476831  | 0.348 | 0.638 | 1.01E-05 | mDC_lung |
| EDF1               | 2.93E-10 | 0.85799765 | 0.605 | 0.728 | 1.04E-05 | mDC_lung |
| LZIC               | 2.94E-10 | 0.20834935 | 0.208 | 0.422 | 1.04E-05 | mDC_lung |
| ICAM3              | 3.16E-10 | 0.16716232 | 0.259 | 0.503 | 1.12E-05 | mDC_lung |
| PUF60              | 3.31E-10 | 0.38160388 | 0.209 | 0.425 | 1.17E-05 | mDC_lung |
| POMP               | 3.34E-10 | 0.80722343 | 0.651 | 0.796 | 1.18E-05 | mDC_lung |
| LSM2               | 3.74E-10 | 0.13172511 | 0.262 | 0.513 | 1.33E-05 | mDC_lung |
| CYTH4              | 3.84E-10 | 0.49856572 | 0.146 | 0.309 | 1.36E-05 | mDC_lung |
| RGS14              | 3.89E-10 | 0.21541909 | 0.146 | 0.309 | 1.38E-05 | mDC_lung |
| ST8SIA4            | 4.02E-10 | 0.37312429 | 0.474 | 0.801 | 1.42E-05 | mDC_lung |
| CLEC7A             | 4.02E-10 | 0.14992728 | 0.136 | 0.287 | 1.42E-05 | mDC_lung |
| MRPS18A            | 4.06E-10 | 0.20220643 | 0.197 | 0.397 | 1.44E-05 | mDC_lung |
| RPS16              | 4.10E-10 | 0.19962499 | 0.939 | 0.969 | 1.45E-05 | mDC_lung |
| ATP6V1FNB          | 4.56E-10 | 0.75293177 | 0.661 | 0.787 | 1.62E-05 | mDC_lung |
| ITGB7              | 4.80E-10 | 0.26710483 | 0.167 | 0.344 | 1.70E-05 | mDC_lung |
| IL16               | 5.32E-10 | 0.26764896 | 0.222 | 0.432 | 1.89E-05 | mDC_lung |
| BSCL2              | 5.79E-10 | 0.16210588 | 0.114 | 0.254 | 2.05E-05 | mDC_lung |
| CUL7               | 6.00E-10 | 0.33233829 | 0.155 | 0.327 | 2.13E-05 | mDC_lung |
| SELENOK            | 6.02E-10 | 1.2375004  | 0.523 | 0.58  | 2.13E-05 | mDC_lung |
| KDM6B              | 6.14E-10 | 0.26592705 | 0.274 | 0.515 | 2.18E-05 | mDC_lung |
| EXOC3              | 6.18E-10 | 0.36378634 | 0.183 | 0.375 | 2.19E-05 | mDC_lung |
| DCPS               | 6.40E-10 | 0.25434132 | 0.2   | 0.406 | 2.27E-05 | mDC_lung |
| MRPL10             | 6.71E-10 | 0.27619837 | 0.13  | 0.283 | 2.38E-05 | mDC_lung |
| CYB5A              | 6.85E-10 | 0.18422561 | 0.248 | 0.482 | 2.43E-05 | mDC_lung |
| BTF3               | 7.12E-10 | 0.47260931 | 0.816 | 0.889 | 2.52E-05 | mDC_lung |

|                    |          |            |       |       |            |          |
|--------------------|----------|------------|-------|-------|------------|----------|
| ELL2               | 7.42E-10 | 0.52551093 | 0.23  | 0.428 | 2.63E-05   | mDC_lung |
| ENSMMUG00000062991 | 7.48E-10 | 0.28181716 | 0.159 | 0.331 | 2.65E-05   | mDC_lung |
| ENSMMUG00000056126 | 8.01E-10 | 2.11489586 | 0.325 | 0.257 | 2.84E-05   | mDC_lung |
| ENSMMUG00000039765 | 8.86E-10 | 0.21173328 | 0.157 | 0.327 | 3.14E-05   | mDC_lung |
| KYNU               | 8.96E-10 | 0.49789897 | 0.232 | 0.441 | 3.18E-05   | mDC_lung |
| HPS1               | 9.69E-10 | 0.20588807 | 0.115 | 0.254 | 3.43E-05   | mDC_lung |
| LAMP2              | 9.87E-10 | 0.49778511 | 0.144 | 0.303 | 3.50E-05   | mDC_lung |
| CD81               | 1.07E-09 | 0.1297321  | 0.272 | 0.518 | 3.79E-05   | mDC_lung |
| ENY2               | 1.16E-09 | 0.91593641 | 0.622 | 0.775 | 4.11E-05   | mDC_lung |
| NAGA               | 1.21E-09 | 0.10042704 | 0.204 | 0.402 | 4.29E-05   | mDC_lung |
| PIH1D1             | 1.24E-09 | 0.21630164 | 0.223 | 0.446 | 4.40E-05   | mDC_lung |
| CD2BP2             | 1.30E-09 | 0.30598558 | 0.148 | 0.308 | 4.61E-05   | mDC_lung |
| SAMM50             | 1.34E-09 | 0.31273808 | 0.177 | 0.36  | 4.74E-05   | mDC_lung |
| COX7A2             | 1.38E-09 | 1.37520212 | 0.48  | 0.528 | 4.88E-05   | mDC_lung |
| PRMT9              | 1.47E-09 | 2.23226677 | 0.34  | 0.256 | 5.19E-05   | mDC_lung |
| ARID5B             | 1.62E-09 | 0.72887855 | 0.22  | 0.42  | 5.73E-05   | mDC_lung |
| DNAJA2             | 1.95E-09 | 0.21951261 | 0.211 | 0.417 | 6.93E-05   | mDC_lung |
| SF3B4              | 2.06E-09 | 0.14398925 | 0.135 | 0.283 | 7.31E-05   | mDC_lung |
| REXO2              | 2.14E-09 | 0.11231295 | 0.176 | 0.352 | 7.59E-05   | mDC_lung |
| SLC35C2            | 2.14E-09 | 0.20201148 | 0.158 | 0.326 | 7.60E-05   | mDC_lung |
| SEPTIN2            | 2.21E-09 | 0.10939445 | 0.362 | 0.666 | 7.82E-05   | mDC_lung |
| CCT7               | 2.31E-09 | 0.16443713 | 0.259 | 0.5   | 8.18E-05   | mDC_lung |
| METRNL             | 2.36E-09 | 2.01898443 | 0.366 | 0.321 | 8.37E-05   | mDC_lung |
| TM2D1              | 2.58E-09 | 0.15035544 | 0.286 | 0.544 | 9.15E-05   | mDC_lung |
| SLC25A6            | 2.80E-09 | 0.35104649 | 0.156 | 0.322 | 9.91E-05   | mDC_lung |
| MRPL47             | 3.13E-09 | 0.23045884 | 0.198 | 0.397 | 0.000111   | mDC_lung |
| TARS1              | 3.19E-09 | 0.30432734 | 0.13  | 0.275 | 0.00011299 | mDC_lung |
| CARS1              | 3.55E-09 | 0.11024824 | 0.177 | 0.35  | 0.00012577 | mDC_lung |
| HMGB2              | 3.56E-09 | 0.31694651 | 0.248 | 0.476 | 0.00012625 | mDC_lung |
| CETN2              | 4.02E-09 | 0.22552286 | 0.178 | 0.353 | 0.00014253 | mDC_lung |
| TRAPPC4            | 4.10E-09 | 0.1403071  | 0.277 | 0.526 | 0.00014518 | mDC_lung |
| ILK                | 4.11E-09 | 0.24022574 | 0.18  | 0.36  | 0.00014572 | mDC_lung |
| HCK                | 4.15E-09 | 0.13560993 | 0.385 | 0.681 | 0.00014691 | mDC_lung |

|                    |          |            |       |       |            |          |
|--------------------|----------|------------|-------|-------|------------|----------|
| GABARAPL2          | 4.77E-09 | 0.52420503 | 0.755 | 0.899 | 0.00016898 | mDC_lung |
| TBC1D25            | 4.97E-09 | 0.16426513 | 0.246 | 0.463 | 0.00017621 | mDC_lung |
| TMEM50A            | 5.06E-09 | 0.12941402 | 0.348 | 0.647 | 0.00017912 | mDC_lung |
| RASGRP2            | 5.17E-09 | 0.22941423 | 0.195 | 0.376 | 0.00018327 | mDC_lung |
| PDHB               | 5.26E-09 | 0.21810548 | 0.177 | 0.349 | 0.00018631 | mDC_lung |
| SPAG7              | 5.31E-09 | 0.23587078 | 0.244 | 0.461 | 0.00018807 | mDC_lung |
| ENSMMUG00000064329 | 5.35E-09 | 0.34138868 | 0.163 | 0.322 | 0.00018972 | mDC_lung |
| DDRK1              | 5.54E-09 | 0.18828803 | 0.209 | 0.404 | 0.00019624 | mDC_lung |
| CXCL16             | 5.80E-09 | 0.21717464 | 0.168 | 0.327 | 0.00020543 | mDC_lung |
| HSD17B4            | 6.31E-09 | 0.30792468 | 0.425 | 0.744 | 0.00022341 | mDC_lung |
| BTF3L4             | 7.06E-09 | 0.21841365 | 0.294 | 0.559 | 0.00025017 | mDC_lung |
| MRPS23             | 7.19E-09 | 0.1704006  | 0.197 | 0.386 | 0.00025465 | mDC_lung |
| CLNS1A             | 7.26E-09 | 0.17284312 | 0.277 | 0.531 | 0.00025741 | mDC_lung |
| DYNLL1             | 7.65E-09 | 0.63463141 | 0.717 | 0.827 | 0.00027104 | mDC_lung |
| VMP1               | 8.60E-09 | 0.47788127 | 0.291 | 0.552 | 0.00030489 | mDC_lung |
| DYNC112            | 8.84E-09 | 0.23990361 | 0.238 | 0.454 | 0.00031322 | mDC_lung |
| ZNHIT1             | 9.09E-09 | 1.02674052 | 0.55  | 0.663 | 0.00032225 | mDC_lung |
| WBP2               | 9.30E-09 | 0.32342333 | 0.178 | 0.355 | 0.0003295  | mDC_lung |
| ENSMMUG00000055376 | 9.63E-09 | 0.37159033 | 0.164 | 0.331 | 0.00034108 | mDC_lung |
| PSMD6              | 9.73E-09 | 0.12802279 | 0.173 | 0.342 | 0.0003447  | mDC_lung |
| BCAP31             | 9.82E-09 | 0.28171459 | 0.218 | 0.42  | 0.00034796 | mDC_lung |
| MRPL43             | 1.06E-08 | 0.23628416 | 0.133 | 0.277 | 0.00037494 | mDC_lung |
| CDC123             | 1.16E-08 | 0.10847031 | 0.247 | 0.463 | 0.00041129 | mDC_lung |
| HACD4              | 1.19E-08 | 0.1477059  | 0.31  | 0.57  | 0.00042234 | mDC_lung |
| TNFRSF10A          | 1.20E-08 | 0.51581153 | 0.137 | 0.275 | 0.00042539 | mDC_lung |
| PTAR1              | 1.29E-08 | 0.17702193 | 0.152 | 0.303 | 0.00045598 | mDC_lung |
| C1D                | 1.29E-08 | 0.11927666 | 0.232 | 0.44  | 0.0004582  | mDC_lung |
| IDH3B              | 1.31E-08 | 0.38193677 | 0.135 | 0.279 | 0.00046591 | mDC_lung |
| PHKG2              | 1.40E-08 | 0.41232179 | 0.134 | 0.275 | 0.00049605 | mDC_lung |
| EEF1B2             | 1.43E-08 | 0.25412046 | 0.907 | 0.959 | 0.00050497 | mDC_lung |
| GLRX2              | 1.45E-08 | 0.13276885 | 0.125 | 0.259 | 0.00051291 | mDC_lung |
| FBXO10             | 1.55E-08 | 0.14761689 | 0.261 | 0.492 | 0.00054767 | mDC_lung |
| NDUFB4             | 1.57E-08 | 0.76071351 | 0.626 | 0.79  | 0.00055625 | mDC_lung |

|                   |          |            |       |       |            |          |
|-------------------|----------|------------|-------|-------|------------|----------|
| SNX17             | 1.65E-08 | 0.30981048 | 0.187 | 0.366 | 0.00058478 | mDC_lung |
| MED10             | 1.71E-08 | 0.22828453 | 0.14  | 0.283 | 0.00060509 | mDC_lung |
| NDUFS4            | 1.88E-08 | 0.17563451 | 0.317 | 0.581 | 0.00066606 | mDC_lung |
| NLRP3             | 1.99E-08 | 0.72093432 | 0.191 | 0.371 | 0.00070515 | mDC_lung |
| MRPL28            | 2.15E-08 | 0.16600279 | 0.139 | 0.28  | 0.00076164 | mDC_lung |
| KDELRL1           | 2.32E-08 | 0.11823817 | 0.289 | 0.533 | 0.00082143 | mDC_lung |
| CREM              | 2.35E-08 | 1.44579522 | 0.481 | 0.503 | 0.00083108 | mDC_lung |
| APIP              | 2.52E-08 | 0.28908203 | 0.194 | 0.373 | 0.00089286 | mDC_lung |
| TPI1              | 2.68E-08 | 0.80958115 | 0.618 | 0.762 | 0.00094822 | mDC_lung |
| TTC37             | 2.83E-08 | 0.25868414 | 0.18  | 0.347 | 0.00100107 | mDC_lung |
| DCTN2             | 2.93E-08 | 0.26893766 | 0.228 | 0.433 | 0.00103764 | mDC_lung |
| GOLGA7            | 2.93E-08 | 0.29918133 | 0.122 | 0.252 | 0.0010379  | mDC_lung |
| MTCH2             | 3.01E-08 | 0.23827291 | 0.252 | 0.471 | 0.00106514 | mDC_lung |
| INO80C            | 3.18E-08 | 0.30496448 | 0.212 | 0.407 | 0.0011256  | mDC_lung |
| NRBF2             | 3.23E-08 | 0.45720637 | 0.146 | 0.293 | 0.00114568 | mDC_lung |
| PFDN4             | 3.35E-08 | 0.26065081 | 0.262 | 0.487 | 0.00118668 | mDC_lung |
| ROGDI             | 3.41E-08 | 0.30949475 | 0.153 | 0.303 | 0.00120678 | mDC_lung |
| PTGS2             | 3.43E-08 | 1.65782646 | 0.335 | 0.251 | 0.00121358 | mDC_lung |
| CHMP2B            | 3.49E-08 | 0.36372621 | 0.189 | 0.368 | 0.0012374  | mDC_lung |
| CASP4             | 3.77E-08 | 0.24429158 | 0.138 | 0.275 | 0.00133695 | mDC_lung |
| ENSMUG00000021246 | 3.80E-08 | 0.35831388 | 0.202 | 0.391 | 0.00134543 | mDC_lung |
| BTK               | 4.01E-08 | 0.18540859 | 0.181 | 0.347 | 0.0014206  | mDC_lung |
| MRPS18C           | 4.75E-08 | 0.37954432 | 0.203 | 0.388 | 0.0016814  | mDC_lung |
| TRABD             | 4.78E-08 | 0.45038011 | 0.202 | 0.383 | 0.00169254 | mDC_lung |
| ETS2              | 4.90E-08 | 0.57858286 | 0.136 | 0.272 | 0.00173563 | mDC_lung |
| ENSMUG00000017466 | 4.95E-08 | 0.5914537  | 0.747 | 0.904 | 0.00175427 | mDC_lung |
| WBP4              | 5.50E-08 | 0.5045861  | 0.132 | 0.267 | 0.0019503  | mDC_lung |
| ABHD16A           | 6.02E-08 | 0.48009246 | 0.158 | 0.311 | 0.0021325  | mDC_lung |
| ITGB1BP1          | 6.09E-08 | 0.35077076 | 0.183 | 0.353 | 0.00215705 | mDC_lung |
| PPIH              | 6.49E-08 | 0.16339402 | 0.214 | 0.402 | 0.00229906 | mDC_lung |
| ENSMUG00000044103 | 6.51E-08 | 0.25952558 | 0.142 | 0.282 | 0.00230805 | mDC_lung |
| PSMD13            | 7.37E-08 | 0.17230553 | 0.276 | 0.508 | 0.00261028 | mDC_lung |
| RFXANK            | 8.05E-08 | 0.22753519 | 0.169 | 0.324 | 0.00285233 | mDC_lung |

|                   |          |            |       |       |            |          |
|-------------------|----------|------------|-------|-------|------------|----------|
| ENSMUG00000000249 | 9.10E-08 | 0.51469018 | 0.251 | 0.477 | 0.00322329 | mDC_lung |
| GPX1              | 9.30E-08 | 1.66736802 | 0.335 | 0.275 | 0.00329675 | mDC_lung |
| MLF2              | 9.97E-08 | 0.42726119 | 0.284 | 0.537 | 0.00353323 | mDC_lung |
| EEF1A1            | 1.02E-07 | 0.22406069 | 0.92  | 0.964 | 0.00360027 | mDC_lung |
| THOC6             | 1.03E-07 | 0.36345134 | 0.145 | 0.287 | 0.00364467 | mDC_lung |
| GLO1              | 1.05E-07 | 0.22174898 | 0.169 | 0.324 | 0.00373134 | mDC_lung |
| IDH3G             | 1.09E-07 | 0.31739469 | 0.18  | 0.344 | 0.00385966 | mDC_lung |
| CARHSP1           | 1.13E-07 | 0.22150291 | 0.222 | 0.404 | 0.00398695 | mDC_lung |
| DMAC1             | 1.16E-07 | 0.26955678 | 0.145 | 0.285 | 0.00409277 | mDC_lung |
| IRF3              | 1.16E-07 | 0.32386595 | 0.263 | 0.489 | 0.0041066  | mDC_lung |
| GLRX3             | 1.17E-07 | 0.21066653 | 0.278 | 0.51  | 0.00414241 | mDC_lung |
| BIN1              | 1.18E-07 | 0.37773243 | 0.205 | 0.391 | 0.00417405 | mDC_lung |
| VAV1              | 1.34E-07 | 1.57759577 | 0.186 | 0.355 | 0.00476432 | mDC_lung |
| SLC39A1           | 1.40E-07 | 0.51487488 | 0.132 | 0.265 | 0.00495936 | mDC_lung |
| DHRS1             | 1.45E-07 | 0.27477733 | 0.168 | 0.321 | 0.00513108 | mDC_lung |
| PSMB5             | 1.52E-07 | 0.16875148 | 0.336 | 0.604 | 0.0053868  | mDC_lung |
| ATPAF2            | 1.57E-07 | 0.2576327  | 0.139 | 0.274 | 0.00554564 | mDC_lung |
| ATP5MC3           | 1.70E-07 | 0.58415019 | 0.717 | 0.873 | 0.00603633 | mDC_lung |
| ALG5              | 1.72E-07 | 0.26036599 | 0.131 | 0.259 | 0.00608379 | mDC_lung |
| NR1H2             | 1.77E-07 | 0.48180453 | 0.199 | 0.378 | 0.00626729 | mDC_lung |
| PSMC4             | 1.86E-07 | 0.22468648 | 0.274 | 0.505 | 0.00658779 | mDC_lung |
| POLR2D            | 1.90E-07 | 0.4365352  | 0.188 | 0.36  | 0.00672849 | mDC_lung |
| CA9               | 2.09E-07 | 0.25905165 | 0.311 | 0.565 | 0.00739882 | mDC_lung |
| U3.99             | 2.11E-07 | 0.45705928 | 0.136 | 0.264 | 0.00745855 | mDC_lung |
| POLR1D            | 2.16E-07 | 0.11102537 | 0.359 | 0.642 | 0.00764401 | mDC_lung |
| POLR2F            | 2.26E-07 | 0.23201267 | 0.282 | 0.511 | 0.00801878 | mDC_lung |
| DGUOK             | 2.27E-07 | 0.19091618 | 0.188 | 0.352 | 0.00804501 | mDC_lung |
| PLGRKT            | 2.32E-07 | 0.40955287 | 0.225 | 0.419 | 0.0082271  | mDC_lung |
| CTTNBP2NL         | 2.36E-07 | 0.24146954 | 0.178 | 0.324 | 0.00835463 | mDC_lung |
| SSR4              | 2.38E-07 | 0.54065677 | 0.694 | 0.855 | 0.00844414 | mDC_lung |
| DTD1              | 2.43E-07 | 0.21510793 | 0.294 | 0.541 | 0.00860453 | mDC_lung |
| TATDN1            | 2.47E-07 | 0.34803378 | 0.168 | 0.321 | 0.0087438  | mDC_lung |
| RNF5              | 2.58E-07 | 0.24144019 | 0.283 | 0.516 | 0.00913739 | mDC_lung |

|          |          |            |       |       |            |          |
|----------|----------|------------|-------|-------|------------|----------|
| ADARB2   | 2.62E-07 | 0.35750995 | 0.186 | 0.349 | 0.00927297 | mDC_lung |
| GATD3A   | 2.73E-07 | 0.45149144 | 0.129 | 0.254 | 0.00966509 | mDC_lung |
| PSMD8    | 2.75E-07 | 0.42203305 | 0.17  | 0.326 | 0.00973978 | mDC_lung |
| POLR2E   | 2.80E-07 | 0.41863218 | 0.212 | 0.396 | 0.00991485 | mDC_lung |
| MRPS6    | 2.83E-07 | 0.30349888 | 0.273 | 0.493 | 0.01001216 | mDC_lung |
| MOSPD3   | 2.88E-07 | 0.32110507 | 0.145 | 0.28  | 0.01022198 | mDC_lung |
| POLR2G   | 2.99E-07 | 0.28920866 | 0.257 | 0.472 | 0.01059329 | mDC_lung |
| MRPS11   | 3.04E-07 | 0.45314005 | 0.148 | 0.288 | 0.01075692 | mDC_lung |
| TXN      | 3.04E-07 | 0.34132156 | 0.853 | 0.953 | 0.01076432 | mDC_lung |
| NMRAL1   | 3.35E-07 | 0.33838527 | 0.142 | 0.275 | 0.0118801  | mDC_lung |
| IL10RA   | 3.35E-07 | 0.30010544 | 0.329 | 0.586 | 0.01188589 | mDC_lung |
| UCHL5    | 3.44E-07 | 0.47710619 | 0.136 | 0.265 | 0.01219062 | mDC_lung |
| NAA20    | 3.84E-07 | 0.33631193 | 0.283 | 0.523 | 0.01360886 | mDC_lung |
| CFAP36   | 3.86E-07 | 0.20595663 | 0.158 | 0.298 | 0.01367827 | mDC_lung |
| SHISA5   | 4.07E-07 | 0.20432301 | 0.34  | 0.607 | 0.01441576 | mDC_lung |
| LAPTM4A  | 4.12E-07 | 0.35509942 | 0.169 | 0.321 | 0.01460835 | mDC_lung |
| NDUFS8   | 4.40E-07 | 0.8432952  | 0.584 | 0.743 | 0.01558781 | mDC_lung |
| DPY30    | 4.41E-07 | 0.38406543 | 0.245 | 0.453 | 0.01561432 | mDC_lung |
| CCDC124  | 4.42E-07 | 0.45243381 | 0.13  | 0.256 | 0.0156471  | mDC_lung |
| MRPS17   | 4.66E-07 | 0.28363713 | 0.199 | 0.37  | 0.01650548 | mDC_lung |
| TNFSF13B | 4.85E-07 | 0.25851091 | 0.298 | 0.537 | 0.01720087 | mDC_lung |
| FIBP     | 4.88E-07 | 0.34515452 | 0.264 | 0.487 | 0.01728467 | mDC_lung |
| VDAC3    | 4.93E-07 | 0.19440716 | 0.137 | 0.259 | 0.01747022 | mDC_lung |
| HMGN4    | 5.08E-07 | 0.32342569 | 0.251 | 0.458 | 0.01800355 | mDC_lung |
| IGFLR1   | 5.64E-07 | 0.43898235 | 0.233 | 0.428 | 0.01999944 | mDC_lung |
| SATB1    | 6.04E-07 | 0.40399155 | 0.298 | 0.493 | 0.02140973 | mDC_lung |
| RBBP4    | 6.15E-07 | 0.25244815 | 0.289 | 0.52  | 0.02180485 | mDC_lung |
| MVB12A   | 6.72E-07 | 0.22867914 | 0.331 | 0.593 | 0.02382576 | mDC_lung |
| INTS5    | 7.08E-07 | 0.2953946  | 0.14  | 0.269 | 0.02509436 | mDC_lung |
| YIF1A    | 7.09E-07 | 0.32168352 | 0.186 | 0.345 | 0.02512866 | mDC_lung |
| TPD52L2  | 7.60E-07 | 0.43174973 | 0.205 | 0.378 | 0.02692665 | mDC_lung |
| HADHB    | 7.69E-07 | 0.33745394 | 0.252 | 0.461 | 0.02726247 | mDC_lung |
| MRPL15   | 7.71E-07 | 0.26628675 | 0.16  | 0.303 | 0.02730565 | mDC_lung |



|                    |          |            |       |       |            |          |
|--------------------|----------|------------|-------|-------|------------|----------|
| ICAM1              | 7.92E-07 | 0.43338297 | 0.185 | 0.332 | 0.02805544 | mDC_lung |
| SEC11C             | 8.04E-07 | 0.31383966 | 0.253 | 0.458 | 0.02848952 | mDC_lung |
| STAR               | 8.62E-07 | 0.31401709 | 0.239 | 0.436 | 0.03053807 | mDC_lung |
| NDUFB8             | 9.06E-07 | 0.83933217 | 0.58  | 0.741 | 0.03211387 | mDC_lung |
| CTSA               | 9.46E-07 | 0.48458666 | 0.159 | 0.296 | 0.03353479 | mDC_lung |
| ENSMMUG00000001458 | 1.06E-06 | 0.28612    | 0.84  | 0.959 | 0.03742754 | mDC_lung |
| ENSMMUG00000014862 | 1.09E-06 | 0.2077081  | 0.381 | 0.671 | 0.03849229 | mDC_lung |
| ZNRD2              | 1.17E-06 | 0.47234578 | 0.135 | 0.259 | 0.04163023 | mDC_lung |
| NUDT5              | 1.25E-06 | 0.56187192 | 0.155 | 0.292 | 0.04431084 | mDC_lung |
| VMO1               | 1.33E-06 | 0.7499428  | 0.709 | 0.782 | 0.04702671 | mDC_lung |
| MRPL48             | 1.42E-06 | 0.23198803 | 0.133 | 0.252 | 0.05018113 | mDC_lung |
| SLAMF9             | 1.48E-06 | 0.29006517 | 0.286 | 0.487 | 0.05238672 | mDC_lung |
| PPA1               | 1.58E-06 | 0.17768623 | 0.345 | 0.611 | 0.05613044 | mDC_lung |
| FOSL2              | 1.69E-06 | 1.76186701 | 0.366 | 0.344 | 0.06003037 | mDC_lung |
| ANXA2              | 1.78E-06 | 0.42928299 | 0.774 | 0.857 | 0.06303801 | mDC_lung |
| LSP1               | 1.89E-06 | 0.36760343 | 0.804 | 0.94  | 0.06687504 | mDC_lung |
| ENSMMUG00000063549 | 2.03E-06 | 0.58049611 | 0.174 | 0.321 | 0.07176359 | mDC_lung |
| NKPD1              | 2.09E-06 | 0.56248185 | 0.17  | 0.318 | 0.0741026  | mDC_lung |
| SLC38A2            | 2.11E-06 | 0.47080061 | 0.28  | 0.495 | 0.0748798  | mDC_lung |
| GZF1               | 2.21E-06 | 0.84934198 | 0.135 | 0.256 | 0.07848082 | mDC_lung |
| COPZ1              | 2.31E-06 | 0.28197235 | 0.291 | 0.523 | 0.08181242 | mDC_lung |
| THYN1              | 2.35E-06 | 0.20453443 | 0.204 | 0.366 | 0.08325084 | mDC_lung |
| POP5               | 2.42E-06 | 0.43882272 | 0.135 | 0.256 | 0.08574689 | mDC_lung |
| RPS3A              | 2.54E-06 | 0.142737   | 0.946 | 0.972 | 0.09010488 | mDC_lung |
| MPHOSPH6           | 2.55E-06 | 0.33678951 | 0.139 | 0.259 | 0.09023228 | mDC_lung |
| GHITM              | 2.61E-06 | 0.23126652 | 0.383 | 0.671 | 0.09258393 | mDC_lung |
| NDUFB7             | 2.66E-06 | 0.6020909  | 0.671 | 0.829 | 0.09410835 | mDC_lung |
| RBX1               | 2.79E-06 | 0.64059027 | 0.658 | 0.824 | 0.09884638 | mDC_lung |
| PXN                | 2.86E-06 | 0.79040453 | 0.141 | 0.264 | 0.10119161 | mDC_lung |
| ENSMMUG00000055748 | 2.94E-06 | 0.28649576 | 0.147 | 0.272 | 0.10433149 | mDC_lung |
| NFU1               | 3.03E-06 | 0.47527231 | 0.178 | 0.327 | 0.10753306 | mDC_lung |
| ENSMMUG00000056624 | 3.23E-06 | 0.45153597 | 0.225 | 0.402 | 0.11436434 | mDC_lung |
| BIRC2              | 3.37E-06 | 0.68898477 | 0.145 | 0.27  | 0.11924334 | mDC_lung |

|                   |          |            |       |       |            |          |
|-------------------|----------|------------|-------|-------|------------|----------|
| TM6SF1            | 3.47E-06 | 0.39728506 | 0.205 | 0.368 | 0.1230268  | mDC_lung |
| RAMAC             | 3.50E-06 | 0.33455512 | 0.204 | 0.365 | 0.12410161 | mDC_lung |
| PSMG2             | 3.52E-06 | 0.43261454 | 0.237 | 0.423 | 0.12470661 | mDC_lung |
| NSMCE1            | 3.69E-06 | 0.41643982 | 0.169 | 0.308 | 0.1307222  | mDC_lung |
| ENSMUG00000038348 | 3.72E-06 | 1.02315004 | 0.628 | 0.72  | 0.1316475  | mDC_lung |
| RBM8A             | 3.87E-06 | 0.95709825 | 0.537 | 0.66  | 0.13694838 | mDC_lung |
| STOML2            | 3.96E-06 | 0.25764962 | 0.28  | 0.497 | 0.14035172 | mDC_lung |
| FUNDC2            | 3.98E-06 | 0.41502453 | 0.174 | 0.318 | 0.14085266 | mDC_lung |
| HSPB11            | 4.00E-06 | 0.39652257 | 0.138 | 0.256 | 0.14180273 | mDC_lung |
| MRPS15            | 4.56E-06 | 0.11643867 | 0.357 | 0.616 | 0.16156996 | mDC_lung |
| ENSMUG00000059289 | 4.58E-06 | 0.34865359 | 0.28  | 0.49  | 0.16242202 | mDC_lung |
| CFDP1             | 5.23E-06 | 0.75305037 | 0.614 | 0.785 | 0.185421   | mDC_lung |
| PSMA6             | 5.31E-06 | 0.29443249 | 0.335 | 0.594 | 0.18804288 | mDC_lung |
| PSMC3             | 5.49E-06 | 0.51313386 | 0.231 | 0.415 | 0.19456812 | mDC_lung |
| PEPD              | 5.62E-06 | 0.26869675 | 0.25  | 0.435 | 0.19899175 | mDC_lung |
| MRPL52            | 5.88E-06 | 1.21498203 | 0.429 | 0.467 | 0.2083275  | mDC_lung |
| MITD1             | 5.94E-06 | 0.53435519 | 0.212 | 0.381 | 0.21050644 | mDC_lung |
| ANXA1             | 6.13E-06 | 0.4684173  | 0.781 | 0.906 | 0.2173674  | mDC_lung |
| MEA1              | 6.62E-06 | 0.36793685 | 0.168 | 0.301 | 0.23471037 | mDC_lung |
| ILF2              | 7.11E-06 | 0.32393518 | 0.267 | 0.474 | 0.25202796 | mDC_lung |
| ESF1              | 7.62E-06 | 0.41718833 | 0.242 | 0.427 | 0.2699358  | mDC_lung |
| ENO1              | 7.67E-06 | 0.44377677 | 0.759 | 0.919 | 0.27173197 | mDC_lung |
| EIF3G             | 7.72E-06 | 0.20837552 | 0.379 | 0.65  | 0.27347077 | mDC_lung |
| DUSP2             | 7.77E-06 | 0.55573023 | 0.159 | 0.279 | 0.27522862 | mDC_lung |
| PARVG             | 8.04E-06 | 0.37486724 | 0.282 | 0.49  | 0.28482817 | mDC_lung |
| MRPS14            | 8.17E-06 | 0.37481171 | 0.245 | 0.435 | 0.2893328  | mDC_lung |
| MGMT              | 8.19E-06 | 0.30110604 | 0.22  | 0.379 | 0.29010894 | mDC_lung |
| CSRP1             | 8.36E-06 | 0.38537854 | 0.296 | 0.515 | 0.29630221 | mDC_lung |
| RPL3              | 8.72E-06 | 0.13293811 | 0.933 | 0.979 | 0.30895922 | mDC_lung |
| STARD7            | 9.07E-06 | 0.41691644 | 0.226 | 0.397 | 0.32150115 | mDC_lung |
| LYAR              | 9.10E-06 | 0.60659583 | 0.197 | 0.347 | 0.32237333 | mDC_lung |
| NANS              | 9.23E-06 | 0.30571519 | 0.262 | 0.458 | 0.32710512 | mDC_lung |
| CNIH4             | 9.38E-06 | 0.18606374 | 0.368 | 0.621 | 0.33252212 | mDC_lung |

|                     |          |            |       |       |            |          |
|---------------------|----------|------------|-------|-------|------------|----------|
| NR4A1               | 9.49E-06 | 0.50429345 | 0.255 | 0.435 | 0.33607336 | mDC_lung |
| PRELID3B            | 9.67E-06 | 0.41211522 | 0.182 | 0.322 | 0.34245542 | mDC_lung |
| ENSMMUG00000006283  | 9.97E-06 | 1.86485394 | 0.273 | 0.23  | 0.35330799 | mDC_lung |
| HNRNPH1             | 1.02E-05 | 0.21384113 | 0.45  | 0.769 | 0.36029271 | mDC_lung |
| PPIA                | 1.09E-05 | 0.17007621 | 0.349 | 0.581 | 0.38591189 | mDC_lung |
| TINF2               | 1.17E-05 | 0.53171511 | 0.661 | 0.852 | 0.416083   | mDC_lung |
| ENSMMUG000000061630 | 1.21E-05 | 0.24102377 | 0.292 | 0.505 | 0.43044925 | mDC_lung |
| POR                 | 1.41E-05 | 0.83644233 | 0.201 | 0.357 | 0.49888307 | mDC_lung |
| PPDPF               | 1.44E-05 | 0.30445422 | 0.303 | 0.523 | 0.50947604 | mDC_lung |
| SEC62               | 1.44E-05 | 0.50502152 | 0.279 | 0.49  | 0.5104322  | mDC_lung |
| ALOX5AP             | 1.44E-05 | 0.20747542 | 0.27  | 0.445 | 0.5114441  | mDC_lung |
| CMC1                | 1.46E-05 | 0.12989462 | 0.164 | 0.287 | 0.51666786 | mDC_lung |
| TMEM219             | 1.46E-05 | 0.25571129 | 0.348 | 0.616 | 0.51689462 | mDC_lung |
| CDKN1A              | 1.49E-05 | 1.0708076  | 0.487 | 0.523 | 0.52629025 | mDC_lung |
| CHCHD1              | 1.52E-05 | 0.31773695 | 0.254 | 0.44  | 0.53984115 | mDC_lung |
| PSMA1               | 1.60E-05 | 0.12438449 | 0.458 | 0.775 | 0.56618678 | mDC_lung |
| DBI                 | 1.63E-05 | 0.57041856 | 0.658 | 0.834 | 0.57871281 | mDC_lung |
| TCEAL8              | 1.74E-05 | 0.53826927 | 0.172 | 0.306 | 0.61812492 | mDC_lung |
| NAPA                | 1.78E-05 | 0.42647879 | 0.247 | 0.432 | 0.63144238 | mDC_lung |
| SDHAF2              | 1.83E-05 | 0.52537618 | 0.144 | 0.261 | 0.65012631 | mDC_lung |
| TAPBPL              | 1.84E-05 | 0.46253526 | 0.18  | 0.313 | 0.65190755 | mDC_lung |
| ESD                 | 1.88E-05 | 0.51860428 | 0.239 | 0.42  | 0.66624288 | mDC_lung |
| FLYWCH2             | 1.88E-05 | 0.52373041 | 0.157 | 0.282 | 0.66713496 | mDC_lung |
| PRMT1               | 1.90E-05 | 0.35204468 | 0.316 | 0.55  | 0.67178982 | mDC_lung |
| GRPEL1              | 1.92E-05 | 0.30169951 | 0.277 | 0.476 | 0.67865898 | mDC_lung |
| NDUFS6              | 1.95E-05 | 0.84253336 | 0.548 | 0.689 | 0.69113803 | mDC_lung |
| DGKB                | 1.98E-05 | 0.69939128 | 0.588 | 0.726 | 0.70292869 | mDC_lung |
| PMVK                | 1.99E-05 | 0.47580664 | 0.19  | 0.334 | 0.70356252 | mDC_lung |
| PQBP1               | 2.00E-05 | 0.63376683 | 0.17  | 0.301 | 0.7093707  | mDC_lung |
| ENSMMUG00000007536  | 2.16E-05 | 0.95101898 | 0.506 | 0.619 | 0.76683257 | mDC_lung |
| ERBB3               | 2.30E-05 | 0.27686242 | 0.386 | 0.663 | 0.81531474 | mDC_lung |
| UCP2                | 2.36E-05 | 0.34448099 | 0.36  | 0.604 | 0.83693986 | mDC_lung |
| SH3BGR1             | 2.49E-05 | 0.42107889 | 0.74  | 0.899 | 0.88180136 | mDC_lung |

|                     |          |            |       |       |            |          |
|---------------------|----------|------------|-------|-------|------------|----------|
| IL13RA1             | 2.59E-05 | 0.57331529 | 0.303 | 0.515 | 0.91835623 | mDC_lung |
| ENSMMUG00000006778  | 2.68E-05 | 0.36712587 | 0.307 | 0.536 | 0.94855557 | mDC_lung |
| MDH1                | 2.73E-05 | 0.24323851 | 0.377 | 0.655 | 0.96706085 | mDC_lung |
| ENSMMUG000000022874 | 2.78E-05 | 0.50684843 | 0.336 | 0.564 | 0.98327287 | mDC_lung |
| PRDX5               | 2.86E-05 | 0.8463254  | 0.563 | 0.707 | 1          | mDC_lung |
| ND3                 | 2.89E-05 | 0.64246594 | 0.72  | 0.814 | 1          | mDC_lung |
| PFDN6               | 2.92E-05 | 0.30512827 | 0.366 | 0.634 | 1          | mDC_lung |
| TMEM14B             | 3.03E-05 | 0.31958155 | 0.781 | 0.915 | 1          | mDC_lung |
| MIDN                | 3.25E-05 | 0.57628713 | 0.273 | 0.464 | 1          | mDC_lung |
| CD58                | 3.37E-05 | 0.24293039 | 0.371 | 0.614 | 1          | mDC_lung |
| C14H11orf58         | 3.75E-05 | 0.25603455 | 0.362 | 0.621 | 1          | mDC_lung |
| ENSMMUG00000000258  | 3.82E-05 | 0.31264795 | 0.163 | 0.282 | 1          | mDC_lung |
| SLC15A3             | 3.82E-05 | 0.56544316 | 0.154 | 0.267 | 1          | mDC_lung |
| CINP                | 3.87E-05 | 0.50447223 | 0.147 | 0.259 | 1          | mDC_lung |
| ENSMMUG000000002324 | 3.91E-05 | 0.89732198 | 0.536 | 0.682 | 1          | mDC_lung |
| RHOF                | 3.95E-05 | 0.50353072 | 0.217 | 0.375 | 1          | mDC_lung |
| SNRPB2              | 4.02E-05 | 0.17706297 | 0.395 | 0.671 | 1          | mDC_lung |
| MIC1                | 4.07E-05 | 0.25233239 | 0.406 | 0.686 | 1          | mDC_lung |
| BAX                 | 4.20E-05 | 0.37490792 | 0.309 | 0.541 | 1          | mDC_lung |
| ENSMMUG000000002075 | 4.21E-05 | 0.74899741 | 0.576 | 0.726 | 1          | mDC_lung |
| DPCD                | 4.26E-05 | 0.45138896 | 0.157 | 0.274 | 1          | mDC_lung |
| STX10               | 4.41E-05 | 0.51058377 | 0.177 | 0.308 | 1          | mDC_lung |
| PHB2                | 4.63E-05 | 0.41663222 | 0.178 | 0.308 | 1          | mDC_lung |
| TMED9               | 5.10E-05 | 0.26010907 | 0.3   | 0.51  | 1          | mDC_lung |
| MCTS1               | 5.13E-05 | 0.36656627 | 0.279 | 0.482 | 1          | mDC_lung |
| RAB5A               | 5.18E-05 | 0.43454412 | 0.41  | 0.682 | 1          | mDC_lung |
| COPE                | 5.22E-05 | 0.67980585 | 0.577 | 0.757 | 1          | mDC_lung |
| AP2S1               | 5.48E-05 | 0.92207245 | 0.518 | 0.648 | 1          | mDC_lung |
| PFDN5               | 5.85E-05 | 0.93642207 | 0.504 | 0.625 | 1          | mDC_lung |
| ENSMMUG000000029987 | 6.54E-05 | 0.47542251 | 0.262 | 0.45  | 1          | mDC_lung |
| WAS                 | 6.64E-05 | 0.23267572 | 0.362 | 0.609 | 1          | mDC_lung |
| PDCD10              | 7.59E-05 | 0.39796791 | 0.352 | 0.604 | 1          | mDC_lung |
| TIMM17A             | 7.64E-05 | 0.43025672 | 0.296 | 0.502 | 1          | mDC_lung |

|                    |            |            |       |       |            |
|--------------------|------------|------------|-------|-------|------------|
| TMEM167A           | 8.17E-05   | 0.42824213 | 0.315 | 0.537 | 1 mDC_lung |
| UQCRC1             | 8.21E-05   | 0.4756323  | 0.296 | 0.508 | 1 mDC_lung |
| RHOG               | 8.28E-05   | 0.25848454 | 0.415 | 0.707 | 1 mDC_lung |
| ENSMMUG00000005880 | 8.48E-05   | 0.36737779 | 0.342 | 0.591 | 1 mDC_lung |
| PRMT2              | 8.52E-05   | 0.37313262 | 0.292 | 0.497 | 1 mDC_lung |
| WASHC3             | 8.53E-05   | 0.47325227 | 0.234 | 0.397 | 1 mDC_lung |
| CSTB               | 8.80E-05   | 1.66198034 | 0.298 | 0.277 | 1 mDC_lung |
| NDUFS3             | 8.84E-05   | 0.30619272 | 0.316 | 0.531 | 1 mDC_lung |
| MRPL34             | 8.85E-05   | 0.3462707  | 0.326 | 0.562 | 1 mDC_lung |
| C18H18orf32        | 8.90E-05   | 0.21713992 | 0.924 | 0.963 | 1 mDC_lung |
| NDUFC2             | 9.17E-05   | 0.64127321 | 0.608 | 0.792 | 1 mDC_lung |
| LY6D               | 9.74E-05   | 0.23489905 | 0.191 | 0.301 | 1 mDC_lung |
| CD320              | 0.00011128 | 0.69761145 | 0.582 | 0.748 | 1 mDC_lung |
| NDUFS7             | 0.00011242 | 0.46777686 | 0.202 | 0.342 | 1 mDC_lung |
| SPCS2              | 0.00011729 | 0.1326881  | 0.402 | 0.658 | 1 mDC_lung |
| ENSMMUG00000050829 | 0.0001232  | 0.10960335 | 0.551 | 0.839 | 1 mDC_lung |
| ENSMMUG00000017890 | 0.00012654 | 0.37323336 | 0.247 | 0.414 | 1 mDC_lung |
| CD2                | 0.00012792 | 0.19164336 | 0.172 | 0.279 | 1 mDC_lung |
| ENSMMUG00000018740 | 0.00012835 | 0.33714253 | 0.325 | 0.549 | 1 mDC_lung |
| NINJ1              | 0.00013832 | 1.74476061 | 0.268 | 0.238 | 1 mDC_lung |
| NDUFV2             | 0.00014225 | 0.77925589 | 0.559 | 0.733 | 1 mDC_lung |
| ERGIC3             | 0.00015041 | 0.49971775 | 0.271 | 0.461 | 1 mDC_lung |
| ENSMMUG00000055457 | 0.00015047 | 0.37875312 | 0.357 | 0.603 | 1 mDC_lung |
| PARK7              | 0.00015114 | 0.73330664 | 0.567 | 0.723 | 1 mDC_lung |
| GABARAP            | 0.00019077 | 0.32357874 | 0.824 | 0.928 | 1 mDC_lung |
| HNMT               | 0.00019567 | 0.48806981 | 0.23  | 0.381 | 1 mDC_lung |
| AP2M1              | 0.000201   | 0.35798198 | 0.366 | 0.63  | 1 mDC_lung |
| CDC37              | 0.00021518 | 0.4659696  | 0.303 | 0.511 | 1 mDC_lung |
| ATP13A3            | 0.00021525 | 0.74379784 | 0.302 | 0.476 | 1 mDC_lung |
| IAH1               | 0.00022239 | 0.39600396 | 0.262 | 0.436 | 1 mDC_lung |
| MRPL13             | 0.00022719 | 0.43729605 | 0.27  | 0.458 | 1 mDC_lung |
| FAM32A             | 0.00022991 | 0.58834276 | 0.174 | 0.292 | 1 mDC_lung |
| NDUFA6             | 0.00023245 | 0.92986296 | 0.492 | 0.609 | 1 mDC_lung |

|                    |            |            |       |       |            |
|--------------------|------------|------------|-------|-------|------------|
| CISD2              | 0.00023621 | 0.6288891  | 0.247 | 0.415 | 1 mDC_lung |
| MAGOH              | 0.00023841 | 0.88193568 | 0.524 | 0.682 | 1 mDC_lung |
| COPS6              | 0.000242   | 0.33928585 | 0.326 | 0.554 | 1 mDC_lung |
| NDUFV1             | 0.000243   | 0.52854539 | 0.263 | 0.443 | 1 mDC_lung |
| SUCLG1             | 0.00024482 | 0.22229907 | 0.408 | 0.682 | 1 mDC_lung |
| ABI3               | 0.00024515 | 0.53517764 | 0.214 | 0.355 | 1 mDC_lung |
| CD59               | 0.00024864 | 0.50629005 | 0.307 | 0.51  | 1 mDC_lung |
| STING1             | 0.00025185 | 0.40049586 | 0.181 | 0.298 | 1 mDC_lung |
| ENSMMUG00000057449 | 0.0002596  | 0.3498184  | 0.348 | 0.59  | 1 mDC_lung |
| SNX18              | 0.00027426 | 0.92635708 | 0.206 | 0.339 | 1 mDC_lung |
| LGALS3             | 0.00029232 | 1.34161041 | 0.392 | 0.401 | 1 mDC_lung |
| BUD23              | 0.00029958 | 0.25697689 | 0.4   | 0.681 | 1 mDC_lung |
| POLR1H             | 0.00031978 | 0.45569805 | 0.287 | 0.487 | 1 mDC_lung |
| PSMG1              | 0.00036234 | 0.69907228 | 0.189 | 0.316 | 1 mDC_lung |
| CSTA               | 0.0003625  | 0.40338153 | 0.28  | 0.45  | 1 mDC_lung |
| YJEFN3             | 0.00039438 | 0.61402838 | 0.573 | 0.744 | 1 mDC_lung |
| CD48               | 0.00041102 | 0.50346117 | 0.275 | 0.453 | 1 mDC_lung |
| ATP6V1G1           | 0.00042209 | 0.24499857 | 0.795 | 0.935 | 1 mDC_lung |
| RPL10A             | 0.0004253  | 0.12076209 | 0.907 | 0.964 | 1 mDC_lung |
| C3H7orf50          | 0.00044729 | 0.157797   | 0.503 | 0.808 | 1 mDC_lung |
| AIP                | 0.00049436 | 0.36414707 | 0.293 | 0.479 | 1 mDC_lung |
| PSMC5              | 0.00050807 | 0.37780793 | 0.343 | 0.57  | 1 mDC_lung |
| PHF5A              | 0.00050964 | 0.4047833  | 0.319 | 0.531 | 1 mDC_lung |
| MYD88              | 0.00053447 | 1.47651173 | 0.324 | 0.324 | 1 mDC_lung |
| RPP21              | 0.00055303 | 0.71559342 | 0.206 | 0.344 | 1 mDC_lung |
| FAM162A            | 0.00057999 | 0.45836745 | 0.249 | 0.404 | 1 mDC_lung |
| ENSMMUG00000051440 | 0.00061415 | 0.42317856 | 0.167 | 0.269 | 1 mDC_lung |
| TXN2               | 0.00061761 | 0.34869711 | 0.303 | 0.498 | 1 mDC_lung |
| ST13               | 0.0006259  | 0.25399948 | 0.391 | 0.642 | 1 mDC_lung |
| COX19              | 0.00063377 | 1.19052903 | 0.374 | 0.406 | 1 mDC_lung |
| ATP5IF1            | 0.00063974 | 0.56025049 | 0.631 | 0.824 | 1 mDC_lung |
| TDG                | 0.00064546 | 0.50058324 | 0.274 | 0.453 | 1 mDC_lung |
| RNF7               | 0.00064702 | 0.98870023 | 0.476 | 0.604 | 1 mDC_lung |

|                    |            |            |       |       |            |
|--------------------|------------|------------|-------|-------|------------|
| MED29              | 0.00065546 | 0.53672988 | 0.26  | 0.423 | 1 mDC_lung |
| PSENEN             | 0.00067457 | 0.85306663 | 0.515 | 0.64  | 1 mDC_lung |
| NUBP2              | 0.00069273 | 0.69364493 | 0.179 | 0.293 | 1 mDC_lung |
| TOMM7              | 0.00071206 | 0.30235329 | 0.773 | 0.906 | 1 mDC_lung |
| MKKS               | 0.00071805 | 0.4509367  | 0.259 | 0.423 | 1 mDC_lung |
| EIF1AY             | 0.00076567 | 0.40946547 | 0.223 | 0.352 | 1 mDC_lung |
| MAMU-DMA           | 0.00077811 | 0.2263013  | 0.888 | 0.961 | 1 mDC_lung |
| ENSMMUG00000059988 | 0.00078985 | 0.57857796 | 0.285 | 0.479 | 1 mDC_lung |
| COPS5              | 0.00080487 | 0.42762421 | 0.233 | 0.378 | 1 mDC_lung |
| HAX1               | 0.00083499 | 0.78571611 | 0.214 | 0.355 | 1 mDC_lung |
| SNRPD3             | 0.00084228 | 0.58693592 | 0.616 | 0.813 | 1 mDC_lung |
| MRPL40             | 0.00093257 | 0.47516634 | 0.28  | 0.456 | 1 mDC_lung |
| PSMB2              | 0.00101168 | 0.52939184 | 0.292 | 0.484 | 1 mDC_lung |
| ENSMMUG00000055885 | 0.00102643 | 0.25308344 | 0.496 | 0.717 | 1 mDC_lung |
| MRPL35             | 0.00102777 | 0.64417455 | 0.161 | 0.261 | 1 mDC_lung |
| SRP9               | 0.00104868 | 0.48824196 | 0.335 | 0.562 | 1 mDC_lung |
| ENSMMUG00000029026 | 0.0010539  | 0.79946627 | 0.508 | 0.637 | 1 mDC_lung |
| NFE2L2             | 0.00108746 | 1.19722648 | 0.438 | 0.507 | 1 mDC_lung |
| ENSMMUG00000063299 | 0.00109874 | 0.77570864 | 0.165 | 0.267 | 1 mDC_lung |
| NCOA7              | 0.00121583 | 0.28442053 | 0.459 | 0.661 | 1 mDC_lung |
| MGST2              | 0.00133063 | 0.43649694 | 0.347 | 0.578 | 1 mDC_lung |
| YWHAE              | 0.00134417 | 0.59098986 | 0.637 | 0.845 | 1 mDC_lung |
| ATP5F1B            | 0.0013576  | 0.4287884  | 0.327 | 0.539 | 1 mDC_lung |
| SERPINB1           | 0.00135946 | 0.23146155 | 0.478 | 0.748 | 1 mDC_lung |
| THOC7              | 0.00135962 | 0.30770011 | 0.347 | 0.555 | 1 mDC_lung |
| GRHPR              | 0.00136123 | 0.51381479 | 0.157 | 0.252 | 1 mDC_lung |
| EIF3I              | 0.00138954 | 0.34559459 | 0.392 | 0.65  | 1 mDC_lung |
| SRRM1              | 0.00143747 | 0.12235533 | 0.534 | 0.818 | 1 mDC_lung |
| AMDHD1             | 0.00146839 | 0.23347066 | 0.44  | 0.705 | 1 mDC_lung |
| TENT5C             | 0.00154919 | 0.74440304 | 0.21  | 0.329 | 1 mDC_lung |
| SDCBP              | 0.00155119 | 0.30524716 | 0.464 | 0.746 | 1 mDC_lung |
| PTPN6              | 0.00174113 | 0.43560217 | 0.368 | 0.606 | 1 mDC_lung |
| MPC2               | 0.00176208 | 0.62972831 | 0.239 | 0.386 | 1 mDC_lung |

|                   |            |            |       |       |            |
|-------------------|------------|------------|-------|-------|------------|
| ECHS1             | 0.00176466 | 0.40200349 | 0.34  | 0.562 | 1 mDC_lung |
| RNF181            | 0.00183335 | 0.58237524 | 0.598 | 0.787 | 1 mDC_lung |
| CLEC2B            | 0.00183775 | 0.62116525 | 0.632 | 0.816 | 1 mDC_lung |
| ETV3              | 0.00188016 | 0.56053812 | 0.391 | 0.624 | 1 mDC_lung |
| TMEM63C           | 0.0018814  | 0.61933753 | 0.165 | 0.262 | 1 mDC_lung |
| DPYSL2            | 0.00213047 | 0.19599979 | 0.468 | 0.717 | 1 mDC_lung |
| HIKESHI           | 0.00213624 | 0.38263308 | 0.315 | 0.513 | 1 mDC_lung |
| PDRG1             | 0.00217448 | 0.54489484 | 0.283 | 0.459 | 1 mDC_lung |
| POC5              | 0.00220239 | 0.46118339 | 0.349 | 0.562 | 1 mDC_lung |
| NCBP2             | 0.00225768 | 0.74019444 | 0.542 | 0.72  | 1 mDC_lung |
| BATF3             | 0.00236835 | 0.30185002 | 0.377 | 0.549 | 1 mDC_lung |
| NPM3              | 0.00241172 | 0.48469545 | 0.285 | 0.45  | 1 mDC_lung |
| PFDN2             | 0.00258485 | 0.37285183 | 0.713 | 0.897 | 1 mDC_lung |
| CCDC59            | 0.00258641 | 0.71529497 | 0.271 | 0.438 | 1 mDC_lung |
| PAFAH1B3          | 0.00288261 | 0.60936495 | 0.231 | 0.366 | 1 mDC_lung |
| ENSMUG00000015208 | 0.002911   | 0.29679648 | 0.482 | 0.759 | 1 mDC_lung |
| MRPL57            | 0.00316085 | 0.36445083 | 0.341 | 0.546 | 1 mDC_lung |
| ENSMUG00000006499 | 0.00329591 | 0.63789929 | 0.563 | 0.844 | 1 mDC_lung |
| LLPH              | 0.0034713  | 0.38653954 | 0.34  | 0.549 | 1 mDC_lung |
| ENSMUG00000022334 | 0.00350122 | 0.65565184 | 0.194 | 0.306 | 1 mDC_lung |
| ENSMUG00000059742 | 0.0038283  | 0.58392028 | 0.282 | 0.445 | 1 mDC_lung |
| RUNX3             | 0.00399302 | 0.49507432 | 0.456 | 0.713 | 1 mDC_lung |
| MRPL11            | 0.00410449 | 0.28745014 | 0.435 | 0.72  | 1 mDC_lung |
| NDUFAF3           | 0.004144   | 0.5881871  | 0.251 | 0.394 | 1 mDC_lung |
| NDUFV3            | 0.00415778 | 0.82211241 | 0.514 | 0.668 | 1 mDC_lung |
| RGS10             | 0.00419054 | 0.18297777 | 0.452 | 0.666 | 1 mDC_lung |
| PHPT1             | 0.00445437 | 1.25845733 | 0.315 | 0.329 | 1 mDC_lung |
| ENSMUG00000006206 | 0.00446952 | 0.25835468 | 0.491 | 0.764 | 1 mDC_lung |
| DDIT4             | 0.00451902 | 0.39546812 | 0.372 | 0.57  | 1 mDC_lung |
| VPS28             | 0.0047238  | 0.94331837 | 0.445 | 0.555 | 1 mDC_lung |
| MRPS12            | 0.00477249 | 0.64728468 | 0.304 | 0.495 | 1 mDC_lung |
| BOLA3             | 0.00477476 | 0.76311261 | 0.244 | 0.388 | 1 mDC_lung |
| RSL24D1           | 0.00487365 | 0.1886453  | 0.517 | 0.787 | 1 mDC_lung |



|                    |            |            |       |       |            |
|--------------------|------------|------------|-------|-------|------------|
| BLVRB              | 0.00490962 | 0.53957419 | 0.298 | 0.469 | 1 mDC_lung |
| NR4A3              | 0.00492143 | 0.44838417 | 0.408 | 0.581 | 1 mDC_lung |
| CMTM1              | 0.00510704 | 0.88773023 | 0.513 | 0.651 | 1 mDC_lung |
| HYPK               | 0.00520465 | 0.64896279 | 0.562 | 0.725 | 1 mDC_lung |
| RASSF4             | 0.00521202 | 0.68859877 | 0.242 | 0.379 | 1 mDC_lung |
| NDUFB9             | 0.0052287  | 0.84328607 | 0.5   | 0.651 | 1 mDC_lung |
| PRPF4B             | 0.00555282 | 0.37229131 | 0.496 | 0.787 | 1 mDC_lung |
| ENSMMUG00000063609 | 0.00560365 | 1.06696554 | 0.408 | 0.49  | 1 mDC_lung |
| FKBP8              | 0.00568848 | 0.61587264 | 0.298 | 0.476 | 1 mDC_lung |
| CD52               | 0.00570803 | 0.19927878 | 0.847 | 0.93  | 1 mDC_lung |
| ANAPC13            | 0.00571193 | 0.60635743 | 0.302 | 0.482 | 1 mDC_lung |
| ENSMMUG00000063288 | 0.00574073 | 0.70560322 | 0.253 | 0.401 | 1 mDC_lung |
| ARHGDIB            | 0.0057792  | 0.18566285 | 0.845 | 0.941 | 1 mDC_lung |
| GSTM4              | 0.00583401 | 0.52602828 | 0.254 | 0.396 | 1 mDC_lung |
| C10H20orf27        | 0.00584734 | 0.51186341 | 0.341 | 0.546 | 1 mDC_lung |
| NAA38              | 0.00600086 | 1.08383437 | 0.412 | 0.502 | 1 mDC_lung |
| BRK1               | 0.00602703 | 0.30807847 | 0.447 | 0.723 | 1 mDC_lung |
| GTF3C6             | 0.00613195 | 0.34543184 | 0.393 | 0.622 | 1 mDC_lung |
| ENSMMUG00000045959 | 0.00657126 | 0.64104104 | 0.264 | 0.417 | 1 mDC_lung |
| CST3               | 0.00661659 | 0.26360642 | 0.883 | 0.93  | 1 mDC_lung |
| NDUFA5             | 0.00673831 | 0.49786461 | 0.316 | 0.5   | 1 mDC_lung |
| MRPL14             | 0.00674511 | 0.54601937 | 0.275 | 0.435 | 1 mDC_lung |
| ENSMMUG00000055825 | 0.0069102  | 0.37643609 | 0.37  | 0.58  | 1 mDC_lung |
| TOMM22             | 0.00699875 | 0.43582728 | 0.355 | 0.57  | 1 mDC_lung |
| MPC1               | 0.00707068 | 0.69823447 | 0.198 | 0.309 | 1 mDC_lung |
| ATP5PD             | 0.00746435 | 0.66310683 | 0.48  | 0.594 | 1 mDC_lung |
| POLE4              | 0.00767339 | 0.58267292 | 0.273 | 0.42  | 1 mDC_lung |
| GUK1               | 0.00777249 | 0.78957693 | 0.252 | 0.396 | 1 mDC_lung |
| PPT1               | 0.00800416 | 0.76532294 | 0.518 | 0.666 | 1 mDC_lung |
| ENSMMUG00000052035 | 0.00803319 | 0.58971014 | 0.253 | 0.396 | 1 mDC_lung |
| ENSMMUG00000019371 | 0.00811867 | 0.74208271 | 0.64  | 0.783 | 1 mDC_lung |
| ZNF706             | 0.00819227 | 0.4003446  | 0.427 | 0.694 | 1 mDC_lung |
| KRR1               | 0.00851792 | 0.63208363 | 0.287 | 0.446 | 1 mDC_lung |

|                    |            |            |       |       |            |
|--------------------|------------|------------|-------|-------|------------|
| SLC25A43           | 0.00904518 | 0.2692118  | 0.744 | 0.907 | 1 mDC_lung |
| HIGD2A             | 0.00930648 | 0.47897508 | 0.325 | 0.513 | 1 mDC_lung |
| NDUFB10            | 0.01085307 | 0.6235184  | 0.524 | 0.699 | 1 mDC_lung |
| ENSMMUG00000017113 | 0.0113076  | 1.22646107 | 0.394 | 0.616 | 1 mDC_lung |
| GTF2H5             | 0.01161739 | 0.58846335 | 0.558 | 0.723 | 1 mDC_lung |
| SSBP1              | 0.0116694  | 0.45027981 | 0.33  | 0.515 | 1 mDC_lung |
| SMNDC1             | 0.01221196 | 0.66894335 | 0.307 | 0.479 | 1 mDC_lung |
| EIF4A3             | 0.01228986 | 0.37058076 | 0.433 | 0.691 | 1 mDC_lung |
| SPCS1              | 0.01231092 | 0.21065591 | 0.466 | 0.717 | 1 mDC_lung |
| SAFB               | 0.01317903 | 0.24832306 | 0.753 | 0.941 | 1 mDC_lung |
| ARL2               | 0.01376297 | 1.10798908 | 0.39  | 0.471 | 1 mDC_lung |
| RAC2               | 0.01385722 | 0.4132334  | 0.379 | 0.593 | 1 mDC_lung |
| GLIPR2             | 0.01487711 | 0.6648644  | 0.586 | 0.757 | 1 mDC_lung |
| NMT1               | 0.01498941 | 0.56551382 | 0.333 | 0.516 | 1 mDC_lung |
| PTPN22             | 0.01625662 | 1.14584033 | 0.276 | 0.419 | 1 mDC_lung |
| PSMB10             | 0.01667144 | 0.2585418  | 0.471 | 0.733 | 1 mDC_lung |
| UXT                | 0.01692803 | 0.80464986 | 0.231 | 0.353 | 1 mDC_lung |
| BUD31              | 0.01770478 | 0.52774724 | 0.297 | 0.454 | 1 mDC_lung |
| MS4A6A             | 0.01854584 | 0.3742921  | 0.272 | 0.383 | 1 mDC_lung |
| NCF4               | 0.02055721 | 1.38120268 | 0.311 | 0.34  | 1 mDC_lung |
| NIT2               | 0.02166171 | 0.57761556 | 0.252 | 0.383 | 1 mDC_lung |
| TECR               | 0.02184763 | 0.67365503 | 0.176 | 0.261 | 1 mDC_lung |
| GNG10              | 0.02222585 | 0.48800115 | 0.308 | 0.467 | 1 mDC_lung |
| UBE2V1             | 0.02274805 | 0.34474308 | 0.445 | 0.702 | 1 mDC_lung |
| ENSMMUG00000041517 | 0.02516685 | 0.71247939 | 0.178 | 0.262 | 1 mDC_lung |
| SMIM4              | 0.02553339 | 1.4516827  | 0.277 | 0.295 | 1 mDC_lung |
| COX1               | 0.02573778 | 0.2732199  | 0.901 | 0.894 | 1 mDC_lung |
| NDUFB5             | 0.02628842 | 0.47852192 | 0.368 | 0.581 | 1 mDC_lung |
| MIF                | 0.02685341 | 0.3121466  | 0.507 | 0.772 | 1 mDC_lung |
| RPL37A             | 0.02696343 | 0.29143273 | 0.912 | 0.971 | 1 mDC_lung |
| C8H8orf33          | 0.02715163 | 0.83992125 | 0.18  | 0.264 | 1 mDC_lung |
| ATP5F1C            | 0.02733662 | 0.58441924 | 0.552 | 0.749 | 1 mDC_lung |
| OSTF1              | 0.0291556  | 0.3811488  | 0.642 | 0.873 | 1 mDC_lung |

|                    |            |            |       |       |            |
|--------------------|------------|------------|-------|-------|------------|
| CD63               | 0.02954792 | 0.21665526 | 0.464 | 0.656 | 1 mDC_lung |
| PYCARD             | 0.02955937 | 0.42415575 | 0.613 | 0.718 | 1 mDC_lung |
| CHCHD7             | 0.03237288 | 1.43285177 | 0.254 | 0.261 | 1 mDC_lung |
| PSME2              | 0.0340614  | 0.11248265 | 0.553 | 0.774 | 1 mDC_lung |
| CLEC4A             | 0.03466346 | 0.64395831 | 0.239 | 0.339 | 1 mDC_lung |
| COMMD4             | 0.03517606 | 0.56795957 | 0.3   | 0.456 | 1 mDC_lung |
| KIFBP              | 0.03550761 | 0.57570556 | 0.594 | 0.793 | 1 mDC_lung |
| PLIN2              | 0.03674952 | 0.96347342 | 0.212 | 0.311 | 1 mDC_lung |
| ENSMMUG00000012525 | 0.03737295 | 0.73613164 | 0.476 | 0.624 | 1 mDC_lung |
| TMEM256            | 0.03774375 | 0.59162041 | 0.284 | 0.422 | 1 mDC_lung |
| TMEM126A           | 0.03791431 | 0.7754164  | 0.221 | 0.329 | 1 mDC_lung |
| COX2               | 0.03825628 | 0.32933439 | 0.903 | 0.878 | 1 mDC_lung |
| TWF2               | 0.03868652 | 0.30711927 | 0.443 | 0.684 | 1 mDC_lung |
| ENSMMUG00000040343 | 0.04074111 | 0.86623902 | 0.23  | 0.337 | 1 mDC_lung |
| ENSMMUG00000014947 | 0.04097361 | 0.66296798 | 0.283 | 0.427 | 1 mDC_lung |
| NFKBID             | 0.04222037 | 1.49456034 | 0.255 | 0.257 | 1 mDC_lung |
| ENSMMUG00000056183 | 0.0431073  | 0.18252561 | 0.918 | 0.954 | 1 mDC_lung |
| TMEM208            | 0.0439727  | 0.85883469 | 0.26  | 0.397 | 1 mDC_lung |
| EIF4E2             | 0.0450446  | 0.52889868 | 0.38  | 0.59  | 1 mDC_lung |
| MRPL20             | 0.04536769 | 0.51959967 | 0.358 | 0.547 | 1 mDC_lung |
| BOLA2B             | 0.0463955  | 1.03246083 | 0.333 | 0.381 | 1 mDC_lung |
| CALCRL             | 0.04649402 | 0.34536442 | 0.642 | 0.837 | 1 mDC_lung |
| PSMB7              | 0.04708008 | 0.41101968 | 0.639 | 0.834 | 1 mDC_lung |
| PFKFB3             | 0.04751032 | 1.50970355 | 0.211 | 0.303 | 1 mDC_lung |
| RAB11A             | 0.04770863 | 1.06846855 | 0.447 | 0.607 | 1 mDC_lung |
| CD83               | 0.04786097 | 0.30111086 | 0.631 | 0.822 | 1 mDC_lung |
| ZNF493             | 0.04910172 | 0.82607514 | 0.176 | 0.254 | 1 mDC_lung |
| ENSMMUG00000022769 | 0.04961489 | 0.11194273 | 0.618 | 0.894 | 1 mDC_lung |
| PGK1               | 0.04972925 | 0.54007121 | 0.566 | 0.783 | 1 mDC_lung |
| GDI2               | 0.05144245 | 0.18522659 | 0.567 | 0.863 | 1 mDC_lung |
| MRPL36             | 0.05236545 | 0.76962721 | 0.231 | 0.339 | 1 mDC_lung |
| EIF3L              | 0.05359209 | 0.11948786 | 0.609 | 0.858 | 1 mDC_lung |
| EIF3J              | 0.05402864 | 0.41957322 | 0.434 | 0.678 | 1 mDC_lung |

|                    |            |            |       |       |            |
|--------------------|------------|------------|-------|-------|------------|
| ERCC1              | 0.05404953 | 0.63337012 | 0.296 | 0.441 | 1 mDC_lung |
| RPS4Y1             | 0.05563906 | 0.43159329 | 0.56  | 0.632 | 1 mDC_lung |
| SSR2               | 0.05835598 | 0.37142149 | 0.606 | 0.796 | 1 mDC_lung |
| MRPS36             | 0.05909871 | 0.65239455 | 0.288 | 0.423 | 1 mDC_lung |
| BTG1               | 0.05915717 | 0.68931891 | 0.587 | 0.754 | 1 mDC_lung |
| LAMTOR1            | 0.05991992 | 0.35792939 | 0.446 | 0.689 | 1 mDC_lung |
| SOD2               | 0.06050918 | 1.37940864 | 0.378 | 0.459 | 1 mDC_lung |
| CD9                | 0.06121994 | 0.47901144 | 0.23  | 0.321 | 1 mDC_lung |
| EXOSC5             | 0.06265847 | 0.75295626 | 0.207 | 0.3   | 1 mDC_lung |
| ERH                | 0.06290337 | 0.63581909 | 0.516 | 0.72  | 1 mDC_lung |
| UBL7               | 0.0643792  | 0.94240896 | 0.196 | 0.28  | 1 mDC_lung |
| CIAO2B             | 0.06627697 | 0.81406941 | 0.445 | 0.591 | 1 mDC_lung |
| UFC1               | 0.06787347 | 0.34348589 | 0.46  | 0.718 | 1 mDC_lung |
| CIAO2A             | 0.07189671 | 0.60515289 | 0.324 | 0.487 | 1 mDC_lung |
| HMGN3              | 0.07196921 | 0.54486977 | 0.534 | 0.689 | 1 mDC_lung |
| SYTL3              | 0.07298173 | 0.60029185 | 0.38  | 0.537 | 1 mDC_lung |
| RGS18              | 0.073286   | 0.27818111 | 0.464 | 0.651 | 1 mDC_lung |
| ENSMMUG00000053817 | 0.07540361 | 0.66051569 | 0.514 | 0.702 | 1 mDC_lung |
| LIMD2              | 0.07575052 | 0.5186331  | 0.598 | 0.806 | 1 mDC_lung |
| EIF4EBP1           | 0.07668234 | 0.71528871 | 0.239 | 0.344 | 1 mDC_lung |
| SKIL               | 0.07719897 | 1.09600262 | 0.203 | 0.287 | 1 mDC_lung |
| UQCC2              | 0.07865071 | 0.746543   | 0.216 | 0.309 | 1 mDC_lung |
| CAPZB              | 0.08097912 | 0.50067568 | 0.594 | 0.813 | 1 mDC_lung |
| ENSMMUG00000054038 | 0.08203638 | 0.26502289 | 0.801 | 0.94  | 1 mDC_lung |
| TIMM8B             | 0.08210224 | 1.01164094 | 0.34  | 0.404 | 1 mDC_lung |
| ANTXR2             | 0.08220996 | 0.84976347 | 0.622 | 0.876 | 1 mDC_lung |
| MTHFD2             | 0.08359322 | 0.64468653 | 0.339 | 0.503 | 1 mDC_lung |
| ENSMMUG00000017231 | 0.08537864 | 0.57576291 | 0.337 | 0.503 | 1 mDC_lung |
| TRMT112            | 0.0866378  | 0.41815293 | 0.598 | 0.806 | 1 mDC_lung |
| FNTB               | 0.08807291 | 0.31535402 | 0.495 | 0.749 | 1 mDC_lung |
| SNRPB              | 0.088285   | 0.51509218 | 0.545 | 0.743 | 1 mDC_lung |
| CLDND1             | 0.08853588 | 0.73150733 | 0.324 | 0.487 | 1 mDC_lung |
| ENSMMUG00000018687 | 0.08930518 | 0.25619621 | 0.409 | 0.562 | 1 mDC_lung |

|                    |            |            |       |       |            |
|--------------------|------------|------------|-------|-------|------------|
| CTSS               | 0.08949771 | 0.3506568  | 0.742 | 0.92  | 1 mDC_lung |
| ARF1               | 0.0895025  | 0.13472776 | 0.603 | 0.858 | 1 mDC_lung |
| SSR3               | 0.09717239 | 0.33568433 | 0.462 | 0.699 | 1 mDC_lung |
| MTHFD2L            | 0.0984437  | 0.66817893 | 0.27  | 0.384 | 1 mDC_lung |
| FKBP2              | 0.10006119 | 0.90106709 | 0.412 | 0.539 | 1 mDC_lung |
| PDGFRA             | 0.10912338 | 0.10933901 | 0.675 | 0.891 | 1 mDC_lung |
| PSMA2              | 0.11003914 | 0.38992465 | 0.618 | 0.844 | 1 mDC_lung |
| YWHAB              | 0.11063901 | 0.10520446 | 0.647 | 0.879 | 1 mDC_lung |
| PSMB1              | 0.11206793 | 0.37241758 | 0.644 | 0.871 | 1 mDC_lung |
| RHOA               | 0.11289109 | 0.24967833 | 0.755 | 0.92  | 1 mDC_lung |
| VDAC1              | 0.11449812 | 0.25806037 | 0.488 | 0.728 | 1 mDC_lung |
| TALDO1             | 0.1192597  | 0.38643738 | 0.644 | 0.853 | 1 mDC_lung |
| EIF2S2             | 0.12036161 | 0.27654007 | 0.534 | 0.783 | 1 mDC_lung |
| DRAP1              | 0.13950028 | 0.45161612 | 0.419 | 0.64  | 1 mDC_lung |
| REEP5              | 0.13965697 | 0.34603593 | 0.451 | 0.678 | 1 mDC_lung |
| EIF4A1             | 0.14212184 | 0.20342304 | 0.568 | 0.824 | 1 mDC_lung |
| DSTN               | 0.14349149 | 0.26842816 | 0.536 | 0.796 | 1 mDC_lung |
| RPS4Y2             | 0.14361614 | 0.32874786 | 0.364 | 0.493 | 1 mDC_lung |
| LAT2               | 0.14645275 | 0.62110671 | 0.414 | 0.634 | 1 mDC_lung |
| MT1M               | 0.14939356 | 0.67968129 | 0.375 | 0.485 | 1 mDC_lung |
| NUFIP1             | 0.14989911 | 0.94803335 | 0.473 | 0.607 | 1 mDC_lung |
| PSMB9              | 0.15790249 | 0.44842546 | 0.64  | 0.811 | 1 mDC_lung |
| TSPO               | 0.15996982 | 0.6087643  | 0.499 | 0.634 | 1 mDC_lung |
| UFM1               | 0.1623827  | 0.66457881 | 0.306 | 0.44  | 1 mDC_lung |
| RBMX               | 0.16798116 | 0.5321892  | 0.445 | 0.666 | 1 mDC_lung |
| ENSMUG00000046482  | 0.16817497 | 1.43038869 | 0.283 | 0.319 | 1 mDC_lung |
| ENSMUG00000012019  | 0.16916202 | 0.60881635 | 0.489 | 0.673 | 1 mDC_lung |
| PIN4               | 0.17408851 | 1.0472349  | 0.327 | 0.406 | 1 mDC_lung |
| TMBIM6             | 0.1791876  | 0.1857352  | 0.583 | 0.836 | 1 mDC_lung |
| ARPC2              | 0.18229956 | 0.12787998 | 0.631 | 0.858 | 1 mDC_lung |
| ENSMUG000000051392 | 0.18243165 | 0.60653352 | 0.547 | 0.744 | 1 mDC_lung |
| LAMTOR2            | 0.18722259 | 0.42015654 | 0.609 | 0.816 | 1 mDC_lung |
| ENSMUG00000030465  | 0.19070759 | 0.35534995 | 0.457 | 0.668 | 1 mDC_lung |

|                    |            |            |       |       |            |
|--------------------|------------|------------|-------|-------|------------|
| LSM6               | 0.19592104 | 0.65147167 | 0.481 | 0.669 | 1 mDC_lung |
| MAMU-E             | 0.20127327 | 0.13226341 | 0.869 | 0.966 | 1 mDC_lung |
| AIMP1              | 0.20553236 | 0.73278506 | 0.464 | 0.655 | 1 mDC_lung |
| GSN                | 0.20912977 | 0.40515585 | 0.516 | 0.743 | 1 mDC_lung |
| MESD               | 0.21126932 | 0.84085251 | 0.289 | 0.414 | 1 mDC_lung |
| NCL                | 0.21266692 | 0.2241077  | 0.632 | 0.868 | 1 mDC_lung |
| ENSMMUG00000058389 | 0.21919567 | 1.16053287 | 0.316 | 0.388 | 1 mDC_lung |
| C11H12orf45        | 0.22298107 | 0.18667059 | 0.608 | 0.822 | 1 mDC_lung |
| POLR2I             | 0.22488183 | 1.02092794 | 0.298 | 0.352 | 1 mDC_lung |
| NUDT1              | 0.22546206 | 0.6829595  | 0.214 | 0.287 | 1 mDC_lung |
| LST1               | 0.22554398 | 0.40624291 | 0.424 | 0.559 | 1 mDC_lung |
| PHB                | 0.22766547 | 0.44587183 | 0.381 | 0.544 | 1 mDC_lung |
| ENSMMUG00000047632 | 0.23322213 | 0.26517273 | 0.428 | 0.526 | 1 mDC_lung |
| COX20              | 0.23602036 | 0.79167328 | 0.285 | 0.397 | 1 mDC_lung |
| NDUFA12            | 0.2360786  | 0.77688258 | 0.416 | 0.557 | 1 mDC_lung |
| UPF2               | 0.25023531 | 1.11876599 | 0.5   | 0.682 | 1 mDC_lung |
| PNKD               | 0.25139992 | 0.94611344 | 0.239 | 0.331 | 1 mDC_lung |
| ENSMMUG00000059843 | 0.25621271 | 1.00116071 | 0.331 | 0.407 | 1 mDC_lung |
| ENSMMUG00000055026 | 0.2565974  | 0.45467055 | 0.39  | 0.559 | 1 mDC_lung |
| RPS19BP1           | 0.26180094 | 0.79062353 | 0.305 | 0.436 | 1 mDC_lung |
| STAC3              | 0.26290257 | 0.82168295 | 0.32  | 0.461 | 1 mDC_lung |
| BORCS7             | 0.2657274  | 0.94912958 | 0.212 | 0.287 | 1 mDC_lung |
| SERTAD1            | 0.26669641 | 1.05770135 | 0.326 | 0.399 | 1 mDC_lung |
| SERTAD3            | 0.27035458 | 0.740201   | 0.32  | 0.467 | 1 mDC_lung |
| ENSMMUG00000056332 | 0.28027744 | 0.89917079 | 0.258 | 0.342 | 1 mDC_lung |
| MRPL21             | 0.28324494 | 0.54036408 | 0.401 | 0.585 | 1 mDC_lung |
| ENSMMUG00000015095 | 0.29621529 | 0.74957316 | 0.292 | 0.414 | 1 mDC_lung |
| ENSMMUG00000062026 | 0.29941992 | 1.296206   | 0.28  | 0.34  | 1 mDC_lung |
| RPS27L             | 0.30312013 | 0.44850769 | 0.542 | 0.756 | 1 mDC_lung |
| CUTA               | 0.30573835 | 0.93028424 | 0.31  | 0.373 | 1 mDC_lung |
| ENSMMUG00000016278 | 0.30742648 | 0.36308236 | 0.492 | 0.728 | 1 mDC_lung |
| POLD4              | 0.31052645 | 0.64728799 | 0.349 | 0.498 | 1 mDC_lung |
| ENSMMUG00000061410 | 0.31257925 | 1.03252732 | 0.206 | 0.277 | 1 mDC_lung |

|                    |            |            |       |       |            |
|--------------------|------------|------------|-------|-------|------------|
| FTH1               | 0.3156869  | 0.32511575 | 0.809 | 0.966 | 1 mDC_lung |
| ENSMMUG00000055627 | 0.32526579 | 0.13923907 | 0.66  | 0.852 | 1 mDC_lung |
| SLIRP              | 0.32586421 | 0.13929217 | 0.656 | 0.888 | 1 mDC_lung |
| CHMP2A             | 0.32711469 | 0.64653866 | 0.458 | 0.632 | 1 mDC_lung |
| RABAC1             | 0.32982106 | 0.64813556 | 0.438 | 0.583 | 1 mDC_lung |
| ANAPC11            | 0.33268459 | 0.59100242 | 0.356 | 0.515 | 1 mDC_lung |
| MDH2               | 0.34232793 | 0.5002875  | 0.438 | 0.655 | 1 mDC_lung |
| MFNG               | 0.34769642 | 0.65548327 | 0.265 | 0.358 | 1 mDC_lung |
| MEF2C              | 0.35333802 | 0.55938763 | 0.652 | 0.844 | 1 mDC_lung |
| ND4                | 0.35662814 | 0.13364484 | 0.894 | 0.906 | 1 mDC_lung |
| GPSM3              | 0.35950825 | 0.36518573 | 0.615 | 0.839 | 1 mDC_lung |
| SNU13              | 0.36598998 | 0.34162492 | 0.524 | 0.782 | 1 mDC_lung |
| CEBPZOS            | 0.36603008 | 0.85243223 | 0.246 | 0.329 | 1 mDC_lung |
| SAP18              | 0.37011745 | 0.3918835  | 0.586 | 0.806 | 1 mDC_lung |
| PRDX1              | 0.37093365 | 0.4684692  | 0.5   | 0.682 | 1 mDC_lung |
| DNAJC19            | 0.39582853 | 0.73890022 | 0.322 | 0.463 | 1 mDC_lung |
| ENSMMUG00000052202 | 0.41009869 | 0.88451038 | 0.263 | 0.36  | 1 mDC_lung |
| DDT                | 0.41211256 | 0.65590332 | 0.417 | 0.567 | 1 mDC_lung |
| ENSMMUG00000065104 | 0.41406313 | 0.57294251 | 0.503 | 0.7   | 1 mDC_lung |
| RAN                | 0.41512712 | 0.38205018 | 0.58  | 0.813 | 1 mDC_lung |
| SUMO1              | 0.42062061 | 0.38078905 | 0.481 | 0.723 | 1 mDC_lung |
| NPM1               | 0.42923302 | 0.13368481 | 0.813 | 0.954 | 1 mDC_lung |
| MS4A7              | 0.42995414 | 0.90179168 | 0.353 | 0.497 | 1 mDC_lung |
| CXHXorf21          | 0.43491974 | 0.77356363 | 0.23  | 0.293 | 1 mDC_lung |
| STXBP2             | 0.44255153 | 1.10795364 | 0.305 | 0.379 | 1 mDC_lung |
| HSBP1              | 0.44277203 | 0.13213773 | 0.621 | 0.822 | 1 mDC_lung |
| ETFB               | 0.44962123 | 0.59218351 | 0.45  | 0.624 | 1 mDC_lung |
| FABP5              | 0.45051352 | 0.91648907 | 0.249 | 0.329 | 1 mDC_lung |
| STMN1              | 0.4621724  | 1.23615209 | 0.34  | 0.43  | 1 mDC_lung |
| ISCA1              | 0.4825562  | 1.27533673 | 0.254 | 0.342 | 1 mDC_lung |
| LSM5               | 0.48739387 | 0.61685573 | 0.424 | 0.565 | 1 mDC_lung |
| DPH2               | 0.48817673 | 0.43045592 | 0.562 | 0.774 | 1 mDC_lung |
| CR1L               | 0.4940739  | 0.97067537 | 0.294 | 0.357 | 1 mDC_lung |

|                    |            |            |       |       |            |
|--------------------|------------|------------|-------|-------|------------|
| PDCD5              | 0.49954205 | 0.63292659 | 0.467 | 0.666 | 1 mDC_lung |
| CYSTM1             | 0.50082608 | 0.88020852 | 0.326 | 0.458 | 1 mDC_lung |
| MRPL51             | 0.50242914 | 0.55836209 | 0.509 | 0.721 | 1 mDC_lung |
| ANXA5              | 0.50703029 | 0.25861375 | 0.64  | 0.832 | 1 mDC_lung |
| TIFAB              | 0.51363684 | 0.93168614 | 0.329 | 0.414 | 1 mDC_lung |
| ENSMMUG00000062885 | 0.51454117 | 1.11351749 | 0.201 | 0.259 | 1 mDC_lung |
| ENSMMUG00000063346 | 0.51633653 | 1.11468279 | 0.348 | 0.477 | 1 mDC_lung |
| ENSMMUG00000065362 | 0.53065396 | 0.32633763 | 0.997 | 1     | 1 mDC_lung |
| SUPT4H1            | 0.53152462 | 0.70550912 | 0.35  | 0.493 | 1 mDC_lung |
| MT2A               | 0.53236378 | 0.96305756 | 0.384 | 0.492 | 1 mDC_lung |
| SF3B6              | 0.53368361 | 0.38331612 | 0.533 | 0.775 | 1 mDC_lung |
| RBIS               | 0.53495393 | 0.39362402 | 0.55  | 0.764 | 1 mDC_lung |
| ARHGDI4            | 0.53563511 | 0.63852507 | 0.483 | 0.674 | 1 mDC_lung |
| EIF6               | 0.53990035 | 0.84213415 | 0.38  | 0.516 | 1 mDC_lung |
| CFP                | 0.54639212 | 0.53591299 | 0.543 | 0.762 | 1 mDC_lung |
| PIN1               | 0.56912293 | 0.66015443 | 0.324 | 0.448 | 1 mDC_lung |
| MRPS21             | 0.57308627 | 0.66421906 | 0.335 | 0.472 | 1 mDC_lung |
| GPALPP1            | 0.57507671 | 1.29401672 | 0.231 | 0.295 | 1 mDC_lung |
| TXNDC17            | 0.58171514 | 0.82074986 | 0.31  | 0.428 | 1 mDC_lung |
| TNNI2              | 0.58733577 | 0.49562399 | 0.26  | 0.326 | 1 mDC_lung |
| HSPE1              | 0.58821127 | 0.21346283 | 0.592 | 0.832 | 1 mDC_lung |
| ENSMMUG00000064139 | 0.61111535 | 0.18359842 | 0.778 | 0.93  | 1 mDC_lung |
| PSMB3              | 0.61158246 | 0.59011655 | 0.471 | 0.686 | 1 mDC_lung |
| ENSMMUG00000016009 | 0.62713121 | 0.53079027 | 0.438 | 0.627 | 1 mDC_lung |
| PRDX6              | 0.64126423 | 0.85054263 | 0.418 | 0.572 | 1 mDC_lung |
| GSTK1              | 0.64212887 | 0.9668236  | 0.294 | 0.368 | 1 mDC_lung |
| GPX4               | 0.6425618  | 1.09489812 | 0.21  | 0.267 | 1 mDC_lung |
| CIB1               | 0.64345837 | 0.91602136 | 0.339 | 0.445 | 1 mDC_lung |
| DAD1               | 0.6559508  | 0.52267396 | 0.434 | 0.635 | 1 mDC_lung |
| TRAPPC2L           | 0.67537426 | 0.85593209 | 0.206 | 0.256 | 1 mDC_lung |
| MRPS25             | 0.68012311 | 0.72981514 | 0.326 | 0.446 | 1 mDC_lung |
| DAZAP1             | 0.69301177 | 0.28648036 | 0.594 | 0.834 | 1 mDC_lung |
| ENSMMUG00000032031 | 0.70869567 | 1.12118149 | 0.233 | 0.279 | 1 mDC_lung |



|                    |            |            |       |       |            |
|--------------------|------------|------------|-------|-------|------------|
| ENSMMUG00000064224 | 0.70876802 | 1.31293824 | 0.301 | 0.365 | 1 mDC_lung |
| RAB27A             | 0.72770427 | 1.32252131 | 0.265 | 0.347 | 1 mDC_lung |
| JUND               | 0.73560485 | 0.36575802 | 0.699 | 0.904 | 1 mDC_lung |
| ENSMMUG00000055773 | 0.75391575 | 0.93330434 | 0.275 | 0.36  | 1 mDC_lung |
| UBXN1              | 0.76036971 | 0.38766789 | 0.52  | 0.751 | 1 mDC_lung |
| PTRHD1             | 0.76485496 | 0.63520992 | 0.423 | 0.585 | 1 mDC_lung |
| CLEC9A             | 0.76855317 | 0.43422348 | 0.27  | 0.29  | 1 mDC_lung |
| NHP2               | 0.7704388  | 0.61222815 | 0.424 | 0.596 | 1 mDC_lung |
| SNRPD1             | 0.77390484 | 0.60915764 | 0.435 | 0.611 | 1 mDC_lung |
| OSTC               | 0.77997986 | 0.40516173 | 0.533 | 0.782 | 1 mDC_lung |
| ATP5MC1            | 0.78066172 | 0.94061303 | 0.307 | 0.423 | 1 mDC_lung |
| VPS29              | 0.79214699 | 0.70740838 | 0.397 | 0.547 | 1 mDC_lung |
| SNRPN              | 0.79335309 | 0.96636949 | 0.265 | 0.347 | 1 mDC_lung |
| PLP2               | 0.79680999 | 0.37964522 | 0.49  | 0.611 | 1 mDC_lung |
| CASP1              | 0.82096537 | 0.27093945 | 0.636 | 0.809 | 1 mDC_lung |
| CALCOCO2           | 0.83593572 | 0.75650758 | 0.385 | 0.536 | 1 mDC_lung |
| PPIB               | 0.84235835 | 0.31118216 | 0.623 | 0.86  | 1 mDC_lung |
| PRR13              | 0.85968605 | 0.3340761  | 0.551 | 0.783 | 1 mDC_lung |
| RB1                | 0.86560936 | 0.60029536 | 0.501 | 0.687 | 1 mDC_lung |
| AKR1A1             | 0.88889362 | 0.60662253 | 0.438 | 0.625 | 1 mDC_lung |
| SNRPD2             | 0.89374251 | 0.28298516 | 0.617 | 0.855 | 1 mDC_lung |
| CSNK2B             | 0.89520555 | 0.5603293  | 0.469 | 0.679 | 1 mDC_lung |
| CBX3               | 0.91003731 | 0.49342644 | 0.474 | 0.691 | 1 mDC_lung |
| CYCS               | 0.91035731 | 0.72983555 | 0.433 | 0.622 | 1 mDC_lung |
| EFHD2              | 0.91574295 | 0.5511697  | 0.501 | 0.735 | 1 mDC_lung |
| VPS25              | 0.92338739 | 1.06480353 | 0.214 | 0.264 | 1 mDC_lung |
| SLC25A10           | 0.92701041 | 0.90499017 | 0.287 | 0.365 | 1 mDC_lung |
| ATG12              | 0.92966648 | 0.51412986 | 0.52  | 0.761 | 1 mDC_lung |
| TOPORS             | 0.94934922 | 0.42288297 | 0.498 | 0.705 | 1 mDC_lung |
| PTPRE              | 0.95597569 | 0.48151586 | 0.564 | 0.79  | 1 mDC_lung |
| ENSMMUG00000063172 | 0.95685882 | 0.95141662 | 0.301 | 0.384 | 1 mDC_lung |
| DCTN3              | 0.95958752 | 0.45021274 | 0.5   | 0.708 | 1 mDC_lung |
| C11H12orf57        | 0.96757853 | 0.26095369 | 0.645 | 0.855 | 1 mDC_lung |

|                    |            |            |       |       |           |           |
|--------------------|------------|------------|-------|-------|-----------|-----------|
| ENSMMUG00000053392 | 0.98874547 | 0.35209291 | 0.55  | 0.782 | 1         | mDC_lung  |
| RNASE6             | 0.98972713 | 0.18233647 | 0.708 | 0.881 | 1         | mDC_lung  |
| ENSMMUG00000040870 | 0.993985   | 1.04973622 | 0.256 | 0.326 | 1         | mDC_lung  |
| VDAC2              | 0.9972154  | 0.19564929 | 0.66  | 0.914 | 1         | mDC_lung  |
| HBE1               | 1.95E-122  | 6.82786963 | 0.657 | 0.076 | 6.92E-118 | mDC_UCBMC |
| PPBP               | 8.48E-102  | 9.116175   | 0.309 | 0.002 | 3.01E-97  | mDC_UCBMC |
| PF4                | 1.40E-76   | 8.88653603 | 0.254 | 0.005 | 4.94E-72  | mDC_UCBMC |
| COG5               | 1.28E-74   | 1.84336155 | 0.826 | 0.249 | 4.55E-70  | mDC_UCBMC |
| TLE4               | 2.87E-69   | 2.02306265 | 0.712 | 0.183 | 1.02E-64  | mDC_UCBMC |
| NKIRAS1            | 2.20E-65   | 2.46278541 | 0.585 | 0.128 | 7.80E-61  | mDC_UCBMC |
| DLG1               | 6.45E-65   | 1.72300059 | 0.835 | 0.308 | 2.29E-60  | mDC_UCBMC |
| BTBD11             | 3.24E-63   | 1.96898817 | 0.597 | 0.13  | 1.15E-58  | mDC_UCBMC |
| PNISR              | 2.28E-62   | 1.60086114 | 0.873 | 0.367 | 8.08E-58  | mDC_UCBMC |
| FBXO34             | 2.94E-62   | 1.49501759 | 0.852 | 0.295 | 1.04E-57  | mDC_UCBMC |
| UBE2E1             | 6.33E-62   | 1.84172834 | 0.669 | 0.177 | 2.24E-57  | mDC_UCBMC |
| SDC2               | 4.99E-61   | 2.6208462  | 0.436 | 0.065 | 1.77E-56  | mDC_UCBMC |
| RICTOR             | 8.26E-61   | 1.83559324 | 0.716 | 0.216 | 2.93E-56  | mDC_UCBMC |
| EPC2               | 8.30E-61   | 1.76519745 | 0.64  | 0.164 | 2.94E-56  | mDC_UCBMC |
| BTA1F1             | 8.95E-61   | 1.60854156 | 0.746 | 0.226 | 3.17E-56  | mDC_UCBMC |
| ENSMMUG00000046264 | 1.72E-60   | 1.55601127 | 0.818 | 0.264 | 6.08E-56  | mDC_UCBMC |
| OPA1               | 3.99E-60   | 1.66305085 | 0.763 | 0.236 | 1.41E-55  | mDC_UCBMC |
| PPM1A              | 7.10E-60   | 1.8439305  | 0.538 | 0.11  | 2.52E-55  | mDC_UCBMC |
| SENP5              | 1.13E-58   | 1.74671489 | 0.746 | 0.246 | 4.01E-54  | mDC_UCBMC |
| TUT4               | 1.31E-58   | 2.1126957  | 0.555 | 0.121 | 4.64E-54  | mDC_UCBMC |
| CAMK4              | 1.01E-57   | 3.25388653 | 0.394 | 0.057 | 3.58E-53  | mDC_UCBMC |
| PTBP2              | 3.35E-57   | 1.79894147 | 0.674 | 0.198 | 1.19E-52  | mDC_UCBMC |
| RPS20              | 3.49E-57   | 1.05886156 | 1     | 0.845 | 1.24E-52  | mDC_UCBMC |
| MARCHF6            | 3.81E-57   | 1.46517156 | 0.843 | 0.31  | 1.35E-52  | mDC_UCBMC |
| CDC42SE2           | 7.07E-57   | 1.51449812 | 0.953 | 0.54  | 2.51E-52  | mDC_UCBMC |
| RAB2A              | 1.66E-56   | 1.58915189 | 0.886 | 0.405 | 5.89E-52  | mDC_UCBMC |
| CUL3               | 2.13E-56   | 1.60014803 | 0.75  | 0.251 | 7.54E-52  | mDC_UCBMC |
| OSBPL9             | 5.16E-56   | 1.50888409 | 0.843 | 0.345 | 1.83E-51  | mDC_UCBMC |
| CDYL               | 5.29E-56   | 1.50457548 | 0.695 | 0.198 | 1.87E-51  | mDC_UCBMC |

|          |          |            |       |       |          |           |
|----------|----------|------------|-------|-------|----------|-----------|
| FBXO33   | 1.14E-55 | 2.09132487 | 0.564 | 0.136 | 4.02E-51 | mDC_UCBMC |
| ZNF292   | 1.26E-55 | 1.39282836 | 0.86  | 0.341 | 4.45E-51 | mDC_UCBMC |
| SH3KBP1  | 3.32E-55 | 1.4613008  | 0.831 | 0.328 | 1.18E-50 | mDC_UCBMC |
| POU2F1   | 4.03E-55 | 2.05710465 | 0.564 | 0.136 | 1.43E-50 | mDC_UCBMC |
| CERT1    | 1.25E-54 | 1.49715706 | 0.809 | 0.297 | 4.42E-50 | mDC_UCBMC |
| ATP10A   | 1.27E-54 | 1.64632719 | 0.627 | 0.164 | 4.52E-50 | mDC_UCBMC |
| RFX3     | 1.60E-54 | 1.50656524 | 0.725 | 0.232 | 5.67E-50 | mDC_UCBMC |
| RPL13A   | 1.62E-54 | 0.77979991 | 1     | 0.937 | 5.75E-50 | mDC_UCBMC |
| HECA     | 2.45E-54 | 1.96144194 | 0.555 | 0.13  | 8.67E-50 | mDC_UCBMC |
| MTMR10   | 4.82E-54 | 2.08336142 | 0.521 | 0.116 | 1.71E-49 | mDC_UCBMC |
| OSBPL8   | 1.21E-53 | 1.26992553 | 0.928 | 0.417 | 4.30E-49 | mDC_UCBMC |
| MCM9     | 1.77E-53 | 1.76871406 | 0.525 | 0.117 | 6.27E-49 | mDC_UCBMC |
| DOP1A    | 3.79E-53 | 1.64210054 | 0.606 | 0.152 | 1.34E-48 | mDC_UCBMC |
| SIK3     | 5.21E-53 | 1.23009856 | 0.949 | 0.504 | 1.84E-48 | mDC_UCBMC |
| DDX5     | 6.35E-53 | 1.02296987 | 0.996 | 0.764 | 2.25E-48 | mDC_UCBMC |
| EIF2AK3  | 7.07E-53 | 1.68052791 | 0.661 | 0.196 | 2.51E-48 | mDC_UCBMC |
| CEP85L   | 7.16E-53 | 1.62541085 | 0.733 | 0.241 | 2.54E-48 | mDC_UCBMC |
| NCOA3    | 7.51E-53 | 1.27582441 | 0.958 | 0.563 | 2.66E-48 | mDC_UCBMC |
| BIRC6    | 8.31E-53 | 1.41855018 | 0.886 | 0.408 | 2.95E-48 | mDC_UCBMC |
| SLMAP    | 1.02E-52 | 1.63487577 | 0.729 | 0.238 | 3.63E-48 | mDC_UCBMC |
| SPPL3    | 1.11E-52 | 1.2694095  | 0.78  | 0.272 | 3.93E-48 | mDC_UCBMC |
| ZDHHC20  | 1.44E-52 | 1.77437437 | 0.725 | 0.248 | 5.09E-48 | mDC_UCBMC |
| SLC38A1  | 4.41E-52 | 1.2480124  | 0.907 | 0.412 | 1.56E-47 | mDC_UCBMC |
| MAPKAPK2 | 4.60E-52 | 1.82357905 | 0.504 | 0.11  | 1.63E-47 | mDC_UCBMC |
| GAS7     | 8.17E-52 | 1.14443534 | 0.919 | 0.407 | 2.90E-47 | mDC_UCBMC |
| MTHFD1L  | 2.60E-51 | 1.34807283 | 0.61  | 0.165 | 9.22E-47 | mDC_UCBMC |
| USP47    | 8.84E-51 | 1.64998757 | 0.703 | 0.23  | 3.13E-46 | mDC_UCBMC |
| CELF2    | 9.06E-51 | 1.04585347 | 0.966 | 0.634 | 3.21E-46 | mDC_UCBMC |
| MPP7     | 1.05E-50 | 2.47014442 | 0.36  | 0.053 | 3.72E-46 | mDC_UCBMC |
| MEF2A    | 1.51E-50 | 1.38225794 | 0.886 | 0.383 | 5.37E-46 | mDC_UCBMC |
| UBE2G1   | 3.20E-50 | 1.58315865 | 0.712 | 0.227 | 1.13E-45 | mDC_UCBMC |
| RASA2    | 3.22E-50 | 1.55504916 | 0.703 | 0.227 | 1.14E-45 | mDC_UCBMC |
| SETD2    | 3.58E-50 | 1.51774224 | 0.75  | 0.275 | 1.27E-45 | mDC_UCBMC |

|                   |          |            |       |       |          |           |
|-------------------|----------|------------|-------|-------|----------|-----------|
| TM9SF3            | 3.76E-50 | 1.27636899 | 0.814 | 0.32  | 1.33E-45 | mDC_UCBMC |
| STAG1             | 4.91E-50 | 1.35580324 | 0.898 | 0.433 | 1.74E-45 | mDC_UCBMC |
| FOXO3             | 7.54E-50 | 1.77210949 | 0.623 | 0.182 | 2.67E-45 | mDC_UCBMC |
| PTPRA             | 8.56E-50 | 1.64114163 | 0.695 | 0.229 | 3.03E-45 | mDC_UCBMC |
| RANBP9            | 1.16E-49 | 1.47564198 | 0.568 | 0.149 | 4.10E-45 | mDC_UCBMC |
| BRAF              | 1.31E-49 | 1.26361582 | 0.797 | 0.313 | 4.66E-45 | mDC_UCBMC |
| CREBRF            | 2.18E-49 | 1.82199576 | 0.572 | 0.157 | 7.72E-45 | mDC_UCBMC |
| TFDP2             | 2.60E-49 | 2.33895124 | 0.5   | 0.122 | 9.21E-45 | mDC_UCBMC |
| AAK1              | 4.65E-49 | 1.61201245 | 0.627 | 0.188 | 1.65E-44 | mDC_UCBMC |
| MSI2              | 4.74E-49 | 1.25379816 | 0.758 | 0.265 | 1.68E-44 | mDC_UCBMC |
| PAG1              | 5.20E-49 | 2.28751424 | 0.458 | 0.098 | 1.84E-44 | mDC_UCBMC |
| KDM6A             | 7.06E-49 | 1.31498815 | 0.814 | 0.314 | 2.50E-44 | mDC_UCBMC |
| ATG13             | 7.34E-49 | 1.794837   | 0.47  | 0.1   | 2.60E-44 | mDC_UCBMC |
| QKI               | 1.08E-48 | 1.20428737 | 0.932 | 0.49  | 3.84E-44 | mDC_UCBMC |
| PRDM2             | 1.25E-48 | 1.44337167 | 0.699 | 0.224 | 4.41E-44 | mDC_UCBMC |
| RAPGEF2           | 1.40E-48 | 1.3693658  | 0.716 | 0.238 | 4.97E-44 | mDC_UCBMC |
| AMBRA1            | 1.53E-48 | 1.64515269 | 0.585 | 0.16  | 5.42E-44 | mDC_UCBMC |
| ELOVL5            | 1.60E-48 | 1.3104211  | 0.852 | 0.353 | 5.68E-44 | mDC_UCBMC |
| NRIP1             | 1.77E-48 | 1.46221125 | 0.775 | 0.291 | 6.26E-44 | mDC_UCBMC |
| KMT2C             | 2.14E-48 | 1.14585164 | 0.949 | 0.516 | 7.57E-44 | mDC_UCBMC |
| EPC1              | 2.62E-48 | 1.49244504 | 0.801 | 0.332 | 9.29E-44 | mDC_UCBMC |
| DAAM1             | 3.03E-48 | 1.85479915 | 0.5   | 0.114 | 1.07E-43 | mDC_UCBMC |
| DDHD1             | 3.62E-48 | 2.08216999 | 0.466 | 0.099 | 1.28E-43 | mDC_UCBMC |
| ZNF644            | 4.42E-48 | 1.41227904 | 0.805 | 0.317 | 1.57E-43 | mDC_UCBMC |
| ATL2              | 5.97E-48 | 1.71234276 | 0.513 | 0.121 | 2.11E-43 | mDC_UCBMC |
| PIK3CA            | 6.16E-48 | 2.34061669 | 0.449 | 0.098 | 2.18E-43 | mDC_UCBMC |
| CTDSPL2           | 7.48E-48 | 1.53028265 | 0.597 | 0.164 | 2.65E-43 | mDC_UCBMC |
| ZNF395            | 7.99E-48 | 1.72136391 | 0.436 | 0.087 | 2.83E-43 | mDC_UCBMC |
| ENSMUG00000061038 | 9.54E-48 | 3.00339946 | 0.318 | 0.043 | 3.38E-43 | mDC_UCBMC |
| MAPK8             | 1.16E-47 | 1.74088157 | 0.602 | 0.176 | 4.12E-43 | mDC_UCBMC |
| GPR89A            | 1.82E-47 | 1.72111165 | 0.517 | 0.126 | 6.45E-43 | mDC_UCBMC |
| CHD7              | 2.19E-47 | 1.80472637 | 0.593 | 0.18  | 7.75E-43 | mDC_UCBMC |
| CD247             | 2.44E-47 | 2.88470109 | 0.318 | 0.043 | 8.65E-43 | mDC_UCBMC |

|                   |          |            |       |       |          |           |
|-------------------|----------|------------|-------|-------|----------|-----------|
| SECISBP2L         | 3.46E-47 | 2.12494543 | 0.432 | 0.087 | 1.23E-42 | mDC_UCBMC |
| SCFD1             | 3.68E-47 | 1.6329093  | 0.712 | 0.249 | 1.30E-42 | mDC_UCBMC |
| FBXO11            | 5.65E-47 | 1.38361579 | 0.801 | 0.323 | 2.00E-42 | mDC_UCBMC |
| AGTPBP1           | 6.80E-47 | 1.36245346 | 0.581 | 0.153 | 2.41E-42 | mDC_UCBMC |
| PHLPP1            | 8.32E-47 | 1.24515817 | 0.767 | 0.272 | 2.95E-42 | mDC_UCBMC |
| ATP11B            | 1.30E-46 | 1.86650831 | 0.517 | 0.133 | 4.59E-42 | mDC_UCBMC |
| EPS8              | 1.71E-46 | 1.71621334 | 0.597 | 0.169 | 6.05E-42 | mDC_UCBMC |
| YPEL5             | 1.87E-46 | 1.34279488 | 0.805 | 0.314 | 6.64E-42 | mDC_UCBMC |
| PAN3              | 1.93E-46 | 1.08810267 | 0.847 | 0.361 | 6.83E-42 | mDC_UCBMC |
| TET2              | 1.95E-46 | 1.20977734 | 0.818 | 0.333 | 6.92E-42 | mDC_UCBMC |
| RNF138            | 2.01E-46 | 1.39889794 | 0.742 | 0.259 | 7.13E-42 | mDC_UCBMC |
| KANSL1            | 2.29E-46 | 1.38744828 | 0.674 | 0.223 | 8.10E-42 | mDC_UCBMC |
| MED13L            | 2.44E-46 | 1.25790731 | 0.894 | 0.437 | 8.63E-42 | mDC_UCBMC |
| JAK1              | 2.76E-46 | 1.17722158 | 0.932 | 0.506 | 9.78E-42 | mDC_UCBMC |
| LEF1              | 2.97E-46 | 2.7317618  | 0.335 | 0.051 | 1.05E-41 | mDC_UCBMC |
| TMEM131           | 3.03E-46 | 1.13746784 | 0.907 | 0.438 | 1.07E-41 | mDC_UCBMC |
| CNOT4             | 4.07E-46 | 1.45942326 | 0.695 | 0.234 | 1.44E-41 | mDC_UCBMC |
| CELF1             | 9.50E-46 | 1.40430682 | 0.703 | 0.255 | 3.36E-41 | mDC_UCBMC |
| LRRFIP1           | 1.60E-45 | 1.12643258 | 0.919 | 0.47  | 5.66E-41 | mDC_UCBMC |
| ENSMUG00000006165 | 1.73E-45 | 1.09143158 | 0.886 | 0.426 | 6.14E-41 | mDC_UCBMC |
| EPB41             | 2.27E-45 | 1.45917241 | 0.758 | 0.309 | 8.03E-41 | mDC_UCBMC |
| UTY               | 3.09E-45 | 1.54273328 | 0.547 | 0.142 | 1.09E-40 | mDC_UCBMC |
| RAF1              | 5.52E-45 | 1.44256725 | 0.648 | 0.212 | 1.96E-40 | mDC_UCBMC |
| PRKCH             | 6.63E-45 | 1.87163061 | 0.517 | 0.137 | 2.35E-40 | mDC_UCBMC |
| CDC73             | 6.80E-45 | 1.35587725 | 0.665 | 0.218 | 2.41E-40 | mDC_UCBMC |
| PITPNC1           | 1.14E-44 | 1.96031635 | 0.653 | 0.222 | 4.02E-40 | mDC_UCBMC |
| CAB39             | 1.16E-44 | 1.2691455  | 0.754 | 0.299 | 4.12E-40 | mDC_UCBMC |
| ZC3H18            | 1.62E-44 | 1.40461974 | 0.559 | 0.152 | 5.75E-40 | mDC_UCBMC |
| PIK3R5            | 1.87E-44 | 1.17840374 | 0.843 | 0.402 | 6.61E-40 | mDC_UCBMC |
| CREBBP            | 1.95E-44 | 1.18729188 | 0.754 | 0.285 | 6.90E-40 | mDC_UCBMC |
| RAB1A             | 2.20E-44 | 1.15675295 | 0.864 | 0.379 | 7.80E-40 | mDC_UCBMC |
| YEATS2            | 2.31E-44 | 1.4040983  | 0.686 | 0.239 | 8.20E-40 | mDC_UCBMC |
| KIF1B             | 2.38E-44 | 1.68735638 | 0.483 | 0.116 | 8.43E-40 | mDC_UCBMC |

|                   |          |            |       |       |          |           |
|-------------------|----------|------------|-------|-------|----------|-----------|
| ZNF92             | 3.44E-44 | 1.74723498 | 0.504 | 0.128 | 1.22E-39 | mDC_UCBMC |
| DNAJC3            | 3.72E-44 | 1.25968116 | 0.729 | 0.258 | 1.32E-39 | mDC_UCBMC |
| PRKD3             | 4.08E-44 | 1.34254774 | 0.648 | 0.201 | 1.44E-39 | mDC_UCBMC |
| LUC7L3            | 5.41E-44 | 1.27131475 | 0.754 | 0.285 | 1.92E-39 | mDC_UCBMC |
| ABCC4             | 5.85E-44 | 1.75720382 | 0.394 | 0.075 | 2.07E-39 | mDC_UCBMC |
| ATG14             | 6.89E-44 | 1.98265035 | 0.386 | 0.073 | 2.44E-39 | mDC_UCBMC |
| PRKCE             | 8.27E-44 | 2.06161065 | 0.39  | 0.075 | 2.93E-39 | mDC_UCBMC |
| KLF10             | 1.25E-43 | 1.45115258 | 0.691 | 0.222 | 4.43E-39 | mDC_UCBMC |
| STK17B            | 1.30E-43 | 1.06004984 | 0.962 | 0.554 | 4.61E-39 | mDC_UCBMC |
| SEPTIN6           | 1.33E-43 | 1.07512642 | 0.894 | 0.453 | 4.72E-39 | mDC_UCBMC |
| TNRC6A            | 1.54E-43 | 1.36946947 | 0.648 | 0.212 | 5.44E-39 | mDC_UCBMC |
| ELMO1             | 2.09E-43 | 0.99811079 | 0.958 | 0.544 | 7.41E-39 | mDC_UCBMC |
| SLC35A3           | 2.30E-43 | 1.62231164 | 0.606 | 0.191 | 8.14E-39 | mDC_UCBMC |
| DBF4              | 2.45E-43 | 1.78135767 | 0.483 | 0.118 | 8.68E-39 | mDC_UCBMC |
| SLC22A18          | 2.52E-43 | 1.65570888 | 0.623 | 0.2   | 8.92E-39 | mDC_UCBMC |
| GSK3B             | 2.94E-43 | 1.2617786  | 0.746 | 0.287 | 1.04E-38 | mDC_UCBMC |
| STK38L            | 3.43E-43 | 1.39161015 | 0.581 | 0.166 | 1.22E-38 | mDC_UCBMC |
| DCP1A             | 3.79E-43 | 1.36356338 | 0.564 | 0.156 | 1.34E-38 | mDC_UCBMC |
| AGO3              | 4.25E-43 | 1.24272011 | 0.678 | 0.236 | 1.50E-38 | mDC_UCBMC |
| XPO4              | 4.32E-43 | 2.16173697 | 0.403 | 0.082 | 1.53E-38 | mDC_UCBMC |
| PLCL1             | 5.40E-43 | 2.90172166 | 0.301 | 0.043 | 1.91E-38 | mDC_UCBMC |
| SCFD2             | 6.93E-43 | 1.48116544 | 0.551 | 0.153 | 2.45E-38 | mDC_UCBMC |
| EML4              | 8.12E-43 | 1.08071631 | 0.915 | 0.458 | 2.88E-38 | mDC_UCBMC |
| INO80D            | 9.66E-43 | 1.67509823 | 0.517 | 0.137 | 3.42E-38 | mDC_UCBMC |
| GAN               | 1.22E-42 | 2.04552302 | 0.364 | 0.066 | 4.33E-38 | mDC_UCBMC |
| MLLT3             | 1.31E-42 | 2.50482005 | 0.301 | 0.043 | 4.65E-38 | mDC_UCBMC |
| OGA               | 1.36E-42 | 1.30306273 | 0.699 | 0.251 | 4.81E-38 | mDC_UCBMC |
| ENSMUG00000063979 | 1.39E-42 | 1.9509623  | 0.458 | 0.11  | 4.92E-38 | mDC_UCBMC |
| TRDMT1            | 1.51E-42 | 1.72565883 | 0.593 | 0.186 | 5.36E-38 | mDC_UCBMC |
| KLF6              | 1.54E-42 | 0.9998609  | 0.953 | 0.448 | 5.44E-38 | mDC_UCBMC |
| WARS2             | 1.56E-42 | 1.71546774 | 0.517 | 0.136 | 5.52E-38 | mDC_UCBMC |
| SP3               | 1.72E-42 | 1.57224692 | 0.564 | 0.166 | 6.09E-38 | mDC_UCBMC |
| ADAM17            | 2.31E-42 | 1.37416727 | 0.542 | 0.149 | 8.18E-38 | mDC_UCBMC |

|                    |          |            |       |       |          |           |
|--------------------|----------|------------|-------|-------|----------|-----------|
| CERS6              | 3.08E-42 | 1.48597846 | 0.653 | 0.233 | 1.09E-37 | mDC_UCBMC |
| ZNF326             | 3.35E-42 | 1.47573493 | 0.614 | 0.194 | 1.19E-37 | mDC_UCBMC |
| SMG6               | 3.75E-42 | 1.21765326 | 0.742 | 0.285 | 1.33E-37 | mDC_UCBMC |
| KAT6B              | 4.17E-42 | 1.60909466 | 0.589 | 0.182 | 1.48E-37 | mDC_UCBMC |
| RCOR1              | 4.17E-42 | 0.75997533 | 0.788 | 0.308 | 1.48E-37 | mDC_UCBMC |
| MEMO1              | 4.19E-42 | 1.37183663 | 0.737 | 0.269 | 1.49E-37 | mDC_UCBMC |
| NUP214             | 6.78E-42 | 1.53244707 | 0.593 | 0.182 | 2.40E-37 | mDC_UCBMC |
| HERC1              | 7.38E-42 | 1.1966128  | 0.653 | 0.215 | 2.62E-37 | mDC_UCBMC |
| ENSMMUG00000051300 | 1.00E-41 | 0.83963376 | 0.987 | 0.587 | 3.54E-37 | mDC_UCBMC |
| KLF12              | 1.15E-41 | 1.04480331 | 0.839 | 0.384 | 4.09E-37 | mDC_UCBMC |
| ATP1B3             | 1.26E-41 | 1.05140155 | 0.924 | 0.473 | 4.46E-37 | mDC_UCBMC |
| DOCK8              | 1.50E-41 | 0.98947624 | 0.953 | 0.556 | 5.30E-37 | mDC_UCBMC |
| ENSMMUG00000011580 | 1.54E-41 | 1.41252501 | 0.699 | 0.265 | 5.44E-37 | mDC_UCBMC |
| SIAH1              | 1.85E-41 | 1.8142531  | 0.381 | 0.075 | 6.55E-37 | mDC_UCBMC |
| TNRC6B             | 1.85E-41 | 1.1864441  | 0.843 | 0.38  | 6.56E-37 | mDC_UCBMC |
| FAF1               | 1.91E-41 | 1.46707542 | 0.627 | 0.209 | 6.77E-37 | mDC_UCBMC |
| H1-3               | 2.91E-41 | 1.89276215 | 0.564 | 0.174 | 1.03E-36 | mDC_UCBMC |
| ENSMMUG00000065175 | 2.97E-41 | 1.49737927 | 0.699 | 0.261 | 1.05E-36 | mDC_UCBMC |
| MAN2A1             | 3.17E-41 | 1.67387566 | 0.64  | 0.226 | 1.12E-36 | mDC_UCBMC |
| SFSWAP             | 3.35E-41 | 1.60741992 | 0.53  | 0.152 | 1.19E-36 | mDC_UCBMC |
| ARHGAP26           | 3.78E-41 | 0.8742585  | 0.924 | 0.506 | 1.34E-36 | mDC_UCBMC |
| ZBTB43             | 4.13E-41 | 2.05805615 | 0.39  | 0.08  | 1.46E-36 | mDC_UCBMC |
| UTRN               | 4.85E-41 | 1.55274253 | 0.691 | 0.279 | 1.72E-36 | mDC_UCBMC |
| PSME4              | 6.03E-41 | 1.16187789 | 0.691 | 0.241 | 2.14E-36 | mDC_UCBMC |
| PXK                | 6.08E-41 | 1.78344338 | 0.47  | 0.119 | 2.15E-36 | mDC_UCBMC |
| SCMH1              | 6.62E-41 | 1.73703152 | 0.407 | 0.086 | 2.35E-36 | mDC_UCBMC |
| GAB2               | 6.81E-41 | 1.10986994 | 0.886 | 0.428 | 2.41E-36 | mDC_UCBMC |
| ASL                | 7.35E-41 | 1.26463878 | 0.585 | 0.186 | 2.61E-36 | mDC_UCBMC |
| RYBP               | 8.87E-41 | 1.44133877 | 0.636 | 0.212 | 3.14E-36 | mDC_UCBMC |
| VPS54              | 9.71E-41 | 1.69612703 | 0.479 | 0.124 | 3.44E-36 | mDC_UCBMC |
| WASHC5             | 1.04E-40 | 1.6581248  | 0.47  | 0.118 | 3.70E-36 | mDC_UCBMC |
| WRN                | 1.29E-40 | 1.50384688 | 0.614 | 0.2   | 4.58E-36 | mDC_UCBMC |
| FAR1               | 1.74E-40 | 1.3695268  | 0.631 | 0.214 | 6.16E-36 | mDC_UCBMC |

|             |          |            |       |       |          |           |
|-------------|----------|------------|-------|-------|----------|-----------|
| YTHDF3      | 1.77E-40 | 1.22874542 | 0.737 | 0.283 | 6.26E-36 | mDC_UCBMC |
| RBM5        | 1.88E-40 | 1.27079244 | 0.708 | 0.261 | 6.67E-36 | mDC_UCBMC |
| SLC12A6     | 2.20E-40 | 1.55779667 | 0.534 | 0.154 | 7.78E-36 | mDC_UCBMC |
| TMEM117     | 2.60E-40 | 1.60563113 | 0.377 | 0.073 | 9.21E-36 | mDC_UCBMC |
| TRA2A       | 2.88E-40 | 1.11342836 | 0.907 | 0.484 | 1.02E-35 | mDC_UCBMC |
| RCC1        | 3.00E-40 | 1.72551105 | 0.525 | 0.15  | 1.06E-35 | mDC_UCBMC |
| GALNT1      | 3.07E-40 | 1.36701849 | 0.64  | 0.21  | 1.09E-35 | mDC_UCBMC |
| SREK1       | 3.68E-40 | 1.15656099 | 0.784 | 0.339 | 1.30E-35 | mDC_UCBMC |
| SLC6A6      | 4.01E-40 | 1.34971033 | 0.61  | 0.192 | 1.42E-35 | mDC_UCBMC |
| TNKS        | 4.40E-40 | 1.47499146 | 0.606 | 0.199 | 1.56E-35 | mDC_UCBMC |
| TMEM87A     | 5.80E-40 | 1.16403943 | 0.75  | 0.292 | 2.06E-35 | mDC_UCBMC |
| FAM117B     | 9.19E-40 | 1.97424149 | 0.483 | 0.136 | 3.25E-35 | mDC_UCBMC |
| RPS6KA5     | 9.95E-40 | 1.38431804 | 0.593 | 0.193 | 3.53E-35 | mDC_UCBMC |
| RBM39       | 9.98E-40 | 0.93504422 | 0.975 | 0.672 | 3.54E-35 | mDC_UCBMC |
| RSRP1       | 1.04E-39 | 1.2299336  | 0.784 | 0.346 | 3.68E-35 | mDC_UCBMC |
| ITGA6       | 1.13E-39 | 2.21115449 | 0.331 | 0.058 | 4.00E-35 | mDC_UCBMC |
| FAM126A     | 1.19E-39 | 1.71461602 | 0.513 | 0.142 | 4.21E-35 | mDC_UCBMC |
| MACO1       | 1.21E-39 | 1.15574394 | 0.606 | 0.192 | 4.27E-35 | mDC_UCBMC |
| RALGPS2     | 1.25E-39 | 1.4514723  | 0.534 | 0.151 | 4.44E-35 | mDC_UCBMC |
| CWC25       | 1.29E-39 | 1.34889206 | 0.568 | 0.164 | 4.58E-35 | mDC_UCBMC |
| LMBR1       | 1.40E-39 | 1.51137697 | 0.492 | 0.133 | 4.98E-35 | mDC_UCBMC |
| ANKRD44     | 1.73E-39 | 1.03346115 | 0.924 | 0.489 | 6.13E-35 | mDC_UCBMC |
| FBXW7       | 1.76E-39 | 0.96177157 | 0.864 | 0.386 | 6.25E-35 | mDC_UCBMC |
| C20H16orf72 | 1.87E-39 | 1.29069588 | 0.644 | 0.225 | 6.63E-35 | mDC_UCBMC |
| NIPBL       | 1.93E-39 | 1.15182346 | 0.767 | 0.329 | 6.85E-35 | mDC_UCBMC |
| ASAP1       | 2.32E-39 | 0.87611331 | 0.814 | 0.338 | 8.23E-35 | mDC_UCBMC |
| USP34       | 3.09E-39 | 1.09050912 | 0.797 | 0.351 | 1.09E-34 | mDC_UCBMC |
| FOXN2       | 3.10E-39 | 1.29595132 | 0.644 | 0.214 | 1.10E-34 | mDC_UCBMC |
| RGCC        | 3.38E-39 | 1.41221344 | 0.585 | 0.181 | 1.20E-34 | mDC_UCBMC |
| SNRK        | 5.89E-39 | 1.6276409  | 0.466 | 0.117 | 2.09E-34 | mDC_UCBMC |
| MEGF9       | 6.32E-39 | 1.72431208 | 0.47  | 0.124 | 2.24E-34 | mDC_UCBMC |
| ERO1B       | 6.62E-39 | 1.29790649 | 0.614 | 0.212 | 2.35E-34 | mDC_UCBMC |
| CHKA        | 7.11E-39 | 1.52448679 | 0.5   | 0.139 | 2.52E-34 | mDC_UCBMC |



|                   |          |            |       |       |          |           |
|-------------------|----------|------------|-------|-------|----------|-----------|
| UHRF1BP1L         | 1.12E-38 | 1.17009204 | 0.661 | 0.236 | 3.96E-34 | mDC_UCBMC |
| DENND1B           | 1.17E-38 | 0.90447585 | 0.814 | 0.335 | 4.14E-34 | mDC_UCBMC |
| FYN               | 2.14E-38 | 1.09049213 | 0.644 | 0.223 | 7.58E-34 | mDC_UCBMC |
| ENSMUG00000008346 | 2.30E-38 | 1.46191812 | 0.555 | 0.176 | 8.14E-34 | mDC_UCBMC |
| WDFY2             | 2.34E-38 | 1.28083731 | 0.678 | 0.257 | 8.29E-34 | mDC_UCBMC |
| RNF130            | 2.35E-38 | 1.36603153 | 0.754 | 0.321 | 8.32E-34 | mDC_UCBMC |
| VEZT              | 2.50E-38 | 1.86086384 | 0.475 | 0.135 | 8.87E-34 | mDC_UCBMC |
| HBA               | 2.54E-38 | 3.87007136 | 0.826 | 0.345 | 8.99E-34 | mDC_UCBMC |
| PUM1              | 2.66E-38 | 1.14095351 | 0.746 | 0.311 | 9.44E-34 | mDC_UCBMC |
| AP3B1             | 2.70E-38 | 1.11212744 | 0.78  | 0.325 | 9.57E-34 | mDC_UCBMC |
| PARP8             | 2.71E-38 | 1.04895492 | 0.669 | 0.233 | 9.62E-34 | mDC_UCBMC |
| SEC23A            | 3.06E-38 | 1.82510392 | 0.466 | 0.126 | 1.08E-33 | mDC_UCBMC |
| KDM2A             | 3.61E-38 | 0.90115693 | 0.843 | 0.385 | 1.28E-33 | mDC_UCBMC |
| MACF1             | 4.63E-38 | 0.99371446 | 0.814 | 0.345 | 1.64E-33 | mDC_UCBMC |
| PLAA              | 4.77E-38 | 1.78494279 | 0.47  | 0.125 | 1.69E-33 | mDC_UCBMC |
| AFF1              | 5.48E-38 | 0.76103076 | 0.72  | 0.274 | 1.94E-33 | mDC_UCBMC |
| MON2              | 5.63E-38 | 1.19490491 | 0.564 | 0.171 | 1.99E-33 | mDC_UCBMC |
| DCAF10            | 7.09E-38 | 1.73453365 | 0.39  | 0.086 | 2.51E-33 | mDC_UCBMC |
| STIM1             | 7.65E-38 | 1.52497624 | 0.436 | 0.108 | 2.71E-33 | mDC_UCBMC |
| EXOSC10           | 7.76E-38 | 1.79576087 | 0.39  | 0.086 | 2.75E-33 | mDC_UCBMC |
| RAPGEF1           | 9.44E-38 | 0.71606832 | 0.953 | 0.533 | 3.35E-33 | mDC_UCBMC |
| ENSMUG00000022610 | 9.94E-38 | 1.02661839 | 0.661 | 0.223 | 3.52E-33 | mDC_UCBMC |
| NR3C1             | 1.00E-37 | 0.76401678 | 0.877 | 0.44  | 3.55E-33 | mDC_UCBMC |
| SAP30BP           | 1.03E-37 | 1.36597997 | 0.564 | 0.178 | 3.65E-33 | mDC_UCBMC |
| CTNNA1            | 1.07E-37 | 1.04949793 | 0.746 | 0.301 | 3.78E-33 | mDC_UCBMC |
| SNX9              | 1.29E-37 | 0.87111717 | 0.945 | 0.503 | 4.56E-33 | mDC_UCBMC |
| RPL27A            | 1.29E-37 | 0.64884468 | 1     | 0.93  | 4.56E-33 | mDC_UCBMC |
| ENSMUG00000030448 | 1.37E-37 | 1.17299169 | 0.814 | 0.359 | 4.87E-33 | mDC_UCBMC |
| RBM27             | 1.45E-37 | 1.31509361 | 0.614 | 0.207 | 5.14E-33 | mDC_UCBMC |
| IL1RAP            | 1.47E-37 | 1.72796088 | 0.356 | 0.071 | 5.22E-33 | mDC_UCBMC |
| MAN1A2            | 2.00E-37 | 1.16591172 | 0.661 | 0.242 | 7.09E-33 | mDC_UCBMC |
| ANKRD28           | 2.59E-37 | 1.32797879 | 0.657 | 0.238 | 9.17E-33 | mDC_UCBMC |
| CCNK              | 2.68E-37 | 1.22616818 | 0.695 | 0.261 | 9.50E-33 | mDC_UCBMC |

|              |          |            |       |       |          |           |
|--------------|----------|------------|-------|-------|----------|-----------|
| MYLIP        | 2.82E-37 | 1.0049123  | 0.682 | 0.24  | 9.98E-33 | mDC_UCBMC |
| BCL11B       | 2.89E-37 | 2.3772487  | 0.271 | 0.04  | 1.02E-32 | mDC_UCBMC |
| EIF2AK2      | 3.36E-37 | 2.36736916 | 0.343 | 0.069 | 1.19E-32 | mDC_UCBMC |
| FNDC3B       | 3.52E-37 | 1.28301749 | 0.631 | 0.22  | 1.25E-32 | mDC_UCBMC |
| USP38        | 3.78E-37 | 1.84513832 | 0.445 | 0.116 | 1.34E-32 | mDC_UCBMC |
| CCDC88C      | 4.16E-37 | 1.56654938 | 0.466 | 0.125 | 1.47E-32 | mDC_UCBMC |
| AFF4         | 4.18E-37 | 0.99195209 | 0.64  | 0.217 | 1.48E-32 | mDC_UCBMC |
| ATP9B        | 4.24E-37 | 1.07496946 | 0.682 | 0.252 | 1.50E-32 | mDC_UCBMC |
| PHF3         | 4.49E-37 | 1.46752441 | 0.585 | 0.198 | 1.59E-32 | mDC_UCBMC |
| PDZD8        | 5.04E-37 | 1.30302229 | 0.559 | 0.178 | 1.79E-32 | mDC_UCBMC |
| UBE2H        | 5.07E-37 | 1.12085954 | 0.678 | 0.255 | 1.80E-32 | mDC_UCBMC |
| TCERG1       | 5.18E-37 | 1.24615426 | 0.614 | 0.21  | 1.83E-32 | mDC_UCBMC |
| ZMYM5        | 7.22E-37 | 1.22043734 | 0.53  | 0.157 | 2.56E-32 | mDC_UCBMC |
| C10H20orf194 | 8.73E-37 | 1.85197811 | 0.339 | 0.067 | 3.09E-32 | mDC_UCBMC |
| SUCO         | 9.21E-37 | 1.35688412 | 0.619 | 0.218 | 3.26E-32 | mDC_UCBMC |
| TGFB1        | 1.01E-36 | 1.33522604 | 0.669 | 0.257 | 3.59E-32 | mDC_UCBMC |
| TIMM23       | 1.07E-36 | 1.43892292 | 0.576 | 0.191 | 3.80E-32 | mDC_UCBMC |
| USP9X        | 1.20E-36 | 0.97218008 | 0.729 | 0.281 | 4.26E-32 | mDC_UCBMC |
| FAM193A      | 1.62E-36 | 1.14003751 | 0.593 | 0.204 | 5.73E-32 | mDC_UCBMC |
| EDRF1        | 1.72E-36 | 1.76670712 | 0.305 | 0.053 | 6.08E-32 | mDC_UCBMC |
| RAB11FIP1    | 1.74E-36 | 1.22356954 | 0.763 | 0.324 | 6.16E-32 | mDC_UCBMC |
| ARID2        | 2.26E-36 | 1.07500604 | 0.72  | 0.273 | 8.03E-32 | mDC_UCBMC |
| MCUB         | 2.61E-36 | 1.48632712 | 0.555 | 0.174 | 9.25E-32 | mDC_UCBMC |
| GRAMD1B      | 2.99E-36 | 1.95054493 | 0.347 | 0.071 | 1.06E-31 | mDC_UCBMC |
| ZNF407       | 3.06E-36 | 1.15449126 | 0.589 | 0.196 | 1.08E-31 | mDC_UCBMC |
| TOX          | 3.35E-36 | 1.53366133 | 0.449 | 0.12  | 1.19E-31 | mDC_UCBMC |
| NUP133       | 3.41E-36 | 1.56824051 | 0.403 | 0.096 | 1.21E-31 | mDC_UCBMC |
| ESYT2        | 4.37E-36 | 0.90336287 | 0.716 | 0.289 | 1.55E-31 | mDC_UCBMC |
| CPSF6        | 5.75E-36 | 1.17666777 | 0.64  | 0.224 | 2.04E-31 | mDC_UCBMC |
| USP3         | 6.01E-36 | 1.21500563 | 0.758 | 0.335 | 2.13E-31 | mDC_UCBMC |
| SENP2        | 6.25E-36 | 1.4126022  | 0.542 | 0.173 | 2.21E-31 | mDC_UCBMC |
| GIT2         | 6.90E-36 | 1.14593569 | 0.691 | 0.26  | 2.45E-31 | mDC_UCBMC |
| PDS5A        | 6.98E-36 | 1.24523916 | 0.593 | 0.202 | 2.47E-31 | mDC_UCBMC |

|                    |          |            |       |       |          |           |
|--------------------|----------|------------|-------|-------|----------|-----------|
| WDFY1              | 7.15E-36 | 1.84725612 | 0.398 | 0.096 | 2.53E-31 | mDC_UCBMC |
| USP15              | 7.82E-36 | 0.94615203 | 0.932 | 0.576 | 2.77E-31 | mDC_UCBMC |
| CPEB1              | 8.92E-36 | 0.58442424 | 0.996 | 0.908 | 3.16E-31 | mDC_UCBMC |
| ENSMMUG00000017297 | 9.27E-36 | 1.40984651 | 0.64  | 0.238 | 3.29E-31 | mDC_UCBMC |
| QRICH1             | 1.19E-35 | 1.16396593 | 0.551 | 0.178 | 4.22E-31 | mDC_UCBMC |
| TP53BP1            | 1.24E-35 | 1.59260734 | 0.492 | 0.145 | 4.39E-31 | mDC_UCBMC |
| TIPARP             | 1.51E-35 | 0.96258658 | 0.886 | 0.492 | 5.35E-31 | mDC_UCBMC |
| SNX29              | 1.65E-35 | 1.01463272 | 0.678 | 0.258 | 5.86E-31 | mDC_UCBMC |
| ARID4B             | 1.76E-35 | 0.92033749 | 0.843 | 0.391 | 6.23E-31 | mDC_UCBMC |
| REPS1              | 1.92E-35 | 1.65304926 | 0.441 | 0.118 | 6.80E-31 | mDC_UCBMC |
| KAT7               | 2.15E-35 | 1.42452653 | 0.462 | 0.126 | 7.62E-31 | mDC_UCBMC |
| THOC1              | 2.24E-35 | 1.68727487 | 0.487 | 0.149 | 7.95E-31 | mDC_UCBMC |
| SMURF1             | 2.39E-35 | 1.34812899 | 0.5   | 0.143 | 8.46E-31 | mDC_UCBMC |
| LIMK2              | 3.15E-35 | 1.6285608  | 0.415 | 0.104 | 1.12E-30 | mDC_UCBMC |
| CPEB2              | 3.18E-35 | 1.31374503 | 0.466 | 0.128 | 1.13E-30 | mDC_UCBMC |
| STK24              | 4.37E-35 | 0.7036117  | 0.814 | 0.365 | 1.55E-30 | mDC_UCBMC |
| BMPR2              | 4.41E-35 | 1.33804889 | 0.458 | 0.128 | 1.56E-30 | mDC_UCBMC |
| C20H16orf87        | 4.56E-35 | 1.8112074  | 0.386 | 0.091 | 1.61E-30 | mDC_UCBMC |
| SINHCAF            | 4.61E-35 | 1.14311496 | 0.763 | 0.317 | 1.63E-30 | mDC_UCBMC |
| EVI5               | 4.71E-35 | 1.53326496 | 0.496 | 0.147 | 1.67E-30 | mDC_UCBMC |
| SCAPER             | 4.74E-35 | 1.34656831 | 0.517 | 0.158 | 1.68E-30 | mDC_UCBMC |
| SMAD3              | 4.87E-35 | 0.95499124 | 0.606 | 0.209 | 1.73E-30 | mDC_UCBMC |
| USP42              | 5.71E-35 | 1.94291666 | 0.373 | 0.088 | 2.02E-30 | mDC_UCBMC |
| PTPN4              | 5.74E-35 | 1.61851296 | 0.36  | 0.078 | 2.04E-30 | mDC_UCBMC |
| NAA25              | 6.27E-35 | 1.53413507 | 0.508 | 0.163 | 2.22E-30 | mDC_UCBMC |
| RLIM               | 7.18E-35 | 1.21903526 | 0.538 | 0.167 | 2.54E-30 | mDC_UCBMC |
| HIPK2              | 7.91E-35 | 1.08597699 | 0.61  | 0.206 | 2.80E-30 | mDC_UCBMC |
| SSBP2              | 7.98E-35 | 0.99308139 | 0.758 | 0.34  | 2.83E-30 | mDC_UCBMC |
| CNST               | 8.60E-35 | 1.08561889 | 0.585 | 0.191 | 3.05E-30 | mDC_UCBMC |
| KCNQ5              | 9.55E-35 | 1.41942508 | 0.483 | 0.139 | 3.38E-30 | mDC_UCBMC |
| FOXO1              | 1.08E-34 | 0.8971257  | 0.699 | 0.283 | 3.83E-30 | mDC_UCBMC |
| RPL7               | 1.21E-34 | 0.65096511 | 0.996 | 0.879 | 4.30E-30 | mDC_UCBMC |
| TSC22D1            | 1.87E-34 | 1.5471493  | 0.373 | 0.086 | 6.62E-30 | mDC_UCBMC |

|          |          |            |       |       |          |           |
|----------|----------|------------|-------|-------|----------|-----------|
| RELL1    | 1.96E-34 | 1.36863331 | 0.466 | 0.131 | 6.93E-30 | mDC_UCBMC |
| ZFAND6   | 2.03E-34 | 1.05717232 | 0.847 | 0.44  | 7.21E-30 | mDC_UCBMC |
| ZRANB2   | 2.09E-34 | 1.15310105 | 0.648 | 0.242 | 7.41E-30 | mDC_UCBMC |
| EP300    | 2.28E-34 | 0.92909575 | 0.771 | 0.323 | 8.06E-30 | mDC_UCBMC |
| TRAPPC10 | 2.39E-34 | 1.21120052 | 0.492 | 0.149 | 8.45E-30 | mDC_UCBMC |
| ROCK1    | 2.43E-34 | 1.08490401 | 0.839 | 0.411 | 8.63E-30 | mDC_UCBMC |
| UBR3     | 2.45E-34 | 1.08180015 | 0.589 | 0.204 | 8.70E-30 | mDC_UCBMC |
| LATS1    | 2.53E-34 | 1.55801465 | 0.356 | 0.078 | 8.96E-30 | mDC_UCBMC |
| FOXJ3    | 2.86E-34 | 1.33904369 | 0.547 | 0.186 | 1.01E-29 | mDC_UCBMC |
| DCAF1    | 2.99E-34 | 1.47754742 | 0.508 | 0.156 | 1.06E-29 | mDC_UCBMC |
| PNN      | 3.09E-34 | 1.22241116 | 0.686 | 0.279 | 1.09E-29 | mDC_UCBMC |
| SPTBN1   | 3.14E-34 | 2.04745569 | 0.356 | 0.081 | 1.11E-29 | mDC_UCBMC |
| GOLGA4   | 3.20E-34 | 1.05287449 | 0.686 | 0.283 | 1.13E-29 | mDC_UCBMC |
| CCDC6    | 3.58E-34 | 1.05419737 | 0.818 | 0.351 | 1.27E-29 | mDC_UCBMC |
| IRAG2    | 3.97E-34 | 1.31011529 | 0.5   | 0.151 | 1.41E-29 | mDC_UCBMC |
| COP1     | 4.46E-34 | 1.01421134 | 0.703 | 0.276 | 1.58E-29 | mDC_UCBMC |
| MARCHF7  | 4.72E-34 | 1.1242474  | 0.686 | 0.277 | 1.67E-29 | mDC_UCBMC |
| SAMD4B   | 4.78E-34 | 1.06557592 | 0.559 | 0.183 | 1.70E-29 | mDC_UCBMC |
| BCLAF1   | 4.88E-34 | 1.12773192 | 0.805 | 0.398 | 1.73E-29 | mDC_UCBMC |
| NUP98    | 5.03E-34 | 0.93478509 | 0.716 | 0.286 | 1.78E-29 | mDC_UCBMC |
| TMEM123  | 5.74E-34 | 1.20055581 | 0.653 | 0.249 | 2.03E-29 | mDC_UCBMC |
| CCNT2    | 5.80E-34 | 1.44361159 | 0.504 | 0.158 | 2.05E-29 | mDC_UCBMC |
| SS18     | 5.83E-34 | 1.52259122 | 0.538 | 0.178 | 2.07E-29 | mDC_UCBMC |
| CNOT2    | 6.04E-34 | 0.98277402 | 0.746 | 0.311 | 2.14E-29 | mDC_UCBMC |
| PDS5B    | 6.09E-34 | 1.27942866 | 0.619 | 0.227 | 2.16E-29 | mDC_UCBMC |
| SCAF8    | 6.22E-34 | 0.9169032  | 0.631 | 0.224 | 2.20E-29 | mDC_UCBMC |
| TLK1     | 6.53E-34 | 1.24237443 | 0.619 | 0.234 | 2.31E-29 | mDC_UCBMC |
| HELZ     | 7.21E-34 | 1.10440646 | 0.648 | 0.244 | 2.56E-29 | mDC_UCBMC |
| PSEN1    | 7.28E-34 | 1.31645894 | 0.619 | 0.236 | 2.58E-29 | mDC_UCBMC |
| SORL1    | 7.42E-34 | 1.9242073  | 0.297 | 0.054 | 2.63E-29 | mDC_UCBMC |
| VAV3     | 7.60E-34 | 1.09627689 | 0.771 | 0.334 | 2.69E-29 | mDC_UCBMC |
| ATXN7    | 7.65E-34 | 0.90654163 | 0.648 | 0.246 | 2.71E-29 | mDC_UCBMC |
| SIPA1L3  | 8.30E-34 | 0.96378796 | 0.606 | 0.219 | 2.94E-29 | mDC_UCBMC |

|          |          |            |       |       |          |           |
|----------|----------|------------|-------|-------|----------|-----------|
| ITCH     | 8.84E-34 | 1.07352403 | 0.674 | 0.277 | 3.13E-29 | mDC_UCBMC |
| HTT      | 8.93E-34 | 1.04935093 | 0.61  | 0.222 | 3.16E-29 | mDC_UCBMC |
| AQR      | 1.06E-33 | 1.39127872 | 0.572 | 0.196 | 3.75E-29 | mDC_UCBMC |
| ECD      | 1.09E-33 | 1.65287231 | 0.403 | 0.1   | 3.85E-29 | mDC_UCBMC |
| ATF2     | 1.26E-33 | 1.16996954 | 0.559 | 0.185 | 4.46E-29 | mDC_UCBMC |
| GMCL1    | 1.30E-33 | 1.26143886 | 0.542 | 0.178 | 4.60E-29 | mDC_UCBMC |
| ABCB7    | 1.61E-33 | 1.55258971 | 0.441 | 0.12  | 5.70E-29 | mDC_UCBMC |
| CYTH1    | 1.63E-33 | 0.91727363 | 0.708 | 0.303 | 5.77E-29 | mDC_UCBMC |
| FBXL20   | 1.71E-33 | 1.11974609 | 0.551 | 0.184 | 6.05E-29 | mDC_UCBMC |
| FOXP1    | 1.92E-33 | 1.14587138 | 0.623 | 0.242 | 6.79E-29 | mDC_UCBMC |
| PPP1R12A | 1.94E-33 | 1.0798079  | 0.792 | 0.383 | 6.87E-29 | mDC_UCBMC |
| ABCC1    | 1.94E-33 | 1.29476286 | 0.508 | 0.158 | 6.89E-29 | mDC_UCBMC |
| CSNK1A1  | 2.00E-33 | 0.83662121 | 0.903 | 0.512 | 7.07E-29 | mDC_UCBMC |
| NCBP1    | 2.17E-33 | 1.94124368 | 0.377 | 0.094 | 7.70E-29 | mDC_UCBMC |
| DIAPH2   | 2.31E-33 | 0.84312281 | 0.831 | 0.382 | 8.17E-29 | mDC_UCBMC |
| TRPS1    | 2.47E-33 | 0.70957985 | 0.758 | 0.313 | 8.74E-29 | mDC_UCBMC |
| INPP5D   | 2.58E-33 | 0.91745449 | 0.758 | 0.334 | 9.12E-29 | mDC_UCBMC |
| ABI1     | 3.13E-33 | 1.04833812 | 0.733 | 0.319 | 1.11E-28 | mDC_UCBMC |
| UBAP1    | 3.18E-33 | 1.08464447 | 0.665 | 0.26  | 1.13E-28 | mDC_UCBMC |
| ELL      | 3.19E-33 | 0.92241305 | 0.572 | 0.188 | 1.13E-28 | mDC_UCBMC |
| H1-4     | 3.33E-33 | 1.37616515 | 0.631 | 0.236 | 1.18E-28 | mDC_UCBMC |
| SUSD6    | 3.44E-33 | 0.84106503 | 0.805 | 0.366 | 1.22E-28 | mDC_UCBMC |
| PAFAH1B1 | 3.96E-33 | 0.99865552 | 0.814 | 0.393 | 1.40E-28 | mDC_UCBMC |
| IQGAP2   | 3.98E-33 | 0.94369093 | 0.708 | 0.281 | 1.41E-28 | mDC_UCBMC |
| RBM33    | 5.02E-33 | 0.85320357 | 0.606 | 0.216 | 1.78E-28 | mDC_UCBMC |
| SOS1     | 5.16E-33 | 1.2734596  | 0.585 | 0.22  | 1.83E-28 | mDC_UCBMC |
| FOXN3    | 6.11E-33 | 0.84985258 | 0.881 | 0.444 | 2.16E-28 | mDC_UCBMC |
| TRA2B    | 6.67E-33 | 0.7853524  | 0.975 | 0.704 | 2.36E-28 | mDC_UCBMC |
| ACVR2A   | 6.92E-33 | 2.26837674 | 0.263 | 0.043 | 2.45E-28 | mDC_UCBMC |
| MBTPS1   | 7.63E-33 | 1.45134014 | 0.492 | 0.151 | 2.70E-28 | mDC_UCBMC |
| ZFC3H1   | 7.84E-33 | 0.95881444 | 0.729 | 0.297 | 2.78E-28 | mDC_UCBMC |
| CLASP2   | 8.58E-33 | 1.00639343 | 0.716 | 0.289 | 3.04E-28 | mDC_UCBMC |
| VPS13B   | 8.67E-33 | 0.70000222 | 0.924 | 0.476 | 3.07E-28 | mDC_UCBMC |

|                    |          |            |       |       |          |           |
|--------------------|----------|------------|-------|-------|----------|-----------|
| RIC1               | 9.17E-33 | 0.66986198 | 0.576 | 0.197 | 3.25E-28 | mDC_UCBMC |
| JMJD1C             | 9.55E-33 | 0.8181564  | 0.945 | 0.573 | 3.38E-28 | mDC_UCBMC |
| SNIP1              | 1.03E-32 | 1.82043814 | 0.36  | 0.085 | 3.63E-28 | mDC_UCBMC |
| SYNJ1              | 1.09E-32 | 1.25548275 | 0.487 | 0.15  | 3.86E-28 | mDC_UCBMC |
| CDKAL1             | 1.11E-32 | 1.08884526 | 0.695 | 0.287 | 3.92E-28 | mDC_UCBMC |
| ZNF44              | 1.12E-32 | 1.45536427 | 0.449 | 0.13  | 3.96E-28 | mDC_UCBMC |
| WDR47              | 1.15E-32 | 1.20450886 | 0.568 | 0.194 | 4.08E-28 | mDC_UCBMC |
| ABCB1              | 1.19E-32 | 2.0457857  | 0.28  | 0.051 | 4.23E-28 | mDC_UCBMC |
| MARK3              | 1.21E-32 | 0.97185934 | 0.657 | 0.248 | 4.28E-28 | mDC_UCBMC |
| ARL15              | 1.28E-32 | 1.18398836 | 0.555 | 0.189 | 4.54E-28 | mDC_UCBMC |
| ENSMMUG00000028906 | 1.39E-32 | 1.74653711 | 0.415 | 0.116 | 4.93E-28 | mDC_UCBMC |
| SMCHD1             | 1.46E-32 | 1.14071131 | 0.754 | 0.36  | 5.16E-28 | mDC_UCBMC |
| ELF4               | 1.57E-32 | 1.42394677 | 0.492 | 0.156 | 5.57E-28 | mDC_UCBMC |
| FOS                | 1.60E-32 | 0.68852265 | 0.979 | 0.683 | 5.65E-28 | mDC_UCBMC |
| DDX6               | 1.64E-32 | 1.06774562 | 0.682 | 0.28  | 5.80E-28 | mDC_UCBMC |
| ARIH1              | 1.72E-32 | 0.84785428 | 0.78  | 0.329 | 6.09E-28 | mDC_UCBMC |
| THUMPD1            | 1.99E-32 | 1.4418059  | 0.47  | 0.138 | 7.04E-28 | mDC_UCBMC |
| TXLNG              | 2.60E-32 | 1.43557166 | 0.466 | 0.14  | 9.22E-28 | mDC_UCBMC |
| ENSMMUG00000017044 | 2.65E-32 | 2.29830071 | 0.301 | 0.061 | 9.39E-28 | mDC_UCBMC |
| NCOR1              | 2.67E-32 | 1.10404442 | 0.695 | 0.278 | 9.47E-28 | mDC_UCBMC |
| CDK13              | 2.75E-32 | 0.90526271 | 0.703 | 0.289 | 9.75E-28 | mDC_UCBMC |
| ABL1               | 2.75E-32 | 1.46832865 | 0.394 | 0.101 | 9.76E-28 | mDC_UCBMC |
| ZNRF2              | 2.78E-32 | 1.34372312 | 0.479 | 0.146 | 9.86E-28 | mDC_UCBMC |
| LSM14A             | 3.71E-32 | 1.1488496  | 0.665 | 0.269 | 1.31E-27 | mDC_UCBMC |
| WDR20              | 5.16E-32 | 1.31276006 | 0.445 | 0.127 | 1.83E-27 | mDC_UCBMC |
| ITSN2              | 5.36E-32 | 0.76463149 | 0.822 | 0.392 | 1.90E-27 | mDC_UCBMC |
| SLC49A4            | 6.08E-32 | 2.0194465  | 0.301 | 0.06  | 2.15E-27 | mDC_UCBMC |
| DNAJC1             | 6.18E-32 | 0.95246564 | 0.623 | 0.232 | 2.19E-27 | mDC_UCBMC |
| PPP2R1B            | 6.37E-32 | 2.03473324 | 0.305 | 0.063 | 2.26E-27 | mDC_UCBMC |
| ABLIM1             | 6.73E-32 | 1.88188431 | 0.394 | 0.106 | 2.39E-27 | mDC_UCBMC |
| LMNA               | 6.96E-32 | 0.86260505 | 0.801 | 0.375 | 2.47E-27 | mDC_UCBMC |
| IMMP2L             | 7.22E-32 | 1.20361561 | 0.623 | 0.246 | 2.56E-27 | mDC_UCBMC |
| SEC24B             | 7.55E-32 | 1.15191851 | 0.644 | 0.27  | 2.68E-27 | mDC_UCBMC |

|             |          |            |       |       |          |           |
|-------------|----------|------------|-------|-------|----------|-----------|
| BDP1        | 7.56E-32 | 0.89601098 | 0.614 | 0.224 | 2.68E-27 | mDC_UCBMC |
| INO80       | 7.86E-32 | 1.16785099 | 0.513 | 0.167 | 2.78E-27 | mDC_UCBMC |
| TRAC        | 8.81E-32 | 1.63209509 | 0.339 | 0.075 | 3.12E-27 | mDC_UCBMC |
| RFX2        | 9.21E-32 | 1.64982527 | 0.297 | 0.058 | 3.26E-27 | mDC_UCBMC |
| RPL23A      | 9.64E-32 | 0.58322211 | 1     | 0.929 | 3.42E-27 | mDC_UCBMC |
| LONP2       | 9.72E-32 | 1.42665365 | 0.5   | 0.164 | 3.44E-27 | mDC_UCBMC |
| CASK        | 9.96E-32 | 1.14572933 | 0.521 | 0.171 | 3.53E-27 | mDC_UCBMC |
| MED23       | 1.07E-31 | 1.32951174 | 0.466 | 0.138 | 3.80E-27 | mDC_UCBMC |
| ZC3H7A      | 1.08E-31 | 1.33137919 | 0.521 | 0.171 | 3.82E-27 | mDC_UCBMC |
| CYB5R4      | 1.23E-31 | 1.40498738 | 0.564 | 0.2   | 4.35E-27 | mDC_UCBMC |
| SKAP1       | 1.24E-31 | 2.02590235 | 0.381 | 0.1   | 4.41E-27 | mDC_UCBMC |
| EXOC6B      | 1.25E-31 | 1.34164432 | 0.39  | 0.1   | 4.41E-27 | mDC_UCBMC |
| PDE3B       | 1.25E-31 | 1.41802423 | 0.5   | 0.161 | 4.42E-27 | mDC_UCBMC |
| ATP8A1      | 1.28E-31 | 1.7483375  | 0.424 | 0.122 | 4.53E-27 | mDC_UCBMC |
| AHI1        | 1.33E-31 | 1.32314592 | 0.513 | 0.172 | 4.70E-27 | mDC_UCBMC |
| NCOA2       | 1.37E-31 | 1.04657573 | 0.623 | 0.231 | 4.86E-27 | mDC_UCBMC |
| WIPI2       | 1.59E-31 | 1.39338598 | 0.453 | 0.131 | 5.65E-27 | mDC_UCBMC |
| FAM172A     | 1.63E-31 | 0.95865343 | 0.754 | 0.331 | 5.77E-27 | mDC_UCBMC |
| IRS2        | 1.63E-31 | 1.74100146 | 0.284 | 0.053 | 5.79E-27 | mDC_UCBMC |
| C18H18orf25 | 1.67E-31 | 1.31872212 | 0.403 | 0.109 | 5.91E-27 | mDC_UCBMC |
| PPP3CC      | 1.78E-31 | 1.3004831  | 0.538 | 0.182 | 6.32E-27 | mDC_UCBMC |
| MTMR3       | 1.94E-31 | 1.20367595 | 0.479 | 0.148 | 6.88E-27 | mDC_UCBMC |
| G2E3        | 2.25E-31 | 1.74837991 | 0.339 | 0.077 | 7.98E-27 | mDC_UCBMC |
| LRBA        | 2.49E-31 | 1.05087417 | 0.708 | 0.302 | 8.82E-27 | mDC_UCBMC |
| PPP1R12B    | 2.87E-31 | 1.81038586 | 0.432 | 0.129 | 1.02E-26 | mDC_UCBMC |
| RNF38       | 2.99E-31 | 1.21896668 | 0.572 | 0.211 | 1.06E-26 | mDC_UCBMC |
| PUM2        | 3.06E-31 | 0.83359708 | 0.742 | 0.31  | 1.08E-26 | mDC_UCBMC |
| LANCL2      | 3.23E-31 | 1.45958328 | 0.432 | 0.126 | 1.15E-26 | mDC_UCBMC |
| TXNDC11     | 3.35E-31 | 1.17410023 | 0.521 | 0.172 | 1.19E-26 | mDC_UCBMC |
| UBL3        | 3.56E-31 | 1.10048568 | 0.746 | 0.333 | 1.26E-26 | mDC_UCBMC |
| TBC1D1      | 3.66E-31 | 0.79393567 | 0.754 | 0.327 | 1.30E-26 | mDC_UCBMC |
| PID1        | 3.99E-31 | 1.37423531 | 0.623 | 0.258 | 1.41E-26 | mDC_UCBMC |
| INPP4B      | 4.01E-31 | 1.97490846 | 0.254 | 0.042 | 1.42E-26 | mDC_UCBMC |

|                     |          |            |       |       |          |           |
|---------------------|----------|------------|-------|-------|----------|-----------|
| RINT1               | 4.14E-31 | 1.77937647 | 0.271 | 0.049 | 1.47E-26 | mDC_UCBMC |
| HIVEP1              | 4.22E-31 | 0.91733407 | 0.606 | 0.228 | 1.49E-26 | mDC_UCBMC |
| LCORL               | 4.40E-31 | 1.17175524 | 0.589 | 0.22  | 1.56E-26 | mDC_UCBMC |
| KLF4                | 4.61E-31 | 0.84775602 | 0.843 | 0.356 | 1.63E-26 | mDC_UCBMC |
| SPECC1              | 5.30E-31 | 1.05089247 | 0.708 | 0.277 | 1.88E-26 | mDC_UCBMC |
| CCDC88A             | 5.94E-31 | 0.88282975 | 0.949 | 0.603 | 2.11E-26 | mDC_UCBMC |
| APLP2               | 6.14E-31 | 1.09739066 | 0.771 | 0.347 | 2.17E-26 | mDC_UCBMC |
| HSPA5               | 6.47E-31 | 0.92112102 | 0.852 | 0.397 | 2.29E-26 | mDC_UCBMC |
| SRSF11              | 6.49E-31 | 0.87635035 | 0.907 | 0.538 | 2.30E-26 | mDC_UCBMC |
| ANKRD11             | 7.23E-31 | 0.67024858 | 0.754 | 0.335 | 2.56E-26 | mDC_UCBMC |
| MRTFA               | 7.41E-31 | 0.69484071 | 0.742 | 0.32  | 2.62E-26 | mDC_UCBMC |
| SEC31A              | 7.77E-31 | 1.12347683 | 0.703 | 0.292 | 2.75E-26 | mDC_UCBMC |
| ZNF410              | 8.35E-31 | 1.21744279 | 0.445 | 0.13  | 2.96E-26 | mDC_UCBMC |
| COX3                | 8.93E-31 | 0.65354464 | 0.996 | 0.906 | 3.16E-26 | mDC_UCBMC |
| ENSMMUG000000031367 | 1.00E-30 | 1.11740307 | 0.606 | 0.224 | 3.56E-26 | mDC_UCBMC |
| MAP4K3              | 1.02E-30 | 1.03441761 | 0.39  | 0.098 | 3.63E-26 | mDC_UCBMC |
| DDX52               | 1.07E-30 | 1.10282945 | 0.496 | 0.158 | 3.78E-26 | mDC_UCBMC |
| TRIM33              | 1.10E-30 | 1.39145012 | 0.479 | 0.157 | 3.90E-26 | mDC_UCBMC |
| GATAD2B             | 1.14E-30 | 0.8802058  | 0.627 | 0.251 | 4.06E-26 | mDC_UCBMC |
| ARHGAP6             | 1.15E-30 | 1.37506478 | 0.352 | 0.083 | 4.06E-26 | mDC_UCBMC |
| VPS13D              | 1.16E-30 | 1.00888483 | 0.525 | 0.174 | 4.11E-26 | mDC_UCBMC |
| PSPC1               | 1.19E-30 | 0.87219647 | 0.627 | 0.237 | 4.22E-26 | mDC_UCBMC |
| TRIM37              | 1.29E-30 | 1.45764082 | 0.381 | 0.1   | 4.55E-26 | mDC_UCBMC |
| MYH9                | 1.43E-30 | 0.86902865 | 0.881 | 0.474 | 5.08E-26 | mDC_UCBMC |
| ITK                 | 1.50E-30 | 2.02003067 | 0.284 | 0.055 | 5.33E-26 | mDC_UCBMC |
| ADD3                | 1.69E-30 | 1.43951661 | 0.534 | 0.187 | 5.97E-26 | mDC_UCBMC |
| RPS3                | 1.71E-30 | 0.58783421 | 1     | 0.919 | 6.05E-26 | mDC_UCBMC |
| HDAC9               | 1.74E-30 | 0.77186808 | 0.818 | 0.41  | 6.16E-26 | mDC_UCBMC |
| GALNT11             | 1.75E-30 | 1.12874527 | 0.5   | 0.16  | 6.22E-26 | mDC_UCBMC |
| RNF24               | 1.76E-30 | 1.78142143 | 0.373 | 0.097 | 6.23E-26 | mDC_UCBMC |
| RUNX2               | 1.87E-30 | 0.7462999  | 0.72  | 0.302 | 6.62E-26 | mDC_UCBMC |
| TGFBR2              | 2.00E-30 | 1.01755746 | 0.648 | 0.256 | 7.08E-26 | mDC_UCBMC |
| ZNF654              | 2.16E-30 | 1.00503238 | 0.466 | 0.144 | 7.66E-26 | mDC_UCBMC |



|                   |          |            |       |       |          |           |
|-------------------|----------|------------|-------|-------|----------|-----------|
| DENND4C           | 2.23E-30 | 1.20999565 | 0.445 | 0.13  | 7.90E-26 | mDC_UCBMC |
| DAZAP2            | 2.26E-30 | 1.02825422 | 0.792 | 0.361 | 8.00E-26 | mDC_UCBMC |
| ASH1L             | 2.30E-30 | 0.63689094 | 0.847 | 0.43  | 8.14E-26 | mDC_UCBMC |
| PLCL2             | 2.31E-30 | 1.21019527 | 0.513 | 0.176 | 8.17E-26 | mDC_UCBMC |
| ESCO1             | 2.31E-30 | 0.83457232 | 0.703 | 0.288 | 8.17E-26 | mDC_UCBMC |
| LAPTM5            | 2.51E-30 | 0.80141225 | 0.932 | 0.591 | 8.89E-26 | mDC_UCBMC |
| CD6               | 2.57E-30 | 1.73156265 | 0.271 | 0.05  | 9.10E-26 | mDC_UCBMC |
| DIDO1             | 2.60E-30 | 1.15712978 | 0.483 | 0.155 | 9.20E-26 | mDC_UCBMC |
| ENSMUG00000060229 | 2.66E-30 | 1.2543105  | 0.597 | 0.228 | 9.43E-26 | mDC_UCBMC |
| HACD2             | 2.66E-30 | 1.90255014 | 0.297 | 0.062 | 9.43E-26 | mDC_UCBMC |
| ARIH2             | 2.97E-30 | 1.19440423 | 0.547 | 0.194 | 1.05E-25 | mDC_UCBMC |
| UBR5              | 3.20E-30 | 0.87400181 | 0.716 | 0.299 | 1.13E-25 | mDC_UCBMC |
| ARL8B             | 3.32E-30 | 0.87769727 | 0.631 | 0.236 | 1.18E-25 | mDC_UCBMC |
| SELENOT           | 3.62E-30 | 1.33213832 | 0.347 | 0.083 | 1.28E-25 | mDC_UCBMC |
| BIN3              | 3.62E-30 | 1.07791796 | 0.682 | 0.279 | 1.28E-25 | mDC_UCBMC |
| ATP2C1            | 3.63E-30 | 1.39619189 | 0.466 | 0.147 | 1.28E-25 | mDC_UCBMC |
| PLEKHM1           | 3.72E-30 | 1.50751926 | 0.343 | 0.082 | 1.32E-25 | mDC_UCBMC |
| ACTR2             | 3.75E-30 | 0.81946424 | 0.97  | 0.706 | 1.33E-25 | mDC_UCBMC |
| MGAT5             | 3.78E-30 | 1.1771015  | 0.5   | 0.164 | 1.34E-25 | mDC_UCBMC |
| CYP20A1           | 3.81E-30 | 1.57203568 | 0.356 | 0.09  | 1.35E-25 | mDC_UCBMC |
| TBC1D23           | 3.94E-30 | 1.16140088 | 0.504 | 0.168 | 1.39E-25 | mDC_UCBMC |
| MAML3             | 4.08E-30 | 0.83147001 | 0.682 | 0.287 | 1.44E-25 | mDC_UCBMC |
| CHD6              | 4.38E-30 | 1.20326494 | 0.576 | 0.219 | 1.55E-25 | mDC_UCBMC |
| SLC66A2           | 4.59E-30 | 0.71685101 | 0.555 | 0.184 | 1.62E-25 | mDC_UCBMC |
| CDC14A            | 4.68E-30 | 1.4564294  | 0.538 | 0.199 | 1.66E-25 | mDC_UCBMC |
| TAF3              | 4.89E-30 | 1.50152285 | 0.521 | 0.184 | 1.73E-25 | mDC_UCBMC |
| PREP              | 5.65E-30 | 1.47141734 | 0.381 | 0.103 | 2.00E-25 | mDC_UCBMC |
| PPP2R2A           | 5.96E-30 | 0.96921033 | 0.64  | 0.253 | 2.11E-25 | mDC_UCBMC |
| ANKIB1            | 6.03E-30 | 1.14502433 | 0.483 | 0.154 | 2.14E-25 | mDC_UCBMC |
| MAML2             | 6.45E-30 | 1.9879739  | 0.398 | 0.117 | 2.29E-25 | mDC_UCBMC |
| CLASP1            | 6.98E-30 | 1.22710055 | 0.458 | 0.144 | 2.47E-25 | mDC_UCBMC |
| ZFAND3            | 7.15E-30 | 0.66330888 | 0.847 | 0.42  | 2.53E-25 | mDC_UCBMC |
| WDR7              | 8.77E-30 | 1.34156301 | 0.504 | 0.175 | 3.11E-25 | mDC_UCBMC |

|                    |          |            |       |       |          |           |
|--------------------|----------|------------|-------|-------|----------|-----------|
| ELF1               | 9.03E-30 | 0.76967267 | 0.941 | 0.561 | 3.20E-25 | mDC_UCBMC |
| AFF3               | 9.33E-30 | 0.81489004 | 0.877 | 0.474 | 3.31E-25 | mDC_UCBMC |
| AGO2               | 9.64E-30 | 0.81122957 | 0.674 | 0.286 | 3.41E-25 | mDC_UCBMC |
| UTP20              | 9.94E-30 | 2.13553691 | 0.284 | 0.059 | 3.52E-25 | mDC_UCBMC |
| GRAMD4             | 1.01E-29 | 0.97537377 | 0.597 | 0.223 | 3.59E-25 | mDC_UCBMC |
| GPATCH8            | 1.06E-29 | 1.00665454 | 0.593 | 0.226 | 3.75E-25 | mDC_UCBMC |
| WDR43              | 1.08E-29 | 1.04596703 | 0.619 | 0.24  | 3.82E-25 | mDC_UCBMC |
| ARFGEF2            | 1.14E-29 | 0.96511982 | 0.458 | 0.14  | 4.03E-25 | mDC_UCBMC |
| TTC39C             | 1.22E-29 | 0.68707778 | 0.669 | 0.261 | 4.33E-25 | mDC_UCBMC |
| CSNK1G3            | 1.29E-29 | 0.99229518 | 0.581 | 0.219 | 4.58E-25 | mDC_UCBMC |
| MLLT10             | 1.30E-29 | 1.06393211 | 0.581 | 0.219 | 4.61E-25 | mDC_UCBMC |
| NCOA1              | 1.57E-29 | 1.0021119  | 0.614 | 0.232 | 5.57E-25 | mDC_UCBMC |
| NUP54              | 1.92E-29 | 1.63813351 | 0.415 | 0.125 | 6.82E-25 | mDC_UCBMC |
| EFL1               | 1.95E-29 | 1.06718382 | 0.648 | 0.264 | 6.89E-25 | mDC_UCBMC |
| USP8               | 1.95E-29 | 0.88507894 | 0.623 | 0.238 | 6.90E-25 | mDC_UCBMC |
| RSF1               | 1.97E-29 | 1.00519818 | 0.657 | 0.271 | 6.99E-25 | mDC_UCBMC |
| KIDINS220          | 2.07E-29 | 1.31645112 | 0.496 | 0.168 | 7.34E-25 | mDC_UCBMC |
| ASCC3              | 2.27E-29 | 0.97868409 | 0.674 | 0.278 | 8.03E-25 | mDC_UCBMC |
| CSGALNACT2         | 2.44E-29 | 0.86362066 | 0.814 | 0.397 | 8.63E-25 | mDC_UCBMC |
| DNAJC2             | 2.94E-29 | 1.10498634 | 0.614 | 0.235 | 1.04E-24 | mDC_UCBMC |
| AKAP13             | 3.04E-29 | 0.6824005  | 0.945 | 0.585 | 1.08E-24 | mDC_UCBMC |
| XPR1               | 3.08E-29 | 1.07678929 | 0.559 | 0.199 | 1.09E-24 | mDC_UCBMC |
| GINM1              | 3.13E-29 | 1.2286706  | 0.466 | 0.15  | 1.11E-24 | mDC_UCBMC |
| BRD7               | 3.19E-29 | 1.21587524 | 0.453 | 0.142 | 1.13E-24 | mDC_UCBMC |
| HIVEP3             | 3.21E-29 | 1.87544759 | 0.314 | 0.071 | 1.14E-24 | mDC_UCBMC |
| RNF2               | 4.03E-29 | 1.25425971 | 0.538 | 0.189 | 1.43E-24 | mDC_UCBMC |
| YME1L1             | 4.62E-29 | 1.00405355 | 0.627 | 0.242 | 1.64E-24 | mDC_UCBMC |
| ENSMMUG00000061044 | 4.78E-29 | 1.30603323 | 0.343 | 0.082 | 1.69E-24 | mDC_UCBMC |
| RBM47              | 4.82E-29 | 0.53551677 | 0.839 | 0.437 | 1.71E-24 | mDC_UCBMC |
| STIM2              | 4.92E-29 | 1.28290119 | 0.551 | 0.199 | 1.74E-24 | mDC_UCBMC |
| ANKRD12            | 5.06E-29 | 0.89936898 | 0.856 | 0.441 | 1.79E-24 | mDC_UCBMC |
| MAP3K5             | 5.57E-29 | 0.83458254 | 0.525 | 0.182 | 1.97E-24 | mDC_UCBMC |
| ATAD2B             | 5.65E-29 | 0.63918442 | 0.784 | 0.359 | 2.00E-24 | mDC_UCBMC |

|          |          |            |       |       |          |           |
|----------|----------|------------|-------|-------|----------|-----------|
| NT5C2    | 6.91E-29 | 1.17245573 | 0.559 | 0.206 | 2.45E-24 | mDC_UCBMC |
| DIS3L2   | 8.19E-29 | 1.20265952 | 0.517 | 0.181 | 2.90E-24 | mDC_UCBMC |
| CHMP7    | 8.36E-29 | 1.98323905 | 0.267 | 0.052 | 2.96E-24 | mDC_UCBMC |
| HOOK3    | 9.00E-29 | 0.80443657 | 0.797 | 0.364 | 3.19E-24 | mDC_UCBMC |
| CNOT6    | 1.09E-28 | 1.61619804 | 0.339 | 0.085 | 3.85E-24 | mDC_UCBMC |
| STAM2    | 1.10E-28 | 1.35467028 | 0.36  | 0.093 | 3.91E-24 | mDC_UCBMC |
| DHX9     | 1.10E-28 | 0.90114855 | 0.763 | 0.341 | 3.91E-24 | mDC_UCBMC |
| USP10    | 1.11E-28 | 0.85099161 | 0.674 | 0.279 | 3.95E-24 | mDC_UCBMC |
| GNG2     | 1.13E-28 | 1.05184097 | 0.678 | 0.307 | 4.01E-24 | mDC_UCBMC |
| KDM3A    | 1.14E-28 | 1.36053489 | 0.403 | 0.118 | 4.03E-24 | mDC_UCBMC |
| TBC1D12  | 1.24E-28 | 1.23419475 | 0.492 | 0.168 | 4.40E-24 | mDC_UCBMC |
| EHD4     | 1.27E-28 | 1.24520548 | 0.508 | 0.172 | 4.51E-24 | mDC_UCBMC |
| ARL4A    | 1.34E-28 | 1.61821146 | 0.28  | 0.057 | 4.74E-24 | mDC_UCBMC |
| KCMF1    | 1.38E-28 | 0.99026301 | 0.547 | 0.198 | 4.89E-24 | mDC_UCBMC |
| GGNBP2   | 1.59E-28 | 0.97797088 | 0.669 | 0.282 | 5.62E-24 | mDC_UCBMC |
| FBXO25   | 1.81E-28 | 1.47603515 | 0.356 | 0.092 | 6.41E-24 | mDC_UCBMC |
| TRIM24   | 1.83E-28 | 1.46238135 | 0.398 | 0.116 | 6.47E-24 | mDC_UCBMC |
| OGT      | 1.86E-28 | 0.97379329 | 0.636 | 0.269 | 6.57E-24 | mDC_UCBMC |
| TMCC1    | 1.87E-28 | 0.90513973 | 0.581 | 0.21  | 6.64E-24 | mDC_UCBMC |
| BBX      | 1.91E-28 | 1.00527683 | 0.691 | 0.291 | 6.75E-24 | mDC_UCBMC |
| AUTS2    | 1.92E-28 | 0.83637797 | 0.475 | 0.152 | 6.80E-24 | mDC_UCBMC |
| PER2     | 2.04E-28 | 1.53288088 | 0.339 | 0.087 | 7.24E-24 | mDC_UCBMC |
| CAPN7    | 2.08E-28 | 1.8344321  | 0.364 | 0.098 | 7.37E-24 | mDC_UCBMC |
| MED27    | 2.19E-28 | 0.96861189 | 0.581 | 0.218 | 7.78E-24 | mDC_UCBMC |
| TASOR2   | 2.23E-28 | 1.29246605 | 0.479 | 0.16  | 7.90E-24 | mDC_UCBMC |
| KAT2B    | 2.26E-28 | 0.90783128 | 0.534 | 0.191 | 8.02E-24 | mDC_UCBMC |
| ALCAM    | 2.47E-28 | 0.64361522 | 0.894 | 0.542 | 8.77E-24 | mDC_UCBMC |
| RPRD1A   | 2.57E-28 | 1.24953314 | 0.483 | 0.16  | 9.11E-24 | mDC_UCBMC |
| PPP4R3A  | 2.62E-28 | 0.87867324 | 0.504 | 0.166 | 9.30E-24 | mDC_UCBMC |
| NAF1     | 2.86E-28 | 1.64336357 | 0.39  | 0.113 | 1.01E-23 | mDC_UCBMC |
| TMEM131L | 3.02E-28 | 0.89698822 | 0.703 | 0.299 | 1.07E-23 | mDC_UCBMC |
| GOLPH3   | 3.20E-28 | 1.21456448 | 0.559 | 0.21  | 1.13E-23 | mDC_UCBMC |
| ILRUN    | 3.24E-28 | 1.12242694 | 0.415 | 0.121 | 1.15E-23 | mDC_UCBMC |

|         |          |            |       |       |          |           |
|---------|----------|------------|-------|-------|----------|-----------|
| USP16   | 3.50E-28 | 1.10608089 | 0.606 | 0.234 | 1.24E-23 | mDC_UCBMC |
| TSC22D3 | 3.59E-28 | 1.0506603  | 0.708 | 0.315 | 1.27E-23 | mDC_UCBMC |
| EMP3    | 3.62E-28 | 0.91105767 | 0.835 | 0.393 | 1.28E-23 | mDC_UCBMC |
| SNX4    | 3.78E-28 | 1.0193293  | 0.627 | 0.252 | 1.34E-23 | mDC_UCBMC |
| RB1CC1  | 3.80E-28 | 1.2165122  | 0.445 | 0.14  | 1.34E-23 | mDC_UCBMC |
| MYSM1   | 3.88E-28 | 1.2184641  | 0.352 | 0.09  | 1.38E-23 | mDC_UCBMC |
| DUSP18  | 3.88E-28 | 0.91641129 | 0.534 | 0.183 | 1.38E-23 | mDC_UCBMC |
| RELCH   | 4.24E-28 | 1.18216211 | 0.492 | 0.17  | 1.50E-23 | mDC_UCBMC |
| ZFR     | 4.27E-28 | 0.94931255 | 0.636 | 0.262 | 1.51E-23 | mDC_UCBMC |
| BTBD9   | 4.29E-28 | 0.77766129 | 0.606 | 0.246 | 1.52E-23 | mDC_UCBMC |
| NUP153  | 4.33E-28 | 1.03650576 | 0.602 | 0.243 | 1.54E-23 | mDC_UCBMC |
| CD44    | 4.59E-28 | 0.65400938 | 0.958 | 0.757 | 1.63E-23 | mDC_UCBMC |
| ZNF43   | 4.62E-28 | 1.15379275 | 0.445 | 0.14  | 1.64E-23 | mDC_UCBMC |
| RLF     | 5.04E-28 | 0.9011568  | 0.636 | 0.258 | 1.78E-23 | mDC_UCBMC |
| BACH2   | 5.44E-28 | 1.51598681 | 0.381 | 0.108 | 1.93E-23 | mDC_UCBMC |
| TANC1   | 5.47E-28 | 1.44895274 | 0.364 | 0.098 | 1.94E-23 | mDC_UCBMC |
| ERN1    | 5.82E-28 | 1.72777214 | 0.322 | 0.079 | 2.06E-23 | mDC_UCBMC |
| SEC63   | 5.94E-28 | 0.98616251 | 0.631 | 0.267 | 2.10E-23 | mDC_UCBMC |
| PRRC2B  | 6.17E-28 | 0.93102187 | 0.614 | 0.243 | 2.19E-23 | mDC_UCBMC |
| STAU1   | 6.22E-28 | 0.84728167 | 0.614 | 0.255 | 2.20E-23 | mDC_UCBMC |
| PPP4R1  | 6.38E-28 | 0.68679095 | 0.47  | 0.15  | 2.26E-23 | mDC_UCBMC |
| ARFGEF1 | 6.74E-28 | 0.87614139 | 0.559 | 0.209 | 2.39E-23 | mDC_UCBMC |
| STRN    | 6.93E-28 | 1.89349386 | 0.314 | 0.075 | 2.46E-23 | mDC_UCBMC |
| RBM14   | 7.75E-28 | 0.82862843 | 0.839 | 0.443 | 2.75E-23 | mDC_UCBMC |
| COG3    | 8.23E-28 | 1.82346605 | 0.292 | 0.065 | 2.92E-23 | mDC_UCBMC |
| RNGTT   | 8.60E-28 | 1.00603976 | 0.572 | 0.226 | 3.05E-23 | mDC_UCBMC |
| AHCTF1  | 9.63E-28 | 1.03284517 | 0.5   | 0.174 | 3.41E-23 | mDC_UCBMC |
| TBC1D5  | 9.89E-28 | 0.75537728 | 0.847 | 0.44  | 3.50E-23 | mDC_UCBMC |
| HBS1L   | 9.89E-28 | 1.00981536 | 0.648 | 0.263 | 3.50E-23 | mDC_UCBMC |
| MBTD1   | 1.00E-27 | 1.40000431 | 0.458 | 0.154 | 3.54E-23 | mDC_UCBMC |
| GOLM2   | 1.02E-27 | 0.97108882 | 0.568 | 0.218 | 3.60E-23 | mDC_UCBMC |
| DYRK1A  | 1.07E-27 | 0.77741474 | 0.602 | 0.23  | 3.79E-23 | mDC_UCBMC |
| ARID1B  | 1.07E-27 | 0.51168188 | 0.818 | 0.388 | 3.80E-23 | mDC_UCBMC |

|          |          |            |       |       |          |           |
|----------|----------|------------|-------|-------|----------|-----------|
| MDM2     | 1.11E-27 | 1.22121084 | 0.428 | 0.132 | 3.92E-23 | mDC_UCBMC |
| NFATC3   | 1.18E-27 | 1.47288828 | 0.449 | 0.15  | 4.19E-23 | mDC_UCBMC |
| ADK      | 1.20E-27 | 0.93379265 | 0.691 | 0.289 | 4.27E-23 | mDC_UCBMC |
| ZEB1     | 1.22E-27 | 0.88012007 | 0.653 | 0.285 | 4.31E-23 | mDC_UCBMC |
| MICU2    | 1.27E-27 | 1.15719075 | 0.525 | 0.191 | 4.50E-23 | mDC_UCBMC |
| EXOC4    | 1.48E-27 | 0.57712232 | 0.801 | 0.377 | 5.25E-23 | mDC_UCBMC |
| SOS2     | 1.55E-27 | 1.08316312 | 0.424 | 0.13  | 5.48E-23 | mDC_UCBMC |
| WDR48    | 1.81E-27 | 1.16410835 | 0.432 | 0.137 | 6.41E-23 | mDC_UCBMC |
| KLHL2    | 1.88E-27 | 1.33922427 | 0.407 | 0.122 | 6.65E-23 | mDC_UCBMC |
| CRY1     | 1.99E-27 | 1.39689118 | 0.322 | 0.078 | 7.04E-23 | mDC_UCBMC |
| RABGEF1  | 2.25E-27 | 0.90350858 | 0.746 | 0.333 | 7.98E-23 | mDC_UCBMC |
| ATG5     | 2.30E-27 | 1.20213988 | 0.572 | 0.223 | 8.13E-23 | mDC_UCBMC |
| ZNFX1    | 2.43E-27 | 0.8780215  | 0.61  | 0.24  | 8.62E-23 | mDC_UCBMC |
| PCCA     | 2.44E-27 | 0.96766795 | 0.551 | 0.206 | 8.66E-23 | mDC_UCBMC |
| ADIPOR1  | 2.56E-27 | 0.97381397 | 0.521 | 0.178 | 9.09E-23 | mDC_UCBMC |
| MAP3K7   | 2.57E-27 | 1.20716712 | 0.419 | 0.128 | 9.10E-23 | mDC_UCBMC |
| G3BP2    | 2.58E-27 | 0.92193815 | 0.826 | 0.439 | 9.14E-23 | mDC_UCBMC |
| TAX1BP1  | 2.65E-27 | 0.96524002 | 0.742 | 0.357 | 9.38E-23 | mDC_UCBMC |
| SNX13    | 2.67E-27 | 1.1906078  | 0.496 | 0.174 | 9.45E-23 | mDC_UCBMC |
| RABGAP1L | 2.80E-27 | 0.85740882 | 0.758 | 0.381 | 9.92E-23 | mDC_UCBMC |
| XPO7     | 2.80E-27 | 1.16603979 | 0.424 | 0.132 | 9.93E-23 | mDC_UCBMC |
| FCHO2    | 2.85E-27 | 0.95438022 | 0.475 | 0.155 | 1.01E-22 | mDC_UCBMC |
| KDM1A    | 3.04E-27 | 0.94240476 | 0.496 | 0.175 | 1.08E-22 | mDC_UCBMC |
| GPHN     | 3.06E-27 | 0.96445487 | 0.555 | 0.218 | 1.09E-22 | mDC_UCBMC |
| BCL7B    | 3.48E-27 | 1.2571599  | 0.47  | 0.157 | 1.23E-22 | mDC_UCBMC |
| EPRS1    | 3.80E-27 | 1.02037108 | 0.555 | 0.202 | 1.34E-22 | mDC_UCBMC |
| THUMPD2  | 3.95E-27 | 1.61043517 | 0.36  | 0.099 | 1.40E-22 | mDC_UCBMC |
| SREBF2   | 4.00E-27 | 0.82777968 | 0.653 | 0.27  | 1.42E-22 | mDC_UCBMC |
| FBXO21   | 4.07E-27 | 1.37912847 | 0.386 | 0.112 | 1.44E-22 | mDC_UCBMC |
| RBBP6    | 4.55E-27 | 1.08867429 | 0.479 | 0.163 | 1.61E-22 | mDC_UCBMC |
| PIP5K1A  | 4.75E-27 | 0.83333917 | 0.538 | 0.195 | 1.68E-22 | mDC_UCBMC |
| CACUL1   | 4.87E-27 | 0.89241824 | 0.496 | 0.166 | 1.72E-22 | mDC_UCBMC |
| KDM7A    | 4.95E-27 | 0.79936617 | 0.648 | 0.277 | 1.76E-22 | mDC_UCBMC |

|                    |          |            |       |       |          |           |
|--------------------|----------|------------|-------|-------|----------|-----------|
| DYNC1H1            | 4.98E-27 | 1.10452493 | 0.551 | 0.204 | 1.76E-22 | mDC_UCBMC |
| CRYBG1             | 5.56E-27 | 0.96346526 | 0.691 | 0.288 | 1.97E-22 | mDC_UCBMC |
| POGZ               | 5.67E-27 | 0.76149587 | 0.585 | 0.219 | 2.01E-22 | mDC_UCBMC |
| NBAS               | 6.23E-27 | 1.05785656 | 0.381 | 0.107 | 2.21E-22 | mDC_UCBMC |
| ZBTB20             | 6.52E-27 | 0.69363686 | 0.699 | 0.314 | 2.31E-22 | mDC_UCBMC |
| CDK17              | 6.56E-27 | 1.13456491 | 0.479 | 0.168 | 2.32E-22 | mDC_UCBMC |
| NOP14              | 6.96E-27 | 1.46761284 | 0.386 | 0.112 | 2.47E-22 | mDC_UCBMC |
| URI1               | 6.99E-27 | 1.11954008 | 0.487 | 0.172 | 2.48E-22 | mDC_UCBMC |
| RNF4               | 7.14E-27 | 1.16828553 | 0.369 | 0.104 | 2.53E-22 | mDC_UCBMC |
| MAPRE2             | 7.36E-27 | 0.99992834 | 0.559 | 0.208 | 2.61E-22 | mDC_UCBMC |
| TSN                | 7.46E-27 | 1.32948585 | 0.445 | 0.144 | 2.64E-22 | mDC_UCBMC |
| GPBP1L1            | 7.63E-27 | 0.92811004 | 0.682 | 0.291 | 2.70E-22 | mDC_UCBMC |
| CUX1               | 7.66E-27 | 0.50798825 | 0.873 | 0.457 | 2.71E-22 | mDC_UCBMC |
| SSH2               | 8.40E-27 | 0.85297242 | 0.699 | 0.33  | 2.97E-22 | mDC_UCBMC |
| ADNP               | 8.50E-27 | 1.05954072 | 0.466 | 0.159 | 3.01E-22 | mDC_UCBMC |
| POLR1F             | 8.61E-27 | 1.33991589 | 0.352 | 0.093 | 3.05E-22 | mDC_UCBMC |
| KMT2E              | 8.63E-27 | 0.63953071 | 0.839 | 0.423 | 3.06E-22 | mDC_UCBMC |
| INPP5A             | 9.05E-27 | 0.4630368  | 0.504 | 0.174 | 3.21E-22 | mDC_UCBMC |
| PEX14              | 1.01E-26 | 1.45832411 | 0.339 | 0.09  | 3.59E-22 | mDC_UCBMC |
| IGF2BP2            | 1.03E-26 | 1.07881318 | 0.377 | 0.108 | 3.65E-22 | mDC_UCBMC |
| MRTFB              | 1.08E-26 | 1.7914683  | 0.275 | 0.06  | 3.81E-22 | mDC_UCBMC |
| TAF2               | 1.19E-26 | 1.53356284 | 0.356 | 0.098 | 4.21E-22 | mDC_UCBMC |
| ENSMMUG00000053384 | 1.22E-26 | 1.71618933 | 0.275 | 0.061 | 4.31E-22 | mDC_UCBMC |
| YTHDC1             | 1.24E-26 | 0.99030183 | 0.653 | 0.283 | 4.39E-22 | mDC_UCBMC |
| TGS1               | 1.25E-26 | 1.30951273 | 0.487 | 0.171 | 4.44E-22 | mDC_UCBMC |
| GTPBP10            | 1.30E-26 | 1.21105108 | 0.339 | 0.087 | 4.61E-22 | mDC_UCBMC |
| CEP170             | 1.32E-26 | 0.74236577 | 0.801 | 0.378 | 4.69E-22 | mDC_UCBMC |
| ATG16L1            | 1.41E-26 | 1.88080402 | 0.28  | 0.062 | 5.01E-22 | mDC_UCBMC |
| PREX1              | 1.50E-26 | 0.49843908 | 0.847 | 0.441 | 5.32E-22 | mDC_UCBMC |
| KIF13A             | 1.61E-26 | 1.05849936 | 0.411 | 0.128 | 5.70E-22 | mDC_UCBMC |
| CAMK1D             | 1.70E-26 | 0.47748164 | 0.839 | 0.418 | 6.03E-22 | mDC_UCBMC |
| CYLD               | 1.81E-26 | 0.93525003 | 0.708 | 0.321 | 6.42E-22 | mDC_UCBMC |
| YAF2               | 1.88E-26 | 0.89039321 | 0.606 | 0.24  | 6.66E-22 | mDC_UCBMC |

|                   |          |            |       |       |          |           |
|-------------------|----------|------------|-------|-------|----------|-----------|
| MKLN1             | 1.90E-26 | 0.90614487 | 0.623 | 0.262 | 6.74E-22 | mDC_UCBMC |
| MXI1              | 1.98E-26 | 1.96963389 | 0.267 | 0.058 | 7.03E-22 | mDC_UCBMC |
| EIF4EBP3          | 2.03E-26 | 0.84267927 | 0.682 | 0.301 | 7.18E-22 | mDC_UCBMC |
| ZNF438            | 2.11E-26 | 1.45721611 | 0.373 | 0.106 | 7.49E-22 | mDC_UCBMC |
| TNIK              | 2.19E-26 | 2.20272806 | 0.318 | 0.085 | 7.76E-22 | mDC_UCBMC |
| PPHLN1            | 2.26E-26 | 0.88357987 | 0.737 | 0.351 | 8.01E-22 | mDC_UCBMC |
| ENSMUG00000063877 | 2.27E-26 | 1.49709349 | 0.326 | 0.084 | 8.06E-22 | mDC_UCBMC |
| MOB3B             | 2.42E-26 | 1.14037134 | 0.415 | 0.126 | 8.57E-22 | mDC_UCBMC |
| SERTAD2           | 2.79E-26 | 0.8316026  | 0.669 | 0.279 | 9.89E-22 | mDC_UCBMC |
| MAPKAP1           | 2.80E-26 | 0.86929418 | 0.508 | 0.178 | 9.93E-22 | mDC_UCBMC |
| LYN               | 2.96E-26 | 0.54695641 | 0.949 | 0.615 | 1.05E-21 | mDC_UCBMC |
| TAPT1             | 3.21E-26 | 1.31545224 | 0.347 | 0.096 | 1.14E-21 | mDC_UCBMC |
| ZZZ3              | 3.32E-26 | 1.27684594 | 0.479 | 0.17  | 1.18E-21 | mDC_UCBMC |
| FAM168A           | 3.38E-26 | 1.630086   | 0.356 | 0.102 | 1.20E-21 | mDC_UCBMC |
| SELL              | 3.54E-26 | 0.84693973 | 0.699 | 0.299 | 1.25E-21 | mDC_UCBMC |
| AMFR              | 3.73E-26 | 1.04774119 | 0.411 | 0.124 | 1.32E-21 | mDC_UCBMC |
| PMAIP1            | 3.78E-26 | 0.66348175 | 0.75  | 0.323 | 1.34E-21 | mDC_UCBMC |
| RFC1              | 4.23E-26 | 1.15020002 | 0.538 | 0.201 | 1.50E-21 | mDC_UCBMC |
| CCDC91            | 4.30E-26 | 1.16137884 | 0.551 | 0.22  | 1.52E-21 | mDC_UCBMC |
| EFR3A             | 4.43E-26 | 1.05651345 | 0.475 | 0.167 | 1.57E-21 | mDC_UCBMC |
| SMG7              | 4.65E-26 | 0.86975359 | 0.564 | 0.217 | 1.65E-21 | mDC_UCBMC |
| TTC14             | 4.82E-26 | 1.31276075 | 0.369 | 0.106 | 1.71E-21 | mDC_UCBMC |
| SP100             | 5.01E-26 | 0.99347617 | 0.792 | 0.42  | 1.78E-21 | mDC_UCBMC |
| EP400             | 5.34E-26 | 1.26408187 | 0.369 | 0.107 | 1.89E-21 | mDC_UCBMC |
| YWHAZ             | 5.52E-26 | 0.66697691 | 0.97  | 0.783 | 1.96E-21 | mDC_UCBMC |
| FAM107B           | 5.93E-26 | 0.71684472 | 0.78  | 0.369 | 2.10E-21 | mDC_UCBMC |
| SESN3             | 6.17E-26 | 1.63056029 | 0.386 | 0.12  | 2.19E-21 | mDC_UCBMC |
| SFMBT1            | 7.37E-26 | 1.59451214 | 0.309 | 0.079 | 2.61E-21 | mDC_UCBMC |
| CEP95             | 7.66E-26 | 1.39633732 | 0.335 | 0.09  | 2.72E-21 | mDC_UCBMC |
| CENPC             | 8.40E-26 | 0.97892744 | 0.436 | 0.141 | 2.98E-21 | mDC_UCBMC |
| KAT6A             | 8.49E-26 | 0.81354329 | 0.564 | 0.222 | 3.01E-21 | mDC_UCBMC |
| ENSMUG00000062103 | 8.62E-26 | 0.80276382 | 0.398 | 0.118 | 3.05E-21 | mDC_UCBMC |
| MDM4              | 8.82E-26 | 1.02454452 | 0.517 | 0.191 | 3.12E-21 | mDC_UCBMC |

|                   |          |            |       |       |          |           |
|-------------------|----------|------------|-------|-------|----------|-----------|
| RAP1B             | 1.00E-25 | 0.79480489 | 0.936 | 0.601 | 3.54E-21 | mDC_UCBMC |
| SDHAF4            | 1.04E-25 | 0.87845081 | 0.636 | 0.269 | 3.68E-21 | mDC_UCBMC |
| HECTD4            | 1.08E-25 | 0.99958934 | 0.424 | 0.136 | 3.84E-21 | mDC_UCBMC |
| LPIN2             | 1.10E-25 | 0.5843156  | 0.631 | 0.259 | 3.90E-21 | mDC_UCBMC |
| ATXN10            | 1.14E-25 | 0.98779853 | 0.678 | 0.312 | 4.04E-21 | mDC_UCBMC |
| MED13             | 1.16E-25 | 0.49217304 | 0.61  | 0.236 | 4.09E-21 | mDC_UCBMC |
| SMARCA4           | 1.22E-25 | 1.05917315 | 0.508 | 0.19  | 4.33E-21 | mDC_UCBMC |
| MARCHF3           | 1.34E-25 | 1.52192159 | 0.322 | 0.084 | 4.75E-21 | mDC_UCBMC |
| RNF216            | 1.35E-25 | 0.77263332 | 0.627 | 0.268 | 4.77E-21 | mDC_UCBMC |
| ARHGAP15          | 1.43E-25 | 0.75609756 | 0.898 | 0.556 | 5.07E-21 | mDC_UCBMC |
| IGF2BP3           | 1.44E-25 | 0.90187438 | 0.525 | 0.195 | 5.12E-21 | mDC_UCBMC |
| JMY               | 1.50E-25 | 1.56658673 | 0.39  | 0.124 | 5.33E-21 | mDC_UCBMC |
| FNDC3A            | 1.52E-25 | 0.84250985 | 0.708 | 0.333 | 5.40E-21 | mDC_UCBMC |
| AP1G1             | 1.63E-25 | 0.90441899 | 0.492 | 0.178 | 5.78E-21 | mDC_UCBMC |
| PDK1              | 1.64E-25 | 2.12038845 | 0.292 | 0.072 | 5.81E-21 | mDC_UCBMC |
| ARHGAP12          | 1.66E-25 | 1.96467634 | 0.28  | 0.065 | 5.88E-21 | mDC_UCBMC |
| C2CD5             | 1.66E-25 | 1.24800051 | 0.356 | 0.101 | 5.90E-21 | mDC_UCBMC |
| WDR70             | 1.74E-25 | 0.9969906  | 0.644 | 0.292 | 6.17E-21 | mDC_UCBMC |
| XYLT1             | 1.77E-25 | 0.11267634 | 0.835 | 0.421 | 6.28E-21 | mDC_UCBMC |
| SBDS              | 1.78E-25 | 1.20744648 | 0.424 | 0.138 | 6.31E-21 | mDC_UCBMC |
| BPTF              | 1.82E-25 | 0.88589553 | 0.669 | 0.295 | 6.47E-21 | mDC_UCBMC |
| RRAS2             | 1.83E-25 | 1.45787739 | 0.284 | 0.067 | 6.47E-21 | mDC_UCBMC |
| SAP130            | 1.87E-25 | 1.31483774 | 0.271 | 0.06  | 6.62E-21 | mDC_UCBMC |
| KDM5A             | 1.94E-25 | 1.06735954 | 0.521 | 0.196 | 6.87E-21 | mDC_UCBMC |
| JAZF1             | 1.95E-25 | 0.7428648  | 0.525 | 0.19  | 6.90E-21 | mDC_UCBMC |
| ENSMUG00000020316 | 1.96E-25 | 0.88503494 | 0.538 | 0.195 | 6.94E-21 | mDC_UCBMC |
| SCAF4             | 1.97E-25 | 0.99383717 | 0.487 | 0.174 | 6.97E-21 | mDC_UCBMC |
| RBM22             | 2.02E-25 | 1.16385871 | 0.483 | 0.175 | 7.15E-21 | mDC_UCBMC |
| CUL2              | 2.05E-25 | 1.26718873 | 0.428 | 0.144 | 7.27E-21 | mDC_UCBMC |
| FBXL5             | 2.06E-25 | 1.19870513 | 0.415 | 0.132 | 7.30E-21 | mDC_UCBMC |
| ZNF451            | 2.06E-25 | 0.84754759 | 0.597 | 0.236 | 7.31E-21 | mDC_UCBMC |
| MIEF1             | 2.14E-25 | 1.29579806 | 0.403 | 0.126 | 7.57E-21 | mDC_UCBMC |
| GATAD2A           | 2.41E-25 | 0.62892953 | 0.555 | 0.214 | 8.52E-21 | mDC_UCBMC |



|          |          |            |       |       |          |           |
|----------|----------|------------|-------|-------|----------|-----------|
| DDX10    | 2.47E-25 | 1.25632087 | 0.441 | 0.149 | 8.74E-21 | mDC_UCBMC |
| ZMIZ1    | 2.49E-25 | 0.90518052 | 0.424 | 0.138 | 8.83E-21 | mDC_UCBMC |
| PHIP     | 2.52E-25 | 0.89216851 | 0.703 | 0.329 | 8.92E-21 | mDC_UCBMC |
| GABPB1   | 2.57E-25 | 0.84312225 | 0.555 | 0.208 | 9.10E-21 | mDC_UCBMC |
| USP4     | 2.65E-25 | 1.07285425 | 0.53  | 0.199 | 9.38E-21 | mDC_UCBMC |
| LCOR     | 2.97E-25 | 0.39180098 | 0.733 | 0.332 | 1.05E-20 | mDC_UCBMC |
| AFTPH    | 3.88E-25 | 0.70333047 | 0.737 | 0.337 | 1.37E-20 | mDC_UCBMC |
| MAPK1    | 4.38E-25 | 1.04587561 | 0.542 | 0.222 | 1.55E-20 | mDC_UCBMC |
| RAB31    | 4.43E-25 | 0.48715247 | 0.894 | 0.505 | 1.57E-20 | mDC_UCBMC |
| MAP3K1   | 4.52E-25 | 1.05612121 | 0.508 | 0.19  | 1.60E-20 | mDC_UCBMC |
| DOCK2    | 4.52E-25 | 0.61123057 | 0.894 | 0.514 | 1.60E-20 | mDC_UCBMC |
| TCP11L2  | 4.54E-25 | 1.19172878 | 0.356 | 0.1   | 1.61E-20 | mDC_UCBMC |
| SLC30A9  | 4.98E-25 | 0.85520519 | 0.5   | 0.18  | 1.76E-20 | mDC_UCBMC |
| MAP3K14  | 5.01E-25 | 1.32001065 | 0.326 | 0.088 | 1.77E-20 | mDC_UCBMC |
| CTCF     | 5.08E-25 | 1.47200059 | 0.432 | 0.15  | 1.80E-20 | mDC_UCBMC |
| TRPM7    | 5.17E-25 | 0.80713895 | 0.754 | 0.365 | 1.83E-20 | mDC_UCBMC |
| FBXO28   | 5.27E-25 | 1.27392091 | 0.297 | 0.072 | 1.87E-20 | mDC_UCBMC |
| LRPPRC   | 5.73E-25 | 0.77883526 | 0.614 | 0.247 | 2.03E-20 | mDC_UCBMC |
| ENTPD4   | 5.93E-25 | 1.14072511 | 0.449 | 0.156 | 2.10E-20 | mDC_UCBMC |
| UBQLN1   | 6.25E-25 | 1.26321708 | 0.492 | 0.181 | 2.21E-20 | mDC_UCBMC |
| TUBB2B   | 6.38E-25 | 0.8006119  | 0.678 | 0.283 | 2.26E-20 | mDC_UCBMC |
| PLEKHM2  | 6.64E-25 | 1.31684855 | 0.356 | 0.103 | 2.35E-20 | mDC_UCBMC |
| CMIP     | 7.14E-25 | 0.14435248 | 0.708 | 0.31  | 2.53E-20 | mDC_UCBMC |
| EWSR1    | 7.35E-25 | 0.92773501 | 0.682 | 0.309 | 2.61E-20 | mDC_UCBMC |
| PPP1R2   | 7.84E-25 | 1.12903306 | 0.559 | 0.219 | 2.78E-20 | mDC_UCBMC |
| SCAF11   | 8.10E-25 | 0.86980105 | 0.822 | 0.432 | 2.87E-20 | mDC_UCBMC |
| BSDC1    | 8.17E-25 | 1.35667296 | 0.407 | 0.132 | 2.89E-20 | mDC_UCBMC |
| RALGAPA1 | 8.64E-25 | 1.01655485 | 0.411 | 0.131 | 3.06E-20 | mDC_UCBMC |
| ZDHHC17  | 9.14E-25 | 1.17263154 | 0.352 | 0.1   | 3.24E-20 | mDC_UCBMC |
| ITPRIP   | 9.29E-25 | 1.79840573 | 0.271 | 0.061 | 3.29E-20 | mDC_UCBMC |
| TOGARAM1 | 9.83E-25 | 1.76611098 | 0.309 | 0.08  | 3.48E-20 | mDC_UCBMC |
| PIK3CB   | 1.08E-24 | 0.60185797 | 0.602 | 0.245 | 3.83E-20 | mDC_UCBMC |
| VPS36    | 1.14E-24 | 0.9153802  | 0.657 | 0.281 | 4.03E-20 | mDC_UCBMC |

|                   |          |            |       |       |          |           |
|-------------------|----------|------------|-------|-------|----------|-----------|
| RPRD2             | 1.15E-24 | 1.12983365 | 0.492 | 0.179 | 4.08E-20 | mDC_UCBMC |
| PPTC7             | 1.20E-24 | 1.08989276 | 0.475 | 0.171 | 4.25E-20 | mDC_UCBMC |
| SLC35D1           | 1.30E-24 | 1.57014901 | 0.322 | 0.089 | 4.62E-20 | mDC_UCBMC |
| BNIP3L            | 1.31E-24 | 0.98274834 | 0.72  | 0.341 | 4.64E-20 | mDC_UCBMC |
| PHC3              | 1.31E-24 | 1.35980743 | 0.343 | 0.099 | 4.64E-20 | mDC_UCBMC |
| ZMYM2             | 1.36E-24 | 0.68638977 | 0.623 | 0.264 | 4.82E-20 | mDC_UCBMC |
| MTPN              | 1.49E-24 | 0.88970835 | 0.831 | 0.448 | 5.29E-20 | mDC_UCBMC |
| PHF6              | 1.58E-24 | 1.11168651 | 0.589 | 0.244 | 5.59E-20 | mDC_UCBMC |
| ITPR1             | 1.61E-24 | 1.33213355 | 0.39  | 0.122 | 5.71E-20 | mDC_UCBMC |
| PTGER4            | 1.65E-24 | 0.83631054 | 0.627 | 0.256 | 5.83E-20 | mDC_UCBMC |
| ZCCHC2            | 1.71E-24 | 1.27363904 | 0.356 | 0.104 | 6.05E-20 | mDC_UCBMC |
| RAB6A             | 1.78E-24 | 0.93515031 | 0.534 | 0.203 | 6.31E-20 | mDC_UCBMC |
| ENSMUG00000056016 | 1.90E-24 | 1.10196563 | 0.373 | 0.112 | 6.74E-20 | mDC_UCBMC |
| SPEN              | 1.97E-24 | 0.66825091 | 0.691 | 0.298 | 6.99E-20 | mDC_UCBMC |
| SRSF4             | 2.01E-24 | 0.89636936 | 0.631 | 0.287 | 7.13E-20 | mDC_UCBMC |
| PIAS1             | 2.03E-24 | 0.70073005 | 0.708 | 0.323 | 7.19E-20 | mDC_UCBMC |
| ITPR2             | 2.08E-24 | 0.6577642  | 0.699 | 0.322 | 7.37E-20 | mDC_UCBMC |
| NAE1              | 2.10E-24 | 1.24350601 | 0.441 | 0.149 | 7.43E-20 | mDC_UCBMC |
| ERC1              | 2.54E-24 | 0.58978223 | 0.686 | 0.302 | 8.99E-20 | mDC_UCBMC |
| HIPK3             | 2.55E-24 | 0.82684553 | 0.674 | 0.317 | 9.03E-20 | mDC_UCBMC |
| APBB1IP           | 2.68E-24 | 0.71269716 | 0.826 | 0.409 | 9.49E-20 | mDC_UCBMC |
| RIOK3             | 2.73E-24 | 0.95268143 | 0.593 | 0.246 | 9.68E-20 | mDC_UCBMC |
| FRS2              | 2.74E-24 | 1.41735323 | 0.347 | 0.102 | 9.69E-20 | mDC_UCBMC |
| TMED10            | 2.90E-24 | 0.81292568 | 0.746 | 0.345 | 1.03E-19 | mDC_UCBMC |
| SETD7             | 2.94E-24 | 1.284152   | 0.432 | 0.15  | 1.04E-19 | mDC_UCBMC |
| FAM168B           | 3.02E-24 | 1.00561747 | 0.436 | 0.15  | 1.07E-19 | mDC_UCBMC |
| FAF2              | 3.07E-24 | 1.18751834 | 0.356 | 0.106 | 1.09E-19 | mDC_UCBMC |
| SELENOI           | 3.34E-24 | 0.94229342 | 0.39  | 0.123 | 1.18E-19 | mDC_UCBMC |
| ARHGEF7           | 3.54E-24 | 0.96033579 | 0.492 | 0.185 | 1.25E-19 | mDC_UCBMC |
| UBAC2             | 3.55E-24 | 0.95434379 | 0.767 | 0.402 | 1.26E-19 | mDC_UCBMC |
| CLINT1            | 3.78E-24 | 0.81550249 | 0.737 | 0.352 | 1.34E-19 | mDC_UCBMC |
| RBMS1             | 3.82E-24 | 1.07755851 | 0.521 | 0.201 | 1.35E-19 | mDC_UCBMC |
| EIF3A             | 3.85E-24 | 0.74630754 | 0.809 | 0.413 | 1.36E-19 | mDC_UCBMC |

|                   |          |            |       |       |          |           |
|-------------------|----------|------------|-------|-------|----------|-----------|
| DENND1A           | 3.96E-24 | 0.54118372 | 0.737 | 0.33  | 1.40E-19 | mDC_UCBMC |
| RUBCN             | 4.02E-24 | 0.85230925 | 0.466 | 0.167 | 1.42E-19 | mDC_UCBMC |
| NIBAN1            | 4.33E-24 | 0.34184239 | 0.754 | 0.357 | 1.53E-19 | mDC_UCBMC |
| NDUFAF7           | 4.46E-24 | 1.71743685 | 0.339 | 0.099 | 1.58E-19 | mDC_UCBMC |
| PSMD12            | 4.76E-24 | 0.91440865 | 0.682 | 0.319 | 1.69E-19 | mDC_UCBMC |
| ENSMUG00000006803 | 4.79E-24 | 0.69863107 | 0.665 | 0.292 | 1.70E-19 | mDC_UCBMC |
| TCF12             | 4.96E-24 | 0.85234834 | 0.733 | 0.371 | 1.76E-19 | mDC_UCBMC |
| PCGF3             | 5.02E-24 | 1.48739682 | 0.309 | 0.083 | 1.78E-19 | mDC_UCBMC |
| RP2               | 5.03E-24 | 0.9070897  | 0.538 | 0.205 | 1.78E-19 | mDC_UCBMC |
| TTC19             | 5.04E-24 | 1.15900802 | 0.475 | 0.173 | 1.79E-19 | mDC_UCBMC |
| DENND5A           | 5.50E-24 | 0.28625104 | 0.682 | 0.306 | 1.95E-19 | mDC_UCBMC |
| TBC1D15           | 5.54E-24 | 0.98859842 | 0.441 | 0.153 | 1.96E-19 | mDC_UCBMC |
| EMILIN2           | 5.59E-24 | 0.57395658 | 0.5   | 0.178 | 1.98E-19 | mDC_UCBMC |
| CLIP1             | 5.76E-24 | 1.0385037  | 0.449 | 0.159 | 2.04E-19 | mDC_UCBMC |
| NFYC              | 6.22E-24 | 0.90017578 | 0.487 | 0.176 | 2.20E-19 | mDC_UCBMC |
| YBX3              | 6.44E-24 | 1.09625318 | 0.415 | 0.136 | 2.28E-19 | mDC_UCBMC |
| HERPUD1           | 7.02E-24 | 0.83427294 | 0.763 | 0.371 | 2.49E-19 | mDC_UCBMC |
| PICALM            | 7.22E-24 | 0.17381011 | 0.928 | 0.576 | 2.56E-19 | mDC_UCBMC |
| WAC               | 7.46E-24 | 0.86943315 | 0.733 | 0.385 | 2.64E-19 | mDC_UCBMC |
| TNKS2             | 7.54E-24 | 1.15359563 | 0.419 | 0.14  | 2.67E-19 | mDC_UCBMC |
| PDLIM1            | 7.72E-24 | 1.59511408 | 0.254 | 0.055 | 2.73E-19 | mDC_UCBMC |
| WDR33             | 8.00E-24 | 0.82231851 | 0.61  | 0.263 | 2.83E-19 | mDC_UCBMC |
| ATP5PB            | 8.02E-24 | 0.86201815 | 0.805 | 0.402 | 2.84E-19 | mDC_UCBMC |
| RMDN3             | 8.10E-24 | 1.41145686 | 0.292 | 0.074 | 2.87E-19 | mDC_UCBMC |
| DOCK5             | 8.24E-24 | 0.80839779 | 0.682 | 0.306 | 2.92E-19 | mDC_UCBMC |
| ILF3              | 8.85E-24 | 0.73139747 | 0.627 | 0.269 | 3.14E-19 | mDC_UCBMC |
| STT3B             | 8.91E-24 | 0.87179964 | 0.597 | 0.26  | 3.16E-19 | mDC_UCBMC |
| XRN1              | 9.00E-24 | 0.77064781 | 0.568 | 0.229 | 3.19E-19 | mDC_UCBMC |
| KCNAB2            | 9.26E-24 | 0.82506393 | 0.555 | 0.215 | 3.28E-19 | mDC_UCBMC |
| IPO5              | 9.29E-24 | 1.11958675 | 0.475 | 0.172 | 3.29E-19 | mDC_UCBMC |
| NIPSNAP2          | 9.49E-24 | 1.04946709 | 0.479 | 0.176 | 3.36E-19 | mDC_UCBMC |
| BRD1              | 9.53E-24 | 1.19070549 | 0.284 | 0.071 | 3.38E-19 | mDC_UCBMC |
| CHN2              | 9.92E-24 | 0.79977441 | 0.487 | 0.183 | 3.52E-19 | mDC_UCBMC |

|          |          |            |       |       |          |           |
|----------|----------|------------|-------|-------|----------|-----------|
| NEK7     | 9.99E-24 | 1.08314889 | 0.487 | 0.182 | 3.54E-19 | mDC_UCBMC |
| GNAQ     | 1.00E-23 | 0.6970534  | 0.78  | 0.389 | 3.54E-19 | mDC_UCBMC |
| DDOST    | 1.01E-23 | 0.82106544 | 0.801 | 0.41  | 3.59E-19 | mDC_UCBMC |
| ADGRG5   | 1.02E-23 | 1.16955137 | 0.453 | 0.161 | 3.61E-19 | mDC_UCBMC |
| TAF5L    | 1.04E-23 | 1.5146274  | 0.335 | 0.096 | 3.68E-19 | mDC_UCBMC |
| GPR107   | 1.09E-23 | 0.83441867 | 0.428 | 0.145 | 3.85E-19 | mDC_UCBMC |
| RBM6     | 1.13E-23 | 0.8236364  | 0.492 | 0.182 | 4.01E-19 | mDC_UCBMC |
| RALGAPA2 | 1.15E-23 | 1.13973976 | 0.407 | 0.136 | 4.08E-19 | mDC_UCBMC |
| NAA16    | 1.17E-23 | 1.49164209 | 0.309 | 0.084 | 4.15E-19 | mDC_UCBMC |
| LMBRD1   | 1.24E-23 | 1.02362129 | 0.602 | 0.265 | 4.38E-19 | mDC_UCBMC |
| MAP4K5   | 1.24E-23 | 1.31866379 | 0.394 | 0.128 | 4.40E-19 | mDC_UCBMC |
| DNAJC7   | 1.25E-23 | 0.92802446 | 0.568 | 0.236 | 4.44E-19 | mDC_UCBMC |
| INPP5K   | 1.26E-23 | 1.21020328 | 0.356 | 0.108 | 4.46E-19 | mDC_UCBMC |
| SLC9A8   | 1.31E-23 | 0.87360256 | 0.335 | 0.094 | 4.65E-19 | mDC_UCBMC |
| NCKAP5L  | 1.40E-23 | 1.04784783 | 0.305 | 0.079 | 4.97E-19 | mDC_UCBMC |
| SATB1    | 1.47E-23 | 0.70833779 | 0.678 | 0.319 | 5.21E-19 | mDC_UCBMC |
| DYRK2    | 1.48E-23 | 1.2983691  | 0.411 | 0.139 | 5.24E-19 | mDC_UCBMC |
| THADA    | 1.51E-23 | 0.63278959 | 0.623 | 0.258 | 5.34E-19 | mDC_UCBMC |
| LRCH1    | 1.52E-23 | 0.88371057 | 0.559 | 0.226 | 5.40E-19 | mDC_UCBMC |
| HIRA     | 1.64E-23 | 0.95003103 | 0.436 | 0.152 | 5.82E-19 | mDC_UCBMC |
| MED21    | 1.67E-23 | 1.31073248 | 0.39  | 0.122 | 5.91E-19 | mDC_UCBMC |
| ATP2B1   | 1.74E-23 | 0.59349427 | 0.64  | 0.276 | 6.16E-19 | mDC_UCBMC |
| NUBPL    | 1.75E-23 | 1.72799016 | 0.267 | 0.063 | 6.18E-19 | mDC_UCBMC |
| DNM1L    | 1.80E-23 | 0.92440981 | 0.53  | 0.212 | 6.37E-19 | mDC_UCBMC |
| CDK6     | 1.97E-23 | 1.04330525 | 0.521 | 0.209 | 6.96E-19 | mDC_UCBMC |
| PCM1     | 1.97E-23 | 0.77070376 | 0.61  | 0.26  | 6.97E-19 | mDC_UCBMC |
| NCKAP5   | 2.01E-23 | 0.42184721 | 0.894 | 0.477 | 7.12E-19 | mDC_UCBMC |
| UBE3A    | 2.01E-23 | 0.72245676 | 0.631 | 0.273 | 7.13E-19 | mDC_UCBMC |
| NIN      | 2.04E-23 | 0.85126059 | 0.559 | 0.233 | 7.23E-19 | mDC_UCBMC |
| TRAF3    | 2.04E-23 | 0.73774203 | 0.555 | 0.222 | 7.23E-19 | mDC_UCBMC |
| TAB2     | 2.04E-23 | 0.6134024  | 0.712 | 0.321 | 7.24E-19 | mDC_UCBMC |
| UXS1     | 2.30E-23 | 0.83535978 | 0.525 | 0.204 | 8.15E-19 | mDC_UCBMC |
| LRRRC8C  | 2.37E-23 | 1.32991829 | 0.36  | 0.112 | 8.41E-19 | mDC_UCBMC |

|                    |          |            |       |       |          |           |
|--------------------|----------|------------|-------|-------|----------|-----------|
| JARID2             | 2.65E-23 | 0.69387839 | 0.818 | 0.476 | 9.40E-19 | mDC_UCBMC |
| MTSS1              | 2.66E-23 | 0.3268744  | 0.784 | 0.398 | 9.43E-19 | mDC_UCBMC |
| PI4K2A             | 2.68E-23 | 1.11331843 | 0.364 | 0.111 | 9.51E-19 | mDC_UCBMC |
| ZRANB1             | 2.69E-23 | 0.87906734 | 0.331 | 0.094 | 9.52E-19 | mDC_UCBMC |
| OSER1              | 2.71E-23 | 1.27830793 | 0.347 | 0.102 | 9.61E-19 | mDC_UCBMC |
| CDK14              | 2.79E-23 | 0.78293806 | 0.466 | 0.165 | 9.88E-19 | mDC_UCBMC |
| SMAD2              | 2.82E-23 | 1.13653632 | 0.424 | 0.145 | 1.00E-18 | mDC_UCBMC |
| TENT2              | 3.06E-23 | 0.78763312 | 0.534 | 0.208 | 1.08E-18 | mDC_UCBMC |
| ENSMMUG00000030374 | 3.09E-23 | 1.26909937 | 0.398 | 0.132 | 1.10E-18 | mDC_UCBMC |
| EEF2               | 3.25E-23 | 0.67763642 | 0.953 | 0.633 | 1.15E-18 | mDC_UCBMC |
| SPIDR              | 3.59E-23 | 0.80721259 | 0.619 | 0.267 | 1.27E-18 | mDC_UCBMC |
| AGPAT3             | 3.65E-23 | 1.12966166 | 0.415 | 0.142 | 1.29E-18 | mDC_UCBMC |
| RHOH               | 4.31E-23 | 0.59572111 | 0.746 | 0.383 | 1.53E-18 | mDC_UCBMC |
| ENSMMUG00000054965 | 4.42E-23 | 1.31952935 | 0.309 | 0.084 | 1.57E-18 | mDC_UCBMC |
| DTNBP1             | 4.44E-23 | 0.79539978 | 0.589 | 0.249 | 1.57E-18 | mDC_UCBMC |
| LRRC40             | 4.44E-23 | 1.30791975 | 0.309 | 0.081 | 1.57E-18 | mDC_UCBMC |
| TBC1D8             | 5.20E-23 | 0.15457769 | 0.911 | 0.554 | 1.84E-18 | mDC_UCBMC |
| ENSMMUG00000058818 | 5.63E-23 | 1.12784799 | 0.356 | 0.109 | 1.99E-18 | mDC_UCBMC |
| LBR                | 5.75E-23 | 0.8815856  | 0.576 | 0.236 | 2.04E-18 | mDC_UCBMC |
| PTPRJ              | 5.79E-23 | 0.26432928 | 0.72  | 0.313 | 2.05E-18 | mDC_UCBMC |
| TRAK1              | 5.85E-23 | 0.61911284 | 0.547 | 0.21  | 2.07E-18 | mDC_UCBMC |
| USP24              | 5.89E-23 | 1.05359331 | 0.398 | 0.132 | 2.09E-18 | mDC_UCBMC |
| BIN2               | 5.91E-23 | 0.88087509 | 0.691 | 0.326 | 2.09E-18 | mDC_UCBMC |
| CCDC97             | 5.97E-23 | 1.38402128 | 0.347 | 0.104 | 2.11E-18 | mDC_UCBMC |
| SUPV3L1            | 6.18E-23 | 1.30302952 | 0.314 | 0.088 | 2.19E-18 | mDC_UCBMC |
| EXOC6              | 6.18E-23 | 0.83473701 | 0.614 | 0.275 | 2.19E-18 | mDC_UCBMC |
| IQGAP1             | 6.20E-23 | 0.70021082 | 0.932 | 0.574 | 2.20E-18 | mDC_UCBMC |
| KPNA6              | 6.31E-23 | 0.80616983 | 0.475 | 0.176 | 2.23E-18 | mDC_UCBMC |
| ZNF592             | 6.31E-23 | 1.15931164 | 0.326 | 0.094 | 2.24E-18 | mDC_UCBMC |
| MSN                | 6.46E-23 | 0.6353852  | 0.907 | 0.548 | 2.29E-18 | mDC_UCBMC |
| CRTC3              | 6.60E-23 | 1.14280519 | 0.415 | 0.146 | 2.34E-18 | mDC_UCBMC |
| CSDE1              | 6.75E-23 | 0.73550221 | 0.818 | 0.449 | 2.39E-18 | mDC_UCBMC |
| AKT3               | 7.04E-23 | 0.82807871 | 0.64  | 0.299 | 2.50E-18 | mDC_UCBMC |

|                    |          |            |       |       |          |           |
|--------------------|----------|------------|-------|-------|----------|-----------|
| PRPF40A            | 7.12E-23 | 0.80543152 | 0.771 | 0.407 | 2.52E-18 | mDC_UCBMC |
| IARS1              | 7.16E-23 | 1.18473108 | 0.369 | 0.116 | 2.54E-18 | mDC_UCBMC |
| FTO                | 7.45E-23 | 1.01584174 | 0.458 | 0.168 | 2.64E-18 | mDC_UCBMC |
| GRB2               | 7.49E-23 | 0.66837364 | 0.881 | 0.496 | 2.65E-18 | mDC_UCBMC |
| RAP1GDS1           | 7.70E-23 | 1.06787399 | 0.572 | 0.247 | 2.73E-18 | mDC_UCBMC |
| AHNAK              | 7.85E-23 | 0.6576152  | 0.915 | 0.54  | 2.78E-18 | mDC_UCBMC |
| SLC20A1            | 8.29E-23 | 0.8154227  | 0.508 | 0.199 | 2.94E-18 | mDC_UCBMC |
| DIP2B              | 8.57E-23 | 0.88229084 | 0.576 | 0.254 | 3.03E-18 | mDC_UCBMC |
| APP                | 8.70E-23 | 0.62585413 | 0.64  | 0.276 | 3.08E-18 | mDC_UCBMC |
| ENSMMUG00000056190 | 8.73E-23 | 1.17460964 | 0.352 | 0.107 | 3.09E-18 | mDC_UCBMC |
| ERP44              | 8.83E-23 | 0.65876659 | 0.801 | 0.389 | 3.13E-18 | mDC_UCBMC |
| SEMA4D             | 9.50E-23 | 1.50185223 | 0.305 | 0.084 | 3.37E-18 | mDC_UCBMC |
| GORASP2            | 9.74E-23 | 1.16898816 | 0.394 | 0.128 | 3.45E-18 | mDC_UCBMC |
| PLA2G6             | 9.79E-23 | 0.97997588 | 0.441 | 0.158 | 3.47E-18 | mDC_UCBMC |
| PIK3R1             | 9.98E-23 | 1.15744444 | 0.47  | 0.18  | 3.53E-18 | mDC_UCBMC |
| SLC17A5            | 1.03E-22 | 1.5582263  | 0.275 | 0.071 | 3.66E-18 | mDC_UCBMC |
| MFSD14B            | 1.04E-22 | 1.05981598 | 0.483 | 0.186 | 3.68E-18 | mDC_UCBMC |
| ENSMMUG00000001894 | 1.08E-22 | 0.85771322 | 0.542 | 0.217 | 3.84E-18 | mDC_UCBMC |
| EEPD1              | 1.16E-22 | 1.46984252 | 0.288 | 0.076 | 4.11E-18 | mDC_UCBMC |
| NUS1               | 1.19E-22 | 1.05423757 | 0.496 | 0.199 | 4.21E-18 | mDC_UCBMC |
| RHEB               | 1.21E-22 | 0.69665883 | 0.665 | 0.296 | 4.29E-18 | mDC_UCBMC |
| TASP1              | 1.22E-22 | 1.39140509 | 0.369 | 0.12  | 4.33E-18 | mDC_UCBMC |
| HERC3              | 1.25E-22 | 0.96835434 | 0.504 | 0.2   | 4.41E-18 | mDC_UCBMC |
| PRRC2C             | 1.25E-22 | 0.66240903 | 0.903 | 0.546 | 4.41E-18 | mDC_UCBMC |
| MAGI3              | 1.26E-22 | 1.0143173  | 0.436 | 0.154 | 4.48E-18 | mDC_UCBMC |
| PPP2R5C            | 1.30E-22 | 0.78792393 | 0.72  | 0.358 | 4.59E-18 | mDC_UCBMC |
| UBE2E3             | 1.30E-22 | 1.38069137 | 0.364 | 0.116 | 4.62E-18 | mDC_UCBMC |
| UBA6               | 1.34E-22 | 1.05488108 | 0.428 | 0.148 | 4.73E-18 | mDC_UCBMC |
| ATG7               | 1.36E-22 | 1.15362798 | 0.432 | 0.156 | 4.83E-18 | mDC_UCBMC |
| PPM1H              | 1.42E-22 | 1.13075546 | 0.403 | 0.137 | 5.03E-18 | mDC_UCBMC |
| BICDL1             | 1.50E-22 | 1.46267228 | 0.254 | 0.059 | 5.31E-18 | mDC_UCBMC |
| NOL10              | 1.51E-22 | 1.2828098  | 0.394 | 0.138 | 5.35E-18 | mDC_UCBMC |
| ITFG1              | 1.54E-22 | 1.17853478 | 0.475 | 0.186 | 5.47E-18 | mDC_UCBMC |

|                    |          |            |       |       |          |           |
|--------------------|----------|------------|-------|-------|----------|-----------|
| PPP3CA             | 1.57E-22 | 0.48286711 | 0.856 | 0.426 | 5.56E-18 | mDC_UCBMC |
| DNAJB12            | 1.60E-22 | 0.91357361 | 0.424 | 0.143 | 5.66E-18 | mDC_UCBMC |
| SESN1              | 1.69E-22 | 1.26477473 | 0.377 | 0.124 | 6.00E-18 | mDC_UCBMC |
| KBTBD2             | 1.82E-22 | 1.08225795 | 0.432 | 0.154 | 6.44E-18 | mDC_UCBMC |
| NCALD              | 1.84E-22 | 0.79382497 | 0.407 | 0.132 | 6.51E-18 | mDC_UCBMC |
| CAMKMT             | 2.00E-22 | 0.72170795 | 0.555 | 0.222 | 7.08E-18 | mDC_UCBMC |
| TSC22D2            | 2.05E-22 | 0.47387356 | 0.547 | 0.214 | 7.25E-18 | mDC_UCBMC |
| MGAT4A             | 2.07E-22 | 1.33560794 | 0.292 | 0.075 | 7.33E-18 | mDC_UCBMC |
| CCSER2             | 2.24E-22 | 0.88273539 | 0.436 | 0.154 | 7.95E-18 | mDC_UCBMC |
| CDC40              | 2.46E-22 | 0.94991935 | 0.513 | 0.2   | 8.71E-18 | mDC_UCBMC |
| ENSMMUG00000060545 | 2.56E-22 | 1.48758026 | 0.322 | 0.093 | 9.08E-18 | mDC_UCBMC |
| VPS8               | 2.60E-22 | 1.0461934  | 0.445 | 0.163 | 9.23E-18 | mDC_UCBMC |
| KLHL28             | 2.65E-22 | 1.20497883 | 0.322 | 0.093 | 9.38E-18 | mDC_UCBMC |
| TLK2               | 2.69E-22 | 0.93405719 | 0.504 | 0.2   | 9.53E-18 | mDC_UCBMC |
| AP2B1              | 2.75E-22 | 0.81204037 | 0.572 | 0.24  | 9.76E-18 | mDC_UCBMC |
| SECISBP2           | 2.95E-22 | 0.95945738 | 0.487 | 0.19  | 1.04E-17 | mDC_UCBMC |
| ZBTB11             | 3.09E-22 | 1.15115096 | 0.398 | 0.137 | 1.09E-17 | mDC_UCBMC |
| SMC4               | 3.30E-22 | 1.14179338 | 0.479 | 0.188 | 1.17E-17 | mDC_UCBMC |
| LMTK2              | 3.36E-22 | 1.10923054 | 0.415 | 0.146 | 1.19E-17 | mDC_UCBMC |
| REV3L              | 3.43E-22 | 0.86396063 | 0.5   | 0.198 | 1.22E-17 | mDC_UCBMC |
| ACIN1              | 3.54E-22 | 0.68745818 | 0.648 | 0.282 | 1.25E-17 | mDC_UCBMC |
| PDCD6IP            | 3.70E-22 | 0.88247828 | 0.581 | 0.25  | 1.31E-17 | mDC_UCBMC |
| SPTLC2             | 3.84E-22 | 1.23231304 | 0.432 | 0.159 | 1.36E-17 | mDC_UCBMC |
| LDLRAD4            | 3.87E-22 | 0.67007615 | 0.665 | 0.316 | 1.37E-17 | mDC_UCBMC |
| UVRAG              | 4.40E-22 | 0.53561984 | 0.873 | 0.448 | 1.56E-17 | mDC_UCBMC |
| CYFIP2             | 5.04E-22 | 0.87794489 | 0.453 | 0.162 | 1.79E-17 | mDC_UCBMC |
| SRGAP2             | 5.26E-22 | 0.81407163 | 0.547 | 0.222 | 1.86E-17 | mDC_UCBMC |
| APC                | 5.43E-22 | 1.1269729  | 0.407 | 0.14  | 1.92E-17 | mDC_UCBMC |
| ZFX                | 5.44E-22 | 1.07379683 | 0.453 | 0.17  | 1.93E-17 | mDC_UCBMC |
| RNF11              | 5.89E-22 | 1.24893903 | 0.403 | 0.138 | 2.09E-17 | mDC_UCBMC |
| FBXL17             | 5.91E-22 | 0.55866338 | 0.589 | 0.248 | 2.09E-17 | mDC_UCBMC |
| LRRFIP2            | 5.94E-22 | 1.01221866 | 0.466 | 0.18  | 2.10E-17 | mDC_UCBMC |
| MPHOSPH8           | 5.96E-22 | 0.87489483 | 0.585 | 0.248 | 2.11E-17 | mDC_UCBMC |

|                   |          |            |       |       |          |           |
|-------------------|----------|------------|-------|-------|----------|-----------|
| ZBTB21            | 6.17E-22 | 1.19593576 | 0.343 | 0.105 | 2.18E-17 | mDC_UCBMC |
| ICE1              | 6.47E-22 | 1.08588772 | 0.373 | 0.123 | 2.29E-17 | mDC_UCBMC |
| UHRF2             | 6.75E-22 | 0.84632005 | 0.508 | 0.2   | 2.39E-17 | mDC_UCBMC |
| NR1D2             | 6.76E-22 | 1.45387702 | 0.271 | 0.069 | 2.39E-17 | mDC_UCBMC |
| DENND4A           | 6.94E-22 | 0.18702763 | 1     | 0.737 | 2.46E-17 | mDC_UCBMC |
| EZH2              | 7.13E-22 | 0.96491282 | 0.403 | 0.139 | 2.53E-17 | mDC_UCBMC |
| UBP1              | 7.36E-22 | 1.23115513 | 0.398 | 0.142 | 2.61E-17 | mDC_UCBMC |
| TRERF1            | 7.62E-22 | 0.51277092 | 0.64  | 0.285 | 2.70E-17 | mDC_UCBMC |
| RPRD1B            | 7.96E-22 | 1.58286054 | 0.28  | 0.075 | 2.82E-17 | mDC_UCBMC |
| ATP2B4            | 8.71E-22 | 0.80986372 | 0.411 | 0.138 | 3.09E-17 | mDC_UCBMC |
| MIER1             | 9.05E-22 | 0.81409546 | 0.644 | 0.296 | 3.21E-17 | mDC_UCBMC |
| ENSMUG00000051505 | 9.09E-22 | 0.6901453  | 0.483 | 0.185 | 3.22E-17 | mDC_UCBMC |
| ENSMUG00000018687 | 9.34E-22 | 0.78339872 | 0.814 | 0.408 | 3.31E-17 | mDC_UCBMC |
| RBM23             | 9.55E-22 | 0.94260847 | 0.475 | 0.182 | 3.38E-17 | mDC_UCBMC |
| ERCC6             | 1.17E-21 | 0.52661571 | 0.496 | 0.189 | 4.16E-17 | mDC_UCBMC |
| PRKX              | 1.19E-21 | 0.67483374 | 0.597 | 0.259 | 4.21E-17 | mDC_UCBMC |
| ATP2A2            | 1.22E-21 | 0.70010799 | 0.555 | 0.231 | 4.31E-17 | mDC_UCBMC |
| LRCH3             | 1.28E-21 | 0.67285517 | 0.581 | 0.249 | 4.55E-17 | mDC_UCBMC |
| RC3H1             | 1.31E-21 | 0.88193913 | 0.449 | 0.171 | 4.64E-17 | mDC_UCBMC |
| IREB2             | 1.48E-21 | 0.82510694 | 0.568 | 0.238 | 5.23E-17 | mDC_UCBMC |
| CAST              | 1.51E-21 | 0.83201709 | 0.725 | 0.363 | 5.33E-17 | mDC_UCBMC |
| PAK1IP1           | 1.54E-21 | 0.87520711 | 0.508 | 0.198 | 5.44E-17 | mDC_UCBMC |
| BCAS3             | 1.55E-21 | 0.75672822 | 0.53  | 0.214 | 5.50E-17 | mDC_UCBMC |
| GLG1              | 1.69E-21 | 1.22138376 | 0.436 | 0.168 | 5.99E-17 | mDC_UCBMC |
| MORC3             | 1.70E-21 | 0.8497314  | 0.555 | 0.234 | 6.01E-17 | mDC_UCBMC |
| CUL1              | 1.84E-21 | 0.51810184 | 0.631 | 0.276 | 6.51E-17 | mDC_UCBMC |
| RMND5A            | 1.91E-21 | 0.70657032 | 0.386 | 0.13  | 6.76E-17 | mDC_UCBMC |
| CAMLG             | 1.97E-21 | 0.78204132 | 0.725 | 0.346 | 6.99E-17 | mDC_UCBMC |
| PTEN              | 1.98E-21 | 0.60617833 | 0.775 | 0.43  | 7.02E-17 | mDC_UCBMC |
| SEC24C            | 2.11E-21 | 0.91159189 | 0.318 | 0.094 | 7.47E-17 | mDC_UCBMC |
| SRPK2             | 2.15E-21 | 1.1990621  | 0.492 | 0.205 | 7.63E-17 | mDC_UCBMC |
| PRKAG2            | 2.22E-21 | 0.69060436 | 0.614 | 0.267 | 7.87E-17 | mDC_UCBMC |
| ARHGAP17          | 2.23E-21 | 0.54358128 | 0.771 | 0.351 | 7.92E-17 | mDC_UCBMC |



|                    |          |            |       |       |          |           |
|--------------------|----------|------------|-------|-------|----------|-----------|
| CUL4A              | 2.45E-21 | 1.14118721 | 0.419 | 0.151 | 8.68E-17 | mDC_UCBMC |
| KCNK13             | 2.45E-21 | 0.32523129 | 0.508 | 0.198 | 8.70E-17 | mDC_UCBMC |
| SEC22A             | 2.51E-21 | 1.25610714 | 0.297 | 0.084 | 8.89E-17 | mDC_UCBMC |
| ARNT               | 2.58E-21 | 1.16621362 | 0.36  | 0.116 | 9.14E-17 | mDC_UCBMC |
| AAGAB              | 2.58E-21 | 1.52530612 | 0.297 | 0.084 | 9.15E-17 | mDC_UCBMC |
| HERC2              | 2.59E-21 | 1.06117971 | 0.47  | 0.188 | 9.17E-17 | mDC_UCBMC |
| DDA1               | 2.64E-21 | 0.93383754 | 0.479 | 0.181 | 9.37E-17 | mDC_UCBMC |
| YARS1              | 2.77E-21 | 1.37206191 | 0.309 | 0.091 | 9.83E-17 | mDC_UCBMC |
| STXBP5             | 2.84E-21 | 0.92410998 | 0.39  | 0.13  | 1.01E-16 | mDC_UCBMC |
| LRMDA              | 2.96E-21 | 0.52515941 | 0.513 | 0.207 | 1.05E-16 | mDC_UCBMC |
| PLEKHM3            | 2.97E-21 | 1.38925268 | 0.292 | 0.082 | 1.05E-16 | mDC_UCBMC |
| SIN3A              | 2.97E-21 | 0.63397002 | 0.534 | 0.217 | 1.05E-16 | mDC_UCBMC |
| MBNL1              | 3.04E-21 | 0.60663676 | 0.983 | 0.77  | 1.08E-16 | mDC_UCBMC |
| TP53BP2            | 3.27E-21 | 0.83947721 | 0.508 | 0.205 | 1.16E-16 | mDC_UCBMC |
| UBASH3B            | 3.30E-21 | 0.40303349 | 0.53  | 0.218 | 1.17E-16 | mDC_UCBMC |
| HNRNPUL1           | 3.39E-21 | 0.93816891 | 0.53  | 0.222 | 1.20E-16 | mDC_UCBMC |
| GAPVD1             | 3.47E-21 | 0.79752901 | 0.513 | 0.214 | 1.23E-16 | mDC_UCBMC |
| MANBA              | 3.73E-21 | 0.5341558  | 0.758 | 0.367 | 1.32E-16 | mDC_UCBMC |
| ENSMMUG00000040181 | 3.81E-21 | 0.76009991 | 0.636 | 0.274 | 1.35E-16 | mDC_UCBMC |
| CABIN1             | 3.99E-21 | 1.06213657 | 0.356 | 0.113 | 1.41E-16 | mDC_UCBMC |
| CUX2               | 4.08E-21 | 1.02549335 | 0.377 | 0.128 | 1.45E-16 | mDC_UCBMC |
| ARID1A             | 4.17E-21 | 0.83724451 | 0.581 | 0.255 | 1.48E-16 | mDC_UCBMC |
| VTA1               | 4.38E-21 | 1.09742777 | 0.419 | 0.15  | 1.55E-16 | mDC_UCBMC |
| ENSMMUG00000012203 | 4.64E-21 | 0.51861174 | 0.784 | 0.396 | 1.65E-16 | mDC_UCBMC |
| CASC3              | 4.67E-21 | 1.08480704 | 0.466 | 0.187 | 1.66E-16 | mDC_UCBMC |
| TAF15              | 4.93E-21 | 0.74117931 | 0.695 | 0.328 | 1.75E-16 | mDC_UCBMC |
| WDPCP              | 5.07E-21 | 1.22743418 | 0.364 | 0.121 | 1.80E-16 | mDC_UCBMC |
| SLC25A26           | 5.27E-21 | 0.87656986 | 0.483 | 0.186 | 1.87E-16 | mDC_UCBMC |
| SPOPL              | 5.29E-21 | 1.07882274 | 0.496 | 0.202 | 1.88E-16 | mDC_UCBMC |
| PISD               | 5.36E-21 | 1.03108873 | 0.39  | 0.131 | 1.90E-16 | mDC_UCBMC |
| DHX8               | 5.40E-21 | 0.89925605 | 0.432 | 0.155 | 1.91E-16 | mDC_UCBMC |
| ADIPOR2            | 5.46E-21 | 0.74492957 | 0.415 | 0.146 | 1.94E-16 | mDC_UCBMC |
| ARMC8              | 5.57E-21 | 1.00694237 | 0.424 | 0.158 | 1.97E-16 | mDC_UCBMC |

|                   |          |            |       |       |          |           |
|-------------------|----------|------------|-------|-------|----------|-----------|
| FUBP1             | 5.65E-21 | 0.88329817 | 0.61  | 0.29  | 2.00E-16 | mDC_UCBMC |
| HMBOX1            | 5.68E-21 | 0.92723357 | 0.352 | 0.114 | 2.01E-16 | mDC_UCBMC |
| MYO5A             | 6.30E-21 | 0.76856301 | 0.614 | 0.275 | 2.23E-16 | mDC_UCBMC |
| ARL2BP            | 6.43E-21 | 1.07448003 | 0.436 | 0.162 | 2.28E-16 | mDC_UCBMC |
| TRIP12            | 6.52E-21 | 0.65410987 | 0.708 | 0.339 | 2.31E-16 | mDC_UCBMC |
| VCL               | 6.61E-21 | 0.65910556 | 0.695 | 0.319 | 2.34E-16 | mDC_UCBMC |
| DDHD2             | 7.04E-21 | 1.07746179 | 0.339 | 0.108 | 2.50E-16 | mDC_UCBMC |
| PRKCB             | 7.49E-21 | 0.63885333 | 0.712 | 0.334 | 2.65E-16 | mDC_UCBMC |
| TWF1              | 7.76E-21 | 1.56629546 | 0.284 | 0.078 | 2.75E-16 | mDC_UCBMC |
| BTRC              | 7.89E-21 | 1.47590587 | 0.288 | 0.081 | 2.80E-16 | mDC_UCBMC |
| ILKAP             | 8.15E-21 | 1.07800193 | 0.458 | 0.18  | 2.89E-16 | mDC_UCBMC |
| CMAH              | 8.67E-21 | 0.50405061 | 0.61  | 0.263 | 3.07E-16 | mDC_UCBMC |
| SPAG9             | 8.68E-21 | 0.21213222 | 0.809 | 0.438 | 3.08E-16 | mDC_UCBMC |
| APPBP2            | 8.69E-21 | 0.62842732 | 0.428 | 0.152 | 3.08E-16 | mDC_UCBMC |
| RPTOR             | 8.70E-21 | 0.80080765 | 0.525 | 0.217 | 3.08E-16 | mDC_UCBMC |
| DLST              | 8.74E-21 | 0.83374275 | 0.466 | 0.176 | 3.10E-16 | mDC_UCBMC |
| KRAS              | 8.85E-21 | 0.97121254 | 0.483 | 0.193 | 3.13E-16 | mDC_UCBMC |
| ELL2              | 9.02E-21 | 0.37773509 | 0.593 | 0.254 | 3.20E-16 | mDC_UCBMC |
| FAM214A           | 1.01E-20 | 1.0913332  | 0.335 | 0.105 | 3.59E-16 | mDC_UCBMC |
| MED1              | 1.02E-20 | 0.98275554 | 0.331 | 0.102 | 3.63E-16 | mDC_UCBMC |
| NPAT              | 1.09E-20 | 1.10901571 | 0.36  | 0.12  | 3.86E-16 | mDC_UCBMC |
| SF3B2             | 1.19E-20 | 0.74688581 | 0.555 | 0.233 | 4.22E-16 | mDC_UCBMC |
| NUFIP2            | 1.20E-20 | 0.51838272 | 0.716 | 0.333 | 4.26E-16 | mDC_UCBMC |
| ENSMUG00000016959 | 1.21E-20 | 0.7942791  | 0.619 | 0.267 | 4.28E-16 | mDC_UCBMC |
| FAM13B            | 1.25E-20 | 0.64043316 | 0.572 | 0.246 | 4.41E-16 | mDC_UCBMC |
| CASP8             | 1.25E-20 | 0.91153444 | 0.47  | 0.184 | 4.42E-16 | mDC_UCBMC |
| PRIM2             | 1.28E-20 | 1.15784507 | 0.343 | 0.111 | 4.53E-16 | mDC_UCBMC |
| FXR1              | 1.29E-20 | 0.77101877 | 0.729 | 0.353 | 4.57E-16 | mDC_UCBMC |
| RIPOR2            | 1.31E-20 | 0.90604884 | 0.742 | 0.395 | 4.64E-16 | mDC_UCBMC |
| TMEM181           | 1.33E-20 | 1.23730272 | 0.254 | 0.065 | 4.73E-16 | mDC_UCBMC |
| CDK12             | 1.38E-20 | 0.87159361 | 0.475 | 0.19  | 4.88E-16 | mDC_UCBMC |
| INPP4A            | 1.42E-20 | 0.33569181 | 0.678 | 0.309 | 5.03E-16 | mDC_UCBMC |
| STRBP             | 1.47E-20 | 1.1539442  | 0.297 | 0.084 | 5.20E-16 | mDC_UCBMC |

|                   |          |            |       |       |          |           |
|-------------------|----------|------------|-------|-------|----------|-----------|
| RPL4              | 1.49E-20 | 0.48422503 | 0.992 | 0.854 | 5.27E-16 | mDC_UCBMC |
| PLEKHB2           | 1.51E-20 | 0.80853416 | 0.551 | 0.232 | 5.34E-16 | mDC_UCBMC |
| HEATR1            | 1.51E-20 | 1.77447272 | 0.254 | 0.065 | 5.35E-16 | mDC_UCBMC |
| CAPZA2            | 1.56E-20 | 0.68415397 | 0.911 | 0.572 | 5.54E-16 | mDC_UCBMC |
| KPNA3             | 1.57E-20 | 0.91704082 | 0.534 | 0.233 | 5.55E-16 | mDC_UCBMC |
| PPP6C             | 1.62E-20 | 1.37359767 | 0.28  | 0.077 | 5.73E-16 | mDC_UCBMC |
| SRSF5             | 1.71E-20 | 0.61594415 | 0.962 | 0.697 | 6.04E-16 | mDC_UCBMC |
| AKAP8             | 1.74E-20 | 1.55430549 | 0.263 | 0.069 | 6.17E-16 | mDC_UCBMC |
| FBXW2             | 1.78E-20 | 1.28497507 | 0.301 | 0.087 | 6.29E-16 | mDC_UCBMC |
| FGFR10P2          | 1.80E-20 | 0.93595266 | 0.458 | 0.176 | 6.39E-16 | mDC_UCBMC |
| NSMCE2            | 1.83E-20 | 0.57966375 | 0.589 | 0.255 | 6.48E-16 | mDC_UCBMC |
| TNFSF8            | 1.99E-20 | 1.02557341 | 0.411 | 0.146 | 7.04E-16 | mDC_UCBMC |
| NDUFA9            | 1.99E-20 | 0.72295466 | 0.602 | 0.257 | 7.06E-16 | mDC_UCBMC |
| ECPAS             | 1.99E-20 | 0.85113477 | 0.5   | 0.207 | 7.06E-16 | mDC_UCBMC |
| UTP4              | 2.02E-20 | 1.67194563 | 0.263 | 0.07  | 7.17E-16 | mDC_UCBMC |
| ATXN7L3B          | 2.12E-20 | 1.02794732 | 0.479 | 0.189 | 7.53E-16 | mDC_UCBMC |
| TBL1XR1           | 2.14E-20 | 0.48540434 | 0.763 | 0.371 | 7.58E-16 | mDC_UCBMC |
| ANAPC10           | 2.21E-20 | 0.97709953 | 0.424 | 0.156 | 7.82E-16 | mDC_UCBMC |
| RANBP2            | 2.22E-20 | 0.61177367 | 0.763 | 0.37  | 7.86E-16 | mDC_UCBMC |
| DHRS3             | 2.23E-20 | 1.09808404 | 0.343 | 0.11  | 7.90E-16 | mDC_UCBMC |
| STK17A            | 2.26E-20 | 0.6451771  | 0.623 | 0.285 | 8.02E-16 | mDC_UCBMC |
| IPMK              | 2.27E-20 | 0.61380536 | 0.593 | 0.255 | 8.03E-16 | mDC_UCBMC |
| RNF34             | 2.44E-20 | 1.148906   | 0.356 | 0.119 | 8.63E-16 | mDC_UCBMC |
| KDM4C             | 2.50E-20 | 0.6959785  | 0.614 | 0.292 | 8.87E-16 | mDC_UCBMC |
| CBLB              | 2.54E-20 | 0.51981566 | 0.648 | 0.307 | 9.01E-16 | mDC_UCBMC |
| EXOC2             | 2.56E-20 | 1.03275422 | 0.373 | 0.126 | 9.08E-16 | mDC_UCBMC |
| EFTUD2            | 2.70E-20 | 1.02035713 | 0.36  | 0.12  | 9.55E-16 | mDC_UCBMC |
| HNRNPU            | 2.73E-20 | 0.56951286 | 0.919 | 0.531 | 9.66E-16 | mDC_UCBMC |
| RASA3             | 2.75E-20 | 0.97252157 | 0.419 | 0.154 | 9.73E-16 | mDC_UCBMC |
| NUDT4             | 2.77E-20 | 1.25692988 | 0.258 | 0.067 | 9.82E-16 | mDC_UCBMC |
| MTDH              | 2.78E-20 | 0.74996239 | 0.678 | 0.321 | 9.84E-16 | mDC_UCBMC |
| SARAF             | 2.85E-20 | 0.61443056 | 0.966 | 0.711 | 1.01E-15 | mDC_UCBMC |
| ENSMUG00000064068 | 2.86E-20 | 1.1785851  | 0.301 | 0.09  | 1.01E-15 | mDC_UCBMC |

|                   |          |            |       |       |          |           |
|-------------------|----------|------------|-------|-------|----------|-----------|
| DCAF6             | 2.91E-20 | 0.8926364  | 0.403 | 0.142 | 1.03E-15 | mDC_UCBMC |
| ENSMUG00000045362 | 2.92E-20 | 1.56303465 | 0.288 | 0.084 | 1.03E-15 | mDC_UCBMC |
| DIAPH1            | 2.95E-20 | 0.61522886 | 0.754 | 0.381 | 1.04E-15 | mDC_UCBMC |
| ETS1              | 2.97E-20 | 1.15185006 | 0.343 | 0.111 | 1.05E-15 | mDC_UCBMC |
| MRPS35            | 3.37E-20 | 1.11798349 | 0.419 | 0.156 | 1.19E-15 | mDC_UCBMC |
| MDN1              | 3.42E-20 | 0.94187214 | 0.36  | 0.122 | 1.21E-15 | mDC_UCBMC |
| HNRNPA0           | 3.50E-20 | 0.84738036 | 0.669 | 0.319 | 1.24E-15 | mDC_UCBMC |
| NUMA1             | 3.53E-20 | 0.89287888 | 0.441 | 0.165 | 1.25E-15 | mDC_UCBMC |
| ARHGAP24          | 3.68E-20 | 0.71804883 | 0.636 | 0.307 | 1.30E-15 | mDC_UCBMC |
| KMT5B             | 3.82E-20 | 0.76346316 | 0.496 | 0.2   | 1.35E-15 | mDC_UCBMC |
| OSBPL11           | 3.99E-20 | 0.6021562  | 0.72  | 0.347 | 1.41E-15 | mDC_UCBMC |
| CTNNB1            | 4.20E-20 | 0.82324456 | 0.555 | 0.243 | 1.49E-15 | mDC_UCBMC |
| SUPT3H            | 4.24E-20 | 1.02451604 | 0.5   | 0.214 | 1.50E-15 | mDC_UCBMC |
| VPS53             | 4.30E-20 | 0.7839434  | 0.394 | 0.145 | 1.52E-15 | mDC_UCBMC |
| PARVB             | 4.33E-20 | 1.08981691 | 0.373 | 0.129 | 1.53E-15 | mDC_UCBMC |
| AP3S1             | 4.51E-20 | 0.5873141  | 0.648 | 0.291 | 1.60E-15 | mDC_UCBMC |
| ADAM10            | 4.78E-20 | 0.87063162 | 0.521 | 0.219 | 1.69E-15 | mDC_UCBMC |
| SOX4              | 4.85E-20 | 0.34468933 | 0.686 | 0.319 | 1.72E-15 | mDC_UCBMC |
| RCL1              | 5.30E-20 | 1.26641284 | 0.297 | 0.087 | 1.88E-15 | mDC_UCBMC |
| SF3A1             | 5.40E-20 | 1.01462286 | 0.407 | 0.145 | 1.91E-15 | mDC_UCBMC |
| TULP4             | 5.71E-20 | 0.98689552 | 0.322 | 0.099 | 2.02E-15 | mDC_UCBMC |
| MSH3              | 5.85E-20 | 1.22217767 | 0.314 | 0.097 | 2.07E-15 | mDC_UCBMC |
| APPL2             | 5.88E-20 | 1.58687735 | 0.263 | 0.071 | 2.08E-15 | mDC_UCBMC |
| BANK1             | 6.45E-20 | 1.25828642 | 0.47  | 0.192 | 2.28E-15 | mDC_UCBMC |
| MAP2K5            | 6.46E-20 | 1.07677371 | 0.411 | 0.154 | 2.29E-15 | mDC_UCBMC |
| CLCN6             | 6.56E-20 | 0.95254524 | 0.339 | 0.11  | 2.32E-15 | mDC_UCBMC |
| AKAP9             | 6.66E-20 | 0.68211316 | 0.669 | 0.322 | 2.36E-15 | mDC_UCBMC |
| MAST2             | 6.67E-20 | 0.90077086 | 0.373 | 0.129 | 2.36E-15 | mDC_UCBMC |
| ETF1              | 6.69E-20 | 0.58391977 | 0.805 | 0.401 | 2.37E-15 | mDC_UCBMC |
| FOSB              | 6.79E-20 | 0.59620927 | 0.919 | 0.524 | 2.40E-15 | mDC_UCBMC |
| SLC4A7            | 7.02E-20 | 0.75221361 | 0.475 | 0.189 | 2.49E-15 | mDC_UCBMC |
| PTPN9             | 7.02E-20 | 0.81056687 | 0.483 | 0.194 | 2.49E-15 | mDC_UCBMC |
| DDB1              | 7.32E-20 | 0.91233838 | 0.432 | 0.165 | 2.59E-15 | mDC_UCBMC |

|          |          |            |       |       |          |           |
|----------|----------|------------|-------|-------|----------|-----------|
| CAPN2    | 7.45E-20 | 0.7315357  | 0.462 | 0.169 | 2.64E-15 | mDC_UCBMC |
| COPS3    | 7.52E-20 | 0.77305431 | 0.513 | 0.21  | 2.66E-15 | mDC_UCBMC |
| TAF11    | 7.55E-20 | 0.82679782 | 0.419 | 0.146 | 2.67E-15 | mDC_UCBMC |
| RBM34    | 7.59E-20 | 1.01748445 | 0.398 | 0.142 | 2.69E-15 | mDC_UCBMC |
| CD2AP    | 7.83E-20 | 0.97924034 | 0.458 | 0.181 | 2.77E-15 | mDC_UCBMC |
| ST7      | 7.93E-20 | 1.10888893 | 0.377 | 0.136 | 2.81E-15 | mDC_UCBMC |
| TPP2     | 8.12E-20 | 1.06153345 | 0.373 | 0.13  | 2.88E-15 | mDC_UCBMC |
| TPK1     | 8.15E-20 | 0.49308827 | 0.381 | 0.13  | 2.89E-15 | mDC_UCBMC |
| CTPS1    | 8.20E-20 | 1.39028924 | 0.373 | 0.133 | 2.91E-15 | mDC_UCBMC |
| WDR36    | 8.22E-20 | 1.04135091 | 0.275 | 0.075 | 2.91E-15 | mDC_UCBMC |
| ELK3     | 8.27E-20 | 0.84594803 | 0.517 | 0.217 | 2.93E-15 | mDC_UCBMC |
| ZC3HAV1  | 8.34E-20 | 0.73402413 | 0.589 | 0.267 | 2.95E-15 | mDC_UCBMC |
| EIF2S3   | 9.07E-20 | 0.76172702 | 0.559 | 0.24  | 3.21E-15 | mDC_UCBMC |
| MAPK6    | 9.46E-20 | 0.94379282 | 0.369 | 0.128 | 3.35E-15 | mDC_UCBMC |
| USP14    | 1.04E-19 | 1.39550778 | 0.394 | 0.146 | 3.70E-15 | mDC_UCBMC |
| MTMR6    | 1.12E-19 | 0.85114257 | 0.449 | 0.172 | 3.98E-15 | mDC_UCBMC |
| GTF2F2   | 1.21E-19 | 0.92911629 | 0.581 | 0.262 | 4.29E-15 | mDC_UCBMC |
| HBP1     | 1.28E-19 | 0.68526858 | 0.547 | 0.238 | 4.53E-15 | mDC_UCBMC |
| B2M      | 1.31E-19 | 0.39949988 | 1     | 0.961 | 4.65E-15 | mDC_UCBMC |
| GDAP2    | 1.35E-19 | 1.54331134 | 0.288 | 0.086 | 4.77E-15 | mDC_UCBMC |
| RFTN1    | 1.45E-19 | 0.2644106  | 0.758 | 0.393 | 5.13E-15 | mDC_UCBMC |
| STK38    | 1.61E-19 | 0.90359951 | 0.513 | 0.219 | 5.71E-15 | mDC_UCBMC |
| PRKDC    | 1.63E-19 | 0.84209855 | 0.674 | 0.329 | 5.79E-15 | mDC_UCBMC |
| SEPTIN7  | 1.69E-19 | 0.66392141 | 0.894 | 0.582 | 5.99E-15 | mDC_UCBMC |
| PGGT1B   | 1.88E-19 | 1.39296635 | 0.254 | 0.068 | 6.66E-15 | mDC_UCBMC |
| CUL5     | 1.93E-19 | 0.70908611 | 0.746 | 0.389 | 6.85E-15 | mDC_UCBMC |
| CNOT1    | 1.93E-19 | 0.5601801  | 0.644 | 0.305 | 6.85E-15 | mDC_UCBMC |
| SREK1IP1 | 2.00E-19 | 0.91216833 | 0.424 | 0.156 | 7.07E-15 | mDC_UCBMC |
| PHTF1    | 2.04E-19 | 1.30953679 | 0.318 | 0.102 | 7.22E-15 | mDC_UCBMC |
| UBXN7    | 2.11E-19 | 0.79189448 | 0.496 | 0.208 | 7.47E-15 | mDC_UCBMC |
| BHLHE40  | 2.20E-19 | 0.65263719 | 0.936 | 0.584 | 7.79E-15 | mDC_UCBMC |
| TUBB6    | 2.26E-19 | 1.03713442 | 0.47  | 0.189 | 8.02E-15 | mDC_UCBMC |
| WWP2     | 2.27E-19 | 0.62098048 | 0.398 | 0.145 | 8.03E-15 | mDC_UCBMC |

|                    |          |            |       |       |          |           |
|--------------------|----------|------------|-------|-------|----------|-----------|
| NONO               | 2.32E-19 | 0.83415987 | 0.636 | 0.31  | 8.22E-15 | mDC_UCBMC |
| WWOX               | 2.34E-19 | 0.37833388 | 0.661 | 0.315 | 8.31E-15 | mDC_UCBMC |
| ABHD2              | 2.38E-19 | 0.8528015  | 0.462 | 0.186 | 8.43E-15 | mDC_UCBMC |
| JAK2               | 2.60E-19 | 0.49271893 | 0.72  | 0.356 | 9.23E-15 | mDC_UCBMC |
| HIPK1              | 2.68E-19 | 1.00181914 | 0.424 | 0.166 | 9.48E-15 | mDC_UCBMC |
| RASGRP1            | 2.93E-19 | 1.67262497 | 0.25  | 0.067 | 1.04E-14 | mDC_UCBMC |
| TTC17              | 3.05E-19 | 0.81135491 | 0.517 | 0.222 | 1.08E-14 | mDC_UCBMC |
| ATF7IP2            | 3.24E-19 | 0.81027739 | 0.53  | 0.227 | 1.15E-14 | mDC_UCBMC |
| SEC61A2            | 3.26E-19 | 1.01001495 | 0.284 | 0.083 | 1.16E-14 | mDC_UCBMC |
| LTN1               | 3.28E-19 | 0.9583525  | 0.394 | 0.146 | 1.16E-14 | mDC_UCBMC |
| NSD2               | 3.31E-19 | 1.09713424 | 0.318 | 0.101 | 1.17E-14 | mDC_UCBMC |
| SUMF1              | 3.32E-19 | 1.37772707 | 0.331 | 0.111 | 1.18E-14 | mDC_UCBMC |
| SLC20A2            | 3.34E-19 | 0.7723085  | 0.263 | 0.071 | 1.18E-14 | mDC_UCBMC |
| RTF2               | 3.35E-19 | 0.69591015 | 0.644 | 0.311 | 1.19E-14 | mDC_UCBMC |
| ABCG1              | 3.46E-19 | 0.77182882 | 0.28  | 0.079 | 1.22E-14 | mDC_UCBMC |
| CCDC12             | 3.47E-19 | 0.64038246 | 0.674 | 0.31  | 1.23E-14 | mDC_UCBMC |
| GCLC               | 3.56E-19 | 1.57468194 | 0.292 | 0.09  | 1.26E-14 | mDC_UCBMC |
| MRPS9              | 3.63E-19 | 0.76955215 | 0.508 | 0.208 | 1.29E-14 | mDC_UCBMC |
| ZCCHC8             | 3.83E-19 | 1.20298998 | 0.275 | 0.077 | 1.36E-14 | mDC_UCBMC |
| TM9SF2             | 3.83E-19 | 1.01246996 | 0.436 | 0.168 | 1.36E-14 | mDC_UCBMC |
| ENSMMUG00000060933 | 3.91E-19 | 1.04426211 | 0.377 | 0.131 | 1.38E-14 | mDC_UCBMC |
| ZNF131             | 4.01E-19 | 1.01311409 | 0.407 | 0.155 | 1.42E-14 | mDC_UCBMC |
| TAOK3              | 4.01E-19 | 0.56376818 | 0.826 | 0.442 | 1.42E-14 | mDC_UCBMC |
| ACSL3              | 4.25E-19 | 1.38371666 | 0.258 | 0.071 | 1.51E-14 | mDC_UCBMC |
| EFCAB2             | 4.27E-19 | 0.84461817 | 0.551 | 0.241 | 1.51E-14 | mDC_UCBMC |
| AVL9               | 4.30E-19 | 0.79261025 | 0.339 | 0.112 | 1.52E-14 | mDC_UCBMC |
| ENSMMUG00000060451 | 4.41E-19 | 1.22836032 | 0.322 | 0.103 | 1.56E-14 | mDC_UCBMC |
| ATG4B              | 4.43E-19 | 1.19172278 | 0.28  | 0.081 | 1.57E-14 | mDC_UCBMC |
| DCK                | 4.47E-19 | 0.79565086 | 0.538 | 0.234 | 1.59E-14 | mDC_UCBMC |
| U2SURP             | 4.74E-19 | 0.73369436 | 0.695 | 0.35  | 1.68E-14 | mDC_UCBMC |
| TNPO1              | 4.82E-19 | 0.26301097 | 0.445 | 0.173 | 1.71E-14 | mDC_UCBMC |
| UBR1               | 4.83E-19 | 0.72516602 | 0.441 | 0.174 | 1.71E-14 | mDC_UCBMC |
| RPS6KC1            | 5.18E-19 | 0.59518948 | 0.5   | 0.208 | 1.83E-14 | mDC_UCBMC |

|                    |          |            |       |       |          |           |
|--------------------|----------|------------|-------|-------|----------|-----------|
| PKN2               | 5.24E-19 | 0.91477718 | 0.555 | 0.249 | 1.86E-14 | mDC_UCBMC |
| AKIRIN2            | 5.90E-19 | 0.66178413 | 0.657 | 0.301 | 2.09E-14 | mDC_UCBMC |
| RAD21              | 6.03E-19 | 0.72982749 | 0.572 | 0.254 | 2.14E-14 | mDC_UCBMC |
| ENSMMUG00000012690 | 6.26E-19 | 1.11074035 | 0.335 | 0.11  | 2.22E-14 | mDC_UCBMC |
| INTS7              | 6.32E-19 | 1.0873054  | 0.301 | 0.09  | 2.24E-14 | mDC_UCBMC |
| TYW5               | 6.56E-19 | 1.33590169 | 0.258 | 0.071 | 2.32E-14 | mDC_UCBMC |
| SSR1               | 6.72E-19 | 0.71218035 | 0.788 | 0.402 | 2.38E-14 | mDC_UCBMC |
| RCSD1              | 6.73E-19 | 0.72016732 | 0.631 | 0.287 | 2.39E-14 | mDC_UCBMC |
| SMG1               | 7.09E-19 | 0.45219746 | 0.521 | 0.222 | 2.51E-14 | mDC_UCBMC |
| CTDP1              | 7.11E-19 | 1.45737182 | 0.284 | 0.085 | 2.52E-14 | mDC_UCBMC |
| TMEM245            | 7.14E-19 | 1.30936139 | 0.322 | 0.105 | 2.53E-14 | mDC_UCBMC |
| SYAP1              | 7.70E-19 | 0.56582078 | 0.61  | 0.271 | 2.73E-14 | mDC_UCBMC |
| MED15              | 7.75E-19 | 0.97212388 | 0.415 | 0.16  | 2.74E-14 | mDC_UCBMC |
| ZNF506             | 7.84E-19 | 0.60414914 | 0.593 | 0.266 | 2.78E-14 | mDC_UCBMC |
| USP20              | 7.96E-19 | 1.30479867 | 0.254 | 0.069 | 2.82E-14 | mDC_UCBMC |
| UBXN2B             | 8.34E-19 | 1.11160093 | 0.25  | 0.065 | 2.95E-14 | mDC_UCBMC |
| PDXDC1             | 8.58E-19 | 0.88433074 | 0.403 | 0.15  | 3.04E-14 | mDC_UCBMC |
| RTF1               | 8.59E-19 | 0.80012761 | 0.547 | 0.242 | 3.04E-14 | mDC_UCBMC |
| VPS13A             | 9.02E-19 | 1.10405438 | 0.339 | 0.112 | 3.20E-14 | mDC_UCBMC |
| LAMP1              | 9.36E-19 | 1.17534085 | 0.356 | 0.124 | 3.32E-14 | mDC_UCBMC |
| CCDC43             | 9.45E-19 | 1.36690212 | 0.292 | 0.089 | 3.35E-14 | mDC_UCBMC |
| ADAP1              | 9.57E-19 | 0.56156224 | 0.458 | 0.176 | 3.39E-14 | mDC_UCBMC |
| RCOR3              | 9.59E-19 | 0.87685789 | 0.394 | 0.144 | 3.40E-14 | mDC_UCBMC |
| CCDC69             | 9.62E-19 | 0.67346139 | 0.555 | 0.244 | 3.41E-14 | mDC_UCBMC |
| HNRNPD             | 1.02E-18 | 0.57239258 | 0.822 | 0.432 | 3.60E-14 | mDC_UCBMC |
| EIF5               | 1.03E-18 | 0.61885141 | 0.877 | 0.498 | 3.63E-14 | mDC_UCBMC |
| SLAIN2             | 1.03E-18 | 0.83718826 | 0.394 | 0.144 | 3.65E-14 | mDC_UCBMC |
| MTREX              | 1.08E-18 | 0.67491623 | 0.725 | 0.384 | 3.82E-14 | mDC_UCBMC |
| ZNF652             | 1.08E-18 | 1.10597405 | 0.331 | 0.112 | 3.84E-14 | mDC_UCBMC |
| MATR3              | 1.09E-18 | 0.56678833 | 0.886 | 0.543 | 3.87E-14 | mDC_UCBMC |
| RAB7A              | 1.21E-18 | 0.50874194 | 0.915 | 0.595 | 4.27E-14 | mDC_UCBMC |
| SLC8A1             | 1.23E-18 | 0.15728333 | 0.763 | 0.377 | 4.35E-14 | mDC_UCBMC |
| HACL1              | 1.23E-18 | 0.90423909 | 0.263 | 0.073 | 4.35E-14 | mDC_UCBMC |

|         |          |            |       |       |          |           |
|---------|----------|------------|-------|-------|----------|-----------|
| SFMBT2  | 1.25E-18 | 0.77371937 | 0.411 | 0.156 | 4.45E-14 | mDC_UCBMC |
| IRF4    | 1.27E-18 | 1.11907184 | 0.314 | 0.102 | 4.52E-14 | mDC_UCBMC |
| GLCE    | 1.31E-18 | 0.81043561 | 0.343 | 0.115 | 4.64E-14 | mDC_UCBMC |
| NSF     | 1.43E-18 | 0.70500321 | 0.521 | 0.226 | 5.06E-14 | mDC_UCBMC |
| VEZF1   | 1.46E-18 | 1.09487167 | 0.318 | 0.102 | 5.19E-14 | mDC_UCBMC |
| PHACTR4 | 1.47E-18 | 0.69474294 | 0.475 | 0.196 | 5.20E-14 | mDC_UCBMC |
| NECAP1  | 1.48E-18 | 0.87137885 | 0.398 | 0.147 | 5.24E-14 | mDC_UCBMC |
| SNW1    | 1.49E-18 | 0.81487988 | 0.619 | 0.294 | 5.28E-14 | mDC_UCBMC |
| PAPOLA  | 1.52E-18 | 0.56999197 | 0.792 | 0.422 | 5.40E-14 | mDC_UCBMC |
| SEC16A  | 1.63E-18 | 0.92493346 | 0.305 | 0.096 | 5.76E-14 | mDC_UCBMC |
| FRYL    | 1.67E-18 | 0.78013318 | 0.466 | 0.191 | 5.90E-14 | mDC_UCBMC |
| POLR3E  | 1.67E-18 | 1.16928135 | 0.297 | 0.093 | 5.90E-14 | mDC_UCBMC |
| PPP2R5A | 1.71E-18 | 0.94524854 | 0.398 | 0.15  | 6.04E-14 | mDC_UCBMC |
| MTMR12  | 1.76E-18 | 1.44787763 | 0.28  | 0.086 | 6.23E-14 | mDC_UCBMC |
| VTI1A   | 1.76E-18 | 0.49633752 | 0.703 | 0.351 | 6.25E-14 | mDC_UCBMC |
| SENP6   | 1.84E-18 | 0.54201442 | 0.678 | 0.343 | 6.53E-14 | mDC_UCBMC |
| CSPP1   | 2.06E-18 | 0.90098396 | 0.381 | 0.139 | 7.30E-14 | mDC_UCBMC |
| MYCBP2  | 2.10E-18 | 0.63794551 | 0.691 | 0.34  | 7.44E-14 | mDC_UCBMC |
| ST3GAL3 | 2.15E-18 | 1.08813424 | 0.297 | 0.094 | 7.61E-14 | mDC_UCBMC |
| CHD1L   | 2.23E-18 | 1.33508175 | 0.254 | 0.07  | 7.91E-14 | mDC_UCBMC |
| RBL2    | 2.35E-18 | 1.22703612 | 0.309 | 0.102 | 8.31E-14 | mDC_UCBMC |
| ALMS1   | 2.35E-18 | 1.15342144 | 0.331 | 0.11  | 8.33E-14 | mDC_UCBMC |
| KDM3B   | 2.40E-18 | 0.71488803 | 0.47  | 0.19  | 8.52E-14 | mDC_UCBMC |
| CCNY    | 2.41E-18 | 0.63241998 | 0.487 | 0.206 | 8.55E-14 | mDC_UCBMC |
| SART3   | 2.55E-18 | 1.10106554 | 0.28  | 0.082 | 9.05E-14 | mDC_UCBMC |
| CAAP1   | 2.67E-18 | 0.84895163 | 0.347 | 0.12  | 9.47E-14 | mDC_UCBMC |
| TMX3    | 2.71E-18 | 1.34582971 | 0.335 | 0.117 | 9.60E-14 | mDC_UCBMC |
| GALNT7  | 2.76E-18 | 1.05817168 | 0.419 | 0.171 | 9.79E-14 | mDC_UCBMC |
| MTRF1L  | 2.96E-18 | 1.09773831 | 0.292 | 0.091 | 1.05E-13 | mDC_UCBMC |
| SUZ12   | 2.97E-18 | 0.8968922  | 0.411 | 0.16  | 1.05E-13 | mDC_UCBMC |
| IFT80   | 3.11E-18 | 1.29393323 | 0.28  | 0.083 | 1.10E-13 | mDC_UCBMC |
| MFF     | 3.12E-18 | 0.94325243 | 0.483 | 0.214 | 1.11E-13 | mDC_UCBMC |
| FAM126B | 3.22E-18 | 1.45629988 | 0.271 | 0.08  | 1.14E-13 | mDC_UCBMC |



|                   |          |            |       |       |          |           |
|-------------------|----------|------------|-------|-------|----------|-----------|
| KIAA0040          | 3.31E-18 | 0.82073827 | 0.386 | 0.14  | 1.17E-13 | mDC_UCBMC |
| LNPEP             | 3.58E-18 | 0.80569081 | 0.483 | 0.203 | 1.27E-13 | mDC_UCBMC |
| RPL23             | 3.68E-18 | 0.38956713 | 0.996 | 0.924 | 1.30E-13 | mDC_UCBMC |
| KIZ               | 3.75E-18 | 0.90774298 | 0.453 | 0.186 | 1.33E-13 | mDC_UCBMC |
| STAU2             | 3.77E-18 | 0.58675022 | 0.504 | 0.216 | 1.34E-13 | mDC_UCBMC |
| WASF2             | 3.77E-18 | 0.68485482 | 0.686 | 0.339 | 1.34E-13 | mDC_UCBMC |
| ADD1              | 3.86E-18 | 0.87140063 | 0.504 | 0.221 | 1.37E-13 | mDC_UCBMC |
| VPS39             | 3.87E-18 | 0.92473897 | 0.373 | 0.136 | 1.37E-13 | mDC_UCBMC |
| FBXO7             | 3.94E-18 | 1.06402529 | 0.343 | 0.12  | 1.39E-13 | mDC_UCBMC |
| TTC7A             | 3.97E-18 | 0.96565392 | 0.305 | 0.101 | 1.41E-13 | mDC_UCBMC |
| OXNAD1            | 4.01E-18 | 1.17518699 | 0.352 | 0.124 | 1.42E-13 | mDC_UCBMC |
| SAMD8             | 4.09E-18 | 0.52210601 | 0.407 | 0.154 | 1.45E-13 | mDC_UCBMC |
| ABI2              | 4.10E-18 | 1.38891877 | 0.305 | 0.099 | 1.45E-13 | mDC_UCBMC |
| SLCO3A1           | 4.30E-18 | 0.82509698 | 0.28  | 0.083 | 1.52E-13 | mDC_UCBMC |
| ATF6B             | 4.59E-18 | 0.88371728 | 0.407 | 0.159 | 1.63E-13 | mDC_UCBMC |
| CNOT8             | 4.71E-18 | 0.7799686  | 0.462 | 0.184 | 1.67E-13 | mDC_UCBMC |
| SPATA6            | 4.74E-18 | 1.18500794 | 0.25  | 0.069 | 1.68E-13 | mDC_UCBMC |
| NDEL1             | 5.20E-18 | 0.50335116 | 0.733 | 0.355 | 1.84E-13 | mDC_UCBMC |
| MBD5              | 5.44E-18 | 0.68266556 | 0.517 | 0.226 | 1.93E-13 | mDC_UCBMC |
| RREB1             | 5.60E-18 | 1.20761201 | 0.309 | 0.103 | 1.98E-13 | mDC_UCBMC |
| UBE2D3            | 5.73E-18 | 0.49614339 | 0.966 | 0.747 | 2.03E-13 | mDC_UCBMC |
| CTNBNB1           | 5.77E-18 | 0.7089429  | 0.538 | 0.244 | 2.04E-13 | mDC_UCBMC |
| RRM1              | 5.77E-18 | 0.74112994 | 0.36  | 0.128 | 2.05E-13 | mDC_UCBMC |
| SLU7              | 5.86E-18 | 0.91228079 | 0.381 | 0.143 | 2.08E-13 | mDC_UCBMC |
| FARS2             | 6.20E-18 | 0.78498709 | 0.504 | 0.22  | 2.20E-13 | mDC_UCBMC |
| KPNB1             | 6.49E-18 | 0.63846041 | 0.572 | 0.259 | 2.30E-13 | mDC_UCBMC |
| MLXIP             | 6.62E-18 | 0.46133275 | 0.347 | 0.118 | 2.35E-13 | mDC_UCBMC |
| ENSMUG00000021539 | 6.65E-18 | 0.94119585 | 0.356 | 0.126 | 2.36E-13 | mDC_UCBMC |
| DYM               | 6.84E-18 | 0.72353456 | 0.517 | 0.227 | 2.43E-13 | mDC_UCBMC |
| TBCE              | 6.89E-18 | 0.73179644 | 0.326 | 0.108 | 2.44E-13 | mDC_UCBMC |
| TENT4B            | 7.02E-18 | 0.94123648 | 0.364 | 0.131 | 2.49E-13 | mDC_UCBMC |
| MED19             | 7.20E-18 | 1.16905464 | 0.314 | 0.106 | 2.55E-13 | mDC_UCBMC |
| MRPL37            | 7.36E-18 | 1.18548318 | 0.381 | 0.141 | 2.61E-13 | mDC_UCBMC |

|                    |          |            |       |       |          |           |
|--------------------|----------|------------|-------|-------|----------|-----------|
| TOR1AIP1           | 7.54E-18 | 0.97731719 | 0.377 | 0.141 | 2.67E-13 | mDC_UCBMC |
| DYNC1LI2           | 7.56E-18 | 0.79869503 | 0.369 | 0.132 | 2.68E-13 | mDC_UCBMC |
| ABHD12             | 7.71E-18 | 0.75891587 | 0.394 | 0.15  | 2.73E-13 | mDC_UCBMC |
| CPSF7              | 7.75E-18 | 0.63207735 | 0.335 | 0.114 | 2.75E-13 | mDC_UCBMC |
| ARFGAP3            | 8.56E-18 | 0.43764699 | 0.784 | 0.421 | 3.03E-13 | mDC_UCBMC |
| SNX30              | 8.69E-18 | 0.85530611 | 0.284 | 0.088 | 3.08E-13 | mDC_UCBMC |
| MN1                | 8.77E-18 | 0.52063601 | 0.263 | 0.073 | 3.11E-13 | mDC_UCBMC |
| GMDS               | 8.91E-18 | 0.69476907 | 0.449 | 0.188 | 3.16E-13 | mDC_UCBMC |
| CASP3              | 9.15E-18 | 1.0089189  | 0.381 | 0.14  | 3.24E-13 | mDC_UCBMC |
| ENSMMUG00000056654 | 9.25E-18 | 0.67082176 | 0.915 | 0.626 | 3.28E-13 | mDC_UCBMC |
| PTPN11             | 1.01E-17 | 0.82864677 | 0.386 | 0.145 | 3.57E-13 | mDC_UCBMC |
| ABHD13             | 1.03E-17 | 1.20045747 | 0.297 | 0.096 | 3.65E-13 | mDC_UCBMC |
| TBC1D14            | 1.04E-17 | 0.79824024 | 0.343 | 0.122 | 3.67E-13 | mDC_UCBMC |
| ARHGEF3            | 1.05E-17 | 1.58843874 | 0.263 | 0.079 | 3.72E-13 | mDC_UCBMC |
| CEBPZ              | 1.06E-17 | 0.71201417 | 0.538 | 0.237 | 3.76E-13 | mDC_UCBMC |
| HSPA9              | 1.08E-17 | 0.6728735  | 0.665 | 0.328 | 3.83E-13 | mDC_UCBMC |
| ASB3               | 1.09E-17 | 1.25359237 | 0.322 | 0.111 | 3.87E-13 | mDC_UCBMC |
| RRP15              | 1.17E-17 | 1.11040116 | 0.364 | 0.134 | 4.13E-13 | mDC_UCBMC |
| STRIP1             | 1.21E-17 | 1.15401403 | 0.25  | 0.071 | 4.29E-13 | mDC_UCBMC |
| SETD5              | 1.26E-17 | 0.58981436 | 0.542 | 0.246 | 4.47E-13 | mDC_UCBMC |
| BECN1              | 1.32E-17 | 1.15951482 | 0.394 | 0.151 | 4.69E-13 | mDC_UCBMC |
| IBTK               | 1.37E-17 | 0.83590718 | 0.403 | 0.158 | 4.85E-13 | mDC_UCBMC |
| NOTCH2             | 1.45E-17 | 0.60369113 | 0.576 | 0.263 | 5.14E-13 | mDC_UCBMC |
| VAPA               | 1.45E-17 | 0.57434992 | 0.801 | 0.426 | 5.15E-13 | mDC_UCBMC |
| CYTIP              | 1.47E-17 | 1.2554279  | 0.419 | 0.172 | 5.21E-13 | mDC_UCBMC |
| UBE2E2             | 1.49E-17 | 0.19287612 | 0.771 | 0.385 | 5.27E-13 | mDC_UCBMC |
| CD164              | 1.51E-17 | 0.63001888 | 0.831 | 0.456 | 5.36E-13 | mDC_UCBMC |
| ECSIT              | 1.53E-17 | 0.79368862 | 0.373 | 0.134 | 5.41E-13 | mDC_UCBMC |
| UBN1               | 1.53E-17 | 1.06064398 | 0.322 | 0.11  | 5.43E-13 | mDC_UCBMC |
| ENSMMUG00000052127 | 1.54E-17 | 0.28108773 | 0.992 | 0.824 | 5.46E-13 | mDC_UCBMC |
| TCF20              | 1.55E-17 | 1.06668715 | 0.39  | 0.151 | 5.50E-13 | mDC_UCBMC |
| SUCLG2             | 1.61E-17 | 0.73160839 | 0.674 | 0.367 | 5.69E-13 | mDC_UCBMC |
| DNTTIP2            | 1.66E-17 | 0.66060879 | 0.725 | 0.373 | 5.88E-13 | mDC_UCBMC |

|          |          |            |       |       |          |           |
|----------|----------|------------|-------|-------|----------|-----------|
| RBPJ     | 1.67E-17 | 0.52653952 | 0.919 | 0.606 | 5.91E-13 | mDC_UCBMC |
| KPNA4    | 1.75E-17 | 0.78799213 | 0.453 | 0.193 | 6.20E-13 | mDC_UCBMC |
| USP36    | 1.83E-17 | 0.32318206 | 0.691 | 0.363 | 6.47E-13 | mDC_UCBMC |
| RPS6KB1  | 1.84E-17 | 0.80369779 | 0.492 | 0.22  | 6.52E-13 | mDC_UCBMC |
| KIAA0232 | 1.96E-17 | 0.84395435 | 0.424 | 0.168 | 6.95E-13 | mDC_UCBMC |
| LONRF3   | 1.98E-17 | 0.1553465  | 0.445 | 0.171 | 7.02E-13 | mDC_UCBMC |
| ZNF93    | 2.07E-17 | 0.94199717 | 0.424 | 0.169 | 7.34E-13 | mDC_UCBMC |
| SLK      | 2.12E-17 | 0.53709849 | 0.394 | 0.148 | 7.53E-13 | mDC_UCBMC |
| PITRM1   | 2.18E-17 | 0.80514135 | 0.373 | 0.137 | 7.73E-13 | mDC_UCBMC |
| PPP2R5E  | 2.40E-17 | 0.84696499 | 0.449 | 0.188 | 8.50E-13 | mDC_UCBMC |
| G3BP1    | 2.41E-17 | 0.57696239 | 0.758 | 0.397 | 8.54E-13 | mDC_UCBMC |
| HDAC5    | 2.44E-17 | 1.10818337 | 0.301 | 0.099 | 8.64E-13 | mDC_UCBMC |
| PSIP1    | 2.49E-17 | 1.15004462 | 0.36  | 0.136 | 8.84E-13 | mDC_UCBMC |
| PPP1R15A | 2.59E-17 | 0.47799994 | 0.814 | 0.438 | 9.18E-13 | mDC_UCBMC |
| EMB      | 2.70E-17 | 1.05104363 | 0.343 | 0.12  | 9.57E-13 | mDC_UCBMC |
| EMC3     | 2.87E-17 | 0.86815967 | 0.449 | 0.186 | 1.02E-12 | mDC_UCBMC |
| GLTP     | 2.99E-17 | 0.58085994 | 0.758 | 0.398 | 1.06E-12 | mDC_UCBMC |
| FRY      | 3.01E-17 | 0.86143029 | 0.411 | 0.164 | 1.07E-12 | mDC_UCBMC |
| CLOCK    | 3.06E-17 | 1.31206788 | 0.28  | 0.089 | 1.08E-12 | mDC_UCBMC |
| RERE     | 3.09E-17 | 0.44329656 | 0.763 | 0.409 | 1.10E-12 | mDC_UCBMC |
| ATP6AP2  | 3.12E-17 | 0.75706287 | 0.712 | 0.365 | 1.11E-12 | mDC_UCBMC |
| SQLE     | 3.24E-17 | 0.88006439 | 0.28  | 0.084 | 1.15E-12 | mDC_UCBMC |
| NDRG1    | 3.30E-17 | 0.67745762 | 0.568 | 0.256 | 1.17E-12 | mDC_UCBMC |
| FOCAD    | 3.32E-17 | 1.27368152 | 0.25  | 0.073 | 1.18E-12 | mDC_UCBMC |
| EIF2AK4  | 3.33E-17 | 0.91003976 | 0.466 | 0.202 | 1.18E-12 | mDC_UCBMC |
| CPSF3    | 3.37E-17 | 0.98407388 | 0.411 | 0.166 | 1.20E-12 | mDC_UCBMC |
| BTBD10   | 3.38E-17 | 1.07452731 | 0.364 | 0.136 | 1.20E-12 | mDC_UCBMC |
| THOC2    | 3.59E-17 | 0.89201775 | 0.496 | 0.231 | 1.27E-12 | mDC_UCBMC |
| BRWD1    | 3.61E-17 | 0.84949846 | 0.462 | 0.198 | 1.28E-12 | mDC_UCBMC |
| TMEM135  | 3.66E-17 | 1.00069175 | 0.326 | 0.113 | 1.30E-12 | mDC_UCBMC |
| TBK1     | 3.72E-17 | 1.02298991 | 0.318 | 0.111 | 1.32E-12 | mDC_UCBMC |
| IGHMBP2  | 3.81E-17 | 0.98720629 | 0.39  | 0.151 | 1.35E-12 | mDC_UCBMC |
| NAV1     | 3.88E-17 | 0.51917282 | 0.513 | 0.222 | 1.37E-12 | mDC_UCBMC |

|                   |          |            |       |       |          |           |
|-------------------|----------|------------|-------|-------|----------|-----------|
| ME2               | 3.96E-17 | 0.90382654 | 0.525 | 0.246 | 1.40E-12 | mDC_UCBMC |
| USP7              | 4.10E-17 | 1.00220073 | 0.369 | 0.142 | 1.45E-12 | mDC_UCBMC |
| MVB12B            | 4.15E-17 | 1.1576974  | 0.347 | 0.128 | 1.47E-12 | mDC_UCBMC |
| LSG1              | 4.19E-17 | 1.17736775 | 0.284 | 0.09  | 1.49E-12 | mDC_UCBMC |
| SMYD3             | 4.25E-17 | 0.94826354 | 0.53  | 0.257 | 1.51E-12 | mDC_UCBMC |
| EHMT1             | 4.26E-17 | 0.68816655 | 0.466 | 0.199 | 1.51E-12 | mDC_UCBMC |
| LIMD1             | 4.52E-17 | 0.71571374 | 0.364 | 0.136 | 1.60E-12 | mDC_UCBMC |
| P4HB              | 4.59E-17 | 0.79035899 | 0.619 | 0.317 | 1.63E-12 | mDC_UCBMC |
| RTTN              | 4.63E-17 | 0.73019981 | 0.314 | 0.108 | 1.64E-12 | mDC_UCBMC |
| RSBN1             | 4.99E-17 | 1.28168515 | 0.292 | 0.097 | 1.77E-12 | mDC_UCBMC |
| H2AFY             | 5.09E-17 | 0.56095868 | 0.958 | 0.634 | 1.80E-12 | mDC_UCBMC |
| CTDSP2            | 5.31E-17 | 0.9702736  | 0.322 | 0.112 | 1.88E-12 | mDC_UCBMC |
| PPP1CA            | 5.53E-17 | 0.52088867 | 0.801 | 0.414 | 1.96E-12 | mDC_UCBMC |
| CXXC5             | 5.83E-17 | 1.09395898 | 0.297 | 0.099 | 2.07E-12 | mDC_UCBMC |
| ALKBH5            | 5.90E-17 | 0.72797966 | 0.352 | 0.125 | 2.09E-12 | mDC_UCBMC |
| BCL2              | 5.94E-17 | 0.95014057 | 0.428 | 0.18  | 2.11E-12 | mDC_UCBMC |
| LEMD3             | 5.97E-17 | 0.73563166 | 0.394 | 0.154 | 2.12E-12 | mDC_UCBMC |
| INTS8             | 6.05E-17 | 1.11333859 | 0.284 | 0.092 | 2.15E-12 | mDC_UCBMC |
| GAK               | 6.08E-17 | 0.56950538 | 0.407 | 0.161 | 2.15E-12 | mDC_UCBMC |
| MAP3K20           | 6.15E-17 | 0.72858349 | 0.572 | 0.277 | 2.18E-12 | mDC_UCBMC |
| SF1               | 6.18E-17 | 0.71705319 | 0.682 | 0.341 | 2.19E-12 | mDC_UCBMC |
| NHSL1             | 6.37E-17 | 0.96516099 | 0.331 | 0.118 | 2.26E-12 | mDC_UCBMC |
| PALM2AKAP2        | 6.42E-17 | 0.91148728 | 0.305 | 0.102 | 2.28E-12 | mDC_UCBMC |
| PIGA              | 6.85E-17 | 1.04347404 | 0.292 | 0.096 | 2.43E-12 | mDC_UCBMC |
| ZNF236            | 6.91E-17 | 0.75589724 | 0.28  | 0.088 | 2.45E-12 | mDC_UCBMC |
| CSNK1G1           | 6.91E-17 | 0.60973244 | 0.475 | 0.209 | 2.45E-12 | mDC_UCBMC |
| KIF13B            | 7.11E-17 | 0.6563452  | 0.373 | 0.141 | 2.52E-12 | mDC_UCBMC |
| UBE2R2            | 7.15E-17 | 0.44305355 | 0.619 | 0.289 | 2.53E-12 | mDC_UCBMC |
| SEC24A            | 7.19E-17 | 0.6766111  | 0.28  | 0.088 | 2.55E-12 | mDC_UCBMC |
| MIPEP             | 7.28E-17 | 1.28485457 | 0.322 | 0.113 | 2.58E-12 | mDC_UCBMC |
| ENSMUG00000049151 | 7.43E-17 | 0.44332808 | 0.996 | 0.901 | 2.63E-12 | mDC_UCBMC |
| BORCS5            | 7.44E-17 | 0.21904674 | 0.47  | 0.195 | 2.64E-12 | mDC_UCBMC |
| MOB2              | 7.56E-17 | 0.80626919 | 0.483 | 0.205 | 2.68E-12 | mDC_UCBMC |

|                    |          |            |       |       |          |           |
|--------------------|----------|------------|-------|-------|----------|-----------|
| KLHL18             | 7.70E-17 | 0.69925188 | 0.364 | 0.134 | 2.73E-12 | mDC_UCBMC |
| HACD4              | 7.90E-17 | 0.62996522 | 0.699 | 0.355 | 2.80E-12 | mDC_UCBMC |
| KATNIP             | 8.30E-17 | 1.15109093 | 0.25  | 0.075 | 2.94E-12 | mDC_UCBMC |
| SLC7A1             | 8.32E-17 | 0.94148968 | 0.275 | 0.087 | 2.95E-12 | mDC_UCBMC |
| IPO11              | 8.38E-17 | 1.13624099 | 0.297 | 0.1   | 2.97E-12 | mDC_UCBMC |
| MICAL2             | 8.41E-17 | 0.51408444 | 0.542 | 0.247 | 2.98E-12 | mDC_UCBMC |
| GLYR1              | 8.58E-17 | 0.69775514 | 0.466 | 0.201 | 3.04E-12 | mDC_UCBMC |
| C15H9orf78         | 8.74E-17 | 0.65311633 | 0.699 | 0.349 | 3.10E-12 | mDC_UCBMC |
| RBM26              | 8.86E-17 | 0.78392534 | 0.504 | 0.224 | 3.14E-12 | mDC_UCBMC |
| STK40              | 8.93E-17 | 0.64499998 | 0.453 | 0.191 | 3.16E-12 | mDC_UCBMC |
| ENSMMUG00000059977 | 9.00E-17 | 0.80943832 | 0.47  | 0.202 | 3.19E-12 | mDC_UCBMC |
| TXNRD1             | 9.06E-17 | 0.37001434 | 0.682 | 0.335 | 3.21E-12 | mDC_UCBMC |
| H2AC20             | 9.15E-17 | 0.67737105 | 0.534 | 0.239 | 3.24E-12 | mDC_UCBMC |
| PARN               | 9.31E-17 | 0.87123918 | 0.364 | 0.141 | 3.30E-12 | mDC_UCBMC |
| PHF21A             | 9.45E-17 | 0.47229374 | 0.521 | 0.228 | 3.35E-12 | mDC_UCBMC |
| FAM241A            | 9.56E-17 | 0.94845474 | 0.394 | 0.157 | 3.39E-12 | mDC_UCBMC |
| XPO6               | 9.75E-17 | 0.58009366 | 0.597 | 0.293 | 3.46E-12 | mDC_UCBMC |
| IWS1               | 9.78E-17 | 0.53531899 | 0.564 | 0.257 | 3.47E-12 | mDC_UCBMC |
| KLHL23             | 1.01E-16 | 0.63161208 | 0.864 | 0.53  | 3.58E-12 | mDC_UCBMC |
| DOCK11             | 1.01E-16 | 0.51772947 | 0.593 | 0.29  | 3.59E-12 | mDC_UCBMC |
| MIDEAS             | 1.05E-16 | 0.54458468 | 0.555 | 0.261 | 3.72E-12 | mDC_UCBMC |
| HPS3               | 1.05E-16 | 0.66529934 | 0.576 | 0.271 | 3.72E-12 | mDC_UCBMC |
| ANKRD13C           | 1.06E-16 | 0.83008117 | 0.339 | 0.121 | 3.75E-12 | mDC_UCBMC |
| CCNC               | 1.06E-16 | 0.88194529 | 0.394 | 0.152 | 3.76E-12 | mDC_UCBMC |
| USP25              | 1.07E-16 | 0.65433831 | 0.419 | 0.171 | 3.77E-12 | mDC_UCBMC |
| NUCB2              | 1.10E-16 | 1.02560225 | 0.314 | 0.106 | 3.91E-12 | mDC_UCBMC |
| PHF14              | 1.11E-16 | 0.8406945  | 0.436 | 0.182 | 3.92E-12 | mDC_UCBMC |
| ELF2               | 1.15E-16 | 0.63500492 | 0.551 | 0.258 | 4.07E-12 | mDC_UCBMC |
| TCOF1              | 1.19E-16 | 0.70564579 | 0.432 | 0.179 | 4.22E-12 | mDC_UCBMC |
| PITPNB             | 1.19E-16 | 0.66317688 | 0.547 | 0.253 | 4.23E-12 | mDC_UCBMC |
| UTP18              | 1.26E-16 | 1.19867084 | 0.331 | 0.122 | 4.47E-12 | mDC_UCBMC |
| GTF2H1             | 1.26E-16 | 1.00587123 | 0.364 | 0.14  | 4.47E-12 | mDC_UCBMC |
| RRBP1              | 1.34E-16 | 0.2618331  | 0.555 | 0.244 | 4.74E-12 | mDC_UCBMC |

|                     |          |            |       |       |          |           |
|---------------------|----------|------------|-------|-------|----------|-----------|
| RAP1GAP2            | 1.35E-16 | 0.58431492 | 0.39  | 0.152 | 4.80E-12 | mDC_UCBMC |
| ACBD6               | 1.38E-16 | 0.75641612 | 0.466 | 0.2   | 4.88E-12 | mDC_UCBMC |
| TRPC4AP             | 1.42E-16 | 0.59361545 | 0.462 | 0.196 | 5.02E-12 | mDC_UCBMC |
| ZNF700              | 1.46E-16 | 0.77001235 | 0.356 | 0.13  | 5.18E-12 | mDC_UCBMC |
| FLNA                | 1.47E-16 | 0.47031142 | 0.661 | 0.321 | 5.20E-12 | mDC_UCBMC |
| RIT1                | 1.53E-16 | 0.9307309  | 0.292 | 0.096 | 5.43E-12 | mDC_UCBMC |
| THOC5               | 1.61E-16 | 0.88477784 | 0.339 | 0.122 | 5.71E-12 | mDC_UCBMC |
| RBM7                | 1.67E-16 | 0.91902308 | 0.343 | 0.127 | 5.91E-12 | mDC_UCBMC |
| PCCB                | 1.67E-16 | 1.12899013 | 0.254 | 0.075 | 5.92E-12 | mDC_UCBMC |
| ENSMMUG000000064749 | 1.71E-16 | 0.93066712 | 0.267 | 0.082 | 6.07E-12 | mDC_UCBMC |
| INTS10              | 1.77E-16 | 1.04827017 | 0.267 | 0.083 | 6.29E-12 | mDC_UCBMC |
| SLC25A44            | 1.78E-16 | 1.18396677 | 0.288 | 0.094 | 6.30E-12 | mDC_UCBMC |
| NRROS               | 1.84E-16 | 0.61619708 | 0.737 | 0.409 | 6.52E-12 | mDC_UCBMC |
| SBNO1               | 1.97E-16 | 0.54948864 | 0.415 | 0.166 | 6.98E-12 | mDC_UCBMC |
| ENSMMUG000000009018 | 1.98E-16 | 1.03853017 | 0.292 | 0.098 | 7.01E-12 | mDC_UCBMC |
| CD1C                | 2.02E-16 | 0.72524129 | 0.602 | 0.293 | 7.15E-12 | mDC_UCBMC |
| PAFAH1B2            | 2.02E-16 | 0.74220601 | 0.381 | 0.148 | 7.16E-12 | mDC_UCBMC |
| TRMU                | 2.02E-16 | 0.75803915 | 0.428 | 0.178 | 7.17E-12 | mDC_UCBMC |
| R3HDM2              | 2.03E-16 | 0.67073343 | 0.436 | 0.188 | 7.20E-12 | mDC_UCBMC |
| BABAM2              | 2.05E-16 | 0.45261724 | 0.657 | 0.333 | 7.25E-12 | mDC_UCBMC |
| MAP3K2              | 2.05E-16 | 0.68620468 | 0.352 | 0.13  | 7.25E-12 | mDC_UCBMC |
| EDEM1               | 2.07E-16 | 0.37045701 | 0.678 | 0.335 | 7.33E-12 | mDC_UCBMC |
| KLF7                | 2.07E-16 | 0.54763956 | 0.466 | 0.195 | 7.34E-12 | mDC_UCBMC |
| USP37               | 2.11E-16 | 0.51801429 | 0.462 | 0.206 | 7.47E-12 | mDC_UCBMC |
| RASSF3              | 2.21E-16 | 0.48074638 | 0.462 | 0.196 | 7.83E-12 | mDC_UCBMC |
| RASGEF1B            | 2.26E-16 | 0.12967332 | 0.784 | 0.377 | 8.02E-12 | mDC_UCBMC |
| TRIM72              | 2.29E-16 | 0.55233008 | 0.725 | 0.4   | 8.10E-12 | mDC_UCBMC |
| MED25               | 2.43E-16 | 1.0077456  | 0.305 | 0.105 | 8.61E-12 | mDC_UCBMC |
| AGPAT1              | 2.48E-16 | 0.62304189 | 0.403 | 0.156 | 8.78E-12 | mDC_UCBMC |
| MYO9A               | 2.48E-16 | 0.62327815 | 0.462 | 0.198 | 8.79E-12 | mDC_UCBMC |
| PHF8                | 2.49E-16 | 1.16526907 | 0.301 | 0.104 | 8.84E-12 | mDC_UCBMC |
| LARP4               | 2.51E-16 | 0.74603759 | 0.449 | 0.192 | 8.88E-12 | mDC_UCBMC |
| TRNT1               | 2.55E-16 | 1.43226706 | 0.254 | 0.079 | 9.05E-12 | mDC_UCBMC |

|            |          |            |       |       |          |           |
|------------|----------|------------|-------|-------|----------|-----------|
| TMOD3      | 2.57E-16 | 0.5002462  | 0.729 | 0.384 | 9.11E-12 | mDC_UCBMC |
| C7H15orf39 | 2.66E-16 | 0.65930443 | 0.432 | 0.177 | 9.43E-12 | mDC_UCBMC |
| CARD11     | 2.75E-16 | 0.63090415 | 0.398 | 0.158 | 9.73E-12 | mDC_UCBMC |
| CITED1     | 2.91E-16 | 0.99493009 | 0.36  | 0.141 | 1.03E-11 | mDC_UCBMC |
| SLC35E1    | 3.02E-16 | 0.78160314 | 0.436 | 0.184 | 1.07E-11 | mDC_UCBMC |
| TIGAR      | 3.12E-16 | 0.54625899 | 0.64  | 0.316 | 1.10E-11 | mDC_UCBMC |
| C4H6orf62  | 3.14E-16 | 0.46720383 | 0.572 | 0.264 | 1.11E-11 | mDC_UCBMC |
| GRSF1      | 3.14E-16 | 1.40768583 | 0.301 | 0.106 | 1.11E-11 | mDC_UCBMC |
| ARID4A     | 3.18E-16 | 0.97432974 | 0.377 | 0.148 | 1.13E-11 | mDC_UCBMC |
| NKTR       | 3.33E-16 | 0.71855812 | 0.445 | 0.199 | 1.18E-11 | mDC_UCBMC |
| NET1       | 3.33E-16 | 0.83663224 | 0.322 | 0.111 | 1.18E-11 | mDC_UCBMC |
| CEP192     | 3.37E-16 | 0.43720925 | 0.521 | 0.236 | 1.19E-11 | mDC_UCBMC |
| ATRX       | 3.37E-16 | 0.5235861  | 0.682 | 0.349 | 1.19E-11 | mDC_UCBMC |
| GMFB       | 3.49E-16 | 0.81830081 | 0.335 | 0.121 | 1.24E-11 | mDC_UCBMC |
| RPS14      | 3.55E-16 | 0.33578168 | 1     | 0.93  | 1.26E-11 | mDC_UCBMC |
| ZC3H12C    | 3.57E-16 | 1.14146879 | 0.339 | 0.128 | 1.26E-11 | mDC_UCBMC |
| ZNF609     | 3.63E-16 | 0.34456875 | 0.597 | 0.283 | 1.29E-11 | mDC_UCBMC |
| LUC7L      | 3.86E-16 | 0.71952341 | 0.445 | 0.195 | 1.37E-11 | mDC_UCBMC |
| TEX264     | 3.87E-16 | 0.81831596 | 0.428 | 0.176 | 1.37E-11 | mDC_UCBMC |
| CEP128     | 3.92E-16 | 0.68633349 | 0.318 | 0.11  | 1.39E-11 | mDC_UCBMC |
| NCAPD3     | 3.96E-16 | 0.75974856 | 0.326 | 0.116 | 1.40E-11 | mDC_UCBMC |
| MTR        | 4.00E-16 | 1.18511016 | 0.25  | 0.076 | 1.42E-11 | mDC_UCBMC |
| PPP2R2D    | 4.11E-16 | 0.86628538 | 0.377 | 0.151 | 1.46E-11 | mDC_UCBMC |
| CAMTA1     | 4.37E-16 | 0.53964802 | 0.869 | 0.506 | 1.55E-11 | mDC_UCBMC |
| TRIM44     | 4.41E-16 | 0.6135423  | 0.445 | 0.194 | 1.56E-11 | mDC_UCBMC |
| RALY       | 4.47E-16 | 0.57225561 | 0.585 | 0.283 | 1.58E-11 | mDC_UCBMC |
| DPM1       | 4.50E-16 | 0.95343626 | 0.331 | 0.122 | 1.60E-11 | mDC_UCBMC |
| KLF13      | 4.53E-16 | 1.06640262 | 0.284 | 0.095 | 1.61E-11 | mDC_UCBMC |
| N4BP1      | 4.57E-16 | 0.85334382 | 0.322 | 0.116 | 1.62E-11 | mDC_UCBMC |
| TCF25      | 4.63E-16 | 0.56796439 | 0.661 | 0.331 | 1.64E-11 | mDC_UCBMC |
| CNOT6L     | 4.67E-16 | 0.52228242 | 0.644 | 0.33  | 1.66E-11 | mDC_UCBMC |
| TOP1       | 4.71E-16 | 0.63932452 | 0.775 | 0.44  | 1.67E-11 | mDC_UCBMC |
| ABCD3      | 4.75E-16 | 1.1141635  | 0.263 | 0.083 | 1.68E-11 | mDC_UCBMC |

|                    |          |            |       |       |          |           |
|--------------------|----------|------------|-------|-------|----------|-----------|
| ATM                | 4.86E-16 | 1.08963659 | 0.331 | 0.122 | 1.72E-11 | mDC_UCBMC |
| SP4                | 5.26E-16 | 0.57592093 | 0.381 | 0.147 | 1.86E-11 | mDC_UCBMC |
| ATP8B4             | 5.27E-16 | 0.68187261 | 0.339 | 0.123 | 1.87E-11 | mDC_UCBMC |
| CNTRL              | 5.33E-16 | 0.53541847 | 0.513 | 0.228 | 1.89E-11 | mDC_UCBMC |
| TLN1               | 5.47E-16 | 0.63812173 | 0.881 | 0.521 | 1.94E-11 | mDC_UCBMC |
| MINDY3             | 5.67E-16 | 1.4724699  | 0.267 | 0.086 | 2.01E-11 | mDC_UCBMC |
| ATXN1              | 5.85E-16 | 0.23477034 | 0.513 | 0.23  | 2.07E-11 | mDC_UCBMC |
| PPP6R3             | 5.97E-16 | 0.40742808 | 0.597 | 0.29  | 2.12E-11 | mDC_UCBMC |
| PI4KA              | 6.69E-16 | 0.74885884 | 0.297 | 0.104 | 2.37E-11 | mDC_UCBMC |
| CLSTN1             | 6.91E-16 | 0.77055887 | 0.373 | 0.143 | 2.45E-11 | mDC_UCBMC |
| NAB1               | 6.92E-16 | 0.95163045 | 0.28  | 0.09  | 2.45E-11 | mDC_UCBMC |
| CAND1              | 6.95E-16 | 0.57846437 | 0.572 | 0.263 | 2.46E-11 | mDC_UCBMC |
| SMARCC1            | 6.95E-16 | 0.5912941  | 0.61  | 0.305 | 2.46E-11 | mDC_UCBMC |
| NDFIP1             | 6.97E-16 | 0.72910458 | 0.581 | 0.279 | 2.47E-11 | mDC_UCBMC |
| ENSMMUG00000055687 | 7.16E-16 | 0.55693177 | 0.534 | 0.242 | 2.54E-11 | mDC_UCBMC |
| EIF4G2             | 7.23E-16 | 0.52141775 | 0.886 | 0.527 | 2.56E-11 | mDC_UCBMC |
| HLCS               | 7.29E-16 | 1.30224382 | 0.254 | 0.079 | 2.58E-11 | mDC_UCBMC |
| TOX4               | 7.44E-16 | 0.74540643 | 0.479 | 0.214 | 2.64E-11 | mDC_UCBMC |
| HMGXB4             | 7.56E-16 | 1.18616993 | 0.292 | 0.102 | 2.68E-11 | mDC_UCBMC |
| BTBD7              | 7.61E-16 | 0.93100956 | 0.343 | 0.131 | 2.70E-11 | mDC_UCBMC |
| SEPTIN11           | 7.73E-16 | 0.58219964 | 0.737 | 0.405 | 2.74E-11 | mDC_UCBMC |
| ANGEL2             | 7.82E-16 | 0.97125782 | 0.258 | 0.081 | 2.77E-11 | mDC_UCBMC |
| ENSMMUG00000013439 | 8.03E-16 | 1.063287   | 0.254 | 0.079 | 2.84E-11 | mDC_UCBMC |
| ZC3H11A            | 8.44E-16 | 0.35508186 | 0.581 | 0.267 | 2.99E-11 | mDC_UCBMC |
| FMC1-LUC7L2        | 8.65E-16 | 0.60176216 | 0.856 | 0.519 | 3.07E-11 | mDC_UCBMC |
| DNAJB6             | 8.75E-16 | 0.48132282 | 0.831 | 0.47  | 3.10E-11 | mDC_UCBMC |
| HERPUD2            | 8.89E-16 | 0.91009571 | 0.339 | 0.129 | 3.15E-11 | mDC_UCBMC |
| TUT7               | 8.90E-16 | 0.39687296 | 0.716 | 0.38  | 3.15E-11 | mDC_UCBMC |
| IRF2BP2            | 9.00E-16 | 0.69877579 | 0.547 | 0.261 | 3.19E-11 | mDC_UCBMC |
| ITFG2              | 9.30E-16 | 0.92180076 | 0.394 | 0.164 | 3.30E-11 | mDC_UCBMC |
| CCDC84             | 9.79E-16 | 0.73541946 | 0.292 | 0.098 | 3.47E-11 | mDC_UCBMC |
| FCHSD2             | 1.00E-15 | 0.22496748 | 0.708 | 0.359 | 3.54E-11 | mDC_UCBMC |
| TRIO               | 1.01E-15 | 0.22905643 | 0.767 | 0.405 | 3.59E-11 | mDC_UCBMC |



|           |          |            |       |       |          |           |
|-----------|----------|------------|-------|-------|----------|-----------|
| RNF115    | 1.06E-15 | 0.76400316 | 0.394 | 0.16  | 3.74E-11 | mDC_UCBMC |
| KCNQ1     | 1.11E-15 | 0.6782091  | 0.466 | 0.208 | 3.92E-11 | mDC_UCBMC |
| EIF4A2    | 1.14E-15 | 0.57687721 | 0.716 | 0.361 | 4.04E-11 | mDC_UCBMC |
| UBTF      | 1.17E-15 | 0.7603909  | 0.369 | 0.143 | 4.15E-11 | mDC_UCBMC |
| IKZF1     | 1.19E-15 | 0.38656683 | 0.708 | 0.37  | 4.21E-11 | mDC_UCBMC |
| ZZEF1     | 1.21E-15 | 0.82480307 | 0.386 | 0.156 | 4.27E-11 | mDC_UCBMC |
| FGD3      | 1.25E-15 | 0.71829739 | 0.424 | 0.182 | 4.42E-11 | mDC_UCBMC |
| SND1      | 1.29E-15 | 0.50273841 | 0.703 | 0.381 | 4.56E-11 | mDC_UCBMC |
| ATP6V0A1  | 1.29E-15 | 0.45415444 | 0.487 | 0.218 | 4.56E-11 | mDC_UCBMC |
| P2RX4     | 1.35E-15 | 0.91614832 | 0.356 | 0.139 | 4.77E-11 | mDC_UCBMC |
| EPS15L1   | 1.35E-15 | 0.25989928 | 0.53  | 0.242 | 4.80E-11 | mDC_UCBMC |
| HNRNPA2B1 | 1.39E-15 | 0.46922377 | 0.992 | 0.806 | 4.92E-11 | mDC_UCBMC |
| TOP2B     | 1.40E-15 | 0.58582142 | 0.534 | 0.246 | 4.96E-11 | mDC_UCBMC |
| PPIP5K2   | 1.41E-15 | 0.82241908 | 0.424 | 0.178 | 4.98E-11 | mDC_UCBMC |
| ATP6V1H   | 1.46E-15 | 0.61600796 | 0.475 | 0.21  | 5.17E-11 | mDC_UCBMC |
| TMED5     | 1.46E-15 | 0.61283389 | 0.521 | 0.236 | 5.18E-11 | mDC_UCBMC |
| RGS12     | 1.50E-15 | 0.61641534 | 0.39  | 0.155 | 5.32E-11 | mDC_UCBMC |
| PPM1E     | 1.52E-15 | 0.61622098 | 0.445 | 0.189 | 5.39E-11 | mDC_UCBMC |
| NFIL3     | 1.56E-15 | 0.64832563 | 0.381 | 0.15  | 5.51E-11 | mDC_UCBMC |
| ANAPC1    | 1.56E-15 | 1.26006134 | 0.254 | 0.081 | 5.51E-11 | mDC_UCBMC |
| TERF1     | 1.57E-15 | 0.9957101  | 0.326 | 0.122 | 5.56E-11 | mDC_UCBMC |
| MBNL2     | 1.59E-15 | 0.72528371 | 0.403 | 0.166 | 5.62E-11 | mDC_UCBMC |
| AKNA      | 1.64E-15 | 0.54621128 | 0.483 | 0.21  | 5.80E-11 | mDC_UCBMC |
| RBM25     | 1.64E-15 | 0.5056077  | 0.725 | 0.387 | 5.82E-11 | mDC_UCBMC |
| UBXN4     | 1.69E-15 | 0.62770717 | 0.682 | 0.349 | 5.98E-11 | mDC_UCBMC |
| FARP2     | 1.70E-15 | 0.49787754 | 0.504 | 0.232 | 6.01E-11 | mDC_UCBMC |
| ZNF280D   | 1.81E-15 | 0.81863869 | 0.305 | 0.108 | 6.41E-11 | mDC_UCBMC |
| DDX3Y     | 1.81E-15 | 0.59496633 | 0.534 | 0.248 | 6.42E-11 | mDC_UCBMC |
| ABCE1     | 1.93E-15 | 0.65551097 | 0.568 | 0.272 | 6.82E-11 | mDC_UCBMC |
| C1GALT1   | 1.94E-15 | 0.88986576 | 0.47  | 0.216 | 6.86E-11 | mDC_UCBMC |
| NAA15     | 2.04E-15 | 0.59679579 | 0.441 | 0.192 | 7.22E-11 | mDC_UCBMC |
| DOP1B     | 2.10E-15 | 1.16491686 | 0.318 | 0.118 | 7.44E-11 | mDC_UCBMC |
| HNRNPR    | 2.22E-15 | 0.63246192 | 0.669 | 0.341 | 7.87E-11 | mDC_UCBMC |

|                    |          |            |       |       |          |           |
|--------------------|----------|------------|-------|-------|----------|-----------|
| MXD1               | 2.26E-15 | 0.39559998 | 0.466 | 0.197 | 8.00E-11 | mDC_UCBMC |
| SLC9A9             | 2.29E-15 | 0.27049319 | 0.915 | 0.581 | 8.10E-11 | mDC_UCBMC |
| ENSMMUG00000060576 | 2.43E-15 | 0.90062928 | 0.288 | 0.1   | 8.60E-11 | mDC_UCBMC |
| ANP32B             | 2.54E-15 | 0.65695344 | 0.792 | 0.432 | 8.99E-11 | mDC_UCBMC |
| PBRM1              | 2.54E-15 | 0.43988476 | 0.559 | 0.267 | 9.01E-11 | mDC_UCBMC |
| PRPF8              | 2.75E-15 | 0.79423016 | 0.576 | 0.29  | 9.74E-11 | mDC_UCBMC |
| HPCAL1             | 2.78E-15 | 0.61240268 | 0.453 | 0.198 | 9.87E-11 | mDC_UCBMC |
| ENSMMUG00000012537 | 2.93E-15 | 0.62219421 | 0.644 | 0.323 | 1.04E-10 | mDC_UCBMC |
| SGMS1              | 3.04E-15 | 0.48733352 | 0.428 | 0.185 | 1.08E-10 | mDC_UCBMC |
| UCK2               | 3.13E-15 | 0.91364142 | 0.309 | 0.11  | 1.11E-10 | mDC_UCBMC |
| ZNF207             | 3.40E-15 | 0.5463551  | 0.648 | 0.327 | 1.20E-10 | mDC_UCBMC |
| PSMD1              | 3.55E-15 | 0.79709099 | 0.428 | 0.186 | 1.26E-10 | mDC_UCBMC |
| SZRD1              | 3.59E-15 | 0.46418893 | 0.542 | 0.244 | 1.27E-10 | mDC_UCBMC |
| COPG2              | 3.65E-15 | 0.72620712 | 0.331 | 0.123 | 1.29E-10 | mDC_UCBMC |
| COX10              | 3.73E-15 | 1.04708761 | 0.292 | 0.104 | 1.32E-10 | mDC_UCBMC |
| UBE2Q2             | 3.77E-15 | 0.71097639 | 0.525 | 0.255 | 1.34E-10 | mDC_UCBMC |
| ERCC6L2            | 3.92E-15 | 1.02037141 | 0.322 | 0.123 | 1.39E-10 | mDC_UCBMC |
| UBA3               | 3.93E-15 | 0.82718083 | 0.386 | 0.154 | 1.39E-10 | mDC_UCBMC |
| PCMTD1             | 4.03E-15 | 0.70588353 | 0.559 | 0.278 | 1.43E-10 | mDC_UCBMC |
| UBE4A              | 4.08E-15 | 0.81830772 | 0.36  | 0.142 | 1.45E-10 | mDC_UCBMC |
| NUCKS1             | 4.11E-15 | 0.55767373 | 0.788 | 0.428 | 1.46E-10 | mDC_UCBMC |
| SIVA1              | 4.24E-15 | 0.82292917 | 0.419 | 0.182 | 1.50E-10 | mDC_UCBMC |
| ANAPC5             | 4.31E-15 | 0.83476127 | 0.347 | 0.134 | 1.53E-10 | mDC_UCBMC |
| MAFG               | 4.33E-15 | 1.1317604  | 0.25  | 0.079 | 1.53E-10 | mDC_UCBMC |
| RNF145             | 4.50E-15 | 1.15592016 | 0.386 | 0.165 | 1.59E-10 | mDC_UCBMC |
| DUSP10             | 4.52E-15 | 0.80052232 | 0.36  | 0.145 | 1.60E-10 | mDC_UCBMC |
| NT5C3A             | 4.65E-15 | 1.19230393 | 0.347 | 0.138 | 1.65E-10 | mDC_UCBMC |
| RTN4               | 4.72E-15 | 0.501198   | 0.619 | 0.322 | 1.67E-10 | mDC_UCBMC |
| FAM204A            | 4.84E-15 | 0.60984933 | 0.53  | 0.248 | 1.72E-10 | mDC_UCBMC |
| SHOC2              | 5.09E-15 | 0.50889102 | 0.686 | 0.367 | 1.80E-10 | mDC_UCBMC |
| ZEB2               | 5.38E-15 | 0.71794396 | 0.712 | 0.441 | 1.91E-10 | mDC_UCBMC |
| TMED2              | 5.49E-15 | 0.69023202 | 0.555 | 0.272 | 1.95E-10 | mDC_UCBMC |
| GNL1               | 5.54E-15 | 0.80714129 | 0.301 | 0.108 | 1.96E-10 | mDC_UCBMC |

|                     |          |            |       |       |          |           |
|---------------------|----------|------------|-------|-------|----------|-----------|
| C3H21orf91          | 5.67E-15 | 0.90751435 | 0.305 | 0.11  | 2.01E-10 | mDC_UCBMC |
| ENSMMUG00000005482  | 5.79E-15 | 0.6614837  | 0.386 | 0.156 | 2.05E-10 | mDC_UCBMC |
| KLF11               | 6.00E-15 | 1.00796887 | 0.28  | 0.096 | 2.13E-10 | mDC_UCBMC |
| PKNOX1              | 6.09E-15 | 0.82926952 | 0.288 | 0.104 | 2.16E-10 | mDC_UCBMC |
| TXLNA               | 6.18E-15 | 0.88133766 | 0.284 | 0.1   | 2.19E-10 | mDC_UCBMC |
| SYK                 | 6.21E-15 | 0.5107944  | 0.674 | 0.344 | 2.20E-10 | mDC_UCBMC |
| ACAP2               | 6.24E-15 | 0.39964242 | 0.771 | 0.42  | 2.21E-10 | mDC_UCBMC |
| RFX7                | 6.25E-15 | 0.7313054  | 0.352 | 0.137 | 2.22E-10 | mDC_UCBMC |
| RBM19               | 6.32E-15 | 0.97030438 | 0.318 | 0.121 | 2.24E-10 | mDC_UCBMC |
| COMMD7              | 6.39E-15 | 0.58734315 | 0.517 | 0.239 | 2.26E-10 | mDC_UCBMC |
| AUH                 | 6.42E-15 | 0.86060569 | 0.292 | 0.104 | 2.27E-10 | mDC_UCBMC |
| APOOL               | 6.45E-15 | 0.7894663  | 0.373 | 0.15  | 2.28E-10 | mDC_UCBMC |
| ENSMMUG00000003412  | 6.46E-15 | 0.34305082 | 1     | 0.947 | 2.29E-10 | mDC_UCBMC |
| CS                  | 6.53E-15 | 0.53757293 | 0.758 | 0.417 | 2.31E-10 | mDC_UCBMC |
| PSME3               | 6.59E-15 | 1.00194501 | 0.314 | 0.116 | 2.34E-10 | mDC_UCBMC |
| YLPM1               | 6.63E-15 | 1.06812385 | 0.318 | 0.12  | 2.35E-10 | mDC_UCBMC |
| PIGU                | 6.66E-15 | 0.73596647 | 0.271 | 0.09  | 2.36E-10 | mDC_UCBMC |
| HS2ST1              | 6.74E-15 | 0.75612766 | 0.364 | 0.148 | 2.39E-10 | mDC_UCBMC |
| ENSMMUG000000059322 | 6.80E-15 | 0.93931323 | 0.335 | 0.13  | 2.41E-10 | mDC_UCBMC |
| GSPT1               | 6.87E-15 | 0.64429148 | 0.347 | 0.136 | 2.44E-10 | mDC_UCBMC |
| LRRC59              | 6.98E-15 | 0.69843656 | 0.343 | 0.13  | 2.47E-10 | mDC_UCBMC |
| NIPA2               | 7.11E-15 | 0.53553322 | 0.585 | 0.291 | 2.52E-10 | mDC_UCBMC |
| RAB3GAP1            | 7.46E-15 | 0.38330774 | 0.525 | 0.238 | 2.64E-10 | mDC_UCBMC |
| ZMYND8              | 7.48E-15 | 0.78912683 | 0.386 | 0.163 | 2.65E-10 | mDC_UCBMC |
| SMC1A               | 8.05E-15 | 0.81509469 | 0.411 | 0.178 | 2.85E-10 | mDC_UCBMC |
| KANSL1L             | 8.46E-15 | 0.86583176 | 0.335 | 0.131 | 3.00E-10 | mDC_UCBMC |
| SDF2                | 9.53E-15 | 0.84878277 | 0.403 | 0.17  | 3.38E-10 | mDC_UCBMC |
| ERBIN               | 9.57E-15 | 0.36221475 | 0.725 | 0.376 | 3.39E-10 | mDC_UCBMC |
| RBM10               | 9.61E-15 | 0.75914082 | 0.314 | 0.116 | 3.40E-10 | mDC_UCBMC |
| FYB1                | 9.86E-15 | 0.49786527 | 0.614 | 0.301 | 3.49E-10 | mDC_UCBMC |
| SLC30A7             | 1.00E-14 | 0.81589998 | 0.326 | 0.126 | 3.55E-10 | mDC_UCBMC |
| SPTAN1              | 1.03E-14 | 0.58334024 | 0.445 | 0.193 | 3.65E-10 | mDC_UCBMC |
| CDC5L               | 1.05E-14 | 0.69640763 | 0.496 | 0.238 | 3.71E-10 | mDC_UCBMC |

|          |          |            |       |       |          |           |
|----------|----------|------------|-------|-------|----------|-----------|
| GANAB    | 1.06E-14 | 0.7016846  | 0.352 | 0.134 | 3.75E-10 | mDC_UCBMC |
| IP6K2    | 1.09E-14 | 0.76757948 | 0.297 | 0.106 | 3.85E-10 | mDC_UCBMC |
| ZNF148   | 1.09E-14 | 0.52059014 | 0.483 | 0.223 | 3.87E-10 | mDC_UCBMC |
| METTL16  | 1.14E-14 | 0.66358129 | 0.322 | 0.122 | 4.03E-10 | mDC_UCBMC |
| ATR      | 1.14E-14 | 1.03329971 | 0.284 | 0.102 | 4.04E-10 | mDC_UCBMC |
| ZNF708   | 1.14E-14 | 1.0931239  | 0.267 | 0.091 | 4.04E-10 | mDC_UCBMC |
| SH2B3    | 1.16E-14 | 0.42741032 | 0.644 | 0.327 | 4.12E-10 | mDC_UCBMC |
| WASL     | 1.17E-14 | 0.70326636 | 0.415 | 0.182 | 4.16E-10 | mDC_UCBMC |
| HDAC4    | 1.23E-14 | 0.55321877 | 0.347 | 0.137 | 4.36E-10 | mDC_UCBMC |
| SYNCRIP  | 1.33E-14 | 0.56620909 | 0.712 | 0.381 | 4.71E-10 | mDC_UCBMC |
| CERS5    | 1.36E-14 | 0.83102305 | 0.339 | 0.128 | 4.82E-10 | mDC_UCBMC |
| SLC44A2  | 1.43E-14 | 0.8993237  | 0.305 | 0.112 | 5.07E-10 | mDC_UCBMC |
| POLR1B   | 1.45E-14 | 0.9007457  | 0.322 | 0.122 | 5.15E-10 | mDC_UCBMC |
| PHF10    | 1.48E-14 | 0.72614107 | 0.292 | 0.104 | 5.25E-10 | mDC_UCBMC |
| NPTN     | 1.48E-14 | 0.55065555 | 0.53  | 0.257 | 5.26E-10 | mDC_UCBMC |
| REST     | 1.56E-14 | 0.81513441 | 0.318 | 0.12  | 5.53E-10 | mDC_UCBMC |
| ARHGAP30 | 1.58E-14 | 0.37675708 | 0.64  | 0.325 | 5.60E-10 | mDC_UCBMC |
| ANKRD10  | 1.59E-14 | 0.47032804 | 0.61  | 0.303 | 5.65E-10 | mDC_UCBMC |
| RPN1     | 1.64E-14 | 0.45552814 | 0.708 | 0.368 | 5.82E-10 | mDC_UCBMC |
| KHDRBS1  | 1.66E-14 | 0.54028086 | 0.585 | 0.287 | 5.89E-10 | mDC_UCBMC |
| PCNP     | 1.68E-14 | 0.54545785 | 0.644 | 0.336 | 5.96E-10 | mDC_UCBMC |
| MNAT1    | 1.70E-14 | 0.63451815 | 0.47  | 0.209 | 6.03E-10 | mDC_UCBMC |
| HECTD1   | 1.70E-14 | 0.73681566 | 0.428 | 0.186 | 6.03E-10 | mDC_UCBMC |
| RPIA     | 1.72E-14 | 1.0797274  | 0.36  | 0.15  | 6.10E-10 | mDC_UCBMC |
| PIK3C2A  | 1.73E-14 | 0.56254237 | 0.398 | 0.167 | 6.14E-10 | mDC_UCBMC |
| USP33    | 1.76E-14 | 0.73855579 | 0.369 | 0.149 | 6.23E-10 | mDC_UCBMC |
| NFKBIB   | 1.78E-14 | 0.64889451 | 0.445 | 0.197 | 6.30E-10 | mDC_UCBMC |
| DERA     | 1.80E-14 | 0.60730481 | 0.458 | 0.204 | 6.39E-10 | mDC_UCBMC |
| RAB3GAP2 | 1.83E-14 | 0.59219303 | 0.407 | 0.17  | 6.48E-10 | mDC_UCBMC |
| PIP4K2A  | 1.86E-14 | 0.39500474 | 0.703 | 0.376 | 6.58E-10 | mDC_UCBMC |
| SMN1     | 1.90E-14 | 0.72504612 | 0.504 | 0.24  | 6.74E-10 | mDC_UCBMC |
| PLEKHA5  | 1.91E-14 | 0.89803126 | 0.271 | 0.093 | 6.76E-10 | mDC_UCBMC |
| EHBP1    | 2.01E-14 | 0.76190212 | 0.326 | 0.126 | 7.14E-10 | mDC_UCBMC |

|                     |          |            |       |       |          |           |
|---------------------|----------|------------|-------|-------|----------|-----------|
| BNIP2               | 2.05E-14 | 0.61925155 | 0.5   | 0.231 | 7.26E-10 | mDC_UCBMC |
| SLC25A4             | 2.06E-14 | 0.62986924 | 0.521 | 0.248 | 7.30E-10 | mDC_UCBMC |
| RETN                | 2.08E-14 | 0.79146114 | 0.326 | 0.122 | 7.37E-10 | mDC_UCBMC |
| R3HDM1              | 2.13E-14 | 0.66290434 | 0.326 | 0.123 | 7.56E-10 | mDC_UCBMC |
| ESYT1               | 2.16E-14 | 0.54126757 | 0.508 | 0.239 | 7.66E-10 | mDC_UCBMC |
| AKAP17A             | 2.17E-14 | 0.836434   | 0.331 | 0.133 | 7.70E-10 | mDC_UCBMC |
| SRSF6               | 2.18E-14 | 0.39886903 | 0.695 | 0.362 | 7.74E-10 | mDC_UCBMC |
| PLA2G4A             | 2.20E-14 | 0.45220805 | 0.398 | 0.167 | 7.78E-10 | mDC_UCBMC |
| LYST                | 2.27E-14 | 0.47051153 | 0.47  | 0.212 | 8.04E-10 | mDC_UCBMC |
| ENSMMUG00000000478  | 2.28E-14 | 0.4480326  | 0.564 | 0.266 | 8.07E-10 | mDC_UCBMC |
| AGK                 | 2.34E-14 | 0.93760419 | 0.28  | 0.1   | 8.29E-10 | mDC_UCBMC |
| LPGAT1              | 2.42E-14 | 0.46985058 | 0.547 | 0.261 | 8.59E-10 | mDC_UCBMC |
| ZMYND11             | 2.44E-14 | 0.84817282 | 0.369 | 0.154 | 8.64E-10 | mDC_UCBMC |
| NEMF                | 2.44E-14 | 0.57252529 | 0.513 | 0.245 | 8.66E-10 | mDC_UCBMC |
| ATP11A              | 2.46E-14 | 0.27121395 | 0.453 | 0.198 | 8.72E-10 | mDC_UCBMC |
| BTBD3               | 2.48E-14 | 0.78087495 | 0.301 | 0.112 | 8.78E-10 | mDC_UCBMC |
| ATF7                | 2.53E-14 | 0.5967881  | 0.436 | 0.196 | 8.97E-10 | mDC_UCBMC |
| LRRC8D              | 2.57E-14 | 0.83921523 | 0.297 | 0.11  | 9.11E-10 | mDC_UCBMC |
| IFT88               | 2.58E-14 | 1.09417859 | 0.271 | 0.094 | 9.15E-10 | mDC_UCBMC |
| PANK3               | 2.64E-14 | 0.63302593 | 0.411 | 0.178 | 9.37E-10 | mDC_UCBMC |
| ARHGAP21            | 2.81E-14 | 0.9709906  | 0.297 | 0.11  | 9.96E-10 | mDC_UCBMC |
| MTMR1               | 2.82E-14 | 0.63554425 | 0.267 | 0.092 | 9.99E-10 | mDC_UCBMC |
| CHD8                | 2.85E-14 | 0.99441181 | 0.271 | 0.095 | 1.01E-09 | mDC_UCBMC |
| AEBP2               | 2.91E-14 | 0.3198943  | 0.5   | 0.229 | 1.03E-09 | mDC_UCBMC |
| RNF19A              | 2.92E-14 | 0.70364115 | 0.415 | 0.181 | 1.03E-09 | mDC_UCBMC |
| ABRAXAS2            | 2.97E-14 | 0.52648938 | 0.364 | 0.146 | 1.05E-09 | mDC_UCBMC |
| MAP4                | 2.98E-14 | 0.78206871 | 0.398 | 0.174 | 1.06E-09 | mDC_UCBMC |
| FBXW11              | 3.03E-14 | 0.46875574 | 0.572 | 0.287 | 1.07E-09 | mDC_UCBMC |
| MCU                 | 3.08E-14 | 0.55422049 | 0.377 | 0.16  | 1.09E-09 | mDC_UCBMC |
| WTAP                | 3.12E-14 | 0.43278054 | 0.746 | 0.407 | 1.10E-09 | mDC_UCBMC |
| ENSMMUG000000021425 | 3.13E-14 | 0.2764378  | 0.576 | 0.273 | 1.11E-09 | mDC_UCBMC |
| TANGO6              | 3.17E-14 | 0.57964842 | 0.373 | 0.155 | 1.12E-09 | mDC_UCBMC |
| SLC10A7             | 3.17E-14 | 0.8164081  | 0.292 | 0.105 | 1.12E-09 | mDC_UCBMC |

|                    |          |            |       |       |          |           |
|--------------------|----------|------------|-------|-------|----------|-----------|
| ST3GAL1            | 3.26E-14 | 0.61376883 | 0.419 | 0.182 | 1.16E-09 | mDC_UCBMC |
| WDR26              | 3.27E-14 | 0.41582309 | 0.419 | 0.18  | 1.16E-09 | mDC_UCBMC |
| KLHDC4             | 3.31E-14 | 0.97469281 | 0.25  | 0.083 | 1.17E-09 | mDC_UCBMC |
| TRIM22             | 3.51E-14 | 0.56359306 | 0.602 | 0.3   | 1.24E-09 | mDC_UCBMC |
| SDHB               | 3.56E-14 | 0.44512311 | 0.559 | 0.266 | 1.26E-09 | mDC_UCBMC |
| MAX                | 3.61E-14 | 0.55926154 | 0.572 | 0.287 | 1.28E-09 | mDC_UCBMC |
| CLIC4              | 3.62E-14 | 0.76895198 | 0.254 | 0.084 | 1.28E-09 | mDC_UCBMC |
| KIF16B             | 3.66E-14 | 0.21828838 | 0.436 | 0.192 | 1.30E-09 | mDC_UCBMC |
| ENSMMUG00000042837 | 3.80E-14 | 0.94362159 | 0.309 | 0.117 | 1.35E-09 | mDC_UCBMC |
| NCOR2              | 3.85E-14 | 0.79874777 | 0.301 | 0.115 | 1.36E-09 | mDC_UCBMC |
| KIAA1109           | 3.85E-14 | 1.0997936  | 0.288 | 0.106 | 1.37E-09 | mDC_UCBMC |
| DHX40              | 3.86E-14 | 0.87892343 | 0.318 | 0.122 | 1.37E-09 | mDC_UCBMC |
| ENSMMUG00000044284 | 3.90E-14 | 0.55519368 | 0.322 | 0.118 | 1.38E-09 | mDC_UCBMC |
| TARDBP             | 4.06E-14 | 0.59597031 | 0.436 | 0.194 | 1.44E-09 | mDC_UCBMC |
| COMMD1             | 4.18E-14 | 0.64298613 | 0.627 | 0.336 | 1.48E-09 | mDC_UCBMC |
| BRD4               | 4.19E-14 | 0.46520503 | 0.53  | 0.253 | 1.48E-09 | mDC_UCBMC |
| GTF3C1             | 4.34E-14 | 0.68349123 | 0.322 | 0.124 | 1.54E-09 | mDC_UCBMC |
| ST7L               | 4.36E-14 | 0.61229239 | 0.322 | 0.122 | 1.55E-09 | mDC_UCBMC |
| GLE1               | 4.41E-14 | 0.96164217 | 0.258 | 0.088 | 1.56E-09 | mDC_UCBMC |
| RAB14              | 4.47E-14 | 0.48444983 | 0.653 | 0.331 | 1.58E-09 | mDC_UCBMC |
| FAM91A1            | 4.53E-14 | 0.61204892 | 0.343 | 0.138 | 1.61E-09 | mDC_UCBMC |
| SIRT1              | 4.59E-14 | 1.09449656 | 0.305 | 0.118 | 1.63E-09 | mDC_UCBMC |
| ENSMMUG00000014862 | 4.63E-14 | 0.44261367 | 0.767 | 0.439 | 1.64E-09 | mDC_UCBMC |
| PPFIA1             | 4.66E-14 | 0.81785633 | 0.271 | 0.096 | 1.65E-09 | mDC_UCBMC |
| SAFB2              | 4.70E-14 | 0.54821628 | 0.483 | 0.223 | 1.67E-09 | mDC_UCBMC |
| EMC7               | 4.89E-14 | 0.62636563 | 0.513 | 0.244 | 1.73E-09 | mDC_UCBMC |
| POLDIP3            | 5.00E-14 | 0.71992208 | 0.326 | 0.127 | 1.77E-09 | mDC_UCBMC |
| SRSF10             | 5.10E-14 | 0.47009603 | 0.581 | 0.289 | 1.81E-09 | mDC_UCBMC |
| SPATA5             | 5.38E-14 | 0.7075077  | 0.356 | 0.148 | 1.91E-09 | mDC_UCBMC |
| SLC9A7             | 6.21E-14 | 0.46822878 | 0.419 | 0.184 | 2.20E-09 | mDC_UCBMC |
| VRK1               | 6.32E-14 | 0.75911902 | 0.352 | 0.142 | 2.24E-09 | mDC_UCBMC |
| EXOC1              | 6.32E-14 | 0.68055583 | 0.381 | 0.159 | 2.24E-09 | mDC_UCBMC |
| PER1               | 6.37E-14 | 0.50133425 | 0.602 | 0.309 | 2.26E-09 | mDC_UCBMC |

|                    |          |            |       |       |          |           |
|--------------------|----------|------------|-------|-------|----------|-----------|
| WIPF2              | 6.48E-14 | 0.71037808 | 0.352 | 0.145 | 2.30E-09 | mDC_UCBMC |
| TRMT10C            | 6.61E-14 | 0.63141877 | 0.508 | 0.24  | 2.34E-09 | mDC_UCBMC |
| TSPAN3             | 6.78E-14 | 0.84055858 | 0.347 | 0.142 | 2.40E-09 | mDC_UCBMC |
| PPIG               | 6.83E-14 | 0.58614158 | 0.674 | 0.356 | 2.42E-09 | mDC_UCBMC |
| PRR14L             | 6.85E-14 | 0.55361887 | 0.373 | 0.157 | 2.43E-09 | mDC_UCBMC |
| SNX2               | 6.85E-14 | 0.67047612 | 0.712 | 0.393 | 2.43E-09 | mDC_UCBMC |
| RIF1               | 6.89E-14 | 0.99210823 | 0.292 | 0.11  | 2.44E-09 | mDC_UCBMC |
| DNAJC24            | 6.90E-14 | 0.67266878 | 0.39  | 0.167 | 2.44E-09 | mDC_UCBMC |
| TCEA1              | 6.95E-14 | 0.56881033 | 0.72  | 0.386 | 2.46E-09 | mDC_UCBMC |
| SSRP1              | 7.04E-14 | 1.09575398 | 0.288 | 0.107 | 2.49E-09 | mDC_UCBMC |
| RPL26              | 7.05E-14 | 0.38080852 | 1     | 0.858 | 2.50E-09 | mDC_UCBMC |
| ENSMMUG00000058037 | 7.92E-14 | 0.62860069 | 0.542 | 0.267 | 2.81E-09 | mDC_UCBMC |
| EIF4G3             | 7.98E-14 | 0.37334893 | 0.449 | 0.203 | 2.83E-09 | mDC_UCBMC |
| SPTLC1             | 8.30E-14 | 0.69896185 | 0.309 | 0.118 | 2.94E-09 | mDC_UCBMC |
| HSPA14             | 8.47E-14 | 0.54908068 | 0.564 | 0.277 | 3.00E-09 | mDC_UCBMC |
| SPECC1L            | 8.50E-14 | 0.62307939 | 0.428 | 0.191 | 3.01E-09 | mDC_UCBMC |
| PCGF5              | 8.73E-14 | 0.79928137 | 0.352 | 0.142 | 3.09E-09 | mDC_UCBMC |
| MTMR14             | 8.96E-14 | 0.75199256 | 0.352 | 0.144 | 3.18E-09 | mDC_UCBMC |
| CAT                | 8.96E-14 | 0.55355833 | 0.695 | 0.363 | 3.18E-09 | mDC_UCBMC |
| BAZ2B              | 9.18E-14 | 0.20895533 | 0.585 | 0.287 | 3.25E-09 | mDC_UCBMC |
| AKAP1              | 9.63E-14 | 0.51602367 | 0.254 | 0.086 | 3.41E-09 | mDC_UCBMC |
| PI4K2B             | 1.01E-13 | 0.6347959  | 0.729 | 0.422 | 3.58E-09 | mDC_UCBMC |
| ARAF               | 1.03E-13 | 0.63257767 | 0.288 | 0.106 | 3.64E-09 | mDC_UCBMC |
| MED30              | 1.03E-13 | 0.93838101 | 0.39  | 0.17  | 3.65E-09 | mDC_UCBMC |
| NR2C2              | 1.06E-13 | 0.76880496 | 0.271 | 0.099 | 3.76E-09 | mDC_UCBMC |
| ASAH1              | 1.14E-13 | 0.93891995 | 0.331 | 0.129 | 4.03E-09 | mDC_UCBMC |
| NPEPPS             | 1.15E-13 | 0.41930295 | 0.407 | 0.176 | 4.07E-09 | mDC_UCBMC |
| RNF10              | 1.17E-13 | 0.5580116  | 0.492 | 0.23  | 4.16E-09 | mDC_UCBMC |
| PECAM1             | 1.18E-13 | 0.60086406 | 0.496 | 0.238 | 4.17E-09 | mDC_UCBMC |
| CHMP4B             | 1.20E-13 | 0.63338281 | 0.432 | 0.197 | 4.27E-09 | mDC_UCBMC |
| SMARCC2            | 1.22E-13 | 0.97416663 | 0.284 | 0.107 | 4.33E-09 | mDC_UCBMC |
| TRIM25             | 1.26E-13 | 0.47905    | 0.428 | 0.193 | 4.45E-09 | mDC_UCBMC |
| VPS4B              | 1.28E-13 | 0.57567103 | 0.525 | 0.253 | 4.52E-09 | mDC_UCBMC |

|                    |          |            |       |       |          |           |
|--------------------|----------|------------|-------|-------|----------|-----------|
| PRSS55             | 1.31E-13 | 0.58761372 | 0.339 | 0.137 | 4.63E-09 | mDC_UCBMC |
| CD69               | 1.35E-13 | 0.42456196 | 0.606 | 0.321 | 4.78E-09 | mDC_UCBMC |
| TSPAN14            | 1.36E-13 | 0.64082139 | 0.314 | 0.12  | 4.81E-09 | mDC_UCBMC |
| BMP2K              | 1.39E-13 | 0.6163645  | 0.445 | 0.204 | 4.92E-09 | mDC_UCBMC |
| TDRD3              | 1.39E-13 | 0.60137408 | 0.415 | 0.186 | 4.94E-09 | mDC_UCBMC |
| STK26              | 1.40E-13 | 0.76003129 | 0.28  | 0.101 | 4.97E-09 | mDC_UCBMC |
| HMGA1              | 1.47E-13 | 0.4288002  | 0.733 | 0.393 | 5.20E-09 | mDC_UCBMC |
| UBXN2A             | 1.52E-13 | 0.58343407 | 0.462 | 0.214 | 5.38E-09 | mDC_UCBMC |
| RNMT               | 1.54E-13 | 0.38761284 | 0.716 | 0.387 | 5.46E-09 | mDC_UCBMC |
| MAZ                | 1.58E-13 | 0.52976177 | 0.373 | 0.154 | 5.59E-09 | mDC_UCBMC |
| NRF1               | 1.63E-13 | 0.58409479 | 0.356 | 0.149 | 5.78E-09 | mDC_UCBMC |
| SLC25A37           | 1.68E-13 | 0.55687348 | 0.373 | 0.16  | 5.96E-09 | mDC_UCBMC |
| MAD1L1             | 1.75E-13 | 0.23696583 | 0.369 | 0.155 | 6.19E-09 | mDC_UCBMC |
| CALU               | 1.80E-13 | 0.77378603 | 0.377 | 0.162 | 6.38E-09 | mDC_UCBMC |
| MEF2D              | 1.82E-13 | 0.64570976 | 0.292 | 0.108 | 6.46E-09 | mDC_UCBMC |
| IGBP1              | 1.83E-13 | 0.6319309  | 0.614 | 0.322 | 6.47E-09 | mDC_UCBMC |
| KANSL2             | 1.84E-13 | 0.80049965 | 0.331 | 0.135 | 6.51E-09 | mDC_UCBMC |
| PPM1D              | 1.89E-13 | 0.73291215 | 0.28  | 0.102 | 6.69E-09 | mDC_UCBMC |
| TMEM248            | 1.90E-13 | 0.55120539 | 0.343 | 0.138 | 6.74E-09 | mDC_UCBMC |
| SCPEP1             | 1.96E-13 | 0.65694386 | 0.419 | 0.184 | 6.94E-09 | mDC_UCBMC |
| DPP8               | 2.02E-13 | 0.94213177 | 0.275 | 0.102 | 7.17E-09 | mDC_UCBMC |
| ENSMMUG00000063316 | 2.04E-13 | 0.442713   | 0.644 | 0.34  | 7.22E-09 | mDC_UCBMC |
| EBNA1BP2           | 2.08E-13 | 0.7116165  | 0.36  | 0.147 | 7.36E-09 | mDC_UCBMC |
| CMTM6              | 2.15E-13 | 0.55594911 | 0.746 | 0.434 | 7.63E-09 | mDC_UCBMC |
| BRWD3              | 2.18E-13 | 0.54202566 | 0.322 | 0.128 | 7.73E-09 | mDC_UCBMC |
| NRAS               | 2.21E-13 | 0.78197402 | 0.381 | 0.167 | 7.85E-09 | mDC_UCBMC |
| LY6D               | 2.22E-13 | 0.49611175 | 0.445 | 0.196 | 7.85E-09 | mDC_UCBMC |
| KATNA1             | 2.28E-13 | 0.72142345 | 0.403 | 0.176 | 8.07E-09 | mDC_UCBMC |
| CACYBP             | 2.46E-13 | 0.4959919  | 0.792 | 0.428 | 8.71E-09 | mDC_UCBMC |
| COPB1              | 2.50E-13 | 0.38920918 | 0.441 | 0.199 | 8.85E-09 | mDC_UCBMC |
| PRPF6              | 2.58E-13 | 0.62018533 | 0.504 | 0.236 | 9.15E-09 | mDC_UCBMC |
| USP6NL             | 2.61E-13 | 0.63647166 | 0.377 | 0.164 | 9.25E-09 | mDC_UCBMC |
| GIGYF2             | 2.64E-13 | 0.31966594 | 0.496 | 0.23  | 9.35E-09 | mDC_UCBMC |



|                    |          |            |       |       |          |           |
|--------------------|----------|------------|-------|-------|----------|-----------|
| TEC                | 2.69E-13 | 0.45401442 | 0.271 | 0.095 | 9.52E-09 | mDC_UCBMC |
| RTN1               | 2.69E-13 | 1.18661778 | 0.258 | 0.093 | 9.54E-09 | mDC_UCBMC |
| CARMIL1            | 2.72E-13 | 0.84843223 | 0.36  | 0.152 | 9.63E-09 | mDC_UCBMC |
| SLC39A11           | 2.73E-13 | 0.48444943 | 0.513 | 0.257 | 9.67E-09 | mDC_UCBMC |
| FNBP4              | 2.82E-13 | 0.49164735 | 0.462 | 0.211 | 9.97E-09 | mDC_UCBMC |
| ITGAV              | 2.88E-13 | 0.81599541 | 0.258 | 0.091 | 1.02E-08 | mDC_UCBMC |
| FKBP3              | 2.93E-13 | 0.44637317 | 0.644 | 0.335 | 1.04E-08 | mDC_UCBMC |
| KLF3               | 2.95E-13 | 0.52199345 | 0.475 | 0.225 | 1.04E-08 | mDC_UCBMC |
| NEPRO              | 3.04E-13 | 1.05969527 | 0.28  | 0.106 | 1.08E-08 | mDC_UCBMC |
| ENSMMUG00000050385 | 3.04E-13 | 0.65960424 | 0.47  | 0.22  | 1.08E-08 | mDC_UCBMC |
| KIAA1328           | 3.05E-13 | 0.83443932 | 0.356 | 0.15  | 1.08E-08 | mDC_UCBMC |
| NBR1               | 3.06E-13 | 0.5316512  | 0.445 | 0.207 | 1.08E-08 | mDC_UCBMC |
| SYNE3              | 3.06E-13 | 0.25820792 | 0.449 | 0.201 | 1.08E-08 | mDC_UCBMC |
| HMOX2              | 3.06E-13 | 0.44676481 | 0.852 | 0.504 | 1.09E-08 | mDC_UCBMC |
| AP2A2              | 3.07E-13 | 0.46544639 | 0.407 | 0.182 | 1.09E-08 | mDC_UCBMC |
| ACBD3              | 3.10E-13 | 0.93216524 | 0.284 | 0.107 | 1.10E-08 | mDC_UCBMC |
| TACC1              | 3.28E-13 | 0.26842074 | 0.669 | 0.348 | 1.16E-08 | mDC_UCBMC |
| DPH3               | 3.41E-13 | 0.48587261 | 0.479 | 0.222 | 1.21E-08 | mDC_UCBMC |
| PTK2B              | 3.43E-13 | 0.71395341 | 0.292 | 0.11  | 1.22E-08 | mDC_UCBMC |
| AARS1              | 3.59E-13 | 0.55524286 | 0.428 | 0.198 | 1.27E-08 | mDC_UCBMC |
| SLC12A9            | 3.68E-13 | 0.42838725 | 0.347 | 0.141 | 1.30E-08 | mDC_UCBMC |
| MYC                | 3.83E-13 | 1.08226503 | 0.258 | 0.092 | 1.36E-08 | mDC_UCBMC |
| GPR132             | 3.84E-13 | 0.42936788 | 0.551 | 0.273 | 1.36E-08 | mDC_UCBMC |
| AOPEP              | 4.04E-13 | 0.22968126 | 0.5   | 0.248 | 1.43E-08 | mDC_UCBMC |
| HIP1               | 4.04E-13 | 0.3917468  | 0.581 | 0.297 | 1.43E-08 | mDC_UCBMC |
| NSD1               | 4.17E-13 | 0.21676181 | 0.585 | 0.284 | 1.48E-08 | mDC_UCBMC |
| BLMH               | 4.20E-13 | 0.71245761 | 0.297 | 0.114 | 1.49E-08 | mDC_UCBMC |
| ZBTB1              | 4.25E-13 | 0.62383111 | 0.403 | 0.186 | 1.51E-08 | mDC_UCBMC |
| RAD51B             | 4.35E-13 | 0.29264028 | 0.458 | 0.212 | 1.54E-08 | mDC_UCBMC |
| LRIG1              | 4.44E-13 | 0.69147439 | 0.301 | 0.114 | 1.57E-08 | mDC_UCBMC |
| ITM2C              | 4.45E-13 | 0.70466691 | 0.39  | 0.163 | 1.58E-08 | mDC_UCBMC |
| IL7R               | 4.68E-13 | 0.36922433 | 0.343 | 0.14  | 1.66E-08 | mDC_UCBMC |
| ZNF277             | 4.69E-13 | 0.53863627 | 0.436 | 0.198 | 1.66E-08 | mDC_UCBMC |

|                   |          |            |       |       |          |           |
|-------------------|----------|------------|-------|-------|----------|-----------|
| HDAC1             | 4.73E-13 | 0.46973871 | 0.593 | 0.302 | 1.68E-08 | mDC_UCBMC |
| PAIP2             | 4.75E-13 | 0.43145302 | 0.835 | 0.528 | 1.68E-08 | mDC_UCBMC |
| PRKAG1            | 5.05E-13 | 0.79776439 | 0.347 | 0.148 | 1.79E-08 | mDC_UCBMC |
| WSB1              | 5.09E-13 | 0.51886772 | 0.78  | 0.462 | 1.80E-08 | mDC_UCBMC |
| YTHDF2            | 5.46E-13 | 0.56263922 | 0.415 | 0.187 | 1.93E-08 | mDC_UCBMC |
| OTULINL           | 5.47E-13 | 0.74893088 | 0.462 | 0.22  | 1.94E-08 | mDC_UCBMC |
| ZCCHC7            | 5.68E-13 | 0.42061075 | 0.542 | 0.271 | 2.01E-08 | mDC_UCBMC |
| HERC4             | 5.69E-13 | 0.46471541 | 0.394 | 0.174 | 2.02E-08 | mDC_UCBMC |
| GMPS              | 5.84E-13 | 0.63988401 | 0.403 | 0.181 | 2.07E-08 | mDC_UCBMC |
| HACD3             | 5.92E-13 | 1.22560847 | 0.25  | 0.089 | 2.10E-08 | mDC_UCBMC |
| GTF2E2            | 5.95E-13 | 0.72566434 | 0.398 | 0.179 | 2.11E-08 | mDC_UCBMC |
| VWA8              | 6.04E-13 | 0.6484702  | 0.258 | 0.093 | 2.14E-08 | mDC_UCBMC |
| ZSWIM4            | 6.13E-13 | 0.5541594  | 0.25  | 0.088 | 2.17E-08 | mDC_UCBMC |
| MIB1              | 6.20E-13 | 0.67288414 | 0.301 | 0.117 | 2.20E-08 | mDC_UCBMC |
| STK4              | 6.26E-13 | 0.42528692 | 0.746 | 0.412 | 2.22E-08 | mDC_UCBMC |
| TET3              | 6.44E-13 | 0.45213084 | 0.305 | 0.119 | 2.28E-08 | mDC_UCBMC |
| RAB18             | 6.59E-13 | 0.66337952 | 0.458 | 0.217 | 2.34E-08 | mDC_UCBMC |
| PADI2             | 6.73E-13 | 0.29971491 | 0.39  | 0.162 | 2.39E-08 | mDC_UCBMC |
| SEC13             | 6.75E-13 | 0.70250396 | 0.335 | 0.138 | 2.39E-08 | mDC_UCBMC |
| RRP1B             | 6.76E-13 | 0.77586687 | 0.318 | 0.126 | 2.39E-08 | mDC_UCBMC |
| IFT57             | 6.91E-13 | 0.80149889 | 0.28  | 0.102 | 2.45E-08 | mDC_UCBMC |
| MORF4L1           | 6.93E-13 | 0.45423285 | 0.903 | 0.589 | 2.46E-08 | mDC_UCBMC |
| NGLY1             | 7.07E-13 | 0.67081605 | 0.432 | 0.203 | 2.51E-08 | mDC_UCBMC |
| FMNL1             | 7.16E-13 | 0.42245759 | 0.284 | 0.107 | 2.54E-08 | mDC_UCBMC |
| RMND1             | 7.21E-13 | 0.97130063 | 0.28  | 0.106 | 2.55E-08 | mDC_UCBMC |
| FAM222B           | 7.24E-13 | 0.77557927 | 0.318 | 0.131 | 2.56E-08 | mDC_UCBMC |
| MKRN1             | 7.41E-13 | 0.78273187 | 0.39  | 0.177 | 2.62E-08 | mDC_UCBMC |
| URGCP             | 7.68E-13 | 0.39997804 | 0.648 | 0.344 | 2.72E-08 | mDC_UCBMC |
| ENSMUG00000017400 | 7.71E-13 | 0.57049674 | 0.28  | 0.104 | 2.73E-08 | mDC_UCBMC |
| EED               | 8.12E-13 | 0.4643291  | 0.407 | 0.181 | 2.88E-08 | mDC_UCBMC |
| FBXO42            | 8.32E-13 | 0.94666206 | 0.297 | 0.12  | 2.95E-08 | mDC_UCBMC |
| DGKZ              | 8.56E-13 | 0.40466527 | 0.309 | 0.12  | 3.03E-08 | mDC_UCBMC |
| HNRNPC            | 8.99E-13 | 0.33754136 | 0.915 | 0.599 | 3.18E-08 | mDC_UCBMC |

|          |          |            |       |       |          |           |
|----------|----------|------------|-------|-------|----------|-----------|
| SETD3    | 9.01E-13 | 0.72732639 | 0.326 | 0.133 | 3.19E-08 | mDC_UCBMC |
| FAM102B  | 9.39E-13 | 0.28534454 | 0.47  | 0.222 | 3.33E-08 | mDC_UCBMC |
| CYRIB    | 9.58E-13 | 0.41347901 | 0.928 | 0.669 | 3.39E-08 | mDC_UCBMC |
| VPS26C   | 9.71E-13 | 0.85654619 | 0.377 | 0.166 | 3.44E-08 | mDC_UCBMC |
| ARHGAP27 | 9.82E-13 | 0.71550507 | 0.263 | 0.094 | 3.48E-08 | mDC_UCBMC |
| SF3B1    | 1.02E-12 | 0.40514921 | 0.839 | 0.527 | 3.61E-08 | mDC_UCBMC |
| CCNT1    | 1.04E-12 | 0.52153723 | 0.288 | 0.111 | 3.69E-08 | mDC_UCBMC |
| PTBP3    | 1.09E-12 | 0.40188048 | 0.839 | 0.502 | 3.85E-08 | mDC_UCBMC |
| WDR37    | 1.09E-12 | 0.99520106 | 0.288 | 0.112 | 3.86E-08 | mDC_UCBMC |
| PTP4A1   | 1.09E-12 | 0.41797258 | 0.682 | 0.367 | 3.88E-08 | mDC_UCBMC |
| CREB5    | 1.11E-12 | 0.76171286 | 0.292 | 0.116 | 3.93E-08 | mDC_UCBMC |
| SP110    | 1.11E-12 | 0.40988304 | 0.72  | 0.375 | 3.94E-08 | mDC_UCBMC |
| IL6R     | 1.11E-12 | 0.39503121 | 0.648 | 0.344 | 3.94E-08 | mDC_UCBMC |
| HAUS2    | 1.13E-12 | 0.71148892 | 0.271 | 0.1   | 4.01E-08 | mDC_UCBMC |
| CHORDC1  | 1.13E-12 | 0.57041368 | 0.5   | 0.244 | 4.01E-08 | mDC_UCBMC |
| SSBP3    | 1.21E-12 | 0.46087325 | 0.403 | 0.181 | 4.27E-08 | mDC_UCBMC |
| MFN1     | 1.21E-12 | 0.63637401 | 0.288 | 0.112 | 4.29E-08 | mDC_UCBMC |
| CCT4     | 1.30E-12 | 0.45574944 | 0.699 | 0.387 | 4.60E-08 | mDC_UCBMC |
| CWC27    | 1.33E-12 | 0.62112544 | 0.381 | 0.166 | 4.73E-08 | mDC_UCBMC |
| UBE2J1   | 1.34E-12 | 0.58763874 | 0.458 | 0.214 | 4.75E-08 | mDC_UCBMC |
| SUPT5H   | 1.35E-12 | 0.56716759 | 0.5   | 0.244 | 4.77E-08 | mDC_UCBMC |
| WDR44    | 1.40E-12 | 0.43673627 | 0.39  | 0.177 | 4.96E-08 | mDC_UCBMC |
| SAR1A    | 1.46E-12 | 0.49073668 | 0.458 | 0.217 | 5.17E-08 | mDC_UCBMC |
| PLEKHF2  | 1.50E-12 | 0.92920056 | 0.275 | 0.107 | 5.33E-08 | mDC_UCBMC |
| FAM118A  | 1.51E-12 | 0.46874438 | 0.326 | 0.137 | 5.36E-08 | mDC_UCBMC |
| TPR      | 1.55E-12 | 0.48112012 | 0.572 | 0.291 | 5.50E-08 | mDC_UCBMC |
| ZNF749   | 1.60E-12 | 0.67552897 | 0.381 | 0.169 | 5.68E-08 | mDC_UCBMC |
| RPAP2    | 1.70E-12 | 0.77183559 | 0.314 | 0.128 | 6.02E-08 | mDC_UCBMC |
| SELPLG   | 1.72E-12 | 0.38103693 | 0.53  | 0.256 | 6.09E-08 | mDC_UCBMC |
| GARS1    | 1.72E-12 | 0.58136547 | 0.305 | 0.122 | 6.11E-08 | mDC_UCBMC |
| PDE7A    | 1.73E-12 | 0.32379635 | 0.356 | 0.154 | 6.14E-08 | mDC_UCBMC |
| UBE3C    | 1.76E-12 | 0.54217364 | 0.364 | 0.162 | 6.22E-08 | mDC_UCBMC |
| THEMIS2  | 1.77E-12 | 0.42743603 | 0.343 | 0.142 | 6.28E-08 | mDC_UCBMC |

|                    |          |            |       |       |          |           |
|--------------------|----------|------------|-------|-------|----------|-----------|
| ENSMMUG00000015583 | 1.83E-12 | 0.46766672 | 0.932 | 0.67  | 6.50E-08 | mDC_UCBMC |
| VKORC1L1           | 1.86E-12 | 0.4863325  | 0.352 | 0.152 | 6.60E-08 | mDC_UCBMC |
| EIF4E              | 1.86E-12 | 0.49292721 | 0.487 | 0.234 | 6.61E-08 | mDC_UCBMC |
| NCK1               | 1.92E-12 | 0.53893615 | 0.466 | 0.223 | 6.80E-08 | mDC_UCBMC |
| ENSMMUG00000058532 | 1.95E-12 | 0.51668083 | 0.797 | 0.493 | 6.89E-08 | mDC_UCBMC |
| EIF4H              | 2.00E-12 | 0.39449161 | 0.708 | 0.387 | 7.07E-08 | mDC_UCBMC |
| ACE                | 2.00E-12 | 0.61948657 | 0.356 | 0.153 | 7.09E-08 | mDC_UCBMC |
| SERINC3            | 2.03E-12 | 0.45215284 | 0.381 | 0.167 | 7.18E-08 | mDC_UCBMC |
| KIAA0930           | 2.04E-12 | 0.28569741 | 0.496 | 0.24  | 7.24E-08 | mDC_UCBMC |
| ENSMMUG00000007970 | 2.11E-12 | 0.76581453 | 0.373 | 0.168 | 7.46E-08 | mDC_UCBMC |
| RBBP7              | 2.18E-12 | 0.5009726  | 0.496 | 0.237 | 7.74E-08 | mDC_UCBMC |
| PSMD2              | 2.19E-12 | 0.48223057 | 0.432 | 0.198 | 7.75E-08 | mDC_UCBMC |
| PWP1               | 2.30E-12 | 0.59620928 | 0.407 | 0.184 | 8.14E-08 | mDC_UCBMC |
| NUMB               | 2.35E-12 | 0.32983213 | 0.568 | 0.285 | 8.32E-08 | mDC_UCBMC |
| EIF2D              | 2.42E-12 | 1.07444381 | 0.258 | 0.097 | 8.58E-08 | mDC_UCBMC |
| POLR2A             | 2.48E-12 | 0.54149032 | 0.475 | 0.232 | 8.79E-08 | mDC_UCBMC |
| TMEM243            | 2.49E-12 | 0.76545273 | 0.551 | 0.291 | 8.82E-08 | mDC_UCBMC |
| ZNF28              | 2.54E-12 | 0.32757311 | 0.513 | 0.249 | 9.00E-08 | mDC_UCBMC |
| ZNF703             | 2.56E-12 | 0.84891864 | 0.28  | 0.106 | 9.07E-08 | mDC_UCBMC |
| EIF4ENIF1          | 2.57E-12 | 0.3544399  | 0.288 | 0.112 | 9.11E-08 | mDC_UCBMC |
| ATRN               | 2.58E-12 | 0.9230895  | 0.309 | 0.128 | 9.13E-08 | mDC_UCBMC |
| EPS15              | 2.67E-12 | 0.32603713 | 0.737 | 0.413 | 9.47E-08 | mDC_UCBMC |
| RGS1               | 2.68E-12 | 0.33525535 | 0.627 | 0.33  | 9.51E-08 | mDC_UCBMC |
| SLTM               | 2.75E-12 | 0.52807341 | 0.589 | 0.317 | 9.75E-08 | mDC_UCBMC |
| FANCC              | 2.79E-12 | 0.68596248 | 0.271 | 0.104 | 9.90E-08 | mDC_UCBMC |
| ATXN2              | 2.93E-12 | 0.49157108 | 0.475 | 0.238 | 1.04E-07 | mDC_UCBMC |
| TRAM1              | 3.01E-12 | 0.41675152 | 0.758 | 0.444 | 1.07E-07 | mDC_UCBMC |
| TRAPPC9            | 3.13E-12 | 0.39481618 | 0.369 | 0.159 | 1.11E-07 | mDC_UCBMC |
| GABARAPL1          | 3.15E-12 | 0.26358204 | 0.492 | 0.23  | 1.11E-07 | mDC_UCBMC |
| PIK3CD             | 3.26E-12 | 0.89269741 | 0.309 | 0.13  | 1.16E-07 | mDC_UCBMC |
| CWC22              | 3.26E-12 | 0.62559956 | 0.339 | 0.144 | 1.16E-07 | mDC_UCBMC |
| RTRAF              | 3.27E-12 | 0.41861006 | 0.89  | 0.561 | 1.16E-07 | mDC_UCBMC |
| EIF2A              | 3.39E-12 | 0.40863311 | 0.521 | 0.262 | 1.20E-07 | mDC_UCBMC |

|                   |          |            |       |       |          |           |
|-------------------|----------|------------|-------|-------|----------|-----------|
| WDFY3             | 3.75E-12 | 0.67515629 | 0.326 | 0.138 | 1.33E-07 | mDC_UCBMC |
| PSMD14            | 3.86E-12 | 0.44651796 | 0.619 | 0.337 | 1.37E-07 | mDC_UCBMC |
| CIR1              | 3.87E-12 | 0.54691887 | 0.513 | 0.265 | 1.37E-07 | mDC_UCBMC |
| NAMPT             | 3.88E-12 | 0.28951364 | 0.822 | 0.492 | 1.38E-07 | mDC_UCBMC |
| RPL31             | 4.04E-12 | 0.48574402 | 0.894 | 0.579 | 1.43E-07 | mDC_UCBMC |
| IMPDH2            | 4.23E-12 | 0.53761974 | 0.534 | 0.275 | 1.50E-07 | mDC_UCBMC |
| LARGE1            | 4.31E-12 | 0.17732812 | 0.369 | 0.16  | 1.53E-07 | mDC_UCBMC |
| CDC27             | 4.39E-12 | 0.32906701 | 0.475 | 0.229 | 1.56E-07 | mDC_UCBMC |
| EXOSC7            | 4.39E-12 | 0.71690022 | 0.381 | 0.17  | 1.56E-07 | mDC_UCBMC |
| CCM2              | 4.53E-12 | 0.31963191 | 0.445 | 0.214 | 1.60E-07 | mDC_UCBMC |
| DCTN4             | 4.71E-12 | 0.56399496 | 0.381 | 0.169 | 1.67E-07 | mDC_UCBMC |
| SERAC1            | 4.79E-12 | 0.50137501 | 0.373 | 0.165 | 1.70E-07 | mDC_UCBMC |
| GNPTAB            | 4.82E-12 | 0.74612734 | 0.314 | 0.13  | 1.71E-07 | mDC_UCBMC |
| CDV3              | 4.83E-12 | 0.64797561 | 0.314 | 0.13  | 1.71E-07 | mDC_UCBMC |
| BACH1             | 4.83E-12 | 0.38199276 | 0.424 | 0.194 | 1.71E-07 | mDC_UCBMC |
| ZSWIM7            | 4.85E-12 | 1.00377917 | 0.254 | 0.096 | 1.72E-07 | mDC_UCBMC |
| STAT5B            | 4.93E-12 | 0.466421   | 0.309 | 0.129 | 1.75E-07 | mDC_UCBMC |
| ANKH              | 4.98E-12 | 0.38444701 | 0.347 | 0.15  | 1.77E-07 | mDC_UCBMC |
| ZNF736            | 5.00E-12 | 0.56107838 | 0.271 | 0.102 | 1.77E-07 | mDC_UCBMC |
| ENSMUG00000018557 | 5.29E-12 | 0.60043308 | 0.428 | 0.207 | 1.87E-07 | mDC_UCBMC |
| CCNL1             | 5.44E-12 | 0.23737619 | 0.945 | 0.681 | 1.93E-07 | mDC_UCBMC |
| GTPBP4            | 5.47E-12 | 0.83489634 | 0.305 | 0.127 | 1.94E-07 | mDC_UCBMC |
| PFDN1             | 5.55E-12 | 0.27301257 | 0.631 | 0.33  | 1.97E-07 | mDC_UCBMC |
| FEM1C             | 5.88E-12 | 0.79810418 | 0.28  | 0.11  | 2.08E-07 | mDC_UCBMC |
| DDX54             | 6.15E-12 | 0.53357935 | 0.39  | 0.174 | 2.18E-07 | mDC_UCBMC |
| TAGAP             | 6.19E-12 | 0.59361609 | 0.377 | 0.17  | 2.19E-07 | mDC_UCBMC |
| NGDN              | 6.31E-12 | 0.76958502 | 0.263 | 0.099 | 2.24E-07 | mDC_UCBMC |
| COPS2             | 6.40E-12 | 0.36320219 | 0.542 | 0.27  | 2.27E-07 | mDC_UCBMC |
| SUGP2             | 6.45E-12 | 0.82291026 | 0.254 | 0.095 | 2.28E-07 | mDC_UCBMC |
| NSFL1C            | 6.53E-12 | 0.60627799 | 0.373 | 0.166 | 2.31E-07 | mDC_UCBMC |
| SWT1              | 6.76E-12 | 0.40158087 | 0.297 | 0.118 | 2.40E-07 | mDC_UCBMC |
| PDE8A             | 6.87E-12 | 0.40338359 | 0.275 | 0.106 | 2.43E-07 | mDC_UCBMC |
| STK3              | 6.89E-12 | 0.40694878 | 0.292 | 0.115 | 2.44E-07 | mDC_UCBMC |

|          |          |            |       |       |          |           |
|----------|----------|------------|-------|-------|----------|-----------|
| FNBP1L   | 7.24E-12 | 0.22463963 | 0.555 | 0.285 | 2.56E-07 | mDC_UCBMC |
| VIRMA    | 7.25E-12 | 0.85711023 | 0.271 | 0.106 | 2.57E-07 | mDC_UCBMC |
| ADPGK    | 7.31E-12 | 1.00877249 | 0.275 | 0.111 | 2.59E-07 | mDC_UCBMC |
| IRAK2    | 7.41E-12 | 0.16943987 | 0.347 | 0.147 | 2.63E-07 | mDC_UCBMC |
| DOCK4    | 7.53E-12 | 0.16774069 | 0.39  | 0.176 | 2.67E-07 | mDC_UCBMC |
| RAB8B    | 7.65E-12 | 0.20702363 | 0.767 | 0.46  | 2.71E-07 | mDC_UCBMC |
| GALK2    | 7.74E-12 | 0.80810226 | 0.305 | 0.125 | 2.74E-07 | mDC_UCBMC |
| ELMOD3   | 7.91E-12 | 0.68910359 | 0.369 | 0.165 | 2.80E-07 | mDC_UCBMC |
| CNOT10   | 8.45E-12 | 0.55761647 | 0.301 | 0.122 | 3.00E-07 | mDC_UCBMC |
| ARHGAP45 | 8.54E-12 | 0.34779476 | 0.542 | 0.276 | 3.03E-07 | mDC_UCBMC |
| NCOA4    | 8.88E-12 | 0.44495452 | 0.47  | 0.229 | 3.15E-07 | mDC_UCBMC |
| PDLIM5   | 9.01E-12 | 0.36305372 | 0.53  | 0.266 | 3.19E-07 | mDC_UCBMC |
| NUP210   | 9.11E-12 | 0.7030938  | 0.297 | 0.12  | 3.23E-07 | mDC_UCBMC |
| AGPS     | 9.12E-12 | 0.49146425 | 0.449 | 0.22  | 3.23E-07 | mDC_UCBMC |
| WWC2     | 9.18E-12 | 0.3194304  | 0.398 | 0.184 | 3.25E-07 | mDC_UCBMC |
| PACS1    | 9.68E-12 | 0.56809005 | 0.373 | 0.169 | 3.43E-07 | mDC_UCBMC |
| PNPLA8   | 9.77E-12 | 0.33997992 | 0.479 | 0.232 | 3.46E-07 | mDC_UCBMC |
| GLB1     | 9.86E-12 | 0.30499873 | 0.487 | 0.239 | 3.49E-07 | mDC_UCBMC |
| NBEAL1   | 9.97E-12 | 0.19666635 | 0.5   | 0.239 | 3.53E-07 | mDC_UCBMC |
| ALOX5AP  | 1.00E-11 | 0.56868978 | 0.559 | 0.296 | 3.54E-07 | mDC_UCBMC |
| HDAC2    | 1.02E-11 | 0.52858128 | 0.538 | 0.279 | 3.60E-07 | mDC_UCBMC |
| XRCC5    | 1.04E-11 | 0.39600442 | 0.843 | 0.519 | 3.70E-07 | mDC_UCBMC |
| PNPLA7   | 1.06E-11 | 0.68262439 | 0.271 | 0.105 | 3.75E-07 | mDC_UCBMC |
| VCAN     | 1.07E-11 | 0.69194361 | 0.369 | 0.169 | 3.79E-07 | mDC_UCBMC |
| GOLGA1   | 1.09E-11 | 0.6309406  | 0.843 | 0.597 | 3.86E-07 | mDC_UCBMC |
| R3HCC1L  | 1.10E-11 | 0.77024719 | 0.25  | 0.094 | 3.90E-07 | mDC_UCBMC |
| KDM5C    | 1.10E-11 | 0.53402794 | 0.297 | 0.12  | 3.90E-07 | mDC_UCBMC |
| TMEM183A | 1.11E-11 | 0.4748888  | 0.386 | 0.172 | 3.93E-07 | mDC_UCBMC |
| KXD1     | 1.13E-11 | 0.49564356 | 0.525 | 0.272 | 4.00E-07 | mDC_UCBMC |
| BOD1L1   | 1.15E-11 | 0.63742756 | 0.386 | 0.18  | 4.06E-07 | mDC_UCBMC |
| CHD1     | 1.16E-11 | 0.38616633 | 0.547 | 0.288 | 4.11E-07 | mDC_UCBMC |
| DHX15    | 1.19E-11 | 0.36881499 | 0.458 | 0.224 | 4.21E-07 | mDC_UCBMC |
| ANKZF1   | 1.21E-11 | 0.88368173 | 0.297 | 0.125 | 4.27E-07 | mDC_UCBMC |

|                   |          |            |       |       |          |           |
|-------------------|----------|------------|-------|-------|----------|-----------|
| NSD3              | 1.25E-11 | 0.20529196 | 0.525 | 0.266 | 4.45E-07 | mDC_UCBMC |
| PPIL4             | 1.28E-11 | 0.49754096 | 0.47  | 0.242 | 4.52E-07 | mDC_UCBMC |
| SLC25A25          | 1.30E-11 | 0.45254362 | 0.288 | 0.116 | 4.61E-07 | mDC_UCBMC |
| ACSL1             | 1.33E-11 | 0.28339434 | 0.292 | 0.118 | 4.73E-07 | mDC_UCBMC |
| MAGT1             | 1.37E-11 | 0.54398786 | 0.415 | 0.2   | 4.86E-07 | mDC_UCBMC |
| SCLT1             | 1.39E-11 | 0.33145938 | 0.555 | 0.298 | 4.93E-07 | mDC_UCBMC |
| LRCH4             | 1.41E-11 | 0.36338786 | 0.275 | 0.105 | 5.01E-07 | mDC_UCBMC |
| RNF40             | 1.50E-11 | 0.77738462 | 0.25  | 0.094 | 5.31E-07 | mDC_UCBMC |
| ENSMUG00000011714 | 1.54E-11 | 0.51323509 | 0.407 | 0.191 | 5.45E-07 | mDC_UCBMC |
| ATP5F1A           | 1.59E-11 | 0.44739169 | 0.852 | 0.548 | 5.63E-07 | mDC_UCBMC |
| FYTTD1            | 1.60E-11 | 0.33963544 | 0.441 | 0.206 | 5.67E-07 | mDC_UCBMC |
| MAP2K1            | 1.61E-11 | 0.34537047 | 0.508 | 0.265 | 5.71E-07 | mDC_UCBMC |
| PIZO1             | 1.62E-11 | 0.66921113 | 0.288 | 0.116 | 5.74E-07 | mDC_UCBMC |
| LENG8             | 1.63E-11 | 0.36604946 | 0.356 | 0.158 | 5.78E-07 | mDC_UCBMC |
| DNAJB14           | 1.66E-11 | 0.59890928 | 0.407 | 0.194 | 5.88E-07 | mDC_UCBMC |
| MPHOSPH10         | 1.68E-11 | 0.97461041 | 0.267 | 0.106 | 5.95E-07 | mDC_UCBMC |
| FGD2              | 1.71E-11 | 0.36922921 | 0.86  | 0.51  | 6.06E-07 | mDC_UCBMC |
| TMEM41B           | 1.73E-11 | 0.94364094 | 0.271 | 0.107 | 6.13E-07 | mDC_UCBMC |
| SRRM2             | 1.89E-11 | 0.40725183 | 0.585 | 0.299 | 6.69E-07 | mDC_UCBMC |
| MBD2              | 1.90E-11 | 0.50549138 | 0.254 | 0.096 | 6.73E-07 | mDC_UCBMC |
| TMF1              | 1.91E-11 | 0.7100315  | 0.267 | 0.106 | 6.78E-07 | mDC_UCBMC |
| ARL6IP5           | 1.93E-11 | 0.42972916 | 0.657 | 0.369 | 6.85E-07 | mDC_UCBMC |
| GLUD1             | 2.04E-11 | 0.45608144 | 0.411 | 0.194 | 7.24E-07 | mDC_UCBMC |
| ASCC1             | 2.08E-11 | 0.57433927 | 0.352 | 0.16  | 7.37E-07 | mDC_UCBMC |
| KDELRL2           | 2.16E-11 | 0.28532561 | 0.623 | 0.325 | 7.67E-07 | mDC_UCBMC |
| TRRAP             | 2.17E-11 | 0.59342118 | 0.288 | 0.118 | 7.68E-07 | mDC_UCBMC |
| ZBTB44            | 2.23E-11 | 0.76852627 | 0.263 | 0.102 | 7.91E-07 | mDC_UCBMC |
| MSL2              | 2.27E-11 | 0.20787175 | 0.445 | 0.212 | 8.03E-07 | mDC_UCBMC |
| NDUFAF4           | 2.42E-11 | 0.48459097 | 0.394 | 0.18  | 8.58E-07 | mDC_UCBMC |
| TFCP2             | 2.43E-11 | 0.51496995 | 0.331 | 0.143 | 8.61E-07 | mDC_UCBMC |
| BCL2L13           | 2.44E-11 | 0.43055419 | 0.424 | 0.203 | 8.63E-07 | mDC_UCBMC |
| DGKA              | 2.51E-11 | 0.40672991 | 0.331 | 0.141 | 8.91E-07 | mDC_UCBMC |
| UBR4              | 2.54E-11 | 0.44145446 | 0.394 | 0.186 | 9.01E-07 | mDC_UCBMC |

|                     |          |            |       |       |          |           |
|---------------------|----------|------------|-------|-------|----------|-----------|
| SMC3                | 2.68E-11 | 0.46916345 | 0.458 | 0.223 | 9.49E-07 | mDC_UCBMC |
| ENSMMUG00000006293  | 2.68E-11 | 0.38928919 | 0.771 | 0.466 | 9.51E-07 | mDC_UCBMC |
| GNA15               | 2.69E-11 | 0.22668542 | 0.619 | 0.342 | 9.52E-07 | mDC_UCBMC |
| ARHGAP4             | 2.70E-11 | 0.15570706 | 0.462 | 0.22  | 9.58E-07 | mDC_UCBMC |
| B3GNT2              | 2.74E-11 | 0.80132037 | 0.322 | 0.138 | 9.69E-07 | mDC_UCBMC |
| DYNC1LI1            | 2.78E-11 | 0.42400638 | 0.508 | 0.251 | 9.85E-07 | mDC_UCBMC |
| PITPNA              | 2.83E-11 | 0.19814884 | 0.288 | 0.118 | 1.00E-06 | mDC_UCBMC |
| GPAT3               | 2.88E-11 | 0.37288853 | 0.275 | 0.109 | 1.02E-06 | mDC_UCBMC |
| GTDC1               | 2.93E-11 | 0.42506045 | 0.335 | 0.149 | 1.04E-06 | mDC_UCBMC |
| OGFRL1              | 2.98E-11 | 0.60690086 | 0.386 | 0.177 | 1.05E-06 | mDC_UCBMC |
| SOAT1               | 3.00E-11 | 0.36320391 | 0.314 | 0.134 | 1.06E-06 | mDC_UCBMC |
| KIF5B               | 3.05E-11 | 0.37207227 | 0.691 | 0.394 | 1.08E-06 | mDC_UCBMC |
| TBCB                | 3.21E-11 | 0.40208776 | 0.53  | 0.27  | 1.14E-06 | mDC_UCBMC |
| CEP350              | 3.25E-11 | 0.38695717 | 0.525 | 0.273 | 1.15E-06 | mDC_UCBMC |
| ENSMMUG000000065373 | 3.35E-11 | 0.14046111 | 0.983 | 0.906 | 1.19E-06 | mDC_UCBMC |
| ENSMMUG000000056012 | 3.35E-11 | 0.4307079  | 0.695 | 0.393 | 1.19E-06 | mDC_UCBMC |
| PMPCB               | 3.36E-11 | 0.45839366 | 0.441 | 0.214 | 1.19E-06 | mDC_UCBMC |
| ATF7IP              | 3.37E-11 | 0.27878153 | 0.682 | 0.378 | 1.19E-06 | mDC_UCBMC |
| ENSMMUG000000054743 | 3.49E-11 | 0.63452307 | 0.292 | 0.122 | 1.24E-06 | mDC_UCBMC |
| SPG11               | 3.50E-11 | 0.45586599 | 0.369 | 0.17  | 1.24E-06 | mDC_UCBMC |
| ERLEC1              | 3.56E-11 | 0.64652254 | 0.377 | 0.174 | 1.26E-06 | mDC_UCBMC |
| DMTF1               | 3.62E-11 | 0.55412974 | 0.36  | 0.164 | 1.28E-06 | mDC_UCBMC |
| USP1                | 3.69E-11 | 0.56998665 | 0.415 | 0.199 | 1.31E-06 | mDC_UCBMC |
| FGD6                | 3.72E-11 | 0.83684986 | 0.263 | 0.102 | 1.32E-06 | mDC_UCBMC |
| TBC1D25             | 3.72E-11 | 0.40787917 | 0.551 | 0.287 | 1.32E-06 | mDC_UCBMC |
| PIK3C3              | 3.79E-11 | 0.59769017 | 0.271 | 0.108 | 1.34E-06 | mDC_UCBMC |
| ATE1                | 3.84E-11 | 0.47167807 | 0.309 | 0.131 | 1.36E-06 | mDC_UCBMC |
| ENSMMUG000000010266 | 3.87E-11 | 0.30625647 | 0.886 | 0.617 | 1.37E-06 | mDC_UCBMC |
| MID1IP1             | 3.89E-11 | 0.59131126 | 0.301 | 0.126 | 1.38E-06 | mDC_UCBMC |
| PDSS2               | 3.98E-11 | 0.44977794 | 0.343 | 0.154 | 1.41E-06 | mDC_UCBMC |
| SCML4               | 4.04E-11 | 0.30750324 | 0.36  | 0.164 | 1.43E-06 | mDC_UCBMC |
| CDC42               | 4.13E-11 | 0.32023902 | 0.992 | 0.86  | 1.46E-06 | mDC_UCBMC |
| KIAA1143            | 4.24E-11 | 0.73707854 | 0.331 | 0.148 | 1.50E-06 | mDC_UCBMC |



|                    |          |            |       |       |          |           |
|--------------------|----------|------------|-------|-------|----------|-----------|
| ENSMMUG00000056043 | 4.35E-11 | 0.5227338  | 0.466 | 0.233 | 1.54E-06 | mDC_UCBMC |
| DCUN1D1            | 4.42E-11 | 0.51519275 | 0.326 | 0.141 | 1.57E-06 | mDC_UCBMC |
| MADD               | 4.54E-11 | 0.34249988 | 0.297 | 0.123 | 1.61E-06 | mDC_UCBMC |
| RNF149             | 4.59E-11 | 0.15493809 | 0.657 | 0.353 | 1.63E-06 | mDC_UCBMC |
| FCF1               | 4.66E-11 | 0.62615305 | 0.314 | 0.134 | 1.65E-06 | mDC_UCBMC |
| DDX50              | 4.66E-11 | 0.42797784 | 0.449 | 0.223 | 1.65E-06 | mDC_UCBMC |
| KLHDC10            | 4.84E-11 | 0.73304099 | 0.271 | 0.109 | 1.71E-06 | mDC_UCBMC |
| ASPH               | 4.88E-11 | 0.41117836 | 0.453 | 0.222 | 1.73E-06 | mDC_UCBMC |
| LIPA               | 4.94E-11 | 0.88158171 | 0.271 | 0.11  | 1.75E-06 | mDC_UCBMC |
| ACAD10             | 4.99E-11 | 0.65462455 | 0.403 | 0.193 | 1.77E-06 | mDC_UCBMC |
| DUSP1              | 5.07E-11 | 0.23390826 | 0.894 | 0.534 | 1.80E-06 | mDC_UCBMC |
| ATXN7L1            | 5.16E-11 | 0.55127646 | 0.263 | 0.102 | 1.83E-06 | mDC_UCBMC |
| GNAL               | 5.22E-11 | 0.50853928 | 0.758 | 0.457 | 1.85E-06 | mDC_UCBMC |
| EIF3H              | 5.36E-11 | 0.39484284 | 0.936 | 0.692 | 1.90E-06 | mDC_UCBMC |
| RNF19B             | 5.88E-11 | 0.78272379 | 0.288 | 0.12  | 2.08E-06 | mDC_UCBMC |
| TMEM38B            | 6.06E-11 | 0.55866471 | 0.369 | 0.172 | 2.15E-06 | mDC_UCBMC |
| VPS4A              | 6.23E-11 | 0.81707706 | 0.271 | 0.112 | 2.21E-06 | mDC_UCBMC |
| ZMYM4              | 6.46E-11 | 0.3300617  | 0.424 | 0.204 | 2.29E-06 | mDC_UCBMC |
| FURIN              | 6.50E-11 | 0.10196484 | 0.292 | 0.115 | 2.30E-06 | mDC_UCBMC |
| FLI1               | 6.51E-11 | 0.24229127 | 0.479 | 0.241 | 2.31E-06 | mDC_UCBMC |
| MIA3               | 7.01E-11 | 0.67636774 | 0.267 | 0.108 | 2.48E-06 | mDC_UCBMC |
| SCAMP1             | 7.45E-11 | 0.31781495 | 0.326 | 0.142 | 2.64E-06 | mDC_UCBMC |
| TBCC               | 7.68E-11 | 0.43042222 | 0.462 | 0.229 | 2.72E-06 | mDC_UCBMC |
| DDX39B             | 7.71E-11 | 0.20376033 | 0.572 | 0.304 | 2.73E-06 | mDC_UCBMC |
| MICU1              | 8.02E-11 | 0.31072564 | 0.521 | 0.273 | 2.84E-06 | mDC_UCBMC |
| ARL3               | 8.11E-11 | 0.55017285 | 0.28  | 0.112 | 2.87E-06 | mDC_UCBMC |
| GAB1               | 8.58E-11 | 0.57194118 | 0.263 | 0.105 | 3.04E-06 | mDC_UCBMC |
| MIGA1              | 8.61E-11 | 0.54786924 | 0.258 | 0.102 | 3.05E-06 | mDC_UCBMC |
| FRMD4B             | 9.08E-11 | 0.35394541 | 0.403 | 0.196 | 3.22E-06 | mDC_UCBMC |
| ERCC8              | 9.10E-11 | 0.5534686  | 0.335 | 0.149 | 3.22E-06 | mDC_UCBMC |
| CLPX               | 9.18E-11 | 0.96711212 | 0.267 | 0.108 | 3.25E-06 | mDC_UCBMC |
| LSM12              | 9.23E-11 | 0.32192861 | 0.445 | 0.213 | 3.27E-06 | mDC_UCBMC |
| EMD                | 9.33E-11 | 0.50730124 | 0.453 | 0.228 | 3.30E-06 | mDC_UCBMC |

|                   |          |            |       |       |          |           |
|-------------------|----------|------------|-------|-------|----------|-----------|
| ANKFY1            | 9.33E-11 | 0.63297238 | 0.326 | 0.142 | 3.30E-06 | mDC_UCBMC |
| DDX17             | 9.58E-11 | 0.33608674 | 0.708 | 0.406 | 3.40E-06 | mDC_UCBMC |
| MAP2K4            | 1.00E-10 | 0.45248019 | 0.364 | 0.17  | 3.56E-06 | mDC_UCBMC |
| STRN3             | 1.02E-10 | 0.10139698 | 0.441 | 0.22  | 3.61E-06 | mDC_UCBMC |
| FAM53B            | 1.03E-10 | 0.18144041 | 0.309 | 0.131 | 3.64E-06 | mDC_UCBMC |
| NASP              | 1.05E-10 | 0.42711528 | 0.597 | 0.33  | 3.72E-06 | mDC_UCBMC |
| MIS18BP1          | 1.07E-10 | 0.90507836 | 0.292 | 0.126 | 3.80E-06 | mDC_UCBMC |
| TMED4             | 1.08E-10 | 0.29922574 | 0.462 | 0.228 | 3.83E-06 | mDC_UCBMC |
| ZNF160            | 1.12E-10 | 0.98693667 | 0.25  | 0.101 | 3.97E-06 | mDC_UCBMC |
| XPC               | 1.13E-10 | 0.51748448 | 0.335 | 0.15  | 4.00E-06 | mDC_UCBMC |
| SAE1              | 1.18E-10 | 0.42718016 | 0.352 | 0.158 | 4.16E-06 | mDC_UCBMC |
| FASTKD2           | 1.18E-10 | 0.63536745 | 0.25  | 0.098 | 4.19E-06 | mDC_UCBMC |
| PSMF1             | 1.25E-10 | 0.61187997 | 0.28  | 0.115 | 4.42E-06 | mDC_UCBMC |
| ENSMUG00000011604 | 1.26E-10 | 0.8925598  | 0.284 | 0.12  | 4.45E-06 | mDC_UCBMC |
| CERS2             | 1.28E-10 | 0.50088655 | 0.343 | 0.156 | 4.52E-06 | mDC_UCBMC |
| ARGLU1            | 1.28E-10 | 0.33996738 | 0.712 | 0.401 | 4.53E-06 | mDC_UCBMC |
| PRNP              | 1.29E-10 | 0.62858575 | 0.466 | 0.236 | 4.55E-06 | mDC_UCBMC |
| ENSMUG00000000350 | 1.29E-10 | 0.65444103 | 0.263 | 0.106 | 4.57E-06 | mDC_UCBMC |
| SMARCA2           | 1.31E-10 | 0.1256508  | 0.581 | 0.303 | 4.63E-06 | mDC_UCBMC |
| PRKN              | 1.31E-10 | 0.24578802 | 0.305 | 0.132 | 4.65E-06 | mDC_UCBMC |
| SEC22B            | 1.32E-10 | 1.08854612 | 0.28  | 0.12  | 4.68E-06 | mDC_UCBMC |
| DCP2              | 1.33E-10 | 0.59656803 | 0.403 | 0.198 | 4.70E-06 | mDC_UCBMC |
| AKAP8L            | 1.33E-10 | 0.54163798 | 0.271 | 0.112 | 4.73E-06 | mDC_UCBMC |
| APH1A             | 1.38E-10 | 0.40493109 | 0.436 | 0.21  | 4.87E-06 | mDC_UCBMC |
| CEP83             | 1.38E-10 | 0.87126094 | 0.258 | 0.104 | 4.88E-06 | mDC_UCBMC |
| GON4L             | 1.39E-10 | 0.48480054 | 0.369 | 0.175 | 4.92E-06 | mDC_UCBMC |
| GOSR1             | 1.41E-10 | 0.92083026 | 0.288 | 0.124 | 4.98E-06 | mDC_UCBMC |
| CCND3             | 1.41E-10 | 0.69544954 | 0.513 | 0.284 | 4.98E-06 | mDC_UCBMC |
| ENSMUG00000006965 | 1.56E-10 | 0.40915312 | 0.593 | 0.323 | 5.53E-06 | mDC_UCBMC |
| ENSMUG00000065288 | 1.58E-10 | 0.19481826 | 0.271 | 0.112 | 5.58E-06 | mDC_UCBMC |
| SVIL              | 1.58E-10 | 0.2620412  | 0.258 | 0.1   | 5.59E-06 | mDC_UCBMC |
| GTF2I             | 1.58E-10 | 0.26305565 | 0.602 | 0.321 | 5.61E-06 | mDC_UCBMC |
| COPA              | 1.63E-10 | 0.31060862 | 0.441 | 0.226 | 5.78E-06 | mDC_UCBMC |

|                    |          |            |       |       |          |           |
|--------------------|----------|------------|-------|-------|----------|-----------|
| DCAF8              | 1.71E-10 | 0.5167145  | 0.369 | 0.178 | 6.06E-06 | mDC_UCBMC |
| ENSMMUG00000045425 | 1.72E-10 | 0.23562133 | 0.564 | 0.289 | 6.09E-06 | mDC_UCBMC |
| GSR                | 1.76E-10 | 0.45646953 | 0.314 | 0.138 | 6.22E-06 | mDC_UCBMC |
| SEC14L1            | 1.77E-10 | 0.29361661 | 0.517 | 0.274 | 6.27E-06 | mDC_UCBMC |
| CAPRIN1            | 1.81E-10 | 0.457863   | 0.449 | 0.231 | 6.43E-06 | mDC_UCBMC |
| AATF               | 1.85E-10 | 0.50651441 | 0.398 | 0.194 | 6.54E-06 | mDC_UCBMC |
| SPN                | 1.86E-10 | 0.22140014 | 0.403 | 0.188 | 6.61E-06 | mDC_UCBMC |
| TSPO               | 1.90E-10 | 0.28844092 | 0.826 | 0.502 | 6.74E-06 | mDC_UCBMC |
| RALGAPB            | 1.91E-10 | 0.51490075 | 0.364 | 0.172 | 6.78E-06 | mDC_UCBMC |
| RBFA               | 1.93E-10 | 0.3824841  | 0.458 | 0.227 | 6.82E-06 | mDC_UCBMC |
| ASCC2              | 1.97E-10 | 0.57499288 | 0.292 | 0.127 | 6.97E-06 | mDC_UCBMC |
| DDIT3              | 2.01E-10 | 0.29729349 | 0.335 | 0.149 | 7.12E-06 | mDC_UCBMC |
| SH3GL1             | 2.02E-10 | 0.28846105 | 0.339 | 0.156 | 7.15E-06 | mDC_UCBMC |
| HEXA               | 2.17E-10 | 0.3257133  | 0.458 | 0.228 | 7.68E-06 | mDC_UCBMC |
| TMEM201            | 2.17E-10 | 0.35799197 | 0.36  | 0.172 | 7.70E-06 | mDC_UCBMC |
| STX16              | 2.20E-10 | 0.43381455 | 0.297 | 0.126 | 7.81E-06 | mDC_UCBMC |
| PRMT3              | 2.23E-10 | 0.59271413 | 0.314 | 0.136 | 7.88E-06 | mDC_UCBMC |
| ENSMMUG00000006778 | 2.26E-10 | 0.31602308 | 0.64  | 0.349 | 7.99E-06 | mDC_UCBMC |
| CHD4               | 2.26E-10 | 0.2418511  | 0.559 | 0.294 | 8.00E-06 | mDC_UCBMC |
| SUPT20H            | 2.31E-10 | 0.78699306 | 0.356 | 0.166 | 8.20E-06 | mDC_UCBMC |
| ENSMMUG00000015217 | 2.40E-10 | 0.24031841 | 0.394 | 0.186 | 8.50E-06 | mDC_UCBMC |
| GSE1               | 2.55E-10 | 0.47483709 | 0.254 | 0.102 | 9.05E-06 | mDC_UCBMC |
| DAP3               | 2.60E-10 | 0.34140163 | 0.347 | 0.155 | 9.23E-06 | mDC_UCBMC |
| PEPD               | 2.65E-10 | 0.43574947 | 0.534 | 0.281 | 9.38E-06 | mDC_UCBMC |
| CEP295             | 2.69E-10 | 0.41116432 | 0.258 | 0.102 | 9.53E-06 | mDC_UCBMC |
| TIA1               | 2.71E-10 | 0.37873152 | 0.39  | 0.186 | 9.59E-06 | mDC_UCBMC |
| EIF3M              | 2.75E-10 | 0.44038088 | 0.814 | 0.492 | 9.73E-06 | mDC_UCBMC |
| ANKS1A             | 2.80E-10 | 0.71657023 | 0.275 | 0.117 | 9.94E-06 | mDC_UCBMC |
| GBF1               | 3.03E-10 | 0.23149672 | 0.335 | 0.152 | 1.07E-05 | mDC_UCBMC |
| PRCP               | 3.09E-10 | 0.35930772 | 0.754 | 0.461 | 1.09E-05 | mDC_UCBMC |
| KARS1              | 3.12E-10 | 0.52830394 | 0.386 | 0.186 | 1.11E-05 | mDC_UCBMC |
| CEBPG              | 3.13E-10 | 0.73197053 | 0.28  | 0.12  | 1.11E-05 | mDC_UCBMC |
| NT5DC1             | 3.13E-10 | 0.68227813 | 0.314 | 0.144 | 1.11E-05 | mDC_UCBMC |

|                    |          |            |       |       |          |           |
|--------------------|----------|------------|-------|-------|----------|-----------|
| ZBTB7A             | 3.14E-10 | 0.37077341 | 0.322 | 0.146 | 1.11E-05 | mDC_UCBMC |
| PBXIP1             | 3.25E-10 | 0.42088953 | 0.39  | 0.188 | 1.15E-05 | mDC_UCBMC |
| MARF1              | 3.43E-10 | 0.90967625 | 0.254 | 0.105 | 1.22E-05 | mDC_UCBMC |
| MAPRE1             | 3.49E-10 | 0.44683173 | 0.678 | 0.385 | 1.24E-05 | mDC_UCBMC |
| GGA3               | 3.56E-10 | 0.343603   | 0.322 | 0.142 | 1.26E-05 | mDC_UCBMC |
| FCRL6              | 3.57E-10 | 0.40593998 | 0.581 | 0.316 | 1.26E-05 | mDC_UCBMC |
| PRKCSH             | 3.63E-10 | 0.30972727 | 0.386 | 0.184 | 1.29E-05 | mDC_UCBMC |
| SRRT               | 3.78E-10 | 0.57721501 | 0.322 | 0.149 | 1.34E-05 | mDC_UCBMC |
| CHSY1              | 3.78E-10 | 0.41515148 | 0.254 | 0.105 | 1.34E-05 | mDC_UCBMC |
| TRAF3IP1           | 3.78E-10 | 0.38131442 | 0.254 | 0.102 | 1.34E-05 | mDC_UCBMC |
| ERCC3              | 3.82E-10 | 0.37155582 | 0.275 | 0.115 | 1.35E-05 | mDC_UCBMC |
| NUP188             | 3.86E-10 | 0.49982737 | 0.25  | 0.1   | 1.37E-05 | mDC_UCBMC |
| UST                | 3.99E-10 | 0.13895641 | 0.428 | 0.214 | 1.41E-05 | mDC_UCBMC |
| THOC6              | 4.08E-10 | 0.33045201 | 0.369 | 0.168 | 1.44E-05 | mDC_UCBMC |
| PIK3CG             | 4.09E-10 | 0.29158784 | 0.356 | 0.164 | 1.45E-05 | mDC_UCBMC |
| SEC61A1            | 4.17E-10 | 0.50441809 | 0.267 | 0.11  | 1.48E-05 | mDC_UCBMC |
| KANSL3             | 4.26E-10 | 0.25241705 | 0.297 | 0.13  | 1.51E-05 | mDC_UCBMC |
| FAM120A            | 4.45E-10 | 0.32082809 | 0.53  | 0.28  | 1.58E-05 | mDC_UCBMC |
| CDIP1              | 4.45E-10 | 0.7632222  | 0.292 | 0.126 | 1.58E-05 | mDC_UCBMC |
| TKT                | 4.47E-10 | 0.36000061 | 0.915 | 0.638 | 1.59E-05 | mDC_UCBMC |
| PIBF1              | 4.55E-10 | 0.75457326 | 0.339 | 0.161 | 1.61E-05 | mDC_UCBMC |
| SARS1              | 4.56E-10 | 0.22439563 | 0.479 | 0.245 | 1.62E-05 | mDC_UCBMC |
| ARHGAP1            | 4.66E-10 | 0.28928722 | 0.377 | 0.174 | 1.65E-05 | mDC_UCBMC |
| IDS                | 4.78E-10 | 0.39310366 | 0.53  | 0.281 | 1.69E-05 | mDC_UCBMC |
| SLC38A9            | 4.81E-10 | 0.25191138 | 0.411 | 0.205 | 1.70E-05 | mDC_UCBMC |
| FBL                | 4.89E-10 | 0.44813287 | 0.492 | 0.258 | 1.73E-05 | mDC_UCBMC |
| UBAP2              | 4.95E-10 | 0.24725151 | 0.496 | 0.265 | 1.75E-05 | mDC_UCBMC |
| CNIH1              | 5.00E-10 | 0.52814362 | 0.381 | 0.186 | 1.77E-05 | mDC_UCBMC |
| ZNF655             | 5.50E-10 | 0.41614383 | 0.297 | 0.13  | 1.95E-05 | mDC_UCBMC |
| FO XK2             | 5.60E-10 | 0.60162076 | 0.267 | 0.114 | 1.98E-05 | mDC_UCBMC |
| TXNIP              | 5.75E-10 | 0.27894941 | 0.771 | 0.466 | 2.04E-05 | mDC_UCBMC |
| ENSMMUG00000021153 | 5.77E-10 | 0.22898169 | 0.5   | 0.26  | 2.04E-05 | mDC_UCBMC |
| CHD3               | 6.51E-10 | 0.75225243 | 0.258 | 0.108 | 2.31E-05 | mDC_UCBMC |

|         |          |            |       |       |          |           |
|---------|----------|------------|-------|-------|----------|-----------|
| TRAPPC8 | 6.57E-10 | 0.6120173  | 0.267 | 0.114 | 2.33E-05 | mDC_UCBMC |
| ZNF800  | 6.64E-10 | 0.71481268 | 0.254 | 0.106 | 2.35E-05 | mDC_UCBMC |
| NR4A2   | 6.81E-10 | 0.46469375 | 0.661 | 0.406 | 2.41E-05 | mDC_UCBMC |
| HNRNPL  | 6.82E-10 | 0.32499343 | 0.767 | 0.45  | 2.42E-05 | mDC_UCBMC |
| RAB22A  | 6.88E-10 | 0.41375848 | 0.275 | 0.118 | 2.44E-05 | mDC_UCBMC |
| STX8    | 7.02E-10 | 0.5333107  | 0.568 | 0.329 | 2.49E-05 | mDC_UCBMC |
| UFL1    | 7.16E-10 | 0.67216995 | 0.271 | 0.118 | 2.54E-05 | mDC_UCBMC |
| MALSU1  | 7.20E-10 | 0.84728078 | 0.288 | 0.128 | 2.55E-05 | mDC_UCBMC |
| API5    | 7.63E-10 | 0.59226123 | 0.301 | 0.134 | 2.70E-05 | mDC_UCBMC |
| TFG     | 8.08E-10 | 0.51175828 | 0.419 | 0.214 | 2.86E-05 | mDC_UCBMC |
| POLR1H  | 8.26E-10 | 0.25904457 | 0.602 | 0.319 | 2.93E-05 | mDC_UCBMC |
| CCDC82  | 8.39E-10 | 0.70487578 | 0.305 | 0.136 | 2.97E-05 | mDC_UCBMC |
| SAMM50  | 8.80E-10 | 0.33322542 | 0.424 | 0.213 | 3.12E-05 | mDC_UCBMC |
| PARP14  | 8.84E-10 | 0.91842758 | 0.254 | 0.108 | 3.13E-05 | mDC_UCBMC |
| POLR3GL | 9.08E-10 | 0.394104   | 0.411 | 0.206 | 3.22E-05 | mDC_UCBMC |
| HTATSF1 | 9.08E-10 | 0.67015442 | 0.271 | 0.118 | 3.22E-05 | mDC_UCBMC |
| SH3GLB1 | 9.09E-10 | 0.43254809 | 0.458 | 0.235 | 3.22E-05 | mDC_UCBMC |
| RABGAP1 | 9.48E-10 | 0.53878384 | 0.275 | 0.119 | 3.36E-05 | mDC_UCBMC |
| LIMS1   | 9.49E-10 | 0.14208112 | 0.699 | 0.391 | 3.36E-05 | mDC_UCBMC |
| CLK4    | 9.56E-10 | 0.47092587 | 0.28  | 0.12  | 3.39E-05 | mDC_UCBMC |
| OLA1    | 9.65E-10 | 0.37073633 | 0.737 | 0.466 | 3.42E-05 | mDC_UCBMC |
| ANO6    | 9.71E-10 | 0.25208338 | 0.458 | 0.232 | 3.44E-05 | mDC_UCBMC |
| OCIAD1  | 9.79E-10 | 0.28729425 | 0.568 | 0.311 | 3.47E-05 | mDC_UCBMC |
| ACTR10  | 9.83E-10 | 0.35500626 | 0.534 | 0.297 | 3.48E-05 | mDC_UCBMC |
| EPB41L3 | 1.02E-09 | 0.3967404  | 0.275 | 0.119 | 3.63E-05 | mDC_UCBMC |
| SURF4   | 1.05E-09 | 0.46345354 | 0.462 | 0.244 | 3.71E-05 | mDC_UCBMC |
| EAPP    | 1.05E-09 | 0.38883407 | 0.386 | 0.185 | 3.71E-05 | mDC_UCBMC |
| NFX1    | 1.06E-09 | 0.4268059  | 0.364 | 0.175 | 3.77E-05 | mDC_UCBMC |
| CDK8    | 1.08E-09 | 0.78152896 | 0.258 | 0.112 | 3.81E-05 | mDC_UCBMC |
| PRPSAP2 | 1.08E-09 | 0.40382232 | 0.386 | 0.188 | 3.84E-05 | mDC_UCBMC |
| EYA3    | 1.09E-09 | 0.27402171 | 0.381 | 0.186 | 3.87E-05 | mDC_UCBMC |
| ZBED1   | 1.12E-09 | 0.15553965 | 0.644 | 0.35  | 3.96E-05 | mDC_UCBMC |
| UFD1    | 1.13E-09 | 0.33484028 | 0.458 | 0.233 | 4.00E-05 | mDC_UCBMC |

|                   |          |            |       |       |          |           |
|-------------------|----------|------------|-------|-------|----------|-----------|
| BRD9              | 1.16E-09 | 0.77116445 | 0.292 | 0.132 | 4.10E-05 | mDC_UCBMC |
| CCT3              | 1.16E-09 | 0.398376   | 0.754 | 0.468 | 4.11E-05 | mDC_UCBMC |
| TMEM43            | 1.18E-09 | 0.62370763 | 0.28  | 0.122 | 4.19E-05 | mDC_UCBMC |
| ARNTL             | 1.20E-09 | 0.38582997 | 0.318 | 0.148 | 4.26E-05 | mDC_UCBMC |
| ACO2              | 1.27E-09 | 0.31329483 | 0.534 | 0.298 | 4.49E-05 | mDC_UCBMC |
| PXMP4             | 1.27E-09 | 0.7909441  | 0.25  | 0.104 | 4.50E-05 | mDC_UCBMC |
| NUP93             | 1.29E-09 | 0.81536495 | 0.254 | 0.108 | 4.56E-05 | mDC_UCBMC |
| ARHGEF6           | 1.32E-09 | 0.40044905 | 0.441 | 0.231 | 4.67E-05 | mDC_UCBMC |
| CSRNP1            | 1.32E-09 | 0.45048406 | 0.547 | 0.305 | 4.67E-05 | mDC_UCBMC |
| ENSMUG00000059017 | 1.33E-09 | 0.48541326 | 0.737 | 0.458 | 4.71E-05 | mDC_UCBMC |
| ADAM9             | 1.34E-09 | 0.22035065 | 0.309 | 0.141 | 4.75E-05 | mDC_UCBMC |
| RDX               | 1.36E-09 | 1.09508613 | 0.28  | 0.127 | 4.82E-05 | mDC_UCBMC |
| DROSHA            | 1.43E-09 | 0.70495064 | 0.25  | 0.104 | 5.06E-05 | mDC_UCBMC |
| FDX1              | 1.53E-09 | 0.48610184 | 0.394 | 0.2   | 5.42E-05 | mDC_UCBMC |
| ENSMUG00000061913 | 1.53E-09 | 0.34609202 | 0.763 | 0.46  | 5.43E-05 | mDC_UCBMC |
| PSMA7             | 1.60E-09 | 0.40126391 | 0.941 | 0.667 | 5.68E-05 | mDC_UCBMC |
| IST1              | 1.61E-09 | 0.25138372 | 0.53  | 0.285 | 5.70E-05 | mDC_UCBMC |
| CNOT7             | 1.66E-09 | 0.45069218 | 0.403 | 0.2   | 5.90E-05 | mDC_UCBMC |
| PYGB              | 1.68E-09 | 0.3715467  | 0.288 | 0.126 | 5.97E-05 | mDC_UCBMC |
| HSD17B11          | 1.74E-09 | 0.46678364 | 0.369 | 0.177 | 6.15E-05 | mDC_UCBMC |
| ENSMUG00000020751 | 1.76E-09 | 0.41563572 | 0.449 | 0.242 | 6.24E-05 | mDC_UCBMC |
| TNPO3             | 1.78E-09 | 0.46985026 | 0.331 | 0.158 | 6.31E-05 | mDC_UCBMC |
| TFAM              | 1.84E-09 | 0.62346398 | 0.411 | 0.208 | 6.52E-05 | mDC_UCBMC |
| ATP11C            | 1.86E-09 | 0.25754819 | 0.305 | 0.138 | 6.60E-05 | mDC_UCBMC |
| EIF3E             | 1.93E-09 | 0.35621331 | 0.936 | 0.679 | 6.85E-05 | mDC_UCBMC |
| RESF1             | 1.96E-09 | 0.58030116 | 0.297 | 0.136 | 6.93E-05 | mDC_UCBMC |
| ERLIN2            | 1.98E-09 | 0.49754459 | 0.403 | 0.204 | 7.00E-05 | mDC_UCBMC |
| ITGB1             | 2.08E-09 | 0.22121971 | 0.78  | 0.454 | 7.37E-05 | mDC_UCBMC |
| PJA2              | 2.10E-09 | 0.43326467 | 0.521 | 0.293 | 7.46E-05 | mDC_UCBMC |
| FKBP5             | 2.12E-09 | 0.247633   | 0.521 | 0.296 | 7.52E-05 | mDC_UCBMC |
| MARK2             | 2.13E-09 | 0.330377   | 0.292 | 0.132 | 7.54E-05 | mDC_UCBMC |
| YY1               | 2.20E-09 | 0.23979671 | 0.487 | 0.25  | 7.81E-05 | mDC_UCBMC |
| SNX14             | 2.21E-09 | 0.17264888 | 0.462 | 0.245 | 7.81E-05 | mDC_UCBMC |

|                   |          |            |       |       |            |           |
|-------------------|----------|------------|-------|-------|------------|-----------|
| IDE               | 2.30E-09 | 0.52386232 | 0.267 | 0.116 | 8.14E-05   | mDC_UCBMC |
| ENSMUG00000062941 | 2.41E-09 | 0.14388788 | 0.314 | 0.146 | 8.55E-05   | mDC_UCBMC |
| RSRC2             | 2.52E-09 | 0.44937783 | 0.682 | 0.414 | 8.95E-05   | mDC_UCBMC |
| STX3              | 2.53E-09 | 0.25099847 | 0.331 | 0.154 | 8.96E-05   | mDC_UCBMC |
| DMXL1             | 2.54E-09 | 0.45981901 | 0.301 | 0.139 | 9.00E-05   | mDC_UCBMC |
| BCL10             | 2.60E-09 | 0.40747428 | 0.352 | 0.17  | 9.20E-05   | mDC_UCBMC |
| RPP14             | 2.66E-09 | 0.83672096 | 0.25  | 0.108 | 9.44E-05   | mDC_UCBMC |
| PPP2R1A           | 2.73E-09 | 0.22064517 | 0.534 | 0.297 | 9.68E-05   | mDC_UCBMC |
| ENSMUG00000019238 | 2.74E-09 | 0.27091982 | 0.53  | 0.281 | 9.69E-05   | mDC_UCBMC |
| SESTD1            | 2.76E-09 | 0.30938548 | 0.258 | 0.111 | 9.77E-05   | mDC_UCBMC |
| IRF5              | 2.84E-09 | 0.54598857 | 0.288 | 0.129 | 0.00010061 | mDC_UCBMC |
| NDUFA10           | 2.93E-09 | 0.4742248  | 0.483 | 0.269 | 0.00010374 | mDC_UCBMC |
| MTM1              | 2.96E-09 | 0.4900185  | 0.25  | 0.105 | 0.00010471 | mDC_UCBMC |
| ZBTB46            | 3.07E-09 | 0.29856263 | 0.403 | 0.212 | 0.00010884 | mDC_UCBMC |
| EIPR1             | 3.15E-09 | 0.3693326  | 0.436 | 0.228 | 0.00011146 | mDC_UCBMC |
| NARS2             | 3.22E-09 | 0.49101202 | 0.258 | 0.112 | 0.00011409 | mDC_UCBMC |
| RBM17             | 3.26E-09 | 0.29065974 | 0.403 | 0.204 | 0.0001155  | mDC_UCBMC |
| LETMD1            | 3.32E-09 | 0.52405322 | 0.297 | 0.136 | 0.00011762 | mDC_UCBMC |
| SEPTIN9           | 3.37E-09 | 0.28963646 | 0.695 | 0.411 | 0.00011956 | mDC_UCBMC |
| TOB1              | 3.50E-09 | 0.73056419 | 0.318 | 0.152 | 0.00012389 | mDC_UCBMC |
| RARA              | 3.76E-09 | 0.20264724 | 0.513 | 0.266 | 0.00013324 | mDC_UCBMC |
| ARMH3             | 3.83E-09 | 0.42383337 | 0.381 | 0.193 | 0.00013563 | mDC_UCBMC |
| SLC35B1           | 3.83E-09 | 0.36400909 | 0.381 | 0.19  | 0.00013583 | mDC_UCBMC |
| ITGB7             | 3.89E-09 | 0.10220299 | 0.415 | 0.2   | 0.00013787 | mDC_UCBMC |
| FUT8              | 3.94E-09 | 0.50666079 | 0.36  | 0.182 | 0.00013948 | mDC_UCBMC |
| CPEB4             | 3.99E-09 | 0.43099823 | 0.254 | 0.11  | 0.00014141 | mDC_UCBMC |
| RNF103            | 4.02E-09 | 0.38855337 | 0.517 | 0.288 | 0.0001426  | mDC_UCBMC |
| ENSMUG00000049833 | 4.12E-09 | 0.72567552 | 0.292 | 0.138 | 0.00014581 | mDC_UCBMC |
| COMMD10           | 4.12E-09 | 0.25552333 | 0.525 | 0.29  | 0.00014611 | mDC_UCBMC |
| XPO1              | 4.19E-09 | 0.40292768 | 0.462 | 0.248 | 0.00014849 | mDC_UCBMC |
| NMI               | 4.51E-09 | 0.59475993 | 0.271 | 0.118 | 0.00015977 | mDC_UCBMC |
| ZDHHC3            | 4.62E-09 | 0.64802044 | 0.258 | 0.112 | 0.00016383 | mDC_UCBMC |
| COPS8             | 4.77E-09 | 0.20644336 | 0.589 | 0.332 | 0.00016886 | mDC_UCBMC |

|                    |          |            |       |       |            |           |
|--------------------|----------|------------|-------|-------|------------|-----------|
| XRN2               | 4.80E-09 | 0.39510918 | 0.708 | 0.426 | 0.00017014 | mDC_UCBMC |
| ENSMMUG00000052293 | 4.88E-09 | 0.79477822 | 0.297 | 0.143 | 0.00017274 | mDC_UCBMC |
| WBP1L              | 4.88E-09 | 0.51283051 | 0.335 | 0.162 | 0.00017287 | mDC_UCBMC |
| RSRC1              | 5.00E-09 | 0.3355018  | 0.475 | 0.259 | 0.00017731 | mDC_UCBMC |
| EIF2B3             | 5.04E-09 | 0.33523308 | 0.39  | 0.194 | 0.00017852 | mDC_UCBMC |
| PPP2R3C            | 5.31E-09 | 0.55404231 | 0.288 | 0.132 | 0.00018826 | mDC_UCBMC |
| PRPF38B            | 5.36E-09 | 0.210519   | 0.547 | 0.297 | 0.00018975 | mDC_UCBMC |
| SYF2               | 5.37E-09 | 0.3358996  | 0.678 | 0.4   | 0.00019041 | mDC_UCBMC |
| UBA2               | 5.39E-09 | 0.33381002 | 0.424 | 0.218 | 0.00019108 | mDC_UCBMC |
| ENSMMUG00000048621 | 5.49E-09 | 0.42470661 | 0.292 | 0.134 | 0.0001947  | mDC_UCBMC |
| GPATCH2L           | 5.56E-09 | 0.33265036 | 0.28  | 0.124 | 0.00019716 | mDC_UCBMC |
| LGMN               | 5.69E-09 | 0.15725222 | 0.555 | 0.3   | 0.00020171 | mDC_UCBMC |
| METTL9             | 5.95E-09 | 0.40515844 | 0.352 | 0.172 | 0.0002107  | mDC_UCBMC |
| ACAP1              | 6.06E-09 | 0.34902038 | 0.267 | 0.116 | 0.00021457 | mDC_UCBMC |
| MAP3K3             | 6.25E-09 | 0.29918437 | 0.352 | 0.17  | 0.00022162 | mDC_UCBMC |
| TRIM5              | 6.35E-09 | 0.26688974 | 0.258 | 0.112 | 0.00022498 | mDC_UCBMC |
| ENSMMUG00000028699 | 6.40E-09 | 0.24008102 | 0.771 | 0.493 | 0.00022688 | mDC_UCBMC |
| DDX46              | 6.49E-09 | 0.24152076 | 0.784 | 0.486 | 0.00023012 | mDC_UCBMC |
| SLC25A3            | 6.50E-09 | 0.37604212 | 0.907 | 0.67  | 0.0002302  | mDC_UCBMC |
| RNF167             | 6.71E-09 | 0.41909961 | 0.343 | 0.167 | 0.0002379  | mDC_UCBMC |
| CTBP1              | 6.81E-09 | 0.23246547 | 0.352 | 0.17  | 0.00024131 | mDC_UCBMC |
| CRYL1              | 6.86E-09 | 0.34443854 | 0.381 | 0.19  | 0.00024301 | mDC_UCBMC |
| SLC18B1            | 7.12E-09 | 0.57992468 | 0.25  | 0.106 | 0.00025216 | mDC_UCBMC |
| BLOC1S6            | 7.13E-09 | 0.41916569 | 0.475 | 0.257 | 0.00025246 | mDC_UCBMC |
| CXCR4              | 7.18E-09 | 0.33157944 | 0.352 | 0.17  | 0.00025458 | mDC_UCBMC |
| UIMC1              | 7.19E-09 | 0.47674948 | 0.28  | 0.129 | 0.00025484 | mDC_UCBMC |
| COPS4              | 7.24E-09 | 0.72340375 | 0.301 | 0.142 | 0.00025642 | mDC_UCBMC |
| PPP4C              | 7.44E-09 | 0.16687589 | 0.606 | 0.334 | 0.00026372 | mDC_UCBMC |
| SMARCB1            | 7.50E-09 | 0.48739863 | 0.403 | 0.21  | 0.00026571 | mDC_UCBMC |
| ST6GAL1            | 7.91E-09 | 0.27165522 | 0.415 | 0.213 | 0.00028009 | mDC_UCBMC |
| IGSF6              | 7.92E-09 | 0.42832535 | 0.572 | 0.33  | 0.00028063 | mDC_UCBMC |
| RPS4Y2             | 7.99E-09 | 0.41763326 | 0.648 | 0.372 | 0.00028325 | mDC_UCBMC |
| CWF19L2            | 8.17E-09 | 0.50031467 | 0.369 | 0.187 | 0.00028947 | mDC_UCBMC |



|                   |          |            |       |       |            |           |
|-------------------|----------|------------|-------|-------|------------|-----------|
| OS9               | 8.47E-09 | 0.14836826 | 0.542 | 0.291 | 0.0003002  | mDC_UCBMC |
| RBM41             | 8.48E-09 | 0.75258041 | 0.25  | 0.11  | 0.00030057 | mDC_UCBMC |
| SNX22             | 8.52E-09 | 0.42999257 | 0.258 | 0.112 | 0.00030173 | mDC_UCBMC |
| SAMHD1            | 8.60E-09 | 0.46052035 | 0.839 | 0.556 | 0.0003047  | mDC_UCBMC |
| WAPL              | 8.61E-09 | 0.31473057 | 0.445 | 0.239 | 0.00030496 | mDC_UCBMC |
| CEP135            | 8.67E-09 | 0.63592469 | 0.263 | 0.118 | 0.00030713 | mDC_UCBMC |
| PDGFRA            | 8.75E-09 | 0.3108953  | 0.949 | 0.72  | 0.00031004 | mDC_UCBMC |
| PCID2             | 8.82E-09 | 0.40127353 | 0.297 | 0.136 | 0.00031248 | mDC_UCBMC |
| INTS6L            | 8.87E-09 | 0.33027708 | 0.314 | 0.149 | 0.00031441 | mDC_UCBMC |
| ENSMUG00000022619 | 8.96E-09 | 0.37274599 | 0.292 | 0.134 | 0.00031746 | mDC_UCBMC |
| GNAI3             | 9.12E-09 | 0.26373684 | 0.619 | 0.348 | 0.0003233  | mDC_UCBMC |
| CAPZA1            | 9.40E-09 | 0.3340259  | 0.797 | 0.507 | 0.00033304 | mDC_UCBMC |
| MIA2              | 9.48E-09 | 0.36093455 | 0.407 | 0.214 | 0.00033599 | mDC_UCBMC |
| POU2F2            | 9.58E-09 | 0.44934872 | 0.301 | 0.142 | 0.00033959 | mDC_UCBMC |
| PGM2              | 1.04E-08 | 0.44993279 | 0.381 | 0.194 | 0.00036947 | mDC_UCBMC |
| MRPL3             | 1.04E-08 | 0.58450365 | 0.297 | 0.14  | 0.00036987 | mDC_UCBMC |
| HM13              | 1.08E-08 | 0.39042267 | 0.458 | 0.246 | 0.00038438 | mDC_UCBMC |
| SMURF2            | 1.18E-08 | 0.17465977 | 0.284 | 0.131 | 0.00041826 | mDC_UCBMC |
| TGFB1             | 1.18E-08 | 0.50835395 | 0.39  | 0.204 | 0.00041834 | mDC_UCBMC |
| PGD               | 1.18E-08 | 0.58787073 | 0.347 | 0.174 | 0.00041841 | mDC_UCBMC |
| SUDS3             | 1.20E-08 | 0.84679527 | 0.258 | 0.119 | 0.0004242  | mDC_UCBMC |
| PPP1CC            | 1.23E-08 | 0.54347204 | 0.47  | 0.261 | 0.00043644 | mDC_UCBMC |
| NDC1              | 1.23E-08 | 0.46312407 | 0.301 | 0.141 | 0.0004367  | mDC_UCBMC |
| DOCK7             | 1.25E-08 | 0.25320357 | 0.258 | 0.115 | 0.00044235 | mDC_UCBMC |
| RUFY3             | 1.29E-08 | 0.45828323 | 0.394 | 0.205 | 0.00045628 | mDC_UCBMC |
| ZNF106            | 1.35E-08 | 0.33766114 | 0.339 | 0.167 | 0.00047925 | mDC_UCBMC |
| SRP72             | 1.36E-08 | 0.3663703  | 0.411 | 0.215 | 0.00048183 | mDC_UCBMC |
| SLC25A36          | 1.37E-08 | 0.41662274 | 0.301 | 0.144 | 0.0004847  | mDC_UCBMC |
| HVCN1             | 1.43E-08 | 0.41501717 | 0.47  | 0.262 | 0.00050645 | mDC_UCBMC |
| SAR1B             | 1.46E-08 | 0.55309428 | 0.275 | 0.126 | 0.00051696 | mDC_UCBMC |
| TRIM13            | 1.48E-08 | 0.64379406 | 0.305 | 0.146 | 0.00052491 | mDC_UCBMC |
| AGPAT4            | 1.51E-08 | 0.2963189  | 0.352 | 0.17  | 0.00053436 | mDC_UCBMC |
| ZNF528            | 1.56E-08 | 0.39918609 | 0.398 | 0.206 | 0.00055123 | mDC_UCBMC |

|         |          |            |       |       |            |           |
|---------|----------|------------|-------|-------|------------|-----------|
| PRKAR1A | 1.58E-08 | 0.20403409 | 0.627 | 0.36  | 0.00056076 | mDC_UCBMC |
| CCDC90B | 1.58E-08 | 0.18997537 | 0.407 | 0.208 | 0.00056146 | mDC_UCBMC |
| PTAR1   | 1.60E-08 | 0.27761153 | 0.369 | 0.18  | 0.00056651 | mDC_UCBMC |
| UBE2B   | 1.61E-08 | 0.40134956 | 0.606 | 0.363 | 0.00056965 | mDC_UCBMC |
| SELENOS | 1.61E-08 | 0.25904936 | 0.873 | 0.544 | 0.00057117 | mDC_UCBMC |
| LEO1    | 1.63E-08 | 0.7667555  | 0.25  | 0.11  | 0.00057674 | mDC_UCBMC |
| TVP23B  | 1.66E-08 | 0.35768443 | 0.275 | 0.124 | 0.00058785 | mDC_UCBMC |
| TBRG4   | 1.67E-08 | 0.38620148 | 0.297 | 0.142 | 0.00059057 | mDC_UCBMC |
| CSNK2A1 | 1.69E-08 | 0.23857606 | 0.64  | 0.392 | 0.00059863 | mDC_UCBMC |
| NOL8    | 1.72E-08 | 0.75186453 | 0.288 | 0.138 | 0.0006105  | mDC_UCBMC |
| SIGLEC5 | 1.74E-08 | 0.70014858 | 0.326 | 0.164 | 0.00061596 | mDC_UCBMC |
| M6PR    | 1.74E-08 | 0.2746933  | 0.729 | 0.434 | 0.00061697 | mDC_UCBMC |
| DDX39A  | 1.75E-08 | 0.25699177 | 0.517 | 0.285 | 0.00061972 | mDC_UCBMC |
| ZC3H13  | 1.77E-08 | 0.40534349 | 0.492 | 0.28  | 0.00062814 | mDC_UCBMC |
| STAG2   | 1.78E-08 | 0.27358909 | 0.661 | 0.39  | 0.00062962 | mDC_UCBMC |
| CRNKL1  | 1.81E-08 | 0.6693164  | 0.331 | 0.165 | 0.00064049 | mDC_UCBMC |
| FAM53C  | 1.83E-08 | 0.557498   | 0.301 | 0.142 | 0.00064823 | mDC_UCBMC |
| ZRSR2   | 1.84E-08 | 0.28154598 | 0.271 | 0.125 | 0.00065023 | mDC_UCBMC |
| TLR3    | 1.88E-08 | 0.55981417 | 0.347 | 0.176 | 0.00066597 | mDC_UCBMC |
| RTN3    | 1.90E-08 | 0.23841807 | 0.614 | 0.36  | 0.00067359 | mDC_UCBMC |
| SUMO3   | 1.91E-08 | 0.55499473 | 0.36  | 0.186 | 0.00067645 | mDC_UCBMC |
| STX17   | 2.03E-08 | 0.43948119 | 0.288 | 0.136 | 0.00072055 | mDC_UCBMC |
| CNPPD1  | 2.15E-08 | 0.29698936 | 0.36  | 0.182 | 0.00076054 | mDC_UCBMC |
| CYSLTR1 | 2.25E-08 | 0.29126493 | 0.309 | 0.144 | 0.00079604 | mDC_UCBMC |
| PPP6R1  | 2.34E-08 | 0.35789242 | 0.517 | 0.29  | 0.0008288  | mDC_UCBMC |
| CAPN1   | 2.44E-08 | 0.26934278 | 0.377 | 0.194 | 0.00086462 | mDC_UCBMC |
| WBP11   | 2.46E-08 | 0.18951107 | 0.479 | 0.257 | 0.00087213 | mDC_UCBMC |
| POLK    | 2.49E-08 | 0.53715212 | 0.326 | 0.165 | 0.0008828  | mDC_UCBMC |
| HEXB    | 2.51E-08 | 0.49636132 | 0.352 | 0.178 | 0.00088944 | mDC_UCBMC |
| GNL3L   | 2.51E-08 | 0.39389059 | 0.28  | 0.127 | 0.000891   | mDC_UCBMC |
| DERL2   | 2.53E-08 | 0.39849156 | 0.386 | 0.202 | 0.00089755 | mDC_UCBMC |
| ZCRB1   | 2.55E-08 | 0.45900169 | 0.364 | 0.188 | 0.00090376 | mDC_UCBMC |
| NCKAP1L | 2.56E-08 | 0.38051806 | 0.746 | 0.467 | 0.00090537 | mDC_UCBMC |

|                    |          |            |       |       |            |           |
|--------------------|----------|------------|-------|-------|------------|-----------|
| ATF4               | 2.61E-08 | 0.28795323 | 0.826 | 0.55  | 0.00092478 | mDC_UCBMC |
| PRKACA             | 2.62E-08 | 0.22458377 | 0.318 | 0.151 | 0.00092751 | mDC_UCBMC |
| BCAS2              | 2.65E-08 | 0.34805227 | 0.445 | 0.239 | 0.00093809 | mDC_UCBMC |
| TSG101             | 2.77E-08 | 0.36582898 | 0.419 | 0.229 | 0.00098102 | mDC_UCBMC |
| FAM133B            | 2.82E-08 | 0.24303271 | 0.496 | 0.274 | 0.0010007  | mDC_UCBMC |
| MAPK14             | 2.84E-08 | 0.63821748 | 0.288 | 0.139 | 0.00100561 | mDC_UCBMC |
| ITGAE              | 2.85E-08 | 0.49198995 | 0.356 | 0.18  | 0.00101107 | mDC_UCBMC |
| ENSMMUG00000047496 | 2.95E-08 | 0.33131678 | 0.411 | 0.214 | 0.00104509 | mDC_UCBMC |
| SERINC1            | 2.98E-08 | 0.28149092 | 0.521 | 0.293 | 0.00105753 | mDC_UCBMC |
| ZNF638             | 3.04E-08 | 0.17179955 | 0.492 | 0.273 | 0.00107792 | mDC_UCBMC |
| URM1               | 3.11E-08 | 0.27280036 | 0.297 | 0.137 | 0.00110068 | mDC_UCBMC |
| PIGY               | 3.11E-08 | 0.32713077 | 0.449 | 0.243 | 0.00110115 | mDC_UCBMC |
| SRRM1              | 3.23E-08 | 0.2668578  | 0.86  | 0.599 | 0.00114485 | mDC_UCBMC |
| IQCG               | 3.24E-08 | 0.56536396 | 0.284 | 0.136 | 0.00114777 | mDC_UCBMC |
| PAK2               | 3.27E-08 | 0.21147823 | 0.763 | 0.444 | 0.00115743 | mDC_UCBMC |
| CCNG2              | 3.56E-08 | 0.35442452 | 0.377 | 0.198 | 0.00126155 | mDC_UCBMC |
| SMARCA5            | 3.57E-08 | 0.22200715 | 0.572 | 0.322 | 0.0012662  | mDC_UCBMC |
| BTBD1              | 3.75E-08 | 0.29818311 | 0.28  | 0.132 | 0.00132984 | mDC_UCBMC |
| ADAR               | 3.86E-08 | 0.24279643 | 0.441 | 0.231 | 0.00136703 | mDC_UCBMC |
| PABPC4             | 3.90E-08 | 0.48456594 | 0.331 | 0.168 | 0.00138251 | mDC_UCBMC |
| CEP120             | 3.92E-08 | 0.40942016 | 0.254 | 0.115 | 0.00139049 | mDC_UCBMC |
| IL6ST              | 3.93E-08 | 0.15586582 | 0.343 | 0.173 | 0.00139193 | mDC_UCBMC |
| CBLL1              | 4.03E-08 | 0.49019138 | 0.254 | 0.115 | 0.0014292  | mDC_UCBMC |
| CWC15              | 4.04E-08 | 0.28557832 | 0.703 | 0.426 | 0.00143008 | mDC_UCBMC |
| PARL               | 4.06E-08 | 0.20153146 | 0.314 | 0.15  | 0.00143837 | mDC_UCBMC |
| SSU72              | 4.08E-08 | 0.28546619 | 0.411 | 0.215 | 0.00144557 | mDC_UCBMC |
| TOMM20             | 4.41E-08 | 0.30623279 | 0.915 | 0.683 | 0.00156145 | mDC_UCBMC |
| HP1BP3             | 4.54E-08 | 0.18433472 | 0.593 | 0.34  | 0.00160844 | mDC_UCBMC |
| CCNG1              | 4.60E-08 | 0.45075983 | 0.513 | 0.294 | 0.00162846 | mDC_UCBMC |
| CHP1               | 4.63E-08 | 0.33566026 | 0.449 | 0.249 | 0.0016422  | mDC_UCBMC |
| ZBTB8OS            | 4.66E-08 | 0.46182238 | 0.271 | 0.126 | 0.00165109 | mDC_UCBMC |
| UBE2G2             | 4.70E-08 | 0.49868625 | 0.305 | 0.151 | 0.00166459 | mDC_UCBMC |
| RELT               | 4.78E-08 | 0.24111177 | 0.343 | 0.174 | 0.00169341 | mDC_UCBMC |

|                   |          |            |       |       |            |           |
|-------------------|----------|------------|-------|-------|------------|-----------|
| TIAL1             | 4.83E-08 | 0.40067693 | 0.453 | 0.248 | 0.00171191 | mDC_UCBMC |
| SLC30A5           | 4.96E-08 | 0.61522239 | 0.25  | 0.117 | 0.00175582 | mDC_UCBMC |
| NMD3              | 4.99E-08 | 0.53247565 | 0.271 | 0.128 | 0.00176747 | mDC_UCBMC |
| LEPROT            | 5.03E-08 | 0.63735    | 0.309 | 0.154 | 0.00178158 | mDC_UCBMC |
| ZNF789            | 5.07E-08 | 0.55340426 | 0.258 | 0.12  | 0.00179783 | mDC_UCBMC |
| SF3B3             | 5.10E-08 | 0.33562176 | 0.335 | 0.165 | 0.00180532 | mDC_UCBMC |
| MTMR9             | 5.22E-08 | 0.11885334 | 0.271 | 0.127 | 0.0018505  | mDC_UCBMC |
| IKBK              | 5.35E-08 | 0.34611859 | 0.292 | 0.14  | 0.00189646 | mDC_UCBMC |
| PRKACB            | 5.48E-08 | 0.2216946  | 0.568 | 0.327 | 0.00194301 | mDC_UCBMC |
| OFD1              | 5.50E-08 | 0.39028769 | 0.326 | 0.169 | 0.00194864 | mDC_UCBMC |
| SOD1              | 5.64E-08 | 0.20098685 | 0.733 | 0.439 | 0.00199722 | mDC_UCBMC |
| APPL1             | 5.66E-08 | 0.30364145 | 0.568 | 0.327 | 0.00200523 | mDC_UCBMC |
| ENSMUG00000055457 | 5.73E-08 | 0.22488708 | 0.674 | 0.408 | 0.00203084 | mDC_UCBMC |
| PLP2              | 5.75E-08 | 0.30566729 | 0.758 | 0.497 | 0.00203704 | mDC_UCBMC |
| B4GALT3           | 5.77E-08 | 0.45123857 | 0.258 | 0.12  | 0.00204584 | mDC_UCBMC |
| CSNK1D            | 5.77E-08 | 0.14641671 | 0.458 | 0.252 | 0.00204595 | mDC_UCBMC |
| CCPG1             | 5.85E-08 | 0.30586481 | 0.424 | 0.228 | 0.00207257 | mDC_UCBMC |
| EPB41L2           | 5.86E-08 | 0.15298484 | 0.5   | 0.282 | 0.00207663 | mDC_UCBMC |
| STX7              | 5.89E-08 | 0.21361938 | 0.631 | 0.365 | 0.00208539 | mDC_UCBMC |
| TAX1BP3           | 5.92E-08 | 0.18334575 | 0.458 | 0.246 | 0.00209767 | mDC_UCBMC |
| KLHL6             | 6.06E-08 | 0.32184282 | 0.356 | 0.181 | 0.00214801 | mDC_UCBMC |
| THRAP3            | 6.07E-08 | 0.15838226 | 0.725 | 0.441 | 0.0021502  | mDC_UCBMC |
| KCTD20            | 6.32E-08 | 0.44804061 | 0.369 | 0.194 | 0.00224013 | mDC_UCBMC |
| CDK19             | 6.67E-08 | 0.56508964 | 0.297 | 0.148 | 0.00236197 | mDC_UCBMC |
| ARCN1             | 6.89E-08 | 0.27001468 | 0.436 | 0.237 | 0.00244257 | mDC_UCBMC |
| FKBP15            | 6.92E-08 | 0.21112367 | 0.487 | 0.271 | 0.00245048 | mDC_UCBMC |
| CHD9              | 6.96E-08 | 0.21685657 | 0.432 | 0.236 | 0.0024671  | mDC_UCBMC |
| SYNRG             | 7.01E-08 | 0.30323891 | 0.301 | 0.145 | 0.00248297 | mDC_UCBMC |
| FCN1              | 7.25E-08 | 0.5534783  | 0.347 | 0.181 | 0.0025701  | mDC_UCBMC |
| PCYOX1            | 7.29E-08 | 0.3954797  | 0.36  | 0.184 | 0.00258344 | mDC_UCBMC |
| RSU1              | 7.36E-08 | 0.31383032 | 0.475 | 0.27  | 0.00260623 | mDC_UCBMC |
| CPLANE1           | 7.70E-08 | 0.60835897 | 0.254 | 0.12  | 0.00272961 | mDC_UCBMC |
| CYBRD1            | 7.78E-08 | 0.3883709  | 0.292 | 0.141 | 0.00275514 | mDC_UCBMC |

|                    |          |            |       |       |            |           |
|--------------------|----------|------------|-------|-------|------------|-----------|
| PPM1B              | 7.80E-08 | 0.14800497 | 0.36  | 0.192 | 0.00276396 | mDC_UCBMC |
| NOP58              | 7.80E-08 | 0.25281649 | 0.576 | 0.341 | 0.00276528 | mDC_UCBMC |
| SDCCAG8            | 7.82E-08 | 0.25019244 | 0.504 | 0.289 | 0.00277192 | mDC_UCBMC |
| PNRC2              | 7.89E-08 | 0.31101987 | 0.606 | 0.353 | 0.00279609 | mDC_UCBMC |
| PHF11              | 7.93E-08 | 0.35865351 | 0.5   | 0.288 | 0.00280821 | mDC_UCBMC |
| CD63               | 8.20E-08 | 0.33543716 | 0.754 | 0.497 | 0.0029058  | mDC_UCBMC |
| SLC3A2             | 8.22E-08 | 0.25626904 | 0.347 | 0.177 | 0.00291404 | mDC_UCBMC |
| KCTD12             | 8.39E-08 | 0.36055228 | 0.5   | 0.287 | 0.00297168 | mDC_UCBMC |
| ENSMMUG00000058165 | 8.51E-08 | 0.32415765 | 0.428 | 0.232 | 0.0030146  | mDC_UCBMC |
| ZNF581             | 8.67E-08 | 0.5660299  | 0.297 | 0.148 | 0.0030712  | mDC_UCBMC |
| ARHGEF1            | 8.72E-08 | 0.22732626 | 0.411 | 0.22  | 0.00309116 | mDC_UCBMC |
| DIABLO             | 9.04E-08 | 0.4105049  | 0.496 | 0.284 | 0.00320263 | mDC_UCBMC |
| MRPL44             | 9.04E-08 | 0.58490101 | 0.25  | 0.116 | 0.00320372 | mDC_UCBMC |
| NRM                | 9.07E-08 | 0.28767237 | 0.25  | 0.112 | 0.0032135  | mDC_UCBMC |
| CCT5               | 9.20E-08 | 0.25770815 | 0.686 | 0.413 | 0.00325886 | mDC_UCBMC |
| ZNF268             | 9.34E-08 | 0.32767653 | 0.331 | 0.172 | 0.00330884 | mDC_UCBMC |
| HSPA4              | 9.54E-08 | 0.24994657 | 0.377 | 0.196 | 0.00337925 | mDC_UCBMC |
| PSMC1              | 9.66E-08 | 0.1630556  | 0.441 | 0.24  | 0.003421   | mDC_UCBMC |
| LRPAP1             | 9.79E-08 | 0.38949187 | 0.381 | 0.201 | 0.00346917 | mDC_UCBMC |
| LTA4H              | 9.87E-08 | 0.39121395 | 0.309 | 0.151 | 0.0034982  | mDC_UCBMC |
| WDR61              | 1.00E-07 | 0.37896192 | 0.343 | 0.176 | 0.00354207 | mDC_UCBMC |
| TPD52              | 1.01E-07 | 0.51987328 | 0.275 | 0.133 | 0.0035728  | mDC_UCBMC |
| MFNG               | 1.02E-07 | 0.30022998 | 0.492 | 0.268 | 0.00360183 | mDC_UCBMC |
| GRIPAP1            | 1.03E-07 | 0.16110596 | 0.297 | 0.143 | 0.00364309 | mDC_UCBMC |
| CREB1              | 1.03E-07 | 0.30952474 | 0.407 | 0.221 | 0.0036671  | mDC_UCBMC |
| CHIC2              | 1.04E-07 | 0.23790506 | 0.369 | 0.196 | 0.00366961 | mDC_UCBMC |
| ERO1A              | 1.09E-07 | 0.18494833 | 0.449 | 0.246 | 0.00386058 | mDC_UCBMC |
| PMM2               | 1.22E-07 | 0.27229899 | 0.267 | 0.124 | 0.00432269 | mDC_UCBMC |
| CNPY3              | 1.23E-07 | 0.29067714 | 0.568 | 0.328 | 0.00435698 | mDC_UCBMC |
| RACK1              | 1.24E-07 | 0.2456631  | 1     | 0.939 | 0.00438793 | mDC_UCBMC |
| TAF1               | 1.25E-07 | 0.45025263 | 0.275 | 0.134 | 0.00444454 | mDC_UCBMC |
| ENSMMUG00000065089 | 1.27E-07 | 0.26300326 | 0.458 | 0.253 | 0.0045091  | mDC_UCBMC |
| KIF2A              | 1.27E-07 | 0.49612482 | 0.373 | 0.202 | 0.00451467 | mDC_UCBMC |

|          |          |            |       |       |            |           |
|----------|----------|------------|-------|-------|------------|-----------|
| RNF141   | 1.28E-07 | 0.49976501 | 0.263 | 0.124 | 0.00452634 | mDC_UCBMC |
| TMEM127  | 1.32E-07 | 0.22599028 | 0.356 | 0.182 | 0.00466661 | mDC_UCBMC |
| KIAA2026 | 1.34E-07 | 0.35412166 | 0.275 | 0.134 | 0.00474951 | mDC_UCBMC |
| LASP1    | 1.37E-07 | 0.10830336 | 0.419 | 0.224 | 0.00483702 | mDC_UCBMC |
| IDH2     | 1.41E-07 | 0.35698788 | 0.716 | 0.445 | 0.00499312 | mDC_UCBMC |
| GOLIM4   | 1.48E-07 | 0.75065276 | 0.25  | 0.12  | 0.00523907 | mDC_UCBMC |
| SYMPK    | 1.51E-07 | 0.33400632 | 0.28  | 0.138 | 0.00533783 | mDC_UCBMC |
| ACER3    | 1.56E-07 | 0.38676969 | 0.415 | 0.231 | 0.00551797 | mDC_UCBMC |
| FERMT3   | 1.63E-07 | 0.19425553 | 0.275 | 0.13  | 0.0057628  | mDC_UCBMC |
| HK2      | 1.65E-07 | 0.56158573 | 0.275 | 0.134 | 0.00584    | mDC_UCBMC |
| TUBGCP2  | 1.66E-07 | 0.30080611 | 0.28  | 0.135 | 0.0058665  | mDC_UCBMC |
| EIF4G1   | 1.66E-07 | 0.24345849 | 0.347 | 0.179 | 0.00588178 | mDC_UCBMC |
| PPA2     | 1.69E-07 | 0.14290868 | 0.432 | 0.237 | 0.00600524 | mDC_UCBMC |
| PREPL    | 1.70E-07 | 0.38654174 | 0.263 | 0.124 | 0.0060243  | mDC_UCBMC |
| CCDC115  | 1.83E-07 | 0.38272716 | 0.309 | 0.158 | 0.00648645 | mDC_UCBMC |
| NKAP     | 1.84E-07 | 0.43532367 | 0.254 | 0.119 | 0.00652762 | mDC_UCBMC |
| MPG      | 1.91E-07 | 0.1930846  | 0.352 | 0.178 | 0.00676645 | mDC_UCBMC |
| RAMAC    | 1.93E-07 | 0.25109167 | 0.432 | 0.234 | 0.00684133 | mDC_UCBMC |
| RSL1D1   | 1.93E-07 | 0.4122344  | 0.559 | 0.335 | 0.00684604 | mDC_UCBMC |
| GLIPR1L2 | 1.94E-07 | 0.18251707 | 0.657 | 0.387 | 0.00686401 | mDC_UCBMC |
| PPP1CB   | 1.96E-07 | 0.22997359 | 0.936 | 0.743 | 0.00694044 | mDC_UCBMC |
| KATNBL1  | 1.97E-07 | 0.1902996  | 0.508 | 0.29  | 0.00698764 | mDC_UCBMC |
| HNRNPH3  | 1.99E-07 | 0.26885252 | 0.737 | 0.469 | 0.00703819 | mDC_UCBMC |
| RBM18    | 1.99E-07 | 0.48186677 | 0.258 | 0.124 | 0.00704958 | mDC_UCBMC |
| ATP5PO   | 2.02E-07 | 0.3410964  | 0.928 | 0.685 | 0.00714088 | mDC_UCBMC |
| SNF8     | 2.03E-07 | 0.27320985 | 0.555 | 0.319 | 0.00719361 | mDC_UCBMC |
| LMAN2    | 2.07E-07 | 0.35315887 | 0.61  | 0.366 | 0.00733186 | mDC_UCBMC |
| TTC3     | 2.20E-07 | 0.15469681 | 0.364 | 0.192 | 0.00778411 | mDC_UCBMC |
| BRD2     | 2.28E-07 | 0.16255134 | 0.742 | 0.444 | 0.00808658 | mDC_UCBMC |
| VPS37A   | 2.39E-07 | 0.26827822 | 0.369 | 0.196 | 0.00846151 | mDC_UCBMC |
| CMTR1    | 2.45E-07 | 0.38303097 | 0.314 | 0.159 | 0.00869797 | mDC_UCBMC |
| AP3D1    | 2.47E-07 | 0.22068448 | 0.25  | 0.119 | 0.00874873 | mDC_UCBMC |
| CLCN7    | 2.56E-07 | 0.32750142 | 0.25  | 0.118 | 0.00907392 | mDC_UCBMC |

|                    |          |            |       |       |            |           |
|--------------------|----------|------------|-------|-------|------------|-----------|
| COMMD9             | 2.57E-07 | 0.2685261  | 0.322 | 0.161 | 0.0091034  | mDC_UCBMC |
| ZBTB10             | 2.60E-07 | 0.3479074  | 0.258 | 0.124 | 0.00922345 | mDC_UCBMC |
| ENSMMUG00000049010 | 2.65E-07 | 0.29294141 | 0.492 | 0.277 | 0.00938649 | mDC_UCBMC |
| RASA1              | 2.66E-07 | 0.11459231 | 0.322 | 0.162 | 0.00941454 | mDC_UCBMC |
| MICAL1             | 2.69E-07 | 0.33615654 | 0.288 | 0.143 | 0.00952449 | mDC_UCBMC |
| TMEM50A            | 2.69E-07 | 0.15715164 | 0.691 | 0.416 | 0.0095345  | mDC_UCBMC |
| PRKRA              | 2.69E-07 | 0.24873084 | 0.398 | 0.216 | 0.00953979 | mDC_UCBMC |
| NAA50              | 2.71E-07 | 0.12957399 | 0.568 | 0.332 | 0.00961285 | mDC_UCBMC |
| RSBN1L             | 2.79E-07 | 0.35031358 | 0.347 | 0.182 | 0.00989097 | mDC_UCBMC |
| ACTN1              | 2.80E-07 | 0.1994945  | 0.636 | 0.373 | 0.00993092 | mDC_UCBMC |
| SON                | 2.84E-07 | 0.19250477 | 0.924 | 0.633 | 0.01005599 | mDC_UCBMC |
| SPI1               | 2.87E-07 | 0.13217826 | 0.297 | 0.149 | 0.01017387 | mDC_UCBMC |
| RWDD1              | 2.87E-07 | 0.25981641 | 0.758 | 0.493 | 0.01018019 | mDC_UCBMC |
| CANX               | 2.88E-07 | 0.28105327 | 0.479 | 0.27  | 0.01020103 | mDC_UCBMC |
| MAPK1IP1L          | 2.94E-07 | 0.22385812 | 0.496 | 0.285 | 0.01043358 | mDC_UCBMC |
| CCAR1              | 2.95E-07 | 0.1925044  | 0.394 | 0.21  | 0.0104377  | mDC_UCBMC |
| HK1                | 2.96E-07 | 0.2614359  | 0.453 | 0.253 | 0.01047223 | mDC_UCBMC |
| CPNE3              | 2.99E-07 | 0.210722   | 0.424 | 0.228 | 0.01058221 | mDC_UCBMC |
| SUN2               | 3.11E-07 | 0.2285777  | 0.258 | 0.124 | 0.01101444 | mDC_UCBMC |
| BZW2               | 3.12E-07 | 0.14650532 | 0.708 | 0.422 | 0.0110471  | mDC_UCBMC |
| PFDN4              | 3.13E-07 | 0.16184605 | 0.538 | 0.311 | 0.01108892 | mDC_UCBMC |
| ENSMMUG00000047277 | 3.16E-07 | 0.26846277 | 0.775 | 0.488 | 0.01121339 | mDC_UCBMC |
| TFEB               | 3.19E-07 | 0.33555093 | 0.254 | 0.124 | 0.01130418 | mDC_UCBMC |
| SNX11              | 3.19E-07 | 0.17245357 | 0.305 | 0.157 | 0.01130951 | mDC_UCBMC |
| EID1               | 3.19E-07 | 0.22473786 | 0.737 | 0.454 | 0.01131316 | mDC_UCBMC |
| MRPL22             | 3.24E-07 | 0.2059242  | 0.381 | 0.204 | 0.01148654 | mDC_UCBMC |
| NOSIP              | 3.25E-07 | 0.35052809 | 0.331 | 0.174 | 0.01151407 | mDC_UCBMC |
| UQCRC2             | 3.27E-07 | 0.24229923 | 0.487 | 0.281 | 0.01160316 | mDC_UCBMC |
| PDIA3              | 3.43E-07 | 0.33424313 | 0.377 | 0.2   | 0.01215148 | mDC_UCBMC |
| ENSMMUG00000055376 | 3.49E-07 | 0.14830098 | 0.377 | 0.199 | 0.0123558  | mDC_UCBMC |
| EZR                | 3.54E-07 | 0.12167291 | 0.911 | 0.641 | 0.01255209 | mDC_UCBMC |
| DYRK1B             | 3.60E-07 | 0.37020664 | 0.271 | 0.133 | 0.01273954 | mDC_UCBMC |
| DERL1              | 3.66E-07 | 0.33920153 | 0.398 | 0.218 | 0.01295984 | mDC_UCBMC |

|                   |          |            |       |       |            |           |
|-------------------|----------|------------|-------|-------|------------|-----------|
| TXNL1             | 3.67E-07 | 0.17885078 | 0.657 | 0.386 | 0.01298716 | mDC_UCBMC |
| POLR1D            | 3.73E-07 | 0.25728644 | 0.682 | 0.424 | 0.01323079 | mDC_UCBMC |
| TAF1B             | 3.92E-07 | 0.78552146 | 0.258 | 0.128 | 0.01387173 | mDC_UCBMC |
| CHID1             | 4.18E-07 | 0.36512509 | 0.288 | 0.146 | 0.01479771 | mDC_UCBMC |
| RALB              | 4.20E-07 | 0.270952   | 0.275 | 0.135 | 0.01486587 | mDC_UCBMC |
| SUCLA2            | 4.35E-07 | 0.32514648 | 0.254 | 0.121 | 0.01540572 | mDC_UCBMC |
| TGFBR1            | 4.36E-07 | 0.22584422 | 0.292 | 0.149 | 0.0154323  | mDC_UCBMC |
| BCAP29            | 4.40E-07 | 0.47181103 | 0.288 | 0.146 | 0.01559937 | mDC_UCBMC |
| VPS26A            | 4.52E-07 | 0.13154404 | 0.449 | 0.251 | 0.01603273 | mDC_UCBMC |
| GCNT2             | 4.60E-07 | 0.26055528 | 0.25  | 0.12  | 0.0162869  | mDC_UCBMC |
| SFPQ              | 4.62E-07 | 0.1995002  | 0.771 | 0.501 | 0.01635682 | mDC_UCBMC |
| BANP              | 4.87E-07 | 0.15610814 | 0.339 | 0.177 | 0.01724959 | mDC_UCBMC |
| ENSMUG00000058986 | 4.87E-07 | 0.24915066 | 0.267 | 0.128 | 0.01726807 | mDC_UCBMC |
| NADSYN1           | 5.07E-07 | 0.1233965  | 0.419 | 0.232 | 0.01795773 | mDC_UCBMC |
| SVBP              | 5.09E-07 | 0.25175843 | 0.352 | 0.186 | 0.01803331 | mDC_UCBMC |
| DHX29             | 5.38E-07 | 0.29706801 | 0.356 | 0.193 | 0.01907122 | mDC_UCBMC |
| PHAX              | 5.46E-07 | 0.62717772 | 0.25  | 0.122 | 0.01935698 | mDC_UCBMC |
| PNO1              | 5.48E-07 | 0.39738015 | 0.297 | 0.15  | 0.01940373 | mDC_UCBMC |
| PAIP1             | 5.49E-07 | 0.40249547 | 0.309 | 0.16  | 0.0194496  | mDC_UCBMC |
| JAML              | 5.50E-07 | 0.21919062 | 0.767 | 0.483 | 0.01950051 | mDC_UCBMC |
| PCBP1             | 5.59E-07 | 0.33036164 | 0.856 | 0.558 | 0.01981472 | mDC_UCBMC |
| PAICS             | 5.66E-07 | 0.29078897 | 0.275 | 0.135 | 0.02005219 | mDC_UCBMC |
| HDLBP             | 5.69E-07 | 0.16294194 | 0.424 | 0.24  | 0.0201563  | mDC_UCBMC |
| CBX6              | 5.80E-07 | 0.17179148 | 0.258 | 0.124 | 0.02053295 | mDC_UCBMC |
| TMEM9B            | 5.88E-07 | 0.33135151 | 0.39  | 0.216 | 0.02083237 | mDC_UCBMC |
| CPNE1             | 5.88E-07 | 0.12857206 | 0.597 | 0.35  | 0.02084738 | mDC_UCBMC |
| PCNA              | 5.95E-07 | 0.50220595 | 0.258 | 0.125 | 0.02108486 | mDC_UCBMC |
| OTUD5             | 6.24E-07 | 0.12862279 | 0.271 | 0.136 | 0.02210605 | mDC_UCBMC |
| NAAA              | 6.57E-07 | 0.11571974 | 0.47  | 0.255 | 0.02327833 | mDC_UCBMC |
| CDC123            | 6.59E-07 | 0.17105719 | 0.513 | 0.293 | 0.02335815 | mDC_UCBMC |
| GOLGA5            | 6.64E-07 | 0.20094636 | 0.356 | 0.194 | 0.0235109  | mDC_UCBMC |
| TSNAX             | 6.93E-07 | 0.20019593 | 0.394 | 0.221 | 0.0245678  | mDC_UCBMC |
| OXR1              | 6.99E-07 | 0.18496567 | 0.407 | 0.228 | 0.02475717 | mDC_UCBMC |



|                   |          |            |       |       |            |           |
|-------------------|----------|------------|-------|-------|------------|-----------|
| DDX24             | 7.15E-07 | 0.12624199 | 0.589 | 0.354 | 0.02534263 | mDC_UCBMC |
| PSAP              | 7.19E-07 | 0.3516154  | 0.898 | 0.654 | 0.02549039 | mDC_UCBMC |
| PLEKHJ1           | 7.75E-07 | 0.2219753  | 0.555 | 0.331 | 0.02744387 | mDC_UCBMC |
| NAA35             | 7.77E-07 | 0.61234706 | 0.263 | 0.132 | 0.02754546 | mDC_UCBMC |
| MRPL49            | 7.82E-07 | 0.36016889 | 0.254 | 0.122 | 0.02771755 | mDC_UCBMC |
| SACM1L            | 7.82E-07 | 0.47921081 | 0.28  | 0.144 | 0.02772445 | mDC_UCBMC |
| SUPT6H            | 7.92E-07 | 0.21027455 | 0.309 | 0.161 | 0.02807925 | mDC_UCBMC |
| CHST12            | 8.08E-07 | 0.33139203 | 0.284 | 0.146 | 0.02861373 | mDC_UCBMC |
| ANXA7             | 8.18E-07 | 0.2627247  | 0.585 | 0.345 | 0.0289861  | mDC_UCBMC |
| PATL1             | 8.20E-07 | 0.27180886 | 0.301 | 0.157 | 0.02906501 | mDC_UCBMC |
| CYFIP1            | 8.21E-07 | 0.22890065 | 0.411 | 0.235 | 0.02908569 | mDC_UCBMC |
| CASP7             | 8.39E-07 | 0.2547915  | 0.25  | 0.122 | 0.0297162  | mDC_UCBMC |
| ANXA2             | 8.39E-07 | 0.25294645 | 0.97  | 0.777 | 0.02974512 | mDC_UCBMC |
| FRG1              | 8.40E-07 | 0.41638533 | 0.318 | 0.165 | 0.02975119 | mDC_UCBMC |
| PSMD9             | 8.41E-07 | 0.28675834 | 0.419 | 0.232 | 0.02979675 | mDC_UCBMC |
| PPP4R3B           | 8.63E-07 | 0.13508284 | 0.403 | 0.228 | 0.03057351 | mDC_UCBMC |
| ENSMUG00000047632 | 8.72E-07 | 0.2865697  | 0.648 | 0.434 | 0.03089025 | mDC_UCBMC |
| FLII              | 8.96E-07 | 0.1543963  | 0.453 | 0.26  | 0.03173396 | mDC_UCBMC |
| NIFK              | 9.32E-07 | 0.27592771 | 0.475 | 0.279 | 0.03301529 | mDC_UCBMC |
| PSMA1             | 9.46E-07 | 0.23057772 | 0.805 | 0.534 | 0.03353635 | mDC_UCBMC |
| SNRNP70           | 9.75E-07 | 0.180411   | 0.419 | 0.246 | 0.03454046 | mDC_UCBMC |
| PDCD4             | 9.75E-07 | 0.21963425 | 0.428 | 0.247 | 0.03455213 | mDC_UCBMC |
| ENSMUG00000061298 | 9.85E-07 | 0.45073109 | 0.25  | 0.123 | 0.03489459 | mDC_UCBMC |
| MED4              | 1.01E-06 | 0.21705416 | 0.356 | 0.192 | 0.03569986 | mDC_UCBMC |
| TRAF3IP3          | 1.02E-06 | 0.1692485  | 0.314 | 0.162 | 0.03619079 | mDC_UCBMC |
| TGOLN2            | 1.04E-06 | 0.15963676 | 0.318 | 0.164 | 0.03680546 | mDC_UCBMC |
| LRRK1             | 1.05E-06 | 0.16363628 | 0.436 | 0.243 | 0.03706495 | mDC_UCBMC |
| JOSD1             | 1.09E-06 | 0.29792714 | 0.263 | 0.131 | 0.03859764 | mDC_UCBMC |
| SEL1L             | 1.10E-06 | 0.18280454 | 0.335 | 0.182 | 0.03911255 | mDC_UCBMC |
| WASHC4            | 1.12E-06 | 0.16271698 | 0.356 | 0.194 | 0.03977161 | mDC_UCBMC |
| SDHA              | 1.13E-06 | 0.13680121 | 0.597 | 0.347 | 0.03993362 | mDC_UCBMC |
| SDHC              | 1.15E-06 | 0.32122112 | 0.47  | 0.274 | 0.04080777 | mDC_UCBMC |
| CD9               | 1.16E-06 | 0.37653003 | 0.428 | 0.236 | 0.04126618 | mDC_UCBMC |

|                    |          |            |       |       |            |           |
|--------------------|----------|------------|-------|-------|------------|-----------|
| PAPSS1             | 1.23E-06 | 0.4862672  | 0.292 | 0.154 | 0.04347634 | mDC_UCBMC |
| UGCG               | 1.24E-06 | 0.30043346 | 0.271 | 0.138 | 0.04377292 | mDC_UCBMC |
| NDUFAF2            | 1.26E-06 | 0.19410662 | 0.335 | 0.178 | 0.04464429 | mDC_UCBMC |
| GTF2B              | 1.29E-06 | 0.14824784 | 0.771 | 0.522 | 0.04566293 | mDC_UCBMC |
| ENSMMUG00000060287 | 1.29E-06 | 0.23198023 | 0.987 | 0.816 | 0.04573711 | mDC_UCBMC |
| PHTF2              | 1.37E-06 | 0.12576409 | 0.288 | 0.146 | 0.04845201 | mDC_UCBMC |
| PLCB1              | 1.37E-06 | 0.38874302 | 0.271 | 0.141 | 0.04860701 | mDC_UCBMC |
| EIF1B              | 1.38E-06 | 0.13582333 | 0.674 | 0.419 | 0.04900556 | mDC_UCBMC |
| ERI3               | 1.39E-06 | 0.43019141 | 0.267 | 0.136 | 0.04929134 | mDC_UCBMC |
| AFG1L              | 1.49E-06 | 0.12346164 | 0.28  | 0.144 | 0.0527441  | mDC_UCBMC |
| ATIC               | 1.54E-06 | 0.34406312 | 0.292 | 0.154 | 0.05471045 | mDC_UCBMC |
| ENSMMUG00000019882 | 1.56E-06 | 0.18562004 | 0.504 | 0.299 | 0.05525373 | mDC_UCBMC |
| ZNF589             | 1.59E-06 | 0.24033131 | 0.356 | 0.195 | 0.05626866 | mDC_UCBMC |
| TMEM179B           | 1.61E-06 | 0.47286705 | 0.339 | 0.187 | 0.05696102 | mDC_UCBMC |
| EIF3F              | 1.62E-06 | 0.28034806 | 0.78  | 0.492 | 0.05725223 | mDC_UCBMC |
| LMO4               | 1.62E-06 | 0.14582485 | 0.432 | 0.24  | 0.05739433 | mDC_UCBMC |
| COTL1              | 1.63E-06 | 0.13007475 | 0.983 | 0.766 | 0.05790624 | mDC_UCBMC |
| ENSMMUG00000061458 | 1.65E-06 | 0.46225988 | 0.284 | 0.149 | 0.05840623 | mDC_UCBMC |
| SCP2               | 1.67E-06 | 0.13015528 | 0.75  | 0.46  | 0.0590338  | mDC_UCBMC |
| VPS13C             | 1.68E-06 | 0.11218858 | 0.788 | 0.51  | 0.05968465 | mDC_UCBMC |
| UGP2               | 1.68E-06 | 0.17751666 | 0.297 | 0.16  | 0.05969932 | mDC_UCBMC |
| DCAF5              | 1.69E-06 | 0.32429373 | 0.297 | 0.159 | 0.05991809 | mDC_UCBMC |
| MOB3A              | 1.69E-06 | 0.13607147 | 0.339 | 0.184 | 0.06001828 | mDC_UCBMC |
| DBNL               | 1.69E-06 | 0.1849399  | 0.826 | 0.516 | 0.06002131 | mDC_UCBMC |
| TPT1               | 1.70E-06 | 0.20559619 | 1     | 0.959 | 0.06014116 | mDC_UCBMC |
| MTIF2              | 1.70E-06 | 0.5308689  | 0.352 | 0.202 | 0.06021924 | mDC_UCBMC |
| RPS15              | 1.71E-06 | 0.20235787 | 1     | 0.944 | 0.06076461 | mDC_UCBMC |
| CLK1               | 1.72E-06 | 0.15701573 | 0.602 | 0.371 | 0.06089438 | mDC_UCBMC |
| IRF9               | 1.79E-06 | 0.65769499 | 0.271 | 0.141 | 0.06335222 | mDC_UCBMC |
| RNF213             | 1.80E-06 | 0.14800758 | 0.314 | 0.168 | 0.0636864  | mDC_UCBMC |
| CCT2               | 1.89E-06 | 0.24424013 | 0.695 | 0.428 | 0.06685865 | mDC_UCBMC |
| TMX1               | 1.90E-06 | 0.43336004 | 0.267 | 0.136 | 0.06728492 | mDC_UCBMC |
| MTF2               | 1.93E-06 | 0.12407555 | 0.263 | 0.131 | 0.06826544 | mDC_UCBMC |

|                   |          |            |       |       |            |           |
|-------------------|----------|------------|-------|-------|------------|-----------|
| SUPT16H           | 2.02E-06 | 0.10067114 | 0.508 | 0.3   | 0.0715329  | mDC_UCBMC |
| KDELRL1           | 2.04E-06 | 0.21284371 | 0.568 | 0.345 | 0.07244637 | mDC_UCBMC |
| ARL6              | 2.11E-06 | 0.27870967 | 0.254 | 0.13  | 0.0746041  | mDC_UCBMC |
| RAD23B            | 2.11E-06 | 0.21605584 | 0.411 | 0.237 | 0.07461265 | mDC_UCBMC |
| ZNF514            | 2.18E-06 | 0.15630638 | 0.492 | 0.289 | 0.07720293 | mDC_UCBMC |
| CKS2              | 2.19E-06 | 0.16624919 | 0.623 | 0.381 | 0.07770923 | mDC_UCBMC |
| DDX3X             | 2.27E-06 | 0.14919035 | 0.788 | 0.52  | 0.08033412 | mDC_UCBMC |
| TAF7              | 2.29E-06 | 0.21202067 | 0.551 | 0.327 | 0.08117399 | mDC_UCBMC |
| UCKL1             | 2.33E-06 | 0.17110119 | 0.288 | 0.151 | 0.08249278 | mDC_UCBMC |
| GUCA1B            | 2.37E-06 | 0.41097029 | 0.28  | 0.146 | 0.08392754 | mDC_UCBMC |
| DENR              | 2.42E-06 | 0.25407242 | 0.453 | 0.266 | 0.08584525 | mDC_UCBMC |
| SASH3             | 2.48E-06 | 0.47411853 | 0.292 | 0.158 | 0.08798153 | mDC_UCBMC |
| VAMP4             | 2.61E-06 | 0.21795277 | 0.254 | 0.127 | 0.09258669 | mDC_UCBMC |
| HNRNPA3           | 2.65E-06 | 0.289989   | 0.924 | 0.676 | 0.0939094  | mDC_UCBMC |
| MAP2K6            | 2.68E-06 | 0.23345831 | 0.47  | 0.279 | 0.09511648 | mDC_UCBMC |
| TRMT10B           | 2.73E-06 | 0.160183   | 0.267 | 0.136 | 0.09678651 | mDC_UCBMC |
| MRPL9             | 2.77E-06 | 0.37165722 | 0.369 | 0.206 | 0.0982534  | mDC_UCBMC |
| SHISA5            | 2.89E-06 | 0.16945246 | 0.644 | 0.402 | 0.10254111 | mDC_UCBMC |
| QARS1             | 2.94E-06 | 0.1510264  | 0.572 | 0.339 | 0.10431033 | mDC_UCBMC |
| CASP12            | 3.08E-06 | 0.13272028 | 0.449 | 0.255 | 0.1090777  | mDC_UCBMC |
| SLC39A7           | 3.23E-06 | 0.24966821 | 0.297 | 0.158 | 0.11460576 | mDC_UCBMC |
| DDX27             | 3.27E-06 | 0.18061702 | 0.318 | 0.171 | 0.11587357 | mDC_UCBMC |
| GPD2              | 3.31E-06 | 0.36760682 | 0.297 | 0.162 | 0.11732465 | mDC_UCBMC |
| NOL7              | 3.37E-06 | 0.33767643 | 0.39  | 0.224 | 0.11951643 | mDC_UCBMC |
| HSP90AB1          | 3.41E-06 | 0.23150334 | 0.987 | 0.839 | 0.12066525 | mDC_UCBMC |
| HHEX              | 3.44E-06 | 0.45327368 | 0.258 | 0.136 | 0.12197654 | mDC_UCBMC |
| SNRPE             | 3.50E-06 | 0.21362916 | 0.746 | 0.468 | 0.12407019 | mDC_UCBMC |
| ENSMUG00000022769 | 3.52E-06 | 0.27534096 | 0.936 | 0.681 | 0.12471046 | mDC_UCBMC |
| ASXL1             | 3.52E-06 | 0.21408847 | 0.301 | 0.162 | 0.12480639 | mDC_UCBMC |
| LSM2              | 3.57E-06 | 0.12734581 | 0.542 | 0.321 | 0.12641589 | mDC_UCBMC |
| CCT8              | 3.57E-06 | 0.21378194 | 0.703 | 0.443 | 0.12644485 | mDC_UCBMC |
| H1-2              | 3.59E-06 | 0.15896221 | 0.428 | 0.242 | 0.12715839 | mDC_UCBMC |
| IP6K1             | 3.64E-06 | 0.2533234  | 0.28  | 0.148 | 0.12906954 | mDC_UCBMC |

|                   |          |            |       |       |            |           |
|-------------------|----------|------------|-------|-------|------------|-----------|
| NUDT21            | 3.65E-06 | 0.25345652 | 0.335 | 0.186 | 0.12947306 | mDC_UCBMC |
| ENSMUG00000061125 | 3.68E-06 | 0.11993023 | 0.852 | 0.599 | 0.1303562  | mDC_UCBMC |
| CCT6A             | 3.73E-06 | 0.20268599 | 0.695 | 0.426 | 0.13213851 | mDC_UCBMC |
| KIAA0319          | 3.78E-06 | 0.11441864 | 0.284 | 0.143 | 0.13386099 | mDC_UCBMC |
| RPN2              | 4.12E-06 | 0.32272202 | 0.492 | 0.315 | 0.14595587 | mDC_UCBMC |
| LTV1              | 4.18E-06 | 0.3106105  | 0.504 | 0.304 | 0.1479734  | mDC_UCBMC |
| NAP1L4            | 4.20E-06 | 0.10703586 | 0.775 | 0.522 | 0.14882781 | mDC_UCBMC |
| PCYT1A            | 4.21E-06 | 0.29956961 | 0.275 | 0.146 | 0.14899743 | mDC_UCBMC |
| ARHGAP32          | 4.24E-06 | 0.11438527 | 0.462 | 0.271 | 0.15023149 | mDC_UCBMC |
| USO1              | 4.30E-06 | 0.12674045 | 0.343 | 0.187 | 0.15252663 | mDC_UCBMC |
| IDI1              | 4.31E-06 | 0.22736468 | 0.267 | 0.138 | 0.15286354 | mDC_UCBMC |
| RASSF2            | 4.33E-06 | 0.11143604 | 0.407 | 0.232 | 0.15342047 | mDC_UCBMC |
| DARS1             | 4.33E-06 | 0.12701316 | 0.525 | 0.309 | 0.1535006  | mDC_UCBMC |
| CBX5              | 4.43E-06 | 0.21910883 | 0.275 | 0.146 | 0.15680995 | mDC_UCBMC |
| PPP1R7            | 4.57E-06 | 0.18088887 | 0.305 | 0.164 | 0.16182082 | mDC_UCBMC |
| CPQ               | 4.59E-06 | 0.10985935 | 0.441 | 0.265 | 0.16248534 | mDC_UCBMC |
| ATAD1             | 4.61E-06 | 0.22399814 | 0.356 | 0.204 | 0.16349518 | mDC_UCBMC |
| MAT2A             | 4.79E-06 | 0.1454473  | 0.458 | 0.27  | 0.1695474  | mDC_UCBMC |
| BUD23             | 5.18E-06 | 0.13831933 | 0.742 | 0.462 | 0.18365905 | mDC_UCBMC |
| CAP1              | 5.22E-06 | 0.25953478 | 0.881 | 0.623 | 0.18486943 | mDC_UCBMC |
| UBB               | 5.27E-06 | 0.21254849 | 0.983 | 0.811 | 0.18690183 | mDC_UCBMC |
| MSL3              | 5.30E-06 | 0.15911761 | 0.394 | 0.226 | 0.18777508 | mDC_UCBMC |
| MED10             | 5.32E-06 | 0.19975981 | 0.318 | 0.171 | 0.18839932 | mDC_UCBMC |
| AGGF1             | 5.41E-06 | 0.4131634  | 0.275 | 0.149 | 0.19174879 | mDC_UCBMC |
| PLBD1             | 5.42E-06 | 0.22592599 | 0.695 | 0.428 | 0.19218745 | mDC_UCBMC |
| CSK               | 5.73E-06 | 0.11324504 | 0.597 | 0.362 | 0.20297955 | mDC_UCBMC |
| RSL24D1           | 5.76E-06 | 0.16726063 | 0.818 | 0.58  | 0.20423979 | mDC_UCBMC |
| OSBPL2            | 5.82E-06 | 0.22486059 | 0.568 | 0.355 | 0.2061576  | mDC_UCBMC |
| CTSD              | 5.89E-06 | 0.10880676 | 0.267 | 0.136 | 0.20859934 | mDC_UCBMC |
| ANAPC16           | 5.92E-06 | 0.31155267 | 0.47  | 0.277 | 0.20974313 | mDC_UCBMC |
| SMARCE1           | 6.00E-06 | 0.22874659 | 0.475 | 0.285 | 0.21265649 | mDC_UCBMC |
| RARS1             | 6.02E-06 | 0.15527013 | 0.284 | 0.151 | 0.21317775 | mDC_UCBMC |
| CASP9             | 6.08E-06 | 0.20046855 | 0.288 | 0.156 | 0.21555593 | mDC_UCBMC |

|                    |          |            |       |       |            |           |
|--------------------|----------|------------|-------|-------|------------|-----------|
| ENSMMUG00000061630 | 6.10E-06 | 0.1828295  | 0.555 | 0.338 | 0.21619192 | mDC_UCBMC |
| ECHDC1             | 6.21E-06 | 0.12908329 | 0.479 | 0.287 | 0.22005149 | mDC_UCBMC |
| PSMD11             | 6.37E-06 | 0.2384404  | 0.343 | 0.197 | 0.22582234 | mDC_UCBMC |
| NOLC1              | 6.53E-06 | 0.27240125 | 0.25  | 0.128 | 0.23138911 | mDC_UCBMC |
| HPS5               | 6.65E-06 | 0.29099002 | 0.373 | 0.217 | 0.23578394 | mDC_UCBMC |
| LENG1              | 6.67E-06 | 0.14586357 | 0.381 | 0.215 | 0.23648025 | mDC_UCBMC |
| TUFM               | 6.68E-06 | 0.14469148 | 0.403 | 0.236 | 0.23665556 | mDC_UCBMC |
| MRPS31             | 6.71E-06 | 0.21728572 | 0.347 | 0.194 | 0.23773293 | mDC_UCBMC |
| DESI2              | 7.10E-06 | 0.29868338 | 0.258 | 0.137 | 0.25155652 | mDC_UCBMC |
| CDK2AP1            | 7.25E-06 | 0.35345752 | 0.275 | 0.145 | 0.25675724 | mDC_UCBMC |
| PBX2               | 7.37E-06 | 0.2043583  | 0.318 | 0.178 | 0.26104797 | mDC_UCBMC |
| PTPMT1             | 7.53E-06 | 0.15760281 | 0.5   | 0.303 | 0.2668922  | mDC_UCBMC |
| VRK2               | 7.67E-06 | 0.31794218 | 0.301 | 0.168 | 0.27159847 | mDC_UCBMC |
| SIL1               | 7.78E-06 | 0.15512684 | 0.331 | 0.189 | 0.27549476 | mDC_UCBMC |
| SF3B4              | 7.92E-06 | 0.2984194  | 0.309 | 0.168 | 0.28056377 | mDC_UCBMC |
| SURF2              | 8.81E-06 | 0.29362967 | 0.263 | 0.136 | 0.31217832 | mDC_UCBMC |
| MAFF               | 8.85E-06 | 0.16648846 | 0.398 | 0.234 | 0.31347952 | mDC_UCBMC |
| ENSMMUG00000012843 | 9.26E-06 | 0.18618536 | 0.326 | 0.182 | 0.32816916 | mDC_UCBMC |
| EAF2               | 9.34E-06 | 0.25524751 | 0.292 | 0.158 | 0.33095948 | mDC_UCBMC |
| PDLIM2             | 9.58E-06 | 0.2285188  | 0.453 | 0.269 | 0.33946299 | mDC_UCBMC |
| SPRYD7             | 9.67E-06 | 0.40190708 | 0.263 | 0.137 | 0.34273282 | mDC_UCBMC |
| ARF1               | 9.92E-06 | 0.22690716 | 0.894 | 0.662 | 0.35138673 | mDC_UCBMC |
| UBE2L3             | 9.94E-06 | 0.16944062 | 0.746 | 0.498 | 0.35234081 | mDC_UCBMC |
| RNF169             | 1.01E-05 | 0.15064483 | 0.25  | 0.131 | 0.35905362 | mDC_UCBMC |
| CCDC66             | 1.03E-05 | 0.22992148 | 0.258 | 0.137 | 0.36492278 | mDC_UCBMC |
| DNAJA2             | 1.06E-05 | 0.20325914 | 0.432 | 0.261 | 0.37514352 | mDC_UCBMC |
| APMAP              | 1.13E-05 | 0.36817465 | 0.28  | 0.152 | 0.40127808 | mDC_UCBMC |
| ENSMMUG00000008383 | 1.17E-05 | 0.25910589 | 0.309 | 0.172 | 0.41591318 | mDC_UCBMC |
| CD38               | 1.18E-05 | 0.26785854 | 0.331 | 0.186 | 0.41640277 | mDC_UCBMC |
| APEX1              | 1.20E-05 | 0.29846799 | 0.716 | 0.466 | 0.42585145 | mDC_UCBMC |
| TMEM63C            | 1.24E-05 | 0.19411329 | 0.322 | 0.18  | 0.43900653 | mDC_UCBMC |
| TAF12              | 1.24E-05 | 0.1595539  | 0.347 | 0.199 | 0.4396998  | mDC_UCBMC |
| HSF1               | 1.28E-05 | 0.15028505 | 0.263 | 0.142 | 0.45344388 | mDC_UCBMC |

|          |          |            |       |       |            |           |
|----------|----------|------------|-------|-------|------------|-----------|
| UQCRB    | 1.30E-05 | 0.22087843 | 0.661 | 0.429 | 0.46194791 | mDC_UCBMC |
| DLD      | 1.36E-05 | 0.23609822 | 0.305 | 0.174 | 0.48139642 | mDC_UCBMC |
| SNX5     | 1.38E-05 | 0.12140705 | 0.466 | 0.275 | 0.48883921 | mDC_UCBMC |
| PTGES3   | 1.41E-05 | 0.18844768 | 0.903 | 0.665 | 0.49855483 | mDC_UCBMC |
| PLCD1    | 1.46E-05 | 0.4037153  | 0.292 | 0.164 | 0.51636992 | mDC_UCBMC |
| VAMP3    | 1.49E-05 | 0.24472428 | 0.28  | 0.15  | 0.52897411 | mDC_UCBMC |
| IMMT     | 1.50E-05 | 0.15622461 | 0.28  | 0.154 | 0.53019767 | mDC_UCBMC |
| MFSD1    | 1.50E-05 | 0.30953352 | 0.305 | 0.169 | 0.53183554 | mDC_UCBMC |
| GCC2     | 1.55E-05 | 0.14054386 | 0.407 | 0.238 | 0.54805287 | mDC_UCBMC |
| AASDHPPT | 1.55E-05 | 0.28158437 | 0.275 | 0.15  | 0.54814138 | mDC_UCBMC |
| PRDX3    | 1.60E-05 | 0.22112064 | 0.419 | 0.255 | 0.56841498 | mDC_UCBMC |
| TCP1     | 1.63E-05 | 0.17647847 | 0.441 | 0.259 | 0.57611443 | mDC_UCBMC |
| PSMC2    | 1.74E-05 | 0.47693257 | 0.292 | 0.166 | 0.61759267 | mDC_UCBMC |
| ERP29    | 1.74E-05 | 0.23142461 | 0.86  | 0.603 | 0.61764909 | mDC_UCBMC |
| ETFA     | 1.77E-05 | 0.17190372 | 0.428 | 0.258 | 0.62629    | mDC_UCBMC |
| SUGT1    | 1.81E-05 | 0.1872795  | 0.492 | 0.31  | 0.64130944 | mDC_UCBMC |
| IAH1     | 1.82E-05 | 0.14340593 | 0.492 | 0.297 | 0.64554755 | mDC_UCBMC |
| RANBP1   | 1.83E-05 | 0.2408871  | 0.415 | 0.248 | 0.6498122  | mDC_UCBMC |
| RRP12    | 1.87E-05 | 0.19060826 | 0.25  | 0.135 | 0.66188479 | mDC_UCBMC |
| XRCC6    | 2.02E-05 | 0.12395428 | 0.814 | 0.559 | 0.71576404 | mDC_UCBMC |
| SP140    | 2.06E-05 | 0.17833801 | 0.39  | 0.228 | 0.73164884 | mDC_UCBMC |
| SETX     | 2.09E-05 | 0.12475553 | 0.352 | 0.207 | 0.7402058  | mDC_UCBMC |
| NANS     | 2.14E-05 | 0.1132722  | 0.504 | 0.304 | 0.75912789 | mDC_UCBMC |
| ZYX      | 2.21E-05 | 0.10490613 | 0.648 | 0.407 | 0.78307205 | mDC_UCBMC |
| PSMA5    | 2.26E-05 | 0.17398025 | 0.669 | 0.423 | 0.80013537 | mDC_UCBMC |
| ADSS2    | 2.31E-05 | 0.10599551 | 0.432 | 0.263 | 0.81988309 | mDC_UCBMC |
| PRXL2A   | 2.38E-05 | 0.28066283 | 0.271 | 0.152 | 0.84484621 | mDC_UCBMC |
| GTPBP8   | 2.39E-05 | 0.52375602 | 0.25  | 0.139 | 0.84550328 | mDC_UCBMC |
| MAP1LC3B | 2.45E-05 | 0.23591579 | 0.771 | 0.528 | 0.86702337 | mDC_UCBMC |
| ATP10D   | 2.45E-05 | 0.3630026  | 0.254 | 0.139 | 0.86810411 | mDC_UCBMC |
| FCER1A   | 2.47E-05 | 0.35773527 | 0.297 | 0.17  | 0.87480337 | mDC_UCBMC |
| BCCIP    | 2.54E-05 | 0.11748793 | 0.407 | 0.242 | 0.90130911 | mDC_UCBMC |
| CEP57    | 2.68E-05 | 0.22618794 | 0.284 | 0.16  | 0.95038814 | mDC_UCBMC |

|                    |          |            |       |       |            |           |
|--------------------|----------|------------|-------|-------|------------|-----------|
| SPTY2D1            | 2.70E-05 | 0.29064277 | 0.258 | 0.14  | 0.95768937 | mDC_UCBMC |
| ARF4               | 2.81E-05 | 0.19258952 | 0.852 | 0.615 | 0.99532922 | mDC_UCBMC |
| RPS4Y1             | 2.91E-05 | 0.17752549 | 0.797 | 0.552 | 1          | mDC_UCBMC |
| VTI1B              | 2.95E-05 | 0.22997993 | 0.267 | 0.147 | 1          | mDC_UCBMC |
| MRPS18B            | 3.01E-05 | 0.19305968 | 0.267 | 0.144 | 1          | mDC_UCBMC |
| CTR9               | 3.09E-05 | 0.39466284 | 0.271 | 0.155 | 1          | mDC_UCBMC |
| ITGB2              | 3.14E-05 | 0.16578203 | 0.856 | 0.528 | 1          | mDC_UCBMC |
| ARPC5L             | 3.15E-05 | 0.20025964 | 0.339 | 0.2   | 1          | mDC_UCBMC |
| TMEM14A            | 3.51E-05 | 0.14723255 | 0.275 | 0.15  | 1          | mDC_UCBMC |
| HCLS1              | 3.59E-05 | 0.10267853 | 0.733 | 0.456 | 1          | mDC_UCBMC |
| SPCS1              | 3.62E-05 | 0.13621016 | 0.792 | 0.517 | 1          | mDC_UCBMC |
| ENSMMUG00000055885 | 3.64E-05 | 0.18495737 | 0.754 | 0.546 | 1          | mDC_UCBMC |
| RECQL              | 3.74E-05 | 0.13628577 | 0.275 | 0.151 | 1          | mDC_UCBMC |
| EEA1               | 3.83E-05 | 0.15802941 | 0.377 | 0.226 | 1          | mDC_UCBMC |
| SKP1               | 3.83E-05 | 0.21542205 | 0.936 | 0.721 | 1          | mDC_UCBMC |
| NAGA               | 3.88E-05 | 0.15132602 | 0.419 | 0.251 | 1          | mDC_UCBMC |
| CTTNBP2NL          | 4.19E-05 | 0.12112057 | 0.356 | 0.21  | 1          | mDC_UCBMC |
| MS4A6A             | 4.22E-05 | 0.23633753 | 0.453 | 0.289 | 1          | mDC_UCBMC |
| ZMAT2              | 4.28E-05 | 0.20737383 | 0.407 | 0.25  | 1          | mDC_UCBMC |
| MPDU1              | 4.29E-05 | 0.16774826 | 0.263 | 0.144 | 1          | mDC_UCBMC |
| LDHB               | 4.33E-05 | 0.27332256 | 0.25  | 0.135 | 1          | mDC_UCBMC |
| ATPAF2             | 4.38E-05 | 0.19758118 | 0.301 | 0.169 | 1          | mDC_UCBMC |
| LAPTM4A            | 4.87E-05 | 0.12076498 | 0.347 | 0.203 | 1          | mDC_UCBMC |
| HSP90B1            | 5.08E-05 | 0.22783433 | 0.847 | 0.599 | 1          | mDC_UCBMC |
| SERBP1             | 5.11E-05 | 0.15692816 | 0.852 | 0.591 | 1          | mDC_UCBMC |
| MRPL39             | 5.57E-05 | 0.33707203 | 0.284 | 0.168 | 1          | mDC_UCBMC |
| RPS11              | 5.61E-05 | 0.17670608 | 1     | 0.949 | 1          | mDC_UCBMC |
| GTF2A2             | 5.91E-05 | 0.12051301 | 0.597 | 0.382 | 1          | mDC_UCBMC |
| POLR2F             | 6.43E-05 | 0.11695839 | 0.53  | 0.337 | 1          | mDC_UCBMC |
| PSMB4              | 6.66E-05 | 0.14676966 | 0.678 | 0.435 | 1          | mDC_UCBMC |
| PLCG2              | 7.00E-05 | 0.14119345 | 0.352 | 0.218 | 1          | mDC_UCBMC |
| MANF               | 7.11E-05 | 0.23150967 | 0.428 | 0.271 | 1          | mDC_UCBMC |
| RPL9               | 7.21E-05 | 0.209344   | 0.996 | 0.913 | 1          | mDC_UCBMC |

|                    |            |            |       |       |             |
|--------------------|------------|------------|-------|-------|-------------|
| FOXRED1            | 7.51E-05   | 0.21813517 | 0.28  | 0.16  | 1 mDC_UCBMC |
| RER1               | 7.55E-05   | 0.10589153 | 0.686 | 0.443 | 1 mDC_UCBMC |
| CALR               | 7.69E-05   | 0.17727331 | 0.788 | 0.524 | 1 mDC_UCBMC |
| ZNF217             | 8.44E-05   | 0.34274018 | 0.258 | 0.15  | 1 mDC_UCBMC |
| ENSMMUG00000017097 | 8.67E-05   | 0.34350784 | 0.373 | 0.225 | 1 mDC_UCBMC |
| QDPR               | 8.74E-05   | 0.12010884 | 0.263 | 0.148 | 1 mDC_UCBMC |
| CNBP               | 9.72E-05   | 0.20986666 | 0.847 | 0.571 | 1 mDC_UCBMC |
| SEC11A             | 9.76E-05   | 0.13746423 | 0.547 | 0.359 | 1 mDC_UCBMC |
| SCCPDH             | 9.81E-05   | 0.2397702  | 0.28  | 0.162 | 1 mDC_UCBMC |
| RWDD4              | 0.00010058 | 0.12423222 | 0.28  | 0.163 | 1 mDC_UCBMC |
| ROS1               | 0.00010193 | 0.41055321 | 0.258 | 0.153 | 1 mDC_UCBMC |
| CCDC186            | 0.00010411 | 0.22129327 | 0.28  | 0.163 | 1 mDC_UCBMC |
| EEF1E1             | 0.00010999 | 0.1936487  | 0.487 | 0.309 | 1 mDC_UCBMC |
| STOML2             | 0.00011321 | 0.1026353  | 0.521 | 0.331 | 1 mDC_UCBMC |
| CHCHD3             | 0.00012909 | 0.11752691 | 0.534 | 0.343 | 1 mDC_UCBMC |
| DHRS1              | 0.0001291  | 0.15946143 | 0.343 | 0.203 | 1 mDC_UCBMC |
| OARD1              | 0.00013894 | 0.22805738 | 0.364 | 0.224 | 1 mDC_UCBMC |
| SRPRA              | 0.00014956 | 0.3808474  | 0.254 | 0.147 | 1 mDC_UCBMC |
| BZW1               | 0.00016164 | 0.17379185 | 0.886 | 0.653 | 1 mDC_UCBMC |
| COPB2              | 0.00016489 | 0.14492425 | 0.322 | 0.199 | 1 mDC_UCBMC |
| RAB12              | 0.00019133 | 0.11353976 | 0.275 | 0.165 | 1 mDC_UCBMC |
| MYDGF              | 0.00019647 | 0.14886704 | 0.627 | 0.408 | 1 mDC_UCBMC |
| MRPS7              | 0.00019827 | 0.24354359 | 0.258 | 0.147 | 1 mDC_UCBMC |
| ENSMMUG00000058755 | 0.00020729 | 0.14273973 | 1     | 0.943 | 1 mDC_UCBMC |
| HNRNPK             | 0.00022034 | 0.18519068 | 0.941 | 0.717 | 1 mDC_UCBMC |
| ZFYVE16            | 0.00022814 | 0.19640661 | 0.369 | 0.235 | 1 mDC_UCBMC |
| DSTN               | 0.00028091 | 0.11040249 | 0.877 | 0.589 | 1 mDC_UCBMC |
| SNAPIN             | 0.00029573 | 0.15509605 | 0.322 | 0.197 | 1 mDC_UCBMC |
| MNT                | 0.00029816 | 0.1286488  | 0.25  | 0.15  | 1 mDC_UCBMC |
| PNKP               | 0.00035009 | 0.11462927 | 0.258 | 0.153 | 1 mDC_UCBMC |
| WDR13              | 0.00037525 | 0.17463183 | 0.975 | 0.756 | 1 mDC_UCBMC |
| PRPF38A            | 0.00038827 | 0.20581854 | 0.258 | 0.157 | 1 mDC_UCBMC |
| CCDC107            | 0.00038894 | 0.1847872  | 0.326 | 0.202 | 1 mDC_UCBMC |



|                    |            |            |       |       |             |
|--------------------|------------|------------|-------|-------|-------------|
| DENND6A            | 0.00041027 | 0.11135898 | 0.254 | 0.154 | 1 mDC_UCBMC |
| RAB4A              | 0.0004132  | 0.29416876 | 0.297 | 0.18  | 1 mDC_UCBMC |
| GRN                | 0.00047685 | 0.11773107 | 0.873 | 0.635 | 1 mDC_UCBMC |
| CD52               | 0.00060302 | 0.23449806 | 0.983 | 0.86  | 1 mDC_UCBMC |
| REXO2              | 0.00063752 | 0.10929199 | 0.347 | 0.221 | 1 mDC_UCBMC |
| CD37               | 0.00065107 | 0.16684477 | 0.949 | 0.713 | 1 mDC_UCBMC |
| ZNF22              | 0.00065128 | 0.25847084 | 0.318 | 0.204 | 1 mDC_UCBMC |
| DPH6               | 0.00068724 | 0.133266   | 0.445 | 0.302 | 1 mDC_UCBMC |
| TTC1               | 0.00070807 | 0.17357628 | 0.369 | 0.234 | 1 mDC_UCBMC |
| BID                | 0.0007427  | 0.20521752 | 0.869 | 0.617 | 1 mDC_UCBMC |
| SHE                | 0.00075043 | 0.27198954 | 0.297 | 0.187 | 1 mDC_UCBMC |
| HMGB1              | 0.00087272 | 0.10078294 | 0.983 | 0.838 | 1 mDC_UCBMC |
| VDAC2              | 0.00100396 | 0.12887273 | 0.945 | 0.719 | 1 mDC_UCBMC |
| DHRS9              | 0.00111893 | 0.14510753 | 0.326 | 0.212 | 1 mDC_UCBMC |
| CDK4               | 0.00115033 | 0.21015161 | 0.258 | 0.16  | 1 mDC_UCBMC |
| PDIA6              | 0.00118197 | 0.13121815 | 0.377 | 0.251 | 1 mDC_UCBMC |
| CYBA               | 0.00118452 | 0.13350828 | 0.958 | 0.669 | 1 mDC_UCBMC |
| FAIM               | 0.00119597 | 0.1814146  | 0.271 | 0.169 | 1 mDC_UCBMC |
| ENSMMUG00000030465 | 0.00132478 | 0.1065037  | 0.691 | 0.506 | 1 mDC_UCBMC |
| ZNF385A            | 0.00154749 | 0.10192635 | 0.318 | 0.21  | 1 mDC_UCBMC |
| ACTB               | 0.00164791 | 0.12731005 | 1     | 0.965 | 1 mDC_UCBMC |
| CCDC47             | 0.00176487 | 0.15304066 | 0.267 | 0.17  | 1 mDC_UCBMC |
| COX4I1             | 0.00225889 | 0.13721127 | 0.983 | 0.856 | 1 mDC_UCBMC |
| PPP1R11            | 0.00250623 | 0.14035972 | 0.25  | 0.158 | 1 mDC_UCBMC |
| ARHGDIB            | 0.0025517  | 0.15166606 | 0.987 | 0.862 | 1 mDC_UCBMC |
| VIM                | 0.00319048 | 0.12509607 | 0.996 | 0.936 | 1 mDC_UCBMC |
| ENSMMUG00000003130 | 0.00328178 | 0.10254257 | 0.267 | 0.172 | 1 mDC_UCBMC |
| RPL15              | 0.0035266  | 0.15279918 | 0.996 | 0.927 | 1 mDC_UCBMC |
| PDHA1              | 0.00474827 | 0.16870475 | 0.292 | 0.188 | 1 mDC_UCBMC |
| RPLP2              | 0.00490924 | 0.12902246 | 0.996 | 0.935 | 1 mDC_UCBMC |
| ENSMMUG00000008097 | 0.01659397 | 0.16410654 | 0.309 | 0.22  | 1 mDC_UCBMC |
| CKS1B              | 0.02066787 | 0.20011556 | 0.347 | 0.248 | 1 mDC_UCBMC |
| ENSMMUG00000055584 | 0.02130757 | 0.10256021 | 0.996 | 0.895 | 1 mDC_UCBMC |

|                     |           |            |       |       |           |            |
|---------------------|-----------|------------|-------|-------|-----------|------------|
| RPL13               | 3.68E-143 | 2.37840874 | 0.987 | 0.827 | 1.30E-138 | mDC_spleen |
| SRRM2               | 1.68E-133 | 2.08283837 | 0.876 | 0.188 | 5.94E-129 | mDC_spleen |
| ENSMMUG000000051300 | 3.61E-133 | 2.17928167 | 0.989 | 0.544 | 1.28E-128 | mDC_spleen |
| TRAPPC5             | 6.50E-133 | 2.53167984 | 0.648 | 0.065 | 2.30E-128 | mDC_spleen |
| C1QBP               | 6.71E-128 | 2.47420064 | 0.712 | 0.101 | 2.38E-123 | mDC_spleen |
| KLF6                | 5.31E-120 | 2.1278616  | 0.931 | 0.401 | 1.88E-115 | mDC_spleen |
| SQSTM1              | 6.48E-115 | 2.37498768 | 0.775 | 0.165 | 2.30E-110 | mDC_spleen |
| JUN                 | 2.77E-114 | 2.64563076 | 0.833 | 0.246 | 9.82E-110 | mDC_spleen |
| LTB                 | 2.32E-111 | 4.51320401 | 0.511 | 0.05  | 8.21E-107 | mDC_spleen |
| ENSMMUG000000055467 | 1.46E-109 | 6.11283081 | 0.36  | 0.004 | 5.17E-105 | mDC_spleen |
| UBE2S               | 5.49E-109 | 2.3314903  | 0.643 | 0.093 | 1.95E-104 | mDC_spleen |
| CCDC85B             | 7.32E-107 | 2.83691317 | 0.503 | 0.044 | 2.59E-102 | mDC_spleen |
| HSPH1               | 2.70E-104 | 2.70747321 | 0.778 | 0.196 | 9.57E-100 | mDC_spleen |
| NUDT8               | 1.17E-101 | 2.18359724 | 0.571 | 0.073 | 4.16E-97  | mDC_spleen |
| ATF3                | 8.35E-100 | 2.25461831 | 0.767 | 0.188 | 2.96E-95  | mDC_spleen |
| ITM2B               | 3.08E-98  | 1.76178232 | 0.931 | 0.47  | 1.09E-93  | mDC_spleen |
| RPS20               | 1.63E-97  | 1.54950151 | 0.968 | 0.838 | 5.76E-93  | mDC_spleen |
| DSE                 | 1.23E-96  | 1.7389882  | 0.672 | 0.125 | 4.35E-92  | mDC_spleen |
| HTR7                | 2.89E-96  | 4.62919603 | 0.373 | 0.018 | 1.02E-91  | mDC_spleen |
| PTGER4              | 8.93E-96  | 2.34384417 | 0.738 | 0.186 | 3.16E-91  | mDC_spleen |
| CYRIA               | 4.01E-95  | 2.01839003 | 0.86  | 0.304 | 1.42E-90  | mDC_spleen |
| RNASET2             | 6.23E-95  | 1.69794057 | 0.918 | 0.466 | 2.21E-90  | mDC_spleen |
| VCAM1               | 1.91E-94  | 4.41570977 | 0.354 | 0.013 | 6.76E-90  | mDC_spleen |
| TBC1D9              | 2.42E-94  | 1.86657501 | 0.833 | 0.262 | 8.57E-90  | mDC_spleen |
| SERP1               | 2.45E-94  | 2.96027767 | 0.41  | 0.027 | 8.68E-90  | mDC_spleen |
| RPS2                | 2.95E-93  | 1.5097347  | 0.939 | 0.669 | 1.05E-88  | mDC_spleen |
| TMEM160             | 1.27E-92  | 2.54418933 | 0.484 | 0.052 | 4.50E-88  | mDC_spleen |
| TRIR                | 1.52E-92  | 1.86754439 | 0.839 | 0.269 | 5.38E-88  | mDC_spleen |
| C10H20orf24         | 7.19E-92  | 1.81423145 | 0.812 | 0.247 | 2.55E-87  | mDC_spleen |
| NFKBIA              | 2.42E-91  | 2.22611943 | 0.918 | 0.435 | 8.59E-87  | mDC_spleen |
| PM20D2              | 7.19E-91  | 1.6985257  | 0.892 | 0.373 | 2.55E-86  | mDC_spleen |
| CHCHD10             | 1.33E-90  | 2.0233179  | 0.566 | 0.083 | 4.71E-86  | mDC_spleen |
| CCDC50              | 3.46E-89  | 2.49931875 | 0.786 | 0.243 | 1.23E-84  | mDC_spleen |

|                   |          |            |       |       |          |            |
|-------------------|----------|------------|-------|-------|----------|------------|
| PLXNC1            | 6.92E-89 | 1.71072589 | 0.82  | 0.252 | 2.45E-84 | mDC_spleen |
| TXNL4A            | 4.80E-88 | 2.01400895 | 0.563 | 0.088 | 1.70E-83 | mDC_spleen |
| CCNG2             | 5.25E-88 | 2.19194217 | 0.611 | 0.114 | 1.86E-83 | mDC_spleen |
| H1FX              | 9.72E-88 | 2.11335198 | 0.508 | 0.066 | 3.45E-83 | mDC_spleen |
| ANKRD33B          | 2.33E-86 | 2.65394899 | 0.558 | 0.101 | 8.26E-82 | mDC_spleen |
| ENSMUG00000054358 | 1.35E-85 | 1.86408685 | 0.984 | 0.607 | 4.79E-81 | mDC_spleen |
| PRKCA             | 2.09E-85 | 2.26725468 | 0.751 | 0.231 | 7.42E-81 | mDC_spleen |
| COX5A             | 4.64E-85 | 1.88492061 | 0.749 | 0.199 | 1.64E-80 | mDC_spleen |
| FOS               | 9.85E-85 | 1.98128169 | 0.937 | 0.664 | 3.49E-80 | mDC_spleen |
| HHEX              | 5.05E-82 | 2.54477765 | 0.471 | 0.063 | 1.79E-77 | mDC_spleen |
| ARHGAP22          | 1.67E-81 | 2.95798956 | 0.452 | 0.058 | 5.93E-77 | mDC_spleen |
| ANKRD10           | 2.27E-81 | 1.65325867 | 0.78  | 0.224 | 8.04E-77 | mDC_spleen |
| SLC8A1            | 1.92E-80 | 1.82935795 | 0.844 | 0.314 | 6.82E-76 | mDC_spleen |
| FMNL2             | 2.38E-80 | 2.3627568  | 0.569 | 0.111 | 8.44E-76 | mDC_spleen |
| TMEM131L          | 3.10E-80 | 1.81522616 | 0.783 | 0.234 | 1.10E-75 | mDC_spleen |
| ARHGAP17          | 1.69E-79 | 1.70022558 | 0.833 | 0.289 | 5.99E-75 | mDC_spleen |
| CLTA              | 3.94E-79 | 1.61762067 | 0.844 | 0.323 | 1.39E-74 | mDC_spleen |
| ULK2              | 1.67E-78 | 2.19009436 | 0.458 | 0.063 | 5.92E-74 | mDC_spleen |
| NOL7              | 2.46E-77 | 1.86623951 | 0.632 | 0.139 | 8.73E-73 | mDC_spleen |
| MYOF              | 4.89E-77 | 2.00229399 | 0.608 | 0.137 | 1.73E-72 | mDC_spleen |
| UVRAG             | 2.08E-76 | 1.54924937 | 0.899 | 0.396 | 7.36E-72 | mDC_spleen |
| UBE2E2            | 3.36E-76 | 1.79490013 | 0.844 | 0.324 | 1.19E-71 | mDC_spleen |
| NOL4L             | 5.21E-76 | 2.54635845 | 0.421 | 0.052 | 1.85E-71 | mDC_spleen |
| XBP1              | 7.07E-76 | 3.26983586 | 0.341 | 0.025 | 2.51E-71 | mDC_spleen |
| OSBPL8            | 1.94E-75 | 1.72172764 | 0.902 | 0.37  | 6.88E-71 | mDC_spleen |
| RASGEF1B          | 2.27E-75 | 1.74207408 | 0.841 | 0.319 | 8.03E-71 | mDC_spleen |
| P2RY13            | 3.29E-75 | 2.47841673 | 0.397 | 0.043 | 1.17E-70 | mDC_spleen |
| RPL27A            | 3.43E-75 | 0.96048763 | 0.958 | 0.934 | 1.22E-70 | mDC_spleen |
| NCOR1             | 1.99E-74 | 1.44043223 | 0.762 | 0.215 | 7.06E-70 | mDC_spleen |
| RUFY3             | 2.40E-74 | 1.97796937 | 0.595 | 0.129 | 8.52E-70 | mDC_spleen |
| KDM2B             | 2.81E-74 | 2.03791579 | 0.757 | 0.243 | 9.96E-70 | mDC_spleen |
| GUCY1A1           | 4.42E-74 | 2.2497548  | 0.487 | 0.081 | 1.57E-69 | mDC_spleen |
| SRGAP2            | 6.81E-74 | 1.88937589 | 0.646 | 0.16  | 2.41E-69 | mDC_spleen |

|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| NOP53              | 8.46E-74 | 1.36786837 | 0.683 | 0.165 | 3.00E-69 | mDC_spleen |
| CLTB               | 9.68E-74 | 1.61640693 | 0.54  | 0.097 | 3.43E-69 | mDC_spleen |
| GBP3               | 1.26E-73 | 2.96994636 | 0.5   | 0.094 | 4.45E-69 | mDC_spleen |
| MSL2               | 1.30E-73 | 1.94002772 | 0.611 | 0.141 | 4.59E-69 | mDC_spleen |
| TCF7L2             | 2.36E-73 | 2.6520299  | 0.41  | 0.05  | 8.36E-69 | mDC_spleen |
| DUSP1              | 3.51E-73 | 1.54138294 | 0.894 | 0.496 | 1.24E-68 | mDC_spleen |
| EPB41L2            | 1.30E-72 | 1.81939374 | 0.704 | 0.202 | 4.60E-68 | mDC_spleen |
| KLF4               | 3.04E-72 | 1.57181032 | 0.823 | 0.311 | 1.08E-67 | mDC_spleen |
| FRMD4A             | 4.04E-72 | 2.75657753 | 0.336 | 0.027 | 1.43E-67 | mDC_spleen |
| FAM241A            | 5.87E-72 | 2.29527988 | 0.516 | 0.098 | 2.08E-67 | mDC_spleen |
| ENSMMUG00000046264 | 6.85E-72 | 1.68856122 | 0.743 | 0.227 | 2.43E-67 | mDC_spleen |
| PPM1L              | 7.48E-72 | 1.93708528 | 0.577 | 0.135 | 2.65E-67 | mDC_spleen |
| NFATC2             | 2.02E-71 | 1.84747539 | 0.526 | 0.1   | 7.16E-67 | mDC_spleen |
| ADAM19             | 2.16E-71 | 1.32278822 | 0.796 | 0.264 | 7.67E-67 | mDC_spleen |
| DENND1A            | 2.84E-71 | 1.38495706 | 0.812 | 0.266 | 1.01E-66 | mDC_spleen |
| ERBIN              | 3.22E-71 | 1.59348491 | 0.828 | 0.311 | 1.14E-66 | mDC_spleen |
| ASPH               | 5.90E-71 | 1.9016781  | 0.619 | 0.152 | 2.09E-66 | mDC_spleen |
| NRIP1              | 7.29E-71 | 1.71189994 | 0.77  | 0.241 | 2.58E-66 | mDC_spleen |
| MTDH               | 1.34E-70 | 1.37646198 | 0.796 | 0.251 | 4.76E-66 | mDC_spleen |
| ENSMMUG00000041076 | 2.60E-70 | 4.51544843 | 0.362 | 0.039 | 9.23E-66 | mDC_spleen |
| TCOF1              | 2.62E-70 | 1.90261907 | 0.556 | 0.118 | 9.29E-66 | mDC_spleen |
| TAMALIN            | 4.45E-70 | 2.57334877 | 0.378 | 0.044 | 1.58E-65 | mDC_spleen |
| PRKCB              | 4.57E-70 | 1.66761143 | 0.794 | 0.272 | 1.62E-65 | mDC_spleen |
| GATM               | 4.74E-70 | 3.16624515 | 0.341 | 0.031 | 1.68E-65 | mDC_spleen |
| CD200R1            | 5.12E-70 | 2.08064423 | 0.474 | 0.079 | 1.81E-65 | mDC_spleen |
| MZT2B              | 1.33E-69 | 1.4000666  | 0.627 | 0.144 | 4.70E-65 | mDC_spleen |
| ENSMMUG00000014831 | 1.36E-69 | 1.5236746  | 0.582 | 0.126 | 4.82E-65 | mDC_spleen |
| PPM1G              | 3.53E-69 | 1.52494268 | 0.693 | 0.199 | 1.25E-64 | mDC_spleen |
| SLC24A4            | 3.56E-69 | 2.5564889  | 0.381 | 0.046 | 1.26E-64 | mDC_spleen |
| ENSMMUG00000052127 | 3.88E-69 | 1.24777186 | 1     | 0.804 | 1.37E-64 | mDC_spleen |
| H2AZ2              | 4.20E-69 | 1.21730329 | 0.952 | 0.599 | 1.49E-64 | mDC_spleen |
| VOPP1              | 4.94E-69 | 1.60342796 | 0.571 | 0.123 | 1.75E-64 | mDC_spleen |
| IKZF1              | 6.36E-69 | 1.52478519 | 0.825 | 0.302 | 2.25E-64 | mDC_spleen |

|                     |          |            |       |       |          |            |
|---------------------|----------|------------|-------|-------|----------|------------|
| CERKL               | 6.67E-69 | 2.24178796 | 0.447 | 0.07  | 2.36E-64 | mDC_spleen |
| PRELID1             | 1.33E-68 | 1.42000376 | 0.693 | 0.187 | 4.72E-64 | mDC_spleen |
| ENSMMUG000000049833 | 1.41E-68 | 2.77223933 | 0.455 | 0.076 | 5.01E-64 | mDC_spleen |
| TMPO                | 1.66E-68 | 2.58581053 | 0.415 | 0.06  | 5.89E-64 | mDC_spleen |
| LRRK1               | 1.68E-68 | 1.62255902 | 0.64  | 0.166 | 5.94E-64 | mDC_spleen |
| APBB1IP             | 1.91E-68 | 1.50162378 | 0.857 | 0.356 | 6.78E-64 | mDC_spleen |
| ENSMMUG000000021425 | 3.15E-68 | 1.67027039 | 0.698 | 0.207 | 1.12E-63 | mDC_spleen |
| ZFAND5              | 5.53E-68 | 1.42920036 | 0.659 | 0.17  | 1.96E-63 | mDC_spleen |
| DUSP10              | 1.03E-67 | 2.41409613 | 0.481 | 0.089 | 3.64E-63 | mDC_spleen |
| RASSF3              | 1.89E-67 | 2.14524418 | 0.571 | 0.138 | 6.68E-63 | mDC_spleen |
| COP1                | 3.71E-67 | 1.60196923 | 0.73  | 0.224 | 1.31E-62 | mDC_spleen |
| ENSMMUG000000008417 | 1.44E-66 | 1.77629702 | 0.5   | 0.092 | 5.10E-62 | mDC_spleen |
| IFNGR1              | 3.96E-66 | 1.61391125 | 0.857 | 0.397 | 1.40E-61 | mDC_spleen |
| ZNF532              | 6.40E-66 | 3.50618935 | 0.27  | 0.014 | 2.27E-61 | mDC_spleen |
| NCKAP5              | 8.60E-66 | 1.37216699 | 0.897 | 0.432 | 3.05E-61 | mDC_spleen |
| ACAP2               | 8.67E-66 | 1.241182   | 0.868 | 0.356 | 3.07E-61 | mDC_spleen |
| FARP2               | 1.13E-65 | 1.38636182 | 0.638 | 0.166 | 4.02E-61 | mDC_spleen |
| ATP5F1D             | 1.78E-65 | 1.2764782  | 0.738 | 0.214 | 6.32E-61 | mDC_spleen |
| LRCH1               | 1.89E-65 | 1.59187495 | 0.64  | 0.169 | 6.69E-61 | mDC_spleen |
| OTULIN              | 2.35E-65 | 1.42432564 | 0.516 | 0.103 | 8.32E-61 | mDC_spleen |
| ENSMMUG000000042343 | 2.79E-65 | 2.32304545 | 0.519 | 0.123 | 9.89E-61 | mDC_spleen |
| ARFGAP3             | 2.88E-65 | 1.18719173 | 0.889 | 0.354 | 1.02E-60 | mDC_spleen |
| ATF7IP              | 4.11E-65 | 1.57607637 | 0.817 | 0.308 | 1.46E-60 | mDC_spleen |
| MYLIP               | 1.21E-64 | 1.55269364 | 0.677 | 0.196 | 4.27E-60 | mDC_spleen |
| FAM107B             | 1.25E-64 | 1.60164095 | 0.812 | 0.317 | 4.44E-60 | mDC_spleen |
| PHACTR1             | 1.89E-64 | 2.10628677 | 0.675 | 0.227 | 6.71E-60 | mDC_spleen |
| RAD23B              | 1.91E-64 | 1.46687214 | 0.627 | 0.159 | 6.78E-60 | mDC_spleen |
| SP140               | 2.19E-64 | 1.68987039 | 0.595 | 0.154 | 7.76E-60 | mDC_spleen |
| EIF3F               | 4.56E-64 | 1.34447049 | 0.87  | 0.436 | 1.61E-59 | mDC_spleen |
| CD72                | 1.74E-63 | 2.14337786 | 0.468 | 0.088 | 6.16E-59 | mDC_spleen |
| B3GNT2              | 2.26E-63 | 2.15248104 | 0.45  | 0.083 | 8.02E-59 | mDC_spleen |
| FCHSD2              | 3.08E-63 | 1.06856425 | 0.81  | 0.294 | 1.09E-58 | mDC_spleen |
| ARID1B              | 7.21E-63 | 1.37630034 | 0.852 | 0.334 | 2.56E-58 | mDC_spleen |

|                   |          |            |       |       |          |            |
|-------------------|----------|------------|-------|-------|----------|------------|
| NXT1              | 1.02E-62 | 2.3979932  | 0.344 | 0.038 | 3.61E-58 | mDC_spleen |
| IFRD1             | 1.72E-62 | 1.43619467 | 0.656 | 0.186 | 6.09E-58 | mDC_spleen |
| TMEM108           | 2.24E-62 | 4.25649592 | 0.278 | 0.021 | 7.95E-58 | mDC_spleen |
| WASF2             | 2.66E-62 | 1.11730531 | 0.802 | 0.271 | 9.42E-58 | mDC_spleen |
| TRAF3             | 4.01E-62 | 1.52929654 | 0.622 | 0.168 | 1.42E-57 | mDC_spleen |
| TACC1             | 5.44E-62 | 1.55383544 | 0.786 | 0.282 | 1.93E-57 | mDC_spleen |
| NUMB              | 5.50E-62 | 1.45621083 | 0.698 | 0.219 | 1.95E-57 | mDC_spleen |
| ST6GAL1           | 6.15E-62 | 1.68738545 | 0.579 | 0.146 | 2.18E-57 | mDC_spleen |
| ZNF366            | 7.95E-62 | 1.41975734 | 0.5   | 0.103 | 2.82E-57 | mDC_spleen |
| TLR10             | 9.23E-62 | 1.84847969 | 0.41  | 0.063 | 3.27E-57 | mDC_spleen |
| ZBED1             | 1.00E-61 | 1.26704523 | 0.786 | 0.28  | 3.55E-57 | mDC_spleen |
| LMO4              | 1.04E-61 | 1.69367892 | 0.616 | 0.168 | 3.69E-57 | mDC_spleen |
| INPP5D            | 1.25E-61 | 1.15059597 | 0.804 | 0.277 | 4.43E-57 | mDC_spleen |
| ENSMUG00000050770 | 1.57E-61 | 2.7583038  | 0.31  | 0.03  | 5.58E-57 | mDC_spleen |
| CAND1             | 1.61E-61 | 1.58334128 | 0.672 | 0.203 | 5.69E-57 | mDC_spleen |
| CYC1              | 2.11E-61 | 1.39268238 | 0.714 | 0.222 | 7.46E-57 | mDC_spleen |
| ENSMUG00000055687 | 3.22E-61 | 1.32678407 | 0.646 | 0.18  | 1.14E-56 | mDC_spleen |
| UHMK1             | 3.45E-61 | 1.6428157  | 0.638 | 0.187 | 1.22E-56 | mDC_spleen |
| EXT1              | 3.93E-61 | 1.88199485 | 0.492 | 0.107 | 1.39E-56 | mDC_spleen |
| HNRNPAB           | 4.31E-61 | 1.37993079 | 0.622 | 0.162 | 1.53E-56 | mDC_spleen |
| SLC9A7            | 4.51E-61 | 1.5746536  | 0.534 | 0.127 | 1.60E-56 | mDC_spleen |
| SPOPL             | 6.64E-61 | 1.65447953 | 0.582 | 0.147 | 2.35E-56 | mDC_spleen |
| PELI1             | 1.05E-60 | 1.86557214 | 0.733 | 0.256 | 3.71E-56 | mDC_spleen |
| UHRF2             | 1.19E-60 | 1.70908622 | 0.579 | 0.148 | 4.20E-56 | mDC_spleen |
| SPECC1            | 1.52E-60 | 1.37221185 | 0.709 | 0.231 | 5.38E-56 | mDC_spleen |
| IRF1              | 1.92E-60 | 1.82973312 | 0.556 | 0.138 | 6.79E-56 | mDC_spleen |
| HYI               | 2.31E-60 | 1.94079385 | 0.331 | 0.037 | 8.18E-56 | mDC_spleen |
| FDX1              | 2.90E-60 | 1.70713144 | 0.553 | 0.135 | 1.03E-55 | mDC_spleen |
| GOLPH3            | 3.54E-60 | 1.53109576 | 0.608 | 0.16  | 1.26E-55 | mDC_spleen |
| CBFA2T3           | 3.63E-60 | 1.28953303 | 0.582 | 0.142 | 1.29E-55 | mDC_spleen |
| PIP4K2A           | 5.38E-60 | 1.46115482 | 0.804 | 0.314 | 1.91E-55 | mDC_spleen |
| RANBP2            | 8.54E-60 | 1.36638327 | 0.812 | 0.315 | 3.02E-55 | mDC_spleen |
| CREG1             | 9.97E-60 | 1.81429236 | 0.452 | 0.086 | 3.53E-55 | mDC_spleen |

|            |          |            |       |       |          |            |
|------------|----------|------------|-------|-------|----------|------------|
| PTPRJ      | 1.20E-59 | 1.14109359 | 0.754 | 0.261 | 4.26E-55 | mDC_spleen |
| USP48      | 1.26E-59 | 1.56248681 | 0.492 | 0.102 | 4.47E-55 | mDC_spleen |
| UNC119     | 2.34E-59 | 2.03845048 | 0.431 | 0.08  | 8.29E-55 | mDC_spleen |
| ITGA4      | 2.45E-59 | 1.40120765 | 0.862 | 0.384 | 8.68E-55 | mDC_spleen |
| FBXO34     | 5.35E-59 | 1.28014564 | 0.775 | 0.258 | 1.90E-54 | mDC_spleen |
| CDK13      | 9.05E-59 | 1.38719397 | 0.733 | 0.237 | 3.21E-54 | mDC_spleen |
| PLBD1      | 1.64E-58 | 1.34569385 | 0.823 | 0.365 | 5.80E-54 | mDC_spleen |
| ABHD6      | 2.85E-58 | 3.12947392 | 0.323 | 0.039 | 1.01E-53 | mDC_spleen |
| DOCK5      | 3.32E-58 | 1.18181147 | 0.746 | 0.249 | 1.18E-53 | mDC_spleen |
| MAPK14     | 4.26E-58 | 2.09517584 | 0.434 | 0.083 | 1.51E-53 | mDC_spleen |
| USP6NL     | 4.53E-58 | 1.69227388 | 0.495 | 0.109 | 1.61E-53 | mDC_spleen |
| TBC1D12    | 5.38E-58 | 1.82502721 | 0.521 | 0.125 | 1.90E-53 | mDC_spleen |
| PLEKHO1    | 6.09E-58 | 1.07831265 | 0.831 | 0.317 | 2.16E-53 | mDC_spleen |
| RPL23A     | 8.21E-58 | 0.70834042 | 0.966 | 0.931 | 2.91E-53 | mDC_spleen |
| PFN1       | 8.48E-58 | 0.99458819 | 0.939 | 0.787 | 3.01E-53 | mDC_spleen |
| CSGALNACT1 | 1.01E-57 | 2.75922354 | 0.323 | 0.038 | 3.58E-53 | mDC_spleen |
| MYO1E      | 1.36E-57 | 1.51054391 | 0.656 | 0.197 | 4.82E-53 | mDC_spleen |
| EIF4A2     | 2.00E-57 | 1.24381975 | 0.791 | 0.303 | 7.10E-53 | mDC_spleen |
| STAMBPL1   | 2.22E-57 | 1.54147916 | 0.474 | 0.099 | 7.88E-53 | mDC_spleen |
| PLCG2      | 2.42E-57 | 1.1970285  | 0.571 | 0.142 | 8.59E-53 | mDC_spleen |
| D2HGDH     | 2.52E-57 | 2.07623675 | 0.368 | 0.055 | 8.94E-53 | mDC_spleen |
| TOR3A      | 2.67E-57 | 1.43777852 | 0.402 | 0.066 | 9.47E-53 | mDC_spleen |
| PMAIP1     | 2.83E-57 | 1.47803314 | 0.741 | 0.28  | 1.00E-52 | mDC_spleen |
| IPMK       | 3.38E-57 | 1.27396718 | 0.661 | 0.2   | 1.20E-52 | mDC_spleen |
| RSRP1      | 3.43E-57 | 1.04846864 | 0.828 | 0.288 | 1.22E-52 | mDC_spleen |
| ARL5A      | 4.74E-57 | 1.21696091 | 0.624 | 0.171 | 1.68E-52 | mDC_spleen |
| TAF10      | 4.77E-57 | 1.53825922 | 0.437 | 0.08  | 1.69E-52 | mDC_spleen |
| NOTCH2     | 6.59E-57 | 1.40062221 | 0.667 | 0.205 | 2.34E-52 | mDC_spleen |
| RANBP1     | 8.85E-57 | 1.35133955 | 0.619 | 0.173 | 3.14E-52 | mDC_spleen |
| TRAK1      | 9.33E-57 | 1.62075837 | 0.585 | 0.164 | 3.31E-52 | mDC_spleen |
| CCDC6      | 9.52E-57 | 1.41519319 | 0.788 | 0.31  | 3.37E-52 | mDC_spleen |
| FBXW7      | 1.33E-56 | 1.16381677 | 0.847 | 0.341 | 4.72E-52 | mDC_spleen |
| RHEB       | 1.34E-56 | 1.18650801 | 0.722 | 0.241 | 4.73E-52 | mDC_spleen |

|            |          |            |       |       |          |            |
|------------|----------|------------|-------|-------|----------|------------|
| AURKAIP1   | 1.76E-56 | 1.67623076 | 0.418 | 0.074 | 6.24E-52 | mDC_spleen |
| GADD45GIP1 | 1.81E-56 | 1.40332251 | 0.503 | 0.108 | 6.43E-52 | mDC_spleen |
| NCF1       | 2.11E-56 | 2.28880031 | 0.402 | 0.071 | 7.47E-52 | mDC_spleen |
| RAB12      | 2.62E-56 | 1.526427   | 0.471 | 0.099 | 9.27E-52 | mDC_spleen |
| PLEKHG2    | 3.68E-56 | 2.06466653 | 0.339 | 0.046 | 1.30E-51 | mDC_spleen |
| MTO1       | 5.03E-56 | 1.85857039 | 0.429 | 0.081 | 1.78E-51 | mDC_spleen |
| FKBP15     | 5.87E-56 | 1.25630342 | 0.664 | 0.199 | 2.08E-51 | mDC_spleen |
| SDF2L1     | 9.44E-56 | 1.37767978 | 0.574 | 0.15  | 3.34E-51 | mDC_spleen |
| FOXN3      | 1.02E-55 | 1.16206195 | 0.862 | 0.404 | 3.61E-51 | mDC_spleen |
| FYB1       | 1.12E-55 | 1.70474173 | 0.685 | 0.249 | 3.97E-51 | mDC_spleen |
| ARIH1      | 1.23E-55 | 1.12140495 | 0.78  | 0.282 | 4.35E-51 | mDC_spleen |
| CTNND1     | 1.24E-55 | 1.65322152 | 0.399 | 0.069 | 4.38E-51 | mDC_spleen |
| RIPK2      | 1.49E-55 | 2.05471231 | 0.434 | 0.088 | 5.27E-51 | mDC_spleen |
| ARNTL      | 2.05E-55 | 1.30534321 | 0.45  | 0.093 | 7.25E-51 | mDC_spleen |
| GPR137B    | 2.33E-55 | 1.28496901 | 0.542 | 0.139 | 8.27E-51 | mDC_spleen |
| NSD1       | 2.43E-55 | 1.24726127 | 0.69  | 0.223 | 8.62E-51 | mDC_spleen |
| R3HDM2     | 3.38E-55 | 1.29402623 | 0.54  | 0.133 | 1.20E-50 | mDC_spleen |
| CCL4L1     | 4.05E-55 | 1.57812928 | 0.476 | 0.108 | 1.43E-50 | mDC_spleen |
| ZNF609     | 7.66E-55 | 1.30506867 | 0.675 | 0.228 | 2.71E-50 | mDC_spleen |
| ATXN2      | 8.11E-55 | 1.22087316 | 0.619 | 0.173 | 2.87E-50 | mDC_spleen |
| ME2        | 9.97E-55 | 1.37535422 | 0.638 | 0.185 | 3.53E-50 | mDC_spleen |
| SENP6      | 2.06E-54 | 1.0540412  | 0.786 | 0.277 | 7.31E-50 | mDC_spleen |
| FLT3       | 2.08E-54 | 1.83117184 | 0.434 | 0.087 | 7.37E-50 | mDC_spleen |
| DDX5       | 3.54E-54 | 0.94847107 | 0.96  | 0.749 | 1.26E-49 | mDC_spleen |
| TP53BP2    | 3.80E-54 | 1.45780276 | 0.574 | 0.155 | 1.35E-49 | mDC_spleen |
| CEP350     | 8.76E-54 | 1.24552201 | 0.667 | 0.207 | 3.11E-49 | mDC_spleen |
| JMJD1C     | 9.34E-54 | 1.17422273 | 0.923 | 0.54  | 3.31E-49 | mDC_spleen |
| GRK3       | 9.80E-54 | 1.12989427 | 0.772 | 0.289 | 3.47E-49 | mDC_spleen |
| ZFP36      | 1.03E-53 | 1.18523221 | 0.952 | 0.813 | 3.66E-49 | mDC_spleen |
| HRH2       | 1.13E-53 | 1.47498478 | 0.458 | 0.099 | 4.01E-49 | mDC_spleen |
| AFTPH      | 1.20E-53 | 1.15738819 | 0.783 | 0.283 | 4.26E-49 | mDC_spleen |
| APP        | 1.88E-53 | 1.38566508 | 0.677 | 0.227 | 6.66E-49 | mDC_spleen |
| DISC1      | 4.81E-53 | 1.20565831 | 0.495 | 0.12  | 1.70E-48 | mDC_spleen |



|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| ENSMMUG00000051957 | 6.66E-53 | 2.21883967 | 0.466 | 0.109 | 2.36E-48 | mDC_spleen |
| QKI                | 6.77E-53 | 1.10994612 | 0.913 | 0.449 | 2.40E-48 | mDC_spleen |
| RBM17              | 7.68E-53 | 1.40381844 | 0.545 | 0.143 | 2.72E-48 | mDC_spleen |
| KCNH7              | 7.80E-53 | 1.90845067 | 0.325 | 0.045 | 2.76E-48 | mDC_spleen |
| ASAP2              | 1.34E-52 | 1.70312273 | 0.45  | 0.097 | 4.74E-48 | mDC_spleen |
| REPS2              | 1.34E-52 | 2.05274657 | 0.344 | 0.052 | 4.75E-48 | mDC_spleen |
| ARHGEF6            | 1.39E-52 | 1.13950094 | 0.595 | 0.166 | 4.93E-48 | mDC_spleen |
| PLCB4              | 1.85E-52 | 3.81623845 | 0.254 | 0.023 | 6.54E-48 | mDC_spleen |
| PPP1CC             | 2.05E-52 | 1.2191127  | 0.643 | 0.191 | 7.27E-48 | mDC_spleen |
| ENSMMUG00000020050 | 2.44E-52 | 1.5704196  | 0.389 | 0.072 | 8.63E-48 | mDC_spleen |
| SLC38A1            | 2.77E-52 | 1.24222394 | 0.868 | 0.371 | 9.83E-48 | mDC_spleen |
| CTSZ               | 2.94E-52 | 1.11736768 | 0.762 | 0.268 | 1.04E-47 | mDC_spleen |
| RAB11FIP4          | 2.97E-52 | 2.31991482 | 0.323 | 0.046 | 1.05E-47 | mDC_spleen |
| FOSB               | 2.99E-52 | 1.17401881 | 0.902 | 0.487 | 1.06E-47 | mDC_spleen |
| IL17RA             | 3.11E-52 | 1.98397686 | 0.354 | 0.057 | 1.10E-47 | mDC_spleen |
| MYCBP2             | 4.09E-52 | 1.08698202 | 0.759 | 0.284 | 1.45E-47 | mDC_spleen |
| RHOB               | 5.24E-52 | 1.89401131 | 0.413 | 0.083 | 1.86E-47 | mDC_spleen |
| TMEM201            | 7.48E-52 | 1.41488885 | 0.487 | 0.117 | 2.65E-47 | mDC_spleen |
| PDE1A              | 1.09E-51 | 2.54927635 | 0.31  | 0.042 | 3.87E-47 | mDC_spleen |
| HOOK3              | 1.33E-51 | 1.17981097 | 0.796 | 0.319 | 4.70E-47 | mDC_spleen |
| SRSF2              | 1.55E-51 | 1.16242388 | 0.746 | 0.28  | 5.48E-47 | mDC_spleen |
| GGA2               | 1.80E-51 | 1.29242794 | 0.423 | 0.083 | 6.37E-47 | mDC_spleen |
| TBC1D1             | 1.85E-51 | 0.99945221 | 0.775 | 0.276 | 6.54E-47 | mDC_spleen |
| ALKBH7             | 2.41E-51 | 1.34266372 | 0.614 | 0.181 | 8.54E-47 | mDC_spleen |
| SCAF4              | 2.46E-51 | 1.42621352 | 0.516 | 0.133 | 8.72E-47 | mDC_spleen |
| UBE2J1             | 2.57E-51 | 1.49082991 | 0.566 | 0.159 | 9.10E-47 | mDC_spleen |
| NUP153             | 3.08E-51 | 1.28371208 | 0.638 | 0.196 | 1.09E-46 | mDC_spleen |
| NAV1               | 4.32E-51 | 1.33656247 | 0.579 | 0.173 | 1.53E-46 | mDC_spleen |
| TBL1XR1            | 5.02E-51 | 1.15201922 | 0.794 | 0.321 | 1.78E-46 | mDC_spleen |
| ARHGAP25           | 5.17E-51 | 1.81302462 | 0.437 | 0.094 | 1.83E-46 | mDC_spleen |
| TOP1               | 6.63E-51 | 1.12810477 | 0.865 | 0.38  | 2.35E-46 | mDC_spleen |
| HNRNPU             | 6.76E-51 | 1.1369026  | 0.907 | 0.494 | 2.40E-46 | mDC_spleen |
| CYRIB              | 8.14E-51 | 0.97186633 | 0.963 | 0.632 | 2.88E-46 | mDC_spleen |

|                     |          |            |       |       |          |            |
|---------------------|----------|------------|-------|-------|----------|------------|
| NXPE3               | 9.06E-51 | 1.20440548 | 0.741 | 0.296 | 3.21E-46 | mDC_spleen |
| NEDD9               | 9.21E-51 | 1.09930428 | 0.722 | 0.275 | 3.26E-46 | mDC_spleen |
| SRSF4               | 9.66E-51 | 0.9278506  | 0.712 | 0.228 | 3.42E-46 | mDC_spleen |
| MED13L              | 1.03E-50 | 1.12227769 | 0.87  | 0.396 | 3.66E-46 | mDC_spleen |
| ZC3H12C             | 1.07E-50 | 1.70110661 | 0.413 | 0.086 | 3.79E-46 | mDC_spleen |
| LMTK2               | 1.13E-50 | 1.58579033 | 0.458 | 0.106 | 3.99E-46 | mDC_spleen |
| STK17B              | 1.50E-50 | 1.12139829 | 0.91  | 0.525 | 5.32E-46 | mDC_spleen |
| PLAC8               | 1.81E-50 | 1.70997489 | 0.823 | 0.508 | 6.42E-46 | mDC_spleen |
| TBC1D5              | 2.10E-50 | 1.04281    | 0.865 | 0.393 | 7.45E-46 | mDC_spleen |
| PPP3CA              | 2.14E-50 | 1.14313682 | 0.839 | 0.385 | 7.57E-46 | mDC_spleen |
| ITSN2               | 2.56E-50 | 0.87639397 | 0.857 | 0.337 | 9.08E-46 | mDC_spleen |
| ZNFX1               | 2.95E-50 | 1.29744845 | 0.624 | 0.197 | 1.04E-45 | mDC_spleen |
| CCNK                | 2.97E-50 | 1.19561356 | 0.68  | 0.22  | 1.05E-45 | mDC_spleen |
| RPS6KC1             | 3.67E-50 | 1.23212848 | 0.563 | 0.16  | 1.30E-45 | mDC_spleen |
| ENSMMUG000000011776 | 4.46E-50 | 2.01366697 | 0.36  | 0.063 | 1.58E-45 | mDC_spleen |
| ENSMMUG000000062755 | 4.60E-50 | 3.61199871 | 0.288 | 0.038 | 1.63E-45 | mDC_spleen |
| NT5C                | 4.76E-50 | 2.0539644  | 0.288 | 0.035 | 1.69E-45 | mDC_spleen |
| EIF2AK3             | 4.96E-50 | 1.24806817 | 0.579 | 0.17  | 1.76E-45 | mDC_spleen |
| UBAP2               | 5.56E-50 | 1.15096754 | 0.638 | 0.201 | 1.97E-45 | mDC_spleen |
| CAST                | 5.69E-50 | 1.05489143 | 0.786 | 0.308 | 2.02E-45 | mDC_spleen |
| SMCHD1              | 7.03E-50 | 0.9550132  | 0.807 | 0.304 | 2.49E-45 | mDC_spleen |
| TRIM22              | 7.45E-50 | 1.06971127 | 0.701 | 0.241 | 2.64E-45 | mDC_spleen |
| ILKAP               | 9.74E-50 | 1.25479369 | 0.519 | 0.134 | 3.45E-45 | mDC_spleen |
| RNF213              | 1.34E-49 | 1.64044436 | 0.463 | 0.111 | 4.76E-45 | mDC_spleen |
| ANKRD44             | 1.35E-49 | 1.08075915 | 0.894 | 0.452 | 4.79E-45 | mDC_spleen |
| STUB1               | 1.41E-49 | 1.27708306 | 0.392 | 0.073 | 5.00E-45 | mDC_spleen |
| YY1                 | 1.46E-49 | 1.22065403 | 0.608 | 0.191 | 5.17E-45 | mDC_spleen |
| EVI2B               | 1.50E-49 | 1.12087788 | 0.757 | 0.284 | 5.30E-45 | mDC_spleen |
| POC1B               | 1.65E-49 | 1.30704178 | 0.653 | 0.224 | 5.84E-45 | mDC_spleen |
| KDELR2              | 1.69E-49 | 1.13675662 | 0.733 | 0.263 | 6.00E-45 | mDC_spleen |
| INSYN2B             | 1.74E-49 | 2.77456512 | 0.283 | 0.035 | 6.16E-45 | mDC_spleen |
| SUDS3               | 2.12E-49 | 1.71191815 | 0.378 | 0.071 | 7.49E-45 | mDC_spleen |
| TANK                | 2.17E-49 | 1.42345233 | 0.772 | 0.326 | 7.70E-45 | mDC_spleen |

|          |          |            |       |       |          |            |
|----------|----------|------------|-------|-------|----------|------------|
| PPP1R16B | 2.29E-49 | 1.16768416 | 0.529 | 0.147 | 8.10E-45 | mDC_spleen |
| NIPA2    | 2.49E-49 | 0.9813949  | 0.693 | 0.23  | 8.81E-45 | mDC_spleen |
| AKIRIN1  | 2.51E-49 | 1.28138639 | 0.571 | 0.163 | 8.91E-45 | mDC_spleen |
| ARMH3    | 2.92E-49 | 1.37643339 | 0.513 | 0.137 | 1.03E-44 | mDC_spleen |
| CTCF     | 3.67E-49 | 1.44107842 | 0.466 | 0.111 | 1.30E-44 | mDC_spleen |
| LRRFIP2  | 4.82E-49 | 1.32678033 | 0.519 | 0.136 | 1.71E-44 | mDC_spleen |
| SLC46A3  | 4.84E-49 | 1.6415103  | 0.37  | 0.067 | 1.71E-44 | mDC_spleen |
| TSPAN33  | 4.92E-49 | 2.04441566 | 0.315 | 0.047 | 1.74E-44 | mDC_spleen |
| LYN      | 5.07E-49 | 1.03990225 | 0.926 | 0.587 | 1.80E-44 | mDC_spleen |
| KTN1     | 5.08E-49 | 0.89138423 | 0.643 | 0.204 | 1.80E-44 | mDC_spleen |
| PIK3R1   | 5.54E-49 | 1.39984733 | 0.516 | 0.137 | 1.96E-44 | mDC_spleen |
| FEZ2     | 5.84E-49 | 1.39284046 | 0.444 | 0.098 | 2.07E-44 | mDC_spleen |
| SEC31A   | 6.38E-49 | 1.10503887 | 0.706 | 0.248 | 2.26E-44 | mDC_spleen |
| INPP5F   | 6.58E-49 | 1.1436947  | 0.606 | 0.195 | 2.33E-44 | mDC_spleen |
| ERO1B    | 8.66E-49 | 1.21196973 | 0.598 | 0.175 | 3.07E-44 | mDC_spleen |
| ZBTB10   | 1.16E-48 | 2.05082488 | 0.381 | 0.076 | 4.12E-44 | mDC_spleen |
| BAG1     | 1.36E-48 | 2.4237715  | 0.254 | 0.026 | 4.81E-44 | mDC_spleen |
| HERC3    | 1.62E-48 | 1.26084689 | 0.55  | 0.155 | 5.75E-44 | mDC_spleen |
| RALY     | 1.65E-48 | 1.08010725 | 0.683 | 0.224 | 5.84E-44 | mDC_spleen |
| UST      | 1.85E-48 | 1.51823613 | 0.545 | 0.159 | 6.57E-44 | mDC_spleen |
| HPS3     | 1.90E-48 | 1.16147918 | 0.656 | 0.216 | 6.72E-44 | mDC_spleen |
| TRERF1   | 2.24E-48 | 1.24939957 | 0.677 | 0.237 | 7.95E-44 | mDC_spleen |
| HSPA5    | 2.56E-48 | 1.27313869 | 0.81  | 0.361 | 9.08E-44 | mDC_spleen |
| ZMYM4    | 2.72E-48 | 1.25658744 | 0.532 | 0.151 | 9.62E-44 | mDC_spleen |
| PARM1    | 2.95E-48 | 1.02357795 | 0.667 | 0.236 | 1.05E-43 | mDC_spleen |
| INPP5B   | 3.20E-48 | 1.73681434 | 0.347 | 0.06  | 1.13E-43 | mDC_spleen |
| RNF145   | 3.62E-48 | 1.41609395 | 0.476 | 0.117 | 1.28E-43 | mDC_spleen |
| SLMAP    | 3.63E-48 | 1.17251343 | 0.651 | 0.208 | 1.28E-43 | mDC_spleen |
| DOCK8    | 3.99E-48 | 1.01207997 | 0.931 | 0.52  | 1.41E-43 | mDC_spleen |
| CNOT6L   | 5.14E-48 | 1.13590494 | 0.738 | 0.271 | 1.82E-43 | mDC_spleen |
| KANSL1   | 6.97E-48 | 1.13609409 | 0.616 | 0.192 | 2.47E-43 | mDC_spleen |
| BMP2K    | 1.11E-47 | 1.43608467 | 0.534 | 0.154 | 3.93E-43 | mDC_spleen |
| PHLPP1   | 1.13E-47 | 1.44816295 | 0.68  | 0.244 | 4.01E-43 | mDC_spleen |

|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| STT3B              | 1.30E-47 | 1.42698481 | 0.648 | 0.21  | 4.61E-43 | mDC_spleen |
| IRAG2              | 1.41E-47 | 1.56003546 | 0.474 | 0.122 | 5.00E-43 | mDC_spleen |
| EML4               | 1.43E-47 | 0.95940088 | 0.894 | 0.416 | 5.06E-43 | mDC_spleen |
| RERE               | 1.72E-47 | 0.96293364 | 0.828 | 0.354 | 6.08E-43 | mDC_spleen |
| AKIRIN2            | 1.80E-47 | 1.24665213 | 0.698 | 0.252 | 6.36E-43 | mDC_spleen |
| SNRNP70            | 2.06E-47 | 0.85446793 | 0.603 | 0.176 | 7.31E-43 | mDC_spleen |
| TOB1               | 2.20E-47 | 1.63187596 | 0.437 | 0.102 | 7.81E-43 | mDC_spleen |
| IVNS1ABP           | 2.24E-47 | 1.31349754 | 0.638 | 0.211 | 7.93E-43 | mDC_spleen |
| CFLAR              | 2.81E-47 | 0.93043921 | 0.804 | 0.33  | 9.96E-43 | mDC_spleen |
| ZMYND8             | 3.80E-47 | 1.32508182 | 0.468 | 0.117 | 1.35E-42 | mDC_spleen |
| TAOK1              | 5.61E-47 | 0.97928164 | 0.571 | 0.17  | 1.99E-42 | mDC_spleen |
| RNASEH2B           | 5.91E-47 | 1.15366222 | 0.672 | 0.226 | 2.09E-42 | mDC_spleen |
| ZNF143             | 8.24E-47 | 1.40050216 | 0.312 | 0.047 | 2.92E-42 | mDC_spleen |
| TAOK3              | 8.89E-47 | 1.15429124 | 0.847 | 0.396 | 3.15E-42 | mDC_spleen |
| TBC1D4             | 9.02E-47 | 1.61722336 | 0.579 | 0.196 | 3.20E-42 | mDC_spleen |
| DPY19L1            | 9.63E-47 | 2.00258395 | 0.288 | 0.041 | 3.41E-42 | mDC_spleen |
| BAZ1A              | 1.21E-46 | 0.70665774 | 0.857 | 0.382 | 4.28E-42 | mDC_spleen |
| CCSER1             | 1.47E-46 | 1.24090837 | 0.728 | 0.306 | 5.20E-42 | mDC_spleen |
| ENSMMUG00000013289 | 1.48E-46 | 1.33060585 | 0.606 | 0.204 | 5.26E-42 | mDC_spleen |
| TLN1               | 1.56E-46 | 0.99487367 | 0.884 | 0.483 | 5.53E-42 | mDC_spleen |
| PRKAG2             | 2.00E-46 | 0.99277052 | 0.653 | 0.219 | 7.10E-42 | mDC_spleen |
| TMEM268            | 2.16E-46 | 1.85849143 | 0.341 | 0.061 | 7.67E-42 | mDC_spleen |
| C7H15orf61         | 2.21E-46 | 1.8159034  | 0.286 | 0.038 | 7.81E-42 | mDC_spleen |
| SASH1              | 2.42E-46 | 2.64245143 | 0.254 | 0.029 | 8.59E-42 | mDC_spleen |
| TCF12              | 2.44E-46 | 1.054251   | 0.802 | 0.314 | 8.64E-42 | mDC_spleen |
| RNASEH2C           | 2.57E-46 | 1.12700006 | 0.669 | 0.221 | 9.10E-42 | mDC_spleen |
| PLEK               | 2.66E-46 | 1.08856388 | 0.839 | 0.43  | 9.41E-42 | mDC_spleen |
| EHD1               | 2.90E-46 | 0.93988126 | 0.389 | 0.078 | 1.03E-41 | mDC_spleen |
| WDR47              | 3.28E-46 | 1.39153863 | 0.537 | 0.164 | 1.16E-41 | mDC_spleen |
| VCL                | 3.52E-46 | 1.21683921 | 0.714 | 0.274 | 1.25E-41 | mDC_spleen |
| PRDM2              | 4.28E-46 | 1.06022119 | 0.619 | 0.197 | 1.52E-41 | mDC_spleen |
| MBNL2              | 4.44E-46 | 1.42647206 | 0.468 | 0.123 | 1.57E-41 | mDC_spleen |
| PAN3               | 4.58E-46 | 0.92181239 | 0.812 | 0.32  | 1.62E-41 | mDC_spleen |

|                     |          |            |       |       |          |            |
|---------------------|----------|------------|-------|-------|----------|------------|
| ENSMMUG00000011711  | 4.92E-46 | 1.19866983 | 0.611 | 0.2   | 1.74E-41 | mDC_spleen |
| ENSMMUG000000065175 | 6.05E-46 | 0.94507753 | 0.683 | 0.219 | 2.14E-41 | mDC_spleen |
| ROS1                | 6.23E-46 | 1.37912787 | 0.426 | 0.095 | 2.21E-41 | mDC_spleen |
| SLC7A5              | 7.35E-46 | 2.23186879 | 0.278 | 0.038 | 2.61E-41 | mDC_spleen |
| C20H16orf72         | 8.73E-46 | 1.02326675 | 0.611 | 0.19  | 3.09E-41 | mDC_spleen |
| GNG2                | 8.98E-46 | 1.21008326 | 0.712 | 0.259 | 3.18E-41 | mDC_spleen |
| TNFAIP3             | 9.61E-46 | 1.25447996 | 0.794 | 0.417 | 3.41E-41 | mDC_spleen |
| TERF2IP             | 9.65E-46 | 1.97030383 | 0.331 | 0.058 | 3.42E-41 | mDC_spleen |
| RALBP1              | 9.68E-46 | 1.07933166 | 0.503 | 0.131 | 3.43E-41 | mDC_spleen |
| CYB561A3            | 9.74E-46 | 1.24667015 | 0.46  | 0.112 | 3.45E-41 | mDC_spleen |
| ADGRE5              | 1.04E-45 | 1.23350052 | 0.836 | 0.393 | 3.68E-41 | mDC_spleen |
| ENSMMUG000000056016 | 1.07E-45 | 2.04608797 | 0.378 | 0.083 | 3.78E-41 | mDC_spleen |
| EMC6                | 1.11E-45 | 1.05157124 | 0.614 | 0.191 | 3.94E-41 | mDC_spleen |
| ZNF524              | 1.13E-45 | 1.63290616 | 0.312 | 0.049 | 4.00E-41 | mDC_spleen |
| CAMK2G              | 1.24E-45 | 1.5136906  | 0.339 | 0.06  | 4.40E-41 | mDC_spleen |
| GTF2I               | 1.25E-45 | 1.0455176  | 0.709 | 0.261 | 4.44E-41 | mDC_spleen |
| BABAM2              | 1.26E-45 | 0.96902995 | 0.738 | 0.276 | 4.46E-41 | mDC_spleen |
| RBM26               | 1.55E-45 | 1.26524353 | 0.574 | 0.176 | 5.49E-41 | mDC_spleen |
| ARID4B              | 1.65E-45 | 1.12982567 | 0.815 | 0.352 | 5.84E-41 | mDC_spleen |
| KDM6A               | 1.87E-45 | 1.03119221 | 0.746 | 0.28  | 6.63E-41 | mDC_spleen |
| HIST1H2AC           | 1.98E-45 | 1.65638936 | 0.587 | 0.199 | 7.01E-41 | mDC_spleen |
| ZDHHC14             | 1.99E-45 | 1.41484162 | 0.447 | 0.114 | 7.05E-41 | mDC_spleen |
| VTI1A               | 2.41E-45 | 1.0634037  | 0.759 | 0.298 | 8.54E-41 | mDC_spleen |
| CHD9                | 2.79E-45 | 1.20709292 | 0.571 | 0.176 | 9.89E-41 | mDC_spleen |
| AKAP10              | 2.94E-45 | 1.65658687 | 0.352 | 0.068 | 1.04E-40 | mDC_spleen |
| AFG1L               | 3.56E-45 | 1.71976017 | 0.405 | 0.094 | 1.26E-40 | mDC_spleen |
| TFCP2               | 3.82E-45 | 1.44705003 | 0.418 | 0.099 | 1.35E-40 | mDC_spleen |
| PLCL2               | 4.34E-45 | 1.42021957 | 0.508 | 0.142 | 1.54E-40 | mDC_spleen |
| ENSMMUG000000012203 | 5.71E-45 | 1.18865408 | 0.791 | 0.354 | 2.02E-40 | mDC_spleen |
| CAPRIN1             | 6.17E-45 | 0.97557266 | 0.579 | 0.172 | 2.19E-40 | mDC_spleen |
| NCOA1               | 6.60E-45 | 1.095626   | 0.601 | 0.196 | 2.34E-40 | mDC_spleen |
| MARK3               | 7.01E-45 | 0.86750216 | 0.64  | 0.21  | 2.48E-40 | mDC_spleen |
| SH3BP5              | 8.26E-45 | 1.16457749 | 0.659 | 0.23  | 2.93E-40 | mDC_spleen |

|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| ENSMMUG00000052424 | 8.73E-45 | 0.99303897 | 0.865 | 0.419 | 3.09E-40 | mDC_spleen |
| PAK2               | 8.89E-45 | 0.87392154 | 0.852 | 0.385 | 3.15E-40 | mDC_spleen |
| RPL23              | 9.42E-45 | 0.61216807 | 0.95  | 0.929 | 3.34E-40 | mDC_spleen |
| PHF14              | 1.26E-44 | 1.56844077 | 0.495 | 0.139 | 4.48E-40 | mDC_spleen |
| LYST               | 1.32E-44 | 1.56955369 | 0.537 | 0.167 | 4.69E-40 | mDC_spleen |
| SUCO               | 1.36E-44 | 1.16157847 | 0.587 | 0.185 | 4.80E-40 | mDC_spleen |
| SFMBT2             | 1.44E-44 | 1.44515215 | 0.452 | 0.118 | 5.09E-40 | mDC_spleen |
| CMIP               | 1.49E-44 | 0.38500544 | 0.722 | 0.264 | 5.29E-40 | mDC_spleen |
| COMMD10            | 1.51E-44 | 1.31406449 | 0.648 | 0.231 | 5.34E-40 | mDC_spleen |
| BRD9               | 1.58E-44 | 1.48127229 | 0.394 | 0.087 | 5.61E-40 | mDC_spleen |
| EHMT1              | 1.60E-44 | 1.05917541 | 0.532 | 0.153 | 5.68E-40 | mDC_spleen |
| GSAP               | 1.61E-44 | 1.00017877 | 0.574 | 0.179 | 5.69E-40 | mDC_spleen |
| YTHDF3             | 1.74E-44 | 1.064697   | 0.693 | 0.247 | 6.17E-40 | mDC_spleen |
| CAMK1D             | 1.76E-44 | 0.87252367 | 0.833 | 0.376 | 6.23E-40 | mDC_spleen |
| NUFIP2             | 1.76E-44 | 1.16579012 | 0.725 | 0.291 | 6.25E-40 | mDC_spleen |
| RELB               | 2.23E-44 | 0.70585556 | 0.587 | 0.182 | 7.91E-40 | mDC_spleen |
| AOAH               | 2.31E-44 | 1.63525469 | 0.717 | 0.348 | 8.17E-40 | mDC_spleen |
| TRPM7              | 2.44E-44 | 0.89313023 | 0.783 | 0.316 | 8.65E-40 | mDC_spleen |
| ATRN               | 2.83E-44 | 1.72503873 | 0.389 | 0.087 | 1.00E-39 | mDC_spleen |
| CPPED1             | 2.89E-44 | 1.18435812 | 0.693 | 0.264 | 1.02E-39 | mDC_spleen |
| C15H9orf72         | 3.28E-44 | 0.98270489 | 0.585 | 0.182 | 1.16E-39 | mDC_spleen |
| HIP1               | 3.45E-44 | 1.40332923 | 0.656 | 0.246 | 1.22E-39 | mDC_spleen |
| SLC30A5            | 4.24E-44 | 1.70154383 | 0.36  | 0.072 | 1.50E-39 | mDC_spleen |
| ENSMMUG00000028689 | 5.65E-44 | 2.23852935 | 0.333 | 0.064 | 2.00E-39 | mDC_spleen |
| ZNRF2              | 6.06E-44 | 1.53888086 | 0.45  | 0.119 | 2.15E-39 | mDC_spleen |
| ATG7               | 6.19E-44 | 1.48931338 | 0.455 | 0.12  | 2.19E-39 | mDC_spleen |
| TLK1               | 7.48E-44 | 1.10317581 | 0.611 | 0.196 | 2.65E-39 | mDC_spleen |
| TNKS               | 8.39E-44 | 1.11087156 | 0.561 | 0.169 | 2.97E-39 | mDC_spleen |
| TRA2A              | 9.00E-44 | 0.99004649 | 0.889 | 0.445 | 3.19E-39 | mDC_spleen |
| USP9X              | 1.09E-43 | 1.10203668 | 0.68  | 0.247 | 3.88E-39 | mDC_spleen |
| RYBP               | 1.21E-43 | 1.04179991 | 0.579 | 0.184 | 4.29E-39 | mDC_spleen |
| NCOA3              | 1.22E-43 | 0.95612548 | 0.926 | 0.531 | 4.31E-39 | mDC_spleen |
| PDLIM5             | 1.29E-43 | 0.92369642 | 0.619 | 0.213 | 4.59E-39 | mDC_spleen |

|                   |          |            |       |       |          |            |
|-------------------|----------|------------|-------|-------|----------|------------|
| JAK2              | 1.35E-43 | 0.84040203 | 0.767 | 0.305 | 4.79E-39 | mDC_spleen |
| EXOC4             | 1.40E-43 | 0.73547358 | 0.802 | 0.333 | 4.97E-39 | mDC_spleen |
| HTT               | 1.42E-43 | 0.94703755 | 0.593 | 0.186 | 5.03E-39 | mDC_spleen |
| BANP              | 1.72E-43 | 1.34643441 | 0.466 | 0.125 | 6.11E-39 | mDC_spleen |
| ARGLU1            | 1.92E-43 | 0.88280548 | 0.804 | 0.343 | 6.81E-39 | mDC_spleen |
| FKBP5             | 2.17E-43 | 0.78079183 | 0.661 | 0.233 | 7.71E-39 | mDC_spleen |
| RPS6KB1           | 2.36E-43 | 1.12665237 | 0.563 | 0.171 | 8.35E-39 | mDC_spleen |
| SETBP1            | 2.62E-43 | 2.08213575 | 0.312 | 0.055 | 9.30E-39 | mDC_spleen |
| FUT8              | 2.65E-43 | 1.14760011 | 0.479 | 0.131 | 9.40E-39 | mDC_spleen |
| SPEN              | 2.67E-43 | 1.01617982 | 0.696 | 0.255 | 9.44E-39 | mDC_spleen |
| DENND6A           | 2.76E-43 | 1.25934924 | 0.418 | 0.098 | 9.78E-39 | mDC_spleen |
| VPS8              | 3.05E-43 | 1.45443432 | 0.468 | 0.127 | 1.08E-38 | mDC_spleen |
| NME3              | 3.12E-43 | 1.05579249 | 0.746 | 0.298 | 1.10E-38 | mDC_spleen |
| ACTR3             | 3.16E-43 | 0.79187903 | 0.968 | 0.742 | 1.12E-38 | mDC_spleen |
| WASL              | 3.36E-43 | 1.16574758 | 0.492 | 0.136 | 1.19E-38 | mDC_spleen |
| CARMIL1           | 3.38E-43 | 1.86629181 | 0.429 | 0.111 | 1.20E-38 | mDC_spleen |
| KLHL15            | 3.50E-43 | 1.4931692  | 0.317 | 0.056 | 1.24E-38 | mDC_spleen |
| ZNF789            | 3.59E-43 | 1.74288854 | 0.362 | 0.077 | 1.27E-38 | mDC_spleen |
| BCL2L2-PABPN1     | 3.99E-43 | 1.14654763 | 0.45  | 0.113 | 1.41E-38 | mDC_spleen |
| ENSMUG00000042837 | 4.07E-43 | 1.60914106 | 0.368 | 0.08  | 1.44E-38 | mDC_spleen |
| ZZEF1             | 4.09E-43 | 1.13666145 | 0.447 | 0.115 | 1.45E-38 | mDC_spleen |
| TLR6              | 4.20E-43 | 1.74970164 | 0.278 | 0.04  | 1.49E-38 | mDC_spleen |
| AGPS              | 4.32E-43 | 1.1904542  | 0.55  | 0.168 | 1.53E-38 | mDC_spleen |
| FAM189A1          | 4.70E-43 | 1.44499637 | 0.296 | 0.046 | 1.66E-38 | mDC_spleen |
| GTPBP1            | 4.84E-43 | 1.84769611 | 0.349 | 0.072 | 1.71E-38 | mDC_spleen |
| ZHX2              | 4.91E-43 | 0.64884461 | 0.561 | 0.171 | 1.74E-38 | mDC_spleen |
| PLPP1             | 5.01E-43 | 2.18854531 | 0.317 | 0.058 | 1.78E-38 | mDC_spleen |
| CEP85L            | 5.52E-43 | 1.03974136 | 0.635 | 0.217 | 1.96E-38 | mDC_spleen |
| HIPK2             | 5.56E-43 | 1.20042486 | 0.556 | 0.179 | 1.97E-38 | mDC_spleen |
| ADAR              | 5.78E-43 | 1.18291927 | 0.563 | 0.175 | 2.05E-38 | mDC_spleen |
| CD47              | 6.49E-43 | 0.94907295 | 0.812 | 0.356 | 2.30E-38 | mDC_spleen |
| ELOVL5            | 6.84E-43 | 1.17731864 | 0.775 | 0.323 | 2.42E-38 | mDC_spleen |
| AGGF1             | 6.90E-43 | 1.31740403 | 0.413 | 0.097 | 2.45E-38 | mDC_spleen |

|          |          |            |       |       |          |            |
|----------|----------|------------|-------|-------|----------|------------|
| COTL1    | 7.11E-43 | 0.94029044 | 0.947 | 0.753 | 2.52E-38 | mDC_spleen |
| SCAF8    | 7.98E-43 | 0.98824451 | 0.593 | 0.192 | 2.83E-38 | mDC_spleen |
| SRPK2    | 8.15E-43 | 1.07002607 | 0.54  | 0.162 | 2.89E-38 | mDC_spleen |
| MAP3K5   | 8.20E-43 | 1.22598031 | 0.505 | 0.151 | 2.90E-38 | mDC_spleen |
| FNBP4    | 8.47E-43 | 1.11716508 | 0.534 | 0.165 | 3.00E-38 | mDC_spleen |
| CDK19    | 8.55E-43 | 1.26747342 | 0.415 | 0.1   | 3.03E-38 | mDC_spleen |
| NXF1     | 8.92E-43 | 1.16405311 | 0.447 | 0.114 | 3.16E-38 | mDC_spleen |
| NUAK2    | 1.01E-42 | 1.57243987 | 0.349 | 0.07  | 3.57E-38 | mDC_spleen |
| ATP7A    | 1.08E-42 | 1.38126902 | 0.474 | 0.131 | 3.82E-38 | mDC_spleen |
| SBF2     | 1.08E-42 | 0.81889032 | 0.659 | 0.232 | 3.82E-38 | mDC_spleen |
| MBNL1    | 1.08E-42 | 1.01064165 | 0.966 | 0.753 | 3.83E-38 | mDC_spleen |
| VPS41    | 1.21E-42 | 1.40789471 | 0.529 | 0.159 | 4.30E-38 | mDC_spleen |
| ZMIZ2    | 1.39E-42 | 1.26992797 | 0.386 | 0.085 | 4.93E-38 | mDC_spleen |
| ANP32B   | 1.50E-42 | 0.96428713 | 0.833 | 0.382 | 5.30E-38 | mDC_spleen |
| VPS45    | 1.71E-42 | 1.95650572 | 0.262 | 0.035 | 6.05E-38 | mDC_spleen |
| RAB30    | 1.73E-42 | 0.71991707 | 0.574 | 0.177 | 6.14E-38 | mDC_spleen |
| CEP120   | 1.77E-42 | 1.99303303 | 0.349 | 0.074 | 6.26E-38 | mDC_spleen |
| PPP2R5E  | 1.97E-42 | 1.27011829 | 0.5   | 0.147 | 6.99E-38 | mDC_spleen |
| PARP14   | 2.30E-42 | 1.83159909 | 0.341 | 0.069 | 8.15E-38 | mDC_spleen |
| PTAFR    | 2.51E-42 | 1.62645096 | 0.331 | 0.063 | 8.90E-38 | mDC_spleen |
| PLA2G7   | 2.56E-42 | 1.69400608 | 0.352 | 0.072 | 9.06E-38 | mDC_spleen |
| GGNBP2   | 2.63E-42 | 0.97601553 | 0.677 | 0.239 | 9.31E-38 | mDC_spleen |
| MIS18BP1 | 2.79E-42 | 1.70948898 | 0.378 | 0.085 | 9.89E-38 | mDC_spleen |
| MAPKAP1  | 3.12E-42 | 1.4116618  | 0.497 | 0.147 | 1.11E-37 | mDC_spleen |
| CSNK1G1  | 3.14E-42 | 1.11709668 | 0.54  | 0.163 | 1.11E-37 | mDC_spleen |
| FLI1     | 3.47E-42 | 0.96711124 | 0.582 | 0.187 | 1.23E-37 | mDC_spleen |
| TRIM44   | 3.49E-42 | 1.21857236 | 0.516 | 0.148 | 1.24E-37 | mDC_spleen |
| RABGAP1L | 3.57E-42 | 0.91901357 | 0.799 | 0.331 | 1.27E-37 | mDC_spleen |
| EYA3     | 3.60E-42 | 1.38455991 | 0.484 | 0.137 | 1.28E-37 | mDC_spleen |
| RDX      | 3.66E-42 | 1.44203969 | 0.378 | 0.083 | 1.30E-37 | mDC_spleen |
| CBL      | 3.89E-42 | 0.78312453 | 0.497 | 0.144 | 1.38E-37 | mDC_spleen |
| CMAH     | 4.28E-42 | 1.18258965 | 0.611 | 0.227 | 1.52E-37 | mDC_spleen |
| FOXO3    | 4.30E-42 | 1.47896838 | 0.524 | 0.163 | 1.52E-37 | mDC_spleen |



|         |          |            |       |       |          |            |
|---------|----------|------------|-------|-------|----------|------------|
| XPO1    | 5.60E-42 | 1.07437597 | 0.59  | 0.19  | 1.98E-37 | mDC_spleen |
| MAP4    | 6.74E-42 | 1.21051222 | 0.471 | 0.131 | 2.39E-37 | mDC_spleen |
| SMARCC1 | 6.76E-42 | 0.83179833 | 0.696 | 0.249 | 2.40E-37 | mDC_spleen |
| YTHDF2  | 6.84E-42 | 1.16306944 | 0.495 | 0.141 | 2.42E-37 | mDC_spleen |
| PDXK    | 7.06E-42 | 1.57614417 | 0.339 | 0.066 | 2.50E-37 | mDC_spleen |
| RAP1A   | 7.17E-42 | 0.83249777 | 0.907 | 0.594 | 2.54E-37 | mDC_spleen |
| PKN2    | 7.85E-42 | 0.99693152 | 0.608 | 0.202 | 2.78E-37 | mDC_spleen |
| IDO1    | 8.49E-42 | 2.50148607 | 0.37  | 0.091 | 3.01E-37 | mDC_spleen |
| PTPRK   | 8.88E-42 | 2.3619595  | 0.27  | 0.041 | 3.15E-37 | mDC_spleen |
| HPS5    | 8.90E-42 | 1.09592474 | 0.526 | 0.158 | 3.16E-37 | mDC_spleen |
| MACF1   | 1.02E-41 | 0.93354129 | 0.767 | 0.309 | 3.62E-37 | mDC_spleen |
| CDH20   | 1.18E-41 | 1.70223412 | 0.325 | 0.062 | 4.18E-37 | mDC_spleen |
| PI4K2A  | 1.26E-41 | 2.05883605 | 0.365 | 0.084 | 4.45E-37 | mDC_spleen |
| PTPRA   | 1.55E-41 | 1.06933977 | 0.611 | 0.204 | 5.50E-37 | mDC_spleen |
| CUX2    | 1.76E-41 | 1.45119684 | 0.397 | 0.096 | 6.25E-37 | mDC_spleen |
| FRMD4B  | 1.81E-41 | 1.21221671 | 0.5   | 0.148 | 6.41E-37 | mDC_spleen |
| LIMCH1  | 1.95E-41 | 1.22906667 | 0.439 | 0.117 | 6.92E-37 | mDC_spleen |
| FNDC3B  | 2.00E-41 | 1.14235958 | 0.577 | 0.192 | 7.09E-37 | mDC_spleen |
| ZNF217  | 2.05E-41 | 1.16301028 | 0.407 | 0.097 | 7.25E-37 | mDC_spleen |
| EPSTI1  | 2.09E-41 | 2.25633166 | 0.315 | 0.059 | 7.41E-37 | mDC_spleen |
| EFL1    | 2.13E-41 | 1.06929952 | 0.635 | 0.227 | 7.54E-37 | mDC_spleen |
| PRPF38B | 2.32E-41 | 0.94813502 | 0.664 | 0.238 | 8.21E-37 | mDC_spleen |
| BIRC6   | 2.51E-41 | 0.85712436 | 0.849 | 0.368 | 8.91E-37 | mDC_spleen |
| CDC14A  | 2.77E-41 | 1.05707925 | 0.54  | 0.163 | 9.83E-37 | mDC_spleen |
| FAF1    | 2.85E-41 | 1.01823806 | 0.569 | 0.182 | 1.01E-36 | mDC_spleen |
| MAP2K1  | 2.89E-41 | 0.95750215 | 0.619 | 0.209 | 1.02E-36 | mDC_spleen |
| MLLT10  | 3.06E-41 | 1.12366064 | 0.571 | 0.184 | 1.08E-36 | mDC_spleen |
| FAM174C | 3.28E-41 | 0.82644758 | 0.421 | 0.1   | 1.16E-36 | mDC_spleen |
| MAF1    | 3.79E-41 | 0.96615845 | 0.577 | 0.181 | 1.34E-36 | mDC_spleen |
| AKR7A2  | 3.88E-41 | 1.132613   | 0.574 | 0.186 | 1.38E-36 | mDC_spleen |
| DLG1    | 3.95E-41 | 0.80264165 | 0.743 | 0.278 | 1.40E-36 | mDC_spleen |
| UBE2Q2  | 4.16E-41 | 0.89004613 | 0.603 | 0.205 | 1.48E-36 | mDC_spleen |
| IL2RG   | 4.17E-41 | 1.17810478 | 0.545 | 0.178 | 1.48E-36 | mDC_spleen |

|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| RPTOR              | 4.79E-41 | 1.01056063 | 0.556 | 0.176 | 1.70E-36 | mDC_spleen |
| ENSMMUG00000011588 | 5.02E-41 | 0.94699526 | 0.381 | 0.087 | 1.78E-36 | mDC_spleen |
| PDSS2              | 5.22E-41 | 1.29162278 | 0.426 | 0.111 | 1.85E-36 | mDC_spleen |
| NBN                | 5.89E-41 | 1.48841929 | 0.431 | 0.112 | 2.09E-36 | mDC_spleen |
| TRIM33             | 6.85E-41 | 1.17769015 | 0.466 | 0.127 | 2.43E-36 | mDC_spleen |
| SLC41A1            | 8.01E-41 | 1.24768213 | 0.476 | 0.137 | 2.84E-36 | mDC_spleen |
| ITPR2              | 8.05E-41 | 0.76519914 | 0.725 | 0.275 | 2.85E-36 | mDC_spleen |
| XPR1               | 8.35E-41 | 1.24625819 | 0.529 | 0.17  | 2.96E-36 | mDC_spleen |
| RPP14              | 1.04E-40 | 1.72996707 | 0.336 | 0.069 | 3.67E-36 | mDC_spleen |
| TRIM13             | 1.14E-40 | 1.37236718 | 0.407 | 0.101 | 4.03E-36 | mDC_spleen |
| MAP2K5             | 1.19E-40 | 1.20346856 | 0.442 | 0.119 | 4.20E-36 | mDC_spleen |
| BRD2               | 1.38E-40 | 0.89199623 | 0.844 | 0.385 | 4.89E-36 | mDC_spleen |
| SURF1              | 1.42E-40 | 1.35456654 | 0.317 | 0.058 | 5.05E-36 | mDC_spleen |
| SPTLC2             | 1.49E-40 | 1.29305221 | 0.452 | 0.125 | 5.28E-36 | mDC_spleen |
| NSF                | 1.73E-40 | 0.94364993 | 0.563 | 0.183 | 6.13E-36 | mDC_spleen |
| ST3GAL5            | 1.89E-40 | 1.05370743 | 0.381 | 0.086 | 6.68E-36 | mDC_spleen |
| PDLIM2             | 1.93E-40 | 0.9611331  | 0.611 | 0.206 | 6.85E-36 | mDC_spleen |
| TSPYL2             | 1.98E-40 | 1.72774526 | 0.307 | 0.057 | 7.03E-36 | mDC_spleen |
| ITPK1              | 2.15E-40 | 1.04359399 | 0.447 | 0.117 | 7.62E-36 | mDC_spleen |
| DENND1B            | 2.22E-40 | 0.98727645 | 0.738 | 0.306 | 7.87E-36 | mDC_spleen |
| ARRB1              | 2.27E-40 | 1.1048264  | 0.558 | 0.179 | 8.03E-36 | mDC_spleen |
| TMCC1              | 2.47E-40 | 1.01254089 | 0.548 | 0.181 | 8.76E-36 | mDC_spleen |
| KDM3B              | 2.48E-40 | 1.181392   | 0.5   | 0.152 | 8.80E-36 | mDC_spleen |
| DIS3L2             | 2.79E-40 | 1.1496357  | 0.503 | 0.15  | 9.89E-36 | mDC_spleen |
| RPS6KA5            | 3.02E-40 | 1.40532632 | 0.532 | 0.168 | 1.07E-35 | mDC_spleen |
| NAA25              | 3.05E-40 | 1.11316621 | 0.479 | 0.135 | 1.08E-35 | mDC_spleen |
| CFAP299            | 3.21E-40 | 1.43526565 | 0.331 | 0.065 | 1.14E-35 | mDC_spleen |
| MFSD14B            | 4.14E-40 | 1.13907521 | 0.5   | 0.15  | 1.47E-35 | mDC_spleen |
| HERC2              | 5.18E-40 | 1.18754589 | 0.505 | 0.148 | 1.84E-35 | mDC_spleen |
| DIPK2A             | 5.67E-40 | 1.28382569 | 0.418 | 0.111 | 2.01E-35 | mDC_spleen |
| ACTN1              | 5.69E-40 | 0.9603944  | 0.743 | 0.315 | 2.02E-35 | mDC_spleen |
| B4GALT1            | 6.30E-40 | 1.02840902 | 0.447 | 0.119 | 2.23E-35 | mDC_spleen |
| ZBTB11             | 6.36E-40 | 1.07201319 | 0.413 | 0.106 | 2.25E-35 | mDC_spleen |

|           |          |            |       |       |          |            |
|-----------|----------|------------|-------|-------|----------|------------|
| SETD2     | 6.55E-40 | 0.85292949 | 0.675 | 0.246 | 2.32E-35 | mDC_spleen |
| SDHAF4    | 6.81E-40 | 0.91482326 | 0.646 | 0.228 | 2.41E-35 | mDC_spleen |
| LCOR      | 7.12E-40 | 0.70046801 | 0.733 | 0.29  | 2.52E-35 | mDC_spleen |
| CCDC186   | 7.71E-40 | 1.39265065 | 0.423 | 0.111 | 2.73E-35 | mDC_spleen |
| ARL14EP   | 8.20E-40 | 1.33944484 | 0.344 | 0.072 | 2.90E-35 | mDC_spleen |
| GMPS      | 8.23E-40 | 1.35191979 | 0.476 | 0.137 | 2.92E-35 | mDC_spleen |
| PAIP1     | 9.17E-40 | 1.42861087 | 0.426 | 0.112 | 3.25E-35 | mDC_spleen |
| INO80     | 9.19E-40 | 1.20897154 | 0.479 | 0.14  | 3.26E-35 | mDC_spleen |
| EXOC6     | 9.42E-40 | 1.11266104 | 0.635 | 0.233 | 3.34E-35 | mDC_spleen |
| ZFAND3    | 1.06E-39 | 0.73877126 | 0.836 | 0.378 | 3.74E-35 | mDC_spleen |
| NSD3      | 1.08E-39 | 0.71589982 | 0.614 | 0.214 | 3.83E-35 | mDC_spleen |
| CDYL      | 1.18E-39 | 1.15270872 | 0.561 | 0.184 | 4.19E-35 | mDC_spleen |
| CHMP4B    | 1.36E-39 | 0.79035661 | 0.511 | 0.151 | 4.81E-35 | mDC_spleen |
| RIN3      | 1.39E-39 | 0.72933471 | 0.677 | 0.246 | 4.92E-35 | mDC_spleen |
| RAB11FIP1 | 1.39E-39 | 1.02826794 | 0.714 | 0.292 | 4.92E-35 | mDC_spleen |
| CERT1     | 1.41E-39 | 0.93651783 | 0.714 | 0.27  | 4.98E-35 | mDC_spleen |
| SURF4     | 1.48E-39 | 1.02585517 | 0.577 | 0.19  | 5.24E-35 | mDC_spleen |
| ABI1      | 1.50E-39 | 0.97898267 | 0.712 | 0.282 | 5.30E-35 | mDC_spleen |
| GALNT1    | 1.53E-39 | 1.25949347 | 0.556 | 0.188 | 5.44E-35 | mDC_spleen |
| MAN2A1    | 1.66E-39 | 0.9591006  | 0.587 | 0.197 | 5.88E-35 | mDC_spleen |
| DIP2B     | 1.67E-39 | 0.77977478 | 0.611 | 0.21  | 5.91E-35 | mDC_spleen |
| ARID1A    | 1.72E-39 | 0.94063279 | 0.616 | 0.211 | 6.11E-35 | mDC_spleen |
| NIN       | 2.03E-39 | 0.75416834 | 0.585 | 0.192 | 7.18E-35 | mDC_spleen |
| THADA     | 2.39E-39 | 1.12225008 | 0.611 | 0.223 | 8.48E-35 | mDC_spleen |
| METTL9    | 2.49E-39 | 1.1926692  | 0.452 | 0.125 | 8.84E-35 | mDC_spleen |
| RNF130    | 2.57E-39 | 1.07727774 | 0.709 | 0.289 | 9.09E-35 | mDC_spleen |
| ST7       | 2.72E-39 | 1.62263167 | 0.402 | 0.103 | 9.62E-35 | mDC_spleen |
| FAM117B   | 2.91E-39 | 1.49956157 | 0.429 | 0.114 | 1.03E-34 | mDC_spleen |
| AKT3      | 3.26E-39 | 0.95515808 | 0.675 | 0.254 | 1.15E-34 | mDC_spleen |
| SLC41A2   | 3.27E-39 | 1.03410922 | 0.503 | 0.154 | 1.16E-34 | mDC_spleen |
| PHF21A    | 3.38E-39 | 1.13157686 | 0.558 | 0.187 | 1.20E-34 | mDC_spleen |
| KMT2C     | 3.39E-39 | 0.92030376 | 0.894 | 0.486 | 1.20E-34 | mDC_spleen |
| FAM120A   | 3.40E-39 | 0.94863896 | 0.632 | 0.225 | 1.20E-34 | mDC_spleen |

|          |          |            |       |       |          |            |
|----------|----------|------------|-------|-------|----------|------------|
| CHSY1    | 3.40E-39 | 1.65678036 | 0.328 | 0.069 | 1.20E-34 | mDC_spleen |
| LPP      | 3.82E-39 | 0.57381848 | 0.817 | 0.376 | 1.35E-34 | mDC_spleen |
| PPP1R12B | 4.10E-39 | 1.32106202 | 0.405 | 0.105 | 1.45E-34 | mDC_spleen |
| TMX4     | 4.29E-39 | 1.47343209 | 0.36  | 0.081 | 1.52E-34 | mDC_spleen |
| ZCCHC7   | 4.54E-39 | 0.95057674 | 0.611 | 0.223 | 1.61E-34 | mDC_spleen |
| SUSD1    | 5.52E-39 | 1.72128537 | 0.325 | 0.068 | 1.96E-34 | mDC_spleen |
| ELMO1    | 6.70E-39 | 0.77311129 | 0.907 | 0.515 | 2.37E-34 | mDC_spleen |
| ESCO1    | 6.79E-39 | 1.020662   | 0.675 | 0.252 | 2.41E-34 | mDC_spleen |
| ING2     | 6.88E-39 | 1.69286511 | 0.373 | 0.089 | 2.44E-34 | mDC_spleen |
| HNRNPD   | 6.96E-39 | 0.74343712 | 0.849 | 0.384 | 2.47E-34 | mDC_spleen |
| MANBA    | 7.23E-39 | 1.15755404 | 0.762 | 0.325 | 2.56E-34 | mDC_spleen |
| TMEM87B  | 7.57E-39 | 1.5449704  | 0.336 | 0.072 | 2.68E-34 | mDC_spleen |
| MLEC     | 7.59E-39 | 1.14436575 | 0.442 | 0.12  | 2.69E-34 | mDC_spleen |
| TRMT1L   | 7.82E-39 | 1.51373023 | 0.36  | 0.082 | 2.77E-34 | mDC_spleen |
| ZNF581   | 8.00E-39 | 1.04044326 | 0.405 | 0.102 | 2.84E-34 | mDC_spleen |
| CERS6    | 8.04E-39 | 1.08544686 | 0.595 | 0.205 | 2.85E-34 | mDC_spleen |
| YTHDC1   | 8.65E-39 | 0.81195024 | 0.667 | 0.24  | 3.06E-34 | mDC_spleen |
| FOXJ3    | 9.58E-39 | 1.00682986 | 0.516 | 0.157 | 3.40E-34 | mDC_spleen |
| LNPEP    | 1.14E-38 | 1.17361447 | 0.519 | 0.164 | 4.04E-34 | mDC_spleen |
| PDS5A    | 1.19E-38 | 1.01263397 | 0.542 | 0.175 | 4.23E-34 | mDC_spleen |
| FAM135A  | 1.28E-38 | 1.07823056 | 0.468 | 0.139 | 4.55E-34 | mDC_spleen |
| CCNL1    | 1.29E-38 | 0.8051609  | 0.929 | 0.658 | 4.58E-34 | mDC_spleen |
| NKTR     | 1.33E-38 | 0.65113258 | 0.516 | 0.154 | 4.69E-34 | mDC_spleen |
| SNX3     | 1.34E-38 | 0.99941215 | 0.802 | 0.384 | 4.76E-34 | mDC_spleen |
| SP110    | 1.37E-38 | 0.96216273 | 0.762 | 0.328 | 4.87E-34 | mDC_spleen |
| ADAP2    | 1.41E-38 | 1.48079068 | 0.299 | 0.056 | 4.99E-34 | mDC_spleen |
| ANO6     | 1.44E-38 | 1.14140205 | 0.548 | 0.184 | 5.11E-34 | mDC_spleen |
| AKAP17A  | 1.52E-38 | 1.10254062 | 0.392 | 0.095 | 5.40E-34 | mDC_spleen |
| DNAJA1   | 1.56E-38 | 1.1061103  | 0.786 | 0.347 | 5.52E-34 | mDC_spleen |
| TAF15    | 2.06E-38 | 0.78727969 | 0.72  | 0.283 | 7.30E-34 | mDC_spleen |
| TSC22D2  | 2.16E-38 | 1.05056273 | 0.54  | 0.182 | 7.67E-34 | mDC_spleen |
| PHF20L1  | 2.22E-38 | 1.295438   | 0.36  | 0.083 | 7.86E-34 | mDC_spleen |
| CTSH     | 2.28E-38 | 1.12758801 | 0.823 | 0.462 | 8.09E-34 | mDC_spleen |

|         |          |            |       |       |          |            |
|---------|----------|------------|-------|-------|----------|------------|
| DENND3  | 2.51E-38 | 1.47684945 | 0.288 | 0.052 | 8.91E-34 | mDC_spleen |
| DESI2   | 2.69E-38 | 1.03397742 | 0.378 | 0.091 | 9.51E-34 | mDC_spleen |
| SMARCA5 | 2.97E-38 | 0.89693924 | 0.683 | 0.265 | 1.05E-33 | mDC_spleen |
| MAP2K6  | 3.01E-38 | 1.2784112  | 0.598 | 0.224 | 1.07E-33 | mDC_spleen |
| IMP3    | 3.12E-38 | 1.23678297 | 0.389 | 0.093 | 1.10E-33 | mDC_spleen |
| NGLY1   | 3.18E-38 | 1.11203717 | 0.511 | 0.157 | 1.13E-33 | mDC_spleen |
| CFD     | 3.21E-38 | 2.23280821 | 0.312 | 0.065 | 1.14E-33 | mDC_spleen |
| ZNF652  | 3.44E-38 | 1.38682531 | 0.354 | 0.083 | 1.22E-33 | mDC_spleen |
| ERO1A   | 3.45E-38 | 1.0095869  | 0.569 | 0.192 | 1.22E-33 | mDC_spleen |
| NSMCE4A | 3.65E-38 | 2.16334349 | 0.272 | 0.047 | 1.29E-33 | mDC_spleen |
| UBE2L6  | 3.76E-38 | 1.38706372 | 0.32  | 0.063 | 1.33E-33 | mDC_spleen |
| PDIA6   | 3.99E-38 | 1.05600573 | 0.561 | 0.187 | 1.41E-33 | mDC_spleen |
| ARID2   | 4.60E-38 | 0.91403521 | 0.648 | 0.246 | 1.63E-33 | mDC_spleen |
| UNC93B1 | 4.62E-38 | 0.80071854 | 0.341 | 0.071 | 1.64E-33 | mDC_spleen |
| TTC39C  | 4.67E-38 | 0.91382499 | 0.619 | 0.232 | 1.66E-33 | mDC_spleen |
| MGAT1   | 4.74E-38 | 1.11173518 | 0.492 | 0.149 | 1.68E-33 | mDC_spleen |
| TAF3    | 4.95E-38 | 1.12925436 | 0.503 | 0.154 | 1.75E-33 | mDC_spleen |
| PLEKHB2 | 5.59E-38 | 0.96491284 | 0.571 | 0.193 | 1.98E-33 | mDC_spleen |
| AHCTF1  | 5.81E-38 | 1.08735002 | 0.481 | 0.145 | 2.06E-33 | mDC_spleen |
| MICU2   | 6.11E-38 | 0.92579686 | 0.511 | 0.16  | 2.16E-33 | mDC_spleen |
| STRN3   | 6.12E-38 | 0.68842103 | 0.534 | 0.17  | 2.17E-33 | mDC_spleen |
| GABPB1  | 7.34E-38 | 1.4095179  | 0.529 | 0.179 | 2.60E-33 | mDC_spleen |
| PPTC7   | 7.60E-38 | 1.05548949 | 0.474 | 0.139 | 2.69E-33 | mDC_spleen |
| LMBRD1  | 7.62E-38 | 0.99787889 | 0.622 | 0.224 | 2.70E-33 | mDC_spleen |
| MED14   | 7.74E-38 | 1.51529618 | 0.304 | 0.061 | 2.74E-33 | mDC_spleen |
| TFRC    | 7.98E-38 | 1.02839808 | 0.481 | 0.144 | 2.83E-33 | mDC_spleen |
| SLC7A6  | 8.08E-38 | 1.4362936  | 0.344 | 0.077 | 2.86E-33 | mDC_spleen |
| ZFX     | 8.94E-38 | 1.18352321 | 0.463 | 0.138 | 3.17E-33 | mDC_spleen |
| TMEM134 | 9.19E-38 | 0.88103085 | 0.423 | 0.109 | 3.26E-33 | mDC_spleen |
| OXR1    | 9.70E-38 | 1.10687113 | 0.532 | 0.175 | 3.44E-33 | mDC_spleen |
| OTULINL | 1.09E-37 | 0.9953876  | 0.54  | 0.173 | 3.86E-33 | mDC_spleen |
| ANKFY1  | 1.17E-37 | 1.38920053 | 0.394 | 0.104 | 4.16E-33 | mDC_spleen |
| OTUD4   | 1.20E-37 | 1.21720448 | 0.341 | 0.076 | 4.27E-33 | mDC_spleen |

|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| GLUD1              | 1.24E-37 | 1.06318241 | 0.492 | 0.149 | 4.38E-33 | mDC_spleen |
| PSTPIP2            | 1.28E-37 | 1.09327505 | 0.45  | 0.128 | 4.54E-33 | mDC_spleen |
| KRAS               | 1.30E-37 | 0.87996064 | 0.508 | 0.156 | 4.61E-33 | mDC_spleen |
| PPP1R12A           | 1.30E-37 | 0.6975536  | 0.804 | 0.337 | 4.61E-33 | mDC_spleen |
| KIF5B              | 1.51E-37 | 0.78652668 | 0.794 | 0.334 | 5.34E-33 | mDC_spleen |
| CDKAL1             | 1.60E-37 | 0.75830601 | 0.667 | 0.252 | 5.67E-33 | mDC_spleen |
| USP25              | 1.82E-37 | 1.13126707 | 0.458 | 0.134 | 6.47E-33 | mDC_spleen |
| UBR4               | 1.92E-37 | 1.07447337 | 0.476 | 0.141 | 6.79E-33 | mDC_spleen |
| ARL5B              | 2.04E-37 | 0.89301809 | 0.526 | 0.178 | 7.24E-33 | mDC_spleen |
| TNRC18             | 2.07E-37 | 0.94430642 | 0.5   | 0.167 | 7.33E-33 | mDC_spleen |
| ENSMMUG00000021153 | 2.18E-37 | 1.07296334 | 0.577 | 0.213 | 7.74E-33 | mDC_spleen |
| KDM4C              | 2.29E-37 | 0.77330214 | 0.667 | 0.244 | 8.11E-33 | mDC_spleen |
| RRBP1              | 2.55E-37 | 0.89941077 | 0.579 | 0.204 | 9.05E-33 | mDC_spleen |
| ATP1A1             | 2.58E-37 | 0.80043343 | 0.72  | 0.299 | 9.13E-33 | mDC_spleen |
| USP8               | 2.97E-37 | 1.04152822 | 0.587 | 0.208 | 1.05E-32 | mDC_spleen |
| MICAL2             | 3.02E-37 | 1.09932503 | 0.582 | 0.205 | 1.07E-32 | mDC_spleen |
| PPM1E              | 3.16E-37 | 1.28081246 | 0.474 | 0.154 | 1.12E-32 | mDC_spleen |
| WDR44              | 3.18E-37 | 1.39734664 | 0.455 | 0.137 | 1.13E-32 | mDC_spleen |
| MBD5               | 3.68E-37 | 1.15632089 | 0.54  | 0.19  | 1.30E-32 | mDC_spleen |
| SLC20A1            | 4.30E-37 | 0.98008619 | 0.511 | 0.166 | 1.52E-32 | mDC_spleen |
| MAMU-DOB           | 4.40E-37 | 0.79608972 | 0.54  | 0.173 | 1.56E-32 | mDC_spleen |
| SLC25A27           | 4.50E-37 | 1.75886168 | 0.265 | 0.044 | 1.59E-32 | mDC_spleen |
| ENSMMUG00000021226 | 4.52E-37 | 1.94952162 | 0.27  | 0.047 | 1.60E-32 | mDC_spleen |
| RAB1A              | 5.21E-37 | 0.79945434 | 0.802 | 0.346 | 1.85E-32 | mDC_spleen |
| RPL13A             | 5.47E-37 | 0.57661626 | 0.958 | 0.942 | 1.94E-32 | mDC_spleen |
| YEATS2             | 5.76E-37 | 0.75422394 | 0.614 | 0.213 | 2.04E-32 | mDC_spleen |
| MEF2A              | 5.86E-37 | 0.83959934 | 0.807 | 0.352 | 2.08E-32 | mDC_spleen |
| GMDS               | 5.99E-37 | 1.05084333 | 0.487 | 0.15  | 2.12E-32 | mDC_spleen |
| CPEB2              | 6.07E-37 | 1.55556998 | 0.399 | 0.111 | 2.15E-32 | mDC_spleen |
| MAT2B              | 6.35E-37 | 1.02445624 | 0.381 | 0.093 | 2.25E-32 | mDC_spleen |
| DIPK1A             | 6.80E-37 | 1.75348337 | 0.315 | 0.068 | 2.41E-32 | mDC_spleen |
| SMURF1             | 7.08E-37 | 1.32614622 | 0.429 | 0.125 | 2.51E-32 | mDC_spleen |
| ACER3              | 7.12E-37 | 1.04399815 | 0.534 | 0.179 | 2.52E-32 | mDC_spleen |

|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| UBQLN1             | 8.13E-37 | 1.12856881 | 0.489 | 0.149 | 2.88E-32 | mDC_spleen |
| PATL1              | 8.23E-37 | 1.06629726 | 0.413 | 0.111 | 2.92E-32 | mDC_spleen |
| PPIG               | 9.42E-37 | 0.97026268 | 0.725 | 0.308 | 3.34E-32 | mDC_spleen |
| SDF4               | 9.99E-37 | 1.21892092 | 0.331 | 0.072 | 3.54E-32 | mDC_spleen |
| BTAF1              | 1.12E-36 | 1.01712894 | 0.598 | 0.213 | 3.98E-32 | mDC_spleen |
| UTRN               | 1.18E-36 | 0.59256427 | 0.669 | 0.242 | 4.17E-32 | mDC_spleen |
| MARCHF7            | 1.23E-36 | 0.80659095 | 0.659 | 0.242 | 4.37E-32 | mDC_spleen |
| SETDB2             | 1.33E-36 | 0.89206769 | 0.431 | 0.12  | 4.71E-32 | mDC_spleen |
| STK10              | 1.34E-36 | 0.57876482 | 0.786 | 0.334 | 4.74E-32 | mDC_spleen |
| ENSMMUG00000055718 | 1.36E-36 | 2.09218573 | 0.312 | 0.068 | 4.81E-32 | mDC_spleen |
| PRNP               | 1.41E-36 | 0.98604424 | 0.553 | 0.187 | 4.98E-32 | mDC_spleen |
| JMY                | 1.42E-36 | 1.26885127 | 0.381 | 0.098 | 5.03E-32 | mDC_spleen |
| RNGTT              | 1.43E-36 | 0.98929035 | 0.566 | 0.191 | 5.06E-32 | mDC_spleen |
| HPCAL1             | 1.48E-36 | 0.9476763  | 0.497 | 0.159 | 5.23E-32 | mDC_spleen |
| PBRM1              | 1.51E-36 | 0.76577799 | 0.619 | 0.22  | 5.37E-32 | mDC_spleen |
| BBX                | 1.53E-36 | 1.03866285 | 0.648 | 0.261 | 5.42E-32 | mDC_spleen |
| HIPK1              | 1.54E-36 | 0.96538965 | 0.452 | 0.131 | 5.45E-32 | mDC_spleen |
| EPC1               | 1.60E-36 | 0.78931036 | 0.751 | 0.297 | 5.68E-32 | mDC_spleen |
| ABR                | 1.71E-36 | 0.61863205 | 0.635 | 0.237 | 6.05E-32 | mDC_spleen |
| ABCC1              | 1.77E-36 | 1.18096772 | 0.452 | 0.137 | 6.26E-32 | mDC_spleen |
| DAP                | 1.84E-36 | 0.84733666 | 0.468 | 0.142 | 6.51E-32 | mDC_spleen |
| ZC3H13             | 1.85E-36 | 0.8382139  | 0.624 | 0.221 | 6.56E-32 | mDC_spleen |
| CYTH1              | 2.10E-36 | 0.63716647 | 0.696 | 0.263 | 7.43E-32 | mDC_spleen |
| TLE4               | 2.37E-36 | 1.10471719 | 0.534 | 0.177 | 8.41E-32 | mDC_spleen |
| PUM1               | 2.46E-36 | 0.86284657 | 0.706 | 0.277 | 8.72E-32 | mDC_spleen |
| SPATA5             | 2.51E-36 | 1.44480911 | 0.407 | 0.111 | 8.88E-32 | mDC_spleen |
| SLX4IP             | 2.51E-36 | 1.60506518 | 0.32  | 0.07  | 8.91E-32 | mDC_spleen |
| ZC3HAV1            | 2.54E-36 | 0.90021921 | 0.614 | 0.226 | 8.99E-32 | mDC_spleen |
| ATP1B3             | 2.83E-36 | 1.09359661 | 0.852 | 0.446 | 1.00E-31 | mDC_spleen |
| ENSMMUG00000053320 | 2.89E-36 | 1.79690871 | 0.272 | 0.049 | 1.02E-31 | mDC_spleen |
| LSM4               | 3.14E-36 | 0.87726017 | 0.611 | 0.218 | 1.11E-31 | mDC_spleen |
| ELK3               | 3.25E-36 | 1.08177295 | 0.54  | 0.179 | 1.15E-31 | mDC_spleen |
| CHIC2              | 3.37E-36 | 0.88533672 | 0.481 | 0.146 | 1.19E-31 | mDC_spleen |

|         |          |            |       |       |          |            |
|---------|----------|------------|-------|-------|----------|------------|
| PDIA3   | 3.37E-36 | 1.23554101 | 0.481 | 0.153 | 1.20E-31 | mDC_spleen |
| DCAF5   | 3.60E-36 | 1.09273478 | 0.413 | 0.112 | 1.27E-31 | mDC_spleen |
| TTC3    | 3.65E-36 | 1.07774954 | 0.471 | 0.145 | 1.29E-31 | mDC_spleen |
| SESN3   | 3.92E-36 | 1.453831   | 0.373 | 0.095 | 1.39E-31 | mDC_spleen |
| CRLF3   | 3.96E-36 | 0.95242119 | 0.495 | 0.152 | 1.40E-31 | mDC_spleen |
| CELF1   | 4.18E-36 | 0.66873111 | 0.635 | 0.227 | 1.48E-31 | mDC_spleen |
| MAP3K8  | 4.55E-36 | 0.89420012 | 0.725 | 0.318 | 1.61E-31 | mDC_spleen |
| ZZZ3    | 4.78E-36 | 1.16791116 | 0.466 | 0.141 | 1.70E-31 | mDC_spleen |
| CYBB    | 4.83E-36 | 1.20142226 | 0.534 | 0.183 | 1.71E-31 | mDC_spleen |
| PPM1B   | 5.32E-36 | 0.75327337 | 0.474 | 0.142 | 1.89E-31 | mDC_spleen |
| AFF1    | 5.43E-36 | 0.76392736 | 0.646 | 0.248 | 1.92E-31 | mDC_spleen |
| ZFC3H1  | 5.48E-36 | 0.81535558 | 0.675 | 0.266 | 1.94E-31 | mDC_spleen |
| FNBP1   | 6.19E-36 | 0.60623167 | 0.952 | 0.604 | 2.19E-31 | mDC_spleen |
| CDK8    | 6.39E-36 | 1.46599253 | 0.333 | 0.076 | 2.26E-31 | mDC_spleen |
| HSPA8   | 6.68E-36 | 0.86114007 | 0.91  | 0.669 | 2.37E-31 | mDC_spleen |
| ATP10D  | 7.29E-36 | 1.19183404 | 0.373 | 0.094 | 2.58E-31 | mDC_spleen |
| PPP3CC  | 7.38E-36 | 1.15676337 | 0.489 | 0.158 | 2.61E-31 | mDC_spleen |
| PPP2R2A | 7.54E-36 | 0.97191554 | 0.608 | 0.221 | 2.67E-31 | mDC_spleen |
| CTDNEP1 | 7.60E-36 | 0.83058238 | 0.526 | 0.17  | 2.69E-31 | mDC_spleen |
| UBR2    | 7.96E-36 | 1.02873498 | 0.444 | 0.135 | 2.82E-31 | mDC_spleen |
| EEF2K   | 8.72E-36 | 1.24521739 | 0.315 | 0.067 | 3.09E-31 | mDC_spleen |
| TNPO3   | 9.19E-36 | 1.15834056 | 0.415 | 0.116 | 3.26E-31 | mDC_spleen |
| WWOX    | 9.69E-36 | 0.78560429 | 0.667 | 0.277 | 3.43E-31 | mDC_spleen |
| USP16   | 9.97E-36 | 1.03137163 | 0.574 | 0.204 | 3.53E-31 | mDC_spleen |
| AFF3    | 1.05E-35 | 0.77262531 | 0.857 | 0.437 | 3.72E-31 | mDC_spleen |
| MARK2   | 1.09E-35 | 1.05269275 | 0.37  | 0.094 | 3.88E-31 | mDC_spleen |
| IDH1    | 1.14E-35 | 1.22867346 | 0.463 | 0.142 | 4.05E-31 | mDC_spleen |
| HERPUD1 | 1.19E-35 | 0.75544175 | 0.77  | 0.328 | 4.21E-31 | mDC_spleen |
| SPATS2L | 1.20E-35 | 1.15434944 | 0.362 | 0.089 | 4.25E-31 | mDC_spleen |
| ACAA1   | 1.26E-35 | 1.0477033  | 0.341 | 0.077 | 4.46E-31 | mDC_spleen |
| TASOR2  | 1.27E-35 | 1.15825467 | 0.45  | 0.135 | 4.50E-31 | mDC_spleen |
| XPO6    | 1.29E-35 | 0.68102448 | 0.656 | 0.244 | 4.57E-31 | mDC_spleen |
| USP24   | 1.32E-35 | 1.2362565  | 0.392 | 0.106 | 4.66E-31 | mDC_spleen |



|          |          |            |       |       |          |            |
|----------|----------|------------|-------|-------|----------|------------|
| BAZ1B    | 1.33E-35 | 0.88559907 | 0.423 | 0.12  | 4.71E-31 | mDC_spleen |
| PRKAR2A  | 1.37E-35 | 0.90164558 | 0.31  | 0.064 | 4.85E-31 | mDC_spleen |
| SUSD6    | 1.63E-35 | 0.57782072 | 0.775 | 0.328 | 5.79E-31 | mDC_spleen |
| MOB3A    | 1.71E-35 | 1.11456868 | 0.452 | 0.136 | 6.05E-31 | mDC_spleen |
| CHORDC1  | 1.88E-35 | 1.03537988 | 0.566 | 0.199 | 6.66E-31 | mDC_spleen |
| CNOT1    | 2.00E-35 | 0.79210235 | 0.672 | 0.261 | 7.10E-31 | mDC_spleen |
| PARP1    | 2.31E-35 | 1.13688617 | 0.357 | 0.087 | 8.19E-31 | mDC_spleen |
| SNX10    | 2.34E-35 | 1.19532439 | 0.386 | 0.1   | 8.29E-31 | mDC_spleen |
| NFKBIE   | 2.35E-35 | 0.67394625 | 0.386 | 0.098 | 8.32E-31 | mDC_spleen |
| STIM2    | 2.72E-35 | 0.98291143 | 0.513 | 0.173 | 9.65E-31 | mDC_spleen |
| SLC25A29 | 2.84E-35 | 1.1855387  | 0.254 | 0.043 | 1.01E-30 | mDC_spleen |
| ZNF506   | 3.24E-35 | 0.65424707 | 0.619 | 0.224 | 1.15E-30 | mDC_spleen |
| SPPL3    | 3.43E-35 | 0.85104905 | 0.656 | 0.253 | 1.22E-30 | mDC_spleen |
| RLIM     | 3.57E-35 | 1.18012961 | 0.471 | 0.147 | 1.27E-30 | mDC_spleen |
| PITHD1   | 3.74E-35 | 1.45861449 | 0.265 | 0.047 | 1.33E-30 | mDC_spleen |
| ASXL2    | 3.90E-35 | 1.00044016 | 0.492 | 0.158 | 1.38E-30 | mDC_spleen |
| UBE2G1   | 4.01E-35 | 0.97064876 | 0.582 | 0.213 | 1.42E-30 | mDC_spleen |
| PDIA4    | 4.05E-35 | 1.15884492 | 0.405 | 0.113 | 1.43E-30 | mDC_spleen |
| YIPF4    | 4.27E-35 | 1.37558542 | 0.259 | 0.045 | 1.51E-30 | mDC_spleen |
| ATP11A   | 4.38E-35 | 0.92146885 | 0.489 | 0.162 | 1.55E-30 | mDC_spleen |
| OSBPL9   | 4.97E-35 | 0.73041598 | 0.77  | 0.313 | 1.76E-30 | mDC_spleen |
| PHF20    | 5.13E-35 | 0.60299773 | 0.709 | 0.283 | 1.82E-30 | mDC_spleen |
| GTF3A    | 5.45E-35 | 1.3623933  | 0.339 | 0.079 | 1.93E-30 | mDC_spleen |
| SLAMF8   | 5.48E-35 | 1.16717462 | 0.328 | 0.075 | 1.94E-30 | mDC_spleen |
| NKIRAS1  | 6.18E-35 | 1.31514479 | 0.426 | 0.124 | 2.19E-30 | mDC_spleen |
| TCERG1   | 6.30E-35 | 0.92844068 | 0.548 | 0.187 | 2.23E-30 | mDC_spleen |
| GIT2     | 6.52E-35 | 0.86423098 | 0.622 | 0.234 | 2.31E-30 | mDC_spleen |
| SNX29    | 6.67E-35 | 0.66094125 | 0.619 | 0.23  | 2.36E-30 | mDC_spleen |
| WTAP     | 6.71E-35 | 0.89829827 | 0.791 | 0.359 | 2.38E-30 | mDC_spleen |
| RPL26    | 6.74E-35 | 0.60405841 | 0.918 | 0.866 | 2.39E-30 | mDC_spleen |
| HVCN1    | 6.83E-35 | 0.76477266 | 0.59  | 0.207 | 2.42E-30 | mDC_spleen |
| ARHGEF7  | 8.38E-35 | 1.11694843 | 0.481 | 0.156 | 2.97E-30 | mDC_spleen |
| PRR14L   | 9.31E-35 | 0.82133892 | 0.423 | 0.12  | 3.30E-30 | mDC_spleen |

|           |          |            |       |       |          |            |
|-----------|----------|------------|-------|-------|----------|------------|
| ZNF146    | 9.36E-35 | 1.1169594  | 0.352 | 0.085 | 3.32E-30 | mDC_spleen |
| SMG6      | 9.61E-35 | 0.67387613 | 0.672 | 0.257 | 3.40E-30 | mDC_spleen |
| CD180     | 1.04E-34 | 1.29117255 | 0.31  | 0.066 | 3.70E-30 | mDC_spleen |
| RNF38     | 1.13E-34 | 0.888993   | 0.542 | 0.182 | 4.02E-30 | mDC_spleen |
| LPGAT1    | 1.38E-34 | 0.8633979  | 0.587 | 0.22  | 4.88E-30 | mDC_spleen |
| RLF       | 1.39E-34 | 0.70695671 | 0.614 | 0.224 | 4.92E-30 | mDC_spleen |
| SERPINB9  | 1.39E-34 | 0.88848949 | 0.81  | 0.447 | 4.92E-30 | mDC_spleen |
| CCDC88A   | 1.50E-34 | 0.9123071  | 0.913 | 0.577 | 5.33E-30 | mDC_spleen |
| UBE2H     | 1.67E-34 | 0.5593307  | 0.619 | 0.227 | 5.90E-30 | mDC_spleen |
| ATXN1     | 1.70E-34 | 0.80463312 | 0.54  | 0.193 | 6.02E-30 | mDC_spleen |
| ITPRID2   | 1.79E-34 | 1.08946662 | 0.299 | 0.061 | 6.33E-30 | mDC_spleen |
| STX11     | 1.93E-34 | 1.29955483 | 0.452 | 0.142 | 6.83E-30 | mDC_spleen |
| TEX14     | 2.13E-34 | 1.14892913 | 0.45  | 0.138 | 7.55E-30 | mDC_spleen |
| SLC9A9    | 2.29E-34 | 0.96472651 | 0.886 | 0.554 | 8.10E-30 | mDC_spleen |
| HINT2     | 2.30E-34 | 1.42234544 | 0.331 | 0.077 | 8.14E-30 | mDC_spleen |
| ARHGEF2   | 2.52E-34 | 0.61642008 | 0.508 | 0.162 | 8.92E-30 | mDC_spleen |
| ILF3      | 2.53E-34 | 0.73888714 | 0.622 | 0.232 | 8.98E-30 | mDC_spleen |
| DNMT1     | 2.79E-34 | 0.90160415 | 0.503 | 0.162 | 9.89E-30 | mDC_spleen |
| KLHL18    | 3.08E-34 | 1.34715217 | 0.381 | 0.106 | 1.09E-29 | mDC_spleen |
| MAP3K3    | 3.52E-34 | 1.22751055 | 0.431 | 0.129 | 1.25E-29 | mDC_spleen |
| SPG11     | 3.86E-34 | 0.76991962 | 0.437 | 0.13  | 1.37E-29 | mDC_spleen |
| PAK1      | 4.05E-34 | 1.04361817 | 0.585 | 0.234 | 1.43E-29 | mDC_spleen |
| PIKFYVE   | 4.23E-34 | 0.87634888 | 0.497 | 0.166 | 1.50E-29 | mDC_spleen |
| RNF115    | 4.33E-34 | 1.05437389 | 0.429 | 0.126 | 1.54E-29 | mDC_spleen |
| GTDC1     | 4.62E-34 | 1.16672995 | 0.397 | 0.112 | 1.64E-29 | mDC_spleen |
| VPS13B    | 4.65E-34 | 0.65511964 | 0.868 | 0.445 | 1.65E-29 | mDC_spleen |
| USP14     | 4.68E-34 | 1.16444068 | 0.407 | 0.116 | 1.66E-29 | mDC_spleen |
| ZSWIM6    | 4.71E-34 | 0.66269449 | 0.611 | 0.231 | 1.67E-29 | mDC_spleen |
| SEC63     | 4.82E-34 | 0.77372976 | 0.624 | 0.23  | 1.71E-29 | mDC_spleen |
| C1H1orf35 | 4.98E-34 | 1.22034774 | 0.37  | 0.094 | 1.77E-29 | mDC_spleen |
| PRKX      | 4.99E-34 | 0.97543196 | 0.587 | 0.226 | 1.77E-29 | mDC_spleen |
| ITGB2     | 5.00E-34 | 0.80136956 | 0.87  | 0.49  | 1.77E-29 | mDC_spleen |
| ZC3H4     | 5.00E-34 | 1.80780076 | 0.275 | 0.055 | 1.77E-29 | mDC_spleen |

|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| ENSMMUG00000011291 | 5.05E-34 | 1.25940772 | 0.315 | 0.071 | 1.79E-29 | mDC_spleen |
| TRPC4AP            | 5.14E-34 | 0.78013463 | 0.495 | 0.159 | 1.82E-29 | mDC_spleen |
| MARCHF6            | 5.14E-34 | 0.87652932 | 0.706 | 0.292 | 1.82E-29 | mDC_spleen |
| SINHCAF            | 5.39E-34 | 0.82178088 | 0.696 | 0.289 | 1.91E-29 | mDC_spleen |
| FCGR1A             | 6.22E-34 | 1.63908694 | 0.299 | 0.065 | 2.21E-29 | mDC_spleen |
| SGMS1              | 6.37E-34 | 0.72487357 | 0.471 | 0.148 | 2.26E-29 | mDC_spleen |
| UXS1               | 6.42E-34 | 1.33609553 | 0.503 | 0.177 | 2.27E-29 | mDC_spleen |
| NGFR               | 6.50E-34 | 1.65884918 | 0.288 | 0.06  | 2.30E-29 | mDC_spleen |
| WNK1               | 7.24E-34 | 0.55666203 | 0.735 | 0.316 | 2.56E-29 | mDC_spleen |
| SLC4A7             | 7.24E-34 | 0.87518891 | 0.481 | 0.157 | 2.57E-29 | mDC_spleen |
| STIP1              | 7.61E-34 | 0.84031147 | 0.516 | 0.168 | 2.70E-29 | mDC_spleen |
| ROCK1              | 7.97E-34 | 0.8084888  | 0.802 | 0.377 | 2.82E-29 | mDC_spleen |
| RNF13              | 8.21E-34 | 0.67634177 | 0.722 | 0.308 | 2.91E-29 | mDC_spleen |
| PIAS1              | 8.26E-34 | 0.69682545 | 0.704 | 0.284 | 2.93E-29 | mDC_spleen |
| ANKS1A             | 8.48E-34 | 1.28631879 | 0.336 | 0.083 | 3.00E-29 | mDC_spleen |
| LRRK2              | 8.93E-34 | 1.0736336  | 0.749 | 0.366 | 3.16E-29 | mDC_spleen |
| RGS1               | 9.03E-34 | 1.003448   | 0.667 | 0.288 | 3.20E-29 | mDC_spleen |
| GTF2F2             | 9.07E-34 | 1.05044844 | 0.595 | 0.224 | 3.21E-29 | mDC_spleen |
| PDS5B              | 9.09E-34 | 0.80423453 | 0.563 | 0.201 | 3.22E-29 | mDC_spleen |
| FARS2              | 9.13E-34 | 0.86892363 | 0.529 | 0.183 | 3.23E-29 | mDC_spleen |
| EIF3B              | 9.85E-34 | 0.75270177 | 0.505 | 0.165 | 3.49E-29 | mDC_spleen |
| PNP                | 1.17E-33 | 1.27836138 | 0.386 | 0.107 | 4.15E-29 | mDC_spleen |
| PTRH1              | 1.17E-33 | 1.17601655 | 0.296 | 0.063 | 4.15E-29 | mDC_spleen |
| NAAA               | 1.27E-33 | 0.9074702  | 0.566 | 0.206 | 4.49E-29 | mDC_spleen |
| CSNK1G3            | 1.30E-33 | 0.91241314 | 0.545 | 0.191 | 4.60E-29 | mDC_spleen |
| RCSD1              | 1.31E-33 | 0.9132989  | 0.635 | 0.249 | 4.64E-29 | mDC_spleen |
| UBE3C              | 1.33E-33 | 0.78069959 | 0.423 | 0.124 | 4.72E-29 | mDC_spleen |
| CCL3               | 1.46E-33 | 1.50030274 | 0.545 | 0.225 | 5.17E-29 | mDC_spleen |
| DERL1              | 1.50E-33 | 0.87753796 | 0.511 | 0.168 | 5.31E-29 | mDC_spleen |
| FAM111A            | 1.51E-33 | 1.26545756 | 0.302 | 0.065 | 5.36E-29 | mDC_spleen |
| PSME4              | 1.55E-33 | 0.9401002  | 0.593 | 0.221 | 5.48E-29 | mDC_spleen |
| RPS6KA4            | 1.62E-33 | 1.15929919 | 0.349 | 0.087 | 5.73E-29 | mDC_spleen |
| OSTM1              | 1.62E-33 | 1.03176284 | 0.291 | 0.061 | 5.75E-29 | mDC_spleen |

|                   |          |            |       |       |          |            |
|-------------------|----------|------------|-------|-------|----------|------------|
| UBR3              | 1.77E-33 | 0.96365928 | 0.521 | 0.183 | 6.27E-29 | mDC_spleen |
| TRIP12            | 1.82E-33 | 0.70698449 | 0.706 | 0.301 | 6.44E-29 | mDC_spleen |
| MAP3K1            | 1.85E-33 | 0.9304593  | 0.487 | 0.162 | 6.56E-29 | mDC_spleen |
| TCF4              | 1.90E-33 | 1.38614093 | 0.553 | 0.213 | 6.75E-29 | mDC_spleen |
| ABHD12            | 1.94E-33 | 1.31354167 | 0.407 | 0.12  | 6.88E-29 | mDC_spleen |
| MAPK1             | 2.15E-33 | 0.7475606  | 0.548 | 0.187 | 7.63E-29 | mDC_spleen |
| PPP6R3            | 2.15E-33 | 0.69519421 | 0.638 | 0.246 | 7.63E-29 | mDC_spleen |
| CMTM6             | 2.17E-33 | 0.85037618 | 0.807 | 0.384 | 7.70E-29 | mDC_spleen |
| ECPAS             | 2.38E-33 | 0.86280703 | 0.513 | 0.173 | 8.44E-29 | mDC_spleen |
| WIPF2             | 2.39E-33 | 0.80025345 | 0.397 | 0.111 | 8.47E-29 | mDC_spleen |
| CHD4              | 2.64E-33 | 0.7689488  | 0.632 | 0.246 | 9.37E-29 | mDC_spleen |
| PRRC2B            | 2.73E-33 | 0.7528842  | 0.585 | 0.213 | 9.67E-29 | mDC_spleen |
| SH2B3             | 2.79E-33 | 0.60526716 | 0.698 | 0.279 | 9.88E-29 | mDC_spleen |
| ADAM8             | 2.85E-33 | 1.27888103 | 0.286 | 0.06  | 1.01E-28 | mDC_spleen |
| ENSMUG00000003130 | 2.91E-33 | 1.19116633 | 0.413 | 0.122 | 1.03E-28 | mDC_spleen |
| ZFP90             | 3.16E-33 | 1.08267324 | 0.28  | 0.056 | 1.12E-28 | mDC_spleen |
| TFEB              | 3.29E-33 | 0.82887386 | 0.344 | 0.085 | 1.17E-28 | mDC_spleen |
| SKAP2             | 3.34E-33 | 0.79867903 | 0.873 | 0.488 | 1.18E-28 | mDC_spleen |
| MLXIP             | 3.46E-33 | 1.18254277 | 0.349 | 0.094 | 1.23E-28 | mDC_spleen |
| POLG2             | 3.59E-33 | 1.87415868 | 0.278 | 0.058 | 1.27E-28 | mDC_spleen |
| SYNJ1             | 3.91E-33 | 1.04767797 | 0.431 | 0.131 | 1.38E-28 | mDC_spleen |
| LCP2              | 4.57E-33 | 1.11006993 | 0.328 | 0.079 | 1.62E-28 | mDC_spleen |
| MRTFA             | 4.60E-33 | 0.52110447 | 0.704 | 0.286 | 1.63E-28 | mDC_spleen |
| DNAJB1            | 4.88E-33 | 1.92100591 | 0.421 | 0.133 | 1.73E-28 | mDC_spleen |
| MANF              | 4.98E-33 | 0.98721735 | 0.582 | 0.211 | 1.76E-28 | mDC_spleen |
| SMYD3             | 4.99E-33 | 0.83815767 | 0.577 | 0.215 | 1.77E-28 | mDC_spleen |
| APC               | 5.26E-33 | 1.23841231 | 0.394 | 0.115 | 1.86E-28 | mDC_spleen |
| TTC13             | 5.40E-33 | 1.37463495 | 0.32  | 0.076 | 1.91E-28 | mDC_spleen |
| IP6K1             | 6.96E-33 | 1.00305162 | 0.381 | 0.106 | 2.47E-28 | mDC_spleen |
| YAF2              | 8.01E-33 | 0.91688179 | 0.566 | 0.213 | 2.84E-28 | mDC_spleen |
| MTCH1             | 9.29E-33 | 0.71208643 | 0.59  | 0.22  | 3.29E-28 | mDC_spleen |
| SIK3              | 9.83E-33 | 0.62486706 | 0.902 | 0.47  | 3.48E-28 | mDC_spleen |
| USP3              | 1.16E-32 | 0.8662345  | 0.712 | 0.304 | 4.09E-28 | mDC_spleen |

|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| C1GALT1            | 1.23E-32 | 0.94005854 | 0.519 | 0.176 | 4.37E-28 | mDC_spleen |
| HP1BP3             | 1.25E-32 | 0.83226672 | 0.688 | 0.287 | 4.43E-28 | mDC_spleen |
| RAB21              | 1.26E-32 | 0.79483437 | 0.418 | 0.121 | 4.47E-28 | mDC_spleen |
| GSK3B              | 1.32E-32 | 0.81824131 | 0.653 | 0.264 | 4.66E-28 | mDC_spleen |
| WIPF1              | 1.36E-32 | 0.78643897 | 0.696 | 0.298 | 4.82E-28 | mDC_spleen |
| PHIP               | 1.37E-32 | 0.67229501 | 0.701 | 0.29  | 4.87E-28 | mDC_spleen |
| MEMO1              | 1.40E-32 | 0.86031694 | 0.632 | 0.249 | 4.96E-28 | mDC_spleen |
| VEZT               | 1.44E-32 | 1.13584165 | 0.407 | 0.118 | 5.10E-28 | mDC_spleen |
| SPAG9              | 1.51E-32 | 0.50683537 | 0.841 | 0.39  | 5.37E-28 | mDC_spleen |
| EFR3A              | 1.57E-32 | 0.92855368 | 0.447 | 0.142 | 5.56E-28 | mDC_spleen |
| SUZ12              | 1.81E-32 | 1.04751038 | 0.429 | 0.129 | 6.43E-28 | mDC_spleen |
| SESN1              | 1.82E-32 | 1.18945574 | 0.365 | 0.1   | 6.45E-28 | mDC_spleen |
| TMEM131            | 1.83E-32 | 0.52725929 | 0.847 | 0.405 | 6.50E-28 | mDC_spleen |
| SETD7              | 1.94E-32 | 1.04371081 | 0.418 | 0.125 | 6.88E-28 | mDC_spleen |
| GTF2E2             | 2.16E-32 | 1.07630831 | 0.447 | 0.142 | 7.64E-28 | mDC_spleen |
| PANK2              | 2.29E-32 | 0.8949267  | 0.339 | 0.083 | 8.10E-28 | mDC_spleen |
| CREBBP             | 2.43E-32 | 0.49714799 | 0.677 | 0.258 | 8.62E-28 | mDC_spleen |
| CLCN5              | 2.58E-32 | 0.88906617 | 0.421 | 0.127 | 9.15E-28 | mDC_spleen |
| FAM193A            | 2.61E-32 | 0.45005197 | 0.532 | 0.18  | 9.26E-28 | mDC_spleen |
| ENSMMUG00000047277 | 2.67E-32 | 0.7354643  | 0.836 | 0.441 | 9.46E-28 | mDC_spleen |
| ITGAX              | 2.76E-32 | 1.28625866 | 0.36  | 0.097 | 9.77E-28 | mDC_spleen |
| FTO                | 2.82E-32 | 1.09013459 | 0.444 | 0.142 | 9.99E-28 | mDC_spleen |
| DOCK2              | 2.82E-32 | 0.66916387 | 0.889 | 0.475 | 1.00E-27 | mDC_spleen |
| MACO1              | 2.83E-32 | 1.05272868 | 0.505 | 0.177 | 1.00E-27 | mDC_spleen |
| CCDC91             | 2.95E-32 | 0.88388336 | 0.534 | 0.19  | 1.05E-27 | mDC_spleen |
| GAK                | 3.09E-32 | 0.82294414 | 0.423 | 0.131 | 1.10E-27 | mDC_spleen |
| LRCH3              | 3.14E-32 | 0.71095282 | 0.579 | 0.215 | 1.11E-27 | mDC_spleen |
| PCYOX1             | 3.32E-32 | 1.03381018 | 0.444 | 0.142 | 1.18E-27 | mDC_spleen |
| LCORL              | 3.63E-32 | 0.9813907  | 0.537 | 0.196 | 1.28E-27 | mDC_spleen |
| TMEM165            | 3.76E-32 | 0.97916737 | 0.341 | 0.087 | 1.33E-27 | mDC_spleen |
| BCAS3              | 4.00E-32 | 0.84266859 | 0.513 | 0.186 | 1.42E-27 | mDC_spleen |
| BRWD1              | 4.05E-32 | 0.85425034 | 0.487 | 0.164 | 1.43E-27 | mDC_spleen |
| HDAC9              | 4.09E-32 | 0.93011782 | 0.78  | 0.378 | 1.45E-27 | mDC_spleen |

|                   |          |            |       |       |          |            |
|-------------------|----------|------------|-------|-------|----------|------------|
| ITGAL             | 4.27E-32 | 0.90379639 | 0.593 | 0.23  | 1.51E-27 | mDC_spleen |
| WWP2              | 4.47E-32 | 0.90222724 | 0.399 | 0.118 | 1.58E-27 | mDC_spleen |
| SPINT2            | 4.54E-32 | 0.99809479 | 0.484 | 0.16  | 1.61E-27 | mDC_spleen |
| ASCC2             | 4.79E-32 | 1.12645687 | 0.352 | 0.093 | 1.70E-27 | mDC_spleen |
| CLASP2            | 5.17E-32 | 0.79635123 | 0.651 | 0.262 | 1.83E-27 | mDC_spleen |
| NCOA2             | 5.18E-32 | 0.77025786 | 0.561 | 0.207 | 1.83E-27 | mDC_spleen |
| RASA1             | 5.29E-32 | 1.03453547 | 0.405 | 0.123 | 1.87E-27 | mDC_spleen |
| HECTD4            | 5.46E-32 | 1.05499725 | 0.392 | 0.115 | 1.94E-27 | mDC_spleen |
| KDM1A             | 5.57E-32 | 0.95880869 | 0.463 | 0.151 | 1.97E-27 | mDC_spleen |
| IKBIP             | 5.73E-32 | 0.96595322 | 0.392 | 0.111 | 2.03E-27 | mDC_spleen |
| HMGXB3            | 5.84E-32 | 1.34985022 | 0.28  | 0.06  | 2.07E-27 | mDC_spleen |
| RPP40             | 6.12E-32 | 0.92389714 | 0.384 | 0.104 | 2.17E-27 | mDC_spleen |
| DYM               | 6.87E-32 | 0.71078171 | 0.534 | 0.192 | 2.43E-27 | mDC_spleen |
| USO1              | 7.22E-32 | 0.94154465 | 0.444 | 0.142 | 2.56E-27 | mDC_spleen |
| NFAT5             | 7.40E-32 | 0.62659882 | 0.611 | 0.244 | 2.62E-27 | mDC_spleen |
| ADK               | 7.51E-32 | 0.8574092  | 0.635 | 0.263 | 2.66E-27 | mDC_spleen |
| CCDC88C           | 8.05E-32 | 1.48375078 | 0.381 | 0.113 | 2.85E-27 | mDC_spleen |
| RNF34             | 8.28E-32 | 1.44786157 | 0.352 | 0.095 | 2.93E-27 | mDC_spleen |
| RAD51B            | 8.32E-32 | 0.8300035  | 0.495 | 0.176 | 2.95E-27 | mDC_spleen |
| CHST11            | 8.85E-32 | 0.68492082 | 0.635 | 0.272 | 3.14E-27 | mDC_spleen |
| UBAC2             | 8.90E-32 | 0.85431608 | 0.775 | 0.362 | 3.15E-27 | mDC_spleen |
| GMPR              | 9.05E-32 | 1.80066455 | 0.251 | 0.049 | 3.21E-27 | mDC_spleen |
| DNASE1L3          | 9.11E-32 | 1.86566958 | 0.397 | 0.127 | 3.23E-27 | mDC_spleen |
| SLC22A18          | 9.66E-32 | 0.79505525 | 0.526 | 0.182 | 3.42E-27 | mDC_spleen |
| GAB1              | 9.69E-32 | 1.74053446 | 0.307 | 0.076 | 3.43E-27 | mDC_spleen |
| RBM6              | 9.72E-32 | 0.86710897 | 0.468 | 0.156 | 3.44E-27 | mDC_spleen |
| ALG2              | 9.75E-32 | 1.2069075  | 0.259 | 0.05  | 3.46E-27 | mDC_spleen |
| NEK7              | 1.04E-31 | 0.87607378 | 0.466 | 0.156 | 3.69E-27 | mDC_spleen |
| ENSMUG00000053918 | 1.08E-31 | 1.26819785 | 0.312 | 0.073 | 3.83E-27 | mDC_spleen |
| HERC1             | 1.12E-31 | 0.84947254 | 0.548 | 0.199 | 3.98E-27 | mDC_spleen |
| FUBP1             | 1.12E-31 | 0.66799124 | 0.643 | 0.247 | 3.98E-27 | mDC_spleen |
| N4BP2L1           | 1.19E-31 | 1.13991152 | 0.328 | 0.083 | 4.23E-27 | mDC_spleen |
| DTNBP1            | 1.43E-31 | 0.59340929 | 0.585 | 0.215 | 5.07E-27 | mDC_spleen |

|          |          |            |       |       |          |            |
|----------|----------|------------|-------|-------|----------|------------|
| VRK2     | 1.48E-31 | 0.78538781 | 0.413 | 0.123 | 5.24E-27 | mDC_spleen |
| TCP1     | 1.52E-31 | 0.89943903 | 0.558 | 0.207 | 5.37E-27 | mDC_spleen |
| RRP1B    | 1.52E-31 | 1.42753562 | 0.352 | 0.097 | 5.38E-27 | mDC_spleen |
| PSPC1    | 1.61E-31 | 0.68441794 | 0.574 | 0.211 | 5.71E-27 | mDC_spleen |
| EP300    | 1.67E-31 | 0.65839005 | 0.709 | 0.294 | 5.93E-27 | mDC_spleen |
| FEM1C    | 1.68E-31 | 1.26440563 | 0.32  | 0.08  | 5.94E-27 | mDC_spleen |
| ATP11C   | 1.73E-31 | 1.17897182 | 0.368 | 0.103 | 6.12E-27 | mDC_spleen |
| KLF7     | 1.74E-31 | 1.19857943 | 0.471 | 0.165 | 6.17E-27 | mDC_spleen |
| GALNT7   | 1.79E-31 | 0.91489295 | 0.442 | 0.139 | 6.36E-27 | mDC_spleen |
| HECW2    | 1.87E-31 | 1.27412062 | 0.296 | 0.069 | 6.62E-27 | mDC_spleen |
| SEC24B   | 1.87E-31 | 0.53287405 | 0.63  | 0.235 | 6.62E-27 | mDC_spleen |
| FBXO9    | 1.89E-31 | 1.04842867 | 0.349 | 0.092 | 6.70E-27 | mDC_spleen |
| PCMTD1   | 2.06E-31 | 0.67893131 | 0.614 | 0.233 | 7.30E-27 | mDC_spleen |
| SLC39A11 | 2.27E-31 | 0.68204281 | 0.569 | 0.214 | 8.06E-27 | mDC_spleen |
| TANGO6   | 2.29E-31 | 0.85481855 | 0.407 | 0.123 | 8.13E-27 | mDC_spleen |
| IQSEC1   | 2.36E-31 | 0.4061827  | 0.593 | 0.224 | 8.36E-27 | mDC_spleen |
| FAM172A  | 2.53E-31 | 0.62700208 | 0.709 | 0.299 | 8.97E-27 | mDC_spleen |
| PNISR    | 2.56E-31 | 0.7170786  | 0.775 | 0.341 | 9.07E-27 | mDC_spleen |
| ENTPD1   | 2.60E-31 | 0.73530641 | 0.749 | 0.39  | 9.21E-27 | mDC_spleen |
| VCP      | 2.69E-31 | 0.70433487 | 0.688 | 0.283 | 9.52E-27 | mDC_spleen |
| DOCK11   | 2.71E-31 | 0.47767972 | 0.632 | 0.247 | 9.61E-27 | mDC_spleen |
| GNG7     | 2.78E-31 | 0.76578541 | 0.487 | 0.16  | 9.85E-27 | mDC_spleen |
| PPP1R21  | 2.79E-31 | 1.14930226 | 0.286 | 0.064 | 9.88E-27 | mDC_spleen |
| ERC1     | 2.80E-31 | 0.73013622 | 0.651 | 0.272 | 9.92E-27 | mDC_spleen |
| RFX3     | 2.89E-31 | 0.81089877 | 0.582 | 0.221 | 1.03E-26 | mDC_spleen |
| PPM1H    | 2.94E-31 | 1.09989718 | 0.386 | 0.114 | 1.04E-26 | mDC_spleen |
| DNA2     | 3.00E-31 | 1.58442855 | 0.27  | 0.058 | 1.06E-26 | mDC_spleen |
| RRP36    | 3.20E-31 | 0.90968785 | 0.347 | 0.091 | 1.13E-26 | mDC_spleen |
| GNB1     | 3.22E-31 | 0.58102138 | 0.757 | 0.333 | 1.14E-26 | mDC_spleen |
| CTR9     | 3.48E-31 | 1.03234695 | 0.389 | 0.11  | 1.23E-26 | mDC_spleen |
| LRRC8C   | 3.70E-31 | 1.72371569 | 0.339 | 0.092 | 1.31E-26 | mDC_spleen |
| ELL      | 3.73E-31 | 0.92349262 | 0.487 | 0.172 | 1.32E-26 | mDC_spleen |
| UGCG     | 3.84E-31 | 1.30876729 | 0.357 | 0.1   | 1.36E-26 | mDC_spleen |

|                   |          |            |       |       |          |            |
|-------------------|----------|------------|-------|-------|----------|------------|
| IRF2              | 4.19E-31 | 0.77258669 | 0.521 | 0.183 | 1.48E-26 | mDC_spleen |
| GABRG3            | 4.20E-31 | 1.25954442 | 0.452 | 0.162 | 1.49E-26 | mDC_spleen |
| FBXL17            | 4.26E-31 | 0.70679108 | 0.569 | 0.218 | 1.51E-26 | mDC_spleen |
| GPATCH2           | 4.27E-31 | 1.49678236 | 0.278 | 0.061 | 1.51E-26 | mDC_spleen |
| MAP2K4            | 4.39E-31 | 0.96608405 | 0.423 | 0.134 | 1.56E-26 | mDC_spleen |
| SNX5              | 4.44E-31 | 0.85855066 | 0.579 | 0.223 | 1.57E-26 | mDC_spleen |
| NF1               | 4.52E-31 | 0.59750281 | 0.717 | 0.32  | 1.60E-26 | mDC_spleen |
| MSH6              | 4.90E-31 | 1.39937502 | 0.257 | 0.052 | 1.73E-26 | mDC_spleen |
| PUM2              | 4.92E-31 | 0.62894955 | 0.683 | 0.281 | 1.74E-26 | mDC_spleen |
| ENSMUG00000056043 | 5.90E-31 | 0.843708   | 0.532 | 0.19  | 2.09E-26 | mDC_spleen |
| GNPTAB            | 5.96E-31 | 1.2371641  | 0.354 | 0.099 | 2.11E-26 | mDC_spleen |
| TRAPPC10          | 6.36E-31 | 0.83153977 | 0.423 | 0.132 | 2.25E-26 | mDC_spleen |
| PTPN9             | 6.39E-31 | 0.78013387 | 0.481 | 0.165 | 2.27E-26 | mDC_spleen |
| PECAM1            | 6.46E-31 | 0.98175325 | 0.537 | 0.199 | 2.29E-26 | mDC_spleen |
| FBXL20            | 6.59E-31 | 0.95949654 | 0.479 | 0.165 | 2.34E-26 | mDC_spleen |
| MAP4K5            | 6.86E-31 | 1.22671147 | 0.37  | 0.107 | 2.43E-26 | mDC_spleen |
| SF1               | 6.97E-31 | 0.69972819 | 0.712 | 0.297 | 2.47E-26 | mDC_spleen |
| RREB1             | 7.05E-31 | 1.48621558 | 0.315 | 0.08  | 2.50E-26 | mDC_spleen |
| ASH1L             | 7.24E-31 | 0.56660902 | 0.825 | 0.393 | 2.57E-26 | mDC_spleen |
| GNAQ              | 7.32E-31 | 0.68722252 | 0.77  | 0.351 | 2.59E-26 | mDC_spleen |
| VPS37A            | 7.76E-31 | 0.80859037 | 0.463 | 0.151 | 2.75E-26 | mDC_spleen |
| FAM207A           | 8.08E-31 | 1.38104721 | 0.286 | 0.063 | 2.86E-26 | mDC_spleen |
| LUC7L             | 8.40E-31 | 0.61109814 | 0.481 | 0.159 | 2.98E-26 | mDC_spleen |
| PIGY              | 8.67E-31 | 0.83058583 | 0.545 | 0.195 | 3.07E-26 | mDC_spleen |
| WWP1              | 8.95E-31 | 1.24786273 | 0.331 | 0.086 | 3.17E-26 | mDC_spleen |
| DDX42             | 9.11E-31 | 0.8082464  | 0.392 | 0.114 | 3.23E-26 | mDC_spleen |
| CREB1             | 9.23E-31 | 0.87361225 | 0.503 | 0.175 | 3.27E-26 | mDC_spleen |
| OXNAD1            | 9.78E-31 | 1.32815301 | 0.352 | 0.1   | 3.46E-26 | mDC_spleen |
| FAM168A           | 1.01E-30 | 1.65710174 | 0.323 | 0.084 | 3.56E-26 | mDC_spleen |
| TRAFD1            | 1.03E-30 | 0.79196181 | 0.341 | 0.087 | 3.66E-26 | mDC_spleen |
| PLEKHF2           | 1.04E-30 | 1.26913519 | 0.315 | 0.078 | 3.70E-26 | mDC_spleen |
| MAPK8IP3          | 1.06E-30 | 1.22003025 | 0.291 | 0.069 | 3.77E-26 | mDC_spleen |
| RBM33             | 1.11E-30 | 0.53995494 | 0.534 | 0.195 | 3.92E-26 | mDC_spleen |



|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| NFKB1              | 1.12E-30 | 0.72644081 | 0.841 | 0.463 | 3.96E-26 | mDC_spleen |
| TTC7A              | 1.15E-30 | 1.12367007 | 0.312 | 0.077 | 4.09E-26 | mDC_spleen |
| MKLN1              | 1.23E-30 | 0.67477479 | 0.601 | 0.23  | 4.36E-26 | mDC_spleen |
| PARG               | 1.33E-30 | 1.59739829 | 0.272 | 0.06  | 4.73E-26 | mDC_spleen |
| PTBP3              | 1.37E-30 | 0.78386351 | 0.841 | 0.466 | 4.86E-26 | mDC_spleen |
| GMCL1              | 1.46E-30 | 1.20892413 | 0.468 | 0.16  | 5.17E-26 | mDC_spleen |
| LARP1              | 1.49E-30 | 0.79099267 | 0.368 | 0.103 | 5.28E-26 | mDC_spleen |
| ITPKB              | 1.49E-30 | 1.30355252 | 0.304 | 0.075 | 5.29E-26 | mDC_spleen |
| ARL8B              | 1.51E-30 | 0.80942799 | 0.558 | 0.215 | 5.36E-26 | mDC_spleen |
| ARHGAP15           | 1.54E-30 | 0.67597651 | 0.889 | 0.523 | 5.45E-26 | mDC_spleen |
| ENSMMUG00000053391 | 1.60E-30 | 1.2353389  | 0.31  | 0.075 | 5.67E-26 | mDC_spleen |
| DLGAP4             | 1.67E-30 | 0.78658573 | 0.399 | 0.118 | 5.90E-26 | mDC_spleen |
| WDR37              | 1.72E-30 | 1.36586484 | 0.323 | 0.084 | 6.11E-26 | mDC_spleen |
| SLAMF7             | 1.79E-30 | 0.61692879 | 0.529 | 0.186 | 6.32E-26 | mDC_spleen |
| SERTAD2            | 1.96E-30 | 0.75511969 | 0.622 | 0.251 | 6.95E-26 | mDC_spleen |
| RAF1               | 2.04E-30 | 0.54987671 | 0.545 | 0.195 | 7.22E-26 | mDC_spleen |
| ENSMMUG00000060229 | 2.05E-30 | 0.82752648 | 0.558 | 0.201 | 7.26E-26 | mDC_spleen |
| AARS1              | 2.09E-30 | 0.93507542 | 0.479 | 0.16  | 7.39E-26 | mDC_spleen |
| PSIP1              | 2.12E-30 | 1.29505194 | 0.373 | 0.108 | 7.51E-26 | mDC_spleen |
| AKAP7              | 2.19E-30 | 1.51141195 | 0.267 | 0.057 | 7.77E-26 | mDC_spleen |
| TRAPPC8            | 2.20E-30 | 0.92444341 | 0.323 | 0.083 | 7.80E-26 | mDC_spleen |
| ASCC3              | 2.31E-30 | 0.68522552 | 0.627 | 0.249 | 8.20E-26 | mDC_spleen |
| SPIDR              | 2.37E-30 | 0.80826521 | 0.593 | 0.238 | 8.39E-26 | mDC_spleen |
| CUX1               | 2.41E-30 | 0.49087666 | 0.836 | 0.424 | 8.55E-26 | mDC_spleen |
| HK2                | 2.42E-30 | 1.32732516 | 0.352 | 0.098 | 8.59E-26 | mDC_spleen |
| MYDGF              | 2.43E-30 | 0.71939695 | 0.77  | 0.345 | 8.62E-26 | mDC_spleen |
| ANKRD13A           | 2.44E-30 | 0.88821557 | 0.288 | 0.066 | 8.63E-26 | mDC_spleen |
| CTBP2              | 2.45E-30 | 0.37664382 | 0.484 | 0.167 | 8.69E-26 | mDC_spleen |
| VPS35L             | 2.47E-30 | 1.33425337 | 0.278 | 0.063 | 8.75E-26 | mDC_spleen |
| ENSMMUG00000063316 | 2.48E-30 | 0.96894418 | 0.669 | 0.301 | 8.79E-26 | mDC_spleen |
| RCOR1              | 2.60E-30 | 0.32159078 | 0.698 | 0.283 | 9.21E-26 | mDC_spleen |
| SPAST              | 2.65E-30 | 1.62105974 | 0.267 | 0.059 | 9.40E-26 | mDC_spleen |
| DEF6               | 2.69E-30 | 1.05405594 | 0.331 | 0.086 | 9.52E-26 | mDC_spleen |

|         |          |            |       |       |          |            |
|---------|----------|------------|-------|-------|----------|------------|
| KIF13B  | 2.76E-30 | 1.16965344 | 0.381 | 0.114 | 9.78E-26 | mDC_spleen |
| TXLNG   | 2.80E-30 | 1.00155026 | 0.402 | 0.124 | 9.91E-26 | mDC_spleen |
| NFATC3  | 3.02E-30 | 1.17254299 | 0.413 | 0.129 | 1.07E-25 | mDC_spleen |
| SWAP70  | 3.07E-30 | 0.65163226 | 0.571 | 0.218 | 1.09E-25 | mDC_spleen |
| UIMC1   | 3.14E-30 | 1.05208228 | 0.347 | 0.094 | 1.11E-25 | mDC_spleen |
| FAM126A | 3.18E-30 | 1.34624748 | 0.407 | 0.133 | 1.13E-25 | mDC_spleen |
| SCARB1  | 3.22E-30 | 0.46233167 | 0.677 | 0.292 | 1.14E-25 | mDC_spleen |
| RRAGC   | 3.30E-30 | 0.8455139  | 0.357 | 0.098 | 1.17E-25 | mDC_spleen |
| CCNY    | 3.52E-30 | 0.72382163 | 0.495 | 0.175 | 1.25E-25 | mDC_spleen |
| SRBD1   | 3.62E-30 | 1.24397582 | 0.328 | 0.085 | 1.28E-25 | mDC_spleen |
| NLRP1   | 3.80E-30 | 0.25565393 | 0.569 | 0.216 | 1.35E-25 | mDC_spleen |
| UBE2R2  | 3.86E-30 | 0.50649223 | 0.63  | 0.251 | 1.37E-25 | mDC_spleen |
| DIAPH2  | 4.31E-30 | 0.68485882 | 0.762 | 0.354 | 1.53E-25 | mDC_spleen |
| DESI1   | 4.38E-30 | 1.00469553 | 0.354 | 0.1   | 1.55E-25 | mDC_spleen |
| DDX39A  | 4.63E-30 | 0.78352817 | 0.603 | 0.237 | 1.64E-25 | mDC_spleen |
| SNX14   | 4.68E-30 | 0.6212858  | 0.55  | 0.198 | 1.66E-25 | mDC_spleen |
| FCHO2   | 4.82E-30 | 1.16802687 | 0.418 | 0.137 | 1.71E-25 | mDC_spleen |
| RFX7    | 4.84E-30 | 1.28374536 | 0.368 | 0.11  | 1.71E-25 | mDC_spleen |
| RNF10   | 4.85E-30 | 0.71372185 | 0.534 | 0.191 | 1.72E-25 | mDC_spleen |
| MICU1   | 4.95E-30 | 0.716626   | 0.59  | 0.228 | 1.75E-25 | mDC_spleen |
| PIK3C2A | 5.46E-30 | 0.92169317 | 0.423 | 0.136 | 1.94E-25 | mDC_spleen |
| OFD1    | 5.50E-30 | 0.60032267 | 0.418 | 0.127 | 1.95E-25 | mDC_spleen |
| DERPC   | 5.90E-30 | 1.26377469 | 0.31  | 0.077 | 2.09E-25 | mDC_spleen |
| RTN4    | 5.99E-30 | 0.58527262 | 0.672 | 0.276 | 2.12E-25 | mDC_spleen |
| ADGRG5  | 6.05E-30 | 1.01926733 | 0.426 | 0.138 | 2.14E-25 | mDC_spleen |
| PPP1R8  | 6.19E-30 | 0.59082564 | 0.659 | 0.275 | 2.19E-25 | mDC_spleen |
| CNOT11  | 6.24E-30 | 1.02066993 | 0.296 | 0.07  | 2.21E-25 | mDC_spleen |
| FRYL    | 6.50E-30 | 1.06749311 | 0.466 | 0.162 | 2.30E-25 | mDC_spleen |
| AKAP13  | 6.55E-30 | 0.59426572 | 0.918 | 0.554 | 2.32E-25 | mDC_spleen |
| ATE1    | 7.20E-30 | 1.11254285 | 0.352 | 0.1   | 2.55E-25 | mDC_spleen |
| DNAJB9  | 7.40E-30 | 0.90708187 | 0.368 | 0.105 | 2.62E-25 | mDC_spleen |
| NSUN2   | 8.11E-30 | 0.81091493 | 0.307 | 0.075 | 2.87E-25 | mDC_spleen |
| CDK6    | 8.34E-30 | 0.94647797 | 0.503 | 0.182 | 2.96E-25 | mDC_spleen |

|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| GSPT1              | 8.54E-30 | 1.04005954 | 0.368 | 0.108 | 3.02E-25 | mDC_spleen |
| CFAP97             | 8.69E-30 | 0.95766581 | 0.275 | 0.061 | 3.08E-25 | mDC_spleen |
| GLS                | 8.71E-30 | 0.48351126 | 0.664 | 0.271 | 3.09E-25 | mDC_spleen |
| MSI2               | 9.15E-30 | 0.48420362 | 0.63  | 0.249 | 3.24E-25 | mDC_spleen |
| WDFY4              | 9.38E-30 | 0.64360979 | 0.828 | 0.405 | 3.32E-25 | mDC_spleen |
| RBMS1              | 9.48E-30 | 1.02887929 | 0.489 | 0.176 | 3.36E-25 | mDC_spleen |
| TRIM26             | 1.01E-29 | 1.01471304 | 0.325 | 0.085 | 3.58E-25 | mDC_spleen |
| RHOQ               | 1.02E-29 | 1.05722249 | 0.299 | 0.073 | 3.61E-25 | mDC_spleen |
| P4HA1              | 1.07E-29 | 0.78745178 | 0.569 | 0.217 | 3.80E-25 | mDC_spleen |
| ACBD3              | 1.10E-29 | 1.3334577  | 0.312 | 0.08  | 3.90E-25 | mDC_spleen |
| SUPT20H            | 1.13E-29 | 0.88148389 | 0.415 | 0.129 | 4.00E-25 | mDC_spleen |
| SLC25A36           | 1.24E-29 | 0.96348469 | 0.37  | 0.108 | 4.39E-25 | mDC_spleen |
| NADK               | 1.25E-29 | 0.5083329  | 0.357 | 0.1   | 4.44E-25 | mDC_spleen |
| NAGK               | 1.44E-29 | 0.66026397 | 0.632 | 0.258 | 5.09E-25 | mDC_spleen |
| WDFY2              | 1.46E-29 | 0.62652651 | 0.601 | 0.235 | 5.16E-25 | mDC_spleen |
| ENSMMUG00000060287 | 1.50E-29 | 0.70705791 | 0.952 | 0.808 | 5.30E-25 | mDC_spleen |
| HERC4              | 1.54E-29 | 0.78603735 | 0.431 | 0.141 | 5.44E-25 | mDC_spleen |
| ARMC10             | 1.64E-29 | 1.34286285 | 0.259 | 0.056 | 5.79E-25 | mDC_spleen |
| GIGYF2             | 1.73E-29 | 0.64171378 | 0.526 | 0.194 | 6.12E-25 | mDC_spleen |
| FBXW4              | 1.73E-29 | 1.18214838 | 0.272 | 0.061 | 6.12E-25 | mDC_spleen |
| WARS1.1            | 1.79E-29 | 0.91710244 | 0.675 | 0.301 | 6.35E-25 | mDC_spleen |
| MTMR3              | 1.81E-29 | 1.02224673 | 0.413 | 0.132 | 6.42E-25 | mDC_spleen |
| CSGALNACT2         | 1.90E-29 | 0.77014129 | 0.775 | 0.364 | 6.71E-25 | mDC_spleen |
| ZNF644             | 1.90E-29 | 0.75253633 | 0.696 | 0.296 | 6.74E-25 | mDC_spleen |
| SRSF10             | 1.92E-29 | 0.73215188 | 0.619 | 0.247 | 6.79E-25 | mDC_spleen |
| SETD3              | 2.04E-29 | 1.23950827 | 0.357 | 0.104 | 7.24E-25 | mDC_spleen |
| MTMR6              | 2.11E-29 | 1.10847886 | 0.437 | 0.147 | 7.46E-25 | mDC_spleen |
| GCA                | 2.11E-29 | 1.38540943 | 0.304 | 0.077 | 7.48E-25 | mDC_spleen |
| TDRD3              | 2.30E-29 | 0.886627   | 0.455 | 0.151 | 8.13E-25 | mDC_spleen |
| USP34              | 2.30E-29 | 0.60420559 | 0.733 | 0.322 | 8.14E-25 | mDC_spleen |
| CD2AP              | 2.35E-29 | 1.0171061  | 0.45  | 0.154 | 8.32E-25 | mDC_spleen |
| KIAA0232           | 2.47E-29 | 0.78277451 | 0.426 | 0.141 | 8.76E-25 | mDC_spleen |
| VAPA               | 2.57E-29 | 0.77964633 | 0.796 | 0.387 | 9.12E-25 | mDC_spleen |

|          |          |            |       |       |          |            |
|----------|----------|------------|-------|-------|----------|------------|
| TPD52    | 2.79E-29 | 1.1630877  | 0.347 | 0.098 | 9.88E-25 | mDC_spleen |
| MVB12B   | 2.82E-29 | 1.07531544 | 0.357 | 0.103 | 9.98E-25 | mDC_spleen |
| RC3H1    | 2.94E-29 | 0.77645795 | 0.439 | 0.145 | 1.04E-24 | mDC_spleen |
| LARP4B   | 3.20E-29 | 0.45765435 | 0.653 | 0.269 | 1.14E-24 | mDC_spleen |
| BTBD3    | 3.38E-29 | 1.26634891 | 0.323 | 0.086 | 1.20E-24 | mDC_spleen |
| DDX10    | 3.45E-29 | 0.98555355 | 0.405 | 0.128 | 1.22E-24 | mDC_spleen |
| TRIP4    | 3.46E-29 | 0.70288493 | 0.381 | 0.114 | 1.23E-24 | mDC_spleen |
| ASAP1    | 3.58E-29 | 0.59398224 | 0.712 | 0.317 | 1.27E-24 | mDC_spleen |
| EIF4EBP3 | 3.58E-29 | 0.53927291 | 0.659 | 0.267 | 1.27E-24 | mDC_spleen |
| LARP4    | 3.59E-29 | 1.025837   | 0.466 | 0.161 | 1.27E-24 | mDC_spleen |
| DCLRE1C  | 3.62E-29 | 1.52012407 | 0.267 | 0.06  | 1.28E-24 | mDC_spleen |
| HEXB     | 3.64E-29 | 0.79678772 | 0.429 | 0.139 | 1.29E-24 | mDC_spleen |
| KMT5B    | 3.81E-29 | 0.79878638 | 0.489 | 0.171 | 1.35E-24 | mDC_spleen |
| POLR2A   | 4.02E-29 | 0.66386666 | 0.529 | 0.191 | 1.43E-24 | mDC_spleen |
| H4C15    | 4.41E-29 | 0.78525769 | 0.556 | 0.215 | 1.56E-24 | mDC_spleen |
| CPEB1    | 4.52E-29 | 0.47236911 | 0.942 | 0.914 | 1.60E-24 | mDC_spleen |
| EIF3A    | 4.57E-29 | 0.57462459 | 0.802 | 0.374 | 1.62E-24 | mDC_spleen |
| RNF216   | 4.68E-29 | 0.4718016  | 0.606 | 0.236 | 1.66E-24 | mDC_spleen |
| SECISBP2 | 4.94E-29 | 0.85559186 | 0.474 | 0.163 | 1.75E-24 | mDC_spleen |
| EIF2B3   | 5.04E-29 | 1.10889563 | 0.447 | 0.158 | 1.79E-24 | mDC_spleen |
| RAP1GDS1 | 5.18E-29 | 0.7548735  | 0.563 | 0.215 | 1.84E-24 | mDC_spleen |
| TRIO     | 5.29E-29 | 0.52055664 | 0.757 | 0.37  | 1.87E-24 | mDC_spleen |
| ZNF292   | 5.42E-29 | 0.61051666 | 0.73  | 0.323 | 1.92E-24 | mDC_spleen |
| ITFG1    | 5.43E-29 | 1.07140535 | 0.46  | 0.159 | 1.93E-24 | mDC_spleen |
| ARFGEF1  | 5.51E-29 | 0.59605845 | 0.513 | 0.185 | 1.95E-24 | mDC_spleen |
| WDR26    | 5.68E-29 | 0.797522   | 0.439 | 0.15  | 2.01E-24 | mDC_spleen |
| NUP62    | 5.72E-29 | 0.84226701 | 0.302 | 0.075 | 2.03E-24 | mDC_spleen |
| MYO6     | 6.38E-29 | 1.73903953 | 0.254 | 0.055 | 2.26E-24 | mDC_spleen |
| FAM13B   | 6.42E-29 | 0.64164149 | 0.558 | 0.215 | 2.28E-24 | mDC_spleen |
| EXOC5    | 6.51E-29 | 0.79231666 | 0.384 | 0.114 | 2.31E-24 | mDC_spleen |
| TRAF1    | 6.64E-29 | 0.67897596 | 0.323 | 0.084 | 2.35E-24 | mDC_spleen |
| ATP2A2   | 6.66E-29 | 1.03048643 | 0.534 | 0.203 | 2.36E-24 | mDC_spleen |
| KLHL6    | 6.74E-29 | 1.0667079  | 0.426 | 0.143 | 2.39E-24 | mDC_spleen |

|                   |          |            |       |       |          |            |
|-------------------|----------|------------|-------|-------|----------|------------|
| CUL1              | 6.81E-29 | 0.49997219 | 0.608 | 0.245 | 2.41E-24 | mDC_spleen |
| NCOR2             | 6.85E-29 | 0.7052623  | 0.328 | 0.088 | 2.43E-24 | mDC_spleen |
| SASH3             | 6.86E-29 | 0.8050081  | 0.389 | 0.117 | 2.43E-24 | mDC_spleen |
| APPL1             | 6.98E-29 | 0.73876893 | 0.656 | 0.277 | 2.47E-24 | mDC_spleen |
| UBP1              | 7.27E-29 | 0.83150125 | 0.389 | 0.117 | 2.58E-24 | mDC_spleen |
| ENSMUG00000011714 | 7.43E-29 | 0.67511544 | 0.458 | 0.154 | 2.63E-24 | mDC_spleen |
| CNOT2             | 7.49E-29 | 0.86267757 | 0.667 | 0.287 | 2.65E-24 | mDC_spleen |
| BIRC3             | 7.74E-29 | 0.541028   | 0.659 | 0.283 | 2.74E-24 | mDC_spleen |
| ATAD2B            | 7.86E-29 | 0.40790598 | 0.746 | 0.325 | 2.78E-24 | mDC_spleen |
| RNF138            | 7.93E-29 | 0.87992928 | 0.608 | 0.246 | 2.81E-24 | mDC_spleen |
| PRPF40A           | 8.45E-29 | 0.60893727 | 0.794 | 0.362 | 3.00E-24 | mDC_spleen |
| SEPHS2            | 8.53E-29 | 1.61686319 | 0.254 | 0.055 | 3.02E-24 | mDC_spleen |
| ZNF428            | 8.64E-29 | 0.92681471 | 0.288 | 0.069 | 3.06E-24 | mDC_spleen |
| GUCY1B1           | 8.65E-29 | 0.99870167 | 0.31  | 0.078 | 3.07E-24 | mDC_spleen |
| SETD5             | 9.20E-29 | 0.59968211 | 0.558 | 0.211 | 3.26E-24 | mDC_spleen |
| FOXP1             | 9.88E-29 | 0.73936716 | 0.571 | 0.216 | 3.50E-24 | mDC_spleen |
| TICAM2            | 1.00E-28 | 0.91763976 | 0.323 | 0.086 | 3.55E-24 | mDC_spleen |
| LGMN              | 1.00E-28 | 0.62769076 | 0.624 | 0.254 | 3.55E-24 | mDC_spleen |
| KPNA3             | 1.03E-28 | 0.78833297 | 0.537 | 0.201 | 3.66E-24 | mDC_spleen |
| MARCHF5           | 1.08E-28 | 1.1997613  | 0.291 | 0.071 | 3.84E-24 | mDC_spleen |
| RSF1              | 1.09E-28 | 0.72045642 | 0.606 | 0.244 | 3.85E-24 | mDC_spleen |
| AKNA              | 1.09E-28 | 0.73462122 | 0.492 | 0.179 | 3.85E-24 | mDC_spleen |
| MGRN1             | 1.12E-28 | 0.30884229 | 0.519 | 0.185 | 3.98E-24 | mDC_spleen |
| ARID4A            | 1.14E-28 | 1.18585185 | 0.386 | 0.122 | 4.03E-24 | mDC_spleen |
| FBXO11            | 1.15E-28 | 0.50337595 | 0.704 | 0.3   | 4.09E-24 | mDC_spleen |
| TNFRSF14          | 1.19E-28 | 0.93385166 | 0.32  | 0.084 | 4.20E-24 | mDC_spleen |
| GCNT2             | 1.25E-28 | 1.43432717 | 0.317 | 0.087 | 4.43E-24 | mDC_spleen |
| DGLUCY            | 1.26E-28 | 1.23317897 | 0.294 | 0.072 | 4.46E-24 | mDC_spleen |
| NDFIP1            | 1.32E-28 | 0.74542683 | 0.603 | 0.241 | 4.66E-24 | mDC_spleen |
| URI1              | 1.33E-28 | 0.97321023 | 0.444 | 0.151 | 4.70E-24 | mDC_spleen |
| RSRC1             | 1.33E-28 | 0.65814637 | 0.558 | 0.213 | 4.72E-24 | mDC_spleen |
| ZNF407            | 1.47E-28 | 0.72028021 | 0.497 | 0.181 | 5.19E-24 | mDC_spleen |
| IQCG              | 1.49E-28 | 1.19202338 | 0.349 | 0.102 | 5.29E-24 | mDC_spleen |

|          |          |            |       |       |          |            |
|----------|----------|------------|-------|-------|----------|------------|
| TPM4     | 1.52E-28 | 0.70464769 | 0.786 | 0.407 | 5.38E-24 | mDC_spleen |
| TTC27    | 1.57E-28 | 1.5222809  | 0.294 | 0.075 | 5.55E-24 | mDC_spleen |
| AVL9     | 1.64E-28 | 1.20356765 | 0.325 | 0.092 | 5.82E-24 | mDC_spleen |
| GOLIM4   | 1.66E-28 | 1.03102304 | 0.323 | 0.086 | 5.90E-24 | mDC_spleen |
| EZH2     | 1.68E-28 | 1.05915203 | 0.378 | 0.118 | 5.96E-24 | mDC_spleen |
| KLF12    | 1.71E-28 | 0.72658933 | 0.751 | 0.361 | 6.07E-24 | mDC_spleen |
| THOC2    | 1.72E-28 | 0.55168973 | 0.534 | 0.193 | 6.11E-24 | mDC_spleen |
| ARHGAP18 | 1.74E-28 | 0.86911304 | 0.365 | 0.11  | 6.15E-24 | mDC_spleen |
| RC3H2    | 1.74E-28 | 0.81732706 | 0.28  | 0.066 | 6.18E-24 | mDC_spleen |
| HECA     | 1.76E-28 | 1.16397636 | 0.399 | 0.129 | 6.24E-24 | mDC_spleen |
| PCCA     | 1.80E-28 | 0.86782551 | 0.503 | 0.184 | 6.39E-24 | mDC_spleen |
| WDR7     | 1.88E-28 | 0.75220793 | 0.455 | 0.154 | 6.66E-24 | mDC_spleen |
| IRF2BP2  | 1.96E-28 | 0.62603412 | 0.579 | 0.222 | 6.96E-24 | mDC_spleen |
| HIPK3    | 1.98E-28 | 0.59294985 | 0.672 | 0.28  | 7.02E-24 | mDC_spleen |
| TM9SF3   | 2.06E-28 | 0.58383606 | 0.704 | 0.299 | 7.30E-24 | mDC_spleen |
| ADAM10   | 2.08E-28 | 0.74833396 | 0.516 | 0.189 | 7.36E-24 | mDC_spleen |
| TNRC6B   | 2.14E-28 | 0.66693134 | 0.757 | 0.356 | 7.57E-24 | mDC_spleen |
| LRRC8D   | 2.15E-28 | 1.35525539 | 0.315 | 0.085 | 7.63E-24 | mDC_spleen |
| RRAGA    | 2.24E-28 | 0.95245984 | 0.259 | 0.055 | 7.94E-24 | mDC_spleen |
| SYNRG    | 2.49E-28 | 1.02876919 | 0.365 | 0.111 | 8.81E-24 | mDC_spleen |
| ADPGK    | 2.51E-28 | 1.00913199 | 0.315 | 0.083 | 8.88E-24 | mDC_spleen |
| RPRD1A   | 2.58E-28 | 0.9347122  | 0.423 | 0.142 | 9.13E-24 | mDC_spleen |
| VPS53    | 2.70E-28 | 0.38635419 | 0.392 | 0.12  | 9.56E-24 | mDC_spleen |
| CDC42SE2 | 2.74E-28 | 0.68780417 | 0.905 | 0.511 | 9.71E-24 | mDC_spleen |
| ZNF385A  | 2.81E-28 | 0.57667903 | 0.468 | 0.156 | 9.97E-24 | mDC_spleen |
| RNF11    | 2.88E-28 | 1.25756104 | 0.376 | 0.118 | 1.02E-23 | mDC_spleen |
| DAPK1    | 2.94E-28 | 0.59661122 | 0.72  | 0.368 | 1.04E-23 | mDC_spleen |
| SUMO3    | 2.94E-28 | 0.89516152 | 0.439 | 0.146 | 1.04E-23 | mDC_spleen |
| LANCL2   | 3.10E-28 | 1.23540713 | 0.368 | 0.112 | 1.10E-23 | mDC_spleen |
| BZW2     | 3.35E-28 | 0.82123663 | 0.767 | 0.376 | 1.19E-23 | mDC_spleen |
| ICE1     | 3.42E-28 | 0.90199045 | 0.352 | 0.103 | 1.21E-23 | mDC_spleen |
| HSPA14   | 3.49E-28 | 0.79839867 | 0.59  | 0.24  | 1.24E-23 | mDC_spleen |
| MTMR10   | 3.53E-28 | 1.41522913 | 0.37  | 0.115 | 1.25E-23 | mDC_spleen |

|          |          |            |       |       |          |            |
|----------|----------|------------|-------|-------|----------|------------|
| ZNF148   | 3.62E-28 | 0.53568614 | 0.513 | 0.187 | 1.28E-23 | mDC_spleen |
| EWSR1    | 3.66E-28 | 0.47632381 | 0.675 | 0.272 | 1.30E-23 | mDC_spleen |
| ZBTB20   | 3.78E-28 | 0.65216047 | 0.651 | 0.287 | 1.34E-23 | mDC_spleen |
| GPHN     | 4.14E-28 | 0.80307986 | 0.511 | 0.195 | 1.47E-23 | mDC_spleen |
| SOS1     | 4.27E-28 | 0.42668231 | 0.54  | 0.194 | 1.51E-23 | mDC_spleen |
| CHD7     | 4.57E-28 | 0.80816485 | 0.481 | 0.168 | 1.62E-23 | mDC_spleen |
| INTS3    | 4.82E-28 | 1.01349236 | 0.286 | 0.071 | 1.71E-23 | mDC_spleen |
| ZEB1     | 5.00E-28 | 0.41038178 | 0.622 | 0.255 | 1.77E-23 | mDC_spleen |
| ZMIZ1    | 5.21E-28 | 0.6095884  | 0.384 | 0.12  | 1.85E-23 | mDC_spleen |
| SNAP23   | 5.29E-28 | 0.83932811 | 0.474 | 0.165 | 1.87E-23 | mDC_spleen |
| RO60     | 6.68E-28 | 0.47264534 | 0.466 | 0.159 | 2.37E-23 | mDC_spleen |
| RNF19A   | 6.69E-28 | 1.0286685  | 0.437 | 0.151 | 2.37E-23 | mDC_spleen |
| CAMKMT   | 6.80E-28 | 0.97986046 | 0.503 | 0.201 | 2.41E-23 | mDC_spleen |
| MCM3AP   | 6.99E-28 | 0.92461699 | 0.275 | 0.066 | 2.48E-23 | mDC_spleen |
| HELZ     | 7.08E-28 | 0.6333408  | 0.571 | 0.224 | 2.51E-23 | mDC_spleen |
| DUSP22   | 7.09E-28 | 1.16064362 | 0.27  | 0.062 | 2.51E-23 | mDC_spleen |
| TLK2     | 7.11E-28 | 0.6028234  | 0.487 | 0.173 | 2.52E-23 | mDC_spleen |
| SYNGR2   | 7.67E-28 | 0.57952161 | 0.751 | 0.339 | 2.72E-23 | mDC_spleen |
| CWC27    | 7.76E-28 | 1.04798103 | 0.407 | 0.137 | 2.75E-23 | mDC_spleen |
| SNX8     | 8.13E-28 | 0.78329536 | 0.484 | 0.179 | 2.88E-23 | mDC_spleen |
| NT5C3A   | 8.69E-28 | 1.06675741 | 0.365 | 0.111 | 3.08E-23 | mDC_spleen |
| PRPSAP2  | 9.39E-28 | 0.94369292 | 0.439 | 0.153 | 3.33E-23 | mDC_spleen |
| SLC25A25 | 9.43E-28 | 1.15997813 | 0.317 | 0.089 | 3.34E-23 | mDC_spleen |
| PHACTR4  | 9.44E-28 | 0.64790334 | 0.471 | 0.168 | 3.35E-23 | mDC_spleen |
| CMPK1    | 1.11E-27 | 0.64148838 | 0.476 | 0.167 | 3.92E-23 | mDC_spleen |
| MED30    | 1.16E-27 | 1.0563979  | 0.418 | 0.139 | 4.09E-23 | mDC_spleen |
| KIF16B   | 1.18E-27 | 0.47249937 | 0.46  | 0.16  | 4.18E-23 | mDC_spleen |
| CLASP1   | 1.22E-27 | 0.94170418 | 0.397 | 0.128 | 4.34E-23 | mDC_spleen |
| MAMU-DOA | 1.25E-27 | 0.78234439 | 0.315 | 0.082 | 4.43E-23 | mDC_spleen |
| PPP3CB   | 1.27E-27 | 1.25513558 | 0.272 | 0.066 | 4.50E-23 | mDC_spleen |
| ADNP     | 1.27E-27 | 0.75409375 | 0.421 | 0.139 | 4.52E-23 | mDC_spleen |
| CGGBP1   | 1.28E-27 | 0.68638435 | 0.492 | 0.176 | 4.53E-23 | mDC_spleen |
| KAT6B    | 1.30E-27 | 0.9946017  | 0.468 | 0.173 | 4.60E-23 | mDC_spleen |

|           |          |            |       |       |          |            |
|-----------|----------|------------|-------|-------|----------|------------|
| NCOA6     | 1.34E-27 | 1.24179494 | 0.27  | 0.066 | 4.75E-23 | mDC_spleen |
| LITAF     | 1.44E-27 | 0.58674818 | 0.672 | 0.304 | 5.12E-23 | mDC_spleen |
| JAK1      | 1.45E-27 | 0.56070694 | 0.876 | 0.477 | 5.14E-23 | mDC_spleen |
| TAPBP     | 1.47E-27 | 0.58063595 | 0.804 | 0.396 | 5.19E-23 | mDC_spleen |
| UBTF      | 1.47E-27 | 1.00311299 | 0.376 | 0.117 | 5.20E-23 | mDC_spleen |
| TNFAIP8L2 | 1.52E-27 | 1.15508466 | 0.278 | 0.066 | 5.39E-23 | mDC_spleen |
| SCAND1    | 1.59E-27 | 0.9003154  | 0.36  | 0.106 | 5.63E-23 | mDC_spleen |
| YPEL5     | 1.59E-27 | 0.76830011 | 0.683 | 0.297 | 5.65E-23 | mDC_spleen |
| CSTF3     | 1.63E-27 | 0.89077047 | 0.365 | 0.111 | 5.79E-23 | mDC_spleen |
| KCMF1     | 1.77E-27 | 0.74661845 | 0.489 | 0.178 | 6.28E-23 | mDC_spleen |
| CSF2RB    | 1.78E-27 | 0.43907189 | 0.431 | 0.142 | 6.32E-23 | mDC_spleen |
| FNBP1L    | 1.83E-27 | 0.49989647 | 0.606 | 0.243 | 6.49E-23 | mDC_spleen |
| RBM25     | 1.92E-27 | 0.6378921  | 0.751 | 0.344 | 6.79E-23 | mDC_spleen |
| AIM2      | 2.02E-27 | 1.0033979  | 0.537 | 0.223 | 7.16E-23 | mDC_spleen |
| PTPN18    | 2.18E-27 | 1.16900362 | 0.257 | 0.058 | 7.71E-23 | mDC_spleen |
| NUS1      | 2.24E-27 | 0.77654097 | 0.481 | 0.172 | 7.94E-23 | mDC_spleen |
| RPS6KA3   | 2.29E-27 | 0.38672283 | 0.548 | 0.211 | 8.13E-23 | mDC_spleen |
| FAM76B    | 2.39E-27 | 1.3277551  | 0.262 | 0.061 | 8.46E-23 | mDC_spleen |
| DYNLL2    | 2.71E-27 | 1.04711398 | 0.257 | 0.058 | 9.61E-23 | mDC_spleen |
| TASP1     | 2.92E-27 | 0.97720132 | 0.344 | 0.101 | 1.04E-22 | mDC_spleen |
| SLC38A9   | 2.96E-27 | 0.57123986 | 0.468 | 0.168 | 1.05E-22 | mDC_spleen |
| SPOP      | 3.05E-27 | 0.62032974 | 0.487 | 0.176 | 1.08E-22 | mDC_spleen |
| GLG1      | 3.19E-27 | 0.83278172 | 0.426 | 0.143 | 1.13E-22 | mDC_spleen |
| SH2D3C    | 3.23E-27 | 1.17485979 | 0.262 | 0.062 | 1.15E-22 | mDC_spleen |
| ANKRD27   | 3.30E-27 | 0.93491658 | 0.254 | 0.057 | 1.17E-22 | mDC_spleen |
| REEP3     | 3.35E-27 | 0.99424734 | 0.317 | 0.087 | 1.19E-22 | mDC_spleen |
| KIAA1328  | 3.35E-27 | 1.23727256 | 0.376 | 0.123 | 1.19E-22 | mDC_spleen |
| H4C5      | 3.39E-27 | 0.8576862  | 0.373 | 0.112 | 1.20E-22 | mDC_spleen |
| BCAT1     | 3.53E-27 | 1.50661971 | 0.265 | 0.064 | 1.25E-22 | mDC_spleen |
| SHPRH     | 3.73E-27 | 1.40489183 | 0.27  | 0.066 | 1.32E-22 | mDC_spleen |
| YBX3      | 4.14E-27 | 0.96483278 | 0.37  | 0.12  | 1.47E-22 | mDC_spleen |
| CDC5L     | 4.25E-27 | 0.83498082 | 0.534 | 0.2   | 1.51E-22 | mDC_spleen |
| MDM4      | 4.41E-27 | 0.8144469  | 0.468 | 0.17  | 1.56E-22 | mDC_spleen |



|                     |          |            |       |       |          |            |
|---------------------|----------|------------|-------|-------|----------|------------|
| NECAP2              | 4.42E-27 | 0.65773902 | 0.516 | 0.192 | 1.57E-22 | mDC_spleen |
| EPB41               | 4.43E-27 | 0.48633146 | 0.685 | 0.282 | 1.57E-22 | mDC_spleen |
| SCLT1               | 4.48E-27 | 0.47918881 | 0.619 | 0.253 | 1.59E-22 | mDC_spleen |
| GRSF1               | 4.57E-27 | 1.27959985 | 0.31  | 0.083 | 1.62E-22 | mDC_spleen |
| ENSMMUG00000003854  | 4.79E-27 | 0.60794112 | 0.392 | 0.123 | 1.70E-22 | mDC_spleen |
| OGT                 | 4.82E-27 | 0.65183267 | 0.598 | 0.241 | 1.71E-22 | mDC_spleen |
| SLAIN2              | 5.19E-27 | 0.88223181 | 0.378 | 0.122 | 1.84E-22 | mDC_spleen |
| HSPA4               | 5.27E-27 | 0.6985746  | 0.45  | 0.157 | 1.87E-22 | mDC_spleen |
| IPO11               | 5.57E-27 | 1.39083098 | 0.296 | 0.08  | 1.97E-22 | mDC_spleen |
| ENSMMUG000000058532 | 5.64E-27 | 0.78132515 | 0.804 | 0.459 | 2.00E-22 | mDC_spleen |
| HEATR5B             | 5.68E-27 | 1.3608378  | 0.317 | 0.089 | 2.01E-22 | mDC_spleen |
| GEM                 | 5.70E-27 | 1.06477736 | 0.254 | 0.058 | 2.02E-22 | mDC_spleen |
| RNF149              | 5.79E-27 | 0.42312433 | 0.688 | 0.313 | 2.05E-22 | mDC_spleen |
| LRPPRC              | 5.82E-27 | 0.80648725 | 0.561 | 0.224 | 2.06E-22 | mDC_spleen |
| HSPA9               | 6.35E-27 | 0.55327082 | 0.68  | 0.289 | 2.25E-22 | mDC_spleen |
| CEP170              | 6.39E-27 | 0.45831354 | 0.751 | 0.348 | 2.26E-22 | mDC_spleen |
| AHSA1               | 6.68E-27 | 0.7430277  | 0.402 | 0.13  | 2.37E-22 | mDC_spleen |
| ZNF106              | 6.84E-27 | 0.80878737 | 0.402 | 0.131 | 2.42E-22 | mDC_spleen |
| TTC17               | 6.92E-27 | 0.75355778 | 0.511 | 0.193 | 2.45E-22 | mDC_spleen |
| ENSMMUG000000058165 | 7.27E-27 | 0.72661365 | 0.503 | 0.19  | 2.58E-22 | mDC_spleen |
| LSM14A              | 7.27E-27 | 0.58819503 | 0.608 | 0.243 | 2.58E-22 | mDC_spleen |
| IL6R                | 7.92E-27 | 0.60246106 | 0.68  | 0.303 | 2.81E-22 | mDC_spleen |
| CYB5B               | 8.74E-27 | 0.79771619 | 0.288 | 0.073 | 3.10E-22 | mDC_spleen |
| CLNK                | 8.76E-27 | 0.99105766 | 0.622 | 0.296 | 3.10E-22 | mDC_spleen |
| ARL2BP              | 9.10E-27 | 0.901113   | 0.415 | 0.139 | 3.22E-22 | mDC_spleen |
| DNAJC1              | 9.60E-27 | 0.80576358 | 0.537 | 0.215 | 3.40E-22 | mDC_spleen |
| TET3                | 9.87E-27 | 0.99998109 | 0.323 | 0.094 | 3.50E-22 | mDC_spleen |
| FBXO42              | 1.01E-26 | 0.81748927 | 0.328 | 0.093 | 3.59E-22 | mDC_spleen |
| PIBF1               | 1.02E-26 | 1.02162865 | 0.392 | 0.128 | 3.61E-22 | mDC_spleen |
| ENSMMUG000000056190 | 1.09E-26 | 1.29647655 | 0.315 | 0.092 | 3.86E-22 | mDC_spleen |
| TRIP11              | 1.09E-26 | 0.73741473 | 0.315 | 0.087 | 3.88E-22 | mDC_spleen |
| SMC4                | 1.10E-26 | 0.64373205 | 0.46  | 0.162 | 3.90E-22 | mDC_spleen |
| RICTOR              | 1.13E-26 | 0.69902121 | 0.545 | 0.211 | 4.00E-22 | mDC_spleen |

|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| TIMM23             | 1.14E-26 | 0.8835712  | 0.481 | 0.177 | 4.06E-22 | mDC_spleen |
| EEA1               | 1.16E-26 | 0.6633819  | 0.489 | 0.179 | 4.09E-22 | mDC_spleen |
| POGZ               | 1.22E-26 | 0.73275758 | 0.513 | 0.201 | 4.31E-22 | mDC_spleen |
| MTIF2              | 1.24E-26 | 0.59325763 | 0.458 | 0.157 | 4.40E-22 | mDC_spleen |
| RBM41              | 1.25E-26 | 1.38189311 | 0.299 | 0.082 | 4.43E-22 | mDC_spleen |
| KLHDC10            | 1.26E-26 | 1.39605461 | 0.302 | 0.083 | 4.47E-22 | mDC_spleen |
| CBLB               | 1.37E-26 | 0.44883882 | 0.635 | 0.275 | 4.85E-22 | mDC_spleen |
| LMO2               | 1.39E-26 | 0.99051836 | 0.302 | 0.08  | 4.92E-22 | mDC_spleen |
| NEDD4L             | 1.43E-26 | 0.40009323 | 0.529 | 0.207 | 5.06E-22 | mDC_spleen |
| WDR70              | 1.50E-26 | 0.60317036 | 0.63  | 0.259 | 5.30E-22 | mDC_spleen |
| ENSMMUG00000058089 | 1.54E-26 | 0.89233844 | 0.341 | 0.102 | 5.46E-22 | mDC_spleen |
| METTL26            | 1.57E-26 | 0.91686334 | 0.354 | 0.106 | 5.57E-22 | mDC_spleen |
| CDC73              | 1.70E-26 | 0.54658486 | 0.537 | 0.207 | 6.03E-22 | mDC_spleen |
| GON4L              | 1.77E-26 | 0.60163207 | 0.421 | 0.14  | 6.26E-22 | mDC_spleen |
| HNRNPA0            | 1.77E-26 | 0.614195   | 0.672 | 0.282 | 6.28E-22 | mDC_spleen |
| RSBN1L             | 1.83E-26 | 0.97062581 | 0.418 | 0.145 | 6.48E-22 | mDC_spleen |
| SMG7               | 1.97E-26 | 0.65325164 | 0.508 | 0.196 | 6.97E-22 | mDC_spleen |
| SLC15A4            | 2.10E-26 | 1.29100968 | 0.265 | 0.066 | 7.43E-22 | mDC_spleen |
| MCL1               | 2.13E-26 | 0.57248676 | 0.836 | 0.458 | 7.55E-22 | mDC_spleen |
| HSF1               | 2.13E-26 | 0.77001151 | 0.349 | 0.105 | 7.56E-22 | mDC_spleen |
| PPP1R2             | 2.15E-26 | 0.77951275 | 0.513 | 0.196 | 7.62E-22 | mDC_spleen |
| AFG3L2             | 2.31E-26 | 1.04269063 | 0.278 | 0.07  | 8.19E-22 | mDC_spleen |
| SLC25A4            | 2.34E-26 | 0.72331848 | 0.548 | 0.213 | 8.29E-22 | mDC_spleen |
| ENSMMUG00000058755 | 2.50E-26 | 0.43726522 | 0.979 | 0.942 | 8.84E-22 | mDC_spleen |
| PPIL4              | 2.53E-26 | 0.519483   | 0.534 | 0.2   | 8.95E-22 | mDC_spleen |
| NFKBIB             | 2.56E-26 | 0.67195016 | 0.46  | 0.167 | 9.07E-22 | mDC_spleen |
| RELCH              | 2.62E-26 | 0.52041393 | 0.437 | 0.151 | 9.30E-22 | mDC_spleen |
| ATP6V1C1           | 2.65E-26 | 0.5829744  | 0.312 | 0.086 | 9.40E-22 | mDC_spleen |
| PPCS               | 2.66E-26 | 1.20715615 | 0.304 | 0.083 | 9.41E-22 | mDC_spleen |
| SLC35A3            | 2.70E-26 | 0.70531201 | 0.489 | 0.18  | 9.58E-22 | mDC_spleen |
| RAB22A             | 2.84E-26 | 0.75313541 | 0.317 | 0.09  | 1.00E-21 | mDC_spleen |
| LRRFIP1            | 2.86E-26 | 0.59966598 | 0.847 | 0.444 | 1.01E-21 | mDC_spleen |
| ENSMMUG00000008604 | 3.16E-26 | 0.62727147 | 0.648 | 0.277 | 1.12E-21 | mDC_spleen |

|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| MPST               | 3.16E-26 | 0.83505569 | 0.455 | 0.165 | 1.12E-21 | mDC_spleen |
| CUL4A              | 3.26E-26 | 1.02317434 | 0.392 | 0.131 | 1.15E-21 | mDC_spleen |
| PPP2R2D            | 3.37E-26 | 0.71378729 | 0.384 | 0.125 | 1.19E-21 | mDC_spleen |
| SPIN1              | 3.42E-26 | 1.00964136 | 0.28  | 0.073 | 1.21E-21 | mDC_spleen |
| ERAP1              | 3.44E-26 | 1.13519351 | 0.254 | 0.06  | 1.22E-21 | mDC_spleen |
| RWDD4              | 3.55E-26 | 0.74798938 | 0.384 | 0.122 | 1.26E-21 | mDC_spleen |
| DEXI               | 3.64E-26 | 0.5631     | 0.54  | 0.213 | 1.29E-21 | mDC_spleen |
| ENSMMUG00000050385 | 3.65E-26 | 0.53219153 | 0.497 | 0.187 | 1.29E-21 | mDC_spleen |
| SGK1               | 3.76E-26 | 1.32651269 | 0.479 | 0.201 | 1.33E-21 | mDC_spleen |
| PCM1               | 3.89E-26 | 0.55285517 | 0.577 | 0.232 | 1.38E-21 | mDC_spleen |
| U2.106             | 4.09E-26 | 1.10574114 | 0.275 | 0.07  | 1.45E-21 | mDC_spleen |
| MAP3K20            | 4.11E-26 | 0.46085936 | 0.593 | 0.24  | 1.46E-21 | mDC_spleen |
| ZNF268             | 4.12E-26 | 0.64085664 | 0.405 | 0.135 | 1.46E-21 | mDC_spleen |
| PPA2               | 4.27E-26 | 0.55601428 | 0.513 | 0.194 | 1.51E-21 | mDC_spleen |
| SMARCA2            | 4.28E-26 | 0.37599571 | 0.627 | 0.261 | 1.52E-21 | mDC_spleen |
| ANKRD17            | 4.35E-26 | 0.31011389 | 0.635 | 0.275 | 1.54E-21 | mDC_spleen |
| ARPC5L             | 4.38E-26 | 0.62155864 | 0.45  | 0.155 | 1.55E-21 | mDC_spleen |
| DENND4A            | 4.52E-26 | 0.93473384 | 0.926 | 0.73  | 1.60E-21 | mDC_spleen |
| SUMF1              | 5.00E-26 | 1.11731292 | 0.317 | 0.092 | 1.77E-21 | mDC_spleen |
| ENSMMUG00000011459 | 5.04E-26 | 0.95607484 | 0.291 | 0.077 | 1.79E-21 | mDC_spleen |
| IDS                | 5.24E-26 | 0.59986212 | 0.582 | 0.24  | 1.86E-21 | mDC_spleen |
| FNDC3A             | 5.49E-26 | 0.57353427 | 0.68  | 0.302 | 1.94E-21 | mDC_spleen |
| IFNGR2             | 5.57E-26 | 0.64843117 | 0.439 | 0.16  | 1.98E-21 | mDC_spleen |
| MXD1               | 5.67E-26 | 0.95679804 | 0.455 | 0.172 | 2.01E-21 | mDC_spleen |
| GAPVD1             | 5.80E-26 | 0.37669415 | 0.5   | 0.186 | 2.05E-21 | mDC_spleen |
| ARRDC3             | 5.89E-26 | 1.29429086 | 0.341 | 0.107 | 2.09E-21 | mDC_spleen |
| STAG1              | 6.04E-26 | 0.59179708 | 0.807 | 0.41  | 2.14E-21 | mDC_spleen |
| NCK1               | 6.11E-26 | 0.58046565 | 0.5   | 0.188 | 2.16E-21 | mDC_spleen |
| DPH6               | 6.26E-26 | 0.7951574  | 0.593 | 0.246 | 2.22E-21 | mDC_spleen |
| STX17              | 6.31E-26 | 0.94323842 | 0.344 | 0.105 | 2.24E-21 | mDC_spleen |
| EIF2AK4            | 6.33E-26 | 0.71340834 | 0.476 | 0.171 | 2.24E-21 | mDC_spleen |
| FGD2               | 6.52E-26 | 0.58713018 | 0.86  | 0.474 | 2.31E-21 | mDC_spleen |
| DNM1L              | 6.54E-26 | 0.54532473 | 0.503 | 0.187 | 2.32E-21 | mDC_spleen |

|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| RABGGTB            | 6.66E-26 | 1.10831839 | 0.262 | 0.064 | 2.36E-21 | mDC_spleen |
| TRANK1             | 6.94E-26 | 0.59995961 | 0.37  | 0.117 | 2.46E-21 | mDC_spleen |
| GTPBP8             | 7.71E-26 | 0.91514151 | 0.341 | 0.102 | 2.73E-21 | mDC_spleen |
| DECR2              | 7.83E-26 | 0.76211961 | 0.511 | 0.196 | 2.78E-21 | mDC_spleen |
| PER2               | 8.13E-26 | 1.40917997 | 0.283 | 0.076 | 2.88E-21 | mDC_spleen |
| DDX50              | 8.33E-26 | 0.61995569 | 0.495 | 0.187 | 2.95E-21 | mDC_spleen |
| MTMR9              | 8.65E-26 | 0.98930468 | 0.325 | 0.097 | 3.07E-21 | mDC_spleen |
| RAB10              | 8.73E-26 | 0.30808351 | 0.701 | 0.314 | 3.09E-21 | mDC_spleen |
| SNX13              | 8.83E-26 | 0.72384688 | 0.437 | 0.156 | 3.13E-21 | mDC_spleen |
| ENSMMUG00000001764 | 9.24E-26 | 0.62638261 | 0.278 | 0.07  | 3.27E-21 | mDC_spleen |
| INPP4A             | 9.67E-26 | 0.31410051 | 0.646 | 0.28  | 3.43E-21 | mDC_spleen |
| CLK1               | 1.01E-25 | 0.61375503 | 0.706 | 0.317 | 3.58E-21 | mDC_spleen |
| NCAPH              | 1.01E-25 | 0.44524523 | 0.426 | 0.145 | 3.59E-21 | mDC_spleen |
| UHRF1BP1L          | 1.02E-25 | 0.52782176 | 0.561 | 0.22  | 3.62E-21 | mDC_spleen |
| VASP               | 1.13E-25 | 0.58320992 | 0.77  | 0.373 | 4.00E-21 | mDC_spleen |
| DNAJC3             | 1.17E-25 | 0.72419995 | 0.593 | 0.246 | 4.13E-21 | mDC_spleen |
| UBE3A              | 1.17E-25 | 0.55941527 | 0.595 | 0.246 | 4.16E-21 | mDC_spleen |
| DCP2               | 1.18E-25 | 0.65277982 | 0.455 | 0.162 | 4.18E-21 | mDC_spleen |
| SUCLG2             | 1.19E-25 | 0.48695933 | 0.722 | 0.321 | 4.20E-21 | mDC_spleen |
| SAMD9L             | 1.20E-25 | 0.55739349 | 0.439 | 0.151 | 4.26E-21 | mDC_spleen |
| STX3               | 1.23E-25 | 0.64210126 | 0.376 | 0.123 | 4.35E-21 | mDC_spleen |
| YWHAH              | 1.23E-25 | 0.61290662 | 0.545 | 0.213 | 4.35E-21 | mDC_spleen |
| PIK3CB             | 1.25E-25 | 0.59410365 | 0.548 | 0.223 | 4.42E-21 | mDC_spleen |
| SIK2               | 1.26E-25 | 0.39343093 | 0.352 | 0.108 | 4.47E-21 | mDC_spleen |
| UEVLD              | 1.31E-25 | 1.45376463 | 0.251 | 0.06  | 4.63E-21 | mDC_spleen |
| TMEM30A            | 1.33E-25 | 0.77924028 | 0.304 | 0.083 | 4.72E-21 | mDC_spleen |
| PNN                | 1.34E-25 | 0.57312688 | 0.619 | 0.255 | 4.74E-21 | mDC_spleen |
| PALM2AKAP2         | 1.35E-25 | 1.49720922 | 0.294 | 0.084 | 4.78E-21 | mDC_spleen |
| DGKD               | 1.41E-25 | 1.01991771 | 0.265 | 0.066 | 4.98E-21 | mDC_spleen |
| TMX3               | 1.43E-25 | 1.195952   | 0.325 | 0.097 | 5.08E-21 | mDC_spleen |
| RBM14              | 1.48E-25 | 0.67075966 | 0.812 | 0.409 | 5.26E-21 | mDC_spleen |
| ENSMMUG00000017297 | 1.50E-25 | 0.60596225 | 0.55  | 0.221 | 5.31E-21 | mDC_spleen |
| UBE2B              | 1.53E-25 | 0.60266233 | 0.698 | 0.311 | 5.44E-21 | mDC_spleen |

|          |          |            |       |       |          |            |
|----------|----------|------------|-------|-------|----------|------------|
| NUP214   | 1.54E-25 | 0.72573502 | 0.468 | 0.173 | 5.45E-21 | mDC_spleen |
| CD84     | 1.58E-25 | 0.95242611 | 0.362 | 0.117 | 5.58E-21 | mDC_spleen |
| LUC7L3   | 1.60E-25 | 0.62367388 | 0.632 | 0.269 | 5.69E-21 | mDC_spleen |
| HS2ST1   | 1.62E-25 | 0.79882567 | 0.373 | 0.123 | 5.74E-21 | mDC_spleen |
| RAB8B    | 1.65E-25 | 0.89401434 | 0.786 | 0.423 | 5.83E-21 | mDC_spleen |
| MAML3    | 1.67E-25 | 0.64099148 | 0.601 | 0.269 | 5.93E-21 | mDC_spleen |
| TAB2     | 1.77E-25 | 0.37082385 | 0.669 | 0.292 | 6.28E-21 | mDC_spleen |
| AATF     | 1.84E-25 | 0.81687141 | 0.442 | 0.16  | 6.53E-21 | mDC_spleen |
| TNFSF13  | 1.88E-25 | 0.70430466 | 0.37  | 0.115 | 6.65E-21 | mDC_spleen |
| PABPC4   | 1.96E-25 | 0.57317008 | 0.399 | 0.131 | 6.96E-21 | mDC_spleen |
| ATP6V1H  | 1.97E-25 | 0.74735944 | 0.481 | 0.18  | 6.98E-21 | mDC_spleen |
| PITPNA   | 2.02E-25 | 0.66473488 | 0.315 | 0.092 | 7.16E-21 | mDC_spleen |
| DPP7     | 2.04E-25 | 0.66382698 | 0.431 | 0.15  | 7.22E-21 | mDC_spleen |
| DMXL1    | 2.21E-25 | 0.90602406 | 0.349 | 0.108 | 7.84E-21 | mDC_spleen |
| DROSHA   | 2.26E-25 | 1.14133611 | 0.286 | 0.078 | 7.99E-21 | mDC_spleen |
| COG5     | 2.38E-25 | 0.56369533 | 0.606 | 0.25  | 8.42E-21 | mDC_spleen |
| LARS1    | 2.45E-25 | 0.60216052 | 0.362 | 0.112 | 8.66E-21 | mDC_spleen |
| SAFB2    | 2.50E-25 | 0.64560264 | 0.497 | 0.192 | 8.87E-21 | mDC_spleen |
| TRIM72   | 2.65E-25 | 0.49953325 | 0.77  | 0.354 | 9.39E-21 | mDC_spleen |
| TGFBR2   | 2.72E-25 | 0.66226534 | 0.566 | 0.238 | 9.64E-21 | mDC_spleen |
| XPC      | 2.88E-25 | 0.71008623 | 0.373 | 0.12  | 1.02E-20 | mDC_spleen |
| ANKIB1   | 2.89E-25 | 0.7496837  | 0.405 | 0.142 | 1.03E-20 | mDC_spleen |
| CHD1     | 2.99E-25 | 0.41538971 | 0.595 | 0.247 | 1.06E-20 | mDC_spleen |
| ST3GAL3  | 3.07E-25 | 1.27403167 | 0.28  | 0.077 | 1.09E-20 | mDC_spleen |
| EPC2     | 3.24E-25 | 0.60318706 | 0.458 | 0.165 | 1.15E-20 | mDC_spleen |
| SCFD1    | 3.46E-25 | 0.61840778 | 0.582 | 0.237 | 1.23E-20 | mDC_spleen |
| GOLGA4   | 3.48E-25 | 0.4172665  | 0.624 | 0.258 | 1.23E-20 | mDC_spleen |
| ICAM1    | 3.52E-25 | 0.36620192 | 0.476 | 0.17  | 1.25E-20 | mDC_spleen |
| TRNT1    | 3.57E-25 | 1.54056995 | 0.251 | 0.062 | 1.26E-20 | mDC_spleen |
| GSK3A    | 3.64E-25 | 0.42592978 | 0.376 | 0.12  | 1.29E-20 | mDC_spleen |
| PPP4R3A  | 3.92E-25 | 0.9255394  | 0.423 | 0.153 | 1.39E-20 | mDC_spleen |
| KIAA2026 | 3.95E-25 | 0.76153241 | 0.336 | 0.103 | 1.40E-20 | mDC_spleen |
| CASK     | 3.99E-25 | 0.65043781 | 0.437 | 0.158 | 1.41E-20 | mDC_spleen |

|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| CLIP1              | 4.19E-25 | 0.67495679 | 0.407 | 0.14  | 1.48E-20 | mDC_spleen |
| JMJD6              | 4.21E-25 | 0.84765813 | 0.262 | 0.065 | 1.49E-20 | mDC_spleen |
| EMILIN2            | 4.30E-25 | 0.56568838 | 0.439 | 0.162 | 1.52E-20 | mDC_spleen |
| ZNF28              | 4.31E-25 | 0.48101658 | 0.537 | 0.215 | 1.53E-20 | mDC_spleen |
| CD4                | 4.43E-25 | 0.5732802  | 0.587 | 0.246 | 1.57E-20 | mDC_spleen |
| ATG3               | 4.47E-25 | 0.80202576 | 0.796 | 0.467 | 1.58E-20 | mDC_spleen |
| H1-2               | 4.64E-25 | 0.9043703  | 0.503 | 0.202 | 1.64E-20 | mDC_spleen |
| CCND3              | 4.76E-25 | 0.71076978 | 0.577 | 0.242 | 1.69E-20 | mDC_spleen |
| RIPOR1             | 4.97E-25 | 0.97004206 | 0.278 | 0.072 | 1.76E-20 | mDC_spleen |
| OSBPL11            | 5.03E-25 | 0.54501423 | 0.69  | 0.317 | 1.78E-20 | mDC_spleen |
| KDM7A              | 5.11E-25 | 0.3232767  | 0.603 | 0.25  | 1.81E-20 | mDC_spleen |
| RABEP1             | 5.17E-25 | 0.24417067 | 0.437 | 0.151 | 1.83E-20 | mDC_spleen |
| GPR132             | 5.73E-25 | 0.66151398 | 0.566 | 0.239 | 2.03E-20 | mDC_spleen |
| AGO3               | 5.87E-25 | 0.55903894 | 0.553 | 0.224 | 2.08E-20 | mDC_spleen |
| WRN                | 5.90E-25 | 0.65723616 | 0.495 | 0.19  | 2.09E-20 | mDC_spleen |
| SMIM14             | 5.97E-25 | 0.73542228 | 0.595 | 0.257 | 2.11E-20 | mDC_spleen |
| SLC38A10           | 6.25E-25 | 1.06670371 | 0.262 | 0.066 | 2.21E-20 | mDC_spleen |
| SLC25A24           | 6.30E-25 | 0.91789429 | 0.286 | 0.077 | 2.23E-20 | mDC_spleen |
| RUFY1              | 6.48E-25 | 0.2722227  | 0.378 | 0.123 | 2.30E-20 | mDC_spleen |
| ARL8A              | 6.91E-25 | 0.57311563 | 0.349 | 0.107 | 2.45E-20 | mDC_spleen |
| SPNS3              | 7.13E-25 | 0.57317313 | 0.434 | 0.154 | 2.53E-20 | mDC_spleen |
| PAFAH1B1           | 7.15E-25 | 0.42726612 | 0.772 | 0.36  | 2.53E-20 | mDC_spleen |
| POU2F1             | 7.38E-25 | 0.85443388 | 0.397 | 0.137 | 2.61E-20 | mDC_spleen |
| ENSMMUG00000061458 | 7.60E-25 | 0.69174905 | 0.36  | 0.114 | 2.69E-20 | mDC_spleen |
| ENSMMUG00000005482 | 8.25E-25 | 0.91531742 | 0.386 | 0.132 | 2.92E-20 | mDC_spleen |
| LARGE1             | 8.42E-25 | 0.83159886 | 0.386 | 0.134 | 2.98E-20 | mDC_spleen |
| CEPT1              | 9.32E-25 | 0.71384537 | 0.389 | 0.133 | 3.30E-20 | mDC_spleen |
| CLINT1             | 9.68E-25 | 0.49167129 | 0.712 | 0.319 | 3.43E-20 | mDC_spleen |
| SMAP2              | 9.76E-25 | 0.55759707 | 0.733 | 0.371 | 3.46E-20 | mDC_spleen |
| PIK3CD             | 1.03E-24 | 1.17595822 | 0.336 | 0.104 | 3.64E-20 | mDC_spleen |
| DST                | 1.10E-24 | 0.64580234 | 0.706 | 0.345 | 3.90E-20 | mDC_spleen |
| DLST               | 1.11E-24 | 0.68685819 | 0.429 | 0.156 | 3.94E-20 | mDC_spleen |
| ZFAND6             | 1.14E-24 | 0.58733245 | 0.815 | 0.406 | 4.04E-20 | mDC_spleen |

|                   |          |            |       |       |          |            |
|-------------------|----------|------------|-------|-------|----------|------------|
| NONO              | 1.16E-24 | 0.6611126  | 0.64  | 0.275 | 4.10E-20 | mDC_spleen |
| ARMC8             | 1.20E-24 | 0.59042989 | 0.402 | 0.137 | 4.27E-20 | mDC_spleen |
| DAPP1             | 1.30E-24 | 0.65118786 | 0.656 | 0.314 | 4.60E-20 | mDC_spleen |
| RTF1              | 1.35E-24 | 0.48470344 | 0.542 | 0.212 | 4.77E-20 | mDC_spleen |
| DIDO1             | 1.35E-24 | 0.55424324 | 0.41  | 0.141 | 4.78E-20 | mDC_spleen |
| CASS4             | 1.37E-24 | 1.02379173 | 0.341 | 0.108 | 4.87E-20 | mDC_spleen |
| PBX2              | 1.43E-24 | 0.60061304 | 0.407 | 0.138 | 5.06E-20 | mDC_spleen |
| CASC3             | 1.48E-24 | 0.45402292 | 0.455 | 0.161 | 5.25E-20 | mDC_spleen |
| TTC19             | 1.49E-24 | 0.72729547 | 0.431 | 0.154 | 5.28E-20 | mDC_spleen |
| SPG21             | 1.49E-24 | 0.72018173 | 0.489 | 0.189 | 5.28E-20 | mDC_spleen |
| FO XK2            | 1.51E-24 | 0.76148828 | 0.304 | 0.088 | 5.35E-20 | mDC_spleen |
| ZNF638            | 1.52E-24 | 0.60353177 | 0.561 | 0.231 | 5.39E-20 | mDC_spleen |
| ZEB2              | 1.56E-24 | 1.04328082 | 0.722 | 0.41  | 5.52E-20 | mDC_spleen |
| ARL15             | 1.58E-24 | 0.6697184  | 0.458 | 0.178 | 5.58E-20 | mDC_spleen |
| MFSD1             | 1.67E-24 | 0.74760915 | 0.389 | 0.131 | 5.91E-20 | mDC_spleen |
| SLC35E2           | 1.74E-24 | 0.53486421 | 0.405 | 0.138 | 6.16E-20 | mDC_spleen |
| KARS1             | 1.75E-24 | 0.59781705 | 0.431 | 0.153 | 6.21E-20 | mDC_spleen |
| TSPAN3            | 1.81E-24 | 0.75460875 | 0.362 | 0.117 | 6.40E-20 | mDC_spleen |
| HSPD1             | 1.86E-24 | 0.73178845 | 0.778 | 0.425 | 6.59E-20 | mDC_spleen |
| RP2               | 1.88E-24 | 0.80387934 | 0.479 | 0.187 | 6.68E-20 | mDC_spleen |
| ATF6B             | 1.90E-24 | 0.71219836 | 0.399 | 0.135 | 6.75E-20 | mDC_spleen |
| EED               | 1.94E-24 | 0.84786101 | 0.421 | 0.154 | 6.86E-20 | mDC_spleen |
| UBAP2L            | 1.95E-24 | 0.62387372 | 0.529 | 0.208 | 6.92E-20 | mDC_spleen |
| CALR              | 2.12E-24 | 0.7096946  | 0.831 | 0.484 | 7.53E-20 | mDC_spleen |
| C1H1orf131        | 2.17E-24 | 0.76903786 | 0.296 | 0.082 | 7.69E-20 | mDC_spleen |
| LRBA              | 2.25E-24 | 0.6866098  | 0.632 | 0.28  | 7.97E-20 | mDC_spleen |
| KLF13             | 2.35E-24 | 1.0980769  | 0.278 | 0.077 | 8.32E-20 | mDC_spleen |
| CLTC              | 2.46E-24 | 0.39811036 | 0.661 | 0.289 | 8.72E-20 | mDC_spleen |
| ENSMUG00000064232 | 2.46E-24 | 0.8166972  | 0.325 | 0.098 | 8.73E-20 | mDC_spleen |
| ATRX              | 2.53E-24 | 0.63264733 | 0.677 | 0.315 | 8.97E-20 | mDC_spleen |
| ARSB              | 2.61E-24 | 1.09163148 | 0.265 | 0.07  | 9.25E-20 | mDC_spleen |
| LTV1              | 2.72E-24 | 0.54359406 | 0.608 | 0.254 | 9.64E-20 | mDC_spleen |
| CNOT10            | 2.73E-24 | 0.95456617 | 0.32  | 0.098 | 9.66E-20 | mDC_spleen |

|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| OGA                | 2.73E-24 | 0.83407866 | 0.571 | 0.24  | 9.68E-20 | mDC_spleen |
| DENND5A            | 2.75E-24 | 0.56272055 | 0.619 | 0.284 | 9.75E-20 | mDC_spleen |
| SND1               | 2.77E-24 | 0.56767187 | 0.722 | 0.342 | 9.83E-20 | mDC_spleen |
| SNX9               | 2.78E-24 | 0.54767865 | 0.873 | 0.477 | 9.87E-20 | mDC_spleen |
| USP36              | 2.95E-24 | 0.26959935 | 0.709 | 0.323 | 1.05E-19 | mDC_spleen |
| RAD21              | 2.96E-24 | 0.63094037 | 0.553 | 0.226 | 1.05E-19 | mDC_spleen |
| CHTOP              | 3.31E-24 | 0.7532667  | 0.384 | 0.126 | 1.17E-19 | mDC_spleen |
| ACIN1              | 3.32E-24 | 0.72490531 | 0.595 | 0.258 | 1.18E-19 | mDC_spleen |
| SP3                | 3.39E-24 | 0.65115615 | 0.439 | 0.159 | 1.20E-19 | mDC_spleen |
| LACTB              | 3.40E-24 | 0.6214106  | 0.27  | 0.069 | 1.20E-19 | mDC_spleen |
| ENSMMUG00000020721 | 3.46E-24 | 0.2197319  | 0.725 | 0.354 | 1.23E-19 | mDC_spleen |
| MAST2              | 3.49E-24 | 0.72778093 | 0.344 | 0.111 | 1.24E-19 | mDC_spleen |
| CCDC107            | 3.53E-24 | 0.62159919 | 0.439 | 0.158 | 1.25E-19 | mDC_spleen |
| PITRM1             | 3.59E-24 | 1.17508429 | 0.352 | 0.118 | 1.27E-19 | mDC_spleen |
| RCOR3              | 3.65E-24 | 0.74712344 | 0.37  | 0.125 | 1.29E-19 | mDC_spleen |
| CAPN7              | 3.67E-24 | 1.28073237 | 0.296 | 0.089 | 1.30E-19 | mDC_spleen |
| CDK12              | 3.75E-24 | 0.72860922 | 0.452 | 0.166 | 1.33E-19 | mDC_spleen |
| RASGRP3            | 3.76E-24 | 1.1320648  | 0.315 | 0.097 | 1.33E-19 | mDC_spleen |
| AMBRA1             | 3.86E-24 | 0.74506179 | 0.434 | 0.158 | 1.37E-19 | mDC_spleen |
| DNAJC13            | 3.89E-24 | 1.21554738 | 0.251 | 0.063 | 1.38E-19 | mDC_spleen |
| ATG4C              | 3.96E-24 | 1.70594406 | 0.251 | 0.065 | 1.40E-19 | mDC_spleen |
| ACTB               | 4.03E-24 | 0.43732756 | 0.995 | 0.962 | 1.43E-19 | mDC_spleen |
| ITCH               | 4.05E-24 | 0.47988335 | 0.606 | 0.254 | 1.44E-19 | mDC_spleen |
| RAB14              | 4.24E-24 | 0.56007145 | 0.659 | 0.295 | 1.50E-19 | mDC_spleen |
| FGR                | 4.34E-24 | 0.50967436 | 0.614 | 0.265 | 1.54E-19 | mDC_spleen |
| EIF5               | 4.39E-24 | 0.60798653 | 0.852 | 0.466 | 1.56E-19 | mDC_spleen |
| CTNNB1             | 4.40E-24 | 0.79583533 | 0.529 | 0.218 | 1.56E-19 | mDC_spleen |
| TIA1               | 4.43E-24 | 0.70403843 | 0.426 | 0.154 | 1.57E-19 | mDC_spleen |
| MTREX              | 4.88E-24 | 0.43943692 | 0.746 | 0.342 | 1.73E-19 | mDC_spleen |
| ZBTB1              | 4.91E-24 | 0.42772165 | 0.434 | 0.154 | 1.74E-19 | mDC_spleen |
| TM9SF4             | 5.03E-24 | 0.52247213 | 0.452 | 0.168 | 1.78E-19 | mDC_spleen |
| PCGF3              | 5.05E-24 | 1.20236137 | 0.265 | 0.072 | 1.79E-19 | mDC_spleen |
| LEMD3              | 5.10E-24 | 0.57134167 | 0.384 | 0.132 | 1.81E-19 | mDC_spleen |



|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| PTK2B              | 5.13E-24 | 1.09157827 | 0.299 | 0.089 | 1.82E-19 | mDC_spleen |
| ZMYND11            | 5.15E-24 | 0.69754264 | 0.378 | 0.128 | 1.82E-19 | mDC_spleen |
| MYO9A              | 5.21E-24 | 0.75106027 | 0.45  | 0.173 | 1.85E-19 | mDC_spleen |
| MBTD1              | 5.27E-24 | 0.77646861 | 0.394 | 0.139 | 1.87E-19 | mDC_spleen |
| GCLC               | 5.36E-24 | 1.15924465 | 0.272 | 0.075 | 1.90E-19 | mDC_spleen |
| TGS1               | 5.82E-24 | 0.72270737 | 0.426 | 0.155 | 2.06E-19 | mDC_spleen |
| NEK9               | 5.97E-24 | 0.87705219 | 0.296 | 0.085 | 2.11E-19 | mDC_spleen |
| NT5DC1             | 5.98E-24 | 0.9530791  | 0.354 | 0.114 | 2.12E-19 | mDC_spleen |
| RAB4A              | 6.03E-24 | 0.82824702 | 0.399 | 0.139 | 2.14E-19 | mDC_spleen |
| MTMR12             | 6.09E-24 | 1.2493254  | 0.262 | 0.07  | 2.16E-19 | mDC_spleen |
| SIPA1L3            | 6.30E-24 | 0.2700197  | 0.519 | 0.203 | 2.23E-19 | mDC_spleen |
| DOP1A              | 6.31E-24 | 1.02357575 | 0.415 | 0.157 | 2.24E-19 | mDC_spleen |
| ZMYM2              | 6.44E-24 | 0.36140586 | 0.574 | 0.24  | 2.28E-19 | mDC_spleen |
| ETNK1              | 6.53E-24 | 0.36538816 | 0.595 | 0.252 | 2.31E-19 | mDC_spleen |
| TARDBP             | 6.58E-24 | 0.54712412 | 0.45  | 0.165 | 2.33E-19 | mDC_spleen |
| ENSMMUG00000039874 | 6.60E-24 | 1.33105596 | 0.265 | 0.072 | 2.34E-19 | mDC_spleen |
| ORC4               | 6.94E-24 | 1.16257286 | 0.283 | 0.08  | 2.46E-19 | mDC_spleen |
| TOPBP1             | 7.17E-24 | 1.13636442 | 0.278 | 0.077 | 2.54E-19 | mDC_spleen |
| ACO2               | 7.20E-24 | 0.40308497 | 0.611 | 0.252 | 2.55E-19 | mDC_spleen |
| MAPKAPK2           | 7.23E-24 | 1.09429369 | 0.344 | 0.114 | 2.56E-19 | mDC_spleen |
| TMEM38B            | 7.27E-24 | 0.60369178 | 0.402 | 0.142 | 2.58E-19 | mDC_spleen |
| KMT2E              | 7.45E-24 | 0.42096297 | 0.783 | 0.395 | 2.64E-19 | mDC_spleen |
| KIN                | 7.56E-24 | 1.07048062 | 0.251 | 0.063 | 2.68E-19 | mDC_spleen |
| BCL2L13            | 7.80E-24 | 0.51249401 | 0.46  | 0.17  | 2.76E-19 | mDC_spleen |
| NBR1               | 7.90E-24 | 0.54710412 | 0.466 | 0.176 | 2.80E-19 | mDC_spleen |
| CMTM3              | 8.76E-24 | 0.45204045 | 0.399 | 0.136 | 3.10E-19 | mDC_spleen |
| BANK1              | 8.90E-24 | 0.8310371  | 0.444 | 0.17  | 3.15E-19 | mDC_spleen |
| UBE2G2             | 9.39E-24 | 0.70135863 | 0.362 | 0.119 | 3.33E-19 | mDC_spleen |
| ADGRE2             | 9.89E-24 | 1.20049249 | 0.262 | 0.07  | 3.51E-19 | mDC_spleen |
| FRY                | 1.05E-23 | 0.67471408 | 0.397 | 0.142 | 3.74E-19 | mDC_spleen |
| RAB6A              | 1.07E-23 | 0.5821931  | 0.476 | 0.185 | 3.80E-19 | mDC_spleen |
| POLR1B             | 1.11E-23 | 0.96630307 | 0.323 | 0.101 | 3.93E-19 | mDC_spleen |
| MDN1               | 1.11E-23 | 0.82896694 | 0.331 | 0.106 | 3.94E-19 | mDC_spleen |

|                   |          |            |       |       |          |            |
|-------------------|----------|------------|-------|-------|----------|------------|
| PER1              | 1.11E-23 | 0.51229656 | 0.63  | 0.27  | 3.95E-19 | mDC_spleen |
| SPTAN1            | 1.12E-23 | 0.78765329 | 0.442 | 0.168 | 3.97E-19 | mDC_spleen |
| KPNA6             | 1.16E-23 | 0.38202261 | 0.431 | 0.157 | 4.12E-19 | mDC_spleen |
| RAPGEF1           | 1.16E-23 | 0.33736606 | 0.881 | 0.509 | 4.12E-19 | mDC_spleen |
| TMEM135           | 1.17E-23 | 0.8843115  | 0.31  | 0.095 | 4.13E-19 | mDC_spleen |
| TSNAX             | 1.18E-23 | 0.70562259 | 0.476 | 0.18  | 4.16E-19 | mDC_spleen |
| POLK              | 1.22E-23 | 0.61793349 | 0.386 | 0.131 | 4.33E-19 | mDC_spleen |
| DYNC1H1           | 1.25E-23 | 0.45069908 | 0.484 | 0.186 | 4.43E-19 | mDC_spleen |
| GBF1              | 1.27E-23 | 0.53960298 | 0.368 | 0.124 | 4.49E-19 | mDC_spleen |
| ASXL1             | 1.33E-23 | 0.64060532 | 0.373 | 0.128 | 4.72E-19 | mDC_spleen |
| TBC1D22A          | 1.36E-23 | 0.33917789 | 0.714 | 0.339 | 4.83E-19 | mDC_spleen |
| NF2               | 1.38E-23 | 0.95150027 | 0.267 | 0.073 | 4.89E-19 | mDC_spleen |
| COMT              | 1.40E-23 | 0.65373223 | 0.696 | 0.334 | 4.97E-19 | mDC_spleen |
| ATP6V1B2          | 1.45E-23 | 0.78730222 | 0.447 | 0.169 | 5.14E-19 | mDC_spleen |
| SAMD4B            | 1.47E-23 | 0.47266236 | 0.458 | 0.172 | 5.20E-19 | mDC_spleen |
| UAP1              | 1.47E-23 | 0.89296026 | 0.399 | 0.144 | 5.23E-19 | mDC_spleen |
| TAF4B             | 1.52E-23 | 0.50069252 | 0.296 | 0.09  | 5.40E-19 | mDC_spleen |
| HNRNPC            | 1.58E-23 | 0.43119875 | 0.921 | 0.565 | 5.58E-19 | mDC_spleen |
| HECTD1            | 1.59E-23 | 0.58330251 | 0.431 | 0.159 | 5.63E-19 | mDC_spleen |
| BMT2              | 1.59E-23 | 1.14522549 | 0.46  | 0.193 | 5.64E-19 | mDC_spleen |
| PI4KA             | 1.67E-23 | 0.73380012 | 0.291 | 0.085 | 5.93E-19 | mDC_spleen |
| PDCD6IP           | 1.71E-23 | 0.43934457 | 0.556 | 0.222 | 6.06E-19 | mDC_spleen |
| SLC30A9           | 1.82E-23 | 0.59101691 | 0.434 | 0.165 | 6.46E-19 | mDC_spleen |
| MAPRE2            | 1.85E-23 | 0.88424163 | 0.476 | 0.195 | 6.57E-19 | mDC_spleen |
| ENSMUG00000030448 | 1.87E-23 | 0.57377283 | 0.728 | 0.335 | 6.62E-19 | mDC_spleen |
| ATXN7             | 2.11E-23 | 0.46876644 | 0.558 | 0.229 | 7.47E-19 | mDC_spleen |
| ZFR               | 2.17E-23 | 0.4311883  | 0.579 | 0.238 | 7.70E-19 | mDC_spleen |
| SETX              | 2.25E-23 | 0.53053119 | 0.444 | 0.166 | 7.99E-19 | mDC_spleen |
| CXCL16            | 2.29E-23 | 0.4783443  | 0.444 | 0.163 | 8.10E-19 | mDC_spleen |
| DNM2              | 2.31E-23 | 0.36625445 | 0.468 | 0.182 | 8.17E-19 | mDC_spleen |
| MIA2              | 2.36E-23 | 0.51976732 | 0.466 | 0.177 | 8.36E-19 | mDC_spleen |
| CIAO1             | 2.42E-23 | 0.75851959 | 0.294 | 0.085 | 8.57E-19 | mDC_spleen |
| LRRC58            | 2.47E-23 | 1.21988017 | 0.262 | 0.071 | 8.74E-19 | mDC_spleen |

|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| CHD2               | 2.55E-23 | 0.25822929 | 0.762 | 0.376 | 9.04E-19 | mDC_spleen |
| SPECC1L            | 2.66E-23 | 0.61619529 | 0.437 | 0.164 | 9.42E-19 | mDC_spleen |
| GATAD2B            | 2.67E-23 | 0.16278993 | 0.566 | 0.229 | 9.47E-19 | mDC_spleen |
| CCT6A              | 2.78E-23 | 0.67066471 | 0.749 | 0.383 | 9.84E-19 | mDC_spleen |
| ZNF131             | 2.97E-23 | 0.62093972 | 0.386 | 0.134 | 1.05E-18 | mDC_spleen |
| GOLM2              | 2.97E-23 | 0.50666673 | 0.505 | 0.199 | 1.05E-18 | mDC_spleen |
| STK40              | 2.99E-23 | 0.63299159 | 0.442 | 0.167 | 1.06E-18 | mDC_spleen |
| MAP4K1             | 2.99E-23 | 0.53306719 | 0.481 | 0.183 | 1.06E-18 | mDC_spleen |
| ZNF800             | 3.04E-23 | 0.91653236 | 0.286 | 0.082 | 1.08E-18 | mDC_spleen |
| PCYT1A             | 3.12E-23 | 0.83178613 | 0.344 | 0.113 | 1.10E-18 | mDC_spleen |
| TAGAP              | 3.19E-23 | 0.70494906 | 0.397 | 0.143 | 1.13E-18 | mDC_spleen |
| DEK                | 3.21E-23 | 0.50050849 | 0.601 | 0.258 | 1.14E-18 | mDC_spleen |
| NAA10              | 3.23E-23 | 0.43407005 | 0.561 | 0.224 | 1.14E-18 | mDC_spleen |
| TRPS1              | 3.26E-23 | 0.75780605 | 0.622 | 0.304 | 1.15E-18 | mDC_spleen |
| CCAR1              | 3.34E-23 | 0.58511539 | 0.455 | 0.174 | 1.18E-18 | mDC_spleen |
| TFG                | 3.34E-23 | 0.60861207 | 0.468 | 0.179 | 1.18E-18 | mDC_spleen |
| CSE1L              | 3.40E-23 | 0.55600534 | 0.328 | 0.1   | 1.20E-18 | mDC_spleen |
| TENT2              | 3.41E-23 | 0.66576593 | 0.479 | 0.19  | 1.21E-18 | mDC_spleen |
| USP10              | 3.42E-23 | 0.40128432 | 0.601 | 0.258 | 1.21E-18 | mDC_spleen |
| NRF1               | 3.49E-23 | 0.70957485 | 0.365 | 0.125 | 1.24E-18 | mDC_spleen |
| NR2C2              | 3.57E-23 | 0.85007628 | 0.278 | 0.079 | 1.26E-18 | mDC_spleen |
| ENSMMUG00000008587 | 3.64E-23 | 1.03050757 | 0.601 | 0.294 | 1.29E-18 | mDC_spleen |
| WBP1L              | 3.66E-23 | 0.72752076 | 0.378 | 0.131 | 1.30E-18 | mDC_spleen |
| TEDC1              | 3.66E-23 | 0.85256915 | 0.251 | 0.064 | 1.30E-18 | mDC_spleen |
| GSR                | 3.81E-23 | 0.76652852 | 0.341 | 0.111 | 1.35E-18 | mDC_spleen |
| EDEM3              | 3.88E-23 | 0.85795628 | 0.333 | 0.108 | 1.37E-18 | mDC_spleen |
| MGAT2              | 3.92E-23 | 0.82131524 | 0.267 | 0.071 | 1.39E-18 | mDC_spleen |
| DYRK2              | 3.92E-23 | 0.7355584  | 0.365 | 0.123 | 1.39E-18 | mDC_spleen |
| PPHLN1             | 3.94E-23 | 0.50081585 | 0.704 | 0.32  | 1.40E-18 | mDC_spleen |
| HTATSF1            | 4.14E-23 | 0.92051941 | 0.304 | 0.092 | 1.47E-18 | mDC_spleen |
| USP42              | 4.15E-23 | 1.24442072 | 0.283 | 0.083 | 1.47E-18 | mDC_spleen |
| EDEM1              | 4.25E-23 | 0.50538344 | 0.656 | 0.305 | 1.51E-18 | mDC_spleen |
| NECTIN2            | 4.31E-23 | 0.63356297 | 0.336 | 0.109 | 1.53E-18 | mDC_spleen |

|                     |          |            |       |       |          |            |
|---------------------|----------|------------|-------|-------|----------|------------|
| PHTF2               | 4.45E-23 | 0.92554533 | 0.344 | 0.116 | 1.58E-18 | mDC_spleen |
| NUP98               | 4.58E-23 | 0.2527695  | 0.622 | 0.267 | 1.62E-18 | mDC_spleen |
| COPA                | 4.69E-23 | 0.30248222 | 0.492 | 0.19  | 1.66E-18 | mDC_spleen |
| BPTF                | 4.75E-23 | 0.54087413 | 0.616 | 0.27  | 1.68E-18 | mDC_spleen |
| SMIM15              | 4.91E-23 | 0.70078656 | 0.325 | 0.1   | 1.74E-18 | mDC_spleen |
| MCUB                | 5.10E-23 | 0.97527679 | 0.434 | 0.168 | 1.81E-18 | mDC_spleen |
| ZRSR2               | 5.49E-23 | 0.68428988 | 0.315 | 0.097 | 1.95E-18 | mDC_spleen |
| ZNHIT6              | 5.57E-23 | 1.00980863 | 0.286 | 0.083 | 1.97E-18 | mDC_spleen |
| CLSTN1              | 5.70E-23 | 0.98887291 | 0.357 | 0.123 | 2.02E-18 | mDC_spleen |
| COA1                | 5.72E-23 | 0.49149097 | 0.553 | 0.224 | 2.03E-18 | mDC_spleen |
| FAM91A1             | 5.74E-23 | 0.67121928 | 0.347 | 0.115 | 2.03E-18 | mDC_spleen |
| KDM2A               | 5.78E-23 | 0.34219934 | 0.759 | 0.361 | 2.05E-18 | mDC_spleen |
| MKRN1               | 5.79E-23 | 0.61487645 | 0.415 | 0.148 | 2.05E-18 | mDC_spleen |
| TSPYL1              | 5.88E-23 | 1.31705265 | 0.265 | 0.073 | 2.08E-18 | mDC_spleen |
| SYK                 | 5.97E-23 | 0.47928919 | 0.675 | 0.309 | 2.12E-18 | mDC_spleen |
| USP7                | 6.21E-23 | 0.68057008 | 0.36  | 0.12  | 2.20E-18 | mDC_spleen |
| PTPN12              | 6.23E-23 | 0.45252664 | 0.344 | 0.113 | 2.21E-18 | mDC_spleen |
| ENSMMUG00000006165  | 6.33E-23 | 0.42660899 | 0.799 | 0.402 | 2.24E-18 | mDC_spleen |
| NCKAP1L             | 6.41E-23 | 0.51706276 | 0.807 | 0.421 | 2.27E-18 | mDC_spleen |
| ENSMMUG000000011604 | 6.56E-23 | 0.91331741 | 0.31  | 0.095 | 2.32E-18 | mDC_spleen |
| COPB2               | 7.02E-23 | 0.52856678 | 0.431 | 0.156 | 2.49E-18 | mDC_spleen |
| SNX4                | 7.11E-23 | 0.46857836 | 0.55  | 0.234 | 2.52E-18 | mDC_spleen |
| MED13               | 7.11E-23 | 0.27129374 | 0.526 | 0.22  | 2.52E-18 | mDC_spleen |
| WWC2                | 7.35E-23 | 0.48899254 | 0.418 | 0.156 | 2.60E-18 | mDC_spleen |
| CHMP5               | 7.47E-23 | 0.51514848 | 0.561 | 0.225 | 2.65E-18 | mDC_spleen |
| VAV3                | 7.50E-23 | 0.61223893 | 0.659 | 0.32  | 2.66E-18 | mDC_spleen |
| DEGS1               | 7.50E-23 | 0.67306887 | 0.378 | 0.13  | 2.66E-18 | mDC_spleen |
| KLF3                | 7.66E-23 | 0.7478817  | 0.487 | 0.196 | 2.71E-18 | mDC_spleen |
| CARD11              | 7.85E-23 | 0.62949731 | 0.384 | 0.137 | 2.78E-18 | mDC_spleen |
| ARF6                | 7.95E-23 | 0.54845065 | 0.796 | 0.417 | 2.82E-18 | mDC_spleen |
| RASA3               | 8.34E-23 | 0.89125608 | 0.384 | 0.136 | 2.96E-18 | mDC_spleen |
| PCNX1               | 8.51E-23 | 0.28865875 | 0.444 | 0.168 | 3.02E-18 | mDC_spleen |
| WAPL                | 8.91E-23 | 0.33017627 | 0.508 | 0.2   | 3.16E-18 | mDC_spleen |

|                   |          |            |       |       |          |            |
|-------------------|----------|------------|-------|-------|----------|------------|
| ESYT2             | 1.05E-22 | 0.4459626  | 0.614 | 0.272 | 3.70E-18 | mDC_spleen |
| INTS6L            | 1.09E-22 | 0.68437098 | 0.354 | 0.12  | 3.88E-18 | mDC_spleen |
| TCF20             | 1.11E-22 | 0.81598977 | 0.373 | 0.131 | 3.93E-18 | mDC_spleen |
| MCU               | 1.19E-22 | 0.61437115 | 0.381 | 0.136 | 4.21E-18 | mDC_spleen |
| CBFB              | 1.20E-22 | 1.15266583 | 0.27  | 0.077 | 4.27E-18 | mDC_spleen |
| RPRD2             | 1.23E-22 | 0.54060105 | 0.431 | 0.163 | 4.34E-18 | mDC_spleen |
| SF3B2             | 1.25E-22 | 0.43511327 | 0.521 | 0.209 | 4.44E-18 | mDC_spleen |
| ZNF326            | 1.26E-22 | 0.67368269 | 0.476 | 0.189 | 4.46E-18 | mDC_spleen |
| LONP2             | 1.32E-22 | 0.68906464 | 0.415 | 0.153 | 4.66E-18 | mDC_spleen |
| TAF1              | 1.38E-22 | 0.76179789 | 0.328 | 0.105 | 4.88E-18 | mDC_spleen |
| WAC               | 1.39E-22 | 0.45920073 | 0.743 | 0.346 | 4.93E-18 | mDC_spleen |
| ATP9B             | 1.43E-22 | 0.48096598 | 0.566 | 0.239 | 5.08E-18 | mDC_spleen |
| TEP1              | 1.54E-22 | 0.42833044 | 0.328 | 0.103 | 5.44E-18 | mDC_spleen |
| ZNF451            | 1.60E-22 | 0.37616815 | 0.526 | 0.218 | 5.66E-18 | mDC_spleen |
| PPP1R15A          | 1.61E-22 | 0.47566991 | 0.783 | 0.407 | 5.69E-18 | mDC_spleen |
| TENT4B            | 1.63E-22 | 1.31848725 | 0.336 | 0.114 | 5.79E-18 | mDC_spleen |
| NUCKS1            | 1.75E-22 | 0.6266263  | 0.759 | 0.398 | 6.20E-18 | mDC_spleen |
| STAT5A            | 1.79E-22 | 0.66747828 | 0.275 | 0.077 | 6.34E-18 | mDC_spleen |
| BMPR2             | 1.87E-22 | 0.91699531 | 0.352 | 0.123 | 6.63E-18 | mDC_spleen |
| REV3L             | 1.88E-22 | 0.50983957 | 0.458 | 0.178 | 6.65E-18 | mDC_spleen |
| TMED5             | 1.88E-22 | 0.56458536 | 0.511 | 0.21  | 6.68E-18 | mDC_spleen |
| NOP56             | 1.92E-22 | 0.39512002 | 0.349 | 0.113 | 6.82E-18 | mDC_spleen |
| FBXO7             | 2.17E-22 | 0.97520685 | 0.32  | 0.103 | 7.69E-18 | mDC_spleen |
| C18H18orf25       | 2.19E-22 | 0.92482562 | 0.317 | 0.102 | 7.77E-18 | mDC_spleen |
| GRAMD4            | 2.28E-22 | 0.50336907 | 0.505 | 0.21  | 8.08E-18 | mDC_spleen |
| BAG4              | 2.30E-22 | 0.92759122 | 0.265 | 0.075 | 8.15E-18 | mDC_spleen |
| TBL1X             | 2.34E-22 | 0.2277437  | 0.532 | 0.226 | 8.29E-18 | mDC_spleen |
| SREK1             | 2.35E-22 | 0.45227513 | 0.706 | 0.314 | 8.34E-18 | mDC_spleen |
| ENSMUG00000054976 | 2.37E-22 | 0.71762418 | 0.27  | 0.075 | 8.41E-18 | mDC_spleen |
| MAMU-A            | 2.37E-22 | 0.64645159 | 0.931 | 0.663 | 8.41E-18 | mDC_spleen |
| SIN3A             | 2.39E-22 | 0.42061841 | 0.487 | 0.197 | 8.47E-18 | mDC_spleen |
| ATR               | 2.40E-22 | 0.86937653 | 0.283 | 0.083 | 8.52E-18 | mDC_spleen |
| SLC9A3R1          | 2.49E-22 | 0.70096118 | 0.302 | 0.091 | 8.82E-18 | mDC_spleen |

|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| MRPL32             | 2.50E-22 | 0.59290152 | 0.402 | 0.144 | 8.87E-18 | mDC_spleen |
| SEPTIN11           | 2.53E-22 | 0.66527025 | 0.735 | 0.37  | 8.95E-18 | mDC_spleen |
| SREBF2             | 2.67E-22 | 0.48006592 | 0.582 | 0.249 | 9.44E-18 | mDC_spleen |
| TOX4               | 2.67E-22 | 0.50718502 | 0.476 | 0.187 | 9.45E-18 | mDC_spleen |
| NARS2              | 2.74E-22 | 1.00250891 | 0.288 | 0.088 | 9.73E-18 | mDC_spleen |
| HIF1A              | 2.77E-22 | 0.47177734 | 0.675 | 0.31  | 9.82E-18 | mDC_spleen |
| KCTD12             | 2.80E-22 | 0.54570237 | 0.571 | 0.245 | 9.92E-18 | mDC_spleen |
| EVI5               | 2.80E-22 | 0.6722239  | 0.386 | 0.141 | 9.92E-18 | mDC_spleen |
| DDX17              | 2.81E-22 | 0.46162187 | 0.746 | 0.364 | 9.95E-18 | mDC_spleen |
| MEF2D              | 2.96E-22 | 0.9541323  | 0.291 | 0.089 | 1.05E-17 | mDC_spleen |
| HGSNAT             | 2.98E-22 | 0.60188614 | 0.402 | 0.148 | 1.05E-17 | mDC_spleen |
| KLHDC2             | 3.02E-22 | 1.22804376 | 0.257 | 0.072 | 1.07E-17 | mDC_spleen |
| STYX               | 3.07E-22 | 0.75135191 | 0.302 | 0.093 | 1.09E-17 | mDC_spleen |
| NUDT21             | 3.23E-22 | 0.63975458 | 0.41  | 0.149 | 1.14E-17 | mDC_spleen |
| ARHGAP24           | 3.34E-22 | 0.6828345  | 0.606 | 0.281 | 1.18E-17 | mDC_spleen |
| TAF13              | 3.35E-22 | 0.85084275 | 0.325 | 0.105 | 1.19E-17 | mDC_spleen |
| BCL7C              | 3.38E-22 | 0.52417185 | 0.262 | 0.07  | 1.20E-17 | mDC_spleen |
| NPTN               | 3.43E-22 | 0.3954474  | 0.545 | 0.224 | 1.22E-17 | mDC_spleen |
| GTPBP4             | 3.57E-22 | 0.73445876 | 0.323 | 0.103 | 1.26E-17 | mDC_spleen |
| CXHXorf38          | 3.57E-22 | 0.98553436 | 0.272 | 0.08  | 1.27E-17 | mDC_spleen |
| CUL5               | 3.66E-22 | 0.57935514 | 0.743 | 0.353 | 1.30E-17 | mDC_spleen |
| CD164              | 3.69E-22 | 0.61965456 | 0.791 | 0.427 | 1.31E-17 | mDC_spleen |
| G3BP2              | 3.78E-22 | 0.68503905 | 0.772 | 0.413 | 1.34E-17 | mDC_spleen |
| ENSMMUG00000030374 | 3.86E-22 | 0.85249669 | 0.347 | 0.119 | 1.37E-17 | mDC_spleen |
| RAB8A              | 3.87E-22 | 0.43436656 | 0.698 | 0.325 | 1.37E-17 | mDC_spleen |
| TRA2B              | 4.03E-22 | 0.55174571 | 0.947 | 0.683 | 1.43E-17 | mDC_spleen |
| GRB2               | 4.27E-22 | 0.4895715  | 0.857 | 0.462 | 1.51E-17 | mDC_spleen |
| MOB3B              | 4.34E-22 | 1.10961794 | 0.336 | 0.117 | 1.54E-17 | mDC_spleen |
| KANSL2             | 4.49E-22 | 0.68744261 | 0.339 | 0.112 | 1.59E-17 | mDC_spleen |
| CSNK1G2            | 4.78E-22 | 0.49511403 | 0.315 | 0.099 | 1.69E-17 | mDC_spleen |
| ZNF277             | 4.87E-22 | 0.63852905 | 0.442 | 0.172 | 1.72E-17 | mDC_spleen |
| NABP1              | 4.88E-22 | 0.42951471 | 0.64  | 0.305 | 1.73E-17 | mDC_spleen |
| ATG10              | 5.00E-22 | 0.91201313 | 0.275 | 0.08  | 1.77E-17 | mDC_spleen |

|         |          |            |       |       |          |            |
|---------|----------|------------|-------|-------|----------|------------|
| DLD     | 5.00E-22 | 0.40333292 | 0.392 | 0.137 | 1.77E-17 | mDC_spleen |
| ZNF93   | 5.08E-22 | 0.64938805 | 0.405 | 0.148 | 1.80E-17 | mDC_spleen |
| BTBD1   | 5.09E-22 | 0.67790888 | 0.323 | 0.104 | 1.80E-17 | mDC_spleen |
| NOP58   | 5.25E-22 | 0.48595456 | 0.646 | 0.297 | 1.86E-17 | mDC_spleen |
| CHST12  | 5.35E-22 | 0.5231121  | 0.344 | 0.114 | 1.90E-17 | mDC_spleen |
| SLC35E1 | 5.50E-22 | 0.51158257 | 0.423 | 0.161 | 1.95E-17 | mDC_spleen |
| FYN     | 5.51E-22 | 1.08518242 | 0.495 | 0.221 | 1.95E-17 | mDC_spleen |
| CASP12  | 5.57E-22 | 0.77937403 | 0.503 | 0.22  | 1.97E-17 | mDC_spleen |
| BTBD9   | 5.76E-22 | 0.21675338 | 0.537 | 0.227 | 2.04E-17 | mDC_spleen |
| PPP4R3B | 5.90E-22 | 0.3579676  | 0.484 | 0.187 | 2.09E-17 | mDC_spleen |
| LIMS1   | 6.12E-22 | 0.84217331 | 0.683 | 0.364 | 2.17E-17 | mDC_spleen |
| UBE2E1  | 6.14E-22 | 0.52321446 | 0.466 | 0.182 | 2.18E-17 | mDC_spleen |
| DCAF8   | 6.35E-22 | 0.49048282 | 0.407 | 0.147 | 2.25E-17 | mDC_spleen |
| TRIM24  | 6.43E-22 | 1.03643964 | 0.323 | 0.107 | 2.28E-17 | mDC_spleen |
| CCNT2   | 6.49E-22 | 0.53258886 | 0.407 | 0.149 | 2.30E-17 | mDC_spleen |
| UBXN4   | 6.60E-22 | 0.60335497 | 0.669 | 0.317 | 2.34E-17 | mDC_spleen |
| GOLGB1  | 6.65E-22 | 0.66870004 | 0.373 | 0.131 | 2.36E-17 | mDC_spleen |
| SLA     | 6.84E-22 | 0.45349769 | 0.349 | 0.117 | 2.42E-17 | mDC_spleen |
| MFF     | 7.00E-22 | 0.64554488 | 0.481 | 0.186 | 2.48E-17 | mDC_spleen |
| FBXW11  | 7.36E-22 | 0.28753109 | 0.587 | 0.253 | 2.61E-17 | mDC_spleen |
| RRP12   | 7.37E-22 | 0.74006958 | 0.32  | 0.103 | 2.61E-17 | mDC_spleen |
| NUDCD1  | 7.41E-22 | 0.57238826 | 0.31  | 0.096 | 2.63E-17 | mDC_spleen |
| IFT88   | 7.52E-22 | 1.35882768 | 0.265 | 0.077 | 2.67E-17 | mDC_spleen |
| ZNF44   | 7.53E-22 | 0.69659935 | 0.354 | 0.123 | 2.67E-17 | mDC_spleen |
| UBE2D2  | 7.86E-22 | 0.56365995 | 0.495 | 0.193 | 2.79E-17 | mDC_spleen |
| MGA     | 7.92E-22 | 0.66787751 | 0.31  | 0.097 | 2.80E-17 | mDC_spleen |
| RNF19B  | 8.00E-22 | 0.94118033 | 0.304 | 0.098 | 2.84E-17 | mDC_spleen |
| CLCN7   | 8.16E-22 | 0.82664293 | 0.296 | 0.092 | 2.89E-17 | mDC_spleen |
| RBM47   | 8.67E-22 | 0.27138089 | 0.796 | 0.407 | 3.07E-17 | mDC_spleen |
| DNAJC10 | 9.85E-22 | 0.6995223  | 0.32  | 0.103 | 3.49E-17 | mDC_spleen |
| MRPS30  | 1.03E-21 | 0.6983705  | 0.302 | 0.092 | 3.64E-17 | mDC_spleen |
| CAMTA2  | 1.07E-21 | 0.71623354 | 0.28  | 0.083 | 3.77E-17 | mDC_spleen |
| SRRT    | 1.07E-21 | 0.6716481  | 0.354 | 0.122 | 3.81E-17 | mDC_spleen |

|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| EHD4               | 1.09E-21 | 0.7467841  | 0.418 | 0.162 | 3.87E-17 | mDC_spleen |
| UBAP1              | 1.14E-21 | 0.42007513 | 0.569 | 0.244 | 4.03E-17 | mDC_spleen |
| ZBTB44             | 1.23E-21 | 1.18026315 | 0.272 | 0.082 | 4.36E-17 | mDC_spleen |
| SLTM               | 1.28E-21 | 0.51695707 | 0.632 | 0.277 | 4.53E-17 | mDC_spleen |
| FUCA2              | 1.35E-21 | 0.84670355 | 0.291 | 0.088 | 4.80E-17 | mDC_spleen |
| ORC3               | 1.37E-21 | 0.65155691 | 0.278 | 0.081 | 4.87E-17 | mDC_spleen |
| ATXN7L3B           | 1.39E-21 | 0.68068614 | 0.439 | 0.17  | 4.92E-17 | mDC_spleen |
| PHF11              | 1.43E-21 | 0.44346729 | 0.577 | 0.244 | 5.06E-17 | mDC_spleen |
| MTMR1              | 1.46E-21 | 0.91865939 | 0.259 | 0.075 | 5.17E-17 | mDC_spleen |
| RABGEF1            | 1.47E-21 | 0.6024155  | 0.646 | 0.318 | 5.19E-17 | mDC_spleen |
| UBE2K              | 1.53E-21 | 0.37108557 | 0.717 | 0.331 | 5.41E-17 | mDC_spleen |
| CEP192             | 1.53E-21 | 0.30740869 | 0.513 | 0.209 | 5.43E-17 | mDC_spleen |
| CCNT1              | 1.61E-21 | 0.5266557  | 0.294 | 0.091 | 5.69E-17 | mDC_spleen |
| SHARPIN            | 1.64E-21 | 0.47426462 | 0.294 | 0.088 | 5.82E-17 | mDC_spleen |
| KIF20B             | 1.72E-21 | 0.85633888 | 0.262 | 0.075 | 6.08E-17 | mDC_spleen |
| ENSMMUG00000062103 | 1.83E-21 | 0.93721825 | 0.32  | 0.111 | 6.50E-17 | mDC_spleen |
| RGS2               | 1.85E-21 | 0.89021331 | 0.741 | 0.444 | 6.54E-17 | mDC_spleen |
| MDM2               | 1.91E-21 | 1.14034692 | 0.349 | 0.123 | 6.75E-17 | mDC_spleen |
| VPS51              | 1.96E-21 | 0.51006196 | 0.339 | 0.114 | 6.94E-17 | mDC_spleen |
| NAA15              | 1.98E-21 | 0.53905195 | 0.434 | 0.168 | 7.02E-17 | mDC_spleen |
| AGK                | 1.99E-21 | 1.15407909 | 0.275 | 0.083 | 7.04E-17 | mDC_spleen |
| PTTG1IP            | 2.00E-21 | 0.47196681 | 0.492 | 0.196 | 7.08E-17 | mDC_spleen |
| STIM1              | 2.03E-21 | 0.87659887 | 0.317 | 0.107 | 7.18E-17 | mDC_spleen |
| RAB2A              | 2.09E-21 | 0.41714438 | 0.791 | 0.381 | 7.40E-17 | mDC_spleen |
| ABL1               | 2.15E-21 | 1.14593702 | 0.296 | 0.097 | 7.63E-17 | mDC_spleen |
| ZRANB2             | 2.27E-21 | 0.46670194 | 0.55  | 0.227 | 8.03E-17 | mDC_spleen |
| UBL3               | 2.29E-21 | 0.38837966 | 0.675 | 0.309 | 8.12E-17 | mDC_spleen |
| AGO2               | 2.30E-21 | 0.273377   | 0.606 | 0.264 | 8.17E-17 | mDC_spleen |
| LASP1              | 2.32E-21 | 0.54884355 | 0.471 | 0.19  | 8.21E-17 | mDC_spleen |
| ZBTB46             | 2.42E-21 | 0.16939386 | 0.458 | 0.176 | 8.58E-17 | mDC_spleen |
| RBM5               | 2.49E-21 | 0.36529097 | 0.585 | 0.248 | 8.82E-17 | mDC_spleen |
| MAP3K2             | 2.53E-21 | 0.86845031 | 0.328 | 0.114 | 8.96E-17 | mDC_spleen |
| LPCAT2             | 2.62E-21 | 0.8622408  | 0.278 | 0.084 | 9.29E-17 | mDC_spleen |



|          |          |            |       |       |          |            |
|----------|----------|------------|-------|-------|----------|------------|
| GPATCH8  | 2.63E-21 | 0.63117193 | 0.508 | 0.211 | 9.32E-17 | mDC_spleen |
| STAG2    | 2.66E-21 | 0.55622757 | 0.701 | 0.351 | 9.41E-17 | mDC_spleen |
| SNX1     | 2.73E-21 | 0.44147268 | 0.495 | 0.199 | 9.66E-17 | mDC_spleen |
| PTPMT1   | 2.80E-21 | 0.53229179 | 0.587 | 0.258 | 9.91E-17 | mDC_spleen |
| NADSYN1  | 2.89E-21 | 0.42984112 | 0.487 | 0.194 | 1.02E-16 | mDC_spleen |
| CHD6     | 2.97E-21 | 0.41197    | 0.503 | 0.202 | 1.05E-16 | mDC_spleen |
| LENG8    | 3.21E-21 | 0.53520772 | 0.37  | 0.133 | 1.14E-16 | mDC_spleen |
| SENP5    | 3.30E-21 | 0.27468259 | 0.571 | 0.243 | 1.17E-16 | mDC_spleen |
| SEL1L    | 3.46E-21 | 0.37310365 | 0.402 | 0.147 | 1.23E-16 | mDC_spleen |
| ELAVL1   | 3.64E-21 | 0.4635075  | 0.437 | 0.168 | 1.29E-16 | mDC_spleen |
| PEA15    | 3.68E-21 | 0.51653327 | 0.405 | 0.148 | 1.30E-16 | mDC_spleen |
| CEP135   | 3.68E-21 | 0.82462158 | 0.296 | 0.093 | 1.31E-16 | mDC_spleen |
| SH3GL1   | 3.70E-21 | 0.47418789 | 0.365 | 0.13  | 1.31E-16 | mDC_spleen |
| KPNB1    | 3.73E-21 | 0.50876012 | 0.537 | 0.236 | 1.32E-16 | mDC_spleen |
| RAB5B    | 3.80E-21 | 0.80174279 | 0.267 | 0.077 | 1.35E-16 | mDC_spleen |
| DEDD2    | 3.84E-21 | 0.41722799 | 0.376 | 0.131 | 1.36E-16 | mDC_spleen |
| IRF4     | 3.89E-21 | 1.3922902  | 0.28  | 0.089 | 1.38E-16 | mDC_spleen |
| COX10    | 3.89E-21 | 0.91169374 | 0.283 | 0.087 | 1.38E-16 | mDC_spleen |
| TM9SF2   | 3.95E-21 | 0.76028868 | 0.397 | 0.151 | 1.40E-16 | mDC_spleen |
| RBM27    | 4.03E-21 | 0.4634544  | 0.489 | 0.199 | 1.43E-16 | mDC_spleen |
| RPS6KA1  | 4.04E-21 | 0.43932115 | 0.463 | 0.18  | 1.43E-16 | mDC_spleen |
| MARCHF8  | 4.09E-21 | 1.18934548 | 0.251 | 0.072 | 1.45E-16 | mDC_spleen |
| NUP58    | 4.26E-21 | 0.57198134 | 0.317 | 0.104 | 1.51E-16 | mDC_spleen |
| C5orf15  | 4.37E-21 | 0.41620369 | 0.357 | 0.121 | 1.55E-16 | mDC_spleen |
| HNRNPUL1 | 4.62E-21 | 0.34880015 | 0.495 | 0.2   | 1.64E-16 | mDC_spleen |
| ATP11B   | 4.93E-21 | 0.61564091 | 0.37  | 0.134 | 1.75E-16 | mDC_spleen |
| CDC40    | 4.97E-21 | 0.60019874 | 0.46  | 0.182 | 1.76E-16 | mDC_spleen |
| CDK17    | 5.05E-21 | 0.64714407 | 0.407 | 0.155 | 1.79E-16 | mDC_spleen |
| BIN3     | 5.06E-21 | 0.41108156 | 0.601 | 0.26  | 1.79E-16 | mDC_spleen |
| PGM2     | 5.17E-21 | 0.69862829 | 0.423 | 0.162 | 1.83E-16 | mDC_spleen |
| ZNF160   | 5.24E-21 | 0.84273136 | 0.27  | 0.08  | 1.86E-16 | mDC_spleen |
| MNT      | 5.24E-21 | 0.36034012 | 0.341 | 0.114 | 1.86E-16 | mDC_spleen |
| REV1     | 5.26E-21 | 0.6573246  | 0.259 | 0.075 | 1.87E-16 | mDC_spleen |

|          |          |            |       |       |          |            |
|----------|----------|------------|-------|-------|----------|------------|
| KLHL2    | 5.95E-21 | 0.94516777 | 0.328 | 0.114 | 2.11E-16 | mDC_spleen |
| FOXN2    | 6.06E-21 | 0.63765031 | 0.492 | 0.211 | 2.15E-16 | mDC_spleen |
| PPP5C    | 6.25E-21 | 0.92321048 | 0.28  | 0.085 | 2.21E-16 | mDC_spleen |
| PPP2CB   | 6.26E-21 | 0.57054233 | 0.272 | 0.08  | 2.22E-16 | mDC_spleen |
| TMF1     | 6.55E-21 | 0.61724992 | 0.28  | 0.086 | 2.32E-16 | mDC_spleen |
| CYTIP    | 6.91E-21 | 0.7121571  | 0.397 | 0.152 | 2.45E-16 | mDC_spleen |
| EEF1E1   | 7.00E-21 | 0.52366528 | 0.59  | 0.262 | 2.48E-16 | mDC_spleen |
| TP53BP1  | 7.17E-21 | 0.75230172 | 0.378 | 0.14  | 2.54E-16 | mDC_spleen |
| CYBA     | 7.20E-21 | 0.48494823 | 0.921 | 0.649 | 2.55E-16 | mDC_spleen |
| DARS1    | 7.53E-21 | 0.45697971 | 0.595 | 0.266 | 2.67E-16 | mDC_spleen |
| VKORC1L1 | 8.16E-21 | 0.49626238 | 0.36  | 0.128 | 2.89E-16 | mDC_spleen |
| PHAX     | 8.34E-21 | 0.82027799 | 0.299 | 0.095 | 2.96E-16 | mDC_spleen |
| EIPR1    | 8.44E-21 | 0.43876387 | 0.484 | 0.193 | 2.99E-16 | mDC_spleen |
| CKAP5    | 8.45E-21 | 0.93003434 | 0.267 | 0.08  | 2.99E-16 | mDC_spleen |
| IMMT     | 8.54E-21 | 0.63752548 | 0.347 | 0.122 | 3.03E-16 | mDC_spleen |
| TBC1D14  | 8.60E-21 | 0.50917967 | 0.317 | 0.106 | 3.05E-16 | mDC_spleen |
| USP1     | 8.69E-21 | 0.48069776 | 0.437 | 0.17  | 3.08E-16 | mDC_spleen |
| MRPL39   | 8.77E-21 | 0.52953749 | 0.37  | 0.131 | 3.11E-16 | mDC_spleen |
| TRRAP    | 8.79E-21 | 0.81573809 | 0.299 | 0.097 | 3.11E-16 | mDC_spleen |
| CRTC3    | 8.92E-21 | 0.38574153 | 0.368 | 0.131 | 3.16E-16 | mDC_spleen |
| NVL      | 9.21E-21 | 0.42497092 | 0.31  | 0.099 | 3.26E-16 | mDC_spleen |
| PHKB     | 9.67E-21 | 0.87110269 | 0.254 | 0.074 | 3.43E-16 | mDC_spleen |
| RALA     | 9.95E-21 | 1.21400891 | 0.839 | 0.537 | 3.53E-16 | mDC_spleen |
| ACSL4    | 1.00E-20 | 0.38536602 | 0.519 | 0.218 | 3.55E-16 | mDC_spleen |
| SLC12A6  | 1.02E-20 | 0.86482838 | 0.397 | 0.153 | 3.61E-16 | mDC_spleen |
| FAR1     | 1.03E-20 | 0.42032354 | 0.5   | 0.207 | 3.64E-16 | mDC_spleen |
| RPAP2    | 1.03E-20 | 0.95080046 | 0.317 | 0.107 | 3.65E-16 | mDC_spleen |
| PLEKHM2  | 1.05E-20 | 1.11970901 | 0.291 | 0.094 | 3.71E-16 | mDC_spleen |
| CNTRL    | 1.05E-20 | 0.47097063 | 0.489 | 0.204 | 3.73E-16 | mDC_spleen |
| NOL8     | 1.07E-20 | 0.77158757 | 0.328 | 0.111 | 3.79E-16 | mDC_spleen |
| KAT8     | 1.12E-20 | 0.8346398  | 0.278 | 0.083 | 3.98E-16 | mDC_spleen |
| MIER1    | 1.13E-20 | 0.53446379 | 0.601 | 0.272 | 3.99E-16 | mDC_spleen |
| BICRAL   | 1.23E-20 | 0.92592346 | 0.254 | 0.074 | 4.37E-16 | mDC_spleen |

|         |          |            |       |       |          |            |
|---------|----------|------------|-------|-------|----------|------------|
| PHF6    | 1.26E-20 | 0.51758713 | 0.526 | 0.226 | 4.46E-16 | mDC_spleen |
| SPRED2  | 1.29E-20 | 0.82473318 | 0.265 | 0.08  | 4.55E-16 | mDC_spleen |
| SBNO1   | 1.29E-20 | 0.51996259 | 0.389 | 0.148 | 4.59E-16 | mDC_spleen |
| KPNA1   | 1.33E-20 | 0.43893076 | 0.41  | 0.154 | 4.72E-16 | mDC_spleen |
| YPEL3   | 1.34E-20 | 0.56937255 | 0.357 | 0.127 | 4.73E-16 | mDC_spleen |
| ASCC1   | 1.41E-20 | 0.4359664  | 0.37  | 0.135 | 5.00E-16 | mDC_spleen |
| SLC10A7 | 1.44E-20 | 1.13202288 | 0.278 | 0.089 | 5.10E-16 | mDC_spleen |
| WDFY3   | 1.57E-20 | 0.73375746 | 0.333 | 0.117 | 5.55E-16 | mDC_spleen |
| RIPOR2  | 1.59E-20 | 0.67962533 | 0.685 | 0.374 | 5.63E-16 | mDC_spleen |
| NOLC1   | 1.69E-20 | 0.91459678 | 0.304 | 0.1   | 5.98E-16 | mDC_spleen |
| PHF3    | 1.70E-20 | 0.46523577 | 0.468 | 0.19  | 6.03E-16 | mDC_spleen |
| GOSR1   | 1.75E-20 | 0.71058156 | 0.31  | 0.101 | 6.19E-16 | mDC_spleen |
| BOD1L1  | 1.77E-20 | 0.53111593 | 0.405 | 0.153 | 6.27E-16 | mDC_spleen |
| CHKA    | 1.78E-20 | 0.59128124 | 0.37  | 0.137 | 6.29E-16 | mDC_spleen |
| NUB1    | 1.78E-20 | 0.9358176  | 0.399 | 0.154 | 6.32E-16 | mDC_spleen |
| ADI1    | 1.78E-20 | 0.57959664 | 0.362 | 0.129 | 6.32E-16 | mDC_spleen |
| MRPL17  | 1.85E-20 | 0.59319414 | 0.378 | 0.137 | 6.55E-16 | mDC_spleen |
| TTC1    | 1.86E-20 | 0.51543647 | 0.471 | 0.192 | 6.59E-16 | mDC_spleen |
| ZNF700  | 1.86E-20 | 0.64172411 | 0.328 | 0.114 | 6.60E-16 | mDC_spleen |
| PPP2R5C | 1.86E-20 | 0.4727045  | 0.69  | 0.328 | 6.61E-16 | mDC_spleen |
| CLEC16A | 1.87E-20 | 0.52345975 | 0.275 | 0.085 | 6.62E-16 | mDC_spleen |
| SMARCA4 | 1.91E-20 | 0.43483746 | 0.444 | 0.174 | 6.75E-16 | mDC_spleen |
| PIK3AP1 | 1.92E-20 | 0.18299673 | 0.735 | 0.377 | 6.81E-16 | mDC_spleen |
| CUL2    | 2.01E-20 | 0.37941829 | 0.365 | 0.131 | 7.14E-16 | mDC_spleen |
| PPIA    | 2.03E-20 | 0.442373   | 0.717 | 0.351 | 7.20E-16 | mDC_spleen |
| PSMD3   | 2.16E-20 | 0.75907732 | 0.267 | 0.079 | 7.65E-16 | mDC_spleen |
| KDM5A   | 2.16E-20 | 0.56520948 | 0.452 | 0.182 | 7.66E-16 | mDC_spleen |
| CDC27   | 2.30E-20 | 0.34387917 | 0.481 | 0.201 | 8.15E-16 | mDC_spleen |
| B2M     | 2.34E-20 | 0.41317372 | 0.979 | 0.963 | 8.30E-16 | mDC_spleen |
| TMEM245 | 2.42E-20 | 1.00682411 | 0.286 | 0.092 | 8.57E-16 | mDC_spleen |
| XPO7    | 2.44E-20 | 0.67062374 | 0.347 | 0.123 | 8.64E-16 | mDC_spleen |
| NARS1   | 2.47E-20 | 0.51142163 | 0.532 | 0.227 | 8.76E-16 | mDC_spleen |
| DYRK1A  | 2.55E-20 | 0.49735269 | 0.505 | 0.218 | 9.04E-16 | mDC_spleen |

|          |          |            |       |       |          |            |
|----------|----------|------------|-------|-------|----------|------------|
| HMGA1    | 2.59E-20 | 0.40530402 | 0.722 | 0.361 | 9.17E-16 | mDC_spleen |
| SHE      | 2.65E-20 | 0.37299673 | 0.399 | 0.147 | 9.40E-16 | mDC_spleen |
| TGFB1    | 2.75E-20 | 0.67252666 | 0.434 | 0.172 | 9.74E-16 | mDC_spleen |
| DIRAS2   | 2.76E-20 | 0.61282144 | 0.323 | 0.111 | 9.78E-16 | mDC_spleen |
| GPR155   | 2.81E-20 | 0.41522782 | 0.275 | 0.085 | 9.94E-16 | mDC_spleen |
| UCKL1    | 2.84E-20 | 0.58085016 | 0.344 | 0.121 | 1.01E-15 | mDC_spleen |
| PPME1    | 2.88E-20 | 0.74262845 | 0.265 | 0.08  | 1.02E-15 | mDC_spleen |
| SMG1     | 2.91E-20 | 0.26736462 | 0.484 | 0.201 | 1.03E-15 | mDC_spleen |
| IGF2BP3  | 2.93E-20 | 0.60645935 | 0.442 | 0.184 | 1.04E-15 | mDC_spleen |
| SSBP3    | 2.97E-20 | 0.48721285 | 0.405 | 0.157 | 1.05E-15 | mDC_spleen |
| MAGEH1   | 2.99E-20 | 0.61005256 | 0.317 | 0.106 | 1.06E-15 | mDC_spleen |
| AASDHPPT | 3.01E-20 | 0.66066625 | 0.339 | 0.119 | 1.07E-15 | mDC_spleen |
| MAPK8    | 3.11E-20 | 0.43750222 | 0.439 | 0.176 | 1.10E-15 | mDC_spleen |
| PLAA     | 3.14E-20 | 1.02096406 | 0.341 | 0.125 | 1.11E-15 | mDC_spleen |
| KIAA0100 | 3.17E-20 | 0.35543377 | 0.36  | 0.13  | 1.12E-15 | mDC_spleen |
| MMADHC   | 3.27E-20 | 0.56949591 | 0.317 | 0.106 | 1.16E-15 | mDC_spleen |
| NCOA4    | 3.31E-20 | 0.42538326 | 0.484 | 0.2   | 1.17E-15 | mDC_spleen |
| CNDP1    | 3.32E-20 | 0.39773107 | 0.402 | 0.148 | 1.18E-15 | mDC_spleen |
| SMAD3    | 3.50E-20 | 0.38849302 | 0.479 | 0.203 | 1.24E-15 | mDC_spleen |
| SENP2    | 3.50E-20 | 0.57765138 | 0.426 | 0.167 | 1.24E-15 | mDC_spleen |
| ASB3     | 3.94E-20 | 0.93040417 | 0.294 | 0.097 | 1.40E-15 | mDC_spleen |
| VPS26C   | 4.03E-20 | 0.61675842 | 0.384 | 0.142 | 1.43E-15 | mDC_spleen |
| UBASH3B  | 4.10E-20 | 0.13060504 | 0.479 | 0.2   | 1.45E-15 | mDC_spleen |
| NDEL1    | 4.11E-20 | 0.52392776 | 0.669 | 0.333 | 1.46E-15 | mDC_spleen |
| CTPS1    | 4.17E-20 | 0.84993512 | 0.336 | 0.118 | 1.48E-15 | mDC_spleen |
| CAPZA1   | 4.27E-20 | 0.42497388 | 0.831 | 0.467 | 1.51E-15 | mDC_spleen |
| RCHY1    | 4.39E-20 | 0.66296537 | 0.294 | 0.094 | 1.56E-15 | mDC_spleen |
| LMAN2    | 4.58E-20 | 0.52166351 | 0.675 | 0.323 | 1.62E-15 | mDC_spleen |
| FGD6     | 4.60E-20 | 1.09974857 | 0.267 | 0.084 | 1.63E-15 | mDC_spleen |
| ATXN2L   | 4.93E-20 | 0.55890287 | 0.28  | 0.089 | 1.75E-15 | mDC_spleen |
| ZNF22    | 4.98E-20 | 0.45655059 | 0.426 | 0.162 | 1.77E-15 | mDC_spleen |
| COQ4     | 5.06E-20 | 0.72685264 | 0.275 | 0.085 | 1.79E-15 | mDC_spleen |
| DNAJC24  | 5.37E-20 | 0.55363994 | 0.384 | 0.145 | 1.90E-15 | mDC_spleen |

|                   |          |            |       |       |          |            |
|-------------------|----------|------------|-------|-------|----------|------------|
| CYB5R4            | 5.39E-20 | 0.64895299 | 0.46  | 0.19  | 1.91E-15 | mDC_spleen |
| MAGI3             | 5.48E-20 | 0.77416775 | 0.37  | 0.143 | 1.94E-15 | mDC_spleen |
| PPP2R3C           | 5.59E-20 | 0.82489985 | 0.315 | 0.108 | 1.98E-15 | mDC_spleen |
| N4BP2L2           | 5.63E-20 | 0.34906907 | 0.664 | 0.312 | 1.99E-15 | mDC_spleen |
| WBP11             | 5.79E-20 | 0.49161964 | 0.524 | 0.221 | 2.05E-15 | mDC_spleen |
| UBE2D1            | 6.20E-20 | 0.51379927 | 0.659 | 0.314 | 2.20E-15 | mDC_spleen |
| BAZ2B             | 6.23E-20 | 0.44740585 | 0.566 | 0.261 | 2.21E-15 | mDC_spleen |
| ZC3H7A            | 6.25E-20 | 0.62718357 | 0.415 | 0.164 | 2.21E-15 | mDC_spleen |
| NDRG1             | 6.30E-20 | 0.46149572 | 0.529 | 0.234 | 2.23E-15 | mDC_spleen |
| G3BP1             | 6.42E-20 | 0.44502464 | 0.73  | 0.368 | 2.27E-15 | mDC_spleen |
| UBR1              | 6.50E-20 | 0.38887561 | 0.405 | 0.156 | 2.30E-15 | mDC_spleen |
| JAGN1             | 6.54E-20 | 0.97933833 | 0.272 | 0.084 | 2.32E-15 | mDC_spleen |
| OPA1              | 6.63E-20 | 0.4013801  | 0.548 | 0.241 | 2.35E-15 | mDC_spleen |
| CAB39             | 6.64E-20 | 0.24786313 | 0.632 | 0.285 | 2.35E-15 | mDC_spleen |
| ADRB1             | 6.71E-20 | 0.77045667 | 0.251 | 0.074 | 2.38E-15 | mDC_spleen |
| RSRC2             | 6.86E-20 | 0.3748305  | 0.757 | 0.365 | 2.43E-15 | mDC_spleen |
| IST1              | 6.96E-20 | 0.48963194 | 0.563 | 0.249 | 2.47E-15 | mDC_spleen |
| SYAP1             | 6.98E-20 | 0.57193892 | 0.553 | 0.251 | 2.47E-15 | mDC_spleen |
| ENTPD4            | 7.04E-20 | 0.5956949  | 0.384 | 0.143 | 2.50E-15 | mDC_spleen |
| PRMT3             | 7.18E-20 | 0.98347693 | 0.323 | 0.115 | 2.54E-15 | mDC_spleen |
| RILPL2            | 7.52E-20 | 0.54135514 | 0.712 | 0.365 | 2.66E-15 | mDC_spleen |
| GINM1             | 7.52E-20 | 0.60440386 | 0.378 | 0.142 | 2.66E-15 | mDC_spleen |
| FAM214A           | 7.79E-20 | 0.83567104 | 0.286 | 0.094 | 2.76E-15 | mDC_spleen |
| TBK1              | 8.11E-20 | 0.53011291 | 0.294 | 0.096 | 2.87E-15 | mDC_spleen |
| ENSMUG00000001894 | 8.14E-20 | 0.54003337 | 0.479 | 0.201 | 2.88E-15 | mDC_spleen |
| RBM23             | 8.57E-20 | 0.53352335 | 0.421 | 0.167 | 3.04E-15 | mDC_spleen |
| NCBP1             | 8.62E-20 | 0.80808251 | 0.283 | 0.091 | 3.05E-15 | mDC_spleen |
| RANBP9            | 8.85E-20 | 0.54565833 | 0.397 | 0.153 | 3.14E-15 | mDC_spleen |
| TOP2B             | 9.15E-20 | 0.36050034 | 0.516 | 0.221 | 3.24E-15 | mDC_spleen |
| LIMD1             | 9.27E-20 | 0.84247949 | 0.336 | 0.12  | 3.28E-15 | mDC_spleen |
| UBA2              | 9.44E-20 | 0.3744875  | 0.46  | 0.186 | 3.35E-15 | mDC_spleen |
| TGFB1             | 9.61E-20 | 0.32148066 | 0.553 | 0.246 | 3.40E-15 | mDC_spleen |
| PRKN              | 9.72E-20 | 0.43104915 | 0.317 | 0.111 | 3.44E-15 | mDC_spleen |

|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| KATNA1             | 9.82E-20 | 0.57427247 | 0.397 | 0.154 | 3.48E-15 | mDC_spleen |
| YLPM1              | 9.99E-20 | 0.63854253 | 0.307 | 0.103 | 3.54E-15 | mDC_spleen |
| IFNAR1             | 1.00E-19 | 0.3765238  | 0.513 | 0.218 | 3.55E-15 | mDC_spleen |
| HNRNPR             | 1.01E-19 | 0.44473909 | 0.651 | 0.312 | 3.59E-15 | mDC_spleen |
| ADAM9              | 1.03E-19 | 0.88412395 | 0.331 | 0.117 | 3.64E-15 | mDC_spleen |
| ACTR2              | 1.04E-19 | 0.45788752 | 0.955 | 0.683 | 3.67E-15 | mDC_spleen |
| PPID               | 1.04E-19 | 0.81381252 | 0.323 | 0.113 | 3.70E-15 | mDC_spleen |
| ATP6V0A1           | 1.05E-19 | 0.36828209 | 0.466 | 0.196 | 3.71E-15 | mDC_spleen |
| DCAF1              | 1.11E-19 | 0.53004909 | 0.392 | 0.151 | 3.95E-15 | mDC_spleen |
| PKNOX1             | 1.12E-19 | 0.3744863  | 0.278 | 0.087 | 3.96E-15 | mDC_spleen |
| KIF1B              | 1.14E-19 | 1.01200922 | 0.331 | 0.12  | 4.06E-15 | mDC_spleen |
| ENSMMUG00000063859 | 1.15E-19 | 0.45789526 | 0.352 | 0.127 | 4.06E-15 | mDC_spleen |
| SF3B3              | 1.15E-19 | 0.57299102 | 0.368 | 0.138 | 4.09E-15 | mDC_spleen |
| STK25              | 1.17E-19 | 0.943434   | 0.257 | 0.077 | 4.15E-15 | mDC_spleen |
| WDR33              | 1.18E-19 | 0.26713002 | 0.563 | 0.24  | 4.18E-15 | mDC_spleen |
| GFPT1              | 1.29E-19 | 0.8463699  | 0.257 | 0.077 | 4.56E-15 | mDC_spleen |
| DMTF1              | 1.31E-19 | 0.295203   | 0.373 | 0.139 | 4.62E-15 | mDC_spleen |
| RARS2              | 1.31E-19 | 0.48063514 | 0.296 | 0.097 | 4.65E-15 | mDC_spleen |
| BLVRA              | 1.37E-19 | 0.72969205 | 0.278 | 0.088 | 4.84E-15 | mDC_spleen |
| UCK2               | 1.40E-19 | 1.35493563 | 0.286 | 0.096 | 4.95E-15 | mDC_spleen |
| CPEB4              | 1.41E-19 | 0.56196418 | 0.278 | 0.089 | 5.00E-15 | mDC_spleen |
| APMAP              | 1.42E-19 | 0.61714613 | 0.341 | 0.122 | 5.04E-15 | mDC_spleen |
| ITFG2              | 1.44E-19 | 0.45342622 | 0.384 | 0.142 | 5.12E-15 | mDC_spleen |
| RNF2               | 1.46E-19 | 0.55512651 | 0.442 | 0.179 | 5.17E-15 | mDC_spleen |
| TMC7               | 1.47E-19 | 0.82158904 | 0.278 | 0.09  | 5.19E-15 | mDC_spleen |
| ARIH2              | 1.47E-19 | 0.39317586 | 0.452 | 0.183 | 5.20E-15 | mDC_spleen |
| CCNI               | 1.47E-19 | 0.49545297 | 0.857 | 0.524 | 5.21E-15 | mDC_spleen |
| EFCAB2             | 1.60E-19 | 0.53774682 | 0.505 | 0.221 | 5.66E-15 | mDC_spleen |
| HNRNPA2B1          | 1.62E-19 | 0.44003698 | 0.966 | 0.793 | 5.75E-15 | mDC_spleen |
| UPF3B              | 1.64E-19 | 0.56869256 | 0.317 | 0.108 | 5.82E-15 | mDC_spleen |
| ACSL1              | 1.64E-19 | 0.59862753 | 0.294 | 0.099 | 5.82E-15 | mDC_spleen |
| MRPL18             | 1.66E-19 | 0.47411693 | 0.392 | 0.146 | 5.88E-15 | mDC_spleen |
| AP3B1              | 1.74E-19 | 0.32271609 | 0.664 | 0.309 | 6.18E-15 | mDC_spleen |

|                     |          |            |       |       |          |            |
|---------------------|----------|------------|-------|-------|----------|------------|
| CCT4                | 1.77E-19 | 0.52675434 | 0.714 | 0.35  | 6.27E-15 | mDC_spleen |
| RAB24               | 1.78E-19 | 0.47514355 | 0.389 | 0.143 | 6.32E-15 | mDC_spleen |
| SNX20               | 1.92E-19 | 0.45500551 | 0.288 | 0.093 | 6.82E-15 | mDC_spleen |
| STX4                | 1.94E-19 | 0.50325409 | 0.251 | 0.074 | 6.89E-15 | mDC_spleen |
| ENSMMUG00000008346  | 1.95E-19 | 0.45654073 | 0.429 | 0.171 | 6.91E-15 | mDC_spleen |
| DOCK7               | 1.98E-19 | 0.63222296 | 0.283 | 0.093 | 7.02E-15 | mDC_spleen |
| EIF4H               | 2.10E-19 | 0.36993839 | 0.725 | 0.348 | 7.43E-15 | mDC_spleen |
| FAM53B              | 2.12E-19 | 0.74573632 | 0.315 | 0.111 | 7.51E-15 | mDC_spleen |
| DNAJC7              | 2.17E-19 | 0.33390299 | 0.516 | 0.216 | 7.70E-15 | mDC_spleen |
| SMC1A               | 2.32E-19 | 0.43558547 | 0.402 | 0.156 | 8.21E-15 | mDC_spleen |
| CAT                 | 2.33E-19 | 0.60027974 | 0.672 | 0.335 | 8.25E-15 | mDC_spleen |
| FANCC               | 2.38E-19 | 0.57065527 | 0.27  | 0.086 | 8.44E-15 | mDC_spleen |
| DDHD2               | 2.38E-19 | 0.61705116 | 0.291 | 0.097 | 8.45E-15 | mDC_spleen |
| IREB2               | 2.53E-19 | 0.63812279 | 0.503 | 0.221 | 8.97E-15 | mDC_spleen |
| CSNK1A1             | 2.56E-19 | 0.41252136 | 0.854 | 0.484 | 9.08E-15 | mDC_spleen |
| RBM19               | 2.67E-19 | 0.38647517 | 0.307 | 0.103 | 9.46E-15 | mDC_spleen |
| GAB2                | 2.72E-19 | 0.35479137 | 0.765 | 0.413 | 9.65E-15 | mDC_spleen |
| NEPRO               | 2.73E-19 | 0.7562487  | 0.278 | 0.089 | 9.67E-15 | mDC_spleen |
| MYO1F               | 2.75E-19 | 0.45861448 | 0.701 | 0.354 | 9.74E-15 | mDC_spleen |
| ENSMMUG000000016898 | 2.80E-19 | 0.59084216 | 0.706 | 0.363 | 9.93E-15 | mDC_spleen |
| NT5C2               | 2.86E-19 | 0.42614984 | 0.466 | 0.195 | 1.01E-14 | mDC_spleen |
| CITED1              | 2.88E-19 | 0.85039494 | 0.339 | 0.124 | 1.02E-14 | mDC_spleen |
| DAZAP2              | 3.04E-19 | 0.46374644 | 0.704 | 0.341 | 1.08E-14 | mDC_spleen |
| CTNBL1              | 3.26E-19 | 0.34874615 | 0.516 | 0.219 | 1.16E-14 | mDC_spleen |
| R3HCC1L             | 3.33E-19 | 0.75808497 | 0.251 | 0.077 | 1.18E-14 | mDC_spleen |
| SAP30BP             | 3.41E-19 | 0.49196283 | 0.434 | 0.173 | 1.21E-14 | mDC_spleen |
| SLU7                | 3.43E-19 | 0.39245331 | 0.349 | 0.127 | 1.21E-14 | mDC_spleen |
| INO80D              | 3.47E-19 | 0.63096806 | 0.365 | 0.139 | 1.23E-14 | mDC_spleen |
| PCF11               | 3.50E-19 | 0.17220524 | 0.489 | 0.201 | 1.24E-14 | mDC_spleen |
| AP3D1               | 3.63E-19 | 0.60167731 | 0.288 | 0.094 | 1.29E-14 | mDC_spleen |
| ZC3H11A             | 3.67E-19 | 0.21481958 | 0.548 | 0.243 | 1.30E-14 | mDC_spleen |
| RBM39               | 3.70E-19 | 0.50373228 | 0.937 | 0.651 | 1.31E-14 | mDC_spleen |
| BDP1                | 3.74E-19 | 0.3137197  | 0.5   | 0.215 | 1.33E-14 | mDC_spleen |

|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| RPS11              | 3.77E-19 | 0.30644693 | 0.968 | 0.952 | 1.34E-14 | mDC_spleen |
| ENSMMUG00000058325 | 3.82E-19 | 0.59032105 | 0.952 | 0.835 | 1.36E-14 | mDC_spleen |
| STX16              | 4.09E-19 | 0.7828542  | 0.304 | 0.106 | 1.45E-14 | mDC_spleen |
| HBS1L              | 4.14E-19 | 0.57763471 | 0.553 | 0.249 | 1.47E-14 | mDC_spleen |
| SELENOI            | 4.25E-19 | 0.43133755 | 0.32  | 0.114 | 1.50E-14 | mDC_spleen |
| FAM168B            | 4.29E-19 | 0.63811835 | 0.368 | 0.139 | 1.52E-14 | mDC_spleen |
| ATP6AP1            | 4.48E-19 | 0.43486921 | 0.381 | 0.142 | 1.59E-14 | mDC_spleen |
| NGRN               | 4.53E-19 | 0.82933689 | 0.27  | 0.086 | 1.60E-14 | mDC_spleen |
| RAC1               | 4.64E-19 | 0.47653663 | 0.894 | 0.595 | 1.64E-14 | mDC_spleen |
| SDE2               | 4.65E-19 | 0.70807227 | 0.27  | 0.086 | 1.65E-14 | mDC_spleen |
| KHDRBS1            | 4.66E-19 | 0.38595665 | 0.571 | 0.259 | 1.65E-14 | mDC_spleen |
| H1-3               | 4.71E-19 | 0.69208904 | 0.418 | 0.173 | 1.67E-14 | mDC_spleen |
| DOP1B              | 4.84E-19 | 0.81534941 | 0.299 | 0.102 | 1.71E-14 | mDC_spleen |
| ENSMMUG00000053089 | 5.12E-19 | 0.35761025 | 0.349 | 0.131 | 1.81E-14 | mDC_spleen |
| TXNDC11            | 5.13E-19 | 0.68276561 | 0.413 | 0.166 | 1.82E-14 | mDC_spleen |
| STK17A             | 5.15E-19 | 0.28066665 | 0.571 | 0.264 | 1.82E-14 | mDC_spleen |
| AP1G1              | 5.23E-19 | 0.24305486 | 0.418 | 0.166 | 1.85E-14 | mDC_spleen |
| BICD2              | 5.41E-19 | 0.63604435 | 0.254 | 0.077 | 1.92E-14 | mDC_spleen |
| ATP5PB             | 5.44E-19 | 0.45657362 | 0.738 | 0.379 | 1.93E-14 | mDC_spleen |
| GNPDA2             | 5.89E-19 | 0.79928434 | 0.254 | 0.078 | 2.09E-14 | mDC_spleen |
| ZCCHC2             | 6.00E-19 | 0.91679913 | 0.286 | 0.097 | 2.12E-14 | mDC_spleen |
| CREBRF             | 6.00E-19 | 0.61052198 | 0.405 | 0.16  | 2.12E-14 | mDC_spleen |
| DICER1             | 6.14E-19 | 1.0036263  | 0.259 | 0.082 | 2.17E-14 | mDC_spleen |
| PPM1D              | 6.17E-19 | 0.78760916 | 0.267 | 0.087 | 2.19E-14 | mDC_spleen |
| EIF4G3             | 6.30E-19 | 0.40737775 | 0.434 | 0.182 | 2.23E-14 | mDC_spleen |
| MSH3               | 6.34E-19 | 1.00400437 | 0.267 | 0.087 | 2.25E-14 | mDC_spleen |
| GTF2H1             | 6.36E-19 | 0.46610571 | 0.341 | 0.123 | 2.25E-14 | mDC_spleen |
| EPRS1              | 6.48E-19 | 0.59582995 | 0.452 | 0.193 | 2.30E-14 | mDC_spleen |
| INTS6              | 6.65E-19 | 0.19775512 | 0.471 | 0.198 | 2.35E-14 | mDC_spleen |
| MTPN               | 6.80E-19 | 0.4737947  | 0.78  | 0.422 | 2.41E-14 | mDC_spleen |
| CUL3               | 7.15E-19 | 0.46966309 | 0.563 | 0.25  | 2.53E-14 | mDC_spleen |
| REPS1              | 7.68E-19 | 0.97741435 | 0.323 | 0.117 | 2.72E-14 | mDC_spleen |
| HDAC3              | 7.79E-19 | 0.75749475 | 0.265 | 0.083 | 2.76E-14 | mDC_spleen |



|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| RBL2               | 8.13E-19 | 0.72519615 | 0.275 | 0.089 | 2.88E-14 | mDC_spleen |
| PHF8               | 8.22E-19 | 0.87599725 | 0.275 | 0.09  | 2.91E-14 | mDC_spleen |
| BRWD3              | 8.46E-19 | 0.53913225 | 0.312 | 0.11  | 3.00E-14 | mDC_spleen |
| ENSMMUG00000052132 | 8.57E-19 | 0.75135702 | 0.365 | 0.143 | 3.03E-14 | mDC_spleen |
| TMOD3              | 8.76E-19 | 0.36786745 | 0.72  | 0.351 | 3.10E-14 | mDC_spleen |
| NAPG               | 8.80E-19 | 0.844887   | 0.267 | 0.086 | 3.12E-14 | mDC_spleen |
| MAX                | 8.90E-19 | 0.39840666 | 0.574 | 0.257 | 3.15E-14 | mDC_spleen |
| GNL3               | 9.16E-19 | 0.50762318 | 0.386 | 0.15  | 3.25E-14 | mDC_spleen |
| IDE                | 9.32E-19 | 0.61556232 | 0.286 | 0.095 | 3.30E-14 | mDC_spleen |
| PDE8A              | 9.42E-19 | 0.77379005 | 0.27  | 0.089 | 3.34E-14 | mDC_spleen |
| CCDC12             | 9.57E-19 | 0.42704238 | 0.608 | 0.29  | 3.39E-14 | mDC_spleen |
| ATP6AP2            | 1.00E-18 | 0.52198351 | 0.68  | 0.338 | 3.56E-14 | mDC_spleen |
| FGD3               | 1.01E-18 | 0.42804964 | 0.41  | 0.161 | 3.57E-14 | mDC_spleen |
| CEP57              | 1.01E-18 | 0.42939854 | 0.349 | 0.129 | 3.59E-14 | mDC_spleen |
| ZCCHC17            | 1.04E-18 | 0.19583375 | 0.37  | 0.139 | 3.70E-14 | mDC_spleen |
| IMMP2L             | 1.07E-18 | 0.43285825 | 0.519 | 0.236 | 3.79E-14 | mDC_spleen |
| PRIM2              | 1.09E-18 | 0.95107724 | 0.291 | 0.101 | 3.88E-14 | mDC_spleen |
| TRIM37             | 1.12E-18 | 0.9570127  | 0.286 | 0.097 | 3.98E-14 | mDC_spleen |
| STXBP5             | 1.14E-18 | 0.85584749 | 0.325 | 0.121 | 4.05E-14 | mDC_spleen |
| RELL1              | 1.16E-18 | 1.14926123 | 0.341 | 0.131 | 4.09E-14 | mDC_spleen |
| SCAF11             | 1.16E-18 | 0.47805087 | 0.778 | 0.404 | 4.10E-14 | mDC_spleen |
| N4BP2              | 1.19E-18 | 0.50104569 | 0.27  | 0.087 | 4.21E-14 | mDC_spleen |
| IPO7               | 1.23E-18 | 0.29857573 | 0.511 | 0.224 | 4.36E-14 | mDC_spleen |
| RAPGEF2            | 1.25E-18 | 0.59133895 | 0.529 | 0.24  | 4.41E-14 | mDC_spleen |
| KRCC1              | 1.28E-18 | 0.68873089 | 0.254 | 0.079 | 4.52E-14 | mDC_spleen |
| GNB2               | 1.31E-18 | 0.37912124 | 0.783 | 0.415 | 4.64E-14 | mDC_spleen |
| TET2               | 1.32E-18 | 0.17811105 | 0.675 | 0.322 | 4.66E-14 | mDC_spleen |
| CCNG1              | 1.39E-18 | 0.43058395 | 0.566 | 0.256 | 4.91E-14 | mDC_spleen |
| ENSMMUG00000021539 | 1.39E-18 | 0.65251252 | 0.315 | 0.113 | 4.94E-14 | mDC_spleen |
| ENSMMUG00000000350 | 1.47E-18 | 0.58222599 | 0.27  | 0.088 | 5.21E-14 | mDC_spleen |
| ST7L               | 1.50E-18 | 0.63887868 | 0.302 | 0.107 | 5.32E-14 | mDC_spleen |
| EIF4ENIF1          | 1.53E-18 | 0.40170463 | 0.283 | 0.095 | 5.41E-14 | mDC_spleen |
| CNIH1              | 1.54E-18 | 0.42465792 | 0.405 | 0.159 | 5.46E-14 | mDC_spleen |

|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| ENSMMUG00000054743 | 1.55E-18 | 0.64687785 | 0.296 | 0.103 | 5.48E-14 | mDC_spleen |
| IBTK               | 1.62E-18 | 0.52600891 | 0.37  | 0.141 | 5.74E-14 | mDC_spleen |
| ENSMMUG00000019376 | 1.67E-18 | 0.56412642 | 0.275 | 0.089 | 5.93E-14 | mDC_spleen |
| BUB3               | 1.70E-18 | 0.4460677  | 0.36  | 0.133 | 6.03E-14 | mDC_spleen |
| SEC14L1            | 1.71E-18 | 0.25840575 | 0.545 | 0.241 | 6.07E-14 | mDC_spleen |
| MZT1               | 1.75E-18 | 0.40456603 | 0.317 | 0.108 | 6.19E-14 | mDC_spleen |
| FBXO33             | 1.75E-18 | 0.76089747 | 0.373 | 0.145 | 6.20E-14 | mDC_spleen |
| PPP1R10            | 1.80E-18 | 0.35562223 | 0.651 | 0.31  | 6.38E-14 | mDC_spleen |
| RABL6              | 1.83E-18 | 0.53644157 | 0.328 | 0.119 | 6.49E-14 | mDC_spleen |
| DENR               | 1.84E-18 | 0.37166334 | 0.524 | 0.227 | 6.52E-14 | mDC_spleen |
| MYH9               | 1.85E-18 | 0.40568504 | 0.836 | 0.444 | 6.57E-14 | mDC_spleen |
| HIST1H2BK          | 2.03E-18 | 0.4143271  | 0.357 | 0.134 | 7.20E-14 | mDC_spleen |
| NAF1               | 2.06E-18 | 0.97622284 | 0.304 | 0.108 | 7.31E-14 | mDC_spleen |
| UGP2               | 2.13E-18 | 0.47563011 | 0.352 | 0.13  | 7.55E-14 | mDC_spleen |
| TXNDC15            | 2.16E-18 | 0.48192079 | 0.262 | 0.083 | 7.64E-14 | mDC_spleen |
| KPNA4              | 2.16E-18 | 0.182529   | 0.429 | 0.173 | 7.66E-14 | mDC_spleen |
| CHCHD3             | 2.18E-18 | 0.44667418 | 0.624 | 0.297 | 7.71E-14 | mDC_spleen |
| ACSL5              | 2.21E-18 | 0.62418242 | 0.262 | 0.082 | 7.82E-14 | mDC_spleen |
| TPR                | 2.22E-18 | 0.33831138 | 0.569 | 0.263 | 7.86E-14 | mDC_spleen |
| BLMH               | 2.23E-18 | 1.30352071 | 0.286 | 0.097 | 7.91E-14 | mDC_spleen |
| KLF11              | 2.27E-18 | 1.03422492 | 0.257 | 0.083 | 8.03E-14 | mDC_spleen |
| IGFBP6             | 2.27E-18 | 0.77884207 | 0.257 | 0.081 | 8.05E-14 | mDC_spleen |
| ANKRD12            | 2.29E-18 | 0.38486695 | 0.783 | 0.418 | 8.10E-14 | mDC_spleen |
| CRYL1              | 2.32E-18 | 0.50632218 | 0.407 | 0.162 | 8.21E-14 | mDC_spleen |
| RNASEH1            | 2.43E-18 | 0.5889238  | 0.352 | 0.131 | 8.60E-14 | mDC_spleen |
| DCUN1D1            | 2.62E-18 | 0.78379301 | 0.328 | 0.121 | 9.29E-14 | mDC_spleen |
| ATP2C1             | 2.64E-18 | 0.63198067 | 0.365 | 0.142 | 9.36E-14 | mDC_spleen |
| SNW1               | 2.67E-18 | 0.42266073 | 0.59  | 0.268 | 9.47E-14 | mDC_spleen |
| MORC3              | 2.74E-18 | 0.35305071 | 0.503 | 0.215 | 9.70E-14 | mDC_spleen |
| INTS8              | 2.76E-18 | 1.00311434 | 0.251 | 0.08  | 9.77E-14 | mDC_spleen |
| TMEM59L            | 3.14E-18 | 0.36500069 | 0.64  | 0.297 | 1.11E-13 | mDC_spleen |
| ATP10A             | 3.15E-18 | 0.66624484 | 0.415 | 0.174 | 1.12E-13 | mDC_spleen |
| HAGH               | 3.29E-18 | 0.55063157 | 0.288 | 0.096 | 1.17E-13 | mDC_spleen |

|          |          |            |       |       |          |            |
|----------|----------|------------|-------|-------|----------|------------|
| FAM118A  | 3.32E-18 | 0.18708128 | 0.325 | 0.117 | 1.18E-13 | mDC_spleen |
| SLC25A11 | 3.42E-18 | 0.59887493 | 0.317 | 0.111 | 1.21E-13 | mDC_spleen |
| PEX14    | 3.44E-18 | 0.8106707  | 0.262 | 0.086 | 1.22E-13 | mDC_spleen |
| KANSL1L  | 3.44E-18 | 0.46713315 | 0.317 | 0.114 | 1.22E-13 | mDC_spleen |
| ADIPOR1  | 3.48E-18 | 0.53938654 | 0.415 | 0.172 | 1.23E-13 | mDC_spleen |
| PDZD8    | 3.58E-18 | 0.35824316 | 0.423 | 0.176 | 1.27E-13 | mDC_spleen |
| MNAT1    | 3.63E-18 | 0.76321322 | 0.437 | 0.191 | 1.28E-13 | mDC_spleen |
| VPS39    | 3.72E-18 | 0.61769016 | 0.331 | 0.123 | 1.32E-13 | mDC_spleen |
| KBTBD2   | 3.81E-18 | 0.56133456 | 0.368 | 0.142 | 1.35E-13 | mDC_spleen |
| REL      | 3.91E-18 | 0.50670286 | 0.873 | 0.607 | 1.38E-13 | mDC_spleen |
| METTL21A | 3.95E-18 | 0.48392361 | 0.302 | 0.105 | 1.40E-13 | mDC_spleen |
| HIRA     | 4.02E-18 | 0.3219605  | 0.365 | 0.142 | 1.42E-13 | mDC_spleen |
| DDX27    | 4.17E-18 | 0.62328103 | 0.365 | 0.142 | 1.48E-13 | mDC_spleen |
| WDFY1    | 4.19E-18 | 0.78991707 | 0.28  | 0.097 | 1.48E-13 | mDC_spleen |
| STX18    | 4.26E-18 | 0.51648473 | 0.471 | 0.202 | 1.51E-13 | mDC_spleen |
| RUVBL2   | 4.34E-18 | 0.63357103 | 0.254 | 0.078 | 1.54E-13 | mDC_spleen |
| FRS2     | 4.51E-18 | 0.74769606 | 0.28  | 0.094 | 1.60E-13 | mDC_spleen |
| AKAP8L   | 4.52E-18 | 0.5034509  | 0.278 | 0.093 | 1.60E-13 | mDC_spleen |
| DBNL     | 4.54E-18 | 0.38615029 | 0.833 | 0.481 | 1.61E-13 | mDC_spleen |
| FAF2     | 4.55E-18 | 0.55640513 | 0.286 | 0.099 | 1.61E-13 | mDC_spleen |
| ATP8A1   | 4.56E-18 | 0.75510467 | 0.32  | 0.119 | 1.62E-13 | mDC_spleen |
| GRIPAP1  | 4.58E-18 | 0.28524205 | 0.325 | 0.119 | 1.62E-13 | mDC_spleen |
| SF3A1    | 4.76E-18 | 0.57234394 | 0.349 | 0.134 | 1.69E-13 | mDC_spleen |
| BACH1    | 4.76E-18 | 0.43922665 | 0.415 | 0.172 | 1.69E-13 | mDC_spleen |
| CCDC90B  | 4.83E-18 | 0.4097195  | 0.431 | 0.18  | 1.71E-13 | mDC_spleen |
| BCL2     | 4.97E-18 | 0.23680696 | 0.397 | 0.162 | 1.76E-13 | mDC_spleen |
| SHTN1    | 5.04E-18 | 0.56940671 | 0.653 | 0.354 | 1.79E-13 | mDC_spleen |
| TRAPPC9  | 5.23E-18 | 0.4244621  | 0.357 | 0.14  | 1.85E-13 | mDC_spleen |
| MTMR14   | 5.36E-18 | 0.23984    | 0.339 | 0.125 | 1.90E-13 | mDC_spleen |
| MED15    | 5.39E-18 | 0.35219893 | 0.373 | 0.145 | 1.91E-13 | mDC_spleen |
| MGME1    | 5.55E-18 | 0.73993812 | 0.275 | 0.093 | 1.97E-13 | mDC_spleen |
| USP47    | 5.77E-18 | 0.42928552 | 0.519 | 0.232 | 2.04E-13 | mDC_spleen |
| PIGA     | 5.82E-18 | 0.58982858 | 0.259 | 0.085 | 2.06E-13 | mDC_spleen |

|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| NEMF               | 6.05E-18 | 0.33660449 | 0.503 | 0.22  | 2.14E-13 | mDC_spleen |
| HSP90AB1           | 6.13E-18 | 0.48951761 | 0.966 | 0.83  | 2.17E-13 | mDC_spleen |
| RAP1B              | 6.16E-18 | 0.52810887 | 0.899 | 0.576 | 2.18E-13 | mDC_spleen |
| SESTD1             | 6.17E-18 | 0.5130307  | 0.272 | 0.092 | 2.18E-13 | mDC_spleen |
| MRE11              | 6.17E-18 | 0.72015385 | 0.28  | 0.095 | 2.19E-13 | mDC_spleen |
| ATP6V0D1           | 6.23E-18 | 0.28579112 | 0.606 | 0.275 | 2.21E-13 | mDC_spleen |
| TXNL1              | 6.47E-18 | 0.48679144 | 0.69  | 0.348 | 2.29E-13 | mDC_spleen |
| TGOLN2             | 6.60E-18 | 0.57767495 | 0.354 | 0.138 | 2.34E-13 | mDC_spleen |
| DOCK4              | 6.71E-18 | 0.42928857 | 0.381 | 0.156 | 2.38E-13 | mDC_spleen |
| ENSMMUG00000063979 | 6.75E-18 | 0.76645395 | 0.315 | 0.114 | 2.39E-13 | mDC_spleen |
| VIRMA              | 6.81E-18 | 0.51513074 | 0.27  | 0.089 | 2.41E-13 | mDC_spleen |
| PPFIA1             | 6.84E-18 | 0.63837358 | 0.254 | 0.082 | 2.43E-13 | mDC_spleen |
| FCHO1              | 7.55E-18 | 0.56586493 | 0.259 | 0.084 | 2.67E-13 | mDC_spleen |
| RPL31              | 7.56E-18 | 0.50053839 | 0.854 | 0.557 | 2.68E-13 | mDC_spleen |
| ABCA1              | 7.60E-18 | 0.38071594 | 0.251 | 0.081 | 2.69E-13 | mDC_spleen |
| MILR1              | 7.75E-18 | 0.60351402 | 0.259 | 0.083 | 2.74E-13 | mDC_spleen |
| WDR82              | 7.86E-18 | 0.42093858 | 0.407 | 0.165 | 2.78E-13 | mDC_spleen |
| VPS26A             | 7.91E-18 | 0.36852946 | 0.497 | 0.216 | 2.80E-13 | mDC_spleen |
| POLR2B             | 8.02E-18 | 0.68069204 | 0.288 | 0.098 | 2.84E-13 | mDC_spleen |
| IMPA2              | 8.16E-18 | 0.55235402 | 0.265 | 0.085 | 2.89E-13 | mDC_spleen |
| CDKN1B             | 8.21E-18 | 0.27462354 | 0.481 | 0.213 | 2.91E-13 | mDC_spleen |
| DHX36              | 8.22E-18 | 0.11020668 | 0.529 | 0.234 | 2.91E-13 | mDC_spleen |
| STAU1              | 8.42E-18 | 0.26165667 | 0.54  | 0.238 | 2.98E-13 | mDC_spleen |
| PPP2R5A            | 8.42E-18 | 0.75593104 | 0.352 | 0.137 | 2.98E-13 | mDC_spleen |
| KIDINS220          | 8.56E-18 | 0.56182963 | 0.399 | 0.16  | 3.03E-13 | mDC_spleen |
| XRCC4              | 8.61E-18 | 0.57596758 | 0.399 | 0.165 | 3.05E-13 | mDC_spleen |
| SUPT3H             | 9.00E-18 | 0.56525711 | 0.45  | 0.198 | 3.19E-13 | mDC_spleen |
| ENSMMUG00000058634 | 9.02E-18 | 0.29897839 | 0.299 | 0.104 | 3.20E-13 | mDC_spleen |
| PKN1               | 9.17E-18 | 0.43107385 | 0.357 | 0.139 | 3.25E-13 | mDC_spleen |
| HIVEP1             | 9.50E-18 | 0.11960526 | 0.497 | 0.219 | 3.37E-13 | mDC_spleen |
| ENSMMUG00000020751 | 9.77E-18 | 0.15063217 | 0.492 | 0.208 | 3.46E-13 | mDC_spleen |
| MAPK6              | 1.03E-17 | 0.76743771 | 0.315 | 0.118 | 3.64E-13 | mDC_spleen |
| ENSMMUG00000009425 | 1.04E-17 | 0.34529925 | 0.463 | 0.196 | 3.67E-13 | mDC_spleen |

|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| TAX1BP1            | 1.06E-17 | 0.3829552  | 0.69  | 0.331 | 3.75E-13 | mDC_spleen |
| SRPRA              | 1.09E-17 | 0.38840301 | 0.323 | 0.117 | 3.85E-13 | mDC_spleen |
| NOC3L              | 1.10E-17 | 0.51568459 | 0.357 | 0.139 | 3.89E-13 | mDC_spleen |
| TAF5L              | 1.12E-17 | 0.89453604 | 0.267 | 0.09  | 3.98E-13 | mDC_spleen |
| P4HB               | 1.17E-17 | 0.40156297 | 0.611 | 0.287 | 4.14E-13 | mDC_spleen |
| CPLANE1            | 1.18E-17 | 0.68911196 | 0.283 | 0.097 | 4.17E-13 | mDC_spleen |
| ABCF1              | 1.19E-17 | 0.24624978 | 0.595 | 0.272 | 4.23E-13 | mDC_spleen |
| UBR5               | 1.26E-17 | 0.28463441 | 0.603 | 0.287 | 4.45E-13 | mDC_spleen |
| MRPL42             | 1.29E-17 | 0.33982007 | 0.487 | 0.204 | 4.59E-13 | mDC_spleen |
| BCLAF1             | 1.31E-17 | 0.42732387 | 0.733 | 0.376 | 4.64E-13 | mDC_spleen |
| ZFP36L1            | 1.34E-17 | 0.50784675 | 0.831 | 0.508 | 4.74E-13 | mDC_spleen |
| UBE2I              | 1.36E-17 | 0.44610842 | 0.738 | 0.38  | 4.82E-13 | mDC_spleen |
| CYFIP1             | 1.38E-17 | 0.23917266 | 0.471 | 0.2   | 4.89E-13 | mDC_spleen |
| NOL10              | 1.53E-17 | 0.34926877 | 0.339 | 0.126 | 5.41E-13 | mDC_spleen |
| C6H5orf51          | 1.54E-17 | 0.22352245 | 0.291 | 0.099 | 5.44E-13 | mDC_spleen |
| SRP54              | 1.56E-17 | 0.30873291 | 0.344 | 0.128 | 5.54E-13 | mDC_spleen |
| ENSMMUG00000054052 | 1.57E-17 | 0.42130598 | 0.437 | 0.183 | 5.56E-13 | mDC_spleen |
| GPD2               | 1.58E-17 | 0.48123218 | 0.349 | 0.134 | 5.62E-13 | mDC_spleen |
| ENSMMUG00000032231 | 1.61E-17 | 0.32134344 | 0.357 | 0.135 | 5.70E-13 | mDC_spleen |
| HDAC4              | 1.66E-17 | 0.33864319 | 0.325 | 0.121 | 5.89E-13 | mDC_spleen |
| HCK                | 1.69E-17 | 0.26583383 | 0.775 | 0.41  | 5.97E-13 | mDC_spleen |
| SLC44A2            | 1.73E-17 | 0.81360203 | 0.28  | 0.098 | 6.13E-13 | mDC_spleen |
| TGFBR1             | 1.76E-17 | 0.51355787 | 0.328 | 0.124 | 6.25E-13 | mDC_spleen |
| WDR74              | 1.80E-17 | 0.3570368  | 0.55  | 0.258 | 6.40E-13 | mDC_spleen |
| DNAJB14            | 1.83E-17 | 0.53376757 | 0.413 | 0.17  | 6.49E-13 | mDC_spleen |
| SULF2              | 1.83E-17 | 0.31840638 | 0.431 | 0.185 | 6.49E-13 | mDC_spleen |
| SSH2               | 1.85E-17 | 0.20604739 | 0.632 | 0.31  | 6.54E-13 | mDC_spleen |
| C4H6orf52          | 1.88E-17 | 0.52456833 | 0.299 | 0.106 | 6.65E-13 | mDC_spleen |
| NCAPD3             | 1.97E-17 | 0.72663796 | 0.288 | 0.104 | 6.99E-13 | mDC_spleen |
| EIF2S3             | 1.98E-17 | 0.30608897 | 0.505 | 0.221 | 7.00E-13 | mDC_spleen |
| PSMD1              | 1.98E-17 | 0.39321812 | 0.407 | 0.167 | 7.03E-13 | mDC_spleen |
| ARL6               | 1.99E-17 | 0.52730889 | 0.296 | 0.105 | 7.05E-13 | mDC_spleen |
| TTC14              | 2.00E-17 | 0.87523975 | 0.286 | 0.101 | 7.08E-13 | mDC_spleen |

|          |          |            |       |       |          |            |
|----------|----------|------------|-------|-------|----------|------------|
| DDX6     | 2.00E-17 | 0.18063049 | 0.585 | 0.265 | 7.09E-13 | mDC_spleen |
| ARHGAP45 | 2.00E-17 | 0.29347727 | 0.548 | 0.246 | 7.10E-13 | mDC_spleen |
| CD38     | 2.02E-17 | 1.13958484 | 0.37  | 0.159 | 7.14E-13 | mDC_spleen |
| ST3GAL1  | 2.11E-17 | 0.38126173 | 0.399 | 0.163 | 7.49E-13 | mDC_spleen |
| AGPAT3   | 2.13E-17 | 0.16348659 | 0.347 | 0.132 | 7.55E-13 | mDC_spleen |
| RNF113A  | 2.14E-17 | 0.68807895 | 0.254 | 0.083 | 7.59E-13 | mDC_spleen |
| PIGP     | 2.15E-17 | 0.23835218 | 0.368 | 0.139 | 7.62E-13 | mDC_spleen |
| KIAA1109 | 2.23E-17 | 0.84021993 | 0.27  | 0.092 | 7.90E-13 | mDC_spleen |
| FBXO21   | 2.23E-17 | 0.63783571 | 0.299 | 0.108 | 7.91E-13 | mDC_spleen |
| DYNC1LI1 | 2.31E-17 | 0.4522445  | 0.5   | 0.227 | 8.19E-13 | mDC_spleen |
| AEBP2    | 2.37E-17 | 0.33609904 | 0.471 | 0.209 | 8.41E-13 | mDC_spleen |
| ABHD2    | 2.39E-17 | 0.28622561 | 0.413 | 0.171 | 8.47E-13 | mDC_spleen |
| RMND5A   | 2.43E-17 | 0.39836029 | 0.32  | 0.121 | 8.62E-13 | mDC_spleen |
| RMND1    | 2.44E-17 | 0.86575921 | 0.267 | 0.091 | 8.63E-13 | mDC_spleen |
| TNRC6A   | 2.46E-17 | 0.40793237 | 0.484 | 0.213 | 8.70E-13 | mDC_spleen |
| PFKL     | 2.60E-17 | 0.37013722 | 0.431 | 0.181 | 9.22E-13 | mDC_spleen |
| AQR      | 2.63E-17 | 0.37055537 | 0.45  | 0.191 | 9.31E-13 | mDC_spleen |
| CXXC5    | 2.63E-17 | 0.88953924 | 0.262 | 0.088 | 9.32E-13 | mDC_spleen |
| TNKS2    | 2.64E-17 | 0.60109162 | 0.341 | 0.133 | 9.34E-13 | mDC_spleen |
| TUT7     | 2.70E-17 | 0.51303427 | 0.688 | 0.353 | 9.56E-13 | mDC_spleen |
| SIRT1    | 2.79E-17 | 0.4307142  | 0.291 | 0.102 | 9.88E-13 | mDC_spleen |
| GARS1    | 2.81E-17 | 0.53139034 | 0.294 | 0.106 | 9.95E-13 | mDC_spleen |
| WIPI2    | 2.82E-17 | 0.73849605 | 0.333 | 0.131 | 1.00E-12 | mDC_spleen |
| DAXX     | 2.82E-17 | 0.52081424 | 0.265 | 0.087 | 1.00E-12 | mDC_spleen |
| KDM3A    | 2.90E-17 | 0.50315874 | 0.31  | 0.114 | 1.03E-12 | mDC_spleen |
| IKBKB    | 2.95E-17 | 0.25723672 | 0.341 | 0.131 | 1.04E-12 | mDC_spleen |
| TAF7     | 2.95E-17 | 0.42653473 | 0.595 | 0.291 | 1.04E-12 | mDC_spleen |
| LRRC41   | 2.96E-17 | 0.46629041 | 0.251 | 0.081 | 1.05E-12 | mDC_spleen |
| TRAM1    | 3.09E-17 | 0.49464285 | 0.765 | 0.409 | 1.10E-12 | mDC_spleen |
| SNRNP27  | 3.10E-17 | 0.41726273 | 0.484 | 0.215 | 1.10E-12 | mDC_spleen |
| DNAJC2   | 3.16E-17 | 0.42111308 | 0.505 | 0.226 | 1.12E-12 | mDC_spleen |
| N4BP1    | 3.21E-17 | 0.52246672 | 0.288 | 0.103 | 1.14E-12 | mDC_spleen |
| KAT7     | 3.24E-17 | 0.58673899 | 0.331 | 0.127 | 1.15E-12 | mDC_spleen |

|                   |          |            |       |       |          |            |
|-------------------|----------|------------|-------|-------|----------|------------|
| CSK               | 3.36E-17 | 0.32931624 | 0.661 | 0.32  | 1.19E-12 | mDC_spleen |
| ZRANB1            | 3.38E-17 | 0.6921667  | 0.259 | 0.089 | 1.20E-12 | mDC_spleen |
| CD300C            | 3.40E-17 | 0.50139997 | 0.288 | 0.1   | 1.20E-12 | mDC_spleen |
| TASOR             | 3.72E-17 | 0.46760472 | 0.302 | 0.109 | 1.32E-12 | mDC_spleen |
| RALGAPB           | 3.72E-17 | 0.2868346  | 0.373 | 0.149 | 1.32E-12 | mDC_spleen |
| NDUFAF1           | 3.76E-17 | 0.4889986  | 0.288 | 0.099 | 1.33E-12 | mDC_spleen |
| ATXN10            | 3.76E-17 | 0.39290601 | 0.614 | 0.292 | 1.33E-12 | mDC_spleen |
| PSEN1             | 3.76E-17 | 0.34322595 | 0.511 | 0.227 | 1.33E-12 | mDC_spleen |
| UTP18             | 3.78E-17 | 0.31608964 | 0.302 | 0.108 | 1.34E-12 | mDC_spleen |
| BTBD10            | 3.91E-17 | 0.6241784  | 0.325 | 0.123 | 1.39E-12 | mDC_spleen |
| NSD2              | 3.96E-17 | 0.7006457  | 0.267 | 0.092 | 1.40E-12 | mDC_spleen |
| PARN              | 3.98E-17 | 0.47819844 | 0.333 | 0.126 | 1.41E-12 | mDC_spleen |
| P2RX4             | 3.99E-17 | 0.4789352  | 0.328 | 0.124 | 1.41E-12 | mDC_spleen |
| PARP8             | 3.99E-17 | 0.23898979 | 0.511 | 0.232 | 1.41E-12 | mDC_spleen |
| SPI1              | 4.19E-17 | 0.2107335  | 0.331 | 0.124 | 1.48E-12 | mDC_spleen |
| ZC3H18            | 4.29E-17 | 0.41846842 | 0.386 | 0.157 | 1.52E-12 | mDC_spleen |
| DHX15             | 4.41E-17 | 0.16849952 | 0.46  | 0.199 | 1.56E-12 | mDC_spleen |
| GANC              | 4.51E-17 | 0.43204375 | 0.272 | 0.092 | 1.60E-12 | mDC_spleen |
| ENSMUG00000051505 | 4.65E-17 | 0.25851861 | 0.415 | 0.173 | 1.65E-12 | mDC_spleen |
| ZNF410            | 4.77E-17 | 1.00478375 | 0.331 | 0.129 | 1.69E-12 | mDC_spleen |
| MVP               | 4.80E-17 | 0.29059767 | 0.556 | 0.258 | 1.70E-12 | mDC_spleen |
| ACLY              | 4.92E-17 | 0.7757123  | 0.251 | 0.082 | 1.74E-12 | mDC_spleen |
| UBE2D3            | 5.34E-17 | 0.44281183 | 0.952 | 0.728 | 1.89E-12 | mDC_spleen |
| POU2F2            | 5.35E-17 | 0.42474936 | 0.32  | 0.12  | 1.90E-12 | mDC_spleen |
| DDHD1             | 5.47E-17 | 0.93775967 | 0.291 | 0.109 | 1.94E-12 | mDC_spleen |
| HUWE1             | 5.55E-17 | 0.10672622 | 0.598 | 0.285 | 1.97E-12 | mDC_spleen |
| DNAJA3            | 5.74E-17 | 0.42291367 | 0.259 | 0.086 | 2.03E-12 | mDC_spleen |
| NMD3              | 5.86E-17 | 0.71894188 | 0.294 | 0.107 | 2.08E-12 | mDC_spleen |
| GLYR1             | 5.96E-17 | 0.3435609  | 0.434 | 0.182 | 2.11E-12 | mDC_spleen |
| SNX11             | 6.05E-17 | 0.40936844 | 0.344 | 0.131 | 2.14E-12 | mDC_spleen |
| CLPX              | 6.11E-17 | 0.72492638 | 0.267 | 0.092 | 2.16E-12 | mDC_spleen |
| KIF2A             | 6.31E-17 | 0.49976942 | 0.413 | 0.173 | 2.23E-12 | mDC_spleen |
| SPTLC1            | 6.40E-17 | 0.54736516 | 0.288 | 0.103 | 2.27E-12 | mDC_spleen |

|                     |          |            |       |       |          |            |
|---------------------|----------|------------|-------|-------|----------|------------|
| BRD7                | 6.41E-17 | 0.32546635 | 0.352 | 0.138 | 2.27E-12 | mDC_spleen |
| POLB                | 6.42E-17 | 0.49750681 | 0.347 | 0.133 | 2.27E-12 | mDC_spleen |
| GAS7                | 6.58E-17 | 0.4668373  | 0.73  | 0.406 | 2.33E-12 | mDC_spleen |
| C4H6orf62           | 6.89E-17 | 0.27423517 | 0.529 | 0.244 | 2.44E-12 | mDC_spleen |
| WASHC4              | 6.91E-17 | 0.10589353 | 0.402 | 0.165 | 2.45E-12 | mDC_spleen |
| PDCD6-AHRR          | 7.26E-17 | 0.12934607 | 0.616 | 0.291 | 2.57E-12 | mDC_spleen |
| DHX9                | 7.66E-17 | 0.33431279 | 0.661 | 0.325 | 2.71E-12 | mDC_spleen |
| SH3GLB1             | 7.69E-17 | 0.49295549 | 0.471 | 0.208 | 2.72E-12 | mDC_spleen |
| TBRG1               | 8.07E-17 | 0.45329563 | 0.304 | 0.108 | 2.86E-12 | mDC_spleen |
| KIAA0930            | 8.09E-17 | 0.24590825 | 0.489 | 0.215 | 2.87E-12 | mDC_spleen |
| WDR43               | 8.13E-17 | 0.36462346 | 0.513 | 0.23  | 2.88E-12 | mDC_spleen |
| ZNF592              | 8.22E-17 | 0.65735573 | 0.259 | 0.089 | 2.91E-12 | mDC_spleen |
| KIF13A              | 8.25E-17 | 0.58728044 | 0.32  | 0.123 | 2.92E-12 | mDC_spleen |
| PIK3CA              | 8.54E-17 | 0.99394033 | 0.291 | 0.105 | 3.03E-12 | mDC_spleen |
| MIB1                | 8.64E-17 | 0.83607464 | 0.283 | 0.103 | 3.06E-12 | mDC_spleen |
| ZNF362              | 8.64E-17 | 0.3044385  | 0.259 | 0.087 | 3.06E-12 | mDC_spleen |
| IRF8                | 8.67E-17 | 0.68117846 | 0.86  | 0.588 | 3.07E-12 | mDC_spleen |
| CNOT4               | 8.73E-17 | 0.44117087 | 0.516 | 0.235 | 3.09E-12 | mDC_spleen |
| ERLIN2              | 9.07E-17 | 0.33803018 | 0.426 | 0.177 | 3.21E-12 | mDC_spleen |
| UFL1                | 9.09E-17 | 0.5115456  | 0.283 | 0.099 | 3.22E-12 | mDC_spleen |
| GALNS               | 9.32E-17 | 0.54228334 | 0.299 | 0.106 | 3.30E-12 | mDC_spleen |
| SRSF1               | 9.53E-17 | 0.26649582 | 0.571 | 0.266 | 3.38E-12 | mDC_spleen |
| GPAA1               | 9.87E-17 | 0.19673171 | 0.336 | 0.125 | 3.50E-12 | mDC_spleen |
| U2.124              | 9.87E-17 | 0.64124328 | 0.259 | 0.088 | 3.50E-12 | mDC_spleen |
| ENSMMUG000000062012 | 1.02E-16 | 0.44519675 | 0.312 | 0.113 | 3.61E-12 | mDC_spleen |
| FBL                 | 1.04E-16 | 0.38391522 | 0.511 | 0.228 | 3.69E-12 | mDC_spleen |
| ENSMMUG00000000478  | 1.07E-16 | 0.41580622 | 0.526 | 0.245 | 3.78E-12 | mDC_spleen |
| PREP                | 1.09E-16 | 0.38567914 | 0.283 | 0.101 | 3.85E-12 | mDC_spleen |
| CWF19L2             | 1.09E-16 | 0.59963404 | 0.389 | 0.162 | 3.86E-12 | mDC_spleen |
| HSD17B12            | 1.09E-16 | 0.33736382 | 0.37  | 0.15  | 3.86E-12 | mDC_spleen |
| ENSMMUG000000065288 | 1.18E-16 | 0.19929671 | 0.272 | 0.095 | 4.18E-12 | mDC_spleen |
| LARP1B              | 1.18E-16 | 0.60049198 | 0.331 | 0.126 | 4.19E-12 | mDC_spleen |
| RSBN1               | 1.19E-16 | 0.68217084 | 0.257 | 0.086 | 4.21E-12 | mDC_spleen |



|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| HDAC2              | 1.21E-16 | 0.42885937 | 0.54  | 0.251 | 4.28E-12 | mDC_spleen |
| PIK3C3             | 1.21E-16 | 0.57244941 | 0.267 | 0.092 | 4.28E-12 | mDC_spleen |
| FAM222B            | 1.23E-16 | 0.38212071 | 0.31  | 0.114 | 4.37E-12 | mDC_spleen |
| WDR45B             | 1.24E-16 | 0.40315814 | 0.365 | 0.145 | 4.39E-12 | mDC_spleen |
| CIR1               | 1.32E-16 | 0.24612616 | 0.526 | 0.235 | 4.66E-12 | mDC_spleen |
| ENSMMUG00000016959 | 1.33E-16 | 0.30762824 | 0.534 | 0.254 | 4.71E-12 | mDC_spleen |
| YME1L1             | 1.33E-16 | 0.29457287 | 0.513 | 0.234 | 4.72E-12 | mDC_spleen |
| ENSMMUG00000019405 | 1.39E-16 | 0.42263535 | 0.283 | 0.099 | 4.91E-12 | mDC_spleen |
| TRPV2              | 1.39E-16 | 0.12997884 | 0.405 | 0.166 | 4.92E-12 | mDC_spleen |
| ATM                | 1.41E-16 | 0.78064126 | 0.296 | 0.109 | 5.00E-12 | mDC_spleen |
| ZNF92              | 1.43E-16 | 0.64674563 | 0.339 | 0.134 | 5.06E-12 | mDC_spleen |
| RGCC               | 1.54E-16 | 0.56870458 | 0.421 | 0.185 | 5.44E-12 | mDC_spleen |
| APOBEC3F           | 1.56E-16 | 0.30892394 | 0.582 | 0.272 | 5.53E-12 | mDC_spleen |
| SEC22B             | 1.64E-16 | 0.37520313 | 0.286 | 0.101 | 5.80E-12 | mDC_spleen |
| LETMD1             | 1.64E-16 | 0.5509151  | 0.31  | 0.115 | 5.83E-12 | mDC_spleen |
| ZDHHC3             | 1.65E-16 | 0.8037161  | 0.267 | 0.094 | 5.86E-12 | mDC_spleen |
| ZNF43              | 1.70E-16 | 0.46323804 | 0.344 | 0.136 | 6.03E-12 | mDC_spleen |
| ENSMMUG00000012537 | 1.74E-16 | 0.35612938 | 0.614 | 0.297 | 6.17E-12 | mDC_spleen |
| PBXIP1             | 1.75E-16 | 0.37925922 | 0.397 | 0.165 | 6.20E-12 | mDC_spleen |
| UBA3               | 1.77E-16 | 0.58628891 | 0.347 | 0.14  | 6.27E-12 | mDC_spleen |
| CANX               | 1.77E-16 | 0.33343739 | 0.513 | 0.238 | 6.27E-12 | mDC_spleen |
| UBE2E3             | 1.78E-16 | 0.62536979 | 0.296 | 0.109 | 6.31E-12 | mDC_spleen |
| ENSMMUG00000018557 | 1.80E-16 | 0.35124833 | 0.429 | 0.184 | 6.37E-12 | mDC_spleen |
| MAGT1              | 1.84E-16 | 0.25576115 | 0.421 | 0.176 | 6.51E-12 | mDC_spleen |
| PI4KB              | 1.87E-16 | 0.46997278 | 0.257 | 0.087 | 6.61E-12 | mDC_spleen |
| RBM22              | 1.89E-16 | 0.30659138 | 0.405 | 0.165 | 6.69E-12 | mDC_spleen |
| DIAPH1             | 1.90E-16 | 0.20738353 | 0.704 | 0.356 | 6.73E-12 | mDC_spleen |
| ABI2               | 1.95E-16 | 0.75578882 | 0.259 | 0.09  | 6.92E-12 | mDC_spleen |
| DYNLT1             | 1.97E-16 | 0.58490969 | 0.254 | 0.085 | 6.98E-12 | mDC_spleen |
| SIL1               | 1.99E-16 | 0.24155471 | 0.386 | 0.159 | 7.04E-12 | mDC_spleen |
| UQCRC2             | 1.99E-16 | 0.24977373 | 0.54  | 0.244 | 7.04E-12 | mDC_spleen |
| QDPR               | 2.02E-16 | 0.49003902 | 0.32  | 0.12  | 7.16E-12 | mDC_spleen |
| MARF1              | 2.02E-16 | 0.6005592  | 0.259 | 0.088 | 7.16E-12 | mDC_spleen |

|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| HMBOX1             | 2.07E-16 | 0.27988718 | 0.291 | 0.106 | 7.34E-12 | mDC_spleen |
| CEP83              | 2.14E-16 | 0.83536732 | 0.257 | 0.089 | 7.57E-12 | mDC_spleen |
| SIGLEC5            | 2.18E-16 | 0.40916338 | 0.352 | 0.14  | 7.72E-12 | mDC_spleen |
| BCL7B              | 2.22E-16 | 0.51153274 | 0.37  | 0.152 | 7.87E-12 | mDC_spleen |
| CCPG1              | 2.39E-16 | 0.35258554 | 0.455 | 0.199 | 8.45E-12 | mDC_spleen |
| SYMPK              | 2.39E-16 | 0.28465271 | 0.31  | 0.114 | 8.46E-12 | mDC_spleen |
| PTBP2              | 2.39E-16 | 0.16913418 | 0.468 | 0.206 | 8.47E-12 | mDC_spleen |
| CTSC               | 2.43E-16 | 0.5375254  | 0.698 | 0.367 | 8.60E-12 | mDC_spleen |
| CELF2              | 2.45E-16 | 0.37379327 | 0.923 | 0.611 | 8.69E-12 | mDC_spleen |
| PMPCB              | 2.59E-16 | 0.32392307 | 0.442 | 0.19  | 9.17E-12 | mDC_spleen |
| CACYBP             | 2.62E-16 | 0.49667816 | 0.738 | 0.404 | 9.30E-12 | mDC_spleen |
| CPQ                | 2.64E-16 | 0.26585108 | 0.5   | 0.23  | 9.34E-12 | mDC_spleen |
| ANKRD13C           | 2.65E-16 | 0.7273065  | 0.294 | 0.111 | 9.39E-12 | mDC_spleen |
| DHRS9              | 2.66E-16 | 0.45806039 | 0.413 | 0.176 | 9.42E-12 | mDC_spleen |
| KAT6A              | 2.90E-16 | 0.15495453 | 0.474 | 0.211 | 1.03E-11 | mDC_spleen |
| PTK2               | 2.92E-16 | 0.33209881 | 0.386 | 0.169 | 1.03E-11 | mDC_spleen |
| ZSCAN18            | 3.05E-16 | 0.65495556 | 0.262 | 0.091 | 1.08E-11 | mDC_spleen |
| CMTR1              | 3.06E-16 | 0.63332367 | 0.341 | 0.135 | 1.09E-11 | mDC_spleen |
| MYO5A              | 3.11E-16 | 0.45426881 | 0.54  | 0.261 | 1.10E-11 | mDC_spleen |
| TSG101             | 3.12E-16 | 0.12984881 | 0.46  | 0.198 | 1.11E-11 | mDC_spleen |
| REST               | 3.14E-16 | 0.6931585  | 0.288 | 0.107 | 1.11E-11 | mDC_spleen |
| ZNF514             | 3.20E-16 | 0.24681462 | 0.548 | 0.252 | 1.13E-11 | mDC_spleen |
| OARD1              | 3.23E-16 | 0.24932201 | 0.442 | 0.187 | 1.15E-11 | mDC_spleen |
| NR3C1              | 3.58E-16 | 0.10328913 | 0.778 | 0.421 | 1.27E-11 | mDC_spleen |
| LEPROT             | 3.77E-16 | 0.49383522 | 0.336 | 0.131 | 1.34E-11 | mDC_spleen |
| ATP6V1E1           | 3.88E-16 | 0.1446168  | 0.569 | 0.261 | 1.37E-11 | mDC_spleen |
| KATNBL1            | 3.90E-16 | 0.28905689 | 0.548 | 0.256 | 1.38E-11 | mDC_spleen |
| ENSMMUG00000060576 | 3.91E-16 | 0.44612213 | 0.257 | 0.089 | 1.38E-11 | mDC_spleen |
| ZMAT2              | 3.93E-16 | 0.43355241 | 0.481 | 0.213 | 1.39E-11 | mDC_spleen |
| SEC13              | 3.99E-16 | 0.41063074 | 0.32  | 0.121 | 1.42E-11 | mDC_spleen |
| GMIP               | 4.09E-16 | 0.30522993 | 0.251 | 0.085 | 1.45E-11 | mDC_spleen |
| ANXA7              | 4.18E-16 | 0.38985393 | 0.622 | 0.31  | 1.48E-11 | mDC_spleen |
| XRN1               | 4.32E-16 | 0.39549726 | 0.479 | 0.218 | 1.53E-11 | mDC_spleen |

|         |          |            |       |       |          |            |
|---------|----------|------------|-------|-------|----------|------------|
| IQGAP1  | 4.40E-16 | 0.38608478 | 0.881 | 0.551 | 1.56E-11 | mDC_spleen |
| DCAF6   | 4.67E-16 | 0.51536475 | 0.333 | 0.134 | 1.66E-11 | mDC_spleen |
| TRAPPC3 | 4.83E-16 | 0.25941674 | 0.37  | 0.148 | 1.71E-11 | mDC_spleen |
| UNKL    | 4.83E-16 | 0.25000647 | 0.458 | 0.2   | 1.71E-11 | mDC_spleen |
| GLB1    | 5.00E-16 | 0.24957414 | 0.479 | 0.215 | 1.77E-11 | mDC_spleen |
| AHCYL1  | 5.09E-16 | 0.20513405 | 0.331 | 0.127 | 1.80E-11 | mDC_spleen |
| RUBCN   | 5.18E-16 | 0.26780577 | 0.384 | 0.159 | 1.84E-11 | mDC_spleen |
| CCM2    | 5.40E-16 | 0.11889468 | 0.437 | 0.192 | 1.91E-11 | mDC_spleen |
| TSC22D3 | 5.43E-16 | 0.41682878 | 0.601 | 0.303 | 1.92E-11 | mDC_spleen |
| CALU    | 5.44E-16 | 0.44104152 | 0.357 | 0.145 | 1.93E-11 | mDC_spleen |
| RPS3    | 5.61E-16 | 0.33747442 | 0.96  | 0.921 | 1.99E-11 | mDC_spleen |
| KCTD20  | 5.75E-16 | 0.34598981 | 0.399 | 0.167 | 2.04E-11 | mDC_spleen |
| NUP205  | 5.78E-16 | 0.46572501 | 0.265 | 0.092 | 2.05E-11 | mDC_spleen |
| C2CD5   | 5.82E-16 | 0.75331439 | 0.27  | 0.098 | 2.06E-11 | mDC_spleen |
| CHD3    | 5.88E-16 | 0.63146445 | 0.262 | 0.092 | 2.08E-11 | mDC_spleen |
| SRP72   | 6.13E-16 | 0.29161906 | 0.439 | 0.187 | 2.17E-11 | mDC_spleen |
| CCDC66  | 6.16E-16 | 0.53033192 | 0.299 | 0.113 | 2.18E-11 | mDC_spleen |
| PPM1A   | 6.38E-16 | 0.60790435 | 0.317 | 0.126 | 2.26E-11 | mDC_spleen |
| ERP44   | 6.76E-16 | 0.44985285 | 0.704 | 0.373 | 2.39E-11 | mDC_spleen |
| MED1    | 7.12E-16 | 0.54082317 | 0.267 | 0.096 | 2.52E-11 | mDC_spleen |
| PRPF8   | 7.37E-16 | 0.19977761 | 0.566 | 0.263 | 2.61E-11 | mDC_spleen |
| SHOC2   | 7.38E-16 | 0.23487014 | 0.68  | 0.336 | 2.61E-11 | mDC_spleen |
| TXNRD1  | 7.40E-16 | 0.36621062 | 0.611 | 0.319 | 2.62E-11 | mDC_spleen |
| MCM9    | 7.68E-16 | 0.69662887 | 0.325 | 0.13  | 2.72E-11 | mDC_spleen |
| SPG7    | 7.81E-16 | 0.14337834 | 0.275 | 0.099 | 2.77E-11 | mDC_spleen |
| NBAS    | 7.83E-16 | 0.77905022 | 0.28  | 0.106 | 2.77E-11 | mDC_spleen |
| BCL6    | 7.98E-16 | 0.12596725 | 0.587 | 0.294 | 2.83E-11 | mDC_spleen |
| ITPR1   | 8.18E-16 | 0.67364659 | 0.302 | 0.118 | 2.90E-11 | mDC_spleen |
| OGDH    | 8.25E-16 | 0.17597367 | 0.624 | 0.303 | 2.92E-11 | mDC_spleen |
| NPAT    | 8.33E-16 | 0.49049146 | 0.296 | 0.112 | 2.95E-11 | mDC_spleen |
| ANKRD28 | 8.80E-16 | 0.4643627  | 0.497 | 0.239 | 3.12E-11 | mDC_spleen |
| INPP5K  | 8.84E-16 | 0.65958603 | 0.28  | 0.103 | 3.13E-11 | mDC_spleen |
| TUBB6   | 9.44E-16 | 0.57731802 | 0.405 | 0.178 | 3.35E-11 | mDC_spleen |

|          |          |            |       |       |          |            |
|----------|----------|------------|-------|-------|----------|------------|
| TERF1    | 9.80E-16 | 0.72324919 | 0.294 | 0.109 | 3.47E-11 | mDC_spleen |
| ARL6IP6  | 1.00E-15 | 0.32463504 | 0.41  | 0.175 | 3.55E-11 | mDC_spleen |
| IARS1    | 1.02E-15 | 0.88701817 | 0.291 | 0.111 | 3.62E-11 | mDC_spleen |
| IRF9     | 1.05E-15 | 0.3992452  | 0.307 | 0.117 | 3.71E-11 | mDC_spleen |
| MON2     | 1.05E-15 | 0.30646488 | 0.402 | 0.175 | 3.72E-11 | mDC_spleen |
| TMEM183A | 1.07E-15 | 0.42119728 | 0.37  | 0.154 | 3.78E-11 | mDC_spleen |
| ECHDC1   | 1.08E-15 | 0.25773247 | 0.537 | 0.251 | 3.84E-11 | mDC_spleen |
| TMEM179B | 1.09E-15 | 0.59529222 | 0.381 | 0.159 | 3.88E-11 | mDC_spleen |
| VPS13C   | 1.15E-15 | 0.36655749 | 0.812 | 0.474 | 4.09E-11 | mDC_spleen |
| EPS8     | 1.19E-15 | 0.76293812 | 0.399 | 0.179 | 4.20E-11 | mDC_spleen |
| MKNK1    | 1.19E-15 | 0.32790699 | 0.294 | 0.108 | 4.21E-11 | mDC_spleen |
| SCML4    | 1.25E-15 | 0.37795159 | 0.349 | 0.147 | 4.41E-11 | mDC_spleen |
| CCSER2   | 1.27E-15 | 0.35540739 | 0.354 | 0.148 | 4.51E-11 | mDC_spleen |
| CASP8    | 1.39E-15 | 0.38712731 | 0.402 | 0.173 | 4.91E-11 | mDC_spleen |
| EIF3M    | 1.44E-15 | 0.45557624 | 0.788 | 0.465 | 5.10E-11 | mDC_spleen |
| CCT2     | 1.46E-15 | 0.45950064 | 0.725 | 0.391 | 5.19E-11 | mDC_spleen |
| TOR1AIP1 | 1.47E-15 | 0.39416315 | 0.328 | 0.13  | 5.22E-11 | mDC_spleen |
| EFTUD2   | 1.52E-15 | 0.54966154 | 0.296 | 0.113 | 5.38E-11 | mDC_spleen |
| SFSWAP   | 1.54E-15 | 0.42786405 | 0.373 | 0.156 | 5.47E-11 | mDC_spleen |
| SLC35A5  | 1.54E-15 | 0.40507643 | 0.331 | 0.131 | 5.47E-11 | mDC_spleen |
| EIF2A    | 1.56E-15 | 0.13769331 | 0.519 | 0.235 | 5.51E-11 | mDC_spleen |
| RPN2     | 1.57E-15 | 0.23079935 | 0.582 | 0.271 | 5.58E-11 | mDC_spleen |
| RAB7A    | 1.59E-15 | 0.58733671 | 0.892 | 0.568 | 5.63E-11 | mDC_spleen |
| VPS13D   | 1.61E-15 | 0.30614847 | 0.399 | 0.173 | 5.71E-11 | mDC_spleen |
| DKC1     | 1.68E-15 | 0.67447538 | 0.262 | 0.092 | 5.94E-11 | mDC_spleen |
| DPP8     | 1.68E-15 | 0.89634108 | 0.254 | 0.089 | 5.95E-11 | mDC_spleen |
| PNPLA8   | 1.68E-15 | 0.402956   | 0.455 | 0.213 | 5.95E-11 | mDC_spleen |
| CORO1C   | 1.71E-15 | 0.1784979  | 0.347 | 0.14  | 6.06E-11 | mDC_spleen |
| CD69     | 1.71E-15 | 0.65949028 | 0.571 | 0.301 | 6.07E-11 | mDC_spleen |
| TMEM248  | 1.73E-15 | 0.57213825 | 0.315 | 0.125 | 6.13E-11 | mDC_spleen |
| PDXDC1   | 1.74E-15 | 0.40119673 | 0.341 | 0.14  | 6.16E-11 | mDC_spleen |
| ABCE1    | 1.74E-15 | 0.29522032 | 0.532 | 0.251 | 6.18E-11 | mDC_spleen |
| ZDHHC20  | 1.75E-15 | 0.136493   | 0.532 | 0.252 | 6.19E-11 | mDC_spleen |

|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| FMNL1              | 1.75E-15 | 0.57799326 | 0.262 | 0.094 | 6.20E-11 | mDC_spleen |
| NUDT9              | 1.80E-15 | 0.3899672  | 0.299 | 0.111 | 6.38E-11 | mDC_spleen |
| PJA2               | 1.83E-15 | 0.25756267 | 0.553 | 0.26  | 6.48E-11 | mDC_spleen |
| SMARCC2            | 1.83E-15 | 0.39785118 | 0.265 | 0.094 | 6.50E-11 | mDC_spleen |
| SLC39A10           | 1.85E-15 | 0.26447536 | 0.64  | 0.337 | 6.56E-11 | mDC_spleen |
| SUPT5H             | 1.85E-15 | 0.41974215 | 0.484 | 0.222 | 6.57E-11 | mDC_spleen |
| JAZF1              | 1.90E-15 | 0.44677392 | 0.407 | 0.187 | 6.73E-11 | mDC_spleen |
| ATL2               | 1.95E-15 | 0.55662306 | 0.325 | 0.132 | 6.92E-11 | mDC_spleen |
| ENSMMUG00000006965 | 2.07E-15 | 0.42841407 | 0.603 | 0.292 | 7.34E-11 | mDC_spleen |
| KLF10              | 2.19E-15 | 0.60620441 | 0.474 | 0.233 | 7.78E-11 | mDC_spleen |
| ZUP1               | 2.26E-15 | 0.11584793 | 0.31  | 0.118 | 8.02E-11 | mDC_spleen |
| H2AFY              | 2.26E-15 | 0.44039997 | 0.897 | 0.617 | 8.02E-11 | mDC_spleen |
| GORASP2            | 2.31E-15 | 0.44356907 | 0.312 | 0.123 | 8.19E-11 | mDC_spleen |
| TAF1D              | 2.32E-15 | 0.51865554 | 0.291 | 0.111 | 8.23E-11 | mDC_spleen |
| HNRNPL             | 2.46E-15 | 0.35255054 | 0.767 | 0.416 | 8.70E-11 | mDC_spleen |
| WDR61              | 2.47E-15 | 0.31948041 | 0.368 | 0.152 | 8.77E-11 | mDC_spleen |
| TXLNA              | 2.51E-15 | 0.27803548 | 0.254 | 0.089 | 8.90E-11 | mDC_spleen |
| ARHGAP30           | 2.52E-15 | 0.20319065 | 0.611 | 0.3   | 8.91E-11 | mDC_spleen |
| ARHGAP21           | 2.55E-15 | 0.74842321 | 0.267 | 0.098 | 9.03E-11 | mDC_spleen |
| L3MBTL3            | 2.55E-15 | 0.45482937 | 0.317 | 0.126 | 9.05E-11 | mDC_spleen |
| UBN1               | 2.68E-15 | 0.64741705 | 0.272 | 0.101 | 9.50E-11 | mDC_spleen |
| PRKRA              | 2.77E-15 | 0.30933363 | 0.429 | 0.188 | 9.82E-11 | mDC_spleen |
| EHBP1              | 2.78E-15 | 0.47216139 | 0.294 | 0.114 | 9.84E-11 | mDC_spleen |
| APLP2              | 2.81E-15 | 0.40071935 | 0.653 | 0.336 | 9.94E-11 | mDC_spleen |
| ZBTB7A             | 2.94E-15 | 0.16901035 | 0.323 | 0.127 | 1.04E-10 | mDC_spleen |
| PTPN11             | 3.03E-15 | 0.44315171 | 0.333 | 0.134 | 1.07E-10 | mDC_spleen |
| P2RY8              | 3.03E-15 | 0.23713937 | 0.585 | 0.295 | 1.07E-10 | mDC_spleen |
| VPS13A             | 3.05E-15 | 0.82683153 | 0.278 | 0.106 | 1.08E-10 | mDC_spleen |
| RBBP6              | 3.12E-15 | 0.40279649 | 0.376 | 0.159 | 1.10E-10 | mDC_spleen |
| SMARCB1            | 3.13E-15 | 0.38473487 | 0.423 | 0.184 | 1.11E-10 | mDC_spleen |
| ADA2               | 3.13E-15 | 0.34700532 | 0.685 | 0.37  | 1.11E-10 | mDC_spleen |
| ZNF438             | 3.22E-15 | 0.78285206 | 0.275 | 0.106 | 1.14E-10 | mDC_spleen |
| ZFH3               | 3.32E-15 | 0.17156748 | 0.447 | 0.212 | 1.18E-10 | mDC_spleen |

|           |          |            |       |       |          |            |
|-----------|----------|------------|-------|-------|----------|------------|
| ZNF528    | 3.43E-15 | 0.30897102 | 0.415 | 0.182 | 1.21E-10 | mDC_spleen |
| C1H1orf50 | 3.44E-15 | 0.18800657 | 0.31  | 0.117 | 1.22E-10 | mDC_spleen |
| RING1     | 3.50E-15 | 0.30686525 | 0.272 | 0.097 | 1.24E-10 | mDC_spleen |
| ZDHHC17   | 3.52E-15 | 0.68853686 | 0.265 | 0.098 | 1.25E-10 | mDC_spleen |
| ZNF121    | 3.53E-15 | 0.42012522 | 0.259 | 0.092 | 1.25E-10 | mDC_spleen |
| SZRD1     | 3.55E-15 | 0.35578905 | 0.484 | 0.23  | 1.26E-10 | mDC_spleen |
| SMC3      | 3.58E-15 | 0.33718331 | 0.447 | 0.201 | 1.27E-10 | mDC_spleen |
| FBXL5     | 3.70E-15 | 0.50753869 | 0.32  | 0.128 | 1.31E-10 | mDC_spleen |
| MED27     | 3.74E-15 | 0.20661842 | 0.466 | 0.212 | 1.33E-10 | mDC_spleen |
| GPATCH11  | 3.85E-15 | 0.4170232  | 0.275 | 0.1   | 1.36E-10 | mDC_spleen |
| FRMD8     | 4.00E-15 | 0.10145947 | 0.275 | 0.1   | 1.42E-10 | mDC_spleen |
| MED31     | 4.04E-15 | 0.46549338 | 0.307 | 0.117 | 1.43E-10 | mDC_spleen |
| NSMCE2    | 4.10E-15 | 0.39811059 | 0.503 | 0.244 | 1.45E-10 | mDC_spleen |
| USP38     | 4.10E-15 | 0.60126075 | 0.307 | 0.12  | 1.45E-10 | mDC_spleen |
| STAT6     | 4.54E-15 | 0.19476281 | 0.344 | 0.138 | 1.61E-10 | mDC_spleen |
| NUP93     | 4.66E-15 | 0.59023673 | 0.257 | 0.092 | 1.65E-10 | mDC_spleen |
| SDCCAG8   | 4.70E-15 | 0.322726   | 0.537 | 0.258 | 1.66E-10 | mDC_spleen |
| SF3A3     | 4.77E-15 | 0.34013579 | 0.288 | 0.108 | 1.69E-10 | mDC_spleen |
| ELF1      | 4.78E-15 | 0.37997557 | 0.862 | 0.543 | 1.69E-10 | mDC_spleen |
| CHN2      | 4.83E-15 | 0.57055893 | 0.392 | 0.178 | 1.71E-10 | mDC_spleen |
| NHSL1     | 4.93E-15 | 1.0160631  | 0.28  | 0.109 | 1.75E-10 | mDC_spleen |
| MRPS28    | 5.69E-15 | 0.29432396 | 0.426 | 0.187 | 2.02E-10 | mDC_spleen |
| SCAPER    | 5.76E-15 | 0.57201967 | 0.37  | 0.162 | 2.04E-10 | mDC_spleen |
| EVL       | 5.78E-15 | 0.28276808 | 0.598 | 0.29  | 2.05E-10 | mDC_spleen |
| DHX29     | 5.79E-15 | 0.33601832 | 0.389 | 0.167 | 2.05E-10 | mDC_spleen |
| BRI3      | 5.99E-15 | 0.28062253 | 0.333 | 0.132 | 2.12E-10 | mDC_spleen |
| PLXNB2    | 6.06E-15 | 0.16258864 | 0.423 | 0.184 | 2.15E-10 | mDC_spleen |
| CLCN3     | 6.11E-15 | 0.1629316  | 0.476 | 0.219 | 2.17E-10 | mDC_spleen |
| MALSU1    | 6.13E-15 | 0.60719165 | 0.291 | 0.11  | 2.17E-10 | mDC_spleen |
| NNT       | 6.33E-15 | 0.49904851 | 0.265 | 0.097 | 2.24E-10 | mDC_spleen |
| FOXRED1   | 6.42E-15 | 0.37601446 | 0.331 | 0.133 | 2.28E-10 | mDC_spleen |
| PACS1     | 6.46E-15 | 0.38355531 | 0.354 | 0.153 | 2.29E-10 | mDC_spleen |
| RCC1      | 6.53E-15 | 0.41787229 | 0.365 | 0.155 | 2.31E-10 | mDC_spleen |

|                   |          |            |       |       |          |            |
|-------------------|----------|------------|-------|-------|----------|------------|
| ZPR1              | 6.57E-15 | 0.52666888 | 0.302 | 0.116 | 2.33E-10 | mDC_spleen |
| EIF5B             | 6.58E-15 | 0.27550373 | 0.556 | 0.274 | 2.33E-10 | mDC_spleen |
| MAP4K3            | 6.88E-15 | 1.04844136 | 0.262 | 0.103 | 2.44E-10 | mDC_spleen |
| WDPCP             | 6.88E-15 | 0.47572437 | 0.294 | 0.115 | 2.44E-10 | mDC_spleen |
| GPR107            | 7.02E-15 | 0.36251793 | 0.339 | 0.14  | 2.49E-10 | mDC_spleen |
| EXOC2             | 7.03E-15 | 0.52603203 | 0.302 | 0.12  | 2.49E-10 | mDC_spleen |
| DUSP2             | 7.21E-15 | 0.16999955 | 0.365 | 0.156 | 2.56E-10 | mDC_spleen |
| CPSF6             | 7.59E-15 | 0.38593987 | 0.476 | 0.226 | 2.69E-10 | mDC_spleen |
| RNF169            | 7.61E-15 | 0.37352812 | 0.283 | 0.109 | 2.69E-10 | mDC_spleen |
| EIF4G2            | 8.13E-15 | 0.35269772 | 0.847 | 0.5   | 2.88E-10 | mDC_spleen |
| RESF1             | 8.41E-15 | 0.37146591 | 0.302 | 0.117 | 2.98E-10 | mDC_spleen |
| COA4              | 8.55E-15 | 0.37677778 | 0.323 | 0.127 | 3.03E-10 | mDC_spleen |
| HNRNPA3           | 9.02E-15 | 0.40548318 | 0.929 | 0.649 | 3.20E-10 | mDC_spleen |
| HDLBP             | 9.62E-15 | 0.17030037 | 0.468 | 0.209 | 3.41E-10 | mDC_spleen |
| AUH               | 9.70E-15 | 0.5121861  | 0.257 | 0.094 | 3.44E-10 | mDC_spleen |
| PAPSS1            | 9.74E-15 | 0.40136169 | 0.325 | 0.131 | 3.45E-10 | mDC_spleen |
| CYLD              | 9.78E-15 | 0.21998108 | 0.614 | 0.306 | 3.47E-10 | mDC_spleen |
| STX8              | 1.01E-14 | 0.38492955 | 0.598 | 0.296 | 3.57E-10 | mDC_spleen |
| PRXL2A            | 1.01E-14 | 0.27497284 | 0.32  | 0.125 | 3.59E-10 | mDC_spleen |
| VTI1B             | 1.04E-14 | 0.48856171 | 0.31  | 0.123 | 3.69E-10 | mDC_spleen |
| SMN1              | 1.10E-14 | 0.32685849 | 0.479 | 0.22  | 3.89E-10 | mDC_spleen |
| AP3S2             | 1.17E-14 | 0.58978394 | 0.267 | 0.099 | 4.14E-10 | mDC_spleen |
| VCPKMT            | 1.22E-14 | 0.62644584 | 0.265 | 0.098 | 4.33E-10 | mDC_spleen |
| NFYC              | 1.28E-14 | 0.46615526 | 0.389 | 0.17  | 4.55E-10 | mDC_spleen |
| BTBD7             | 1.33E-14 | 0.24795156 | 0.304 | 0.12  | 4.71E-10 | mDC_spleen |
| ENSMUG00000028906 | 1.33E-14 | 0.66856071 | 0.296 | 0.118 | 4.72E-10 | mDC_spleen |
| HM13              | 1.34E-14 | 0.2033451  | 0.474 | 0.219 | 4.74E-10 | mDC_spleen |
| OTUD5             | 1.36E-14 | 0.27305092 | 0.296 | 0.114 | 4.83E-10 | mDC_spleen |
| BECN1             | 1.44E-14 | 0.54737401 | 0.339 | 0.141 | 5.10E-10 | mDC_spleen |
| TYK2              | 1.44E-14 | 0.24798823 | 0.296 | 0.114 | 5.11E-10 | mDC_spleen |
| AIFM3             | 1.50E-14 | 0.2626189  | 0.275 | 0.102 | 5.32E-10 | mDC_spleen |
| MFN1              | 1.51E-14 | 0.20000118 | 0.267 | 0.099 | 5.35E-10 | mDC_spleen |
| ZCRB1             | 1.52E-14 | 0.2163807  | 0.384 | 0.164 | 5.38E-10 | mDC_spleen |

|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| WDR41              | 1.53E-14 | 0.62862072 | 0.307 | 0.123 | 5.43E-10 | mDC_spleen |
| MAMU-DRA           | 1.54E-14 | 0.47413786 | 0.995 | 0.985 | 5.45E-10 | mDC_spleen |
| ENSMMUG00000017400 | 1.56E-14 | 0.44332536 | 0.254 | 0.093 | 5.54E-10 | mDC_spleen |
| MTF2               | 1.60E-14 | 0.40207388 | 0.286 | 0.111 | 5.68E-10 | mDC_spleen |
| JTB                | 1.61E-14 | 0.31729976 | 0.571 | 0.286 | 5.70E-10 | mDC_spleen |
| PNRC2              | 1.64E-14 | 0.40487901 | 0.624 | 0.322 | 5.80E-10 | mDC_spleen |
| VPS35              | 1.67E-14 | 0.11870473 | 0.397 | 0.17  | 5.90E-10 | mDC_spleen |
| OLA1               | 1.70E-14 | 0.3330032  | 0.77  | 0.429 | 6.01E-10 | mDC_spleen |
| HSP90AA1           | 1.72E-14 | 0.59074382 | 0.952 | 0.745 | 6.11E-10 | mDC_spleen |
| LBR                | 1.80E-14 | 0.29592729 | 0.481 | 0.227 | 6.37E-10 | mDC_spleen |
| CCDC69             | 1.82E-14 | 0.11432782 | 0.495 | 0.228 | 6.47E-10 | mDC_spleen |
| TULP4              | 1.86E-14 | 0.87352831 | 0.251 | 0.095 | 6.61E-10 | mDC_spleen |
| HCLS1              | 1.94E-14 | 0.4142427  | 0.743 | 0.424 | 6.88E-10 | mDC_spleen |
| ZMYM5              | 1.96E-14 | 0.52356982 | 0.368 | 0.163 | 6.94E-10 | mDC_spleen |
| HERPUD2            | 2.03E-14 | 0.13336771 | 0.302 | 0.117 | 7.18E-10 | mDC_spleen |
| STAT5B             | 2.07E-14 | 0.2306579  | 0.294 | 0.114 | 7.32E-10 | mDC_spleen |
| IL6ST              | 2.08E-14 | 0.41935588 | 0.354 | 0.152 | 7.38E-10 | mDC_spleen |
| DYNC1LI2           | 2.10E-14 | 0.54924518 | 0.307 | 0.125 | 7.46E-10 | mDC_spleen |
| AGPAT1             | 2.13E-14 | 0.45647965 | 0.344 | 0.146 | 7.55E-10 | mDC_spleen |
| ENSMMUG00000020316 | 2.24E-14 | 0.42567623 | 0.421 | 0.192 | 7.95E-10 | mDC_spleen |
| ABCB7              | 2.29E-14 | 0.67948339 | 0.304 | 0.125 | 8.12E-10 | mDC_spleen |
| RNF24              | 2.30E-14 | 0.79180225 | 0.259 | 0.1   | 8.15E-10 | mDC_spleen |
| BIN2               | 2.31E-14 | 0.24175158 | 0.622 | 0.307 | 8.20E-10 | mDC_spleen |
| AUTS2              | 2.32E-14 | 0.4919035  | 0.349 | 0.154 | 8.21E-10 | mDC_spleen |
| ATP8B4             | 2.43E-14 | 0.99732039 | 0.286 | 0.115 | 8.61E-10 | mDC_spleen |
| PTP4A1             | 2.48E-14 | 0.3463078  | 0.651 | 0.342 | 8.78E-10 | mDC_spleen |
| STAT1              | 2.51E-14 | 0.21725743 | 0.376 | 0.165 | 8.90E-10 | mDC_spleen |
| SEC23A             | 2.52E-14 | 0.32497444 | 0.323 | 0.131 | 8.91E-10 | mDC_spleen |
| AKAP9              | 2.55E-14 | 0.16803155 | 0.606 | 0.303 | 9.03E-10 | mDC_spleen |
| C5H4orf27          | 2.84E-14 | 0.36529768 | 0.323 | 0.132 | 1.01E-09 | mDC_spleen |
| EP400              | 2.91E-14 | 0.55274234 | 0.275 | 0.106 | 1.03E-09 | mDC_spleen |
| SYNE3              | 2.92E-14 | 0.21441692 | 0.41  | 0.186 | 1.04E-09 | mDC_spleen |
| SCAMP1             | 2.92E-14 | 0.18406545 | 0.312 | 0.126 | 1.04E-09 | mDC_spleen |



|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| PRKDC              | 2.94E-14 | 0.34654128 | 0.611 | 0.311 | 1.04E-09 | mDC_spleen |
| LHPP               | 2.99E-14 | 0.58442137 | 0.259 | 0.097 | 1.06E-09 | mDC_spleen |
| PITPNB             | 3.01E-14 | 0.22855022 | 0.5   | 0.235 | 1.07E-09 | mDC_spleen |
| GNA13              | 3.05E-14 | 0.21432941 | 0.709 | 0.407 | 1.08E-09 | mDC_spleen |
| PPIP5K2            | 3.17E-14 | 0.28369055 | 0.378 | 0.165 | 1.12E-09 | mDC_spleen |
| TXNDC9             | 3.18E-14 | 0.35655667 | 0.28  | 0.106 | 1.13E-09 | mDC_spleen |
| CCDC47             | 3.21E-14 | 0.12229025 | 0.341 | 0.139 | 1.14E-09 | mDC_spleen |
| GCC2               | 3.21E-14 | 0.50298095 | 0.447 | 0.21  | 1.14E-09 | mDC_spleen |
| MATR3              | 3.60E-14 | 0.36277019 | 0.865 | 0.513 | 1.28E-09 | mDC_spleen |
| ANKZF1             | 3.65E-14 | 0.32336036 | 0.286 | 0.11  | 1.29E-09 | mDC_spleen |
| LEO1               | 3.66E-14 | 0.80826475 | 0.254 | 0.094 | 1.30E-09 | mDC_spleen |
| TBCE               | 3.69E-14 | 0.72990078 | 0.265 | 0.103 | 1.31E-09 | mDC_spleen |
| ENSMMUG00000042951 | 3.75E-14 | 0.2666076  | 0.677 | 0.344 | 1.33E-09 | mDC_spleen |
| BCAS2              | 3.77E-14 | 0.37515086 | 0.46  | 0.213 | 1.34E-09 | mDC_spleen |
| EIF4G1             | 3.78E-14 | 0.48037566 | 0.362 | 0.157 | 1.34E-09 | mDC_spleen |
| AZIN1              | 3.91E-14 | 0.18006067 | 0.511 | 0.245 | 1.39E-09 | mDC_spleen |
| DCXR               | 4.01E-14 | 0.19228472 | 0.394 | 0.169 | 1.42E-09 | mDC_spleen |
| TAPT1              | 4.11E-14 | 0.43629744 | 0.254 | 0.095 | 1.46E-09 | mDC_spleen |
| RTTN               | 4.21E-14 | 0.28922959 | 0.265 | 0.1   | 1.49E-09 | mDC_spleen |
| RASSF2             | 4.32E-14 | 0.25323331 | 0.444 | 0.204 | 1.53E-09 | mDC_spleen |
| VPS4B              | 4.50E-14 | 0.32650623 | 0.489 | 0.235 | 1.59E-09 | mDC_spleen |
| RALB               | 4.51E-14 | 0.48958509 | 0.291 | 0.116 | 1.60E-09 | mDC_spleen |
| MGAT5              | 4.73E-14 | 0.21808376 | 0.373 | 0.165 | 1.68E-09 | mDC_spleen |
| SLC35B1            | 4.73E-14 | 0.3764529  | 0.386 | 0.168 | 1.68E-09 | mDC_spleen |
| FMC1-LUC7L2        | 4.99E-14 | 0.39666213 | 0.844 | 0.487 | 1.77E-09 | mDC_spleen |
| ENSMMUG00000064760 | 5.01E-14 | 0.39459789 | 0.278 | 0.105 | 1.77E-09 | mDC_spleen |
| NIPSNAP2           | 5.02E-14 | 0.3260852  | 0.386 | 0.17  | 1.78E-09 | mDC_spleen |
| ARHGAP4            | 5.28E-14 | 0.16424655 | 0.439 | 0.201 | 1.87E-09 | mDC_spleen |
| SDHA               | 5.84E-14 | 0.29913866 | 0.611 | 0.317 | 2.07E-09 | mDC_spleen |
| SNX2               | 5.87E-14 | 0.35293689 | 0.693 | 0.365 | 2.08E-09 | mDC_spleen |
| PRSS55             | 5.94E-14 | 0.61760258 | 0.304 | 0.125 | 2.11E-09 | mDC_spleen |
| MAPRE1             | 6.08E-14 | 0.32711432 | 0.677 | 0.354 | 2.15E-09 | mDC_spleen |
| MPLKIP             | 6.15E-14 | 0.21895274 | 0.384 | 0.166 | 2.18E-09 | mDC_spleen |

|             |          |            |       |       |          |            |
|-------------|----------|------------|-------|-------|----------|------------|
| AKT2        | 6.77E-14 | 0.2099897  | 0.27  | 0.102 | 2.40E-09 | mDC_spleen |
| PHF10       | 7.03E-14 | 0.39902429 | 0.254 | 0.095 | 2.49E-09 | mDC_spleen |
| TBC1D15     | 7.12E-14 | 0.12971028 | 0.349 | 0.148 | 2.52E-09 | mDC_spleen |
| HBP1        | 7.17E-14 | 0.27191377 | 0.476 | 0.225 | 2.54E-09 | mDC_spleen |
| RFX5        | 7.38E-14 | 0.27425358 | 0.262 | 0.098 | 2.61E-09 | mDC_spleen |
| NFYB        | 7.49E-14 | 0.20359226 | 0.294 | 0.114 | 2.65E-09 | mDC_spleen |
| API5        | 7.65E-14 | 0.4178732  | 0.296 | 0.118 | 2.71E-09 | mDC_spleen |
| SACM1L      | 7.67E-14 | 0.47174263 | 0.304 | 0.123 | 2.72E-09 | mDC_spleen |
| TMED4       | 7.79E-14 | 0.14141141 | 0.447 | 0.208 | 2.76E-09 | mDC_spleen |
| OXSRI       | 7.83E-14 | 0.21173862 | 0.812 | 0.485 | 2.77E-09 | mDC_spleen |
| RAP1GAP2    | 8.79E-14 | 0.47806404 | 0.331 | 0.144 | 3.11E-09 | mDC_spleen |
| C19H19orf38 | 9.02E-14 | 0.23358203 | 0.421 | 0.189 | 3.20E-09 | mDC_spleen |
| CEBPG       | 9.06E-14 | 0.38076774 | 0.272 | 0.105 | 3.21E-09 | mDC_spleen |
| TUBB        | 9.40E-14 | 0.38637663 | 0.783 | 0.467 | 3.33E-09 | mDC_spleen |
| CRYBG1      | 9.56E-14 | 0.37152567 | 0.556 | 0.283 | 3.39E-09 | mDC_spleen |
| NSFL1C      | 9.76E-14 | 0.27939428 | 0.352 | 0.15  | 3.46E-09 | mDC_spleen |
| PATJ        | 1.02E-13 | 0.77584736 | 0.254 | 0.098 | 3.63E-09 | mDC_spleen |
| GM2A        | 1.03E-13 | 0.35524812 | 0.251 | 0.092 | 3.64E-09 | mDC_spleen |
| TCIRG1      | 1.14E-13 | 0.20604894 | 0.294 | 0.116 | 4.05E-09 | mDC_spleen |
| ARAP1       | 1.16E-13 | 0.24420443 | 0.267 | 0.103 | 4.10E-09 | mDC_spleen |
| FBXO6       | 1.16E-13 | 0.12909767 | 0.315 | 0.127 | 4.12E-09 | mDC_spleen |
| ADD1        | 1.19E-13 | 0.2108088  | 0.45  | 0.207 | 4.22E-09 | mDC_spleen |
| ACBD6       | 1.25E-13 | 0.38344966 | 0.405 | 0.189 | 4.43E-09 | mDC_spleen |
| CREB5       | 1.28E-13 | 0.14942198 | 0.27  | 0.104 | 4.54E-09 | mDC_spleen |
| MEGF9       | 1.30E-13 | 0.41530115 | 0.312 | 0.132 | 4.62E-09 | mDC_spleen |
| ARL6IP5     | 1.38E-13 | 0.30377178 | 0.653 | 0.34  | 4.90E-09 | mDC_spleen |
| PSME3       | 1.38E-13 | 0.38198621 | 0.272 | 0.106 | 4.90E-09 | mDC_spleen |
| TBC1D10C    | 1.42E-13 | 0.29240435 | 0.325 | 0.135 | 5.03E-09 | mDC_spleen |
| CHP1        | 1.43E-13 | 0.1779698  | 0.476 | 0.221 | 5.06E-09 | mDC_spleen |
| RTF2        | 1.48E-13 | 0.3031195  | 0.59  | 0.291 | 5.24E-09 | mDC_spleen |
| NIFK        | 1.52E-13 | 0.22694816 | 0.513 | 0.247 | 5.40E-09 | mDC_spleen |
| BNIP3L      | 1.54E-13 | 0.29045671 | 0.632 | 0.326 | 5.46E-09 | mDC_spleen |
| NDUFAF7     | 1.57E-13 | 0.56255252 | 0.254 | 0.097 | 5.58E-09 | mDC_spleen |

|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| ENSMMUG00000058818 | 1.59E-13 | 0.64273144 | 0.27  | 0.107 | 5.63E-09 | mDC_spleen |
| WDR1               | 1.60E-13 | 0.1621063  | 0.659 | 0.335 | 5.67E-09 | mDC_spleen |
| CPSF7              | 1.61E-13 | 0.29544384 | 0.272 | 0.108 | 5.70E-09 | mDC_spleen |
| ARFGEF2            | 1.66E-13 | 0.15526759 | 0.331 | 0.142 | 5.90E-09 | mDC_spleen |
| LTN1               | 1.67E-13 | 0.12778883 | 0.328 | 0.139 | 5.91E-09 | mDC_spleen |
| ADAM17             | 1.72E-13 | 0.42699436 | 0.357 | 0.159 | 6.08E-09 | mDC_spleen |
| CDV3               | 1.83E-13 | 0.318337   | 0.291 | 0.117 | 6.50E-09 | mDC_spleen |
| XRN2               | 1.94E-13 | 0.18990203 | 0.725 | 0.392 | 6.86E-09 | mDC_spleen |
| CYB5R3             | 1.97E-13 | 0.31275692 | 0.368 | 0.162 | 6.98E-09 | mDC_spleen |
| EPS15              | 2.01E-13 | 0.21677399 | 0.714 | 0.385 | 7.11E-09 | mDC_spleen |
| ENSMMUG00000049718 | 2.15E-13 | 0.5723008  | 0.272 | 0.107 | 7.63E-09 | mDC_spleen |
| PCBP1              | 2.21E-13 | 0.38987458 | 0.839 | 0.531 | 7.84E-09 | mDC_spleen |
| ADORA2B            | 2.23E-13 | 1.30866689 | 0.32  | 0.156 | 7.92E-09 | mDC_spleen |
| HK1                | 2.26E-13 | 0.21316362 | 0.474 | 0.227 | 8.00E-09 | mDC_spleen |
| USP15              | 2.40E-13 | 0.19660062 | 0.907 | 0.545 | 8.51E-09 | mDC_spleen |
| SCFD2              | 2.41E-13 | 0.40975978 | 0.36  | 0.165 | 8.54E-09 | mDC_spleen |
| FXR1               | 2.43E-13 | 0.24961561 | 0.648 | 0.337 | 8.61E-09 | mDC_spleen |
| PIK3CG             | 2.44E-13 | 0.18304572 | 0.341 | 0.148 | 8.64E-09 | mDC_spleen |
| PRRC2C             | 2.53E-13 | 0.28712534 | 0.86  | 0.52  | 8.97E-09 | mDC_spleen |
| DDX24              | 2.58E-13 | 0.1570966  | 0.624 | 0.32  | 9.13E-09 | mDC_spleen |
| PAK1IP1            | 2.62E-13 | 0.20311034 | 0.415 | 0.192 | 9.27E-09 | mDC_spleen |
| UBXN2A             | 2.80E-13 | 0.31131918 | 0.423 | 0.199 | 9.91E-09 | mDC_spleen |
| AGA                | 2.89E-13 | 0.35797214 | 0.267 | 0.103 | 1.02E-08 | mDC_spleen |
| ELF4               | 2.96E-13 | 0.13700691 | 0.362 | 0.156 | 1.05E-08 | mDC_spleen |
| AFF4               | 3.09E-13 | 0.11287648 | 0.463 | 0.222 | 1.10E-08 | mDC_spleen |
| PIP5K1A            | 3.10E-13 | 0.17673797 | 0.418 | 0.193 | 1.10E-08 | mDC_spleen |
| PPP1R7             | 3.21E-13 | 0.20682505 | 0.333 | 0.141 | 1.14E-08 | mDC_spleen |
| TPP1               | 3.33E-13 | 0.11876515 | 0.487 | 0.228 | 1.18E-08 | mDC_spleen |
| CDK5RAP3           | 3.36E-13 | 0.10512434 | 0.341 | 0.144 | 1.19E-08 | mDC_spleen |
| IRF5               | 3.44E-13 | 0.30371912 | 0.283 | 0.114 | 1.22E-08 | mDC_spleen |
| TOR2A              | 3.62E-13 | 0.47050628 | 0.265 | 0.103 | 1.28E-08 | mDC_spleen |
| PNO1               | 3.70E-13 | 0.44818407 | 0.31  | 0.131 | 1.31E-08 | mDC_spleen |
| SYNCRIP            | 3.74E-13 | 0.21272653 | 0.677 | 0.356 | 1.33E-08 | mDC_spleen |

|                   |          |            |       |       |          |            |
|-------------------|----------|------------|-------|-------|----------|------------|
| AGTPBP1           | 3.98E-13 | 0.44778879 | 0.365 | 0.168 | 1.41E-08 | mDC_spleen |
| BRMS1             | 4.09E-13 | 0.17132792 | 0.339 | 0.142 | 1.45E-08 | mDC_spleen |
| PSMA3             | 4.09E-13 | 0.27010628 | 0.616 | 0.32  | 1.45E-08 | mDC_spleen |
| LMAN1             | 4.35E-13 | 0.4906886  | 0.302 | 0.126 | 1.54E-08 | mDC_spleen |
| ATF7              | 4.62E-13 | 0.30750497 | 0.399 | 0.181 | 1.64E-08 | mDC_spleen |
| SFPQ              | 4.65E-13 | 0.18653994 | 0.823 | 0.458 | 1.65E-08 | mDC_spleen |
| VPS54             | 4.83E-13 | 0.60100825 | 0.31  | 0.134 | 1.71E-08 | mDC_spleen |
| H2AC20            | 4.94E-13 | 0.28702806 | 0.468 | 0.227 | 1.75E-08 | mDC_spleen |
| ARF4              | 4.99E-13 | 0.39528014 | 0.884 | 0.582 | 1.77E-08 | mDC_spleen |
| CLEC7A            | 4.99E-13 | 0.26216191 | 0.339 | 0.148 | 1.77E-08 | mDC_spleen |
| LRIF1             | 5.01E-13 | 0.15150571 | 0.434 | 0.201 | 1.77E-08 | mDC_spleen |
| RMDN1             | 5.02E-13 | 0.37790793 | 0.452 | 0.21  | 1.78E-08 | mDC_spleen |
| JOSD1             | 5.06E-13 | 0.37741403 | 0.28  | 0.112 | 1.79E-08 | mDC_spleen |
| CSDE1             | 5.19E-13 | 0.24437637 | 0.778 | 0.421 | 1.84E-08 | mDC_spleen |
| GPAT3             | 5.22E-13 | 0.52330557 | 0.251 | 0.098 | 1.85E-08 | mDC_spleen |
| SIVA1             | 5.24E-13 | 0.28774149 | 0.378 | 0.168 | 1.86E-08 | mDC_spleen |
| PRPF38A           | 5.28E-13 | 0.21522381 | 0.315 | 0.131 | 1.87E-08 | mDC_spleen |
| BHLHE40           | 5.84E-13 | 0.36556564 | 0.841 | 0.573 | 2.07E-08 | mDC_spleen |
| ENSMUG00000007970 | 6.07E-13 | 0.26001657 | 0.352 | 0.153 | 2.15E-08 | mDC_spleen |
| NPEPPS            | 6.18E-13 | 0.10715128 | 0.362 | 0.164 | 2.19E-08 | mDC_spleen |
| EXOC1             | 6.24E-13 | 0.35610284 | 0.339 | 0.148 | 2.21E-08 | mDC_spleen |
| IPO5              | 6.26E-13 | 0.39920026 | 0.376 | 0.168 | 2.22E-08 | mDC_spleen |
| ZBTB21            | 6.28E-13 | 0.50775581 | 0.259 | 0.103 | 2.23E-08 | mDC_spleen |
| RARS1             | 6.38E-13 | 0.21088163 | 0.31  | 0.13  | 2.26E-08 | mDC_spleen |
| WARS2             | 6.41E-13 | 0.47519656 | 0.333 | 0.148 | 2.27E-08 | mDC_spleen |
| WDR48             | 6.43E-13 | 0.26496822 | 0.32  | 0.137 | 2.28E-08 | mDC_spleen |
| KIAA0040          | 6.57E-13 | 0.46543954 | 0.312 | 0.135 | 2.33E-08 | mDC_spleen |
| SERINC1           | 6.89E-13 | 0.18961845 | 0.54  | 0.264 | 2.44E-08 | mDC_spleen |
| RIOK1             | 7.04E-13 | 0.28247907 | 0.259 | 0.1   | 2.49E-08 | mDC_spleen |
| ILRUN             | 7.09E-13 | 0.32058775 | 0.294 | 0.124 | 2.51E-08 | mDC_spleen |
| CERS5             | 7.25E-13 | 0.67282543 | 0.286 | 0.121 | 2.57E-08 | mDC_spleen |
| GPBP1L1           | 7.31E-13 | 0.16571929 | 0.561 | 0.283 | 2.59E-08 | mDC_spleen |
| TBRG4             | 7.89E-13 | 0.13190824 | 0.302 | 0.124 | 2.80E-08 | mDC_spleen |

|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| VPS36              | 8.06E-13 | 0.28444729 | 0.542 | 0.273 | 2.85E-08 | mDC_spleen |
| CAMLG              | 8.19E-13 | 0.22900695 | 0.638 | 0.331 | 2.90E-08 | mDC_spleen |
| RFC1               | 8.20E-13 | 0.30448268 | 0.421 | 0.199 | 2.91E-08 | mDC_spleen |
| ENSMMUG00000049010 | 8.45E-13 | 0.3260604  | 0.503 | 0.251 | 2.99E-08 | mDC_spleen |
| AHI1               | 8.84E-13 | 0.27605058 | 0.378 | 0.174 | 3.13E-08 | mDC_spleen |
| C12H2orf76         | 8.91E-13 | 0.31505402 | 0.254 | 0.098 | 3.16E-08 | mDC_spleen |
| FH                 | 9.40E-13 | 0.14115336 | 0.291 | 0.117 | 3.33E-08 | mDC_spleen |
| COPS3              | 9.48E-13 | 0.16865074 | 0.431 | 0.201 | 3.36E-08 | mDC_spleen |
| USP4               | 9.99E-13 | 0.20591635 | 0.418 | 0.196 | 3.54E-08 | mDC_spleen |
| CEP128             | 1.00E-12 | 0.59953479 | 0.257 | 0.106 | 3.56E-08 | mDC_spleen |
| ARCN1              | 1.09E-12 | 0.17341925 | 0.45  | 0.213 | 3.87E-08 | mDC_spleen |
| ERCC6L2            | 1.16E-12 | 0.26119235 | 0.28  | 0.114 | 4.11E-08 | mDC_spleen |
| ENSMMUG00000007732 | 1.16E-12 | 0.21186645 | 0.386 | 0.172 | 4.11E-08 | mDC_spleen |
| AMD1               | 1.22E-12 | 0.20143993 | 0.656 | 0.345 | 4.31E-08 | mDC_spleen |
| SRSF11             | 1.27E-12 | 0.25246956 | 0.873 | 0.509 | 4.50E-08 | mDC_spleen |
| HADH               | 1.30E-12 | 0.16679338 | 0.299 | 0.123 | 4.60E-08 | mDC_spleen |
| PRDX3              | 1.31E-12 | 0.25649467 | 0.468 | 0.224 | 4.66E-08 | mDC_spleen |
| ZNF207             | 1.32E-12 | 0.25262727 | 0.595 | 0.308 | 4.69E-08 | mDC_spleen |
| LIMK2              | 1.33E-12 | 0.61362118 | 0.272 | 0.111 | 4.71E-08 | mDC_spleen |
| HOMER2             | 1.41E-12 | 0.21634552 | 0.302 | 0.128 | 4.99E-08 | mDC_spleen |
| DDX18              | 1.41E-12 | 0.15747879 | 0.516 | 0.255 | 4.99E-08 | mDC_spleen |
| LIN7C              | 1.42E-12 | 0.42845411 | 0.265 | 0.105 | 5.03E-08 | mDC_spleen |
| DYRK1B             | 1.45E-12 | 0.20152398 | 0.283 | 0.115 | 5.13E-08 | mDC_spleen |
| STXBP3             | 1.51E-12 | 0.24355401 | 0.312 | 0.133 | 5.34E-08 | mDC_spleen |
| USP33              | 1.53E-12 | 0.38824168 | 0.32  | 0.139 | 5.42E-08 | mDC_spleen |
| BCCIP              | 1.55E-12 | 0.1808773  | 0.45  | 0.213 | 5.47E-08 | mDC_spleen |
| CDIP1              | 1.58E-12 | 0.33349062 | 0.275 | 0.114 | 5.58E-08 | mDC_spleen |
| ARHGAP1            | 1.58E-12 | 0.25553392 | 0.352 | 0.159 | 5.59E-08 | mDC_spleen |
| DNAJC17            | 1.58E-12 | 0.61414761 | 0.257 | 0.102 | 5.61E-08 | mDC_spleen |
| RHOH               | 1.59E-12 | 0.11123487 | 0.669 | 0.367 | 5.65E-08 | mDC_spleen |
| SLC30A7            | 1.62E-12 | 0.34125051 | 0.283 | 0.117 | 5.74E-08 | mDC_spleen |
| DRG1               | 1.62E-12 | 0.14931745 | 0.257 | 0.099 | 5.75E-08 | mDC_spleen |
| PSMB4              | 1.63E-12 | 0.32477739 | 0.712 | 0.4   | 5.78E-08 | mDC_spleen |

|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| VPS4A              | 1.65E-12 | 0.23109357 | 0.254 | 0.1   | 5.86E-08 | mDC_spleen |
| PSMD7              | 1.68E-12 | 0.19707121 | 0.503 | 0.245 | 5.95E-08 | mDC_spleen |
| SEPTIN6            | 1.76E-12 | 0.11686834 | 0.794 | 0.435 | 6.22E-08 | mDC_spleen |
| STX7               | 1.82E-12 | 0.18322256 | 0.64  | 0.335 | 6.43E-08 | mDC_spleen |
| TSPAN31            | 1.84E-12 | 0.17581995 | 0.283 | 0.114 | 6.50E-08 | mDC_spleen |
| GAR1               | 1.88E-12 | 0.14880829 | 0.487 | 0.234 | 6.66E-08 | mDC_spleen |
| ENSMMUG00000059322 | 1.90E-12 | 0.20840386 | 0.291 | 0.12  | 6.75E-08 | mDC_spleen |
| MRPL4              | 1.92E-12 | 0.33563079 | 0.257 | 0.101 | 6.81E-08 | mDC_spleen |
| OGFRL1             | 1.96E-12 | 0.21900664 | 0.36  | 0.162 | 6.93E-08 | mDC_spleen |
| TAF1B              | 1.96E-12 | 0.1820147  | 0.272 | 0.11  | 6.94E-08 | mDC_spleen |
| NAIP               | 1.99E-12 | 0.19371085 | 0.291 | 0.123 | 7.06E-08 | mDC_spleen |
| PSMC2              | 2.03E-12 | 0.33777779 | 0.328 | 0.142 | 7.20E-08 | mDC_spleen |
| U2SURP             | 2.09E-12 | 0.20804589 | 0.64  | 0.329 | 7.39E-08 | mDC_spleen |
| CSNK2A1            | 2.10E-12 | 0.21733306 | 0.68  | 0.355 | 7.43E-08 | mDC_spleen |
| LSM10              | 2.13E-12 | 0.26149907 | 0.577 | 0.296 | 7.54E-08 | mDC_spleen |
| NASP               | 2.14E-12 | 0.13555282 | 0.587 | 0.305 | 7.57E-08 | mDC_spleen |
| NAMPT              | 2.16E-12 | 0.49788735 | 0.759 | 0.475 | 7.64E-08 | mDC_spleen |
| SP100              | 2.19E-12 | 0.23025509 | 0.725 | 0.399 | 7.77E-08 | mDC_spleen |
| DDOST              | 2.23E-12 | 0.24879833 | 0.725 | 0.39  | 7.90E-08 | mDC_spleen |
| RSU1               | 2.25E-12 | 0.2286989  | 0.487 | 0.245 | 7.98E-08 | mDC_spleen |
| SBDS               | 2.26E-12 | 0.21627191 | 0.32  | 0.137 | 8.00E-08 | mDC_spleen |
| PAOX               | 2.31E-12 | 0.10614172 | 0.452 | 0.215 | 8.17E-08 | mDC_spleen |
| DDX52              | 2.38E-12 | 0.2114794  | 0.354 | 0.162 | 8.45E-08 | mDC_spleen |
| SSRP1              | 2.41E-12 | 0.51221914 | 0.251 | 0.098 | 8.55E-08 | mDC_spleen |
| LRMDA              | 2.42E-12 | 0.21293704 | 0.407 | 0.204 | 8.59E-08 | mDC_spleen |
| TAF12              | 2.43E-12 | 0.13232991 | 0.384 | 0.173 | 8.60E-08 | mDC_spleen |
| KDM5C              | 2.44E-12 | 0.33366312 | 0.267 | 0.109 | 8.64E-08 | mDC_spleen |
| ATL3               | 2.45E-12 | 0.18766903 | 0.402 | 0.189 | 8.68E-08 | mDC_spleen |
| MRPS22             | 2.49E-12 | 0.1068664  | 0.262 | 0.103 | 8.83E-08 | mDC_spleen |
| PSMD2              | 2.50E-12 | 0.25903323 | 0.394 | 0.185 | 8.87E-08 | mDC_spleen |
| NAA50              | 2.59E-12 | 0.16553704 | 0.582 | 0.303 | 9.17E-08 | mDC_spleen |
| STAT2              | 2.62E-12 | 0.23971905 | 0.265 | 0.106 | 9.28E-08 | mDC_spleen |
| PTP4A2             | 2.80E-12 | 0.21515801 | 0.878 | 0.566 | 9.90E-08 | mDC_spleen |

|                     |          |            |       |       |          |            |
|---------------------|----------|------------|-------|-------|----------|------------|
| ENSMMUG000000011580 | 2.82E-12 | 0.20590589 | 0.537 | 0.265 | 9.99E-08 | mDC_spleen |
| TBC1D23             | 2.85E-12 | 0.18810183 | 0.37  | 0.17  | 1.01E-07 | mDC_spleen |
| NCLN                | 3.10E-12 | 0.23453637 | 0.296 | 0.125 | 1.10E-07 | mDC_spleen |
| CDK2AP2             | 3.22E-12 | 0.32778493 | 0.516 | 0.269 | 1.14E-07 | mDC_spleen |
| RBCK1               | 3.29E-12 | 0.10049018 | 0.344 | 0.151 | 1.17E-07 | mDC_spleen |
| POLDIP3             | 3.43E-12 | 0.25416192 | 0.283 | 0.118 | 1.21E-07 | mDC_spleen |
| EMD                 | 3.47E-12 | 0.11117857 | 0.439 | 0.208 | 1.23E-07 | mDC_spleen |
| MRPL44              | 3.56E-12 | 0.39167538 | 0.254 | 0.1   | 1.26E-07 | mDC_spleen |
| GALK2               | 3.58E-12 | 0.6712299  | 0.272 | 0.115 | 1.27E-07 | mDC_spleen |
| NCF2                | 3.60E-12 | 0.48024947 | 0.368 | 0.168 | 1.27E-07 | mDC_spleen |
| KLHL23              | 3.76E-12 | 0.31293618 | 0.836 | 0.503 | 1.33E-07 | mDC_spleen |
| MORF4L2             | 3.77E-12 | 0.14023313 | 0.513 | 0.259 | 1.34E-07 | mDC_spleen |
| RNF141              | 3.87E-12 | 0.50139028 | 0.265 | 0.108 | 1.37E-07 | mDC_spleen |
| DBF4                | 3.88E-12 | 0.66994994 | 0.296 | 0.131 | 1.37E-07 | mDC_spleen |
| CSPP1               | 3.90E-12 | 0.25922965 | 0.307 | 0.134 | 1.38E-07 | mDC_spleen |
| TCEA1               | 3.93E-12 | 0.30775802 | 0.667 | 0.366 | 1.39E-07 | mDC_spleen |
| ATF2                | 4.09E-12 | 0.13791634 | 0.399 | 0.19  | 1.45E-07 | mDC_spleen |
| MPHOSPH8            | 4.12E-12 | 0.2847768  | 0.481 | 0.242 | 1.46E-07 | mDC_spleen |
| CLK4                | 4.26E-12 | 0.47133593 | 0.262 | 0.108 | 1.51E-07 | mDC_spleen |
| ZNF655              | 4.32E-12 | 0.19721646 | 0.28  | 0.117 | 1.53E-07 | mDC_spleen |
| UBE4A               | 4.49E-12 | 0.4566462  | 0.307 | 0.134 | 1.59E-07 | mDC_spleen |
| PCID2               | 4.53E-12 | 0.36609267 | 0.288 | 0.122 | 1.61E-07 | mDC_spleen |
| HNRNPM              | 4.69E-12 | 0.22384567 | 0.733 | 0.408 | 1.66E-07 | mDC_spleen |
| RPN1                | 4.96E-12 | 0.1379424  | 0.667 | 0.344 | 1.76E-07 | mDC_spleen |
| DNAJC9              | 5.02E-12 | 0.37676995 | 0.251 | 0.1   | 1.78E-07 | mDC_spleen |
| NSRP1               | 5.14E-12 | 0.13823356 | 0.463 | 0.231 | 1.82E-07 | mDC_spleen |
| COPB1               | 5.80E-12 | 0.16121743 | 0.397 | 0.186 | 2.06E-07 | mDC_spleen |
| ENSMMUG000000006803 | 6.10E-12 | 0.30195044 | 0.553 | 0.284 | 2.16E-07 | mDC_spleen |
| TMEM147             | 6.58E-12 | 0.18859893 | 0.513 | 0.256 | 2.33E-07 | mDC_spleen |
| SERINC3             | 6.94E-12 | 0.20389737 | 0.344 | 0.155 | 2.46E-07 | mDC_spleen |
| MED19               | 6.98E-12 | 0.15783086 | 0.254 | 0.101 | 2.47E-07 | mDC_spleen |
| DPM1                | 7.11E-12 | 0.27741524 | 0.275 | 0.115 | 2.52E-07 | mDC_spleen |
| STK4                | 7.32E-12 | 0.13495041 | 0.706 | 0.388 | 2.59E-07 | mDC_spleen |

|          |          |            |       |       |          |            |
|----------|----------|------------|-------|-------|----------|------------|
| OSER1    | 7.45E-12 | 0.54513081 | 0.251 | 0.103 | 2.64E-07 | mDC_spleen |
| SUPT16H  | 7.78E-12 | 0.13042817 | 0.534 | 0.271 | 2.76E-07 | mDC_spleen |
| TMED10   | 7.80E-12 | 0.15287184 | 0.632 | 0.335 | 2.76E-07 | mDC_spleen |
| DNAJC15  | 7.81E-12 | 0.23779384 | 0.54  | 0.282 | 2.77E-07 | mDC_spleen |
| GNL1     | 8.06E-12 | 0.23060091 | 0.251 | 0.102 | 2.86E-07 | mDC_spleen |
| COPG2    | 8.62E-12 | 0.38782653 | 0.275 | 0.117 | 3.05E-07 | mDC_spleen |
| ETF1     | 8.69E-12 | 0.30456031 | 0.696 | 0.389 | 3.08E-07 | mDC_spleen |
| MIPEP    | 8.79E-12 | 0.17078243 | 0.262 | 0.108 | 3.12E-07 | mDC_spleen |
| ATF7IP2  | 8.93E-12 | 0.19543351 | 0.444 | 0.219 | 3.17E-07 | mDC_spleen |
| ATG13    | 9.04E-12 | 0.38386395 | 0.272 | 0.117 | 3.20E-07 | mDC_spleen |
| VAT1     | 9.28E-12 | 0.11942156 | 0.278 | 0.116 | 3.29E-07 | mDC_spleen |
| ETFA     | 9.49E-12 | 0.19313523 | 0.468 | 0.229 | 3.36E-07 | mDC_spleen |
| PXK      | 9.77E-12 | 0.41132614 | 0.299 | 0.13  | 3.46E-07 | mDC_spleen |
| DUSP18   | 9.91E-12 | 0.17745665 | 0.386 | 0.187 | 3.51E-07 | mDC_spleen |
| CTBS     | 1.01E-11 | 0.36802178 | 0.254 | 0.103 | 3.57E-07 | mDC_spleen |
| SS18     | 1.02E-11 | 0.20450995 | 0.386 | 0.183 | 3.61E-07 | mDC_spleen |
| PUM3     | 1.03E-11 | 0.2187336  | 0.257 | 0.103 | 3.65E-07 | mDC_spleen |
| CPSF3    | 1.09E-11 | 0.32521239 | 0.349 | 0.158 | 3.85E-07 | mDC_spleen |
| B4GALT3  | 1.18E-11 | 0.13869563 | 0.259 | 0.106 | 4.17E-07 | mDC_spleen |
| PAG1     | 1.21E-11 | 0.61650885 | 0.267 | 0.114 | 4.29E-07 | mDC_spleen |
| WDR46    | 1.36E-11 | 0.15093526 | 0.272 | 0.113 | 4.81E-07 | mDC_spleen |
| LSM8     | 1.38E-11 | 0.20462951 | 0.561 | 0.286 | 4.89E-07 | mDC_spleen |
| SERAC1   | 1.39E-11 | 0.15548966 | 0.336 | 0.154 | 4.92E-07 | mDC_spleen |
| ATP6V1D  | 1.50E-11 | 0.15136931 | 0.479 | 0.238 | 5.31E-07 | mDC_spleen |
| RPIA     | 1.55E-11 | 0.32405582 | 0.315 | 0.14  | 5.50E-07 | mDC_spleen |
| BABAM1   | 1.69E-11 | 0.11840751 | 0.275 | 0.115 | 5.99E-07 | mDC_spleen |
| TSC22D4  | 1.74E-11 | 0.31735931 | 0.257 | 0.106 | 6.17E-07 | mDC_spleen |
| CABIN1   | 1.81E-11 | 0.34350916 | 0.265 | 0.113 | 6.40E-07 | mDC_spleen |
| ATIC     | 1.82E-11 | 0.1529245  | 0.31  | 0.134 | 6.45E-07 | mDC_spleen |
| PAFAH1B2 | 1.97E-11 | 0.40630108 | 0.315 | 0.142 | 6.99E-07 | mDC_spleen |
| CKS1B    | 2.04E-11 | 0.12249402 | 0.439 | 0.213 | 7.24E-07 | mDC_spleen |
| PNPLA6   | 2.08E-11 | 0.23942592 | 0.254 | 0.104 | 7.36E-07 | mDC_spleen |
| RPL9     | 2.16E-11 | 0.27427253 | 0.958 | 0.915 | 7.66E-07 | mDC_spleen |



|                   |          |            |       |       |          |            |
|-------------------|----------|------------|-------|-------|----------|------------|
| MED23             | 2.18E-11 | 0.32239391 | 0.317 | 0.145 | 7.71E-07 | mDC_spleen |
| IGSF6             | 2.19E-11 | 0.50861605 | 0.54  | 0.314 | 7.76E-07 | mDC_spleen |
| SDHB              | 2.40E-11 | 0.38936389 | 0.489 | 0.255 | 8.51E-07 | mDC_spleen |
| PAICS             | 2.44E-11 | 0.29020963 | 0.278 | 0.12  | 8.64E-07 | mDC_spleen |
| TFDP2             | 2.52E-11 | 0.37240308 | 0.307 | 0.137 | 8.94E-07 | mDC_spleen |
| SLC25A26          | 2.60E-11 | 0.24598423 | 0.384 | 0.183 | 9.20E-07 | mDC_spleen |
| PTRH2             | 2.68E-11 | 0.10375477 | 0.27  | 0.111 | 9.48E-07 | mDC_spleen |
| CHM               | 2.79E-11 | 0.13897427 | 0.315 | 0.14  | 9.89E-07 | mDC_spleen |
| PTPRC             | 2.80E-11 | 0.23271943 | 0.944 | 0.801 | 9.91E-07 | mDC_spleen |
| SCP2              | 2.81E-11 | 0.31736001 | 0.741 | 0.432 | 9.95E-07 | mDC_spleen |
| RBM10             | 2.83E-11 | 0.18052293 | 0.262 | 0.11  | 1.00E-06 | mDC_spleen |
| CNOT8             | 2.87E-11 | 0.36684954 | 0.37  | 0.181 | 1.02E-06 | mDC_spleen |
| RRP1              | 2.93E-11 | 0.17298073 | 0.294 | 0.127 | 1.04E-06 | mDC_spleen |
| ENSMUG00000019882 | 3.09E-11 | 0.15343244 | 0.529 | 0.27  | 1.10E-06 | mDC_spleen |
| CAP1              | 3.25E-11 | 0.32186291 | 0.87  | 0.599 | 1.15E-06 | mDC_spleen |
| CCDC82            | 3.36E-11 | 0.15822949 | 0.286 | 0.124 | 1.19E-06 | mDC_spleen |
| TBCB              | 3.39E-11 | 0.12630342 | 0.5   | 0.251 | 1.20E-06 | mDC_spleen |
| SRPRB             | 3.45E-11 | 0.29114822 | 0.259 | 0.108 | 1.22E-06 | mDC_spleen |
| RBM18             | 3.47E-11 | 0.14725218 | 0.262 | 0.108 | 1.23E-06 | mDC_spleen |
| DDIT3             | 3.54E-11 | 0.15988448 | 0.304 | 0.138 | 1.26E-06 | mDC_spleen |
| KCNE3             | 3.56E-11 | 0.44980974 | 0.265 | 0.114 | 1.26E-06 | mDC_spleen |
| CYFIP2            | 3.72E-11 | 0.33388007 | 0.341 | 0.163 | 1.32E-06 | mDC_spleen |
| EEF2              | 3.73E-11 | 0.28933218 | 0.892 | 0.616 | 1.32E-06 | mDC_spleen |
| RNF167            | 3.92E-11 | 0.33447441 | 0.331 | 0.152 | 1.39E-06 | mDC_spleen |
| PARP6             | 3.94E-11 | 0.1876732  | 0.656 | 0.373 | 1.40E-06 | mDC_spleen |
| NAA35             | 3.96E-11 | 0.22798832 | 0.27  | 0.116 | 1.40E-06 | mDC_spleen |
| PLCB1             | 4.04E-11 | 0.55940523 | 0.278 | 0.125 | 1.43E-06 | mDC_spleen |
| RALGAP1           | 4.05E-11 | 0.38759849 | 0.296 | 0.134 | 1.43E-06 | mDC_spleen |
| RABGAP1           | 4.15E-11 | 0.2510964  | 0.257 | 0.108 | 1.47E-06 | mDC_spleen |
| LILRA3            | 4.21E-11 | 1.01192269 | 0.331 | 0.165 | 1.49E-06 | mDC_spleen |
| TANC2             | 4.22E-11 | 0.79673862 | 0.317 | 0.159 | 1.49E-06 | mDC_spleen |
| ZCCHC9            | 4.33E-11 | 0.28430489 | 0.299 | 0.133 | 1.54E-06 | mDC_spleen |
| RPAP3             | 4.41E-11 | 0.11798115 | 0.278 | 0.118 | 1.56E-06 | mDC_spleen |

|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| FBXO27             | 4.78E-11 | 0.3388163  | 0.259 | 0.112 | 1.69E-06 | mDC_spleen |
| ENSMMUG00000058919 | 4.80E-11 | 0.28740203 | 0.582 | 0.312 | 1.70E-06 | mDC_spleen |
| OS9                | 4.89E-11 | 0.1286304  | 0.521 | 0.271 | 1.73E-06 | mDC_spleen |
| CNST               | 5.06E-11 | 0.23843091 | 0.405 | 0.2   | 1.79E-06 | mDC_spleen |
| WSB1               | 5.09E-11 | 0.12490453 | 0.765 | 0.433 | 1.80E-06 | mDC_spleen |
| ZFYVE16            | 5.13E-11 | 0.25917587 | 0.415 | 0.208 | 1.82E-06 | mDC_spleen |
| DNAJB6             | 5.23E-11 | 0.46004835 | 0.754 | 0.454 | 1.85E-06 | mDC_spleen |
| VTA1               | 5.40E-11 | 0.38167553 | 0.323 | 0.149 | 1.91E-06 | mDC_spleen |
| SUN2               | 5.41E-11 | 0.39352628 | 0.259 | 0.11  | 1.92E-06 | mDC_spleen |
| ARF5               | 6.16E-11 | 0.40939327 | 0.828 | 0.523 | 2.18E-06 | mDC_spleen |
| TXNIP              | 6.46E-11 | 0.46658109 | 0.717 | 0.449 | 2.29E-06 | mDC_spleen |
| ENSMMUG00000064120 | 6.48E-11 | 0.20064963 | 0.672 | 0.379 | 2.30E-06 | mDC_spleen |
| GNAL               | 6.81E-11 | 0.17116846 | 0.73  | 0.433 | 2.41E-06 | mDC_spleen |
| CCNC               | 6.85E-11 | 0.39319935 | 0.317 | 0.148 | 2.43E-06 | mDC_spleen |
| RER1               | 7.00E-11 | 0.1892607  | 0.725 | 0.407 | 2.48E-06 | mDC_spleen |
| PYGB               | 7.03E-11 | 0.46259807 | 0.265 | 0.116 | 2.49E-06 | mDC_spleen |
| RALGAPA2           | 7.47E-11 | 0.12687868 | 0.302 | 0.137 | 2.65E-06 | mDC_spleen |
| RGS18              | 7.53E-11 | 0.16140224 | 0.778 | 0.461 | 2.67E-06 | mDC_spleen |
| EXOSC7             | 7.59E-11 | 0.38961863 | 0.339 | 0.159 | 2.69E-06 | mDC_spleen |
| RIOK3              | 7.65E-11 | 0.14173505 | 0.479 | 0.242 | 2.71E-06 | mDC_spleen |
| FCF1               | 7.85E-11 | 0.23811719 | 0.28  | 0.124 | 2.78E-06 | mDC_spleen |
| CTBP1              | 8.56E-11 | 0.22710846 | 0.336 | 0.156 | 3.03E-06 | mDC_spleen |
| GPR35              | 8.75E-11 | 0.13536161 | 0.336 | 0.157 | 3.10E-06 | mDC_spleen |
| POLR2H             | 8.87E-11 | 0.2440943  | 0.278 | 0.12  | 3.14E-06 | mDC_spleen |
| IKBK               | 8.89E-11 | 0.12253513 | 0.286 | 0.126 | 3.15E-06 | mDC_spleen |
| APPBP2             | 9.58E-11 | 0.14194351 | 0.323 | 0.152 | 3.39E-06 | mDC_spleen |
| PAPOLA             | 9.64E-11 | 0.21618409 | 0.728 | 0.401 | 3.41E-06 | mDC_spleen |
| ENSMMUG00000008396 | 1.05E-10 | 0.3161091  | 0.291 | 0.131 | 3.72E-06 | mDC_spleen |
| CNOT7              | 1.05E-10 | 0.11473353 | 0.384 | 0.184 | 3.73E-06 | mDC_spleen |
| ANP32E             | 1.15E-10 | 0.23040192 | 0.669 | 0.384 | 4.06E-06 | mDC_spleen |
| NUP54              | 1.18E-10 | 0.28979664 | 0.291 | 0.129 | 4.19E-06 | mDC_spleen |
| RUBCNL             | 1.26E-10 | 0.44392805 | 0.262 | 0.117 | 4.45E-06 | mDC_spleen |
| EMG1               | 1.28E-10 | 0.18664908 | 0.296 | 0.131 | 4.53E-06 | mDC_spleen |

|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| HSP90B1            | 1.30E-10 | 0.39590041 | 0.836 | 0.576 | 4.60E-06 | mDC_spleen |
| NUDC               | 1.30E-10 | 0.1677406  | 0.677 | 0.368 | 4.61E-06 | mDC_spleen |
| RNF4               | 1.32E-10 | 0.19294861 | 0.254 | 0.108 | 4.67E-06 | mDC_spleen |
| YWHAZ              | 1.34E-10 | 0.32950217 | 0.96  | 0.766 | 4.76E-06 | mDC_spleen |
| TM9SF1             | 1.42E-10 | 0.13758826 | 0.503 | 0.26  | 5.04E-06 | mDC_spleen |
| NUP210             | 1.46E-10 | 0.40524279 | 0.259 | 0.112 | 5.18E-06 | mDC_spleen |
| SUGT1              | 1.54E-10 | 0.18883383 | 0.537 | 0.278 | 5.45E-06 | mDC_spleen |
| CDC42SE1           | 1.55E-10 | 0.12002015 | 0.497 | 0.254 | 5.50E-06 | mDC_spleen |
| R3HDM1             | 1.58E-10 | 0.50520296 | 0.265 | 0.119 | 5.59E-06 | mDC_spleen |
| BCL2L11            | 1.60E-10 | 0.20239253 | 0.257 | 0.112 | 5.65E-06 | mDC_spleen |
| DDX3Y              | 1.65E-10 | 0.35133513 | 0.442 | 0.244 | 5.83E-06 | mDC_spleen |
| NUCB1              | 1.65E-10 | 0.21265454 | 0.344 | 0.165 | 5.86E-06 | mDC_spleen |
| ENSMMUG00000038088 | 1.76E-10 | 0.11452394 | 0.312 | 0.142 | 6.24E-06 | mDC_spleen |
| DCP1A              | 1.88E-10 | 0.11379657 | 0.354 | 0.172 | 6.66E-06 | mDC_spleen |
| PRKACB             | 1.98E-10 | 0.15477231 | 0.563 | 0.303 | 7.01E-06 | mDC_spleen |
| MRPS18B            | 2.01E-10 | 0.36276367 | 0.283 | 0.127 | 7.10E-06 | mDC_spleen |
| RRM1               | 2.08E-10 | 0.28461332 | 0.28  | 0.126 | 7.36E-06 | mDC_spleen |
| ENSMMUG00000022619 | 2.08E-10 | 0.11332499 | 0.275 | 0.122 | 7.37E-06 | mDC_spleen |
| TMEM243            | 2.34E-10 | 0.1361167  | 0.521 | 0.272 | 8.30E-06 | mDC_spleen |
| SENP7              | 2.37E-10 | 0.25590455 | 0.31  | 0.143 | 8.41E-06 | mDC_spleen |
| VRK1               | 2.39E-10 | 0.44259408 | 0.294 | 0.136 | 8.48E-06 | mDC_spleen |
| SELENOS            | 2.44E-10 | 0.26125648 | 0.828 | 0.522 | 8.63E-06 | mDC_spleen |
| NAE1               | 2.75E-10 | 0.18974159 | 0.323 | 0.151 | 9.74E-06 | mDC_spleen |
| BTG2               | 2.78E-10 | 0.34496225 | 0.831 | 0.601 | 9.87E-06 | mDC_spleen |
| TSPAN14            | 2.90E-10 | 0.11098416 | 0.259 | 0.115 | 1.03E-05 | mDC_spleen |
| SNAPIN             | 3.34E-10 | 0.2412877  | 0.36  | 0.173 | 1.18E-05 | mDC_spleen |
| GPR141             | 3.34E-10 | 0.40565729 | 0.413 | 0.218 | 1.18E-05 | mDC_spleen |
| ITGB1              | 3.56E-10 | 0.17186665 | 0.738 | 0.431 | 1.26E-05 | mDC_spleen |
| ENSMMUG00000040181 | 3.83E-10 | 0.13327411 | 0.513 | 0.27  | 1.36E-05 | mDC_spleen |
| CAPZA2             | 3.96E-10 | 0.28926278 | 0.878 | 0.546 | 1.40E-05 | mDC_spleen |
| RRP15              | 3.98E-10 | 0.25319287 | 0.288 | 0.131 | 1.41E-05 | mDC_spleen |
| MRPL37             | 3.98E-10 | 0.22642468 | 0.299 | 0.139 | 1.41E-05 | mDC_spleen |
| TEX264             | 4.10E-10 | 0.31606024 | 0.349 | 0.171 | 1.45E-05 | mDC_spleen |

|            |          |            |       |       |          |            |
|------------|----------|------------|-------|-------|----------|------------|
| SEPTIN9    | 4.56E-10 | 0.24449252 | 0.688 | 0.384 | 1.62E-05 | mDC_spleen |
| EIF4B      | 4.78E-10 | 0.16092964 | 0.733 | 0.418 | 1.70E-05 | mDC_spleen |
| UPF3A      | 5.11E-10 | 0.17190178 | 0.286 | 0.129 | 1.81E-05 | mDC_spleen |
| BST2       | 5.13E-10 | 0.28911721 | 0.794 | 0.517 | 1.82E-05 | mDC_spleen |
| C15H9orf78 | 5.23E-10 | 0.1464179  | 0.611 | 0.337 | 1.85E-05 | mDC_spleen |
| COPZ1      | 5.31E-10 | 0.10865166 | 0.59  | 0.313 | 1.88E-05 | mDC_spleen |
| TXNDC12    | 5.43E-10 | 0.12591663 | 0.288 | 0.131 | 1.92E-05 | mDC_spleen |
| PPP1CA     | 5.87E-10 | 0.16219432 | 0.701 | 0.401 | 2.08E-05 | mDC_spleen |
| RAB18      | 6.30E-10 | 0.25824589 | 0.41  | 0.205 | 2.23E-05 | mDC_spleen |
| WASHC5     | 6.94E-10 | 0.1346403  | 0.286 | 0.133 | 2.46E-05 | mDC_spleen |
| PEX16      | 7.07E-10 | 0.37808617 | 0.254 | 0.109 | 2.51E-05 | mDC_spleen |
| LMBR1      | 7.31E-10 | 0.22598839 | 0.307 | 0.147 | 2.59E-05 | mDC_spleen |
| NOP14      | 7.38E-10 | 0.41876991 | 0.259 | 0.118 | 2.61E-05 | mDC_spleen |
| HAT1       | 7.39E-10 | 0.12294288 | 0.312 | 0.147 | 2.62E-05 | mDC_spleen |
| CD83       | 7.57E-10 | 0.24960882 | 0.847 | 0.658 | 2.68E-05 | mDC_spleen |
| H1-4       | 7.81E-10 | 0.13932101 | 0.463 | 0.242 | 2.77E-05 | mDC_spleen |
| MBTPS1     | 8.68E-10 | 0.21627692 | 0.331 | 0.16  | 3.08E-05 | mDC_spleen |
| THUMPD1    | 8.69E-10 | 0.28579235 | 0.307 | 0.148 | 3.08E-05 | mDC_spleen |
| ELMOD3     | 8.82E-10 | 0.14576016 | 0.325 | 0.156 | 3.12E-05 | mDC_spleen |
| CASP3      | 9.37E-10 | 0.38838541 | 0.294 | 0.139 | 3.32E-05 | mDC_spleen |
| PREPL      | 9.73E-10 | 0.1539541  | 0.251 | 0.112 | 3.45E-05 | mDC_spleen |
| TVP23B     | 9.85E-10 | 0.21619115 | 0.254 | 0.114 | 3.49E-05 | mDC_spleen |
| PDCD4      | 9.92E-10 | 0.16821084 | 0.437 | 0.226 | 3.51E-05 | mDC_spleen |
| ASAH1      | 1.02E-09 | 0.40272    | 0.27  | 0.125 | 3.61E-05 | mDC_spleen |
| DDX3X      | 1.03E-09 | 0.12987727 | 0.804 | 0.487 | 3.65E-05 | mDC_spleen |
| RB1CC1     | 1.07E-09 | 0.24490299 | 0.307 | 0.146 | 3.80E-05 | mDC_spleen |
| TIGAR      | 1.21E-09 | 0.21578616 | 0.545 | 0.308 | 4.28E-05 | mDC_spleen |
| MICAL1     | 1.23E-09 | 0.24528381 | 0.28  | 0.13  | 4.36E-05 | mDC_spleen |
| TMX1       | 1.34E-09 | 0.19725486 | 0.27  | 0.122 | 4.76E-05 | mDC_spleen |
| NRAS       | 1.38E-09 | 0.1582173  | 0.331 | 0.159 | 4.90E-05 | mDC_spleen |
| VAMP4      | 1.40E-09 | 0.19030156 | 0.254 | 0.114 | 4.97E-05 | mDC_spleen |
| IRAK2      | 1.41E-09 | 0.33603419 | 0.291 | 0.142 | 4.99E-05 | mDC_spleen |
| HNRNPH3    | 1.47E-09 | 0.17553407 | 0.743 | 0.439 | 5.22E-05 | mDC_spleen |

|                    |          |            |       |       |            |            |
|--------------------|----------|------------|-------|-------|------------|------------|
| RAB3GAP2           | 1.58E-09 | 0.20802835 | 0.333 | 0.166 | 5.61E-05   | mDC_spleen |
| PDE3B              | 1.61E-09 | 0.23825378 | 0.336 | 0.171 | 5.69E-05   | mDC_spleen |
| SIKE1              | 1.76E-09 | 0.22795759 | 0.296 | 0.14  | 6.23E-05   | mDC_spleen |
| LAMP1              | 1.77E-09 | 0.31940139 | 0.267 | 0.124 | 6.28E-05   | mDC_spleen |
| KIZ                | 1.84E-09 | 0.11223324 | 0.362 | 0.183 | 6.51E-05   | mDC_spleen |
| ENSMMUG00000061125 | 1.92E-09 | 0.50578145 | 0.778 | 0.593 | 6.79E-05   | mDC_spleen |
| MTX2               | 2.00E-09 | 0.32366438 | 0.352 | 0.174 | 7.10E-05   | mDC_spleen |
| SMAD2              | 2.05E-09 | 0.21501888 | 0.31  | 0.148 | 7.28E-05   | mDC_spleen |
| MORF4L1            | 2.08E-09 | 0.31004492 | 0.865 | 0.566 | 7.38E-05   | mDC_spleen |
| ENSMMUG00000048621 | 2.28E-09 | 0.2708879  | 0.27  | 0.124 | 8.08E-05   | mDC_spleen |
| AMFR               | 2.31E-09 | 0.46846863 | 0.275 | 0.131 | 8.20E-05   | mDC_spleen |
| PNKP               | 2.32E-09 | 0.16149632 | 0.288 | 0.134 | 8.24E-05   | mDC_spleen |
| ANAPC5             | 2.46E-09 | 0.3090677  | 0.278 | 0.131 | 8.72E-05   | mDC_spleen |
| ADD3               | 2.61E-09 | 0.22970965 | 0.376 | 0.195 | 9.26E-05   | mDC_spleen |
| LCP1               | 2.74E-09 | 0.24735003 | 0.963 | 0.838 | 9.70E-05   | mDC_spleen |
| ENSMMUG00000060933 | 2.76E-09 | 0.24121446 | 0.278 | 0.133 | 9.79E-05   | mDC_spleen |
| MOB2               | 2.78E-09 | 0.30177022 | 0.389 | 0.202 | 9.85E-05   | mDC_spleen |
| MPG                | 2.87E-09 | 0.300578   | 0.331 | 0.166 | 0.00010184 | mDC_spleen |
| RALGPS2            | 3.22E-09 | 0.56667716 | 0.325 | 0.169 | 0.00011402 | mDC_spleen |
| TPP2               | 3.41E-09 | 0.13015595 | 0.278 | 0.131 | 0.00012067 | mDC_spleen |
| MTSS1              | 4.70E-09 | 0.12598682 | 0.635 | 0.399 | 0.00016637 | mDC_spleen |
| CTSD               | 4.75E-09 | 0.53318643 | 0.259 | 0.124 | 0.00016847 | mDC_spleen |
| M6PR               | 4.80E-09 | 0.17584514 | 0.698 | 0.412 | 0.0001701  | mDC_spleen |
| COMMD3             | 5.16E-09 | 0.1066936  | 0.614 | 0.344 | 0.0001828  | mDC_spleen |
| ENSMMUG00000015583 | 5.17E-09 | 0.24318079 | 0.892 | 0.654 | 0.00018315 | mDC_spleen |
| TNFSF8             | 5.43E-09 | 0.43266256 | 0.296 | 0.151 | 0.00019228 | mDC_spleen |
| NCOA7              | 5.43E-09 | 0.15056768 | 0.722 | 0.477 | 0.00019249 | mDC_spleen |
| ALKBH5             | 7.45E-09 | 0.16707259 | 0.265 | 0.125 | 0.00026409 | mDC_spleen |
| CNBP               | 7.78E-09 | 0.20909407 | 0.833 | 0.546 | 0.00027555 | mDC_spleen |
| RBM34              | 8.35E-09 | 0.25225394 | 0.294 | 0.144 | 0.00029585 | mDC_spleen |
| CBX5               | 8.77E-09 | 0.20049907 | 0.278 | 0.131 | 0.00031082 | mDC_spleen |
| HEXIM1             | 8.96E-09 | 0.18075425 | 0.28  | 0.137 | 0.00031748 | mDC_spleen |
| PDZD11             | 9.04E-09 | 0.14817669 | 0.27  | 0.125 | 0.00032017 | mDC_spleen |

|                    |          |            |       |       |            |            |
|--------------------|----------|------------|-------|-------|------------|------------|
| PGD                | 1.05E-08 | 0.17670779 | 0.325 | 0.162 | 0.00037316 | mDC_spleen |
| PCGF5              | 1.06E-08 | 0.10959413 | 0.286 | 0.139 | 0.00037671 | mDC_spleen |
| CWC25              | 1.11E-08 | 0.275745   | 0.349 | 0.182 | 0.0003922  | mDC_spleen |
| RBFA               | 1.15E-08 | 0.23071397 | 0.405 | 0.218 | 0.00040798 | mDC_spleen |
| IDH2               | 1.20E-08 | 0.14667947 | 0.704 | 0.42  | 0.00042481 | mDC_spleen |
| VIM                | 1.37E-08 | 0.43882855 | 0.971 | 0.937 | 0.00048665 | mDC_spleen |
| SON                | 1.52E-08 | 0.17359217 | 0.886 | 0.613 | 0.00053951 | mDC_spleen |
| MID1IP1            | 1.54E-08 | 0.17096937 | 0.254 | 0.12  | 0.00054392 | mDC_spleen |
| GTF3C1             | 1.56E-08 | 0.100285   | 0.257 | 0.121 | 0.00055256 | mDC_spleen |
| SCPEP1             | 1.56E-08 | 0.25545124 | 0.347 | 0.18  | 0.00055442 | mDC_spleen |
| FKBP1A             | 2.10E-08 | 0.222827   | 0.735 | 0.478 | 0.00074573 | mDC_spleen |
| MRFAP1             | 2.15E-08 | 0.2104299  | 0.614 | 0.367 | 0.00076025 | mDC_spleen |
| TAF9               | 2.16E-08 | 0.13488907 | 0.688 | 0.402 | 0.00076557 | mDC_spleen |
| ENSMUG00000008383  | 2.62E-08 | 0.13928311 | 0.315 | 0.156 | 0.00092931 | mDC_spleen |
| CCT3               | 2.66E-08 | 0.12778448 | 0.754 | 0.438 | 0.0009422  | mDC_spleen |
| DENND4C            | 3.01E-08 | 0.45856741 | 0.28  | 0.142 | 0.00106592 | mDC_spleen |
| SSR1               | 3.12E-08 | 0.13816445 | 0.659 | 0.398 | 0.00110714 | mDC_spleen |
| CCT5               | 3.46E-08 | 0.12088589 | 0.672 | 0.388 | 0.00122576 | mDC_spleen |
| CKS2               | 3.88E-08 | 0.16132461 | 0.614 | 0.359 | 0.00137327 | mDC_spleen |
| TPK1               | 4.12E-08 | 0.13256137 | 0.267 | 0.135 | 0.00145895 | mDC_spleen |
| ERI3               | 5.03E-08 | 0.16915203 | 0.259 | 0.125 | 0.001782   | mDC_spleen |
| YWHAG              | 5.68E-08 | 0.10697739 | 0.735 | 0.452 | 0.00201306 | mDC_spleen |
| CAMTA1             | 6.53E-08 | 0.20584535 | 0.794 | 0.489 | 0.00231224 | mDC_spleen |
| DCUN1D5            | 7.06E-08 | 0.21119811 | 0.336 | 0.177 | 0.00250023 | mDC_spleen |
| PRKCH              | 7.40E-08 | 0.50351616 | 0.299 | 0.158 | 0.00262219 | mDC_spleen |
| SKP1               | 8.65E-08 | 0.27742156 | 0.929 | 0.701 | 0.00306365 | mDC_spleen |
| TES                | 1.01E-07 | 0.21451723 | 0.272 | 0.138 | 0.00357722 | mDC_spleen |
| HMOX2              | 1.10E-07 | 0.28252222 | 0.738 | 0.5   | 0.00391458 | mDC_spleen |
| ENSMUG000000061128 | 1.20E-07 | 0.24083597 | 0.889 | 0.694 | 0.00425296 | mDC_spleen |
| HNRNPF             | 1.38E-07 | 0.23603512 | 0.852 | 0.588 | 0.00487343 | mDC_spleen |
| GRN                | 1.42E-07 | 0.2020375  | 0.881 | 0.608 | 0.00502004 | mDC_spleen |
| PSME2              | 2.10E-07 | 0.24992369 | 0.81  | 0.582 | 0.0074248  | mDC_spleen |
| UBE2N              | 2.51E-07 | 0.15537666 | 0.743 | 0.452 | 0.00888038 | mDC_spleen |

|                    |            |            |       |       |            |            |
|--------------------|------------|------------|-------|-------|------------|------------|
| TSN                | 2.55E-07   | 0.16635752 | 0.296 | 0.154 | 0.00902641 | mDC_spleen |
| BID                | 4.34E-07   | 0.20279733 | 0.868 | 0.591 | 0.01536963 | mDC_spleen |
| ND2                | 4.34E-07   | 0.29715802 | 0.963 | 0.895 | 0.01537325 | mDC_spleen |
| XRCC5              | 4.94E-07   | 0.17142245 | 0.78  | 0.503 | 0.01750535 | mDC_spleen |
| ENSMMUG00000065373 | 1.78E-06   | 0.40539824 | 0.955 | 0.906 | 0.06320644 | mDC_spleen |
| LYZ                | 2.06E-06   | 1.23563132 | 0.902 | 0.828 | 0.07300866 | mDC_spleen |
| MAP4K4             | 2.45E-06   | 0.11968748 | 0.574 | 0.366 | 0.08690303 | mDC_spleen |
| CAPN2              | 2.63E-06   | 0.14281507 | 0.312 | 0.18  | 0.09323354 | mDC_spleen |
| HSBP1              | 3.05E-06   | 0.26304982 | 0.844 | 0.65  | 0.1080924  | mDC_spleen |
| RPS27              | 3.10E-06   | 0.1423584  | 0.931 | 0.919 | 0.10982955 | mDC_spleen |
| SERBP1             | 3.34E-06   | 0.1216595  | 0.839 | 0.568 | 0.11850982 | mDC_spleen |
| MPEG1              | 5.17E-06   | 0.33972656 | 0.611 | 0.421 | 0.18314667 | mDC_spleen |
| PSMB8              | 5.66E-06   | 0.17396677 | 0.91  | 0.697 | 0.20040533 | mDC_spleen |
| ATP2B4             | 8.00E-06   | 0.20639619 | 0.265 | 0.15  | 0.28347934 | mDC_spleen |
| CD86               | 2.01E-05   | 0.15825405 | 0.825 | 0.641 | 0.71394445 | mDC_spleen |
| ENSA               | 2.18E-05   | 0.23527397 | 0.828 | 0.594 | 0.77279743 | mDC_spleen |
| UBB                | 3.06E-05   | 0.25766532 | 0.913 | 0.813 | 1          | mDC_spleen |
| KCNQ5              | 3.22E-05   | 0.22560471 | 0.267 | 0.163 | 1          | mDC_spleen |
| CMC1               | 5.85E-05   | 0.16886966 | 0.304 | 0.181 | 1          | mDC_spleen |
| RPS15              | 6.46E-05   | 0.11441046 | 0.966 | 0.948 | 1          | mDC_spleen |
| HNRNPA1            | 0.00010013 | 0.11672563 | 0.831 | 0.573 | 1          | mDC_spleen |
| ID2                | 0.00011359 | 0.470606   | 0.638 | 0.475 | 1          | mDC_spleen |
| APEX1              | 0.00017412 | 0.10051091 | 0.659 | 0.456 | 1          | mDC_spleen |
| HSPE1              | 0.00028483 | 0.11564863 | 0.873 | 0.623 | 1          | mDC_spleen |
| RPL7               | 0.00059821 | 0.12068317 | 0.923 | 0.887 | 1          | mDC_spleen |
| RBPJ               | 0.00105314 | 0.12982804 | 0.817 | 0.601 | 1          | mDC_spleen |
| AHNAK              | 0.00631906 | 0.21507519 | 0.709 | 0.558 | 1          | mDC_spleen |
| TMSB4X             | 0.00800031 | 0.14991628 | 0.995 | 0.973 | 1          | mDC_spleen |
| CPVL               | 0.00996073 | 0.29971042 | 0.788 | 0.827 | 1          | mDC_spleen |
| ENSMMUG00000064692 | 0.04529435 | 0.13266325 | 0.857 | 0.745 | 1          | mDC_spleen |
| COX3               | 0.09503542 | 0.31714844 | 0.889 | 0.926 | 1          | mDC_spleen |
| IL1B               | 8.46E-45   | 7.19469067 | 0.842 | 0.065 | 3.00E-40   | pDC_lung   |
| PLXDC2             | 2.73E-39   | 9.11873528 | 0.749 | 0.02  | 9.67E-35   | pDC_lung   |

|                    |          |            |       |       |          |          |
|--------------------|----------|------------|-------|-------|----------|----------|
| ATP13A3            | 1.01E-34 | 6.44228744 | 0.77  | 0.176 | 3.59E-30 | pDC_lung |
| DOCK4              | 3.34E-29 | 5.52986392 | 0.694 | 0.137 | 1.18E-24 | pDC_lung |
| RAPGEF1            | 6.56E-29 | 2.8900576  | 0.891 | 0.824 | 2.32E-24 | pDC_lung |
| ALCAM              | 9.66E-27 | 3.06732159 | 0.88  | 0.85  | 3.42E-22 | pDC_lung |
| NFKB1              | 1.51E-26 | 2.73273331 | 0.907 | 0.915 | 5.34E-22 | pDC_lung |
| MAP4K4             | 1.10E-24 | 3.1300407  | 0.863 | 0.81  | 3.89E-20 | pDC_lung |
| NR4A3              | 3.30E-24 | 3.05517136 | 0.82  | 0.66  | 1.17E-19 | pDC_lung |
| OLR1               | 1.43E-23 | 6.94320052 | 0.563 | 0.065 | 5.08E-19 | pDC_lung |
| CD86               | 2.15E-23 | 2.99822686 | 0.792 | 0.575 | 7.61E-19 | pDC_lung |
| GPR183             | 5.82E-22 | 2.63441401 | 0.82  | 0.745 | 2.06E-17 | pDC_lung |
| PRMT9              | 7.32E-22 | 5.30479381 | 0.623 | 0.19  | 2.59E-17 | pDC_lung |
| SLC8A1             | 1.11E-21 | 3.85763233 | 0.661 | 0.242 | 3.92E-17 | pDC_lung |
| FCGR2B             | 2.07E-21 | 7.40539892 | 0.503 | 0.039 | 7.33E-17 | pDC_lung |
| XYLT1              | 2.10E-21 | 3.83982712 | 0.743 | 0.458 | 7.43E-17 | pDC_lung |
| COX2               | 1.95E-20 | 1.68284467 | 0.913 | 0.784 | 6.90E-16 | pDC_lung |
| ENSMMUG00000065362 | 1.51E-19 | 1.1862604  | 1     | 0.993 | 5.36E-15 | pDC_lung |
| SLC11A2            | 3.09E-19 | 4.78565646 | 0.574 | 0.163 | 1.10E-14 | pDC_lung |
| ARHGAP24           | 3.40E-19 | 2.78934698 | 0.716 | 0.392 | 1.20E-14 | pDC_lung |
| DENND4A            | 6.31E-19 | 1.74186632 | 0.934 | 0.941 | 2.24E-14 | pDC_lung |
| ND4                | 8.26E-19 | 1.42783502 | 0.918 | 0.81  | 2.93E-14 | pDC_lung |
| COX1               | 2.43E-18 | 1.33944497 | 0.94  | 0.824 | 8.60E-14 | pDC_lung |
| MTSS1              | 3.16E-18 | 2.25769551 | 0.831 | 0.758 | 1.12E-13 | pDC_lung |
| PDE4B              | 3.97E-18 | 2.38974909 | 0.776 | 0.739 | 1.41E-13 | pDC_lung |
| CD44               | 1.04E-17 | 2.46342394 | 0.858 | 0.954 | 3.69E-13 | pDC_lung |
| PRDM1              | 1.27E-17 | 8.32808691 | 0.404 | 0.013 | 4.51E-13 | pDC_lung |
| PID1               | 1.31E-17 | 5.29023553 | 0.481 | 0.078 | 4.65E-13 | pDC_lung |
| NFE2L2             | 3.31E-17 | 2.87742121 | 0.738 | 0.634 | 1.17E-12 | pDC_lung |
| MAMU-DRB1          | 6.59E-17 | 1.51983744 | 0.934 | 0.837 | 2.34E-12 | pDC_lung |
| KYNU               | 1.11E-16 | 3.41287545 | 0.716 | 0.582 | 3.94E-12 | pDC_lung |
| SLC2A3             | 2.63E-16 | 4.1940537  | 0.574 | 0.229 | 9.33E-12 | pDC_lung |
| PTGS2              | 3.55E-16 | 7.18002789 | 0.377 | 0.013 | 1.26E-11 | pDC_lung |
| GK                 | 3.96E-16 | 5.17033497 | 0.568 | 0.242 | 1.40E-11 | pDC_lung |
| CD83               | 4.54E-16 | 1.21833149 | 0.956 | 0.967 | 1.61E-11 | pDC_lung |



|                    |          |            |       |       |          |          |
|--------------------|----------|------------|-------|-------|----------|----------|
| NRROS              | 5.98E-16 | 3.93699581 | 0.617 | 0.333 | 2.12E-11 | pDC_lung |
| MBP                | 7.23E-16 | 3.03947609 | 0.71  | 0.647 | 2.56E-11 | pDC_lung |
| ENSMMUG00000063346 | 7.55E-16 | 3.60468238 | 0.59  | 0.268 | 2.68E-11 | pDC_lung |
| LITAF              | 7.69E-16 | 2.37094576 | 0.77  | 0.621 | 2.72E-11 | pDC_lung |
| PPARD              | 9.45E-16 | 5.32093508 | 0.497 | 0.137 | 3.35E-11 | pDC_lung |
| SYTL3              | 4.08E-15 | 3.34723643 | 0.601 | 0.307 | 1.45E-10 | pDC_lung |
| NFKBID             | 4.46E-15 | 3.733598   | 0.634 | 0.412 | 1.58E-10 | pDC_lung |
| AOAH               | 5.00E-15 | 4.89197359 | 0.475 | 0.124 | 1.77E-10 | pDC_lung |
| CAMK1D             | 5.29E-15 | 2.53960782 | 0.721 | 0.595 | 1.87E-10 | pDC_lung |
| VAV1               | 7.61E-15 | 4.59865657 | 0.546 | 0.235 | 2.70E-10 | pDC_lung |
| ND4L               | 1.42E-14 | 3.34674808 | 0.645 | 0.444 | 5.03E-10 | pDC_lung |
| CXCL8              | 1.59E-14 | 6.95486674 | 0.344 | 0.013 | 5.65E-10 | pDC_lung |
| TRPS1              | 1.84E-14 | 3.43905747 | 0.623 | 0.379 | 6.52E-10 | pDC_lung |
| IL7R               | 2.38E-14 | 3.55983359 | 0.617 | 0.386 | 8.42E-10 | pDC_lung |
| ELL2               | 3.60E-14 | 3.02649327 | 0.705 | 0.641 | 1.28E-09 | pDC_lung |
| NLRP3              | 3.96E-14 | 5.32584168 | 0.454 | 0.118 | 1.40E-09 | pDC_lung |
| BAZ1A              | 4.28E-14 | 1.93953987 | 0.814 | 0.908 | 1.52E-09 | pDC_lung |
| ATP6               | 4.55E-14 | 1.21024806 | 0.913 | 0.791 | 1.61E-09 | pDC_lung |
| ENTPD1             | 5.52E-14 | 3.74247219 | 0.508 | 0.17  | 1.96E-09 | pDC_lung |
| IFNAR2             | 5.95E-14 | 2.62564051 | 0.716 | 0.712 | 2.11E-09 | pDC_lung |
| ATP6V0A1           | 6.00E-14 | 4.20605568 | 0.454 | 0.111 | 2.13E-09 | pDC_lung |
| ELMO1              | 7.89E-14 | 1.64772194 | 0.825 | 0.843 | 2.80E-09 | pDC_lung |
| ND3                | 2.99E-13 | 1.81558665 | 0.738 | 0.654 | 1.06E-08 | pDC_lung |
| CPVL               | 3.76E-13 | 2.36958701 | 0.596 | 0.288 | 1.33E-08 | pDC_lung |
| RUNX1              | 6.62E-13 | 2.5909331  | 0.645 | 0.418 | 2.35E-08 | pDC_lung |
| ARHGAP26           | 6.75E-13 | 2.07028981 | 0.787 | 0.791 | 2.39E-08 | pDC_lung |
| ENSMMUG00000058532 | 1.07E-12 | 1.89175973 | 0.738 | 0.647 | 3.80E-08 | pDC_lung |
| PLEK               | 1.17E-12 | 4.08262186 | 0.53  | 0.255 | 4.13E-08 | pDC_lung |
| LONRF3             | 1.35E-12 | 5.85821371 | 0.388 | 0.078 | 4.77E-08 | pDC_lung |
| NLRP1              | 1.87E-12 | 3.69603688 | 0.563 | 0.327 | 6.64E-08 | pDC_lung |
| ENSMMUG00000041688 | 2.04E-12 | 4.27542037 | 0.563 | 0.34  | 7.24E-08 | pDC_lung |
| BNC2               | 2.11E-12 | 6.65679096 | 0.29  | 0.007 | 7.48E-08 | pDC_lung |
| GTF2F2             | 2.22E-12 | 0.20920354 | 0.109 | 0.516 | 7.87E-08 | pDC_lung |

|                   |          |            |       |       |          |          |
|-------------------|----------|------------|-------|-------|----------|----------|
| COX3              | 2.55E-12 | 0.77438162 | 0.934 | 0.843 | 9.02E-08 | pDC_lung |
| LAT2              | 2.86E-12 | 4.06202706 | 0.426 | 0.118 | 1.01E-07 | pDC_lung |
| LPXN              | 3.25E-12 | 4.33072474 | 0.508 | 0.242 | 1.15E-07 | pDC_lung |
| NUP214            | 4.64E-12 | 0.22922851 | 0.098 | 0.484 | 1.64E-07 | pDC_lung |
| SLC9A7            | 5.41E-12 | 0.18091088 | 0.126 | 0.536 | 1.92E-07 | pDC_lung |
| PICALM            | 6.98E-12 | 2.49538827 | 0.749 | 0.856 | 2.47E-07 | pDC_lung |
| PIK3AP1           | 7.18E-12 | 2.93691011 | 0.672 | 0.654 | 2.54E-07 | pDC_lung |
| ZFX               | 7.61E-12 | 0.1694711  | 0.131 | 0.549 | 2.70E-07 | pDC_lung |
| DHRS3             | 9.57E-12 | 0.19736608 | 0.126 | 0.542 | 3.39E-07 | pDC_lung |
| GPR65             | 9.91E-12 | 4.7520832  | 0.41  | 0.118 | 3.51E-07 | pDC_lung |
| ETS2              | 1.14E-11 | 5.38565531 | 0.377 | 0.085 | 4.05E-07 | pDC_lung |
| BTBD7             | 1.15E-11 | 0.11980644 | 0.077 | 0.425 | 4.08E-07 | pDC_lung |
| ABCA6             | 1.18E-11 | 6.44645162 | 0.273 | 0.007 | 4.17E-07 | pDC_lung |
| ND2               | 1.25E-11 | 0.99151766 | 0.902 | 0.967 | 4.43E-07 | pDC_lung |
| FNIP2             | 1.26E-11 | 4.5798904  | 0.497 | 0.235 | 4.45E-07 | pDC_lung |
| MAPRE1            | 1.32E-11 | 0.12110022 | 0.18  | 0.667 | 4.69E-07 | pDC_lung |
| OXSRI             | 1.45E-11 | 3.093377   | 0.656 | 0.595 | 5.13E-07 | pDC_lung |
| HNRNPC            | 1.55E-11 | 1.79776237 | 0.776 | 0.928 | 5.48E-07 | pDC_lung |
| ASXL2             | 1.69E-11 | 0.21974526 | 0.158 | 0.608 | 5.98E-07 | pDC_lung |
| GABRG3            | 3.02E-11 | 5.22939625 | 0.355 | 0.072 | 1.07E-06 | pDC_lung |
| ANTXR2            | 4.68E-11 | 3.3055109  | 0.628 | 0.536 | 1.66E-06 | pDC_lung |
| HAVCR2            | 4.84E-11 | 5.47385375 | 0.372 | 0.092 | 1.72E-06 | pDC_lung |
| ARHGAP15          | 5.12E-11 | 2.0416405  | 0.727 | 0.725 | 1.81E-06 | pDC_lung |
| MVP               | 5.67E-11 | 0.12517746 | 0.137 | 0.549 | 2.01E-06 | pDC_lung |
| BRD4              | 5.71E-11 | 0.33738573 | 0.175 | 0.641 | 2.02E-06 | pDC_lung |
| ENSMUG00000042343 | 6.67E-11 | 5.18061871 | 0.328 | 0.052 | 2.36E-06 | pDC_lung |
| USP10             | 8.28E-11 | 0.19847128 | 0.109 | 0.484 | 2.93E-06 | pDC_lung |
| PPP1R18           | 1.06E-10 | 0.38119977 | 0.098 | 0.458 | 3.74E-06 | pDC_lung |
| PLAUR             | 1.12E-10 | 6.2541348  | 0.284 | 0.026 | 3.96E-06 | pDC_lung |
| ARHGAP31          | 1.27E-10 | 2.46321342 | 0.683 | 0.706 | 4.49E-06 | pDC_lung |
| FOSL2             | 1.37E-10 | 3.11230171 | 0.568 | 0.392 | 4.86E-06 | pDC_lung |
| SCIMP             | 1.49E-10 | 5.72224363 | 0.301 | 0.039 | 5.29E-06 | pDC_lung |
| NCKAP5            | 1.72E-10 | 3.1308483  | 0.536 | 0.32  | 6.09E-06 | pDC_lung |

|                   |          |            |       |       |          |          |
|-------------------|----------|------------|-------|-------|----------|----------|
| CDK12             | 1.74E-10 | 0.33445347 | 0.131 | 0.523 | 6.17E-06 | pDC_lung |
| RASGEF1B          | 1.93E-10 | 2.51538138 | 0.678 | 0.686 | 6.83E-06 | pDC_lung |
| GNAL              | 1.98E-10 | 0.12709411 | 0.164 | 0.595 | 7.02E-06 | pDC_lung |
| KCNK13            | 2.02E-10 | 4.89422633 | 0.361 | 0.092 | 7.16E-06 | pDC_lung |
| TLR2              | 2.08E-10 | 6.68176943 | 0.268 | 0.02  | 7.37E-06 | pDC_lung |
| UHRF1BP1L         | 2.37E-10 | 0.17273697 | 0.153 | 0.562 | 8.38E-06 | pDC_lung |
| PPP1CA            | 3.51E-10 | 0.29430641 | 0.109 | 0.471 | 1.24E-05 | pDC_lung |
| RTN1              | 3.56E-10 | 4.43949607 | 0.344 | 0.078 | 1.26E-05 | pDC_lung |
| CSRP2             | 4.05E-10 | 4.63450536 | 0.41  | 0.15  | 1.44E-05 | pDC_lung |
| ATP6V1E1          | 4.13E-10 | 0.22603249 | 0.109 | 0.464 | 1.46E-05 | pDC_lung |
| RBM27             | 4.87E-10 | 0.11344394 | 0.12  | 0.49  | 1.73E-05 | pDC_lung |
| ARAP2             | 5.80E-10 | 0.27730526 | 0.186 | 0.621 | 2.06E-05 | pDC_lung |
| ICAM1             | 5.92E-10 | 2.01033696 | 0.738 | 0.837 | 2.10E-05 | pDC_lung |
| GAPVD1            | 6.02E-10 | 0.11177193 | 0.115 | 0.471 | 2.13E-05 | pDC_lung |
| TNFAIP3           | 6.51E-10 | 1.00955045 | 0.847 | 0.935 | 2.31E-05 | pDC_lung |
| IL1R2             | 7.28E-10 | 4.49341145 | 0.366 | 0.105 | 2.58E-05 | pDC_lung |
| P2RX4             | 7.61E-10 | 3.76879078 | 0.415 | 0.157 | 2.70E-05 | pDC_lung |
| RPS6KB1           | 8.11E-10 | 0.28634048 | 0.142 | 0.529 | 2.87E-05 | pDC_lung |
| SEPTIN2           | 8.16E-10 | 0.14635884 | 0.202 | 0.66  | 2.89E-05 | pDC_lung |
| RIF1              | 8.18E-10 | 0.21959035 | 0.049 | 0.32  | 2.90E-05 | pDC_lung |
| CLTC              | 8.35E-10 | 0.1939857  | 0.197 | 0.654 | 2.96E-05 | pDC_lung |
| NSRP1             | 8.49E-10 | 0.33812646 | 0.137 | 0.523 | 3.01E-05 | pDC_lung |
| CPEB4             | 8.55E-10 | 0.18694025 | 0.137 | 0.51  | 3.03E-05 | pDC_lung |
| ARHGAP10          | 9.49E-10 | 2.32941657 | 0.628 | 0.503 | 3.36E-05 | pDC_lung |
| STEAP4            | 9.92E-10 | 5.88136537 | 0.273 | 0.033 | 3.51E-05 | pDC_lung |
| ENSMUG00000051095 | 1.10E-09 | 6.59863438 | 0.262 | 0.026 | 3.89E-05 | pDC_lung |
| CNTRL             | 1.11E-09 | 0.25152211 | 0.109 | 0.451 | 3.95E-05 | pDC_lung |
| PHACTR1           | 1.12E-09 | 3.79465952 | 0.47  | 0.248 | 3.95E-05 | pDC_lung |
| HDAC2             | 1.17E-09 | 0.25185526 | 0.12  | 0.484 | 4.13E-05 | pDC_lung |
| ETV6              | 1.21E-09 | 1.58050626 | 0.765 | 0.85  | 4.27E-05 | pDC_lung |
| EZH2              | 1.36E-09 | 0.27685728 | 0.224 | 0.686 | 4.81E-05 | pDC_lung |
| UBA1              | 1.52E-09 | 0.470202   | 0.115 | 0.464 | 5.37E-05 | pDC_lung |
| ACAD10            | 1.54E-09 | 0.11989855 | 0.06  | 0.34  | 5.45E-05 | pDC_lung |

|           |          |            |       |       |            |          |
|-----------|----------|------------|-------|-------|------------|----------|
| TRIM72    | 1.55E-09 | 0.2050634  | 0.273 | 0.778 | 5.47E-05   | pDC_lung |
| RIN2      | 1.92E-09 | 4.13010719 | 0.399 | 0.15  | 6.79E-05   | pDC_lung |
| TTC37     | 1.99E-09 | 0.31484021 | 0.104 | 0.438 | 7.06E-05   | pDC_lung |
| LARP4     | 2.05E-09 | 0.25923455 | 0.104 | 0.438 | 7.26E-05   | pDC_lung |
| SUPT5H    | 2.12E-09 | 0.62182248 | 0.082 | 0.386 | 7.49E-05   | pDC_lung |
| SPAG9     | 2.43E-09 | 1.9612344  | 0.721 | 0.765 | 8.62E-05   | pDC_lung |
| GNA13     | 2.50E-09 | 2.52245562 | 0.645 | 0.667 | 8.85E-05   | pDC_lung |
| TCERG1    | 2.56E-09 | 0.21521345 | 0.12  | 0.471 | 9.08E-05   | pDC_lung |
| SECISBP2  | 2.59E-09 | 0.43284478 | 0.087 | 0.399 | 9.17E-05   | pDC_lung |
| PI4KB     | 2.75E-09 | 0.34003104 | 0.077 | 0.373 | 9.75E-05   | pDC_lung |
| FAM168B   | 2.83E-09 | 0.14311313 | 0.104 | 0.431 | 0.00010027 | pDC_lung |
| PRKCSH    | 2.89E-09 | 0.13581572 | 0.077 | 0.373 | 0.00010234 | pDC_lung |
| PELP1     | 3.00E-09 | 0.37608045 | 0.033 | 0.268 | 0.00010625 | pDC_lung |
| RO60      | 3.21E-09 | 0.29356505 | 0.12  | 0.471 | 0.00011376 | pDC_lung |
| DDX24     | 3.25E-09 | 0.2599735  | 0.175 | 0.582 | 0.00011516 | pDC_lung |
| NPLOC4    | 3.32E-09 | 0.14824138 | 0.055 | 0.32  | 0.00011759 | pDC_lung |
| PPP6R1    | 3.34E-09 | 0.17472321 | 0.071 | 0.353 | 0.00011846 | pDC_lung |
| PTPN1     | 4.13E-09 | 1.90409485 | 0.721 | 0.784 | 0.0001465  | pDC_lung |
| ABCE1     | 4.27E-09 | 0.17682464 | 0.126 | 0.477 | 0.0001514  | pDC_lung |
| ZC3H18    | 4.28E-09 | 0.32183828 | 0.098 | 0.418 | 0.00015153 | pDC_lung |
| CTSB      | 4.34E-09 | 3.05359361 | 0.574 | 0.458 | 0.00015385 | pDC_lung |
| CTTNBP2NL | 4.73E-09 | 0.19223094 | 0.148 | 0.523 | 0.00016772 | pDC_lung |
| ZYX       | 4.76E-09 | 0.14647175 | 0.115 | 0.451 | 0.00016875 | pDC_lung |
| NDUFS1    | 5.21E-09 | 0.54423608 | 0.044 | 0.288 | 0.00018469 | pDC_lung |
| CHD9      | 6.33E-09 | 0.19233735 | 0.186 | 0.601 | 0.00022416 | pDC_lung |
| CCL4L1    | 6.38E-09 | 4.62140519 | 0.41  | 0.176 | 0.00022601 | pDC_lung |
| UBA6      | 7.10E-09 | 0.36867766 | 0.115 | 0.444 | 0.00025163 | pDC_lung |
| FAM13B    | 7.22E-09 | 0.17242434 | 0.175 | 0.575 | 0.00025567 | pDC_lung |
| RNF38     | 7.25E-09 | 0.19548328 | 0.153 | 0.523 | 0.00025701 | pDC_lung |
| ATG5      | 8.66E-09 | 0.17874624 | 0.153 | 0.523 | 0.00030695 | pDC_lung |
| KCMF1     | 8.98E-09 | 0.13705279 | 0.142 | 0.497 | 0.00031808 | pDC_lung |
| RBM47     | 9.61E-09 | 2.01359553 | 0.683 | 0.667 | 0.0003406  | pDC_lung |
| LUZP1     | 9.78E-09 | 0.28029619 | 0.06  | 0.32  | 0.00034642 | pDC_lung |

|                    |          |            |       |       |            |          |
|--------------------|----------|------------|-------|-------|------------|----------|
| KPNA1              | 1.00E-08 | 0.35064318 | 0.109 | 0.431 | 0.00035427 | pDC_lung |
| TTC3               | 1.01E-08 | 0.28266805 | 0.098 | 0.405 | 0.00035911 | pDC_lung |
| DNM2               | 1.06E-08 | 0.34568236 | 0.175 | 0.575 | 0.00037448 | pDC_lung |
| PLCD4              | 1.09E-08 | 0.10133075 | 0.137 | 0.49  | 0.00038451 | pDC_lung |
| TBC1D23            | 1.12E-08 | 0.30893041 | 0.131 | 0.471 | 0.00039726 | pDC_lung |
| LYN                | 1.15E-08 | 1.28244012 | 0.842 | 0.895 | 0.00040887 | pDC_lung |
| SPG7               | 1.18E-08 | 0.65779338 | 0.06  | 0.32  | 0.00041842 | pDC_lung |
| IST1               | 1.18E-08 | 0.30543783 | 0.131 | 0.477 | 0.00041881 | pDC_lung |
| CLDND1             | 1.24E-08 | 0.31816308 | 0.126 | 0.464 | 0.00043998 | pDC_lung |
| MRPL33             | 1.26E-08 | 0.3457413  | 0.115 | 0.438 | 0.00044788 | pDC_lung |
| ENSMMUG00000015274 | 1.34E-08 | 3.46215113 | 0.475 | 0.288 | 0.0004735  | pDC_lung |
| GAS7               | 1.41E-08 | 2.71213962 | 0.546 | 0.412 | 0.00049917 | pDC_lung |
| PFKFB3             | 1.42E-08 | 2.41892447 | 0.552 | 0.399 | 0.0005047  | pDC_lung |
| MED27              | 1.46E-08 | 0.63958481 | 0.158 | 0.536 | 0.00051693 | pDC_lung |
| UBE2F              | 1.46E-08 | 0.67538025 | 0.148 | 0.51  | 0.00051795 | pDC_lung |
| RARS2              | 1.84E-08 | 0.24461717 | 0.066 | 0.327 | 0.00065115 | pDC_lung |
| ASCC1              | 1.92E-08 | 0.20791225 | 0.104 | 0.412 | 0.00068155 | pDC_lung |
| PRPF4B             | 1.94E-08 | 0.42497623 | 0.268 | 0.778 | 0.00068667 | pDC_lung |
| ZMYM2              | 1.95E-08 | 0.16096908 | 0.24  | 0.686 | 0.00068949 | pDC_lung |
| OSGEP              | 2.25E-08 | 0.36269171 | 0.044 | 0.275 | 0.00079892 | pDC_lung |
| AKIRIN2            | 2.28E-08 | 0.24396383 | 0.158 | 0.529 | 0.0008074  | pDC_lung |
| IL17RA             | 2.31E-08 | 0.13139199 | 0.049 | 0.288 | 0.00081926 | pDC_lung |
| TXNDC11            | 2.44E-08 | 0.1809364  | 0.087 | 0.373 | 0.00086414 | pDC_lung |
| NCAPD3             | 2.48E-08 | 0.13198643 | 0.082 | 0.359 | 0.00087717 | pDC_lung |
| ABR                | 2.56E-08 | 2.39656315 | 0.601 | 0.542 | 0.00090838 | pDC_lung |
| TMEM135            | 2.68E-08 | 0.34179889 | 0.109 | 0.418 | 0.0009495  | pDC_lung |
| COMMD1             | 2.89E-08 | 0.17840859 | 0.153 | 0.51  | 0.00102464 | pDC_lung |
| NHSL1              | 3.04E-08 | 3.59604435 | 0.361 | 0.131 | 0.0010788  | pDC_lung |
| IP6K1              | 3.08E-08 | 0.32036526 | 0.082 | 0.359 | 0.0010912  | pDC_lung |
| PATL1              | 3.31E-08 | 0.36125081 | 0.175 | 0.562 | 0.0011715  | pDC_lung |
| ENSMMUG00000017297 | 3.35E-08 | 0.34936568 | 0.115 | 0.425 | 0.00118798 | pDC_lung |
| GPD2               | 3.35E-08 | 0.47343812 | 0.066 | 0.32  | 0.0011887  | pDC_lung |
| EML4               | 3.40E-08 | 2.12582074 | 0.656 | 0.654 | 0.00120539 | pDC_lung |

|                   |          |            |       |       |            |          |
|-------------------|----------|------------|-------|-------|------------|----------|
| NFATC2            | 3.46E-08 | 0.21792069 | 0.109 | 0.412 | 0.00122665 | pDC_lung |
| REL               | 3.52E-08 | 0.94700216 | 0.831 | 0.967 | 0.00124659 | pDC_lung |
| JOSD1             | 3.63E-08 | 0.37246499 | 0.12  | 0.438 | 0.00128482 | pDC_lung |
| CCDC25            | 3.91E-08 | 0.50561367 | 0.066 | 0.32  | 0.00138449 | pDC_lung |
| PTPRJ             | 4.22E-08 | 1.76452711 | 0.683 | 0.667 | 0.00149402 | pDC_lung |
| TLE4              | 4.31E-08 | 0.29475558 | 0.169 | 0.536 | 0.0015275  | pDC_lung |
| EIPR1             | 4.39E-08 | 0.24266592 | 0.109 | 0.412 | 0.00155373 | pDC_lung |
| MBD1              | 4.57E-08 | 0.29199844 | 0.044 | 0.268 | 0.0016181  | pDC_lung |
| ZNF438            | 4.97E-08 | 0.17313396 | 0.12  | 0.431 | 0.0017608  | pDC_lung |
| SNX1              | 5.00E-08 | 0.23295358 | 0.082 | 0.353 | 0.00177133 | pDC_lung |
| APLP2             | 5.18E-08 | 0.71408627 | 0.23  | 0.667 | 0.00183701 | pDC_lung |
| MOB2              | 5.48E-08 | 0.17782862 | 0.093 | 0.373 | 0.00194065 | pDC_lung |
| PTK2B             | 5.75E-08 | 0.46720059 | 0.224 | 0.654 | 0.00203702 | pDC_lung |
| NDEL1             | 5.78E-08 | 0.57647438 | 0.175 | 0.556 | 0.0020488  | pDC_lung |
| KIAA1109          | 5.87E-08 | 0.43240107 | 0.098 | 0.386 | 0.00208033 | pDC_lung |
| CAB39             | 6.08E-08 | 0.2199041  | 0.219 | 0.627 | 0.00215497 | pDC_lung |
| DCP1A             | 6.13E-08 | 0.3563932  | 0.164 | 0.529 | 0.00217289 | pDC_lung |
| SENP2             | 6.26E-08 | 0.19808413 | 0.066 | 0.314 | 0.00221956 | pDC_lung |
| BLVRB             | 6.34E-08 | 0.17545394 | 0.137 | 0.458 | 0.0022458  | pDC_lung |
| ARHGAP30          | 6.61E-08 | 0.19289008 | 0.12  | 0.431 | 0.00234349 | pDC_lung |
| PPP1R9B           | 6.63E-08 | 0.40815874 | 0.066 | 0.314 | 0.0023487  | pDC_lung |
| SUCLG2            | 6.73E-08 | 0.37470159 | 0.191 | 0.588 | 0.00238496 | pDC_lung |
| SHB               | 6.84E-08 | 0.21429326 | 0.06  | 0.301 | 0.002424   | pDC_lung |
| GBF1              | 6.90E-08 | 0.11580852 | 0.137 | 0.464 | 0.00244519 | pDC_lung |
| SAFB2             | 7.05E-08 | 0.4531569  | 0.164 | 0.529 | 0.00249715 | pDC_lung |
| ROMO1             | 7.23E-08 | 0.2362193  | 0.208 | 0.621 | 0.00256349 | pDC_lung |
| ENSMUG00000064531 | 7.63E-08 | 0.27426506 | 0.109 | 0.405 | 0.00270468 | pDC_lung |
| BTN2A2            | 8.16E-08 | 0.16414953 | 0.142 | 0.471 | 0.00289183 | pDC_lung |
| ENSMUG00000054210 | 8.46E-08 | 4.93681516 | 0.268 | 0.059 | 0.00299822 | pDC_lung |
| KLHL18            | 8.49E-08 | 0.25355297 | 0.087 | 0.359 | 0.00300871 | pDC_lung |
| PTPN2             | 8.54E-08 | 3.20152547 | 0.563 | 0.523 | 0.00302671 | pDC_lung |
| AP2B1             | 8.58E-08 | 0.11143566 | 0.18  | 0.556 | 0.00304122 | pDC_lung |
| CCNT2             | 9.03E-08 | 0.14308484 | 0.153 | 0.497 | 0.00320119 | pDC_lung |

|                    |          |            |       |       |            |          |
|--------------------|----------|------------|-------|-------|------------|----------|
| SYAP1              | 9.06E-08 | 0.31793749 | 0.175 | 0.549 | 0.00320927 | pDC_lung |
| TASOR              | 9.24E-08 | 0.21209916 | 0.098 | 0.379 | 0.00327538 | pDC_lung |
| MAN1A1             | 9.41E-08 | 2.58359905 | 0.612 | 0.595 | 0.00333587 | pDC_lung |
| TNFRSF1B           | 9.58E-08 | 2.54359288 | 0.607 | 0.614 | 0.00339474 | pDC_lung |
| HMBBOX1            | 9.67E-08 | 0.14964519 | 0.137 | 0.464 | 0.00342472 | pDC_lung |
| HPS5               | 9.70E-08 | 0.40375006 | 0.109 | 0.405 | 0.00343813 | pDC_lung |
| EYA3               | 1.05E-07 | 0.16404967 | 0.115 | 0.412 | 0.00373404 | pDC_lung |
| SLK                | 1.09E-07 | 0.10103542 | 0.137 | 0.458 | 0.00386244 | pDC_lung |
| TCF25              | 1.10E-07 | 0.10971776 | 0.18  | 0.556 | 0.00391025 | pDC_lung |
| CSNK1G2            | 1.10E-07 | 0.80066619 | 0.104 | 0.392 | 0.00391511 | pDC_lung |
| POLD4              | 1.13E-07 | 0.2739956  | 0.093 | 0.366 | 0.00401383 | pDC_lung |
| ENSMMUG00000039874 | 1.14E-07 | 0.14685643 | 0.087 | 0.353 | 0.00404726 | pDC_lung |
| PSMC3              | 1.19E-07 | 0.12817424 | 0.06  | 0.294 | 0.00420058 | pDC_lung |
| KAT6A              | 1.27E-07 | 0.36668423 | 0.224 | 0.647 | 0.0045034  | pDC_lung |
| PARN               | 1.28E-07 | 0.101344   | 0.087 | 0.353 | 0.00453129 | pDC_lung |
| LSM12              | 1.29E-07 | 0.33745937 | 0.093 | 0.366 | 0.00456309 | pDC_lung |
| CD40               | 1.29E-07 | 0.2229722  | 0.219 | 0.627 | 0.0045797  | pDC_lung |
| NRF1               | 1.30E-07 | 0.22452644 | 0.164 | 0.51  | 0.00460211 | pDC_lung |
| GLE1               | 1.34E-07 | 0.12688442 | 0.049 | 0.268 | 0.00474604 | pDC_lung |
| SNX2               | 1.36E-07 | 0.78968634 | 0.219 | 0.647 | 0.00482441 | pDC_lung |
| PANK3              | 1.36E-07 | 0.15084933 | 0.137 | 0.451 | 0.00483411 | pDC_lung |
| SEPTIN6            | 1.37E-07 | 0.10433758 | 0.202 | 0.582 | 0.00486189 | pDC_lung |
| DCP2               | 1.41E-07 | 0.15742435 | 0.109 | 0.399 | 0.00499547 | pDC_lung |
| SETX               | 1.46E-07 | 0.38670149 | 0.169 | 0.529 | 0.00516822 | pDC_lung |
| DGLUCY             | 1.53E-07 | 0.14132593 | 0.077 | 0.327 | 0.00540662 | pDC_lung |
| MB21D2             | 1.57E-07 | 3.64249415 | 0.426 | 0.242 | 0.00557654 | pDC_lung |
| PIK3CB             | 1.65E-07 | 0.27294831 | 0.279 | 0.745 | 0.00585823 | pDC_lung |
| PPP4R3A            | 1.66E-07 | 0.44106974 | 0.137 | 0.458 | 0.00586592 | pDC_lung |
| ENSMMUG00000051505 | 1.69E-07 | 0.29910893 | 0.153 | 0.484 | 0.00598308 | pDC_lung |
| TMED10             | 1.74E-07 | 0.42047833 | 0.104 | 0.386 | 0.0061475  | pDC_lung |
| HNRNPLL            | 1.80E-07 | 0.30987044 | 0.093 | 0.359 | 0.00637151 | pDC_lung |
| PJA2               | 1.80E-07 | 0.13104893 | 0.23  | 0.647 | 0.00637454 | pDC_lung |
| WRN                | 1.81E-07 | 0.32653749 | 0.126 | 0.431 | 0.00642091 | pDC_lung |

|                   |          |            |       |       |            |          |
|-------------------|----------|------------|-------|-------|------------|----------|
| JMJD1C            | 1.82E-07 | 1.7797725  | 0.727 | 0.876 | 0.00646452 | pDC_lung |
| RBM5              | 1.83E-07 | 0.3883525  | 0.219 | 0.614 | 0.0064777  | pDC_lung |
| PLAU              | 1.84E-07 | 5.11383071 | 0.251 | 0.052 | 0.00652661 | pDC_lung |
| LAMTOR3           | 1.84E-07 | 0.14382662 | 0.175 | 0.536 | 0.00652962 | pDC_lung |
| EHD4              | 1.91E-07 | 0.39527566 | 0.137 | 0.451 | 0.00676339 | pDC_lung |
| CLK1              | 1.91E-07 | 0.3060914  | 0.257 | 0.712 | 0.00677823 | pDC_lung |
| CERT1             | 1.94E-07 | 0.3665211  | 0.235 | 0.667 | 0.00687772 | pDC_lung |
| MTMR14            | 1.97E-07 | 0.20546453 | 0.12  | 0.418 | 0.00698224 | pDC_lung |
| USP36             | 1.98E-07 | 2.99121512 | 0.574 | 0.562 | 0.00701112 | pDC_lung |
| RABEP1            | 1.99E-07 | 0.3538179  | 0.148 | 0.477 | 0.00703527 | pDC_lung |
| WARS2             | 2.08E-07 | 0.12183445 | 0.055 | 0.275 | 0.00738652 | pDC_lung |
| ENSMUG00000042837 | 2.13E-07 | 0.18735764 | 0.087 | 0.346 | 0.00754303 | pDC_lung |
| CDK19             | 2.14E-07 | 0.16980389 | 0.115 | 0.405 | 0.00756864 | pDC_lung |
| ZNF207            | 2.25E-07 | 0.38582104 | 0.18  | 0.542 | 0.00798318 | pDC_lung |
| ZBTB46            | 2.28E-07 | 0.46569051 | 0.191 | 0.562 | 0.00808519 | pDC_lung |
| TNIP1             | 2.30E-07 | 0.28348343 | 0.164 | 0.497 | 0.00816485 | pDC_lung |
| DDX50             | 2.39E-07 | 0.36516347 | 0.115 | 0.405 | 0.00846338 | pDC_lung |
| ARCN1             | 2.44E-07 | 0.25533679 | 0.093 | 0.359 | 0.00863407 | pDC_lung |
| PLEC              | 2.52E-07 | 0.17224461 | 0.153 | 0.471 | 0.00893676 | pDC_lung |
| CREB1             | 2.54E-07 | 0.36979056 | 0.186 | 0.556 | 0.0090028  | pDC_lung |
| VPS8              | 2.67E-07 | 0.11240002 | 0.186 | 0.542 | 0.00944955 | pDC_lung |
| HM13              | 2.86E-07 | 0.50077723 | 0.169 | 0.51  | 0.01013026 | pDC_lung |
| UBAP2             | 2.91E-07 | 0.19605226 | 0.164 | 0.497 | 0.01031232 | pDC_lung |
| DHX36             | 2.96E-07 | 0.44938064 | 0.213 | 0.614 | 0.01049004 | pDC_lung |
| BATF              | 2.97E-07 | 4.45119977 | 0.306 | 0.105 | 0.01051086 | pDC_lung |
| CHD2              | 2.98E-07 | 2.13121781 | 0.639 | 0.765 | 0.01057574 | pDC_lung |
| CAPZA2            | 3.07E-07 | 0.13979546 | 0.262 | 0.693 | 0.01087793 | pDC_lung |
| RPN2              | 3.17E-07 | 0.22286303 | 0.093 | 0.353 | 0.0112329  | pDC_lung |
| MAP3K3            | 3.21E-07 | 0.44065589 | 0.109 | 0.392 | 0.01136457 | pDC_lung |
| ATP2C1            | 3.28E-07 | 0.61646751 | 0.197 | 0.575 | 0.0116194  | pDC_lung |
| LONRF1            | 3.32E-07 | 0.71902066 | 0.093 | 0.353 | 0.01176147 | pDC_lung |
| CRTC3             | 3.42E-07 | 0.30706768 | 0.104 | 0.373 | 0.01212836 | pDC_lung |
| ERBB3             | 3.43E-07 | 0.19782025 | 0.098 | 0.366 | 0.01213657 | pDC_lung |



|                    |          |            |       |       |            |          |
|--------------------|----------|------------|-------|-------|------------|----------|
| FGD4               | 3.46E-07 | 3.68523821 | 0.399 | 0.209 | 0.01226768 | pDC_lung |
| CCL3               | 3.52E-07 | 3.98065345 | 0.328 | 0.124 | 0.01247986 | pDC_lung |
| ZBTB1              | 3.65E-07 | 0.2365544  | 0.148 | 0.464 | 0.01294994 | pDC_lung |
| NDUFB11            | 3.72E-07 | 0.14033585 | 0.148 | 0.471 | 0.01319167 | pDC_lung |
| PTPRE              | 3.73E-07 | 3.85939574 | 0.273 | 0.072 | 0.01321702 | pDC_lung |
| DPP9               | 3.76E-07 | 0.41841782 | 0.115 | 0.399 | 0.01331646 | pDC_lung |
| UBE3A              | 3.76E-07 | 0.60432523 | 0.257 | 0.706 | 0.01333894 | pDC_lung |
| ARF1               | 3.80E-07 | 0.28865608 | 0.262 | 0.712 | 0.01347268 | pDC_lung |
| NRBF2              | 3.82E-07 | 0.23500351 | 0.066 | 0.294 | 0.01352042 | pDC_lung |
| ATF1               | 4.17E-07 | 0.566286   | 0.093 | 0.353 | 0.0147858  | pDC_lung |
| MED17              | 4.30E-07 | 0.45354925 | 0.06  | 0.281 | 0.01525021 | pDC_lung |
| REV3L              | 4.44E-07 | 0.70676601 | 0.137 | 0.438 | 0.0157238  | pDC_lung |
| SAE1               | 4.53E-07 | 0.14628698 | 0.055 | 0.268 | 0.01604287 | pDC_lung |
| EIF2A              | 4.55E-07 | 0.54277621 | 0.109 | 0.386 | 0.01610534 | pDC_lung |
| SCLT1              | 4.64E-07 | 0.37865213 | 0.268 | 0.706 | 0.01643907 | pDC_lung |
| BDP1               | 4.85E-07 | 0.20465508 | 0.148 | 0.458 | 0.01719275 | pDC_lung |
| TM9SF4             | 4.88E-07 | 0.12131772 | 0.109 | 0.386 | 0.01729588 | pDC_lung |
| FAM177A1           | 4.91E-07 | 0.39658736 | 0.077 | 0.314 | 0.01739055 | pDC_lung |
| ZC3HAV1            | 5.03E-07 | 0.14246234 | 0.213 | 0.575 | 0.01781683 | pDC_lung |
| NOD2               | 5.22E-07 | 4.42406086 | 0.273 | 0.078 | 0.0184805  | pDC_lung |
| ATP6V0D1           | 5.30E-07 | 0.55979449 | 0.219 | 0.614 | 0.01876695 | pDC_lung |
| TAOK1              | 5.39E-07 | 0.26874895 | 0.224 | 0.614 | 0.01908774 | pDC_lung |
| DMXL1              | 5.53E-07 | 0.23296523 | 0.071 | 0.301 | 0.01960524 | pDC_lung |
| AMZ2               | 5.61E-07 | 3.37400286 | 0.454 | 0.314 | 0.0198908  | pDC_lung |
| FKBP8              | 5.75E-07 | 0.33477318 | 0.115 | 0.392 | 0.02037591 | pDC_lung |
| TBC1D15            | 6.07E-07 | 0.25932039 | 0.12  | 0.399 | 0.02150935 | pDC_lung |
| ERICH1             | 6.08E-07 | 0.67880991 | 0.12  | 0.405 | 0.02154245 | pDC_lung |
| TMEM41B            | 6.15E-07 | 0.83770483 | 0.071 | 0.301 | 0.02179276 | pDC_lung |
| RNMT               | 6.37E-07 | 0.51189217 | 0.18  | 0.536 | 0.02256243 | pDC_lung |
| TXLNG              | 6.46E-07 | 0.13700528 | 0.082 | 0.32  | 0.02287888 | pDC_lung |
| TSPAN33            | 6.60E-07 | 0.41971422 | 0.158 | 0.484 | 0.02339178 | pDC_lung |
| ENSMMUG00000016959 | 6.61E-07 | 0.40775257 | 0.208 | 0.575 | 0.02341377 | pDC_lung |
| MLLT10             | 6.80E-07 | 0.34069555 | 0.213 | 0.601 | 0.02411103 | pDC_lung |

|                    |          |            |       |       |            |          |
|--------------------|----------|------------|-------|-------|------------|----------|
| CCDC47             | 6.81E-07 | 0.12524988 | 0.098 | 0.353 | 0.02411259 | pDC_lung |
| RALGAPB            | 6.82E-07 | 0.43465186 | 0.093 | 0.346 | 0.0241574  | pDC_lung |
| ATP2A2             | 6.84E-07 | 0.19103057 | 0.148 | 0.458 | 0.02424033 | pDC_lung |
| BORCS5             | 6.93E-07 | 0.41476241 | 0.087 | 0.333 | 0.0245387  | pDC_lung |
| ENSMMUG00000062012 | 7.40E-07 | 0.54775262 | 0.082 | 0.32  | 0.02620284 | pDC_lung |
| DAPK1              | 7.40E-07 | 1.96177244 | 0.607 | 0.516 | 0.02620827 | pDC_lung |
| CBWD1              | 7.48E-07 | 0.40815986 | 0.126 | 0.412 | 0.02650979 | pDC_lung |
| CAST               | 7.50E-07 | 0.57870248 | 0.344 | 0.85  | 0.02657998 | pDC_lung |
| ORC3               | 7.61E-07 | 0.3821747  | 0.06  | 0.275 | 0.02695758 | pDC_lung |
| IL15RA             | 8.38E-07 | 0.39310252 | 0.109 | 0.373 | 0.02968284 | pDC_lung |
| MBD2               | 8.39E-07 | 0.2650419  | 0.098 | 0.353 | 0.02974131 | pDC_lung |
| SLC25A27           | 8.49E-07 | 0.89228242 | 0.06  | 0.275 | 0.03007051 | pDC_lung |
| REV1               | 8.49E-07 | 0.49203417 | 0.06  | 0.275 | 0.03007051 | pDC_lung |
| PIK3R1             | 8.75E-07 | 0.6153283  | 0.164 | 0.49  | 0.03098986 | pDC_lung |
| ITGAE              | 8.79E-07 | 0.26077235 | 0.071 | 0.294 | 0.03116083 | pDC_lung |
| OTUD5              | 8.95E-07 | 0.53458342 | 0.087 | 0.333 | 0.03172568 | pDC_lung |
| ZEB2               | 8.97E-07 | 1.59731822 | 0.699 | 0.712 | 0.03177465 | pDC_lung |
| LTN1               | 9.13E-07 | 0.24542043 | 0.082 | 0.32  | 0.03234617 | pDC_lung |
| TNRC18             | 9.33E-07 | 0.27030786 | 0.246 | 0.647 | 0.03305034 | pDC_lung |
| GSK3B              | 9.82E-07 | 0.13787227 | 0.322 | 0.817 | 0.03478741 | pDC_lung |
| ZNF654             | 9.97E-07 | 0.58537394 | 0.104 | 0.366 | 0.03534134 | pDC_lung |
| P4HB               | 1.01E-06 | 0.76495885 | 0.164 | 0.49  | 0.03564094 | pDC_lung |
| WWP1               | 1.06E-06 | 0.49746642 | 0.186 | 0.529 | 0.03738805 | pDC_lung |
| CCNL1              | 1.06E-06 | 1.02711761 | 0.825 | 0.954 | 0.03745952 | pDC_lung |
| NUMA1              | 1.06E-06 | 0.66209209 | 0.12  | 0.399 | 0.03754824 | pDC_lung |
| RPTOR              | 1.07E-06 | 0.13254521 | 0.142 | 0.438 | 0.03788052 | pDC_lung |
| GON4L              | 1.07E-06 | 0.29688282 | 0.137 | 0.431 | 0.03789964 | pDC_lung |
| PLBD1              | 1.10E-06 | 0.24812585 | 0.066 | 0.281 | 0.03891578 | pDC_lung |
| SAMD4B             | 1.11E-06 | 0.20595582 | 0.191 | 0.542 | 0.03948199 | pDC_lung |
| ATF7IP2            | 1.12E-06 | 0.34179176 | 0.126 | 0.405 | 0.03974024 | pDC_lung |
| ENSMMUG00000000350 | 1.12E-06 | 0.81820243 | 0.071 | 0.294 | 0.03976163 | pDC_lung |
| POGZ               | 1.13E-06 | 0.42404602 | 0.23  | 0.621 | 0.03999073 | pDC_lung |
| IRAK3              | 1.15E-06 | 0.21980596 | 0.071 | 0.294 | 0.04080831 | pDC_lung |

|         |          |            |       |       |            |          |
|---------|----------|------------|-------|-------|------------|----------|
| SFPQ    | 1.17E-06 | 0.20961199 | 0.279 | 0.712 | 0.0413022  | pDC_lung |
| RUBCN   | 1.17E-06 | 0.26084868 | 0.213 | 0.582 | 0.0415442  | pDC_lung |
| SEC63   | 1.25E-06 | 0.39511101 | 0.175 | 0.503 | 0.04424492 | pDC_lung |
| STAT1   | 1.25E-06 | 1.14536025 | 0.169 | 0.503 | 0.04436808 | pDC_lung |
| TENT2   | 1.25E-06 | 0.17856584 | 0.191 | 0.536 | 0.04436882 | pDC_lung |
| LDLRAD4 | 1.27E-06 | 2.55123915 | 0.475 | 0.333 | 0.04516008 | pDC_lung |
| HSPA9   | 1.28E-06 | 0.58770998 | 0.208 | 0.588 | 0.04536161 | pDC_lung |
| ARRDC3  | 1.29E-06 | 0.58411882 | 0.087 | 0.327 | 0.04578195 | pDC_lung |
| SMG6    | 1.30E-06 | 0.27909204 | 0.23  | 0.621 | 0.04602936 | pDC_lung |
| RGCC    | 1.31E-06 | 0.31415077 | 0.06  | 0.268 | 0.04652846 | pDC_lung |
| EIF4E   | 1.32E-06 | 0.55143541 | 0.115 | 0.386 | 0.04676187 | pDC_lung |
| TBC1D24 | 1.37E-06 | 0.36807716 | 0.29  | 0.725 | 0.04848003 | pDC_lung |
| NDUFA9  | 1.40E-06 | 0.10124256 | 0.055 | 0.255 | 0.04975678 | pDC_lung |
| GPAT4   | 1.44E-06 | 0.14682272 | 0.055 | 0.255 | 0.05115101 | pDC_lung |
| DCTN6   | 1.46E-06 | 0.53215077 | 0.082 | 0.314 | 0.0518127  | pDC_lung |
| NCF4    | 1.49E-06 | 0.25111392 | 0.12  | 0.392 | 0.05269046 | pDC_lung |
| SEC23B  | 1.54E-06 | 0.26150926 | 0.055 | 0.255 | 0.05455182 | pDC_lung |
| FAF1    | 1.54E-06 | 0.11325652 | 0.213 | 0.562 | 0.05473884 | pDC_lung |
| SLC35E1 | 1.57E-06 | 0.95122994 | 0.104 | 0.359 | 0.05561635 | pDC_lung |
| CNPY3   | 1.60E-06 | 0.22960043 | 0.098 | 0.346 | 0.05661171 | pDC_lung |
| BRD7    | 1.66E-06 | 0.38674072 | 0.082 | 0.314 | 0.05866121 | pDC_lung |
| SUSD6   | 1.70E-06 | 3.21887971 | 0.437 | 0.294 | 0.0603323  | pDC_lung |
| DTD1    | 1.72E-06 | 0.36363611 | 0.109 | 0.366 | 0.06097112 | pDC_lung |
| ARIH2   | 1.73E-06 | 0.20721226 | 0.164 | 0.477 | 0.06146433 | pDC_lung |
| ZZEF1   | 1.74E-06 | 0.28151454 | 0.131 | 0.412 | 0.06168217 | pDC_lung |
| RELT    | 1.77E-06 | 0.46445702 | 0.115 | 0.379 | 0.06287218 | pDC_lung |
| FDX1    | 1.78E-06 | 0.19626545 | 0.153 | 0.458 | 0.06323553 | pDC_lung |
| ZNF28   | 1.84E-06 | 0.26564188 | 0.148 | 0.444 | 0.06523367 | pDC_lung |
| RAD51B  | 1.86E-06 | 0.15838228 | 0.219 | 0.562 | 0.0660587  | pDC_lung |
| QRICH1  | 1.88E-06 | 0.51808633 | 0.158 | 0.471 | 0.06651581 | pDC_lung |
| DCAF1   | 1.94E-06 | 0.78813001 | 0.093 | 0.333 | 0.06877002 | pDC_lung |
| CDKN1B  | 1.94E-06 | 0.44646807 | 0.098 | 0.346 | 0.06889957 | pDC_lung |
| TMEM87A | 1.95E-06 | 0.21655634 | 0.18  | 0.51  | 0.06916128 | pDC_lung |

|                    |          |            |       |       |            |          |
|--------------------|----------|------------|-------|-------|------------|----------|
| DPP7               | 1.95E-06 | 0.28561937 | 0.126 | 0.399 | 0.06926792 | pDC_lung |
| RNF11              | 1.96E-06 | 0.91890235 | 0.093 | 0.333 | 0.06931957 | pDC_lung |
| ENSMMUG00000049951 | 1.96E-06 | 0.13137344 | 0.082 | 0.307 | 0.06950672 | pDC_lung |
| HERC1              | 1.98E-06 | 0.15605477 | 0.186 | 0.516 | 0.07030018 | pDC_lung |
| EMD                | 2.08E-06 | 0.11045703 | 0.082 | 0.307 | 0.07363647 | pDC_lung |
| IKBKB              | 2.10E-06 | 0.36221892 | 0.175 | 0.497 | 0.07455611 | pDC_lung |
| SESN1              | 2.11E-06 | 0.1872409  | 0.082 | 0.307 | 0.07485903 | pDC_lung |
| ZBTB7A             | 2.12E-06 | 0.70287986 | 0.093 | 0.333 | 0.0750522  | pDC_lung |
| RRBP1              | 2.12E-06 | 0.3423694  | 0.142 | 0.431 | 0.07527466 | pDC_lung |
| VPS35              | 2.16E-06 | 0.29746225 | 0.06  | 0.261 | 0.07639163 | pDC_lung |
| PCNX1              | 2.18E-06 | 0.19593649 | 0.115 | 0.373 | 0.07709712 | pDC_lung |
| RBM22              | 2.19E-06 | 0.48120911 | 0.066 | 0.275 | 0.07766711 | pDC_lung |
| MAP3K20            | 2.20E-06 | 0.23267704 | 0.169 | 0.484 | 0.07799616 | pDC_lung |
| CMIP               | 2.27E-06 | 2.62956323 | 0.568 | 0.569 | 0.08057476 | pDC_lung |
| VPS53              | 2.33E-06 | 0.72167391 | 0.109 | 0.366 | 0.08268781 | pDC_lung |
| CYBA               | 2.33E-06 | 0.234336   | 0.23  | 0.601 | 0.08271945 | pDC_lung |
| EVL                | 2.40E-06 | 0.18248769 | 0.115 | 0.373 | 0.08499708 | pDC_lung |
| PPIB               | 2.41E-06 | 0.11436888 | 0.219 | 0.588 | 0.08521936 | pDC_lung |
| MEF2C              | 2.44E-06 | 2.42210651 | 0.552 | 0.503 | 0.08647018 | pDC_lung |
| ENSMMUG00000014831 | 2.52E-06 | 3.16424484 | 0.393 | 0.229 | 0.08937707 | pDC_lung |
| TEC                | 2.52E-06 | 0.12147297 | 0.087 | 0.314 | 0.08938816 | pDC_lung |
| AMD1               | 2.53E-06 | 0.43570822 | 0.224 | 0.595 | 0.08978572 | pDC_lung |
| MAP2K2             | 2.58E-06 | 0.26698644 | 0.06  | 0.261 | 0.09123959 | pDC_lung |
| CHD4               | 2.58E-06 | 0.51643596 | 0.219 | 0.575 | 0.09125894 | pDC_lung |
| CIITA              | 2.62E-06 | 2.86777218 | 0.415 | 0.255 | 0.09290609 | pDC_lung |
| PRKACB             | 2.68E-06 | 0.50855499 | 0.126 | 0.399 | 0.09481157 | pDC_lung |
| POLR2E             | 2.84E-06 | 0.30114646 | 0.082 | 0.307 | 0.10050126 | pDC_lung |
| CLK4               | 2.88E-06 | 0.52363541 | 0.082 | 0.307 | 0.10214906 | pDC_lung |
| YME1L1             | 2.88E-06 | 0.88386924 | 0.158 | 0.464 | 0.10217176 | pDC_lung |
| ZNF131             | 2.90E-06 | 0.44150977 | 0.126 | 0.399 | 0.10267453 | pDC_lung |
| USP47              | 2.91E-06 | 0.40151096 | 0.186 | 0.523 | 0.10309337 | pDC_lung |
| MEF2D              | 3.07E-06 | 0.44096722 | 0.066 | 0.268 | 0.1087759  | pDC_lung |
| FAM53C             | 3.11E-06 | 0.53401507 | 0.131 | 0.399 | 0.11002472 | pDC_lung |

|                   |          |            |       |       |            |          |
|-------------------|----------|------------|-------|-------|------------|----------|
| APP               | 3.16E-06 | 0.23843966 | 0.279 | 0.667 | 0.11184729 | pDC_lung |
| ERN1              | 3.16E-06 | 0.1629245  | 0.087 | 0.314 | 0.11193368 | pDC_lung |
| MDN1              | 3.30E-06 | 0.57003855 | 0.071 | 0.281 | 0.11697264 | pDC_lung |
| TYK2              | 3.33E-06 | 0.43471242 | 0.109 | 0.359 | 0.11804689 | pDC_lung |
| NAPA              | 3.40E-06 | 0.18196682 | 0.093 | 0.327 | 0.12047137 | pDC_lung |
| GPALPP1           | 3.42E-06 | 3.78441827 | 0.388 | 0.235 | 0.12134374 | pDC_lung |
| LMBR1             | 3.44E-06 | 0.32970739 | 0.082 | 0.301 | 0.12188527 | pDC_lung |
| SPTSSA            | 3.47E-06 | 0.40541759 | 0.104 | 0.346 | 0.12300405 | pDC_lung |
| IKBK              | 3.59E-06 | 0.56061431 | 0.087 | 0.314 | 0.12716847 | pDC_lung |
| ADARB2            | 3.60E-06 | 0.57211914 | 0.142 | 0.425 | 0.12746821 | pDC_lung |
| AFTPH             | 3.65E-06 | 0.27396167 | 0.301 | 0.758 | 0.12945115 | pDC_lung |
| CCDC84            | 3.77E-06 | 0.58210936 | 0.066 | 0.268 | 0.13374351 | pDC_lung |
| TET3              | 3.85E-06 | 0.35387558 | 0.246 | 0.621 | 0.13652938 | pDC_lung |
| ACER3             | 3.87E-06 | 0.27516605 | 0.148 | 0.431 | 0.1371691  | pDC_lung |
| AP3B1             | 3.99E-06 | 0.50972594 | 0.251 | 0.647 | 0.14130218 | pDC_lung |
| GPN3              | 4.20E-06 | 0.32993194 | 0.06  | 0.255 | 0.14882836 | pDC_lung |
| RREB1             | 4.24E-06 | 0.65566479 | 0.087 | 0.314 | 0.15020222 | pDC_lung |
| SMAD3             | 4.25E-06 | 0.28635003 | 0.164 | 0.458 | 0.15061463 | pDC_lung |
| RLF               | 4.32E-06 | 0.58834751 | 0.24  | 0.621 | 0.15321864 | pDC_lung |
| WAPL              | 4.37E-06 | 0.46391753 | 0.219 | 0.575 | 0.15485189 | pDC_lung |
| JAK1              | 4.42E-06 | 1.55058697 | 0.727 | 0.863 | 0.15652795 | pDC_lung |
| PPID              | 4.47E-06 | 0.32773518 | 0.093 | 0.32  | 0.15845289 | pDC_lung |
| WDFY1             | 4.49E-06 | 0.59804563 | 0.082 | 0.301 | 0.15912304 | pDC_lung |
| P2RY8             | 4.50E-06 | 2.32464456 | 0.546 | 0.51  | 0.15950909 | pDC_lung |
| ENSMUG00000064749 | 4.58E-06 | 0.76411476 | 0.06  | 0.255 | 0.16240585 | pDC_lung |
| SMG7              | 4.89E-06 | 0.4873147  | 0.169 | 0.471 | 0.1733221  | pDC_lung |
| STAT5B            | 4.90E-06 | 0.45750262 | 0.137 | 0.405 | 0.17359731 | pDC_lung |
| DCAF8             | 4.94E-06 | 0.70139107 | 0.164 | 0.464 | 0.17498253 | pDC_lung |
| UBR4              | 5.04E-06 | 0.51324077 | 0.224 | 0.595 | 0.17842979 | pDC_lung |
| CST3              | 5.19E-06 | 2.06838892 | 0.601 | 0.595 | 0.18398664 | pDC_lung |
| ENSMUG00000061630 | 5.29E-06 | 0.21037155 | 0.137 | 0.405 | 0.18744101 | pDC_lung |
| IL6ST             | 5.36E-06 | 0.31650833 | 0.191 | 0.516 | 0.1899918  | pDC_lung |
| YTHDC2            | 5.43E-06 | 3.54210934 | 0.443 | 0.327 | 0.19245188 | pDC_lung |

|                    |          |            |       |       |            |          |
|--------------------|----------|------------|-------|-------|------------|----------|
| ATR                | 5.64E-06 | 0.31852955 | 0.066 | 0.261 | 0.19986762 | pDC_lung |
| ENSMMUG00000021153 | 5.68E-06 | 0.23025762 | 0.208 | 0.542 | 0.20112487 | pDC_lung |
| BICRAL             | 5.68E-06 | 0.55484071 | 0.12  | 0.373 | 0.20137451 | pDC_lung |
| ZNHIT6             | 5.69E-06 | 0.56472453 | 0.077 | 0.288 | 0.20168144 | pDC_lung |
| ZCCHC17            | 5.69E-06 | 0.63276801 | 0.077 | 0.288 | 0.20168144 | pDC_lung |
| H2AFJ              | 5.75E-06 | 0.30993812 | 0.235 | 0.595 | 0.2037854  | pDC_lung |
| FOXN3              | 5.83E-06 | 1.41928592 | 0.694 | 0.81  | 0.20650786 | pDC_lung |
| STX7               | 6.05E-06 | 0.356035   | 0.093 | 0.32  | 0.2142601  | pDC_lung |
| RBM10              | 6.19E-06 | 0.43767205 | 0.087 | 0.307 | 0.21926255 | pDC_lung |
| MSH3               | 6.28E-06 | 0.62028604 | 0.093 | 0.32  | 0.22264862 | pDC_lung |
| EIF2AK3            | 6.29E-06 | 0.72632595 | 0.164 | 0.458 | 0.22284513 | pDC_lung |
| C12H2orf76         | 6.33E-06 | 0.23691604 | 0.082 | 0.294 | 0.22433191 | pDC_lung |
| PUF60              | 6.38E-06 | 0.13699805 | 0.082 | 0.294 | 0.22612679 | pDC_lung |
| DNAJB12            | 6.41E-06 | 0.20460363 | 0.066 | 0.261 | 0.22695726 | pDC_lung |
| MCU                | 6.47E-06 | 0.1213595  | 0.262 | 0.641 | 0.22918541 | pDC_lung |
| RSL1D1             | 6.50E-06 | 0.49502918 | 0.104 | 0.34  | 0.23028815 | pDC_lung |
| ACTN1              | 6.63E-06 | 0.53043329 | 0.235 | 0.595 | 0.23476189 | pDC_lung |
| DIAPH2             | 6.64E-06 | 2.03932078 | 0.596 | 0.627 | 0.23527609 | pDC_lung |
| USP7               | 6.72E-06 | 0.69860977 | 0.126 | 0.386 | 0.23798651 | pDC_lung |
| APIP               | 6.75E-06 | 0.21000014 | 0.093 | 0.314 | 0.23909183 | pDC_lung |
| AP1G1              | 6.78E-06 | 0.72728494 | 0.153 | 0.438 | 0.2403336  | pDC_lung |
| FGD3               | 6.89E-06 | 0.8268097  | 0.093 | 0.32  | 0.2440823  | pDC_lung |
| CEP57              | 6.90E-06 | 0.74096453 | 0.087 | 0.307 | 0.24457795 | pDC_lung |
| ENSMMUG00000004441 | 6.98E-06 | 0.29587613 | 0.29  | 0.686 | 0.24745919 | pDC_lung |
| VPS54              | 7.16E-06 | 0.60862103 | 0.098 | 0.327 | 0.25386866 | pDC_lung |
| TEP1               | 7.29E-06 | 0.84671937 | 0.087 | 0.307 | 0.25826144 | pDC_lung |
| ANXA11             | 7.63E-06 | 0.25530768 | 0.093 | 0.314 | 0.27033756 | pDC_lung |
| USP3               | 7.77E-06 | 0.25120137 | 0.301 | 0.719 | 0.27520593 | pDC_lung |
| RHOH               | 7.91E-06 | 2.84594203 | 0.503 | 0.438 | 0.28043874 | pDC_lung |
| UBR1               | 8.33E-06 | 0.6560216  | 0.142 | 0.412 | 0.29519069 | pDC_lung |
| TRIM28             | 8.44E-06 | 0.2123178  | 0.109 | 0.346 | 0.29916503 | pDC_lung |
| IPO5               | 8.64E-06 | 0.71408817 | 0.098 | 0.327 | 0.30630501 | pDC_lung |
| TOP1               | 8.80E-06 | 0.18084569 | 0.344 | 0.804 | 0.31164114 | pDC_lung |

|           |          |            |       |       |            |          |
|-----------|----------|------------|-------|-------|------------|----------|
| RNF216    | 9.02E-06 | 0.48810416 | 0.251 | 0.641 | 0.31942423 | pDC_lung |
| ZNF236    | 9.40E-06 | 0.67632371 | 0.115 | 0.359 | 0.33322723 | pDC_lung |
| ILF2      | 9.45E-06 | 0.7190609  | 0.104 | 0.333 | 0.33469886 | pDC_lung |
| NOP58     | 9.47E-06 | 0.55109098 | 0.169 | 0.464 | 0.33540276 | pDC_lung |
| DNAJC1    | 9.57E-06 | 0.39330495 | 0.18  | 0.484 | 0.33910801 | pDC_lung |
| UAP1      | 9.66E-06 | 0.55469144 | 0.12  | 0.366 | 0.34232332 | pDC_lung |
| PPP1R12B  | 9.73E-06 | 0.35485443 | 0.109 | 0.34  | 0.34475472 | pDC_lung |
| TBC1D25   | 1.01E-05 | 0.25476351 | 0.066 | 0.255 | 0.35810579 | pDC_lung |
| GNG10     | 1.01E-05 | 0.22045935 | 0.175 | 0.477 | 0.35922669 | pDC_lung |
| NR3C1     | 1.03E-05 | 0.44293107 | 0.328 | 0.778 | 0.36362555 | pDC_lung |
| BCCIP     | 1.03E-05 | 0.18116526 | 0.082 | 0.288 | 0.36644324 | pDC_lung |
| EIF2AK4   | 1.05E-05 | 0.12679253 | 0.066 | 0.255 | 0.37335902 | pDC_lung |
| NDUFA10   | 1.06E-05 | 0.7022161  | 0.093 | 0.314 | 0.37484498 | pDC_lung |
| CNOT1     | 1.08E-05 | 0.20745028 | 0.306 | 0.758 | 0.3831328  | pDC_lung |
| IPCEF1    | 1.09E-05 | 4.17543693 | 0.284 | 0.118 | 0.38622079 | pDC_lung |
| CHCHD7    | 1.13E-05 | 0.31675187 | 0.082 | 0.288 | 0.3994398  | pDC_lung |
| GALNS     | 1.14E-05 | 0.31052261 | 0.066 | 0.255 | 0.40239122 | pDC_lung |
| SERTAD3   | 1.15E-05 | 0.36987978 | 0.109 | 0.34  | 0.40731004 | pDC_lung |
| KIDINS220 | 1.18E-05 | 0.42770154 | 0.104 | 0.333 | 0.41701962 | pDC_lung |
| YWHAG     | 1.19E-05 | 0.45829963 | 0.279 | 0.699 | 0.42188906 | pDC_lung |
| EP400     | 1.21E-05 | 0.5508665  | 0.098 | 0.32  | 0.4299997  | pDC_lung |
| MAPK8     | 1.22E-05 | 0.24023952 | 0.186 | 0.49  | 0.43125359 | pDC_lung |
| SNX10     | 1.22E-05 | 0.4503601  | 0.066 | 0.255 | 0.4335692  | pDC_lung |
| F11R      | 1.29E-05 | 0.15223075 | 0.131 | 0.379 | 0.45546176 | pDC_lung |
| SBNO1     | 1.29E-05 | 0.63657074 | 0.115 | 0.353 | 0.45776337 | pDC_lung |
| SLC23A2   | 1.30E-05 | 3.75081641 | 0.328 | 0.17  | 0.45887862 | pDC_lung |
| SLC35A5   | 1.30E-05 | 0.52768664 | 0.082 | 0.288 | 0.45963147 | pDC_lung |
| DDHD1     | 1.30E-05 | 0.22244792 | 0.077 | 0.275 | 0.46062291 | pDC_lung |
| YTHDC1    | 1.32E-05 | 0.96794262 | 0.268 | 0.68  | 0.46638472 | pDC_lung |
| ZNF700    | 1.34E-05 | 0.56851817 | 0.077 | 0.275 | 0.47547622 | pDC_lung |
| RBM23     | 1.35E-05 | 0.79710802 | 0.098 | 0.32  | 0.47688305 | pDC_lung |
| TFDP2     | 1.42E-05 | 0.3318652  | 0.12  | 0.359 | 0.50208446 | pDC_lung |
| ARNT      | 1.42E-05 | 0.26333733 | 0.071 | 0.261 | 0.50303681 | pDC_lung |

|                     |          |            |       |       |            |          |
|---------------------|----------|------------|-------|-------|------------|----------|
| FAM193A             | 1.42E-05 | 0.5417183  | 0.235 | 0.595 | 0.50415695 | pDC_lung |
| CMTM6               | 1.42E-05 | 0.21331754 | 0.366 | 0.817 | 0.50451512 | pDC_lung |
| RIOK1               | 1.43E-05 | 0.57901756 | 0.098 | 0.32  | 0.50582264 | pDC_lung |
| PTP4A2              | 1.43E-05 | 0.29721779 | 0.273 | 0.673 | 0.50736193 | pDC_lung |
| SND1                | 1.43E-05 | 0.58031938 | 0.279 | 0.686 | 0.50844624 | pDC_lung |
| QKI                 | 1.50E-05 | 1.1503866  | 0.721 | 0.876 | 0.53291576 | pDC_lung |
| AHI1                | 1.51E-05 | 0.67152097 | 0.093 | 0.307 | 0.53578344 | pDC_lung |
| THRAP3              | 1.52E-05 | 0.42128842 | 0.311 | 0.758 | 0.53925351 | pDC_lung |
| RHOG                | 1.52E-05 | 0.3823681  | 0.202 | 0.529 | 0.53963718 | pDC_lung |
| FAM117B             | 1.53E-05 | 0.66566732 | 0.071 | 0.261 | 0.54096522 | pDC_lung |
| THADA               | 1.59E-05 | 0.33637066 | 0.224 | 0.556 | 0.56410916 | pDC_lung |
| ZNF410              | 1.60E-05 | 1.06302052 | 0.153 | 0.431 | 0.56838039 | pDC_lung |
| ATF7IP              | 1.61E-05 | 0.36697302 | 0.399 | 0.869 | 0.57095563 | pDC_lung |
| MORF4L2             | 1.62E-05 | 0.38558492 | 0.148 | 0.418 | 0.57325578 | pDC_lung |
| ESF1                | 1.63E-05 | 0.42195291 | 0.104 | 0.327 | 0.57692181 | pDC_lung |
| HIF1A               | 1.64E-05 | 0.67055334 | 0.23  | 0.582 | 0.58160538 | pDC_lung |
| SLC39A11            | 1.65E-05 | 0.52387841 | 0.235 | 0.601 | 0.58398684 | pDC_lung |
| TPD52               | 1.65E-05 | 0.70325819 | 0.077 | 0.268 | 0.58431168 | pDC_lung |
| JARID2              | 1.66E-05 | 1.80159227 | 0.71  | 0.85  | 0.58641195 | pDC_lung |
| ENSMMUG00000006778  | 1.69E-05 | 0.4225327  | 0.12  | 0.359 | 0.59727786 | pDC_lung |
| SH3GL1              | 1.70E-05 | 0.41185994 | 0.093 | 0.307 | 0.60359478 | pDC_lung |
| HPRT1               | 1.73E-05 | 0.25741903 | 0.087 | 0.294 | 0.6134341  | pDC_lung |
| ABCC1               | 1.79E-05 | 0.28458987 | 0.126 | 0.366 | 0.63586712 | pDC_lung |
| ARHGEF6             | 1.82E-05 | 0.58807637 | 0.126 | 0.373 | 0.64579804 | pDC_lung |
| WASHC4              | 1.86E-05 | 0.60143381 | 0.142 | 0.405 | 0.65844423 | pDC_lung |
| PTPRC               | 1.94E-05 | 1.32678459 | 0.678 | 0.797 | 0.68667279 | pDC_lung |
| FKBP2               | 1.99E-05 | 0.55308893 | 0.137 | 0.392 | 0.70363118 | pDC_lung |
| ABCA1               | 2.00E-05 | 3.33001769 | 0.464 | 0.386 | 0.70794636 | pDC_lung |
| TMEM50B             | 2.02E-05 | 0.4976258  | 0.082 | 0.281 | 0.71580258 | pDC_lung |
| USP9X               | 2.02E-05 | 0.12968975 | 0.317 | 0.732 | 0.7163237  | pDC_lung |
| DCUN1D1             | 2.04E-05 | 0.7573315  | 0.115 | 0.346 | 0.72115531 | pDC_lung |
| ATXN7               | 2.04E-05 | 0.39433594 | 0.306 | 0.725 | 0.72433862 | pDC_lung |
| ENSMMUG000000051957 | 2.05E-05 | 0.50276621 | 0.208 | 0.529 | 0.72812077 | pDC_lung |



|                   |          |            |       |       |            |          |
|-------------------|----------|------------|-------|-------|------------|----------|
| GPATCH2L          | 2.06E-05 | 0.94131503 | 0.104 | 0.327 | 0.73129472 | pDC_lung |
| RPRD2             | 2.07E-05 | 0.40457812 | 0.142 | 0.399 | 0.73370801 | pDC_lung |
| GEM               | 2.08E-05 | 0.71442206 | 0.082 | 0.281 | 0.73807703 | pDC_lung |
| KIZ               | 2.08E-05 | 0.14271011 | 0.082 | 0.281 | 0.73807703 | pDC_lung |
| FMNL1             | 2.15E-05 | 0.55538612 | 0.115 | 0.346 | 0.76238595 | pDC_lung |
| IPO11             | 2.30E-05 | 0.62757673 | 0.093 | 0.301 | 0.81586222 | pDC_lung |
| METTL16           | 2.32E-05 | 0.30447402 | 0.093 | 0.301 | 0.82189441 | pDC_lung |
| YWHAH             | 2.34E-05 | 0.60565455 | 0.175 | 0.464 | 0.82957118 | pDC_lung |
| DYM               | 2.36E-05 | 0.29449555 | 0.175 | 0.458 | 0.83510118 | pDC_lung |
| CAMTA1            | 2.37E-05 | 0.31207379 | 0.279 | 0.66  | 0.83996215 | pDC_lung |
| RTN4              | 2.45E-05 | 0.48303098 | 0.317 | 0.745 | 0.86678694 | pDC_lung |
| POLK              | 2.48E-05 | 0.77065441 | 0.098 | 0.314 | 0.87861194 | pDC_lung |
| EPB41L2           | 2.50E-05 | 0.27760125 | 0.279 | 0.647 | 0.88438114 | pDC_lung |
| UBE2V1            | 2.53E-05 | 0.4438552  | 0.224 | 0.569 | 0.89675147 | pDC_lung |
| TARS1             | 2.54E-05 | 0.11112911 | 0.077 | 0.268 | 0.89885928 | pDC_lung |
| EIF4EBP3          | 2.57E-05 | 0.19422892 | 0.284 | 0.686 | 0.91169724 | pDC_lung |
| FARS2             | 2.63E-05 | 0.11068548 | 0.197 | 0.49  | 0.93094105 | pDC_lung |
| RAB3GAP1          | 2.63E-05 | 0.84700528 | 0.164 | 0.444 | 0.93201361 | pDC_lung |
| PPP2R2D           | 2.63E-05 | 0.77996602 | 0.142 | 0.399 | 0.93353583 | pDC_lung |
| GADD45B           | 2.72E-05 | 1.20204872 | 0.705 | 0.85  | 0.96403077 | pDC_lung |
| PDE4A             | 2.78E-05 | 3.33863997 | 0.333 | 0.183 | 0.98547112 | pDC_lung |
| TNFRSF14          | 2.83E-05 | 0.95969536 | 0.137 | 0.386 | 1          | pDC_lung |
| NLK               | 2.96E-05 | 0.27785085 | 0.164 | 0.431 | 1          | pDC_lung |
| NR4A2             | 2.99E-05 | 2.27191957 | 0.503 | 0.451 | 1          | pDC_lung |
| SLC25A13          | 3.07E-05 | 1.14623698 | 0.087 | 0.288 | 1          | pDC_lung |
| MICOS13           | 3.26E-05 | 0.31837684 | 0.18  | 0.471 | 1          | pDC_lung |
| SREK1             | 3.34E-05 | 0.54040845 | 0.268 | 0.654 | 1          | pDC_lung |
| MAML3             | 3.38E-05 | 1.81139749 | 0.497 | 0.373 | 1          | pDC_lung |
| ENSMUG00000061458 | 3.45E-05 | 1.07724896 | 0.142 | 0.399 | 1          | pDC_lung |
| TEKT1             | 3.51E-05 | 1.34279247 | 0.087 | 0.288 | 1          | pDC_lung |
| NAGK              | 3.56E-05 | 0.60125374 | 0.082 | 0.275 | 1          | pDC_lung |
| CHMP4B            | 3.60E-05 | 0.37427361 | 0.175 | 0.458 | 1          | pDC_lung |
| MAGT1             | 3.68E-05 | 0.44135637 | 0.115 | 0.34  | 1          | pDC_lung |

|                    |          |            |       |       |            |
|--------------------|----------|------------|-------|-------|------------|
| NMD3               | 3.73E-05 | 0.93942787 | 0.098 | 0.307 | 1 pDC_lung |
| SRSF1              | 3.83E-05 | 0.74588352 | 0.219 | 0.549 | 1 pDC_lung |
| CSNK1D             | 3.86E-05 | 0.94152182 | 0.164 | 0.438 | 1 pDC_lung |
| HIPK2              | 3.87E-05 | 0.37161287 | 0.35  | 0.765 | 1 pDC_lung |
| WBP1L              | 3.87E-05 | 0.39994647 | 0.142 | 0.392 | 1 pDC_lung |
| DOCK7              | 3.89E-05 | 0.75201036 | 0.109 | 0.327 | 1 pDC_lung |
| DDB1               | 3.89E-05 | 0.47286852 | 0.077 | 0.261 | 1 pDC_lung |
| STXBP2             | 3.92E-05 | 0.74346463 | 0.098 | 0.307 | 1 pDC_lung |
| FES                | 3.94E-05 | 0.58766293 | 0.109 | 0.327 | 1 pDC_lung |
| OGDH               | 4.00E-05 | 0.63087467 | 0.24  | 0.588 | 1 pDC_lung |
| TNFAIP2            | 4.03E-05 | 3.51735062 | 0.322 | 0.176 | 1 pDC_lung |
| ENSMMUG00000018687 | 4.16E-05 | 0.30993943 | 0.115 | 0.333 | 1 pDC_lung |
| ENSMMUG00000006499 | 4.19E-05 | 2.52702724 | 0.596 | 0.739 | 1 pDC_lung |
| TCF12              | 4.30E-05 | 0.13821588 | 0.339 | 0.758 | 1 pDC_lung |
| BAG6               | 4.34E-05 | 0.66040001 | 0.087 | 0.281 | 1 pDC_lung |
| INPP5A             | 4.53E-05 | 0.30236579 | 0.191 | 0.477 | 1 pDC_lung |
| ENSMMUG00000022610 | 4.58E-05 | 0.66275466 | 0.077 | 0.255 | 1 pDC_lung |
| KBTBD2             | 4.63E-05 | 0.7942708  | 0.158 | 0.425 | 1 pDC_lung |
| PKNOX1             | 4.73E-05 | 0.54560371 | 0.115 | 0.333 | 1 pDC_lung |
| ENSMMUG00000011714 | 4.88E-05 | 1.64725111 | 0.18  | 0.471 | 1 pDC_lung |
| ERCC1              | 4.88E-05 | 0.88788472 | 0.087 | 0.281 | 1 pDC_lung |
| PRDX6              | 4.91E-05 | 0.66335411 | 0.18  | 0.471 | 1 pDC_lung |
| COPA               | 5.00E-05 | 0.87936238 | 0.175 | 0.458 | 1 pDC_lung |
| TGFBR2             | 5.06E-05 | 2.21983824 | 0.47  | 0.386 | 1 pDC_lung |
| PDSS2              | 5.16E-05 | 1.27245673 | 0.148 | 0.405 | 1 pDC_lung |
| ZNF407             | 5.20E-05 | 0.23619674 | 0.24  | 0.562 | 1 pDC_lung |
| TSG101             | 5.26E-05 | 0.64204077 | 0.104 | 0.314 | 1 pDC_lung |
| PTBP1              | 5.28E-05 | 1.14634527 | 0.126 | 0.359 | 1 pDC_lung |
| TREML1             | 5.30E-05 | 1.3077591  | 0.104 | 0.314 | 1 pDC_lung |
| RHEB               | 5.33E-05 | 0.37575265 | 0.322 | 0.765 | 1 pDC_lung |
| GALNT11            | 5.35E-05 | 0.71559732 | 0.12  | 0.346 | 1 pDC_lung |
| ENSMMUG00000013289 | 5.59E-05 | 0.21978774 | 0.098 | 0.294 | 1 pDC_lung |
| ARHGAP25           | 5.88E-05 | 0.73074528 | 0.191 | 0.477 | 1 pDC_lung |

|                    |          |            |       |       |            |
|--------------------|----------|------------|-------|-------|------------|
| ABCG1              | 5.93E-05 | 0.11627636 | 0.186 | 0.451 | 1 pDC_lung |
| Metazoa-SRP.1344   | 5.98E-05 | 0.85031146 | 0.082 | 0.268 | 1 pDC_lung |
| AHCYL1             | 6.19E-05 | 0.73523856 | 0.131 | 0.366 | 1 pDC_lung |
| ENSMMUG00000065373 | 6.22E-05 | 0.36502328 | 0.951 | 0.935 | 1 pDC_lung |
| WDR47              | 6.23E-05 | 0.25867961 | 0.126 | 0.346 | 1 pDC_lung |
| EIF4A1             | 6.35E-05 | 0.28486817 | 0.273 | 0.634 | 1 pDC_lung |
| RTN3               | 6.35E-05 | 1.05890787 | 0.213 | 0.529 | 1 pDC_lung |
| ZCCHC10            | 6.39E-05 | 0.64586149 | 0.104 | 0.307 | 1 pDC_lung |
| IER3               | 6.55E-05 | 0.37629733 | 0.268 | 0.614 | 1 pDC_lung |
| ASCC2              | 6.58E-05 | 0.63377858 | 0.082 | 0.268 | 1 pDC_lung |
| HEATR5B            | 6.79E-05 | 0.37848713 | 0.077 | 0.255 | 1 pDC_lung |
| BACH1              | 6.97E-05 | 0.79140468 | 0.158 | 0.418 | 1 pDC_lung |
| ERCC6L2            | 7.10E-05 | 0.62338871 | 0.077 | 0.255 | 1 pDC_lung |
| P2RY10             | 7.23E-05 | 0.63425496 | 0.104 | 0.307 | 1 pDC_lung |
| ENSMMUG00000049010 | 7.34E-05 | 0.13977003 | 0.109 | 0.314 | 1 pDC_lung |
| TCF4               | 7.35E-05 | 2.85606612 | 0.415 | 0.307 | 1 pDC_lung |
| REEP3              | 7.76E-05 | 0.33817528 | 0.115 | 0.327 | 1 pDC_lung |
| ARL2               | 7.79E-05 | 0.39155468 | 0.082 | 0.261 | 1 pDC_lung |
| NAA20              | 7.84E-05 | 0.68458634 | 0.104 | 0.307 | 1 pDC_lung |
| WDR7               | 8.01E-05 | 0.68648862 | 0.191 | 0.477 | 1 pDC_lung |
| SCAMP2             | 8.10E-05 | 1.36579677 | 0.126 | 0.353 | 1 pDC_lung |
| NUFIP1             | 8.30E-05 | 3.56208731 | 0.383 | 0.275 | 1 pDC_lung |
| STAT6              | 8.32E-05 | 0.42165747 | 0.082 | 0.261 | 1 pDC_lung |
| ITGAX              | 8.42E-05 | 0.48828629 | 0.137 | 0.366 | 1 pDC_lung |
| ZNF268             | 8.44E-05 | 0.64662569 | 0.12  | 0.333 | 1 pDC_lung |
| FHOD1              | 8.49E-05 | 0.52562274 | 0.098 | 0.294 | 1 pDC_lung |
| TAMALIN            | 8.51E-05 | 0.62767539 | 0.087 | 0.275 | 1 pDC_lung |
| ACBD6              | 9.09E-05 | 0.32856396 | 0.093 | 0.281 | 1 pDC_lung |
| ARHGEF1            | 9.27E-05 | 0.98198027 | 0.115 | 0.327 | 1 pDC_lung |
| AK2                | 9.30E-05 | 1.05740267 | 0.131 | 0.359 | 1 pDC_lung |
| DEAF1              | 9.45E-05 | 0.83586837 | 0.115 | 0.327 | 1 pDC_lung |
| GOLGA5             | 9.82E-05 | 0.64176882 | 0.093 | 0.281 | 1 pDC_lung |
| ENSMMUG00000058389 | 9.85E-05 | 0.22598615 | 0.109 | 0.314 | 1 pDC_lung |

|         |            |            |       |       |            |
|---------|------------|------------|-------|-------|------------|
| USP37   | 9.92E-05   | 3.08110441 | 0.454 | 0.405 | 1 pDC_lung |
| PPP1R10 | 9.94E-05   | 0.63588437 | 0.273 | 0.641 | 1 pDC_lung |
| IARS1   | 0.00010482 | 0.28702754 | 0.087 | 0.268 | 1 pDC_lung |
| LUC7L   | 0.00010493 | 0.77481762 | 0.186 | 0.464 | 1 pDC_lung |
| ZNF267  | 0.00010777 | 2.11335156 | 0.53  | 0.569 | 1 pDC_lung |
| RBPM5   | 0.00010818 | 0.44226959 | 0.12  | 0.327 | 1 pDC_lung |
| SBNO2   | 0.0001091  | 0.53384359 | 0.191 | 0.471 | 1 pDC_lung |
| SNX8    | 0.00010964 | 0.94128206 | 0.257 | 0.601 | 1 pDC_lung |
| SLC15A3 | 0.00011024 | 0.98995236 | 0.109 | 0.314 | 1 pDC_lung |
| TDG     | 0.000111   | 0.31552771 | 0.104 | 0.301 | 1 pDC_lung |
| RASSF5  | 0.00011184 | 2.63888236 | 0.481 | 0.464 | 1 pDC_lung |
| RBCK1   | 0.0001141  | 0.75339476 | 0.087 | 0.268 | 1 pDC_lung |
| UBR5    | 0.00011761 | 0.56598436 | 0.333 | 0.771 | 1 pDC_lung |
| RILPL2  | 0.00011802 | 0.61639966 | 0.322 | 0.739 | 1 pDC_lung |
| MON2    | 0.00012143 | 0.9419272  | 0.158 | 0.412 | 1 pDC_lung |
| VPS26A  | 0.00012164 | 0.46839147 | 0.213 | 0.503 | 1 pDC_lung |
| WDR74   | 0.000122   | 1.00379322 | 0.219 | 0.523 | 1 pDC_lung |
| CNDP1   | 0.00012243 | 0.69401861 | 0.087 | 0.268 | 1 pDC_lung |
| TTC39C  | 0.00012635 | 0.89067912 | 0.169 | 0.425 | 1 pDC_lung |
| SLC38A2 | 0.00013205 | 0.71376769 | 0.273 | 0.641 | 1 pDC_lung |
| LENG8   | 0.00013289 | 0.58202155 | 0.142 | 0.373 | 1 pDC_lung |
| PRIM2   | 0.00013791 | 0.87091495 | 0.087 | 0.268 | 1 pDC_lung |
| TLK2    | 0.00013893 | 0.52245252 | 0.191 | 0.471 | 1 pDC_lung |
| OTUD4   | 0.00014051 | 0.89389279 | 0.153 | 0.392 | 1 pDC_lung |
| DCTN4   | 0.00014115 | 0.44147638 | 0.093 | 0.275 | 1 pDC_lung |
| TMEM123 | 0.00014238 | 0.84826201 | 0.197 | 0.484 | 1 pDC_lung |
| GTPBP4  | 0.0001438  | 0.8940459  | 0.087 | 0.268 | 1 pDC_lung |
| NRDC    | 0.00014499 | 0.90795107 | 0.164 | 0.418 | 1 pDC_lung |
| RASA1   | 0.0001464  | 0.61353049 | 0.18  | 0.451 | 1 pDC_lung |
| SLC2A13 | 0.00014698 | 0.46352993 | 0.115 | 0.314 | 1 pDC_lung |
| PPP2R2A | 0.00014795 | 0.91718503 | 0.23  | 0.556 | 1 pDC_lung |
| CLASP2  | 0.00015234 | 0.50578163 | 0.295 | 0.673 | 1 pDC_lung |
| ZNF277  | 0.0001533  | 1.0033358  | 0.213 | 0.516 | 1 pDC_lung |

|                    |            |            |       |       |            |
|--------------------|------------|------------|-------|-------|------------|
| CDV3               | 0.0001539  | 0.84046783 | 0.098 | 0.288 | 1 pDC_lung |
| CPLANE1            | 0.00015586 | 0.61843786 | 0.082 | 0.255 | 1 pDC_lung |
| NAP1L4             | 0.00015619 | 0.55963956 | 0.306 | 0.712 | 1 pDC_lung |
| CTBP1              | 0.00016034 | 0.7486547  | 0.082 | 0.255 | 1 pDC_lung |
| PCM1               | 0.00017161 | 0.66956865 | 0.197 | 0.477 | 1 pDC_lung |
| TPD52L2            | 0.00017207 | 0.8627469  | 0.082 | 0.255 | 1 pDC_lung |
| SGPL1              | 0.00017793 | 1.07405706 | 0.18  | 0.438 | 1 pDC_lung |
| CSGALNACT2         | 0.00018222 | 2.68377834 | 0.464 | 0.431 | 1 pDC_lung |
| HSD17B4            | 0.00018225 | 1.32372517 | 0.689 | 0.895 | 1 pDC_lung |
| UBR3               | 0.00018405 | 0.50873444 | 0.224 | 0.523 | 1 pDC_lung |
| ENSMMUG00000064329 | 0.00018507 | 0.95284033 | 0.158 | 0.399 | 1 pDC_lung |
| MKLN1              | 0.00018714 | 0.64340154 | 0.295 | 0.68  | 1 pDC_lung |
| R3HDM1             | 0.0001903  | 0.12147834 | 0.098 | 0.281 | 1 pDC_lung |
| ASXL1              | 0.00019999 | 0.90919084 | 0.164 | 0.405 | 1 pDC_lung |
| TMEM201            | 0.00020289 | 0.66578968 | 0.153 | 0.392 | 1 pDC_lung |
| SBF2               | 0.0002029  | 0.22564167 | 0.366 | 0.771 | 1 pDC_lung |
| ENSMMUG00000010266 | 0.00020396 | 0.20262996 | 0.41  | 0.843 | 1 pDC_lung |
| ATG3               | 0.00021003 | 0.95046353 | 0.235 | 0.562 | 1 pDC_lung |
| TAB2               | 0.00021227 | 0.588692   | 0.333 | 0.745 | 1 pDC_lung |
| INPP4A             | 0.00021555 | 0.29312748 | 0.24  | 0.536 | 1 pDC_lung |
| PLSCR1             | 0.00021832 | 3.6755759  | 0.306 | 0.183 | 1 pDC_lung |
| CREM               | 0.00021915 | 2.27552194 | 0.454 | 0.405 | 1 pDC_lung |
| WDPCP              | 0.00022299 | 0.29656027 | 0.148 | 0.366 | 1 pDC_lung |
| SLC12A6            | 0.00022544 | 1.44587273 | 0.148 | 0.373 | 1 pDC_lung |
| NAB1               | 0.00023463 | 0.5811569  | 0.109 | 0.301 | 1 pDC_lung |
| COX19              | 0.00023517 | 1.04623544 | 0.115 | 0.314 | 1 pDC_lung |
| MGMT               | 0.00023911 | 0.55959198 | 0.142 | 0.359 | 1 pDC_lung |
| SCFD2              | 0.00023923 | 0.45095436 | 0.104 | 0.288 | 1 pDC_lung |
| CD274              | 0.00024198 | 0.15441476 | 0.224 | 0.49  | 1 pDC_lung |
| U5.18              | 0.00024213 | 0.68868719 | 0.126 | 0.327 | 1 pDC_lung |
| AKR1A1             | 0.00024253 | 0.83486154 | 0.137 | 0.353 | 1 pDC_lung |
| CORO1A             | 0.00024348 | 0.37133968 | 0.224 | 0.516 | 1 pDC_lung |
| SNX9               | 0.00024709 | 1.63951798 | 0.634 | 0.784 | 1 pDC_lung |

|          |            |            |       |       |            |
|----------|------------|------------|-------|-------|------------|
| DIRAS2   | 0.00024916 | 0.41372852 | 0.142 | 0.359 | 1 pDC_lung |
| SSH1     | 0.00025025 | 0.67472153 | 0.311 | 0.693 | 1 pDC_lung |
| SHOC2    | 0.00025044 | 0.59517604 | 0.284 | 0.654 | 1 pDC_lung |
| CTSC     | 0.00025123 | 0.4659805  | 0.257 | 0.549 | 1 pDC_lung |
| SLC3A2   | 0.00025557 | 0.63758559 | 0.087 | 0.255 | 1 pDC_lung |
| CTBP2    | 0.00025945 | 0.77109286 | 0.268 | 0.614 | 1 pDC_lung |
| PRSS55   | 0.00026911 | 0.51860867 | 0.137 | 0.346 | 1 pDC_lung |
| CLIP1    | 0.00027785 | 0.98540605 | 0.137 | 0.353 | 1 pDC_lung |
| PRKAR1A  | 0.00028663 | 0.89890785 | 0.235 | 0.556 | 1 pDC_lung |
| APPBP2   | 0.00029476 | 0.7549301  | 0.158 | 0.386 | 1 pDC_lung |
| PELI1    | 0.00029925 | 1.54516458 | 0.694 | 0.85  | 1 pDC_lung |
| RNF10    | 0.00030032 | 1.10509743 | 0.142 | 0.359 | 1 pDC_lung |
| TTYH2    | 0.00030089 | 0.40742251 | 0.126 | 0.32  | 1 pDC_lung |
| CCNH     | 0.00030586 | 2.8413982  | 0.437 | 0.399 | 1 pDC_lung |
| DAP3     | 0.00030944 | 0.9578812  | 0.104 | 0.288 | 1 pDC_lung |
| SIK3     | 0.00031499 | 1.13487649 | 0.689 | 0.889 | 1 pDC_lung |
| MAPK8IP3 | 0.00031708 | 1.37194026 | 0.12  | 0.32  | 1 pDC_lung |
| AAK1     | 0.00033827 | 0.62564101 | 0.191 | 0.451 | 1 pDC_lung |
| SLC9A9   | 0.0003441  | 1.10919322 | 0.689 | 0.778 | 1 pDC_lung |
| NXPE3    | 0.00035192 | 1.15809122 | 0.705 | 0.869 | 1 pDC_lung |
| NECTIN2  | 0.00035307 | 0.15883802 | 0.273 | 0.582 | 1 pDC_lung |
| PRKCB    | 0.00035475 | 0.18758643 | 0.306 | 0.654 | 1 pDC_lung |
| MAN1A2   | 0.00036122 | 1.09396141 | 0.164 | 0.399 | 1 pDC_lung |
| LST1     | 0.00036273 | 0.43530727 | 0.126 | 0.32  | 1 pDC_lung |
| RASGRP3  | 0.00036781 | 0.63907721 | 0.104 | 0.281 | 1 pDC_lung |
| CLCN3    | 0.00037669 | 1.9114753  | 0.202 | 0.477 | 1 pDC_lung |
| RNF169   | 0.00038208 | 0.35745319 | 0.104 | 0.281 | 1 pDC_lung |
| DUSP22   | 0.00038868 | 0.50001844 | 0.131 | 0.333 | 1 pDC_lung |
| CSF2RB   | 0.00039676 | 0.58520935 | 0.219 | 0.503 | 1 pDC_lung |
| TRIP10   | 0.00040348 | 0.63579415 | 0.197 | 0.458 | 1 pDC_lung |
| NR1H2    | 0.00040598 | 1.35708794 | 0.098 | 0.275 | 1 pDC_lung |
| PTEN     | 0.00041136 | 0.59421746 | 0.268 | 0.608 | 1 pDC_lung |
| AGO2     | 0.00041578 | 2.0410375  | 0.541 | 0.614 | 1 pDC_lung |

|                   |            |            |       |       |            |
|-------------------|------------|------------|-------|-------|------------|
| MITF              | 0.00042093 | 3.12463203 | 0.251 | 0.124 | 1 pDC_lung |
| GALNT1            | 0.00042515 | 0.6424872  | 0.224 | 0.51  | 1 pDC_lung |
| ZC3H11A           | 0.00042562 | 0.55693759 | 0.246 | 0.556 | 1 pDC_lung |
| HEXA              | 0.0004288  | 1.38645231 | 0.109 | 0.294 | 1 pDC_lung |
| GLTP              | 0.00043172 | 0.70062179 | 0.246 | 0.562 | 1 pDC_lung |
| RGS1              | 0.0004357  | 1.27973904 | 0.612 | 0.686 | 1 pDC_lung |
| ANXA5             | 0.00043772 | 0.91468257 | 0.246 | 0.569 | 1 pDC_lung |
| PITPNB            | 0.00043983 | 0.52105132 | 0.268 | 0.614 | 1 pDC_lung |
| ATG10             | 0.00044203 | 0.28283735 | 0.098 | 0.268 | 1 pDC_lung |
| NIN               | 0.00045417 | 0.69811974 | 0.251 | 0.556 | 1 pDC_lung |
| SNX29             | 0.00047192 | 2.0809002  | 0.519 | 0.556 | 1 pDC_lung |
| AGO3              | 0.00048026 | 0.62879924 | 0.246 | 0.556 | 1 pDC_lung |
| PLCG2             | 0.00050727 | 0.54505188 | 0.23  | 0.51  | 1 pDC_lung |
| PVR               | 0.00050796 | 0.11076652 | 0.104 | 0.275 | 1 pDC_lung |
| ASL               | 0.00050993 | 1.18546271 | 0.104 | 0.281 | 1 pDC_lung |
| AGPAT4            | 0.00051109 | 1.21448941 | 0.131 | 0.327 | 1 pDC_lung |
| PLGRKT            | 0.00051331 | 1.0505845  | 0.23  | 0.536 | 1 pDC_lung |
| SGMS1             | 0.00053232 | 0.97428087 | 0.235 | 0.529 | 1 pDC_lung |
| NIPBL             | 0.0005368  | 0.53430832 | 0.355 | 0.784 | 1 pDC_lung |
| DENND4C           | 0.00056641 | 0.59536377 | 0.109 | 0.288 | 1 pDC_lung |
| WIPF1             | 0.00057672 | 0.28696409 | 0.372 | 0.771 | 1 pDC_lung |
| FGL2              | 0.00060753 | 3.04215314 | 0.317 | 0.209 | 1 pDC_lung |
| CACUL1            | 0.00062137 | 0.67248682 | 0.137 | 0.333 | 1 pDC_lung |
| SSR1              | 0.00062192 | 1.09014027 | 0.202 | 0.464 | 1 pDC_lung |
| PKIB              | 0.00062401 | 2.6072725  | 0.393 | 0.314 | 1 pDC_lung |
| ENSMUG00000020643 | 0.00062798 | 0.75853511 | 0.109 | 0.288 | 1 pDC_lung |
| ENSMUG00000058089 | 0.00065104 | 0.73080171 | 0.104 | 0.275 | 1 pDC_lung |
| STXBP5            | 0.00065104 | 0.74573451 | 0.104 | 0.275 | 1 pDC_lung |
| OSBPL9            | 0.00065425 | 0.69235417 | 0.251 | 0.562 | 1 pDC_lung |
| KIAA0100          | 0.00065506 | 0.79840425 | 0.104 | 0.275 | 1 pDC_lung |
| GTF2B             | 0.000667   | 0.48124472 | 0.322 | 0.693 | 1 pDC_lung |
| TMEM131           | 0.00067178 | 1.30544912 | 0.667 | 0.882 | 1 pDC_lung |
| RAB5A             | 0.00067203 | 0.89601814 | 0.224 | 0.503 | 1 pDC_lung |

|                    |            |            |       |       |            |
|--------------------|------------|------------|-------|-------|------------|
| SMYD3              | 0.00067961 | 0.56628436 | 0.224 | 0.497 | 1 pDC_lung |
| HS2ST1             | 0.00068335 | 0.71378207 | 0.142 | 0.346 | 1 pDC_lung |
| CREB5              | 0.00069096 | 2.83780957 | 0.322 | 0.216 | 1 pDC_lung |
| CLEC2B             | 0.00073061 | 0.67092329 | 0.208 | 0.464 | 1 pDC_lung |
| ELF1               | 0.00075573 | 1.50070001 | 0.672 | 0.863 | 1 pDC_lung |
| CALCOCO2           | 0.00078111 | 0.8242888  | 0.169 | 0.399 | 1 pDC_lung |
| NCKAP1L            | 0.00078467 | 0.66557082 | 0.29  | 0.634 | 1 pDC_lung |
| HNRNPM             | 0.00080741 | 0.29653353 | 0.268 | 0.569 | 1 pDC_lung |
| ENSMMUG00000011291 | 0.00081614 | 0.98799863 | 0.098 | 0.261 | 1 pDC_lung |
| COX7A1             | 0.00081614 | 0.79251067 | 0.098 | 0.261 | 1 pDC_lung |
| SRRM1              | 0.00082769 | 0.45880458 | 0.339 | 0.719 | 1 pDC_lung |
| G0S2               | 0.00083187 | 3.07510068 | 0.262 | 0.144 | 1 pDC_lung |
| FBXW11             | 0.00084994 | 0.28485252 | 0.372 | 0.771 | 1 pDC_lung |
| SLC9A8             | 0.00086345 | 1.30624321 | 0.142 | 0.34  | 1 pDC_lung |
| ZRANB1             | 0.00087108 | 0.97758717 | 0.126 | 0.314 | 1 pDC_lung |
| MAP3K5             | 0.0008744  | 0.54549171 | 0.131 | 0.32  | 1 pDC_lung |
| GSPT1              | 0.00089216 | 0.59354892 | 0.104 | 0.268 | 1 pDC_lung |
| FKBP5              | 0.00089348 | 0.82000425 | 0.235 | 0.484 | 1 pDC_lung |
| CHST11             | 0.00090788 | 2.04946366 | 0.525 | 0.523 | 1 pDC_lung |
| EIF3A              | 0.00091102 | 0.63280477 | 0.301 | 0.66  | 1 pDC_lung |
| SCML4              | 0.00093835 | 3.44144306 | 0.29  | 0.183 | 1 pDC_lung |
| ARFGEF2            | 0.00095625 | 1.11318171 | 0.131 | 0.32  | 1 pDC_lung |
| MYO5A              | 0.00096168 | 0.53411706 | 0.208 | 0.458 | 1 pDC_lung |
| SIPA1L1            | 0.00096295 | 2.25378227 | 0.448 | 0.425 | 1 pDC_lung |
| GRB2               | 0.00099546 | 0.67502528 | 0.355 | 0.758 | 1 pDC_lung |
| MARCHF7            | 0.00106686 | 0.65414602 | 0.344 | 0.719 | 1 pDC_lung |
| PI4K2A             | 0.0010673  | 1.06965972 | 0.142 | 0.34  | 1 pDC_lung |
| PHF20              | 0.00112733 | 0.37875073 | 0.317 | 0.654 | 1 pDC_lung |
| FNDC3B             | 0.00119051 | 2.29234963 | 0.525 | 0.601 | 1 pDC_lung |
| GLIPR2             | 0.00120993 | 0.77479612 | 0.169 | 0.386 | 1 pDC_lung |
| DOCK10             | 0.00121492 | 1.03718423 | 0.699 | 0.915 | 1 pDC_lung |
| PTBP2              | 0.00123296 | 0.79117271 | 0.224 | 0.49  | 1 pDC_lung |
| SGK1               | 0.00124923 | 2.88156677 | 0.322 | 0.229 | 1 pDC_lung |



|           |            |            |       |       |            |
|-----------|------------|------------|-------|-------|------------|
| TOX4      | 0.00125667 | 0.84671138 | 0.186 | 0.418 | 1 pDC_lung |
| BIRC2     | 0.00125774 | 0.41688477 | 0.246 | 0.516 | 1 pDC_lung |
| GMDS      | 0.00130357 | 0.53932012 | 0.153 | 0.346 | 1 pDC_lung |
| GOLGA4    | 0.00131426 | 0.65297276 | 0.317 | 0.693 | 1 pDC_lung |
| CASP1     | 0.00135309 | 0.6217551  | 0.235 | 0.503 | 1 pDC_lung |
| SEMA4A    | 0.00135892 | 2.37532379 | 0.459 | 0.464 | 1 pDC_lung |
| RALGAPA1  | 0.00140518 | 0.94346289 | 0.175 | 0.392 | 1 pDC_lung |
| ZNF331    | 0.0014101  | 4.01425699 | 0.262 | 0.157 | 1 pDC_lung |
| PTPN6     | 0.00141603 | 0.87226142 | 0.158 | 0.366 | 1 pDC_lung |
| FBXO34    | 0.00144721 | 0.62044181 | 0.322 | 0.66  | 1 pDC_lung |
| ZMIZ2     | 0.0014678  | 1.26636282 | 0.137 | 0.327 | 1 pDC_lung |
| SEPTIN9   | 0.00147169 | 1.3130263  | 0.148 | 0.346 | 1 pDC_lung |
| IPO7      | 0.00147352 | 1.23364238 | 0.208 | 0.464 | 1 pDC_lung |
| SETDB2    | 0.00148693 | 1.26532788 | 0.164 | 0.379 | 1 pDC_lung |
| FLI1      | 0.0015012  | 1.11412869 | 0.197 | 0.444 | 1 pDC_lung |
| PDSS1     | 0.00151503 | 0.92840981 | 0.104 | 0.261 | 1 pDC_lung |
| PPP1CB    | 0.00153896 | 0.62870336 | 0.311 | 0.654 | 1 pDC_lung |
| C1H1orf43 | 0.00155292 | 0.99068939 | 0.109 | 0.275 | 1 pDC_lung |
| KDM2A     | 0.00161028 | 0.58564147 | 0.35  | 0.732 | 1 pDC_lung |
| TCIRG1    | 0.00167296 | 0.9068582  | 0.104 | 0.261 | 1 pDC_lung |
| UGP2      | 0.00173634 | 0.67601117 | 0.137 | 0.32  | 1 pDC_lung |
| WDR26     | 0.00174695 | 1.11121665 | 0.169 | 0.386 | 1 pDC_lung |
| NUFIP2    | 0.00177931 | 0.6353592  | 0.372 | 0.758 | 1 pDC_lung |
| RAB22A    | 0.00180351 | 1.05542805 | 0.109 | 0.268 | 1 pDC_lung |
| MVB12A    | 0.00181349 | 1.08023293 | 0.12  | 0.288 | 1 pDC_lung |
| PIP5K1A   | 0.0018325  | 1.33845236 | 0.208 | 0.464 | 1 pDC_lung |
| RAB31     | 0.00184106 | 0.60498352 | 0.328 | 0.686 | 1 pDC_lung |
| U4.62     | 0.00185556 | 3.22227055 | 0.262 | 0.157 | 1 pDC_lung |
| SYK       | 0.00185944 | 0.96708735 | 0.246 | 0.529 | 1 pDC_lung |
| DDX3X     | 0.00190705 | 0.22381046 | 0.454 | 0.889 | 1 pDC_lung |
| SLC30A7   | 0.00194788 | 1.06412808 | 0.142 | 0.327 | 1 pDC_lung |
| ETS1      | 0.00195492 | 0.45573081 | 0.109 | 0.261 | 1 pDC_lung |
| HEXIM1    | 0.00197344 | 0.6274245  | 0.175 | 0.386 | 1 pDC_lung |

|                    |            |            |       |       |            |
|--------------------|------------|------------|-------|-------|------------|
| SERAC1             | 0.00199743 | 1.33375015 | 0.109 | 0.268 | 1 pDC_lung |
| CYLD               | 0.00204177 | 0.67386462 | 0.317 | 0.66  | 1 pDC_lung |
| APBB1IP            | 0.00205935 | 0.67365589 | 0.284 | 0.595 | 1 pDC_lung |
| CLCN5              | 0.00207788 | 1.00531113 | 0.109 | 0.268 | 1 pDC_lung |
| ENSMMUG00000015208 | 0.00208092 | 0.93364058 | 0.317 | 0.699 | 1 pDC_lung |
| DYRK1A             | 0.00208592 | 0.5667823  | 0.328 | 0.68  | 1 pDC_lung |
| ENSMMUG00000052424 | 0.00214572 | 0.74407365 | 0.738 | 0.915 | 1 pDC_lung |
| SPECC1             | 0.00221231 | 0.26841601 | 0.333 | 0.673 | 1 pDC_lung |
| UBAP2L             | 0.0022427  | 0.79223387 | 0.262 | 0.562 | 1 pDC_lung |
| RTCB               | 0.00226037 | 1.25292974 | 0.109 | 0.268 | 1 pDC_lung |
| NAA50              | 0.00226623 | 1.05509926 | 0.251 | 0.529 | 1 pDC_lung |
| XPR1               | 0.00227218 | 0.73943525 | 0.164 | 0.366 | 1 pDC_lung |
| MGAT5              | 0.00229983 | 0.46147161 | 0.328 | 0.66  | 1 pDC_lung |
| DUSP2              | 0.00235895 | 2.30016937 | 0.404 | 0.353 | 1 pDC_lung |
| ENSMMUG00000006165 | 0.00236872 | 1.48371782 | 0.612 | 0.804 | 1 pDC_lung |
| DOP1B              | 0.00247867 | 0.99905336 | 0.115 | 0.275 | 1 pDC_lung |
| PSAP               | 0.00253563 | 2.5398194  | 0.475 | 0.523 | 1 pDC_lung |
| PPM1H              | 0.00264589 | 0.57835096 | 0.158 | 0.346 | 1 pDC_lung |
| PLEKHB2            | 0.00266719 | 0.55891276 | 0.279 | 0.575 | 1 pDC_lung |
| AGPAT3             | 0.00268441 | 0.32039139 | 0.175 | 0.373 | 1 pDC_lung |
| BRWD3              | 0.00275964 | 1.14501861 | 0.164 | 0.366 | 1 pDC_lung |
| TANC1              | 0.00286532 | 0.1941105  | 0.186 | 0.379 | 1 pDC_lung |
| ENSMMUG00000058818 | 0.00294241 | 1.21088538 | 0.109 | 0.261 | 1 pDC_lung |
| EIF4G1             | 0.00300537 | 0.73258663 | 0.12  | 0.281 | 1 pDC_lung |
| CYSTM1             | 0.00307808 | 1.00576082 | 0.23  | 0.477 | 1 pDC_lung |
| RARA               | 0.0030863  | 1.19910112 | 0.12  | 0.281 | 1 pDC_lung |
| IFI16              | 0.00309437 | 1.72748711 | 0.536 | 0.641 | 1 pDC_lung |
| SEMA4D             | 0.00318518 | 0.66719609 | 0.158 | 0.346 | 1 pDC_lung |
| CHN2               | 0.00323901 | 2.54809117 | 0.361 | 0.288 | 1 pDC_lung |
| ABCF1              | 0.00325051 | 0.82368739 | 0.186 | 0.405 | 1 pDC_lung |
| ATG7               | 0.00325264 | 0.73857483 | 0.235 | 0.484 | 1 pDC_lung |
| SENP5              | 0.0036334  | 0.68658014 | 0.29  | 0.582 | 1 pDC_lung |
| YTHDF3             | 0.0036767  | 1.03006839 | 0.251 | 0.536 | 1 pDC_lung |

|                     |            |            |       |       |            |
|---------------------|------------|------------|-------|-------|------------|
| PSEN1               | 0.00382228 | 1.0217983  | 0.202 | 0.431 | 1 pDC_lung |
| EPB41               | 0.00386455 | 0.52628173 | 0.284 | 0.575 | 1 pDC_lung |
| MIDEAS              | 0.00390675 | 1.41821852 | 0.213 | 0.458 | 1 pDC_lung |
| HGSNAT              | 0.00395299 | 1.52505416 | 0.18  | 0.392 | 1 pDC_lung |
| IRAK2               | 0.00400046 | 2.43559915 | 0.47  | 0.516 | 1 pDC_lung |
| RNF19B              | 0.00405091 | 0.97596884 | 0.355 | 0.739 | 1 pDC_lung |
| STK24               | 0.00406659 | 1.12125255 | 0.306 | 0.627 | 1 pDC_lung |
| ANKRD17             | 0.00407512 | 0.79790698 | 0.355 | 0.712 | 1 pDC_lung |
| RIPK1               | 0.00407796 | 1.76679749 | 0.115 | 0.268 | 1 pDC_lung |
| ESYT2               | 0.00414953 | 0.94999149 | 0.257 | 0.523 | 1 pDC_lung |
| ENSMMUG00000008587  | 0.00434896 | 0.87387436 | 0.18  | 0.373 | 1 pDC_lung |
| SAT1                | 0.00440949 | 0.63684043 | 0.383 | 0.771 | 1 pDC_lung |
| LGMN                | 0.00454793 | 1.20473646 | 0.213 | 0.444 | 1 pDC_lung |
| CD69                | 0.00460583 | 0.13365745 | 0.169 | 0.34  | 1 pDC_lung |
| CLIC4               | 0.00460656 | 0.94075917 | 0.213 | 0.444 | 1 pDC_lung |
| CEP192              | 0.00463825 | 1.25482874 | 0.219 | 0.464 | 1 pDC_lung |
| R3HDM2              | 0.0047576  | 0.53992778 | 0.284 | 0.562 | 1 pDC_lung |
| STAU1               | 0.00476322 | 0.71490192 | 0.306 | 0.608 | 1 pDC_lung |
| TGFB1               | 0.00479283 | 1.26075215 | 0.191 | 0.399 | 1 pDC_lung |
| LIMK2               | 0.00482242 | 1.01150573 | 0.148 | 0.32  | 1 pDC_lung |
| ATP1A1              | 0.00487831 | 1.37168391 | 0.219 | 0.464 | 1 pDC_lung |
| UTRN                | 0.00489087 | 0.5487902  | 0.273 | 0.536 | 1 pDC_lung |
| EIF4H               | 0.00496925 | 1.2361388  | 0.284 | 0.601 | 1 pDC_lung |
| ZNF516              | 0.00511483 | 1.25192276 | 0.126 | 0.281 | 1 pDC_lung |
| VASP                | 0.00554533 | 0.51539321 | 0.339 | 0.667 | 1 pDC_lung |
| CDC37               | 0.00557243 | 1.48533961 | 0.235 | 0.497 | 1 pDC_lung |
| SNX18               | 0.00567651 | 1.32200464 | 0.12  | 0.268 | 1 pDC_lung |
| ESCO1               | 0.00571365 | 0.61953117 | 0.322 | 0.634 | 1 pDC_lung |
| PIM3                | 0.00581288 | 1.33721118 | 0.131 | 0.288 | 1 pDC_lung |
| BCOR                | 0.00594925 | 1.33459966 | 0.197 | 0.412 | 1 pDC_lung |
| ENSMMUG000000011711 | 0.00598044 | 0.58969729 | 0.251 | 0.49  | 1 pDC_lung |
| RNF13               | 0.0061154  | 0.6198389  | 0.317 | 0.621 | 1 pDC_lung |
| KDM7A               | 0.00615032 | 0.71411041 | 0.213 | 0.431 | 1 pDC_lung |

|                    |            |            |       |       |            |
|--------------------|------------|------------|-------|-------|------------|
| PITRM1             | 0.00619524 | 1.02948697 | 0.131 | 0.288 | 1 pDC_lung |
| STAG2              | 0.00622824 | 0.58483127 | 0.415 | 0.824 | 1 pDC_lung |
| ST3GAL1            | 0.00640779 | 2.41436311 | 0.372 | 0.327 | 1 pDC_lung |
| TFRC               | 0.00658394 | 1.59739167 | 0.164 | 0.346 | 1 pDC_lung |
| PLEKHM2            | 0.00664346 | 1.29650457 | 0.164 | 0.346 | 1 pDC_lung |
| SRGAP2             | 0.00687161 | 0.67788024 | 0.262 | 0.503 | 1 pDC_lung |
| WWC2               | 0.00696987 | 0.12361427 | 0.23  | 0.425 | 1 pDC_lung |
| DDIT4              | 0.00702495 | 0.95411094 | 0.126 | 0.275 | 1 pDC_lung |
| KDM6B              | 0.0070744  | 2.22621506 | 0.454 | 0.503 | 1 pDC_lung |
| ARID5B             | 0.00708633 | 2.22691438 | 0.415 | 0.405 | 1 pDC_lung |
| EDEM1              | 0.00709153 | 1.22938163 | 0.262 | 0.542 | 1 pDC_lung |
| PTPN22             | 0.00712912 | 1.13299043 | 0.126 | 0.275 | 1 pDC_lung |
| ENSMMUG00000063316 | 0.00722645 | 0.13926793 | 0.306 | 0.562 | 1 pDC_lung |
| DISC1              | 0.0075401  | 0.32122445 | 0.279 | 0.516 | 1 pDC_lung |
| INSIG1             | 0.00757319 | 2.70294607 | 0.29  | 0.216 | 1 pDC_lung |
| RANBP9             | 0.00773101 | 1.02430438 | 0.246 | 0.49  | 1 pDC_lung |
| FBRSL1             | 0.00790236 | 1.29618967 | 0.158 | 0.333 | 1 pDC_lung |
| TSC22D2            | 0.00799756 | 0.90746846 | 0.366 | 0.739 | 1 pDC_lung |
| KCNQ1              | 0.00839957 | 1.20918087 | 0.268 | 0.542 | 1 pDC_lung |
| ZBTB20             | 0.00847821 | 0.4161918  | 0.388 | 0.752 | 1 pDC_lung |
| PANX1              | 0.00849631 | 1.21354193 | 0.153 | 0.32  | 1 pDC_lung |
| AFF1               | 0.00855985 | 0.90620814 | 0.344 | 0.68  | 1 pDC_lung |
| ENSMMUG00000002075 | 0.00859634 | 0.65804135 | 0.18  | 0.366 | 1 pDC_lung |
| CORO1C             | 0.00871216 | 1.48296051 | 0.262 | 0.536 | 1 pDC_lung |
| UBL3               | 0.00908055 | 1.24690776 | 0.262 | 0.536 | 1 pDC_lung |
| SAMD8              | 0.00932245 | 1.23588115 | 0.224 | 0.451 | 1 pDC_lung |
| DERA               | 0.00936913 | 1.47788017 | 0.213 | 0.431 | 1 pDC_lung |
| RERE               | 0.0094724  | 0.39322985 | 0.383 | 0.719 | 1 pDC_lung |
| DIP2B              | 0.00957496 | 0.60798425 | 0.344 | 0.686 | 1 pDC_lung |
| PPP1R8             | 0.00963844 | 1.22778312 | 0.295 | 0.601 | 1 pDC_lung |
| BCAS3              | 0.00967402 | 1.08916563 | 0.246 | 0.49  | 1 pDC_lung |
| MT2A               | 0.00997425 | 2.34587792 | 0.317 | 0.242 | 1 pDC_lung |
| ATP1B3             | 0.01011928 | 0.32124285 | 0.393 | 0.739 | 1 pDC_lung |

|                     |            |            |       |       |            |
|---------------------|------------|------------|-------|-------|------------|
| RAB12               | 0.0101717  | 0.9996868  | 0.251 | 0.51  | 1 pDC_lung |
| ARFGAP3             | 0.01017221 | 1.70786765 | 0.563 | 0.732 | 1 pDC_lung |
| MAFF                | 0.01030207 | 1.09698833 | 0.268 | 0.536 | 1 pDC_lung |
| SKAP2               | 0.01047505 | 0.33511198 | 0.361 | 0.66  | 1 pDC_lung |
| PSME4               | 0.01055206 | 1.36535509 | 0.246 | 0.497 | 1 pDC_lung |
| ENSMMUG00000019371  | 0.01066299 | 1.62318021 | 0.475 | 0.503 | 1 pDC_lung |
| SLCO3A1             | 0.01085544 | 1.23802521 | 0.158 | 0.327 | 1 pDC_lung |
| B4GALT5             | 0.0110373  | 2.7093147  | 0.388 | 0.386 | 1 pDC_lung |
| TRAF1               | 0.01115145 | 0.35714852 | 0.383 | 0.693 | 1 pDC_lung |
| PIK3R5              | 0.01117988 | 1.54529506 | 0.552 | 0.68  | 1 pDC_lung |
| ADK                 | 0.01147957 | 0.50563876 | 0.339 | 0.654 | 1 pDC_lung |
| TMCC1               | 0.01148455 | 0.90698555 | 0.279 | 0.556 | 1 pDC_lung |
| RASA2               | 0.01177906 | 0.98601015 | 0.235 | 0.464 | 1 pDC_lung |
| LRRK2               | 0.01209331 | 0.46197742 | 0.235 | 0.438 | 1 pDC_lung |
| ENSMMUG000000031947 | 0.01218893 | 0.52357002 | 0.361 | 0.699 | 1 pDC_lung |
| DENND5A             | 0.01224719 | 1.30861819 | 0.623 | 0.81  | 1 pDC_lung |
| CSRNP1              | 0.01245936 | 0.67503035 | 0.306 | 0.595 | 1 pDC_lung |
| STAT4               | 0.01248855 | 3.08858336 | 0.251 | 0.176 | 1 pDC_lung |
| PPM1E               | 0.01271177 | 2.4109801  | 0.377 | 0.359 | 1 pDC_lung |
| HERPUD1             | 0.0128501  | 1.17262132 | 0.322 | 0.654 | 1 pDC_lung |
| ATP6V1A             | 0.01297772 | 2.36758814 | 0.437 | 0.471 | 1 pDC_lung |
| NAA15               | 0.01339638 | 1.35189534 | 0.186 | 0.373 | 1 pDC_lung |
| DNTTIP2             | 0.01360939 | 1.24427954 | 0.213 | 0.425 | 1 pDC_lung |
| RABGEF1             | 0.01395132 | 0.49516083 | 0.404 | 0.771 | 1 pDC_lung |
| FGR                 | 0.01401411 | 1.07081384 | 0.153 | 0.307 | 1 pDC_lung |
| AFF3                | 0.01444903 | 1.88536357 | 0.421 | 0.425 | 1 pDC_lung |
| IGF2BP3             | 0.01466974 | 1.04764543 | 0.197 | 0.386 | 1 pDC_lung |
| ATP9B               | 0.01490183 | 1.07399882 | 0.279 | 0.549 | 1 pDC_lung |
| FRMD8               | 0.0151701  | 3.27773357 | 0.251 | 0.183 | 1 pDC_lung |
| RIC1                | 0.01517867 | 1.40568054 | 0.219 | 0.431 | 1 pDC_lung |
| EFHD2               | 0.01521736 | 1.15575254 | 0.251 | 0.497 | 1 pDC_lung |
| ENSMMUG000000054743 | 0.0153987  | 0.92454021 | 0.153 | 0.307 | 1 pDC_lung |
| FBXL17              | 0.01550168 | 0.77708729 | 0.268 | 0.503 | 1 pDC_lung |

|                   |            |            |       |       |            |
|-------------------|------------|------------|-------|-------|------------|
| RAPGEF2           | 0.0157776  | 1.18850117 | 0.612 | 0.725 | 1 pDC_lung |
| EMP3              | 0.01605217 | 0.36897982 | 0.142 | 0.281 | 1 pDC_lung |
| SAMSN1            | 0.01647431 | 1.12850056 | 0.628 | 0.739 | 1 pDC_lung |
| PRCP              | 0.01772433 | 1.20640601 | 0.164 | 0.32  | 1 pDC_lung |
| MAP3K11           | 0.01793873 | 1.30216906 | 0.131 | 0.268 | 1 pDC_lung |
| RALGAPA2          | 0.018194   | 2.81761618 | 0.388 | 0.399 | 1 pDC_lung |
| CD74              | 0.01825329 | 0.37949635 | 0.967 | 0.941 | 1 pDC_lung |
| CELF2             | 0.01828334 | 0.62355181 | 0.787 | 0.941 | 1 pDC_lung |
| EIF4A3            | 0.01830509 | 0.93953129 | 0.284 | 0.549 | 1 pDC_lung |
| GALC              | 0.01856459 | 1.39337392 | 0.148 | 0.294 | 1 pDC_lung |
| RIN3              | 0.01881888 | 2.05124354 | 0.377 | 0.373 | 1 pDC_lung |
| BCL2L11           | 0.0189607  | 0.98699876 | 0.322 | 0.601 | 1 pDC_lung |
| MROH1             | 0.01940948 | 1.49671087 | 0.158 | 0.314 | 1 pDC_lung |
| PHLPP1            | 0.01972094 | 0.59509083 | 0.301 | 0.556 | 1 pDC_lung |
| LPCAT3            | 0.0198919  | 3.40922466 | 0.257 | 0.196 | 1 pDC_lung |
| IDO2              | 0.02046268 | 0.28376449 | 0.23  | 0.392 | 1 pDC_lung |
| HDAC4             | 0.020468   | 3.07899269 | 0.251 | 0.19  | 1 pDC_lung |
| HMOX2             | 0.02130385 | 1.23126299 | 0.273 | 0.529 | 1 pDC_lung |
| SEMA7A            | 0.02165113 | 1.0917398  | 0.23  | 0.431 | 1 pDC_lung |
| N4BP2L1           | 0.0218866  | 0.57758741 | 0.213 | 0.386 | 1 pDC_lung |
| NF1               | 0.02205896 | 0.72877588 | 0.344 | 0.66  | 1 pDC_lung |
| NCOR2             | 0.02207358 | 1.10563925 | 0.197 | 0.379 | 1 pDC_lung |
| FBXO11            | 0.02213021 | 0.3749296  | 0.437 | 0.81  | 1 pDC_lung |
| ENSMUG00000017113 | 0.02220119 | 1.83850504 | 0.525 | 0.699 | 1 pDC_lung |
| IQGAP2            | 0.0223031  | 2.70808011 | 0.251 | 0.19  | 1 pDC_lung |
| RB1               | 0.02267975 | 1.53226258 | 0.208 | 0.405 | 1 pDC_lung |
| ABHD18            | 0.02268701 | 1.2241639  | 0.131 | 0.261 | 1 pDC_lung |
| ENSMUG00000062941 | 0.02348214 | 1.26434776 | 0.131 | 0.261 | 1 pDC_lung |
| GNG7              | 0.0235543  | 1.05450238 | 0.175 | 0.333 | 1 pDC_lung |
| IPMK              | 0.02372784 | 1.42943977 | 0.273 | 0.529 | 1 pDC_lung |
| DENND1A           | 0.0244229  | 1.57084058 | 0.492 | 0.582 | 1 pDC_lung |
| EPS15L1           | 0.02533211 | 1.82875933 | 0.164 | 0.32  | 1 pDC_lung |
| ABCC4             | 0.02634601 | 2.92976556 | 0.257 | 0.203 | 1 pDC_lung |

|          |            |            |       |       |            |
|----------|------------|------------|-------|-------|------------|
| WDFY3    | 0.02718314 | 2.76111722 | 0.257 | 0.203 | 1 pDC_lung |
| HUWE1    | 0.02751814 | 1.3389064  | 0.366 | 0.719 | 1 pDC_lung |
| GNB1     | 0.02765123 | 0.50442009 | 0.415 | 0.765 | 1 pDC_lung |
| NFIL3    | 0.0281946  | 1.85247531 | 0.169 | 0.327 | 1 pDC_lung |
| RFTN1    | 0.0284364  | 0.2298798  | 0.557 | 0.824 | 1 pDC_lung |
| ST8SIA4  | 0.02873311 | 0.35250464 | 0.426 | 0.778 | 1 pDC_lung |
| GAB2     | 0.028809   | 0.51749696 | 0.743 | 0.928 | 1 pDC_lung |
| CTNND1   | 0.02883818 | 2.34207119 | 0.361 | 0.359 | 1 pDC_lung |
| ANKRD11  | 0.03017193 | 0.52038461 | 0.41  | 0.797 | 1 pDC_lung |
| NAMPT    | 0.03056208 | 0.50488789 | 0.41  | 0.739 | 1 pDC_lung |
| IFNGR2   | 0.03072418 | 1.29882188 | 0.579 | 0.784 | 1 pDC_lung |
| ATF6     | 0.0309826  | 2.01276898 | 0.508 | 0.68  | 1 pDC_lung |
| LIMS1    | 0.03108937 | 1.55761327 | 0.568 | 0.758 | 1 pDC_lung |
| MAP2K3   | 0.03150729 | 1.76023059 | 0.421 | 0.444 | 1 pDC_lung |
| PAFAH1B1 | 0.03189119 | 0.67725576 | 0.415 | 0.817 | 1 pDC_lung |
| ZBED1    | 0.03269608 | 0.67463694 | 0.344 | 0.627 | 1 pDC_lung |
| BTBD9    | 0.03285244 | 1.42939394 | 0.317 | 0.588 | 1 pDC_lung |
| VAV3     | 0.03337634 | 1.64763154 | 0.404 | 0.418 | 1 pDC_lung |
| NIPA2    | 0.03351298 | 1.65141557 | 0.208 | 0.392 | 1 pDC_lung |
| STK40    | 0.03387271 | 1.92910925 | 0.164 | 0.307 | 1 pDC_lung |
| HIP1     | 0.03424827 | 0.71835281 | 0.306 | 0.529 | 1 pDC_lung |
| STK38L   | 0.0343892  | 1.19744423 | 0.208 | 0.379 | 1 pDC_lung |
| RBPJ     | 0.03474996 | 0.84024621 | 0.628 | 0.725 | 1 pDC_lung |
| RPS6KA3  | 0.03480762 | 0.64824105 | 0.399 | 0.719 | 1 pDC_lung |
| PRKX     | 0.03563179 | 0.64578    | 0.361 | 0.647 | 1 pDC_lung |
| KDM4C    | 0.03590745 | 0.77976847 | 0.339 | 0.627 | 1 pDC_lung |
| TET2     | 0.03714165 | 2.08815803 | 0.464 | 0.582 | 1 pDC_lung |
| PSPC1    | 0.03776677 | 0.94738463 | 0.333 | 0.614 | 1 pDC_lung |
| ERGIC1   | 0.03780221 | 1.39745029 | 0.202 | 0.379 | 1 pDC_lung |
| NUP98    | 0.03785141 | 0.96241443 | 0.393 | 0.765 | 1 pDC_lung |
| SMG1     | 0.03792504 | 0.61189341 | 0.432 | 0.791 | 1 pDC_lung |
| PCF11    | 0.03835128 | 1.39612141 | 0.279 | 0.529 | 1 pDC_lung |
| WAC      | 0.03849279 | 0.75433285 | 0.393 | 0.758 | 1 pDC_lung |

|                   |            |            |       |       |            |
|-------------------|------------|------------|-------|-------|------------|
| MAMU-DRA          | 0.03878087 | 0.50635509 | 0.918 | 0.876 | 1 pDC_lung |
| JMY               | 0.03934973 | 1.76915379 | 0.158 | 0.294 | 1 pDC_lung |
| MAMU-DMA          | 0.04010629 | 1.56741662 | 0.464 | 0.562 | 1 pDC_lung |
| CXCR4             | 0.04024943 | 1.02785964 | 0.158 | 0.294 | 1 pDC_lung |
| ENSMUG00000012203 | 0.04073964 | 0.81117946 | 0.393 | 0.693 | 1 pDC_lung |
| SNRNP200          | 0.04079026 | 1.4665901  | 0.235 | 0.438 | 1 pDC_lung |
| ZC3H12C           | 0.04091553 | 2.57356407 | 0.339 | 0.333 | 1 pDC_lung |
| PRKCH             | 0.04122609 | 0.46520788 | 0.18  | 0.314 | 1 pDC_lung |
| STAG1             | 0.0413626  | 0.32336303 | 0.454 | 0.83  | 1 pDC_lung |
| ZNF609            | 0.041585   | 0.90018647 | 0.322 | 0.582 | 1 pDC_lung |
| TXNRD1            | 0.04250451 | 1.04409445 | 0.366 | 0.693 | 1 pDC_lung |
| ZHX2              | 0.04369679 | 1.09548015 | 0.35  | 0.66  | 1 pDC_lung |
| VCL               | 0.04493575 | 1.11840963 | 0.224 | 0.399 | 1 pDC_lung |
| CXCL16            | 0.04560501 | 0.40809558 | 0.251 | 0.431 | 1 pDC_lung |
| CUX2              | 0.04649364 | 0.8310614  | 0.148 | 0.268 | 1 pDC_lung |
| ARHGEF7           | 0.04708577 | 1.15983713 | 0.344 | 0.621 | 1 pDC_lung |
| C15H9orf72        | 0.04769703 | 1.15173958 | 0.235 | 0.418 | 1 pDC_lung |
| NSMCE2            | 0.04793103 | 0.826531   | 0.339 | 0.614 | 1 pDC_lung |
| EZR               | 0.04884546 | 1.02491262 | 0.388 | 0.739 | 1 pDC_lung |
| DEXI              | 0.04906571 | 1.17924622 | 0.169 | 0.307 | 1 pDC_lung |
| MECP2             | 0.05027193 | 1.24918643 | 0.257 | 0.464 | 1 pDC_lung |
| ANKS1A            | 0.05166362 | 1.11773494 | 0.186 | 0.327 | 1 pDC_lung |
| UST               | 0.0521223  | 0.95376601 | 0.23  | 0.405 | 1 pDC_lung |
| PREX1             | 0.0565915  | 1.37148371 | 0.596 | 0.81  | 1 pDC_lung |
| USP6NL            | 0.05703852 | 1.11175491 | 0.301 | 0.536 | 1 pDC_lung |
| AIF1              | 0.05705756 | 0.15198898 | 0.208 | 0.333 | 1 pDC_lung |
| PLCB2             | 0.05716243 | 1.18724181 | 0.224 | 0.405 | 1 pDC_lung |
| IL10RA            | 0.05779554 | 1.30742499 | 0.219 | 0.392 | 1 pDC_lung |
| ARIH1             | 0.05785414 | 0.51783895 | 0.481 | 0.863 | 1 pDC_lung |
| ARHGAP4           | 0.05819238 | 2.00919712 | 0.164 | 0.301 | 1 pDC_lung |
| IL4R              | 0.0603769  | 1.18158944 | 0.317 | 0.595 | 1 pDC_lung |
| WDR59             | 0.06172469 | 2.12771981 | 0.191 | 0.346 | 1 pDC_lung |
| OXR1              | 0.06201631 | 0.72661378 | 0.279 | 0.497 | 1 pDC_lung |



|                     |            |            |       |       |            |
|---------------------|------------|------------|-------|-------|------------|
| ZFC3H1              | 0.06226204 | 0.71394831 | 0.399 | 0.739 | 1 pDC_lung |
| EXOC4               | 0.06448777 | 1.40396818 | 0.557 | 0.758 | 1 pDC_lung |
| CD53                | 0.06454773 | 2.16158791 | 0.41  | 0.497 | 1 pDC_lung |
| PDCD6-AHRR          | 0.06470032 | 2.95937055 | 0.366 | 0.412 | 1 pDC_lung |
| BCL11A              | 0.06569389 | 1.55201725 | 0.273 | 0.471 | 1 pDC_lung |
| CTNNA1              | 0.06682382 | 1.33414274 | 0.306 | 0.562 | 1 pDC_lung |
| MYO1G               | 0.06705019 | 2.69877423 | 0.306 | 0.301 | 1 pDC_lung |
| ALPK1               | 0.06734549 | 1.1655166  | 0.153 | 0.268 | 1 pDC_lung |
| DOCK8               | 0.06851609 | 0.12944798 | 0.557 | 0.915 | 1 pDC_lung |
| RUFY1               | 0.06896322 | 1.61397264 | 0.23  | 0.412 | 1 pDC_lung |
| ITPR1               | 0.07097666 | 2.48250787 | 0.279 | 0.255 | 1 pDC_lung |
| ARF4                | 0.07109437 | 0.39302707 | 0.475 | 0.85  | 1 pDC_lung |
| ZDHHC20             | 0.07165301 | 1.37081434 | 0.186 | 0.327 | 1 pDC_lung |
| OPA3                | 0.07171506 | 1.50181558 | 0.142 | 0.255 | 1 pDC_lung |
| USP15               | 0.07189006 | 0.90514445 | 0.607 | 0.869 | 1 pDC_lung |
| LARGE1              | 0.0722074  | 1.99042674 | 0.164 | 0.294 | 1 pDC_lung |
| HNRNPH1             | 0.07250271 | 0.50499881 | 0.454 | 0.843 | 1 pDC_lung |
| SLC39A10            | 0.07320979 | 2.41160699 | 0.383 | 0.438 | 1 pDC_lung |
| ENSMMUG00000006293  | 0.07345881 | 1.55583822 | 0.339 | 0.627 | 1 pDC_lung |
| OSBPL11             | 0.07490256 | 2.7962815  | 0.339 | 0.359 | 1 pDC_lung |
| TUT7                | 0.07788695 | 1.64499572 | 0.339 | 0.627 | 1 pDC_lung |
| CD58                | 0.0782202  | 1.92040916 | 0.486 | 0.641 | 1 pDC_lung |
| NFKB2               | 0.0783202  | 1.64174593 | 0.213 | 0.379 | 1 pDC_lung |
| NBEAL1              | 0.07891448 | 1.5312178  | 0.235 | 0.418 | 1 pDC_lung |
| CHD1                | 0.08037914 | 1.10781111 | 0.328 | 0.582 | 1 pDC_lung |
| ENSMMUG000000062716 | 0.08050337 | 1.53881594 | 0.175 | 0.307 | 1 pDC_lung |
| GPBP1               | 0.08335494 | 0.92293308 | 0.623 | 0.889 | 1 pDC_lung |
| CREBBP              | 0.08338204 | 0.60584615 | 0.393 | 0.732 | 1 pDC_lung |
| ATP2B1              | 0.08393064 | 1.45878524 | 0.503 | 0.634 | 1 pDC_lung |
| UBE2H               | 0.08582059 | 1.01866358 | 0.372 | 0.68  | 1 pDC_lung |
| FOXO3               | 0.08638113 | 1.17910928 | 0.322 | 0.582 | 1 pDC_lung |
| INPP5D              | 0.08685234 | 2.22302633 | 0.366 | 0.405 | 1 pDC_lung |
| HNRNPU              | 0.0881211  | 0.19679909 | 0.552 | 0.908 | 1 pDC_lung |

|                    |            |            |       |       |            |
|--------------------|------------|------------|-------|-------|------------|
| ENSMMUG00000028699 | 0.08922582 | 0.8631061  | 0.355 | 0.627 | 1 pDC_lung |
| SLC38A9            | 0.09012642 | 2.21465335 | 0.268 | 0.471 | 1 pDC_lung |
| RUNX3              | 0.09474908 | 1.42891713 | 0.53  | 0.699 | 1 pDC_lung |
| YWHAЕ              | 0.09516614 | 0.78099988 | 0.399 | 0.732 | 1 pDC_lung |
| VMO1               | 0.0969687  | 0.19863399 | 0.284 | 0.438 | 1 pDC_lung |
| PLA2G6             | 0.09863693 | 1.6058156  | 0.246 | 0.431 | 1 pDC_lung |
| ENSMMUG00000046641 | 0.09935488 | 0.74745351 | 0.432 | 0.712 | 1 pDC_lung |
| GPR137B            | 0.10035447 | 1.35145222 | 0.262 | 0.451 | 1 pDC_lung |
| MTHFD1L            | 0.10038255 | 1.27156692 | 0.153 | 0.261 | 1 pDC_lung |
| NEDD9              | 0.10248368 | 1.34170386 | 0.175 | 0.294 | 1 pDC_lung |
| ZDHHC14            | 0.1039235  | 2.12128804 | 0.311 | 0.307 | 1 pDC_lung |
| PABPC1             | 0.10686075 | 0.51743979 | 0.781 | 0.961 | 1 pDC_lung |
| KPNA4              | 0.10690089 | 0.90231948 | 0.311 | 0.516 | 1 pDC_lung |
| WSB1               | 0.1128327  | 0.79777324 | 0.399 | 0.739 | 1 pDC_lung |
| TM9SF3             | 0.11328427 | 1.4908047  | 0.514 | 0.712 | 1 pDC_lung |
| TRA2B              | 0.11565222 | 0.16696208 | 0.596 | 0.967 | 1 pDC_lung |
| ZFAND3             | 0.11596285 | 0.59112737 | 0.738 | 0.941 | 1 pDC_lung |
| KMT2E              | 0.11704118 | 1.28247633 | 0.579 | 0.889 | 1 pDC_lung |
| LCOR               | 0.11934243 | 0.8374969  | 0.437 | 0.778 | 1 pDC_lung |
| UBAC2              | 0.12291383 | 1.10701625 | 0.377 | 0.686 | 1 pDC_lung |
| MANBA              | 0.12432064 | 1.07040621 | 0.579 | 0.797 | 1 pDC_lung |
| JUND               | 0.12523102 | 0.61938324 | 0.492 | 0.856 | 1 pDC_lung |
| LYZ                | 0.12781814 | 0.6927805  | 0.372 | 0.601 | 1 pDC_lung |
| RNF149             | 0.12807543 | 2.54873784 | 0.317 | 0.34  | 1 pDC_lung |
| ADIPOR2            | 0.1292253  | 1.68509743 | 0.18  | 0.301 | 1 pDC_lung |
| SERINC5            | 0.13166667 | 1.44193881 | 0.191 | 0.314 | 1 pDC_lung |
| DOT1L              | 0.13360641 | 2.02803187 | 0.164 | 0.275 | 1 pDC_lung |
| MAD1L1             | 0.13792367 | 1.63219473 | 0.169 | 0.281 | 1 pDC_lung |
| TBC1D8             | 0.1394332  | 0.51206538 | 0.492 | 0.758 | 1 pDC_lung |
| ARL8B              | 0.13944143 | 1.50914467 | 0.295 | 0.516 | 1 pDC_lung |
| SMURF2             | 0.13999972 | 1.74958614 | 0.169 | 0.281 | 1 pDC_lung |
| RGS2               | 0.14005642 | 1.56902144 | 0.454 | 0.562 | 1 pDC_lung |
| TNFRSF10A          | 0.14396835 | 2.38380051 | 0.251 | 0.235 | 1 pDC_lung |

|                     |            |            |       |       |            |
|---------------------|------------|------------|-------|-------|------------|
| TIPARP              | 0.14404727 | 1.90995724 | 0.421 | 0.536 | 1 pDC_lung |
| INTS6               | 0.14476458 | 1.33995349 | 0.393 | 0.712 | 1 pDC_lung |
| ELF2                | 0.1453485  | 1.58704489 | 0.295 | 0.516 | 1 pDC_lung |
| IQSEC1              | 0.1467553  | 0.93310575 | 0.328 | 0.549 | 1 pDC_lung |
| NEURL3              | 0.14745553 | 0.96498213 | 0.175 | 0.275 | 1 pDC_lung |
| SKIL                | 0.14854259 | 2.08597402 | 0.23  | 0.392 | 1 pDC_lung |
| PLEKHG2             | 0.15062757 | 1.70881554 | 0.175 | 0.281 | 1 pDC_lung |
| HK1                 | 0.15126609 | 1.92901501 | 0.219 | 0.366 | 1 pDC_lung |
| NABP1               | 0.15378576 | 1.18214695 | 0.355 | 0.627 | 1 pDC_lung |
| EIF4G3              | 0.1558286  | 0.89438074 | 0.246 | 0.392 | 1 pDC_lung |
| MAP3K2              | 0.15784315 | 1.86694333 | 0.158 | 0.261 | 1 pDC_lung |
| B4GALT1             | 0.15808975 | 2.35025903 | 0.317 | 0.346 | 1 pDC_lung |
| HCK                 | 0.16069041 | 1.66145774 | 0.432 | 0.562 | 1 pDC_lung |
| GAK                 | 0.16142027 | 1.88862058 | 0.235 | 0.399 | 1 pDC_lung |
| PPM1L               | 0.16170033 | 1.26526816 | 0.197 | 0.314 | 1 pDC_lung |
| BHLHE40             | 0.16253188 | 0.91911294 | 0.552 | 0.771 | 1 pDC_lung |
| ZFHX3               | 0.16391632 | 1.13200321 | 0.306 | 0.523 | 1 pDC_lung |
| MAPKAPK2            | 0.16673563 | 1.78501844 | 0.219 | 0.359 | 1 pDC_lung |
| ENSMMUG000000022874 | 0.16741032 | 0.49485417 | 0.486 | 0.83  | 1 pDC_lung |
| ENSMMUG000000061125 | 0.16787456 | 0.62834264 | 0.563 | 0.719 | 1 pDC_lung |
| LPIN2               | 0.17094538 | 1.50837909 | 0.235 | 0.386 | 1 pDC_lung |
| TRERF1              | 0.17180243 | 1.4093314  | 0.23  | 0.379 | 1 pDC_lung |
| SLC7A1              | 0.17926876 | 1.8201349  | 0.18  | 0.294 | 1 pDC_lung |
| BTG2                | 0.17967869 | 0.71890603 | 0.432 | 0.745 | 1 pDC_lung |
| TRAPPC9             | 0.18336355 | 1.61477334 | 0.158 | 0.255 | 1 pDC_lung |
| TBC1D4              | 0.18761166 | 0.72292497 | 0.667 | 0.967 | 1 pDC_lung |
| ETV3                | 0.19228642 | 0.96286203 | 0.546 | 0.778 | 1 pDC_lung |
| IFI30               | 0.19420482 | 1.38660906 | 0.273 | 0.458 | 1 pDC_lung |
| ATXN1               | 0.1949501  | 1.36702692 | 0.41  | 0.471 | 1 pDC_lung |
| RAB1A               | 0.19661074 | 0.83414195 | 0.426 | 0.752 | 1 pDC_lung |
| PDE7A               | 0.19693691 | 1.78717596 | 0.246 | 0.399 | 1 pDC_lung |
| GRAMD4              | 0.19729987 | 1.5409039  | 0.164 | 0.261 | 1 pDC_lung |
| IDO1                | 0.19837194 | 0.68878725 | 0.464 | 0.431 | 1 pDC_lung |

|          |            |            |       |       |            |
|----------|------------|------------|-------|-------|------------|
| SH3BP5   | 0.20437415 | 2.31033629 | 0.328 | 0.366 | 1 pDC_lung |
| MTHFD2   | 0.20506897 | 1.3620826  | 0.464 | 0.621 | 1 pDC_lung |
| BCL6     | 0.20890432 | 1.266291   | 0.366 | 0.621 | 1 pDC_lung |
| JAML     | 0.2118187  | 1.31810815 | 0.219 | 0.346 | 1 pDC_lung |
| TBC1D9   | 0.21258487 | 1.91965317 | 0.486 | 0.66  | 1 pDC_lung |
| KANSL3   | 0.21755445 | 1.92850268 | 0.202 | 0.327 | 1 pDC_lung |
| CDK14    | 0.22385418 | 0.75473629 | 0.262 | 0.399 | 1 pDC_lung |
| TIGAR    | 0.22744427 | 1.0123327  | 0.317 | 0.523 | 1 pDC_lung |
| GATAD2B  | 0.22790095 | 1.57336639 | 0.301 | 0.503 | 1 pDC_lung |
| FMNL3    | 0.22801214 | 1.4709048  | 0.257 | 0.405 | 1 pDC_lung |
| HP1BP3   | 0.22974208 | 1.26217003 | 0.404 | 0.739 | 1 pDC_lung |
| RAB27A   | 0.23704949 | 1.99703774 | 0.208 | 0.333 | 1 pDC_lung |
| ATP6V1B2 | 0.23866052 | 1.82232065 | 0.197 | 0.307 | 1 pDC_lung |
| GNA15    | 0.24113668 | 1.87971345 | 0.23  | 0.366 | 1 pDC_lung |
| S100A6   | 0.2434912  | 0.79544382 | 0.339 | 0.333 | 1 pDC_lung |
| STK10    | 0.24425214 | 1.89406412 | 0.366 | 0.438 | 1 pDC_lung |
| FOSB     | 0.25296175 | 0.48278504 | 0.557 | 0.856 | 1 pDC_lung |
| LRMDA    | 0.25694686 | 0.5154149  | 0.366 | 0.556 | 1 pDC_lung |
| AZIN1    | 0.26069411 | 1.60492    | 0.284 | 0.464 | 1 pDC_lung |
| NFATC1   | 0.26366689 | 2.83383384 | 0.279 | 0.301 | 1 pDC_lung |
| IFNAR1   | 0.26564728 | 1.64290581 | 0.322 | 0.542 | 1 pDC_lung |
| MLXIP    | 0.26914055 | 1.43339523 | 0.197 | 0.301 | 1 pDC_lung |
| SSBP2    | 0.27048845 | 0.89392392 | 0.383 | 0.608 | 1 pDC_lung |
| IL13RA1  | 0.27255896 | 1.9747183  | 0.41  | 0.549 | 1 pDC_lung |
| CUL1     | 0.276871   | 1.33938522 | 0.372 | 0.621 | 1 pDC_lung |
| NBN      | 0.27827964 | 1.16525866 | 0.344 | 0.575 | 1 pDC_lung |
| NR4A1    | 0.28139721 | 1.58002147 | 0.41  | 0.516 | 1 pDC_lung |
| PPP3CA   | 0.28398617 | 0.74844173 | 0.443 | 0.739 | 1 pDC_lung |
| STK3     | 0.28437374 | 1.57591821 | 0.213 | 0.327 | 1 pDC_lung |
| IRF8     | 0.2868766  | 1.16877151 | 0.317 | 0.497 | 1 pDC_lung |
| MAPK6    | 0.28762246 | 1.47493781 | 0.251 | 0.399 | 1 pDC_lung |
| MIDN     | 0.2903635  | 1.86514859 | 0.208 | 0.32  | 1 pDC_lung |
| ACSL1    | 0.29220858 | 1.86926374 | 0.262 | 0.418 | 1 pDC_lung |

|         |            |            |       |       |            |
|---------|------------|------------|-------|-------|------------|
| MYO1F   | 0.29421366 | 1.80898863 | 0.175 | 0.268 | 1 pDC_lung |
| DUSP5   | 0.2976669  | 1.57877764 | 0.197 | 0.301 | 1 pDC_lung |
| ARL5B   | 0.29785002 | 2.23191178 | 0.333 | 0.399 | 1 pDC_lung |
| CD46    | 0.30022295 | 1.74089884 | 0.328 | 0.549 | 1 pDC_lung |
| ELL     | 0.30890889 | 2.0328536  | 0.404 | 0.549 | 1 pDC_lung |
| NEDD4L  | 0.30931359 | 2.08589063 | 0.393 | 0.51  | 1 pDC_lung |
| RIPK2   | 0.31278215 | 1.52843108 | 0.432 | 0.562 | 1 pDC_lung |
| FRMD4B  | 0.31425815 | 2.13865716 | 0.257 | 0.268 | 1 pDC_lung |
| FCHO2   | 0.31726401 | 1.64531101 | 0.213 | 0.327 | 1 pDC_lung |
| TANGO6  | 0.31917461 | 1.8122459  | 0.169 | 0.255 | 1 pDC_lung |
| SATB1   | 0.32145547 | 2.68905017 | 0.301 | 0.346 | 1 pDC_lung |
| MICAL2  | 0.32616779 | 1.91475236 | 0.246 | 0.255 | 1 pDC_lung |
| UPF2    | 0.32824617 | 2.10992568 | 0.388 | 0.497 | 1 pDC_lung |
| PIK3C2A | 0.32876512 | 1.51625373 | 0.18  | 0.268 | 1 pDC_lung |
| AFF4    | 0.32928033 | 2.07724636 | 0.366 | 0.464 | 1 pDC_lung |
| SH2B3   | 0.32958106 | 1.95212351 | 0.41  | 0.556 | 1 pDC_lung |
| PTPN12  | 0.33645393 | 2.23494977 | 0.273 | 0.301 | 1 pDC_lung |
| UBE2W   | 0.3399023  | 1.06842556 | 0.361 | 0.588 | 1 pDC_lung |
| PDE4D   | 0.35022655 | 0.80302389 | 0.29  | 0.275 | 1 pDC_lung |
| ENSA    | 0.35116621 | 1.51709281 | 0.503 | 0.752 | 1 pDC_lung |
| ABHD12  | 0.35324097 | 1.5404825  | 0.23  | 0.34  | 1 pDC_lung |
| CSNK1A1 | 0.36166494 | 0.61785405 | 0.503 | 0.843 | 1 pDC_lung |
| ZFYVE16 | 0.36715296 | 1.19219647 | 0.268 | 0.399 | 1 pDC_lung |
| TRAK1   | 0.37248279 | 1.62944479 | 0.317 | 0.51  | 1 pDC_lung |
| CDKN1A  | 0.38013614 | 0.9966368  | 0.366 | 0.588 | 1 pDC_lung |
| SMAP2   | 0.3857559  | 0.88712283 | 0.47  | 0.784 | 1 pDC_lung |
| ARHGEF2 | 0.38778186 | 1.36961189 | 0.344 | 0.575 | 1 pDC_lung |
| ELOVL5  | 0.40128735 | 1.41429363 | 0.432 | 0.745 | 1 pDC_lung |
| KIF16B  | 0.40591432 | 1.79218225 | 0.175 | 0.255 | 1 pDC_lung |
| CUX1    | 0.40693955 | 0.66906396 | 0.607 | 0.889 | 1 pDC_lung |
| AHNAK   | 0.40700135 | 1.0769576  | 0.322 | 0.49  | 1 pDC_lung |
| WDFY4   | 0.40735924 | 1.64524478 | 0.377 | 0.471 | 1 pDC_lung |
| NEK1    | 0.40859723 | 3.21380162 | 0.175 | 0.255 | 1 pDC_lung |

|                    |            |            |       |       |            |
|--------------------|------------|------------|-------|-------|------------|
| GATAD2A            | 0.40972367 | 1.71761573 | 0.301 | 0.471 | 1 pDC_lung |
| TP53BP2            | 0.41179461 | 1.61095654 | 0.317 | 0.51  | 1 pDC_lung |
| GNAQ               | 0.42017345 | 0.86651641 | 0.481 | 0.824 | 1 pDC_lung |
| CCSER1             | 0.4208943  | 1.05321696 | 0.377 | 0.438 | 1 pDC_lung |
| ARL15              | 0.42867358 | 1.74832425 | 0.35  | 0.438 | 1 pDC_lung |
| KIFBP              | 0.43912126 | 1.44012101 | 0.372 | 0.484 | 1 pDC_lung |
| AP1B1              | 0.43918283 | 1.495402   | 0.191 | 0.275 | 1 pDC_lung |
| MINK1              | 0.44652237 | 1.60969617 | 0.383 | 0.503 | 1 pDC_lung |
| SPIDR              | 0.4510323  | 1.62355089 | 0.306 | 0.477 | 1 pDC_lung |
| ENSMMUG00000018474 | 0.45360882 | 2.30186743 | 0.279 | 0.327 | 1 pDC_lung |
| CCM2               | 0.45663572 | 1.46704601 | 0.35  | 0.562 | 1 pDC_lung |
| RCOR1              | 0.46648653 | 1.84982398 | 0.361 | 0.477 | 1 pDC_lung |
| PRKAG2             | 0.46952258 | 1.76118261 | 0.311 | 0.373 | 1 pDC_lung |
| PAK1               | 0.47087023 | 1.08377961 | 0.404 | 0.654 | 1 pDC_lung |
| UBASH3B            | 0.47295435 | 1.5937182  | 0.301 | 0.458 | 1 pDC_lung |
| BAZ2B              | 0.48063075 | 1.11745294 | 0.41  | 0.673 | 1 pDC_lung |
| BCL2A1             | 0.48527023 | 1.00241675 | 0.628 | 0.83  | 1 pDC_lung |
| ENSMMUG00000053089 | 0.48669648 | 1.65788931 | 0.213 | 0.307 | 1 pDC_lung |
| TCOF1              | 0.49529437 | 1.86374021 | 0.186 | 0.261 | 1 pDC_lung |
| ATP11A             | 0.50017991 | 1.88568271 | 0.454 | 0.66  | 1 pDC_lung |
| STX11              | 0.50631302 | 1.18592768 | 0.328 | 0.497 | 1 pDC_lung |
| IMMP2L             | 0.51390585 | 1.22576805 | 0.295 | 0.418 | 1 pDC_lung |
| IKZF1              | 0.51924937 | 0.9226717  | 0.464 | 0.771 | 1 pDC_lung |
| BCL2               | 0.52488872 | 1.28190658 | 0.355 | 0.516 | 1 pDC_lung |
| COMMD10            | 0.53473797 | 1.57274944 | 0.246 | 0.359 | 1 pDC_lung |
| SLC43A3            | 0.53498658 | 1.46711523 | 0.273 | 0.405 | 1 pDC_lung |
| SLC4A7             | 0.5364306  | 2.21242745 | 0.235 | 0.261 | 1 pDC_lung |
| MYO1E              | 0.53780738 | 1.24900531 | 0.295 | 0.425 | 1 pDC_lung |
| WDR45B             | 0.54329192 | 2.36367609 | 0.23  | 0.333 | 1 pDC_lung |
| LPP                | 0.54439931 | 0.36353344 | 0.612 | 0.882 | 1 pDC_lung |
| ETNK1              | 0.54455166 | 1.22681852 | 0.361 | 0.569 | 1 pDC_lung |
| ZNRF1              | 0.54966844 | 1.36266203 | 0.284 | 0.405 | 1 pDC_lung |
| TAF4B              | 0.56907571 | 2.14286449 | 0.437 | 0.588 | 1 pDC_lung |

|                    |            |            |       |       |            |
|--------------------|------------|------------|-------|-------|------------|
| AKAP13             | 0.57383058 | 0.15414066 | 0.727 | 0.954 | 1 pDC_lung |
| ENSMMUG00000046482 | 0.57488339 | 1.65751966 | 0.24  | 0.34  | 1 pDC_lung |
| SSH2               | 0.57638481 | 0.95520361 | 0.448 | 0.719 | 1 pDC_lung |
| CYTB               | 0.57909474 | 2.50295061 | 0.235 | 0.268 | 1 pDC_lung |
| ANKRD12            | 0.57982165 | 0.96962068 | 0.503 | 0.765 | 1 pDC_lung |
| ZSWIM6             | 0.59140952 | 0.93912961 | 0.503 | 0.725 | 1 pDC_lung |
| ERBIN              | 0.5948156  | 1.45451944 | 0.475 | 0.725 | 1 pDC_lung |
| ACSL4              | 0.60215536 | 2.44173233 | 0.279 | 0.418 | 1 pDC_lung |
| UBAP1              | 0.60226028 | 1.39792031 | 0.295 | 0.438 | 1 pDC_lung |
| BCL2L1             | 0.60238751 | 1.75310013 | 0.344 | 0.451 | 1 pDC_lung |
| PNPLA8             | 0.60522735 | 2.21454118 | 0.268 | 0.32  | 1 pDC_lung |
| ACTR2              | 0.62089575 | 0.33288376 | 0.617 | 0.902 | 1 pDC_lung |
| BAIAP2             | 0.62289662 | 2.12737944 | 0.273 | 0.327 | 1 pDC_lung |
| VPS13B             | 0.62663399 | 0.14105785 | 0.667 | 0.948 | 1 pDC_lung |
| ITCH               | 0.63249772 | 1.46282831 | 0.388 | 0.549 | 1 pDC_lung |
| EVI5               | 0.63595737 | 1.83628127 | 0.29  | 0.353 | 1 pDC_lung |
| ERC1               | 0.63775633 | 1.1806901  | 0.393 | 0.601 | 1 pDC_lung |
| RAB7A              | 0.64885634 | 1.3439831  | 0.492 | 0.797 | 1 pDC_lung |
| WVOX               | 0.65190027 | 1.20468133 | 0.306 | 0.431 | 1 pDC_lung |
| NRP2               | 0.66505401 | 0.35847606 | 0.464 | 0.601 | 1 pDC_lung |
| SDCBP              | 0.6652604  | 1.44662912 | 0.41  | 0.582 | 1 pDC_lung |
| DHX15              | 0.66717594 | 1.81608652 | 0.24  | 0.34  | 1 pDC_lung |
| TGFBR1             | 0.68068044 | 2.53906634 | 0.268 | 0.333 | 1 pDC_lung |
| TEX14              | 0.68445486 | 1.70030361 | 0.268 | 0.373 | 1 pDC_lung |
| KLF7               | 0.68601061 | 1.43941635 | 0.421 | 0.621 | 1 pDC_lung |
| ETF1               | 0.69440912 | 1.97735279 | 0.377 | 0.549 | 1 pDC_lung |
| GCNT2              | 0.70179891 | 1.90734592 | 0.437 | 0.712 | 1 pDC_lung |
| MALT1              | 0.70358685 | 2.36774298 | 0.306 | 0.464 | 1 pDC_lung |
| TAGAP              | 0.71108007 | 1.69463139 | 0.246 | 0.288 | 1 pDC_lung |
| GPCPD1             | 0.72079098 | 0.89534895 | 0.404 | 0.582 | 1 pDC_lung |
| ENSMMUG00000056183 | 0.72427515 | 1.03302872 | 0.503 | 0.66  | 1 pDC_lung |
| U8.13              | 0.72905657 | 2.15020779 | 0.24  | 0.288 | 1 pDC_lung |
| BABAM2             | 0.7414927  | 1.17594598 | 0.443 | 0.706 | 1 pDC_lung |

|                   |            |            |       |       |                     |
|-------------------|------------|------------|-------|-------|---------------------|
| PPP1R15A          | 0.75825979 | 0.64377185 | 0.563 | 0.915 | 1 pDC_lung          |
| ZMIZ1             | 0.76731146 | 2.30504362 | 0.23  | 0.275 | 1 pDC_lung          |
| DDX3Y             | 0.76986326 | 1.45907112 | 0.273 | 0.32  | 1 pDC_lung          |
| LAPTM5            | 0.77929821 | 1.79718793 | 0.301 | 0.438 | 1 pDC_lung          |
| CDK6              | 0.78543948 | 1.27338593 | 0.464 | 0.693 | 1 pDC_lung          |
| DENND1B           | 0.78890491 | 0.64933378 | 0.404 | 0.569 | 1 pDC_lung          |
| TYROBP            | 0.79293814 | 2.06913468 | 0.399 | 0.582 | 1 pDC_lung          |
| MEF2A             | 0.80260812 | 1.44128878 | 0.437 | 0.66  | 1 pDC_lung          |
| CD80              | 0.80461362 | 0.67009308 | 0.525 | 0.745 | 1 pDC_lung          |
| TBC1D22A          | 0.81739221 | 1.34622855 | 0.399 | 0.582 | 1 pDC_lung          |
| AOPEP             | 0.82944804 | 2.17902997 | 0.301 | 0.399 | 1 pDC_lung          |
| GSAP              | 0.84411689 | 1.77436467 | 0.339 | 0.497 | 1 pDC_lung          |
| LAMP2             | 0.8736921  | 2.31050685 | 0.235 | 0.294 | 1 pDC_lung          |
| ASH1L             | 0.88878715 | 0.59734965 | 0.568 | 0.882 | 1 pDC_lung          |
| ITPR2             | 0.90211735 | 0.94042543 | 0.497 | 0.765 | 1 pDC_lung          |
| CTSS              | 0.91188988 | 0.89526362 | 0.492 | 0.784 | 1 pDC_lung          |
| CYFIP1            | 0.9245839  | 2.07256926 | 0.29  | 0.405 | 1 pDC_lung          |
| OSBPL8            | 0.92624148 | 1.07585075 | 0.497 | 0.791 | 1 pDC_lung          |
| GBE1              | 0.96433237 | 2.42544967 | 0.344 | 0.503 | 1 pDC_lung          |
| EXOC6B            | 0.97125896 | 1.65851016 | 0.24  | 0.307 | 1 pDC_lung          |
| ARID5A            | 0.97552883 | 2.15897796 | 0.219 | 0.275 | 1 pDC_lung          |
| VPS13D            | 0.97692466 | 1.89678884 | 0.322 | 0.464 | 1 pDC_lung          |
| BRAF              | 0.97943213 | 1.36703544 | 0.459 | 0.725 | 1 pDC_lung          |
| GRK3              | 0.98170787 | 0.70397921 | 0.552 | 0.837 | 1 pDC_lung          |
| ENSMUG00000058165 | 0.98603666 | 1.63619527 | 0.235 | 0.294 | 1 pDC_lung          |
| DENND3            | 0.98603666 | 1.5423587  | 0.235 | 0.294 | 1 pDC_lung          |
| CALCRL            | 0.98897907 | 2.43368461 | 0.268 | 0.353 | 1 pDC_lung          |
| TBL1X             | 0.99072786 | 0.89814544 | 0.333 | 0.438 | 1 pDC_lung          |
| VMP1              | 0.99157884 | 1.85777658 | 0.361 | 0.536 | 1 pDC_lung          |
| RAF1              | 0.99278827 | 1.57063554 | 0.322 | 0.451 | 1 pDC_lung          |
| SMAD7             | 0.99394745 | 1.71046032 | 0.213 | 0.261 | 1 pDC_lung          |
| DOCK2             | 0.99812676 | 0.90883978 | 0.459 | 0.712 | 1 pDC_lung          |
| RPS20             | 1.20E-47   | 3.57219196 | 0.967 | 0.286 | 4.26E-43 pDC_spleen |



|                   |          |            |       |       |          |            |
|-------------------|----------|------------|-------|-------|----------|------------|
| KDM2B             | 1.93E-45 | 3.25239847 | 0.98  | 0.232 | 6.82E-41 | pDC_spleen |
| JUN               | 5.83E-45 | 3.61878687 | 0.934 | 0.168 | 2.07E-40 | pDC_spleen |
| ZEB1              | 1.91E-44 | 3.51579012 | 0.94  | 0.151 | 6.77E-40 | pDC_spleen |
| EPSTI1            | 6.04E-43 | 4.21957482 | 0.887 | 0.141 | 2.14E-38 | pDC_spleen |
| RPL13             | 3.32E-42 | 2.68750752 | 0.98  | 0.503 | 1.18E-37 | pDC_spleen |
| G3BP1             | 4.81E-40 | 2.98501215 | 0.914 | 0.141 | 1.70E-35 | pDC_spleen |
| ADAM19            | 2.33E-39 | 3.64576018 | 0.788 | 0.049 | 8.25E-35 | pDC_spleen |
| PSIP1             | 2.35E-39 | 3.15144492 | 0.815 | 0.065 | 8.32E-35 | pDC_spleen |
| RPL27A            | 4.21E-39 | 2.38842298 | 0.967 | 0.481 | 1.49E-34 | pDC_spleen |
| ARID4A            | 6.34E-39 | 3.83106137 | 0.775 | 0.043 | 2.25E-34 | pDC_spleen |
| ATP8A1            | 7.34E-38 | 4.58646738 | 0.742 | 0.043 | 2.60E-33 | pDC_spleen |
| RPS2              | 9.01E-38 | 2.60580572 | 0.907 | 0.211 | 3.19E-33 | pDC_spleen |
| TRIR              | 1.02E-37 | 3.56098372 | 0.775 | 0.059 | 3.62E-33 | pDC_spleen |
| ENSMUG00000051300 | 1.46E-37 | 2.27076113 | 1     | 0.432 | 5.16E-33 | pDC_spleen |
| HSPH1             | 7.71E-37 | 2.79892519 | 0.821 | 0.081 | 2.73E-32 | pDC_spleen |
| LAMP3             | 4.79E-36 | 2.42261349 | 0.841 | 0.103 | 1.70E-31 | pDC_spleen |
| DNAJB6            | 1.21E-35 | 2.56657013 | 0.94  | 0.184 | 4.29E-31 | pDC_spleen |
| MARCKSL1          | 1.91E-35 | 3.62214367 | 0.808 | 0.119 | 6.77E-31 | pDC_spleen |
| HSPA8             | 1.43E-34 | 2.39070098 | 0.901 | 0.178 | 5.07E-30 | pDC_spleen |
| EIF3F             | 4.28E-34 | 2.53902566 | 0.815 | 0.086 | 1.52E-29 | pDC_spleen |
| SINHCAF           | 5.76E-34 | 2.51679489 | 0.887 | 0.168 | 2.04E-29 | pDC_spleen |
| RHOB              | 8.05E-34 | 5.09216818 | 0.649 | 0.022 | 2.85E-29 | pDC_spleen |
| H2AZ2             | 1.04E-33 | 2.19980545 | 0.914 | 0.184 | 3.68E-29 | pDC_spleen |
| LRRFIP2           | 1.64E-33 | 2.91948493 | 0.795 | 0.097 | 5.81E-29 | pDC_spleen |
| ACTB              | 1.80E-33 | 2.36813271 | 0.974 | 0.638 | 6.37E-29 | pDC_spleen |
| ENSMUG00000018557 | 2.80E-33 | 4.43018968 | 0.636 | 0.016 | 9.93E-29 | pDC_spleen |
| PFN1              | 5.71E-33 | 2.40234163 | 0.927 | 0.308 | 2.02E-28 | pDC_spleen |
| DNAJA1            | 6.94E-33 | 1.97860895 | 0.861 | 0.13  | 2.46E-28 | pDC_spleen |
| TMEM87B           | 9.47E-33 | 3.6798217  | 0.695 | 0.049 | 3.35E-28 | pDC_spleen |
| SRSF2             | 1.16E-32 | 2.46748198 | 0.755 | 0.07  | 4.11E-28 | pDC_spleen |
| DIP2A             | 1.51E-32 | 3.18505315 | 0.762 | 0.103 | 5.35E-28 | pDC_spleen |
| CPEB1             | 1.65E-32 | 2.02309169 | 0.934 | 0.346 | 5.86E-28 | pDC_spleen |
| LASP1             | 6.25E-32 | 2.62587004 | 0.728 | 0.065 | 2.21E-27 | pDC_spleen |

|                   |          |            |       |       |          |            |
|-------------------|----------|------------|-------|-------|----------|------------|
| HMGN3             | 9.29E-32 | 0.4886604  | 0.901 | 0.157 | 3.29E-27 | pDC_spleen |
| TUBB              | 9.48E-32 | 2.66711722 | 0.801 | 0.119 | 3.36E-27 | pDC_spleen |
| RNF115            | 1.28E-31 | 2.77421834 | 0.709 | 0.059 | 4.53E-27 | pDC_spleen |
| YEATS2            | 1.43E-31 | 2.06248323 | 0.808 | 0.108 | 5.08E-27 | pDC_spleen |
| ESR1              | 1.61E-31 | 4.63596345 | 0.629 | 0.027 | 5.71E-27 | pDC_spleen |
| FSCN1             | 1.86E-31 | 3.85751829 | 0.715 | 0.092 | 6.59E-27 | pDC_spleen |
| RPL23A            | 2.97E-31 | 2.21163501 | 0.967 | 0.481 | 1.05E-26 | pDC_spleen |
| PTPRK             | 3.18E-31 | 3.07299436 | 0.728 | 0.081 | 1.12E-26 | pDC_spleen |
| RSBN1L            | 3.80E-31 | 2.95456627 | 0.682 | 0.049 | 1.35E-26 | pDC_spleen |
| CCDC50            | 4.49E-31 | 1.95786641 | 0.887 | 0.173 | 1.59E-26 | pDC_spleen |
| UHMK1             | 5.16E-31 | 1.85135772 | 0.775 | 0.086 | 1.83E-26 | pDC_spleen |
| TMEM150C          | 6.44E-31 | 7.13072485 | 0.57  | 0.005 | 2.28E-26 | pDC_spleen |
| ARHGAP22          | 7.49E-31 | 3.38152678 | 0.735 | 0.119 | 2.65E-26 | pDC_spleen |
| NRIP1             | 7.85E-31 | 2.58408672 | 0.934 | 0.265 | 2.78E-26 | pDC_spleen |
| MXD1              | 1.12E-30 | 2.39214604 | 0.755 | 0.086 | 3.96E-26 | pDC_spleen |
| VOPP1             | 1.26E-30 | 2.31618756 | 0.768 | 0.097 | 4.47E-26 | pDC_spleen |
| ENSMUG00000041076 | 1.43E-30 | 4.26436092 | 0.609 | 0.022 | 5.07E-26 | pDC_spleen |
| CLNK              | 1.58E-30 | 2.45440011 | 0.675 | 0.049 | 5.58E-26 | pDC_spleen |
| TMEM131L          | 2.32E-30 | 2.11895327 | 0.927 | 0.227 | 8.22E-26 | pDC_spleen |
| DUSP10            | 3.07E-30 | 2.3966848  | 0.689 | 0.054 | 1.09E-25 | pDC_spleen |
| PCGF5             | 3.42E-30 | 2.06769318 | 0.722 | 0.07  | 1.21E-25 | pDC_spleen |
| ATOX1             | 3.43E-30 | 1.95005695 | 0.894 | 0.211 | 1.22E-25 | pDC_spleen |
| NUCKS1            | 5.80E-30 | 2.1409776  | 0.815 | 0.124 | 2.06E-25 | pDC_spleen |
| CARMIL1           | 9.03E-30 | 2.98706447 | 0.742 | 0.097 | 3.20E-25 | pDC_spleen |
| DNAJC15           | 1.58E-29 | 2.51624819 | 0.768 | 0.103 | 5.61E-25 | pDC_spleen |
| NDRG1             | 2.08E-29 | 3.033242   | 0.728 | 0.108 | 7.37E-25 | pDC_spleen |
| NUB1              | 2.87E-29 | 2.68518993 | 0.788 | 0.151 | 1.02E-24 | pDC_spleen |
| ENSMUG00000006965 | 3.95E-29 | 2.10107701 | 0.795 | 0.124 | 1.40E-24 | pDC_spleen |
| FLT3              | 4.14E-29 | 2.90268995 | 0.675 | 0.059 | 1.47E-24 | pDC_spleen |
| RPS11             | 4.31E-29 | 1.80756515 | 0.96  | 0.481 | 1.53E-24 | pDC_spleen |
| PRPF18            | 5.10E-29 | 2.94604291 | 0.636 | 0.043 | 1.81E-24 | pDC_spleen |
| BMP2K             | 5.79E-29 | 2.52702112 | 0.934 | 0.319 | 2.05E-24 | pDC_spleen |
| COMMD3            | 5.93E-29 | 3.08168849 | 0.669 | 0.059 | 2.10E-24 | pDC_spleen |

|                   |          |            |       |       |          |            |
|-------------------|----------|------------|-------|-------|----------|------------|
| DAAM1             | 5.98E-29 | 3.77298084 | 0.649 | 0.059 | 2.12E-24 | pDC_spleen |
| CDH2              | 6.84E-29 | 5.54215082 | 0.543 | 0.005 | 2.42E-24 | pDC_spleen |
| SNX3              | 8.19E-29 | 2.17323026 | 0.728 | 0.081 | 2.90E-24 | pDC_spleen |
| RASSF3            | 8.74E-29 | 1.95729439 | 0.861 | 0.178 | 3.10E-24 | pDC_spleen |
| SCD5              | 1.23E-28 | 7.03668325 | 0.543 | 0.011 | 4.36E-24 | pDC_spleen |
| YPEL5             | 1.29E-28 | 1.93850985 | 0.828 | 0.141 | 4.58E-24 | pDC_spleen |
| NKIRAS1           | 1.48E-28 | 3.67650033 | 0.583 | 0.022 | 5.25E-24 | pDC_spleen |
| RPS14             | 1.65E-28 | 1.82035716 | 0.934 | 0.395 | 5.86E-24 | pDC_spleen |
| COTL1             | 1.97E-28 | 2.40029295 | 0.881 | 0.27  | 6.97E-24 | pDC_spleen |
| RNF34             | 3.01E-28 | 3.66907595 | 0.596 | 0.032 | 1.07E-23 | pDC_spleen |
| RPL13A            | 3.98E-28 | 1.74633727 | 0.947 | 0.492 | 1.41E-23 | pDC_spleen |
| SETD7             | 4.85E-28 | 2.18858448 | 0.589 | 0.027 | 1.72E-23 | pDC_spleen |
| NCOA7             | 5.46E-28 | 1.5903122  | 0.927 | 0.227 | 1.93E-23 | pDC_spleen |
| RPL26             | 6.93E-28 | 1.80227939 | 0.934 | 0.314 | 2.45E-23 | pDC_spleen |
| IRF2              | 7.05E-28 | 2.80067299 | 0.649 | 0.059 | 2.50E-23 | pDC_spleen |
| EIF4A2            | 7.56E-28 | 1.91955805 | 0.861 | 0.173 | 2.68E-23 | pDC_spleen |
| ENSMUG00000058755 | 1.30E-27 | 1.96437262 | 0.96  | 0.476 | 4.59E-23 | pDC_spleen |
| TXNL1             | 1.33E-27 | 1.9100795  | 0.715 | 0.086 | 4.70E-23 | pDC_spleen |
| TRIM24            | 1.36E-27 | 1.61902562 | 0.675 | 0.065 | 4.83E-23 | pDC_spleen |
| EID1              | 1.48E-27 | 3.58711868 | 0.589 | 0.032 | 5.24E-23 | pDC_spleen |
| CD47              | 1.48E-27 | 2.0426105  | 0.775 | 0.124 | 5.26E-23 | pDC_spleen |
| ENSMUG00000065175 | 1.53E-27 | 3.15145467 | 0.603 | 0.038 | 5.41E-23 | pDC_spleen |
| LRRK1             | 1.98E-27 | 1.90714646 | 0.841 | 0.168 | 7.02E-23 | pDC_spleen |
| FGFR1             | 1.99E-27 | 3.59766712 | 0.609 | 0.049 | 7.04E-23 | pDC_spleen |
| RPS27L            | 2.87E-27 | 2.00593977 | 0.821 | 0.168 | 1.02E-22 | pDC_spleen |
| PDZD2             | 3.22E-27 | 5.02184512 | 0.53  | 0.011 | 1.14E-22 | pDC_spleen |
| ATF7              | 3.28E-27 | 2.77203062 | 0.715 | 0.108 | 1.16E-22 | pDC_spleen |
| DERL1             | 3.85E-27 | 1.799203   | 0.636 | 0.049 | 1.36E-22 | pDC_spleen |
| SEC61B            | 3.89E-27 | 1.60420786 | 0.901 | 0.227 | 1.38E-22 | pDC_spleen |
| HSP90AA1          | 4.12E-27 | 2.13157608 | 0.954 | 0.362 | 1.46E-22 | pDC_spleen |
| DGKH              | 4.58E-27 | 3.58759534 | 0.636 | 0.065 | 1.62E-22 | pDC_spleen |
| CACYBP            | 4.80E-27 | 2.13941905 | 0.722 | 0.097 | 1.70E-22 | pDC_spleen |
| PPIL4             | 5.36E-27 | 1.74740373 | 0.715 | 0.086 | 1.90E-22 | pDC_spleen |

|                     |          |            |       |       |          |            |
|---------------------|----------|------------|-------|-------|----------|------------|
| NECAP2              | 5.42E-27 | 2.26482177 | 0.689 | 0.076 | 1.92E-22 | pDC_spleen |
| ANKFN1              | 6.25E-27 | 7.99123541 | 0.517 | 0.011 | 2.21E-22 | pDC_spleen |
| ENSMMUG00000003272  | 6.26E-27 | 7.60509885 | 0.497 | 0     | 2.22E-22 | pDC_spleen |
| SLC22A23            | 6.74E-27 | 4.50696155 | 0.556 | 0.027 | 2.39E-22 | pDC_spleen |
| ENSMMUG000000030448 | 7.14E-27 | 2.60609506 | 0.629 | 0.049 | 2.53E-22 | pDC_spleen |
| ATP6V0E1            | 7.43E-27 | 2.11894474 | 0.788 | 0.141 | 2.63E-22 | pDC_spleen |
| G3BP2               | 1.23E-26 | 1.9639139  | 0.828 | 0.178 | 4.36E-22 | pDC_spleen |
| MAP2K4              | 1.40E-26 | 1.94119949 | 0.762 | 0.119 | 4.94E-22 | pDC_spleen |
| TMEM256             | 1.98E-26 | 2.34834113 | 0.675 | 0.086 | 7.00E-22 | pDC_spleen |
| UBB                 | 2.21E-26 | 1.65201258 | 0.94  | 0.319 | 7.83E-22 | pDC_spleen |
| SPPL3               | 2.50E-26 | 1.94017495 | 0.868 | 0.211 | 8.86E-22 | pDC_spleen |
| TRAPPC5             | 2.54E-26 | 1.95658451 | 0.623 | 0.049 | 8.98E-22 | pDC_spleen |
| RPL7                | 2.64E-26 | 1.84887539 | 0.907 | 0.324 | 9.34E-22 | pDC_spleen |
| DPYSL2              | 2.91E-26 | 1.85692347 | 0.775 | 0.13  | 1.03E-21 | pDC_spleen |
| MTDH                | 3.87E-26 | 1.63012623 | 0.755 | 0.114 | 1.37E-21 | pDC_spleen |
| FXR1                | 4.97E-26 | 1.73081175 | 0.768 | 0.114 | 1.76E-21 | pDC_spleen |
| UBE2D1              | 5.44E-26 | 2.10559975 | 0.682 | 0.081 | 1.93E-21 | pDC_spleen |
| FOS                 | 5.50E-26 | 2.00738611 | 0.934 | 0.362 | 1.95E-21 | pDC_spleen |
| SEPTIN11            | 5.51E-26 | 1.84051663 | 0.742 | 0.114 | 1.95E-21 | pDC_spleen |
| PPP1R2              | 6.57E-26 | 3.01833878 | 0.556 | 0.027 | 2.33E-21 | pDC_spleen |
| ITM2B               | 7.79E-26 | 1.51978649 | 0.868 | 0.2   | 2.76E-21 | pDC_spleen |
| AUTS2               | 1.24E-25 | 3.99552246 | 0.609 | 0.065 | 4.38E-21 | pDC_spleen |
| KIAA0586            | 1.31E-25 | 3.12046667 | 0.583 | 0.043 | 4.64E-21 | pDC_spleen |
| RUFY3               | 1.34E-25 | 1.46779607 | 0.781 | 0.13  | 4.73E-21 | pDC_spleen |
| SOX4                | 1.34E-25 | 1.47373453 | 0.742 | 0.119 | 4.74E-21 | pDC_spleen |
| RNGTT               | 1.36E-25 | 1.86935005 | 0.762 | 0.124 | 4.80E-21 | pDC_spleen |
| TRAPPC8             | 1.41E-25 | 2.32380368 | 0.609 | 0.049 | 4.99E-21 | pDC_spleen |
| EED                 | 1.47E-25 | 1.4494178  | 0.682 | 0.081 | 5.21E-21 | pDC_spleen |
| HSPD1               | 1.51E-25 | 1.93988586 | 0.801 | 0.151 | 5.35E-21 | pDC_spleen |
| DBNL                | 1.52E-25 | 1.31292929 | 0.775 | 0.114 | 5.38E-21 | pDC_spleen |
| MYH9                | 1.73E-25 | 1.56264246 | 0.874 | 0.2   | 6.12E-21 | pDC_spleen |
| ACTG1               | 1.83E-25 | 2.10475554 | 0.94  | 0.476 | 6.48E-21 | pDC_spleen |
| TASOR2              | 2.32E-25 | 1.86776287 | 0.649 | 0.07  | 8.23E-21 | pDC_spleen |

|                   |          |            |       |       |          |            |
|-------------------|----------|------------|-------|-------|----------|------------|
| HTR7              | 3.14E-25 | 3.82999053 | 0.609 | 0.076 | 1.11E-20 | pDC_spleen |
| SMIM14            | 3.61E-25 | 1.53926231 | 0.742 | 0.119 | 1.28E-20 | pDC_spleen |
| B3GNT2            | 4.38E-25 | 2.56585459 | 0.556 | 0.032 | 1.55E-20 | pDC_spleen |
| DNM1              | 4.43E-25 | 2.64594484 | 0.636 | 0.07  | 1.57E-20 | pDC_spleen |
| MICU2             | 5.35E-25 | 1.7033217  | 0.709 | 0.097 | 1.89E-20 | pDC_spleen |
| CERS6             | 5.42E-25 | 3.00015782 | 0.901 | 0.443 | 1.92E-20 | pDC_spleen |
| UBE2S             | 5.64E-25 | 2.2542677  | 0.603 | 0.054 | 2.00E-20 | pDC_spleen |
| CLTA              | 5.75E-25 | 2.05028179 | 0.669 | 0.081 | 2.04E-20 | pDC_spleen |
| TIA1              | 6.46E-25 | 1.44759931 | 0.629 | 0.059 | 2.29E-20 | pDC_spleen |
| CD2AP             | 7.21E-25 | 2.13935126 | 0.662 | 0.081 | 2.55E-20 | pDC_spleen |
| GRSF1             | 7.29E-25 | 2.58349185 | 0.563 | 0.038 | 2.58E-20 | pDC_spleen |
| BEND5             | 7.30E-25 | 5.631806   | 0.503 | 0.016 | 2.59E-20 | pDC_spleen |
| PRDM2             | 7.57E-25 | 1.91723269 | 0.808 | 0.168 | 2.68E-20 | pDC_spleen |
| CD59              | 8.34E-25 | 1.5811794  | 0.748 | 0.119 | 2.95E-20 | pDC_spleen |
| RPS3              | 9.09E-25 | 1.6273865  | 0.934 | 0.405 | 3.22E-20 | pDC_spleen |
| COX5A             | 9.17E-25 | 2.69426246 | 0.576 | 0.043 | 3.25E-20 | pDC_spleen |
| ZBTB10            | 9.97E-25 | 1.50697608 | 0.742 | 0.119 | 3.53E-20 | pDC_spleen |
| CD320             | 1.18E-24 | 2.09106536 | 0.669 | 0.086 | 4.17E-20 | pDC_spleen |
| ANO6              | 1.56E-24 | 2.08243985 | 0.675 | 0.092 | 5.52E-20 | pDC_spleen |
| RPL15             | 1.62E-24 | 1.6323844  | 0.927 | 0.4   | 5.74E-20 | pDC_spleen |
| PCBP1             | 1.75E-24 | 1.72293424 | 0.775 | 0.141 | 6.20E-20 | pDC_spleen |
| VAV2              | 1.87E-24 | 2.47812705 | 0.583 | 0.049 | 6.64E-20 | pDC_spleen |
| CDC42SE2          | 1.93E-24 | 1.53288895 | 0.954 | 0.314 | 6.83E-20 | pDC_spleen |
| MACO1             | 2.03E-24 | 2.06565613 | 0.589 | 0.049 | 7.18E-20 | pDC_spleen |
| AHCYL2            | 2.15E-24 | 2.62946238 | 0.623 | 0.07  | 7.61E-20 | pDC_spleen |
| TMEM59            | 2.22E-24 | 1.84353751 | 0.649 | 0.07  | 7.87E-20 | pDC_spleen |
| CAP1              | 2.42E-24 | 2.24734939 | 0.662 | 0.086 | 8.59E-20 | pDC_spleen |
| ALKBH7            | 2.90E-24 | 2.16804876 | 0.583 | 0.049 | 1.03E-19 | pDC_spleen |
| ENSMUG00000061128 | 2.91E-24 | 1.63247009 | 0.821 | 0.173 | 1.03E-19 | pDC_spleen |
| SLCO5A1           | 2.94E-24 | 3.02497234 | 0.642 | 0.097 | 1.04E-19 | pDC_spleen |
| NPM1              | 3.12E-24 | 1.63622776 | 0.934 | 0.314 | 1.11E-19 | pDC_spleen |
| ZFP90             | 3.36E-24 | 1.42705829 | 0.629 | 0.065 | 1.19E-19 | pDC_spleen |
| SCMH1             | 3.78E-24 | 2.58219831 | 0.616 | 0.07  | 1.34E-19 | pDC_spleen |

|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| MTMR6              | 4.15E-24 | 1.31668137 | 0.629 | 0.065 | 1.47E-19 | pDC_spleen |
| CCT6A              | 4.19E-24 | 1.66686085 | 0.695 | 0.103 | 1.48E-19 | pDC_spleen |
| CACNA2D1           | 4.33E-24 | 6.69597355 | 0.464 | 0.005 | 1.53E-19 | pDC_spleen |
| ENSMMUG00000047277 | 4.71E-24 | 1.49118745 | 0.755 | 0.13  | 1.67E-19 | pDC_spleen |
| LNPEP              | 4.83E-24 | 2.98065069 | 0.536 | 0.032 | 1.71E-19 | pDC_spleen |
| C15H9orf78         | 4.83E-24 | 2.17081684 | 0.623 | 0.065 | 1.71E-19 | pDC_spleen |
| TMEM59L            | 5.97E-24 | 1.67998593 | 0.609 | 0.059 | 2.12E-19 | pDC_spleen |
| USP24              | 6.04E-24 | 1.38551555 | 0.702 | 0.097 | 2.14E-19 | pDC_spleen |
| USP48              | 6.88E-24 | 1.76728293 | 0.543 | 0.032 | 2.44E-19 | pDC_spleen |
| TENT4B             | 7.07E-24 | 3.41120531 | 0.517 | 0.027 | 2.50E-19 | pDC_spleen |
| CEP350             | 7.11E-24 | 1.97792519 | 0.828 | 0.232 | 2.52E-19 | pDC_spleen |
| TERF2IP            | 7.53E-24 | 2.3804316  | 0.497 | 0.016 | 2.67E-19 | pDC_spleen |
| GMPS               | 9.23E-24 | 3.05258707 | 0.49  | 0.016 | 3.27E-19 | pDC_spleen |
| PLEKHG1            | 9.36E-24 | 2.79508801 | 0.596 | 0.065 | 3.32E-19 | pDC_spleen |
| CASP3              | 9.60E-24 | 2.94611829 | 0.563 | 0.049 | 3.40E-19 | pDC_spleen |
| METTL9             | 1.08E-23 | 2.60804421 | 0.536 | 0.032 | 3.82E-19 | pDC_spleen |
| SDHAF4             | 1.09E-23 | 1.61197871 | 0.728 | 0.119 | 3.85E-19 | pDC_spleen |
| PSMA4              | 1.12E-23 | 1.84405048 | 0.662 | 0.086 | 3.96E-19 | pDC_spleen |
| SPINT2             | 1.16E-23 | 2.98271296 | 0.49  | 0.016 | 4.13E-19 | pDC_spleen |
| HIST1H2AC          | 1.19E-23 | 2.23663642 | 0.603 | 0.065 | 4.21E-19 | pDC_spleen |
| UBE2B              | 1.23E-23 | 1.51784437 | 0.775 | 0.141 | 4.35E-19 | pDC_spleen |
| ATP5MC2            | 1.33E-23 | 1.48049795 | 0.788 | 0.151 | 4.70E-19 | pDC_spleen |
| SUCLG1             | 1.37E-23 | 1.34522514 | 0.781 | 0.141 | 4.87E-19 | pDC_spleen |
| XPO1               | 1.46E-23 | 1.12720805 | 0.722 | 0.108 | 5.18E-19 | pDC_spleen |
| NME3               | 1.48E-23 | 2.08924554 | 0.589 | 0.054 | 5.24E-19 | pDC_spleen |
| ZNF366             | 1.48E-23 | 3.20548481 | 0.517 | 0.027 | 5.25E-19 | pDC_spleen |
| NDFIP1             | 1.76E-23 | 1.11718089 | 0.695 | 0.097 | 6.22E-19 | pDC_spleen |
| LSP1               | 1.81E-23 | 1.56538606 | 0.947 | 0.341 | 6.40E-19 | pDC_spleen |
| UBE2I              | 1.90E-23 | 1.57924207 | 0.742 | 0.124 | 6.73E-19 | pDC_spleen |
| ENSMMUG00000058919 | 2.08E-23 | 1.81220503 | 0.775 | 0.157 | 7.36E-19 | pDC_spleen |
| IL21R              | 2.27E-23 | 3.15606296 | 0.51  | 0.027 | 8.04E-19 | pDC_spleen |
| FAM135A            | 2.30E-23 | 1.58433202 | 0.722 | 0.119 | 8.15E-19 | pDC_spleen |
| TFG                | 2.35E-23 | 1.91713666 | 0.589 | 0.054 | 8.34E-19 | pDC_spleen |

|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| MYL12B             | 2.38E-23 | 1.62733163 | 0.868 | 0.254 | 8.44E-19 | pDC_spleen |
| RAP1GDS1           | 2.67E-23 | 1.31477284 | 0.596 | 0.059 | 9.47E-19 | pDC_spleen |
| REPS1              | 2.83E-23 | 1.68318105 | 0.517 | 0.027 | 1.00E-18 | pDC_spleen |
| DHX58              | 3.51E-23 | 2.87497246 | 0.523 | 0.032 | 1.24E-18 | pDC_spleen |
| KDM4B              | 3.52E-23 | 2.49716822 | 0.57  | 0.054 | 1.25E-18 | pDC_spleen |
| NMT1               | 3.79E-23 | 1.68949424 | 0.695 | 0.108 | 1.34E-18 | pDC_spleen |
| PSMB9              | 3.85E-23 | 1.56811712 | 0.735 | 0.135 | 1.36E-18 | pDC_spleen |
| CAND1              | 3.86E-23 | 1.19306351 | 0.841 | 0.195 | 1.37E-18 | pDC_spleen |
| SLC25A36           | 3.96E-23 | 2.11042227 | 0.556 | 0.043 | 1.40E-18 | pDC_spleen |
| GTF2I              | 3.97E-23 | 1.4654124  | 0.762 | 0.135 | 1.41E-18 | pDC_spleen |
| OSTF1              | 4.00E-23 | 1.67961981 | 0.854 | 0.232 | 1.42E-18 | pDC_spleen |
| MPZL1              | 4.45E-23 | 3.18539564 | 0.53  | 0.038 | 1.58E-18 | pDC_spleen |
| IDH1               | 4.51E-23 | 2.47025051 | 0.616 | 0.081 | 1.60E-18 | pDC_spleen |
| SREBF2             | 4.51E-23 | 1.50340233 | 0.709 | 0.114 | 1.60E-18 | pDC_spleen |
| IRF1               | 4.71E-23 | 1.42338281 | 0.821 | 0.184 | 1.67E-18 | pDC_spleen |
| MSL2               | 5.63E-23 | 1.34417056 | 0.821 | 0.178 | 1.99E-18 | pDC_spleen |
| LTB                | 5.75E-23 | 7.59947705 | 0.444 | 0.005 | 2.04E-18 | pDC_spleen |
| LMBRD1             | 5.76E-23 | 1.546041   | 0.722 | 0.124 | 2.04E-18 | pDC_spleen |
| ENSMMUG00000060287 | 5.98E-23 | 1.45044126 | 0.834 | 0.205 | 2.12E-18 | pDC_spleen |
| GALNT7             | 6.24E-23 | 1.72054167 | 0.662 | 0.092 | 2.21E-18 | pDC_spleen |
| CLEC16A            | 7.18E-23 | 1.52828963 | 0.748 | 0.146 | 2.54E-18 | pDC_spleen |
| H1-4               | 7.39E-23 | 2.60825763 | 0.517 | 0.032 | 2.62E-18 | pDC_spleen |
| MAP2K1             | 7.86E-23 | 1.34384696 | 0.775 | 0.146 | 2.78E-18 | pDC_spleen |
| ENSMMUG00000061913 | 8.09E-23 | 1.63714545 | 0.656 | 0.086 | 2.87E-18 | pDC_spleen |
| BCL2L2-PABPN1      | 8.20E-23 | 2.07699019 | 0.523 | 0.032 | 2.91E-18 | pDC_spleen |
| CLTB               | 1.06E-22 | 2.8878139  | 0.477 | 0.016 | 3.75E-18 | pDC_spleen |
| CDH1               | 1.09E-22 | 4.85440739 | 0.444 | 0.005 | 3.86E-18 | pDC_spleen |
| COX16              | 1.11E-22 | 1.54456736 | 0.715 | 0.119 | 3.94E-18 | pDC_spleen |
| VEZT               | 1.13E-22 | 2.36676428 | 0.53  | 0.038 | 4.01E-18 | pDC_spleen |
| PSMA3              | 1.26E-22 | 2.56194584 | 0.596 | 0.07  | 4.46E-18 | pDC_spleen |
| ENSMMUG00000003412 | 1.38E-22 | 1.59903884 | 0.954 | 0.486 | 4.88E-18 | pDC_spleen |
| YWHAB              | 1.47E-22 | 1.50004389 | 0.808 | 0.184 | 5.21E-18 | pDC_spleen |
| SCAPER             | 1.58E-22 | 2.01305969 | 0.722 | 0.141 | 5.61E-18 | pDC_spleen |

|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| RPL31              | 1.75E-22 | 1.75544712 | 0.768 | 0.173 | 6.19E-18 | pDC_spleen |
| HINT2              | 1.80E-22 | 3.41944733 | 0.47  | 0.016 | 6.39E-18 | pDC_spleen |
| MTMR4              | 1.86E-22 | 2.94184462 | 0.51  | 0.032 | 6.59E-18 | pDC_spleen |
| ENSMMUG00000042951 | 1.99E-22 | 1.72472969 | 0.603 | 0.065 | 7.04E-18 | pDC_spleen |
| KMT5B              | 1.99E-22 | 1.44905133 | 0.603 | 0.065 | 7.04E-18 | pDC_spleen |
| RTRAF              | 2.05E-22 | 1.47956007 | 0.709 | 0.114 | 7.26E-18 | pDC_spleen |
| APBB2              | 2.15E-22 | 2.11273994 | 0.649 | 0.097 | 7.61E-18 | pDC_spleen |
| GTF2H5             | 2.26E-22 | 1.64479114 | 0.715 | 0.119 | 8.02E-18 | pDC_spleen |
| DYNC1LI1           | 2.30E-22 | 1.47038917 | 0.642 | 0.086 | 8.14E-18 | pDC_spleen |
| EEF1A1             | 2.46E-22 | 1.42878118 | 0.96  | 0.524 | 8.73E-18 | pDC_spleen |
| IL15               | 2.74E-22 | 2.83713283 | 0.503 | 0.032 | 9.72E-18 | pDC_spleen |
| FYN                | 2.85E-22 | 2.7770091  | 0.543 | 0.049 | 1.01E-17 | pDC_spleen |
| FOXN2              | 2.93E-22 | 2.24964448 | 0.695 | 0.135 | 1.04E-17 | pDC_spleen |
| ENSMMUG00000064692 | 3.02E-22 | 2.06704567 | 0.788 | 0.227 | 1.07E-17 | pDC_spleen |
| BST2               | 3.13E-22 | 2.24913213 | 0.629 | 0.086 | 1.11E-17 | pDC_spleen |
| MTPN               | 3.55E-22 | 2.13230147 | 0.642 | 0.092 | 1.26E-17 | pDC_spleen |
| SLTM               | 3.66E-22 | 1.30275701 | 0.768 | 0.146 | 1.30E-17 | pDC_spleen |
| RPL9               | 3.87E-22 | 1.40643668 | 0.934 | 0.405 | 1.37E-17 | pDC_spleen |
| NOL4L              | 4.27E-22 | 1.36595211 | 0.755 | 0.146 | 1.51E-17 | pDC_spleen |
| CCNG2              | 4.36E-22 | 1.60610211 | 0.682 | 0.108 | 1.55E-17 | pDC_spleen |
| ATF3               | 4.38E-22 | 1.62257629 | 0.874 | 0.281 | 1.55E-17 | pDC_spleen |
| GORASP1            | 4.73E-22 | 2.39667375 | 0.556 | 0.054 | 1.67E-17 | pDC_spleen |
| DGKB               | 4.84E-22 | 1.38174026 | 0.689 | 0.114 | 1.71E-17 | pDC_spleen |
| COX7C              | 5.00E-22 | 1.64604178 | 0.854 | 0.243 | 1.77E-17 | pDC_spleen |
| RPS15              | 5.02E-22 | 1.42167564 | 0.954 | 0.486 | 1.78E-17 | pDC_spleen |
| VCP                | 5.15E-22 | 1.09769787 | 0.656 | 0.086 | 1.83E-17 | pDC_spleen |
| COMT               | 5.51E-22 | 1.38104414 | 0.848 | 0.216 | 1.95E-17 | pDC_spleen |
| SUDS3              | 5.81E-22 | 2.7220582  | 0.49  | 0.027 | 2.06E-17 | pDC_spleen |
| PRMT2              | 5.83E-22 | 1.51093714 | 0.722 | 0.13  | 2.06E-17 | pDC_spleen |
| CDC42EP4           | 7.17E-22 | 3.5723971  | 0.47  | 0.022 | 2.54E-17 | pDC_spleen |
| PSMA2              | 7.61E-22 | 1.33283932 | 0.808 | 0.168 | 2.70E-17 | pDC_spleen |
| PHF21A             | 7.67E-22 | 1.66839282 | 0.887 | 0.276 | 2.72E-17 | pDC_spleen |
| SNRNP27            | 8.43E-22 | 2.62010302 | 0.477 | 0.022 | 2.99E-17 | pDC_spleen |



|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| WASL               | 8.58E-22 | 1.07472372 | 0.656 | 0.092 | 3.04E-17 | pDC_spleen |
| TUBA1C             | 9.17E-22 | 1.96004391 | 0.609 | 0.081 | 3.25E-17 | pDC_spleen |
| ILRUN              | 9.29E-22 | 1.96859052 | 0.609 | 0.081 | 3.29E-17 | pDC_spleen |
| USP1               | 9.31E-22 | 3.5837344  | 0.483 | 0.027 | 3.30E-17 | pDC_spleen |
| BBX                | 9.98E-22 | 1.19376769 | 0.828 | 0.189 | 3.54E-17 | pDC_spleen |
| DNAJB1             | 1.01E-21 | 2.82030867 | 0.51  | 0.038 | 3.58E-17 | pDC_spleen |
| ARID1A             | 1.24E-21 | 1.49605123 | 0.709 | 0.124 | 4.39E-17 | pDC_spleen |
| NUDC               | 1.28E-21 | 2.66618671 | 0.536 | 0.049 | 4.54E-17 | pDC_spleen |
| MYL6               | 1.30E-21 | 1.42093432 | 0.881 | 0.276 | 4.60E-17 | pDC_spleen |
| REPS2              | 1.42E-21 | 2.91553613 | 0.497 | 0.032 | 5.02E-17 | pDC_spleen |
| CALM3              | 1.45E-21 | 2.03602759 | 0.53  | 0.043 | 5.15E-17 | pDC_spleen |
| ENSMMUG00000060229 | 1.77E-21 | 1.45228517 | 0.53  | 0.043 | 6.27E-17 | pDC_spleen |
| TMSB10             | 1.83E-21 | 1.1948443  | 1     | 0.762 | 6.49E-17 | pDC_spleen |
| SEM1               | 1.91E-21 | 1.45567014 | 0.781 | 0.173 | 6.77E-17 | pDC_spleen |
| SLC25A43           | 1.94E-21 | 1.80739788 | 0.715 | 0.146 | 6.87E-17 | pDC_spleen |
| TOR1AIP1           | 1.99E-21 | 1.73856415 | 0.543 | 0.049 | 7.07E-17 | pDC_spleen |
| GPR157             | 2.11E-21 | 3.41308826 | 0.49  | 0.032 | 7.48E-17 | pDC_spleen |
| RPS27              | 2.17E-21 | 1.37477272 | 0.927 | 0.405 | 7.69E-17 | pDC_spleen |
| HDAC3              | 2.23E-21 | 2.41481051 | 0.483 | 0.027 | 7.92E-17 | pDC_spleen |
| ATP11C             | 2.27E-21 | 1.91667149 | 0.656 | 0.108 | 8.06E-17 | pDC_spleen |
| CHCHD2             | 2.51E-21 | 1.38700297 | 0.854 | 0.211 | 8.89E-17 | pDC_spleen |
| ENSMMUG00000059321 | 2.61E-21 | 7.76808137 | 0.404 | 0     | 9.24E-17 | pDC_spleen |
| DDOST              | 2.76E-21 | 1.77501311 | 0.675 | 0.108 | 9.79E-17 | pDC_spleen |
| NADSYN1            | 2.98E-21 | 0.86673548 | 0.623 | 0.081 | 1.05E-16 | pDC_spleen |
| PARK7              | 3.30E-21 | 1.46752672 | 0.715 | 0.135 | 1.17E-16 | pDC_spleen |
| ARF5               | 3.32E-21 | 2.71102309 | 0.583 | 0.081 | 1.18E-16 | pDC_spleen |
| PNISR              | 3.33E-21 | 1.15240829 | 0.934 | 0.303 | 1.18E-16 | pDC_spleen |
| CASC3              | 3.36E-21 | 2.53495818 | 0.503 | 0.038 | 1.19E-16 | pDC_spleen |
| GINM1              | 3.64E-21 | 1.60329912 | 0.649 | 0.103 | 1.29E-16 | pDC_spleen |
| GPHN               | 3.84E-21 | 1.98468123 | 0.775 | 0.205 | 1.36E-16 | pDC_spleen |
| ENOX1              | 3.89E-21 | 3.85615867 | 0.457 | 0.022 | 1.38E-16 | pDC_spleen |
| CTSZ               | 4.20E-21 | 1.6455877  | 0.642 | 0.097 | 1.49E-16 | pDC_spleen |
| KRAS               | 4.22E-21 | 1.56104112 | 0.616 | 0.086 | 1.50E-16 | pDC_spleen |

|          |          |            |       |       |          |            |
|----------|----------|------------|-------|-------|----------|------------|
| B2M      | 4.50E-21 | 1.56247903 | 0.98  | 0.714 | 1.59E-16 | pDC_spleen |
| PSMB4    | 4.53E-21 | 2.06880106 | 0.576 | 0.07  | 1.60E-16 | pDC_spleen |
| TXN      | 4.66E-21 | 0.97758645 | 0.901 | 0.303 | 1.65E-16 | pDC_spleen |
| CSE1L    | 4.93E-21 | 2.46470756 | 0.503 | 0.038 | 1.75E-16 | pDC_spleen |
| PSME2    | 5.17E-21 | 1.37926485 | 0.755 | 0.157 | 1.83E-16 | pDC_spleen |
| PLAGL1   | 5.41E-21 | 2.41931244 | 0.55  | 0.059 | 1.92E-16 | pDC_spleen |
| VPS37A   | 5.41E-21 | 2.16006635 | 0.55  | 0.059 | 1.92E-16 | pDC_spleen |
| RMDN1    | 5.43E-21 | 1.50480571 | 0.576 | 0.065 | 1.92E-16 | pDC_spleen |
| ST3GAL5  | 5.61E-21 | 3.66639221 | 0.444 | 0.016 | 1.99E-16 | pDC_spleen |
| NOTCH2   | 5.66E-21 | 1.39053877 | 0.649 | 0.103 | 2.01E-16 | pDC_spleen |
| CSNK1G3  | 6.11E-21 | 1.46670637 | 0.695 | 0.13  | 2.16E-16 | pDC_spleen |
| NRXN2    | 6.32E-21 | 7.07389634 | 0.397 | 0     | 2.24E-16 | pDC_spleen |
| NADK     | 6.33E-21 | 1.48697682 | 0.636 | 0.097 | 2.24E-16 | pDC_spleen |
| NPAT     | 6.41E-21 | 2.19681089 | 0.49  | 0.032 | 2.27E-16 | pDC_spleen |
| USP45    | 6.70E-21 | 2.98542822 | 0.43  | 0.011 | 2.37E-16 | pDC_spleen |
| MARK3    | 6.73E-21 | 1.28296461 | 0.695 | 0.119 | 2.39E-16 | pDC_spleen |
| TSNAX    | 7.46E-21 | 2.54716988 | 0.483 | 0.032 | 2.64E-16 | pDC_spleen |
| BIRC3    | 7.50E-21 | 1.97737345 | 0.954 | 0.459 | 2.66E-16 | pDC_spleen |
| CYC1     | 8.09E-21 | 1.88053567 | 0.503 | 0.038 | 2.87E-16 | pDC_spleen |
| MAP1LC3B | 8.19E-21 | 1.54940224 | 0.636 | 0.092 | 2.90E-16 | pDC_spleen |
| SLC15A4  | 8.24E-21 | 3.42215951 | 0.47  | 0.027 | 2.92E-16 | pDC_spleen |
| RNASEH2B | 8.44E-21 | 1.63945163 | 0.503 | 0.038 | 2.99E-16 | pDC_spleen |
| APOL2    | 8.61E-21 | 2.81302642 | 0.47  | 0.027 | 3.05E-16 | pDC_spleen |
| CWF19L2  | 9.28E-21 | 1.72680257 | 0.603 | 0.081 | 3.29E-16 | pDC_spleen |
| PDLIM5   | 9.35E-21 | 1.17751298 | 0.762 | 0.168 | 3.31E-16 | pDC_spleen |
| TMEM268  | 9.60E-21 | 2.02639146 | 0.523 | 0.049 | 3.40E-16 | pDC_spleen |
| TMEM38B  | 1.09E-20 | 1.62160687 | 0.497 | 0.038 | 3.86E-16 | pDC_spleen |
| RPL23    | 1.09E-20 | 1.39508462 | 0.921 | 0.514 | 3.87E-16 | pDC_spleen |
| IREB2    | 1.12E-20 | 1.13941005 | 0.576 | 0.07  | 3.97E-16 | pDC_spleen |
| COA1     | 1.13E-20 | 2.11577372 | 0.556 | 0.065 | 3.99E-16 | pDC_spleen |
| PPP3CC   | 1.17E-20 | 1.82283415 | 0.556 | 0.059 | 4.14E-16 | pDC_spleen |
| PMPCB    | 1.27E-20 | 2.73832741 | 0.503 | 0.043 | 4.49E-16 | pDC_spleen |
| IGBP1    | 1.33E-20 | 2.00076505 | 0.51  | 0.043 | 4.72E-16 | pDC_spleen |

|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| CRTAM              | 1.35E-20 | 3.87906536 | 0.437 | 0.016 | 4.77E-16 | pDC_spleen |
| DBI                | 1.47E-20 | 1.45184039 | 0.828 | 0.216 | 5.22E-16 | pDC_spleen |
| GHITM              | 1.50E-20 | 1.26693027 | 0.603 | 0.081 | 5.30E-16 | pDC_spleen |
| EIF3M              | 1.75E-20 | 1.60837203 | 0.642 | 0.108 | 6.20E-16 | pDC_spleen |
| LSM4               | 1.79E-20 | 1.78910071 | 0.483 | 0.032 | 6.33E-16 | pDC_spleen |
| PNN                | 1.83E-20 | 1.65611244 | 0.629 | 0.092 | 6.49E-16 | pDC_spleen |
| MIC1               | 1.84E-20 | 1.44362768 | 0.656 | 0.114 | 6.51E-16 | pDC_spleen |
| ERP44              | 1.89E-20 | 1.14510412 | 0.775 | 0.162 | 6.69E-16 | pDC_spleen |
| ANXA6              | 1.91E-20 | 1.48991541 | 0.629 | 0.097 | 6.76E-16 | pDC_spleen |
| PRR13              | 2.01E-20 | 0.98500457 | 0.722 | 0.135 | 7.13E-16 | pDC_spleen |
| CLIC2              | 2.02E-20 | 1.99182769 | 0.623 | 0.108 | 7.16E-16 | pDC_spleen |
| RPL6               | 2.32E-20 | 1.3493148  | 0.954 | 0.47  | 8.21E-16 | pDC_spleen |
| IL2RG              | 2.37E-20 | 1.17544404 | 0.695 | 0.124 | 8.40E-16 | pDC_spleen |
| LAD1               | 2.40E-20 | 2.30740656 | 0.556 | 0.07  | 8.49E-16 | pDC_spleen |
| PAIP1              | 2.68E-20 | 1.88635852 | 0.477 | 0.032 | 9.50E-16 | pDC_spleen |
| BTG3               | 2.82E-20 | 2.26804288 | 0.464 | 0.027 | 1.00E-15 | pDC_spleen |
| SSR2               | 2.83E-20 | 1.22862222 | 0.656 | 0.103 | 1.00E-15 | pDC_spleen |
| DRAM1              | 2.99E-20 | 1.12845538 | 0.715 | 0.135 | 1.06E-15 | pDC_spleen |
| RANBP1             | 3.03E-20 | 4.00833092 | 0.43  | 0.016 | 1.07E-15 | pDC_spleen |
| SNRPB2             | 3.10E-20 | 1.46062143 | 0.609 | 0.086 | 1.10E-15 | pDC_spleen |
| SCPEP1             | 3.17E-20 | 1.32338043 | 0.503 | 0.043 | 1.12E-15 | pDC_spleen |
| SNRPE              | 3.24E-20 | 1.50286228 | 0.576 | 0.07  | 1.15E-15 | pDC_spleen |
| APEX1              | 3.26E-20 | 3.02633554 | 0.51  | 0.054 | 1.15E-15 | pDC_spleen |
| GLB1               | 3.72E-20 | 1.59342465 | 0.57  | 0.07  | 1.32E-15 | pDC_spleen |
| ME2                | 3.73E-20 | 1.24554747 | 0.623 | 0.092 | 1.32E-15 | pDC_spleen |
| CD200              | 3.74E-20 | 1.17054971 | 0.596 | 0.092 | 1.32E-15 | pDC_spleen |
| TCEA1              | 4.27E-20 | 1.09550711 | 0.662 | 0.108 | 1.51E-15 | pDC_spleen |
| ITGA1              | 4.39E-20 | 3.35447429 | 0.444 | 0.022 | 1.56E-15 | pDC_spleen |
| CHD6               | 4.44E-20 | 0.85353719 | 0.709 | 0.135 | 1.57E-15 | pDC_spleen |
| DLGAP4             | 4.55E-20 | 1.52633861 | 0.563 | 0.07  | 1.61E-15 | pDC_spleen |
| SERTAD2            | 4.57E-20 | 1.10997225 | 0.742 | 0.146 | 1.62E-15 | pDC_spleen |
| ENSMMUG00000058634 | 4.93E-20 | 0.96752601 | 0.563 | 0.065 | 1.75E-15 | pDC_spleen |
| TMEM14B            | 5.10E-20 | 1.41573498 | 0.815 | 0.222 | 1.81E-15 | pDC_spleen |

|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| CMTR1              | 5.26E-20 | 1.2585564  | 0.49  | 0.038 | 1.86E-15 | pDC_spleen |
| NCOR1              | 5.42E-20 | 0.94970985 | 0.768 | 0.151 | 1.92E-15 | pDC_spleen |
| KCNMA1             | 5.75E-20 | 4.16748736 | 0.411 | 0.011 | 2.04E-15 | pDC_spleen |
| RAB11FIP1          | 6.18E-20 | 2.11227072 | 0.563 | 0.076 | 2.19E-15 | pDC_spleen |
| POLD1              | 6.40E-20 | 2.60767808 | 0.49  | 0.043 | 2.27E-15 | pDC_spleen |
| H1-3               | 6.46E-20 | 5.85492251 | 0.404 | 0.011 | 2.29E-15 | pDC_spleen |
| PSMA7              | 6.49E-20 | 1.42628474 | 0.748 | 0.173 | 2.30E-15 | pDC_spleen |
| CREBRF             | 6.60E-20 | 1.47194332 | 0.596 | 0.081 | 2.34E-15 | pDC_spleen |
| CALR               | 6.68E-20 | 1.1021891  | 0.795 | 0.184 | 2.37E-15 | pDC_spleen |
| ZNF326             | 6.75E-20 | 1.46182479 | 0.609 | 0.086 | 2.39E-15 | pDC_spleen |
| ENSMMUG00000015270 | 6.92E-20 | 1.29351997 | 0.967 | 0.535 | 2.45E-15 | pDC_spleen |
| DSE                | 7.18E-20 | 0.76341716 | 0.768 | 0.162 | 2.55E-15 | pDC_spleen |
| EIF4G2             | 7.23E-20 | 1.17703906 | 0.894 | 0.259 | 2.56E-15 | pDC_spleen |
| DDX5               | 7.38E-20 | 1.27173601 | 0.947 | 0.578 | 2.61E-15 | pDC_spleen |
| XPO6               | 7.51E-20 | 1.1172309  | 0.742 | 0.146 | 2.66E-15 | pDC_spleen |
| DOP1A              | 7.55E-20 | 1.28706407 | 0.689 | 0.13  | 2.67E-15 | pDC_spleen |
| FRS2               | 7.68E-20 | 2.24806532 | 0.51  | 0.049 | 2.72E-15 | pDC_spleen |
| WDR44              | 7.74E-20 | 1.83510432 | 0.536 | 0.059 | 2.74E-15 | pDC_spleen |
| PPIG               | 7.79E-20 | 0.97062319 | 0.715 | 0.141 | 2.76E-15 | pDC_spleen |
| GSN                | 7.87E-20 | 1.4716216  | 0.722 | 0.162 | 2.79E-15 | pDC_spleen |
| TRAF5              | 8.29E-20 | 3.91096055 | 0.457 | 0.032 | 2.94E-15 | pDC_spleen |
| FARP2              | 8.69E-20 | 1.49798537 | 0.662 | 0.119 | 3.08E-15 | pDC_spleen |
| NASP               | 8.69E-20 | 1.1414287  | 0.642 | 0.103 | 3.08E-15 | pDC_spleen |
| NTN1               | 8.73E-20 | 8.07854372 | 0.377 | 0     | 3.09E-15 | pDC_spleen |
| SMC4               | 9.39E-20 | 1.77991113 | 0.656 | 0.119 | 3.33E-15 | pDC_spleen |
| CUL3               | 9.43E-20 | 0.7185444  | 0.715 | 0.13  | 3.34E-15 | pDC_spleen |
| GABARAPL2          | 1.01E-19 | 1.25415402 | 0.748 | 0.178 | 3.57E-15 | pDC_spleen |
| ENSMMUG00000013429 | 1.02E-19 | 1.1430375  | 0.987 | 0.578 | 3.61E-15 | pDC_spleen |
| SQSTM1             | 1.05E-19 | 0.90127405 | 0.854 | 0.232 | 3.74E-15 | pDC_spleen |
| PDGFRA             | 1.08E-19 | 1.3081091  | 0.854 | 0.249 | 3.81E-15 | pDC_spleen |
| FAM118A            | 1.10E-19 | 1.47394723 | 0.596 | 0.086 | 3.88E-15 | pDC_spleen |
| ENSMMUG00000058325 | 1.12E-19 | 1.66895841 | 0.954 | 0.47  | 3.96E-15 | pDC_spleen |
| SH3GLB1            | 1.12E-19 | 0.59840682 | 0.636 | 0.097 | 3.97E-15 | pDC_spleen |

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|--------------------|----------|------------|-------|-------|----------|------------|
| EIF4ENIF1          | 1.18E-19 | 1.7069974  | 0.483 | 0.038 | 4.19E-15 | pDC_spleen |
| CCDC90B            | 1.20E-19 | 1.93773968 | 0.483 | 0.038 | 4.24E-15 | pDC_spleen |
| SNRNP70            | 1.25E-19 | 1.02358286 | 0.543 | 0.059 | 4.44E-15 | pDC_spleen |
| H2AFZ              | 1.29E-19 | 1.10479884 | 0.808 | 0.189 | 4.58E-15 | pDC_spleen |
| SPATS2L            | 1.40E-19 | 1.48564164 | 0.536 | 0.059 | 4.97E-15 | pDC_spleen |
| ARL6IP5            | 1.41E-19 | 1.71738919 | 0.642 | 0.114 | 5.01E-15 | pDC_spleen |
| ENSMMUG00000015563 | 1.46E-19 | 1.22700429 | 0.987 | 0.465 | 5.18E-15 | pDC_spleen |
| ATP10D             | 1.47E-19 | 1.23483005 | 0.51  | 0.049 | 5.21E-15 | pDC_spleen |
| C18H18orf32        | 1.48E-19 | 1.43404175 | 0.921 | 0.416 | 5.24E-15 | pDC_spleen |
| CSNK1G1            | 1.51E-19 | 0.72653398 | 0.695 | 0.124 | 5.36E-15 | pDC_spleen |
| C1QBP              | 1.77E-19 | 4.20625625 | 0.404 | 0.011 | 6.26E-15 | pDC_spleen |
| SLC44A1            | 1.81E-19 | 2.27882899 | 0.464 | 0.032 | 6.41E-15 | pDC_spleen |
| C10H20orf24        | 1.81E-19 | 1.52242589 | 0.662 | 0.135 | 6.41E-15 | pDC_spleen |
| C4H6orf62          | 1.90E-19 | 1.45821973 | 0.841 | 0.232 | 6.74E-15 | pDC_spleen |
| FGD6               | 1.91E-19 | 3.7895204  | 0.404 | 0.011 | 6.75E-15 | pDC_spleen |
| RPLP2              | 1.97E-19 | 1.28147605 | 0.94  | 0.411 | 6.97E-15 | pDC_spleen |
| SLC24A4            | 2.07E-19 | 8.32035378 | 0.371 | 0     | 7.34E-15 | pDC_spleen |
| CPT1A              | 2.09E-19 | 3.12477263 | 0.404 | 0.011 | 7.39E-15 | pDC_spleen |
| MYH11              | 2.12E-19 | 2.8759028  | 0.404 | 0.011 | 7.51E-15 | pDC_spleen |
| CBFA2T3            | 2.13E-19 | 1.51165862 | 0.596 | 0.086 | 7.55E-15 | pDC_spleen |
| PIP4K2A            | 2.16E-19 | 1.33415211 | 0.947 | 0.384 | 7.66E-15 | pDC_spleen |
| ERLEC1             | 2.17E-19 | 1.93431277 | 0.464 | 0.032 | 7.69E-15 | pDC_spleen |
| MARCKS             | 2.19E-19 | 2.32378394 | 0.517 | 0.059 | 7.77E-15 | pDC_spleen |
| PPP4R3B            | 2.23E-19 | 1.24869497 | 0.589 | 0.081 | 7.89E-15 | pDC_spleen |
| NOL7               | 2.27E-19 | 1.58870049 | 0.49  | 0.043 | 8.03E-15 | pDC_spleen |
| ATP5F1A            | 2.29E-19 | 1.29461296 | 0.675 | 0.124 | 8.13E-15 | pDC_spleen |
| PARP1              | 2.31E-19 | 1.89955382 | 0.45  | 0.027 | 8.20E-15 | pDC_spleen |
| CNOT2              | 2.32E-19 | 1.03901865 | 0.722 | 0.146 | 8.21E-15 | pDC_spleen |
| SKP1               | 2.34E-19 | 1.15487269 | 0.934 | 0.362 | 8.30E-15 | pDC_spleen |
| HNRNPAB            | 2.36E-19 | 1.93428272 | 0.464 | 0.032 | 8.37E-15 | pDC_spleen |
| PPTC7              | 2.37E-19 | 1.13560357 | 0.616 | 0.092 | 8.39E-15 | pDC_spleen |
| FAM241A            | 2.39E-19 | 1.28209756 | 0.728 | 0.168 | 8.48E-15 | pDC_spleen |
| RNF138             | 2.60E-19 | 1.61014985 | 0.563 | 0.076 | 9.23E-15 | pDC_spleen |

|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| PSMB8              | 2.62E-19 | 1.16707006 | 0.775 | 0.195 | 9.28E-15 | pDC_spleen |
| ENSMMUG00000020721 | 2.62E-19 | 1.18323192 | 0.927 | 0.335 | 9.29E-15 | pDC_spleen |
| ARID1B             | 2.77E-19 | 1.64230489 | 0.947 | 0.432 | 9.80E-15 | pDC_spleen |
| RAB14              | 2.95E-19 | 0.97709121 | 0.642 | 0.108 | 1.04E-14 | pDC_spleen |
| ENSMMUG00000011588 | 2.97E-19 | 1.41684459 | 0.702 | 0.141 | 1.05E-14 | pDC_spleen |
| GCN1               | 3.09E-19 | 1.273632   | 0.94  | 0.427 | 1.10E-14 | pDC_spleen |
| H2AC20             | 3.12E-19 | 0.96523785 | 0.464 | 0.032 | 1.11E-14 | pDC_spleen |
| ENSMMUG00000056016 | 3.17E-19 | 1.82969723 | 0.543 | 0.07  | 1.12E-14 | pDC_spleen |
| IK                 | 3.17E-19 | 1.01371504 | 0.669 | 0.119 | 1.12E-14 | pDC_spleen |
| ARHGAP12           | 3.19E-19 | 2.66451585 | 0.477 | 0.043 | 1.13E-14 | pDC_spleen |
| LRIG1              | 3.23E-19 | 3.69863002 | 0.45  | 0.032 | 1.14E-14 | pDC_spleen |
| SNX11              | 3.43E-19 | 1.26539851 | 0.649 | 0.114 | 1.21E-14 | pDC_spleen |
| TRMT112            | 3.45E-19 | 1.90240179 | 0.642 | 0.119 | 1.22E-14 | pDC_spleen |
| WDR48              | 3.52E-19 | 1.65857265 | 0.517 | 0.054 | 1.25E-14 | pDC_spleen |
| ENSMMUG00000021539 | 3.56E-19 | 2.63514145 | 0.457 | 0.032 | 1.26E-14 | pDC_spleen |
| APPL1              | 3.60E-19 | 1.21468961 | 0.768 | 0.184 | 1.28E-14 | pDC_spleen |
| WARS1.1            | 3.61E-19 | 1.62264146 | 0.669 | 0.146 | 1.28E-14 | pDC_spleen |
| SCFD1              | 3.72E-19 | 1.47162936 | 0.543 | 0.065 | 1.32E-14 | pDC_spleen |
| ILKAP              | 3.76E-19 | 0.64016201 | 0.695 | 0.13  | 1.33E-14 | pDC_spleen |
| SMURF1             | 3.88E-19 | 1.23864528 | 0.682 | 0.135 | 1.37E-14 | pDC_spleen |
| GNG5               | 3.98E-19 | 1.00626806 | 0.854 | 0.249 | 1.41E-14 | pDC_spleen |
| HINT1              | 3.98E-19 | 1.30085755 | 0.821 | 0.249 | 1.41E-14 | pDC_spleen |
| ANXA4              | 4.21E-19 | 1.15337032 | 0.616 | 0.103 | 1.49E-14 | pDC_spleen |
| ENSMMUG00000008417 | 4.24E-19 | 4.02646251 | 0.397 | 0.011 | 1.50E-14 | pDC_spleen |
| FBXO27             | 4.30E-19 | 2.39159597 | 0.49  | 0.049 | 1.52E-14 | pDC_spleen |
| SNF8               | 5.10E-19 | 1.98912088 | 0.464 | 0.038 | 1.81E-14 | pDC_spleen |
| CHORDC1            | 5.24E-19 | 0.76281011 | 0.609 | 0.092 | 1.86E-14 | pDC_spleen |
| CGGBP1             | 5.26E-19 | 2.56394224 | 0.47  | 0.038 | 1.86E-14 | pDC_spleen |
| ENSMMUG00000012419 | 5.32E-19 | 1.25053265 | 0.781 | 0.2   | 1.89E-14 | pDC_spleen |
| H1-2               | 5.46E-19 | 2.23419445 | 0.464 | 0.038 | 1.94E-14 | pDC_spleen |
| COX4I1             | 5.65E-19 | 1.22968769 | 0.848 | 0.276 | 2.00E-14 | pDC_spleen |
| SP100              | 5.65E-19 | 1.17401221 | 0.801 | 0.205 | 2.00E-14 | pDC_spleen |
| TAOK3              | 5.86E-19 | 1.8161694  | 0.954 | 0.492 | 2.08E-14 | pDC_spleen |

|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| ADAM10             | 5.90E-19 | 1.0498277  | 0.603 | 0.092 | 2.09E-14 | pDC_spleen |
| TCP1               | 6.00E-19 | 1.57410986 | 0.51  | 0.054 | 2.13E-14 | pDC_spleen |
| ENSMMUG00000005482 | 6.20E-19 | 1.12693132 | 0.629 | 0.108 | 2.20E-14 | pDC_spleen |
| ARPC3              | 6.59E-19 | 1.32502166 | 0.881 | 0.314 | 2.33E-14 | pDC_spleen |
| OLFM1              | 6.60E-19 | 5.37800076 | 0.377 | 0.005 | 2.34E-14 | pDC_spleen |
| TMEM50A            | 6.67E-19 | 1.55316965 | 0.609 | 0.097 | 2.36E-14 | pDC_spleen |
| RIPOR2             | 6.83E-19 | 1.97717062 | 0.583 | 0.097 | 2.42E-14 | pDC_spleen |
| NOP53              | 6.84E-19 | 0.84251977 | 0.623 | 0.097 | 2.42E-14 | pDC_spleen |
| KIF2A              | 7.03E-19 | 2.21292676 | 0.563 | 0.086 | 2.49E-14 | pDC_spleen |
| RWDD1              | 7.09E-19 | 1.7869261  | 0.563 | 0.076 | 2.51E-14 | pDC_spleen |
| SHTN1              | 7.24E-19 | 1.10956963 | 0.762 | 0.189 | 2.57E-14 | pDC_spleen |
| TRIM33             | 7.29E-19 | 1.30000548 | 0.523 | 0.059 | 2.58E-14 | pDC_spleen |
| TMX3               | 7.45E-19 | 1.97390383 | 0.424 | 0.022 | 2.64E-14 | pDC_spleen |
| TNPO3              | 7.53E-19 | 1.11831196 | 0.576 | 0.081 | 2.67E-14 | pDC_spleen |
| CCNG1              | 7.59E-19 | 1.89619384 | 0.53  | 0.065 | 2.69E-14 | pDC_spleen |
| URI1               | 7.75E-19 | 1.81444496 | 0.517 | 0.059 | 2.75E-14 | pDC_spleen |
| TRAFD1             | 8.03E-19 | 1.99939371 | 0.523 | 0.065 | 2.84E-14 | pDC_spleen |
| STT3B              | 8.17E-19 | 1.18259748 | 0.589 | 0.086 | 2.89E-14 | pDC_spleen |
| PALM2AKAP2         | 8.35E-19 | 2.65862107 | 0.53  | 0.076 | 2.96E-14 | pDC_spleen |
| TBC1D10A           | 8.51E-19 | 1.08153335 | 0.523 | 0.059 | 3.02E-14 | pDC_spleen |
| ENSMMUG00000053863 | 8.56E-19 | 4.12832544 | 0.391 | 0.011 | 3.03E-14 | pDC_spleen |
| SEC31A             | 8.87E-19 | 0.9056756  | 0.781 | 0.184 | 3.14E-14 | pDC_spleen |
| PKN2               | 8.91E-19 | 0.73359939 | 0.781 | 0.178 | 3.16E-14 | pDC_spleen |
| PSMA1              | 8.93E-19 | 1.12608507 | 0.636 | 0.114 | 3.16E-14 | pDC_spleen |
| NDUFV2             | 8.96E-19 | 1.19302391 | 0.616 | 0.097 | 3.18E-14 | pDC_spleen |
| HMGA1              | 9.06E-19 | 1.2078029  | 0.55  | 0.07  | 3.21E-14 | pDC_spleen |
| SNN                | 9.26E-19 | 1.83104263 | 0.503 | 0.054 | 3.28E-14 | pDC_spleen |
| CHST7              | 9.37E-19 | 3.64790799 | 0.391 | 0.011 | 3.32E-14 | pDC_spleen |
| PIBF1              | 9.44E-19 | 1.61846953 | 0.503 | 0.054 | 3.35E-14 | pDC_spleen |
| NDE1               | 9.60E-19 | 1.11594417 | 0.609 | 0.097 | 3.40E-14 | pDC_spleen |
| MTO1               | 9.95E-19 | 1.67453748 | 0.424 | 0.022 | 3.52E-14 | pDC_spleen |
| GRAMD1A            | 1.01E-18 | 1.85086494 | 0.53  | 0.065 | 3.57E-14 | pDC_spleen |
| EPC1               | 1.03E-18 | 0.52211305 | 0.788 | 0.173 | 3.65E-14 | pDC_spleen |

|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| FRYL               | 1.03E-18 | 1.1361254  | 0.709 | 0.141 | 3.66E-14 | pDC_spleen |
| ENSMMUG00000059017 | 1.10E-18 | 2.00134461 | 0.57  | 0.086 | 3.90E-14 | pDC_spleen |
| PPP1R9A            | 1.15E-18 | 8.89697808 | 0.358 | 0     | 4.08E-14 | pDC_spleen |
| SPTBN1             | 1.25E-18 | 3.34694633 | 0.404 | 0.016 | 4.42E-14 | pDC_spleen |
| UHRF2              | 1.27E-18 | 0.28538813 | 0.636 | 0.108 | 4.49E-14 | pDC_spleen |
| NCOA1              | 1.30E-18 | 1.31948387 | 0.755 | 0.189 | 4.60E-14 | pDC_spleen |
| CCDC171            | 1.32E-18 | 3.37762397 | 0.404 | 0.016 | 4.69E-14 | pDC_spleen |
| RPL37A             | 1.34E-18 | 1.1399022  | 0.914 | 0.395 | 4.75E-14 | pDC_spleen |
| CDC14A             | 1.39E-18 | 1.21302889 | 0.695 | 0.151 | 4.93E-14 | pDC_spleen |
| AGPS               | 1.45E-18 | 1.18720952 | 0.589 | 0.086 | 5.15E-14 | pDC_spleen |
| FBXO7              | 1.46E-18 | 1.60011763 | 0.45  | 0.032 | 5.18E-14 | pDC_spleen |
| ARHGEF3            | 1.56E-18 | 2.13900115 | 0.53  | 0.076 | 5.53E-14 | pDC_spleen |
| SNRPD2             | 1.58E-18 | 1.58338451 | 0.662 | 0.13  | 5.59E-14 | pDC_spleen |
| KDM5B              | 1.65E-18 | 4.99595596 | 0.371 | 0.005 | 5.84E-14 | pDC_spleen |
| PFDN4              | 1.66E-18 | 2.20404582 | 0.51  | 0.059 | 5.89E-14 | pDC_spleen |
| ANKIB1             | 1.69E-18 | 0.79000643 | 0.543 | 0.07  | 5.97E-14 | pDC_spleen |
| ACO2               | 1.71E-18 | 0.99203007 | 0.616 | 0.103 | 6.05E-14 | pDC_spleen |
| PDCD6IP            | 1.71E-18 | 0.47777687 | 0.583 | 0.086 | 6.07E-14 | pDC_spleen |
| KLHL6              | 1.80E-18 | 1.45161756 | 0.563 | 0.081 | 6.36E-14 | pDC_spleen |
| PARP6              | 1.85E-18 | 0.65340658 | 0.748 | 0.162 | 6.55E-14 | pDC_spleen |
| MDH1               | 1.89E-18 | 1.51041382 | 0.57  | 0.081 | 6.69E-14 | pDC_spleen |
| ELAVL1             | 1.91E-18 | 2.04838518 | 0.43  | 0.027 | 6.76E-14 | pDC_spleen |
| ENSMMUG00000012564 | 1.94E-18 | 3.16178698 | 0.384 | 0.011 | 6.89E-14 | pDC_spleen |
| CCNK               | 2.11E-18 | 1.43969435 | 0.57  | 0.081 | 7.47E-14 | pDC_spleen |
| CCT8               | 2.11E-18 | 1.4606211  | 0.583 | 0.092 | 7.48E-14 | pDC_spleen |
| PPHLN1             | 2.19E-18 | 0.6757688  | 0.728 | 0.146 | 7.75E-14 | pDC_spleen |
| DNAJB14            | 2.25E-18 | 2.19686147 | 0.497 | 0.054 | 7.99E-14 | pDC_spleen |
| MAGI3              | 2.27E-18 | 1.61599598 | 0.748 | 0.189 | 8.05E-14 | pDC_spleen |
| DYNC1H1            | 2.28E-18 | 0.44476109 | 0.636 | 0.108 | 8.06E-14 | pDC_spleen |
| ANKRD24            | 2.46E-18 | 1.7629457  | 0.629 | 0.135 | 8.73E-14 | pDC_spleen |
| CPNE1              | 2.47E-18 | 1.03601578 | 0.636 | 0.108 | 8.76E-14 | pDC_spleen |
| EIF2B3             | 2.49E-18 | 1.33395555 | 0.517 | 0.059 | 8.81E-14 | pDC_spleen |
| JADE3              | 2.57E-18 | 1.76034826 | 0.497 | 0.054 | 9.10E-14 | pDC_spleen |



|                     |          |            |       |       |          |            |
|---------------------|----------|------------|-------|-------|----------|------------|
| C16H17orf49         | 2.64E-18 | 0.85089361 | 0.828 | 0.222 | 9.35E-14 | pDC_spleen |
| MRPL51              | 2.93E-18 | 1.36548576 | 0.629 | 0.114 | 1.04E-13 | pDC_spleen |
| ANKLE2              | 2.95E-18 | 2.22237905 | 0.49  | 0.054 | 1.05E-13 | pDC_spleen |
| RAB18               | 2.96E-18 | 0.74293412 | 0.629 | 0.103 | 1.05E-13 | pDC_spleen |
| TLK1                | 2.97E-18 | 0.89675241 | 0.748 | 0.168 | 1.05E-13 | pDC_spleen |
| TMEM167A            | 3.04E-18 | 1.14187204 | 0.603 | 0.097 | 1.08E-13 | pDC_spleen |
| HIPK1               | 3.07E-18 | 0.99361208 | 0.623 | 0.103 | 1.09E-13 | pDC_spleen |
| AKNA                | 3.16E-18 | 0.9339783  | 0.623 | 0.108 | 1.12E-13 | pDC_spleen |
| PDE8A               | 3.17E-18 | 1.52888741 | 0.583 | 0.092 | 1.12E-13 | pDC_spleen |
| TMEM258             | 3.21E-18 | 1.34604286 | 0.636 | 0.114 | 1.14E-13 | pDC_spleen |
| ENSMMUG00000019882  | 3.24E-18 | 1.18095124 | 0.609 | 0.103 | 1.15E-13 | pDC_spleen |
| MRPL21              | 3.65E-18 | 1.67151322 | 0.457 | 0.038 | 1.29E-13 | pDC_spleen |
| AKIP1               | 3.67E-18 | 2.77719812 | 0.397 | 0.016 | 1.30E-13 | pDC_spleen |
| SFT2D1              | 3.94E-18 | 3.04366729 | 0.424 | 0.027 | 1.39E-13 | pDC_spleen |
| TYW3                | 4.22E-18 | 4.40269005 | 0.364 | 0.005 | 1.49E-13 | pDC_spleen |
| CSTF3               | 4.27E-18 | 1.27331512 | 0.47  | 0.043 | 1.51E-13 | pDC_spleen |
| SMS                 | 4.53E-18 | 1.29011168 | 0.523 | 0.07  | 1.60E-13 | pDC_spleen |
| PPP1R16B            | 4.55E-18 | 1.90968743 | 0.576 | 0.108 | 1.61E-13 | pDC_spleen |
| ANKRD27             | 4.59E-18 | 2.42519307 | 0.424 | 0.027 | 1.63E-13 | pDC_spleen |
| RNF145              | 4.62E-18 | 1.43022832 | 0.583 | 0.097 | 1.64E-13 | pDC_spleen |
| MAP4                | 4.68E-18 | 0.7627098  | 0.742 | 0.162 | 1.66E-13 | pDC_spleen |
| DNAJC2              | 4.79E-18 | 1.53147002 | 0.517 | 0.065 | 1.70E-13 | pDC_spleen |
| ENSMMUG00000016898  | 4.87E-18 | 1.19945883 | 0.543 | 0.076 | 1.72E-13 | pDC_spleen |
| CSRP1               | 4.97E-18 | 1.71768028 | 0.53  | 0.07  | 1.76E-13 | pDC_spleen |
| ENSMMUG00000003073  | 4.97E-18 | 1.18482535 | 0.947 | 0.427 | 1.76E-13 | pDC_spleen |
| ENSMMUG000000053392 | 4.98E-18 | 1.42136947 | 0.656 | 0.13  | 1.76E-13 | pDC_spleen |
| UBE2L6              | 5.32E-18 | 2.5689452  | 0.437 | 0.032 | 1.89E-13 | pDC_spleen |
| POGLUT1             | 5.41E-18 | 1.62543692 | 0.391 | 0.016 | 1.92E-13 | pDC_spleen |
| COX6C               | 5.41E-18 | 1.35312863 | 0.834 | 0.281 | 1.92E-13 | pDC_spleen |
| KRTCAP2             | 5.52E-18 | 1.17728779 | 0.821 | 0.232 | 1.95E-13 | pDC_spleen |
| AP3S1               | 5.60E-18 | 1.13946539 | 0.536 | 0.07  | 1.98E-13 | pDC_spleen |
| ENY2                | 5.81E-18 | 1.21451897 | 0.649 | 0.13  | 2.06E-13 | pDC_spleen |
| PIGY                | 5.82E-18 | 2.82097273 | 0.391 | 0.016 | 2.06E-13 | pDC_spleen |

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|---------|----------|------------|-------|-------|----------|------------|
| FRMD4A  | 5.87E-18 | 1.08773625 | 0.887 | 0.319 | 2.08E-13 | pDC_spleen |
| UBE2E1  | 5.97E-18 | 1.16875062 | 0.649 | 0.124 | 2.11E-13 | pDC_spleen |
| ISCU    | 6.09E-18 | 2.59796123 | 0.47  | 0.049 | 2.16E-13 | pDC_spleen |
| RPS23   | 6.83E-18 | 1.17656034 | 0.974 | 0.497 | 2.42E-13 | pDC_spleen |
| CSDE1   | 6.96E-18 | 0.87180912 | 0.815 | 0.205 | 2.46E-13 | pDC_spleen |
| MTX2    | 7.01E-18 | 2.22623298 | 0.437 | 0.032 | 2.48E-13 | pDC_spleen |
| DDX42   | 7.01E-18 | 1.12467338 | 0.517 | 0.065 | 2.48E-13 | pDC_spleen |
| NBEA    | 7.12E-18 | 1.91446575 | 0.464 | 0.043 | 2.52E-13 | pDC_spleen |
| MGLL    | 7.32E-18 | 3.53108763 | 0.411 | 0.027 | 2.59E-13 | pDC_spleen |
| RRAS2   | 7.43E-18 | 2.09894901 | 0.417 | 0.027 | 2.63E-13 | pDC_spleen |
| ZNF292  | 7.75E-18 | 1.07217393 | 0.848 | 0.243 | 2.74E-13 | pDC_spleen |
| INPP5F  | 7.98E-18 | 1.94960713 | 0.583 | 0.103 | 2.83E-13 | pDC_spleen |
| SOD1    | 8.00E-18 | 1.54455563 | 0.49  | 0.054 | 2.83E-13 | pDC_spleen |
| COX7B   | 8.19E-18 | 1.2082801  | 0.735 | 0.178 | 2.90E-13 | pDC_spleen |
| RGS10   | 8.23E-18 | 1.04005008 | 0.609 | 0.103 | 2.92E-13 | pDC_spleen |
| PLAAT3  | 8.28E-18 | 3.52520012 | 0.464 | 0.059 | 2.93E-13 | pDC_spleen |
| COX8A   | 8.31E-18 | 1.09697539 | 0.675 | 0.135 | 2.94E-13 | pDC_spleen |
| VAC14   | 8.31E-18 | 2.3941494  | 0.417 | 0.027 | 2.94E-13 | pDC_spleen |
| NME2    | 8.39E-18 | 1.16833712 | 0.887 | 0.292 | 2.97E-13 | pDC_spleen |
| TOP2B   | 8.53E-18 | 0.67950029 | 0.649 | 0.119 | 3.02E-13 | pDC_spleen |
| HIGD2A  | 9.17E-18 | 2.46902175 | 0.417 | 0.027 | 3.25E-13 | pDC_spleen |
| RPS4X   | 9.33E-18 | 1.22258811 | 0.934 | 0.476 | 3.31E-13 | pDC_spleen |
| NCOA3   | 9.58E-18 | 1.44496975 | 0.947 | 0.438 | 3.39E-13 | pDC_spleen |
| RAD23B  | 9.88E-18 | 0.75894629 | 0.583 | 0.092 | 3.50E-13 | pDC_spleen |
| CRYZ    | 9.95E-18 | 3.4547404  | 0.358 | 0.005 | 3.52E-13 | pDC_spleen |
| CHCHD1  | 1.01E-17 | 2.9736667  | 0.404 | 0.022 | 3.58E-13 | pDC_spleen |
| IDH2    | 1.01E-17 | 1.07287133 | 0.53  | 0.07  | 3.59E-13 | pDC_spleen |
| RBX1    | 1.02E-17 | 1.24062594 | 0.722 | 0.168 | 3.61E-13 | pDC_spleen |
| RPS7    | 1.03E-17 | 1.09348174 | 0.974 | 0.535 | 3.64E-13 | pDC_spleen |
| NSD3    | 1.03E-17 | 0.54927991 | 0.748 | 0.162 | 3.65E-13 | pDC_spleen |
| VPS41   | 1.05E-17 | 0.727417   | 0.543 | 0.076 | 3.71E-13 | pDC_spleen |
| PKD2    | 1.08E-17 | 4.26783044 | 0.371 | 0.011 | 3.83E-13 | pDC_spleen |
| DENND6A | 1.12E-17 | 1.31868037 | 0.464 | 0.043 | 3.96E-13 | pDC_spleen |

|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| ENSMMUG00000060808 | 1.13E-17 | 3.14546549 | 0.384 | 0.016 | 3.99E-13 | pDC_spleen |
| CCDC88A            | 1.14E-17 | 1.20312274 | 0.967 | 0.503 | 4.04E-13 | pDC_spleen |
| SNAP23             | 1.21E-17 | 1.02882838 | 0.616 | 0.108 | 4.29E-13 | pDC_spleen |
| UBXN1              | 1.22E-17 | 0.62162818 | 0.801 | 0.2   | 4.31E-13 | pDC_spleen |
| EXOC5              | 1.22E-17 | 1.90123874 | 0.457 | 0.043 | 4.31E-13 | pDC_spleen |
| TBC1D12            | 1.22E-17 | 1.05338254 | 0.563 | 0.086 | 4.33E-13 | pDC_spleen |
| CPEB2              | 1.26E-17 | 1.98042233 | 0.517 | 0.07  | 4.46E-13 | pDC_spleen |
| ENSMMUG00000001458 | 1.27E-17 | 1.11345694 | 0.874 | 0.286 | 4.50E-13 | pDC_spleen |
| SYNGR2             | 1.29E-17 | 0.91256426 | 0.828 | 0.216 | 4.56E-13 | pDC_spleen |
| DYNLL1             | 1.29E-17 | 1.67412086 | 0.662 | 0.157 | 4.57E-13 | pDC_spleen |
| NGLY1              | 1.30E-17 | 1.37596116 | 0.51  | 0.065 | 4.61E-13 | pDC_spleen |
| CDYL               | 1.32E-17 | 0.94980147 | 0.768 | 0.195 | 4.69E-13 | pDC_spleen |
| ENSMMUG00000016278 | 1.32E-17 | 1.96507633 | 0.517 | 0.07  | 4.69E-13 | pDC_spleen |
| ENSMMUG00000065104 | 1.35E-17 | 1.17939663 | 0.609 | 0.108 | 4.80E-13 | pDC_spleen |
| ZFAND5             | 1.43E-17 | 0.67825938 | 0.762 | 0.173 | 5.07E-13 | pDC_spleen |
| B3GALNT2           | 1.45E-17 | 1.45885976 | 0.43  | 0.032 | 5.14E-13 | pDC_spleen |
| SPTAN1             | 1.46E-17 | 1.27387684 | 0.556 | 0.086 | 5.16E-13 | pDC_spleen |
| ENSMMUG00000053735 | 1.46E-17 | 1.33310512 | 0.649 | 0.13  | 5.18E-13 | pDC_spleen |
| GTF2E2             | 1.47E-17 | 2.10102216 | 0.43  | 0.032 | 5.21E-13 | pDC_spleen |
| ENSMMUG00000019505 | 1.48E-17 | 0.76159998 | 0.848 | 0.259 | 5.25E-13 | pDC_spleen |
| FAM107B            | 1.49E-17 | 1.3267289  | 0.868 | 0.281 | 5.28E-13 | pDC_spleen |
| PPP2R5A            | 1.51E-17 | 1.8624965  | 0.417 | 0.027 | 5.37E-13 | pDC_spleen |
| MARCHF8            | 1.53E-17 | 2.032425   | 0.43  | 0.032 | 5.43E-13 | pDC_spleen |
| PCMT1              | 1.66E-17 | 2.87042915 | 0.424 | 0.032 | 5.89E-13 | pDC_spleen |
| PFKL               | 1.73E-17 | 1.37174789 | 0.55  | 0.081 | 6.14E-13 | pDC_spleen |
| SNX6               | 1.75E-17 | 0.89372341 | 0.649 | 0.124 | 6.22E-13 | pDC_spleen |
| PSME1              | 1.78E-17 | 1.296357   | 0.768 | 0.211 | 6.32E-13 | pDC_spleen |
| EEF2               | 1.85E-17 | 1.07679885 | 0.914 | 0.324 | 6.56E-13 | pDC_spleen |
| MED8               | 1.86E-17 | 1.15509353 | 0.483 | 0.054 | 6.58E-13 | pDC_spleen |
| ENSMMUG00000006206 | 1.86E-17 | 0.85413473 | 0.629 | 0.119 | 6.61E-13 | pDC_spleen |
| PSMB10             | 1.89E-17 | 1.01851325 | 0.609 | 0.108 | 6.69E-13 | pDC_spleen |
| FKBP3              | 1.93E-17 | 1.45359125 | 0.47  | 0.049 | 6.84E-13 | pDC_spleen |
| BZW1               | 1.93E-17 | 0.75858391 | 0.788 | 0.2   | 6.85E-13 | pDC_spleen |

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|---------------------|----------|------------|-------|-------|----------|------------|
| PPM1A               | 1.94E-17 | 1.23433055 | 0.523 | 0.07  | 6.88E-13 | pDC_spleen |
| HLX                 | 2.07E-17 | 2.63208487 | 0.384 | 0.016 | 7.35E-13 | pDC_spleen |
| ENSMMUG000000003130 | 2.12E-17 | 1.34424441 | 0.642 | 0.135 | 7.53E-13 | pDC_spleen |
| HNRNPA0             | 2.15E-17 | 1.04846154 | 0.55  | 0.081 | 7.63E-13 | pDC_spleen |
| ENSMMUG000000012537 | 2.20E-17 | 1.40532175 | 0.51  | 0.065 | 7.81E-13 | pDC_spleen |
| RELCH               | 2.21E-17 | 1.13654842 | 0.55  | 0.081 | 7.82E-13 | pDC_spleen |
| LAMTOR2             | 2.26E-17 | 1.95161306 | 0.503 | 0.065 | 8.01E-13 | pDC_spleen |
| SLC25A29            | 2.49E-17 | 5.02031393 | 0.364 | 0.011 | 8.82E-13 | pDC_spleen |
| GOLPH3              | 2.52E-17 | 0.82985616 | 0.662 | 0.13  | 8.93E-13 | pDC_spleen |
| SELENOT             | 2.55E-17 | 1.09814183 | 0.457 | 0.043 | 9.05E-13 | pDC_spleen |
| SF1                 | 2.58E-17 | 0.55047505 | 0.669 | 0.135 | 9.13E-13 | pDC_spleen |
| FRY                 | 2.60E-17 | 2.6800306  | 0.417 | 0.032 | 9.23E-13 | pDC_spleen |
| FOXJ3               | 2.62E-17 | 1.32697867 | 0.589 | 0.103 | 9.29E-13 | pDC_spleen |
| ARHGAP17            | 2.66E-17 | 1.34229965 | 0.748 | 0.195 | 9.41E-13 | pDC_spleen |
| ZNF92               | 2.66E-17 | 0.6620114  | 0.457 | 0.043 | 9.41E-13 | pDC_spleen |
| ZMYM5               | 2.66E-17 | 1.50165014 | 0.483 | 0.054 | 9.42E-13 | pDC_spleen |
| UBR2                | 2.85E-17 | 0.96363394 | 0.642 | 0.124 | 1.01E-12 | pDC_spleen |
| IQGAP1              | 3.08E-17 | 1.06929835 | 0.894 | 0.341 | 1.09E-12 | pDC_spleen |
| ECPAS               | 3.08E-17 | 0.80018274 | 0.656 | 0.13  | 1.09E-12 | pDC_spleen |
| ATRN                | 3.10E-17 | 0.90248326 | 0.57  | 0.092 | 1.10E-12 | pDC_spleen |
| NDUFA2              | 3.15E-17 | 1.16558011 | 0.728 | 0.168 | 1.11E-12 | pDC_spleen |
| BRK1                | 3.26E-17 | 1.55622758 | 0.563 | 0.092 | 1.16E-12 | pDC_spleen |
| ARFGEF1             | 3.26E-17 | 0.60304438 | 0.742 | 0.173 | 1.16E-12 | pDC_spleen |
| IFT80               | 3.32E-17 | 2.65575322 | 0.391 | 0.022 | 1.17E-12 | pDC_spleen |
| POLR2A              | 3.43E-17 | 0.85304826 | 0.636 | 0.124 | 1.21E-12 | pDC_spleen |
| GPSM3               | 3.62E-17 | 0.80384464 | 0.728 | 0.168 | 1.28E-12 | pDC_spleen |
| ARNTL               | 3.75E-17 | 0.86149987 | 0.57  | 0.092 | 1.33E-12 | pDC_spleen |
| TMOD3               | 3.89E-17 | 0.8389177  | 0.642 | 0.124 | 1.38E-12 | pDC_spleen |
| ANP32E              | 3.92E-17 | 1.43686933 | 0.57  | 0.103 | 1.39E-12 | pDC_spleen |
| PSMB7               | 3.93E-17 | 0.98283622 | 0.788 | 0.216 | 1.39E-12 | pDC_spleen |
| ABHD2               | 4.09E-17 | 1.91336896 | 0.483 | 0.059 | 1.45E-12 | pDC_spleen |
| GDI2                | 4.12E-17 | 0.86063273 | 0.649 | 0.13  | 1.46E-12 | pDC_spleen |
| PRPF6               | 4.12E-17 | 1.53912751 | 0.477 | 0.054 | 1.46E-12 | pDC_spleen |

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|---------------------|----------|------------|-------|-------|----------|------------|
| CYFIP2              | 4.30E-17 | 2.47966695 | 0.444 | 0.043 | 1.52E-12 | pDC_spleen |
| TAGLN2              | 4.46E-17 | 1.06942049 | 0.868 | 0.265 | 1.58E-12 | pDC_spleen |
| AKR7A2              | 4.49E-17 | 2.55288567 | 0.377 | 0.016 | 1.59E-12 | pDC_spleen |
| DESI2               | 4.57E-17 | 0.80219664 | 0.517 | 0.07  | 1.62E-12 | pDC_spleen |
| ANP32B              | 4.68E-17 | 1.52273894 | 0.609 | 0.124 | 1.66E-12 | pDC_spleen |
| TAPBP               | 4.76E-17 | 0.80153618 | 0.709 | 0.151 | 1.69E-12 | pDC_spleen |
| DHX9                | 4.93E-17 | 1.00107524 | 0.662 | 0.141 | 1.75E-12 | pDC_spleen |
| HECTD4              | 5.01E-17 | 0.88370268 | 0.523 | 0.076 | 1.78E-12 | pDC_spleen |
| RNF213              | 5.19E-17 | 0.97436382 | 0.702 | 0.151 | 1.84E-12 | pDC_spleen |
| TMPO                | 5.22E-17 | 1.0371264  | 0.45  | 0.043 | 1.85E-12 | pDC_spleen |
| ENSMMUG00000009425  | 5.47E-17 | 1.57920274 | 0.55  | 0.086 | 1.94E-12 | pDC_spleen |
| RDH5                | 5.58E-17 | 0.86631673 | 0.669 | 0.141 | 1.98E-12 | pDC_spleen |
| MOB3A               | 5.62E-17 | 0.56551928 | 0.728 | 0.168 | 1.99E-12 | pDC_spleen |
| ROBO2               | 5.74E-17 | 0.89014959 | 0.815 | 0.227 | 2.03E-12 | pDC_spleen |
| DCAF6               | 6.06E-17 | 1.29575427 | 0.596 | 0.114 | 2.15E-12 | pDC_spleen |
| MTMR10              | 6.19E-17 | 2.19237621 | 0.404 | 0.027 | 2.19E-12 | pDC_spleen |
| RPL30               | 6.32E-17 | 1.04568784 | 0.967 | 0.47  | 2.24E-12 | pDC_spleen |
| EIF3D               | 6.51E-17 | 0.96241229 | 0.57  | 0.097 | 2.31E-12 | pDC_spleen |
| TAF9                | 6.62E-17 | 1.33202524 | 0.55  | 0.086 | 2.35E-12 | pDC_spleen |
| NET1                | 6.85E-17 | 2.3612527  | 0.417 | 0.032 | 2.43E-12 | pDC_spleen |
| STK17A              | 6.90E-17 | 0.95558674 | 0.682 | 0.151 | 2.44E-12 | pDC_spleen |
| DLG1                | 6.92E-17 | 1.14858376 | 0.775 | 0.216 | 2.45E-12 | pDC_spleen |
| ENSMMUG000000031367 | 7.12E-17 | 1.89202414 | 0.43  | 0.038 | 2.52E-12 | pDC_spleen |
| YY1                 | 7.19E-17 | 1.0464537  | 0.589 | 0.103 | 2.55E-12 | pDC_spleen |
| COX20               | 7.35E-17 | 1.29195939 | 0.536 | 0.081 | 2.60E-12 | pDC_spleen |
| ENSMMUG000000056190 | 7.40E-17 | 1.84865583 | 0.457 | 0.049 | 2.62E-12 | pDC_spleen |
| DIPK2A              | 7.41E-17 | 0.83187713 | 0.51  | 0.07  | 2.63E-12 | pDC_spleen |
| AKAP12              | 7.71E-17 | 7.23372705 | 0.325 | 0     | 2.73E-12 | pDC_spleen |
| ERH                 | 7.87E-17 | 1.01728045 | 0.609 | 0.114 | 2.79E-12 | pDC_spleen |
| CERS5               | 7.92E-17 | 1.89596419 | 0.43  | 0.038 | 2.81E-12 | pDC_spleen |
| CCT2                | 8.06E-17 | 1.18798586 | 0.576 | 0.103 | 2.86E-12 | pDC_spleen |
| FAM168A             | 8.17E-17 | 1.06962245 | 0.642 | 0.135 | 2.89E-12 | pDC_spleen |
| RPS16               | 8.68E-17 | 1.09653385 | 0.934 | 0.454 | 3.08E-12 | pDC_spleen |

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|--------------------|----------|------------|-------|-------|----------|------------|
| TOMM20             | 8.81E-17 | 0.96206855 | 0.735 | 0.184 | 3.12E-12 | pDC_spleen |
| ENSMMUG00000016894 | 8.89E-17 | 1.23418191 | 0.656 | 0.141 | 3.15E-12 | pDC_spleen |
| KLF6               | 8.89E-17 | 1.144626   | 0.934 | 0.492 | 3.15E-12 | pDC_spleen |
| SRRM2              | 8.91E-17 | 1.01746904 | 0.887 | 0.243 | 3.16E-12 | pDC_spleen |
| HSPA4              | 9.04E-17 | 0.90917073 | 0.483 | 0.059 | 3.20E-12 | pDC_spleen |
| MAT2A              | 9.07E-17 | 0.50713103 | 0.576 | 0.097 | 3.21E-12 | pDC_spleen |
| BRD9               | 9.43E-17 | 0.74207882 | 0.503 | 0.065 | 3.34E-12 | pDC_spleen |
| RFC1               | 9.57E-17 | 1.35654172 | 0.457 | 0.049 | 3.39E-12 | pDC_spleen |
| NFKBIB             | 9.58E-17 | 0.49525328 | 0.589 | 0.103 | 3.40E-12 | pDC_spleen |
| CAMLG              | 9.59E-17 | 1.2780362  | 0.576 | 0.103 | 3.40E-12 | pDC_spleen |
| ENSMMUG00000047481 | 9.60E-17 | 1.55360601 | 0.669 | 0.162 | 3.40E-12 | pDC_spleen |
| TALDO1             | 1.01E-16 | 1.22999528 | 0.689 | 0.162 | 3.59E-12 | pDC_spleen |
| ZC3H7B             | 1.02E-16 | 2.69286632 | 0.371 | 0.016 | 3.63E-12 | pDC_spleen |
| IRAG2              | 1.06E-16 | 1.38328194 | 0.43  | 0.038 | 3.76E-12 | pDC_spleen |
| ENSMMUG00000053142 | 1.06E-16 | 1.40790933 | 0.43  | 0.038 | 3.76E-12 | pDC_spleen |
| RAB5B              | 1.06E-16 | 1.57030611 | 0.444 | 0.043 | 3.76E-12 | pDC_spleen |
| RPL7A              | 1.07E-16 | 1.13000467 | 0.934 | 0.432 | 3.78E-12 | pDC_spleen |
| DYNLL2             | 1.08E-16 | 2.96055135 | 0.371 | 0.016 | 3.84E-12 | pDC_spleen |
| YAF2               | 1.12E-16 | 0.70025877 | 0.702 | 0.157 | 3.97E-12 | pDC_spleen |
| NSF                | 1.13E-16 | 0.43787137 | 0.609 | 0.114 | 4.00E-12 | pDC_spleen |
| CAPZA1             | 1.18E-16 | 0.82979561 | 0.801 | 0.222 | 4.17E-12 | pDC_spleen |
| ENSMMUG00000055687 | 1.18E-16 | 1.18854291 | 0.589 | 0.108 | 4.18E-12 | pDC_spleen |
| UBTF               | 1.18E-16 | 1.85310297 | 0.43  | 0.038 | 4.18E-12 | pDC_spleen |
| MYLIP              | 1.20E-16 | 0.87873017 | 0.695 | 0.162 | 4.25E-12 | pDC_spleen |
| AP2M1              | 1.21E-16 | 1.14866191 | 0.603 | 0.114 | 4.27E-12 | pDC_spleen |
| CFL1               | 1.21E-16 | 1.22429922 | 0.874 | 0.341 | 4.28E-12 | pDC_spleen |
| RBM26              | 1.22E-16 | 0.79777907 | 0.609 | 0.114 | 4.33E-12 | pDC_spleen |
| BAZ1B              | 1.22E-16 | 1.16937703 | 0.556 | 0.092 | 4.33E-12 | pDC_spleen |
| PTGES3             | 1.23E-16 | 0.92677581 | 0.874 | 0.281 | 4.35E-12 | pDC_spleen |
| ENSMMUG00000019238 | 1.24E-16 | 1.56457831 | 0.444 | 0.043 | 4.40E-12 | pDC_spleen |
| RBM14              | 1.26E-16 | 0.49552804 | 0.722 | 0.162 | 4.47E-12 | pDC_spleen |
| NUAK2              | 1.28E-16 | 2.22472339 | 0.437 | 0.043 | 4.53E-12 | pDC_spleen |
| LSM8               | 1.28E-16 | 2.22946738 | 0.437 | 0.043 | 4.53E-12 | pDC_spleen |

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|--------------------|----------|------------|-------|-------|----------|------------|
| RPL19              | 1.30E-16 | 0.99718572 | 0.954 | 0.416 | 4.62E-12 | pDC_spleen |
| UBE2D2             | 1.32E-16 | 4.20441728 | 0.351 | 0.011 | 4.69E-12 | pDC_spleen |
| SLMAP              | 1.34E-16 | 0.40767473 | 0.642 | 0.124 | 4.75E-12 | pDC_spleen |
| TGOLN2             | 1.42E-16 | 1.10247997 | 0.497 | 0.065 | 5.03E-12 | pDC_spleen |
| SMARCA5            | 1.43E-16 | 0.71269094 | 0.762 | 0.178 | 5.08E-12 | pDC_spleen |
| POLR1D             | 1.45E-16 | 1.12538862 | 0.589 | 0.108 | 5.13E-12 | pDC_spleen |
| CGNL1              | 1.53E-16 | 3.57093191 | 0.364 | 0.016 | 5.43E-12 | pDC_spleen |
| BID                | 1.55E-16 | 0.67364951 | 0.669 | 0.151 | 5.50E-12 | pDC_spleen |
| MIER1              | 1.56E-16 | 1.34143534 | 0.563 | 0.097 | 5.53E-12 | pDC_spleen |
| ENSMMUG00000055825 | 1.57E-16 | 0.64791526 | 0.682 | 0.146 | 5.56E-12 | pDC_spleen |
| HNRNPD             | 1.58E-16 | 0.64246049 | 0.821 | 0.211 | 5.60E-12 | pDC_spleen |
| RER1               | 1.61E-16 | 0.93923278 | 0.656 | 0.141 | 5.72E-12 | pDC_spleen |
| ADGRE5             | 1.62E-16 | 1.32636065 | 0.781 | 0.238 | 5.75E-12 | pDC_spleen |
| SPIN1              | 1.63E-16 | 3.19251078 | 0.351 | 0.011 | 5.76E-12 | pDC_spleen |
| SEC14L1            | 1.64E-16 | 0.82248058 | 0.675 | 0.146 | 5.80E-12 | pDC_spleen |
| POU2F1             | 1.65E-16 | 1.21773083 | 0.609 | 0.119 | 5.84E-12 | pDC_spleen |
| DTNB               | 1.68E-16 | 1.94595411 | 0.536 | 0.097 | 5.95E-12 | pDC_spleen |
| SMOC1              | 1.76E-16 | 7.44946208 | 0.318 | 0     | 6.25E-12 | pDC_spleen |
| RNF111             | 1.77E-16 | 0.79788801 | 0.437 | 0.043 | 6.27E-12 | pDC_spleen |
| WDR33              | 1.83E-16 | 0.81314811 | 0.543 | 0.086 | 6.48E-12 | pDC_spleen |
| RRP36              | 1.86E-16 | 1.46588123 | 0.397 | 0.027 | 6.60E-12 | pDC_spleen |
| SESN3              | 1.89E-16 | 1.05418043 | 0.742 | 0.195 | 6.69E-12 | pDC_spleen |
| PRIMPOL            | 1.90E-16 | 2.79452077 | 0.364 | 0.016 | 6.74E-12 | pDC_spleen |
| HSPE1              | 1.94E-16 | 0.84769047 | 0.841 | 0.249 | 6.89E-12 | pDC_spleen |
| NDUFS4             | 2.07E-16 | 0.66238183 | 0.556 | 0.092 | 7.32E-12 | pDC_spleen |
| FNTB               | 2.07E-16 | 0.8756375  | 0.702 | 0.157 | 7.32E-12 | pDC_spleen |
| ENSMMUG00000049151 | 2.11E-16 | 0.98119128 | 0.934 | 0.378 | 7.48E-12 | pDC_spleen |
| CNOT6L             | 2.12E-16 | 0.28116826 | 0.722 | 0.162 | 7.50E-12 | pDC_spleen |
| PPP2R5E            | 2.12E-16 | 0.88042789 | 0.642 | 0.13  | 7.50E-12 | pDC_spleen |
| MED12L             | 2.17E-16 | 5.49012792 | 0.331 | 0.005 | 7.69E-12 | pDC_spleen |
| AVL9               | 2.20E-16 | 1.56776982 | 0.47  | 0.059 | 7.78E-12 | pDC_spleen |
| MED30              | 2.20E-16 | 3.1813707  | 0.377 | 0.022 | 7.79E-12 | pDC_spleen |
| PI4K2B             | 2.33E-16 | 1.00675869 | 0.722 | 0.173 | 8.26E-12 | pDC_spleen |

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|-------------------|----------|------------|-------|-------|----------|------------|
| AP5M1             | 2.33E-16 | 1.77649939 | 0.411 | 0.032 | 8.27E-12 | pDC_spleen |
| C3H21orf91        | 2.36E-16 | 1.73930647 | 0.464 | 0.054 | 8.36E-12 | pDC_spleen |
| ATF4              | 2.40E-16 | 0.58343606 | 0.821 | 0.216 | 8.50E-12 | pDC_spleen |
| UBXN4             | 2.40E-16 | 0.95586495 | 0.656 | 0.135 | 8.51E-12 | pDC_spleen |
| THOC2             | 2.41E-16 | 0.615546   | 0.563 | 0.092 | 8.56E-12 | pDC_spleen |
| EFTUD2            | 2.46E-16 | 2.81476343 | 0.377 | 0.022 | 8.71E-12 | pDC_spleen |
| SEC11A            | 2.48E-16 | 1.49933256 | 0.464 | 0.054 | 8.79E-12 | pDC_spleen |
| GLRX2             | 2.49E-16 | 2.42344442 | 0.391 | 0.027 | 8.82E-12 | pDC_spleen |
| TBCC              | 2.52E-16 | 2.75001567 | 0.391 | 0.027 | 8.94E-12 | pDC_spleen |
| NDUFA4            | 2.62E-16 | 1.14646052 | 0.775 | 0.211 | 9.27E-12 | pDC_spleen |
| EEF1G             | 2.67E-16 | 1.14301812 | 0.795 | 0.243 | 9.45E-12 | pDC_spleen |
| MORF4L1           | 2.68E-16 | 0.81735214 | 0.927 | 0.335 | 9.51E-12 | pDC_spleen |
| ENSMUG00000020050 | 2.71E-16 | 1.23092528 | 0.464 | 0.054 | 9.60E-12 | pDC_spleen |
| ENSMUG00000055627 | 2.71E-16 | 1.02760293 | 0.762 | 0.2   | 9.62E-12 | pDC_spleen |
| TBCB              | 2.76E-16 | 3.19567186 | 0.331 | 0.005 | 9.78E-12 | pDC_spleen |
| PARM1             | 2.90E-16 | 1.5287035  | 0.623 | 0.135 | 1.03E-11 | pDC_spleen |
| RANBP2            | 3.10E-16 | 0.8666558  | 0.781 | 0.222 | 1.10E-11 | pDC_spleen |
| PDHX              | 3.19E-16 | 1.46750509 | 0.417 | 0.038 | 1.13E-11 | pDC_spleen |
| CDK17             | 3.28E-16 | 1.03612101 | 0.748 | 0.205 | 1.16E-11 | pDC_spleen |
| RSRP1             | 3.31E-16 | 0.87331119 | 0.901 | 0.303 | 1.17E-11 | pDC_spleen |
| RPL36AL           | 3.43E-16 | 1.00789175 | 0.854 | 0.308 | 1.22E-11 | pDC_spleen |
| AKIRIN1           | 3.51E-16 | 0.81506504 | 0.57  | 0.097 | 1.24E-11 | pDC_spleen |
| BIN3              | 3.62E-16 | 1.07013604 | 0.55  | 0.092 | 1.28E-11 | pDC_spleen |
| CTDNEP1           | 3.77E-16 | 1.50214738 | 0.457 | 0.054 | 1.33E-11 | pDC_spleen |
| NONO              | 3.83E-16 | 0.52236401 | 0.583 | 0.103 | 1.36E-11 | pDC_spleen |
| RPS3A             | 3.93E-16 | 1.09201132 | 0.967 | 0.578 | 1.39E-11 | pDC_spleen |
| MKRN1             | 3.93E-16 | 1.49722647 | 0.404 | 0.032 | 1.39E-11 | pDC_spleen |
| FDFT1             | 4.01E-16 | 0.84678497 | 0.536 | 0.086 | 1.42E-11 | pDC_spleen |
| LMTK2             | 4.12E-16 | 1.82187084 | 0.497 | 0.076 | 1.46E-11 | pDC_spleen |
| DAPP1             | 4.16E-16 | 0.6489249  | 0.775 | 0.2   | 1.48E-11 | pDC_spleen |
| ARL14EP           | 4.36E-16 | 2.85846336 | 0.358 | 0.016 | 1.55E-11 | pDC_spleen |
| SLIRP             | 4.36E-16 | 1.26747582 | 0.748 | 0.205 | 1.55E-11 | pDC_spleen |
| SF3B2             | 4.46E-16 | 0.96942071 | 0.536 | 0.086 | 1.58E-11 | pDC_spleen |



|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| RPL3               | 4.68E-16 | 1.11202334 | 0.927 | 0.53  | 1.66E-11 | pDC_spleen |
| PSMC1              | 4.82E-16 | 3.19095019 | 0.358 | 0.016 | 1.71E-11 | pDC_spleen |
| SMARCE1            | 4.89E-16 | 0.68124967 | 0.536 | 0.086 | 1.73E-11 | pDC_spleen |
| ENSMMUG00000001210 | 4.90E-16 | 1.22736648 | 0.861 | 0.335 | 1.74E-11 | pDC_spleen |
| TNRC6A             | 4.99E-16 | 0.88974986 | 0.583 | 0.108 | 1.77E-11 | pDC_spleen |
| ANXA7              | 5.11E-16 | 0.71762354 | 0.636 | 0.135 | 1.81E-11 | pDC_spleen |
| SFMBT2             | 5.14E-16 | 0.91377115 | 0.669 | 0.157 | 1.82E-11 | pDC_spleen |
| NFE2L1             | 5.17E-16 | 1.17252847 | 0.47  | 0.059 | 1.83E-11 | pDC_spleen |
| ATG13              | 5.21E-16 | 1.66107079 | 0.404 | 0.032 | 1.84E-11 | pDC_spleen |
| SMARCB1            | 5.32E-16 | 2.23711652 | 0.358 | 0.016 | 1.89E-11 | pDC_spleen |
| ATP5MG             | 5.35E-16 | 1.04989194 | 0.868 | 0.276 | 1.90E-11 | pDC_spleen |
| MGST3              | 5.46E-16 | 0.7880957  | 0.603 | 0.114 | 1.93E-11 | pDC_spleen |
| SRP54              | 5.56E-16 | 1.04401014 | 0.51  | 0.076 | 1.97E-11 | pDC_spleen |
| MCUR1              | 5.61E-16 | 2.15370712 | 0.371 | 0.022 | 1.99E-11 | pDC_spleen |
| CCDC12             | 5.79E-16 | 0.87399751 | 0.623 | 0.124 | 2.05E-11 | pDC_spleen |
| ICE1               | 5.79E-16 | 2.07572109 | 0.358 | 0.016 | 2.05E-11 | pDC_spleen |
| TMTC2              | 5.81E-16 | 2.16044477 | 0.384 | 0.027 | 2.06E-11 | pDC_spleen |
| CHD3               | 5.84E-16 | 1.24430625 | 0.457 | 0.054 | 2.07E-11 | pDC_spleen |
| IFI35              | 5.84E-16 | 2.30628752 | 0.371 | 0.022 | 2.07E-11 | pDC_spleen |
| FAM162A            | 5.99E-16 | 1.18863057 | 0.47  | 0.059 | 2.12E-11 | pDC_spleen |
| RNF44              | 6.09E-16 | 2.25868311 | 0.371 | 0.022 | 2.16E-11 | pDC_spleen |
| RAN                | 6.41E-16 | 0.76097783 | 0.689 | 0.162 | 2.27E-11 | pDC_spleen |
| PER1               | 6.57E-16 | 0.21231648 | 0.636 | 0.124 | 2.33E-11 | pDC_spleen |
| TSC22D3            | 6.70E-16 | 1.4576718  | 0.523 | 0.086 | 2.37E-11 | pDC_spleen |
| MRTFA              | 6.87E-16 | 1.03811679 | 0.927 | 0.362 | 2.43E-11 | pDC_spleen |
| TNFRSF11A          | 6.98E-16 | 2.59383679 | 0.43  | 0.049 | 2.47E-11 | pDC_spleen |
| ENSMMUG00000016665 | 6.99E-16 | 1.07162315 | 0.636 | 0.135 | 2.48E-11 | pDC_spleen |
| TMSB4X             | 7.09E-16 | 1.13701798 | 0.987 | 0.843 | 2.51E-11 | pDC_spleen |
| TAPBPL             | 7.12E-16 | 1.24878962 | 0.457 | 0.054 | 2.52E-11 | pDC_spleen |
| GLUD1              | 7.22E-16 | 1.82699255 | 0.384 | 0.027 | 2.56E-11 | pDC_spleen |
| UBA3               | 7.47E-16 | 2.16136057 | 0.424 | 0.043 | 2.65E-11 | pDC_spleen |
| PLCL1              | 7.48E-16 | 2.37975849 | 0.57  | 0.141 | 2.65E-11 | pDC_spleen |
| ITGA4              | 7.51E-16 | 1.33399746 | 0.768 | 0.243 | 2.66E-11 | pDC_spleen |

|                     |          |            |       |       |          |            |
|---------------------|----------|------------|-------|-------|----------|------------|
| PPM1G               | 7.59E-16 | 1.34711515 | 0.49  | 0.07  | 2.69E-11 | pDC_spleen |
| CCT4                | 7.60E-16 | 0.90496794 | 0.616 | 0.124 | 2.69E-11 | pDC_spleen |
| VDAC1               | 8.07E-16 | 0.93255269 | 0.563 | 0.103 | 2.86E-11 | pDC_spleen |
| KCNQ5               | 8.15E-16 | 2.3536382  | 0.437 | 0.054 | 2.89E-11 | pDC_spleen |
| OFD1                | 8.15E-16 | 2.13585842 | 0.384 | 0.027 | 2.89E-11 | pDC_spleen |
| MYO6                | 8.16E-16 | 3.12349671 | 0.364 | 0.022 | 2.89E-11 | pDC_spleen |
| ST8SIA1             | 8.23E-16 | 4.74906768 | 0.358 | 0.022 | 2.92E-11 | pDC_spleen |
| ENSMMUG00000004545  | 8.28E-16 | 0.89562083 | 0.795 | 0.227 | 2.93E-11 | pDC_spleen |
| TAX1BP1             | 8.47E-16 | 0.6625732  | 0.762 | 0.189 | 3.00E-11 | pDC_spleen |
| SEL1L3              | 8.88E-16 | 3.42552098 | 0.351 | 0.016 | 3.15E-11 | pDC_spleen |
| FBXW7               | 8.89E-16 | 0.81239356 | 0.788 | 0.238 | 3.15E-11 | pDC_spleen |
| ACLY                | 8.98E-16 | 1.63679385 | 0.397 | 0.032 | 3.18E-11 | pDC_spleen |
| PPP1CC              | 8.98E-16 | 0.8756399  | 0.483 | 0.065 | 3.18E-11 | pDC_spleen |
| DCTN3               | 8.99E-16 | 1.44299436 | 0.483 | 0.07  | 3.19E-11 | pDC_spleen |
| ING2                | 9.08E-16 | 6.19287548 | 0.305 | 0     | 3.22E-11 | pDC_spleen |
| PCDH9               | 9.08E-16 | 8.53179116 | 0.305 | 0     | 3.22E-11 | pDC_spleen |
| TTC5                | 9.10E-16 | 3.06354186 | 0.338 | 0.011 | 3.22E-11 | pDC_spleen |
| PDCD10              | 9.19E-16 | 1.10776377 | 0.576 | 0.108 | 3.26E-11 | pDC_spleen |
| ATP5PF              | 9.51E-16 | 0.9880666  | 0.656 | 0.151 | 3.37E-11 | pDC_spleen |
| SETD3               | 9.65E-16 | 1.58348298 | 0.437 | 0.049 | 3.42E-11 | pDC_spleen |
| TUBA1A              | 9.67E-16 | 1.07822039 | 0.874 | 0.297 | 3.43E-11 | pDC_spleen |
| LPCAT1              | 9.82E-16 | 0.63533655 | 0.57  | 0.103 | 3.48E-11 | pDC_spleen |
| CDC5L               | 1.00E-15 | 0.95818369 | 0.477 | 0.065 | 3.55E-11 | pDC_spleen |
| ERGIC2              | 1.01E-15 | 1.18594806 | 0.536 | 0.092 | 3.57E-11 | pDC_spleen |
| EEF1B2              | 1.01E-15 | 1.00556258 | 0.881 | 0.324 | 3.58E-11 | pDC_spleen |
| COPS8               | 1.02E-15 | 1.26657228 | 0.424 | 0.043 | 3.60E-11 | pDC_spleen |
| PKD1L1              | 1.02E-15 | 2.70266221 | 0.417 | 0.043 | 3.60E-11 | pDC_spleen |
| EIF1B               | 1.03E-15 | 0.71135577 | 0.596 | 0.114 | 3.67E-11 | pDC_spleen |
| UBE2G2              | 1.04E-15 | 1.64263539 | 0.411 | 0.038 | 3.70E-11 | pDC_spleen |
| GCC2                | 1.08E-15 | 0.9106033  | 0.543 | 0.092 | 3.83E-11 | pDC_spleen |
| ENSMMUG000000064139 | 1.13E-15 | 0.94895656 | 0.987 | 0.422 | 4.01E-11 | pDC_spleen |
| ZNF532              | 1.14E-15 | 1.75376339 | 0.411 | 0.038 | 4.05E-11 | pDC_spleen |
| HECA                | 1.22E-15 | 1.35858418 | 0.497 | 0.076 | 4.31E-11 | pDC_spleen |

|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| ENSMMUG00000063979 | 1.24E-15 | 2.42459513 | 0.364 | 0.022 | 4.38E-11 | pDC_spleen |
| RTF1               | 1.25E-15 | 1.07406315 | 0.464 | 0.059 | 4.42E-11 | pDC_spleen |
| SLAIN2             | 1.31E-15 | 2.66915351 | 0.364 | 0.022 | 4.63E-11 | pDC_spleen |
| ENSMMUG00000055584 | 1.34E-15 | 1.13697013 | 0.927 | 0.389 | 4.75E-11 | pDC_spleen |
| SNRPD1             | 1.36E-15 | 1.89189657 | 0.47  | 0.065 | 4.81E-11 | pDC_spleen |
| CTCF               | 1.36E-15 | 0.79449571 | 0.477 | 0.065 | 4.84E-11 | pDC_spleen |
| ENSMMUG00000056793 | 1.39E-15 | 0.95140894 | 0.775 | 0.222 | 4.91E-11 | pDC_spleen |
| ENSMMUG00000054069 | 1.39E-15 | 4.13594952 | 0.318 | 0.005 | 4.93E-11 | pDC_spleen |
| TAF10              | 1.39E-15 | 4.13826683 | 0.318 | 0.005 | 4.93E-11 | pDC_spleen |
| RPAP2              | 1.40E-15 | 1.70461056 | 0.43  | 0.049 | 4.97E-11 | pDC_spleen |
| PSMD2              | 1.42E-15 | 0.91139393 | 0.424 | 0.043 | 5.02E-11 | pDC_spleen |
| LANCL2             | 1.43E-15 | 1.21429044 | 0.437 | 0.049 | 5.05E-11 | pDC_spleen |
| ENSMMUG00000062545 | 1.43E-15 | 2.99020843 | 0.318 | 0.005 | 5.08E-11 | pDC_spleen |
| TFCP2              | 1.46E-15 | 1.80815318 | 0.43  | 0.049 | 5.16E-11 | pDC_spleen |
| HBA                | 1.46E-15 | 1.30601616 | 0.377 | 0.027 | 5.17E-11 | pDC_spleen |
| UGCG               | 1.53E-15 | 0.57581452 | 0.563 | 0.103 | 5.42E-11 | pDC_spleen |
| TNRC6B             | 1.54E-15 | 0.67285946 | 0.854 | 0.276 | 5.47E-11 | pDC_spleen |
| RABGAP1L           | 1.58E-15 | 1.52837682 | 0.894 | 0.465 | 5.58E-11 | pDC_spleen |
| ATP6V1G1           | 1.59E-15 | 0.87663666 | 0.834 | 0.27  | 5.63E-11 | pDC_spleen |
| RPL22              | 1.60E-15 | 1.05017991 | 0.94  | 0.422 | 5.67E-11 | pDC_spleen |
| ATP5MC3            | 1.71E-15 | 1.22599661 | 0.669 | 0.173 | 6.07E-11 | pDC_spleen |
| ENSMMUG00000005593 | 1.73E-15 | 0.88108814 | 0.98  | 0.443 | 6.11E-11 | pDC_spleen |
| HNRNPA1            | 1.73E-15 | 0.87325522 | 0.742 | 0.195 | 6.14E-11 | pDC_spleen |
| PTPRA              | 1.73E-15 | 0.44625835 | 0.642 | 0.135 | 6.14E-11 | pDC_spleen |
| LMAN2              | 1.74E-15 | 0.69153103 | 0.53  | 0.086 | 6.15E-11 | pDC_spleen |
| MED13L             | 1.74E-15 | 1.34073632 | 0.974 | 0.53  | 6.15E-11 | pDC_spleen |
| ENSMMUG00000018740 | 1.75E-15 | 0.64916022 | 0.636 | 0.135 | 6.21E-11 | pDC_spleen |
| RNASEH1            | 1.77E-15 | 1.92775123 | 0.417 | 0.043 | 6.26E-11 | pDC_spleen |
| RNF5               | 1.78E-15 | 1.61809784 | 0.417 | 0.043 | 6.30E-11 | pDC_spleen |
| ACOT9              | 1.79E-15 | 2.54956525 | 0.377 | 0.027 | 6.34E-11 | pDC_spleen |
| RNF121             | 1.80E-15 | 2.4721646  | 0.358 | 0.022 | 6.36E-11 | pDC_spleen |
| MTMR12             | 1.81E-15 | 1.88103386 | 0.391 | 0.032 | 6.41E-11 | pDC_spleen |
| RPL18              | 1.84E-15 | 0.95056415 | 0.934 | 0.476 | 6.51E-11 | pDC_spleen |

|                   |          |            |       |       |          |            |
|-------------------|----------|------------|-------|-------|----------|------------|
| HTT               | 1.84E-15 | 0.40133383 | 0.682 | 0.157 | 6.52E-11 | pDC_spleen |
| TRPC4AP           | 1.85E-15 | 0.4168462  | 0.589 | 0.114 | 6.55E-11 | pDC_spleen |
| ANAPC13           | 1.86E-15 | 2.37372579 | 0.417 | 0.043 | 6.59E-11 | pDC_spleen |
| RALBP1            | 1.89E-15 | 1.78110562 | 0.444 | 0.054 | 6.69E-11 | pDC_spleen |
| RRM2B             | 1.91E-15 | 1.60588841 | 0.377 | 0.027 | 6.78E-11 | pDC_spleen |
| SNRPD3            | 1.92E-15 | 0.93512083 | 0.709 | 0.173 | 6.82E-11 | pDC_spleen |
| SECISBP2L         | 2.03E-15 | 1.48984167 | 0.404 | 0.038 | 7.18E-11 | pDC_spleen |
| SFSWAP            | 2.04E-15 | 0.80621908 | 0.477 | 0.065 | 7.23E-11 | pDC_spleen |
| LRCH1             | 2.04E-15 | 1.05513557 | 0.702 | 0.189 | 7.24E-11 | pDC_spleen |
| SMARCA2           | 2.11E-15 | 0.33665023 | 0.649 | 0.141 | 7.48E-11 | pDC_spleen |
| PDE1A             | 2.13E-15 | 0.90157148 | 0.377 | 0.027 | 7.55E-11 | pDC_spleen |
| FAU               | 2.16E-15 | 0.94376435 | 0.94  | 0.486 | 7.65E-11 | pDC_spleen |
| MAF1              | 2.18E-15 | 1.51431959 | 0.404 | 0.038 | 7.71E-11 | pDC_spleen |
| WTAP              | 2.27E-15 | 0.86945772 | 0.954 | 0.362 | 8.03E-11 | pDC_spleen |
| CLPTM1            | 2.28E-15 | 1.01703081 | 0.563 | 0.103 | 8.09E-11 | pDC_spleen |
| CNBP              | 2.29E-15 | 0.88936319 | 0.722 | 0.184 | 8.11E-11 | pDC_spleen |
| ST6GALNAC3        | 2.33E-15 | 5.42741337 | 0.344 | 0.022 | 8.27E-11 | pDC_spleen |
| RACK1             | 2.43E-15 | 1.08095367 | 0.934 | 0.53  | 8.61E-11 | pDC_spleen |
| DNAJC13           | 2.45E-15 | 0.94590697 | 0.391 | 0.032 | 8.68E-11 | pDC_spleen |
| H4C15             | 2.51E-15 | 1.32607376 | 0.483 | 0.07  | 8.88E-11 | pDC_spleen |
| ENSMUG00000003854 | 2.53E-15 | 2.95752466 | 0.344 | 0.016 | 8.96E-11 | pDC_spleen |
| PSMD14            | 2.62E-15 | 0.6304087  | 0.596 | 0.119 | 9.29E-11 | pDC_spleen |
| TRAM1             | 2.66E-15 | 1.22228903 | 0.47  | 0.065 | 9.43E-11 | pDC_spleen |
| SLC30A9           | 2.67E-15 | 0.42599732 | 0.563 | 0.103 | 9.45E-11 | pDC_spleen |
| MRPL57            | 2.67E-15 | 1.66179142 | 0.503 | 0.081 | 9.48E-11 | pDC_spleen |
| ATP5PO            | 2.70E-15 | 1.01892289 | 0.728 | 0.2   | 9.55E-11 | pDC_spleen |
| KCNK5             | 2.75E-15 | 2.43103816 | 0.344 | 0.016 | 9.75E-11 | pDC_spleen |
| RAMP1             | 2.76E-15 | 0.68515735 | 0.543 | 0.103 | 9.76E-11 | pDC_spleen |
| ZNF706            | 2.82E-15 | 0.79009397 | 0.609 | 0.13  | 9.98E-11 | pDC_spleen |
| TRA2A             | 2.84E-15 | 0.83076509 | 0.901 | 0.341 | 1.01E-10 | pDC_spleen |
| PSMB3             | 2.86E-15 | 1.0094434  | 0.523 | 0.086 | 1.01E-10 | pDC_spleen |
| AATF              | 2.91E-15 | 1.00688498 | 0.457 | 0.059 | 1.03E-10 | pDC_spleen |
| ERP29             | 2.93E-15 | 1.48242457 | 0.47  | 0.065 | 1.04E-10 | pDC_spleen |

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|-------------------|----------|------------|-------|-------|----------|------------|
| ZNF43             | 2.95E-15 | 0.98009801 | 0.457 | 0.059 | 1.04E-10 | pDC_spleen |
| SRSF7             | 2.97E-15 | 0.74816234 | 0.854 | 0.265 | 1.05E-10 | pDC_spleen |
| PRMT1             | 2.97E-15 | 1.38811026 | 0.517 | 0.086 | 1.05E-10 | pDC_spleen |
| SETBP1            | 3.05E-15 | 0.82148388 | 0.669 | 0.162 | 1.08E-10 | pDC_spleen |
| HIST1H2BK         | 3.06E-15 | 1.18351435 | 0.457 | 0.059 | 1.08E-10 | pDC_spleen |
| SPCS1             | 3.06E-15 | 1.07933991 | 0.57  | 0.108 | 1.08E-10 | pDC_spleen |
| SHROOM3           | 3.07E-15 | 1.88417242 | 0.397 | 0.038 | 1.09E-10 | pDC_spleen |
| UBA52             | 3.11E-15 | 0.98168422 | 0.96  | 0.503 | 1.10E-10 | pDC_spleen |
| SAP18             | 3.15E-15 | 1.38050442 | 0.596 | 0.124 | 1.12E-10 | pDC_spleen |
| CYRIA             | 3.17E-15 | 0.94730822 | 0.901 | 0.33  | 1.12E-10 | pDC_spleen |
| ASPH              | 3.18E-15 | 1.94841487 | 0.411 | 0.043 | 1.13E-10 | pDC_spleen |
| RBIS              | 3.21E-15 | 1.09801063 | 0.675 | 0.168 | 1.14E-10 | pDC_spleen |
| PSMD4             | 3.25E-15 | 1.47549532 | 0.51  | 0.086 | 1.15E-10 | pDC_spleen |
| EMC6              | 3.37E-15 | 2.23177913 | 0.371 | 0.027 | 1.19E-10 | pDC_spleen |
| PCMTD1            | 3.41E-15 | 0.37752938 | 0.656 | 0.141 | 1.21E-10 | pDC_spleen |
| RDX               | 3.45E-15 | 1.89356802 | 0.397 | 0.038 | 1.22E-10 | pDC_spleen |
| PHF3              | 3.48E-15 | 0.4392265  | 0.563 | 0.103 | 1.23E-10 | pDC_spleen |
| TTBK2             | 3.65E-15 | 1.83874943 | 0.411 | 0.043 | 1.29E-10 | pDC_spleen |
| RBBP6             | 3.66E-15 | 0.27694534 | 0.497 | 0.076 | 1.30E-10 | pDC_spleen |
| RSRC2             | 3.69E-15 | 0.6318158  | 0.675 | 0.162 | 1.31E-10 | pDC_spleen |
| MBNL2             | 3.71E-15 | 1.11305081 | 0.556 | 0.103 | 1.31E-10 | pDC_spleen |
| CPSF3             | 3.73E-15 | 1.36413553 | 0.358 | 0.022 | 1.32E-10 | pDC_spleen |
| RPS26             | 3.76E-15 | 0.99287401 | 0.96  | 0.508 | 1.33E-10 | pDC_spleen |
| ATF6B             | 3.81E-15 | 1.44751863 | 0.424 | 0.049 | 1.35E-10 | pDC_spleen |
| ENSMUG00000022489 | 3.84E-15 | 0.79884687 | 0.742 | 0.189 | 1.36E-10 | pDC_spleen |
| MAPK1             | 3.87E-15 | 0.5441751  | 0.556 | 0.103 | 1.37E-10 | pDC_spleen |
| ATG12             | 3.88E-15 | 0.52876504 | 0.656 | 0.141 | 1.38E-10 | pDC_spleen |
| TINF2             | 3.90E-15 | 0.92428107 | 0.722 | 0.184 | 1.38E-10 | pDC_spleen |
| GOLGB1            | 3.97E-15 | 1.18087257 | 0.45  | 0.059 | 1.41E-10 | pDC_spleen |
| TAF7              | 4.00E-15 | 0.62889913 | 0.576 | 0.114 | 1.42E-10 | pDC_spleen |
| RPL10             | 4.03E-15 | 0.97922929 | 0.967 | 0.573 | 1.43E-10 | pDC_spleen |
| H2AFY             | 4.27E-15 | 1.01251184 | 0.795 | 0.249 | 1.51E-10 | pDC_spleen |
| DDT               | 4.29E-15 | 2.07088251 | 0.464 | 0.07  | 1.52E-10 | pDC_spleen |

|                   |          |            |       |       |          |            |
|-------------------|----------|------------|-------|-------|----------|------------|
| KIF13A            | 4.38E-15 | 1.3077156  | 0.536 | 0.103 | 1.55E-10 | pDC_spleen |
| KDEL2             | 4.39E-15 | 0.79353844 | 0.675 | 0.162 | 1.55E-10 | pDC_spleen |
| ACTR3B            | 4.39E-15 | 1.35105805 | 0.596 | 0.135 | 1.56E-10 | pDC_spleen |
| RPL39             | 4.42E-15 | 0.91069748 | 0.94  | 0.411 | 1.57E-10 | pDC_spleen |
| CSNK2A1           | 4.58E-15 | 0.55234244 | 0.629 | 0.135 | 1.62E-10 | pDC_spleen |
| PRDM16            | 4.60E-15 | 9.13836967 | 0.291 | 0     | 1.63E-10 | pDC_spleen |
| KHDRBS3           | 4.60E-15 | 7.77658907 | 0.291 | 0     | 1.63E-10 | pDC_spleen |
| ITGB4             | 4.60E-15 | 7.26821768 | 0.291 | 0     | 1.63E-10 | pDC_spleen |
| RBMS3             | 4.62E-15 | 7.0121896  | 0.305 | 0.005 | 1.64E-10 | pDC_spleen |
| SPCS3             | 4.64E-15 | 0.84249507 | 0.589 | 0.119 | 1.64E-10 | pDC_spleen |
| GALNT2            | 4.70E-15 | 1.14425199 | 0.437 | 0.054 | 1.67E-10 | pDC_spleen |
| TAF15             | 4.71E-15 | 0.45261573 | 0.715 | 0.173 | 1.67E-10 | pDC_spleen |
| APOBEC3F          | 4.71E-15 | 1.13610427 | 0.45  | 0.059 | 1.67E-10 | pDC_spleen |
| EDEM3             | 4.72E-15 | 1.96180812 | 0.384 | 0.032 | 1.67E-10 | pDC_spleen |
| IWS1              | 4.76E-15 | 1.31328528 | 0.437 | 0.054 | 1.69E-10 | pDC_spleen |
| EIF5              | 4.82E-15 | 0.82563607 | 0.907 | 0.297 | 1.71E-10 | pDC_spleen |
| SDC4              | 4.89E-15 | 1.4397091  | 0.424 | 0.049 | 1.73E-10 | pDC_spleen |
| MGAT1             | 4.95E-15 | 1.41552546 | 0.397 | 0.038 | 1.75E-10 | pDC_spleen |
| BTF3              | 5.10E-15 | 0.86703098 | 0.788 | 0.238 | 1.81E-10 | pDC_spleen |
| DCK               | 5.14E-15 | 1.06148865 | 0.603 | 0.135 | 1.82E-10 | pDC_spleen |
| EIF1AX            | 5.14E-15 | 0.79046919 | 0.649 | 0.151 | 1.82E-10 | pDC_spleen |
| CHMP5             | 5.25E-15 | 1.34377068 | 0.45  | 0.059 | 1.86E-10 | pDC_spleen |
| ZNF22             | 5.25E-15 | 1.36382303 | 0.437 | 0.054 | 1.86E-10 | pDC_spleen |
| IP6K2             | 5.38E-15 | 2.32690092 | 0.364 | 0.027 | 1.91E-10 | pDC_spleen |
| SMCHD1            | 5.39E-15 | 0.74175882 | 0.689 | 0.178 | 1.91E-10 | pDC_spleen |
| PPM1K             | 5.48E-15 | 2.57282181 | 0.338 | 0.016 | 1.94E-10 | pDC_spleen |
| ENSMUG00000006803 | 5.49E-15 | 0.82743307 | 0.596 | 0.124 | 1.95E-10 | pDC_spleen |
| MRPL32            | 5.55E-15 | 2.26970981 | 0.351 | 0.022 | 1.97E-10 | pDC_spleen |
| USP22             | 5.55E-15 | 0.75707912 | 0.397 | 0.038 | 1.97E-10 | pDC_spleen |
| TENM2             | 5.61E-15 | 6.00626159 | 0.305 | 0.005 | 1.99E-10 | pDC_spleen |
| SLC41A1           | 5.62E-15 | 1.14973861 | 0.609 | 0.135 | 1.99E-10 | pDC_spleen |
| ATXN2             | 5.62E-15 | 0.51862942 | 0.801 | 0.222 | 1.99E-10 | pDC_spleen |
| TOB1              | 5.65E-15 | 1.70497325 | 0.377 | 0.032 | 2.00E-10 | pDC_spleen |

|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| PPM1J              | 5.68E-15 | 2.51123967 | 0.364 | 0.027 | 2.01E-10 | pDC_spleen |
| GTPBP1             | 5.82E-15 | 0.64084244 | 0.629 | 0.141 | 2.06E-10 | pDC_spleen |
| NT5C3A             | 5.86E-15 | 1.95915433 | 0.351 | 0.022 | 2.08E-10 | pDC_spleen |
| MAP4K5             | 5.88E-15 | 2.30732848 | 0.338 | 0.016 | 2.08E-10 | pDC_spleen |
| ATXN10             | 5.90E-15 | 0.8485174  | 0.642 | 0.146 | 2.09E-10 | pDC_spleen |
| CNIH1              | 5.94E-15 | 2.52900836 | 0.351 | 0.022 | 2.11E-10 | pDC_spleen |
| ZFR                | 6.03E-15 | 0.52607854 | 0.583 | 0.114 | 2.14E-10 | pDC_spleen |
| NDUFB5             | 6.07E-15 | 1.9448911  | 0.404 | 0.043 | 2.15E-10 | pDC_spleen |
| DDX17              | 6.17E-15 | 0.23221162 | 0.848 | 0.232 | 2.19E-10 | pDC_spleen |
| PFDN5              | 6.20E-15 | 0.85103325 | 0.656 | 0.151 | 2.20E-10 | pDC_spleen |
| ENSMMUG00000011459 | 6.27E-15 | 0.39521366 | 0.503 | 0.081 | 2.22E-10 | pDC_spleen |
| UBE2G1             | 6.47E-15 | 0.65292552 | 0.623 | 0.135 | 2.29E-10 | pDC_spleen |
| SMAD2              | 6.52E-15 | 1.40207869 | 0.45  | 0.059 | 2.31E-10 | pDC_spleen |
| GTDC1              | 6.62E-15 | 1.13400376 | 0.675 | 0.173 | 2.35E-10 | pDC_spleen |
| EDARADD            | 6.67E-15 | 2.83195232 | 0.364 | 0.027 | 2.36E-10 | pDC_spleen |
| ATP6V1FNB          | 6.76E-15 | 0.76426586 | 0.669 | 0.168 | 2.40E-10 | pDC_spleen |
| YJEFN3             | 6.82E-15 | 1.28362808 | 0.51  | 0.086 | 2.41E-10 | pDC_spleen |
| ATRX               | 6.85E-15 | 0.62897877 | 0.821 | 0.243 | 2.43E-10 | pDC_spleen |
| PSMD1              | 6.89E-15 | 0.8349531  | 0.51  | 0.086 | 2.44E-10 | pDC_spleen |
| REST               | 6.94E-15 | 1.96064775 | 0.364 | 0.027 | 2.46E-10 | pDC_spleen |
| ENSMMUG00000011776 | 6.97E-15 | 1.28080819 | 0.51  | 0.086 | 2.47E-10 | pDC_spleen |
| UBQLN1             | 7.01E-15 | 0.97753582 | 0.424 | 0.049 | 2.48E-10 | pDC_spleen |
| CWC15              | 7.04E-15 | 0.72366777 | 0.589 | 0.119 | 2.49E-10 | pDC_spleen |
| PSMD7              | 7.04E-15 | 1.59255629 | 0.47  | 0.07  | 2.50E-10 | pDC_spleen |
| LIMD2              | 7.07E-15 | 0.90446986 | 0.589 | 0.124 | 2.51E-10 | pDC_spleen |
| EEF1E1             | 7.09E-15 | 0.80473758 | 0.45  | 0.059 | 2.51E-10 | pDC_spleen |
| LSM5               | 7.33E-15 | 1.47098918 | 0.464 | 0.065 | 2.60E-10 | pDC_spleen |
| ARF6               | 7.36E-15 | 0.74501134 | 0.556 | 0.103 | 2.61E-10 | pDC_spleen |
| TAF2               | 7.42E-15 | 0.58523742 | 0.464 | 0.065 | 2.63E-10 | pDC_spleen |
| RTF2               | 7.78E-15 | 0.83848467 | 0.503 | 0.081 | 2.76E-10 | pDC_spleen |
| SEC24B             | 7.83E-15 | 0.58263551 | 0.722 | 0.184 | 2.77E-10 | pDC_spleen |
| IGSF8              | 8.04E-15 | 2.36847191 | 0.411 | 0.049 | 2.85E-10 | pDC_spleen |
| RALY               | 8.12E-15 | 0.28517909 | 0.788 | 0.205 | 2.88E-10 | pDC_spleen |

|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| MACF1              | 8.22E-15 | 0.90401047 | 0.868 | 0.308 | 2.91E-10 | pDC_spleen |
| POMP               | 8.36E-15 | 0.79648697 | 0.669 | 0.157 | 2.96E-10 | pDC_spleen |
| EXOC6              | 8.49E-15 | 1.07632993 | 0.662 | 0.173 | 3.01E-10 | pDC_spleen |
| ENSMMUG00000010647 | 8.99E-15 | 1.51508101 | 0.483 | 0.076 | 3.18E-10 | pDC_spleen |
| AMMECR1            | 9.09E-15 | 3.42357889 | 0.318 | 0.011 | 3.22E-10 | pDC_spleen |
| LUC7L3             | 9.19E-15 | 0.50117695 | 0.642 | 0.146 | 3.26E-10 | pDC_spleen |
| IFFO2              | 9.21E-15 | 1.67569112 | 0.404 | 0.043 | 3.26E-10 | pDC_spleen |
| SNX5               | 9.22E-15 | 0.80838286 | 0.536 | 0.097 | 3.27E-10 | pDC_spleen |
| PHF14              | 9.23E-15 | 0.59089617 | 0.603 | 0.124 | 3.27E-10 | pDC_spleen |
| MRPL34             | 9.34E-15 | 1.3035773  | 0.523 | 0.092 | 3.31E-10 | pDC_spleen |
| ENSMMUG00000013492 | 9.43E-15 | 2.1076082  | 0.377 | 0.032 | 3.34E-10 | pDC_spleen |
| RYBP               | 9.74E-15 | 0.72105845 | 0.695 | 0.173 | 3.45E-10 | pDC_spleen |
| PPP2R1A            | 9.77E-15 | 0.72967023 | 0.49  | 0.076 | 3.46E-10 | pDC_spleen |
| RPL27              | 9.85E-15 | 0.85684424 | 0.947 | 0.416 | 3.49E-10 | pDC_spleen |
| C1GALT1            | 9.89E-15 | 1.11844939 | 0.543 | 0.103 | 3.50E-10 | pDC_spleen |
| CLCN7              | 1.02E-14 | 0.45861876 | 0.464 | 0.065 | 3.62E-10 | pDC_spleen |
| PCNP               | 1.03E-14 | 0.24303103 | 0.53  | 0.092 | 3.64E-10 | pDC_spleen |
| TRADD              | 1.04E-14 | 3.66777109 | 0.331 | 0.016 | 3.69E-10 | pDC_spleen |
| C1H1orf35          | 1.05E-14 | 1.1341869  | 0.364 | 0.027 | 3.72E-10 | pDC_spleen |
| OTULIN             | 1.05E-14 | 1.07338077 | 0.536 | 0.103 | 3.72E-10 | pDC_spleen |
| U2SURP             | 1.10E-14 | 0.48034135 | 0.669 | 0.157 | 3.89E-10 | pDC_spleen |
| DDX46              | 1.10E-14 | 0.84517804 | 0.556 | 0.108 | 3.90E-10 | pDC_spleen |
| MME                | 1.11E-14 | 6.08923506 | 0.298 | 0.005 | 3.93E-10 | pDC_spleen |
| TEDC1              | 1.13E-14 | 2.24834879 | 0.344 | 0.022 | 4.00E-10 | pDC_spleen |
| KLHL23             | 1.14E-14 | 0.90007615 | 0.669 | 0.168 | 4.05E-10 | pDC_spleen |
| PMAIP1             | 1.15E-14 | 0.75616241 | 0.629 | 0.151 | 4.08E-10 | pDC_spleen |
| TTLL5              | 1.17E-14 | 1.4976616  | 0.444 | 0.059 | 4.14E-10 | pDC_spleen |
| ACIN1              | 1.18E-14 | 0.42902256 | 0.695 | 0.168 | 4.19E-10 | pDC_spleen |
| QARS1              | 1.18E-14 | 1.3428332  | 0.444 | 0.059 | 4.19E-10 | pDC_spleen |
| STK17B             | 1.20E-14 | 0.7978072  | 0.861 | 0.319 | 4.25E-10 | pDC_spleen |
| LLPH               | 1.21E-14 | 1.32237788 | 0.45  | 0.065 | 4.27E-10 | pDC_spleen |
| EHMT1              | 1.21E-14 | 0.38884761 | 0.642 | 0.146 | 4.27E-10 | pDC_spleen |
| NAA25              | 1.22E-14 | 1.27499504 | 0.45  | 0.065 | 4.32E-10 | pDC_spleen |



|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| SNX14              | 1.25E-14 | 0.32245069 | 0.629 | 0.141 | 4.44E-10 | pDC_spleen |
| CSNK2B             | 1.26E-14 | 0.63424468 | 0.523 | 0.092 | 4.47E-10 | pDC_spleen |
| C1D                | 1.29E-14 | 1.02591807 | 0.377 | 0.032 | 4.56E-10 | pDC_spleen |
| ZMYND8             | 1.30E-14 | 0.66834923 | 0.603 | 0.13  | 4.61E-10 | pDC_spleen |
| DCAF5              | 1.31E-14 | 0.87544723 | 0.536 | 0.103 | 4.63E-10 | pDC_spleen |
| SLC25A3            | 1.31E-14 | 0.7714415  | 0.788 | 0.227 | 4.64E-10 | pDC_spleen |
| PAOX               | 1.31E-14 | 1.02715034 | 0.43  | 0.054 | 4.66E-10 | pDC_spleen |
| KLF4               | 1.32E-14 | 0.91306756 | 0.609 | 0.141 | 4.68E-10 | pDC_spleen |
| TNFRSF11B          | 1.33E-14 | 5.20724128 | 0.298 | 0.005 | 4.70E-10 | pDC_spleen |
| RRAD               | 1.33E-14 | 1.55140599 | 0.424 | 0.054 | 4.72E-10 | pDC_spleen |
| ENSMMUG00000050385 | 1.35E-14 | 1.13411886 | 0.424 | 0.054 | 4.78E-10 | pDC_spleen |
| MRPS15             | 1.37E-14 | 1.38721485 | 0.444 | 0.059 | 4.84E-10 | pDC_spleen |
| RBM33              | 1.39E-14 | 0.58949802 | 0.589 | 0.124 | 4.93E-10 | pDC_spleen |
| PSMA5              | 1.43E-14 | 0.75376342 | 0.536 | 0.103 | 5.05E-10 | pDC_spleen |
| NDUF3AF3           | 1.50E-14 | 2.71032877 | 0.358 | 0.027 | 5.32E-10 | pDC_spleen |
| ATL3               | 1.50E-14 | 0.20641847 | 0.417 | 0.049 | 5.32E-10 | pDC_spleen |
| MEX3C              | 1.51E-14 | 4.01041503 | 0.311 | 0.011 | 5.37E-10 | pDC_spleen |
| ST7L               | 1.52E-14 | 1.34136685 | 0.417 | 0.049 | 5.39E-10 | pDC_spleen |
| KIAA0930           | 1.54E-14 | 1.73373159 | 0.371 | 0.032 | 5.46E-10 | pDC_spleen |
| BUB3               | 1.54E-14 | 2.78960882 | 0.344 | 0.022 | 5.47E-10 | pDC_spleen |
| ENSMMUG00000051440 | 1.58E-14 | 1.86682227 | 0.371 | 0.032 | 5.61E-10 | pDC_spleen |
| SRSF11             | 1.60E-14 | 0.86722596 | 0.887 | 0.314 | 5.67E-10 | pDC_spleen |
| RPSA               | 1.65E-14 | 0.96805037 | 0.947 | 0.514 | 5.84E-10 | pDC_spleen |
| PAPOLA             | 1.71E-14 | 0.51242607 | 0.742 | 0.195 | 6.06E-10 | pDC_spleen |
| WWP2               | 1.74E-14 | 1.01731683 | 0.457 | 0.065 | 6.16E-10 | pDC_spleen |
| VDAC2              | 1.74E-14 | 0.77075274 | 0.854 | 0.286 | 6.16E-10 | pDC_spleen |
| RPL34              | 1.75E-14 | 0.91345001 | 0.947 | 0.492 | 6.19E-10 | pDC_spleen |
| IPPK               | 1.76E-14 | 1.64569288 | 0.371 | 0.032 | 6.22E-10 | pDC_spleen |
| BNIP3L             | 1.76E-14 | 0.45138212 | 0.609 | 0.135 | 6.25E-10 | pDC_spleen |
| MYO9A              | 1.78E-14 | 0.52733251 | 0.623 | 0.141 | 6.29E-10 | pDC_spleen |
| ATXN7L3B           | 1.81E-14 | 0.53123278 | 0.47  | 0.07  | 6.41E-10 | pDC_spleen |
| SYF2               | 1.82E-14 | 0.71616106 | 0.523 | 0.092 | 6.44E-10 | pDC_spleen |
| DSTN               | 1.84E-14 | 1.4689296  | 0.55  | 0.114 | 6.51E-10 | pDC_spleen |

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|--------------------|----------|------------|-------|-------|----------|------------|
| BTBD1              | 1.85E-14 | 1.38478153 | 0.371 | 0.032 | 6.55E-10 | pDC_spleen |
| JTB                | 1.85E-14 | 1.19134251 | 0.47  | 0.07  | 6.56E-10 | pDC_spleen |
| CRIP1              | 1.86E-14 | 0.53043175 | 0.709 | 0.195 | 6.59E-10 | pDC_spleen |
| VPS26C             | 1.88E-14 | 1.9602983  | 0.358 | 0.027 | 6.67E-10 | pDC_spleen |
| LMO4               | 1.89E-14 | 2.79167248 | 0.364 | 0.032 | 6.69E-10 | pDC_spleen |
| CCT5               | 1.89E-14 | 0.9747396  | 0.517 | 0.092 | 6.69E-10 | pDC_spleen |
| RASSF2             | 1.89E-14 | 0.37228863 | 0.669 | 0.157 | 6.71E-10 | pDC_spleen |
| COX5B              | 1.91E-14 | 1.03639694 | 0.662 | 0.168 | 6.77E-10 | pDC_spleen |
| NDUFA1             | 1.92E-14 | 0.68614482 | 0.795 | 0.222 | 6.82E-10 | pDC_spleen |
| ENSMMUG00000052747 | 1.93E-14 | 0.80842856 | 0.742 | 0.216 | 6.85E-10 | pDC_spleen |
| CLASP1             | 1.96E-14 | 0.58945629 | 0.682 | 0.168 | 6.96E-10 | pDC_spleen |
| EFCAB2             | 1.99E-14 | 0.88265209 | 0.55  | 0.108 | 7.04E-10 | pDC_spleen |
| STAMBPL1           | 1.99E-14 | 0.9149904  | 0.589 | 0.13  | 7.04E-10 | pDC_spleen |
| SERP1              | 1.99E-14 | 3.4530229  | 0.311 | 0.011 | 7.05E-10 | pDC_spleen |
| ATP11B             | 2.01E-14 | 0.43330262 | 0.483 | 0.076 | 7.11E-10 | pDC_spleen |
| DLD                | 2.03E-14 | 0.53112256 | 0.49  | 0.081 | 7.20E-10 | pDC_spleen |
| SNU13              | 2.03E-14 | 0.62110928 | 0.583 | 0.119 | 7.20E-10 | pDC_spleen |
| VCAM1              | 2.05E-14 | 3.03534452 | 0.311 | 0.011 | 7.25E-10 | pDC_spleen |
| SIAH2              | 2.12E-14 | 1.01483998 | 0.437 | 0.059 | 7.50E-10 | pDC_spleen |
| SRSF10             | 2.13E-14 | 0.48479242 | 0.649 | 0.151 | 7.56E-10 | pDC_spleen |
| ATL2               | 2.14E-14 | 1.44418832 | 0.397 | 0.043 | 7.57E-10 | pDC_spleen |
| RNF114             | 2.16E-14 | 0.75880813 | 0.53  | 0.097 | 7.65E-10 | pDC_spleen |
| NNT                | 2.16E-14 | 1.31039819 | 0.397 | 0.043 | 7.67E-10 | pDC_spleen |
| NDUFAB1            | 2.17E-14 | 1.36758694 | 0.411 | 0.049 | 7.67E-10 | pDC_spleen |
| ZNF217             | 2.21E-14 | 0.45605483 | 0.649 | 0.146 | 7.82E-10 | pDC_spleen |
| GABARAP            | 2.23E-14 | 0.87946853 | 0.808 | 0.254 | 7.91E-10 | pDC_spleen |
| FBXO6              | 2.25E-14 | 1.12488213 | 0.437 | 0.059 | 7.96E-10 | pDC_spleen |
| TMEM106A           | 2.26E-14 | 2.70549509 | 0.311 | 0.011 | 8.01E-10 | pDC_spleen |
| ENSMMUG00000055467 | 2.28E-14 | 7.00114881 | 0.278 | 0     | 8.09E-10 | pDC_spleen |
| MBD5               | 2.32E-14 | 0.99962899 | 0.795 | 0.27  | 8.20E-10 | pDC_spleen |
| ADAR               | 2.37E-14 | 1.10234624 | 0.47  | 0.076 | 8.38E-10 | pDC_spleen |
| HSP90AB1           | 2.37E-14 | 1.06699725 | 0.934 | 0.449 | 8.41E-10 | pDC_spleen |
| COX6B1             | 2.37E-14 | 0.90468491 | 0.583 | 0.124 | 8.41E-10 | pDC_spleen |

|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| DRAP1              | 2.38E-14 | 1.40555584 | 0.457 | 0.07  | 8.44E-10 | pDC_spleen |
| ARHGAP1            | 2.41E-14 | 3.10144243 | 0.338 | 0.022 | 8.55E-10 | pDC_spleen |
| KTN1               | 2.42E-14 | 0.35164336 | 0.609 | 0.13  | 8.59E-10 | pDC_spleen |
| CNOT8              | 2.47E-14 | 1.29778556 | 0.424 | 0.054 | 8.76E-10 | pDC_spleen |
| RAB4A              | 2.49E-14 | 1.54084544 | 0.371 | 0.032 | 8.83E-10 | pDC_spleen |
| IRS2               | 2.50E-14 | 1.35128158 | 0.404 | 0.049 | 8.84E-10 | pDC_spleen |
| RPLP1              | 2.50E-14 | 0.89638329 | 0.954 | 0.557 | 8.85E-10 | pDC_spleen |
| MRPS33             | 2.53E-14 | 1.37958015 | 0.424 | 0.054 | 8.98E-10 | pDC_spleen |
| NOD1               | 2.55E-14 | 2.50702725 | 0.338 | 0.022 | 9.02E-10 | pDC_spleen |
| NFAT5              | 2.55E-14 | 0.91316959 | 0.954 | 0.427 | 9.04E-10 | pDC_spleen |
| SSBP3              | 2.57E-14 | 0.75581258 | 0.497 | 0.086 | 9.12E-10 | pDC_spleen |
| FAM126A            | 2.59E-14 | 1.21668016 | 0.45  | 0.065 | 9.19E-10 | pDC_spleen |
| MMD                | 2.60E-14 | 1.26880455 | 0.411 | 0.049 | 9.23E-10 | pDC_spleen |
| GLRX3              | 2.62E-14 | 0.81473497 | 0.55  | 0.108 | 9.30E-10 | pDC_spleen |
| DISP1              | 2.64E-14 | 1.3608507  | 0.43  | 0.059 | 9.35E-10 | pDC_spleen |
| ATP5PB             | 2.65E-14 | 0.73190462 | 0.55  | 0.108 | 9.40E-10 | pDC_spleen |
| ENSMMUG00000008346 | 2.65E-14 | 1.070451   | 0.556 | 0.114 | 9.41E-10 | pDC_spleen |
| MRPL11             | 2.68E-14 | 0.94710346 | 0.47  | 0.076 | 9.51E-10 | pDC_spleen |
| PRPF40A            | 2.69E-14 | 0.49733485 | 0.788 | 0.227 | 9.54E-10 | pDC_spleen |
| EFL1               | 2.72E-14 | 0.83173212 | 0.523 | 0.097 | 9.63E-10 | pDC_spleen |
| PTPMT1             | 2.74E-14 | 0.87051898 | 0.384 | 0.038 | 9.72E-10 | pDC_spleen |
| NSMCE1             | 2.76E-14 | 0.85129258 | 0.523 | 0.103 | 9.78E-10 | pDC_spleen |
| RC3H2              | 2.79E-14 | 2.62488349 | 0.325 | 0.016 | 9.90E-10 | pDC_spleen |
| C14H11orf58        | 2.80E-14 | 1.13839975 | 0.53  | 0.103 | 9.91E-10 | pDC_spleen |
| PIKFYVE            | 2.94E-14 | 1.08439719 | 0.616 | 0.151 | 1.04E-09 | pDC_spleen |
| PHKB               | 2.95E-14 | 0.76006956 | 0.477 | 0.076 | 1.05E-09 | pDC_spleen |
| GABPB1             | 2.99E-14 | 0.8000184  | 0.728 | 0.205 | 1.06E-09 | pDC_spleen |
| ENSMMUG00000012019 | 3.05E-14 | 0.8491533  | 0.536 | 0.103 | 1.08E-09 | pDC_spleen |
| UBL5               | 3.06E-14 | 0.76336691 | 0.722 | 0.195 | 1.08E-09 | pDC_spleen |
| SPAG7              | 3.07E-14 | 0.91096224 | 0.483 | 0.081 | 1.09E-09 | pDC_spleen |
| HNRNPK             | 3.07E-14 | 0.62035207 | 0.815 | 0.249 | 1.09E-09 | pDC_spleen |
| CCDC66             | 3.11E-14 | 1.25854507 | 0.397 | 0.043 | 1.10E-09 | pDC_spleen |
| EIF2S2             | 3.20E-14 | 0.70668611 | 0.722 | 0.195 | 1.13E-09 | pDC_spleen |

|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| ERO1B              | 3.23E-14 | 0.64026732 | 0.649 | 0.157 | 1.15E-09 | pDC_spleen |
| SDF2L1             | 3.34E-14 | 0.87480193 | 0.424 | 0.054 | 1.18E-09 | pDC_spleen |
| RHOF               | 3.35E-14 | 0.29885618 | 0.576 | 0.119 | 1.19E-09 | pDC_spleen |
| SDHA               | 3.35E-14 | 0.79606448 | 0.45  | 0.065 | 1.19E-09 | pDC_spleen |
| IFI27L2            | 3.36E-14 | 0.64722221 | 0.728 | 0.2   | 1.19E-09 | pDC_spleen |
| DARS1              | 3.38E-14 | 0.41489362 | 0.623 | 0.141 | 1.20E-09 | pDC_spleen |
| ENSMMUG00000049833 | 3.45E-14 | 1.07475146 | 0.457 | 0.07  | 1.22E-09 | pDC_spleen |
| SIAH1              | 3.46E-14 | 0.62226304 | 0.424 | 0.054 | 1.23E-09 | pDC_spleen |
| MYDGF              | 3.47E-14 | 0.63294516 | 0.55  | 0.108 | 1.23E-09 | pDC_spleen |
| SYNJ1              | 3.48E-14 | 0.85939835 | 0.437 | 0.059 | 1.23E-09 | pDC_spleen |
| PPP2R3A            | 3.50E-14 | 2.32542749 | 0.351 | 0.027 | 1.24E-09 | pDC_spleen |
| USO1               | 3.50E-14 | 0.82535588 | 0.55  | 0.108 | 1.24E-09 | pDC_spleen |
| KPNB1              | 3.60E-14 | 0.38363158 | 0.583 | 0.124 | 1.28E-09 | pDC_spleen |
| TNFRSF9            | 3.61E-14 | 1.52346949 | 0.391 | 0.043 | 1.28E-09 | pDC_spleen |
| TMEM160            | 3.65E-14 | 0.69585172 | 0.397 | 0.043 | 1.29E-09 | pDC_spleen |
| TMCO1              | 3.66E-14 | 2.04434135 | 0.364 | 0.032 | 1.30E-09 | pDC_spleen |
| C20H16orf72        | 3.73E-14 | 0.38087329 | 0.656 | 0.157 | 1.32E-09 | pDC_spleen |
| PIN4               | 3.81E-14 | 2.26381805 | 0.364 | 0.032 | 1.35E-09 | pDC_spleen |
| AIP                | 3.88E-14 | 0.9007695  | 0.477 | 0.076 | 1.37E-09 | pDC_spleen |
| TRAF2              | 3.90E-14 | 0.63962949 | 0.411 | 0.049 | 1.38E-09 | pDC_spleen |
| NUDT4              | 3.98E-14 | 1.8811188  | 0.338 | 0.022 | 1.41E-09 | pDC_spleen |
| SAR1A              | 3.99E-14 | 0.79684086 | 0.517 | 0.092 | 1.41E-09 | pDC_spleen |
| INO80              | 4.01E-14 | 0.38684418 | 0.53  | 0.097 | 1.42E-09 | pDC_spleen |
| FRRS1              | 4.03E-14 | 3.99746229 | 0.305 | 0.011 | 1.43E-09 | pDC_spleen |
| NDUFB4             | 4.29E-14 | 1.11956748 | 0.616 | 0.146 | 1.52E-09 | pDC_spleen |
| RNF167             | 4.30E-14 | 1.82814715 | 0.377 | 0.038 | 1.52E-09 | pDC_spleen |
| RYK                | 4.45E-14 | 3.39286501 | 0.305 | 0.011 | 1.58E-09 | pDC_spleen |
| OGA                | 4.50E-14 | 0.40959969 | 0.702 | 0.178 | 1.59E-09 | pDC_spleen |
| IMP3               | 4.52E-14 | 3.32852247 | 0.318 | 0.016 | 1.60E-09 | pDC_spleen |
| SUB1               | 4.54E-14 | 0.64080034 | 0.927 | 0.357 | 1.61E-09 | pDC_spleen |
| ENSMMUG00000053391 | 4.58E-14 | 3.7217205  | 0.305 | 0.011 | 1.62E-09 | pDC_spleen |
| TMEM219            | 4.59E-14 | 0.76277629 | 0.497 | 0.086 | 1.63E-09 | pDC_spleen |
| TLN1               | 4.63E-14 | 0.67581318 | 0.735 | 0.205 | 1.64E-09 | pDC_spleen |

|                   |          |            |       |       |          |            |
|-------------------|----------|------------|-------|-------|----------|------------|
| ZC3H7A            | 4.66E-14 | 0.12883528 | 0.556 | 0.108 | 1.65E-09 | pDC_spleen |
| MCTS1             | 4.68E-14 | 1.55083948 | 0.364 | 0.032 | 1.66E-09 | pDC_spleen |
| LSM2              | 4.72E-14 | 2.45681701 | 0.371 | 0.038 | 1.67E-09 | pDC_spleen |
| SLC10A7           | 4.74E-14 | 0.64419199 | 0.464 | 0.07  | 1.68E-09 | pDC_spleen |
| TNNI2             | 4.75E-14 | 1.41519931 | 0.424 | 0.059 | 1.68E-09 | pDC_spleen |
| FUT8              | 4.80E-14 | 0.77613106 | 0.523 | 0.103 | 1.70E-09 | pDC_spleen |
| SELENOS           | 4.80E-14 | 0.69733831 | 0.801 | 0.232 | 1.70E-09 | pDC_spleen |
| SMC3              | 4.82E-14 | 0.31436539 | 0.444 | 0.065 | 1.71E-09 | pDC_spleen |
| ALG2              | 4.87E-14 | 1.86787735 | 0.351 | 0.027 | 1.72E-09 | pDC_spleen |
| SNX4              | 5.21E-14 | 0.49458427 | 0.603 | 0.135 | 1.84E-09 | pDC_spleen |
| OSTC              | 5.33E-14 | 1.12527288 | 0.57  | 0.124 | 1.89E-09 | pDC_spleen |
| CAPN1             | 5.37E-14 | 1.78665516 | 0.404 | 0.049 | 1.90E-09 | pDC_spleen |
| IGKC              | 5.48E-14 | 0.79001844 | 0.417 | 0.054 | 1.94E-09 | pDC_spleen |
| ARGLU1            | 5.60E-14 | 0.6238576  | 0.874 | 0.27  | 1.98E-09 | pDC_spleen |
| EIF3H             | 5.61E-14 | 0.33016018 | 0.775 | 0.222 | 1.99E-09 | pDC_spleen |
| CD82              | 5.64E-14 | 2.34069987 | 0.331 | 0.022 | 2.00E-09 | pDC_spleen |
| SYNE1             | 5.65E-14 | 1.68594275 | 0.384 | 0.043 | 2.00E-09 | pDC_spleen |
| CIAO2B            | 5.66E-14 | 1.3801489  | 0.464 | 0.076 | 2.01E-09 | pDC_spleen |
| CASK              | 5.73E-14 | 1.0148665  | 0.483 | 0.086 | 2.03E-09 | pDC_spleen |
| DYNC1LI2          | 5.74E-14 | 1.19522334 | 0.404 | 0.049 | 2.03E-09 | pDC_spleen |
| VPS39             | 5.75E-14 | 0.48420542 | 0.483 | 0.081 | 2.04E-09 | pDC_spleen |
| ZNF148            | 5.76E-14 | 0.59990121 | 0.629 | 0.146 | 2.04E-09 | pDC_spleen |
| TNKS2             | 5.86E-14 | 1.15134397 | 0.391 | 0.043 | 2.08E-09 | pDC_spleen |
| HIKESHI           | 5.90E-14 | 1.89004737 | 0.377 | 0.038 | 2.09E-09 | pDC_spleen |
| SP140             | 5.90E-14 | 0.63406894 | 0.662 | 0.173 | 2.09E-09 | pDC_spleen |
| PBXIP1            | 5.95E-14 | 0.85950964 | 0.523 | 0.103 | 2.11E-09 | pDC_spleen |
| ARRB2             | 6.00E-14 | 0.71328782 | 0.702 | 0.195 | 2.12E-09 | pDC_spleen |
| CFAP299           | 6.31E-14 | 2.72612853 | 0.318 | 0.016 | 2.23E-09 | pDC_spleen |
| CPSF6             | 6.44E-14 | 1.0662059  | 0.47  | 0.076 | 2.28E-09 | pDC_spleen |
| PSMC4             | 6.46E-14 | 0.89304341 | 0.457 | 0.07  | 2.29E-09 | pDC_spleen |
| GCA               | 6.53E-14 | 4.06979086 | 0.311 | 0.016 | 2.31E-09 | pDC_spleen |
| ENSMUG00000018421 | 6.58E-14 | 5.22065001 | 0.298 | 0.011 | 2.33E-09 | pDC_spleen |
| MIA2              | 6.64E-14 | 0.67656412 | 0.477 | 0.081 | 2.35E-09 | pDC_spleen |

|                     |          |            |       |       |          |            |
|---------------------|----------|------------|-------|-------|----------|------------|
| SPTLC2              | 6.64E-14 | 0.98472828 | 0.43  | 0.059 | 2.35E-09 | pDC_spleen |
| RPRD1A              | 6.72E-14 | 2.53837104 | 0.331 | 0.022 | 2.38E-09 | pDC_spleen |
| ZC3H13              | 6.93E-14 | 1.05388068 | 0.583 | 0.13  | 2.46E-09 | pDC_spleen |
| PIGA                | 6.94E-14 | 0.41469775 | 0.318 | 0.016 | 2.46E-09 | pDC_spleen |
| ENSMMUG000000061824 | 7.10E-14 | 1.00822383 | 0.94  | 0.508 | 2.52E-09 | pDC_spleen |
| CTNNB1              | 7.11E-14 | 0.40502583 | 0.636 | 0.151 | 2.52E-09 | pDC_spleen |
| ENSMMUG000000010236 | 7.13E-14 | 0.14969494 | 0.417 | 0.054 | 2.53E-09 | pDC_spleen |
| RPL38               | 7.23E-14 | 0.84073219 | 0.967 | 0.486 | 2.56E-09 | pDC_spleen |
| REXO2               | 7.27E-14 | 1.6466205  | 0.424 | 0.059 | 2.58E-09 | pDC_spleen |
| PTK2                | 7.31E-14 | 4.63213609 | 0.285 | 0.005 | 2.59E-09 | pDC_spleen |
| MKKS                | 7.31E-14 | 0.95807029 | 0.45  | 0.07  | 2.59E-09 | pDC_spleen |
| NEMF                | 7.41E-14 | 0.70268417 | 0.536 | 0.108 | 2.62E-09 | pDC_spleen |
| ADD1                | 7.45E-14 | 0.27908098 | 0.583 | 0.13  | 2.64E-09 | pDC_spleen |
| LEPROTL1            | 7.54E-14 | 1.5690909  | 0.371 | 0.038 | 2.67E-09 | pDC_spleen |
| NIPSNAP2            | 7.58E-14 | 0.95806021 | 0.404 | 0.049 | 2.69E-09 | pDC_spleen |
| AAMP                | 7.75E-14 | 3.39036068 | 0.285 | 0.005 | 2.75E-09 | pDC_spleen |
| PPIA                | 7.82E-14 | 0.64432556 | 0.616 | 0.141 | 2.77E-09 | pDC_spleen |
| TPM4                | 7.97E-14 | 0.90653719 | 0.649 | 0.168 | 2.82E-09 | pDC_spleen |
| FGFR1OP2            | 8.01E-14 | 2.25194191 | 0.358 | 0.032 | 2.84E-09 | pDC_spleen |
| SGPP1               | 8.01E-14 | 2.16504077 | 0.344 | 0.027 | 2.84E-09 | pDC_spleen |
| PFDN2               | 8.01E-14 | 0.47792214 | 0.682 | 0.178 | 2.84E-09 | pDC_spleen |
| ALS2                | 8.05E-14 | 3.85215056 | 0.311 | 0.016 | 2.85E-09 | pDC_spleen |
| UVRAG               | 8.09E-14 | 1.06495416 | 0.96  | 0.622 | 2.87E-09 | pDC_spleen |
| RAB2A               | 8.10E-14 | 0.45380573 | 0.808 | 0.238 | 2.87E-09 | pDC_spleen |
| PSENN               | 8.22E-14 | 1.25020437 | 0.464 | 0.076 | 2.91E-09 | pDC_spleen |
| EPB41L3             | 8.23E-14 | 0.78093603 | 0.656 | 0.168 | 2.92E-09 | pDC_spleen |
| SCP2                | 8.30E-14 | 0.50940925 | 0.636 | 0.151 | 2.94E-09 | pDC_spleen |
| ARHGAP45            | 8.30E-14 | 0.54139296 | 0.477 | 0.081 | 2.94E-09 | pDC_spleen |
| MED28               | 8.44E-14 | 0.70291612 | 0.457 | 0.07  | 2.99E-09 | pDC_spleen |
| PTPN9               | 8.60E-14 | 0.47578855 | 0.583 | 0.13  | 3.05E-09 | pDC_spleen |
| KLF13               | 8.65E-14 | 1.88481685 | 0.358 | 0.032 | 3.06E-09 | pDC_spleen |
| RNF130              | 8.74E-14 | 0.81140384 | 0.735 | 0.211 | 3.10E-09 | pDC_spleen |
| DIAPH1              | 8.78E-14 | 0.5409498  | 0.682 | 0.178 | 3.11E-09 | pDC_spleen |

|                     |          |            |       |       |          |            |
|---------------------|----------|------------|-------|-------|----------|------------|
| RAB21               | 9.11E-14 | 0.33558966 | 0.642 | 0.151 | 3.23E-09 | pDC_spleen |
| STARD4              | 9.13E-14 | 1.98718828 | 0.344 | 0.027 | 3.23E-09 | pDC_spleen |
| ATP2B4              | 9.18E-14 | 0.66784495 | 0.477 | 0.081 | 3.25E-09 | pDC_spleen |
| WASF2               | 9.21E-14 | 0.74121659 | 0.815 | 0.243 | 3.26E-09 | pDC_spleen |
| EFR3A               | 9.24E-14 | 0.62105748 | 0.563 | 0.119 | 3.27E-09 | pDC_spleen |
| PRR14L              | 9.32E-14 | 0.87535299 | 0.523 | 0.103 | 3.30E-09 | pDC_spleen |
| PLAC8               | 9.40E-14 | 2.48432558 | 0.49  | 0.114 | 3.33E-09 | pDC_spleen |
| ZNF581              | 9.50E-14 | 1.20252485 | 0.344 | 0.027 | 3.36E-09 | pDC_spleen |
| WBP2                | 9.56E-14 | 0.8418251  | 0.437 | 0.065 | 3.39E-09 | pDC_spleen |
| ENSMMUG00000007657  | 9.57E-14 | 0.87710008 | 0.695 | 0.189 | 3.39E-09 | pDC_spleen |
| ENSMMUG000000051392 | 9.62E-14 | 0.61356624 | 0.709 | 0.189 | 3.41E-09 | pDC_spleen |
| CNOT4               | 9.78E-14 | 0.35120395 | 0.689 | 0.178 | 3.47E-09 | pDC_spleen |
| DPH6                | 9.83E-14 | 0.95387826 | 0.55  | 0.114 | 3.48E-09 | pDC_spleen |
| SYNRG               | 9.87E-14 | 1.11696028 | 0.411 | 0.054 | 3.50E-09 | pDC_spleen |
| ARPC2               | 1.00E-13 | 0.77579337 | 0.675 | 0.184 | 3.54E-09 | pDC_spleen |
| TOMM7               | 1.00E-13 | 0.64175439 | 0.781 | 0.243 | 3.55E-09 | pDC_spleen |
| TRIM44              | 1.00E-13 | 0.52363046 | 0.623 | 0.146 | 3.55E-09 | pDC_spleen |
| CUL5                | 1.01E-13 | 1.26801953 | 0.536 | 0.119 | 3.57E-09 | pDC_spleen |
| CDYL2               | 1.02E-13 | 2.10595736 | 0.338 | 0.027 | 3.63E-09 | pDC_spleen |
| WHAMM               | 1.03E-13 | 1.53222981 | 0.358 | 0.032 | 3.67E-09 | pDC_spleen |
| CD164               | 1.04E-13 | 0.38835261 | 0.762 | 0.222 | 3.69E-09 | pDC_spleen |
| UFC1                | 1.06E-13 | 0.8501172  | 0.51  | 0.097 | 3.75E-09 | pDC_spleen |
| ASAP2               | 1.10E-13 | 1.21072774 | 0.457 | 0.076 | 3.89E-09 | pDC_spleen |
| ZNF451              | 1.10E-13 | 0.37777087 | 0.709 | 0.184 | 3.91E-09 | pDC_spleen |
| DDX39A              | 1.11E-13 | 0.87490719 | 0.596 | 0.141 | 3.92E-09 | pDC_spleen |
| VAMP8               | 1.11E-13 | 1.73324859 | 0.543 | 0.135 | 3.94E-09 | pDC_spleen |
| PAPSS1              | 1.11E-13 | 1.08411928 | 0.464 | 0.076 | 3.95E-09 | pDC_spleen |
| ENSMMUG000000003867 | 1.12E-13 | 0.83261299 | 0.98  | 0.681 | 3.97E-09 | pDC_spleen |
| PFDN1               | 1.12E-13 | 0.71570828 | 0.517 | 0.097 | 3.97E-09 | pDC_spleen |
| TDRD7               | 1.13E-13 | 1.25769365 | 0.371 | 0.038 | 3.99E-09 | pDC_spleen |
| FBXO10              | 1.16E-13 | 1.27905707 | 0.391 | 0.049 | 4.12E-09 | pDC_spleen |
| RAD21               | 1.17E-13 | 0.94042991 | 0.589 | 0.135 | 4.14E-09 | pDC_spleen |
| PSMB6               | 1.18E-13 | 1.0053055  | 0.603 | 0.141 | 4.18E-09 | pDC_spleen |

|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| IAH1               | 1.23E-13 | 2.977509   | 0.311 | 0.016 | 4.37E-09 | pDC_spleen |
| ELOA               | 1.25E-13 | 0.87780656 | 0.947 | 0.508 | 4.43E-09 | pDC_spleen |
| MACC1              | 1.27E-13 | 2.02266346 | 0.364 | 0.038 | 4.49E-09 | pDC_spleen |
| TUBB2B             | 1.27E-13 | 1.04321932 | 0.404 | 0.054 | 4.49E-09 | pDC_spleen |
| SNW1               | 1.29E-13 | 0.73087712 | 0.517 | 0.097 | 4.57E-09 | pDC_spleen |
| ENSMMUG00000038348 | 1.30E-13 | 0.48500139 | 0.603 | 0.141 | 4.62E-09 | pDC_spleen |
| FBXO33             | 1.33E-13 | 1.02095917 | 0.384 | 0.043 | 4.69E-09 | pDC_spleen |
| MFF                | 1.33E-13 | 0.9132829  | 0.384 | 0.043 | 4.69E-09 | pDC_spleen |
| SUGT1              | 1.33E-13 | 0.68319945 | 0.51  | 0.097 | 4.70E-09 | pDC_spleen |
| CCT3               | 1.33E-13 | 1.08028727 | 0.57  | 0.124 | 4.72E-09 | pDC_spleen |
| HNRNPR             | 1.36E-13 | 0.97543223 | 0.49  | 0.092 | 4.82E-09 | pDC_spleen |
| MRPL20             | 1.36E-13 | 1.43124967 | 0.411 | 0.054 | 4.82E-09 | pDC_spleen |
| TBPL1              | 1.38E-13 | 1.86596763 | 0.351 | 0.032 | 4.90E-09 | pDC_spleen |
| POLB               | 1.44E-13 | 2.23704794 | 0.311 | 0.016 | 5.09E-09 | pDC_spleen |
| TBC1D1             | 1.44E-13 | 0.79137242 | 0.881 | 0.319 | 5.09E-09 | pDC_spleen |
| EIF3G              | 1.44E-13 | 0.77533327 | 0.523 | 0.103 | 5.11E-09 | pDC_spleen |
| IQCB1              | 1.45E-13 | 1.27558568 | 0.391 | 0.049 | 5.13E-09 | pDC_spleen |
| ENSMMUG00000012843 | 1.49E-13 | 2.02831793 | 0.364 | 0.038 | 5.29E-09 | pDC_spleen |
| BTF3L4             | 1.49E-13 | 0.82920478 | 0.477 | 0.081 | 5.29E-09 | pDC_spleen |
| AGGF1              | 1.50E-13 | 2.543822   | 0.311 | 0.016 | 5.30E-09 | pDC_spleen |
| AKT3               | 1.52E-13 | 0.82458745 | 0.881 | 0.351 | 5.37E-09 | pDC_spleen |
| CD63               | 1.53E-13 | 0.28526497 | 0.781 | 0.227 | 5.42E-09 | pDC_spleen |
| TYW5               | 1.55E-13 | 1.81743475 | 0.351 | 0.032 | 5.50E-09 | pDC_spleen |
| RP9                | 1.56E-13 | 4.51746789 | 0.278 | 0.005 | 5.53E-09 | pDC_spleen |
| ASB3               | 1.59E-13 | 0.84734583 | 0.411 | 0.054 | 5.62E-09 | pDC_spleen |
| ABTB2              | 1.59E-13 | 0.95703755 | 0.596 | 0.157 | 5.63E-09 | pDC_spleen |
| KATNBL1            | 1.63E-13 | 0.71740251 | 0.642 | 0.157 | 5.77E-09 | pDC_spleen |
| MAPKAP1            | 1.66E-13 | 0.42278414 | 0.583 | 0.13  | 5.89E-09 | pDC_spleen |
| SLC25A24           | 1.69E-13 | 2.11463334 | 0.325 | 0.022 | 6.00E-09 | pDC_spleen |
| SEC61G             | 1.70E-13 | 0.51192531 | 0.702 | 0.195 | 6.02E-09 | pDC_spleen |
| MTIF2              | 1.71E-13 | 0.93231087 | 0.424 | 0.059 | 6.05E-09 | pDC_spleen |
| RPL10A             | 1.73E-13 | 1.02089163 | 0.894 | 0.438 | 6.12E-09 | pDC_spleen |
| MPLKIP             | 1.73E-13 | 3.67244354 | 0.278 | 0.005 | 6.12E-09 | pDC_spleen |



|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| STXBP3             | 1.76E-13 | 1.85844636 | 0.351 | 0.032 | 6.25E-09 | pDC_spleen |
| PRKDC              | 1.77E-13 | 0.85215288 | 0.576 | 0.13  | 6.26E-09 | pDC_spleen |
| PHF5A              | 1.78E-13 | 1.34799106 | 0.47  | 0.081 | 6.32E-09 | pDC_spleen |
| SORBS1             | 1.78E-13 | 3.81719112 | 0.291 | 0.011 | 6.32E-09 | pDC_spleen |
| ENSMMUG00000056354 | 1.79E-13 | 0.66748041 | 0.887 | 0.33  | 6.34E-09 | pDC_spleen |
| MRPL42             | 1.80E-13 | 1.93767541 | 0.364 | 0.038 | 6.38E-09 | pDC_spleen |
| NDUFV1             | 1.81E-13 | 1.59903454 | 0.325 | 0.022 | 6.41E-09 | pDC_spleen |
| TMED5              | 1.85E-13 | 0.37892969 | 0.397 | 0.049 | 6.55E-09 | pDC_spleen |
| CCDC85B            | 1.86E-13 | 1.18417237 | 0.325 | 0.022 | 6.58E-09 | pDC_spleen |
| RANBP10            | 1.86E-13 | 1.95640763 | 0.325 | 0.022 | 6.58E-09 | pDC_spleen |
| COMMD6             | 1.91E-13 | 0.58513806 | 0.834 | 0.276 | 6.78E-09 | pDC_spleen |
| PSMB1              | 1.93E-13 | 0.69433713 | 0.755 | 0.216 | 6.83E-09 | pDC_spleen |
| DAP                | 1.93E-13 | 0.64256418 | 0.695 | 0.195 | 6.84E-09 | pDC_spleen |
| VPS4B              | 1.94E-13 | 0.37035298 | 0.556 | 0.119 | 6.87E-09 | pDC_spleen |
| PRRC2B             | 1.94E-13 | 0.31499481 | 0.642 | 0.162 | 6.88E-09 | pDC_spleen |
| GMCL1              | 2.01E-13 | 1.35873639 | 0.377 | 0.043 | 7.14E-09 | pDC_spleen |
| ABRACL             | 2.04E-13 | 2.51885844 | 0.305 | 0.016 | 7.23E-09 | pDC_spleen |
| RANBP3             | 2.05E-13 | 1.91600672 | 0.351 | 0.032 | 7.28E-09 | pDC_spleen |
| NUDT21             | 2.08E-13 | 1.21839508 | 0.391 | 0.049 | 7.36E-09 | pDC_spleen |
| PTGER4             | 2.13E-13 | 0.44295805 | 0.675 | 0.173 | 7.55E-09 | pDC_spleen |
| POLR2F             | 2.13E-13 | 2.05933242 | 0.351 | 0.032 | 7.56E-09 | pDC_spleen |
| HERC4              | 2.14E-13 | 0.4586249  | 0.629 | 0.151 | 7.59E-09 | pDC_spleen |
| MAP3K1             | 2.17E-13 | 0.54259806 | 0.57  | 0.124 | 7.70E-09 | pDC_spleen |
| ACOT13             | 2.20E-13 | 1.58848596 | 0.364 | 0.038 | 7.79E-09 | pDC_spleen |
| NDUFA8             | 2.22E-13 | 3.04000341 | 0.305 | 0.016 | 7.86E-09 | pDC_spleen |
| H2AC12             | 2.24E-13 | 2.62446613 | 0.291 | 0.011 | 7.92E-09 | pDC_spleen |
| C5orf15            | 2.27E-13 | 2.91992159 | 0.291 | 0.011 | 8.03E-09 | pDC_spleen |
| CAMSAP1            | 2.27E-13 | 1.64539785 | 0.291 | 0.011 | 8.03E-09 | pDC_spleen |
| HSBP1              | 2.33E-13 | 1.19375853 | 0.563 | 0.135 | 8.25E-09 | pDC_spleen |
| GAPDH              | 2.38E-13 | 0.94224545 | 0.841 | 0.335 | 8.42E-09 | pDC_spleen |
| PSMB5              | 2.42E-13 | 1.07263902 | 0.444 | 0.07  | 8.58E-09 | pDC_spleen |
| SFMBT1             | 2.44E-13 | 2.42946675 | 0.344 | 0.032 | 8.66E-09 | pDC_spleen |
| TCF7               | 2.45E-13 | 6.07170589 | 0.258 | 0     | 8.67E-09 | pDC_spleen |

|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| ENSMMUG00000058952 | 2.45E-13 | 5.7898894  | 0.258 | 0     | 8.67E-09 | pDC_spleen |
| GFRA2              | 2.45E-13 | 6.63231213 | 0.258 | 0     | 8.67E-09 | pDC_spleen |
| LEO1               | 2.47E-13 | 1.4405441  | 0.291 | 0.011 | 8.74E-09 | pDC_spleen |
| CMPK1              | 2.50E-13 | 1.18498581 | 0.417 | 0.059 | 8.86E-09 | pDC_spleen |
| ENSMMUG00000039070 | 2.55E-13 | 1.44711295 | 0.43  | 0.07  | 9.02E-09 | pDC_spleen |
| JADE2              | 2.55E-13 | 2.52414489 | 0.318 | 0.022 | 9.05E-09 | pDC_spleen |
| WBP11              | 2.59E-13 | 0.71991628 | 0.47  | 0.081 | 9.18E-09 | pDC_spleen |
| ENSMMUG00000056043 | 2.59E-13 | 0.28776906 | 0.444 | 0.07  | 9.18E-09 | pDC_spleen |
| RCSD1              | 2.62E-13 | 1.43806521 | 0.596 | 0.168 | 9.30E-09 | pDC_spleen |
| LRCH3              | 2.63E-13 | 0.51437654 | 0.709 | 0.195 | 9.33E-09 | pDC_spleen |
| ENPP1              | 2.67E-13 | 6.20644318 | 0.272 | 0.005 | 9.44E-09 | pDC_spleen |
| HDAC1              | 2.69E-13 | 1.21557152 | 0.424 | 0.065 | 9.53E-09 | pDC_spleen |
| CIR1               | 2.71E-13 | 0.88153551 | 0.47  | 0.081 | 9.59E-09 | pDC_spleen |
| KDM5C              | 2.75E-13 | 0.79665408 | 0.364 | 0.038 | 9.75E-09 | pDC_spleen |
| LYST               | 2.75E-13 | 1.13840482 | 0.768 | 0.259 | 9.75E-09 | pDC_spleen |
| PGM2               | 2.75E-13 | 1.40530086 | 0.351 | 0.032 | 9.75E-09 | pDC_spleen |
| MRFAP1             | 2.77E-13 | 0.95258345 | 0.49  | 0.092 | 9.82E-09 | pDC_spleen |
| LPGAT1             | 2.80E-13 | 0.42713997 | 0.642 | 0.162 | 9.93E-09 | pDC_spleen |
| OST4               | 2.81E-13 | 0.72032748 | 0.695 | 0.195 | 9.96E-09 | pDC_spleen |
| MRPL18             | 2.84E-13 | 0.84464102 | 0.377 | 0.043 | 1.00E-08 | pDC_spleen |
| TMEM147            | 2.84E-13 | 1.38306242 | 0.377 | 0.043 | 1.00E-08 | pDC_spleen |
| CCNC               | 2.90E-13 | 1.54889254 | 0.377 | 0.043 | 1.03E-08 | pDC_spleen |
| SUPT20H            | 2.91E-13 | 1.52686846 | 0.371 | 0.043 | 1.03E-08 | pDC_spleen |
| GUCY1B1            | 2.92E-13 | 1.7012682  | 0.305 | 0.016 | 1.03E-08 | pDC_spleen |
| KAT14              | 3.00E-13 | 2.24742135 | 0.305 | 0.016 | 1.06E-08 | pDC_spleen |
| ZNF493             | 3.02E-13 | 1.89187582 | 0.331 | 0.027 | 1.07E-08 | pDC_spleen |
| NDUFB8             | 3.08E-13 | 0.85116776 | 0.563 | 0.124 | 1.09E-08 | pDC_spleen |
| SLX4IP             | 3.16E-13 | 1.74260079 | 0.397 | 0.054 | 1.12E-08 | pDC_spleen |
| DAZAP2             | 3.20E-13 | 0.43004935 | 0.623 | 0.151 | 1.13E-08 | pDC_spleen |
| RPS28              | 3.22E-13 | 0.6857374  | 0.954 | 0.438 | 1.14E-08 | pDC_spleen |
| DYNC1I2            | 3.24E-13 | 0.48894564 | 0.53  | 0.108 | 1.15E-08 | pDC_spleen |
| TRIM26             | 3.26E-13 | 1.87475831 | 0.331 | 0.027 | 1.16E-08 | pDC_spleen |
| UNKL               | 3.26E-13 | 2.36639295 | 0.331 | 0.027 | 1.16E-08 | pDC_spleen |

|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| KAT7               | 3.32E-13 | 1.35779466 | 0.391 | 0.049 | 1.17E-08 | pDC_spleen |
| NPTN               | 3.34E-13 | 0.24730923 | 0.616 | 0.146 | 1.18E-08 | pDC_spleen |
| ENSMMUG00000014862 | 3.41E-13 | 1.36238774 | 0.437 | 0.07  | 1.21E-08 | pDC_spleen |
| UQCRC2             | 3.51E-13 | 1.02788199 | 0.404 | 0.054 | 1.24E-08 | pDC_spleen |
| COPB2              | 3.52E-13 | 1.07292409 | 0.391 | 0.049 | 1.25E-08 | pDC_spleen |
| ST13               | 3.64E-13 | 0.49729741 | 0.563 | 0.124 | 1.29E-08 | pDC_spleen |
| FUBP1              | 3.65E-13 | 0.14661668 | 0.695 | 0.178 | 1.29E-08 | pDC_spleen |
| MRPL9              | 3.72E-13 | 1.36570563 | 0.331 | 0.027 | 1.32E-08 | pDC_spleen |
| SETD2              | 3.73E-13 | 0.24267243 | 0.702 | 0.195 | 1.32E-08 | pDC_spleen |
| DIPK1A             | 3.78E-13 | 1.82328996 | 0.358 | 0.038 | 1.34E-08 | pDC_spleen |
| CYB5R4             | 3.78E-13 | 0.2887494  | 0.49  | 0.092 | 1.34E-08 | pDC_spleen |
| CEP70              | 3.78E-13 | 1.75568014 | 0.272 | 0.005 | 1.34E-08 | pDC_spleen |
| MED19              | 3.78E-13 | 1.56746594 | 0.272 | 0.005 | 1.34E-08 | pDC_spleen |
| SLC39A13           | 3.86E-13 | 2.07266269 | 0.331 | 0.027 | 1.37E-08 | pDC_spleen |
| ZMYM4              | 3.93E-13 | 0.50511666 | 0.629 | 0.157 | 1.39E-08 | pDC_spleen |
| TMEM260            | 4.02E-13 | 2.04462743 | 0.331 | 0.027 | 1.42E-08 | pDC_spleen |
| BSDC1              | 4.06E-13 | 1.56189332 | 0.344 | 0.032 | 1.44E-08 | pDC_spleen |
| RP2                | 4.08E-13 | 0.30920174 | 0.556 | 0.119 | 1.45E-08 | pDC_spleen |
| BCAT1              | 4.10E-13 | 1.46254252 | 0.397 | 0.054 | 1.45E-08 | pDC_spleen |
| KLHL7              | 4.17E-13 | 3.80946919 | 0.285 | 0.011 | 1.48E-08 | pDC_spleen |
| FEZ2               | 4.18E-13 | 0.95632166 | 0.318 | 0.022 | 1.48E-08 | pDC_spleen |
| SENP6              | 4.20E-13 | 0.63792867 | 0.775 | 0.243 | 1.49E-08 | pDC_spleen |
| MAN2A1             | 4.22E-13 | 0.14171219 | 0.689 | 0.184 | 1.50E-08 | pDC_spleen |
| ESYT1              | 4.27E-13 | 2.07247696 | 0.344 | 0.032 | 1.51E-08 | pDC_spleen |
| SMDT1              | 4.33E-13 | 0.79286543 | 0.735 | 0.216 | 1.53E-08 | pDC_spleen |
| ELF4               | 4.42E-13 | 0.99870109 | 0.437 | 0.07  | 1.57E-08 | pDC_spleen |
| KRIT1              | 4.46E-13 | 0.56945228 | 0.45  | 0.076 | 1.58E-08 | pDC_spleen |
| CLINT1             | 4.52E-13 | 0.44326263 | 0.722 | 0.195 | 1.60E-08 | pDC_spleen |
| UXS1               | 4.55E-13 | 0.5105593  | 0.53  | 0.114 | 1.61E-08 | pDC_spleen |
| SPRING1            | 4.57E-13 | 1.04317407 | 0.331 | 0.027 | 1.62E-08 | pDC_spleen |
| GNAI2.1            | 4.61E-13 | 0.28761345 | 0.801 | 0.238 | 1.63E-08 | pDC_spleen |
| RPL35A             | 4.65E-13 | 0.75219461 | 0.947 | 0.492 | 1.65E-08 | pDC_spleen |
| AFDN               | 4.71E-13 | 0.69912574 | 0.53  | 0.114 | 1.67E-08 | pDC_spleen |

|                     |          |            |       |       |          |            |
|---------------------|----------|------------|-------|-------|----------|------------|
| TPM1                | 4.73E-13 | 2.39223094 | 0.285 | 0.011 | 1.68E-08 | pDC_spleen |
| RC3H1               | 4.74E-13 | 0.18447541 | 0.477 | 0.086 | 1.68E-08 | pDC_spleen |
| VRK2                | 4.78E-13 | 0.70686921 | 0.464 | 0.081 | 1.70E-08 | pDC_spleen |
| FADS1               | 5.01E-13 | 3.22095119 | 0.285 | 0.011 | 1.77E-08 | pDC_spleen |
| NBR1                | 5.04E-13 | 0.43306494 | 0.45  | 0.076 | 1.78E-08 | pDC_spleen |
| DNTTIP1             | 5.08E-13 | 3.26664595 | 0.285 | 0.011 | 1.80E-08 | pDC_spleen |
| ENSMMUG000000055457 | 5.11E-13 | 1.00814979 | 0.464 | 0.081 | 1.81E-08 | pDC_spleen |
| CKS1B               | 5.15E-13 | 3.12162108 | 0.298 | 0.016 | 1.82E-08 | pDC_spleen |
| DPY19L1             | 5.15E-13 | 2.53762233 | 0.285 | 0.011 | 1.83E-08 | pDC_spleen |
| ENSMMUG000000005880 | 5.16E-13 | 0.59164236 | 0.477 | 0.086 | 1.83E-08 | pDC_spleen |
| ROS1                | 5.17E-13 | 1.55771998 | 0.344 | 0.032 | 1.83E-08 | pDC_spleen |
| ENSMMUG000000053384 | 5.22E-13 | 1.72063312 | 0.285 | 0.011 | 1.85E-08 | pDC_spleen |
| RGS19               | 5.31E-13 | 0.39631871 | 0.536 | 0.114 | 1.88E-08 | pDC_spleen |
| PIGX                | 5.35E-13 | 5.80134592 | 0.252 | 0     | 1.90E-08 | pDC_spleen |
| PTPRS               | 5.35E-13 | 6.61723875 | 0.252 | 0     | 1.90E-08 | pDC_spleen |
| RLIM                | 5.43E-13 | 0.83279869 | 0.437 | 0.07  | 1.92E-08 | pDC_spleen |
| NR1D2               | 5.54E-13 | 1.09776822 | 0.358 | 0.038 | 1.96E-08 | pDC_spleen |
| PSMB2               | 5.72E-13 | 1.03371016 | 0.384 | 0.049 | 2.03E-08 | pDC_spleen |
| FAM13A              | 5.94E-13 | 2.45951688 | 0.358 | 0.043 | 2.11E-08 | pDC_spleen |
| SSR4                | 6.03E-13 | 0.7382625  | 0.695 | 0.195 | 2.14E-08 | pDC_spleen |
| RPL24               | 6.11E-13 | 0.80289096 | 0.94  | 0.438 | 2.17E-08 | pDC_spleen |
| SMARCC1             | 6.38E-13 | 0.34511782 | 0.649 | 0.162 | 2.26E-08 | pDC_spleen |
| PLK2                | 6.40E-13 | 2.25256345 | 0.298 | 0.016 | 2.27E-08 | pDC_spleen |
| STX8                | 6.42E-13 | 0.18506701 | 0.722 | 0.205 | 2.27E-08 | pDC_spleen |
| CHD8                | 6.43E-13 | 0.84126094 | 0.358 | 0.038 | 2.28E-08 | pDC_spleen |
| RSBN1               | 6.45E-13 | 2.04553008 | 0.311 | 0.022 | 2.29E-08 | pDC_spleen |
| SNRNP48             | 6.49E-13 | 2.80603502 | 0.298 | 0.016 | 2.30E-08 | pDC_spleen |
| OS9                 | 6.49E-13 | 0.43204313 | 0.477 | 0.092 | 2.30E-08 | pDC_spleen |
| ZFPM2               | 6.55E-13 | 5.72520815 | 0.278 | 0.011 | 2.32E-08 | pDC_spleen |
| IDS                 | 6.56E-13 | 0.86669432 | 0.457 | 0.081 | 2.32E-08 | pDC_spleen |
| MINDY2              | 6.58E-13 | 2.66974435 | 0.298 | 0.016 | 2.33E-08 | pDC_spleen |
| EIF3E               | 6.60E-13 | 0.89004255 | 0.775 | 0.265 | 2.34E-08 | pDC_spleen |
| SLC41A2             | 6.70E-13 | 1.18760679 | 0.404 | 0.059 | 2.37E-08 | pDC_spleen |

|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| LRPPRC             | 6.80E-13 | 0.41311989 | 0.523 | 0.108 | 2.41E-08 | pDC_spleen |
| NAA10              | 6.81E-13 | 1.37912987 | 0.325 | 0.027 | 2.41E-08 | pDC_spleen |
| GNAI3              | 6.92E-13 | 0.5158801  | 0.576 | 0.135 | 2.45E-08 | pDC_spleen |
| STX17              | 6.96E-13 | 0.35896796 | 0.464 | 0.081 | 2.46E-08 | pDC_spleen |
| SUPT4H1            | 6.96E-13 | 1.46374666 | 0.483 | 0.097 | 2.47E-08 | pDC_spleen |
| RPS13              | 6.99E-13 | 0.82409203 | 0.94  | 0.492 | 2.48E-08 | pDC_spleen |
| TIFA               | 7.04E-13 | 1.43353595 | 0.298 | 0.016 | 2.49E-08 | pDC_spleen |
| MED31              | 7.04E-13 | 2.38553211 | 0.298 | 0.016 | 2.49E-08 | pDC_spleen |
| SUPT3H             | 7.13E-13 | 0.60986811 | 0.669 | 0.195 | 2.53E-08 | pDC_spleen |
| TRIP12             | 7.19E-13 | 0.64252819 | 0.874 | 0.314 | 2.55E-08 | pDC_spleen |
| DIS3L2             | 7.38E-13 | 0.5367684  | 0.623 | 0.157 | 2.62E-08 | pDC_spleen |
| SLC22A18           | 7.46E-13 | 0.55047846 | 0.437 | 0.07  | 2.64E-08 | pDC_spleen |
| GAB1               | 7.49E-13 | 0.43807464 | 0.543 | 0.119 | 2.65E-08 | pDC_spleen |
| KCNH7              | 7.70E-13 | 0.25714367 | 0.384 | 0.049 | 2.73E-08 | pDC_spleen |
| NT5C2              | 7.70E-13 | 0.82493831 | 0.49  | 0.097 | 2.73E-08 | pDC_spleen |
| DAD1               | 7.93E-13 | 1.33623521 | 0.417 | 0.065 | 2.81E-08 | pDC_spleen |
| PSMD13             | 7.94E-13 | 0.82740309 | 0.497 | 0.097 | 2.81E-08 | pDC_spleen |
| TRAPPC10           | 7.96E-13 | 0.36895446 | 0.517 | 0.108 | 2.82E-08 | pDC_spleen |
| ARMH3              | 7.97E-13 | 0.33573614 | 0.51  | 0.103 | 2.82E-08 | pDC_spleen |
| ENSMMUG00000059988 | 8.11E-13 | 1.44165775 | 0.338 | 0.032 | 2.87E-08 | pDC_spleen |
| RHOT1              | 8.12E-13 | 4.01231105 | 0.265 | 0.005 | 2.88E-08 | pDC_spleen |
| SS18               | 8.20E-13 | 1.23373469 | 0.43  | 0.07  | 2.91E-08 | pDC_spleen |
| H2BC18             | 8.24E-13 | 1.4183229  | 0.265 | 0.005 | 2.92E-08 | pDC_spleen |
| TCF20              | 8.39E-13 | 0.5512009  | 0.47  | 0.086 | 2.97E-08 | pDC_spleen |
| C11H12orf57        | 8.97E-13 | 0.89991694 | 0.709 | 0.243 | 3.18E-08 | pDC_spleen |
| TRIM8              | 9.15E-13 | 1.51290787 | 0.325 | 0.027 | 3.24E-08 | pDC_spleen |
| URGCP              | 9.30E-13 | 0.65113844 | 0.397 | 0.059 | 3.29E-08 | pDC_spleen |
| COPG2              | 9.39E-13 | 0.80467984 | 0.325 | 0.027 | 3.33E-08 | pDC_spleen |
| ENSMMUG00000053146 | 9.40E-13 | 0.9214354  | 0.636 | 0.173 | 3.33E-08 | pDC_spleen |
| ELK3               | 9.49E-13 | 0.44021559 | 0.649 | 0.178 | 3.36E-08 | pDC_spleen |
| MAPRE2             | 9.52E-13 | 1.23686364 | 0.424 | 0.07  | 3.37E-08 | pDC_spleen |
| RAB11A             | 9.61E-13 | 0.8842899  | 0.543 | 0.124 | 3.41E-08 | pDC_spleen |
| SOS1               | 9.65E-13 | 0.45273569 | 0.662 | 0.173 | 3.42E-08 | pDC_spleen |

|                     |          |            |       |       |          |            |
|---------------------|----------|------------|-------|-------|----------|------------|
| ATP5MPL             | 9.72E-13 | 0.86985097 | 0.768 | 0.254 | 3.45E-08 | pDC_spleen |
| KANSL1L             | 1.01E-12 | 1.48471413 | 0.391 | 0.054 | 3.58E-08 | pDC_spleen |
| EPS15               | 1.01E-12 | 0.82175329 | 0.881 | 0.324 | 3.58E-08 | pDC_spleen |
| VPS36               | 1.03E-12 | 0.74418835 | 0.417 | 0.065 | 3.64E-08 | pDC_spleen |
| RSL24D1             | 1.04E-12 | 0.54745037 | 0.596 | 0.151 | 3.68E-08 | pDC_spleen |
| ENSMMUG00000008097  | 1.06E-12 | 1.99882295 | 0.338 | 0.032 | 3.74E-08 | pDC_spleen |
| CBLB                | 1.07E-12 | 0.66843488 | 0.742 | 0.243 | 3.78E-08 | pDC_spleen |
| PHTF1               | 1.07E-12 | 1.49290769 | 0.338 | 0.032 | 3.79E-08 | pDC_spleen |
| PDK3                | 1.07E-12 | 2.45258501 | 0.278 | 0.011 | 3.79E-08 | pDC_spleen |
| DNAJC9              | 1.09E-12 | 2.20884423 | 0.278 | 0.011 | 3.85E-08 | pDC_spleen |
| UPF3A               | 1.09E-12 | 1.92410291 | 0.358 | 0.043 | 3.87E-08 | pDC_spleen |
| AKAP10              | 1.10E-12 | 0.42599227 | 0.417 | 0.065 | 3.90E-08 | pDC_spleen |
| NEK7                | 1.13E-12 | 0.44518476 | 0.55  | 0.124 | 4.00E-08 | pDC_spleen |
| GLG1                | 1.13E-12 | 0.57784841 | 0.517 | 0.108 | 4.01E-08 | pDC_spleen |
| NIPAL3              | 1.13E-12 | 2.08672825 | 0.278 | 0.011 | 4.01E-08 | pDC_spleen |
| PBX2                | 1.14E-12 | 1.68539835 | 0.338 | 0.032 | 4.03E-08 | pDC_spleen |
| AKAP17A             | 1.16E-12 | 0.75449908 | 0.404 | 0.059 | 4.11E-08 | pDC_spleen |
| HERC2               | 1.18E-12 | 0.13756507 | 0.596 | 0.141 | 4.17E-08 | pDC_spleen |
| BMT2                | 1.19E-12 | 0.60237658 | 0.523 | 0.119 | 4.23E-08 | pDC_spleen |
| ENSMMUG000000040181 | 1.20E-12 | 1.44187358 | 0.377 | 0.049 | 4.26E-08 | pDC_spleen |
| ZCCHC7              | 1.23E-12 | 0.46352883 | 0.722 | 0.216 | 4.34E-08 | pDC_spleen |
| TXNIP               | 1.24E-12 | 0.28421268 | 0.662 | 0.173 | 4.40E-08 | pDC_spleen |
| NUP54               | 1.27E-12 | 1.47734471 | 0.351 | 0.038 | 4.51E-08 | pDC_spleen |
| FKBP1A              | 1.30E-12 | 0.80677371 | 0.536 | 0.119 | 4.61E-08 | pDC_spleen |
| PDS5A               | 1.30E-12 | 0.56948341 | 0.656 | 0.173 | 4.61E-08 | pDC_spleen |
| MRPL39              | 1.31E-12 | 0.9000923  | 0.616 | 0.168 | 4.63E-08 | pDC_spleen |
| LSM6                | 1.32E-12 | 0.89311607 | 0.477 | 0.092 | 4.67E-08 | pDC_spleen |
| GPATCH8             | 1.33E-12 | 0.38831949 | 0.583 | 0.141 | 4.70E-08 | pDC_spleen |
| ENSMMUG000000014947 | 1.33E-12 | 0.74822953 | 0.417 | 0.065 | 4.72E-08 | pDC_spleen |
| SLC35A3             | 1.33E-12 | 1.11532667 | 0.391 | 0.054 | 4.73E-08 | pDC_spleen |
| ENSMMUG000000049722 | 1.34E-12 | 0.42610257 | 0.57  | 0.135 | 4.75E-08 | pDC_spleen |
| STK4                | 1.35E-12 | 0.65825764 | 0.848 | 0.314 | 4.77E-08 | pDC_spleen |
| CREB3               | 1.36E-12 | 0.80373744 | 0.364 | 0.043 | 4.80E-08 | pDC_spleen |

|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| ANKRD13A           | 1.37E-12 | 0.71698682 | 0.364 | 0.043 | 4.86E-08 | pDC_spleen |
| M6PR               | 1.38E-12 | 0.63152823 | 0.57  | 0.135 | 4.89E-08 | pDC_spleen |
| GLS                | 1.40E-12 | 0.32806706 | 0.881 | 0.308 | 4.94E-08 | pDC_spleen |
| NSD1               | 1.43E-12 | 0.19741979 | 0.715 | 0.2   | 5.05E-08 | pDC_spleen |
| CPM                | 1.43E-12 | 2.61808528 | 0.318 | 0.027 | 5.07E-08 | pDC_spleen |
| IQCG               | 1.46E-12 | 2.14717029 | 0.305 | 0.022 | 5.17E-08 | pDC_spleen |
| SZRD1              | 1.48E-12 | 0.33688749 | 0.642 | 0.168 | 5.24E-08 | pDC_spleen |
| LARP1              | 1.49E-12 | 0.73925543 | 0.444 | 0.076 | 5.26E-08 | pDC_spleen |
| ASCC3              | 1.51E-12 | 0.68590046 | 0.649 | 0.178 | 5.35E-08 | pDC_spleen |
| CMAH               | 1.55E-12 | 0.82606726 | 0.762 | 0.27  | 5.48E-08 | pDC_spleen |
| LTV1               | 1.55E-12 | 0.40390443 | 0.517 | 0.108 | 5.50E-08 | pDC_spleen |
| TERF1              | 1.57E-12 | 1.77240517 | 0.318 | 0.027 | 5.55E-08 | pDC_spleen |
| CHM                | 1.57E-12 | 0.63537451 | 0.437 | 0.076 | 5.55E-08 | pDC_spleen |
| TPR                | 1.57E-12 | 0.38550539 | 0.49  | 0.097 | 5.58E-08 | pDC_spleen |
| RPS12              | 1.61E-12 | 0.84010506 | 0.94  | 0.519 | 5.72E-08 | pDC_spleen |
| MAT2B              | 1.67E-12 | 1.72803257 | 0.331 | 0.032 | 5.92E-08 | pDC_spleen |
| TPT1               | 1.69E-12 | 0.72618256 | 0.987 | 0.665 | 5.98E-08 | pDC_spleen |
| ENSMMUG00000063637 | 1.70E-12 | 0.73728657 | 0.894 | 0.335 | 6.02E-08 | pDC_spleen |
| MARK2              | 1.70E-12 | 0.75316376 | 0.391 | 0.054 | 6.02E-08 | pDC_spleen |
| EXOC2              | 1.72E-12 | 0.42521246 | 0.497 | 0.103 | 6.09E-08 | pDC_spleen |
| SIRT1              | 1.72E-12 | 0.38497447 | 0.391 | 0.054 | 6.09E-08 | pDC_spleen |
| SUMO3              | 1.75E-12 | 1.43257192 | 0.371 | 0.049 | 6.20E-08 | pDC_spleen |
| PLXNC1             | 1.75E-12 | 0.86532071 | 0.921 | 0.416 | 6.21E-08 | pDC_spleen |
| SLC25A12           | 1.79E-12 | 3.20836867 | 0.258 | 0.005 | 6.33E-08 | pDC_spleen |
| FAM174C            | 1.79E-12 | 3.77630383 | 0.258 | 0.005 | 6.33E-08 | pDC_spleen |
| ACTA2              | 1.83E-12 | 1.40032166 | 0.344 | 0.038 | 6.47E-08 | pDC_spleen |
| GNPTAB             | 1.83E-12 | 1.98910971 | 0.358 | 0.043 | 6.50E-08 | pDC_spleen |
| JPT1               | 1.85E-12 | 0.69246667 | 0.848 | 0.303 | 6.55E-08 | pDC_spleen |
| FBXO21             | 1.86E-12 | 0.46956384 | 0.358 | 0.043 | 6.58E-08 | pDC_spleen |
| RELL1              | 1.86E-12 | 0.91465083 | 0.556 | 0.135 | 6.60E-08 | pDC_spleen |
| SLC38A1            | 1.87E-12 | 0.52698333 | 0.874 | 0.324 | 6.62E-08 | pDC_spleen |
| PGD                | 1.87E-12 | 1.91469006 | 0.331 | 0.032 | 6.63E-08 | pDC_spleen |
| RPL4               | 1.87E-12 | 0.8158172  | 0.874 | 0.378 | 6.64E-08 | pDC_spleen |

|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| SF3B6              | 1.88E-12 | 0.74917391 | 0.523 | 0.114 | 6.66E-08 | pDC_spleen |
| ZNRF2              | 1.89E-12 | 1.00722183 | 0.397 | 0.059 | 6.69E-08 | pDC_spleen |
| RBM6               | 1.90E-12 | 0.28950873 | 0.609 | 0.151 | 6.74E-08 | pDC_spleen |
| FEM1C              | 1.92E-12 | 0.36525995 | 0.305 | 0.022 | 6.81E-08 | pDC_spleen |
| ENSMMUG00000056012 | 1.92E-12 | 1.2205945  | 0.457 | 0.086 | 6.82E-08 | pDC_spleen |
| FKBP15             | 1.95E-12 | 0.23156249 | 0.503 | 0.103 | 6.89E-08 | pDC_spleen |
| CDC40              | 1.97E-12 | 2.78961765 | 0.285 | 0.016 | 6.99E-08 | pDC_spleen |
| ENSMMUG00000057079 | 2.02E-12 | 0.33741542 | 0.397 | 0.059 | 7.17E-08 | pDC_spleen |
| CHD7               | 2.04E-12 | 0.44847621 | 0.695 | 0.2   | 7.21E-08 | pDC_spleen |
| NCOA4              | 2.04E-12 | 0.70490137 | 0.47  | 0.092 | 7.22E-08 | pDC_spleen |
| FNBP1L             | 2.07E-12 | 0.54685541 | 0.616 | 0.162 | 7.34E-08 | pDC_spleen |
| BRD2               | 2.07E-12 | 0.42871794 | 0.801 | 0.254 | 7.35E-08 | pDC_spleen |
| SVBP               | 2.10E-12 | 1.9275781  | 0.344 | 0.038 | 7.44E-08 | pDC_spleen |
| TMA7               | 2.10E-12 | 0.87234606 | 0.762 | 0.259 | 7.45E-08 | pDC_spleen |
| PTP4A1             | 2.13E-12 | 0.46973533 | 0.583 | 0.141 | 7.53E-08 | pDC_spleen |
| UBP1               | 2.13E-12 | 0.65214997 | 0.444 | 0.081 | 7.54E-08 | pDC_spleen |
| CCDC69             | 2.17E-12 | 0.96075839 | 0.417 | 0.07  | 7.69E-08 | pDC_spleen |
| ERO1A              | 2.18E-12 | 0.43569615 | 0.57  | 0.135 | 7.72E-08 | pDC_spleen |
| KCTD12             | 2.18E-12 | 0.18057734 | 0.477 | 0.092 | 7.72E-08 | pDC_spleen |
| PNP                | 2.18E-12 | 0.49295099 | 0.411 | 0.065 | 7.73E-08 | pDC_spleen |
| HBE1               | 2.25E-12 | 2.24726997 | 0.272 | 0.011 | 7.97E-08 | pDC_spleen |
| NEK6               | 2.25E-12 | 0.46977897 | 0.57  | 0.141 | 7.97E-08 | pDC_spleen |
| MZT2B              | 2.28E-12 | 1.3536966  | 0.331 | 0.032 | 8.09E-08 | pDC_spleen |
| PRELID1            | 2.29E-12 | 1.00712404 | 0.371 | 0.049 | 8.12E-08 | pDC_spleen |
| EHBP1              | 2.29E-12 | 0.55683606 | 0.464 | 0.092 | 8.13E-08 | pDC_spleen |
| PLEKHJ1            | 2.30E-12 | 1.07954722 | 0.318 | 0.027 | 8.14E-08 | pDC_spleen |
| PIAS2              | 2.30E-12 | 0.76599015 | 0.384 | 0.054 | 8.17E-08 | pDC_spleen |
| MAX                | 2.34E-12 | 1.11226834 | 0.444 | 0.081 | 8.30E-08 | pDC_spleen |
| ENSMMUG00000048973 | 2.37E-12 | 1.0593787  | 0.331 | 0.032 | 8.40E-08 | pDC_spleen |
| MMADHC             | 2.38E-12 | 3.02983281 | 0.272 | 0.011 | 8.42E-08 | pDC_spleen |
| EXOC1              | 2.39E-12 | 0.66891905 | 0.43  | 0.076 | 8.46E-08 | pDC_spleen |
| RPS27A             | 2.40E-12 | 0.7241664  | 0.821 | 0.281 | 8.49E-08 | pDC_spleen |
| ENSMMUG00000029987 | 2.41E-12 | 0.86132035 | 0.411 | 0.065 | 8.55E-08 | pDC_spleen |



|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| TMBIM6             | 2.41E-12 | 0.78349581 | 0.848 | 0.292 | 8.55E-08 | pDC_spleen |
| MAP3K14            | 2.43E-12 | 0.57774722 | 0.358 | 0.043 | 8.61E-08 | pDC_spleen |
| MRPL40             | 2.44E-12 | 3.06426    | 0.272 | 0.011 | 8.66E-08 | pDC_spleen |
| EIF3L              | 2.47E-12 | 0.71769603 | 0.762 | 0.238 | 8.76E-08 | pDC_spleen |
| TAF5L              | 2.48E-12 | 2.70658293 | 0.285 | 0.016 | 8.80E-08 | pDC_spleen |
| CEPT1              | 2.52E-12 | 0.80082427 | 0.45  | 0.081 | 8.94E-08 | pDC_spleen |
| ARMC8              | 2.52E-12 | 0.57577466 | 0.411 | 0.065 | 8.94E-08 | pDC_spleen |
| PDCD5              | 2.55E-12 | 1.4289323  | 0.45  | 0.086 | 9.04E-08 | pDC_spleen |
| FAM133B            | 2.59E-12 | 0.45493812 | 0.47  | 0.092 | 9.18E-08 | pDC_spleen |
| WDR82              | 2.61E-12 | 0.38047504 | 0.411 | 0.065 | 9.24E-08 | pDC_spleen |
| NDUFB9             | 2.64E-12 | 0.73101189 | 0.444 | 0.081 | 9.34E-08 | pDC_spleen |
| PREP               | 2.65E-12 | 1.35253779 | 0.331 | 0.032 | 9.39E-08 | pDC_spleen |
| MED14              | 2.66E-12 | 1.30393415 | 0.358 | 0.043 | 9.41E-08 | pDC_spleen |
| GOLGA1             | 2.67E-12 | 1.07282147 | 0.669 | 0.211 | 9.46E-08 | pDC_spleen |
| TM9SF2             | 2.68E-12 | 0.47221454 | 0.397 | 0.059 | 9.51E-08 | pDC_spleen |
| TXNL4A             | 2.72E-12 | 0.52579478 | 0.424 | 0.07  | 9.63E-08 | pDC_spleen |
| FAM120B            | 2.72E-12 | 0.45536572 | 0.358 | 0.043 | 9.64E-08 | pDC_spleen |
| UQCRB              | 2.74E-12 | 0.98275159 | 0.464 | 0.092 | 9.71E-08 | pDC_spleen |
| ENSMMUG00000022428 | 2.77E-12 | 0.48972619 | 0.649 | 0.173 | 9.80E-08 | pDC_spleen |
| SPECC1L            | 2.79E-12 | 0.2881787  | 0.709 | 0.205 | 9.89E-08 | pDC_spleen |
| NKPD1              | 2.83E-12 | 0.91388341 | 0.344 | 0.038 | 1.00E-07 | pDC_spleen |
| GTF2A2             | 2.86E-12 | 0.95434935 | 0.344 | 0.038 | 1.01E-07 | pDC_spleen |
| DPH2               | 2.88E-12 | 0.45081237 | 0.57  | 0.135 | 1.02E-07 | pDC_spleen |
| RPS29              | 2.96E-12 | 0.62067771 | 0.967 | 0.524 | 1.05E-07 | pDC_spleen |
| NDUFC2             | 3.01E-12 | 0.87220377 | 0.55  | 0.13  | 1.07E-07 | pDC_spleen |
| ENSMMUG00000055718 | 3.03E-12 | 2.86447426 | 0.298 | 0.022 | 1.07E-07 | pDC_spleen |
| INO80D             | 3.05E-12 | 0.30587292 | 0.536 | 0.119 | 1.08E-07 | pDC_spleen |
| SNX17              | 3.11E-12 | 2.13296938 | 0.325 | 0.032 | 1.10E-07 | pDC_spleen |
| TNKS               | 3.15E-12 | 0.42669645 | 0.616 | 0.162 | 1.12E-07 | pDC_spleen |
| ANK3               | 3.23E-12 | 3.01220878 | 0.338 | 0.043 | 1.15E-07 | pDC_spleen |
| HBS1L              | 3.25E-12 | 0.2101305  | 0.623 | 0.162 | 1.15E-07 | pDC_spleen |
| ENSMMUG00000055773 | 3.25E-12 | 0.52742463 | 0.477 | 0.097 | 1.15E-07 | pDC_spleen |
| EMC3               | 3.25E-12 | 1.99462344 | 0.285 | 0.016 | 1.15E-07 | pDC_spleen |

|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| MCCC1              | 3.26E-12 | 1.76646571 | 0.338 | 0.038 | 1.15E-07 | pDC_spleen |
| GADD45A            | 3.27E-12 | 1.09194744 | 0.464 | 0.092 | 1.16E-07 | pDC_spleen |
| OCIAD1             | 3.30E-12 | 0.33756324 | 0.483 | 0.097 | 1.17E-07 | pDC_spleen |
| FMO5               | 3.32E-12 | 2.26758828 | 0.311 | 0.027 | 1.18E-07 | pDC_spleen |
| PSMC5              | 3.33E-12 | 0.75796185 | 0.483 | 0.097 | 1.18E-07 | pDC_spleen |
| ATP5PD             | 3.33E-12 | 0.77137353 | 0.497 | 0.103 | 1.18E-07 | pDC_spleen |
| FNBP4              | 3.39E-12 | 0.2680381  | 0.57  | 0.135 | 1.20E-07 | pDC_spleen |
| TOPORS             | 3.41E-12 | 0.38980883 | 0.55  | 0.13  | 1.21E-07 | pDC_spleen |
| FLNA               | 3.42E-12 | 0.66882851 | 0.603 | 0.157 | 1.21E-07 | pDC_spleen |
| POLR2D             | 3.47E-12 | 2.30664647 | 0.325 | 0.032 | 1.23E-07 | pDC_spleen |
| SRPK2              | 3.47E-12 | 0.68437048 | 0.576 | 0.146 | 1.23E-07 | pDC_spleen |
| ENSMMUG00000006463 | 3.48E-12 | 0.53916748 | 0.748 | 0.232 | 1.23E-07 | pDC_spleen |
| PCNT               | 3.53E-12 | 1.16529548 | 0.404 | 0.065 | 1.25E-07 | pDC_spleen |
| ZNF107             | 3.59E-12 | 2.47340342 | 0.298 | 0.022 | 1.27E-07 | pDC_spleen |
| PAN3               | 3.63E-12 | 0.72668364 | 0.901 | 0.362 | 1.29E-07 | pDC_spleen |
| CNPPD1             | 3.67E-12 | 2.25783818 | 0.311 | 0.027 | 1.30E-07 | pDC_spleen |
| GADD45GIP1         | 3.69E-12 | 1.25328697 | 0.298 | 0.022 | 1.31E-07 | pDC_spleen |
| CEP85L             | 3.69E-12 | 0.53842614 | 0.642 | 0.173 | 1.31E-07 | pDC_spleen |
| KDM3B              | 3.74E-12 | 0.54828769 | 0.576 | 0.141 | 1.32E-07 | pDC_spleen |
| A4GALT             | 3.75E-12 | 3.97822176 | 0.252 | 0.005 | 1.33E-07 | pDC_spleen |
| TM9SF1             | 3.76E-12 | 0.52638606 | 0.497 | 0.103 | 1.33E-07 | pDC_spleen |
| CHST12             | 3.76E-12 | 3.96440965 | 0.265 | 0.011 | 1.33E-07 | pDC_spleen |
| USP11              | 3.81E-12 | 3.72089384 | 0.252 | 0.005 | 1.35E-07 | pDC_spleen |
| NIFK               | 3.82E-12 | 0.98258066 | 0.364 | 0.049 | 1.36E-07 | pDC_spleen |
| PPCS               | 3.84E-12 | 1.96123004 | 0.311 | 0.027 | 1.36E-07 | pDC_spleen |
| MBNL3              | 3.86E-12 | 2.1384088  | 0.252 | 0.005 | 1.37E-07 | pDC_spleen |
| ZDHHC24            | 3.86E-12 | 3.34754805 | 0.252 | 0.005 | 1.37E-07 | pDC_spleen |
| SURF1              | 3.86E-12 | 2.11796261 | 0.252 | 0.005 | 1.37E-07 | pDC_spleen |
| LETMD1             | 3.88E-12 | 2.02149716 | 0.298 | 0.022 | 1.38E-07 | pDC_spleen |
| ENSMMUG00000002320 | 3.91E-12 | 0.81697217 | 0.987 | 0.568 | 1.38E-07 | pDC_spleen |
| LSM14A             | 3.96E-12 | 0.66432239 | 0.57  | 0.141 | 1.40E-07 | pDC_spleen |
| AHCTF1             | 3.96E-12 | 0.36360749 | 0.609 | 0.157 | 1.40E-07 | pDC_spleen |
| SLC25A4            | 3.98E-12 | 1.77528825 | 0.325 | 0.032 | 1.41E-07 | pDC_spleen |

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|--------------------|----------|------------|-------|-------|----------|------------|
| DAZAP1             | 4.09E-12 | 0.76057983 | 0.861 | 0.319 | 1.45E-07 | pDC_spleen |
| PPP4C              | 4.19E-12 | 0.24199443 | 0.464 | 0.086 | 1.49E-07 | pDC_spleen |
| NOCT               | 4.25E-12 | 1.13859432 | 0.377 | 0.054 | 1.51E-07 | pDC_spleen |
| PTRHD1             | 4.29E-12 | 1.29262206 | 0.424 | 0.076 | 1.52E-07 | pDC_spleen |
| POLR2H             | 4.33E-12 | 3.11169139 | 0.265 | 0.011 | 1.53E-07 | pDC_spleen |
| HSPA14             | 4.41E-12 | 0.86513943 | 0.45  | 0.086 | 1.56E-07 | pDC_spleen |
| TTC17              | 4.44E-12 | 0.81008245 | 0.57  | 0.141 | 1.57E-07 | pDC_spleen |
| UBE2R2             | 4.45E-12 | 0.42545563 | 0.629 | 0.173 | 1.58E-07 | pDC_spleen |
| SPATA5             | 4.51E-12 | 0.70370452 | 0.45  | 0.086 | 1.60E-07 | pDC_spleen |
| NDUFS3             | 4.56E-12 | 1.41458695 | 0.325 | 0.032 | 1.62E-07 | pDC_spleen |
| NRAS               | 4.60E-12 | 1.50109391 | 0.351 | 0.043 | 1.63E-07 | pDC_spleen |
| CCND1              | 4.60E-12 | 0.79479579 | 0.351 | 0.043 | 1.63E-07 | pDC_spleen |
| MBTD1              | 4.66E-12 | 0.42658984 | 0.43  | 0.076 | 1.65E-07 | pDC_spleen |
| INPP4B             | 4.68E-12 | 0.48137534 | 0.47  | 0.097 | 1.66E-07 | pDC_spleen |
| RUNX2              | 4.69E-12 | 0.19792826 | 0.748 | 0.243 | 1.66E-07 | pDC_spleen |
| CTDSP2             | 4.70E-12 | 3.67009225 | 0.265 | 0.011 | 1.67E-07 | pDC_spleen |
| DNAJC3             | 4.70E-12 | 0.67449431 | 0.477 | 0.097 | 1.67E-07 | pDC_spleen |
| PNKD               | 4.77E-12 | 1.43135085 | 0.351 | 0.043 | 1.69E-07 | pDC_spleen |
| STOML2             | 4.84E-12 | 0.64953437 | 0.391 | 0.059 | 1.71E-07 | pDC_spleen |
| NAV1               | 4.86E-12 | 0.72318073 | 0.682 | 0.211 | 1.72E-07 | pDC_spleen |
| NUDT3              | 4.89E-12 | 0.57686062 | 0.987 | 0.611 | 1.73E-07 | pDC_spleen |
| NDUFA6             | 4.99E-12 | 0.73467513 | 0.417 | 0.07  | 1.77E-07 | pDC_spleen |
| FYTTD1             | 5.04E-12 | 0.63078284 | 0.417 | 0.07  | 1.79E-07 | pDC_spleen |
| PPM1B              | 5.08E-12 | 0.35253687 | 0.53  | 0.124 | 1.80E-07 | pDC_spleen |
| ADA2               | 5.13E-12 | 1.17398324 | 0.517 | 0.124 | 1.82E-07 | pDC_spleen |
| ENSMMUG00000053817 | 5.14E-12 | 0.65919082 | 0.609 | 0.162 | 1.82E-07 | pDC_spleen |
| NARS1              | 5.17E-12 | 0.73125186 | 0.444 | 0.081 | 1.83E-07 | pDC_spleen |
| CWC27              | 5.20E-12 | 0.28209017 | 0.391 | 0.059 | 1.84E-07 | pDC_spleen |
| ENSMMUG00000006608 | 5.22E-12 | 0.4407338  | 0.801 | 0.259 | 1.85E-07 | pDC_spleen |
| CLSTN1             | 5.29E-12 | 0.31063072 | 0.517 | 0.114 | 1.87E-07 | pDC_spleen |
| ENSMMUG00000011580 | 5.31E-12 | 0.11160891 | 0.444 | 0.081 | 1.88E-07 | pDC_spleen |
| YARS2              | 5.33E-12 | 2.19830282 | 0.265 | 0.011 | 1.89E-07 | pDC_spleen |
| APC                | 5.33E-12 | 0.85836192 | 0.45  | 0.086 | 1.89E-07 | pDC_spleen |

|                   |          |            |       |       |          |            |
|-------------------|----------|------------|-------|-------|----------|------------|
| EEA1              | 5.35E-12 | 0.46039155 | 0.543 | 0.13  | 1.89E-07 | pDC_spleen |
| BATF3             | 5.36E-12 | 0.79149851 | 0.483 | 0.108 | 1.90E-07 | pDC_spleen |
| ZNF506            | 5.44E-12 | 0.44220701 | 0.616 | 0.162 | 1.93E-07 | pDC_spleen |
| TMED9             | 5.46E-12 | 0.37998876 | 0.47  | 0.092 | 1.93E-07 | pDC_spleen |
| ENSMUG00000017400 | 5.48E-12 | 1.01383321 | 0.338 | 0.038 | 1.94E-07 | pDC_spleen |
| PARG              | 5.55E-12 | 0.63379438 | 0.338 | 0.038 | 1.97E-07 | pDC_spleen |
| DNAJC8            | 5.57E-12 | 0.2010599  | 0.47  | 0.092 | 1.97E-07 | pDC_spleen |
| RPS9              | 5.61E-12 | 0.79457344 | 0.96  | 0.557 | 1.99E-07 | pDC_spleen |
| PPDPF             | 5.68E-12 | 0.45515592 | 0.384 | 0.059 | 2.01E-07 | pDC_spleen |
| DIDO1             | 5.74E-12 | 0.44252664 | 0.404 | 0.065 | 2.03E-07 | pDC_spleen |
| GSKIP             | 5.76E-12 | 2.2222002  | 0.278 | 0.016 | 2.04E-07 | pDC_spleen |
| CARD11            | 5.79E-12 | 1.57311411 | 0.331 | 0.038 | 2.05E-07 | pDC_spleen |
| LAP3              | 5.88E-12 | 0.5228757  | 0.834 | 0.276 | 2.08E-07 | pDC_spleen |
| MIB1              | 5.89E-12 | 0.6507773  | 0.424 | 0.076 | 2.09E-07 | pDC_spleen |
| KANSL1            | 5.92E-12 | 0.38671571 | 0.762 | 0.238 | 2.10E-07 | pDC_spleen |
| UBXN7             | 5.99E-12 | 0.87187487 | 0.404 | 0.065 | 2.12E-07 | pDC_spleen |
| IMPDH2            | 6.02E-12 | 0.97926218 | 0.364 | 0.049 | 2.13E-07 | pDC_spleen |
| FBL               | 6.04E-12 | 1.03401995 | 0.351 | 0.043 | 2.14E-07 | pDC_spleen |
| PARP14            | 6.06E-12 | 0.40060909 | 0.404 | 0.065 | 2.15E-07 | pDC_spleen |
| MED4              | 6.08E-12 | 0.71589464 | 0.391 | 0.059 | 2.16E-07 | pDC_spleen |
| UQCRH             | 6.10E-12 | 0.63613175 | 0.682 | 0.195 | 2.16E-07 | pDC_spleen |
| PRNP              | 6.11E-12 | 0.72772897 | 0.47  | 0.097 | 2.16E-07 | pDC_spleen |
| ATP5F1C           | 6.15E-12 | 0.75288677 | 0.536 | 0.13  | 2.18E-07 | pDC_spleen |
| INO80C            | 6.15E-12 | 0.35625556 | 0.43  | 0.076 | 2.18E-07 | pDC_spleen |
| ENSMUG00000063859 | 6.20E-12 | 1.43669541 | 0.417 | 0.076 | 2.20E-07 | pDC_spleen |
| GATD3A            | 6.28E-12 | 0.26671432 | 0.424 | 0.076 | 2.23E-07 | pDC_spleen |
| TICAM2            | 6.38E-12 | 0.47908509 | 0.364 | 0.049 | 2.26E-07 | pDC_spleen |
| MIF               | 6.40E-12 | 1.38654864 | 0.404 | 0.07  | 2.27E-07 | pDC_spleen |
| RHOA              | 6.41E-12 | 0.43082291 | 0.907 | 0.33  | 2.27E-07 | pDC_spleen |
| EBAG9             | 6.43E-12 | 0.76633102 | 0.291 | 0.022 | 2.28E-07 | pDC_spleen |
| CXXC5             | 6.58E-12 | 2.15989758 | 0.278 | 0.016 | 2.33E-07 | pDC_spleen |
| SCAND1            | 6.69E-12 | 1.48224877 | 0.291 | 0.022 | 2.37E-07 | pDC_spleen |
| RAB8A             | 6.72E-12 | 0.59707153 | 0.503 | 0.108 | 2.38E-07 | pDC_spleen |

|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| ST3GAL2            | 6.76E-12 | 2.54853462 | 0.278 | 0.016 | 2.39E-07 | pDC_spleen |
| SP3                | 6.82E-12 | 0.61234165 | 0.49  | 0.103 | 2.42E-07 | pDC_spleen |
| ZNF638             | 6.91E-12 | 0.20248064 | 0.735 | 0.216 | 2.45E-07 | pDC_spleen |
| ZRANB2             | 7.12E-12 | 0.20488984 | 0.536 | 0.124 | 2.52E-07 | pDC_spleen |
| EHD1               | 7.13E-12 | 0.40704778 | 0.675 | 0.195 | 2.52E-07 | pDC_spleen |
| MBTPS1             | 7.14E-12 | 1.72962408 | 0.291 | 0.022 | 2.53E-07 | pDC_spleen |
| MRPS31             | 7.21E-12 | 1.20230377 | 0.371 | 0.054 | 2.55E-07 | pDC_spleen |
| LONP2              | 7.23E-12 | 0.16657218 | 0.437 | 0.081 | 2.56E-07 | pDC_spleen |
| ZZZ3               | 7.36E-12 | 0.36930338 | 0.45  | 0.086 | 2.61E-07 | pDC_spleen |
| RRAGC              | 7.37E-12 | 0.7725474  | 0.331 | 0.038 | 2.61E-07 | pDC_spleen |
| CAPRIN1            | 7.50E-12 | 0.27314518 | 0.411 | 0.07  | 2.66E-07 | pDC_spleen |
| RIOK3              | 7.50E-12 | 0.49168071 | 0.563 | 0.146 | 2.66E-07 | pDC_spleen |
| LARP7              | 7.51E-12 | 0.82077938 | 0.384 | 0.059 | 2.66E-07 | pDC_spleen |
| VTI1B              | 7.55E-12 | 1.53553088 | 0.305 | 0.027 | 2.67E-07 | pDC_spleen |
| ENSMMUG00000028689 | 7.61E-12 | 1.86705857 | 0.291 | 0.022 | 2.70E-07 | pDC_spleen |
| BNIP2              | 7.81E-12 | 1.04639438 | 0.371 | 0.054 | 2.77E-07 | pDC_spleen |
| ACE                | 7.81E-12 | 1.33417591 | 0.371 | 0.054 | 2.77E-07 | pDC_spleen |
| SH3BGRL            | 7.82E-12 | 0.7983064  | 0.709 | 0.243 | 2.77E-07 | pDC_spleen |
| CDK8               | 7.84E-12 | 1.58493886 | 0.358 | 0.049 | 2.78E-07 | pDC_spleen |
| ENSMMUG00000056332 | 7.89E-12 | 0.80842704 | 0.609 | 0.173 | 2.79E-07 | pDC_spleen |
| RBL2               | 7.92E-12 | 1.2005865  | 0.291 | 0.022 | 2.80E-07 | pDC_spleen |
| MNAT1              | 7.92E-12 | 0.79545317 | 0.517 | 0.119 | 2.81E-07 | pDC_spleen |
| ENSMMUG00000015095 | 8.02E-12 | 1.99727438 | 0.291 | 0.022 | 2.84E-07 | pDC_spleen |
| YPEL2              | 8.12E-12 | 1.4450767  | 0.291 | 0.022 | 2.88E-07 | pDC_spleen |
| KDM1A              | 8.13E-12 | 0.1244071  | 0.563 | 0.141 | 2.88E-07 | pDC_spleen |
| HNRNPH2            | 8.13E-12 | 0.784088   | 0.901 | 0.432 | 2.88E-07 | pDC_spleen |
| SPAST              | 8.14E-12 | 0.83801601 | 0.344 | 0.043 | 2.88E-07 | pDC_spleen |
| ILK                | 8.16E-12 | 0.52587124 | 0.49  | 0.103 | 2.89E-07 | pDC_spleen |
| DNAI3              | 8.18E-12 | 4.22703686 | 0.258 | 0.011 | 2.90E-07 | pDC_spleen |
| EIF4E2             | 8.20E-12 | 0.5982252  | 0.589 | 0.151 | 2.91E-07 | pDC_spleen |
| NPEPPS             | 8.28E-12 | 0.25208309 | 0.464 | 0.092 | 2.93E-07 | pDC_spleen |
| NDUFS6             | 8.34E-12 | 1.06146398 | 0.457 | 0.092 | 2.95E-07 | pDC_spleen |
| MTERF1             | 8.45E-12 | 1.57462826 | 0.305 | 0.027 | 3.00E-07 | pDC_spleen |

|           |          |            |       |       |          |            |
|-----------|----------|------------|-------|-------|----------|------------|
| ZNF106    | 8.53E-12 | 1.34162396 | 0.344 | 0.043 | 3.02E-07 | pDC_spleen |
| METAP2    | 8.65E-12 | 0.82953214 | 0.43  | 0.081 | 3.07E-07 | pDC_spleen |
| LAMTOR1   | 8.66E-12 | 0.92785397 | 0.483 | 0.103 | 3.07E-07 | pDC_spleen |
| PRPF38B   | 8.75E-12 | 0.44450486 | 0.57  | 0.141 | 3.10E-07 | pDC_spleen |
| TSPYL1    | 8.78E-12 | 1.62128805 | 0.305 | 0.027 | 3.11E-07 | pDC_spleen |
| HNRNPF    | 8.85E-12 | 0.46870658 | 0.755 | 0.243 | 3.14E-07 | pDC_spleen |
| RNF150    | 8.88E-12 | 3.54043809 | 0.272 | 0.016 | 3.15E-07 | pDC_spleen |
| THYN1     | 8.94E-12 | 1.63342443 | 0.344 | 0.043 | 3.17E-07 | pDC_spleen |
| ANKRD13C  | 8.95E-12 | 2.15181975 | 0.338 | 0.043 | 3.17E-07 | pDC_spleen |
| NXF1      | 9.03E-12 | 0.72276364 | 0.43  | 0.081 | 3.20E-07 | pDC_spleen |
| HIST1H2BJ | 9.12E-12 | 1.53918497 | 0.305 | 0.027 | 3.23E-07 | pDC_spleen |
| BOD1L1    | 9.12E-12 | 0.70300382 | 0.43  | 0.081 | 3.23E-07 | pDC_spleen |
| RBBP7     | 9.13E-12 | 1.0830358  | 0.397 | 0.065 | 3.23E-07 | pDC_spleen |
| RNF139    | 9.35E-12 | 1.72393053 | 0.305 | 0.027 | 3.31E-07 | pDC_spleen |
| DGUOK     | 9.38E-12 | 1.67725583 | 0.331 | 0.038 | 3.32E-07 | pDC_spleen |
| SLC35B1   | 9.38E-12 | 1.51924813 | 0.331 | 0.038 | 3.32E-07 | pDC_spleen |
| COPZ1     | 9.39E-12 | 1.27735921 | 0.384 | 0.059 | 3.33E-07 | pDC_spleen |
| RFX7      | 9.47E-12 | 1.35217739 | 0.411 | 0.076 | 3.36E-07 | pDC_spleen |
| ATAD1     | 9.57E-12 | 0.52628332 | 0.371 | 0.054 | 3.39E-07 | pDC_spleen |
| ZNHIT1    | 9.66E-12 | 0.29371417 | 0.477 | 0.097 | 3.42E-07 | pDC_spleen |
| PSMD12    | 9.90E-12 | 0.617611   | 0.55  | 0.135 | 3.51E-07 | pDC_spleen |
| WIPI2     | 9.99E-12 | 0.64184388 | 0.358 | 0.049 | 3.54E-07 | pDC_spleen |
| SPCS2     | 1.01E-11 | 0.53854265 | 0.556 | 0.135 | 3.57E-07 | pDC_spleen |
| AP1S1     | 1.04E-11 | 0.66067972 | 0.318 | 0.032 | 3.68E-07 | pDC_spleen |
| FBXW2     | 1.04E-11 | 1.77510754 | 0.318 | 0.032 | 3.68E-07 | pDC_spleen |
| KHDRBS1   | 1.08E-11 | 0.11210069 | 0.675 | 0.195 | 3.84E-07 | pDC_spleen |
| DIABLO    | 1.09E-11 | 0.67072206 | 0.424 | 0.076 | 3.87E-07 | pDC_spleen |
| ZNF296    | 1.09E-11 | 2.85624176 | 0.258 | 0.011 | 3.87E-07 | pDC_spleen |
| GNB2      | 1.10E-11 | 0.15317733 | 0.596 | 0.151 | 3.90E-07 | pDC_spleen |
| BLM       | 1.12E-11 | 0.5504915  | 0.344 | 0.043 | 3.96E-07 | pDC_spleen |
| RMND5A    | 1.12E-11 | 0.12569952 | 0.384 | 0.059 | 3.97E-07 | pDC_spleen |
| KIF20B    | 1.12E-11 | 2.58194402 | 0.258 | 0.011 | 3.98E-07 | pDC_spleen |
| ZMYND11   | 1.13E-11 | 0.72576709 | 0.424 | 0.076 | 4.00E-07 | pDC_spleen |

|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| PSMD11             | 1.13E-11 | 1.37916958 | 0.358 | 0.049 | 4.02E-07 | pDC_spleen |
| SNRPB              | 1.14E-11 | 0.44988622 | 0.53  | 0.124 | 4.05E-07 | pDC_spleen |
| TMEM120B           | 1.15E-11 | 0.57772813 | 0.384 | 0.059 | 4.06E-07 | pDC_spleen |
| PIK3C3             | 1.17E-11 | 0.47700064 | 0.397 | 0.065 | 4.16E-07 | pDC_spleen |
| PPA2               | 1.19E-11 | 0.69191146 | 0.53  | 0.13  | 4.22E-07 | pDC_spleen |
| CAT                | 1.20E-11 | 0.84858836 | 0.457 | 0.092 | 4.27E-07 | pDC_spleen |
| RAB8B              | 1.21E-11 | 1.1253564  | 0.894 | 0.492 | 4.27E-07 | pDC_spleen |
| EGR1               | 1.23E-11 | 0.63205273 | 0.384 | 0.059 | 4.34E-07 | pDC_spleen |
| BAX                | 1.23E-11 | 0.88353827 | 0.391 | 0.065 | 4.36E-07 | pDC_spleen |
| CUL4A              | 1.25E-11 | 0.47410753 | 0.384 | 0.059 | 4.44E-07 | pDC_spleen |
| ANAPC16            | 1.26E-11 | 0.99209826 | 0.358 | 0.049 | 4.46E-07 | pDC_spleen |
| ABI2               | 1.26E-11 | 0.59186617 | 0.358 | 0.049 | 4.46E-07 | pDC_spleen |
| DNAJC19            | 1.27E-11 | 0.7845587  | 0.384 | 0.059 | 4.49E-07 | pDC_spleen |
| ENSMMUG00000049376 | 1.27E-11 | 2.23767269 | 0.272 | 0.016 | 4.52E-07 | pDC_spleen |
| PKN1               | 1.30E-11 | 0.30579263 | 0.411 | 0.07  | 4.60E-07 | pDC_spleen |
| XIAP               | 1.31E-11 | 0.47450453 | 0.404 | 0.07  | 4.63E-07 | pDC_spleen |
| WDR13              | 1.32E-11 | 0.60316447 | 0.788 | 0.265 | 4.68E-07 | pDC_spleen |
| BCL7C              | 1.32E-11 | 0.76818169 | 0.285 | 0.022 | 4.69E-07 | pDC_spleen |
| ANAPC7             | 1.33E-11 | 2.2427769  | 0.298 | 0.027 | 4.70E-07 | pDC_spleen |
| GSTP1              | 1.34E-11 | 0.78100285 | 0.735 | 0.249 | 4.74E-07 | pDC_spleen |
| ZNF385A            | 1.34E-11 | 2.15623662 | 0.298 | 0.027 | 4.76E-07 | pDC_spleen |
| HMGN4              | 1.37E-11 | 1.23660809 | 0.404 | 0.07  | 4.84E-07 | pDC_spleen |
| RNF181             | 1.37E-11 | 0.46604528 | 0.596 | 0.157 | 4.84E-07 | pDC_spleen |
| LZIC               | 1.37E-11 | 0.70654342 | 0.384 | 0.059 | 4.85E-07 | pDC_spleen |
| TGS1               | 1.37E-11 | 1.73091666 | 0.325 | 0.038 | 4.85E-07 | pDC_spleen |
| C5H4orf27          | 1.42E-11 | 1.76368916 | 0.272 | 0.016 | 5.02E-07 | pDC_spleen |
| SASH3              | 1.42E-11 | 1.79452316 | 0.325 | 0.038 | 5.03E-07 | pDC_spleen |
| RAMAC              | 1.43E-11 | 1.69952416 | 0.298 | 0.027 | 5.07E-07 | pDC_spleen |
| IFRD1              | 1.43E-11 | 0.59410923 | 0.629 | 0.178 | 5.08E-07 | pDC_spleen |
| IGFLR1             | 1.44E-11 | 0.98906894 | 0.417 | 0.076 | 5.10E-07 | pDC_spleen |
| VPS29              | 1.44E-11 | 0.34634284 | 0.483 | 0.103 | 5.10E-07 | pDC_spleen |
| PGGT1B             | 1.46E-11 | 1.5000758  | 0.272 | 0.016 | 5.16E-07 | pDC_spleen |
| SPINT1             | 1.46E-11 | 1.29488033 | 0.272 | 0.016 | 5.16E-07 | pDC_spleen |

|          |          |            |       |       |          |            |
|----------|----------|------------|-------|-------|----------|------------|
| MRPL14   | 1.47E-11 | 0.34399724 | 0.51  | 0.114 | 5.19E-07 | pDC_spleen |
| EIF3K    | 1.49E-11 | 0.63902696 | 0.788 | 0.276 | 5.26E-07 | pDC_spleen |
| CRYBG1   | 1.58E-11 | 0.57707728 | 0.53  | 0.13  | 5.61E-07 | pDC_spleen |
| RAB10    | 1.60E-11 | 0.50472223 | 0.848 | 0.303 | 5.67E-07 | pDC_spleen |
| TFAM     | 1.63E-11 | 2.1730554  | 0.285 | 0.022 | 5.77E-07 | pDC_spleen |
| DNM1L    | 1.65E-11 | 0.40743518 | 0.483 | 0.103 | 5.86E-07 | pDC_spleen |
| PRPSAP2  | 1.69E-11 | 1.96632457 | 0.311 | 0.032 | 5.99E-07 | pDC_spleen |
| BHLHB9   | 1.69E-11 | 2.02032562 | 0.285 | 0.022 | 6.00E-07 | pDC_spleen |
| DDX6     | 1.70E-11 | 0.4272842  | 0.755 | 0.232 | 6.03E-07 | pDC_spleen |
| MYG1     | 1.71E-11 | 0.56330568 | 0.53  | 0.124 | 6.05E-07 | pDC_spleen |
| SRSF6    | 1.73E-11 | 0.37841713 | 0.517 | 0.119 | 6.14E-07 | pDC_spleen |
| AHSA1    | 1.73E-11 | 1.60191986 | 0.311 | 0.032 | 6.14E-07 | pDC_spleen |
| AURKAIP1 | 1.74E-11 | 1.93730294 | 0.285 | 0.022 | 6.15E-07 | pDC_spleen |
| ADA      | 1.75E-11 | 1.25874235 | 0.298 | 0.027 | 6.20E-07 | pDC_spleen |
| SRI      | 1.75E-11 | 0.53255444 | 0.874 | 0.335 | 6.21E-07 | pDC_spleen |
| STRBP    | 1.76E-11 | 1.24668382 | 0.285 | 0.022 | 6.23E-07 | pDC_spleen |
| MDM2     | 1.78E-11 | 1.93239452 | 0.391 | 0.07  | 6.31E-07 | pDC_spleen |
| NCBP2    | 1.79E-11 | 0.70588234 | 0.53  | 0.13  | 6.34E-07 | pDC_spleen |
| POLR1B   | 1.79E-11 | 1.61373736 | 0.351 | 0.049 | 6.35E-07 | pDC_spleen |
| NAF1     | 1.79E-11 | 1.70332846 | 0.298 | 0.027 | 6.36E-07 | pDC_spleen |
| CERKL    | 1.79E-11 | 1.37779293 | 0.298 | 0.027 | 6.36E-07 | pDC_spleen |
| NDST1    | 1.83E-11 | 1.20055569 | 0.338 | 0.043 | 6.50E-07 | pDC_spleen |
| TRRAP    | 1.84E-11 | 0.13940328 | 0.404 | 0.07  | 6.53E-07 | pDC_spleen |
| VPS28    | 1.85E-11 | 0.7203948  | 0.477 | 0.103 | 6.54E-07 | pDC_spleen |
| ITGB2    | 1.86E-11 | 1.01772148 | 0.503 | 0.124 | 6.58E-07 | pDC_spleen |
| SDF4     | 1.87E-11 | 1.01261551 | 0.325 | 0.038 | 6.62E-07 | pDC_spleen |
| MDH2     | 1.90E-11 | 1.01007804 | 0.391 | 0.065 | 6.74E-07 | pDC_spleen |
| PSMD9    | 1.91E-11 | 1.66426219 | 0.311 | 0.032 | 6.77E-07 | pDC_spleen |
| PPP2R5C  | 1.93E-11 | 0.29855965 | 0.662 | 0.195 | 6.83E-07 | pDC_spleen |
| HOMER2   | 1.94E-11 | 1.11509398 | 0.325 | 0.038 | 6.86E-07 | pDC_spleen |
| PPP1R21  | 1.94E-11 | 0.94771767 | 0.351 | 0.049 | 6.88E-07 | pDC_spleen |
| USP8     | 1.94E-11 | 0.21505457 | 0.589 | 0.151 | 6.89E-07 | pDC_spleen |
| EIF6     | 1.95E-11 | 0.96915496 | 0.464 | 0.097 | 6.90E-07 | pDC_spleen |



|                   |          |            |       |       |          |            |
|-------------------|----------|------------|-------|-------|----------|------------|
| TWF2              | 1.95E-11 | 0.50299594 | 0.444 | 0.086 | 6.91E-07 | pDC_spleen |
| RAB3GAP2          | 1.95E-11 | 0.45577343 | 0.49  | 0.108 | 6.91E-07 | pDC_spleen |
| FBXL3             | 1.96E-11 | 0.68161444 | 0.364 | 0.054 | 6.93E-07 | pDC_spleen |
| HOOK3             | 1.98E-11 | 0.23046587 | 0.848 | 0.281 | 7.01E-07 | pDC_spleen |
| CMC1              | 1.98E-11 | 1.26127456 | 0.298 | 0.027 | 7.02E-07 | pDC_spleen |
| MED21             | 1.98E-11 | 0.90321014 | 0.325 | 0.038 | 7.03E-07 | pDC_spleen |
| EBF1              | 1.99E-11 | 3.13560096 | 0.278 | 0.022 | 7.06E-07 | pDC_spleen |
| KDM5A             | 2.01E-11 | 0.1528414  | 0.49  | 0.108 | 7.12E-07 | pDC_spleen |
| SAMM50            | 2.03E-11 | 1.60966374 | 0.298 | 0.027 | 7.20E-07 | pDC_spleen |
| TRAPPC3           | 2.04E-11 | 0.62791003 | 0.377 | 0.059 | 7.21E-07 | pDC_spleen |
| RCAN3             | 2.08E-11 | 1.49237044 | 0.311 | 0.032 | 7.38E-07 | pDC_spleen |
| DDA1              | 2.10E-11 | 0.79453246 | 0.364 | 0.054 | 7.46E-07 | pDC_spleen |
| GRPEL1            | 2.11E-11 | 0.65956367 | 0.338 | 0.043 | 7.48E-07 | pDC_spleen |
| STYX              | 2.11E-11 | 1.17914652 | 0.298 | 0.027 | 7.48E-07 | pDC_spleen |
| CLNS1A            | 2.12E-11 | 0.53046852 | 0.517 | 0.119 | 7.51E-07 | pDC_spleen |
| FBXW4             | 2.13E-11 | 1.07191624 | 0.351 | 0.049 | 7.54E-07 | pDC_spleen |
| NDUF4F4           | 2.13E-11 | 1.54704349 | 0.325 | 0.038 | 7.55E-07 | pDC_spleen |
| VTA1              | 2.16E-11 | 0.52647351 | 0.338 | 0.043 | 7.65E-07 | pDC_spleen |
| PIN1              | 2.18E-11 | 1.4402581  | 0.325 | 0.038 | 7.73E-07 | pDC_spleen |
| ENSMUG00000056624 | 2.19E-11 | 0.83321163 | 0.364 | 0.054 | 7.76E-07 | pDC_spleen |
| TRIM38            | 2.19E-11 | 0.53642278 | 0.623 | 0.178 | 7.77E-07 | pDC_spleen |
| SLU7              | 2.21E-11 | 1.55433204 | 0.325 | 0.038 | 7.82E-07 | pDC_spleen |
| ENSMUG00000038088 | 2.21E-11 | 0.90285626 | 0.325 | 0.038 | 7.82E-07 | pDC_spleen |
| SELPLG            | 2.27E-11 | 1.05963328 | 0.417 | 0.081 | 8.04E-07 | pDC_spleen |
| STX6              | 2.29E-11 | 0.51957825 | 0.338 | 0.043 | 8.11E-07 | pDC_spleen |
| ILF3              | 2.32E-11 | 0.10107062 | 0.609 | 0.162 | 8.23E-07 | pDC_spleen |
| ATP1B1            | 2.39E-11 | 2.66518668 | 0.278 | 0.022 | 8.46E-07 | pDC_spleen |
| TMX1              | 2.39E-11 | 2.56986775 | 0.252 | 0.011 | 8.48E-07 | pDC_spleen |
| STT3A             | 2.39E-11 | 2.89862342 | 0.252 | 0.011 | 8.48E-07 | pDC_spleen |
| SACM1L            | 2.40E-11 | 0.66125625 | 0.377 | 0.059 | 8.51E-07 | pDC_spleen |
| AARS1             | 2.44E-11 | 0.39986599 | 0.417 | 0.076 | 8.63E-07 | pDC_spleen |
| EIF2S3            | 2.45E-11 | 0.27399487 | 0.43  | 0.081 | 8.69E-07 | pDC_spleen |
| UHRF1BP1          | 2.46E-11 | 2.37783926 | 0.252 | 0.011 | 8.72E-07 | pDC_spleen |

|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| ALG13              | 2.50E-11 | 0.75941194 | 0.351 | 0.049 | 8.85E-07 | pDC_spleen |
| MEF2B              | 2.51E-11 | 0.70772786 | 0.338 | 0.043 | 8.90E-07 | pDC_spleen |
| HECTD1             | 2.55E-11 | 0.28038137 | 0.503 | 0.114 | 9.03E-07 | pDC_spleen |
| ZNHIT3             | 2.56E-11 | 2.52234268 | 0.265 | 0.016 | 9.07E-07 | pDC_spleen |
| RCC1               | 2.58E-11 | 0.59202471 | 0.325 | 0.038 | 9.13E-07 | pDC_spleen |
| AIMP1              | 2.61E-11 | 0.87909007 | 0.477 | 0.103 | 9.23E-07 | pDC_spleen |
| SERBP1             | 2.61E-11 | 0.63678569 | 0.695 | 0.211 | 9.24E-07 | pDC_spleen |
| LIN7C              | 2.64E-11 | 2.10933957 | 0.291 | 0.027 | 9.35E-07 | pDC_spleen |
| TOMM22             | 2.69E-11 | 0.59498432 | 0.424 | 0.081 | 9.53E-07 | pDC_spleen |
| MED15              | 2.72E-11 | 0.14785847 | 0.55  | 0.135 | 9.64E-07 | pDC_spleen |
| ITFG1              | 2.72E-11 | 0.31349415 | 0.649 | 0.195 | 9.65E-07 | pDC_spleen |
| XBP1               | 2.79E-11 | 0.5275115  | 0.464 | 0.097 | 9.88E-07 | pDC_spleen |
| UCHL3              | 2.82E-11 | 0.85664886 | 0.424 | 0.081 | 9.98E-07 | pDC_spleen |
| SRRT               | 2.98E-11 | 0.67685659 | 0.358 | 0.054 | 1.05E-06 | pDC_spleen |
| STAT5A             | 2.99E-11 | 0.24407979 | 0.662 | 0.205 | 1.06E-06 | pDC_spleen |
| MED12              | 3.05E-11 | 2.21749409 | 0.278 | 0.022 | 1.08E-06 | pDC_spleen |
| NDUFS2             | 3.07E-11 | 0.82132127 | 0.411 | 0.076 | 1.09E-06 | pDC_spleen |
| RNF103             | 3.07E-11 | 0.4399032  | 0.411 | 0.076 | 1.09E-06 | pDC_spleen |
| CREG1              | 3.08E-11 | 2.40790276 | 0.265 | 0.016 | 1.09E-06 | pDC_spleen |
| CFAP97             | 3.10E-11 | 1.78293548 | 0.291 | 0.027 | 1.10E-06 | pDC_spleen |
| UBE3C              | 3.11E-11 | 0.61121165 | 0.45  | 0.092 | 1.10E-06 | pDC_spleen |
| HYI                | 3.16E-11 | 1.49652696 | 0.265 | 0.016 | 1.12E-06 | pDC_spleen |
| ANKRD28            | 3.16E-11 | 0.67285448 | 0.404 | 0.076 | 1.12E-06 | pDC_spleen |
| MAPK9              | 3.21E-11 | 2.32023592 | 0.278 | 0.022 | 1.14E-06 | pDC_spleen |
| ZNF528             | 3.23E-11 | 0.71708849 | 0.444 | 0.092 | 1.14E-06 | pDC_spleen |
| BTBD10             | 3.26E-11 | 0.68620347 | 0.331 | 0.043 | 1.15E-06 | pDC_spleen |
| MRPL43             | 3.29E-11 | 2.20233904 | 0.278 | 0.022 | 1.17E-06 | pDC_spleen |
| POLR2G             | 3.33E-11 | 2.03013638 | 0.318 | 0.038 | 1.18E-06 | pDC_spleen |
| HMGCS1             | 3.39E-11 | 0.96438702 | 0.384 | 0.065 | 1.20E-06 | pDC_spleen |
| HDLBP              | 3.41E-11 | 0.17511733 | 0.536 | 0.13  | 1.21E-06 | pDC_spleen |
| ENSMMUG00000064120 | 3.44E-11 | 0.68198097 | 0.715 | 0.232 | 1.22E-06 | pDC_spleen |
| ICAM3              | 3.44E-11 | 1.02070799 | 0.358 | 0.054 | 1.22E-06 | pDC_spleen |
| MLF2               | 3.45E-11 | 1.71847178 | 0.331 | 0.043 | 1.22E-06 | pDC_spleen |

|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| SELENOI            | 3.45E-11 | 1.26104055 | 0.331 | 0.043 | 1.22E-06 | pDC_spleen |
| CCDC6              | 3.47E-11 | 0.3249596  | 0.47  | 0.103 | 1.23E-06 | pDC_spleen |
| RNASEH2C           | 3.49E-11 | 1.87591255 | 0.331 | 0.043 | 1.24E-06 | pDC_spleen |
| ITGB1BP1           | 3.55E-11 | 1.93096267 | 0.278 | 0.022 | 1.26E-06 | pDC_spleen |
| SPOPL              | 3.58E-11 | 0.80101524 | 0.444 | 0.092 | 1.27E-06 | pDC_spleen |
| LYPLA1             | 3.60E-11 | 1.97627465 | 0.291 | 0.027 | 1.28E-06 | pDC_spleen |
| TRAF6              | 3.69E-11 | 1.561423   | 0.278 | 0.022 | 1.31E-06 | pDC_spleen |
| ANKRD10            | 3.71E-11 | 0.611013   | 0.848 | 0.314 | 1.31E-06 | pDC_spleen |
| VSIR               | 3.71E-11 | 0.12247644 | 0.523 | 0.124 | 1.32E-06 | pDC_spleen |
| SAMD9L             | 3.72E-11 | 1.2947493  | 0.364 | 0.059 | 1.32E-06 | pDC_spleen |
| GGA3               | 3.75E-11 | 1.46065547 | 0.318 | 0.038 | 1.33E-06 | pDC_spleen |
| FOXP1              | 3.79E-11 | 0.56906864 | 0.722 | 0.243 | 1.34E-06 | pDC_spleen |
| SHPRH              | 3.79E-11 | 0.94263628 | 0.318 | 0.038 | 1.34E-06 | pDC_spleen |
| C1H1orf50          | 3.84E-11 | 0.53292274 | 0.318 | 0.038 | 1.36E-06 | pDC_spleen |
| EIF3I              | 3.91E-11 | 0.68130964 | 0.397 | 0.07  | 1.39E-06 | pDC_spleen |
| ENSMMUG00000064232 | 4.01E-11 | 1.22143277 | 0.331 | 0.043 | 1.42E-06 | pDC_spleen |
| TXLNA              | 4.03E-11 | 0.82210285 | 0.291 | 0.027 | 1.43E-06 | pDC_spleen |
| RAB30              | 4.14E-11 | 0.36236678 | 0.795 | 0.276 | 1.47E-06 | pDC_spleen |
| TRIP11             | 4.15E-11 | 1.15711871 | 0.371 | 0.059 | 1.47E-06 | pDC_spleen |
| RPL32              | 4.17E-11 | 0.61311711 | 0.947 | 0.514 | 1.48E-06 | pDC_spleen |
| HNRNPH3            | 4.18E-11 | 0.32789961 | 0.795 | 0.265 | 1.48E-06 | pDC_spleen |
| HADHA              | 4.24E-11 | 0.8869777  | 0.411 | 0.076 | 1.50E-06 | pDC_spleen |
| TRPM7              | 4.30E-11 | 0.53983038 | 0.947 | 0.416 | 1.52E-06 | pDC_spleen |
| BMPR2              | 4.31E-11 | 0.65427963 | 0.49  | 0.119 | 1.53E-06 | pDC_spleen |
| DENND2B            | 4.35E-11 | 2.36103481 | 0.311 | 0.038 | 1.54E-06 | pDC_spleen |
| ZDHHC3             | 4.36E-11 | 1.23006356 | 0.305 | 0.032 | 1.54E-06 | pDC_spleen |
| PNKP               | 4.36E-11 | 0.9283899  | 0.305 | 0.032 | 1.54E-06 | pDC_spleen |
| UBE2J1             | 4.45E-11 | 0.60442277 | 0.43  | 0.086 | 1.58E-06 | pDC_spleen |
| HMG20B             | 4.50E-11 | 0.38751993 | 0.331 | 0.043 | 1.60E-06 | pDC_spleen |
| PRMT3              | 4.53E-11 | 0.311679   | 0.397 | 0.07  | 1.61E-06 | pDC_spleen |
| YLPM1              | 4.56E-11 | 0.61522098 | 0.344 | 0.049 | 1.61E-06 | pDC_spleen |
| ADH5               | 4.58E-11 | 1.27620797 | 0.318 | 0.038 | 1.62E-06 | pDC_spleen |
| AVEN               | 4.61E-11 | 0.83031747 | 0.331 | 0.043 | 1.63E-06 | pDC_spleen |

|                   |          |            |       |       |          |            |
|-------------------|----------|------------|-------|-------|----------|------------|
| KPNA6             | 4.63E-11 | 0.23063753 | 0.444 | 0.092 | 1.64E-06 | pDC_spleen |
| IPO9              | 4.63E-11 | 1.17472328 | 0.305 | 0.032 | 1.64E-06 | pDC_spleen |
| GPR107            | 4.67E-11 | 0.15961012 | 0.576 | 0.151 | 1.65E-06 | pDC_spleen |
| GGNBP2            | 4.69E-11 | 0.38270708 | 0.662 | 0.195 | 1.66E-06 | pDC_spleen |
| PDHB              | 4.75E-11 | 0.72539291 | 0.358 | 0.054 | 1.68E-06 | pDC_spleen |
| BLVRA             | 4.76E-11 | 1.89696902 | 0.338 | 0.049 | 1.69E-06 | pDC_spleen |
| CNOT7             | 4.77E-11 | 1.00791508 | 0.331 | 0.043 | 1.69E-06 | pDC_spleen |
| USP14             | 4.82E-11 | 0.52202856 | 0.344 | 0.049 | 1.71E-06 | pDC_spleen |
| USP42             | 4.83E-11 | 0.72176074 | 0.331 | 0.043 | 1.71E-06 | pDC_spleen |
| RPL5              | 4.89E-11 | 0.682082   | 0.921 | 0.459 | 1.73E-06 | pDC_spleen |
| RFX5              | 4.92E-11 | 1.05799459 | 0.305 | 0.032 | 1.74E-06 | pDC_spleen |
| PHF10             | 4.94E-11 | 0.19722774 | 0.331 | 0.043 | 1.75E-06 | pDC_spleen |
| PPM1D             | 5.05E-11 | 0.52143317 | 0.331 | 0.043 | 1.79E-06 | pDC_spleen |
| EDF1              | 5.07E-11 | 0.43778959 | 0.656 | 0.189 | 1.80E-06 | pDC_spleen |
| PHC3              | 5.11E-11 | 0.9322508  | 0.364 | 0.059 | 1.81E-06 | pDC_spleen |
| TDP2              | 5.12E-11 | 2.37261571 | 0.258 | 0.016 | 1.81E-06 | pDC_spleen |
| CDC123            | 5.14E-11 | 0.16337798 | 0.397 | 0.07  | 1.82E-06 | pDC_spleen |
| PDIA3             | 5.25E-11 | 0.29565429 | 0.397 | 0.07  | 1.86E-06 | pDC_spleen |
| ADNP              | 5.25E-11 | 0.19893969 | 0.53  | 0.13  | 1.86E-06 | pDC_spleen |
| TUBB6             | 5.34E-11 | 1.52130477 | 0.371 | 0.065 | 1.89E-06 | pDC_spleen |
| UIMC1             | 5.52E-11 | 0.72728685 | 0.351 | 0.054 | 1.96E-06 | pDC_spleen |
| PAQR7             | 5.56E-11 | 1.65326567 | 0.285 | 0.027 | 1.97E-06 | pDC_spleen |
| SUZ12             | 5.70E-11 | 0.20588363 | 0.47  | 0.103 | 2.02E-06 | pDC_spleen |
| MTMR3             | 5.77E-11 | 0.20299501 | 0.503 | 0.119 | 2.05E-06 | pDC_spleen |
| ZNF514            | 5.86E-11 | 0.38675683 | 0.358 | 0.054 | 2.08E-06 | pDC_spleen |
| CYCS              | 5.86E-11 | 0.21756833 | 0.417 | 0.081 | 2.08E-06 | pDC_spleen |
| CDC42SE1          | 5.89E-11 | 0.30360531 | 0.523 | 0.13  | 2.09E-06 | pDC_spleen |
| ISG15             | 5.90E-11 | 2.38545447 | 0.318 | 0.043 | 2.09E-06 | pDC_spleen |
| MAP3K7            | 5.98E-11 | 1.56731423 | 0.285 | 0.027 | 2.12E-06 | pDC_spleen |
| KAT6B             | 6.05E-11 | 0.11480472 | 0.609 | 0.173 | 2.14E-06 | pDC_spleen |
| KIFAP3            | 6.07E-11 | 2.20341241 | 0.258 | 0.016 | 2.15E-06 | pDC_spleen |
| ENSMUG00000051430 | 6.10E-11 | 2.02965895 | 0.298 | 0.032 | 2.16E-06 | pDC_spleen |
| WNK1              | 6.15E-11 | 0.5474596  | 0.861 | 0.335 | 2.18E-06 | pDC_spleen |

|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| LRRC1              | 6.15E-11 | 2.19270837 | 0.258 | 0.016 | 2.18E-06 | pDC_spleen |
| FBXO9              | 6.15E-11 | 1.33540122 | 0.258 | 0.016 | 2.18E-06 | pDC_spleen |
| ETFB               | 6.20E-11 | 0.69292287 | 0.377 | 0.065 | 2.20E-06 | pDC_spleen |
| TATDN1             | 6.21E-11 | 1.07938575 | 0.364 | 0.059 | 2.20E-06 | pDC_spleen |
| POC5               | 6.24E-11 | 0.68446846 | 0.497 | 0.119 | 2.21E-06 | pDC_spleen |
| APH1A              | 6.25E-11 | 1.31388974 | 0.338 | 0.049 | 2.21E-06 | pDC_spleen |
| DDX18              | 6.27E-11 | 0.73660697 | 0.377 | 0.065 | 2.22E-06 | pDC_spleen |
| MYOF               | 6.30E-11 | 1.09106028 | 0.351 | 0.054 | 2.23E-06 | pDC_spleen |
| SIK2               | 6.31E-11 | 0.42779569 | 0.576 | 0.157 | 2.24E-06 | pDC_spleen |
| ENSMMUG00000055026 | 6.33E-11 | 0.37347716 | 0.536 | 0.135 | 2.24E-06 | pDC_spleen |
| ENSMMUG00000029973 | 6.43E-11 | 0.18191532 | 0.662 | 0.195 | 2.28E-06 | pDC_spleen |
| RNF41              | 6.46E-11 | 1.91313622 | 0.272 | 0.022 | 2.29E-06 | pDC_spleen |
| SFI1               | 6.49E-11 | 2.02885318 | 0.258 | 0.016 | 2.30E-06 | pDC_spleen |
| PHF11              | 6.54E-11 | 0.51801871 | 0.457 | 0.097 | 2.32E-06 | pDC_spleen |
| SLC25A39           | 6.58E-11 | 1.94312277 | 0.272 | 0.022 | 2.33E-06 | pDC_spleen |
| GUCY1A1            | 6.65E-11 | 1.0602023  | 0.404 | 0.081 | 2.36E-06 | pDC_spleen |
| BFAR               | 6.66E-11 | 1.17204635 | 0.258 | 0.016 | 2.36E-06 | pDC_spleen |
| RPIA               | 6.71E-11 | 1.58976483 | 0.272 | 0.022 | 2.38E-06 | pDC_spleen |
| ANKMY2             | 6.80E-11 | 1.75822618 | 0.272 | 0.022 | 2.41E-06 | pDC_spleen |
| APOOL              | 6.80E-11 | 1.68369866 | 0.272 | 0.022 | 2.41E-06 | pDC_spleen |
| ECHDC1             | 6.85E-11 | 1.13363533 | 0.364 | 0.059 | 2.43E-06 | pDC_spleen |
| ENSMMUG00000012690 | 6.88E-11 | 2.15900565 | 0.298 | 0.032 | 2.44E-06 | pDC_spleen |
| ENSMMUG00000055114 | 6.92E-11 | 0.59980509 | 0.411 | 0.081 | 2.45E-06 | pDC_spleen |
| SPOP               | 6.92E-11 | 0.45253179 | 0.55  | 0.146 | 2.45E-06 | pDC_spleen |
| CRLF3              | 6.92E-11 | 0.25897698 | 0.444 | 0.092 | 2.45E-06 | pDC_spleen |
| PAIP2              | 6.94E-11 | 0.2222723  | 0.649 | 0.189 | 2.46E-06 | pDC_spleen |
| TARDBP             | 6.99E-11 | 0.51447618 | 0.464 | 0.103 | 2.48E-06 | pDC_spleen |
| PHF12              | 7.06E-11 | 1.54764544 | 0.272 | 0.022 | 2.50E-06 | pDC_spleen |
| SUMF1              | 7.12E-11 | 1.09514842 | 0.351 | 0.054 | 2.52E-06 | pDC_spleen |
| ATXN2L             | 7.24E-11 | 1.11159325 | 0.272 | 0.022 | 2.57E-06 | pDC_spleen |
| COMMD7             | 7.29E-11 | 0.22015656 | 0.43  | 0.086 | 2.58E-06 | pDC_spleen |
| MTMR1              | 7.44E-11 | 0.42216987 | 0.351 | 0.054 | 2.64E-06 | pDC_spleen |
| AMBRA1             | 7.45E-11 | 0.22502503 | 0.642 | 0.189 | 2.64E-06 | pDC_spleen |

|                   |          |            |       |       |          |            |
|-------------------|----------|------------|-------|-------|----------|------------|
| PRDX3             | 7.47E-11 | 0.62502992 | 0.364 | 0.059 | 2.65E-06 | pDC_spleen |
| TCEAL8            | 7.48E-11 | 2.07212025 | 0.285 | 0.027 | 2.65E-06 | pDC_spleen |
| NDUFB10           | 7.60E-11 | 0.88768021 | 0.444 | 0.097 | 2.69E-06 | pDC_spleen |
| RABAC1            | 7.64E-11 | 0.54099355 | 0.417 | 0.081 | 2.71E-06 | pDC_spleen |
| SF3A1             | 7.69E-11 | 1.22969491 | 0.351 | 0.054 | 2.73E-06 | pDC_spleen |
| CHMP2A            | 7.72E-11 | 0.21492945 | 0.517 | 0.124 | 2.73E-06 | pDC_spleen |
| ZC3H10            | 7.78E-11 | 0.54878907 | 0.768 | 0.27  | 2.76E-06 | pDC_spleen |
| INVS              | 7.86E-11 | 1.40409727 | 0.285 | 0.027 | 2.78E-06 | pDC_spleen |
| FAF2              | 7.86E-11 | 1.48726184 | 0.325 | 0.043 | 2.79E-06 | pDC_spleen |
| TMEM9B            | 7.94E-11 | 1.35033181 | 0.311 | 0.038 | 2.81E-06 | pDC_spleen |
| RAB2B             | 8.05E-11 | 1.36756485 | 0.298 | 0.032 | 2.85E-06 | pDC_spleen |
| ZSCAN18           | 8.10E-11 | 0.74570287 | 0.338 | 0.049 | 2.87E-06 | pDC_spleen |
| OLA1              | 8.12E-11 | 0.32271059 | 0.722 | 0.232 | 2.88E-06 | pDC_spleen |
| SRSF4             | 8.37E-11 | 0.16597452 | 0.768 | 0.243 | 2.96E-06 | pDC_spleen |
| NMRK1             | 8.39E-11 | 1.7350359  | 0.364 | 0.065 | 2.97E-06 | pDC_spleen |
| CKAP5             | 8.42E-11 | 1.35631463 | 0.325 | 0.043 | 2.99E-06 | pDC_spleen |
| ITPA              | 8.52E-11 | 1.13453691 | 0.311 | 0.038 | 3.02E-06 | pDC_spleen |
| GLYR1             | 8.53E-11 | 0.53947552 | 0.377 | 0.065 | 3.02E-06 | pDC_spleen |
| ZNF44             | 8.58E-11 | 0.10555445 | 0.391 | 0.07  | 3.04E-06 | pDC_spleen |
| RIPOR1            | 8.65E-11 | 1.27761889 | 0.298 | 0.032 | 3.07E-06 | pDC_spleen |
| STIL              | 8.67E-11 | 1.46973866 | 0.285 | 0.027 | 3.07E-06 | pDC_spleen |
| MMP25             | 8.68E-11 | 0.9483652  | 0.351 | 0.054 | 3.08E-06 | pDC_spleen |
| ATP6AP2           | 8.84E-11 | 1.07606962 | 0.384 | 0.07  | 3.13E-06 | pDC_spleen |
| XPO7              | 8.86E-11 | 1.11820368 | 0.338 | 0.049 | 3.14E-06 | pDC_spleen |
| TRAF7             | 8.97E-11 | 1.47773117 | 0.298 | 0.032 | 3.18E-06 | pDC_spleen |
| HVCN1             | 8.98E-11 | 0.69974489 | 0.444 | 0.097 | 3.18E-06 | pDC_spleen |
| GTF3C6            | 9.02E-11 | 0.81966151 | 0.411 | 0.081 | 3.20E-06 | pDC_spleen |
| RNF2              | 9.08E-11 | 0.26680095 | 0.464 | 0.103 | 3.22E-06 | pDC_spleen |
| SUN2              | 9.11E-11 | 0.5545323  | 0.285 | 0.027 | 3.23E-06 | pDC_spleen |
| TUBGCP3           | 9.19E-11 | 0.96717895 | 0.298 | 0.032 | 3.25E-06 | pDC_spleen |
| BCAP31            | 9.33E-11 | 0.35078843 | 0.391 | 0.07  | 3.31E-06 | pDC_spleen |
| CHFR              | 9.38E-11 | 0.52821966 | 0.364 | 0.059 | 3.32E-06 | pDC_spleen |
| ENSMUG00000059289 | 9.43E-11 | 1.31543631 | 0.371 | 0.065 | 3.34E-06 | pDC_spleen |

|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| RNF19A             | 9.52E-11 | 0.40372861 | 0.616 | 0.184 | 3.37E-06 | pDC_spleen |
| ATP5IF1            | 9.53E-11 | 0.86422113 | 0.497 | 0.124 | 3.38E-06 | pDC_spleen |
| RPS24              | 9.58E-11 | 0.65180022 | 0.954 | 0.53  | 3.40E-06 | pDC_spleen |
| OARD1              | 9.59E-11 | 1.42129536 | 0.338 | 0.049 | 3.40E-06 | pDC_spleen |
| TRPV2              | 9.69E-11 | 0.42774367 | 0.364 | 0.059 | 3.43E-06 | pDC_spleen |
| PRKAG1             | 9.69E-11 | 0.19701181 | 0.351 | 0.054 | 3.43E-06 | pDC_spleen |
| SUPT16H            | 9.72E-11 | 0.75933782 | 0.424 | 0.086 | 3.44E-06 | pDC_spleen |
| THAP9              | 9.75E-11 | 0.94584722 | 0.298 | 0.032 | 3.46E-06 | pDC_spleen |
| RNF4               | 9.78E-11 | 0.81039675 | 0.325 | 0.043 | 3.46E-06 | pDC_spleen |
| WDR1               | 9.91E-11 | 0.46645892 | 0.576 | 0.157 | 3.51E-06 | pDC_spleen |
| GPS2               | 9.92E-11 | 0.49910346 | 0.311 | 0.038 | 3.52E-06 | pDC_spleen |
| LDHA               | 1.00E-10 | 0.30375616 | 0.728 | 0.227 | 3.56E-06 | pDC_spleen |
| ENSMMUG00000007536 | 1.01E-10 | 0.93957529 | 0.437 | 0.092 | 3.57E-06 | pDC_spleen |
| FAM120A            | 1.02E-10 | 0.18668689 | 0.57  | 0.151 | 3.62E-06 | pDC_spleen |
| SSU72              | 1.02E-10 | 0.30116624 | 0.364 | 0.059 | 3.62E-06 | pDC_spleen |
| H1FX               | 1.02E-10 | 0.63687316 | 0.351 | 0.054 | 3.63E-06 | pDC_spleen |
| CCNY               | 1.03E-10 | 0.21739215 | 0.503 | 0.124 | 3.63E-06 | pDC_spleen |
| STMN1              | 1.05E-10 | 1.23753734 | 0.404 | 0.081 | 3.73E-06 | pDC_spleen |
| UEVLD              | 1.06E-10 | 1.04389033 | 0.325 | 0.043 | 3.75E-06 | pDC_spleen |
| SPN                | 1.07E-10 | 0.18597975 | 0.325 | 0.043 | 3.80E-06 | pDC_spleen |
| FMC1-LUC7L2        | 1.07E-10 | 0.35841292 | 0.768 | 0.254 | 3.80E-06 | pDC_spleen |
| CHTOP              | 1.08E-10 | 0.76792701 | 0.325 | 0.043 | 3.84E-06 | pDC_spleen |
| ALAS1              | 1.11E-10 | 1.14744274 | 0.364 | 0.065 | 3.93E-06 | pDC_spleen |
| ENSMMUG00000003101 | 1.12E-10 | 0.45972168 | 0.424 | 0.086 | 3.96E-06 | pDC_spleen |
| PPP1R12A           | 1.14E-10 | 0.34238829 | 0.848 | 0.297 | 4.04E-06 | pDC_spleen |
| NAA38              | 1.15E-10 | 1.77215517 | 0.318 | 0.043 | 4.08E-06 | pDC_spleen |
| MORC3              | 1.16E-10 | 0.13882    | 0.497 | 0.119 | 4.10E-06 | pDC_spleen |
| C6H5orf24          | 1.16E-10 | 2.0573467  | 0.252 | 0.016 | 4.12E-06 | pDC_spleen |
| JAG1               | 1.18E-10 | 2.33118484 | 0.252 | 0.016 | 4.17E-06 | pDC_spleen |
| PHTF2              | 1.19E-10 | 0.90644122 | 0.417 | 0.086 | 4.23E-06 | pDC_spleen |
| CCT7               | 1.22E-10 | 0.74157144 | 0.384 | 0.07  | 4.33E-06 | pDC_spleen |
| PARP8              | 1.23E-10 | 0.21550984 | 0.715 | 0.222 | 4.34E-06 | pDC_spleen |
| PDRG1              | 1.26E-10 | 0.13824023 | 0.503 | 0.124 | 4.45E-06 | pDC_spleen |

|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| SIL1               | 1.26E-10 | 0.66901306 | 0.656 | 0.211 | 4.45E-06 | pDC_spleen |
| UNC119             | 1.26E-10 | 2.10644342 | 0.252 | 0.016 | 4.45E-06 | pDC_spleen |
| CCDC174            | 1.27E-10 | 1.23979705 | 0.291 | 0.032 | 4.49E-06 | pDC_spleen |
| FO XK1             | 1.27E-10 | 0.72921271 | 0.331 | 0.049 | 4.50E-06 | pDC_spleen |
| NFYC               | 1.29E-10 | 0.27818446 | 0.411 | 0.081 | 4.56E-06 | pDC_spleen |
| MRPS6              | 1.29E-10 | 0.10005476 | 0.483 | 0.114 | 4.58E-06 | pDC_spleen |
| NCK2               | 1.30E-10 | 0.56022458 | 0.636 | 0.189 | 4.59E-06 | pDC_spleen |
| TAX1BP3            | 1.30E-10 | 1.10748601 | 0.344 | 0.054 | 4.60E-06 | pDC_spleen |
| NAPG               | 1.32E-10 | 2.13760296 | 0.278 | 0.027 | 4.67E-06 | pDC_spleen |
| TMEM134            | 1.32E-10 | 1.62140794 | 0.252 | 0.016 | 4.69E-06 | pDC_spleen |
| CASD1              | 1.33E-10 | 1.73486429 | 0.278 | 0.027 | 4.72E-06 | pDC_spleen |
| ENSMUG00000000983  | 1.34E-10 | 0.36728205 | 0.689 | 0.216 | 4.75E-06 | pDC_spleen |
| TRAF3              | 1.35E-10 | 0.32089778 | 0.874 | 0.319 | 4.78E-06 | pDC_spleen |
| STIM2              | 1.36E-10 | 0.64533713 | 0.437 | 0.097 | 4.83E-06 | pDC_spleen |
| WDR43              | 1.37E-10 | 0.44850574 | 0.411 | 0.081 | 4.84E-06 | pDC_spleen |
| GNG2               | 1.37E-10 | 0.9228168  | 0.49  | 0.141 | 4.86E-06 | pDC_spleen |
| CD38               | 1.38E-10 | 0.48543678 | 0.391 | 0.076 | 4.89E-06 | pDC_spleen |
| NXN                | 1.38E-10 | 2.32093331 | 0.265 | 0.022 | 4.89E-06 | pDC_spleen |
| HNRNPL             | 1.38E-10 | 0.16632807 | 0.709 | 0.216 | 4.89E-06 | pDC_spleen |
| ZBTB11             | 1.39E-10 | 0.30651688 | 0.331 | 0.049 | 4.92E-06 | pDC_spleen |
| PLA2R1             | 1.40E-10 | 2.15512559 | 0.265 | 0.022 | 4.95E-06 | pDC_spleen |
| SWT1               | 1.40E-10 | 0.20481712 | 0.457 | 0.103 | 4.97E-06 | pDC_spleen |
| ITGB1              | 1.41E-10 | 0.48022687 | 0.629 | 0.189 | 5.01E-06 | pDC_spleen |
| WDR37              | 1.41E-10 | 0.68385623 | 0.358 | 0.059 | 5.01E-06 | pDC_spleen |
| TES                | 1.42E-10 | 0.98770043 | 0.318 | 0.043 | 5.02E-06 | pDC_spleen |
| MITD1              | 1.42E-10 | 1.34576747 | 0.318 | 0.043 | 5.02E-06 | pDC_spleen |
| ENSMUG000000060923 | 1.43E-10 | 0.37950093 | 0.755 | 0.259 | 5.06E-06 | pDC_spleen |
| EWSR1              | 1.43E-10 | 0.11340701 | 0.662 | 0.195 | 5.07E-06 | pDC_spleen |
| SLC25A25           | 1.44E-10 | 0.30928812 | 0.556 | 0.151 | 5.10E-06 | pDC_spleen |
| BRWD1              | 1.48E-10 | 0.37952948 | 0.51  | 0.124 | 5.23E-06 | pDC_spleen |
| CBX3               | 1.48E-10 | 0.68962707 | 0.53  | 0.141 | 5.24E-06 | pDC_spleen |
| SMARCD1            | 1.49E-10 | 0.91309459 | 0.278 | 0.027 | 5.28E-06 | pDC_spleen |
| TIAL1              | 1.51E-10 | 0.46800916 | 0.444 | 0.097 | 5.33E-06 | pDC_spleen |



|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| DHX40              | 1.54E-10 | 0.17799011 | 0.371 | 0.065 | 5.44E-06 | pDC_spleen |
| ENSMMUG00000028906 | 1.54E-10 | 1.01838131 | 0.305 | 0.038 | 5.46E-06 | pDC_spleen |
| CYB5B              | 1.56E-10 | 1.89849389 | 0.278 | 0.027 | 5.54E-06 | pDC_spleen |
| EIF2B5             | 1.57E-10 | 0.91414989 | 0.265 | 0.022 | 5.55E-06 | pDC_spleen |
| CDK5RAP3           | 1.61E-10 | 1.77627348 | 0.265 | 0.022 | 5.69E-06 | pDC_spleen |
| PCGF3              | 1.61E-10 | 0.81868159 | 0.291 | 0.032 | 5.71E-06 | pDC_spleen |
| APLF               | 1.63E-10 | 1.31157218 | 0.265 | 0.022 | 5.76E-06 | pDC_spleen |
| AXIN1              | 1.65E-10 | 1.21940988 | 0.291 | 0.032 | 5.84E-06 | pDC_spleen |
| VIRMA              | 1.67E-10 | 0.69329141 | 0.265 | 0.022 | 5.91E-06 | pDC_spleen |
| ENSMMUG00000044585 | 1.67E-10 | 0.30344452 | 0.695 | 0.216 | 5.91E-06 | pDC_spleen |
| HMGB1              | 1.69E-10 | 0.79753014 | 0.815 | 0.351 | 5.97E-06 | pDC_spleen |
| CDKAL1             | 1.69E-10 | 0.30174856 | 0.775 | 0.27  | 5.99E-06 | pDC_spleen |
| TMED4              | 1.71E-10 | 0.75894406 | 0.371 | 0.065 | 6.05E-06 | pDC_spleen |
| MTF2               | 1.71E-10 | 0.15762422 | 0.358 | 0.059 | 6.07E-06 | pDC_spleen |
| CAMK2G             | 1.72E-10 | 0.7438101  | 0.278 | 0.027 | 6.11E-06 | pDC_spleen |
| AMDHD1             | 1.73E-10 | 1.13027941 | 0.444 | 0.103 | 6.13E-06 | pDC_spleen |
| SHISA5             | 1.75E-10 | 1.13354804 | 0.391 | 0.076 | 6.19E-06 | pDC_spleen |
| SRP9               | 1.77E-10 | 0.37584142 | 0.47  | 0.108 | 6.27E-06 | pDC_spleen |
| WASHC5             | 1.77E-10 | 0.5341583  | 0.358 | 0.059 | 6.27E-06 | pDC_spleen |
| SPATS2             | 1.78E-10 | 1.12014579 | 0.318 | 0.043 | 6.30E-06 | pDC_spleen |
| ZCRB1              | 1.79E-10 | 0.94917506 | 0.305 | 0.038 | 6.36E-06 | pDC_spleen |
| SMARCA4            | 1.80E-10 | 0.26260198 | 0.53  | 0.135 | 6.38E-06 | pDC_spleen |
| PIAS1              | 1.81E-10 | 0.61221402 | 0.848 | 0.335 | 6.40E-06 | pDC_spleen |
| PSMD3              | 1.83E-10 | 0.91762134 | 0.278 | 0.027 | 6.50E-06 | pDC_spleen |
| ANAPC10            | 1.84E-10 | 0.75560222 | 0.404 | 0.081 | 6.51E-06 | pDC_spleen |
| PELI2              | 1.84E-10 | 1.33512173 | 0.318 | 0.043 | 6.52E-06 | pDC_spleen |
| GIGYF2             | 1.86E-10 | 0.28006743 | 0.51  | 0.13  | 6.59E-06 | pDC_spleen |
| GANAB              | 1.88E-10 | 0.99545911 | 0.278 | 0.027 | 6.66E-06 | pDC_spleen |
| RABL6              | 1.88E-10 | 0.4832276  | 0.278 | 0.027 | 6.66E-06 | pDC_spleen |
| HAUS6              | 1.90E-10 | 0.32175003 | 0.278 | 0.027 | 6.74E-06 | pDC_spleen |
| SMN1               | 1.90E-10 | 1.14643404 | 0.291 | 0.032 | 6.74E-06 | pDC_spleen |
| CEP120             | 1.92E-10 | 1.24675553 | 0.411 | 0.086 | 6.79E-06 | pDC_spleen |
| PTPN11             | 1.93E-10 | 0.13062228 | 0.397 | 0.076 | 6.84E-06 | pDC_spleen |

|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| MAP2K5             | 1.93E-10 | 0.19399026 | 0.503 | 0.124 | 6.85E-06 | pDC_spleen |
| ENSMMUG00000058037 | 1.95E-10 | 1.06270552 | 0.404 | 0.081 | 6.92E-06 | pDC_spleen |
| LBR                | 1.95E-10 | 0.79776978 | 0.391 | 0.076 | 6.92E-06 | pDC_spleen |
| PDZD8              | 2.01E-10 | 0.4775421  | 0.411 | 0.086 | 7.14E-06 | pDC_spleen |
| TXNDC17            | 2.02E-10 | 2.43272926 | 0.285 | 0.032 | 7.14E-06 | pDC_spleen |
| COX17              | 2.03E-10 | 0.49665687 | 0.682 | 0.222 | 7.18E-06 | pDC_spleen |
| IGF1R              | 2.03E-10 | 1.91520571 | 0.298 | 0.038 | 7.19E-06 | pDC_spleen |
| ENSMMUG00000041183 | 2.06E-10 | 0.7921023  | 0.318 | 0.043 | 7.30E-06 | pDC_spleen |
| EMC7               | 2.06E-10 | 0.70636771 | 0.305 | 0.038 | 7.30E-06 | pDC_spleen |
| ZNF644             | 2.09E-10 | 0.42752058 | 0.735 | 0.259 | 7.39E-06 | pDC_spleen |
| UQCRQ              | 2.09E-10 | 0.45516619 | 0.57  | 0.162 | 7.41E-06 | pDC_spleen |
| ZNF93              | 2.11E-10 | 0.46055901 | 0.377 | 0.07  | 7.49E-06 | pDC_spleen |
| AUH                | 2.19E-10 | 0.32075714 | 0.344 | 0.054 | 7.76E-06 | pDC_spleen |
| RAB11FIP4          | 2.19E-10 | 2.34227942 | 0.258 | 0.022 | 7.78E-06 | pDC_spleen |
| ZNF280D            | 2.20E-10 | 2.06850248 | 0.298 | 0.038 | 7.80E-06 | pDC_spleen |
| TMEM248            | 2.22E-10 | 0.14167025 | 0.371 | 0.065 | 7.86E-06 | pDC_spleen |
| UBXN2A             | 2.25E-10 | 0.27945583 | 0.377 | 0.07  | 7.97E-06 | pDC_spleen |
| DNAJB4             | 2.31E-10 | 0.69912502 | 0.404 | 0.081 | 8.20E-06 | pDC_spleen |
| PFDN6              | 2.43E-10 | 0.53999513 | 0.404 | 0.081 | 8.62E-06 | pDC_spleen |
| IVNS1ABP           | 2.44E-10 | 0.53763122 | 0.444 | 0.103 | 8.65E-06 | pDC_spleen |
| AP2A2              | 2.47E-10 | 0.52908052 | 0.397 | 0.081 | 8.75E-06 | pDC_spleen |
| MAML2              | 2.51E-10 | 0.50058912 | 0.583 | 0.184 | 8.90E-06 | pDC_spleen |
| CAPG               | 2.52E-10 | 0.36389416 | 0.543 | 0.146 | 8.94E-06 | pDC_spleen |
| OSBPL2             | 2.53E-10 | 0.13431291 | 0.49  | 0.119 | 8.95E-06 | pDC_spleen |
| ENSMMUG00000062350 | 2.58E-10 | 0.49159499 | 0.954 | 0.535 | 9.14E-06 | pDC_spleen |
| TKT                | 2.59E-10 | 0.22507331 | 0.417 | 0.086 | 9.17E-06 | pDC_spleen |
| TPM3               | 2.60E-10 | 0.55605947 | 0.921 | 0.405 | 9.21E-06 | pDC_spleen |
| UFM1               | 2.60E-10 | 1.51144107 | 0.351 | 0.059 | 9.23E-06 | pDC_spleen |
| RBBP4              | 2.63E-10 | 0.72831445 | 0.464 | 0.108 | 9.33E-06 | pDC_spleen |
| GRHPR              | 2.72E-10 | 2.09697778 | 0.258 | 0.022 | 9.63E-06 | pDC_spleen |
| CCSER2             | 2.74E-10 | 0.35414562 | 0.616 | 0.189 | 9.70E-06 | pDC_spleen |
| PHF6               | 2.75E-10 | 0.48794999 | 0.364 | 0.065 | 9.75E-06 | pDC_spleen |
| ENSMMUG00000052220 | 2.75E-10 | 2.58055744 | 0.258 | 0.022 | 9.76E-06 | pDC_spleen |

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|---------------------|----------|------------|-------|-------|----------|------------|
| MRPS18A             | 2.78E-10 | 0.93845203 | 0.364 | 0.065 | 9.85E-06 | pDC_spleen |
| C11H12orf45         | 2.79E-10 | 0.60127335 | 0.576 | 0.168 | 9.88E-06 | pDC_spleen |
| CCPG1               | 2.79E-10 | 0.8376454  | 0.424 | 0.092 | 9.90E-06 | pDC_spleen |
| COX10               | 2.84E-10 | 0.48895759 | 0.298 | 0.038 | 1.01E-05 | pDC_spleen |
| YWHAZ               | 2.88E-10 | 0.62692121 | 0.954 | 0.486 | 1.02E-05 | pDC_spleen |
| ENSMMUG00000000249  | 2.88E-10 | 0.43939874 | 0.404 | 0.081 | 1.02E-05 | pDC_spleen |
| DCAF10              | 2.90E-10 | 0.50023949 | 0.364 | 0.065 | 1.03E-05 | pDC_spleen |
| ENSMMUG000000056654 | 2.91E-10 | 0.43213066 | 0.775 | 0.259 | 1.03E-05 | pDC_spleen |
| PRKRA               | 2.96E-10 | 0.67590897 | 0.325 | 0.049 | 1.05E-05 | pDC_spleen |
| MTHFS               | 2.98E-10 | 0.31957603 | 0.47  | 0.114 | 1.06E-05 | pDC_spleen |
| GSTM4               | 3.00E-10 | 1.13376454 | 0.371 | 0.07  | 1.06E-05 | pDC_spleen |
| PCYT1A              | 3.00E-10 | 0.23493563 | 0.464 | 0.108 | 1.06E-05 | pDC_spleen |
| WDR41               | 3.01E-10 | 2.41245795 | 0.258 | 0.022 | 1.07E-05 | pDC_spleen |
| TSPAN3              | 3.12E-10 | 1.54195975 | 0.298 | 0.038 | 1.11E-05 | pDC_spleen |
| EIF4EBP2            | 3.12E-10 | 0.93956027 | 0.258 | 0.022 | 1.11E-05 | pDC_spleen |
| MED10               | 3.18E-10 | 0.98613202 | 0.272 | 0.027 | 1.13E-05 | pDC_spleen |
| TIMM23              | 3.19E-10 | 0.55894521 | 0.351 | 0.059 | 1.13E-05 | pDC_spleen |
| IDH3G               | 3.21E-10 | 1.90566136 | 0.272 | 0.027 | 1.14E-05 | pDC_spleen |
| ENSMMUG000000049530 | 3.24E-10 | 0.82681045 | 0.258 | 0.022 | 1.15E-05 | pDC_spleen |
| NUP93               | 3.24E-10 | 0.52080904 | 0.285 | 0.032 | 1.15E-05 | pDC_spleen |
| CNN3                | 3.28E-10 | 1.48542782 | 0.258 | 0.022 | 1.16E-05 | pDC_spleen |
| IRF2BP2             | 3.34E-10 | 0.24803775 | 0.45  | 0.103 | 1.18E-05 | pDC_spleen |
| MAGED2              | 3.34E-10 | 1.15639835 | 0.298 | 0.038 | 1.18E-05 | pDC_spleen |
| STRN                | 3.40E-10 | 0.73005381 | 0.285 | 0.032 | 1.21E-05 | pDC_spleen |
| VPS45               | 3.41E-10 | 1.05018721 | 0.258 | 0.022 | 1.21E-05 | pDC_spleen |
| ENSMMUG000000045362 | 3.41E-10 | 1.77694592 | 0.258 | 0.022 | 1.21E-05 | pDC_spleen |
| SSBP1               | 3.43E-10 | 0.4880673  | 0.364 | 0.065 | 1.21E-05 | pDC_spleen |
| LCP1                | 3.43E-10 | 0.67379434 | 0.947 | 0.508 | 1.22E-05 | pDC_spleen |
| COPS4               | 3.45E-10 | 1.18781142 | 0.258 | 0.022 | 1.22E-05 | pDC_spleen |
| RCOR3               | 3.46E-10 | 0.14901921 | 0.424 | 0.092 | 1.23E-05 | pDC_spleen |
| TXN2                | 3.46E-10 | 0.35038273 | 0.364 | 0.065 | 1.23E-05 | pDC_spleen |
| ERAP1               | 3.50E-10 | 1.43672023 | 0.272 | 0.027 | 1.24E-05 | pDC_spleen |
| SELENOK             | 3.54E-10 | 0.22312211 | 0.497 | 0.124 | 1.25E-05 | pDC_spleen |

|                   |          |            |       |       |          |            |
|-------------------|----------|------------|-------|-------|----------|------------|
| ELOC              | 3.55E-10 | 0.28150665 | 0.437 | 0.097 | 1.26E-05 | pDC_spleen |
| THOC7             | 3.61E-10 | 0.76667417 | 0.371 | 0.07  | 1.28E-05 | pDC_spleen |
| SESN2             | 3.61E-10 | 0.86520005 | 0.285 | 0.032 | 1.28E-05 | pDC_spleen |
| CXHXorf38         | 3.65E-10 | 1.00257699 | 0.285 | 0.032 | 1.29E-05 | pDC_spleen |
| ENSMUG00000057449 | 3.67E-10 | 1.24673717 | 0.384 | 0.076 | 1.30E-05 | pDC_spleen |
| DYRK3             | 3.67E-10 | 0.49512335 | 0.338 | 0.054 | 1.30E-05 | pDC_spleen |
| SPI1              | 3.71E-10 | 0.36567495 | 0.338 | 0.054 | 1.32E-05 | pDC_spleen |
| PPP1R15B          | 3.74E-10 | 1.01017019 | 0.285 | 0.032 | 1.32E-05 | pDC_spleen |
| MGA               | 3.76E-10 | 0.83794989 | 0.371 | 0.07  | 1.33E-05 | pDC_spleen |
| ENSMUG00000015946 | 3.76E-10 | 1.48655466 | 0.272 | 0.027 | 1.33E-05 | pDC_spleen |
| EIF5B             | 3.81E-10 | 0.43140445 | 0.477 | 0.119 | 1.35E-05 | pDC_spleen |
| ARL6              | 3.86E-10 | 0.24632483 | 0.411 | 0.086 | 1.37E-05 | pDC_spleen |
| CHSY1             | 3.90E-10 | 0.80180909 | 0.311 | 0.043 | 1.38E-05 | pDC_spleen |
| XPC               | 3.97E-10 | 0.98853104 | 0.285 | 0.032 | 1.41E-05 | pDC_spleen |
| NCK1              | 3.97E-10 | 0.21935926 | 0.47  | 0.114 | 1.41E-05 | pDC_spleen |
| PTPN4             | 3.98E-10 | 0.43210028 | 0.351 | 0.059 | 1.41E-05 | pDC_spleen |
| SNX13             | 4.06E-10 | 0.62334323 | 0.457 | 0.114 | 1.44E-05 | pDC_spleen |
| ASAP1             | 4.08E-10 | 1.43663202 | 0.775 | 0.459 | 1.45E-05 | pDC_spleen |
| STAC3             | 4.11E-10 | 0.49578894 | 0.298 | 0.038 | 1.46E-05 | pDC_spleen |
| NEMP1             | 4.16E-10 | 0.70283555 | 0.325 | 0.049 | 1.47E-05 | pDC_spleen |
| HSPA5             | 4.21E-10 | 0.79738578 | 0.616 | 0.2   | 1.49E-05 | pDC_spleen |
| H4C5              | 4.27E-10 | 0.86149476 | 0.311 | 0.043 | 1.51E-05 | pDC_spleen |
| ARID2             | 4.27E-10 | 0.50199751 | 0.854 | 0.357 | 1.51E-05 | pDC_spleen |
| TTC7A             | 4.31E-10 | 0.89770783 | 0.331 | 0.054 | 1.53E-05 | pDC_spleen |
| NUP62             | 4.32E-10 | 0.62276976 | 0.311 | 0.043 | 1.53E-05 | pDC_spleen |
| POLR2B            | 4.34E-10 | 1.30191229 | 0.344 | 0.059 | 1.54E-05 | pDC_spleen |
| R3HCC1L           | 4.36E-10 | 0.38422519 | 0.397 | 0.081 | 1.54E-05 | pDC_spleen |
| ARPC5L            | 4.36E-10 | 0.78624034 | 0.298 | 0.038 | 1.54E-05 | pDC_spleen |
| STAR              | 4.40E-10 | 1.368374   | 0.318 | 0.049 | 1.56E-05 | pDC_spleen |
| SMARCC2           | 4.46E-10 | 0.65955311 | 0.298 | 0.038 | 1.58E-05 | pDC_spleen |
| TRAPPC4           | 4.47E-10 | 1.26419903 | 0.358 | 0.065 | 1.58E-05 | pDC_spleen |
| FAM53B            | 4.55E-10 | 0.27641402 | 0.43  | 0.097 | 1.61E-05 | pDC_spleen |
| TOB2              | 4.61E-10 | 0.63158006 | 0.358 | 0.065 | 1.63E-05 | pDC_spleen |

|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| UBE2E3             | 4.63E-10 | 0.67030426 | 0.384 | 0.076 | 1.64E-05 | pDC_spleen |
| ZNF160             | 4.75E-10 | 0.2172553  | 0.325 | 0.049 | 1.68E-05 | pDC_spleen |
| SOS2               | 4.80E-10 | 0.55344111 | 0.371 | 0.07  | 1.70E-05 | pDC_spleen |
| PNRC2              | 5.02E-10 | 0.23644965 | 0.536 | 0.146 | 1.78E-05 | pDC_spleen |
| H6PD               | 5.11E-10 | 1.71613703 | 0.291 | 0.038 | 1.81E-05 | pDC_spleen |
| ENSMMUG00000049718 | 5.17E-10 | 1.20984102 | 0.291 | 0.038 | 1.83E-05 | pDC_spleen |
| ENSMMUG00000016009 | 5.31E-10 | 0.47491652 | 0.457 | 0.108 | 1.88E-05 | pDC_spleen |
| TRIM37             | 5.35E-10 | 1.07704019 | 0.291 | 0.038 | 1.90E-05 | pDC_spleen |
| TP53BP1            | 5.37E-10 | 1.02597668 | 0.344 | 0.059 | 1.90E-05 | pDC_spleen |
| USP46              | 5.38E-10 | 0.98690133 | 0.305 | 0.043 | 1.91E-05 | pDC_spleen |
| DPP8               | 5.43E-10 | 0.72724735 | 0.318 | 0.049 | 1.92E-05 | pDC_spleen |
| MPHOSPH8           | 5.43E-10 | 0.33626475 | 0.411 | 0.086 | 1.92E-05 | pDC_spleen |
| AP4B1              | 5.48E-10 | 1.71100315 | 0.265 | 0.027 | 1.94E-05 | pDC_spleen |
| AAMDC              | 5.55E-10 | 1.22964096 | 0.265 | 0.027 | 1.97E-05 | pDC_spleen |
| ENSMMUG00000038373 | 5.76E-10 | 0.42963434 | 0.583 | 0.173 | 2.04E-05 | pDC_spleen |
| CFAP20             | 5.83E-10 | 1.80501397 | 0.252 | 0.022 | 2.06E-05 | pDC_spleen |
| CHCHD10            | 5.97E-10 | 1.10028924 | 0.265 | 0.027 | 2.11E-05 | pDC_spleen |
| REEP5              | 6.05E-10 | 0.19132277 | 0.457 | 0.108 | 2.14E-05 | pDC_spleen |
| TMEM179B           | 6.05E-10 | 1.70712182 | 0.252 | 0.022 | 2.14E-05 | pDC_spleen |
| RPN1               | 6.17E-10 | 0.5512383  | 0.477 | 0.119 | 2.18E-05 | pDC_spleen |
| MEAF6              | 6.21E-10 | 2.02114541 | 0.278 | 0.032 | 2.20E-05 | pDC_spleen |
| SCO1               | 6.44E-10 | 1.42271883 | 0.252 | 0.022 | 2.28E-05 | pDC_spleen |
| RASSF1             | 6.46E-10 | 0.38173644 | 0.43  | 0.097 | 2.29E-05 | pDC_spleen |
| EIF3J              | 6.51E-10 | 0.42604445 | 0.735 | 0.249 | 2.31E-05 | pDC_spleen |
| C14H11orf49        | 6.52E-10 | 1.46094122 | 0.252 | 0.022 | 2.31E-05 | pDC_spleen |
| ACTR1A             | 6.57E-10 | 0.80945233 | 0.265 | 0.027 | 2.33E-05 | pDC_spleen |
| SYT11              | 6.60E-10 | 1.80442396 | 0.252 | 0.022 | 2.34E-05 | pDC_spleen |
| PDE7B              | 6.62E-10 | 2.09967205 | 0.285 | 0.038 | 2.35E-05 | pDC_spleen |
| GMPR2              | 6.65E-10 | 0.73470831 | 0.291 | 0.038 | 2.36E-05 | pDC_spleen |
| DMAC1              | 6.73E-10 | 1.45446976 | 0.305 | 0.043 | 2.38E-05 | pDC_spleen |
| GLMN               | 6.85E-10 | 1.03259474 | 0.252 | 0.022 | 2.43E-05 | pDC_spleen |
| ZC3H15             | 7.00E-10 | 0.19110358 | 0.477 | 0.119 | 2.48E-05 | pDC_spleen |
| RPL28              | 7.01E-10 | 0.6319023  | 0.974 | 0.611 | 2.49E-05 | pDC_spleen |

|                   |          |            |       |       |          |            |
|-------------------|----------|------------|-------|-------|----------|------------|
| TOPBP1            | 7.02E-10 | 1.73439596 | 0.252 | 0.022 | 2.49E-05 | pDC_spleen |
| ATG16L1           | 7.11E-10 | 1.13333774 | 0.252 | 0.022 | 2.52E-05 | pDC_spleen |
| MATR3             | 7.13E-10 | 0.29547733 | 0.861 | 0.33  | 2.52E-05 | pDC_spleen |
| PSMA6             | 7.21E-10 | 0.21133086 | 0.55  | 0.157 | 2.55E-05 | pDC_spleen |
| BPTF              | 7.36E-10 | 0.24658682 | 0.742 | 0.254 | 2.61E-05 | pDC_spleen |
| SEC23A            | 7.44E-10 | 0.72723659 | 0.305 | 0.043 | 2.64E-05 | pDC_spleen |
| FTO               | 7.50E-10 | 0.16053162 | 0.589 | 0.178 | 2.66E-05 | pDC_spleen |
| SF3B4             | 7.51E-10 | 0.84467244 | 0.265 | 0.027 | 2.66E-05 | pDC_spleen |
| CCDC59            | 7.55E-10 | 1.12742584 | 0.351 | 0.065 | 2.68E-05 | pDC_spleen |
| ZNF789            | 7.58E-10 | 1.22400236 | 0.278 | 0.032 | 2.68E-05 | pDC_spleen |
| PAFAH1B2          | 7.59E-10 | 0.10209064 | 0.344 | 0.059 | 2.69E-05 | pDC_spleen |
| NIPSNAP3B         | 7.60E-10 | 0.80666838 | 0.265 | 0.027 | 2.69E-05 | pDC_spleen |
| GUCA1B            | 7.61E-10 | 1.15431761 | 0.305 | 0.043 | 2.70E-05 | pDC_spleen |
| ENSMUG00000011604 | 7.61E-10 | 0.34036502 | 0.305 | 0.043 | 2.70E-05 | pDC_spleen |
| VRK1              | 7.73E-10 | 0.44274807 | 0.358 | 0.065 | 2.74E-05 | pDC_spleen |
| DROSHA            | 7.85E-10 | 0.99867576 | 0.278 | 0.032 | 2.78E-05 | pDC_spleen |
| CARM1             | 7.85E-10 | 1.21556939 | 0.278 | 0.032 | 2.78E-05 | pDC_spleen |
| SLC38A10          | 7.97E-10 | 0.3193059  | 0.265 | 0.027 | 2.82E-05 | pDC_spleen |
| TMEM243           | 7.99E-10 | 0.93632549 | 0.364 | 0.07  | 2.83E-05 | pDC_spleen |
| LRIF1             | 8.29E-10 | 0.60501943 | 0.464 | 0.119 | 2.94E-05 | pDC_spleen |
| PLAA              | 8.29E-10 | 0.47225537 | 0.331 | 0.054 | 2.94E-05 | pDC_spleen |
| ZMAT2             | 8.31E-10 | 0.29160038 | 0.358 | 0.065 | 2.94E-05 | pDC_spleen |
| EZH1              | 8.41E-10 | 0.55969462 | 0.305 | 0.043 | 2.98E-05 | pDC_spleen |
| GPBP1L1           | 8.50E-10 | 0.21389596 | 0.576 | 0.168 | 3.01E-05 | pDC_spleen |
| RPL12             | 8.57E-10 | 0.51785068 | 0.927 | 0.454 | 3.04E-05 | pDC_spleen |
| CSK               | 8.73E-10 | 0.685406   | 0.391 | 0.081 | 3.09E-05 | pDC_spleen |
| RPS6KC1           | 8.82E-10 | 0.20041174 | 0.623 | 0.189 | 3.13E-05 | pDC_spleen |
| IRF3              | 8.85E-10 | 0.41671078 | 0.417 | 0.092 | 3.14E-05 | pDC_spleen |
| PPP3CB            | 8.90E-10 | 1.36323208 | 0.311 | 0.049 | 3.15E-05 | pDC_spleen |
| SMC1A             | 8.94E-10 | 0.10123959 | 0.417 | 0.092 | 3.17E-05 | pDC_spleen |
| PHF8              | 9.30E-10 | 0.83104074 | 0.364 | 0.07  | 3.29E-05 | pDC_spleen |
| CBFB              | 9.37E-10 | 0.4868744  | 0.318 | 0.049 | 3.32E-05 | pDC_spleen |
| FBXL5             | 9.53E-10 | 0.40798445 | 0.377 | 0.076 | 3.38E-05 | pDC_spleen |

|                     |          |            |       |       |          |            |
|---------------------|----------|------------|-------|-------|----------|------------|
| ZNF800              | 9.67E-10 | 0.40729089 | 0.351 | 0.065 | 3.43E-05 | pDC_spleen |
| MARF1               | 9.77E-10 | 0.47104758 | 0.397 | 0.086 | 3.46E-05 | pDC_spleen |
| TBC1D2B             | 9.83E-10 | 0.16727529 | 0.503 | 0.135 | 3.48E-05 | pDC_spleen |
| TLR10               | 1.00E-09 | 2.7499915  | 0.258 | 0.027 | 3.55E-05 | pDC_spleen |
| SRP14               | 1.01E-09 | 0.53589674 | 0.795 | 0.292 | 3.57E-05 | pDC_spleen |
| ATG101              | 1.03E-09 | 1.26255361 | 0.325 | 0.054 | 3.67E-05 | pDC_spleen |
| COPS2               | 1.04E-09 | 0.54812316 | 0.364 | 0.07  | 3.68E-05 | pDC_spleen |
| TNF                 | 1.04E-09 | 0.96828792 | 0.404 | 0.092 | 3.69E-05 | pDC_spleen |
| IMPDH1              | 1.05E-09 | 0.40010479 | 0.351 | 0.065 | 3.72E-05 | pDC_spleen |
| MRPS36              | 1.06E-09 | 1.32168366 | 0.325 | 0.054 | 3.75E-05 | pDC_spleen |
| HIPK3               | 1.06E-09 | 0.27704894 | 0.801 | 0.297 | 3.76E-05 | pDC_spleen |
| ENSMMUG00000011798  | 1.07E-09 | 0.32607007 | 0.391 | 0.081 | 3.80E-05 | pDC_spleen |
| NSMF                | 1.08E-09 | 1.58277983 | 0.272 | 0.032 | 3.82E-05 | pDC_spleen |
| SEPTIN7             | 1.08E-09 | 0.15740266 | 0.742 | 0.259 | 3.82E-05 | pDC_spleen |
| PIK3CA              | 1.08E-09 | 0.40036084 | 0.411 | 0.092 | 3.83E-05 | pDC_spleen |
| TM2D1               | 1.09E-09 | 0.10455098 | 0.364 | 0.07  | 3.87E-05 | pDC_spleen |
| ETFA                | 1.10E-09 | 0.90152033 | 0.338 | 0.059 | 3.89E-05 | pDC_spleen |
| ENSMMUG000000063609 | 1.10E-09 | 1.08675768 | 0.351 | 0.065 | 3.91E-05 | pDC_spleen |
| EMC2                | 1.11E-09 | 0.2375026  | 0.325 | 0.054 | 3.95E-05 | pDC_spleen |
| ABHD3               | 1.12E-09 | 0.72084097 | 0.371 | 0.076 | 3.97E-05 | pDC_spleen |
| DNAJC7              | 1.12E-09 | 0.49020036 | 0.43  | 0.103 | 3.98E-05 | pDC_spleen |
| ADD3                | 1.13E-09 | 0.74149577 | 0.411 | 0.097 | 3.99E-05 | pDC_spleen |
| RPS21               | 1.13E-09 | 0.32194086 | 0.914 | 0.389 | 4.01E-05 | pDC_spleen |
| KIF13B              | 1.15E-09 | 0.13893203 | 0.623 | 0.2   | 4.07E-05 | pDC_spleen |
| KIAA0232            | 1.16E-09 | 0.34145895 | 0.43  | 0.103 | 4.13E-05 | pDC_spleen |
| NHLRC2              | 1.17E-09 | 1.65583704 | 0.258 | 0.027 | 4.15E-05 | pDC_spleen |
| CEP83               | 1.18E-09 | 0.39936959 | 0.311 | 0.049 | 4.19E-05 | pDC_spleen |
| MANF                | 1.19E-09 | 1.67477548 | 0.311 | 0.049 | 4.23E-05 | pDC_spleen |
| MIS18BP1            | 1.23E-09 | 0.63777558 | 0.325 | 0.054 | 4.35E-05 | pDC_spleen |
| INIP                | 1.23E-09 | 2.30402492 | 0.258 | 0.027 | 4.36E-05 | pDC_spleen |
| MPC1                | 1.25E-09 | 1.10007405 | 0.311 | 0.049 | 4.42E-05 | pDC_spleen |
| ID2                 | 1.25E-09 | 0.73177907 | 0.934 | 0.524 | 4.44E-05 | pDC_spleen |
| RABGAP1             | 1.26E-09 | 0.3803263  | 0.424 | 0.097 | 4.47E-05 | pDC_spleen |

|         |          |            |       |       |          |            |
|---------|----------|------------|-------|-------|----------|------------|
| ZNF708  | 1.26E-09 | 0.3045437  | 0.351 | 0.065 | 4.47E-05 | pDC_spleen |
| MSANTD1 | 1.28E-09 | 0.73455693 | 0.258 | 0.027 | 4.52E-05 | pDC_spleen |
| TDRD3   | 1.29E-09 | 0.14388188 | 0.444 | 0.108 | 4.58E-05 | pDC_spleen |
| MRPL13  | 1.35E-09 | 0.87857982 | 0.298 | 0.043 | 4.78E-05 | pDC_spleen |
| SMU1    | 1.39E-09 | 0.13213549 | 0.391 | 0.081 | 4.94E-05 | pDC_spleen |
| NT5DC1  | 1.39E-09 | 0.47778351 | 0.371 | 0.076 | 4.94E-05 | pDC_spleen |
| POLR1H  | 1.39E-09 | 0.3109511  | 0.338 | 0.059 | 4.94E-05 | pDC_spleen |
| THG1L   | 1.40E-09 | 1.31111053 | 0.258 | 0.027 | 4.97E-05 | pDC_spleen |
| TGM2    | 1.40E-09 | 1.80295475 | 0.258 | 0.027 | 4.97E-05 | pDC_spleen |
| KATNIP  | 1.40E-09 | 1.86750848 | 0.258 | 0.027 | 4.97E-05 | pDC_spleen |
| GPX4    | 1.43E-09 | 1.28721278 | 0.285 | 0.038 | 5.05E-05 | pDC_spleen |
| MGST2   | 1.43E-09 | 1.08159563 | 0.298 | 0.043 | 5.06E-05 | pDC_spleen |
| GPATCH2 | 1.43E-09 | 0.45755937 | 0.338 | 0.059 | 5.07E-05 | pDC_spleen |
| RPP14   | 1.45E-09 | 0.88769848 | 0.258 | 0.027 | 5.15E-05 | pDC_spleen |
| RPS6KA4 | 1.46E-09 | 0.8745084  | 0.285 | 0.038 | 5.17E-05 | pDC_spleen |
| RBM7    | 1.47E-09 | 0.87391238 | 0.311 | 0.049 | 5.20E-05 | pDC_spleen |
| LARS1   | 1.47E-09 | 0.40759731 | 0.351 | 0.065 | 5.21E-05 | pDC_spleen |
| HHIPL1  | 1.48E-09 | 1.41467377 | 0.272 | 0.032 | 5.23E-05 | pDC_spleen |
| INPP5K  | 1.48E-09 | 0.65820264 | 0.311 | 0.049 | 5.25E-05 | pDC_spleen |
| SULF2   | 1.49E-09 | 0.24697737 | 0.53  | 0.157 | 5.29E-05 | pDC_spleen |
| MRPS18B | 1.49E-09 | 1.525554   | 0.272 | 0.032 | 5.29E-05 | pDC_spleen |
| EHBP1L1 | 1.50E-09 | 0.41287139 | 0.325 | 0.054 | 5.31E-05 | pDC_spleen |
| POLH    | 1.52E-09 | 0.98541806 | 0.298 | 0.043 | 5.40E-05 | pDC_spleen |
| DPY30   | 1.52E-09 | 1.48835329 | 0.298 | 0.043 | 5.40E-05 | pDC_spleen |
| BCL10   | 1.53E-09 | 0.51958429 | 0.311 | 0.049 | 5.43E-05 | pDC_spleen |
| SDHB    | 1.53E-09 | 0.79855882 | 0.311 | 0.049 | 5.43E-05 | pDC_spleen |
| NFKBIE  | 1.53E-09 | 0.53602859 | 0.45  | 0.114 | 5.43E-05 | pDC_spleen |
| TAB3    | 1.54E-09 | 0.55593393 | 0.298 | 0.043 | 5.46E-05 | pDC_spleen |
| ADAM9   | 1.55E-09 | 0.17217514 | 0.51  | 0.141 | 5.49E-05 | pDC_spleen |
| FMR1    | 1.56E-09 | 1.07229299 | 0.298 | 0.043 | 5.52E-05 | pDC_spleen |
| PLEKHO1 | 1.56E-09 | 0.10734578 | 0.477 | 0.124 | 5.54E-05 | pDC_spleen |
| KLHL2   | 1.56E-09 | 0.55418562 | 0.311 | 0.049 | 5.54E-05 | pDC_spleen |
| BIN2    | 1.57E-09 | 0.376487   | 0.404 | 0.092 | 5.55E-05 | pDC_spleen |



|                     |          |            |       |       |          |            |
|---------------------|----------|------------|-------|-------|----------|------------|
| MINDY3              | 1.58E-09 | 0.93249398 | 0.285 | 0.038 | 5.59E-05 | pDC_spleen |
| MLEC                | 1.58E-09 | 1.19725864 | 0.285 | 0.038 | 5.59E-05 | pDC_spleen |
| IDE                 | 1.58E-09 | 0.59368431 | 0.258 | 0.027 | 5.60E-05 | pDC_spleen |
| RAP1A               | 1.59E-09 | 0.50810844 | 0.815 | 0.33  | 5.63E-05 | pDC_spleen |
| WASHC3              | 1.59E-09 | 0.71764863 | 0.344 | 0.065 | 5.64E-05 | pDC_spleen |
| ENSMMUG00000030317  | 1.60E-09 | 1.11087164 | 0.285 | 0.038 | 5.65E-05 | pDC_spleen |
| TMEM126A            | 1.60E-09 | 1.46169017 | 0.272 | 0.032 | 5.67E-05 | pDC_spleen |
| S100BPB             | 1.64E-09 | 0.47942482 | 0.272 | 0.032 | 5.80E-05 | pDC_spleen |
| ENSMMUG00000022619  | 1.65E-09 | 0.50981985 | 0.311 | 0.049 | 5.85E-05 | pDC_spleen |
| ENSMMUG00000017466  | 1.65E-09 | 0.69426129 | 0.748 | 0.292 | 5.86E-05 | pDC_spleen |
| ENSMMUG00000037794  | 1.68E-09 | 0.86060025 | 0.272 | 0.032 | 5.94E-05 | pDC_spleen |
| DENR                | 1.68E-09 | 0.81296804 | 0.358 | 0.07  | 5.97E-05 | pDC_spleen |
| ECHS1               | 1.70E-09 | 0.23198128 | 0.272 | 0.032 | 6.01E-05 | pDC_spleen |
| ENSMMUG00000055794  | 1.74E-09 | 0.85567843 | 0.272 | 0.032 | 6.15E-05 | pDC_spleen |
| NDUFA5              | 1.85E-09 | 0.87498426 | 0.331 | 0.059 | 6.56E-05 | pDC_spleen |
| YTHDF2              | 1.89E-09 | 0.62412741 | 0.391 | 0.086 | 6.71E-05 | pDC_spleen |
| NDUFV3              | 1.90E-09 | 0.37798677 | 0.517 | 0.146 | 6.72E-05 | pDC_spleen |
| RAC1                | 1.93E-09 | 0.33736206 | 0.848 | 0.314 | 6.84E-05 | pDC_spleen |
| ENSMMUG000000062894 | 1.94E-09 | 2.77085617 | 0.252 | 0.027 | 6.87E-05 | pDC_spleen |
| KIAA0319            | 2.02E-09 | 2.01851031 | 0.265 | 0.032 | 7.16E-05 | pDC_spleen |
| CEP170              | 2.06E-09 | 0.30363861 | 0.815 | 0.314 | 7.29E-05 | pDC_spleen |
| SYMPK               | 2.08E-09 | 0.77612868 | 0.358 | 0.07  | 7.36E-05 | pDC_spleen |
| PLCL2               | 2.09E-09 | 0.21729834 | 0.483 | 0.13  | 7.42E-05 | pDC_spleen |
| STK26               | 2.12E-09 | 1.08691968 | 0.331 | 0.059 | 7.51E-05 | pDC_spleen |
| ROCK2               | 2.12E-09 | 0.45630237 | 0.305 | 0.049 | 7.53E-05 | pDC_spleen |
| RBM25               | 2.14E-09 | 0.16093991 | 0.722 | 0.243 | 7.59E-05 | pDC_spleen |
| NHP2                | 2.16E-09 | 1.27077273 | 0.364 | 0.076 | 7.65E-05 | pDC_spleen |
| ATE1                | 2.20E-09 | 0.21822088 | 0.43  | 0.103 | 7.78E-05 | pDC_spleen |
| PPP2R1B             | 2.29E-09 | 1.48643205 | 0.252 | 0.027 | 8.13E-05 | pDC_spleen |
| ENSMMUG00000032231  | 2.32E-09 | 0.17311002 | 0.404 | 0.092 | 8.23E-05 | pDC_spleen |
| TCF7L2              | 2.42E-09 | 1.14653665 | 0.305 | 0.049 | 8.56E-05 | pDC_spleen |
| CYB5A               | 2.44E-09 | 0.26491363 | 0.444 | 0.108 | 8.63E-05 | pDC_spleen |
| SETD5               | 2.48E-09 | 0.19198557 | 0.589 | 0.189 | 8.80E-05 | pDC_spleen |

|                    |          |            |       |       |            |            |
|--------------------|----------|------------|-------|-------|------------|------------|
| UPF3B              | 2.49E-09 | 2.29689635 | 0.252 | 0.027 | 8.83E-05   | pDC_spleen |
| COPS5              | 2.52E-09 | 1.26265542 | 0.305 | 0.049 | 8.94E-05   | pDC_spleen |
| TEX264             | 2.54E-09 | 0.60332034 | 0.318 | 0.054 | 9.00E-05   | pDC_spleen |
| MGRN1              | 2.54E-09 | 0.26702514 | 0.43  | 0.103 | 9.00E-05   | pDC_spleen |
| EXT1               | 2.55E-09 | 0.8587445  | 0.675 | 0.27  | 9.04E-05   | pDC_spleen |
| U2AF2              | 2.59E-09 | 0.29113355 | 0.344 | 0.065 | 9.18E-05   | pDC_spleen |
| SEC13              | 2.61E-09 | 0.23078763 | 0.265 | 0.032 | 9.24E-05   | pDC_spleen |
| HSPB11             | 2.61E-09 | 1.71477334 | 0.252 | 0.027 | 9.26E-05   | pDC_spleen |
| MAPKBP1            | 2.64E-09 | 0.6077558  | 0.291 | 0.043 | 9.34E-05   | pDC_spleen |
| UBE2Q2             | 2.66E-09 | 0.25490378 | 0.411 | 0.097 | 9.43E-05   | pDC_spleen |
| UNC50              | 2.71E-09 | 0.72830433 | 0.252 | 0.027 | 9.60E-05   | pDC_spleen |
| MFSD11             | 2.74E-09 | 1.52305575 | 0.252 | 0.027 | 9.71E-05   | pDC_spleen |
| RPS5               | 2.76E-09 | 0.4796496  | 0.914 | 0.459 | 9.76E-05   | pDC_spleen |
| CLOCK              | 2.78E-09 | 0.86019036 | 0.305 | 0.049 | 9.84E-05   | pDC_spleen |
| ARSB               | 2.79E-09 | 1.55996326 | 0.265 | 0.032 | 9.90E-05   | pDC_spleen |
| C18H18orf25        | 2.84E-09 | 0.14116834 | 0.344 | 0.065 | 0.00010046 | pDC_spleen |
| PHPT1              | 2.84E-09 | 1.18212144 | 0.278 | 0.038 | 0.00010048 | pDC_spleen |
| ENSMMUG00000059145 | 2.84E-09 | 1.08108364 | 0.252 | 0.027 | 0.00010067 | pDC_spleen |
| MRPS11             | 2.86E-09 | 1.62096316 | 0.265 | 0.032 | 0.00010131 | pDC_spleen |
| DBF4               | 2.88E-09 | 0.41411708 | 0.291 | 0.043 | 0.00010197 | pDC_spleen |
| CASP8              | 2.89E-09 | 0.23495769 | 0.351 | 0.07  | 0.0001023  | pDC_spleen |
| CUL7               | 2.89E-09 | 0.44751289 | 0.265 | 0.032 | 0.00010249 | pDC_spleen |
| DDX23              | 2.94E-09 | 1.66820949 | 0.252 | 0.027 | 0.00010431 | pDC_spleen |
| FAM111A            | 2.99E-09 | 1.36591552 | 0.265 | 0.032 | 0.00010609 | pDC_spleen |
| SNX27              | 3.01E-09 | 1.13055033 | 0.252 | 0.027 | 0.00010682 | pDC_spleen |
| ERI3               | 3.01E-09 | 1.04967398 | 0.252 | 0.027 | 0.00010682 | pDC_spleen |
| ENSMMUG00000017097 | 3.03E-09 | 1.86026504 | 0.278 | 0.038 | 0.00010747 | pDC_spleen |
| BTBD3              | 3.05E-09 | 1.39540921 | 0.252 | 0.027 | 0.00010809 | pDC_spleen |
| USE1               | 3.05E-09 | 1.45567343 | 0.252 | 0.027 | 0.00010809 | pDC_spleen |
| GPR89A             | 3.07E-09 | 0.16205385 | 0.331 | 0.059 | 0.00010869 | pDC_spleen |
| GTF3C2             | 3.12E-09 | 0.68482336 | 0.252 | 0.027 | 0.00011068 | pDC_spleen |
| FAM126B            | 3.14E-09 | 0.3745538  | 0.291 | 0.043 | 0.00011129 | pDC_spleen |
| NR2C1              | 3.16E-09 | 0.92262725 | 0.252 | 0.027 | 0.000112   | pDC_spleen |

|                    |          |            |       |       |            |            |
|--------------------|----------|------------|-------|-------|------------|------------|
| ANKRD33B           | 3.17E-09 | 0.79811539 | 0.887 | 0.449 | 0.00011224 | pDC_spleen |
| METTL15            | 3.17E-09 | 0.55744254 | 0.278 | 0.038 | 0.00011239 | pDC_spleen |
| MRPL10             | 3.20E-09 | 1.1860857  | 0.252 | 0.027 | 0.00011333 | pDC_spleen |
| TRIM22             | 3.24E-09 | 0.6945296  | 0.404 | 0.097 | 0.00011466 | pDC_spleen |
| ENSMMUG00000058216 | 3.36E-09 | 0.90630918 | 0.265 | 0.032 | 0.00011901 | pDC_spleen |
| FANCM              | 3.40E-09 | 0.99852527 | 0.265 | 0.032 | 0.00012038 | pDC_spleen |
| ZNF483             | 3.44E-09 | 0.2046077  | 0.675 | 0.227 | 0.00012176 | pDC_spleen |
| RAB11B             | 3.48E-09 | 0.17533777 | 0.265 | 0.032 | 0.00012318 | pDC_spleen |
| ANP32A             | 3.49E-09 | 0.20027927 | 0.735 | 0.254 | 0.00012382 | pDC_spleen |
| MSH6               | 3.51E-09 | 0.19879957 | 0.278 | 0.038 | 0.00012428 | pDC_spleen |
| COP1               | 3.53E-09 | 0.16412089 | 0.788 | 0.286 | 0.00012516 | pDC_spleen |
| USP4               | 3.53E-09 | 0.2832022  | 0.377 | 0.081 | 0.00012516 | pDC_spleen |
| STX18              | 3.64E-09 | 1.00196202 | 0.338 | 0.065 | 0.0001291  | pDC_spleen |
| CHP1               | 3.73E-09 | 0.11266892 | 0.364 | 0.076 | 0.00013208 | pDC_spleen |
| BZW2               | 3.75E-09 | 0.19268568 | 0.728 | 0.259 | 0.00013285 | pDC_spleen |
| MRPL23             | 3.81E-09 | 0.25622662 | 0.536 | 0.157 | 0.00013501 | pDC_spleen |
| CRPPA              | 3.82E-09 | 1.67039014 | 0.258 | 0.032 | 0.00013533 | pDC_spleen |
| SMAD4              | 3.87E-09 | 0.26994276 | 0.364 | 0.076 | 0.00013729 | pDC_spleen |
| HERC3              | 4.03E-09 | 0.15926445 | 0.444 | 0.114 | 0.00014292 | pDC_spleen |
| SNUPN              | 4.05E-09 | 1.25869027 | 0.258 | 0.032 | 0.00014337 | pDC_spleen |
| TPI1               | 4.06E-09 | 0.18357252 | 0.57  | 0.178 | 0.00014384 | pDC_spleen |
| KRCC1              | 4.29E-09 | 1.81469137 | 0.258 | 0.032 | 0.00015187 | pDC_spleen |
| ENSMMUG00000000478 | 4.36E-09 | 0.38210921 | 0.338 | 0.065 | 0.00015463 | pDC_spleen |
| SAP30BP            | 4.50E-09 | 0.49486171 | 0.338 | 0.065 | 0.00015933 | pDC_spleen |
| STAT3              | 4.52E-09 | 0.24933017 | 0.384 | 0.086 | 0.0001601  | pDC_spleen |
| MEMO1              | 4.58E-09 | 0.29920563 | 0.583 | 0.189 | 0.00016235 | pDC_spleen |
| SLC33A1            | 4.64E-09 | 0.58136982 | 0.325 | 0.059 | 0.0001645  | pDC_spleen |
| MTCH2              | 4.70E-09 | 0.28986209 | 0.364 | 0.076 | 0.00016653 | pDC_spleen |
| SF3B1              | 4.80E-09 | 0.17252305 | 0.834 | 0.297 | 0.00016999 | pDC_spleen |
| KLHL28             | 4.85E-09 | 1.02994877 | 0.305 | 0.054 | 0.00017178 | pDC_spleen |
| KLF11              | 4.86E-09 | 0.90625916 | 0.298 | 0.049 | 0.00017224 | pDC_spleen |
| SLC25A26           | 4.87E-09 | 0.16614102 | 0.338 | 0.065 | 0.00017258 | pDC_spleen |
| PPP1R7             | 4.92E-09 | 1.93992401 | 0.258 | 0.032 | 0.00017431 | pDC_spleen |

|                    |          |            |       |       |            |            |
|--------------------|----------|------------|-------|-------|------------|------------|
| PSMD6              | 4.95E-09 | 0.97006288 | 0.311 | 0.054 | 0.00017553 | pDC_spleen |
| ZFP36L1            | 4.99E-09 | 0.55995414 | 0.947 | 0.486 | 0.00017698 | pDC_spleen |
| MESD               | 5.01E-09 | 0.44628043 | 0.417 | 0.103 | 0.00017747 | pDC_spleen |
| CKS2               | 5.01E-09 | 0.42869994 | 0.358 | 0.076 | 0.00017759 | pDC_spleen |
| PHIP               | 5.05E-09 | 0.3861318  | 0.828 | 0.319 | 0.00017898 | pDC_spleen |
| RPL36              | 5.06E-09 | 0.13514222 | 0.927 | 0.378 | 0.00017913 | pDC_spleen |
| ACTN4              | 5.23E-09 | 0.41100374 | 0.437 | 0.114 | 0.00018547 | pDC_spleen |
| DCUN1D4            | 5.28E-09 | 0.63110236 | 0.344 | 0.07  | 0.00018719 | pDC_spleen |
| CEP128             | 5.29E-09 | 0.98977851 | 0.338 | 0.07  | 0.00018732 | pDC_spleen |
| ENSMMUG00000045425 | 5.29E-09 | 0.7080824  | 0.285 | 0.043 | 0.00018744 | pDC_spleen |
| CCND3              | 5.31E-09 | 0.31826166 | 0.358 | 0.076 | 0.00018818 | pDC_spleen |
| CREB3L2            | 5.35E-09 | 0.87518985 | 0.298 | 0.049 | 0.00018949 | pDC_spleen |
| PMS1               | 5.52E-09 | 1.44948924 | 0.258 | 0.032 | 0.00019546 | pDC_spleen |
| AQR                | 5.57E-09 | 0.11052456 | 0.397 | 0.092 | 0.00019739 | pDC_spleen |
| CHD1L              | 5.58E-09 | 1.18769395 | 0.258 | 0.032 | 0.00019771 | pDC_spleen |
| ENSMMUG00000052293 | 5.63E-09 | 1.81167744 | 0.318 | 0.059 | 0.00019961 | pDC_spleen |
| COQ10B             | 5.69E-09 | 0.40563079 | 0.325 | 0.059 | 0.00020155 | pDC_spleen |
| IFNGR1             | 5.73E-09 | 0.34381862 | 0.695 | 0.243 | 0.000203   | pDC_spleen |
| TSC22D1            | 5.77E-09 | 0.37115388 | 0.331 | 0.065 | 0.00020443 | pDC_spleen |
| ENSMMUG00000030408 | 5.83E-09 | 0.39255388 | 0.596 | 0.189 | 0.00020657 | pDC_spleen |
| ZBTB8OS            | 5.84E-09 | 1.16385807 | 0.258 | 0.032 | 0.00020695 | pDC_spleen |
| ENSMMUG00000022769 | 5.88E-09 | 0.10945713 | 0.748 | 0.259 | 0.00020837 | pDC_spleen |
| ADIPOR1            | 5.88E-09 | 0.25168695 | 0.298 | 0.049 | 0.00020842 | pDC_spleen |
| GBP3               | 5.94E-09 | 0.34372392 | 0.616 | 0.216 | 0.00021036 | pDC_spleen |
| ANAPC5             | 6.00E-09 | 0.17008957 | 0.272 | 0.038 | 0.00021256 | pDC_spleen |
| RNF7               | 6.01E-09 | 0.26465814 | 0.43  | 0.108 | 0.00021307 | pDC_spleen |
| TSPAN31            | 6.09E-09 | 0.83210743 | 0.285 | 0.043 | 0.00021578 | pDC_spleen |
| MPST               | 6.11E-09 | 0.28105929 | 0.258 | 0.032 | 0.00021661 | pDC_spleen |
| XPNPEP1            | 6.18E-09 | 1.14013286 | 0.258 | 0.032 | 0.00021909 | pDC_spleen |
| SEC61A2            | 6.20E-09 | 0.51013127 | 0.272 | 0.038 | 0.00021975 | pDC_spleen |
| UBE2A              | 6.27E-09 | 0.1036124  | 0.384 | 0.086 | 0.00022201 | pDC_spleen |
| MCMBP              | 6.27E-09 | 0.69073334 | 0.272 | 0.038 | 0.0002222  | pDC_spleen |
| KIAA1328           | 6.39E-09 | 0.57316492 | 0.397 | 0.097 | 0.00022633 | pDC_spleen |

|                    |          |            |       |       |            |            |
|--------------------|----------|------------|-------|-------|------------|------------|
| HERPUD2            | 6.47E-09 | 0.21719495 | 0.298 | 0.049 | 0.00022918 | pDC_spleen |
| PSMC2              | 6.47E-09 | 0.7161006  | 0.258 | 0.032 | 0.0002293  | pDC_spleen |
| BCL2L13            | 6.49E-09 | 0.12818999 | 0.344 | 0.07  | 0.00022996 | pDC_spleen |
| DPH3               | 6.55E-09 | 0.24744406 | 0.258 | 0.032 | 0.00023193 | pDC_spleen |
| CDK9               | 6.63E-09 | 0.5142616  | 0.272 | 0.038 | 0.00023485 | pDC_spleen |
| NCL                | 6.66E-09 | 0.28485736 | 0.768 | 0.286 | 0.00023583 | pDC_spleen |
| UTP14A             | 6.70E-09 | 0.65332514 | 0.258 | 0.032 | 0.00023727 | pDC_spleen |
| SPART              | 6.85E-09 | 1.17206573 | 0.258 | 0.032 | 0.00024272 | pDC_spleen |
| ADSS2              | 6.92E-09 | 1.67829235 | 0.278 | 0.043 | 0.00024534 | pDC_spleen |
| STARD3NL           | 7.30E-09 | 0.21166065 | 0.404 | 0.097 | 0.0002585  | pDC_spleen |
| SPEN               | 7.35E-09 | 0.2673242  | 0.801 | 0.297 | 0.00026039 | pDC_spleen |
| NFKBIA             | 7.51E-09 | 0.79592785 | 0.967 | 0.784 | 0.00026617 | pDC_spleen |
| ENSMMUG00000017890 | 7.62E-09 | 0.56412695 | 0.331 | 0.065 | 0.00027012 | pDC_spleen |
| CCDC82             | 7.79E-09 | 1.11711364 | 0.291 | 0.049 | 0.00027594 | pDC_spleen |
| XRCC5              | 7.80E-09 | 0.19622305 | 0.881 | 0.324 | 0.00027641 | pDC_spleen |
| PBRM1              | 7.88E-09 | 0.187766   | 0.762 | 0.276 | 0.00027928 | pDC_spleen |
| HIVEP1             | 7.91E-09 | 0.77901713 | 0.788 | 0.368 | 0.00028032 | pDC_spleen |
| EPRS1              | 8.18E-09 | 0.26367374 | 0.358 | 0.076 | 0.00028979 | pDC_spleen |
| TMBIM1             | 8.25E-09 | 1.64685215 | 0.252 | 0.032 | 0.00029225 | pDC_spleen |
| DNMT1              | 8.25E-09 | 0.35673854 | 0.331 | 0.065 | 0.00029239 | pDC_spleen |
| MRPS12             | 8.28E-09 | 0.34347707 | 0.364 | 0.081 | 0.00029333 | pDC_spleen |
| ENSMMUG00000060377 | 8.40E-09 | 0.15607942 | 0.728 | 0.259 | 0.00029754 | pDC_spleen |
| RAB6A              | 8.52E-09 | 0.15859222 | 0.457 | 0.124 | 0.000302   | pDC_spleen |
| KATNA1             | 9.10E-09 | 0.31329705 | 0.377 | 0.086 | 0.00032239 | pDC_spleen |
| PDE6D              | 9.22E-09 | 1.22990934 | 0.291 | 0.049 | 0.00032663 | pDC_spleen |
| TRMT10B            | 9.27E-09 | 0.83539225 | 0.278 | 0.043 | 0.00032857 | pDC_spleen |
| CBX5               | 9.38E-09 | 0.32447853 | 0.331 | 0.065 | 0.00033243 | pDC_spleen |
| HAX1               | 9.51E-09 | 0.46544754 | 0.305 | 0.054 | 0.00033696 | pDC_spleen |
| CCNI               | 9.79E-09 | 0.147091   | 0.775 | 0.281 | 0.00034696 | pDC_spleen |
| COX7A2             | 9.89E-09 | 0.38954837 | 0.377 | 0.086 | 0.00035035 | pDC_spleen |
| KXD1               | 9.98E-09 | 0.12701422 | 0.437 | 0.114 | 0.00035366 | pDC_spleen |
| XRN2               | 1.01E-08 | 0.30627283 | 0.616 | 0.2   | 0.0003563  | pDC_spleen |
| SHE                | 1.01E-08 | 0.91341344 | 0.338 | 0.07  | 0.00035766 | pDC_spleen |

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|--------------------|----------|------------|-------|-------|------------|------------|
| ERGIC3             | 1.03E-08 | 0.83548788 | 0.291 | 0.049 | 0.00036662 | pDC_spleen |
| RFX3               | 1.04E-08 | 0.18132086 | 0.543 | 0.168 | 0.00036839 | pDC_spleen |
| PDS5B              | 1.07E-08 | 0.20559072 | 0.51  | 0.151 | 0.00037923 | pDC_spleen |
| PREPL              | 1.08E-08 | 1.16550591 | 0.252 | 0.032 | 0.00038397 | pDC_spleen |
| PPFIA1             | 1.09E-08 | 0.11613804 | 0.305 | 0.054 | 0.000385   | pDC_spleen |
| CIAO2A             | 1.12E-08 | 0.95971584 | 0.265 | 0.038 | 0.00039579 | pDC_spleen |
| NEPRO              | 1.12E-08 | 0.98917255 | 0.252 | 0.032 | 0.00039724 | pDC_spleen |
| NIT2               | 1.13E-08 | 0.70864228 | 0.278 | 0.043 | 0.00039869 | pDC_spleen |
| HAT1               | 1.13E-08 | 0.59170436 | 0.278 | 0.043 | 0.00039869 | pDC_spleen |
| PYCARD             | 1.13E-08 | 2.12377215 | 0.331 | 0.081 | 0.00039966 | pDC_spleen |
| ANAPC11            | 1.14E-08 | 0.46568362 | 0.377 | 0.086 | 0.00040226 | pDC_spleen |
| FBXO38             | 1.17E-08 | 0.43240898 | 0.265 | 0.038 | 0.00041358 | pDC_spleen |
| PHLDA1             | 1.17E-08 | 1.28762476 | 0.265 | 0.038 | 0.00041358 | pDC_spleen |
| SNAPIN             | 1.19E-08 | 1.63786986 | 0.252 | 0.032 | 0.00042035 | pDC_spleen |
| AIDA               | 1.19E-08 | 0.536656   | 0.278 | 0.043 | 0.00042062 | pDC_spleen |
| MPRIP              | 1.21E-08 | 0.63317514 | 0.265 | 0.038 | 0.00042744 | pDC_spleen |
| CCNYL1             | 1.21E-08 | 0.70782927 | 0.252 | 0.032 | 0.00042996 | pDC_spleen |
| ZNF749             | 1.22E-08 | 0.6999921  | 0.265 | 0.038 | 0.00043216 | pDC_spleen |
| SCAMP1             | 1.24E-08 | 1.02497118 | 0.298 | 0.054 | 0.00044072 | pDC_spleen |
| CLEC2D             | 1.25E-08 | 2.1132362  | 0.258 | 0.038 | 0.00044253 | pDC_spleen |
| ATP6V1D            | 1.25E-08 | 0.13669653 | 0.278 | 0.043 | 0.00044371 | pDC_spleen |
| UFL1               | 1.26E-08 | 0.85849461 | 0.252 | 0.032 | 0.00044476 | pDC_spleen |
| ENSMMUG00000005086 | 1.28E-08 | 0.54080327 | 0.377 | 0.092 | 0.00045317 | pDC_spleen |
| TMEM183A           | 1.28E-08 | 0.84535178 | 0.252 | 0.032 | 0.00045491 | pDC_spleen |
| CYB561A3           | 1.30E-08 | 1.24719222 | 0.311 | 0.059 | 0.00046225 | pDC_spleen |
| TPRA1              | 1.31E-08 | 1.4758227  | 0.272 | 0.043 | 0.00046301 | pDC_spleen |
| BLCAP              | 1.31E-08 | 0.76052276 | 0.252 | 0.032 | 0.00046528 | pDC_spleen |
| RPL8               | 1.32E-08 | 0.67737463 | 0.947 | 0.578 | 0.00046645 | pDC_spleen |
| ITPKB              | 1.32E-08 | 0.37987741 | 0.344 | 0.076 | 0.00046854 | pDC_spleen |
| ZNF143             | 1.33E-08 | 0.98712531 | 0.252 | 0.032 | 0.00047055 | pDC_spleen |
| PUM3               | 1.35E-08 | 1.01082002 | 0.265 | 0.038 | 0.00047696 | pDC_spleen |
| ENSMMUG00000062885 | 1.36E-08 | 1.01370565 | 0.252 | 0.032 | 0.00048127 | pDC_spleen |
| CEBPG              | 1.36E-08 | 1.14911853 | 0.252 | 0.032 | 0.00048127 | pDC_spleen |

|                    |          |            |       |       |            |            |
|--------------------|----------|------------|-------|-------|------------|------------|
| E2F3               | 1.36E-08 | 0.2873812  | 0.338 | 0.07  | 0.00048271 | pDC_spleen |
| ENSMMUG00000065288 | 1.36E-08 | 0.22051425 | 0.278 | 0.043 | 0.00048326 | pDC_spleen |
| CFL2               | 1.37E-08 | 0.53139561 | 0.311 | 0.059 | 0.00048601 | pDC_spleen |
| GLO1               | 1.39E-08 | 0.50327698 | 0.265 | 0.038 | 0.00049288 | pDC_spleen |
| OAZ1               | 1.39E-08 | 0.33537956 | 0.762 | 0.292 | 0.00049423 | pDC_spleen |
| ENSMMUG00000050829 | 1.49E-08 | 0.29399847 | 0.828 | 0.324 | 0.00052641 | pDC_spleen |
| UBE2N              | 1.49E-08 | 0.22836316 | 0.616 | 0.205 | 0.00052763 | pDC_spleen |
| PRKAR2B            | 1.49E-08 | 2.05006215 | 0.258 | 0.038 | 0.00052806 | pDC_spleen |
| ANKFY1             | 1.51E-08 | 0.27863865 | 0.338 | 0.07  | 0.00053656 | pDC_spleen |
| ACAP2              | 1.53E-08 | 0.30614113 | 0.821 | 0.33  | 0.00054114 | pDC_spleen |
| UBA2               | 1.56E-08 | 0.17315844 | 0.351 | 0.076 | 0.00055159 | pDC_spleen |
| KPNA3              | 1.57E-08 | 0.29062375 | 0.424 | 0.114 | 0.00055623 | pDC_spleen |
| ST7                | 1.59E-08 | 0.94448286 | 0.424 | 0.119 | 0.00056216 | pDC_spleen |
| GNA12              | 1.59E-08 | 0.20297162 | 0.298 | 0.054 | 0.00056341 | pDC_spleen |
| PITPNM2            | 1.59E-08 | 0.3719283  | 0.311 | 0.059 | 0.00056464 | pDC_spleen |
| TSPO               | 1.61E-08 | 1.11960521 | 0.371 | 0.092 | 0.00056951 | pDC_spleen |
| CDC42              | 1.62E-08 | 0.62983097 | 0.947 | 0.486 | 0.00057323 | pDC_spleen |
| RBM41              | 1.62E-08 | 0.71919549 | 0.298 | 0.054 | 0.00057501 | pDC_spleen |
| SRPRA              | 1.65E-08 | 0.42307297 | 0.338 | 0.07  | 0.00058493 | pDC_spleen |
| MTIF3              | 1.69E-08 | 0.32361191 | 0.325 | 0.065 | 0.00059716 | pDC_spleen |
| ENSMMUG00000059843 | 1.70E-08 | 0.86547004 | 0.285 | 0.049 | 0.00060343 | pDC_spleen |
| VPS13A             | 1.74E-08 | 0.1959125  | 0.325 | 0.065 | 0.0006179  | pDC_spleen |
| SLC20A1            | 1.75E-08 | 0.14118086 | 0.437 | 0.119 | 0.00062177 | pDC_spleen |
| PHACTR4            | 1.77E-08 | 0.22521918 | 0.424 | 0.114 | 0.00062733 | pDC_spleen |
| SUFU               | 1.78E-08 | 0.2342533  | 0.285 | 0.049 | 0.00062909 | pDC_spleen |
| SMC6               | 1.78E-08 | 1.87646438 | 0.258 | 0.038 | 0.00062954 | pDC_spleen |
| MXI1               | 1.78E-08 | 0.89983621 | 0.318 | 0.065 | 0.00063099 | pDC_spleen |
| PCCA               | 1.79E-08 | 0.30690982 | 0.497 | 0.151 | 0.0006343  | pDC_spleen |
| SSR3               | 1.83E-08 | 0.291038   | 0.483 | 0.146 | 0.00064963 | pDC_spleen |
| IDI1               | 1.87E-08 | 1.20313951 | 0.285 | 0.049 | 0.00066266 | pDC_spleen |
| SEL1L              | 1.89E-08 | 0.26909191 | 0.338 | 0.07  | 0.00066868 | pDC_spleen |
| BBS9               | 1.90E-08 | 0.27117    | 0.344 | 0.076 | 0.00067154 | pDC_spleen |
| UBE4A              | 1.94E-08 | 1.57353788 | 0.258 | 0.038 | 0.00068715 | pDC_spleen |

|                    |          |            |       |       |            |            |
|--------------------|----------|------------|-------|-------|------------|------------|
| PDIA6              | 1.94E-08 | 0.66960488 | 0.377 | 0.092 | 0.00068752 | pDC_spleen |
| ENSMMUG00000065089 | 1.97E-08 | 0.36481102 | 0.344 | 0.076 | 0.00069732 | pDC_spleen |
| NUBP2              | 2.00E-08 | 1.12213284 | 0.258 | 0.038 | 0.00071005 | pDC_spleen |
| TNIP2              | 2.01E-08 | 0.3123252  | 0.344 | 0.076 | 0.00071057 | pDC_spleen |
| GLCC11             | 2.05E-08 | 0.93449605 | 0.351 | 0.081 | 0.0007257  | pDC_spleen |
| IMMT               | 2.07E-08 | 0.60162062 | 0.272 | 0.043 | 0.00073326 | pDC_spleen |
| MRPS14             | 2.09E-08 | 1.70164089 | 0.258 | 0.038 | 0.00074173 | pDC_spleen |
| VAMP3              | 2.11E-08 | 0.61624424 | 0.272 | 0.043 | 0.000749   | pDC_spleen |
| CTDSPL             | 2.12E-08 | 1.24991626 | 0.258 | 0.038 | 0.00074987 | pDC_spleen |
| ZNF736             | 2.12E-08 | 0.62794913 | 0.285 | 0.049 | 0.00075048 | pDC_spleen |
| NOP56              | 2.14E-08 | 1.13171642 | 0.272 | 0.043 | 0.00075699 | pDC_spleen |
| ACTR3              | 2.15E-08 | 0.61281117 | 0.954 | 0.508 | 0.0007602  | pDC_spleen |
| PEX14              | 2.16E-08 | 0.50725911 | 0.285 | 0.049 | 0.00076617 | pDC_spleen |
| AKR1B1             | 2.20E-08 | 0.33739658 | 0.397 | 0.103 | 0.00077887 | pDC_spleen |
| SNRPN              | 2.28E-08 | 0.28840488 | 0.331 | 0.07  | 0.00080667 | pDC_spleen |
| KANSL2             | 2.30E-08 | 0.42983939 | 0.331 | 0.07  | 0.0008144  | pDC_spleen |
| DDX27              | 2.30E-08 | 0.20463522 | 0.285 | 0.049 | 0.00081519 | pDC_spleen |
| TBL1XR1            | 2.31E-08 | 0.50233046 | 0.914 | 0.443 | 0.00081676 | pDC_spleen |
| NFYA               | 2.31E-08 | 1.02599336 | 0.258 | 0.038 | 0.00081813 | pDC_spleen |
| MRPS17             | 2.35E-08 | 0.70766426 | 0.272 | 0.043 | 0.00083274 | pDC_spleen |
| MTM1               | 2.35E-08 | 0.17007325 | 0.272 | 0.043 | 0.00083274 | pDC_spleen |
| ZNF136             | 2.35E-08 | 0.50320053 | 0.272 | 0.043 | 0.00083274 | pDC_spleen |
| IL4I1              | 2.35E-08 | 1.11482534 | 0.358 | 0.092 | 0.00083305 | pDC_spleen |
| CEP112             | 2.36E-08 | 0.66579427 | 0.258 | 0.038 | 0.00083611 | pDC_spleen |
| SART3              | 2.38E-08 | 0.44957483 | 0.272 | 0.043 | 0.00084159 | pDC_spleen |
| CRNKL1             | 2.38E-08 | 1.06439131 | 0.272 | 0.043 | 0.00084159 | pDC_spleen |
| PPP1R11            | 2.40E-08 | 0.99340281 | 0.272 | 0.043 | 0.00085054 | pDC_spleen |
| CLIC1              | 2.41E-08 | 0.55392003 | 0.497 | 0.151 | 0.00085233 | pDC_spleen |
| DOCK5              | 2.42E-08 | 0.10388104 | 0.609 | 0.211 | 0.00085863 | pDC_spleen |
| MRI1               | 2.44E-08 | 0.40580304 | 0.689 | 0.254 | 0.00086475 | pDC_spleen |
| AAGAB              | 2.46E-08 | 0.36250219 | 0.258 | 0.038 | 0.00087324 | pDC_spleen |
| DUSP1              | 2.48E-08 | 0.64220024 | 0.927 | 0.535 | 0.00087794 | pDC_spleen |
| KRR1               | 2.53E-08 | 0.65769598 | 0.272 | 0.043 | 0.00089669 | pDC_spleen |



|                    |          |            |       |       |            |            |
|--------------------|----------|------------|-------|-------|------------|------------|
| CTSH               | 2.54E-08 | 0.66809378 | 0.947 | 0.568 | 0.00089949 | pDC_spleen |
| AASDHPPT           | 2.55E-08 | 1.11072601 | 0.258 | 0.038 | 0.00090213 | pDC_spleen |
| PABPC4             | 2.58E-08 | 0.38890753 | 0.285 | 0.049 | 0.00091308 | pDC_spleen |
| USP40              | 2.67E-08 | 0.34347628 | 0.272 | 0.043 | 0.00094526 | pDC_spleen |
| ECSIT              | 2.67E-08 | 0.17157926 | 0.272 | 0.043 | 0.00094526 | pDC_spleen |
| BUD23              | 2.67E-08 | 0.62039845 | 0.364 | 0.086 | 0.00094602 | pDC_spleen |
| LSM7               | 2.70E-08 | 0.75463052 | 0.437 | 0.124 | 0.00095838 | pDC_spleen |
| ENSMMUG00000014648 | 2.95E-08 | 0.20507167 | 0.682 | 0.243 | 0.00104526 | pDC_spleen |
| ATP5F1E            | 3.01E-08 | 0.37338535 | 0.881 | 0.411 | 0.00106531 | pDC_spleen |
| CNST               | 3.08E-08 | 0.22213754 | 0.424 | 0.114 | 0.00109056 | pDC_spleen |
| ENSMMUG00000052202 | 3.08E-08 | 0.72992938 | 0.291 | 0.054 | 0.00109234 | pDC_spleen |
| DHX29              | 3.15E-08 | 0.77125685 | 0.291 | 0.054 | 0.00111457 | pDC_spleen |
| PRKAA1             | 3.16E-08 | 0.3205218  | 0.318 | 0.065 | 0.00112002 | pDC_spleen |
| BCL7A              | 3.16E-08 | 0.31130432 | 0.318 | 0.065 | 0.00112002 | pDC_spleen |
| UFD1               | 3.18E-08 | 0.38541967 | 0.305 | 0.059 | 0.00112833 | pDC_spleen |
| ENSMMUG00000052802 | 3.29E-08 | 0.11530118 | 0.338 | 0.076 | 0.00116596 | pDC_spleen |
| AP2S1              | 3.31E-08 | 0.18155824 | 0.305 | 0.059 | 0.00117363 | pDC_spleen |
| CHKA               | 3.32E-08 | 0.26776191 | 0.364 | 0.086 | 0.00117516 | pDC_spleen |
| NVL                | 3.32E-08 | 1.82159814 | 0.252 | 0.038 | 0.00117606 | pDC_spleen |
| PPA1               | 3.33E-08 | 0.66825297 | 0.391 | 0.103 | 0.00117963 | pDC_spleen |
| BUD31              | 3.40E-08 | 0.13625026 | 0.351 | 0.081 | 0.00120521 | pDC_spleen |
| NIBAN1             | 3.43E-08 | 0.70887187 | 0.828 | 0.395 | 0.00121563 | pDC_spleen |
| TRNT1              | 3.48E-08 | 0.98084518 | 0.265 | 0.043 | 0.00123386 | pDC_spleen |
| RNASET2            | 3.54E-08 | 0.8297511  | 0.503 | 0.173 | 0.00125392 | pDC_spleen |
| ZBTB38             | 3.54E-08 | 0.7518791  | 0.278 | 0.049 | 0.00125525 | pDC_spleen |
| MRPL47             | 3.58E-08 | 0.21277246 | 0.318 | 0.065 | 0.00126932 | pDC_spleen |
| ARL6IP6            | 3.60E-08 | 0.80031611 | 0.291 | 0.054 | 0.00127654 | pDC_spleen |
| AGFG1              | 3.62E-08 | 0.39211567 | 0.291 | 0.054 | 0.00128296 | pDC_spleen |
| PRELID3B           | 3.69E-08 | 0.20593529 | 0.305 | 0.059 | 0.00130747 | pDC_spleen |
| MARCHF3            | 3.75E-08 | 1.20898505 | 0.265 | 0.043 | 0.00132833 | pDC_spleen |
| CD84               | 3.75E-08 | 0.34321874 | 0.636 | 0.238 | 0.00132934 | pDC_spleen |
| RALB               | 3.76E-08 | 1.07049295 | 0.298 | 0.059 | 0.00133194 | pDC_spleen |
| ENSMMUG00000030374 | 3.85E-08 | 0.14402206 | 0.291 | 0.054 | 0.00136246 | pDC_spleen |

|                     |          |            |       |       |            |            |
|---------------------|----------|------------|-------|-------|------------|------------|
| FBXW5               | 3.86E-08 | 1.31329443 | 0.252 | 0.038 | 0.00136873 | pDC_spleen |
| RPP30               | 3.90E-08 | 1.266622   | 0.252 | 0.038 | 0.0013836  | pDC_spleen |
| PLA2G4C             | 3.90E-08 | 0.73430151 | 0.252 | 0.038 | 0.0013836  | pDC_spleen |
| TPST1               | 3.95E-08 | 0.99927984 | 0.252 | 0.038 | 0.00139864 | pDC_spleen |
| STK39               | 3.95E-08 | 1.04331746 | 0.252 | 0.038 | 0.00139864 | pDC_spleen |
| MPC2                | 3.97E-08 | 0.72077196 | 0.278 | 0.049 | 0.00140523 | pDC_spleen |
| ESD                 | 4.04E-08 | 0.86353388 | 0.291 | 0.054 | 0.00143234 | pDC_spleen |
| ORC4                | 4.10E-08 | 1.33397558 | 0.252 | 0.038 | 0.0014525  | pDC_spleen |
| ENSMMUG00000012525  | 4.11E-08 | 0.29945742 | 0.43  | 0.119 | 0.00145507 | pDC_spleen |
| ARAF                | 4.12E-08 | 0.21210429 | 0.265 | 0.043 | 0.00146013 | pDC_spleen |
| PIGU                | 4.12E-08 | 0.33264954 | 0.265 | 0.043 | 0.00146013 | pDC_spleen |
| CCNDBP1             | 4.26E-08 | 0.74281134 | 0.278 | 0.049 | 0.00150958 | pDC_spleen |
| HSD17B12            | 4.36E-08 | 0.82730208 | 0.344 | 0.081 | 0.00154512 | pDC_spleen |
| FAM91A1             | 4.44E-08 | 0.27385009 | 0.311 | 0.065 | 0.00157417 | pDC_spleen |
| NDUFS8              | 4.45E-08 | 0.35012134 | 0.457 | 0.135 | 0.00157518 | pDC_spleen |
| JAK2                | 4.49E-08 | 0.52658384 | 0.801 | 0.33  | 0.00159223 | pDC_spleen |
| MPP5                | 4.53E-08 | 0.34150969 | 0.265 | 0.043 | 0.00160459 | pDC_spleen |
| MRPS21              | 4.53E-08 | 0.88105948 | 0.325 | 0.07  | 0.00160646 | pDC_spleen |
| ENSMMUG00000004539  | 4.57E-08 | 0.34091261 | 0.709 | 0.27  | 0.00161847 | pDC_spleen |
| NRM                 | 4.59E-08 | 0.44957838 | 0.252 | 0.038 | 0.00162648 | pDC_spleen |
| ENSMMUG000000063877 | 4.59E-08 | 0.19898978 | 0.252 | 0.038 | 0.00162648 | pDC_spleen |
| ENSMMUG000000060545 | 4.62E-08 | 0.57763298 | 0.325 | 0.07  | 0.00163698 | pDC_spleen |
| ATP6AP1             | 4.72E-08 | 0.44789322 | 0.278 | 0.049 | 0.00167175 | pDC_spleen |
| TTC32               | 4.74E-08 | 0.7046912  | 0.252 | 0.038 | 0.00167979 | pDC_spleen |
| RBMX                | 4.85E-08 | 0.1552574  | 0.675 | 0.243 | 0.00171854 | pDC_spleen |
| LAPTM4A             | 4.91E-08 | 0.51498441 | 0.285 | 0.054 | 0.00174066 | pDC_spleen |
| NFU1                | 4.95E-08 | 0.63000905 | 0.252 | 0.038 | 0.00175351 | pDC_spleen |
| AKT2                | 4.98E-08 | 0.16166095 | 0.265 | 0.043 | 0.00176285 | pDC_spleen |
| VIM                 | 5.00E-08 | 0.91712023 | 0.98  | 0.735 | 0.00177052 | pDC_spleen |
| HSD17B11            | 5.00E-08 | 0.57170118 | 0.252 | 0.038 | 0.00177242 | pDC_spleen |
| FTL                 | 5.03E-08 | 0.13665908 | 0.921 | 0.422 | 0.00178197 | pDC_spleen |
| MRPS9               | 5.05E-08 | 0.79888387 | 0.298 | 0.059 | 0.00178845 | pDC_spleen |
| GSK3A               | 5.13E-08 | 0.28436531 | 0.311 | 0.065 | 0.0018177  | pDC_spleen |

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|--------------------|----------|------------|-------|-------|------------|------------|
| STAU2              | 5.21E-08 | 0.17659003 | 0.517 | 0.168 | 0.00184761 | pDC_spleen |
| STRIP1             | 5.28E-08 | 0.32539576 | 0.252 | 0.038 | 0.00187    | pDC_spleen |
| ARL1               | 5.28E-08 | 0.75414087 | 0.252 | 0.038 | 0.00187    | pDC_spleen |
| SDHAF2             | 5.28E-08 | 0.19143494 | 0.252 | 0.038 | 0.00187    | pDC_spleen |
| POLE4              | 5.37E-08 | 0.5107669  | 0.325 | 0.07  | 0.00190225 | pDC_spleen |
| TTC28              | 5.43E-08 | 0.82197516 | 0.344 | 0.086 | 0.00192465 | pDC_spleen |
| NANS               | 5.50E-08 | 0.68594329 | 0.358 | 0.086 | 0.00194996 | pDC_spleen |
| UBN2               | 5.51E-08 | 0.23050532 | 0.298 | 0.059 | 0.00195277 | pDC_spleen |
| NUP205             | 5.90E-08 | 0.17963811 | 0.298 | 0.059 | 0.0020906  | pDC_spleen |
| PPFIBP2            | 6.00E-08 | 1.13977778 | 0.272 | 0.049 | 0.00212467 | pDC_spleen |
| MCM3AP             | 6.06E-08 | 0.66511164 | 0.285 | 0.054 | 0.00214659 | pDC_spleen |
| CPEB3              | 6.35E-08 | 0.30620327 | 0.391 | 0.103 | 0.00224919 | pDC_spleen |
| KDELR1             | 6.42E-08 | 0.70186521 | 0.424 | 0.119 | 0.00227337 | pDC_spleen |
| ELOB               | 6.44E-08 | 0.16921735 | 0.656 | 0.232 | 0.00228046 | pDC_spleen |
| C5H4orf33          | 6.45E-08 | 0.24323176 | 0.311 | 0.065 | 0.00228507 | pDC_spleen |
| PEA15              | 6.56E-08 | 0.9463227  | 0.285 | 0.054 | 0.0023242  | pDC_spleen |
| PPIH               | 6.67E-08 | 0.39060994 | 0.272 | 0.049 | 0.00236442 | pDC_spleen |
| COPB1              | 6.67E-08 | 0.89577071 | 0.272 | 0.049 | 0.00236442 | pDC_spleen |
| ENSMMUG00000065217 | 6.76E-08 | 0.70682032 | 0.258 | 0.043 | 0.00239559 | pDC_spleen |
| CFP                | 6.81E-08 | 0.96477333 | 0.272 | 0.049 | 0.00241296 | pDC_spleen |
| STARD9             | 6.95E-08 | 0.71304045 | 0.272 | 0.049 | 0.00246247 | pDC_spleen |
| LAMTOR4            | 6.97E-08 | 0.1828617  | 0.497 | 0.151 | 0.00247017 | pDC_spleen |
| RASSF4             | 7.10E-08 | 0.94880002 | 0.318 | 0.07  | 0.00251416 | pDC_spleen |
| BCAS2              | 7.22E-08 | 0.24782142 | 0.351 | 0.086 | 0.00255832 | pDC_spleen |
| SF3A3              | 7.43E-08 | 0.47098339 | 0.258 | 0.043 | 0.00263101 | pDC_spleen |
| FAM222B            | 7.43E-08 | 0.70371173 | 0.258 | 0.043 | 0.00263101 | pDC_spleen |
| TOX                | 7.43E-08 | 1.08723531 | 0.417 | 0.135 | 0.00263152 | pDC_spleen |
| EGLN1              | 7.56E-08 | 1.60347169 | 0.298 | 0.065 | 0.00267917 | pDC_spleen |
| RECQL              | 7.61E-08 | 0.3651232  | 0.285 | 0.054 | 0.00269636 | pDC_spleen |
| HEXD               | 7.66E-08 | 0.70785618 | 0.258 | 0.043 | 0.00271436 | pDC_spleen |
| TIMM8B             | 7.74E-08 | 1.00668928 | 0.258 | 0.043 | 0.0027427  | pDC_spleen |
| SLC39A9            | 7.82E-08 | 1.18576875 | 0.258 | 0.043 | 0.00277134 | pDC_spleen |
| ENSMMUG00000063196 | 7.99E-08 | 0.33273434 | 0.258 | 0.043 | 0.00282947 | pDC_spleen |

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|--------------------|----------|------------|-------|-------|------------|------------|
| ENSMMUG00000019944 | 7.99E-08 | 0.29674939 | 0.371 | 0.097 | 0.00283104 | pDC_spleen |
| PPIP5K2            | 8.06E-08 | 0.4055393  | 0.305 | 0.065 | 0.00285714 | pDC_spleen |
| DCTN2              | 8.09E-08 | 0.80199689 | 0.272 | 0.049 | 0.00286647 | pDC_spleen |
| CFDP1              | 8.16E-08 | 0.21601073 | 0.702 | 0.254 | 0.00289102 | pDC_spleen |
| TOGARAM1           | 8.41E-08 | 0.5567163  | 0.258 | 0.043 | 0.00298002 | pDC_spleen |
| HYOU1              | 8.45E-08 | 0.58849194 | 0.258 | 0.043 | 0.00299548 | pDC_spleen |
| C2CD5              | 8.50E-08 | 0.95321579 | 0.258 | 0.043 | 0.00301105 | pDC_spleen |
| ARHGDIB            | 8.65E-08 | 1.04442417 | 0.503 | 0.189 | 0.00306633 | pDC_spleen |
| ENSMMUG00000063288 | 8.75E-08 | 0.28856457 | 0.397 | 0.108 | 0.00309901 | pDC_spleen |
| LSM10              | 8.77E-08 | 0.92436085 | 0.258 | 0.043 | 0.00310602 | pDC_spleen |
| ENSMMUG00000021425 | 8.89E-08 | 0.72900417 | 0.868 | 0.486 | 0.00314963 | pDC_spleen |
| ABHD17B            | 9.14E-08 | 0.24938637 | 0.258 | 0.043 | 0.00323717 | pDC_spleen |
| HADHB              | 9.31E-08 | 0.98070537 | 0.291 | 0.059 | 0.00330027 | pDC_spleen |
| UXT                | 9.42E-08 | 0.62466195 | 0.258 | 0.043 | 0.00333903 | pDC_spleen |
| ENSMMUG00000047632 | 9.57E-08 | 0.67881213 | 0.404 | 0.119 | 0.00339082 | pDC_spleen |
| FBXO42             | 9.60E-08 | 0.63391982 | 0.325 | 0.076 | 0.00340042 | pDC_spleen |
| ENSMMUG00000051928 | 9.80E-08 | 0.42743283 | 0.278 | 0.054 | 0.00347399 | pDC_spleen |
| TMCC3              | 9.89E-08 | 0.55369177 | 0.397 | 0.114 | 0.0035054  | pDC_spleen |
| PDCD4              | 1.00E-07 | 0.10076943 | 0.384 | 0.103 | 0.00355471 | pDC_spleen |
| CEP135             | 1.01E-07 | 0.43279098 | 0.291 | 0.059 | 0.00356525 | pDC_spleen |
| SMIM19             | 1.06E-07 | 0.5722131  | 0.278 | 0.054 | 0.00375927 | pDC_spleen |
| CITED1             | 1.12E-07 | 0.10754091 | 0.424 | 0.124 | 0.00397323 | pDC_spleen |
| ZRANB3             | 1.14E-07 | 0.74780458 | 0.278 | 0.054 | 0.00402739 | pDC_spleen |
| BECN1              | 1.18E-07 | 0.36238946 | 0.278 | 0.054 | 0.00418881 | pDC_spleen |
| HMGB2              | 1.20E-07 | 0.28853942 | 0.477 | 0.151 | 0.00424182 | pDC_spleen |
| ZNF618             | 1.22E-07 | 0.78798859 | 0.265 | 0.049 | 0.00434019 | pDC_spleen |
| DOK1               | 1.23E-07 | 0.53766789 | 0.291 | 0.059 | 0.00436254 | pDC_spleen |
| PTAR1              | 1.24E-07 | 0.88718784 | 0.285 | 0.059 | 0.00441036 | pDC_spleen |
| ITSN2              | 1.25E-07 | 0.24821073 | 0.874 | 0.378 | 0.00441635 | pDC_spleen |
| PSMG2              | 1.30E-07 | 0.31953629 | 0.278 | 0.054 | 0.00462023 | pDC_spleen |
| SDCCAG8            | 1.39E-07 | 0.17473287 | 0.616 | 0.222 | 0.00492291 | pDC_spleen |
| IRF4               | 1.40E-07 | 0.44644218 | 0.576 | 0.222 | 0.00496064 | pDC_spleen |
| ENSMMUG00000020751 | 1.41E-07 | 0.47819105 | 0.325 | 0.076 | 0.00497932 | pDC_spleen |

|                     |          |            |       |       |            |            |
|---------------------|----------|------------|-------|-------|------------|------------|
| TMEM230             | 1.44E-07 | 0.78359277 | 0.298 | 0.065 | 0.00510781 | pDC_spleen |
| VPS13C              | 1.44E-07 | 0.37427556 | 0.868 | 0.368 | 0.00511202 | pDC_spleen |
| PIH1D1              | 1.45E-07 | 0.41370061 | 0.252 | 0.043 | 0.00512432 | pDC_spleen |
| RELB                | 1.46E-07 | 0.21682937 | 0.927 | 0.416 | 0.00517701 | pDC_spleen |
| GABPA               | 1.47E-07 | 0.58886369 | 0.265 | 0.049 | 0.0051986  | pDC_spleen |
| NSD2                | 1.51E-07 | 0.50888498 | 0.265 | 0.049 | 0.00535678 | pDC_spleen |
| MCFD2               | 1.52E-07 | 0.59057548 | 0.252 | 0.043 | 0.00539421 | pDC_spleen |
| BLMH                | 1.54E-07 | 0.31892143 | 0.252 | 0.043 | 0.00544981 | pDC_spleen |
| ENSMMUG00000000451  | 1.60E-07 | 0.49687554 | 0.331 | 0.081 | 0.00568086 | pDC_spleen |
| BACH2               | 1.64E-07 | 0.35370192 | 0.384 | 0.114 | 0.00582517 | pDC_spleen |
| CAPN7               | 1.65E-07 | 0.22110348 | 0.252 | 0.043 | 0.00585484 | pDC_spleen |
| ENSMMUG000000051427 | 1.68E-07 | 1.03627686 | 0.517 | 0.195 | 0.00596704 | pDC_spleen |
| ZNF592              | 1.69E-07 | 0.1762532  | 0.252 | 0.043 | 0.00597582 | pDC_spleen |
| EIF2S1              | 1.69E-07 | 0.24244274 | 0.298 | 0.065 | 0.00598943 | pDC_spleen |
| DHRS1               | 1.72E-07 | 0.53047979 | 0.252 | 0.043 | 0.0060992  | pDC_spleen |
| TMEM245             | 1.94E-07 | 0.79843758 | 0.272 | 0.054 | 0.00688071 | pDC_spleen |
| TMED2               | 1.97E-07 | 0.84199734 | 0.285 | 0.059 | 0.006984   | pDC_spleen |
| C4H6orf52           | 1.99E-07 | 0.41415625 | 0.285 | 0.059 | 0.00705068 | pDC_spleen |
| ENSMMUG000000051239 | 2.00E-07 | 0.15728385 | 0.371 | 0.097 | 0.00709128 | pDC_spleen |
| RARS1               | 2.09E-07 | 0.33058306 | 0.285 | 0.059 | 0.00739342 | pDC_spleen |
| PXK                 | 2.13E-07 | 0.1179026  | 0.285 | 0.059 | 0.00753498 | pDC_spleen |
| NPM3                | 2.15E-07 | 0.27955411 | 0.318 | 0.076 | 0.00762022 | pDC_spleen |
| EAF2                | 2.17E-07 | 1.19923165 | 0.351 | 0.103 | 0.00768929 | pDC_spleen |
| NUP50               | 2.25E-07 | 0.20002063 | 0.285 | 0.059 | 0.00797554 | pDC_spleen |
| ENSMMUG000000040870 | 2.31E-07 | 0.66159743 | 0.272 | 0.054 | 0.0081948  | pDC_spleen |
| PDAP1               | 2.37E-07 | 0.1547557  | 0.377 | 0.103 | 0.00840357 | pDC_spleen |
| SERPINB9            | 2.49E-07 | 0.26672341 | 0.656 | 0.27  | 0.00882509 | pDC_spleen |
| FAM204A             | 2.54E-07 | 0.79140705 | 0.258 | 0.049 | 0.00901577 | pDC_spleen |
| CISD2               | 2.59E-07 | 0.45205761 | 0.318 | 0.076 | 0.00919148 | pDC_spleen |
| ZUP1                | 2.67E-07 | 0.14395542 | 0.351 | 0.092 | 0.00945167 | pDC_spleen |
| SERINC3             | 2.79E-07 | 0.18344262 | 0.318 | 0.076 | 0.00986883 | pDC_spleen |
| SIPA1L3             | 2.86E-07 | 0.38111121 | 0.543 | 0.205 | 0.01013759 | pDC_spleen |
| PTBP3               | 2.87E-07 | 0.22260025 | 0.887 | 0.405 | 0.01016467 | pDC_spleen |

|                   |          |            |       |       |            |            |
|-------------------|----------|------------|-------|-------|------------|------------|
| XRCC4             | 2.88E-07 | 0.11692238 | 0.457 | 0.146 | 0.0102211  | pDC_spleen |
| ARHGDI            | 2.90E-07 | 0.15900439 | 0.49  | 0.162 | 0.01026546 | pDC_spleen |
| MARCHF5           | 3.11E-07 | 0.1038332  | 0.291 | 0.065 | 0.01102694 | pDC_spleen |
| CASP12            | 3.24E-07 | 0.47800962 | 0.278 | 0.059 | 0.01146305 | pDC_spleen |
| MCUB              | 3.27E-07 | 0.52985993 | 0.278 | 0.059 | 0.0115715  | pDC_spleen |
| UBE2V2            | 3.28E-07 | 0.14588076 | 0.318 | 0.076 | 0.01162485 | pDC_spleen |
| KLF3              | 3.29E-07 | 0.56121002 | 0.358 | 0.097 | 0.01164296 | pDC_spleen |
| NSA2              | 3.39E-07 | 0.43958768 | 0.788 | 0.346 | 0.01200919 | pDC_spleen |
| MAMU-A            | 3.41E-07 | 0.87494475 | 0.947 | 0.535 | 0.01206889 | pDC_spleen |
| RAP1B             | 3.60E-07 | 0.45439457 | 0.947 | 0.497 | 0.01274028 | pDC_spleen |
| ENSMUG00000015583 | 3.85E-07 | 0.38362658 | 0.914 | 0.416 | 0.01363303 | pDC_spleen |
| ENSMUG00000040343 | 3.99E-07 | 0.13155037 | 0.311 | 0.076 | 0.01412712 | pDC_spleen |
| BLNK              | 4.21E-07 | 0.3508246  | 0.285 | 0.065 | 0.01491529 | pDC_spleen |
| ABCB7             | 4.35E-07 | 0.1116186  | 0.252 | 0.049 | 0.01541573 | pDC_spleen |
| RAB9A             | 4.44E-07 | 0.71484336 | 0.318 | 0.081 | 0.01573675 | pDC_spleen |
| ENOX2             | 4.52E-07 | 0.6851346  | 0.252 | 0.049 | 0.01603197 | pDC_spleen |
| CANX              | 4.57E-07 | 0.25366575 | 0.325 | 0.081 | 0.01618031 | pDC_spleen |
| FIBP              | 4.66E-07 | 0.13756751 | 0.278 | 0.059 | 0.01651216 | pDC_spleen |
| BRD1              | 4.81E-07 | 0.23568561 | 0.298 | 0.07  | 0.01702592 | pDC_spleen |
| RBM8A             | 4.81E-07 | 0.1784055  | 0.457 | 0.151 | 0.01705625 | pDC_spleen |
| MRPS25            | 4.94E-07 | 0.43452907 | 0.298 | 0.07  | 0.01748897 | pDC_spleen |
| MRPL52            | 4.97E-07 | 0.40190858 | 0.344 | 0.092 | 0.01762453 | pDC_spleen |
| IBTK              | 4.98E-07 | 0.10877219 | 0.298 | 0.07  | 0.017646   | pDC_spleen |
| RALGPS1           | 5.09E-07 | 0.41768078 | 0.252 | 0.049 | 0.01802658 | pDC_spleen |
| DEDD2             | 5.09E-07 | 0.1663837  | 0.252 | 0.049 | 0.01802658 | pDC_spleen |
| ELMOD3            | 5.27E-07 | 0.21769729 | 0.377 | 0.108 | 0.01865927 | pDC_spleen |
| HINT3             | 5.28E-07 | 0.36100602 | 0.318 | 0.081 | 0.01870959 | pDC_spleen |
| FCHSD2            | 6.49E-07 | 0.63079587 | 0.887 | 0.476 | 0.02299194 | pDC_spleen |
| DDX10             | 6.95E-07 | 0.12004949 | 0.318 | 0.081 | 0.02462306 | pDC_spleen |
| SLC35D1           | 7.07E-07 | 0.22328305 | 0.285 | 0.065 | 0.025062   | pDC_spleen |
| CYTIP             | 7.30E-07 | 0.64810698 | 0.258 | 0.054 | 0.02587314 | pDC_spleen |
| AKAP8             | 7.30E-07 | 0.24447455 | 0.258 | 0.054 | 0.02587314 | pDC_spleen |
| KCTD20            | 7.73E-07 | 0.25602552 | 0.305 | 0.076 | 0.02738413 | pDC_spleen |

|                    |          |            |       |       |            |            |
|--------------------|----------|------------|-------|-------|------------|------------|
| TRIB1              | 7.73E-07 | 0.20834753 | 0.305 | 0.076 | 0.02738413 | pDC_spleen |
| USP34              | 7.95E-07 | 0.24660771 | 0.881 | 0.389 | 0.02815507 | pDC_spleen |
| NAA35              | 8.03E-07 | 0.17552194 | 0.258 | 0.054 | 0.02843448 | pDC_spleen |
| ZNF146             | 8.03E-07 | 0.26999828 | 0.258 | 0.054 | 0.02843448 | pDC_spleen |
| APMAP              | 8.52E-07 | 0.21888645 | 0.272 | 0.059 | 0.03018029 | pDC_spleen |
| CASP7              | 8.56E-07 | 0.50842809 | 0.278 | 0.065 | 0.03032719 | pDC_spleen |
| ENSMMUG00000060643 | 9.06E-07 | 0.18725835 | 0.325 | 0.086 | 0.03208527 | pDC_spleen |
| COPS6              | 9.33E-07 | 0.18192167 | 0.258 | 0.054 | 0.03304788 | pDC_spleen |
| ABI1               | 9.79E-07 | 0.12755399 | 0.841 | 0.384 | 0.03467493 | pDC_spleen |
| RAC2               | 1.00E-06 | 0.38777248 | 0.311 | 0.081 | 0.03549738 | pDC_spleen |
| RBM39              | 1.08E-06 | 0.42228639 | 0.934 | 0.481 | 0.03812606 | pDC_spleen |
| PGK1               | 1.09E-06 | 0.50965027 | 0.384 | 0.119 | 0.03844535 | pDC_spleen |
| FAM32A             | 1.24E-06 | 0.73684424 | 0.252 | 0.054 | 0.04392718 | pDC_spleen |
| ENSMMUG00000008695 | 1.31E-06 | 0.18765438 | 0.252 | 0.054 | 0.04645992 | pDC_spleen |
| DST                | 1.34E-06 | 0.22570034 | 0.841 | 0.373 | 0.04764653 | pDC_spleen |
| PAK2               | 1.44E-06 | 0.16631282 | 0.848 | 0.362 | 0.05099329 | pDC_spleen |
| PRXL2A             | 1.45E-06 | 0.52869942 | 0.298 | 0.076 | 0.05125776 | pDC_spleen |
| KLF12              | 1.51E-06 | 0.25770347 | 0.921 | 0.47  | 0.05345596 | pDC_spleen |
| RAPH1              | 1.69E-06 | 0.62383015 | 0.391 | 0.135 | 0.0599148  | pDC_spleen |
| TAF1               | 1.69E-06 | 0.33366048 | 0.272 | 0.065 | 0.05995512 | pDC_spleen |
| ENSMMUG00000012140 | 1.71E-06 | 0.40984881 | 0.94  | 0.546 | 0.06059107 | pDC_spleen |
| STRADA             | 1.78E-06 | 0.28206355 | 0.272 | 0.065 | 0.06322654 | pDC_spleen |
| CSKMT              | 1.84E-06 | 0.61073437 | 0.258 | 0.059 | 0.06507876 | pDC_spleen |
| PM20D2             | 1.86E-06 | 0.3812423  | 0.967 | 0.551 | 0.06575201 | pDC_spleen |
| NCOA2              | 1.89E-06 | 0.13541473 | 0.609 | 0.249 | 0.06711171 | pDC_spleen |
| CD37               | 1.98E-06 | 0.16101258 | 0.51  | 0.189 | 0.07031917 | pDC_spleen |
| ATG2B              | 2.00E-06 | 0.2886659  | 0.272 | 0.065 | 0.07091324 | pDC_spleen |
| EAPP               | 2.12E-06 | 0.87266163 | 0.258 | 0.059 | 0.07519267 | pDC_spleen |
| ANXA2              | 2.25E-06 | 0.41147653 | 0.616 | 0.265 | 0.0796792  | pDC_spleen |
| DDRK1              | 2.26E-06 | 0.72148874 | 0.258 | 0.059 | 0.0800775  | pDC_spleen |
| THUMPD1            | 2.35E-06 | 0.38550637 | 0.278 | 0.07  | 0.08314957 | pDC_spleen |
| TBK1               | 2.35E-06 | 0.18148308 | 0.325 | 0.092 | 0.08341721 | pDC_spleen |
| ADORA2B            | 2.71E-06 | 1.01690519 | 0.391 | 0.146 | 0.0958483  | pDC_spleen |

|          |          |            |       |       |            |            |
|----------|----------|------------|-------|-------|------------|------------|
| PSD3     | 2.92E-06 | 1.12552974 | 0.483 | 0.238 | 0.10356857 | pDC_spleen |
| NCALD    | 3.25E-06 | 0.63155071 | 0.272 | 0.07  | 0.1149908  | pDC_spleen |
| ST3GAL3  | 3.38E-06 | 0.51446057 | 0.252 | 0.059 | 0.11991861 | pDC_spleen |
| ZNFX1    | 3.49E-06 | 0.31777787 | 0.854 | 0.4   | 0.12364528 | pDC_spleen |
| ATP10A   | 3.62E-06 | 0.53528433 | 0.358 | 0.119 | 0.12831814 | pDC_spleen |
| TACC1    | 3.66E-06 | 0.15457663 | 0.801 | 0.335 | 0.1295712  | pDC_spleen |
| WAS      | 3.98E-06 | 0.21381902 | 0.285 | 0.076 | 0.14109369 | pDC_spleen |
| MFHAS1   | 4.00E-06 | 0.15529818 | 0.371 | 0.124 | 0.14172754 | pDC_spleen |
| LYSMD3   | 4.65E-06 | 0.23346551 | 0.252 | 0.059 | 0.16492547 | pDC_spleen |
| PRKD3    | 5.20E-06 | 0.57289546 | 0.278 | 0.076 | 0.18435352 | pDC_spleen |
| HYPK     | 5.55E-06 | 0.57722232 | 0.311 | 0.092 | 0.19671408 | pDC_spleen |
| SRSF5    | 5.58E-06 | 0.20201188 | 0.861 | 0.378 | 0.19775714 | pDC_spleen |
| PACS1    | 5.92E-06 | 0.1239002  | 0.768 | 0.357 | 0.20992519 | pDC_spleen |
| USP38    | 6.24E-06 | 0.26079925 | 0.278 | 0.076 | 0.22101921 | pDC_spleen |
| MSI2     | 6.58E-06 | 0.19220779 | 0.649 | 0.281 | 0.23317346 | pDC_spleen |
| NDUFA12  | 7.54E-06 | 0.56522779 | 0.252 | 0.065 | 0.2670718  | pDC_spleen |
| BRMS1    | 7.61E-06 | 0.20727809 | 0.258 | 0.065 | 0.26948615 | pDC_spleen |
| AP3S2    | 1.01E-05 | 0.2008817  | 0.252 | 0.065 | 0.35941165 | pDC_spleen |
| TBCK     | 1.04E-05 | 0.11723287 | 0.252 | 0.065 | 0.36861004 | pDC_spleen |
| PTTG1IP  | 1.04E-05 | 0.13907566 | 0.377 | 0.13  | 0.37016472 | pDC_spleen |
| SH3KBP1  | 1.27E-05 | 0.4295948  | 0.742 | 0.389 | 0.45013791 | pDC_spleen |
| BANK1    | 1.77E-05 | 0.42470941 | 0.338 | 0.124 | 0.62647848 | pDC_spleen |
| RALGPS2  | 1.89E-05 | 1.02165756 | 0.298 | 0.097 | 0.66827705 | pDC_spleen |
| FOXO1    | 2.25E-05 | 0.37500635 | 0.762 | 0.416 | 0.79879972 | pDC_spleen |
| GLIPR1L2 | 2.35E-05 | 0.2121088  | 0.424 | 0.168 | 0.83397554 | pDC_spleen |
| LIMCH1   | 2.49E-05 | 1.49770708 | 0.338 | 0.141 | 0.88180349 | pDC_spleen |
| SWAP70   | 2.54E-05 | 0.28087678 | 0.834 | 0.432 | 0.90161931 | pDC_spleen |
| FOXRED1  | 3.22E-05 | 0.59739153 | 0.258 | 0.076 | 1          | pDC_spleen |
| TRIO     | 3.85E-05 | 0.49555099 | 0.841 | 0.459 | 1          | pDC_spleen |
| TNFSF13B | 5.73E-05 | 0.56919078 | 0.272 | 0.086 | 1          | pDC_spleen |
| STARD7   | 6.07E-05 | 0.29605341 | 0.252 | 0.076 | 1          | pDC_spleen |
| PSTPIP2  | 6.21E-05 | 0.16213698 | 0.285 | 0.097 | 1          | pDC_spleen |
| FTH1     | 8.69E-05 | 0.62442275 | 0.874 | 0.551 | 1          | pDC_spleen |



|                   |            |            |       |       |           |                    |
|-------------------|------------|------------|-------|-------|-----------|--------------------|
| RPL35             | 0.00012186 | 0.27794402 | 0.927 | 0.578 | 1         | pDC_spleen         |
| EXOC3             | 0.00012647 | 0.10761082 | 0.252 | 0.081 | 1         | pDC_spleen         |
| GPR132            | 0.00013289 | 0.12461666 | 0.556 | 0.265 | 1         | pDC_spleen         |
| PRKCA             | 0.00013362 | 0.70404852 | 0.715 | 0.465 | 1         | pDC_spleen         |
| PRDX5             | 0.0001439  | 0.9256891  | 0.391 | 0.162 | 1         | pDC_spleen         |
| MAMU-E            | 0.00020883 | 0.39357312 | 0.96  | 0.584 | 1         | pDC_spleen         |
| RPS4Y1            | 0.00023066 | 0.14244945 | 0.417 | 0.195 | 1         | pDC_spleen         |
| CAMKMT            | 0.0002351  | 0.50727766 | 0.43  | 0.2   | 1         | pDC_spleen         |
| CNTLN             | 0.00026294 | 0.22273942 | 0.258 | 0.092 | 1         | pDC_spleen         |
| PITPNC1           | 0.00027386 | 0.10238665 | 0.589 | 0.303 | 1         | pDC_spleen         |
| MBNL1             | 0.00028401 | 0.31056361 | 0.96  | 0.676 | 1         | pDC_spleen         |
| SERPINB1          | 0.00032555 | 0.1037417  | 0.384 | 0.162 | 1         | pDC_spleen         |
| PRRC2C            | 0.00033288 | 0.1203487  | 0.901 | 0.497 | 1         | pDC_spleen         |
| CD52              | 0.00038043 | 0.44306313 | 0.51  | 0.27  | 1         | pDC_spleen         |
| HNRNPA2B1         | 0.00041793 | 0.29225809 | 0.947 | 0.659 | 1         | pDC_spleen         |
| BTG1              | 0.0011914  | 0.15150106 | 0.96  | 0.649 | 1         | pDC_spleen         |
| RALA              | 0.00187319 | 0.26297228 | 0.947 | 0.622 | 1         | pDC_spleen         |
| FNBP1             | 0.0023646  | 0.19643273 | 0.974 | 0.778 | 1         | pDC_spleen         |
| ANKRD44           | 0.00313538 | 0.14325065 | 0.94  | 0.622 | 1         | pDC_spleen         |
| KMT2C             | 0.0037277  | 0.25615777 | 0.94  | 0.616 | 1         | pDC_spleen         |
| UBE2E2            | 0.00483169 | 0.62278313 | 0.715 | 0.486 | 1         | pDC_spleen         |
| ZFP36             | 0.00592686 | 0.44494917 | 0.921 | 0.714 | 1         | pDC_spleen         |
| TANK              | 0.00930581 | 0.13226596 | 0.947 | 0.595 | 1         | pDC_spleen         |
| SRGN              | 0.01437007 | 0.45648601 | 0.901 | 0.686 | 1         | pDC_spleen         |
| GPR39             | 0.02182908 | 0.64559131 | 0.331 | 0.211 | 1         | pDC_spleen         |
| ENSMUG00000054358 | 0.19998426 | 1.15232133 | 0.993 | 0.816 | 1         | pDC_spleen         |
| SOD2              | 0.63721025 | 0.11479226 | 0.669 | 0.578 | 1         | pDC_spleen         |
| RPS21             | 1.21E-160  | 1.72516199 | 0.974 | 0.883 | 4.30E-156 | Proliferating_lung |
| ATP5F1E           | 1.05E-145  | 1.71456467 | 0.961 | 0.87  | 3.72E-141 | Proliferating_lung |
| ENSMUG00000062350 | 6.06E-141  | 1.44121582 | 0.98  | 0.937 | 2.15E-136 | Proliferating_lung |
| FAU               | 9.02E-138  | 1.22344651 | 0.965 | 0.895 | 3.20E-133 | Proliferating_lung |
| ENSMUG00000056354 | 7.13E-136  | 1.72031918 | 0.957 | 0.869 | 2.53E-131 | Proliferating_lung |
| RPL36             | 3.71E-125  | 1.52341498 | 0.954 | 0.845 | 1.32E-120 | Proliferating_lung |

|                     |           |            |       |       |           |                    |
|---------------------|-----------|------------|-------|-------|-----------|--------------------|
| TMSB10              | 5.40E-123 | 1.45108671 | 0.985 | 0.93  | 1.91E-118 | Proliferating_lung |
| STMN1               | 3.02E-121 | 1.85041711 | 0.97  | 0.869 | 1.07E-116 | Proliferating_lung |
| GZMB                | 1.89E-117 | 3.93903009 | 0.679 | 0.157 | 6.69E-113 | Proliferating_lung |
| FTL                 | 2.03E-111 | 2.01750932 | 0.909 | 0.798 | 7.20E-107 | Proliferating_lung |
| ENSMMUG00000012140  | 4.32E-110 | 1.13633609 | 0.98  | 0.951 | 1.53E-105 | Proliferating_lung |
| MYL12B              | 1.14E-108 | 1.82662725 | 0.922 | 0.812 | 4.04E-104 | Proliferating_lung |
| HCST                | 3.68E-107 | 3.06211004 | 0.824 | 0.495 | 1.30E-102 | Proliferating_lung |
| ATP5MPL             | 1.82E-105 | 1.77833019 | 0.898 | 0.791 | 6.45E-101 | Proliferating_lung |
| HOPX                | 3.02E-105 | 3.48284375 | 0.631 | 0.144 | 1.07E-100 | Proliferating_lung |
| TYROBP              | 5.42E-103 | 3.34413267 | 0.716 | 0.268 | 1.92E-98  | Proliferating_lung |
| TAGLN2              | 6.37E-102 | 2.05235273 | 0.898 | 0.729 | 2.26E-97  | Proliferating_lung |
| ENSMMUG00000022428  | 2.53E-101 | 2.17389001 | 0.842 | 0.644 | 8.98E-97  | Proliferating_lung |
| ENSMMUG00000004441  | 3.49E-100 | 2.37441282 | 0.857 | 0.607 | 1.24E-95  | Proliferating_lung |
| ENSMMUG000000064224 | 1.01E-99  | 1.90259463 | 0.915 | 0.786 | 3.58E-95  | Proliferating_lung |
| NKG7                | 1.44E-98  | 3.13175569 | 0.668 | 0.186 | 5.12E-94  | Proliferating_lung |
| RPS28               | 6.04E-98  | 1.02393792 | 0.974 | 0.925 | 2.14E-93  | Proliferating_lung |
| RPS29               | 7.06E-98  | 0.91330641 | 0.987 | 0.922 | 2.50E-93  | Proliferating_lung |
| ENSMMUG000000050862 | 1.37E-97  | 2.91108602 | 0.709 | 0.244 | 4.86E-93  | Proliferating_lung |
| S100A10             | 1.73E-96  | 2.11696763 | 0.898 | 0.754 | 6.12E-92  | Proliferating_lung |
| S100A4              | 3.18E-95  | 3.11898843 | 0.759 | 0.35  | 1.13E-90  | Proliferating_lung |
| ENSMMUG000000005593 | 6.12E-94  | 1.1536718  | 0.965 | 0.932 | 2.17E-89  | Proliferating_lung |
| RPLP1               | 2.17E-93  | 0.98978599 | 0.987 | 0.935 | 7.68E-89  | Proliferating_lung |
| UBL5                | 6.15E-93  | 1.95294967 | 0.855 | 0.703 | 2.18E-88  | Proliferating_lung |
| SRP14               | 8.74E-93  | 1.44200975 | 0.907 | 0.83  | 3.10E-88  | Proliferating_lung |
| CLIC1               | 7.65E-92  | 2.25946829 | 0.848 | 0.62  | 2.71E-87  | Proliferating_lung |
| UBA52               | 1.75E-91  | 0.94458546 | 0.976 | 0.91  | 6.21E-87  | Proliferating_lung |
| ENSMMUG000000044585 | 4.04E-91  | 1.78275792 | 0.866 | 0.724 | 1.43E-86  | Proliferating_lung |
| NUDT3               | 1.28E-90  | 0.87900739 | 0.978 | 0.953 | 4.53E-86  | Proliferating_lung |
| RPL36AL             | 2.91E-90  | 1.33993975 | 0.92  | 0.813 | 1.03E-85  | Proliferating_lung |
| TMA7                | 6.92E-88  | 1.43890756 | 0.887 | 0.817 | 2.45E-83  | Proliferating_lung |
| PRPF31              | 3.83E-87  | 2.10055808 | 0.811 | 0.657 | 1.36E-82  | Proliferating_lung |
| GMFG                | 1.50E-86  | 1.33326215 | 0.915 | 0.837 | 5.31E-82  | Proliferating_lung |
| ENSMMUG000000051392 | 4.12E-85  | 1.44895748 | 0.95  | 0.866 | 1.46E-80  | Proliferating_lung |

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|--------------------|----------|------------|-------|-------|----------|--------------------|
| ELOB               | 4.86E-84 | 1.75266957 | 0.85  | 0.746 | 1.72E-79 | Proliferating_lung |
| KLRB1              | 6.41E-84 | 2.82705101 | 0.664 | 0.23  | 2.27E-79 | Proliferating_lung |
| H2AFZ              | 8.06E-82 | 1.47273911 | 0.922 | 0.811 | 2.85E-77 | Proliferating_lung |
| CRIP1              | 5.76E-81 | 1.78186153 | 0.889 | 0.765 | 2.04E-76 | Proliferating_lung |
| ENSMMUG00000030408 | 4.25E-80 | 1.75378533 | 0.835 | 0.735 | 1.50E-75 | Proliferating_lung |
| ENSMMUG00000019505 | 1.14E-79 | 1.75754218 | 0.839 | 0.709 | 4.05E-75 | Proliferating_lung |
| JPT1               | 1.72E-79 | 1.2667246  | 0.907 | 0.867 | 6.08E-75 | Proliferating_lung |
| ATP5MG             | 4.42E-79 | 1.20811353 | 0.926 | 0.829 | 1.57E-74 | Proliferating_lung |
| HINT1              | 1.37E-78 | 1.23799046 | 0.915 | 0.812 | 4.86E-74 | Proliferating_lung |
| IFI27L2            | 1.91E-77 | 1.84554172 | 0.839 | 0.706 | 6.78E-73 | Proliferating_lung |
| MYL6               | 9.20E-77 | 1.61468239 | 0.866 | 0.776 | 3.26E-72 | Proliferating_lung |
| RPL10              | 5.09E-76 | 0.87613947 | 0.97  | 0.932 | 1.80E-71 | Proliferating_lung |
| GPR65              | 6.36E-76 | 3.69029217 | 0.616 | 0.258 | 2.25E-71 | Proliferating_lung |
| CORO1A             | 2.01E-75 | 1.37361737 | 0.926 | 0.857 | 7.12E-71 | Proliferating_lung |
| MAMU-E             | 5.41E-74 | 1.31597379 | 0.928 | 0.887 | 1.92E-69 | Proliferating_lung |
| ROMO1              | 1.72E-73 | 1.73201481 | 0.818 | 0.718 | 6.10E-69 | Proliferating_lung |
| ENSMMUG00000015563 | 1.99E-73 | 0.88026934 | 0.965 | 0.922 | 7.05E-69 | Proliferating_lung |
| RPS23              | 3.02E-73 | 0.82442548 | 0.978 | 0.941 | 1.07E-68 | Proliferating_lung |
| ZC3H10             | 2.55E-72 | 1.47076383 | 0.876 | 0.812 | 9.03E-68 | Proliferating_lung |
| COX8A              | 4.18E-72 | 1.74323422 | 0.818 | 0.682 | 1.48E-67 | Proliferating_lung |
| ENSMMUG00000056793 | 4.41E-72 | 1.39627942 | 0.874 | 0.786 | 1.56E-67 | Proliferating_lung |
| TUBB               | 6.83E-70 | 1.30933799 | 0.957 | 0.836 | 2.42E-65 | Proliferating_lung |
| RPL32              | 9.52E-70 | 0.81985529 | 0.972 | 0.937 | 3.37E-65 | Proliferating_lung |
| ENSMMUG00000060377 | 2.79E-69 | 1.61231405 | 0.831 | 0.733 | 9.88E-65 | Proliferating_lung |
| HMGB1              | 5.53E-69 | 1.02328792 | 0.972 | 0.942 | 1.96E-64 | Proliferating_lung |
| GNG5               | 5.12E-68 | 1.48466347 | 0.852 | 0.747 | 1.81E-63 | Proliferating_lung |
| RPL18              | 2.40E-67 | 0.81804259 | 0.978 | 0.909 | 8.49E-63 | Proliferating_lung |
| ENSMMUG00000064139 | 2.44E-67 | 1.54807979 | 0.889 | 0.852 | 8.65E-63 | Proliferating_lung |
| ENSMMUG00000063583 | 7.17E-67 | 3.97732906 | 0.438 | 0.088 | 2.54E-62 | Proliferating_lung |
| GSTP1              | 2.46E-66 | 1.65712713 | 0.822 | 0.727 | 8.72E-62 | Proliferating_lung |
| RPL35A             | 3.27E-66 | 0.83891074 | 0.97  | 0.915 | 1.16E-61 | Proliferating_lung |
| ENSMMUG00000013257 | 1.11E-64 | 1.49656722 | 0.881 | 0.767 | 3.94E-60 | Proliferating_lung |
| KLRD1              | 4.35E-64 | 2.61479319 | 0.551 | 0.173 | 1.54E-59 | Proliferating_lung |

|                    |          |            |       |       |          |                    |
|--------------------|----------|------------|-------|-------|----------|--------------------|
| RPS26              | 5.88E-64 | 0.79039196 | 0.967 | 0.933 | 2.08E-59 | Proliferating_lung |
| CFL1               | 2.89E-62 | 1.07549564 | 0.922 | 0.857 | 1.02E-57 | Proliferating_lung |
| KLRF1              | 3.98E-62 | 2.83285356 | 0.536 | 0.181 | 1.41E-57 | Proliferating_lung |
| ENSMMUG00000013429 | 4.93E-61 | 0.74499796 | 0.983 | 0.949 | 1.75E-56 | Proliferating_lung |
| NDUFA1             | 6.14E-61 | 1.42800498 | 0.826 | 0.732 | 2.18E-56 | Proliferating_lung |
| OAZ1               | 2.67E-60 | 2.01682486 | 0.733 | 0.55  | 9.46E-56 | Proliferating_lung |
| ENSMMUG00000049722 | 1.58E-59 | 1.69880907 | 0.777 | 0.653 | 5.61E-55 | Proliferating_lung |
| CST7               | 1.82E-59 | 3.67192513 | 0.436 | 0.113 | 6.45E-55 | Proliferating_lung |
| RPL19              | 4.81E-59 | 0.91725528 | 0.948 | 0.89  | 1.71E-54 | Proliferating_lung |
| TUBA1A             | 2.18E-57 | 1.12410062 | 0.965 | 0.896 | 7.71E-53 | Proliferating_lung |
| COX5B              | 3.68E-57 | 1.72059281 | 0.774 | 0.663 | 1.30E-52 | Proliferating_lung |
| CHCHD2             | 1.00E-56 | 1.10590486 | 0.887 | 0.811 | 3.55E-52 | Proliferating_lung |
| ELOA               | 1.01E-56 | 0.69926196 | 0.985 | 0.932 | 3.57E-52 | Proliferating_lung |
| ANXA1              | 1.22E-56 | 2.05014678 | 0.751 | 0.542 | 4.32E-52 | Proliferating_lung |
| HNRNPDL            | 8.04E-56 | 1.21833744 | 0.881 | 0.848 | 2.85E-51 | Proliferating_lung |
| EDF1               | 1.90E-55 | 1.79861216 | 0.738 | 0.618 | 6.74E-51 | Proliferating_lung |
| TMEM258            | 3.02E-55 | 1.39145956 | 0.813 | 0.715 | 1.07E-50 | Proliferating_lung |
| IFI16              | 1.03E-54 | 1.35922054 | 0.816 | 0.747 | 3.65E-50 | Proliferating_lung |
| RPS9               | 1.25E-54 | 0.76906279 | 0.967 | 0.913 | 4.44E-50 | Proliferating_lung |
| OSTF1              | 1.26E-54 | 2.10325394 | 0.701 | 0.487 | 4.46E-50 | Proliferating_lung |
| RPL8               | 1.63E-54 | 0.75310276 | 0.976 | 0.92  | 5.77E-50 | Proliferating_lung |
| RPL39              | 4.40E-54 | 0.88444941 | 0.952 | 0.892 | 1.56E-49 | Proliferating_lung |
| ENSMMUG00000017466 | 5.08E-53 | 1.36079804 | 0.868 | 0.783 | 1.80E-48 | Proliferating_lung |
| ARPC3              | 7.46E-53 | 1.14785824 | 0.848 | 0.812 | 2.64E-48 | Proliferating_lung |
| OST4               | 3.33E-52 | 1.48270354 | 0.768 | 0.689 | 1.18E-47 | Proliferating_lung |
| RPL38              | 9.95E-52 | 0.70508004 | 0.97  | 0.905 | 3.52E-47 | Proliferating_lung |
| CBX3               | 1.47E-51 | 1.31215874 | 0.861 | 0.795 | 5.20E-47 | Proliferating_lung |
| ENSMMUG00000047481 | 2.03E-51 | 1.40616688 | 0.787 | 0.711 | 7.19E-47 | Proliferating_lung |
| ENSMMUG00000052747 | 3.93E-51 | 1.40573418 | 0.79  | 0.724 | 1.39E-46 | Proliferating_lung |
| ENSMMUG00000012419 | 6.65E-51 | 1.44813748 | 0.781 | 0.71  | 2.36E-46 | Proliferating_lung |
| TMSB4X             | 8.65E-51 | 0.65084187 | 0.993 | 0.985 | 3.06E-46 | Proliferating_lung |
| XCL1               | 1.32E-50 | 3.66248825 | 0.436 | 0.131 | 4.69E-46 | Proliferating_lung |
| COX7C              | 1.80E-50 | 1.01427486 | 0.866 | 0.8   | 6.39E-46 | Proliferating_lung |

|                     |          |            |       |       |          |                    |
|---------------------|----------|------------|-------|-------|----------|--------------------|
| COX6C               | 9.92E-49 | 0.9890278  | 0.87  | 0.817 | 3.51E-44 | Proliferating_lung |
| COX7B               | 1.19E-48 | 1.25601343 | 0.818 | 0.762 | 4.22E-44 | Proliferating_lung |
| ENSMMUG000000061824 | 1.40E-48 | 0.94874737 | 0.926 | 0.907 | 4.96E-44 | Proliferating_lung |
| NDUFB11             | 2.30E-48 | 1.83574846 | 0.685 | 0.548 | 8.16E-44 | Proliferating_lung |
| RPS13               | 2.52E-48 | 0.72035631 | 0.963 | 0.919 | 8.93E-44 | Proliferating_lung |
| CKS1B               | 2.68E-48 | 1.65958159 | 0.757 | 0.591 | 9.51E-44 | Proliferating_lung |
| PSMB9               | 3.45E-48 | 1.68293409 | 0.761 | 0.651 | 1.22E-43 | Proliferating_lung |
| MBD3                | 3.54E-48 | 1.4434617  | 0.766 | 0.729 | 1.25E-43 | Proliferating_lung |
| CCL3                | 1.71E-47 | 3.18287301 | 0.464 | 0.158 | 6.06E-43 | Proliferating_lung |
| RPL24               | 3.78E-47 | 0.71629549 | 0.952 | 0.913 | 1.34E-42 | Proliferating_lung |
| PSMB6               | 5.54E-47 | 1.70392488 | 0.698 | 0.578 | 1.96E-42 | Proliferating_lung |
| COX6B1              | 6.61E-47 | 1.74810345 | 0.698 | 0.564 | 2.34E-42 | Proliferating_lung |
| ENSMMUG000000054210 | 8.05E-47 | 4.32361042 | 0.315 | 0.061 | 2.85E-42 | Proliferating_lung |
| C16H17orf49         | 2.23E-46 | 1.61616576 | 0.742 | 0.66  | 7.89E-42 | Proliferating_lung |
| GZMA                | 4.36E-46 | 3.61003557 | 0.319 | 0.063 | 1.54E-41 | Proliferating_lung |
| RPL34               | 7.44E-46 | 0.71967686 | 0.972 | 0.924 | 2.63E-41 | Proliferating_lung |
| ENSMMUG000000057791 | 4.24E-45 | 1.95006026 | 0.518 | 0.201 | 1.50E-40 | Proliferating_lung |
| ENSMMUG000000007657 | 4.29E-45 | 1.13677429 | 0.826 | 0.777 | 1.52E-40 | Proliferating_lung |
| ATOX1               | 8.86E-45 | 1.9834057  | 0.675 | 0.54  | 3.14E-40 | Proliferating_lung |
| ENSMMUG000000004545 | 9.77E-45 | 1.17059175 | 0.813 | 0.75  | 3.46E-40 | Proliferating_lung |
| RPSA                | 1.46E-44 | 0.67516429 | 0.972 | 0.925 | 5.17E-40 | Proliferating_lung |
| SNRPB               | 2.17E-44 | 1.257719   | 0.809 | 0.759 | 7.68E-40 | Proliferating_lung |
| RPL35               | 2.45E-44 | 0.66067678 | 0.978 | 0.929 | 8.69E-40 | Proliferating_lung |
| SRGN                | 8.34E-44 | 1.42818457 | 0.805 | 0.733 | 2.95E-39 | Proliferating_lung |
| RPS7                | 2.55E-43 | 0.64436727 | 0.967 | 0.934 | 9.04E-39 | Proliferating_lung |
| RPS5                | 5.97E-43 | 0.68429674 | 0.967 | 0.897 | 2.11E-38 | Proliferating_lung |
| NDUFA2              | 1.24E-42 | 1.55912412 | 0.722 | 0.642 | 4.39E-38 | Proliferating_lung |
| H4C3                | 2.18E-42 | 1.96426616 | 0.733 | 0.542 | 7.74E-38 | Proliferating_lung |
| EEF1D               | 3.06E-42 | 0.93372677 | 0.861 | 0.847 | 1.09E-37 | Proliferating_lung |
| ENSMMUG000000051239 | 3.06E-42 | 2.69668485 | 0.508 | 0.26  | 1.09E-37 | Proliferating_lung |
| DBI                 | 3.42E-42 | 1.44173104 | 0.759 | 0.662 | 1.21E-37 | Proliferating_lung |
| HMGB2               | 7.55E-42 | 0.8881724  | 0.957 | 0.906 | 2.68E-37 | Proliferating_lung |
| PET100              | 7.64E-42 | 2.41323057 | 0.549 | 0.327 | 2.71E-37 | Proliferating_lung |

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|---------------------|----------|------------|-------|-------|----------|--------------------|
| RPL12               | 1.92E-41 | 0.76136693 | 0.957 | 0.904 | 6.79E-37 | Proliferating_lung |
| ENSMMUG00000001458  | 6.59E-41 | 1.17266217 | 0.842 | 0.821 | 2.34E-36 | Proliferating_lung |
| ERH                 | 3.67E-40 | 1.42599314 | 0.746 | 0.705 | 1.30E-35 | Proliferating_lung |
| NDUFA4              | 5.38E-40 | 1.12456823 | 0.809 | 0.769 | 1.91E-35 | Proliferating_lung |
| ROBO2               | 8.54E-40 | 1.10182127 | 0.82  | 0.771 | 3.02E-35 | Proliferating_lung |
| NDUFB2              | 1.31E-39 | 1.18412194 | 0.785 | 0.773 | 4.66E-35 | Proliferating_lung |
| PRF1                | 2.16E-39 | 3.45816017 | 0.315 | 0.08  | 7.64E-35 | Proliferating_lung |
| LSM7                | 2.31E-39 | 1.44089271 | 0.738 | 0.663 | 8.19E-35 | Proliferating_lung |
| RPL27               | 3.12E-39 | 0.59599271 | 0.965 | 0.909 | 1.11E-34 | Proliferating_lung |
| PPM1J               | 1.03E-38 | 3.13451408 | 0.356 | 0.11  | 3.65E-34 | Proliferating_lung |
| RPS12               | 1.05E-38 | 0.72985928 | 0.987 | 0.933 | 3.71E-34 | Proliferating_lung |
| RBM8A               | 1.51E-38 | 1.54770949 | 0.707 | 0.621 | 5.34E-34 | Proliferating_lung |
| RPL30               | 2.03E-38 | 0.5924053  | 0.97  | 0.926 | 7.20E-34 | Proliferating_lung |
| RPL28               | 2.09E-38 | 0.60790867 | 0.965 | 0.939 | 7.40E-34 | Proliferating_lung |
| ENSMMUG000000058581 | 2.28E-38 | 3.1887002  | 0.503 | 0.268 | 8.07E-34 | Proliferating_lung |
| RPL22               | 2.97E-38 | 0.65654202 | 0.954 | 0.891 | 1.05E-33 | Proliferating_lung |
| EIF3K               | 1.11E-37 | 0.8709926  | 0.852 | 0.835 | 3.93E-33 | Proliferating_lung |
| ENSMMUG00000002320  | 5.65E-37 | 0.92651244 | 0.907 | 0.889 | 2.00E-32 | Proliferating_lung |
| LDHA                | 1.33E-36 | 1.46194253 | 0.705 | 0.632 | 4.70E-32 | Proliferating_lung |
| ENSMMUG000000016665 | 1.39E-36 | 1.35229833 | 0.722 | 0.666 | 4.94E-32 | Proliferating_lung |
| ENSMMUG000000003867 | 4.05E-36 | 0.54164291 | 0.983 | 0.962 | 1.43E-31 | Proliferating_lung |
| RDH5                | 5.91E-36 | 1.69162039 | 0.662 | 0.584 | 2.09E-31 | Proliferating_lung |
| SRI                 | 2.43E-35 | 1.99174606 | 0.601 | 0.436 | 8.62E-31 | Proliferating_lung |
| PSMA2               | 1.10E-34 | 1.18803331 | 0.748 | 0.719 | 3.89E-30 | Proliferating_lung |
| ENSMMUG000000050845 | 2.71E-34 | 1.67428983 | 0.666 | 0.576 | 9.61E-30 | Proliferating_lung |
| WDR83OS             | 2.72E-34 | 1.10912048 | 0.77  | 0.761 | 9.65E-30 | Proliferating_lung |
| RPS27A              | 5.06E-34 | 1.08515075 | 0.779 | 0.755 | 1.79E-29 | Proliferating_lung |
| CD63                | 6.96E-34 | 1.80470999 | 0.638 | 0.497 | 2.47E-29 | Proliferating_lung |
| NME2                | 8.24E-34 | 0.84259987 | 0.887 | 0.865 | 2.92E-29 | Proliferating_lung |
| COMMD6              | 1.31E-33 | 1.05015832 | 0.792 | 0.756 | 4.63E-29 | Proliferating_lung |
| PSME1               | 2.16E-33 | 1.13763538 | 0.774 | 0.735 | 7.66E-29 | Proliferating_lung |
| GABARAPL2           | 2.27E-33 | 1.65936337 | 0.655 | 0.558 | 8.03E-29 | Proliferating_lung |
| ENSMMUG000000054038 | 2.44E-33 | 1.15815566 | 0.798 | 0.796 | 8.66E-29 | Proliferating_lung |

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|---------------------|----------|------------|-------|-------|----------|--------------------|
| ENSMMUG00000003073  | 3.76E-33 | 0.6031708  | 0.952 | 0.892 | 1.33E-28 | Proliferating_lung |
| ATP6V1G1            | 7.49E-33 | 1.04767538 | 0.785 | 0.763 | 2.66E-28 | Proliferating_lung |
| SNRPD3              | 7.90E-33 | 1.04974347 | 0.792 | 0.755 | 2.80E-28 | Proliferating_lung |
| SMDT1               | 4.05E-32 | 1.15561034 | 0.742 | 0.725 | 1.44E-27 | Proliferating_lung |
| ENSMMUG000000053735 | 4.16E-32 | 1.10646899 | 0.757 | 0.732 | 1.47E-27 | Proliferating_lung |
| PYCARD              | 6.47E-32 | 2.3879375  | 0.488 | 0.287 | 2.29E-27 | Proliferating_lung |
| GAPDH               | 7.20E-32 | 1.04157035 | 0.859 | 0.838 | 2.55E-27 | Proliferating_lung |
| THY1                | 1.01E-31 | 2.32812341 | 0.456 | 0.232 | 3.58E-27 | Proliferating_lung |
| ENSMMUG000000053392 | 1.66E-31 | 1.11861184 | 0.772 | 0.733 | 5.88E-27 | Proliferating_lung |
| NDUFB4              | 1.92E-31 | 1.27288689 | 0.718 | 0.697 | 6.82E-27 | Proliferating_lung |
| SEC61B              | 3.45E-31 | 1.15769089 | 0.738 | 0.711 | 1.22E-26 | Proliferating_lung |
| ENSMMUG000000053146 | 3.77E-31 | 1.47314682 | 0.683 | 0.646 | 1.34E-26 | Proliferating_lung |
| ATP5MC2             | 4.59E-31 | 1.23112768 | 0.711 | 0.683 | 1.63E-26 | Proliferating_lung |
| ID2                 | 3.10E-30 | 1.75898677 | 0.688 | 0.589 | 1.10E-25 | Proliferating_lung |
| COX17               | 4.92E-30 | 1.55509008 | 0.651 | 0.564 | 1.74E-25 | Proliferating_lung |
| RAN                 | 7.41E-30 | 0.94889984 | 0.792 | 0.763 | 2.63E-25 | Proliferating_lung |
| FOSL2               | 1.39E-29 | 2.93144232 | 0.315 | 0.109 | 4.92E-25 | Proliferating_lung |
| B2M                 | 2.05E-29 | 0.52436068 | 0.991 | 0.982 | 7.25E-25 | Proliferating_lung |
| SELENOK             | 2.80E-29 | 2.15376177 | 0.557 | 0.436 | 9.94E-25 | Proliferating_lung |
| UQCRQ               | 3.21E-29 | 1.12357546 | 0.74  | 0.706 | 1.14E-24 | Proliferating_lung |
| RPS4X               | 5.08E-29 | 0.56511695 | 0.972 | 0.91  | 1.80E-24 | Proliferating_lung |
| SUB1                | 1.21E-28 | 0.76595165 | 0.868 | 0.883 | 4.28E-24 | Proliferating_lung |
| TPI1                | 1.53E-28 | 1.3448017  | 0.679 | 0.63  | 5.41E-24 | Proliferating_lung |
| RGS9                | 2.05E-28 | 1.41849509 | 0.577 | 0.343 | 7.27E-24 | Proliferating_lung |
| ATP5PF              | 2.08E-28 | 1.11888236 | 0.735 | 0.721 | 7.36E-24 | Proliferating_lung |
| CD7                 | 3.12E-28 | 1.76214443 | 0.625 | 0.543 | 1.11E-23 | Proliferating_lung |
| RPL7A               | 3.16E-28 | 0.55128643 | 0.976 | 0.9   | 1.12E-23 | Proliferating_lung |
| CASP1               | 4.02E-28 | 2.0504408  | 0.495 | 0.307 | 1.43E-23 | Proliferating_lung |
| UQCRH               | 9.17E-28 | 1.01305863 | 0.74  | 0.75  | 3.25E-23 | Proliferating_lung |
| H2AFJ               | 9.95E-28 | 1.37824591 | 0.677 | 0.588 | 3.53E-23 | Proliferating_lung |
| CCL4L1              | 1.01E-27 | 3.6705023  | 0.273 | 0.083 | 3.59E-23 | Proliferating_lung |
| SNRPD1              | 1.08E-27 | 1.14171156 | 0.725 | 0.697 | 3.81E-23 | Proliferating_lung |
| RAC2                | 1.72E-27 | 1.39760738 | 0.668 | 0.615 | 6.09E-23 | Proliferating_lung |

|                    |          |            |       |       |          |                    |
|--------------------|----------|------------|-------|-------|----------|--------------------|
| BZW1               | 8.12E-27 | 1.11777831 | 0.731 | 0.76  | 2.88E-22 | Proliferating_lung |
| SEM1               | 8.54E-27 | 1.13767264 | 0.705 | 0.685 | 3.03E-22 | Proliferating_lung |
| LSM5               | 9.00E-27 | 1.28163187 | 0.668 | 0.627 | 3.19E-22 | Proliferating_lung |
| GLIPR2             | 1.82E-26 | 1.8063659  | 0.564 | 0.443 | 6.43E-22 | Proliferating_lung |
| TINF2              | 1.87E-26 | 1.13151353 | 0.711 | 0.709 | 6.63E-22 | Proliferating_lung |
| CLEC2B             | 1.06E-25 | 1.66356997 | 0.612 | 0.528 | 3.76E-21 | Proliferating_lung |
| YWHAB              | 1.24E-25 | 0.94022675 | 0.781 | 0.806 | 4.39E-21 | Proliferating_lung |
| SEC61G             | 2.08E-25 | 1.06337499 | 0.716 | 0.71  | 7.37E-21 | Proliferating_lung |
| SSR4               | 7.44E-25 | 1.07426809 | 0.718 | 0.722 | 2.64E-20 | Proliferating_lung |
| PPIB               | 1.02E-24 | 1.09488944 | 0.716 | 0.728 | 3.62E-20 | Proliferating_lung |
| ACTB               | 2.14E-24 | 0.62699137 | 0.985 | 0.956 | 7.57E-20 | Proliferating_lung |
| SERTAD1            | 3.54E-24 | 2.53744386 | 0.412 | 0.236 | 1.26E-19 | Proliferating_lung |
| PSMB8              | 4.46E-24 | 1.12459238 | 0.725 | 0.729 | 1.58E-19 | Proliferating_lung |
| NDUFC2             | 5.12E-24 | 1.25181146 | 0.672 | 0.657 | 1.81E-19 | Proliferating_lung |
| ENSMMUG00000053539 | 7.99E-24 | 2.86101985 | 0.302 | 0.121 | 2.83E-19 | Proliferating_lung |
| RPS27L             | 1.06E-23 | 1.67366076 | 0.636 | 0.595 | 3.75E-19 | Proliferating_lung |
| ARPC2              | 1.11E-23 | 1.42004381 | 0.655 | 0.611 | 3.94E-19 | Proliferating_lung |
| DCTN3              | 1.14E-23 | 1.44674365 | 0.638 | 0.594 | 4.03E-19 | Proliferating_lung |
| RBX1               | 1.91E-23 | 1.06155664 | 0.705 | 0.734 | 6.77E-19 | Proliferating_lung |
| SAMSN1             | 2.22E-23 | 2.43029938 | 0.403 | 0.229 | 7.85E-19 | Proliferating_lung |
| PSME2              | 2.32E-23 | 1.60559144 | 0.607 | 0.551 | 8.21E-19 | Proliferating_lung |
| SERPINB1           | 2.89E-23 | 2.24922477 | 0.388 | 0.206 | 1.03E-18 | Proliferating_lung |
| KRTCAP2            | 3.23E-23 | 0.96692591 | 0.729 | 0.733 | 1.15E-18 | Proliferating_lung |
| CA1                | 4.71E-23 | 2.38586398 | 0.278 | 0.1   | 1.67E-18 | Proliferating_lung |
| MYG1               | 5.98E-23 | 1.91801211 | 0.501 | 0.384 | 2.12E-18 | Proliferating_lung |
| ACTG1              | 7.31E-23 | 0.5643046  | 0.961 | 0.894 | 2.59E-18 | Proliferating_lung |
| CFDP1              | 8.03E-23 | 0.97358358 | 0.744 | 0.795 | 2.85E-18 | Proliferating_lung |
| MGST3              | 1.23E-22 | 1.59027048 | 0.566 | 0.5   | 4.34E-18 | Proliferating_lung |
| NSA2               | 1.28E-22 | 0.95074559 | 0.738 | 0.755 | 4.55E-18 | Proliferating_lung |
| SLC25A43           | 1.94E-22 | 0.86365008 | 0.79  | 0.778 | 6.86E-18 | Proliferating_lung |
| RAMP1              | 3.00E-22 | 2.61196784 | 0.269 | 0.096 | 1.06E-17 | Proliferating_lung |
| BCL2A1             | 3.49E-22 | 3.31794659 | 0.306 | 0.132 | 1.24E-17 | Proliferating_lung |
| LAT2               | 5.76E-22 | 2.24142609 | 0.375 | 0.195 | 2.04E-17 | Proliferating_lung |



|                    |          |            |       |       |          |                    |
|--------------------|----------|------------|-------|-------|----------|--------------------|
| CDK1               | 1.60E-21 | 1.76703319 | 0.529 | 0.403 | 5.69E-17 | Proliferating_lung |
| DYNLL1             | 1.96E-21 | 1.45862942 | 0.616 | 0.549 | 6.93E-17 | Proliferating_lung |
| ARHGDIB            | 2.44E-21 | 0.52449357 | 0.915 | 0.91  | 8.64E-17 | Proliferating_lung |
| SSR2               | 3.22E-21 | 1.08582581 | 0.672 | 0.67  | 1.14E-16 | Proliferating_lung |
| ENSMMUG00000022489 | 3.26E-21 | 0.94649895 | 0.714 | 0.717 | 1.15E-16 | Proliferating_lung |
| RPS24              | 4.15E-21 | 0.44773989 | 0.98  | 0.932 | 1.47E-16 | Proliferating_lung |
| COX7A1             | 6.20E-21 | 2.64486966 | 0.354 | 0.191 | 2.20E-16 | Proliferating_lung |
| MRI1               | 7.16E-21 | 1.1435289  | 0.659 | 0.681 | 2.54E-16 | Proliferating_lung |
| RPL5               | 7.53E-21 | 0.46117695 | 0.954 | 0.929 | 2.67E-16 | Proliferating_lung |
| MRPL23             | 7.67E-21 | 1.15925064 | 0.64  | 0.647 | 2.72E-16 | Proliferating_lung |
| ENSMMUG00000063637 | 1.36E-20 | 0.63311358 | 0.881 | 0.859 | 4.83E-16 | Proliferating_lung |
| VDAC3              | 1.92E-20 | 1.47659583 | 0.581 | 0.538 | 6.79E-16 | Proliferating_lung |
| PSMB1              | 2.09E-20 | 1.01010991 | 0.703 | 0.709 | 7.40E-16 | Proliferating_lung |
| NDUFB7             | 3.01E-20 | 1.50069311 | 0.575 | 0.528 | 1.07E-15 | Proliferating_lung |
| ENSMMUG00000031947 | 3.03E-20 | 0.831063   | 0.764 | 0.787 | 1.07E-15 | Proliferating_lung |
| ATP5MC3            | 3.72E-20 | 0.85306567 | 0.755 | 0.761 | 1.32E-15 | Proliferating_lung |
| LGALS3             | 4.02E-20 | 2.54909696 | 0.315 | 0.147 | 1.43E-15 | Proliferating_lung |
| ENSMMUG00000016305 | 4.04E-20 | 1.26383432 | 0.618 | 0.598 | 1.43E-15 | Proliferating_lung |
| GABARAP            | 6.17E-20 | 1.02321196 | 0.688 | 0.694 | 2.19E-15 | Proliferating_lung |
| ENSMMUG00000001210 | 6.97E-20 | 0.61313263 | 0.839 | 0.823 | 2.47E-15 | Proliferating_lung |
| ATP5IF1            | 7.07E-20 | 0.97742968 | 0.714 | 0.735 | 2.50E-15 | Proliferating_lung |
| MRPL52             | 7.17E-20 | 1.71867419 | 0.521 | 0.441 | 2.54E-15 | Proliferating_lung |
| COX7A2             | 1.04E-19 | 1.77015326 | 0.512 | 0.427 | 3.68E-15 | Proliferating_lung |
| SAP18              | 1.06E-19 | 1.11140388 | 0.672 | 0.688 | 3.77E-15 | Proliferating_lung |
| MRPL33             | 1.75E-19 | 1.71179227 | 0.516 | 0.437 | 6.21E-15 | Proliferating_lung |
| ENSMMUG00000058325 | 2.97E-19 | 0.61175103 | 0.931 | 0.898 | 1.05E-14 | Proliferating_lung |
| FKBP2              | 3.03E-19 | 1.87366754 | 0.486 | 0.389 | 1.07E-14 | Proliferating_lung |
| CREM               | 4.31E-19 | 1.77127367 | 0.557 | 0.497 | 1.53E-14 | Proliferating_lung |
| COPE               | 4.33E-19 | 1.46391731 | 0.575 | 0.555 | 1.53E-14 | Proliferating_lung |
| POMP               | 7.23E-19 | 1.2326245  | 0.616 | 0.605 | 2.56E-14 | Proliferating_lung |
| VAMP8              | 7.97E-19 | 1.33894308 | 0.586 | 0.538 | 2.82E-14 | Proliferating_lung |
| PFDN5              | 2.66E-18 | 1.66466782 | 0.512 | 0.448 | 9.44E-14 | Proliferating_lung |
| PLAAT4             | 2.93E-18 | 1.89026413 | 0.477 | 0.363 | 1.04E-13 | Proliferating_lung |

|                    |          |            |       |       |          |                    |
|--------------------|----------|------------|-------|-------|----------|--------------------|
| ENSMMUG00000050829 | 3.59E-18 | 1.23465205 | 0.688 | 0.729 | 1.27E-13 | Proliferating_lung |
| CKS2               | 7.51E-18 | 1.19459577 | 0.672 | 0.587 | 2.66E-13 | Proliferating_lung |
| WDR13              | 1.10E-17 | 0.82889844 | 0.751 | 0.789 | 3.91E-13 | Proliferating_lung |
| ENSMMUG00000055584 | 4.28E-17 | 0.52600092 | 0.907 | 0.901 | 1.52E-12 | Proliferating_lung |
| RNF181             | 6.03E-17 | 1.20843364 | 0.61  | 0.6   | 2.14E-12 | Proliferating_lung |
| PCLAF              | 6.20E-17 | 1.34700163 | 0.616 | 0.577 | 2.20E-12 | Proliferating_lung |
| TALDO1             | 1.38E-16 | 1.12491065 | 0.631 | 0.657 | 4.89E-12 | Proliferating_lung |
| ENSMMUG00000016894 | 1.38E-16 | 0.99627152 | 0.664 | 0.694 | 4.90E-12 | Proliferating_lung |
| CIB1               | 2.40E-16 | 2.05123605 | 0.403 | 0.283 | 8.52E-12 | Proliferating_lung |
| RPA3               | 2.84E-16 | 1.71980541 | 0.482 | 0.398 | 1.01E-11 | Proliferating_lung |
| HMG3               | 5.37E-16 | 1.91985918 | 0.438 | 0.33  | 1.90E-11 | Proliferating_lung |
| ARHGDI1            | 5.67E-16 | 1.45055905 | 0.536 | 0.499 | 2.01E-11 | Proliferating_lung |
| TXN                | 6.03E-16 | 1.00505068 | 0.683 | 0.704 | 2.14E-11 | Proliferating_lung |
| NDUFB8             | 1.78E-15 | 1.21017184 | 0.584 | 0.58  | 6.30E-11 | Proliferating_lung |
| MAGOH              | 2.00E-15 | 1.26926272 | 0.592 | 0.606 | 7.09E-11 | Proliferating_lung |
| NCL                | 2.37E-15 | 0.68836337 | 0.811 | 0.878 | 8.39E-11 | Proliferating_lung |
| TOMM7              | 9.25E-15 | 0.52537562 | 0.883 | 0.831 | 3.28E-10 | Proliferating_lung |
| NCBP2              | 1.11E-14 | 1.30853992 | 0.57  | 0.579 | 3.94E-10 | Proliferating_lung |
| COX19              | 1.64E-14 | 1.82895606 | 0.44  | 0.358 | 5.82E-10 | Proliferating_lung |
| ENSMMUG00000049151 | 2.46E-14 | 0.52150406 | 0.898 | 0.903 | 8.73E-10 | Proliferating_lung |
| NDUFA6             | 2.80E-14 | 1.08118388 | 0.614 | 0.654 | 9.91E-10 | Proliferating_lung |
| NDUFA12            | 3.59E-14 | 1.20675525 | 0.568 | 0.564 | 1.27E-09 | Proliferating_lung |
| TMEM14B            | 5.39E-14 | 0.82262434 | 0.707 | 0.761 | 1.91E-09 | Proliferating_lung |
| PRDX6              | 5.49E-14 | 1.19180509 | 0.597 | 0.595 | 1.94E-09 | Proliferating_lung |
| TMBIM6             | 6.20E-14 | 0.9532244  | 0.649 | 0.704 | 2.20E-09 | Proliferating_lung |
| ENSMMUG00000063609 | 8.33E-14 | 1.61832248 | 0.44  | 0.358 | 2.95E-09 | Proliferating_lung |
| ATP6V1FNB          | 8.59E-14 | 1.24734325 | 0.553 | 0.551 | 3.04E-09 | Proliferating_lung |
| RPL6               | 1.01E-13 | 0.38117642 | 0.963 | 0.916 | 3.58E-09 | Proliferating_lung |
| BAX                | 1.03E-13 | 1.61408898 | 0.484 | 0.43  | 3.65E-09 | Proliferating_lung |
| MT2A               | 1.10E-13 | 2.38795891 | 0.252 | 0.122 | 3.88E-09 | Proliferating_lung |
| ZNHIT1             | 1.15E-13 | 1.42095791 | 0.521 | 0.498 | 4.06E-09 | Proliferating_lung |
| ATP5PD             | 1.89E-13 | 1.40348018 | 0.505 | 0.468 | 6.68E-09 | Proliferating_lung |
| BST2               | 2.65E-13 | 1.34221003 | 0.525 | 0.465 | 9.40E-09 | Proliferating_lung |

|                    |          |            |       |       |          |                    |
|--------------------|----------|------------|-------|-------|----------|--------------------|
| SF3B6              | 3.07E-13 | 1.00354018 | 0.627 | 0.667 | 1.09E-08 | Proliferating_lung |
| GCN1               | 3.23E-13 | 0.41848757 | 0.941 | 0.914 | 1.14E-08 | Proliferating_lung |
| LSM6               | 5.11E-13 | 0.9407929  | 0.61  | 0.645 | 1.81E-08 | Proliferating_lung |
| PSENEN             | 5.53E-13 | 1.73973664 | 0.399 | 0.308 | 1.96E-08 | Proliferating_lung |
| CIAO2B             | 9.94E-13 | 1.70970577 | 0.453 | 0.401 | 3.52E-08 | Proliferating_lung |
| SPCS1              | 1.25E-12 | 1.14568232 | 0.575 | 0.582 | 4.42E-08 | Proliferating_lung |
| PLAC8              | 1.67E-12 | 1.14422839 | 0.577 | 0.522 | 5.91E-08 | Proliferating_lung |
| GPX4               | 1.70E-12 | 1.98542683 | 0.33  | 0.22  | 6.02E-08 | Proliferating_lung |
| NAA38              | 1.96E-12 | 1.43956766 | 0.471 | 0.426 | 6.94E-08 | Proliferating_lung |
| UCP2               | 1.96E-12 | 1.40282824 | 0.555 | 0.571 | 6.95E-08 | Proliferating_lung |
| NDUFS8             | 4.34E-12 | 1.22838922 | 0.549 | 0.572 | 1.54E-07 | Proliferating_lung |
| UBXN1              | 5.08E-12 | 1.14288317 | 0.566 | 0.587 | 1.80E-07 | Proliferating_lung |
| ENSMMUG00000062086 | 6.74E-12 | 1.51983466 | 0.479 | 0.425 | 2.39E-07 | Proliferating_lung |
| NDUFS6             | 6.89E-12 | 1.12998377 | 0.549 | 0.567 | 2.44E-07 | Proliferating_lung |
| ENSMMUG00000056126 | 7.72E-12 | 1.84964352 | 0.403 | 0.336 | 2.73E-07 | Proliferating_lung |
| IKBKG              | 8.00E-12 | 0.20518068 | 0.115 | 0.307 | 2.83E-07 | Proliferating_lung |
| MRPL51             | 8.29E-12 | 0.97167718 | 0.616 | 0.663 | 2.94E-07 | Proliferating_lung |
| UBB                | 1.17E-11 | 0.44488586 | 0.905 | 0.887 | 4.14E-07 | Proliferating_lung |
| SNRPD2             | 1.19E-11 | 0.64718952 | 0.735 | 0.772 | 4.23E-07 | Proliferating_lung |
| BHLHE40            | 1.44E-11 | 2.05520462 | 0.258 | 0.141 | 5.10E-07 | Proliferating_lung |
| SLIRP              | 1.63E-11 | 0.67925211 | 0.705 | 0.756 | 5.76E-07 | Proliferating_lung |
| ELOC               | 1.74E-11 | 1.74619666 | 0.414 | 0.348 | 6.16E-07 | Proliferating_lung |
| CMTM1              | 1.82E-11 | 1.59801238 | 0.421 | 0.349 | 6.44E-07 | Proliferating_lung |
| LSP1               | 2.37E-11 | 0.86196518 | 0.664 | 0.743 | 8.39E-07 | Proliferating_lung |
| MAF1               | 2.47E-11 | 0.13322983 | 0.113 | 0.298 | 8.76E-07 | Proliferating_lung |
| MICOS13            | 3.58E-11 | 1.4123862  | 0.473 | 0.436 | 1.27E-06 | Proliferating_lung |
| NUSAP1             | 3.72E-11 | 1.08407744 | 0.584 | 0.551 | 1.32E-06 | Proliferating_lung |
| LAMTOR4            | 3.98E-11 | 1.25166403 | 0.525 | 0.544 | 1.41E-06 | Proliferating_lung |
| CD320              | 4.21E-11 | 1.1139275  | 0.557 | 0.573 | 1.49E-06 | Proliferating_lung |
| CMC1               | 4.23E-11 | 1.51544654 | 0.501 | 0.447 | 1.50E-06 | Proliferating_lung |
| ENSMMUG00000012019 | 4.65E-11 | 1.077187   | 0.564 | 0.596 | 1.65E-06 | Proliferating_lung |
| DAD1               | 4.68E-11 | 0.88399071 | 0.662 | 0.712 | 1.66E-06 | Proliferating_lung |
| ENSMMUG00000057449 | 4.90E-11 | 0.91749793 | 0.612 | 0.661 | 1.74E-06 | Proliferating_lung |

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|---------------------|----------|------------|-------|-------|----------|--------------------|
| LSM2                | 5.88E-11 | 1.00553165 | 0.568 | 0.558 | 2.08E-06 | Proliferating_lung |
| BOLA2B              | 5.94E-11 | 1.54562991 | 0.436 | 0.373 | 2.10E-06 | Proliferating_lung |
| PTTG1               | 6.36E-11 | 1.26631039 | 0.484 | 0.398 | 2.25E-06 | Proliferating_lung |
| SPCS2               | 7.71E-11 | 0.93059784 | 0.61  | 0.62  | 2.73E-06 | Proliferating_lung |
| TOPORS              | 9.94E-11 | 0.80726438 | 0.64  | 0.713 | 3.52E-06 | Proliferating_lung |
| ENSMMUG00000006463  | 1.17E-10 | 0.6261487  | 0.746 | 0.786 | 4.14E-06 | Proliferating_lung |
| ENSMMUG000000029973 | 1.18E-10 | 0.84734075 | 0.612 | 0.656 | 4.19E-06 | Proliferating_lung |
| ANAPC11             | 1.33E-10 | 1.37193768 | 0.49  | 0.472 | 4.72E-06 | Proliferating_lung |
| COX20               | 1.42E-10 | 1.27670615 | 0.51  | 0.477 | 5.03E-06 | Proliferating_lung |
| PARK7               | 1.59E-10 | 1.08003293 | 0.564 | 0.592 | 5.63E-06 | Proliferating_lung |
| ENSMMUG000000064120 | 1.70E-10 | 1.36600096 | 0.518 | 0.504 | 6.01E-06 | Proliferating_lung |
| PCNA                | 1.72E-10 | 1.05724782 | 0.614 | 0.627 | 6.10E-06 | Proliferating_lung |
| MAMU-A              | 1.77E-10 | 0.85518879 | 0.787 | 0.859 | 6.26E-06 | Proliferating_lung |
| NDUFB9              | 1.92E-10 | 1.2467373  | 0.542 | 0.572 | 6.81E-06 | Proliferating_lung |
| DDX23               | 2.05E-10 | 0.11737678 | 0.115 | 0.291 | 7.27E-06 | Proliferating_lung |
| ENO1                | 2.89E-10 | 0.57349557 | 0.766 | 0.832 | 1.02E-05 | Proliferating_lung |
| ARHGAP30            | 3.48E-10 | 0.13699857 | 0.252 | 0.514 | 1.23E-05 | Proliferating_lung |
| ANP32E              | 3.89E-10 | 0.90270795 | 0.642 | 0.648 | 1.38E-05 | Proliferating_lung |
| ENSMMUG000000059843 | 4.51E-10 | 1.47710469 | 0.473 | 0.465 | 1.60E-05 | Proliferating_lung |
| RAB11A              | 4.95E-10 | 1.63701691 | 0.427 | 0.384 | 1.75E-05 | Proliferating_lung |
| NUFIP1              | 5.48E-10 | 0.3959775  | 0.161 | 0.362 | 1.94E-05 | Proliferating_lung |
| NDUFB10             | 7.76E-10 | 1.15657614 | 0.529 | 0.564 | 2.75E-05 | Proliferating_lung |
| GADD45B             | 9.88E-10 | 1.89729017 | 0.375 | 0.291 | 3.50E-05 | Proliferating_lung |
| AP2S1               | 1.00E-09 | 1.53056616 | 0.44  | 0.418 | 3.55E-05 | Proliferating_lung |
| ND4L                | 1.21E-09 | 1.15910357 | 0.508 | 0.484 | 4.29E-05 | Proliferating_lung |
| ATP5F1C             | 1.45E-09 | 0.9371918  | 0.581 | 0.647 | 5.13E-05 | Proliferating_lung |
| HNRNPH2             | 1.48E-09 | 0.38511879 | 0.948 | 0.884 | 5.25E-05 | Proliferating_lung |
| SRP9                | 1.52E-09 | 1.28331606 | 0.486 | 0.483 | 5.38E-05 | Proliferating_lung |
| LCP1                | 1.54E-09 | 0.60897307 | 0.826 | 0.898 | 5.45E-05 | Proliferating_lung |
| DPH2                | 1.89E-09 | 1.53660561 | 0.397 | 0.344 | 6.69E-05 | Proliferating_lung |
| PFN1                | 2.15E-09 | 0.47426688 | 0.889 | 0.88  | 7.63E-05 | Proliferating_lung |
| ENSMMUG000000064232 | 2.17E-09 | 0.16127618 | 0.174 | 0.378 | 7.70E-05 | Proliferating_lung |
| RBM34               | 2.23E-09 | 0.17025541 | 0.197 | 0.418 | 7.90E-05 | Proliferating_lung |

|                    |          |            |       |       |            |                    |
|--------------------|----------|------------|-------|-------|------------|--------------------|
| PRMT2              | 2.95E-09 | 1.54686194 | 0.436 | 0.411 | 0.0001044  | Proliferating_lung |
| ETFB               | 3.04E-09 | 1.40617364 | 0.473 | 0.468 | 0.00010775 | Proliferating_lung |
| MTRF1L             | 3.98E-09 | 0.23469914 | 0.134 | 0.311 | 0.00014118 | Proliferating_lung |
| GUCA1B             | 3.99E-09 | 0.16927357 | 0.134 | 0.31  | 0.0001412  | Proliferating_lung |
| CENPM              | 4.15E-09 | 1.30876202 | 0.484 | 0.466 | 0.00014717 | Proliferating_lung |
| TOP2A              | 4.42E-09 | 0.7049248  | 0.672 | 0.614 | 0.00015648 | Proliferating_lung |
| ENSMMUG00000060382 | 4.43E-09 | 2.13138219 | 0.33  | 0.25  | 0.00015687 | Proliferating_lung |
| NDUFA10            | 4.85E-09 | 0.24978093 | 0.21  | 0.436 | 0.00017175 | Proliferating_lung |
| SUMO1              | 5.43E-09 | 0.75764461 | 0.642 | 0.734 | 0.00019251 | Proliferating_lung |
| PIN1               | 6.18E-09 | 1.47490715 | 0.436 | 0.412 | 0.00021901 | Proliferating_lung |
| MRPL34             | 8.52E-09 | 1.25829179 | 0.475 | 0.475 | 0.00030191 | Proliferating_lung |
| DAZAP1             | 9.35E-09 | 0.7179812  | 0.69  | 0.822 | 0.00033125 | Proliferating_lung |
| PRDX3              | 9.62E-09 | 0.10813226 | 0.215 | 0.441 | 0.0003409  | Proliferating_lung |
| TSC22D4            | 9.66E-09 | 0.10075329 | 0.117 | 0.275 | 0.00034218 | Proliferating_lung |
| CTBP1              | 1.03E-08 | 0.18918471 | 0.152 | 0.335 | 0.00036356 | Proliferating_lung |
| LRCH4              | 1.09E-08 | 0.11097785 | 0.111 | 0.266 | 0.0003878  | Proliferating_lung |
| ENSMMUG00000004633 | 1.10E-08 | 1.47484123 | 0.419 | 0.373 | 0.00038953 | Proliferating_lung |
| ENSMMUG00000015274 | 1.18E-08 | 0.12710901 | 0.121 | 0.279 | 0.00041732 | Proliferating_lung |
| PCNP               | 1.21E-08 | 0.11740896 | 0.323 | 0.619 | 0.00042709 | Proliferating_lung |
| ENSMMUG00000000983 | 1.52E-08 | 1.10797183 | 0.536 | 0.582 | 0.00053875 | Proliferating_lung |
| TIAL1              | 1.62E-08 | 0.13729771 | 0.278 | 0.534 | 0.00057384 | Proliferating_lung |
| GTF3C1             | 1.63E-08 | 1.83095536 | 0.421 | 0.394 | 0.00057928 | Proliferating_lung |
| RABAC1             | 1.99E-08 | 1.68272028 | 0.384 | 0.334 | 0.00070344 | Proliferating_lung |
| GNAI3              | 2.02E-08 | 0.15163152 | 0.306 | 0.585 | 0.00071596 | Proliferating_lung |
| MRPS12             | 2.22E-08 | 1.36665522 | 0.427 | 0.404 | 0.00078492 | Proliferating_lung |
| SRSF7              | 2.31E-08 | 0.58093528 | 0.733 | 0.817 | 0.00081757 | Proliferating_lung |
| ENSMMUG00000064531 | 2.46E-08 | 1.40303167 | 0.458 | 0.449 | 0.00087225 | Proliferating_lung |
| CGGBP1             | 2.46E-08 | 0.14322997 | 0.236 | 0.469 | 0.00087232 | Proliferating_lung |
| DNAJC19            | 2.49E-08 | 1.21345092 | 0.495 | 0.53  | 0.00088149 | Proliferating_lung |
| PSMD2              | 2.74E-08 | 0.12238632 | 0.221 | 0.444 | 0.00097038 | Proliferating_lung |
| NDUFV2             | 3.01E-08 | 1.08081383 | 0.544 | 0.601 | 0.00106577 | Proliferating_lung |
| ARCN1              | 3.04E-08 | 0.24970903 | 0.167 | 0.354 | 0.001076   | Proliferating_lung |
| VEZF1              | 3.08E-08 | 0.2425848  | 0.141 | 0.31  | 0.00109097 | Proliferating_lung |

|                    |          |            |       |       |            |                    |
|--------------------|----------|------------|-------|-------|------------|--------------------|
| SDHC               | 3.38E-08 | 0.10421936 | 0.21  | 0.422 | 0.00119873 | Proliferating_lung |
| OSTC               | 3.49E-08 | 0.98317707 | 0.542 | 0.596 | 0.00123737 | Proliferating_lung |
| SDF2               | 3.64E-08 | 0.18331772 | 0.187 | 0.387 | 0.00129051 | Proliferating_lung |
| QARS1              | 3.95E-08 | 0.21906158 | 0.228 | 0.448 | 0.00140066 | Proliferating_lung |
| BRD8               | 3.98E-08 | 0.10281465 | 0.154 | 0.33  | 0.00140853 | Proliferating_lung |
| HSBP1              | 4.24E-08 | 1.37543463 | 0.412 | 0.369 | 0.00150113 | Proliferating_lung |
| HADH               | 4.30E-08 | 0.11301952 | 0.184 | 0.378 | 0.00152193 | Proliferating_lung |
| TUFM               | 4.30E-08 | 0.13379158 | 0.204 | 0.408 | 0.00152255 | Proliferating_lung |
| TNFRSF1B           | 4.34E-08 | 1.56088036 | 0.343 | 0.26  | 0.0015379  | Proliferating_lung |
| NUP85              | 4.97E-08 | 0.21059507 | 0.158 | 0.338 | 0.00176115 | Proliferating_lung |
| CISD2              | 5.23E-08 | 1.48375976 | 0.403 | 0.363 | 0.00185166 | Proliferating_lung |
| UQCRC2             | 5.48E-08 | 0.20563177 | 0.267 | 0.512 | 0.00194238 | Proliferating_lung |
| PRR13              | 7.46E-08 | 1.27234758 | 0.473 | 0.489 | 0.0026434  | Proliferating_lung |
| UCHL3              | 7.78E-08 | 0.12602355 | 0.193 | 0.386 | 0.00275605 | Proliferating_lung |
| PHPT1              | 7.99E-08 | 1.99727017 | 0.291 | 0.219 | 0.00283146 | Proliferating_lung |
| ANXA6              | 8.05E-08 | 0.17333529 | 0.171 | 0.352 | 0.00285102 | Proliferating_lung |
| PSMG2              | 8.45E-08 | 1.16360466 | 0.466 | 0.476 | 0.00299479 | Proliferating_lung |
| VDAC2              | 8.81E-08 | 0.73837012 | 0.623 | 0.729 | 0.0031218  | Proliferating_lung |
| TIMM8B             | 9.28E-08 | 1.56057927 | 0.384 | 0.343 | 0.00328709 | Proliferating_lung |
| AP1M1              | 9.72E-08 | 0.17790795 | 0.163 | 0.343 | 0.00344377 | Proliferating_lung |
| PSMB7              | 1.07E-07 | 0.61422292 | 0.672 | 0.793 | 0.00380101 | Proliferating_lung |
| IMP3               | 1.08E-07 | 0.30783133 | 0.132 | 0.288 | 0.0038175  | Proliferating_lung |
| TIMP1              | 1.09E-07 | 2.45543625 | 0.275 | 0.195 | 0.00386304 | Proliferating_lung |
| PHF5A              | 1.14E-07 | 1.19189591 | 0.479 | 0.488 | 0.0040424  | Proliferating_lung |
| FAM111A            | 1.25E-07 | 0.10861211 | 0.215 | 0.416 | 0.00444442 | Proliferating_lung |
| LAMP1              | 1.30E-07 | 0.18962862 | 0.169 | 0.346 | 0.0046179  | Proliferating_lung |
| PSMC2              | 1.85E-07 | 0.16057826 | 0.169 | 0.348 | 0.00654732 | Proliferating_lung |
| RNASEH2A           | 1.91E-07 | 1.63114409 | 0.377 | 0.339 | 0.00677259 | Proliferating_lung |
| POLR2I             | 1.95E-07 | 1.23168665 | 0.443 | 0.429 | 0.00691962 | Proliferating_lung |
| WDR61              | 1.97E-07 | 0.12883403 | 0.137 | 0.291 | 0.00699508 | Proliferating_lung |
| MTA2               | 2.00E-07 | 0.20193619 | 0.128 | 0.28  | 0.00709382 | Proliferating_lung |
| ENSMMUG00000046482 | 2.07E-07 | 1.51293784 | 0.282 | 0.196 | 0.00732409 | Proliferating_lung |
| BIRC2              | 2.14E-07 | 0.16216814 | 0.23  | 0.441 | 0.00758476 | Proliferating_lung |

|                    |          |            |       |       |            |                    |
|--------------------|----------|------------|-------|-------|------------|--------------------|
| CCNDBP1            | 2.17E-07 | 0.20291446 | 0.154 | 0.322 | 0.00769583 | Proliferating_lung |
| LYAR               | 2.34E-07 | 0.16564354 | 0.171 | 0.346 | 0.00829263 | Proliferating_lung |
| EEF1A1             | 2.34E-07 | 0.2591271  | 0.928 | 0.925 | 0.00830764 | Proliferating_lung |
| RHOA               | 2.35E-07 | 0.50631314 | 0.772 | 0.874 | 0.00831043 | Proliferating_lung |
| TDG                | 2.36E-07 | 0.22736281 | 0.247 | 0.468 | 0.00836498 | Proliferating_lung |
| UGP2               | 2.43E-07 | 0.25061711 | 0.13  | 0.281 | 0.00860362 | Proliferating_lung |
| PFKL               | 2.55E-07 | 0.29077336 | 0.184 | 0.365 | 0.00905155 | Proliferating_lung |
| CMPK1              | 2.61E-07 | 0.42236548 | 0.182 | 0.363 | 0.00923278 | Proliferating_lung |
| CENPW              | 2.69E-07 | 1.56907375 | 0.362 | 0.313 | 0.00952661 | Proliferating_lung |
| AMD1               | 2.76E-07 | 0.10169905 | 0.315 | 0.567 | 0.0097648  | Proliferating_lung |
| ENSMMUG00000038088 | 3.13E-07 | 0.13968173 | 0.158 | 0.323 | 0.0111056  | Proliferating_lung |
| MPC2               | 3.35E-07 | 1.15646495 | 0.516 | 0.565 | 0.01185542 | Proliferating_lung |
| M6PR               | 3.56E-07 | 0.17957351 | 0.189 | 0.369 | 0.01259643 | Proliferating_lung |
| MFAP1              | 3.71E-07 | 0.22161476 | 0.163 | 0.332 | 0.01314831 | Proliferating_lung |
| H2AC12             | 3.78E-07 | 0.94502145 | 0.501 | 0.476 | 0.0133837  | Proliferating_lung |
| ATP6V0E1           | 3.94E-07 | 0.98934114 | 0.536 | 0.597 | 0.0139629  | Proliferating_lung |
| CCNG1              | 3.98E-07 | 0.17915672 | 0.189 | 0.376 | 0.01411012 | Proliferating_lung |
| ATP6V1E1           | 4.65E-07 | 0.24746059 | 0.23  | 0.433 | 0.01645839 | Proliferating_lung |
| HCLS1              | 4.87E-07 | 0.11638177 | 0.262 | 0.482 | 0.01727013 | Proliferating_lung |
| BTG1               | 4.95E-07 | 0.59045713 | 0.748 | 0.841 | 0.01752201 | Proliferating_lung |
| CUTA               | 5.06E-07 | 0.98785908 | 0.54  | 0.588 | 0.01792281 | Proliferating_lung |
| PDGFRA             | 5.24E-07 | 0.49219416 | 0.759 | 0.863 | 0.01857215 | Proliferating_lung |
| STARD3             | 5.37E-07 | 0.25562935 | 0.134 | 0.284 | 0.01902586 | Proliferating_lung |
| ENSMMUG00000055773 | 5.54E-07 | 1.59986258 | 0.382 | 0.335 | 0.01961516 | Proliferating_lung |
| ENY2               | 5.60E-07 | 0.77096299 | 0.607 | 0.681 | 0.01985315 | Proliferating_lung |
| ENSMMUG00000049718 | 5.79E-07 | 0.11565395 | 0.167 | 0.336 | 0.02052242 | Proliferating_lung |
| CDC123             | 5.82E-07 | 0.16736148 | 0.187 | 0.367 | 0.020629   | Proliferating_lung |
| ENSMMUG00000016898 | 6.36E-07 | 0.56426429 | 0.735 | 0.774 | 0.02254047 | Proliferating_lung |
| PPP6R1             | 6.56E-07 | 0.24369801 | 0.247 | 0.466 | 0.02324937 | Proliferating_lung |
| ZCCHC9             | 6.70E-07 | 0.28263496 | 0.143 | 0.296 | 0.02373423 | Proliferating_lung |
| TMED9              | 7.41E-07 | 1.34953818 | 0.427 | 0.43  | 0.02624923 | Proliferating_lung |
| VPS35              | 7.64E-07 | 0.10547279 | 0.152 | 0.307 | 0.02706173 | Proliferating_lung |
| MAP3K8             | 7.77E-07 | 1.37802072 | 0.306 | 0.222 | 0.02753888 | Proliferating_lung |

|                    |          |            |       |       |            |                    |
|--------------------|----------|------------|-------|-------|------------|--------------------|
| SLC9A3R1           | 8.18E-07 | 0.23731805 | 0.202 | 0.391 | 0.02899037 | Proliferating_lung |
| FABP5              | 8.20E-07 | 1.73086742 | 0.254 | 0.178 | 0.02905443 | Proliferating_lung |
| NSFL1C             | 9.17E-07 | 0.25517393 | 0.137 | 0.285 | 0.03250664 | Proliferating_lung |
| BCAP29             | 9.26E-07 | 0.10238987 | 0.223 | 0.416 | 0.03279931 | Proliferating_lung |
| DDIT3              | 9.40E-07 | 0.29414183 | 0.165 | 0.329 | 0.03332087 | Proliferating_lung |
| ANXA2              | 9.63E-07 | 0.96613802 | 0.544 | 0.593 | 0.0341243  | Proliferating_lung |
| ANXA11             | 9.87E-07 | 0.22287285 | 0.217 | 0.405 | 0.03495528 | Proliferating_lung |
| TPM3               | 9.92E-07 | 0.45821502 | 0.809 | 0.866 | 0.03515934 | Proliferating_lung |
| UXT                | 9.98E-07 | 1.41367926 | 0.373 | 0.338 | 0.03536147 | Proliferating_lung |
| ZCRB1              | 1.00E-06 | 0.15504804 | 0.23  | 0.424 | 0.03541911 | Proliferating_lung |
| PRPF38A            | 1.02E-06 | 0.32276187 | 0.143 | 0.291 | 0.03624205 | Proliferating_lung |
| BIRC5              | 1.11E-06 | 1.23805062 | 0.436 | 0.405 | 0.03938206 | Proliferating_lung |
| TRAPPC3            | 1.21E-06 | 0.32819111 | 0.139 | 0.288 | 0.04295822 | Proliferating_lung |
| VPS28              | 1.22E-06 | 1.5049094  | 0.377 | 0.353 | 0.04306109 | Proliferating_lung |
| MANF               | 1.33E-06 | 0.13446435 | 0.241 | 0.448 | 0.04712993 | Proliferating_lung |
| NSMCE1             | 1.33E-06 | 0.1042265  | 0.262 | 0.481 | 0.04725787 | Proliferating_lung |
| HSPE1              | 1.34E-06 | 0.5462434  | 0.72  | 0.835 | 0.04742502 | Proliferating_lung |
| PSAP               | 1.35E-06 | 0.57810875 | 0.143 | 0.291 | 0.04768262 | Proliferating_lung |
| LLPH               | 1.35E-06 | 1.12593206 | 0.475 | 0.497 | 0.04774665 | Proliferating_lung |
| BAG6               | 1.39E-06 | 0.46813448 | 0.132 | 0.276 | 0.04911872 | Proliferating_lung |
| TXNDC12            | 1.39E-06 | 0.11154672 | 0.15  | 0.302 | 0.04915677 | Proliferating_lung |
| ENSMMUG00000061630 | 1.39E-06 | 0.17406208 | 0.269 | 0.496 | 0.0492139  | Proliferating_lung |
| SLC39A10           | 1.39E-06 | 0.25116898 | 0.143 | 0.286 | 0.04939702 | Proliferating_lung |
| CD3G               | 1.48E-06 | 0.15977379 | 0.234 | 0.432 | 0.05243165 | Proliferating_lung |
| CHTOP              | 1.51E-06 | 0.1816317  | 0.156 | 0.312 | 0.05363967 | Proliferating_lung |
| ENSMMUG00000063127 | 1.60E-06 | 1.77515431 | 0.308 | 0.244 | 0.05652555 | Proliferating_lung |
| SPCS3              | 1.64E-06 | 0.82095861 | 0.557 | 0.643 | 0.05828259 | Proliferating_lung |
| SEC61A1            | 1.66E-06 | 0.38559956 | 0.117 | 0.25  | 0.05895207 | Proliferating_lung |
| SPC25              | 1.67E-06 | 1.24413041 | 0.436 | 0.421 | 0.05906229 | Proliferating_lung |
| SLFN5              | 1.69E-06 | 0.16734794 | 0.21  | 0.389 | 0.059903   | Proliferating_lung |
| AMZ2               | 1.79E-06 | 1.53051898 | 0.26  | 0.186 | 0.06326969 | Proliferating_lung |
| USP1               | 1.84E-06 | 0.18244107 | 0.321 | 0.565 | 0.06502947 | Proliferating_lung |
| EIF6               | 1.84E-06 | 1.62550703 | 0.351 | 0.321 | 0.06505947 | Proliferating_lung |



|                     |          |            |       |       |            |                    |
|---------------------|----------|------------|-------|-------|------------|--------------------|
| HLTF                | 2.03E-06 | 0.11913978 | 0.143 | 0.288 | 0.07186777 | Proliferating_lung |
| PPDPF               | 2.06E-06 | 1.20146599 | 0.503 | 0.574 | 0.07289797 | Proliferating_lung |
| CDC37L1             | 2.08E-06 | 0.28581233 | 0.121 | 0.255 | 0.07357001 | Proliferating_lung |
| UBE2A               | 2.10E-06 | 0.2016164  | 0.182 | 0.348 | 0.07447409 | Proliferating_lung |
| ENSMMUG00000002075  | 2.36E-06 | 1.65999147 | 0.317 | 0.265 | 0.08377845 | Proliferating_lung |
| MRPL48              | 2.38E-06 | 0.11249197 | 0.15  | 0.295 | 0.08425233 | Proliferating_lung |
| ISCA1               | 2.44E-06 | 1.57851445 | 0.41  | 0.415 | 0.08641198 | Proliferating_lung |
| SHCBP1              | 2.56E-06 | 0.25266841 | 0.154 | 0.301 | 0.09060399 | Proliferating_lung |
| CFAP36              | 2.73E-06 | 0.22957332 | 0.124 | 0.256 | 0.09673678 | Proliferating_lung |
| SACM1L              | 2.79E-06 | 0.40380224 | 0.226 | 0.416 | 0.09876929 | Proliferating_lung |
| P2RY8               | 3.00E-06 | 0.41041075 | 0.213 | 0.394 | 0.10635361 | Proliferating_lung |
| CSRNP1              | 3.16E-06 | 0.12216067 | 0.174 | 0.327 | 0.11183118 | Proliferating_lung |
| NCLN                | 3.36E-06 | 0.38698323 | 0.2   | 0.377 | 0.11904337 | Proliferating_lung |
| CTSS                | 3.40E-06 | 1.29206549 | 0.462 | 0.487 | 0.12044427 | Proliferating_lung |
| PLP2                | 3.46E-06 | 1.54861418 | 0.347 | 0.304 | 0.12275944 | Proliferating_lung |
| ENSMMUG000000053817 | 3.51E-06 | 1.02682476 | 0.54  | 0.606 | 0.12447187 | Proliferating_lung |
| EMD                 | 3.64E-06 | 0.40098908 | 0.154 | 0.306 | 0.1288906  | Proliferating_lung |
| RPS4Y1              | 3.79E-06 | 0.58858316 | 0.592 | 0.551 | 0.13419292 | Proliferating_lung |
| MPLKIP              | 3.94E-06 | 0.2109243  | 0.121 | 0.25  | 0.13968874 | Proliferating_lung |
| RPS6KA1             | 3.98E-06 | 0.38412349 | 0.152 | 0.297 | 0.14118059 | Proliferating_lung |
| DBNL                | 4.08E-06 | 0.17528951 | 0.228 | 0.415 | 0.14460025 | Proliferating_lung |
| APOBEC3F            | 4.13E-06 | 1.46325641 | 0.282 | 0.213 | 0.14648294 | Proliferating_lung |
| CD69                | 4.20E-06 | 0.21713704 | 0.722 | 0.915 | 0.14870509 | Proliferating_lung |
| COX4I1              | 4.20E-06 | 0.34024588 | 0.844 | 0.827 | 0.14888378 | Proliferating_lung |
| TMEM256             | 4.46E-06 | 1.38188042 | 0.362 | 0.332 | 0.15803381 | Proliferating_lung |
| PIN4                | 4.63E-06 | 1.47807842 | 0.36  | 0.338 | 0.1641664  | Proliferating_lung |
| CRNKL1              | 4.67E-06 | 0.38955745 | 0.21  | 0.39  | 0.16534046 | Proliferating_lung |
| CTSB                | 4.70E-06 | 0.22878314 | 0.184 | 0.345 | 0.16663902 | Proliferating_lung |
| ESYT1               | 4.73E-06 | 0.30590378 | 0.206 | 0.384 | 0.16759355 | Proliferating_lung |
| MSL3                | 4.82E-06 | 0.43739849 | 0.156 | 0.302 | 0.1706105  | Proliferating_lung |
| CAPZB               | 5.10E-06 | 0.62428391 | 0.651 | 0.762 | 0.18079631 | Proliferating_lung |
| SRP54               | 5.23E-06 | 0.18062524 | 0.2   | 0.369 | 0.18543058 | Proliferating_lung |
| PHAX                | 5.37E-06 | 0.2742904  | 0.158 | 0.306 | 0.1901677  | Proliferating_lung |

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|--------------------|----------|------------|-------|-------|------------|--------------------|
| EXOSC7             | 6.02E-06 | 0.40719524 | 0.189 | 0.358 | 0.21320112 | Proliferating_lung |
| TMEM109            | 6.11E-06 | 0.28927974 | 0.221 | 0.41  | 0.21648327 | Proliferating_lung |
| CENPO              | 6.40E-06 | 1.06833    | 0.482 | 0.494 | 0.2265919  | Proliferating_lung |
| AP2M1              | 6.42E-06 | 1.279826   | 0.421 | 0.437 | 0.22744067 | Proliferating_lung |
| XRCC1              | 6.44E-06 | 0.4661038  | 0.13  | 0.261 | 0.22834413 | Proliferating_lung |
| PDHB               | 6.45E-06 | 0.3686801  | 0.143 | 0.286 | 0.22845224 | Proliferating_lung |
| MYNN               | 6.84E-06 | 0.41805922 | 0.158 | 0.305 | 0.24231208 | Proliferating_lung |
| CENPN              | 6.87E-06 | 0.24722775 | 0.167 | 0.317 | 0.24331719 | Proliferating_lung |
| BRIX1              | 6.97E-06 | 0.33815384 | 0.132 | 0.262 | 0.24690372 | Proliferating_lung |
| HAUS1              | 7.15E-06 | 0.41567804 | 0.126 | 0.256 | 0.25327304 | Proliferating_lung |
| ARRB2              | 7.38E-06 | 0.20737222 | 0.254 | 0.458 | 0.2614445  | Proliferating_lung |
| GPANK1             | 8.20E-06 | 0.1090514  | 0.139 | 0.271 | 0.29054415 | Proliferating_lung |
| FRG1               | 8.59E-06 | 0.11036434 | 0.148 | 0.283 | 0.30419218 | Proliferating_lung |
| GPR174             | 8.60E-06 | 0.22304536 | 0.245 | 0.432 | 0.30468378 | Proliferating_lung |
| NCOA7              | 9.14E-06 | 0.12942023 | 0.375 | 0.636 | 0.32385591 | Proliferating_lung |
| RPN1               | 9.23E-06 | 0.14690531 | 0.33  | 0.582 | 0.32700048 | Proliferating_lung |
| CYB5A              | 9.28E-06 | 0.16762191 | 0.254 | 0.45  | 0.32869426 | Proliferating_lung |
| ARF1               | 9.40E-06 | 0.76797978 | 0.597 | 0.708 | 0.33306051 | Proliferating_lung |
| URGCP              | 1.03E-05 | 0.19029472 | 0.273 | 0.486 | 0.36539383 | Proliferating_lung |
| DGKB               | 1.11E-05 | 1.27271675 | 0.434 | 0.451 | 0.39169007 | Proliferating_lung |
| HSP90AA1           | 1.14E-05 | 0.23535176 | 0.892 | 0.929 | 0.40495414 | Proliferating_lung |
| ENSMMUG00000011798 | 1.17E-05 | 0.14184004 | 0.293 | 0.501 | 0.41559452 | Proliferating_lung |
| ICAM3              | 1.19E-05 | 0.17547015 | 0.271 | 0.488 | 0.42336948 | Proliferating_lung |
| UBR7               | 1.22E-05 | 0.23816934 | 0.145 | 0.278 | 0.43117897 | Proliferating_lung |
| IMMP1L             | 1.32E-05 | 0.31909647 | 0.128 | 0.252 | 0.46941606 | Proliferating_lung |
| ENSMMUG00000018687 | 1.35E-05 | 1.32186983 | 0.445 | 0.473 | 0.47748774 | Proliferating_lung |
| RASSF2             | 1.35E-05 | 0.35420007 | 0.148 | 0.281 | 0.47920594 | Proliferating_lung |
| SUCLA2             | 1.38E-05 | 0.17247015 | 0.148 | 0.278 | 0.48995232 | Proliferating_lung |
| UBE2L6             | 1.40E-05 | 0.28814301 | 0.176 | 0.329 | 0.49577316 | Proliferating_lung |
| ENSMMUG00000059289 | 1.45E-05 | 1.07927384 | 0.477 | 0.525 | 0.51356777 | Proliferating_lung |
| PSMB3              | 1.50E-05 | 1.0927829  | 0.469 | 0.523 | 0.53174809 | Proliferating_lung |
| RAB4A              | 1.52E-05 | 0.21987558 | 0.161 | 0.3   | 0.53820537 | Proliferating_lung |
| CCPG1              | 1.52E-05 | 0.11623181 | 0.158 | 0.292 | 0.53980763 | Proliferating_lung |

|                     |          |            |       |       |            |                    |
|---------------------|----------|------------|-------|-------|------------|--------------------|
| ENSMMUG00000007970  | 1.58E-05 | 0.20455767 | 0.148 | 0.281 | 0.56000897 | Proliferating_lung |
| GTF2H5              | 1.62E-05 | 0.74977894 | 0.57  | 0.642 | 0.5742158  | Proliferating_lung |
| MRPS6               | 1.69E-05 | 0.11454981 | 0.308 | 0.524 | 0.59718366 | Proliferating_lung |
| SNRNP40             | 1.72E-05 | 0.12863016 | 0.236 | 0.424 | 0.60782587 | Proliferating_lung |
| ASL                 | 1.75E-05 | 0.258006   | 0.236 | 0.418 | 0.61914932 | Proliferating_lung |
| ENSMMUG000000052035 | 1.79E-05 | 1.36757271 | 0.38  | 0.371 | 0.63359839 | Proliferating_lung |
| HAUS2               | 2.00E-05 | 0.36046079 | 0.163 | 0.306 | 0.70954353 | Proliferating_lung |
| U2AF2               | 2.08E-05 | 0.34731251 | 0.208 | 0.383 | 0.73742993 | Proliferating_lung |
| MRPL32              | 2.08E-05 | 0.2146689  | 0.202 | 0.368 | 0.73749435 | Proliferating_lung |
| PPIH                | 2.12E-05 | 1.20424383 | 0.419 | 0.431 | 0.75174823 | Proliferating_lung |
| ADA                 | 2.17E-05 | 0.26390013 | 0.171 | 0.316 | 0.76772099 | Proliferating_lung |
| RBM22               | 2.19E-05 | 0.27191194 | 0.167 | 0.312 | 0.77467958 | Proliferating_lung |
| ANP32A              | 2.28E-05 | 0.7128811  | 0.575 | 0.656 | 0.80730599 | Proliferating_lung |
| MRPS21              | 2.34E-05 | 1.23096798 | 0.393 | 0.394 | 0.82757862 | Proliferating_lung |
| DSN1                | 2.38E-05 | 0.3362309  | 0.191 | 0.348 | 0.84504157 | Proliferating_lung |
| SMIM4               | 2.41E-05 | 1.82747474 | 0.267 | 0.215 | 0.85545146 | Proliferating_lung |
| RHNO1               | 2.42E-05 | 0.34083482 | 0.152 | 0.287 | 0.85640128 | Proliferating_lung |
| SH3BGRL             | 2.62E-05 | 1.10925299 | 0.456 | 0.481 | 0.9296076  | Proliferating_lung |
| NPM1                | 2.66E-05 | 0.27814383 | 0.855 | 0.871 | 0.94308891 | Proliferating_lung |
| NUDT1               | 2.86E-05 | 1.30577677 | 0.397 | 0.399 | 1          | Proliferating_lung |
| MEA1                | 3.02E-05 | 0.46261951 | 0.15  | 0.285 | 1          | Proliferating_lung |
| PSMB2               | 3.10E-05 | 1.25049446 | 0.41  | 0.423 | 1          | Proliferating_lung |
| KRR1                | 3.20E-05 | 0.37418585 | 0.249 | 0.446 | 1          | Proliferating_lung |
| PRRC2A              | 3.22E-05 | 0.54735594 | 0.174 | 0.322 | 1          | Proliferating_lung |
| ENSMMUG000000019882 | 3.28E-05 | 0.14672188 | 0.336 | 0.575 | 1          | Proliferating_lung |
| ENSMMUG000000058919 | 3.36E-05 | 0.19317677 | 0.228 | 0.398 | 1          | Proliferating_lung |
| ENSMMUG000000047632 | 3.37E-05 | 0.772212   | 0.469 | 0.43  | 1          | Proliferating_lung |
| CD74                | 3.41E-05 | 0.11661908 | 0.245 | 0.392 | 1          | Proliferating_lung |
| ENSMMUG000000008396 | 3.44E-05 | 0.44977612 | 0.152 | 0.287 | 1          | Proliferating_lung |
| DRAP1               | 3.45E-05 | 1.31670073 | 0.423 | 0.447 | 1          | Proliferating_lung |
| ENSMMUG000000030317 | 3.63E-05 | 0.31144834 | 0.215 | 0.382 | 1          | Proliferating_lung |
| SARS1               | 3.89E-05 | 0.17961365 | 0.249 | 0.437 | 1          | Proliferating_lung |
| SCAMP2              | 3.99E-05 | 0.35577532 | 0.217 | 0.387 | 1          | Proliferating_lung |

|                    |          |            |       |       |                      |
|--------------------|----------|------------|-------|-------|----------------------|
| TMED4              | 4.30E-05 | 0.21059317 | 0.206 | 0.364 | 1 Proliferating_lung |
| CSK                | 4.40E-05 | 0.32433906 | 0.284 | 0.494 | 1 Proliferating_lung |
| RGS19              | 4.57E-05 | 0.28637872 | 0.184 | 0.329 | 1 Proliferating_lung |
| NKPD1              | 4.62E-05 | 1.47523179 | 0.367 | 0.362 | 1 Proliferating_lung |
| GPALPP1            | 4.79E-05 | 0.45391799 | 0.165 | 0.299 | 1 Proliferating_lung |
| ACAP1              | 4.88E-05 | 0.42538062 | 0.223 | 0.396 | 1 Proliferating_lung |
| DPY30              | 5.10E-05 | 1.19536252 | 0.44  | 0.482 | 1 Proliferating_lung |
| TRMT112            | 5.10E-05 | 0.75932803 | 0.566 | 0.657 | 1 Proliferating_lung |
| GNL3L              | 5.23E-05 | 0.21582431 | 0.132 | 0.25  | 1 Proliferating_lung |
| MRPS11             | 5.25E-05 | 0.62792625 | 0.148 | 0.274 | 1 Proliferating_lung |
| MRPL42             | 5.32E-05 | 0.26877343 | 0.271 | 0.472 | 1 Proliferating_lung |
| PLD3               | 5.55E-05 | 0.18738518 | 0.161 | 0.286 | 1 Proliferating_lung |
| TAPBPL             | 5.62E-05 | 1.28190471 | 0.423 | 0.446 | 1 Proliferating_lung |
| YEATS4             | 5.66E-05 | 0.38456567 | 0.158 | 0.291 | 1 Proliferating_lung |
| C1H1orf43          | 5.69E-05 | 0.29731582 | 0.154 | 0.283 | 1 Proliferating_lung |
| ENSMMUG00000061410 | 5.85E-05 | 1.75505854 | 0.275 | 0.235 | 1 Proliferating_lung |
| MRPS33             | 5.89E-05 | 0.22159916 | 0.223 | 0.396 | 1 Proliferating_lung |
| KIF2C              | 5.95E-05 | 0.11235376 | 0.184 | 0.319 | 1 Proliferating_lung |
| ZNF706             | 6.02E-05 | 0.86375741 | 0.525 | 0.606 | 1 Proliferating_lung |
| SMU1               | 6.04E-05 | 0.29938008 | 0.299 | 0.52  | 1 Proliferating_lung |
| MAP2K2             | 6.08E-05 | 0.39922746 | 0.165 | 0.296 | 1 Proliferating_lung |
| BRK1               | 6.11E-05 | 0.95168459 | 0.495 | 0.577 | 1 Proliferating_lung |
| RAD51              | 6.21E-05 | 0.30098237 | 0.18  | 0.317 | 1 Proliferating_lung |
| ENSMMUG00000019238 | 6.28E-05 | 0.15280623 | 0.332 | 0.56  | 1 Proliferating_lung |
| PSMD8              | 6.30E-05 | 0.29091287 | 0.169 | 0.309 | 1 Proliferating_lung |
| PSMC1              | 6.32E-05 | 0.35984158 | 0.219 | 0.391 | 1 Proliferating_lung |
| EVI2B              | 6.34E-05 | 0.30048679 | 0.191 | 0.33  | 1 Proliferating_lung |
| TSNAX              | 6.40E-05 | 0.3997403  | 0.191 | 0.343 | 1 Proliferating_lung |
| ACTR10             | 6.42E-05 | 0.3478194  | 0.241 | 0.424 | 1 Proliferating_lung |
| AHSA1              | 6.51E-05 | 0.4013452  | 0.228 | 0.399 | 1 Proliferating_lung |
| RPL3               | 6.65E-05 | 0.20326816 | 0.985 | 0.933 | 1 Proliferating_lung |
| DNAJC9             | 6.70E-05 | 0.27636844 | 0.28  | 0.486 | 1 Proliferating_lung |
| FIBP               | 6.82E-05 | 1.49412504 | 0.328 | 0.305 | 1 Proliferating_lung |

|                    |            |            |       |       |                      |
|--------------------|------------|------------|-------|-------|----------------------|
| PPIL1              | 7.04E-05   | 0.29679562 | 0.154 | 0.282 | 1 Proliferating_lung |
| UNKL               | 7.10E-05   | 0.48717098 | 0.206 | 0.365 | 1 Proliferating_lung |
| CCT5               | 7.15E-05   | 0.11244362 | 0.39  | 0.636 | 1 Proliferating_lung |
| ADI1               | 7.40E-05   | 0.24692976 | 0.219 | 0.378 | 1 Proliferating_lung |
| ENSMMUG00000059322 | 7.56E-05   | 0.31555885 | 0.184 | 0.332 | 1 Proliferating_lung |
| TMEM134            | 7.62E-05   | 0.45647403 | 0.134 | 0.252 | 1 Proliferating_lung |
| HDDC2              | 7.67E-05   | 0.36478068 | 0.154 | 0.283 | 1 Proliferating_lung |
| TMEM219            | 7.87E-05   | 1.24253048 | 0.414 | 0.437 | 1 Proliferating_lung |
| FGFR10P2           | 7.95E-05   | 0.10128772 | 0.321 | 0.529 | 1 Proliferating_lung |
| PSMD6              | 8.01E-05   | 0.24742399 | 0.217 | 0.383 | 1 Proliferating_lung |
| RBIS               | 8.04E-05   | 0.82311997 | 0.525 | 0.617 | 1 Proliferating_lung |
| YWHAЕ              | 8.14E-05   | 0.59575291 | 0.64  | 0.76  | 1 Proliferating_lung |
| ENSMMUG00000014648 | 8.21E-05   | 0.53103349 | 0.655 | 0.757 | 1 Proliferating_lung |
| LSM8               | 8.58E-05   | 1.02082771 | 0.486 | 0.549 | 1 Proliferating_lung |
| RTRAF              | 8.60E-05   | 0.58672554 | 0.592 | 0.71  | 1 Proliferating_lung |
| GLOD4              | 8.62E-05   | 0.39605963 | 0.137 | 0.255 | 1 Proliferating_lung |
| NUDT5              | 9.18E-05   | 0.28737166 | 0.163 | 0.289 | 1 Proliferating_lung |
| SRPRA              | 9.35E-05   | 0.39619754 | 0.154 | 0.277 | 1 Proliferating_lung |
| RPL22L1            | 9.61E-05   | 0.54216235 | 0.783 | 0.823 | 1 Proliferating_lung |
| SERPINB9           | 9.81E-05   | 1.44141446 | 0.38  | 0.38  | 1 Proliferating_lung |
| THOC7              | 0.00010184 | 0.12194961 | 0.249 | 0.427 | 1 Proliferating_lung |
| MKKS               | 0.00010763 | 0.24276402 | 0.174 | 0.307 | 1 Proliferating_lung |
| TENT5C             | 0.00010824 | 0.9977945  | 0.497 | 0.537 | 1 Proliferating_lung |
| BUB3               | 0.00011073 | 0.15405523 | 0.328 | 0.545 | 1 Proliferating_lung |
| EIF2S1             | 0.00011649 | 0.14346258 | 0.21  | 0.365 | 1 Proliferating_lung |
| H1-5               | 0.0001229  | 1.23991072 | 0.414 | 0.399 | 1 Proliferating_lung |
| MED10              | 0.00012533 | 0.48221733 | 0.156 | 0.286 | 1 Proliferating_lung |
| AK2                | 0.00012536 | 0.29453817 | 0.18  | 0.315 | 1 Proliferating_lung |
| COPS8              | 0.00012571 | 0.36595895 | 0.273 | 0.472 | 1 Proliferating_lung |
| CAP1               | 0.00012843 | 0.72347069 | 0.573 | 0.661 | 1 Proliferating_lung |
| REXO2              | 0.00013343 | 1.1734028  | 0.436 | 0.477 | 1 Proliferating_lung |
| CCDC25             | 0.00013517 | 0.45335864 | 0.18  | 0.317 | 1 Proliferating_lung |
| TBC1D10C           | 0.00013911 | 0.43902326 | 0.256 | 0.443 | 1 Proliferating_lung |

|             |            |            |       |       |                      |
|-------------|------------|------------|-------|-------|----------------------|
| PWP1        | 0.00014158 | 0.33036588 | 0.215 | 0.374 | 1 Proliferating_lung |
| CDC42       | 0.00014305 | 0.36055681 | 0.842 | 0.931 | 1 Proliferating_lung |
| SFT2D1      | 0.00014535 | 0.3807399  | 0.154 | 0.278 | 1 Proliferating_lung |
| ZNF483      | 0.00014651 | 0.54293982 | 0.623 | 0.725 | 1 Proliferating_lung |
| BROX        | 0.00014772 | 0.61901389 | 0.167 | 0.297 | 1 Proliferating_lung |
| RGS1        | 0.00016419 | 0.30870352 | 0.291 | 0.479 | 1 Proliferating_lung |
| CALM3       | 0.0001675  | 0.76029286 | 0.544 | 0.589 | 1 Proliferating_lung |
| NUP37       | 0.00017571 | 0.31252681 | 0.141 | 0.255 | 1 Proliferating_lung |
| YJEFN3      | 0.00018139 | 0.85740879 | 0.527 | 0.624 | 1 Proliferating_lung |
| PGM2        | 0.00018361 | 0.32983061 | 0.156 | 0.279 | 1 Proliferating_lung |
| STARD3NL    | 0.00019046 | 1.64701439 | 0.291 | 0.251 | 1 Proliferating_lung |
| CAPN1       | 0.00019191 | 0.61264235 | 0.148 | 0.265 | 1 Proliferating_lung |
| FUCA2       | 0.00019636 | 0.32152102 | 0.167 | 0.295 | 1 Proliferating_lung |
| ERCC1       | 0.000198   | 1.57057975 | 0.295 | 0.269 | 1 Proliferating_lung |
| UFD1        | 0.00019868 | 0.31671626 | 0.256 | 0.43  | 1 Proliferating_lung |
| BOLA3       | 0.0002012  | 1.53917193 | 0.354 | 0.355 | 1 Proliferating_lung |
| EEF1E1      | 0.00020732 | 0.20374377 | 0.312 | 0.509 | 1 Proliferating_lung |
| AP3S1       | 0.00021197 | 0.2784942  | 0.215 | 0.368 | 1 Proliferating_lung |
| TAF7        | 0.00021546 | 0.1889236  | 0.306 | 0.506 | 1 Proliferating_lung |
| INO80C      | 0.00021701 | 0.38124101 | 0.221 | 0.382 | 1 Proliferating_lung |
| DTYMK       | 0.00022113 | 1.18508447 | 0.416 | 0.445 | 1 Proliferating_lung |
| MYDGF       | 0.00022594 | 0.317476   | 0.312 | 0.533 | 1 Proliferating_lung |
| C14H11orf58 | 0.00022973 | 0.96300257 | 0.471 | 0.526 | 1 Proliferating_lung |
| BTF3        | 0.00024693 | 0.34393654 | 0.711 | 0.769 | 1 Proliferating_lung |
| PDCD5       | 0.00025641 | 0.94282954 | 0.482 | 0.553 | 1 Proliferating_lung |
| EEF1B2      | 0.00026024 | 0.23776276 | 0.885 | 0.878 | 1 Proliferating_lung |
| FAM204A     | 0.00026419 | 0.28072176 | 0.249 | 0.417 | 1 Proliferating_lung |
| FAM162A     | 0.00026875 | 0.38611262 | 0.165 | 0.289 | 1 Proliferating_lung |
| PPP1R18     | 0.00028373 | 1.59895523 | 0.323 | 0.308 | 1 Proliferating_lung |
| SSBP1       | 0.0002874  | 0.9396624  | 0.462 | 0.527 | 1 Proliferating_lung |
| TMX1        | 0.00029479 | 0.2716194  | 0.193 | 0.327 | 1 Proliferating_lung |
| CD3D        | 0.00029778 | 0.16512674 | 0.453 | 0.7   | 1 Proliferating_lung |
| HNRNPH3     | 0.00029853 | 0.14690354 | 0.49  | 0.792 | 1 Proliferating_lung |

|                     |            |            |       |       |                      |
|---------------------|------------|------------|-------|-------|----------------------|
| IRF9                | 0.00031394 | 0.44777274 | 0.156 | 0.272 | 1 Proliferating_lung |
| CLNS1A              | 0.00032719 | 0.31091567 | 0.269 | 0.452 | 1 Proliferating_lung |
| SYTL2               | 0.00033222 | 0.43461584 | 0.221 | 0.363 | 1 Proliferating_lung |
| MRPS18A             | 0.00033812 | 0.46028834 | 0.189 | 0.326 | 1 Proliferating_lung |
| SHISA5              | 0.00035148 | 0.98662487 | 0.475 | 0.541 | 1 Proliferating_lung |
| NR4A2               | 0.00039027 | 0.94390118 | 0.453 | 0.464 | 1 Proliferating_lung |
| CCDC82              | 0.00039383 | 0.36732792 | 0.312 | 0.52  | 1 Proliferating_lung |
| ITGB3BP             | 0.00040202 | 0.95516977 | 0.453 | 0.487 | 1 Proliferating_lung |
| CDC42SE1            | 0.00040422 | 0.49014994 | 0.232 | 0.396 | 1 Proliferating_lung |
| RBM7                | 0.00041301 | 0.41960887 | 0.165 | 0.287 | 1 Proliferating_lung |
| CCDC28A             | 0.00043543 | 0.45166671 | 0.154 | 0.267 | 1 Proliferating_lung |
| ENSMMUG00000016278  | 0.00043581 | 0.33835918 | 0.293 | 0.488 | 1 Proliferating_lung |
| SNRNP27             | 0.00044405 | 0.48553104 | 0.217 | 0.369 | 1 Proliferating_lung |
| SCAND1              | 0.00045046 | 0.43155202 | 0.143 | 0.253 | 1 Proliferating_lung |
| CRTAM               | 0.00045573 | 0.99449536 | 0.284 | 0.227 | 1 Proliferating_lung |
| PPP1R7              | 0.00047211 | 0.4280652  | 0.217 | 0.369 | 1 Proliferating_lung |
| DDT                 | 0.0004772  | 0.20883074 | 0.306 | 0.49  | 1 Proliferating_lung |
| SMARCE1             | 0.00048523 | 0.13407972 | 0.319 | 0.512 | 1 Proliferating_lung |
| ENSMMUG00000018740  | 0.00051019 | 1.11288631 | 0.445 | 0.497 | 1 Proliferating_lung |
| SAMM50              | 0.00051266 | 0.39975879 | 0.18  | 0.306 | 1 Proliferating_lung |
| ENSMMUG000000061128 | 0.00053832 | 0.59038183 | 0.575 | 0.671 | 1 Proliferating_lung |
| ENSMMUG000000061298 | 0.00055388 | 0.45815855 | 0.2   | 0.335 | 1 Proliferating_lung |
| POC5                | 0.00055479 | 0.3530977  | 0.332 | 0.544 | 1 Proliferating_lung |
| GPSM3               | 0.00056284 | 0.78256628 | 0.516 | 0.607 | 1 Proliferating_lung |
| DDIT4               | 0.0005653  | 1.42280692 | 0.252 | 0.214 | 1 Proliferating_lung |
| RAD51C              | 0.00056547 | 0.39054288 | 0.18  | 0.306 | 1 Proliferating_lung |
| SYF2                | 0.00056741 | 0.84014064 | 0.542 | 0.643 | 1 Proliferating_lung |
| ANXA5               | 0.00057532 | 1.23761008 | 0.362 | 0.358 | 1 Proliferating_lung |
| DERL2               | 0.00058635 | 0.39672027 | 0.219 | 0.368 | 1 Proliferating_lung |
| RHOG                | 0.00059157 | 1.34575769 | 0.362 | 0.374 | 1 Proliferating_lung |
| PFDN2               | 0.00060255 | 0.6923996  | 0.531 | 0.638 | 1 Proliferating_lung |
| UBA7                | 0.00061471 | 0.32687801 | 0.152 | 0.261 | 1 Proliferating_lung |
| SEC11C              | 0.00063057 | 1.16317661 | 0.364 | 0.377 | 1 Proliferating_lung |

|                    |            |            |       |       |                      |
|--------------------|------------|------------|-------|-------|----------------------|
| ENSMMUG00000044329 | 0.00063297 | 0.29606672 | 0.176 | 0.3   | 1 Proliferating_lung |
| EMC7               | 0.0006358  | 0.35386022 | 0.247 | 0.413 | 1 Proliferating_lung |
| ENSMMUG00000017097 | 0.00064634 | 1.01173532 | 0.445 | 0.505 | 1 Proliferating_lung |
| SLC39A7            | 0.00064844 | 0.68303437 | 0.178 | 0.303 | 1 Proliferating_lung |
| WDR1               | 0.00066058 | 0.30942964 | 0.28  | 0.46  | 1 Proliferating_lung |
| UBE2V2             | 0.00066082 | 0.16463047 | 0.256 | 0.42  | 1 Proliferating_lung |
| TBCC               | 0.00066522 | 0.44789065 | 0.232 | 0.389 | 1 Proliferating_lung |
| GNPDA2             | 0.00072105 | 0.29239589 | 0.163 | 0.274 | 1 Proliferating_lung |
| FAM32A             | 0.00072331 | 1.57418367 | 0.284 | 0.26  | 1 Proliferating_lung |
| FCRL6              | 0.00072448 | 0.30986028 | 0.171 | 0.284 | 1 Proliferating_lung |
| NUB1               | 0.00073952 | 0.41084484 | 0.187 | 0.314 | 1 Proliferating_lung |
| DIABLO             | 0.00075999 | 0.48361642 | 0.293 | 0.487 | 1 Proliferating_lung |
| MRPL21             | 0.00077371 | 0.5545621  | 0.213 | 0.358 | 1 Proliferating_lung |
| VASP               | 0.00078262 | 0.30700927 | 0.267 | 0.438 | 1 Proliferating_lung |
| GRK6               | 0.00080553 | 0.53815277 | 0.174 | 0.293 | 1 Proliferating_lung |
| ENSMMUG00000055457 | 0.00083387 | 0.16920885 | 0.351 | 0.568 | 1 Proliferating_lung |
| S100A6             | 0.00084991 | 1.6651643  | 0.508 | 0.572 | 1 Proliferating_lung |
| LMAN2              | 0.00086691 | 0.28227748 | 0.297 | 0.481 | 1 Proliferating_lung |
| TSR2               | 0.00086822 | 0.46273364 | 0.178 | 0.301 | 1 Proliferating_lung |
| ENSMMUG00000029987 | 0.00089184 | 0.4536962  | 0.215 | 0.362 | 1 Proliferating_lung |
| ZCCHC10            | 0.00089303 | 0.43426862 | 0.206 | 0.344 | 1 Proliferating_lung |
| MLF2               | 0.00090917 | 0.35945729 | 0.189 | 0.315 | 1 Proliferating_lung |
| RBBP8              | 0.00091263 | 0.36806782 | 0.18  | 0.296 | 1 Proliferating_lung |
| POLR3H             | 0.00099173 | 0.59013245 | 0.165 | 0.281 | 1 Proliferating_lung |
| MPC1               | 0.00099384 | 1.37283437 | 0.373 | 0.396 | 1 Proliferating_lung |
| TES                | 0.00107515 | 0.42829414 | 0.232 | 0.383 | 1 Proliferating_lung |
| PTBP1              | 0.00107544 | 0.33382867 | 0.325 | 0.526 | 1 Proliferating_lung |
| UQCRB              | 0.00114492 | 0.19602112 | 0.373 | 0.585 | 1 Proliferating_lung |
| ARHGAP32           | 0.00116042 | 0.61235731 | 0.189 | 0.315 | 1 Proliferating_lung |
| NDUFV3             | 0.00116968 | 1.41345761 | 0.325 | 0.321 | 1 Proliferating_lung |
| MTIF3              | 0.00118038 | 0.73428547 | 0.18  | 0.303 | 1 Proliferating_lung |
| RECQL              | 0.00120411 | 0.46327911 | 0.195 | 0.321 | 1 Proliferating_lung |
| DGUOK              | 0.00124651 | 0.51325113 | 0.223 | 0.368 | 1 Proliferating_lung |



|                     |            |            |       |       |                      |
|---------------------|------------|------------|-------|-------|----------------------|
| IGFLR1              | 0.00136703 | 0.44302163 | 0.178 | 0.294 | 1 Proliferating_lung |
| PTPA                | 0.00137503 | 0.52433236 | 0.176 | 0.291 | 1 Proliferating_lung |
| PDHA1               | 0.00141407 | 0.36952927 | 0.152 | 0.256 | 1 Proliferating_lung |
| UPF3A               | 0.00146221 | 0.44483915 | 0.154 | 0.256 | 1 Proliferating_lung |
| ITGAE               | 0.00154713 | 0.46217509 | 0.28  | 0.456 | 1 Proliferating_lung |
| SAMHD1              | 0.00163388 | 0.81926014 | 0.384 | 0.363 | 1 Proliferating_lung |
| MRPL9               | 0.00170221 | 0.34311132 | 0.202 | 0.332 | 1 Proliferating_lung |
| GNG10               | 0.00181612 | 0.39514633 | 0.152 | 0.25  | 1 Proliferating_lung |
| EFHD2               | 0.00183285 | 0.95888269 | 0.306 | 0.281 | 1 Proliferating_lung |
| MLH3                | 0.00183826 | 1.24400436 | 0.39  | 0.43  | 1 Proliferating_lung |
| HERPUD1             | 0.00184232 | 0.38398813 | 0.28  | 0.446 | 1 Proliferating_lung |
| NDUFB5              | 0.0019731  | 1.00999665 | 0.416 | 0.472 | 1 Proliferating_lung |
| NFU1                | 0.00198477 | 0.6093866  | 0.167 | 0.278 | 1 Proliferating_lung |
| TMEM147             | 0.00200664 | 0.44180829 | 0.267 | 0.435 | 1 Proliferating_lung |
| HSD17B11            | 0.00207898 | 0.54232882 | 0.202 | 0.327 | 1 Proliferating_lung |
| CCT8                | 0.00216971 | 0.15706197 | 0.384 | 0.605 | 1 Proliferating_lung |
| SIKE1               | 0.00221369 | 0.66141035 | 0.165 | 0.276 | 1 Proliferating_lung |
| CPD                 | 0.00226723 | 0.43633973 | 0.163 | 0.26  | 1 Proliferating_lung |
| ENSMMUG00000017231  | 0.00227945 | 1.16599714 | 0.349 | 0.369 | 1 Proliferating_lung |
| ZBTB8OS             | 0.00232115 | 0.36060219 | 0.189 | 0.306 | 1 Proliferating_lung |
| STXBP2              | 0.00238274 | 1.25818908 | 0.299 | 0.289 | 1 Proliferating_lung |
| ENSMMUG00000015208  | 0.00241063 | 0.15041347 | 0.338 | 0.539 | 1 Proliferating_lung |
| ENSMMUG00000007536  | 0.00242061 | 0.81893437 | 0.449 | 0.499 | 1 Proliferating_lung |
| ENSMMUG000000055026 | 0.00245463 | 0.68059584 | 0.534 | 0.61  | 1 Proliferating_lung |
| CDKN3               | 0.00257169 | 1.16835211 | 0.317 | 0.297 | 1 Proliferating_lung |
| PHF19               | 0.00264121 | 0.74405216 | 0.239 | 0.384 | 1 Proliferating_lung |
| SLC25A3             | 0.00267142 | 0.55658405 | 0.59  | 0.717 | 1 Proliferating_lung |
| STX3.1              | 0.0026764  | 0.41854402 | 0.176 | 0.285 | 1 Proliferating_lung |
| CHMP2A              | 0.00274974 | 1.08548049 | 0.369 | 0.393 | 1 Proliferating_lung |
| CFAP20              | 0.00276517 | 0.53431018 | 0.158 | 0.259 | 1 Proliferating_lung |
| MITD1               | 0.00278455 | 1.46796511 | 0.312 | 0.311 | 1 Proliferating_lung |
| RNF103              | 0.00280184 | 0.35387384 | 0.31  | 0.489 | 1 Proliferating_lung |
| DDOST               | 0.00284079 | 0.24574132 | 0.39  | 0.627 | 1 Proliferating_lung |

|                    |            |            |       |       |                      |
|--------------------|------------|------------|-------|-------|----------------------|
| CDCA8              | 0.0030431  | 0.32982032 | 0.217 | 0.341 | 1 Proliferating_lung |
| CD2                | 0.00314193 | 0.32014479 | 0.343 | 0.541 | 1 Proliferating_lung |
| NOSIP              | 0.00318434 | 0.66217361 | 0.23  | 0.375 | 1 Proliferating_lung |
| UQCC2              | 0.00331823 | 1.31093872 | 0.356 | 0.379 | 1 Proliferating_lung |
| PSMA4              | 0.00332076 | 0.72560933 | 0.516 | 0.608 | 1 Proliferating_lung |
| CUL7               | 0.00332994 | 0.60607147 | 0.184 | 0.301 | 1 Proliferating_lung |
| RBBP4              | 0.00333697 | 0.82832323 | 0.516 | 0.649 | 1 Proliferating_lung |
| TUBB2B             | 0.00335943 | 1.27429892 | 0.384 | 0.398 | 1 Proliferating_lung |
| RPLP2              | 0.00337647 | 0.17243614 | 0.952 | 0.905 | 1 Proliferating_lung |
| TRAPPC4            | 0.00353484 | 1.08783029 | 0.388 | 0.425 | 1 Proliferating_lung |
| ENSMMUG00000059961 | 0.00359806 | 0.57263125 | 0.158 | 0.258 | 1 Proliferating_lung |
| SUMO3              | 0.00360451 | 0.40396354 | 0.245 | 0.394 | 1 Proliferating_lung |
| EIF2S2             | 0.0036293  | 0.59210749 | 0.59  | 0.709 | 1 Proliferating_lung |
| GIN51              | 0.00364665 | 0.3224111  | 0.232 | 0.366 | 1 Proliferating_lung |
| TMEM18             | 0.00378069 | 0.53891222 | 0.158 | 0.255 | 1 Proliferating_lung |
| ENSMMUG00000005880 | 0.00379248 | 0.28039669 | 0.377 | 0.595 | 1 Proliferating_lung |
| PDCD10             | 0.00387237 | 0.85580888 | 0.482 | 0.59  | 1 Proliferating_lung |
| PTPN22             | 0.0038834  | 0.61487348 | 0.495 | 0.518 | 1 Proliferating_lung |
| UBE2V1             | 0.00396308 | 0.36268563 | 0.388 | 0.616 | 1 Proliferating_lung |
| NAA20              | 0.00400486 | 0.70001962 | 0.239 | 0.386 | 1 Proliferating_lung |
| ATP5F1B            | 0.00401634 | 0.27227897 | 0.31  | 0.485 | 1 Proliferating_lung |
| DNAJA2             | 0.00413414 | 0.36537874 | 0.267 | 0.421 | 1 Proliferating_lung |
| EXOC3              | 0.00415671 | 0.54752355 | 0.195 | 0.313 | 1 Proliferating_lung |
| ARL6IP6            | 0.00419291 | 0.46182403 | 0.245 | 0.386 | 1 Proliferating_lung |
| BUD31              | 0.00420128 | 1.1046799  | 0.423 | 0.5   | 1 Proliferating_lung |
| CASP12             | 0.00435928 | 0.41444758 | 0.293 | 0.468 | 1 Proliferating_lung |
| ADH5               | 0.00437006 | 0.60199502 | 0.187 | 0.302 | 1 Proliferating_lung |
| SUCLG1             | 0.00454236 | 0.33535311 | 0.336 | 0.542 | 1 Proliferating_lung |
| ENSMMUG00000055825 | 0.00455928 | 0.5233876  | 0.245 | 0.385 | 1 Proliferating_lung |
| FTH1               | 0.00461648 | 0.60426005 | 0.681 | 0.792 | 1 Proliferating_lung |
| SMC2               | 0.00463014 | 0.16346781 | 0.464 | 0.678 | 1 Proliferating_lung |
| CD81               | 0.00467873 | 1.24956911 | 0.358 | 0.382 | 1 Proliferating_lung |
| TTC1               | 0.00480051 | 0.34750645 | 0.23  | 0.365 | 1 Proliferating_lung |

|                    |            |            |       |       |                      |
|--------------------|------------|------------|-------|-------|----------------------|
| JTB                | 0.00480242 | 0.39474496 | 0.289 | 0.458 | 1 Proliferating_lung |
| TBCB               | 0.00500729 | 0.59083815 | 0.182 | 0.294 | 1 Proliferating_lung |
| SKIL               | 0.00502005 | 0.58025287 | 0.184 | 0.295 | 1 Proliferating_lung |
| DDA1               | 0.0051374  | 0.40904061 | 0.197 | 0.311 | 1 Proliferating_lung |
| TMEM243            | 0.00530182 | 0.25413582 | 0.341 | 0.538 | 1 Proliferating_lung |
| SUPT16H            | 0.0053535  | 0.19800115 | 0.44  | 0.652 | 1 Proliferating_lung |
| SLA                | 0.00535382 | 0.5069907  | 0.193 | 0.297 | 1 Proliferating_lung |
| DNAJC15            | 0.005435   | 0.37149634 | 0.308 | 0.482 | 1 Proliferating_lung |
| CDKN2AIPNL         | 0.00550517 | 0.6747749  | 0.163 | 0.26  | 1 Proliferating_lung |
| EIF4E2             | 0.00551007 | 1.16392559 | 0.39  | 0.445 | 1 Proliferating_lung |
| ENSMMUG00000038373 | 0.00560684 | 0.47395995 | 0.64  | 0.757 | 1 Proliferating_lung |
| PTPN6              | 0.00579846 | 1.55694591 | 0.31  | 0.314 | 1 Proliferating_lung |
| PARVG              | 0.00580183 | 0.50450583 | 0.215 | 0.339 | 1 Proliferating_lung |
| TAF11              | 0.00602804 | 0.64690511 | 0.202 | 0.325 | 1 Proliferating_lung |
| MOB2               | 0.00627748 | 0.25913004 | 0.343 | 0.532 | 1 Proliferating_lung |
| CAPG               | 0.00631255 | 0.95713129 | 0.484 | 0.58  | 1 Proliferating_lung |
| PFDN1              | 0.00642042 | 0.24868275 | 0.345 | 0.541 | 1 Proliferating_lung |
| APIP               | 0.00648492 | 0.53940498 | 0.241 | 0.382 | 1 Proliferating_lung |
| ERBB3              | 0.00653966 | 0.56460308 | 0.59  | 0.698 | 1 Proliferating_lung |
| SPN                | 0.00656978 | 0.78261967 | 0.161 | 0.256 | 1 Proliferating_lung |
| GRK2               | 0.00664231 | 0.49342233 | 0.191 | 0.3   | 1 Proliferating_lung |
| MAZ                | 0.0066672  | 0.52867909 | 0.28  | 0.446 | 1 Proliferating_lung |
| NUDC               | 0.00673123 | 0.62278753 | 0.553 | 0.668 | 1 Proliferating_lung |
| BCAS2              | 0.00673547 | 0.28503691 | 0.351 | 0.55  | 1 Proliferating_lung |
| HADHA              | 0.00685258 | 0.49668409 | 0.249 | 0.391 | 1 Proliferating_lung |
| AHNAK              | 0.00687869 | 0.98772478 | 0.28  | 0.252 | 1 Proliferating_lung |
| AIMP1              | 0.00689093 | 0.76384915 | 0.488 | 0.59  | 1 Proliferating_lung |
| CDC37              | 0.00713474 | 0.42729068 | 0.33  | 0.519 | 1 Proliferating_lung |
| ENSMMUG00000000249 | 0.00729471 | 0.74999133 | 0.193 | 0.311 | 1 Proliferating_lung |
| SMNDC1             | 0.00742414 | 0.38159431 | 0.369 | 0.57  | 1 Proliferating_lung |
| CENPU              | 0.00747856 | 0.32585953 | 0.33  | 0.503 | 1 Proliferating_lung |
| ENSMMUG00000013492 | 0.0074905  | 0.48876777 | 0.213 | 0.332 | 1 Proliferating_lung |
| APH1A              | 0.00763005 | 0.61660061 | 0.171 | 0.271 | 1 Proliferating_lung |

|                   |            |            |       |       |                      |
|-------------------|------------|------------|-------|-------|----------------------|
| HNRNPK            | 0.00767879 | 0.33308924 | 0.753 | 0.87  | 1 Proliferating_lung |
| ESF1              | 0.00801619 | 0.50026868 | 0.286 | 0.44  | 1 Proliferating_lung |
| SNU13             | 0.00810158 | 0.42263236 | 0.62  | 0.75  | 1 Proliferating_lung |
| AKR1B1            | 0.00820508 | 0.43653761 | 0.206 | 0.321 | 1 Proliferating_lung |
| INIP              | 0.00823086 | 0.79344303 | 0.178 | 0.282 | 1 Proliferating_lung |
| MAD2L1            | 0.00823787 | 1.05914042 | 0.395 | 0.443 | 1 Proliferating_lung |
| GIMAP7            | 0.00834452 | 0.70921372 | 0.497 | 0.572 | 1 Proliferating_lung |
| OARD1             | 0.00859762 | 0.53502365 | 0.206 | 0.322 | 1 Proliferating_lung |
| CCT7              | 0.00861319 | 0.36958745 | 0.312 | 0.492 | 1 Proliferating_lung |
| PRDX5             | 0.00869473 | 1.00554921 | 0.412 | 0.471 | 1 Proliferating_lung |
| AKR1A1            | 0.00915211 | 1.02627109 | 0.401 | 0.461 | 1 Proliferating_lung |
| FBXO10            | 0.00916578 | 1.01559652 | 0.373 | 0.406 | 1 Proliferating_lung |
| VPS29             | 0.00918044 | 1.06453185 | 0.358 | 0.392 | 1 Proliferating_lung |
| RHOF              | 0.00942922 | 1.32951474 | 0.291 | 0.291 | 1 Proliferating_lung |
| RNF167            | 0.00985552 | 1.17075717 | 0.36  | 0.396 | 1 Proliferating_lung |
| ENSMUG00000012525 | 0.00997521 | 0.80104046 | 0.471 | 0.572 | 1 Proliferating_lung |
| ITGB1             | 0.01032041 | 0.77673899 | 0.438 | 0.479 | 1 Proliferating_lung |
| FAM133B           | 0.0104354  | 0.28242994 | 0.384 | 0.584 | 1 Proliferating_lung |
| TPRKB             | 0.01051126 | 1.23470065 | 0.321 | 0.335 | 1 Proliferating_lung |
| PVRIG             | 0.01055656 | 0.55421968 | 0.197 | 0.305 | 1 Proliferating_lung |
| EIF4A3            | 0.01056779 | 0.70922516 | 0.479 | 0.573 | 1 Proliferating_lung |
| COMMD4            | 0.01072782 | 1.21869396 | 0.343 | 0.371 | 1 Proliferating_lung |
| MRPL40            | 0.01125348 | 1.3032678  | 0.299 | 0.308 | 1 Proliferating_lung |
| PPP1CA            | 0.01135813 | 0.31954027 | 0.421 | 0.649 | 1 Proliferating_lung |
| MYO1E             | 0.01147316 | 0.40957318 | 0.291 | 0.246 | 1 Proliferating_lung |
| ICAM2             | 0.01163762 | 0.5474844  | 0.174 | 0.267 | 1 Proliferating_lung |
| CCDC115           | 0.01169747 | 0.58370907 | 0.189 | 0.292 | 1 Proliferating_lung |
| SSR3              | 0.01170131 | 0.88473035 | 0.425 | 0.508 | 1 Proliferating_lung |
| POLR3GL           | 0.01175923 | 0.53182124 | 0.258 | 0.398 | 1 Proliferating_lung |
| TXNIP             | 0.01191026 | 0.2393428  | 0.449 | 0.662 | 1 Proliferating_lung |
| GZMM              | 0.01196871 | 0.76642391 | 0.323 | 0.299 | 1 Proliferating_lung |
| ARL2              | 0.01214194 | 1.08466131 | 0.369 | 0.41  | 1 Proliferating_lung |
| ECHS1             | 0.01221077 | 0.63830132 | 0.241 | 0.375 | 1 Proliferating_lung |

|                    |            |            |       |       |                      |
|--------------------|------------|------------|-------|-------|----------------------|
| ENSMMUG00000041517 | 0.01246276 | 0.4304348  | 0.176 | 0.267 | 1 Proliferating_lung |
| ID3                | 0.01263711 | 0.58411493 | 0.221 | 0.322 | 1 Proliferating_lung |
| RBM38              | 0.01277899 | 0.72355749 | 0.18  | 0.278 | 1 Proliferating_lung |
| DSTN               | 0.01296606 | 0.76822034 | 0.43  | 0.499 | 1 Proliferating_lung |
| ENSMMUG00000040870 | 0.01318766 | 1.095662   | 0.325 | 0.336 | 1 Proliferating_lung |
| BCL10              | 0.01414093 | 0.75844676 | 0.165 | 0.256 | 1 Proliferating_lung |
| CENPK              | 0.01414875 | 0.44577252 | 0.332 | 0.511 | 1 Proliferating_lung |
| MAMU-DRA           | 0.01420639 | 0.23558955 | 0.206 | 0.285 | 1 Proliferating_lung |
| IL12RB2            | 0.01433566 | 0.94323618 | 0.265 | 0.227 | 1 Proliferating_lung |
| IL2RG              | 0.01438818 | 0.54135756 | 0.573 | 0.697 | 1 Proliferating_lung |
| ARPC5L             | 0.01442856 | 1.20861613 | 0.354 | 0.388 | 1 Proliferating_lung |
| SLC3A2             | 0.01479122 | 0.54468406 | 0.258 | 0.394 | 1 Proliferating_lung |
| H1-4               | 0.0152259  | 0.76357595 | 0.549 | 0.637 | 1 Proliferating_lung |
| SYTL3              | 0.01608422 | 0.67214824 | 0.57  | 0.669 | 1 Proliferating_lung |
| ENSMMUG00000052601 | 0.01647629 | 0.54332196 | 0.18  | 0.274 | 1 Proliferating_lung |
| CCNA2              | 0.01653769 | 0.46505715 | 0.241 | 0.356 | 1 Proliferating_lung |
| ATG12              | 0.01676238 | 0.63660421 | 0.514 | 0.647 | 1 Proliferating_lung |
| NRBF2              | 0.01682063 | 0.6546597  | 0.169 | 0.256 | 1 Proliferating_lung |
| DPM2               | 0.01754627 | 1.41079401 | 0.284 | 0.289 | 1 Proliferating_lung |
| NFE2L2             | 0.01784038 | 0.76762458 | 0.184 | 0.28  | 1 Proliferating_lung |
| TUBA1C             | 0.01840392 | 0.51981634 | 0.245 | 0.363 | 1 Proliferating_lung |
| TMBIM4             | 0.01883461 | 0.7878293  | 0.462 | 0.553 | 1 Proliferating_lung |
| TEX30              | 0.01884577 | 1.33329376 | 0.293 | 0.304 | 1 Proliferating_lung |
| PDLIM2             | 0.01905563 | 0.56688301 | 0.262 | 0.399 | 1 Proliferating_lung |
| PSMB5              | 0.01948683 | 0.46677249 | 0.165 | 0.25  | 1 Proliferating_lung |
| ADARB2             | 0.0197256  | 0.44939857 | 0.223 | 0.337 | 1 Proliferating_lung |
| SEC14L2            | 0.01973577 | 0.57169967 | 0.241 | 0.365 | 1 Proliferating_lung |
| LIMD2              | 0.02032954 | 0.68361705 | 0.547 | 0.688 | 1 Proliferating_lung |
| SOD2               | 0.02034593 | 1.46762237 | 0.191 | 0.291 | 1 Proliferating_lung |
| GDI2               | 0.02040195 | 0.17562662 | 0.41  | 0.609 | 1 Proliferating_lung |
| FLNA               | 0.02042874 | 0.58079475 | 0.373 | 0.579 | 1 Proliferating_lung |
| SIVA1              | 0.02046915 | 0.79968745 | 0.451 | 0.546 | 1 Proliferating_lung |
| NAPA               | 0.02110765 | 0.50660129 | 0.243 | 0.371 | 1 Proliferating_lung |

|                    |            |            |       |       |                      |
|--------------------|------------|------------|-------|-------|----------------------|
| CWC15              | 0.02164487 | 0.66405168 | 0.516 | 0.653 | 1 Proliferating_lung |
| SERBP1             | 0.02170149 | 0.28440154 | 0.679 | 0.817 | 1 Proliferating_lung |
| ENSMMUG00000060287 | 0.02173502 | 0.28400683 | 0.844 | 0.92  | 1 Proliferating_lung |
| DMAC1              | 0.02176323 | 0.68883942 | 0.182 | 0.274 | 1 Proliferating_lung |
| ENSMMUG00000049295 | 0.02192351 | 0.72086307 | 0.189 | 0.289 | 1 Proliferating_lung |
| GPR183             | 0.02224753 | 1.54902302 | 0.408 | 0.474 | 1 Proliferating_lung |
| MRPL57             | 0.02294789 | 0.86531546 | 0.43  | 0.5   | 1 Proliferating_lung |
| C3H7orf50          | 0.0232597  | 0.61398667 | 0.534 | 0.686 | 1 Proliferating_lung |
| C11H12orf57        | 0.02336154 | 0.54908807 | 0.56  | 0.689 | 1 Proliferating_lung |
| MIC1               | 0.02350997 | 0.6199266  | 0.557 | 0.691 | 1 Proliferating_lung |
| IFNAR2             | 0.02371836 | 0.53501281 | 0.521 | 0.612 | 1 Proliferating_lung |
| NDUFAF3            | 0.02422128 | 1.35570008 | 0.289 | 0.302 | 1 Proliferating_lung |
| FLYWCH2            | 0.0242666  | 0.57606151 | 0.167 | 0.25  | 1 Proliferating_lung |
| RFC4               | 0.02433222 | 0.64632816 | 0.265 | 0.399 | 1 Proliferating_lung |
| NTAN1              | 0.02434713 | 0.63120647 | 0.273 | 0.415 | 1 Proliferating_lung |
| TMCO1              | 0.02462415 | 0.36586034 | 0.315 | 0.477 | 1 Proliferating_lung |
| NFYB               | 0.02499847 | 1.46832784 | 0.262 | 0.264 | 1 Proliferating_lung |
| UBE2N              | 0.02525175 | 0.35371666 | 0.403 | 0.623 | 1 Proliferating_lung |
| TAF9               | 0.02673436 | 0.46860612 | 0.347 | 0.527 | 1 Proliferating_lung |
| DYNC1I2            | 0.02683153 | 0.58728888 | 0.258 | 0.386 | 1 Proliferating_lung |
| DTD1               | 0.02693351 | 1.00401154 | 0.349 | 0.385 | 1 Proliferating_lung |
| POLR2D             | 0.02709462 | 0.61690037 | 0.267 | 0.408 | 1 Proliferating_lung |
| CYBA               | 0.02789    | 0.74942343 | 0.505 | 0.644 | 1 Proliferating_lung |
| RNASE6             | 0.02835258 | 0.67418446 | 0.176 | 0.26  | 1 Proliferating_lung |
| APBB2              | 0.0284398  | 0.74632295 | 0.182 | 0.265 | 1 Proliferating_lung |
| KIF22              | 0.02845334 | 0.49223922 | 0.304 | 0.453 | 1 Proliferating_lung |
| SEPTIN7            | 0.02880392 | 0.27103559 | 0.809 | 0.916 | 1 Proliferating_lung |
| NANS               | 0.03067132 | 0.53020581 | 0.202 | 0.3   | 1 Proliferating_lung |
| HNRNPA1            | 0.03087472 | 0.38013926 | 0.675 | 0.813 | 1 Proliferating_lung |
| GABARAPL1          | 0.03159649 | 0.74881324 | 0.169 | 0.252 | 1 Proliferating_lung |
| HIGD2A             | 0.03274209 | 0.54854497 | 0.243 | 0.363 | 1 Proliferating_lung |
| ENSMMUG00000009425 | 0.0327767  | 1.29611285 | 0.256 | 0.255 | 1 Proliferating_lung |
| STRAP              | 0.03304449 | 0.37534664 | 0.395 | 0.599 | 1 Proliferating_lung |

|                     |            |            |       |       |                      |
|---------------------|------------|------------|-------|-------|----------------------|
| CNBP                | 0.03322501 | 0.23285004 | 0.508 | 0.734 | 1 Proliferating_lung |
| PARPBP              | 0.03345599 | 0.54997869 | 0.202 | 0.294 | 1 Proliferating_lung |
| SKA2                | 0.03363944 | 0.46660868 | 0.262 | 0.385 | 1 Proliferating_lung |
| ITPA                | 0.03392234 | 0.64144629 | 0.204 | 0.301 | 1 Proliferating_lung |
| IRF2                | 0.03497659 | 0.43399776 | 0.323 | 0.483 | 1 Proliferating_lung |
| SREK1IP1            | 0.03562702 | 0.40888119 | 0.343 | 0.513 | 1 Proliferating_lung |
| RPS4Y2              | 0.03579589 | 0.85349883 | 0.347 | 0.365 | 1 Proliferating_lung |
| ENSMMUG000000045959 | 0.03596837 | 0.47340064 | 0.239 | 0.357 | 1 Proliferating_lung |
| EMP3                | 0.03644681 | 0.11444072 | 0.332 | 0.457 | 1 Proliferating_lung |
| UCHL5               | 0.03756168 | 0.63297483 | 0.219 | 0.325 | 1 Proliferating_lung |
| PSMC5               | 0.03793445 | 0.93345444 | 0.421 | 0.519 | 1 Proliferating_lung |
| OSBPL2              | 0.0383579  | 0.40418609 | 0.315 | 0.478 | 1 Proliferating_lung |
| COPS5               | 0.03859452 | 0.51711815 | 0.258 | 0.384 | 1 Proliferating_lung |
| GLO1                | 0.03862787 | 0.63302678 | 0.223 | 0.332 | 1 Proliferating_lung |
| IDH2                | 0.03985458 | 0.70868379 | 0.492 | 0.615 | 1 Proliferating_lung |
| CMTM6               | 0.0399156  | 0.34931936 | 0.384 | 0.569 | 1 Proliferating_lung |
| LAMTOR1             | 0.04023897 | 0.92871077 | 0.395 | 0.467 | 1 Proliferating_lung |
| PSMC4               | 0.04057039 | 0.59602693 | 0.28  | 0.421 | 1 Proliferating_lung |
| HYPK                | 0.04113997 | 0.80353192 | 0.451 | 0.549 | 1 Proliferating_lung |
| VDAC1               | 0.04127933 | 0.47705777 | 0.308 | 0.462 | 1 Proliferating_lung |
| ENSMMUG000000006499 | 0.04188673 | 0.41384503 | 0.38  | 0.569 | 1 Proliferating_lung |
| EIF3I               | 0.04198381 | 0.83565834 | 0.423 | 0.525 | 1 Proliferating_lung |
| MCM5                | 0.0427076  | 0.61519712 | 0.221 | 0.322 | 1 Proliferating_lung |
| WBP4                | 0.04285899 | 0.75322862 | 0.208 | 0.309 | 1 Proliferating_lung |
| PRMT1               | 0.0428659  | 0.54899368 | 0.315 | 0.483 | 1 Proliferating_lung |
| CIAO2A              | 0.04295519 | 1.09987434 | 0.345 | 0.399 | 1 Proliferating_lung |
| CENPS-CORT          | 0.04556339 | 1.20323479 | 0.323 | 0.36  | 1 Proliferating_lung |
| ENSMMUG000000038348 | 0.04607798 | 0.7551088  | 0.557 | 0.639 | 1 Proliferating_lung |
| PIH1D1              | 0.04636478 | 1.08779734 | 0.336 | 0.369 | 1 Proliferating_lung |
| METAP2              | 0.04664494 | 0.22626208 | 0.406 | 0.596 | 1 Proliferating_lung |
| POLR1D              | 0.04722874 | 0.59733749 | 0.499 | 0.619 | 1 Proliferating_lung |
| SMS                 | 0.04763381 | 0.4580278  | 0.293 | 0.43  | 1 Proliferating_lung |
| RBCK1               | 0.04838619 | 0.70921478 | 0.176 | 0.255 | 1 Proliferating_lung |

|                    |            |            |       |       |                      |
|--------------------|------------|------------|-------|-------|----------------------|
| ANAPC16            | 0.04845472 | 0.4949445  | 0.262 | 0.391 | 1 Proliferating_lung |
| MRPS36             | 0.04901177 | 1.25513432 | 0.304 | 0.332 | 1 Proliferating_lung |
| DLGAP5             | 0.04908495 | 0.76873137 | 0.403 | 0.428 | 1 Proliferating_lung |
| RER1               | 0.04968795 | 0.82489688 | 0.44  | 0.537 | 1 Proliferating_lung |
| POLR2G             | 0.05011386 | 0.46534219 | 0.302 | 0.448 | 1 Proliferating_lung |
| TOMM22             | 0.05021418 | 0.91551467 | 0.384 | 0.46  | 1 Proliferating_lung |
| NHP2               | 0.05039111 | 0.88127193 | 0.406 | 0.491 | 1 Proliferating_lung |
| NDUFS7             | 0.05057153 | 0.85265232 | 0.18  | 0.266 | 1 Proliferating_lung |
| ENSMMUG00000016009 | 0.05094365 | 0.28317503 | 0.369 | 0.527 | 1 Proliferating_lung |
| ENSMMUG00000063288 | 0.05176699 | 1.09988656 | 0.336 | 0.381 | 1 Proliferating_lung |
| PFDN4              | 0.05192698 | 0.60304293 | 0.28  | 0.425 | 1 Proliferating_lung |
| CLDND1             | 0.05326805 | 0.60503595 | 0.275 | 0.41  | 1 Proliferating_lung |
| C11H12orf45        | 0.05362663 | 0.87031442 | 0.408 | 0.485 | 1 Proliferating_lung |
| CTSC               | 0.05441679 | 0.88797491 | 0.304 | 0.309 | 1 Proliferating_lung |
| TPT1               | 0.05449556 | 0.10963447 | 0.976 | 0.962 | 1 Proliferating_lung |
| GSTM4              | 0.05541424 | 0.57646819 | 0.204 | 0.298 | 1 Proliferating_lung |
| PSMA7              | 0.05597811 | 0.2139694  | 0.744 | 0.807 | 1 Proliferating_lung |
| CARHSP1            | 0.05601703 | 0.9032503  | 0.445 | 0.545 | 1 Proliferating_lung |
| ESD                | 0.05669461 | 1.06829566 | 0.362 | 0.42  | 1 Proliferating_lung |
| HADHB              | 0.05710588 | 0.62216392 | 0.234 | 0.344 | 1 Proliferating_lung |
| CBX5               | 0.05801764 | 0.25602514 | 0.393 | 0.578 | 1 Proliferating_lung |
| RBMX               | 0.05879612 | 0.46326128 | 0.623 | 0.797 | 1 Proliferating_lung |
| POLE3              | 0.05962195 | 0.52462227 | 0.28  | 0.41  | 1 Proliferating_lung |
| ENSMMUG00000055748 | 0.06013247 | 0.87292614 | 0.18  | 0.265 | 1 Proliferating_lung |
| CCDC59             | 0.06077238 | 0.53291362 | 0.295 | 0.439 | 1 Proliferating_lung |
| CD48               | 0.06311292 | 1.19484873 | 0.297 | 0.317 | 1 Proliferating_lung |
| SDHAF2             | 0.06378286 | 0.75491874 | 0.193 | 0.279 | 1 Proliferating_lung |
| ENSMMUG00000012843 | 0.06573115 | 1.17198532 | 0.293 | 0.315 | 1 Proliferating_lung |
| MRPL20             | 0.06804525 | 0.88875984 | 0.36  | 0.407 | 1 Proliferating_lung |
| SKAP2              | 0.06847588 | 0.13084716 | 0.243 | 0.322 | 1 Proliferating_lung |
| TMEM59             | 0.07129258 | 0.6541929  | 0.521 | 0.66  | 1 Proliferating_lung |
| COX16              | 0.07199174 | 0.18985019 | 0.508 | 0.747 | 1 Proliferating_lung |
| SF3B4              | 0.07228768 | 0.76975667 | 0.206 | 0.297 | 1 Proliferating_lung |



|                    |            |            |       |       |                      |
|--------------------|------------|------------|-------|-------|----------------------|
| MRPL47             | 0.07338819 | 0.63292582 | 0.275 | 0.404 | 1 Proliferating_lung |
| FKBP8              | 0.07467249 | 1.42236995 | 0.295 | 0.327 | 1 Proliferating_lung |
| TWF2               | 0.07525721 | 1.03129508 | 0.351 | 0.406 | 1 Proliferating_lung |
| MRPL11             | 0.07680513 | 0.68911007 | 0.432 | 0.53  | 1 Proliferating_lung |
| FKBP1A             | 0.07688565 | 1.00934215 | 0.395 | 0.477 | 1 Proliferating_lung |
| HMGN4              | 0.07809124 | 1.19303058 | 0.345 | 0.404 | 1 Proliferating_lung |
| ENSMMUG00000029026 | 0.07823644 | 0.7603984  | 0.464 | 0.591 | 1 Proliferating_lung |
| UBE2I              | 0.07939644 | 0.58623684 | 0.508 | 0.662 | 1 Proliferating_lung |
| STARD7             | 0.07962323 | 0.54096744 | 0.226 | 0.32  | 1 Proliferating_lung |
| FNTB               | 0.08032848 | 0.36920193 | 0.399 | 0.586 | 1 Proliferating_lung |
| AMDHD1             | 0.08227085 | 0.36873587 | 0.584 | 0.73  | 1 Proliferating_lung |
| ENSMMUG00000043332 | 0.08235642 | 0.72297309 | 0.282 | 0.412 | 1 Proliferating_lung |
| SUPT4H1            | 0.08443383 | 1.01602787 | 0.347 | 0.394 | 1 Proliferating_lung |
| ZMAT2              | 0.08558773 | 0.55075342 | 0.28  | 0.41  | 1 Proliferating_lung |
| TAF12              | 0.08687399 | 0.74702556 | 0.206 | 0.294 | 1 Proliferating_lung |
| ENSMMUG00000063549 | 0.08706106 | 0.56254382 | 0.2   | 0.276 | 1 Proliferating_lung |
| PCBP1              | 0.08744142 | 0.17749359 | 0.54  | 0.735 | 1 Proliferating_lung |
| CSNK2B             | 0.08898929 | 0.9837608  | 0.412 | 0.52  | 1 Proliferating_lung |
| NDUFAB1            | 0.08935571 | 0.72075286 | 0.425 | 0.52  | 1 Proliferating_lung |
| NCAPG              | 0.0895221  | 0.39765079 | 0.293 | 0.402 | 1 Proliferating_lung |
| PDRG1              | 0.0904498  | 0.65748322 | 0.267 | 0.393 | 1 Proliferating_lung |
| CCDC167            | 0.09216002 | 1.03321856 | 0.328 | 0.374 | 1 Proliferating_lung |
| MRPS15             | 0.09290312 | 0.41395956 | 0.369 | 0.554 | 1 Proliferating_lung |
| PUF60              | 0.09331555 | 0.70425441 | 0.245 | 0.355 | 1 Proliferating_lung |
| COPZ1              | 0.09358437 | 1.05906642 | 0.306 | 0.342 | 1 Proliferating_lung |
| PRKAR1A            | 0.09474996 | 0.60237099 | 0.321 | 0.476 | 1 Proliferating_lung |
| ENSMMUG00000065089 | 0.09533891 | 0.55823451 | 0.373 | 0.544 | 1 Proliferating_lung |
| CBR1               | 0.09562246 | 0.7348752  | 0.184 | 0.26  | 1 Proliferating_lung |
| MESD               | 0.0958301  | 0.92412155 | 0.197 | 0.286 | 1 Proliferating_lung |
| MIDN               | 0.09586689 | 0.81713711 | 0.184 | 0.26  | 1 Proliferating_lung |
| LSM10              | 0.09699677 | 0.65657716 | 0.217 | 0.312 | 1 Proliferating_lung |
| ENSMMUG00000063198 | 0.09757516 | 0.81684184 | 0.189 | 0.267 | 1 Proliferating_lung |
| PSMB10             | 0.10345778 | 1.0477994  | 0.328 | 0.376 | 1 Proliferating_lung |

|                    |            |            |       |       |                      |
|--------------------|------------|------------|-------|-------|----------------------|
| NUF2               | 0.10386949 | 0.31717185 | 0.358 | 0.492 | 1 Proliferating_lung |
| TRNAU1AP           | 0.10705781 | 0.69374508 | 0.202 | 0.284 | 1 Proliferating_lung |
| MDH1               | 0.10733733 | 0.36829893 | 0.41  | 0.611 | 1 Proliferating_lung |
| ATP5MC1            | 0.10878778 | 1.25237503 | 0.271 | 0.294 | 1 Proliferating_lung |
| LMO4               | 0.10905742 | 0.69136393 | 0.204 | 0.285 | 1 Proliferating_lung |
| ERP29              | 0.11075358 | 0.88387893 | 0.397 | 0.479 | 1 Proliferating_lung |
| SLC38A2            | 0.11109842 | 0.49332033 | 0.388 | 0.57  | 1 Proliferating_lung |
| MED6               | 0.11439013 | 0.7117324  | 0.195 | 0.274 | 1 Proliferating_lung |
| NAXE               | 0.11465393 | 0.93004824 | 0.184 | 0.263 | 1 Proliferating_lung |
| IAH1               | 0.11495823 | 0.72189394 | 0.226 | 0.325 | 1 Proliferating_lung |
| POLD4              | 0.12019576 | 1.41305531 | 0.239 | 0.251 | 1 Proliferating_lung |
| PTGES3             | 0.12022506 | 0.19618453 | 0.729 | 0.868 | 1 Proliferating_lung |
| PGK1               | 0.12105935 | 0.41466396 | 0.538 | 0.664 | 1 Proliferating_lung |
| UBE2L3             | 0.12155495 | 0.36776232 | 0.425 | 0.641 | 1 Proliferating_lung |
| RAB8A              | 0.12317847 | 0.73781907 | 0.278 | 0.404 | 1 Proliferating_lung |
| FUNDC2             | 0.12764826 | 0.8447847  | 0.193 | 0.274 | 1 Proliferating_lung |
| TM9SF1             | 0.12862267 | 1.13360795 | 0.299 | 0.337 | 1 Proliferating_lung |
| STAT4              | 0.13221978 | 0.66153241 | 0.456 | 0.623 | 1 Proliferating_lung |
| VIM                | 0.13421189 | 0.23020196 | 0.497 | 0.678 | 1 Proliferating_lung |
| SMC3               | 0.1344332  | 0.2568275  | 0.51  | 0.712 | 1 Proliferating_lung |
| LZIC               | 0.13700618 | 0.72979884 | 0.249 | 0.354 | 1 Proliferating_lung |
| DDX39A             | 0.13817737 | 0.23197026 | 0.486 | 0.702 | 1 Proliferating_lung |
| ENSMMUG00000065104 | 0.14740616 | 0.60871872 | 0.475 | 0.592 | 1 Proliferating_lung |
| CHCHD1             | 0.14921908 | 0.9514595  | 0.356 | 0.425 | 1 Proliferating_lung |
| ANAPC13            | 0.14933159 | 0.94094814 | 0.373 | 0.457 | 1 Proliferating_lung |
| ZNF493             | 0.15062684 | 0.86986718 | 0.256 | 0.365 | 1 Proliferating_lung |
| RBBP7              | 0.15189005 | 0.52340705 | 0.393 | 0.587 | 1 Proliferating_lung |
| H1-3               | 0.15256931 | 0.15318471 | 0.54  | 0.667 | 1 Proliferating_lung |
| BCAP31             | 0.1535346  | 1.24706103 | 0.336 | 0.405 | 1 Proliferating_lung |
| SVBP               | 0.15585386 | 0.8056821  | 0.202 | 0.279 | 1 Proliferating_lung |
| RSL24D1            | 0.15603701 | 0.19246257 | 0.482 | 0.671 | 1 Proliferating_lung |
| BID                | 0.1582893  | 0.41796943 | 0.369 | 0.529 | 1 Proliferating_lung |
| CD53               | 0.16005912 | 0.18671568 | 0.477 | 0.661 | 1 Proliferating_lung |

|                     |            |            |       |       |                      |
|---------------------|------------|------------|-------|-------|----------------------|
| AP1S1               | 0.16156303 | 1.33964944 | 0.26  | 0.286 | 1 Proliferating_lung |
| SNRPB2              | 0.16338195 | 0.70884692 | 0.451 | 0.574 | 1 Proliferating_lung |
| EIF3L               | 0.16497788 | 0.25491269 | 0.531 | 0.773 | 1 Proliferating_lung |
| PPIA                | 0.16527478 | 0.76689442 | 0.414 | 0.505 | 1 Proliferating_lung |
| ATP5PO              | 0.16929184 | 0.30127705 | 0.664 | 0.811 | 1 Proliferating_lung |
| SCP2                | 0.16962293 | 0.3804688  | 0.393 | 0.558 | 1 Proliferating_lung |
| ENSMMUG000000032031 | 0.17024456 | 0.71068128 | 0.193 | 0.264 | 1 Proliferating_lung |
| FLII                | 0.17540485 | 0.71116516 | 0.245 | 0.342 | 1 Proliferating_lung |
| ENSMMUG000000002668 | 0.18086692 | 0.84239357 | 0.191 | 0.263 | 1 Proliferating_lung |
| ZC3H15              | 0.1823217  | 0.53568265 | 0.388 | 0.574 | 1 Proliferating_lung |
| SEPTIN2             | 0.18882591 | 0.88757202 | 0.401 | 0.501 | 1 Proliferating_lung |
| PSMA5               | 0.19018681 | 0.63643266 | 0.46  | 0.581 | 1 Proliferating_lung |
| TMEM50A             | 0.19037383 | 0.65365195 | 0.475 | 0.621 | 1 Proliferating_lung |
| TMEM59L             | 0.19046389 | 0.56120306 | 0.302 | 0.428 | 1 Proliferating_lung |
| PCMT1               | 0.19107369 | 0.68937656 | 0.297 | 0.42  | 1 Proliferating_lung |
| ENSMMUG000000059742 | 0.19440569 | 0.51531296 | 0.312 | 0.431 | 1 Proliferating_lung |
| LAP3                | 0.1956416  | 0.54802499 | 0.312 | 0.451 | 1 Proliferating_lung |
| GLRX3               | 0.19635574 | 0.58678583 | 0.358 | 0.519 | 1 Proliferating_lung |
| ZWINT               | 0.19953523 | 0.72539375 | 0.228 | 0.315 | 1 Proliferating_lung |
| REEP5               | 0.19972392 | 0.88222425 | 0.397 | 0.502 | 1 Proliferating_lung |
| CEP20               | 0.19996175 | 0.98645853 | 0.182 | 0.252 | 1 Proliferating_lung |
| HAX1                | 0.20593272 | 1.15758769 | 0.286 | 0.332 | 1 Proliferating_lung |
| ENSMMUG000000045425 | 0.20938883 | 0.61917905 | 0.349 | 0.506 | 1 Proliferating_lung |
| HMMR                | 0.20947099 | 0.54028917 | 0.241 | 0.316 | 1 Proliferating_lung |
| PSMD4               | 0.21197414 | 0.82565366 | 0.289 | 0.411 | 1 Proliferating_lung |
| DCPS                | 0.21203868 | 1.070292   | 0.256 | 0.281 | 1 Proliferating_lung |
| SEC62               | 0.21318391 | 0.61972971 | 0.466 | 0.617 | 1 Proliferating_lung |
| IK                  | 0.21461215 | 0.36189971 | 0.43  | 0.616 | 1 Proliferating_lung |
| LEPROTL1            | 0.21630044 | 0.94060359 | 0.347 | 0.421 | 1 Proliferating_lung |
| IL2RB               | 0.2194927  | 0.64352707 | 0.28  | 0.277 | 1 Proliferating_lung |
| RNASEH2C            | 0.21954327 | 0.62614375 | 0.44  | 0.54  | 1 Proliferating_lung |
| UBE2T               | 0.22015458 | 0.95742775 | 0.195 | 0.263 | 1 Proliferating_lung |
| TXN2                | 0.22046908 | 0.6468597  | 0.282 | 0.396 | 1 Proliferating_lung |

|                    |            |            |       |       |                      |
|--------------------|------------|------------|-------|-------|----------------------|
| SNF8               | 0.22235881 | 0.58877473 | 0.336 | 0.493 | 1 Proliferating_lung |
| POLE4              | 0.22407217 | 0.98730538 | 0.345 | 0.417 | 1 Proliferating_lung |
| C18H18orf32        | 0.2246388  | 0.12308755 | 0.931 | 0.899 | 1 Proliferating_lung |
| RWDD1              | 0.23056882 | 0.27055336 | 0.471 | 0.659 | 1 Proliferating_lung |
| EXOSC8             | 0.23076777 | 0.79368155 | 0.232 | 0.317 | 1 Proliferating_lung |
| GTF3C6             | 0.23418435 | 0.72475883 | 0.41  | 0.516 | 1 Proliferating_lung |
| PFDN6              | 0.23626929 | 0.82586265 | 0.369 | 0.456 | 1 Proliferating_lung |
| POLR2H             | 0.23651377 | 0.72729501 | 0.241 | 0.335 | 1 Proliferating_lung |
| EIF5B              | 0.24328522 | 0.56608763 | 0.364 | 0.51  | 1 Proliferating_lung |
| SNRPE              | 0.24368786 | 0.22013794 | 0.521 | 0.717 | 1 Proliferating_lung |
| ENSMMUG00000058389 | 0.24415726 | 0.82684424 | 0.269 | 0.381 | 1 Proliferating_lung |
| TM2D1              | 0.24673736 | 0.71521442 | 0.252 | 0.348 | 1 Proliferating_lung |
| SOD1               | 0.24743018 | 0.43115377 | 0.408 | 0.58  | 1 Proliferating_lung |
| MED31              | 0.24802553 | 1.00022917 | 0.208 | 0.286 | 1 Proliferating_lung |
| RFC2               | 0.25399141 | 1.15109457 | 0.252 | 0.277 | 1 Proliferating_lung |
| IRF3               | 0.25435733 | 0.9498209  | 0.356 | 0.442 | 1 Proliferating_lung |
| CCDC107            | 0.25701902 | 1.03000985 | 0.23  | 0.312 | 1 Proliferating_lung |
| MRPS25             | 0.25742153 | 0.85744444 | 0.358 | 0.435 | 1 Proliferating_lung |
| ACTN4              | 0.26115758 | 0.37246937 | 0.284 | 0.372 | 1 Proliferating_lung |
| CDK4               | 0.26788544 | 0.70849735 | 0.275 | 0.376 | 1 Proliferating_lung |
| ENSMMUG00000008097 | 0.27084281 | 0.67086443 | 0.295 | 0.419 | 1 Proliferating_lung |
| RPA2               | 0.2710537  | 1.06892621 | 0.297 | 0.348 | 1 Proliferating_lung |
| PDAP1              | 0.27220568 | 0.83158742 | 0.416 | 0.544 | 1 Proliferating_lung |
| RUNX3              | 0.27333393 | 0.90576609 | 0.364 | 0.436 | 1 Proliferating_lung |
| GIMAP4             | 0.27544595 | 1.00414306 | 0.245 | 0.26  | 1 Proliferating_lung |
| BUD23              | 0.27596222 | 0.40190575 | 0.388 | 0.554 | 1 Proliferating_lung |
| AIP                | 0.2760077  | 0.85405091 | 0.401 | 0.52  | 1 Proliferating_lung |
| NDUFS3             | 0.28206622 | 0.60434611 | 0.302 | 0.427 | 1 Proliferating_lung |
| TBC1D24            | 0.28759407 | 0.66339384 | 0.471 | 0.625 | 1 Proliferating_lung |
| UFC1               | 0.28997824 | 0.63405192 | 0.432 | 0.558 | 1 Proliferating_lung |
| WAS                | 0.29275457 | 0.72794207 | 0.341 | 0.495 | 1 Proliferating_lung |
| UFM1               | 0.29547146 | 1.32161902 | 0.256 | 0.288 | 1 Proliferating_lung |
| CYCS               | 0.29751998 | 0.6580398  | 0.43  | 0.56  | 1 Proliferating_lung |

|                   |            |            |       |       |                      |
|-------------------|------------|------------|-------|-------|----------------------|
| SLC25A10          | 0.30276526 | 0.97622279 | 0.293 | 0.334 | 1 Proliferating_lung |
| TXNL1             | 0.30527619 | 0.75995418 | 0.33  | 0.467 | 1 Proliferating_lung |
| XRCC6             | 0.30903624 | 0.11713691 | 0.605 | 0.817 | 1 Proliferating_lung |
| H2AZ2             | 0.31167915 | 0.10534816 | 0.822 | 0.893 | 1 Proliferating_lung |
| TIGAR             | 0.31283978 | 0.44096945 | 0.516 | 0.701 | 1 Proliferating_lung |
| RAMAC             | 0.31543833 | 1.11862007 | 0.332 | 0.417 | 1 Proliferating_lung |
| PIK3R1            | 0.31656664 | 0.82704417 | 0.36  | 0.511 | 1 Proliferating_lung |
| EIF4A1            | 0.31962234 | 0.5251316  | 0.479 | 0.607 | 1 Proliferating_lung |
| HNRNPA3           | 0.32062068 | 0.20585383 | 0.761 | 0.897 | 1 Proliferating_lung |
| PSMG1             | 0.32102792 | 0.88221753 | 0.208 | 0.281 | 1 Proliferating_lung |
| MRPL36            | 0.32722206 | 1.12850174 | 0.243 | 0.27  | 1 Proliferating_lung |
| H2AC20            | 0.33010725 | 0.56998112 | 0.423 | 0.555 | 1 Proliferating_lung |
| TIMM17A           | 0.33488135 | 0.84099888 | 0.334 | 0.411 | 1 Proliferating_lung |
| ENSMUG00000062026 | 0.33776422 | 1.09018525 | 0.256 | 0.291 | 1 Proliferating_lung |
| ENSMUG00000030465 | 0.33917221 | 0.48695822 | 0.453 | 0.574 | 1 Proliferating_lung |
| MRFAP1            | 0.34401118 | 0.72268289 | 0.336 | 0.479 | 1 Proliferating_lung |
| STX10             | 0.35245382 | 1.10486554 | 0.295 | 0.352 | 1 Proliferating_lung |
| MIF               | 0.35501292 | 0.55046538 | 0.531 | 0.701 | 1 Proliferating_lung |
| MRPS18C           | 0.35864546 | 1.12248071 | 0.31  | 0.377 | 1 Proliferating_lung |
| HIKESHI           | 0.36273574 | 0.63371971 | 0.332 | 0.47  | 1 Proliferating_lung |
| PSMD9             | 0.37042709 | 0.88700214 | 0.23  | 0.311 | 1 Proliferating_lung |
| RRM2              | 0.37046873 | 0.41341455 | 0.343 | 0.445 | 1 Proliferating_lung |
| IL10RA            | 0.37479509 | 1.30798714 | 0.245 | 0.28  | 1 Proliferating_lung |
| APMAP             | 0.37480639 | 0.8270251  | 0.243 | 0.33  | 1 Proliferating_lung |
| MRPL14            | 0.37573496 | 0.7133781  | 0.406 | 0.52  | 1 Proliferating_lung |
| TBC1D25           | 0.37717173 | 0.80653702 | 0.317 | 0.451 | 1 Proliferating_lung |
| NRBP1             | 0.38142686 | 1.09864888 | 0.228 | 0.25  | 1 Proliferating_lung |
| SDCBP             | 0.38171155 | 0.99523849 | 0.254 | 0.279 | 1 Proliferating_lung |
| MRPL13            | 0.38784112 | 0.78281566 | 0.373 | 0.471 | 1 Proliferating_lung |
| H3C2              | 0.38851635 | 0.87355792 | 0.267 | 0.294 | 1 Proliferating_lung |
| ABCF1             | 0.39057399 | 0.61743199 | 0.39  | 0.56  | 1 Proliferating_lung |
| PDZD11            | 0.39197915 | 0.98507266 | 0.2   | 0.262 | 1 Proliferating_lung |
| MCM7              | 0.39206839 | 0.7209394  | 0.395 | 0.493 | 1 Proliferating_lung |

|                    |            |            |       |       |                      |
|--------------------|------------|------------|-------|-------|----------------------|
| ENSMMUG00000017890 | 0.39286032 | 0.79865691 | 0.262 | 0.359 | 1 Proliferating_lung |
| MAGOHB             | 0.39411983 | 0.82042771 | 0.213 | 0.281 | 1 Proliferating_lung |
| ENSMMUG00000022769 | 0.3980283  | 0.25973369 | 0.657 | 0.851 | 1 Proliferating_lung |
| MPHOSPH6           | 0.40611533 | 0.84604222 | 0.247 | 0.328 | 1 Proliferating_lung |
| PLGRKT             | 0.40888486 | 0.80085136 | 0.371 | 0.471 | 1 Proliferating_lung |
| SNRPN              | 0.40931448 | 0.72997157 | 0.278 | 0.38  | 1 Proliferating_lung |
| MRPS14             | 0.41539429 | 0.6822942  | 0.265 | 0.356 | 1 Proliferating_lung |
| GMNN               | 0.41958793 | 1.09173211 | 0.28  | 0.327 | 1 Proliferating_lung |
| DHPS               | 0.41979022 | 1.25834401 | 0.226 | 0.253 | 1 Proliferating_lung |
| MRPL17             | 0.42387861 | 0.77408381 | 0.226 | 0.295 | 1 Proliferating_lung |
| ISG20              | 0.42947003 | 1.17643013 | 0.284 | 0.335 | 1 Proliferating_lung |
| MRPL35             | 0.43087759 | 0.91942752 | 0.193 | 0.25  | 1 Proliferating_lung |
| COMT               | 0.43468879 | 0.55168496 | 0.338 | 0.467 | 1 Proliferating_lung |
| HSP90B1            | 0.43712475 | 0.38453844 | 0.555 | 0.711 | 1 Proliferating_lung |
| SAT1               | 0.44425241 | 1.39789423 | 0.241 | 0.271 | 1 Proliferating_lung |
| ENSMMUG00000059017 | 0.44569281 | 0.27681433 | 0.501 | 0.679 | 1 Proliferating_lung |
| ST13               | 0.44658187 | 0.30722579 | 0.477 | 0.665 | 1 Proliferating_lung |
| DNAJC8             | 0.44907783 | 0.4662806  | 0.416 | 0.587 | 1 Proliferating_lung |
| ZNHIT3             | 0.44925753 | 0.7502941  | 0.302 | 0.413 | 1 Proliferating_lung |
| EIF1AX             | 0.46174412 | 0.627155   | 0.488 | 0.632 | 1 Proliferating_lung |
| PSMA3              | 0.48444422 | 0.57252884 | 0.469 | 0.636 | 1 Proliferating_lung |
| SPTSSA             | 0.48533057 | 0.64907562 | 0.223 | 0.282 | 1 Proliferating_lung |
| LAMTOR2            | 0.49428225 | 0.70999668 | 0.295 | 0.399 | 1 Proliferating_lung |
| DCTPP1             | 0.49619409 | 0.7769152  | 0.369 | 0.456 | 1 Proliferating_lung |
| PTRHD1             | 0.49899463 | 1.05616642 | 0.293 | 0.357 | 1 Proliferating_lung |
| C1D                | 0.50297264 | 0.56088691 | 0.338 | 0.457 | 1 Proliferating_lung |
| RPP21              | 0.50599503 | 0.94102508 | 0.275 | 0.328 | 1 Proliferating_lung |
| NCAPH2             | 0.50881677 | 0.8469887  | 0.213 | 0.272 | 1 Proliferating_lung |
| POC1A              | 0.50915147 | 0.80576192 | 0.2   | 0.251 | 1 Proliferating_lung |
| PLEKHJ1            | 0.51249907 | 0.86605207 | 0.215 | 0.276 | 1 Proliferating_lung |
| STK16              | 0.51698534 | 0.94190084 | 0.202 | 0.259 | 1 Proliferating_lung |
| HNRNPF             | 0.51745435 | 0.20670992 | 0.651 | 0.807 | 1 Proliferating_lung |
| TMEM126A           | 0.51823855 | 0.9981039  | 0.243 | 0.322 | 1 Proliferating_lung |

|                    |            |            |       |       |                      |
|--------------------|------------|------------|-------|-------|----------------------|
| GRPEL1             | 0.52404957 | 0.83479067 | 0.206 | 0.265 | 1 Proliferating_lung |
| POLR2F             | 0.5248883  | 0.8273465  | 0.328 | 0.412 | 1 Proliferating_lung |
| SMIM19             | 0.52544437 | 0.85009954 | 0.271 | 0.362 | 1 Proliferating_lung |
| CDKN2D             | 0.52573127 | 0.9590944  | 0.228 | 0.289 | 1 Proliferating_lung |
| TCEAL8             | 0.52624861 | 0.91906883 | 0.284 | 0.336 | 1 Proliferating_lung |
| POP5               | 0.52737672 | 1.11589816 | 0.252 | 0.296 | 1 Proliferating_lung |
| TMEM230            | 0.52755161 | 0.62135083 | 0.419 | 0.554 | 1 Proliferating_lung |
| ENSMMUG00000002324 | 0.5282381  | 0.55246579 | 0.462 | 0.619 | 1 Proliferating_lung |
| GSTK1              | 0.52989407 | 1.04206296 | 0.232 | 0.262 | 1 Proliferating_lung |
| HSPB11             | 0.52989896 | 0.92754363 | 0.2   | 0.252 | 1 Proliferating_lung |
| OSGEP              | 0.53327882 | 0.83459429 | 0.206 | 0.265 | 1 Proliferating_lung |
| SLC25A44           | 0.53396642 | 0.58770076 | 0.354 | 0.483 | 1 Proliferating_lung |
| ENSMMUG00000006075 | 0.5434667  | 0.99959735 | 0.206 | 0.265 | 1 Proliferating_lung |
| MED8               | 0.54657187 | 1.02203555 | 0.234 | 0.305 | 1 Proliferating_lung |
| NDUFS2             | 0.5512608  | 0.9228364  | 0.347 | 0.446 | 1 Proliferating_lung |
| EIF1B              | 0.55198019 | 0.79592536 | 0.395 | 0.519 | 1 Proliferating_lung |
| CHRA1              | 0.55898771 | 0.9864344  | 0.317 | 0.393 | 1 Proliferating_lung |
| CTSD               | 0.55941257 | 1.05954436 | 0.23  | 0.293 | 1 Proliferating_lung |
| ITGB1BP1           | 0.55979771 | 0.88549097 | 0.267 | 0.355 | 1 Proliferating_lung |
| CNIH4              | 0.56464156 | 0.8046371  | 0.341 | 0.421 | 1 Proliferating_lung |
| EIF1AY             | 0.56859282 | 0.96470224 | 0.245 | 0.276 | 1 Proliferating_lung |
| CXCR4              | 0.57476703 | 0.88384526 | 0.273 | 0.352 | 1 Proliferating_lung |
| GUK1               | 0.57530498 | 0.95185854 | 0.273 | 0.33  | 1 Proliferating_lung |
| ENSMMUG00000004539 | 0.57566291 | 0.5525792  | 0.419 | 0.573 | 1 Proliferating_lung |
| NDUFA5             | 0.57583384 | 0.64420105 | 0.332 | 0.454 | 1 Proliferating_lung |
| EIF3J              | 0.58527468 | 0.58953422 | 0.419 | 0.594 | 1 Proliferating_lung |
| POLD2              | 0.58902383 | 0.92094017 | 0.213 | 0.272 | 1 Proliferating_lung |
| PYHIN1             | 0.58941221 | 0.83671051 | 0.364 | 0.465 | 1 Proliferating_lung |
| NDUFV1             | 0.59428823 | 1.15202992 | 0.28  | 0.343 | 1 Proliferating_lung |
| HSPA8              | 0.60168323 | 0.16411398 | 0.768 | 0.872 | 1 Proliferating_lung |
| MDH2               | 0.6085315  | 0.77107339 | 0.388 | 0.51  | 1 Proliferating_lung |
| ITGB2              | 0.60887658 | 0.81680156 | 0.412 | 0.549 | 1 Proliferating_lung |
| CDK2AP2            | 0.61032085 | 0.86092209 | 0.297 | 0.36  | 1 Proliferating_lung |

|                     |            |            |       |       |                      |
|---------------------|------------|------------|-------|-------|----------------------|
| MCTS1               | 0.61915484 | 0.84772272 | 0.299 | 0.37  | 1 Proliferating_lung |
| ENSMMUG00000048973  | 0.62713901 | 0.98184886 | 0.221 | 0.288 | 1 Proliferating_lung |
| SELENOS             | 0.62913647 | 0.29528597 | 0.51  | 0.716 | 1 Proliferating_lung |
| TPX2                | 0.63244927 | 0.49236525 | 0.375 | 0.478 | 1 Proliferating_lung |
| MZT1                | 0.63347283 | 0.94908128 | 0.295 | 0.364 | 1 Proliferating_lung |
| PSMC3               | 0.63369977 | 0.968724   | 0.243 | 0.314 | 1 Proliferating_lung |
| GTF2A2              | 0.63640875 | 0.57993161 | 0.362 | 0.486 | 1 Proliferating_lung |
| RNF5                | 0.63651072 | 1.08254415 | 0.265 | 0.321 | 1 Proliferating_lung |
| ARF6                | 0.64372614 | 0.84971798 | 0.377 | 0.497 | 1 Proliferating_lung |
| PPIE                | 0.64884545 | 1.00156094 | 0.217 | 0.276 | 1 Proliferating_lung |
| ENSMMUG000000064692 | 0.65019143 | 0.13516433 | 0.705 | 0.787 | 1 Proliferating_lung |
| TMEM167A            | 0.65258839 | 0.92786527 | 0.291 | 0.383 | 1 Proliferating_lung |
| DCTN2               | 0.65734821 | 1.00731344 | 0.267 | 0.321 | 1 Proliferating_lung |
| RASGRP2             | 0.66035905 | 0.88537338 | 0.341 | 0.437 | 1 Proliferating_lung |
| AURKB               | 0.66113451 | 1.22894631 | 0.219 | 0.25  | 1 Proliferating_lung |
| GLIPR1L2            | 0.67541757 | 0.63736362 | 0.388 | 0.527 | 1 Proliferating_lung |
| POLR1H              | 0.67717531 | 0.7645251  | 0.336 | 0.457 | 1 Proliferating_lung |
| ENSMMUG000000015095 | 0.68347729 | 0.92943004 | 0.284 | 0.353 | 1 Proliferating_lung |
| ENSMMUG000000047496 | 0.68808856 | 1.00209241 | 0.236 | 0.302 | 1 Proliferating_lung |
| CD83                | 0.68867995 | 1.12949313 | 0.384 | 0.523 | 1 Proliferating_lung |
| ENSMMUG000000004522 | 0.68870455 | 0.9696172  | 0.306 | 0.383 | 1 Proliferating_lung |
| MED4                | 0.69177698 | 0.93388332 | 0.297 | 0.4   | 1 Proliferating_lung |
| ILK                 | 0.69295983 | 0.86150451 | 0.215 | 0.266 | 1 Proliferating_lung |
| INTS5               | 0.69371993 | 0.92431731 | 0.23  | 0.288 | 1 Proliferating_lung |
| MRPL22              | 0.69578049 | 0.85720994 | 0.306 | 0.416 | 1 Proliferating_lung |
| SRRM1               | 0.69830884 | 0.2679332  | 0.633 | 0.82  | 1 Proliferating_lung |
| ZNF331              | 0.70517825 | 1.0684017  | 0.239 | 0.278 | 1 Proliferating_lung |
| PNKD                | 0.70597821 | 1.13559729 | 0.269 | 0.332 | 1 Proliferating_lung |
| H1-2                | 0.72390402 | 0.71488226 | 0.499 | 0.649 | 1 Proliferating_lung |
| PHB2                | 0.72451273 | 0.89154228 | 0.26  | 0.333 | 1 Proliferating_lung |
| OPTN                | 0.72965246 | 1.0593637  | 0.234 | 0.296 | 1 Proliferating_lung |
| THYN1               | 0.73043964 | 0.68201688 | 0.306 | 0.405 | 1 Proliferating_lung |
| WASHC3              | 0.73697445 | 0.86980678 | 0.256 | 0.305 | 1 Proliferating_lung |



|                    |            |            |       |       |                      |
|--------------------|------------|------------|-------|-------|----------------------|
| ENSMMUG00000039765 | 0.74415317 | 1.00613417 | 0.217 | 0.252 | 1 Proliferating_lung |
| THOC6              | 0.74684259 | 1.01420492 | 0.202 | 0.25  | 1 Proliferating_lung |
| CD37               | 0.75503585 | 0.28838739 | 0.514 | 0.655 | 1 Proliferating_lung |
| ORC6               | 0.7671191  | 0.77120799 | 0.299 | 0.394 | 1 Proliferating_lung |
| LARP7              | 0.76855257 | 0.90177366 | 0.321 | 0.407 | 1 Proliferating_lung |
| SRSF5              | 0.77170316 | 0.18094653 | 0.668 | 0.837 | 1 Proliferating_lung |
| TYMS               | 0.77485303 | 0.59738203 | 0.325 | 0.387 | 1 Proliferating_lung |
| SNX17              | 0.77896307 | 0.97836686 | 0.223 | 0.28  | 1 Proliferating_lung |
| ARF5               | 0.78255229 | 0.64205451 | 0.408 | 0.573 | 1 Proliferating_lung |
| RAB37              | 0.79515067 | 1.03090266 | 0.234 | 0.291 | 1 Proliferating_lung |
| MRPL43             | 0.81700188 | 1.01681039 | 0.217 | 0.27  | 1 Proliferating_lung |
| PSMA6              | 0.82220226 | 0.65201359 | 0.39  | 0.528 | 1 Proliferating_lung |
| ANKRD39            | 0.83252995 | 1.00712236 | 0.228 | 0.288 | 1 Proliferating_lung |
| CHMP5              | 0.83644504 | 0.94082935 | 0.28  | 0.363 | 1 Proliferating_lung |
| NUCB2              | 0.84057528 | 0.55767353 | 0.423 | 0.572 | 1 Proliferating_lung |
| PSMA1              | 0.84083889 | 0.38016225 | 0.49  | 0.672 | 1 Proliferating_lung |
| UQCRC1             | 0.84260017 | 0.86249723 | 0.341 | 0.466 | 1 Proliferating_lung |
| ENSMMUG00000055627 | 0.85585681 | 0.22115001 | 0.601 | 0.75  | 1 Proliferating_lung |
| STAR               | 0.86599905 | 1.00492203 | 0.299 | 0.398 | 1 Proliferating_lung |
| MEAF6              | 0.86670267 | 1.03364968 | 0.275 | 0.358 | 1 Proliferating_lung |
| RAD51AP1           | 0.86726501 | 0.73397922 | 0.338 | 0.43  | 1 Proliferating_lung |
| HPRT1              | 0.86869046 | 0.77355812 | 0.354 | 0.476 | 1 Proliferating_lung |
| GHITM              | 0.86896531 | 0.57170583 | 0.434 | 0.59  | 1 Proliferating_lung |
| STOML2             | 0.86987734 | 0.74175402 | 0.358 | 0.475 | 1 Proliferating_lung |
| ENSMMUG00000042951 | 0.8725857  | 0.45456678 | 0.464 | 0.642 | 1 Proliferating_lung |
| PRDX1              | 0.87617686 | 0.56464472 | 0.421 | 0.549 | 1 Proliferating_lung |
| PMVK               | 0.87650606 | 1.07428443 | 0.239 | 0.302 | 1 Proliferating_lung |
| ENSMMUG00000006206 | 0.87860237 | 0.44780008 | 0.473 | 0.643 | 1 Proliferating_lung |
| RPS19BP1           | 0.87933576 | 0.71823693 | 0.317 | 0.413 | 1 Proliferating_lung |
| PSMD13             | 0.88373538 | 0.62547125 | 0.423 | 0.589 | 1 Proliferating_lung |
| NDUFA8             | 0.88464634 | 0.92445934 | 0.265 | 0.338 | 1 Proliferating_lung |
| HDAC1              | 0.88558254 | 0.52963448 | 0.447 | 0.615 | 1 Proliferating_lung |
| CD58               | 0.88745824 | 0.79831279 | 0.343 | 0.445 | 1 Proliferating_lung |

|                     |            |            |       |       |                      |
|---------------------|------------|------------|-------|-------|----------------------|
| JUND                | 0.88853624 | 0.43372383 | 0.592 | 0.769 | 1 Proliferating_lung |
| CALCOCO2            | 0.8933554  | 0.55571385 | 0.406 | 0.564 | 1 Proliferating_lung |
| PPP4C               | 0.89480764 | 0.8771084  | 0.367 | 0.499 | 1 Proliferating_lung |
| KDELRL1             | 0.90255933 | 0.81845613 | 0.321 | 0.42  | 1 Proliferating_lung |
| ENSMMUG000000059988 | 0.90652892 | 0.83811003 | 0.308 | 0.394 | 1 Proliferating_lung |
| ILF2                | 0.90790832 | 0.53368097 | 0.423 | 0.562 | 1 Proliferating_lung |
| CEMIP2              | 0.90857056 | 0.70610991 | 0.388 | 0.514 | 1 Proliferating_lung |
| EIF3G               | 0.92607687 | 0.68989195 | 0.377 | 0.508 | 1 Proliferating_lung |
| MAP1LC3B            | 0.92642388 | 0.68932261 | 0.384 | 0.523 | 1 Proliferating_lung |
| NMT1                | 0.92771621 | 0.88907865 | 0.358 | 0.482 | 1 Proliferating_lung |
| ENSMMUG000000019109 | 0.93332819 | 1.08154818 | 0.208 | 0.25  | 1 Proliferating_lung |
| ARFRP1              | 0.93772732 | 0.99997189 | 0.223 | 0.274 | 1 Proliferating_lung |
| C5H4orf27           | 0.94136512 | 0.74902368 | 0.328 | 0.417 | 1 Proliferating_lung |
| ERGIC3              | 0.94258888 | 1.09937901 | 0.234 | 0.292 | 1 Proliferating_lung |
| MFNG                | 0.94431256 | 0.79152193 | 0.343 | 0.461 | 1 Proliferating_lung |
| RNF7                | 0.9494694  | 0.76086344 | 0.356 | 0.482 | 1 Proliferating_lung |
| DDRKG1              | 0.95440458 | 0.99064434 | 0.239 | 0.289 | 1 Proliferating_lung |
| MRPS23              | 0.95600688 | 0.99973092 | 0.247 | 0.306 | 1 Proliferating_lung |
| GNAI2.1             | 0.95614344 | 0.59080072 | 0.434 | 0.582 | 1 Proliferating_lung |
| MED29               | 0.95751233 | 1.09579311 | 0.223 | 0.27  | 1 Proliferating_lung |
| HAT1                | 0.9608907  | 0.69861027 | 0.369 | 0.493 | 1 Proliferating_lung |
| RAD23A              | 0.96324159 | 0.8937009  | 0.328 | 0.427 | 1 Proliferating_lung |
| SEC11A              | 0.96431024 | 0.50821262 | 0.456 | 0.625 | 1 Proliferating_lung |
| COPS6               | 0.96438484 | 0.77492328 | 0.36  | 0.493 | 1 Proliferating_lung |
| GMPR2               | 0.96612458 | 1.05256518 | 0.215 | 0.26  | 1 Proliferating_lung |
| SPAG7               | 0.96900719 | 1.06104517 | 0.213 | 0.255 | 1 Proliferating_lung |
| SNX6                | 0.97885857 | 0.47242131 | 0.486 | 0.671 | 1 Proliferating_lung |
| RAB27A              | 0.98015387 | 0.77543867 | 0.267 | 0.318 | 1 Proliferating_lung |
| LCK                 | 0.98138346 | 0.39648062 | 0.531 | 0.716 | 1 Proliferating_lung |
| RPL37A              | 0.98205317 | 0.10660181 | 0.944 | 0.908 | 1 Proliferating_lung |
| POLR2E              | 0.98399229 | 1.13777463 | 0.252 | 0.317 | 1 Proliferating_lung |
| NAA10               | 0.99418055 | 0.97420337 | 0.215 | 0.257 | 1 Proliferating_lung |
| PHB                 | 0.99586852 | 0.83176024 | 0.308 | 0.39  | 1 Proliferating_lung |

|          |           |            |       |       |           |                     |
|----------|-----------|------------|-------|-------|-----------|---------------------|
| CAMK4    | 5.26E-112 | 1.98243407 | 0.907 | 0.425 | 1.86E-107 | Proliferating_UCBMC |
| HBE1     | 1.34E-102 | 3.15442137 | 0.641 | 0.132 | 4.74E-98  | Proliferating_UCBMC |
| PLCL1    | 1.24E-91  | 1.9805805  | 0.767 | 0.253 | 4.41E-87  | Proliferating_UCBMC |
| HBA      | 7.30E-83  | 2.63349478 | 0.7   | 0.206 | 2.59E-78  | Proliferating_UCBMC |
| EPB41    | 5.48E-77  | 1.37740198 | 0.912 | 0.552 | 1.94E-72  | Proliferating_UCBMC |
| MPP7     | 7.52E-74  | 1.91240302 | 0.784 | 0.346 | 2.66E-69  | Proliferating_UCBMC |
| IL7R     | 1.79E-73  | 1.42058456 | 0.85  | 0.374 | 6.35E-69  | Proliferating_UCBMC |
| PDE3B    | 1.91E-69  | 1.37257573 | 0.861 | 0.422 | 6.77E-65  | Proliferating_UCBMC |
| OSBPL9   | 2.14E-69  | 1.37310827 | 0.91  | 0.563 | 7.58E-65  | Proliferating_UCBMC |
| MXI1     | 4.39E-68  | 2.10660788 | 0.586 | 0.175 | 1.56E-63  | Proliferating_UCBMC |
| ABLM1    | 1.02E-65  | 1.29000568 | 0.907 | 0.543 | 3.61E-61  | Proliferating_UCBMC |
| CDC42SE2 | 6.41E-65  | 1.00797016 | 0.969 | 0.769 | 2.27E-60  | Proliferating_UCBMC |
| TANC1    | 2.47E-64  | 1.96069704 | 0.637 | 0.218 | 8.76E-60  | Proliferating_UCBMC |
| CHMP7    | 1.87E-63  | 2.04178046 | 0.612 | 0.206 | 6.63E-59  | Proliferating_UCBMC |
| ITGA6    | 4.53E-63  | 1.5201843  | 0.769 | 0.343 | 1.60E-58  | Proliferating_UCBMC |
| MAN2A1   | 3.66E-62  | 1.39163843 | 0.881 | 0.51  | 1.30E-57  | Proliferating_UCBMC |
| ESYT2    | 1.87E-61  | 1.22073432 | 0.885 | 0.495 | 6.61E-57  | Proliferating_UCBMC |
| FAM117B  | 1.96E-59  | 1.69061843 | 0.694 | 0.287 | 6.95E-55  | Proliferating_UCBMC |
| TM9SF3   | 1.97E-59  | 1.31487699 | 0.868 | 0.499 | 6.96E-55  | Proliferating_UCBMC |
| SPPL3    | 8.63E-59  | 1.37658886 | 0.841 | 0.458 | 3.06E-54  | Proliferating_UCBMC |
| PIK3CA   | 1.52E-58  | 1.79001944 | 0.694 | 0.302 | 5.39E-54  | Proliferating_UCBMC |
| LEF1     | 1.94E-58  | 1.23748105 | 0.872 | 0.433 | 6.86E-54  | Proliferating_UCBMC |
| ATG14    | 3.86E-58  | 1.89910345 | 0.559 | 0.184 | 1.37E-53  | Proliferating_UCBMC |
| USP3     | 5.79E-58  | 1.27703923 | 0.85  | 0.491 | 2.05E-53  | Proliferating_UCBMC |
| DNM3     | 6.85E-58  | 1.41594482 | 0.773 | 0.361 | 2.43E-53  | Proliferating_UCBMC |
| CREBRF   | 1.77E-57  | 1.31021378 | 0.813 | 0.409 | 6.27E-53  | Proliferating_UCBMC |
| CDC14A   | 1.87E-57  | 1.38624926 | 0.83  | 0.456 | 6.63E-53  | Proliferating_UCBMC |
| BRAF     | 5.79E-57  | 1.34601421 | 0.85  | 0.498 | 2.05E-52  | Proliferating_UCBMC |
| EPC1     | 2.53E-56  | 1.05875788 | 0.932 | 0.634 | 8.98E-52  | Proliferating_UCBMC |
| WRN      | 6.08E-56  | 1.27375606 | 0.837 | 0.474 | 2.16E-51  | Proliferating_UCBMC |
| CCSER2   | 8.08E-56  | 1.62320953 | 0.698 | 0.311 | 2.86E-51  | Proliferating_UCBMC |
| MBTD1    | 1.06E-55  | 1.46814377 | 0.747 | 0.356 | 3.75E-51  | Proliferating_UCBMC |
| ATG13    | 1.23E-55  | 1.55790365 | 0.678 | 0.296 | 4.37E-51  | Proliferating_UCBMC |

|                    |          |            |       |       |          |                     |
|--------------------|----------|------------|-------|-------|----------|---------------------|
| ENSMMUG00000061038 | 2.40E-55 | 1.83372194 | 0.601 | 0.225 | 8.50E-51 | Proliferating_UCBMC |
| FBXO33             | 1.06E-54 | 1.180291   | 0.837 | 0.45  | 3.76E-50 | Proliferating_UCBMC |
| FOXN3              | 4.84E-54 | 0.98935982 | 0.967 | 0.686 | 1.72E-49 | Proliferating_UCBMC |
| COG5               | 1.04E-52 | 1.18232337 | 0.861 | 0.507 | 3.67E-48 | Proliferating_UCBMC |
| ARHGEF7            | 2.54E-52 | 1.15733182 | 0.841 | 0.47  | 9.00E-48 | Proliferating_UCBMC |
| ZEB1               | 2.63E-52 | 1.19328732 | 0.877 | 0.555 | 9.31E-48 | Proliferating_UCBMC |
| GNG2               | 5.04E-52 | 0.93007487 | 0.941 | 0.639 | 1.79E-47 | Proliferating_UCBMC |
| ENSMMUG00000056654 | 5.85E-52 | 1.15780595 | 0.883 | 0.664 | 2.07E-47 | Proliferating_UCBMC |
| MARCHF3            | 1.05E-51 | 1.63620541 | 0.687 | 0.322 | 3.72E-47 | Proliferating_UCBMC |
| PTBP2              | 1.14E-51 | 1.22348005 | 0.83  | 0.482 | 4.06E-47 | Proliferating_UCBMC |
| CHD7               | 1.50E-51 | 1.45457957 | 0.72  | 0.333 | 5.33E-47 | Proliferating_UCBMC |
| ENSMMUG00000056331 | 2.56E-50 | 1.81973218 | 0.504 | 0.151 | 9.09E-46 | Proliferating_UCBMC |
| NDST3              | 6.36E-50 | 1.75343019 | 0.537 | 0.173 | 2.26E-45 | Proliferating_UCBMC |
| RICTOR             | 1.67E-49 | 1.15392059 | 0.839 | 0.497 | 5.93E-45 | Proliferating_UCBMC |
| NRIP1              | 3.02E-49 | 1.14428537 | 0.815 | 0.459 | 1.07E-44 | Proliferating_UCBMC |
| ADAMTS6            | 4.83E-49 | 1.93104012 | 0.493 | 0.153 | 1.71E-44 | Proliferating_UCBMC |
| CERS6              | 7.70E-49 | 1.1769268  | 0.817 | 0.454 | 2.73E-44 | Proliferating_UCBMC |
| PNISR              | 8.28E-49 | 0.97276241 | 0.921 | 0.647 | 2.93E-44 | Proliferating_UCBMC |
| G3BP2              | 1.29E-48 | 1.26120685 | 0.866 | 0.566 | 4.56E-44 | Proliferating_UCBMC |
| SSBP2              | 1.65E-48 | 1.09626166 | 0.907 | 0.583 | 5.86E-44 | Proliferating_UCBMC |
| BACH2              | 4.62E-48 | 0.81286604 | 0.855 | 0.465 | 1.64E-43 | Proliferating_UCBMC |
| USP15              | 8.94E-48 | 0.83054584 | 0.949 | 0.72  | 3.17E-43 | Proliferating_UCBMC |
| PUM1               | 4.41E-47 | 0.97362513 | 0.914 | 0.609 | 1.56E-42 | Proliferating_UCBMC |
| SELL               | 7.58E-47 | 1.20018892 | 0.7   | 0.33  | 2.69E-42 | Proliferating_UCBMC |
| AKT3               | 1.11E-46 | 1.09460839 | 0.839 | 0.48  | 3.92E-42 | Proliferating_UCBMC |
| RPL13A             | 1.70E-46 | 0.68141005 | 0.978 | 0.923 | 6.03E-42 | Proliferating_UCBMC |
| NCOA3              | 5.29E-46 | 0.85286623 | 0.916 | 0.6   | 1.88E-41 | Proliferating_UCBMC |
| YEATS2             | 5.65E-46 | 1.08880177 | 0.804 | 0.45  | 2.00E-41 | Proliferating_UCBMC |
| LMBRD1             | 6.10E-46 | 1.33208361 | 0.725 | 0.375 | 2.16E-41 | Proliferating_UCBMC |
| HIVEP1             | 6.58E-46 | 1.07906562 | 0.817 | 0.485 | 2.33E-41 | Proliferating_UCBMC |
| MAML3              | 1.64E-45 | 1.25712036 | 0.711 | 0.332 | 5.81E-41 | Proliferating_UCBMC |
| DUSP16             | 1.17E-44 | 1.65453748 | 0.513 | 0.182 | 4.15E-40 | Proliferating_UCBMC |
| TMEM123            | 1.20E-44 | 1.05055496 | 0.905 | 0.647 | 4.24E-40 | Proliferating_UCBMC |

|                    |          |            |       |       |          |                     |
|--------------------|----------|------------|-------|-------|----------|---------------------|
| RCAN3              | 1.41E-44 | 1.46978246 | 0.542 | 0.194 | 5.00E-40 | Proliferating_UCBMC |
| RASA2              | 1.46E-44 | 0.97779175 | 0.899 | 0.602 | 5.17E-40 | Proliferating_UCBMC |
| RPS14              | 1.83E-44 | 0.64271376 | 0.971 | 0.919 | 6.49E-40 | Proliferating_UCBMC |
| LMBR1              | 2.21E-44 | 1.5814569  | 0.595 | 0.256 | 7.83E-40 | Proliferating_UCBMC |
| TFDP2              | 3.85E-44 | 0.95110825 | 0.813 | 0.456 | 1.36E-39 | Proliferating_UCBMC |
| CELF1              | 4.46E-44 | 1.02766799 | 0.85  | 0.533 | 1.58E-39 | Proliferating_UCBMC |
| SATB1              | 5.13E-44 | 0.82676848 | 0.877 | 0.473 | 1.82E-39 | Proliferating_UCBMC |
| UBE2E1             | 9.76E-44 | 1.47674581 | 0.628 | 0.284 | 3.46E-39 | Proliferating_UCBMC |
| RANBP9             | 2.60E-43 | 1.12312729 | 0.773 | 0.429 | 9.22E-39 | Proliferating_UCBMC |
| STK38              | 3.20E-43 | 1.21125095 | 0.791 | 0.463 | 1.13E-38 | Proliferating_UCBMC |
| FOXP1              | 3.57E-43 | 0.98894076 | 0.848 | 0.509 | 1.26E-38 | Proliferating_UCBMC |
| TXNIP              | 4.65E-43 | 0.91754143 | 0.839 | 0.514 | 1.65E-38 | Proliferating_UCBMC |
| ABCG1              | 4.72E-43 | 1.58964156 | 0.562 | 0.233 | 1.67E-38 | Proliferating_UCBMC |
| MAPK8              | 5.82E-43 | 1.20111751 | 0.729 | 0.372 | 2.06E-38 | Proliferating_UCBMC |
| DYRK2              | 7.79E-43 | 1.49280267 | 0.608 | 0.268 | 2.76E-38 | Proliferating_UCBMC |
| CPEB1              | 1.04E-42 | 0.66163392 | 0.976 | 0.873 | 3.67E-38 | Proliferating_UCBMC |
| UTY                | 1.52E-42 | 1.37366093 | 0.581 | 0.23  | 5.39E-38 | Proliferating_UCBMC |
| SLC35A3            | 1.89E-42 | 1.12136277 | 0.756 | 0.423 | 6.69E-38 | Proliferating_UCBMC |
| RPS20              | 3.34E-42 | 0.72066367 | 0.967 | 0.893 | 1.18E-37 | Proliferating_UCBMC |
| COX3               | 1.19E-41 | 0.42514863 | 0.978 | 0.881 | 4.21E-37 | Proliferating_UCBMC |
| RASSF3             | 2.01E-41 | 1.10560989 | 0.74  | 0.387 | 7.12E-37 | Proliferating_UCBMC |
| ATF2               | 3.26E-41 | 1.23043053 | 0.705 | 0.367 | 1.16E-36 | Proliferating_UCBMC |
| TNRC6A             | 4.89E-41 | 1.13929352 | 0.784 | 0.475 | 1.73E-36 | Proliferating_UCBMC |
| RSRP1              | 4.92E-41 | 0.85339574 | 0.93  | 0.635 | 1.74E-36 | Proliferating_UCBMC |
| SSH2               | 4.92E-41 | 0.78650566 | 0.96  | 0.708 | 1.74E-36 | Proliferating_UCBMC |
| MARCHF6            | 5.30E-41 | 1.01251218 | 0.822 | 0.483 | 1.88E-36 | Proliferating_UCBMC |
| PPM1A              | 9.40E-41 | 1.47654573 | 0.575 | 0.252 | 3.33E-36 | Proliferating_UCBMC |
| ENSMMUG00000011580 | 1.30E-40 | 0.9603219  | 0.874 | 0.593 | 4.60E-36 | Proliferating_UCBMC |
| SNED1              | 2.04E-40 | 2.32378275 | 0.308 | 0.063 | 7.23E-36 | Proliferating_UCBMC |
| CERT1              | 3.69E-40 | 1.08462917 | 0.742 | 0.402 | 1.31E-35 | Proliferating_UCBMC |
| S1PR1              | 3.76E-40 | 1.73580784 | 0.496 | 0.189 | 1.33E-35 | Proliferating_UCBMC |
| MTMR14             | 5.43E-40 | 1.52803744 | 0.537 | 0.213 | 1.92E-35 | Proliferating_UCBMC |
| SMCHD1             | 5.69E-40 | 0.85269714 | 0.93  | 0.66  | 2.01E-35 | Proliferating_UCBMC |

|                    |          |            |       |       |          |                     |
|--------------------|----------|------------|-------|-------|----------|---------------------|
| SENP5              | 1.10E-39 | 1.15830911 | 0.736 | 0.412 | 3.89E-35 | Proliferating_UCBMC |
| ARHGAP12           | 2.20E-39 | 1.58055573 | 0.531 | 0.211 | 7.79E-35 | Proliferating_UCBMC |
| ENSMMUG00000006165 | 2.58E-39 | 0.73663655 | 0.956 | 0.716 | 9.15E-35 | Proliferating_UCBMC |
| PECAM1             | 2.76E-39 | 1.33267599 | 0.654 | 0.312 | 9.79E-35 | Proliferating_UCBMC |
| KLF7               | 3.11E-39 | 1.71686668 | 0.48  | 0.178 | 1.10E-34 | Proliferating_UCBMC |
| CTDSPL2            | 5.91E-39 | 1.03631459 | 0.793 | 0.477 | 2.09E-34 | Proliferating_UCBMC |
| GRAP               | 6.24E-39 | 1.4313024  | 0.548 | 0.232 | 2.21E-34 | Proliferating_UCBMC |
| NKIRAS1            | 1.00E-38 | 1.66832561 | 0.513 | 0.201 | 3.55E-34 | Proliferating_UCBMC |
| LSM14A             | 1.22E-38 | 0.91394254 | 0.852 | 0.541 | 4.34E-34 | Proliferating_UCBMC |
| RB1CC1             | 1.42E-38 | 1.21522978 | 0.626 | 0.296 | 5.04E-34 | Proliferating_UCBMC |
| AGTPBP1            | 1.49E-38 | 1.11106398 | 0.683 | 0.351 | 5.27E-34 | Proliferating_UCBMC |
| WDR48              | 2.28E-38 | 1.25879397 | 0.577 | 0.256 | 8.07E-34 | Proliferating_UCBMC |
| ADD3               | 2.88E-38 | 0.92416311 | 0.874 | 0.547 | 1.02E-33 | Proliferating_UCBMC |
| EXOC6B             | 4.03E-38 | 1.36733759 | 0.606 | 0.281 | 1.43E-33 | Proliferating_UCBMC |
| RGL1               | 5.51E-38 | 2.5925375  | 0.291 | 0.061 | 1.95E-33 | Proliferating_UCBMC |
| CYTIP              | 5.93E-38 | 0.97227348 | 0.833 | 0.51  | 2.10E-33 | Proliferating_UCBMC |
| ENSMMUG00000065175 | 8.33E-38 | 1.2289138  | 0.7   | 0.4   | 2.95E-33 | Proliferating_UCBMC |
| SCFD1              | 1.12E-37 | 1.085734   | 0.718 | 0.406 | 3.98E-33 | Proliferating_UCBMC |
| LDLRAD4            | 1.23E-37 | 1.21107445 | 0.665 | 0.348 | 4.35E-33 | Proliferating_UCBMC |
| DCP1A              | 1.46E-37 | 1.19919883 | 0.667 | 0.349 | 5.16E-33 | Proliferating_UCBMC |
| PDK1               | 1.49E-37 | 1.28329085 | 0.619 | 0.295 | 5.30E-33 | Proliferating_UCBMC |
| SETD7              | 1.70E-37 | 1.6242243  | 0.498 | 0.2   | 6.04E-33 | Proliferating_UCBMC |
| N4BP1              | 2.25E-37 | 1.42131441 | 0.553 | 0.25  | 7.97E-33 | Proliferating_UCBMC |
| EIF2AK2            | 2.33E-37 | 1.47419024 | 0.577 | 0.268 | 8.25E-33 | Proliferating_UCBMC |
| CASP3              | 2.39E-37 | 0.99112246 | 0.773 | 0.449 | 8.46E-33 | Proliferating_UCBMC |
| RAB2A              | 3.25E-37 | 0.95372788 | 0.837 | 0.564 | 1.15E-32 | Proliferating_UCBMC |
| GOLGA4             | 3.31E-37 | 0.96303237 | 0.817 | 0.514 | 1.17E-32 | Proliferating_UCBMC |
| CD6                | 4.33E-37 | 1.13754689 | 0.678 | 0.331 | 1.54E-32 | Proliferating_UCBMC |
| EDRF1              | 4.56E-37 | 1.49999383 | 0.504 | 0.206 | 1.61E-32 | Proliferating_UCBMC |
| OGT                | 5.40E-37 | 0.88626882 | 0.815 | 0.496 | 1.91E-32 | Proliferating_UCBMC |
| PIAS1              | 1.04E-36 | 0.95216736 | 0.85  | 0.562 | 3.69E-32 | Proliferating_UCBMC |
| GIT2               | 1.19E-36 | 1.0047923  | 0.731 | 0.435 | 4.21E-32 | Proliferating_UCBMC |
| AGO3               | 2.61E-36 | 1.11029689 | 0.753 | 0.434 | 9.23E-32 | Proliferating_UCBMC |

|                    |          |            |       |       |          |                     |
|--------------------|----------|------------|-------|-------|----------|---------------------|
| ENSMMUG00000063979 | 4.17E-36 | 1.47060642 | 0.535 | 0.232 | 1.48E-31 | Proliferating_UCBMC |
| ARHGEF3            | 4.33E-36 | 1.04293339 | 0.74  | 0.406 | 1.54E-31 | Proliferating_UCBMC |
| ATP10A             | 5.04E-36 | 0.8934038  | 0.762 | 0.415 | 1.79E-31 | Proliferating_UCBMC |
| RPL7               | 6.06E-36 | 0.66902636 | 0.945 | 0.813 | 2.15E-31 | Proliferating_UCBMC |
| KIRREL1            | 7.49E-36 | 2.22828208 | 0.308 | 0.074 | 2.66E-31 | Proliferating_UCBMC |
| CD28               | 1.67E-35 | 0.85866877 | 0.72  | 0.337 | 5.93E-31 | Proliferating_UCBMC |
| TNRC6B             | 2.00E-35 | 0.72482752 | 0.943 | 0.693 | 7.09E-31 | Proliferating_UCBMC |
| DHRS3              | 2.12E-35 | 1.99074359 | 0.372 | 0.113 | 7.51E-31 | Proliferating_UCBMC |
| MAML2              | 2.39E-35 | 0.70462191 | 0.907 | 0.591 | 8.48E-31 | Proliferating_UCBMC |
| ENSMMUG00000031367 | 5.22E-35 | 1.42874494 | 0.575 | 0.28  | 1.85E-30 | Proliferating_UCBMC |
| SECISBP2L          | 5.78E-35 | 1.39316236 | 0.537 | 0.244 | 2.05E-30 | Proliferating_UCBMC |
| BTAF1              | 6.26E-35 | 0.98646099 | 0.749 | 0.426 | 2.22E-30 | Proliferating_UCBMC |
| ENSMMUG00000028906 | 6.75E-35 | 0.99337863 | 0.747 | 0.431 | 2.39E-30 | Proliferating_UCBMC |
| CUL5               | 6.96E-35 | 1.0271066  | 0.789 | 0.507 | 2.47E-30 | Proliferating_UCBMC |
| RSF1               | 8.70E-35 | 0.91806218 | 0.822 | 0.535 | 3.08E-30 | Proliferating_UCBMC |
| DLG1               | 9.66E-35 | 0.81406935 | 0.877 | 0.568 | 3.42E-30 | Proliferating_UCBMC |
| CSNK1A1            | 1.04E-34 | 0.7688854  | 0.894 | 0.625 | 3.69E-30 | Proliferating_UCBMC |
| RPS3               | 1.20E-34 | 0.59863314 | 0.956 | 0.896 | 4.27E-30 | Proliferating_UCBMC |
| TMEM87A            | 1.43E-34 | 1.0305756  | 0.722 | 0.401 | 5.08E-30 | Proliferating_UCBMC |
| DENND5A            | 1.69E-34 | 1.19403134 | 0.643 | 0.342 | 6.00E-30 | Proliferating_UCBMC |
| VEZT               | 2.21E-34 | 1.30516416 | 0.537 | 0.235 | 7.82E-30 | Proliferating_UCBMC |
| PDZD8              | 2.52E-34 | 1.33464728 | 0.566 | 0.261 | 8.93E-30 | Proliferating_UCBMC |
| GPHN               | 3.20E-34 | 1.10800392 | 0.672 | 0.348 | 1.13E-29 | Proliferating_UCBMC |
| YIPF5              | 4.19E-34 | 1.6582202  | 0.5   | 0.223 | 1.48E-29 | Proliferating_UCBMC |
| PRKCI              | 4.98E-34 | 1.61895219 | 0.43  | 0.157 | 1.76E-29 | Proliferating_UCBMC |
| RPL23A             | 5.40E-34 | 0.58503971 | 0.982 | 0.927 | 1.91E-29 | Proliferating_UCBMC |
| DOCK10             | 5.68E-34 | 0.74586741 | 0.945 | 0.663 | 2.01E-29 | Proliferating_UCBMC |
| JMY                | 6.39E-34 | 0.85286318 | 0.7   | 0.376 | 2.27E-29 | Proliferating_UCBMC |
| RPS16              | 8.10E-34 | 0.5473007  | 0.971 | 0.916 | 2.87E-29 | Proliferating_UCBMC |
| EIF2AK3            | 9.75E-34 | 0.90682113 | 0.789 | 0.436 | 3.45E-29 | Proliferating_UCBMC |
| PPP3CC             | 1.53E-33 | 0.87783989 | 0.813 | 0.495 | 5.41E-29 | Proliferating_UCBMC |
| CUL3               | 1.63E-33 | 0.85212531 | 0.828 | 0.54  | 5.78E-29 | Proliferating_UCBMC |
| SLC25A26           | 2.12E-33 | 1.1385013  | 0.617 | 0.312 | 7.52E-29 | Proliferating_UCBMC |

|         |          |            |       |       |          |                     |
|---------|----------|------------|-------|-------|----------|---------------------|
| ICOS    | 2.50E-33 | 1.31376135 | 0.641 | 0.318 | 8.85E-29 | Proliferating_UCBMC |
| UTRN    | 2.99E-33 | 0.61105745 | 0.954 | 0.691 | 1.06E-28 | Proliferating_UCBMC |
| SIPA1L2 | 3.24E-33 | 1.36166774 | 0.416 | 0.141 | 1.15E-28 | Proliferating_UCBMC |
| PRKD3   | 3.37E-33 | 1.04302174 | 0.703 | 0.396 | 1.20E-28 | Proliferating_UCBMC |
| MARCHF7 | 5.13E-33 | 0.88565704 | 0.784 | 0.49  | 1.82E-28 | Proliferating_UCBMC |
| DIP2B   | 7.49E-33 | 0.8263805  | 0.863 | 0.564 | 2.65E-28 | Proliferating_UCBMC |
| CTNNB1  | 8.17E-33 | 0.81713311 | 0.793 | 0.509 | 2.89E-28 | Proliferating_UCBMC |
| TBC1D15 | 8.74E-33 | 1.15683963 | 0.659 | 0.37  | 3.10E-28 | Proliferating_UCBMC |
| TSN     | 9.83E-33 | 1.11895618 | 0.617 | 0.322 | 3.48E-28 | Proliferating_UCBMC |
| FOXO1   | 9.88E-33 | 0.81185338 | 0.817 | 0.496 | 3.50E-28 | Proliferating_UCBMC |
| AFF1    | 1.34E-32 | 0.90729731 | 0.778 | 0.465 | 4.76E-28 | Proliferating_UCBMC |
| BSDC1   | 1.45E-32 | 1.26119665 | 0.555 | 0.266 | 5.15E-28 | Proliferating_UCBMC |
| ZNF827  | 1.49E-32 | 1.02282865 | 0.663 | 0.344 | 5.27E-28 | Proliferating_UCBMC |
| TLK1    | 2.02E-32 | 0.80787807 | 0.839 | 0.545 | 7.16E-28 | Proliferating_UCBMC |
| SS18    | 2.07E-32 | 1.00931909 | 0.744 | 0.44  | 7.33E-28 | Proliferating_UCBMC |
| SERINC1 | 2.24E-32 | 0.90971264 | 0.714 | 0.405 | 7.94E-28 | Proliferating_UCBMC |
| NR3C1   | 3.15E-32 | 0.80165337 | 0.863 | 0.591 | 1.12E-27 | Proliferating_UCBMC |
| THUMPD2 | 3.96E-32 | 1.27814291 | 0.581 | 0.286 | 1.40E-27 | Proliferating_UCBMC |
| TCF12   | 5.16E-32 | 0.73485021 | 0.945 | 0.654 | 1.83E-27 | Proliferating_UCBMC |
| PAG1    | 6.08E-32 | 0.80967141 | 0.826 | 0.523 | 2.15E-27 | Proliferating_UCBMC |
| PIK3R5  | 7.39E-32 | 0.70936707 | 0.676 | 0.357 | 2.62E-27 | Proliferating_UCBMC |
| MINDY3  | 8.69E-32 | 1.20047654 | 0.577 | 0.286 | 3.08E-27 | Proliferating_UCBMC |
| SFSWAP  | 9.50E-32 | 0.97592146 | 0.681 | 0.397 | 3.37E-27 | Proliferating_UCBMC |
| DDX5    | 9.56E-32 | 0.5479856  | 0.978 | 0.833 | 3.39E-27 | Proliferating_UCBMC |
| CCM2    | 1.22E-31 | 0.90179545 | 0.784 | 0.498 | 4.33E-27 | Proliferating_UCBMC |
| PREP    | 1.32E-31 | 0.93385382 | 0.665 | 0.349 | 4.68E-27 | Proliferating_UCBMC |
| PHC3    | 1.40E-31 | 0.96379631 | 0.665 | 0.356 | 4.97E-27 | Proliferating_UCBMC |
| EPC2    | 1.45E-31 | 1.10800364 | 0.703 | 0.41  | 5.13E-27 | Proliferating_UCBMC |
| RBMS2   | 1.54E-31 | 1.81899434 | 0.366 | 0.122 | 5.47E-27 | Proliferating_UCBMC |
| RBM33   | 1.56E-31 | 0.82866084 | 0.786 | 0.476 | 5.51E-27 | Proliferating_UCBMC |
| ZFAND6  | 1.85E-31 | 0.78215069 | 0.868 | 0.61  | 6.57E-27 | Proliferating_UCBMC |
| WDR7    | 2.65E-31 | 1.02294022 | 0.733 | 0.431 | 9.39E-27 | Proliferating_UCBMC |
| HERC1   | 3.00E-31 | 0.79894416 | 0.773 | 0.47  | 1.06E-26 | Proliferating_UCBMC |



|                   |          |            |       |       |          |                     |
|-------------------|----------|------------|-------|-------|----------|---------------------|
| ATP8A1            | 4.20E-31 | 0.73482827 | 0.762 | 0.46  | 1.49E-26 | Proliferating_UCBMC |
| RNF145            | 4.26E-31 | 0.96423388 | 0.733 | 0.435 | 1.51E-26 | Proliferating_UCBMC |
| CREBBP            | 4.49E-31 | 0.72553747 | 0.806 | 0.485 | 1.59E-26 | Proliferating_UCBMC |
| DDX6              | 4.89E-31 | 0.83139259 | 0.83  | 0.566 | 1.73E-26 | Proliferating_UCBMC |
| CNOT4             | 5.03E-31 | 0.85557011 | 0.78  | 0.508 | 1.78E-26 | Proliferating_UCBMC |
| PHF3              | 7.29E-31 | 1.01103377 | 0.731 | 0.442 | 2.58E-26 | Proliferating_UCBMC |
| MACO1             | 7.67E-31 | 1.06564198 | 0.65  | 0.356 | 2.72E-26 | Proliferating_UCBMC |
| LONP2             | 7.67E-31 | 0.90054064 | 0.707 | 0.402 | 2.72E-26 | Proliferating_UCBMC |
| MBNL1             | 7.94E-31 | 0.52625812 | 0.998 | 0.918 | 2.81E-26 | Proliferating_UCBMC |
| ZBTB20            | 9.97E-31 | 0.78978804 | 0.793 | 0.494 | 3.53E-26 | Proliferating_UCBMC |
| STAG1             | 1.16E-30 | 0.60164055 | 0.971 | 0.744 | 4.11E-26 | Proliferating_UCBMC |
| CD247             | 1.22E-30 | 0.43232943 | 0.899 | 0.57  | 4.31E-26 | Proliferating_UCBMC |
| RYBP              | 1.73E-30 | 1.34963261 | 0.54  | 0.264 | 6.12E-26 | Proliferating_UCBMC |
| GOLGA1            | 1.84E-30 | 0.94065469 | 0.824 | 0.58  | 6.51E-26 | Proliferating_UCBMC |
| MTREX             | 1.97E-30 | 0.70787179 | 0.857 | 0.58  | 6.97E-26 | Proliferating_UCBMC |
| JMJD1C            | 3.03E-30 | 0.62191219 | 0.963 | 0.704 | 1.07E-25 | Proliferating_UCBMC |
| RNF13             | 3.32E-30 | 0.94523783 | 0.672 | 0.371 | 1.18E-25 | Proliferating_UCBMC |
| SENP2             | 3.42E-30 | 0.98511841 | 0.639 | 0.332 | 1.21E-25 | Proliferating_UCBMC |
| MRPS35            | 3.47E-30 | 1.25193148 | 0.564 | 0.288 | 1.23E-25 | Proliferating_UCBMC |
| CYTH1             | 3.99E-30 | 0.83786634 | 0.773 | 0.465 | 1.41E-25 | Proliferating_UCBMC |
| THEMIS            | 4.76E-30 | 0.64409192 | 0.78  | 0.414 | 1.69E-25 | Proliferating_UCBMC |
| TBC1D23           | 4.85E-30 | 1.0378042  | 0.597 | 0.309 | 1.72E-25 | Proliferating_UCBMC |
| BCL2              | 6.60E-30 | 1.18818815 | 0.676 | 0.379 | 2.34E-25 | Proliferating_UCBMC |
| CCDC91            | 6.76E-30 | 0.91642959 | 0.767 | 0.497 | 2.39E-25 | Proliferating_UCBMC |
| ENSMUG00000014862 | 7.28E-30 | 1.03951908 | 0.729 | 0.462 | 2.58E-25 | Proliferating_UCBMC |
| RNF125            | 7.56E-30 | 1.52115648 | 0.407 | 0.149 | 2.68E-25 | Proliferating_UCBMC |
| STK38L            | 7.73E-30 | 1.32646431 | 0.441 | 0.177 | 2.74E-25 | Proliferating_UCBMC |
| RPL23             | 8.08E-30 | 0.52780122 | 0.967 | 0.885 | 2.86E-25 | Proliferating_UCBMC |
| CYLD              | 8.19E-30 | 0.97341705 | 0.718 | 0.447 | 2.90E-25 | Proliferating_UCBMC |
| SCMH1             | 8.52E-30 | 1.17546585 | 0.573 | 0.283 | 3.02E-25 | Proliferating_UCBMC |
| FYB1              | 9.05E-30 | 0.73657198 | 0.872 | 0.585 | 3.21E-25 | Proliferating_UCBMC |
| KANSL1            | 9.30E-30 | 0.72332615 | 0.874 | 0.565 | 3.30E-25 | Proliferating_UCBMC |
| SLMAP             | 1.14E-29 | 0.73899438 | 0.793 | 0.485 | 4.05E-25 | Proliferating_UCBMC |

|           |          |            |       |       |          |                     |
|-----------|----------|------------|-------|-------|----------|---------------------|
| ATP9B     | 1.28E-29 | 0.73463942 | 0.78  | 0.468 | 4.53E-25 | Proliferating_UCBMC |
| ZNF292    | 1.46E-29 | 0.71723238 | 0.87  | 0.619 | 5.16E-25 | Proliferating_UCBMC |
| HELZ      | 1.71E-29 | 0.71119052 | 0.813 | 0.514 | 6.06E-25 | Proliferating_UCBMC |
| PDZRN3    | 1.80E-29 | 1.26514384 | 0.465 | 0.196 | 6.37E-25 | Proliferating_UCBMC |
| CARMIL1   | 2.46E-29 | 1.10872215 | 0.568 | 0.28  | 8.72E-25 | Proliferating_UCBMC |
| PAN3      | 2.63E-29 | 0.69097698 | 0.859 | 0.573 | 9.33E-25 | Proliferating_UCBMC |
| PCNX2     | 3.40E-29 | 1.54594664 | 0.366 | 0.127 | 1.20E-24 | Proliferating_UCBMC |
| UXS1      | 3.66E-29 | 0.80401189 | 0.76  | 0.469 | 1.30E-24 | Proliferating_UCBMC |
| SUCLG2    | 4.22E-29 | 1.04689748 | 0.707 | 0.431 | 1.49E-24 | Proliferating_UCBMC |
| IREB2     | 4.51E-29 | 1.17528488 | 0.588 | 0.313 | 1.60E-24 | Proliferating_UCBMC |
| BIRC6     | 5.05E-29 | 0.61807472 | 0.93  | 0.668 | 1.79E-24 | Proliferating_UCBMC |
| KLHL28    | 5.10E-29 | 1.06021985 | 0.588 | 0.306 | 1.81E-24 | Proliferating_UCBMC |
| FANCC     | 5.43E-29 | 0.79177432 | 0.802 | 0.497 | 1.92E-24 | Proliferating_UCBMC |
| RPRD1A    | 6.06E-29 | 1.09025382 | 0.579 | 0.295 | 2.15E-24 | Proliferating_UCBMC |
| ARHGAP15  | 7.14E-29 | 0.50006765 | 0.985 | 0.814 | 2.53E-24 | Proliferating_UCBMC |
| RPL27A    | 7.16E-29 | 0.5456496  | 0.976 | 0.899 | 2.54E-24 | Proliferating_UCBMC |
| SRSF11    | 7.76E-29 | 0.60111963 | 0.949 | 0.771 | 2.75E-24 | Proliferating_UCBMC |
| BTBD11    | 8.23E-29 | 0.68150883 | 0.747 | 0.43  | 2.91E-24 | Proliferating_UCBMC |
| TUT4      | 9.11E-29 | 0.71255964 | 0.899 | 0.624 | 3.23E-24 | Proliferating_UCBMC |
| RNF38     | 9.62E-29 | 0.71243659 | 0.784 | 0.502 | 3.41E-24 | Proliferating_UCBMC |
| TET2      | 1.02E-28 | 1.00286567 | 0.612 | 0.323 | 3.61E-24 | Proliferating_UCBMC |
| SEPTIN6   | 1.04E-28 | 0.63369846 | 0.91  | 0.666 | 3.68E-24 | Proliferating_UCBMC |
| LRBA      | 1.07E-28 | 0.67551192 | 0.863 | 0.609 | 3.78E-24 | Proliferating_UCBMC |
| TNFRSF10A | 1.21E-28 | 1.2657351  | 0.548 | 0.276 | 4.27E-24 | Proliferating_UCBMC |
| OSBPL8    | 1.37E-28 | 0.71532273 | 0.894 | 0.629 | 4.85E-24 | Proliferating_UCBMC |
| EMP3      | 1.47E-28 | 0.58957066 | 0.687 | 0.322 | 5.21E-24 | Proliferating_UCBMC |
| UBE2H     | 1.89E-28 | 0.77228838 | 0.806 | 0.52  | 6.69E-24 | Proliferating_UCBMC |
| TMCC1     | 2.10E-28 | 0.94739594 | 0.617 | 0.324 | 7.45E-24 | Proliferating_UCBMC |
| EXOC6     | 2.52E-28 | 0.86160323 | 0.76  | 0.478 | 8.91E-24 | Proliferating_UCBMC |
| ECD       | 2.55E-28 | 1.02884179 | 0.61  | 0.325 | 9.04E-24 | Proliferating_UCBMC |
| DPYD      | 2.69E-28 | 1.2615212  | 0.412 | 0.16  | 9.53E-24 | Proliferating_UCBMC |
| BMPR1B    | 3.39E-28 | 1.53646137 | 0.357 | 0.121 | 1.20E-23 | Proliferating_UCBMC |
| CTDP1     | 3.62E-28 | 1.19655923 | 0.476 | 0.218 | 1.28E-23 | Proliferating_UCBMC |

|                    |          |            |       |       |          |                     |
|--------------------|----------|------------|-------|-------|----------|---------------------|
| PELI1              | 4.07E-28 | 0.56423152 | 0.793 | 0.496 | 1.44E-23 | Proliferating_UCBMC |
| CAPN7              | 4.96E-28 | 1.31884363 | 0.471 | 0.212 | 1.76E-23 | Proliferating_UCBMC |
| TPT1               | 5.13E-28 | 0.45542458 | 0.985 | 0.959 | 1.82E-23 | Proliferating_UCBMC |
| TBC1D22B           | 5.31E-28 | 1.13530051 | 0.489 | 0.219 | 1.88E-23 | Proliferating_UCBMC |
| IMMP2L             | 6.20E-28 | 0.86619364 | 0.742 | 0.439 | 2.20E-23 | Proliferating_UCBMC |
| ENSMMUG00000030448 | 7.57E-28 | 1.03084125 | 0.692 | 0.432 | 2.68E-23 | Proliferating_UCBMC |
| SNX4               | 7.90E-28 | 1.12637761 | 0.652 | 0.371 | 2.80E-23 | Proliferating_UCBMC |
| TCERG1             | 8.07E-28 | 0.83056838 | 0.725 | 0.439 | 2.86E-23 | Proliferating_UCBMC |
| MRTFA              | 8.10E-28 | 0.86266443 | 0.72  | 0.443 | 2.87E-23 | Proliferating_UCBMC |
| KDM6A              | 9.08E-28 | 0.65969368 | 0.879 | 0.595 | 3.22E-23 | Proliferating_UCBMC |
| SEC24B             | 9.44E-28 | 0.9495651  | 0.656 | 0.371 | 3.35E-23 | Proliferating_UCBMC |
| PAPOLG             | 9.67E-28 | 1.25067501 | 0.434 | 0.179 | 3.42E-23 | Proliferating_UCBMC |
| VPS39              | 1.00E-27 | 1.19514608 | 0.522 | 0.256 | 3.55E-23 | Proliferating_UCBMC |
| HERC3              | 1.07E-27 | 0.94622417 | 0.612 | 0.319 | 3.80E-23 | Proliferating_UCBMC |
| INPP4B             | 1.22E-27 | 1.19153689 | 0.559 | 0.282 | 4.33E-23 | Proliferating_UCBMC |
| YME1L1             | 1.40E-27 | 0.84110972 | 0.716 | 0.457 | 4.97E-23 | Proliferating_UCBMC |
| FBXO3              | 1.66E-27 | 1.4772059  | 0.399 | 0.157 | 5.89E-23 | Proliferating_UCBMC |
| RPS4Y1             | 2.29E-27 | 0.77659997 | 0.784 | 0.479 | 8.12E-23 | Proliferating_UCBMC |
| ITK                | 2.52E-27 | 0.68604482 | 0.817 | 0.505 | 8.91E-23 | Proliferating_UCBMC |
| ENSMMUG00000003412 | 2.61E-27 | 0.50178513 | 0.969 | 0.929 | 9.24E-23 | Proliferating_UCBMC |
| ELMO1              | 2.64E-27 | 0.62902887 | 0.899 | 0.63  | 9.34E-23 | Proliferating_UCBMC |
| FKBP5              | 2.79E-27 | 0.75318684 | 0.771 | 0.464 | 9.89E-23 | Proliferating_UCBMC |
| CHD6               | 2.82E-27 | 0.85588743 | 0.683 | 0.386 | 9.98E-23 | Proliferating_UCBMC |
| SLC22A18           | 2.85E-27 | 0.9879465  | 0.659 | 0.373 | 1.01E-22 | Proliferating_UCBMC |
| KDM7A              | 3.24E-27 | 1.44655372 | 0.372 | 0.138 | 1.15E-22 | Proliferating_UCBMC |
| TMEM131            | 3.40E-27 | 0.75761879 | 0.771 | 0.463 | 1.20E-22 | Proliferating_UCBMC |
| RFX3               | 3.90E-27 | 0.89763527 | 0.738 | 0.485 | 1.38E-22 | Proliferating_UCBMC |
| NT5C2              | 4.59E-27 | 0.93856832 | 0.711 | 0.445 | 1.63E-22 | Proliferating_UCBMC |
| APPL2              | 5.45E-27 | 1.3654679  | 0.445 | 0.196 | 1.93E-22 | Proliferating_UCBMC |
| LANCL2             | 6.37E-27 | 1.29280637 | 0.482 | 0.225 | 2.26E-22 | Proliferating_UCBMC |
| AQR                | 7.36E-27 | 0.77192975 | 0.705 | 0.415 | 2.61E-22 | Proliferating_UCBMC |
| GLG1               | 8.56E-27 | 0.73419955 | 0.725 | 0.426 | 3.03E-22 | Proliferating_UCBMC |
| ZZZ3               | 1.06E-26 | 0.89316984 | 0.637 | 0.355 | 3.75E-22 | Proliferating_UCBMC |

|         |          |            |       |       |          |                     |
|---------|----------|------------|-------|-------|----------|---------------------|
| MLLT3   | 1.19E-26 | 0.57625678 | 0.824 | 0.494 | 4.20E-22 | Proliferating_UCBMC |
| ELK3    | 1.59E-26 | 0.82089367 | 0.674 | 0.376 | 5.65E-22 | Proliferating_UCBMC |
| SLC12A6 | 1.75E-26 | 0.7491345  | 0.749 | 0.454 | 6.19E-22 | Proliferating_UCBMC |
| MTR     | 2.06E-26 | 1.08079664 | 0.496 | 0.236 | 7.29E-22 | Proliferating_UCBMC |
| REPS1   | 2.23E-26 | 1.26868386 | 0.535 | 0.272 | 7.89E-22 | Proliferating_UCBMC |
| TIMM23  | 2.80E-26 | 0.93275707 | 0.645 | 0.371 | 9.93E-22 | Proliferating_UCBMC |
| PIK3IP1 | 2.95E-26 | 1.77025314 | 0.315 | 0.104 | 1.05E-21 | Proliferating_UCBMC |
| PRKCQ   | 3.01E-26 | 0.66840169 | 0.74  | 0.44  | 1.07E-21 | Proliferating_UCBMC |
| RETREG1 | 3.11E-26 | 0.82249636 | 0.621 | 0.321 | 1.10E-21 | Proliferating_UCBMC |
| KPNA6   | 3.12E-26 | 1.01797634 | 0.491 | 0.228 | 1.11E-21 | Proliferating_UCBMC |
| TTC17   | 3.30E-26 | 0.97513923 | 0.674 | 0.407 | 1.17E-21 | Proliferating_UCBMC |
| KMT2C   | 3.46E-26 | 0.54152377 | 0.936 | 0.689 | 1.23E-21 | Proliferating_UCBMC |
| SLC30A7 | 3.80E-26 | 0.93952526 | 0.667 | 0.382 | 1.35E-21 | Proliferating_UCBMC |
| ARID4B  | 3.89E-26 | 0.43818676 | 0.932 | 0.704 | 1.38E-21 | Proliferating_UCBMC |
| LATS1   | 3.93E-26 | 1.11398036 | 0.489 | 0.228 | 1.39E-21 | Proliferating_UCBMC |
| INO80D  | 3.94E-26 | 0.80139597 | 0.692 | 0.412 | 1.40E-21 | Proliferating_UCBMC |
| KMT2E   | 4.16E-26 | 0.64402721 | 0.861 | 0.592 | 1.48E-21 | Proliferating_UCBMC |
| SPOCK2  | 4.36E-26 | 0.70007606 | 0.665 | 0.34  | 1.54E-21 | Proliferating_UCBMC |
| RPL4    | 4.39E-26 | 0.54185576 | 0.947 | 0.842 | 1.56E-21 | Proliferating_UCBMC |
| CNOT2   | 4.42E-26 | 0.61423027 | 0.835 | 0.551 | 1.57E-21 | Proliferating_UCBMC |
| VTA1    | 4.50E-26 | 0.97543225 | 0.59  | 0.319 | 1.59E-21 | Proliferating_UCBMC |
| ARIH2   | 4.88E-26 | 0.86246361 | 0.659 | 0.393 | 1.73E-21 | Proliferating_UCBMC |
| USP10   | 5.15E-26 | 0.86131853 | 0.727 | 0.44  | 1.82E-21 | Proliferating_UCBMC |
| GPATCH8 | 5.44E-26 | 0.74671356 | 0.793 | 0.505 | 1.93E-21 | Proliferating_UCBMC |
| CDKAL1  | 6.13E-26 | 0.51379302 | 0.892 | 0.598 | 2.17E-21 | Proliferating_UCBMC |
| TNKS    | 6.27E-26 | 0.84491233 | 0.711 | 0.438 | 2.22E-21 | Proliferating_UCBMC |
| ARMC8   | 6.35E-26 | 1.03925137 | 0.604 | 0.338 | 2.25E-21 | Proliferating_UCBMC |
| ANKH    | 6.86E-26 | 1.26415744 | 0.454 | 0.205 | 2.43E-21 | Proliferating_UCBMC |
| RINT1   | 6.97E-26 | 1.40408963 | 0.421 | 0.177 | 2.47E-21 | Proliferating_UCBMC |
| VPS37B  | 7.22E-26 | 0.7244655  | 0.643 | 0.355 | 2.56E-21 | Proliferating_UCBMC |
| TNIK    | 7.50E-26 | 0.46584699 | 0.919 | 0.606 | 2.66E-21 | Proliferating_UCBMC |
| CELF2   | 7.52E-26 | 0.50197097 | 0.963 | 0.741 | 2.67E-21 | Proliferating_UCBMC |
| NUP54   | 1.00E-25 | 1.11618834 | 0.557 | 0.301 | 3.55E-21 | Proliferating_UCBMC |

|                    |          |            |       |       |          |                     |
|--------------------|----------|------------|-------|-------|----------|---------------------|
| CLASP2             | 1.01E-25 | 0.82651474 | 0.744 | 0.455 | 3.57E-21 | Proliferating_UCBMC |
| ENSMMUG00000063635 | 1.06E-25 | 1.18489229 | 0.423 | 0.175 | 3.76E-21 | Proliferating_UCBMC |
| UBXN7              | 1.14E-25 | 0.88835201 | 0.626 | 0.356 | 4.04E-21 | Proliferating_UCBMC |
| TNKS2              | 1.19E-25 | 1.14023971 | 0.551 | 0.3   | 4.23E-21 | Proliferating_UCBMC |
| DHX9               | 1.65E-25 | 0.68472843 | 0.872 | 0.612 | 5.86E-21 | Proliferating_UCBMC |
| C10H20orf194       | 1.83E-25 | 1.30131598 | 0.341 | 0.124 | 6.48E-21 | Proliferating_UCBMC |
| DDX3Y              | 2.10E-25 | 0.62607087 | 0.645 | 0.316 | 7.44E-21 | Proliferating_UCBMC |
| ATG5               | 2.22E-25 | 0.87372586 | 0.7   | 0.432 | 7.88E-21 | Proliferating_UCBMC |
| TSC22D3            | 2.23E-25 | 0.70237294 | 0.771 | 0.51  | 7.89E-21 | Proliferating_UCBMC |
| USP33              | 2.85E-25 | 0.96818761 | 0.575 | 0.306 | 1.01E-20 | Proliferating_UCBMC |
| ATXN7              | 2.94E-25 | 0.67405696 | 0.749 | 0.474 | 1.04E-20 | Proliferating_UCBMC |
| NDUFA9             | 3.41E-25 | 0.95506004 | 0.619 | 0.357 | 1.21E-20 | Proliferating_UCBMC |
| MON2               | 3.55E-25 | 0.95056758 | 0.604 | 0.348 | 1.26E-20 | Proliferating_UCBMC |
| ERO1B              | 3.69E-25 | 0.65002462 | 0.729 | 0.425 | 1.31E-20 | Proliferating_UCBMC |
| STK4               | 3.74E-25 | 0.63282779 | 0.892 | 0.629 | 1.32E-20 | Proliferating_UCBMC |
| FAM172A            | 4.67E-25 | 0.61062477 | 0.866 | 0.58  | 1.66E-20 | Proliferating_UCBMC |
| FAXDC2             | 4.92E-25 | 1.47540389 | 0.39  | 0.163 | 1.74E-20 | Proliferating_UCBMC |
| RLF                | 6.35E-25 | 0.62809876 | 0.76  | 0.47  | 2.25E-20 | Proliferating_UCBMC |
| PRPF40A            | 6.47E-25 | 0.74738436 | 0.833 | 0.599 | 2.29E-20 | Proliferating_UCBMC |
| SCAPER             | 6.77E-25 | 0.58570618 | 0.826 | 0.55  | 2.40E-20 | Proliferating_UCBMC |
| DIAPH2             | 7.81E-25 | 0.71223511 | 0.773 | 0.501 | 2.77E-20 | Proliferating_UCBMC |
| CUL2               | 9.11E-25 | 0.95212501 | 0.597 | 0.327 | 3.23E-20 | Proliferating_UCBMC |
| ATP11B             | 9.51E-25 | 0.83131269 | 0.736 | 0.47  | 3.37E-20 | Proliferating_UCBMC |
| FBXO34             | 1.09E-24 | 0.57385372 | 0.87  | 0.571 | 3.87E-20 | Proliferating_UCBMC |
| RIPOR2             | 1.10E-24 | 0.52197029 | 0.974 | 0.825 | 3.91E-20 | Proliferating_UCBMC |
| KIDINS220          | 1.31E-24 | 0.78796867 | 0.615 | 0.346 | 4.63E-20 | Proliferating_UCBMC |
| ZZEF1              | 1.36E-24 | 0.97820043 | 0.546 | 0.289 | 4.81E-20 | Proliferating_UCBMC |
| TAF4B              | 1.38E-24 | 1.35185865 | 0.421 | 0.184 | 4.88E-20 | Proliferating_UCBMC |
| MED23              | 1.50E-24 | 1.05305049 | 0.537 | 0.286 | 5.30E-20 | Proliferating_UCBMC |
| DIS3L2             | 1.52E-24 | 0.86944241 | 0.676 | 0.41  | 5.38E-20 | Proliferating_UCBMC |
| ZNF654             | 1.77E-24 | 0.93187879 | 0.577 | 0.308 | 6.26E-20 | Proliferating_UCBMC |
| ZFC3H1             | 1.82E-24 | 0.7610337  | 0.696 | 0.435 | 6.46E-20 | Proliferating_UCBMC |
| METTL16            | 1.98E-24 | 1.01679943 | 0.546 | 0.283 | 7.01E-20 | Proliferating_UCBMC |

|                   |          |            |       |       |          |                     |
|-------------------|----------|------------|-------|-------|----------|---------------------|
| FOXJ3             | 2.63E-24 | 0.82765671 | 0.698 | 0.427 | 9.32E-20 | Proliferating_UCBMC |
| GSTT1             | 2.78E-24 | 1.67382781 | 0.26  | 0.074 | 9.83E-20 | Proliferating_UCBMC |
| HECA              | 2.88E-24 | 0.81355245 | 0.637 | 0.35  | 1.02E-19 | Proliferating_UCBMC |
| COPA              | 3.09E-24 | 0.87354453 | 0.626 | 0.366 | 1.10E-19 | Proliferating_UCBMC |
| GALNT11           | 3.24E-24 | 1.04974967 | 0.513 | 0.257 | 1.15E-19 | Proliferating_UCBMC |
| FBXL20            | 3.34E-24 | 0.76377672 | 0.678 | 0.396 | 1.18E-19 | Proliferating_UCBMC |
| SPTBN1            | 3.39E-24 | 0.77793851 | 0.764 | 0.49  | 1.20E-19 | Proliferating_UCBMC |
| CRTC3             | 3.65E-24 | 0.70951734 | 0.744 | 0.464 | 1.29E-19 | Proliferating_UCBMC |
| TRIB2             | 3.95E-24 | 1.00770195 | 0.489 | 0.242 | 1.40E-19 | Proliferating_UCBMC |
| BNIP3L            | 3.95E-24 | 0.83466747 | 0.648 | 0.387 | 1.40E-19 | Proliferating_UCBMC |
| WDR43             | 5.85E-24 | 0.97470346 | 0.623 | 0.358 | 2.07E-19 | Proliferating_UCBMC |
| AFF4              | 6.44E-24 | 0.77728059 | 0.57  | 0.308 | 2.28E-19 | Proliferating_UCBMC |
| MSI2              | 6.98E-24 | 0.61112972 | 0.817 | 0.533 | 2.47E-19 | Proliferating_UCBMC |
| CPSF3             | 7.19E-24 | 0.99340623 | 0.61  | 0.361 | 2.55E-19 | Proliferating_UCBMC |
| FRS2              | 7.66E-24 | 1.06271058 | 0.493 | 0.246 | 2.71E-19 | Proliferating_UCBMC |
| RIOK3             | 7.73E-24 | 0.90449187 | 0.619 | 0.365 | 2.74E-19 | Proliferating_UCBMC |
| SEC31A            | 7.98E-24 | 0.72539156 | 0.733 | 0.48  | 2.83E-19 | Proliferating_UCBMC |
| FYN               | 8.39E-24 | 0.55802714 | 0.883 | 0.594 | 2.97E-19 | Proliferating_UCBMC |
| APP               | 8.49E-24 | 1.07759614 | 0.526 | 0.271 | 3.01E-19 | Proliferating_UCBMC |
| KAT6B             | 9.18E-24 | 0.60150667 | 0.797 | 0.519 | 3.25E-19 | Proliferating_UCBMC |
| GSK3B             | 9.86E-24 | 0.61947683 | 0.828 | 0.565 | 3.49E-19 | Proliferating_UCBMC |
| GTPBP10           | 1.02E-23 | 1.11428896 | 0.474 | 0.23  | 3.62E-19 | Proliferating_UCBMC |
| USP47             | 1.03E-23 | 0.60357108 | 0.813 | 0.559 | 3.65E-19 | Proliferating_UCBMC |
| GPR137B           | 1.21E-23 | 1.76072017 | 0.317 | 0.117 | 4.29E-19 | Proliferating_UCBMC |
| RALGAPA2          | 1.22E-23 | 0.86774787 | 0.632 | 0.366 | 4.31E-19 | Proliferating_UCBMC |
| MAP4K4            | 1.39E-23 | 0.54754741 | 0.835 | 0.567 | 4.92E-19 | Proliferating_UCBMC |
| WASHC5            | 1.41E-23 | 1.45828578 | 0.419 | 0.196 | 5.01E-19 | Proliferating_UCBMC |
| CDK13             | 1.45E-23 | 0.55811787 | 0.795 | 0.521 | 5.13E-19 | Proliferating_UCBMC |
| TNPO1             | 1.60E-23 | 1.02203771 | 0.553 | 0.299 | 5.67E-19 | Proliferating_UCBMC |
| LUC7L3            | 1.63E-23 | 0.72971355 | 0.826 | 0.559 | 5.76E-19 | Proliferating_UCBMC |
| TLE4              | 1.85E-23 | 0.70794482 | 0.621 | 0.345 | 6.56E-19 | Proliferating_UCBMC |
| C1GALT1           | 1.91E-23 | 0.96040653 | 0.588 | 0.331 | 6.77E-19 | Proliferating_UCBMC |
| ENSMUG00000053384 | 1.94E-23 | 1.47916216 | 0.366 | 0.151 | 6.87E-19 | Proliferating_UCBMC |

|                    |          |            |       |       |          |                     |
|--------------------|----------|------------|-------|-------|----------|---------------------|
| KLHL2              | 2.19E-23 | 0.93423587 | 0.551 | 0.292 | 7.76E-19 | Proliferating_UCBMC |
| APC                | 2.65E-23 | 0.8889718  | 0.522 | 0.267 | 9.38E-19 | Proliferating_UCBMC |
| URI1               | 3.24E-23 | 0.88154702 | 0.656 | 0.394 | 1.15E-18 | Proliferating_UCBMC |
| MEGF9              | 3.43E-23 | 1.42667693 | 0.33  | 0.122 | 1.22E-18 | Proliferating_UCBMC |
| AMBRA1             | 3.72E-23 | 0.81013115 | 0.645 | 0.376 | 1.32E-18 | Proliferating_UCBMC |
| CD2AP              | 6.31E-23 | 0.86903769 | 0.604 | 0.353 | 2.24E-18 | Proliferating_UCBMC |
| ASH2L              | 6.49E-23 | 1.31874939 | 0.401 | 0.179 | 2.30E-18 | Proliferating_UCBMC |
| ARL8B              | 6.76E-23 | 0.86484411 | 0.61  | 0.352 | 2.40E-18 | Proliferating_UCBMC |
| CCNT2              | 7.23E-23 | 0.79761746 | 0.608 | 0.354 | 2.56E-18 | Proliferating_UCBMC |
| KLF12              | 8.06E-23 | 0.4011147  | 0.938 | 0.715 | 2.86E-18 | Proliferating_UCBMC |
| RPS6KB1            | 8.08E-23 | 0.63057099 | 0.7   | 0.446 | 2.86E-18 | Proliferating_UCBMC |
| MBNL2              | 9.38E-23 | 0.94704506 | 0.626 | 0.377 | 3.32E-18 | Proliferating_UCBMC |
| EEF2               | 9.49E-23 | 0.5922021  | 0.888 | 0.669 | 3.36E-18 | Proliferating_UCBMC |
| TIAM1              | 9.55E-23 | 0.84227669 | 0.559 | 0.292 | 3.38E-18 | Proliferating_UCBMC |
| TCP11L2            | 9.72E-23 | 1.37704006 | 0.35  | 0.141 | 3.44E-18 | Proliferating_UCBMC |
| ENSMMUG00000015270 | 1.02E-22 | 0.42122912 | 0.985 | 0.953 | 3.60E-18 | Proliferating_UCBMC |
| TXNDC11            | 1.17E-22 | 0.91977439 | 0.515 | 0.27  | 4.13E-18 | Proliferating_UCBMC |
| RPRD2              | 1.32E-22 | 0.81988292 | 0.698 | 0.442 | 4.67E-18 | Proliferating_UCBMC |
| SLC22A23           | 1.48E-22 | 1.69397793 | 0.306 | 0.112 | 5.23E-18 | Proliferating_UCBMC |
| MICU2              | 1.48E-22 | 0.83017383 | 0.665 | 0.411 | 5.23E-18 | Proliferating_UCBMC |
| TMEM63A            | 1.53E-22 | 1.3556305  | 0.348 | 0.141 | 5.44E-18 | Proliferating_UCBMC |
| SEPTIN9            | 1.55E-22 | 0.64416091 | 0.78  | 0.492 | 5.48E-18 | Proliferating_UCBMC |
| LMTK2              | 1.58E-22 | 0.89691955 | 0.584 | 0.332 | 5.61E-18 | Proliferating_UCBMC |
| DIP2C              | 1.89E-22 | 1.42474808 | 0.337 | 0.132 | 6.70E-18 | Proliferating_UCBMC |
| WDR33              | 2.01E-22 | 0.84451327 | 0.678 | 0.44  | 7.14E-18 | Proliferating_UCBMC |
| ENSMMUG00000020751 | 2.14E-22 | 1.19781689 | 0.489 | 0.261 | 7.59E-18 | Proliferating_UCBMC |
| ERN1               | 2.23E-22 | 1.17627057 | 0.43  | 0.2   | 7.90E-18 | Proliferating_UCBMC |
| PEX14              | 2.45E-22 | 0.85752707 | 0.573 | 0.305 | 8.67E-18 | Proliferating_UCBMC |
| BCL11B             | 2.58E-22 | 0.41417985 | 0.775 | 0.434 | 9.16E-18 | Proliferating_UCBMC |
| RBM5               | 2.65E-22 | 0.67510194 | 0.753 | 0.505 | 9.40E-18 | Proliferating_UCBMC |
| C18H18orf25        | 2.81E-22 | 0.81071461 | 0.575 | 0.322 | 9.97E-18 | Proliferating_UCBMC |
| BBX                | 2.91E-22 | 0.69368528 | 0.718 | 0.45  | 1.03E-17 | Proliferating_UCBMC |
| MTMR10             | 3.07E-22 | 1.10236484 | 0.443 | 0.213 | 1.09E-17 | Proliferating_UCBMC |

|                    |          |            |       |       |          |                     |
|--------------------|----------|------------|-------|-------|----------|---------------------|
| FAM168A            | 3.28E-22 | 0.81546399 | 0.617 | 0.36  | 1.16E-17 | Proliferating_UCBMC |
| RYK                | 3.61E-22 | 1.34401265 | 0.324 | 0.125 | 1.28E-17 | Proliferating_UCBMC |
| CDC73              | 3.84E-22 | 0.81143034 | 0.661 | 0.402 | 1.36E-17 | Proliferating_UCBMC |
| ENSMMUG00000052477 | 3.86E-22 | 1.81685218 | 0.256 | 0.081 | 1.37E-17 | Proliferating_UCBMC |
| ENSMMUG00000053012 | 3.98E-22 | 1.39562584 | 0.324 | 0.125 | 1.41E-17 | Proliferating_UCBMC |
| CIR1               | 4.17E-22 | 0.73877162 | 0.641 | 0.381 | 1.48E-17 | Proliferating_UCBMC |
| GAB2               | 4.23E-22 | 1.44572923 | 0.399 | 0.177 | 1.50E-17 | Proliferating_UCBMC |
| MAX                | 5.17E-22 | 0.74883513 | 0.661 | 0.412 | 1.83E-17 | Proliferating_UCBMC |
| ESCO1              | 5.31E-22 | 0.67343931 | 0.7   | 0.434 | 1.88E-17 | Proliferating_UCBMC |
| WDFY2              | 5.55E-22 | 1.06149901 | 0.588 | 0.35  | 1.97E-17 | Proliferating_UCBMC |
| EAPP               | 5.57E-22 | 0.95558619 | 0.504 | 0.256 | 1.98E-17 | Proliferating_UCBMC |
| ENSMMUG00000046264 | 7.53E-22 | 0.79069302 | 0.641 | 0.384 | 2.67E-17 | Proliferating_UCBMC |
| PCCA               | 8.53E-22 | 0.7308813  | 0.683 | 0.427 | 3.02E-17 | Proliferating_UCBMC |
| XPO4               | 9.30E-22 | 0.97017117 | 0.493 | 0.256 | 3.30E-17 | Proliferating_UCBMC |
| XPO7               | 9.47E-22 | 0.78951153 | 0.555 | 0.307 | 3.35E-17 | Proliferating_UCBMC |
| RFX2               | 9.47E-22 | 1.09395583 | 0.432 | 0.206 | 3.36E-17 | Proliferating_UCBMC |
| ZNF92              | 9.87E-22 | 0.85674997 | 0.573 | 0.318 | 3.50E-17 | Proliferating_UCBMC |
| ANKRD44            | 1.11E-21 | 0.39661419 | 0.96  | 0.758 | 3.93E-17 | Proliferating_UCBMC |
| PELI2              | 1.18E-21 | 1.34482745 | 0.319 | 0.12  | 4.20E-17 | Proliferating_UCBMC |
| UHRF1BP1L          | 1.20E-21 | 0.81952961 | 0.626 | 0.376 | 4.26E-17 | Proliferating_UCBMC |
| TRPM7              | 1.31E-21 | 0.47007489 | 0.894 | 0.65  | 4.64E-17 | Proliferating_UCBMC |
| TRA2A              | 1.42E-21 | 0.50366263 | 0.941 | 0.709 | 5.02E-17 | Proliferating_UCBMC |
| ACIN1              | 1.50E-21 | 0.62461316 | 0.762 | 0.505 | 5.31E-17 | Proliferating_UCBMC |
| UBE2E2             | 1.52E-21 | 0.89714385 | 0.526 | 0.278 | 5.37E-17 | Proliferating_UCBMC |
| PTPRA              | 1.65E-21 | 0.62251925 | 0.767 | 0.51  | 5.83E-17 | Proliferating_UCBMC |
| BRWD1              | 1.87E-21 | 0.68137503 | 0.67  | 0.41  | 6.62E-17 | Proliferating_UCBMC |
| JAK1               | 1.95E-21 | 0.38931083 | 0.949 | 0.774 | 6.92E-17 | Proliferating_UCBMC |
| MTMR3              | 1.98E-21 | 0.91503837 | 0.526 | 0.285 | 7.02E-17 | Proliferating_UCBMC |
| TNFSF8             | 1.99E-21 | 0.98074884 | 0.458 | 0.221 | 7.04E-17 | Proliferating_UCBMC |
| RNMT               | 2.31E-21 | 0.62699091 | 0.78  | 0.538 | 8.19E-17 | Proliferating_UCBMC |
| LAPTM5             | 2.40E-21 | 0.58099334 | 0.837 | 0.567 | 8.49E-17 | Proliferating_UCBMC |
| SCFD2              | 2.41E-21 | 0.82231315 | 0.535 | 0.286 | 8.53E-17 | Proliferating_UCBMC |
| ZNF644             | 2.45E-21 | 0.65863866 | 0.83  | 0.605 | 8.67E-17 | Proliferating_UCBMC |



|                    |          |            |       |       |          |                     |
|--------------------|----------|------------|-------|-------|----------|---------------------|
| AKAP13             | 2.51E-21 | 0.47964173 | 0.943 | 0.745 | 8.90E-17 | Proliferating_UCBMC |
| CSDE1              | 2.52E-21 | 0.65222662 | 0.815 | 0.572 | 8.94E-17 | Proliferating_UCBMC |
| PSEN1              | 3.00E-21 | 0.97170526 | 0.555 | 0.32  | 1.06E-16 | Proliferating_UCBMC |
| ENSMMUG00000060545 | 3.08E-21 | 0.88267748 | 0.575 | 0.331 | 1.09E-16 | Proliferating_UCBMC |
| TRAT1              | 3.16E-21 | 0.94896214 | 0.449 | 0.21  | 1.12E-16 | Proliferating_UCBMC |
| SIAH1              | 3.55E-21 | 1.28848462 | 0.396 | 0.186 | 1.26E-16 | Proliferating_UCBMC |
| FAM214A            | 3.94E-21 | 0.82701175 | 0.568 | 0.326 | 1.39E-16 | Proliferating_UCBMC |
| PLEKHM1            | 4.38E-21 | 0.97419363 | 0.419 | 0.193 | 1.55E-16 | Proliferating_UCBMC |
| ENSMMUG00000059977 | 4.39E-21 | 1.2319168  | 0.396 | 0.183 | 1.56E-16 | Proliferating_UCBMC |
| SETD2              | 4.53E-21 | 0.5567064  | 0.861 | 0.61  | 1.61E-16 | Proliferating_UCBMC |
| PDE4D              | 4.68E-21 | 0.65615574 | 0.597 | 0.327 | 1.66E-16 | Proliferating_UCBMC |
| CDK17              | 4.75E-21 | 0.56283088 | 0.782 | 0.501 | 1.68E-16 | Proliferating_UCBMC |
| DPP4               | 4.91E-21 | 1.35991975 | 0.337 | 0.134 | 1.74E-16 | Proliferating_UCBMC |
| ENSMMUG00000047632 | 6.04E-21 | 0.94062437 | 0.608 | 0.377 | 2.14E-16 | Proliferating_UCBMC |
| ST6GALNAC5         | 6.51E-21 | 1.72322729 | 0.273 | 0.096 | 2.31E-16 | Proliferating_UCBMC |
| ZNF326             | 7.03E-21 | 0.71619254 | 0.606 | 0.344 | 2.49E-16 | Proliferating_UCBMC |
| TCEA3              | 7.11E-21 | 1.21767782 | 0.326 | 0.126 | 2.52E-16 | Proliferating_UCBMC |
| RBBP5              | 8.21E-21 | 1.30593992 | 0.39  | 0.182 | 2.91E-16 | Proliferating_UCBMC |
| KAT6A              | 8.44E-21 | 0.57813513 | 0.795 | 0.56  | 2.99E-16 | Proliferating_UCBMC |
| ENSMMUG00000051957 | 8.99E-21 | 1.36326168 | 0.35  | 0.151 | 3.19E-16 | Proliferating_UCBMC |
| ENSMMUG00000049151 | 9.13E-21 | 0.46181235 | 0.949 | 0.883 | 3.23E-16 | Proliferating_UCBMC |
| ATP2B4             | 9.83E-21 | 0.71239872 | 0.659 | 0.394 | 3.48E-16 | Proliferating_UCBMC |
| TRAPPC10           | 1.27E-20 | 0.49494099 | 0.67  | 0.41  | 4.50E-16 | Proliferating_UCBMC |
| RNF4               | 1.28E-20 | 0.8055273  | 0.555 | 0.315 | 4.54E-16 | Proliferating_UCBMC |
| WDR70              | 1.33E-20 | 0.60477289 | 0.815 | 0.558 | 4.72E-16 | Proliferating_UCBMC |
| FBXO11             | 1.34E-20 | 0.65584317 | 0.72  | 0.464 | 4.74E-16 | Proliferating_UCBMC |
| UBE4A              | 1.37E-20 | 0.94736504 | 0.493 | 0.262 | 4.86E-16 | Proliferating_UCBMC |
| DNAJC3             | 1.61E-20 | 0.6518684  | 0.707 | 0.445 | 5.71E-16 | Proliferating_UCBMC |
| ABRAXAS2           | 1.68E-20 | 1.27540315 | 0.317 | 0.127 | 5.97E-16 | Proliferating_UCBMC |
| GPR107             | 1.75E-20 | 0.90946515 | 0.557 | 0.322 | 6.19E-16 | Proliferating_UCBMC |
| NBEA               | 1.85E-20 | 1.3269482  | 0.438 | 0.225 | 6.57E-16 | Proliferating_UCBMC |
| AHI1               | 1.94E-20 | 0.50894553 | 0.727 | 0.468 | 6.88E-16 | Proliferating_UCBMC |
| WASL               | 2.09E-20 | 0.88152491 | 0.595 | 0.351 | 7.40E-16 | Proliferating_UCBMC |

|                     |          |            |       |       |          |                     |
|---------------------|----------|------------|-------|-------|----------|---------------------|
| EIF3H               | 2.17E-20 | 0.54081157 | 0.916 | 0.726 | 7.69E-16 | Proliferating_UCBMC |
| ZNF483              | 2.19E-20 | 0.59451113 | 0.844 | 0.641 | 7.77E-16 | Proliferating_UCBMC |
| BIN3                | 2.64E-20 | 0.83791192 | 0.599 | 0.37  | 9.37E-16 | Proliferating_UCBMC |
| ACSL1               | 2.97E-20 | 1.24378188 | 0.361 | 0.162 | 1.05E-15 | Proliferating_UCBMC |
| CAMK1D              | 2.98E-20 | 0.43328068 | 0.879 | 0.583 | 1.05E-15 | Proliferating_UCBMC |
| ENSMMUG00000008346  | 3.14E-20 | 0.62105839 | 0.771 | 0.504 | 1.11E-15 | Proliferating_UCBMC |
| AAK1                | 3.40E-20 | 0.57283168 | 0.795 | 0.515 | 1.20E-15 | Proliferating_UCBMC |
| AUH                 | 4.25E-20 | 0.91996516 | 0.498 | 0.266 | 1.50E-15 | Proliferating_UCBMC |
| ENSMMUG000000055457 | 4.51E-20 | 0.7589766  | 0.683 | 0.441 | 1.60E-15 | Proliferating_UCBMC |
| NIPBL               | 4.71E-20 | 0.57922106 | 0.773 | 0.54  | 1.67E-15 | Proliferating_UCBMC |
| PNN                 | 4.91E-20 | 0.57546903 | 0.835 | 0.604 | 1.74E-15 | Proliferating_UCBMC |
| ENSMMUG000000058755 | 6.18E-20 | 0.39577914 | 0.971 | 0.927 | 2.19E-15 | Proliferating_UCBMC |
| TAPT1               | 6.49E-20 | 1.00939103 | 0.482 | 0.253 | 2.30E-15 | Proliferating_UCBMC |
| KLF3                | 6.77E-20 | 0.73536352 | 0.487 | 0.247 | 2.40E-15 | Proliferating_UCBMC |
| JAML                | 6.83E-20 | 0.91812814 | 0.529 | 0.298 | 2.42E-15 | Proliferating_UCBMC |
| PIP5K1A             | 7.12E-20 | 0.72975207 | 0.632 | 0.387 | 2.52E-15 | Proliferating_UCBMC |
| FAF1                | 7.13E-20 | 0.52924781 | 0.881 | 0.624 | 2.52E-15 | Proliferating_UCBMC |
| ENSMMUG000000006778 | 7.27E-20 | 0.68693357 | 0.656 | 0.417 | 2.58E-15 | Proliferating_UCBMC |
| MED15               | 7.67E-20 | 0.84577909 | 0.524 | 0.306 | 2.72E-15 | Proliferating_UCBMC |
| DGKA                | 8.67E-20 | 0.68169707 | 0.665 | 0.415 | 3.07E-15 | Proliferating_UCBMC |
| CEP295              | 8.91E-20 | 0.73236088 | 0.628 | 0.382 | 3.16E-15 | Proliferating_UCBMC |
| AP3B1               | 8.94E-20 | 0.58732355 | 0.784 | 0.535 | 3.17E-15 | Proliferating_UCBMC |
| SOX4                | 9.03E-20 | 0.22914454 | 0.78  | 0.485 | 3.20E-15 | Proliferating_UCBMC |
| AOPEP               | 1.05E-19 | 0.66636269 | 0.643 | 0.399 | 3.71E-15 | Proliferating_UCBMC |
| RCC1                | 1.05E-19 | 0.80206727 | 0.652 | 0.404 | 3.72E-15 | Proliferating_UCBMC |
| ENSMMUG000000063877 | 1.07E-19 | 0.88995265 | 0.531 | 0.304 | 3.78E-15 | Proliferating_UCBMC |
| SCAF8               | 1.12E-19 | 0.5676599  | 0.729 | 0.495 | 3.98E-15 | Proliferating_UCBMC |
| ANKRD28             | 1.20E-19 | 0.63495625 | 0.676 | 0.418 | 4.25E-15 | Proliferating_UCBMC |
| PLEKHM3             | 1.21E-19 | 1.19717793 | 0.394 | 0.191 | 4.30E-15 | Proliferating_UCBMC |
| SDHAF4              | 1.24E-19 | 0.60064806 | 0.786 | 0.525 | 4.38E-15 | Proliferating_UCBMC |
| TRIM33              | 1.29E-19 | 0.62859324 | 0.696 | 0.43  | 4.58E-15 | Proliferating_UCBMC |
| SREK1               | 1.37E-19 | 0.62271383 | 0.839 | 0.601 | 4.87E-15 | Proliferating_UCBMC |
| GMCL1               | 1.38E-19 | 0.81901941 | 0.685 | 0.453 | 4.88E-15 | Proliferating_UCBMC |

|                    |          |            |       |       |          |                     |
|--------------------|----------|------------|-------|-------|----------|---------------------|
| TRERF1             | 1.39E-19 | 0.56407068 | 0.597 | 0.336 | 4.92E-15 | Proliferating_UCBMC |
| PLAA               | 1.42E-19 | 0.81358423 | 0.482 | 0.256 | 5.04E-15 | Proliferating_UCBMC |
| EFR3A              | 1.44E-19 | 0.85284837 | 0.553 | 0.323 | 5.09E-15 | Proliferating_UCBMC |
| NUP98              | 1.44E-19 | 0.56478318 | 0.804 | 0.55  | 5.10E-15 | Proliferating_UCBMC |
| UBR5               | 1.45E-19 | 0.51613071 | 0.78  | 0.52  | 5.15E-15 | Proliferating_UCBMC |
| FTO                | 1.53E-19 | 0.75865072 | 0.597 | 0.351 | 5.40E-15 | Proliferating_UCBMC |
| RAB7A              | 1.57E-19 | 0.60171938 | 0.824 | 0.604 | 5.55E-15 | Proliferating_UCBMC |
| ERCC6L2            | 1.59E-19 | 0.87300798 | 0.502 | 0.272 | 5.63E-15 | Proliferating_UCBMC |
| STAU1              | 1.65E-19 | 0.48745289 | 0.714 | 0.475 | 5.86E-15 | Proliferating_UCBMC |
| RAF1               | 1.65E-19 | 0.64536561 | 0.667 | 0.42  | 5.86E-15 | Proliferating_UCBMC |
| EXOSC10            | 1.66E-19 | 1.09240888 | 0.441 | 0.226 | 5.90E-15 | Proliferating_UCBMC |
| CSGALNACT2         | 1.75E-19 | 0.64933295 | 0.74  | 0.5   | 6.22E-15 | Proliferating_UCBMC |
| RHOH               | 2.13E-19 | 0.57617933 | 0.846 | 0.634 | 7.55E-15 | Proliferating_UCBMC |
| TP53BP1            | 2.14E-19 | 0.77721918 | 0.648 | 0.404 | 7.57E-15 | Proliferating_UCBMC |
| MTPAP              | 2.26E-19 | 1.16137534 | 0.372 | 0.171 | 7.99E-15 | Proliferating_UCBMC |
| RAB5A              | 2.32E-19 | 0.75532132 | 0.623 | 0.408 | 8.21E-15 | Proliferating_UCBMC |
| APBB1IP            | 2.35E-19 | 0.46718105 | 0.938 | 0.801 | 8.34E-15 | Proliferating_UCBMC |
| CPSF6              | 2.55E-19 | 0.69184655 | 0.685 | 0.45  | 9.03E-15 | Proliferating_UCBMC |
| NUP133             | 2.57E-19 | 0.82364703 | 0.487 | 0.259 | 9.10E-15 | Proliferating_UCBMC |
| ENSMMUG00000056012 | 2.61E-19 | 0.69284244 | 0.659 | 0.422 | 9.23E-15 | Proliferating_UCBMC |
| ZNF462             | 2.86E-19 | 1.57127651 | 0.295 | 0.115 | 1.01E-14 | Proliferating_UCBMC |
| UBAP1              | 3.14E-19 | 0.56808414 | 0.674 | 0.429 | 1.11E-14 | Proliferating_UCBMC |
| SIPA1L1            | 3.17E-19 | 0.72588127 | 0.729 | 0.488 | 1.12E-14 | Proliferating_UCBMC |
| PPTC7              | 3.18E-19 | 0.90884754 | 0.507 | 0.276 | 1.13E-14 | Proliferating_UCBMC |
| KCMF1              | 3.37E-19 | 0.77329468 | 0.548 | 0.311 | 1.19E-14 | Proliferating_UCBMC |
| MED13L             | 3.44E-19 | 0.44989967 | 0.894 | 0.644 | 1.22E-14 | Proliferating_UCBMC |
| GINM1              | 3.87E-19 | 0.89497418 | 0.544 | 0.315 | 1.37E-14 | Proliferating_UCBMC |
| ZC3H7A             | 4.11E-19 | 0.80216573 | 0.551 | 0.316 | 1.46E-14 | Proliferating_UCBMC |
| VPS54              | 4.30E-19 | 0.85523096 | 0.502 | 0.279 | 1.52E-14 | Proliferating_UCBMC |
| PKIA               | 4.96E-19 | 1.75740723 | 0.273 | 0.105 | 1.76E-14 | Proliferating_UCBMC |
| ALMS1              | 5.17E-19 | 0.82309396 | 0.579 | 0.357 | 1.83E-14 | Proliferating_UCBMC |
| CMTR1              | 5.28E-19 | 0.84317505 | 0.553 | 0.323 | 1.87E-14 | Proliferating_UCBMC |
| CCNK               | 5.43E-19 | 0.70400314 | 0.689 | 0.451 | 1.92E-14 | Proliferating_UCBMC |

|                   |          |            |       |       |          |                     |
|-------------------|----------|------------|-------|-------|----------|---------------------|
| XRN1              | 7.07E-19 | 0.70230545 | 0.663 | 0.439 | 2.50E-14 | Proliferating_UCBMC |
| ENSMUG00000022610 | 7.39E-19 | 0.51245069 | 0.709 | 0.45  | 2.62E-14 | Proliferating_UCBMC |
| PGM2L1            | 7.57E-19 | 1.46016004 | 0.271 | 0.1   | 2.68E-14 | Proliferating_UCBMC |
| PI4K2B            | 7.61E-19 | 0.50744993 | 0.833 | 0.629 | 2.69E-14 | Proliferating_UCBMC |
| MCM9              | 7.99E-19 | 0.81620182 | 0.535 | 0.316 | 2.83E-14 | Proliferating_UCBMC |
| TMEM135           | 8.16E-19 | 0.76724257 | 0.54  | 0.301 | 2.89E-14 | Proliferating_UCBMC |
| ADNP              | 8.16E-19 | 0.75856734 | 0.632 | 0.396 | 2.89E-14 | Proliferating_UCBMC |
| ZRANB2            | 8.33E-19 | 0.6346968  | 0.709 | 0.478 | 2.95E-14 | Proliferating_UCBMC |
| PLAG1             | 8.42E-19 | 1.55255962 | 0.275 | 0.104 | 2.98E-14 | Proliferating_UCBMC |
| LCOR              | 9.03E-19 | 0.59748984 | 0.718 | 0.486 | 3.20E-14 | Proliferating_UCBMC |
| SRPK2             | 9.28E-19 | 0.53696996 | 0.771 | 0.516 | 3.29E-14 | Proliferating_UCBMC |
| PPFIBP1           | 9.43E-19 | 0.96799159 | 0.443 | 0.226 | 3.34E-14 | Proliferating_UCBMC |
| DNAJC7            | 1.00E-18 | 0.78954784 | 0.639 | 0.414 | 3.56E-14 | Proliferating_UCBMC |
| CFLAR             | 1.08E-18 | 0.55036613 | 0.709 | 0.464 | 3.82E-14 | Proliferating_UCBMC |
| USP24             | 1.12E-18 | 0.7091141  | 0.557 | 0.327 | 3.97E-14 | Proliferating_UCBMC |
| ARIH1             | 1.13E-18 | 0.45772045 | 0.808 | 0.555 | 4.00E-14 | Proliferating_UCBMC |
| HSD17B4           | 1.14E-18 | 0.6394752  | 0.859 | 0.675 | 4.04E-14 | Proliferating_UCBMC |
| UBE2G1            | 1.17E-18 | 0.70297036 | 0.643 | 0.417 | 4.15E-14 | Proliferating_UCBMC |
| RNF149            | 1.18E-18 | 0.66441835 | 0.674 | 0.428 | 4.19E-14 | Proliferating_UCBMC |
| AKAP9             | 1.19E-18 | 0.53413374 | 0.76  | 0.518 | 4.21E-14 | Proliferating_UCBMC |
| INTS9             | 1.22E-18 | 1.15503559 | 0.41  | 0.206 | 4.31E-14 | Proliferating_UCBMC |
| DAAM1             | 1.24E-18 | 1.20560831 | 0.399 | 0.197 | 4.40E-14 | Proliferating_UCBMC |
| CHIC2             | 1.29E-18 | 0.95120523 | 0.544 | 0.323 | 4.58E-14 | Proliferating_UCBMC |
| RELL1             | 1.36E-18 | 0.64744168 | 0.615 | 0.365 | 4.81E-14 | Proliferating_UCBMC |
| ZNF43             | 1.36E-18 | 0.68874208 | 0.599 | 0.366 | 4.83E-14 | Proliferating_UCBMC |
| TUT7              | 1.53E-18 | 0.64931217 | 0.67  | 0.441 | 5.43E-14 | Proliferating_UCBMC |
| TENT2             | 1.57E-18 | 0.64412371 | 0.601 | 0.355 | 5.56E-14 | Proliferating_UCBMC |
| MAP4K3            | 1.76E-18 | 1.54585698 | 0.333 | 0.147 | 6.25E-14 | Proliferating_UCBMC |
| INPP5K            | 1.81E-18 | 1.0719353  | 0.394 | 0.19  | 6.43E-14 | Proliferating_UCBMC |
| SOS1              | 2.12E-18 | 0.73060193 | 0.711 | 0.485 | 7.50E-14 | Proliferating_UCBMC |
| ACTR2             | 2.43E-18 | 0.5022069  | 0.952 | 0.769 | 8.59E-14 | Proliferating_UCBMC |
| ARID2             | 2.44E-18 | 0.59731847 | 0.806 | 0.573 | 8.63E-14 | Proliferating_UCBMC |
| USP9Y             | 2.50E-18 | 1.01232421 | 0.355 | 0.156 | 8.86E-14 | Proliferating_UCBMC |

|                    |          |            |       |       |          |                     |
|--------------------|----------|------------|-------|-------|----------|---------------------|
| SECISBP2           | 2.55E-18 | 0.72429157 | 0.522 | 0.297 | 9.05E-14 | Proliferating_UCBMC |
| ITCH               | 2.76E-18 | 0.2938714  | 0.866 | 0.6   | 9.79E-14 | Proliferating_UCBMC |
| ABCB7              | 2.79E-18 | 1.20371246 | 0.465 | 0.258 | 9.88E-14 | Proliferating_UCBMC |
| PGGT1B             | 2.86E-18 | 1.17649221 | 0.335 | 0.148 | 1.01E-13 | Proliferating_UCBMC |
| ZNF618             | 3.04E-18 | 1.25996924 | 0.293 | 0.117 | 1.08E-13 | Proliferating_UCBMC |
| PITPNC1            | 3.10E-18 | 0.21036598 | 0.958 | 0.729 | 1.10E-13 | Proliferating_UCBMC |
| ENSMMUG00000051545 | 3.17E-18 | 1.27115126 | 0.258 | 0.091 | 1.12E-13 | Proliferating_UCBMC |
| NFYC               | 3.24E-18 | 0.7632733  | 0.584 | 0.354 | 1.15E-13 | Proliferating_UCBMC |
| HBS1L              | 3.31E-18 | 0.57684754 | 0.764 | 0.516 | 1.17E-13 | Proliferating_UCBMC |
| ATP2C1             | 3.33E-18 | 0.74156704 | 0.557 | 0.326 | 1.18E-13 | Proliferating_UCBMC |
| PCMTD1             | 3.38E-18 | 0.82282174 | 0.606 | 0.385 | 1.20E-13 | Proliferating_UCBMC |
| ZRANB1             | 3.38E-18 | 0.9186795  | 0.401 | 0.204 | 1.20E-13 | Proliferating_UCBMC |
| ZFP82              | 3.48E-18 | 1.4666168  | 0.302 | 0.127 | 1.23E-13 | Proliferating_UCBMC |
| PPHLN1             | 3.87E-18 | 0.64222407 | 0.756 | 0.534 | 1.37E-13 | Proliferating_UCBMC |
| CSNK1G3            | 4.00E-18 | 0.76083827 | 0.581 | 0.35  | 1.42E-13 | Proliferating_UCBMC |
| NIPSNAP2           | 4.05E-18 | 0.81089481 | 0.544 | 0.321 | 1.44E-13 | Proliferating_UCBMC |
| RAB18              | 4.06E-18 | 0.81444311 | 0.522 | 0.307 | 1.44E-13 | Proliferating_UCBMC |
| FBXL5              | 4.17E-18 | 0.93436687 | 0.465 | 0.257 | 1.48E-13 | Proliferating_UCBMC |
| SNRK               | 4.79E-18 | 0.52645074 | 0.656 | 0.43  | 1.70E-13 | Proliferating_UCBMC |
| SRSF4              | 5.04E-18 | 0.6012717  | 0.813 | 0.571 | 1.79E-13 | Proliferating_UCBMC |
| NAA25              | 5.17E-18 | 1.01554657 | 0.454 | 0.241 | 1.83E-13 | Proliferating_UCBMC |
| FBXO28             | 5.23E-18 | 1.1601894  | 0.385 | 0.192 | 1.85E-13 | Proliferating_UCBMC |
| RBM27              | 5.33E-18 | 0.67347947 | 0.705 | 0.466 | 1.89E-13 | Proliferating_UCBMC |
| ACSL3              | 5.42E-18 | 1.00563077 | 0.454 | 0.242 | 1.92E-13 | Proliferating_UCBMC |
| ITPR2              | 5.89E-18 | 0.49974296 | 0.817 | 0.568 | 2.09E-13 | Proliferating_UCBMC |
| PTPN1              | 6.22E-18 | 0.61308633 | 0.709 | 0.465 | 2.20E-13 | Proliferating_UCBMC |
| FNDC3A             | 6.24E-18 | 0.49532859 | 0.795 | 0.532 | 2.21E-13 | Proliferating_UCBMC |
| GATAD2B            | 6.41E-18 | 0.56552051 | 0.749 | 0.509 | 2.27E-13 | Proliferating_UCBMC |
| RPL26              | 6.77E-18 | 0.43491846 | 0.945 | 0.819 | 2.40E-13 | Proliferating_UCBMC |
| UBR3               | 7.16E-18 | 0.66753836 | 0.619 | 0.382 | 2.54E-13 | Proliferating_UCBMC |
| SFMBT1             | 7.26E-18 | 0.76256324 | 0.601 | 0.366 | 2.57E-13 | Proliferating_UCBMC |
| PRIM2              | 7.34E-18 | 0.5088381  | 0.817 | 0.563 | 2.60E-13 | Proliferating_UCBMC |
| SNX29              | 7.80E-18 | 0.23833572 | 0.65  | 0.399 | 2.76E-13 | Proliferating_UCBMC |

|         |          |            |       |       |          |                     |
|---------|----------|------------|-------|-------|----------|---------------------|
| DNAJC2  | 7.89E-18 | 0.76358368 | 0.648 | 0.416 | 2.79E-13 | Proliferating_UCBMC |
| TFG     | 8.01E-18 | 0.93376486 | 0.5   | 0.301 | 2.84E-13 | Proliferating_UCBMC |
| HBP1    | 9.11E-18 | 0.79043184 | 0.588 | 0.377 | 3.23E-13 | Proliferating_UCBMC |
| CHD2    | 9.33E-18 | 0.43018233 | 0.87  | 0.629 | 3.31E-13 | Proliferating_UCBMC |
| AP2A2   | 9.61E-18 | 0.91145418 | 0.449 | 0.242 | 3.40E-13 | Proliferating_UCBMC |
| MBTPS1  | 9.95E-18 | 0.86843997 | 0.555 | 0.343 | 3.53E-13 | Proliferating_UCBMC |
| OGA     | 1.06E-17 | 0.52607056 | 0.729 | 0.515 | 3.76E-13 | Proliferating_UCBMC |
| KDM5A   | 1.08E-17 | 0.69121513 | 0.632 | 0.406 | 3.82E-13 | Proliferating_UCBMC |
| BTBD10  | 1.11E-17 | 0.80782363 | 0.5   | 0.288 | 3.92E-13 | Proliferating_UCBMC |
| TAF3    | 1.12E-17 | 0.68462158 | 0.692 | 0.475 | 3.98E-13 | Proliferating_UCBMC |
| CYB5A   | 1.14E-17 | 0.63382118 | 0.575 | 0.327 | 4.05E-13 | Proliferating_UCBMC |
| OPA1    | 1.21E-17 | 0.77084182 | 0.557 | 0.336 | 4.27E-13 | Proliferating_UCBMC |
| RCL1    | 1.40E-17 | 1.38075371 | 0.346 | 0.164 | 4.96E-13 | Proliferating_UCBMC |
| RTTN    | 1.46E-17 | 0.82738379 | 0.577 | 0.356 | 5.18E-13 | Proliferating_UCBMC |
| RPTOR   | 1.49E-17 | 0.49009181 | 0.588 | 0.352 | 5.27E-13 | Proliferating_UCBMC |
| ZFR     | 1.57E-17 | 0.657602   | 0.656 | 0.435 | 5.57E-13 | Proliferating_UCBMC |
| MED13   | 1.75E-17 | 0.62706865 | 0.623 | 0.397 | 6.20E-13 | Proliferating_UCBMC |
| CLINT1  | 1.75E-17 | 0.64088898 | 0.749 | 0.523 | 6.21E-13 | Proliferating_UCBMC |
| SAP30BP | 1.84E-17 | 0.69446228 | 0.584 | 0.358 | 6.50E-13 | Proliferating_UCBMC |
| CDCA7L  | 2.05E-17 | 0.88321523 | 0.454 | 0.245 | 7.26E-13 | Proliferating_UCBMC |
| POU2F1  | 2.07E-17 | 0.6035896  | 0.661 | 0.43  | 7.33E-13 | Proliferating_UCBMC |
| CCNC    | 2.17E-17 | 0.85762693 | 0.496 | 0.288 | 7.68E-13 | Proliferating_UCBMC |
| RPRD1B  | 2.49E-17 | 0.86342164 | 0.414 | 0.213 | 8.83E-13 | Proliferating_UCBMC |
| TRPS1   | 2.56E-17 | 0.42530104 | 0.65  | 0.398 | 9.07E-13 | Proliferating_UCBMC |
| MLXIP   | 2.79E-17 | 0.68608071 | 0.427 | 0.216 | 9.88E-13 | Proliferating_UCBMC |
| SH3KBP1 | 3.10E-17 | 0.40220327 | 0.934 | 0.73  | 1.10E-12 | Proliferating_UCBMC |
| MYSM1   | 3.27E-17 | 0.88562341 | 0.385 | 0.187 | 1.16E-12 | Proliferating_UCBMC |
| MIER1   | 3.64E-17 | 0.48368471 | 0.806 | 0.55  | 1.29E-12 | Proliferating_UCBMC |
| FBXO25  | 3.72E-17 | 1.14051643 | 0.372 | 0.187 | 1.32E-12 | Proliferating_UCBMC |
| PIAS2   | 3.77E-17 | 0.92408996 | 0.432 | 0.23  | 1.34E-12 | Proliferating_UCBMC |
| RALA    | 3.90E-17 | 0.74591853 | 0.604 | 0.372 | 1.38E-12 | Proliferating_UCBMC |
| CAMTA1  | 5.57E-17 | 0.63133916 | 0.727 | 0.504 | 1.97E-12 | Proliferating_UCBMC |
| MYLIP   | 5.68E-17 | 0.54019054 | 0.656 | 0.41  | 2.01E-12 | Proliferating_UCBMC |

|                    |          |            |       |       |          |                     |
|--------------------|----------|------------|-------|-------|----------|---------------------|
| ENSMMUG00000064068 | 6.05E-17 | 0.99469061 | 0.379 | 0.183 | 2.14E-12 | Proliferating_UCBMC |
| WVOX               | 6.16E-17 | 0.45231779 | 0.903 | 0.657 | 2.18E-12 | Proliferating_UCBMC |
| IRAK2              | 6.34E-17 | 0.58382821 | 0.608 | 0.371 | 2.25E-12 | Proliferating_UCBMC |
| ABI1               | 6.61E-17 | 0.42705637 | 0.811 | 0.56  | 2.34E-12 | Proliferating_UCBMC |
| COPB1              | 7.32E-17 | 0.81277885 | 0.551 | 0.336 | 2.59E-12 | Proliferating_UCBMC |
| STAG2              | 7.69E-17 | 0.46536584 | 0.888 | 0.683 | 2.72E-12 | Proliferating_UCBMC |
| SLU7               | 7.78E-17 | 0.72245872 | 0.573 | 0.353 | 2.76E-12 | Proliferating_UCBMC |
| ATXN7L1            | 9.46E-17 | 0.77359265 | 0.456 | 0.237 | 3.35E-12 | Proliferating_UCBMC |
| NBR1               | 9.62E-17 | 0.54252549 | 0.663 | 0.43  | 3.41E-12 | Proliferating_UCBMC |
| PIK3C2A            | 9.64E-17 | 0.90674936 | 0.454 | 0.245 | 3.41E-12 | Proliferating_UCBMC |
| NGDN               | 9.70E-17 | 1.08278662 | 0.381 | 0.192 | 3.44E-12 | Proliferating_UCBMC |
| NDFIP1             | 9.92E-17 | 0.51460306 | 0.822 | 0.578 | 3.52E-12 | Proliferating_UCBMC |
| ARFGEF2            | 1.15E-16 | 0.80813623 | 0.476 | 0.277 | 4.06E-12 | Proliferating_UCBMC |
| PTAR1              | 1.25E-16 | 0.76454965 | 0.493 | 0.276 | 4.42E-12 | Proliferating_UCBMC |
| QRICH1             | 1.27E-16 | 0.54748674 | 0.615 | 0.383 | 4.50E-12 | Proliferating_UCBMC |
| PARP12             | 1.35E-16 | 1.37066456 | 0.271 | 0.11  | 4.77E-12 | Proliferating_UCBMC |
| VPS13B             | 1.39E-16 | 0.37008871 | 0.916 | 0.686 | 4.92E-12 | Proliferating_UCBMC |
| KAT7               | 1.42E-16 | 0.57151028 | 0.608 | 0.371 | 5.02E-12 | Proliferating_UCBMC |
| SMAD7              | 1.48E-16 | 0.78750941 | 0.359 | 0.168 | 5.25E-12 | Proliferating_UCBMC |
| CASP8              | 1.50E-16 | 0.60060631 | 0.707 | 0.486 | 5.32E-12 | Proliferating_UCBMC |
| ENSMMUG00000014947 | 1.52E-16 | 0.84930422 | 0.522 | 0.316 | 5.40E-12 | Proliferating_UCBMC |
| MORC3              | 1.57E-16 | 0.73583606 | 0.537 | 0.325 | 5.58E-12 | Proliferating_UCBMC |
| WDR44              | 1.70E-16 | 0.91976102 | 0.434 | 0.238 | 6.03E-12 | Proliferating_UCBMC |
| ASAP1              | 1.70E-16 | 0.29713014 | 0.802 | 0.55  | 6.03E-12 | Proliferating_UCBMC |
| HEXA               | 1.74E-16 | 0.89745319 | 0.419 | 0.227 | 6.18E-12 | Proliferating_UCBMC |
| PPP1R2             | 1.84E-16 | 0.61229855 | 0.665 | 0.44  | 6.52E-12 | Proliferating_UCBMC |
| SPRTN              | 1.87E-16 | 1.24626587 | 0.282 | 0.117 | 6.64E-12 | Proliferating_UCBMC |
| USP9X              | 1.89E-16 | 0.35900949 | 0.778 | 0.517 | 6.68E-12 | Proliferating_UCBMC |
| GOLPH3             | 2.00E-16 | 0.54758298 | 0.676 | 0.439 | 7.07E-12 | Proliferating_UCBMC |
| UBE3C              | 2.22E-16 | 0.65930064 | 0.606 | 0.376 | 7.86E-12 | Proliferating_UCBMC |
| NPM3               | 2.23E-16 | 0.64567252 | 0.575 | 0.346 | 7.89E-12 | Proliferating_UCBMC |
| RNGTT              | 2.24E-16 | 0.56419551 | 0.762 | 0.526 | 7.92E-12 | Proliferating_UCBMC |
| B3GALNT2           | 2.57E-16 | 1.30894528 | 0.346 | 0.171 | 9.11E-12 | Proliferating_UCBMC |

|                   |          |            |       |       |          |                     |
|-------------------|----------|------------|-------|-------|----------|---------------------|
| RPP30             | 2.80E-16 | 1.06213336 | 0.37  | 0.188 | 9.91E-12 | Proliferating_UCBMC |
| TRDMT1            | 2.81E-16 | 0.97377466 | 0.416 | 0.219 | 9.96E-12 | Proliferating_UCBMC |
| MTPN              | 2.88E-16 | 0.63961239 | 0.7   | 0.47  | 1.02E-11 | Proliferating_UCBMC |
| ASB3              | 2.89E-16 | 0.78828692 | 0.509 | 0.299 | 1.03E-11 | Proliferating_UCBMC |
| TGS1              | 3.25E-16 | 0.72248186 | 0.612 | 0.404 | 1.15E-11 | Proliferating_UCBMC |
| PRKX              | 3.27E-16 | 0.3836884  | 0.758 | 0.512 | 1.16E-11 | Proliferating_UCBMC |
| SUPV3L1           | 3.28E-16 | 1.05107463 | 0.361 | 0.18  | 1.16E-11 | Proliferating_UCBMC |
| RALGAPB           | 3.46E-16 | 0.78136773 | 0.487 | 0.278 | 1.23E-11 | Proliferating_UCBMC |
| TAF2              | 3.51E-16 | 0.80579536 | 0.465 | 0.258 | 1.24E-11 | Proliferating_UCBMC |
| PAIP2             | 3.53E-16 | 0.47588459 | 0.894 | 0.689 | 1.25E-11 | Proliferating_UCBMC |
| NUP214            | 3.85E-16 | 0.61173694 | 0.643 | 0.418 | 1.37E-11 | Proliferating_UCBMC |
| ARID1B            | 4.04E-16 | 0.39749139 | 0.885 | 0.619 | 1.43E-11 | Proliferating_UCBMC |
| DDB1              | 4.09E-16 | 0.73697567 | 0.478 | 0.279 | 1.45E-11 | Proliferating_UCBMC |
| ENSMUG00000029026 | 4.65E-16 | 0.45300585 | 0.727 | 0.491 | 1.65E-11 | Proliferating_UCBMC |
| SHOC2             | 4.87E-16 | 0.4999343  | 0.718 | 0.49  | 1.73E-11 | Proliferating_UCBMC |
| AEBP2             | 5.23E-16 | 0.68214232 | 0.612 | 0.4   | 1.85E-11 | Proliferating_UCBMC |
| TCF20             | 5.39E-16 | 0.78364224 | 0.579 | 0.376 | 1.91E-11 | Proliferating_UCBMC |
| NOL10             | 5.50E-16 | 0.913136   | 0.471 | 0.272 | 1.95E-11 | Proliferating_UCBMC |
| USP34             | 5.50E-16 | 0.33071822 | 0.874 | 0.638 | 1.95E-11 | Proliferating_UCBMC |
| TAX1BP1           | 5.55E-16 | 0.57319054 | 0.729 | 0.512 | 1.97E-11 | Proliferating_UCBMC |
| SMYD3             | 6.08E-16 | 0.48929062 | 0.791 | 0.55  | 2.15E-11 | Proliferating_UCBMC |
| ZNF107            | 6.47E-16 | 1.09139738 | 0.407 | 0.221 | 2.29E-11 | Proliferating_UCBMC |
| TRAF3             | 6.94E-16 | 0.48600795 | 0.648 | 0.414 | 2.46E-11 | Proliferating_UCBMC |
| IKZF5             | 8.18E-16 | 0.99384671 | 0.326 | 0.15  | 2.90E-11 | Proliferating_UCBMC |
| DHX40             | 8.36E-16 | 0.99681092 | 0.432 | 0.243 | 2.96E-11 | Proliferating_UCBMC |
| YTHDC1            | 8.53E-16 | 0.58009404 | 0.725 | 0.497 | 3.02E-11 | Proliferating_UCBMC |
| SINHCAF           | 8.89E-16 | 0.64423039 | 0.588 | 0.374 | 3.15E-11 | Proliferating_UCBMC |
| CSNK2A1           | 8.94E-16 | 0.63219414 | 0.733 | 0.529 | 3.17E-11 | Proliferating_UCBMC |
| ZMYM5             | 9.03E-16 | 0.85182864 | 0.465 | 0.264 | 3.20E-11 | Proliferating_UCBMC |
| RSBN1             | 9.53E-16 | 1.10527874 | 0.35  | 0.172 | 3.38E-11 | Proliferating_UCBMC |
| PPIG              | 1.02E-15 | 0.49934409 | 0.828 | 0.598 | 3.62E-11 | Proliferating_UCBMC |
| TAB2              | 1.03E-15 | 0.61354351 | 0.579 | 0.35  | 3.65E-11 | Proliferating_UCBMC |
| PPP2R2A           | 1.04E-15 | 0.60029813 | 0.692 | 0.466 | 3.69E-11 | Proliferating_UCBMC |



|                    |          |            |       |       |          |                     |
|--------------------|----------|------------|-------|-------|----------|---------------------|
| SLC30A9            | 1.04E-15 | 0.69749528 | 0.566 | 0.346 | 3.70E-11 | Proliferating_UCBMC |
| HDAC2              | 1.06E-15 | 0.6745238  | 0.59  | 0.369 | 3.77E-11 | Proliferating_UCBMC |
| IQGAP2             | 1.09E-15 | 0.51220534 | 0.753 | 0.523 | 3.87E-11 | Proliferating_UCBMC |
| FAM160B1           | 1.10E-15 | 1.15508254 | 0.326 | 0.156 | 3.89E-11 | Proliferating_UCBMC |
| RMND5A             | 1.18E-15 | 0.73194088 | 0.526 | 0.315 | 4.19E-11 | Proliferating_UCBMC |
| ENSMMUG00000058037 | 1.21E-15 | 0.8011168  | 0.498 | 0.298 | 4.30E-11 | Proliferating_UCBMC |
| CENPC              | 1.32E-15 | 0.52339779 | 0.758 | 0.53  | 4.69E-11 | Proliferating_UCBMC |
| ECSIT              | 1.37E-15 | 0.75155381 | 0.405 | 0.216 | 4.87E-11 | Proliferating_UCBMC |
| DCAF10             | 1.46E-15 | 0.89828804 | 0.423 | 0.231 | 5.17E-11 | Proliferating_UCBMC |
| RBMS1              | 1.57E-15 | 0.4774962  | 0.733 | 0.488 | 5.57E-11 | Proliferating_UCBMC |
| HIF1A              | 1.60E-15 | 0.48640237 | 0.663 | 0.416 | 5.66E-11 | Proliferating_UCBMC |
| ATL2               | 1.62E-15 | 0.72477706 | 0.542 | 0.33  | 5.73E-11 | Proliferating_UCBMC |
| GPR89A             | 1.67E-15 | 0.76149148 | 0.491 | 0.284 | 5.91E-11 | Proliferating_UCBMC |
| HERC6              | 1.69E-15 | 1.07304238 | 0.388 | 0.204 | 5.98E-11 | Proliferating_UCBMC |
| MAGI3              | 1.69E-15 | 1.07223608 | 0.412 | 0.222 | 5.98E-11 | Proliferating_UCBMC |
| PRMT9              | 1.71E-15 | 0.84284482 | 0.385 | 0.197 | 6.07E-11 | Proliferating_UCBMC |
| SLC38A9            | 1.82E-15 | 0.80093776 | 0.482 | 0.276 | 6.46E-11 | Proliferating_UCBMC |
| DTNBP1             | 1.87E-15 | 0.61992175 | 0.7   | 0.475 | 6.64E-11 | Proliferating_UCBMC |
| ZNF708             | 1.92E-15 | 0.9888513  | 0.388 | 0.206 | 6.80E-11 | Proliferating_UCBMC |
| IGF2BP3            | 1.92E-15 | 0.41539347 | 0.612 | 0.371 | 6.81E-11 | Proliferating_UCBMC |
| ANAPC10            | 2.12E-15 | 0.7948846  | 0.555 | 0.355 | 7.50E-11 | Proliferating_UCBMC |
| SEC61A2            | 2.13E-15 | 0.78322296 | 0.449 | 0.251 | 7.56E-11 | Proliferating_UCBMC |
| PPP2R5A            | 2.15E-15 | 0.67393115 | 0.546 | 0.328 | 7.60E-11 | Proliferating_UCBMC |
| FGD3               | 2.15E-15 | 0.50140112 | 0.639 | 0.414 | 7.61E-11 | Proliferating_UCBMC |
| CNOT6              | 2.15E-15 | 0.76750606 | 0.434 | 0.242 | 7.63E-11 | Proliferating_UCBMC |
| RTKN2              | 2.16E-15 | 0.88714651 | 0.452 | 0.254 | 7.65E-11 | Proliferating_UCBMC |
| ENSMMUG00000006463 | 2.22E-15 | 0.4834781  | 0.872 | 0.738 | 7.86E-11 | Proliferating_UCBMC |
| GPBP1L1            | 2.27E-15 | 0.5720989  | 0.665 | 0.429 | 8.04E-11 | Proliferating_UCBMC |
| FAM118A            | 2.33E-15 | 0.48159203 | 0.608 | 0.372 | 8.25E-11 | Proliferating_UCBMC |
| SEC23A             | 2.33E-15 | 0.74834595 | 0.467 | 0.271 | 8.26E-11 | Proliferating_UCBMC |
| RPS3A              | 2.34E-15 | 0.33576899 | 0.978 | 0.947 | 8.28E-11 | Proliferating_UCBMC |
| CBLB               | 2.53E-15 | 0.32871643 | 0.919 | 0.695 | 8.95E-11 | Proliferating_UCBMC |
| SYTL2              | 2.57E-15 | 0.32100436 | 0.487 | 0.262 | 9.09E-11 | Proliferating_UCBMC |

|          |          |            |       |       |          |                     |
|----------|----------|------------|-------|-------|----------|---------------------|
| TRPC4AP  | 2.65E-15 | 0.58505277 | 0.548 | 0.336 | 9.39E-11 | Proliferating_UCBMC |
| RGS10    | 2.65E-15 | 0.51057819 | 0.634 | 0.387 | 9.40E-11 | Proliferating_UCBMC |
| KIAA1109 | 2.75E-15 | 0.54370289 | 0.57  | 0.348 | 9.74E-11 | Proliferating_UCBMC |
| APOOL    | 2.96E-15 | 0.88626361 | 0.43  | 0.246 | 1.05E-10 | Proliferating_UCBMC |
| HTT      | 3.01E-15 | 0.6714011  | 0.623 | 0.42  | 1.07E-10 | Proliferating_UCBMC |
| EIF3A    | 3.02E-15 | 0.46405398 | 0.802 | 0.565 | 1.07E-10 | Proliferating_UCBMC |
| UBAC2    | 3.06E-15 | 0.49564686 | 0.833 | 0.615 | 1.08E-10 | Proliferating_UCBMC |
| ZNRF2    | 3.14E-15 | 0.70936264 | 0.399 | 0.209 | 1.11E-10 | Proliferating_UCBMC |
| BMPR2    | 3.23E-15 | 1.40596518 | 0.308 | 0.142 | 1.15E-10 | Proliferating_UCBMC |
| VAC14    | 3.23E-15 | 0.87215514 | 0.339 | 0.163 | 1.15E-10 | Proliferating_UCBMC |
| IARS1    | 3.39E-15 | 0.65346025 | 0.551 | 0.341 | 1.20E-10 | Proliferating_UCBMC |
| ST6GAL1  | 3.52E-15 | 0.54454849 | 0.718 | 0.473 | 1.25E-10 | Proliferating_UCBMC |
| NCAPD3   | 3.60E-15 | 0.56432922 | 0.775 | 0.563 | 1.28E-10 | Proliferating_UCBMC |
| CNOT1    | 3.69E-15 | 0.4010225  | 0.791 | 0.55  | 1.31E-10 | Proliferating_UCBMC |
| GPBP1    | 3.93E-15 | 0.38272315 | 0.874 | 0.654 | 1.39E-10 | Proliferating_UCBMC |
| TTC7A    | 4.26E-15 | 0.5497682  | 0.48  | 0.272 | 1.51E-10 | Proliferating_UCBMC |
| G2E3     | 5.16E-15 | 0.59959877 | 0.581 | 0.365 | 1.83E-10 | Proliferating_UCBMC |
| MGAT5    | 5.31E-15 | 0.20769665 | 0.835 | 0.575 | 1.88E-10 | Proliferating_UCBMC |
| BICDL1   | 5.32E-15 | 0.39605957 | 0.696 | 0.45  | 1.89E-10 | Proliferating_UCBMC |
| PDGFRA   | 5.43E-15 | 0.38562993 | 0.936 | 0.796 | 1.92E-10 | Proliferating_UCBMC |
| DDX52    | 5.49E-15 | 0.65704328 | 0.515 | 0.306 | 1.95E-10 | Proliferating_UCBMC |
| CD96     | 5.57E-15 | 0.5028812  | 0.485 | 0.26  | 1.97E-10 | Proliferating_UCBMC |
| TRAC     | 5.71E-15 | 0.38645364 | 0.89  | 0.624 | 2.02E-10 | Proliferating_UCBMC |
| DOCK11   | 5.77E-15 | 0.57131048 | 0.747 | 0.524 | 2.04E-10 | Proliferating_UCBMC |
| WIPI2    | 5.80E-15 | 0.75275711 | 0.551 | 0.342 | 2.06E-10 | Proliferating_UCBMC |
| TBC1D5   | 6.81E-15 | 0.32549745 | 0.91  | 0.678 | 2.41E-10 | Proliferating_UCBMC |
| RALGPS2  | 7.24E-15 | 0.4021051  | 0.529 | 0.301 | 2.57E-10 | Proliferating_UCBMC |
| UBR4     | 7.76E-15 | 0.65454906 | 0.555 | 0.345 | 2.75E-10 | Proliferating_UCBMC |
| ZNF451   | 8.08E-15 | 0.56043479 | 0.672 | 0.458 | 2.86E-10 | Proliferating_UCBMC |
| VTI1A    | 8.17E-15 | 0.45102754 | 0.782 | 0.564 | 2.90E-10 | Proliferating_UCBMC |
| ATF7IP2  | 8.41E-15 | 0.76982125 | 0.5   | 0.289 | 2.98E-10 | Proliferating_UCBMC |
| MDM4     | 8.62E-15 | 0.54628235 | 0.608 | 0.394 | 3.05E-10 | Proliferating_UCBMC |
| ASH1L    | 8.70E-15 | 0.30138875 | 0.877 | 0.67  | 3.08E-10 | Proliferating_UCBMC |

|                    |          |            |       |       |          |                     |
|--------------------|----------|------------|-------|-------|----------|---------------------|
| ITSN2              | 8.73E-15 | 0.46286216 | 0.767 | 0.54  | 3.09E-10 | Proliferating_UCBMC |
| MED27              | 8.83E-15 | 0.48623511 | 0.628 | 0.41  | 3.13E-10 | Proliferating_UCBMC |
| KDM3A              | 9.19E-15 | 0.86189785 | 0.396 | 0.21  | 3.25E-10 | Proliferating_UCBMC |
| SELENOT            | 9.54E-15 | 0.79087118 | 0.452 | 0.257 | 3.38E-10 | Proliferating_UCBMC |
| MRTFB              | 9.65E-15 | 0.73729199 | 0.43  | 0.232 | 3.42E-10 | Proliferating_UCBMC |
| RPIA               | 1.01E-14 | 0.70688576 | 0.54  | 0.335 | 3.57E-10 | Proliferating_UCBMC |
| ENSMMUG00000059742 | 1.07E-14 | 0.74589358 | 0.537 | 0.346 | 3.78E-10 | Proliferating_UCBMC |
| MGAT4A             | 1.07E-14 | 0.76044867 | 0.46  | 0.26  | 3.79E-10 | Proliferating_UCBMC |
| STRIP1             | 1.09E-14 | 0.89049597 | 0.337 | 0.171 | 3.85E-10 | Proliferating_UCBMC |
| COP1               | 1.13E-14 | 0.40105448 | 0.74  | 0.485 | 3.99E-10 | Proliferating_UCBMC |
| CUX1               | 1.13E-14 | 0.28146984 | 0.804 | 0.541 | 4.00E-10 | Proliferating_UCBMC |
| SEC63              | 1.13E-14 | 0.47962647 | 0.731 | 0.502 | 4.01E-10 | Proliferating_UCBMC |
| EXOC4              | 1.20E-14 | 0.41191271 | 0.824 | 0.57  | 4.25E-10 | Proliferating_UCBMC |
| HDAC5              | 1.21E-14 | 0.89308004 | 0.359 | 0.183 | 4.29E-10 | Proliferating_UCBMC |
| HNRNPUL1           | 1.26E-14 | 0.49266487 | 0.718 | 0.508 | 4.48E-10 | Proliferating_UCBMC |
| SEC24C             | 1.31E-14 | 0.90231822 | 0.326 | 0.157 | 4.65E-10 | Proliferating_UCBMC |
| NR1D2              | 1.48E-14 | 0.69988499 | 0.414 | 0.223 | 5.26E-10 | Proliferating_UCBMC |
| STXBP5             | 1.60E-14 | 0.4824211  | 0.52  | 0.312 | 5.66E-10 | Proliferating_UCBMC |
| FAM241A            | 2.25E-14 | 0.60846021 | 0.482 | 0.278 | 7.97E-10 | Proliferating_UCBMC |
| UBR1               | 2.35E-14 | 0.51407602 | 0.7   | 0.498 | 8.32E-10 | Proliferating_UCBMC |
| ELL2               | 2.37E-14 | 0.58088249 | 0.485 | 0.276 | 8.38E-10 | Proliferating_UCBMC |
| SOCS5              | 2.39E-14 | 1.10014876 | 0.273 | 0.121 | 8.47E-10 | Proliferating_UCBMC |
| RNPC3              | 2.40E-14 | 1.0250514  | 0.339 | 0.173 | 8.50E-10 | Proliferating_UCBMC |
| SMAP2              | 2.41E-14 | 0.52141603 | 0.689 | 0.458 | 8.53E-10 | Proliferating_UCBMC |
| ZDHHHC17           | 2.46E-14 | 1.06667512 | 0.337 | 0.172 | 8.72E-10 | Proliferating_UCBMC |
| ENSMMUG00000012537 | 2.49E-14 | 0.64962519 | 0.595 | 0.399 | 8.83E-10 | Proliferating_UCBMC |
| RTF2               | 2.57E-14 | 0.63377632 | 0.511 | 0.31  | 9.10E-10 | Proliferating_UCBMC |
| TGFB1              | 2.59E-14 | 0.17411137 | 0.692 | 0.465 | 9.16E-10 | Proliferating_UCBMC |
| HACD2              | 2.59E-14 | 0.84698032 | 0.388 | 0.206 | 9.18E-10 | Proliferating_UCBMC |
| PCED1B             | 2.60E-14 | 0.98118646 | 0.335 | 0.164 | 9.22E-10 | Proliferating_UCBMC |
| TMX3               | 2.62E-14 | 1.01434546 | 0.436 | 0.261 | 9.29E-10 | Proliferating_UCBMC |
| ANKRD13C           | 2.63E-14 | 0.88209063 | 0.423 | 0.24  | 9.33E-10 | Proliferating_UCBMC |
| RACK1              | 2.64E-14 | 0.35044083 | 0.963 | 0.913 | 9.35E-10 | Proliferating_UCBMC |

|                    |          |            |       |       |          |                     |
|--------------------|----------|------------|-------|-------|----------|---------------------|
| ICE1               | 2.67E-14 | 0.79420835 | 0.447 | 0.256 | 9.47E-10 | Proliferating_UCBMC |
| RIC1               | 2.76E-14 | 0.80792737 | 0.509 | 0.32  | 9.78E-10 | Proliferating_UCBMC |
| PRPF18             | 2.88E-14 | 0.85000503 | 0.419 | 0.237 | 1.02E-09 | Proliferating_UCBMC |
| RPS4Y2             | 3.03E-14 | 0.48890858 | 0.526 | 0.297 | 1.07E-09 | Proliferating_UCBMC |
| RASGRF2            | 3.39E-14 | 1.42596429 | 0.258 | 0.11  | 1.20E-09 | Proliferating_UCBMC |
| SMAD4              | 3.51E-14 | 0.78385998 | 0.43  | 0.242 | 1.24E-09 | Proliferating_UCBMC |
| WAC                | 3.72E-14 | 0.38497979 | 0.811 | 0.596 | 1.32E-09 | Proliferating_UCBMC |
| DOP1A              | 4.03E-14 | 0.70562624 | 0.487 | 0.292 | 1.43E-09 | Proliferating_UCBMC |
| FBXL4              | 4.09E-14 | 1.05486519 | 0.302 | 0.144 | 1.45E-09 | Proliferating_UCBMC |
| CBLL1              | 4.42E-14 | 0.8205937  | 0.414 | 0.232 | 1.57E-09 | Proliferating_UCBMC |
| SERINC5            | 4.71E-14 | 0.91098609 | 0.322 | 0.155 | 1.67E-09 | Proliferating_UCBMC |
| ENSMMUG00000009018 | 4.92E-14 | 1.39676833 | 0.26  | 0.116 | 1.74E-09 | Proliferating_UCBMC |
| PSPC1              | 5.01E-14 | 0.39828395 | 0.769 | 0.53  | 1.78E-09 | Proliferating_UCBMC |
| FBXL17             | 5.10E-14 | 0.51844534 | 0.656 | 0.435 | 1.81E-09 | Proliferating_UCBMC |
| ZMPSTE24           | 5.18E-14 | 0.97360816 | 0.352 | 0.187 | 1.84E-09 | Proliferating_UCBMC |
| ZNF44              | 5.26E-14 | 0.74436902 | 0.463 | 0.273 | 1.86E-09 | Proliferating_UCBMC |
| RBM39              | 5.96E-14 | 0.25761683 | 0.965 | 0.842 | 2.11E-09 | Proliferating_UCBMC |
| C20H16orf87        | 5.98E-14 | 0.64784204 | 0.469 | 0.278 | 2.12E-09 | Proliferating_UCBMC |
| DOP1B              | 6.05E-14 | 0.58917054 | 0.476 | 0.287 | 2.14E-09 | Proliferating_UCBMC |
| TASP1              | 6.27E-14 | 0.57480011 | 0.599 | 0.394 | 2.22E-09 | Proliferating_UCBMC |
| ZNF407             | 6.35E-14 | 0.37108053 | 0.685 | 0.458 | 2.25E-09 | Proliferating_UCBMC |
| DDHD2              | 6.49E-14 | 0.89654783 | 0.412 | 0.231 | 2.30E-09 | Proliferating_UCBMC |
| ZFAND3             | 6.60E-14 | 0.31207057 | 0.846 | 0.592 | 2.34E-09 | Proliferating_UCBMC |
| PKN2               | 6.61E-14 | 0.39432713 | 0.744 | 0.505 | 2.34E-09 | Proliferating_UCBMC |
| TMEM248            | 7.33E-14 | 0.74992273 | 0.414 | 0.233 | 2.60E-09 | Proliferating_UCBMC |
| PPP6C              | 7.35E-14 | 0.91010772 | 0.348 | 0.18  | 2.61E-09 | Proliferating_UCBMC |
| SCML4              | 7.53E-14 | 0.40747339 | 0.817 | 0.603 | 2.67E-09 | Proliferating_UCBMC |
| TMEM117            | 7.95E-14 | 0.71928098 | 0.357 | 0.18  | 2.82E-09 | Proliferating_UCBMC |
| NRAS               | 8.01E-14 | 0.84541177 | 0.423 | 0.24  | 2.84E-09 | Proliferating_UCBMC |
| GSPT1              | 8.23E-14 | 0.79136689 | 0.46  | 0.274 | 2.92E-09 | Proliferating_UCBMC |
| IL1RAP             | 8.28E-14 | 1.09055507 | 0.339 | 0.174 | 2.93E-09 | Proliferating_UCBMC |
| SUCO               | 8.63E-14 | 0.44425761 | 0.687 | 0.462 | 3.06E-09 | Proliferating_UCBMC |
| HACE1              | 9.06E-14 | 0.82546592 | 0.498 | 0.315 | 3.21E-09 | Proliferating_UCBMC |

|                     |          |            |       |       |          |                     |
|---------------------|----------|------------|-------|-------|----------|---------------------|
| PPP1R16B            | 9.20E-14 | 0.53409085 | 0.593 | 0.387 | 3.26E-09 | Proliferating_UCBMC |
| MINDY2              | 9.27E-14 | 0.84365009 | 0.37  | 0.2   | 3.29E-09 | Proliferating_UCBMC |
| FAM13A              | 9.30E-14 | 1.38657524 | 0.286 | 0.136 | 3.29E-09 | Proliferating_UCBMC |
| PHF8                | 9.67E-14 | 0.87369765 | 0.403 | 0.233 | 3.42E-09 | Proliferating_UCBMC |
| ATG16L1             | 9.67E-14 | 0.7495487  | 0.388 | 0.21  | 3.43E-09 | Proliferating_UCBMC |
| SNX9                | 9.90E-14 | 0.83408358 | 0.469 | 0.277 | 3.51E-09 | Proliferating_UCBMC |
| RFWD3               | 9.97E-14 | 0.71442873 | 0.546 | 0.355 | 3.53E-09 | Proliferating_UCBMC |
| UBA6                | 1.02E-13 | 0.69756192 | 0.427 | 0.239 | 3.62E-09 | Proliferating_UCBMC |
| ATP6V0A1            | 1.02E-13 | 1.28504516 | 0.306 | 0.154 | 3.63E-09 | Proliferating_UCBMC |
| YPEL5               | 1.10E-13 | 0.41252949 | 0.742 | 0.513 | 3.89E-09 | Proliferating_UCBMC |
| DNM1L               | 1.20E-13 | 0.55031218 | 0.619 | 0.425 | 4.26E-09 | Proliferating_UCBMC |
| APPBP2              | 1.22E-13 | 0.60682286 | 0.504 | 0.303 | 4.32E-09 | Proliferating_UCBMC |
| KRAS                | 1.23E-13 | 0.62912615 | 0.54  | 0.345 | 4.35E-09 | Proliferating_UCBMC |
| UBL3                | 1.27E-13 | 0.68948006 | 0.502 | 0.311 | 4.49E-09 | Proliferating_UCBMC |
| RPL10A              | 1.30E-13 | 0.35172243 | 0.954 | 0.893 | 4.59E-09 | Proliferating_UCBMC |
| YLPM1               | 1.44E-13 | 0.64146512 | 0.511 | 0.307 | 5.11E-09 | Proliferating_UCBMC |
| TANC2               | 1.52E-13 | 0.63492903 | 0.474 | 0.269 | 5.39E-09 | Proliferating_UCBMC |
| RLIM                | 1.57E-13 | 0.63728665 | 0.46  | 0.276 | 5.55E-09 | Proliferating_UCBMC |
| LEMD3               | 1.59E-13 | 0.60569706 | 0.564 | 0.372 | 5.62E-09 | Proliferating_UCBMC |
| ENSMMUG00000002324  | 1.89E-13 | 0.5388391  | 0.703 | 0.527 | 6.68E-09 | Proliferating_UCBMC |
| AATF                | 1.91E-13 | 0.76668702 | 0.46  | 0.281 | 6.77E-09 | Proliferating_UCBMC |
| CDC40               | 2.12E-13 | 0.50457138 | 0.537 | 0.336 | 7.51E-09 | Proliferating_UCBMC |
| DTNB                | 2.14E-13 | 0.5763794  | 0.526 | 0.33  | 7.57E-09 | Proliferating_UCBMC |
| SAMD4B              | 2.14E-13 | 0.80723506 | 0.421 | 0.243 | 7.59E-09 | Proliferating_UCBMC |
| ENSMMUG000000045362 | 2.15E-13 | 1.07052768 | 0.291 | 0.141 | 7.62E-09 | Proliferating_UCBMC |
| NDUFAF5             | 2.31E-13 | 0.86190054 | 0.37  | 0.202 | 8.18E-09 | Proliferating_UCBMC |
| ANKRD17             | 2.33E-13 | 0.45796034 | 0.758 | 0.523 | 8.24E-09 | Proliferating_UCBMC |
| GTF2E2              | 2.55E-13 | 0.87128969 | 0.487 | 0.31  | 9.03E-09 | Proliferating_UCBMC |
| ILKAP               | 2.68E-13 | 0.62363745 | 0.59  | 0.412 | 9.48E-09 | Proliferating_UCBMC |
| MXD1                | 2.73E-13 | 0.52647836 | 0.491 | 0.295 | 9.68E-09 | Proliferating_UCBMC |
| GPRIN3              | 2.90E-13 | 0.64455582 | 0.524 | 0.332 | 1.03E-08 | Proliferating_UCBMC |
| NCBP1               | 2.92E-13 | 0.70328098 | 0.441 | 0.255 | 1.03E-08 | Proliferating_UCBMC |
| HEATR1              | 3.00E-13 | 1.15186637 | 0.355 | 0.192 | 1.06E-08 | Proliferating_UCBMC |

|                    |          |            |       |       |          |                     |
|--------------------|----------|------------|-------|-------|----------|---------------------|
| ERC1               | 3.08E-13 | 0.45085752 | 0.615 | 0.39  | 1.09E-08 | Proliferating_UCBMC |
| ZNF420             | 3.08E-13 | 0.96000432 | 0.368 | 0.202 | 1.09E-08 | Proliferating_UCBMC |
| HERPUD2            | 3.37E-13 | 0.70943843 | 0.463 | 0.282 | 1.19E-08 | Proliferating_UCBMC |
| TMEM106B           | 3.48E-13 | 0.92424725 | 0.357 | 0.194 | 1.23E-08 | Proliferating_UCBMC |
| EMC3               | 3.55E-13 | 0.62757815 | 0.491 | 0.3   | 1.26E-08 | Proliferating_UCBMC |
| RAB8B              | 3.60E-13 | 0.37493542 | 0.894 | 0.7   | 1.27E-08 | Proliferating_UCBMC |
| ZDHHC20            | 3.81E-13 | 0.52272121 | 0.535 | 0.348 | 1.35E-08 | Proliferating_UCBMC |
| MYEF2              | 3.98E-13 | 1.13322527 | 0.3   | 0.147 | 1.41E-08 | Proliferating_UCBMC |
| CNOT10             | 4.03E-13 | 0.49204379 | 0.513 | 0.316 | 1.43E-08 | Proliferating_UCBMC |
| INPP5A             | 4.17E-13 | 0.54334898 | 0.491 | 0.298 | 1.48E-08 | Proliferating_UCBMC |
| WDFY1              | 4.19E-13 | 0.72176756 | 0.441 | 0.262 | 1.49E-08 | Proliferating_UCBMC |
| ENSMMUG00000030465 | 4.48E-13 | 0.60120933 | 0.683 | 0.486 | 1.59E-08 | Proliferating_UCBMC |
| RAPGEF1            | 4.52E-13 | 0.39999465 | 0.676 | 0.462 | 1.60E-08 | Proliferating_UCBMC |
| MAML1              | 4.53E-13 | 0.97590952 | 0.326 | 0.171 | 1.61E-08 | Proliferating_UCBMC |
| GCC2               | 4.62E-13 | 0.64702415 | 0.557 | 0.359 | 1.64E-08 | Proliferating_UCBMC |
| GLYR1              | 4.64E-13 | 0.78947758 | 0.496 | 0.318 | 1.64E-08 | Proliferating_UCBMC |
| COX10              | 4.64E-13 | 0.72999081 | 0.434 | 0.256 | 1.65E-08 | Proliferating_UCBMC |
| SLC16A10           | 4.68E-13 | 1.1309655  | 0.295 | 0.143 | 1.66E-08 | Proliferating_UCBMC |
| ENSMMUG00000008587 | 5.10E-13 | 0.56501218 | 0.698 | 0.496 | 1.81E-08 | Proliferating_UCBMC |
| MTHFD1L            | 5.19E-13 | 0.63879504 | 0.489 | 0.292 | 1.84E-08 | Proliferating_UCBMC |
| OSER1              | 5.38E-13 | 0.77181554 | 0.465 | 0.285 | 1.91E-08 | Proliferating_UCBMC |
| ENSMMUG00000006803 | 5.39E-13 | 0.47406402 | 0.676 | 0.465 | 1.91E-08 | Proliferating_UCBMC |
| BRD7               | 5.47E-13 | 0.59743042 | 0.579 | 0.386 | 1.94E-08 | Proliferating_UCBMC |
| ZMYM2              | 5.49E-13 | 0.50082598 | 0.639 | 0.421 | 1.94E-08 | Proliferating_UCBMC |
| ERBIN              | 5.67E-13 | 0.39806547 | 0.815 | 0.585 | 2.01E-08 | Proliferating_UCBMC |
| CIP2A              | 5.67E-13 | 0.72255565 | 0.467 | 0.284 | 2.01E-08 | Proliferating_UCBMC |
| ABCG2              | 5.97E-13 | 0.82425725 | 0.39  | 0.211 | 2.11E-08 | Proliferating_UCBMC |
| TENT4B             | 6.07E-13 | 0.73998007 | 0.412 | 0.236 | 2.15E-08 | Proliferating_UCBMC |
| SYNE2              | 6.09E-13 | 0.32949877 | 0.771 | 0.54  | 2.16E-08 | Proliferating_UCBMC |
| MED1               | 6.49E-13 | 0.93506559 | 0.407 | 0.242 | 2.30E-08 | Proliferating_UCBMC |
| HACD3              | 6.52E-13 | 0.69106225 | 0.518 | 0.327 | 2.31E-08 | Proliferating_UCBMC |
| GAPVD1             | 6.78E-13 | 0.62870767 | 0.593 | 0.414 | 2.40E-08 | Proliferating_UCBMC |
| KLHL23             | 6.90E-13 | 0.3748758  | 0.894 | 0.677 | 2.44E-08 | Proliferating_UCBMC |

|                   |          |            |       |       |          |                     |
|-------------------|----------|------------|-------|-------|----------|---------------------|
| SEC23IP           | 6.94E-13 | 1.1310751  | 0.302 | 0.156 | 2.46E-08 | Proliferating_UCBMC |
| STK17B            | 7.03E-13 | 0.32494076 | 0.919 | 0.738 | 2.49E-08 | Proliferating_UCBMC |
| POLR3E            | 7.21E-13 | 1.05543021 | 0.271 | 0.127 | 2.55E-08 | Proliferating_UCBMC |
| LCMT1             | 7.28E-13 | 0.888436   | 0.335 | 0.176 | 2.58E-08 | Proliferating_UCBMC |
| SMG7              | 7.41E-13 | 0.63055791 | 0.597 | 0.402 | 2.62E-08 | Proliferating_UCBMC |
| SYNE1             | 7.43E-13 | 0.37954107 | 0.623 | 0.411 | 2.63E-08 | Proliferating_UCBMC |
| EFTUD2            | 7.49E-13 | 0.74832646 | 0.43  | 0.254 | 2.65E-08 | Proliferating_UCBMC |
| PSMD12            | 7.53E-13 | 0.4143427  | 0.855 | 0.622 | 2.67E-08 | Proliferating_UCBMC |
| AGPAT3            | 8.08E-13 | 0.86015633 | 0.326 | 0.168 | 2.86E-08 | Proliferating_UCBMC |
| SDF2              | 8.49E-13 | 0.52251435 | 0.465 | 0.281 | 3.01E-08 | Proliferating_UCBMC |
| CTNNB1            | 8.53E-13 | 0.47030376 | 0.632 | 0.427 | 3.02E-08 | Proliferating_UCBMC |
| RAB1A             | 8.66E-13 | 0.37394246 | 0.727 | 0.495 | 3.07E-08 | Proliferating_UCBMC |
| RBL2              | 9.02E-13 | 0.60768635 | 0.476 | 0.287 | 3.20E-08 | Proliferating_UCBMC |
| NKTR              | 9.19E-13 | 0.37352778 | 0.612 | 0.399 | 3.25E-08 | Proliferating_UCBMC |
| HIPK3             | 9.46E-13 | 0.63536911 | 0.445 | 0.27  | 3.35E-08 | Proliferating_UCBMC |
| GORASP2           | 9.85E-13 | 0.71162897 | 0.427 | 0.251 | 3.49E-08 | Proliferating_UCBMC |
| RAB3GAP1          | 9.94E-13 | 0.43780085 | 0.586 | 0.377 | 3.52E-08 | Proliferating_UCBMC |
| GABPB1            | 1.03E-12 | 0.47054801 | 0.676 | 0.483 | 3.64E-08 | Proliferating_UCBMC |
| MED14             | 1.06E-12 | 0.79438624 | 0.412 | 0.234 | 3.76E-08 | Proliferating_UCBMC |
| ADSL              | 1.06E-12 | 0.72520782 | 0.399 | 0.224 | 3.77E-08 | Proliferating_UCBMC |
| CHD8              | 1.07E-12 | 0.64154544 | 0.421 | 0.242 | 3.78E-08 | Proliferating_UCBMC |
| CD5               | 1.10E-12 | 1.1011425  | 0.275 | 0.13  | 3.89E-08 | Proliferating_UCBMC |
| EFL1              | 1.11E-12 | 0.57743653 | 0.548 | 0.351 | 3.95E-08 | Proliferating_UCBMC |
| ZER1              | 1.15E-12 | 1.10113638 | 0.273 | 0.129 | 4.09E-08 | Proliferating_UCBMC |
| ENSMUG00000017044 | 1.20E-12 | 1.05195671 | 0.326 | 0.172 | 4.27E-08 | Proliferating_UCBMC |
| TLK2              | 1.21E-12 | 0.56256067 | 0.615 | 0.428 | 4.28E-08 | Proliferating_UCBMC |
| WDR26             | 1.22E-12 | 0.4449189  | 0.542 | 0.339 | 4.31E-08 | Proliferating_UCBMC |
| PPP1R12B          | 1.23E-12 | 0.50075767 | 0.531 | 0.333 | 4.37E-08 | Proliferating_UCBMC |
| ZC3H11A           | 1.26E-12 | 0.40880236 | 0.659 | 0.458 | 4.48E-08 | Proliferating_UCBMC |
| FNIP2             | 1.29E-12 | 0.71528273 | 0.271 | 0.123 | 4.57E-08 | Proliferating_UCBMC |
| THOC2             | 1.36E-12 | 0.51071827 | 0.665 | 0.458 | 4.82E-08 | Proliferating_UCBMC |
| CD226             | 1.38E-12 | 0.95545154 | 0.344 | 0.182 | 4.90E-08 | Proliferating_UCBMC |
| TRMT10C           | 1.45E-12 | 0.60159352 | 0.544 | 0.35  | 5.13E-08 | Proliferating_UCBMC |

|                    |          |            |       |       |          |                     |
|--------------------|----------|------------|-------|-------|----------|---------------------|
| RBPJ               | 1.50E-12 | 0.51853932 | 0.619 | 0.407 | 5.33E-08 | Proliferating_UCBMC |
| TRIM37             | 1.51E-12 | 0.65633489 | 0.474 | 0.295 | 5.37E-08 | Proliferating_UCBMC |
| GTPBP4             | 1.53E-12 | 0.79303774 | 0.359 | 0.195 | 5.43E-08 | Proliferating_UCBMC |
| MED21              | 1.64E-12 | 0.66121289 | 0.443 | 0.26  | 5.81E-08 | Proliferating_UCBMC |
| BDP1               | 1.77E-12 | 0.2956973  | 0.672 | 0.459 | 6.27E-08 | Proliferating_UCBMC |
| APLP2              | 1.84E-12 | 0.62558792 | 0.511 | 0.324 | 6.51E-08 | Proliferating_UCBMC |
| TOX4               | 1.86E-12 | 0.62744295 | 0.537 | 0.357 | 6.60E-08 | Proliferating_UCBMC |
| ENSMMUG00000017113 | 1.89E-12 | 0.61594918 | 0.524 | 0.34  | 6.69E-08 | Proliferating_UCBMC |
| TBL1XR1            | 2.02E-12 | 0.29288373 | 0.857 | 0.624 | 7.15E-08 | Proliferating_UCBMC |
| SNX25              | 2.07E-12 | 0.6019089  | 0.476 | 0.289 | 7.34E-08 | Proliferating_UCBMC |
| TOGARAM1           | 2.10E-12 | 0.82652995 | 0.39  | 0.227 | 7.45E-08 | Proliferating_UCBMC |
| EXPH5              | 2.16E-12 | 0.6709705  | 0.306 | 0.152 | 7.66E-08 | Proliferating_UCBMC |
| SDHB               | 2.21E-12 | 0.54140834 | 0.502 | 0.319 | 7.84E-08 | Proliferating_UCBMC |
| DAZAP2             | 2.29E-12 | 0.47864429 | 0.678 | 0.479 | 8.11E-08 | Proliferating_UCBMC |
| SLC38A1            | 2.36E-12 | 0.29102033 | 0.841 | 0.623 | 8.38E-08 | Proliferating_UCBMC |
| POC5               | 2.48E-12 | 0.45356431 | 0.626 | 0.431 | 8.78E-08 | Proliferating_UCBMC |
| GPCPD1             | 2.98E-12 | 0.40853518 | 0.672 | 0.47  | 1.06E-07 | Proliferating_UCBMC |
| SKAP1              | 3.02E-12 | 0.30030456 | 0.963 | 0.79  | 1.07E-07 | Proliferating_UCBMC |
| ENSMMUG00000014648 | 3.07E-12 | 0.43527749 | 0.855 | 0.681 | 1.09E-07 | Proliferating_UCBMC |
| SLC35D1            | 3.08E-12 | 0.66314641 | 0.412 | 0.241 | 1.09E-07 | Proliferating_UCBMC |
| QKI                | 3.29E-12 | 0.16927873 | 0.753 | 0.525 | 1.17E-07 | Proliferating_UCBMC |
| RNF19A             | 3.37E-12 | 0.44719187 | 0.599 | 0.383 | 1.19E-07 | Proliferating_UCBMC |
| ARRB2              | 3.57E-12 | 0.38012368 | 0.551 | 0.345 | 1.27E-07 | Proliferating_UCBMC |
| TMOD3              | 3.71E-12 | 0.45804032 | 0.729 | 0.521 | 1.31E-07 | Proliferating_UCBMC |
| TAF15              | 3.75E-12 | 0.31103012 | 0.879 | 0.652 | 1.33E-07 | Proliferating_UCBMC |
| TRMT11             | 3.90E-12 | 0.96521212 | 0.3   | 0.153 | 1.38E-07 | Proliferating_UCBMC |
| RPL31              | 4.16E-12 | 0.41210404 | 0.835 | 0.644 | 1.47E-07 | Proliferating_UCBMC |
| FBXO21             | 4.52E-12 | 0.56451683 | 0.443 | 0.263 | 1.60E-07 | Proliferating_UCBMC |
| ZNF346             | 4.55E-12 | 1.02533419 | 0.267 | 0.127 | 1.61E-07 | Proliferating_UCBMC |
| IFT80              | 4.83E-12 | 0.43624048 | 0.634 | 0.422 | 1.71E-07 | Proliferating_UCBMC |
| SEC22A             | 4.87E-12 | 0.7382686  | 0.374 | 0.211 | 1.73E-07 | Proliferating_UCBMC |
| RFTN1              | 4.87E-12 | 0.53177346 | 0.487 | 0.299 | 1.73E-07 | Proliferating_UCBMC |
| MDN1               | 4.89E-12 | 0.75718271 | 0.46  | 0.286 | 1.73E-07 | Proliferating_UCBMC |



|                    |          |            |       |       |          |                     |
|--------------------|----------|------------|-------|-------|----------|---------------------|
| PUM2               | 5.07E-12 | 0.45256366 | 0.813 | 0.624 | 1.80E-07 | Proliferating_UCBMC |
| ACBD3              | 5.20E-12 | 0.64577394 | 0.412 | 0.246 | 1.84E-07 | Proliferating_UCBMC |
| SSRP1              | 5.32E-12 | 0.68010347 | 0.469 | 0.292 | 1.88E-07 | Proliferating_UCBMC |
| INO80              | 5.60E-12 | 0.56394244 | 0.465 | 0.294 | 1.99E-07 | Proliferating_UCBMC |
| XPR1               | 5.65E-12 | 0.49300138 | 0.559 | 0.379 | 2.00E-07 | Proliferating_UCBMC |
| PAK1IP1            | 5.75E-12 | 0.64835795 | 0.467 | 0.286 | 2.04E-07 | Proliferating_UCBMC |
| ABI2               | 5.76E-12 | 0.98718236 | 0.326 | 0.173 | 2.04E-07 | Proliferating_UCBMC |
| BCL7B              | 5.93E-12 | 0.52842864 | 0.474 | 0.296 | 2.10E-07 | Proliferating_UCBMC |
| CRBN               | 6.06E-12 | 0.88842532 | 0.359 | 0.203 | 2.15E-07 | Proliferating_UCBMC |
| CSPP1              | 6.25E-12 | 0.67218606 | 0.537 | 0.35  | 2.21E-07 | Proliferating_UCBMC |
| EIF4B              | 6.38E-12 | 0.49231674 | 0.689 | 0.49  | 2.26E-07 | Proliferating_UCBMC |
| PRRC2B             | 6.42E-12 | 0.22014493 | 0.756 | 0.528 | 2.27E-07 | Proliferating_UCBMC |
| KIAA1143           | 6.49E-12 | 0.69466101 | 0.482 | 0.311 | 2.30E-07 | Proliferating_UCBMC |
| ENSMMUG00000014003 | 6.54E-12 | 0.94844611 | 0.322 | 0.168 | 2.32E-07 | Proliferating_UCBMC |
| VPS53              | 6.90E-12 | 0.6182943  | 0.445 | 0.268 | 2.44E-07 | Proliferating_UCBMC |
| ARHGEF6            | 6.93E-12 | 0.43095796 | 0.619 | 0.419 | 2.45E-07 | Proliferating_UCBMC |
| FUT8               | 7.03E-12 | 0.6338548  | 0.5   | 0.32  | 2.49E-07 | Proliferating_UCBMC |
| PRRC2C             | 7.32E-12 | 0.34992057 | 0.91  | 0.724 | 2.59E-07 | Proliferating_UCBMC |
| HM13               | 7.50E-12 | 0.56238451 | 0.463 | 0.277 | 2.66E-07 | Proliferating_UCBMC |
| MTA3               | 7.59E-12 | 0.85350989 | 0.394 | 0.231 | 2.69E-07 | Proliferating_UCBMC |
| CNST               | 7.60E-12 | 0.55030534 | 0.557 | 0.375 | 2.69E-07 | Proliferating_UCBMC |
| PPP3CA             | 8.12E-12 | 0.40164666 | 0.826 | 0.606 | 2.88E-07 | Proliferating_UCBMC |
| LCLAT1             | 8.58E-12 | 0.49513664 | 0.535 | 0.347 | 3.04E-07 | Proliferating_UCBMC |
| ERP44              | 8.80E-12 | 0.47160299 | 0.637 | 0.446 | 3.12E-07 | Proliferating_UCBMC |
| TRIM72             | 9.04E-12 | 0.38436627 | 0.87  | 0.679 | 3.20E-07 | Proliferating_UCBMC |
| PCCB               | 9.21E-12 | 0.98377269 | 0.286 | 0.146 | 3.26E-07 | Proliferating_UCBMC |
| MKLN1              | 9.34E-12 | 0.43018635 | 0.727 | 0.523 | 3.31E-07 | Proliferating_UCBMC |
| LMBRD2             | 9.39E-12 | 1.15146068 | 0.258 | 0.125 | 3.33E-07 | Proliferating_UCBMC |
| DNAJB12            | 9.73E-12 | 0.65784375 | 0.394 | 0.233 | 3.45E-07 | Proliferating_UCBMC |
| ENSMMUG00000008199 | 1.00E-11 | 0.80565365 | 0.352 | 0.194 | 3.55E-07 | Proliferating_UCBMC |
| LDHB               | 1.01E-11 | 0.65478296 | 0.381 | 0.213 | 3.57E-07 | Proliferating_UCBMC |
| HMBOX1             | 1.01E-11 | 0.52098067 | 0.515 | 0.325 | 3.59E-07 | Proliferating_UCBMC |
| ZNF506             | 1.03E-11 | 0.55697904 | 0.564 | 0.378 | 3.66E-07 | Proliferating_UCBMC |

|                    |          |            |       |       |          |                     |
|--------------------|----------|------------|-------|-------|----------|---------------------|
| ASCC3              | 1.04E-11 | 0.42831991 | 0.692 | 0.505 | 3.67E-07 | Proliferating_UCBMC |
| USP42              | 1.04E-11 | 0.90451697 | 0.344 | 0.194 | 3.69E-07 | Proliferating_UCBMC |
| NAA16              | 1.04E-11 | 0.60009509 | 0.419 | 0.251 | 3.69E-07 | Proliferating_UCBMC |
| CLIP1              | 1.07E-11 | 0.51890942 | 0.487 | 0.308 | 3.78E-07 | Proliferating_UCBMC |
| USP49              | 1.07E-11 | 0.62999919 | 0.3   | 0.152 | 3.78E-07 | Proliferating_UCBMC |
| LIN52              | 1.17E-11 | 0.49551028 | 0.438 | 0.266 | 4.16E-07 | Proliferating_UCBMC |
| LTN1               | 1.23E-11 | 0.57889315 | 0.509 | 0.327 | 4.35E-07 | Proliferating_UCBMC |
| TBL1X              | 1.27E-11 | 0.63065688 | 0.485 | 0.303 | 4.49E-07 | Proliferating_UCBMC |
| N4BP2L1            | 1.33E-11 | 0.54069482 | 0.355 | 0.192 | 4.71E-07 | Proliferating_UCBMC |
| GARS1              | 1.41E-11 | 0.77077897 | 0.33  | 0.182 | 5.01E-07 | Proliferating_UCBMC |
| RPL5               | 1.44E-11 | 0.30290318 | 0.971 | 0.923 | 5.11E-07 | Proliferating_UCBMC |
| PAFAH1B2           | 1.48E-11 | 0.65030311 | 0.443 | 0.275 | 5.23E-07 | Proliferating_UCBMC |
| GFM2               | 1.55E-11 | 0.96823108 | 0.333 | 0.184 | 5.51E-07 | Proliferating_UCBMC |
| ZNF682             | 1.67E-11 | 0.90484123 | 0.317 | 0.172 | 5.92E-07 | Proliferating_UCBMC |
| VPS13D             | 1.73E-11 | 0.39647875 | 0.491 | 0.31  | 6.12E-07 | Proliferating_UCBMC |
| PDCD4              | 1.89E-11 | 0.4387761  | 0.689 | 0.465 | 6.68E-07 | Proliferating_UCBMC |
| UQCC1              | 1.95E-11 | 0.99422564 | 0.352 | 0.207 | 6.93E-07 | Proliferating_UCBMC |
| TMEM39A            | 2.08E-11 | 1.10887297 | 0.256 | 0.121 | 7.37E-07 | Proliferating_UCBMC |
| ACTR10             | 2.27E-11 | 0.5227349  | 0.502 | 0.324 | 8.05E-07 | Proliferating_UCBMC |
| TFAM               | 2.46E-11 | 0.44051529 | 0.597 | 0.394 | 8.71E-07 | Proliferating_UCBMC |
| FRG1               | 2.46E-11 | 0.60826488 | 0.361 | 0.201 | 8.72E-07 | Proliferating_UCBMC |
| FAR1               | 2.51E-11 | 0.43245368 | 0.623 | 0.429 | 8.89E-07 | Proliferating_UCBMC |
| LRRC40             | 2.56E-11 | 0.92709019 | 0.374 | 0.221 | 9.06E-07 | Proliferating_UCBMC |
| SERINC3            | 2.71E-11 | 0.6645929  | 0.401 | 0.244 | 9.59E-07 | Proliferating_UCBMC |
| TYW5               | 2.84E-11 | 0.65887994 | 0.346 | 0.189 | 1.01E-06 | Proliferating_UCBMC |
| JARID2             | 2.89E-11 | 0.26614462 | 0.85  | 0.619 | 1.02E-06 | Proliferating_UCBMC |
| ENSMMUG00000060229 | 2.96E-11 | 0.49864783 | 0.604 | 0.394 | 1.05E-06 | Proliferating_UCBMC |
| REST               | 3.08E-11 | 0.66939834 | 0.368 | 0.214 | 1.09E-06 | Proliferating_UCBMC |
| DYM                | 3.16E-11 | 0.43391418 | 0.659 | 0.458 | 1.12E-06 | Proliferating_UCBMC |
| DIDO1              | 3.17E-11 | 0.55469996 | 0.493 | 0.324 | 1.12E-06 | Proliferating_UCBMC |
| ENSMMUG00000062930 | 3.18E-11 | 1.05401004 | 0.286 | 0.149 | 1.13E-06 | Proliferating_UCBMC |
| IWS1               | 3.20E-11 | 0.54242168 | 0.524 | 0.345 | 1.13E-06 | Proliferating_UCBMC |
| EML4               | 3.24E-11 | 0.16125084 | 0.925 | 0.756 | 1.15E-06 | Proliferating_UCBMC |

|                    |          |            |       |       |          |                     |
|--------------------|----------|------------|-------|-------|----------|---------------------|
| ZC3H18             | 3.48E-11 | 0.57068604 | 0.533 | 0.362 | 1.23E-06 | Proliferating_UCBMC |
| TMEM38B            | 3.50E-11 | 1.06676812 | 0.311 | 0.17  | 1.24E-06 | Proliferating_UCBMC |
| RELCH              | 3.71E-11 | 0.42813426 | 0.531 | 0.351 | 1.31E-06 | Proliferating_UCBMC |
| EHBP1              | 3.77E-11 | 0.49220536 | 0.564 | 0.368 | 1.34E-06 | Proliferating_UCBMC |
| USP16              | 3.79E-11 | 0.42976733 | 0.601 | 0.414 | 1.34E-06 | Proliferating_UCBMC |
| GRAP2              | 3.79E-11 | 0.65930736 | 0.434 | 0.256 | 1.34E-06 | Proliferating_UCBMC |
| GAN                | 3.96E-11 | 0.71952177 | 0.282 | 0.141 | 1.40E-06 | Proliferating_UCBMC |
| DCTN4              | 4.09E-11 | 0.48147347 | 0.436 | 0.262 | 1.45E-06 | Proliferating_UCBMC |
| SUGP2              | 4.21E-11 | 0.51324022 | 0.432 | 0.266 | 1.49E-06 | Proliferating_UCBMC |
| ENSMMUG00000020316 | 4.34E-11 | 0.45768464 | 0.553 | 0.366 | 1.54E-06 | Proliferating_UCBMC |
| SUN1               | 4.40E-11 | 0.85165681 | 0.28  | 0.142 | 1.56E-06 | Proliferating_UCBMC |
| NLRC5              | 4.64E-11 | 0.25099686 | 0.449 | 0.269 | 1.64E-06 | Proliferating_UCBMC |
| CLK4               | 4.72E-11 | 0.5959039  | 0.432 | 0.269 | 1.67E-06 | Proliferating_UCBMC |
| HERC2              | 4.74E-11 | 0.27904039 | 0.615 | 0.411 | 1.68E-06 | Proliferating_UCBMC |
| DENND4C            | 4.78E-11 | 0.44427522 | 0.43  | 0.251 | 1.69E-06 | Proliferating_UCBMC |
| RASA3              | 4.80E-11 | 0.49894097 | 0.449 | 0.278 | 1.70E-06 | Proliferating_UCBMC |
| ZNFX1              | 4.80E-11 | 0.53149601 | 0.425 | 0.254 | 1.70E-06 | Proliferating_UCBMC |
| LARP4              | 4.97E-11 | 0.51164729 | 0.562 | 0.375 | 1.76E-06 | Proliferating_UCBMC |
| MAU2               | 5.07E-11 | 0.81750455 | 0.286 | 0.149 | 1.80E-06 | Proliferating_UCBMC |
| RAB9B              | 5.10E-11 | 1.04501655 | 0.26  | 0.13  | 1.81E-06 | Proliferating_UCBMC |
| TOP1               | 5.11E-11 | 0.34598073 | 0.852 | 0.613 | 1.81E-06 | Proliferating_UCBMC |
| MFNG               | 5.20E-11 | 0.3318311  | 0.579 | 0.371 | 1.84E-06 | Proliferating_UCBMC |
| GLMN               | 5.44E-11 | 0.51343803 | 0.555 | 0.372 | 1.93E-06 | Proliferating_UCBMC |
| GOLM2              | 5.46E-11 | 0.33698091 | 0.663 | 0.47  | 1.94E-06 | Proliferating_UCBMC |
| LIMK2              | 5.47E-11 | 0.51757527 | 0.46  | 0.29  | 1.94E-06 | Proliferating_UCBMC |
| SMARCC2            | 5.80E-11 | 0.55066908 | 0.388 | 0.226 | 2.06E-06 | Proliferating_UCBMC |
| ADK                | 6.28E-11 | 0.50364773 | 0.661 | 0.459 | 2.22E-06 | Proliferating_UCBMC |
| PPP1R12A           | 6.39E-11 | 0.35590039 | 0.863 | 0.679 | 2.27E-06 | Proliferating_UCBMC |
| NSMCE2             | 6.45E-11 | 0.29620152 | 0.76  | 0.55  | 2.29E-06 | Proliferating_UCBMC |
| CTDSP2             | 6.49E-11 | 0.70523486 | 0.317 | 0.172 | 2.30E-06 | Proliferating_UCBMC |
| RPS11              | 7.01E-11 | 0.28143378 | 0.967 | 0.92  | 2.48E-06 | Proliferating_UCBMC |
| RPLP2              | 7.02E-11 | 0.27284848 | 0.958 | 0.903 | 2.49E-06 | Proliferating_UCBMC |
| ENSMMUG00000007536 | 7.72E-11 | 0.52184315 | 0.599 | 0.442 | 2.73E-06 | Proliferating_UCBMC |

|                     |          |            |       |       |          |                     |
|---------------------|----------|------------|-------|-------|----------|---------------------|
| KANSL2              | 7.74E-11 | 0.35584221 | 0.581 | 0.371 | 2.74E-06 | Proliferating_UCBMC |
| GTF2F2              | 7.78E-11 | 0.41129153 | 0.553 | 0.376 | 2.76E-06 | Proliferating_UCBMC |
| FO XK1              | 8.00E-11 | 0.85253161 | 0.344 | 0.194 | 2.83E-06 | Proliferating_UCBMC |
| ENSM MUG00000062716 | 8.15E-11 | 0.87500835 | 0.672 | 0.54  | 2.89E-06 | Proliferating_UCBMC |
| USP20               | 8.36E-11 | 0.88121725 | 0.278 | 0.144 | 2.96E-06 | Proliferating_UCBMC |
| PISD                | 8.57E-11 | 0.82517917 | 0.374 | 0.221 | 3.04E-06 | Proliferating_UCBMC |
| KDM4C               | 8.91E-11 | 0.28747955 | 0.731 | 0.515 | 3.16E-06 | Proliferating_UCBMC |
| SND1                | 9.56E-11 | 0.27918915 | 0.714 | 0.5   | 3.39E-06 | Proliferating_UCBMC |
| TTC27               | 9.56E-11 | 0.72479874 | 0.355 | 0.205 | 3.39E-06 | Proliferating_UCBMC |
| MEMO1               | 9.63E-11 | 0.47024524 | 0.659 | 0.478 | 3.41E-06 | Proliferating_UCBMC |
| ZNF280D             | 9.86E-11 | 0.48986517 | 0.458 | 0.294 | 3.49E-06 | Proliferating_UCBMC |
| MAP2K6              | 9.91E-11 | 0.55354504 | 0.37  | 0.209 | 3.51E-06 | Proliferating_UCBMC |
| RBM19               | 9.93E-11 | 0.83211839 | 0.284 | 0.144 | 3.52E-06 | Proliferating_UCBMC |
| SORL1               | 1.05E-10 | 0.36380135 | 0.665 | 0.463 | 3.72E-06 | Proliferating_UCBMC |
| CAB39               | 1.08E-10 | 0.34804566 | 0.764 | 0.565 | 3.81E-06 | Proliferating_UCBMC |
| USP7                | 1.08E-10 | 0.36563138 | 0.513 | 0.331 | 3.84E-06 | Proliferating_UCBMC |
| SNX13               | 1.11E-10 | 0.46197254 | 0.548 | 0.369 | 3.92E-06 | Proliferating_UCBMC |
| ENSM MUG00000065104 | 1.13E-10 | 0.39342379 | 0.696 | 0.508 | 4.02E-06 | Proliferating_UCBMC |
| OLA1                | 1.17E-10 | 0.36171226 | 0.72  | 0.547 | 4.15E-06 | Proliferating_UCBMC |
| ARL6IP5             | 1.23E-10 | 0.54243925 | 0.645 | 0.47  | 4.35E-06 | Proliferating_UCBMC |
| ATP6V1A             | 1.28E-10 | 0.95822336 | 0.328 | 0.186 | 4.53E-06 | Proliferating_UCBMC |
| ENSM MUG00000047277 | 1.29E-10 | 0.54138875 | 0.751 | 0.548 | 4.56E-06 | Proliferating_UCBMC |
| NUP50               | 1.30E-10 | 0.48733301 | 0.542 | 0.361 | 4.62E-06 | Proliferating_UCBMC |
| KLHL12              | 1.32E-10 | 0.55427353 | 0.28  | 0.142 | 4.68E-06 | Proliferating_UCBMC |
| SART3               | 1.33E-10 | 0.80537554 | 0.328 | 0.182 | 4.73E-06 | Proliferating_UCBMC |
| PAFAH1B1            | 1.34E-10 | 0.33492926 | 0.797 | 0.598 | 4.76E-06 | Proliferating_UCBMC |
| CXHXorf38           | 1.35E-10 | 0.67382472 | 0.388 | 0.23  | 4.78E-06 | Proliferating_UCBMC |
| DTL                 | 1.37E-10 | 0.47273629 | 0.559 | 0.372 | 4.85E-06 | Proliferating_UCBMC |
| ARHGAP32            | 1.39E-10 | 0.57285034 | 0.392 | 0.237 | 4.94E-06 | Proliferating_UCBMC |
| DDX17               | 1.47E-10 | 0.31141999 | 0.817 | 0.62  | 5.20E-06 | Proliferating_UCBMC |
| FAM222B             | 1.53E-10 | 0.43917623 | 0.489 | 0.316 | 5.43E-06 | Proliferating_UCBMC |
| TIGAR               | 1.54E-10 | 0.21933323 | 0.806 | 0.59  | 5.45E-06 | Proliferating_UCBMC |
| KPNA3               | 1.54E-10 | 0.40465627 | 0.604 | 0.432 | 5.46E-06 | Proliferating_UCBMC |

|         |          |            |       |       |          |                     |
|---------|----------|------------|-------|-------|----------|---------------------|
| ELOVL5  | 1.58E-10 | 0.37419203 | 0.736 | 0.543 | 5.60E-06 | Proliferating_UCBMC |
| MTMR6   | 1.58E-10 | 0.63450315 | 0.425 | 0.27  | 5.61E-06 | Proliferating_UCBMC |
| ASCC2   | 1.60E-10 | 0.82137516 | 0.35  | 0.203 | 5.67E-06 | Proliferating_UCBMC |
| MFSD14B | 1.61E-10 | 0.51807917 | 0.445 | 0.277 | 5.71E-06 | Proliferating_UCBMC |
| DDX47   | 1.66E-10 | 0.74818501 | 0.355 | 0.204 | 5.88E-06 | Proliferating_UCBMC |
| EIF2A   | 1.66E-10 | 0.51575449 | 0.533 | 0.356 | 5.88E-06 | Proliferating_UCBMC |
| BCLAF1  | 1.68E-10 | 0.23717091 | 0.903 | 0.713 | 5.96E-06 | Proliferating_UCBMC |
| TP53BP2 | 1.70E-10 | 0.41588361 | 0.469 | 0.291 | 6.03E-06 | Proliferating_UCBMC |
| SPTLC1  | 1.78E-10 | 0.54622383 | 0.374 | 0.217 | 6.32E-06 | Proliferating_UCBMC |
| PITPNB  | 1.87E-10 | 0.41323321 | 0.63  | 0.442 | 6.62E-06 | Proliferating_UCBMC |
| RFC1    | 1.91E-10 | 0.42400122 | 0.747 | 0.585 | 6.75E-06 | Proliferating_UCBMC |
| CRY1    | 1.94E-10 | 0.26001989 | 0.511 | 0.326 | 6.87E-06 | Proliferating_UCBMC |
| PTPN4   | 1.97E-10 | 0.41054771 | 0.63  | 0.441 | 6.96E-06 | Proliferating_UCBMC |
| LEPROT  | 2.02E-10 | 0.78937665 | 0.271 | 0.139 | 7.16E-06 | Proliferating_UCBMC |
| KDM1A   | 2.07E-10 | 0.71413432 | 0.454 | 0.299 | 7.32E-06 | Proliferating_UCBMC |
| KPNA4   | 2.07E-10 | 0.89076857 | 0.368 | 0.223 | 7.34E-06 | Proliferating_UCBMC |
| SPATA5  | 2.11E-10 | 0.49065559 | 0.559 | 0.386 | 7.47E-06 | Proliferating_UCBMC |
| ANKRD12 | 2.14E-10 | 0.30533982 | 0.764 | 0.565 | 7.58E-06 | Proliferating_UCBMC |
| BRF1    | 2.16E-10 | 0.61433862 | 0.289 | 0.152 | 7.65E-06 | Proliferating_UCBMC |
| CPSF7   | 2.23E-10 | 0.67151417 | 0.41  | 0.261 | 7.92E-06 | Proliferating_UCBMC |
| YTHDF3  | 2.27E-10 | 0.38805603 | 0.584 | 0.406 | 8.06E-06 | Proliferating_UCBMC |
| NOL11   | 2.30E-10 | 0.56456704 | 0.335 | 0.187 | 8.14E-06 | Proliferating_UCBMC |
| RPL37A  | 2.39E-10 | 0.2544434  | 0.967 | 0.899 | 8.49E-06 | Proliferating_UCBMC |
| PRKAG2  | 2.42E-10 | 0.93925615 | 0.311 | 0.176 | 8.58E-06 | Proliferating_UCBMC |
| PRKACB  | 2.43E-10 | 0.3880675  | 0.76  | 0.581 | 8.59E-06 | Proliferating_UCBMC |
| SEC13   | 2.46E-10 | 0.71969204 | 0.363 | 0.218 | 8.72E-06 | Proliferating_UCBMC |
| UBE2E3  | 2.46E-10 | 0.52909589 | 0.57  | 0.405 | 8.72E-06 | Proliferating_UCBMC |
| PLEKHB2 | 2.48E-10 | 0.56548983 | 0.489 | 0.321 | 8.79E-06 | Proliferating_UCBMC |
| LNPEP   | 2.49E-10 | 0.28988111 | 0.718 | 0.52  | 8.81E-06 | Proliferating_UCBMC |
| CLSTN1  | 2.52E-10 | 0.4737723  | 0.43  | 0.271 | 8.91E-06 | Proliferating_UCBMC |
| CYP20A1 | 2.69E-10 | 0.72427709 | 0.315 | 0.177 | 9.54E-06 | Proliferating_UCBMC |
| WARS2   | 2.71E-10 | 0.75152485 | 0.396 | 0.247 | 9.60E-06 | Proliferating_UCBMC |
| ATP6V1H | 2.75E-10 | 0.46422021 | 0.485 | 0.312 | 9.73E-06 | Proliferating_UCBMC |

|          |          |            |       |       |          |                     |
|----------|----------|------------|-------|-------|----------|---------------------|
| BCAS3    | 2.84E-10 | 0.45996935 | 0.606 | 0.415 | 1.01E-05 | Proliferating_UCBMC |
| YARS1    | 2.87E-10 | 0.75977372 | 0.33  | 0.19  | 1.02E-05 | Proliferating_UCBMC |
| EPRS1    | 2.90E-10 | 0.53219707 | 0.537 | 0.363 | 1.03E-05 | Proliferating_UCBMC |
| PHIP     | 2.98E-10 | 0.29681318 | 0.791 | 0.594 | 1.06E-05 | Proliferating_UCBMC |
| IRF2BP2  | 3.03E-10 | 0.52092614 | 0.385 | 0.231 | 1.08E-05 | Proliferating_UCBMC |
| CDC27    | 3.04E-10 | 0.45428643 | 0.608 | 0.42  | 1.08E-05 | Proliferating_UCBMC |
| STAM     | 3.16E-10 | 0.63824481 | 0.33  | 0.189 | 1.12E-05 | Proliferating_UCBMC |
| NAPG     | 3.27E-10 | 0.67069789 | 0.443 | 0.293 | 1.16E-05 | Proliferating_UCBMC |
| CD52     | 3.31E-10 | 0.2725026  | 0.969 | 0.808 | 1.17E-05 | Proliferating_UCBMC |
| CACUL1   | 3.43E-10 | 0.61079892 | 0.374 | 0.224 | 1.22E-05 | Proliferating_UCBMC |
| DPEP2    | 3.53E-10 | 0.5764701  | 0.262 | 0.125 | 1.25E-05 | Proliferating_UCBMC |
| ELF2     | 3.54E-10 | 0.34373718 | 0.659 | 0.47  | 1.25E-05 | Proliferating_UCBMC |
| SF1      | 3.56E-10 | 0.34846172 | 0.742 | 0.531 | 1.26E-05 | Proliferating_UCBMC |
| TRANK1   | 3.66E-10 | 0.37166124 | 0.491 | 0.321 | 1.30E-05 | Proliferating_UCBMC |
| THADA    | 3.68E-10 | 0.47565561 | 0.626 | 0.445 | 1.30E-05 | Proliferating_UCBMC |
| SYNJ1    | 3.68E-10 | 0.46603442 | 0.355 | 0.204 | 1.31E-05 | Proliferating_UCBMC |
| SUSD6    | 3.74E-10 | 0.53740723 | 0.507 | 0.341 | 1.33E-05 | Proliferating_UCBMC |
| ANKIB1   | 3.81E-10 | 0.3374395  | 0.615 | 0.441 | 1.35E-05 | Proliferating_UCBMC |
| TBCE     | 3.87E-10 | 0.78417586 | 0.377 | 0.231 | 1.37E-05 | Proliferating_UCBMC |
| DHX8     | 3.94E-10 | 0.64482957 | 0.456 | 0.296 | 1.40E-05 | Proliferating_UCBMC |
| LRPPRC   | 4.18E-10 | 0.3960992  | 0.67  | 0.47  | 1.48E-05 | Proliferating_UCBMC |
| CCDC43   | 4.22E-10 | 0.79466436 | 0.286 | 0.154 | 1.50E-05 | Proliferating_UCBMC |
| MCUB     | 4.29E-10 | 0.45348282 | 0.753 | 0.533 | 1.52E-05 | Proliferating_UCBMC |
| CENPU    | 4.34E-10 | 0.48952031 | 0.588 | 0.405 | 1.54E-05 | Proliferating_UCBMC |
| MARF1    | 4.36E-10 | 0.59845611 | 0.344 | 0.203 | 1.54E-05 | Proliferating_UCBMC |
| ZNF131   | 4.40E-10 | 0.33787277 | 0.568 | 0.381 | 1.56E-05 | Proliferating_UCBMC |
| IL6ST    | 4.49E-10 | 0.23129635 | 0.648 | 0.422 | 1.59E-05 | Proliferating_UCBMC |
| MTERF4   | 4.54E-10 | 0.7095579  | 0.269 | 0.141 | 1.61E-05 | Proliferating_UCBMC |
| PRMT7    | 4.69E-10 | 0.82622454 | 0.308 | 0.174 | 1.66E-05 | Proliferating_UCBMC |
| NUP93    | 4.91E-10 | 0.71053085 | 0.35  | 0.206 | 1.74E-05 | Proliferating_UCBMC |
| RPL15    | 5.02E-10 | 0.28744461 | 0.956 | 0.877 | 1.78E-05 | Proliferating_UCBMC |
| PDSS1    | 5.02E-10 | 0.71124886 | 0.346 | 0.201 | 1.78E-05 | Proliferating_UCBMC |
| RABGAP1L | 5.14E-10 | 0.14869062 | 0.947 | 0.725 | 1.82E-05 | Proliferating_UCBMC |

|                   |          |            |       |       |          |                     |
|-------------------|----------|------------|-------|-------|----------|---------------------|
| ZNF395            | 5.19E-10 | 0.86493217 | 0.302 | 0.163 | 1.84E-05 | Proliferating_UCBMC |
| FBXW7             | 5.38E-10 | 0.21970208 | 0.784 | 0.57  | 1.91E-05 | Proliferating_UCBMC |
| PDE7A             | 5.46E-10 | 0.31022345 | 0.696 | 0.496 | 1.93E-05 | Proliferating_UCBMC |
| TRNT1             | 5.54E-10 | 0.72916338 | 0.344 | 0.205 | 1.96E-05 | Proliferating_UCBMC |
| ABCD3             | 5.56E-10 | 0.72204019 | 0.372 | 0.221 | 1.97E-05 | Proliferating_UCBMC |
| ENSMUG00000041517 | 5.67E-10 | 0.65361116 | 0.35  | 0.201 | 2.01E-05 | Proliferating_UCBMC |
| CYSLTR1           | 5.76E-10 | 0.5444902  | 0.452 | 0.286 | 2.04E-05 | Proliferating_UCBMC |
| FAM126B           | 5.90E-10 | 0.63769234 | 0.363 | 0.221 | 2.09E-05 | Proliferating_UCBMC |
| ATG7              | 5.91E-10 | 0.65913942 | 0.414 | 0.254 | 2.09E-05 | Proliferating_UCBMC |
| NUBPL             | 6.03E-10 | 0.79910079 | 0.361 | 0.219 | 2.14E-05 | Proliferating_UCBMC |
| MAPKAPK2          | 6.12E-10 | 0.5751117  | 0.326 | 0.182 | 2.17E-05 | Proliferating_UCBMC |
| MIEF1             | 6.14E-10 | 0.52850233 | 0.282 | 0.149 | 2.17E-05 | Proliferating_UCBMC |
| ODR4              | 6.18E-10 | 0.84887257 | 0.315 | 0.183 | 2.19E-05 | Proliferating_UCBMC |
| UBE2B             | 6.49E-10 | 0.45524124 | 0.709 | 0.536 | 2.30E-05 | Proliferating_UCBMC |
| PRXL2A            | 6.91E-10 | 0.77615852 | 0.392 | 0.251 | 2.45E-05 | Proliferating_UCBMC |
| UBQLN1            | 7.00E-10 | 0.50282101 | 0.544 | 0.368 | 2.48E-05 | Proliferating_UCBMC |
| MARK3             | 7.08E-10 | 0.2881897  | 0.628 | 0.441 | 2.51E-05 | Proliferating_UCBMC |
| TCEA1             | 7.12E-10 | 0.38263128 | 0.764 | 0.582 | 2.52E-05 | Proliferating_UCBMC |
| LCORL             | 7.24E-10 | 0.59887785 | 0.535 | 0.379 | 2.56E-05 | Proliferating_UCBMC |
| DCK               | 7.39E-10 | 0.60111645 | 0.511 | 0.35  | 2.62E-05 | Proliferating_UCBMC |
| MPHOSPH10         | 7.48E-10 | 0.73302145 | 0.355 | 0.21  | 2.65E-05 | Proliferating_UCBMC |
| STAU2             | 8.08E-10 | 0.48807074 | 0.652 | 0.47  | 2.86E-05 | Proliferating_UCBMC |
| APTX              | 8.33E-10 | 0.65844302 | 0.335 | 0.191 | 2.95E-05 | Proliferating_UCBMC |
| ATP5PB            | 8.69E-10 | 0.41588708 | 0.652 | 0.467 | 3.08E-05 | Proliferating_UCBMC |
| ATXN10            | 8.93E-10 | 0.44881759 | 0.692 | 0.528 | 3.17E-05 | Proliferating_UCBMC |
| TRRAP             | 9.00E-10 | 0.39576854 | 0.485 | 0.316 | 3.19E-05 | Proliferating_UCBMC |
| FLNA              | 9.04E-10 | 0.17669947 | 0.67  | 0.465 | 3.20E-05 | Proliferating_UCBMC |
| MAN1A2            | 9.15E-10 | 0.36555814 | 0.566 | 0.396 | 3.24E-05 | Proliferating_UCBMC |
| CMSS1             | 9.33E-10 | 0.54101642 | 0.507 | 0.337 | 3.31E-05 | Proliferating_UCBMC |
| RBM25             | 9.39E-10 | 0.35334274 | 0.78  | 0.595 | 3.33E-05 | Proliferating_UCBMC |
| MED10             | 1.00E-09 | 0.47799072 | 0.357 | 0.209 | 3.55E-05 | Proliferating_UCBMC |
| PSMF1             | 1.04E-09 | 0.69213    | 0.302 | 0.165 | 3.67E-05 | Proliferating_UCBMC |
| DSTYK             | 1.05E-09 | 0.76131147 | 0.267 | 0.139 | 3.71E-05 | Proliferating_UCBMC |

|           |          |            |       |       |          |                     |
|-----------|----------|------------|-------|-------|----------|---------------------|
| APIP      | 1.09E-09 | 0.41403049 | 0.465 | 0.296 | 3.85E-05 | Proliferating_UCBMC |
| SLC4A7    | 1.19E-09 | 0.33323251 | 0.544 | 0.367 | 4.23E-05 | Proliferating_UCBMC |
| TXLNG     | 1.28E-09 | 0.62187353 | 0.447 | 0.296 | 4.53E-05 | Proliferating_UCBMC |
| PPP1CB    | 1.28E-09 | 0.33254078 | 0.85  | 0.666 | 4.53E-05 | Proliferating_UCBMC |
| HMOX2     | 1.28E-09 | 0.46267508 | 0.531 | 0.368 | 4.54E-05 | Proliferating_UCBMC |
| AHCTF1    | 1.29E-09 | 0.44712642 | 0.562 | 0.392 | 4.56E-05 | Proliferating_UCBMC |
| HACL1     | 1.34E-09 | 0.52079982 | 0.319 | 0.178 | 4.74E-05 | Proliferating_UCBMC |
| CEP85L    | 1.34E-09 | 0.2614621  | 0.703 | 0.5   | 4.74E-05 | Proliferating_UCBMC |
| ERCC8     | 1.42E-09 | 1.05007211 | 0.286 | 0.16  | 5.01E-05 | Proliferating_UCBMC |
| MLLT10    | 1.43E-09 | 0.30635815 | 0.626 | 0.419 | 5.07E-05 | Proliferating_UCBMC |
| DCAF8     | 1.46E-09 | 0.51849097 | 0.509 | 0.351 | 5.16E-05 | Proliferating_UCBMC |
| MRPS9     | 1.47E-09 | 0.43466538 | 0.57  | 0.405 | 5.20E-05 | Proliferating_UCBMC |
| DENND1A   | 1.47E-09 | 0.47434107 | 0.551 | 0.389 | 5.22E-05 | Proliferating_UCBMC |
| PTPN2     | 1.68E-09 | 0.33972564 | 0.718 | 0.542 | 5.97E-05 | Proliferating_UCBMC |
| CCND3     | 1.72E-09 | 0.38554207 | 0.722 | 0.546 | 6.11E-05 | Proliferating_UCBMC |
| ZNF93     | 1.77E-09 | 0.32679496 | 0.601 | 0.426 | 6.28E-05 | Proliferating_UCBMC |
| NSF       | 1.78E-09 | 0.44365768 | 0.621 | 0.461 | 6.32E-05 | Proliferating_UCBMC |
| CWC25     | 1.83E-09 | 0.46684023 | 0.465 | 0.303 | 6.48E-05 | Proliferating_UCBMC |
| IGF1R     | 1.86E-09 | 1.01621815 | 0.328 | 0.194 | 6.59E-05 | Proliferating_UCBMC |
| ASPH      | 1.90E-09 | 0.95878398 | 0.291 | 0.164 | 6.74E-05 | Proliferating_UCBMC |
| SESN3     | 1.93E-09 | 0.88775108 | 0.335 | 0.202 | 6.84E-05 | Proliferating_UCBMC |
| RNF216    | 1.96E-09 | 0.28914734 | 0.665 | 0.497 | 6.96E-05 | Proliferating_UCBMC |
| C12orf65  | 1.97E-09 | 0.61132149 | 0.348 | 0.205 | 7.00E-05 | Proliferating_UCBMC |
| RBM14     | 2.06E-09 | 0.1875861  | 0.866 | 0.648 | 7.28E-05 | Proliferating_UCBMC |
| CCNDBP1   | 2.08E-09 | 0.55352284 | 0.383 | 0.235 | 7.35E-05 | Proliferating_UCBMC |
| C4H6orf89 | 2.10E-09 | 0.69236558 | 0.313 | 0.18  | 7.44E-05 | Proliferating_UCBMC |
| CHI3L2    | 2.11E-09 | 0.51965143 | 0.313 | 0.171 | 7.47E-05 | Proliferating_UCBMC |
| CNOT6L    | 2.16E-09 | 0.20105801 | 0.835 | 0.604 | 7.64E-05 | Proliferating_UCBMC |
| NEDD4L    | 2.20E-09 | 0.37119863 | 0.438 | 0.281 | 7.79E-05 | Proliferating_UCBMC |
| SLC10A7   | 2.32E-09 | 0.3919975  | 0.438 | 0.28  | 8.21E-05 | Proliferating_UCBMC |
| PPP4R3A   | 2.32E-09 | 0.36021887 | 0.522 | 0.359 | 8.22E-05 | Proliferating_UCBMC |
| MFSD8     | 2.34E-09 | 0.71602275 | 0.284 | 0.159 | 8.30E-05 | Proliferating_UCBMC |
| EWSR1     | 2.35E-09 | 0.32620741 | 0.731 | 0.53  | 8.32E-05 | Proliferating_UCBMC |



|                    |          |            |       |       |            |                     |
|--------------------|----------|------------|-------|-------|------------|---------------------|
| ENSMMUG00000012690 | 2.40E-09 | 0.68610028 | 0.443 | 0.294 | 8.51E-05   | Proliferating_UCBMC |
| CHKA               | 2.41E-09 | 0.66346987 | 0.346 | 0.207 | 8.55E-05   | Proliferating_UCBMC |
| WDR20              | 2.47E-09 | 0.66998988 | 0.407 | 0.259 | 8.75E-05   | Proliferating_UCBMC |
| SCAF11             | 2.58E-09 | 0.36169467 | 0.808 | 0.634 | 9.13E-05   | Proliferating_UCBMC |
| KIAA1328           | 2.62E-09 | 0.42955007 | 0.601 | 0.426 | 9.27E-05   | Proliferating_UCBMC |
| ENSMMUG00000061458 | 2.62E-09 | 0.40455336 | 0.474 | 0.306 | 9.27E-05   | Proliferating_UCBMC |
| ATRX               | 2.66E-09 | 0.25147435 | 0.835 | 0.63  | 9.44E-05   | Proliferating_UCBMC |
| HSF2               | 2.70E-09 | 0.60652918 | 0.341 | 0.199 | 9.57E-05   | Proliferating_UCBMC |
| POGZ               | 2.71E-09 | 0.33578786 | 0.57  | 0.394 | 9.59E-05   | Proliferating_UCBMC |
| BTF3L4             | 2.73E-09 | 0.53816887 | 0.59  | 0.441 | 9.68E-05   | Proliferating_UCBMC |
| ZFP30              | 2.80E-09 | 0.65352166 | 0.264 | 0.141 | 9.91E-05   | Proliferating_UCBMC |
| STAT5B             | 2.83E-09 | 0.40686523 | 0.544 | 0.367 | 0.00010034 | Proliferating_UCBMC |
| PPP2R2D            | 2.88E-09 | 0.44183475 | 0.485 | 0.326 | 0.00010192 | Proliferating_UCBMC |
| KCNAB2             | 2.92E-09 | 0.28543927 | 0.48  | 0.306 | 0.0001034  | Proliferating_UCBMC |
| CEP120             | 2.98E-09 | 0.64961266 | 0.383 | 0.24  | 0.00010553 | Proliferating_UCBMC |
| MRPL44             | 3.08E-09 | 0.59241296 | 0.374 | 0.236 | 0.00010916 | Proliferating_UCBMC |
| AP2B1              | 3.23E-09 | 0.28195413 | 0.537 | 0.366 | 0.0001145  | Proliferating_UCBMC |
| PDS5A              | 3.25E-09 | 0.32584343 | 0.692 | 0.498 | 0.00011508 | Proliferating_UCBMC |
| PCM1               | 3.28E-09 | 0.37027607 | 0.692 | 0.519 | 0.00011623 | Proliferating_UCBMC |
| TMEM183A           | 3.30E-09 | 0.56090148 | 0.469 | 0.311 | 0.00011677 | Proliferating_UCBMC |
| PRPF8              | 3.36E-09 | 0.37542246 | 0.606 | 0.436 | 0.00011895 | Proliferating_UCBMC |
| RNF103             | 3.37E-09 | 0.43818366 | 0.557 | 0.395 | 0.00011928 | Proliferating_UCBMC |
| TRIP12             | 3.43E-09 | 0.32611299 | 0.674 | 0.506 | 0.0001217  | Proliferating_UCBMC |
| MYO6               | 3.44E-09 | 0.5404602  | 0.333 | 0.188 | 0.00012192 | Proliferating_UCBMC |
| TDRD3              | 3.44E-09 | 0.37771302 | 0.485 | 0.322 | 0.00012193 | Proliferating_UCBMC |
| KIAA0319           | 3.49E-09 | 0.63771229 | 0.256 | 0.132 | 0.00012349 | Proliferating_UCBMC |
| RPL9               | 3.72E-09 | 0.28838092 | 0.958 | 0.889 | 0.00013167 | Proliferating_UCBMC |
| CLPX               | 3.78E-09 | 0.59473998 | 0.355 | 0.218 | 0.00013387 | Proliferating_UCBMC |
| CD3E               | 3.79E-09 | 0.20931027 | 0.663 | 0.437 | 0.00013413 | Proliferating_UCBMC |
| RRP15              | 3.82E-09 | 0.81538737 | 0.284 | 0.16  | 0.00013538 | Proliferating_UCBMC |
| RSL1D1             | 3.92E-09 | 0.5040944  | 0.597 | 0.443 | 0.00013881 | Proliferating_UCBMC |
| SRSF5              | 4.01E-09 | 0.28061791 | 0.885 | 0.754 | 0.00014222 | Proliferating_UCBMC |
| UBA7               | 4.03E-09 | 0.68587143 | 0.328 | 0.194 | 0.0001427  | Proliferating_UCBMC |

|                    |          |            |       |       |            |                     |
|--------------------|----------|------------|-------|-------|------------|---------------------|
| IP6K2              | 4.12E-09 | 0.49417564 | 0.487 | 0.332 | 0.00014597 | Proliferating_UCBMC |
| C2CD5              | 4.19E-09 | 0.63757122 | 0.445 | 0.3   | 0.00014839 | Proliferating_UCBMC |
| GLCE               | 4.32E-09 | 0.33718602 | 0.48  | 0.307 | 0.00015294 | Proliferating_UCBMC |
| DUS2               | 4.34E-09 | 0.72837903 | 0.289 | 0.165 | 0.00015379 | Proliferating_UCBMC |
| KHDC4              | 4.38E-09 | 0.86556608 | 0.282 | 0.16  | 0.0001553  | Proliferating_UCBMC |
| KCTD20             | 4.49E-09 | 0.30018075 | 0.533 | 0.353 | 0.00015902 | Proliferating_UCBMC |
| ENSMMUG00000061630 | 4.57E-09 | 0.47956347 | 0.548 | 0.389 | 0.00016194 | Proliferating_UCBMC |
| RAD51B             | 5.02E-09 | 0.28610472 | 0.802 | 0.602 | 0.00017771 | Proliferating_UCBMC |
| MAP3K1             | 5.03E-09 | 0.35523441 | 0.535 | 0.358 | 0.00017818 | Proliferating_UCBMC |
| GTF3C3             | 5.06E-09 | 0.64848225 | 0.322 | 0.192 | 0.0001794  | Proliferating_UCBMC |
| DPM1               | 5.23E-09 | 0.53097662 | 0.39  | 0.246 | 0.00018526 | Proliferating_UCBMC |
| SFXN1              | 5.31E-09 | 0.64194333 | 0.41  | 0.266 | 0.00018815 | Proliferating_UCBMC |
| BIN2               | 5.63E-09 | 0.22086176 | 0.795 | 0.585 | 0.00019966 | Proliferating_UCBMC |
| SLC39A11           | 5.73E-09 | 0.43694579 | 0.482 | 0.314 | 0.00020309 | Proliferating_UCBMC |
| SREK1IP1           | 5.79E-09 | 0.38097099 | 0.59  | 0.418 | 0.00020504 | Proliferating_UCBMC |
| PCMTD2             | 6.02E-09 | 0.79322282 | 0.282 | 0.159 | 0.00021314 | Proliferating_UCBMC |
| GRAMD1B            | 6.06E-09 | 0.23847346 | 0.487 | 0.317 | 0.00021462 | Proliferating_UCBMC |
| FCMR               | 6.12E-09 | 0.2617356  | 0.557 | 0.367 | 0.00021684 | Proliferating_UCBMC |
| ITM2A              | 6.29E-09 | 0.3515086  | 0.478 | 0.304 | 0.00022274 | Proliferating_UCBMC |
| PPP4R1             | 6.55E-09 | 0.64922356 | 0.352 | 0.216 | 0.00023193 | Proliferating_UCBMC |
| TMEM71             | 6.55E-09 | 0.26004154 | 0.504 | 0.323 | 0.00023197 | Proliferating_UCBMC |
| ENSMMUG00000016009 | 6.81E-09 | 0.52633241 | 0.584 | 0.445 | 0.00024127 | Proliferating_UCBMC |
| GTF2B              | 6.88E-09 | 0.23899063 | 0.797 | 0.604 | 0.00024378 | Proliferating_UCBMC |
| ENSMMUG00000055627 | 6.95E-09 | 0.32957539 | 0.846 | 0.657 | 0.00024621 | Proliferating_UCBMC |
| AUTS2              | 6.97E-09 | 0.2685813  | 0.493 | 0.321 | 0.0002471  | Proliferating_UCBMC |
| SLC39A9            | 7.04E-09 | 0.83950767 | 0.326 | 0.201 | 0.00024956 | Proliferating_UCBMC |
| GUCA1B             | 7.19E-09 | 0.49187174 | 0.361 | 0.223 | 0.00025466 | Proliferating_UCBMC |
| EIF3M              | 7.53E-09 | 0.42340194 | 0.687 | 0.51  | 0.0002667  | Proliferating_UCBMC |
| ZRSR2              | 7.59E-09 | 0.52891225 | 0.363 | 0.222 | 0.00026882 | Proliferating_UCBMC |
| PRNP               | 7.74E-09 | 0.94516894 | 0.269 | 0.152 | 0.00027412 | Proliferating_UCBMC |
| LRRFIP2            | 7.78E-09 | 0.49570871 | 0.48  | 0.332 | 0.0002757  | Proliferating_UCBMC |
| STK3               | 7.84E-09 | 0.65137154 | 0.324 | 0.189 | 0.00027792 | Proliferating_UCBMC |
| ARID1A             | 7.85E-09 | 0.21422241 | 0.733 | 0.538 | 0.00027815 | Proliferating_UCBMC |

|                     |          |            |       |       |            |                     |
|---------------------|----------|------------|-------|-------|------------|---------------------|
| SLC23A2             | 7.86E-09 | 0.30408677 | 0.425 | 0.275 | 0.00027865 | Proliferating_UCBMC |
| COG3                | 7.94E-09 | 0.71017717 | 0.264 | 0.143 | 0.00028127 | Proliferating_UCBMC |
| THOC5               | 8.27E-09 | 0.58620862 | 0.372 | 0.241 | 0.00029318 | Proliferating_UCBMC |
| RAD18               | 8.47E-09 | 0.54448186 | 0.333 | 0.194 | 0.00029994 | Proliferating_UCBMC |
| ATG2B               | 8.66E-09 | 0.87116174 | 0.286 | 0.165 | 0.00030685 | Proliferating_UCBMC |
| ETV3                | 8.71E-09 | 0.45422075 | 0.348 | 0.208 | 0.00030878 | Proliferating_UCBMC |
| GALNT1              | 8.87E-09 | 0.25930647 | 0.533 | 0.356 | 0.00031446 | Proliferating_UCBMC |
| ELMOD3              | 8.91E-09 | 0.5391016  | 0.46  | 0.314 | 0.00031571 | Proliferating_UCBMC |
| ADD1                | 8.93E-09 | 0.34462654 | 0.637 | 0.457 | 0.00031643 | Proliferating_UCBMC |
| DHX29               | 9.19E-09 | 0.4007607  | 0.423 | 0.266 | 0.00032555 | Proliferating_UCBMC |
| FAM184A             | 9.24E-09 | 0.53539653 | 0.315 | 0.178 | 0.0003273  | Proliferating_UCBMC |
| FHIT                | 9.34E-09 | 0.71501336 | 0.344 | 0.207 | 0.00033095 | Proliferating_UCBMC |
| EDEM1               | 9.99E-09 | 0.45483084 | 0.465 | 0.311 | 0.00035405 | Proliferating_UCBMC |
| PFDN1               | 1.00E-08 | 0.37973183 | 0.615 | 0.438 | 0.00035439 | Proliferating_UCBMC |
| SCAMP1              | 1.07E-08 | 0.67517788 | 0.289 | 0.162 | 0.00037925 | Proliferating_UCBMC |
| SP110               | 1.08E-08 | 0.25563264 | 0.623 | 0.445 | 0.0003818  | Proliferating_UCBMC |
| SMG6                | 1.08E-08 | 0.17860284 | 0.782 | 0.588 | 0.00038203 | Proliferating_UCBMC |
| VAPA                | 1.09E-08 | 0.3576195  | 0.731 | 0.551 | 0.00038544 | Proliferating_UCBMC |
| ENSMMUG000000001894 | 1.10E-08 | 0.41923309 | 0.595 | 0.442 | 0.00039089 | Proliferating_UCBMC |
| SP3                 | 1.12E-08 | 0.36520659 | 0.597 | 0.43  | 0.00039729 | Proliferating_UCBMC |
| SNIP1               | 1.13E-08 | 0.55494555 | 0.43  | 0.291 | 0.0003987  | Proliferating_UCBMC |
| MATR3               | 1.13E-08 | 0.25663281 | 0.925 | 0.763 | 0.00039951 | Proliferating_UCBMC |
| CYB5R4              | 1.18E-08 | 0.54160526 | 0.449 | 0.298 | 0.00041707 | Proliferating_UCBMC |
| ARL15               | 1.21E-08 | 0.28632666 | 0.683 | 0.492 | 0.00042714 | Proliferating_UCBMC |
| CAMKMT              | 1.21E-08 | 0.43035769 | 0.557 | 0.404 | 0.00043048 | Proliferating_UCBMC |
| PRPF6               | 1.26E-08 | 0.36017553 | 0.562 | 0.392 | 0.00044701 | Proliferating_UCBMC |
| U2SURP              | 1.28E-08 | 0.35350557 | 0.729 | 0.581 | 0.00045191 | Proliferating_UCBMC |
| ADIPOR1             | 1.28E-08 | 0.56201995 | 0.392 | 0.254 | 0.00045287 | Proliferating_UCBMC |
| PRDM2               | 1.32E-08 | 0.29169207 | 0.54  | 0.367 | 0.00046701 | Proliferating_UCBMC |
| PIK3C3              | 1.39E-08 | 0.55898977 | 0.355 | 0.214 | 0.00049083 | Proliferating_UCBMC |
| NUMA1               | 1.41E-08 | 0.47826767 | 0.566 | 0.403 | 0.00050082 | Proliferating_UCBMC |
| TEX10               | 1.44E-08 | 0.49459105 | 0.39  | 0.247 | 0.00051052 | Proliferating_UCBMC |
| ACO2                | 1.44E-08 | 0.44314433 | 0.474 | 0.316 | 0.0005114  | Proliferating_UCBMC |

|                    |          |            |       |       |            |                     |
|--------------------|----------|------------|-------|-------|------------|---------------------|
| APBA2              | 1.45E-08 | 0.31894703 | 0.399 | 0.246 | 0.00051213 | Proliferating_UCBMC |
| VIRMA              | 1.46E-08 | 0.59953082 | 0.372 | 0.236 | 0.00051612 | Proliferating_UCBMC |
| EXOC1              | 1.46E-08 | 0.54972878 | 0.388 | 0.248 | 0.00051789 | Proliferating_UCBMC |
| TSG101             | 1.50E-08 | 0.46238514 | 0.502 | 0.352 | 0.00053154 | Proliferating_UCBMC |
| ENSMMUG00000054462 | 1.51E-08 | 0.67636468 | 0.291 | 0.17  | 0.0005367  | Proliferating_UCBMC |
| NARS1              | 1.52E-08 | 0.33062895 | 0.694 | 0.514 | 0.00053723 | Proliferating_UCBMC |
| KIZ                | 1.56E-08 | 0.37477949 | 0.515 | 0.351 | 0.00055145 | Proliferating_UCBMC |
| CENPP              | 1.56E-08 | 0.33621331 | 0.608 | 0.44  | 0.00055279 | Proliferating_UCBMC |
| PLCL2              | 1.64E-08 | 0.31316872 | 0.654 | 0.478 | 0.00057954 | Proliferating_UCBMC |
| PPFIA1             | 1.64E-08 | 0.51379133 | 0.286 | 0.162 | 0.0005821  | Proliferating_UCBMC |
| GSTM4              | 1.69E-08 | 0.58935978 | 0.372 | 0.234 | 0.00059748 | Proliferating_UCBMC |
| ACE                | 1.70E-08 | 0.40103372 | 0.489 | 0.336 | 0.0006012  | Proliferating_UCBMC |
| NEPRO              | 1.70E-08 | 0.68827987 | 0.313 | 0.187 | 0.00060399 | Proliferating_UCBMC |
| BTRC               | 1.73E-08 | 0.48129518 | 0.419 | 0.277 | 0.00061388 | Proliferating_UCBMC |
| MEF2A              | 1.79E-08 | 0.30868516 | 0.626 | 0.456 | 0.00063447 | Proliferating_UCBMC |
| CLASP1             | 1.81E-08 | 0.3241994  | 0.623 | 0.449 | 0.00064178 | Proliferating_UCBMC |
| MSH3               | 1.89E-08 | 0.43858542 | 0.553 | 0.398 | 0.00067023 | Proliferating_UCBMC |
| BECN1              | 1.98E-08 | 0.57183772 | 0.388 | 0.252 | 0.00070257 | Proliferating_UCBMC |
| FARS2              | 2.05E-08 | 0.43412148 | 0.518 | 0.358 | 0.00072744 | Proliferating_UCBMC |
| BOD1L1             | 2.08E-08 | 0.33395387 | 0.487 | 0.335 | 0.0007377  | Proliferating_UCBMC |
| TMEM245            | 2.09E-08 | 0.34211398 | 0.542 | 0.38  | 0.00074019 | Proliferating_UCBMC |
| ETNK1              | 2.09E-08 | 0.45071805 | 0.491 | 0.347 | 0.00074046 | Proliferating_UCBMC |
| AGK                | 2.09E-08 | 0.6321749  | 0.357 | 0.222 | 0.0007416  | Proliferating_UCBMC |
| ARID5B             | 2.31E-08 | 0.21278482 | 0.727 | 0.518 | 0.00081778 | Proliferating_UCBMC |
| KIAA0232           | 2.39E-08 | 0.55985784 | 0.412 | 0.275 | 0.00084564 | Proliferating_UCBMC |
| CCNT1              | 2.43E-08 | 0.43729118 | 0.445 | 0.301 | 0.00086049 | Proliferating_UCBMC |
| LUC7L              | 2.61E-08 | 0.18002164 | 0.533 | 0.37  | 0.000924   | Proliferating_UCBMC |
| MAP2K5             | 2.75E-08 | 0.43468736 | 0.513 | 0.363 | 0.00097393 | Proliferating_UCBMC |
| POLR1B             | 2.88E-08 | 0.59125624 | 0.326 | 0.201 | 0.00102053 | Proliferating_UCBMC |
| ENSMMUG00000056190 | 2.88E-08 | 0.41616896 | 0.551 | 0.389 | 0.00102214 | Proliferating_UCBMC |
| ENSMMUG00000054948 | 2.89E-08 | 0.8608831  | 0.324 | 0.2   | 0.0010231  | Proliferating_UCBMC |
| STAT1              | 2.89E-08 | 0.299647   | 0.447 | 0.294 | 0.0010244  | Proliferating_UCBMC |
| BIRC2              | 3.02E-08 | 0.38841549 | 0.493 | 0.34  | 0.00106984 | Proliferating_UCBMC |

|                   |          |            |       |       |            |                     |
|-------------------|----------|------------|-------|-------|------------|---------------------|
| SIN3A             | 3.06E-08 | 0.40028654 | 0.544 | 0.395 | 0.00108429 | Proliferating_UCBMC |
| MIA2              | 3.13E-08 | 0.36883401 | 0.581 | 0.402 | 0.00110789 | Proliferating_UCBMC |
| COPS2             | 3.22E-08 | 0.42625489 | 0.498 | 0.338 | 0.00114051 | Proliferating_UCBMC |
| TPP2              | 3.31E-08 | 0.27630191 | 0.504 | 0.346 | 0.00117311 | Proliferating_UCBMC |
| ZNF37A            | 3.43E-08 | 0.55794482 | 0.278 | 0.157 | 0.00121408 | Proliferating_UCBMC |
| OCIAD1            | 3.43E-08 | 0.39679004 | 0.581 | 0.42  | 0.00121664 | Proliferating_UCBMC |
| NDUFS4            | 3.45E-08 | 0.44627021 | 0.599 | 0.443 | 0.00122066 | Proliferating_UCBMC |
| CDC37L1           | 3.47E-08 | 0.51933917 | 0.311 | 0.182 | 0.00122922 | Proliferating_UCBMC |
| CDK7              | 3.49E-08 | 0.84932977 | 0.262 | 0.147 | 0.001237   | Proliferating_UCBMC |
| SENP6             | 3.52E-08 | 0.23908421 | 0.72  | 0.523 | 0.00124618 | Proliferating_UCBMC |
| CS                | 3.57E-08 | 0.31606189 | 0.698 | 0.531 | 0.00126371 | Proliferating_UCBMC |
| REV3L             | 3.57E-08 | 0.24758646 | 0.665 | 0.495 | 0.00126473 | Proliferating_UCBMC |
| ENSMUG00000012525 | 3.60E-08 | 0.27048354 | 0.656 | 0.501 | 0.00127621 | Proliferating_UCBMC |
| SEC14L1           | 3.62E-08 | 0.445802   | 0.436 | 0.291 | 0.00128228 | Proliferating_UCBMC |
| DPP8              | 3.81E-08 | 0.45369456 | 0.368 | 0.238 | 0.00134904 | Proliferating_UCBMC |
| FNBP4             | 3.82E-08 | 0.30361598 | 0.601 | 0.441 | 0.00135495 | Proliferating_UCBMC |
| PDLIM5            | 3.83E-08 | 0.54268174 | 0.35  | 0.216 | 0.00135699 | Proliferating_UCBMC |
| RPL3              | 3.87E-08 | 0.23660511 | 0.974 | 0.938 | 0.00137114 | Proliferating_UCBMC |
| PPIP5K2           | 3.92E-08 | 0.54964605 | 0.441 | 0.299 | 0.00138846 | Proliferating_UCBMC |
| COPS4             | 3.96E-08 | 0.54511202 | 0.35  | 0.216 | 0.00140413 | Proliferating_UCBMC |
| SBF2              | 4.11E-08 | 0.56206102 | 0.432 | 0.287 | 0.00145566 | Proliferating_UCBMC |
| STAM2             | 4.16E-08 | 0.68239503 | 0.293 | 0.176 | 0.00147518 | Proliferating_UCBMC |
| CDC25B            | 4.21E-08 | 0.3978072  | 0.463 | 0.307 | 0.00149128 | Proliferating_UCBMC |
| HIP1R             | 4.29E-08 | 0.78428963 | 0.256 | 0.145 | 0.00151942 | Proliferating_UCBMC |
| RMND1             | 4.33E-08 | 0.8529808  | 0.337 | 0.217 | 0.001535   | Proliferating_UCBMC |
| USP36             | 4.40E-08 | 0.25685414 | 0.588 | 0.425 | 0.00155744 | Proliferating_UCBMC |
| USP14             | 4.41E-08 | 0.56732088 | 0.48  | 0.342 | 0.00156265 | Proliferating_UCBMC |
| STT3B             | 4.41E-08 | 0.24216144 | 0.725 | 0.511 | 0.00156319 | Proliferating_UCBMC |
| NUP153            | 4.48E-08 | 0.31206434 | 0.694 | 0.538 | 0.0015871  | Proliferating_UCBMC |
| PPA1              | 4.61E-08 | 0.33808306 | 0.559 | 0.387 | 0.00163493 | Proliferating_UCBMC |
| C15H9orf78        | 4.62E-08 | 0.30410878 | 0.718 | 0.546 | 0.00163791 | Proliferating_UCBMC |
| CITED1            | 4.71E-08 | 0.35388212 | 0.471 | 0.318 | 0.0016693  | Proliferating_UCBMC |
| UHMK1             | 4.74E-08 | 0.41493114 | 0.449 | 0.306 | 0.00167924 | Proliferating_UCBMC |

|                     |          |            |       |       |            |                     |
|---------------------|----------|------------|-------|-------|------------|---------------------|
| SLC7A6              | 4.75E-08 | 0.57142419 | 0.419 | 0.283 | 0.00168441 | Proliferating_UCBMC |
| MTRF1L              | 4.83E-08 | 0.37417803 | 0.357 | 0.226 | 0.00171065 | Proliferating_UCBMC |
| ENSMMUG000000019944 | 4.84E-08 | 0.75811883 | 0.295 | 0.177 | 0.00171421 | Proliferating_UCBMC |
| THOC1               | 4.90E-08 | 0.53306519 | 0.5   | 0.366 | 0.00173681 | Proliferating_UCBMC |
| RALGAPA1            | 4.93E-08 | 0.38808767 | 0.423 | 0.28  | 0.00174834 | Proliferating_UCBMC |
| FAM193A             | 5.09E-08 | 0.39134911 | 0.542 | 0.396 | 0.00180207 | Proliferating_UCBMC |
| UBE2Q2              | 5.09E-08 | 0.40611183 | 0.487 | 0.341 | 0.00180482 | Proliferating_UCBMC |
| ENSMMUG000000056683 | 5.33E-08 | 0.47365321 | 0.441 | 0.299 | 0.00188773 | Proliferating_UCBMC |
| KDM3B               | 5.47E-08 | 0.33977395 | 0.59  | 0.431 | 0.00193675 | Proliferating_UCBMC |
| SEC23B              | 5.54E-08 | 0.89063729 | 0.3   | 0.186 | 0.00196339 | Proliferating_UCBMC |
| IPO11               | 5.64E-08 | 0.36872236 | 0.467 | 0.321 | 0.00199832 | Proliferating_UCBMC |
| DHX15               | 5.96E-08 | 0.43610072 | 0.617 | 0.455 | 0.00211182 | Proliferating_UCBMC |
| DCTN6               | 6.09E-08 | 0.56217242 | 0.401 | 0.263 | 0.00215749 | Proliferating_UCBMC |
| RELB                | 6.25E-08 | 0.29058223 | 0.496 | 0.34  | 0.00221457 | Proliferating_UCBMC |
| MTBP                | 6.35E-08 | 0.69435649 | 0.324 | 0.198 | 0.0022511  | Proliferating_UCBMC |
| PSMD6               | 6.56E-08 | 0.32892852 | 0.449 | 0.294 | 0.00232513 | Proliferating_UCBMC |
| SF3A1               | 6.69E-08 | 0.50576311 | 0.43  | 0.291 | 0.0023705  | Proliferating_UCBMC |
| ZNF350              | 6.70E-08 | 0.6613532  | 0.256 | 0.144 | 0.00237484 | Proliferating_UCBMC |
| ENSMMUG000000051928 | 6.92E-08 | 0.82344298 | 0.313 | 0.194 | 0.00245185 | Proliferating_UCBMC |
| MTERF1              | 7.00E-08 | 0.61848354 | 0.297 | 0.175 | 0.00247861 | Proliferating_UCBMC |
| WASF2               | 7.05E-08 | 0.27476443 | 0.731 | 0.535 | 0.00249941 | Proliferating_UCBMC |
| PRKCB               | 7.10E-08 | 0.10938191 | 0.817 | 0.633 | 0.00251523 | Proliferating_UCBMC |
| ABL1                | 7.21E-08 | 0.45807456 | 0.344 | 0.212 | 0.00255391 | Proliferating_UCBMC |
| GPR132              | 7.23E-08 | 0.70642877 | 0.286 | 0.169 | 0.00256143 | Proliferating_UCBMC |
| TEX264              | 7.23E-08 | 0.49364299 | 0.456 | 0.315 | 0.00256246 | Proliferating_UCBMC |
| ENSMMUG000000032031 | 7.33E-08 | 0.45982998 | 0.337 | 0.209 | 0.00259609 | Proliferating_UCBMC |
| ANO6                | 7.41E-08 | 0.53984816 | 0.403 | 0.267 | 0.00262519 | Proliferating_UCBMC |
| CLIC4               | 7.57E-08 | 0.64469927 | 0.401 | 0.27  | 0.00268272 | Proliferating_UCBMC |
| NAA15               | 7.58E-08 | 0.42556639 | 0.537 | 0.394 | 0.0026868  | Proliferating_UCBMC |
| ARHGAP17            | 7.77E-08 | 0.2694062  | 0.432 | 0.276 | 0.00275341 | Proliferating_UCBMC |
| SMURF1              | 7.80E-08 | 0.65719438 | 0.333 | 0.206 | 0.00276437 | Proliferating_UCBMC |
| CNOT7               | 7.97E-08 | 0.42906162 | 0.436 | 0.296 | 0.0028237  | Proliferating_UCBMC |
| NBAS                | 8.01E-08 | 0.48307151 | 0.454 | 0.308 | 0.00283765 | Proliferating_UCBMC |

|                    |          |            |       |       |            |                     |
|--------------------|----------|------------|-------|-------|------------|---------------------|
| PHF11              | 8.34E-08 | 0.48214698 | 0.515 | 0.373 | 0.00295642 | Proliferating_UCBMC |
| CUL4A              | 8.49E-08 | 0.47884603 | 0.456 | 0.309 | 0.00300767 | Proliferating_UCBMC |
| RNF144A            | 8.55E-08 | 0.61079272 | 0.304 | 0.182 | 0.00302969 | Proliferating_UCBMC |
| CWC27              | 8.65E-08 | 0.31400888 | 0.579 | 0.411 | 0.00306593 | Proliferating_UCBMC |
| PPIL4              | 8.79E-08 | 0.19646878 | 0.634 | 0.465 | 0.00311378 | Proliferating_UCBMC |
| SFI1               | 8.82E-08 | 0.59602416 | 0.377 | 0.246 | 0.00312353 | Proliferating_UCBMC |
| PSIP1              | 8.96E-08 | 0.37667138 | 0.744 | 0.547 | 0.00317487 | Proliferating_UCBMC |
| SASS6              | 9.00E-08 | 0.35478351 | 0.533 | 0.38  | 0.0031885  | Proliferating_UCBMC |
| UBA3               | 9.08E-08 | 0.50454827 | 0.401 | 0.273 | 0.00321876 | Proliferating_UCBMC |
| WDR62              | 9.21E-08 | 0.50480418 | 0.335 | 0.214 | 0.00326365 | Proliferating_UCBMC |
| SF3B2              | 9.23E-08 | 0.41206398 | 0.59  | 0.432 | 0.00326931 | Proliferating_UCBMC |
| ENSMMUG00000021539 | 9.34E-08 | 0.52782933 | 0.357 | 0.226 | 0.00330948 | Proliferating_UCBMC |
| ENSMMUG00000009264 | 9.38E-08 | 0.70535141 | 0.319 | 0.201 | 0.0033225  | Proliferating_UCBMC |
| UPF1               | 9.50E-08 | 0.49873227 | 0.26  | 0.146 | 0.00336489 | Proliferating_UCBMC |
| NPAT               | 9.53E-08 | 0.34071232 | 0.628 | 0.449 | 0.00337516 | Proliferating_UCBMC |
| ENSMMUG00000044345 | 9.89E-08 | 0.62728913 | 0.286 | 0.164 | 0.00350263 | Proliferating_UCBMC |
| DNAJC24            | 9.97E-08 | 0.2138588  | 0.65  | 0.47  | 0.00353208 | Proliferating_UCBMC |
| ADPGK              | 1.03E-07 | 0.80181075 | 0.3   | 0.185 | 0.00364975 | Proliferating_UCBMC |
| TSC22D2            | 1.04E-07 | 0.26099539 | 0.467 | 0.313 | 0.00366779 | Proliferating_UCBMC |
| MPZL1              | 1.04E-07 | 0.35571406 | 0.57  | 0.42  | 0.00367838 | Proliferating_UCBMC |
| AARS1              | 1.06E-07 | 0.36826862 | 0.597 | 0.448 | 0.00374818 | Proliferating_UCBMC |
| FAM168B            | 1.10E-07 | 0.35060178 | 0.465 | 0.327 | 0.00390248 | Proliferating_UCBMC |
| TARDBP             | 1.12E-07 | 0.32595168 | 0.5   | 0.36  | 0.00396437 | Proliferating_UCBMC |
| AMFR               | 1.12E-07 | 0.54391936 | 0.293 | 0.176 | 0.00398058 | Proliferating_UCBMC |
| SMU1               | 1.13E-07 | 0.22850924 | 0.575 | 0.415 | 0.00400579 | Proliferating_UCBMC |
| ADI1               | 1.14E-07 | 0.40571599 | 0.441 | 0.293 | 0.00404278 | Proliferating_UCBMC |
| NELFA              | 1.16E-07 | 0.72108908 | 0.289 | 0.173 | 0.00411557 | Proliferating_UCBMC |
| MRPS16             | 1.16E-07 | 0.64933544 | 0.251 | 0.142 | 0.00412051 | Proliferating_UCBMC |
| ALG5               | 1.20E-07 | 0.52339094 | 0.335 | 0.208 | 0.00424399 | Proliferating_UCBMC |
| LARGE1             | 1.21E-07 | 0.16787167 | 0.43  | 0.282 | 0.00428513 | Proliferating_UCBMC |
| ENSMMUG00000028699 | 1.22E-07 | 0.22949233 | 0.731 | 0.548 | 0.00431451 | Proliferating_UCBMC |
| FBXO7              | 1.22E-07 | 0.45769574 | 0.352 | 0.221 | 0.0043236  | Proliferating_UCBMC |
| ABCE1              | 1.23E-07 | 0.43843762 | 0.564 | 0.406 | 0.00434853 | Proliferating_UCBMC |

|          |          |            |       |       |            |                     |
|----------|----------|------------|-------|-------|------------|---------------------|
| MAP3K3   | 1.23E-07 | 0.38499799 | 0.355 | 0.229 | 0.00437251 | Proliferating_UCBMC |
| MED25    | 1.24E-07 | 0.53716715 | 0.392 | 0.261 | 0.004389   | Proliferating_UCBMC |
| ATP2A2   | 1.25E-07 | 0.378006   | 0.54  | 0.4   | 0.00442413 | Proliferating_UCBMC |
| INTS7    | 1.31E-07 | 0.47923827 | 0.399 | 0.261 | 0.00464662 | Proliferating_UCBMC |
| ODF2L    | 1.33E-07 | 0.76662532 | 0.286 | 0.175 | 0.00469588 | Proliferating_UCBMC |
| RAP1GDS1 | 1.33E-07 | 0.46524142 | 0.504 | 0.356 | 0.00469719 | Proliferating_UCBMC |
| SOS2     | 1.33E-07 | 0.43026001 | 0.399 | 0.254 | 0.00471236 | Proliferating_UCBMC |
| PTEN     | 1.34E-07 | 0.16574109 | 0.654 | 0.454 | 0.0047315  | Proliferating_UCBMC |
| TTLL5    | 1.34E-07 | 0.75496524 | 0.359 | 0.24  | 0.00476532 | Proliferating_UCBMC |
| PAIP1    | 1.39E-07 | 0.44604705 | 0.414 | 0.277 | 0.00493518 | Proliferating_UCBMC |
| DUSP10   | 1.40E-07 | 0.31516821 | 0.441 | 0.295 | 0.00497576 | Proliferating_UCBMC |
| FAM126A  | 1.41E-07 | 0.39976666 | 0.445 | 0.3   | 0.00499729 | Proliferating_UCBMC |
| VCL      | 1.48E-07 | 0.60591581 | 0.337 | 0.211 | 0.00524031 | Proliferating_UCBMC |
| NONO     | 1.54E-07 | 0.32195047 | 0.769 | 0.594 | 0.0054456  | Proliferating_UCBMC |
| PICALM   | 1.54E-07 | 0.17287324 | 0.822 | 0.644 | 0.00546413 | Proliferating_UCBMC |
| HECTD4   | 1.57E-07 | 0.13106082 | 0.546 | 0.378 | 0.00554831 | Proliferating_UCBMC |
| RNF11    | 1.61E-07 | 0.60596344 | 0.361 | 0.234 | 0.00569218 | Proliferating_UCBMC |
| EIF2AK4  | 1.67E-07 | 0.56632254 | 0.357 | 0.231 | 0.0059183  | Proliferating_UCBMC |
| USP37    | 1.68E-07 | 0.28871856 | 0.573 | 0.427 | 0.00596713 | Proliferating_UCBMC |
| PRPF39   | 1.71E-07 | 0.605801   | 0.271 | 0.159 | 0.00607009 | Proliferating_UCBMC |
| RANBP2   | 1.72E-07 | 0.12845442 | 0.806 | 0.585 | 0.00609165 | Proliferating_UCBMC |
| DCUN1D1  | 1.73E-07 | 0.60482063 | 0.313 | 0.194 | 0.0061273  | Proliferating_UCBMC |
| RAB6A    | 1.74E-07 | 0.29128361 | 0.443 | 0.304 | 0.00617699 | Proliferating_UCBMC |
| NCOA2    | 1.75E-07 | 0.25452847 | 0.67  | 0.493 | 0.00620471 | Proliferating_UCBMC |
| NUP88    | 1.77E-07 | 0.56262244 | 0.383 | 0.256 | 0.00628147 | Proliferating_UCBMC |
| DYNC1LI2 | 1.79E-07 | 0.45505708 | 0.363 | 0.229 | 0.00633084 | Proliferating_UCBMC |
| PPP2R1B  | 1.79E-07 | 0.53860393 | 0.361 | 0.236 | 0.00634335 | Proliferating_UCBMC |
| EPG5     | 1.82E-07 | 0.70198582 | 0.271 | 0.161 | 0.00644015 | Proliferating_UCBMC |
| RAB3GAP2 | 1.91E-07 | 0.3224549  | 0.537 | 0.389 | 0.00677742 | Proliferating_UCBMC |
| SUGT1    | 1.92E-07 | 0.35096998 | 0.608 | 0.445 | 0.00679925 | Proliferating_UCBMC |
| PTPN11   | 1.92E-07 | 0.34580939 | 0.449 | 0.311 | 0.006814   | Proliferating_UCBMC |
| PRPSAP2  | 1.92E-07 | 0.42873543 | 0.401 | 0.269 | 0.00681574 | Proliferating_UCBMC |
| EIF3E    | 1.94E-07 | 0.25622545 | 0.874 | 0.704 | 0.00689095 | Proliferating_UCBMC |



|                    |          |            |       |       |            |                     |
|--------------------|----------|------------|-------|-------|------------|---------------------|
| RASGRP1            | 1.98E-07 | 0.24755537 | 0.493 | 0.341 | 0.00701587 | Proliferating_UCBMC |
| ENSMMUG00000016305 | 2.00E-07 | 0.17149482 | 0.72  | 0.56  | 0.00706903 | Proliferating_UCBMC |
| CAAP1              | 2.00E-07 | 0.6289434  | 0.337 | 0.217 | 0.00708039 | Proliferating_UCBMC |
| GALK2              | 2.01E-07 | 0.42705543 | 0.377 | 0.243 | 0.00711851 | Proliferating_UCBMC |
| IPO5               | 2.10E-07 | 0.60367977 | 0.445 | 0.321 | 0.00742996 | Proliferating_UCBMC |
| CTSH               | 2.11E-07 | 0.2406636  | 0.344 | 0.205 | 0.00745951 | Proliferating_UCBMC |
| ZNF148             | 2.12E-07 | 0.30177149 | 0.689 | 0.515 | 0.00752639 | Proliferating_UCBMC |
| FILIP1L            | 2.13E-07 | 0.64108569 | 0.3   | 0.187 | 0.00755348 | Proliferating_UCBMC |
| SNW1               | 2.14E-07 | 0.35169967 | 0.608 | 0.451 | 0.00759844 | Proliferating_UCBMC |
| RSRC1              | 2.16E-07 | 0.28359054 | 0.663 | 0.482 | 0.00765855 | Proliferating_UCBMC |
| CCNY               | 2.18E-07 | 0.17364146 | 0.573 | 0.411 | 0.00771404 | Proliferating_UCBMC |
| BNIP2              | 2.19E-07 | 0.51682413 | 0.39  | 0.262 | 0.00774295 | Proliferating_UCBMC |
| SCAP               | 2.22E-07 | 0.50817331 | 0.286 | 0.172 | 0.00785074 | Proliferating_UCBMC |
| HS2ST1             | 2.29E-07 | 0.22876909 | 0.553 | 0.378 | 0.00811414 | Proliferating_UCBMC |
| UGCG               | 2.29E-07 | 0.65275768 | 0.379 | 0.253 | 0.00811886 | Proliferating_UCBMC |
| SLC35A5            | 2.34E-07 | 0.83008156 | 0.267 | 0.164 | 0.00829625 | Proliferating_UCBMC |
| SUGP1              | 2.35E-07 | 0.57022972 | 0.251 | 0.143 | 0.00834    | Proliferating_UCBMC |
| IGBP1              | 2.37E-07 | 0.36242156 | 0.502 | 0.359 | 0.00839988 | Proliferating_UCBMC |
| ENSMMUG00000006293 | 2.42E-07 | 0.35881977 | 0.791 | 0.634 | 0.00858515 | Proliferating_UCBMC |
| ARID4A             | 2.45E-07 | 0.46971567 | 0.452 | 0.318 | 0.00866548 | Proliferating_UCBMC |
| ZNF136             | 2.50E-07 | 0.4821736  | 0.3   | 0.187 | 0.00885837 | Proliferating_UCBMC |
| TASOR2             | 2.50E-07 | 0.34872894 | 0.548 | 0.402 | 0.00886606 | Proliferating_UCBMC |
| TULP4              | 2.53E-07 | 0.39304306 | 0.377 | 0.247 | 0.00897205 | Proliferating_UCBMC |
| EP400              | 2.56E-07 | 0.52135337 | 0.423 | 0.293 | 0.00905779 | Proliferating_UCBMC |
| MALT1              | 2.56E-07 | 0.49981425 | 0.502 | 0.36  | 0.00907852 | Proliferating_UCBMC |
| ATAD2B             | 2.56E-07 | 0.2664467  | 0.643 | 0.485 | 0.00907867 | Proliferating_UCBMC |
| FCF1               | 2.59E-07 | 0.50002713 | 0.328 | 0.208 | 0.00917996 | Proliferating_UCBMC |
| DHRS7B             | 2.62E-07 | 0.26835993 | 0.366 | 0.233 | 0.00929465 | Proliferating_UCBMC |
| FRYL               | 2.64E-07 | 0.17334107 | 0.615 | 0.448 | 0.00935592 | Proliferating_UCBMC |
| PHF6               | 2.64E-07 | 0.44169473 | 0.48  | 0.34  | 0.00935757 | Proliferating_UCBMC |
| USP8               | 2.67E-07 | 0.34340949 | 0.469 | 0.316 | 0.00945245 | Proliferating_UCBMC |
| SPRING1            | 2.77E-07 | 0.80149825 | 0.3   | 0.19  | 0.00981548 | Proliferating_UCBMC |
| NEMF               | 2.81E-07 | 0.32002551 | 0.54  | 0.39  | 0.00996685 | Proliferating_UCBMC |

|          |          |            |       |       |            |                     |
|----------|----------|------------|-------|-------|------------|---------------------|
| ARHGEF1  | 2.88E-07 | 0.20369597 | 0.678 | 0.512 | 0.01021315 | Proliferating_UCBMC |
| PDXDC1   | 2.91E-07 | 0.25280119 | 0.405 | 0.267 | 0.01030134 | Proliferating_UCBMC |
| LIN54    | 2.95E-07 | 0.40559349 | 0.458 | 0.321 | 0.01043609 | Proliferating_UCBMC |
| BTBD9    | 2.97E-07 | 0.31447435 | 0.507 | 0.356 | 0.01053387 | Proliferating_UCBMC |
| FOXO3    | 2.97E-07 | 0.28112433 | 0.427 | 0.277 | 0.01053583 | Proliferating_UCBMC |
| XRN2     | 3.07E-07 | 0.23822269 | 0.808 | 0.629 | 0.01087171 | Proliferating_UCBMC |
| RSC1A1   | 3.39E-07 | 0.52097738 | 0.293 | 0.184 | 0.01201671 | Proliferating_UCBMC |
| COPS7B   | 3.40E-07 | 0.57972497 | 0.291 | 0.177 | 0.01203588 | Proliferating_UCBMC |
| ARNT     | 3.43E-07 | 0.42393108 | 0.399 | 0.27  | 0.01216044 | Proliferating_UCBMC |
| ING3     | 3.49E-07 | 0.49484629 | 0.337 | 0.215 | 0.01236123 | Proliferating_UCBMC |
| WWP2     | 3.60E-07 | 0.64042817 | 0.414 | 0.286 | 0.01275413 | Proliferating_UCBMC |
| UBP1     | 3.62E-07 | 0.50188457 | 0.392 | 0.264 | 0.01280955 | Proliferating_UCBMC |
| NUP155   | 3.65E-07 | 0.41666091 | 0.412 | 0.286 | 0.01294937 | Proliferating_UCBMC |
| LIN9     | 3.69E-07 | 0.55564614 | 0.335 | 0.218 | 0.01307446 | Proliferating_UCBMC |
| TANGO6   | 3.79E-07 | 0.25717705 | 0.445 | 0.302 | 0.01342895 | Proliferating_UCBMC |
| KLHDC10  | 3.80E-07 | 0.6432485  | 0.289 | 0.176 | 0.0134737  | Proliferating_UCBMC |
| SPIDR    | 3.85E-07 | 0.28970367 | 0.634 | 0.48  | 0.01362387 | Proliferating_UCBMC |
| ARHGAP45 | 3.86E-07 | 0.20362029 | 0.584 | 0.421 | 0.01368119 | Proliferating_UCBMC |
| YAF2     | 3.87E-07 | 0.24858253 | 0.7   | 0.525 | 0.01370658 | Proliferating_UCBMC |
| NECAP1   | 3.91E-07 | 0.55074349 | 0.372 | 0.246 | 0.01386472 | Proliferating_UCBMC |
| VPS13A   | 3.92E-07 | 0.36186386 | 0.491 | 0.35  | 0.01388489 | Proliferating_UCBMC |
| UBAP2L   | 4.03E-07 | 0.23998009 | 0.529 | 0.381 | 0.01427221 | Proliferating_UCBMC |
| SUFU     | 4.08E-07 | 0.5155486  | 0.379 | 0.253 | 0.01446523 | Proliferating_UCBMC |
| USP25    | 4.10E-07 | 0.37000173 | 0.493 | 0.353 | 0.01453375 | Proliferating_UCBMC |
| MCU      | 4.15E-07 | 0.32112855 | 0.454 | 0.309 | 0.01468909 | Proliferating_UCBMC |
| ASXL1    | 4.18E-07 | 0.1199232  | 0.496 | 0.343 | 0.01480029 | Proliferating_UCBMC |
| MAP2K4   | 4.21E-07 | 0.42904108 | 0.414 | 0.287 | 0.01490096 | Proliferating_UCBMC |
| PLEKHA1  | 4.22E-07 | 0.50538458 | 0.385 | 0.259 | 0.01495597 | Proliferating_UCBMC |
| ECPAS    | 4.24E-07 | 0.24549019 | 0.43  | 0.298 | 0.01501224 | Proliferating_UCBMC |
| SSBP3    | 4.25E-07 | 0.30950015 | 0.529 | 0.372 | 0.01507038 | Proliferating_UCBMC |
| SARAF    | 4.31E-07 | 0.25932101 | 0.863 | 0.741 | 0.0152712  | Proliferating_UCBMC |
| LENG8    | 4.31E-07 | 0.40284448 | 0.357 | 0.231 | 0.01527968 | Proliferating_UCBMC |
| CTCF     | 4.42E-07 | 0.13112072 | 0.722 | 0.526 | 0.01567328 | Proliferating_UCBMC |

|                    |          |            |       |       |            |                     |
|--------------------|----------|------------|-------|-------|------------|---------------------|
| R3HDM1             | 4.50E-07 | 0.38062811 | 0.546 | 0.401 | 0.01595066 | Proliferating_UCBMC |
| ENSMMUG00000060576 | 4.53E-07 | 0.53315225 | 0.33  | 0.215 | 0.01605028 | Proliferating_UCBMC |
| MNAT1              | 4.77E-07 | 0.27414318 | 0.588 | 0.432 | 0.01689449 | Proliferating_UCBMC |
| RABGAP1            | 4.78E-07 | 0.38824222 | 0.39  | 0.261 | 0.01692726 | Proliferating_UCBMC |
| DIP2A              | 4.85E-07 | 0.58165488 | 0.317 | 0.199 | 0.01717845 | Proliferating_UCBMC |
| TRIM25             | 5.04E-07 | 0.46125589 | 0.403 | 0.279 | 0.01784558 | Proliferating_UCBMC |
| RPS15              | 5.08E-07 | 0.20547592 | 0.969 | 0.943 | 0.01801056 | Proliferating_UCBMC |
| PNPLA8             | 5.13E-07 | 0.29840759 | 0.533 | 0.381 | 0.0181678  | Proliferating_UCBMC |
| PCNP               | 5.13E-07 | 0.24194574 | 0.641 | 0.497 | 0.01818613 | Proliferating_UCBMC |
| RO60               | 5.25E-07 | 0.47367153 | 0.372 | 0.247 | 0.01858585 | Proliferating_UCBMC |
| CCDC186            | 5.36E-07 | 0.46109926 | 0.311 | 0.195 | 0.01897389 | Proliferating_UCBMC |
| STK26              | 5.37E-07 | 0.45688984 | 0.504 | 0.366 | 0.01902528 | Proliferating_UCBMC |
| COX16              | 5.38E-07 | 0.26849185 | 0.811 | 0.631 | 0.01906022 | Proliferating_UCBMC |
| PBRM1              | 5.39E-07 | 0.19507826 | 0.749 | 0.558 | 0.01909374 | Proliferating_UCBMC |
| SEC22B             | 5.62E-07 | 0.65062548 | 0.366 | 0.255 | 0.01990037 | Proliferating_UCBMC |
| APEX1              | 5.71E-07 | 0.40088088 | 0.52  | 0.389 | 0.02024195 | Proliferating_UCBMC |
| IMPDH2             | 6.25E-07 | 0.39712951 | 0.526 | 0.387 | 0.02214445 | Proliferating_UCBMC |
| CWC22              | 6.44E-07 | 0.30510405 | 0.414 | 0.281 | 0.02282934 | Proliferating_UCBMC |
| SLAIN2             | 6.45E-07 | 0.47537127 | 0.416 | 0.29  | 0.02285898 | Proliferating_UCBMC |
| ZCCHC8             | 6.76E-07 | 0.26167576 | 0.379 | 0.246 | 0.02395628 | Proliferating_UCBMC |
| RRAS2              | 6.78E-07 | 0.22757268 | 0.52  | 0.363 | 0.02403724 | Proliferating_UCBMC |
| CDC23              | 6.96E-07 | 0.50330709 | 0.35  | 0.231 | 0.02464663 | Proliferating_UCBMC |
| EIF4A2             | 7.32E-07 | 0.30882029 | 0.78  | 0.612 | 0.02592768 | Proliferating_UCBMC |
| SUN2               | 7.32E-07 | 0.33690497 | 0.458 | 0.32  | 0.02594303 | Proliferating_UCBMC |
| CCR7               | 7.41E-07 | 0.16479532 | 0.419 | 0.268 | 0.02624356 | Proliferating_UCBMC |
| SELENOI            | 7.47E-07 | 0.60115427 | 0.324 | 0.211 | 0.02646453 | Proliferating_UCBMC |
| BLOC1S6            | 7.51E-07 | 0.66287776 | 0.267 | 0.164 | 0.02659337 | Proliferating_UCBMC |
| PDE4B              | 7.65E-07 | 0.25462526 | 0.537 | 0.381 | 0.02711451 | Proliferating_UCBMC |
| NET1               | 7.80E-07 | 0.63625923 | 0.3   | 0.19  | 0.0276317  | Proliferating_UCBMC |
| FAM204A            | 8.04E-07 | 0.38088738 | 0.471 | 0.332 | 0.02850198 | Proliferating_UCBMC |
| ATP11A             | 8.22E-07 | 0.42296725 | 0.337 | 0.216 | 0.02911721 | Proliferating_UCBMC |
| PDS5B              | 8.22E-07 | 0.26613996 | 0.76  | 0.585 | 0.02913496 | Proliferating_UCBMC |
| MNS1               | 8.29E-07 | 0.6764298  | 0.267 | 0.163 | 0.02937335 | Proliferating_UCBMC |

|                    |          |            |       |       |            |                     |
|--------------------|----------|------------|-------|-------|------------|---------------------|
| STRN               | 8.35E-07 | 0.46605114 | 0.436 | 0.301 | 0.02957789 | Proliferating_UCBMC |
| CDC123             | 8.35E-07 | 0.32949556 | 0.412 | 0.281 | 0.02959261 | Proliferating_UCBMC |
| CASP12             | 8.36E-07 | 0.22341998 | 0.526 | 0.379 | 0.02962108 | Proliferating_UCBMC |
| ME2                | 8.55E-07 | 0.32179427 | 0.632 | 0.484 | 0.03027816 | Proliferating_UCBMC |
| BCL7A              | 8.58E-07 | 0.82490571 | 0.269 | 0.167 | 0.03040953 | Proliferating_UCBMC |
| PARP2              | 8.59E-07 | 0.38170748 | 0.322 | 0.206 | 0.03044804 | Proliferating_UCBMC |
| CAST               | 8.60E-07 | 0.29266838 | 0.643 | 0.484 | 0.03046733 | Proliferating_UCBMC |
| ENSMMUG00000062515 | 8.75E-07 | 0.53163655 | 0.317 | 0.198 | 0.03100237 | Proliferating_UCBMC |
| GGNBP2             | 8.91E-07 | 0.17668314 | 0.645 | 0.485 | 0.03156171 | Proliferating_UCBMC |
| R3HCC1L            | 8.94E-07 | 0.55401035 | 0.403 | 0.282 | 0.03167283 | Proliferating_UCBMC |
| ZNF652             | 8.98E-07 | 0.3406904  | 0.357 | 0.231 | 0.03182983 | Proliferating_UCBMC |
| ENSMMUG00000029973 | 9.15E-07 | 0.24711086 | 0.749 | 0.604 | 0.0324111  | Proliferating_UCBMC |
| ATRN               | 9.26E-07 | 0.34733629 | 0.381 | 0.256 | 0.03281969 | Proliferating_UCBMC |
| LPIN2              | 9.78E-07 | 0.28686507 | 0.485 | 0.345 | 0.03465435 | Proliferating_UCBMC |
| PSME4              | 1.01E-06 | 0.14542906 | 0.672 | 0.499 | 0.03582626 | Proliferating_UCBMC |
| EXOSC9             | 1.01E-06 | 0.4528075  | 0.322 | 0.206 | 0.03589362 | Proliferating_UCBMC |
| MCM4               | 1.03E-06 | 0.33227997 | 0.489 | 0.352 | 0.03648604 | Proliferating_UCBMC |
| PWP1               | 1.03E-06 | 0.33723462 | 0.427 | 0.293 | 0.03650735 | Proliferating_UCBMC |
| JOSD1              | 1.03E-06 | 0.30714209 | 0.335 | 0.215 | 0.03650941 | Proliferating_UCBMC |
| ERI1               | 1.05E-06 | 0.47879812 | 0.374 | 0.258 | 0.0372676  | Proliferating_UCBMC |
| ULK4               | 1.06E-06 | 0.59533577 | 0.3   | 0.191 | 0.03743049 | Proliferating_UCBMC |
| MFF                | 1.06E-06 | 0.30270869 | 0.52  | 0.375 | 0.03764066 | Proliferating_UCBMC |
| RARS2              | 1.11E-06 | 0.65497192 | 0.291 | 0.185 | 0.03944732 | Proliferating_UCBMC |
| ATR                | 1.12E-06 | 0.2644042  | 0.551 | 0.399 | 0.03983513 | Proliferating_UCBMC |
| HDAC4              | 1.13E-06 | 0.31219415 | 0.436 | 0.311 | 0.03994516 | Proliferating_UCBMC |
| G3BP1              | 1.13E-06 | 0.34853036 | 0.742 | 0.587 | 0.04018536 | Proliferating_UCBMC |
| AKAP8L             | 1.16E-06 | 0.45762711 | 0.313 | 0.205 | 0.04102154 | Proliferating_UCBMC |
| BRIP1              | 1.17E-06 | 0.42458395 | 0.482 | 0.351 | 0.04132232 | Proliferating_UCBMC |
| SDHC               | 1.18E-06 | 0.34945909 | 0.454 | 0.329 | 0.04196978 | Proliferating_UCBMC |
| SPIN1              | 1.20E-06 | 0.60811532 | 0.308 | 0.196 | 0.0426537  | Proliferating_UCBMC |
| ADA                | 1.21E-06 | 0.4018678  | 0.363 | 0.242 | 0.04275569 | Proliferating_UCBMC |
| EIF2S3             | 1.21E-06 | 0.32409835 | 0.588 | 0.435 | 0.04286288 | Proliferating_UCBMC |
| ANAPC1             | 1.29E-06 | 0.34453042 | 0.403 | 0.271 | 0.04570565 | Proliferating_UCBMC |

|                    |          |            |       |       |            |                     |
|--------------------|----------|------------|-------|-------|------------|---------------------|
| CCDC6              | 1.30E-06 | 0.48116175 | 0.39  | 0.27  | 0.04595074 | Proliferating_UCBMC |
| DNMT1              | 1.30E-06 | 0.24338    | 0.791 | 0.609 | 0.04615087 | Proliferating_UCBMC |
| XRCC5              | 1.32E-06 | 0.26909081 | 0.892 | 0.739 | 0.04663366 | Proliferating_UCBMC |
| ERLEC1             | 1.35E-06 | 0.46539902 | 0.441 | 0.316 | 0.0479872  | Proliferating_UCBMC |
| TMED2              | 1.36E-06 | 0.39794811 | 0.507 | 0.372 | 0.04805889 | Proliferating_UCBMC |
| DNM2               | 1.37E-06 | 0.27771785 | 0.577 | 0.435 | 0.04847734 | Proliferating_UCBMC |
| ENSMMUG00000062103 | 1.39E-06 | 0.12196354 | 0.579 | 0.419 | 0.04935467 | Proliferating_UCBMC |
| ATF6B              | 1.41E-06 | 0.54209839 | 0.333 | 0.222 | 0.04996765 | Proliferating_UCBMC |
| POLK               | 1.41E-06 | 0.46276274 | 0.388 | 0.269 | 0.05001728 | Proliferating_UCBMC |
| SP100              | 1.42E-06 | 0.19798835 | 0.833 | 0.656 | 0.05020834 | Proliferating_UCBMC |
| TRIM24             | 1.42E-06 | 0.42205145 | 0.482 | 0.351 | 0.05025688 | Proliferating_UCBMC |
| DDHD1              | 1.43E-06 | 0.56319344 | 0.339 | 0.226 | 0.0505685  | Proliferating_UCBMC |
| ENSMMUG00000030374 | 1.45E-06 | 0.31857717 | 0.434 | 0.301 | 0.05120169 | Proliferating_UCBMC |
| FAM133B            | 1.45E-06 | 0.24694068 | 0.641 | 0.485 | 0.0513705  | Proliferating_UCBMC |
| NDEL1              | 1.46E-06 | 0.26788785 | 0.502 | 0.351 | 0.05155561 | Proliferating_UCBMC |
| ST3GAL3            | 1.46E-06 | 0.27928519 | 0.522 | 0.38  | 0.05166378 | Proliferating_UCBMC |
| ZRANB3             | 1.46E-06 | 0.21395018 | 0.511 | 0.358 | 0.05175778 | Proliferating_UCBMC |
| FYTTD1             | 1.47E-06 | 0.35724377 | 0.474 | 0.343 | 0.05196884 | Proliferating_UCBMC |
| RAD23B             | 1.53E-06 | 0.41221348 | 0.471 | 0.341 | 0.05419096 | Proliferating_UCBMC |
| RC3H1              | 1.55E-06 | 0.2963077  | 0.443 | 0.31  | 0.05506646 | Proliferating_UCBMC |
| MTMR1              | 1.58E-06 | 0.42514951 | 0.35  | 0.232 | 0.05584898 | Proliferating_UCBMC |
| AGPS               | 1.58E-06 | 0.31828575 | 0.542 | 0.407 | 0.05602366 | Proliferating_UCBMC |
| AP4E1              | 1.63E-06 | 0.37543835 | 0.267 | 0.161 | 0.05772099 | Proliferating_UCBMC |
| TSPAN3             | 1.66E-06 | 0.45688952 | 0.326 | 0.21  | 0.05886229 | Proliferating_UCBMC |
| FBXW2              | 1.71E-06 | 0.36430721 | 0.394 | 0.274 | 0.06059051 | Proliferating_UCBMC |
| TRIM52             | 1.72E-06 | 0.45314473 | 0.256 | 0.152 | 0.06100812 | Proliferating_UCBMC |
| PRDM10             | 1.77E-06 | 0.60239347 | 0.267 | 0.165 | 0.06266994 | Proliferating_UCBMC |
| CMAH               | 1.80E-06 | 0.29252748 | 0.568 | 0.409 | 0.06395402 | Proliferating_UCBMC |
| CHD1L              | 1.83E-06 | 0.65401899 | 0.295 | 0.191 | 0.06473484 | Proliferating_UCBMC |
| ATE1               | 2.01E-06 | 0.35199848 | 0.445 | 0.312 | 0.07107537 | Proliferating_UCBMC |
| AFTPH              | 2.02E-06 | 0.32881659 | 0.557 | 0.405 | 0.07156987 | Proliferating_UCBMC |
| SERGEF             | 2.06E-06 | 0.52175757 | 0.291 | 0.186 | 0.0731565  | Proliferating_UCBMC |
| ENSMMUG00000064749 | 2.09E-06 | 0.41526897 | 0.339 | 0.222 | 0.07407593 | Proliferating_UCBMC |

|                   |          |            |       |       |            |                     |
|-------------------|----------|------------|-------|-------|------------|---------------------|
| NRF1              | 2.09E-06 | 0.27191387 | 0.588 | 0.429 | 0.07410964 | Proliferating_UCBMC |
| LIMS1             | 2.11E-06 | 0.2489537  | 0.586 | 0.425 | 0.07472777 | Proliferating_UCBMC |
| PPP1R8            | 2.11E-06 | 0.3233514  | 0.46  | 0.329 | 0.07489814 | Proliferating_UCBMC |
| TM9SF2            | 2.21E-06 | 0.30744335 | 0.487 | 0.347 | 0.07846449 | Proliferating_UCBMC |
| PINX1             | 2.23E-06 | 0.77184131 | 0.253 | 0.156 | 0.07894929 | Proliferating_UCBMC |
| LRCH4             | 2.23E-06 | 0.33834772 | 0.302 | 0.193 | 0.07909539 | Proliferating_UCBMC |
| TMEM263           | 2.24E-06 | 0.34290243 | 0.363 | 0.245 | 0.07933321 | Proliferating_UCBMC |
| MRPL37            | 2.24E-06 | 0.63719072 | 0.317 | 0.214 | 0.07942907 | Proliferating_UCBMC |
| CUL1              | 2.28E-06 | 0.22269481 | 0.509 | 0.366 | 0.08084239 | Proliferating_UCBMC |
| ZMYND11           | 2.29E-06 | 0.27168526 | 0.584 | 0.428 | 0.08101615 | Proliferating_UCBMC |
| SELENOS           | 2.30E-06 | 0.20069004 | 0.775 | 0.614 | 0.08166851 | Proliferating_UCBMC |
| EIF2B3            | 2.42E-06 | 0.38055194 | 0.515 | 0.386 | 0.08564864 | Proliferating_UCBMC |
| TRMT10B           | 2.51E-06 | 0.43587309 | 0.311 | 0.202 | 0.0888687  | Proliferating_UCBMC |
| LRRC8C            | 2.53E-06 | 0.39406419 | 0.394 | 0.271 | 0.0895984  | Proliferating_UCBMC |
| STMN3             | 2.55E-06 | 0.56327977 | 0.317 | 0.207 | 0.09029987 | Proliferating_UCBMC |
| PRKDC             | 2.55E-06 | 0.24983293 | 0.835 | 0.62  | 0.09035657 | Proliferating_UCBMC |
| MBD5              | 2.57E-06 | 0.27779052 | 0.641 | 0.499 | 0.09114812 | Proliferating_UCBMC |
| PMPCB             | 2.60E-06 | 0.30635357 | 0.465 | 0.333 | 0.09200243 | Proliferating_UCBMC |
| KLHL6             | 2.64E-06 | 0.38557489 | 0.357 | 0.236 | 0.09369513 | Proliferating_UCBMC |
| STK40             | 2.70E-06 | 0.35316898 | 0.352 | 0.236 | 0.09552996 | Proliferating_UCBMC |
| TESPA1            | 2.71E-06 | 0.36905839 | 0.401 | 0.273 | 0.09606038 | Proliferating_UCBMC |
| ACSL4             | 2.84E-06 | 0.41288776 | 0.335 | 0.224 | 0.10046964 | Proliferating_UCBMC |
| CLOCK             | 2.90E-06 | 0.55820541 | 0.333 | 0.223 | 0.10281694 | Proliferating_UCBMC |
| SLC9A8            | 2.92E-06 | 0.44406348 | 0.311 | 0.2   | 0.10359481 | Proliferating_UCBMC |
| ITFG1             | 2.98E-06 | 0.24148239 | 0.59  | 0.442 | 0.10569769 | Proliferating_UCBMC |
| NCOA4             | 3.01E-06 | 0.39963625 | 0.377 | 0.264 | 0.10649957 | Proliferating_UCBMC |
| ENSMUG00000015583 | 3.01E-06 | 0.23169117 | 0.93  | 0.805 | 0.1065544  | Proliferating_UCBMC |
| ENSMUG00000059017 | 3.04E-06 | 0.24205533 | 0.751 | 0.584 | 0.10763189 | Proliferating_UCBMC |
| SMARCC1           | 3.04E-06 | 0.19117361 | 0.784 | 0.585 | 0.10787037 | Proliferating_UCBMC |
| MYCBP2            | 3.10E-06 | 0.18441007 | 0.811 | 0.607 | 0.10984914 | Proliferating_UCBMC |
| SCLT1             | 3.15E-06 | 0.11020048 | 0.667 | 0.511 | 0.11154331 | Proliferating_UCBMC |
| ANAPC7            | 3.15E-06 | 0.43453604 | 0.352 | 0.238 | 0.11158108 | Proliferating_UCBMC |
| DDA1              | 3.20E-06 | 0.41760076 | 0.366 | 0.246 | 0.1132787  | Proliferating_UCBMC |

|                    |          |            |       |       |            |                     |
|--------------------|----------|------------|-------|-------|------------|---------------------|
| ZNF638             | 3.25E-06 | 0.21915091 | 0.652 | 0.482 | 0.11508481 | Proliferating_UCBMC |
| DDX46              | 3.45E-06 | 0.22059571 | 0.806 | 0.662 | 0.12211995 | Proliferating_UCBMC |
| TAF5L              | 3.48E-06 | 0.38400096 | 0.264 | 0.162 | 0.12338089 | Proliferating_UCBMC |
| SMPD4              | 3.50E-06 | 0.5479853  | 0.335 | 0.23  | 0.12413129 | Proliferating_UCBMC |
| SYNE3              | 3.54E-06 | 0.42334537 | 0.352 | 0.238 | 0.12533713 | Proliferating_UCBMC |
| XPA                | 3.56E-06 | 0.66588566 | 0.262 | 0.166 | 0.12614376 | Proliferating_UCBMC |
| NECAP2             | 3.63E-06 | 0.36205043 | 0.372 | 0.26  | 0.12869782 | Proliferating_UCBMC |
| RNF141             | 3.64E-06 | 0.51999937 | 0.271 | 0.173 | 0.12897223 | Proliferating_UCBMC |
| IST1               | 3.65E-06 | 0.18533246 | 0.544 | 0.396 | 0.1291982  | Proliferating_UCBMC |
| ANAPC5             | 3.82E-06 | 0.28879716 | 0.401 | 0.282 | 0.13546592 | Proliferating_UCBMC |
| ZMYM4              | 4.06E-06 | 0.3123657  | 0.485 | 0.353 | 0.14390314 | Proliferating_UCBMC |
| CPEB4              | 4.13E-06 | 0.43760299 | 0.306 | 0.201 | 0.14625699 | Proliferating_UCBMC |
| RPAP2              | 4.26E-06 | 0.53853356 | 0.383 | 0.271 | 0.15102245 | Proliferating_UCBMC |
| COPS3              | 4.28E-06 | 0.28934879 | 0.507 | 0.376 | 0.15169873 | Proliferating_UCBMC |
| SPAG16             | 4.30E-06 | 0.52070338 | 0.269 | 0.169 | 0.1522328  | Proliferating_UCBMC |
| EP300              | 4.33E-06 | 0.12643482 | 0.645 | 0.485 | 0.15335832 | Proliferating_UCBMC |
| GTF3C2             | 4.34E-06 | 0.6238591  | 0.3   | 0.198 | 0.15375431 | Proliferating_UCBMC |
| TRAPPC9            | 4.46E-06 | 0.30787536 | 0.491 | 0.356 | 0.15814126 | Proliferating_UCBMC |
| TMTC2              | 4.48E-06 | 0.54575027 | 0.348 | 0.239 | 0.15887177 | Proliferating_UCBMC |
| UHRF2              | 4.75E-06 | 0.19334776 | 0.581 | 0.425 | 0.1684734  | Proliferating_UCBMC |
| CNOT8              | 4.81E-06 | 0.28673513 | 0.372 | 0.255 | 0.17047249 | Proliferating_UCBMC |
| PHF14              | 4.91E-06 | 0.28833832 | 0.566 | 0.434 | 0.17382969 | Proliferating_UCBMC |
| TM9SF4             | 4.92E-06 | 0.32971626 | 0.355 | 0.247 | 0.17423151 | Proliferating_UCBMC |
| CHCHD3             | 5.16E-06 | 0.21265787 | 0.696 | 0.529 | 0.18280261 | Proliferating_UCBMC |
| MAK16              | 5.17E-06 | 0.74842278 | 0.291 | 0.195 | 0.18306993 | Proliferating_UCBMC |
| RSL24D1            | 5.41E-06 | 0.24701253 | 0.729 | 0.576 | 0.19156138 | Proliferating_UCBMC |
| SIMC1              | 5.46E-06 | 0.45906017 | 0.258 | 0.159 | 0.19357182 | Proliferating_UCBMC |
| ENSMMUG00000018557 | 5.49E-06 | 0.29309189 | 0.581 | 0.443 | 0.19459561 | Proliferating_UCBMC |
| HPCAL1             | 5.50E-06 | 0.14892621 | 0.559 | 0.405 | 0.19484842 | Proliferating_UCBMC |
| FMC1-LUC7L2        | 5.60E-06 | 0.24840497 | 0.877 | 0.72  | 0.19824804 | Proliferating_UCBMC |
| SBNO1              | 5.61E-06 | 0.2981707  | 0.46  | 0.339 | 0.19881368 | Proliferating_UCBMC |
| ZNF267             | 5.63E-06 | 0.28945408 | 0.403 | 0.283 | 0.19953086 | Proliferating_UCBMC |
| ENSMMUG00000022874 | 5.69E-06 | 0.27307713 | 0.392 | 0.264 | 0.20157345 | Proliferating_UCBMC |

|          |          |            |       |       |            |                     |
|----------|----------|------------|-------|-------|------------|---------------------|
| SENP7    | 5.70E-06 | 0.18180831 | 0.564 | 0.41  | 0.20186511 | Proliferating_UCBMC |
| TOR1AIP1 | 5.74E-06 | 0.25943914 | 0.399 | 0.277 | 0.20353106 | Proliferating_UCBMC |
| CNBP     | 5.80E-06 | 0.17393983 | 0.811 | 0.618 | 0.20541957 | Proliferating_UCBMC |
| MIB1     | 5.91E-06 | 0.27923568 | 0.465 | 0.341 | 0.20933583 | Proliferating_UCBMC |
| HMGA1    | 5.92E-06 | 0.17489632 | 0.756 | 0.548 | 0.20985043 | Proliferating_UCBMC |
| WDR75    | 6.11E-06 | 0.48230251 | 0.306 | 0.203 | 0.21659984 | Proliferating_UCBMC |
| PIGU     | 6.16E-06 | 0.51697925 | 0.306 | 0.205 | 0.21823214 | Proliferating_UCBMC |
| NAE1     | 6.18E-06 | 0.34918438 | 0.432 | 0.316 | 0.21889283 | Proliferating_UCBMC |
| SLC44A2  | 6.24E-06 | 0.28196589 | 0.504 | 0.368 | 0.22107658 | Proliferating_UCBMC |
| TOB1     | 6.35E-06 | 0.41913019 | 0.396 | 0.283 | 0.22503207 | Proliferating_UCBMC |
| GIGYF2   | 6.37E-06 | 0.26898153 | 0.581 | 0.455 | 0.22571582 | Proliferating_UCBMC |
| TRIM22   | 6.38E-06 | 0.41472132 | 0.48  | 0.353 | 0.22620032 | Proliferating_UCBMC |
| TBC1D20  | 6.63E-06 | 0.63698881 | 0.278 | 0.182 | 0.234753   | Proliferating_UCBMC |
| NUP205   | 6.68E-06 | 0.54179608 | 0.471 | 0.361 | 0.23674054 | Proliferating_UCBMC |
| VPS8     | 6.76E-06 | 0.24207352 | 0.412 | 0.291 | 0.23965878 | Proliferating_UCBMC |
| UBN1     | 6.84E-06 | 0.4240313  | 0.275 | 0.179 | 0.2422986  | Proliferating_UCBMC |
| SERTAD2  | 7.02E-06 | 0.26952231 | 0.445 | 0.312 | 0.24878753 | Proliferating_UCBMC |
| PI4KA    | 7.13E-06 | 0.21162417 | 0.326 | 0.217 | 0.25256697 | Proliferating_UCBMC |
| PSMA1    | 7.21E-06 | 0.22302528 | 0.733 | 0.579 | 0.25550774 | Proliferating_UCBMC |
| PTP4A2   | 7.47E-06 | 0.27640841 | 0.612 | 0.477 | 0.2646653  | Proliferating_UCBMC |
| HDLBP    | 7.53E-06 | 0.18516152 | 0.526 | 0.394 | 0.26697194 | Proliferating_UCBMC |
| ATAD1    | 7.72E-06 | 0.34979986 | 0.478 | 0.356 | 0.27342478 | Proliferating_UCBMC |
| SAMD8    | 7.77E-06 | 0.58992848 | 0.304 | 0.206 | 0.27530929 | Proliferating_UCBMC |
| DCAF6    | 8.01E-06 | 0.33497109 | 0.449 | 0.34  | 0.28369641 | Proliferating_UCBMC |
| NOL8     | 8.33E-06 | 0.42930564 | 0.337 | 0.235 | 0.29518382 | Proliferating_UCBMC |
| TMED10   | 8.35E-06 | 0.29006199 | 0.601 | 0.465 | 0.29570372 | Proliferating_UCBMC |
| CD4      | 8.38E-06 | 0.41496499 | 0.319 | 0.21  | 0.29689994 | Proliferating_UCBMC |
| BAZ2A    | 8.62E-06 | 0.43802492 | 0.267 | 0.167 | 0.30544182 | Proliferating_UCBMC |
| WDR36    | 8.69E-06 | 0.54890659 | 0.326 | 0.225 | 0.30781519 | Proliferating_UCBMC |
| SLC30A5  | 8.71E-06 | 0.68138524 | 0.284 | 0.19  | 0.30851035 | Proliferating_UCBMC |
| CCDC50   | 8.74E-06 | 0.25596394 | 0.434 | 0.3   | 0.30973849 | Proliferating_UCBMC |
| CDIP1    | 8.74E-06 | 0.49618299 | 0.295 | 0.197 | 0.3097504  | Proliferating_UCBMC |
| SKIL     | 8.84E-06 | 0.15815666 | 0.35  | 0.231 | 0.31319454 | Proliferating_UCBMC |



|                    |          |            |       |       |            |                     |
|--------------------|----------|------------|-------|-------|------------|---------------------|
| SEMA4D             | 8.96E-06 | 0.11645291 | 0.674 | 0.512 | 0.31741495 | Proliferating_UCBMC |
| SREBF2             | 9.00E-06 | 0.24679662 | 0.52  | 0.384 | 0.31876602 | Proliferating_UCBMC |
| SGK1               | 9.01E-06 | 0.4881994  | 0.264 | 0.166 | 0.31932552 | Proliferating_UCBMC |
| NOP14              | 9.16E-06 | 0.43040849 | 0.361 | 0.257 | 0.32463391 | Proliferating_UCBMC |
| UBE3A              | 9.33E-06 | 0.24825955 | 0.502 | 0.379 | 0.33042582 | Proliferating_UCBMC |
| ULK2               | 9.35E-06 | 0.22356053 | 0.306 | 0.2   | 0.33136386 | Proliferating_UCBMC |
| FBXW8              | 9.82E-06 | 0.38333285 | 0.359 | 0.251 | 0.34780681 | Proliferating_UCBMC |
| DBF4               | 9.87E-06 | 0.34963062 | 0.452 | 0.325 | 0.3498102  | Proliferating_UCBMC |
| HMGXB4             | 1.00E-05 | 0.37872712 | 0.427 | 0.311 | 0.35558251 | Proliferating_UCBMC |
| ENSMMUG00000048621 | 1.05E-05 | 0.42551298 | 0.352 | 0.25  | 0.37156902 | Proliferating_UCBMC |
| NDUFAF7            | 1.05E-05 | 0.48693385 | 0.295 | 0.203 | 0.37223144 | Proliferating_UCBMC |
| LARP4B             | 1.08E-05 | 0.31525865 | 0.515 | 0.386 | 0.38414735 | Proliferating_UCBMC |
| DCUN1D2            | 1.09E-05 | 0.39726115 | 0.278 | 0.181 | 0.38580184 | Proliferating_UCBMC |
| LBH                | 1.13E-05 | 0.2475428  | 0.586 | 0.428 | 0.40214873 | Proliferating_UCBMC |
| EIF4EBP3           | 1.14E-05 | 0.17165088 | 0.687 | 0.534 | 0.40432616 | Proliferating_UCBMC |
| OXCT1              | 1.15E-05 | 0.18739346 | 0.443 | 0.322 | 0.40665276 | Proliferating_UCBMC |
| GNL2               | 1.18E-05 | 0.58166491 | 0.251 | 0.158 | 0.41798706 | Proliferating_UCBMC |
| KANSL3             | 1.20E-05 | 0.18428131 | 0.366 | 0.251 | 0.42604755 | Proliferating_UCBMC |
| ZNF207             | 1.24E-05 | 0.12483451 | 0.731 | 0.589 | 0.43769102 | Proliferating_UCBMC |
| MANBA              | 1.24E-05 | 0.11429322 | 0.617 | 0.465 | 0.43820785 | Proliferating_UCBMC |
| ZNF700             | 1.24E-05 | 0.23985933 | 0.396 | 0.283 | 0.43878713 | Proliferating_UCBMC |
| MADD               | 1.25E-05 | 0.22184786 | 0.432 | 0.306 | 0.44253898 | Proliferating_UCBMC |
| THUMPD1            | 1.25E-05 | 0.31594854 | 0.419 | 0.301 | 0.44348391 | Proliferating_UCBMC |
| POLR1F             | 1.30E-05 | 0.62355593 | 0.251 | 0.163 | 0.45903398 | Proliferating_UCBMC |
| ROCK1              | 1.32E-05 | 0.1695453  | 0.85  | 0.673 | 0.46835977 | Proliferating_UCBMC |
| TWF1               | 1.35E-05 | 0.38686064 | 0.286 | 0.189 | 0.47694901 | Proliferating_UCBMC |
| ZC3H13             | 1.38E-05 | 0.28919855 | 0.515 | 0.391 | 0.49023957 | Proliferating_UCBMC |
| CAND1              | 1.41E-05 | 0.25595698 | 0.628 | 0.477 | 0.49936821 | Proliferating_UCBMC |
| SDE2               | 1.43E-05 | 0.44940791 | 0.293 | 0.196 | 0.50758197 | Proliferating_UCBMC |
| ZNF438             | 1.43E-05 | 0.34340541 | 0.317 | 0.213 | 0.50784757 | Proliferating_UCBMC |
| DDT                | 1.44E-05 | 0.24237431 | 0.54  | 0.4   | 0.50944482 | Proliferating_UCBMC |
| SMARCA4            | 1.44E-05 | 0.1902205  | 0.507 | 0.37  | 0.51158937 | Proliferating_UCBMC |
| ZBTB11             | 1.45E-05 | 0.3085796  | 0.396 | 0.286 | 0.51400964 | Proliferating_UCBMC |

|          |          |            |       |       |            |                     |
|----------|----------|------------|-------|-------|------------|---------------------|
| ANKZF1   | 1.46E-05 | 0.33419626 | 0.278 | 0.181 | 0.5158401  | Proliferating_UCBMC |
| HGSNAT   | 1.46E-05 | 0.36714665 | 0.333 | 0.227 | 0.51691845 | Proliferating_UCBMC |
| CYFIP2   | 1.47E-05 | 0.1022464  | 0.681 | 0.516 | 0.51911202 | Proliferating_UCBMC |
| SMC1A    | 1.48E-05 | 0.21865345 | 0.656 | 0.495 | 0.52326308 | Proliferating_UCBMC |
| HSPA4    | 1.50E-05 | 0.3915543  | 0.449 | 0.333 | 0.5318319  | Proliferating_UCBMC |
| RFX7     | 1.51E-05 | 0.32401612 | 0.436 | 0.315 | 0.53650277 | Proliferating_UCBMC |
| BORCS5   | 1.52E-05 | 0.34496239 | 0.352 | 0.246 | 0.53879278 | Proliferating_UCBMC |
| MSN      | 1.53E-05 | 0.12785995 | 0.903 | 0.758 | 0.5415425  | Proliferating_UCBMC |
| GALNT7   | 1.56E-05 | 0.37300649 | 0.449 | 0.335 | 0.55393867 | Proliferating_UCBMC |
| DDOST    | 1.58E-05 | 0.25350091 | 0.67  | 0.52  | 0.5614659  | Proliferating_UCBMC |
| MYO5A    | 1.60E-05 | 0.23388727 | 0.59  | 0.457 | 0.56772701 | Proliferating_UCBMC |
| VPS4B    | 1.61E-05 | 0.16132295 | 0.553 | 0.411 | 0.56941077 | Proliferating_UCBMC |
| ATP6V0D1 | 1.61E-05 | 0.35078219 | 0.535 | 0.405 | 0.57099806 | Proliferating_UCBMC |
| STAT5A   | 1.71E-05 | 0.40791902 | 0.293 | 0.196 | 0.60558875 | Proliferating_UCBMC |
| TIA1     | 1.72E-05 | 0.29696784 | 0.568 | 0.439 | 0.60787563 | Proliferating_UCBMC |
| RAB22A   | 1.75E-05 | 0.56234767 | 0.295 | 0.206 | 0.62097448 | Proliferating_UCBMC |
| ELP2     | 1.76E-05 | 0.62396222 | 0.251 | 0.162 | 0.62294253 | Proliferating_UCBMC |
| VPS26A   | 1.78E-05 | 0.52594067 | 0.432 | 0.316 | 0.62943727 | Proliferating_UCBMC |
| STRBP    | 1.80E-05 | 0.48690999 | 0.458 | 0.348 | 0.63784113 | Proliferating_UCBMC |
| ATL3     | 1.88E-05 | 0.20639711 | 0.471 | 0.341 | 0.66657523 | Proliferating_UCBMC |
| NR2C2    | 1.91E-05 | 0.20211003 | 0.423 | 0.301 | 0.67851558 | Proliferating_UCBMC |
| MDH1     | 1.99E-05 | 0.17436743 | 0.678 | 0.509 | 0.70539481 | Proliferating_UCBMC |
| AP5M1    | 2.01E-05 | 0.45182014 | 0.284 | 0.186 | 0.71384346 | Proliferating_UCBMC |
| ATF7     | 2.04E-05 | 0.27535839 | 0.487 | 0.375 | 0.72231901 | Proliferating_UCBMC |
| ARFGEF1  | 2.06E-05 | 0.1108467  | 0.586 | 0.433 | 0.72944717 | Proliferating_UCBMC |
| ZCCHC7   | 2.09E-05 | 0.12875594 | 0.751 | 0.583 | 0.73906672 | Proliferating_UCBMC |
| PTCD3    | 2.10E-05 | 0.32667376 | 0.357 | 0.252 | 0.7433067  | Proliferating_UCBMC |
| SP4      | 2.14E-05 | 0.31985353 | 0.352 | 0.247 | 0.7579064  | Proliferating_UCBMC |
| WBP11    | 2.16E-05 | 0.26605243 | 0.568 | 0.443 | 0.76400834 | Proliferating_UCBMC |
| MRPS30   | 2.18E-05 | 0.39426766 | 0.335 | 0.232 | 0.77371806 | Proliferating_UCBMC |
| AZIN1    | 2.21E-05 | 0.35304378 | 0.485 | 0.366 | 0.7830901  | Proliferating_UCBMC |
| ADAM17   | 2.22E-05 | 0.34131106 | 0.383 | 0.271 | 0.78498352 | Proliferating_UCBMC |
| FAM53C   | 2.22E-05 | 0.40564029 | 0.366 | 0.266 | 0.78757525 | Proliferating_UCBMC |

|                   |          |            |       |       |            |                     |
|-------------------|----------|------------|-------|-------|------------|---------------------|
| NCOA1             | 2.23E-05 | 0.2926297  | 0.509 | 0.396 | 0.78894929 | Proliferating_UCBMC |
| MPRIP             | 2.24E-05 | 0.40482313 | 0.278 | 0.188 | 0.7940524  | Proliferating_UCBMC |
| INTS8             | 2.26E-05 | 0.37323394 | 0.368 | 0.266 | 0.80066309 | Proliferating_UCBMC |
| DOCK2             | 2.26E-05 | 0.10150909 | 0.874 | 0.733 | 0.80129649 | Proliferating_UCBMC |
| NFKBIB            | 2.29E-05 | 0.11855685 | 0.504 | 0.37  | 0.81140197 | Proliferating_UCBMC |
| C3H21orf91        | 2.30E-05 | 0.24693369 | 0.463 | 0.347 | 0.81531304 | Proliferating_UCBMC |
| ENTPD4            | 2.31E-05 | 0.31993271 | 0.41  | 0.3   | 0.81811513 | Proliferating_UCBMC |
| ENSMUG00000057691 | 2.34E-05 | 0.68177125 | 0.304 | 0.212 | 0.82949145 | Proliferating_UCBMC |
| ITGB7             | 2.34E-05 | 0.40078204 | 0.262 | 0.169 | 0.83036345 | Proliferating_UCBMC |
| NFATC3            | 2.40E-05 | 0.16037192 | 0.654 | 0.5   | 0.85055135 | Proliferating_UCBMC |
| DENND6A           | 2.40E-05 | 0.32938705 | 0.452 | 0.34  | 0.85194452 | Proliferating_UCBMC |
| CCT3              | 2.46E-05 | 0.18189196 | 0.758 | 0.59  | 0.8711559  | Proliferating_UCBMC |
| SDAD1             | 2.47E-05 | 0.622257   | 0.251 | 0.166 | 0.87509289 | Proliferating_UCBMC |
| ZNF736            | 2.47E-05 | 0.35180172 | 0.355 | 0.256 | 0.87535267 | Proliferating_UCBMC |
| CDC42             | 2.48E-05 | 0.11834026 | 0.963 | 0.885 | 0.88006823 | Proliferating_UCBMC |
| FAM91A1           | 2.52E-05 | 0.25700821 | 0.392 | 0.281 | 0.89164025 | Proliferating_UCBMC |
| AMMECR1           | 2.52E-05 | 0.37525181 | 0.275 | 0.181 | 0.89405249 | Proliferating_UCBMC |
| UIMC1             | 2.58E-05 | 0.40475994 | 0.441 | 0.334 | 0.91318273 | Proliferating_UCBMC |
| ZNF592            | 2.63E-05 | 0.44342712 | 0.28  | 0.188 | 0.93234387 | Proliferating_UCBMC |
| CEP128            | 2.64E-05 | 0.18651754 | 0.524 | 0.392 | 0.93418739 | Proliferating_UCBMC |
| RBFA              | 2.71E-05 | 0.29615783 | 0.562 | 0.424 | 0.95997456 | Proliferating_UCBMC |
| SRP72             | 2.74E-05 | 0.47407503 | 0.348 | 0.25  | 0.96933093 | Proliferating_UCBMC |
| TNIP1             | 2.74E-05 | 0.16118791 | 0.352 | 0.244 | 0.97023383 | Proliferating_UCBMC |
| ERCC3             | 2.76E-05 | 0.50481277 | 0.271 | 0.182 | 0.97789508 | Proliferating_UCBMC |
| ARMH3             | 2.79E-05 | 0.19170481 | 0.456 | 0.337 | 0.98695793 | Proliferating_UCBMC |
| RAP1B             | 2.79E-05 | 0.12377558 | 0.956 | 0.835 | 0.98821006 | Proliferating_UCBMC |
| UBR2              | 2.87E-05 | 0.36646053 | 0.476 | 0.363 | 1          | Proliferating_UCBMC |
| USP38             | 2.93E-05 | 0.60505222 | 0.273 | 0.182 | 1          | Proliferating_UCBMC |
| CEBPZ             | 3.01E-05 | 0.27526884 | 0.601 | 0.465 | 1          | Proliferating_UCBMC |
| ENSMUG00000049010 | 3.01E-05 | 0.23605744 | 0.5   | 0.387 | 1          | Proliferating_UCBMC |
| NOC3L             | 3.01E-05 | 0.29265854 | 0.405 | 0.292 | 1          | Proliferating_UCBMC |
| CWF19L2           | 3.04E-05 | 0.20380583 | 0.555 | 0.428 | 1          | Proliferating_UCBMC |
| SEC62             | 3.10E-05 | 0.12519992 | 0.694 | 0.53  | 1          | Proliferating_UCBMC |

|                   |          |            |       |       |                       |
|-------------------|----------|------------|-------|-------|-----------------------|
| SKI               | 3.20E-05 | 0.2422862  | 0.271 | 0.177 | 1 Proliferating_UCBMC |
| VEZF1             | 3.28E-05 | 0.11180411 | 0.341 | 0.233 | 1 Proliferating_UCBMC |
| VPS51             | 3.31E-05 | 0.25004715 | 0.355 | 0.253 | 1 Proliferating_UCBMC |
| FKBP3             | 3.31E-05 | 0.2020298  | 0.637 | 0.479 | 1 Proliferating_UCBMC |
| LAMTOR3           | 3.33E-05 | 0.49881838 | 0.333 | 0.237 | 1 Proliferating_UCBMC |
| CHORDC1           | 3.34E-05 | 0.14094091 | 0.559 | 0.431 | 1 Proliferating_UCBMC |
| EXOG              | 3.37E-05 | 0.32784592 | 0.313 | 0.214 | 1 Proliferating_UCBMC |
| SCAF4             | 3.38E-05 | 0.23886391 | 0.478 | 0.36  | 1 Proliferating_UCBMC |
| FXR1              | 3.41E-05 | 0.22050154 | 0.74  | 0.591 | 1 Proliferating_UCBMC |
| HAUS2             | 3.44E-05 | 0.19144706 | 0.346 | 0.236 | 1 Proliferating_UCBMC |
| GTPBP1            | 3.49E-05 | 0.33356026 | 0.357 | 0.25  | 1 Proliferating_UCBMC |
| RPL27             | 3.51E-05 | 0.18650104 | 0.96  | 0.911 | 1 Proliferating_UCBMC |
| BLMH              | 3.55E-05 | 0.44623951 | 0.33  | 0.237 | 1 Proliferating_UCBMC |
| ATP5PO            | 3.55E-05 | 0.2007812  | 0.872 | 0.731 | 1 Proliferating_UCBMC |
| TTC14             | 3.55E-05 | 0.41803339 | 0.381 | 0.279 | 1 Proliferating_UCBMC |
| IGHMBP2           | 3.58E-05 | 0.26501754 | 0.344 | 0.24  | 1 Proliferating_UCBMC |
| HLCS              | 3.62E-05 | 0.27424967 | 0.339 | 0.236 | 1 Proliferating_UCBMC |
| R3HDM4            | 3.71E-05 | 0.48231729 | 0.26  | 0.171 | 1 Proliferating_UCBMC |
| FAM98B            | 3.73E-05 | 0.49213553 | 0.264 | 0.177 | 1 Proliferating_UCBMC |
| TAF11             | 3.76E-05 | 0.19285833 | 0.368 | 0.261 | 1 Proliferating_UCBMC |
| ENSMUG00000010556 | 3.76E-05 | 0.35735514 | 0.256 | 0.167 | 1 Proliferating_UCBMC |
| MAPK8IP3          | 3.84E-05 | 0.38338401 | 0.256 | 0.168 | 1 Proliferating_UCBMC |
| PPM1D             | 3.87E-05 | 0.29548452 | 0.366 | 0.265 | 1 Proliferating_UCBMC |
| RTF1              | 3.89E-05 | 0.13435216 | 0.568 | 0.439 | 1 Proliferating_UCBMC |
| EXOSC7            | 3.97E-05 | 0.18663652 | 0.394 | 0.28  | 1 Proliferating_UCBMC |
| APPL1             | 3.99E-05 | 0.35605372 | 0.407 | 0.3   | 1 Proliferating_UCBMC |
| HDAC3             | 4.08E-05 | 0.28982978 | 0.319 | 0.224 | 1 Proliferating_UCBMC |
| ATF4              | 4.11E-05 | 0.22032518 | 0.67  | 0.519 | 1 Proliferating_UCBMC |
| FASTKD2           | 4.19E-05 | 0.50578292 | 0.275 | 0.183 | 1 Proliferating_UCBMC |
| TOMM20            | 4.21E-05 | 0.19988973 | 0.824 | 0.658 | 1 Proliferating_UCBMC |
| CCDC28A           | 4.25E-05 | 0.16133265 | 0.311 | 0.207 | 1 Proliferating_UCBMC |
| NUP188            | 4.32E-05 | 0.35240323 | 0.328 | 0.231 | 1 Proliferating_UCBMC |
| SPTY2D1           | 4.35E-05 | 0.28208216 | 0.317 | 0.22  | 1 Proliferating_UCBMC |

|                    |          |            |       |       |                       |
|--------------------|----------|------------|-------|-------|-----------------------|
| RNF10              | 4.40E-05 | 0.22156067 | 0.43  | 0.321 | 1 Proliferating_UCBMC |
| IPO8               | 4.45E-05 | 0.36503141 | 0.286 | 0.194 | 1 Proliferating_UCBMC |
| MPHOSPH8           | 4.49E-05 | 0.17716868 | 0.643 | 0.499 | 1 Proliferating_UCBMC |
| THOC7              | 4.55E-05 | 0.24024023 | 0.469 | 0.343 | 1 Proliferating_UCBMC |
| CLPTM1             | 4.56E-05 | 0.40653914 | 0.253 | 0.167 | 1 Proliferating_UCBMC |
| EIF4G2             | 4.63E-05 | 0.17540794 | 0.833 | 0.68  | 1 Proliferating_UCBMC |
| ZBTB44             | 4.68E-05 | 0.20673403 | 0.324 | 0.226 | 1 Proliferating_UCBMC |
| FLNB               | 4.71E-05 | 0.48730962 | 0.253 | 0.164 | 1 Proliferating_UCBMC |
| CEP95              | 4.72E-05 | 0.47657841 | 0.278 | 0.188 | 1 Proliferating_UCBMC |
| MECP2              | 4.74E-05 | 0.20937836 | 0.562 | 0.435 | 1 Proliferating_UCBMC |
| MAP4               | 4.86E-05 | 0.25399897 | 0.33  | 0.228 | 1 Proliferating_UCBMC |
| SUPT6H             | 4.87E-05 | 0.38130279 | 0.33  | 0.231 | 1 Proliferating_UCBMC |
| ICAM2              | 5.13E-05 | 0.24564549 | 0.315 | 0.213 | 1 Proliferating_UCBMC |
| ANTXR2             | 5.13E-05 | 0.37035757 | 0.328 | 0.23  | 1 Proliferating_UCBMC |
| SGMS1              | 5.17E-05 | 0.25218648 | 0.432 | 0.315 | 1 Proliferating_UCBMC |
| CTPS1              | 5.24E-05 | 0.17223165 | 0.399 | 0.285 | 1 Proliferating_UCBMC |
| SSR1               | 5.24E-05 | 0.12764017 | 0.511 | 0.384 | 1 Proliferating_UCBMC |
| SF3B1              | 5.29E-05 | 0.11332441 | 0.868 | 0.738 | 1 Proliferating_UCBMC |
| ENSMMUG00000054965 | 5.35E-05 | 0.33321535 | 0.37  | 0.269 | 1 Proliferating_UCBMC |
| FAF2               | 5.39E-05 | 0.44439582 | 0.352 | 0.261 | 1 Proliferating_UCBMC |
| HELLS              | 5.39E-05 | 0.11481031 | 0.749 | 0.563 | 1 Proliferating_UCBMC |
| EIF2B1             | 5.41E-05 | 0.54695279 | 0.282 | 0.196 | 1 Proliferating_UCBMC |
| SNRNP200           | 5.45E-05 | 0.12403672 | 0.544 | 0.408 | 1 Proliferating_UCBMC |
| MYO9A              | 5.46E-05 | 0.32639622 | 0.335 | 0.235 | 1 Proliferating_UCBMC |
| SAFB               | 5.69E-05 | 0.2011051  | 0.949 | 0.817 | 1 Proliferating_UCBMC |
| SUCLG1             | 5.76E-05 | 0.18590246 | 0.586 | 0.446 | 1 Proliferating_UCBMC |
| PNPT1              | 5.89E-05 | 0.35330081 | 0.297 | 0.206 | 1 Proliferating_UCBMC |
| ATXN7L3B           | 5.99E-05 | 0.24088695 | 0.456 | 0.347 | 1 Proliferating_UCBMC |
| ENSMMUG00000048215 | 6.12E-05 | 0.5752445  | 0.264 | 0.178 | 1 Proliferating_UCBMC |
| PARL               | 6.12E-05 | 0.3481072  | 0.282 | 0.189 | 1 Proliferating_UCBMC |
| TAF1D              | 6.21E-05 | 0.36371002 | 0.377 | 0.276 | 1 Proliferating_UCBMC |
| UBE2D3             | 6.47E-05 | 0.12103014 | 0.925 | 0.811 | 1 Proliferating_UCBMC |
| ENSMMUG00000061756 | 6.59E-05 | 0.17229965 | 0.381 | 0.267 | 1 Proliferating_UCBMC |

|         |          |            |       |       |                       |
|---------|----------|------------|-------|-------|-----------------------|
| RPS27   | 6.61E-05 | 0.16354354 | 0.958 | 0.907 | 1 Proliferating_UCBMC |
| EEF1B2  | 6.63E-05 | 0.17624735 | 0.952 | 0.853 | 1 Proliferating_UCBMC |
| ADAR    | 6.63E-05 | 0.15254629 | 0.544 | 0.406 | 1 Proliferating_UCBMC |
| PXK     | 6.66E-05 | 0.10611947 | 0.399 | 0.282 | 1 Proliferating_UCBMC |
| CASK    | 6.98E-05 | 0.20561961 | 0.407 | 0.305 | 1 Proliferating_UCBMC |
| WDPCP   | 7.09E-05 | 0.33456988 | 0.43  | 0.321 | 1 Proliferating_UCBMC |
| RUBCN   | 7.19E-05 | 0.23120966 | 0.441 | 0.326 | 1 Proliferating_UCBMC |
| NUP107  | 7.20E-05 | 0.42192576 | 0.315 | 0.223 | 1 Proliferating_UCBMC |
| NDUFS1  | 7.24E-05 | 0.52435369 | 0.315 | 0.226 | 1 Proliferating_UCBMC |
| SMNDC1  | 7.34E-05 | 0.18502995 | 0.599 | 0.481 | 1 Proliferating_UCBMC |
| AKAP8   | 7.43E-05 | 0.40490317 | 0.251 | 0.169 | 1 Proliferating_UCBMC |
| AVL9    | 7.70E-05 | 0.26636444 | 0.366 | 0.267 | 1 Proliferating_UCBMC |
| CCDC82  | 7.72E-05 | 0.16618133 | 0.557 | 0.426 | 1 Proliferating_UCBMC |
| RNF2    | 7.73E-05 | 0.16326301 | 0.271 | 0.182 | 1 Proliferating_UCBMC |
| MORF4L1 | 7.76E-05 | 0.19083189 | 0.861 | 0.716 | 1 Proliferating_UCBMC |
| SLC25A4 | 7.92E-05 | 0.21307705 | 0.436 | 0.329 | 1 Proliferating_UCBMC |
| UTP18   | 7.93E-05 | 0.43003732 | 0.324 | 0.229 | 1 Proliferating_UCBMC |
| BRWD3   | 7.96E-05 | 0.45904911 | 0.322 | 0.23  | 1 Proliferating_UCBMC |
| GLTP    | 8.04E-05 | 0.44978395 | 0.319 | 0.229 | 1 Proliferating_UCBMC |
| RHEB    | 8.08E-05 | 0.18457141 | 0.725 | 0.574 | 1 Proliferating_UCBMC |
| L3MBTL3 | 8.09E-05 | 0.39562809 | 0.291 | 0.199 | 1 Proliferating_UCBMC |
| XPC     | 8.20E-05 | 0.2353199  | 0.423 | 0.311 | 1 Proliferating_UCBMC |
| LSM12   | 8.38E-05 | 0.21539512 | 0.396 | 0.29  | 1 Proliferating_UCBMC |
| SEC24A  | 8.45E-05 | 0.43655363 | 0.253 | 0.169 | 1 Proliferating_UCBMC |
| SETDB1  | 8.73E-05 | 0.46395663 | 0.302 | 0.211 | 1 Proliferating_UCBMC |
| MRT04   | 8.78E-05 | 0.39007059 | 0.267 | 0.181 | 1 Proliferating_UCBMC |
| BZW2    | 8.85E-05 | 0.28340811 | 0.533 | 0.414 | 1 Proliferating_UCBMC |
| CD200   | 8.86E-05 | 0.52720429 | 0.278 | 0.194 | 1 Proliferating_UCBMC |
| RAD21   | 8.89E-05 | 0.158483   | 0.837 | 0.659 | 1 Proliferating_UCBMC |
| TMEM168 | 9.01E-05 | 0.29354192 | 0.278 | 0.186 | 1 Proliferating_UCBMC |
| YTHDF2  | 9.11E-05 | 0.26578962 | 0.403 | 0.301 | 1 Proliferating_UCBMC |
| TBPL1   | 9.32E-05 | 0.2069913  | 0.372 | 0.275 | 1 Proliferating_UCBMC |
| CCDC59  | 9.56E-05 | 0.20032547 | 0.482 | 0.367 | 1 Proliferating_UCBMC |

|                    |            |            |       |       |                       |
|--------------------|------------|------------|-------|-------|-----------------------|
| GOLGA5             | 9.65E-05   | 0.40701028 | 0.291 | 0.204 | 1 Proliferating_UCBMC |
| RAE1               | 9.90E-05   | 0.25658802 | 0.355 | 0.257 | 1 Proliferating_UCBMC |
| NCOR1              | 0.00010068 | 0.11424042 | 0.733 | 0.569 | 1 Proliferating_UCBMC |
| UBA2               | 0.00010108 | 0.16633848 | 0.595 | 0.451 | 1 Proliferating_UCBMC |
| FOCAD              | 0.00010151 | 0.1490814  | 0.434 | 0.316 | 1 Proliferating_UCBMC |
| COMMD10            | 0.00010224 | 0.10901679 | 0.632 | 0.49  | 1 Proliferating_UCBMC |
| DNTTIP2            | 0.0001025  | 0.19542021 | 0.487 | 0.381 | 1 Proliferating_UCBMC |
| ZNF655             | 0.00010407 | 0.53357823 | 0.256 | 0.176 | 1 Proliferating_UCBMC |
| LSG1               | 0.00010489 | 0.33964575 | 0.335 | 0.241 | 1 Proliferating_UCBMC |
| CCDC97             | 0.00010586 | 0.37662808 | 0.269 | 0.186 | 1 Proliferating_UCBMC |
| INTS2              | 0.00010768 | 0.49482921 | 0.256 | 0.174 | 1 Proliferating_UCBMC |
| FAM76B             | 0.000108   | 0.39341874 | 0.355 | 0.26  | 1 Proliferating_UCBMC |
| ECE1               | 0.00010808 | 0.47856644 | 0.253 | 0.17  | 1 Proliferating_UCBMC |
| RNF121             | 0.00010939 | 0.4967125  | 0.253 | 0.17  | 1 Proliferating_UCBMC |
| PLD3               | 0.00011045 | 0.24258072 | 0.322 | 0.225 | 1 Proliferating_UCBMC |
| ACBD6              | 0.00011113 | 0.19234734 | 0.361 | 0.26  | 1 Proliferating_UCBMC |
| NLK                | 0.00011267 | 0.46137828 | 0.311 | 0.216 | 1 Proliferating_UCBMC |
| UFD1               | 0.00011465 | 0.10843229 | 0.46  | 0.351 | 1 Proliferating_UCBMC |
| FUBP1              | 0.00011619 | 0.19566349 | 0.762 | 0.616 | 1 Proliferating_UCBMC |
| CCDC90B            | 0.00011628 | 0.40334041 | 0.377 | 0.285 | 1 Proliferating_UCBMC |
| ANKFY1             | 0.00011736 | 0.28418945 | 0.405 | 0.309 | 1 Proliferating_UCBMC |
| SAP130             | 0.00011737 | 0.29740759 | 0.313 | 0.221 | 1 Proliferating_UCBMC |
| SPATS2             | 0.00011757 | 0.1589439  | 0.3   | 0.209 | 1 Proliferating_UCBMC |
| IFNGR1             | 0.0001176  | 0.17351649 | 0.366 | 0.265 | 1 Proliferating_UCBMC |
| CREB1              | 0.0001179  | 0.16829123 | 0.524 | 0.407 | 1 Proliferating_UCBMC |
| RTCB               | 0.00011837 | 0.39091587 | 0.377 | 0.281 | 1 Proliferating_UCBMC |
| ENSMMUG00000055376 | 0.00012635 | 0.44071031 | 0.366 | 0.276 | 1 Proliferating_UCBMC |
| TBC1D2B            | 0.00012642 | 0.30905675 | 0.326 | 0.232 | 1 Proliferating_UCBMC |
| DDX18              | 0.00012669 | 0.11235925 | 0.619 | 0.482 | 1 Proliferating_UCBMC |
| FAM13B             | 0.00012707 | 0.17279132 | 0.522 | 0.4   | 1 Proliferating_UCBMC |
| ZNF236             | 0.0001301  | 0.15808833 | 0.335 | 0.236 | 1 Proliferating_UCBMC |
| ENSMMUG00000003073 | 0.00013471 | 0.1525304  | 0.965 | 0.888 | 1 Proliferating_UCBMC |
| ILRUN              | 0.00013682 | 0.37014416 | 0.401 | 0.303 | 1 Proliferating_UCBMC |

|                      |            |            |       |       |                       |
|----------------------|------------|------------|-------|-------|-----------------------|
| ATF7IP               | 0.00014306 | 0.15006607 | 0.795 | 0.643 | 1 Proliferating_UCBMC |
| CAPZA2               | 0.00014342 | 0.15180323 | 0.758 | 0.612 | 1 Proliferating_UCBMC |
| ENSMMUG000000016959  | 0.00015155 | 0.18241659 | 0.588 | 0.468 | 1 Proliferating_UCBMC |
| NIFK                 | 0.00015172 | 0.19976152 | 0.436 | 0.326 | 1 Proliferating_UCBMC |
| RFFL                 | 0.00015237 | 0.45332483 | 0.262 | 0.179 | 1 Proliferating_UCBMC |
| ERCC6                | 0.00015256 | 0.23923779 | 0.311 | 0.221 | 1 Proliferating_UCBMC |
| ENSMMUG000000017400  | 0.00016144 | 0.34432985 | 0.35  | 0.259 | 1 Proliferating_UCBMC |
| ATP2B1               | 0.00016246 | 0.30447248 | 0.372 | 0.274 | 1 Proliferating_UCBMC |
| BROX                 | 0.00016555 | 0.11841521 | 0.328 | 0.236 | 1 Proliferating_UCBMC |
| AP1G1                | 0.00017028 | 0.13700813 | 0.526 | 0.403 | 1 Proliferating_UCBMC |
| FMR1                 | 0.00017642 | 0.34175981 | 0.304 | 0.218 | 1 Proliferating_UCBMC |
| STIM2                | 0.00018291 | 0.20383731 | 0.498 | 0.396 | 1 Proliferating_UCBMC |
| DERA                 | 0.00018316 | 0.21347956 | 0.452 | 0.341 | 1 Proliferating_UCBMC |
| BTBD1                | 0.00018484 | 0.14751591 | 0.352 | 0.255 | 1 Proliferating_UCBMC |
| DGCR2                | 0.00018787 | 0.31744379 | 0.319 | 0.23  | 1 Proliferating_UCBMC |
| RBM10                | 0.00018823 | 0.2054779  | 0.337 | 0.249 | 1 Proliferating_UCBMC |
| FANCM                | 0.00019455 | 0.23234009 | 0.377 | 0.275 | 1 Proliferating_UCBMC |
| IFT88                | 0.00019517 | 0.30058531 | 0.403 | 0.301 | 1 Proliferating_UCBMC |
| SLC35B1              | 0.00019536 | 0.35069291 | 0.467 | 0.37  | 1 Proliferating_UCBMC |
| ENSMMUG000000001210  | 0.00019662 | 0.20753137 | 0.896 | 0.802 | 1 Proliferating_UCBMC |
| WTAP                 | 0.00020087 | 0.14797465 | 0.767 | 0.595 | 1 Proliferating_UCBMC |
| NDUFAF2              | 0.00020106 | 0.49308802 | 0.319 | 0.233 | 1 Proliferating_UCBMC |
| MRPS31               | 0.00020245 | 0.14629223 | 0.544 | 0.417 | 1 Proliferating_UCBMC |
| BAZ1B                | 0.00020365 | 0.20688539 | 0.637 | 0.5   | 1 Proliferating_UCBMC |
| GOT1                 | 0.00020945 | 0.39855322 | 0.3   | 0.216 | 1 Proliferating_UCBMC |
| RPS6KC1              | 0.00021364 | 0.17321367 | 0.43  | 0.321 | 1 Proliferating_UCBMC |
| CRNKL1               | 0.00022042 | 0.1742077  | 0.41  | 0.314 | 1 Proliferating_UCBMC |
| ENSMMUG0000000061913 | 0.00022813 | 0.20356232 | 0.716 | 0.57  | 1 Proliferating_UCBMC |
| POLE                 | 0.00023018 | 0.23328611 | 0.258 | 0.176 | 1 Proliferating_UCBMC |
| CBFA2T2              | 0.00023091 | 0.165468   | 0.346 | 0.25  | 1 Proliferating_UCBMC |
| TVP23B               | 0.00023173 | 0.36270094 | 0.286 | 0.202 | 1 Proliferating_UCBMC |
| NAF1                 | 0.00023262 | 0.44220338 | 0.306 | 0.224 | 1 Proliferating_UCBMC |
| VRK1                 | 0.00023579 | 0.27832552 | 0.716 | 0.588 | 1 Proliferating_UCBMC |



|                    |            |            |       |       |                       |
|--------------------|------------|------------|-------|-------|-----------------------|
| STX17              | 0.00023608 | 0.23294408 | 0.337 | 0.244 | 1 Proliferating_UCBMC |
| IPO9               | 0.00023669 | 0.25361145 | 0.456 | 0.356 | 1 Proliferating_UCBMC |
| GAR1               | 0.0002367  | 0.22387633 | 0.385 | 0.279 | 1 Proliferating_UCBMC |
| RWDD1              | 0.00024471 | 0.14438575 | 0.709 | 0.568 | 1 Proliferating_UCBMC |
| RSRC2              | 0.00025265 | 0.17519385 | 0.789 | 0.655 | 1 Proliferating_UCBMC |
| RRP1B              | 0.00025404 | 0.32749077 | 0.41  | 0.311 | 1 Proliferating_UCBMC |
| CCT6A              | 0.00025551 | 0.18858905 | 0.698 | 0.547 | 1 Proliferating_UCBMC |
| DLST               | 0.00026001 | 0.35266809 | 0.405 | 0.312 | 1 Proliferating_UCBMC |
| OTUD5              | 0.0002691  | 0.25103197 | 0.289 | 0.201 | 1 Proliferating_UCBMC |
| CEP83              | 0.00027141 | 0.16720462 | 0.293 | 0.203 | 1 Proliferating_UCBMC |
| ZNF106             | 0.00027151 | 0.38284632 | 0.282 | 0.199 | 1 Proliferating_UCBMC |
| MIA3               | 0.00027207 | 0.28071807 | 0.322 | 0.236 | 1 Proliferating_UCBMC |
| RBM23              | 0.0002746  | 0.21676851 | 0.419 | 0.321 | 1 Proliferating_UCBMC |
| MARCHF5            | 0.00028104 | 0.462437   | 0.286 | 0.207 | 1 Proliferating_UCBMC |
| ENSMMUG00000029987 | 0.00028658 | 0.19210732 | 0.392 | 0.294 | 1 Proliferating_UCBMC |
| RPS24              | 0.00028872 | 0.15013282 | 0.98  | 0.933 | 1 Proliferating_UCBMC |
| PBXIP1             | 0.0002935  | 0.14254731 | 0.443 | 0.334 | 1 Proliferating_UCBMC |
| PGS1               | 0.00029911 | 0.47489057 | 0.282 | 0.206 | 1 Proliferating_UCBMC |
| SRSF10             | 0.00030726 | 0.18671964 | 0.751 | 0.624 | 1 Proliferating_UCBMC |
| TERF1              | 0.00030767 | 0.19725366 | 0.445 | 0.346 | 1 Proliferating_UCBMC |
| SMAD2              | 0.00030799 | 0.14572211 | 0.396 | 0.3   | 1 Proliferating_UCBMC |
| DDX10              | 0.00031102 | 0.46570179 | 0.319 | 0.236 | 1 Proliferating_UCBMC |
| PCGF5              | 0.00031116 | 0.39007928 | 0.311 | 0.225 | 1 Proliferating_UCBMC |
| ZNF160             | 0.00031335 | 0.22708375 | 0.322 | 0.236 | 1 Proliferating_UCBMC |
| ZNHIT6             | 0.00031376 | 0.2483742  | 0.28  | 0.197 | 1 Proliferating_UCBMC |
| GLE1               | 0.00032119 | 0.12527469 | 0.377 | 0.283 | 1 Proliferating_UCBMC |
| ATP6AP2            | 0.00032223 | 0.29066336 | 0.372 | 0.279 | 1 Proliferating_UCBMC |
| ECHDC1             | 0.00032893 | 0.23971539 | 0.507 | 0.384 | 1 Proliferating_UCBMC |
| SGF29              | 0.00033293 | 0.13681777 | 0.297 | 0.209 | 1 Proliferating_UCBMC |
| ENSMMUG00000039874 | 0.00033829 | 0.18635414 | 0.308 | 0.228 | 1 Proliferating_UCBMC |
| UBE2G2             | 0.00033887 | 0.19734701 | 0.416 | 0.316 | 1 Proliferating_UCBMC |
| TNRC6C             | 0.00034651 | 0.11551031 | 0.43  | 0.33  | 1 Proliferating_UCBMC |
| CCT4               | 0.00035448 | 0.16084843 | 0.72  | 0.572 | 1 Proliferating_UCBMC |

|                    |            |            |       |       |                       |
|--------------------|------------|------------|-------|-------|-----------------------|
| SAMM50             | 0.00035968 | 0.40144797 | 0.33  | 0.248 | 1 Proliferating_UCBMC |
| SPEN               | 0.00036484 | 0.10549975 | 0.531 | 0.413 | 1 Proliferating_UCBMC |
| RNF169             | 0.00036531 | 0.32955744 | 0.278 | 0.196 | 1 Proliferating_UCBMC |
| ENSMMUG00000007426 | 0.00036769 | 0.37563858 | 0.271 | 0.193 | 1 Proliferating_UCBMC |
| TUFM               | 0.00037723 | 0.14321205 | 0.427 | 0.322 | 1 Proliferating_UCBMC |
| PRKAG1             | 0.0003961  | 0.30362197 | 0.302 | 0.223 | 1 Proliferating_UCBMC |
| PDSS2              | 0.00040497 | 0.22275812 | 0.403 | 0.308 | 1 Proliferating_UCBMC |
| TTC19              | 0.00040768 | 0.1301529  | 0.43  | 0.326 | 1 Proliferating_UCBMC |
| PIBF1              | 0.00040926 | 0.31847496 | 0.504 | 0.41  | 1 Proliferating_UCBMC |
| KAT2B              | 0.00041954 | 0.29881333 | 0.284 | 0.201 | 1 Proliferating_UCBMC |
| CALU               | 0.00042455 | 0.21708756 | 0.46  | 0.365 | 1 Proliferating_UCBMC |
| RESF1              | 0.00042535 | 0.17039333 | 0.412 | 0.317 | 1 Proliferating_UCBMC |
| ADAM10             | 0.00043227 | 0.1631421  | 0.623 | 0.505 | 1 Proliferating_UCBMC |
| WDR82              | 0.00045306 | 0.35534479 | 0.372 | 0.278 | 1 Proliferating_UCBMC |
| KMT5B              | 0.0004683  | 0.21593058 | 0.344 | 0.251 | 1 Proliferating_UCBMC |
| NARS2              | 0.00048225 | 0.29684023 | 0.297 | 0.216 | 1 Proliferating_UCBMC |
| DRG1               | 0.00048628 | 0.31673974 | 0.291 | 0.211 | 1 Proliferating_UCBMC |
| PJA2               | 0.00049061 | 0.18679216 | 0.562 | 0.459 | 1 Proliferating_UCBMC |
| TNPO3              | 0.00050238 | 0.27207631 | 0.498 | 0.396 | 1 Proliferating_UCBMC |
| NR2C1              | 0.00050468 | 0.18743675 | 0.271 | 0.19  | 1 Proliferating_UCBMC |
| ITFG2              | 0.00051093 | 0.23403379 | 0.412 | 0.318 | 1 Proliferating_UCBMC |
| PPP1R7             | 0.0005125  | 0.12138365 | 0.396 | 0.3   | 1 Proliferating_UCBMC |
| GTF2H1             | 0.00051312 | 0.46191812 | 0.348 | 0.266 | 1 Proliferating_UCBMC |
| CNTLN              | 0.00051323 | 0.21347539 | 0.269 | 0.189 | 1 Proliferating_UCBMC |
| SMN1               | 0.00051378 | 0.20783966 | 0.41  | 0.323 | 1 Proliferating_UCBMC |
| CCDC84             | 0.00052724 | 0.25480582 | 0.251 | 0.173 | 1 Proliferating_UCBMC |
| SPOP               | 0.00053115 | 0.21477133 | 0.485 | 0.385 | 1 Proliferating_UCBMC |
| COMMD7             | 0.00053459 | 0.19990477 | 0.559 | 0.443 | 1 Proliferating_UCBMC |
| C15orf41           | 0.00054458 | 0.31531768 | 0.414 | 0.312 | 1 Proliferating_UCBMC |
| SLC16A7            | 0.00055783 | 0.46201901 | 0.328 | 0.246 | 1 Proliferating_UCBMC |
| PCNT               | 0.00056294 | 0.23403104 | 0.372 | 0.284 | 1 Proliferating_UCBMC |
| ORC2               | 0.00058473 | 0.32518756 | 0.328 | 0.25  | 1 Proliferating_UCBMC |
| TMEM41B            | 0.00058825 | 0.10127752 | 0.341 | 0.253 | 1 Proliferating_UCBMC |

|                   |            |            |       |       |                       |
|-------------------|------------|------------|-------|-------|-----------------------|
| COMMD1            | 0.00060029 | 0.22261773 | 0.619 | 0.508 | 1 Proliferating_UCBMC |
| PAPOLA            | 0.00060308 | 0.15659469 | 0.795 | 0.644 | 1 Proliferating_UCBMC |
| GABPA             | 0.00061111 | 0.30800059 | 0.275 | 0.199 | 1 Proliferating_UCBMC |
| RSU1              | 0.00061877 | 0.15692508 | 0.454 | 0.356 | 1 Proliferating_UCBMC |
| KAT14             | 0.00063773 | 0.22910331 | 0.275 | 0.198 | 1 Proliferating_UCBMC |
| SDCCAG8           | 0.0006549  | 0.24528278 | 0.399 | 0.306 | 1 Proliferating_UCBMC |
| SH3GLB1           | 0.0006571  | 0.53814218 | 0.383 | 0.306 | 1 Proliferating_UCBMC |
| MTIF2             | 0.00068098 | 0.3841367  | 0.326 | 0.249 | 1 Proliferating_UCBMC |
| NCK1              | 0.0006892  | 0.11491759 | 0.491 | 0.385 | 1 Proliferating_UCBMC |
| OS9               | 0.00069447 | 0.25911046 | 0.41  | 0.323 | 1 Proliferating_UCBMC |
| NUB1              | 0.00069732 | 0.27345023 | 0.339 | 0.256 | 1 Proliferating_UCBMC |
| KLF13             | 0.00069937 | 0.14423696 | 0.306 | 0.223 | 1 Proliferating_UCBMC |
| ARGLU1            | 0.00070088 | 0.12262171 | 0.793 | 0.62  | 1 Proliferating_UCBMC |
| TKT               | 0.00070598 | 0.1110535  | 0.61  | 0.477 | 1 Proliferating_UCBMC |
| COX4I1            | 0.00071611 | 0.16791695 | 0.916 | 0.799 | 1 Proliferating_UCBMC |
| MEX3C             | 0.00072199 | 0.24127576 | 0.271 | 0.195 | 1 Proliferating_UCBMC |
| MAP3K5            | 0.00072685 | 0.14947707 | 0.416 | 0.326 | 1 Proliferating_UCBMC |
| CDC5L             | 0.00074123 | 0.13866329 | 0.533 | 0.435 | 1 Proliferating_UCBMC |
| INO80C            | 0.00074154 | 0.12728412 | 0.41  | 0.31  | 1 Proliferating_UCBMC |
| HOOK3             | 0.00075724 | 0.11023334 | 0.802 | 0.631 | 1 Proliferating_UCBMC |
| WASHC4            | 0.00077935 | 0.1219039  | 0.452 | 0.344 | 1 Proliferating_UCBMC |
| RPN2              | 0.00078253 | 0.17198847 | 0.5   | 0.389 | 1 Proliferating_UCBMC |
| MRPL11            | 0.00078365 | 0.1466312  | 0.593 | 0.469 | 1 Proliferating_UCBMC |
| ZBTB1             | 0.00082991 | 0.1082725  | 0.463 | 0.358 | 1 Proliferating_UCBMC |
| RPL30             | 0.00084164 | 0.12594005 | 0.978 | 0.923 | 1 Proliferating_UCBMC |
| ENSMUG00000056043 | 0.00084211 | 0.26302658 | 0.372 | 0.284 | 1 Proliferating_UCBMC |
| ENSMUG00000057079 | 0.0008471  | 0.31599102 | 0.37  | 0.286 | 1 Proliferating_UCBMC |
| RPS5              | 0.00084848 | 0.11853849 | 0.956 | 0.902 | 1 Proliferating_UCBMC |
| ACAP2             | 0.00085967 | 0.10686124 | 0.811 | 0.639 | 1 Proliferating_UCBMC |
| MYNN              | 0.00086762 | 0.15050281 | 0.326 | 0.241 | 1 Proliferating_UCBMC |
| RBM28             | 0.00087715 | 0.38043084 | 0.269 | 0.194 | 1 Proliferating_UCBMC |
| TMF1              | 0.00087857 | 0.11321327 | 0.291 | 0.211 | 1 Proliferating_UCBMC |
| SCYL2             | 0.00089325 | 0.20855752 | 0.256 | 0.183 | 1 Proliferating_UCBMC |

|                    |            |            |       |       |                       |
|--------------------|------------|------------|-------|-------|-----------------------|
| GNL3               | 0.00090452 | 0.30025611 | 0.401 | 0.31  | 1 Proliferating_UCBMC |
| GCN1               | 0.00092198 | 0.12497613 | 0.956 | 0.908 | 1 Proliferating_UCBMC |
| DNAJA2             | 0.00094735 | 0.12580645 | 0.456 | 0.349 | 1 Proliferating_UCBMC |
| GGA3               | 0.00094827 | 0.21410779 | 0.35  | 0.266 | 1 Proliferating_UCBMC |
| OXR1               | 0.00095941 | 0.2282469  | 0.432 | 0.333 | 1 Proliferating_UCBMC |
| PREPL              | 0.00097561 | 0.31477144 | 0.311 | 0.232 | 1 Proliferating_UCBMC |
| VPS35L             | 0.00098359 | 0.27916392 | 0.313 | 0.229 | 1 Proliferating_UCBMC |
| ENSMMUG00000055718 | 0.00101361 | 0.49542626 | 0.262 | 0.192 | 1 Proliferating_UCBMC |
| VPS36              | 0.00102967 | 0.14315396 | 0.46  | 0.359 | 1 Proliferating_UCBMC |
| SLC35E1            | 0.00106286 | 0.4111437  | 0.284 | 0.21  | 1 Proliferating_UCBMC |
| PHF10              | 0.0010645  | 0.34282547 | 0.273 | 0.201 | 1 Proliferating_UCBMC |
| SMARCE1            | 0.00106493 | 0.17594218 | 0.533 | 0.43  | 1 Proliferating_UCBMC |
| SF3A2              | 0.00107152 | 0.22964412 | 0.289 | 0.212 | 1 Proliferating_UCBMC |
| GPALPP1            | 0.00109543 | 0.18317614 | 0.319 | 0.24  | 1 Proliferating_UCBMC |
| NFX1               | 0.00111524 | 0.33307553 | 0.33  | 0.251 | 1 Proliferating_UCBMC |
| VPS37A             | 0.00111653 | 0.3318272  | 0.26  | 0.191 | 1 Proliferating_UCBMC |
| SUPT5H             | 0.0011637  | 0.30675842 | 0.383 | 0.301 | 1 Proliferating_UCBMC |
| EEFSEC             | 0.00117179 | 0.1222297  | 0.315 | 0.232 | 1 Proliferating_UCBMC |
| ZFX                | 0.00118277 | 0.20665556 | 0.427 | 0.34  | 1 Proliferating_UCBMC |
| ARCN1              | 0.00118809 | 0.25737002 | 0.361 | 0.28  | 1 Proliferating_UCBMC |
| DCAF1              | 0.00119535 | 0.14660288 | 0.419 | 0.324 | 1 Proliferating_UCBMC |
| MAP3K7             | 0.00120103 | 0.11893464 | 0.328 | 0.245 | 1 Proliferating_UCBMC |
| PSMC1              | 0.00123598 | 0.12639694 | 0.414 | 0.316 | 1 Proliferating_UCBMC |
| SMARCAD1           | 0.00124195 | 0.20408565 | 0.256 | 0.184 | 1 Proliferating_UCBMC |
| RPL6               | 0.00126683 | 0.13121165 | 0.974 | 0.913 | 1 Proliferating_UCBMC |
| GOSR1              | 0.00131433 | 0.14929278 | 0.293 | 0.217 | 1 Proliferating_UCBMC |
| UGGT1              | 0.00132125 | 0.35262026 | 0.282 | 0.21  | 1 Proliferating_UCBMC |
| LIG1               | 0.0013425  | 0.14667404 | 0.474 | 0.363 | 1 Proliferating_UCBMC |
| MTDH               | 0.00137877 | 0.15590998 | 0.619 | 0.49  | 1 Proliferating_UCBMC |
| TUBA4A             | 0.00140025 | 0.11878318 | 0.456 | 0.357 | 1 Proliferating_UCBMC |
| CASC3              | 0.00140754 | 0.10040813 | 0.476 | 0.386 | 1 Proliferating_UCBMC |
| STRN3              | 0.0014165  | 0.16091638 | 0.485 | 0.379 | 1 Proliferating_UCBMC |
| BRD3               | 0.00148259 | 0.1046346  | 0.264 | 0.187 | 1 Proliferating_UCBMC |

|                   |            |            |       |       |                       |
|-------------------|------------|------------|-------|-------|-----------------------|
| KPNA1             | 0.00150012 | 0.20410326 | 0.43  | 0.33  | 1 Proliferating_UCBMC |
| TERB1             | 0.00152764 | 0.23495906 | 0.355 | 0.276 | 1 Proliferating_UCBMC |
| CDK6              | 0.00155475 | 0.10500237 | 0.432 | 0.338 | 1 Proliferating_UCBMC |
| MED19             | 0.00163577 | 0.27227729 | 0.275 | 0.202 | 1 Proliferating_UCBMC |
| PSMD11            | 0.00166125 | 0.16463613 | 0.458 | 0.361 | 1 Proliferating_UCBMC |
| CHD1              | 0.00167374 | 0.11480628 | 0.559 | 0.457 | 1 Proliferating_UCBMC |
| RNF34             | 0.0016938  | 0.16676737 | 0.368 | 0.286 | 1 Proliferating_UCBMC |
| CERS5             | 0.00174047 | 0.24307921 | 0.297 | 0.221 | 1 Proliferating_UCBMC |
| LRRC8D            | 0.00174189 | 0.40133856 | 0.324 | 0.254 | 1 Proliferating_UCBMC |
| HMGN5             | 0.00174316 | 0.28420069 | 0.363 | 0.276 | 1 Proliferating_UCBMC |
| NOP58             | 0.00177297 | 0.13247639 | 0.661 | 0.531 | 1 Proliferating_UCBMC |
| EIF3D             | 0.00178254 | 0.1832116  | 0.559 | 0.458 | 1 Proliferating_UCBMC |
| CRTC1             | 0.00178874 | 0.13309536 | 0.256 | 0.182 | 1 Proliferating_UCBMC |
| ATP13A3           | 0.00180331 | 0.14587454 | 0.33  | 0.246 | 1 Proliferating_UCBMC |
| NDUF4F4           | 0.00182111 | 0.23213915 | 0.341 | 0.26  | 1 Proliferating_UCBMC |
| PARG              | 0.00185133 | 0.24981203 | 0.306 | 0.233 | 1 Proliferating_UCBMC |
| GTPBP8            | 0.00185291 | 0.29840356 | 0.335 | 0.261 | 1 Proliferating_UCBMC |
| ENSMUG00000054743 | 0.00185682 | 0.12033755 | 0.39  | 0.301 | 1 Proliferating_UCBMC |
| PRKAA1            | 0.00186089 | 0.20408089 | 0.289 | 0.211 | 1 Proliferating_UCBMC |
| SAR1B             | 0.00188441 | 0.239051   | 0.308 | 0.236 | 1 Proliferating_UCBMC |
| PSMD2             | 0.00188675 | 0.15664274 | 0.445 | 0.358 | 1 Proliferating_UCBMC |
| DAP               | 0.00189531 | 0.24955866 | 0.37  | 0.291 | 1 Proliferating_UCBMC |
| KIAA0100          | 0.00190771 | 0.15582953 | 0.258 | 0.187 | 1 Proliferating_UCBMC |
| DERL2             | 0.00194062 | 0.11376996 | 0.388 | 0.303 | 1 Proliferating_UCBMC |
| RBM34             | 0.00196735 | 0.15773083 | 0.414 | 0.335 | 1 Proliferating_UCBMC |
| STX3.1            | 0.00199835 | 0.20359242 | 0.311 | 0.233 | 1 Proliferating_UCBMC |
| ENSMUG00000061298 | 0.00204779 | 0.22531625 | 0.352 | 0.276 | 1 Proliferating_UCBMC |
| TBCC              | 0.00204965 | 0.11785159 | 0.412 | 0.321 | 1 Proliferating_UCBMC |
| TMEM161B          | 0.00207616 | 0.49780586 | 0.275 | 0.211 | 1 Proliferating_UCBMC |
| TTF1              | 0.00208759 | 0.11593551 | 0.449 | 0.36  | 1 Proliferating_UCBMC |
| ATP5F1A           | 0.00211716 | 0.12686499 | 0.797 | 0.658 | 1 Proliferating_UCBMC |
| ZNF277            | 0.00213032 | 0.27617278 | 0.317 | 0.246 | 1 Proliferating_UCBMC |
| NCOA6             | 0.00217001 | 0.11711765 | 0.311 | 0.233 | 1 Proliferating_UCBMC |

|                   |            |            |       |       |                       |
|-------------------|------------|------------|-------|-------|-----------------------|
| CEP170            | 0.00218572 | 0.1233349  | 0.526 | 0.415 | 1 Proliferating_UCBMC |
| PGD               | 0.00223731 | 0.21086558 | 0.275 | 0.209 | 1 Proliferating_UCBMC |
| MAPKAP1           | 0.00224983 | 0.17139784 | 0.526 | 0.439 | 1 Proliferating_UCBMC |
| BCCIP             | 0.00225408 | 0.18795332 | 0.493 | 0.397 | 1 Proliferating_UCBMC |
| EID1              | 0.00225801 | 0.13400112 | 0.555 | 0.435 | 1 Proliferating_UCBMC |
| PSMD7             | 0.00229306 | 0.21710837 | 0.504 | 0.418 | 1 Proliferating_UCBMC |
| MMD               | 0.00232314 | 0.1907246  | 0.374 | 0.289 | 1 Proliferating_UCBMC |
| RPL7A             | 0.00238785 | 0.1203788  | 0.967 | 0.904 | 1 Proliferating_UCBMC |
| SIRT1             | 0.00245715 | 0.25933725 | 0.271 | 0.203 | 1 Proliferating_UCBMC |
| STX16             | 0.00247111 | 0.26600026 | 0.35  | 0.271 | 1 Proliferating_UCBMC |
| LETMD1            | 0.00248649 | 0.20830459 | 0.297 | 0.231 | 1 Proliferating_UCBMC |
| VMP1              | 0.00251907 | 0.18180572 | 0.504 | 0.402 | 1 Proliferating_UCBMC |
| BBS9              | 0.00257027 | 0.25142281 | 0.26  | 0.188 | 1 Proliferating_UCBMC |
| USP39             | 0.00260977 | 0.46570784 | 0.264 | 0.199 | 1 Proliferating_UCBMC |
| PSMB4             | 0.00265679 | 0.11451152 | 0.562 | 0.457 | 1 Proliferating_UCBMC |
| ATM               | 0.00266465 | 0.10229561 | 0.533 | 0.435 | 1 Proliferating_UCBMC |
| CAPRIN1           | 0.00267164 | 0.12687289 | 0.529 | 0.421 | 1 Proliferating_UCBMC |
| CDC7              | 0.00272061 | 0.13403746 | 0.258 | 0.19  | 1 Proliferating_UCBMC |
| GTDC1             | 0.00279803 | 0.14350413 | 0.366 | 0.283 | 1 Proliferating_UCBMC |
| PMS1              | 0.00280253 | 0.21062751 | 0.357 | 0.276 | 1 Proliferating_UCBMC |
| PHKB              | 0.00295927 | 0.30472924 | 0.324 | 0.251 | 1 Proliferating_UCBMC |
| MCPH1             | 0.00306319 | 0.24570747 | 0.37  | 0.288 | 1 Proliferating_UCBMC |
| CCDC66            | 0.00308906 | 0.18053213 | 0.416 | 0.333 | 1 Proliferating_UCBMC |
| RRM1              | 0.00313084 | 0.1329305  | 0.696 | 0.577 | 1 Proliferating_UCBMC |
| POLD1             | 0.00316722 | 0.21766716 | 0.302 | 0.231 | 1 Proliferating_UCBMC |
| KPNB1             | 0.00318203 | 0.12256745 | 0.579 | 0.482 | 1 Proliferating_UCBMC |
| RTN4              | 0.00320004 | 0.11826858 | 0.522 | 0.432 | 1 Proliferating_UCBMC |
| RPSA              | 0.00330383 | 0.11319548 | 0.974 | 0.925 | 1 Proliferating_UCBMC |
| ENSMUG00000032231 | 0.00335273 | 0.23756974 | 0.328 | 0.252 | 1 Proliferating_UCBMC |
| STT3A.1           | 0.00360088 | 0.16156036 | 0.54  | 0.439 | 1 Proliferating_UCBMC |
| NUDT5             | 0.00361336 | 0.21237578 | 0.306 | 0.234 | 1 Proliferating_UCBMC |
| ATIC              | 0.00373188 | 0.26516938 | 0.302 | 0.233 | 1 Proliferating_UCBMC |
| CCT8              | 0.00373355 | 0.10959907 | 0.637 | 0.508 | 1 Proliferating_UCBMC |

|           |            |            |       |       |                       |
|-----------|------------|------------|-------|-------|-----------------------|
| ZNF268    | 0.00374028 | 0.11178148 | 0.335 | 0.263 | 1 Proliferating_UCBMC |
| DNAJB14   | 0.0039798  | 0.23891346 | 0.357 | 0.281 | 1 Proliferating_UCBMC |
| DDX54     | 0.00416572 | 0.1138268  | 0.355 | 0.276 | 1 Proliferating_UCBMC |
| LRRC58    | 0.00418224 | 0.23829847 | 0.275 | 0.211 | 1 Proliferating_UCBMC |
| TCF7      | 0.0043534  | 0.13817709 | 0.335 | 0.256 | 1 Proliferating_UCBMC |
| POLDIP3   | 0.00440155 | 0.17653826 | 0.258 | 0.193 | 1 Proliferating_UCBMC |
| KARS1     | 0.004464   | 0.13595827 | 0.381 | 0.303 | 1 Proliferating_UCBMC |
| MPHOSPH9  | 0.00447855 | 0.18591088 | 0.396 | 0.311 | 1 Proliferating_UCBMC |
| PCGF3     | 0.00460798 | 0.3031101  | 0.273 | 0.207 | 1 Proliferating_UCBMC |
| PHF12     | 0.00460969 | 0.188368   | 0.3   | 0.23  | 1 Proliferating_UCBMC |
| FEZ2      | 0.00477942 | 0.40396568 | 0.275 | 0.212 | 1 Proliferating_UCBMC |
| IBTK      | 0.00483239 | 0.15050865 | 0.28  | 0.212 | 1 Proliferating_UCBMC |
| DNMT3A    | 0.0048468  | 0.15616402 | 0.337 | 0.261 | 1 Proliferating_UCBMC |
| TSR2      | 0.0049956  | 0.17501686 | 0.317 | 0.247 | 1 Proliferating_UCBMC |
| DHX35     | 0.0050608  | 0.10412956 | 0.286 | 0.217 | 1 Proliferating_UCBMC |
| C1H1orf43 | 0.00511068 | 0.11149949 | 0.297 | 0.228 | 1 Proliferating_UCBMC |
| FBXO9     | 0.00523444 | 0.18065545 | 0.284 | 0.221 | 1 Proliferating_UCBMC |
| ACAA2     | 0.00544067 | 0.2547951  | 0.306 | 0.246 | 1 Proliferating_UCBMC |
| HLTF      | 0.00545671 | 0.19734845 | 0.3   | 0.228 | 1 Proliferating_UCBMC |
| EIF4E     | 0.00548945 | 0.1979728  | 0.469 | 0.39  | 1 Proliferating_UCBMC |
| RNF114    | 0.0054988  | 0.1604046  | 0.328 | 0.264 | 1 Proliferating_UCBMC |
| GLOD4     | 0.00563799 | 0.15746312 | 0.271 | 0.204 | 1 Proliferating_UCBMC |
| MED30     | 0.00580591 | 0.10180677 | 0.498 | 0.41  | 1 Proliferating_UCBMC |
| LIN7C     | 0.00583986 | 0.25615517 | 0.282 | 0.223 | 1 Proliferating_UCBMC |
| DLD       | 0.0058868  | 0.30509801 | 0.304 | 0.24  | 1 Proliferating_UCBMC |
| UFL1      | 0.00624939 | 0.25457341 | 0.284 | 0.218 | 1 Proliferating_UCBMC |
| ETFA      | 0.00631939 | 0.17513438 | 0.445 | 0.365 | 1 Proliferating_UCBMC |
| ALKBH5    | 0.00655663 | 0.15510156 | 0.253 | 0.194 | 1 Proliferating_UCBMC |
| FOXK2     | 0.00662326 | 0.26855694 | 0.269 | 0.211 | 1 Proliferating_UCBMC |
| GANAB     | 0.00664637 | 0.35100648 | 0.315 | 0.256 | 1 Proliferating_UCBMC |
| SH3GL1    | 0.00677884 | 0.18303345 | 0.306 | 0.241 | 1 Proliferating_UCBMC |
| MAP4K5    | 0.00681587 | 0.11647681 | 0.269 | 0.203 | 1 Proliferating_UCBMC |
| SLF1      | 0.00695872 | 0.24847588 | 0.381 | 0.307 | 1 Proliferating_UCBMC |

|                    |            |            |       |       |                       |
|--------------------|------------|------------|-------|-------|-----------------------|
| NAP1L4             | 0.0069733  | 0.10744208 | 0.835 | 0.709 | 1 Proliferating_UCBMC |
| RHOT1              | 0.00721689 | 0.10471052 | 0.293 | 0.229 | 1 Proliferating_UCBMC |
| NUDT4              | 0.00723251 | 0.21975267 | 0.278 | 0.217 | 1 Proliferating_UCBMC |
| ENSMMUG00000052601 | 0.0074102  | 0.13152925 | 0.3   | 0.228 | 1 Proliferating_UCBMC |
| FMNL1              | 0.00741676 | 0.1574339  | 0.264 | 0.202 | 1 Proliferating_UCBMC |
| DCLRE1C            | 0.00749524 | 0.22232287 | 0.302 | 0.24  | 1 Proliferating_UCBMC |
| SLCO3A1            | 0.00750852 | 0.13560966 | 0.322 | 0.25  | 1 Proliferating_UCBMC |
| NSFL1C             | 0.00751922 | 0.14318744 | 0.289 | 0.226 | 1 Proliferating_UCBMC |
| RFC3               | 0.00764944 | 0.1059411  | 0.531 | 0.433 | 1 Proliferating_UCBMC |
| COA1               | 0.00816168 | 0.12047379 | 0.67  | 0.557 | 1 Proliferating_UCBMC |
| TXNDC16            | 0.00831015 | 0.25109539 | 0.282 | 0.221 | 1 Proliferating_UCBMC |
| POLB               | 0.00870391 | 0.21925806 | 0.278 | 0.217 | 1 Proliferating_UCBMC |
| AHCYL2             | 0.00875663 | 0.19950431 | 0.28  | 0.219 | 1 Proliferating_UCBMC |
| HPS3               | 0.00894869 | 0.18141495 | 0.26  | 0.201 | 1 Proliferating_UCBMC |
| HIRA               | 0.00912612 | 0.1680962  | 0.328 | 0.266 | 1 Proliferating_UCBMC |
| SLX4IP             | 0.00932929 | 0.1165075  | 0.377 | 0.301 | 1 Proliferating_UCBMC |
| CEP70              | 0.00980323 | 0.11233113 | 0.315 | 0.247 | 1 Proliferating_UCBMC |
| SURF2              | 0.00986647 | 0.29313609 | 0.256 | 0.201 | 1 Proliferating_UCBMC |
| DENND1C            | 0.01007123 | 0.1068649  | 0.28  | 0.219 | 1 Proliferating_UCBMC |
| SLC25A36           | 0.01044556 | 0.25885894 | 0.352 | 0.294 | 1 Proliferating_UCBMC |
| YTHDC2             | 0.01056222 | 0.16149406 | 0.372 | 0.306 | 1 Proliferating_UCBMC |
| CCDC115            | 0.01086766 | 0.12828853 | 0.311 | 0.246 | 1 Proliferating_UCBMC |
| LNPX               | 0.01194472 | 0.1247447  | 0.295 | 0.236 | 1 Proliferating_UCBMC |
| SDHA               | 0.01231439 | 0.16188259 | 0.346 | 0.28  | 1 Proliferating_UCBMC |
| PIK3CG             | 0.01290055 | 0.12776272 | 0.297 | 0.237 | 1 Proliferating_UCBMC |
| KLHDC2             | 0.0137764  | 0.14488995 | 0.328 | 0.267 | 1 Proliferating_UCBMC |
| AGGF1              | 0.01453585 | 0.42381326 | 0.273 | 0.225 | 1 Proliferating_UCBMC |
| E2F3               | 0.01455667 | 0.13141392 | 0.359 | 0.292 | 1 Proliferating_UCBMC |
| UBTF               | 0.01630781 | 0.11209975 | 0.41  | 0.338 | 1 Proliferating_UCBMC |
| NASP               | 0.01641231 | 0.11654054 | 0.874 | 0.746 | 1 Proliferating_UCBMC |
| NOLC1              | 0.01654148 | 0.25668912 | 0.304 | 0.241 | 1 Proliferating_UCBMC |
| PABPC4             | 0.01666639 | 0.1102043  | 0.264 | 0.207 | 1 Proliferating_UCBMC |
| MRE11              | 0.01680314 | 0.15809165 | 0.348 | 0.287 | 1 Proliferating_UCBMC |



|                   |            |            |       |       |                       |
|-------------------|------------|------------|-------|-------|-----------------------|
| OXNAD1            | 0.01695293 | 0.12199094 | 0.324 | 0.267 | 1 Proliferating_UCBMC |
| EIPR1             | 0.01858843 | 0.10700492 | 0.454 | 0.386 | 1 Proliferating_UCBMC |
| NMD3              | 0.02009887 | 0.13388078 | 0.262 | 0.213 | 1 Proliferating_UCBMC |
| PIGK              | 0.02024488 | 0.14077313 | 0.262 | 0.207 | 1 Proliferating_UCBMC |
| MTRR              | 0.02081145 | 0.2386178  | 0.273 | 0.224 | 1 Proliferating_UCBMC |
| ALG8              | 0.02152537 | 0.2534338  | 0.264 | 0.214 | 1 Proliferating_UCBMC |
| PATL1             | 0.02173699 | 0.30643146 | 0.258 | 0.208 | 1 Proliferating_UCBMC |
| MRPL3             | 0.02181182 | 0.21464786 | 0.278 | 0.221 | 1 Proliferating_UCBMC |
| PRDX2             | 0.02183153 | 0.19437889 | 0.258 | 0.206 | 1 Proliferating_UCBMC |
| BTBD7             | 0.02285474 | 0.17762039 | 0.324 | 0.266 | 1 Proliferating_UCBMC |
| ZNF680            | 0.02477091 | 0.11011616 | 0.278 | 0.221 | 1 Proliferating_UCBMC |
| VPS41             | 0.02730834 | 0.18050371 | 0.304 | 0.25  | 1 Proliferating_UCBMC |
| CDCA2             | 0.02773342 | 0.39722795 | 0.297 | 0.25  | 1 Proliferating_UCBMC |
| HNRNP             | 0.02925192 | 0.10180912 | 0.828 | 0.68  | 1 Proliferating_UCBMC |
| CDCA7             | 0.03312327 | 0.15524497 | 0.317 | 0.264 | 1 Proliferating_UCBMC |
| ORC4              | 0.03538807 | 0.15393698 | 0.282 | 0.23  | 1 Proliferating_UCBMC |
| TMEM154           | 0.03657894 | 0.20482998 | 0.256 | 0.206 | 1 Proliferating_UCBMC |
| COMMD3            | 0.03807342 | 0.1043599  | 0.381 | 0.324 | 1 Proliferating_UCBMC |
| STX18             | 0.03853057 | 0.18176401 | 0.264 | 0.22  | 1 Proliferating_UCBMC |
| ENSMUG00000058818 | 0.03876565 | 0.23681439 | 0.333 | 0.283 | 1 Proliferating_UCBMC |
| SLC7A1            | 0.03980541 | 0.10421721 | 0.293 | 0.243 | 1 Proliferating_UCBMC |
| TM7SF3            | 0.03988937 | 0.2288503  | 0.313 | 0.256 | 1 Proliferating_UCBMC |
| TXNDC15           | 0.04334589 | 0.19553141 | 0.3   | 0.253 | 1 Proliferating_UCBMC |
| MKRN2             | 0.04657243 | 0.17135652 | 0.26  | 0.218 | 1 Proliferating_UCBMC |
| ZNF367            | 0.05083291 | 0.23518071 | 0.297 | 0.254 | 1 Proliferating_UCBMC |
| PANK3             | 0.05297058 | 0.21804306 | 0.264 | 0.222 | 1 Proliferating_UCBMC |
| CCDC47            | 0.06076158 | 0.2421456  | 0.306 | 0.265 | 1 Proliferating_UCBMC |
| PNO1              | 0.06186748 | 0.10750074 | 0.267 | 0.219 | 1 Proliferating_UCBMC |
| VCPKMT            | 0.06597911 | 0.10670578 | 0.262 | 0.216 | 1 Proliferating_UCBMC |
| MCMBP             | 0.06973465 | 0.15667215 | 0.264 | 0.222 | 1 Proliferating_UCBMC |
| IKKB              | 0.07188989 | 0.17753575 | 0.293 | 0.248 | 1 Proliferating_UCBMC |
| ENSMUG00000000478 | 0.08910851 | 0.14129268 | 0.335 | 0.298 | 1 Proliferating_UCBMC |
| GNPDA2            | 0.09237681 | 0.12112077 | 0.273 | 0.231 | 1 Proliferating_UCBMC |

|                     |            |            |       |       |           |                      |
|---------------------|------------|------------|-------|-------|-----------|----------------------|
| RBL1                | 0.10242806 | 0.12264235 | 0.421 | 0.374 | 1         | Proliferating_UCBMC  |
| FAM102A             | 0.10584345 | 0.12321281 | 0.26  | 0.221 | 1         | Proliferating_UCBMC  |
| IARS2               | 0.11146985 | 0.12818342 | 0.282 | 0.243 | 1         | Proliferating_UCBMC  |
| TMEM30A             | 0.1162253  | 0.12977449 | 0.253 | 0.221 | 1         | Proliferating_UCBMC  |
| TBCK                | 0.15151121 | 0.17125329 | 0.262 | 0.231 | 1         | Proliferating_UCBMC  |
| ENSMMUG00000020643  | 0.18069412 | 0.10392875 | 0.454 | 0.409 | 1         | Proliferating_UCBMC  |
| MTCH1               | 0.23350921 | 0.14868221 | 0.269 | 0.246 | 1         | Proliferating_UCBMC  |
| RPL13               | 3.26E-113  | 1.94721782 | 0.926 | 0.864 | 1.16E-108 | Proliferating_spleen |
| JUN                 | 6.08E-111  | 2.53279823 | 0.87  | 0.435 | 2.15E-106 | Proliferating_spleen |
| SRRM2               | 4.38E-107  | 1.79316279 | 0.889 | 0.414 | 1.55E-102 | Proliferating_spleen |
| ENSMMUG000000051300 | 7.92E-105  | 1.51726966 | 0.982 | 0.725 | 2.81E-100 | Proliferating_spleen |
| ENSMMUG000000054358 | 1.15E-102  | 3.09234408 | 0.993 | 0.777 | 4.08E-98  | Proliferating_spleen |
| KLF6                | 2.94E-85   | 1.64674487 | 0.903 | 0.541 | 1.04E-80  | Proliferating_spleen |
| FOSB                | 7.15E-80   | 2.40099523 | 0.72  | 0.27  | 2.53E-75  | Proliferating_spleen |
| TRAPPC5             | 8.42E-79   | 2.80859591 | 0.45  | 0.054 | 2.99E-74  | Proliferating_spleen |
| LTB                 | 8.87E-74   | 2.58493428 | 0.659 | 0.306 | 3.14E-69  | Proliferating_spleen |
| UBE2S               | 1.91E-72   | 2.00608861 | 0.641 | 0.208 | 6.77E-68  | Proliferating_spleen |
| ATP5F1D             | 4.00E-72   | 1.51028664 | 0.703 | 0.264 | 1.42E-67  | Proliferating_spleen |
| ENSMMUG000000008417 | 4.04E-71   | 2.1606928  | 0.532 | 0.121 | 1.43E-66  | Proliferating_spleen |
| C1QBP               | 5.34E-71   | 2.38451136 | 0.531 | 0.129 | 1.89E-66  | Proliferating_spleen |
| DUSP1               | 1.76E-68   | 1.6975985  | 0.728 | 0.317 | 6.25E-64  | Proliferating_spleen |
| CARD11              | 4.27E-68   | 1.9888929  | 0.67  | 0.242 | 1.51E-63  | Proliferating_spleen |
| NOP53               | 9.31E-68   | 1.61909957 | 0.654 | 0.231 | 3.30E-63  | Proliferating_spleen |
| PM20D2              | 5.97E-64   | 1.27802965 | 0.818 | 0.456 | 2.12E-59  | Proliferating_spleen |
| CHCHD10             | 3.28E-63   | 2.94525859 | 0.389 | 0.052 | 1.16E-58  | Proliferating_spleen |
| TMPO                | 1.17E-60   | 1.32384833 | 0.792 | 0.417 | 4.14E-56  | Proliferating_spleen |
| NXPE3               | 2.22E-59   | 1.58603431 | 0.751 | 0.354 | 7.85E-55  | Proliferating_spleen |
| ENSMMUG000000011776 | 3.17E-59   | 3.09799988 | 0.385 | 0.058 | 1.12E-54  | Proliferating_spleen |
| XYLT1               | 1.45E-57   | 1.65048089 | 0.769 | 0.379 | 5.15E-53  | Proliferating_spleen |
| SRSF2               | 4.00E-56   | 1.24658028 | 0.759 | 0.409 | 1.42E-51  | Proliferating_spleen |
| ENSMMUG000000049833 | 8.27E-56   | 2.64217677 | 0.553 | 0.193 | 2.93E-51  | Proliferating_spleen |
| RPS2                | 2.08E-54   | 1.27922457 | 0.822 | 0.738 | 7.38E-50  | Proliferating_spleen |
| ENSMMUG000000052127 | 2.97E-54   | 1.36631466 | 0.992 | 0.883 | 1.05E-49  | Proliferating_spleen |

|                    |          |            |       |       |          |                      |
|--------------------|----------|------------|-------|-------|----------|----------------------|
| TXNL4A             | 5.14E-54 | 1.60423633 | 0.558 | 0.187 | 1.82E-49 | Proliferating_spleen |
| COTL1              | 1.35E-53 | 1.22950814 | 0.814 | 0.537 | 4.78E-49 | Proliferating_spleen |
| ACAP2              | 4.28E-53 | 1.0071453  | 0.888 | 0.523 | 1.51E-48 | Proliferating_spleen |
| PPP1R10            | 2.09E-52 | 1.38751323 | 0.677 | 0.289 | 7.41E-48 | Proliferating_spleen |
| NT5C               | 2.82E-52 | 1.92014781 | 0.414 | 0.086 | 9.99E-48 | Proliferating_spleen |
| COX5A              | 3.71E-52 | 1.52834651 | 0.645 | 0.303 | 1.31E-47 | Proliferating_spleen |
| HDAC9              | 1.29E-51 | 2.71690977 | 0.405 | 0.092 | 4.55E-47 | Proliferating_spleen |
| SFMBT2             | 1.56E-51 | 1.75848219 | 0.595 | 0.237 | 5.51E-47 | Proliferating_spleen |
| TRIR               | 3.53E-51 | 1.24678851 | 0.73  | 0.404 | 1.25E-46 | Proliferating_spleen |
| PRKCA              | 4.66E-51 | 1.7119804  | 0.761 | 0.395 | 1.65E-46 | Proliferating_spleen |
| TMEM160            | 5.84E-50 | 1.51682093 | 0.476 | 0.131 | 2.07E-45 | Proliferating_spleen |
| STK17A             | 9.45E-50 | 1.08987053 | 0.861 | 0.542 | 3.35E-45 | Proliferating_spleen |
| ENSMMUG00000062269 | 1.34E-49 | 3.95290528 | 0.315 | 0.045 | 4.74E-45 | Proliferating_spleen |
| RUNX1              | 1.51E-49 | 1.26162512 | 0.872 | 0.549 | 5.34E-45 | Proliferating_spleen |
| CCNL1              | 6.03E-48 | 1.04800544 | 0.904 | 0.599 | 2.14E-43 | Proliferating_spleen |
| STIM1              | 2.97E-47 | 1.2497344  | 0.769 | 0.392 | 1.05E-42 | Proliferating_spleen |
| ATF3               | 4.80E-46 | 3.2395552  | 0.312 | 0.049 | 1.70E-41 | Proliferating_spleen |
| MZT2B              | 6.13E-46 | 1.36840401 | 0.616 | 0.267 | 2.17E-41 | Proliferating_spleen |
| FCHSD2             | 7.15E-46 | 1.36849344 | 0.777 | 0.448 | 2.53E-41 | Proliferating_spleen |
| ITPKB              | 8.66E-46 | 1.43277539 | 0.642 | 0.28  | 3.07E-41 | Proliferating_spleen |
| FBNP1              | 1.04E-45 | 1.01509132 | 0.953 | 0.704 | 3.67E-41 | Proliferating_spleen |
| PLCG2              | 2.33E-45 | 2.2818815  | 0.436 | 0.13  | 8.26E-41 | Proliferating_spleen |
| CHST11             | 3.10E-45 | 1.29204968 | 0.793 | 0.45  | 1.10E-40 | Proliferating_spleen |
| EZH2               | 5.34E-45 | 0.98248446 | 0.861 | 0.536 | 1.89E-40 | Proliferating_spleen |
| VAV3               | 6.60E-45 | 1.21553758 | 0.724 | 0.366 | 2.34E-40 | Proliferating_spleen |
| KCNQ5              | 7.35E-45 | 1.32329678 | 0.792 | 0.478 | 2.61E-40 | Proliferating_spleen |
| ADGRE5             | 2.65E-44 | 2.11570983 | 0.768 | 0.468 | 9.38E-40 | Proliferating_spleen |
| SQSTM1             | 5.52E-44 | 1.61218181 | 0.574 | 0.234 | 1.96E-39 | Proliferating_spleen |
| BMT2               | 8.18E-44 | 2.65483947 | 0.512 | 0.22  | 2.90E-39 | Proliferating_spleen |
| AFF3               | 8.48E-44 | 1.15998289 | 0.862 | 0.59  | 3.00E-39 | Proliferating_spleen |
| DGKD               | 1.55E-43 | 1.67349039 | 0.508 | 0.183 | 5.51E-39 | Proliferating_spleen |
| CCDC85B            | 3.91E-43 | 2.07630229 | 0.293 | 0.04  | 1.39E-38 | Proliferating_spleen |
| ENSMMUG00000062894 | 4.93E-43 | 3.15493578 | 0.316 | 0.059 | 1.75E-38 | Proliferating_spleen |

|                    |          |            |       |       |          |                      |
|--------------------|----------|------------|-------|-------|----------|----------------------|
| ENSMMUG00000028689 | 6.26E-43 | 2.8318594  | 0.404 | 0.116 | 2.22E-38 | Proliferating_spleen |
| BANK1              | 9.03E-43 | 2.45902102 | 0.407 | 0.123 | 3.20E-38 | Proliferating_spleen |
| BCL2L2-PABPN1      | 1.58E-42 | 1.4707032  | 0.427 | 0.12  | 5.58E-38 | Proliferating_spleen |
| TERF2IP            | 1.76E-42 | 1.29210618 | 0.532 | 0.192 | 6.23E-38 | Proliferating_spleen |
| SEL1L3             | 1.77E-42 | 2.79407978 | 0.297 | 0.049 | 6.29E-38 | Proliferating_spleen |
| GNB1               | 2.70E-42 | 1.14745359 | 0.753 | 0.392 | 9.56E-38 | Proliferating_spleen |
| CLTA               | 3.71E-42 | 1.28679864 | 0.616 | 0.279 | 1.31E-37 | Proliferating_spleen |
| EHMT1              | 5.92E-42 | 1.22625416 | 0.685 | 0.323 | 2.10E-37 | Proliferating_spleen |
| PPM1G              | 7.51E-42 | 1.13609796 | 0.643 | 0.298 | 2.66E-37 | Proliferating_spleen |
| NFKBIA             | 9.40E-42 | 1.48655708 | 0.751 | 0.462 | 3.33E-37 | Proliferating_spleen |
| MYCBP2             | 2.12E-41 | 0.90703302 | 0.843 | 0.517 | 7.50E-37 | Proliferating_spleen |
| ADORA2B            | 2.15E-41 | 2.68540018 | 0.405 | 0.131 | 7.62E-37 | Proliferating_spleen |
| ENSMMUG00000020050 | 2.16E-41 | 2.19954866 | 0.351 | 0.081 | 7.65E-37 | Proliferating_spleen |
| ABR                | 2.55E-41 | 2.07809448 | 0.492 | 0.181 | 9.02E-37 | Proliferating_spleen |
| NCOR1              | 3.03E-41 | 0.92695354 | 0.809 | 0.456 | 1.07E-36 | Proliferating_spleen |
| LRRFIP1            | 3.27E-41 | 0.95718487 | 0.807 | 0.471 | 1.16E-36 | Proliferating_spleen |
| SPAG9              | 4.40E-41 | 1.12299885 | 0.809 | 0.473 | 1.56E-36 | Proliferating_spleen |
| PPP2R5E            | 8.87E-41 | 1.16535653 | 0.715 | 0.372 | 3.14E-36 | Proliferating_spleen |
| TBC1D5             | 2.80E-40 | 0.89098282 | 0.915 | 0.601 | 9.91E-36 | Proliferating_spleen |
| CEP192             | 3.57E-40 | 1.06077535 | 0.795 | 0.449 | 1.26E-35 | Proliferating_spleen |
| TOX                | 3.85E-40 | 1.42113533 | 0.836 | 0.588 | 1.36E-35 | Proliferating_spleen |
| EIF4G3             | 5.56E-40 | 1.40520571 | 0.599 | 0.275 | 1.97E-35 | Proliferating_spleen |
| ATXN1              | 6.46E-40 | 1.99990243 | 0.457 | 0.162 | 2.29E-35 | Proliferating_spleen |
| HYI                | 6.52E-40 | 1.34690652 | 0.369 | 0.087 | 2.31E-35 | Proliferating_spleen |
| CCDC88C            | 8.93E-40 | 1.2520365  | 0.638 | 0.303 | 3.16E-35 | Proliferating_spleen |
| PLXNC1             | 1.02E-39 | 2.23921763 | 0.355 | 0.091 | 3.62E-35 | Proliferating_spleen |
| IFRD1              | 2.29E-39 | 1.21270373 | 0.684 | 0.369 | 8.11E-35 | Proliferating_spleen |
| HSPH1              | 4.44E-39 | 1.5401951  | 0.714 | 0.395 | 1.57E-34 | Proliferating_spleen |
| H1FX               | 6.53E-39 | 1.7807649  | 0.404 | 0.12  | 2.31E-34 | Proliferating_spleen |
| RBM17              | 1.41E-38 | 1.06277175 | 0.677 | 0.362 | 5.00E-34 | Proliferating_spleen |
| ZNF609             | 2.20E-38 | 1.26926836 | 0.747 | 0.413 | 7.81E-34 | Proliferating_spleen |
| IKZF1              | 4.28E-38 | 0.86658205 | 0.859 | 0.568 | 1.52E-33 | Proliferating_spleen |
| MKI67              | 4.43E-38 | 1.08846575 | 0.819 | 0.539 | 1.57E-33 | Proliferating_spleen |

|                   |          |            |       |       |          |                      |
|-------------------|----------|------------|-------|-------|----------|----------------------|
| GRK5              | 8.76E-38 | 1.33188965 | 0.666 | 0.344 | 3.10E-33 | Proliferating_spleen |
| PTEN              | 1.02E-37 | 1.18236922 | 0.685 | 0.366 | 3.62E-33 | Proliferating_spleen |
| TMEM131L          | 1.22E-37 | 0.95817829 | 0.854 | 0.567 | 4.32E-33 | Proliferating_spleen |
| B3GNT2            | 1.69E-37 | 1.62507274 | 0.47  | 0.174 | 5.99E-33 | Proliferating_spleen |
| HNRNP             | 1.85E-37 | 0.77954024 | 0.878 | 0.617 | 6.56E-33 | Proliferating_spleen |
| NSD2              | 2.05E-37 | 1.05132118 | 0.755 | 0.416 | 7.25E-33 | Proliferating_spleen |
| HIST1H2AC         | 2.16E-37 | 1.63348335 | 0.516 | 0.21  | 7.64E-33 | Proliferating_spleen |
| PAK2              | 2.39E-37 | 0.76005745 | 0.85  | 0.581 | 8.47E-33 | Proliferating_spleen |
| NABP1             | 2.77E-37 | 1.41379474 | 0.572 | 0.267 | 9.83E-33 | Proliferating_spleen |
| ENSMUG00000055687 | 3.75E-37 | 1.23406281 | 0.718 | 0.369 | 1.33E-32 | Proliferating_spleen |
| ENSMUG00000040065 | 4.09E-37 | 1.67650629 | 0.366 | 0.101 | 1.45E-32 | Proliferating_spleen |
| NSD1              | 6.47E-37 | 0.95197178 | 0.781 | 0.437 | 2.29E-32 | Proliferating_spleen |
| PLEKHG1           | 8.02E-37 | 1.49195141 | 0.596 | 0.301 | 2.84E-32 | Proliferating_spleen |
| MCL1              | 1.18E-36 | 1.10618252 | 0.682 | 0.367 | 4.20E-32 | Proliferating_spleen |
| GADD45GIP1        | 1.83E-36 | 1.39059926 | 0.408 | 0.125 | 6.47E-32 | Proliferating_spleen |
| ND2               | 3.47E-36 | 0.93480892 | 0.977 | 0.867 | 1.23E-31 | Proliferating_spleen |
| RAD51B            | 5.31E-36 | 0.90846657 | 0.831 | 0.516 | 1.88E-31 | Proliferating_spleen |
| R3HDM2            | 5.87E-36 | 1.2135411  | 0.624 | 0.309 | 2.08E-31 | Proliferating_spleen |
| ZBTB10            | 7.59E-36 | 1.85245427 | 0.443 | 0.167 | 2.69E-31 | Proliferating_spleen |
| ARHGAP26          | 7.99E-36 | 1.4744296  | 0.684 | 0.378 | 2.83E-31 | Proliferating_spleen |
| C10H20orf24       | 8.40E-36 | 0.99031674 | 0.631 | 0.302 | 2.98E-31 | Proliferating_spleen |
| ANP32B            | 1.22E-35 | 0.83048619 | 0.855 | 0.744 | 4.31E-31 | Proliferating_spleen |
| SETX              | 1.51E-35 | 1.14172699 | 0.7   | 0.381 | 5.34E-31 | Proliferating_spleen |
| GTF2I             | 2.42E-35 | 0.93926403 | 0.754 | 0.436 | 8.56E-31 | Proliferating_spleen |
| TPM4              | 2.53E-35 | 0.90835204 | 0.677 | 0.322 | 8.97E-31 | Proliferating_spleen |
| WDR74             | 3.40E-35 | 1.54282701 | 0.609 | 0.297 | 1.20E-30 | Proliferating_spleen |
| METTL9            | 3.60E-35 | 1.06536298 | 0.626 | 0.296 | 1.28E-30 | Proliferating_spleen |
| CTCF              | 4.36E-35 | 1.02001868 | 0.761 | 0.434 | 1.55E-30 | Proliferating_spleen |
| ARID1B            | 4.41E-35 | 0.76643817 | 0.874 | 0.545 | 1.56E-30 | Proliferating_spleen |
| STK39             | 4.72E-35 | 1.49321429 | 0.757 | 0.478 | 1.67E-30 | Proliferating_spleen |
| ZFAND5            | 4.81E-35 | 1.12908212 | 0.496 | 0.186 | 1.70E-30 | Proliferating_spleen |
| SRGAP2            | 5.33E-35 | 1.65853406 | 0.476 | 0.191 | 1.89E-30 | Proliferating_spleen |
| ANKRD11           | 8.14E-35 | 1.12029876 | 0.828 | 0.497 | 2.88E-30 | Proliferating_spleen |

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| RASSF1             | 8.25E-35 | 1.03102567 | 0.691 | 0.39  | 2.92E-30 | Proliferating_spleen |
| RANBP2             | 8.43E-35 | 0.95289503 | 0.815 | 0.509 | 2.99E-30 | Proliferating_spleen |
| TEX14              | 1.06E-34 | 2.09568476 | 0.289 | 0.061 | 3.74E-30 | Proliferating_spleen |
| MSL2               | 1.16E-34 | 1.33083674 | 0.603 | 0.293 | 4.10E-30 | Proliferating_spleen |
| LDB2               | 1.51E-34 | 2.28859715 | 0.342 | 0.097 | 5.36E-30 | Proliferating_spleen |
| PACS1              | 1.58E-34 | 1.20517799 | 0.669 | 0.358 | 5.61E-30 | Proliferating_spleen |
| YWHAH              | 2.50E-34 | 1.02685075 | 0.661 | 0.326 | 8.87E-30 | Proliferating_spleen |
| MTDH               | 2.65E-34 | 0.97424575 | 0.704 | 0.381 | 9.40E-30 | Proliferating_spleen |
| ZHX2               | 2.96E-34 | 0.92861959 | 0.565 | 0.25  | 1.05E-29 | Proliferating_spleen |
| GLUD1              | 3.66E-34 | 1.47661324 | 0.547 | 0.249 | 1.30E-29 | Proliferating_spleen |
| ENSMMUG00000052424 | 4.09E-34 | 0.88824283 | 0.876 | 0.575 | 1.45E-29 | Proliferating_spleen |
| TOP1               | 4.13E-34 | 0.82689855 | 0.845 | 0.544 | 1.46E-29 | Proliferating_spleen |
| ZC3HAV1            | 4.48E-34 | 0.91563738 | 0.87  | 0.581 | 1.59E-29 | Proliferating_spleen |
| NFATC2             | 4.57E-34 | 1.42135412 | 0.536 | 0.245 | 1.62E-29 | Proliferating_spleen |
| TBC1D1             | 4.87E-34 | 1.04324391 | 0.758 | 0.452 | 1.73E-29 | Proliferating_spleen |
| CLASP1             | 4.98E-34 | 1.05242051 | 0.677 | 0.351 | 1.76E-29 | Proliferating_spleen |
| STUB1              | 5.44E-34 | 1.55355313 | 0.327 | 0.083 | 1.93E-29 | Proliferating_spleen |
| RCSD1              | 5.46E-34 | 0.94919916 | 0.741 | 0.427 | 1.93E-29 | Proliferating_spleen |
| ENSMMUG00000058089 | 7.92E-34 | 2.15750389 | 0.295 | 0.067 | 2.81E-29 | Proliferating_spleen |
| KDM2A              | 9.29E-34 | 0.91511259 | 0.823 | 0.489 | 3.29E-29 | Proliferating_spleen |
| LMNB1              | 9.76E-34 | 0.89753202 | 0.745 | 0.416 | 3.46E-29 | Proliferating_spleen |
| PTPRJ              | 1.10E-33 | 1.39724162 | 0.561 | 0.27  | 3.88E-29 | Proliferating_spleen |
| MBD5               | 1.31E-33 | 0.98559406 | 0.722 | 0.389 | 4.64E-29 | Proliferating_spleen |
| MLEC               | 1.63E-33 | 1.2727505  | 0.364 | 0.105 | 5.78E-29 | Proliferating_spleen |
| NEK7               | 1.69E-33 | 1.18026028 | 0.682 | 0.374 | 6.00E-29 | Proliferating_spleen |
| RBM26              | 2.40E-33 | 0.9286575  | 0.72  | 0.393 | 8.49E-29 | Proliferating_spleen |
| ASXL2              | 2.59E-33 | 1.10932215 | 0.565 | 0.251 | 9.19E-29 | Proliferating_spleen |
| U5.18              | 2.73E-33 | 1.56574264 | 0.365 | 0.105 | 9.67E-29 | Proliferating_spleen |
| IL27RA             | 2.91E-33 | 1.42955398 | 0.386 | 0.126 | 1.03E-28 | Proliferating_spleen |
| HNRNPU             | 3.10E-33 | 0.70727774 | 0.889 | 0.671 | 1.10E-28 | Proliferating_spleen |
| ARL5A              | 5.70E-33 | 1.2198692  | 0.485 | 0.195 | 2.02E-28 | Proliferating_spleen |
| FOS                | 7.15E-33 | 0.93687391 | 0.859 | 0.659 | 2.53E-28 | Proliferating_spleen |
| STK10              | 7.23E-33 | 1.07076875 | 0.772 | 0.456 | 2.56E-28 | Proliferating_spleen |

|          |          |            |       |       |          |                      |
|----------|----------|------------|-------|-------|----------|----------------------|
| SMAD3    | 7.50E-33 | 1.21805831 | 0.55  | 0.252 | 2.66E-28 | Proliferating_spleen |
| AKAP10   | 9.04E-33 | 1.21877173 | 0.465 | 0.18  | 3.20E-28 | Proliferating_spleen |
| GMDS     | 1.02E-32 | 1.04671597 | 0.735 | 0.431 | 3.63E-28 | Proliferating_spleen |
| NEDD9    | 1.07E-32 | 0.97031859 | 0.793 | 0.502 | 3.78E-28 | Proliferating_spleen |
| GALM     | 1.41E-32 | 1.56329787 | 0.374 | 0.118 | 5.01E-28 | Proliferating_spleen |
| RERE     | 1.49E-32 | 0.79900813 | 0.866 | 0.586 | 5.26E-28 | Proliferating_spleen |
| CAMK1D   | 1.51E-32 | 0.87589342 | 0.834 | 0.527 | 5.36E-28 | Proliferating_spleen |
| NXT1     | 1.76E-32 | 1.35590022 | 0.285 | 0.061 | 6.24E-28 | Proliferating_spleen |
| ZMYND8   | 2.06E-32 | 1.14379456 | 0.664 | 0.35  | 7.29E-28 | Proliferating_spleen |
| ARRDC3   | 2.22E-32 | 1.19448005 | 0.512 | 0.217 | 7.86E-28 | Proliferating_spleen |
| RASA1    | 2.39E-32 | 1.2566164  | 0.539 | 0.242 | 8.49E-28 | Proliferating_spleen |
| HUWE1    | 3.24E-32 | 0.83889667 | 0.78  | 0.475 | 1.15E-27 | Proliferating_spleen |
| PRPF38B  | 3.53E-32 | 0.84893669 | 0.726 | 0.399 | 1.25E-27 | Proliferating_spleen |
| RABGAP1L | 3.54E-32 | 0.86635262 | 0.909 | 0.686 | 1.25E-27 | Proliferating_spleen |
| ANKRD44  | 3.73E-32 | 0.77896447 | 0.955 | 0.698 | 1.32E-27 | Proliferating_spleen |
| ATXN2    | 4.81E-32 | 1.08547195 | 0.645 | 0.327 | 1.70E-27 | Proliferating_spleen |
| HNRNPAB  | 5.38E-32 | 1.09025058 | 0.631 | 0.355 | 1.91E-27 | Proliferating_spleen |
| TAOK1    | 6.99E-32 | 1.09897312 | 0.612 | 0.32  | 2.48E-27 | Proliferating_spleen |
| STT3B    | 8.51E-32 | 0.92430912 | 0.734 | 0.437 | 3.01E-27 | Proliferating_spleen |
| NUP153   | 9.65E-32 | 0.9081918  | 0.768 | 0.43  | 3.42E-27 | Proliferating_spleen |
| PHF20    | 1.15E-31 | 0.93678391 | 0.726 | 0.398 | 4.06E-27 | Proliferating_spleen |
| KDM4C    | 1.73E-31 | 0.95332766 | 0.75  | 0.432 | 6.13E-27 | Proliferating_spleen |
| SMARCC1  | 1.76E-31 | 0.85014172 | 0.804 | 0.507 | 6.25E-27 | Proliferating_spleen |
| MOB3A    | 1.97E-31 | 1.48615287 | 0.523 | 0.245 | 6.99E-27 | Proliferating_spleen |
| TBL1XR1  | 2.71E-31 | 0.81234143 | 0.854 | 0.553 | 9.60E-27 | Proliferating_spleen |
| PSPC1    | 3.69E-31 | 0.8832575  | 0.772 | 0.452 | 1.31E-26 | Proliferating_spleen |
| LRCH1    | 4.40E-31 | 1.32142572 | 0.582 | 0.297 | 1.56E-26 | Proliferating_spleen |
| ARIH1    | 4.86E-31 | 0.85073555 | 0.812 | 0.473 | 1.72E-26 | Proliferating_spleen |
| DOCK2    | 7.14E-31 | 0.79687711 | 0.919 | 0.652 | 2.53E-26 | Proliferating_spleen |
| MACF1    | 7.60E-31 | 1.01197256 | 0.838 | 0.538 | 2.69E-26 | Proliferating_spleen |
| CMIP     | 8.17E-31 | 0.99776399 | 0.57  | 0.286 | 2.90E-26 | Proliferating_spleen |
| H2AFX    | 9.97E-31 | 1.10851032 | 0.564 | 0.286 | 3.53E-26 | Proliferating_spleen |
| PRELID1  | 1.01E-30 | 1.19034879 | 0.405 | 0.14  | 3.57E-26 | Proliferating_spleen |

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|-------------|----------|------------|-------|-------|----------|----------------------|
| SMARCA5     | 1.26E-30 | 0.91017249 | 0.704 | 0.416 | 4.45E-26 | Proliferating_spleen |
| WWOX        | 1.41E-30 | 0.81613911 | 0.865 | 0.611 | 5.01E-26 | Proliferating_spleen |
| VGLL4       | 1.47E-30 | 1.05645099 | 0.536 | 0.243 | 5.20E-26 | Proliferating_spleen |
| TET3        | 1.56E-30 | 1.29978709 | 0.507 | 0.227 | 5.52E-26 | Proliferating_spleen |
| LCP2        | 1.87E-30 | 1.38189493 | 0.492 | 0.214 | 6.62E-26 | Proliferating_spleen |
| PRKCB       | 1.94E-30 | 0.87371034 | 0.849 | 0.55  | 6.89E-26 | Proliferating_spleen |
| PIP4K2A     | 2.16E-30 | 0.80973847 | 0.862 | 0.585 | 7.66E-26 | Proliferating_spleen |
| VPS13B      | 2.30E-30 | 0.78633076 | 0.909 | 0.62  | 8.13E-26 | Proliferating_spleen |
| C20H16orf72 | 2.74E-30 | 1.17639703 | 0.664 | 0.367 | 9.73E-26 | Proliferating_spleen |
| ROCK1       | 3.07E-30 | 0.73374164 | 0.886 | 0.588 | 1.09E-25 | Proliferating_spleen |
| EXOC4       | 3.15E-30 | 0.79866176 | 0.808 | 0.503 | 1.12E-25 | Proliferating_spleen |
| GLCC1       | 3.55E-30 | 1.25169654 | 0.546 | 0.268 | 1.26E-25 | Proliferating_spleen |
| PSME4       | 3.57E-30 | 0.92076066 | 0.719 | 0.407 | 1.27E-25 | Proliferating_spleen |
| DESI2       | 3.59E-30 | 1.11130494 | 0.397 | 0.137 | 1.27E-25 | Proliferating_spleen |
| MMS22L      | 3.71E-30 | 1.3699658  | 0.509 | 0.237 | 1.31E-25 | Proliferating_spleen |
| PBX3        | 3.71E-30 | 1.23947255 | 0.604 | 0.318 | 1.32E-25 | Proliferating_spleen |
| C7H15orf61  | 4.39E-30 | 1.25091369 | 0.301 | 0.077 | 1.56E-25 | Proliferating_spleen |
| TRAF2       | 4.43E-30 | 1.73918733 | 0.341 | 0.106 | 1.57E-25 | Proliferating_spleen |
| DNAJA1      | 4.56E-30 | 0.77308767 | 0.773 | 0.507 | 1.61E-25 | Proliferating_spleen |
| JMJD1C      | 4.79E-30 | 0.64973843 | 0.922 | 0.656 | 1.70E-25 | Proliferating_spleen |
| PHF21A      | 5.00E-30 | 1.1282169  | 0.639 | 0.336 | 1.77E-25 | Proliferating_spleen |
| DNAJC1      | 5.10E-30 | 1.09034884 | 0.708 | 0.411 | 1.81E-25 | Proliferating_spleen |
| CCNG2       | 7.06E-30 | 1.48841453 | 0.399 | 0.146 | 2.50E-25 | Proliferating_spleen |
| PDS5A       | 7.45E-30 | 0.83201961 | 0.723 | 0.412 | 2.64E-25 | Proliferating_spleen |
| ARID1A      | 7.99E-30 | 0.85371772 | 0.769 | 0.448 | 2.83E-25 | Proliferating_spleen |
| BRD9        | 1.04E-29 | 0.85539114 | 0.512 | 0.212 | 3.67E-25 | Proliferating_spleen |
| CBFB        | 1.16E-29 | 1.13719026 | 0.522 | 0.24  | 4.10E-25 | Proliferating_spleen |
| UVRAG       | 1.40E-29 | 1.03900776 | 0.718 | 0.415 | 4.96E-25 | Proliferating_spleen |
| BRD2        | 1.46E-29 | 0.78670767 | 0.739 | 0.446 | 5.16E-25 | Proliferating_spleen |
| RIN3        | 1.66E-29 | 1.42457144 | 0.546 | 0.268 | 5.89E-25 | Proliferating_spleen |
| BAZ1A       | 1.72E-29 | 0.92090747 | 0.722 | 0.432 | 6.08E-25 | Proliferating_spleen |
| GALNT2      | 1.80E-29 | 1.39713302 | 0.405 | 0.151 | 6.37E-25 | Proliferating_spleen |
| CELF2       | 1.89E-29 | 0.71171231 | 0.935 | 0.694 | 6.69E-25 | Proliferating_spleen |



|                    |          |            |       |       |          |                      |
|--------------------|----------|------------|-------|-------|----------|----------------------|
| BPTF               | 2.29E-29 | 0.85210666 | 0.832 | 0.542 | 8.10E-25 | Proliferating_spleen |
| CIT                | 2.29E-29 | 1.02900864 | 0.634 | 0.351 | 8.12E-25 | Proliferating_spleen |
| HIST2H3A           | 2.60E-29 | 1.69907279 | 0.347 | 0.113 | 9.22E-25 | Proliferating_spleen |
| ATP1B3             | 2.63E-29 | 0.96151972 | 0.684 | 0.395 | 9.33E-25 | Proliferating_spleen |
| KIF23              | 2.74E-29 | 1.24517049 | 0.419 | 0.156 | 9.72E-25 | Proliferating_spleen |
| SDF2L1             | 2.86E-29 | 0.91174497 | 0.609 | 0.309 | 1.01E-24 | Proliferating_spleen |
| PARP1              | 2.88E-29 | 1.0612581  | 0.507 | 0.222 | 1.02E-24 | Proliferating_spleen |
| HOOK3              | 2.93E-29 | 0.72065583 | 0.847 | 0.541 | 1.04E-24 | Proliferating_spleen |
| DOT1L              | 3.08E-29 | 1.82534166 | 0.285 | 0.074 | 1.09E-24 | Proliferating_spleen |
| ARL5B              | 3.25E-29 | 1.09994807 | 0.442 | 0.177 | 1.15E-24 | Proliferating_spleen |
| NSD3               | 3.57E-29 | 0.75193845 | 0.768 | 0.451 | 1.26E-24 | Proliferating_spleen |
| MBP                | 3.57E-29 | 0.95044999 | 0.782 | 0.466 | 1.26E-24 | Proliferating_spleen |
| KLHL15             | 4.40E-29 | 1.81608114 | 0.315 | 0.094 | 1.56E-24 | Proliferating_spleen |
| SUZ12              | 5.61E-29 | 0.74314896 | 0.769 | 0.45  | 1.99E-24 | Proliferating_spleen |
| PRRC2B             | 5.72E-29 | 0.96996232 | 0.759 | 0.454 | 2.03E-24 | Proliferating_spleen |
| IKZF2              | 6.29E-29 | 1.26321464 | 0.658 | 0.4   | 2.23E-24 | Proliferating_spleen |
| STAMBPL1           | 7.06E-29 | 1.15233376 | 0.465 | 0.189 | 2.50E-24 | Proliferating_spleen |
| ZCCHC7             | 7.53E-29 | 0.85703902 | 0.789 | 0.499 | 2.67E-24 | Proliferating_spleen |
| ENSMMUG00000052802 | 7.74E-29 | 1.29602678 | 0.478 | 0.207 | 2.74E-24 | Proliferating_spleen |
| VAV1               | 7.97E-29 | 0.93641474 | 0.522 | 0.244 | 2.82E-24 | Proliferating_spleen |
| ITPR1              | 8.94E-29 | 1.65679629 | 0.453 | 0.203 | 3.17E-24 | Proliferating_spleen |
| ITM2B              | 9.63E-29 | 0.61254357 | 0.85  | 0.655 | 3.41E-24 | Proliferating_spleen |
| ITGAL              | 9.71E-29 | 1.22744693 | 0.572 | 0.282 | 3.44E-24 | Proliferating_spleen |
| GLS                | 1.08E-28 | 0.96603201 | 0.642 | 0.343 | 3.82E-24 | Proliferating_spleen |
| FAM107B            | 1.14E-28 | 0.94824309 | 0.73  | 0.447 | 4.03E-24 | Proliferating_spleen |
| CUX1               | 1.27E-28 | 0.97387852 | 0.773 | 0.484 | 4.48E-24 | Proliferating_spleen |
| SURF4              | 1.30E-28 | 1.06187496 | 0.461 | 0.189 | 4.60E-24 | Proliferating_spleen |
| CLTB               | 1.37E-28 | 1.03431709 | 0.372 | 0.125 | 4.84E-24 | Proliferating_spleen |
| ING2               | 1.48E-28 | 1.23479831 | 0.349 | 0.111 | 5.24E-24 | Proliferating_spleen |
| NOL4L              | 1.50E-28 | 2.01133013 | 0.324 | 0.105 | 5.30E-24 | Proliferating_spleen |
| CSNK1G1            | 1.70E-28 | 1.08115984 | 0.624 | 0.336 | 6.01E-24 | Proliferating_spleen |
| KIF4A              | 1.84E-28 | 1.28355273 | 0.409 | 0.161 | 6.53E-24 | Proliferating_spleen |
| NUFIP2             | 1.86E-28 | 1.04452811 | 0.699 | 0.415 | 6.59E-24 | Proliferating_spleen |

|                    |          |            |       |       |          |                      |
|--------------------|----------|------------|-------|-------|----------|----------------------|
| MAPK14             | 2.46E-28 | 1.51338551 | 0.42  | 0.17  | 8.70E-24 | Proliferating_spleen |
| KDEL2              | 2.60E-28 | 0.99934363 | 0.465 | 0.193 | 9.21E-24 | Proliferating_spleen |
| ENSMMUG00000056190 | 2.77E-28 | 1.02621761 | 0.593 | 0.304 | 9.83E-24 | Proliferating_spleen |
| CYRIB              | 3.05E-28 | 0.7544641  | 0.924 | 0.719 | 1.08E-23 | Proliferating_spleen |
| SLC24A3            | 3.37E-28 | 2.62622332 | 0.395 | 0.172 | 1.19E-23 | Proliferating_spleen |
| TGFBR2             | 3.49E-28 | 0.85381377 | 0.75  | 0.478 | 1.24E-23 | Proliferating_spleen |
| INPP5D             | 4.15E-28 | 1.00309198 | 0.676 | 0.389 | 1.47E-23 | Proliferating_spleen |
| ALCAM              | 4.42E-28 | 1.5309318  | 0.322 | 0.098 | 1.57E-23 | Proliferating_spleen |
| CYC1               | 4.59E-28 | 0.87916875 | 0.527 | 0.242 | 1.63E-23 | Proliferating_spleen |
| TTC39C             | 5.76E-28 | 1.0945315  | 0.565 | 0.292 | 2.04E-23 | Proliferating_spleen |
| STRN3              | 6.70E-28 | 0.94999375 | 0.564 | 0.282 | 2.38E-23 | Proliferating_spleen |
| PDIA6              | 7.46E-28 | 1.03419015 | 0.531 | 0.251 | 2.64E-23 | Proliferating_spleen |
| SETD5              | 7.71E-28 | 0.71901891 | 0.709 | 0.395 | 2.73E-23 | Proliferating_spleen |
| UBAP2              | 7.75E-28 | 0.88311385 | 0.716 | 0.4   | 2.75E-23 | Proliferating_spleen |
| TCF12              | 1.00E-27 | 0.60432069 | 0.903 | 0.598 | 3.54E-23 | Proliferating_spleen |
| MAPKAP1            | 1.15E-27 | 0.94078445 | 0.632 | 0.326 | 4.09E-23 | Proliferating_spleen |
| ASAP1              | 1.21E-27 | 0.8842783  | 0.786 | 0.483 | 4.28E-23 | Proliferating_spleen |
| ZFAND3             | 1.31E-27 | 0.76911801 | 0.826 | 0.529 | 4.64E-23 | Proliferating_spleen |
| MFHAS1             | 1.35E-27 | 2.11313623 | 0.259 | 0.063 | 4.79E-23 | Proliferating_spleen |
| RALBP1             | 1.47E-27 | 0.87059235 | 0.495 | 0.212 | 5.21E-23 | Proliferating_spleen |
| KTN1               | 1.79E-27 | 0.90858822 | 0.538 | 0.255 | 6.35E-23 | Proliferating_spleen |
| RBM6               | 1.82E-27 | 0.92176116 | 0.646 | 0.354 | 6.44E-23 | Proliferating_spleen |
| PNP                | 2.22E-27 | 1.53816141 | 0.289 | 0.079 | 7.87E-23 | Proliferating_spleen |
| STK17B             | 2.47E-27 | 0.66423589 | 0.924 | 0.677 | 8.76E-23 | Proliferating_spleen |
| MCUB               | 2.98E-27 | 0.6789929  | 0.755 | 0.462 | 1.06E-22 | Proliferating_spleen |
| GBF1               | 3.22E-27 | 1.24559727 | 0.507 | 0.245 | 1.14E-22 | Proliferating_spleen |
| LDLR               | 3.38E-27 | 1.44833601 | 0.446 | 0.198 | 1.20E-22 | Proliferating_spleen |
| UBE2R2             | 3.46E-27 | 0.9072799  | 0.62  | 0.323 | 1.23E-22 | Proliferating_spleen |
| FBXW4              | 3.46E-27 | 1.33654095 | 0.464 | 0.204 | 1.23E-22 | Proliferating_spleen |
| ROCK2              | 3.57E-27 | 1.17598666 | 0.411 | 0.158 | 1.26E-22 | Proliferating_spleen |
| RPS6KA5            | 3.79E-27 | 1.10250026 | 0.708 | 0.428 | 1.34E-22 | Proliferating_spleen |
| XPO1               | 4.36E-27 | 0.74615528 | 0.724 | 0.424 | 1.55E-22 | Proliferating_spleen |
| HNRNPC             | 5.15E-27 | 0.60640617 | 0.922 | 0.739 | 1.82E-22 | Proliferating_spleen |

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|--------------------|----------|------------|-------|-------|----------|----------------------|
| FBXW11             | 5.84E-27 | 1.00610889 | 0.55  | 0.264 | 2.07E-22 | Proliferating_spleen |
| CYB5B              | 6.71E-27 | 1.04357979 | 0.376 | 0.137 | 2.38E-22 | Proliferating_spleen |
| DOCK8              | 6.82E-27 | 0.8020025  | 0.861 | 0.61  | 2.41E-22 | Proliferating_spleen |
| PDE7A              | 7.94E-27 | 0.80381584 | 0.716 | 0.417 | 2.81E-22 | Proliferating_spleen |
| RBM15              | 1.02E-26 | 1.16014989 | 0.503 | 0.231 | 3.60E-22 | Proliferating_spleen |
| ENSMMUG00000055114 | 1.12E-26 | 1.07484683 | 0.639 | 0.362 | 3.97E-22 | Proliferating_spleen |
| TASOR              | 1.15E-26 | 0.83753636 | 0.542 | 0.249 | 4.09E-22 | Proliferating_spleen |
| IP6K1              | 1.16E-26 | 1.09481796 | 0.515 | 0.246 | 4.11E-22 | Proliferating_spleen |
| IKZF3              | 1.18E-26 | 0.87957577 | 0.707 | 0.435 | 4.18E-22 | Proliferating_spleen |
| DYRK1A             | 1.64E-26 | 0.90708436 | 0.692 | 0.414 | 5.80E-22 | Proliferating_spleen |
| MELK               | 2.03E-26 | 1.5805237  | 0.374 | 0.142 | 7.20E-22 | Proliferating_spleen |
| ARL15              | 2.10E-26 | 0.81668709 | 0.705 | 0.414 | 7.45E-22 | Proliferating_spleen |
| ME2                | 2.14E-26 | 0.8334003  | 0.695 | 0.387 | 7.59E-22 | Proliferating_spleen |
| PHTF2              | 2.20E-26 | 1.21802356 | 0.48  | 0.227 | 7.80E-22 | Proliferating_spleen |
| EIF4EBP3           | 2.45E-26 | 0.73216924 | 0.749 | 0.436 | 8.67E-22 | Proliferating_spleen |
| SLC38A1            | 3.14E-26 | 0.74662908 | 0.843 | 0.553 | 1.11E-21 | Proliferating_spleen |
| DNAJB1             | 3.18E-26 | 1.2196234  | 0.316 | 0.104 | 1.13E-21 | Proliferating_spleen |
| GPD2               | 3.74E-26 | 1.14414423 | 0.48  | 0.221 | 1.33E-21 | Proliferating_spleen |
| MTA1               | 5.14E-26 | 1.31594426 | 0.319 | 0.103 | 1.82E-21 | Proliferating_spleen |
| AURKAIP1           | 5.48E-26 | 0.80935495 | 0.416 | 0.161 | 1.94E-21 | Proliferating_spleen |
| BARD1              | 5.86E-26 | 1.10283051 | 0.439 | 0.185 | 2.07E-21 | Proliferating_spleen |
| H4C15              | 6.64E-26 | 0.89760056 | 0.592 | 0.307 | 2.35E-21 | Proliferating_spleen |
| PBRM1              | 6.80E-26 | 0.80822397 | 0.769 | 0.482 | 2.41E-21 | Proliferating_spleen |
| ENSMMUG00000021425 | 6.96E-26 | 0.97979787 | 0.549 | 0.281 | 2.47E-21 | Proliferating_spleen |
| FAM120A            | 7.13E-26 | 0.86739862 | 0.658 | 0.363 | 2.53E-21 | Proliferating_spleen |
| AGO2               | 7.37E-26 | 1.06719025 | 0.527 | 0.26  | 2.61E-21 | Proliferating_spleen |
| MBNL1              | 7.80E-26 | 0.50955388 | 0.989 | 0.899 | 2.76E-21 | Proliferating_spleen |
| ST3GAL3            | 8.04E-26 | 0.99201896 | 0.57  | 0.296 | 2.85E-21 | Proliferating_spleen |
| PTPRC              | 8.37E-26 | 0.4886057  | 0.972 | 0.93  | 2.97E-21 | Proliferating_spleen |
| FLI1               | 9.10E-26 | 0.80351968 | 0.642 | 0.36  | 3.22E-21 | Proliferating_spleen |
| ZNF143             | 9.30E-26 | 1.28127819 | 0.326 | 0.107 | 3.30E-21 | Proliferating_spleen |
| MTMR12             | 1.04E-25 | 1.34993657 | 0.42  | 0.177 | 3.69E-21 | Proliferating_spleen |
| C1H1orf35          | 1.19E-25 | 0.87735393 | 0.424 | 0.173 | 4.23E-21 | Proliferating_spleen |

|                    |          |            |       |       |          |                      |
|--------------------|----------|------------|-------|-------|----------|----------------------|
| PHACTR2            | 1.20E-25 | 1.45832801 | 0.466 | 0.222 | 4.24E-21 | Proliferating_spleen |
| RRP36              | 1.22E-25 | 0.68068153 | 0.349 | 0.117 | 4.31E-21 | Proliferating_spleen |
| CD74               | 1.36E-25 | 1.02571819 | 0.493 | 0.236 | 4.81E-21 | Proliferating_spleen |
| SMYD3              | 1.56E-25 | 0.78014799 | 0.773 | 0.49  | 5.53E-21 | Proliferating_spleen |
| TOX2               | 1.72E-25 | 2.09908036 | 0.353 | 0.138 | 6.08E-21 | Proliferating_spleen |
| MIS18BP1           | 1.77E-25 | 0.79659946 | 0.659 | 0.377 | 6.28E-21 | Proliferating_spleen |
| FAF1               | 1.82E-25 | 0.69049501 | 0.85  | 0.569 | 6.44E-21 | Proliferating_spleen |
| SESN1              | 1.85E-25 | 1.06525334 | 0.512 | 0.257 | 6.55E-21 | Proliferating_spleen |
| PDCD6-AHRR         | 2.05E-25 | 0.8126477  | 0.434 | 0.176 | 7.27E-21 | Proliferating_spleen |
| NOL7               | 2.08E-25 | 0.93056745 | 0.512 | 0.242 | 7.39E-21 | Proliferating_spleen |
| ENSMMUG00000049951 | 2.14E-25 | 1.58019359 | 0.323 | 0.115 | 7.59E-21 | Proliferating_spleen |
| PPP6R3             | 2.71E-25 | 0.76284097 | 0.788 | 0.497 | 9.61E-21 | Proliferating_spleen |
| NF1                | 3.06E-25 | 0.97958454 | 0.572 | 0.301 | 1.08E-20 | Proliferating_spleen |
| GATAD2A            | 3.21E-25 | 0.97125176 | 0.647 | 0.348 | 1.14E-20 | Proliferating_spleen |
| POLQ               | 3.24E-25 | 1.2882776  | 0.439 | 0.196 | 1.15E-20 | Proliferating_spleen |
| SLC7A5             | 3.42E-25 | 1.66447018 | 0.282 | 0.085 | 1.21E-20 | Proliferating_spleen |
| DENND2D            | 3.42E-25 | 0.99199903 | 0.553 | 0.292 | 1.21E-20 | Proliferating_spleen |
| PGRMC2             | 3.45E-25 | 1.24940652 | 0.289 | 0.085 | 1.22E-20 | Proliferating_spleen |
| ITFG1              | 3.50E-25 | 0.91439427 | 0.641 | 0.355 | 1.24E-20 | Proliferating_spleen |
| NCOA2              | 3.76E-25 | 0.80695635 | 0.703 | 0.411 | 1.33E-20 | Proliferating_spleen |
| EFCAB2             | 4.00E-25 | 0.8382592  | 0.722 | 0.454 | 1.42E-20 | Proliferating_spleen |
| ARID4B             | 4.17E-25 | 0.77122133 | 0.922 | 0.642 | 1.48E-20 | Proliferating_spleen |
| USP48              | 4.34E-25 | 0.85975844 | 0.518 | 0.24  | 1.54E-20 | Proliferating_spleen |
| TTC13              | 4.46E-25 | 1.25989509 | 0.441 | 0.2   | 1.58E-20 | Proliferating_spleen |
| USP34              | 4.60E-25 | 0.76055701 | 0.864 | 0.573 | 1.63E-20 | Proliferating_spleen |
| CDYL               | 4.72E-25 | 1.44255338 | 0.45  | 0.212 | 1.67E-20 | Proliferating_spleen |
| GSK3B              | 5.00E-25 | 0.68972353 | 0.811 | 0.496 | 1.77E-20 | Proliferating_spleen |
| RBM14              | 5.05E-25 | 0.76631193 | 0.864 | 0.581 | 1.79E-20 | Proliferating_spleen |
| NPLOC4             | 5.22E-25 | 1.4801871  | 0.382 | 0.151 | 1.85E-20 | Proliferating_spleen |
| SDF4               | 6.32E-25 | 1.1196379  | 0.328 | 0.114 | 2.24E-20 | Proliferating_spleen |
| ATF7IP             | 6.55E-25 | 0.65550793 | 0.836 | 0.562 | 2.32E-20 | Proliferating_spleen |
| ENSMMUG00000011588 | 6.99E-25 | 1.57317958 | 0.397 | 0.165 | 2.48E-20 | Proliferating_spleen |
| STK24              | 7.49E-25 | 0.906162   | 0.668 | 0.37  | 2.65E-20 | Proliferating_spleen |

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|----------|----------|------------|-------|-------|----------|----------------------|
| RBBP6    | 7.57E-25 | 0.88439892 | 0.578 | 0.296 | 2.68E-20 | Proliferating_spleen |
| PTK2B    | 8.10E-25 | 0.81982391 | 0.481 | 0.223 | 2.87E-20 | Proliferating_spleen |
| ILF3     | 8.81E-25 | 0.73176863 | 0.78  | 0.484 | 3.12E-20 | Proliferating_spleen |
| OXSRI    | 1.01E-24 | 0.87799726 | 0.623 | 0.34  | 3.58E-20 | Proliferating_spleen |
| KIF5B    | 1.02E-24 | 0.70321546 | 0.73  | 0.447 | 3.61E-20 | Proliferating_spleen |
| KDM6A    | 1.06E-24 | 0.60708376 | 0.853 | 0.528 | 3.74E-20 | Proliferating_spleen |
| PHACTR4  | 1.29E-24 | 0.89994382 | 0.603 | 0.319 | 4.58E-20 | Proliferating_spleen |
| LARP1    | 1.66E-24 | 1.15548543 | 0.399 | 0.17  | 5.88E-20 | Proliferating_spleen |
| IL6ST    | 1.68E-24 | 1.08110078 | 0.615 | 0.378 | 5.94E-20 | Proliferating_spleen |
| CBL      | 1.72E-24 | 1.29146098 | 0.386 | 0.158 | 6.10E-20 | Proliferating_spleen |
| ALKBH7   | 1.91E-24 | 0.9229311  | 0.426 | 0.176 | 6.76E-20 | Proliferating_spleen |
| HIP1     | 2.00E-24 | 1.97013862 | 0.331 | 0.125 | 7.08E-20 | Proliferating_spleen |
| MAP2K1   | 2.00E-24 | 1.09428078 | 0.473 | 0.221 | 7.10E-20 | Proliferating_spleen |
| NFAT5    | 2.12E-24 | 0.85423048 | 0.603 | 0.336 | 7.51E-20 | Proliferating_spleen |
| UHRF2    | 2.14E-24 | 0.90075933 | 0.618 | 0.348 | 7.57E-20 | Proliferating_spleen |
| RGS3     | 2.25E-24 | 1.03381503 | 0.485 | 0.23  | 7.97E-20 | Proliferating_spleen |
| NUP210   | 2.45E-24 | 0.8515241  | 0.673 | 0.386 | 8.68E-20 | Proliferating_spleen |
| PTPRCAP  | 2.59E-24 | 0.76028036 | 0.295 | 0.087 | 9.19E-20 | Proliferating_spleen |
| CDK8     | 2.73E-24 | 1.26604983 | 0.419 | 0.181 | 9.66E-20 | Proliferating_spleen |
| LRCH3    | 2.99E-24 | 0.86348399 | 0.655 | 0.377 | 1.06E-19 | Proliferating_spleen |
| SLC25A25 | 3.40E-24 | 1.41574391 | 0.369 | 0.146 | 1.20E-19 | Proliferating_spleen |
| BUB1B    | 3.63E-24 | 1.13434498 | 0.465 | 0.225 | 1.29E-19 | Proliferating_spleen |
| STRBP    | 3.90E-24 | 0.82700652 | 0.527 | 0.258 | 1.38E-19 | Proliferating_spleen |
| ARGLU1   | 3.96E-24 | 0.66988389 | 0.812 | 0.551 | 1.40E-19 | Proliferating_spleen |
| PHLPP1   | 4.36E-24 | 1.60564468 | 0.478 | 0.25  | 1.55E-19 | Proliferating_spleen |
| HIPK2    | 4.37E-24 | 1.30497949 | 0.45  | 0.213 | 1.55E-19 | Proliferating_spleen |
| SIK3     | 4.45E-24 | 1.04593606 | 0.912 | 0.677 | 1.58E-19 | Proliferating_spleen |
| MAP3K4   | 4.67E-24 | 1.09100214 | 0.438 | 0.195 | 1.66E-19 | Proliferating_spleen |
| DNM2     | 4.85E-24 | 0.86475634 | 0.632 | 0.346 | 1.72E-19 | Proliferating_spleen |
| ZNF367   | 5.38E-24 | 1.08662097 | 0.395 | 0.162 | 1.91E-19 | Proliferating_spleen |
| USP44    | 5.50E-24 | 1.00083651 | 0.508 | 0.254 | 1.95E-19 | Proliferating_spleen |
| RANBP1   | 6.50E-24 | 1.00594824 | 0.642 | 0.425 | 2.30E-19 | Proliferating_spleen |
| GAK      | 6.54E-24 | 1.51945288 | 0.441 | 0.21  | 2.32E-19 | Proliferating_spleen |

|         |          |            |       |       |          |                      |
|---------|----------|------------|-------|-------|----------|----------------------|
| DIAPH3  | 6.65E-24 | 0.72944915 | 0.72  | 0.459 | 2.36E-19 | Proliferating_spleen |
| SLC9A9  | 6.69E-24 | 1.36813957 | 0.526 | 0.28  | 2.37E-19 | Proliferating_spleen |
| WIPF1   | 6.78E-24 | 0.72698743 | 0.854 | 0.622 | 2.40E-19 | Proliferating_spleen |
| ASXL1   | 6.99E-24 | 1.27583874 | 0.523 | 0.273 | 2.48E-19 | Proliferating_spleen |
| SMG1    | 7.06E-24 | 0.85687925 | 0.65  | 0.368 | 2.50E-19 | Proliferating_spleen |
| ARFGEF1 | 7.67E-24 | 0.88166648 | 0.624 | 0.354 | 2.72E-19 | Proliferating_spleen |
| XPO6    | 8.41E-24 | 0.77715211 | 0.653 | 0.368 | 2.98E-19 | Proliferating_spleen |
| ARMH3   | 9.30E-24 | 1.13255479 | 0.511 | 0.256 | 3.29E-19 | Proliferating_spleen |
| IFT80   | 9.35E-24 | 0.87121184 | 0.628 | 0.361 | 3.31E-19 | Proliferating_spleen |
| STIM2   | 1.00E-23 | 0.75409807 | 0.581 | 0.297 | 3.56E-19 | Proliferating_spleen |
| FBXO34  | 1.15E-23 | 0.73814202 | 0.809 | 0.527 | 4.06E-19 | Proliferating_spleen |
| CHAF1A  | 1.23E-23 | 1.32392478 | 0.386 | 0.161 | 4.36E-19 | Proliferating_spleen |
| KMT5A   | 1.29E-23 | 1.1607322  | 0.33  | 0.119 | 4.56E-19 | Proliferating_spleen |
| SP140   | 1.38E-23 | 0.92129943 | 0.547 | 0.289 | 4.87E-19 | Proliferating_spleen |
| PRKCH   | 1.43E-23 | 1.12754571 | 0.859 | 0.737 | 5.06E-19 | Proliferating_spleen |
| AKIRIN2 | 1.55E-23 | 1.10439761 | 0.408 | 0.175 | 5.47E-19 | Proliferating_spleen |
| AKIRIN1 | 1.58E-23 | 0.82899029 | 0.462 | 0.21  | 5.61E-19 | Proliferating_spleen |
| WNK1    | 1.60E-23 | 0.64626414 | 0.803 | 0.519 | 5.67E-19 | Proliferating_spleen |
| SNRNP70 | 1.73E-23 | 0.65998816 | 0.672 | 0.387 | 6.14E-19 | Proliferating_spleen |
| DNAJC13 | 2.06E-23 | 1.93472616 | 0.253 | 0.072 | 7.30E-19 | Proliferating_spleen |
| PSIP1   | 2.34E-23 | 0.58675805 | 0.75  | 0.481 | 8.29E-19 | Proliferating_spleen |
| HERC4   | 2.86E-23 | 0.7863703  | 0.616 | 0.33  | 1.01E-18 | Proliferating_spleen |
| HSPD1   | 2.87E-23 | 0.77003948 | 0.712 | 0.457 | 1.02E-18 | Proliferating_spleen |
| CEP170  | 3.02E-23 | 0.87335672 | 0.589 | 0.329 | 1.07E-18 | Proliferating_spleen |
| ELF1    | 3.21E-23 | 0.53895038 | 0.912 | 0.723 | 1.14E-18 | Proliferating_spleen |
| EDEM3   | 3.22E-23 | 0.93175879 | 0.42  | 0.183 | 1.14E-18 | Proliferating_spleen |
| MYH9    | 3.24E-23 | 0.70998215 | 0.855 | 0.589 | 1.15E-18 | Proliferating_spleen |
| ANKRD10 | 3.26E-23 | 0.76144307 | 0.641 | 0.375 | 1.16E-18 | Proliferating_spleen |
| NIN     | 3.46E-23 | 1.25324022 | 0.424 | 0.191 | 1.23E-18 | Proliferating_spleen |
| VCP     | 3.50E-23 | 0.60293771 | 0.618 | 0.329 | 1.24E-18 | Proliferating_spleen |
| NCAPD2  | 3.80E-23 | 1.27996696 | 0.353 | 0.139 | 1.35E-18 | Proliferating_spleen |
| MED13L  | 3.83E-23 | 0.64993663 | 0.868 | 0.587 | 1.36E-18 | Proliferating_spleen |
| PPP1CC  | 4.01E-23 | 0.72703764 | 0.665 | 0.413 | 1.42E-18 | Proliferating_spleen |

|          |          |            |       |       |          |                      |
|----------|----------|------------|-------|-------|----------|----------------------|
| CASP8AP2 | 4.35E-23 | 0.97252317 | 0.468 | 0.219 | 1.54E-18 | Proliferating_spleen |
| SMC4     | 4.72E-23 | 0.67764146 | 0.901 | 0.752 | 1.67E-18 | Proliferating_spleen |
| CHEK2    | 4.79E-23 | 1.29931516 | 0.338 | 0.13  | 1.70E-18 | Proliferating_spleen |
| VPS4A    | 5.05E-23 | 1.004309   | 0.507 | 0.244 | 1.79E-18 | Proliferating_spleen |
| BCL2L12  | 5.11E-23 | 0.8838403  | 0.264 | 0.075 | 1.81E-18 | Proliferating_spleen |
| ST3GAL1  | 5.31E-23 | 1.07701095 | 0.574 | 0.309 | 1.88E-18 | Proliferating_spleen |
| KIFC1    | 5.35E-23 | 0.92430915 | 0.618 | 0.351 | 1.90E-18 | Proliferating_spleen |
| ERBIN    | 5.46E-23 | 0.68374274 | 0.803 | 0.523 | 1.94E-18 | Proliferating_spleen |
| KNTC1    | 5.75E-23 | 1.03049431 | 0.527 | 0.275 | 2.04E-18 | Proliferating_spleen |
| MSI2     | 5.95E-23 | 0.70288919 | 0.774 | 0.479 | 2.11E-18 | Proliferating_spleen |
| HTT      | 7.18E-23 | 0.70616578 | 0.638 | 0.344 | 2.55E-18 | Proliferating_spleen |
| CLK1     | 7.27E-23 | 0.70782271 | 0.773 | 0.507 | 2.58E-18 | Proliferating_spleen |
| STAG1    | 7.63E-23 | 0.58154602 | 0.941 | 0.698 | 2.70E-18 | Proliferating_spleen |
| VTI1A    | 8.22E-23 | 0.61157174 | 0.788 | 0.491 | 2.91E-18 | Proliferating_spleen |
| PHF14    | 9.71E-23 | 0.78888707 | 0.624 | 0.345 | 3.44E-18 | Proliferating_spleen |
| ZNF217   | 9.77E-23 | 0.93645352 | 0.43  | 0.188 | 3.46E-18 | Proliferating_spleen |
| PITHD1   | 1.03E-22 | 0.74443019 | 0.368 | 0.144 | 3.66E-18 | Proliferating_spleen |
| CAPRIN1  | 1.12E-22 | 0.84376244 | 0.599 | 0.331 | 3.98E-18 | Proliferating_spleen |
| IRAG2    | 1.26E-22 | 1.03572569 | 0.532 | 0.289 | 4.47E-18 | Proliferating_spleen |
| FAM53B   | 1.35E-22 | 1.10476254 | 0.401 | 0.173 | 4.78E-18 | Proliferating_spleen |
| PAXBP1   | 1.36E-22 | 1.20022748 | 0.374 | 0.154 | 4.81E-18 | Proliferating_spleen |
| EXT1     | 1.49E-22 | 1.1437102  | 0.505 | 0.267 | 5.27E-18 | Proliferating_spleen |
| ZBTB16   | 1.54E-22 | 2.78711497 | 0.253 | 0.083 | 5.46E-18 | Proliferating_spleen |
| HINT2    | 1.58E-22 | 0.78605563 | 0.42  | 0.176 | 5.59E-18 | Proliferating_spleen |
| MAPK1    | 1.69E-22 | 0.9416007  | 0.674 | 0.393 | 6.00E-18 | Proliferating_spleen |
| STIL     | 1.73E-22 | 0.93539455 | 0.5   | 0.251 | 6.14E-18 | Proliferating_spleen |
| JARID2   | 1.79E-22 | 0.61428502 | 0.827 | 0.566 | 6.33E-18 | Proliferating_spleen |
| ZC3H4    | 1.79E-22 | 1.28454704 | 0.342 | 0.129 | 6.35E-18 | Proliferating_spleen |
| GRB2     | 1.95E-22 | 0.79563134 | 0.718 | 0.445 | 6.90E-18 | Proliferating_spleen |
| MLLT10   | 2.08E-22 | 0.91909076 | 0.612 | 0.365 | 7.38E-18 | Proliferating_spleen |
| U2.106   | 2.09E-22 | 1.45056064 | 0.342 | 0.137 | 7.40E-18 | Proliferating_spleen |
| SRBD1    | 2.29E-22 | 1.01642492 | 0.499 | 0.25  | 8.10E-18 | Proliferating_spleen |
| ARHGAP35 | 2.38E-22 | 1.37740002 | 0.424 | 0.203 | 8.44E-18 | Proliferating_spleen |

|                    |          |            |       |       |          |                      |
|--------------------|----------|------------|-------|-------|----------|----------------------|
| UHRF1              | 2.40E-22 | 0.80593912 | 0.493 | 0.242 | 8.49E-18 | Proliferating_spleen |
| FUZ                | 2.43E-22 | 1.41357066 | 0.323 | 0.123 | 8.60E-18 | Proliferating_spleen |
| FBXW7              | 2.46E-22 | 0.71995902 | 0.776 | 0.509 | 8.73E-18 | Proliferating_spleen |
| SENP6              | 2.47E-22 | 0.69175191 | 0.728 | 0.455 | 8.76E-18 | Proliferating_spleen |
| RPS6KC1            | 2.62E-22 | 1.11988053 | 0.482 | 0.245 | 9.27E-18 | Proliferating_spleen |
| CEP350             | 2.62E-22 | 0.75314917 | 0.647 | 0.372 | 9.29E-18 | Proliferating_spleen |
| PPP3CA             | 2.76E-22 | 0.68955546 | 0.809 | 0.551 | 9.79E-18 | Proliferating_spleen |
| RNASEH2B           | 2.81E-22 | 0.71371891 | 0.674 | 0.407 | 9.97E-18 | Proliferating_spleen |
| CDC25C             | 2.97E-22 | 1.46559581 | 0.266 | 0.084 | 1.05E-17 | Proliferating_spleen |
| FNBP4              | 3.06E-22 | 0.82795718 | 0.641 | 0.36  | 1.09E-17 | Proliferating_spleen |
| EPM2AIP1           | 3.09E-22 | 1.30870982 | 0.293 | 0.098 | 1.10E-17 | Proliferating_spleen |
| ATAD2B             | 3.18E-22 | 0.72353887 | 0.686 | 0.4   | 1.13E-17 | Proliferating_spleen |
| PPM1B              | 3.25E-22 | 0.80974838 | 0.546 | 0.292 | 1.15E-17 | Proliferating_spleen |
| PARD3              | 3.37E-22 | 1.38332492 | 0.407 | 0.184 | 1.19E-17 | Proliferating_spleen |
| GEN1               | 3.68E-22 | 0.97468037 | 0.322 | 0.118 | 1.30E-17 | Proliferating_spleen |
| SMC6               | 3.69E-22 | 1.21034151 | 0.478 | 0.248 | 1.31E-17 | Proliferating_spleen |
| HPCAL1             | 3.76E-22 | 0.91314533 | 0.589 | 0.333 | 1.33E-17 | Proliferating_spleen |
| SLC20A1            | 3.89E-22 | 0.80443637 | 0.588 | 0.318 | 1.38E-17 | Proliferating_spleen |
| IGHM               | 4.02E-22 | 2.67655235 | 0.264 | 0.087 | 1.42E-17 | Proliferating_spleen |
| BAZ1B              | 4.38E-22 | 0.72294345 | 0.689 | 0.414 | 1.55E-17 | Proliferating_spleen |
| IQCG               | 4.71E-22 | 1.1175567  | 0.365 | 0.149 | 1.67E-17 | Proliferating_spleen |
| DNA2               | 4.96E-22 | 1.26476654 | 0.391 | 0.172 | 1.76E-17 | Proliferating_spleen |
| ENSMMUG00000058532 | 5.01E-22 | 1.21037693 | 0.458 | 0.219 | 1.78E-17 | Proliferating_spleen |
| ST7L               | 5.15E-22 | 0.99824735 | 0.404 | 0.176 | 1.83E-17 | Proliferating_spleen |
| ANKRD26            | 5.27E-22 | 1.57593934 | 0.305 | 0.111 | 1.87E-17 | Proliferating_spleen |
| CEP128             | 5.64E-22 | 0.9578603  | 0.569 | 0.315 | 2.00E-17 | Proliferating_spleen |
| CDK19              | 5.83E-22 | 0.97820265 | 0.493 | 0.254 | 2.06E-17 | Proliferating_spleen |
| TOB2               | 5.86E-22 | 0.97726207 | 0.368 | 0.148 | 2.08E-17 | Proliferating_spleen |
| ZFP36L1            | 6.24E-22 | 0.6815641  | 0.766 | 0.532 | 2.21E-17 | Proliferating_spleen |
| MARK2              | 6.51E-22 | 0.95371176 | 0.476 | 0.234 | 2.31E-17 | Proliferating_spleen |
| GRAMD1B            | 6.54E-22 | 1.26189588 | 0.492 | 0.26  | 2.32E-17 | Proliferating_spleen |
| ENSMMUG00000011711 | 6.71E-22 | 1.06560518 | 0.396 | 0.176 | 2.38E-17 | Proliferating_spleen |
| POLA1              | 7.03E-22 | 0.93553807 | 0.676 | 0.433 | 2.49E-17 | Proliferating_spleen |



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| ELOVL5             | 7.28E-22 | 0.71281999 | 0.753 | 0.469 | 2.58E-17 | Proliferating_spleen |
| RALY               | 7.30E-22 | 0.589204   | 0.735 | 0.452 | 2.59E-17 | Proliferating_spleen |
| ECT2               | 7.52E-22 | 1.12981629 | 0.373 | 0.161 | 2.67E-17 | Proliferating_spleen |
| SPTAN1             | 8.16E-22 | 0.72422512 | 0.584 | 0.315 | 2.89E-17 | Proliferating_spleen |
| CD164              | 8.87E-22 | 0.62330197 | 0.772 | 0.531 | 3.14E-17 | Proliferating_spleen |
| POC1B              | 9.51E-22 | 0.94449217 | 0.523 | 0.273 | 3.37E-17 | Proliferating_spleen |
| ANKRD17            | 1.02E-21 | 0.71744817 | 0.732 | 0.47  | 3.62E-17 | Proliferating_spleen |
| ASH1L              | 1.16E-21 | 0.62723449 | 0.886 | 0.598 | 4.10E-17 | Proliferating_spleen |
| TFCP2              | 1.26E-21 | 1.15125889 | 0.404 | 0.181 | 4.45E-17 | Proliferating_spleen |
| REV3L              | 1.45E-21 | 0.60363748 | 0.696 | 0.416 | 5.13E-17 | Proliferating_spleen |
| ENSMMUG00000053089 | 1.50E-21 | 1.59576077 | 0.346 | 0.146 | 5.30E-17 | Proliferating_spleen |
| ZBED1              | 1.55E-21 | 1.03173207 | 0.486 | 0.245 | 5.49E-17 | Proliferating_spleen |
| CD47               | 1.55E-21 | 0.66779087 | 0.685 | 0.432 | 5.51E-17 | Proliferating_spleen |
| CDKAL1             | 1.59E-21 | 0.76377254 | 0.831 | 0.555 | 5.63E-17 | Proliferating_spleen |
| ENSMMUG00000041744 | 1.64E-21 | 1.19128886 | 0.389 | 0.173 | 5.82E-17 | Proliferating_spleen |
| RAPGEF1            | 1.68E-21 | 0.74032115 | 0.672 | 0.399 | 5.94E-17 | Proliferating_spleen |
| RNF138             | 1.69E-21 | 0.94012798 | 0.531 | 0.277 | 5.99E-17 | Proliferating_spleen |
| ATAD5              | 1.85E-21 | 0.82585666 | 0.574 | 0.318 | 6.55E-17 | Proliferating_spleen |
| NUMB               | 1.90E-21 | 0.89121753 | 0.576 | 0.325 | 6.74E-17 | Proliferating_spleen |
| AGPAT5             | 1.95E-21 | 1.21432676 | 0.288 | 0.097 | 6.92E-17 | Proliferating_spleen |
| ABCC1              | 1.99E-21 | 1.57866308 | 0.43  | 0.221 | 7.06E-17 | Proliferating_spleen |
| RB1                | 2.38E-21 | 0.6742352  | 0.455 | 0.212 | 8.43E-17 | Proliferating_spleen |
| WTAP               | 2.52E-21 | 0.67911556 | 0.784 | 0.528 | 8.94E-17 | Proliferating_spleen |
| CEP85L             | 2.64E-21 | 0.78783842 | 0.705 | 0.435 | 9.34E-17 | Proliferating_spleen |
| TRA2B              | 2.64E-21 | 0.52023863 | 0.961 | 0.839 | 9.34E-17 | Proliferating_spleen |
| PLCB1              | 2.80E-21 | 1.42913606 | 0.45  | 0.237 | 9.92E-17 | Proliferating_spleen |
| WDR47              | 3.00E-21 | 1.29622473 | 0.35  | 0.144 | 1.06E-16 | Proliferating_spleen |
| MTO1               | 3.08E-21 | 1.25897458 | 0.323 | 0.122 | 1.09E-16 | Proliferating_spleen |
| HEBP2              | 3.11E-21 | 1.29284011 | 0.258 | 0.08  | 1.10E-16 | Proliferating_spleen |
| TMEM87B            | 3.18E-21 | 0.91402457 | 0.397 | 0.178 | 1.12E-16 | Proliferating_spleen |
| SIK2               | 3.21E-21 | 1.07095865 | 0.391 | 0.172 | 1.14E-16 | Proliferating_spleen |
| ID3                | 3.32E-21 | 0.53832999 | 0.423 | 0.19  | 1.18E-16 | Proliferating_spleen |
| ARHGAP9            | 3.37E-21 | 0.8068311  | 0.457 | 0.211 | 1.20E-16 | Proliferating_spleen |

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|--------------------|----------|------------|-------|-------|----------|----------------------|
| RNGTT              | 3.41E-21 | 0.58189026 | 0.749 | 0.463 | 1.21E-16 | Proliferating_spleen |
| NFATC3             | 3.47E-21 | 0.79091271 | 0.685 | 0.427 | 1.23E-16 | Proliferating_spleen |
| LIMD1              | 3.64E-21 | 1.16032704 | 0.346 | 0.14  | 1.29E-16 | Proliferating_spleen |
| MKLN1              | 3.65E-21 | 0.59228586 | 0.735 | 0.452 | 1.29E-16 | Proliferating_spleen |
| PAN3               | 3.66E-21 | 0.64752974 | 0.818 | 0.517 | 1.30E-16 | Proliferating_spleen |
| ARID2              | 3.81E-21 | 0.55402096 | 0.795 | 0.509 | 1.35E-16 | Proliferating_spleen |
| MAST2              | 3.83E-21 | 1.10321611 | 0.489 | 0.255 | 1.36E-16 | Proliferating_spleen |
| NOP58              | 4.08E-21 | 0.70358839 | 0.708 | 0.452 | 1.45E-16 | Proliferating_spleen |
| ELMO1              | 4.21E-21 | 0.60607806 | 0.855 | 0.581 | 1.49E-16 | Proliferating_spleen |
| HECTD4             | 4.36E-21 | 1.02905556 | 0.558 | 0.316 | 1.54E-16 | Proliferating_spleen |
| METTL15            | 4.52E-21 | 1.02339965 | 0.392 | 0.174 | 1.60E-16 | Proliferating_spleen |
| LYN                | 4.62E-21 | 1.29996537 | 0.418 | 0.209 | 1.64E-16 | Proliferating_spleen |
| RRBP1              | 4.75E-21 | 1.16931199 | 0.343 | 0.137 | 1.68E-16 | Proliferating_spleen |
| LPP                | 5.02E-21 | 1.00357995 | 0.639 | 0.388 | 1.78E-16 | Proliferating_spleen |
| S100PBP            | 5.15E-21 | 1.42934858 | 0.303 | 0.111 | 1.82E-16 | Proliferating_spleen |
| COP1               | 6.50E-21 | 0.74936913 | 0.696 | 0.44  | 2.30E-16 | Proliferating_spleen |
| HSPA9              | 6.61E-21 | 0.70472995 | 0.707 | 0.451 | 2.34E-16 | Proliferating_spleen |
| TBC1D22A           | 6.64E-21 | 0.82841107 | 0.592 | 0.325 | 2.35E-16 | Proliferating_spleen |
| WAPL               | 6.76E-21 | 0.72128779 | 0.611 | 0.344 | 2.40E-16 | Proliferating_spleen |
| ENSMMUG00000062103 | 6.84E-21 | 0.87683484 | 0.6   | 0.352 | 2.42E-16 | Proliferating_spleen |
| SCAI               | 6.96E-21 | 1.08749099 | 0.426 | 0.204 | 2.47E-16 | Proliferating_spleen |
| SFPQ               | 7.22E-21 | 0.59914072 | 0.859 | 0.613 | 2.56E-16 | Proliferating_spleen |
| TRIM44             | 7.62E-21 | 1.19364359 | 0.461 | 0.232 | 2.70E-16 | Proliferating_spleen |
| LARP4B             | 1.00E-20 | 0.80948927 | 0.561 | 0.308 | 3.54E-16 | Proliferating_spleen |
| CSTF3              | 1.02E-20 | 0.97087672 | 0.404 | 0.18  | 3.61E-16 | Proliferating_spleen |
| RABEP1             | 1.03E-20 | 0.66485892 | 0.439 | 0.201 | 3.65E-16 | Proliferating_spleen |
| MEMO1              | 1.08E-20 | 0.60849809 | 0.681 | 0.403 | 3.83E-16 | Proliferating_spleen |
| NPEPPS             | 1.19E-20 | 0.74468954 | 0.488 | 0.247 | 4.21E-16 | Proliferating_spleen |
| BICRAL             | 1.28E-20 | 0.88649364 | 0.347 | 0.142 | 4.52E-16 | Proliferating_spleen |
| ENSMMUG00000005482 | 1.34E-20 | 0.76538475 | 0.646 | 0.372 | 4.74E-16 | Proliferating_spleen |
| SPG11              | 1.34E-20 | 1.13508571 | 0.414 | 0.198 | 4.76E-16 | Proliferating_spleen |
| FANCI              | 1.35E-20 | 0.82383599 | 0.592 | 0.345 | 4.79E-16 | Proliferating_spleen |
| MAD1L1             | 1.39E-20 | 1.02964207 | 0.435 | 0.209 | 4.93E-16 | Proliferating_spleen |

|          |          |            |       |       |          |                      |
|----------|----------|------------|-------|-------|----------|----------------------|
| ELL      | 1.45E-20 | 1.54590878 | 0.462 | 0.24  | 5.12E-16 | Proliferating_spleen |
| PIKFYVE  | 1.47E-20 | 1.53588732 | 0.401 | 0.193 | 5.20E-16 | Proliferating_spleen |
| TLN1     | 1.48E-20 | 0.58742648 | 0.684 | 0.432 | 5.25E-16 | Proliferating_spleen |
| OTULIN   | 1.59E-20 | 0.71933395 | 0.369 | 0.155 | 5.63E-16 | Proliferating_spleen |
| CNTRL    | 1.67E-20 | 0.79388196 | 0.646 | 0.389 | 5.90E-16 | Proliferating_spleen |
| SPEN     | 1.84E-20 | 0.82740007 | 0.586 | 0.331 | 6.50E-16 | Proliferating_spleen |
| PDIA3    | 1.87E-20 | 0.5953828  | 0.449 | 0.204 | 6.63E-16 | Proliferating_spleen |
| CALR     | 1.87E-20 | 0.62302303 | 0.741 | 0.515 | 6.63E-16 | Proliferating_spleen |
| NFKB1    | 2.19E-20 | 0.74246715 | 0.785 | 0.545 | 7.77E-16 | Proliferating_spleen |
| BANP     | 2.20E-20 | 0.91391373 | 0.423 | 0.198 | 7.79E-16 | Proliferating_spleen |
| NFATC1   | 2.41E-20 | 1.18770196 | 0.411 | 0.199 | 8.54E-16 | Proliferating_spleen |
| KLF12    | 2.41E-20 | 0.690264   | 0.907 | 0.671 | 8.55E-16 | Proliferating_spleen |
| SMG6     | 2.47E-20 | 0.73896157 | 0.786 | 0.523 | 8.77E-16 | Proliferating_spleen |
| ABI1     | 3.04E-20 | 0.718064   | 0.774 | 0.51  | 1.08E-15 | Proliferating_spleen |
| TCP1     | 3.06E-20 | 0.66353468 | 0.536 | 0.293 | 1.08E-15 | Proliferating_spleen |
| WASF2    | 3.07E-20 | 0.53001475 | 0.736 | 0.47  | 1.09E-15 | Proliferating_spleen |
| FAM189A1 | 3.12E-20 | 0.8218726  | 0.254 | 0.079 | 1.10E-15 | Proliferating_spleen |
| FARS2    | 3.34E-20 | 0.88928812 | 0.534 | 0.295 | 1.18E-15 | Proliferating_spleen |
| NUP98    | 3.55E-20 | 0.60818543 | 0.778 | 0.492 | 1.26E-15 | Proliferating_spleen |
| VWA8     | 3.58E-20 | 1.16333171 | 0.32  | 0.127 | 1.27E-15 | Proliferating_spleen |
| BMP2K    | 3.58E-20 | 0.73990613 | 0.578 | 0.33  | 1.27E-15 | Proliferating_spleen |
| SLX4IP   | 3.59E-20 | 0.88655255 | 0.446 | 0.221 | 1.27E-15 | Proliferating_spleen |
| KMT2C    | 3.65E-20 | 0.56516224 | 0.908 | 0.635 | 1.29E-15 | Proliferating_spleen |
| PCNX1    | 3.78E-20 | 1.058793   | 0.514 | 0.284 | 1.34E-15 | Proliferating_spleen |
| LSM4     | 3.97E-20 | 0.68696472 | 0.62  | 0.369 | 1.41E-15 | Proliferating_spleen |
| NNT      | 4.15E-20 | 0.9649549  | 0.404 | 0.184 | 1.47E-15 | Proliferating_spleen |
| ARHGAP15 | 4.28E-20 | 0.55275178 | 0.95  | 0.789 | 1.52E-15 | Proliferating_spleen |
| KIF11    | 4.39E-20 | 0.72840493 | 0.527 | 0.273 | 1.56E-15 | Proliferating_spleen |
| DMXL1    | 4.60E-20 | 0.92408549 | 0.459 | 0.23  | 1.63E-15 | Proliferating_spleen |
| TMX4     | 4.80E-20 | 0.95352931 | 0.435 | 0.214 | 1.70E-15 | Proliferating_spleen |
| FRYL     | 4.87E-20 | 0.793156   | 0.638 | 0.377 | 1.73E-15 | Proliferating_spleen |
| SMURF2   | 4.95E-20 | 0.86734467 | 0.441 | 0.219 | 1.75E-15 | Proliferating_spleen |
| PDE4A    | 5.13E-20 | 1.16763056 | 0.296 | 0.108 | 1.82E-15 | Proliferating_spleen |

|                   |          |            |       |       |          |                      |
|-------------------|----------|------------|-------|-------|----------|----------------------|
| TPD52             | 5.15E-20 | 1.26186115 | 0.281 | 0.101 | 1.83E-15 | Proliferating_spleen |
| SIPA1L3           | 6.42E-20 | 1.33267062 | 0.376 | 0.172 | 2.27E-15 | Proliferating_spleen |
| SPIDR             | 6.86E-20 | 0.73143701 | 0.666 | 0.405 | 2.43E-15 | Proliferating_spleen |
| MGAT5             | 6.91E-20 | 0.78483918 | 0.789 | 0.531 | 2.45E-15 | Proliferating_spleen |
| GIGYF2            | 7.06E-20 | 0.66715405 | 0.643 | 0.365 | 2.50E-15 | Proliferating_spleen |
| TFRC              | 7.41E-20 | 0.90499949 | 0.428 | 0.207 | 2.62E-15 | Proliferating_spleen |
| ANKS1A            | 7.43E-20 | 1.4788492  | 0.296 | 0.115 | 2.63E-15 | Proliferating_spleen |
| GSE1              | 7.81E-20 | 1.16136498 | 0.327 | 0.136 | 2.77E-15 | Proliferating_spleen |
| TRAPPC8           | 8.14E-20 | 1.09223998 | 0.345 | 0.145 | 2.88E-15 | Proliferating_spleen |
| MARK3             | 8.14E-20 | 0.74160294 | 0.639 | 0.374 | 2.88E-15 | Proliferating_spleen |
| HNRNPLL           | 8.64E-20 | 1.23760911 | 0.332 | 0.139 | 3.06E-15 | Proliferating_spleen |
| MAP3K5            | 8.82E-20 | 0.91642489 | 0.481 | 0.246 | 3.12E-15 | Proliferating_spleen |
| BIRC6             | 1.04E-19 | 0.51360446 | 0.895 | 0.614 | 3.68E-15 | Proliferating_spleen |
| ENSMUG00000052132 | 1.21E-19 | 1.46075997 | 0.255 | 0.086 | 4.27E-15 | Proliferating_spleen |
| USP9X             | 1.29E-19 | 0.66363637 | 0.732 | 0.472 | 4.59E-15 | Proliferating_spleen |
| FBXO42            | 1.38E-19 | 0.92794733 | 0.389 | 0.174 | 4.89E-15 | Proliferating_spleen |
| BRIP1             | 1.52E-19 | 0.82934241 | 0.52  | 0.28  | 5.38E-15 | Proliferating_spleen |
| TMEM165           | 1.59E-19 | 1.06422903 | 0.32  | 0.127 | 5.64E-15 | Proliferating_spleen |
| DNAJB4            | 1.65E-19 | 1.1388392  | 0.351 | 0.153 | 5.83E-15 | Proliferating_spleen |
| KIAA1328          | 1.65E-19 | 0.72186316 | 0.614 | 0.362 | 5.86E-15 | Proliferating_spleen |
| UCK2              | 1.80E-19 | 1.141584   | 0.281 | 0.102 | 6.36E-15 | Proliferating_spleen |
| UTRN              | 1.85E-19 | 0.60046763 | 0.912 | 0.643 | 6.57E-15 | Proliferating_spleen |
| HEXIM1            | 1.86E-19 | 0.9990189  | 0.358 | 0.152 | 6.58E-15 | Proliferating_spleen |
| RBM39             | 1.93E-19 | 0.54409562 | 0.969 | 0.8   | 6.82E-15 | Proliferating_spleen |
| SEMA4D            | 1.98E-19 | 0.73020578 | 0.697 | 0.443 | 7.00E-15 | Proliferating_spleen |
| ITCH              | 2.07E-19 | 0.79918423 | 0.816 | 0.556 | 7.32E-15 | Proliferating_spleen |
| TRIM38            | 2.12E-19 | 0.62753081 | 0.365 | 0.156 | 7.50E-15 | Proliferating_spleen |
| HDAC4             | 2.14E-19 | 1.10844032 | 0.47  | 0.244 | 7.58E-15 | Proliferating_spleen |
| TLK1              | 2.24E-19 | 0.5299621  | 0.793 | 0.491 | 7.95E-15 | Proliferating_spleen |
| EEA1              | 2.43E-19 | 0.73460951 | 0.615 | 0.355 | 8.60E-15 | Proliferating_spleen |
| KANSL1            | 2.44E-19 | 0.51168331 | 0.809 | 0.52  | 8.66E-15 | Proliferating_spleen |
| PHIP              | 2.52E-19 | 0.6086718  | 0.8   | 0.525 | 8.91E-15 | Proliferating_spleen |
| CHD4              | 2.63E-19 | 0.73656926 | 0.723 | 0.474 | 9.31E-15 | Proliferating_spleen |

|                   |          |            |       |       |          |                      |
|-------------------|----------|------------|-------|-------|----------|----------------------|
| ANLN              | 2.64E-19 | 0.89764702 | 0.396 | 0.185 | 9.37E-15 | Proliferating_spleen |
| HECTD1            | 2.76E-19 | 0.85092937 | 0.526 | 0.285 | 9.77E-15 | Proliferating_spleen |
| SLC25A24          | 2.80E-19 | 0.73407477 | 0.28  | 0.099 | 9.91E-15 | Proliferating_spleen |
| HSD17B12          | 3.06E-19 | 1.06526875 | 0.382 | 0.176 | 1.08E-14 | Proliferating_spleen |
| DIPK1A            | 3.09E-19 | 1.08911845 | 0.439 | 0.226 | 1.09E-14 | Proliferating_spleen |
| DDX3X             | 3.25E-19 | 0.62290453 | 0.831 | 0.61  | 1.15E-14 | Proliferating_spleen |
| P4HB              | 3.31E-19 | 0.53925483 | 0.549 | 0.293 | 1.17E-14 | Proliferating_spleen |
| MARS1             | 3.34E-19 | 1.15201187 | 0.368 | 0.162 | 1.18E-14 | Proliferating_spleen |
| DDX50             | 3.46E-19 | 0.66204965 | 0.646 | 0.374 | 1.23E-14 | Proliferating_spleen |
| CENPI             | 3.47E-19 | 1.20865342 | 0.291 | 0.108 | 1.23E-14 | Proliferating_spleen |
| EP300             | 3.48E-19 | 0.71094948 | 0.676 | 0.411 | 1.23E-14 | Proliferating_spleen |
| FDX1              | 3.51E-19 | 1.26990216 | 0.257 | 0.089 | 1.24E-14 | Proliferating_spleen |
| MAMU-DRA          | 3.53E-19 | 0.98916372 | 0.376 | 0.172 | 1.25E-14 | Proliferating_spleen |
| FEM1C             | 3.66E-19 | 1.19033461 | 0.282 | 0.104 | 1.30E-14 | Proliferating_spleen |
| ENSMUG00000011714 | 3.69E-19 | 0.57104031 | 0.531 | 0.281 | 1.31E-14 | Proliferating_spleen |
| TSC22D1           | 3.93E-19 | 1.20717498 | 0.409 | 0.201 | 1.39E-14 | Proliferating_spleen |
| MAP2K5            | 4.41E-19 | 0.73752411 | 0.541 | 0.294 | 1.56E-14 | Proliferating_spleen |
| JAZF1             | 4.54E-19 | 0.85932738 | 0.482 | 0.254 | 1.61E-14 | Proliferating_spleen |
| SCAF8             | 4.54E-19 | 0.63588315 | 0.72  | 0.43  | 1.61E-14 | Proliferating_spleen |
| PLAGL1            | 4.62E-19 | 0.9378816  | 0.255 | 0.087 | 1.64E-14 | Proliferating_spleen |
| RNF213            | 4.91E-19 | 0.85650666 | 0.619 | 0.364 | 1.74E-14 | Proliferating_spleen |
| FBXL17            | 5.18E-19 | 0.66679449 | 0.638 | 0.38  | 1.83E-14 | Proliferating_spleen |
| INPP5F            | 5.51E-19 | 1.29772324 | 0.277 | 0.104 | 1.95E-14 | Proliferating_spleen |
| SPG7              | 5.52E-19 | 1.02714064 | 0.339 | 0.141 | 1.96E-14 | Proliferating_spleen |
| SLC9A1            | 5.55E-19 | 1.66673182 | 0.259 | 0.094 | 1.97E-14 | Proliferating_spleen |
| CCNY              | 6.04E-19 | 0.92070848 | 0.589 | 0.348 | 2.14E-14 | Proliferating_spleen |
| MGA               | 6.54E-19 | 0.90145381 | 0.431 | 0.213 | 2.32E-14 | Proliferating_spleen |
| ENSMUG00000044346 | 6.66E-19 | 0.9479991  | 0.257 | 0.089 | 2.36E-14 | Proliferating_spleen |
| UBAC2             | 6.84E-19 | 0.55285552 | 0.82  | 0.557 | 2.42E-14 | Proliferating_spleen |
| PPP6R2            | 6.87E-19 | 1.41771256 | 0.305 | 0.122 | 2.43E-14 | Proliferating_spleen |
| INTS6L            | 7.07E-19 | 0.9440757  | 0.466 | 0.242 | 2.51E-14 | Proliferating_spleen |
| DUSP10            | 7.45E-19 | 0.9608385  | 0.454 | 0.238 | 2.64E-14 | Proliferating_spleen |
| SETD2             | 7.50E-19 | 0.53708533 | 0.836 | 0.552 | 2.66E-14 | Proliferating_spleen |

|                    |          |            |       |       |          |                      |
|--------------------|----------|------------|-------|-------|----------|----------------------|
| RASGEF1B           | 7.92E-19 | 1.19243069 | 0.414 | 0.211 | 2.80E-14 | Proliferating_spleen |
| ENSMMUG00000030374 | 8.36E-19 | 0.97463793 | 0.459 | 0.239 | 2.96E-14 | Proliferating_spleen |
| PIK3AP1            | 8.48E-19 | 1.18507278 | 0.361 | 0.166 | 3.01E-14 | Proliferating_spleen |
| PHKB               | 9.09E-19 | 0.98659212 | 0.385 | 0.179 | 3.22E-14 | Proliferating_spleen |
| RAP1A              | 9.12E-19 | 0.572404   | 0.789 | 0.568 | 3.23E-14 | Proliferating_spleen |
| SF3B3              | 9.17E-19 | 0.53228997 | 0.559 | 0.308 | 3.25E-14 | Proliferating_spleen |
| IQSEC1             | 1.06E-18 | 1.20535962 | 0.404 | 0.204 | 3.75E-14 | Proliferating_spleen |
| INPP5B             | 1.06E-18 | 1.39832573 | 0.265 | 0.096 | 3.76E-14 | Proliferating_spleen |
| C2CD3              | 1.15E-18 | 0.79122298 | 0.427 | 0.211 | 4.08E-14 | Proliferating_spleen |
| ZNF638             | 1.18E-18 | 0.66831922 | 0.666 | 0.417 | 4.18E-14 | Proliferating_spleen |
| KLHL18             | 1.18E-18 | 1.21734908 | 0.411 | 0.2   | 4.19E-14 | Proliferating_spleen |
| RNASET2            | 1.23E-18 | 1.41300243 | 0.281 | 0.108 | 4.34E-14 | Proliferating_spleen |
| E2F3               | 1.24E-18 | 0.91252988 | 0.43  | 0.214 | 4.39E-14 | Proliferating_spleen |
| USO1               | 1.27E-18 | 0.82856882 | 0.396 | 0.185 | 4.49E-14 | Proliferating_spleen |
| QSER1              | 1.32E-18 | 1.18056119 | 0.326 | 0.136 | 4.68E-14 | Proliferating_spleen |
| ZMYM4              | 1.41E-18 | 0.88793747 | 0.516 | 0.286 | 5.01E-14 | Proliferating_spleen |
| SUDS3              | 1.42E-18 | 0.77210854 | 0.381 | 0.173 | 5.05E-14 | Proliferating_spleen |
| SLA                | 1.47E-18 | 0.50538376 | 0.386 | 0.173 | 5.20E-14 | Proliferating_spleen |
| FANCA              | 1.52E-18 | 0.93850415 | 0.422 | 0.208 | 5.39E-14 | Proliferating_spleen |
| PDIA4              | 1.64E-18 | 1.01672196 | 0.35  | 0.153 | 5.80E-14 | Proliferating_spleen |
| TUBGCP3            | 1.69E-18 | 0.75556309 | 0.528 | 0.284 | 5.99E-14 | Proliferating_spleen |
| FAM193A            | 1.70E-18 | 0.72352226 | 0.577 | 0.322 | 6.04E-14 | Proliferating_spleen |
| GGNBP2             | 1.71E-18 | 0.75168699 | 0.674 | 0.411 | 6.05E-14 | Proliferating_spleen |
| SYK                | 1.85E-18 | 1.21308229 | 0.35  | 0.162 | 6.55E-14 | Proliferating_spleen |
| EIF5               | 1.91E-18 | 0.56285414 | 0.712 | 0.448 | 6.77E-14 | Proliferating_spleen |
| NRDC               | 2.03E-18 | 0.62016597 | 0.515 | 0.277 | 7.21E-14 | Proliferating_spleen |
| ENSMMUG00000053918 | 2.30E-18 | 1.40480097 | 0.272 | 0.105 | 8.14E-14 | Proliferating_spleen |
| ZRANB3             | 2.45E-18 | 0.94557431 | 0.52  | 0.303 | 8.68E-14 | Proliferating_spleen |
| RCOR1              | 2.50E-18 | 0.78999009 | 0.491 | 0.26  | 8.86E-14 | Proliferating_spleen |
| MARCKSL1           | 2.61E-18 | 0.96456639 | 0.296 | 0.116 | 9.25E-14 | Proliferating_spleen |
| AKAP17A            | 2.70E-18 | 1.17830713 | 0.338 | 0.145 | 9.55E-14 | Proliferating_spleen |
| NDE1               | 2.79E-18 | 1.00250942 | 0.364 | 0.164 | 9.87E-14 | Proliferating_spleen |
| PTPRA              | 2.80E-18 | 0.62081986 | 0.735 | 0.455 | 9.91E-14 | Proliferating_spleen |

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|--------------------|----------|------------|-------|-------|----------|----------------------|
| RAB11FIP1          | 2.95E-18 | 1.46757615 | 0.412 | 0.214 | 1.04E-13 | Proliferating_spleen |
| REV1               | 3.04E-18 | 0.92865463 | 0.428 | 0.212 | 1.08E-13 | Proliferating_spleen |
| ATP2A3             | 3.09E-18 | 1.01965372 | 0.434 | 0.225 | 1.09E-13 | Proliferating_spleen |
| EPB41L2            | 3.21E-18 | 0.94397945 | 0.427 | 0.208 | 1.14E-13 | Proliferating_spleen |
| SAFB2              | 3.35E-18 | 0.78092489 | 0.495 | 0.26  | 1.19E-13 | Proliferating_spleen |
| KDM4B              | 3.38E-18 | 1.26031357 | 0.293 | 0.117 | 1.20E-13 | Proliferating_spleen |
| CHD2               | 3.59E-18 | 0.5775871  | 0.839 | 0.579 | 1.27E-13 | Proliferating_spleen |
| ZNF407             | 3.71E-18 | 0.72838864 | 0.661 | 0.407 | 1.32E-13 | Proliferating_spleen |
| U8.13              | 3.85E-18 | 0.92473288 | 0.309 | 0.121 | 1.36E-13 | Proliferating_spleen |
| UBE3A              | 4.00E-18 | 0.69647531 | 0.549 | 0.303 | 1.42E-13 | Proliferating_spleen |
| ZSWIM6             | 4.01E-18 | 0.93804835 | 0.458 | 0.242 | 1.42E-13 | Proliferating_spleen |
| SMARCA2            | 4.11E-18 | 0.76361584 | 0.636 | 0.392 | 1.46E-13 | Proliferating_spleen |
| PRIM2              | 4.36E-18 | 0.6547687  | 0.768 | 0.523 | 1.55E-13 | Proliferating_spleen |
| DENND6A            | 4.37E-18 | 0.48028425 | 0.501 | 0.264 | 1.55E-13 | Proliferating_spleen |
| ATRX               | 4.39E-18 | 0.5937309  | 0.822 | 0.577 | 1.56E-13 | Proliferating_spleen |
| DYM                | 4.70E-18 | 0.64818578 | 0.654 | 0.399 | 1.67E-13 | Proliferating_spleen |
| DEK                | 4.86E-18 | 0.52365813 | 0.805 | 0.627 | 1.72E-13 | Proliferating_spleen |
| YY1                | 5.12E-18 | 0.49453831 | 0.589 | 0.328 | 1.81E-13 | Proliferating_spleen |
| C1H1orf112         | 5.13E-18 | 1.16807574 | 0.315 | 0.136 | 1.82E-13 | Proliferating_spleen |
| MGRN1              | 5.32E-18 | 0.68510212 | 0.351 | 0.154 | 1.88E-13 | Proliferating_spleen |
| HS2ST1             | 5.37E-18 | 0.87091769 | 0.546 | 0.329 | 1.90E-13 | Proliferating_spleen |
| ARHGAP19           | 5.51E-18 | 0.84019221 | 0.422 | 0.21  | 1.95E-13 | Proliferating_spleen |
| CLTC               | 5.66E-18 | 0.64357571 | 0.574 | 0.331 | 2.01E-13 | Proliferating_spleen |
| ENSMMUG00000058818 | 5.75E-18 | 0.73491527 | 0.415 | 0.201 | 2.04E-13 | Proliferating_spleen |
| B3GLCT             | 5.97E-18 | 1.20351334 | 0.366 | 0.176 | 2.11E-13 | Proliferating_spleen |
| ABHD17A            | 6.05E-18 | 0.99202644 | 0.273 | 0.102 | 2.14E-13 | Proliferating_spleen |
| AHCTF1             | 6.12E-18 | 0.51114442 | 0.578 | 0.326 | 2.17E-13 | Proliferating_spleen |
| NCOR2              | 6.34E-18 | 1.34599471 | 0.324 | 0.145 | 2.25E-13 | Proliferating_spleen |
| PRKAR2A            | 6.51E-18 | 1.30191746 | 0.301 | 0.125 | 2.31E-13 | Proliferating_spleen |
| DYNC1H1            | 6.54E-18 | 0.89693748 | 0.495 | 0.264 | 2.32E-13 | Proliferating_spleen |
| RGCC               | 6.86E-18 | 0.78928892 | 0.496 | 0.278 | 2.43E-13 | Proliferating_spleen |
| TAF10              | 6.91E-18 | 0.67646422 | 0.265 | 0.093 | 2.45E-13 | Proliferating_spleen |
| ATP2A2             | 7.66E-18 | 0.69528957 | 0.577 | 0.327 | 2.71E-13 | Proliferating_spleen |

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|--------------------|----------|------------|-------|-------|----------|----------------------|
| RAD23B             | 7.67E-18 | 0.73356319 | 0.504 | 0.273 | 2.72E-13 | Proliferating_spleen |
| TMC8               | 7.70E-18 | 0.6905735  | 0.359 | 0.157 | 2.73E-13 | Proliferating_spleen |
| LPIN1              | 7.73E-18 | 1.03214797 | 0.351 | 0.161 | 2.74E-13 | Proliferating_spleen |
| WDPCP              | 7.79E-18 | 0.85903454 | 0.473 | 0.252 | 2.76E-13 | Proliferating_spleen |
| INTS6              | 7.96E-18 | 0.61931856 | 0.614 | 0.368 | 2.82E-13 | Proliferating_spleen |
| CDK5RAP2           | 8.07E-18 | 0.7595728  | 0.588 | 0.341 | 2.86E-13 | Proliferating_spleen |
| IGF2BP3            | 8.37E-18 | 0.88870012 | 0.557 | 0.341 | 2.97E-13 | Proliferating_spleen |
| DLG1               | 8.51E-18 | 0.5260351  | 0.805 | 0.529 | 3.02E-13 | Proliferating_spleen |
| TAOK3              | 8.51E-18 | 0.5876677  | 0.732 | 0.475 | 3.02E-13 | Proliferating_spleen |
| NR2C2              | 8.51E-18 | 0.84833564 | 0.451 | 0.239 | 3.02E-13 | Proliferating_spleen |
| ENSMMUG00000054743 | 8.60E-18 | 0.95619173 | 0.442 | 0.232 | 3.05E-13 | Proliferating_spleen |
| KLHDC2             | 8.64E-18 | 0.98487743 | 0.397 | 0.192 | 3.06E-13 | Proliferating_spleen |
| ZNF146             | 8.64E-18 | 0.67892383 | 0.385 | 0.176 | 3.06E-13 | Proliferating_spleen |
| PTPN9              | 8.74E-18 | 1.09081719 | 0.403 | 0.197 | 3.10E-13 | Proliferating_spleen |
| IMP3               | 8.85E-18 | 0.4249064  | 0.357 | 0.154 | 3.14E-13 | Proliferating_spleen |
| EHD4               | 9.17E-18 | 1.15151176 | 0.292 | 0.116 | 3.25E-13 | Proliferating_spleen |
| SMARCA4            | 1.01E-17 | 0.82072444 | 0.531 | 0.307 | 3.57E-13 | Proliferating_spleen |
| PREX1              | 1.03E-17 | 0.91726368 | 0.696 | 0.462 | 3.65E-13 | Proliferating_spleen |
| CXXC5              | 1.07E-17 | 0.82479974 | 0.359 | 0.161 | 3.79E-13 | Proliferating_spleen |
| UBE2K              | 1.08E-17 | 0.67394855 | 0.676 | 0.436 | 3.84E-13 | Proliferating_spleen |
| SH2D3C             | 1.17E-17 | 1.09393018 | 0.303 | 0.123 | 4.16E-13 | Proliferating_spleen |
| NCOA1              | 1.29E-17 | 0.64145612 | 0.564 | 0.316 | 4.59E-13 | Proliferating_spleen |
| AHCYL2             | 1.33E-17 | 1.22701037 | 0.338 | 0.153 | 4.72E-13 | Proliferating_spleen |
| CDK12              | 1.34E-17 | 0.86808837 | 0.551 | 0.314 | 4.75E-13 | Proliferating_spleen |
| P4HA1              | 1.37E-17 | 0.77919613 | 0.449 | 0.235 | 4.86E-13 | Proliferating_spleen |
| ST6GAL1            | 1.42E-17 | 0.58389935 | 0.674 | 0.432 | 5.04E-13 | Proliferating_spleen |
| RAB10              | 1.45E-17 | 0.56813862 | 0.619 | 0.351 | 5.12E-13 | Proliferating_spleen |
| PWWP2A             | 1.49E-17 | 1.23585594 | 0.259 | 0.095 | 5.28E-13 | Proliferating_spleen |
| RNF115             | 1.57E-17 | 0.85961695 | 0.569 | 0.344 | 5.56E-13 | Proliferating_spleen |
| KIAA0040           | 1.57E-17 | 0.87244116 | 0.5   | 0.281 | 5.58E-13 | Proliferating_spleen |
| BUB1               | 1.58E-17 | 0.91344308 | 0.315 | 0.132 | 5.59E-13 | Proliferating_spleen |
| DDX5               | 1.64E-17 | 0.41048035 | 0.947 | 0.813 | 5.82E-13 | Proliferating_spleen |
| ERC1               | 1.68E-17 | 0.80027139 | 0.576 | 0.351 | 5.95E-13 | Proliferating_spleen |



|         |          |            |       |       |          |                      |
|---------|----------|------------|-------|-------|----------|----------------------|
| DENND1B | 1.69E-17 | 1.04491428 | 0.484 | 0.269 | 6.01E-13 | Proliferating_spleen |
| NSMCE2  | 1.71E-17 | 0.63933177 | 0.746 | 0.496 | 6.05E-13 | Proliferating_spleen |
| PKN2    | 1.80E-17 | 0.63147434 | 0.707 | 0.46  | 6.37E-13 | Proliferating_spleen |
| ZBTB11  | 1.82E-17 | 0.89834084 | 0.434 | 0.222 | 6.47E-13 | Proliferating_spleen |
| PMAIP1  | 1.84E-17 | 0.803462   | 0.531 | 0.309 | 6.53E-13 | Proliferating_spleen |
| SNX29   | 1.88E-17 | 1.19457541 | 0.592 | 0.367 | 6.66E-13 | Proliferating_spleen |
| XPR1    | 1.90E-17 | 0.75312229 | 0.564 | 0.319 | 6.72E-13 | Proliferating_spleen |
| CEP55   | 1.97E-17 | 0.69637466 | 0.289 | 0.111 | 6.98E-13 | Proliferating_spleen |
| SRSF4   | 2.03E-17 | 0.42502083 | 0.792 | 0.513 | 7.19E-13 | Proliferating_spleen |
| GTF3A   | 2.08E-17 | 0.74679664 | 0.33  | 0.139 | 7.38E-13 | Proliferating_spleen |
| DUSP2   | 2.10E-17 | 0.86252813 | 0.268 | 0.099 | 7.43E-13 | Proliferating_spleen |
| ACTN1   | 2.10E-17 | 0.59749263 | 0.505 | 0.279 | 7.44E-13 | Proliferating_spleen |
| MLLT3   | 2.17E-17 | 0.74192331 | 0.711 | 0.482 | 7.70E-13 | Proliferating_spleen |
| GNAQ    | 2.18E-17 | 1.25872965 | 0.486 | 0.287 | 7.71E-13 | Proliferating_spleen |
| SEC63   | 2.26E-17 | 0.57252279 | 0.708 | 0.449 | 7.99E-13 | Proliferating_spleen |
| OSBPL8  | 2.29E-17 | 0.47420161 | 0.854 | 0.578 | 8.11E-13 | Proliferating_spleen |
| SPATA5  | 2.37E-17 | 0.74676689 | 0.568 | 0.326 | 8.39E-13 | Proliferating_spleen |
| SLC35E2 | 2.40E-17 | 0.83880523 | 0.384 | 0.179 | 8.51E-13 | Proliferating_spleen |
| AKR7A2  | 2.43E-17 | 0.64836212 | 0.412 | 0.204 | 8.60E-13 | Proliferating_spleen |
| CHN2    | 2.45E-17 | 1.04719456 | 0.574 | 0.377 | 8.67E-13 | Proliferating_spleen |
| POLH    | 2.49E-17 | 0.62896799 | 0.464 | 0.236 | 8.84E-13 | Proliferating_spleen |
| SIPA1L1 | 2.50E-17 | 0.49098367 | 0.699 | 0.437 | 8.87E-13 | Proliferating_spleen |
| HMGA1   | 2.54E-17 | 0.63772652 | 0.711 | 0.519 | 8.98E-13 | Proliferating_spleen |
| DNMT3A  | 2.60E-17 | 0.9758261  | 0.392 | 0.193 | 9.20E-13 | Proliferating_spleen |
| TRMO    | 2.79E-17 | 0.88121937 | 0.285 | 0.11  | 9.90E-13 | Proliferating_spleen |
| LRPPRC  | 2.83E-17 | 0.62420062 | 0.659 | 0.416 | 1.00E-12 | Proliferating_spleen |
| TCF7    | 2.96E-17 | 0.90243557 | 0.385 | 0.191 | 1.05E-12 | Proliferating_spleen |
| PITPNC1 | 2.99E-17 | 0.81264963 | 0.878 | 0.721 | 1.06E-12 | Proliferating_spleen |
| BCLAF1  | 3.01E-17 | 0.58939447 | 0.904 | 0.652 | 1.07E-12 | Proliferating_spleen |
| BCL11B  | 3.12E-17 | 0.92201548 | 0.624 | 0.449 | 1.11E-12 | Proliferating_spleen |
| TRIP12  | 3.31E-17 | 0.58995768 | 0.7   | 0.433 | 1.17E-12 | Proliferating_spleen |
| PARG    | 3.33E-17 | 1.03915981 | 0.358 | 0.168 | 1.18E-12 | Proliferating_spleen |
| H4C5    | 3.35E-17 | 0.67083635 | 0.427 | 0.212 | 1.19E-12 | Proliferating_spleen |

|           |          |            |       |       |          |                      |
|-----------|----------|------------|-------|-------|----------|----------------------|
| MYO5A     | 3.46E-17 | 0.74082289 | 0.63  | 0.384 | 1.23E-12 | Proliferating_spleen |
| SERTAD2   | 3.47E-17 | 0.84754823 | 0.465 | 0.255 | 1.23E-12 | Proliferating_spleen |
| SYNRG     | 3.62E-17 | 0.96207132 | 0.449 | 0.245 | 1.28E-12 | Proliferating_spleen |
| CAMKMT    | 3.84E-17 | 0.76358322 | 0.574 | 0.342 | 1.36E-12 | Proliferating_spleen |
| AKNA      | 3.86E-17 | 0.61528189 | 0.615 | 0.356 | 1.37E-12 | Proliferating_spleen |
| PKNOX1    | 3.89E-17 | 1.38167691 | 0.264 | 0.103 | 1.38E-12 | Proliferating_spleen |
| HNRNPA2B1 | 3.90E-17 | 0.32328722 | 0.972 | 0.937 | 1.38E-12 | Proliferating_spleen |
| RACGAP1   | 3.92E-17 | 0.70418489 | 0.304 | 0.123 | 1.39E-12 | Proliferating_spleen |
| BRCA1     | 4.02E-17 | 0.79351658 | 0.592 | 0.35  | 1.43E-12 | Proliferating_spleen |
| SCAF4     | 4.06E-17 | 0.71097894 | 0.52  | 0.289 | 1.44E-12 | Proliferating_spleen |
| RHEB      | 4.10E-17 | 0.50661097 | 0.755 | 0.502 | 1.45E-12 | Proliferating_spleen |
| GMPS      | 4.11E-17 | 0.62461433 | 0.528 | 0.289 | 1.46E-12 | Proliferating_spleen |
| TMEM164   | 4.21E-17 | 1.20853236 | 0.291 | 0.122 | 1.49E-12 | Proliferating_spleen |
| RABGEF1   | 4.23E-17 | 0.84653658 | 0.586 | 0.366 | 1.50E-12 | Proliferating_spleen |
| SND1      | 4.26E-17 | 0.7079527  | 0.692 | 0.451 | 1.51E-12 | Proliferating_spleen |
| FOXN3     | 4.33E-17 | 0.40014615 | 0.92  | 0.636 | 1.53E-12 | Proliferating_spleen |
| PGAM1     | 4.88E-17 | 0.96466387 | 0.277 | 0.106 | 1.73E-12 | Proliferating_spleen |
| CHORDC1   | 4.95E-17 | 0.7143776  | 0.603 | 0.356 | 1.75E-12 | Proliferating_spleen |
| DNAJC24   | 5.29E-17 | 0.69002485 | 0.653 | 0.411 | 1.87E-12 | Proliferating_spleen |
| TASOR2    | 5.44E-17 | 0.62603905 | 0.577 | 0.333 | 1.93E-12 | Proliferating_spleen |
| KIF13B    | 5.47E-17 | 1.09696269 | 0.37  | 0.181 | 1.94E-12 | Proliferating_spleen |
| PARN      | 5.67E-17 | 0.85338348 | 0.52  | 0.295 | 2.01E-12 | Proliferating_spleen |
| PDS5B     | 5.95E-17 | 0.57814808 | 0.768 | 0.525 | 2.11E-12 | Proliferating_spleen |
| ITSN2     | 6.05E-17 | 0.58792238 | 0.743 | 0.487 | 2.14E-12 | Proliferating_spleen |
| PHF20L1   | 6.42E-17 | 0.82809528 | 0.4   | 0.197 | 2.27E-12 | Proliferating_spleen |
| TRIM33    | 6.49E-17 | 0.614767   | 0.641 | 0.392 | 2.30E-12 | Proliferating_spleen |
| SORL1     | 6.53E-17 | 0.66706285 | 0.657 | 0.407 | 2.31E-12 | Proliferating_spleen |
| TICAM2    | 6.94E-17 | 0.70128518 | 0.269 | 0.101 | 2.46E-12 | Proliferating_spleen |
| TMEM201   | 6.98E-17 | 0.81616155 | 0.378 | 0.179 | 2.47E-12 | Proliferating_spleen |
| PDSS2     | 7.09E-17 | 0.75304708 | 0.451 | 0.239 | 2.51E-12 | Proliferating_spleen |
| YTHDC1    | 7.28E-17 | 0.58111542 | 0.704 | 0.443 | 2.58E-12 | Proliferating_spleen |
| ODC1      | 7.85E-17 | 0.98952553 | 0.315 | 0.134 | 2.78E-12 | Proliferating_spleen |
| EVI2B     | 8.05E-17 | 0.60142235 | 0.404 | 0.2   | 2.85E-12 | Proliferating_spleen |

|         |          |            |       |       |          |                      |
|---------|----------|------------|-------|-------|----------|----------------------|
| RC3H2   | 8.36E-17 | 0.93547634 | 0.315 | 0.136 | 2.96E-12 | Proliferating_spleen |
| CWC27   | 8.50E-17 | 0.73865936 | 0.584 | 0.355 | 3.01E-12 | Proliferating_spleen |
| SETD3   | 9.14E-17 | 0.87475957 | 0.403 | 0.201 | 3.24E-12 | Proliferating_spleen |
| SSBP3   | 9.46E-17 | 0.73007902 | 0.536 | 0.317 | 3.35E-12 | Proliferating_spleen |
| ITGA1   | 9.66E-17 | 1.33217694 | 0.345 | 0.17  | 3.42E-12 | Proliferating_spleen |
| RUFY3   | 9.75E-17 | 1.27450398 | 0.334 | 0.155 | 3.45E-12 | Proliferating_spleen |
| DCAF1   | 9.92E-17 | 0.8917308  | 0.466 | 0.256 | 3.52E-12 | Proliferating_spleen |
| ADK     | 1.03E-16 | 0.66186562 | 0.641 | 0.412 | 3.65E-12 | Proliferating_spleen |
| THAP9   | 1.03E-16 | 1.44881819 | 0.255 | 0.098 | 3.66E-12 | Proliferating_spleen |
| UBALD2  | 1.10E-16 | 1.3743755  | 0.314 | 0.142 | 3.91E-12 | Proliferating_spleen |
| NCK2    | 1.12E-16 | 0.95287398 | 0.455 | 0.259 | 3.96E-12 | Proliferating_spleen |
| DGLUCY  | 1.14E-16 | 1.31599804 | 0.274 | 0.111 | 4.04E-12 | Proliferating_spleen |
| DARS1   | 1.23E-16 | 0.52736503 | 0.565 | 0.331 | 4.37E-12 | Proliferating_spleen |
| CAB39   | 1.25E-16 | 0.54399704 | 0.761 | 0.506 | 4.43E-12 | Proliferating_spleen |
| KRIT1   | 1.26E-16 | 0.77563535 | 0.48  | 0.261 | 4.46E-12 | Proliferating_spleen |
| MSH3    | 1.31E-16 | 0.68040701 | 0.573 | 0.333 | 4.66E-12 | Proliferating_spleen |
| ATF1    | 1.33E-16 | 0.73818215 | 0.468 | 0.249 | 4.69E-12 | Proliferating_spleen |
| ITFG2   | 1.33E-16 | 0.86865616 | 0.462 | 0.248 | 4.70E-12 | Proliferating_spleen |
| EIF3F   | 1.39E-16 | 0.64939168 | 0.716 | 0.53  | 4.94E-12 | Proliferating_spleen |
| MYC     | 1.63E-16 | 0.97507421 | 0.269 | 0.106 | 5.76E-12 | Proliferating_spleen |
| SPTBN1  | 1.66E-16 | 0.49254788 | 0.705 | 0.451 | 5.89E-12 | Proliferating_spleen |
| GATAD2B | 1.66E-16 | 0.52007748 | 0.719 | 0.458 | 5.89E-12 | Proliferating_spleen |
| SLC6A6  | 1.69E-16 | 1.26963095 | 0.28  | 0.116 | 6.00E-12 | Proliferating_spleen |
| MAF1    | 1.80E-16 | 0.35241381 | 0.357 | 0.157 | 6.37E-12 | Proliferating_spleen |
| PRORP   | 1.83E-16 | 1.31400887 | 0.293 | 0.126 | 6.48E-12 | Proliferating_spleen |
| TSEN54  | 1.87E-16 | 0.45614039 | 0.303 | 0.125 | 6.64E-12 | Proliferating_spleen |
| CREB1   | 1.89E-16 | 0.57524106 | 0.573 | 0.331 | 6.70E-12 | Proliferating_spleen |
| MCM3AP  | 1.91E-16 | 0.89181936 | 0.323 | 0.141 | 6.78E-12 | Proliferating_spleen |
| AHCYL1  | 1.95E-16 | 0.7862646  | 0.315 | 0.136 | 6.92E-12 | Proliferating_spleen |
| TTC19   | 1.96E-16 | 0.68367165 | 0.474 | 0.258 | 6.93E-12 | Proliferating_spleen |
| POU2F1  | 1.97E-16 | 0.58337468 | 0.631 | 0.381 | 6.99E-12 | Proliferating_spleen |
| CBFA2T2 | 2.02E-16 | 1.20339165 | 0.38  | 0.192 | 7.17E-12 | Proliferating_spleen |
| MTOR    | 2.11E-16 | 1.08735164 | 0.305 | 0.133 | 7.46E-12 | Proliferating_spleen |

|                   |          |            |       |       |          |                      |
|-------------------|----------|------------|-------|-------|----------|----------------------|
| CEP250            | 2.14E-16 | 1.29238949 | 0.28  | 0.116 | 7.60E-12 | Proliferating_spleen |
| RAB1A             | 2.17E-16 | 0.7136956  | 0.691 | 0.451 | 7.69E-12 | Proliferating_spleen |
| GOLM2             | 2.21E-16 | 0.73256026 | 0.658 | 0.413 | 7.81E-12 | Proliferating_spleen |
| DENND4A           | 2.23E-16 | 0.66016152 | 0.868 | 0.684 | 7.89E-12 | Proliferating_spleen |
| ENSMUG00000042837 | 2.32E-16 | 1.08079717 | 0.359 | 0.179 | 8.20E-12 | Proliferating_spleen |
| FEZ2              | 2.36E-16 | 0.99725283 | 0.328 | 0.15  | 8.36E-12 | Proliferating_spleen |
| NUP58             | 2.54E-16 | 0.68418067 | 0.382 | 0.185 | 9.01E-12 | Proliferating_spleen |
| ANKIB1            | 2.59E-16 | 0.69079594 | 0.628 | 0.376 | 9.18E-12 | Proliferating_spleen |
| INCENP            | 2.61E-16 | 1.18974828 | 0.274 | 0.11  | 9.24E-12 | Proliferating_spleen |
| ENSMUG00000060923 | 2.73E-16 | 0.55533569 | 0.861 | 0.694 | 9.69E-12 | Proliferating_spleen |
| STRN              | 2.77E-16 | 0.77504314 | 0.451 | 0.247 | 9.82E-12 | Proliferating_spleen |
| ANO10             | 2.79E-16 | 1.08855013 | 0.284 | 0.119 | 9.89E-12 | Proliferating_spleen |
| MAP2K3            | 2.82E-16 | 0.89343947 | 0.455 | 0.246 | 1.00E-11 | Proliferating_spleen |
| QKI               | 2.95E-16 | 0.78073553 | 0.723 | 0.479 | 1.05E-11 | Proliferating_spleen |
| OTUD4             | 2.99E-16 | 0.90410713 | 0.345 | 0.16  | 1.06E-11 | Proliferating_spleen |
| CCNB1             | 3.01E-16 | 0.76235021 | 0.282 | 0.114 | 1.07E-11 | Proliferating_spleen |
| GRAMD4            | 3.02E-16 | 1.2527826  | 0.272 | 0.113 | 1.07E-11 | Proliferating_spleen |
| KHDRBS1           | 3.12E-16 | 0.45057023 | 0.627 | 0.376 | 1.10E-11 | Proliferating_spleen |
| CHD1              | 3.12E-16 | 0.49151722 | 0.627 | 0.37  | 1.11E-11 | Proliferating_spleen |
| HSF1              | 3.23E-16 | 0.84313491 | 0.309 | 0.132 | 1.15E-11 | Proliferating_spleen |
| SH3KBP1           | 3.30E-16 | 0.48926047 | 0.897 | 0.696 | 1.17E-11 | Proliferating_spleen |
| RCOR3             | 3.30E-16 | 0.80494816 | 0.489 | 0.272 | 1.17E-11 | Proliferating_spleen |
| ARHGAP25          | 3.35E-16 | 0.84696706 | 0.541 | 0.316 | 1.19E-11 | Proliferating_spleen |
| CBLB              | 3.39E-16 | 0.55729326 | 0.877 | 0.659 | 1.20E-11 | Proliferating_spleen |
| CRTC3             | 3.50E-16 | 0.5039157  | 0.684 | 0.425 | 1.24E-11 | Proliferating_spleen |
| NADSYN1           | 3.52E-16 | 0.54474101 | 0.48  | 0.25  | 1.25E-11 | Proliferating_spleen |
| SNX5              | 3.61E-16 | 0.74755494 | 0.48  | 0.266 | 1.28E-11 | Proliferating_spleen |
| TRAPPC9           | 3.74E-16 | 0.75458603 | 0.512 | 0.297 | 1.32E-11 | Proliferating_spleen |
| PPP3CB            | 3.79E-16 | 0.98357206 | 0.316 | 0.14  | 1.34E-11 | Proliferating_spleen |
| MGME1             | 3.91E-16 | 0.64378249 | 0.434 | 0.223 | 1.39E-11 | Proliferating_spleen |
| SMARCD1           | 3.93E-16 | 0.81308372 | 0.291 | 0.119 | 1.39E-11 | Proliferating_spleen |
| UBASH3B           | 4.22E-16 | 0.9033118  | 0.53  | 0.316 | 1.50E-11 | Proliferating_spleen |
| RFX7              | 4.34E-16 | 0.86142547 | 0.461 | 0.257 | 1.54E-11 | Proliferating_spleen |

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|-------------------|----------|------------|-------|-------|----------|----------------------|
| THADA             | 4.59E-16 | 0.60138403 | 0.627 | 0.387 | 1.62E-11 | Proliferating_spleen |
| UBE2G1            | 4.59E-16 | 0.58779262 | 0.62  | 0.365 | 1.63E-11 | Proliferating_spleen |
| ETV6              | 4.60E-16 | 1.06588207 | 0.396 | 0.204 | 1.63E-11 | Proliferating_spleen |
| RRP1B             | 4.81E-16 | 0.73244168 | 0.454 | 0.244 | 1.70E-11 | Proliferating_spleen |
| EBAG9             | 4.84E-16 | 1.27174505 | 0.269 | 0.109 | 1.72E-11 | Proliferating_spleen |
| SPAG5             | 4.84E-16 | 0.79107186 | 0.326 | 0.144 | 1.72E-11 | Proliferating_spleen |
| DENND1A           | 4.96E-16 | 0.69487821 | 0.561 | 0.33  | 1.76E-11 | Proliferating_spleen |
| ZNF148            | 5.39E-16 | 0.57290493 | 0.699 | 0.454 | 1.91E-11 | Proliferating_spleen |
| TOMM70            | 5.46E-16 | 0.82595487 | 0.295 | 0.123 | 1.94E-11 | Proliferating_spleen |
| PRDM2             | 5.52E-16 | 0.66303337 | 0.535 | 0.317 | 1.95E-11 | Proliferating_spleen |
| VPS8              | 5.93E-16 | 0.8268213  | 0.435 | 0.234 | 2.10E-11 | Proliferating_spleen |
| ATR               | 6.59E-16 | 0.70624375 | 0.562 | 0.342 | 2.33E-11 | Proliferating_spleen |
| SWAP70            | 6.77E-16 | 1.55745945 | 0.286 | 0.128 | 2.40E-11 | Proliferating_spleen |
| EIF3B             | 6.83E-16 | 0.6772127  | 0.391 | 0.188 | 2.42E-11 | Proliferating_spleen |
| AFTPH             | 6.84E-16 | 0.64687956 | 0.569 | 0.348 | 2.42E-11 | Proliferating_spleen |
| EIPR1             | 7.15E-16 | 0.64892702 | 0.532 | 0.301 | 2.53E-11 | Proliferating_spleen |
| KDM2B             | 7.37E-16 | 0.9099956  | 0.508 | 0.294 | 2.61E-11 | Proliferating_spleen |
| TRAF3             | 7.81E-16 | 0.72238014 | 0.603 | 0.377 | 2.77E-11 | Proliferating_spleen |
| TRIM24            | 8.06E-16 | 0.5696999  | 0.509 | 0.289 | 2.86E-11 | Proliferating_spleen |
| ZSCAN18           | 8.14E-16 | 1.23360158 | 0.251 | 0.098 | 2.88E-11 | Proliferating_spleen |
| TNRC18            | 8.24E-16 | 1.1792282  | 0.336 | 0.158 | 2.92E-11 | Proliferating_spleen |
| HERC2             | 8.27E-16 | 0.74420921 | 0.591 | 0.367 | 2.93E-11 | Proliferating_spleen |
| ENSMUG00000017297 | 8.55E-16 | 0.79891263 | 0.455 | 0.245 | 3.03E-11 | Proliferating_spleen |
| GOLPH3            | 8.64E-16 | 0.6179939  | 0.638 | 0.396 | 3.06E-11 | Proliferating_spleen |
| CLEC16A           | 9.27E-16 | 0.90101901 | 0.361 | 0.179 | 3.28E-11 | Proliferating_spleen |
| FBXO5             | 9.73E-16 | 0.67530934 | 0.453 | 0.24  | 3.45E-11 | Proliferating_spleen |
| SACS              | 9.78E-16 | 1.14871311 | 0.27  | 0.113 | 3.47E-11 | Proliferating_spleen |
| IPO11             | 9.90E-16 | 0.75548179 | 0.48  | 0.266 | 3.51E-11 | Proliferating_spleen |
| WDR37             | 1.00E-15 | 0.97438526 | 0.296 | 0.128 | 3.55E-11 | Proliferating_spleen |
| SBNO1             | 1.02E-15 | 0.75993647 | 0.495 | 0.273 | 3.60E-11 | Proliferating_spleen |
| AUTS2             | 1.09E-15 | 1.07183916 | 0.474 | 0.282 | 3.85E-11 | Proliferating_spleen |
| EXOC2             | 1.10E-15 | 0.76095961 | 0.414 | 0.214 | 3.89E-11 | Proliferating_spleen |
| LCOR              | 1.11E-15 | 0.56248846 | 0.699 | 0.43  | 3.93E-11 | Proliferating_spleen |

|                     |          |            |       |       |          |                      |
|---------------------|----------|------------|-------|-------|----------|----------------------|
| PIBF1               | 1.12E-15 | 0.54827803 | 0.569 | 0.329 | 3.99E-11 | Proliferating_spleen |
| CENPE               | 1.17E-15 | 0.7736222  | 0.55  | 0.342 | 4.13E-11 | Proliferating_spleen |
| ENSMMUG000000003130 | 1.19E-15 | 0.55155505 | 0.691 | 0.449 | 4.20E-11 | Proliferating_spleen |
| TSPAN5              | 1.23E-15 | 0.75566032 | 0.311 | 0.141 | 4.35E-11 | Proliferating_spleen |
| ETF1                | 1.23E-15 | 0.49979066 | 0.643 | 0.39  | 4.38E-11 | Proliferating_spleen |
| TNPO3               | 1.24E-15 | 0.53444446 | 0.555 | 0.318 | 4.38E-11 | Proliferating_spleen |
| YIPF4               | 1.26E-15 | 0.75214197 | 0.261 | 0.101 | 4.45E-11 | Proliferating_spleen |
| DICER1              | 1.26E-15 | 0.68290138 | 0.408 | 0.205 | 4.48E-11 | Proliferating_spleen |
| ATM                 | 1.30E-15 | 0.58650753 | 0.593 | 0.356 | 4.59E-11 | Proliferating_spleen |
| PPP1R12B            | 1.30E-15 | 0.7638897  | 0.504 | 0.293 | 4.60E-11 | Proliferating_spleen |
| EIF2AK3             | 1.31E-15 | 0.59281053 | 0.658 | 0.432 | 4.65E-11 | Proliferating_spleen |
| SP3                 | 1.34E-15 | 0.56122084 | 0.612 | 0.366 | 4.75E-11 | Proliferating_spleen |
| FAM174C             | 1.36E-15 | 0.89709464 | 0.28  | 0.116 | 4.83E-11 | Proliferating_spleen |
| RSRC1               | 1.38E-15 | 0.61395223 | 0.655 | 0.432 | 4.90E-11 | Proliferating_spleen |
| C15orf41            | 1.38E-15 | 0.69613918 | 0.45  | 0.251 | 4.91E-11 | Proliferating_spleen |
| FUBP1               | 1.39E-15 | 0.48423726 | 0.793 | 0.545 | 4.91E-11 | Proliferating_spleen |
| SLC2A3              | 1.45E-15 | 0.71044901 | 0.715 | 0.514 | 5.13E-11 | Proliferating_spleen |
| RBL1                | 1.52E-15 | 0.59292698 | 0.511 | 0.286 | 5.39E-11 | Proliferating_spleen |
| WWP1                | 1.53E-15 | 1.0164404  | 0.385 | 0.201 | 5.43E-11 | Proliferating_spleen |
| MDM4                | 1.60E-15 | 0.66946976 | 0.582 | 0.348 | 5.66E-11 | Proliferating_spleen |
| JADE1               | 1.64E-15 | 0.66367334 | 0.359 | 0.174 | 5.82E-11 | Proliferating_spleen |
| SASH3               | 1.65E-15 | 0.51475504 | 0.409 | 0.198 | 5.85E-11 | Proliferating_spleen |
| ACTL6A              | 1.69E-15 | 0.45623468 | 0.304 | 0.127 | 5.97E-11 | Proliferating_spleen |
| MAP3K1              | 1.78E-15 | 0.78020134 | 0.522 | 0.314 | 6.30E-11 | Proliferating_spleen |
| UBR5                | 1.79E-15 | 0.60597712 | 0.73  | 0.48  | 6.35E-11 | Proliferating_spleen |
| FNBP1L              | 1.80E-15 | 0.78368395 | 0.485 | 0.273 | 6.37E-11 | Proliferating_spleen |
| SKAP2               | 1.81E-15 | 0.79808873 | 0.409 | 0.211 | 6.41E-11 | Proliferating_spleen |
| TRIP11              | 1.82E-15 | 0.77923582 | 0.293 | 0.125 | 6.44E-11 | Proliferating_spleen |
| ENSMMUG000000064232 | 1.82E-15 | 0.47224478 | 0.439 | 0.225 | 6.45E-11 | Proliferating_spleen |
| VKORC1L1            | 1.91E-15 | 1.11610324 | 0.347 | 0.173 | 6.75E-11 | Proliferating_spleen |
| B4GALT1             | 1.91E-15 | 0.80054137 | 0.355 | 0.172 | 6.77E-11 | Proliferating_spleen |
| MAML2               | 1.99E-15 | 0.54502116 | 0.803 | 0.577 | 7.07E-11 | Proliferating_spleen |
| TOPBP1              | 2.03E-15 | 0.50279164 | 0.576 | 0.341 | 7.20E-11 | Proliferating_spleen |

|                   |          |            |       |       |          |                      |
|-------------------|----------|------------|-------|-------|----------|----------------------|
| BTRC              | 2.11E-15 | 0.8197447  | 0.426 | 0.227 | 7.49E-11 | Proliferating_spleen |
| POLR2A            | 2.13E-15 | 0.56561898 | 0.636 | 0.399 | 7.54E-11 | Proliferating_spleen |
| DCAF6             | 2.27E-15 | 0.74087042 | 0.492 | 0.271 | 8.04E-11 | Proliferating_spleen |
| UBE2D2            | 2.32E-15 | 0.52266611 | 0.509 | 0.289 | 8.23E-11 | Proliferating_spleen |
| REL               | 2.36E-15 | 0.46206434 | 0.788 | 0.569 | 8.36E-11 | Proliferating_spleen |
| TANGO6            | 2.44E-15 | 0.94842175 | 0.45  | 0.254 | 8.65E-11 | Proliferating_spleen |
| NUDT4             | 2.47E-15 | 1.04370456 | 0.331 | 0.155 | 8.74E-11 | Proliferating_spleen |
| PPP2R2D           | 2.52E-15 | 0.56235886 | 0.488 | 0.274 | 8.95E-11 | Proliferating_spleen |
| DCAF5             | 2.58E-15 | 0.72199541 | 0.496 | 0.285 | 9.13E-11 | Proliferating_spleen |
| CHD9              | 2.63E-15 | 0.80041332 | 0.443 | 0.246 | 9.31E-11 | Proliferating_spleen |
| IL17RA            | 2.78E-15 | 1.15612453 | 0.265 | 0.11  | 9.83E-11 | Proliferating_spleen |
| OAS2              | 2.82E-15 | 0.80844927 | 0.25  | 0.097 | 1.00E-10 | Proliferating_spleen |
| PCNT              | 3.18E-15 | 0.67386795 | 0.419 | 0.219 | 1.13E-10 | Proliferating_spleen |
| LRRFIP2           | 3.39E-15 | 0.59973015 | 0.493 | 0.275 | 1.20E-10 | Proliferating_spleen |
| SPAST             | 3.40E-15 | 0.79234322 | 0.297 | 0.13  | 1.21E-10 | Proliferating_spleen |
| MSH6              | 3.70E-15 | 0.61587432 | 0.373 | 0.184 | 1.31E-10 | Proliferating_spleen |
| SNX13             | 3.73E-15 | 0.64647349 | 0.542 | 0.318 | 1.32E-10 | Proliferating_spleen |
| OSBPL11           | 3.76E-15 | 0.77869936 | 0.336 | 0.162 | 1.33E-10 | Proliferating_spleen |
| NPAT              | 4.10E-15 | 0.555592   | 0.622 | 0.398 | 1.45E-10 | Proliferating_spleen |
| USP36             | 4.11E-15 | 0.69479373 | 0.596 | 0.368 | 1.46E-10 | Proliferating_spleen |
| TACC1             | 4.14E-15 | 0.49082752 | 0.645 | 0.416 | 1.47E-10 | Proliferating_spleen |
| ENSMUG00000049687 | 4.22E-15 | 0.51919916 | 0.3   | 0.133 | 1.50E-10 | Proliferating_spleen |
| ENSMUG00000064760 | 4.39E-15 | 0.61140188 | 0.265 | 0.104 | 1.55E-10 | Proliferating_spleen |
| SYNCRIP           | 4.40E-15 | 0.4958654  | 0.691 | 0.454 | 1.56E-10 | Proliferating_spleen |
| DROSHA            | 4.41E-15 | 1.31240149 | 0.291 | 0.132 | 1.56E-10 | Proliferating_spleen |
| ASPM              | 4.49E-15 | 0.74276282 | 0.501 | 0.291 | 1.59E-10 | Proliferating_spleen |
| PARP6             | 4.51E-15 | 0.53016628 | 0.576 | 0.356 | 1.60E-10 | Proliferating_spleen |
| ZNF384            | 4.52E-15 | 0.91668551 | 0.295 | 0.13  | 1.60E-10 | Proliferating_spleen |
| RUFY1             | 4.82E-15 | 0.78749472 | 0.293 | 0.126 | 1.71E-10 | Proliferating_spleen |
| OGDH              | 4.88E-15 | 0.51851098 | 0.484 | 0.27  | 1.73E-10 | Proliferating_spleen |
| HSPA8             | 4.89E-15 | 0.39750938 | 0.88  | 0.813 | 1.73E-10 | Proliferating_spleen |
| BABAM2            | 4.91E-15 | 0.61109295 | 0.643 | 0.41  | 1.74E-10 | Proliferating_spleen |
| SPECC1L           | 5.07E-15 | 0.46320386 | 0.672 | 0.426 | 1.80E-10 | Proliferating_spleen |

|          |          |            |       |       |          |                      |
|----------|----------|------------|-------|-------|----------|----------------------|
| ZDHHC20  | 5.15E-15 | 0.61870435 | 0.526 | 0.297 | 1.82E-10 | Proliferating_spleen |
| RPS6KA3  | 5.26E-15 | 0.65174378 | 0.618 | 0.392 | 1.86E-10 | Proliferating_spleen |
| DIP2B    | 5.49E-15 | 0.36392783 | 0.795 | 0.526 | 1.94E-10 | Proliferating_spleen |
| HIRA     | 5.65E-15 | 0.85249652 | 0.388 | 0.198 | 2.00E-10 | Proliferating_spleen |
| GAS7     | 5.69E-15 | 1.08588686 | 0.319 | 0.154 | 2.02E-10 | Proliferating_spleen |
| ATP6V0D1 | 5.79E-15 | 0.53168424 | 0.569 | 0.338 | 2.05E-10 | Proliferating_spleen |
| TRA2A    | 5.87E-15 | 0.46808772 | 0.895 | 0.673 | 2.08E-10 | Proliferating_spleen |
| DEF6     | 5.97E-15 | 0.64191591 | 0.338 | 0.153 | 2.12E-10 | Proliferating_spleen |
| KBTBD2   | 6.05E-15 | 0.6879735  | 0.478 | 0.277 | 2.14E-10 | Proliferating_spleen |
| CAMK2G   | 6.05E-15 | 1.19561057 | 0.27  | 0.116 | 2.14E-10 | Proliferating_spleen |
| GTDC1    | 6.33E-15 | 0.89129161 | 0.409 | 0.222 | 2.24E-10 | Proliferating_spleen |
| PLCL2    | 6.53E-15 | 0.52592825 | 0.657 | 0.421 | 2.31E-10 | Proliferating_spleen |
| TMEM70   | 6.53E-15 | 0.56556535 | 0.254 | 0.097 | 2.31E-10 | Proliferating_spleen |
| PITRM1   | 6.54E-15 | 0.89121716 | 0.345 | 0.165 | 2.32E-10 | Proliferating_spleen |
| INSYN2B  | 6.58E-15 | 1.17004008 | 0.253 | 0.103 | 2.33E-10 | Proliferating_spleen |
| ST8SIA4  | 6.60E-15 | 0.56504251 | 0.63  | 0.4   | 2.34E-10 | Proliferating_spleen |
| SLC16A7  | 6.62E-15 | 0.7186611  | 0.37  | 0.187 | 2.35E-10 | Proliferating_spleen |
| FAM13B   | 7.01E-15 | 0.72779153 | 0.553 | 0.337 | 2.48E-10 | Proliferating_spleen |
| CCDC50   | 7.05E-15 | 0.93932321 | 0.438 | 0.255 | 2.50E-10 | Proliferating_spleen |
| TP53BP2  | 7.15E-15 | 0.73182202 | 0.446 | 0.255 | 2.53E-10 | Proliferating_spleen |
| ETS1     | 7.17E-15 | 0.39451283 | 0.897 | 0.743 | 2.54E-10 | Proliferating_spleen |
| REEP3    | 9.01E-15 | 1.00799928 | 0.291 | 0.128 | 3.19E-10 | Proliferating_spleen |
| LNPEP    | 9.08E-15 | 0.63662837 | 0.709 | 0.464 | 3.22E-10 | Proliferating_spleen |
| AGGF1    | 9.10E-15 | 0.73018067 | 0.338 | 0.157 | 3.22E-10 | Proliferating_spleen |
| AAK1     | 9.16E-15 | 0.52134386 | 0.719 | 0.489 | 3.24E-10 | Proliferating_spleen |
| CCAR1    | 9.20E-15 | 0.69032567 | 0.546 | 0.328 | 3.26E-10 | Proliferating_spleen |
| SLC12A6  | 9.56E-15 | 0.60137781 | 0.67  | 0.425 | 3.39E-10 | Proliferating_spleen |
| TAF1     | 9.71E-15 | 0.61066948 | 0.477 | 0.268 | 3.44E-10 | Proliferating_spleen |
| CEPT1    | 1.04E-14 | 0.52870467 | 0.412 | 0.21  | 3.68E-10 | Proliferating_spleen |
| TMEM181  | 1.09E-14 | 0.7940924  | 0.474 | 0.278 | 3.85E-10 | Proliferating_spleen |
| DIAPH1   | 1.10E-14 | 0.40639612 | 0.777 | 0.531 | 3.91E-10 | Proliferating_spleen |
| GTSE1    | 1.11E-14 | 0.63581544 | 0.419 | 0.222 | 3.93E-10 | Proliferating_spleen |
| PER1     | 1.12E-14 | 0.48907366 | 0.591 | 0.349 | 3.96E-10 | Proliferating_spleen |



|                  |          |            |       |       |          |                      |
|------------------|----------|------------|-------|-------|----------|----------------------|
| RNF216           | 1.13E-14 | 0.60486602 | 0.682 | 0.431 | 3.99E-10 | Proliferating_spleen |
| MAN1A2           | 1.17E-14 | 0.68424175 | 0.566 | 0.343 | 4.16E-10 | Proliferating_spleen |
| KIAA2026         | 1.24E-14 | 0.71796253 | 0.351 | 0.173 | 4.39E-10 | Proliferating_spleen |
| SCLT1            | 1.27E-14 | 0.63837526 | 0.686 | 0.447 | 4.50E-10 | Proliferating_spleen |
| CENPP            | 1.27E-14 | 0.77156108 | 0.605 | 0.39  | 4.50E-10 | Proliferating_spleen |
| PANK2            | 1.32E-14 | 0.50791789 | 0.319 | 0.144 | 4.68E-10 | Proliferating_spleen |
| FOCAD            | 1.32E-14 | 0.89278871 | 0.454 | 0.262 | 4.68E-10 | Proliferating_spleen |
| GSK3A            | 1.33E-14 | 0.58719383 | 0.297 | 0.13  | 4.70E-10 | Proliferating_spleen |
| ITPR2            | 1.33E-14 | 0.48731948 | 0.772 | 0.527 | 4.72E-10 | Proliferating_spleen |
| TESC             | 1.38E-14 | 0.54240048 | 0.651 | 0.468 | 4.91E-10 | Proliferating_spleen |
| RAF1             | 1.51E-14 | 0.49258193 | 0.619 | 0.381 | 5.35E-10 | Proliferating_spleen |
| RAC1             | 1.58E-14 | 0.55551773 | 0.481 | 0.271 | 5.59E-10 | Proliferating_spleen |
| ARFGAP3          | 1.61E-14 | 0.59735704 | 0.692 | 0.438 | 5.71E-10 | Proliferating_spleen |
| TBCK             | 1.61E-14 | 0.90637909 | 0.335 | 0.162 | 5.72E-10 | Proliferating_spleen |
| DDX17            | 1.63E-14 | 0.4540591  | 0.816 | 0.56  | 5.77E-10 | Proliferating_spleen |
| Metazoa-SRP.1344 | 1.63E-14 | 0.97450306 | 0.286 | 0.126 | 5.78E-10 | Proliferating_spleen |
| SUPT20H          | 1.69E-14 | 0.55104627 | 0.441 | 0.233 | 5.99E-10 | Proliferating_spleen |
| WBP1L            | 1.70E-14 | 0.75395694 | 0.427 | 0.234 | 6.02E-10 | Proliferating_spleen |
| ARHGAP11A        | 1.71E-14 | 0.59033088 | 0.461 | 0.26  | 6.08E-10 | Proliferating_spleen |
| FKBP15           | 1.82E-14 | 1.06532215 | 0.35  | 0.178 | 6.44E-10 | Proliferating_spleen |
| FOXO1            | 1.83E-14 | 0.50410382 | 0.723 | 0.472 | 6.47E-10 | Proliferating_spleen |
| INTS3            | 1.90E-14 | 0.73396888 | 0.295 | 0.132 | 6.74E-10 | Proliferating_spleen |
| GTPBP1           | 1.90E-14 | 0.94075795 | 0.377 | 0.2   | 6.74E-10 | Proliferating_spleen |
| CITED1           | 1.91E-14 | 0.85509057 | 0.469 | 0.272 | 6.76E-10 | Proliferating_spleen |
| EIF4A2           | 1.93E-14 | 0.40441891 | 0.791 | 0.551 | 6.83E-10 | Proliferating_spleen |
| CNOT1            | 1.94E-14 | 0.45271174 | 0.751 | 0.507 | 6.89E-10 | Proliferating_spleen |
| HSPA5            | 1.97E-14 | 0.61405392 | 0.742 | 0.532 | 6.97E-10 | Proliferating_spleen |
| KIF2C            | 2.02E-14 | 0.52966487 | 0.388 | 0.196 | 7.17E-10 | Proliferating_spleen |
| ERO1B            | 2.04E-14 | 0.63761141 | 0.631 | 0.409 | 7.24E-10 | Proliferating_spleen |
| MTHFD2           | 2.06E-14 | 0.54021159 | 0.407 | 0.21  | 7.29E-10 | Proliferating_spleen |
| SCAPER           | 2.14E-14 | 0.55101149 | 0.764 | 0.514 | 7.60E-10 | Proliferating_spleen |
| CCNH             | 2.16E-14 | 0.62536534 | 0.47  | 0.264 | 7.66E-10 | Proliferating_spleen |
| ARL14EP          | 2.17E-14 | 0.6480857  | 0.311 | 0.14  | 7.67E-10 | Proliferating_spleen |

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|-------------------|----------|------------|-------|-------|----------|----------------------|
| SLC7A6            | 2.21E-14 | 0.77561313 | 0.428 | 0.233 | 7.83E-10 | Proliferating_spleen |
| ST6GALNAC3        | 2.24E-14 | 1.41655606 | 0.3   | 0.144 | 7.94E-10 | Proliferating_spleen |
| FYN               | 2.27E-14 | 0.54268779 | 0.784 | 0.584 | 8.06E-10 | Proliferating_spleen |
| SNIP1             | 2.30E-14 | 0.66837212 | 0.442 | 0.238 | 8.14E-10 | Proliferating_spleen |
| GALNT7            | 2.37E-14 | 0.66146085 | 0.481 | 0.273 | 8.40E-10 | Proliferating_spleen |
| E2F8              | 2.45E-14 | 0.68348001 | 0.28  | 0.121 | 8.69E-10 | Proliferating_spleen |
| R3HDM1            | 2.50E-14 | 0.59575546 | 0.565 | 0.341 | 8.87E-10 | Proliferating_spleen |
| SPRED2            | 2.54E-14 | 1.0772569  | 0.265 | 0.115 | 8.99E-10 | Proliferating_spleen |
| PPP1R15A          | 2.56E-14 | 0.55247104 | 0.67  | 0.438 | 9.07E-10 | Proliferating_spleen |
| FAM102A           | 2.65E-14 | 0.83619386 | 0.326 | 0.156 | 9.38E-10 | Proliferating_spleen |
| SH3GL1            | 2.68E-14 | 0.80060573 | 0.357 | 0.179 | 9.48E-10 | Proliferating_spleen |
| FAM120B           | 2.70E-14 | 0.85571588 | 0.326 | 0.157 | 9.58E-10 | Proliferating_spleen |
| AP1G1             | 2.79E-14 | 0.66697961 | 0.557 | 0.34  | 9.89E-10 | Proliferating_spleen |
| PTPN7             | 2.82E-14 | 0.56023412 | 0.343 | 0.161 | 1.00E-09 | Proliferating_spleen |
| IPCEF1            | 2.85E-14 | 0.92454574 | 0.462 | 0.273 | 1.01E-09 | Proliferating_spleen |
| HMBOX1            | 2.90E-14 | 0.69157327 | 0.486 | 0.289 | 1.03E-09 | Proliferating_spleen |
| ENSMUG00000061125 | 3.11E-14 | 0.92706309 | 0.734 | 0.603 | 1.10E-09 | Proliferating_spleen |
| PAG1              | 3.14E-14 | 0.4336076  | 0.745 | 0.494 | 1.11E-09 | Proliferating_spleen |
| ANKRD13A          | 3.20E-14 | 0.72513446 | 0.265 | 0.114 | 1.13E-09 | Proliferating_spleen |
| IPMK              | 3.23E-14 | 0.7850888  | 0.301 | 0.137 | 1.14E-09 | Proliferating_spleen |
| CASC3             | 3.28E-14 | 0.54388662 | 0.538 | 0.307 | 1.16E-09 | Proliferating_spleen |
| AKAP13            | 3.30E-14 | 0.45223672 | 0.924 | 0.698 | 1.17E-09 | Proliferating_spleen |
| GBP3              | 3.34E-14 | 0.91539269 | 0.395 | 0.211 | 1.18E-09 | Proliferating_spleen |
| H2AZ2             | 3.40E-14 | 0.42722848 | 0.892 | 0.858 | 1.20E-09 | Proliferating_spleen |
| CAND1             | 3.76E-14 | 0.47070585 | 0.649 | 0.413 | 1.33E-09 | Proliferating_spleen |
| RELB              | 3.80E-14 | 0.77729471 | 0.493 | 0.293 | 1.35E-09 | Proliferating_spleen |
| ZBED5             | 3.89E-14 | 0.68054606 | 0.3   | 0.136 | 1.38E-09 | Proliferating_spleen |
| KIAA1671          | 4.17E-14 | 1.18140623 | 0.338 | 0.175 | 1.48E-09 | Proliferating_spleen |
| SUCO              | 4.36E-14 | 0.52038256 | 0.654 | 0.419 | 1.55E-09 | Proliferating_spleen |
| LRIF1             | 4.37E-14 | 0.66496272 | 0.404 | 0.217 | 1.55E-09 | Proliferating_spleen |
| TXNRD1            | 4.37E-14 | 0.61409822 | 0.381 | 0.19  | 1.55E-09 | Proliferating_spleen |
| CREBBP            | 4.46E-14 | 0.57304172 | 0.705 | 0.466 | 1.58E-09 | Proliferating_spleen |
| ZFP36             | 4.47E-14 | 0.58288969 | 0.807 | 0.634 | 1.58E-09 | Proliferating_spleen |

|                   |          |            |       |       |          |                      |
|-------------------|----------|------------|-------|-------|----------|----------------------|
| NRF1              | 4.48E-14 | 0.58577754 | 0.591 | 0.377 | 1.59E-09 | Proliferating_spleen |
| RANBP3            | 4.49E-14 | 0.78450787 | 0.3   | 0.134 | 1.59E-09 | Proliferating_spleen |
| SLK               | 4.63E-14 | 0.71161398 | 0.349 | 0.169 | 1.64E-09 | Proliferating_spleen |
| LPIN2             | 4.71E-14 | 0.72710047 | 0.497 | 0.291 | 1.67E-09 | Proliferating_spleen |
| NBAS              | 4.73E-14 | 0.74830777 | 0.455 | 0.261 | 1.68E-09 | Proliferating_spleen |
| ENSMUG00000063859 | 4.85E-14 | 0.87025153 | 0.466 | 0.268 | 1.72E-09 | Proliferating_spleen |
| UBE2D3            | 4.97E-14 | 0.41887616 | 0.916 | 0.783 | 1.76E-09 | Proliferating_spleen |
| PCF11             | 5.08E-14 | 0.63336677 | 0.419 | 0.226 | 1.80E-09 | Proliferating_spleen |
| AXIN1             | 5.09E-14 | 0.88761837 | 0.365 | 0.189 | 1.80E-09 | Proliferating_spleen |
| VPS13A            | 5.13E-14 | 0.69219501 | 0.501 | 0.297 | 1.82E-09 | Proliferating_spleen |
| RASGRP1           | 5.27E-14 | 0.80202296 | 0.492 | 0.294 | 1.87E-09 | Proliferating_spleen |
| SEPTIN6           | 5.43E-14 | 0.4095057  | 0.873 | 0.62  | 1.92E-09 | Proliferating_spleen |
| GPATCH2L          | 5.55E-14 | 0.91611275 | 0.259 | 0.11  | 1.97E-09 | Proliferating_spleen |
| HMGXB3            | 5.67E-14 | 1.14810446 | 0.284 | 0.129 | 2.01E-09 | Proliferating_spleen |
| CRADD             | 5.90E-14 | 0.87648344 | 0.386 | 0.207 | 2.09E-09 | Proliferating_spleen |
| CUL4A             | 6.01E-14 | 0.74557908 | 0.455 | 0.263 | 2.13E-09 | Proliferating_spleen |
| IQGAP1            | 6.14E-14 | 0.40432872 | 0.865 | 0.66  | 2.18E-09 | Proliferating_spleen |
| LRBA              | 6.16E-14 | 0.42082118 | 0.835 | 0.553 | 2.18E-09 | Proliferating_spleen |
| IPO7              | 6.20E-14 | 0.61352558 | 0.524 | 0.305 | 2.20E-09 | Proliferating_spleen |
| EP400             | 6.21E-14 | 0.72578171 | 0.436 | 0.242 | 2.20E-09 | Proliferating_spleen |
| NXF1              | 6.44E-14 | 0.62422921 | 0.357 | 0.177 | 2.28E-09 | Proliferating_spleen |
| PRIMPOL           | 6.45E-14 | 0.7285818  | 0.312 | 0.146 | 2.28E-09 | Proliferating_spleen |
| SNX27             | 6.52E-14 | 1.04754761 | 0.272 | 0.119 | 2.31E-09 | Proliferating_spleen |
| PCBD2             | 6.54E-14 | 0.74066759 | 0.368 | 0.192 | 2.32E-09 | Proliferating_spleen |
| ZNF131            | 6.59E-14 | 0.75584161 | 0.547 | 0.34  | 2.34E-09 | Proliferating_spleen |
| HIST1H2BH         | 6.91E-14 | 0.72193165 | 0.259 | 0.108 | 2.45E-09 | Proliferating_spleen |
| INPP4A            | 6.92E-14 | 0.63834809 | 0.562 | 0.351 | 2.45E-09 | Proliferating_spleen |
| VPS35L            | 6.96E-14 | 0.91805539 | 0.345 | 0.177 | 2.47E-09 | Proliferating_spleen |
| CCNT1             | 7.00E-14 | 0.72271878 | 0.449 | 0.252 | 2.48E-09 | Proliferating_spleen |
| PFKP              | 7.42E-14 | 0.7967801  | 0.357 | 0.18  | 2.63E-09 | Proliferating_spleen |
| VOPP1             | 7.43E-14 | 1.19021204 | 0.255 | 0.111 | 2.63E-09 | Proliferating_spleen |
| LIN54             | 7.47E-14 | 0.5813203  | 0.469 | 0.269 | 2.65E-09 | Proliferating_spleen |
| TM7SF3            | 7.61E-14 | 0.56801113 | 0.37  | 0.192 | 2.70E-09 | Proliferating_spleen |

|                    |          |            |       |       |          |                      |
|--------------------|----------|------------|-------|-------|----------|----------------------|
| BLM                | 7.67E-14 | 0.80561133 | 0.438 | 0.245 | 2.72E-09 | Proliferating_spleen |
| RPTOR              | 8.22E-14 | 0.81043521 | 0.53  | 0.326 | 2.91E-09 | Proliferating_spleen |
| ILKAP              | 8.40E-14 | 0.48304642 | 0.597 | 0.351 | 2.98E-09 | Proliferating_spleen |
| ERI2               | 8.48E-14 | 0.41082145 | 0.258 | 0.104 | 3.00E-09 | Proliferating_spleen |
| RAI1               | 8.60E-14 | 0.88804795 | 0.293 | 0.138 | 3.05E-09 | Proliferating_spleen |
| MFN1               | 8.73E-14 | 0.69484062 | 0.293 | 0.131 | 3.09E-09 | Proliferating_spleen |
| DPP7               | 8.75E-14 | 0.78691675 | 0.366 | 0.185 | 3.10E-09 | Proliferating_spleen |
| RAB4A              | 8.81E-14 | 0.41008103 | 0.365 | 0.177 | 3.12E-09 | Proliferating_spleen |
| SIRPG              | 8.95E-14 | 0.87436205 | 0.37  | 0.2   | 3.17E-09 | Proliferating_spleen |
| LPXN               | 9.09E-14 | 0.51919148 | 0.535 | 0.318 | 3.22E-09 | Proliferating_spleen |
| AFF1               | 9.20E-14 | 0.4757547  | 0.686 | 0.44  | 3.26E-09 | Proliferating_spleen |
| GAPVD1             | 9.32E-14 | 0.51025164 | 0.597 | 0.354 | 3.30E-09 | Proliferating_spleen |
| NFYA               | 1.01E-13 | 0.98526798 | 0.281 | 0.127 | 3.58E-09 | Proliferating_spleen |
| CDK13              | 1.01E-13 | 0.56354962 | 0.731 | 0.487 | 3.59E-09 | Proliferating_spleen |
| MTF2               | 1.05E-13 | 0.55289437 | 0.486 | 0.286 | 3.73E-09 | Proliferating_spleen |
| UBTF               | 1.05E-13 | 0.54647562 | 0.47  | 0.267 | 3.73E-09 | Proliferating_spleen |
| PPM1D              | 1.08E-13 | 0.71307236 | 0.395 | 0.21  | 3.84E-09 | Proliferating_spleen |
| SPECC1             | 1.10E-13 | 1.30044205 | 0.28  | 0.131 | 3.91E-09 | Proliferating_spleen |
| CCDC88A            | 1.15E-13 | 0.86302653 | 0.369 | 0.199 | 4.09E-09 | Proliferating_spleen |
| ENSMMUG00000015274 | 1.17E-13 | 0.59283364 | 0.328 | 0.16  | 4.14E-09 | Proliferating_spleen |
| AVL9               | 1.17E-13 | 0.90996429 | 0.395 | 0.213 | 4.15E-09 | Proliferating_spleen |
| MNAT1              | 1.18E-13 | 0.56901692 | 0.597 | 0.376 | 4.18E-09 | Proliferating_spleen |
| WDR26              | 1.20E-13 | 0.76829857 | 0.503 | 0.307 | 4.24E-09 | Proliferating_spleen |
| PIK3CD             | 1.28E-13 | 0.64246135 | 0.576 | 0.354 | 4.52E-09 | Proliferating_spleen |
| IL21R              | 1.29E-13 | 0.46361243 | 0.297 | 0.138 | 4.57E-09 | Proliferating_spleen |
| FNDC3A             | 1.30E-13 | 0.56240656 | 0.727 | 0.505 | 4.60E-09 | Proliferating_spleen |
| ATE1               | 1.34E-13 | 0.72944383 | 0.454 | 0.263 | 4.74E-09 | Proliferating_spleen |
| PDGFD              | 1.38E-13 | 1.66653822 | 0.343 | 0.2   | 4.88E-09 | Proliferating_spleen |
| DECR2              | 1.38E-13 | 0.49728514 | 0.327 | 0.154 | 4.88E-09 | Proliferating_spleen |
| CHD3               | 1.39E-13 | 0.63808939 | 0.542 | 0.327 | 4.92E-09 | Proliferating_spleen |
| MBNL2              | 1.41E-13 | 0.48488773 | 0.57  | 0.344 | 4.99E-09 | Proliferating_spleen |
| GLA                | 1.42E-13 | 0.39278757 | 0.314 | 0.142 | 5.05E-09 | Proliferating_spleen |
| TOP2B              | 1.46E-13 | 0.60527248 | 0.665 | 0.44  | 5.18E-09 | Proliferating_spleen |

|                     |          |            |       |       |          |                      |
|---------------------|----------|------------|-------|-------|----------|----------------------|
| DOCK11              | 1.46E-13 | 0.40070083 | 0.723 | 0.473 | 5.19E-09 | Proliferating_spleen |
| RTN4                | 1.51E-13 | 0.53591807 | 0.582 | 0.355 | 5.36E-09 | Proliferating_spleen |
| ENSMMUG00000008587  | 1.52E-13 | 0.48498857 | 0.673 | 0.454 | 5.39E-09 | Proliferating_spleen |
| STX11               | 1.53E-13 | 0.96043276 | 0.25  | 0.107 | 5.41E-09 | Proliferating_spleen |
| JAK2                | 1.62E-13 | 1.11399232 | 0.404 | 0.231 | 5.74E-09 | Proliferating_spleen |
| ENSMMUG000000063316 | 1.64E-13 | 1.08500834 | 0.636 | 0.471 | 5.82E-09 | Proliferating_spleen |
| NFX1                | 1.76E-13 | 0.71930728 | 0.372 | 0.193 | 6.25E-09 | Proliferating_spleen |
| APBA2               | 1.80E-13 | 1.10469876 | 0.378 | 0.214 | 6.36E-09 | Proliferating_spleen |
| CLCN3               | 1.81E-13 | 0.63816512 | 0.399 | 0.212 | 6.43E-09 | Proliferating_spleen |
| PPIA                | 1.84E-13 | 0.27107634 | 0.611 | 0.374 | 6.51E-09 | Proliferating_spleen |
| MALT1               | 1.85E-13 | 0.43696246 | 0.514 | 0.306 | 6.56E-09 | Proliferating_spleen |
| WRNIP1              | 1.86E-13 | 0.95037262 | 0.277 | 0.127 | 6.59E-09 | Proliferating_spleen |
| ASCC1               | 1.87E-13 | 0.71000605 | 0.432 | 0.243 | 6.61E-09 | Proliferating_spleen |
| SRPK2               | 1.90E-13 | 0.5523834  | 0.715 | 0.482 | 6.73E-09 | Proliferating_spleen |
| ELAVL1              | 1.90E-13 | 0.47020165 | 0.445 | 0.243 | 6.74E-09 | Proliferating_spleen |
| HLCS                | 1.98E-13 | 0.93177396 | 0.357 | 0.189 | 7.02E-09 | Proliferating_spleen |
| OXR1                | 2.02E-13 | 0.6160971  | 0.466 | 0.274 | 7.17E-09 | Proliferating_spleen |
| EIF3A               | 2.09E-13 | 0.48490139 | 0.761 | 0.523 | 7.40E-09 | Proliferating_spleen |
| FOXJ3               | 2.17E-13 | 0.42506707 | 0.634 | 0.395 | 7.67E-09 | Proliferating_spleen |
| ADNP                | 2.17E-13 | 0.49031151 | 0.585 | 0.36  | 7.70E-09 | Proliferating_spleen |
| DDX11               | 2.20E-13 | 0.89831556 | 0.382 | 0.203 | 7.79E-09 | Proliferating_spleen |
| RABL6               | 2.22E-13 | 0.29959772 | 0.495 | 0.284 | 7.88E-09 | Proliferating_spleen |
| SRRT                | 2.24E-13 | 0.68259409 | 0.432 | 0.24  | 7.95E-09 | Proliferating_spleen |
| HMGCS1              | 2.32E-13 | 0.97177498 | 0.276 | 0.126 | 8.21E-09 | Proliferating_spleen |
| ABHD12              | 2.33E-13 | 0.84439827 | 0.451 | 0.266 | 8.26E-09 | Proliferating_spleen |
| YWHAG               | 2.39E-13 | 0.68086297 | 0.419 | 0.226 | 8.48E-09 | Proliferating_spleen |
| MIB1                | 2.40E-13 | 0.68075995 | 0.485 | 0.285 | 8.51E-09 | Proliferating_spleen |
| HMG20B              | 2.46E-13 | 0.48272132 | 0.296 | 0.134 | 8.72E-09 | Proliferating_spleen |
| SEPTIN11            | 2.66E-13 | 0.42820731 | 0.635 | 0.401 | 9.44E-09 | Proliferating_spleen |
| PRKX                | 2.69E-13 | 0.57639791 | 0.704 | 0.479 | 9.53E-09 | Proliferating_spleen |
| CSNK1G2             | 2.77E-13 | 0.68151109 | 0.312 | 0.152 | 9.81E-09 | Proliferating_spleen |
| PXK                 | 2.79E-13 | 0.99951201 | 0.408 | 0.238 | 9.89E-09 | Proliferating_spleen |
| WAC                 | 2.80E-13 | 0.47254954 | 0.791 | 0.545 | 9.92E-09 | Proliferating_spleen |

|                    |          |            |       |       |          |                      |
|--------------------|----------|------------|-------|-------|----------|----------------------|
| RSBN1L             | 2.86E-13 | 0.47431297 | 0.512 | 0.304 | 1.01E-08 | Proliferating_spleen |
| CSKMT              | 2.89E-13 | 0.62026491 | 0.332 | 0.167 | 1.02E-08 | Proliferating_spleen |
| NUP160             | 2.95E-13 | 0.7987219  | 0.386 | 0.204 | 1.05E-08 | Proliferating_spleen |
| ENSMMUG00000065373 | 2.96E-13 | 1.06952719 | 0.947 | 0.943 | 1.05E-08 | Proliferating_spleen |
| TRPM7              | 3.04E-13 | 0.49025329 | 0.857 | 0.604 | 1.08E-08 | Proliferating_spleen |
| ATP1A1             | 3.08E-13 | 0.50084021 | 0.423 | 0.232 | 1.09E-08 | Proliferating_spleen |
| SREBF2             | 3.11E-13 | 0.55318262 | 0.535 | 0.329 | 1.10E-08 | Proliferating_spleen |
| CNOT6L             | 3.28E-13 | 0.51375604 | 0.781 | 0.576 | 1.16E-08 | Proliferating_spleen |
| SLTM               | 3.28E-13 | 0.49020135 | 0.718 | 0.487 | 1.16E-08 | Proliferating_spleen |
| MYBL2              | 3.31E-13 | 0.60848043 | 0.455 | 0.261 | 1.17E-08 | Proliferating_spleen |
| NSMCE4A            | 3.44E-13 | 0.61718285 | 0.288 | 0.131 | 1.22E-08 | Proliferating_spleen |
| CANX               | 3.50E-13 | 0.51776465 | 0.423 | 0.237 | 1.24E-08 | Proliferating_spleen |
| FOXO3              | 3.77E-13 | 0.76171227 | 0.412 | 0.243 | 1.34E-08 | Proliferating_spleen |
| BTG2               | 3.80E-13 | 0.53646111 | 0.777 | 0.57  | 1.35E-08 | Proliferating_spleen |
| ACTN4              | 4.02E-13 | 0.52409274 | 0.461 | 0.256 | 1.42E-08 | Proliferating_spleen |
| TNIK               | 4.31E-13 | 0.55331157 | 0.786 | 0.615 | 1.53E-08 | Proliferating_spleen |
| NCAPG2             | 4.39E-13 | 0.37174519 | 0.604 | 0.372 | 1.56E-08 | Proliferating_spleen |
| USP25              | 4.51E-13 | 0.63182917 | 0.503 | 0.302 | 1.60E-08 | Proliferating_spleen |
| CTDNEP1            | 4.55E-13 | 0.39508669 | 0.38  | 0.193 | 1.61E-08 | Proliferating_spleen |
| SMG7               | 4.56E-13 | 0.48862527 | 0.578 | 0.356 | 1.61E-08 | Proliferating_spleen |
| DNAJB9             | 4.72E-13 | 0.55460085 | 0.292 | 0.136 | 1.67E-08 | Proliferating_spleen |
| SLC39A11           | 4.90E-13 | 0.77342426 | 0.459 | 0.28  | 1.74E-08 | Proliferating_spleen |
| ARMC2              | 4.91E-13 | 1.26332285 | 0.272 | 0.128 | 1.74E-08 | Proliferating_spleen |
| ENSMMUG00000060439 | 4.91E-13 | 0.74810182 | 0.339 | 0.178 | 1.74E-08 | Proliferating_spleen |
| FANCM              | 4.93E-13 | 0.79017399 | 0.4   | 0.224 | 1.75E-08 | Proliferating_spleen |
| TCF20              | 5.02E-13 | 0.40834855 | 0.558 | 0.33  | 1.78E-08 | Proliferating_spleen |
| SLF1               | 5.23E-13 | 0.52395915 | 0.432 | 0.243 | 1.85E-08 | Proliferating_spleen |
| PRKDC              | 5.29E-13 | 0.47380023 | 0.773 | 0.603 | 1.87E-08 | Proliferating_spleen |
| LASP1              | 5.32E-13 | 0.57013039 | 0.509 | 0.298 | 1.88E-08 | Proliferating_spleen |
| SIN3A              | 5.33E-13 | 0.43464113 | 0.559 | 0.336 | 1.89E-08 | Proliferating_spleen |
| SLC4A7             | 5.34E-13 | 0.66154565 | 0.527 | 0.326 | 1.89E-08 | Proliferating_spleen |
| LCORL              | 5.41E-13 | 0.47345123 | 0.542 | 0.325 | 1.92E-08 | Proliferating_spleen |
| BDP1               | 5.50E-13 | 0.67819953 | 0.641 | 0.417 | 1.95E-08 | Proliferating_spleen |

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|-------------------|----------|------------|-------|-------|----------|----------------------|
| NEDD4             | 5.50E-13 | 0.75510477 | 0.262 | 0.118 | 1.95E-08 | Proliferating_spleen |
| CDCA7             | 5.60E-13 | 0.67275122 | 0.377 | 0.199 | 1.99E-08 | Proliferating_spleen |
| INKA1             | 6.18E-13 | 0.66142499 | 0.265 | 0.114 | 2.19E-08 | Proliferating_spleen |
| DDX42             | 6.34E-13 | 0.51275584 | 0.449 | 0.246 | 2.25E-08 | Proliferating_spleen |
| QRICH1            | 6.39E-13 | 0.58962257 | 0.565 | 0.351 | 2.27E-08 | Proliferating_spleen |
| RWDD4             | 6.50E-13 | 0.59306258 | 0.323 | 0.154 | 2.30E-08 | Proliferating_spleen |
| SUFU              | 6.55E-13 | 0.73266466 | 0.384 | 0.21  | 2.32E-08 | Proliferating_spleen |
| NCOA6             | 6.68E-13 | 0.83398081 | 0.345 | 0.181 | 2.37E-08 | Proliferating_spleen |
| UBE2H             | 6.84E-13 | 0.44992033 | 0.742 | 0.483 | 2.42E-08 | Proliferating_spleen |
| ZMYM2             | 6.84E-13 | 0.55565459 | 0.597 | 0.387 | 2.42E-08 | Proliferating_spleen |
| NLK               | 6.85E-13 | 0.84831397 | 0.33  | 0.172 | 2.43E-08 | Proliferating_spleen |
| KDM6B             | 6.93E-13 | 0.44243008 | 0.351 | 0.179 | 2.45E-08 | Proliferating_spleen |
| MBD2              | 7.19E-13 | 1.16709359 | 0.266 | 0.122 | 2.55E-08 | Proliferating_spleen |
| UCKL1             | 7.21E-13 | 0.69751077 | 0.289 | 0.134 | 2.55E-08 | Proliferating_spleen |
| EYA3              | 7.27E-13 | 0.72136725 | 0.369 | 0.201 | 2.57E-08 | Proliferating_spleen |
| AMBRA1            | 7.31E-13 | 0.48394016 | 0.569 | 0.354 | 2.59E-08 | Proliferating_spleen |
| EML4              | 7.48E-13 | 0.43550838 | 0.918 | 0.709 | 2.65E-08 | Proliferating_spleen |
| BCAS3             | 7.55E-13 | 0.59439731 | 0.574 | 0.38  | 2.68E-08 | Proliferating_spleen |
| CIAO1             | 7.61E-13 | 0.46189721 | 0.259 | 0.111 | 2.70E-08 | Proliferating_spleen |
| CMTM7             | 7.72E-13 | 1.05682253 | 0.28  | 0.131 | 2.73E-08 | Proliferating_spleen |
| TRIP4             | 7.81E-13 | 0.61892409 | 0.411 | 0.23  | 2.77E-08 | Proliferating_spleen |
| RNF38             | 7.82E-13 | 0.48161693 | 0.724 | 0.462 | 2.77E-08 | Proliferating_spleen |
| DCLRE1C           | 7.92E-13 | 0.71413936 | 0.35  | 0.181 | 2.81E-08 | Proliferating_spleen |
| SYNE2             | 8.33E-13 | 0.61181329 | 0.722 | 0.508 | 2.95E-08 | Proliferating_spleen |
| SNX14             | 8.36E-13 | 0.50614141 | 0.515 | 0.311 | 2.96E-08 | Proliferating_spleen |
| YPEL5             | 8.38E-13 | 0.51406425 | 0.7   | 0.475 | 2.97E-08 | Proliferating_spleen |
| DEPDC1B           | 8.45E-13 | 0.6417385  | 0.258 | 0.114 | 2.99E-08 | Proliferating_spleen |
| FRMD8             | 8.69E-13 | 0.70517025 | 0.276 | 0.123 | 3.08E-08 | Proliferating_spleen |
| ZNF268            | 8.71E-13 | 0.69337352 | 0.381 | 0.203 | 3.08E-08 | Proliferating_spleen |
| POLR2B            | 9.25E-13 | 0.45487347 | 0.408 | 0.219 | 3.28E-08 | Proliferating_spleen |
| ENSMUG00000039874 | 9.34E-13 | 0.76869586 | 0.343 | 0.175 | 3.31E-08 | Proliferating_spleen |
| ENSMUG00000057691 | 9.40E-13 | 0.75416839 | 0.327 | 0.165 | 3.33E-08 | Proliferating_spleen |
| IPO9              | 9.53E-13 | 0.46001855 | 0.499 | 0.291 | 3.38E-08 | Proliferating_spleen |

|           |          |            |       |       |          |                      |
|-----------|----------|------------|-------|-------|----------|----------------------|
| TCF3      | 9.68E-13 | 0.96315234 | 0.323 | 0.166 | 3.43E-08 | Proliferating_spleen |
| PNKP      | 9.79E-13 | 0.64296441 | 0.391 | 0.21  | 3.47E-08 | Proliferating_spleen |
| XIAP      | 9.96E-13 | 0.88571005 | 0.289 | 0.14  | 3.53E-08 | Proliferating_spleen |
| SLC38A10  | 1.03E-12 | 0.7312647  | 0.301 | 0.146 | 3.65E-08 | Proliferating_spleen |
| SLC7A1    | 1.06E-12 | 0.78513922 | 0.35  | 0.181 | 3.75E-08 | Proliferating_spleen |
| MORF4L2   | 1.07E-12 | 0.44749574 | 0.53  | 0.32  | 3.79E-08 | Proliferating_spleen |
| HIST1H2AE | 1.10E-12 | 0.54112997 | 0.269 | 0.121 | 3.89E-08 | Proliferating_spleen |
| NF2       | 1.10E-12 | 0.82260789 | 0.327 | 0.167 | 3.90E-08 | Proliferating_spleen |
| CKAP5     | 1.11E-12 | 0.53110075 | 0.558 | 0.363 | 3.94E-08 | Proliferating_spleen |
| ILRUN     | 1.12E-12 | 0.53164299 | 0.435 | 0.245 | 3.95E-08 | Proliferating_spleen |
| SGMS1     | 1.12E-12 | 0.67816753 | 0.447 | 0.266 | 3.96E-08 | Proliferating_spleen |
| DMTF1     | 1.14E-12 | 0.4879006  | 0.524 | 0.322 | 4.04E-08 | Proliferating_spleen |
| VPS41     | 1.14E-12 | 0.73378904 | 0.358 | 0.189 | 4.04E-08 | Proliferating_spleen |
| KIF14     | 1.14E-12 | 0.73921708 | 0.318 | 0.158 | 4.04E-08 | Proliferating_spleen |
| NSF       | 1.16E-12 | 0.55046185 | 0.631 | 0.403 | 4.09E-08 | Proliferating_spleen |
| SLC25A42  | 1.16E-12 | 0.75280668 | 0.257 | 0.113 | 4.11E-08 | Proliferating_spleen |
| TBC1D2B   | 1.18E-12 | 0.83859066 | 0.349 | 0.185 | 4.17E-08 | Proliferating_spleen |
| HSPA4     | 1.18E-12 | 0.56586066 | 0.474 | 0.277 | 4.20E-08 | Proliferating_spleen |
| BRCA2     | 1.19E-12 | 0.62120861 | 0.53  | 0.33  | 4.20E-08 | Proliferating_spleen |
| NOLC1     | 1.24E-12 | 0.67075378 | 0.349 | 0.185 | 4.40E-08 | Proliferating_spleen |
| TGFBR1    | 1.26E-12 | 0.81493962 | 0.33  | 0.168 | 4.45E-08 | Proliferating_spleen |
| ZNF512    | 1.28E-12 | 0.8164992  | 0.257 | 0.115 | 4.53E-08 | Proliferating_spleen |
| LYPLA1    | 1.31E-12 | 0.48015308 | 0.382 | 0.2   | 4.63E-08 | Proliferating_spleen |
| BCL2L13   | 1.31E-12 | 0.85865882 | 0.38  | 0.21  | 4.65E-08 | Proliferating_spleen |
| SLC9A3R1  | 1.32E-12 | 0.28133469 | 0.447 | 0.25  | 4.68E-08 | Proliferating_spleen |
| TERB1     | 1.33E-12 | 0.60261078 | 0.396 | 0.217 | 4.72E-08 | Proliferating_spleen |
| USP6NL    | 1.34E-12 | 0.99573505 | 0.327 | 0.172 | 4.74E-08 | Proliferating_spleen |
| PRMT3     | 1.35E-12 | 0.60470978 | 0.345 | 0.175 | 4.79E-08 | Proliferating_spleen |
| COMMD10   | 1.35E-12 | 0.63249671 | 0.638 | 0.44  | 4.80E-08 | Proliferating_spleen |
| INVS      | 1.36E-12 | 1.13243332 | 0.27  | 0.129 | 4.81E-08 | Proliferating_spleen |
| DHX35     | 1.37E-12 | 0.91321216 | 0.323 | 0.166 | 4.85E-08 | Proliferating_spleen |
| YTHDC2    | 1.39E-12 | 0.59701738 | 0.428 | 0.24  | 4.94E-08 | Proliferating_spleen |
| RNF139    | 1.44E-12 | 0.86296008 | 0.27  | 0.127 | 5.09E-08 | Proliferating_spleen |



|                    |          |            |       |       |          |                      |
|--------------------|----------|------------|-------|-------|----------|----------------------|
| ZNF236             | 1.45E-12 | 0.86804915 | 0.353 | 0.191 | 5.14E-08 | Proliferating_spleen |
| CKAP2L             | 1.52E-12 | 0.56105726 | 0.4   | 0.216 | 5.37E-08 | Proliferating_spleen |
| HNRNPF             | 1.55E-12 | 0.37467559 | 0.842 | 0.701 | 5.50E-08 | Proliferating_spleen |
| WDR82              | 1.56E-12 | 0.59331913 | 0.401 | 0.225 | 5.52E-08 | Proliferating_spleen |
| LCLAT1             | 1.56E-12 | 0.50596643 | 0.509 | 0.309 | 5.53E-08 | Proliferating_spleen |
| PPP1R12A           | 1.63E-12 | 0.44183096 | 0.851 | 0.631 | 5.77E-08 | Proliferating_spleen |
| GRK3               | 1.66E-12 | 0.9972467  | 0.274 | 0.13  | 5.89E-08 | Proliferating_spleen |
| NCAPH              | 1.69E-12 | 0.44681706 | 0.449 | 0.257 | 5.99E-08 | Proliferating_spleen |
| NDEL1              | 1.70E-12 | 0.55815465 | 0.496 | 0.309 | 6.03E-08 | Proliferating_spleen |
| THEMIS             | 1.80E-12 | 0.73284588 | 0.607 | 0.439 | 6.37E-08 | Proliferating_spleen |
| NUP62              | 1.92E-12 | 0.59331921 | 0.345 | 0.175 | 6.80E-08 | Proliferating_spleen |
| HIBCH              | 1.93E-12 | 0.74655161 | 0.258 | 0.117 | 6.84E-08 | Proliferating_spleen |
| EIF2AK4            | 1.95E-12 | 0.79339259 | 0.355 | 0.192 | 6.92E-08 | Proliferating_spleen |
| ATP11B             | 1.97E-12 | 0.37256504 | 0.678 | 0.434 | 6.97E-08 | Proliferating_spleen |
| AMD1               | 2.02E-12 | 0.37620713 | 0.623 | 0.395 | 7.17E-08 | Proliferating_spleen |
| TPST2              | 2.03E-12 | 0.86788161 | 0.323 | 0.167 | 7.19E-08 | Proliferating_spleen |
| N4BP2              | 2.05E-12 | 0.88223522 | 0.372 | 0.205 | 7.28E-08 | Proliferating_spleen |
| BTBD9              | 2.08E-12 | 0.49931914 | 0.501 | 0.313 | 7.35E-08 | Proliferating_spleen |
| ENSMMUG00000022619 | 2.08E-12 | 0.56024711 | 0.339 | 0.173 | 7.36E-08 | Proliferating_spleen |
| TSC22D2            | 2.09E-12 | 0.62811839 | 0.455 | 0.274 | 7.41E-08 | Proliferating_spleen |
| CEP135             | 2.14E-12 | 0.66031168 | 0.424 | 0.24  | 7.58E-08 | Proliferating_spleen |
| ADAM10             | 2.14E-12 | 0.42302072 | 0.668 | 0.432 | 7.58E-08 | Proliferating_spleen |
| FTO                | 2.14E-12 | 0.65462115 | 0.527 | 0.331 | 7.60E-08 | Proliferating_spleen |
| MPRIP              | 2.15E-12 | 1.12663798 | 0.296 | 0.145 | 7.61E-08 | Proliferating_spleen |
| TNRC6C             | 2.17E-12 | 0.62005193 | 0.464 | 0.271 | 7.69E-08 | Proliferating_spleen |
| PPP4R3A            | 2.20E-12 | 0.7221306  | 0.515 | 0.314 | 7.80E-08 | Proliferating_spleen |
| MYLIP              | 2.22E-12 | 0.60972988 | 0.593 | 0.385 | 7.86E-08 | Proliferating_spleen |
| ENSMMUG00000000350 | 2.39E-12 | 0.72788889 | 0.351 | 0.184 | 8.46E-08 | Proliferating_spleen |
| C2CD5              | 2.39E-12 | 0.60382709 | 0.443 | 0.256 | 8.46E-08 | Proliferating_spleen |
| TACC3              | 2.42E-12 | 0.41003284 | 0.68  | 0.448 | 8.58E-08 | Proliferating_spleen |
| TNRC6B             | 2.60E-12 | 0.36737815 | 0.895 | 0.654 | 9.20E-08 | Proliferating_spleen |
| UBQLN1             | 2.63E-12 | 0.51527501 | 0.53  | 0.325 | 9.31E-08 | Proliferating_spleen |
| MRPL10             | 2.63E-12 | 0.61483547 | 0.451 | 0.266 | 9.33E-08 | Proliferating_spleen |

|             |          |            |       |       |          |                      |
|-------------|----------|------------|-------|-------|----------|----------------------|
| KDM3B       | 2.67E-12 | 0.41113636 | 0.597 | 0.376 | 9.47E-08 | Proliferating_spleen |
| TOM1L2      | 2.68E-12 | 0.98399879 | 0.284 | 0.141 | 9.50E-08 | Proliferating_spleen |
| ZFX         | 2.72E-12 | 0.57266577 | 0.473 | 0.275 | 9.62E-08 | Proliferating_spleen |
| UBE2T       | 2.72E-12 | 0.13488509 | 0.341 | 0.166 | 9.63E-08 | Proliferating_spleen |
| DYNC2I2     | 2.79E-12 | 0.66699503 | 0.312 | 0.154 | 9.90E-08 | Proliferating_spleen |
| MEF2A       | 2.80E-12 | 0.51783509 | 0.62  | 0.408 | 9.93E-08 | Proliferating_spleen |
| CDCA2       | 2.82E-12 | 0.70464886 | 0.355 | 0.188 | 9.98E-08 | Proliferating_spleen |
| OXNAD1      | 2.90E-12 | 0.34837647 | 0.38  | 0.204 | 1.03E-07 | Proliferating_spleen |
| BTBD7       | 2.94E-12 | 0.68108481 | 0.377 | 0.205 | 1.04E-07 | Proliferating_spleen |
| SF1         | 2.96E-12 | 0.43227892 | 0.714 | 0.489 | 1.05E-07 | Proliferating_spleen |
| KCNAB2      | 2.97E-12 | 0.80024253 | 0.45  | 0.277 | 1.05E-07 | Proliferating_spleen |
| ATL2        | 3.08E-12 | 0.48083014 | 0.497 | 0.299 | 1.09E-07 | Proliferating_spleen |
| ARAP2       | 3.15E-12 | 0.61177979 | 0.619 | 0.427 | 1.12E-07 | Proliferating_spleen |
| CDS2        | 3.22E-12 | 1.06821596 | 0.316 | 0.165 | 1.14E-07 | Proliferating_spleen |
| CHST12      | 3.25E-12 | 0.49202036 | 0.384 | 0.208 | 1.15E-07 | Proliferating_spleen |
| RPS6KB1     | 3.36E-12 | 0.54467444 | 0.649 | 0.409 | 1.19E-07 | Proliferating_spleen |
| FUT8        | 3.48E-12 | 0.69739635 | 0.473 | 0.285 | 1.23E-07 | Proliferating_spleen |
| MIDEAS      | 3.49E-12 | 0.86050703 | 0.296 | 0.143 | 1.24E-07 | Proliferating_spleen |
| EFL1        | 3.61E-12 | 0.63204905 | 0.511 | 0.319 | 1.28E-07 | Proliferating_spleen |
| FMC1-LUC7L2 | 3.63E-12 | 0.31726666 | 0.866 | 0.68  | 1.29E-07 | Proliferating_spleen |
| DOCK10      | 3.67E-12 | 0.38200479 | 0.877 | 0.63  | 1.30E-07 | Proliferating_spleen |
| UIMC1       | 3.72E-12 | 0.53882116 | 0.473 | 0.274 | 1.32E-07 | Proliferating_spleen |
| CEP152      | 3.85E-12 | 0.59612196 | 0.266 | 0.125 | 1.36E-07 | Proliferating_spleen |
| UBE3C       | 3.85E-12 | 0.54137736 | 0.551 | 0.349 | 1.36E-07 | Proliferating_spleen |
| SNTB1       | 3.85E-12 | 1.24725944 | 0.301 | 0.161 | 1.36E-07 | Proliferating_spleen |
| TP53BP1     | 3.93E-12 | 0.40555923 | 0.591 | 0.374 | 1.39E-07 | Proliferating_spleen |
| DYNLL2      | 3.98E-12 | 0.43020287 | 0.305 | 0.15  | 1.41E-07 | Proliferating_spleen |
| MIS18A      | 4.02E-12 | 0.40053176 | 0.324 | 0.158 | 1.42E-07 | Proliferating_spleen |
| CASK        | 4.11E-12 | 0.67002221 | 0.434 | 0.251 | 1.45E-07 | Proliferating_spleen |
| TRAF5       | 4.13E-12 | 0.94205357 | 0.299 | 0.152 | 1.46E-07 | Proliferating_spleen |
| DKC1        | 4.17E-12 | 0.41705825 | 0.326 | 0.164 | 1.48E-07 | Proliferating_spleen |
| CENPJ       | 4.36E-12 | 0.58749418 | 0.378 | 0.208 | 1.54E-07 | Proliferating_spleen |
| DDX10       | 4.43E-12 | 0.61791453 | 0.35  | 0.186 | 1.57E-07 | Proliferating_spleen |

|         |          |            |       |       |          |                      |
|---------|----------|------------|-------|-------|----------|----------------------|
| RILPL2  | 4.44E-12 | 0.43321659 | 0.516 | 0.311 | 1.57E-07 | Proliferating_spleen |
| TFB1M   | 4.57E-12 | 0.80484022 | 0.284 | 0.137 | 1.62E-07 | Proliferating_spleen |
| NDFIP1  | 4.59E-12 | 0.4379956  | 0.761 | 0.551 | 1.62E-07 | Proliferating_spleen |
| GLG1    | 4.66E-12 | 0.41182726 | 0.628 | 0.411 | 1.65E-07 | Proliferating_spleen |
| ZGRF1   | 4.88E-12 | 0.70479967 | 0.472 | 0.284 | 1.73E-07 | Proliferating_spleen |
| STAT5B  | 4.88E-12 | 0.52808454 | 0.523 | 0.329 | 1.73E-07 | Proliferating_spleen |
| CD38    | 4.93E-12 | 0.49267358 | 0.761 | 0.584 | 1.75E-07 | Proliferating_spleen |
| NOTCH2  | 4.95E-12 | 0.89309065 | 0.293 | 0.143 | 1.75E-07 | Proliferating_spleen |
| BRD1    | 5.10E-12 | 1.23496272 | 0.268 | 0.131 | 1.81E-07 | Proliferating_spleen |
| AACS    | 5.29E-12 | 0.49925594 | 0.304 | 0.15  | 1.87E-07 | Proliferating_spleen |
| RRAS2   | 5.40E-12 | 0.67715775 | 0.508 | 0.323 | 1.91E-07 | Proliferating_spleen |
| ZEB2    | 5.41E-12 | 0.61245378 | 0.439 | 0.259 | 1.92E-07 | Proliferating_spleen |
| PITPNM2 | 5.50E-12 | 1.18818411 | 0.342 | 0.19  | 1.95E-07 | Proliferating_spleen |
| ND6     | 5.57E-12 | 1.22162663 | 0.284 | 0.144 | 1.97E-07 | Proliferating_spleen |
| GATA3   | 5.60E-12 | 0.81355921 | 0.349 | 0.19  | 1.99E-07 | Proliferating_spleen |
| SLC12A2 | 5.65E-12 | 0.97399666 | 0.251 | 0.115 | 2.00E-07 | Proliferating_spleen |
| KAT6B   | 5.73E-12 | 0.53365099 | 0.718 | 0.496 | 2.03E-07 | Proliferating_spleen |
| FANCD2  | 5.77E-12 | 0.67464803 | 0.336 | 0.175 | 2.04E-07 | Proliferating_spleen |
| SMCHD1  | 5.78E-12 | 0.33869388 | 0.877 | 0.619 | 2.05E-07 | Proliferating_spleen |
| RIC1    | 5.86E-12 | 0.50296818 | 0.481 | 0.283 | 2.08E-07 | Proliferating_spleen |
| ADAM17  | 5.92E-12 | 0.65552288 | 0.395 | 0.226 | 2.10E-07 | Proliferating_spleen |
| UBR4    | 5.99E-12 | 0.62501796 | 0.509 | 0.316 | 2.12E-07 | Proliferating_spleen |
| STX16   | 6.00E-12 | 0.5939     | 0.386 | 0.216 | 2.12E-07 | Proliferating_spleen |
| SLMAP   | 6.01E-12 | 0.48253109 | 0.696 | 0.467 | 2.13E-07 | Proliferating_spleen |
| CD247   | 6.13E-12 | 0.73083523 | 0.762 | 0.578 | 2.17E-07 | Proliferating_spleen |
| ERO1A   | 6.18E-12 | 0.4309101  | 0.393 | 0.21  | 2.19E-07 | Proliferating_spleen |
| TRERF1  | 6.20E-12 | 0.73344937 | 0.505 | 0.328 | 2.20E-07 | Proliferating_spleen |
| PPA2    | 6.27E-12 | 0.61591931 | 0.369 | 0.197 | 2.22E-07 | Proliferating_spleen |
| GON4L   | 6.35E-12 | 0.54878809 | 0.488 | 0.292 | 2.25E-07 | Proliferating_spleen |
| GART    | 6.56E-12 | 0.52549477 | 0.277 | 0.129 | 2.32E-07 | Proliferating_spleen |
| RREB1   | 6.58E-12 | 1.04043699 | 0.282 | 0.143 | 2.33E-07 | Proliferating_spleen |
| SLFN5   | 7.07E-12 | 0.44281412 | 0.441 | 0.257 | 2.51E-07 | Proliferating_spleen |
| SIL1    | 7.16E-12 | 0.67248427 | 0.316 | 0.163 | 2.54E-07 | Proliferating_spleen |

|                   |          |            |       |       |          |                      |
|-------------------|----------|------------|-------|-------|----------|----------------------|
| ABHD2             | 7.21E-12 | 0.66441157 | 0.35  | 0.185 | 2.55E-07 | Proliferating_spleen |
| MRPS27            | 7.39E-12 | 0.49335273 | 0.419 | 0.231 | 2.62E-07 | Proliferating_spleen |
| GPATCH2           | 7.46E-12 | 0.7936684  | 0.292 | 0.144 | 2.64E-07 | Proliferating_spleen |
| HTATSF1           | 7.74E-12 | 0.43000715 | 0.419 | 0.234 | 2.74E-07 | Proliferating_spleen |
| BRD4              | 7.79E-12 | 0.44857097 | 0.511 | 0.31  | 2.76E-07 | Proliferating_spleen |
| RBM23             | 7.93E-12 | 0.50766074 | 0.453 | 0.263 | 2.81E-07 | Proliferating_spleen |
| WDR70             | 8.00E-12 | 0.39778273 | 0.759 | 0.522 | 2.83E-07 | Proliferating_spleen |
| TNFAIP3           | 8.04E-12 | 0.56147245 | 0.754 | 0.566 | 2.85E-07 | Proliferating_spleen |
| RAP1GDS1          | 8.09E-12 | 0.58357846 | 0.501 | 0.313 | 2.87E-07 | Proliferating_spleen |
| EEFSEC            | 8.21E-12 | 0.80682781 | 0.342 | 0.185 | 2.91E-07 | Proliferating_spleen |
| ARNTL             | 8.31E-12 | 0.66798068 | 0.365 | 0.201 | 2.95E-07 | Proliferating_spleen |
| KIF2A             | 8.48E-12 | 0.36579892 | 0.669 | 0.445 | 3.00E-07 | Proliferating_spleen |
| PHRF1             | 8.52E-12 | 0.98356682 | 0.28  | 0.134 | 3.02E-07 | Proliferating_spleen |
| CYFIP2            | 8.55E-12 | 0.5728843  | 0.676 | 0.469 | 3.03E-07 | Proliferating_spleen |
| GABPB1            | 8.65E-12 | 0.60540017 | 0.654 | 0.44  | 3.07E-07 | Proliferating_spleen |
| IDE               | 8.82E-12 | 0.80804448 | 0.331 | 0.177 | 3.13E-07 | Proliferating_spleen |
| FAM168A           | 9.23E-12 | 0.54992903 | 0.542 | 0.34  | 3.27E-07 | Proliferating_spleen |
| KNL1              | 9.26E-12 | 0.47447358 | 0.554 | 0.361 | 3.28E-07 | Proliferating_spleen |
| TAF13             | 9.28E-12 | 0.75695719 | 0.358 | 0.19  | 3.29E-07 | Proliferating_spleen |
| CCNA2             | 9.28E-12 | 0.28948919 | 0.427 | 0.24  | 3.29E-07 | Proliferating_spleen |
| UMPS              | 9.40E-12 | 0.53115392 | 0.327 | 0.168 | 3.33E-07 | Proliferating_spleen |
| MRTFA             | 9.48E-12 | 0.44938353 | 0.649 | 0.414 | 3.36E-07 | Proliferating_spleen |
| SUSD6             | 9.54E-12 | 0.59458394 | 0.493 | 0.301 | 3.38E-07 | Proliferating_spleen |
| KIF21B            | 9.63E-12 | 0.74939908 | 0.282 | 0.139 | 3.41E-07 | Proliferating_spleen |
| EIF2B3            | 9.98E-12 | 0.3990797  | 0.535 | 0.33  | 3.54E-07 | Proliferating_spleen |
| ACTR3             | 1.00E-11 | 0.36343437 | 0.832 | 0.663 | 3.54E-07 | Proliferating_spleen |
| SFMBT1            | 1.02E-11 | 0.57646842 | 0.536 | 0.344 | 3.60E-07 | Proliferating_spleen |
| ENSMUG00000018557 | 1.07E-11 | 0.41723633 | 0.604 | 0.381 | 3.79E-07 | Proliferating_spleen |
| GLMN              | 1.08E-11 | 0.50403364 | 0.534 | 0.332 | 3.82E-07 | Proliferating_spleen |
| UGGT1             | 1.14E-11 | 0.68949167 | 0.314 | 0.162 | 4.04E-07 | Proliferating_spleen |
| PHAX              | 1.16E-11 | 0.39592765 | 0.359 | 0.188 | 4.09E-07 | Proliferating_spleen |
| NKTR              | 1.16E-11 | 0.61686267 | 0.568 | 0.368 | 4.12E-07 | Proliferating_spleen |
| CDC27             | 1.18E-11 | 0.47472789 | 0.585 | 0.38  | 4.18E-07 | Proliferating_spleen |

|                    |          |            |       |       |          |                      |
|--------------------|----------|------------|-------|-------|----------|----------------------|
| DIAPH2             | 1.21E-11 | 0.47794422 | 0.703 | 0.473 | 4.28E-07 | Proliferating_spleen |
| RHOT1              | 1.22E-11 | 0.81093525 | 0.332 | 0.177 | 4.32E-07 | Proliferating_spleen |
| SNX1               | 1.23E-11 | 0.31146552 | 0.489 | 0.284 | 4.35E-07 | Proliferating_spleen |
| SSH2               | 1.23E-11 | 0.29160822 | 0.901 | 0.677 | 4.36E-07 | Proliferating_spleen |
| HACE1              | 1.25E-11 | 0.37146399 | 0.473 | 0.278 | 4.45E-07 | Proliferating_spleen |
| CLINT1             | 1.29E-11 | 0.41207161 | 0.716 | 0.479 | 4.58E-07 | Proliferating_spleen |
| NIPA2              | 1.30E-11 | 0.59190937 | 0.393 | 0.222 | 4.62E-07 | Proliferating_spleen |
| DCP2               | 1.31E-11 | 0.45221081 | 0.572 | 0.368 | 4.64E-07 | Proliferating_spleen |
| WWP2               | 1.34E-11 | 0.54295799 | 0.419 | 0.242 | 4.76E-07 | Proliferating_spleen |
| ENSMMUG00000058919 | 1.42E-11 | 0.43548089 | 0.457 | 0.264 | 5.01E-07 | Proliferating_spleen |
| ENSMMUG00000060229 | 1.42E-11 | 0.4525078  | 0.559 | 0.364 | 5.05E-07 | Proliferating_spleen |
| ARHGEF2            | 1.44E-11 | 0.84164401 | 0.277 | 0.137 | 5.10E-07 | Proliferating_spleen |
| HECA               | 1.45E-11 | 0.55624808 | 0.531 | 0.345 | 5.14E-07 | Proliferating_spleen |
| CPLANE1            | 1.47E-11 | 0.80810901 | 0.431 | 0.259 | 5.21E-07 | Proliferating_spleen |
| ZMYND11            | 1.49E-11 | 0.51958663 | 0.581 | 0.381 | 5.28E-07 | Proliferating_spleen |
| TCOF1              | 1.51E-11 | 0.4847263  | 0.299 | 0.145 | 5.36E-07 | Proliferating_spleen |
| ZNF410             | 1.53E-11 | 0.6791223  | 0.461 | 0.282 | 5.43E-07 | Proliferating_spleen |
| DDX39B             | 1.54E-11 | 0.35512499 | 0.703 | 0.461 | 5.46E-07 | Proliferating_spleen |
| RC3H1              | 1.55E-11 | 0.56930581 | 0.445 | 0.267 | 5.49E-07 | Proliferating_spleen |
| PRR11              | 1.58E-11 | 0.60484166 | 0.272 | 0.131 | 5.59E-07 | Proliferating_spleen |
| SAP130             | 1.59E-11 | 0.88521586 | 0.33  | 0.178 | 5.62E-07 | Proliferating_spleen |
| TBCD               | 1.59E-11 | 0.94099155 | 0.304 | 0.16  | 5.64E-07 | Proliferating_spleen |
| IMMP2L             | 1.65E-11 | 0.52946635 | 0.628 | 0.436 | 5.83E-07 | Proliferating_spleen |
| FANCC              | 1.67E-11 | 0.40358964 | 0.708 | 0.478 | 5.90E-07 | Proliferating_spleen |
| OPA3               | 1.68E-11 | 1.02114327 | 0.266 | 0.13  | 5.97E-07 | Proliferating_spleen |
| ENSMMUG00000064329 | 1.80E-11 | 0.43830897 | 0.395 | 0.22  | 6.39E-07 | Proliferating_spleen |
| MAMU-DOB           | 1.82E-11 | 0.6335391  | 0.257 | 0.119 | 6.44E-07 | Proliferating_spleen |
| PDE8A              | 1.84E-11 | 1.00142661 | 0.301 | 0.16  | 6.51E-07 | Proliferating_spleen |
| PTPN22             | 1.85E-11 | 0.42579409 | 0.634 | 0.412 | 6.55E-07 | Proliferating_spleen |
| ENSMMUG00000019933 | 1.87E-11 | 0.5691988  | 0.295 | 0.15  | 6.62E-07 | Proliferating_spleen |
| TOB1               | 1.95E-11 | 0.51164712 | 0.411 | 0.236 | 6.92E-07 | Proliferating_spleen |
| ANKFY1             | 2.18E-11 | 0.5948259  | 0.439 | 0.251 | 7.74E-07 | Proliferating_spleen |
| PPP5C              | 2.24E-11 | 0.41977721 | 0.342 | 0.174 | 7.94E-07 | Proliferating_spleen |

|          |          |            |       |       |          |                      |
|----------|----------|------------|-------|-------|----------|----------------------|
| HDAC7    | 2.25E-11 | 0.7114448  | 0.409 | 0.245 | 7.99E-07 | Proliferating_spleen |
| ATP9B    | 2.27E-11 | 0.47773776 | 0.674 | 0.456 | 8.04E-07 | Proliferating_spleen |
| MTRR     | 2.27E-11 | 0.76310895 | 0.324 | 0.167 | 8.04E-07 | Proliferating_spleen |
| MAPRE2   | 2.31E-11 | 0.41294899 | 0.705 | 0.498 | 8.20E-07 | Proliferating_spleen |
| CSE1L    | 2.32E-11 | 0.41617934 | 0.441 | 0.256 | 8.23E-07 | Proliferating_spleen |
| PAFAH1B1 | 2.38E-11 | 0.43053063 | 0.776 | 0.553 | 8.44E-07 | Proliferating_spleen |
| USP7     | 2.39E-11 | 0.50124233 | 0.482 | 0.299 | 8.47E-07 | Proliferating_spleen |
| RFX3     | 2.39E-11 | 0.28297563 | 0.695 | 0.44  | 8.48E-07 | Proliferating_spleen |
| ZNF652   | 2.40E-11 | 1.00340011 | 0.349 | 0.199 | 8.51E-07 | Proliferating_spleen |
| GPATCH8  | 2.42E-11 | 0.45825895 | 0.712 | 0.481 | 8.56E-07 | Proliferating_spleen |
| LUC7L3   | 2.43E-11 | 0.34489851 | 0.765 | 0.525 | 8.61E-07 | Proliferating_spleen |
| MAPK6    | 2.48E-11 | 0.7839193  | 0.405 | 0.236 | 8.80E-07 | Proliferating_spleen |
| RAB6A    | 2.55E-11 | 0.77041712 | 0.441 | 0.262 | 9.02E-07 | Proliferating_spleen |
| ZC3H7B   | 2.63E-11 | 0.80682868 | 0.264 | 0.129 | 9.31E-07 | Proliferating_spleen |
| FAF2     | 2.63E-11 | 0.527843   | 0.381 | 0.209 | 9.33E-07 | Proliferating_spleen |
| CNOT2    | 2.69E-11 | 0.47263141 | 0.762 | 0.521 | 9.53E-07 | Proliferating_spleen |
| ZNF160   | 2.83E-11 | 0.601107   | 0.347 | 0.188 | 1.00E-06 | Proliferating_spleen |
| SLC25A12 | 2.89E-11 | 0.90693556 | 0.265 | 0.132 | 1.02E-06 | Proliferating_spleen |
| HNRNPL   | 2.89E-11 | 0.33342549 | 0.753 | 0.537 | 1.02E-06 | Proliferating_spleen |
| AGPS     | 2.89E-11 | 0.45861504 | 0.558 | 0.352 | 1.02E-06 | Proliferating_spleen |
| NAA15    | 2.90E-11 | 0.42855472 | 0.549 | 0.34  | 1.03E-06 | Proliferating_spleen |
| KMT5B    | 2.91E-11 | 0.61978362 | 0.364 | 0.205 | 1.03E-06 | Proliferating_spleen |
| CEP63    | 3.17E-11 | 0.68859783 | 0.285 | 0.141 | 1.12E-06 | Proliferating_spleen |
| RTTN     | 3.33E-11 | 0.49221823 | 0.526 | 0.328 | 1.18E-06 | Proliferating_spleen |
| TNKS     | 3.40E-11 | 0.35600172 | 0.639 | 0.411 | 1.21E-06 | Proliferating_spleen |
| IRF1     | 3.48E-11 | 0.7792066  | 0.561 | 0.381 | 1.23E-06 | Proliferating_spleen |
| HPS3     | 3.60E-11 | 0.94445444 | 0.296 | 0.153 | 1.28E-06 | Proliferating_spleen |
| ZNF800   | 3.62E-11 | 0.66640046 | 0.312 | 0.163 | 1.28E-06 | Proliferating_spleen |
| ATAD2    | 3.74E-11 | 0.50794627 | 0.715 | 0.506 | 1.32E-06 | Proliferating_spleen |
| VMP1     | 3.75E-11 | 0.54556937 | 0.536 | 0.344 | 1.33E-06 | Proliferating_spleen |
| LUC7L    | 3.75E-11 | 0.72458958 | 0.522 | 0.328 | 1.33E-06 | Proliferating_spleen |
| FAM172A  | 3.82E-11 | 0.43034559 | 0.78  | 0.56  | 1.36E-06 | Proliferating_spleen |
| CSK      | 3.87E-11 | 0.20334563 | 0.557 | 0.338 | 1.37E-06 | Proliferating_spleen |

|                   |          |            |       |       |          |                      |
|-------------------|----------|------------|-------|-------|----------|----------------------|
| CUL1              | 3.88E-11 | 0.51036202 | 0.509 | 0.32  | 1.37E-06 | Proliferating_spleen |
| FNDC3B            | 3.98E-11 | 0.98980743 | 0.314 | 0.169 | 1.41E-06 | Proliferating_spleen |
| MRE11             | 4.02E-11 | 0.62730915 | 0.4   | 0.226 | 1.43E-06 | Proliferating_spleen |
| TRIM22            | 4.03E-11 | 0.33122302 | 0.496 | 0.301 | 1.43E-06 | Proliferating_spleen |
| CLASP2            | 4.09E-11 | 0.3649716  | 0.655 | 0.437 | 1.45E-06 | Proliferating_spleen |
| EWSR1             | 4.15E-11 | 0.45895844 | 0.703 | 0.491 | 1.47E-06 | Proliferating_spleen |
| ARF4              | 4.16E-11 | 0.45366815 | 0.742 | 0.555 | 1.48E-06 | Proliferating_spleen |
| NDC1              | 4.17E-11 | 0.44256755 | 0.309 | 0.157 | 1.48E-06 | Proliferating_spleen |
| MAMU-DRB1         | 4.18E-11 | 0.36832658 | 0.282 | 0.149 | 1.48E-06 | Proliferating_spleen |
| TAGAP             | 4.27E-11 | 0.48695591 | 0.584 | 0.392 | 1.51E-06 | Proliferating_spleen |
| FO XK2            | 4.34E-11 | 0.82538311 | 0.308 | 0.161 | 1.54E-06 | Proliferating_spleen |
| STIP1             | 4.34E-11 | 0.38369168 | 0.488 | 0.295 | 1.54E-06 | Proliferating_spleen |
| DPH3              | 4.39E-11 | 0.44090738 | 0.326 | 0.168 | 1.56E-06 | Proliferating_spleen |
| TANK              | 4.41E-11 | 0.7176819  | 0.549 | 0.378 | 1.56E-06 | Proliferating_spleen |
| GLCE              | 4.45E-11 | 0.75649102 | 0.443 | 0.283 | 1.58E-06 | Proliferating_spleen |
| WDHD1             | 4.47E-11 | 0.43453174 | 0.42  | 0.24  | 1.58E-06 | Proliferating_spleen |
| ABHD3             | 4.68E-11 | 0.57228453 | 0.353 | 0.196 | 1.66E-06 | Proliferating_spleen |
| HPS5              | 4.89E-11 | 0.74551565 | 0.289 | 0.148 | 1.73E-06 | Proliferating_spleen |
| SH2B3             | 4.97E-11 | 0.7714892  | 0.342 | 0.191 | 1.76E-06 | Proliferating_spleen |
| ZNF644            | 5.06E-11 | 0.36066379 | 0.803 | 0.557 | 1.79E-06 | Proliferating_spleen |
| ENSMUG00000006165 | 5.10E-11 | 0.34156111 | 0.918 | 0.672 | 1.81E-06 | Proliferating_spleen |
| NOP56             | 5.42E-11 | 0.27234227 | 0.5   | 0.306 | 1.92E-06 | Proliferating_spleen |
| TBC1D10B          | 5.68E-11 | 0.5192911  | 0.438 | 0.26  | 2.01E-06 | Proliferating_spleen |
| AKT2              | 5.72E-11 | 0.46575291 | 0.355 | 0.189 | 2.03E-06 | Proliferating_spleen |
| FO XN2            | 5.76E-11 | 0.67206838 | 0.507 | 0.315 | 2.04E-06 | Proliferating_spleen |
| HNRNPH1           | 5.78E-11 | 0.30460604 | 0.868 | 0.704 | 2.05E-06 | Proliferating_spleen |
| CTNNB1            | 5.83E-11 | 0.39059282 | 0.726 | 0.474 | 2.07E-06 | Proliferating_spleen |
| MTCH1             | 6.03E-11 | 0.40634176 | 0.343 | 0.179 | 2.14E-06 | Proliferating_spleen |
| SUPT3H            | 6.34E-11 | 0.6136613  | 0.553 | 0.369 | 2.25E-06 | Proliferating_spleen |
| UBAP1             | 6.41E-11 | 0.59960581 | 0.612 | 0.402 | 2.27E-06 | Proliferating_spleen |
| EHBP1             | 6.96E-11 | 0.6416804  | 0.52  | 0.342 | 2.46E-06 | Proliferating_spleen |
| NUP214            | 7.03E-11 | 0.35857797 | 0.6   | 0.383 | 2.49E-06 | Proliferating_spleen |
| ENO2              | 7.36E-11 | 0.73105617 | 0.262 | 0.13  | 2.61E-06 | Proliferating_spleen |

|            |          |            |       |       |          |                      |
|------------|----------|------------|-------|-------|----------|----------------------|
| ZBTB20     | 7.40E-11 | 0.47739492 | 0.697 | 0.478 | 2.62E-06 | Proliferating_spleen |
| INTS8      | 7.69E-11 | 0.41255378 | 0.388 | 0.219 | 2.73E-06 | Proliferating_spleen |
| ODF2       | 7.89E-11 | 0.55339332 | 0.292 | 0.148 | 2.80E-06 | Proliferating_spleen |
| MAP4K4     | 7.97E-11 | 0.40532228 | 0.769 | 0.537 | 2.82E-06 | Proliferating_spleen |
| TRIM13     | 8.22E-11 | 0.7198632  | 0.296 | 0.155 | 2.91E-06 | Proliferating_spleen |
| YTHDF3     | 8.36E-11 | 0.48394251 | 0.569 | 0.363 | 2.96E-06 | Proliferating_spleen |
| PCGF3      | 8.61E-11 | 0.77357267 | 0.304 | 0.162 | 3.05E-06 | Proliferating_spleen |
| MROH1      | 8.63E-11 | 0.69558376 | 0.33  | 0.184 | 3.06E-06 | Proliferating_spleen |
| TMEM131    | 8.64E-11 | 0.43002903 | 0.664 | 0.454 | 3.06E-06 | Proliferating_spleen |
| CRLF3      | 8.72E-11 | 0.42208344 | 0.434 | 0.257 | 3.09E-06 | Proliferating_spleen |
| RASAL3     | 8.91E-11 | 0.66778658 | 0.265 | 0.129 | 3.16E-06 | Proliferating_spleen |
| MTMR1      | 8.98E-11 | 0.72010154 | 0.349 | 0.197 | 3.18E-06 | Proliferating_spleen |
| ALG8       | 9.47E-11 | 0.66984405 | 0.309 | 0.162 | 3.36E-06 | Proliferating_spleen |
| TAF15      | 9.56E-11 | 0.36232502 | 0.831 | 0.62  | 3.39E-06 | Proliferating_spleen |
| MTCH2      | 9.57E-11 | 0.56568994 | 0.377 | 0.217 | 3.39E-06 | Proliferating_spleen |
| RPRD2      | 9.89E-11 | 0.38920932 | 0.632 | 0.415 | 3.51E-06 | Proliferating_spleen |
| CNOT11     | 9.98E-11 | 0.46779923 | 0.259 | 0.123 | 3.53E-06 | Proliferating_spleen |
| UNC119     | 1.02E-10 | 0.46524594 | 0.301 | 0.155 | 3.60E-06 | Proliferating_spleen |
| TASP1      | 1.04E-10 | 0.36493544 | 0.564 | 0.358 | 3.68E-06 | Proliferating_spleen |
| NUP205     | 1.05E-10 | 0.25221806 | 0.5   | 0.303 | 3.72E-06 | Proliferating_spleen |
| C1H1orf131 | 1.06E-10 | 0.41429305 | 0.291 | 0.145 | 3.77E-06 | Proliferating_spleen |
| PPP4R3B    | 1.09E-10 | 0.38192398 | 0.546 | 0.344 | 3.87E-06 | Proliferating_spleen |
| PCM1       | 1.10E-10 | 0.33960231 | 0.695 | 0.462 | 3.91E-06 | Proliferating_spleen |
| DTNB       | 1.11E-10 | 0.6184856  | 0.482 | 0.304 | 3.92E-06 | Proliferating_spleen |
| RNF19B     | 1.14E-10 | 1.29434175 | 0.266 | 0.136 | 4.03E-06 | Proliferating_spleen |
| SIRT1      | 1.15E-10 | 0.64532462 | 0.301 | 0.157 | 4.06E-06 | Proliferating_spleen |
| FAM91A1    | 1.17E-10 | 0.61180064 | 0.403 | 0.237 | 4.15E-06 | Proliferating_spleen |
| KIAA0232   | 1.19E-10 | 0.56399945 | 0.405 | 0.237 | 4.20E-06 | Proliferating_spleen |
| ZC3H11A    | 1.20E-10 | 0.48017393 | 0.632 | 0.416 | 4.25E-06 | Proliferating_spleen |
| KIAA1109   | 1.23E-10 | 0.73364243 | 0.505 | 0.331 | 4.36E-06 | Proliferating_spleen |
| COPG2      | 1.23E-10 | 0.54772603 | 0.307 | 0.158 | 4.37E-06 | Proliferating_spleen |
| SPATS2     | 1.25E-10 | 0.9662509  | 0.312 | 0.17  | 4.43E-06 | Proliferating_spleen |
| KLF13      | 1.27E-10 | 0.80962061 | 0.327 | 0.18  | 4.48E-06 | Proliferating_spleen |



|                    |          |            |       |       |          |                      |
|--------------------|----------|------------|-------|-------|----------|----------------------|
| EPC2               | 1.35E-10 | 0.25200864 | 0.616 | 0.389 | 4.78E-06 | Proliferating_spleen |
| KIAA0586           | 1.40E-10 | 0.60481932 | 0.343 | 0.188 | 4.97E-06 | Proliferating_spleen |
| SLF2               | 1.41E-10 | 0.37568552 | 0.441 | 0.261 | 5.00E-06 | Proliferating_spleen |
| ENSMMUG00000012203 | 1.45E-10 | 1.10943386 | 0.324 | 0.186 | 5.15E-06 | Proliferating_spleen |
| TLL5               | 1.46E-10 | 0.63672104 | 0.359 | 0.202 | 5.18E-06 | Proliferating_spleen |
| NAA50              | 1.48E-10 | 0.34583073 | 0.609 | 0.401 | 5.24E-06 | Proliferating_spleen |
| TTC14              | 1.49E-10 | 0.40666351 | 0.401 | 0.231 | 5.29E-06 | Proliferating_spleen |
| CEP112             | 1.52E-10 | 0.67950484 | 0.258 | 0.128 | 5.39E-06 | Proliferating_spleen |
| LRRRC8D            | 1.64E-10 | 0.57686297 | 0.362 | 0.201 | 5.83E-06 | Proliferating_spleen |
| FER                | 1.65E-10 | 0.84615953 | 0.262 | 0.131 | 5.85E-06 | Proliferating_spleen |
| NEDD4L             | 1.69E-10 | 0.79684624 | 0.412 | 0.254 | 5.98E-06 | Proliferating_spleen |
| NBN                | 1.70E-10 | 0.6465475  | 0.315 | 0.167 | 6.02E-06 | Proliferating_spleen |
| DDX1               | 1.72E-10 | 0.51589894 | 0.35  | 0.192 | 6.08E-06 | Proliferating_spleen |
| MAN1A1             | 1.74E-10 | 0.54682686 | 0.526 | 0.349 | 6.17E-06 | Proliferating_spleen |
| MCM3               | 1.74E-10 | 0.32387624 | 0.527 | 0.336 | 6.17E-06 | Proliferating_spleen |
| ECPAS              | 1.74E-10 | 0.55554826 | 0.428 | 0.258 | 6.17E-06 | Proliferating_spleen |
| ANKRD28            | 1.75E-10 | 0.4578297  | 0.599 | 0.4   | 6.20E-06 | Proliferating_spleen |
| RORA               | 1.80E-10 | 0.79131869 | 0.486 | 0.325 | 6.37E-06 | Proliferating_spleen |
| CCDC91             | 1.81E-10 | 0.26633799 | 0.708 | 0.46  | 6.41E-06 | Proliferating_spleen |
| SFI1               | 1.81E-10 | 0.62451863 | 0.369 | 0.212 | 6.42E-06 | Proliferating_spleen |
| PPP2R1A            | 1.83E-10 | 0.36321505 | 0.526 | 0.331 | 6.50E-06 | Proliferating_spleen |
| WSB1               | 1.85E-10 | 0.38649227 | 0.759 | 0.558 | 6.56E-06 | Proliferating_spleen |
| NCOA3              | 1.86E-10 | 0.47249667 | 0.815 | 0.583 | 6.60E-06 | Proliferating_spleen |
| SPINT2             | 1.87E-10 | 0.23907315 | 0.351 | 0.189 | 6.63E-06 | Proliferating_spleen |
| USP24              | 1.89E-10 | 0.53238982 | 0.493 | 0.307 | 6.68E-06 | Proliferating_spleen |
| WDR1               | 1.89E-10 | 0.31075163 | 0.52  | 0.32  | 6.71E-06 | Proliferating_spleen |
| KPNB1              | 1.91E-10 | 0.2435063  | 0.634 | 0.408 | 6.78E-06 | Proliferating_spleen |
| ITPK1              | 1.96E-10 | 1.02511908 | 0.276 | 0.146 | 6.95E-06 | Proliferating_spleen |
| TRIO               | 1.97E-10 | 0.86622892 | 0.277 | 0.143 | 6.99E-06 | Proliferating_spleen |
| RNF169             | 1.99E-10 | 0.82852768 | 0.293 | 0.157 | 7.04E-06 | Proliferating_spleen |
| KIF15              | 2.07E-10 | 0.41732538 | 0.53  | 0.333 | 7.32E-06 | Proliferating_spleen |
| PELI1              | 2.10E-10 | 0.57749744 | 0.692 | 0.485 | 7.44E-06 | Proliferating_spleen |
| PUM2               | 2.16E-10 | 0.27974703 | 0.8   | 0.575 | 7.64E-06 | Proliferating_spleen |

|           |          |            |       |       |          |                      |
|-----------|----------|------------|-------|-------|----------|----------------------|
| HIBADH    | 2.28E-10 | 0.71940792 | 0.301 | 0.158 | 8.07E-06 | Proliferating_spleen |
| AP2A1     | 2.28E-10 | 0.43877001 | 0.262 | 0.128 | 8.09E-06 | Proliferating_spleen |
| DDX23     | 2.39E-10 | 0.21848084 | 0.328 | 0.173 | 8.48E-06 | Proliferating_spleen |
| FMNL1     | 2.39E-10 | 0.75154365 | 0.296 | 0.157 | 8.48E-06 | Proliferating_spleen |
| MED28     | 2.56E-10 | 0.3517096  | 0.446 | 0.261 | 9.06E-06 | Proliferating_spleen |
| KIAA0319L | 2.57E-10 | 0.93203366 | 0.258 | 0.131 | 9.10E-06 | Proliferating_spleen |
| CCDC6     | 2.59E-10 | 0.58242782 | 0.393 | 0.23  | 9.19E-06 | Proliferating_spleen |
| MTHFD1L   | 2.59E-10 | 0.67426818 | 0.434 | 0.275 | 9.19E-06 | Proliferating_spleen |
| PMS1      | 2.76E-10 | 0.58433025 | 0.388 | 0.226 | 9.78E-06 | Proliferating_spleen |
| KPNA1     | 2.79E-10 | 0.39546362 | 0.453 | 0.28  | 9.90E-06 | Proliferating_spleen |
| ATP10D    | 2.82E-10 | 0.7729262  | 0.258 | 0.129 | 1.00E-05 | Proliferating_spleen |
| PSMD3     | 2.87E-10 | 0.26585255 | 0.295 | 0.148 | 1.02E-05 | Proliferating_spleen |
| ZCCHC17   | 2.95E-10 | 0.42975602 | 0.364 | 0.199 | 1.04E-05 | Proliferating_spleen |
| UBA1      | 2.96E-10 | 0.38358302 | 0.38  | 0.216 | 1.05E-05 | Proliferating_spleen |
| MARCHF5   | 3.04E-10 | 0.69167953 | 0.308 | 0.165 | 1.08E-05 | Proliferating_spleen |
| MICU1     | 3.09E-10 | 0.51825322 | 0.443 | 0.278 | 1.09E-05 | Proliferating_spleen |
| PLEKHB2   | 3.10E-10 | 0.59634174 | 0.462 | 0.29  | 1.10E-05 | Proliferating_spleen |
| WIPF2     | 3.15E-10 | 0.63352859 | 0.372 | 0.217 | 1.12E-05 | Proliferating_spleen |
| LYST      | 3.16E-10 | 0.96690677 | 0.542 | 0.39  | 1.12E-05 | Proliferating_spleen |
| R3HCC1L   | 3.23E-10 | 0.53023224 | 0.408 | 0.24  | 1.14E-05 | Proliferating_spleen |
| NBR1      | 3.26E-10 | 0.50395968 | 0.608 | 0.401 | 1.15E-05 | Proliferating_spleen |
| PRC1      | 3.26E-10 | 0.42140938 | 0.451 | 0.271 | 1.16E-05 | Proliferating_spleen |
| ERGIC1    | 3.51E-10 | 0.62456848 | 0.323 | 0.177 | 1.25E-05 | Proliferating_spleen |
| YTHDF2    | 3.56E-10 | 0.45011245 | 0.426 | 0.251 | 1.26E-05 | Proliferating_spleen |
| RBMS1     | 3.59E-10 | 0.43851283 | 0.669 | 0.463 | 1.27E-05 | Proliferating_spleen |
| TMEM59L   | 3.62E-10 | 0.20774969 | 0.503 | 0.304 | 1.28E-05 | Proliferating_spleen |
| PPP6R1    | 3.63E-10 | 0.20755999 | 0.515 | 0.317 | 1.29E-05 | Proliferating_spleen |
| INPP5A    | 3.68E-10 | 0.66480581 | 0.442 | 0.278 | 1.30E-05 | Proliferating_spleen |
| SLAIN2    | 3.75E-10 | 0.39229112 | 0.419 | 0.248 | 1.33E-05 | Proliferating_spleen |
| PI4KA     | 3.76E-10 | 0.86624501 | 0.326 | 0.184 | 1.33E-05 | Proliferating_spleen |
| UBR2      | 3.81E-10 | 0.38968675 | 0.499 | 0.309 | 1.35E-05 | Proliferating_spleen |
| PTCD3     | 3.84E-10 | 0.53476552 | 0.368 | 0.211 | 1.36E-05 | Proliferating_spleen |
| SHPRH     | 3.88E-10 | 0.6800828  | 0.269 | 0.134 | 1.37E-05 | Proliferating_spleen |

|          |          |            |       |       |          |                      |
|----------|----------|------------|-------|-------|----------|----------------------|
| DECR1    | 3.98E-10 | 0.34829231 | 0.443 | 0.258 | 1.41E-05 | Proliferating_spleen |
| ATP11A   | 4.01E-10 | 0.79153982 | 0.326 | 0.187 | 1.42E-05 | Proliferating_spleen |
| CSRNP1   | 4.12E-10 | 0.36006675 | 0.377 | 0.21  | 1.46E-05 | Proliferating_spleen |
| LARGE1   | 4.23E-10 | 0.8616184  | 0.407 | 0.255 | 1.50E-05 | Proliferating_spleen |
| ATG4C    | 4.30E-10 | 0.6836008  | 0.257 | 0.126 | 1.52E-05 | Proliferating_spleen |
| MDFIC    | 4.31E-10 | 0.92487791 | 0.277 | 0.15  | 1.53E-05 | Proliferating_spleen |
| ALG6     | 4.34E-10 | 0.93445478 | 0.259 | 0.134 | 1.54E-05 | Proliferating_spleen |
| BORCS5   | 4.42E-10 | 0.57078573 | 0.359 | 0.208 | 1.57E-05 | Proliferating_spleen |
| NEMP1    | 4.45E-10 | 0.55412714 | 0.266 | 0.132 | 1.58E-05 | Proliferating_spleen |
| ENTPD4   | 4.57E-10 | 0.46884495 | 0.424 | 0.254 | 1.62E-05 | Proliferating_spleen |
| DPH6     | 4.59E-10 | 0.61977209 | 0.454 | 0.282 | 1.63E-05 | Proliferating_spleen |
| CHM      | 4.65E-10 | 0.29206603 | 0.532 | 0.33  | 1.65E-05 | Proliferating_spleen |
| TMEM259  | 4.70E-10 | 0.673538   | 0.253 | 0.127 | 1.66E-05 | Proliferating_spleen |
| ESCO1    | 4.80E-10 | 0.42266398 | 0.619 | 0.416 | 1.70E-05 | Proliferating_spleen |
| MAEA     | 4.83E-10 | 0.52768037 | 0.259 | 0.127 | 1.71E-05 | Proliferating_spleen |
| GINS1    | 4.87E-10 | 0.30821573 | 0.43  | 0.247 | 1.72E-05 | Proliferating_spleen |
| TRIM72   | 5.03E-10 | 0.34378798 | 0.847 | 0.638 | 1.78E-05 | Proliferating_spleen |
| EZR      | 5.05E-10 | 0.33247456 | 0.885 | 0.723 | 1.79E-05 | Proliferating_spleen |
| IWS1     | 5.08E-10 | 0.51195421 | 0.493 | 0.314 | 1.80E-05 | Proliferating_spleen |
| CCT2     | 5.14E-10 | 0.33680584 | 0.715 | 0.527 | 1.82E-05 | Proliferating_spleen |
| PTP4A1   | 5.18E-10 | 0.24714583 | 0.557 | 0.36  | 1.84E-05 | Proliferating_spleen |
| SBF2     | 5.19E-10 | 0.62035354 | 0.414 | 0.257 | 1.84E-05 | Proliferating_spleen |
| NDC80    | 5.23E-10 | 0.30417974 | 0.512 | 0.322 | 1.85E-05 | Proliferating_spleen |
| SRP54    | 5.38E-10 | 0.25414406 | 0.423 | 0.24  | 1.91E-05 | Proliferating_spleen |
| AASDHPPT | 5.64E-10 | 0.51132095 | 0.354 | 0.198 | 2.00E-05 | Proliferating_spleen |
| ADAR     | 5.65E-10 | 0.41588845 | 0.547 | 0.361 | 2.00E-05 | Proliferating_spleen |
| ANKRD27  | 5.87E-10 | 0.75475297 | 0.3   | 0.161 | 2.08E-05 | Proliferating_spleen |
| BTBD1    | 5.94E-10 | 0.65043918 | 0.365 | 0.214 | 2.11E-05 | Proliferating_spleen |
| MIGA1    | 6.07E-10 | 0.77609143 | 0.284 | 0.149 | 2.15E-05 | Proliferating_spleen |
| PTBP3    | 6.09E-10 | 0.31147881 | 0.822 | 0.628 | 2.16E-05 | Proliferating_spleen |
| EIF4E    | 6.18E-10 | 0.42950102 | 0.518 | 0.326 | 2.19E-05 | Proliferating_spleen |
| LSG1     | 6.25E-10 | 0.56515336 | 0.351 | 0.199 | 2.22E-05 | Proliferating_spleen |
| PIGU     | 6.34E-10 | 0.64771191 | 0.311 | 0.169 | 2.24E-05 | Proliferating_spleen |

|          |          |            |       |       |          |                      |
|----------|----------|------------|-------|-------|----------|----------------------|
| RIF1     | 6.46E-10 | 0.48002743 | 0.528 | 0.345 | 2.29E-05 | Proliferating_spleen |
| ANAPC1   | 6.48E-10 | 0.71831295 | 0.391 | 0.239 | 2.30E-05 | Proliferating_spleen |
| ASCC3    | 6.54E-10 | 0.44717624 | 0.674 | 0.46  | 2.32E-05 | Proliferating_spleen |
| COA4     | 6.55E-10 | 0.31184546 | 0.291 | 0.148 | 2.32E-05 | Proliferating_spleen |
| AP3B1    | 6.55E-10 | 0.34194842 | 0.727 | 0.503 | 2.32E-05 | Proliferating_spleen |
| MTHFD1   | 6.70E-10 | 0.53834219 | 0.365 | 0.209 | 2.38E-05 | Proliferating_spleen |
| VPS51    | 6.85E-10 | 0.50356008 | 0.368 | 0.211 | 2.43E-05 | Proliferating_spleen |
| CORO1C   | 6.98E-10 | 0.29040777 | 0.284 | 0.144 | 2.47E-05 | Proliferating_spleen |
| SPOP     | 7.12E-10 | 0.29599656 | 0.519 | 0.326 | 2.52E-05 | Proliferating_spleen |
| UBA2     | 7.13E-10 | 0.33175209 | 0.603 | 0.4   | 2.53E-05 | Proliferating_spleen |
| UAP1     | 7.37E-10 | 0.70678675 | 0.268 | 0.138 | 2.61E-05 | Proliferating_spleen |
| SAMD8    | 7.43E-10 | 0.76617476 | 0.311 | 0.17  | 2.63E-05 | Proliferating_spleen |
| CMAH     | 7.45E-10 | 0.57857839 | 0.547 | 0.376 | 2.64E-05 | Proliferating_spleen |
| ATXN2L   | 7.62E-10 | 0.38122963 | 0.312 | 0.166 | 2.70E-05 | Proliferating_spleen |
| HP1BP3   | 7.65E-10 | 0.4250681  | 0.765 | 0.587 | 2.71E-05 | Proliferating_spleen |
| UGCG     | 7.68E-10 | 0.42175414 | 0.374 | 0.217 | 2.72E-05 | Proliferating_spleen |
| TRRAP    | 7.76E-10 | 0.51206532 | 0.457 | 0.286 | 2.75E-05 | Proliferating_spleen |
| ADSS2    | 7.96E-10 | 0.21894314 | 0.542 | 0.345 | 2.82E-05 | Proliferating_spleen |
| PPP2R2A  | 8.04E-10 | 0.36221197 | 0.645 | 0.434 | 2.85E-05 | Proliferating_spleen |
| FGD3     | 8.07E-10 | 0.39856087 | 0.586 | 0.386 | 2.86E-05 | Proliferating_spleen |
| GNL1     | 8.13E-10 | 0.75022863 | 0.324 | 0.181 | 2.88E-05 | Proliferating_spleen |
| CMTM3    | 8.27E-10 | 0.39687408 | 0.261 | 0.129 | 2.93E-05 | Proliferating_spleen |
| RNF34    | 8.32E-10 | 0.47521281 | 0.399 | 0.235 | 2.95E-05 | Proliferating_spleen |
| FAM76B   | 8.40E-10 | 0.50907999 | 0.373 | 0.215 | 2.98E-05 | Proliferating_spleen |
| EIF4EBP2 | 8.50E-10 | 0.70377828 | 0.28  | 0.146 | 3.01E-05 | Proliferating_spleen |
| TUT4     | 8.72E-10 | 0.2849315  | 0.824 | 0.598 | 3.09E-05 | Proliferating_spleen |
| MTSS1    | 8.76E-10 | 0.7980276  | 0.338 | 0.197 | 3.10E-05 | Proliferating_spleen |
| RUBCN    | 8.89E-10 | 0.49525051 | 0.45  | 0.282 | 3.15E-05 | Proliferating_spleen |
| AVEN     | 9.08E-10 | 1.06651639 | 0.253 | 0.136 | 3.22E-05 | Proliferating_spleen |
| HIPK1    | 9.50E-10 | 0.40737122 | 0.554 | 0.373 | 3.37E-05 | Proliferating_spleen |
| KAT7     | 9.60E-10 | 0.52110682 | 0.538 | 0.354 | 3.40E-05 | Proliferating_spleen |
| RNF10    | 9.60E-10 | 0.39911934 | 0.447 | 0.272 | 3.40E-05 | Proliferating_spleen |
| HCFC1    | 9.68E-10 | 0.53607652 | 0.32  | 0.175 | 3.43E-05 | Proliferating_spleen |

|                    |          |            |       |       |          |                      |
|--------------------|----------|------------|-------|-------|----------|----------------------|
| RAPGEF2            | 9.69E-10 | 0.49386629 | 0.473 | 0.311 | 3.43E-05 | Proliferating_spleen |
| INTS4              | 9.94E-10 | 0.83893743 | 0.273 | 0.143 | 3.52E-05 | Proliferating_spleen |
| TTK                | 9.95E-10 | 0.40527068 | 0.399 | 0.232 | 3.53E-05 | Proliferating_spleen |
| NARS2              | 1.03E-09 | 0.56617389 | 0.316 | 0.176 | 3.64E-05 | Proliferating_spleen |
| CEP83              | 1.03E-09 | 0.91880334 | 0.3   | 0.169 | 3.64E-05 | Proliferating_spleen |
| MAP2K4             | 1.05E-09 | 0.51976686 | 0.414 | 0.248 | 3.72E-05 | Proliferating_spleen |
| AARS1              | 1.09E-09 | 0.32035481 | 0.607 | 0.393 | 3.87E-05 | Proliferating_spleen |
| ATP13A3            | 1.10E-09 | 0.74277194 | 0.347 | 0.205 | 3.88E-05 | Proliferating_spleen |
| GPRIN3             | 1.10E-09 | 0.51931203 | 0.48  | 0.308 | 3.90E-05 | Proliferating_spleen |
| USP4               | 1.11E-09 | 0.49573988 | 0.424 | 0.252 | 3.92E-05 | Proliferating_spleen |
| FLOT1              | 1.11E-09 | 0.3864872  | 0.364 | 0.204 | 3.92E-05 | Proliferating_spleen |
| ENSMMUG00000057079 | 1.15E-09 | 0.39257955 | 0.399 | 0.237 | 4.09E-05 | Proliferating_spleen |
| CPNE1              | 1.19E-09 | 0.33571481 | 0.658 | 0.428 | 4.20E-05 | Proliferating_spleen |
| PDCD6IP            | 1.20E-09 | 0.37689256 | 0.532 | 0.346 | 4.24E-05 | Proliferating_spleen |
| LRIG1              | 1.20E-09 | 0.71558317 | 0.377 | 0.226 | 4.25E-05 | Proliferating_spleen |
| MPZL1              | 1.21E-09 | 0.43494378 | 0.572 | 0.373 | 4.28E-05 | Proliferating_spleen |
| PTPN11             | 1.23E-09 | 0.4680263  | 0.442 | 0.274 | 4.36E-05 | Proliferating_spleen |
| SREK1              | 1.28E-09 | 0.268767   | 0.797 | 0.561 | 4.54E-05 | Proliferating_spleen |
| NRROS              | 1.29E-09 | 0.45260072 | 0.457 | 0.287 | 4.58E-05 | Proliferating_spleen |
| AHSA1              | 1.29E-09 | 0.15250631 | 0.454 | 0.268 | 4.59E-05 | Proliferating_spleen |
| ZNF292             | 1.32E-09 | 0.28962336 | 0.824 | 0.577 | 4.66E-05 | Proliferating_spleen |
| PCCA               | 1.32E-09 | 0.31025326 | 0.614 | 0.403 | 4.66E-05 | Proliferating_spleen |
| CHMP4B             | 1.36E-09 | 0.50241106 | 0.286 | 0.151 | 4.82E-05 | Proliferating_spleen |
| NEMF               | 1.39E-09 | 0.3081415  | 0.536 | 0.345 | 4.94E-05 | Proliferating_spleen |
| KANSL3             | 1.42E-09 | 0.78793087 | 0.362 | 0.217 | 5.02E-05 | Proliferating_spleen |
| ARHGAP30           | 1.45E-09 | 0.1855348  | 0.549 | 0.354 | 5.15E-05 | Proliferating_spleen |
| RFTN1              | 1.46E-09 | 0.64220776 | 0.438 | 0.28  | 5.17E-05 | Proliferating_spleen |
| TGFBR3             | 1.47E-09 | 1.06660624 | 0.33  | 0.2   | 5.21E-05 | Proliferating_spleen |
| POLE2              | 1.49E-09 | 0.72143192 | 0.276 | 0.149 | 5.28E-05 | Proliferating_spleen |
| KLHDC4             | 1.54E-09 | 0.27994177 | 0.295 | 0.155 | 5.46E-05 | Proliferating_spleen |
| YAF2               | 1.54E-09 | 0.40726632 | 0.686 | 0.482 | 5.46E-05 | Proliferating_spleen |
| GNB2               | 1.55E-09 | 0.20162429 | 0.539 | 0.344 | 5.51E-05 | Proliferating_spleen |
| ENSMMUG00000062012 | 1.56E-09 | 0.75280993 | 0.255 | 0.13  | 5.53E-05 | Proliferating_spleen |

|                     |          |            |       |       |          |                      |
|---------------------|----------|------------|-------|-------|----------|----------------------|
| PARBP               | 1.57E-09 | 0.19592149 | 0.358 | 0.196 | 5.55E-05 | Proliferating_spleen |
| SMAD2               | 1.59E-09 | 0.55106246 | 0.418 | 0.252 | 5.64E-05 | Proliferating_spleen |
| UEVLD               | 1.62E-09 | 0.88586654 | 0.273 | 0.145 | 5.73E-05 | Proliferating_spleen |
| PPP2R5C             | 1.62E-09 | 0.32818439 | 0.885 | 0.699 | 5.73E-05 | Proliferating_spleen |
| GPR107              | 1.63E-09 | 0.45975366 | 0.486 | 0.306 | 5.78E-05 | Proliferating_spleen |
| FUBP3               | 1.66E-09 | 0.66811872 | 0.27  | 0.144 | 5.90E-05 | Proliferating_spleen |
| ENSMMUG000000037794 | 1.67E-09 | 0.60775604 | 0.277 | 0.144 | 5.91E-05 | Proliferating_spleen |
| SLC39A10            | 1.69E-09 | 0.17032436 | 0.33  | 0.179 | 5.97E-05 | Proliferating_spleen |
| XPC                 | 1.71E-09 | 0.4401296  | 0.434 | 0.268 | 6.07E-05 | Proliferating_spleen |
| C4H6orf62           | 1.73E-09 | 0.25441579 | 0.526 | 0.343 | 6.13E-05 | Proliferating_spleen |
| COMT                | 1.73E-09 | 0.21007545 | 0.547 | 0.338 | 6.13E-05 | Proliferating_spleen |
| EPS15L1             | 1.74E-09 | 0.50716145 | 0.373 | 0.217 | 6.18E-05 | Proliferating_spleen |
| TMEM245             | 1.76E-09 | 0.41196762 | 0.527 | 0.341 | 6.22E-05 | Proliferating_spleen |
| VPS13D              | 1.76E-09 | 0.71564974 | 0.449 | 0.287 | 6.22E-05 | Proliferating_spleen |
| RLIM                | 1.78E-09 | 0.45423182 | 0.416 | 0.254 | 6.32E-05 | Proliferating_spleen |
| KPNA2               | 1.80E-09 | 0.40711441 | 0.439 | 0.271 | 6.39E-05 | Proliferating_spleen |
| CLYBL               | 1.83E-09 | 0.71270561 | 0.397 | 0.245 | 6.49E-05 | Proliferating_spleen |
| JAK1                | 1.86E-09 | 0.42141298 | 0.932 | 0.732 | 6.58E-05 | Proliferating_spleen |
| SUPT5H              | 1.87E-09 | 0.38457801 | 0.416 | 0.248 | 6.64E-05 | Proliferating_spleen |
| ADIPOR2             | 1.90E-09 | 0.52454444 | 0.312 | 0.172 | 6.73E-05 | Proliferating_spleen |
| NUP155              | 1.90E-09 | 0.4964384  | 0.409 | 0.248 | 6.73E-05 | Proliferating_spleen |
| TIA1                | 1.91E-09 | 0.3073381  | 0.588 | 0.383 | 6.77E-05 | Proliferating_spleen |
| ENSMMUG000000001894 | 2.04E-09 | 0.29888696 | 0.603 | 0.388 | 7.22E-05 | Proliferating_spleen |
| TRAPPC3             | 2.07E-09 | 0.18954473 | 0.33  | 0.179 | 7.33E-05 | Proliferating_spleen |
| ATRN                | 2.12E-09 | 0.75621582 | 0.372 | 0.225 | 7.50E-05 | Proliferating_spleen |
| ENSMMUG000000017400 | 2.13E-09 | 0.50773115 | 0.37  | 0.214 | 7.56E-05 | Proliferating_spleen |
| ZBTB1               | 2.17E-09 | 0.5373139  | 0.481 | 0.31  | 7.68E-05 | Proliferating_spleen |
| SLC25A37            | 2.19E-09 | 0.67619988 | 0.291 | 0.157 | 7.74E-05 | Proliferating_spleen |
| TRAC                | 2.23E-09 | 0.38322886 | 0.755 | 0.649 | 7.90E-05 | Proliferating_spleen |
| TLK2                | 2.25E-09 | 0.38738037 | 0.593 | 0.387 | 7.96E-05 | Proliferating_spleen |
| TULP4               | 2.25E-09 | 0.72525309 | 0.362 | 0.219 | 7.98E-05 | Proliferating_spleen |
| NCAPG               | 2.26E-09 | 0.28786231 | 0.473 | 0.29  | 7.99E-05 | Proliferating_spleen |
| MAP4K5              | 2.29E-09 | 0.87839348 | 0.292 | 0.164 | 8.11E-05 | Proliferating_spleen |

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|--------------------|----------|------------|-------|-------|------------|----------------------|
| NUBPL              | 2.30E-09 | 0.67377478 | 0.336 | 0.195 | 8.14E-05   | Proliferating_spleen |
| TBC1D10C           | 2.31E-09 | 0.16456865 | 0.495 | 0.307 | 8.18E-05   | Proliferating_spleen |
| GNA13              | 2.41E-09 | 0.47891331 | 0.586 | 0.401 | 8.55E-05   | Proliferating_spleen |
| TMTC2              | 2.47E-09 | 0.60878744 | 0.349 | 0.204 | 8.77E-05   | Proliferating_spleen |
| ZC3H18             | 2.54E-09 | 0.48405919 | 0.512 | 0.326 | 9.01E-05   | Proliferating_spleen |
| CDK6               | 2.59E-09 | 0.45681919 | 0.455 | 0.29  | 9.18E-05   | Proliferating_spleen |
| SKAP1              | 2.65E-09 | 0.43412436 | 0.873 | 0.809 | 9.38E-05   | Proliferating_spleen |
| ENSMMUG00000028906 | 2.71E-09 | 0.41653865 | 0.628 | 0.428 | 9.61E-05   | Proliferating_spleen |
| ZNF277             | 2.75E-09 | 0.54887418 | 0.347 | 0.199 | 9.76E-05   | Proliferating_spleen |
| SH3BP5             | 2.78E-09 | 0.90546109 | 0.255 | 0.133 | 9.87E-05   | Proliferating_spleen |
| TDRD3              | 2.79E-09 | 0.58800448 | 0.458 | 0.293 | 9.88E-05   | Proliferating_spleen |
| UBR3               | 2.80E-09 | 0.46013617 | 0.549 | 0.365 | 9.92E-05   | Proliferating_spleen |
| RANGAP1            | 2.81E-09 | 0.42989169 | 0.364 | 0.208 | 9.96E-05   | Proliferating_spleen |
| CAST               | 2.83E-09 | 0.37267044 | 0.636 | 0.439 | 0.00010015 | Proliferating_spleen |
| RAB7A              | 2.86E-09 | 0.33491142 | 0.8   | 0.555 | 0.00010141 | Proliferating_spleen |
| SGO2               | 2.91E-09 | 0.53335136 | 0.311 | 0.177 | 0.00010309 | Proliferating_spleen |
| RAB21              | 2.96E-09 | 0.27372575 | 0.336 | 0.19  | 0.00010493 | Proliferating_spleen |
| NSRP1              | 2.97E-09 | 0.2660955  | 0.539 | 0.355 | 0.00010516 | Proliferating_spleen |
| SMAP2              | 2.98E-09 | 0.44312433 | 0.623 | 0.439 | 0.00010554 | Proliferating_spleen |
| CKAP2              | 2.99E-09 | 0.47583456 | 0.373 | 0.221 | 0.00010582 | Proliferating_spleen |
| FHIT               | 3.02E-09 | 0.80768972 | 0.316 | 0.187 | 0.00010693 | Proliferating_spleen |
| CFAP97             | 3.05E-09 | 0.5032635  | 0.259 | 0.133 | 0.000108   | Proliferating_spleen |
| IL16               | 3.07E-09 | 0.47925365 | 0.355 | 0.204 | 0.00010873 | Proliferating_spleen |
| URI1               | 3.09E-09 | 0.28539836 | 0.574 | 0.378 | 0.00010951 | Proliferating_spleen |
| GABPA              | 3.12E-09 | 0.54124288 | 0.293 | 0.161 | 0.00011056 | Proliferating_spleen |
| GRIPAP1            | 3.14E-09 | 0.49929874 | 0.277 | 0.148 | 0.00011139 | Proliferating_spleen |
| NAF1               | 3.19E-09 | 0.31352669 | 0.326 | 0.183 | 0.00011291 | Proliferating_spleen |
| INO80D             | 3.19E-09 | 0.34916872 | 0.6   | 0.399 | 0.00011315 | Proliferating_spleen |
| FBXW8              | 3.26E-09 | 0.55784514 | 0.364 | 0.214 | 0.00011563 | Proliferating_spleen |
| CHTOP              | 3.30E-09 | 0.18297764 | 0.357 | 0.198 | 0.00011679 | Proliferating_spleen |
| RAB11FIP3          | 3.32E-09 | 1.15094947 | 0.251 | 0.134 | 0.0001176  | Proliferating_spleen |
| ENSMMUG00000051928 | 3.42E-09 | 0.56206243 | 0.3   | 0.167 | 0.00012109 | Proliferating_spleen |
| CDK17              | 3.53E-09 | 0.38634475 | 0.685 | 0.492 | 0.00012515 | Proliferating_spleen |

|          |          |            |       |       |            |                      |
|----------|----------|------------|-------|-------|------------|----------------------|
| BTAF1    | 3.92E-09 | 0.31914717 | 0.63  | 0.422 | 0.00013895 | Proliferating_spleen |
| HELZ     | 3.97E-09 | 0.40710673 | 0.714 | 0.501 | 0.00014059 | Proliferating_spleen |
| POLA2    | 3.99E-09 | 0.3642299  | 0.362 | 0.205 | 0.00014126 | Proliferating_spleen |
| ATG7     | 4.00E-09 | 0.67854825 | 0.376 | 0.235 | 0.00014185 | Proliferating_spleen |
| PBXIP1   | 4.08E-09 | 0.52384024 | 0.457 | 0.289 | 0.0001447  | Proliferating_spleen |
| MAGT1    | 4.14E-09 | 0.14592255 | 0.414 | 0.243 | 0.0001466  | Proliferating_spleen |
| NUMA1    | 4.31E-09 | 0.36905835 | 0.549 | 0.366 | 0.00015288 | Proliferating_spleen |
| LEMD3    | 4.32E-09 | 0.33652302 | 0.528 | 0.341 | 0.00015305 | Proliferating_spleen |
| LARP4    | 4.32E-09 | 0.45189388 | 0.524 | 0.346 | 0.00015312 | Proliferating_spleen |
| PRR14L   | 4.34E-09 | 0.86922443 | 0.331 | 0.2   | 0.00015362 | Proliferating_spleen |
| WDR62    | 4.41E-09 | 0.61204051 | 0.324 | 0.185 | 0.00015642 | Proliferating_spleen |
| SRSF10   | 4.45E-09 | 0.30111589 | 0.776 | 0.565 | 0.00015751 | Proliferating_spleen |
| UBE2J1   | 4.53E-09 | 0.27527242 | 0.407 | 0.244 | 0.00016052 | Proliferating_spleen |
| ALKBH5   | 4.54E-09 | 0.50045268 | 0.282 | 0.152 | 0.00016093 | Proliferating_spleen |
| CUL3     | 4.65E-09 | 0.30737071 | 0.749 | 0.514 | 0.00016486 | Proliferating_spleen |
| HDGF     | 4.66E-09 | 0.35046485 | 0.376 | 0.221 | 0.00016505 | Proliferating_spleen |
| TBL1X    | 4.75E-09 | 0.43298882 | 0.439 | 0.283 | 0.00016818 | Proliferating_spleen |
| TAF3     | 4.77E-09 | 0.3466829  | 0.651 | 0.439 | 0.00016892 | Proliferating_spleen |
| SPTLC2   | 4.88E-09 | 0.57253386 | 0.409 | 0.255 | 0.00017287 | Proliferating_spleen |
| ABL1     | 4.89E-09 | 0.66753686 | 0.32  | 0.19  | 0.00017337 | Proliferating_spleen |
| MAP4     | 4.92E-09 | 0.67375079 | 0.331 | 0.196 | 0.00017441 | Proliferating_spleen |
| TRANK1   | 4.94E-09 | 0.64609516 | 0.457 | 0.295 | 0.00017509 | Proliferating_spleen |
| POLK     | 4.97E-09 | 0.39067366 | 0.388 | 0.232 | 0.00017625 | Proliferating_spleen |
| USP8     | 5.00E-09 | 0.50700912 | 0.443 | 0.29  | 0.00017714 | Proliferating_spleen |
| MAT2B    | 5.01E-09 | 0.29178546 | 0.335 | 0.189 | 0.00017744 | Proliferating_spleen |
| FAM111A  | 5.23E-09 | 0.18633033 | 0.458 | 0.281 | 0.00018533 | Proliferating_spleen |
| PRSS55   | 5.23E-09 | 0.7782712  | 0.319 | 0.183 | 0.00018535 | Proliferating_spleen |
| ZZZ3     | 5.36E-09 | 0.46976773 | 0.531 | 0.352 | 0.00018981 | Proliferating_spleen |
| HSP90AB1 | 5.51E-09 | 0.40783809 | 0.907 | 0.833 | 0.00019508 | Proliferating_spleen |
| UFL1     | 5.55E-09 | 0.39736836 | 0.311 | 0.176 | 0.00019677 | Proliferating_spleen |
| SMIM14   | 5.60E-09 | 0.73851395 | 0.369 | 0.235 | 0.00019858 | Proliferating_spleen |
| WDR76    | 5.65E-09 | 0.32426833 | 0.45  | 0.282 | 0.00020023 | Proliferating_spleen |
| CMSS1    | 5.69E-09 | 0.44005337 | 0.474 | 0.31  | 0.00020148 | Proliferating_spleen |



|                     |          |            |       |       |            |                      |
|---------------------|----------|------------|-------|-------|------------|----------------------|
| IL2RB               | 5.70E-09 | 0.51400048 | 0.355 | 0.215 | 0.00020201 | Proliferating_spleen |
| TRAPPC10            | 5.80E-09 | 0.55136655 | 0.585 | 0.398 | 0.00020549 | Proliferating_spleen |
| VRK2                | 5.85E-09 | 0.49634269 | 0.281 | 0.153 | 0.00020714 | Proliferating_spleen |
| TMEM41B             | 5.87E-09 | 0.70850349 | 0.358 | 0.212 | 0.00020784 | Proliferating_spleen |
| LBR                 | 5.88E-09 | 0.27123697 | 0.724 | 0.536 | 0.00020825 | Proliferating_spleen |
| TTC7A               | 6.06E-09 | 0.79673078 | 0.409 | 0.264 | 0.00021456 | Proliferating_spleen |
| KAT2B               | 6.27E-09 | 0.7171073  | 0.295 | 0.167 | 0.00022205 | Proliferating_spleen |
| ENSMMUG00000008604  | 6.28E-09 | 0.41615916 | 0.374 | 0.221 | 0.00022262 | Proliferating_spleen |
| GPR174              | 6.33E-09 | 0.18723954 | 0.48  | 0.299 | 0.00022442 | Proliferating_spleen |
| SYPL1               | 6.48E-09 | 0.35637765 | 0.423 | 0.262 | 0.00022973 | Proliferating_spleen |
| NUP188              | 6.49E-09 | 0.5588505  | 0.334 | 0.196 | 0.00022993 | Proliferating_spleen |
| CEP57L1             | 6.64E-09 | 0.44740006 | 0.323 | 0.185 | 0.00023521 | Proliferating_spleen |
| FAM241A             | 6.83E-09 | 0.67665425 | 0.414 | 0.27  | 0.00024212 | Proliferating_spleen |
| TAPBP               | 6.91E-09 | 0.29178214 | 0.538 | 0.349 | 0.00024469 | Proliferating_spleen |
| ZNF569              | 6.94E-09 | 0.67845206 | 0.259 | 0.137 | 0.0002458  | Proliferating_spleen |
| POGZ                | 7.03E-09 | 0.41407814 | 0.542 | 0.362 | 0.00024894 | Proliferating_spleen |
| ENSMMUG000000064749 | 7.14E-09 | 0.66725749 | 0.328 | 0.195 | 0.00025305 | Proliferating_spleen |
| C12H2orf76          | 7.53E-09 | 0.37724594 | 0.276 | 0.145 | 0.00026691 | Proliferating_spleen |
| RASA2               | 7.59E-09 | 0.25635707 | 0.812 | 0.579 | 0.00026895 | Proliferating_spleen |
| DIS3L2              | 7.68E-09 | 0.35977152 | 0.592 | 0.395 | 0.0002721  | Proliferating_spleen |
| IVNS1ABP            | 7.75E-09 | 0.19047767 | 0.553 | 0.356 | 0.00027464 | Proliferating_spleen |
| ROS1                | 7.84E-09 | 0.48102092 | 0.316 | 0.176 | 0.00027767 | Proliferating_spleen |
| AEBP2               | 8.22E-09 | 0.36975758 | 0.565 | 0.373 | 0.0002913  | Proliferating_spleen |
| MCM9                | 8.25E-09 | 0.48754666 | 0.472 | 0.298 | 0.00029236 | Proliferating_spleen |
| DTNBP1              | 8.25E-09 | 0.34163194 | 0.647 | 0.448 | 0.00029237 | Proliferating_spleen |
| GTF2H1              | 8.33E-09 | 0.36062633 | 0.373 | 0.22  | 0.00029509 | Proliferating_spleen |
| SAE1                | 8.35E-09 | 0.30500256 | 0.622 | 0.421 | 0.00029593 | Proliferating_spleen |
| DDHD1               | 8.50E-09 | 0.4885402  | 0.334 | 0.196 | 0.00030112 | Proliferating_spleen |
| ENSMMUG000000046264 | 8.66E-09 | 0.32536564 | 0.555 | 0.373 | 0.00030682 | Proliferating_spleen |
| SMC1A               | 8.71E-09 | 0.35019384 | 0.643 | 0.456 | 0.00030852 | Proliferating_spleen |
| TXLNG               | 8.84E-09 | 0.25647713 | 0.428 | 0.264 | 0.00031326 | Proliferating_spleen |
| SRSF6               | 8.92E-09 | 0.3421228  | 0.622 | 0.427 | 0.00031616 | Proliferating_spleen |
| SRSF1               | 8.96E-09 | 0.28881224 | 0.624 | 0.424 | 0.00031757 | Proliferating_spleen |

|                    |          |            |       |       |            |                      |
|--------------------|----------|------------|-------|-------|------------|----------------------|
| PPIL1              | 9.00E-09 | 0.21397524 | 0.327 | 0.181 | 0.00031881 | Proliferating_spleen |
| GANAB              | 9.08E-09 | 0.1991919  | 0.357 | 0.203 | 0.00032159 | Proliferating_spleen |
| BRD8               | 9.14E-09 | 0.35398144 | 0.368 | 0.211 | 0.00032402 | Proliferating_spleen |
| C2H3orf38          | 9.34E-09 | 0.56529731 | 0.265 | 0.143 | 0.00033109 | Proliferating_spleen |
| MYO1F              | 9.39E-09 | 0.86054185 | 0.286 | 0.163 | 0.00033269 | Proliferating_spleen |
| PIK3CG             | 9.44E-09 | 0.55541145 | 0.331 | 0.191 | 0.00033458 | Proliferating_spleen |
| IFT88              | 9.48E-09 | 0.44834964 | 0.415 | 0.259 | 0.00033603 | Proliferating_spleen |
| GPANK1             | 9.93E-09 | 0.33538781 | 0.312 | 0.172 | 0.00035181 | Proliferating_spleen |
| PELP1              | 1.01E-08 | 0.56335886 | 0.25  | 0.132 | 0.00035629 | Proliferating_spleen |
| IMMT               | 1.01E-08 | 0.30027198 | 0.399 | 0.237 | 0.00035792 | Proliferating_spleen |
| PPP1R21            | 1.03E-08 | 0.74547907 | 0.258 | 0.138 | 0.00036465 | Proliferating_spleen |
| GOLGA4             | 1.04E-08 | 0.24936649 | 0.723 | 0.495 | 0.00036795 | Proliferating_spleen |
| ABHD17B            | 1.05E-08 | 0.48722857 | 0.335 | 0.197 | 0.00037064 | Proliferating_spleen |
| ATXN10             | 1.06E-08 | 0.31228799 | 0.693 | 0.475 | 0.00037422 | Proliferating_spleen |
| ENSMMUG00000063877 | 1.08E-08 | 0.41425901 | 0.459 | 0.291 | 0.00038112 | Proliferating_spleen |
| RSRP1              | 1.08E-08 | 0.25707466 | 0.858 | 0.601 | 0.00038273 | Proliferating_spleen |
| SNX25              | 1.11E-08 | 0.52471246 | 0.422 | 0.274 | 0.00039218 | Proliferating_spleen |
| MYDGF              | 1.12E-08 | 0.13935755 | 0.581 | 0.383 | 0.00039514 | Proliferating_spleen |
| MDN1               | 1.12E-08 | 0.48537397 | 0.42  | 0.264 | 0.00039683 | Proliferating_spleen |
| ENSMMUG00000009264 | 1.12E-08 | 0.6683047  | 0.307 | 0.175 | 0.00039769 | Proliferating_spleen |
| SLC35A1            | 1.14E-08 | 0.65446814 | 0.261 | 0.141 | 0.00040445 | Proliferating_spleen |
| NUP88              | 1.15E-08 | 0.36777296 | 0.374 | 0.224 | 0.00040752 | Proliferating_spleen |
| MYO1D              | 1.16E-08 | 1.41010889 | 0.284 | 0.173 | 0.00040952 | Proliferating_spleen |
| SYAP1              | 1.16E-08 | 0.40105893 | 0.523 | 0.355 | 0.00041101 | Proliferating_spleen |
| GNAL               | 1.17E-08 | 0.32643824 | 0.391 | 0.235 | 0.00041555 | Proliferating_spleen |
| FOXP1              | 1.20E-08 | 0.30580662 | 0.724 | 0.503 | 0.00042636 | Proliferating_spleen |
| MFSD14B            | 1.21E-08 | 0.58452122 | 0.405 | 0.257 | 0.00042739 | Proliferating_spleen |
| NGLY1              | 1.22E-08 | 0.42749339 | 0.316 | 0.18  | 0.00043069 | Proliferating_spleen |
| GLE1               | 1.22E-08 | 0.59028906 | 0.393 | 0.24  | 0.00043283 | Proliferating_spleen |
| HMCES              | 1.25E-08 | 0.29245239 | 0.269 | 0.143 | 0.00044218 | Proliferating_spleen |
| CALU               | 1.26E-08 | 0.18019196 | 0.493 | 0.308 | 0.00044495 | Proliferating_spleen |
| GZMM               | 1.29E-08 | 0.59268142 | 0.384 | 0.243 | 0.00045591 | Proliferating_spleen |
| TGOLN2             | 1.31E-08 | 0.13790867 | 0.316 | 0.173 | 0.00046541 | Proliferating_spleen |

|                     |          |            |       |       |            |                      |
|---------------------|----------|------------|-------|-------|------------|----------------------|
| ZNF28               | 1.36E-08 | 0.18914488 | 0.497 | 0.322 | 0.00048083 | Proliferating_spleen |
| NCKAP1L             | 1.40E-08 | 0.36413073 | 0.518 | 0.345 | 0.00049625 | Proliferating_spleen |
| LMTK2               | 1.41E-08 | 0.32169942 | 0.497 | 0.323 | 0.00049875 | Proliferating_spleen |
| MYO9A               | 1.41E-08 | 0.65550648 | 0.336 | 0.202 | 0.00049998 | Proliferating_spleen |
| ARHGAP17            | 1.42E-08 | 0.6442254  | 0.393 | 0.258 | 0.00050142 | Proliferating_spleen |
| ARL2BP              | 1.42E-08 | 0.14113269 | 0.25  | 0.128 | 0.00050397 | Proliferating_spleen |
| ALG13               | 1.44E-08 | 0.19092806 | 0.308 | 0.169 | 0.00050893 | Proliferating_spleen |
| CABIN1              | 1.45E-08 | 0.50766565 | 0.428 | 0.274 | 0.00051267 | Proliferating_spleen |
| ENSMMUG000000063549 | 1.45E-08 | 0.16100549 | 0.334 | 0.19  | 0.00051301 | Proliferating_spleen |
| MSH2                | 1.46E-08 | 0.4449762  | 0.355 | 0.211 | 0.00051628 | Proliferating_spleen |
| PNO1                | 1.46E-08 | 0.47349283 | 0.304 | 0.174 | 0.00051737 | Proliferating_spleen |
| VPS53               | 1.46E-08 | 0.57574042 | 0.397 | 0.251 | 0.00051761 | Proliferating_spleen |
| TARDBP              | 1.48E-08 | 0.29784264 | 0.499 | 0.317 | 0.00052293 | Proliferating_spleen |
| PPHLN1              | 1.50E-08 | 0.26837239 | 0.724 | 0.49  | 0.00052998 | Proliferating_spleen |
| KHSRP               | 1.50E-08 | 0.25163855 | 0.299 | 0.163 | 0.00053092 | Proliferating_spleen |
| DAP                 | 1.52E-08 | 0.43577523 | 0.399 | 0.243 | 0.00053684 | Proliferating_spleen |
| CEP78               | 1.53E-08 | 0.49090167 | 0.254 | 0.134 | 0.00054079 | Proliferating_spleen |
| ENSMMUG00000006343  | 1.53E-08 | 0.66419113 | 0.37  | 0.233 | 0.0005412  | Proliferating_spleen |
| SELENOI             | 1.53E-08 | 0.55574548 | 0.315 | 0.183 | 0.00054254 | Proliferating_spleen |
| XRCC4               | 1.62E-08 | 0.23017374 | 0.464 | 0.285 | 0.00057325 | Proliferating_spleen |
| IQGAP2              | 1.62E-08 | 0.39081021 | 0.692 | 0.501 | 0.00057419 | Proliferating_spleen |
| ARID4A              | 1.64E-08 | 0.42254923 | 0.446 | 0.281 | 0.00058179 | Proliferating_spleen |
| ZCCHC2              | 1.65E-08 | 0.3686673  | 0.269 | 0.144 | 0.00058469 | Proliferating_spleen |
| RNF121              | 1.65E-08 | 0.77919338 | 0.257 | 0.141 | 0.00058485 | Proliferating_spleen |
| RABGAP1             | 1.67E-08 | 0.53078333 | 0.376 | 0.232 | 0.0005926  | Proliferating_spleen |
| ENSMMUG000000051505 | 1.67E-08 | 0.54483373 | 0.264 | 0.143 | 0.00059306 | Proliferating_spleen |
| NUCKS1              | 1.68E-08 | 0.32558609 | 0.853 | 0.746 | 0.00059644 | Proliferating_spleen |
| EXOC6               | 1.73E-08 | 0.29800247 | 0.669 | 0.463 | 0.00061381 | Proliferating_spleen |
| DGKZ                | 1.73E-08 | 0.3939443  | 0.505 | 0.33  | 0.00061417 | Proliferating_spleen |
| DHX15               | 1.74E-08 | 0.23978951 | 0.603 | 0.415 | 0.00061669 | Proliferating_spleen |
| PHF12               | 1.75E-08 | 0.4463442  | 0.323 | 0.189 | 0.00061865 | Proliferating_spleen |
| PVRIG               | 1.77E-08 | 0.16091426 | 0.358 | 0.208 | 0.00062838 | Proliferating_spleen |
| BCL2L1              | 1.78E-08 | 0.62038131 | 0.274 | 0.152 | 0.00062932 | Proliferating_spleen |

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|--------------------|----------|------------|-------|-------|------------|----------------------|
| PSMD1              | 1.81E-08 | 0.28341012 | 0.486 | 0.316 | 0.00063957 | Proliferating_spleen |
| MCU                | 1.83E-08 | 0.55254354 | 0.43  | 0.283 | 0.00064961 | Proliferating_spleen |
| ATXN7              | 1.92E-08 | 0.34118938 | 0.668 | 0.454 | 0.00068019 | Proliferating_spleen |
| MDM2               | 2.02E-08 | 0.76009003 | 0.312 | 0.183 | 0.00071682 | Proliferating_spleen |
| ORC4               | 2.15E-08 | 0.44715402 | 0.318 | 0.185 | 0.00076146 | Proliferating_spleen |
| MKKS               | 2.16E-08 | 0.29118382 | 0.351 | 0.204 | 0.00076707 | Proliferating_spleen |
| GTF2E2             | 2.17E-08 | 0.24719653 | 0.451 | 0.283 | 0.00076792 | Proliferating_spleen |
| RLF                | 2.19E-08 | 0.39970727 | 0.661 | 0.46  | 0.00077611 | Proliferating_spleen |
| STAU2              | 2.22E-08 | 0.31604663 | 0.628 | 0.433 | 0.00078778 | Proliferating_spleen |
| SLC38A2            | 2.26E-08 | 0.19747011 | 0.623 | 0.436 | 0.00079907 | Proliferating_spleen |
| ENSMMUG00000064286 | 2.33E-08 | 0.40122544 | 0.288 | 0.157 | 0.00082544 | Proliferating_spleen |
| SP100              | 2.36E-08 | 0.42524156 | 0.791 | 0.635 | 0.0008364  | Proliferating_spleen |
| GOLGB1             | 2.41E-08 | 0.50352192 | 0.289 | 0.162 | 0.00085259 | Proliferating_spleen |
| CELF1              | 2.41E-08 | 0.18997179 | 0.758 | 0.508 | 0.00085414 | Proliferating_spleen |
| TCERG1             | 2.42E-08 | 0.33027178 | 0.63  | 0.426 | 0.00085675 | Proliferating_spleen |
| GRAP2              | 2.46E-08 | 0.52718628 | 0.378 | 0.245 | 0.00087072 | Proliferating_spleen |
| NPTN               | 2.47E-08 | 0.44894259 | 0.47  | 0.304 | 0.00087439 | Proliferating_spleen |
| ENSMMUG00000017113 | 2.52E-08 | 0.39338557 | 0.484 | 0.315 | 0.00089202 | Proliferating_spleen |
| HMG20A             | 2.64E-08 | 0.54855504 | 0.255 | 0.137 | 0.00093692 | Proliferating_spleen |
| CSNK1D             | 2.65E-08 | 0.29074068 | 0.397 | 0.242 | 0.00093803 | Proliferating_spleen |
| CCDC66             | 2.75E-08 | 0.32588254 | 0.447 | 0.282 | 0.0009754  | Proliferating_spleen |
| FBXO11             | 2.76E-08 | 0.36431068 | 0.641 | 0.448 | 0.00097732 | Proliferating_spleen |
| RBM33              | 2.76E-08 | 0.32653766 | 0.676 | 0.469 | 0.00097856 | Proliferating_spleen |
| DBNL               | 2.90E-08 | 0.22868095 | 0.455 | 0.289 | 0.00102707 | Proliferating_spleen |
| ZNF121             | 2.91E-08 | 0.51592811 | 0.268 | 0.146 | 0.00103062 | Proliferating_spleen |
| USP47              | 2.91E-08 | 0.33972117 | 0.754 | 0.527 | 0.00103148 | Proliferating_spleen |
| STXBP5             | 2.93E-08 | 0.62927799 | 0.454 | 0.301 | 0.00103777 | Proliferating_spleen |
| CLIC4              | 2.93E-08 | 0.49503068 | 0.386 | 0.24  | 0.00103956 | Proliferating_spleen |
| FBXL20             | 3.01E-08 | 0.36494802 | 0.57  | 0.395 | 0.00106674 | Proliferating_spleen |
| C18H18orf25        | 3.08E-08 | 0.39080834 | 0.484 | 0.317 | 0.00108981 | Proliferating_spleen |
| DERL1              | 3.08E-08 | 0.56748096 | 0.399 | 0.247 | 0.0010919  | Proliferating_spleen |
| OGA                | 3.10E-08 | 0.3345083  | 0.696 | 0.474 | 0.00109668 | Proliferating_spleen |
| JMY                | 3.10E-08 | 0.56547699 | 0.564 | 0.386 | 0.00109671 | Proliferating_spleen |

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| DLST     | 3.12E-08 | 0.4076917  | 0.427 | 0.266 | 0.00110578 | Proliferating_spleen |
| EMC6     | 3.14E-08 | 0.19726099 | 0.416 | 0.25  | 0.00111389 | Proliferating_spleen |
| PLCD4    | 3.23E-08 | 0.30864512 | 0.501 | 0.325 | 0.00114426 | Proliferating_spleen |
| ABHD18   | 3.27E-08 | 0.41561582 | 0.388 | 0.235 | 0.00115877 | Proliferating_spleen |
| NUDT9    | 3.31E-08 | 0.40613976 | 0.278 | 0.149 | 0.00117397 | Proliferating_spleen |
| TYMS     | 3.35E-08 | 0.42237748 | 0.45  | 0.305 | 0.00118674 | Proliferating_spleen |
| SZRD1    | 3.36E-08 | 0.17528788 | 0.526 | 0.338 | 0.00119012 | Proliferating_spleen |
| DYNLT1   | 3.39E-08 | 0.52311757 | 0.286 | 0.163 | 0.00119986 | Proliferating_spleen |
| NONO     | 3.41E-08 | 0.22449534 | 0.754 | 0.551 | 0.00120909 | Proliferating_spleen |
| PICALM   | 3.51E-08 | 0.32755049 | 0.801 | 0.604 | 0.00124334 | Proliferating_spleen |
| USP14    | 3.52E-08 | 0.20721897 | 0.478 | 0.301 | 0.0012455  | Proliferating_spleen |
| SCML4    | 3.62E-08 | 0.41343492 | 0.759 | 0.583 | 0.0012826  | Proliferating_spleen |
| GPBP1L1  | 3.72E-08 | 0.36251824 | 0.591 | 0.415 | 0.00131968 | Proliferating_spleen |
| ATXN7L3B | 3.81E-08 | 0.34470608 | 0.47  | 0.302 | 0.0013496  | Proliferating_spleen |
| FAM118A  | 3.81E-08 | 0.48535403 | 0.524 | 0.366 | 0.00135151 | Proliferating_spleen |
| YPEL3    | 3.85E-08 | 0.20724306 | 0.285 | 0.158 | 0.00136316 | Proliferating_spleen |
| CLIP1    | 3.86E-08 | 0.46761127 | 0.445 | 0.286 | 0.00136875 | Proliferating_spleen |
| AOPEP    | 3.89E-08 | 0.28295088 | 0.566 | 0.385 | 0.0013769  | Proliferating_spleen |
| USP37    | 3.94E-08 | 0.34396301 | 0.572 | 0.383 | 0.0013961  | Proliferating_spleen |
| STT3A.1  | 4.22E-08 | 0.31985489 | 0.564 | 0.388 | 0.00149688 | Proliferating_spleen |
| ZNF700   | 4.27E-08 | 0.46705033 | 0.397 | 0.247 | 0.00151232 | Proliferating_spleen |
| FILIP1L  | 4.29E-08 | 0.53914034 | 0.285 | 0.163 | 0.00151946 | Proliferating_spleen |
| LIN52    | 4.32E-08 | 0.6684307  | 0.392 | 0.249 | 0.00153018 | Proliferating_spleen |
| OFD1     | 4.36E-08 | 0.48828854 | 0.355 | 0.22  | 0.00154367 | Proliferating_spleen |
| RASSF2   | 4.57E-08 | 0.27189457 | 0.318 | 0.184 | 0.0016204  | Proliferating_spleen |
| IFNAR1   | 4.61E-08 | 0.25028099 | 0.331 | 0.189 | 0.00163333 | Proliferating_spleen |
| HAUS6    | 4.66E-08 | 0.39290791 | 0.416 | 0.26  | 0.0016497  | Proliferating_spleen |
| MPST     | 4.70E-08 | 0.44352353 | 0.262 | 0.142 | 0.00166366 | Proliferating_spleen |
| MIA2     | 4.70E-08 | 0.3250514  | 0.545 | 0.376 | 0.00166685 | Proliferating_spleen |
| DIP2A    | 4.72E-08 | 0.51107221 | 0.299 | 0.177 | 0.00167208 | Proliferating_spleen |
| SMN1     | 4.82E-08 | 0.25415109 | 0.441 | 0.271 | 0.00170764 | Proliferating_spleen |
| HELLS    | 4.98E-08 | 0.38027472 | 0.703 | 0.542 | 0.00176599 | Proliferating_spleen |
| ACBD3    | 5.02E-08 | 0.49070243 | 0.37  | 0.227 | 0.00177731 | Proliferating_spleen |

|                    |          |            |       |       |            |                      |
|--------------------|----------|------------|-------|-------|------------|----------------------|
| WASHC4             | 5.05E-08 | 0.4510396  | 0.458 | 0.305 | 0.00178812 | Proliferating_spleen |
| TMCC1              | 5.18E-08 | 0.49053707 | 0.492 | 0.333 | 0.00183494 | Proliferating_spleen |
| MAT2A              | 5.26E-08 | 0.37566492 | 0.385 | 0.237 | 0.00186277 | Proliferating_spleen |
| SESN3              | 5.33E-08 | 0.48923104 | 0.309 | 0.181 | 0.00188734 | Proliferating_spleen |
| SLC30A9            | 5.34E-08 | 0.42423007 | 0.495 | 0.334 | 0.00189155 | Proliferating_spleen |
| PPWD1              | 5.35E-08 | 0.42633092 | 0.278 | 0.157 | 0.00189619 | Proliferating_spleen |
| PPP3CC             | 5.38E-08 | 0.30847621 | 0.696 | 0.49  | 0.00190656 | Proliferating_spleen |
| LARS1              | 5.44E-08 | 0.42221622 | 0.369 | 0.23  | 0.00192784 | Proliferating_spleen |
| DHX36              | 5.50E-08 | 0.29666858 | 0.558 | 0.374 | 0.00194715 | Proliferating_spleen |
| FBXO38             | 5.68E-08 | 0.68546994 | 0.253 | 0.139 | 0.00201407 | Proliferating_spleen |
| ADD3               | 5.71E-08 | 0.28976648 | 0.747 | 0.548 | 0.00202178 | Proliferating_spleen |
| ENSMMUG00000060576 | 5.71E-08 | 0.63184167 | 0.318 | 0.189 | 0.00202402 | Proliferating_spleen |
| CYTH1              | 5.78E-08 | 0.34322336 | 0.654 | 0.466 | 0.00204717 | Proliferating_spleen |
| UBP1               | 6.07E-08 | 0.34403884 | 0.378 | 0.235 | 0.00215209 | Proliferating_spleen |
| EXOC5              | 6.12E-08 | 0.21348427 | 0.362 | 0.219 | 0.00216905 | Proliferating_spleen |
| TRPS1              | 6.14E-08 | 0.48438234 | 0.555 | 0.396 | 0.00217415 | Proliferating_spleen |
| AFG3L2             | 6.19E-08 | 0.32042617 | 0.25  | 0.136 | 0.00219251 | Proliferating_spleen |
| H2AFY              | 6.19E-08 | 0.32391372 | 0.761 | 0.574 | 0.00219345 | Proliferating_spleen |
| CCND3              | 6.20E-08 | 0.39811767 | 0.696 | 0.513 | 0.00219691 | Proliferating_spleen |
| LTV1               | 6.27E-08 | 0.27795645 | 0.504 | 0.328 | 0.00222074 | Proliferating_spleen |
| TXNDC16            | 6.49E-08 | 0.45737708 | 0.308 | 0.18  | 0.00229922 | Proliferating_spleen |
| PUM1               | 6.53E-08 | 0.23384639 | 0.832 | 0.58  | 0.00231317 | Proliferating_spleen |
| HMMR               | 6.60E-08 | 0.33412983 | 0.373 | 0.232 | 0.00233741 | Proliferating_spleen |
| PANK3              | 6.62E-08 | 0.28144174 | 0.307 | 0.175 | 0.00234688 | Proliferating_spleen |
| BUB3               | 6.70E-08 | 0.25505608 | 0.582 | 0.405 | 0.00237491 | Proliferating_spleen |
| ARID5B             | 6.77E-08 | 0.36628246 | 0.661 | 0.506 | 0.00239835 | Proliferating_spleen |
| DAP3               | 6.91E-08 | 0.26425074 | 0.478 | 0.314 | 0.00244776 | Proliferating_spleen |
| NT5DC1             | 6.97E-08 | 0.65815787 | 0.328 | 0.2   | 0.00247049 | Proliferating_spleen |
| RPP14              | 7.05E-08 | 0.36795949 | 0.339 | 0.201 | 0.00249957 | Proliferating_spleen |
| EMSY               | 7.13E-08 | 0.50314516 | 0.307 | 0.181 | 0.00252546 | Proliferating_spleen |
| KATNBL1            | 7.19E-08 | 0.27102303 | 0.553 | 0.374 | 0.00254686 | Proliferating_spleen |
| CDC20              | 7.23E-08 | 0.43589471 | 0.25  | 0.138 | 0.00256193 | Proliferating_spleen |
| UBE2W              | 7.32E-08 | 0.38043845 | 0.353 | 0.213 | 0.0025952  | Proliferating_spleen |

|                     |          |            |       |       |            |                      |
|---------------------|----------|------------|-------|-------|------------|----------------------|
| PPID                | 7.48E-08 | 0.3090009  | 0.314 | 0.18  | 0.00265046 | Proliferating_spleen |
| ENSMMUG00000003854  | 7.55E-08 | 0.27673258 | 0.349 | 0.21  | 0.00267336 | Proliferating_spleen |
| LRR58               | 7.61E-08 | 0.25645368 | 0.299 | 0.172 | 0.00269477 | Proliferating_spleen |
| ENSMMUG000000062941 | 7.87E-08 | 0.67581696 | 0.296 | 0.176 | 0.00278893 | Proliferating_spleen |
| LTN1                | 7.98E-08 | 0.37722222 | 0.466 | 0.305 | 0.00282787 | Proliferating_spleen |
| SNX3                | 8.03E-08 | 0.17850631 | 0.564 | 0.377 | 0.00284672 | Proliferating_spleen |
| ARFGEF2             | 8.26E-08 | 0.53217046 | 0.416 | 0.263 | 0.00292571 | Proliferating_spleen |
| ZNF589              | 8.34E-08 | 0.44319    | 0.332 | 0.195 | 0.00295343 | Proliferating_spleen |
| METTL26             | 8.44E-08 | 0.2766676  | 0.266 | 0.145 | 0.00298956 | Proliferating_spleen |
| DDX27               | 8.46E-08 | 0.20525583 | 0.338 | 0.199 | 0.00299812 | Proliferating_spleen |
| RALGPS2             | 8.60E-08 | 0.83356272 | 0.434 | 0.306 | 0.00304636 | Proliferating_spleen |
| CRY1                | 8.93E-08 | 0.58489965 | 0.455 | 0.313 | 0.00316241 | Proliferating_spleen |
| YLPM1               | 9.48E-08 | 0.44815135 | 0.445 | 0.297 | 0.00335942 | Proliferating_spleen |
| IRAK2               | 9.51E-08 | 0.38958548 | 0.526 | 0.364 | 0.00337103 | Proliferating_spleen |
| NR2C1               | 9.60E-08 | 0.72115967 | 0.276 | 0.161 | 0.0034014  | Proliferating_spleen |
| PRPF3               | 9.65E-08 | 0.40841671 | 0.262 | 0.146 | 0.00341748 | Proliferating_spleen |
| LEO1                | 9.70E-08 | 0.37619035 | 0.392 | 0.245 | 0.00343726 | Proliferating_spleen |
| TRAM1               | 9.82E-08 | 0.18162134 | 0.597 | 0.407 | 0.00347864 | Proliferating_spleen |
| BCL6                | 1.03E-07 | 0.51942434 | 0.259 | 0.145 | 0.00364497 | Proliferating_spleen |
| RPS20               | 1.07E-07 | 0.30432186 | 0.897 | 0.927 | 0.00377368 | Proliferating_spleen |
| RAD21               | 1.08E-07 | 0.30883489 | 0.795 | 0.638 | 0.00382942 | Proliferating_spleen |
| ARMC1               | 1.08E-07 | 0.18899648 | 0.269 | 0.146 | 0.00383953 | Proliferating_spleen |
| CDC6                | 1.08E-07 | 0.31960355 | 0.273 | 0.154 | 0.00384093 | Proliferating_spleen |
| NEK1                | 1.09E-07 | 0.20048128 | 0.293 | 0.167 | 0.00386669 | Proliferating_spleen |
| CCNT2               | 1.10E-07 | 0.32608939 | 0.522 | 0.344 | 0.0038929  | Proliferating_spleen |
| CTPS1               | 1.11E-07 | 0.49419379 | 0.395 | 0.252 | 0.00394719 | Proliferating_spleen |
| MANF                | 1.11E-07 | 0.23974306 | 0.48  | 0.318 | 0.00394947 | Proliferating_spleen |
| N4BP2L2             | 1.13E-07 | 0.17482017 | 0.565 | 0.373 | 0.0040197  | Proliferating_spleen |
| ENSMMUG000000016959 | 1.15E-07 | 0.1879988  | 0.608 | 0.414 | 0.00407535 | Proliferating_spleen |
| RELCH               | 1.16E-07 | 0.34143461 | 0.493 | 0.325 | 0.0041118  | Proliferating_spleen |
| OTULINL             | 1.17E-07 | 0.39957771 | 0.295 | 0.173 | 0.00413874 | Proliferating_spleen |
| ENSMMUG000000008346 | 1.26E-07 | 0.30085564 | 0.684 | 0.491 | 0.00445994 | Proliferating_spleen |
| ENSMMUG000000011604 | 1.26E-07 | 0.29483985 | 0.551 | 0.372 | 0.00447111 | Proliferating_spleen |

|                    |          |            |       |       |            |                      |
|--------------------|----------|------------|-------|-------|------------|----------------------|
| RMND5A             | 1.30E-07 | 0.37254627 | 0.458 | 0.304 | 0.0046191  | Proliferating_spleen |
| RSU1               | 1.30E-07 | 0.34616044 | 0.472 | 0.31  | 0.00462203 | Proliferating_spleen |
| PCID2              | 1.33E-07 | 0.37155328 | 0.355 | 0.213 | 0.00470524 | Proliferating_spleen |
| ENSMMUG00000040181 | 1.35E-07 | 0.2200495  | 0.523 | 0.34  | 0.00477193 | Proliferating_spleen |
| SP110              | 1.36E-07 | 0.47388957 | 0.592 | 0.415 | 0.00480964 | Proliferating_spleen |
| SLC9A8             | 1.39E-07 | 0.6544658  | 0.295 | 0.178 | 0.00490856 | Proliferating_spleen |
| STT3A              | 1.41E-07 | 0.23868086 | 0.262 | 0.144 | 0.00498577 | Proliferating_spleen |
| SPIN1              | 1.41E-07 | 0.60782513 | 0.291 | 0.175 | 0.00501066 | Proliferating_spleen |
| CEP70              | 1.46E-07 | 0.57024707 | 0.336 | 0.209 | 0.00516918 | Proliferating_spleen |
| BRWD1              | 1.48E-07 | 0.37224582 | 0.578 | 0.402 | 0.00525453 | Proliferating_spleen |
| ERI3               | 1.49E-07 | 0.49978986 | 0.326 | 0.201 | 0.00527631 | Proliferating_spleen |
| SINHCAF            | 1.49E-07 | 0.31326598 | 0.528 | 0.355 | 0.00528907 | Proliferating_spleen |
| PIP5K1A            | 1.50E-07 | 0.26995654 | 0.554 | 0.374 | 0.00532877 | Proliferating_spleen |
| STAU1              | 1.51E-07 | 0.42104691 | 0.649 | 0.452 | 0.0053519  | Proliferating_spleen |
| ZNF514             | 1.58E-07 | 0.30131151 | 0.531 | 0.356 | 0.0055875  | Proliferating_spleen |
| NLRC3              | 1.58E-07 | 0.58944521 | 0.251 | 0.141 | 0.00560048 | Proliferating_spleen |
| EIF4G1             | 1.60E-07 | 0.21994082 | 0.4   | 0.25  | 0.00565622 | Proliferating_spleen |
| KDM1A              | 1.63E-07 | 0.29708929 | 0.428 | 0.271 | 0.00577215 | Proliferating_spleen |
| TXNDC15            | 1.64E-07 | 0.19853191 | 0.343 | 0.203 | 0.00579803 | Proliferating_spleen |
| ADCY7              | 1.71E-07 | 0.40644255 | 0.303 | 0.178 | 0.00604554 | Proliferating_spleen |
| ENSMMUG00000011459 | 1.71E-07 | 0.68426064 | 0.254 | 0.143 | 0.0060475  | Proliferating_spleen |
| CEP95              | 1.71E-07 | 0.48956717 | 0.277 | 0.161 | 0.00604963 | Proliferating_spleen |
| ARL3               | 1.76E-07 | 0.29467281 | 0.269 | 0.153 | 0.00623783 | Proliferating_spleen |
| IKBK               | 1.78E-07 | 0.28534935 | 0.323 | 0.197 | 0.00631204 | Proliferating_spleen |
| TLE4               | 1.80E-07 | 0.54602791 | 0.505 | 0.352 | 0.00636238 | Proliferating_spleen |
| MPHOSPH9           | 1.81E-07 | 0.37083531 | 0.414 | 0.27  | 0.00640153 | Proliferating_spleen |
| IGF1R              | 1.81E-07 | 0.40223154 | 0.296 | 0.178 | 0.00643075 | Proliferating_spleen |
| LIMS1              | 1.83E-07 | 0.34336263 | 0.559 | 0.397 | 0.00646965 | Proliferating_spleen |
| MICU2              | 1.84E-07 | 0.25935898 | 0.584 | 0.398 | 0.00653243 | Proliferating_spleen |
| BZW2               | 1.87E-07 | 0.27467822 | 0.541 | 0.37  | 0.00661785 | Proliferating_spleen |
| IARS2              | 1.91E-07 | 0.17795422 | 0.327 | 0.195 | 0.00677938 | Proliferating_spleen |
| FAM53C             | 1.92E-07 | 0.25171509 | 0.373 | 0.228 | 0.00679384 | Proliferating_spleen |
| WASL               | 1.93E-07 | 0.29165238 | 0.512 | 0.342 | 0.00683343 | Proliferating_spleen |



|                    |          |            |       |       |            |                      |
|--------------------|----------|------------|-------|-------|------------|----------------------|
| MXD1               | 1.97E-07 | 0.45889718 | 0.428 | 0.284 | 0.00699243 | Proliferating_spleen |
| PREP               | 2.00E-07 | 0.3943639  | 0.526 | 0.363 | 0.00708714 | Proliferating_spleen |
| UBAP2L             | 2.02E-07 | 0.3046151  | 0.516 | 0.344 | 0.00717048 | Proliferating_spleen |
| KRAS               | 2.03E-07 | 0.24762501 | 0.489 | 0.325 | 0.00719859 | Proliferating_spleen |
| MED13              | 2.04E-07 | 0.31939509 | 0.559 | 0.378 | 0.00721556 | Proliferating_spleen |
| ZC3H7A             | 2.04E-07 | 0.35763282 | 0.466 | 0.311 | 0.007237   | Proliferating_spleen |
| POLE               | 2.07E-07 | 0.75246621 | 0.258 | 0.15  | 0.00733842 | Proliferating_spleen |
| MCMBP              | 2.07E-07 | 0.32200088 | 0.303 | 0.178 | 0.00734507 | Proliferating_spleen |
| ZBTB44             | 2.07E-07 | 0.12071668 | 0.324 | 0.196 | 0.00734636 | Proliferating_spleen |
| ATG10              | 2.11E-07 | 0.5167711  | 0.251 | 0.142 | 0.00747297 | Proliferating_spleen |
| PABPC1             | 2.13E-07 | 0.19646036 | 0.927 | 0.845 | 0.00755571 | Proliferating_spleen |
| ITGAX              | 2.19E-07 | 0.90701752 | 0.259 | 0.154 | 0.00776772 | Proliferating_spleen |
| ZFC3H1             | 2.22E-07 | 0.35608073 | 0.614 | 0.421 | 0.00785028 | Proliferating_spleen |
| GNL3               | 2.25E-07 | 0.37203623 | 0.415 | 0.27  | 0.00797922 | Proliferating_spleen |
| UBL3               | 2.32E-07 | 0.29458814 | 0.45  | 0.294 | 0.00820477 | Proliferating_spleen |
| SNX9               | 2.35E-07 | 0.44058711 | 0.404 | 0.27  | 0.00833296 | Proliferating_spleen |
| UBE2G2             | 2.37E-07 | 0.36931262 | 0.427 | 0.275 | 0.00838351 | Proliferating_spleen |
| ENSMMUG00000055718 | 2.37E-07 | 0.3625296  | 0.277 | 0.158 | 0.00838531 | Proliferating_spleen |
| STX18              | 2.39E-07 | 0.3106516  | 0.301 | 0.176 | 0.00845109 | Proliferating_spleen |
| ORC3               | 2.40E-07 | 0.45481943 | 0.303 | 0.179 | 0.00849618 | Proliferating_spleen |
| WARS2              | 2.44E-07 | 0.50099538 | 0.362 | 0.228 | 0.00865002 | Proliferating_spleen |
| IGF2R              | 2.44E-07 | 0.50921985 | 0.257 | 0.146 | 0.00865704 | Proliferating_spleen |
| AIM2               | 2.56E-07 | 0.17254108 | 0.268 | 0.146 | 0.00906047 | Proliferating_spleen |
| UHMK1              | 2.59E-07 | 0.25811027 | 0.43  | 0.277 | 0.00916318 | Proliferating_spleen |
| MRPL18             | 2.59E-07 | 0.11329591 | 0.277 | 0.156 | 0.00917779 | Proliferating_spleen |
| CSPP1              | 2.61E-07 | 0.20296807 | 0.489 | 0.33  | 0.00924422 | Proliferating_spleen |
| THRAP3             | 2.63E-07 | 0.24230114 | 0.797 | 0.625 | 0.00931374 | Proliferating_spleen |
| SSBP2              | 2.64E-07 | 0.19067552 | 0.781 | 0.584 | 0.00934466 | Proliferating_spleen |
| CRTC1              | 2.65E-07 | 0.70678254 | 0.261 | 0.154 | 0.0093965  | Proliferating_spleen |
| NVL                | 2.71E-07 | 0.21166592 | 0.328 | 0.195 | 0.00960892 | Proliferating_spleen |
| USP16              | 2.77E-07 | 0.29454373 | 0.562 | 0.387 | 0.009806   | Proliferating_spleen |
| CEP290             | 2.78E-07 | 0.52971029 | 0.269 | 0.154 | 0.00984219 | Proliferating_spleen |
| MED1               | 2.80E-07 | 0.28676087 | 0.365 | 0.225 | 0.00993593 | Proliferating_spleen |

|          |          |            |       |       |            |                      |
|----------|----------|------------|-------|-------|------------|----------------------|
| NME3     | 2.86E-07 | 0.24144499 | 0.631 | 0.459 | 0.01015025 | Proliferating_spleen |
| MEF2D    | 2.92E-07 | 0.26869945 | 0.265 | 0.15  | 0.0103337  | Proliferating_spleen |
| ZNF44    | 2.98E-07 | 0.33518514 | 0.404 | 0.261 | 0.01054263 | Proliferating_spleen |
| CLSTN1   | 3.00E-07 | 0.43238865 | 0.392 | 0.251 | 0.01062    | Proliferating_spleen |
| UPF3B    | 3.02E-07 | 0.23625151 | 0.319 | 0.189 | 0.01069727 | Proliferating_spleen |
| ZNF451   | 3.05E-07 | 0.26747304 | 0.623 | 0.431 | 0.01080612 | Proliferating_spleen |
| CD200    | 3.07E-07 | 0.49965917 | 0.282 | 0.164 | 0.01087069 | Proliferating_spleen |
| SMURF1   | 3.08E-07 | 0.66665593 | 0.304 | 0.189 | 0.01092117 | Proliferating_spleen |
| BOD1L1   | 3.09E-07 | 0.36160411 | 0.465 | 0.305 | 0.01095789 | Proliferating_spleen |
| HERC1    | 3.09E-07 | 0.32132858 | 0.664 | 0.463 | 0.01095855 | Proliferating_spleen |
| ZNF736   | 3.11E-07 | 0.29302586 | 0.361 | 0.221 | 0.0110188  | Proliferating_spleen |
| SASS6    | 3.24E-07 | 0.31393564 | 0.512 | 0.349 | 0.01148034 | Proliferating_spleen |
| CCNI     | 3.33E-07 | 0.19582678 | 0.7   | 0.521 | 0.01179141 | Proliferating_spleen |
| KAT6A    | 3.40E-07 | 0.16452208 | 0.742 | 0.529 | 0.01206103 | Proliferating_spleen |
| LPCAT3   | 3.41E-07 | 0.36036161 | 0.281 | 0.164 | 0.01209419 | Proliferating_spleen |
| PTGER4   | 3.47E-07 | 0.3362101  | 0.335 | 0.21  | 0.01230541 | Proliferating_spleen |
| WIPI2    | 3.48E-07 | 0.16618788 | 0.491 | 0.326 | 0.0123226  | Proliferating_spleen |
| MTAP     | 3.51E-07 | 0.39304747 | 0.278 | 0.163 | 0.01242306 | Proliferating_spleen |
| TMF1     | 3.54E-07 | 0.76541398 | 0.297 | 0.18  | 0.01253405 | Proliferating_spleen |
| CDC73    | 3.54E-07 | 0.28004304 | 0.572 | 0.393 | 0.01254555 | Proliferating_spleen |
| FAM168B  | 3.61E-07 | 0.35311734 | 0.453 | 0.294 | 0.01278412 | Proliferating_spleen |
| PUM3     | 3.71E-07 | 0.25442098 | 0.289 | 0.167 | 0.0131387  | Proliferating_spleen |
| GSPT1    | 3.79E-07 | 0.30461918 | 0.404 | 0.261 | 0.01343943 | Proliferating_spleen |
| SLC25A36 | 3.86E-07 | 0.19720829 | 0.393 | 0.243 | 0.01368739 | Proliferating_spleen |
| FOKK1    | 3.90E-07 | 0.53645275 | 0.299 | 0.184 | 0.01383513 | Proliferating_spleen |
| NUP50    | 4.03E-07 | 0.29761413 | 0.499 | 0.339 | 0.01428984 | Proliferating_spleen |
| ARHGEF6  | 4.06E-07 | 0.37290098 | 0.572 | 0.395 | 0.0143988  | Proliferating_spleen |
| CCDC47   | 4.07E-07 | 0.14229447 | 0.353 | 0.214 | 0.01441499 | Proliferating_spleen |
| KLHL6    | 4.09E-07 | 0.38954768 | 0.336 | 0.214 | 0.01449604 | Proliferating_spleen |
| FAM214A  | 4.15E-07 | 0.38571448 | 0.478 | 0.322 | 0.01469204 | Proliferating_spleen |
| ACAD10   | 4.21E-07 | 0.25379117 | 0.312 | 0.186 | 0.01491652 | Proliferating_spleen |
| TMEM161B | 4.24E-07 | 0.27989253 | 0.296 | 0.174 | 0.01502947 | Proliferating_spleen |
| ATP7A    | 4.28E-07 | 0.41430575 | 0.25  | 0.142 | 0.01515052 | Proliferating_spleen |

|                   |          |            |       |       |            |                      |
|-------------------|----------|------------|-------|-------|------------|----------------------|
| GDI2              | 4.28E-07 | 0.22244951 | 0.661 | 0.467 | 0.01515811 | Proliferating_spleen |
| CEP85             | 4.29E-07 | 0.39845581 | 0.265 | 0.151 | 0.01521437 | Proliferating_spleen |
| CAT               | 4.30E-07 | 0.18334782 | 0.464 | 0.304 | 0.01523746 | Proliferating_spleen |
| PAICS             | 4.45E-07 | 0.25726559 | 0.384 | 0.24  | 0.01577888 | Proliferating_spleen |
| TRIM37            | 4.49E-07 | 0.3526106  | 0.426 | 0.278 | 0.0158949  | Proliferating_spleen |
| KDM5C             | 4.59E-07 | 0.52999397 | 0.251 | 0.143 | 0.01627833 | Proliferating_spleen |
| EED               | 4.62E-07 | 0.47697892 | 0.358 | 0.225 | 0.0163805  | Proliferating_spleen |
| OTUD6B            | 4.65E-07 | 0.28997258 | 0.261 | 0.149 | 0.01647375 | Proliferating_spleen |
| THOC1             | 4.80E-07 | 0.27671814 | 0.497 | 0.326 | 0.01701439 | Proliferating_spleen |
| NDUFS1            | 4.84E-07 | 0.27434067 | 0.322 | 0.193 | 0.01714368 | Proliferating_spleen |
| FDFT1             | 4.88E-07 | 0.25359098 | 0.33  | 0.203 | 0.01727359 | Proliferating_spleen |
| LETMD1            | 4.90E-07 | 0.26830198 | 0.32  | 0.191 | 0.01735931 | Proliferating_spleen |
| SMS               | 5.03E-07 | 0.13057174 | 0.485 | 0.317 | 0.01781221 | Proliferating_spleen |
| CD4               | 5.14E-07 | 0.59809516 | 0.303 | 0.189 | 0.01822329 | Proliferating_spleen |
| MMADHC            | 5.15E-07 | 0.15156687 | 0.272 | 0.155 | 0.01823522 | Proliferating_spleen |
| MCM8              | 5.18E-07 | 0.52288154 | 0.309 | 0.193 | 0.01835392 | Proliferating_spleen |
| ORC1              | 5.24E-07 | 0.32369333 | 0.261 | 0.151 | 0.01857736 | Proliferating_spleen |
| OGT               | 5.33E-07 | 0.28289949 | 0.7   | 0.49  | 0.0188799  | Proliferating_spleen |
| NUP107            | 5.43E-07 | 0.37488777 | 0.316 | 0.193 | 0.01923797 | Proliferating_spleen |
| ABCD3             | 5.44E-07 | 0.45151793 | 0.33  | 0.209 | 0.01928245 | Proliferating_spleen |
| MKRN2             | 5.49E-07 | 0.2485024  | 0.299 | 0.174 | 0.01946021 | Proliferating_spleen |
| MATR3             | 5.53E-07 | 0.25157192 | 0.895 | 0.737 | 0.01960112 | Proliferating_spleen |
| SP4               | 5.63E-07 | 0.50751262 | 0.346 | 0.22  | 0.01995544 | Proliferating_spleen |
| UBXN4             | 6.01E-07 | 0.24701846 | 0.623 | 0.435 | 0.02130249 | Proliferating_spleen |
| PABPC4            | 6.04E-07 | 0.48113976 | 0.286 | 0.172 | 0.02138553 | Proliferating_spleen |
| DCAF15            | 6.11E-07 | 0.29211054 | 0.257 | 0.145 | 0.02164231 | Proliferating_spleen |
| SOS1              | 6.17E-07 | 0.14645241 | 0.658 | 0.458 | 0.02185598 | Proliferating_spleen |
| SERGEF            | 6.26E-07 | 0.61640978 | 0.276 | 0.165 | 0.02218841 | Proliferating_spleen |
| ENSMUG00000038088 | 6.27E-07 | 0.12371933 | 0.357 | 0.213 | 0.02221073 | Proliferating_spleen |
| UXS1              | 6.32E-07 | 0.33482795 | 0.653 | 0.464 | 0.02239913 | Proliferating_spleen |
| TTC27             | 6.36E-07 | 0.56565789 | 0.311 | 0.193 | 0.02255146 | Proliferating_spleen |
| UBE2B             | 6.39E-07 | 0.20217022 | 0.699 | 0.491 | 0.02263667 | Proliferating_spleen |
| THOC2             | 6.42E-07 | 0.27822622 | 0.609 | 0.438 | 0.02273732 | Proliferating_spleen |

|                    |          |            |       |       |            |                      |
|--------------------|----------|------------|-------|-------|------------|----------------------|
| ZNF438             | 6.43E-07 | 0.60655237 | 0.305 | 0.19  | 0.0227885  | Proliferating_spleen |
| EPRS1              | 6.54E-07 | 0.23915072 | 0.501 | 0.338 | 0.02318391 | Proliferating_spleen |
| SLC35E1            | 6.55E-07 | 0.27579477 | 0.296 | 0.177 | 0.02320519 | Proliferating_spleen |
| GIMAP4             | 6.61E-07 | 0.13345618 | 0.326 | 0.199 | 0.02340584 | Proliferating_spleen |
| OXCT1              | 6.71E-07 | 0.38855481 | 0.435 | 0.291 | 0.02378988 | Proliferating_spleen |
| PEX14              | 6.94E-07 | 0.42961661 | 0.453 | 0.318 | 0.02458566 | Proliferating_spleen |
| AKAP8L             | 7.00E-07 | 0.53452225 | 0.3   | 0.181 | 0.02479847 | Proliferating_spleen |
| TTC17              | 7.01E-07 | 0.21372166 | 0.581 | 0.399 | 0.02482248 | Proliferating_spleen |
| EVL                | 7.15E-07 | 0.33512821 | 0.781 | 0.603 | 0.02531766 | Proliferating_spleen |
| DGCR2              | 7.32E-07 | 0.49306775 | 0.322 | 0.2   | 0.02594394 | Proliferating_spleen |
| ENSMMUG00000007426 | 7.52E-07 | 0.3922184  | 0.277 | 0.164 | 0.02664528 | Proliferating_spleen |
| DGKA               | 7.54E-07 | 0.31312757 | 0.578 | 0.407 | 0.02670937 | Proliferating_spleen |
| CHCHD3             | 7.54E-07 | 0.33134483 | 0.668 | 0.499 | 0.02672011 | Proliferating_spleen |
| ENSMMUG00000010266 | 7.56E-07 | 0.17161903 | 0.869 | 0.738 | 0.02678948 | Proliferating_spleen |
| OPA1               | 7.59E-07 | 0.36643341 | 0.482 | 0.327 | 0.02689654 | Proliferating_spleen |
| RBM41              | 7.68E-07 | 0.44326238 | 0.264 | 0.154 | 0.02719643 | Proliferating_spleen |
| WDR36              | 7.87E-07 | 0.44269826 | 0.322 | 0.197 | 0.02787316 | Proliferating_spleen |
| TSPYL1             | 7.88E-07 | 0.29178609 | 0.292 | 0.174 | 0.02791961 | Proliferating_spleen |
| STX8               | 8.18E-07 | 0.46517907 | 0.593 | 0.425 | 0.02897757 | Proliferating_spleen |
| RPL27A             | 8.42E-07 | 0.27170882 | 0.885 | 0.949 | 0.02983638 | Proliferating_spleen |
| CNPPD1             | 8.43E-07 | 0.14368033 | 0.25  | 0.139 | 0.02988084 | Proliferating_spleen |
| MRPL39             | 8.59E-07 | 0.11903663 | 0.399 | 0.252 | 0.03044366 | Proliferating_spleen |
| RETREG1            | 8.64E-07 | 0.4800762  | 0.477 | 0.343 | 0.03062734 | Proliferating_spleen |
| ATIC               | 8.71E-07 | 0.35414055 | 0.32  | 0.197 | 0.03086366 | Proliferating_spleen |
| TBRG4              | 8.73E-07 | 0.45134441 | 0.269 | 0.157 | 0.03092852 | Proliferating_spleen |
| SLC30A5            | 8.93E-07 | 0.4309743  | 0.278 | 0.165 | 0.03163829 | Proliferating_spleen |
| NOP14              | 8.94E-07 | 0.31099585 | 0.359 | 0.226 | 0.03168761 | Proliferating_spleen |
| TGS1               | 8.96E-07 | 0.19051984 | 0.565 | 0.377 | 0.0317384  | Proliferating_spleen |
| NUDT21             | 9.03E-07 | 0.13402839 | 0.446 | 0.291 | 0.0319822  | Proliferating_spleen |
| ITK                | 9.04E-07 | 0.37985016 | 0.677 | 0.521 | 0.03201502 | Proliferating_spleen |
| DOP1A              | 9.07E-07 | 0.35507468 | 0.424 | 0.282 | 0.03214927 | Proliferating_spleen |
| CAPZA1             | 9.12E-07 | 0.25211434 | 0.834 | 0.685 | 0.03231824 | Proliferating_spleen |
| NFKBIB             | 9.44E-07 | 0.34565751 | 0.491 | 0.339 | 0.03344091 | Proliferating_spleen |

|           |          |            |       |       |            |                      |
|-----------|----------|------------|-------|-------|------------|----------------------|
| PPP2R1B   | 1.01E-06 | 0.43158887 | 0.339 | 0.214 | 0.03580637 | Proliferating_spleen |
| RARS1     | 1.03E-06 | 0.32583717 | 0.312 | 0.189 | 0.03656762 | Proliferating_spleen |
| SYNE1     | 1.03E-06 | 0.37217618 | 0.561 | 0.396 | 0.03656996 | Proliferating_spleen |
| AKT3      | 1.04E-06 | 0.16291869 | 0.684 | 0.494 | 0.03672002 | Proliferating_spleen |
| NLRC5     | 1.05E-06 | 0.83376691 | 0.386 | 0.263 | 0.03737011 | Proliferating_spleen |
| BIN3      | 1.08E-06 | 0.27705908 | 0.531 | 0.353 | 0.03832177 | Proliferating_spleen |
| IKBKB     | 1.10E-06 | 0.11969464 | 0.331 | 0.203 | 0.0391311  | Proliferating_spleen |
| HEG1      | 1.15E-06 | 0.97838342 | 0.307 | 0.207 | 0.04085153 | Proliferating_spleen |
| NECAP1    | 1.16E-06 | 0.35565028 | 0.35  | 0.224 | 0.04102693 | Proliferating_spleen |
| FOXRED1   | 1.16E-06 | 0.36020876 | 0.319 | 0.195 | 0.04115174 | Proliferating_spleen |
| PDCD4     | 1.17E-06 | 0.28283497 | 0.612 | 0.457 | 0.04158401 | Proliferating_spleen |
| IARS1     | 1.18E-06 | 0.24090476 | 0.485 | 0.328 | 0.0416834  | Proliferating_spleen |
| FBXO21    | 1.19E-06 | 0.44922367 | 0.384 | 0.255 | 0.04224128 | Proliferating_spleen |
| ICE1      | 1.20E-06 | 0.41736441 | 0.38  | 0.25  | 0.04252879 | Proliferating_spleen |
| SNX2      | 1.20E-06 | 0.28794711 | 0.524 | 0.358 | 0.04254076 | Proliferating_spleen |
| RAB22A    | 1.21E-06 | 0.1301189  | 0.297 | 0.176 | 0.04288967 | Proliferating_spleen |
| AIFM3     | 1.21E-06 | 0.37259864 | 0.319 | 0.195 | 0.04294196 | Proliferating_spleen |
| ZNF506    | 1.22E-06 | 0.2707746  | 0.52  | 0.355 | 0.0431091  | Proliferating_spleen |
| MAPK1IP1L | 1.23E-06 | 0.20681056 | 0.555 | 0.393 | 0.04344503 | Proliferating_spleen |
| MARCHF7   | 1.24E-06 | 0.26117117 | 0.684 | 0.479 | 0.04382014 | Proliferating_spleen |
| ARNT      | 1.25E-06 | 0.39794909 | 0.378 | 0.246 | 0.04432861 | Proliferating_spleen |
| BRWD3     | 1.32E-06 | 0.3384917  | 0.322 | 0.201 | 0.04678667 | Proliferating_spleen |
| ANO6      | 1.33E-06 | 0.42578698 | 0.376 | 0.247 | 0.046993   | Proliferating_spleen |
| PHF8      | 1.34E-06 | 0.30399417 | 0.353 | 0.221 | 0.04735109 | Proliferating_spleen |
| PPP1R2    | 1.41E-06 | 0.14775404 | 0.604 | 0.42  | 0.05009115 | Proliferating_spleen |
| DENND4C   | 1.43E-06 | 0.72564492 | 0.364 | 0.249 | 0.05066417 | Proliferating_spleen |
| ZNF682    | 1.43E-06 | 0.59820978 | 0.27  | 0.164 | 0.05066574 | Proliferating_spleen |
| SELENOT   | 1.43E-06 | 0.37807406 | 0.382 | 0.252 | 0.05077028 | Proliferating_spleen |
| MMD       | 1.47E-06 | 0.29282271 | 0.386 | 0.252 | 0.05202462 | Proliferating_spleen |
| ZNF680    | 1.49E-06 | 0.38242673 | 0.3   | 0.185 | 0.05271309 | Proliferating_spleen |
| ANXA6     | 1.52E-06 | 0.22026867 | 0.377 | 0.24  | 0.05368892 | Proliferating_spleen |
| BTN2A2    | 1.52E-06 | 0.21335659 | 0.639 | 0.444 | 0.05378177 | Proliferating_spleen |
| SPG21     | 1.55E-06 | 0.19358621 | 0.272 | 0.157 | 0.05479313 | Proliferating_spleen |

|         |          |            |       |       |            |                      |
|---------|----------|------------|-------|-------|------------|----------------------|
| RMDN1   | 1.55E-06 | 0.24647642 | 0.434 | 0.289 | 0.05489252 | Proliferating_spleen |
| IQCB1   | 1.56E-06 | 0.56384783 | 0.257 | 0.153 | 0.05538224 | Proliferating_spleen |
| CTR9    | 1.58E-06 | 0.15821277 | 0.33  | 0.2   | 0.05581027 | Proliferating_spleen |
| TIPARP  | 1.58E-06 | 0.78124638 | 0.281 | 0.177 | 0.05586764 | Proliferating_spleen |
| MRPS17  | 1.60E-06 | 0.10960694 | 0.288 | 0.167 | 0.05659546 | Proliferating_spleen |
| CAMLG   | 1.65E-06 | 0.21596304 | 0.582 | 0.405 | 0.05837058 | Proliferating_spleen |
| CNOT6   | 1.66E-06 | 0.48104688 | 0.365 | 0.238 | 0.05887239 | Proliferating_spleen |
| VPS37A  | 1.67E-06 | 0.46434909 | 0.27  | 0.161 | 0.05909242 | Proliferating_spleen |
| NAA35   | 1.70E-06 | 0.28026336 | 0.395 | 0.256 | 0.06006137 | Proliferating_spleen |
| DIDO1   | 1.74E-06 | 0.3162927  | 0.457 | 0.301 | 0.06162793 | Proliferating_spleen |
| PSD4    | 1.74E-06 | 0.12430331 | 0.27  | 0.158 | 0.06172746 | Proliferating_spleen |
| BCL7A   | 1.76E-06 | 0.48959754 | 0.251 | 0.149 | 0.06219127 | Proliferating_spleen |
| ORC2    | 1.76E-06 | 0.2894619  | 0.342 | 0.214 | 0.06251824 | Proliferating_spleen |
| UBASH3A | 1.80E-06 | 0.46189427 | 0.276 | 0.168 | 0.06369363 | Proliferating_spleen |
| UPF2    | 1.82E-06 | 0.34753037 | 0.589 | 0.415 | 0.064416   | Proliferating_spleen |
| INO80   | 1.84E-06 | 0.29331075 | 0.422 | 0.275 | 0.06521375 | Proliferating_spleen |
| DHX30   | 1.84E-06 | 0.25848399 | 0.332 | 0.207 | 0.06523618 | Proliferating_spleen |
| INTS2   | 1.87E-06 | 0.40912929 | 0.254 | 0.15  | 0.06625681 | Proliferating_spleen |
| LONP2   | 1.90E-06 | 0.28875881 | 0.582 | 0.408 | 0.06738207 | Proliferating_spleen |
| GPBP1   | 1.92E-06 | 0.25679385 | 0.812 | 0.636 | 0.06788195 | Proliferating_spleen |
| PHF10   | 1.94E-06 | 0.23769477 | 0.282 | 0.17  | 0.06879712 | Proliferating_spleen |
| RFWD3   | 1.98E-06 | 0.14638474 | 0.497 | 0.334 | 0.07017006 | Proliferating_spleen |
| TBCE    | 1.99E-06 | 0.42057806 | 0.339 | 0.216 | 0.07048574 | Proliferating_spleen |
| WDR20   | 2.03E-06 | 0.22738181 | 0.37  | 0.243 | 0.07193787 | Proliferating_spleen |
| KIF18A  | 2.06E-06 | 0.55400564 | 0.258 | 0.154 | 0.07309819 | Proliferating_spleen |
| ZNF106  | 2.09E-06 | 0.33631337 | 0.282 | 0.173 | 0.07416018 | Proliferating_spleen |
| TM9SF2  | 2.13E-06 | 0.35064538 | 0.465 | 0.321 | 0.07548289 | Proliferating_spleen |
| FXR1    | 2.14E-06 | 0.26726532 | 0.727 | 0.555 | 0.07589493 | Proliferating_spleen |
| SLC10A7 | 2.18E-06 | 0.30917686 | 0.395 | 0.266 | 0.07725226 | Proliferating_spleen |
| STX17   | 2.19E-06 | 0.4099531  | 0.336 | 0.215 | 0.0775982  | Proliferating_spleen |
| CEP57   | 2.21E-06 | 0.14376067 | 0.558 | 0.379 | 0.07817852 | Proliferating_spleen |
| PPP2R3C | 2.25E-06 | 0.143388   | 0.415 | 0.269 | 0.07985339 | Proliferating_spleen |
| MCM6    | 2.31E-06 | 0.36541109 | 0.414 | 0.283 | 0.08167163 | Proliferating_spleen |

|           |          |            |       |       |            |                      |
|-----------|----------|------------|-------|-------|------------|----------------------|
| TRAF3IP3  | 2.36E-06 | 0.25497207 | 0.641 | 0.489 | 0.08345527 | Proliferating_spleen |
| NT5C3A    | 2.36E-06 | 0.30217936 | 0.372 | 0.242 | 0.08369659 | Proliferating_spleen |
| BBS9      | 2.38E-06 | 0.64492536 | 0.264 | 0.163 | 0.08429532 | Proliferating_spleen |
| KARS1     | 2.38E-06 | 0.11674446 | 0.403 | 0.261 | 0.08430321 | Proliferating_spleen |
| MCM10     | 2.57E-06 | 0.2335742  | 0.399 | 0.26  | 0.09091123 | Proliferating_spleen |
| HK1       | 2.58E-06 | 0.18228776 | 0.407 | 0.267 | 0.09151967 | Proliferating_spleen |
| RWDD2B    | 2.66E-06 | 0.13373743 | 0.253 | 0.146 | 0.09431263 | Proliferating_spleen |
| C5H4orf33 | 2.70E-06 | 0.25208898 | 0.288 | 0.176 | 0.09566016 | Proliferating_spleen |
| RGS10     | 2.72E-06 | 0.41855395 | 0.526 | 0.398 | 0.09631614 | Proliferating_spleen |
| IBTK      | 2.73E-06 | 0.36345813 | 0.292 | 0.181 | 0.09657001 | Proliferating_spleen |
| LRR1      | 2.82E-06 | 0.19042328 | 0.253 | 0.143 | 0.09997806 | Proliferating_spleen |
| SUGP2     | 2.96E-06 | 0.46086268 | 0.382 | 0.254 | 0.10473037 | Proliferating_spleen |
| CD46      | 3.04E-06 | 0.18182738 | 0.584 | 0.412 | 0.10763799 | Proliferating_spleen |
| PPP4R1    | 3.04E-06 | 0.40181761 | 0.316 | 0.202 | 0.10764284 | Proliferating_spleen |
| PDK3      | 3.12E-06 | 0.47643413 | 0.28  | 0.172 | 0.11042672 | Proliferating_spleen |
| ADPGK     | 3.21E-06 | 0.34283657 | 0.276 | 0.168 | 0.11375877 | Proliferating_spleen |
| RALGAP1   | 3.23E-06 | 0.31746389 | 0.391 | 0.261 | 0.11460152 | Proliferating_spleen |
| RPIA      | 3.25E-06 | 0.28734954 | 0.472 | 0.326 | 0.11511639 | Proliferating_spleen |
| ZNF207    | 3.31E-06 | 0.22643176 | 0.75  | 0.529 | 0.11716809 | Proliferating_spleen |
| PRDX3     | 3.38E-06 | 0.10362913 | 0.465 | 0.307 | 0.11988717 | Proliferating_spleen |
| SDHAF4    | 3.45E-06 | 0.2801428  | 0.7   | 0.514 | 0.12207098 | Proliferating_spleen |
| RNF11     | 3.52E-06 | 0.30523304 | 0.335 | 0.215 | 0.124724   | Proliferating_spleen |
| GMEB1     | 3.52E-06 | 0.42834487 | 0.253 | 0.152 | 0.12473945 | Proliferating_spleen |
| TRPC4AP   | 3.55E-06 | 0.25254046 | 0.477 | 0.328 | 0.12584975 | Proliferating_spleen |
| CHI3L2    | 3.62E-06 | 0.83692596 | 0.261 | 0.168 | 0.12815305 | Proliferating_spleen |
| VCPKMT    | 3.64E-06 | 0.22070659 | 0.291 | 0.179 | 0.12911935 | Proliferating_spleen |
| SPRING1   | 3.76E-06 | 0.22992492 | 0.281 | 0.17  | 0.13331208 | Proliferating_spleen |
| AGK       | 3.81E-06 | 0.43956723 | 0.322 | 0.209 | 0.13515827 | Proliferating_spleen |
| RHOH      | 3.82E-06 | 0.23747774 | 0.796 | 0.608 | 0.13549399 | Proliferating_spleen |
| KPNA3     | 3.85E-06 | 0.26813044 | 0.578 | 0.399 | 0.13624157 | Proliferating_spleen |
| VPS13C    | 3.90E-06 | 0.42989359 | 0.441 | 0.309 | 0.13803044 | Proliferating_spleen |
| PSEN1     | 4.03E-06 | 0.25696733 | 0.468 | 0.317 | 0.14294894 | Proliferating_spleen |
| KATNA1    | 4.12E-06 | 0.26977956 | 0.384 | 0.254 | 0.14611137 | Proliferating_spleen |

|                    |          |            |       |       |            |                      |
|--------------------|----------|------------|-------|-------|------------|----------------------|
| UBR1               | 4.15E-06 | 0.19066982 | 0.659 | 0.468 | 0.14695867 | Proliferating_spleen |
| PPP2R5A            | 4.23E-06 | 0.28117969 | 0.466 | 0.325 | 0.14988355 | Proliferating_spleen |
| RESF1              | 4.28E-06 | 0.13549412 | 0.423 | 0.279 | 0.15154277 | Proliferating_spleen |
| RALGAPA2           | 4.39E-06 | 0.30320909 | 0.523 | 0.37  | 0.15537512 | Proliferating_spleen |
| COPB2              | 4.47E-06 | 0.17025825 | 0.365 | 0.237 | 0.15849243 | Proliferating_spleen |
| RASSF5             | 4.50E-06 | 0.1545127  | 0.405 | 0.264 | 0.15943964 | Proliferating_spleen |
| MTA3               | 4.71E-06 | 0.32129393 | 0.341 | 0.223 | 0.16700126 | Proliferating_spleen |
| PTPN2              | 4.76E-06 | 0.21844234 | 0.696 | 0.505 | 0.1684803  | Proliferating_spleen |
| TIAM1              | 4.76E-06 | 0.50467604 | 0.432 | 0.311 | 0.16859976 | Proliferating_spleen |
| CCNK               | 4.79E-06 | 0.10946793 | 0.62  | 0.433 | 0.16954248 | Proliferating_spleen |
| STAT5A             | 4.82E-06 | 0.47216794 | 0.281 | 0.175 | 0.17074724 | Proliferating_spleen |
| COG5               | 4.83E-06 | 0.12971577 | 0.726 | 0.506 | 0.17109397 | Proliferating_spleen |
| FAM184A            | 4.86E-06 | 0.74872649 | 0.268 | 0.174 | 0.17216944 | Proliferating_spleen |
| ENSMMUG00000061458 | 4.88E-06 | 0.2666252  | 0.424 | 0.293 | 0.17279171 | Proliferating_spleen |
| AP1B1              | 4.93E-06 | 0.35258975 | 0.285 | 0.179 | 0.1745724  | Proliferating_spleen |
| SKI                | 4.94E-06 | 0.75784965 | 0.255 | 0.16  | 0.17497041 | Proliferating_spleen |
| ERCC6              | 5.03E-06 | 0.44162778 | 0.307 | 0.196 | 0.17807079 | Proliferating_spleen |
| WDR7               | 5.06E-06 | 0.18249563 | 0.609 | 0.437 | 0.17937633 | Proliferating_spleen |
| CERS6              | 5.25E-06 | 0.196961   | 0.658 | 0.469 | 0.18598214 | Proliferating_spleen |
| ENSMMUG00000047277 | 5.27E-06 | 0.20169609 | 0.677 | 0.544 | 0.18679758 | Proliferating_spleen |
| TPP2               | 5.30E-06 | 0.32425964 | 0.469 | 0.326 | 0.18767459 | Proliferating_spleen |
| BIRC3              | 5.37E-06 | 0.39865118 | 0.396 | 0.282 | 0.19033645 | Proliferating_spleen |
| IRAK1BP1           | 5.38E-06 | 0.56113418 | 0.266 | 0.168 | 0.19052097 | Proliferating_spleen |
| EIF4G2             | 5.38E-06 | 0.21561755 | 0.824 | 0.639 | 0.19069113 | Proliferating_spleen |
| ERCC6L             | 5.40E-06 | 0.25031203 | 0.277 | 0.17  | 0.1914566  | Proliferating_spleen |
| GALNT1             | 5.46E-06 | 0.30846131 | 0.478 | 0.345 | 0.19352074 | Proliferating_spleen |
| FOXM1              | 5.50E-06 | 0.39205439 | 0.268 | 0.163 | 0.19501771 | Proliferating_spleen |
| TPX2               | 5.53E-06 | 0.19849472 | 0.53  | 0.385 | 0.19581293 | Proliferating_spleen |
| EDEM1              | 5.54E-06 | 0.36491506 | 0.427 | 0.293 | 0.19631606 | Proliferating_spleen |
| TERF1              | 5.61E-06 | 0.10055728 | 0.459 | 0.304 | 0.19894179 | Proliferating_spleen |
| GALK2              | 5.68E-06 | 0.42319711 | 0.343 | 0.228 | 0.20127753 | Proliferating_spleen |
| ATF6               | 5.70E-06 | 0.20394951 | 0.476 | 0.322 | 0.20193765 | Proliferating_spleen |
| HDLBP              | 5.70E-06 | 0.15782738 | 0.519 | 0.358 | 0.20205195 | Proliferating_spleen |



|                    |          |            |       |       |            |                      |
|--------------------|----------|------------|-------|-------|------------|----------------------|
| ENSMMUG00000056043 | 5.74E-06 | 0.1616742  | 0.381 | 0.249 | 0.20343787 | Proliferating_spleen |
| ENSMMUG00000065362 | 5.78E-06 | 0.75434817 | 1     | 0.998 | 0.20462588 | Proliferating_spleen |
| MCPH1              | 5.83E-06 | 0.29710251 | 0.381 | 0.254 | 0.20644904 | Proliferating_spleen |
| SRSF7              | 5.86E-06 | 0.12865567 | 0.868 | 0.733 | 0.20768735 | Proliferating_spleen |
| ACBD6              | 5.93E-06 | 0.40868117 | 0.353 | 0.235 | 0.20997477 | Proliferating_spleen |
| RNF19A             | 6.01E-06 | 0.3485628  | 0.519 | 0.38  | 0.21299479 | Proliferating_spleen |
| EIF2S3             | 6.01E-06 | 0.19899583 | 0.569 | 0.402 | 0.21310423 | Proliferating_spleen |
| ANAPC7             | 6.05E-06 | 0.2969127  | 0.335 | 0.216 | 0.21453077 | Proliferating_spleen |
| SLC39A9            | 6.07E-06 | 0.21960405 | 0.297 | 0.185 | 0.21492018 | Proliferating_spleen |
| RSC1A1             | 6.14E-06 | 0.53517196 | 0.272 | 0.167 | 0.21760636 | Proliferating_spleen |
| RFFL               | 6.24E-06 | 0.41392784 | 0.257 | 0.157 | 0.22094969 | Proliferating_spleen |
| CD2AP              | 6.35E-06 | 0.23584992 | 0.509 | 0.351 | 0.22504518 | Proliferating_spleen |
| MED30              | 6.36E-06 | 0.14293009 | 0.527 | 0.36  | 0.22532679 | Proliferating_spleen |
| GOSR1              | 6.39E-06 | 0.30437725 | 0.3   | 0.188 | 0.22625206 | Proliferating_spleen |
| UBN1               | 6.46E-06 | 0.35697528 | 0.262 | 0.16  | 0.22889818 | Proliferating_spleen |
| CPEB4              | 6.50E-06 | 0.41856189 | 0.288 | 0.183 | 0.23016715 | Proliferating_spleen |
| CLOCK              | 6.55E-06 | 0.37758999 | 0.314 | 0.204 | 0.23222782 | Proliferating_spleen |
| ZNFX1              | 6.63E-06 | 0.54825313 | 0.365 | 0.249 | 0.2350578  | Proliferating_spleen |
| RBM25              | 6.69E-06 | 0.23771724 | 0.751 | 0.56  | 0.23713177 | Proliferating_spleen |
| WBP11              | 6.71E-06 | 0.11035541 | 0.576 | 0.398 | 0.23763973 | Proliferating_spleen |
| DDX54              | 6.76E-06 | 0.22245076 | 0.368 | 0.242 | 0.2394023  | Proliferating_spleen |
| RBM27              | 6.77E-06 | 0.15654998 | 0.632 | 0.45  | 0.23973286 | Proliferating_spleen |
| CRYBG1             | 6.87E-06 | 0.35191554 | 0.338 | 0.22  | 0.24349018 | Proliferating_spleen |
| CACUL1             | 6.89E-06 | 0.43070577 | 0.327 | 0.215 | 0.2442008  | Proliferating_spleen |
| TM9SF4             | 6.91E-06 | 0.3824334  | 0.345 | 0.222 | 0.24493212 | Proliferating_spleen |
| DCUN1D2            | 6.94E-06 | 0.63727219 | 0.262 | 0.163 | 0.24587984 | Proliferating_spleen |
| ETNK1              | 7.08E-06 | 0.17110876 | 0.472 | 0.318 | 0.25090633 | Proliferating_spleen |
| PARP14             | 7.09E-06 | 0.22395478 | 0.301 | 0.19  | 0.25119686 | Proliferating_spleen |
| CYB5R4             | 7.29E-06 | 0.25921033 | 0.411 | 0.282 | 0.258248   | Proliferating_spleen |
| TMEM168            | 7.46E-06 | 0.5987189  | 0.265 | 0.167 | 0.26418604 | Proliferating_spleen |
| ENSMMUG00000006803 | 7.53E-06 | 0.21153542 | 0.62  | 0.445 | 0.26689144 | Proliferating_spleen |
| ENSMMUG00000054948 | 7.60E-06 | 0.26869378 | 0.293 | 0.186 | 0.26932304 | Proliferating_spleen |
| TAF1D              | 7.77E-06 | 0.29667593 | 0.374 | 0.246 | 0.27535452 | Proliferating_spleen |

|                   |          |            |       |       |            |                      |
|-------------------|----------|------------|-------|-------|------------|----------------------|
| PPIL4             | 8.09E-06 | 0.33497487 | 0.601 | 0.439 | 0.28672712 | Proliferating_spleen |
| CSNK1G3           | 8.11E-06 | 0.24016623 | 0.493 | 0.349 | 0.28751587 | Proliferating_spleen |
| CD53              | 8.20E-06 | 0.21515756 | 0.699 | 0.538 | 0.29056654 | Proliferating_spleen |
| ATF7              | 8.32E-06 | 0.18981858 | 0.493 | 0.334 | 0.29471274 | Proliferating_spleen |
| VRK1              | 8.57E-06 | 0.18479979 | 0.72  | 0.544 | 0.30349104 | Proliferating_spleen |
| ENSMUG00000054965 | 8.78E-06 | 0.14519577 | 0.366 | 0.24  | 0.3112348  | Proliferating_spleen |
| CNST              | 8.84E-06 | 0.30582844 | 0.508 | 0.357 | 0.31334992 | Proliferating_spleen |
| SENP7             | 8.88E-06 | 0.26191627 | 0.532 | 0.388 | 0.31479181 | Proliferating_spleen |
| NAMPT             | 9.00E-06 | 0.38139588 | 0.419 | 0.295 | 0.31893436 | Proliferating_spleen |
| SEC23B            | 9.15E-06 | 0.23911372 | 0.276 | 0.169 | 0.32428602 | Proliferating_spleen |
| POT1              | 9.23E-06 | 0.46546015 | 0.327 | 0.217 | 0.32711737 | Proliferating_spleen |
| DDX39A            | 9.27E-06 | 0.18841253 | 0.735 | 0.566 | 0.3283935  | Proliferating_spleen |
| CXHXorf38         | 9.40E-06 | 0.40548155 | 0.335 | 0.223 | 0.33289182 | Proliferating_spleen |
| UHRF1BP1L         | 9.47E-06 | 0.25059626 | 0.531 | 0.374 | 0.33567234 | Proliferating_spleen |
| LRRC8C            | 9.58E-06 | 0.45628268 | 0.369 | 0.254 | 0.33927902 | Proliferating_spleen |
| EBNA1BP2          | 9.62E-06 | 0.13340198 | 0.341 | 0.217 | 0.34068308 | Proliferating_spleen |
| DERA              | 9.63E-06 | 0.31151406 | 0.445 | 0.311 | 0.3412267  | Proliferating_spleen |
| TTC37             | 9.92E-06 | 0.24589333 | 0.382 | 0.256 | 0.35140448 | Proliferating_spleen |
| AMMECR1           | 1.03E-05 | 0.32596353 | 0.259 | 0.164 | 0.36342253 | Proliferating_spleen |
| MED25             | 1.04E-05 | 0.3023412  | 0.365 | 0.242 | 0.36708819 | Proliferating_spleen |
| CRTAM             | 1.06E-05 | 0.3525558  | 0.299 | 0.198 | 0.37684503 | Proliferating_spleen |
| UTP18             | 1.07E-05 | 0.29905848 | 0.316 | 0.205 | 0.3780055  | Proliferating_spleen |
| PFN1              | 1.10E-05 | 0.22098957 | 0.859 | 0.902 | 0.38834256 | Proliferating_spleen |
| CCPG1             | 1.12E-05 | 0.18506855 | 0.32  | 0.202 | 0.39816292 | Proliferating_spleen |
| CNOT8             | 1.13E-05 | 0.35686888 | 0.353 | 0.234 | 0.40195059 | Proliferating_spleen |
| RUVBL1            | 1.17E-05 | 0.11295946 | 0.341 | 0.217 | 0.41580343 | Proliferating_spleen |
| CHKA              | 1.19E-05 | 0.41942749 | 0.304 | 0.198 | 0.42012627 | Proliferating_spleen |
| SNRNP200          | 1.19E-05 | 0.16827081 | 0.531 | 0.376 | 0.42110996 | Proliferating_spleen |
| SLC44A2           | 1.19E-05 | 0.29579333 | 0.484 | 0.342 | 0.42194375 | Proliferating_spleen |
| GTPBP8            | 1.22E-05 | 0.26339516 | 0.35  | 0.225 | 0.43066614 | Proliferating_spleen |
| GGA3              | 1.22E-05 | 0.15612783 | 0.358 | 0.234 | 0.43274642 | Proliferating_spleen |
| SMAD4             | 1.22E-05 | 0.30998946 | 0.358 | 0.242 | 0.43356605 | Proliferating_spleen |
| TXLNA             | 1.24E-05 | 0.2705369  | 0.285 | 0.177 | 0.43858607 | Proliferating_spleen |

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|--------------------|----------|------------|-------|-------|------------|----------------------|
| CNTLN              | 1.27E-05 | 0.63082978 | 0.264 | 0.168 | 0.44896257 | Proliferating_spleen |
| NCK1               | 1.27E-05 | 0.20897784 | 0.496 | 0.348 | 0.4494438  | Proliferating_spleen |
| ULK2               | 1.27E-05 | 0.52495742 | 0.284 | 0.185 | 0.45103546 | Proliferating_spleen |
| TESPA1             | 1.29E-05 | 0.32967219 | 0.373 | 0.256 | 0.45596186 | Proliferating_spleen |
| UBE2F              | 1.31E-05 | 0.22432997 | 0.355 | 0.234 | 0.46503405 | Proliferating_spleen |
| ATP2C1             | 1.34E-05 | 0.25575986 | 0.466 | 0.327 | 0.47443455 | Proliferating_spleen |
| RCHY1              | 1.38E-05 | 0.25940783 | 0.278 | 0.176 | 0.48985902 | Proliferating_spleen |
| DBF4               | 1.39E-05 | 0.15062935 | 0.432 | 0.301 | 0.49331675 | Proliferating_spleen |
| FAM126A            | 1.42E-05 | 0.30706712 | 0.408 | 0.284 | 0.50264234 | Proliferating_spleen |
| DNM1L              | 1.44E-05 | 0.21827662 | 0.574 | 0.401 | 0.50948301 | Proliferating_spleen |
| DHRS7B             | 1.44E-05 | 0.56498552 | 0.327 | 0.223 | 0.50992661 | Proliferating_spleen |
| TRNT1              | 1.46E-05 | 0.41242779 | 0.303 | 0.195 | 0.51627828 | Proliferating_spleen |
| ARHGAP4            | 1.47E-05 | 0.24721573 | 0.455 | 0.313 | 0.52102207 | Proliferating_spleen |
| RNF145             | 1.47E-05 | 0.12828593 | 0.618 | 0.436 | 0.52216316 | Proliferating_spleen |
| USP15              | 1.48E-05 | 0.19138406 | 0.907 | 0.683 | 0.52335063 | Proliferating_spleen |
| ECHDC1             | 1.48E-05 | 0.25944618 | 0.495 | 0.355 | 0.52401671 | Proliferating_spleen |
| APPBP2             | 1.49E-05 | 0.32299434 | 0.427 | 0.303 | 0.52834076 | Proliferating_spleen |
| EIF3M              | 1.50E-05 | 0.12662532 | 0.657 | 0.479 | 0.53109678 | Proliferating_spleen |
| EIF4A1             | 1.54E-05 | 0.11836577 | 0.662 | 0.498 | 0.54607176 | Proliferating_spleen |
| TYW5               | 1.56E-05 | 0.58713279 | 0.285 | 0.189 | 0.55156046 | Proliferating_spleen |
| NMD3               | 1.57E-05 | 0.17218979 | 0.288 | 0.177 | 0.5576585  | Proliferating_spleen |
| SCFD2              | 1.57E-05 | 0.35248248 | 0.422 | 0.301 | 0.55797004 | Proliferating_spleen |
| UBE2E2             | 1.59E-05 | 0.49520582 | 0.409 | 0.295 | 0.56330029 | Proliferating_spleen |
| PATL1              | 1.62E-05 | 0.15640375 | 0.28  | 0.175 | 0.5740482  | Proliferating_spleen |
| DPP8               | 1.65E-05 | 0.19623334 | 0.339 | 0.221 | 0.58316256 | Proliferating_spleen |
| TMC6               | 1.65E-05 | 0.25530784 | 0.326 | 0.211 | 0.58333809 | Proliferating_spleen |
| HJURP              | 1.66E-05 | 0.15725309 | 0.292 | 0.185 | 0.58798862 | Proliferating_spleen |
| MRPS28             | 1.66E-05 | 0.21532366 | 0.289 | 0.18  | 0.58932086 | Proliferating_spleen |
| TOGARAM1           | 1.69E-05 | 0.34970719 | 0.335 | 0.221 | 0.59855177 | Proliferating_spleen |
| ENSMMUG00000028699 | 1.74E-05 | 0.46179389 | 0.682 | 0.53  | 0.61823544 | Proliferating_spleen |
| ENSMMUG00000022874 | 1.76E-05 | 0.49362047 | 0.358 | 0.251 | 0.62250902 | Proliferating_spleen |
| ATP6V1H            | 1.77E-05 | 0.3790417  | 0.431 | 0.302 | 0.62552521 | Proliferating_spleen |
| CMTM6              | 1.78E-05 | 0.11773014 | 0.609 | 0.443 | 0.63205185 | Proliferating_spleen |

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|--------------------|----------|------------|-------|-------|------------|----------------------|
| SUPT6H             | 1.80E-05 | 0.27474021 | 0.32  | 0.209 | 0.63789291 | Proliferating_spleen |
| INTS7              | 1.88E-05 | 0.23540287 | 0.362 | 0.248 | 0.66486011 | Proliferating_spleen |
| ENSMMUG00000032231 | 1.89E-05 | 0.2401082  | 0.335 | 0.223 | 0.67074871 | Proliferating_spleen |
| ARHGEF7            | 1.91E-05 | 0.21098504 | 0.676 | 0.489 | 0.67638199 | Proliferating_spleen |
| MGMT               | 1.94E-05 | 0.41527724 | 0.658 | 0.504 | 0.68580836 | Proliferating_spleen |
| ZNF592             | 1.95E-05 | 0.39437356 | 0.268 | 0.169 | 0.68954905 | Proliferating_spleen |
| CASP8              | 1.95E-05 | 0.22823387 | 0.649 | 0.464 | 0.69093987 | Proliferating_spleen |
| FAM222B            | 1.97E-05 | 0.34396522 | 0.432 | 0.307 | 0.69854164 | Proliferating_spleen |
| ATP8A1             | 1.97E-05 | 0.39075547 | 0.634 | 0.469 | 0.69854692 | Proliferating_spleen |
| RNF149             | 2.06E-05 | 0.20822147 | 0.58  | 0.427 | 0.72859005 | Proliferating_spleen |
| ZNF136             | 2.07E-05 | 0.23811597 | 0.274 | 0.173 | 0.73259847 | Proliferating_spleen |
| HSPA14             | 2.10E-05 | 0.12347898 | 0.439 | 0.304 | 0.74249973 | Proliferating_spleen |
| IPO8               | 2.13E-05 | 0.41962215 | 0.274 | 0.175 | 0.75537526 | Proliferating_spleen |
| PIAS1              | 2.15E-05 | 0.14554203 | 0.759 | 0.545 | 0.76151395 | Proliferating_spleen |
| MED14              | 2.19E-05 | 0.14494578 | 0.343 | 0.234 | 0.77566833 | Proliferating_spleen |
| ZNF528             | 2.30E-05 | 0.15198132 | 0.518 | 0.367 | 0.81332009 | Proliferating_spleen |
| EFR3A              | 2.38E-05 | 0.19309998 | 0.464 | 0.323 | 0.84368361 | Proliferating_spleen |
| PRRC2C             | 2.39E-05 | 0.20938858 | 0.877 | 0.693 | 0.84606435 | Proliferating_spleen |
| RIOK1              | 2.40E-05 | 0.23413345 | 0.266 | 0.165 | 0.85078829 | Proliferating_spleen |
| BCL7B              | 2.41E-05 | 0.40764121 | 0.415 | 0.287 | 0.85413388 | Proliferating_spleen |
| CD226              | 2.44E-05 | 0.49862615 | 0.277 | 0.185 | 0.86304261 | Proliferating_spleen |
| HNRNPA0            | 2.47E-05 | 0.14183825 | 0.655 | 0.504 | 0.87493286 | Proliferating_spleen |
| STMN3              | 2.49E-05 | 0.2469335  | 0.295 | 0.191 | 0.88372921 | Proliferating_spleen |
| GIT2               | 2.52E-05 | 0.14136183 | 0.626 | 0.427 | 0.89320616 | Proliferating_spleen |
| RAB8B              | 2.57E-05 | 0.33597231 | 0.841 | 0.683 | 0.90928267 | Proliferating_spleen |
| NT5C2              | 2.66E-05 | 0.17646033 | 0.618 | 0.438 | 0.94267388 | Proliferating_spleen |
| H3C2               | 2.66E-05 | 0.10724047 | 0.351 | 0.234 | 0.94299138 | Proliferating_spleen |
| SEC61A2            | 2.67E-05 | 0.29174335 | 0.37  | 0.254 | 0.94582006 | Proliferating_spleen |
| PNPT1              | 2.67E-05 | 0.27471604 | 0.289 | 0.185 | 0.94632023 | Proliferating_spleen |
| PREPL              | 2.67E-05 | 0.22481607 | 0.314 | 0.205 | 0.94747351 | Proliferating_spleen |
| POLDIP3            | 2.68E-05 | 0.38306493 | 0.265 | 0.167 | 0.95098633 | Proliferating_spleen |
| POLD1              | 2.72E-05 | 0.28648699 | 0.311 | 0.202 | 0.96390979 | Proliferating_spleen |
| CENPF              | 2.73E-05 | 0.5083193  | 0.699 | 0.584 | 0.96698335 | Proliferating_spleen |

|                   |          |            |       |       |            |                      |
|-------------------|----------|------------|-------|-------|------------|----------------------|
| ODF2L             | 2.75E-05 | 0.4244206  | 0.258 | 0.163 | 0.97460689 | Proliferating_spleen |
| FAM126B           | 2.76E-05 | 0.20266908 | 0.32  | 0.211 | 0.97779285 | Proliferating_spleen |
| ZNF280D           | 2.81E-05 | 0.29291963 | 0.412 | 0.28  | 0.99387106 | Proliferating_spleen |
| RIPOR2            | 2.88E-05 | 0.2545036  | 0.927 | 0.816 | 1          | Proliferating_spleen |
| PGS1              | 2.91E-05 | 0.17107713 | 0.286 | 0.179 | 1          | Proliferating_spleen |
| TSPAN14           | 2.97E-05 | 0.18212466 | 0.37  | 0.25  | 1          | Proliferating_spleen |
| ZZEF1             | 2.99E-05 | 0.21160607 | 0.432 | 0.301 | 1          | Proliferating_spleen |
| LSM12             | 3.00E-05 | 0.22053229 | 0.386 | 0.264 | 1          | Proliferating_spleen |
| CNOT10            | 3.01E-05 | 0.39645263 | 0.442 | 0.313 | 1          | Proliferating_spleen |
| RSRC2             | 3.05E-05 | 0.19561175 | 0.792 | 0.611 | 1          | Proliferating_spleen |
| TMEM117           | 3.16E-05 | 0.7751291  | 0.277 | 0.189 | 1          | Proliferating_spleen |
| IL4R              | 3.19E-05 | 0.22778875 | 0.469 | 0.342 | 1          | Proliferating_spleen |
| ENSMUG00000054462 | 3.19E-05 | 0.47460363 | 0.254 | 0.162 | 1          | Proliferating_spleen |
| NEK9              | 3.21E-05 | 0.19472817 | 0.254 | 0.158 | 1          | Proliferating_spleen |
| DYNC1LI2          | 3.21E-05 | 0.27102291 | 0.322 | 0.221 | 1          | Proliferating_spleen |
| PIGK              | 3.25E-05 | 0.29755328 | 0.277 | 0.178 | 1          | Proliferating_spleen |
| HBS1L             | 3.34E-05 | 0.16682459 | 0.674 | 0.511 | 1          | Proliferating_spleen |
| SF3A3             | 3.34E-05 | 0.1701663  | 0.349 | 0.23  | 1          | Proliferating_spleen |
| ARL8B             | 3.37E-05 | 0.18654877 | 0.504 | 0.357 | 1          | Proliferating_spleen |
| EPSTI1            | 3.40E-05 | 0.45255609 | 0.32  | 0.214 | 1          | Proliferating_spleen |
| KLHDC10           | 3.43E-05 | 0.3949552  | 0.257 | 0.166 | 1          | Proliferating_spleen |
| FYB1              | 3.43E-05 | 0.2937273  | 0.735 | 0.605 | 1          | Proliferating_spleen |
| RNF144A           | 3.55E-05 | 0.3494507  | 0.268 | 0.174 | 1          | Proliferating_spleen |
| CCDC12            | 3.56E-05 | 0.257137   | 0.588 | 0.424 | 1          | Proliferating_spleen |
| FBXO9             | 3.59E-05 | 0.34201552 | 0.296 | 0.191 | 1          | Proliferating_spleen |
| SEC22B            | 3.71E-05 | 0.10180545 | 0.354 | 0.23  | 1          | Proliferating_spleen |
| CERS5             | 3.71E-05 | 0.27723773 | 0.299 | 0.197 | 1          | Proliferating_spleen |
| STK40             | 3.74E-05 | 0.13184519 | 0.327 | 0.22  | 1          | Proliferating_spleen |
| ATL3              | 3.76E-05 | 0.20928854 | 0.45  | 0.318 | 1          | Proliferating_spleen |
| DNAJB14           | 3.77E-05 | 0.19753926 | 0.369 | 0.248 | 1          | Proliferating_spleen |
| RBL2              | 3.89E-05 | 0.24702982 | 0.405 | 0.285 | 1          | Proliferating_spleen |
| PIK3C3            | 3.89E-05 | 0.42031519 | 0.307 | 0.209 | 1          | Proliferating_spleen |
| CERT1             | 3.89E-05 | 0.19941298 | 0.588 | 0.421 | 1          | Proliferating_spleen |

|          |          |            |       |       |                        |
|----------|----------|------------|-------|-------|------------------------|
| IFNAR2   | 3.89E-05 | 0.1378263  | 0.677 | 0.514 | 1 Proliferating_spleen |
| SH2D1A   | 3.96E-05 | 0.54105318 | 0.449 | 0.351 | 1 Proliferating_spleen |
| SDCCAG8  | 3.98E-05 | 0.25502798 | 0.401 | 0.275 | 1 Proliferating_spleen |
| SMARCAD1 | 4.08E-05 | 0.22667761 | 0.255 | 0.162 | 1 Proliferating_spleen |
| NCBP1    | 4.08E-05 | 0.26885937 | 0.368 | 0.256 | 1 Proliferating_spleen |
| PRPF8    | 4.20E-05 | 0.15462559 | 0.577 | 0.407 | 1 Proliferating_spleen |
| ITGA4    | 4.20E-05 | 0.27674538 | 0.518 | 0.385 | 1 Proliferating_spleen |
| GPHN     | 4.24E-05 | 0.2510242  | 0.511 | 0.377 | 1 Proliferating_spleen |
| ACE      | 4.33E-05 | 0.20209235 | 0.453 | 0.318 | 1 Proliferating_spleen |
| USP38    | 4.35E-05 | 0.29754639 | 0.259 | 0.165 | 1 Proliferating_spleen |
| CD28     | 4.37E-05 | 0.50327384 | 0.491 | 0.403 | 1 Proliferating_spleen |
| ATP2B1   | 4.40E-05 | 0.18575799 | 0.365 | 0.249 | 1 Proliferating_spleen |
| PKN1     | 4.49E-05 | 0.26584483 | 0.314 | 0.208 | 1 Proliferating_spleen |
| VIRMA    | 4.59E-05 | 0.20928709 | 0.334 | 0.225 | 1 Proliferating_spleen |
| LMAN1    | 4.63E-05 | 0.1919163  | 0.391 | 0.269 | 1 Proliferating_spleen |
| WDR44    | 4.83E-05 | 0.36239769 | 0.354 | 0.242 | 1 Proliferating_spleen |
| MAP2K6   | 4.95E-05 | 0.58640066 | 0.304 | 0.212 | 1 Proliferating_spleen |
| PNRC2    | 4.96E-05 | 0.11398309 | 0.639 | 0.473 | 1 Proliferating_spleen |
| NAPG     | 4.97E-05 | 0.11375066 | 0.408 | 0.274 | 1 Proliferating_spleen |
| RANBP9   | 5.04E-05 | 0.12717528 | 0.622 | 0.444 | 1 Proliferating_spleen |
| KDM5A    | 5.09E-05 | 0.1619181  | 0.558 | 0.396 | 1 Proliferating_spleen |
| PRPSAP2  | 5.13E-05 | 0.30170843 | 0.369 | 0.254 | 1 Proliferating_spleen |
| AP2A2    | 5.20E-05 | 0.32458716 | 0.361 | 0.249 | 1 Proliferating_spleen |
| BRD7     | 5.24E-05 | 0.13169046 | 0.524 | 0.37  | 1 Proliferating_spleen |
| BICDL1   | 5.31E-05 | 0.13049946 | 0.593 | 0.457 | 1 Proliferating_spleen |
| ZFAND6   | 5.33E-05 | 0.14436809 | 0.797 | 0.587 | 1 Proliferating_spleen |
| RARS2    | 5.33E-05 | 0.33877894 | 0.266 | 0.172 | 1 Proliferating_spleen |
| FAR1     | 5.34E-05 | 0.2630817  | 0.562 | 0.417 | 1 Proliferating_spleen |
| LIMK2    | 5.39E-05 | 0.30648225 | 0.404 | 0.282 | 1 Proliferating_spleen |
| HACD2    | 5.52E-05 | 0.41909838 | 0.309 | 0.212 | 1 Proliferating_spleen |
| PTPMT1   | 5.54E-05 | 0.10276603 | 0.512 | 0.367 | 1 Proliferating_spleen |
| TMEM135  | 5.61E-05 | 0.21289845 | 0.432 | 0.313 | 1 Proliferating_spleen |
| GPCPD1   | 5.64E-05 | 0.15657617 | 0.616 | 0.451 | 1 Proliferating_spleen |

|         |          |            |       |       |                        |
|---------|----------|------------|-------|-------|------------------------|
| METTL16 | 5.64E-05 | 0.24698413 | 0.423 | 0.301 | 1 Proliferating_spleen |
| AKAP9   | 5.70E-05 | 0.3133076  | 0.678 | 0.508 | 1 Proliferating_spleen |
| SEL1L   | 5.72E-05 | 0.13048826 | 0.305 | 0.204 | 1 Proliferating_spleen |
| RPL26   | 5.86E-05 | 0.20795551 | 0.832 | 0.871 | 1 Proliferating_spleen |
| GFM2    | 5.99E-05 | 0.39852021 | 0.277 | 0.183 | 1 Proliferating_spleen |
| SMCO4   | 6.12E-05 | 0.28066275 | 0.255 | 0.163 | 1 Proliferating_spleen |
| EIF2B1  | 6.21E-05 | 0.2187141  | 0.274 | 0.175 | 1 Proliferating_spleen |
| SEC23A  | 6.34E-05 | 0.34831611 | 0.391 | 0.271 | 1 Proliferating_spleen |
| PTPN1   | 6.50E-05 | 0.23159068 | 0.623 | 0.459 | 1 Proliferating_spleen |
| TIMM23  | 6.68E-05 | 0.24885552 | 0.528 | 0.38  | 1 Proliferating_spleen |
| TAF2    | 6.88E-05 | 0.29874365 | 0.377 | 0.264 | 1 Proliferating_spleen |
| ITM2A   | 7.00E-05 | 0.38125225 | 0.411 | 0.304 | 1 Proliferating_spleen |
| WDFY1   | 7.08E-05 | 0.24535309 | 0.376 | 0.259 | 1 Proliferating_spleen |
| HIF1A   | 7.32E-05 | 0.28871246 | 0.557 | 0.425 | 1 Proliferating_spleen |
| PRPF40A | 7.34E-05 | 0.10810904 | 0.77  | 0.576 | 1 Proliferating_spleen |
| NEPRO   | 7.37E-05 | 0.31867546 | 0.274 | 0.179 | 1 Proliferating_spleen |
| ZMYM5   | 7.37E-05 | 0.28852457 | 0.382 | 0.268 | 1 Proliferating_spleen |
| KLHL2   | 7.60E-05 | 0.17921573 | 0.431 | 0.308 | 1 Proliferating_spleen |
| ZNF43   | 7.94E-05 | 0.16989095 | 0.514 | 0.363 | 1 Proliferating_spleen |
| KCMF1   | 8.00E-05 | 0.28496038 | 0.445 | 0.321 | 1 Proliferating_spleen |
| DCAF8   | 8.07E-05 | 0.11614071 | 0.47  | 0.332 | 1 Proliferating_spleen |
| DPM1    | 8.08E-05 | 0.26082484 | 0.346 | 0.237 | 1 Proliferating_spleen |
| DCAF10  | 8.11E-05 | 0.3112589  | 0.341 | 0.237 | 1 Proliferating_spleen |
| ULK4    | 8.40E-05 | 0.42039011 | 0.272 | 0.179 | 1 Proliferating_spleen |
| GINM1   | 8.47E-05 | 0.18247568 | 0.45  | 0.319 | 1 Proliferating_spleen |
| RBM28   | 8.72E-05 | 0.19132435 | 0.266 | 0.173 | 1 Proliferating_spleen |
| SF3A1   | 8.72E-05 | 0.12340663 | 0.397 | 0.273 | 1 Proliferating_spleen |
| TENT2   | 8.94E-05 | 0.16483557 | 0.496 | 0.363 | 1 Proliferating_spleen |
| RBM10   | 9.09E-05 | 0.31185323 | 0.335 | 0.223 | 1 Proliferating_spleen |
| COX10   | 9.27E-05 | 0.3220948  | 0.366 | 0.255 | 1 Proliferating_spleen |
| MAML1   | 9.34E-05 | 0.4313192  | 0.264 | 0.173 | 1 Proliferating_spleen |
| SDE2    | 9.53E-05 | 0.16947203 | 0.274 | 0.18  | 1 Proliferating_spleen |
| XRN2    | 9.65E-05 | 0.1924298  | 0.766 | 0.607 | 1 Proliferating_spleen |

|          |            |            |       |       |                        |
|----------|------------|------------|-------|-------|------------------------|
| DENND1C  | 9.80E-05   | 0.21526275 | 0.291 | 0.191 | 1 Proliferating_spleen |
| GTF2F2   | 9.99E-05   | 0.18846575 | 0.504 | 0.361 | 1 Proliferating_spleen |
| RTKN2    | 0.00010372 | 0.18384221 | 0.368 | 0.26  | 1 Proliferating_spleen |
| UBE2V2   | 0.00010493 | 0.11984644 | 0.449 | 0.314 | 1 Proliferating_spleen |
| TTF1     | 0.0001077  | 0.19003129 | 0.458 | 0.325 | 1 Proliferating_spleen |
| EXOG     | 0.00010862 | 0.34656528 | 0.293 | 0.199 | 1 Proliferating_spleen |
| MAPKAPK2 | 0.00010915 | 0.5597258  | 0.268 | 0.184 | 1 Proliferating_spleen |
| ASL      | 0.00011011 | 0.14210068 | 0.441 | 0.308 | 1 Proliferating_spleen |
| APPL1    | 0.0001117  | 0.12025923 | 0.396 | 0.275 | 1 Proliferating_spleen |
| BBX      | 0.00011222 | 0.2162848  | 0.605 | 0.457 | 1 Proliferating_spleen |
| ARFGAP2  | 0.00011279 | 0.32722706 | 0.27  | 0.18  | 1 Proliferating_spleen |
| FYTTD1   | 0.00011361 | 0.11633335 | 0.454 | 0.318 | 1 Proliferating_spleen |
| AZIN1    | 0.00011376 | 0.15558909 | 0.476 | 0.336 | 1 Proliferating_spleen |
| ELF2     | 0.00011508 | 0.19233805 | 0.609 | 0.45  | 1 Proliferating_spleen |
| EIF4H    | 0.00011539 | 0.13220329 | 0.635 | 0.471 | 1 Proliferating_spleen |
| TBC1D20  | 0.00011738 | 0.15695681 | 0.259 | 0.167 | 1 Proliferating_spleen |
| RNF4     | 0.00011932 | 0.22721096 | 0.453 | 0.322 | 1 Proliferating_spleen |
| ZCCHC8   | 0.00012017 | 0.32115402 | 0.338 | 0.238 | 1 Proliferating_spleen |
| VASP     | 0.00012318 | 0.11865192 | 0.464 | 0.331 | 1 Proliferating_spleen |
| NIPBL    | 0.00012393 | 0.16563671 | 0.711 | 0.518 | 1 Proliferating_spleen |
| DYNC1LI1 | 0.00012534 | 0.10891595 | 0.292 | 0.189 | 1 Proliferating_spleen |
| USP42    | 0.0001276  | 0.27489642 | 0.288 | 0.192 | 1 Proliferating_spleen |
| ASB3     | 0.00013048 | 0.14256296 | 0.426 | 0.301 | 1 Proliferating_spleen |
| RNF114   | 0.00013111 | 0.21072762 | 0.346 | 0.23  | 1 Proliferating_spleen |
| PTGES3   | 0.00013508 | 0.14540318 | 0.865 | 0.8   | 1 Proliferating_spleen |
| MFF      | 0.00013957 | 0.15296691 | 0.489 | 0.354 | 1 Proliferating_spleen |
| MED15    | 0.00014189 | 0.23869102 | 0.442 | 0.304 | 1 Proliferating_spleen |
| DTL      | 0.00014984 | 0.28415713 | 0.491 | 0.369 | 1 Proliferating_spleen |
| RELL1    | 0.00015235 | 0.2315907  | 0.504 | 0.376 | 1 Proliferating_spleen |
| DISP1    | 0.00015594 | 0.35538217 | 0.374 | 0.27  | 1 Proliferating_spleen |
| STK26    | 0.00015855 | 0.11190916 | 0.48  | 0.342 | 1 Proliferating_spleen |
| TEX264   | 0.00016169 | 0.14069122 | 0.423 | 0.297 | 1 Proliferating_spleen |
| APBB1IP  | 0.0001629  | 0.20880843 | 0.928 | 0.766 | 1 Proliferating_spleen |



|                    |            |            |       |       |                        |
|--------------------|------------|------------|-------|-------|------------------------|
| CCM2               | 0.00016491 | 0.10289613 | 0.681 | 0.492 | 1 Proliferating_spleen |
| ENSMMUG00000056838 | 0.00016522 | 0.11965365 | 0.251 | 0.164 | 1 Proliferating_spleen |
| STAM               | 0.00016896 | 0.55852018 | 0.277 | 0.188 | 1 Proliferating_spleen |
| XPO7               | 0.00016924 | 0.15745353 | 0.443 | 0.32  | 1 Proliferating_spleen |
| HDAC3              | 0.00017069 | 0.25153945 | 0.305 | 0.205 | 1 Proliferating_spleen |
| HERC6              | 0.0001732  | 0.26822006 | 0.307 | 0.212 | 1 Proliferating_spleen |
| PAPOLA             | 0.00017587 | 0.13944868 | 0.781 | 0.609 | 1 Proliferating_spleen |
| LENG8              | 0.000177   | 0.22740153 | 0.32  | 0.221 | 1 Proliferating_spleen |
| PITPNB             | 0.0001773  | 0.21104229 | 0.578 | 0.425 | 1 Proliferating_spleen |
| TUBA1C             | 0.00017903 | 0.14129416 | 0.389 | 0.282 | 1 Proliferating_spleen |
| NBEA               | 0.00018061 | 0.17404613 | 0.341 | 0.237 | 1 Proliferating_spleen |
| AP2B1              | 0.00018124 | 0.23215175 | 0.485 | 0.354 | 1 Proliferating_spleen |
| SYNJ1              | 0.00018348 | 0.4271789  | 0.295 | 0.205 | 1 Proliferating_spleen |
| PNPLA8             | 0.00018373 | 0.12167246 | 0.496 | 0.363 | 1 Proliferating_spleen |
| TMEM248            | 0.00018658 | 0.3156287  | 0.339 | 0.237 | 1 Proliferating_spleen |
| ENSMMUG00000020316 | 0.00018729 | 0.12602778 | 0.492 | 0.356 | 1 Proliferating_spleen |
| NAA25              | 0.000188   | 0.14389189 | 0.357 | 0.254 | 1 Proliferating_spleen |
| ERGIC2             | 0.00019072 | 0.10790048 | 0.489 | 0.349 | 1 Proliferating_spleen |
| UBE2E3             | 0.0001915  | 0.1849135  | 0.534 | 0.383 | 1 Proliferating_spleen |
| PTPN4              | 0.00019267 | 0.17453426 | 0.573 | 0.428 | 1 Proliferating_spleen |
| PRKAG2             | 0.00020142 | 0.17273305 | 0.262 | 0.173 | 1 Proliferating_spleen |
| SHOC2              | 0.00020204 | 0.18512031 | 0.642 | 0.481 | 1 Proliferating_spleen |
| SETDB1             | 0.00020213 | 0.11753976 | 0.288 | 0.193 | 1 Proliferating_spleen |
| STAM2              | 0.00020754 | 0.38422925 | 0.255 | 0.169 | 1 Proliferating_spleen |
| ALMS1              | 0.00020828 | 0.27625814 | 0.495 | 0.356 | 1 Proliferating_spleen |
| KANSL2             | 0.00020895 | 0.21869263 | 0.493 | 0.377 | 1 Proliferating_spleen |
| CEP295             | 0.0002194  | 0.21026035 | 0.528 | 0.386 | 1 Proliferating_spleen |
| EIF2A              | 0.00022798 | 0.12603651 | 0.477 | 0.345 | 1 Proliferating_spleen |
| LEF1               | 0.0002319  | 0.22515857 | 0.614 | 0.505 | 1 Proliferating_spleen |
| GFPT1              | 0.00023475 | 0.11811993 | 0.286 | 0.192 | 1 Proliferating_spleen |
| MTERF1             | 0.00023729 | 0.43832537 | 0.253 | 0.173 | 1 Proliferating_spleen |
| NFYC               | 0.00024569 | 0.12402045 | 0.489 | 0.358 | 1 Proliferating_spleen |
| REST               | 0.00025095 | 0.2821848  | 0.309 | 0.213 | 1 Proliferating_spleen |

|                    |            |            |       |       |                        |
|--------------------|------------|------------|-------|-------|------------------------|
| VAPA               | 0.00025716 | 0.18258338 | 0.695 | 0.525 | 1 Proliferating_spleen |
| SECISBP2           | 0.00026367 | 0.34204632 | 0.424 | 0.306 | 1 Proliferating_spleen |
| PSMD12             | 0.00026471 | 0.24903759 | 0.754 | 0.631 | 1 Proliferating_spleen |
| MACO1              | 0.00026776 | 0.12881329 | 0.516 | 0.372 | 1 Proliferating_spleen |
| MED27              | 0.00028075 | 0.16249276 | 0.551 | 0.403 | 1 Proliferating_spleen |
| HSP90AA1           | 0.00028321 | 0.23322075 | 0.928 | 0.91  | 1 Proliferating_spleen |
| SKP1               | 0.00028723 | 0.13195244 | 0.911 | 0.847 | 1 Proliferating_spleen |
| RRM1               | 0.0002905  | 0.15670018 | 0.693 | 0.542 | 1 Proliferating_spleen |
| MARCHF6            | 0.00029845 | 0.12874205 | 0.674 | 0.496 | 1 Proliferating_spleen |
| ACIN1              | 0.00032225 | 0.16825045 | 0.673 | 0.497 | 1 Proliferating_spleen |
| YEATS2             | 0.00032274 | 0.11860423 | 0.643 | 0.469 | 1 Proliferating_spleen |
| ENSMMUG00000021539 | 0.00032349 | 0.27121678 | 0.314 | 0.22  | 1 Proliferating_spleen |
| HGSNAT             | 0.00032371 | 0.21924191 | 0.308 | 0.214 | 1 Proliferating_spleen |
| PIAS2              | 0.00034052 | 0.20392297 | 0.341 | 0.24  | 1 Proliferating_spleen |
| AIDA               | 0.00034619 | 0.13595985 | 0.258 | 0.173 | 1 Proliferating_spleen |
| ANTXR2             | 0.00035828 | 0.23657856 | 0.308 | 0.215 | 1 Proliferating_spleen |
| DEAF1              | 0.00035892 | 0.15330163 | 0.33  | 0.226 | 1 Proliferating_spleen |
| BCL2L11            | 0.00036996 | 0.30243127 | 0.254 | 0.173 | 1 Proliferating_spleen |
| ABCE1              | 0.000371   | 0.12365531 | 0.524 | 0.389 | 1 Proliferating_spleen |
| RTN3               | 0.00037943 | 0.1761792  | 0.657 | 0.49  | 1 Proliferating_spleen |
| PARP2              | 0.00038015 | 0.15381503 | 0.288 | 0.197 | 1 Proliferating_spleen |
| NR1D2              | 0.00038378 | 0.37745912 | 0.326 | 0.235 | 1 Proliferating_spleen |
| TAPT1              | 0.000395   | 0.17442129 | 0.372 | 0.271 | 1 Proliferating_spleen |
| NCOA4              | 0.00039761 | 0.11742936 | 0.355 | 0.246 | 1 Proliferating_spleen |
| TFG                | 0.00040378 | 0.13506085 | 0.428 | 0.297 | 1 Proliferating_spleen |
| AUH                | 0.00041234 | 0.27817014 | 0.388 | 0.283 | 1 Proliferating_spleen |
| RASA3              | 0.00042041 | 0.27846347 | 0.385 | 0.277 | 1 Proliferating_spleen |
| ATP10A             | 0.00042095 | 0.1909187  | 0.584 | 0.451 | 1 Proliferating_spleen |
| MAP3K3             | 0.00042139 | 0.12567498 | 0.318 | 0.22  | 1 Proliferating_spleen |
| ERP44              | 0.00043563 | 0.12209489 | 0.582 | 0.431 | 1 Proliferating_spleen |
| COMMD1             | 0.0004402  | 0.17380784 | 0.622 | 0.471 | 1 Proliferating_spleen |
| ENSMMUG00000017044 | 0.00044071 | 0.13170215 | 0.261 | 0.177 | 1 Proliferating_spleen |
| MTMR3              | 0.00044186 | 0.23582631 | 0.412 | 0.302 | 1 Proliferating_spleen |

|            |            |            |       |       |                        |
|------------|------------|------------|-------|-------|------------------------|
| PRPF4B     | 0.00044628 | 0.2343488  | 0.884 | 0.737 | 1 Proliferating_spleen |
| NASP       | 0.00044945 | 0.13691725 | 0.847 | 0.728 | 1 Proliferating_spleen |
| PSTPIP1    | 0.00045269 | 0.10629443 | 0.257 | 0.17  | 1 Proliferating_spleen |
| NAP1L4     | 0.00045844 | 0.10990815 | 0.826 | 0.677 | 1 Proliferating_spleen |
| ANKRD12    | 0.00046012 | 0.16899175 | 0.705 | 0.551 | 1 Proliferating_spleen |
| HM13       | 0.00046209 | 0.24232361 | 0.385 | 0.282 | 1 Proliferating_spleen |
| NAA16      | 0.00048747 | 0.17243616 | 0.355 | 0.25  | 1 Proliferating_spleen |
| PPTC7      | 0.00050887 | 0.14587291 | 0.399 | 0.292 | 1 Proliferating_spleen |
| CSGALNACT2 | 0.00051586 | 0.13414033 | 0.658 | 0.491 | 1 Proliferating_spleen |
| OTUD5      | 0.00051998 | 0.33225534 | 0.27  | 0.188 | 1 Proliferating_spleen |
| POLR1B     | 0.00052642 | 0.22267269 | 0.285 | 0.196 | 1 Proliferating_spleen |
| LIN9       | 0.00054786 | 0.29050993 | 0.301 | 0.209 | 1 Proliferating_spleen |
| CDIP1      | 0.0005504  | 0.21617717 | 0.273 | 0.185 | 1 Proliferating_spleen |
| CEP120     | 0.0005644  | 0.21331637 | 0.332 | 0.236 | 1 Proliferating_spleen |
| SEC24B     | 0.00056752 | 0.10290692 | 0.526 | 0.388 | 1 Proliferating_spleen |
| RAB28      | 0.00057057 | 0.11788682 | 0.254 | 0.172 | 1 Proliferating_spleen |
| CCT6A      | 0.00057741 | 0.17404173 | 0.658 | 0.532 | 1 Proliferating_spleen |
| MIER1      | 0.00057804 | 0.14813271 | 0.707 | 0.55  | 1 Proliferating_spleen |
| HIPK3      | 0.00058331 | 0.17550819 | 0.378 | 0.269 | 1 Proliferating_spleen |
| DNAJC17    | 0.00058753 | 0.1092583  | 0.254 | 0.17  | 1 Proliferating_spleen |
| SEC14L1    | 0.00058762 | 0.20460961 | 0.391 | 0.282 | 1 Proliferating_spleen |
| STK4       | 0.00059197 | 0.11673096 | 0.793 | 0.626 | 1 Proliferating_spleen |
| YWHAZ      | 0.00059418 | 0.20339483 | 0.909 | 0.834 | 1 Proliferating_spleen |
| MTREX      | 0.00059463 | 0.10116847 | 0.757 | 0.575 | 1 Proliferating_spleen |
| PTP4A2     | 0.00059649 | 0.11127844 | 0.599 | 0.446 | 1 Proliferating_spleen |
| CCDC97     | 0.00063341 | 0.31532791 | 0.254 | 0.172 | 1 Proliferating_spleen |
| CENPC      | 0.00064955 | 0.20113299 | 0.676 | 0.525 | 1 Proliferating_spleen |
| ZRSR2      | 0.00065805 | 0.26511108 | 0.311 | 0.221 | 1 Proliferating_spleen |
| CDC45      | 0.00066494 | 0.1512586  | 0.332 | 0.235 | 1 Proliferating_spleen |
| RPRD1A     | 0.00066565 | 0.17079458 | 0.436 | 0.321 | 1 Proliferating_spleen |
| FCMR       | 0.00066734 | 0.2520344  | 0.477 | 0.373 | 1 Proliferating_spleen |
| CCT4       | 0.00067315 | 0.15030959 | 0.697 | 0.544 | 1 Proliferating_spleen |
| ERCC3      | 0.00071608 | 0.16279204 | 0.253 | 0.169 | 1 Proliferating_spleen |

|         |            |            |       |       |                        |
|---------|------------|------------|-------|-------|------------------------|
| SAR1A   | 0.00072796 | 0.14288722 | 0.507 | 0.369 | 1 Proliferating_spleen |
| SCCPDH  | 0.00072947 | 0.14488021 | 0.261 | 0.174 | 1 Proliferating_spleen |
| PARP8   | 0.00074527 | 0.2921421  | 0.377 | 0.287 | 1 Proliferating_spleen |
| CSNK1A1 | 0.00075212 | 0.16096995 | 0.814 | 0.607 | 1 Proliferating_spleen |
| CD44    | 0.00076072 | 0.18827668 | 0.688 | 0.56  | 1 Proliferating_spleen |
| IST1    | 0.00076315 | 0.19117672 | 0.505 | 0.381 | 1 Proliferating_spleen |
| BACH2   | 0.00076597 | 0.33186484 | 0.639 | 0.518 | 1 Proliferating_spleen |
| HERC3   | 0.00080074 | 0.15361005 | 0.462 | 0.349 | 1 Proliferating_spleen |
| BID     | 0.00080653 | 0.12735791 | 0.554 | 0.428 | 1 Proliferating_spleen |
| IFNGR1  | 0.00090377 | 0.13143305 | 0.347 | 0.248 | 1 Proliferating_spleen |
| NOL8    | 0.00091968 | 0.18304513 | 0.316 | 0.22  | 1 Proliferating_spleen |
| ATG16L1 | 0.0009204  | 0.19736897 | 0.305 | 0.221 | 1 Proliferating_spleen |
| PIK3C2A | 0.00092179 | 0.16558016 | 0.354 | 0.26  | 1 Proliferating_spleen |
| STXBP3  | 0.00099224 | 0.15289331 | 0.359 | 0.259 | 1 Proliferating_spleen |
| MLXIP   | 0.0010232  | 0.34937008 | 0.319 | 0.237 | 1 Proliferating_spleen |
| KIF20B  | 0.00105089 | 0.15597077 | 0.562 | 0.443 | 1 Proliferating_spleen |
| IL12RB2 | 0.00110971 | 0.11676652 | 0.28  | 0.203 | 1 Proliferating_spleen |
| MYO1E   | 0.00115151 | 0.13267661 | 0.307 | 0.22  | 1 Proliferating_spleen |
| TAB2    | 0.00119238 | 0.14997936 | 0.473 | 0.364 | 1 Proliferating_spleen |
| SPTLC1  | 0.0012604  | 0.33998213 | 0.307 | 0.223 | 1 Proliferating_spleen |
| AATF    | 0.00126785 | 0.12173073 | 0.392 | 0.281 | 1 Proliferating_spleen |
| CHD8    | 0.00130435 | 0.24257358 | 0.342 | 0.25  | 1 Proliferating_spleen |
| CCDC93  | 0.00135635 | 0.1810841  | 0.251 | 0.178 | 1 Proliferating_spleen |
| CDC7    | 0.00138752 | 0.11315785 | 0.251 | 0.174 | 1 Proliferating_spleen |
| NUP93   | 0.0013984  | 0.14928654 | 0.292 | 0.208 | 1 Proliferating_spleen |
| SGF29   | 0.00140444 | 0.12270866 | 0.278 | 0.197 | 1 Proliferating_spleen |
| ARIH2   | 0.0014124  | 0.10853838 | 0.547 | 0.4   | 1 Proliferating_spleen |
| ZNF326  | 0.00148221 | 0.20688477 | 0.478 | 0.365 | 1 Proliferating_spleen |
| G2E3    | 0.00152192 | 0.13708552 | 0.489 | 0.372 | 1 Proliferating_spleen |
| WDR75   | 0.00158809 | 0.13661095 | 0.277 | 0.195 | 1 Proliferating_spleen |
| TMEM38B | 0.0016019  | 0.22029266 | 0.25  | 0.175 | 1 Proliferating_spleen |
| TANC2   | 0.00163017 | 0.28369966 | 0.372 | 0.287 | 1 Proliferating_spleen |
| SAMHD1  | 0.00172645 | 0.1607307  | 0.424 | 0.323 | 1 Proliferating_spleen |

|         |            |            |       |       |                        |
|---------|------------|------------|-------|-------|------------------------|
| RRM2    | 0.00173065 | 0.14815872 | 0.474 | 0.369 | 1 Proliferating_spleen |
| VIM     | 0.00175416 | 0.28039225 | 0.67  | 0.592 | 1 Proliferating_spleen |
| JAML    | 0.00177879 | 0.1454651  | 0.419 | 0.315 | 1 Proliferating_spleen |
| PAIP1   | 0.00178051 | 0.14371921 | 0.369 | 0.271 | 1 Proliferating_spleen |
| KIFBP   | 0.00179457 | 0.18442019 | 0.734 | 0.599 | 1 Proliferating_spleen |
| SON     | 0.00191787 | 0.12623279 | 0.885 | 0.767 | 1 Proliferating_spleen |
| CD6     | 0.0020047  | 0.10845342 | 0.484 | 0.38  | 1 Proliferating_spleen |
| ABI2    | 0.00202994 | 0.23164207 | 0.255 | 0.183 | 1 Proliferating_spleen |
| ACSL3   | 0.00208467 | 0.12341874 | 0.35  | 0.26  | 1 Proliferating_spleen |
| ODR4    | 0.0020905  | 0.19208949 | 0.264 | 0.184 | 1 Proliferating_spleen |
| CD2     | 0.00211045 | 0.11147992 | 0.538 | 0.444 | 1 Proliferating_spleen |
| FBXW2   | 0.00216561 | 0.12450331 | 0.364 | 0.261 | 1 Proliferating_spleen |
| PRKAG1  | 0.00217467 | 0.10428741 | 0.295 | 0.204 | 1 Proliferating_spleen |
| SEPTIN9 | 0.00231008 | 0.17246148 | 0.642 | 0.514 | 1 Proliferating_spleen |
| FBXO7   | 0.00233968 | 0.18540089 | 0.303 | 0.221 | 1 Proliferating_spleen |
| AHI1    | 0.00235986 | 0.1123197  | 0.611 | 0.481 | 1 Proliferating_spleen |
| ZDHHC17 | 0.00237037 | 0.23721416 | 0.259 | 0.184 | 1 Proliferating_spleen |
| DNAJC3  | 0.00237165 | 0.20266388 | 0.589 | 0.459 | 1 Proliferating_spleen |
| TXNDC11 | 0.00244934 | 0.19541239 | 0.392 | 0.293 | 1 Proliferating_spleen |
| BTBD11  | 0.00260315 | 0.15265446 | 0.578 | 0.468 | 1 Proliferating_spleen |
| ACO2    | 0.00265626 | 0.13518409 | 0.418 | 0.313 | 1 Proliferating_spleen |
| ZNRF2   | 0.00275118 | 0.19000826 | 0.304 | 0.226 | 1 Proliferating_spleen |
| CHD6    | 0.00277858 | 0.1686897  | 0.535 | 0.412 | 1 Proliferating_spleen |
| PDSS1   | 0.00278744 | 0.23286716 | 0.282 | 0.207 | 1 Proliferating_spleen |
| ENSA    | 0.00291506 | 0.23011201 | 0.716 | 0.583 | 1 Proliferating_spleen |
| PNN     | 0.00291834 | 0.15484992 | 0.758 | 0.593 | 1 Proliferating_spleen |
| RAP1B   | 0.00305824 | 0.24001991 | 0.92  | 0.826 | 1 Proliferating_spleen |
| SENP2   | 0.00313132 | 0.14878434 | 0.474 | 0.369 | 1 Proliferating_spleen |
| SMARCC2 | 0.00336606 | 0.21814385 | 0.316 | 0.233 | 1 Proliferating_spleen |
| CWC25   | 0.00337331 | 0.13435033 | 0.404 | 0.302 | 1 Proliferating_spleen |
| AFF4    | 0.00348836 | 0.22964841 | 0.439 | 0.332 | 1 Proliferating_spleen |
| ANXA7   | 0.00349795 | 0.12380678 | 0.328 | 0.242 | 1 Proliferating_spleen |
| RPL31   | 0.00350011 | 0.16197668 | 0.753 | 0.651 | 1 Proliferating_spleen |

|                     |            |            |       |       |                        |
|---------------------|------------|------------|-------|-------|------------------------|
| RPL23               | 0.00350417 | 0.16187768 | 0.882 | 0.928 | 1 Proliferating_spleen |
| ENSMMUG00000008199  | 0.00355819 | 0.19672405 | 0.278 | 0.204 | 1 Proliferating_spleen |
| ATF7IP2             | 0.0035773  | 0.14558125 | 0.397 | 0.306 | 1 Proliferating_spleen |
| ZNF92               | 0.00397563 | 0.11262084 | 0.447 | 0.34  | 1 Proliferating_spleen |
| ENSMMUG000000022610 | 0.00403741 | 0.2635668  | 0.592 | 0.464 | 1 Proliferating_spleen |
| PRKCQ               | 0.00408133 | 0.14516841 | 0.592 | 0.467 | 1 Proliferating_spleen |
| C12orf65            | 0.00431879 | 0.123704   | 0.285 | 0.211 | 1 Proliferating_spleen |
| ZNHIT6              | 0.00450074 | 0.27431281 | 0.259 | 0.188 | 1 Proliferating_spleen |
| UBA6                | 0.00487981 | 0.17340592 | 0.335 | 0.255 | 1 Proliferating_spleen |
| PHC3                | 0.00492494 | 0.14433321 | 0.501 | 0.391 | 1 Proliferating_spleen |
| STRIP1              | 0.00492672 | 0.1169275  | 0.257 | 0.184 | 1 Proliferating_spleen |
| IL1RAP              | 0.00505369 | 0.11264215 | 0.257 | 0.189 | 1 Proliferating_spleen |
| STAT1               | 0.00517666 | 0.11945181 | 0.388 | 0.294 | 1 Proliferating_spleen |
| CACYBP              | 0.00527222 | 0.10297424 | 0.689 | 0.577 | 1 Proliferating_spleen |
| SOS2                | 0.00540845 | 0.18975364 | 0.335 | 0.26  | 1 Proliferating_spleen |
| PLAA                | 0.00542613 | 0.21291785 | 0.368 | 0.279 | 1 Proliferating_spleen |
| RSBN1               | 0.00547487 | 0.1335838  | 0.258 | 0.19  | 1 Proliferating_spleen |
| ASCC2               | 0.00567671 | 0.10431187 | 0.285 | 0.21  | 1 Proliferating_spleen |
| DNMT1               | 0.00578026 | 0.11065193 | 0.742 | 0.592 | 1 Proliferating_spleen |
| KDM3A               | 0.00616746 | 0.17105102 | 0.301 | 0.228 | 1 Proliferating_spleen |
| ENSMMUG000000061756 | 0.00689571 | 0.26457643 | 0.342 | 0.263 | 1 Proliferating_spleen |
| GTF2B               | 0.00748815 | 0.24250338 | 0.73  | 0.599 | 1 Proliferating_spleen |
| JOSD1               | 0.0077245  | 0.11506673 | 0.288 | 0.215 | 1 Proliferating_spleen |
| TCF25               | 0.00939825 | 0.1038724  | 0.496 | 0.38  | 1 Proliferating_spleen |
| CTDSPL2             | 0.01024165 | 0.11598367 | 0.646 | 0.497 | 1 Proliferating_spleen |
| PDLIM5              | 0.01062776 | 0.16201406 | 0.292 | 0.222 | 1 Proliferating_spleen |
| MINDY2              | 0.01085637 | 0.12283939 | 0.286 | 0.214 | 1 Proliferating_spleen |
| ACSL1               | 0.0109489  | 0.30184509 | 0.251 | 0.188 | 1 Proliferating_spleen |
| LANCL2              | 0.01339487 | 0.11016235 | 0.338 | 0.261 | 1 Proliferating_spleen |
| CCR7                | 0.01389012 | 0.1214886  | 0.347 | 0.279 | 1 Proliferating_spleen |
| OLA1                | 0.01536715 | 0.16144238 | 0.674 | 0.53  | 1 Proliferating_spleen |
| KMT2E               | 0.01555996 | 0.10101077 | 0.749 | 0.599 | 1 Proliferating_spleen |
| PISD                | 0.01686814 | 0.10985415 | 0.301 | 0.232 | 1 Proliferating_spleen |

|                    |            |            |       |       |                        |
|--------------------|------------|------------|-------|-------|------------------------|
| SPOCK2             | 0.01899033 | 0.25786084 | 0.465 | 0.4   | 1 Proliferating_spleen |
| CTSH               | 0.02114884 | 0.37199138 | 0.27  | 0.221 | 1 Proliferating_spleen |
| MRTFB              | 0.02135481 | 0.13009067 | 0.323 | 0.257 | 1 Proliferating_spleen |
| MYO6               | 0.02138149 | 0.21968994 | 0.257 | 0.204 | 1 Proliferating_spleen |
| HSP90B1            | 0.02180289 | 0.12522595 | 0.723 | 0.623 | 1 Proliferating_spleen |
| MAML3              | 0.02321567 | 0.17359692 | 0.478 | 0.402 | 1 Proliferating_spleen |
| TGFB1              | 0.02456461 | 0.3584157  | 0.582 | 0.482 | 1 Proliferating_spleen |
| RPL23A             | 0.02578887 | 0.10816075 | 0.907 | 0.97  | 1 Proliferating_spleen |
| NUP133             | 0.03238496 | 0.10607338 | 0.364 | 0.287 | 1 Proliferating_spleen |
| STK3               | 0.03711943 | 0.1396689  | 0.255 | 0.202 | 1 Proliferating_spleen |
| APC                | 0.03847858 | 0.11028852 | 0.378 | 0.304 | 1 Proliferating_spleen |
| PDE4B              | 0.04088085 | 0.16894465 | 0.466 | 0.39  | 1 Proliferating_spleen |
| SLCO3A1            | 0.04880677 | 0.21495077 | 0.3   | 0.245 | 1 Proliferating_spleen |
| TNFSF8             | 0.06761486 | 0.12612547 | 0.318 | 0.261 | 1 Proliferating_spleen |
| ENSMMUG00000064692 | 0.10681452 | 0.1784767  | 0.761 | 0.767 | 1 Proliferating_spleen |
| ATP6               | 0.12335402 | 0.45966198 | 0.799 | 0.914 | 1 Proliferating_spleen |
| COX1               | 0.12857357 | 0.62267682 | 0.815 | 0.928 | 1 Proliferating_spleen |
| TEC                | 0.36307375 | 0.3203001  | 0.532 | 0.502 | 1 Proliferating_spleen |
| COX2               | 0.50680685 | 0.40478887 | 0.781 | 0.945 | 1 Proliferating_spleen |
| CD96               | 0.50966828 | 0.19699342 | 0.332 | 0.313 | 1 Proliferating_spleen |
| CD37               | 0.53888533 | 0.1196239  | 0.634 | 0.601 | 1 Proliferating_spleen |
| COX3               | 0.55092731 | 0.57682572 | 0.846 | 0.957 | 1 Proliferating_spleen |
| ND3                | 0.79498873 | 0.31348015 | 0.692 | 0.717 | 1 Proliferating_spleen |
| ND4                | 0.88956562 | 0.47820491 | 0.809 | 0.933 | 1 Proliferating_spleen |
| ADCYAP1            | 1.32E-50   | 12.1344746 | 0.367 | 0     | 4.68E-46 HSPC_lung     |
| ENPP3              | 9.56E-44   | 6.04990711 | 0.7   | 0.042 | 3.39E-39 HSPC_lung     |
| HAMP               | 1.35E-41   | 12.5272412 | 0.3   | 0     | 4.79E-37 HSPC_lung     |
| CPA3               | 2.84E-39   | 6.44434135 | 0.767 | 0.068 | 1.00E-34 HSPC_lung     |
| MS4A2              | 6.00E-39   | 5.25310065 | 0.733 | 0.058 | 2.13E-34 HSPC_lung     |
| IL1RL1             | 2.64E-38   | 9.09439206 | 0.333 | 0.003 | 9.37E-34 HSPC_lung     |
| CMA1               | 3.65E-38   | 4.43792892 | 0.733 | 0.058 | 1.29E-33 HSPC_lung     |
| ENSMMUG00000047001 | 9.76E-35   | 4.63785199 | 0.833 | 0.1   | 3.46E-30 HSPC_lung     |
| GNG4               | 6.17E-33   | 9.71065579 | 0.267 | 0.002 | 2.19E-28 HSPC_lung     |

|                    |          |            |       |       |            |           |
|--------------------|----------|------------|-------|-------|------------|-----------|
| ENSMMUG00000043574 | 2.36E-30 | 5.64759082 | 0.667 | 0.068 | 8.38E-26   | HSPC_lung |
| HPGD               | 1.25E-22 | 6.5736585  | 0.7   | 0.123 | 4.43E-18   | HSPC_lung |
| FCGR1A             | 1.34E-22 | 7.49698575 | 0.267 | 0.008 | 4.75E-18   | HSPC_lung |
| GPR65              | 6.25E-21 | 6.41987628 | 0.567 | 0.078 | 2.22E-16   | HSPC_lung |
| IL18R1             | 1.68E-17 | 6.65706792 | 0.3   | 0.02  | 5.96E-13   | HSPC_lung |
| PLIN2              | 2.55E-17 | 5.58218452 | 0.767 | 0.23  | 9.04E-13   | HSPC_lung |
| ENSMMUG00000053253 | 8.21E-17 | 4.28637393 | 0.4   | 0.042 | 2.91E-12   | HSPC_lung |
| SAMSN1             | 3.92E-16 | 4.97582801 | 0.7   | 0.191 | 1.39E-11   | HSPC_lung |
| ENSMMUG00000050892 | 2.69E-14 | 5.95926311 | 0.3   | 0.027 | 9.52E-10   | HSPC_lung |
| PRG3               | 3.23E-14 | 3.40902834 | 0.367 | 0.042 | 1.15E-09   | HSPC_lung |
| NR4A3              | 1.73E-11 | 5.65121317 | 0.367 | 0.058 | 6.14E-07   | HSPC_lung |
| ENSMMUG00000062350 | 1.75E-11 | 1.38883736 | 1     | 0.923 | 6.20E-07   | HSPC_lung |
| SRGN               | 5.21E-11 | 3.31544916 | 0.867 | 0.564 | 1.84E-06   | HSPC_lung |
| CD63               | 5.50E-11 | 2.87801995 | 0.867 | 0.537 | 1.95E-06   | HSPC_lung |
| KIT                | 5.44E-10 | 3.59896271 | 0.767 | 0.428 | 1.93E-05   | HSPC_lung |
| RPS21              | 2.19E-09 | 1.48157178 | 0.9   | 0.852 | 7.75E-05   | HSPC_lung |
| BHLHE40            | 2.32E-09 | 5.97146805 | 0.367 | 0.075 | 8.21E-05   | HSPC_lung |
| RPS28              | 5.36E-08 | 1.04379513 | 0.967 | 0.917 | 0.00190077 | HSPC_lung |
| AFF2               | 1.14E-07 | 3.33894486 | 0.367 | 0.088 | 0.00402522 | HSPC_lung |
| RPL36AL            | 4.61E-07 | 1.38813254 | 0.8   | 0.812 | 0.01634458 | HSPC_lung |
| RPL22L1            | 8.11E-07 | 1.39513276 | 0.867 | 0.812 | 0.0287195  | HSPC_lung |
| ACSL4              | 8.87E-07 | 3.85877506 | 0.567 | 0.276 | 0.03143987 | HSPC_lung |
| BATF               | 9.29E-07 | 4.95653649 | 0.367 | 0.106 | 0.03290219 | HSPC_lung |
| SYTL3              | 9.54E-07 | 3.9395235  | 0.5   | 0.2   | 0.03379172 | HSPC_lung |
| LPXN               | 1.72E-06 | 4.44650377 | 0.367 | 0.11  | 0.06111107 | HSPC_lung |
| GADD45B            | 1.95E-06 | 4.49503631 | 0.533 | 0.26  | 0.06919847 | HSPC_lung |
| RPL10              | 2.06E-06 | 1.04167497 | 1     | 0.92  | 0.0728783  | HSPC_lung |
| TMSB10             | 2.13E-06 | 1.69392145 | 0.833 | 0.807 | 0.07539683 | HSPC_lung |
| MITF               | 2.14E-06 | 2.39593912 | 0.3   | 0.068 | 0.07566322 | HSPC_lung |
| ENSMMUG00000005593 | 2.46E-06 | 1.15809586 | 0.9   | 0.918 | 0.0870845  | HSPC_lung |
| FOSL2              | 3.09E-06 | 4.43490923 | 0.3   | 0.075 | 0.10938181 | HSPC_lung |
| SLC24A3            | 3.27E-06 | 2.33191921 | 0.767 | 0.536 | 0.11587022 | HSPC_lung |
| ST8SIA6            | 3.39E-06 | 3.75448911 | 0.4   | 0.133 | 0.12021455 | HSPC_lung |



|                    |            |            |       |       |            |           |
|--------------------|------------|------------|-------|-------|------------|-----------|
| PKN2               | 5.83E-06   | 0.17814795 | 0.233 | 0.759 | 0.2064124  | HSPC_lung |
| GALC               | 6.95E-06   | 4.39764034 | 0.433 | 0.175 | 0.24619771 | HSPC_lung |
| GNPTAB             | 9.33E-06   | 3.94061669 | 0.467 | 0.205 | 0.33045871 | HSPC_lung |
| FAU                | 9.69E-06   | 0.83080778 | 0.867 | 0.897 | 0.34340156 | HSPC_lung |
| SLC45A3            | 1.00E-05   | 3.43323464 | 0.433 | 0.171 | 0.35484351 | HSPC_lung |
| SAT1               | 1.03E-05   | 3.31688426 | 0.633 | 0.398 | 0.36513136 | HSPC_lung |
| PRDM8              | 1.25E-05   | 4.10555808 | 0.333 | 0.103 | 0.44128466 | HSPC_lung |
| PAG1               | 1.29E-05   | 2.71070567 | 0.533 | 0.276 | 0.45724409 | HSPC_lung |
| UBA52              | 1.55E-05   | 0.80033472 | 0.9   | 0.899 | 0.5489666  | HSPC_lung |
| RPL39              | 1.81E-05   | 1.0638256  | 0.9   | 0.86  | 0.64034605 | HSPC_lung |
| SLC2A3             | 2.20E-05   | 3.2974278  | 0.667 | 0.537 | 0.78026581 | HSPC_lung |
| NR4A1              | 2.28E-05   | 4.77781741 | 0.3   | 0.088 | 0.8094889  | HSPC_lung |
| GMFG               | 2.39E-05   | 1.3713899  | 0.8   | 0.617 | 0.84648159 | HSPC_lung |
| VIM                | 2.53E-05   | 1.93239852 | 0.733 | 0.532 | 0.89814605 | HSPC_lung |
| BTK                | 4.00E-05   | 4.26406898 | 0.433 | 0.198 | 1          | HSPC_lung |
| ATP5F1E            | 4.57E-05   | 1.25495013 | 0.767 | 0.864 | 1          | HSPC_lung |
| RPL36              | 5.97E-05   | 1.04661364 | 0.8   | 0.849 | 1          | HSPC_lung |
| ELOA               | 6.44E-05   | 0.90535394 | 0.933 | 0.91  | 1          | HSPC_lung |
| ENSMMUG00000063334 | 7.68E-05   | 4.23973619 | 0.267 | 0.073 | 1          | HSPC_lung |
| IVNS1ABP           | 9.60E-05   | 0.68538895 | 0.1   | 0.554 | 1          | HSPC_lung |
| ENSMMUG00000060377 | 0.00014213 | 1.59007516 | 0.7   | 0.734 | 1          | HSPC_lung |
| RNF10              | 0.00016007 | 0.11073833 | 0.1   | 0.532 | 1          | HSPC_lung |
| CABIN1             | 0.00017145 | 0.15538877 | 0.033 | 0.403 | 1          | HSPC_lung |
| TNFSF10            | 0.00025619 | 2.83158635 | 0.533 | 0.359 | 1          | HSPC_lung |
| GSTP1              | 0.00028006 | 1.24274791 | 0.8   | 0.775 | 1          | HSPC_lung |
| OGN                | 0.00032605 | 4.43952923 | 0.267 | 0.088 | 1          | HSPC_lung |
| DPP7               | 0.00032813 | 0.28870778 | 0.1   | 0.502 | 1          | HSPC_lung |
| ENSMMUG00000015563 | 0.00037432 | 0.64926596 | 0.933 | 0.91  | 1          | HSPC_lung |
| CHRM3              | 0.00040623 | 3.40183218 | 0.3   | 0.113 | 1          | HSPC_lung |
| IQGAP2             | 0.00041371 | 0.37574772 | 0.2   | 0.699 | 1          | HSPC_lung |
| ZNF43              | 0.00041758 | 0.23845589 | 0.067 | 0.423 | 1          | HSPC_lung |
| GALNT3             | 0.00042215 | 3.36623542 | 0.333 | 0.138 | 1          | HSPC_lung |
| SRP72              | 0.0004345  | 0.3506791  | 0.033 | 0.371 | 1          | HSPC_lung |

|         |            |            |       |       |             |
|---------|------------|------------|-------|-------|-------------|
| LMO4    | 0.00043833 | 3.05729961 | 0.467 | 0.261 | 1 HSPC_lung |
| COPB1   | 0.00048038 | 0.10598382 | 0.067 | 0.418 | 1 HSPC_lung |
| RPL34   | 0.00048587 | 0.66531325 | 0.967 | 0.918 | 1 HSPC_lung |
| DDX42   | 0.00050914 | 0.56972537 | 0.067 | 0.431 | 1 HSPC_lung |
| COMMD6  | 0.0005118  | 1.57621057 | 0.667 | 0.699 | 1 HSPC_lung |
| ARIH2   | 0.00054833 | 0.30918021 | 0.167 | 0.604 | 1 HSPC_lung |
| ZC3H18  | 0.00055316 | 0.40428372 | 0.1   | 0.483 | 1 HSPC_lung |
| EIF5B   | 0.00055954 | 0.17982655 | 0.167 | 0.599 | 1 HSPC_lung |
| CAND1   | 0.00057923 | 0.35874486 | 0.133 | 0.551 | 1 HSPC_lung |
| CLU     | 0.00064383 | 1.85544747 | 0.567 | 0.379 | 1 HSPC_lung |
| SPIN1   | 0.00079816 | 0.19153323 | 0.033 | 0.349 | 1 HSPC_lung |
| ZC3H10  | 0.00079975 | 1.34550653 | 0.7   | 0.787 | 1 HSPC_lung |
| STX3    | 0.00080597 | 3.15936867 | 0.3   | 0.118 | 1 HSPC_lung |
| RPS23   | 0.0008129  | 0.89852067 | 0.9   | 0.92  | 1 HSPC_lung |
| RPL22   | 0.00082057 | 0.61264588 | 0.9   | 0.887 | 1 HSPC_lung |
| ZNF331  | 0.000881   | 4.9197629  | 0.3   | 0.125 | 1 HSPC_lung |
| RGS2    | 0.00090357 | 3.75501969 | 0.367 | 0.183 | 1 HSPC_lung |
| DNM2    | 0.00093123 | 0.26074534 | 0.1   | 0.466 | 1 HSPC_lung |
| ERLEC1  | 0.00094508 | 0.21896857 | 0.067 | 0.406 | 1 HSPC_lung |
| NOP58   | 0.00098502 | 0.45113745 | 0.233 | 0.666 | 1 HSPC_lung |
| SUPT20H | 0.00101314 | 1.27789179 | 0.1   | 0.471 | 1 HSPC_lung |
| P2RX1   | 0.00116885 | 3.39643155 | 0.433 | 0.258 | 1 HSPC_lung |
| RPL12   | 0.00120782 | 0.78532037 | 0.833 | 0.88  | 1 HSPC_lung |
| INPP5D  | 0.001227   | 0.11464478 | 0.2   | 0.592 | 1 HSPC_lung |
| TTC13   | 0.00125554 | 0.25926371 | 0.033 | 0.333 | 1 HSPC_lung |
| CBLB    | 0.00127818 | 0.20510542 | 0.2   | 0.634 | 1 HSPC_lung |
| NUDT21  | 0.0012992  | 0.12702765 | 0.133 | 0.524 | 1 HSPC_lung |
| GCSAML  | 0.00129996 | 3.32625007 | 0.367 | 0.19  | 1 HSPC_lung |
| EIF4B   | 0.00135446 | 0.33043736 | 0.2   | 0.599 | 1 HSPC_lung |
| EID1    | 0.00136887 | 0.23006077 | 0.167 | 0.576 | 1 HSPC_lung |
| RPN1    | 0.0013992  | 2.4737924  | 0.667 | 0.689 | 1 HSPC_lung |
| RPS26   | 0.00140083 | 0.72079416 | 0.9   | 0.903 | 1 HSPC_lung |
| ADAR    | 0.00144975 | 0.3177517  | 0.067 | 0.393 | 1 HSPC_lung |

|                     |            |            |       |       |             |
|---------------------|------------|------------|-------|-------|-------------|
| NT5C                | 0.00149977 | 0.14777485 | 0.033 | 0.326 | 1 HSPC_lung |
| SFPQ                | 0.00152067 | 0.64985237 | 0.333 | 0.76  | 1 HSPC_lung |
| PPP1CC              | 0.00155894 | 0.29769548 | 0.2   | 0.602 | 1 HSPC_lung |
| RPLP1               | 0.00156708 | 0.63985953 | 0.9   | 0.923 | 1 HSPC_lung |
| TCF25               | 0.00157857 | 0.28389024 | 0.1   | 0.453 | 1 HSPC_lung |
| MCUB                | 0.00180249 | 0.82480369 | 0.067 | 0.381 | 1 HSPC_lung |
| CLK1                | 0.00180448 | 0.27193283 | 0.167 | 0.581 | 1 HSPC_lung |
| ENSMMUG00000000983  | 0.00180511 | 1.30568252 | 0.667 | 0.646 | 1 HSPC_lung |
| NUDT3               | 0.00187533 | 0.72639179 | 0.933 | 0.915 | 1 HSPC_lung |
| COX7A1              | 0.00188444 | 3.3895024  | 0.4   | 0.233 | 1 HSPC_lung |
| COX6C               | 0.00191554 | 1.10146427 | 0.667 | 0.774 | 1 HSPC_lung |
| ENSMMUG000000040181 | 0.00192243 | 0.55824262 | 0.067 | 0.381 | 1 HSPC_lung |
| RAB8A               | 0.00195934 | 0.33386544 | 0.1   | 0.429 | 1 HSPC_lung |
| RPSA                | 0.0019708  | 0.68773063 | 0.9   | 0.899 | 1 HSPC_lung |
| TOX4                | 0.00197923 | 0.72379529 | 0.1   | 0.444 | 1 HSPC_lung |
| RPS4X               | 0.0020012  | 0.66698041 | 0.933 | 0.895 | 1 HSPC_lung |
| ANP32E              | 0.00202069 | 0.23274344 | 0.167 | 0.551 | 1 HSPC_lung |
| SEC31A              | 0.00209075 | 0.14627297 | 0.2   | 0.567 | 1 HSPC_lung |
| TASP1               | 0.00212585 | 0.17772222 | 0.133 | 0.499 | 1 HSPC_lung |
| CD44                | 0.0021618  | 2.22190431 | 0.633 | 0.581 | 1 HSPC_lung |
| EPS15               | 0.00216894 | 0.42611319 | 0.267 | 0.73  | 1 HSPC_lung |
| LAMP1               | 0.00222637 | 0.10582175 | 0.1   | 0.441 | 1 HSPC_lung |
| CRLF3               | 0.0022339  | 0.62622157 | 0.1   | 0.439 | 1 HSPC_lung |
| DIS3L2              | 0.00227913 | 0.40661814 | 0.167 | 0.542 | 1 HSPC_lung |
| CCDC66              | 0.00233455 | 0.23174846 | 0.1   | 0.434 | 1 HSPC_lung |
| ENSMMUG000000052424 | 0.00236777 | 1.31534463 | 0.7   | 0.73  | 1 HSPC_lung |
| KATNA1              | 0.00243787 | 0.26698788 | 0.067 | 0.366 | 1 HSPC_lung |
| JUND                | 0.00244059 | 2.19123878 | 0.7   | 0.641 | 1 HSPC_lung |
| ENSMMUG000000004441 | 0.0024445  | 3.31382473 | 0.433 | 0.285 | 1 HSPC_lung |
| DDX39A              | 0.00247013 | 0.12204115 | 0.167 | 0.566 | 1 HSPC_lung |
| MAPRE1              | 0.00251352 | 0.12603834 | 0.167 | 0.544 | 1 HSPC_lung |
| TARS1               | 0.00254256 | 0.50853586 | 0.067 | 0.361 | 1 HSPC_lung |
| ENSMMUG000000016305 | 0.00256574 | 2.10236    | 0.567 | 0.534 | 1 HSPC_lung |

|          |            |            |       |       |             |
|----------|------------|------------|-------|-------|-------------|
| M6PR     | 0.00257875 | 0.39679693 | 0.167 | 0.546 | 1 HSPC_lung |
| EFL1     | 0.00262536 | 0.4817471  | 0.1   | 0.434 | 1 HSPC_lung |
| TRIP12   | 0.00262863 | 0.14082686 | 0.233 | 0.654 | 1 HSPC_lung |
| TMEM183A | 0.00267391 | 0.40880905 | 0.1   | 0.433 | 1 HSPC_lung |
| PFDN2    | 0.00270395 | 0.11585781 | 0.233 | 0.662 | 1 HSPC_lung |
| COX7C    | 0.0027099  | 0.90787464 | 0.733 | 0.772 | 1 HSPC_lung |
| INO80    | 0.00271821 | 0.26188649 | 0.133 | 0.473 | 1 HSPC_lung |
| OTUD4    | 0.00275216 | 0.35741319 | 0.033 | 0.303 | 1 HSPC_lung |
| ESYT2    | 0.00276579 | 0.2965284  | 0.233 | 0.629 | 1 HSPC_lung |
| RBM6     | 0.00277294 | 0.47003784 | 0.167 | 0.539 | 1 HSPC_lung |
| IGBP1    | 0.00280733 | 0.2087115  | 0.133 | 0.494 | 1 HSPC_lung |
| RPS9     | 0.00281031 | 0.69334263 | 0.867 | 0.915 | 1 HSPC_lung |
| MLF2     | 0.00281894 | 0.34868353 | 0.067 | 0.361 | 1 HSPC_lung |
| SPIDR    | 0.00283598 | 0.31069502 | 0.167 | 0.561 | 1 HSPC_lung |
| TIMP1    | 0.00284404 | 2.73134766 | 0.433 | 0.285 | 1 HSPC_lung |
| PTP4A2   | 0.00284687 | 0.19098398 | 0.267 | 0.647 | 1 HSPC_lung |
| BABAM1   | 0.00295558 | 0.45635644 | 0.067 | 0.354 | 1 HSPC_lung |
| DARS1    | 0.00297702 | 0.13687406 | 0.167 | 0.531 | 1 HSPC_lung |
| RGS1     | 0.00302771 | 2.47748741 | 0.4   | 0.236 | 1 HSPC_lung |
| GBF1     | 0.0030985  | 0.26389397 | 0.1   | 0.418 | 1 HSPC_lung |
| CMPK1    | 0.00311696 | 0.45312437 | 0.067 | 0.353 | 1 HSPC_lung |
| MDN1     | 0.00323585 | 0.21544809 | 0.133 | 0.471 | 1 HSPC_lung |
| STK4     | 0.00327223 | 0.20372857 | 0.233 | 0.666 | 1 HSPC_lung |
| USP33    | 0.00332317 | 0.12993593 | 0.133 | 0.488 | 1 HSPC_lung |
| YARS1    | 0.00336469 | 0.6162683  | 0.067 | 0.358 | 1 HSPC_lung |
| LANCL2   | 0.00337048 | 0.8146243  | 0.067 | 0.359 | 1 HSPC_lung |
| PSMA5    | 0.00338273 | 0.42697157 | 0.2   | 0.567 | 1 HSPC_lung |
| TAX1BP1  | 0.00347688 | 0.11190321 | 0.2   | 0.569 | 1 HSPC_lung |
| KAT6A    | 0.00349579 | 0.38363197 | 0.2   | 0.582 | 1 HSPC_lung |
| NUP54    | 0.0035177  | 0.38859578 | 0.1   | 0.418 | 1 HSPC_lung |
| NFKB1    | 0.00357987 | 3.34916353 | 0.533 | 0.403 | 1 HSPC_lung |
| SAMD4B   | 0.00359539 | 1.44013768 | 0.133 | 0.489 | 1 HSPC_lung |
| H2AFY    | 0.00368291 | 0.28068698 | 0.267 | 0.669 | 1 HSPC_lung |

|                    |            |            |       |       |             |
|--------------------|------------|------------|-------|-------|-------------|
| ENSMMUG00000021246 | 0.00369684 | 0.11636688 | 0.033 | 0.291 | 1 HSPC_lung |
| PPP4C              | 0.00374136 | 0.45389709 | 0.133 | 0.474 | 1 HSPC_lung |
| CALU               | 0.00375681 | 0.1747089  | 0.1   | 0.409 | 1 HSPC_lung |
| ENSMMUG00000022976 | 0.00377914 | 4.29750444 | 0.267 | 0.116 | 1 HSPC_lung |
| PDCD6IP            | 0.00381533 | 0.11436323 | 0.233 | 0.641 | 1 HSPC_lung |
| GRAMD4             | 0.0038313  | 0.72023967 | 0.067 | 0.343 | 1 HSPC_lung |
| TPR                | 0.00398959 | 0.36278003 | 0.267 | 0.692 | 1 HSPC_lung |
| NUFIP2             | 0.00399092 | 0.45043484 | 0.167 | 0.537 | 1 HSPC_lung |
| PDCD6-AHRR         | 0.00400254 | 0.70245435 | 0.1   | 0.418 | 1 HSPC_lung |
| ENSMMUG00000006608 | 0.00401167 | 0.21424692 | 0.333 | 0.762 | 1 HSPC_lung |
| WDR36              | 0.00401803 | 0.39065952 | 0.033 | 0.288 | 1 HSPC_lung |
| ADIPOR1            | 0.00404892 | 0.3291037  | 0.1   | 0.411 | 1 HSPC_lung |
| ENSMMUG00000030408 | 0.00405987 | 1.52465862 | 0.633 | 0.689 | 1 HSPC_lung |
| MORC3              | 0.00407602 | 0.31896868 | 0.167 | 0.539 | 1 HSPC_lung |
| TNPO3              | 0.00409942 | 0.25389419 | 0.133 | 0.471 | 1 HSPC_lung |
| APC                | 0.00412022 | 0.15467082 | 0.1   | 0.409 | 1 HSPC_lung |
| SECISBP2L          | 0.00418825 | 0.51107805 | 0.033 | 0.286 | 1 HSPC_lung |
| CEP290             | 0.00423896 | 0.51317462 | 0.067 | 0.343 | 1 HSPC_lung |
| PPP5C              | 0.00436522 | 0.10560995 | 0.033 | 0.285 | 1 HSPC_lung |
| CST3               | 0.00450005 | 2.61500068 | 0.533 | 0.478 | 1 HSPC_lung |
| ABHD2              | 0.00460193 | 0.32732674 | 0.1   | 0.411 | 1 HSPC_lung |
| TXN2               | 0.00460193 | 0.15896053 | 0.1   | 0.411 | 1 HSPC_lung |
| BRD2               | 0.00466808 | 0.39824557 | 0.2   | 0.576 | 1 HSPC_lung |
| CAAP1              | 0.00474036 | 0.58869177 | 0.033 | 0.281 | 1 HSPC_lung |
| ARHGAP12           | 0.0048221  | 0.78256518 | 0.067 | 0.344 | 1 HSPC_lung |
| FAM126B            | 0.00485906 | 0.25887375 | 0.067 | 0.344 | 1 HSPC_lung |
| PSMB3              | 0.00489572 | 0.37505974 | 0.167 | 0.516 | 1 HSPC_lung |
| RAPGEF1            | 0.0050193  | 0.28443063 | 0.067 | 0.343 | 1 HSPC_lung |
| TMOD3              | 0.00508207 | 0.12687322 | 0.133 | 0.454 | 1 HSPC_lung |
| RPL38              | 0.00513946 | 0.61678135 | 0.833 | 0.895 | 1 HSPC_lung |
| ITGB1              | 0.00521375 | 0.14066821 | 0.2   | 0.579 | 1 HSPC_lung |
| LIMS1              | 0.00522573 | 0.15417097 | 0.2   | 0.577 | 1 HSPC_lung |
| PRPF38B            | 0.00527011 | 0.31544769 | 0.233 | 0.636 | 1 HSPC_lung |

|                   |            |            |       |       |             |
|-------------------|------------|------------|-------|-------|-------------|
| HSPA14            | 0.00531961 | 0.64351513 | 0.1   | 0.393 | 1 HSPC_lung |
| ETF1              | 0.00536322 | 0.68575337 | 0.2   | 0.606 | 1 HSPC_lung |
| SMS               | 0.00539923 | 0.27581434 | 0.133 | 0.444 | 1 HSPC_lung |
| TENT2             | 0.0054517  | 0.33210746 | 0.2   | 0.544 | 1 HSPC_lung |
| SUPT16H           | 0.005516   | 0.26881163 | 0.233 | 0.626 | 1 HSPC_lung |
| LRMDA             | 0.00564298 | 1.58632693 | 0.533 | 0.391 | 1 HSPC_lung |
| PRDM2             | 0.00573788 | 0.33383775 | 0.1   | 0.398 | 1 HSPC_lung |
| C4H6orf89         | 0.00579515 | 0.17365216 | 0.067 | 0.333 | 1 HSPC_lung |
| UFD1              | 0.00581335 | 0.47468967 | 0.1   | 0.386 | 1 HSPC_lung |
| NUFIP1            | 0.00583758 | 3.37171005 | 0.433 | 0.313 | 1 HSPC_lung |
| RPL35A            | 0.00588136 | 0.54572988 | 0.833 | 0.913 | 1 HSPC_lung |
| SUPT5H            | 0.00590765 | 0.430996   | 0.067 | 0.336 | 1 HSPC_lung |
| TERF1             | 0.00591041 | 0.13101785 | 0.133 | 0.458 | 1 HSPC_lung |
| SERINC1           | 0.00592896 | 0.23530844 | 0.133 | 0.449 | 1 HSPC_lung |
| SARAF             | 0.00602219 | 0.50835494 | 0.267 | 0.699 | 1 HSPC_lung |
| PIAS2             | 0.00605507 | 0.45646248 | 0.033 | 0.271 | 1 HSPC_lung |
| DOP1B             | 0.0061103  | 0.54224775 | 0.067 | 0.333 | 1 HSPC_lung |
| ARCN1             | 0.00620328 | 0.14697438 | 0.1   | 0.386 | 1 HSPC_lung |
| NR3C1             | 0.00625294 | 0.18955652 | 0.2   | 0.552 | 1 HSPC_lung |
| ENSMUG00000030448 | 0.00625498 | 1.04116045 | 0.2   | 0.549 | 1 HSPC_lung |
| ZBTB7A            | 0.00634476 | 0.21019869 | 0.067 | 0.333 | 1 HSPC_lung |
| KPNA1             | 0.00639667 | 0.33172081 | 0.2   | 0.562 | 1 HSPC_lung |
| CTSD              | 0.00640533 | 3.01056796 | 0.533 | 0.483 | 1 HSPC_lung |
| GNB1              | 0.00644083 | 0.150542   | 0.267 | 0.644 | 1 HSPC_lung |
| ATAD2B            | 0.00654369 | 0.14297222 | 0.233 | 0.619 | 1 HSPC_lung |
| CHP1              | 0.00655133 | 0.15113917 | 0.133 | 0.443 | 1 HSPC_lung |
| TAF7              | 0.00656874 | 0.55660142 | 0.167 | 0.519 | 1 HSPC_lung |
| ZC3H13            | 0.00659546 | 0.4643589  | 0.233 | 0.617 | 1 HSPC_lung |
| NEDD9             | 0.00669543 | 2.56050391 | 0.433 | 0.29  | 1 HSPC_lung |
| HEXIM1            | 0.00677887 | 0.64227756 | 0.033 | 0.266 | 1 HSPC_lung |
| SELENOK           | 0.00698252 | 2.49627783 | 0.533 | 0.501 | 1 HSPC_lung |
| AFTPH             | 0.00702606 | 0.55187381 | 0.167 | 0.494 | 1 HSPC_lung |
| SUCLG2            | 0.00705027 | 0.11967148 | 0.2   | 0.534 | 1 HSPC_lung |

|           |            |            |       |       |             |
|-----------|------------|------------|-------|-------|-------------|
| TTC3      | 0.00722866 | 0.12614827 | 0.067 | 0.326 | 1 HSPC_lung |
| RNF149    | 0.0072435  | 0.55092683 | 0.067 | 0.328 | 1 HSPC_lung |
| MMD       | 0.0072435  | 0.86153081 | 0.067 | 0.328 | 1 HSPC_lung |
| NR4A2     | 0.00727358 | 3.49313866 | 0.367 | 0.225 | 1 HSPC_lung |
| CREM      | 0.00728321 | 3.11624529 | 0.433 | 0.316 | 1 HSPC_lung |
| COX4I1    | 0.00730845 | 0.84204245 | 0.667 | 0.8   | 1 HSPC_lung |
| CRIP1     | 0.00732367 | 2.52467105 | 0.433 | 0.308 | 1 HSPC_lung |
| MAPK1IP1L | 0.00732641 | 0.10614862 | 0.167 | 0.511 | 1 HSPC_lung |
| USPL1     | 0.00737433 | 0.10635496 | 0.033 | 0.263 | 1 HSPC_lung |
| KCMF1     | 0.00748405 | 0.62393191 | 0.167 | 0.481 | 1 HSPC_lung |
| NNT       | 0.00750811 | 0.13924336 | 0.133 | 0.436 | 1 HSPC_lung |
| AGPS      | 0.00760998 | 0.70446445 | 0.133 | 0.449 | 1 HSPC_lung |
| FOXN2     | 0.00766152 | 0.1850205  | 0.133 | 0.449 | 1 HSPC_lung |
| DENND5A   | 0.00767711 | 0.4331525  | 0.133 | 0.446 | 1 HSPC_lung |
| ERBIN     | 0.00768892 | 0.47955574 | 0.233 | 0.662 | 1 HSPC_lung |
| GLCCI1    | 0.00770274 | 0.30407261 | 0.133 | 0.404 | 1 HSPC_lung |
| DPH6      | 0.00779471 | 0.48064853 | 0.167 | 0.502 | 1 HSPC_lung |
| UBE2I     | 0.00780052 | 0.30637211 | 0.233 | 0.594 | 1 HSPC_lung |
| SLC3A2    | 0.00787003 | 0.11595852 | 0.1   | 0.386 | 1 HSPC_lung |
| SIN3A     | 0.00787967 | 0.18978385 | 0.167 | 0.493 | 1 HSPC_lung |
| MED4      | 0.00796238 | 0.81447819 | 0.1   | 0.378 | 1 HSPC_lung |
| SUSD1     | 0.00812684 | 0.53967647 | 0.1   | 0.373 | 1 HSPC_lung |
| LDB2      | 0.00813166 | 1.64766664 | 0.4   | 0.241 | 1 HSPC_lung |
| ARL2BP    | 0.00813814 | 0.38901209 | 0.067 | 0.323 | 1 HSPC_lung |
| ITM2B     | 0.00814878 | 1.85328899 | 0.733 | 0.84  | 1 HSPC_lung |
| LRCH3     | 0.00822007 | 0.60608248 | 0.233 | 0.616 | 1 HSPC_lung |
| RAD51B    | 0.00823794 | 0.1691264  | 0.333 | 0.691 | 1 HSPC_lung |
| DDIT4     | 0.00824068 | 3.98411897 | 0.3   | 0.16  | 1 HSPC_lung |
| MTA1      | 0.00830007 | 0.22394786 | 0.067 | 0.313 | 1 HSPC_lung |
| TRMT11    | 0.00831023 | 0.26792256 | 0.033 | 0.258 | 1 HSPC_lung |
| PDK1      | 0.00838101 | 0.31132993 | 0.067 | 0.309 | 1 HSPC_lung |
| FAM91A1   | 0.00839374 | 0.16404341 | 0.1   | 0.383 | 1 HSPC_lung |
| TMED4     | 0.00845099 | 0.25736298 | 0.133 | 0.421 | 1 HSPC_lung |

|                   |            |            |       |       |             |
|-------------------|------------|------------|-------|-------|-------------|
| AKAP8L            | 0.00853475 | 0.24835383 | 0.067 | 0.319 | 1 HSPC_lung |
| YTHDF3            | 0.0085531  | 0.36503893 | 0.133 | 0.439 | 1 HSPC_lung |
| BRWD1             | 0.00879392 | 0.33709343 | 0.233 | 0.584 | 1 HSPC_lung |
| PELI1             | 0.00897881 | 0.30455543 | 0.133 | 0.436 | 1 HSPC_lung |
| DDX46             | 0.00898679 | 0.2962651  | 0.267 | 0.692 | 1 HSPC_lung |
| AKAP8             | 0.00899477 | 0.14938112 | 0.033 | 0.255 | 1 HSPC_lung |
| WBP1L             | 0.00903919 | 0.28158643 | 0.167 | 0.499 | 1 HSPC_lung |
| DENND1B           | 0.00912093 | 2.29626712 | 0.433 | 0.304 | 1 HSPC_lung |
| GTF3C1            | 0.009179   | 0.80503232 | 0.1   | 0.381 | 1 HSPC_lung |
| ARF6              | 0.00920548 | 0.65853206 | 0.133 | 0.439 | 1 HSPC_lung |
| SCAF4             | 0.00921383 | 0.74044215 | 0.167 | 0.478 | 1 HSPC_lung |
| ATP1A1            | 0.00930051 | 0.16464726 | 0.167 | 0.506 | 1 HSPC_lung |
| OSBPL11           | 0.00939379 | 0.77047813 | 0.033 | 0.253 | 1 HSPC_lung |
| WDR43             | 0.00956518 | 0.17383863 | 0.2   | 0.512 | 1 HSPC_lung |
| TPP2              | 0.00961469 | 0.51488998 | 0.1   | 0.378 | 1 HSPC_lung |
| SMG1              | 0.00966287 | 0.24832783 | 0.2   | 0.546 | 1 HSPC_lung |
| ARL5A             | 0.00971914 | 0.27893767 | 0.167 | 0.496 | 1 HSPC_lung |
| ANAPC10           | 0.0097633  | 0.15347668 | 0.133 | 0.428 | 1 HSPC_lung |
| PRKCI             | 0.00977057 | 0.4686554  | 0.033 | 0.251 | 1 HSPC_lung |
| MMS19             | 0.00977057 | 0.38054811 | 0.033 | 0.251 | 1 HSPC_lung |
| STK25             | 0.00977057 | 1.29904997 | 0.033 | 0.251 | 1 HSPC_lung |
| MIDN              | 0.00977648 | 3.96748229 | 0.367 | 0.241 | 1 HSPC_lung |
| MLEC              | 0.00980546 | 2.30092234 | 0.5   | 0.426 | 1 HSPC_lung |
| PDE7A             | 0.00992372 | 0.64879832 | 0.167 | 0.493 | 1 HSPC_lung |
| ERCC6L2           | 0.01004465 | 0.64774862 | 0.1   | 0.371 | 1 HSPC_lung |
| ANXA1             | 0.01013192 | 2.2216877  | 0.467 | 0.358 | 1 HSPC_lung |
| TSPYL1            | 0.01016147 | 0.21353402 | 0.033 | 0.25  | 1 HSPC_lung |
| ACAD10            | 0.01016396 | 0.30277633 | 0.1   | 0.364 | 1 HSPC_lung |
| ENSMUG00000058325 | 0.0102158  | 0.1560053  | 0.267 | 0.644 | 1 HSPC_lung |
| PLCD4             | 0.01023977 | 0.58723561 | 0.133 | 0.441 | 1 HSPC_lung |
| COMMD10           | 0.01028958 | 0.11611548 | 0.233 | 0.614 | 1 HSPC_lung |
| ATP6V0A1          | 0.01049377 | 0.72839079 | 0.2   | 0.516 | 1 HSPC_lung |
| BTBD7             | 0.01049924 | 0.26637542 | 0.133 | 0.419 | 1 HSPC_lung |



|                    |            |            |       |       |             |
|--------------------|------------|------------|-------|-------|-------------|
| AHNAK              | 0.01057378 | 2.26830498 | 0.4   | 0.258 | 1 HSPC_lung |
| KHDRBS1            | 0.0106313  | 0.44475743 | 0.2   | 0.536 | 1 HSPC_lung |
| ARIH1              | 0.01063275 | 0.2465777  | 0.267 | 0.687 | 1 HSPC_lung |
| LPCAT2             | 0.0106573  | 2.72926346 | 0.267 | 0.131 | 1 HSPC_lung |
| ARHGAP6            | 0.01068632 | 0.50338976 | 0.133 | 0.433 | 1 HSPC_lung |
| ENSMMUG00000064281 | 0.01088952 | 0.28744925 | 0.067 | 0.309 | 1 HSPC_lung |
| ITGAV              | 0.01089212 | 0.5840914  | 0.1   | 0.364 | 1 HSPC_lung |
| LEO1               | 0.01096896 | 3.47927887 | 0.4   | 0.293 | 1 HSPC_lung |
| STIM2              | 0.01103461 | 0.54362425 | 0.1   | 0.373 | 1 HSPC_lung |
| PLCB1              | 0.01105528 | 0.1883099  | 0.233 | 0.554 | 1 HSPC_lung |
| RPL18              | 0.01113482 | 0.63104945 | 0.9   | 0.903 | 1 HSPC_lung |
| ZDHHC14            | 0.0111944  | 0.31062924 | 0.2   | 0.534 | 1 HSPC_lung |
| GABARAPL2          | 0.01127821 | 0.36122156 | 0.233 | 0.577 | 1 HSPC_lung |
| CACUL1             | 0.01136571 | 0.48571198 | 0.1   | 0.366 | 1 HSPC_lung |
| EFR3A              | 0.01137975 | 0.10069186 | 0.1   | 0.368 | 1 HSPC_lung |
| SYNGR2             | 0.01147385 | 1.21276529 | 0.067 | 0.308 | 1 HSPC_lung |
| GSE1               | 0.01154417 | 0.17422771 | 0.233 | 0.574 | 1 HSPC_lung |
| ID2                | 0.01158085 | 2.96169888 | 0.4   | 0.278 | 1 HSPC_lung |
| ACOT13             | 0.01161601 | 0.21782479 | 0.067 | 0.306 | 1 HSPC_lung |
| CMIP               | 0.01161832 | 0.6004145  | 0.133 | 0.418 | 1 HSPC_lung |
| CDK12              | 0.01163415 | 0.4129756  | 0.167 | 0.486 | 1 HSPC_lung |
| ZNF506             | 0.0118415  | 0.33028517 | 0.1   | 0.366 | 1 HSPC_lung |
| SNX1               | 0.0118576  | 0.28382343 | 0.167 | 0.463 | 1 HSPC_lung |
| PRR13              | 0.01190097 | 0.20721224 | 0.133 | 0.419 | 1 HSPC_lung |
| ACSL3              | 0.01206097 | 0.16319457 | 0.067 | 0.304 | 1 HSPC_lung |
| PHF10              | 0.01208595 | 0.33587291 | 0.1   | 0.366 | 1 HSPC_lung |
| XRN2               | 0.01208829 | 0.49453155 | 0.267 | 0.626 | 1 HSPC_lung |
| ZNF654             | 0.01209725 | 0.29419826 | 0.133 | 0.419 | 1 HSPC_lung |
| POLDIP3            | 0.01225341 | 0.13489189 | 0.067 | 0.303 | 1 HSPC_lung |
| MARS1              | 0.0123695  | 0.71137173 | 0.067 | 0.304 | 1 HSPC_lung |
| CSNK1D             | 0.0124153  | 0.83977725 | 0.1   | 0.361 | 1 HSPC_lung |
| TMEM126A           | 0.01242984 | 0.35374056 | 0.133 | 0.411 | 1 HSPC_lung |
| EEF1D              | 0.01244123 | 0.99354231 | 0.667 | 0.785 | 1 HSPC_lung |

|         |            |            |       |       |             |
|---------|------------|------------|-------|-------|-------------|
| SIK3    | 0.01254818 | 0.28237242 | 0.4   | 0.772 | 1 HSPC_lung |
| MRRF    | 0.01256687 | 0.47592181 | 0.067 | 0.303 | 1 HSPC_lung |
| IP6K2   | 0.01266071 | 0.12542102 | 0.133 | 0.409 | 1 HSPC_lung |
| COBLL1  | 0.01267501 | 0.12827656 | 0.067 | 0.301 | 1 HSPC_lung |
| BLVRA   | 0.01276181 | 0.16872403 | 0.167 | 0.446 | 1 HSPC_lung |
| POGZ    | 0.01279015 | 0.43169162 | 0.167 | 0.466 | 1 HSPC_lung |
| RASA2   | 0.01286402 | 0.82655878 | 0.167 | 0.474 | 1 HSPC_lung |
| NSD1    | 0.0128852  | 0.27177854 | 0.267 | 0.646 | 1 HSPC_lung |
| TAOK1   | 0.01299033 | 0.52224073 | 0.167 | 0.494 | 1 HSPC_lung |
| ETFB    | 0.01317999 | 0.11541708 | 0.2   | 0.547 | 1 HSPC_lung |
| ARFGAP3 | 0.0132132  | 0.43891316 | 0.2   | 0.557 | 1 HSPC_lung |
| RTCB    | 0.01333365 | 0.64185129 | 0.1   | 0.349 | 1 HSPC_lung |
| COPS8   | 0.01336975 | 0.83394617 | 0.133 | 0.413 | 1 HSPC_lung |
| GDI2    | 0.01343687 | 0.1764582  | 0.233 | 0.581 | 1 HSPC_lung |
| CARNMT1 | 0.01345931 | 1.11160511 | 0.067 | 0.293 | 1 HSPC_lung |
| SMU1    | 0.01361967 | 0.96726899 | 0.133 | 0.423 | 1 HSPC_lung |
| SMPD4   | 0.01377032 | 0.43937131 | 0.1   | 0.351 | 1 HSPC_lung |
| DDX54   | 0.01380155 | 0.8766319  | 0.1   | 0.358 | 1 HSPC_lung |
| ZNF22   | 0.01386911 | 0.1846225  | 0.133 | 0.409 | 1 HSPC_lung |
| MYNN    | 0.01390338 | 0.18774823 | 0.067 | 0.298 | 1 HSPC_lung |
| SNAP23  | 0.01394966 | 0.81802128 | 0.167 | 0.486 | 1 HSPC_lung |
| TAF13   | 0.01406954 | 0.14721648 | 0.067 | 0.291 | 1 HSPC_lung |
| DNAJB1  | 0.01406962 | 0.79957083 | 0.1   | 0.361 | 1 HSPC_lung |
| SF3A3   | 0.01414805 | 1.14682354 | 0.1   | 0.359 | 1 HSPC_lung |
| AHSA1   | 0.01416435 | 0.51369638 | 0.1   | 0.361 | 1 HSPC_lung |
| CEBPZ   | 0.01423476 | 0.6214657  | 0.2   | 0.527 | 1 HSPC_lung |
| CDS2    | 0.01425583 | 0.46709751 | 0.067 | 0.298 | 1 HSPC_lung |
| MRPS18C | 0.01434586 | 0.4593326  | 0.167 | 0.456 | 1 HSPC_lung |
| YWHAG   | 0.0144992  | 0.46887754 | 0.233 | 0.581 | 1 HSPC_lung |
| PSMD2   | 0.01450115 | 0.61558677 | 0.167 | 0.471 | 1 HSPC_lung |
| CPT1A   | 0.01462062 | 0.59550558 | 0.067 | 0.293 | 1 HSPC_lung |
| SOS2    | 0.01463621 | 0.33045974 | 0.067 | 0.296 | 1 HSPC_lung |
| SETDB2  | 0.01474095 | 0.56622975 | 0.067 | 0.296 | 1 HSPC_lung |

|                     |            |            |       |       |             |
|---------------------|------------|------------|-------|-------|-------------|
| MGRN1               | 0.01484634 | 0.88432539 | 0.067 | 0.296 | 1 HSPC_lung |
| PKP4                | 0.01486597 | 0.25307677 | 0.067 | 0.295 | 1 HSPC_lung |
| KBTBD2              | 0.01500973 | 0.52665099 | 0.1   | 0.358 | 1 HSPC_lung |
| SPG11               | 0.01505428 | 1.44485146 | 0.1   | 0.353 | 1 HSPC_lung |
| THUMPD1             | 0.01513319 | 0.18065927 | 0.067 | 0.295 | 1 HSPC_lung |
| ENSMMUG00000000478  | 0.01516079 | 0.84580183 | 0.1   | 0.358 | 1 HSPC_lung |
| CAP1                | 0.01518536 | 0.91470072 | 0.167 | 0.476 | 1 HSPC_lung |
| KMT2E               | 0.01526453 | 1.49830684 | 0.7   | 0.775 | 1 HSPC_lung |
| TFPI                | 0.01526661 | 0.16454713 | 0.1   | 0.349 | 1 HSPC_lung |
| C5H4orf27           | 0.01530219 | 0.38219851 | 0.167 | 0.451 | 1 HSPC_lung |
| IRF1                | 0.01535    | 0.57212262 | 0.067 | 0.295 | 1 HSPC_lung |
| BRAF                | 0.01536335 | 0.17758786 | 0.3   | 0.687 | 1 HSPC_lung |
| SKIL                | 0.0155518  | 3.74642286 | 0.333 | 0.21  | 1 HSPC_lung |
| USO1                | 0.01562624 | 0.24880985 | 0.133 | 0.413 | 1 HSPC_lung |
| FUT8                | 0.01566122 | 0.25217074 | 0.167 | 0.453 | 1 HSPC_lung |
| REPS1               | 0.01569031 | 0.2449458  | 0.1   | 0.354 | 1 HSPC_lung |
| ATF6                | 0.01585229 | 0.13980186 | 0.233 | 0.571 | 1 HSPC_lung |
| TMEM248             | 0.01590885 | 0.39317926 | 0.067 | 0.29  | 1 HSPC_lung |
| RBBP6               | 0.01607543 | 0.96871639 | 0.167 | 0.488 | 1 HSPC_lung |
| ENSMMUG000000013257 | 0.01607617 | 0.90606909 | 0.133 | 0.409 | 1 HSPC_lung |
| DBNL                | 0.01624959 | 0.28511543 | 0.133 | 0.406 | 1 HSPC_lung |
| MANBA               | 0.01627212 | 2.69546004 | 0.5   | 0.471 | 1 HSPC_lung |
| ILRUN               | 0.01628194 | 0.60183567 | 0.133 | 0.409 | 1 HSPC_lung |
| FSTL1               | 0.01640494 | 0.57966347 | 0.067 | 0.291 | 1 HSPC_lung |
| IREB2               | 0.01669498 | 0.89140999 | 0.167 | 0.464 | 1 HSPC_lung |
| FOCAD               | 0.01672176 | 0.38181348 | 0.167 | 0.448 | 1 HSPC_lung |
| GUCA1B              | 0.01673284 | 0.93709872 | 0.067 | 0.283 | 1 HSPC_lung |
| ARHGEF7             | 0.01679867 | 0.30159755 | 0.167 | 0.473 | 1 HSPC_lung |
| MACF1               | 0.01680867 | 0.67477422 | 0.233 | 0.544 | 1 HSPC_lung |
| TNKS2               | 0.01704445 | 0.14942343 | 0.133 | 0.393 | 1 HSPC_lung |
| SP100               | 0.01720544 | 0.69533302 | 0.3   | 0.714 | 1 HSPC_lung |
| TPST2               | 0.01728086 | 0.65411228 | 0.067 | 0.288 | 1 HSPC_lung |
| MTHFD1L             | 0.01732941 | 0.43929934 | 0.167 | 0.444 | 1 HSPC_lung |

|                    |            |            |       |       |             |
|--------------------|------------|------------|-------|-------|-------------|
| EIF3L              | 0.01761907 | 0.26621291 | 0.3   | 0.732 | 1 HSPC_lung |
| ENSMMUG00000031367 | 0.01775443 | 0.30846034 | 0.133 | 0.396 | 1 HSPC_lung |
| RNF103             | 0.01783677 | 0.77978482 | 0.2   | 0.529 | 1 HSPC_lung |
| BICRAL             | 0.01805951 | 0.64305933 | 0.1   | 0.339 | 1 HSPC_lung |
| QARS1              | 0.01807242 | 0.39205217 | 0.167 | 0.459 | 1 HSPC_lung |
| C16H17orf49        | 0.01817119 | 1.45738079 | 0.6   | 0.692 | 1 HSPC_lung |
| PHF11              | 0.01819541 | 0.26641385 | 0.2   | 0.509 | 1 HSPC_lung |
| TLN1               | 0.01836306 | 0.33410803 | 0.3   | 0.682 | 1 HSPC_lung |
| FNDC3A             | 0.01871108 | 0.21178219 | 0.3   | 0.656 | 1 HSPC_lung |
| PREPL              | 0.01893167 | 0.26236117 | 0.067 | 0.278 | 1 HSPC_lung |
| TSG101             | 0.01897327 | 0.14740344 | 0.133 | 0.401 | 1 HSPC_lung |
| TAPBP              | 0.018982   | 0.92402174 | 0.133 | 0.408 | 1 HSPC_lung |
| HNRNPH3            | 0.01922181 | 0.25177851 | 0.367 | 0.749 | 1 HSPC_lung |
| KPNA3              | 0.01923697 | 0.20876173 | 0.233 | 0.564 | 1 HSPC_lung |
| USP47              | 0.01935899 | 0.31989485 | 0.267 | 0.609 | 1 HSPC_lung |
| MRPL42             | 0.01935908 | 0.14437998 | 0.2   | 0.502 | 1 HSPC_lung |
| HEXA               | 0.01937073 | 0.22417617 | 0.1   | 0.344 | 1 HSPC_lung |
| BRK1               | 0.01947197 | 0.29559823 | 0.2   | 0.501 | 1 HSPC_lung |
| ROS1               | 0.01949213 | 0.21761181 | 0.1   | 0.336 | 1 HSPC_lung |
| ENSMMUG00000048973 | 0.01981587 | 0.48682681 | 0.1   | 0.336 | 1 HSPC_lung |
| TOP2B              | 0.0198261  | 0.31219553 | 0.3   | 0.649 | 1 HSPC_lung |
| PANK3              | 0.01994667 | 1.2508109  | 0.1   | 0.336 | 1 HSPC_lung |
| MDH2               | 0.0200736  | 0.11609364 | 0.2   | 0.531 | 1 HSPC_lung |
| NCLN               | 0.02024026 | 0.42637336 | 0.133 | 0.399 | 1 HSPC_lung |
| MRPL32             | 0.02035197 | 0.23029071 | 0.167 | 0.456 | 1 HSPC_lung |
| MLH3               | 0.02043621 | 0.44177875 | 0.133 | 0.406 | 1 HSPC_lung |
| ARF1               | 0.02048258 | 0.12596612 | 0.333 | 0.729 | 1 HSPC_lung |
| SLC9A3R1           | 0.0207187  | 0.62670532 | 0.067 | 0.28  | 1 HSPC_lung |
| RPL30              | 0.02082042 | 0.51669839 | 0.9   | 0.915 | 1 HSPC_lung |
| TM9SF1             | 0.02085348 | 0.26849389 | 0.1   | 0.334 | 1 HSPC_lung |
| ZNF581             | 0.02085782 | 0.9994463  | 0.067 | 0.275 | 1 HSPC_lung |
| ENSMMUG00000019238 | 0.02085974 | 1.04281391 | 0.233 | 0.599 | 1 HSPC_lung |
| POLR2B             | 0.02094735 | 1.03256737 | 0.133 | 0.394 | 1 HSPC_lung |

|                   |            |            |       |       |             |
|-------------------|------------|------------|-------|-------|-------------|
| G3BP2             | 0.0210287  | 0.63412565 | 0.333 | 0.702 | 1 HSPC_lung |
| ZMYM2             | 0.0210654  | 0.33857993 | 0.267 | 0.584 | 1 HSPC_lung |
| CHD4              | 0.02110299 | 0.16123885 | 0.267 | 0.617 | 1 HSPC_lung |
| RNMT              | 0.02129233 | 0.29458328 | 0.3   | 0.661 | 1 HSPC_lung |
| PGM2              | 0.02148735 | 0.92664471 | 0.133 | 0.401 | 1 HSPC_lung |
| SERPINB1          | 0.02159289 | 2.76696878 | 0.433 | 0.369 | 1 HSPC_lung |
| POLE3             | 0.02169242 | 0.22544332 | 0.167 | 0.453 | 1 HSPC_lung |
| ANAPC11           | 0.02196804 | 0.10394941 | 0.2   | 0.471 | 1 HSPC_lung |
| FOXP1             | 0.02203529 | 0.61985299 | 0.167 | 0.459 | 1 HSPC_lung |
| AP2M1             | 0.02234114 | 0.54874382 | 0.233 | 0.552 | 1 HSPC_lung |
| BECN1             | 0.02267803 | 0.34371414 | 0.067 | 0.275 | 1 HSPC_lung |
| HOMER2            | 0.02270703 | 1.50810457 | 0.1   | 0.339 | 1 HSPC_lung |
| DNAJB12           | 0.02274614 | 0.25218037 | 0.067 | 0.27  | 1 HSPC_lung |
| DYNC1LI2          | 0.02278633 | 0.39914019 | 0.1   | 0.328 | 1 HSPC_lung |
| ENSMUG00000019376 | 0.02282134 | 0.1936619  | 0.1   | 0.329 | 1 HSPC_lung |
| MRT04             | 0.02285547 | 0.76083958 | 0.1   | 0.321 | 1 HSPC_lung |
| HDLBP             | 0.02289669 | 0.5919592  | 0.2   | 0.504 | 1 HSPC_lung |
| STK40             | 0.02304672 | 1.46544772 | 0.067 | 0.276 | 1 HSPC_lung |
| BIRC3             | 0.02318809 | 3.95353394 | 0.267 | 0.15  | 1 HSPC_lung |
| REV1              | 0.02334082 | 0.38837704 | 0.167 | 0.451 | 1 HSPC_lung |
| TMEM147           | 0.02356903 | 0.44965043 | 0.2   | 0.501 | 1 HSPC_lung |
| KLHL18            | 0.02359283 | 1.06999824 | 0.067 | 0.266 | 1 HSPC_lung |
| MFSD14B           | 0.02369983 | 1.05784679 | 0.167 | 0.431 | 1 HSPC_lung |
| POMP              | 0.02379432 | 0.53211797 | 0.267 | 0.609 | 1 HSPC_lung |
| NMD3              | 0.02383644 | 1.18320107 | 0.167 | 0.434 | 1 HSPC_lung |
| IPO5              | 0.02410476 | 0.42652317 | 0.2   | 0.488 | 1 HSPC_lung |
| MRPL48            | 0.02412114 | 0.13436748 | 0.1   | 0.326 | 1 HSPC_lung |
| RPS12             | 0.0242277  | 0.50929042 | 0.967 | 0.923 | 1 HSPC_lung |
| CTNBL1            | 0.02436864 | 0.69464687 | 0.267 | 0.654 | 1 HSPC_lung |
| DDX3Y             | 0.02441423 | 0.67313411 | 0.233 | 0.507 | 1 HSPC_lung |
| NCOA7             | 0.02445367 | 0.11720472 | 0.267 | 0.571 | 1 HSPC_lung |
| DIDO1             | 0.02455528 | 0.76684794 | 0.167 | 0.434 | 1 HSPC_lung |
| ATP5F1C           | 0.02467873 | 0.15127697 | 0.3   | 0.642 | 1 HSPC_lung |

|          |            |            |       |       |             |
|----------|------------|------------|-------|-------|-------------|
| MALSU1   | 0.02507508 | 0.47671593 | 0.167 | 0.448 | 1 HSPC_lung |
| VPS25    | 0.02517718 | 0.50394162 | 0.067 | 0.268 | 1 HSPC_lung |
| NMT1     | 0.02522261 | 0.94391385 | 0.167 | 0.448 | 1 HSPC_lung |
| RPS13    | 0.02533947 | 0.72343024 | 0.867 | 0.902 | 1 HSPC_lung |
| USP3     | 0.0253858  | 0.39866538 | 0.2   | 0.504 | 1 HSPC_lung |
| NCBP1    | 0.02539964 | 1.14302711 | 0.1   | 0.326 | 1 HSPC_lung |
| PPP2R2D  | 0.02543956 | 1.17310741 | 0.133 | 0.396 | 1 HSPC_lung |
| PPIA     | 0.02551993 | 0.81515779 | 0.167 | 0.448 | 1 HSPC_lung |
| HMGXB4   | 0.02557004 | 0.32929984 | 0.1   | 0.323 | 1 HSPC_lung |
| PIGU     | 0.02558692 | 0.15333696 | 0.067 | 0.27  | 1 HSPC_lung |
| HADH     | 0.02559163 | 0.14346311 | 0.167 | 0.443 | 1 HSPC_lung |
| RGS10    | 0.02563358 | 2.67785802 | 0.333 | 0.223 | 1 HSPC_lung |
| WSB1     | 0.02567542 | 0.15454035 | 0.4   | 0.75  | 1 HSPC_lung |
| UBA7     | 0.02570739 | 2.67123089 | 0.333 | 0.221 | 1 HSPC_lung |
| LDAH     | 0.02611888 | 0.18050246 | 0.067 | 0.27  | 1 HSPC_lung |
| PPP2R1A  | 0.02613346 | 0.40246883 | 0.133 | 0.379 | 1 HSPC_lung |
| GSK3A    | 0.02620846 | 1.41576605 | 0.067 | 0.27  | 1 HSPC_lung |
| TRIM38   | 0.02647881 | 1.04692761 | 0.067 | 0.27  | 1 HSPC_lung |
| N4BP1    | 0.02649737 | 0.43106066 | 0.067 | 0.263 | 1 HSPC_lung |
| COPB2    | 0.0265916  | 0.30000287 | 0.133 | 0.388 | 1 HSPC_lung |
| NDUFS4   | 0.02661948 | 0.35610906 | 0.267 | 0.604 | 1 HSPC_lung |
| TRIM37   | 0.02672875 | 0.43880507 | 0.133 | 0.373 | 1 HSPC_lung |
| DDX27    | 0.02675121 | 0.95721441 | 0.1   | 0.331 | 1 HSPC_lung |
| PITRM1   | 0.02683769 | 0.26373698 | 0.167 | 0.431 | 1 HSPC_lung |
| WASL     | 0.02711316 | 0.74460512 | 0.2   | 0.491 | 1 HSPC_lung |
| CARMIL1  | 0.02715161 | 1.26584609 | 0.067 | 0.268 | 1 HSPC_lung |
| RELB     | 0.02724445 | 0.45711054 | 0.067 | 0.268 | 1 HSPC_lung |
| NF2      | 0.02733756 | 0.791689   | 0.067 | 0.268 | 1 HSPC_lung |
| EEF1A1   | 0.02741943 | 0.40238879 | 0.9   | 0.897 | 1 HSPC_lung |
| RHNO1    | 0.02754432 | 1.44012561 | 0.067 | 0.261 | 1 HSPC_lung |
| NDUFS8   | 0.02761912 | 0.10095773 | 0.267 | 0.592 | 1 HSPC_lung |
| PRRC2A   | 0.02770452 | 0.85362731 | 0.1   | 0.323 | 1 HSPC_lung |
| PPP1R12B | 0.02795679 | 0.33117533 | 0.167 | 0.439 | 1 HSPC_lung |

|                    |            |            |       |       |             |
|--------------------|------------|------------|-------|-------|-------------|
| ARFGAP2            | 0.0280616  | 0.37840703 | 0.067 | 0.265 | 1 HSPC_lung |
| SCN9A              | 0.02809951 | 3.1008324  | 0.3   | 0.178 | 1 HSPC_lung |
| SLC50A1            | 0.02841461 | 0.84091726 | 0.067 | 0.266 | 1 HSPC_lung |
| NSRP1              | 0.02853269 | 0.16794564 | 0.233 | 0.517 | 1 HSPC_lung |
| LMAN1              | 0.02853575 | 0.36204673 | 0.2   | 0.506 | 1 HSPC_lung |
| GNPDA2             | 0.02858269 | 1.11324314 | 0.1   | 0.326 | 1 HSPC_lung |
| LRRFIP2            | 0.02877463 | 0.41452615 | 0.233 | 0.526 | 1 HSPC_lung |
| PPP1R16B           | 0.02894997 | 0.77086845 | 0.067 | 0.258 | 1 HSPC_lung |
| TTC32              | 0.02923169 | 0.6444367  | 0.067 | 0.265 | 1 HSPC_lung |
| PCYT1A             | 0.02936422 | 0.16796756 | 0.067 | 0.263 | 1 HSPC_lung |
| PAPOLA             | 0.02945965 | 0.39783284 | 0.367 | 0.789 | 1 HSPC_lung |
| NDUFA4             | 0.02954405 | 0.22730371 | 0.433 | 0.777 | 1 HSPC_lung |
| UFM1               | 0.02957602 | 0.26644874 | 0.1   | 0.321 | 1 HSPC_lung |
| GLRX3              | 0.02962679 | 0.17143599 | 0.2   | 0.483 | 1 HSPC_lung |
| CCPG1              | 0.02976263 | 1.11517136 | 0.133 | 0.374 | 1 HSPC_lung |
| PDAP1              | 0.0298756  | 0.22063642 | 0.2   | 0.496 | 1 HSPC_lung |
| ATP8               | 0.02996855 | 0.83918539 | 0.067 | 0.263 | 1 HSPC_lung |
| CNOT6L             | 0.0299865  | 0.52517465 | 0.2   | 0.509 | 1 HSPC_lung |
| TMEM59L            | 0.0300067  | 0.41408226 | 0.2   | 0.484 | 1 HSPC_lung |
| ENSMMUG00000064760 | 0.03026605 | 0.55387673 | 0.067 | 0.258 | 1 HSPC_lung |
| ZC3H7B             | 0.03051483 | 0.29220486 | 0.067 | 0.261 | 1 HSPC_lung |
| CCDC167            | 0.03058355 | 0.927489   | 0.067 | 0.263 | 1 HSPC_lung |
| LPIN1              | 0.03061842 | 0.29030528 | 0.067 | 0.261 | 1 HSPC_lung |
| FBXO28             | 0.03063688 | 0.26816807 | 0.1   | 0.318 | 1 HSPC_lung |
| MED14              | 0.0307223  | 0.50264686 | 0.067 | 0.261 | 1 HSPC_lung |
| COG6               | 0.0307223  | 0.96633424 | 0.067 | 0.261 | 1 HSPC_lung |
| TMSB4X             | 0.03080971 | 0.75676114 | 0.833 | 0.894 | 1 HSPC_lung |
| CCNH               | 0.03085719 | 2.42898906 | 0.533 | 0.614 | 1 HSPC_lung |
| DNAJC15            | 0.03117463 | 0.11432004 | 0.233 | 0.517 | 1 HSPC_lung |
| GABARAPL1          | 0.03120701 | 0.21860152 | 0.067 | 0.258 | 1 HSPC_lung |
| SEC14L1            | 0.03128889 | 0.31860329 | 0.2   | 0.469 | 1 HSPC_lung |
| AGTPBP1            | 0.03147168 | 0.27275259 | 0.267 | 0.574 | 1 HSPC_lung |
| TMEM43             | 0.03156432 | 0.66453067 | 0.067 | 0.261 | 1 HSPC_lung |

|                     |            |            |       |       |             |
|---------------------|------------|------------|-------|-------|-------------|
| ENSMMUG000000039874 | 0.03167096 | 1.2031589  | 0.067 | 0.261 | 1 HSPC_lung |
| ZEB2                | 0.03181713 | 1.01653278 | 0.667 | 0.765 | 1 HSPC_lung |
| DCAF11              | 0.03212633 | 0.33214084 | 0.067 | 0.255 | 1 HSPC_lung |
| TOMM70              | 0.03213797 | 0.57266967 | 0.067 | 0.26  | 1 HSPC_lung |
| DIABLO              | 0.03217128 | 0.10903487 | 0.2   | 0.479 | 1 HSPC_lung |
| NUP85               | 0.03219894 | 0.96891591 | 0.1   | 0.321 | 1 HSPC_lung |
| RAB5A               | 0.03226672 | 0.86826954 | 0.2   | 0.484 | 1 HSPC_lung |
| LCP1                | 0.03274175 | 1.59396327 | 0.533 | 0.479 | 1 HSPC_lung |
| RBM34               | 0.03284496 | 0.43321215 | 0.133 | 0.369 | 1 HSPC_lung |
| CPSF7               | 0.0328486  | 0.45782697 | 0.1   | 0.314 | 1 HSPC_lung |
| KHDC4               | 0.03286577 | 0.65636563 | 0.067 | 0.256 | 1 HSPC_lung |
| GSTM4               | 0.03294304 | 0.85983704 | 0.133 | 0.369 | 1 HSPC_lung |
| ENSMMUG000000020316 | 0.03296092 | 0.61415117 | 0.2   | 0.471 | 1 HSPC_lung |
| MCTP1               | 0.03306894 | 1.77502333 | 0.433 | 0.319 | 1 HSPC_lung |
| PI4KA               | 0.03316444 | 0.15671577 | 0.067 | 0.258 | 1 HSPC_lung |
| ZC3H11A             | 0.03318725 | 0.73881387 | 0.233 | 0.564 | 1 HSPC_lung |
| RPL28               | 0.03335604 | 0.61141534 | 0.867 | 0.905 | 1 HSPC_lung |
| IAH1                | 0.03338925 | 0.53297033 | 0.1   | 0.319 | 1 HSPC_lung |
| ATP11A              | 0.03350069 | 0.69072399 | 0.067 | 0.258 | 1 HSPC_lung |
| TOMM22              | 0.03357751 | 0.17512889 | 0.167 | 0.436 | 1 HSPC_lung |
| AATF                | 0.03363015 | 0.17684884 | 0.1   | 0.314 | 1 HSPC_lung |
| ENSMMUG000000001210 | 0.03369329 | 0.69739817 | 0.7   | 0.812 | 1 HSPC_lung |
| ENSMMUG000000013491 | 0.03384124 | 0.65224708 | 0.1   | 0.314 | 1 HSPC_lung |
| UBL3                | 0.03387783 | 0.17440299 | 0.067 | 0.256 | 1 HSPC_lung |
| SCMH1               | 0.03389418 | 0.53909142 | 0.1   | 0.314 | 1 HSPC_lung |
| THRAP3              | 0.0338964  | 0.38375996 | 0.367 | 0.732 | 1 HSPC_lung |
| OPTN                | 0.03395355 | 1.85581971 | 0.067 | 0.258 | 1 HSPC_lung |
| GNL3                | 0.03411953 | 0.4318876  | 0.2   | 0.469 | 1 HSPC_lung |
| HOOK3               | 0.03475164 | 0.38296918 | 0.3   | 0.684 | 1 HSPC_lung |
| ZNF652              | 0.03491644 | 0.64866798 | 0.067 | 0.256 | 1 HSPC_lung |
| ADAMTS6             | 0.0349553  | 0.20546308 | 0.067 | 0.255 | 1 HSPC_lung |
| ENSMMUG000000007426 | 0.03501094 | 0.68564643 | 0.1   | 0.316 | 1 HSPC_lung |
| CWC22               | 0.03504558 | 0.61006455 | 0.1   | 0.309 | 1 HSPC_lung |



|                   |            |            |       |       |             |
|-------------------|------------|------------|-------|-------|-------------|
| ELK3              | 0.03505074 | 0.55839514 | 0.167 | 0.434 | 1 HSPC_lung |
| CTSC              | 0.0353385  | 0.54538553 | 0.1   | 0.316 | 1 HSPC_lung |
| BRD8              | 0.03540334 | 0.76906563 | 0.133 | 0.366 | 1 HSPC_lung |
| PRKX              | 0.03540921 | 0.50711894 | 0.133 | 0.351 | 1 HSPC_lung |
| EIF4EBP3          | 0.03547698 | 0.2962138  | 0.3   | 0.636 | 1 HSPC_lung |
| MRI1              | 0.0355846  | 0.14208643 | 0.333 | 0.689 | 1 HSPC_lung |
| LSM14A            | 0.03559432 | 0.263227   | 0.333 | 0.699 | 1 HSPC_lung |
| HMOX2             | 0.03565233 | 0.19042315 | 0.067 | 0.25  | 1 HSPC_lung |
| NXF1              | 0.03571629 | 0.15957128 | 0.1   | 0.306 | 1 HSPC_lung |
| AIFM3             | 0.03588117 | 0.70203073 | 0.1   | 0.308 | 1 HSPC_lung |
| ENSMUG00000042837 | 0.03606429 | 0.65414175 | 0.067 | 0.253 | 1 HSPC_lung |
| KIAA0040          | 0.036312   | 0.45121644 | 0.167 | 0.423 | 1 HSPC_lung |
| GTF2B             | 0.03645028 | 0.59592444 | 0.3   | 0.601 | 1 HSPC_lung |
| GHITM             | 0.03657641 | 0.46027037 | 0.3   | 0.621 | 1 HSPC_lung |
| SLC10A7           | 0.03658038 | 0.43138254 | 0.167 | 0.421 | 1 HSPC_lung |
| TPM3              | 0.03672424 | 0.11083629 | 0.333 | 0.717 | 1 HSPC_lung |
| DBF4              | 0.03691464 | 0.11996276 | 0.133 | 0.354 | 1 HSPC_lung |
| STT3B             | 0.03720505 | 0.31907332 | 0.333 | 0.714 | 1 HSPC_lung |
| STARD3NL          | 0.03750573 | 0.66968108 | 0.1   | 0.313 | 1 HSPC_lung |
| SH3GLB1           | 0.03760976 | 1.02328086 | 0.2   | 0.499 | 1 HSPC_lung |
| TIMMDC1           | 0.03787886 | 0.59624096 | 0.1   | 0.309 | 1 HSPC_lung |
| ST3GAL1           | 0.03788742 | 0.61965598 | 0.2   | 0.502 | 1 HSPC_lung |
| ZNF106            | 0.03790108 | 0.18738094 | 0.1   | 0.3   | 1 HSPC_lung |
| CERS5             | 0.03808433 | 0.11286167 | 0.067 | 0.251 | 1 HSPC_lung |
| TNFAIP3           | 0.03815024 | 2.39003671 | 0.4   | 0.316 | 1 HSPC_lung |
| PAFAH1B1          | 0.03824035 | 0.12823877 | 0.3   | 0.654 | 1 HSPC_lung |
| MAX               | 0.03831358 | 0.47905545 | 0.167 | 0.428 | 1 HSPC_lung |
| NEK1              | 0.03867829 | 1.83657942 | 0.1   | 0.313 | 1 HSPC_lung |
| NOC2L             | 0.03872271 | 1.51746049 | 0.067 | 0.251 | 1 HSPC_lung |
| MRPL18            | 0.03873639 | 0.22767446 | 0.1   | 0.303 | 1 HSPC_lung |
| MFN1              | 0.0387922  | 1.01538155 | 0.1   | 0.304 | 1 HSPC_lung |
| VASP              | 0.03881475 | 0.65103549 | 0.133 | 0.363 | 1 HSPC_lung |
| IRAK3             | 0.03881787 | 0.34249793 | 0.133 | 0.354 | 1 HSPC_lung |

|                     |            |            |       |       |             |
|---------------------|------------|------------|-------|-------|-------------|
| KLHDC10             | 0.03894547 | 0.96552847 | 0.1   | 0.309 | 1 HSPC_lung |
| MXD1                | 0.03894547 | 0.20796856 | 0.1   | 0.309 | 1 HSPC_lung |
| KDM5B               | 0.03925719 | 0.29452226 | 0.133 | 0.358 | 1 HSPC_lung |
| OFD1                | 0.03945001 | 0.20745582 | 0.1   | 0.306 | 1 HSPC_lung |
| ENSMMUG000000058818 | 0.03952814 | 0.19095705 | 0.1   | 0.298 | 1 HSPC_lung |
| ZBED5               | 0.04007417 | 0.65708432 | 0.067 | 0.25  | 1 HSPC_lung |
| EIF5                | 0.04037565 | 0.10537204 | 0.333 | 0.697 | 1 HSPC_lung |
| APIP                | 0.04040625 | 1.47100696 | 0.167 | 0.414 | 1 HSPC_lung |
| PDZK1IP1            | 0.04040625 | 0.43729617 | 0.167 | 0.414 | 1 HSPC_lung |
| PRMT1               | 0.04052456 | 0.34225329 | 0.233 | 0.551 | 1 HSPC_lung |
| TDG                 | 0.04063279 | 1.13662219 | 0.167 | 0.414 | 1 HSPC_lung |
| DDHD2               | 0.04064413 | 0.65327822 | 0.1   | 0.301 | 1 HSPC_lung |
| WDR82               | 0.04143646 | 0.81457766 | 0.133 | 0.371 | 1 HSPC_lung |
| DENND4A             | 0.04146746 | 0.50735969 | 0.8   | 0.872 | 1 HSPC_lung |
| GSTK1               | 0.04169715 | 0.36345839 | 0.133 | 0.366 | 1 HSPC_lung |
| TM2D3               | 0.04186878 | 0.86454836 | 0.1   | 0.308 | 1 HSPC_lung |
| TOMM20              | 0.04204883 | 0.23381407 | 0.433 | 0.777 | 1 HSPC_lung |
| MRPS18A             | 0.04206249 | 1.1267951  | 0.167 | 0.404 | 1 HSPC_lung |
| BAX                 | 0.04215706 | 1.46059449 | 0.133 | 0.371 | 1 HSPC_lung |
| ERAL1               | 0.04237487 | 0.62029641 | 0.1   | 0.3   | 1 HSPC_lung |
| TRIM28              | 0.04245141 | 1.0137439  | 0.2   | 0.476 | 1 HSPC_lung |
| MTPN                | 0.04251832 | 0.9923273  | 0.2   | 0.488 | 1 HSPC_lung |
| SDHB                | 0.04255533 | 0.77726495 | 0.167 | 0.413 | 1 HSPC_lung |
| ETNK1               | 0.04297791 | 0.92907424 | 0.2   | 0.494 | 1 HSPC_lung |
| CALM3               | 0.04298731 | 0.49310194 | 0.233 | 0.544 | 1 HSPC_lung |
| CYBA                | 0.04301297 | 0.18837779 | 0.167 | 0.404 | 1 HSPC_lung |
| CFDP1               | 0.04337452 | 0.46575379 | 0.367 | 0.75  | 1 HSPC_lung |
| MYO5A               | 0.04364758 | 1.03179159 | 0.167 | 0.423 | 1 HSPC_lung |
| NCK1                | 0.04370536 | 0.33941631 | 0.133 | 0.353 | 1 HSPC_lung |
| ANTXR2              | 0.04382425 | 1.73851584 | 0.467 | 0.396 | 1 HSPC_lung |
| ENSMMUG000000002320 | 0.04383938 | 0.9190054  | 0.733 | 0.844 | 1 HSPC_lung |
| ENSMMUG000000018687 | 0.04387264 | 1.06395999 | 0.233 | 0.552 | 1 HSPC_lung |
| ITPR1               | 0.04433987 | 0.65854796 | 0.2   | 0.458 | 1 HSPC_lung |

|                    |            |            |       |       |             |
|--------------------|------------|------------|-------|-------|-------------|
| FRA10AC1           | 0.0443945  | 0.19907524 | 0.1   | 0.304 | 1 HSPC_lung |
| LAMTOR2            | 0.04451188 | 0.59923717 | 0.2   | 0.491 | 1 HSPC_lung |
| INPP5A             | 0.04456245 | 1.08469008 | 0.133 | 0.361 | 1 HSPC_lung |
| MTIF3              | 0.04459617 | 0.36558667 | 0.167 | 0.404 | 1 HSPC_lung |
| SSR3               | 0.04471629 | 0.29320381 | 0.267 | 0.592 | 1 HSPC_lung |
| AKAP17A            | 0.0451263  | 0.77460087 | 0.1   | 0.298 | 1 HSPC_lung |
| RARS1              | 0.04524791 | 0.52135524 | 0.2   | 0.459 | 1 HSPC_lung |
| POFUT1             | 0.04529497 | 0.54199292 | 0.1   | 0.303 | 1 HSPC_lung |
| SURF4              | 0.04544027 | 0.62360235 | 0.167 | 0.421 | 1 HSPC_lung |
| BCAS2              | 0.04552565 | 0.10154062 | 0.2   | 0.454 | 1 HSPC_lung |
| ZNF268             | 0.04562073 | 0.41921842 | 0.133 | 0.359 | 1 HSPC_lung |
| HMG20A             | 0.04598563 | 0.74212381 | 0.1   | 0.303 | 1 HSPC_lung |
| SAP30BP            | 0.04602448 | 0.94775556 | 0.133 | 0.363 | 1 HSPC_lung |
| CNBP               | 0.04609946 | 0.23261834 | 0.333 | 0.724 | 1 HSPC_lung |
| YAF2               | 0.0461347  | 0.30935001 | 0.233 | 0.519 | 1 HSPC_lung |
| ECD                | 0.04619103 | 0.71409396 | 0.167 | 0.421 | 1 HSPC_lung |
| ARHGDIB            | 0.04632779 | 1.36413057 | 0.633 | 0.654 | 1 HSPC_lung |
| ENSMMUG00000062941 | 0.04635167 | 0.62934556 | 0.1   | 0.301 | 1 HSPC_lung |
| JMY                | 0.04674185 | 0.55271095 | 0.133 | 0.359 | 1 HSPC_lung |
| WASHC4             | 0.04674265 | 0.25906918 | 0.1   | 0.296 | 1 HSPC_lung |
| LSM10              | 0.04696937 | 0.53236166 | 0.133 | 0.353 | 1 HSPC_lung |
| KIAA0586           | 0.0470328  | 0.52689126 | 0.133 | 0.346 | 1 HSPC_lung |
| ZDHHC20            | 0.04735445 | 0.14136624 | 0.2   | 0.438 | 1 HSPC_lung |
| CETN2              | 0.04739458 | 0.46446524 | 0.1   | 0.295 | 1 HSPC_lung |
| ENSMMUG00000011714 | 0.04754527 | 0.41307952 | 0.2   | 0.483 | 1 HSPC_lung |
| C11H12orf45        | 0.04757789 | 0.4668173  | 0.233 | 0.507 | 1 HSPC_lung |
| INTS8              | 0.0476578  | 0.26453598 | 0.133 | 0.344 | 1 HSPC_lung |
| SLC20A2            | 0.04776291 | 0.6175541  | 0.1   | 0.293 | 1 HSPC_lung |
| EIF4G2             | 0.04786975 | 0.69533233 | 0.333 | 0.717 | 1 HSPC_lung |
| DAD1               | 0.04787239 | 0.31531863 | 0.3   | 0.634 | 1 HSPC_lung |
| VMP1               | 0.0485206  | 0.63877238 | 0.267 | 0.571 | 1 HSPC_lung |
| GATAD2B            | 0.04873888 | 0.67801026 | 0.233 | 0.541 | 1 HSPC_lung |
| SKAP1              | 0.04932749 | 1.89890362 | 0.467 | 0.394 | 1 HSPC_lung |

|                   |            |            |       |       |             |
|-------------------|------------|------------|-------|-------|-------------|
| AGAP1             | 0.04945142 | 1.92529831 | 0.467 | 0.433 | 1 HSPC_lung |
| DIAPH1            | 0.04959474 | 1.44074383 | 0.233 | 0.566 | 1 HSPC_lung |
| SURF2             | 0.04969581 | 0.41001324 | 0.1   | 0.29  | 1 HSPC_lung |
| CDC73             | 0.04979279 | 0.51988567 | 0.267 | 0.576 | 1 HSPC_lung |
| LAMTOR1           | 0.0499914  | 0.17664635 | 0.2   | 0.479 | 1 HSPC_lung |
| MAPRE2            | 0.05004776 | 0.70116657 | 0.233 | 0.516 | 1 HSPC_lung |
| TMEM181           | 0.05006707 | 0.57599262 | 0.1   | 0.291 | 1 HSPC_lung |
| MRPS28            | 0.05057906 | 0.41624894 | 0.2   | 0.463 | 1 HSPC_lung |
| MAMU-A            | 0.05081669 | 0.35718189 | 0.333 | 0.671 | 1 HSPC_lung |
| ENSMUG00000002668 | 0.05122159 | 0.11307375 | 0.1   | 0.29  | 1 HSPC_lung |
| ATXN2L            | 0.05137856 | 1.14437262 | 0.1   | 0.298 | 1 HSPC_lung |
| EIF3A             | 0.05163773 | 0.11454693 | 0.467 | 0.764 | 1 HSPC_lung |
| DHX36             | 0.05164373 | 0.59249166 | 0.267 | 0.556 | 1 HSPC_lung |
| FAM222B           | 0.05177567 | 0.29991053 | 0.167 | 0.394 | 1 HSPC_lung |
| CAMKMT            | 0.05204012 | 0.36698277 | 0.2   | 0.469 | 1 HSPC_lung |
| TAF9              | 0.05214548 | 0.49365847 | 0.267 | 0.624 | 1 HSPC_lung |
| PABPC4            | 0.05242432 | 0.89180601 | 0.167 | 0.409 | 1 HSPC_lung |
| HPCAL1            | 0.05260138 | 0.22924698 | 0.1   | 0.293 | 1 HSPC_lung |
| UBA1              | 0.05271641 | 0.60908113 | 0.1   | 0.288 | 1 HSPC_lung |
| VPS4A             | 0.05272019 | 1.66726353 | 0.1   | 0.296 | 1 HSPC_lung |
| MCL1              | 0.0527892  | 0.37557412 | 0.267 | 0.577 | 1 HSPC_lung |
| PRPF6             | 0.05298642 | 0.69081983 | 0.167 | 0.414 | 1 HSPC_lung |
| ARL2              | 0.0530349  | 0.22430212 | 0.233 | 0.506 | 1 HSPC_lung |
| ST7               | 0.05306508 | 0.31534029 | 0.233 | 0.526 | 1 HSPC_lung |
| MAF1              | 0.05333198 | 1.30203242 | 0.133 | 0.358 | 1 HSPC_lung |
| ERO1A             | 0.05335162 | 1.03117055 | 0.1   | 0.296 | 1 HSPC_lung |
| TCEAL8            | 0.05387332 | 0.81138682 | 0.133 | 0.349 | 1 HSPC_lung |
| ZNF277            | 0.05398986 | 0.12660613 | 0.167 | 0.404 | 1 HSPC_lung |
| CEBPZOS           | 0.0540902  | 0.27027023 | 0.167 | 0.391 | 1 HSPC_lung |
| ZFR               | 0.05435702 | 0.43815087 | 0.3   | 0.599 | 1 HSPC_lung |
| RPL27             | 0.05440047 | 0.52176273 | 0.8   | 0.887 | 1 HSPC_lung |
| RBBP4             | 0.0544122  | 1.2196521  | 0.267 | 0.587 | 1 HSPC_lung |
| MT1M              | 0.05454117 | 1.46664237 | 0.467 | 0.408 | 1 HSPC_lung |

|                    |            |            |       |       |             |
|--------------------|------------|------------|-------|-------|-------------|
| MITD1              | 0.05472354 | 0.59289928 | 0.133 | 0.353 | 1 HSPC_lung |
| TSNAX              | 0.05480332 | 1.42405999 | 0.133 | 0.356 | 1 HSPC_lung |
| ZNF589             | 0.05484357 | 0.60143696 | 0.1   | 0.293 | 1 HSPC_lung |
| PTRH2              | 0.05490228 | 1.58281343 | 0.1   | 0.295 | 1 HSPC_lung |
| RPL32              | 0.05541334 | 0.43632487 | 0.967 | 0.938 | 1 HSPC_lung |
| UQCRC1             | 0.05547087 | 0.45057573 | 0.233 | 0.516 | 1 HSPC_lung |
| COQ4               | 0.05566343 | 0.7207846  | 0.1   | 0.293 | 1 HSPC_lung |
| ZNF428             | 0.05586962 | 0.74985296 | 0.1   | 0.29  | 1 HSPC_lung |
| AVEN               | 0.05591956 | 0.11440594 | 0.1   | 0.28  | 1 HSPC_lung |
| EYA3               | 0.05595138 | 0.68458829 | 0.167 | 0.411 | 1 HSPC_lung |
| TRAM1              | 0.05634185 | 0.92386805 | 0.233 | 0.531 | 1 HSPC_lung |
| SMARCA1            | 0.05658914 | 0.98685648 | 0.1   | 0.283 | 1 HSPC_lung |
| SMAP2              | 0.05675427 | 0.85491952 | 0.167 | 0.403 | 1 HSPC_lung |
| ENSMUG00000022874  | 0.0571905  | 0.15423023 | 0.1   | 0.281 | 1 HSPC_lung |
| PPP1R7             | 0.05731599 | 0.54365041 | 0.1   | 0.288 | 1 HSPC_lung |
| ELOVL5             | 0.05749915 | 0.25353712 | 0.3   | 0.637 | 1 HSPC_lung |
| R3HDM1             | 0.05759977 | 0.49718782 | 0.2   | 0.456 | 1 HSPC_lung |
| ERC1               | 0.05773952 | 0.24960589 | 0.2   | 0.449 | 1 HSPC_lung |
| GMCL1              | 0.05794877 | 0.99730196 | 0.2   | 0.464 | 1 HSPC_lung |
| IFRD1              | 0.05801943 | 0.13440191 | 0.233 | 0.479 | 1 HSPC_lung |
| ENSMUG00000006343  | 0.0580645  | 0.19887167 | 0.1   | 0.29  | 1 HSPC_lung |
| AGPAT3             | 0.05848522 | 0.96960849 | 0.133 | 0.346 | 1 HSPC_lung |
| ENSMUG000000061458 | 0.05854236 | 0.76293637 | 0.167 | 0.401 | 1 HSPC_lung |
| DISP1              | 0.05862224 | 0.15117919 | 0.1   | 0.286 | 1 HSPC_lung |
| ESF1               | 0.05864006 | 0.52932055 | 0.2   | 0.459 | 1 HSPC_lung |
| EIF1AX             | 0.05896501 | 0.43142508 | 0.367 | 0.681 | 1 HSPC_lung |
| VDAC1              | 0.05902746 | 0.45101174 | 0.2   | 0.478 | 1 HSPC_lung |
| TRIM72             | 0.05909701 | 0.17505898 | 0.4   | 0.765 | 1 HSPC_lung |
| UBA6               | 0.05910183 | 0.12773577 | 0.133 | 0.331 | 1 HSPC_lung |
| EIF4G3             | 0.05962541 | 0.36530627 | 0.2   | 0.448 | 1 HSPC_lung |
| RNF19A             | 0.05967699 | 0.40181959 | 0.267 | 0.562 | 1 HSPC_lung |
| HAX1               | 0.0597782  | 0.47584023 | 0.1   | 0.285 | 1 HSPC_lung |
| ARL6IP5            | 0.05992203 | 0.50953812 | 0.233 | 0.514 | 1 HSPC_lung |

|                     |            |            |       |       |             |
|---------------------|------------|------------|-------|-------|-------------|
| AHCYL1              | 0.06000968 | 0.2185844  | 0.133 | 0.348 | 1 HSPC_lung |
| GTF2H1              | 0.06014416 | 0.85710597 | 0.133 | 0.341 | 1 HSPC_lung |
| ARHGAP15            | 0.06021549 | 0.99037415 | 0.7   | 0.649 | 1 HSPC_lung |
| CYB5A               | 0.06040221 | 0.41876829 | 0.2   | 0.451 | 1 HSPC_lung |
| DYRK1A              | 0.06064913 | 0.20451247 | 0.3   | 0.629 | 1 HSPC_lung |
| CNOT4               | 0.06085429 | 0.47675465 | 0.3   | 0.639 | 1 HSPC_lung |
| AZIN1               | 0.06135789 | 0.70735654 | 0.2   | 0.466 | 1 HSPC_lung |
| PRIMPOL             | 0.06139074 | 0.3638028  | 0.167 | 0.388 | 1 HSPC_lung |
| DICER1              | 0.06155219 | 0.41450087 | 0.133 | 0.338 | 1 HSPC_lung |
| PDE4D               | 0.06239447 | 0.15364096 | 0.133 | 0.321 | 1 HSPC_lung |
| CIB1                | 0.06252217 | 0.63496669 | 0.133 | 0.341 | 1 HSPC_lung |
| STAT5A              | 0.06272965 | 1.26200095 | 0.1   | 0.286 | 1 HSPC_lung |
| KRIT1               | 0.06275606 | 0.39181698 | 0.2   | 0.454 | 1 HSPC_lung |
| ZNF493              | 0.06287314 | 0.23225011 | 0.133 | 0.336 | 1 HSPC_lung |
| WDR44               | 0.06296168 | 0.74417833 | 0.1   | 0.283 | 1 HSPC_lung |
| TEX30               | 0.0630978  | 0.83962081 | 0.1   | 0.286 | 1 HSPC_lung |
| FRMD4B              | 0.0632628  | 2.68255482 | 0.333 | 0.253 | 1 HSPC_lung |
| ND3                 | 0.06351089 | 0.95651602 | 0.733 | 0.754 | 1 HSPC_lung |
| SSR2                | 0.06353319 | 1.63080325 | 0.533 | 0.612 | 1 HSPC_lung |
| NDUFC2              | 0.06358762 | 0.41993563 | 0.333 | 0.669 | 1 HSPC_lung |
| DYNC2I2             | 0.06389196 | 0.83726514 | 0.1   | 0.283 | 1 HSPC_lung |
| POT1                | 0.06408979 | 0.31744899 | 0.133 | 0.331 | 1 HSPC_lung |
| REXO2               | 0.06470388 | 0.41090489 | 0.2   | 0.448 | 1 HSPC_lung |
| PM20D2              | 0.0651027  | 0.26525489 | 0.367 | 0.669 | 1 HSPC_lung |
| BTG1                | 0.06514743 | 1.86319309 | 0.533 | 0.572 | 1 HSPC_lung |
| ZDHHC3              | 0.06523923 | 0.78568573 | 0.2   | 0.436 | 1 HSPC_lung |
| CAPN1               | 0.06542977 | 0.67182869 | 0.133 | 0.344 | 1 HSPC_lung |
| PAFAH1B2            | 0.06569336 | 0.94901802 | 0.167 | 0.386 | 1 HSPC_lung |
| TATDN1              | 0.06601491 | 0.51651433 | 0.133 | 0.334 | 1 HSPC_lung |
| LARP7               | 0.06613845 | 0.42039541 | 0.167 | 0.398 | 1 HSPC_lung |
| ENSMMUG000000001458 | 0.06636954 | 0.35177355 | 0.367 | 0.734 | 1 HSPC_lung |
| EIF3J               | 0.06703457 | 0.6620557  | 0.333 | 0.652 | 1 HSPC_lung |
| FLNB                | 0.06707144 | 0.48595859 | 0.1   | 0.281 | 1 HSPC_lung |

|                    |            |            |       |       |             |
|--------------------|------------|------------|-------|-------|-------------|
| FKBP2              | 0.06709013 | 0.83171584 | 0.2   | 0.436 | 1 HSPC_lung |
| STOML2             | 0.06740316 | 0.35691562 | 0.267 | 0.572 | 1 HSPC_lung |
| CDC5L              | 0.06767515 | 0.49399722 | 0.233 | 0.491 | 1 HSPC_lung |
| SP110              | 0.06798001 | 0.86675924 | 0.233 | 0.506 | 1 HSPC_lung |
| ADARB2             | 0.06800812 | 0.92003688 | 0.167 | 0.383 | 1 HSPC_lung |
| KMT5B              | 0.06832704 | 0.14049362 | 0.167 | 0.371 | 1 HSPC_lung |
| IL4R               | 0.06856872 | 2.62415991 | 0.267 | 0.176 | 1 HSPC_lung |
| WDR18              | 0.06891415 | 1.91558013 | 0.1   | 0.283 | 1 HSPC_lung |
| COX17              | 0.06894548 | 1.93299104 | 0.5   | 0.554 | 1 HSPC_lung |
| SETX               | 0.06897264 | 0.36198169 | 0.233 | 0.493 | 1 HSPC_lung |
| DTNBP1             | 0.06914592 | 0.22572132 | 0.233 | 0.486 | 1 HSPC_lung |
| PSMB1              | 0.06916116 | 0.14511332 | 0.4   | 0.722 | 1 HSPC_lung |
| HADHB              | 0.06928397 | 0.14038293 | 0.233 | 0.499 | 1 HSPC_lung |
| PARVB              | 0.07002519 | 0.5040202  | 0.233 | 0.502 | 1 HSPC_lung |
| SEC61A2            | 0.07019265 | 0.47951873 | 0.1   | 0.271 | 1 HSPC_lung |
| TAF11              | 0.07045859 | 0.95223882 | 0.1   | 0.281 | 1 HSPC_lung |
| EIF4A3             | 0.07052812 | 1.05814578 | 0.2   | 0.456 | 1 HSPC_lung |
| PRRC2C             | 0.0707182  | 0.49279445 | 0.367 | 0.784 | 1 HSPC_lung |
| FAM120B            | 0.07082349 | 0.48029643 | 0.133 | 0.328 | 1 HSPC_lung |
| PCNX4              | 0.07093763 | 1.14906706 | 0.1   | 0.266 | 1 HSPC_lung |
| TRMT10B            | 0.07100296 | 0.92738456 | 0.1   | 0.28  | 1 HSPC_lung |
| ENSMMUG00000047259 | 0.07107065 | 2.38143943 | 0.1   | 0.281 | 1 HSPC_lung |
| MRPS23             | 0.0715952  | 1.4171129  | 0.133 | 0.333 | 1 HSPC_lung |
| NDUFB8             | 0.0716003  | 0.45904723 | 0.3   | 0.641 | 1 HSPC_lung |
| ERCC6              | 0.07222824 | 0.85795084 | 0.1   | 0.275 | 1 HSPC_lung |
| RPS24              | 0.07277699 | 0.37786112 | 0.933 | 0.922 | 1 HSPC_lung |
| SMDT1              | 0.07327035 | 1.69870624 | 0.567 | 0.654 | 1 HSPC_lung |
| ROCK2              | 0.07371085 | 1.19857317 | 0.133 | 0.326 | 1 HSPC_lung |
| ICAM3              | 0.07423525 | 1.10671419 | 0.167 | 0.396 | 1 HSPC_lung |
| NUCB2              | 0.07451092 | 0.35896139 | 0.167 | 0.371 | 1 HSPC_lung |
| MVB12B             | 0.0747322  | 0.44991308 | 0.167 | 0.379 | 1 HSPC_lung |
| PPDPF              | 0.07501993 | 0.28884801 | 0.2   | 0.434 | 1 HSPC_lung |
| TECR               | 0.07509873 | 0.56607279 | 0.233 | 0.463 | 1 HSPC_lung |

|                    |            |            |       |       |             |
|--------------------|------------|------------|-------|-------|-------------|
| RPUSD4             | 0.07561131 | 0.98129185 | 0.1   | 0.27  | 1 HSPC_lung |
| PTPRC              | 0.07566887 | 0.36092076 | 0.333 | 0.619 | 1 HSPC_lung |
| RPL8               | 0.0757744  | 0.38914826 | 0.867 | 0.9   | 1 HSPC_lung |
| NDUFV1             | 0.0763488  | 0.76724474 | 0.167 | 0.396 | 1 HSPC_lung |
| ENSMMUG00000064139 | 0.07664155 | 0.46283392 | 0.333 | 0.606 | 1 HSPC_lung |
| POLR2E             | 0.07718851 | 1.46596247 | 0.2   | 0.433 | 1 HSPC_lung |
| NIPSNAP3B          | 0.07777051 | 0.40811661 | 0.1   | 0.265 | 1 HSPC_lung |
| ZMAT2              | 0.07781857 | 1.09376523 | 0.167 | 0.399 | 1 HSPC_lung |
| CRNKL1             | 0.07790655 | 1.06227493 | 0.1   | 0.271 | 1 HSPC_lung |
| INIP               | 0.0788047  | 1.35573688 | 0.1   | 0.271 | 1 HSPC_lung |
| N4BP2L1            | 0.07903056 | 1.10109191 | 0.1   | 0.271 | 1 HSPC_lung |
| AP3B1              | 0.07914363 | 0.41857847 | 0.3   | 0.589 | 1 HSPC_lung |
| NFAT5              | 0.07929083 | 0.36577138 | 0.267 | 0.524 | 1 HSPC_lung |
| MRPS31             | 0.07930026 | 0.68354861 | 0.233 | 0.499 | 1 HSPC_lung |
| DPH2               | 0.07942874 | 0.21755419 | 0.233 | 0.496 | 1 HSPC_lung |
| RAB4A              | 0.08047247 | 0.92052605 | 0.1   | 0.273 | 1 HSPC_lung |
| EDF1               | 0.08047841 | 0.20224466 | 0.267 | 0.554 | 1 HSPC_lung |
| ABCF1              | 0.08058241 | 1.58047176 | 0.233 | 0.509 | 1 HSPC_lung |
| RBM42              | 0.08083555 | 0.4200611  | 0.1   | 0.266 | 1 HSPC_lung |
| STMN1              | 0.0808995  | 0.10748115 | 0.4   | 0.749 | 1 HSPC_lung |
| ERI3               | 0.08171471 | 1.32781005 | 0.133 | 0.328 | 1 HSPC_lung |
| SENP7              | 0.08175452 | 0.20266792 | 0.167 | 0.384 | 1 HSPC_lung |
| TMEM117            | 0.08227506 | 0.63577174 | 0.2   | 0.414 | 1 HSPC_lung |
| API5               | 0.08248465 | 0.46125011 | 0.133 | 0.319 | 1 HSPC_lung |
| ENSMMUG00000052132 | 0.08290071 | 1.19694344 | 0.2   | 0.433 | 1 HSPC_lung |
| GALNT11            | 0.08314524 | 0.35223075 | 0.167 | 0.378 | 1 HSPC_lung |
| LSP1               | 0.08330491 | 0.40911595 | 0.2   | 0.434 | 1 HSPC_lung |
| CD82               | 0.08335953 | 0.67020574 | 0.167 | 0.383 | 1 HSPC_lung |
| SNRNP200           | 0.08339648 | 1.21213604 | 0.2   | 0.438 | 1 HSPC_lung |
| NAMPT              | 0.08380359 | 3.29235343 | 0.367 | 0.316 | 1 HSPC_lung |
| KXD1               | 0.08424406 | 0.53260634 | 0.133 | 0.324 | 1 HSPC_lung |
| SAR1A              | 0.08443652 | 0.56113587 | 0.2   | 0.448 | 1 HSPC_lung |
| MRPS36             | 0.08454756 | 0.71121392 | 0.167 | 0.386 | 1 HSPC_lung |



|                    |            |            |       |       |             |
|--------------------|------------|------------|-------|-------|-------------|
| VRK2               | 0.08479743 | 0.1245066  | 0.133 | 0.316 | 1 HSPC_lung |
| IMP4               | 0.08485003 | 1.62834626 | 0.1   | 0.271 | 1 HSPC_lung |
| SH3GL1             | 0.08486077 | 0.7755837  | 0.133 | 0.329 | 1 HSPC_lung |
| GPALPP1            | 0.08533018 | 1.65238176 | 0.1   | 0.271 | 1 HSPC_lung |
| S100A4             | 0.08546956 | 1.57159002 | 0.533 | 0.552 | 1 HSPC_lung |
| ENSMMUG00000062026 | 0.08593803 | 0.71275813 | 0.133 | 0.316 | 1 HSPC_lung |
| UBE2V1             | 0.08595741 | 0.30811021 | 0.267 | 0.571 | 1 HSPC_lung |
| NUDT1              | 0.08608445 | 0.34720416 | 0.133 | 0.319 | 1 HSPC_lung |
| GRIK1              | 0.08655033 | 0.29354474 | 0.167 | 0.344 | 1 HSPC_lung |
| ZFC3H1             | 0.08656003 | 0.31946133 | 0.233 | 0.494 | 1 HSPC_lung |
| PRPF31             | 0.0868469  | 1.61675109 | 0.533 | 0.636 | 1 HSPC_lung |
| SLC25A4            | 0.08700394 | 0.71181683 | 0.133 | 0.319 | 1 HSPC_lung |
| KIAA1109           | 0.08759923 | 0.44166358 | 0.167 | 0.359 | 1 HSPC_lung |
| R3HCC1L            | 0.08788706 | 0.65207631 | 0.133 | 0.324 | 1 HSPC_lung |
| ROBO2              | 0.08802042 | 0.60699062 | 0.733 | 0.812 | 1 HSPC_lung |
| RABGEF1            | 0.08845438 | 1.12690708 | 0.233 | 0.517 | 1 HSPC_lung |
| CD58               | 0.08883576 | 0.55089083 | 0.2   | 0.434 | 1 HSPC_lung |
| SDF4               | 0.08911161 | 1.2096771  | 0.1   | 0.268 | 1 HSPC_lung |
| IP6K1              | 0.089477   | 0.32654662 | 0.267 | 0.532 | 1 HSPC_lung |
| C5H4orf33          | 0.08953257 | 0.62742485 | 0.1   | 0.261 | 1 HSPC_lung |
| REEP5              | 0.09002896 | 1.54371182 | 0.2   | 0.433 | 1 HSPC_lung |
| WHRN               | 0.09013052 | 0.85617601 | 0.1   | 0.263 | 1 HSPC_lung |
| ZNF44              | 0.09030675 | 0.2441132  | 0.233 | 0.446 | 1 HSPC_lung |
| LMNA               | 0.09034493 | 1.94063261 | 0.5   | 0.529 | 1 HSPC_lung |
| ENSMMUG00000049718 | 0.09044274 | 0.55516349 | 0.2   | 0.416 | 1 HSPC_lung |
| RHOBTB3            | 0.0906235  | 1.65344438 | 0.1   | 0.268 | 1 HSPC_lung |
| AIP                | 0.09070184 | 1.26174635 | 0.133 | 0.324 | 1 HSPC_lung |
| MAP7D3             | 0.0907134  | 0.91006685 | 0.1   | 0.26  | 1 HSPC_lung |
| POLH               | 0.09089591 | 0.31304219 | 0.1   | 0.263 | 1 HSPC_lung |
| BUD31              | 0.09105733 | 0.7733945  | 0.233 | 0.481 | 1 HSPC_lung |
| VTI1A              | 0.09164592 | 0.1278603  | 0.367 | 0.686 | 1 HSPC_lung |
| SUPT4H1            | 0.09186003 | 0.76673699 | 0.167 | 0.384 | 1 HSPC_lung |
| PRKRA              | 0.09192458 | 0.6887219  | 0.1   | 0.263 | 1 HSPC_lung |

|                    |            |            |       |       |             |
|--------------------|------------|------------|-------|-------|-------------|
| CUL1               | 0.09220218 | 1.19540813 | 0.233 | 0.517 | 1 HSPC_lung |
| ENSA               | 0.09330677 | 0.22909469 | 0.367 | 0.7   | 1 HSPC_lung |
| OPA1               | 0.09407369 | 0.85131166 | 0.267 | 0.576 | 1 HSPC_lung |
| TMEM205            | 0.09427331 | 0.56712549 | 0.133 | 0.316 | 1 HSPC_lung |
| RALGAPA1           | 0.09441397 | 0.67676741 | 0.167 | 0.366 | 1 HSPC_lung |
| SNF8               | 0.09443191 | 0.27721029 | 0.233 | 0.478 | 1 HSPC_lung |
| SENP2              | 0.09444738 | 1.27655336 | 0.2   | 0.433 | 1 HSPC_lung |
| PAOX               | 0.09507192 | 0.12628332 | 0.3   | 0.564 | 1 HSPC_lung |
| CEP57L1            | 0.09645101 | 0.20328576 | 0.133 | 0.314 | 1 HSPC_lung |
| C5orf15            | 0.09685967 | 0.46455966 | 0.1   | 0.261 | 1 HSPC_lung |
| OST4               | 0.09696649 | 1.48166517 | 0.533 | 0.667 | 1 HSPC_lung |
| RAD51              | 0.09703343 | 0.26275992 | 0.1   | 0.255 | 1 HSPC_lung |
| DCAF16             | 0.09720893 | 1.62132528 | 0.1   | 0.263 | 1 HSPC_lung |
| PSME2              | 0.09745844 | 0.29980665 | 0.2   | 0.426 | 1 HSPC_lung |
| GNAL               | 0.09758728 | 1.01794152 | 0.167 | 0.363 | 1 HSPC_lung |
| SNRPN              | 0.09770373 | 0.75986018 | 0.2   | 0.419 | 1 HSPC_lung |
| ZNF708             | 0.09794448 | 0.64047517 | 0.1   | 0.261 | 1 HSPC_lung |
| ZNF700             | 0.09822575 | 0.12573983 | 0.167 | 0.349 | 1 HSPC_lung |
| MBD3               | 0.09826498 | 0.71485481 | 0.633 | 0.707 | 1 HSPC_lung |
| SDCCAG8            | 0.09836808 | 0.6239371  | 0.2   | 0.429 | 1 HSPC_lung |
| CHMP2B             | 0.09854949 | 1.87733947 | 0.133 | 0.316 | 1 HSPC_lung |
| WDR7               | 0.09903901 | 0.69487249 | 0.2   | 0.441 | 1 HSPC_lung |
| PRMT2              | 0.09911241 | 0.32751886 | 0.167 | 0.359 | 1 HSPC_lung |
| MEAF6              | 0.09912303 | 1.00786075 | 0.133 | 0.318 | 1 HSPC_lung |
| ZNF33B             | 0.09963469 | 0.47849433 | 0.133 | 0.311 | 1 HSPC_lung |
| INPP4A             | 0.09970123 | 0.49827953 | 0.1   | 0.258 | 1 HSPC_lung |
| BROX               | 0.10026375 | 1.12105976 | 0.133 | 0.308 | 1 HSPC_lung |
| ERCC3              | 0.10042743 | 1.22499281 | 0.1   | 0.251 | 1 HSPC_lung |
| ENSMMUG00000052202 | 0.10146522 | 0.35386344 | 0.133 | 0.311 | 1 HSPC_lung |
| ARHGAP45           | 0.10166373 | 0.67317005 | 0.1   | 0.253 | 1 HSPC_lung |
| DYRK2              | 0.10185457 | 0.66673411 | 0.1   | 0.256 | 1 HSPC_lung |
| ENSMMUG00000038348 | 0.1018556  | 0.50255109 | 0.367 | 0.644 | 1 HSPC_lung |
| AKR1B1             | 0.10202082 | 0.36202094 | 0.1   | 0.25  | 1 HSPC_lung |

|                   |            |            |       |       |             |
|-------------------|------------|------------|-------|-------|-------------|
| PTRHD1            | 0.10209133 | 0.93573255 | 0.2   | 0.421 | 1 HSPC_lung |
| RBIS              | 0.10254464 | 0.19676686 | 0.333 | 0.622 | 1 HSPC_lung |
| ZFAND5            | 0.10268854 | 0.31289852 | 0.2   | 0.423 | 1 HSPC_lung |
| PSMA1             | 0.10301821 | 0.30063594 | 0.3   | 0.606 | 1 HSPC_lung |
| CHN2              | 0.10305012 | 2.08921229 | 0.4   | 0.356 | 1 HSPC_lung |
| STAM2             | 0.1040128  | 0.78507739 | 0.1   | 0.26  | 1 HSPC_lung |
| CD53              | 0.10407106 | 0.45686002 | 0.167 | 0.363 | 1 HSPC_lung |
| NDUFAF4           | 0.10458366 | 0.67132685 | 0.167 | 0.363 | 1 HSPC_lung |
| EIF2B5            | 0.10458691 | 2.03516549 | 0.1   | 0.26  | 1 HSPC_lung |
| RAP1GDS1          | 0.10524288 | 0.42654346 | 0.167 | 0.356 | 1 HSPC_lung |
| DACH1             | 0.10538296 | 0.70720243 | 0.2   | 0.389 | 1 HSPC_lung |
| ARHGAP4           | 0.10560189 | 0.29839462 | 0.133 | 0.314 | 1 HSPC_lung |
| SLC38A2           | 0.10594928 | 0.21031881 | 0.267 | 0.522 | 1 HSPC_lung |
| N6AMT1            | 0.1059585  | 2.01849901 | 0.1   | 0.258 | 1 HSPC_lung |
| COX10             | 0.1060028  | 0.58319297 | 0.133 | 0.304 | 1 HSPC_lung |
| ENSMUG00000016278 | 0.10624873 | 0.46138208 | 0.233 | 0.481 | 1 HSPC_lung |
| SNX6              | 0.10629886 | 0.73154799 | 0.267 | 0.542 | 1 HSPC_lung |
| CTNNB1            | 0.1063405  | 0.64054021 | 0.333 | 0.646 | 1 HSPC_lung |
| NDUFB5            | 0.10702084 | 0.29326446 | 0.233 | 0.464 | 1 HSPC_lung |
| GABARAP           | 0.10721744 | 0.29345632 | 0.367 | 0.699 | 1 HSPC_lung |
| TAGLN2            | 0.10726728 | 1.60100461 | 0.567 | 0.644 | 1 HSPC_lung |
| TMA7              | 0.10771858 | 1.03008669 | 0.6   | 0.784 | 1 HSPC_lung |
| PLGRKT            | 0.10791656 | 1.03788183 | 0.2   | 0.409 | 1 HSPC_lung |
| VPS8              | 0.10852963 | 1.51529722 | 0.2   | 0.438 | 1 HSPC_lung |
| ARFRP1            | 0.10892557 | 0.64677157 | 0.133 | 0.308 | 1 HSPC_lung |
| CEP85L            | 0.10966614 | 0.4299251  | 0.2   | 0.431 | 1 HSPC_lung |
| AP1M1             | 0.10967421 | 0.63058771 | 0.133 | 0.313 | 1 HSPC_lung |
| ZFAND3            | 0.11013289 | 0.15042657 | 0.5   | 0.847 | 1 HSPC_lung |
| CHD2              | 0.11034894 | 0.40589881 | 0.367 | 0.704 | 1 HSPC_lung |
| VPS13D            | 0.11056408 | 0.9337003  | 0.267 | 0.507 | 1 HSPC_lung |
| HNRNPA0           | 0.11069745 | 1.00490624 | 0.3   | 0.584 | 1 HSPC_lung |
| SEPTIN11          | 0.11125303 | 0.35706698 | 0.2   | 0.428 | 1 HSPC_lung |
| DHX8              | 0.11145228 | 0.32184056 | 0.133 | 0.301 | 1 HSPC_lung |

|                    |            |            |       |       |             |
|--------------------|------------|------------|-------|-------|-------------|
| TIAL1              | 0.11193225 | 1.5393336  | 0.267 | 0.557 | 1 HSPC_lung |
| MAZ                | 0.11229974 | 1.08383273 | 0.2   | 0.413 | 1 HSPC_lung |
| STX17              | 0.11232243 | 1.83920994 | 0.133 | 0.308 | 1 HSPC_lung |
| PSMC5              | 0.11335305 | 0.5114437  | 0.233 | 0.478 | 1 HSPC_lung |
| SLC35E2            | 0.11342595 | 0.99877544 | 0.167 | 0.371 | 1 HSPC_lung |
| EMG1               | 0.11367147 | 0.11925743 | 0.1   | 0.25  | 1 HSPC_lung |
| HEATR5B            | 0.11367147 | 0.41607591 | 0.1   | 0.25  | 1 HSPC_lung |
| CARM1              | 0.11434217 | 0.6088018  | 0.133 | 0.308 | 1 HSPC_lung |
| MAP4K3             | 0.11444887 | 0.71314426 | 0.167 | 0.366 | 1 HSPC_lung |
| HNRNPA3            | 0.11490891 | 0.27773273 | 0.5   | 0.847 | 1 HSPC_lung |
| DBI                | 0.11494461 | 2.15152246 | 0.433 | 0.426 | 1 HSPC_lung |
| ENSMMUG00000014862 | 0.11503008 | 0.37023633 | 0.3   | 0.546 | 1 HSPC_lung |
| MAPK6              | 0.11522093 | 2.85944192 | 0.367 | 0.339 | 1 HSPC_lung |
| ENSMMUG00000054743 | 0.11626221 | 0.48392292 | 0.133 | 0.304 | 1 HSPC_lung |
| POLR1H             | 0.11639052 | 0.37319211 | 0.2   | 0.426 | 1 HSPC_lung |
| RNF7               | 0.11677851 | 0.22369159 | 0.233 | 0.441 | 1 HSPC_lung |
| ENSMMUG00000064329 | 0.11754233 | 2.00637897 | 0.1   | 0.251 | 1 HSPC_lung |
| UBASH3B            | 0.11777987 | 0.97034068 | 0.1   | 0.25  | 1 HSPC_lung |
| ATF4               | 0.11818955 | 0.80398997 | 0.367 | 0.662 | 1 HSPC_lung |
| RELL1              | 0.1185419  | 0.72792394 | 0.233 | 0.448 | 1 HSPC_lung |
| BMPR2              | 0.11858241 | 0.54826715 | 0.167 | 0.351 | 1 HSPC_lung |
| KLHL2              | 0.11952709 | 0.77417759 | 0.167 | 0.348 | 1 HSPC_lung |
| MAP2K2             | 0.1199437  | 1.16729397 | 0.133 | 0.3   | 1 HSPC_lung |
| TIPARP             | 0.12234233 | 1.65205828 | 0.433 | 0.398 | 1 HSPC_lung |
| GTF2H5             | 0.12279423 | 0.57117612 | 0.267 | 0.539 | 1 HSPC_lung |
| SNRK               | 0.12317594 | 1.10110026 | 0.133 | 0.296 | 1 HSPC_lung |
| CHTOP              | 0.12333028 | 0.83953946 | 0.167 | 0.348 | 1 HSPC_lung |
| EEA1               | 0.12370698 | 1.36705806 | 0.267 | 0.517 | 1 HSPC_lung |
| DEAF1              | 0.12395268 | 0.57847542 | 0.133 | 0.3   | 1 HSPC_lung |
| ENSMMUG00000029026 | 0.12477373 | 0.64818086 | 0.3   | 0.569 | 1 HSPC_lung |
| IFNAR2             | 0.12483878 | 0.71912639 | 0.233 | 0.471 | 1 HSPC_lung |
| RPL24              | 0.12493335 | 0.39822058 | 0.867 | 0.903 | 1 HSPC_lung |
| VPS37B             | 0.12704651 | 1.67618616 | 0.167 | 0.336 | 1 HSPC_lung |

|                    |            |            |       |       |             |
|--------------------|------------|------------|-------|-------|-------------|
| DNAJC3             | 0.12722262 | 1.0984064  | 0.233 | 0.481 | 1 HSPC_lung |
| BMP2K              | 0.12770324 | 0.45828189 | 0.4   | 0.684 | 1 HSPC_lung |
| ESD                | 0.12856346 | 0.30573559 | 0.267 | 0.519 | 1 HSPC_lung |
| CIAO2B             | 0.12881163 | 0.55091629 | 0.167 | 0.354 | 1 HSPC_lung |
| TMEM165            | 0.12888608 | 0.89805735 | 0.167 | 0.363 | 1 HSPC_lung |
| RRP15              | 0.12961004 | 0.29939601 | 0.133 | 0.298 | 1 HSPC_lung |
| TMEM63C            | 0.12961005 | 0.37695388 | 0.133 | 0.298 | 1 HSPC_lung |
| TMBIM1             | 0.12961005 | 1.13302391 | 0.133 | 0.298 | 1 HSPC_lung |
| PAPSS1             | 0.13051312 | 0.81021345 | 0.233 | 0.418 | 1 HSPC_lung |
| ZNF28              | 0.1310007  | 0.80550326 | 0.267 | 0.522 | 1 HSPC_lung |
| USP8               | 0.13126631 | 0.88807788 | 0.167 | 0.354 | 1 HSPC_lung |
| NDUFB9             | 0.13134455 | 0.37936402 | 0.3   | 0.591 | 1 HSPC_lung |
| ITM2C              | 0.1320265  | 0.63934055 | 0.167 | 0.351 | 1 HSPC_lung |
| ENG                | 0.13234033 | 1.04950096 | 0.133 | 0.281 | 1 HSPC_lung |
| GAPDH              | 0.13241429 | 0.95614581 | 0.633 | 0.799 | 1 HSPC_lung |
| ENSMMUG00000044585 | 0.13255563 | 1.28869475 | 0.567 | 0.719 | 1 HSPC_lung |
| NFE2L2             | 0.13378205 | 1.03717209 | 0.2   | 0.424 | 1 HSPC_lung |
| BAZ2B              | 0.13398002 | 0.60816539 | 0.233 | 0.478 | 1 HSPC_lung |
| SNX29              | 0.13592401 | 0.17648504 | 0.2   | 0.393 | 1 HSPC_lung |
| GAK                | 0.13615664 | 1.9773967  | 0.133 | 0.296 | 1 HSPC_lung |
| ATP5MC2            | 0.13645871 | 1.03051381 | 0.567 | 0.666 | 1 HSPC_lung |
| SRPRA              | 0.13819165 | 1.15549784 | 0.133 | 0.296 | 1 HSPC_lung |
| VPS29              | 0.13824915 | 0.8120293  | 0.2   | 0.391 | 1 HSPC_lung |
| SACM1L             | 0.13828392 | 0.50046002 | 0.167 | 0.349 | 1 HSPC_lung |
| ARHGEF3            | 0.13884394 | 0.33566501 | 0.167 | 0.348 | 1 HSPC_lung |
| NEDD4              | 0.13926456 | 0.93662008 | 0.133 | 0.293 | 1 HSPC_lung |
| NSA2               | 0.13976582 | 1.09311951 | 0.567 | 0.75  | 1 HSPC_lung |
| GPR141             | 0.13997784 | 2.12616457 | 0.3   | 0.243 | 1 HSPC_lung |
| TFB1M              | 0.14061967 | 0.88007111 | 0.167 | 0.344 | 1 HSPC_lung |
| RPS7               | 0.1407703  | 0.39348151 | 0.833 | 0.928 | 1 HSPC_lung |
| TFAM               | 0.14128112 | 1.25761157 | 0.233 | 0.471 | 1 HSPC_lung |
| ENSMMUG00000049722 | 0.14152893 | 0.4435155  | 0.3   | 0.611 | 1 HSPC_lung |
| CDKN2AIPNL         | 0.14170324 | 1.41070717 | 0.167 | 0.353 | 1 HSPC_lung |

|                     |            |            |       |       |             |
|---------------------|------------|------------|-------|-------|-------------|
| CCNG1               | 0.14186749 | 0.45195435 | 0.167 | 0.353 | 1 HSPC_lung |
| UBE2W               | 0.14207591 | 0.55150896 | 0.167 | 0.341 | 1 HSPC_lung |
| SMARCA2             | 0.14251036 | 0.68441742 | 0.267 | 0.542 | 1 HSPC_lung |
| ZBTB44              | 0.14340874 | 0.18545956 | 0.2   | 0.399 | 1 HSPC_lung |
| TTC1                | 0.14352949 | 0.46183998 | 0.167 | 0.349 | 1 HSPC_lung |
| ENSMMUG00000015583  | 0.14497266 | 0.25321397 | 0.467 | 0.815 | 1 HSPC_lung |
| PSMB9               | 0.14610695 | 0.72253801 | 0.133 | 0.293 | 1 HSPC_lung |
| ATL3                | 0.1462019  | 0.96425572 | 0.2   | 0.394 | 1 HSPC_lung |
| FARSA               | 0.14648035 | 1.10780283 | 0.133 | 0.285 | 1 HSPC_lung |
| SAFB2               | 0.14717118 | 1.18524265 | 0.233 | 0.476 | 1 HSPC_lung |
| ENSMMUG000000061630 | 0.14731709 | 1.17458947 | 0.2   | 0.406 | 1 HSPC_lung |
| YWHAB               | 0.14797264 | 0.52003913 | 0.4   | 0.699 | 1 HSPC_lung |
| ENSMMUG000000006778 | 0.14830182 | 0.43782283 | 0.267 | 0.514 | 1 HSPC_lung |
| PCNX1               | 0.14921499 | 2.05429413 | 0.433 | 0.454 | 1 HSPC_lung |
| PTPA                | 0.14961171 | 1.71575461 | 0.167 | 0.349 | 1 HSPC_lung |
| SYNGR1              | 0.15003592 | 1.19845315 | 0.2   | 0.379 | 1 HSPC_lung |
| PRDX6               | 0.15206401 | 0.89764922 | 0.3   | 0.602 | 1 HSPC_lung |
| UBR5                | 0.15301874 | 0.73321566 | 0.333 | 0.619 | 1 HSPC_lung |
| TNS3                | 0.15432247 | 3.47495046 | 0.3   | 0.256 | 1 HSPC_lung |
| RBM8A               | 0.15432756 | 0.68100463 | 0.3   | 0.579 | 1 HSPC_lung |
| CBX3                | 0.15538346 | 0.32219015 | 0.4   | 0.725 | 1 HSPC_lung |
| ZNF330              | 0.15548066 | 1.15446894 | 0.133 | 0.288 | 1 HSPC_lung |
| GNAI2.1             | 0.15599966 | 1.67578954 | 0.2   | 0.414 | 1 HSPC_lung |
| ENSMMUG000000052747 | 0.15634394 | 1.19613931 | 0.533 | 0.661 | 1 HSPC_lung |
| ENSMMUG000000051392 | 0.15654195 | 0.23418997 | 0.433 | 0.78  | 1 HSPC_lung |
| NDUFA8              | 0.15784492 | 0.63070798 | 0.267 | 0.502 | 1 HSPC_lung |
| TP53BP2             | 0.1583829  | 0.82008117 | 0.167 | 0.349 | 1 HSPC_lung |
| LRPAP1              | 0.15890093 | 1.16041226 | 0.133 | 0.288 | 1 HSPC_lung |
| AK2                 | 0.15940805 | 0.96908964 | 0.2   | 0.404 | 1 HSPC_lung |
| TRIP11              | 0.1599075  | 1.07386722 | 0.133 | 0.29  | 1 HSPC_lung |
| ZBTB11              | 0.16087033 | 1.76716795 | 0.133 | 0.29  | 1 HSPC_lung |
| GANAB               | 0.16154196 | 0.94729209 | 0.2   | 0.396 | 1 HSPC_lung |
| ATM                 | 0.1616341  | 0.86851839 | 0.167 | 0.349 | 1 HSPC_lung |

|                     |            |            |       |       |             |
|---------------------|------------|------------|-------|-------|-------------|
| GGNBP2              | 0.16194424 | 1.35674798 | 0.267 | 0.521 | 1 HSPC_lung |
| CIBAR1              | 0.16254736 | 0.92272499 | 0.133 | 0.281 | 1 HSPC_lung |
| PDIA6               | 0.16261655 | 0.8530193  | 0.267 | 0.491 | 1 HSPC_lung |
| PAFAH1B3            | 0.16319326 | 0.32109926 | 0.133 | 0.278 | 1 HSPC_lung |
| MRPS6               | 0.16326015 | 0.62833545 | 0.267 | 0.521 | 1 HSPC_lung |
| ENSMMUG00000053146  | 0.16354151 | 0.31888246 | 0.433 | 0.684 | 1 HSPC_lung |
| WDR61               | 0.16385561 | 0.62973458 | 0.167 | 0.341 | 1 HSPC_lung |
| ENSMMUG00000004545  | 0.16522114 | 0.88607926 | 0.567 | 0.739 | 1 HSPC_lung |
| ARF4                | 0.1662338  | 0.10201624 | 0.433 | 0.724 | 1 HSPC_lung |
| ENSMMUG000000017890 | 0.16713902 | 1.40187726 | 0.167 | 0.339 | 1 HSPC_lung |
| RNF167              | 0.16771418 | 0.82943795 | 0.2   | 0.398 | 1 HSPC_lung |
| SON                 | 0.1678371  | 1.02982769 | 0.633 | 0.837 | 1 HSPC_lung |
| ZNF483              | 0.16797157 | 1.27314934 | 0.5   | 0.629 | 1 HSPC_lung |
| PRKCB               | 0.16958358 | 0.24711895 | 0.333 | 0.566 | 1 HSPC_lung |
| LAMTOR4             | 0.17091172 | 0.58986603 | 0.267 | 0.501 | 1 HSPC_lung |
| DOCK10              | 0.17116205 | 0.68104472 | 0.233 | 0.441 | 1 HSPC_lung |
| NDUFA9              | 0.17135818 | 0.4408771  | 0.233 | 0.459 | 1 HSPC_lung |
| ATP5F1A             | 0.17141357 | 0.43999912 | 0.433 | 0.755 | 1 HSPC_lung |
| ANKRD27             | 0.17194134 | 0.23940485 | 0.133 | 0.275 | 1 HSPC_lung |
| YJEFN3              | 0.17235571 | 0.49595773 | 0.367 | 0.654 | 1 HSPC_lung |
| RIN3                | 0.17353479 | 1.73455749 | 0.133 | 0.286 | 1 HSPC_lung |
| CSGALNACT2          | 0.17426665 | 1.10291423 | 0.267 | 0.511 | 1 HSPC_lung |
| ELL2                | 0.17442156 | 0.42260109 | 0.333 | 0.607 | 1 HSPC_lung |
| TWF2                | 0.17443426 | 0.544033   | 0.133 | 0.275 | 1 HSPC_lung |
| ENSMMUG00000058532  | 0.17465241 | 0.97736501 | 0.233 | 0.428 | 1 HSPC_lung |
| RPL19               | 0.17581564 | 0.54919274 | 0.7   | 0.859 | 1 HSPC_lung |
| NSFL1C              | 0.17594708 | 1.28128709 | 0.133 | 0.283 | 1 HSPC_lung |
| PHF6                | 0.1763419  | 1.44435924 | 0.233 | 0.459 | 1 HSPC_lung |
| TMEM256             | 0.17636358 | 0.83620689 | 0.133 | 0.283 | 1 HSPC_lung |
| TSC22D2             | 0.17665566 | 0.23402427 | 0.167 | 0.323 | 1 HSPC_lung |
| FER                 | 0.17710057 | 0.55262597 | 0.167 | 0.318 | 1 HSPC_lung |
| RNF40               | 0.17725625 | 2.01511168 | 0.133 | 0.286 | 1 HSPC_lung |
| CLIP1               | 0.17773468 | 0.63314946 | 0.133 | 0.273 | 1 HSPC_lung |

|                    |            |            |       |       |             |
|--------------------|------------|------------|-------|-------|-------------|
| EEF1B2             | 0.1779501  | 0.3715199  | 0.8   | 0.842 | 1 HSPC_lung |
| CDK13              | 0.17830383 | 1.0197641  | 0.3   | 0.582 | 1 HSPC_lung |
| DHRS7              | 0.17926636 | 0.74834739 | 0.133 | 0.281 | 1 HSPC_lung |
| GNAI3              | 0.17962387 | 0.9391175  | 0.233 | 0.463 | 1 HSPC_lung |
| SEC61A1            | 0.17974885 | 1.82364712 | 0.133 | 0.285 | 1 HSPC_lung |
| CHMP2A             | 0.18029826 | 1.02847989 | 0.233 | 0.444 | 1 HSPC_lung |
| S100A6             | 0.18053808 | 0.73974831 | 0.767 | 0.787 | 1 HSPC_lung |
| HIF1A              | 0.18135118 | 2.06432467 | 0.467 | 0.527 | 1 HSPC_lung |
| HSPA5              | 0.18182638 | 0.15842985 | 0.433 | 0.747 | 1 HSPC_lung |
| ZNF609             | 0.18235934 | 0.4360876  | 0.3   | 0.519 | 1 HSPC_lung |
| ITGB3BP            | 0.18340074 | 1.26330931 | 0.167 | 0.336 | 1 HSPC_lung |
| RASGRP2            | 0.18363439 | 0.22259918 | 0.167 | 0.324 | 1 HSPC_lung |
| TBC1D1             | 0.18383252 | 0.72095986 | 0.267 | 0.494 | 1 HSPC_lung |
| RDH5               | 0.18401089 | 1.30889205 | 0.467 | 0.552 | 1 HSPC_lung |
| SUFU               | 0.18479114 | 1.56541971 | 0.133 | 0.266 | 1 HSPC_lung |
| R3HDM2             | 0.18503505 | 0.43063632 | 0.233 | 0.433 | 1 HSPC_lung |
| MEA1               | 0.18537812 | 0.16846594 | 0.133 | 0.27  | 1 HSPC_lung |
| RPL7A              | 0.18553969 | 0.29110389 | 0.933 | 0.902 | 1 HSPC_lung |
| HSP90B1            | 0.18564444 | 0.50849186 | 0.433 | 0.7   | 1 HSPC_lung |
| HMGN4              | 0.185953   | 0.1443674  | 0.2   | 0.378 | 1 HSPC_lung |
| ENSMMUG00000015270 | 0.18597675 | 0.20802237 | 0.967 | 0.92  | 1 HSPC_lung |
| STK3               | 0.18620523 | 0.58429073 | 0.2   | 0.389 | 1 HSPC_lung |
| YWHAE              | 0.18636191 | 0.74409769 | 0.433 | 0.789 | 1 HSPC_lung |
| ENSMMUG00000022428 | 0.18646412 | 1.17265036 | 0.533 | 0.622 | 1 HSPC_lung |
| DOCK7              | 0.18673573 | 0.53428955 | 0.167 | 0.321 | 1 HSPC_lung |
| BIRC2              | 0.18705687 | 0.75337232 | 0.2   | 0.381 | 1 HSPC_lung |
| SNX14              | 0.18832568 | 0.86332442 | 0.233 | 0.443 | 1 HSPC_lung |
| LSM7               | 0.18902408 | 0.25755754 | 0.367 | 0.639 | 1 HSPC_lung |
| FKBP1A             | 0.18912479 | 0.76802841 | 0.3   | 0.544 | 1 HSPC_lung |
| PIK3AP1            | 0.19020284 | 0.57443939 | 0.133 | 0.268 | 1 HSPC_lung |
| RABAC1             | 0.19031723 | 0.26748621 | 0.133 | 0.271 | 1 HSPC_lung |
| IFNAR1             | 0.19044175 | 1.47486448 | 0.133 | 0.276 | 1 HSPC_lung |
| ANAPC13            | 0.19125158 | 0.76765576 | 0.233 | 0.436 | 1 HSPC_lung |



|                     |            |            |       |       |             |
|---------------------|------------|------------|-------|-------|-------------|
| NECAP2              | 0.19133354 | 0.91022752 | 0.2   | 0.384 | 1 HSPC_lung |
| EIF1B               | 0.19154981 | 1.01769487 | 0.3   | 0.591 | 1 HSPC_lung |
| RPL35               | 0.19211    | 0.50278772 | 0.767 | 0.87  | 1 HSPC_lung |
| NDUFB10             | 0.19334863 | 0.44242016 | 0.3   | 0.571 | 1 HSPC_lung |
| SLC39A7             | 0.19373178 | 1.05335627 | 0.167 | 0.336 | 1 HSPC_lung |
| FLI1                | 0.19424802 | 1.73197055 | 0.4   | 0.386 | 1 HSPC_lung |
| ENSMMUG00000006499  | 0.1971481  | 0.47489107 | 0.333 | 0.599 | 1 HSPC_lung |
| ENSMMUG000000065104 | 0.19802446 | 0.23175534 | 0.333 | 0.571 | 1 HSPC_lung |
| NXPE3               | 0.19842397 | 2.33713479 | 0.467 | 0.541 | 1 HSPC_lung |
| STOM                | 0.1986407  | 1.21067739 | 0.133 | 0.261 | 1 HSPC_lung |
| PNPLA8              | 0.19903356 | 1.34710279 | 0.133 | 0.276 | 1 HSPC_lung |
| BUD23               | 0.20131602 | 0.73491164 | 0.267 | 0.501 | 1 HSPC_lung |
| PET100              | 0.20224674 | 1.21905336 | 0.2   | 0.383 | 1 HSPC_lung |
| SPTBN1              | 0.20238014 | 0.40809354 | 0.2   | 0.379 | 1 HSPC_lung |
| KIF13B              | 0.20418237 | 2.08297357 | 0.367 | 0.361 | 1 HSPC_lung |
| LYSMD3              | 0.20427057 | 0.88933862 | 0.133 | 0.268 | 1 HSPC_lung |
| PDIA3               | 0.20542636 | 0.87569337 | 0.167 | 0.324 | 1 HSPC_lung |
| HNRNPC              | 0.20627398 | 0.11924429 | 0.6   | 0.862 | 1 HSPC_lung |
| CYHR1               | 0.20633291 | 1.32356704 | 0.133 | 0.265 | 1 HSPC_lung |
| REL                 | 0.20675727 | 0.29014147 | 0.3   | 0.512 | 1 HSPC_lung |
| DOCK2               | 0.20705833 | 0.56613708 | 0.267 | 0.504 | 1 HSPC_lung |
| ENSMMUG000000015208 | 0.20837173 | 0.70970147 | 0.233 | 0.433 | 1 HSPC_lung |
| CAPN7               | 0.20837587 | 0.8698046  | 0.133 | 0.273 | 1 HSPC_lung |
| BST2                | 0.21002782 | 0.68794847 | 0.233 | 0.433 | 1 HSPC_lung |
| CMC1                | 0.21025059 | 0.51553636 | 0.2   | 0.368 | 1 HSPC_lung |
| CYP20A1             | 0.21173526 | 1.37875658 | 0.133 | 0.273 | 1 HSPC_lung |
| LDLR                | 0.21173526 | 1.29708588 | 0.133 | 0.273 | 1 HSPC_lung |
| UQCRH               | 0.21183156 | 0.29552919 | 0.433 | 0.795 | 1 HSPC_lung |
| SEC61B              | 0.21188318 | 0.15147587 | 0.4   | 0.697 | 1 HSPC_lung |
| SIKE1               | 0.21213779 | 0.69018765 | 0.133 | 0.265 | 1 HSPC_lung |
| CDKN1B              | 0.21316412 | 1.77762353 | 0.133 | 0.268 | 1 HSPC_lung |
| CEP170              | 0.21448181 | 0.94702516 | 0.3   | 0.529 | 1 HSPC_lung |
| RPS5                | 0.21533174 | 0.46345293 | 0.8   | 0.89  | 1 HSPC_lung |

|                     |            |            |       |       |             |
|---------------------|------------|------------|-------|-------|-------------|
| SPRYD7              | 0.21596986 | 1.46338232 | 0.133 | 0.26  | 1 HSPC_lung |
| MAPKAPK2            | 0.2169681  | 0.60559728 | 0.133 | 0.26  | 1 HSPC_lung |
| PIGS                | 0.21708327 | 1.20151575 | 0.133 | 0.266 | 1 HSPC_lung |
| BCAP29              | 0.21739082 | 0.90056692 | 0.2   | 0.384 | 1 HSPC_lung |
| SUB1                | 0.21779828 | 0.1413819  | 0.5   | 0.829 | 1 HSPC_lung |
| ENSMMUG00000003867  | 0.21793427 | 0.34534592 | 0.933 | 0.95  | 1 HSPC_lung |
| COTL1               | 0.21902815 | 0.33412723 | 0.2   | 0.363 | 1 HSPC_lung |
| ENSMMUG000000049736 | 0.21947821 | 0.93816125 | 0.133 | 0.26  | 1 HSPC_lung |
| NTHL1               | 0.21957196 | 1.62441561 | 0.133 | 0.266 | 1 HSPC_lung |
| SH3BGR1             | 0.21972351 | 0.41963806 | 0.367 | 0.657 | 1 HSPC_lung |
| ATP13A3             | 0.22042463 | 0.90368734 | 0.233 | 0.409 | 1 HSPC_lung |
| CHD1                | 0.22100326 | 0.78019684 | 0.333 | 0.554 | 1 HSPC_lung |
| AHI1                | 0.22116367 | 1.69123165 | 0.233 | 0.428 | 1 HSPC_lung |
| PSMA2               | 0.22119501 | 0.36927144 | 0.4   | 0.689 | 1 HSPC_lung |
| CAMK1D              | 0.22123636 | 0.27610972 | 0.267 | 0.456 | 1 HSPC_lung |
| EIF3M               | 0.22129125 | 0.67079787 | 0.433 | 0.722 | 1 HSPC_lung |
| RAB3GAP1            | 0.22241818 | 1.04327743 | 0.267 | 0.506 | 1 HSPC_lung |
| GPR174              | 0.22258534 | 0.45047853 | 0.133 | 0.266 | 1 HSPC_lung |
| RBM38               | 0.22288208 | 0.26244194 | 0.167 | 0.313 | 1 HSPC_lung |
| PPT1                | 0.22308474 | 0.3408296  | 0.133 | 0.265 | 1 HSPC_lung |
| ASH1L               | 0.22343902 | 0.62853766 | 0.5   | 0.814 | 1 HSPC_lung |
| ANO6                | 0.22509717 | 1.03677126 | 0.167 | 0.301 | 1 HSPC_lung |
| PJA2                | 0.22549362 | 0.97913084 | 0.3   | 0.537 | 1 HSPC_lung |
| SLC25A44            | 0.2263822  | 0.48376803 | 0.167 | 0.316 | 1 HSPC_lung |
| ECHDC1              | 0.22766586 | 1.08697139 | 0.167 | 0.328 | 1 HSPC_lung |
| ENSMMUG000000063609 | 0.22815715 | 0.8382659  | 0.233 | 0.428 | 1 HSPC_lung |
| PDE3A               | 0.22889837 | 0.13215882 | 0.167 | 0.293 | 1 HSPC_lung |
| RASA1               | 0.22998198 | 1.65724471 | 0.233 | 0.448 | 1 HSPC_lung |
| UQCRCQ              | 0.23015564 | 1.07311378 | 0.533 | 0.636 | 1 HSPC_lung |
| ENSMMUG000000059977 | 0.23123066 | 0.94117833 | 0.167 | 0.316 | 1 HSPC_lung |
| ENSMMUG000000008396 | 0.23145442 | 1.10588217 | 0.167 | 0.324 | 1 HSPC_lung |
| MOB2                | 0.23215952 | 1.59662086 | 0.233 | 0.428 | 1 HSPC_lung |
| IRF3                | 0.23238331 | 0.48763894 | 0.233 | 0.428 | 1 HSPC_lung |

|                    |            |            |       |       |             |
|--------------------|------------|------------|-------|-------|-------------|
| VPS13C             | 0.23406445 | 0.67891285 | 0.367 | 0.644 | 1 HSPC_lung |
| EEF2               | 0.2344707  | 0.18133642 | 0.533 | 0.8   | 1 HSPC_lung |
| PPIB               | 0.23457643 | 1.44483764 | 0.533 | 0.662 | 1 HSPC_lung |
| CLIC1              | 0.23468594 | 0.65035955 | 0.367 | 0.644 | 1 HSPC_lung |
| CFLAR              | 0.23637636 | 1.70637173 | 0.233 | 0.423 | 1 HSPC_lung |
| NIN                | 0.23763387 | 1.01928772 | 0.133 | 0.26  | 1 HSPC_lung |
| HSD17B11           | 0.23770582 | 1.06843446 | 0.2   | 0.359 | 1 HSPC_lung |
| FRG1               | 0.2381455  | 0.58784946 | 0.133 | 0.263 | 1 HSPC_lung |
| LYPLA1             | 0.23992649 | 1.36805547 | 0.167 | 0.309 | 1 HSPC_lung |
| SEL1L              | 0.24031172 | 1.37885899 | 0.133 | 0.26  | 1 HSPC_lung |
| RNF121             | 0.24081534 | 0.91926243 | 0.133 | 0.263 | 1 HSPC_lung |
| PLXNC1             | 0.24150421 | 0.74774994 | 0.167 | 0.311 | 1 HSPC_lung |
| CSNK1A1            | 0.24157239 | 0.52946095 | 0.5   | 0.814 | 1 HSPC_lung |
| MCFD2              | 0.24191226 | 0.81305632 | 0.133 | 0.261 | 1 HSPC_lung |
| ENSMMUG00000049151 | 0.24204195 | 0.80091213 | 0.7   | 0.832 | 1 HSPC_lung |
| COPS6              | 0.24283909 | 0.6986174  | 0.233 | 0.439 | 1 HSPC_lung |
| PTGER3             | 0.2435716  | 1.7420752  | 0.133 | 0.255 | 1 HSPC_lung |
| METTL5             | 0.24409632 | 0.40240985 | 0.133 | 0.26  | 1 HSPC_lung |
| STMP1              | 0.24521089 | 0.58936755 | 0.133 | 0.253 | 1 HSPC_lung |
| IFNGR1             | 0.24785534 | 1.41341025 | 0.133 | 0.263 | 1 HSPC_lung |
| GNG5               | 0.24797255 | 1.00665522 | 0.6   | 0.774 | 1 HSPC_lung |
| SNX17              | 0.24913632 | 0.48829662 | 0.167 | 0.309 | 1 HSPC_lung |
| CTSS               | 0.24913857 | 0.54752537 | 0.267 | 0.428 | 1 HSPC_lung |
| EIF1AY             | 0.24920423 | 0.82546277 | 0.233 | 0.396 | 1 HSPC_lung |
| RHOH               | 0.24923757 | 1.1763086  | 0.533 | 0.554 | 1 HSPC_lung |
| RAB11B             | 0.24954109 | 1.69319558 | 0.133 | 0.261 | 1 HSPC_lung |
| HUWE1              | 0.25013721 | 1.2457102  | 0.4   | 0.709 | 1 HSPC_lung |
| KLHL13             | 0.25091373 | 1.44185975 | 0.167 | 0.301 | 1 HSPC_lung |
| PHACTR4            | 0.25192699 | 0.68992478 | 0.267 | 0.488 | 1 HSPC_lung |
| NRBF2              | 0.25240733 | 1.83554245 | 0.133 | 0.256 | 1 HSPC_lung |
| ENSMMUG00000002324 | 0.25273687 | 1.65693347 | 0.467 | 0.554 | 1 HSPC_lung |
| CWC15              | 0.25365634 | 0.8528168  | 0.367 | 0.644 | 1 HSPC_lung |
| DOCK11             | 0.25387026 | 0.77834517 | 0.233 | 0.428 | 1 HSPC_lung |

|                    |            |            |       |       |             |
|--------------------|------------|------------|-------|-------|-------------|
| BZW1               | 0.25416552 | 0.60247051 | 0.4   | 0.681 | 1 HSPC_lung |
| SELENOS            | 0.25450748 | 1.02074508 | 0.367 | 0.676 | 1 HSPC_lung |
| RNF145             | 0.25565426 | 0.88663305 | 0.233 | 0.411 | 1 HSPC_lung |
| PEAK1              | 0.25584556 | 0.71489771 | 0.133 | 0.25  | 1 HSPC_lung |
| RPL6               | 0.25679119 | 0.29065963 | 0.833 | 0.903 | 1 HSPC_lung |
| ZNHIT1             | 0.25695844 | 0.6816473  | 0.3   | 0.549 | 1 HSPC_lung |
| SCLT1              | 0.25797045 | 1.16506262 | 0.267 | 0.479 | 1 HSPC_lung |
| ENSMMUG00000031947 | 0.25826836 | 1.13040169 | 0.533 | 0.7   | 1 HSPC_lung |
| LAGE3              | 0.25856768 | 1.76023397 | 0.133 | 0.258 | 1 HSPC_lung |
| EXOC1              | 0.25868262 | 0.67631448 | 0.233 | 0.404 | 1 HSPC_lung |
| RPLP2              | 0.25938423 | 0.30762886 | 0.8   | 0.905 | 1 HSPC_lung |
| PRKAG1             | 0.25970382 | 1.61956371 | 0.133 | 0.258 | 1 HSPC_lung |
| NBEAL1             | 0.26032503 | 1.34733062 | 0.2   | 0.364 | 1 HSPC_lung |
| BRD4               | 0.26092989 | 1.11540024 | 0.267 | 0.468 | 1 HSPC_lung |
| GART               | 0.26163549 | 0.66073272 | 0.167 | 0.303 | 1 HSPC_lung |
| C1H1orf43          | 0.26216548 | 0.58088644 | 0.133 | 0.25  | 1 HSPC_lung |
| VTI1B              | 0.26330181 | 0.66205212 | 0.133 | 0.251 | 1 HSPC_lung |
| FNTB               | 0.26374275 | 0.53408746 | 0.333 | 0.587 | 1 HSPC_lung |
| CYFIP1             | 0.26479542 | 1.62596065 | 0.133 | 0.26  | 1 HSPC_lung |
| POLR2F             | 0.26734429 | 0.70852588 | 0.333 | 0.549 | 1 HSPC_lung |
| CENPM              | 0.26759346 | 0.55419025 | 0.2   | 0.348 | 1 HSPC_lung |
| PDIA4              | 0.26813043 | 0.1550208  | 0.167 | 0.301 | 1 HSPC_lung |
| JOSD1              | 0.26840066 | 1.30792006 | 0.133 | 0.256 | 1 HSPC_lung |
| TMEM123            | 0.26848057 | 0.76705656 | 0.333 | 0.597 | 1 HSPC_lung |
| POLR2C             | 0.26904448 | 0.79678063 | 0.133 | 0.255 | 1 HSPC_lung |
| FUZ                | 0.26918203 | 0.98419031 | 0.133 | 0.25  | 1 HSPC_lung |
| CNOT7              | 0.2693396  | 0.83634686 | 0.167 | 0.306 | 1 HSPC_lung |
| TEX264             | 0.26994595 | 2.09874834 | 0.2   | 0.356 | 1 HSPC_lung |
| PLIN3              | 0.27037755 | 0.83915874 | 0.167 | 0.303 | 1 HSPC_lung |
| GUK1               | 0.2708438  | 2.00113902 | 0.2   | 0.368 | 1 HSPC_lung |
| CFAP97             | 0.27150476 | 1.11374051 | 0.133 | 0.251 | 1 HSPC_lung |
| RHOG               | 0.27214674 | 1.87447027 | 0.333 | 0.329 | 1 HSPC_lung |
| ITPR2              | 0.27223218 | 1.23405375 | 0.5   | 0.554 | 1 HSPC_lung |

|                     |            |            |       |       |             |
|---------------------|------------|------------|-------|-------|-------------|
| MRPL33              | 0.27249447 | 0.77264916 | 0.267 | 0.468 | 1 HSPC_lung |
| SEPTIN2             | 0.27306772 | 0.83685927 | 0.3   | 0.544 | 1 HSPC_lung |
| COG3                | 0.2731656  | 1.34044016 | 0.133 | 0.255 | 1 HSPC_lung |
| MKKS                | 0.2745005  | 1.42923464 | 0.2   | 0.368 | 1 HSPC_lung |
| TBCK                | 0.27511212 | 0.8907596  | 0.167 | 0.293 | 1 HSPC_lung |
| CTDNEP1             | 0.27638245 | 1.29157313 | 0.2   | 0.364 | 1 HSPC_lung |
| IL6ST               | 0.27654336 | 0.91914665 | 0.167 | 0.306 | 1 HSPC_lung |
| CTBP2               | 0.27691918 | 0.6591817  | 0.167 | 0.296 | 1 HSPC_lung |
| ASL                 | 0.27767832 | 1.05129907 | 0.167 | 0.309 | 1 HSPC_lung |
| ZFP36               | 0.27794564 | 0.77126959 | 0.3   | 0.524 | 1 HSPC_lung |
| GBE1                | 0.27877757 | 2.13312268 | 0.367 | 0.376 | 1 HSPC_lung |
| BCOR                | 0.27904223 | 2.15796074 | 0.133 | 0.256 | 1 HSPC_lung |
| INTS6               | 0.27943877 | 0.46790229 | 0.333 | 0.551 | 1 HSPC_lung |
| DENND4C             | 0.28108973 | 0.94928751 | 0.267 | 0.464 | 1 HSPC_lung |
| NCF4                | 0.28143768 | 2.10498755 | 0.267 | 0.228 | 1 HSPC_lung |
| SNAPC5              | 0.28237798 | 0.44880433 | 0.133 | 0.25  | 1 HSPC_lung |
| CD81                | 0.28280638 | 0.90407318 | 0.3   | 0.524 | 1 HSPC_lung |
| CCDC59              | 0.28816569 | 0.4502241  | 0.267 | 0.444 | 1 HSPC_lung |
| TBPL1               | 0.28916216 | 0.36841961 | 0.233 | 0.396 | 1 HSPC_lung |
| ENSMMUG000000021539 | 0.28958066 | 2.20568174 | 0.167 | 0.309 | 1 HSPC_lung |
| ANKRD12             | 0.29060455 | 1.19886408 | 0.4   | 0.705 | 1 HSPC_lung |
| BTG2                | 0.29100712 | 0.7965159  | 0.333 | 0.596 | 1 HSPC_lung |
| RNF144A             | 0.29384985 | 0.83228815 | 0.2   | 0.351 | 1 HSPC_lung |
| UBE2A               | 0.29422895 | 0.68599639 | 0.167 | 0.295 | 1 HSPC_lung |
| ZSWIM6              | 0.29565602 | 2.34832783 | 0.4   | 0.453 | 1 HSPC_lung |
| ATOX1               | 0.29637049 | 0.2852868  | 0.333 | 0.537 | 1 HSPC_lung |
| PSMD4               | 0.29661848 | 0.90916777 | 0.233 | 0.416 | 1 HSPC_lung |
| RNF213              | 0.29827707 | 0.90348539 | 0.267 | 0.439 | 1 HSPC_lung |
| MICU1               | 0.2998702  | 0.57356538 | 0.3   | 0.493 | 1 HSPC_lung |
| PDLIM5              | 0.30180938 | 2.35952873 | 0.333 | 0.326 | 1 HSPC_lung |
| ACTR2               | 0.30303445 | 0.90283689 | 0.567 | 0.71  | 1 HSPC_lung |
| ATG12               | 0.3042009  | 0.63503317 | 0.333 | 0.564 | 1 HSPC_lung |
| LIMD2               | 0.30486937 | 1.10253836 | 0.4   | 0.421 | 1 HSPC_lung |

|                    |            |            |       |       |             |
|--------------------|------------|------------|-------|-------|-------------|
| CYLD               | 0.30673199 | 1.78873724 | 0.167 | 0.303 | 1 HSPC_lung |
| SAMM50             | 0.30692834 | 0.26769652 | 0.2   | 0.338 | 1 HSPC_lung |
| ABHD16A            | 0.30733401 | 1.11725915 | 0.167 | 0.303 | 1 HSPC_lung |
| TGFBR2             | 0.30808061 | 0.66698158 | 0.2   | 0.344 | 1 HSPC_lung |
| GALNT7             | 0.30818365 | 1.18850447 | 0.3   | 0.502 | 1 HSPC_lung |
| ARHGDI A           | 0.30879476 | 0.94357628 | 0.2   | 0.354 | 1 HSPC_lung |
| CNOT8              | 0.30981879 | 0.75444538 | 0.2   | 0.344 | 1 HSPC_lung |
| RBMX               | 0.31098748 | 0.56269088 | 0.433 | 0.765 | 1 HSPC_lung |
| PRDX1              | 0.31226416 | 0.50022945 | 0.4   | 0.661 | 1 HSPC_lung |
| ENSMMUG00000061298 | 0.31230456 | 1.35294527 | 0.167 | 0.295 | 1 HSPC_lung |
| PTK2B              | 0.31267002 | 2.79162207 | 0.267 | 0.243 | 1 HSPC_lung |
| SATB1              | 0.31297583 | 0.762163   | 0.2   | 0.348 | 1 HSPC_lung |
| INPP4B             | 0.31409924 | 1.42807549 | 0.233 | 0.376 | 1 HSPC_lung |
| POLR1F             | 0.31571679 | 1.4489632  | 0.2   | 0.359 | 1 HSPC_lung |
| MAN1A1             | 0.31724446 | 2.08959373 | 0.367 | 0.369 | 1 HSPC_lung |
| WIPF1              | 0.32010957 | 1.60304459 | 0.3   | 0.527 | 1 HSPC_lung |
| AMD1               | 0.32015465 | 0.6827561  | 0.4   | 0.686 | 1 HSPC_lung |
| NDUFB7             | 0.32046918 | 0.81858598 | 0.367 | 0.592 | 1 HSPC_lung |
| SWT1               | 0.32165669 | 1.63130259 | 0.167 | 0.281 | 1 HSPC_lung |
| MAP4K4             | 0.32186322 | 1.75364701 | 0.533 | 0.651 | 1 HSPC_lung |
| RPL5               | 0.32201958 | 0.36054145 | 0.833 | 0.9   | 1 HSPC_lung |
| SCYL2              | 0.32257179 | 0.34994027 | 0.2   | 0.328 | 1 HSPC_lung |
| MAML3              | 0.32326223 | 0.69793757 | 0.333 | 0.514 | 1 HSPC_lung |
| C12H2orf76         | 0.32592893 | 1.89253324 | 0.167 | 0.298 | 1 HSPC_lung |
| SOD2               | 0.32655611 | 0.12473154 | 0.3   | 0.502 | 1 HSPC_lung |
| SLC4A7             | 0.32675941 | 1.19276489 | 0.3   | 0.516 | 1 HSPC_lung |
| PHACTR2            | 0.33035467 | 0.95580533 | 0.2   | 0.341 | 1 HSPC_lung |
| ELF1               | 0.33055273 | 0.39519062 | 0.533 | 0.837 | 1 HSPC_lung |
| ATP5MC1            | 0.33151749 | 0.98951133 | 0.233 | 0.393 | 1 HSPC_lung |
| WDR74              | 0.33310787 | 1.6456855  | 0.3   | 0.534 | 1 HSPC_lung |
| GNB2               | 0.33530357 | 1.39278401 | 0.3   | 0.536 | 1 HSPC_lung |
| SMIM1              | 0.33562185 | 0.19679514 | 0.267 | 0.404 | 1 HSPC_lung |
| TINF2              | 0.33570378 | 1.01901628 | 0.533 | 0.694 | 1 HSPC_lung |

|                    |            |            |       |       |             |
|--------------------|------------|------------|-------|-------|-------------|
| ANKRD13C           | 0.33649454 | 0.83467712 | 0.167 | 0.283 | 1 HSPC_lung |
| COX7A2             | 0.33737751 | 0.5586689  | 0.267 | 0.466 | 1 HSPC_lung |
| MRPL51             | 0.34124595 | 0.66665715 | 0.367 | 0.637 | 1 HSPC_lung |
| PDRG1              | 0.34172201 | 1.20534278 | 0.233 | 0.398 | 1 HSPC_lung |
| NHP2               | 0.34269992 | 0.37352748 | 0.3   | 0.517 | 1 HSPC_lung |
| MPHOSPH6           | 0.34439965 | 0.93908443 | 0.167 | 0.283 | 1 HSPC_lung |
| MRPL46             | 0.34619717 | 1.09246188 | 0.167 | 0.29  | 1 HSPC_lung |
| FBXO34             | 0.3462133  | 0.53456423 | 0.533 | 0.8   | 1 HSPC_lung |
| ENSMMUG00000061128 | 0.34648028 | 0.90842909 | 0.267 | 0.466 | 1 HSPC_lung |
| NSMCE1             | 0.34787543 | 2.34909795 | 0.333 | 0.358 | 1 HSPC_lung |
| HNRNPU             | 0.34947028 | 0.52674309 | 0.533 | 0.845 | 1 HSPC_lung |
| MICOS13            | 0.34979397 | 0.47096287 | 0.333 | 0.564 | 1 HSPC_lung |
| SMIM4              | 0.35048528 | 1.05616957 | 0.167 | 0.28  | 1 HSPC_lung |
| CD2AP              | 0.35138703 | 0.68428764 | 0.3   | 0.506 | 1 HSPC_lung |
| ATP5MPL            | 0.35269776 | 0.6502136  | 0.6   | 0.757 | 1 HSPC_lung |
| ENSMMUG00000047496 | 0.35358604 | 1.39237981 | 0.167 | 0.288 | 1 HSPC_lung |
| INPP5B             | 0.35390235 | 0.95802029 | 0.167 | 0.278 | 1 HSPC_lung |
| ETS1               | 0.35394726 | 0.98572356 | 0.2   | 0.341 | 1 HSPC_lung |
| TTC28              | 0.35443041 | 0.30136879 | 0.367 | 0.567 | 1 HSPC_lung |
| WDR1               | 0.35567381 | 0.64904209 | 0.167 | 0.286 | 1 HSPC_lung |
| PHPT1              | 0.35664364 | 1.36350905 | 0.2   | 0.344 | 1 HSPC_lung |
| ENSMMUG00000022769 | 0.35666766 | 0.65145185 | 0.467 | 0.782 | 1 HSPC_lung |
| CPD                | 0.35695044 | 2.01352392 | 0.167 | 0.288 | 1 HSPC_lung |
| STK26              | 0.35740656 | 0.82578654 | 0.3   | 0.478 | 1 HSPC_lung |
| CAPG               | 0.35755149 | 2.12712186 | 0.267 | 0.248 | 1 HSPC_lung |
| ATP5PD             | 0.36166046 | 0.82101491 | 0.3   | 0.504 | 1 HSPC_lung |
| SNX9               | 0.36324201 | 0.98540108 | 0.533 | 0.631 | 1 HSPC_lung |
| CDC37              | 0.36456438 | 1.19348271 | 0.267 | 0.471 | 1 HSPC_lung |
| MFNG               | 0.36512055 | 1.62949303 | 0.3   | 0.291 | 1 HSPC_lung |
| CHCHD2             | 0.3653803  | 0.12760924 | 0.567 | 0.802 | 1 HSPC_lung |
| FNDC3B             | 0.365682   | 1.31337833 | 0.3   | 0.502 | 1 HSPC_lung |
| GPBP1L1            | 0.3664743  | 0.97376438 | 0.367 | 0.607 | 1 HSPC_lung |
| OSGEP              | 0.36682119 | 0.46246396 | 0.167 | 0.281 | 1 HSPC_lung |

|                    |            |            |       |       |             |
|--------------------|------------|------------|-------|-------|-------------|
| ENSMMUG00000064531 | 0.36895656 | 1.10541    | 0.233 | 0.406 | 1 HSPC_lung |
| COX20              | 0.36980825 | 0.74568302 | 0.333 | 0.547 | 1 HSPC_lung |
| TPT1               | 0.37190864 | 0.18766483 | 0.867 | 0.942 | 1 HSPC_lung |
| CD83               | 0.37226162 | 3.57235739 | 0.267 | 0.256 | 1 HSPC_lung |
| IRF2BP2            | 0.37229385 | 0.86162984 | 0.167 | 0.283 | 1 HSPC_lung |
| B3GALNT2           | 0.37386812 | 1.8958245  | 0.167 | 0.28  | 1 HSPC_lung |
| BTBD9              | 0.37428518 | 0.8260352  | 0.267 | 0.429 | 1 HSPC_lung |
| DCTN3              | 0.37748443 | 0.52338169 | 0.367 | 0.614 | 1 HSPC_lung |
| NELFA              | 0.37778862 | 2.09133514 | 0.167 | 0.285 | 1 HSPC_lung |
| SIPA1L1            | 0.37911242 | 1.14004668 | 0.2   | 0.329 | 1 HSPC_lung |
| LLPH               | 0.37969812 | 0.62268725 | 0.333 | 0.547 | 1 HSPC_lung |
| SNRPD3             | 0.38036758 | 0.32130177 | 0.433 | 0.707 | 1 HSPC_lung |
| PRDX5              | 0.38383576 | 0.98602658 | 0.267 | 0.439 | 1 HSPC_lung |
| ITPRID2            | 0.38401226 | 1.7986476  | 0.167 | 0.286 | 1 HSPC_lung |
| PTP4A1             | 0.3852691  | 1.43824921 | 0.2   | 0.343 | 1 HSPC_lung |
| FTL                | 0.38660353 | 0.89336558 | 0.667 | 0.869 | 1 HSPC_lung |
| SUCLA2             | 0.38878145 | 1.27192469 | 0.167 | 0.28  | 1 HSPC_lung |
| TNFRSF14           | 0.38925629 | 1.90275875 | 0.2   | 0.341 | 1 HSPC_lung |
| RFX7               | 0.3934182  | 0.58861697 | 0.3   | 0.459 | 1 HSPC_lung |
| MED28              | 0.39346781 | 0.54687567 | 0.267 | 0.443 | 1 HSPC_lung |
| RPL37A             | 0.39562201 | 0.1613472  | 0.867 | 0.915 | 1 HSPC_lung |
| VKORC1L1           | 0.39676656 | 0.59408411 | 0.2   | 0.321 | 1 HSPC_lung |
| RARS2              | 0.39743595 | 0.84124707 | 0.167 | 0.27  | 1 HSPC_lung |
| ENSMMUG00000016894 | 0.39806731 | 0.75495029 | 0.5   | 0.637 | 1 HSPC_lung |
| EIF3K              | 0.39817784 | 0.75232553 | 0.567 | 0.784 | 1 HSPC_lung |
| ENSMMUG00000030465 | 0.39935011 | 1.27277849 | 0.433 | 0.521 | 1 HSPC_lung |
| TIMM8B             | 0.40053866 | 0.54528192 | 0.3   | 0.507 | 1 HSPC_lung |
| STX3.1             | 0.40179634 | 1.33858502 | 0.233 | 0.404 | 1 HSPC_lung |
| OSTF1              | 0.40269907 | 1.02547633 | 0.233 | 0.386 | 1 HSPC_lung |
| ATXN1              | 0.40627497 | 1.77689391 | 0.333 | 0.331 | 1 HSPC_lung |
| PIP4K2A            | 0.40714913 | 0.7479861  | 0.567 | 0.747 | 1 HSPC_lung |
| CAPZB              | 0.40868037 | 1.20011186 | 0.4   | 0.636 | 1 HSPC_lung |
| AKR1A1             | 0.40923196 | 1.7378531  | 0.233 | 0.376 | 1 HSPC_lung |



|                     |            |            |       |       |             |
|---------------------|------------|------------|-------|-------|-------------|
| COX6B1              | 0.40972658 | 1.07521901 | 0.467 | 0.586 | 1 HSPC_lung |
| ARHGAP25            | 0.41013958 | 1.26397658 | 0.2   | 0.323 | 1 HSPC_lung |
| CYRIB               | 0.41142734 | 0.61378374 | 0.4   | 0.666 | 1 HSPC_lung |
| THUMPD2             | 0.41174152 | 0.9696317  | 0.267 | 0.444 | 1 HSPC_lung |
| IQGAP1              | 0.41219524 | 1.16515115 | 0.433 | 0.488 | 1 HSPC_lung |
| PGAP1               | 0.41258477 | 0.98997889 | 0.3   | 0.276 | 1 HSPC_lung |
| EML4                | 0.41500032 | 1.75934802 | 0.433 | 0.541 | 1 HSPC_lung |
| ELOC                | 0.41525992 | 0.88180985 | 0.267 | 0.426 | 1 HSPC_lung |
| TOMM7               | 0.41578553 | 0.43392362 | 0.733 | 0.797 | 1 HSPC_lung |
| TMC6                | 0.41718425 | 1.35806657 | 0.167 | 0.275 | 1 HSPC_lung |
| PPP3CA              | 0.41802524 | 0.92003765 | 0.433 | 0.719 | 1 HSPC_lung |
| TOX                 | 0.42019274 | 0.89239265 | 0.567 | 0.641 | 1 HSPC_lung |
| ENSMMUG00000016665  | 0.42067919 | 0.68742509 | 0.5   | 0.679 | 1 HSPC_lung |
| CASP4               | 0.42420456 | 1.28580076 | 0.167 | 0.265 | 1 HSPC_lung |
| MED23               | 0.42533212 | 2.1119443  | 0.233 | 0.401 | 1 HSPC_lung |
| UXT                 | 0.42695222 | 0.46553071 | 0.233 | 0.376 | 1 HSPC_lung |
| ZBTB1               | 0.42896363 | 1.64373356 | 0.167 | 0.278 | 1 HSPC_lung |
| IFI27L2             | 0.43030714 | 1.3415458  | 0.467 | 0.581 | 1 HSPC_lung |
| PSAP                | 0.43109821 | 1.06619875 | 0.233 | 0.381 | 1 HSPC_lung |
| RPS19BP1            | 0.43247152 | 1.00814519 | 0.233 | 0.371 | 1 HSPC_lung |
| NCKAP1L             | 0.43620899 | 1.60028645 | 0.233 | 0.373 | 1 HSPC_lung |
| PSMB7               | 0.4371294  | 0.43245935 | 0.467 | 0.74  | 1 HSPC_lung |
| NSD3                | 0.4375695  | 0.63923345 | 0.433 | 0.727 | 1 HSPC_lung |
| XYLT1               | 0.43851078 | 0.92915549 | 0.5   | 0.617 | 1 HSPC_lung |
| C11H12orf57         | 0.43901188 | 1.15887378 | 0.467 | 0.566 | 1 HSPC_lung |
| CLDND1              | 0.44018749 | 2.38584964 | 0.233 | 0.371 | 1 HSPC_lung |
| YWHAZ               | 0.44182968 | 0.63303239 | 0.633 | 0.762 | 1 HSPC_lung |
| DGKB                | 0.44777311 | 1.88895766 | 0.2   | 0.331 | 1 HSPC_lung |
| AAMDC               | 0.44781847 | 0.69568981 | 0.2   | 0.328 | 1 HSPC_lung |
| ENSMMUG000000061913 | 0.44891942 | 0.3626023  | 0.433 | 0.651 | 1 HSPC_lung |
| ARHGEF1             | 0.4513861  | 1.62269572 | 0.167 | 0.273 | 1 HSPC_lung |
| MYL12B              | 0.45278911 | 1.05947489 | 0.533 | 0.755 | 1 HSPC_lung |
| COX7B               | 0.45345224 | 0.68902983 | 0.5   | 0.725 | 1 HSPC_lung |

|                    |            |            |       |       |             |
|--------------------|------------|------------|-------|-------|-------------|
| LDB1               | 0.45378707 | 1.62734308 | 0.2   | 0.326 | 1 HSPC_lung |
| ENSMMUG00000055627 | 0.45444774 | 0.8211219  | 0.6   | 0.734 | 1 HSPC_lung |
| PRKACB             | 0.45790488 | 0.45719312 | 0.333 | 0.502 | 1 HSPC_lung |
| STARD7             | 0.45916629 | 1.69580666 | 0.333 | 0.369 | 1 HSPC_lung |
| TET2               | 0.45981907 | 0.93991202 | 0.233 | 0.371 | 1 HSPC_lung |
| GPATCH2L           | 0.46144677 | 1.31977534 | 0.167 | 0.27  | 1 HSPC_lung |
| IKZF2              | 0.46438374 | 0.48999728 | 0.267 | 0.398 | 1 HSPC_lung |
| UBR4               | 0.46554725 | 1.50848857 | 0.3   | 0.507 | 1 HSPC_lung |
| PGK1               | 0.46652326 | 0.14998829 | 0.4   | 0.636 | 1 HSPC_lung |
| ENSMMUG00000041517 | 0.46679913 | 0.81423093 | 0.2   | 0.308 | 1 HSPC_lung |
| HNRNPDL            | 0.46853385 | 0.82883556 | 0.533 | 0.772 | 1 HSPC_lung |
| GABPA              | 0.47152945 | 1.00388934 | 0.167 | 0.256 | 1 HSPC_lung |
| ENSMMUG00000008587 | 0.47700342 | 0.69716623 | 0.233 | 0.354 | 1 HSPC_lung |
| KLHDC4             | 0.47710291 | 0.47123665 | 0.167 | 0.258 | 1 HSPC_lung |
| ENSMMUG00000017466 | 0.48060801 | 0.72419977 | 0.567 | 0.76  | 1 HSPC_lung |
| PER1               | 0.48184768 | 1.33335954 | 0.267 | 0.416 | 1 HSPC_lung |
| SLC25A43           | 0.48216515 | 0.59523607 | 0.433 | 0.682 | 1 HSPC_lung |
| RPS6KA3            | 0.48399551 | 1.39942465 | 0.267 | 0.391 | 1 HSPC_lung |
| CHRA1              | 0.48421228 | 1.622833   | 0.267 | 0.258 | 1 HSPC_lung |
| P4HA1              | 0.48480259 | 1.53940077 | 0.2   | 0.304 | 1 HSPC_lung |
| FOSB               | 0.48747817 | 1.46389695 | 0.467 | 0.594 | 1 HSPC_lung |
| ENSMMUG00000055457 | 0.49410306 | 0.80601092 | 0.3   | 0.469 | 1 HSPC_lung |
| GNA15              | 0.49557545 | 1.96065354 | 0.267 | 0.266 | 1 HSPC_lung |
| OSTC               | 0.49758436 | 0.58108915 | 0.4   | 0.679 | 1 HSPC_lung |
| ENSMMUG00000064692 | 0.49998171 | 0.19434282 | 0.5   | 0.73  | 1 HSPC_lung |
| ACTG1              | 0.50046255 | 0.32956222 | 0.633 | 0.714 | 1 HSPC_lung |
| ATP6V1G1           | 0.50198462 | 0.97167065 | 0.4   | 0.705 | 1 HSPC_lung |
| RGS18              | 0.50305199 | 1.72905106 | 0.267 | 0.265 | 1 HSPC_lung |
| NDUFB2             | 0.50380939 | 1.02780254 | 0.5   | 0.687 | 1 HSPC_lung |
| SH3KBP1            | 0.50432275 | 1.7007945  | 0.367 | 0.381 | 1 HSPC_lung |
| ENSMMUG00000006463 | 0.50593447 | 0.50928915 | 0.567 | 0.775 | 1 HSPC_lung |
| ROMO1              | 0.50673894 | 0.57087481 | 0.4   | 0.707 | 1 HSPC_lung |
| DAZAP1             | 0.50719762 | 0.16419984 | 0.5   | 0.787 | 1 HSPC_lung |

|                    |            |            |       |       |             |
|--------------------|------------|------------|-------|-------|-------------|
| MRPL38             | 0.50874266 | 1.94930195 | 0.2   | 0.308 | 1 HSPC_lung |
| PSMB8              | 0.51309802 | 1.29951365 | 0.267 | 0.413 | 1 HSPC_lung |
| COX8A              | 0.51392575 | 0.8015206  | 0.367 | 0.587 | 1 HSPC_lung |
| U2.106             | 0.51515435 | 2.18453742 | 0.167 | 0.255 | 1 HSPC_lung |
| ENSMMUG00000003646 | 0.51858541 | 2.08656006 | 0.167 | 0.263 | 1 HSPC_lung |
| TGFB1              | 0.52302265 | 1.66273034 | 0.167 | 0.255 | 1 HSPC_lung |
| MTIF2              | 0.52341585 | 1.29212537 | 0.233 | 0.366 | 1 HSPC_lung |
| BOLA2B             | 0.52444296 | 1.44793803 | 0.233 | 0.378 | 1 HSPC_lung |
| ENSMMUG00000012140 | 0.52471248 | 0.15335015 | 0.867 | 0.897 | 1 HSPC_lung |
| CORO1A             | 0.52654493 | 1.59495729 | 0.233 | 0.351 | 1 HSPC_lung |
| GLO1               | 0.52970912 | 0.68277134 | 0.233 | 0.351 | 1 HSPC_lung |
| NDUFA2             | 0.53363195 | 0.97291787 | 0.467 | 0.622 | 1 HSPC_lung |
| HS2ST1             | 0.53532631 | 1.1931473  | 0.3   | 0.461 | 1 HSPC_lung |
| ESYT1              | 0.53668665 | 1.63342777 | 0.367 | 0.418 | 1 HSPC_lung |
| PSENE1             | 0.53933244 | 2.09987659 | 0.3   | 0.341 | 1 HSPC_lung |
| GNG10              | 0.5394317  | 0.66681848 | 0.233 | 0.353 | 1 HSPC_lung |
| ADD3               | 0.5394369  | 0.75372321 | 0.267 | 0.393 | 1 HSPC_lung |
| ENSMMUG00000059742 | 0.54129204 | 0.66074564 | 0.267 | 0.399 | 1 HSPC_lung |
| RAB37              | 0.54179334 | 2.0281754  | 0.2   | 0.316 | 1 HSPC_lung |
| PSME1              | 0.54359249 | 0.56739819 | 0.433 | 0.715 | 1 HSPC_lung |
| SEPTIN9            | 0.54360365 | 1.6509918  | 0.2   | 0.314 | 1 HSPC_lung |
| GCN1               | 0.5483779  | 0.19233621 | 0.833 | 0.895 | 1 HSPC_lung |
| SNU13              | 0.54972316 | 1.09450675 | 0.5   | 0.704 | 1 HSPC_lung |
| TSC22D1            | 0.54984815 | 0.68950985 | 0.333 | 0.539 | 1 HSPC_lung |
| ENSMMUG00000047632 | 0.5542987  | 1.72137485 | 0.3   | 0.311 | 1 HSPC_lung |
| DDX17              | 0.55561371 | 1.20453971 | 0.533 | 0.799 | 1 HSPC_lung |
| ARPC2              | 0.560384   | 1.37405473 | 0.367 | 0.434 | 1 HSPC_lung |
| ENSMMUG00000014648 | 0.5607116  | 0.19350137 | 0.467 | 0.702 | 1 HSPC_lung |
| DIAPH2             | 0.56556281 | 1.8368642  | 0.333 | 0.363 | 1 HSPC_lung |
| ENSMMUG00000003073 | 0.56965296 | 0.34222404 | 0.7   | 0.884 | 1 HSPC_lung |
| EMD                | 0.56988382 | 2.79938179 | 0.2   | 0.313 | 1 HSPC_lung |
| AOPEP              | 0.57088003 | 1.91404499 | 0.433 | 0.544 | 1 HSPC_lung |
| TPM4               | 0.57249608 | 1.68129771 | 0.3   | 0.338 | 1 HSPC_lung |

|                    |            |            |       |       |             |
|--------------------|------------|------------|-------|-------|-------------|
| SYAP1              | 0.57491415 | 1.18900392 | 0.3   | 0.458 | 1 HSPC_lung |
| PLEKHA5            | 0.57523017 | 1.00391957 | 0.267 | 0.394 | 1 HSPC_lung |
| NDUFA6             | 0.57575556 | 0.77925516 | 0.367 | 0.586 | 1 HSPC_lung |
| GPSM3              | 0.57630396 | 1.30117307 | 0.233 | 0.358 | 1 HSPC_lung |
| PPA1               | 0.57864307 | 1.08769492 | 0.267 | 0.408 | 1 HSPC_lung |
| PRKCA              | 0.58124917 | 1.9752431  | 0.3   | 0.324 | 1 HSPC_lung |
| ZNF521             | 0.58382385 | 0.90318953 | 0.367 | 0.408 | 1 HSPC_lung |
| KRTCAP2            | 0.58821939 | 0.91222181 | 0.533 | 0.742 | 1 HSPC_lung |
| RILPL2             | 0.58838665 | 1.49910727 | 0.233 | 0.323 | 1 HSPC_lung |
| RPS29              | 0.5885216  | 0.15203385 | 0.833 | 0.918 | 1 HSPC_lung |
| WBP4               | 0.58953224 | 0.82725034 | 0.267 | 0.388 | 1 HSPC_lung |
| MRPL23             | 0.60510513 | 1.03833614 | 0.433 | 0.592 | 1 HSPC_lung |
| CFL1               | 0.60568386 | 0.65418858 | 0.567 | 0.78  | 1 HSPC_lung |
| MTHFD2             | 0.607583   | 2.23114713 | 0.233 | 0.351 | 1 HSPC_lung |
| SRSF7              | 0.6077079  | 0.31909475 | 0.467 | 0.794 | 1 HSPC_lung |
| TXNIP              | 0.60835714 | 0.87437658 | 0.367 | 0.522 | 1 HSPC_lung |
| RAB21              | 0.60851163 | 1.81479878 | 0.233 | 0.353 | 1 HSPC_lung |
| ENSMMUG00000056126 | 0.6086663  | 1.39922799 | 0.233 | 0.356 | 1 HSPC_lung |
| N4BP2L2            | 0.61132088 | 1.17748962 | 0.467 | 0.619 | 1 HSPC_lung |
| VAMP8              | 0.61285679 | 0.51369697 | 0.4   | 0.614 | 1 HSPC_lung |
| SLIRP              | 0.61299685 | 0.45226244 | 0.567 | 0.759 | 1 HSPC_lung |
| ATP5PF             | 0.61686294 | 0.66871679 | 0.433 | 0.707 | 1 HSPC_lung |
| MYL6               | 0.61801118 | 1.31463523 | 0.467 | 0.672 | 1 HSPC_lung |
| CRTC3              | 0.61867261 | 1.22822129 | 0.233 | 0.323 | 1 HSPC_lung |
| EXT1               | 0.61886011 | 0.46447532 | 0.333 | 0.464 | 1 HSPC_lung |
| ARPC3              | 0.6225041  | 0.42463059 | 0.567 | 0.772 | 1 HSPC_lung |
| TNIK               | 0.62290645 | 0.77140413 | 0.367 | 0.567 | 1 HSPC_lung |
| ENSMMUG00000041688 | 0.62322429 | 0.80708257 | 0.2   | 0.283 | 1 HSPC_lung |
| CUTA               | 0.62781767 | 1.38466136 | 0.4   | 0.526 | 1 HSPC_lung |
| USP37              | 0.62879856 | 1.84317923 | 0.3   | 0.453 | 1 HSPC_lung |
| PCF11              | 0.62975777 | 1.65110234 | 0.3   | 0.474 | 1 HSPC_lung |
| IST1               | 0.63022441 | 1.11011064 | 0.267 | 0.389 | 1 HSPC_lung |
| RAC2               | 0.63185749 | 0.99101067 | 0.3   | 0.319 | 1 HSPC_lung |

|                     |            |            |       |       |             |
|---------------------|------------|------------|-------|-------|-------------|
| AP1S1               | 0.63638874 | 0.99414992 | 0.2   | 0.281 | 1 HSPC_lung |
| KDM3B               | 0.63793662 | 1.01853875 | 0.367 | 0.547 | 1 HSPC_lung |
| POLR1D              | 0.63850658 | 0.56858643 | 0.367 | 0.571 | 1 HSPC_lung |
| RPS16               | 0.63852815 | 0.11039698 | 0.8   | 0.9   | 1 HSPC_lung |
| ENSMMUG000000012203 | 0.63949559 | 1.68875947 | 0.333 | 0.379 | 1 HSPC_lung |
| TEC                 | 0.64025179 | 1.11696284 | 0.4   | 0.511 | 1 HSPC_lung |
| SRP14               | 0.6410277  | 0.45172543 | 0.567 | 0.81  | 1 HSPC_lung |
| ENSMMUG000000032031 | 0.6430687  | 1.79478623 | 0.2   | 0.291 | 1 HSPC_lung |
| SSR4                | 0.64360349 | 0.71202182 | 0.533 | 0.742 | 1 HSPC_lung |
| ENSMMUG000000000249 | 0.6473352  | 1.82512647 | 0.267 | 0.418 | 1 HSPC_lung |
| ZNF280D             | 0.6516891  | 1.51125557 | 0.2   | 0.29  | 1 HSPC_lung |
| ATP5MG              | 0.65413791 | 0.70409238 | 0.6   | 0.817 | 1 HSPC_lung |
| HNRNPH2             | 0.65459658 | 0.16353004 | 0.8   | 0.875 | 1 HSPC_lung |
| C18H18orf32         | 0.65564214 | 0.12367951 | 0.633 | 0.875 | 1 HSPC_lung |
| PFDN1               | 0.65685547 | 0.96975625 | 0.367 | 0.586 | 1 HSPC_lung |
| ARL5B               | 0.65841449 | 2.78437411 | 0.267 | 0.295 | 1 HSPC_lung |
| COMMD4              | 0.65970108 | 1.26822915 | 0.267 | 0.401 | 1 HSPC_lung |
| ND4L                | 0.66095386 | 1.31278791 | 0.433 | 0.534 | 1 HSPC_lung |
| NFKBIA              | 0.6631528  | 0.78744493 | 0.3   | 0.448 | 1 HSPC_lung |
| NME2                | 0.6631648  | 0.38376903 | 0.6   | 0.822 | 1 HSPC_lung |
| CASK                | 0.66890584 | 1.44714322 | 0.2   | 0.278 | 1 HSPC_lung |
| DDX3X               | 0.66894181 | 1.3512935  | 0.433 | 0.666 | 1 HSPC_lung |
| ENSMMUG000000013429 | 0.67540803 | 0.22942436 | 0.967 | 0.938 | 1 HSPC_lung |
| VCL                 | 0.67777204 | 1.78558642 | 0.233 | 0.346 | 1 HSPC_lung |
| NCBP2               | 0.67811797 | 0.88241343 | 0.4   | 0.612 | 1 HSPC_lung |
| DCTN4               | 0.681183   | 0.72417201 | 0.267 | 0.386 | 1 HSPC_lung |
| OAZ1                | 0.68386122 | 1.28498666 | 0.367 | 0.602 | 1 HSPC_lung |
| EIF3G               | 0.68463599 | 0.94524782 | 0.367 | 0.561 | 1 HSPC_lung |
| EVL                 | 0.6872793  | 1.72962715 | 0.267 | 0.295 | 1 HSPC_lung |
| RNF181              | 0.69215161 | 1.70849481 | 0.367 | 0.491 | 1 HSPC_lung |
| TRIO                | 0.69298437 | 1.42185411 | 0.367 | 0.434 | 1 HSPC_lung |
| COPE                | 0.69439522 | 1.37276216 | 0.4   | 0.507 | 1 HSPC_lung |
| MAST4               | 0.69581784 | 0.92332907 | 0.233 | 0.328 | 1 HSPC_lung |

|                    |            |            |       |       |             |
|--------------------|------------|------------|-------|-------|-------------|
| ST8SIA4            | 0.701583   | 1.75322737 | 0.267 | 0.301 | 1 HSPC_lung |
| FGL2               | 0.7029913  | 1.28173476 | 0.333 | 0.522 | 1 HSPC_lung |
| CDC14A             | 0.70494198 | 1.43373624 | 0.267 | 0.388 | 1 HSPC_lung |
| AAK1               | 0.70527488 | 1.84464917 | 0.267 | 0.389 | 1 HSPC_lung |
| PFDN6              | 0.71328367 | 1.09275586 | 0.367 | 0.458 | 1 HSPC_lung |
| ENSMMUG00000058389 | 0.7158595  | 1.78950615 | 0.233 | 0.334 | 1 HSPC_lung |
| ATP6V1A            | 0.71610755 | 1.27388976 | 0.2   | 0.278 | 1 HSPC_lung |
| ERGIC3             | 0.71909259 | 1.88775739 | 0.3   | 0.363 | 1 HSPC_lung |
| PECAM1             | 0.72036603 | 1.29602194 | 0.267 | 0.29  | 1 HSPC_lung |
| ZHX2               | 0.72456054 | 1.31690612 | 0.233 | 0.318 | 1 HSPC_lung |
| GAB2               | 0.72589213 | 1.78437478 | 0.3   | 0.413 | 1 HSPC_lung |
| ENSMMUG00000064224 | 0.72605115 | 2.07395382 | 0.267 | 0.311 | 1 HSPC_lung |
| ARID5B             | 0.72924223 | 1.26322124 | 0.233 | 0.318 | 1 HSPC_lung |
| MYG1               | 0.73308557 | 1.31742498 | 0.233 | 0.329 | 1 HSPC_lung |
| HNRNPH1            | 0.7358911  | 0.76721816 | 0.533 | 0.795 | 1 HSPC_lung |
| NDUFV2             | 0.7368701  | 0.82571485 | 0.4   | 0.649 | 1 HSPC_lung |
| GMPR2              | 0.74067402 | 1.20405762 | 0.233 | 0.336 | 1 HSPC_lung |
| TMBIM6             | 0.74400537 | 0.76470028 | 0.467 | 0.727 | 1 HSPC_lung |
| ENSMMUG00000019505 | 0.74518384 | 0.76289011 | 0.5   | 0.725 | 1 HSPC_lung |
| LDHA               | 0.74537999 | 0.9580563  | 0.333 | 0.504 | 1 HSPC_lung |
| EXOC6B             | 0.75149597 | 1.27390417 | 0.2   | 0.268 | 1 HSPC_lung |
| USP36              | 0.75300106 | 1.98450514 | 0.267 | 0.401 | 1 HSPC_lung |
| ANKRD33B           | 0.75751427 | 1.90673911 | 0.2   | 0.263 | 1 HSPC_lung |
| ALDH1A1            | 0.7591123  | 1.15943468 | 0.367 | 0.416 | 1 HSPC_lung |
| ENSMMUG00000056354 | 0.76198378 | 0.46533623 | 0.667 | 0.845 | 1 HSPC_lung |
| CD37               | 0.7648776  | 0.77168211 | 0.367 | 0.493 | 1 HSPC_lung |
| SDHAF2             | 0.76553964 | 2.56828868 | 0.2   | 0.271 | 1 HSPC_lung |
| PFDN5              | 0.76746747 | 1.59772529 | 0.333 | 0.424 | 1 HSPC_lung |
| TIGAR              | 0.76781027 | 0.71408606 | 0.4   | 0.612 | 1 HSPC_lung |
| IGFLR1             | 0.76786591 | 1.76127671 | 0.2   | 0.28  | 1 HSPC_lung |
| ENSMMUG00000050845 | 0.76998163 | 1.1562488  | 0.3   | 0.409 | 1 HSPC_lung |
| ABCC1              | 0.77759463 | 2.27882287 | 0.3   | 0.366 | 1 HSPC_lung |
| TANK               | 0.77838424 | 0.81187813 | 0.433 | 0.539 | 1 HSPC_lung |

|                    |            |            |       |       |             |
|--------------------|------------|------------|-------|-------|-------------|
| RBM22              | 0.77933401 | 1.85239688 | 0.233 | 0.319 | 1 HSPC_lung |
| CNST               | 0.78029624 | 1.67649504 | 0.367 | 0.486 | 1 HSPC_lung |
| TGOLN2             | 0.78223055 | 1.59383036 | 0.2   | 0.27  | 1 HSPC_lung |
| ENSMMUG00000057449 | 0.78252209 | 0.84505014 | 0.367 | 0.526 | 1 HSPC_lung |
| ENSMMUG00000053089 | 0.78318241 | 1.0593344  | 0.233 | 0.306 | 1 HSPC_lung |
| BRWD3              | 0.78900677 | 0.94438496 | 0.233 | 0.306 | 1 HSPC_lung |
| ENSMMUG00000063637 | 0.78917768 | 0.3224471  | 0.6   | 0.85  | 1 HSPC_lung |
| ZBTB20             | 0.79031233 | 0.86797815 | 0.5   | 0.681 | 1 HSPC_lung |
| SMURF1             | 0.79460259 | 1.40127505 | 0.3   | 0.411 | 1 HSPC_lung |
| AKAP13             | 0.79530333 | 0.64758497 | 0.567 | 0.727 | 1 HSPC_lung |
| ENSMMUG00000010266 | 0.79709116 | 0.7786837  | 0.567 | 0.809 | 1 HSPC_lung |
| NDUFA1             | 0.80079156 | 0.82085877 | 0.467 | 0.71  | 1 HSPC_lung |
| CHST11             | 0.80229585 | 0.7682428  | 0.533 | 0.737 | 1 HSPC_lung |
| HMGN3              | 0.80588113 | 0.83461624 | 0.333 | 0.438 | 1 HSPC_lung |
| SPCS3              | 0.80768515 | 1.56510348 | 0.4   | 0.577 | 1 HSPC_lung |
| S100A10            | 0.8114992  | 0.80385738 | 0.467 | 0.629 | 1 HSPC_lung |
| PABPC1             | 0.82371216 | 0.3935259  | 0.667 | 0.92  | 1 HSPC_lung |
| CDK19              | 0.82958629 | 1.08682646 | 0.4   | 0.536 | 1 HSPC_lung |
| ENSMMUG00000004539 | 0.8301029  | 1.60137352 | 0.333 | 0.433 | 1 HSPC_lung |
| LAPTM5             | 0.83164001 | 1.19093925 | 0.4   | 0.557 | 1 HSPC_lung |
| SP4                | 0.83251407 | 1.34033695 | 0.2   | 0.256 | 1 HSPC_lung |
| RUBCN              | 0.83557828 | 1.38255482 | 0.233 | 0.309 | 1 HSPC_lung |
| FBXL17             | 0.84362409 | 0.66372908 | 0.367 | 0.502 | 1 HSPC_lung |
| P4HB               | 0.84816414 | 2.22659091 | 0.333 | 0.458 | 1 HSPC_lung |
| RERE               | 0.84992961 | 0.7135388  | 0.467 | 0.74  | 1 HSPC_lung |
| UBL5               | 0.85288775 | 0.85780434 | 0.467 | 0.651 | 1 HSPC_lung |
| ELOB               | 0.85409045 | 0.75199795 | 0.467 | 0.7   | 1 HSPC_lung |
| AEBP2              | 0.86176807 | 2.08242454 | 0.3   | 0.408 | 1 HSPC_lung |
| GNA14              | 0.86471641 | 0.96867294 | 0.233 | 0.28  | 1 HSPC_lung |
| LZIC               | 0.86568355 | 1.53463527 | 0.233 | 0.306 | 1 HSPC_lung |
| WDR83OS            | 0.87276998 | 1.23995333 | 0.533 | 0.774 | 1 HSPC_lung |
| MTR                | 0.872912   | 1.77291471 | 0.233 | 0.273 | 1 HSPC_lung |
| H2AFJ              | 0.88182479 | 0.55127474 | 0.5   | 0.691 | 1 HSPC_lung |

|                     |            |            |       |       |             |
|---------------------|------------|------------|-------|-------|-------------|
| COX5B               | 0.88411757 | 0.58087958 | 0.467 | 0.682 | 1 HSPC_lung |
| COX16               | 0.88415425 | 0.93451034 | 0.4   | 0.586 | 1 HSPC_lung |
| ANXA4               | 0.88824259 | 1.15203795 | 0.267 | 0.343 | 1 HSPC_lung |
| SNRPB2              | 0.89029754 | 1.06146636 | 0.367 | 0.544 | 1 HSPC_lung |
| SAT2                | 0.89166725 | 1.04159188 | 0.2   | 0.25  | 1 HSPC_lung |
| RPS27A              | 0.89210603 | 0.79325174 | 0.467 | 0.719 | 1 HSPC_lung |
| ENSMMUG000000017297 | 0.89748798 | 1.62599733 | 0.267 | 0.349 | 1 HSPC_lung |
| POC5                | 0.89804252 | 1.46096248 | 0.333 | 0.483 | 1 HSPC_lung |
| ENSMMUG000000002075 | 0.8990331  | 1.2953372  | 0.333 | 0.449 | 1 HSPC_lung |
| PIN4                | 0.89918721 | 1.25294948 | 0.3   | 0.408 | 1 HSPC_lung |
| ARHGEF6             | 0.90000385 | 2.09339621 | 0.233 | 0.283 | 1 HSPC_lung |
| MT2A                | 0.90173336 | 0.98863154 | 0.233 | 0.285 | 1 HSPC_lung |
| ENSMMUG000000056793 | 0.90381082 | 0.78493966 | 0.467 | 0.735 | 1 HSPC_lung |
| C14H11orf49         | 0.90453718 | 1.53075197 | 0.267 | 0.366 | 1 HSPC_lung |
| MCU                 | 0.90763135 | 1.73975503 | 0.3   | 0.411 | 1 HSPC_lung |
| ACTB                | 0.90969313 | 0.13049952 | 0.867 | 0.922 | 1 HSPC_lung |
| VPS28               | 0.91301282 | 1.90988038 | 0.3   | 0.426 | 1 HSPC_lung |
| SEC24B              | 0.91751007 | 1.09110646 | 0.367 | 0.484 | 1 HSPC_lung |
| MRPL52              | 0.91801247 | 1.21980445 | 0.333 | 0.476 | 1 HSPC_lung |
| LENG8               | 0.92009591 | 1.8701049  | 0.267 | 0.358 | 1 HSPC_lung |
| ENSMMUG000000015274 | 0.92191601 | 2.38242446 | 0.2   | 0.251 | 1 HSPC_lung |
| ENSMMUG000000063549 | 0.92436184 | 1.87464042 | 0.3   | 0.426 | 1 HSPC_lung |
| XRCC6               | 0.92445023 | 0.89181059 | 0.5   | 0.742 | 1 HSPC_lung |
| TPI1                | 0.92994399 | 0.92909901 | 0.367 | 0.502 | 1 HSPC_lung |
| ZFP36L1             | 0.93022085 | 2.07206852 | 0.333 | 0.471 | 1 HSPC_lung |
| RPAP2               | 0.93086072 | 1.62807079 | 0.233 | 0.296 | 1 HSPC_lung |
| TMEM258             | 0.9310178  | 0.43734994 | 0.467 | 0.694 | 1 HSPC_lung |
| RPS6KA5             | 0.93332565 | 1.31230834 | 0.467 | 0.642 | 1 HSPC_lung |
| CCDC69              | 0.94261272 | 1.91696881 | 0.233 | 0.29  | 1 HSPC_lung |
| STX10               | 0.94647308 | 1.37935898 | 0.233 | 0.303 | 1 HSPC_lung |
| STXBP2              | 0.94748154 | 2.46070406 | 0.233 | 0.303 | 1 HSPC_lung |
| SLC43A3             | 0.95000088 | 2.31073354 | 0.233 | 0.285 | 1 HSPC_lung |
| TOPORS              | 0.95115471 | 0.76322244 | 0.433 | 0.671 | 1 HSPC_lung |



|                    |            |            |       |       |                     |
|--------------------|------------|------------|-------|-------|---------------------|
| ENSMMUG00000022489 | 0.95143027 | 0.4029858  | 0.467 | 0.705 | 1 HSPC_lung         |
| ENSMMUG00000007657 | 0.95319031 | 0.46689303 | 0.533 | 0.719 | 1 HSPC_lung         |
| CD38               | 0.95602588 | 1.15352269 | 0.367 | 0.494 | 1 HSPC_lung         |
| CDK17              | 0.95648224 | 1.84587487 | 0.367 | 0.547 | 1 HSPC_lung         |
| WBP2               | 0.96487004 | 2.82098232 | 0.2   | 0.25  | 1 HSPC_lung         |
| SIK2               | 0.96576764 | 2.2285406  | 0.233 | 0.306 | 1 HSPC_lung         |
| ENO1               | 0.96661874 | 0.64802471 | 0.5   | 0.672 | 1 HSPC_lung         |
| ENSMMUG00000012419 | 0.96889558 | 0.49338456 | 0.467 | 0.715 | 1 HSPC_lung         |
| PLD3               | 0.9719583  | 1.93776287 | 0.233 | 0.295 | 1 HSPC_lung         |
| C8H8orf33          | 0.97333786 | 2.1676866  | 0.233 | 0.29  | 1 HSPC_lung         |
| MAMU-E             | 0.97411193 | 0.80033284 | 0.5   | 0.669 | 1 HSPC_lung         |
| PBX1               | 0.97420298 | 1.29069592 | 0.267 | 0.339 | 1 HSPC_lung         |
| PRKCSH             | 0.98007186 | 1.77718986 | 0.267 | 0.341 | 1 HSPC_lung         |
| WDR13              | 0.98141797 | 1.03596307 | 0.5   | 0.754 | 1 HSPC_lung         |
| ENSMMUG00000029973 | 0.98412226 | 0.84385739 | 0.433 | 0.669 | 1 HSPC_lung         |
| ENSMMUG00000016009 | 0.98476807 | 1.5167607  | 0.367 | 0.521 | 1 HSPC_lung         |
| CCNL1              | 0.98725339 | 1.29938314 | 0.6   | 0.804 | 1 HSPC_lung         |
| ABCC5              | 0.9887011  | 0.88649782 | 0.267 | 0.329 | 1 HSPC_lung         |
| UQCC2              | 0.9896995  | 1.17673579 | 0.267 | 0.331 | 1 HSPC_lung         |
| TKT                | 0.99580456 | 0.42892517 | 0.467 | 0.646 | 1 HSPC_lung         |
| FBXW7              | 0.99709863 | 1.63216622 | 0.5   | 0.72  | 1 HSPC_lung         |
| FLOT1              | 0.99794869 | 2.08033648 | 0.233 | 0.29  | 1 HSPC_lung         |
| STXBP5             | 0.99826452 | 1.72238896 | 0.367 | 0.529 | 1 HSPC_lung         |
| AFF3               | 1.26E-19   | 1.28206766 | 0.9   | 0.516 | 4.47E-15 HSPC_UCBMC |
| ENSMMUG00000049151 | 4.00E-19   | 1.09723734 | 0.944 | 0.806 | 1.42E-14 HSPC_UCBMC |
| RHOH               | 4.59E-18   | 1.38344127 | 0.9   | 0.495 | 1.63E-13 HSPC_UCBMC |
| TXNIP              | 1.31E-17   | 1.56153828 | 0.822 | 0.464 | 4.64E-13 HSPC_UCBMC |
| SPPL3              | 2.42E-17   | 1.6263317  | 0.867 | 0.521 | 8.58E-13 HSPC_UCBMC |
| HMG3               | 2.86E-17   | 1.78594017 | 0.8   | 0.372 | 1.01E-12 HSPC_UCBMC |
| HIVEP1             | 4.47E-17   | 1.82509774 | 0.733 | 0.351 | 1.58E-12 HSPC_UCBMC |
| GAB2               | 9.29E-17   | 1.67443968 | 0.767 | 0.348 | 3.29E-12 HSPC_UCBMC |
| STK38L             | 1.11E-16   | 1.83256574 | 0.667 | 0.296 | 3.94E-12 HSPC_UCBMC |
| ENSMMUG00000056654 | 1.13E-16   | 1.34472181 | 0.856 | 0.649 | 4.01E-12 HSPC_UCBMC |

|                   |          |            |       |       |          |            |
|-------------------|----------|------------|-------|-------|----------|------------|
| ELMO1             | 1.84E-16 | 1.18928839 | 0.922 | 0.632 | 6.52E-12 | HSPC_UCBMC |
| TAGLN2            | 8.90E-16 | 1.32880792 | 0.878 | 0.601 | 3.15E-11 | HSPC_UCBMC |
| UBE2E1            | 2.51E-15 | 1.58828371 | 0.744 | 0.401 | 8.88E-11 | HSPC_UCBMC |
| MSI2              | 2.59E-15 | 1.04092663 | 0.944 | 0.636 | 9.18E-11 | HSPC_UCBMC |
| CDK6              | 5.00E-15 | 1.07170451 | 0.933 | 0.66  | 1.77E-10 | HSPC_UCBMC |
| CERS6             | 6.88E-15 | 1.48843411 | 0.778 | 0.434 | 2.44E-10 | HSPC_UCBMC |
| OSBPL9            | 7.78E-15 | 1.22009202 | 0.922 | 0.699 | 2.76E-10 | HSPC_UCBMC |
| CDC42SE2          | 9.02E-15 | 1.25686044 | 0.856 | 0.713 | 3.20E-10 | HSPC_UCBMC |
| MAML3             | 9.93E-15 | 1.49040157 | 0.822 | 0.453 | 3.52E-10 | HSPC_UCBMC |
| ANXA1             | 1.15E-14 | 1.8750402  | 0.7   | 0.307 | 4.07E-10 | HSPC_UCBMC |
| NT5C2             | 1.22E-14 | 1.71382328 | 0.778 | 0.455 | 4.33E-10 | HSPC_UCBMC |
| NCOA3             | 2.08E-14 | 1.52602878 | 0.844 | 0.529 | 7.37E-10 | HSPC_UCBMC |
| LYN               | 2.08E-14 | 1.03605152 | 0.878 | 0.451 | 7.38E-10 | HSPC_UCBMC |
| TAB2              | 2.74E-14 | 1.60071393 | 0.8   | 0.468 | 9.71E-10 | HSPC_UCBMC |
| EIF2AK2           | 3.64E-14 | 1.89979953 | 0.667 | 0.312 | 1.29E-09 | HSPC_UCBMC |
| CERT1             | 6.42E-14 | 1.39682406 | 0.811 | 0.523 | 2.28E-09 | HSPC_UCBMC |
| ZNF521            | 9.68E-14 | 1.20203656 | 0.756 | 0.348 | 3.43E-09 | HSPC_UCBMC |
| SOX4              | 1.18E-13 | 1.29405007 | 0.856 | 0.523 | 4.19E-09 | HSPC_UCBMC |
| ENSMUG00000047632 | 1.42E-13 | 2.1954148  | 0.578 | 0.266 | 5.03E-09 | HSPC_UCBMC |
| CSGALNACT2        | 1.82E-13 | 1.20216972 | 0.8   | 0.449 | 6.44E-09 | HSPC_UCBMC |
| AKAP13            | 2.57E-13 | 1.1041181  | 0.9   | 0.689 | 9.12E-09 | HSPC_UCBMC |
| FCHSD2            | 2.90E-13 | 1.18864188 | 0.889 | 0.604 | 1.03E-08 | HSPC_UCBMC |
| ANKRD28           | 4.29E-13 | 1.06830976 | 0.9   | 0.567 | 1.52E-08 | HSPC_UCBMC |
| DENND1B           | 5.20E-13 | 1.23057439 | 0.622 | 0.259 | 1.84E-08 | HSPC_UCBMC |
| ANTXR2            | 6.05E-13 | 1.37315085 | 0.722 | 0.346 | 2.14E-08 | HSPC_UCBMC |
| IQGAP1            | 9.12E-13 | 1.37989682 | 0.778 | 0.436 | 3.23E-08 | HSPC_UCBMC |
| BTBD3             | 1.14E-12 | 2.52790136 | 0.389 | 0.107 | 4.03E-08 | HSPC_UCBMC |
| JAK1              | 1.45E-12 | 1.04899973 | 0.856 | 0.558 | 5.15E-08 | HSPC_UCBMC |
| MPP7              | 1.57E-12 | 1.80640048 | 0.678 | 0.344 | 5.56E-08 | HSPC_UCBMC |
| GRIK1             | 1.63E-12 | 1.32292326 | 0.667 | 0.281 | 5.78E-08 | HSPC_UCBMC |
| RIPOR2            | 2.27E-12 | 1.03234143 | 0.9   | 0.606 | 8.04E-08 | HSPC_UCBMC |
| GRID2             | 3.02E-12 | 1.38811821 | 0.656 | 0.288 | 1.07E-07 | HSPC_UCBMC |
| PTBP2             | 3.10E-12 | 1.19896672 | 0.844 | 0.608 | 1.10E-07 | HSPC_UCBMC |

|                    |          |            |       |       |          |            |
|--------------------|----------|------------|-------|-------|----------|------------|
| ACTG1              | 3.20E-12 | 0.99557688 | 0.911 | 0.677 | 1.13E-07 | HSPC_UCBMC |
| RGS6               | 5.10E-12 | 1.71513502 | 0.6   | 0.253 | 1.81E-07 | HSPC_UCBMC |
| ACTR2              | 6.19E-12 | 1.11903485 | 0.878 | 0.675 | 2.19E-07 | HSPC_UCBMC |
| DENND5A            | 6.56E-12 | 1.47188636 | 0.722 | 0.383 | 2.32E-07 | HSPC_UCBMC |
| CALCRL             | 7.22E-12 | 1.70957532 | 0.6   | 0.259 | 2.56E-07 | HSPC_UCBMC |
| TMSB10             | 7.89E-12 | 0.72829874 | 0.967 | 0.782 | 2.79E-07 | HSPC_UCBMC |
| PTPN1              | 9.69E-12 | 1.66577126 | 0.678 | 0.372 | 3.43E-07 | HSPC_UCBMC |
| FNBP1              | 1.08E-11 | 1.17485146 | 0.822 | 0.484 | 3.82E-07 | HSPC_UCBMC |
| CCDC88A            | 1.29E-11 | 1.31830164 | 0.8   | 0.518 | 4.57E-07 | HSPC_UCBMC |
| TMCC1              | 1.35E-11 | 1.3944029  | 0.689 | 0.368 | 4.79E-07 | HSPC_UCBMC |
| CEP85L             | 1.59E-11 | 1.30120522 | 0.711 | 0.372 | 5.62E-07 | HSPC_UCBMC |
| USP3               | 1.74E-11 | 1.37757223 | 0.733 | 0.449 | 6.18E-07 | HSPC_UCBMC |
| CELF2              | 1.97E-11 | 1.19407633 | 0.811 | 0.462 | 6.99E-07 | HSPC_UCBMC |
| LPP                | 2.35E-11 | 1.34926951 | 0.644 | 0.283 | 8.33E-07 | HSPC_UCBMC |
| EMP3               | 2.51E-11 | 1.74166326 | 0.422 | 0.139 | 8.88E-07 | HSPC_UCBMC |
| PLAC8              | 2.84E-11 | 0.97356631 | 0.844 | 0.482 | 1.00E-06 | HSPC_UCBMC |
| SCFD1              | 2.85E-11 | 1.44913345 | 0.711 | 0.438 | 1.01E-06 | HSPC_UCBMC |
| SRSF5              | 3.01E-11 | 0.90020628 | 0.911 | 0.784 | 1.07E-06 | HSPC_UCBMC |
| ENSMMUG00000065104 | 3.19E-11 | 1.32616519 | 0.756 | 0.527 | 1.13E-06 | HSPC_UCBMC |
| ENSMMUG00000053539 | 3.38E-11 | 1.29758297 | 0.667 | 0.307 | 1.20E-06 | HSPC_UCBMC |
| ZBTB20             | 3.54E-11 | 0.99002219 | 0.867 | 0.64  | 1.25E-06 | HSPC_UCBMC |
| TOX                | 4.42E-11 | 0.86727752 | 0.9   | 0.593 | 1.57E-06 | HSPC_UCBMC |
| ASXL3              | 4.43E-11 | 2.13070296 | 0.411 | 0.133 | 1.57E-06 | HSPC_UCBMC |
| TET2               | 5.30E-11 | 1.37213182 | 0.622 | 0.322 | 1.88E-06 | HSPC_UCBMC |
| RAB27B             | 5.91E-11 | 2.28767017 | 0.356 | 0.105 | 2.09E-06 | HSPC_UCBMC |
| VAV3               | 6.33E-11 | 1.3106963  | 0.733 | 0.421 | 2.24E-06 | HSPC_UCBMC |
| AGO4               | 6.54E-11 | 2.31542065 | 0.333 | 0.092 | 2.32E-06 | HSPC_UCBMC |
| SEC23A             | 6.95E-11 | 1.8932     | 0.489 | 0.187 | 2.46E-06 | HSPC_UCBMC |
| ENO1               | 8.97E-11 | 1.02095795 | 0.867 | 0.63  | 3.18E-06 | HSPC_UCBMC |
| NAALADL2           | 1.04E-10 | 1.66492051 | 0.489 | 0.207 | 3.69E-06 | HSPC_UCBMC |
| TM9SF3             | 1.07E-10 | 1.10687846 | 0.856 | 0.684 | 3.80E-06 | HSPC_UCBMC |
| ENSMMUG00000046264 | 1.30E-10 | 1.22677653 | 0.778 | 0.547 | 4.59E-06 | HSPC_UCBMC |
| LRRFIP1            | 1.32E-10 | 1.22387885 | 0.767 | 0.488 | 4.69E-06 | HSPC_UCBMC |

|         |          |            |       |       |          |            |
|---------|----------|------------|-------|-------|----------|------------|
| RPS6KA5 | 1.43E-10 | 1.03017801 | 0.856 | 0.597 | 5.06E-06 | HSPC_UCBMC |
| LAPTM5  | 1.63E-10 | 1.23664107 | 0.778 | 0.512 | 5.79E-06 | HSPC_UCBMC |
| TAOK3   | 1.67E-10 | 1.28013185 | 0.844 | 0.601 | 5.91E-06 | HSPC_UCBMC |
| SEC31A  | 1.72E-10 | 1.37532355 | 0.778 | 0.512 | 6.10E-06 | HSPC_UCBMC |
| ADAM17  | 1.73E-10 | 1.42783766 | 0.656 | 0.36  | 6.12E-06 | HSPC_UCBMC |
| SRSF11  | 1.92E-10 | 0.62232029 | 0.967 | 0.841 | 6.79E-06 | HSPC_UCBMC |
| PNISR   | 1.92E-10 | 0.84629751 | 0.911 | 0.787 | 6.80E-06 | HSPC_UCBMC |
| RNF130  | 2.03E-10 | 1.09869292 | 0.7   | 0.394 | 7.21E-06 | HSPC_UCBMC |
| ITPR1   | 2.29E-10 | 1.10611649 | 0.711 | 0.401 | 8.12E-06 | HSPC_UCBMC |
| RAB2A   | 2.32E-10 | 0.92138275 | 0.844 | 0.66  | 8.21E-06 | HSPC_UCBMC |
| PDGFRA  | 2.33E-10 | 0.92213515 | 0.867 | 0.776 | 8.26E-06 | HSPC_UCBMC |
| CD74    | 2.70E-10 | 0.77931265 | 0.878 | 0.477 | 9.55E-06 | HSPC_UCBMC |
| JUND    | 2.75E-10 | 0.78878012 | 0.889 | 0.603 | 9.74E-06 | HSPC_UCBMC |
| RAB7A   | 2.95E-10 | 1.04336196 | 0.844 | 0.652 | 1.04E-05 | HSPC_UCBMC |
| TRA2A   | 3.00E-10 | 0.75867402 | 0.944 | 0.828 | 1.06E-05 | HSPC_UCBMC |
| CCSER2  | 3.08E-10 | 1.42628254 | 0.411 | 0.139 | 1.09E-05 | HSPC_UCBMC |
| RBPM5   | 3.12E-10 | 1.23043701 | 0.678 | 0.348 | 1.11E-05 | HSPC_UCBMC |
| TIMP1   | 3.42E-10 | 1.24440822 | 0.556 | 0.248 | 1.21E-05 | HSPC_UCBMC |
| MOB3A   | 3.49E-10 | 1.66110845 | 0.556 | 0.25  | 1.24E-05 | HSPC_UCBMC |
| MTPN    | 3.55E-10 | 1.08356455 | 0.711 | 0.434 | 1.26E-05 | HSPC_UCBMC |
| LSP1    | 3.72E-10 | 1.35845509 | 0.7   | 0.377 | 1.32E-05 | HSPC_UCBMC |
| LRMDA   | 3.86E-10 | 1.12444705 | 0.7   | 0.348 | 1.37E-05 | HSPC_UCBMC |
| WDR33   | 3.99E-10 | 1.29111957 | 0.756 | 0.494 | 1.41E-05 | HSPC_UCBMC |
| JMJD1C  | 5.28E-10 | 0.7505863  | 0.922 | 0.767 | 1.87E-05 | HSPC_UCBMC |
| G3BP2   | 5.32E-10 | 0.84846537 | 0.856 | 0.656 | 1.89E-05 | HSPC_UCBMC |
| UBE2E2  | 5.82E-10 | 1.07024282 | 0.644 | 0.305 | 2.06E-05 | HSPC_UCBMC |
| PRKCB   | 6.68E-10 | 1.1085386  | 0.822 | 0.51  | 2.37E-05 | HSPC_UCBMC |
| DOCK8   | 6.73E-10 | 1.13236528 | 0.756 | 0.436 | 2.38E-05 | HSPC_UCBMC |
| PAPSS1  | 7.00E-10 | 1.65052969 | 0.633 | 0.372 | 2.48E-05 | HSPC_UCBMC |
| PNN     | 7.01E-10 | 1.10936374 | 0.856 | 0.686 | 2.48E-05 | HSPC_UCBMC |
| CDC42   | 8.38E-10 | 0.76752618 | 0.933 | 0.828 | 2.97E-05 | HSPC_UCBMC |
| RPS14   | 8.40E-10 | 0.61537487 | 0.989 | 0.889 | 2.97E-05 | HSPC_UCBMC |
| SCMH1   | 9.09E-10 | 1.23013694 | 0.567 | 0.261 | 3.22E-05 | HSPC_UCBMC |

|                   |          |            |       |       |            |            |
|-------------------|----------|------------|-------|-------|------------|------------|
| CCM2              | 9.72E-10 | 1.60077562 | 0.689 | 0.416 | 3.44E-05   | HSPC_UCBMC |
| NKIRAS1           | 1.01E-09 | 0.94618621 | 0.6   | 0.303 | 3.56E-05   | HSPC_UCBMC |
| RPS4Y1            | 1.01E-09 | 0.94972009 | 0.833 | 0.612 | 3.59E-05   | HSPC_UCBMC |
| RRAS2             | 1.16E-09 | 1.38930281 | 0.567 | 0.283 | 4.10E-05   | HSPC_UCBMC |
| S1PR1             | 1.17E-09 | 1.88567133 | 0.3   | 0.083 | 4.15E-05   | HSPC_UCBMC |
| GPR107            | 1.26E-09 | 1.64848332 | 0.578 | 0.294 | 4.46E-05   | HSPC_UCBMC |
| GMFG              | 1.34E-09 | 0.80091363 | 0.9   | 0.58  | 4.75E-05   | HSPC_UCBMC |
| CD34              | 1.46E-09 | 0.99803329 | 0.678 | 0.32  | 5.16E-05   | HSPC_UCBMC |
| RFX7              | 1.47E-09 | 1.14441811 | 0.711 | 0.409 | 5.20E-05   | HSPC_UCBMC |
| ATP8B4            | 1.54E-09 | 0.72552154 | 0.678 | 0.301 | 5.46E-05   | HSPC_UCBMC |
| PPIP5K2           | 1.56E-09 | 1.17709415 | 0.7   | 0.436 | 5.53E-05   | HSPC_UCBMC |
| CNST              | 1.68E-09 | 1.13566752 | 0.711 | 0.442 | 5.97E-05   | HSPC_UCBMC |
| ZNF483            | 1.78E-09 | 1.07843766 | 0.789 | 0.595 | 6.30E-05   | HSPC_UCBMC |
| AKT3              | 2.13E-09 | 1.16871994 | 0.778 | 0.51  | 7.56E-05   | HSPC_UCBMC |
| RSRP1             | 2.29E-09 | 0.86171044 | 0.9   | 0.767 | 8.11E-05   | HSPC_UCBMC |
| FBXO33            | 2.37E-09 | 1.35947471 | 0.6   | 0.32  | 8.40E-05   | HSPC_UCBMC |
| PPP1R16B          | 2.40E-09 | 1.73692498 | 0.478 | 0.211 | 8.51E-05   | HSPC_UCBMC |
| FAM107B           | 2.42E-09 | 1.37256292 | 0.611 | 0.311 | 8.57E-05   | HSPC_UCBMC |
| PTPRC             | 2.44E-09 | 0.60687456 | 0.911 | 0.555 | 8.63E-05   | HSPC_UCBMC |
| MAMU-DRA          | 2.79E-09 | 0.80894977 | 0.822 | 0.488 | 9.89E-05   | HSPC_UCBMC |
| FOXN3             | 2.82E-09 | 0.8924591  | 0.911 | 0.758 | 9.99E-05   | HSPC_UCBMC |
| PRPF40A           | 2.86E-09 | 0.85483611 | 0.822 | 0.677 | 0.00010127 | HSPC_UCBMC |
| RPL5              | 3.00E-09 | 0.57257468 | 0.989 | 0.882 | 0.00010626 | HSPC_UCBMC |
| CYB5R4            | 3.03E-09 | 1.74350234 | 0.567 | 0.318 | 0.00010738 | HSPC_UCBMC |
| EXOC6B            | 3.05E-09 | 1.79833587 | 0.5   | 0.226 | 0.00010796 | HSPC_UCBMC |
| NRIP1             | 3.21E-09 | 0.90812036 | 0.811 | 0.553 | 0.00011356 | HSPC_UCBMC |
| CLIC1             | 3.29E-09 | 0.85816884 | 0.811 | 0.601 | 0.00011668 | HSPC_UCBMC |
| LCORL             | 3.35E-09 | 1.0310204  | 0.8   | 0.532 | 0.00011857 | HSPC_UCBMC |
| ENSMUG00000012525 | 3.43E-09 | 1.11405894 | 0.744 | 0.519 | 0.00012147 | HSPC_UCBMC |
| PBX1              | 3.52E-09 | 1.11191825 | 0.589 | 0.294 | 0.00012473 | HSPC_UCBMC |
| TMSB4X            | 3.59E-09 | 0.66394382 | 0.967 | 0.878 | 0.00012725 | HSPC_UCBMC |
| CLINT1            | 5.40E-09 | 0.88043145 | 0.844 | 0.684 | 0.00019126 | HSPC_UCBMC |
| ITPR2             | 5.46E-09 | 0.8150085  | 0.8   | 0.51  | 0.00019359 | HSPC_UCBMC |

|                   |          |            |       |       |            |            |
|-------------------|----------|------------|-------|-------|------------|------------|
| WDFY1             | 5.62E-09 | 1.38496252 | 0.456 | 0.185 | 0.00019913 | HSPC_UCBMC |
| DOCK2             | 5.63E-09 | 1.13741317 | 0.744 | 0.451 | 0.00019943 | HSPC_UCBMC |
| VPS37B            | 5.77E-09 | 1.27639322 | 0.567 | 0.288 | 0.00020449 | HSPC_UCBMC |
| MEF2C             | 5.92E-09 | 1.00340843 | 0.844 | 0.486 | 0.0002098  | HSPC_UCBMC |
| ITM2C             | 6.63E-09 | 1.0298053  | 0.611 | 0.298 | 0.00023491 | HSPC_UCBMC |
| RAP1B             | 6.91E-09 | 0.68990475 | 0.889 | 0.739 | 0.00024486 | HSPC_UCBMC |
| TMOD3             | 7.04E-09 | 1.29960013 | 0.667 | 0.401 | 0.00024945 | HSPC_UCBMC |
| TP53BP1           | 7.62E-09 | 1.13266247 | 0.744 | 0.447 | 0.00026994 | HSPC_UCBMC |
| TRIO              | 8.30E-09 | 1.18553019 | 0.667 | 0.392 | 0.00029416 | HSPC_UCBMC |
| BMPR2             | 8.63E-09 | 1.31380877 | 0.578 | 0.303 | 0.00030564 | HSPC_UCBMC |
| ZNF44             | 8.89E-09 | 1.2780771  | 0.633 | 0.403 | 0.00031511 | HSPC_UCBMC |
| SEPTIN7           | 1.02E-08 | 0.76394168 | 0.867 | 0.776 | 0.00036276 | HSPC_UCBMC |
| ZNF292            | 1.09E-08 | 0.89698382 | 0.833 | 0.623 | 0.00038566 | HSPC_UCBMC |
| BDH2              | 1.11E-08 | 2.02625508 | 0.311 | 0.098 | 0.00039221 | HSPC_UCBMC |
| YES1              | 1.16E-08 | 2.59912747 | 0.278 | 0.085 | 0.00041278 | HSPC_UCBMC |
| APBB1IP           | 1.17E-08 | 1.07209175 | 0.789 | 0.566 | 0.00041501 | HSPC_UCBMC |
| WDR48             | 1.20E-08 | 1.21191926 | 0.511 | 0.235 | 0.00042412 | HSPC_UCBMC |
| ARHGDIB           | 1.23E-08 | 0.68978876 | 0.889 | 0.614 | 0.00043559 | HSPC_UCBMC |
| PPP1R12A          | 1.35E-08 | 0.82926859 | 0.889 | 0.704 | 0.00047783 | HSPC_UCBMC |
| ENSMUG00000055114 | 1.35E-08 | 1.6857787  | 0.411 | 0.165 | 0.00047856 | HSPC_UCBMC |
| SCAPER            | 1.35E-08 | 1.32091075 | 0.578 | 0.294 | 0.00047983 | HSPC_UCBMC |
| ZNF654            | 1.39E-08 | 1.12997316 | 0.644 | 0.366 | 0.00049413 | HSPC_UCBMC |
| ROBO2             | 1.53E-08 | 0.62558154 | 0.944 | 0.786 | 0.0005406  | HSPC_UCBMC |
| MEF2A             | 1.58E-08 | 1.10724817 | 0.778 | 0.547 | 0.00056131 | HSPC_UCBMC |
| NUP54             | 1.59E-08 | 1.34423859 | 0.6   | 0.37  | 0.00056286 | HSPC_UCBMC |
| IKZF2             | 1.60E-08 | 0.89419887 | 0.656 | 0.348 | 0.0005664  | HSPC_UCBMC |
| BIRC6             | 1.62E-08 | 0.79228769 | 0.889 | 0.741 | 0.00057516 | HSPC_UCBMC |
| DPP10             | 1.65E-08 | 2.45606173 | 0.367 | 0.139 | 0.00058637 | HSPC_UCBMC |
| CUL5              | 1.66E-08 | 0.92944521 | 0.833 | 0.68  | 0.00058703 | HSPC_UCBMC |
| ELF1              | 1.81E-08 | 0.58965235 | 0.933 | 0.804 | 0.00064292 | HSPC_UCBMC |
| LMBRD1            | 1.96E-08 | 1.03557122 | 0.756 | 0.492 | 0.0006949  | HSPC_UCBMC |
| MAMU-DRB1         | 2.02E-08 | 0.61661846 | 0.844 | 0.458 | 0.00071684 | HSPC_UCBMC |
| G3BP1             | 2.05E-08 | 0.71464277 | 0.856 | 0.688 | 0.00072524 | HSPC_UCBMC |

|                    |          |            |       |       |            |            |
|--------------------|----------|------------|-------|-------|------------|------------|
| ENSMMUG00000014862 | 2.12E-08 | 1.18591422 | 0.7   | 0.506 | 0.00075227 | HSPC_UCBMC |
| DACH1              | 2.16E-08 | 1.3256555  | 0.633 | 0.338 | 0.00076556 | HSPC_UCBMC |
| PRKD3              | 2.25E-08 | 1.35835158 | 0.522 | 0.259 | 0.00079724 | HSPC_UCBMC |
| TLE4               | 2.31E-08 | 1.3704068  | 0.578 | 0.303 | 0.00082005 | HSPC_UCBMC |
| ELK3               | 2.33E-08 | 0.96074979 | 0.656 | 0.383 | 0.00082496 | HSPC_UCBMC |
| PARP8              | 2.33E-08 | 1.36583172 | 0.622 | 0.344 | 0.0008265  | HSPC_UCBMC |
| CTNNA1             | 2.43E-08 | 1.31122974 | 0.6   | 0.342 | 0.00086137 | HSPC_UCBMC |
| MYLIP              | 2.44E-08 | 0.87641788 | 0.7   | 0.399 | 0.00086419 | HSPC_UCBMC |
| ENSMMUG00000053091 | 2.50E-08 | 2.27448333 | 0.267 | 0.078 | 0.00088477 | HSPC_UCBMC |
| ELOVL5             | 2.57E-08 | 0.95883598 | 0.789 | 0.593 | 0.00091039 | HSPC_UCBMC |
| YME1L1             | 2.57E-08 | 0.80980078 | 0.767 | 0.555 | 0.00091061 | HSPC_UCBMC |
| ENSMMUG00000002324 | 2.66E-08 | 0.80610198 | 0.733 | 0.519 | 0.00094325 | HSPC_UCBMC |
| SUB1               | 2.74E-08 | 0.62490136 | 0.922 | 0.795 | 0.000971   | HSPC_UCBMC |
| CAMTA1             | 2.76E-08 | 1.07819583 | 0.7   | 0.486 | 0.0009788  | HSPC_UCBMC |
| ENSMMUG00000006463 | 2.78E-08 | 0.81122065 | 0.911 | 0.741 | 0.00098525 | HSPC_UCBMC |
| RASA2              | 2.85E-08 | 1.01595924 | 0.678 | 0.423 | 0.00101059 | HSPC_UCBMC |
| KLF10              | 2.97E-08 | 1.91099964 | 0.433 | 0.196 | 0.00105064 | HSPC_UCBMC |
| SEPTIN6            | 3.01E-08 | 0.93723958 | 0.767 | 0.555 | 0.00106811 | HSPC_UCBMC |
| ARPC3              | 3.08E-08 | 0.66315378 | 0.9   | 0.739 | 0.001092   | HSPC_UCBMC |
| LRBA               | 3.10E-08 | 0.71021501 | 0.922 | 0.806 | 0.00109955 | HSPC_UCBMC |
| USP47              | 3.20E-08 | 0.76948606 | 0.778 | 0.562 | 0.00113513 | HSPC_UCBMC |
| CTSS               | 3.31E-08 | 1.13198134 | 0.667 | 0.379 | 0.00117171 | HSPC_UCBMC |
| MFNG               | 3.33E-08 | 1.51004159 | 0.522 | 0.253 | 0.0011797  | HSPC_UCBMC |
| RAB18              | 3.34E-08 | 1.31061399 | 0.644 | 0.397 | 0.00118321 | HSPC_UCBMC |
| ENSMMUG00000014648 | 3.40E-08 | 0.82132208 | 0.856 | 0.664 | 0.00120361 | HSPC_UCBMC |
| VIM                | 3.41E-08 | 0.55691376 | 0.856 | 0.49  | 0.00120855 | HSPC_UCBMC |
| GAS7               | 3.54E-08 | 1.5585121  | 0.511 | 0.255 | 0.00125509 | HSPC_UCBMC |
| GNA14              | 3.61E-08 | 1.51874661 | 0.489 | 0.242 | 0.00128084 | HSPC_UCBMC |
| PRKCI              | 3.66E-08 | 1.44044384 | 0.456 | 0.205 | 0.00129852 | HSPC_UCBMC |
| RICTOR             | 3.80E-08 | 0.92084466 | 0.756 | 0.523 | 0.00134514 | HSPC_UCBMC |
| RAPGEF1            | 3.88E-08 | 1.36072829 | 0.556 | 0.292 | 0.00137301 | HSPC_UCBMC |
| NR3C1              | 3.89E-08 | 0.88109237 | 0.756 | 0.499 | 0.00137841 | HSPC_UCBMC |
| RYBP               | 3.92E-08 | 1.10545014 | 0.644 | 0.384 | 0.00138787 | HSPC_UCBMC |

|                    |          |            |       |       |            |            |
|--------------------|----------|------------|-------|-------|------------|------------|
| RAP1GDS1           | 4.06E-08 | 1.4455772  | 0.589 | 0.307 | 0.00143779 | HSPC_UCBMC |
| RALGAPA2           | 4.09E-08 | 0.93902038 | 0.711 | 0.468 | 0.00144842 | HSPC_UCBMC |
| TMEM106B           | 4.21E-08 | 1.6333196  | 0.489 | 0.238 | 0.00149317 | HSPC_UCBMC |
| TPT1               | 4.47E-08 | 0.4760475  | 0.989 | 0.93  | 0.0015855  | HSPC_UCBMC |
| ENSMMUG00000003073 | 4.48E-08 | 0.55510622 | 0.967 | 0.86  | 0.00158793 | HSPC_UCBMC |
| MRTFA              | 5.13E-08 | 1.27863601 | 0.656 | 0.401 | 0.001818   | HSPC_UCBMC |
| RUNX2              | 5.53E-08 | 1.72222832 | 0.433 | 0.187 | 0.00195838 | HSPC_UCBMC |
| DOCK5              | 5.55E-08 | 1.51197112 | 0.4   | 0.165 | 0.00196685 | HSPC_UCBMC |
| ENSMMUG00000045362 | 5.59E-08 | 1.57209855 | 0.378 | 0.148 | 0.00197971 | HSPC_UCBMC |
| RIMKLB             | 6.04E-08 | 1.18335742 | 0.533 | 0.268 | 0.00214095 | HSPC_UCBMC |
| ABCA1              | 6.15E-08 | 1.9463763  | 0.311 | 0.109 | 0.0021801  | HSPC_UCBMC |
| CLIC4              | 6.16E-08 | 1.18730975 | 0.644 | 0.394 | 0.00218323 | HSPC_UCBMC |
| TNPO1              | 6.22E-08 | 1.2188495  | 0.656 | 0.383 | 0.00220214 | HSPC_UCBMC |
| TRDMT1             | 6.30E-08 | 1.66350568 | 0.467 | 0.229 | 0.00223318 | HSPC_UCBMC |
| MEIS1              | 6.38E-08 | 1.06013485 | 0.6   | 0.292 | 0.00226114 | HSPC_UCBMC |
| TXNDC11            | 6.44E-08 | 1.7759585  | 0.478 | 0.238 | 0.00228329 | HSPC_UCBMC |
| PHLPP1             | 6.67E-08 | 0.96814016 | 0.722 | 0.475 | 0.00236329 | HSPC_UCBMC |
| SPTBN1             | 6.91E-08 | 1.18036234 | 0.611 | 0.331 | 0.00244863 | HSPC_UCBMC |
| TIPARP             | 6.98E-08 | 1.02948348 | 0.611 | 0.364 | 0.00247351 | HSPC_UCBMC |
| KIF1B              | 7.30E-08 | 1.17257652 | 0.467 | 0.207 | 0.00258604 | HSPC_UCBMC |
| ANXA2              | 8.29E-08 | 1.67518573 | 0.411 | 0.174 | 0.00293788 | HSPC_UCBMC |
| SENP5              | 8.54E-08 | 0.99907964 | 0.711 | 0.497 | 0.00302673 | HSPC_UCBMC |
| ERMP1              | 8.71E-08 | 2.09945066 | 0.433 | 0.201 | 0.00308558 | HSPC_UCBMC |
| LUC7L3             | 8.96E-08 | 0.71548755 | 0.867 | 0.758 | 0.0031737  | HSPC_UCBMC |
| SLC24A3            | 9.39E-08 | 0.54878103 | 0.778 | 0.508 | 0.00332803 | HSPC_UCBMC |
| RAB37              | 9.55E-08 | 1.24753667 | 0.533 | 0.274 | 0.0033827  | HSPC_UCBMC |
| ENSMMUG00000059977 | 9.55E-08 | 1.45573905 | 0.511 | 0.275 | 0.00338544 | HSPC_UCBMC |
| KDELRL1            | 9.70E-08 | 1.03647411 | 0.733 | 0.47  | 0.00343547 | HSPC_UCBMC |
| ERO1B              | 1.03E-07 | 1.0677719  | 0.689 | 0.46  | 0.00365986 | HSPC_UCBMC |
| FBXL20             | 1.04E-07 | 0.9515538  | 0.778 | 0.558 | 0.00366851 | HSPC_UCBMC |
| GPR137B            | 1.04E-07 | 1.74456099 | 0.322 | 0.115 | 0.00367171 | HSPC_UCBMC |
| ARID4B             | 1.05E-07 | 0.86845039 | 0.844 | 0.68  | 0.00371028 | HSPC_UCBMC |
| NCF4               | 1.10E-07 | 1.55281276 | 0.444 | 0.194 | 0.00388364 | HSPC_UCBMC |



|                    |          |            |       |       |            |            |
|--------------------|----------|------------|-------|-------|------------|------------|
| CASP3              | 1.10E-07 | 1.48717299 | 0.611 | 0.388 | 0.00389233 | HSPC_UCBMC |
| SNTB1              | 1.15E-07 | 1.07969453 | 0.589 | 0.322 | 0.00406786 | HSPC_UCBMC |
| MYO5A              | 1.15E-07 | 1.18268199 | 0.611 | 0.377 | 0.00407008 | HSPC_UCBMC |
| ENSMMUG00000009018 | 1.16E-07 | 1.85492144 | 0.378 | 0.161 | 0.0041129  | HSPC_UCBMC |
| CCNY               | 1.16E-07 | 0.87744167 | 0.722 | 0.481 | 0.00412678 | HSPC_UCBMC |
| ENSMMUG00000007536 | 1.20E-07 | 1.11332584 | 0.711 | 0.536 | 0.004264   | HSPC_UCBMC |
| PLCB1              | 1.28E-07 | 0.72467744 | 0.767 | 0.501 | 0.0045496  | HSPC_UCBMC |
| SIK3               | 1.30E-07 | 0.73762704 | 0.878 | 0.734 | 0.00460507 | HSPC_UCBMC |
| ZFAND6             | 1.32E-07 | 0.76690509 | 0.833 | 0.689 | 0.00466332 | HSPC_UCBMC |
| C10H20orf194       | 1.33E-07 | 1.11043231 | 0.511 | 0.25  | 0.00470276 | HSPC_UCBMC |
| SNRPN              | 1.37E-07 | 1.24015409 | 0.622 | 0.373 | 0.00486545 | HSPC_UCBMC |
| EPC1               | 1.45E-07 | 0.62795853 | 0.844 | 0.689 | 0.00512108 | HSPC_UCBMC |
| DNAJC2             | 1.47E-07 | 1.14759616 | 0.7   | 0.503 | 0.00519752 | HSPC_UCBMC |
| ENSMMUG00000014947 | 1.47E-07 | 1.48632286 | 0.533 | 0.285 | 0.0052242  | HSPC_UCBMC |
| FMNL1              | 1.48E-07 | 2.18378497 | 0.289 | 0.094 | 0.00523792 | HSPC_UCBMC |
| PRKACB             | 1.50E-07 | 0.87391685 | 0.733 | 0.455 | 0.00532527 | HSPC_UCBMC |
| ENSMMUG00000016305 | 1.52E-07 | 0.69344989 | 0.733 | 0.503 | 0.0054021  | HSPC_UCBMC |
| ENSMMUG00000055825 | 1.53E-07 | 1.10953633 | 0.622 | 0.359 | 0.00542722 | HSPC_UCBMC |
| ARHGAP6            | 1.56E-07 | 1.5268467  | 0.622 | 0.384 | 0.00554056 | HSPC_UCBMC |
| ATXN10             | 1.58E-07 | 0.84238037 | 0.789 | 0.59  | 0.00558172 | HSPC_UCBMC |
| KLHL13             | 1.58E-07 | 1.02086026 | 0.522 | 0.257 | 0.00561237 | HSPC_UCBMC |
| FBXO11             | 1.65E-07 | 0.92786012 | 0.767 | 0.595 | 0.00583975 | HSPC_UCBMC |
| NRAS               | 1.77E-07 | 1.32087748 | 0.533 | 0.301 | 0.0062811  | HSPC_UCBMC |
| SEC24B             | 1.79E-07 | 1.00222395 | 0.711 | 0.44  | 0.00635199 | HSPC_UCBMC |
| RPL28              | 1.87E-07 | 0.50548142 | 0.967 | 0.893 | 0.00661915 | HSPC_UCBMC |
| MVB12B             | 1.88E-07 | 1.03563753 | 0.6   | 0.331 | 0.00667292 | HSPC_UCBMC |
| MPZL1              | 1.95E-07 | 1.66763089 | 0.489 | 0.248 | 0.00690957 | HSPC_UCBMC |
| MAPK8              | 1.97E-07 | 1.01046307 | 0.711 | 0.464 | 0.00696281 | HSPC_UCBMC |
| ADGRB3             | 2.08E-07 | 0.57451478 | 0.633 | 0.342 | 0.00736726 | HSPC_UCBMC |
| CUL3               | 2.10E-07 | 0.84163878 | 0.833 | 0.662 | 0.00745472 | HSPC_UCBMC |
| GALNT3             | 2.15E-07 | 0.94529071 | 0.333 | 0.116 | 0.00761702 | HSPC_UCBMC |
| CBFB               | 2.20E-07 | 1.62491112 | 0.478 | 0.244 | 0.00778457 | HSPC_UCBMC |
| ZNF644             | 2.35E-07 | 0.89461821 | 0.822 | 0.656 | 0.00833892 | HSPC_UCBMC |

|                    |          |            |       |       |            |            |
|--------------------|----------|------------|-------|-------|------------|------------|
| SNX4               | 2.36E-07 | 1.19734037 | 0.622 | 0.409 | 0.00837482 | HSPC_UCBMC |
| TRPS1              | 2.37E-07 | 1.13566611 | 0.667 | 0.399 | 0.00839502 | HSPC_UCBMC |
| IL1RAP             | 2.42E-07 | 1.59911396 | 0.411 | 0.187 | 0.00857451 | HSPC_UCBMC |
| SLC4A7             | 2.43E-07 | 0.96521752 | 0.689 | 0.475 | 0.00862559 | HSPC_UCBMC |
| ATG13              | 2.46E-07 | 1.01661944 | 0.589 | 0.346 | 0.00871117 | HSPC_UCBMC |
| ENSMMUG00000056183 | 2.51E-07 | 1.00593066 | 0.633 | 0.359 | 0.00888769 | HSPC_UCBMC |
| ZNF43              | 2.62E-07 | 1.28061505 | 0.611 | 0.372 | 0.00926631 | HSPC_UCBMC |
| XYLT1              | 2.70E-07 | 0.73778082 | 0.844 | 0.573 | 0.0095673  | HSPC_UCBMC |
| DST                | 2.87E-07 | 1.77818437 | 0.456 | 0.233 | 0.01017441 | HSPC_UCBMC |
| YEATS2             | 2.89E-07 | 1.37224547 | 0.644 | 0.434 | 0.01024153 | HSPC_UCBMC |
| CTDSPL2            | 3.00E-07 | 1.05549804 | 0.644 | 0.436 | 0.01063893 | HSPC_UCBMC |
| XRN2               | 3.03E-07 | 0.86774227 | 0.756 | 0.584 | 0.01074315 | HSPC_UCBMC |
| MAP4K3             | 3.06E-07 | 1.12100113 | 0.567 | 0.322 | 0.01084938 | HSPC_UCBMC |
| ITCH               | 3.21E-07 | 0.7421409  | 0.778 | 0.603 | 0.01136765 | HSPC_UCBMC |
| RASGRP2            | 3.56E-07 | 0.93364414 | 0.544 | 0.279 | 0.01260968 | HSPC_UCBMC |
| TBC1D4             | 3.60E-07 | 1.11363056 | 0.522 | 0.279 | 0.01275964 | HSPC_UCBMC |
| PTEN               | 3.65E-07 | 0.63698128 | 0.8   | 0.606 | 0.0129438  | HSPC_UCBMC |
| RUNX1              | 3.69E-07 | 0.5055388  | 0.889 | 0.739 | 0.013065   | HSPC_UCBMC |
| SELL               | 3.82E-07 | 1.29695041 | 0.367 | 0.15  | 0.01353091 | HSPC_UCBMC |
| NKTR               | 3.95E-07 | 0.74972222 | 0.756 | 0.514 | 0.01401335 | HSPC_UCBMC |
| RACK1              | 4.58E-07 | 0.48866013 | 0.989 | 0.876 | 0.01621598 | HSPC_UCBMC |
| RAB3GAP2           | 4.60E-07 | 1.45577153 | 0.611 | 0.373 | 0.0162894  | HSPC_UCBMC |
| ATF4               | 4.63E-07 | 0.81283332 | 0.789 | 0.625 | 0.01639289 | HSPC_UCBMC |
| NIN                | 4.65E-07 | 1.24896582 | 0.456 | 0.22  | 0.01648249 | HSPC_UCBMC |
| NCKAP5L            | 4.65E-07 | 1.80361474 | 0.278 | 0.094 | 0.01648563 | HSPC_UCBMC |
| ANKRD44            | 4.73E-07 | 0.79501115 | 0.733 | 0.503 | 0.01676137 | HSPC_UCBMC |
| AP3B1              | 5.13E-07 | 0.69474211 | 0.756 | 0.545 | 0.01816784 | HSPC_UCBMC |
| ZNF92              | 5.14E-07 | 1.20723807 | 0.556 | 0.322 | 0.01821379 | HSPC_UCBMC |
| ENSMMUG00000054948 | 5.18E-07 | 1.44266014 | 0.411 | 0.19  | 0.01834979 | HSPC_UCBMC |
| ENSMMUG00000020751 | 5.24E-07 | 1.0597645  | 0.589 | 0.36  | 0.0185596  | HSPC_UCBMC |
| NDUFAF7            | 5.42E-07 | 1.00684735 | 0.467 | 0.218 | 0.01921291 | HSPC_UCBMC |
| YPEL5              | 5.53E-07 | 0.86489376 | 0.756 | 0.488 | 0.01958574 | HSPC_UCBMC |
| LPCAT2             | 5.55E-07 | 1.48422105 | 0.3   | 0.111 | 0.01965067 | HSPC_UCBMC |

|                    |          |            |       |       |            |            |
|--------------------|----------|------------|-------|-------|------------|------------|
| CD63               | 5.71E-07 | 0.54909281 | 0.756 | 0.519 | 0.02021605 | HSPC_UCBMC |
| SMAD5              | 5.90E-07 | 1.20754251 | 0.367 | 0.148 | 0.02089578 | HSPC_UCBMC |
| SSBP2              | 5.93E-07 | 0.70462814 | 0.9   | 0.76  | 0.02101053 | HSPC_UCBMC |
| RPL13A             | 5.93E-07 | 0.47491374 | 0.989 | 0.895 | 0.02102734 | HSPC_UCBMC |
| AHI1               | 6.25E-07 | 0.97158991 | 0.622 | 0.384 | 0.02215278 | HSPC_UCBMC |
| DCP1A              | 6.28E-07 | 1.18987162 | 0.656 | 0.425 | 0.02224463 | HSPC_UCBMC |
| ENSMMUG00000061824 | 6.44E-07 | 0.45928404 | 0.956 | 0.908 | 0.02280363 | HSPC_UCBMC |
| CASP12             | 6.47E-07 | 1.08570769 | 0.544 | 0.294 | 0.02293977 | HSPC_UCBMC |
| ENSMMUG00000056012 | 6.52E-07 | 0.96545803 | 0.711 | 0.536 | 0.02310487 | HSPC_UCBMC |
| ZNF682             | 6.69E-07 | 1.62787731 | 0.267 | 0.089 | 0.02372068 | HSPC_UCBMC |
| RPS16              | 6.94E-07 | 0.48111115 | 0.967 | 0.884 | 0.02459273 | HSPC_UCBMC |
| COG5               | 7.15E-07 | 0.69922417 | 0.8   | 0.649 | 0.02532149 | HSPC_UCBMC |
| UTRN               | 7.75E-07 | 0.52430655 | 0.856 | 0.63  | 0.02746163 | HSPC_UCBMC |
| RBM7               | 7.81E-07 | 1.46264303 | 0.478 | 0.24  | 0.02766551 | HSPC_UCBMC |
| ATP6V1G1           | 8.01E-07 | 0.73007133 | 0.811 | 0.671 | 0.02837163 | HSPC_UCBMC |
| CAPG               | 8.15E-07 | 1.37418073 | 0.444 | 0.216 | 0.02886095 | HSPC_UCBMC |
| KIFAP3             | 8.16E-07 | 1.94149516 | 0.367 | 0.155 | 0.02892852 | HSPC_UCBMC |
| MTSS1              | 8.37E-07 | 0.89270303 | 0.711 | 0.46  | 0.02965405 | HSPC_UCBMC |
| MAMU-E             | 8.42E-07 | 0.55195908 | 0.878 | 0.625 | 0.02982517 | HSPC_UCBMC |
| ZNF410             | 8.44E-07 | 1.27839596 | 0.556 | 0.333 | 0.02991372 | HSPC_UCBMC |
| MAX                | 8.52E-07 | 1.12202951 | 0.6   | 0.384 | 0.03017374 | HSPC_UCBMC |
| GPR141             | 1.04E-06 | 1.16099972 | 0.444 | 0.213 | 0.03668131 | HSPC_UCBMC |
| GSN                | 1.05E-06 | 1.76411021 | 0.267 | 0.092 | 0.03732068 | HSPC_UCBMC |
| ZDHHC20            | 1.05E-06 | 1.19815406 | 0.611 | 0.396 | 0.03736417 | HSPC_UCBMC |
| ENSMMUG00000055026 | 1.06E-06 | 0.88246385 | 0.744 | 0.536 | 0.0376963  | HSPC_UCBMC |
| ENSMMUG00000052424 | 1.07E-06 | 0.94266318 | 0.889 | 0.702 | 0.03806772 | HSPC_UCBMC |
| ERG                | 1.10E-06 | 0.83619746 | 0.6   | 0.314 | 0.03905887 | HSPC_UCBMC |
| LSM14A             | 1.12E-06 | 0.8214737  | 0.789 | 0.664 | 0.03967329 | HSPC_UCBMC |
| RPL34              | 1.17E-06 | 0.4248442  | 0.978 | 0.911 | 0.04161219 | HSPC_UCBMC |
| SLC25A26           | 1.19E-06 | 1.33020378 | 0.567 | 0.36  | 0.04202222 | HSPC_UCBMC |
| RPSA               | 1.19E-06 | 0.48379939 | 0.989 | 0.884 | 0.0421906  | HSPC_UCBMC |
| MRPS35             | 1.21E-06 | 1.27171641 | 0.511 | 0.279 | 0.04301882 | HSPC_UCBMC |
| SERPINB1           | 1.25E-06 | 0.48597257 | 0.611 | 0.333 | 0.04434062 | HSPC_UCBMC |

|                   |          |            |       |       |            |            |
|-------------------|----------|------------|-------|-------|------------|------------|
| RSL24D1           | 1.28E-06 | 0.73179697 | 0.778 | 0.597 | 0.04537777 | HSPC_UCBMC |
| SYK               | 1.29E-06 | 1.38028568 | 0.567 | 0.344 | 0.04558374 | HSPC_UCBMC |
| CLMN              | 1.29E-06 | 1.6170069  | 0.378 | 0.172 | 0.045856   | HSPC_UCBMC |
| TLK1              | 1.30E-06 | 0.72901408 | 0.8   | 0.63  | 0.04601627 | HSPC_UCBMC |
| DIAPH2            | 1.40E-06 | 0.79845473 | 0.578 | 0.325 | 0.04957492 | HSPC_UCBMC |
| YWHAZ             | 1.40E-06 | 0.54634428 | 0.878 | 0.736 | 0.04963374 | HSPC_UCBMC |
| MBNL2             | 1.46E-06 | 1.35378672 | 0.578 | 0.355 | 0.05167362 | HSPC_UCBMC |
| RPS27A            | 1.50E-06 | 0.69109914 | 0.811 | 0.689 | 0.05303039 | HSPC_UCBMC |
| MACF1             | 1.56E-06 | 0.84235331 | 0.7   | 0.501 | 0.05534052 | HSPC_UCBMC |
| RFX2              | 1.64E-06 | 1.33380604 | 0.533 | 0.311 | 0.05819611 | HSPC_UCBMC |
| AFF4              | 1.73E-06 | 1.17406743 | 0.589 | 0.353 | 0.06117944 | HSPC_UCBMC |
| CD44              | 1.79E-06 | 0.88205947 | 0.733 | 0.558 | 0.06345829 | HSPC_UCBMC |
| ATP10A            | 1.83E-06 | 1.05690754 | 0.411 | 0.187 | 0.06497559 | HSPC_UCBMC |
| WDFY4             | 1.88E-06 | 1.43752134 | 0.433 | 0.222 | 0.06650656 | HSPC_UCBMC |
| PCNX1             | 1.91E-06 | 0.57900098 | 0.644 | 0.421 | 0.06773152 | HSPC_UCBMC |
| ENSMUG00000004441 | 1.91E-06 | 0.88930563 | 0.5   | 0.257 | 0.06777565 | HSPC_UCBMC |
| RNF150            | 1.95E-06 | 1.32603915 | 0.389 | 0.181 | 0.0692069  | HSPC_UCBMC |
| PRKAG2            | 1.95E-06 | 1.07443763 | 0.422 | 0.196 | 0.0692501  | HSPC_UCBMC |
| AP3S1             | 1.97E-06 | 1.10392944 | 0.622 | 0.407 | 0.06990167 | HSPC_UCBMC |
| TOGARAM1          | 2.04E-06 | 1.14254644 | 0.6   | 0.37  | 0.07238529 | HSPC_UCBMC |
| SH3BGR1           | 2.10E-06 | 0.60957282 | 0.844 | 0.61  | 0.0742732  | HSPC_UCBMC |
| ZRANB2            | 2.10E-06 | 0.73690622 | 0.8   | 0.684 | 0.0743758  | HSPC_UCBMC |
| EML4              | 2.11E-06 | 0.84411069 | 0.711 | 0.506 | 0.07461056 | HSPC_UCBMC |
| TMEM263           | 2.17E-06 | 1.2550783  | 0.367 | 0.153 | 0.07677356 | HSPC_UCBMC |
| ZFR               | 2.26E-06 | 0.6872733  | 0.756 | 0.556 | 0.08000482 | HSPC_UCBMC |
| MEGF9             | 2.26E-06 | 1.31302678 | 0.289 | 0.107 | 0.08011894 | HSPC_UCBMC |
| KLHL6             | 2.27E-06 | 1.23862263 | 0.433 | 0.203 | 0.08027819 | HSPC_UCBMC |
| MTHFD1L           | 2.31E-06 | 0.89708557 | 0.622 | 0.399 | 0.08188853 | HSPC_UCBMC |
| CHN2              | 2.37E-06 | 0.89703944 | 0.567 | 0.323 | 0.0838893  | HSPC_UCBMC |
| PPTC7             | 2.37E-06 | 1.10438036 | 0.544 | 0.299 | 0.08413302 | HSPC_UCBMC |
| PIK3CA            | 2.38E-06 | 0.96626483 | 0.589 | 0.364 | 0.08424347 | HSPC_UCBMC |
| B2M               | 2.43E-06 | 0.31256704 | 1     | 0.898 | 0.08600954 | HSPC_UCBMC |
| ENSMUG00000022769 | 2.69E-06 | 0.71410255 | 0.856 | 0.752 | 0.09539394 | HSPC_UCBMC |

|                    |          |            |       |       |            |            |
|--------------------|----------|------------|-------|-------|------------|------------|
| ACTB               | 2.75E-06 | 0.41231511 | 0.967 | 0.911 | 0.09735789 | HSPC_UCBMC |
| GRK3               | 2.85E-06 | 0.7509353  | 0.7   | 0.488 | 0.10096049 | HSPC_UCBMC |
| PELI1              | 2.90E-06 | 0.77370648 | 0.644 | 0.384 | 0.10272742 | HSPC_UCBMC |
| ENSMMUG00000058818 | 3.00E-06 | 0.75882647 | 0.489 | 0.255 | 0.10624278 | HSPC_UCBMC |
| SUSD6              | 3.04E-06 | 1.1655988  | 0.611 | 0.381 | 0.10784605 | HSPC_UCBMC |
| SECISBP2L          | 3.05E-06 | 1.53008745 | 0.456 | 0.244 | 0.10799971 | HSPC_UCBMC |
| KCNQ5              | 3.09E-06 | 0.71090663 | 0.722 | 0.445 | 0.10961308 | HSPC_UCBMC |
| IGF2BP2            | 3.17E-06 | 0.60698282 | 0.844 | 0.673 | 0.11225062 | HSPC_UCBMC |
| NCK1               | 3.17E-06 | 1.22472224 | 0.522 | 0.312 | 0.11233998 | HSPC_UCBMC |
| PPHLN1             | 3.18E-06 | 0.68555672 | 0.8   | 0.643 | 0.11272796 | HSPC_UCBMC |
| EDARADD            | 3.28E-06 | 1.71571102 | 0.267 | 0.098 | 0.11634819 | HSPC_UCBMC |
| HSP90AB1           | 3.37E-06 | 0.4811247  | 0.956 | 0.854 | 0.11952504 | HSPC_UCBMC |
| CD109              | 3.43E-06 | 0.77527756 | 0.411 | 0.176 | 0.12139201 | HSPC_UCBMC |
| SSR1               | 3.46E-06 | 1.0070579  | 0.667 | 0.444 | 0.12250435 | HSPC_UCBMC |
| HNRNPDL            | 3.57E-06 | 0.64122351 | 0.833 | 0.749 | 0.12656743 | HSPC_UCBMC |
| ENSMMUG00000031367 | 3.57E-06 | 1.45609927 | 0.522 | 0.36  | 0.12662146 | HSPC_UCBMC |
| SHOC2              | 3.58E-06 | 0.5902546  | 0.8   | 0.59  | 0.12674483 | HSPC_UCBMC |
| PIK3CB             | 3.59E-06 | 0.86693828 | 0.678 | 0.471 | 0.1271934  | HSPC_UCBMC |
| ADGRL2             | 3.61E-06 | 1.70103735 | 0.311 | 0.12  | 0.1277447  | HSPC_UCBMC |
| SPOPL              | 3.63E-06 | 1.72182701 | 0.422 | 0.231 | 0.12865714 | HSPC_UCBMC |
| USP33              | 3.66E-06 | 0.91549761 | 0.656 | 0.44  | 0.12975222 | HSPC_UCBMC |
| ESYT2              | 3.94E-06 | 0.81122285 | 0.722 | 0.591 | 0.13948261 | HSPC_UCBMC |
| SLC35A3            | 4.11E-06 | 0.90941448 | 0.656 | 0.494 | 0.1456277  | HSPC_UCBMC |
| SRPK2              | 4.25E-06 | 0.9277282  | 0.689 | 0.482 | 0.15073817 | HSPC_UCBMC |
| RARA               | 4.33E-06 | 0.82295452 | 0.389 | 0.172 | 0.15359648 | HSPC_UCBMC |
| BCLAF1             | 4.36E-06 | 0.66304002 | 0.878 | 0.747 | 0.15454019 | HSPC_UCBMC |
| MARCHF7            | 4.40E-06 | 0.82742438 | 0.778 | 0.616 | 0.15573526 | HSPC_UCBMC |
| ENSMMUG00000002075 | 4.43E-06 | 0.84882345 | 0.611 | 0.416 | 0.1569552  | HSPC_UCBMC |
| GIT2               | 4.49E-06 | 1.1717736  | 0.578 | 0.373 | 0.15917131 | HSPC_UCBMC |
| TRIM72             | 4.58E-06 | 0.50358231 | 0.878 | 0.726 | 0.16219242 | HSPC_UCBMC |
| DNAJB14            | 4.59E-06 | 1.07720415 | 0.467 | 0.242 | 0.16246032 | HSPC_UCBMC |
| SELENOS            | 4.60E-06 | 0.69416176 | 0.789 | 0.64  | 0.1631233  | HSPC_UCBMC |
| MAPKAPK2           | 4.61E-06 | 0.86230816 | 0.444 | 0.222 | 0.16336825 | HSPC_UCBMC |

|                   |          |            |       |       |            |            |
|-------------------|----------|------------|-------|-------|------------|------------|
| SS18              | 4.62E-06 | 1.05223963 | 0.644 | 0.449 | 0.16366032 | HSPC_UCBMC |
| LANCL2            | 4.75E-06 | 1.0194486  | 0.522 | 0.316 | 0.1683254  | HSPC_UCBMC |
| PDE3A             | 4.83E-06 | 1.34549231 | 0.478 | 0.255 | 0.17100736 | HSPC_UCBMC |
| RAB14             | 4.98E-06 | 1.1020564  | 0.656 | 0.466 | 0.17631924 | HSPC_UCBMC |
| PRKN              | 4.98E-06 | 1.29813014 | 0.433 | 0.216 | 0.17638661 | HSPC_UCBMC |
| CRIP1             | 4.98E-06 | 1.39941266 | 0.5   | 0.283 | 0.17650489 | HSPC_UCBMC |
| GNG11             | 5.00E-06 | 0.61828947 | 0.567 | 0.294 | 0.17712751 | HSPC_UCBMC |
| QKI               | 5.03E-06 | 0.57071125 | 0.844 | 0.725 | 0.17826714 | HSPC_UCBMC |
| ATXN7L3B          | 5.05E-06 | 1.09964524 | 0.611 | 0.384 | 0.17883255 | HSPC_UCBMC |
| GINM1             | 5.23E-06 | 1.36740268 | 0.578 | 0.383 | 0.18536784 | HSPC_UCBMC |
| PLAA              | 5.36E-06 | 1.11375421 | 0.589 | 0.368 | 0.18984365 | HSPC_UCBMC |
| RPL18             | 5.40E-06 | 0.39371381 | 0.989 | 0.889 | 0.19142415 | HSPC_UCBMC |
| ENSMUG00000056016 | 5.41E-06 | 1.33678331 | 0.256 | 0.092 | 0.19182271 | HSPC_UCBMC |
| PDE4D             | 5.44E-06 | 1.15588484 | 0.489 | 0.283 | 0.1928788  | HSPC_UCBMC |
| SUPT3H            | 5.53E-06 | 0.83794747 | 0.678 | 0.471 | 0.19582678 | HSPC_UCBMC |
| RRP15             | 5.54E-06 | 1.3793643  | 0.478 | 0.259 | 0.19619125 | HSPC_UCBMC |
| SETBP1            | 5.77E-06 | 1.55676342 | 0.411 | 0.203 | 0.20448947 | HSPC_UCBMC |
| FNDC3A            | 5.98E-06 | 0.63748618 | 0.767 | 0.617 | 0.21183675 | HSPC_UCBMC |
| COX16             | 6.01E-06 | 0.63876574 | 0.767 | 0.545 | 0.2128426  | HSPC_UCBMC |
| MED19             | 6.02E-06 | 1.45946729 | 0.422 | 0.227 | 0.21320919 | HSPC_UCBMC |
| VAPA              | 6.03E-06 | 0.65557972 | 0.822 | 0.684 | 0.21381078 | HSPC_UCBMC |
| NCOA7             | 6.04E-06 | 1.1036366  | 0.733 | 0.527 | 0.21388655 | HSPC_UCBMC |
| LIMD2             | 6.08E-06 | 0.7208177  | 0.656 | 0.381 | 0.21525339 | HSPC_UCBMC |
| RNF220            | 6.24E-06 | 0.73289167 | 0.622 | 0.39  | 0.22122148 | HSPC_UCBMC |
| FAM13B            | 6.32E-06 | 0.76788314 | 0.733 | 0.514 | 0.22404582 | HSPC_UCBMC |
| DUSP16            | 6.37E-06 | 1.34059612 | 0.4   | 0.192 | 0.22563174 | HSPC_UCBMC |
| SCP2              | 6.55E-06 | 0.85613288 | 0.678 | 0.49  | 0.23193715 | HSPC_UCBMC |
| TUT4              | 6.63E-06 | 0.74732302 | 0.756 | 0.569 | 0.23480654 | HSPC_UCBMC |
| CCDC91            | 6.76E-06 | 0.97809488 | 0.667 | 0.466 | 0.23961675 | HSPC_UCBMC |
| RBM39             | 6.78E-06 | 0.57710406 | 0.944 | 0.85  | 0.24040038 | HSPC_UCBMC |
| C16H17orf49       | 6.96E-06 | 0.63956401 | 0.8   | 0.669 | 0.24666837 | HSPC_UCBMC |
| ZNF609            | 7.24E-06 | 0.81393326 | 0.678 | 0.481 | 0.25661408 | HSPC_UCBMC |
| AAK1              | 7.30E-06 | 1.08883063 | 0.556 | 0.355 | 0.25848488 | HSPC_UCBMC |

|                    |          |            |       |       |            |            |
|--------------------|----------|------------|-------|-------|------------|------------|
| ANKIB1             | 7.37E-06 | 0.73765175 | 0.622 | 0.414 | 0.26112828 | HSPC_UCBMC |
| CYTH1              | 7.37E-06 | 1.01886277 | 0.633 | 0.429 | 0.26129813 | HSPC_UCBMC |
| RPL30              | 7.38E-06 | 0.40648355 | 0.978 | 0.904 | 0.26164572 | HSPC_UCBMC |
| PUM2               | 7.57E-06 | 0.64699095 | 0.867 | 0.726 | 0.26828906 | HSPC_UCBMC |
| FOXP1              | 7.72E-06 | 0.78621849 | 0.633 | 0.414 | 0.27338462 | HSPC_UCBMC |
| CNOT7              | 7.90E-06 | 1.04357918 | 0.478 | 0.27  | 0.28007781 | HSPC_UCBMC |
| VPS36              | 8.05E-06 | 1.13890345 | 0.589 | 0.392 | 0.28516584 | HSPC_UCBMC |
| EIF2AK3            | 8.05E-06 | 1.14640024 | 0.556 | 0.366 | 0.28520061 | HSPC_UCBMC |
| AGO3               | 8.38E-06 | 0.90146219 | 0.689 | 0.494 | 0.29691891 | HSPC_UCBMC |
| ENSMMUG00000012537 | 8.57E-06 | 0.89648493 | 0.7   | 0.49  | 0.30374578 | HSPC_UCBMC |
| HOOK3              | 8.65E-06 | 0.7274539  | 0.778 | 0.647 | 0.30655756 | HSPC_UCBMC |
| RPL10A             | 8.95E-06 | 0.4260379  | 0.956 | 0.874 | 0.31711416 | HSPC_UCBMC |
| WDR13              | 8.97E-06 | 0.53232935 | 0.844 | 0.725 | 0.31778747 | HSPC_UCBMC |
| CSNK2A1            | 9.05E-06 | 0.75296474 | 0.744 | 0.634 | 0.3207465  | HSPC_UCBMC |
| RNF38              | 9.28E-06 | 1.00132626 | 0.7   | 0.525 | 0.32874242 | HSPC_UCBMC |
| CSDE1              | 9.48E-06 | 0.68379914 | 0.756 | 0.665 | 0.33576507 | HSPC_UCBMC |
| POC5               | 9.66E-06 | 1.05020928 | 0.6   | 0.455 | 0.34243619 | HSPC_UCBMC |
| SEPTIN11           | 9.67E-06 | 1.04142518 | 0.622 | 0.383 | 0.3427144  | HSPC_UCBMC |
| AUTS2              | 9.77E-06 | 0.69242106 | 0.733 | 0.542 | 0.34616768 | HSPC_UCBMC |
| SERAC1             | 9.79E-06 | 1.65884705 | 0.322 | 0.148 | 0.34687689 | HSPC_UCBMC |
| SRP14              | 1.05E-05 | 0.54776449 | 0.9   | 0.782 | 0.37067079 | HSPC_UCBMC |
| SARAF              | 1.05E-05 | 0.65696879 | 0.833 | 0.652 | 0.37267072 | HSPC_UCBMC |
| FOS                | 1.06E-05 | 0.24960189 | 0.911 | 0.728 | 0.37590456 | HSPC_UCBMC |
| PYCARD             | 1.08E-05 | 1.15379801 | 0.544 | 0.338 | 0.38222933 | HSPC_UCBMC |
| CD164              | 1.10E-05 | 0.40706525 | 0.833 | 0.566 | 0.39027904 | HSPC_UCBMC |
| ENSMMUG00000065175 | 1.11E-05 | 0.96366294 | 0.656 | 0.519 | 0.39416383 | HSPC_UCBMC |
| ROCK1              | 1.12E-05 | 0.74111607 | 0.844 | 0.686 | 0.39611561 | HSPC_UCBMC |
| DENND11            | 1.12E-05 | 1.2624792  | 0.389 | 0.19  | 0.39659373 | HSPC_UCBMC |
| ALCAM              | 1.13E-05 | 1.31113013 | 0.411 | 0.207 | 0.39983926 | HSPC_UCBMC |
| RBMS2              | 1.14E-05 | 1.67948223 | 0.322 | 0.146 | 0.40262586 | HSPC_UCBMC |
| KCMF1              | 1.15E-05 | 0.68037294 | 0.622 | 0.44  | 0.40588909 | HSPC_UCBMC |
| CEBPZ              | 1.15E-05 | 0.94608898 | 0.656 | 0.488 | 0.40599865 | HSPC_UCBMC |
| GLCE               | 1.16E-05 | 1.2515655  | 0.422 | 0.224 | 0.41247845 | HSPC_UCBMC |

|                    |          |            |       |       |            |            |
|--------------------|----------|------------|-------|-------|------------|------------|
| TP53INP1           | 1.17E-05 | 2.04779819 | 0.256 | 0.1   | 0.4155691  | HSPC_UCBMC |
| USP9Y              | 1.18E-05 | 1.01024298 | 0.367 | 0.17  | 0.41760726 | HSPC_UCBMC |
| HCST               | 1.20E-05 | 1.20227303 | 0.4   | 0.207 | 0.42591206 | HSPC_UCBMC |
| ITGA5              | 1.22E-05 | 1.5440704  | 0.333 | 0.148 | 0.43103288 | HSPC_UCBMC |
| ABI2               | 1.23E-05 | 1.34094038 | 0.456 | 0.257 | 0.43455079 | HSPC_UCBMC |
| GALNT1             | 1.23E-05 | 0.90905632 | 0.722 | 0.562 | 0.43478479 | HSPC_UCBMC |
| ENSMMUG00000060287 | 1.26E-05 | 0.66554623 | 0.811 | 0.588 | 0.44633058 | HSPC_UCBMC |
| CYP20A1            | 1.26E-05 | 1.38941854 | 0.433 | 0.238 | 0.44736652 | HSPC_UCBMC |
| PAM                | 1.26E-05 | 1.1166676  | 0.367 | 0.17  | 0.44784803 | HSPC_UCBMC |
| CEP112             | 1.26E-05 | 1.71203665 | 0.256 | 0.098 | 0.44785202 | HSPC_UCBMC |
| RHOA               | 1.27E-05 | 0.5867975  | 0.867 | 0.786 | 0.45066036 | HSPC_UCBMC |
| FAM102B            | 1.28E-05 | 1.47883941 | 0.378 | 0.181 | 0.45399531 | HSPC_UCBMC |
| MYL6               | 1.28E-05 | 0.5385164  | 0.789 | 0.641 | 0.45526591 | HSPC_UCBMC |
| CDK17              | 1.32E-05 | 0.55778345 | 0.722 | 0.508 | 0.46665787 | HSPC_UCBMC |
| ENSMMUG00000030448 | 1.33E-05 | 0.8120807  | 0.633 | 0.516 | 0.47077614 | HSPC_UCBMC |
| NRROS              | 1.33E-05 | 1.16349529 | 0.578 | 0.384 | 0.47218239 | HSPC_UCBMC |
| SYPL1              | 1.33E-05 | 0.83474734 | 0.667 | 0.468 | 0.4726628  | HSPC_UCBMC |
| LRP12              | 1.34E-05 | 1.61922331 | 0.289 | 0.122 | 0.47357442 | HSPC_UCBMC |
| ENSMMUG00000006165 | 1.35E-05 | 0.58736277 | 0.9   | 0.795 | 0.47811032 | HSPC_UCBMC |
| ZMYM5              | 1.36E-05 | 1.0793198  | 0.522 | 0.327 | 0.48221406 | HSPC_UCBMC |
| ZNF395             | 1.37E-05 | 1.2324704  | 0.433 | 0.237 | 0.48496248 | HSPC_UCBMC |
| DDIT3              | 1.39E-05 | 0.82298534 | 0.4   | 0.189 | 0.4929177  | HSPC_UCBMC |
| TPM3               | 1.41E-05 | 0.74312105 | 0.822 | 0.678 | 0.4988586  | HSPC_UCBMC |
| SMG7               | 1.43E-05 | 0.67580926 | 0.711 | 0.505 | 0.50717786 | HSPC_UCBMC |
| VAMP8              | 1.47E-05 | 0.78797288 | 0.778 | 0.575 | 0.52109715 | HSPC_UCBMC |
| CCNC               | 1.48E-05 | 1.08179078 | 0.522 | 0.333 | 0.52456711 | HSPC_UCBMC |
| STMN1              | 1.51E-05 | 0.56890584 | 0.867 | 0.71  | 0.53432058 | HSPC_UCBMC |
| TRIM44             | 1.52E-05 | 1.40630598 | 0.522 | 0.311 | 0.53688115 | HSPC_UCBMC |
| CWC15              | 1.54E-05 | 0.6392479  | 0.744 | 0.612 | 0.54560177 | HSPC_UCBMC |
| SLC23A2            | 1.55E-05 | 1.16869696 | 0.344 | 0.161 | 0.54797534 | HSPC_UCBMC |
| CNOT2              | 1.58E-05 | 0.56286476 | 0.8   | 0.652 | 0.56157117 | HSPC_UCBMC |
| WDFY2              | 1.61E-05 | 0.92202519 | 0.722 | 0.543 | 0.56942997 | HSPC_UCBMC |
| HDAC2              | 1.61E-05 | 0.89561978 | 0.689 | 0.51  | 0.57114394 | HSPC_UCBMC |



|                    |          |            |       |       |            |            |
|--------------------|----------|------------|-------|-------|------------|------------|
| ZEB1               | 1.64E-05 | 0.80356243 | 0.667 | 0.47  | 0.58014882 | HSPC_UCBMC |
| FAM204A            | 1.67E-05 | 1.07128821 | 0.556 | 0.377 | 0.59010959 | HSPC_UCBMC |
| GPHN               | 1.70E-05 | 0.60612931 | 0.811 | 0.643 | 0.60296957 | HSPC_UCBMC |
| NPM1               | 1.72E-05 | 0.56224207 | 0.922 | 0.776 | 0.6103853  | HSPC_UCBMC |
| CD59               | 1.77E-05 | 0.71935806 | 0.811 | 0.612 | 0.62761283 | HSPC_UCBMC |
| CITED1             | 1.77E-05 | 0.9515907  | 0.611 | 0.407 | 0.62812727 | HSPC_UCBMC |
| ENSMMUG00000011580 | 1.82E-05 | 0.84343642 | 0.7   | 0.564 | 0.64601732 | HSPC_UCBMC |
| MEMO1              | 1.84E-05 | 0.7876981  | 0.756 | 0.599 | 0.65081592 | HSPC_UCBMC |
| CHRM3              | 1.86E-05 | 0.93725843 | 0.256 | 0.1   | 0.65769226 | HSPC_UCBMC |
| CAPZA2             | 1.87E-05 | 0.78664055 | 0.744 | 0.634 | 0.66117704 | HSPC_UCBMC |
| TNFSF8             | 1.88E-05 | 1.3227524  | 0.267 | 0.104 | 0.66697418 | HSPC_UCBMC |
| PARD3              | 1.90E-05 | 0.84357355 | 0.6   | 0.364 | 0.67450493 | HSPC_UCBMC |
| FAM117B            | 1.91E-05 | 1.04985377 | 0.511 | 0.298 | 0.67541522 | HSPC_UCBMC |
| GNAI3              | 1.92E-05 | 0.88361431 | 0.611 | 0.425 | 0.67945637 | HSPC_UCBMC |
| SEPTIN9            | 1.95E-05 | 0.89146109 | 0.489 | 0.279 | 0.69242766 | HSPC_UCBMC |
| ZMIZ1              | 1.97E-05 | 1.0555781  | 0.333 | 0.152 | 0.69703863 | HSPC_UCBMC |
| ELF2               | 1.97E-05 | 0.67629433 | 0.756 | 0.58  | 0.69737088 | HSPC_UCBMC |
| RPL10              | 1.99E-05 | 0.3776352  | 0.989 | 0.913 | 0.70587823 | HSPC_UCBMC |
| TMEM117            | 2.01E-05 | 0.83186774 | 0.589 | 0.373 | 0.71135999 | HSPC_UCBMC |
| IGBP1              | 2.01E-05 | 0.84876666 | 0.633 | 0.451 | 0.71147384 | HSPC_UCBMC |
| PRKCH              | 2.01E-05 | 0.28625146 | 0.756 | 0.53  | 0.71301209 | HSPC_UCBMC |
| MAGI3              | 2.02E-05 | 1.29783808 | 0.344 | 0.168 | 0.71455317 | HSPC_UCBMC |
| SH3KBP1            | 2.02E-05 | 0.94409126 | 0.556 | 0.351 | 0.71556159 | HSPC_UCBMC |
| RPL32              | 2.06E-05 | 0.38369456 | 1     | 0.93  | 0.72946445 | HSPC_UCBMC |
| PHIP               | 2.09E-05 | 0.43039335 | 0.856 | 0.697 | 0.73998329 | HSPC_UCBMC |
| ATXN7              | 2.09E-05 | 0.85359624 | 0.633 | 0.436 | 0.74141197 | HSPC_UCBMC |
| KMT2E              | 2.11E-05 | 0.41343141 | 0.878 | 0.754 | 0.74625049 | HSPC_UCBMC |
| CCDC171            | 2.13E-05 | 1.25448673 | 0.4   | 0.203 | 0.75461556 | HSPC_UCBMC |
| ZNF131             | 2.16E-05 | 0.81071718 | 0.7   | 0.519 | 0.76449316 | HSPC_UCBMC |
| RTRAF              | 2.17E-05 | 0.72288282 | 0.811 | 0.651 | 0.76784436 | HSPC_UCBMC |
| HIPK3              | 2.18E-05 | 1.04857057 | 0.6   | 0.436 | 0.77407494 | HSPC_UCBMC |
| ENSMMUG00000015270 | 2.20E-05 | 0.43581443 | 0.978 | 0.913 | 0.77811742 | HSPC_UCBMC |
| SENP6              | 2.20E-05 | 0.64439266 | 0.833 | 0.682 | 0.78046162 | HSPC_UCBMC |

|                   |          |            |       |       |            |            |
|-------------------|----------|------------|-------|-------|------------|------------|
| SBF2              | 2.27E-05 | 0.58588181 | 0.633 | 0.373 | 0.80270353 | HSPC_UCBMC |
| MPHOSPH8          | 2.28E-05 | 0.88170773 | 0.7   | 0.545 | 0.80943066 | HSPC_UCBMC |
| WWC2              | 2.29E-05 | 0.88194504 | 0.556 | 0.351 | 0.81173903 | HSPC_UCBMC |
| CORO1A            | 2.31E-05 | 0.89059935 | 0.522 | 0.316 | 0.8189911  | HSPC_UCBMC |
| PREP              | 2.35E-05 | 1.12195386 | 0.544 | 0.357 | 0.83285056 | HSPC_UCBMC |
| NF1               | 2.40E-05 | 0.89776455 | 0.689 | 0.497 | 0.84998587 | HSPC_UCBMC |
| ENSMUG00000008383 | 2.42E-05 | 1.08993347 | 0.389 | 0.19  | 0.85716146 | HSPC_UCBMC |
| PDZRN3            | 2.45E-05 | 1.2297217  | 0.367 | 0.187 | 0.8688167  | HSPC_UCBMC |
| PIAS2             | 2.50E-05 | 1.37184184 | 0.422 | 0.233 | 0.88601742 | HSPC_UCBMC |
| VDAC2             | 2.58E-05 | 0.67443902 | 0.8   | 0.68  | 0.91263598 | HSPC_UCBMC |
| CAP1              | 2.63E-05 | 1.0664569  | 0.622 | 0.434 | 0.93093745 | HSPC_UCBMC |
| HACD4             | 2.65E-05 | 1.60238118 | 0.411 | 0.224 | 0.93994908 | HSPC_UCBMC |
| DDX52             | 2.65E-05 | 1.09209445 | 0.6   | 0.405 | 0.94032673 | HSPC_UCBMC |
| TAF7              | 2.72E-05 | 0.72607797 | 0.656 | 0.477 | 0.96454387 | HSPC_UCBMC |
| TSN               | 2.74E-05 | 1.01106803 | 0.544 | 0.37  | 0.96920072 | HSPC_UCBMC |
| ITGA4             | 2.75E-05 | 0.32926219 | 0.956 | 0.793 | 0.9743159  | HSPC_UCBMC |
| APP               | 2.88E-05 | 1.0253239  | 0.711 | 0.523 | 1          | HSPC_UCBMC |
| RPL35A            | 2.88E-05 | 0.38420603 | 1     | 0.895 | 1          | HSPC_UCBMC |
| PPM1H             | 2.91E-05 | 1.02245706 | 0.367 | 0.183 | 1          | HSPC_UCBMC |
| MPPED2            | 2.93E-05 | 1.56092364 | 0.311 | 0.142 | 1          | HSPC_UCBMC |
| DOCK10            | 2.94E-05 | 0.89331141 | 0.611 | 0.401 | 1          | HSPC_UCBMC |
| FGFR1             | 2.95E-05 | 1.43682736 | 0.278 | 0.118 | 1          | HSPC_UCBMC |
| RPS3A             | 2.99E-05 | 0.3675352  | 1     | 0.896 | 1          | HSPC_UCBMC |
| NME2              | 3.07E-05 | 0.44646315 | 0.933 | 0.791 | 1          | HSPC_UCBMC |
| CYRIA             | 3.14E-05 | 1.07264731 | 0.311 | 0.137 | 1          | HSPC_UCBMC |
| GALNT7            | 3.15E-05 | 0.87458264 | 0.667 | 0.464 | 1          | HSPC_UCBMC |
| NFAT5             | 3.17E-05 | 0.78022013 | 0.689 | 0.482 | 1          | HSPC_UCBMC |
| TOX4              | 3.18E-05 | 0.80376343 | 0.589 | 0.401 | 1          | HSPC_UCBMC |
| HACD2             | 3.18E-05 | 1.17066701 | 0.3   | 0.137 | 1          | HSPC_UCBMC |
| BZW1              | 3.20E-05 | 0.60105747 | 0.767 | 0.651 | 1          | HSPC_UCBMC |
| MAMU-DMA          | 3.21E-05 | 1.20666672 | 0.533 | 0.336 | 1          | HSPC_UCBMC |
| SCML2             | 3.22E-05 | 1.18729682 | 0.411 | 0.218 | 1          | HSPC_UCBMC |
| RNF125            | 3.22E-05 | 0.75121201 | 0.311 | 0.133 | 1          | HSPC_UCBMC |

|          |          |            |       |       |              |
|----------|----------|------------|-------|-------|--------------|
| BTBD10   | 3.23E-05 | 0.83254384 | 0.456 | 0.255 | 1 HSPC_UCBMC |
| CPEB1    | 3.24E-05 | 0.39693036 | 0.967 | 0.86  | 1 HSPC_UCBMC |
| CYLD     | 3.30E-05 | 0.7461814  | 0.478 | 0.266 | 1 HSPC_UCBMC |
| TIMM23   | 3.30E-05 | 1.02914204 | 0.644 | 0.481 | 1 HSPC_UCBMC |
| FBXL17   | 3.36E-05 | 0.8241532  | 0.656 | 0.47  | 1 HSPC_UCBMC |
| CAMK1D   | 3.36E-05 | 0.69325108 | 0.644 | 0.414 | 1 HSPC_UCBMC |
| PAIP2    | 3.42E-05 | 0.54001021 | 0.811 | 0.715 | 1 HSPC_UCBMC |
| SNX29    | 3.46E-05 | 0.31497481 | 0.6   | 0.348 | 1 HSPC_UCBMC |
| KPNA3    | 3.53E-05 | 1.05781882 | 0.678 | 0.527 | 1 HSPC_UCBMC |
| BBX      | 3.54E-05 | 0.94123726 | 0.733 | 0.542 | 1 HSPC_UCBMC |
| COP1     | 3.55E-05 | 0.94858537 | 0.678 | 0.521 | 1 HSPC_UCBMC |
| PNRC2    | 3.60E-05 | 0.74613365 | 0.7   | 0.564 | 1 HSPC_UCBMC |
| POGZ     | 3.62E-05 | 1.09023085 | 0.589 | 0.429 | 1 HSPC_UCBMC |
| GNAQ     | 3.68E-05 | 0.45743818 | 0.856 | 0.654 | 1 HSPC_UCBMC |
| ZBTB2    | 3.69E-05 | 1.15045637 | 0.289 | 0.126 | 1 HSPC_UCBMC |
| OSBPL8   | 3.75E-05 | 0.52103703 | 0.822 | 0.684 | 1 HSPC_UCBMC |
| SMURF1   | 3.87E-05 | 0.9799041  | 0.567 | 0.379 | 1 HSPC_UCBMC |
| TRA2B    | 3.89E-05 | 0.40110417 | 0.967 | 0.876 | 1 HSPC_UCBMC |
| HNRNPM   | 3.91E-05 | 0.55774128 | 0.789 | 0.656 | 1 HSPC_UCBMC |
| DDA1     | 3.96E-05 | 1.21188288 | 0.4   | 0.214 | 1 HSPC_UCBMC |
| ACTR10   | 3.99E-05 | 0.95891288 | 0.611 | 0.423 | 1 HSPC_UCBMC |
| FXR1     | 4.01E-05 | 0.7204753  | 0.767 | 0.68  | 1 HSPC_UCBMC |
| HTT      | 4.02E-05 | 0.67095602 | 0.711 | 0.543 | 1 HSPC_UCBMC |
| SETD2    | 4.09E-05 | 0.80095776 | 0.822 | 0.702 | 1 HSPC_UCBMC |
| ATP11A   | 4.09E-05 | 1.33955681 | 0.411 | 0.222 | 1 HSPC_UCBMC |
| TOMM7    | 4.11E-05 | 0.41993073 | 0.933 | 0.771 | 1 HSPC_UCBMC |
| ERICH1   | 4.22E-05 | 1.26992847 | 0.467 | 0.268 | 1 HSPC_UCBMC |
| ARHGAP32 | 4.27E-05 | 0.67328997 | 0.4   | 0.214 | 1 HSPC_UCBMC |
| CEP70    | 4.30E-05 | 0.8091744  | 0.511 | 0.298 | 1 HSPC_UCBMC |
| CRTC3    | 4.31E-05 | 0.91824862 | 0.5   | 0.288 | 1 HSPC_UCBMC |
| TSPO     | 4.34E-05 | 0.77758792 | 0.689 | 0.492 | 1 HSPC_UCBMC |
| UBA7     | 4.35E-05 | 1.10264149 | 0.389 | 0.2   | 1 HSPC_UCBMC |
| PLEKHM1  | 4.41E-05 | 1.64523683 | 0.333 | 0.166 | 1 HSPC_UCBMC |

|          |          |            |       |       |              |
|----------|----------|------------|-------|-------|--------------|
| PELI2    | 4.49E-05 | 1.64270749 | 0.333 | 0.165 | 1 HSPC_UCBMC |
| CLNS1A   | 4.61E-05 | 0.83316059 | 0.622 | 0.436 | 1 HSPC_UCBMC |
| LMO4     | 4.76E-05 | 1.14665209 | 0.433 | 0.244 | 1 HSPC_UCBMC |
| SINHCAF  | 4.78E-05 | 0.72372154 | 0.689 | 0.516 | 1 HSPC_UCBMC |
| RYK      | 4.78E-05 | 1.2761667  | 0.289 | 0.131 | 1 HSPC_UCBMC |
| GTF2B    | 4.83E-05 | 0.54646056 | 0.722 | 0.564 | 1 HSPC_UCBMC |
| RPL23A   | 4.87E-05 | 0.40135219 | 0.989 | 0.904 | 1 HSPC_UCBMC |
| ARPC2    | 5.07E-05 | 0.7505     | 0.611 | 0.401 | 1 HSPC_UCBMC |
| REPS1    | 5.08E-05 | 1.08079806 | 0.489 | 0.318 | 1 HSPC_UCBMC |
| CAPN7    | 5.14E-05 | 1.19498459 | 0.422 | 0.24  | 1 HSPC_UCBMC |
| GTF2F2   | 5.16E-05 | 0.72724042 | 0.633 | 0.431 | 1 HSPC_UCBMC |
| PPM1A    | 5.20E-05 | 0.8067341  | 0.578 | 0.368 | 1 HSPC_UCBMC |
| PEX13    | 5.25E-05 | 1.40240053 | 0.344 | 0.174 | 1 HSPC_UCBMC |
| FNDC3B   | 5.34E-05 | 0.34651156 | 0.656 | 0.466 | 1 HSPC_UCBMC |
| RPL3     | 5.46E-05 | 0.40974151 | 0.978 | 0.878 | 1 HSPC_UCBMC |
| APEX1    | 5.50E-05 | 0.79059654 | 0.7   | 0.564 | 1 HSPC_UCBMC |
| ASH1L    | 5.65E-05 | 0.38968638 | 0.878 | 0.786 | 1 HSPC_UCBMC |
| ARHGAP15 | 5.67E-05 | 0.40791947 | 0.856 | 0.617 | 1 HSPC_UCBMC |
| DCTN4    | 5.68E-05 | 0.92724334 | 0.533 | 0.355 | 1 HSPC_UCBMC |
| EIF3H    | 5.69E-05 | 0.52962612 | 0.856 | 0.778 | 1 HSPC_UCBMC |
| EAPP     | 5.74E-05 | 1.22505322 | 0.422 | 0.242 | 1 HSPC_UCBMC |
| BIN3     | 5.75E-05 | 0.98926859 | 0.611 | 0.451 | 1 HSPC_UCBMC |
| CPEB2    | 5.76E-05 | 1.51092143 | 0.311 | 0.144 | 1 HSPC_UCBMC |
| CYRIB    | 5.80E-05 | 0.67487278 | 0.789 | 0.63  | 1 HSPC_UCBMC |
| UPF2     | 5.84E-05 | 0.57859084 | 0.778 | 0.614 | 1 HSPC_UCBMC |
| MED4     | 5.89E-05 | 1.04152136 | 0.511 | 0.34  | 1 HSPC_UCBMC |
| STIM1    | 5.95E-05 | 0.74736164 | 0.633 | 0.433 | 1 HSPC_UCBMC |
| PER2     | 6.08E-05 | 1.08161636 | 0.367 | 0.187 | 1 HSPC_UCBMC |
| RPL9     | 6.13E-05 | 0.37814492 | 0.978 | 0.845 | 1 HSPC_UCBMC |
| RPN1     | 6.13E-05 | 0.6362778  | 0.811 | 0.667 | 1 HSPC_UCBMC |
| ARHGEF6  | 6.18E-05 | 0.75881282 | 0.444 | 0.253 | 1 HSPC_UCBMC |
| RPL7A    | 6.27E-05 | 0.38480048 | 0.978 | 0.891 | 1 HSPC_UCBMC |
| RPS4X    | 6.27E-05 | 0.33086362 | 0.967 | 0.885 | 1 HSPC_UCBMC |

|                    |          |            |       |       |              |
|--------------------|----------|------------|-------|-------|--------------|
| FRS2               | 6.29E-05 | 0.71412342 | 0.467 | 0.283 | 1 HSPC_UCBMC |
| HECA               | 6.38E-05 | 1.14701402 | 0.5   | 0.303 | 1 HSPC_UCBMC |
| PPP1R13B           | 6.55E-05 | 1.30276292 | 0.3   | 0.14  | 1 HSPC_UCBMC |
| VPS39              | 6.58E-05 | 1.16643111 | 0.489 | 0.294 | 1 HSPC_UCBMC |
| TFB2M              | 6.63E-05 | 1.27584337 | 0.4   | 0.214 | 1 HSPC_UCBMC |
| HIGD2A             | 6.63E-05 | 0.94623681 | 0.533 | 0.333 | 1 HSPC_UCBMC |
| RPRD1A             | 6.65E-05 | 0.76011566 | 0.589 | 0.412 | 1 HSPC_UCBMC |
| CASP4              | 6.71E-05 | 1.27950347 | 0.422 | 0.233 | 1 HSPC_UCBMC |
| GABPB1             | 6.74E-05 | 0.82016937 | 0.7   | 0.566 | 1 HSPC_UCBMC |
| PLXNC1             | 6.76E-05 | 0.94089277 | 0.467 | 0.277 | 1 HSPC_UCBMC |
| RCSD1              | 6.79E-05 | 1.24725994 | 0.522 | 0.349 | 1 HSPC_UCBMC |
| KDM1A              | 6.84E-05 | 0.6790152  | 0.689 | 0.51  | 1 HSPC_UCBMC |
| EGFL7              | 6.87E-05 | 0.86662922 | 0.511 | 0.292 | 1 HSPC_UCBMC |
| ABI1               | 6.87E-05 | 0.67296735 | 0.733 | 0.601 | 1 HSPC_UCBMC |
| CAMKMT             | 6.90E-05 | 0.74817454 | 0.611 | 0.431 | 1 HSPC_UCBMC |
| EDRF1              | 6.95E-05 | 1.54810276 | 0.378 | 0.214 | 1 HSPC_UCBMC |
| INPP4B             | 7.01E-05 | 0.42472714 | 0.556 | 0.338 | 1 HSPC_UCBMC |
| ENSMMUG00000016009 | 7.16E-05 | 0.88177447 | 0.611 | 0.497 | 1 HSPC_UCBMC |
| ZNF506             | 7.23E-05 | 0.89555278 | 0.533 | 0.323 | 1 HSPC_UCBMC |
| MSRB3              | 7.23E-05 | 1.15243222 | 0.278 | 0.118 | 1 HSPC_UCBMC |
| DOCK11             | 7.24E-05 | 0.89242239 | 0.567 | 0.394 | 1 HSPC_UCBMC |
| TGFBR1             | 7.25E-05 | 1.46613212 | 0.367 | 0.203 | 1 HSPC_UCBMC |
| DHRS7              | 7.31E-05 | 1.06144219 | 0.433 | 0.248 | 1 HSPC_UCBMC |
| ENSMMUG00000058037 | 7.35E-05 | 1.32758888 | 0.478 | 0.314 | 1 HSPC_UCBMC |
| PRRC2B             | 7.38E-05 | 0.69145991 | 0.633 | 0.46  | 1 HSPC_UCBMC |
| TMEM123            | 7.60E-05 | 0.62619    | 0.711 | 0.564 | 1 HSPC_UCBMC |
| BCL2               | 7.87E-05 | 0.32536081 | 0.411 | 0.205 | 1 HSPC_UCBMC |
| GPSM3              | 8.02E-05 | 0.95967084 | 0.533 | 0.322 | 1 HSPC_UCBMC |
| KMT5B              | 8.13E-05 | 0.94319543 | 0.511 | 0.336 | 1 HSPC_UCBMC |
| EIF3E              | 8.21E-05 | 0.45754182 | 0.9   | 0.774 | 1 HSPC_UCBMC |
| COPB1              | 8.33E-05 | 1.01538614 | 0.544 | 0.377 | 1 HSPC_UCBMC |
| ENSMMUG00000012203 | 8.42E-05 | 0.38060239 | 0.567 | 0.346 | 1 HSPC_UCBMC |
| IKZF5              | 8.50E-05 | 1.0587942  | 0.3   | 0.139 | 1 HSPC_UCBMC |

|                   |            |            |       |       |              |
|-------------------|------------|------------|-------|-------|--------------|
| ZRANB1            | 8.52E-05   | 0.92556851 | 0.467 | 0.272 | 1 HSPC_UCBMC |
| TNS3              | 8.54E-05   | 0.35053126 | 0.433 | 0.229 | 1 HSPC_UCBMC |
| PGD               | 8.73E-05   | 0.76252566 | 0.567 | 0.359 | 1 HSPC_UCBMC |
| ETV6              | 8.89E-05   | 0.48077766 | 0.756 | 0.571 | 1 HSPC_UCBMC |
| WASHC5            | 8.95E-05   | 1.67343738 | 0.4   | 0.246 | 1 HSPC_UCBMC |
| CNBP              | 9.03E-05   | 0.51464081 | 0.789 | 0.691 | 1 HSPC_UCBMC |
| SF3A1             | 9.43E-05   | 1.0236643  | 0.544 | 0.37  | 1 HSPC_UCBMC |
| ARRB2             | 9.57E-05   | 0.93866256 | 0.389 | 0.211 | 1 HSPC_UCBMC |
| PRKCE             | 9.60E-05   | 1.333341   | 0.344 | 0.181 | 1 HSPC_UCBMC |
| KANSL2            | 9.60E-05   | 1.17205182 | 0.511 | 0.357 | 1 HSPC_UCBMC |
| SLMAP             | 9.71E-05   | 0.67782235 | 0.744 | 0.627 | 1 HSPC_UCBMC |
| IL4R              | 9.80E-05   | 0.91581387 | 0.333 | 0.155 | 1 HSPC_UCBMC |
| POLR1H            | 9.86E-05   | 0.77864066 | 0.556 | 0.392 | 1 HSPC_UCBMC |
| RWDD1             | 9.86E-05   | 0.67580582 | 0.733 | 0.519 | 1 HSPC_UCBMC |
| NIPSNAP2          | 0.00010027 | 0.79508719 | 0.644 | 0.492 | 1 HSPC_UCBMC |
| ATF2              | 0.00010038 | 0.69426542 | 0.644 | 0.495 | 1 HSPC_UCBMC |
| RPS20             | 0.00010142 | 0.34286429 | 1     | 0.876 | 1 HSPC_UCBMC |
| PRKAR1A           | 0.00010159 | 0.92317837 | 0.556 | 0.37  | 1 HSPC_UCBMC |
| MAMU-A            | 0.00010183 | 0.6058727  | 0.778 | 0.634 | 1 HSPC_UCBMC |
| IREB2             | 0.00010203 | 0.72252407 | 0.589 | 0.427 | 1 HSPC_UCBMC |
| RBM25             | 0.00010215 | 0.66403176 | 0.744 | 0.658 | 1 HSPC_UCBMC |
| BEX4              | 0.00010418 | 1.27343345 | 0.378 | 0.207 | 1 HSPC_UCBMC |
| PPP4R1            | 0.00010488 | 1.24994158 | 0.478 | 0.311 | 1 HSPC_UCBMC |
| MAP7D3            | 0.00010493 | 1.28842301 | 0.4   | 0.227 | 1 HSPC_UCBMC |
| ENSMUG00000030465 | 0.00010544 | 0.9980968  | 0.611 | 0.501 | 1 HSPC_UCBMC |
| ENSMUG00000029973 | 0.00010649 | 0.63880881 | 0.767 | 0.64  | 1 HSPC_UCBMC |
| CPSF6             | 0.00010786 | 0.60776516 | 0.756 | 0.606 | 1 HSPC_UCBMC |
| DIABLO            | 0.00010815 | 0.74684835 | 0.589 | 0.445 | 1 HSPC_UCBMC |
| ATG5              | 0.00010992 | 0.8925066  | 0.633 | 0.455 | 1 HSPC_UCBMC |
| PTPRA             | 0.00011065 | 0.57293407 | 0.8   | 0.623 | 1 HSPC_UCBMC |
| ZNF708            | 0.00011213 | 1.25516953 | 0.4   | 0.229 | 1 HSPC_UCBMC |
| FOXJ3             | 0.00011221 | 0.52420778 | 0.7   | 0.499 | 1 HSPC_UCBMC |
| ARF1              | 0.00011248 | 0.52086376 | 0.8   | 0.695 | 1 HSPC_UCBMC |

|                     |            |            |       |       |              |
|---------------------|------------|------------|-------|-------|--------------|
| UHRF1BP1L           | 0.00011351 | 0.69810761 | 0.589 | 0.407 | 1 HSPC_UCBMC |
| KAT6B               | 0.00011352 | 0.55280801 | 0.689 | 0.506 | 1 HSPC_UCBMC |
| RILPL2              | 0.00011477 | 0.67220063 | 0.511 | 0.287 | 1 HSPC_UCBMC |
| AHNAK               | 0.00011506 | 0.96841263 | 0.411 | 0.24  | 1 HSPC_UCBMC |
| PHTF1               | 0.00011599 | 1.26380201 | 0.378 | 0.218 | 1 HSPC_UCBMC |
| MLLT10              | 0.00011661 | 0.52229936 | 0.767 | 0.614 | 1 HSPC_UCBMC |
| ALDH1A1             | 0.00011721 | 0.69057049 | 0.6   | 0.383 | 1 HSPC_UCBMC |
| GPALPP1             | 0.00011745 | 0.93489405 | 0.422 | 0.237 | 1 HSPC_UCBMC |
| ACVR2A              | 0.00011748 | 1.4775029  | 0.267 | 0.118 | 1 HSPC_UCBMC |
| WDR47               | 0.00011968 | 1.02909737 | 0.444 | 0.268 | 1 HSPC_UCBMC |
| PJA2                | 0.00012021 | 0.75822697 | 0.656 | 0.505 | 1 HSPC_UCBMC |
| ENSMMUG00000041517  | 0.00012197 | 1.30024405 | 0.444 | 0.279 | 1 HSPC_UCBMC |
| ENSMMUG00000000983  | 0.00012286 | 0.57320456 | 0.778 | 0.625 | 1 HSPC_UCBMC |
| MTMR12              | 0.00012418 | 1.52803674 | 0.367 | 0.207 | 1 HSPC_UCBMC |
| GPR89A              | 0.00012579 | 0.81935224 | 0.511 | 0.333 | 1 HSPC_UCBMC |
| ATP2C1              | 0.00012674 | 0.49138059 | 0.822 | 0.654 | 1 HSPC_UCBMC |
| ANO6                | 0.00012871 | 0.9931693  | 0.444 | 0.27  | 1 HSPC_UCBMC |
| RELL1               | 0.00012882 | 0.62700175 | 0.611 | 0.409 | 1 HSPC_UCBMC |
| KLF6                | 0.00012907 | 0.64586012 | 0.789 | 0.614 | 1 HSPC_UCBMC |
| ENSMMUG000000059017 | 0.00013184 | 0.64840778 | 0.8   | 0.68  | 1 HSPC_UCBMC |
| EXOC6               | 0.00013366 | 0.85715153 | 0.722 | 0.588 | 1 HSPC_UCBMC |
| KLHL28              | 0.00013562 | 0.98727268 | 0.522 | 0.333 | 1 HSPC_UCBMC |
| FAM160B1            | 0.00013629 | 1.39560328 | 0.344 | 0.192 | 1 HSPC_UCBMC |
| UTY                 | 0.00013917 | 0.19521653 | 0.656 | 0.457 | 1 HSPC_UCBMC |
| AFDN                | 0.0001438  | 1.50746509 | 0.289 | 0.135 | 1 HSPC_UCBMC |
| COMMD7              | 0.00014383 | 0.71734309 | 0.644 | 0.46  | 1 HSPC_UCBMC |
| RPL4                | 0.00014531 | 0.43845468 | 0.922 | 0.802 | 1 HSPC_UCBMC |
| BCR                 | 0.00014598 | 1.22826312 | 0.333 | 0.166 | 1 HSPC_UCBMC |
| TTC7A               | 0.00014992 | 1.14138687 | 0.3   | 0.144 | 1 HSPC_UCBMC |
| FAR1                | 0.0001502  | 1.06275095 | 0.567 | 0.381 | 1 HSPC_UCBMC |
| WDR43               | 0.00015386 | 0.80459253 | 0.622 | 0.477 | 1 HSPC_UCBMC |
| KPNA4               | 0.00015527 | 0.88669949 | 0.533 | 0.346 | 1 HSPC_UCBMC |
| ITM2A               | 0.00015532 | 0.75659659 | 0.289 | 0.131 | 1 HSPC_UCBMC |

|                    |            |            |       |       |              |
|--------------------|------------|------------|-------|-------|--------------|
| ENSMMUG00000060229 | 0.00015953 | 0.80323098 | 0.7   | 0.569 | 1 HSPC_UCBMC |
| TRPC4AP            | 0.00016005 | 1.02565654 | 0.578 | 0.401 | 1 HSPC_UCBMC |
| CCDC6              | 0.000162   | 0.78064462 | 0.689 | 0.521 | 1 HSPC_UCBMC |
| TMEM131            | 0.00016437 | 0.46835582 | 0.811 | 0.652 | 1 HSPC_UCBMC |
| TASP1              | 0.00016492 | 0.75235823 | 0.656 | 0.453 | 1 HSPC_UCBMC |
| ENSMMUG00000019371 | 0.00016709 | 1.44331354 | 0.3   | 0.14  | 1 HSPC_UCBMC |
| RPS6KC1            | 0.00017139 | 0.57525417 | 0.633 | 0.462 | 1 HSPC_UCBMC |
| PDLIM2             | 0.00017151 | 1.08779228 | 0.367 | 0.196 | 1 HSPC_UCBMC |
| HSH2D              | 0.00017182 | 1.09934736 | 0.433 | 0.261 | 1 HSPC_UCBMC |
| ENSMMUG00000061038 | 0.00017345 | 1.23083765 | 0.344 | 0.183 | 1 HSPC_UCBMC |
| LATS1              | 0.00017512 | 0.98833329 | 0.389 | 0.209 | 1 HSPC_UCBMC |
| DDX5               | 0.00017615 | 0.36566994 | 0.967 | 0.887 | 1 HSPC_UCBMC |
| PDZD2              | 0.00017762 | 0.73435787 | 0.556 | 0.359 | 1 HSPC_UCBMC |
| HMGA2              | 0.00017776 | 1.05946087 | 0.533 | 0.342 | 1 HSPC_UCBMC |
| MAML2              | 0.00017958 | 0.62358481 | 0.578 | 0.368 | 1 HSPC_UCBMC |
| AQR                | 0.00018082 | 0.91135423 | 0.622 | 0.464 | 1 HSPC_UCBMC |
| GSTM4              | 0.00018091 | 0.92979055 | 0.489 | 0.336 | 1 HSPC_UCBMC |
| ENSMMUG00000050540 | 0.00018146 | 0.89665588 | 0.411 | 0.22  | 1 HSPC_UCBMC |
| SEC61B             | 0.00018469 | 0.66877869 | 0.789 | 0.665 | 1 HSPC_UCBMC |
| MAPRE2             | 0.00018473 | 0.58889127 | 0.667 | 0.475 | 1 HSPC_UCBMC |
| KPNA6              | 0.00019023 | 1.16806729 | 0.467 | 0.292 | 1 HSPC_UCBMC |
| NUFIP1             | 0.00019138 | 0.50603033 | 0.467 | 0.294 | 1 HSPC_UCBMC |
| ARHGAP25           | 0.00019166 | 1.06530121 | 0.467 | 0.292 | 1 HSPC_UCBMC |
| PHF11              | 0.0001937  | 0.88192993 | 0.644 | 0.47  | 1 HSPC_UCBMC |
| OPA1               | 0.00019439 | 0.5631328  | 0.667 | 0.543 | 1 HSPC_UCBMC |
| TMBIM4             | 0.00019596 | 0.97178179 | 0.667 | 0.564 | 1 HSPC_UCBMC |
| WDPCP              | 0.00019598 | 0.93215252 | 0.389 | 0.201 | 1 HSPC_UCBMC |
| ERN1               | 0.00019615 | 1.51798795 | 0.289 | 0.142 | 1 HSPC_UCBMC |
| SPAG9              | 0.00019697 | 0.63753236 | 0.8   | 0.652 | 1 HSPC_UCBMC |
| TSGA10             | 0.00019796 | 0.93311275 | 0.256 | 0.113 | 1 HSPC_UCBMC |
| USP42              | 0.00019897 | 0.97536463 | 0.4   | 0.231 | 1 HSPC_UCBMC |
| UBAP1              | 0.00019946 | 0.50547417 | 0.689 | 0.53  | 1 HSPC_UCBMC |
| CSNK1A1            | 0.00020182 | 0.4494814  | 0.867 | 0.787 | 1 HSPC_UCBMC |



|                    |            |            |       |       |              |
|--------------------|------------|------------|-------|-------|--------------|
| ABCD3              | 0.00020524 | 0.71388314 | 0.456 | 0.281 | 1 HSPC_UCBMC |
| FN1                | 0.00020663 | 0.904755   | 0.389 | 0.205 | 1 HSPC_UCBMC |
| COX7C              | 0.0002072  | 0.47723242 | 0.911 | 0.747 | 1 HSPC_UCBMC |
| RBM5               | 0.00020856 | 0.71315511 | 0.711 | 0.567 | 1 HSPC_UCBMC |
| RNF4               | 0.00020979 | 1.0668641  | 0.444 | 0.277 | 1 HSPC_UCBMC |
| AGAP1              | 0.00021052 | 0.36498412 | 0.589 | 0.409 | 1 HSPC_UCBMC |
| SPIDR              | 0.00021102 | 0.69454683 | 0.689 | 0.518 | 1 HSPC_UCBMC |
| RPL7               | 0.00021585 | 0.39274735 | 0.967 | 0.843 | 1 HSPC_UCBMC |
| DIAPH1             | 0.00021669 | 0.80880963 | 0.711 | 0.523 | 1 HSPC_UCBMC |
| CUX1               | 0.00021709 | 0.44416845 | 0.811 | 0.704 | 1 HSPC_UCBMC |
| FYTTD1             | 0.00021889 | 0.82191395 | 0.467 | 0.274 | 1 HSPC_UCBMC |
| GMFB               | 0.00022173 | 1.78606431 | 0.278 | 0.135 | 1 HSPC_UCBMC |
| RSL1D1             | 0.00022321 | 0.78687332 | 0.656 | 0.529 | 1 HSPC_UCBMC |
| SNW1               | 0.00022409 | 0.81513608 | 0.656 | 0.51  | 1 HSPC_UCBMC |
| WIPF1              | 0.00022417 | 0.35349448 | 0.689 | 0.488 | 1 HSPC_UCBMC |
| ENSMUG00000005880  | 0.00022542 | 0.6235208  | 0.644 | 0.462 | 1 HSPC_UCBMC |
| STARD9             | 0.00022571 | 1.31345302 | 0.256 | 0.116 | 1 HSPC_UCBMC |
| TOM1L2             | 0.00022855 | 1.34525188 | 0.4   | 0.238 | 1 HSPC_UCBMC |
| C20H16orf54        | 0.00023182 | 1.36800895 | 0.344 | 0.181 | 1 HSPC_UCBMC |
| TRIB2              | 0.00023372 | 0.84303534 | 0.333 | 0.177 | 1 HSPC_UCBMC |
| KRTCAP2            | 0.00023532 | 0.39099955 | 0.856 | 0.712 | 1 HSPC_UCBMC |
| C20H16orf87        | 0.00023823 | 1.05330796 | 0.478 | 0.299 | 1 HSPC_UCBMC |
| RSF1               | 0.00023992 | 0.61177243 | 0.744 | 0.604 | 1 HSPC_UCBMC |
| TMEM87A            | 0.00024131 | 0.62184719 | 0.7   | 0.542 | 1 HSPC_UCBMC |
| PSMB8              | 0.0002435  | 0.48633364 | 0.611 | 0.372 | 1 HSPC_UCBMC |
| RNMT               | 0.00024604 | 0.6730823  | 0.733 | 0.628 | 1 HSPC_UCBMC |
| PLA2G6             | 0.00024684 | 0.94650131 | 0.378 | 0.203 | 1 HSPC_UCBMC |
| ZNF350             | 0.00024854 | 1.22309171 | 0.289 | 0.142 | 1 HSPC_UCBMC |
| MCU                | 0.00025027 | 0.89704474 | 0.544 | 0.383 | 1 HSPC_UCBMC |
| PRR13              | 0.00025303 | 0.67215453 | 0.556 | 0.381 | 1 HSPC_UCBMC |
| ENSMUG000000055457 | 0.00025594 | 0.87997993 | 0.556 | 0.445 | 1 HSPC_UCBMC |
| IQGAP2             | 0.00026053 | 0.58305005 | 0.789 | 0.656 | 1 HSPC_UCBMC |
| BTBD11             | 0.00026554 | 0.95816859 | 0.433 | 0.272 | 1 HSPC_UCBMC |

|                    |            |            |       |       |              |
|--------------------|------------|------------|-------|-------|--------------|
| RPS28              | 0.00027125 | 0.30844142 | 0.989 | 0.908 | 1 HSPC_UCBMC |
| CCDC12             | 0.00027291 | 0.7982358  | 0.567 | 0.41  | 1 HSPC_UCBMC |
| DLK1               | 0.00027344 | 0.41090201 | 0.578 | 0.349 | 1 HSPC_UCBMC |
| DYRK2              | 0.00027377 | 0.84758097 | 0.389 | 0.226 | 1 HSPC_UCBMC |
| SOS1               | 0.00027677 | 0.60963942 | 0.7   | 0.59  | 1 HSPC_UCBMC |
| RGS19              | 0.00027853 | 0.99581911 | 0.367 | 0.2   | 1 HSPC_UCBMC |
| KLHL23             | 0.00027918 | 0.50261997 | 0.856 | 0.754 | 1 HSPC_UCBMC |
| RPS5               | 0.00028383 | 0.3717967  | 0.989 | 0.869 | 1 HSPC_UCBMC |
| DAZAP2             | 0.00028412 | 0.87170451 | 0.644 | 0.492 | 1 HSPC_UCBMC |
| ENSMMUG00000064139 | 0.00028672 | 0.33535126 | 0.778 | 0.562 | 1 HSPC_UCBMC |
| BDP1               | 0.00028805 | 0.42115175 | 0.778 | 0.61  | 1 HSPC_UCBMC |
| AAR2               | 0.00028836 | 1.93517077 | 0.256 | 0.126 | 1 HSPC_UCBMC |
| MCM9               | 0.00028845 | 1.2757967  | 0.5   | 0.342 | 1 HSPC_UCBMC |
| CDC73              | 0.00029297 | 0.55924416 | 0.689 | 0.54  | 1 HSPC_UCBMC |
| CHD3               | 0.000296   | 1.17591874 | 0.333 | 0.185 | 1 HSPC_UCBMC |
| ARHGEF3            | 0.00030127 | 0.88245508 | 0.478 | 0.316 | 1 HSPC_UCBMC |
| PPFIBP1            | 0.00030133 | 1.17045684 | 0.344 | 0.185 | 1 HSPC_UCBMC |
| SCAF8              | 0.00030471 | 0.58902292 | 0.744 | 0.569 | 1 HSPC_UCBMC |
| LRCH1              | 0.00030636 | 0.85526881 | 0.556 | 0.366 | 1 HSPC_UCBMC |
| LYZ                | 0.00030794 | 0.45548663 | 0.256 | 0.115 | 1 HSPC_UCBMC |
| KLF12              | 0.00030936 | 0.19610273 | 0.822 | 0.658 | 1 HSPC_UCBMC |
| TAF9               | 0.00031054 | 0.63121793 | 0.678 | 0.595 | 1 HSPC_UCBMC |
| FAM135A            | 0.00031336 | 1.09504117 | 0.333 | 0.176 | 1 HSPC_UCBMC |
| NIBAN1             | 0.00031386 | 1.27144651 | 0.3   | 0.152 | 1 HSPC_UCBMC |
| PHF3               | 0.00031723 | 0.66556663 | 0.744 | 0.58  | 1 HSPC_UCBMC |
| NAA25              | 0.00031847 | 0.76199729 | 0.544 | 0.37  | 1 HSPC_UCBMC |
| THUMPD1            | 0.00031879 | 1.02670689 | 0.433 | 0.259 | 1 HSPC_UCBMC |
| UBXN7              | 0.00031947 | 1.14117271 | 0.556 | 0.427 | 1 HSPC_UCBMC |
| ADAM9              | 0.00031999 | 0.7177186  | 0.378 | 0.211 | 1 HSPC_UCBMC |
| ENSMMUG00000052747 | 0.00032039 | 0.50387322 | 0.744 | 0.64  | 1 HSPC_UCBMC |
| MED15              | 0.00032205 | 0.67075756 | 0.5   | 0.322 | 1 HSPC_UCBMC |
| GNG2               | 0.00033151 | 0.93696721 | 0.4   | 0.235 | 1 HSPC_UCBMC |
| ASNS               | 0.00033257 | 1.50799871 | 0.278 | 0.14  | 1 HSPC_UCBMC |

|                    |            |            |       |       |              |
|--------------------|------------|------------|-------|-------|--------------|
| ERBIN              | 0.00033909 | 0.60986659 | 0.744 | 0.625 | 1 HSPC_UCBMC |
| ATOX1              | 0.00033973 | 0.79960995 | 0.633 | 0.51  | 1 HSPC_UCBMC |
| SLC38A1            | 0.00034017 | 0.76123611 | 0.5   | 0.336 | 1 HSPC_UCBMC |
| RLIM               | 0.00034073 | 0.87629495 | 0.522 | 0.351 | 1 HSPC_UCBMC |
| AOPEP              | 0.00034616 | 0.54686566 | 0.656 | 0.519 | 1 HSPC_UCBMC |
| RAB11FIP1          | 0.00034735 | 1.58703559 | 0.356 | 0.207 | 1 HSPC_UCBMC |
| ENSMMUG00000059289 | 0.00035276 | 0.77416201 | 0.667 | 0.534 | 1 HSPC_UCBMC |
| VTA1               | 0.00035577 | 1.29231886 | 0.5   | 0.351 | 1 HSPC_UCBMC |
| CDK7               | 0.00035661 | 1.21994129 | 0.389 | 0.237 | 1 HSPC_UCBMC |
| CLU                | 0.00035799 | 0.46119824 | 0.567 | 0.359 | 1 HSPC_UCBMC |
| CA9                | 0.00036198 | 1.05425064 | 0.322 | 0.165 | 1 HSPC_UCBMC |
| AP2B1              | 0.00036248 | 0.50057942 | 0.689 | 0.503 | 1 HSPC_UCBMC |
| ZDHHC15            | 0.00036986 | 1.99571647 | 0.267 | 0.131 | 1 HSPC_UCBMC |
| CAMLG              | 0.00037171 | 0.75891998 | 0.633 | 0.495 | 1 HSPC_UCBMC |
| CREBRF             | 0.00037188 | 0.36285178 | 0.578 | 0.37  | 1 HSPC_UCBMC |
| TBC1D1             | 0.00037341 | 0.74185467 | 0.622 | 0.46  | 1 HSPC_UCBMC |
| VASP               | 0.00038084 | 0.92516994 | 0.5   | 0.327 | 1 HSPC_UCBMC |
| HDAC1              | 0.00038216 | 0.59137661 | 0.633 | 0.477 | 1 HSPC_UCBMC |
| ARID5B             | 0.0003847  | 0.79992895 | 0.478 | 0.287 | 1 HSPC_UCBMC |
| CDC42SE1           | 0.00038571 | 1.18903343 | 0.311 | 0.161 | 1 HSPC_UCBMC |
| PAK1IP1            | 0.00039025 | 0.6267189  | 0.544 | 0.373 | 1 HSPC_UCBMC |
| ENSMMUG00000006343 | 0.00039441 | 0.87684271 | 0.422 | 0.257 | 1 HSPC_UCBMC |
| SPRED1             | 0.00039967 | 1.66799457 | 0.278 | 0.135 | 1 HSPC_UCBMC |
| RPS7               | 0.00040112 | 0.30356437 | 0.978 | 0.915 | 1 HSPC_UCBMC |
| MYL12B             | 0.00040254 | 0.44955204 | 0.833 | 0.73  | 1 HSPC_UCBMC |
| NCKAP1L            | 0.00040487 | 0.82465677 | 0.533 | 0.338 | 1 HSPC_UCBMC |
| TFG                | 0.00040569 | 0.55494464 | 0.644 | 0.49  | 1 HSPC_UCBMC |
| ARHGAP45           | 0.00040718 | 1.17966067 | 0.389 | 0.222 | 1 HSPC_UCBMC |
| RAB9B              | 0.00041248 | 1.37385021 | 0.3   | 0.159 | 1 HSPC_UCBMC |
| RPAP2              | 0.00041372 | 0.8802979  | 0.433 | 0.27  | 1 HSPC_UCBMC |
| ZEB2               | 0.00041499 | 0.69624393 | 0.867 | 0.743 | 1 HSPC_UCBMC |
| ENSMMUG00000053384 | 0.00041759 | 1.39262217 | 0.311 | 0.168 | 1 HSPC_UCBMC |
| PPP3CA             | 0.00041848 | 0.53937087 | 0.789 | 0.691 | 1 HSPC_UCBMC |

|                   |            |            |       |       |              |
|-------------------|------------|------------|-------|-------|--------------|
| UXS1              | 0.00041931 | 0.66858197 | 0.611 | 0.468 | 1 HSPC_UCBMC |
| ASAH1             | 0.00041995 | 0.97514114 | 0.267 | 0.129 | 1 HSPC_UCBMC |
| SOCS5             | 0.00042342 | 1.17995124 | 0.322 | 0.165 | 1 HSPC_UCBMC |
| ARMCX1            | 0.00042434 | 1.09281451 | 0.289 | 0.144 | 1 HSPC_UCBMC |
| SF3B1             | 0.00042443 | 0.41516204 | 0.822 | 0.736 | 1 HSPC_UCBMC |
| HOPX              | 0.00042809 | 0.85449796 | 0.422 | 0.248 | 1 HSPC_UCBMC |
| CYFIP2            | 0.00042865 | 0.99635439 | 0.467 | 0.29  | 1 HSPC_UCBMC |
| RNF181            | 0.00042942 | 0.65928971 | 0.622 | 0.462 | 1 HSPC_UCBMC |
| CAMK4             | 0.00043071 | 1.32444274 | 0.311 | 0.165 | 1 HSPC_UCBMC |
| FAM91A1           | 0.00043278 | 1.14697089 | 0.533 | 0.342 | 1 HSPC_UCBMC |
| ENSMUG00000001210 | 0.00043294 | 0.45509889 | 0.911 | 0.789 | 1 HSPC_UCBMC |
| ARG2              | 0.00044906 | 0.96196116 | 0.311 | 0.166 | 1 HSPC_UCBMC |
| CDKAL1            | 0.00044937 | 0.50249014 | 0.756 | 0.651 | 1 HSPC_UCBMC |
| ST8SIA6           | 0.00046099 | 0.40558079 | 0.267 | 0.126 | 1 HSPC_UCBMC |
| STAM2             | 0.00046286 | 0.90592382 | 0.4   | 0.227 | 1 HSPC_UCBMC |
| SPIN1             | 0.00046442 | 1.00491519 | 0.478 | 0.311 | 1 HSPC_UCBMC |
| LRCH3             | 0.00046456 | 0.57068553 | 0.711 | 0.579 | 1 HSPC_UCBMC |
| FRMD4B            | 0.00047293 | 0.55851807 | 0.411 | 0.231 | 1 HSPC_UCBMC |
| RUBCN             | 0.00047458 | 1.02728675 | 0.444 | 0.283 | 1 HSPC_UCBMC |
| SLC39A11          | 0.00047594 | 0.93218595 | 0.556 | 0.399 | 1 HSPC_UCBMC |
| RPS3              | 0.00048374 | 0.34977641 | 0.967 | 0.85  | 1 HSPC_UCBMC |
| DIDO1             | 0.00048722 | 0.7558518  | 0.556 | 0.399 | 1 HSPC_UCBMC |
| RAB8B             | 0.00048743 | 0.51432261 | 0.611 | 0.42  | 1 HSPC_UCBMC |
| ABCC1             | 0.00049059 | 0.95148748 | 0.511 | 0.338 | 1 HSPC_UCBMC |
| BAZ2B             | 0.00049414 | 0.65556783 | 0.589 | 0.445 | 1 HSPC_UCBMC |
| RFX3              | 0.00049725 | 0.56199587 | 0.744 | 0.649 | 1 HSPC_UCBMC |
| RPL27             | 0.00049876 | 0.33537464 | 0.989 | 0.865 | 1 HSPC_UCBMC |
| UBE2D3            | 0.00050917 | 0.33938735 | 0.911 | 0.845 | 1 HSPC_UCBMC |
| PPIG              | 0.00050988 | 0.56322031 | 0.811 | 0.669 | 1 HSPC_UCBMC |
| NR1D2             | 0.0005165  | 1.69886186 | 0.344 | 0.196 | 1 HSPC_UCBMC |
| CHD2              | 0.0005217  | 0.2736905  | 0.833 | 0.664 | 1 HSPC_UCBMC |
| UST               | 0.0005347  | 1.16214579 | 0.356 | 0.198 | 1 HSPC_UCBMC |
| ATP5F1C           | 0.00053481 | 0.46207991 | 0.767 | 0.603 | 1 HSPC_UCBMC |

|                   |            |            |       |       |              |
|-------------------|------------|------------|-------|-------|--------------|
| DNAJC1            | 0.00053501 | 0.57889007 | 0.744 | 0.579 | 1 HSPC_UCBMC |
| UBXN1             | 0.00053809 | 0.59285238 | 0.656 | 0.482 | 1 HSPC_UCBMC |
| XPO4              | 0.00054386 | 0.68271185 | 0.533 | 0.36  | 1 HSPC_UCBMC |
| RNASEH1           | 0.00054465 | 1.634697   | 0.344 | 0.205 | 1 HSPC_UCBMC |
| ZZZ3              | 0.00055556 | 0.51405427 | 0.656 | 0.512 | 1 HSPC_UCBMC |
| TXNDC12           | 0.00055904 | 0.99322548 | 0.411 | 0.244 | 1 HSPC_UCBMC |
| MED23             | 0.00056566 | 0.55384321 | 0.533 | 0.37  | 1 HSPC_UCBMC |
| MBTD1             | 0.00056646 | 0.73262863 | 0.667 | 0.538 | 1 HSPC_UCBMC |
| DERL2             | 0.00056823 | 1.24817131 | 0.4   | 0.248 | 1 HSPC_UCBMC |
| EFR3A             | 0.00057304 | 0.74708707 | 0.5   | 0.331 | 1 HSPC_UCBMC |
| TCAIM             | 0.00058022 | 1.18304762 | 0.356 | 0.203 | 1 HSPC_UCBMC |
| ARHGAP4           | 0.00058177 | 0.76862162 | 0.456 | 0.281 | 1 HSPC_UCBMC |
| RIN3              | 0.00058297 | 0.54093278 | 0.444 | 0.251 | 1 HSPC_UCBMC |
| SYNCRIP           | 0.00058955 | 0.50074737 | 0.733 | 0.582 | 1 HSPC_UCBMC |
| ENSMUG00000022489 | 0.00058964 | 0.61876643 | 0.822 | 0.673 | 1 HSPC_UCBMC |
| NCOR1             | 0.00060436 | 0.54239671 | 0.778 | 0.66  | 1 HSPC_UCBMC |
| ST8SIA4           | 0.00061001 | 0.62519524 | 0.456 | 0.274 | 1 HSPC_UCBMC |
| RAB1A             | 0.00061131 | 0.67672363 | 0.744 | 0.645 | 1 HSPC_UCBMC |
| CD38              | 0.0006119  | 0.51136705 | 0.644 | 0.462 | 1 HSPC_UCBMC |
| RBPJ              | 0.00061573 | 0.89077152 | 0.589 | 0.488 | 1 HSPC_UCBMC |
| INPP4A            | 0.00062065 | 1.02362932 | 0.378 | 0.229 | 1 HSPC_UCBMC |
| ATP6V1A           | 0.00062527 | 1.50383232 | 0.422 | 0.25  | 1 HSPC_UCBMC |
| TRAM1             | 0.00063179 | 0.76429845 | 0.633 | 0.497 | 1 HSPC_UCBMC |
| PHACTR2           | 0.00063618 | 0.79096658 | 0.478 | 0.311 | 1 HSPC_UCBMC |
| EFCAB2            | 0.00064244 | 0.79039489 | 0.667 | 0.525 | 1 HSPC_UCBMC |
| UBAC2             | 0.00064398 | 0.79404662 | 0.611 | 0.44  | 1 HSPC_UCBMC |
| OLA1              | 0.0006512  | 0.4151881  | 0.756 | 0.643 | 1 HSPC_UCBMC |
| SLC22A18          | 0.00065669 | 0.66172861 | 0.589 | 0.44  | 1 HSPC_UCBMC |
| POLR1D            | 0.00066543 | 0.79173033 | 0.644 | 0.547 | 1 HSPC_UCBMC |
| TRIM37            | 0.00067299 | 0.78623075 | 0.489 | 0.34  | 1 HSPC_UCBMC |
| RBM23             | 0.00067426 | 0.85062713 | 0.422 | 0.266 | 1 HSPC_UCBMC |
| ESYT1             | 0.00068315 | 0.5873842  | 0.567 | 0.39  | 1 HSPC_UCBMC |
| PUM1              | 0.0006835  | 0.51066088 | 0.822 | 0.701 | 1 HSPC_UCBMC |

|                    |            |            |       |       |              |
|--------------------|------------|------------|-------|-------|--------------|
| KIFBP              | 0.00068599 | 0.6519935  | 0.744 | 0.621 | 1 HSPC_UCBMC |
| LAMTOR2            | 0.00070129 | 0.61970601 | 0.622 | 0.453 | 1 HSPC_UCBMC |
| PGAP1              | 0.00070688 | 0.8108952  | 0.411 | 0.255 | 1 HSPC_UCBMC |
| ENSMMUG00000062350 | 0.00072491 | 0.22660531 | 1     | 0.915 | 1 HSPC_UCBMC |
| ENSMMUG00000028906 | 0.00072788 | 0.80749636 | 0.5   | 0.353 | 1 HSPC_UCBMC |
| SUSD4              | 0.00072987 | 1.08553535 | 0.344 | 0.196 | 1 HSPC_UCBMC |
| TOR1AIP1           | 0.00073179 | 1.21438958 | 0.389 | 0.238 | 1 HSPC_UCBMC |
| ZBTB16             | 0.00073854 | 0.37211471 | 0.278 | 0.135 | 1 HSPC_UCBMC |
| SMG6               | 0.00074098 | 0.54827035 | 0.7   | 0.545 | 1 HSPC_UCBMC |
| PSMA1              | 0.0007418  | 0.6767309  | 0.678 | 0.577 | 1 HSPC_UCBMC |
| UBE2G1             | 0.00074325 | 0.50399501 | 0.722 | 0.628 | 1 HSPC_UCBMC |
| RALGPS2            | 0.00074816 | 0.31468994 | 0.567 | 0.394 | 1 HSPC_UCBMC |
| ZMPSTE24           | 0.00075049 | 1.30768876 | 0.389 | 0.244 | 1 HSPC_UCBMC |
| RPL6               | 0.00075063 | 0.28978519 | 0.978 | 0.887 | 1 HSPC_UCBMC |
| UBB                | 0.00077411 | 0.3469016  | 0.9   | 0.848 | 1 HSPC_UCBMC |
| MED10              | 0.00077742 | 1.04948737 | 0.344 | 0.194 | 1 HSPC_UCBMC |
| DENND4C            | 0.00078795 | 0.89630981 | 0.589 | 0.433 | 1 HSPC_UCBMC |
| MRPL10             | 0.00079377 | 1.01052964 | 0.478 | 0.322 | 1 HSPC_UCBMC |
| KAT6A              | 0.00079531 | 0.5576847  | 0.678 | 0.545 | 1 HSPC_UCBMC |
| ENSMMUG00000057791 | 0.00080134 | 0.4647403  | 0.511 | 0.307 | 1 HSPC_UCBMC |
| RLF                | 0.00080434 | 0.58038537 | 0.711 | 0.567 | 1 HSPC_UCBMC |
| ZNF700             | 0.00081294 | 0.86224575 | 0.478 | 0.318 | 1 HSPC_UCBMC |
| DNAJB6             | 0.00081425 | 0.41464603 | 0.789 | 0.684 | 1 HSPC_UCBMC |
| TMEM181            | 0.00084434 | 0.93929744 | 0.411 | 0.261 | 1 HSPC_UCBMC |
| RPL27A             | 0.00085057 | 0.3121518  | 0.967 | 0.887 | 1 HSPC_UCBMC |
| PI4K2B             | 0.00085077 | 0.54956119 | 0.744 | 0.667 | 1 HSPC_UCBMC |
| RALA               | 0.000853   | 1.03270695 | 0.478 | 0.342 | 1 HSPC_UCBMC |
| ENSMMUG00000013429 | 0.00085575 | 0.30448201 | 1     | 0.93  | 1 HSPC_UCBMC |
| ANKRD33B           | 0.00087223 | 0.86829678 | 0.389 | 0.238 | 1 HSPC_UCBMC |
| ZNF433             | 0.00087435 | 0.89593072 | 0.289 | 0.148 | 1 HSPC_UCBMC |
| PMM2               | 0.00087653 | 0.75983649 | 0.289 | 0.152 | 1 HSPC_UCBMC |
| DNM1L              | 0.00088417 | 0.77058642 | 0.567 | 0.42  | 1 HSPC_UCBMC |
| RAP1GAP2           | 0.00088474 | 1.25465592 | 0.267 | 0.137 | 1 HSPC_UCBMC |

|                     |            |            |       |       |              |
|---------------------|------------|------------|-------|-------|--------------|
| BIN1                | 0.00088516 | 1.18221616 | 0.311 | 0.163 | 1 HSPC_UCBMC |
| MALT1               | 0.00089514 | 0.81743669 | 0.3   | 0.157 | 1 HSPC_UCBMC |
| SP100               | 0.00090404 | 0.28362578 | 0.778 | 0.68  | 1 HSPC_UCBMC |
| GOLGA4              | 0.00090573 | 0.61867147 | 0.7   | 0.556 | 1 HSPC_UCBMC |
| SNAPC5              | 0.00091196 | 1.057376   | 0.367 | 0.224 | 1 HSPC_UCBMC |
| ENSMMUG00000006293  | 0.00091431 | 0.29639814 | 0.811 | 0.697 | 1 HSPC_UCBMC |
| COMMD3              | 0.00091899 | 0.72866535 | 0.7   | 0.564 | 1 HSPC_UCBMC |
| CNOT4               | 0.00093686 | 0.37503132 | 0.733 | 0.604 | 1 HSPC_UCBMC |
| SMYD3               | 0.00095982 | 0.49308998 | 0.733 | 0.577 | 1 HSPC_UCBMC |
| PRKCQ               | 0.00096166 | 0.86341626 | 0.322 | 0.174 | 1 HSPC_UCBMC |
| FOXO1               | 0.00096569 | 0.75210734 | 0.478 | 0.32  | 1 HSPC_UCBMC |
| SMDT1               | 0.00097283 | 0.37635869 | 0.767 | 0.63  | 1 HSPC_UCBMC |
| RPLP2               | 0.00097733 | 0.3015747  | 0.967 | 0.889 | 1 HSPC_UCBMC |
| ENSMMUG00000002320  | 0.00097943 | 0.30070116 | 0.889 | 0.83  | 1 HSPC_UCBMC |
| STX18               | 0.00097949 | 1.32127529 | 0.344 | 0.205 | 1 HSPC_UCBMC |
| N4BP1               | 0.00098469 | 0.90726493 | 0.378 | 0.233 | 1 HSPC_UCBMC |
| RPL15               | 0.00099415 | 0.36095545 | 0.967 | 0.848 | 1 HSPC_UCBMC |
| PLEKHA5             | 0.00099635 | 0.61724911 | 0.533 | 0.364 | 1 HSPC_UCBMC |
| APOOL               | 0.00099662 | 0.72035252 | 0.478 | 0.335 | 1 HSPC_UCBMC |
| EIF2A               | 0.00100896 | 0.99959208 | 0.556 | 0.423 | 1 HSPC_UCBMC |
| ITK                 | 0.00101554 | 0.99273785 | 0.256 | 0.126 | 1 HSPC_UCBMC |
| PTPN2               | 0.00102247 | 0.74734948 | 0.622 | 0.527 | 1 HSPC_UCBMC |
| RALGAPA1            | 0.00102429 | 0.66093511 | 0.5   | 0.333 | 1 HSPC_UCBMC |
| GCN1                | 0.0010442  | 0.30325324 | 0.967 | 0.88  | 1 HSPC_UCBMC |
| CASD1               | 0.00106195 | 0.99146297 | 0.389 | 0.235 | 1 HSPC_UCBMC |
| ZC3H7A              | 0.00106301 | 0.7086502  | 0.544 | 0.36  | 1 HSPC_UCBMC |
| DHX9                | 0.00106863 | 0.4736873  | 0.756 | 0.673 | 1 HSPC_UCBMC |
| TBC1D23             | 0.00107223 | 0.49560523 | 0.644 | 0.473 | 1 HSPC_UCBMC |
| RPS23               | 0.00107678 | 0.27433115 | 0.989 | 0.908 | 1 HSPC_UCBMC |
| HNRNPA1             | 0.00107803 | 0.42732751 | 0.867 | 0.754 | 1 HSPC_UCBMC |
| ENSMMUG000000055584 | 0.00108391 | 0.37371372 | 0.922 | 0.874 | 1 HSPC_UCBMC |
| NAA20               | 0.00112392 | 0.97331441 | 0.467 | 0.322 | 1 HSPC_UCBMC |
| GNA13               | 0.00112445 | 0.56644183 | 0.556 | 0.383 | 1 HSPC_UCBMC |

|                     |            |            |       |       |              |
|---------------------|------------|------------|-------|-------|--------------|
| SF3B6               | 0.00112558 | 0.48772435 | 0.733 | 0.636 | 1 HSPC_UCBMC |
| STAU2               | 0.00113561 | 0.75876033 | 0.611 | 0.492 | 1 HSPC_UCBMC |
| LONP2               | 0.00115673 | 0.56052395 | 0.644 | 0.451 | 1 HSPC_UCBMC |
| YTHDF2              | 0.00116832 | 0.81578876 | 0.533 | 0.386 | 1 HSPC_UCBMC |
| YLPM1               | 0.00118605 | 0.74160056 | 0.556 | 0.399 | 1 HSPC_UCBMC |
| KLHL18              | 0.00119434 | 1.1801296  | 0.378 | 0.237 | 1 HSPC_UCBMC |
| ARHGAP5             | 0.0011988  | 0.63532942 | 0.533 | 0.396 | 1 HSPC_UCBMC |
| RPL24               | 0.00120828 | 0.29375014 | 0.978 | 0.889 | 1 HSPC_UCBMC |
| PIP5K1A             | 0.00121308 | 0.82813034 | 0.533 | 0.381 | 1 HSPC_UCBMC |
| SNX13               | 0.00121546 | 0.66961923 | 0.622 | 0.479 | 1 HSPC_UCBMC |
| PSEN1               | 0.00122778 | 0.72847964 | 0.522 | 0.359 | 1 HSPC_UCBMC |
| ENSMMUG00000006965  | 0.00123912 | 0.44436218 | 0.722 | 0.634 | 1 HSPC_UCBMC |
| DDX6                | 0.00125041 | 0.65719276 | 0.689 | 0.59  | 1 HSPC_UCBMC |
| PIAS1               | 0.00125324 | 0.45364875 | 0.744 | 0.656 | 1 HSPC_UCBMC |
| SH3BP5              | 0.00125379 | 1.20467142 | 0.4   | 0.268 | 1 HSPC_UCBMC |
| SUMO1               | 0.00125662 | 0.56720626 | 0.756 | 0.612 | 1 HSPC_UCBMC |
| PTRHD1              | 0.00125816 | 0.97324337 | 0.544 | 0.388 | 1 HSPC_UCBMC |
| KIAA0319            | 0.00126493 | 1.04793538 | 0.3   | 0.161 | 1 HSPC_UCBMC |
| CHSY1               | 0.00127017 | 1.29058051 | 0.322 | 0.181 | 1 HSPC_UCBMC |
| CRBN                | 0.00127953 | 0.82413834 | 0.433 | 0.272 | 1 HSPC_UCBMC |
| DDX18               | 0.00128909 | 0.67484916 | 0.689 | 0.534 | 1 HSPC_UCBMC |
| AHCTF1              | 0.00129347 | 0.68962817 | 0.678 | 0.542 | 1 HSPC_UCBMC |
| ERP44               | 0.00131684 | 0.66693668 | 0.656 | 0.534 | 1 HSPC_UCBMC |
| UBE2N               | 0.00134175 | 0.54623405 | 0.689 | 0.571 | 1 HSPC_UCBMC |
| SAP18               | 0.00135488 | 0.52788392 | 0.778 | 0.632 | 1 HSPC_UCBMC |
| C14H11orf58         | 0.00136264 | 0.6540578  | 0.678 | 0.543 | 1 HSPC_UCBMC |
| RNF141              | 0.00139142 | 1.24339734 | 0.344 | 0.205 | 1 HSPC_UCBMC |
| ENSMMUG000000063288 | 0.0013985  | 0.94642364 | 0.544 | 0.399 | 1 HSPC_UCBMC |
| HINT1               | 0.00140874 | 0.39291868 | 0.889 | 0.786 | 1 HSPC_UCBMC |
| PAPOLG              | 0.00141129 | 0.85677333 | 0.322 | 0.185 | 1 HSPC_UCBMC |
| RAF1                | 0.00141753 | 0.75249255 | 0.611 | 0.492 | 1 HSPC_UCBMC |
| SETD7               | 0.00144491 | 0.9885795  | 0.478 | 0.331 | 1 HSPC_UCBMC |
| RING1               | 0.00145466 | 1.11774427 | 0.333 | 0.196 | 1 HSPC_UCBMC |



|                    |            |            |       |       |              |
|--------------------|------------|------------|-------|-------|--------------|
| CDC40              | 0.00147625 | 1.20141915 | 0.444 | 0.318 | 1 HSPC_UCBMC |
| ENSMMUG00000022874 | 0.00151087 | 1.08899065 | 0.4   | 0.251 | 1 HSPC_UCBMC |
| GTF2H5             | 0.00151113 | 0.5671249  | 0.644 | 0.506 | 1 HSPC_UCBMC |
| FBXL5              | 0.00151385 | 0.8744434  | 0.444 | 0.312 | 1 HSPC_UCBMC |
| MAML1              | 0.00154689 | 1.21570724 | 0.256 | 0.133 | 1 HSPC_UCBMC |
| PPP1CB             | 0.00155465 | 0.38271931 | 0.789 | 0.684 | 1 HSPC_UCBMC |
| GLG1               | 0.00156707 | 0.69447182 | 0.511 | 0.36  | 1 HSPC_UCBMC |
| MOK                | 0.00156843 | 1.46251238 | 0.344 | 0.209 | 1 HSPC_UCBMC |
| CD200              | 0.00157053 | 1.13270863 | 0.333 | 0.203 | 1 HSPC_UCBMC |
| RTF2               | 0.00158814 | 0.71264763 | 0.689 | 0.564 | 1 HSPC_UCBMC |
| CTNNB1             | 0.00160129 | 0.56747563 | 0.733 | 0.614 | 1 HSPC_UCBMC |
| ZNF136             | 0.00160749 | 1.32346148 | 0.278 | 0.15  | 1 HSPC_UCBMC |
| TSC22D3            | 0.00162612 | 0.77880437 | 0.578 | 0.429 | 1 HSPC_UCBMC |
| MDM4               | 0.00165208 | 0.50095609 | 0.633 | 0.486 | 1 HSPC_UCBMC |
| ENSMMUG00000064224 | 0.0016879  | 0.36829241 | 0.456 | 0.285 | 1 HSPC_UCBMC |
| ANXA5              | 0.00169228 | 0.80056192 | 0.467 | 0.299 | 1 HSPC_UCBMC |
| LITAF              | 0.00170109 | 1.08910102 | 0.267 | 0.142 | 1 HSPC_UCBMC |
| PPP1R18            | 0.0017108  | 1.30192065 | 0.278 | 0.15  | 1 HSPC_UCBMC |
| NAA16              | 0.00171753 | 0.52938113 | 0.433 | 0.294 | 1 HSPC_UCBMC |
| MAN1A1             | 0.00172895 | 0.76809866 | 0.511 | 0.346 | 1 HSPC_UCBMC |
| HERPUD1            | 0.00175579 | 0.89457989 | 0.489 | 0.355 | 1 HSPC_UCBMC |
| SNU13              | 0.00175756 | 0.49640426 | 0.789 | 0.678 | 1 HSPC_UCBMC |
| AEBP2              | 0.00177865 | 0.40358496 | 0.511 | 0.384 | 1 HSPC_UCBMC |
| RBM14              | 0.0017865  | 0.49463042 | 0.8   | 0.734 | 1 HSPC_UCBMC |
| TES                | 0.00179505 | 0.96727395 | 0.322 | 0.179 | 1 HSPC_UCBMC |
| VAMP7              | 0.00182445 | 0.59042053 | 0.322 | 0.181 | 1 HSPC_UCBMC |
| DNAJC27            | 0.00182711 | 1.14352382 | 0.311 | 0.174 | 1 HSPC_UCBMC |
| ENSMMUG00000032031 | 0.00182802 | 0.82042581 | 0.4   | 0.268 | 1 HSPC_UCBMC |
| SUCLG2             | 0.00183969 | 0.62341391 | 0.656 | 0.495 | 1 HSPC_UCBMC |
| CCNK               | 0.00185229 | 0.72201932 | 0.633 | 0.521 | 1 HSPC_UCBMC |
| MAGED2             | 0.00185317 | 0.9789524  | 0.422 | 0.274 | 1 HSPC_UCBMC |
| ATP5PB             | 0.00185482 | 0.72241019 | 0.656 | 0.542 | 1 HSPC_UCBMC |
| PDCD4              | 0.00185919 | 0.72131252 | 0.678 | 0.555 | 1 HSPC_UCBMC |

|                    |            |            |       |       |              |
|--------------------|------------|------------|-------|-------|--------------|
| NOL10              | 0.0018788  | 0.70030607 | 0.522 | 0.392 | 1 HSPC_UCBMC |
| PIK3C2A            | 0.00187949 | 1.15377298 | 0.478 | 0.338 | 1 HSPC_UCBMC |
| MINDY3             | 0.00189458 | 0.90667473 | 0.433 | 0.281 | 1 HSPC_UCBMC |
| MAST4              | 0.0019032  | 0.59855057 | 0.478 | 0.298 | 1 HSPC_UCBMC |
| GTPBP10            | 0.00191829 | 1.1746277  | 0.456 | 0.32  | 1 HSPC_UCBMC |
| MTMR10             | 0.00194083 | 0.96014507 | 0.267 | 0.139 | 1 HSPC_UCBMC |
| JPT1               | 0.00194281 | 0.34892072 | 0.9   | 0.8   | 1 HSPC_UCBMC |
| RABAC1             | 0.0019717  | 0.9732908  | 0.389 | 0.244 | 1 HSPC_UCBMC |
| STK26              | 0.00197199 | 0.51118773 | 0.589 | 0.449 | 1 HSPC_UCBMC |
| BRIX1              | 0.00198223 | 0.9448485  | 0.422 | 0.272 | 1 HSPC_UCBMC |
| DAZAP1             | 0.001986   | 0.48723217 | 0.822 | 0.765 | 1 HSPC_UCBMC |
| RBM27              | 0.0019923  | 0.76935056 | 0.667 | 0.542 | 1 HSPC_UCBMC |
| HSD17B4            | 0.00203593 | 0.45261154 | 0.744 | 0.597 | 1 HSPC_UCBMC |
| APBB2              | 0.00203868 | 1.25090881 | 0.278 | 0.15  | 1 HSPC_UCBMC |
| ENSMMUG00000060377 | 0.002042   | 0.36861583 | 0.833 | 0.715 | 1 HSPC_UCBMC |
| ACAD10             | 0.00204395 | 1.11798453 | 0.456 | 0.335 | 1 HSPC_UCBMC |
| RCC1               | 0.00204979 | 0.69312786 | 0.611 | 0.527 | 1 HSPC_UCBMC |
| GOLPH3             | 0.00205129 | 0.87732878 | 0.633 | 0.516 | 1 HSPC_UCBMC |
| GMCL1              | 0.00205248 | 0.701823   | 0.567 | 0.433 | 1 HSPC_UCBMC |
| CCNT2              | 0.00206348 | 0.59561703 | 0.589 | 0.447 | 1 HSPC_UCBMC |
| CNOT6              | 0.00206755 | 0.5840077  | 0.467 | 0.323 | 1 HSPC_UCBMC |
| SAT1               | 0.00207176 | 0.27527091 | 0.533 | 0.388 | 1 HSPC_UCBMC |
| TRAF5              | 0.00207428 | 1.40897275 | 0.267 | 0.144 | 1 HSPC_UCBMC |
| TMEM127            | 0.00207488 | 1.17273638 | 0.267 | 0.14  | 1 HSPC_UCBMC |
| UBE2Q2             | 0.00207788 | 0.57502997 | 0.611 | 0.482 | 1 HSPC_UCBMC |
| ARL3               | 0.00209468 | 1.22867938 | 0.322 | 0.19  | 1 HSPC_UCBMC |
| LSM2               | 0.00210559 | 0.73436714 | 0.622 | 0.512 | 1 HSPC_UCBMC |
| ENSMMUG00000061458 | 0.00211739 | 0.70758381 | 0.522 | 0.368 | 1 HSPC_UCBMC |
| DTNB               | 0.0021213  | 0.92210311 | 0.344 | 0.203 | 1 HSPC_UCBMC |
| MGAT4A             | 0.00212858 | 0.90257701 | 0.333 | 0.2   | 1 HSPC_UCBMC |
| ENSMMUG00000001458 | 0.00214842 | 0.36045146 | 0.8   | 0.702 | 1 HSPC_UCBMC |
| PDXDC1             | 0.00214903 | 0.75311403 | 0.456 | 0.298 | 1 HSPC_UCBMC |
| NDUFAF4            | 0.00215071 | 1.05902284 | 0.456 | 0.336 | 1 HSPC_UCBMC |

|                     |            |            |       |       |              |
|---------------------|------------|------------|-------|-------|--------------|
| ENSMMUG00000003412  | 0.00215395 | 0.31307571 | 0.978 | 0.884 | 1 HSPC_UCBMC |
| PIK3R5              | 0.00217758 | 1.27370369 | 0.267 | 0.148 | 1 HSPC_UCBMC |
| ENSMMUG000000029026 | 0.00218543 | 0.74601005 | 0.633 | 0.543 | 1 HSPC_UCBMC |
| CDK5RAP3            | 0.00221127 | 1.18135475 | 0.333 | 0.205 | 1 HSPC_UCBMC |
| MED17               | 0.00221423 | 1.02782326 | 0.411 | 0.274 | 1 HSPC_UCBMC |
| AKR1B1              | 0.00225191 | 0.7226024  | 0.367 | 0.222 | 1 HSPC_UCBMC |
| MRPL11              | 0.00226216 | 0.65432086 | 0.633 | 0.51  | 1 HSPC_UCBMC |
| POU2F1              | 0.00226224 | 0.55014892 | 0.622 | 0.482 | 1 HSPC_UCBMC |
| ZBED1               | 0.0022628  | 0.53505707 | 0.578 | 0.429 | 1 HSPC_UCBMC |
| PITPNC1             | 0.00227164 | 0.33016823 | 0.511 | 0.355 | 1 HSPC_UCBMC |
| VPS54               | 0.00231216 | 0.94231339 | 0.511 | 0.362 | 1 HSPC_UCBMC |
| ZNF596              | 0.00232509 | 1.36845555 | 0.267 | 0.152 | 1 HSPC_UCBMC |
| FAM241A             | 0.00233489 | 0.52935224 | 0.433 | 0.266 | 1 HSPC_UCBMC |
| PAG1                | 0.00233603 | 0.52422631 | 0.422 | 0.266 | 1 HSPC_UCBMC |
| NUDT3               | 0.00233738 | 0.25080122 | 0.989 | 0.904 | 1 HSPC_UCBMC |
| TSTD2               | 0.00234324 | 1.13716511 | 0.278 | 0.153 | 1 HSPC_UCBMC |
| REEP5               | 0.00234513 | 0.6213512  | 0.556 | 0.399 | 1 HSPC_UCBMC |
| LPGAT1              | 0.00235039 | 0.66483664 | 0.344 | 0.201 | 1 HSPC_UCBMC |
| TSPAN3              | 0.00235881 | 0.80823669 | 0.456 | 0.314 | 1 HSPC_UCBMC |
| SEC24C              | 0.00236372 | 0.92448197 | 0.322 | 0.194 | 1 HSPC_UCBMC |
| NHP2                | 0.00237056 | 0.68770627 | 0.6   | 0.492 | 1 HSPC_UCBMC |
| SWT1                | 0.0023971  | 0.26842648 | 0.411 | 0.253 | 1 HSPC_UCBMC |
| SLC66A2             | 0.00240392 | 1.12693186 | 0.356 | 0.222 | 1 HSPC_UCBMC |
| IGHM                | 0.00243735 | 0.29709271 | 0.467 | 0.301 | 1 HSPC_UCBMC |
| RCOR1               | 0.00244524 | 0.42083015 | 0.578 | 0.442 | 1 HSPC_UCBMC |
| PCM1                | 0.00245803 | 0.49915255 | 0.767 | 0.654 | 1 HSPC_UCBMC |
| TENT4A              | 0.00246061 | 0.98715623 | 0.267 | 0.146 | 1 HSPC_UCBMC |
| GLIPR1L2            | 0.00248105 | 0.47276126 | 0.489 | 0.309 | 1 HSPC_UCBMC |
| RNF2                | 0.0025069  | 1.30274544 | 0.378 | 0.25  | 1 HSPC_UCBMC |
| RPS13               | 0.00250794 | 0.2656125  | 0.944 | 0.893 | 1 HSPC_UCBMC |
| MDH1                | 0.00251462 | 0.80110467 | 0.544 | 0.434 | 1 HSPC_UCBMC |
| ENSMMUG000000064068 | 0.00253085 | 0.84039139 | 0.344 | 0.205 | 1 HSPC_UCBMC |
| PDE3B               | 0.002541   | 0.4354073  | 0.622 | 0.473 | 1 HSPC_UCBMC |

|             |            |            |       |       |              |
|-------------|------------|------------|-------|-------|--------------|
| P2RX4       | 0.00254674 | 1.0881958  | 0.278 | 0.152 | 1 HSPC_UCBMC |
| NLRC3       | 0.00254674 | 0.9715486  | 0.278 | 0.152 | 1 HSPC_UCBMC |
| SIAH1       | 0.00262116 | 0.63978011 | 0.478 | 0.323 | 1 HSPC_UCBMC |
| YARS1       | 0.0026256  | 0.97664255 | 0.444 | 0.327 | 1 HSPC_UCBMC |
| C1GALT1     | 0.00263699 | 0.98462938 | 0.478 | 0.349 | 1 HSPC_UCBMC |
| IWS1        | 0.00264745 | 0.71179383 | 0.522 | 0.407 | 1 HSPC_UCBMC |
| RBIS        | 0.00265317 | 0.57011369 | 0.678 | 0.597 | 1 HSPC_UCBMC |
| BCL7B       | 0.00265793 | 0.89011172 | 0.411 | 0.274 | 1 HSPC_UCBMC |
| TFPI        | 0.00266383 | 0.39152168 | 0.489 | 0.312 | 1 HSPC_UCBMC |
| CHD6        | 0.00266501 | 0.57948939 | 0.567 | 0.433 | 1 HSPC_UCBMC |
| MIB1        | 0.00270007 | 0.41863757 | 0.622 | 0.46  | 1 HSPC_UCBMC |
| FMR1        | 0.00270331 | 0.86680734 | 0.322 | 0.192 | 1 HSPC_UCBMC |
| SATB1       | 0.00272494 | 0.32928812 | 0.478 | 0.318 | 1 HSPC_UCBMC |
| FMC1-LUC7L2 | 0.00276612 | 0.37117991 | 0.833 | 0.799 | 1 HSPC_UCBMC |
| NFATC2      | 0.00277843 | 0.45764317 | 0.433 | 0.268 | 1 HSPC_UCBMC |
| TEX10       | 0.00279391 | 0.78856789 | 0.411 | 0.264 | 1 HSPC_UCBMC |
| PARL        | 0.00279749 | 0.76888176 | 0.4   | 0.27  | 1 HSPC_UCBMC |
| PPP3CC      | 0.00279765 | 0.79132537 | 0.6   | 0.449 | 1 HSPC_UCBMC |
| QRICH1      | 0.00280261 | 0.50109893 | 0.567 | 0.429 | 1 HSPC_UCBMC |
| ZFYVE16     | 0.00280995 | 1.37675345 | 0.256 | 0.146 | 1 HSPC_UCBMC |
| CYFIP1      | 0.002834   | 0.27673529 | 0.389 | 0.231 | 1 HSPC_UCBMC |
| GRAMD1B     | 0.00285417 | 0.69942112 | 0.356 | 0.213 | 1 HSPC_UCBMC |
| JAM3        | 0.00286815 | 1.3036522  | 0.289 | 0.17  | 1 HSPC_UCBMC |
| MBD1        | 0.00286829 | 1.08490887 | 0.378 | 0.248 | 1 HSPC_UCBMC |
| SDCCAG8     | 0.00287209 | 0.54354141 | 0.544 | 0.397 | 1 HSPC_UCBMC |
| PDE4B       | 0.00287928 | 0.7328437  | 0.344 | 0.205 | 1 HSPC_UCBMC |
| DLST        | 0.00290424 | 1.01139918 | 0.456 | 0.333 | 1 HSPC_UCBMC |
| APPL1       | 0.00291049 | 0.98158825 | 0.422 | 0.285 | 1 HSPC_UCBMC |
| PLEKHM3     | 0.00291287 | 0.90898755 | 0.311 | 0.179 | 1 HSPC_UCBMC |
| CREBBP      | 0.00291612 | 0.47576794 | 0.689 | 0.601 | 1 HSPC_UCBMC |
| ECD         | 0.0029171  | 0.92385093 | 0.522 | 0.39  | 1 HSPC_UCBMC |
| TCEAL8      | 0.00292748 | 0.59088512 | 0.467 | 0.318 | 1 HSPC_UCBMC |
| RGS10       | 0.00293172 | 0.5227642  | 0.356 | 0.207 | 1 HSPC_UCBMC |

|                   |            |            |       |       |              |
|-------------------|------------|------------|-------|-------|--------------|
| ANKRD13C          | 0.00293406 | 0.90824993 | 0.4   | 0.257 | 1 HSPC_UCBMC |
| RIC1              | 0.00295999 | 0.72624388 | 0.5   | 0.377 | 1 HSPC_UCBMC |
| SEC61A2           | 0.00296948 | 0.66716313 | 0.4   | 0.24  | 1 HSPC_UCBMC |
| CDYL              | 0.00299464 | 0.35239872 | 0.622 | 0.449 | 1 HSPC_UCBMC |
| PPP1R2            | 0.00300897 | 0.70465363 | 0.533 | 0.383 | 1 HSPC_UCBMC |
| SCAMP1            | 0.00301391 | 0.89771013 | 0.356 | 0.216 | 1 HSPC_UCBMC |
| CPQ               | 0.00302494 | 0.78797272 | 0.278 | 0.152 | 1 HSPC_UCBMC |
| VAV1              | 0.00305734 | 0.62794425 | 0.367 | 0.22  | 1 HSPC_UCBMC |
| GSTP1             | 0.00307323 | 0.31837054 | 0.889 | 0.758 | 1 HSPC_UCBMC |
| SUPV3L1           | 0.00307874 | 0.87267322 | 0.389 | 0.268 | 1 HSPC_UCBMC |
| KDM7A             | 0.00308158 | 0.93413546 | 0.289 | 0.168 | 1 HSPC_UCBMC |
| PTBP3             | 0.003096   | 0.60658615 | 0.778 | 0.706 | 1 HSPC_UCBMC |
| SCCPDH            | 0.00310108 | 0.62910791 | 0.5   | 0.348 | 1 HSPC_UCBMC |
| RAB5A             | 0.00317884 | 0.5265639  | 0.6   | 0.449 | 1 HSPC_UCBMC |
| CBFA2T3           | 0.00319799 | 0.80114781 | 0.344 | 0.214 | 1 HSPC_UCBMC |
| RPL36AL           | 0.00320771 | 0.24080038 | 0.911 | 0.795 | 1 HSPC_UCBMC |
| NDUFB4            | 0.00325704 | 0.52048128 | 0.767 | 0.662 | 1 HSPC_UCBMC |
| SNRK              | 0.0032742  | 0.51392547 | 0.4   | 0.27  | 1 HSPC_UCBMC |
| BZW2              | 0.00330059 | 0.49085531 | 0.644 | 0.521 | 1 HSPC_UCBMC |
| ZNFX1             | 0.00330271 | 0.80625689 | 0.333 | 0.203 | 1 HSPC_UCBMC |
| TBC1D5            | 0.00332443 | 0.3437085  | 0.9   | 0.802 | 1 HSPC_UCBMC |
| ILKAP             | 0.00334112 | 0.67159857 | 0.6   | 0.468 | 1 HSPC_UCBMC |
| TBCC              | 0.003342   | 0.95401586 | 0.344 | 0.226 | 1 HSPC_UCBMC |
| COMT              | 0.00335604 | 0.47948081 | 0.711 | 0.555 | 1 HSPC_UCBMC |
| ENSMUG00000055748 | 0.0033636  | 1.17025794 | 0.333 | 0.209 | 1 HSPC_UCBMC |
| GNAI2.1           | 0.0033716  | 0.40019978 | 0.522 | 0.384 | 1 HSPC_UCBMC |
| PDLIM5            | 0.0033774  | 0.62099062 | 0.456 | 0.305 | 1 HSPC_UCBMC |
| TWF2              | 0.00338558 | 0.66747893 | 0.4   | 0.246 | 1 HSPC_UCBMC |
| ENSMUG00000031947 | 0.00342988 | 0.38976328 | 0.756 | 0.682 | 1 HSPC_UCBMC |
| DDX3Y             | 0.003455   | 0.39644926 | 0.622 | 0.473 | 1 HSPC_UCBMC |
| IMPA1             | 0.00348115 | 1.09849719 | 0.289 | 0.168 | 1 HSPC_UCBMC |
| SAFB              | 0.00350854 | 0.3143429  | 0.944 | 0.843 | 1 HSPC_UCBMC |
| SCAF11            | 0.00353207 | 0.3335271  | 0.811 | 0.726 | 1 HSPC_UCBMC |

|                   |            |            |       |       |              |
|-------------------|------------|------------|-------|-------|--------------|
| PHACTR1           | 0.00353546 | 0.77451676 | 0.456 | 0.305 | 1 HSPC_UCBMC |
| ABCG1             | 0.00354847 | 0.85042317 | 0.333 | 0.194 | 1 HSPC_UCBMC |
| IGF2BP3           | 0.00355349 | 0.29022261 | 0.733 | 0.586 | 1 HSPC_UCBMC |
| PCMTD1            | 0.00355689 | 0.45780216 | 0.656 | 0.503 | 1 HSPC_UCBMC |
| ACOT7             | 0.00356765 | 1.27474993 | 0.356 | 0.238 | 1 HSPC_UCBMC |
| EFL1              | 0.00360581 | 0.65089869 | 0.544 | 0.397 | 1 HSPC_UCBMC |
| EMC3              | 0.00360851 | 1.09225323 | 0.411 | 0.298 | 1 HSPC_UCBMC |
| CNTLN             | 0.0036139  | 0.6761452  | 0.411 | 0.274 | 1 HSPC_UCBMC |
| PECAM1            | 0.00361986 | 0.35278684 | 0.433 | 0.264 | 1 HSPC_UCBMC |
| TYW5              | 0.00363925 | 1.34660493 | 0.333 | 0.205 | 1 HSPC_UCBMC |
| ENSMUG00000055392 | 0.00365088 | 1.06254464 | 0.267 | 0.148 | 1 HSPC_UCBMC |
| TNKS2             | 0.00365994 | 0.78466382 | 0.5   | 0.36  | 1 HSPC_UCBMC |
| CMTM7             | 0.00366263 | 1.20619225 | 0.267 | 0.155 | 1 HSPC_UCBMC |
| BTF3L4            | 0.0036746  | 0.56476097 | 0.7   | 0.569 | 1 HSPC_UCBMC |
| M6PR              | 0.00367738 | 0.64903895 | 0.622 | 0.512 | 1 HSPC_UCBMC |
| MYG1              | 0.00367783 | 0.54530949 | 0.456 | 0.303 | 1 HSPC_UCBMC |
| GABARAP           | 0.00367832 | 0.42502975 | 0.789 | 0.665 | 1 HSPC_UCBMC |
| PGM1              | 0.00368079 | 1.59582579 | 0.3   | 0.185 | 1 HSPC_UCBMC |
| LRRC28            | 0.00369233 | 0.92648499 | 0.256 | 0.14  | 1 HSPC_UCBMC |
| DPP4              | 0.00370225 | 0.768179   | 0.267 | 0.146 | 1 HSPC_UCBMC |
| MAP4K4            | 0.00371167 | 0.27951177 | 0.789 | 0.621 | 1 HSPC_UCBMC |
| DBI               | 0.00372005 | 0.53317614 | 0.567 | 0.403 | 1 HSPC_UCBMC |
| MTMR14            | 0.00375677 | 0.84219592 | 0.344 | 0.207 | 1 HSPC_UCBMC |
| MVB12A            | 0.00376203 | 1.1649372  | 0.344 | 0.214 | 1 HSPC_UCBMC |
| EZR               | 0.00376557 | 0.38813639 | 0.744 | 0.647 | 1 HSPC_UCBMC |
| FBXO25            | 0.00380244 | 0.95852742 | 0.311 | 0.187 | 1 HSPC_UCBMC |
| MTPAP             | 0.00380714 | 1.01163764 | 0.378 | 0.237 | 1 HSPC_UCBMC |
| MKLN1             | 0.00382349 | 0.55091546 | 0.756 | 0.634 | 1 HSPC_UCBMC |
| UBE2E3            | 0.00383838 | 0.73565452 | 0.633 | 0.553 | 1 HSPC_UCBMC |
| WSB1              | 0.00386821 | 0.41162068 | 0.822 | 0.719 | 1 HSPC_UCBMC |
| CCNH              | 0.00387786 | 0.35242886 | 0.711 | 0.593 | 1 HSPC_UCBMC |
| MGMT              | 0.00389519 | 0.59649575 | 0.556 | 0.399 | 1 HSPC_UCBMC |
| IST1              | 0.00390651 | 0.49640392 | 0.5   | 0.364 | 1 HSPC_UCBMC |

|            |            |            |       |       |              |
|------------|------------|------------|-------|-------|--------------|
| SEC23B     | 0.00393601 | 0.94159069 | 0.3   | 0.176 | 1 HSPC_UCBMC |
| EPC2       | 0.00398326 | 0.56748817 | 0.533 | 0.397 | 1 HSPC_UCBMC |
| CUL2       | 0.004      | 0.42204456 | 0.511 | 0.349 | 1 HSPC_UCBMC |
| ITFG2      | 0.00402061 | 0.61716141 | 0.489 | 0.344 | 1 HSPC_UCBMC |
| TFAM       | 0.00402727 | 0.62993343 | 0.567 | 0.442 | 1 HSPC_UCBMC |
| ZNF704     | 0.00408058 | 0.93084232 | 0.333 | 0.196 | 1 HSPC_UCBMC |
| ATP6V1H    | 0.00412066 | 0.61012267 | 0.478 | 0.335 | 1 HSPC_UCBMC |
| RPL23      | 0.00414818 | 0.24152967 | 0.944 | 0.874 | 1 HSPC_UCBMC |
| ENSA       | 0.00415639 | 0.44613283 | 0.767 | 0.671 | 1 HSPC_UCBMC |
| ZDHHC17    | 0.00419748 | 0.72554955 | 0.333 | 0.198 | 1 HSPC_UCBMC |
| TRIM5      | 0.00424034 | 0.99226334 | 0.289 | 0.166 | 1 HSPC_UCBMC |
| C13H2orf49 | 0.00424957 | 1.81290777 | 0.378 | 0.261 | 1 HSPC_UCBMC |
| DPYSL2     | 0.00425555 | 0.36497838 | 0.311 | 0.176 | 1 HSPC_UCBMC |
| ASB3       | 0.00428087 | 0.62114251 | 0.511 | 0.397 | 1 HSPC_UCBMC |
| USP16      | 0.00428146 | 0.67774865 | 0.567 | 0.434 | 1 HSPC_UCBMC |
| SELENOT    | 0.00434286 | 0.9917519  | 0.311 | 0.19  | 1 HSPC_UCBMC |
| SESTD1     | 0.00435771 | 1.10526179 | 0.267 | 0.153 | 1 HSPC_UCBMC |
| ZNF280D    | 0.00438212 | 0.56485816 | 0.411 | 0.264 | 1 HSPC_UCBMC |
| BUD23      | 0.00439803 | 0.72013833 | 0.578 | 0.475 | 1 HSPC_UCBMC |
| MFN1       | 0.00443515 | 1.13822111 | 0.4   | 0.277 | 1 HSPC_UCBMC |
| PTGER3     | 0.00443545 | 1.0984812  | 0.356 | 0.231 | 1 HSPC_UCBMC |
| ARID1B     | 0.00445357 | 0.32214945 | 0.889 | 0.819 | 1 HSPC_UCBMC |
| MIGA1      | 0.00445419 | 0.69693609 | 0.422 | 0.287 | 1 HSPC_UCBMC |
| NME7       | 0.00448247 | 0.87518267 | 0.256 | 0.144 | 1 HSPC_UCBMC |
| TNFRSF8    | 0.00449241 | 0.51033747 | 0.278 | 0.155 | 1 HSPC_UCBMC |
| CSNK1G3    | 0.0045124  | 0.58586985 | 0.544 | 0.403 | 1 HSPC_UCBMC |
| BRWD3      | 0.00454228 | 0.69281723 | 0.422 | 0.283 | 1 HSPC_UCBMC |
| PAN3       | 0.00457412 | 0.3387743  | 0.878 | 0.769 | 1 HSPC_UCBMC |
| DDX17      | 0.00457412 | 0.35782188 | 0.856 | 0.774 | 1 HSPC_UCBMC |
| GALNT11    | 0.004621   | 0.68764274 | 0.489 | 0.348 | 1 HSPC_UCBMC |
| TXNL1      | 0.00467469 | 0.48773948 | 0.622 | 0.516 | 1 HSPC_UCBMC |
| AVL9       | 0.00471698 | 0.71317265 | 0.389 | 0.246 | 1 HSPC_UCBMC |
| POLB       | 0.00472261 | 1.114906   | 0.344 | 0.224 | 1 HSPC_UCBMC |

|                   |            |            |       |       |              |
|-------------------|------------|------------|-------|-------|--------------|
| CD37              | 0.00474284 | 0.18399111 | 0.656 | 0.458 | 1 HSPC_UCBMC |
| TMEM222           | 0.0048537  | 0.959044   | 0.278 | 0.159 | 1 HSPC_UCBMC |
| SLC25A36          | 0.00489011 | 0.75607278 | 0.467 | 0.335 | 1 HSPC_UCBMC |
| REL               | 0.00493319 | 0.21068795 | 0.633 | 0.481 | 1 HSPC_UCBMC |
| ENSMUG00000051928 | 0.00495103 | 0.92870877 | 0.422 | 0.305 | 1 HSPC_UCBMC |
| GTF2H1            | 0.00497338 | 1.03749686 | 0.422 | 0.316 | 1 HSPC_UCBMC |
| GLRX3             | 0.00500127 | 0.66609486 | 0.544 | 0.457 | 1 HSPC_UCBMC |
| EFHD2             | 0.00500371 | 0.6040639  | 0.333 | 0.205 | 1 HSPC_UCBMC |
| CD53              | 0.00501384 | 0.52957711 | 0.489 | 0.331 | 1 HSPC_UCBMC |
| IFI16             | 0.00502811 | 0.44214558 | 0.644 | 0.449 | 1 HSPC_UCBMC |
| TRMT10C           | 0.00506129 | 0.89397036 | 0.533 | 0.405 | 1 HSPC_UCBMC |
| RER1              | 0.005064   | 0.66074545 | 0.589 | 0.479 | 1 HSPC_UCBMC |
| P2RX1             | 0.00507132 | 0.43520999 | 0.378 | 0.248 | 1 HSPC_UCBMC |
| AKAP9             | 0.00507879 | 0.66800098 | 0.711 | 0.61  | 1 HSPC_UCBMC |
| BST2              | 0.00508313 | 0.48633141 | 0.567 | 0.399 | 1 HSPC_UCBMC |
| VTI1B             | 0.00509529 | 0.74111225 | 0.356 | 0.227 | 1 HSPC_UCBMC |
| CLIP1             | 0.00512204 | 0.73580641 | 0.378 | 0.248 | 1 HSPC_UCBMC |
| SMN1              | 0.00518083 | 0.86731557 | 0.5   | 0.388 | 1 HSPC_UCBMC |
| ERCC6L2           | 0.00521614 | 0.62004329 | 0.467 | 0.34  | 1 HSPC_UCBMC |
| FYN               | 0.00526169 | 0.72471458 | 0.433 | 0.301 | 1 HSPC_UCBMC |
| DYNC1LI2          | 0.00527482 | 0.72012626 | 0.422 | 0.299 | 1 HSPC_UCBMC |
| COPS4             | 0.0052924  | 0.98060477 | 0.378 | 0.266 | 1 HSPC_UCBMC |
| LEF1              | 0.00529935 | 0.68210747 | 0.278 | 0.155 | 1 HSPC_UCBMC |
| TGS1              | 0.0053243  | 0.7714154  | 0.567 | 0.475 | 1 HSPC_UCBMC |
| C20H16orf72       | 0.00536129 | 0.54025367 | 0.622 | 0.518 | 1 HSPC_UCBMC |
| LAMTOR4           | 0.00536827 | 0.60464014 | 0.578 | 0.475 | 1 HSPC_UCBMC |
| MAP3K3            | 0.00537767 | 1.14488977 | 0.333 | 0.203 | 1 HSPC_UCBMC |
| MTHFD2L           | 0.00541395 | 0.68847942 | 0.589 | 0.492 | 1 HSPC_UCBMC |
| PRKRA             | 0.00545722 | 1.05513358 | 0.356 | 0.238 | 1 HSPC_UCBMC |
| ARHGDI            | 0.00547612 | 0.44866369 | 0.467 | 0.327 | 1 HSPC_UCBMC |
| EIF3G             | 0.00549338 | 0.47166467 | 0.644 | 0.536 | 1 HSPC_UCBMC |
| FAM214A           | 0.00549456 | 0.16874608 | 0.467 | 0.312 | 1 HSPC_UCBMC |
| SDHC              | 0.00549748 | 0.8037265  | 0.5   | 0.368 | 1 HSPC_UCBMC |



|                     |            |            |       |       |              |
|---------------------|------------|------------|-------|-------|--------------|
| FRRS1               | 0.00550352 | 0.70839253 | 0.322 | 0.196 | 1 HSPC_UCBMC |
| SEC61G              | 0.00551126 | 0.46039291 | 0.7   | 0.647 | 1 HSPC_UCBMC |
| ENSMMUG00000006778  | 0.0055312  | 0.75326653 | 0.578 | 0.49  | 1 HSPC_UCBMC |
| ZNF93               | 0.00553453 | 0.71938804 | 0.533 | 0.421 | 1 HSPC_UCBMC |
| ACBD5               | 0.00554638 | 1.21948602 | 0.333 | 0.214 | 1 HSPC_UCBMC |
| TRIP4               | 0.00555016 | 1.08340029 | 0.411 | 0.294 | 1 HSPC_UCBMC |
| ENSMMUG000000012140 | 0.00561873 | 0.27388947 | 0.967 | 0.884 | 1 HSPC_UCBMC |
| IRAK1BP1            | 0.00564501 | 1.22681801 | 0.389 | 0.262 | 1 HSPC_UCBMC |
| ERGIC3              | 0.00568683 | 0.69414299 | 0.456 | 0.344 | 1 HSPC_UCBMC |
| RIPK2               | 0.00573357 | 0.59536502 | 0.289 | 0.166 | 1 HSPC_UCBMC |
| TSR2                | 0.00574793 | 1.21377551 | 0.311 | 0.194 | 1 HSPC_UCBMC |
| GAN                 | 0.0057596  | 1.11034689 | 0.3   | 0.189 | 1 HSPC_UCBMC |
| SCAMP2              | 0.00576298 | 1.00809646 | 0.422 | 0.296 | 1 HSPC_UCBMC |
| DCTN2               | 0.00577623 | 0.52370238 | 0.411 | 0.272 | 1 HSPC_UCBMC |
| ENSMMUG000000008346 | 0.00578387 | 0.29333698 | 0.722 | 0.571 | 1 HSPC_UCBMC |
| MTMR2               | 0.00578978 | 0.96390791 | 0.278 | 0.157 | 1 HSPC_UCBMC |
| TOP2B               | 0.00583143 | 0.5033368  | 0.711 | 0.619 | 1 HSPC_UCBMC |
| TMED2               | 0.00583505 | 0.65659471 | 0.522 | 0.407 | 1 HSPC_UCBMC |
| YWHAЕ               | 0.00584044 | 0.4409452  | 0.833 | 0.762 | 1 HSPC_UCBMC |
| KCNAB2              | 0.00585639 | 0.60376999 | 0.333 | 0.207 | 1 HSPC_UCBMC |
| UBASH3B             | 0.00587683 | 0.49660275 | 0.356 | 0.224 | 1 HSPC_UCBMC |
| HIBCH               | 0.00588232 | 0.96424064 | 0.411 | 0.266 | 1 HSPC_UCBMC |
| MANBA               | 0.00593811 | 0.18129548 | 0.567 | 0.457 | 1 HSPC_UCBMC |
| SREBF2              | 0.00599887 | 0.76058332 | 0.533 | 0.414 | 1 HSPC_UCBMC |
| NIFK                | 0.00601257 | 0.71265285 | 0.511 | 0.392 | 1 HSPC_UCBMC |
| RPLP1               | 0.0060303  | 0.22483255 | 0.989 | 0.911 | 1 HSPC_UCBMC |
| PITPNB              | 0.00606873 | 0.56012224 | 0.611 | 0.475 | 1 HSPC_UCBMC |
| BCAP31              | 0.00610377 | 0.86388172 | 0.522 | 0.418 | 1 HSPC_UCBMC |
| ENSMMUG000000003867 | 0.00618994 | 0.2072651  | 1     | 0.941 | 1 HSPC_UCBMC |
| PTPRE               | 0.00623467 | 1.07622831 | 0.311 | 0.189 | 1 HSPC_UCBMC |
| RUNX3               | 0.0062365  | 0.79083286 | 0.289 | 0.163 | 1 HSPC_UCBMC |
| SAMD4B              | 0.00624535 | 0.32927825 | 0.6   | 0.451 | 1 HSPC_UCBMC |
| ZNF827              | 0.00635275 | 0.44431896 | 0.467 | 0.316 | 1 HSPC_UCBMC |

|                    |            |            |       |       |              |
|--------------------|------------|------------|-------|-------|--------------|
| EIF3K              | 0.00637199 | 0.38999281 | 0.811 | 0.767 | 1 HSPC_UCBMC |
| TBL1XR1            | 0.00646488 | 0.31416136 | 0.822 | 0.719 | 1 HSPC_UCBMC |
| KIZ                | 0.00647183 | 0.62496019 | 0.589 | 0.464 | 1 HSPC_UCBMC |
| PI4KA              | 0.00647269 | 1.00366847 | 0.356 | 0.231 | 1 HSPC_UCBMC |
| CRPPA              | 0.00648092 | 1.1446211  | 0.3   | 0.181 | 1 HSPC_UCBMC |
| WDR41              | 0.00649677 | 1.47980823 | 0.256 | 0.155 | 1 HSPC_UCBMC |
| ENSMMUG00000013257 | 0.00652137 | 0.2761281  | 0.544 | 0.372 | 1 HSPC_UCBMC |
| NDUFB2             | 0.00654778 | 0.38061705 | 0.789 | 0.66  | 1 HSPC_UCBMC |
| UHRF1BP1           | 0.00655322 | 0.6135919  | 0.389 | 0.253 | 1 HSPC_UCBMC |
| MLXIP              | 0.00656626 | 1.34946357 | 0.311 | 0.198 | 1 HSPC_UCBMC |
| LRIG1              | 0.00658729 | 0.89648274 | 0.3   | 0.181 | 1 HSPC_UCBMC |
| EP400              | 0.00658904 | 0.67642067 | 0.422 | 0.288 | 1 HSPC_UCBMC |
| FAIM               | 0.00663025 | 1.13324545 | 0.311 | 0.201 | 1 HSPC_UCBMC |
| EIF3M              | 0.00665221 | 0.41782116 | 0.778 | 0.697 | 1 HSPC_UCBMC |
| ETFB               | 0.00666961 | 0.76973616 | 0.611 | 0.518 | 1 HSPC_UCBMC |
| EVL                | 0.00670261 | 0.50325714 | 0.411 | 0.274 | 1 HSPC_UCBMC |
| RAB6A              | 0.00670526 | 0.49483852 | 0.556 | 0.434 | 1 HSPC_UCBMC |
| OXR1               | 0.00675822 | 0.5093957  | 0.7   | 0.577 | 1 HSPC_UCBMC |
| ARFGEF1            | 0.00684372 | 0.63882085 | 0.589 | 0.481 | 1 HSPC_UCBMC |
| TALDO1             | 0.00688062 | 0.32657386 | 0.878 | 0.773 | 1 HSPC_UCBMC |
| RP2                | 0.00690676 | 1.04548136 | 0.267 | 0.161 | 1 HSPC_UCBMC |
| TIGAR              | 0.00693238 | 0.65463664 | 0.689 | 0.588 | 1 HSPC_UCBMC |
| RPL22              | 0.00697417 | 0.25209245 | 0.956 | 0.876 | 1 HSPC_UCBMC |
| GPR183             | 0.00699175 | 0.62620351 | 0.278 | 0.155 | 1 HSPC_UCBMC |
| SERTAD2            | 0.00699653 | 0.47524094 | 0.567 | 0.416 | 1 HSPC_UCBMC |
| MARCHF6            | 0.00709442 | 0.20288413 | 0.8   | 0.736 | 1 HSPC_UCBMC |
| CLASP2             | 0.00713975 | 0.52885158 | 0.689 | 0.567 | 1 HSPC_UCBMC |
| ENSMMUG00000007657 | 0.00714907 | 0.29466794 | 0.811 | 0.693 | 1 HSPC_UCBMC |
| TPM4               | 0.007162   | 0.4012656  | 0.478 | 0.312 | 1 HSPC_UCBMC |
| SREK1IP1           | 0.00716234 | 0.71944362 | 0.556 | 0.464 | 1 HSPC_UCBMC |
| E2F3               | 0.007207   | 0.56379669 | 0.411 | 0.281 | 1 HSPC_UCBMC |
| OCIAD1             | 0.00725071 | 0.55062996 | 0.667 | 0.566 | 1 HSPC_UCBMC |
| CBWD1              | 0.00727601 | 0.91114667 | 0.389 | 0.257 | 1 HSPC_UCBMC |

|                    |            |            |       |       |              |
|--------------------|------------|------------|-------|-------|--------------|
| TMEM241            | 0.00731587 | 1.00851095 | 0.3   | 0.183 | 1 HSPC_UCBMC |
| LRRC40             | 0.00736704 | 1.01662417 | 0.289 | 0.183 | 1 HSPC_UCBMC |
| CTNBNL1            | 0.00739647 | 0.78773248 | 0.689 | 0.627 | 1 HSPC_UCBMC |
| ENSMMUG00000018687 | 0.00739767 | 0.51434547 | 0.633 | 0.521 | 1 HSPC_UCBMC |
| PPP2R2A            | 0.00739913 | 0.36027394 | 0.644 | 0.58  | 1 HSPC_UCBMC |
| RPL12              | 0.00742061 | 0.22957065 | 0.967 | 0.863 | 1 HSPC_UCBMC |
| TMEM135            | 0.00756894 | 0.52836385 | 0.5   | 0.359 | 1 HSPC_UCBMC |
| AGPS               | 0.0075718  | 0.42315753 | 0.556 | 0.414 | 1 HSPC_UCBMC |
| DIS3L2             | 0.00759781 | 0.40531825 | 0.644 | 0.505 | 1 HSPC_UCBMC |
| ENSMMUG00000017400 | 0.00760878 | 0.64056163 | 0.4   | 0.275 | 1 HSPC_UCBMC |
| MED12              | 0.00764997 | 0.98811787 | 0.3   | 0.19  | 1 HSPC_UCBMC |
| STK40              | 0.00767647 | 0.68621753 | 0.367 | 0.25  | 1 HSPC_UCBMC |
| AAGAB              | 0.00768284 | 0.85394126 | 0.344 | 0.231 | 1 HSPC_UCBMC |
| SFI1               | 0.00778417 | 1.10202216 | 0.289 | 0.181 | 1 HSPC_UCBMC |
| KANSL1L            | 0.00788134 | 0.61792419 | 0.522 | 0.401 | 1 HSPC_UCBMC |
| MRPL44             | 0.00789341 | 0.73998773 | 0.411 | 0.283 | 1 HSPC_UCBMC |
| GOLGB1             | 0.00797306 | 0.85579663 | 0.4   | 0.283 | 1 HSPC_UCBMC |
| XXYLT1             | 0.00807154 | 0.85136934 | 0.322 | 0.2   | 1 HSPC_UCBMC |
| ELOA               | 0.0080881  | 0.25197452 | 0.978 | 0.9   | 1 HSPC_UCBMC |
| ENSMMUG00000056354 | 0.00815951 | 0.23120174 | 0.933 | 0.821 | 1 HSPC_UCBMC |
| LNPEP              | 0.00821951 | 0.47904116 | 0.544 | 0.433 | 1 HSPC_UCBMC |
| HELZ               | 0.00822917 | 0.36615328 | 0.711 | 0.599 | 1 HSPC_UCBMC |
| PAFAH1B2           | 0.00825831 | 0.5766057  | 0.5   | 0.355 | 1 HSPC_UCBMC |
| ZNF121             | 0.0082734  | 1.18170955 | 0.367 | 0.257 | 1 HSPC_UCBMC |
| KDM5A              | 0.00828693 | 0.49576586 | 0.567 | 0.449 | 1 HSPC_UCBMC |
| GOLGA1             | 0.00830302 | 0.37877291 | 0.778 | 0.689 | 1 HSPC_UCBMC |
| ENSMMUG00000059742 | 0.00831713 | 0.8674045  | 0.489 | 0.377 | 1 HSPC_UCBMC |
| UCHL3              | 0.00838172 | 0.58903617 | 0.5   | 0.386 | 1 HSPC_UCBMC |
| STX8               | 0.00839948 | 0.48681615 | 0.644 | 0.534 | 1 HSPC_UCBMC |
| GSK3B              | 0.00840304 | 0.32722188 | 0.8   | 0.662 | 1 HSPC_UCBMC |
| SLC9A7             | 0.00847313 | 0.85146932 | 0.311 | 0.201 | 1 HSPC_UCBMC |
| RFTN1              | 0.00848519 | 0.66976932 | 0.433 | 0.292 | 1 HSPC_UCBMC |
| SCLT1              | 0.00852484 | 0.43756833 | 0.589 | 0.449 | 1 HSPC_UCBMC |

|                    |            |            |       |       |              |
|--------------------|------------|------------|-------|-------|--------------|
| SREK1              | 0.0085385  | 0.4039405  | 0.756 | 0.693 | 1 HSPC_UCBMC |
| TGFB1              | 0.00855079 | 0.74609561 | 0.356 | 0.233 | 1 HSPC_UCBMC |
| TENT2              | 0.00855659 | 0.24737229 | 0.622 | 0.512 | 1 HSPC_UCBMC |
| PDS5A              | 0.00859609 | 0.19760135 | 0.722 | 0.562 | 1 HSPC_UCBMC |
| TMED5              | 0.00862778 | 1.0837291  | 0.3   | 0.187 | 1 HSPC_UCBMC |
| RAMAC              | 0.00868232 | 0.67269427 | 0.478 | 0.366 | 1 HSPC_UCBMC |
| TXLNG              | 0.00873197 | 0.6069645  | 0.489 | 0.36  | 1 HSPC_UCBMC |
| ACBD3              | 0.0087616  | 0.9177815  | 0.4   | 0.283 | 1 HSPC_UCBMC |
| SNX27              | 0.00884251 | 1.1891236  | 0.289 | 0.181 | 1 HSPC_UCBMC |
| NBEA               | 0.00885745 | 0.76445008 | 0.356 | 0.237 | 1 HSPC_UCBMC |
| ARID2              | 0.00886375 | 0.31278583 | 0.8   | 0.712 | 1 HSPC_UCBMC |
| TRIM22             | 0.0088676  | 0.77173187 | 0.422 | 0.292 | 1 HSPC_UCBMC |
| PTPN9              | 0.00891172 | 0.66484613 | 0.4   | 0.268 | 1 HSPC_UCBMC |
| RBMX               | 0.00903926 | 0.39286906 | 0.844 | 0.734 | 1 HSPC_UCBMC |
| ARL8B              | 0.00906134 | 1.03557528 | 0.522 | 0.401 | 1 HSPC_UCBMC |
| XRN1               | 0.00911465 | 0.2967494  | 0.622 | 0.51  | 1 HSPC_UCBMC |
| CFL1               | 0.00915623 | 0.25697708 | 0.856 | 0.756 | 1 HSPC_UCBMC |
| PSMB9              | 0.00919455 | 0.65752368 | 0.4   | 0.266 | 1 HSPC_UCBMC |
| DCAF15             | 0.00919972 | 0.68421032 | 0.322 | 0.209 | 1 HSPC_UCBMC |
| NUFIP2             | 0.00923757 | 0.44391839 | 0.633 | 0.501 | 1 HSPC_UCBMC |
| ANXA4              | 0.0092456  | 0.87540592 | 0.444 | 0.322 | 1 HSPC_UCBMC |
| TTC39C             | 0.00924996 | 0.86357268 | 0.378 | 0.268 | 1 HSPC_UCBMC |
| TCERG1             | 0.00928583 | 0.37478498 | 0.667 | 0.58  | 1 HSPC_UCBMC |
| UBE2B              | 0.00932879 | 0.41132534 | 0.733 | 0.662 | 1 HSPC_UCBMC |
| CETN2              | 0.00934282 | 0.8492826  | 0.389 | 0.268 | 1 HSPC_UCBMC |
| ENSMMUG00000063877 | 0.00935642 | 0.66777876 | 0.389 | 0.266 | 1 HSPC_UCBMC |
| TCF4               | 0.00944647 | 0.3966134  | 0.533 | 0.381 | 1 HSPC_UCBMC |
| ATXN1              | 0.00944752 | 0.35430804 | 0.444 | 0.312 | 1 HSPC_UCBMC |
| SCFD2              | 0.00948323 | 0.48557963 | 0.578 | 0.429 | 1 HSPC_UCBMC |
| RWDD2B             | 0.00950631 | 1.34058206 | 0.278 | 0.17  | 1 HSPC_UCBMC |
| HNRNPR             | 0.00954126 | 0.50688839 | 0.778 | 0.689 | 1 HSPC_UCBMC |
| MAPK8IP3           | 0.00955907 | 0.95729976 | 0.333 | 0.22  | 1 HSPC_UCBMC |
| AFTPH              | 0.00957596 | 0.70459127 | 0.578 | 0.462 | 1 HSPC_UCBMC |

|         |            |            |       |       |              |
|---------|------------|------------|-------|-------|--------------|
| MADD    | 0.00962828 | 0.75463702 | 0.367 | 0.25  | 1 HSPC_UCBMC |
| MAPK1   | 0.00964693 | 0.41757734 | 0.633 | 0.549 | 1 HSPC_UCBMC |
| CHST11  | 0.00970004 | 0.17319029 | 0.867 | 0.704 | 1 HSPC_UCBMC |
| ALG5    | 0.0097095  | 1.03896701 | 0.333 | 0.237 | 1 HSPC_UCBMC |
| MEAF6   | 0.00975097 | 0.59855921 | 0.422 | 0.29  | 1 HSPC_UCBMC |
| RFXANK  | 0.00979047 | 0.84862119 | 0.289 | 0.179 | 1 HSPC_UCBMC |
| TYROBP  | 0.00982367 | 0.9165564  | 0.289 | 0.183 | 1 HSPC_UCBMC |
| HSF2    | 0.00988851 | 1.2188945  | 0.344 | 0.246 | 1 HSPC_UCBMC |
| BACH2   | 0.0099177  | 0.52437561 | 0.433 | 0.303 | 1 HSPC_UCBMC |
| CASP9   | 0.00993844 | 0.99448458 | 0.333 | 0.22  | 1 HSPC_UCBMC |
| ETV3    | 0.00995846 | 0.50280333 | 0.333 | 0.213 | 1 HSPC_UCBMC |
| SNX6    | 0.01000655 | 0.53695609 | 0.633 | 0.512 | 1 HSPC_UCBMC |
| CCDC25  | 0.0100142  | 0.8035585  | 0.367 | 0.259 | 1 HSPC_UCBMC |
| VPS4B   | 0.01005319 | 0.56987027 | 0.511 | 0.401 | 1 HSPC_UCBMC |
| AFF1    | 0.01007738 | 0.21412106 | 0.844 | 0.762 | 1 HSPC_UCBMC |
| MBD2    | 0.01008645 | 1.40050598 | 0.267 | 0.168 | 1 HSPC_UCBMC |
| CCT2    | 0.01009902 | 0.37780738 | 0.822 | 0.721 | 1 HSPC_UCBMC |
| STK38   | 0.0101016  | 0.5526642  | 0.556 | 0.468 | 1 HSPC_UCBMC |
| MAP3K7  | 0.01011822 | 0.79766618 | 0.378 | 0.257 | 1 HSPC_UCBMC |
| ABCE1   | 0.0101368  | 0.44401873 | 0.611 | 0.518 | 1 HSPC_UCBMC |
| NMI     | 0.01015647 | 1.13101813 | 0.3   | 0.187 | 1 HSPC_UCBMC |
| YTHDF3  | 0.01017104 | 0.28280486 | 0.544 | 0.405 | 1 HSPC_UCBMC |
| STK17B  | 0.01021518 | 0.34745348 | 0.756 | 0.645 | 1 HSPC_UCBMC |
| SPAG7   | 0.01021643 | 0.79109259 | 0.4   | 0.283 | 1 HSPC_UCBMC |
| LCP1    | 0.01024676 | 0.26093736 | 0.622 | 0.458 | 1 HSPC_UCBMC |
| TULP4   | 0.01032015 | 0.67889542 | 0.4   | 0.275 | 1 HSPC_UCBMC |
| ANAPC16 | 0.01038055 | 0.6679566  | 0.489 | 0.368 | 1 HSPC_UCBMC |
| STRAP   | 0.01069707 | 0.46345296 | 0.622 | 0.508 | 1 HSPC_UCBMC |
| SCAP    | 0.01076724 | 0.85982525 | 0.311 | 0.203 | 1 HSPC_UCBMC |
| ATRX    | 0.0107852  | 0.43578602 | 0.767 | 0.719 | 1 HSPC_UCBMC |
| TNRC6A  | 0.01083474 | 0.37613335 | 0.7   | 0.595 | 1 HSPC_UCBMC |
| CDC14A  | 0.01094991 | 0.31581465 | 0.5   | 0.362 | 1 HSPC_UCBMC |
| KDM2B   | 0.01099658 | 0.47676553 | 0.478 | 0.34  | 1 HSPC_UCBMC |

|                    |            |            |       |       |              |
|--------------------|------------|------------|-------|-------|--------------|
| RBMX2              | 0.01103923 | 1.00072108 | 0.256 | 0.165 | 1 HSPC_UCBMC |
| TTC27              | 0.01104437 | 0.59711855 | 0.489 | 0.372 | 1 HSPC_UCBMC |
| CHD7               | 0.01104529 | 0.75236481 | 0.522 | 0.421 | 1 HSPC_UCBMC |
| FTO                | 0.01126378 | 0.5998191  | 0.5   | 0.39  | 1 HSPC_UCBMC |
| BCAS2              | 0.01127353 | 0.58154616 | 0.522 | 0.429 | 1 HSPC_UCBMC |
| BBS9               | 0.01128164 | 1.44046853 | 0.278 | 0.176 | 1 HSPC_UCBMC |
| FAU                | 0.0112872  | 0.21440222 | 0.956 | 0.885 | 1 HSPC_UCBMC |
| CNTNAP2            | 0.01132505 | 0.72874192 | 0.311 | 0.187 | 1 HSPC_UCBMC |
| APC                | 0.01134501 | 0.45756239 | 0.511 | 0.375 | 1 HSPC_UCBMC |
| GSTK1              | 0.01135804 | 0.48254691 | 0.467 | 0.336 | 1 HSPC_UCBMC |
| RPS11              | 0.01137762 | 0.24258687 | 0.989 | 0.9   | 1 HSPC_UCBMC |
| NGLY1              | 0.01141904 | 0.67953365 | 0.456 | 0.335 | 1 HSPC_UCBMC |
| UBXN4              | 0.01151914 | 0.65141604 | 0.711 | 0.584 | 1 HSPC_UCBMC |
| RPS6KB1            | 0.01154997 | 0.66430444 | 0.533 | 0.423 | 1 HSPC_UCBMC |
| ERGIC2             | 0.01157305 | 0.76604741 | 0.556 | 0.455 | 1 HSPC_UCBMC |
| STK4               | 0.01165311 | 0.44894206 | 0.722 | 0.632 | 1 HSPC_UCBMC |
| HSD17B11           | 0.01165947 | 0.92313282 | 0.444 | 0.336 | 1 HSPC_UCBMC |
| LRRFIP2            | 0.01173586 | 0.76479148 | 0.6   | 0.497 | 1 HSPC_UCBMC |
| MORF4L1            | 0.0117494  | 0.39513818 | 0.844 | 0.774 | 1 HSPC_UCBMC |
| TMED10             | 0.01178172 | 0.7419119  | 0.589 | 0.477 | 1 HSPC_UCBMC |
| SDF2               | 0.01179984 | 1.15438026 | 0.367 | 0.255 | 1 HSPC_UCBMC |
| MIF                | 0.01182727 | 0.5078006  | 0.622 | 0.482 | 1 HSPC_UCBMC |
| PTDSS1             | 0.01191334 | 1.1313682  | 0.278 | 0.176 | 1 HSPC_UCBMC |
| EEF1B2             | 0.01193801 | 0.24023643 | 0.922 | 0.826 | 1 HSPC_UCBMC |
| KDM2A              | 0.01197474 | 0.30673934 | 0.711 | 0.63  | 1 HSPC_UCBMC |
| ENSMMUG00000060923 | 0.01202813 | 0.40148039 | 0.811 | 0.717 | 1 HSPC_UCBMC |
| MAP2K5             | 0.01220684 | 0.64612705 | 0.533 | 0.429 | 1 HSPC_UCBMC |
| ST3GAL1            | 0.01222647 | 0.1977876  | 0.611 | 0.468 | 1 HSPC_UCBMC |
| TAF11              | 0.0123161  | 0.49111884 | 0.367 | 0.257 | 1 HSPC_UCBMC |
| NONO               | 0.01232207 | 0.38593323 | 0.767 | 0.638 | 1 HSPC_UCBMC |
| LENG8              | 0.01236124 | 0.56459559 | 0.456 | 0.336 | 1 HSPC_UCBMC |
| EIF4B              | 0.01236871 | 0.43399358 | 0.678 | 0.564 | 1 HSPC_UCBMC |
| CNOT8              | 0.01237162 | 0.88631049 | 0.422 | 0.323 | 1 HSPC_UCBMC |

|                   |            |            |       |       |              |
|-------------------|------------|------------|-------|-------|--------------|
| RWDD4             | 0.01238749 | 0.74158495 | 0.478 | 0.353 | 1 HSPC_UCBMC |
| ENSMUG00000003646 | 0.01241357 | 0.45941675 | 0.356 | 0.242 | 1 HSPC_UCBMC |
| ENSMUG00000042157 | 0.01246049 | 1.05998984 | 0.289 | 0.19  | 1 HSPC_UCBMC |
| COX4I1            | 0.01249313 | 0.2598228  | 0.911 | 0.774 | 1 HSPC_UCBMC |
| HELQ              | 0.01250351 | 0.72660133 | 0.333 | 0.224 | 1 HSPC_UCBMC |
| SNX14             | 0.01258783 | 0.82029534 | 0.5   | 0.421 | 1 HSPC_UCBMC |
| STK39             | 0.0126108  | 0.78476374 | 0.333 | 0.222 | 1 HSPC_UCBMC |
| TRIM24            | 0.01262155 | 0.36662809 | 0.578 | 0.44  | 1 HSPC_UCBMC |
| C1D               | 0.01263794 | 0.42139815 | 0.544 | 0.42  | 1 HSPC_UCBMC |
| USP10             | 0.01265444 | 0.44072948 | 0.644 | 0.584 | 1 HSPC_UCBMC |
| SERINC1           | 0.0126706  | 0.51939862 | 0.533 | 0.418 | 1 HSPC_UCBMC |
| TGFBR2            | 0.01267272 | 0.451838   | 0.456 | 0.318 | 1 HSPC_UCBMC |
| RNF138            | 0.01268757 | 0.31727112 | 0.644 | 0.49  | 1 HSPC_UCBMC |
| UBP1              | 0.01269921 | 0.49756031 | 0.433 | 0.322 | 1 HSPC_UCBMC |
| SETDB1            | 0.01274927 | 0.8180017  | 0.411 | 0.294 | 1 HSPC_UCBMC |
| ENSMUG00000045959 | 0.01286066 | 0.85909905 | 0.444 | 0.331 | 1 HSPC_UCBMC |
| CCDC43            | 0.01296434 | 1.00098857 | 0.289 | 0.187 | 1 HSPC_UCBMC |
| KIAA1143          | 0.01300992 | 0.59475886 | 0.511 | 0.392 | 1 HSPC_UCBMC |
| ABLIM1            | 0.01312846 | 0.37246976 | 0.444 | 0.303 | 1 HSPC_UCBMC |
| ENSMUG00000058325 | 0.01317568 | 0.10782225 | 0.778 | 0.601 | 1 HSPC_UCBMC |
| NAB1              | 0.01322405 | 0.84794069 | 0.267 | 0.166 | 1 HSPC_UCBMC |
| NUBPL             | 0.01325029 | 0.62340215 | 0.433 | 0.323 | 1 HSPC_UCBMC |
| COMMD6            | 0.01325315 | 0.28897805 | 0.778 | 0.684 | 1 HSPC_UCBMC |
| KRR1              | 0.01328697 | 0.66955784 | 0.456 | 0.372 | 1 HSPC_UCBMC |
| RTF1              | 0.01329271 | 0.68558685 | 0.556 | 0.481 | 1 HSPC_UCBMC |
| ATP9B             | 0.01345333 | 0.21634663 | 0.678 | 0.551 | 1 HSPC_UCBMC |
| PPP6C             | 0.01349826 | 0.99018804 | 0.3   | 0.2   | 1 HSPC_UCBMC |
| ZSWIM6            | 0.01349871 | 0.31504892 | 0.533 | 0.436 | 1 HSPC_UCBMC |
| EIF4ENIF1         | 0.01350238 | 0.7485848  | 0.311 | 0.209 | 1 HSPC_UCBMC |
| AKAP8L            | 0.013536   | 0.95392308 | 0.411 | 0.29  | 1 HSPC_UCBMC |
| GTF2E2            | 0.0135627  | 0.53795029 | 0.433 | 0.312 | 1 HSPC_UCBMC |
| WDR44             | 0.01358453 | 1.06871824 | 0.367 | 0.259 | 1 HSPC_UCBMC |
| YIPF5             | 0.01362083 | 1.29089543 | 0.311 | 0.216 | 1 HSPC_UCBMC |

|                   |            |            |       |       |              |
|-------------------|------------|------------|-------|-------|--------------|
| PSMB1             | 0.01362379 | 0.32449809 | 0.767 | 0.697 | 1 HSPC_UCBMC |
| VDAC1             | 0.01365858 | 0.80481384 | 0.522 | 0.455 | 1 HSPC_UCBMC |
| SECISBP2          | 0.01366529 | 0.6448055  | 0.456 | 0.36  | 1 HSPC_UCBMC |
| FLI1              | 0.01385753 | 0.33470341 | 0.522 | 0.364 | 1 HSPC_UCBMC |
| RBM18             | 0.01395219 | 0.98058974 | 0.289 | 0.185 | 1 HSPC_UCBMC |
| PIGU              | 0.01396239 | 0.91298344 | 0.356 | 0.244 | 1 HSPC_UCBMC |
| GPAT3             | 0.01401242 | 0.82599514 | 0.278 | 0.17  | 1 HSPC_UCBMC |
| PAFAH1B1          | 0.01401895 | 0.53723405 | 0.689 | 0.628 | 1 HSPC_UCBMC |
| SRGN              | 0.01408108 | 0.26439378 | 0.667 | 0.564 | 1 HSPC_UCBMC |
| AGK               | 0.01410172 | 0.90964916 | 0.378 | 0.279 | 1 HSPC_UCBMC |
| ARF4              | 0.01419    | 0.27220518 | 0.756 | 0.702 | 1 HSPC_UCBMC |
| CEP170            | 0.01423214 | 0.50079056 | 0.578 | 0.508 | 1 HSPC_UCBMC |
| YWHAG             | 0.0142323  | 0.50791662 | 0.644 | 0.551 | 1 HSPC_UCBMC |
| PRCC              | 0.01423299 | 1.18360385 | 0.267 | 0.168 | 1 HSPC_UCBMC |
| CYSLTR1           | 0.01429531 | 0.34849102 | 0.3   | 0.179 | 1 HSPC_UCBMC |
| ARL6IP5           | 0.01438328 | 0.59262757 | 0.578 | 0.488 | 1 HSPC_UCBMC |
| HCLS1             | 0.01446763 | 0.95005469 | 0.333 | 0.22  | 1 HSPC_UCBMC |
| KANSL1            | 0.01447846 | 0.24579753 | 0.744 | 0.628 | 1 HSPC_UCBMC |
| ENSMUG00000049736 | 0.01448103 | 1.02039311 | 0.344 | 0.238 | 1 HSPC_UCBMC |
| AUH               | 0.01450514 | 0.55240799 | 0.578 | 0.462 | 1 HSPC_UCBMC |
| FNBP4             | 0.01459772 | 0.4445684  | 0.622 | 0.516 | 1 HSPC_UCBMC |
| ENSMUG00000005086 | 0.01462834 | 0.73393052 | 0.333 | 0.227 | 1 HSPC_UCBMC |
| YAF2              | 0.01474249 | 0.40246318 | 0.578 | 0.494 | 1 HSPC_UCBMC |
| AAMDC             | 0.01475777 | 0.57816967 | 0.422 | 0.305 | 1 HSPC_UCBMC |
| RPS27             | 0.01476298 | 0.18480368 | 0.956 | 0.861 | 1 HSPC_UCBMC |
| RNPC3             | 0.01482797 | 1.41266489 | 0.322 | 0.227 | 1 HSPC_UCBMC |
| THOC5             | 0.01483867 | 0.68975509 | 0.378 | 0.253 | 1 HSPC_UCBMC |
| TADA1             | 0.01498865 | 0.761624   | 0.289 | 0.181 | 1 HSPC_UCBMC |
| NSF               | 0.01499094 | 0.82285655 | 0.467 | 0.379 | 1 HSPC_UCBMC |
| TSC22D2           | 0.0150274  | 0.90246883 | 0.411 | 0.299 | 1 HSPC_UCBMC |
| UBA6              | 0.01514646 | 0.6303529  | 0.433 | 0.303 | 1 HSPC_UCBMC |
| PSME3             | 0.01516843 | 0.57411854 | 0.333 | 0.224 | 1 HSPC_UCBMC |
| PSMD12            | 0.01524292 | 0.34013412 | 0.656 | 0.597 | 1 HSPC_UCBMC |



|                    |            |            |       |       |              |
|--------------------|------------|------------|-------|-------|--------------|
| MAGOH              | 0.01532513 | 0.52355136 | 0.689 | 0.573 | 1 HSPC_UCBMC |
| ATF7IP2            | 0.0153535  | 0.58936898 | 0.544 | 0.46  | 1 HSPC_UCBMC |
| MED28              | 0.01544307 | 0.61974448 | 0.522 | 0.42  | 1 HSPC_UCBMC |
| ERLEC1             | 0.0155313  | 0.61158312 | 0.478 | 0.375 | 1 HSPC_UCBMC |
| TAPT1              | 0.01555124 | 0.4768244  | 0.533 | 0.423 | 1 HSPC_UCBMC |
| KMT2C              | 0.01569595 | 0.16326646 | 0.922 | 0.856 | 1 HSPC_UCBMC |
| TOMM20             | 0.01569953 | 0.30127391 | 0.811 | 0.752 | 1 HSPC_UCBMC |
| SMARCE1            | 0.01590014 | 0.61171885 | 0.6   | 0.471 | 1 HSPC_UCBMC |
| IRAG2              | 0.01590753 | 0.58933111 | 0.378 | 0.266 | 1 HSPC_UCBMC |
| STAT5A             | 0.01592304 | 0.61751733 | 0.367 | 0.262 | 1 HSPC_UCBMC |
| CSNK2B             | 0.0160697  | 0.50782793 | 0.611 | 0.525 | 1 HSPC_UCBMC |
| MTMR1              | 0.01612364 | 0.51153976 | 0.289 | 0.183 | 1 HSPC_UCBMC |
| COX10              | 0.01623556 | 0.93156917 | 0.389 | 0.281 | 1 HSPC_UCBMC |
| AP5M1              | 0.01627168 | 0.91601971 | 0.289 | 0.196 | 1 HSPC_UCBMC |
| UTP18              | 0.01632223 | 0.71985781 | 0.4   | 0.274 | 1 HSPC_UCBMC |
| PISD               | 0.01636541 | 1.16098047 | 0.289 | 0.189 | 1 HSPC_UCBMC |
| DDX39B             | 0.01637373 | 0.50176891 | 0.689 | 0.621 | 1 HSPC_UCBMC |
| CBLB               | 0.01638043 | 0.1003349  | 0.744 | 0.591 | 1 HSPC_UCBMC |
| ENSMMUG00000022610 | 0.01658368 | 0.441364   | 0.267 | 0.159 | 1 HSPC_UCBMC |
| NDUFB5             | 0.01663121 | 0.49691648 | 0.556 | 0.436 | 1 HSPC_UCBMC |
| RELCH              | 0.01664759 | 0.68540747 | 0.522 | 0.414 | 1 HSPC_UCBMC |
| PREX1              | 0.01668105 | 0.83648531 | 0.444 | 0.357 | 1 HSPC_UCBMC |
| MEA1               | 0.0168702  | 0.86055838 | 0.367 | 0.246 | 1 HSPC_UCBMC |
| MTR                | 0.0169026  | 0.48626793 | 0.389 | 0.251 | 1 HSPC_UCBMC |
| EIF3J              | 0.01694114 | 0.41838341 | 0.711 | 0.625 | 1 HSPC_UCBMC |
| KDM3A              | 0.0169812  | 0.68308073 | 0.4   | 0.307 | 1 HSPC_UCBMC |
| FAM193A            | 0.01704233 | 0.533199   | 0.578 | 0.471 | 1 HSPC_UCBMC |
| GAPDH              | 0.01705619 | 0.20577035 | 0.922 | 0.769 | 1 HSPC_UCBMC |
| SMARCC2            | 0.01715232 | 0.86690056 | 0.389 | 0.283 | 1 HSPC_UCBMC |
| KDM5B              | 0.01723064 | 0.60564741 | 0.433 | 0.333 | 1 HSPC_UCBMC |
| CAPZB              | 0.01738465 | 0.39254767 | 0.678 | 0.616 | 1 HSPC_UCBMC |
| ENSMMUG00000050829 | 0.01739858 | 0.45770537 | 0.489 | 0.364 | 1 HSPC_UCBMC |
| SAMD12             | 0.01742127 | 0.85170152 | 0.256 | 0.155 | 1 HSPC_UCBMC |

|                   |            |            |       |       |              |
|-------------------|------------|------------|-------|-------|--------------|
| PDK1              | 0.01744232 | 0.72237902 | 0.389 | 0.283 | 1 HSPC_UCBMC |
| BANK1             | 0.01754254 | 0.10737586 | 0.422 | 0.29  | 1 HSPC_UCBMC |
| UBE2L3            | 0.01765122 | 0.46457127 | 0.656 | 0.569 | 1 HSPC_UCBMC |
| RAB3GAP1          | 0.01775768 | 0.21959265 | 0.6   | 0.477 | 1 HSPC_UCBMC |
| CDC14B            | 0.01780528 | 0.43618795 | 0.289 | 0.181 | 1 HSPC_UCBMC |
| PLAGL1            | 0.0178458  | 0.64268604 | 0.4   | 0.277 | 1 HSPC_UCBMC |
| HFM1              | 0.01793027 | 0.69418061 | 0.267 | 0.163 | 1 HSPC_UCBMC |
| CFDP1             | 0.0179428  | 0.3154328  | 0.767 | 0.726 | 1 HSPC_UCBMC |
| SMAD2             | 0.01799764 | 0.64536389 | 0.478 | 0.357 | 1 HSPC_UCBMC |
| BIN2              | 0.01803518 | 0.85268734 | 0.444 | 0.336 | 1 HSPC_UCBMC |
| PPM1D             | 0.0180469  | 0.7378936  | 0.4   | 0.301 | 1 HSPC_UCBMC |
| ASCC3             | 0.01813234 | 0.35369155 | 0.633 | 0.523 | 1 HSPC_UCBMC |
| POLR3GL           | 0.01813944 | 0.82973403 | 0.456 | 0.362 | 1 HSPC_UCBMC |
| PQBP1             | 0.01815377 | 1.17625293 | 0.333 | 0.235 | 1 HSPC_UCBMC |
| EIF3L             | 0.01823088 | 0.34161088 | 0.789 | 0.699 | 1 HSPC_UCBMC |
| NAA35             | 0.01825904 | 0.74835347 | 0.467 | 0.357 | 1 HSPC_UCBMC |
| GTF2A2            | 0.01831019 | 0.42329657 | 0.633 | 0.54  | 1 HSPC_UCBMC |
| SYAP1             | 0.0184161  | 0.72651381 | 0.522 | 0.438 | 1 HSPC_UCBMC |
| SFSWAP            | 0.01844586 | 0.48674932 | 0.589 | 0.473 | 1 HSPC_UCBMC |
| MAK16             | 0.01858693 | 1.11309264 | 0.333 | 0.237 | 1 HSPC_UCBMC |
| NUB1              | 0.01860942 | 0.60667836 | 0.378 | 0.255 | 1 HSPC_UCBMC |
| ENSMUG00000010266 | 0.01861421 | 0.41542007 | 0.856 | 0.787 | 1 HSPC_UCBMC |
| TBCK              | 0.01866283 | 0.8859104  | 0.367 | 0.274 | 1 HSPC_UCBMC |
| SLC35E1           | 0.0187684  | 1.19047721 | 0.289 | 0.187 | 1 HSPC_UCBMC |
| HPS3              | 0.01888577 | 1.21937772 | 0.267 | 0.172 | 1 HSPC_UCBMC |
| BID               | 0.01888808 | 0.69134634 | 0.511 | 0.409 | 1 HSPC_UCBMC |
| SPATS2            | 0.01890173 | 0.62868337 | 0.344 | 0.238 | 1 HSPC_UCBMC |
| HPCAL1            | 0.01896112 | 0.67805591 | 0.389 | 0.266 | 1 HSPC_UCBMC |
| PRPF4B            | 0.01903664 | 0.27717815 | 0.889 | 0.752 | 1 HSPC_UCBMC |
| ANAPC10           | 0.01905741 | 0.6956534  | 0.489 | 0.401 | 1 HSPC_UCBMC |
| CWC25             | 0.01912258 | 0.79136093 | 0.344 | 0.233 | 1 HSPC_UCBMC |
| LAMTOR1           | 0.01923037 | 0.44922449 | 0.556 | 0.451 | 1 HSPC_UCBMC |
| DBF4              | 0.01923469 | 0.32489337 | 0.444 | 0.327 | 1 HSPC_UCBMC |

|                    |            |            |       |       |              |
|--------------------|------------|------------|-------|-------|--------------|
| EIF2S3             | 0.01924324 | 0.58826971 | 0.556 | 0.479 | 1 HSPC_UCBMC |
| HIF1A              | 0.01927022 | 0.37302316 | 0.622 | 0.508 | 1 HSPC_UCBMC |
| DOP1B              | 0.01946053 | 0.78723578 | 0.411 | 0.305 | 1 HSPC_UCBMC |
| OGA                | 0.0198458  | 0.16075414 | 0.656 | 0.551 | 1 HSPC_UCBMC |
| TCF7L2             | 0.01996185 | 1.22453238 | 0.256 | 0.155 | 1 HSPC_UCBMC |
| CAND1              | 0.02002824 | 0.38660007 | 0.611 | 0.518 | 1 HSPC_UCBMC |
| LRCH4              | 0.02010282 | 0.67566279 | 0.289 | 0.194 | 1 HSPC_UCBMC |
| STAT1              | 0.02013884 | 0.11278623 | 0.311 | 0.196 | 1 HSPC_UCBMC |
| AATF               | 0.02013958 | 0.63427143 | 0.4   | 0.288 | 1 HSPC_UCBMC |
| SEC22B             | 0.02015657 | 0.87204769 | 0.289 | 0.192 | 1 HSPC_UCBMC |
| GBE1               | 0.02024174 | 0.46506161 | 0.478 | 0.359 | 1 HSPC_UCBMC |
| DTNBP1             | 0.0202839  | 0.60370682 | 0.556 | 0.46  | 1 HSPC_UCBMC |
| USP5               | 0.02030314 | 0.97585446 | 0.256 | 0.166 | 1 HSPC_UCBMC |
| ENSMMUG00000063635 | 0.02064924 | 0.62762221 | 0.344 | 0.233 | 1 HSPC_UCBMC |
| FRG1               | 0.02068134 | 0.42910989 | 0.356 | 0.24  | 1 HSPC_UCBMC |
| MAP2K6             | 0.02076488 | 0.74132813 | 0.278 | 0.172 | 1 HSPC_UCBMC |
| ENSMMUG00000037794 | 0.02094868 | 0.6063418  | 0.4   | 0.281 | 1 HSPC_UCBMC |
| CDK13              | 0.02097468 | 0.26373162 | 0.678 | 0.551 | 1 HSPC_UCBMC |
| ENSMMUG00000006608 | 0.02097943 | 0.29842255 | 0.8   | 0.732 | 1 HSPC_UCBMC |
| MRPS9              | 0.02108913 | 0.77673464 | 0.522 | 0.429 | 1 HSPC_UCBMC |
| NOL8               | 0.02121448 | 0.4771317  | 0.5   | 0.409 | 1 HSPC_UCBMC |
| RUVBL1             | 0.02122588 | 0.73644666 | 0.433 | 0.348 | 1 HSPC_UCBMC |
| PDCD5              | 0.02140073 | 0.50723778 | 0.567 | 0.47  | 1 HSPC_UCBMC |
| GGPS1              | 0.02142784 | 0.75197805 | 0.344 | 0.235 | 1 HSPC_UCBMC |
| ENSMMUG00000053089 | 0.02146228 | 0.97686748 | 0.389 | 0.288 | 1 HSPC_UCBMC |
| ENSMMUG00000015217 | 0.02168597 | 0.57059224 | 0.5   | 0.425 | 1 HSPC_UCBMC |
| EID1               | 0.02174765 | 0.46861295 | 0.611 | 0.547 | 1 HSPC_UCBMC |
| PRKCSH             | 0.02176225 | 0.28917337 | 0.433 | 0.322 | 1 HSPC_UCBMC |
| FTL                | 0.02185715 | 0.15184931 | 0.944 | 0.845 | 1 HSPC_UCBMC |
| CAB39              | 0.021946   | 0.3225428  | 0.733 | 0.671 | 1 HSPC_UCBMC |
| GATAD2A            | 0.02198416 | 0.54140093 | 0.589 | 0.49  | 1 HSPC_UCBMC |
| PBXIP1             | 0.022146   | 0.83459608 | 0.411 | 0.316 | 1 HSPC_UCBMC |
| ARHGAP12           | 0.02215328 | 0.38380187 | 0.433 | 0.314 | 1 HSPC_UCBMC |

|                    |            |            |       |       |              |
|--------------------|------------|------------|-------|-------|--------------|
| ANKRD12            | 0.02226451 | 0.11322874 | 0.756 | 0.68  | 1 HSPC_UCBMC |
| GNAL               | 0.02236141 | 0.3874667  | 0.467 | 0.335 | 1 HSPC_UCBMC |
| PPM1L              | 0.02239472 | 0.9585501  | 0.256 | 0.165 | 1 HSPC_UCBMC |
| PDSS2              | 0.02242209 | 0.68908091 | 0.544 | 0.431 | 1 HSPC_UCBMC |
| ZBTB44             | 0.02249273 | 0.39632141 | 0.489 | 0.373 | 1 HSPC_UCBMC |
| MON2               | 0.02249755 | 0.5402401  | 0.522 | 0.416 | 1 HSPC_UCBMC |
| COMMD1             | 0.02251364 | 0.60638806 | 0.589 | 0.538 | 1 HSPC_UCBMC |
| ENSMMUG00000007970 | 0.02254976 | 0.7506242  | 0.4   | 0.303 | 1 HSPC_UCBMC |
| ATP2B1             | 0.02255356 | 0.63008355 | 0.456 | 0.362 | 1 HSPC_UCBMC |
| PRDX5              | 0.02255887 | 0.59630107 | 0.533 | 0.414 | 1 HSPC_UCBMC |
| SENP2              | 0.02266043 | 0.61728404 | 0.511 | 0.407 | 1 HSPC_UCBMC |
| PHACTR4            | 0.02266364 | 0.60623075 | 0.578 | 0.46  | 1 HSPC_UCBMC |
| FAM168A            | 0.02273137 | 0.44136016 | 0.378 | 0.259 | 1 HSPC_UCBMC |
| ABRAXAS1           | 0.02280522 | 0.60379525 | 0.278 | 0.176 | 1 HSPC_UCBMC |
| ENSMMUG00000055627 | 0.02294396 | 0.28423606 | 0.811 | 0.713 | 1 HSPC_UCBMC |
| P4HA1              | 0.02306135 | 0.73759373 | 0.4   | 0.283 | 1 HSPC_UCBMC |
| RPS24              | 0.02308381 | 0.17516051 | 0.956 | 0.917 | 1 HSPC_UCBMC |
| PEX14              | 0.02317764 | 0.19904619 | 0.467 | 0.342 | 1 HSPC_UCBMC |
| DSTN               | 0.02321324 | 0.47623752 | 0.644 | 0.542 | 1 HSPC_UCBMC |
| RBM34              | 0.02321569 | 0.81768791 | 0.444 | 0.344 | 1 HSPC_UCBMC |
| PHF8               | 0.02326042 | 0.51985462 | 0.311 | 0.207 | 1 HSPC_UCBMC |
| ACE                | 0.02336002 | 0.36977188 | 0.5   | 0.41  | 1 HSPC_UCBMC |
| PHF20              | 0.02344072 | 0.45207325 | 0.622 | 0.521 | 1 HSPC_UCBMC |
| GUCY1A1            | 0.02348393 | 0.53356648 | 0.422 | 0.299 | 1 HSPC_UCBMC |
| ARHGEF1            | 0.02353863 | 0.68262127 | 0.367 | 0.251 | 1 HSPC_UCBMC |
| RAI1               | 0.02364441 | 0.66649489 | 0.311 | 0.205 | 1 HSPC_UCBMC |
| TEC                | 0.02375005 | 0.54347444 | 0.567 | 0.495 | 1 HSPC_UCBMC |
| GLB1               | 0.02382641 | 0.50351119 | 0.533 | 0.44  | 1 HSPC_UCBMC |
| SLC9A3R1           | 0.02392989 | 0.55518032 | 0.367 | 0.253 | 1 HSPC_UCBMC |
| MAP3K1             | 0.02421654 | 0.68601867 | 0.378 | 0.274 | 1 HSPC_UCBMC |
| GOLGA5             | 0.02422299 | 0.72087212 | 0.311 | 0.216 | 1 HSPC_UCBMC |
| PCDHGB5            | 0.02425323 | 0.95315784 | 0.278 | 0.19  | 1 HSPC_UCBMC |
| TTC14              | 0.02435072 | 0.31169287 | 0.422 | 0.305 | 1 HSPC_UCBMC |

|                     |            |            |       |       |              |
|---------------------|------------|------------|-------|-------|--------------|
| RASA3               | 0.02438735 | 1.09226997 | 0.278 | 0.187 | 1 HSPC_UCBMC |
| HMOX2               | 0.02439265 | 0.79365758 | 0.322 | 0.227 | 1 HSPC_UCBMC |
| ENSMMUG000000061298 | 0.02446339 | 0.56164385 | 0.367 | 0.275 | 1 HSPC_UCBMC |
| COPS8               | 0.02464598 | 0.70210711 | 0.478 | 0.386 | 1 HSPC_UCBMC |
| MCTP1               | 0.02465859 | 0.31479617 | 0.444 | 0.305 | 1 HSPC_UCBMC |
| SUSD1               | 0.02467212 | 0.62423958 | 0.444 | 0.346 | 1 HSPC_UCBMC |
| ATG10               | 0.02478989 | 1.06954863 | 0.356 | 0.255 | 1 HSPC_UCBMC |
| NOSIP               | 0.02488595 | 0.42537802 | 0.433 | 0.336 | 1 HSPC_UCBMC |
| UBR5                | 0.02490665 | 0.34528531 | 0.667 | 0.595 | 1 HSPC_UCBMC |
| PDZD8               | 0.02495681 | 0.1971586  | 0.656 | 0.51  | 1 HSPC_UCBMC |
| CLSTN1              | 0.02510852 | 0.56627533 | 0.411 | 0.292 | 1 HSPC_UCBMC |
| L3MBTL3             | 0.02513257 | 0.80023478 | 0.256 | 0.168 | 1 HSPC_UCBMC |
| EPS15L1             | 0.02557716 | 1.06963058 | 0.4   | 0.318 | 1 HSPC_UCBMC |
| MFSD8               | 0.0258038  | 0.51080036 | 0.278 | 0.181 | 1 HSPC_UCBMC |
| LYPLA2              | 0.02587562 | 1.03960386 | 0.278 | 0.192 | 1 HSPC_UCBMC |
| ROS1                | 0.02621122 | 0.34671196 | 0.433 | 0.307 | 1 HSPC_UCBMC |
| CD2AP               | 0.02631511 | 0.60242165 | 0.589 | 0.481 | 1 HSPC_UCBMC |
| INVS                | 0.02631602 | 0.73458601 | 0.3   | 0.201 | 1 HSPC_UCBMC |
| CSK                 | 0.02634809 | 0.52181283 | 0.311 | 0.207 | 1 HSPC_UCBMC |
| C11H12orf45         | 0.0264145  | 0.56452461 | 0.567 | 0.482 | 1 HSPC_UCBMC |
| NIP7                | 0.02647495 | 1.00252386 | 0.267 | 0.179 | 1 HSPC_UCBMC |
| PPP1R7              | 0.02648044 | 0.39490946 | 0.378 | 0.262 | 1 HSPC_UCBMC |
| MYCBP2              | 0.0266096  | 0.24980821 | 0.733 | 0.627 | 1 HSPC_UCBMC |
| RAB2B               | 0.02707047 | 0.9232223  | 0.256 | 0.168 | 1 HSPC_UCBMC |
| ADAR                | 0.0270796  | 0.57774121 | 0.467 | 0.362 | 1 HSPC_UCBMC |
| UBE3A               | 0.02714814 | 0.57270467 | 0.633 | 0.508 | 1 HSPC_UCBMC |
| PLIN3               | 0.02725433 | 0.64430043 | 0.389 | 0.281 | 1 HSPC_UCBMC |
| ZNF326              | 0.02732093 | 0.63750777 | 0.556 | 0.477 | 1 HSPC_UCBMC |
| OGT                 | 0.02737029 | 0.18832196 | 0.678 | 0.562 | 1 HSPC_UCBMC |
| NPM3                | 0.02738322 | 0.37521523 | 0.656 | 0.534 | 1 HSPC_UCBMC |
| RPL8                | 0.02748248 | 0.21090871 | 0.978 | 0.885 | 1 HSPC_UCBMC |
| RSBN1               | 0.02755943 | 0.76140063 | 0.378 | 0.285 | 1 HSPC_UCBMC |
| CD247               | 0.02756903 | 0.52572025 | 0.267 | 0.17  | 1 HSPC_UCBMC |

|                   |            |            |       |       |              |
|-------------------|------------|------------|-------|-------|--------------|
| EEF2              | 0.02772122 | 0.2198174  | 0.856 | 0.776 | 1 HSPC_UCBMC |
| TBCE              | 0.02783441 | 0.63323225 | 0.444 | 0.366 | 1 HSPC_UCBMC |
| ARHGAP26          | 0.02783737 | 0.72517823 | 0.311 | 0.205 | 1 HSPC_UCBMC |
| ANKRD42           | 0.02805247 | 0.86120101 | 0.267 | 0.174 | 1 HSPC_UCBMC |
| NAE1              | 0.02807447 | 0.59282629 | 0.522 | 0.44  | 1 HSPC_UCBMC |
| WDR3              | 0.02823952 | 0.71790911 | 0.333 | 0.227 | 1 HSPC_UCBMC |
| PKIA              | 0.02832957 | 0.82495155 | 0.356 | 0.255 | 1 HSPC_UCBMC |
| BTBD9             | 0.02836586 | 0.77801123 | 0.467 | 0.414 | 1 HSPC_UCBMC |
| URI1              | 0.0284902  | 0.51391877 | 0.522 | 0.444 | 1 HSPC_UCBMC |
| NAF1              | 0.02853536 | 0.36266454 | 0.344 | 0.237 | 1 HSPC_UCBMC |
| FRA10AC1          | 0.02859677 | 1.04253344 | 0.367 | 0.283 | 1 HSPC_UCBMC |
| ILVBL             | 0.02867255 | 0.53895381 | 0.256 | 0.163 | 1 HSPC_UCBMC |
| SOS2              | 0.02879941 | 0.99280305 | 0.367 | 0.272 | 1 HSPC_UCBMC |
| ZNRF2             | 0.02880365 | 0.51732983 | 0.378 | 0.277 | 1 HSPC_UCBMC |
| SDAD1             | 0.02893817 | 0.42651161 | 0.367 | 0.262 | 1 HSPC_UCBMC |
| ARHGAP18          | 0.02894329 | 0.62904353 | 0.267 | 0.172 | 1 HSPC_UCBMC |
| CCDC59            | 0.02900303 | 0.44860999 | 0.522 | 0.421 | 1 HSPC_UCBMC |
| SLC25A3           | 0.02905759 | 0.36091053 | 0.744 | 0.697 | 1 HSPC_UCBMC |
| LYPLA1            | 0.02926301 | 0.95260861 | 0.389 | 0.288 | 1 HSPC_UCBMC |
| UBL3              | 0.0294738  | 0.74304675 | 0.333 | 0.233 | 1 HSPC_UCBMC |
| ITGB1BP1          | 0.02947676 | 0.82472134 | 0.3   | 0.216 | 1 HSPC_UCBMC |
| DNTTIP2           | 0.02950278 | 0.37797879 | 0.533 | 0.444 | 1 HSPC_UCBMC |
| TTC1              | 0.02965338 | 0.44798158 | 0.444 | 0.323 | 1 HSPC_UCBMC |
| PPIB              | 0.02976828 | 0.19990765 | 0.689 | 0.651 | 1 HSPC_UCBMC |
| NCOA2             | 0.02984198 | 0.26111161 | 0.633 | 0.543 | 1 HSPC_UCBMC |
| TBL1X             | 0.02987821 | 0.72994804 | 0.367 | 0.264 | 1 HSPC_UCBMC |
| ZCRB1             | 0.02989699 | 0.51663796 | 0.522 | 0.423 | 1 HSPC_UCBMC |
| RAE1              | 0.02993671 | 0.67043257 | 0.356 | 0.259 | 1 HSPC_UCBMC |
| ENSMUG00000017297 | 0.02996726 | 0.46555726 | 0.433 | 0.331 | 1 HSPC_UCBMC |
| FBXW11            | 0.02998876 | 0.48816799 | 0.522 | 0.418 | 1 HSPC_UCBMC |
| RIOK1             | 0.02999125 | 0.64058297 | 0.344 | 0.25  | 1 HSPC_UCBMC |
| SYF2              | 0.0302304  | 0.59965187 | 0.589 | 0.495 | 1 HSPC_UCBMC |
| RNF167            | 0.0303261  | 0.59893168 | 0.467 | 0.375 | 1 HSPC_UCBMC |

|                   |            |            |       |       |              |
|-------------------|------------|------------|-------|-------|--------------|
| RPRD2             | 0.03046111 | 0.23637439 | 0.567 | 0.462 | 1 HSPC_UCBMC |
| ABL1              | 0.03047969 | 0.48274791 | 0.411 | 0.314 | 1 HSPC_UCBMC |
| EIF4E             | 0.03058179 | 0.43885248 | 0.6   | 0.503 | 1 HSPC_UCBMC |
| DRAP1             | 0.03062748 | 0.55505433 | 0.478 | 0.396 | 1 HSPC_UCBMC |
| CACUL1            | 0.03078092 | 0.62612531 | 0.422 | 0.342 | 1 HSPC_UCBMC |
| PRSS55            | 0.03098234 | 0.28113312 | 0.311 | 0.203 | 1 HSPC_UCBMC |
| DUSP10            | 0.03103064 | 0.83162547 | 0.333 | 0.238 | 1 HSPC_UCBMC |
| JARID2            | 0.03116846 | 0.26830673 | 0.7   | 0.63  | 1 HSPC_UCBMC |
| NUDC              | 0.03119588 | 0.28539746 | 0.711 | 0.601 | 1 HSPC_UCBMC |
| PRKAR2A           | 0.03121004 | 0.66883254 | 0.311 | 0.224 | 1 HSPC_UCBMC |
| ATM               | 0.03124104 | 0.54121759 | 0.422 | 0.327 | 1 HSPC_UCBMC |
| TCF20             | 0.0315321  | 0.73939573 | 0.411 | 0.329 | 1 HSPC_UCBMC |
| ARIH1             | 0.0316997  | 0.30002913 | 0.711 | 0.66  | 1 HSPC_UCBMC |
| ENSMUG00000021425 | 0.03175461 | 0.47677776 | 0.489 | 0.379 | 1 HSPC_UCBMC |
| WDR1              | 0.03176723 | 0.62172999 | 0.367 | 0.266 | 1 HSPC_UCBMC |
| SMIM19            | 0.03182027 | 0.92572648 | 0.389 | 0.296 | 1 HSPC_UCBMC |
| FAM126A           | 0.03182987 | 0.62875096 | 0.456 | 0.355 | 1 HSPC_UCBMC |
| SLC7A6OS          | 0.03201178 | 0.77506012 | 0.311 | 0.216 | 1 HSPC_UCBMC |
| SDHAF4            | 0.03206057 | 0.45163675 | 0.667 | 0.601 | 1 HSPC_UCBMC |
| WDR59             | 0.03217593 | 0.85994244 | 0.311 | 0.214 | 1 HSPC_UCBMC |
| IRF9              | 0.03221654 | 0.42669386 | 0.278 | 0.176 | 1 HSPC_UCBMC |
| TRUB2             | 0.03227728 | 1.02915484 | 0.256 | 0.174 | 1 HSPC_UCBMC |
| TP53BP2           | 0.03235946 | 0.3994611  | 0.422 | 0.327 | 1 HSPC_UCBMC |
| DDX54             | 0.03244631 | 0.73046269 | 0.411 | 0.335 | 1 HSPC_UCBMC |
| IGFLR1            | 0.03274649 | 0.64068136 | 0.367 | 0.261 | 1 HSPC_UCBMC |
| PLGRKT            | 0.03278387 | 0.44349759 | 0.467 | 0.388 | 1 HSPC_UCBMC |
| GORASP2           | 0.03280445 | 1.00148728 | 0.344 | 0.253 | 1 HSPC_UCBMC |
| SLC38A9           | 0.03282797 | 0.54709945 | 0.544 | 0.451 | 1 HSPC_UCBMC |
| ENSMUG00000015583 | 0.03335089 | 0.29529826 | 0.856 | 0.789 | 1 HSPC_UCBMC |
| ZNHIT1            | 0.03338821 | 0.32293153 | 0.6   | 0.527 | 1 HSPC_UCBMC |
| DEPTOR            | 0.03379879 | 0.87923523 | 0.289 | 0.2   | 1 HSPC_UCBMC |
| OSTF1             | 0.03452636 | 0.36909984 | 0.467 | 0.364 | 1 HSPC_UCBMC |
| RUFY2             | 0.03457494 | 0.45732317 | 0.289 | 0.19  | 1 HSPC_UCBMC |

|                   |            |            |       |       |              |
|-------------------|------------|------------|-------|-------|--------------|
| HERC3             | 0.03461965 | 0.38053284 | 0.456 | 0.353 | 1 HSPC_UCBMC |
| ZNF22             | 0.03463813 | 0.3908977  | 0.478 | 0.383 | 1 HSPC_UCBMC |
| SWAP70            | 0.03475254 | 0.42946966 | 0.289 | 0.194 | 1 HSPC_UCBMC |
| MBIP              | 0.03486096 | 1.19796724 | 0.278 | 0.19  | 1 HSPC_UCBMC |
| CCDC84            | 0.03489733 | 0.83264249 | 0.278 | 0.185 | 1 HSPC_UCBMC |
| APIP              | 0.03494766 | 0.46165438 | 0.489 | 0.388 | 1 HSPC_UCBMC |
| ENSMUG00000007426 | 0.03509067 | 0.38924111 | 0.389 | 0.292 | 1 HSPC_UCBMC |
| ARHGEF2           | 0.03542115 | 0.25482336 | 0.444 | 0.331 | 1 HSPC_UCBMC |
| DGUOK             | 0.03556791 | 0.77536223 | 0.367 | 0.268 | 1 HSPC_UCBMC |
| ZNF706            | 0.03581889 | 0.37471418 | 0.622 | 0.553 | 1 HSPC_UCBMC |
| SLC35E2           | 0.03594223 | 0.51559729 | 0.444 | 0.348 | 1 HSPC_UCBMC |
| SON               | 0.03612555 | 0.29746996 | 0.811 | 0.83  | 1 HSPC_UCBMC |
| ENSMUG00000021539 | 0.03633777 | 0.35475934 | 0.389 | 0.288 | 1 HSPC_UCBMC |
| GNG5              | 0.03643029 | 0.19832829 | 0.867 | 0.749 | 1 HSPC_UCBMC |
| TMEM42            | 0.03645084 | 0.8956611  | 0.256 | 0.17  | 1 HSPC_UCBMC |
| CYTIP             | 0.03691653 | 0.36514741 | 0.267 | 0.166 | 1 HSPC_UCBMC |
| DSTYK             | 0.03712522 | 0.64540677 | 0.333 | 0.235 | 1 HSPC_UCBMC |
| ZSCAN18           | 0.03714167 | 0.94757014 | 0.322 | 0.24  | 1 HSPC_UCBMC |
| YIF1A             | 0.03738777 | 0.92946526 | 0.344 | 0.255 | 1 HSPC_UCBMC |
| RAB27A            | 0.03748844 | 0.41897782 | 0.289 | 0.196 | 1 HSPC_UCBMC |
| SRSF6             | 0.03764979 | 0.57311854 | 0.622 | 0.584 | 1 HSPC_UCBMC |
| RBBP6             | 0.03770105 | 0.36499623 | 0.544 | 0.46  | 1 HSPC_UCBMC |
| MORF4L2           | 0.03770773 | 0.44991811 | 0.567 | 0.54  | 1 HSPC_UCBMC |
| TWF1              | 0.0378434  | 0.75795735 | 0.267 | 0.189 | 1 HSPC_UCBMC |
| MRI1              | 0.03787666 | 0.19003382 | 0.744 | 0.66  | 1 HSPC_UCBMC |
| MAP4              | 0.03791382 | 0.82971229 | 0.322 | 0.242 | 1 HSPC_UCBMC |
| TRAC              | 0.03802722 | 0.27348797 | 0.289 | 0.187 | 1 HSPC_UCBMC |
| CALU              | 0.03828986 | 0.66289094 | 0.489 | 0.379 | 1 HSPC_UCBMC |
| KPNB1             | 0.03857686 | 0.50970579 | 0.689 | 0.58  | 1 HSPC_UCBMC |
| EIF3I             | 0.03860218 | 0.42777089 | 0.6   | 0.506 | 1 HSPC_UCBMC |
| IK                | 0.0386934  | 0.51691441 | 0.644 | 0.575 | 1 HSPC_UCBMC |
| DPY30             | 0.03896459 | 0.38897908 | 0.533 | 0.445 | 1 HSPC_UCBMC |
| ENSMUG00000048621 | 0.03902278 | 0.793426   | 0.311 | 0.222 | 1 HSPC_UCBMC |



|                    |            |            |       |       |              |
|--------------------|------------|------------|-------|-------|--------------|
| GNG7               | 0.03905541 | 0.9546127  | 0.311 | 0.227 | 1 HSPC_UCBMC |
| PHOSPHO2           | 0.03917192 | 0.84683452 | 0.322 | 0.233 | 1 HSPC_UCBMC |
| ENSMMUG00000064140 | 0.03934417 | 1.04535049 | 0.278 | 0.192 | 1 HSPC_UCBMC |
| NELFA              | 0.03966964 | 0.50579478 | 0.356 | 0.266 | 1 HSPC_UCBMC |
| TPI1               | 0.03978074 | 0.48108525 | 0.578 | 0.482 | 1 HSPC_UCBMC |
| RNF216             | 0.04002532 | 0.48826927 | 0.656 | 0.586 | 1 HSPC_UCBMC |
| ELMOD3             | 0.04004512 | 0.40239986 | 0.456 | 0.346 | 1 HSPC_UCBMC |
| SDHB               | 0.04009684 | 0.36560465 | 0.489 | 0.386 | 1 HSPC_UCBMC |
| SH3GL1             | 0.04036147 | 0.36403745 | 0.411 | 0.305 | 1 HSPC_UCBMC |
| CCT3               | 0.04036523 | 0.27865815 | 0.733 | 0.632 | 1 HSPC_UCBMC |
| NGDN               | 0.04045746 | 1.22208062 | 0.278 | 0.192 | 1 HSPC_UCBMC |
| UBA52              | 0.04079723 | 0.17161572 | 0.989 | 0.884 | 1 HSPC_UCBMC |
| IFT20              | 0.04088869 | 0.84833904 | 0.267 | 0.179 | 1 HSPC_UCBMC |
| STRBP              | 0.04090925 | 0.16562446 | 0.589 | 0.519 | 1 HSPC_UCBMC |
| RRP12              | 0.04111301 | 0.56385892 | 0.422 | 0.331 | 1 HSPC_UCBMC |
| ESCO1              | 0.04150457 | 0.43134778 | 0.578 | 0.488 | 1 HSPC_UCBMC |
| STK3               | 0.04158493 | 0.19001354 | 0.467 | 0.366 | 1 HSPC_UCBMC |
| MIER1              | 0.04158609 | 0.32329164 | 0.722 | 0.643 | 1 HSPC_UCBMC |
| SPTAN1             | 0.04162204 | 0.88052772 | 0.3   | 0.209 | 1 HSPC_UCBMC |
| RPE                | 0.04170841 | 1.04419667 | 0.267 | 0.187 | 1 HSPC_UCBMC |
| ADI1               | 0.04171449 | 0.46726217 | 0.444 | 0.351 | 1 HSPC_UCBMC |
| DLG1               | 0.04180266 | 0.25333101 | 0.8   | 0.719 | 1 HSPC_UCBMC |
| CTPS1              | 0.04181141 | 0.76244337 | 0.311 | 0.233 | 1 HSPC_UCBMC |
| DGKB               | 0.04214776 | 0.16222751 | 0.422 | 0.309 | 1 HSPC_UCBMC |
| GTF3C2             | 0.04236968 | 0.63029168 | 0.367 | 0.266 | 1 HSPC_UCBMC |
| CAPZA1             | 0.04295717 | 0.31320236 | 0.756 | 0.691 | 1 HSPC_UCBMC |
| HIP1               | 0.04339824 | 0.70268741 | 0.267 | 0.181 | 1 HSPC_UCBMC |
| COPA               | 0.04341814 | 0.64184742 | 0.533 | 0.434 | 1 HSPC_UCBMC |
| SEC13              | 0.04362544 | 1.01496574 | 0.356 | 0.272 | 1 HSPC_UCBMC |
| ENSMMUG00000013491 | 0.04369302 | 0.73119094 | 0.389 | 0.29  | 1 HSPC_UCBMC |
| ALDH16A1           | 0.04379166 | 0.78137244 | 0.311 | 0.22  | 1 HSPC_UCBMC |
| MRPL47             | 0.04407444 | 0.32323205 | 0.489 | 0.409 | 1 HSPC_UCBMC |
| WDR46              | 0.04412289 | 0.6736213  | 0.311 | 0.216 | 1 HSPC_UCBMC |

|                    |            |            |       |       |              |
|--------------------|------------|------------|-------|-------|--------------|
| THOC1              | 0.0441762  | 0.38824613 | 0.533 | 0.455 | 1 HSPC_UCBMC |
| BNIP2              | 0.04440942 | 0.28105376 | 0.489 | 0.355 | 1 HSPC_UCBMC |
| LAPTM4A            | 0.04443827 | 0.6284441  | 0.433 | 0.346 | 1 HSPC_UCBMC |
| CNTRL              | 0.04460303 | 0.21742378 | 0.5   | 0.377 | 1 HSPC_UCBMC |
| WDR70              | 0.04498796 | 0.3221063  | 0.711 | 0.667 | 1 HSPC_UCBMC |
| PPP2R1A            | 0.0450258  | 0.41573643 | 0.444 | 0.355 | 1 HSPC_UCBMC |
| SAFB2              | 0.04504985 | 0.41405364 | 0.511 | 0.457 | 1 HSPC_UCBMC |
| TBK1               | 0.04527661 | 1.21265862 | 0.278 | 0.192 | 1 HSPC_UCBMC |
| ADH5               | 0.04529734 | 0.8587226  | 0.344 | 0.268 | 1 HSPC_UCBMC |
| HAUS1              | 0.04547977 | 0.56628794 | 0.367 | 0.274 | 1 HSPC_UCBMC |
| GNPDA2             | 0.04589333 | 0.41072683 | 0.4   | 0.301 | 1 HSPC_UCBMC |
| ILK                | 0.04589853 | 0.69741661 | 0.256 | 0.174 | 1 HSPC_UCBMC |
| FNTB               | 0.04603478 | 0.2082026  | 0.689 | 0.556 | 1 HSPC_UCBMC |
| SSR3               | 0.04645574 | 0.53585468 | 0.622 | 0.569 | 1 HSPC_UCBMC |
| ANXA11             | 0.04651327 | 0.45582356 | 0.3   | 0.214 | 1 HSPC_UCBMC |
| ENSMUG00000004539  | 0.04715734 | 0.48137259 | 0.489 | 0.418 | 1 HSPC_UCBMC |
| THYN1              | 0.04728091 | 0.62170786 | 0.411 | 0.323 | 1 HSPC_UCBMC |
| TNRC18             | 0.04733105 | 0.23697477 | 0.533 | 0.409 | 1 HSPC_UCBMC |
| UHMK1              | 0.04743584 | 0.63537361 | 0.389 | 0.311 | 1 HSPC_UCBMC |
| CSNK1D             | 0.04751853 | 0.79428521 | 0.411 | 0.338 | 1 HSPC_UCBMC |
| TTC32              | 0.04777208 | 0.6350415  | 0.322 | 0.244 | 1 HSPC_UCBMC |
| ARMCX3             | 0.04779603 | 0.30752532 | 0.322 | 0.224 | 1 HSPC_UCBMC |
| DHX30              | 0.04827527 | 0.54138567 | 0.433 | 0.34  | 1 HSPC_UCBMC |
| SAT2               | 0.04830927 | 0.45750158 | 0.333 | 0.233 | 1 HSPC_UCBMC |
| SCAI               | 0.04863997 | 0.30604008 | 0.411 | 0.309 | 1 HSPC_UCBMC |
| TBC1D24            | 0.04873447 | 0.25071097 | 0.8   | 0.715 | 1 HSPC_UCBMC |
| ZNHIT3             | 0.04895018 | 0.54761301 | 0.389 | 0.298 | 1 HSPC_UCBMC |
| PNPLA8             | 0.04897311 | 0.5541427  | 0.344 | 0.257 | 1 HSPC_UCBMC |
| CPSF7              | 0.04907382 | 0.66657765 | 0.378 | 0.292 | 1 HSPC_UCBMC |
| EPM2AIP1           | 0.04969874 | 0.89750104 | 0.3   | 0.222 | 1 HSPC_UCBMC |
| ENSMUG000000064531 | 0.04985735 | 0.55613764 | 0.467 | 0.386 | 1 HSPC_UCBMC |
| HDAC9              | 0.05008113 | 0.25259765 | 0.411 | 0.296 | 1 HSPC_UCBMC |
| CIR1               | 0.05011677 | 0.25161216 | 0.556 | 0.453 | 1 HSPC_UCBMC |

|                     |            |            |       |       |              |
|---------------------|------------|------------|-------|-------|--------------|
| KDM4C               | 0.05026616 | 0.22797569 | 0.678 | 0.584 | 1 HSPC_UCBMC |
| NAA15               | 0.0504916  | 0.49485104 | 0.589 | 0.532 | 1 HSPC_UCBMC |
| ZFC3H1              | 0.05051501 | 0.26980635 | 0.567 | 0.468 | 1 HSPC_UCBMC |
| ANKMY2              | 0.05056814 | 0.85666885 | 0.256 | 0.181 | 1 HSPC_UCBMC |
| PIK3AP1             | 0.05066565 | 1.06089582 | 0.333 | 0.25  | 1 HSPC_UCBMC |
| BRWD1               | 0.05079173 | 0.21095194 | 0.644 | 0.555 | 1 HSPC_UCBMC |
| WASF2               | 0.05103467 | 0.28794454 | 0.744 | 0.647 | 1 HSPC_UCBMC |
| DPM1                | 0.05129402 | 0.63442801 | 0.389 | 0.303 | 1 HSPC_UCBMC |
| DNAJC3              | 0.05130112 | 0.25567668 | 0.544 | 0.457 | 1 HSPC_UCBMC |
| ENSMMUG00000013439  | 0.05137827 | 0.3520244  | 0.267 | 0.183 | 1 HSPC_UCBMC |
| MLF2                | 0.05141072 | 0.61171545 | 0.411 | 0.336 | 1 HSPC_UCBMC |
| RC3H1               | 0.0514771  | 0.50007643 | 0.478 | 0.396 | 1 HSPC_UCBMC |
| WAS                 | 0.0517277  | 0.43086326 | 0.333 | 0.238 | 1 HSPC_UCBMC |
| RAB28               | 0.05176561 | 0.57143242 | 0.311 | 0.233 | 1 HSPC_UCBMC |
| ZNF207              | 0.05190159 | 0.25671361 | 0.7   | 0.656 | 1 HSPC_UCBMC |
| CCNI                | 0.05190453 | 0.38871062 | 0.711 | 0.616 | 1 HSPC_UCBMC |
| GTF3C1              | 0.05227787 | 0.4965446  | 0.456 | 0.353 | 1 HSPC_UCBMC |
| CFAP36              | 0.05250069 | 0.70085218 | 0.422 | 0.333 | 1 HSPC_UCBMC |
| ENSMMUG000000061128 | 0.05252294 | 0.50096402 | 0.522 | 0.445 | 1 HSPC_UCBMC |
| ENSMMUG000000056043 | 0.05308301 | 0.76772633 | 0.411 | 0.348 | 1 HSPC_UCBMC |
| GLMN                | 0.05328814 | 0.31863726 | 0.478 | 0.384 | 1 HSPC_UCBMC |
| ARID4A              | 0.05330411 | 0.71502056 | 0.433 | 0.362 | 1 HSPC_UCBMC |
| KIAA1109            | 0.0533615  | 0.24018479 | 0.444 | 0.335 | 1 HSPC_UCBMC |
| CPSF3               | 0.05339595 | 0.65106478 | 0.5   | 0.44  | 1 HSPC_UCBMC |
| TRIP12              | 0.05339674 | 0.24215871 | 0.7   | 0.623 | 1 HSPC_UCBMC |
| THAP4               | 0.05341082 | 0.6744476  | 0.256 | 0.172 | 1 HSPC_UCBMC |
| SP4                 | 0.05346296 | 0.6548691  | 0.322 | 0.242 | 1 HSPC_UCBMC |
| APPBP2              | 0.05387571 | 0.52551373 | 0.444 | 0.355 | 1 HSPC_UCBMC |
| GPATCH8             | 0.05399078 | 0.1938588  | 0.678 | 0.601 | 1 HSPC_UCBMC |
| RNF149              | 0.05402236 | 0.56275428 | 0.4   | 0.301 | 1 HSPC_UCBMC |
| MED21               | 0.05408947 | 0.40954687 | 0.422 | 0.338 | 1 HSPC_UCBMC |
| PHF6                | 0.05416132 | 0.42219355 | 0.522 | 0.436 | 1 HSPC_UCBMC |
| ZNF618              | 0.0542948  | 0.79596181 | 0.356 | 0.266 | 1 HSPC_UCBMC |

|                     |            |            |       |       |              |
|---------------------|------------|------------|-------|-------|--------------|
| ENSMMUG00000012419  | 0.0543664  | 0.19418394 | 0.789 | 0.689 | 1 HSPC_UCBMC |
| RSRC2               | 0.05437077 | 0.4248573  | 0.733 | 0.684 | 1 HSPC_UCBMC |
| DYNLRB2             | 0.05443506 | 0.83420901 | 0.267 | 0.187 | 1 HSPC_UCBMC |
| DZIP3               | 0.05444413 | 0.38068488 | 0.278 | 0.19  | 1 HSPC_UCBMC |
| SF1                 | 0.05450819 | 0.39454495 | 0.722 | 0.641 | 1 HSPC_UCBMC |
| ENSMMUG000000061025 | 0.05461037 | 0.24921228 | 0.267 | 0.176 | 1 HSPC_UCBMC |
| PRMT1               | 0.05461999 | 0.27075803 | 0.611 | 0.523 | 1 HSPC_UCBMC |
| OSBPL11             | 0.05466658 | 0.83478969 | 0.311 | 0.231 | 1 HSPC_UCBMC |
| HTATSF1             | 0.05486875 | 0.83293356 | 0.4   | 0.325 | 1 HSPC_UCBMC |
| NOTCH2              | 0.05487634 | 0.40837295 | 0.3   | 0.205 | 1 HSPC_UCBMC |
| ODR4                | 0.05489926 | 0.89315214 | 0.344 | 0.259 | 1 HSPC_UCBMC |
| METTL9              | 0.05499147 | 0.71560178 | 0.544 | 0.482 | 1 HSPC_UCBMC |
| RASGEF1B            | 0.05533586 | 0.8351049  | 0.3   | 0.216 | 1 HSPC_UCBMC |
| UGP2                | 0.05533784 | 0.6194771  | 0.322 | 0.238 | 1 HSPC_UCBMC |
| DNAJB12             | 0.05541022 | 0.74620166 | 0.333 | 0.248 | 1 HSPC_UCBMC |
| BRAF                | 0.05548163 | 0.30363729 | 0.7   | 0.664 | 1 HSPC_UCBMC |
| QDPR                | 0.05562637 | 0.580038   | 0.456 | 0.349 | 1 HSPC_UCBMC |
| HGSNAT              | 0.05567963 | 0.30075356 | 0.422 | 0.325 | 1 HSPC_UCBMC |
| NSA2                | 0.05610195 | 0.21879    | 0.8   | 0.732 | 1 HSPC_UCBMC |
| FHIT                | 0.05623315 | 0.49041639 | 0.367 | 0.281 | 1 HSPC_UCBMC |
| CCNT1               | 0.05630498 | 0.37723845 | 0.367 | 0.274 | 1 HSPC_UCBMC |
| NDUFV3              | 0.05632792 | 0.43098611 | 0.533 | 0.436 | 1 HSPC_UCBMC |
| ENSMMUG000000064120 | 0.05644101 | 0.2423316  | 0.311 | 0.207 | 1 HSPC_UCBMC |
| ZNHIT6              | 0.05701805 | 0.67952934 | 0.311 | 0.224 | 1 HSPC_UCBMC |
| TERF2               | 0.05707927 | 0.82187742 | 0.256 | 0.185 | 1 HSPC_UCBMC |
| GPN1                | 0.0571918  | 0.80274031 | 0.256 | 0.176 | 1 HSPC_UCBMC |
| KLHL2               | 0.05740587 | 0.11081939 | 0.422 | 0.325 | 1 HSPC_UCBMC |
| HNRNPK              | 0.05756411 | 0.23028489 | 0.856 | 0.813 | 1 HSPC_UCBMC |
| AASDHPPT            | 0.05782393 | 0.44612914 | 0.456 | 0.357 | 1 HSPC_UCBMC |
| EIF1AY              | 0.05787613 | 0.4574596  | 0.456 | 0.377 | 1 HSPC_UCBMC |
| MDN1                | 0.05808087 | 0.10537498 | 0.544 | 0.44  | 1 HSPC_UCBMC |
| UPF3A               | 0.05808876 | 0.69897229 | 0.267 | 0.183 | 1 HSPC_UCBMC |
| ST13                | 0.05829269 | 0.34091735 | 0.756 | 0.667 | 1 HSPC_UCBMC |

|             |            |            |       |       |              |
|-------------|------------|------------|-------|-------|--------------|
| CDC123      | 0.05870246 | 0.52188109 | 0.467 | 0.364 | 1 HSPC_UCBMC |
| STK16       | 0.05880103 | 0.94498307 | 0.356 | 0.272 | 1 HSPC_UCBMC |
| UHRF2       | 0.05897191 | 0.31840287 | 0.644 | 0.562 | 1 HSPC_UCBMC |
| FASTKD2     | 0.05911625 | 0.53394634 | 0.389 | 0.301 | 1 HSPC_UCBMC |
| COMMD9      | 0.05926188 | 1.16515042 | 0.3   | 0.229 | 1 HSPC_UCBMC |
| IARS2       | 0.05954348 | 0.97726143 | 0.311 | 0.227 | 1 HSPC_UCBMC |
| ATP2A2      | 0.05987552 | 0.28470479 | 0.567 | 0.499 | 1 HSPC_UCBMC |
| RO60        | 0.06001492 | 0.49881662 | 0.4   | 0.296 | 1 HSPC_UCBMC |
| SLC25A4     | 0.06022254 | 0.42266537 | 0.389 | 0.298 | 1 HSPC_UCBMC |
| RRBP1       | 0.06038307 | 0.81565805 | 0.433 | 0.357 | 1 HSPC_UCBMC |
| WARS2       | 0.06070661 | 0.71443583 | 0.433 | 0.386 | 1 HSPC_UCBMC |
| NFU1        | 0.06074419 | 0.31487601 | 0.4   | 0.296 | 1 HSPC_UCBMC |
| C18H18orf32 | 0.06077029 | 0.11459914 | 0.967 | 0.847 | 1 HSPC_UCBMC |
| PPP2R2D     | 0.06077948 | 0.39854154 | 0.444 | 0.373 | 1 HSPC_UCBMC |
| NKAP        | 0.06093193 | 0.9458619  | 0.267 | 0.2   | 1 HSPC_UCBMC |
| RPS4Y2      | 0.06108436 | 0.42309052 | 0.567 | 0.457 | 1 HSPC_UCBMC |
| TBC1D15     | 0.06153309 | 0.4234037  | 0.444 | 0.368 | 1 HSPC_UCBMC |
| RNF34       | 0.06193451 | 0.48433192 | 0.444 | 0.359 | 1 HSPC_UCBMC |
| DHRS1       | 0.06193475 | 0.48551368 | 0.278 | 0.196 | 1 HSPC_UCBMC |
| USP36       | 0.06247623 | 0.25258078 | 0.467 | 0.383 | 1 HSPC_UCBMC |
| EXOSC10     | 0.06264075 | 0.64954566 | 0.367 | 0.29  | 1 HSPC_UCBMC |
| ASCC1       | 0.06293367 | 0.36409849 | 0.444 | 0.346 | 1 HSPC_UCBMC |
| AP1G1       | 0.0629611  | 0.75941817 | 0.522 | 0.414 | 1 HSPC_UCBMC |
| ZNF749      | 0.06299149 | 0.47147009 | 0.433 | 0.364 | 1 HSPC_UCBMC |
| TSG101      | 0.06323695 | 0.83564515 | 0.444 | 0.379 | 1 HSPC_UCBMC |
| PTPRJ       | 0.06324605 | 0.52663217 | 0.267 | 0.185 | 1 HSPC_UCBMC |
| ECHS1       | 0.06325952 | 0.48210819 | 0.5   | 0.409 | 1 HSPC_UCBMC |
| FUCA2       | 0.06326846 | 0.92842043 | 0.278 | 0.198 | 1 HSPC_UCBMC |
| RAC2        | 0.06407452 | 0.23222739 | 0.4   | 0.305 | 1 HSPC_UCBMC |
| ADNP        | 0.06411549 | 0.33315361 | 0.533 | 0.468 | 1 HSPC_UCBMC |
| RSU1        | 0.06421619 | 0.45485008 | 0.489 | 0.412 | 1 HSPC_UCBMC |
| COG3        | 0.06426775 | 0.34544285 | 0.322 | 0.237 | 1 HSPC_UCBMC |
| ZNF148      | 0.06457216 | 0.32653197 | 0.644 | 0.551 | 1 HSPC_UCBMC |

|         |            |            |       |       |              |
|---------|------------|------------|-------|-------|--------------|
| CCT8    | 0.06463584 | 0.29428821 | 0.678 | 0.619 | 1 HSPC_UCBMC |
| RPS6KA2 | 0.064805   | 0.69570049 | 0.311 | 0.227 | 1 HSPC_UCBMC |
| AP4S1   | 0.06517746 | 0.30946579 | 0.311 | 0.224 | 1 HSPC_UCBMC |
| S100A4  | 0.06518867 | 0.38588452 | 0.644 | 0.536 | 1 HSPC_UCBMC |
| GPR174  | 0.06536388 | 0.48266206 | 0.344 | 0.246 | 1 HSPC_UCBMC |
| RTN4    | 0.06560431 | 0.46882719 | 0.667 | 0.599 | 1 HSPC_UCBMC |
| PXK     | 0.06576142 | 0.26500011 | 0.478 | 0.384 | 1 HSPC_UCBMC |
| ZCCHC10 | 0.06586426 | 0.9246079  | 0.356 | 0.283 | 1 HSPC_UCBMC |
| RAB11B  | 0.06595016 | 0.30724537 | 0.333 | 0.242 | 1 HSPC_UCBMC |
| SLU7    | 0.0660316  | 0.52290716 | 0.444 | 0.366 | 1 HSPC_UCBMC |
| TMEM201 | 0.06609566 | 0.83870958 | 0.467 | 0.364 | 1 HSPC_UCBMC |
| SUPT6H  | 0.06612188 | 0.84633548 | 0.378 | 0.292 | 1 HSPC_UCBMC |
| TTC3    | 0.06651239 | 0.9896096  | 0.378 | 0.303 | 1 HSPC_UCBMC |
| SAP30BP | 0.06673938 | 0.59278048 | 0.411 | 0.342 | 1 HSPC_UCBMC |
| URM1    | 0.06675092 | 0.72462991 | 0.311 | 0.229 | 1 HSPC_UCBMC |
| GALK2   | 0.06683072 | 0.68351856 | 0.367 | 0.298 | 1 HSPC_UCBMC |
| PIGN    | 0.06698077 | 0.49817645 | 0.3   | 0.211 | 1 HSPC_UCBMC |
| FARS2   | 0.06721182 | 0.3755478  | 0.622 | 0.516 | 1 HSPC_UCBMC |
| U2SURP  | 0.0677855  | 0.28986208 | 0.756 | 0.736 | 1 HSPC_UCBMC |
| CCNG1   | 0.06784682 | 0.51859132 | 0.411 | 0.333 | 1 HSPC_UCBMC |
| ACAP1   | 0.06809301 | 0.52159418 | 0.311 | 0.226 | 1 HSPC_UCBMC |
| INO80D  | 0.06837665 | 0.67499421 | 0.422 | 0.357 | 1 HSPC_UCBMC |
| PLCG2   | 0.0691104  | 0.29477029 | 0.311 | 0.226 | 1 HSPC_UCBMC |
| ATP10D  | 0.06923896 | 0.7276692  | 0.267 | 0.19  | 1 HSPC_UCBMC |
| RPL26   | 0.07003874 | 0.17402816 | 0.944 | 0.832 | 1 HSPC_UCBMC |
| WDR20   | 0.07013731 | 0.48127167 | 0.4   | 0.316 | 1 HSPC_UCBMC |
| HDDC2   | 0.07030553 | 0.62148053 | 0.422 | 0.346 | 1 HSPC_UCBMC |
| FBXO28  | 0.07031342 | 0.23341308 | 0.389 | 0.294 | 1 HSPC_UCBMC |
| CTDSP2  | 0.07054179 | 0.71471577 | 0.289 | 0.216 | 1 HSPC_UCBMC |
| MFF     | 0.07055734 | 0.52788733 | 0.544 | 0.481 | 1 HSPC_UCBMC |
| TTC17   | 0.07076255 | 0.36064067 | 0.656 | 0.58  | 1 HSPC_UCBMC |
| INPP5A  | 0.07099167 | 0.34012625 | 0.433 | 0.336 | 1 HSPC_UCBMC |
| SAR1A   | 0.07167879 | 0.48218586 | 0.5   | 0.425 | 1 HSPC_UCBMC |

|                     |            |            |       |       |              |
|---------------------|------------|------------|-------|-------|--------------|
| CEP120              | 0.07214094 | 0.27736896 | 0.3   | 0.224 | 1 HSPC_UCBMC |
| CENPC               | 0.07220134 | 0.30543779 | 0.633 | 0.54  | 1 HSPC_UCBMC |
| ZNF268              | 0.07250615 | 0.6506115  | 0.411 | 0.338 | 1 HSPC_UCBMC |
| ENSMMUG00000019882  | 0.0725089  | 0.30658915 | 0.567 | 0.477 | 1 HSPC_UCBMC |
| DNAJC8              | 0.07266726 | 0.51716997 | 0.589 | 0.499 | 1 HSPC_UCBMC |
| MED6                | 0.07274295 | 1.04784502 | 0.311 | 0.231 | 1 HSPC_UCBMC |
| MLLT3               | 0.07326257 | 0.20958879 | 0.756 | 0.684 | 1 HSPC_UCBMC |
| TMX3                | 0.073617   | 0.82480511 | 0.311 | 0.24  | 1 HSPC_UCBMC |
| ATP5PF              | 0.07402812 | 0.194101   | 0.778 | 0.68  | 1 HSPC_UCBMC |
| ERGIC1              | 0.07422393 | 0.5029807  | 0.5   | 0.431 | 1 HSPC_UCBMC |
| SPRED2              | 0.07437864 | 0.35236312 | 0.267 | 0.187 | 1 HSPC_UCBMC |
| AGPAT1              | 0.07454213 | 0.89152776 | 0.322 | 0.242 | 1 HSPC_UCBMC |
| TINF2               | 0.07471693 | 0.19270585 | 0.767 | 0.673 | 1 HSPC_UCBMC |
| MRPL15              | 0.07512608 | 0.94754451 | 0.356 | 0.298 | 1 HSPC_UCBMC |
| EIF1B               | 0.07516241 | 0.34704682 | 0.644 | 0.566 | 1 HSPC_UCBMC |
| ATG12               | 0.07552971 | 0.30251253 | 0.656 | 0.536 | 1 HSPC_UCBMC |
| TMEM59              | 0.07599054 | 0.29108137 | 0.644 | 0.58  | 1 HSPC_UCBMC |
| PAIP1               | 0.07611203 | 0.4117334  | 0.478 | 0.405 | 1 HSPC_UCBMC |
| TRMT10B             | 0.07631726 | 0.33030688 | 0.333 | 0.261 | 1 HSPC_UCBMC |
| PMPCB               | 0.07643858 | 0.41197507 | 0.556 | 0.508 | 1 HSPC_UCBMC |
| LDHA                | 0.07670461 | 0.26096552 | 0.589 | 0.481 | 1 HSPC_UCBMC |
| CALCOCO2            | 0.07684346 | 0.43638179 | 0.689 | 0.595 | 1 HSPC_UCBMC |
| LDLR                | 0.07700189 | 0.61521514 | 0.333 | 0.255 | 1 HSPC_UCBMC |
| FEZ2                | 0.07705022 | 0.53805895 | 0.378 | 0.283 | 1 HSPC_UCBMC |
| TBC1D7              | 0.07785804 | 0.61922772 | 0.256 | 0.174 | 1 HSPC_UCBMC |
| NIPSNAP3B           | 0.07788842 | 0.45512476 | 0.322 | 0.246 | 1 HSPC_UCBMC |
| MTREX               | 0.07810053 | 0.25156778 | 0.7   | 0.671 | 1 HSPC_UCBMC |
| DYM                 | 0.07813342 | 0.29564298 | 0.633 | 0.564 | 1 HSPC_UCBMC |
| SMARCB1             | 0.0787012  | 0.42293658 | 0.533 | 0.464 | 1 HSPC_UCBMC |
| NFIC                | 0.07876147 | 0.18581462 | 0.267 | 0.196 | 1 HSPC_UCBMC |
| SYNE2               | 0.07912552 | 0.55682984 | 0.311 | 0.226 | 1 HSPC_UCBMC |
| ENSMMUG000000063979 | 0.07935624 | 0.23433545 | 0.389 | 0.292 | 1 HSPC_UCBMC |
| NAPG                | 0.07937156 | 0.50685861 | 0.433 | 0.351 | 1 HSPC_UCBMC |

|                    |            |            |       |       |              |
|--------------------|------------|------------|-------|-------|--------------|
| CASP1              | 0.07953136 | 0.55215131 | 0.378 | 0.298 | 1 HSPC_UCBMC |
| NKAPD1             | 0.08019165 | 1.04990957 | 0.256 | 0.179 | 1 HSPC_UCBMC |
| KIF13B             | 0.08066616 | 0.42592343 | 0.433 | 0.349 | 1 HSPC_UCBMC |
| GATAD2B            | 0.08093115 | 0.16709537 | 0.622 | 0.51  | 1 HSPC_UCBMC |
| ENSMMUG00000006803 | 0.08116963 | 0.43966217 | 0.656 | 0.636 | 1 HSPC_UCBMC |
| PSMD14             | 0.08164193 | 0.26397905 | 0.644 | 0.584 | 1 HSPC_UCBMC |
| PSMB6              | 0.081723   | 0.31235713 | 0.578 | 0.501 | 1 HSPC_UCBMC |
| INPP5D             | 0.08183002 | 0.25351069 | 0.656 | 0.56  | 1 HSPC_UCBMC |
| QSER1              | 0.08188285 | 0.55202671 | 0.389 | 0.303 | 1 HSPC_UCBMC |
| CPNE3              | 0.08192937 | 0.53676399 | 0.278 | 0.198 | 1 HSPC_UCBMC |
| WBP1L              | 0.08193192 | 0.32288441 | 0.556 | 0.471 | 1 HSPC_UCBMC |
| NCOR2              | 0.08246767 | 0.51933667 | 0.256 | 0.185 | 1 HSPC_UCBMC |
| C15H9orf78         | 0.08259646 | 0.42432158 | 0.656 | 0.575 | 1 HSPC_UCBMC |
| TMEM67             | 0.08266138 | 1.03845365 | 0.3   | 0.235 | 1 HSPC_UCBMC |
| LPIN1              | 0.0828266  | 0.61869684 | 0.322 | 0.24  | 1 HSPC_UCBMC |
| TCEA1              | 0.08295709 | 0.28274961 | 0.711 | 0.658 | 1 HSPC_UCBMC |
| PTTG1IP            | 0.08353979 | 0.82113349 | 0.3   | 0.22  | 1 HSPC_UCBMC |
| SLC25A44           | 0.084014   | 0.69924639 | 0.367 | 0.299 | 1 HSPC_UCBMC |
| ENSMMUG00000019944 | 0.08430266 | 0.57900893 | 0.267 | 0.198 | 1 HSPC_UCBMC |
| CYBA               | 0.08445942 | 0.37316111 | 0.478 | 0.379 | 1 HSPC_UCBMC |
| ENSMMUG00000038373 | 0.08507469 | 0.35332974 | 0.744 | 0.665 | 1 HSPC_UCBMC |
| NPEPPS             | 0.08519855 | 0.64872321 | 0.478 | 0.434 | 1 HSPC_UCBMC |
| FKBP3              | 0.08586495 | 0.35087926 | 0.622 | 0.571 | 1 HSPC_UCBMC |
| KHDRBS1            | 0.08638479 | 0.40628884 | 0.6   | 0.506 | 1 HSPC_UCBMC |
| TVP23B             | 0.08638505 | 0.62093303 | 0.367 | 0.279 | 1 HSPC_UCBMC |
| RNF169             | 0.08644578 | 0.54675727 | 0.311 | 0.242 | 1 HSPC_UCBMC |
| KLHL12             | 0.08663202 | 0.84910511 | 0.289 | 0.216 | 1 HSPC_UCBMC |
| ME2                | 0.08674729 | 0.32394438 | 0.533 | 0.488 | 1 HSPC_UCBMC |
| IVD                | 0.08684192 | 0.24140458 | 0.344 | 0.261 | 1 HSPC_UCBMC |
| CSRP1              | 0.08710529 | 0.59816757 | 0.278 | 0.2   | 1 HSPC_UCBMC |
| POLR1F             | 0.08711686 | 0.54826662 | 0.411 | 0.342 | 1 HSPC_UCBMC |
| YTHDC1             | 0.08721612 | 0.35281699 | 0.656 | 0.625 | 1 HSPC_UCBMC |
| ETF1               | 0.08728382 | 0.28404493 | 0.656 | 0.575 | 1 HSPC_UCBMC |



|                     |            |            |       |       |              |
|---------------------|------------|------------|-------|-------|--------------|
| SLC9A9              | 0.08760126 | 0.7142234  | 0.278 | 0.196 | 1 HSPC_UCBMC |
| NEMF                | 0.08762552 | 0.3964999  | 0.556 | 0.518 | 1 HSPC_UCBMC |
| ACTN1               | 0.08783157 | 0.26094337 | 0.278 | 0.192 | 1 HSPC_UCBMC |
| CDK2AP1             | 0.08827202 | 0.40080935 | 0.3   | 0.222 | 1 HSPC_UCBMC |
| MIA3                | 0.08827395 | 0.76902431 | 0.333 | 0.266 | 1 HSPC_UCBMC |
| ZNF346              | 0.0887984  | 0.27789826 | 0.3   | 0.22  | 1 HSPC_UCBMC |
| ZC3H14              | 0.08888185 | 0.47350683 | 0.256 | 0.185 | 1 HSPC_UCBMC |
| FO XK1              | 0.08916703 | 0.92484268 | 0.289 | 0.211 | 1 HSPC_UCBMC |
| ZNF736              | 0.08920871 | 0.5981708  | 0.289 | 0.218 | 1 HSPC_UCBMC |
| ZCCHC8              | 0.08924968 | 0.50559964 | 0.344 | 0.268 | 1 HSPC_UCBMC |
| BRK1                | 0.08955343 | 0.39950672 | 0.522 | 0.481 | 1 HSPC_UCBMC |
| QTRT1               | 0.08988667 | 0.52089448 | 0.3   | 0.226 | 1 HSPC_UCBMC |
| PIGY                | 0.09005592 | 0.27424648 | 0.567 | 0.458 | 1 HSPC_UCBMC |
| ZNF107              | 0.09007618 | 0.94733373 | 0.256 | 0.189 | 1 HSPC_UCBMC |
| THOC7               | 0.09023038 | 0.41755391 | 0.544 | 0.479 | 1 HSPC_UCBMC |
| ADIPOR1             | 0.09034386 | 0.37745715 | 0.456 | 0.386 | 1 HSPC_UCBMC |
| FBXO21              | 0.09071376 | 0.6289721  | 0.311 | 0.235 | 1 HSPC_UCBMC |
| RNF13               | 0.09088626 | 0.38033526 | 0.489 | 0.421 | 1 HSPC_UCBMC |
| LEMD3               | 0.09104309 | 0.23468726 | 0.544 | 0.475 | 1 HSPC_UCBMC |
| GUCA1B              | 0.09117989 | 0.71336508 | 0.333 | 0.262 | 1 HSPC_UCBMC |
| XRCC6               | 0.09135424 | 0.34071793 | 0.767 | 0.725 | 1 HSPC_UCBMC |
| SPG7                | 0.09152979 | 0.11819977 | 0.278 | 0.372 | 1 HSPC_UCBMC |
| GRHPR               | 0.09177267 | 0.38815972 | 0.356 | 0.275 | 1 HSPC_UCBMC |
| ENSM MUG00000019505 | 0.0918404  | 0.17397213 | 0.789 | 0.702 | 1 HSPC_UCBMC |
| ENSM MUG00000053045 | 0.09199636 | 0.66491597 | 0.278 | 0.201 | 1 HSPC_UCBMC |
| INO80C              | 0.09215548 | 0.769978   | 0.278 | 0.209 | 1 HSPC_UCBMC |
| ATP2A3              | 0.09217285 | 0.15609171 | 0.289 | 0.203 | 1 HSPC_UCBMC |
| USP8                | 0.09219497 | 0.43786204 | 0.433 | 0.331 | 1 HSPC_UCBMC |
| AMMECR1L            | 0.09225095 | 0.15449592 | 0.289 | 0.205 | 1 HSPC_UCBMC |
| STIM2               | 0.09231153 | 0.33825151 | 0.433 | 0.348 | 1 HSPC_UCBMC |
| NR1H2               | 0.0924708  | 0.50708179 | 0.278 | 0.198 | 1 HSPC_UCBMC |
| PTK2B               | 0.09248747 | 0.15121397 | 0.311 | 0.233 | 1 HSPC_UCBMC |
| PRDM2               | 0.09262721 | 0.44086273 | 0.444 | 0.373 | 1 HSPC_UCBMC |

|                    |            |            |       |       |              |
|--------------------|------------|------------|-------|-------|--------------|
| ALG6               | 0.09267232 | 0.68008592 | 0.278 | 0.201 | 1 HSPC_UCBMC |
| C4H6orf89          | 0.09270976 | 0.30088199 | 0.389 | 0.309 | 1 HSPC_UCBMC |
| FAF2               | 0.09292219 | 0.89584234 | 0.411 | 0.325 | 1 HSPC_UCBMC |
| USE1               | 0.09314061 | 1.06821898 | 0.289 | 0.22  | 1 HSPC_UCBMC |
| METTL21A           | 0.0932802  | 0.72184174 | 0.378 | 0.301 | 1 HSPC_UCBMC |
| PPP1R9A            | 0.09341283 | 0.29935576 | 0.356 | 0.272 | 1 HSPC_UCBMC |
| SAMM50             | 0.09357712 | 0.7982303  | 0.389 | 0.322 | 1 HSPC_UCBMC |
| MROH1              | 0.09413528 | 0.58234365 | 0.267 | 0.196 | 1 HSPC_UCBMC |
| HS2ST1             | 0.09417536 | 0.31581589 | 0.5   | 0.445 | 1 HSPC_UCBMC |
| TIMMDC1            | 0.09423299 | 0.78402916 | 0.356 | 0.29  | 1 HSPC_UCBMC |
| POLR1B             | 0.09430227 | 1.01195329 | 0.289 | 0.22  | 1 HSPC_UCBMC |
| PRMT2              | 0.09450194 | 0.50553091 | 0.411 | 0.34  | 1 HSPC_UCBMC |
| LEPROTL1           | 0.09461296 | 0.64748273 | 0.4   | 0.346 | 1 HSPC_UCBMC |
| TAF1B              | 0.09463122 | 0.7467816  | 0.267 | 0.201 | 1 HSPC_UCBMC |
| KIF13A             | 0.09466542 | 0.28697119 | 0.3   | 0.222 | 1 HSPC_UCBMC |
| DNMT3A             | 0.09475195 | 0.63531279 | 0.289 | 0.216 | 1 HSPC_UCBMC |
| ZC3H10             | 0.09504913 | 0.13309653 | 0.867 | 0.769 | 1 HSPC_UCBMC |
| MAPK14             | 0.09588074 | 0.45125159 | 0.489 | 0.421 | 1 HSPC_UCBMC |
| ENSMMUG00000000478 | 0.09595438 | 0.87939917 | 0.378 | 0.34  | 1 HSPC_UCBMC |
| C1H1orf43          | 0.09657185 | 0.73323863 | 0.311 | 0.233 | 1 HSPC_UCBMC |
| BTAF1              | 0.09658488 | 0.13889609 | 0.644 | 0.586 | 1 HSPC_UCBMC |
| ENTPD4             | 0.0968825  | 0.53567883 | 0.389 | 0.309 | 1 HSPC_UCBMC |
| RBM43              | 0.09696807 | 0.57992468 | 0.278 | 0.205 | 1 HSPC_UCBMC |
| KDM1B              | 0.0969879  | 0.47752823 | 0.278 | 0.201 | 1 HSPC_UCBMC |
| TNFSF10            | 0.09709839 | 0.59871581 | 0.422 | 0.359 | 1 HSPC_UCBMC |
| GRB2               | 0.09720832 | 0.38367215 | 0.6   | 0.534 | 1 HSPC_UCBMC |
| TOM1               | 0.0976691  | 0.10706716 | 0.278 | 0.205 | 1 HSPC_UCBMC |
| AKR1A1             | 0.0977415  | 0.17132575 | 0.433 | 0.359 | 1 HSPC_UCBMC |
| EIF4A3             | 0.09777168 | 0.4803689  | 0.5   | 0.434 | 1 HSPC_UCBMC |
| PAICS              | 0.09786482 | 0.29523814 | 0.456 | 0.372 | 1 HSPC_UCBMC |
| TENT4B             | 0.09795898 | 0.5918835  | 0.344 | 0.279 | 1 HSPC_UCBMC |
| DARS1              | 0.09812238 | 0.37009936 | 0.567 | 0.505 | 1 HSPC_UCBMC |
| TBP                | 0.09823821 | 0.96065503 | 0.256 | 0.19  | 1 HSPC_UCBMC |

|                    |            |            |       |       |              |
|--------------------|------------|------------|-------|-------|--------------|
| DOP1A              | 0.09834316 | 0.18652983 | 0.256 | 0.183 | 1 HSPC_UCBMC |
| TMEM50A            | 0.09837494 | 0.61765085 | 0.478 | 0.431 | 1 HSPC_UCBMC |
| ITGA6              | 0.09841387 | 0.45972365 | 0.344 | 0.272 | 1 HSPC_UCBMC |
| GLO1               | 0.0986282  | 0.5448569  | 0.4   | 0.336 | 1 HSPC_UCBMC |
| H2AFY              | 0.09912014 | 0.31225122 | 0.7   | 0.641 | 1 HSPC_UCBMC |
| BCL7A              | 0.099623   | 0.63318789 | 0.333 | 0.266 | 1 HSPC_UCBMC |
| NUP88              | 0.09970675 | 0.76151004 | 0.356 | 0.279 | 1 HSPC_UCBMC |
| ZNF528             | 0.10019073 | 0.68716859 | 0.489 | 0.44  | 1 HSPC_UCBMC |
| PHF12              | 0.10025679 | 0.33024166 | 0.344 | 0.259 | 1 HSPC_UCBMC |
| PLEK               | 0.10027743 | 0.5303527  | 0.322 | 0.248 | 1 HSPC_UCBMC |
| SHQ1               | 0.10029988 | 0.66022509 | 0.311 | 0.238 | 1 HSPC_UCBMC |
| NDUFS4             | 0.10049425 | 0.35289182 | 0.644 | 0.579 | 1 HSPC_UCBMC |
| FAM20B             | 0.1005376  | 0.25569816 | 0.278 | 0.203 | 1 HSPC_UCBMC |
| SENP7              | 0.10085399 | 0.54308363 | 0.444 | 0.362 | 1 HSPC_UCBMC |
| ICAM3              | 0.10089727 | 0.29040219 | 0.444 | 0.375 | 1 HSPC_UCBMC |
| SNRNP48            | 0.1008982  | 0.39154251 | 0.3   | 0.222 | 1 HSPC_UCBMC |
| STRADA             | 0.10099724 | 1.00882718 | 0.256 | 0.19  | 1 HSPC_UCBMC |
| CEP43              | 0.10109616 | 0.60080327 | 0.367 | 0.288 | 1 HSPC_UCBMC |
| ENSMMUG00000017044 | 0.1014162  | 0.88135733 | 0.267 | 0.207 | 1 HSPC_UCBMC |
| TRAF3IP3           | 0.10174721 | 0.39341199 | 0.311 | 0.229 | 1 HSPC_UCBMC |
| DCAF10             | 0.10238295 | 0.43828979 | 0.444 | 0.381 | 1 HSPC_UCBMC |
| AP2A2              | 0.10310664 | 0.38790553 | 0.478 | 0.407 | 1 HSPC_UCBMC |
| GOSR1              | 0.10365937 | 0.29341789 | 0.344 | 0.262 | 1 HSPC_UCBMC |
| H1-3               | 0.1049504  | 0.25588905 | 0.756 | 0.652 | 1 HSPC_UCBMC |
| CDC42BPA           | 0.10523105 | 0.39756267 | 0.478 | 0.39  | 1 HSPC_UCBMC |
| ATG14              | 0.1054774  | 0.1761207  | 0.4   | 0.329 | 1 HSPC_UCBMC |
| SRSF4              | 0.10552654 | 0.35024647 | 0.733 | 0.697 | 1 HSPC_UCBMC |
| CCDC69             | 0.10564856 | 0.38991544 | 0.356 | 0.275 | 1 HSPC_UCBMC |
| RAB11A             | 0.10597746 | 0.59262167 | 0.467 | 0.396 | 1 HSPC_UCBMC |
| WDR36              | 0.10631856 | 0.51301459 | 0.333 | 0.266 | 1 HSPC_UCBMC |
| FNIP2              | 0.10677797 | 0.67932759 | 0.278 | 0.205 | 1 HSPC_UCBMC |
| EIF4EBP1           | 0.1069517  | 0.62322323 | 0.467 | 0.416 | 1 HSPC_UCBMC |
| ZNF438             | 0.10738766 | 0.67043783 | 0.3   | 0.242 | 1 HSPC_UCBMC |

|                    |            |            |       |       |              |
|--------------------|------------|------------|-------|-------|--------------|
| ENSMMUG00000006283 | 0.10769505 | 0.48603824 | 0.267 | 0.198 | 1 HSPC_UCBMC |
| ENSMMUG00000059322 | 0.10772472 | 0.39984399 | 0.278 | 0.205 | 1 HSPC_UCBMC |
| CTSH               | 0.10825454 | 0.25878046 | 0.278 | 0.198 | 1 HSPC_UCBMC |
| RPRD1B             | 0.10827112 | 0.40462457 | 0.322 | 0.244 | 1 HSPC_UCBMC |
| PLEKHB2            | 0.10828832 | 0.1119328  | 0.389 | 0.292 | 1 HSPC_UCBMC |
| COPS6              | 0.10853749 | 0.5323591  | 0.478 | 0.421 | 1 HSPC_UCBMC |
| SIRT1              | 0.10942717 | 0.49994796 | 0.322 | 0.251 | 1 HSPC_UCBMC |
| TMEM41B            | 0.10959917 | 0.54699828 | 0.356 | 0.285 | 1 HSPC_UCBMC |
| GTPBP4             | 0.10966279 | 0.65792084 | 0.378 | 0.307 | 1 HSPC_UCBMC |
| RPS29              | 0.10978804 | 0.13476549 | 0.978 | 0.904 | 1 HSPC_UCBMC |
| HLCS               | 0.1101504  | 0.3535456  | 0.333 | 0.266 | 1 HSPC_UCBMC |
| DGCR2              | 0.11034084 | 0.77653016 | 0.389 | 0.318 | 1 HSPC_UCBMC |
| TXNRD1             | 0.11043256 | 0.30390068 | 0.533 | 0.466 | 1 HSPC_UCBMC |
| NOP14              | 0.11071719 | 0.56422555 | 0.456 | 0.392 | 1 HSPC_UCBMC |
| GOLGA7             | 0.11139078 | 0.39847217 | 0.322 | 0.248 | 1 HSPC_UCBMC |
| DCP2               | 0.11148268 | 0.28399689 | 0.489 | 0.427 | 1 HSPC_UCBMC |
| LIMK2              | 0.11183823 | 0.53011611 | 0.4   | 0.329 | 1 HSPC_UCBMC |
| PRKX               | 0.1119423  | 0.37827565 | 0.411 | 0.329 | 1 HSPC_UCBMC |
| UFD1               | 0.11227214 | 0.38028269 | 0.444 | 0.36  | 1 HSPC_UCBMC |
| GABARAPL2          | 0.11258409 | 0.20146597 | 0.633 | 0.549 | 1 HSPC_UCBMC |
| VCL                | 0.11319863 | 0.43740275 | 0.4   | 0.331 | 1 HSPC_UCBMC |
| CUTA               | 0.11379812 | 0.22003969 | 0.578 | 0.51  | 1 HSPC_UCBMC |
| INKA1              | 0.11409759 | 0.52580685 | 0.378 | 0.307 | 1 HSPC_UCBMC |
| ETS1               | 0.1142914  | 0.30472887 | 0.4   | 0.323 | 1 HSPC_UCBMC |
| HNRNPL             | 0.11434029 | 0.25769448 | 0.711 | 0.689 | 1 HSPC_UCBMC |
| SIMC1              | 0.11477857 | 0.58701411 | 0.289 | 0.214 | 1 HSPC_UCBMC |
| ENSMMUG00000061630 | 0.11571413 | 0.31827369 | 0.444 | 0.388 | 1 HSPC_UCBMC |
| HEXA               | 0.11580523 | 0.47609655 | 0.4   | 0.322 | 1 HSPC_UCBMC |
| SEC11A             | 0.11597641 | 0.2341082  | 0.622 | 0.53  | 1 HSPC_UCBMC |
| NT5DC1             | 0.1162618  | 0.49896978 | 0.333 | 0.248 | 1 HSPC_UCBMC |
| FAM118A            | 0.11653057 | 0.25776852 | 0.344 | 0.27  | 1 HSPC_UCBMC |
| LYSMD3             | 0.11658767 | 0.25983697 | 0.322 | 0.251 | 1 HSPC_UCBMC |
| METTL16            | 0.11665322 | 0.68602374 | 0.411 | 0.359 | 1 HSPC_UCBMC |

|                    |            |            |       |       |              |
|--------------------|------------|------------|-------|-------|--------------|
| HMBOX1             | 0.11677799 | 0.31233174 | 0.478 | 0.405 | 1 HSPC_UCBMC |
| NDUFB7             | 0.11684084 | 0.12219725 | 0.656 | 0.569 | 1 HSPC_UCBMC |
| DOCK7              | 0.11693335 | 0.47695145 | 0.378 | 0.303 | 1 HSPC_UCBMC |
| BORCS7             | 0.11715929 | 0.93187803 | 0.256 | 0.194 | 1 HSPC_UCBMC |
| CRY1               | 0.11720583 | 0.44535056 | 0.322 | 0.25  | 1 HSPC_UCBMC |
| NVL                | 0.11722424 | 0.70804695 | 0.411 | 0.333 | 1 HSPC_UCBMC |
| ENSMMUG00000020316 | 0.11821814 | 0.66707032 | 0.522 | 0.447 | 1 HSPC_UCBMC |
| LUC7L              | 0.11823439 | 0.28824011 | 0.556 | 0.473 | 1 HSPC_UCBMC |
| SZRD1              | 0.11851874 | 0.44253557 | 0.4   | 0.34  | 1 HSPC_UCBMC |
| DNM3               | 0.11904171 | 0.17774025 | 0.267 | 0.192 | 1 HSPC_UCBMC |
| RDH5               | 0.11918603 | 0.35684595 | 0.6   | 0.54  | 1 HSPC_UCBMC |
| CERS5              | 0.11979085 | 0.65038343 | 0.3   | 0.233 | 1 HSPC_UCBMC |
| LMTK2              | 0.12021794 | 0.54809081 | 0.511 | 0.451 | 1 HSPC_UCBMC |
| ZBTB11             | 0.1203132  | 0.27375906 | 0.344 | 0.272 | 1 HSPC_UCBMC |
| TRERF1             | 0.12089973 | 0.6522737  | 0.289 | 0.226 | 1 HSPC_UCBMC |
| TRAPPC10           | 0.12099376 | 0.43406445 | 0.444 | 0.401 | 1 HSPC_UCBMC |
| NUS1               | 0.12106252 | 0.735174   | 0.278 | 0.205 | 1 HSPC_UCBMC |
| DCUN1D5            | 0.12120184 | 0.18363878 | 0.5   | 0.412 | 1 HSPC_UCBMC |
| FCRL6              | 0.12148371 | 0.38318018 | 0.356 | 0.283 | 1 HSPC_UCBMC |
| SEC24A             | 0.12202573 | 0.47544685 | 0.289 | 0.214 | 1 HSPC_UCBMC |
| HSD17B12           | 0.12256866 | 0.72280905 | 0.4   | 0.353 | 1 HSPC_UCBMC |
| GBP3               | 0.12275378 | 0.48067852 | 0.256 | 0.183 | 1 HSPC_UCBMC |
| ENSMMUG00000048215 | 0.12308147 | 0.60516462 | 0.267 | 0.2   | 1 HSPC_UCBMC |
| DNAJC7             | 0.12336819 | 0.41552474 | 0.511 | 0.455 | 1 HSPC_UCBMC |
| PPIL4              | 0.12354704 | 0.25768599 | 0.489 | 0.409 | 1 HSPC_UCBMC |
| ENSMMUG00000009264 | 0.12382381 | 0.54943012 | 0.278 | 0.214 | 1 HSPC_UCBMC |
| TRIM25             | 0.12494584 | 0.45723712 | 0.433 | 0.364 | 1 HSPC_UCBMC |
| BLMH               | 0.12500904 | 0.46602363 | 0.444 | 0.36  | 1 HSPC_UCBMC |
| REST               | 0.12571271 | 0.38924127 | 0.411 | 0.336 | 1 HSPC_UCBMC |
| FUZ                | 0.12582113 | 0.12588668 | 0.311 | 0.233 | 1 HSPC_UCBMC |
| CBLL1              | 0.12602664 | 0.49556594 | 0.333 | 0.262 | 1 HSPC_UCBMC |
| GTPBP8             | 0.1260509  | 0.44084385 | 0.3   | 0.229 | 1 HSPC_UCBMC |
| UBE2I              | 0.12616752 | 0.31680206 | 0.622 | 0.569 | 1 HSPC_UCBMC |

|                   |            |            |       |       |              |
|-------------------|------------|------------|-------|-------|--------------|
| TCF25             | 0.12630773 | 0.54014779 | 0.467 | 0.431 | 1 HSPC_UCBMC |
| ENSMUG00000029987 | 0.1273911  | 0.64927784 | 0.389 | 0.329 | 1 HSPC_UCBMC |
| PWWP3A            | 0.12742632 | 0.45573253 | 0.256 | 0.185 | 1 HSPC_UCBMC |
| PRMT7             | 0.12814737 | 0.28463308 | 0.289 | 0.22  | 1 HSPC_UCBMC |
| ATP5F1A           | 0.12836847 | 0.12349793 | 0.822 | 0.726 | 1 HSPC_UCBMC |
| DMAC1             | 0.12840754 | 0.35924956 | 0.433 | 0.377 | 1 HSPC_UCBMC |
| IVNS1ABP          | 0.12890098 | 0.51621364 | 0.556 | 0.529 | 1 HSPC_UCBMC |
| ANKRD10           | 0.12965174 | 0.34484507 | 0.633 | 0.566 | 1 HSPC_UCBMC |
| LDB2              | 0.12975829 | 0.40619965 | 0.311 | 0.238 | 1 HSPC_UCBMC |
| ENSMUG00000049010 | 0.13041112 | 0.3793161  | 0.511 | 0.475 | 1 HSPC_UCBMC |
| PIK3CD            | 0.13043889 | 0.42591723 | 0.367 | 0.287 | 1 HSPC_UCBMC |
| ABHD17B           | 0.13066855 | 0.82070908 | 0.289 | 0.229 | 1 HSPC_UCBMC |
| TARDBP            | 0.13101149 | 0.62906307 | 0.522 | 0.473 | 1 HSPC_UCBMC |
| DCAF16            | 0.13129885 | 0.45859148 | 0.3   | 0.248 | 1 HSPC_UCBMC |
| TDG               | 0.13153848 | 0.15782508 | 0.456 | 0.394 | 1 HSPC_UCBMC |
| TRMT11            | 0.13179578 | 0.48453122 | 0.3   | 0.238 | 1 HSPC_UCBMC |
| AIMP1             | 0.13221434 | 0.55859493 | 0.578 | 0.553 | 1 HSPC_UCBMC |
| EIF4G2            | 0.13239175 | 0.2435279  | 0.711 | 0.697 | 1 HSPC_UCBMC |
| SSH2              | 0.13241716 | 0.27608818 | 0.711 | 0.652 | 1 HSPC_UCBMC |
| MRPS16            | 0.13269709 | 0.30264066 | 0.267 | 0.194 | 1 HSPC_UCBMC |
| GCSAML            | 0.13330911 | 0.26798916 | 0.256 | 0.189 | 1 HSPC_UCBMC |
| SIKE1             | 0.13333679 | 0.40406091 | 0.311 | 0.25  | 1 HSPC_UCBMC |
| RPP30             | 0.13342526 | 0.48536341 | 0.289 | 0.233 | 1 HSPC_UCBMC |
| TAX1BP1           | 0.13355103 | 0.27953473 | 0.589 | 0.545 | 1 HSPC_UCBMC |
| RARS2             | 0.13409409 | 0.49307823 | 0.322 | 0.255 | 1 HSPC_UCBMC |
| PFDN1             | 0.13432028 | 0.29825332 | 0.611 | 0.569 | 1 HSPC_UCBMC |
| CASP6             | 0.13529805 | 0.5945393  | 0.278 | 0.214 | 1 HSPC_UCBMC |
| NR2C1             | 0.13532387 | 0.28499661 | 0.2   | 0.294 | 1 HSPC_UCBMC |
| FAM234A           | 0.13595559 | 0.76456829 | 0.256 | 0.201 | 1 HSPC_UCBMC |
| IPMK              | 0.13607223 | 0.83396235 | 0.322 | 0.246 | 1 HSPC_UCBMC |
| MRPL40            | 0.13615251 | 0.65210325 | 0.411 | 0.351 | 1 HSPC_UCBMC |
| UNC50             | 0.13661027 | 0.78959354 | 0.289 | 0.237 | 1 HSPC_UCBMC |
| NAMPT             | 0.13695664 | 0.11446967 | 0.389 | 0.307 | 1 HSPC_UCBMC |

|                   |            |            |       |       |              |
|-------------------|------------|------------|-------|-------|--------------|
| CHIC2             | 0.13866596 | 0.65002808 | 0.422 | 0.375 | 1 HSPC_UCBMC |
| TXNDC17           | 0.13959468 | 0.43926481 | 0.356 | 0.29  | 1 HSPC_UCBMC |
| SLC35A5           | 0.14184265 | 0.81697584 | 0.278 | 0.211 | 1 HSPC_UCBMC |
| SYNE1             | 0.14207341 | 0.19609103 | 0.289 | 0.216 | 1 HSPC_UCBMC |
| NFATC3            | 0.1421059  | 0.19725717 | 0.556 | 0.532 | 1 HSPC_UCBMC |
| UFC1              | 0.14335266 | 0.28895896 | 0.589 | 0.523 | 1 HSPC_UCBMC |
| ANAPC7            | 0.14356515 | 0.44873534 | 0.411 | 0.359 | 1 HSPC_UCBMC |
| TNIK              | 0.1435995  | 0.21518218 | 0.6   | 0.551 | 1 HSPC_UCBMC |
| TMC8              | 0.14370659 | 0.30943328 | 0.444 | 0.368 | 1 HSPC_UCBMC |
| ARAP2             | 0.14376966 | 0.13989885 | 0.267 | 0.194 | 1 HSPC_UCBMC |
| PSMA7             | 0.14416072 | 0.2283382  | 0.733 | 0.686 | 1 HSPC_UCBMC |
| GNG10             | 0.14431097 | 0.24203559 | 0.411 | 0.336 | 1 HSPC_UCBMC |
| UBE2V1            | 0.14465078 | 0.45795503 | 0.6   | 0.549 | 1 HSPC_UCBMC |
| TRIM13            | 0.14488764 | 0.76144434 | 0.422 | 0.372 | 1 HSPC_UCBMC |
| MED27             | 0.14624396 | 0.26559403 | 0.489 | 0.423 | 1 HSPC_UCBMC |
| NUCB2             | 0.14629884 | 0.60494334 | 0.4   | 0.355 | 1 HSPC_UCBMC |
| PFDN4             | 0.14702715 | 0.47032201 | 0.5   | 0.449 | 1 HSPC_UCBMC |
| PTAR1             | 0.14739727 | 0.26604744 | 0.478 | 0.403 | 1 HSPC_UCBMC |
| ESAM              | 0.1475965  | 0.47806337 | 0.278 | 0.203 | 1 HSPC_UCBMC |
| KRAS              | 0.1479817  | 0.61171964 | 0.489 | 0.458 | 1 HSPC_UCBMC |
| SIPA1L3           | 0.14804577 | 0.40405933 | 0.356 | 0.29  | 1 HSPC_UCBMC |
| VPS28             | 0.14991816 | 0.25405448 | 0.444 | 0.416 | 1 HSPC_UCBMC |
| BICD1             | 0.15031772 | 0.84366665 | 0.256 | 0.196 | 1 HSPC_UCBMC |
| DHX37             | 0.15039928 | 0.54408145 | 0.322 | 0.268 | 1 HSPC_UCBMC |
| SLC39A9           | 0.15113592 | 0.46612914 | 0.267 | 0.198 | 1 HSPC_UCBMC |
| FYB1              | 0.15128909 | 0.16103491 | 0.267 | 0.201 | 1 HSPC_UCBMC |
| PSMB10            | 0.15282792 | 0.72692601 | 0.344 | 0.288 | 1 HSPC_UCBMC |
| LENG1             | 0.15339193 | 0.56455332 | 0.289 | 0.224 | 1 HSPC_UCBMC |
| MDM2              | 0.15372015 | 0.52816556 | 0.356 | 0.279 | 1 HSPC_UCBMC |
| SP110             | 0.15394923 | 0.13197315 | 0.544 | 0.484 | 1 HSPC_UCBMC |
| ENSMUG00000048644 | 0.154015   | 0.66700677 | 0.278 | 0.229 | 1 HSPC_UCBMC |
| ECHDC1            | 0.15419231 | 0.21349757 | 0.389 | 0.309 | 1 HSPC_UCBMC |
| ABL2              | 0.15445526 | 0.56248143 | 0.311 | 0.25  | 1 HSPC_UCBMC |

|                     |            |            |       |       |              |
|---------------------|------------|------------|-------|-------|--------------|
| CNOT6L              | 0.15462509 | 0.23989168 | 0.533 | 0.488 | 1 HSPC_UCBMC |
| NDUFA8              | 0.15511325 | 0.21327443 | 0.544 | 0.482 | 1 HSPC_UCBMC |
| LLPH                | 0.15528571 | 0.21619852 | 0.589 | 0.529 | 1 HSPC_UCBMC |
| TCEAL4              | 0.15539105 | 0.28795331 | 0.278 | 0.211 | 1 HSPC_UCBMC |
| ULK4                | 0.15591849 | 0.72866232 | 0.289 | 0.237 | 1 HSPC_UCBMC |
| EIF4E2              | 0.15599276 | 0.40530682 | 0.444 | 0.401 | 1 HSPC_UCBMC |
| WDR83OS             | 0.15663535 | 0.15307076 | 0.8   | 0.756 | 1 HSPC_UCBMC |
| ENSMMUG00000006499  | 0.15740527 | 0.52394482 | 0.6   | 0.584 | 1 HSPC_UCBMC |
| ACTR3               | 0.15773327 | 0.26910478 | 0.678 | 0.649 | 1 HSPC_UCBMC |
| SEC23IP             | 0.15782304 | 0.40670815 | 0.256 | 0.198 | 1 HSPC_UCBMC |
| ACSL3               | 0.15785764 | 0.43437266 | 0.344 | 0.285 | 1 HSPC_UCBMC |
| LYAR                | 0.15795103 | 0.77475174 | 0.367 | 0.331 | 1 HSPC_UCBMC |
| ADSS2               | 0.15811836 | 0.79524547 | 0.467 | 0.425 | 1 HSPC_UCBMC |
| TMEM63C             | 0.15953376 | 0.48454332 | 0.344 | 0.281 | 1 HSPC_UCBMC |
| ETFA                | 0.1596218  | 0.51514989 | 0.544 | 0.488 | 1 HSPC_UCBMC |
| ENSMMUG000000061959 | 0.16040512 | 0.26856239 | 0.444 | 0.336 | 1 HSPC_UCBMC |
| EEF1E1              | 0.16107315 | 0.3784951  | 0.6   | 0.564 | 1 HSPC_UCBMC |
| TERF1               | 0.1611101  | 0.41211418 | 0.478 | 0.436 | 1 HSPC_UCBMC |
| LDHB                | 0.16118498 | 1.24324621 | 0.278 | 0.226 | 1 HSPC_UCBMC |
| ADGRF3              | 0.16123069 | 0.16287094 | 0.267 | 0.196 | 1 HSPC_UCBMC |
| ENSMMUG000000012019 | 0.16140101 | 0.17467912 | 0.667 | 0.579 | 1 HSPC_UCBMC |
| CDC5L               | 0.16160308 | 0.65375137 | 0.511 | 0.473 | 1 HSPC_UCBMC |
| AGA                 | 0.16160781 | 0.47567275 | 0.289 | 0.218 | 1 HSPC_UCBMC |
| CEP162              | 0.16198458 | 0.42450532 | 0.311 | 0.244 | 1 HSPC_UCBMC |
| LSM10               | 0.16237352 | 0.57301858 | 0.378 | 0.336 | 1 HSPC_UCBMC |
| NDFIP1              | 0.16259936 | 0.12108934 | 0.733 | 0.712 | 1 HSPC_UCBMC |
| HSP90B1             | 0.16275589 | 0.23614698 | 0.722 | 0.682 | 1 HSPC_UCBMC |
| ZFX                 | 0.16409911 | 0.74509386 | 0.389 | 0.325 | 1 HSPC_UCBMC |
| TFB1M               | 0.16461414 | 0.37020123 | 0.378 | 0.329 | 1 HSPC_UCBMC |
| ADPGK               | 0.16536885 | 0.34493259 | 0.278 | 0.213 | 1 HSPC_UCBMC |
| MATR3               | 0.16585543 | 0.10878256 | 0.878 | 0.843 | 1 HSPC_UCBMC |
| MRPL9               | 0.16596799 | 0.44786327 | 0.422 | 0.368 | 1 HSPC_UCBMC |
| POLR2C              | 0.16641037 | 0.25269693 | 0.3   | 0.24  | 1 HSPC_UCBMC |



|                    |            |            |       |       |              |
|--------------------|------------|------------|-------|-------|--------------|
| SOD2               | 0.16742742 | 0.50289824 | 0.5   | 0.492 | 1 HSPC_UCBMC |
| XPO5               | 0.16782687 | 0.58232352 | 0.333 | 0.281 | 1 HSPC_UCBMC |
| WASL               | 0.16794567 | 0.16555481 | 0.544 | 0.466 | 1 HSPC_UCBMC |
| ACADSB             | 0.16832824 | 0.54078269 | 0.278 | 0.22  | 1 HSPC_UCBMC |
| ERCC6              | 0.16840456 | 0.11330016 | 0.333 | 0.255 | 1 HSPC_UCBMC |
| ZPR1               | 0.16923848 | 0.60735096 | 0.267 | 0.218 | 1 HSPC_UCBMC |
| LETMD1             | 0.16927066 | 0.71419305 | 0.356 | 0.294 | 1 HSPC_UCBMC |
| BTBD1              | 0.16960948 | 0.80941796 | 0.367 | 0.323 | 1 HSPC_UCBMC |
| DIP2B              | 0.17021251 | 0.31098648 | 0.6   | 0.564 | 1 HSPC_UCBMC |
| EIF2B1             | 0.17174124 | 0.54579013 | 0.267 | 0.214 | 1 HSPC_UCBMC |
| CMTM1              | 0.17193542 | 0.43158417 | 0.478 | 0.397 | 1 HSPC_UCBMC |
| TRAF3              | 0.17205124 | 0.20095472 | 0.433 | 0.394 | 1 HSPC_UCBMC |
| PSPC1              | 0.17228413 | 0.10374291 | 0.656 | 0.619 | 1 HSPC_UCBMC |
| FBXL4              | 0.17243989 | 0.46132012 | 0.278 | 0.216 | 1 HSPC_UCBMC |
| NDUFB10            | 0.17281679 | 0.41378054 | 0.6   | 0.551 | 1 HSPC_UCBMC |
| CASK               | 0.1730834  | 0.13879645 | 0.333 | 0.264 | 1 HSPC_UCBMC |
| NAA50              | 0.17393875 | 0.35657479 | 0.611 | 0.547 | 1 HSPC_UCBMC |
| KIF2A              | 0.17519291 | 0.18512914 | 0.5   | 0.429 | 1 HSPC_UCBMC |
| CABIN1             | 0.17529096 | 0.29558249 | 0.444 | 0.375 | 1 HSPC_UCBMC |
| SMURF2             | 0.1761963  | 0.13218735 | 0.289 | 0.226 | 1 HSPC_UCBMC |
| TANC1              | 0.17701227 | 0.38322426 | 0.333 | 0.262 | 1 HSPC_UCBMC |
| NOSTRIN            | 0.17750239 | 0.17580146 | 0.278 | 0.224 | 1 HSPC_UCBMC |
| TRAK1              | 0.17761954 | 0.16921121 | 0.367 | 0.283 | 1 HSPC_UCBMC |
| LZIC               | 0.17764199 | 0.20293388 | 0.367 | 0.292 | 1 HSPC_UCBMC |
| NOB1               | 0.17808908 | 0.51375961 | 0.267 | 0.216 | 1 HSPC_UCBMC |
| NDUFA5             | 0.17851965 | 0.23764814 | 0.589 | 0.501 | 1 HSPC_UCBMC |
| PANK3              | 0.17888435 | 0.50415178 | 0.367 | 0.318 | 1 HSPC_UCBMC |
| ARFGEF2            | 0.17974131 | 0.62674949 | 0.478 | 0.457 | 1 HSPC_UCBMC |
| LMAN1              | 0.17982839 | 0.42110388 | 0.533 | 0.484 | 1 HSPC_UCBMC |
| ENSMMUG00000060576 | 0.18057184 | 0.43640236 | 0.333 | 0.266 | 1 HSPC_UCBMC |
| PLAG1              | 0.18081853 | 0.60407088 | 0.311 | 0.251 | 1 HSPC_UCBMC |
| ZNF592             | 0.18215695 | 0.3464344  | 0.289 | 0.231 | 1 HSPC_UCBMC |
| CDCA7              | 0.18224356 | 0.52965599 | 0.311 | 0.244 | 1 HSPC_UCBMC |

|                    |            |            |       |       |              |
|--------------------|------------|------------|-------|-------|--------------|
| N4BP2L1            | 0.18324546 | 0.89530926 | 0.311 | 0.255 | 1 HSPC_UCBMC |
| MAP3K8             | 0.18358948 | 0.24444806 | 0.267 | 0.207 | 1 HSPC_UCBMC |
| THUMPD2            | 0.18468213 | 0.36218529 | 0.467 | 0.431 | 1 HSPC_UCBMC |
| DGKZ               | 0.18484204 | 0.41886811 | 0.389 | 0.316 | 1 HSPC_UCBMC |
| GNL3L              | 0.18547588 | 0.29003265 | 0.256 | 0.196 | 1 HSPC_UCBMC |
| IPO8               | 0.18575057 | 0.65254257 | 0.256 | 0.201 | 1 HSPC_UCBMC |
| OSGEP              | 0.18684698 | 0.46585381 | 0.322 | 0.268 | 1 HSPC_UCBMC |
| FKBP1A             | 0.18769119 | 0.27131891 | 0.556 | 0.529 | 1 HSPC_UCBMC |
| NUCB1              | 0.18820856 | 0.79763047 | 0.278 | 0.235 | 1 HSPC_UCBMC |
| SKAP2              | 0.18826509 | 0.31757832 | 0.578 | 0.494 | 1 HSPC_UCBMC |
| TSEN2              | 0.18827654 | 0.3103766  | 0.311 | 0.248 | 1 HSPC_UCBMC |
| FLOT1              | 0.18865926 | 0.39846343 | 0.333 | 0.279 | 1 HSPC_UCBMC |
| MIC1               | 0.18952084 | 0.14159123 | 0.467 | 0.39  | 1 HSPC_UCBMC |
| TNPO3              | 0.18957888 | 0.27671132 | 0.5   | 0.447 | 1 HSPC_UCBMC |
| LDLRAD4            | 0.18965578 | 0.47427773 | 0.367 | 0.322 | 1 HSPC_UCBMC |
| RNF103             | 0.18969909 | 0.37303767 | 0.522 | 0.512 | 1 HSPC_UCBMC |
| DDX39A             | 0.19102371 | 0.20831082 | 0.589 | 0.54  | 1 HSPC_UCBMC |
| N4BP2              | 0.1924332  | 0.26469286 | 0.278 | 0.214 | 1 HSPC_UCBMC |
| ATP6V1E1           | 0.19289469 | 0.51488505 | 0.389 | 0.349 | 1 HSPC_UCBMC |
| MRPL3              | 0.19356614 | 0.46965849 | 0.422 | 0.39  | 1 HSPC_UCBMC |
| MYSM1              | 0.19433708 | 0.57696704 | 0.289 | 0.242 | 1 HSPC_UCBMC |
| PPP2R5A            | 0.19443474 | 0.49176718 | 0.456 | 0.375 | 1 HSPC_UCBMC |
| ENSMMUG00000059988 | 0.197073   | 0.52024547 | 0.478 | 0.429 | 1 HSPC_UCBMC |
| LIMS1              | 0.19817508 | 0.104051   | 0.622 | 0.549 | 1 HSPC_UCBMC |
| EIPR1              | 0.19822752 | 0.21211686 | 0.456 | 0.39  | 1 HSPC_UCBMC |
| RBFA               | 0.19845823 | 0.24937939 | 0.6   | 0.536 | 1 HSPC_UCBMC |
| TM2D1              | 0.19920519 | 0.6141569  | 0.444 | 0.386 | 1 HSPC_UCBMC |
| UBXN2A             | 0.19938476 | 0.57254757 | 0.478 | 0.447 | 1 HSPC_UCBMC |
| ENSMMUG00000022619 | 0.19975327 | 0.56699223 | 0.344 | 0.29  | 1 HSPC_UCBMC |
| YIPF3              | 0.20049012 | 0.70189938 | 0.267 | 0.209 | 1 HSPC_UCBMC |
| CEP57              | 0.20088755 | 0.32860036 | 0.533 | 0.479 | 1 HSPC_UCBMC |
| NANS               | 0.20111642 | 0.94579301 | 0.311 | 0.274 | 1 HSPC_UCBMC |
| GRPEL1             | 0.20133125 | 0.6891065  | 0.333 | 0.298 | 1 HSPC_UCBMC |

|                    |            |            |       |       |              |
|--------------------|------------|------------|-------|-------|--------------|
| EIF4A1             | 0.20186984 | 0.13413072 | 0.578 | 0.621 | 1 HSPC_UCBMC |
| ENSMMUG00000065089 | 0.20197394 | 0.31798237 | 0.544 | 0.497 | 1 HSPC_UCBMC |
| ZBTB7A             | 0.20210896 | 0.11373709 | 0.244 | 0.333 | 1 HSPC_UCBMC |
| B3GALNT2           | 0.20331118 | 0.47035454 | 0.322 | 0.266 | 1 HSPC_UCBMC |
| ANKRD27            | 0.20397975 | 0.29551942 | 0.311 | 0.261 | 1 HSPC_UCBMC |
| SEC63              | 0.20423457 | 0.3519043  | 0.656 | 0.651 | 1 HSPC_UCBMC |
| PWP1               | 0.20426118 | 0.7053304  | 0.389 | 0.362 | 1 HSPC_UCBMC |
| MRPS23             | 0.20434779 | 0.57164502 | 0.367 | 0.316 | 1 HSPC_UCBMC |
| HACL1              | 0.20495123 | 0.2868261  | 0.344 | 0.279 | 1 HSPC_UCBMC |
| NDUFA12            | 0.20499079 | 0.3450496  | 0.522 | 0.49  | 1 HSPC_UCBMC |
| VRK2               | 0.20558026 | 0.66363425 | 0.367 | 0.298 | 1 HSPC_UCBMC |
| PPP4C              | 0.20586259 | 0.3465562  | 0.489 | 0.453 | 1 HSPC_UCBMC |
| RSBN1L             | 0.20609734 | 0.1362031  | 0.322 | 0.41  | 1 HSPC_UCBMC |
| RDX                | 0.2061491  | 0.61639367 | 0.389 | 0.333 | 1 HSPC_UCBMC |
| CLEC2B             | 0.20621476 | 0.54492564 | 0.344 | 0.298 | 1 HSPC_UCBMC |
| PPP2R5C            | 0.20742358 | 0.24511832 | 0.767 | 0.736 | 1 HSPC_UCBMC |
| ENSMMUG00000015208 | 0.20785422 | 0.34561926 | 0.456 | 0.418 | 1 HSPC_UCBMC |
| MXD1               | 0.2107711  | 0.26414079 | 0.356 | 0.29  | 1 HSPC_UCBMC |
| SPCS3              | 0.21079034 | 0.10996375 | 0.622 | 0.56  | 1 HSPC_UCBMC |
| MTCH2              | 0.2112109  | 0.21208396 | 0.456 | 0.388 | 1 HSPC_UCBMC |
| NAXE               | 0.21373254 | 0.73183099 | 0.322 | 0.283 | 1 HSPC_UCBMC |
| EIF2B5             | 0.21381199 | 0.21063773 | 0.3   | 0.244 | 1 HSPC_UCBMC |
| LAMP2              | 0.21398223 | 0.49294177 | 0.322 | 0.275 | 1 HSPC_UCBMC |
| SMAP2              | 0.21540985 | 0.18815392 | 0.456 | 0.381 | 1 HSPC_UCBMC |
| ENSMMUG00000004633 | 0.21586893 | 0.13671588 | 0.244 | 0.331 | 1 HSPC_UCBMC |
| ENSMMUG00000061913 | 0.21732802 | 0.2140339  | 0.689 | 0.632 | 1 HSPC_UCBMC |
| CCDC28A            | 0.2173447  | 0.62792043 | 0.267 | 0.216 | 1 HSPC_UCBMC |
| NCLN               | 0.21792308 | 0.43601165 | 0.422 | 0.381 | 1 HSPC_UCBMC |
| PPP4R3B            | 0.22039084 | 0.20123747 | 0.567 | 0.518 | 1 HSPC_UCBMC |
| RPL31              | 0.22094646 | 0.13094036 | 0.811 | 0.721 | 1 HSPC_UCBMC |
| ASL                | 0.2209524  | 0.50964261 | 0.333 | 0.298 | 1 HSPC_UCBMC |
| UBE2L6             | 0.22232102 | 0.54825003 | 0.267 | 0.207 | 1 HSPC_UCBMC |
| EIF3D              | 0.22255807 | 0.1977054  | 0.6   | 0.562 | 1 HSPC_UCBMC |

|         |            |            |       |       |              |
|---------|------------|------------|-------|-------|--------------|
| DPH6    | 0.22389575 | 0.36653127 | 0.544 | 0.477 | 1 HSPC_UCBMC |
| TAF12   | 0.22414253 | 0.83755258 | 0.344 | 0.309 | 1 HSPC_UCBMC |
| BOD1L1  | 0.22432996 | 0.60872844 | 0.467 | 0.42  | 1 HSPC_UCBMC |
| HAUS2   | 0.22451575 | 0.3820676  | 0.378 | 0.333 | 1 HSPC_UCBMC |
| PGK1    | 0.22581364 | 0.15893978 | 0.678 | 0.616 | 1 HSPC_UCBMC |
| MED30   | 0.22601237 | 0.43553423 | 0.422 | 0.377 | 1 HSPC_UCBMC |
| TOMM22  | 0.22648251 | 0.13214666 | 0.489 | 0.412 | 1 HSPC_UCBMC |
| MESD    | 0.2264986  | 0.88909603 | 0.278 | 0.231 | 1 HSPC_UCBMC |
| ARFGAP3 | 0.22657987 | 0.23613466 | 0.567 | 0.536 | 1 HSPC_UCBMC |
| MRPL45  | 0.22697051 | 0.3691625  | 0.356 | 0.311 | 1 HSPC_UCBMC |
| DERA    | 0.22727904 | 0.34021233 | 0.411 | 0.364 | 1 HSPC_UCBMC |
| DGLUCY  | 0.22734088 | 0.26365451 | 0.267 | 0.322 | 1 HSPC_UCBMC |
| PRRC2C  | 0.22757024 | 0.1698145  | 0.767 | 0.763 | 1 HSPC_UCBMC |
| GPATCH2 | 0.22762979 | 0.59924222 | 0.256 | 0.209 | 1 HSPC_UCBMC |
| CCDC174 | 0.22768596 | 0.76244342 | 0.256 | 0.214 | 1 HSPC_UCBMC |
| SRRM1   | 0.22816489 | 0.17438905 | 0.756 | 0.704 | 1 HSPC_UCBMC |
| PFDN2   | 0.22839703 | 0.22974856 | 0.656 | 0.64  | 1 HSPC_UCBMC |
| PTPN12  | 0.22928429 | 0.61781731 | 0.3   | 0.244 | 1 HSPC_UCBMC |
| GNAI1   | 0.23024588 | 0.11204347 | 0.389 | 0.316 | 1 HSPC_UCBMC |
| UAP1    | 0.23146169 | 0.60092977 | 0.256 | 0.211 | 1 HSPC_UCBMC |
| ABHD12  | 0.23252359 | 0.1421396  | 0.356 | 0.309 | 1 HSPC_UCBMC |
| UPF3B   | 0.23366317 | 0.19987129 | 0.456 | 0.414 | 1 HSPC_UCBMC |
| SNRPD3  | 0.23395976 | 0.12066488 | 0.767 | 0.682 | 1 HSPC_UCBMC |
| OSER1   | 0.23450865 | 0.50762629 | 0.3   | 0.266 | 1 HSPC_UCBMC |
| COPS2   | 0.23469746 | 0.5836551  | 0.478 | 0.44  | 1 HSPC_UCBMC |
| DNAJA2  | 0.23637788 | 0.65587914 | 0.367 | 0.342 | 1 HSPC_UCBMC |
| CDK12   | 0.23675473 | 0.28811894 | 0.511 | 0.464 | 1 HSPC_UCBMC |
| GMPR2   | 0.23679907 | 0.36478863 | 0.367 | 0.325 | 1 HSPC_UCBMC |
| BACH1   | 0.23699902 | 0.41610874 | 0.333 | 0.298 | 1 HSPC_UCBMC |
| MTA3    | 0.23720233 | 0.59633537 | 0.267 | 0.214 | 1 HSPC_UCBMC |
| INTS10  | 0.23858896 | 0.96498524 | 0.278 | 0.235 | 1 HSPC_UCBMC |
| NTHL1   | 0.2391622  | 0.30843576 | 0.3   | 0.253 | 1 HSPC_UCBMC |
| MIA2    | 0.2395646  | 0.35955641 | 0.433 | 0.392 | 1 HSPC_UCBMC |

|                    |            |            |       |       |              |
|--------------------|------------|------------|-------|-------|--------------|
| ZNF451             | 0.239661   | 0.11948732 | 0.711 | 0.686 | 1 HSPC_UCBMC |
| FGD3               | 0.23985301 | 0.6277686  | 0.322 | 0.274 | 1 HSPC_UCBMC |
| KATNA1             | 0.23987071 | 0.15647171 | 0.411 | 0.342 | 1 HSPC_UCBMC |
| WBP11              | 0.24080363 | 0.12056836 | 0.6   | 0.547 | 1 HSPC_UCBMC |
| XRCC5              | 0.24153397 | 0.19859119 | 0.778 | 0.773 | 1 HSPC_UCBMC |
| SLC9A8             | 0.24218558 | 0.63636619 | 0.256 | 0.201 | 1 HSPC_UCBMC |
| COMMD4             | 0.24220641 | 0.20459825 | 0.433 | 0.388 | 1 HSPC_UCBMC |
| FKTN               | 0.24261696 | 0.51072741 | 0.289 | 0.231 | 1 HSPC_UCBMC |
| HSPA5              | 0.24276352 | 0.15635914 | 0.789 | 0.723 | 1 HSPC_UCBMC |
| AXIN1              | 0.24331899 | 0.19416519 | 0.278 | 0.229 | 1 HSPC_UCBMC |
| NDUFA10            | 0.24353313 | 0.25890263 | 0.522 | 0.484 | 1 HSPC_UCBMC |
| TRRAP              | 0.24547891 | 0.44699166 | 0.422 | 0.375 | 1 HSPC_UCBMC |
| WDR82              | 0.24554345 | 0.25326071 | 0.3   | 0.37  | 1 HSPC_UCBMC |
| NAPA               | 0.2462432  | 0.55589721 | 0.378 | 0.329 | 1 HSPC_UCBMC |
| BLOC1S6            | 0.24689354 | 0.51161733 | 0.267 | 0.224 | 1 HSPC_UCBMC |
| PDLIM1             | 0.24756801 | 0.74400355 | 0.378 | 0.348 | 1 HSPC_UCBMC |
| LGALS3             | 0.24775192 | 0.45645801 | 0.278 | 0.229 | 1 HSPC_UCBMC |
| STRN               | 0.24856194 | 0.40997294 | 0.411 | 0.355 | 1 HSPC_UCBMC |
| SBDS               | 0.24890095 | 0.50061832 | 0.322 | 0.281 | 1 HSPC_UCBMC |
| SMARCA4            | 0.24943284 | 0.52111757 | 0.478 | 0.445 | 1 HSPC_UCBMC |
| DHX40              | 0.24944655 | 0.33890937 | 0.322 | 0.279 | 1 HSPC_UCBMC |
| SPAST              | 0.25073755 | 0.30109848 | 0.333 | 0.277 | 1 HSPC_UCBMC |
| POLR2F             | 0.25079917 | 0.29513371 | 0.578 | 0.532 | 1 HSPC_UCBMC |
| LTN1               | 0.25177513 | 0.44860996 | 0.433 | 0.412 | 1 HSPC_UCBMC |
| MNAT1              | 0.25267072 | 0.34955572 | 0.533 | 0.521 | 1 HSPC_UCBMC |
| ENSMMUG00000058389 | 0.2538176  | 0.2276048  | 0.378 | 0.322 | 1 HSPC_UCBMC |
| CCDC115            | 0.25411526 | 0.75733992 | 0.322 | 0.275 | 1 HSPC_UCBMC |
| KLHL9              | 0.25417223 | 0.73681144 | 0.267 | 0.216 | 1 HSPC_UCBMC |
| PRKAG1             | 0.25447148 | 0.29883615 | 0.289 | 0.246 | 1 HSPC_UCBMC |
| SLC35D1            | 0.25473436 | 0.12898842 | 0.389 | 0.342 | 1 HSPC_UCBMC |
| WDR7               | 0.25525165 | 0.36028106 | 0.478 | 0.421 | 1 HSPC_UCBMC |
| THADA              | 0.25593755 | 0.2629853  | 0.622 | 0.614 | 1 HSPC_UCBMC |
| PTGES3             | 0.25612175 | 0.16890457 | 0.856 | 0.85  | 1 HSPC_UCBMC |

|                   |            |            |       |       |              |
|-------------------|------------|------------|-------|-------|--------------|
| DHPS              | 0.25733152 | 0.37120578 | 0.267 | 0.213 | 1 HSPC_UCBMC |
| PSMB7             | 0.25770984 | 0.11483374 | 0.778 | 0.719 | 1 HSPC_UCBMC |
| PHKG2             | 0.25799685 | 0.57270607 | 0.289 | 0.25  | 1 HSPC_UCBMC |
| CCND3             | 0.25807148 | 0.10433857 | 0.6   | 0.569 | 1 HSPC_UCBMC |
| SF3A2             | 0.25856684 | 0.6643688  | 0.367 | 0.322 | 1 HSPC_UCBMC |
| ADARB2            | 0.25864439 | 0.2101261  | 0.4   | 0.368 | 1 HSPC_UCBMC |
| EXT2              | 0.25899541 | 0.60845673 | 0.267 | 0.214 | 1 HSPC_UCBMC |
| RBM10             | 0.259832   | 0.26214508 | 0.356 | 0.296 | 1 HSPC_UCBMC |
| NIPA2             | 0.26008736 | 0.13441924 | 0.367 | 0.323 | 1 HSPC_UCBMC |
| NRF1              | 0.26047587 | 0.28263006 | 0.522 | 0.495 | 1 HSPC_UCBMC |
| FARP2             | 0.26047841 | 0.3255251  | 0.267 | 0.218 | 1 HSPC_UCBMC |
| ATF6              | 0.26062707 | 0.22386093 | 0.611 | 0.545 | 1 HSPC_UCBMC |
| HAX1              | 0.26164786 | 0.41018777 | 0.311 | 0.27  | 1 HSPC_UCBMC |
| ECPAS             | 0.26354724 | 0.22061279 | 0.556 | 0.545 | 1 HSPC_UCBMC |
| RREB1             | 0.26357669 | 0.36727952 | 0.4   | 0.353 | 1 HSPC_UCBMC |
| RBM22             | 0.26368385 | 0.36935224 | 0.356 | 0.309 | 1 HSPC_UCBMC |
| TPP2              | 0.26420738 | 0.73211384 | 0.4   | 0.359 | 1 HSPC_UCBMC |
| CDK4              | 0.26492529 | 0.34486608 | 0.522 | 0.481 | 1 HSPC_UCBMC |
| SLC25A43          | 0.26505318 | 0.20609345 | 0.7   | 0.665 | 1 HSPC_UCBMC |
| SAP130            | 0.26626012 | 0.40583072 | 0.278 | 0.233 | 1 HSPC_UCBMC |
| MGST2             | 0.26735374 | 0.339824   | 0.556 | 0.516 | 1 HSPC_UCBMC |
| RGS1              | 0.26741013 | 0.14526467 | 0.289 | 0.237 | 1 HSPC_UCBMC |
| ASH2L             | 0.26879426 | 0.39658015 | 0.356 | 0.305 | 1 HSPC_UCBMC |
| PSENN             | 0.26882583 | 0.1737824  | 0.389 | 0.331 | 1 HSPC_UCBMC |
| ENSMUG00000054965 | 0.26957995 | 0.32245221 | 0.267 | 0.222 | 1 HSPC_UCBMC |
| EFTUD2            | 0.27032435 | 0.197227   | 0.378 | 0.335 | 1 HSPC_UCBMC |
| PHPT1             | 0.27085783 | 0.45994586 | 0.367 | 0.333 | 1 HSPC_UCBMC |
| ENSMUG00000060545 | 0.27165272 | 0.21901707 | 0.478 | 0.442 | 1 HSPC_UCBMC |
| RNF139            | 0.27219224 | 0.3147018  | 0.256 | 0.207 | 1 HSPC_UCBMC |
| AIP               | 0.27219395 | 0.3435821  | 0.367 | 0.307 | 1 HSPC_UCBMC |
| TBC1D25           | 0.27295054 | 0.68413226 | 0.411 | 0.381 | 1 HSPC_UCBMC |
| XPA               | 0.27314066 | 0.44840242 | 0.278 | 0.233 | 1 HSPC_UCBMC |
| IFNGR1            | 0.27447298 | 0.64382723 | 0.3   | 0.25  | 1 HSPC_UCBMC |

|          |            |            |       |       |              |
|----------|------------|------------|-------|-------|--------------|
| EIF1AX   | 0.27460313 | 0.18813578 | 0.667 | 0.665 | 1 HSPC_UCBMC |
| DNTTIP1  | 0.27639091 | 0.33536006 | 0.256 | 0.218 | 1 HSPC_UCBMC |
| RPUSD4   | 0.2763916  | 0.25517775 | 0.3   | 0.255 | 1 HSPC_UCBMC |
| CERKL    | 0.27685104 | 0.17278072 | 0.4   | 0.349 | 1 HSPC_UCBMC |
| CPNE1    | 0.27737262 | 0.25841497 | 0.622 | 0.601 | 1 HSPC_UCBMC |
| IDH3B    | 0.2774288  | 0.44917081 | 0.344 | 0.29  | 1 HSPC_UCBMC |
| FAM168B  | 0.27747915 | 0.51508455 | 0.389 | 0.346 | 1 HSPC_UCBMC |
| PSMA2    | 0.2778998  | 0.13445957 | 0.722 | 0.667 | 1 HSPC_UCBMC |
| SSU72    | 0.27790407 | 0.35368413 | 0.378 | 0.333 | 1 HSPC_UCBMC |
| ZMYM4    | 0.2780864  | 0.19352548 | 0.589 | 0.53  | 1 HSPC_UCBMC |
| PARP6    | 0.27904464 | 0.16704259 | 0.278 | 0.214 | 1 HSPC_UCBMC |
| RMND1    | 0.28021788 | 0.51860554 | 0.311 | 0.277 | 1 HSPC_UCBMC |
| N6AMT1   | 0.2802338  | 0.55796485 | 0.278 | 0.246 | 1 HSPC_UCBMC |
| SRP72    | 0.28073714 | 0.14596634 | 0.4   | 0.348 | 1 HSPC_UCBMC |
| UBTF     | 0.28311153 | 0.42985696 | 0.433 | 0.386 | 1 HSPC_UCBMC |
| CMIP     | 0.28317352 | 0.35601584 | 0.433 | 0.399 | 1 HSPC_UCBMC |
| INTS8    | 0.28421773 | 0.52850315 | 0.367 | 0.329 | 1 HSPC_UCBMC |
| FAM171A1 | 0.28500815 | 0.21906891 | 0.289 | 0.242 | 1 HSPC_UCBMC |
| NCBP2    | 0.28553554 | 0.17636783 | 0.622 | 0.599 | 1 HSPC_UCBMC |
| CWC22    | 0.28604708 | 0.62878524 | 0.322 | 0.296 | 1 HSPC_UCBMC |
| DDX50    | 0.28713762 | 0.32690231 | 0.489 | 0.471 | 1 HSPC_UCBMC |
| CEBPZOS  | 0.28762095 | 0.21768903 | 0.422 | 0.373 | 1 HSPC_UCBMC |
| MKRN2    | 0.28794142 | 0.6253803  | 0.256 | 0.216 | 1 HSPC_UCBMC |
| STX10    | 0.28831608 | 0.47972844 | 0.333 | 0.294 | 1 HSPC_UCBMC |
| TSPYL1   | 0.28839958 | 0.17386842 | 0.278 | 0.233 | 1 HSPC_UCBMC |
| IMP4     | 0.28882089 | 0.15270514 | 0.211 | 0.272 | 1 HSPC_UCBMC |
| NECTIN2  | 0.28947516 | 0.64359091 | 0.289 | 0.244 | 1 HSPC_UCBMC |
| CDKN1B   | 0.28979893 | 0.35617361 | 0.3   | 0.255 | 1 HSPC_UCBMC |
| VPS41    | 0.29075186 | 0.24337135 | 0.4   | 0.36  | 1 HSPC_UCBMC |
| SIPA1L1  | 0.29210232 | 0.40471937 | 0.356 | 0.318 | 1 HSPC_UCBMC |
| CLDND1   | 0.29211736 | 0.11046764 | 0.4   | 0.359 | 1 HSPC_UCBMC |
| MAP2K2   | 0.29277669 | 0.34757255 | 0.233 | 0.301 | 1 HSPC_UCBMC |
| PSMB4    | 0.29317411 | 0.16775039 | 0.567 | 0.527 | 1 HSPC_UCBMC |

|         |            |            |       |       |              |
|---------|------------|------------|-------|-------|--------------|
| CDS2    | 0.29508604 | 0.10211938 | 0.222 | 0.298 | 1 HSPC_UCBMC |
| SERBP1  | 0.29513925 | 0.17948788 | 0.778 | 0.739 | 1 HSPC_UCBMC |
| CHM     | 0.29583647 | 0.27910165 | 0.378 | 0.323 | 1 HSPC_UCBMC |
| TCEAL9  | 0.29585171 | 0.49973652 | 0.322 | 0.272 | 1 HSPC_UCBMC |
| PSMA4   | 0.29685985 | 0.17949801 | 0.656 | 0.616 | 1 HSPC_UCBMC |
| MBTPS1  | 0.29698116 | 0.1407323  | 0.478 | 0.423 | 1 HSPC_UCBMC |
| ZNF236  | 0.29720646 | 0.39812642 | 0.278 | 0.233 | 1 HSPC_UCBMC |
| FBXO38  | 0.29725066 | 0.57830371 | 0.289 | 0.238 | 1 HSPC_UCBMC |
| DENR    | 0.2973475  | 0.46863379 | 0.489 | 0.458 | 1 HSPC_UCBMC |
| ADA     | 0.29799186 | 0.60750026 | 0.256 | 0.211 | 1 HSPC_UCBMC |
| TBCB    | 0.29902286 | 0.69840844 | 0.289 | 0.262 | 1 HSPC_UCBMC |
| IFI27L2 | 0.30086546 | 0.18568588 | 0.6   | 0.571 | 1 HSPC_UCBMC |
| SEC22A  | 0.30108506 | 0.31882874 | 0.356 | 0.316 | 1 HSPC_UCBMC |
| WWP2    | 0.3011582  | 0.35839854 | 0.378 | 0.333 | 1 HSPC_UCBMC |
| OFD1    | 0.3022613  | 0.45638819 | 0.333 | 0.29  | 1 HSPC_UCBMC |
| NEPRO   | 0.30324319 | 0.35036397 | 0.278 | 0.238 | 1 HSPC_UCBMC |
| ZNF28   | 0.30489468 | 0.33671151 | 0.556 | 0.503 | 1 HSPC_UCBMC |
| CEP95   | 0.30554058 | 0.45788866 | 0.3   | 0.255 | 1 HSPC_UCBMC |
| PSMA5   | 0.30560339 | 0.30898513 | 0.556 | 0.549 | 1 HSPC_UCBMC |
| EXOC3   | 0.3068297  | 0.3386379  | 0.289 | 0.25  | 1 HSPC_UCBMC |
| RBM28   | 0.30851051 | 0.60480018 | 0.289 | 0.246 | 1 HSPC_UCBMC |
| MRPS30  | 0.30920411 | 0.47061254 | 0.389 | 0.348 | 1 HSPC_UCBMC |
| SEL1L   | 0.30922344 | 0.34007545 | 0.289 | 0.248 | 1 HSPC_UCBMC |
| PAPOLA  | 0.3144021  | 0.27721652 | 0.811 | 0.762 | 1 HSPC_UCBMC |
| GARS1   | 0.31468549 | 0.65512241 | 0.367 | 0.333 | 1 HSPC_UCBMC |
| RERE    | 0.31473954 | 0.14753469 | 0.756 | 0.723 | 1 HSPC_UCBMC |
| SLC35A1 | 0.31497647 | 0.14565721 | 0.267 | 0.218 | 1 HSPC_UCBMC |
| UQCC1   | 0.31520939 | 0.20416077 | 0.367 | 0.327 | 1 HSPC_UCBMC |
| RCOR3   | 0.3152344  | 0.14508858 | 0.478 | 0.436 | 1 HSPC_UCBMC |
| SNX9    | 0.31557644 | 0.13039888 | 0.667 | 0.619 | 1 HSPC_UCBMC |
| XRCC1   | 0.31718639 | 0.35481212 | 0.278 | 0.231 | 1 HSPC_UCBMC |
| PSMD7   | 0.31720226 | 0.54727341 | 0.511 | 0.486 | 1 HSPC_UCBMC |
| CHP1    | 0.32005393 | 0.26073331 | 0.456 | 0.423 | 1 HSPC_UCBMC |



|                    |            |            |       |       |              |
|--------------------|------------|------------|-------|-------|--------------|
| KDM6B              | 0.32051304 | 0.24403128 | 0.256 | 0.218 | 1 HSPC_UCBMC |
| IRAK3              | 0.32197059 | 0.26221021 | 0.378 | 0.338 | 1 HSPC_UCBMC |
| CCDC90B            | 0.32331369 | 0.67203789 | 0.378 | 0.373 | 1 HSPC_UCBMC |
| ERO1A              | 0.32470208 | 0.35765383 | 0.322 | 0.281 | 1 HSPC_UCBMC |
| PARP2              | 0.32574068 | 0.39058642 | 0.4   | 0.353 | 1 HSPC_UCBMC |
| CD58               | 0.32577946 | 0.5212666  | 0.444 | 0.42  | 1 HSPC_UCBMC |
| PPA2               | 0.32774806 | 0.21542783 | 0.567 | 0.538 | 1 HSPC_UCBMC |
| NAP1L4             | 0.33012299 | 0.17810266 | 0.733 | 0.747 | 1 HSPC_UCBMC |
| SPN                | 0.3324282  | 0.48919227 | 0.467 | 0.473 | 1 HSPC_UCBMC |
| TMEM205            | 0.33429347 | 0.51780233 | 0.344 | 0.301 | 1 HSPC_UCBMC |
| DNAJC19            | 0.33431003 | 0.22146454 | 0.544 | 0.523 | 1 HSPC_UCBMC |
| ITPA               | 0.33527576 | 0.39977064 | 0.344 | 0.292 | 1 HSPC_UCBMC |
| ACO1               | 0.33714204 | 0.53674527 | 0.3   | 0.264 | 1 HSPC_UCBMC |
| ENSMMUG00000001894 | 0.33767235 | 0.55634479 | 0.511 | 0.477 | 1 HSPC_UCBMC |
| FAM133B            | 0.33791528 | 0.11536582 | 0.578 | 0.519 | 1 HSPC_UCBMC |
| TAF3               | 0.33967329 | 0.20250363 | 0.556 | 0.519 | 1 HSPC_UCBMC |
| SUGT1              | 0.34154045 | 0.26446209 | 0.544 | 0.551 | 1 HSPC_UCBMC |
| FGFR1OP2           | 0.34321614 | 0.14557314 | 0.589 | 0.519 | 1 HSPC_UCBMC |
| UFL1               | 0.34399401 | 0.82466953 | 0.256 | 0.218 | 1 HSPC_UCBMC |
| ABHD16A            | 0.34507798 | 0.1470335  | 0.333 | 0.29  | 1 HSPC_UCBMC |
| MAP2K1             | 0.34508315 | 0.37196508 | 0.256 | 0.213 | 1 HSPC_UCBMC |
| FDFT1              | 0.34560328 | 0.73497683 | 0.278 | 0.253 | 1 HSPC_UCBMC |
| VKORC1L1           | 0.34565124 | 0.18804041 | 0.356 | 0.309 | 1 HSPC_UCBMC |
| PPP6R1             | 0.34649772 | 0.61836327 | 0.356 | 0.336 | 1 HSPC_UCBMC |
| TM9SF2             | 0.3475337  | 0.17744675 | 0.489 | 0.434 | 1 HSPC_UCBMC |
| RABGAP1            | 0.34794968 | 0.15772477 | 0.356 | 0.322 | 1 HSPC_UCBMC |
| DESI1              | 0.34817993 | 0.59916602 | 0.267 | 0.238 | 1 HSPC_UCBMC |
| TANGO6             | 0.3488925  | 0.32038927 | 0.422 | 0.373 | 1 HSPC_UCBMC |
| PEAK1              | 0.35019179 | 0.28001349 | 0.267 | 0.24  | 1 HSPC_UCBMC |
| ANKRD39            | 0.35222039 | 0.51645548 | 0.256 | 0.224 | 1 HSPC_UCBMC |
| RELB               | 0.35294735 | 0.31150799 | 0.289 | 0.253 | 1 HSPC_UCBMC |
| DDX24              | 0.35312573 | 0.25311003 | 0.644 | 0.621 | 1 HSPC_UCBMC |
| ATAD1              | 0.3534916  | 0.56458674 | 0.367 | 0.336 | 1 HSPC_UCBMC |

|                    |            |            |       |       |              |
|--------------------|------------|------------|-------|-------|--------------|
| CPEB3              | 0.35604991 | 0.60347214 | 0.278 | 0.235 | 1 HSPC_UCBMC |
| SLC30A5            | 0.35619318 | 0.1788776  | 0.244 | 0.303 | 1 HSPC_UCBMC |
| DISP1              | 0.35776425 | 0.13211433 | 0.322 | 0.27  | 1 HSPC_UCBMC |
| KIDINS220          | 0.35800477 | 0.12006158 | 0.578 | 0.527 | 1 HSPC_UCBMC |
| HAT1               | 0.35829319 | 0.30298354 | 0.511 | 0.499 | 1 HSPC_UCBMC |
| BECN1              | 0.36091943 | 0.18457512 | 0.3   | 0.259 | 1 HSPC_UCBMC |
| TRMU               | 0.36102646 | 0.44339574 | 0.267 | 0.227 | 1 HSPC_UCBMC |
| SMU1               | 0.3619131  | 0.17679141 | 0.444 | 0.403 | 1 HSPC_UCBMC |
| COPS3              | 0.36195544 | 0.49871328 | 0.478 | 0.453 | 1 HSPC_UCBMC |
| EXOSC3             | 0.36270621 | 0.37281602 | 0.289 | 0.253 | 1 HSPC_UCBMC |
| USP38              | 0.36391453 | 0.42348892 | 0.256 | 0.229 | 1 HSPC_UCBMC |
| ENSMMUG00000062086 | 0.36618939 | 0.3935968  | 0.322 | 0.268 | 1 HSPC_UCBMC |
| STAMPB             | 0.36652026 | 0.30407389 | 0.222 | 0.268 | 1 HSPC_UCBMC |
| MAPK1IP1L          | 0.36719303 | 0.42219069 | 0.522 | 0.49  | 1 HSPC_UCBMC |
| ELL                | 0.36766578 | 0.17074131 | 0.3   | 0.25  | 1 HSPC_UCBMC |
| ZNF589             | 0.36797303 | 0.4058008  | 0.311 | 0.279 | 1 HSPC_UCBMC |
| MTMR6              | 0.36808528 | 0.47130707 | 0.278 | 0.244 | 1 HSPC_UCBMC |
| PCNP               | 0.37021199 | 0.30303143 | 0.578 | 0.542 | 1 HSPC_UCBMC |
| ACOT13             | 0.37051024 | 0.46016039 | 0.322 | 0.29  | 1 HSPC_UCBMC |
| COPB2              | 0.37083018 | 0.14073244 | 0.4   | 0.372 | 1 HSPC_UCBMC |
| GRK2               | 0.37356986 | 0.37051904 | 0.267 | 0.227 | 1 HSPC_UCBMC |
| CRNKL1             | 0.37358815 | 0.56635008 | 0.289 | 0.259 | 1 HSPC_UCBMC |
| DRG1               | 0.37476565 | 0.54853454 | 0.3   | 0.27  | 1 HSPC_UCBMC |
| DDOST              | 0.37526517 | 0.12243281 | 0.656 | 0.634 | 1 HSPC_UCBMC |
| PCGF3              | 0.37643474 | 0.35268535 | 0.267 | 0.231 | 1 HSPC_UCBMC |
| ZC3H11A            | 0.37715878 | 0.16065884 | 0.544 | 0.549 | 1 HSPC_UCBMC |
| TMEM9              | 0.37744559 | 0.38775886 | 0.267 | 0.235 | 1 HSPC_UCBMC |
| SRSF10             | 0.37759355 | 0.23366426 | 0.678 | 0.651 | 1 HSPC_UCBMC |
| EIF2AK4            | 0.37832337 | 0.33965425 | 0.522 | 0.499 | 1 HSPC_UCBMC |
| RPL7L1             | 0.37932383 | 0.59562536 | 0.267 | 0.229 | 1 HSPC_UCBMC |
| NOP58              | 0.38139542 | 0.26064882 | 0.644 | 0.645 | 1 HSPC_UCBMC |
| ARGLU1             | 0.38148613 | 0.18351406 | 0.811 | 0.754 | 1 HSPC_UCBMC |
| METTL5             | 0.38219217 | 0.52979281 | 0.267 | 0.251 | 1 HSPC_UCBMC |

|            |            |            |       |       |              |
|------------|------------|------------|-------|-------|--------------|
| COG6       | 0.3831148  | 0.25414924 | 0.278 | 0.248 | 1 HSPC_UCBMC |
| RNF144A    | 0.38476589 | 0.11213659 | 0.389 | 0.336 | 1 HSPC_UCBMC |
| EMC7       | 0.3849906  | 0.6390839  | 0.333 | 0.323 | 1 HSPC_UCBMC |
| WASHC4     | 0.38502304 | 0.31271123 | 0.333 | 0.279 | 1 HSPC_UCBMC |
| CAPRIN1    | 0.38505441 | 0.25520489 | 0.6   | 0.556 | 1 HSPC_UCBMC |
| STARD3NL   | 0.38920348 | 0.53039559 | 0.322 | 0.299 | 1 HSPC_UCBMC |
| SACM1L     | 0.3892765  | 0.34277312 | 0.378 | 0.335 | 1 HSPC_UCBMC |
| TXNDC15    | 0.38982815 | 0.54124936 | 0.333 | 0.316 | 1 HSPC_UCBMC |
| DDHD2      | 0.39069163 | 0.1205655  | 0.333 | 0.285 | 1 HSPC_UCBMC |
| LTV1       | 0.3919243  | 0.23246729 | 0.5   | 0.479 | 1 HSPC_UCBMC |
| ST6GALNAC4 | 0.39274338 | 0.68722053 | 0.256 | 0.237 | 1 HSPC_UCBMC |
| PKD2       | 0.39310894 | 0.21411342 | 0.278 | 0.244 | 1 HSPC_UCBMC |
| RFC1       | 0.3959556  | 0.12905885 | 0.6   | 0.56  | 1 HSPC_UCBMC |
| TRMT112    | 0.39792954 | 0.17118816 | 0.767 | 0.697 | 1 HSPC_UCBMC |
| GLYR1      | 0.39877281 | 0.20943689 | 0.467 | 0.425 | 1 HSPC_UCBMC |
| FOXK2      | 0.39966031 | 0.19388684 | 0.244 | 0.288 | 1 HSPC_UCBMC |
| GAR1       | 0.4002995  | 0.37275465 | 0.478 | 0.47  | 1 HSPC_UCBMC |
| GRAMD4     | 0.40045448 | 0.14026324 | 0.367 | 0.323 | 1 HSPC_UCBMC |
| TKT        | 0.40076399 | 0.23530583 | 0.689 | 0.628 | 1 HSPC_UCBMC |
| TAF4B      | 0.40090476 | 0.48273583 | 0.278 | 0.244 | 1 HSPC_UCBMC |
| MIDEAS     | 0.40222773 | 0.71230093 | 0.289 | 0.264 | 1 HSPC_UCBMC |
| EIF6       | 0.40262167 | 0.32081417 | 0.389 | 0.364 | 1 HSPC_UCBMC |
| NUDT5      | 0.40282938 | 0.51296646 | 0.322 | 0.309 | 1 HSPC_UCBMC |
| PPDPF      | 0.40526875 | 0.16193775 | 0.489 | 0.412 | 1 HSPC_UCBMC |
| SIVA1      | 0.40576444 | 0.13554222 | 0.467 | 0.425 | 1 HSPC_UCBMC |
| IRF2BP2    | 0.40597688 | 0.38797464 | 0.3   | 0.274 | 1 HSPC_UCBMC |
| RIOK3      | 0.40629701 | 0.17267544 | 0.478 | 0.421 | 1 HSPC_UCBMC |
| IPO5       | 0.40654694 | 0.14895963 | 0.511 | 0.468 | 1 HSPC_UCBMC |
| DPP8       | 0.40765086 | 0.24722116 | 0.311 | 0.279 | 1 HSPC_UCBMC |
| ZNF428     | 0.40783233 | 0.14757894 | 0.233 | 0.288 | 1 HSPC_UCBMC |
| PSMD13     | 0.40969763 | 0.35597383 | 0.467 | 0.451 | 1 HSPC_UCBMC |
| SSBP1      | 0.41006711 | 0.28903074 | 0.478 | 0.466 | 1 HSPC_UCBMC |
| MECP2      | 0.4116941  | 0.3987173  | 0.411 | 0.405 | 1 HSPC_UCBMC |

|                    |            |            |       |       |              |
|--------------------|------------|------------|-------|-------|--------------|
| WTAP               | 0.41246392 | 0.1656331  | 0.711 | 0.704 | 1 HSPC_UCBMC |
| ENSMMUG00000050989 | 0.41456772 | 0.42487047 | 0.4   | 0.394 | 1 HSPC_UCBMC |
| SPINT2             | 0.4152132  | 0.18018341 | 0.533 | 0.499 | 1 HSPC_UCBMC |
| ICE2               | 0.41561989 | 0.23168643 | 0.367 | 0.322 | 1 HSPC_UCBMC |
| ZC3H15             | 0.41680586 | 0.25351609 | 0.556 | 0.569 | 1 HSPC_UCBMC |
| PER1               | 0.41709324 | 0.54796124 | 0.433 | 0.405 | 1 HSPC_UCBMC |
| ENSMMUG00000017890 | 0.41940389 | 0.30846593 | 0.356 | 0.327 | 1 HSPC_UCBMC |
| MRPL14             | 0.42033097 | 0.4119462  | 0.511 | 0.473 | 1 HSPC_UCBMC |
| MRPL21             | 0.42088563 | 0.34202471 | 0.4   | 0.384 | 1 HSPC_UCBMC |
| MTERF1             | 0.42244101 | 0.15180925 | 0.267 | 0.237 | 1 HSPC_UCBMC |
| ARIH2              | 0.42271    | 0.44021688 | 0.6   | 0.58  | 1 HSPC_UCBMC |
| IDE                | 0.42335522 | 0.14914862 | 0.411 | 0.383 | 1 HSPC_UCBMC |
| EIF2D              | 0.42340396 | 0.69060575 | 0.3   | 0.279 | 1 HSPC_UCBMC |
| ENSMMUG00000064232 | 0.42379558 | 0.13996408 | 0.322 | 0.366 | 1 HSPC_UCBMC |
| ST7L               | 0.423892   | 0.17503777 | 0.422 | 0.383 | 1 HSPC_UCBMC |
| HYPK               | 0.42504183 | 0.32338981 | 0.567 | 0.577 | 1 HSPC_UCBMC |
| HADH               | 0.42613286 | 0.34934007 | 0.433 | 0.429 | 1 HSPC_UCBMC |
| ARNT               | 0.42630071 | 0.20531516 | 0.322 | 0.301 | 1 HSPC_UCBMC |
| BTG3               | 0.42683065 | 0.31656056 | 0.278 | 0.261 | 1 HSPC_UCBMC |
| SEC11C             | 0.42985057 | 0.17686453 | 0.311 | 0.268 | 1 HSPC_UCBMC |
| EWSR1              | 0.43099568 | 0.14460025 | 0.656 | 0.658 | 1 HSPC_UCBMC |
| MSH6               | 0.43169346 | 0.20519202 | 0.322 | 0.373 | 1 HSPC_UCBMC |
| CASC3              | 0.43180722 | 0.70103705 | 0.4   | 0.364 | 1 HSPC_UCBMC |
| PHTF2              | 0.43271037 | 0.20076177 | 0.411 | 0.386 | 1 HSPC_UCBMC |
| FHL2               | 0.43286102 | 0.29759905 | 0.422 | 0.399 | 1 HSPC_UCBMC |
| ARHGAP1            | 0.43339013 | 0.15150384 | 0.389 | 0.362 | 1 HSPC_UCBMC |
| DYNC1H1            | 0.43450164 | 0.21718346 | 0.556 | 0.53  | 1 HSPC_UCBMC |
| MRPL32             | 0.43497787 | 0.1679476  | 0.444 | 0.442 | 1 HSPC_UCBMC |
| PTP4A1             | 0.43578715 | 0.11276945 | 0.367 | 0.331 | 1 HSPC_UCBMC |
| GTF2I              | 0.43640696 | 0.23302343 | 0.7   | 0.715 | 1 HSPC_UCBMC |
| COX20              | 0.4365748  | 0.29502978 | 0.556 | 0.534 | 1 HSPC_UCBMC |
| AAMP               | 0.43749231 | 0.43219605 | 0.267 | 0.22  | 1 HSPC_UCBMC |
| ENSMMUG00000062941 | 0.43826096 | 0.26116808 | 0.322 | 0.287 | 1 HSPC_UCBMC |

|                    |            |            |       |       |              |
|--------------------|------------|------------|-------|-------|--------------|
| NCL                | 0.43850498 | 0.20497251 | 0.856 | 0.797 | 1 HSPC_UCBMC |
| THOC6              | 0.43857286 | 0.24741884 | 0.267 | 0.231 | 1 HSPC_UCBMC |
| SH3GLB1            | 0.439394   | 0.16755319 | 0.511 | 0.481 | 1 HSPC_UCBMC |
| FOXN2              | 0.44020393 | 0.32443794 | 0.444 | 0.433 | 1 HSPC_UCBMC |
| RNASET2            | 0.44151045 | 0.15380926 | 0.444 | 0.381 | 1 HSPC_UCBMC |
| SPG21              | 0.44316025 | 0.36828318 | 0.256 | 0.226 | 1 HSPC_UCBMC |
| NRBP1              | 0.4432321  | 0.10089138 | 0.256 | 0.224 | 1 HSPC_UCBMC |
| MARF1              | 0.44441504 | 0.18831234 | 0.267 | 0.327 | 1 HSPC_UCBMC |
| PRKCA              | 0.44569643 | 0.36526877 | 0.367 | 0.316 | 1 HSPC_UCBMC |
| NSFL1C             | 0.4462477  | 0.2250423  | 0.3   | 0.272 | 1 HSPC_UCBMC |
| DPCD               | 0.44745134 | 0.16117627 | 0.256 | 0.311 | 1 HSPC_UCBMC |
| C5orf15            | 0.45197905 | 0.53744181 | 0.278 | 0.25  | 1 HSPC_UCBMC |
| SNX2               | 0.4526092  | 0.2363353  | 0.544 | 0.542 | 1 HSPC_UCBMC |
| CDCA7L             | 0.4529034  | 0.31119911 | 0.3   | 0.272 | 1 HSPC_UCBMC |
| ENSMMUG00000064749 | 0.45338095 | 0.49587523 | 0.3   | 0.272 | 1 HSPC_UCBMC |
| ACBD6              | 0.45363411 | 0.24683853 | 0.444 | 0.414 | 1 HSPC_UCBMC |
| PIK3R1             | 0.45520022 | 0.1375079  | 0.467 | 0.444 | 1 HSPC_UCBMC |
| TRMT1              | 0.45741097 | 0.3024036  | 0.278 | 0.24  | 1 HSPC_UCBMC |
| CNPY3              | 0.45778996 | 0.39350628 | 0.256 | 0.227 | 1 HSPC_UCBMC |
| WIPI2              | 0.4595437  | 0.26369475 | 0.422 | 0.399 | 1 HSPC_UCBMC |
| SMAD3              | 0.45970814 | 0.62252034 | 0.256 | 0.229 | 1 HSPC_UCBMC |
| METAP1D            | 0.46089241 | 0.5023343  | 0.289 | 0.259 | 1 HSPC_UCBMC |
| HPRT1              | 0.46160267 | 0.42656075 | 0.367 | 0.344 | 1 HSPC_UCBMC |
| ANKFY1             | 0.46212311 | 0.18091844 | 0.4   | 0.373 | 1 HSPC_UCBMC |
| TPD52L2            | 0.46262933 | 0.1002709  | 0.311 | 0.283 | 1 HSPC_UCBMC |
| MED14              | 0.46283898 | 0.18135001 | 0.289 | 0.246 | 1 HSPC_UCBMC |
| ANXA7              | 0.46352805 | 0.11021781 | 0.633 | 0.608 | 1 HSPC_UCBMC |
| IQCB1              | 0.46355479 | 0.29683373 | 0.333 | 0.307 | 1 HSPC_UCBMC |
| GTF3C6             | 0.46599566 | 0.23617562 | 0.456 | 0.447 | 1 HSPC_UCBMC |
| MCFD2              | 0.46686024 | 0.57755671 | 0.267 | 0.253 | 1 HSPC_UCBMC |
| DYRK1B             | 0.46812248 | 0.32612566 | 0.256 | 0.233 | 1 HSPC_UCBMC |
| TMC7               | 0.46929839 | 0.4814275  | 0.289 | 0.274 | 1 HSPC_UCBMC |
| DHX29              | 0.4710901  | 0.76911704 | 0.4   | 0.377 | 1 HSPC_UCBMC |

|                   |            |            |       |       |              |
|-------------------|------------|------------|-------|-------|--------------|
| TM7SF3            | 0.47128979 | 0.32954959 | 0.522 | 0.516 | 1 HSPC_UCBMC |
| ENSMUG00000038348 | 0.47194998 | 0.12389098 | 0.644 | 0.628 | 1 HSPC_UCBMC |
| KLHDC10           | 0.47511768 | 0.38475532 | 0.311 | 0.298 | 1 HSPC_UCBMC |
| PSMD6             | 0.47595807 | 0.41299557 | 0.389 | 0.39  | 1 HSPC_UCBMC |
| RALY              | 0.476188   | 0.13993314 | 0.633 | 0.593 | 1 HSPC_UCBMC |
| TMEM33            | 0.47667894 | 0.72788476 | 0.256 | 0.218 | 1 HSPC_UCBMC |
| SUGP2             | 0.47793913 | 0.23623027 | 0.4   | 0.364 | 1 HSPC_UCBMC |
| C3H7orf50         | 0.47825035 | 0.2565016  | 0.689 | 0.658 | 1 HSPC_UCBMC |
| CCPG1             | 0.47860075 | 0.32375569 | 0.367 | 0.362 | 1 HSPC_UCBMC |
| WDR11             | 0.4818288  | 0.30399142 | 0.3   | 0.275 | 1 HSPC_UCBMC |
| ERI3              | 0.48263696 | 0.29128008 | 0.333 | 0.316 | 1 HSPC_UCBMC |
| NBAS              | 0.48331787 | 0.47152195 | 0.433 | 0.425 | 1 HSPC_UCBMC |
| ERCC3             | 0.483578   | 0.22514454 | 0.267 | 0.24  | 1 HSPC_UCBMC |
| ENSMUG00000056190 | 0.48633653 | 0.20861842 | 0.333 | 0.292 | 1 HSPC_UCBMC |
| NAT10             | 0.48661709 | 0.38709849 | 0.289 | 0.262 | 1 HSPC_UCBMC |
| EIF4H             | 0.48782243 | 0.36651652 | 0.556 | 0.534 | 1 HSPC_UCBMC |
| ATR               | 0.48791747 | 0.17256059 | 0.456 | 0.434 | 1 HSPC_UCBMC |
| APH1A             | 0.48829032 | 0.43350975 | 0.278 | 0.261 | 1 HSPC_UCBMC |
| ESD               | 0.49006127 | 0.10839969 | 0.5   | 0.508 | 1 HSPC_UCBMC |
| ATIC              | 0.49075807 | 0.44172225 | 0.389 | 0.388 | 1 HSPC_UCBMC |
| CHMP2A            | 0.49079816 | 0.29131614 | 0.456 | 0.431 | 1 HSPC_UCBMC |
| NECAP2            | 0.49113169 | 0.18356086 | 0.389 | 0.373 | 1 HSPC_UCBMC |
| HNRNPA0           | 0.49420053 | 0.12018417 | 0.578 | 0.569 | 1 HSPC_UCBMC |
| STXBP2            | 0.49463317 | 0.11102097 | 0.322 | 0.296 | 1 HSPC_UCBMC |
| DCTN6             | 0.49473739 | 0.30946552 | 0.389 | 0.379 | 1 HSPC_UCBMC |
| CACYBP            | 0.49560245 | 0.28137301 | 0.656 | 0.638 | 1 HSPC_UCBMC |
| IP6K2             | 0.50060037 | 0.20527508 | 0.422 | 0.392 | 1 HSPC_UCBMC |
| NAA38             | 0.50217262 | 0.52086987 | 0.478 | 0.458 | 1 HSPC_UCBMC |
| VGLL4             | 0.50222006 | 0.20906418 | 0.289 | 0.264 | 1 HSPC_UCBMC |
| MRPL43            | 0.50548602 | 0.71655293 | 0.3   | 0.281 | 1 HSPC_UCBMC |
| GLS               | 0.51148748 | 0.23831326 | 0.611 | 0.58  | 1 HSPC_UCBMC |
| MANF              | 0.51187798 | 0.45590983 | 0.444 | 0.433 | 1 HSPC_UCBMC |
| POLH              | 0.51217881 | 0.77032422 | 0.278 | 0.251 | 1 HSPC_UCBMC |

|                   |            |            |       |       |              |
|-------------------|------------|------------|-------|-------|--------------|
| ALG8              | 0.51225764 | 0.42566986 | 0.333 | 0.307 | 1 HSPC_UCBMC |
| R3HDM1            | 0.51417551 | 0.27323518 | 0.478 | 0.438 | 1 HSPC_UCBMC |
| API5              | 0.51914465 | 0.30817059 | 0.333 | 0.307 | 1 HSPC_UCBMC |
| TMEM230           | 0.51928701 | 0.15172523 | 0.522 | 0.508 | 1 HSPC_UCBMC |
| ILF3              | 0.52321573 | 0.16138039 | 0.656 | 0.654 | 1 HSPC_UCBMC |
| AIFM1             | 0.52400561 | 0.56156132 | 0.3   | 0.272 | 1 HSPC_UCBMC |
| PNO1              | 0.52483183 | 0.61779009 | 0.311 | 0.296 | 1 HSPC_UCBMC |
| PPT1              | 0.52881935 | 0.33590027 | 0.278 | 0.255 | 1 HSPC_UCBMC |
| NUP205            | 0.52883219 | 0.10226757 | 0.422 | 0.377 | 1 HSPC_UCBMC |
| TM9SF4            | 0.53048135 | 0.42000866 | 0.356 | 0.348 | 1 HSPC_UCBMC |
| NUP133            | 0.53222508 | 0.10721957 | 0.389 | 0.355 | 1 HSPC_UCBMC |
| TXLNA             | 0.53238884 | 0.56090779 | 0.278 | 0.262 | 1 HSPC_UCBMC |
| ADD3              | 0.53259835 | 0.19136218 | 0.4   | 0.384 | 1 HSPC_UCBMC |
| ENSMUG00000000350 | 0.53524307 | 0.18144735 | 0.278 | 0.311 | 1 HSPC_UCBMC |
| MRPL36            | 0.53559647 | 0.34538098 | 0.333 | 0.312 | 1 HSPC_UCBMC |
| ENSMUG00000014003 | 0.53617977 | 0.21249056 | 0.278 | 0.253 | 1 HSPC_UCBMC |
| ARHGEF7           | 0.53632442 | 0.16066163 | 0.467 | 0.457 | 1 HSPC_UCBMC |
| SUFU              | 0.53637571 | 0.22319517 | 0.278 | 0.257 | 1 HSPC_UCBMC |
| MPHOSPH10         | 0.53710992 | 0.46481347 | 0.3   | 0.283 | 1 HSPC_UCBMC |
| MRPL48            | 0.53834483 | 0.24885878 | 0.278 | 0.322 | 1 HSPC_UCBMC |
| DDX47             | 0.53864145 | 0.67528782 | 0.256 | 0.227 | 1 HSPC_UCBMC |
| DCAF1             | 0.53869167 | 0.53259238 | 0.378 | 0.392 | 1 HSPC_UCBMC |
| ERCC8             | 0.53972469 | 0.72529841 | 0.322 | 0.305 | 1 HSPC_UCBMC |
| CDC16             | 0.54169962 | 0.23150263 | 0.267 | 0.24  | 1 HSPC_UCBMC |
| ATP6V1FNB         | 0.54196555 | 0.117242   | 0.611 | 0.536 | 1 HSPC_UCBMC |
| ENSMUG00000018557 | 0.54261737 | 0.25644471 | 0.556 | 0.545 | 1 HSPC_UCBMC |
| CHMP2B            | 0.54326685 | 0.21471177 | 0.333 | 0.303 | 1 HSPC_UCBMC |
| TPGS2             | 0.54478997 | 0.17993282 | 0.278 | 0.253 | 1 HSPC_UCBMC |
| PRELID3B          | 0.54562052 | 0.20188529 | 0.289 | 0.259 | 1 HSPC_UCBMC |
| TMEM248           | 0.54805094 | 0.6172152  | 0.278 | 0.279 | 1 HSPC_UCBMC |
| URGCP             | 0.54844833 | 0.23178916 | 0.522 | 0.503 | 1 HSPC_UCBMC |
| NDUFA9            | 0.54874871 | 0.36046157 | 0.456 | 0.447 | 1 HSPC_UCBMC |
| IRF3              | 0.54926019 | 0.10835782 | 0.433 | 0.416 | 1 HSPC_UCBMC |

|                    |            |            |       |       |              |
|--------------------|------------|------------|-------|-------|--------------|
| GGA3               | 0.55011095 | 0.25753172 | 0.389 | 0.359 | 1 HSPC_UCBMC |
| RRP1               | 0.55067927 | 0.49152882 | 0.278 | 0.281 | 1 HSPC_UCBMC |
| LSM6               | 0.5516343  | 0.13249947 | 0.567 | 0.564 | 1 HSPC_UCBMC |
| MPG                | 0.55248011 | 0.35224605 | 0.256 | 0.238 | 1 HSPC_UCBMC |
| ENSMMUG00000058532 | 0.55251764 | 0.22171093 | 0.433 | 0.416 | 1 HSPC_UCBMC |
| RNF7               | 0.55328269 | 0.46761115 | 0.433 | 0.431 | 1 HSPC_UCBMC |
| SARS1              | 0.55502047 | 0.30303027 | 0.389 | 0.388 | 1 HSPC_UCBMC |
| HPS4               | 0.55674948 | 0.21574788 | 0.222 | 0.275 | 1 HSPC_UCBMC |
| EHBP1              | 0.55812884 | 0.20890995 | 0.544 | 0.523 | 1 HSPC_UCBMC |
| ENY2               | 0.55827752 | 0.13810564 | 0.722 | 0.686 | 1 HSPC_UCBMC |
| ECSIT              | 0.56045891 | 0.11897942 | 0.333 | 0.314 | 1 HSPC_UCBMC |
| CHORDC1            | 0.56136792 | 0.26416613 | 0.5   | 0.462 | 1 HSPC_UCBMC |
| ATP6AP2            | 0.56345824 | 0.22275483 | 0.456 | 0.44  | 1 HSPC_UCBMC |
| TAF2               | 0.56681492 | 0.16109365 | 0.356 | 0.323 | 1 HSPC_UCBMC |
| PTPN11             | 0.56788367 | 0.54532226 | 0.378 | 0.379 | 1 HSPC_UCBMC |
| TBPL1              | 0.57376244 | 0.20369977 | 0.411 | 0.384 | 1 HSPC_UCBMC |
| SHPRH              | 0.57481414 | 0.74260931 | 0.378 | 0.366 | 1 HSPC_UCBMC |
| KEAP1              | 0.57663611 | 0.32693469 | 0.3   | 0.281 | 1 HSPC_UCBMC |
| AARS1              | 0.58065364 | 0.13122455 | 0.467 | 0.46  | 1 HSPC_UCBMC |
| THUMPD3            | 0.58144778 | 0.26286658 | 0.289 | 0.266 | 1 HSPC_UCBMC |
| GLUD1              | 0.58173619 | 0.34624621 | 0.256 | 0.237 | 1 HSPC_UCBMC |
| TMF1               | 0.5843303  | 0.28726383 | 0.256 | 0.296 | 1 HSPC_UCBMC |
| SLC50A1            | 0.58604265 | 0.36630307 | 0.211 | 0.264 | 1 HSPC_UCBMC |
| SLC10A7            | 0.59005041 | 0.51711058 | 0.422 | 0.407 | 1 HSPC_UCBMC |
| UBE2D1             | 0.59008401 | 0.20131334 | 0.456 | 0.447 | 1 HSPC_UCBMC |
| TMEM219            | 0.59224273 | 0.53993211 | 0.378 | 0.384 | 1 HSPC_UCBMC |
| SLC30A7            | 0.59316292 | 0.33039009 | 0.433 | 0.414 | 1 HSPC_UCBMC |
| CCT5               | 0.59427185 | 0.21450764 | 0.633 | 0.588 | 1 HSPC_UCBMC |
| LARS2              | 0.59918166 | 0.13441887 | 0.278 | 0.257 | 1 HSPC_UCBMC |
| MTRF1L             | 0.59986536 | 0.45723915 | 0.278 | 0.262 | 1 HSPC_UCBMC |
| CMTM6              | 0.60157098 | 0.3479945  | 0.522 | 0.506 | 1 HSPC_UCBMC |
| SF3B2              | 0.60266226 | 0.34978372 | 0.467 | 0.44  | 1 HSPC_UCBMC |
| UBE4A              | 0.60269461 | 0.30156083 | 0.322 | 0.309 | 1 HSPC_UCBMC |



|         |            |            |       |       |              |
|---------|------------|------------|-------|-------|--------------|
| MORC3   | 0.60271103 | 0.15774099 | 0.533 | 0.519 | 1 HSPC_UCBMC |
| PPP2R3C | 0.60299687 | 0.20319136 | 0.311 | 0.355 | 1 HSPC_UCBMC |
| HAUS6   | 0.60393148 | 1.28170165 | 0.422 | 0.41  | 1 HSPC_UCBMC |
| DDX42   | 0.60454691 | 0.19393136 | 0.411 | 0.414 | 1 HSPC_UCBMC |
| CTBP1   | 0.60469885 | 0.28735191 | 0.3   | 0.283 | 1 HSPC_UCBMC |
| SNRPD1  | 0.60600728 | 0.10502669 | 0.689 | 0.647 | 1 HSPC_UCBMC |
| CXXC5   | 0.60777486 | 0.23697193 | 0.489 | 0.497 | 1 HSPC_UCBMC |
| ABCB7   | 0.60839868 | 0.12150943 | 0.478 | 0.466 | 1 HSPC_UCBMC |
| SESN1   | 0.61433865 | 0.13517836 | 0.467 | 0.458 | 1 HSPC_UCBMC |
| PSAP    | 0.6176196  | 0.19862624 | 0.333 | 0.381 | 1 HSPC_UCBMC |
| RBM26   | 0.61797942 | 0.15652723 | 0.611 | 0.606 | 1 HSPC_UCBMC |
| UNKL    | 0.61933984 | 0.16230289 | 0.378 | 0.36  | 1 HSPC_UCBMC |
| POLR3H  | 0.61959622 | 0.42206575 | 0.289 | 0.277 | 1 HSPC_UCBMC |
| PSMC1   | 0.62009829 | 0.37764773 | 0.422 | 0.433 | 1 HSPC_UCBMC |
| RBM8A   | 0.62015286 | 0.14515232 | 0.578 | 0.564 | 1 HSPC_UCBMC |
| PRPF6   | 0.62039184 | 0.27126419 | 0.4   | 0.403 | 1 HSPC_UCBMC |
| MTIF2   | 0.62047155 | 0.32124595 | 0.367 | 0.359 | 1 HSPC_UCBMC |
| ZCCHC2  | 0.62574311 | 0.23057182 | 0.311 | 0.283 | 1 HSPC_UCBMC |
| PSMD11  | 0.62731409 | 0.22285204 | 0.467 | 0.449 | 1 HSPC_UCBMC |
| UBE2W   | 0.62804045 | 0.1032405  | 0.356 | 0.329 | 1 HSPC_UCBMC |
| TDRD3   | 0.62824821 | 0.15165043 | 0.444 | 0.431 | 1 HSPC_UCBMC |
| LARP4   | 0.63285442 | 0.15229806 | 0.544 | 0.512 | 1 HSPC_UCBMC |
| PSMC2   | 0.63483742 | 0.1893079  | 0.389 | 0.383 | 1 HSPC_UCBMC |
| LAS1L   | 0.63556777 | 0.49304765 | 0.278 | 0.262 | 1 HSPC_UCBMC |
| ATP6AP1 | 0.63657653 | 0.31268225 | 0.256 | 0.238 | 1 HSPC_UCBMC |
| LCLAT1  | 0.63717458 | 0.19772737 | 0.4   | 0.392 | 1 HSPC_UCBMC |
| CNOT10  | 0.63917997 | 0.41141781 | 0.444 | 0.427 | 1 HSPC_UCBMC |
| ZBTB1   | 0.63936803 | 0.11164544 | 0.278 | 0.272 | 1 HSPC_UCBMC |
| EMC2    | 0.64086977 | 0.244936   | 0.333 | 0.305 | 1 HSPC_UCBMC |
| SUMO3   | 0.64092117 | 0.36460283 | 0.367 | 0.351 | 1 HSPC_UCBMC |
| TTC37   | 0.64364491 | 0.15554892 | 0.389 | 0.392 | 1 HSPC_UCBMC |
| ILF2    | 0.64433304 | 0.11519402 | 0.556 | 0.553 | 1 HSPC_UCBMC |
| CPT1A   | 0.64448615 | 0.22990661 | 0.244 | 0.288 | 1 HSPC_UCBMC |

|                    |            |            |       |       |              |
|--------------------|------------|------------|-------|-------|--------------|
| NADSYN1            | 0.64848023 | 0.30156788 | 0.433 | 0.433 | 1 HSPC_UCBMC |
| MARS1              | 0.64940011 | 0.33553899 | 0.311 | 0.29  | 1 HSPC_UCBMC |
| PARG               | 0.64955126 | 0.34942744 | 0.344 | 0.333 | 1 HSPC_UCBMC |
| KANSL3             | 0.65182592 | 0.17503587 | 0.3   | 0.312 | 1 HSPC_UCBMC |
| IFNAR2             | 0.65286009 | 0.15740593 | 0.489 | 0.455 | 1 HSPC_UCBMC |
| PSMC3              | 0.65371574 | 0.49442579 | 0.333 | 0.329 | 1 HSPC_UCBMC |
| RPP21              | 0.65688968 | 0.18539014 | 0.322 | 0.322 | 1 HSPC_UCBMC |
| ZZEF1              | 0.65867926 | 0.31854124 | 0.356 | 0.36  | 1 HSPC_UCBMC |
| SUCLG1             | 0.65914864 | 0.23060249 | 0.5   | 0.534 | 1 HSPC_UCBMC |
| ENSMMUG00000048973 | 0.66034642 | 0.36196282 | 0.333 | 0.323 | 1 HSPC_UCBMC |
| MED31              | 0.66039725 | 0.45976716 | 0.322 | 0.299 | 1 HSPC_UCBMC |
| DERL1              | 0.662968   | 0.26824364 | 0.411 | 0.396 | 1 HSPC_UCBMC |
| PSME2              | 0.66384429 | 0.10709578 | 0.411 | 0.416 | 1 HSPC_UCBMC |
| ENSMMUG00000064286 | 0.66712667 | 0.32178283 | 0.322 | 0.316 | 1 HSPC_UCBMC |
| NMD3               | 0.66864597 | 0.13277523 | 0.422 | 0.421 | 1 HSPC_UCBMC |
| SDCBP              | 0.66969047 | 0.10151384 | 0.533 | 0.529 | 1 HSPC_UCBMC |
| LAP3               | 0.67004264 | 0.54674856 | 0.411 | 0.405 | 1 HSPC_UCBMC |
| CLOCK              | 0.67340164 | 0.30375505 | 0.256 | 0.237 | 1 HSPC_UCBMC |
| INTS7              | 0.67470928 | 0.25191848 | 0.356 | 0.34  | 1 HSPC_UCBMC |
| CSNK1G2            | 0.67495012 | 0.17008753 | 0.3   | 0.316 | 1 HSPC_UCBMC |
| AFG1L              | 0.67659209 | 0.55286534 | 0.267 | 0.251 | 1 HSPC_UCBMC |
| VPS35L             | 0.68341874 | 0.24464205 | 0.344 | 0.32  | 1 HSPC_UCBMC |
| SBNO1              | 0.68531215 | 0.13387235 | 0.456 | 0.449 | 1 HSPC_UCBMC |
| DNAJC17            | 0.68575499 | 0.17710594 | 0.222 | 0.25  | 1 HSPC_UCBMC |
| ING2               | 0.68586105 | 0.36624896 | 0.311 | 0.303 | 1 HSPC_UCBMC |
| DHX36              | 0.68625424 | 0.13040022 | 0.544 | 0.542 | 1 HSPC_UCBMC |
| LARS1              | 0.68696616 | 0.31584257 | 0.422 | 0.438 | 1 HSPC_UCBMC |
| COPG2              | 0.68800775 | 0.39313482 | 0.311 | 0.307 | 1 HSPC_UCBMC |
| POLR2D             | 0.68908306 | 0.22383414 | 0.444 | 0.449 | 1 HSPC_UCBMC |
| TIA1               | 0.69244645 | 0.17703253 | 0.556 | 0.571 | 1 HSPC_UCBMC |
| TMED9              | 0.69582033 | 0.28276275 | 0.411 | 0.434 | 1 HSPC_UCBMC |
| ENSMMUG00000015274 | 0.69716453 | 0.24614159 | 0.256 | 0.248 | 1 HSPC_UCBMC |
| ACIN1              | 0.69896889 | 0.16336812 | 0.644 | 0.652 | 1 HSPC_UCBMC |

|                    |            |            |       |       |              |
|--------------------|------------|------------|-------|-------|--------------|
| RBBP7              | 0.69965445 | 0.27409995 | 0.478 | 0.514 | 1 HSPC_UCBMC |
| RCHY1              | 0.69976342 | 0.11769044 | 0.311 | 0.294 | 1 HSPC_UCBMC |
| HSDL2              | 0.70247346 | 0.27566011 | 0.267 | 0.251 | 1 HSPC_UCBMC |
| ARL14EP            | 0.70317858 | 0.4215334  | 0.344 | 0.353 | 1 HSPC_UCBMC |
| GPATCH2L           | 0.70620967 | 0.12306846 | 0.278 | 0.262 | 1 HSPC_UCBMC |
| FLYWCH2            | 0.70707393 | 0.23611265 | 0.3   | 0.292 | 1 HSPC_UCBMC |
| ZNF146             | 0.71388835 | 0.20276679 | 0.333 | 0.373 | 1 HSPC_UCBMC |
| MAGT1              | 0.71693165 | 0.10276362 | 0.378 | 0.375 | 1 HSPC_UCBMC |
| CNIH4              | 0.71718828 | 0.50736811 | 0.322 | 0.314 | 1 HSPC_UCBMC |
| UBA3               | 0.71892521 | 0.19217621 | 0.344 | 0.342 | 1 HSPC_UCBMC |
| IKBKB              | 0.72077825 | 0.54943962 | 0.289 | 0.303 | 1 HSPC_UCBMC |
| GSR                | 0.72381077 | 0.26701713 | 0.289 | 0.275 | 1 HSPC_UCBMC |
| MCM8               | 0.72855394 | 0.12993997 | 0.267 | 0.292 | 1 HSPC_UCBMC |
| SLC7A1             | 0.72895437 | 0.23940349 | 0.244 | 0.272 | 1 HSPC_UCBMC |
| TADA2A             | 0.73064098 | 0.53204408 | 0.256 | 0.238 | 1 HSPC_UCBMC |
| KDM5C              | 0.73092541 | 0.11503938 | 0.278 | 0.261 | 1 HSPC_UCBMC |
| NUP62CL            | 0.73205334 | 0.22829741 | 0.322 | 0.368 | 1 HSPC_UCBMC |
| ICE1               | 0.73537264 | 0.25987498 | 0.356 | 0.336 | 1 HSPC_UCBMC |
| CERS2              | 0.74095906 | 0.26019008 | 0.344 | 0.338 | 1 HSPC_UCBMC |
| WBP4               | 0.74321947 | 0.15407198 | 0.356 | 0.386 | 1 HSPC_UCBMC |
| TRNT1              | 0.7438547  | 0.20953186 | 0.389 | 0.37  | 1 HSPC_UCBMC |
| IGHMBP2            | 0.74787003 | 0.20030112 | 0.322 | 0.312 | 1 HSPC_UCBMC |
| MED25              | 0.74813284 | 0.12249005 | 0.467 | 0.447 | 1 HSPC_UCBMC |
| RPP14              | 0.74886851 | 0.25673918 | 0.311 | 0.362 | 1 HSPC_UCBMC |
| TRAPPC4            | 0.74898481 | 0.21059539 | 0.378 | 0.399 | 1 HSPC_UCBMC |
| MRPL13             | 0.75113475 | 0.33943496 | 0.467 | 0.442 | 1 HSPC_UCBMC |
| ENSMMUG00000007732 | 0.75209002 | 0.32087024 | 0.289 | 0.281 | 1 HSPC_UCBMC |
| BORCS5             | 0.75292407 | 0.18983564 | 0.256 | 0.25  | 1 HSPC_UCBMC |
| CIBAR1             | 0.75724227 | 0.34300496 | 0.278 | 0.274 | 1 HSPC_UCBMC |
| TRIM27             | 0.7598565  | 0.2832425  | 0.267 | 0.292 | 1 HSPC_UCBMC |
| PSMC5              | 0.76019885 | 0.2134438  | 0.478 | 0.464 | 1 HSPC_UCBMC |
| PTOV1              | 0.76643888 | 0.12706851 | 0.3   | 0.333 | 1 HSPC_UCBMC |
| LIN7C              | 0.7681029  | 0.7877665  | 0.244 | 0.29  | 1 HSPC_UCBMC |

|         |            |            |       |       |              |
|---------|------------|------------|-------|-------|--------------|
| SLAIN2  | 0.76852521 | 0.259835   | 0.344 | 0.338 | 1 HSPC_UCBMC |
| UBQLN1  | 0.76926527 | 0.16767178 | 0.489 | 0.479 | 1 HSPC_UCBMC |
| PPP2R1B | 0.77340475 | 0.40961569 | 0.344 | 0.329 | 1 HSPC_UCBMC |
| BAG6    | 0.77715608 | 0.43931404 | 0.3   | 0.287 | 1 HSPC_UCBMC |
| HSF1    | 0.782008   | 0.24630215 | 0.356 | 0.353 | 1 HSPC_UCBMC |
| MRPL33  | 0.78661269 | 0.2743572  | 0.444 | 0.46  | 1 HSPC_UCBMC |
| WDR75   | 0.78675008 | 0.22629418 | 0.344 | 0.346 | 1 HSPC_UCBMC |
| MRPS22  | 0.78714023 | 0.2302977  | 0.289 | 0.323 | 1 HSPC_UCBMC |
| HNRNPU  | 0.78755072 | 0.11898692 | 0.889 | 0.821 | 1 HSPC_UCBMC |
| SNX17   | 0.79012088 | 0.28982701 | 0.311 | 0.301 | 1 HSPC_UCBMC |
| STYX    | 0.79711601 | 0.36597112 | 0.289 | 0.292 | 1 HSPC_UCBMC |
| ZXDC    | 0.79899077 | 0.26576565 | 0.267 | 0.264 | 1 HSPC_UCBMC |
| HSPA14  | 0.80040785 | 0.1039833  | 0.367 | 0.381 | 1 HSPC_UCBMC |
| UFM1    | 0.80480938 | 0.18058058 | 0.311 | 0.311 | 1 HSPC_UCBMC |
| MSH2    | 0.80876841 | 0.56313405 | 0.344 | 0.357 | 1 HSPC_UCBMC |
| MYNN    | 0.80960923 | 0.63910483 | 0.278 | 0.288 | 1 HSPC_UCBMC |
| ZCCHC17 | 0.81165376 | 0.10757544 | 0.311 | 0.323 | 1 HSPC_UCBMC |
| CHCHD1  | 0.81182242 | 0.23969393 | 0.467 | 0.49  | 1 HSPC_UCBMC |
| TIMM17A | 0.81187399 | 0.42919925 | 0.378 | 0.414 | 1 HSPC_UCBMC |
| NFYC    | 0.81197462 | 0.18324304 | 0.378 | 0.39  | 1 HSPC_UCBMC |
| AZIN1   | 0.81537163 | 0.14799587 | 0.433 | 0.457 | 1 HSPC_UCBMC |
| PRIMPOL | 0.81767372 | 0.11617429 | 0.389 | 0.375 | 1 HSPC_UCBMC |
| PPIE    | 0.81908755 | 0.19369764 | 0.256 | 0.248 | 1 HSPC_UCBMC |
| PIH1D1  | 0.81954599 | 0.14059995 | 0.322 | 0.322 | 1 HSPC_UCBMC |
| COPZ1   | 0.82731275 | 0.13508192 | 0.3   | 0.298 | 1 HSPC_UCBMC |
| DTD1    | 0.82823997 | 0.10442422 | 0.444 | 0.453 | 1 HSPC_UCBMC |
| LIN54   | 0.83076337 | 0.19079161 | 0.344 | 0.342 | 1 HSPC_UCBMC |
| CLPX    | 0.83710919 | 0.50002887 | 0.322 | 0.323 | 1 HSPC_UCBMC |
| GOLM2   | 0.83753516 | 0.24732295 | 0.467 | 0.475 | 1 HSPC_UCBMC |
| FAM53C  | 0.83784954 | 0.3293796  | 0.322 | 0.316 | 1 HSPC_UCBMC |
| MMADHC  | 0.84047913 | 0.48628695 | 0.311 | 0.303 | 1 HSPC_UCBMC |
| SAV1    | 0.84080436 | 0.12129923 | 0.222 | 0.25  | 1 HSPC_UCBMC |
| UBR7    | 0.84284763 | 0.67960434 | 0.267 | 0.277 | 1 HSPC_UCBMC |

|                   |            |            |       |       |              |
|-------------------|------------|------------|-------|-------|--------------|
| DKC1              | 0.84286551 | 0.35085183 | 0.4   | 0.421 | 1 HSPC_UCBMC |
| UBE2V2            | 0.84443032 | 0.27811467 | 0.4   | 0.396 | 1 HSPC_UCBMC |
| PCBD2             | 0.84622546 | 0.24293099 | 0.289 | 0.281 | 1 HSPC_UCBMC |
| VPS35             | 0.8487511  | 0.31014956 | 0.322 | 0.327 | 1 HSPC_UCBMC |
| UCK2              | 0.86093346 | 0.32289704 | 0.489 | 0.473 | 1 HSPC_UCBMC |
| KLHDC4            | 0.86151494 | 0.23511244 | 0.256 | 0.253 | 1 HSPC_UCBMC |
| ENSMUG00000056683 | 0.86437074 | 0.1142709  | 0.3   | 0.292 | 1 HSPC_UCBMC |
| CFAP298           | 0.86513397 | 0.14922502 | 0.289 | 0.307 | 1 HSPC_UCBMC |
| ASXL1             | 0.86531757 | 0.20858945 | 0.378 | 0.39  | 1 HSPC_UCBMC |
| SLC3A2            | 0.86852238 | 0.13463263 | 0.367 | 0.373 | 1 HSPC_UCBMC |
| NOLC1             | 0.87033562 | 0.38637339 | 0.389 | 0.384 | 1 HSPC_UCBMC |
| CGGBP1            | 0.87096389 | 0.15255193 | 0.411 | 0.431 | 1 HSPC_UCBMC |
| NUP58             | 0.87328481 | 0.30178424 | 0.311 | 0.327 | 1 HSPC_UCBMC |
| ARCN1             | 0.87475723 | 0.19962135 | 0.367 | 0.373 | 1 HSPC_UCBMC |
| DDRKG1            | 0.87579489 | 0.16784746 | 0.378 | 0.381 | 1 HSPC_UCBMC |
| CUL7              | 0.8776218  | 0.3182394  | 0.389 | 0.399 | 1 HSPC_UCBMC |
| TMEM167A          | 0.87803333 | 0.13892394 | 0.4   | 0.399 | 1 HSPC_UCBMC |
| EPB41L2           | 0.88048563 | 0.13421956 | 0.356 | 0.359 | 1 HSPC_UCBMC |
| PIN1              | 0.88171578 | 0.62745175 | 0.344 | 0.39  | 1 HSPC_UCBMC |
| MPHOSPH6          | 0.88265813 | 0.12334488 | 0.267 | 0.279 | 1 HSPC_UCBMC |
| COX19             | 0.88548684 | 0.17511884 | 0.344 | 0.355 | 1 HSPC_UCBMC |
| MPC1              | 0.88705488 | 0.14844516 | 0.289 | 0.314 | 1 HSPC_UCBMC |
| CD81              | 0.88886222 | 0.1134213  | 0.478 | 0.519 | 1 HSPC_UCBMC |
| HIBADH            | 0.88979168 | 0.22679634 | 0.333 | 0.349 | 1 HSPC_UCBMC |
| ATG16L1           | 0.8900991  | 0.23476651 | 0.256 | 0.262 | 1 HSPC_UCBMC |
| TOMM70            | 0.89064503 | 0.17315526 | 0.256 | 0.25  | 1 HSPC_UCBMC |
| SRPRB             | 0.89075412 | 0.10914394 | 0.267 | 0.274 | 1 HSPC_UCBMC |
| DHRS3             | 0.89217031 | 0.74561043 | 0.289 | 0.314 | 1 HSPC_UCBMC |
| NFE2L2            | 0.89408473 | 0.10162705 | 0.4   | 0.416 | 1 HSPC_UCBMC |
| SLC30A9           | 0.89697954 | 0.11828276 | 0.533 | 0.525 | 1 HSPC_UCBMC |
| GBF1              | 0.90166386 | 0.1203588  | 0.411 | 0.401 | 1 HSPC_UCBMC |
| TRAPPC3           | 0.90225612 | 0.10597379 | 0.278 | 0.288 | 1 HSPC_UCBMC |
| HM13              | 0.90409871 | 0.1557229  | 0.4   | 0.407 | 1 HSPC_UCBMC |

|                    |            |            |       |       |              |
|--------------------|------------|------------|-------|-------|--------------|
| ABHD2              | 0.9101987  | 0.12376018 | 0.4   | 0.396 | 1 HSPC_UCBMC |
| RTCB               | 0.91202898 | 0.16154859 | 0.322 | 0.34  | 1 HSPC_UCBMC |
| USP20              | 0.91359146 | 0.37584679 | 0.244 | 0.253 | 1 HSPC_UCBMC |
| ENSMMUG00000055376 | 0.91363414 | 0.25360758 | 0.389 | 0.421 | 1 HSPC_UCBMC |
| PSMG1              | 0.91381409 | 0.43783521 | 0.344 | 0.373 | 1 HSPC_UCBMC |
| C6H5orf24          | 0.91822595 | 0.44556426 | 0.244 | 0.261 | 1 HSPC_UCBMC |
| TIMM8B             | 0.92413318 | 0.1188573  | 0.478 | 0.501 | 1 HSPC_UCBMC |
| GCC2               | 0.92553788 | 0.26246243 | 0.411 | 0.418 | 1 HSPC_UCBMC |
| GALNT2             | 0.9258889  | 0.34000045 | 0.478 | 0.497 | 1 HSPC_UCBMC |
| PSMC4              | 0.92726936 | 0.12541562 | 0.433 | 0.445 | 1 HSPC_UCBMC |
| CMAH               | 0.92754203 | 0.37848162 | 0.411 | 0.449 | 1 HSPC_UCBMC |
| TM9SF1             | 0.93320303 | 0.14075715 | 0.311 | 0.325 | 1 HSPC_UCBMC |
| BSCL2              | 0.93531392 | 0.21839266 | 0.256 | 0.259 | 1 HSPC_UCBMC |
| CNIH1              | 0.93639087 | 0.32483448 | 0.311 | 0.329 | 1 HSPC_UCBMC |
| RBM41              | 0.93778851 | 0.10624428 | 0.311 | 0.322 | 1 HSPC_UCBMC |
| LDAH               | 0.93899853 | 0.23491704 | 0.244 | 0.262 | 1 HSPC_UCBMC |
| TAPBP              | 0.93961973 | 0.19463562 | 0.389 | 0.396 | 1 HSPC_UCBMC |
| ROGDI              | 0.9452301  | 0.22639343 | 0.244 | 0.25  | 1 HSPC_UCBMC |
| AP2M1              | 0.94728154 | 0.11291931 | 0.533 | 0.538 | 1 HSPC_UCBMC |
| USO1               | 0.94796238 | 0.11618549 | 0.389 | 0.401 | 1 HSPC_UCBMC |
| RINT1              | 0.95034135 | 0.46193854 | 0.3   | 0.309 | 1 HSPC_UCBMC |
| MCTS1              | 0.9522702  | 0.27465446 | 0.311 | 0.331 | 1 HSPC_UCBMC |
| ATG4C              | 0.95511939 | 0.27732519 | 0.367 | 0.36  | 1 HSPC_UCBMC |
| TTF1               | 0.95679056 | 0.33141484 | 0.278 | 0.285 | 1 HSPC_UCBMC |
| CHTOP              | 0.95719157 | 0.25322959 | 0.322 | 0.342 | 1 HSPC_UCBMC |
| POP5               | 0.96045921 | 0.34435663 | 0.322 | 0.362 | 1 HSPC_UCBMC |
| HERPUD2            | 0.96267343 | 0.23785946 | 0.356 | 0.386 | 1 HSPC_UCBMC |
| PUS7               | 0.962768   | 0.19257931 | 0.311 | 0.314 | 1 HSPC_UCBMC |
| MAPKAP1            | 0.97071196 | 0.1325578  | 0.456 | 0.462 | 1 HSPC_UCBMC |
| PCID2              | 0.97139986 | 0.18608567 | 0.344 | 0.368 | 1 HSPC_UCBMC |
| AGGF1              | 0.97161277 | 0.65996991 | 0.278 | 0.299 | 1 HSPC_UCBMC |
| POLR3E             | 0.97544427 | 0.10269834 | 0.244 | 0.251 | 1 HSPC_UCBMC |
| ENSMMUG00000045425 | 0.9762417  | 0.14333046 | 0.522 | 0.521 | 1 HSPC_UCBMC |

|                    |            |            |       |       |          |             |
|--------------------|------------|------------|-------|-------|----------|-------------|
| DHX8               | 0.9770818  | 0.14908819 | 0.3   | 0.292 | 1        | HSPC_UCBMC  |
| RNF11              | 0.98509847 | 0.10697591 | 0.4   | 0.401 | 1        | HSPC_UCBMC  |
| CREB1              | 0.9855969  | 0.17559446 | 0.511 | 0.549 | 1        | HSPC_UCBMC  |
| TTC19              | 0.98853345 | 0.18164113 | 0.389 | 0.412 | 1        | HSPC_UCBMC  |
| MYDGF              | 0.99154109 | 0.18893491 | 0.489 | 0.523 | 1        | HSPC_UCBMC  |
| CCDC66             | 0.99527456 | 0.14696556 | 0.422 | 0.418 | 1        | HSPC_UCBMC  |
| ODF2L              | 0.99967403 | 0.23634108 | 0.244 | 0.255 | 1        | HSPC_UCBMC  |
| MRPS7              | 1          | 0.34209443 | 0.256 | 0.266 | 1        | HSPC_UCBMC  |
| ENSMMUG00000054358 | 5.44E-33   | 2.95555023 | 0.99  | 0.858 | 1.93E-28 | HSPC_spleen |
| SLC25A37           | 3.23E-25   | 4.46551944 | 0.726 | 0.242 | 1.14E-20 | HSPC_spleen |
| RPL13              | 3.68E-23   | 1.67325906 | 0.922 | 0.883 | 1.31E-18 | HSPC_spleen |
| SPTA1              | 4.68E-23   | 5.98497715 | 0.571 | 0.067 | 1.66E-18 | HSPC_spleen |
| ANK1               | 7.91E-23   | 4.1635894  | 0.616 | 0.117 | 2.80E-18 | HSPC_spleen |
| ENSMMUG00000051300 | 2.05E-21   | 1.11021323 | 0.986 | 0.808 | 7.28E-17 | HSPC_spleen |
| HEMGN              | 9.37E-21   | 2.90375814 | 0.708 | 0.275 | 3.32E-16 | HSPC_spleen |
| ENSMMUG00000044429 | 1.03E-20   | 6.48315039 | 0.509 | 0.033 | 3.66E-16 | HSPC_spleen |
| ALAS2              | 7.61E-20   | 3.84730941 | 0.54  | 0.067 | 2.70E-15 | HSPC_spleen |
| ERMAP              | 1.05E-19   | 4.1824472  | 0.558 | 0.1   | 3.73E-15 | HSPC_spleen |
| SLC4A1             | 1.65E-19   | 4.88114154 | 0.483 | 0.017 | 5.85E-15 | HSPC_spleen |
| FECH               | 1.75E-19   | 3.01156795 | 0.642 | 0.2   | 6.21E-15 | HSPC_spleen |
| SOX6               | 2.76E-19   | 5.53331588 | 0.534 | 0.092 | 9.78E-15 | HSPC_spleen |
| SPTB               | 2.13E-18   | 5.07327219 | 0.462 | 0.017 | 7.53E-14 | HSPC_spleen |
| TRAK2              | 3.24E-18   | 3.75932788 | 0.683 | 0.292 | 1.15E-13 | HSPC_spleen |
| PIP5K1B            | 6.99E-18   | 3.28901671 | 0.634 | 0.217 | 2.48E-13 | HSPC_spleen |
| SLC2A1             | 9.24E-18   | 4.64026466 | 0.489 | 0.058 | 3.27E-13 | HSPC_spleen |
| SPECC1             | 1.01E-17   | 2.86665179 | 0.712 | 0.308 | 3.59E-13 | HSPC_spleen |
| AHSP               | 1.01E-17   | 3.65964782 | 0.523 | 0.083 | 3.59E-13 | HSPC_spleen |
| RHAG               | 1.11E-17   | 4.11971998 | 0.509 | 0.083 | 3.95E-13 | HSPC_spleen |
| HBM                | 1.35E-17   | 5.61579677 | 0.479 | 0.058 | 4.77E-13 | HSPC_spleen |
| MKI67              | 1.98E-17   | 3.58092553 | 0.626 | 0.242 | 7.01E-13 | HSPC_spleen |
| RHCE               | 3.88E-17   | 5.54625429 | 0.444 | 0.025 | 1.37E-12 | HSPC_spleen |
| C1QBP              | 4.28E-17   | 1.96883403 | 0.656 | 0.225 | 1.52E-12 | HSPC_spleen |
| ATP5F1D            | 7.36E-17   | 1.87121124 | 0.638 | 0.208 | 2.61E-12 | HSPC_spleen |

|                    |          |            |       |       |          |             |
|--------------------|----------|------------|-------|-------|----------|-------------|
| KEL                | 8.66E-17 | 4.82124805 | 0.454 | 0.042 | 3.07E-12 | HSPC_spleen |
| EPB42              | 1.37E-16 | 7.07823093 | 0.413 | 0.008 | 4.85E-12 | HSPC_spleen |
| UBAC1              | 1.68E-16 | 2.5437045  | 0.581 | 0.167 | 5.96E-12 | HSPC_spleen |
| TRAPPC5            | 1.87E-16 | 3.85205391 | 0.444 | 0.033 | 6.62E-12 | HSPC_spleen |
| GADD45GIP1         | 2.84E-16 | 2.7751865  | 0.56  | 0.15  | 1.01E-11 | HSPC_spleen |
| CENPF              | 3.71E-16 | 3.92998527 | 0.562 | 0.183 | 1.31E-11 | HSPC_spleen |
| TMPO               | 5.25E-16 | 2.34249172 | 0.616 | 0.217 | 1.86E-11 | HSPC_spleen |
| NOP53              | 7.38E-16 | 1.63240548 | 0.652 | 0.25  | 2.62E-11 | HSPC_spleen |
| ABCB10             | 7.92E-16 | 3.67596733 | 0.532 | 0.142 | 2.81E-11 | HSPC_spleen |
| CHCHD10            | 8.05E-16 | 2.60538003 | 0.497 | 0.092 | 2.85E-11 | HSPC_spleen |
| UROS               | 8.51E-16 | 2.97052084 | 0.552 | 0.167 | 3.02E-11 | HSPC_spleen |
| DIAPH3             | 9.46E-16 | 4.06896706 | 0.468 | 0.067 | 3.35E-11 | HSPC_spleen |
| TESC               | 9.50E-16 | 3.20026494 | 0.472 | 0.067 | 3.37E-11 | HSPC_spleen |
| TFRC               | 9.70E-16 | 2.06796597 | 0.74  | 0.425 | 3.44E-11 | HSPC_spleen |
| CPOX               | 1.84E-15 | 3.48872357 | 0.485 | 0.092 | 6.52E-11 | HSPC_spleen |
| TXNL4A             | 1.95E-15 | 2.02175268 | 0.601 | 0.192 | 6.92E-11 | HSPC_spleen |
| NFIA               | 2.33E-15 | 3.47616388 | 0.568 | 0.192 | 8.25E-11 | HSPC_spleen |
| TMEM131L           | 2.46E-15 | 2.01155889 | 0.836 | 0.492 | 8.72E-11 | HSPC_spleen |
| RRM2               | 3.12E-15 | 3.47100264 | 0.46  | 0.067 | 1.11E-10 | HSPC_spleen |
| BLVRB              | 3.87E-15 | 1.80437881 | 0.699 | 0.333 | 1.37E-10 | HSPC_spleen |
| CA1                | 4.17E-15 | 4.53683994 | 0.47  | 0.083 | 1.48E-10 | HSPC_spleen |
| ITSN1              | 6.70E-15 | 5.16128218 | 0.411 | 0.033 | 2.37E-10 | HSPC_spleen |
| RPS2               | 1.15E-14 | 1.28918622 | 0.828 | 0.717 | 4.06E-10 | HSPC_spleen |
| ANP32B             | 1.25E-14 | 1.00610889 | 0.869 | 0.658 | 4.41E-10 | HSPC_spleen |
| GLRX5              | 1.56E-14 | 2.5648067  | 0.485 | 0.1   | 5.53E-10 | HSPC_spleen |
| FCGR2B             | 2.43E-14 | 3.43828158 | 0.47  | 0.092 | 8.62E-10 | HSPC_spleen |
| HMBS               | 2.47E-14 | 3.11713129 | 0.538 | 0.192 | 8.74E-10 | HSPC_spleen |
| TOP2A              | 2.95E-14 | 4.20735106 | 0.468 | 0.108 | 1.05E-09 | HSPC_spleen |
| SRSF2              | 3.13E-14 | 1.16820829 | 0.767 | 0.425 | 1.11E-09 | HSPC_spleen |
| CR1L               | 4.24E-14 | 3.12575716 | 0.671 | 0.325 | 1.50E-09 | HSPC_spleen |
| NCAPG              | 4.62E-14 | 4.51001947 | 0.409 | 0.05  | 1.64E-09 | HSPC_spleen |
| ENSMMUG00000008417 | 6.65E-14 | 1.526202   | 0.519 | 0.125 | 2.36E-09 | HSPC_spleen |
| DEK                | 6.91E-14 | 1.21586618 | 0.751 | 0.467 | 2.45E-09 | HSPC_spleen |



|                    |          |            |       |       |          |             |
|--------------------|----------|------------|-------|-------|----------|-------------|
| DMTN               | 7.04E-14 | 7.07444189 | 0.348 | 0     | 2.50E-09 | HSPC_spleen |
| ATAD5              | 9.17E-14 | 2.69928145 | 0.589 | 0.25  | 3.25E-09 | HSPC_spleen |
| H2AFX              | 9.35E-14 | 2.58433951 | 0.456 | 0.092 | 3.31E-09 | HSPC_spleen |
| UBE2S              | 9.62E-14 | 1.67033068 | 0.587 | 0.208 | 3.41E-09 | HSPC_spleen |
| MYH10              | 1.05E-13 | 2.69121417 | 0.546 | 0.183 | 3.74E-09 | HSPC_spleen |
| PRC1               | 1.08E-13 | 3.22882606 | 0.481 | 0.117 | 3.83E-09 | HSPC_spleen |
| OSBP2              | 1.23E-13 | 4.55603242 | 0.389 | 0.033 | 4.35E-09 | HSPC_spleen |
| HBA                | 1.26E-13 | 2.82288777 | 0.718 | 0.533 | 4.48E-09 | HSPC_spleen |
| ASPM               | 1.72E-13 | 5.49399162 | 0.378 | 0.025 | 6.10E-09 | HSPC_spleen |
| HMGB2              | 1.90E-13 | 1.56129743 | 0.808 | 0.592 | 6.74E-09 | HSPC_spleen |
| PKHD1L1            | 2.10E-13 | 7.15612878 | 0.348 | 0.008 | 7.45E-09 | HSPC_spleen |
| H1FX               | 2.30E-13 | 2.00345745 | 0.46  | 0.083 | 8.14E-09 | HSPC_spleen |
| AP1B1              | 2.75E-13 | 2.36472953 | 0.532 | 0.175 | 9.73E-09 | HSPC_spleen |
| HECTD4             | 2.95E-13 | 2.80107962 | 0.751 | 0.45  | 1.05E-08 | HSPC_spleen |
| FAM210B            | 2.96E-13 | 2.51849568 | 0.523 | 0.183 | 1.05E-08 | HSPC_spleen |
| SF3B3              | 2.98E-13 | 1.78615755 | 0.583 | 0.225 | 1.06E-08 | HSPC_spleen |
| CENPE              | 3.19E-13 | 3.59229356 | 0.472 | 0.117 | 1.13E-08 | HSPC_spleen |
| NEDD4L             | 3.26E-13 | 3.02210569 | 0.705 | 0.392 | 1.15E-08 | HSPC_spleen |
| LPCAT3             | 3.79E-13 | 2.38342428 | 0.64  | 0.325 | 1.34E-08 | HSPC_spleen |
| MBOAT2             | 4.07E-13 | 3.76198274 | 0.448 | 0.1   | 1.44E-08 | HSPC_spleen |
| TLCD4              | 4.22E-13 | 2.5610483  | 0.656 | 0.383 | 1.49E-08 | HSPC_spleen |
| SLC43A1            | 4.78E-13 | 2.77731717 | 0.466 | 0.108 | 1.69E-08 | HSPC_spleen |
| ENSMMUG00000065373 | 4.95E-13 | 1.45794022 | 0.965 | 0.942 | 1.75E-08 | HSPC_spleen |
| RIPOR3             | 7.18E-13 | 3.25389993 | 0.417 | 0.067 | 2.54E-08 | HSPC_spleen |
| LMO2               | 8.19E-13 | 2.06165398 | 0.55  | 0.2   | 2.90E-08 | HSPC_spleen |
| EIF2AK1            | 9.50E-13 | 1.70359695 | 0.595 | 0.225 | 3.37E-08 | HSPC_spleen |
| ENSMMUG00000052127 | 1.04E-12 | 1.47435321 | 0.998 | 0.933 | 3.68E-08 | HSPC_spleen |
| HIPK1              | 1.16E-12 | 2.12581045 | 0.701 | 0.367 | 4.12E-08 | HSPC_spleen |
| SMC4               | 1.24E-12 | 1.58046702 | 0.808 | 0.483 | 4.39E-08 | HSPC_spleen |
| PCLAF              | 1.32E-12 | 2.25635669 | 0.476 | 0.108 | 4.69E-08 | HSPC_spleen |
| FRMD4A             | 1.38E-12 | 4.55214613 | 0.368 | 0.033 | 4.90E-08 | HSPC_spleen |
| LGALS3BP           | 1.68E-12 | 2.91750619 | 0.446 | 0.108 | 5.95E-08 | HSPC_spleen |
| BTN2A2             | 1.69E-12 | 1.46743664 | 0.753 | 0.417 | 6.01E-08 | HSPC_spleen |

|                    |          |            |       |       |          |             |
|--------------------|----------|------------|-------|-------|----------|-------------|
| BRCA2              | 1.79E-12 | 3.20609246 | 0.421 | 0.075 | 6.36E-08 | HSPC_spleen |
| DLGAP5             | 2.24E-12 | 3.90885941 | 0.391 | 0.058 | 7.95E-08 | HSPC_spleen |
| ENSMMUG00000017113 | 2.46E-12 | 2.02994686 | 0.779 | 0.508 | 8.73E-08 | HSPC_spleen |
| FKBP4              | 2.66E-12 | 3.54625349 | 0.395 | 0.067 | 9.41E-08 | HSPC_spleen |
| BCAM               | 3.00E-12 | 3.24172155 | 0.386 | 0.05  | 1.06E-07 | HSPC_spleen |
| KLF1               | 3.01E-12 | 3.26896365 | 0.405 | 0.075 | 1.07E-07 | HSPC_spleen |
| GCLM               | 3.09E-12 | 3.60250812 | 0.387 | 0.058 | 1.10E-07 | HSPC_spleen |
| SLC16A10           | 5.14E-12 | 2.98703547 | 0.523 | 0.2   | 1.82E-07 | HSPC_spleen |
| SMC2               | 8.22E-12 | 2.46167356 | 0.448 | 0.117 | 2.91E-07 | HSPC_spleen |
| ENSMMUG00000054823 | 8.29E-12 | 4.9492279  | 0.329 | 0.017 | 2.94E-07 | HSPC_spleen |
| TPX2               | 9.42E-12 | 3.12058604 | 0.419 | 0.092 | 3.34E-07 | HSPC_spleen |
| TRIM10             | 9.87E-12 | 3.74359914 | 0.358 | 0.042 | 3.50E-07 | HSPC_spleen |
| RANBP1             | 1.09E-11 | 1.48149608 | 0.648 | 0.325 | 3.87E-07 | HSPC_spleen |
| HBE1               | 1.18E-11 | 2.70195757 | 0.724 | 0.608 | 4.19E-07 | HSPC_spleen |
| KIF11              | 1.18E-11 | 4.18850962 | 0.35  | 0.033 | 4.20E-07 | HSPC_spleen |
| PRDX2              | 1.71E-11 | 1.60370575 | 0.63  | 0.292 | 6.05E-07 | HSPC_spleen |
| KIF15              | 1.82E-11 | 3.77274724 | 0.358 | 0.042 | 6.45E-07 | HSPC_spleen |
| TPM1               | 2.12E-11 | 2.50140351 | 0.436 | 0.108 | 7.50E-07 | HSPC_spleen |
| SLC22A16           | 2.13E-11 | 4.50504188 | 0.319 | 0.017 | 7.55E-07 | HSPC_spleen |
| LBR                | 2.84E-11 | 1.46691575 | 0.72  | 0.408 | 1.01E-06 | HSPC_spleen |
| ENSMMUG00000016909 | 2.88E-11 | 5.89086421 | 0.323 | 0.025 | 1.02E-06 | HSPC_spleen |
| ENSMMUG00000065362 | 3.05E-11 | 1.27494764 | 0.996 | 0.983 | 1.08E-06 | HSPC_spleen |
| TCF3               | 3.36E-11 | 1.64649194 | 0.538 | 0.208 | 1.19E-06 | HSPC_spleen |
| MARK3              | 3.56E-11 | 1.84878751 | 0.773 | 0.467 | 1.26E-06 | HSPC_spleen |
| SLC25A21           | 3.58E-11 | 3.21727377 | 0.38  | 0.067 | 1.27E-06 | HSPC_spleen |
| CA2                | 3.65E-11 | 2.19059834 | 0.427 | 0.1   | 1.29E-06 | HSPC_spleen |
| TUBA4A             | 3.65E-11 | 2.18305886 | 0.528 | 0.225 | 1.29E-06 | HSPC_spleen |
| TFR2               | 3.77E-11 | 2.69429284 | 0.421 | 0.108 | 1.33E-06 | HSPC_spleen |
| DCK                | 5.88E-11 | 1.84245596 | 0.705 | 0.417 | 2.08E-06 | HSPC_spleen |
| APLP2              | 6.89E-11 | 1.41127949 | 0.691 | 0.358 | 2.44E-06 | HSPC_spleen |
| DENND2A            | 7.10E-11 | 3.56640151 | 0.348 | 0.05  | 2.51E-06 | HSPC_spleen |
| EAF2               | 7.12E-11 | 3.23711454 | 0.411 | 0.108 | 2.52E-06 | HSPC_spleen |
| PRELID1            | 8.75E-11 | 2.17962369 | 0.438 | 0.117 | 3.10E-06 | HSPC_spleen |

|         |          |            |       |       |          |             |
|---------|----------|------------|-------|-------|----------|-------------|
| BUB1B   | 8.79E-11 | 3.66766278 | 0.354 | 0.058 | 3.11E-06 | HSPC_spleen |
| MFHAS1  | 1.07E-10 | 4.02176726 | 0.364 | 0.067 | 3.81E-06 | HSPC_spleen |
| FBH1    | 1.09E-10 | 1.91588074 | 0.505 | 0.192 | 3.85E-06 | HSPC_spleen |
| ZMYND8  | 1.13E-10 | 1.17328997 | 0.838 | 0.533 | 4.00E-06 | HSPC_spleen |
| TXNDC16 | 1.20E-10 | 2.51797329 | 0.507 | 0.183 | 4.27E-06 | HSPC_spleen |
| CDC7    | 1.24E-10 | 3.48801405 | 0.403 | 0.108 | 4.39E-06 | HSPC_spleen |
| BIRC5   | 1.32E-10 | 3.04601877 | 0.348 | 0.05  | 4.67E-06 | HSPC_spleen |
| MYL4    | 1.33E-10 | 2.72815615 | 0.387 | 0.083 | 4.72E-06 | HSPC_spleen |
| NSD2    | 1.78E-10 | 1.93774102 | 0.652 | 0.35  | 6.31E-06 | HSPC_spleen |
| TMEM160 | 1.84E-10 | 1.34149304 | 0.438 | 0.125 | 6.51E-06 | HSPC_spleen |
| CDC20   | 2.24E-10 | 3.08461674 | 0.35  | 0.058 | 7.92E-06 | HSPC_spleen |
| DCAF8   | 2.29E-10 | 1.8425548  | 0.681 | 0.375 | 8.10E-06 | HSPC_spleen |
| BACE2   | 2.37E-10 | 1.93660395 | 0.507 | 0.183 | 8.38E-06 | HSPC_spleen |
| SRRM2   | 2.41E-10 | 0.71269359 | 0.775 | 0.458 | 8.54E-06 | HSPC_spleen |
| AMMECR1 | 2.51E-10 | 2.78002308 | 0.477 | 0.167 | 8.89E-06 | HSPC_spleen |
| RFESD   | 2.63E-10 | 1.9419003  | 0.366 | 0.058 | 9.31E-06 | HSPC_spleen |
| ORC2    | 2.66E-10 | 2.07195967 | 0.569 | 0.267 | 9.42E-06 | HSPC_spleen |
| SNCA    | 3.07E-10 | 5.75512412 | 0.28  | 0.008 | 1.09E-05 | HSPC_spleen |
| HNRNPAB | 3.48E-10 | 1.32670376 | 0.558 | 0.242 | 1.23E-05 | HSPC_spleen |
| FAM53B  | 3.79E-10 | 1.9279592  | 0.466 | 0.15  | 1.34E-05 | HSPC_spleen |
| CIT     | 3.84E-10 | 2.77893908 | 0.423 | 0.117 | 1.36E-05 | HSPC_spleen |
| ALOX15  | 4.07E-10 | 2.04074366 | 0.509 | 0.217 | 1.44E-05 | HSPC_spleen |
| H4C15   | 4.22E-10 | 1.23728851 | 0.652 | 0.367 | 1.49E-05 | HSPC_spleen |
| ATAD2   | 4.42E-10 | 2.35936814 | 0.515 | 0.225 | 1.57E-05 | HSPC_spleen |
| CDC27   | 4.76E-10 | 1.83508524 | 0.703 | 0.433 | 1.69E-05 | HSPC_spleen |
| REPS2   | 4.98E-10 | 4.1797827  | 0.305 | 0.033 | 1.77E-05 | HSPC_spleen |
| SQSTM1  | 5.25E-10 | 1.16163688 | 0.659 | 0.358 | 1.86E-05 | HSPC_spleen |
| SLC20A1 | 6.38E-10 | 1.79596675 | 0.55  | 0.242 | 2.26E-05 | HSPC_spleen |
| NHLRC2  | 6.58E-10 | 1.73711443 | 0.532 | 0.2   | 2.33E-05 | HSPC_spleen |
| PCNA    | 7.20E-10 | 1.74156157 | 0.521 | 0.225 | 2.55E-05 | HSPC_spleen |
| COX5A   | 7.34E-10 | 1.3534301  | 0.614 | 0.317 | 2.60E-05 | HSPC_spleen |
| TYMS    | 7.38E-10 | 2.14110301 | 0.427 | 0.133 | 2.61E-05 | HSPC_spleen |
| POLA1   | 7.43E-10 | 2.22814827 | 0.548 | 0.25  | 2.63E-05 | HSPC_spleen |

|                    |          |            |       |       |            |             |
|--------------------|----------|------------|-------|-------|------------|-------------|
| PCNT               | 7.67E-10 | 2.46824732 | 0.415 | 0.125 | 2.72E-05   | HSPC_spleen |
| KNTC1              | 7.75E-10 | 3.23463401 | 0.354 | 0.075 | 2.74E-05   | HSPC_spleen |
| SSBP3              | 7.88E-10 | 1.16275706 | 0.769 | 0.45  | 2.79E-05   | HSPC_spleen |
| ENSMMUG00000063859 | 8.90E-10 | 2.15034818 | 0.45  | 0.15  | 3.15E-05   | HSPC_spleen |
| NUF2               | 9.42E-10 | 3.33276707 | 0.342 | 0.067 | 3.34E-05   | HSPC_spleen |
| MZT2B              | 9.72E-10 | 1.65325761 | 0.499 | 0.208 | 3.45E-05   | HSPC_spleen |
| LRRN2              | 9.93E-10 | 3.32821523 | 0.321 | 0.042 | 3.52E-05   | HSPC_spleen |
| MYBL2              | 1.02E-09 | 2.27560369 | 0.364 | 0.075 | 3.63E-05   | HSPC_spleen |
| NUP210             | 1.11E-09 | 1.66582708 | 0.536 | 0.242 | 3.92E-05   | HSPC_spleen |
| NCAPG2             | 1.28E-09 | 2.71034333 | 0.35  | 0.067 | 4.53E-05   | HSPC_spleen |
| ZGRF1              | 1.35E-09 | 2.61913978 | 0.372 | 0.083 | 4.80E-05   | HSPC_spleen |
| TRIR               | 1.36E-09 | 0.72579272 | 0.712 | 0.383 | 4.83E-05   | HSPC_spleen |
| CLTA               | 1.41E-09 | 1.11666155 | 0.65  | 0.383 | 4.99E-05   | HSPC_spleen |
| SLC11A2            | 1.62E-09 | 2.46603082 | 0.456 | 0.175 | 5.72E-05   | HSPC_spleen |
| CYC1               | 1.66E-09 | 1.35022684 | 0.577 | 0.283 | 5.87E-05   | HSPC_spleen |
| EHBP1L1            | 1.86E-09 | 1.98862885 | 0.294 | 0.025 | 6.59E-05   | HSPC_spleen |
| MRPS27             | 1.89E-09 | 1.75429511 | 0.493 | 0.175 | 6.70E-05   | HSPC_spleen |
| KMT5A              | 1.92E-09 | 2.61345669 | 0.391 | 0.117 | 6.79E-05   | HSPC_spleen |
| TRPM7              | 2.13E-09 | 1.19895981 | 0.793 | 0.567 | 7.54E-05   | HSPC_spleen |
| DENND1A            | 2.32E-09 | 2.04402348 | 0.72  | 0.467 | 8.23E-05   | HSPC_spleen |
| MMS22L             | 2.34E-09 | 2.65868346 | 0.411 | 0.133 | 8.28E-05   | HSPC_spleen |
| SLC25A42           | 2.53E-09 | 2.72177727 | 0.384 | 0.108 | 8.97E-05   | HSPC_spleen |
| RGCC               | 2.53E-09 | 1.52795284 | 0.577 | 0.3   | 8.98E-05   | HSPC_spleen |
| MGAT5              | 2.62E-09 | 1.72945884 | 0.771 | 0.533 | 9.27E-05   | HSPC_spleen |
| APOBEC3H           | 2.66E-09 | 2.497169   | 0.397 | 0.117 | 9.43E-05   | HSPC_spleen |
| PRR5               | 2.72E-09 | 2.67187939 | 0.356 | 0.083 | 9.65E-05   | HSPC_spleen |
| ARHGAP11A          | 2.73E-09 | 3.5278558  | 0.317 | 0.05  | 9.67E-05   | HSPC_spleen |
| CRACD              | 2.75E-09 | 1.71788309 | 0.614 | 0.325 | 9.75E-05   | HSPC_spleen |
| POLQ               | 2.81E-09 | 2.27171669 | 0.344 | 0.067 | 9.94E-05   | HSPC_spleen |
| STRN3              | 2.87E-09 | 1.58806768 | 0.642 | 0.342 | 0.00010154 | HSPC_spleen |
| Metazoa-SRP.1340   | 3.11E-09 | 2.66903846 | 0.331 | 0.058 | 0.00011007 | HSPC_spleen |
| PPIA               | 3.33E-09 | 0.70737947 | 0.495 | 0.175 | 0.0001179  | HSPC_spleen |
| SRGAP2             | 3.50E-09 | 2.58911789 | 0.37  | 0.083 | 0.00012416 | HSPC_spleen |

|          |          |            |       |       |            |             |
|----------|----------|------------|-------|-------|------------|-------------|
| ADAM10   | 3.94E-09 | 1.30959    | 0.779 | 0.5   | 0.00013952 | HSPC_spleen |
| GAB1     | 4.11E-09 | 1.76635087 | 0.577 | 0.283 | 0.00014554 | HSPC_spleen |
| PIEZO1   | 4.11E-09 | 2.37311272 | 0.405 | 0.125 | 0.00014564 | HSPC_spleen |
| LARP1    | 4.26E-09 | 1.19729889 | 0.581 | 0.267 | 0.00015082 | HSPC_spleen |
| SLC1A5   | 4.38E-09 | 2.72559804 | 0.321 | 0.058 | 0.0001553  | HSPC_spleen |
| HMGA1    | 4.51E-09 | 1.26306545 | 0.689 | 0.442 | 0.00015993 | HSPC_spleen |
| ANLN     | 4.55E-09 | 3.99262957 | 0.295 | 0.042 | 0.00016116 | HSPC_spleen |
| GCLC     | 4.63E-09 | 2.80188332 | 0.386 | 0.108 | 0.00016411 | HSPC_spleen |
| NUSAP1   | 4.73E-09 | 3.3487962  | 0.321 | 0.058 | 0.00016775 | HSPC_spleen |
| ANKH     | 4.96E-09 | 1.7868624  | 0.538 | 0.242 | 0.00017575 | HSPC_spleen |
| NFE2     | 5.13E-09 | 1.33607872 | 0.542 | 0.233 | 0.00018168 | HSPC_spleen |
| PPP2R5B  | 5.67E-09 | 2.75063378 | 0.278 | 0.025 | 0.00020095 | HSPC_spleen |
| CREG1    | 6.00E-09 | 2.32552981 | 0.386 | 0.108 | 0.0002126  | HSPC_spleen |
| STUB1    | 6.17E-09 | 2.2995669  | 0.401 | 0.133 | 0.0002187  | HSPC_spleen |
| ARHGEF12 | 6.61E-09 | 2.93675842 | 0.476 | 0.2   | 0.00023404 | HSPC_spleen |
| BMP2K    | 6.61E-09 | 1.20546224 | 0.718 | 0.467 | 0.00023436 | HSPC_spleen |
| FBXW7    | 6.67E-09 | 1.22286677 | 0.851 | 0.783 | 0.0002362  | HSPC_spleen |
| ABCB1    | 6.79E-09 | 1.7156146  | 0.438 | 0.158 | 0.00024076 | HSPC_spleen |
| RNF123   | 6.90E-09 | 3.11211841 | 0.325 | 0.067 | 0.00024443 | HSPC_spleen |
| PAPSS2   | 7.05E-09 | 1.67451031 | 0.495 | 0.217 | 0.00024982 | HSPC_spleen |
| TMOD1    | 7.16E-09 | 4.4372359  | 0.26  | 0.017 | 0.00025358 | HSPC_spleen |
| UBE2O    | 7.48E-09 | 3.45083077 | 0.37  | 0.1   | 0.00026495 | HSPC_spleen |
| PGRMC2   | 7.69E-09 | 1.09714945 | 0.421 | 0.117 | 0.00027238 | HSPC_spleen |
| CHCHD3   | 7.71E-09 | 1.25920536 | 0.689 | 0.433 | 0.00027331 | HSPC_spleen |
| GLUL     | 8.17E-09 | 1.63336493 | 0.485 | 0.2   | 0.00028959 | HSPC_spleen |
| WNK1     | 8.66E-09 | 1.67504994 | 0.816 | 0.608 | 0.00030686 | HSPC_spleen |
| CPEB4    | 9.03E-09 | 1.76415743 | 0.524 | 0.225 | 0.00031993 | HSPC_spleen |
| ASAP1    | 9.33E-09 | 1.65658514 | 0.691 | 0.475 | 0.00033072 | HSPC_spleen |
| ADD2     | 9.36E-09 | 3.27884043 | 0.284 | 0.033 | 0.00033147 | HSPC_spleen |
| DECR1    | 9.43E-09 | 1.15309421 | 0.689 | 0.367 | 0.00033413 | HSPC_spleen |
| TACC3    | 9.49E-09 | 1.70433488 | 0.497 | 0.217 | 0.00033625 | HSPC_spleen |
| H4C5     | 9.50E-09 | 2.18272178 | 0.474 | 0.217 | 0.00033675 | HSPC_spleen |
| KIF4A    | 1.01E-08 | 4.76635761 | 0.274 | 0.033 | 0.00035643 | HSPC_spleen |

|                    |          |            |       |       |            |             |
|--------------------|----------|------------|-------|-------|------------|-------------|
| RAB6B              | 1.02E-08 | 1.48884559 | 0.476 | 0.175 | 0.00036294 | HSPC_spleen |
| EPOR               | 1.13E-08 | 1.8445717  | 0.342 | 0.083 | 0.0003997  | HSPC_spleen |
| ASPH               | 1.15E-08 | 1.07446134 | 0.603 | 0.317 | 0.00040681 | HSPC_spleen |
| FBXO5              | 1.16E-08 | 2.31374187 | 0.329 | 0.067 | 0.00041257 | HSPC_spleen |
| UROD               | 1.19E-08 | 1.01825829 | 0.595 | 0.283 | 0.00042029 | HSPC_spleen |
| CDK1               | 1.28E-08 | 2.38009969 | 0.321 | 0.058 | 0.00045421 | HSPC_spleen |
| AURKAIP1           | 1.29E-08 | 0.87746315 | 0.444 | 0.142 | 0.00045721 | HSPC_spleen |
| SRPX               | 1.36E-08 | 4.82699451 | 0.262 | 0.025 | 0.00048346 | HSPC_spleen |
| TEKT1              | 1.39E-08 | 1.81878431 | 0.564 | 0.3   | 0.00049098 | HSPC_spleen |
| RSC1A1             | 1.48E-08 | 2.02104446 | 0.495 | 0.225 | 0.00052471 | HSPC_spleen |
| DNAJA4             | 1.49E-08 | 2.72336451 | 0.337 | 0.083 | 0.00052959 | HSPC_spleen |
| RHBDD1             | 1.58E-08 | 2.02931075 | 0.534 | 0.258 | 0.00056069 | HSPC_spleen |
| PPM1G              | 1.61E-08 | 1.11881859 | 0.601 | 0.333 | 0.00056969 | HSPC_spleen |
| BPGM               | 1.81E-08 | 2.77440401 | 0.378 | 0.108 | 0.00064071 | HSPC_spleen |
| WDR76              | 1.83E-08 | 1.86763107 | 0.403 | 0.133 | 0.00064881 | HSPC_spleen |
| ND2                | 1.87E-08 | 0.93426908 | 0.945 | 0.892 | 0.00066416 | HSPC_spleen |
| ENSMMUG00000041744 | 1.89E-08 | 0.94051856 | 0.495 | 0.183 | 0.00067046 | HSPC_spleen |
| RPA3               | 2.08E-08 | 1.54011264 | 0.415 | 0.142 | 0.00073836 | HSPC_spleen |
| HSPH1              | 2.21E-08 | 1.60991294 | 0.579 | 0.3   | 0.00078376 | HSPC_spleen |
| UCP2               | 2.31E-08 | 1.14762444 | 0.485 | 0.192 | 0.00081924 | HSPC_spleen |
| HELLS              | 2.74E-08 | 1.33447774 | 0.495 | 0.2   | 0.00097061 | HSPC_spleen |
| ENSMMUG00000018740 | 2.79E-08 | 0.99501877 | 0.724 | 0.458 | 0.00098877 | HSPC_spleen |
| SLC35B1            | 2.86E-08 | 1.24449517 | 0.705 | 0.475 | 0.00101175 | HSPC_spleen |
| NCAPD2             | 2.95E-08 | 4.37451117 | 0.274 | 0.042 | 0.00104439 | HSPC_spleen |
| ALAD               | 3.15E-08 | 2.19748759 | 0.382 | 0.125 | 0.0011173  | HSPC_spleen |
| OGDH               | 3.23E-08 | 1.13017844 | 0.597 | 0.283 | 0.00114279 | HSPC_spleen |
| C16H17orf99        | 3.35E-08 | 2.64694536 | 0.327 | 0.075 | 0.00118846 | HSPC_spleen |
| MCM7               | 3.47E-08 | 1.40929094 | 0.485 | 0.2   | 0.00122907 | HSPC_spleen |
| ORC1               | 3.47E-08 | 2.38661206 | 0.387 | 0.133 | 0.00122998 | HSPC_spleen |
| SLC22A23           | 3.53E-08 | 2.68534792 | 0.342 | 0.083 | 0.0012494  | HSPC_spleen |
| EDEM3              | 3.61E-08 | 1.22812562 | 0.526 | 0.242 | 0.00127961 | HSPC_spleen |
| DPF3               | 3.65E-08 | 2.39803844 | 0.294 | 0.05  | 0.0012915  | HSPC_spleen |
| SKP2               | 3.65E-08 | 2.36107481 | 0.337 | 0.083 | 0.00129308 | HSPC_spleen |

|                    |          |            |       |       |            |             |
|--------------------|----------|------------|-------|-------|------------|-------------|
| CAT                | 3.74E-08 | 1.17656713 | 0.661 | 0.408 | 0.00132388 | HSPC_spleen |
| UHRF1              | 3.74E-08 | 2.11656634 | 0.38  | 0.125 | 0.0013241  | HSPC_spleen |
| KNL1               | 3.78E-08 | 2.03790332 | 0.366 | 0.1   | 0.00133886 | HSPC_spleen |
| HIST1H2BH          | 3.87E-08 | 2.5633797  | 0.295 | 0.05  | 0.00137206 | HSPC_spleen |
| TBCEL              | 3.88E-08 | 4.32383979 | 0.294 | 0.058 | 0.00137491 | HSPC_spleen |
| PCSK6              | 3.90E-08 | 3.81527248 | 0.274 | 0.042 | 0.0013809  | HSPC_spleen |
| TUBGCP3            | 4.20E-08 | 1.69859958 | 0.474 | 0.2   | 0.0014876  | HSPC_spleen |
| KIF22              | 4.23E-08 | 2.49644263 | 0.35  | 0.1   | 0.00150011 | HSPC_spleen |
| NUDT4              | 4.50E-08 | 1.57460167 | 0.519 | 0.233 | 0.00159267 | HSPC_spleen |
| NPTN               | 4.57E-08 | 1.63551667 | 0.591 | 0.3   | 0.00161852 | HSPC_spleen |
| RBM17              | 4.61E-08 | 0.79970017 | 0.658 | 0.383 | 0.00163251 | HSPC_spleen |
| RANBP10            | 4.63E-08 | 2.57263822 | 0.403 | 0.15  | 0.00164101 | HSPC_spleen |
| ENSMMUG00000055773 | 5.02E-08 | 1.7542696  | 0.521 | 0.258 | 0.00177713 | HSPC_spleen |
| ENSMMUG00000049519 | 5.54E-08 | 2.67951863 | 0.272 | 0.042 | 0.00196392 | HSPC_spleen |
| HBQ1               | 5.57E-08 | 1.95200091 | 0.386 | 0.133 | 0.00197363 | HSPC_spleen |
| HMMR               | 5.60E-08 | 3.69926899 | 0.282 | 0.05  | 0.0019855  | HSPC_spleen |
| CCNA2              | 5.96E-08 | 3.07077655 | 0.272 | 0.042 | 0.00211069 | HSPC_spleen |
| HINT2              | 6.15E-08 | 1.89146814 | 0.358 | 0.108 | 0.00217941 | HSPC_spleen |
| NCEH1              | 6.27E-08 | 2.0040498  | 0.368 | 0.117 | 0.0022202  | HSPC_spleen |
| FBXO7              | 6.61E-08 | 1.2713564  | 0.597 | 0.317 | 0.00234136 | HSPC_spleen |
| H1-2               | 7.01E-08 | 0.90707868 | 0.644 | 0.392 | 0.00248215 | HSPC_spleen |
| LTBP1              | 7.16E-08 | 2.30217383 | 0.35  | 0.1   | 0.00253788 | HSPC_spleen |
| BRCA1              | 7.29E-08 | 2.21753124 | 0.431 | 0.183 | 0.00258143 | HSPC_spleen |
| DECR2              | 7.56E-08 | 0.89276026 | 0.573 | 0.3   | 0.00267816 | HSPC_spleen |
| PITHD1             | 7.85E-08 | 2.10417301 | 0.409 | 0.158 | 0.00278164 | HSPC_spleen |
| LSM8               | 7.85E-08 | 0.91888041 | 0.658 | 0.383 | 0.00278233 | HSPC_spleen |
| ASXL2              | 8.09E-08 | 1.10811831 | 0.564 | 0.275 | 0.00286561 | HSPC_spleen |
| MTX2               | 8.29E-08 | 1.44722687 | 0.554 | 0.267 | 0.00293621 | HSPC_spleen |
| MCM6               | 8.35E-08 | 1.49223603 | 0.479 | 0.225 | 0.00295724 | HSPC_spleen |
| KIF23              | 8.41E-08 | 3.17837461 | 0.292 | 0.058 | 0.00298041 | HSPC_spleen |
| NPRL3              | 8.49E-08 | 2.17087666 | 0.409 | 0.167 | 0.00300791 | HSPC_spleen |
| ATP6V0A1           | 8.51E-08 | 0.60835326 | 0.556 | 0.267 | 0.00301574 | HSPC_spleen |
| WAPL               | 8.58E-08 | 1.12467338 | 0.661 | 0.392 | 0.00304046 | HSPC_spleen |

|                   |          |            |       |       |            |             |
|-------------------|----------|------------|-------|-------|------------|-------------|
| PHLPP2            | 8.80E-08 | 2.92395532 | 0.337 | 0.092 | 0.00311905 | HSPC_spleen |
| CISD2             | 8.98E-08 | 0.99033321 | 0.613 | 0.358 | 0.00318104 | HSPC_spleen |
| H4C3              | 9.57E-08 | 1.60289331 | 0.501 | 0.242 | 0.00339156 | HSPC_spleen |
| LIG1              | 9.88E-08 | 1.5850203  | 0.366 | 0.117 | 0.00350127 | HSPC_spleen |
| ATP11B            | 1.00E-07 | 1.75830723 | 0.712 | 0.508 | 0.00356064 | HSPC_spleen |
| CTSB              | 1.03E-07 | 1.35984967 | 0.548 | 0.267 | 0.0036528  | HSPC_spleen |
| SLC25A39          | 1.05E-07 | 1.7447071  | 0.403 | 0.142 | 0.00372517 | HSPC_spleen |
| WDHD1             | 1.06E-07 | 2.06552784 | 0.401 | 0.142 | 0.0037432  | HSPC_spleen |
| RPS6KA1           | 1.12E-07 | 1.33557762 | 0.532 | 0.25  | 0.00396066 | HSPC_spleen |
| RBM38             | 1.17E-07 | 1.63571582 | 0.354 | 0.1   | 0.00416092 | HSPC_spleen |
| MAP3K4            | 1.18E-07 | 1.42637033 | 0.466 | 0.208 | 0.00417004 | HSPC_spleen |
| NT5C              | 1.18E-07 | 0.73023984 | 0.362 | 0.1   | 0.00417324 | HSPC_spleen |
| ENSMUG00000016898 | 1.18E-07 | 0.95896463 | 0.732 | 0.517 | 0.00417945 | HSPC_spleen |
| C7H15orf61        | 1.25E-07 | 2.03365387 | 0.317 | 0.075 | 0.0044113  | HSPC_spleen |
| CBR1              | 1.29E-07 | 1.63315837 | 0.423 | 0.175 | 0.00456481 | HSPC_spleen |
| RNF152            | 1.31E-07 | 2.63778435 | 0.268 | 0.042 | 0.00465682 | HSPC_spleen |
| NT5M              | 1.35E-07 | 1.74809925 | 0.479 | 0.225 | 0.00478145 | HSPC_spleen |
| RNASEH2B          | 1.38E-07 | 0.97053953 | 0.568 | 0.292 | 0.00490065 | HSPC_spleen |
| RBX1              | 1.42E-07 | 0.77419689 | 0.775 | 0.55  | 0.00503345 | HSPC_spleen |
| GMNN              | 1.56E-07 | 1.41517811 | 0.389 | 0.133 | 0.00553861 | HSPC_spleen |
| HEBP1             | 1.61E-07 | 1.62800515 | 0.446 | 0.2   | 0.00570491 | HSPC_spleen |
| NXT1              | 1.66E-07 | 2.27159606 | 0.303 | 0.075 | 0.00586793 | HSPC_spleen |
| RBL1              | 1.74E-07 | 1.293259   | 0.45  | 0.183 | 0.00616927 | HSPC_spleen |
| CENPP             | 1.74E-07 | 1.2691061  | 0.415 | 0.142 | 0.00617409 | HSPC_spleen |
| GADD45A           | 1.75E-07 | 1.56961893 | 0.391 | 0.133 | 0.00621806 | HSPC_spleen |
| BCL2L2-PABPN1     | 1.81E-07 | 0.81756232 | 0.507 | 0.233 | 0.00641838 | HSPC_spleen |
| ZHX3              | 1.81E-07 | 2.6411669  | 0.335 | 0.1   | 0.00642373 | HSPC_spleen |
| RAD21             | 1.83E-07 | 0.76977003 | 0.72  | 0.442 | 0.00647248 | HSPC_spleen |
| HERC2             | 1.88E-07 | 1.02451341 | 0.681 | 0.442 | 0.00664589 | HSPC_spleen |
| IRF2              | 1.90E-07 | 1.30713772 | 0.501 | 0.242 | 0.0067188  | HSPC_spleen |
| SGO2              | 1.91E-07 | 3.80935445 | 0.266 | 0.05  | 0.00675094 | HSPC_spleen |
| AURKA             | 1.98E-07 | 3.3410744  | 0.268 | 0.05  | 0.00701004 | HSPC_spleen |
| CDK5RAP2          | 2.06E-07 | 1.7051574  | 0.462 | 0.2   | 0.00729678 | HSPC_spleen |



|                    |          |            |       |       |            |             |
|--------------------|----------|------------|-------|-------|------------|-------------|
| HK1                | 2.07E-07 | 1.27848666 | 0.577 | 0.325 | 0.00732786 | HSPC_spleen |
| BCL2L1             | 2.10E-07 | 1.83335409 | 0.419 | 0.158 | 0.00745843 | HSPC_spleen |
| HSBP1L1            | 2.48E-07 | 0.77684356 | 0.274 | 0.05  | 0.00878288 | HSPC_spleen |
| CASP8AP2           | 2.52E-07 | 1.73335182 | 0.36  | 0.117 | 0.00892796 | HSPC_spleen |
| JAZF1              | 2.55E-07 | 2.40390846 | 0.368 | 0.125 | 0.00904246 | HSPC_spleen |
| ATP7A              | 2.59E-07 | 1.97271785 | 0.431 | 0.183 | 0.00916891 | HSPC_spleen |
| H1-5               | 2.71E-07 | 2.42433204 | 0.368 | 0.142 | 0.00961672 | HSPC_spleen |
| CLSPN              | 2.73E-07 | 2.62881383 | 0.27  | 0.05  | 0.00965747 | HSPC_spleen |
| BAG1               | 2.81E-07 | 1.98701424 | 0.264 | 0.042 | 0.00997035 | HSPC_spleen |
| EPB41              | 2.84E-07 | 1.86884203 | 0.867 | 0.667 | 0.01005275 | HSPC_spleen |
| ADORA2B            | 2.97E-07 | 2.3898763  | 0.342 | 0.108 | 0.01052307 | HSPC_spleen |
| UBR2               | 3.07E-07 | 1.90717605 | 0.614 | 0.35  | 0.01087732 | HSPC_spleen |
| CLCN3              | 3.13E-07 | 1.18568609 | 0.659 | 0.408 | 0.01110022 | HSPC_spleen |
| WRN                | 3.14E-07 | 1.25643653 | 0.796 | 0.6   | 0.01112079 | HSPC_spleen |
| ENSMMUG00000041076 | 3.20E-07 | 1.9031317  | 0.348 | 0.108 | 0.01132167 | HSPC_spleen |
| PRIM2              | 3.29E-07 | 1.46898067 | 0.585 | 0.342 | 0.01167042 | HSPC_spleen |
| ENSMMUG00000028689 | 3.33E-07 | 2.0284148  | 0.321 | 0.083 | 0.01180186 | HSPC_spleen |
| B3GNT2             | 3.40E-07 | 1.20127582 | 0.431 | 0.175 | 0.01205228 | HSPC_spleen |
| BMT2               | 3.71E-07 | 2.24361671 | 0.464 | 0.225 | 0.01313448 | HSPC_spleen |
| ST6GAL1            | 3.76E-07 | 1.59183663 | 0.624 | 0.375 | 0.01333561 | HSPC_spleen |
| FANCD2             | 3.93E-07 | 2.72774806 | 0.252 | 0.042 | 0.0139207  | HSPC_spleen |
| WDTC1              | 4.09E-07 | 2.76006765 | 0.303 | 0.083 | 0.01450932 | HSPC_spleen |
| NUCKS1             | 4.19E-07 | 0.84818671 | 0.841 | 0.625 | 0.01483277 | HSPC_spleen |
| ENSMMUG00000049833 | 4.19E-07 | 2.2701368  | 0.434 | 0.2   | 0.01483586 | HSPC_spleen |
| ZRANB3             | 4.25E-07 | 1.50493243 | 0.528 | 0.283 | 0.01505725 | HSPC_spleen |
| FANCA              | 4.29E-07 | 2.22468398 | 0.344 | 0.117 | 0.01519103 | HSPC_spleen |
| ECT2               | 4.87E-07 | 3.25609516 | 0.321 | 0.1   | 0.01726138 | HSPC_spleen |
| LSM4               | 5.25E-07 | 1.1837348  | 0.577 | 0.358 | 0.0186107  | HSPC_spleen |
| ARF6               | 5.40E-07 | 0.46357243 | 0.476 | 0.208 | 0.01914018 | HSPC_spleen |
| OAT                | 5.41E-07 | 1.68430563 | 0.284 | 0.058 | 0.01916835 | HSPC_spleen |
| CKAP5              | 5.63E-07 | 2.1553628  | 0.511 | 0.275 | 0.01995184 | HSPC_spleen |
| AFG3L2             | 5.70E-07 | 1.53752855 | 0.389 | 0.142 | 0.02018368 | HSPC_spleen |
| BSDC1              | 5.72E-07 | 1.26967599 | 0.622 | 0.375 | 0.02027468 | HSPC_spleen |

|           |          |            |       |       |            |             |
|-----------|----------|------------|-------|-------|------------|-------------|
| MPST      | 5.87E-07 | 1.07523317 | 0.511 | 0.233 | 0.02080651 | HSPC_spleen |
| TLN2      | 5.90E-07 | 2.75293164 | 0.315 | 0.092 | 0.02089044 | HSPC_spleen |
| RAP1A     | 6.10E-07 | 1.04758289 | 0.775 | 0.567 | 0.02160966 | HSPC_spleen |
| RAD51AP1  | 6.32E-07 | 2.37401173 | 0.264 | 0.05  | 0.0223903  | HSPC_spleen |
| TSPAN14   | 6.46E-07 | 1.71852384 | 0.476 | 0.242 | 0.02289277 | HSPC_spleen |
| C1H1orf35 | 6.59E-07 | 1.07781093 | 0.409 | 0.158 | 0.0233326  | HSPC_spleen |
| NBN       | 6.79E-07 | 1.58484102 | 0.501 | 0.267 | 0.02404935 | HSPC_spleen |
| CYB5R3    | 7.05E-07 | 0.84853814 | 0.548 | 0.292 | 0.02497942 | HSPC_spleen |
| EGFL8     | 7.27E-07 | 1.96497195 | 0.311 | 0.092 | 0.02576428 | HSPC_spleen |
| CENPO     | 7.47E-07 | 1.58470109 | 0.378 | 0.142 | 0.02647566 | HSPC_spleen |
| NDUFS1    | 8.23E-07 | 1.82530916 | 0.335 | 0.108 | 0.02914711 | HSPC_spleen |
| JMJD6     | 8.83E-07 | 2.01897273 | 0.307 | 0.092 | 0.03127632 | HSPC_spleen |
| STK11     | 9.09E-07 | 1.60915488 | 0.323 | 0.1   | 0.03220197 | HSPC_spleen |
| ABCG2     | 9.75E-07 | 1.76921498 | 0.387 | 0.15  | 0.03454285 | HSPC_spleen |
| CCDC85B   | 1.02E-06 | 2.1162521  | 0.294 | 0.083 | 0.03609338 | HSPC_spleen |
| TOP1      | 1.04E-06 | 1.12459365 | 0.894 | 0.642 | 0.0367309  | HSPC_spleen |
| SEC22C    | 1.04E-06 | 1.60960608 | 0.352 | 0.133 | 0.03676697 | HSPC_spleen |
| H2AC20    | 1.09E-06 | 0.94100737 | 0.589 | 0.342 | 0.03876321 | HSPC_spleen |
| NR6A1     | 1.10E-06 | 1.2483326  | 0.618 | 0.367 | 0.03908183 | HSPC_spleen |
| CD47      | 1.13E-06 | 0.42102718 | 0.873 | 0.642 | 0.04019919 | HSPC_spleen |
| PTPMT1    | 1.14E-06 | 0.9836026  | 0.609 | 0.383 | 0.04028935 | HSPC_spleen |
| CDKN3     | 1.14E-06 | 2.24966103 | 0.313 | 0.1   | 0.0403143  | HSPC_spleen |
| FAF1      | 1.14E-06 | 1.47922001 | 0.722 | 0.475 | 0.04033703 | HSPC_spleen |
| CLK4      | 1.16E-06 | 1.08249664 | 0.503 | 0.233 | 0.04107919 | HSPC_spleen |
| MCM2      | 1.17E-06 | 0.71145512 | 0.391 | 0.15  | 0.04137333 | HSPC_spleen |
| TEX2      | 1.18E-06 | 1.78668912 | 0.476 | 0.25  | 0.04180769 | HSPC_spleen |
| MFSD12    | 1.20E-06 | 2.5279408  | 0.28  | 0.075 | 0.04257489 | HSPC_spleen |
| ZNF800    | 1.21E-06 | 1.29533722 | 0.407 | 0.167 | 0.04297894 | HSPC_spleen |
| FAM174C   | 1.24E-06 | 1.39806886 | 0.341 | 0.117 | 0.04387401 | HSPC_spleen |
| ANAPC11   | 1.26E-06 | 0.97828722 | 0.501 | 0.275 | 0.04461661 | HSPC_spleen |
| POLA2     | 1.29E-06 | 1.74155244 | 0.315 | 0.092 | 0.04569514 | HSPC_spleen |
| GSTO1     | 1.31E-06 | 2.15119168 | 0.282 | 0.075 | 0.04628126 | HSPC_spleen |
| FANCI     | 1.34E-06 | 1.83135402 | 0.407 | 0.192 | 0.04748649 | HSPC_spleen |

|                    |          |            |       |       |            |             |
|--------------------|----------|------------|-------|-------|------------|-------------|
| KIFC1              | 1.36E-06 | 1.24695779 | 0.364 | 0.125 | 0.04809419 | HSPC_spleen |
| CCNB1              | 1.38E-06 | 2.54170855 | 0.294 | 0.092 | 0.04905786 | HSPC_spleen |
| IMPA2              | 1.46E-06 | 2.18186964 | 0.284 | 0.075 | 0.05176755 | HSPC_spleen |
| STRADB             | 1.51E-06 | 2.04679903 | 0.323 | 0.108 | 0.05337153 | HSPC_spleen |
| AP2A1              | 1.53E-06 | 1.29194424 | 0.458 | 0.208 | 0.0541005  | HSPC_spleen |
| EZH2               | 1.53E-06 | 1.33442958 | 0.705 | 0.508 | 0.05426893 | HSPC_spleen |
| BOLA3              | 1.56E-06 | 1.41978339 | 0.474 | 0.25  | 0.05542056 | HSPC_spleen |
| PARPBP             | 1.60E-06 | 2.1161111  | 0.305 | 0.092 | 0.05660982 | HSPC_spleen |
| NDC80              | 1.64E-06 | 2.76410833 | 0.282 | 0.075 | 0.05802492 | HSPC_spleen |
| SPC25              | 1.64E-06 | 2.65353578 | 0.286 | 0.083 | 0.05822298 | HSPC_spleen |
| VRK1               | 1.65E-06 | 1.11786845 | 0.595 | 0.342 | 0.0583241  | HSPC_spleen |
| MCM4               | 1.69E-06 | 1.10135548 | 0.446 | 0.208 | 0.05981477 | HSPC_spleen |
| NT5C3A             | 1.72E-06 | 1.31060064 | 0.573 | 0.342 | 0.06100931 | HSPC_spleen |
| EVI5               | 1.82E-06 | 1.56313429 | 0.503 | 0.275 | 0.06461641 | HSPC_spleen |
| PNP                | 1.84E-06 | 0.84723567 | 0.538 | 0.292 | 0.06516576 | HSPC_spleen |
| DTL                | 1.90E-06 | 1.27846774 | 0.368 | 0.142 | 0.06732892 | HSPC_spleen |
| RABGAP1L           | 1.95E-06 | 1.55414196 | 0.912 | 0.783 | 0.06926654 | HSPC_spleen |
| GLRX               | 1.98E-06 | 0.8553563  | 0.499 | 0.233 | 0.07011665 | HSPC_spleen |
| YY1                | 2.01E-06 | 0.69583512 | 0.671 | 0.392 | 0.07115485 | HSPC_spleen |
| SCARB1             | 2.11E-06 | 2.19558981 | 0.344 | 0.133 | 0.07489682 | HSPC_spleen |
| CYBRD1             | 2.15E-06 | 2.16999746 | 0.325 | 0.108 | 0.07603734 | HSPC_spleen |
| ZNF511             | 2.29E-06 | 1.85484573 | 0.264 | 0.058 | 0.08120198 | HSPC_spleen |
| PPOX               | 2.33E-06 | 1.9716964  | 0.341 | 0.133 | 0.08254255 | HSPC_spleen |
| ENSMMUG00000017097 | 2.35E-06 | 1.18869543 | 0.587 | 0.358 | 0.08342907 | HSPC_spleen |
| TMEM120B           | 2.39E-06 | 1.54031945 | 0.407 | 0.175 | 0.08455836 | HSPC_spleen |
| PDZK1IP1           | 2.39E-06 | 0.86376183 | 0.45  | 0.2   | 0.08461662 | HSPC_spleen |
| MIS18BP1           | 2.44E-06 | 1.0499958  | 0.517 | 0.283 | 0.08649683 | HSPC_spleen |
| STAG2              | 2.50E-06 | 0.72148034 | 0.787 | 0.567 | 0.08842246 | HSPC_spleen |
| CCAR1              | 2.51E-06 | 0.94359826 | 0.703 | 0.45  | 0.08910838 | HSPC_spleen |
| CSE1L              | 2.58E-06 | 1.30916294 | 0.493 | 0.275 | 0.0912782  | HSPC_spleen |
| IFRD2              | 2.58E-06 | 1.18502968 | 0.356 | 0.125 | 0.09140003 | HSPC_spleen |
| LIN52              | 2.59E-06 | 2.34404612 | 0.386 | 0.167 | 0.09168423 | HSPC_spleen |
| MCM5               | 2.61E-06 | 1.28749423 | 0.386 | 0.15  | 0.0924149  | HSPC_spleen |

|                     |          |            |       |       |            |             |
|---------------------|----------|------------|-------|-------|------------|-------------|
| RASGRP3             | 2.68E-06 | 2.22125341 | 0.325 | 0.108 | 0.09507435 | HSPC_spleen |
| TST                 | 2.72E-06 | 2.01754572 | 0.319 | 0.108 | 0.0964965  | HSPC_spleen |
| KIF20B              | 2.78E-06 | 1.43762366 | 0.448 | 0.225 | 0.09837277 | HSPC_spleen |
| CYTB                | 2.78E-06 | 2.09895322 | 0.309 | 0.1   | 0.0986685  | HSPC_spleen |
| CKS1B               | 2.79E-06 | 0.88964295 | 0.562 | 0.35  | 0.09889607 | HSPC_spleen |
| FXN                 | 2.84E-06 | 1.41208961 | 0.317 | 0.1   | 0.1007412  | HSPC_spleen |
| IMP3                | 2.88E-06 | 1.35770679 | 0.372 | 0.133 | 0.10187179 | HSPC_spleen |
| CAST                | 3.03E-06 | 0.94452689 | 0.579 | 0.342 | 0.10722599 | HSPC_spleen |
| ATP1B3              | 3.03E-06 | 0.79226029 | 0.748 | 0.5   | 0.10727024 | HSPC_spleen |
| STAM                | 3.17E-06 | 1.32990516 | 0.454 | 0.225 | 0.11215648 | HSPC_spleen |
| UGCG                | 3.26E-06 | 1.31072367 | 0.495 | 0.275 | 0.11541162 | HSPC_spleen |
| MAP2K3              | 3.42E-06 | 1.39110224 | 0.399 | 0.175 | 0.12117263 | HSPC_spleen |
| YPEL4               | 3.44E-06 | 2.3864411  | 0.252 | 0.058 | 0.12184737 | HSPC_spleen |
| DNAJB4              | 3.48E-06 | 1.13282905 | 0.505 | 0.267 | 0.12335341 | HSPC_spleen |
| MED8                | 3.54E-06 | 1.15175875 | 0.431 | 0.208 | 0.12541146 | HSPC_spleen |
| DYRK3               | 3.65E-06 | 2.10963282 | 0.264 | 0.067 | 0.1292191  | HSPC_spleen |
| ENSMMUG000000004522 | 3.82E-06 | 1.65050898 | 0.378 | 0.175 | 0.13517569 | HSPC_spleen |
| MGME1               | 3.84E-06 | 1.25761934 | 0.423 | 0.192 | 0.13602996 | HSPC_spleen |
| ENSMMUG000000003130 | 3.91E-06 | 0.59422193 | 0.646 | 0.425 | 0.13871368 | HSPC_spleen |
| MICAL3              | 4.04E-06 | 2.12486511 | 0.292 | 0.092 | 0.14326409 | HSPC_spleen |
| ADAMTS3             | 4.06E-06 | 2.10080747 | 0.295 | 0.092 | 0.14402654 | HSPC_spleen |
| CMAS                | 4.14E-06 | 0.91110571 | 0.585 | 0.317 | 0.14651889 | HSPC_spleen |
| BAZ1B               | 4.31E-06 | 0.7013604  | 0.607 | 0.358 | 0.15254144 | HSPC_spleen |
| CEP63               | 4.31E-06 | 1.95727647 | 0.35  | 0.142 | 0.15264006 | HSPC_spleen |
| ATP8                | 4.37E-06 | 0.79519248 | 0.294 | 0.083 | 0.15471746 | HSPC_spleen |
| MGST3               | 4.40E-06 | 0.98008891 | 0.699 | 0.517 | 0.15586255 | HSPC_spleen |
| RB1                 | 4.40E-06 | 0.91261741 | 0.521 | 0.283 | 0.15598023 | HSPC_spleen |
| DNA2                | 4.43E-06 | 1.8446367  | 0.346 | 0.133 | 0.15696148 | HSPC_spleen |
| H3C2                | 4.45E-06 | 1.88392722 | 0.276 | 0.083 | 0.15771813 | HSPC_spleen |
| XPO1                | 4.47E-06 | 0.68964399 | 0.652 | 0.425 | 0.15832168 | HSPC_spleen |
| MCM10               | 4.47E-06 | 1.9094841  | 0.342 | 0.133 | 0.15835251 | HSPC_spleen |
| RNASEH2C            | 4.48E-06 | 0.87868204 | 0.593 | 0.35  | 0.15869567 | HSPC_spleen |
| HAGH                | 4.51E-06 | 1.86204525 | 0.29  | 0.092 | 0.15974589 | HSPC_spleen |

|                   |          |            |       |       |            |             |
|-------------------|----------|------------|-------|-------|------------|-------------|
| POLE2             | 4.58E-06 | 1.74747001 | 0.292 | 0.083 | 0.16227639 | HSPC_spleen |
| YWHAH             | 4.60E-06 | 0.69474452 | 0.595 | 0.35  | 0.16283518 | HSPC_spleen |
| PTTG1             | 4.74E-06 | 1.22918793 | 0.419 | 0.2   | 0.16794382 | HSPC_spleen |
| SUDS3             | 4.90E-06 | 1.40288621 | 0.368 | 0.15  | 0.17360991 | HSPC_spleen |
| ENSMUG00000011776 | 4.96E-06 | 1.25571777 | 0.307 | 0.1   | 0.17557948 | HSPC_spleen |
| RBP1              | 5.30E-06 | 1.80259696 | 0.421 | 0.217 | 0.1878285  | HSPC_spleen |
| JAK2              | 5.34E-06 | 1.05008516 | 0.673 | 0.442 | 0.18931441 | HSPC_spleen |
| GEN1              | 5.44E-06 | 1.80404617 | 0.262 | 0.067 | 0.19282493 | HSPC_spleen |
| NNT               | 5.78E-06 | 0.91731098 | 0.464 | 0.242 | 0.2048374  | HSPC_spleen |
| IFT80             | 5.82E-06 | 1.82963343 | 0.534 | 0.308 | 0.20636456 | HSPC_spleen |
| PARP1             | 5.86E-06 | 0.9168209  | 0.556 | 0.308 | 0.20778022 | HSPC_spleen |
| USP7              | 6.01E-06 | 1.27617819 | 0.548 | 0.333 | 0.21280002 | HSPC_spleen |
| TIPIN             | 6.03E-06 | 2.15961235 | 0.27  | 0.075 | 0.21375657 | HSPC_spleen |
| MBNL3             | 6.16E-06 | 2.16936733 | 0.27  | 0.075 | 0.21835906 | HSPC_spleen |
| SEC62             | 6.19E-06 | 1.10804645 | 0.748 | 0.525 | 0.21948164 | HSPC_spleen |
| H2AZ2             | 6.34E-06 | 0.63951578 | 0.793 | 0.625 | 0.22467669 | HSPC_spleen |
| AGO2              | 6.54E-06 | 0.95430147 | 0.581 | 0.342 | 0.23157367 | HSPC_spleen |
| INTS6L            | 6.85E-06 | 1.50284598 | 0.495 | 0.267 | 0.24267417 | HSPC_spleen |
| POC1B             | 7.02E-06 | 1.34202222 | 0.524 | 0.3   | 0.24876453 | HSPC_spleen |
| TASOR             | 7.16E-06 | 1.30697006 | 0.429 | 0.208 | 0.25366839 | HSPC_spleen |
| ZFPM1             | 7.22E-06 | 2.56238368 | 0.28  | 0.092 | 0.25569956 | HSPC_spleen |
| HIST1H2AC         | 7.22E-06 | 1.08993475 | 0.638 | 0.392 | 0.25597877 | HSPC_spleen |
| AKR7A2            | 7.23E-06 | 0.78712121 | 0.444 | 0.233 | 0.25620103 | HSPC_spleen |
| TTK               | 7.24E-06 | 2.91329924 | 0.25  | 0.067 | 0.25665077 | HSPC_spleen |
| TMEM245           | 7.31E-06 | 1.20726004 | 0.706 | 0.483 | 0.25912275 | HSPC_spleen |
| E2F4              | 7.46E-06 | 1.29224203 | 0.36  | 0.158 | 0.26415571 | HSPC_spleen |
| GTF3A             | 7.48E-06 | 1.33916009 | 0.368 | 0.15  | 0.26502723 | HSPC_spleen |
| RALBP1            | 7.93E-06 | 0.9647982  | 0.542 | 0.317 | 0.28111454 | HSPC_spleen |
| ACSS1             | 8.47E-06 | 1.05140669 | 0.395 | 0.158 | 0.30003536 | HSPC_spleen |
| CENPU             | 8.56E-06 | 0.7899163  | 0.417 | 0.192 | 0.30316097 | HSPC_spleen |
| RRM1              | 8.60E-06 | 0.95796234 | 0.538 | 0.333 | 0.30467786 | HSPC_spleen |
| USP44             | 8.96E-06 | 1.33663083 | 0.456 | 0.225 | 0.31752431 | HSPC_spleen |
| HEATR5B           | 9.05E-06 | 1.23901239 | 0.28  | 0.083 | 0.32055202 | HSPC_spleen |

|          |          |            |       |       |            |             |
|----------|----------|------------|-------|-------|------------|-------------|
| MPHOSPH9 | 9.09E-06 | 1.83747767 | 0.344 | 0.142 | 0.32220817 | HSPC_spleen |
| GMPR     | 9.10E-06 | 1.22748223 | 0.333 | 0.125 | 0.32234551 | HSPC_spleen |
| DDHD1    | 9.16E-06 | 1.82256097 | 0.47  | 0.242 | 0.3246603  | HSPC_spleen |
| RHOT1    | 1.01E-05 | 1.29414581 | 0.427 | 0.208 | 0.3578022  | HSPC_spleen |
| NUP37    | 1.05E-05 | 1.45512681 | 0.35  | 0.142 | 0.37204274 | HSPC_spleen |
| SLC38A5  | 1.06E-05 | 1.2786917  | 0.348 | 0.142 | 0.37503588 | HSPC_spleen |
| ENG      | 1.07E-05 | 0.62942353 | 0.313 | 0.108 | 0.37747435 | HSPC_spleen |
| LNPk     | 1.07E-05 | 1.63207333 | 0.339 | 0.133 | 0.3778887  | HSPC_spleen |
| VPS53    | 1.07E-05 | 1.22791226 | 0.523 | 0.275 | 0.37909528 | HSPC_spleen |
| HDAC3    | 1.07E-05 | 1.35051354 | 0.335 | 0.133 | 0.37917561 | HSPC_spleen |
| H2AC12   | 1.08E-05 | 1.21997366 | 0.421 | 0.2   | 0.38347495 | HSPC_spleen |
| HADHA    | 1.11E-05 | 0.98358209 | 0.55  | 0.367 | 0.39216405 | HSPC_spleen |
| VDAC3    | 1.13E-05 | 0.66905344 | 0.693 | 0.475 | 0.39871744 | HSPC_spleen |
| MAP4K5   | 1.13E-05 | 0.94767937 | 0.62  | 0.4   | 0.40104705 | HSPC_spleen |
| PKN2     | 1.17E-05 | 0.53635862 | 0.779 | 0.542 | 0.41577169 | HSPC_spleen |
| PSIP1    | 1.20E-05 | 0.6523256  | 0.738 | 0.517 | 0.4238675  | HSPC_spleen |
| PRPF19   | 1.23E-05 | 1.2065644  | 0.356 | 0.15  | 0.43589666 | HSPC_spleen |
| MCM3     | 1.28E-05 | 1.06687809 | 0.468 | 0.233 | 0.45336596 | HSPC_spleen |
| FAM120A  | 1.29E-05 | 0.73321915 | 0.591 | 0.367 | 0.45790483 | HSPC_spleen |
| WIP1     | 1.31E-05 | 1.41350277 | 0.27  | 0.075 | 0.4656706  | HSPC_spleen |
| CPVL     | 1.33E-05 | 1.29418885 | 0.45  | 0.25  | 0.47125538 | HSPC_spleen |
| MAFG     | 1.33E-05 | 1.4783547  | 0.27  | 0.083 | 0.47246982 | HSPC_spleen |
| RAD51    | 1.37E-05 | 1.29118905 | 0.284 | 0.092 | 0.48426515 | HSPC_spleen |
| NOL7     | 1.39E-05 | 0.65527202 | 0.579 | 0.35  | 0.49171515 | HSPC_spleen |
| RAD23B   | 1.39E-05 | 0.57958695 | 0.556 | 0.325 | 0.49252021 | HSPC_spleen |
| AIDA     | 1.41E-05 | 1.30943536 | 0.315 | 0.108 | 0.50040891 | HSPC_spleen |
| ZNF367   | 1.42E-05 | 1.78262892 | 0.27  | 0.083 | 0.5024275  | HSPC_spleen |
| NFE2L1   | 1.43E-05 | 1.04915039 | 0.323 | 0.117 | 0.50650555 | HSPC_spleen |
| RPA2     | 1.43E-05 | 1.03409198 | 0.354 | 0.15  | 0.50761786 | HSPC_spleen |
| CEP295   | 1.51E-05 | 1.16620836 | 0.485 | 0.267 | 0.53366164 | HSPC_spleen |
| GIN51    | 1.53E-05 | 1.00857148 | 0.448 | 0.242 | 0.54168422 | HSPC_spleen |
| ZNRF3    | 1.54E-05 | 1.69602303 | 0.405 | 0.2   | 0.54411196 | HSPC_spleen |
| ARHGAP19 | 1.54E-05 | 1.96919104 | 0.319 | 0.125 | 0.54499785 | HSPC_spleen |

|                   |          |            |       |       |            |             |
|-------------------|----------|------------|-------|-------|------------|-------------|
| FAR2              | 1.56E-05 | 1.49674611 | 0.622 | 0.417 | 0.55150473 | HSPC_spleen |
| RBM42             | 1.57E-05 | 1.0668901  | 0.295 | 0.1   | 0.55801971 | HSPC_spleen |
| MED12L            | 1.59E-05 | 1.71825175 | 0.515 | 0.292 | 0.56310728 | HSPC_spleen |
| SRRT              | 1.63E-05 | 1.22806924 | 0.452 | 0.233 | 0.57843158 | HSPC_spleen |
| SLC46A3           | 1.73E-05 | 0.62424195 | 0.272 | 0.083 | 0.61267409 | HSPC_spleen |
| MBP               | 1.75E-05 | 0.67376007 | 0.718 | 0.467 | 0.61897065 | HSPC_spleen |
| AKAP10            | 1.78E-05 | 1.1939454  | 0.391 | 0.183 | 0.63126054 | HSPC_spleen |
| CNN3              | 1.87E-05 | 0.97808442 | 0.523 | 0.292 | 0.66239077 | HSPC_spleen |
| CHAF1A            | 1.91E-05 | 1.57357802 | 0.29  | 0.1   | 0.67517794 | HSPC_spleen |
| VCP               | 1.93E-05 | 0.72412312 | 0.658 | 0.408 | 0.68330106 | HSPC_spleen |
| PAXIP1            | 2.01E-05 | 2.28882742 | 0.272 | 0.092 | 0.71080118 | HSPC_spleen |
| FAM13A            | 2.11E-05 | 1.13687599 | 0.573 | 0.367 | 0.74867729 | HSPC_spleen |
| CENPW             | 2.13E-05 | 1.62443425 | 0.294 | 0.108 | 0.75634269 | HSPC_spleen |
| RESF1             | 2.14E-05 | 0.98896827 | 0.393 | 0.183 | 0.75658993 | HSPC_spleen |
| WDR5              | 2.16E-05 | 1.16078967 | 0.327 | 0.133 | 0.76374129 | HSPC_spleen |
| GLIPR2            | 2.18E-05 | 0.79337582 | 0.448 | 0.217 | 0.77278003 | HSPC_spleen |
| CKAP2             | 2.22E-05 | 2.74692622 | 0.274 | 0.1   | 0.7855719  | HSPC_spleen |
| LEPROT            | 2.22E-05 | 0.65379338 | 0.466 | 0.233 | 0.78793432 | HSPC_spleen |
| TNKS              | 2.29E-05 | 1.10739346 | 0.74  | 0.558 | 0.81299542 | HSPC_spleen |
| NAPEPLD           | 2.30E-05 | 1.99905728 | 0.329 | 0.142 | 0.81529224 | HSPC_spleen |
| ENSMUG00000003780 | 2.46E-05 | 1.39915701 | 0.311 | 0.117 | 0.87213645 | HSPC_spleen |
| ANAPC1            | 2.57E-05 | 1.10497566 | 0.495 | 0.275 | 0.91065581 | HSPC_spleen |
| PKIG              | 2.59E-05 | 1.11824105 | 0.456 | 0.25  | 0.91718635 | HSPC_spleen |
| MAD2L1            | 2.63E-05 | 0.88294583 | 0.348 | 0.15  | 0.93039283 | HSPC_spleen |
| PRELID2           | 2.63E-05 | 1.95060015 | 0.284 | 0.1   | 0.93183935 | HSPC_spleen |
| ZDHHC14           | 2.66E-05 | 0.42836475 | 0.56  | 0.342 | 0.9414303  | HSPC_spleen |
| FRY               | 2.69E-05 | 1.94611716 | 0.299 | 0.108 | 0.95184518 | HSPC_spleen |
| USP1              | 2.73E-05 | 1.21534607 | 0.464 | 0.267 | 0.96779671 | HSPC_spleen |
| ADGRG1            | 2.75E-05 | 1.26266959 | 0.442 | 0.25  | 0.97368253 | HSPC_spleen |
| MTHFD1            | 2.76E-05 | 1.02880242 | 0.399 | 0.2   | 0.97616607 | HSPC_spleen |
| SLC48A1           | 2.78E-05 | 1.58070347 | 0.325 | 0.142 | 0.9846889  | HSPC_spleen |
| DIS3L             | 2.82E-05 | 1.96637464 | 0.262 | 0.083 | 0.99884414 | HSPC_spleen |
| LMNB1             | 2.83E-05 | 1.03865996 | 0.44  | 0.242 | 1          | HSPC_spleen |

|                   |          |            |       |       |               |
|-------------------|----------|------------|-------|-------|---------------|
| LMBRD2            | 2.90E-05 | 1.46971176 | 0.374 | 0.175 | 1 HSPC_spleen |
| R3HDM4            | 2.90E-05 | 1.45684835 | 0.339 | 0.142 | 1 HSPC_spleen |
| POLDIP2           | 2.92E-05 | 1.78147942 | 0.26  | 0.083 | 1 HSPC_spleen |
| KAT2B             | 2.92E-05 | 1.86800925 | 0.397 | 0.192 | 1 HSPC_spleen |
| TAF1              | 2.98E-05 | 1.33555283 | 0.487 | 0.292 | 1 HSPC_spleen |
| CHEK2             | 3.03E-05 | 0.88130647 | 0.292 | 0.1   | 1 HSPC_spleen |
| DNAJC9            | 3.08E-05 | 0.62706899 | 0.505 | 0.283 | 1 HSPC_spleen |
| SERINC5           | 3.10E-05 | 1.85129966 | 0.403 | 0.217 | 1 HSPC_spleen |
| CDT1              | 3.12E-05 | 1.06246541 | 0.305 | 0.117 | 1 HSPC_spleen |
| BUB1              | 3.12E-05 | 1.91445789 | 0.286 | 0.1   | 1 HSPC_spleen |
| COL4A5            | 3.14E-05 | 1.69698455 | 0.346 | 0.158 | 1 HSPC_spleen |
| ITGB3BP           | 3.16E-05 | 0.38827506 | 0.368 | 0.158 | 1 HSPC_spleen |
| AMBRA1            | 3.18E-05 | 1.48946106 | 0.593 | 0.392 | 1 HSPC_spleen |
| COA4              | 3.18E-05 | 0.97794563 | 0.389 | 0.183 | 1 HSPC_spleen |
| GPANK1            | 3.21E-05 | 1.27524622 | 0.342 | 0.15  | 1 HSPC_spleen |
| OXSRI             | 3.25E-05 | 0.88859003 | 0.544 | 0.325 | 1 HSPC_spleen |
| PRDX3             | 3.27E-05 | 0.669713   | 0.614 | 0.383 | 1 HSPC_spleen |
| PTCD3             | 3.28E-05 | 0.96621623 | 0.427 | 0.217 | 1 HSPC_spleen |
| PAXBP1            | 3.30E-05 | 1.13087692 | 0.444 | 0.233 | 1 HSPC_spleen |
| SMC6              | 3.50E-05 | 1.38462759 | 0.411 | 0.217 | 1 HSPC_spleen |
| TMEM259           | 3.51E-05 | 1.29081034 | 0.295 | 0.117 | 1 HSPC_spleen |
| SRBD1             | 3.55E-05 | 1.15879966 | 0.47  | 0.25  | 1 HSPC_spleen |
| GPSM2             | 3.66E-05 | 2.17131454 | 0.282 | 0.1   | 1 HSPC_spleen |
| NOP56             | 3.71E-05 | 0.53971819 | 0.548 | 0.3   | 1 HSPC_spleen |
| TAF10             | 3.73E-05 | 1.44220843 | 0.26  | 0.083 | 1 HSPC_spleen |
| PTPRM             | 3.74E-05 | 1.74535543 | 0.395 | 0.2   | 1 HSPC_spleen |
| SKA2              | 3.76E-05 | 1.67877637 | 0.325 | 0.133 | 1 HSPC_spleen |
| NDC1              | 3.77E-05 | 1.75980158 | 0.307 | 0.125 | 1 HSPC_spleen |
| SLC16A1           | 3.86E-05 | 2.84121979 | 0.411 | 0.225 | 1 HSPC_spleen |
| NUP160            | 3.91E-05 | 1.37491993 | 0.372 | 0.192 | 1 HSPC_spleen |
| ENSMUG00000011711 | 3.91E-05 | 1.56348052 | 0.434 | 0.25  | 1 HSPC_spleen |
| DTYMK             | 3.92E-05 | 1.20937429 | 0.352 | 0.158 | 1 HSPC_spleen |
| NUP93             | 4.31E-05 | 1.12437306 | 0.386 | 0.183 | 1 HSPC_spleen |



|                    |          |            |       |       |               |
|--------------------|----------|------------|-------|-------|---------------|
| RAB12              | 4.36E-05 | 1.67697333 | 0.329 | 0.142 | 1 HSPC_spleen |
| TLL12              | 4.42E-05 | 1.71764802 | 0.254 | 0.083 | 1 HSPC_spleen |
| EIF3B              | 4.57E-05 | 1.06529909 | 0.493 | 0.292 | 1 HSPC_spleen |
| ST3GAL2            | 4.63E-05 | 0.67776582 | 0.37  | 0.167 | 1 HSPC_spleen |
| ENSMMUG00000061125 | 4.67E-05 | 0.91614241 | 0.751 | 0.608 | 1 HSPC_spleen |
| MYB                | 4.75E-05 | 1.52738865 | 0.341 | 0.15  | 1 HSPC_spleen |
| SYNRG              | 4.83E-05 | 0.89858724 | 0.472 | 0.258 | 1 HSPC_spleen |
| ARL5A              | 5.00E-05 | 0.35316796 | 0.526 | 0.283 | 1 HSPC_spleen |
| FADS1              | 5.00E-05 | 1.34924097 | 0.331 | 0.142 | 1 HSPC_spleen |
| CCDC34             | 5.02E-05 | 1.55092923 | 0.36  | 0.183 | 1 HSPC_spleen |
| SLC39A8            | 5.08E-05 | 0.65968743 | 0.399 | 0.183 | 1 HSPC_spleen |
| FN3KRP             | 5.11E-05 | 1.16284211 | 0.284 | 0.1   | 1 HSPC_spleen |
| RFC4               | 5.39E-05 | 1.19220574 | 0.432 | 0.242 | 1 HSPC_spleen |
| RAC1               | 5.49E-05 | 0.30374132 | 0.605 | 0.383 | 1 HSPC_spleen |
| PPP1CC             | 5.49E-05 | 0.32337632 | 0.624 | 0.408 | 1 HSPC_spleen |
| GLCC11             | 5.53E-05 | 0.77653438 | 0.429 | 0.233 | 1 HSPC_spleen |
| ABCC4              | 5.68E-05 | 1.90205511 | 0.395 | 0.208 | 1 HSPC_spleen |
| MAST2              | 5.70E-05 | 1.55176334 | 0.323 | 0.133 | 1 HSPC_spleen |
| BLVRA              | 5.72E-05 | 0.69097676 | 0.47  | 0.275 | 1 HSPC_spleen |
| AKAP7              | 5.85E-05 | 1.68584825 | 0.284 | 0.108 | 1 HSPC_spleen |
| TARS1              | 5.93E-05 | 0.15724826 | 0.387 | 0.175 | 1 HSPC_spleen |
| ENSMMUG00000055687 | 5.96E-05 | 1.12134271 | 0.595 | 0.433 | 1 HSPC_spleen |
| KDEL2              | 6.05E-05 | 0.64696205 | 0.503 | 0.3   | 1 HSPC_spleen |
| HEXIM1             | 6.32E-05 | 0.75520583 | 0.29  | 0.108 | 1 HSPC_spleen |
| SPATA5             | 6.35E-05 | 1.09291774 | 0.589 | 0.367 | 1 HSPC_spleen |
| CEP192             | 6.64E-05 | 0.73364033 | 0.691 | 0.475 | 1 HSPC_spleen |
| CTCF               | 6.66E-05 | 0.93201165 | 0.628 | 0.4   | 1 HSPC_spleen |
| CLTB               | 6.70E-05 | 0.57649845 | 0.29  | 0.108 | 1 HSPC_spleen |
| COX1               | 6.80E-05 | 0.94303306 | 0.91  | 0.892 | 1 HSPC_spleen |
| COA1               | 6.81E-05 | 0.65141273 | 0.687 | 0.508 | 1 HSPC_spleen |
| DNAJC11            | 6.83E-05 | 0.66259358 | 0.364 | 0.167 | 1 HSPC_spleen |
| ATRN               | 7.11E-05 | 1.15714557 | 0.464 | 0.258 | 1 HSPC_spleen |
| STT3A.1            | 7.17E-05 | 0.73042437 | 0.374 | 0.167 | 1 HSPC_spleen |

|                    |            |            |       |       |               |
|--------------------|------------|------------|-------|-------|---------------|
| ENSMMUG00000058089 | 7.32E-05   | 1.29520923 | 0.258 | 0.083 | 1 HSPC_spleen |
| PLCL2              | 7.39E-05   | 1.39178192 | 0.658 | 0.467 | 1 HSPC_spleen |
| PKP4               | 7.49E-05   | 0.92890142 | 0.319 | 0.133 | 1 HSPC_spleen |
| UIMC1              | 7.68E-05   | 0.84860864 | 0.626 | 0.425 | 1 HSPC_spleen |
| EMSY               | 7.87E-05   | 1.67919821 | 0.346 | 0.175 | 1 HSPC_spleen |
| ENSMMUG00000039765 | 7.92E-05   | 1.06912482 | 0.429 | 0.242 | 1 HSPC_spleen |
| CD52               | 8.14E-05   | 0.92100973 | 0.841 | 0.742 | 1 HSPC_spleen |
| RANGAP1            | 8.19E-05   | 0.94516081 | 0.28  | 0.1   | 1 HSPC_spleen |
| ARMH3              | 8.21E-05   | 1.25037892 | 0.468 | 0.275 | 1 HSPC_spleen |
| DAAM1              | 8.36E-05   | 0.84260598 | 0.532 | 0.325 | 1 HSPC_spleen |
| DYNC2I2            | 8.55E-05   | 0.60484889 | 0.309 | 0.125 | 1 HSPC_spleen |
| SSRP1              | 8.60E-05   | 0.87301897 | 0.425 | 0.217 | 1 HSPC_spleen |
| TFDP1              | 8.62E-05   | 1.2392363  | 0.335 | 0.15  | 1 HSPC_spleen |
| DAP                | 8.69E-05   | 0.90946793 | 0.462 | 0.275 | 1 HSPC_spleen |
| SGMS1              | 8.77E-05   | 1.11292291 | 0.597 | 0.408 | 1 HSPC_spleen |
| TUBB               | 8.93E-05   | 0.65347232 | 0.753 | 0.633 | 1 HSPC_spleen |
| EPN1               | 8.96E-05   | 0.83766205 | 0.309 | 0.133 | 1 HSPC_spleen |
| CMPK1              | 9.18E-05   | 0.43980358 | 0.378 | 0.175 | 1 HSPC_spleen |
| CMSS1              | 9.26E-05   | 1.03652316 | 0.442 | 0.25  | 1 HSPC_spleen |
| DCAF12             | 9.36E-05   | 1.99369741 | 0.297 | 0.125 | 1 HSPC_spleen |
| SLC25A51           | 9.46E-05   | 1.4828099  | 0.346 | 0.167 | 1 HSPC_spleen |
| KLF3               | 9.54E-05   | 0.90156048 | 0.622 | 0.433 | 1 HSPC_spleen |
| RBM15              | 9.93E-05   | 0.99542838 | 0.415 | 0.225 | 1 HSPC_spleen |
| RMND5A             | 9.95E-05   | 1.5229346  | 0.47  | 0.275 | 1 HSPC_spleen |
| TFDP2              | 9.96E-05   | 0.75185367 | 0.865 | 0.633 | 1 HSPC_spleen |
| CALR               | 0.00010179 | 0.70069597 | 0.73  | 0.583 | 1 HSPC_spleen |
| ENSMMUG00000011604 | 0.00010403 | 1.00251576 | 0.448 | 0.258 | 1 HSPC_spleen |
| DNAJC6             | 0.00011294 | 1.7926396  | 0.339 | 0.167 | 1 HSPC_spleen |
| ENSMMUG00000057079 | 0.00011338 | 1.44248356 | 0.29  | 0.117 | 1 HSPC_spleen |
| MPP1               | 0.00011342 | 0.88357962 | 0.485 | 0.267 | 1 HSPC_spleen |
| TRAPPC8            | 0.00011432 | 1.04980573 | 0.346 | 0.15  | 1 HSPC_spleen |
| NCAPH              | 0.00011489 | 1.24917855 | 0.26  | 0.092 | 1 HSPC_spleen |
| RABEP1             | 0.00011596 | 0.890007   | 0.503 | 0.308 | 1 HSPC_spleen |

|                    |            |            |       |       |               |
|--------------------|------------|------------|-------|-------|---------------|
| BCAT1              | 0.00011598 | 1.23612212 | 0.421 | 0.242 | 1 HSPC_spleen |
| CEP128             | 0.00011601 | 1.0607715  | 0.407 | 0.225 | 1 HSPC_spleen |
| METAP2             | 0.00011685 | 0.57361817 | 0.785 | 0.55  | 1 HSPC_spleen |
| GDE1               | 0.00011706 | 1.07000603 | 0.35  | 0.158 | 1 HSPC_spleen |
| ENSMMUG00000032231 | 0.00011748 | 0.61383355 | 0.523 | 0.308 | 1 HSPC_spleen |
| UBR1               | 0.00011797 | 1.00831796 | 0.642 | 0.458 | 1 HSPC_spleen |
| HIRA               | 0.00011831 | 0.62330383 | 0.409 | 0.217 | 1 HSPC_spleen |
| CFAP410            | 0.00011915 | 1.02253514 | 0.358 | 0.175 | 1 HSPC_spleen |
| GSPT1              | 0.00012414 | 1.12159117 | 0.431 | 0.233 | 1 HSPC_spleen |
| MOV10              | 0.00012565 | 0.75613556 | 0.26  | 0.092 | 1 HSPC_spleen |
| PRNP               | 0.0001276  | 1.354105   | 0.307 | 0.142 | 1 HSPC_spleen |
| ERI2               | 0.00013292 | 1.59828672 | 0.262 | 0.1   | 1 HSPC_spleen |
| DIRAS1             | 0.00013394 | 0.59897598 | 0.474 | 0.258 | 1 HSPC_spleen |
| ZNF33A             | 0.00013611 | 1.01679577 | 0.538 | 0.342 | 1 HSPC_spleen |
| TMEM70             | 0.00013742 | 1.24109663 | 0.315 | 0.142 | 1 HSPC_spleen |
| NUP107             | 0.00014101 | 1.24486004 | 0.372 | 0.192 | 1 HSPC_spleen |
| NEMP1              | 0.00014215 | 0.90817043 | 0.278 | 0.108 | 1 HSPC_spleen |
| KATNBL1            | 0.00014285 | 0.78469305 | 0.577 | 0.358 | 1 HSPC_spleen |
| PKD1L1             | 0.000143   | 1.13926534 | 0.262 | 0.1   | 1 HSPC_spleen |
| TIMM29             | 0.00014518 | 0.6807618  | 0.26  | 0.1   | 1 HSPC_spleen |
| ORC4               | 0.00014622 | 0.80855469 | 0.507 | 0.308 | 1 HSPC_spleen |
| DYNLL2             | 0.00014713 | 0.73553628 | 0.374 | 0.192 | 1 HSPC_spleen |
| TMEM59L            | 0.00015553 | 0.50132971 | 0.507 | 0.317 | 1 HSPC_spleen |
| ENSMMUG00000017231 | 0.00015853 | 0.69320843 | 0.566 | 0.375 | 1 HSPC_spleen |
| YPEL3              | 0.00016021 | 0.71791386 | 0.344 | 0.15  | 1 HSPC_spleen |
| TERF2IP            | 0.00016183 | 0.72588012 | 0.352 | 0.167 | 1 HSPC_spleen |
| GRB10              | 0.00016466 | 1.85854657 | 0.297 | 0.133 | 1 HSPC_spleen |
| AGFG1              | 0.00016532 | 1.31680837 | 0.327 | 0.158 | 1 HSPC_spleen |
| FKBP5              | 0.00016577 | 1.15150228 | 0.468 | 0.283 | 1 HSPC_spleen |
| POLE3              | 0.00016848 | 0.71325805 | 0.474 | 0.292 | 1 HSPC_spleen |
| PMS1               | 0.00017016 | 1.03892853 | 0.407 | 0.233 | 1 HSPC_spleen |
| PTRH1              | 0.00017026 | 1.12106513 | 0.27  | 0.108 | 1 HSPC_spleen |
| EIF2B3             | 0.00017274 | 0.60465525 | 0.528 | 0.35  | 1 HSPC_spleen |

|                   |            |            |       |       |               |
|-------------------|------------|------------|-------|-------|---------------|
| SUZ12             | 0.00017284 | 0.78459895 | 0.669 | 0.458 | 1 HSPC_spleen |
| ATP1A1            | 0.00017656 | 0.4704184  | 0.528 | 0.325 | 1 HSPC_spleen |
| CEP135            | 0.00017728 | 0.927794   | 0.38  | 0.183 | 1 HSPC_spleen |
| PRKDC             | 0.0001809  | 0.67850835 | 0.738 | 0.575 | 1 HSPC_spleen |
| PSMD3             | 0.0001817  | 1.00545895 | 0.36  | 0.175 | 1 HSPC_spleen |
| PYCR2             | 0.00018574 | 1.08892747 | 0.313 | 0.133 | 1 HSPC_spleen |
| FBXO9             | 0.0001895  | 0.92400174 | 0.485 | 0.308 | 1 HSPC_spleen |
| VPS13A            | 0.00018953 | 0.72620944 | 0.652 | 0.442 | 1 HSPC_spleen |
| NFKBIB            | 0.00018958 | 1.21534474 | 0.417 | 0.242 | 1 HSPC_spleen |
| APEH              | 0.00020066 | 1.36355733 | 0.256 | 0.1   | 1 HSPC_spleen |
| PSMF1             | 0.00020535 | 0.78621764 | 0.409 | 0.217 | 1 HSPC_spleen |
| KTN1              | 0.00020618 | 0.76194245 | 0.605 | 0.442 | 1 HSPC_spleen |
| ALKBH7            | 0.00020626 | 0.51045198 | 0.497 | 0.3   | 1 HSPC_spleen |
| BANP              | 0.00020746 | 0.87314627 | 0.36  | 0.175 | 1 HSPC_spleen |
| FBL               | 0.00020882 | 0.56108057 | 0.487 | 0.292 | 1 HSPC_spleen |
| XRCC4             | 0.00021429 | 0.98405647 | 0.511 | 0.317 | 1 HSPC_spleen |
| MAC1R             | 0.00021688 | 2.10831519 | 0.25  | 0.1   | 1 HSPC_spleen |
| ZNF514            | 0.00021936 | 0.59114793 | 0.591 | 0.392 | 1 HSPC_spleen |
| EEF2K             | 0.00021987 | 0.84794325 | 0.341 | 0.167 | 1 HSPC_spleen |
| RPIA              | 0.00022936 | 1.11064688 | 0.362 | 0.175 | 1 HSPC_spleen |
| EXOSC7            | 0.00023328 | 0.77485824 | 0.477 | 0.275 | 1 HSPC_spleen |
| ACTL6A            | 0.00023739 | 0.84026752 | 0.295 | 0.133 | 1 HSPC_spleen |
| DROSHA            | 0.00023779 | 1.06218961 | 0.374 | 0.2   | 1 HSPC_spleen |
| LONP1             | 0.00023864 | 1.22982984 | 0.305 | 0.142 | 1 HSPC_spleen |
| ENSMUG00000051239 | 0.00024781 | 0.5696334  | 0.348 | 0.158 | 1 HSPC_spleen |
| TMEM242           | 0.00025285 | 0.3228605  | 0.476 | 0.267 | 1 HSPC_spleen |
| RABL6             | 0.00027581 | 0.49649628 | 0.489 | 0.292 | 1 HSPC_spleen |
| KLHDC2            | 0.00027799 | 0.38578374 | 0.444 | 0.242 | 1 HSPC_spleen |
| DENND6A           | 0.00028119 | 1.01511999 | 0.389 | 0.2   | 1 HSPC_spleen |
| GATA1             | 0.00028281 | 1.32897386 | 0.262 | 0.108 | 1 HSPC_spleen |
| APMAP             | 0.00029139 | 0.6258734  | 0.36  | 0.183 | 1 HSPC_spleen |
| TBCD              | 0.00029222 | 1.45218316 | 0.317 | 0.15  | 1 HSPC_spleen |
| SNX3              | 0.00029558 | 0.40245619 | 0.609 | 0.4   | 1 HSPC_spleen |

|                   |            |            |       |       |               |
|-------------------|------------|------------|-------|-------|---------------|
| SNRNP70           | 0.00029588 | 0.18748456 | 0.658 | 0.458 | 1 HSPC_spleen |
| AMFR              | 0.0002998  | 0.7745153  | 0.573 | 0.375 | 1 HSPC_spleen |
| RAB10             | 0.00030589 | 0.60373165 | 0.699 | 0.483 | 1 HSPC_spleen |
| HIST1H2BK         | 0.00030964 | 1.62889242 | 0.292 | 0.133 | 1 HSPC_spleen |
| BRD8              | 0.00030982 | 0.45093998 | 0.391 | 0.2   | 1 HSPC_spleen |
| PSMD9             | 0.00032195 | 0.74658415 | 0.466 | 0.267 | 1 HSPC_spleen |
| TMEM14B           | 0.00032443 | 0.57438418 | 0.83  | 0.7   | 1 HSPC_spleen |
| PACS1             | 0.00032826 | 0.77342857 | 0.599 | 0.408 | 1 HSPC_spleen |
| CENPM             | 0.0003285  | 0.62166441 | 0.376 | 0.192 | 1 HSPC_spleen |
| C5H4orf27         | 0.00032872 | 0.40221912 | 0.472 | 0.292 | 1 HSPC_spleen |
| GFI1B             | 0.00033113 | 0.7316301  | 0.354 | 0.183 | 1 HSPC_spleen |
| DNM2              | 0.00033741 | 0.6228439  | 0.481 | 0.308 | 1 HSPC_spleen |
| C10H20orf24       | 0.00034004 | 0.31021359 | 0.644 | 0.442 | 1 HSPC_spleen |
| PBRM1             | 0.0003444  | 0.56163232 | 0.658 | 0.458 | 1 HSPC_spleen |
| ATP5IF1           | 0.00034969 | 0.85675759 | 0.779 | 0.692 | 1 HSPC_spleen |
| PIGA              | 0.00035548 | 0.8769157  | 0.337 | 0.167 | 1 HSPC_spleen |
| RUSF1             | 0.00035815 | 0.89720441 | 0.309 | 0.142 | 1 HSPC_spleen |
| IPO11             | 0.00036118 | 0.58222379 | 0.562 | 0.375 | 1 HSPC_spleen |
| CBX5              | 0.00036568 | 0.64804664 | 0.532 | 0.35  | 1 HSPC_spleen |
| FANCC             | 0.00036636 | 1.01991971 | 0.523 | 0.358 | 1 HSPC_spleen |
| TIMM21            | 0.00036954 | 0.94905783 | 0.282 | 0.117 | 1 HSPC_spleen |
| ARHGAP35          | 0.0003807  | 1.24138223 | 0.362 | 0.192 | 1 HSPC_spleen |
| LIN9              | 0.00038877 | 1.53446957 | 0.284 | 0.125 | 1 HSPC_spleen |
| PTBP1             | 0.00039326 | 0.48161206 | 0.511 | 0.292 | 1 HSPC_spleen |
| CKS2              | 0.00039827 | 0.47424662 | 0.65  | 0.467 | 1 HSPC_spleen |
| BOP1              | 0.00041532 | 1.28122586 | 0.25  | 0.1   | 1 HSPC_spleen |
| STT3A             | 0.00041887 | 0.87939257 | 0.327 | 0.158 | 1 HSPC_spleen |
| ANP32E            | 0.00042335 | 0.47559726 | 0.568 | 0.383 | 1 HSPC_spleen |
| ENSMUG00000053735 | 0.00042461 | 0.71139456 | 0.724 | 0.617 | 1 HSPC_spleen |
| PBX3              | 0.00043186 | 1.00818879 | 0.526 | 0.35  | 1 HSPC_spleen |
| DNAJA1            | 0.00043301 | 0.50453758 | 0.722 | 0.575 | 1 HSPC_spleen |
| JTB               | 0.0004332  | 0.30817792 | 0.536 | 0.35  | 1 HSPC_spleen |
| NASP              | 0.00043362 | 0.43374702 | 0.722 | 0.525 | 1 HSPC_spleen |

|                    |            |            |       |       |               |
|--------------------|------------|------------|-------|-------|---------------|
| TRAP1              | 0.00043614 | 0.72926813 | 0.339 | 0.167 | 1 HSPC_spleen |
| SMARCA5            | 0.00044336 | 0.40621007 | 0.64  | 0.433 | 1 HSPC_spleen |
| CNNM2              | 0.00044768 | 1.30326448 | 0.29  | 0.142 | 1 HSPC_spleen |
| DAP3               | 0.00044784 | 0.77895504 | 0.524 | 0.342 | 1 HSPC_spleen |
| GPCPD1             | 0.00046246 | 1.70630289 | 0.528 | 0.342 | 1 HSPC_spleen |
| FOXO3              | 0.00046352 | 1.36968035 | 0.65  | 0.458 | 1 HSPC_spleen |
| ARL15              | 0.00048056 | 0.81817154 | 0.673 | 0.483 | 1 HSPC_spleen |
| CENPS-CORT         | 0.00048589 | 1.0869222  | 0.288 | 0.133 | 1 HSPC_spleen |
| ENSMMUG00000063609 | 0.0004882  | 0.11451315 | 0.458 | 0.25  | 1 HSPC_spleen |
| BFAR               | 0.0004962  | 1.14691175 | 0.256 | 0.108 | 1 HSPC_spleen |
| ENSMMUG00000011459 | 0.00051577 | 1.35103126 | 0.266 | 0.117 | 1 HSPC_spleen |
| RNASEH2A           | 0.00051673 | 0.80519582 | 0.366 | 0.183 | 1 HSPC_spleen |
| SLC44A1            | 0.00052766 | 0.64011825 | 0.423 | 0.242 | 1 HSPC_spleen |
| USP48              | 0.00052879 | 0.34852439 | 0.526 | 0.325 | 1 HSPC_spleen |
| PCBD1              | 0.00053164 | 1.10684831 | 0.313 | 0.158 | 1 HSPC_spleen |
| FOXRED1            | 0.0005344  | 0.8161563  | 0.331 | 0.167 | 1 HSPC_spleen |
| NDUFAF2            | 0.00054043 | 0.99392727 | 0.63  | 0.458 | 1 HSPC_spleen |
| RAD23A             | 0.00054233 | 0.64669405 | 0.558 | 0.383 | 1 HSPC_spleen |
| ZNF143             | 0.00055269 | 1.78098994 | 0.266 | 0.125 | 1 HSPC_spleen |
| NUDT21             | 0.00055707 | 0.38424936 | 0.544 | 0.342 | 1 HSPC_spleen |
| CEP85              | 0.00057786 | 0.67325041 | 0.301 | 0.142 | 1 HSPC_spleen |
| CSKMT              | 0.00058024 | 1.13191618 | 0.294 | 0.142 | 1 HSPC_spleen |
| FAXDC2             | 0.00058213 | 1.82585617 | 0.292 | 0.142 | 1 HSPC_spleen |
| CYB5B              | 0.00058547 | 0.90837301 | 0.333 | 0.167 | 1 HSPC_spleen |
| IP6K1              | 0.0005922  | 0.61941474 | 0.556 | 0.367 | 1 HSPC_spleen |
| RNF10              | 0.00059315 | 0.51671576 | 0.55  | 0.35  | 1 HSPC_spleen |
| TLK2               | 0.0005948  | 0.67389735 | 0.632 | 0.45  | 1 HSPC_spleen |
| RC3H2              | 0.00059654 | 0.89998996 | 0.311 | 0.15  | 1 HSPC_spleen |
| GLRX2              | 0.00059886 | 0.83120543 | 0.341 | 0.175 | 1 HSPC_spleen |
| MNS1               | 0.00060528 | 1.16724642 | 0.331 | 0.167 | 1 HSPC_spleen |
| MMD                | 0.0006083  | 0.14747789 | 0.346 | 0.183 | 1 HSPC_spleen |
| ENSMMUG00000050336 | 0.00061338 | 0.94341716 | 0.307 | 0.15  | 1 HSPC_spleen |
| KPNA2              | 0.00062646 | 1.53143815 | 0.337 | 0.192 | 1 HSPC_spleen |

|                   |            |            |       |       |               |
|-------------------|------------|------------|-------|-------|---------------|
| ZER1              | 0.00064043 | 1.4645381  | 0.393 | 0.242 | 1 HSPC_spleen |
| UBE2J2            | 0.00064062 | 1.11230775 | 0.301 | 0.15  | 1 HSPC_spleen |
| CCDC77            | 0.00064208 | 0.67816466 | 0.28  | 0.125 | 1 HSPC_spleen |
| SDE2              | 0.00064441 | 0.82657082 | 0.335 | 0.158 | 1 HSPC_spleen |
| POLK              | 0.00065743 | 0.64128302 | 0.413 | 0.242 | 1 HSPC_spleen |
| COX8A             | 0.00066336 | 0.31415224 | 0.611 | 0.433 | 1 HSPC_spleen |
| TMEM260           | 0.00066553 | 1.18321567 | 0.276 | 0.125 | 1 HSPC_spleen |
| DNAJC13           | 0.00067225 | 0.9496698  | 0.268 | 0.117 | 1 HSPC_spleen |
| PPP5C             | 0.00068007 | 0.17116387 | 0.303 | 0.142 | 1 HSPC_spleen |
| NDUFS7            | 0.00068563 | 1.02869919 | 0.292 | 0.142 | 1 HSPC_spleen |
| PWWP2A            | 0.00068892 | 0.85469593 | 0.25  | 0.1   | 1 HSPC_spleen |
| STIL              | 0.0006891  | 1.32127312 | 0.393 | 0.242 | 1 HSPC_spleen |
| PCGF5             | 0.00069089 | 0.48948696 | 0.364 | 0.192 | 1 HSPC_spleen |
| AMDHD1            | 0.00069217 | 0.52594309 | 0.679 | 0.525 | 1 HSPC_spleen |
| FEM1C             | 0.00070525 | 0.68320989 | 0.286 | 0.142 | 1 HSPC_spleen |
| LMAN2             | 0.00070576 | 0.40435348 | 0.587 | 0.375 | 1 HSPC_spleen |
| ND4               | 0.00070746 | 0.94719067 | 0.885 | 0.933 | 1 HSPC_spleen |
| ATG9A             | 0.00071535 | 1.06737746 | 0.25  | 0.108 | 1 HSPC_spleen |
| TMCO1             | 0.00071888 | 0.57809716 | 0.521 | 0.358 | 1 HSPC_spleen |
| CANX              | 0.00075045 | 0.49967072 | 0.573 | 0.4   | 1 HSPC_spleen |
| RASSF1            | 0.00075464 | 0.47919271 | 0.481 | 0.292 | 1 HSPC_spleen |
| TUBA1C            | 0.00076153 | 0.72087753 | 0.409 | 0.242 | 1 HSPC_spleen |
| UBN2              | 0.0007695  | 0.79361474 | 0.423 | 0.258 | 1 HSPC_spleen |
| NME3              | 0.00078367 | 0.42397257 | 0.605 | 0.442 | 1 HSPC_spleen |
| TMEM9B            | 0.00078497 | 0.91738538 | 0.274 | 0.125 | 1 HSPC_spleen |
| SNX1              | 0.00078989 | 0.54093078 | 0.483 | 0.3   | 1 HSPC_spleen |
| ISCA1             | 0.00079505 | 0.51894782 | 0.614 | 0.417 | 1 HSPC_spleen |
| LRR1              | 0.00081384 | 0.57806417 | 0.256 | 0.108 | 1 HSPC_spleen |
| TMEM98            | 0.00081558 | 0.56807576 | 0.329 | 0.158 | 1 HSPC_spleen |
| ODC1              | 0.00082932 | 0.92399828 | 0.372 | 0.217 | 1 HSPC_spleen |
| ENSMUG00000018360 | 0.00083767 | 1.36341535 | 0.288 | 0.142 | 1 HSPC_spleen |
| TSFM              | 0.00085306 | 0.7599521  | 0.305 | 0.15  | 1 HSPC_spleen |
| EIF4G1            | 0.00085322 | 0.73722974 | 0.448 | 0.275 | 1 HSPC_spleen |

|                   |            |            |       |       |               |
|-------------------|------------|------------|-------|-------|---------------|
| UQCRC2            | 0.00085341 | 0.49954492 | 0.609 | 0.417 | 1 HSPC_spleen |
| FARSB             | 0.00086983 | 0.71008146 | 0.387 | 0.225 | 1 HSPC_spleen |
| NUP50             | 0.00088114 | 0.60950292 | 0.413 | 0.233 | 1 HSPC_spleen |
| MXI1              | 0.0008966  | 1.2568449  | 0.401 | 0.233 | 1 HSPC_spleen |
| ENSMUG00000063198 | 0.00089742 | 1.10668215 | 0.295 | 0.15  | 1 HSPC_spleen |
| GTDC1             | 0.00090708 | 0.87935427 | 0.538 | 0.367 | 1 HSPC_spleen |
| LARGE1            | 0.00091071 | 1.17081183 | 0.382 | 0.233 | 1 HSPC_spleen |
| HADHB             | 0.0009173  | 0.66000119 | 0.521 | 0.342 | 1 HSPC_spleen |
| PRRG1             | 0.00091838 | 0.40839853 | 0.485 | 0.3   | 1 HSPC_spleen |
| CLEC16A           | 0.00093853 | 1.14732925 | 0.354 | 0.208 | 1 HSPC_spleen |
| IPO9              | 0.0009413  | 0.72357785 | 0.477 | 0.308 | 1 HSPC_spleen |
| LAMP1             | 0.00095959 | 0.3019421  | 0.462 | 0.267 | 1 HSPC_spleen |
| FBXW2             | 0.00096276 | 0.9169722  | 0.468 | 0.3   | 1 HSPC_spleen |
| TAB3              | 0.00098016 | 1.36985878 | 0.266 | 0.125 | 1 HSPC_spleen |
| HCFC1             | 0.0009843  | 0.85817113 | 0.323 | 0.167 | 1 HSPC_spleen |
| NSMCE4A           | 0.0009919  | 0.81252564 | 0.268 | 0.117 | 1 HSPC_spleen |
| ACADM             | 0.00099752 | 0.68065498 | 0.391 | 0.225 | 1 HSPC_spleen |
| CCDC88C           | 0.00100562 | 0.9526625  | 0.432 | 0.275 | 1 HSPC_spleen |
| CCDC167           | 0.0010076  | 0.30454448 | 0.282 | 0.133 | 1 HSPC_spleen |
| PSMD1             | 0.00101215 | 0.66281076 | 0.587 | 0.4   | 1 HSPC_spleen |
| OARD1             | 0.00102661 | 0.31875357 | 0.442 | 0.258 | 1 HSPC_spleen |
| NUMA1             | 0.00102851 | 0.81191052 | 0.573 | 0.4   | 1 HSPC_spleen |
| TMBIM1            | 0.00103383 | 0.28140852 | 0.321 | 0.158 | 1 HSPC_spleen |
| SMC3              | 0.001054   | 0.3843831  | 0.644 | 0.483 | 1 HSPC_spleen |
| POLD1             | 0.00106296 | 0.81303411 | 0.264 | 0.117 | 1 HSPC_spleen |
| CYHR1             | 0.0010865  | 0.10752577 | 0.288 | 0.133 | 1 HSPC_spleen |
| NAA10             | 0.00108925 | 0.36026647 | 0.393 | 0.208 | 1 HSPC_spleen |
| UBE2G2            | 0.00109586 | 0.83685744 | 0.44  | 0.267 | 1 HSPC_spleen |
| ATP5MC1           | 0.00111911 | 0.35570395 | 0.417 | 0.25  | 1 HSPC_spleen |
| COX2              | 0.00112309 | 0.75442286 | 0.892 | 0.933 | 1 HSPC_spleen |
| BRD9              | 0.00112387 | 0.70743054 | 0.38  | 0.208 | 1 HSPC_spleen |
| KIAA2026          | 0.0011527  | 1.00320433 | 0.364 | 0.2   | 1 HSPC_spleen |
| NUP155            | 0.00116036 | 0.74730702 | 0.446 | 0.283 | 1 HSPC_spleen |



|                   |            |            |       |       |               |
|-------------------|------------|------------|-------|-------|---------------|
| ENSMUG00000062716 | 0.00118143 | 0.55441644 | 0.509 | 0.333 | 1 HSPC_spleen |
| B4GALT5           | 0.00119859 | 0.76924851 | 0.358 | 0.2   | 1 HSPC_spleen |
| CEMIP2            | 0.00120225 | 0.59978505 | 0.272 | 0.133 | 1 HSPC_spleen |
| SLF1              | 0.00121061 | 0.44589256 | 0.317 | 0.158 | 1 HSPC_spleen |
| EBAG9             | 0.00121798 | 0.93673549 | 0.303 | 0.158 | 1 HSPC_spleen |
| CBX3              | 0.00125104 | 0.29100536 | 0.742 | 0.575 | 1 HSPC_spleen |
| DHRS7B            | 0.00127443 | 0.84269086 | 0.401 | 0.225 | 1 HSPC_spleen |
| RPN2              | 0.00127788 | 0.29926884 | 0.597 | 0.408 | 1 HSPC_spleen |
| BTRC              | 0.00127958 | 1.31493203 | 0.481 | 0.333 | 1 HSPC_spleen |
| RSBN1L            | 0.00128002 | 0.13022894 | 0.432 | 0.25  | 1 HSPC_spleen |
| ATG2B             | 0.00130065 | 1.10173767 | 0.276 | 0.133 | 1 HSPC_spleen |
| PSMD8             | 0.00130125 | 0.88553531 | 0.278 | 0.133 | 1 HSPC_spleen |
| PDCD10            | 0.00130696 | 0.53444694 | 0.742 | 0.525 | 1 HSPC_spleen |
| ALDH6A1           | 0.00131172 | 1.1615272  | 0.28  | 0.142 | 1 HSPC_spleen |
| AK3               | 0.00131349 | 0.94269687 | 0.301 | 0.15  | 1 HSPC_spleen |
| NARS2             | 0.00133367 | 0.53184188 | 0.442 | 0.3   | 1 HSPC_spleen |
| ASCC2             | 0.00133946 | 1.27229198 | 0.405 | 0.25  | 1 HSPC_spleen |
| CCS               | 0.00135884 | 0.47192398 | 0.327 | 0.183 | 1 HSPC_spleen |
| PELP1             | 0.00136768 | 0.70179662 | 0.317 | 0.167 | 1 HSPC_spleen |
| ATG3              | 0.00138917 | 0.57789022 | 0.501 | 0.342 | 1 HSPC_spleen |
| FAM98B            | 0.00139683 | 1.00149247 | 0.333 | 0.183 | 1 HSPC_spleen |
| IDH2              | 0.00141141 | 0.4560068  | 0.626 | 0.458 | 1 HSPC_spleen |
| UBN1              | 0.00141296 | 1.16117295 | 0.294 | 0.158 | 1 HSPC_spleen |
| NELFCD            | 0.00143907 | 0.72196507 | 0.386 | 0.225 | 1 HSPC_spleen |
| PSMG2             | 0.00146692 | 0.30989995 | 0.536 | 0.358 | 1 HSPC_spleen |
| CETN3             | 0.00147066 | 0.7975743  | 0.344 | 0.192 | 1 HSPC_spleen |
| ARL1              | 0.00147706 | 0.831681   | 0.325 | 0.167 | 1 HSPC_spleen |
| STAG1             | 0.00149469 | 0.77391944 | 0.873 | 0.717 | 1 HSPC_spleen |
| ZC3H7B            | 0.00151478 | 0.70293033 | 0.28  | 0.133 | 1 HSPC_spleen |
| FKBP2             | 0.00151912 | 0.18285516 | 0.458 | 0.283 | 1 HSPC_spleen |
| ACADS             | 0.001522   | 0.99062527 | 0.286 | 0.15  | 1 HSPC_spleen |
| TTC7B             | 0.00152305 | 0.76890583 | 0.411 | 0.25  | 1 HSPC_spleen |
| KPNA1             | 0.00154021 | 0.34324876 | 0.575 | 0.417 | 1 HSPC_spleen |

|                    |            |            |       |       |               |
|--------------------|------------|------------|-------|-------|---------------|
| ENSMMUG00000055718 | 0.00154047 | 1.10562367 | 0.286 | 0.142 | 1 HSPC_spleen |
| ENSMMUG00000044346 | 0.00156224 | 1.02066638 | 0.292 | 0.15  | 1 HSPC_spleen |
| MRPL28             | 0.00159147 | 0.81547537 | 0.288 | 0.142 | 1 HSPC_spleen |
| CREBZF             | 0.00159269 | 0.77373362 | 0.28  | 0.133 | 1 HSPC_spleen |
| CALM3              | 0.00162798 | 0.32620768 | 0.562 | 0.392 | 1 HSPC_spleen |
| KAT8               | 0.0016437  | 1.18721358 | 0.268 | 0.133 | 1 HSPC_spleen |
| CEP20              | 0.0016776  | 0.87851946 | 0.311 | 0.167 | 1 HSPC_spleen |
| SDF2L1             | 0.0017044  | 0.67284936 | 0.438 | 0.275 | 1 HSPC_spleen |
| BCL11A             | 0.0017081  | 0.41249157 | 0.573 | 0.392 | 1 HSPC_spleen |
| TMEM164            | 0.0017446  | 1.01070335 | 0.352 | 0.208 | 1 HSPC_spleen |
| RP9                | 0.00175533 | 0.46400721 | 0.28  | 0.133 | 1 HSPC_spleen |
| SDHA               | 0.00176382 | 0.50411653 | 0.454 | 0.292 | 1 HSPC_spleen |
| PRPS1              | 0.00176711 | 1.40338743 | 0.26  | 0.133 | 1 HSPC_spleen |
| PPP6R3             | 0.00180866 | 0.65594667 | 0.751 | 0.567 | 1 HSPC_spleen |
| MTCH1              | 0.00181439 | 0.20679059 | 0.374 | 0.2   | 1 HSPC_spleen |
| EIF3F              | 0.00181564 | 0.37839294 | 0.724 | 0.55  | 1 HSPC_spleen |
| TOPBP1             | 0.00181824 | 0.42968143 | 0.515 | 0.342 | 1 HSPC_spleen |
| RAB8A              | 0.00185266 | 0.29752449 | 0.446 | 0.275 | 1 HSPC_spleen |
| ENSMMUG00000021246 | 0.0018629  | 0.23549305 | 0.307 | 0.158 | 1 HSPC_spleen |
| TBC1D13            | 0.00186981 | 1.23593537 | 0.295 | 0.158 | 1 HSPC_spleen |
| PRDX4              | 0.00190385 | 0.64637399 | 0.399 | 0.233 | 1 HSPC_spleen |
| NUDCD1             | 0.00191973 | 1.34039837 | 0.37  | 0.225 | 1 HSPC_spleen |
| HMG20A             | 0.00194738 | 0.48719531 | 0.321 | 0.175 | 1 HSPC_spleen |
| ENSMMUG00000020643 | 0.0019939  | 0.62798529 | 0.431 | 0.267 | 1 HSPC_spleen |
| DDB1               | 0.00200977 | 0.72652663 | 0.552 | 0.383 | 1 HSPC_spleen |
| ENSMMUG00000063316 | 0.0020244  | 0.75699175 | 0.658 | 0.517 | 1 HSPC_spleen |
| DGLUCY             | 0.00203868 | 0.23368829 | 0.341 | 0.2   | 1 HSPC_spleen |
| PLEKHJ1            | 0.00204694 | 0.39534998 | 0.389 | 0.217 | 1 HSPC_spleen |
| MTG2               | 0.00208796 | 0.60139909 | 0.299 | 0.15  | 1 HSPC_spleen |
| FRYL               | 0.00210847 | 1.53176705 | 0.607 | 0.475 | 1 HSPC_spleen |
| TERB1              | 0.00216391 | 1.17857193 | 0.295 | 0.167 | 1 HSPC_spleen |
| ARHGAP21           | 0.00216916 | 0.89560949 | 0.333 | 0.175 | 1 HSPC_spleen |
| PM20D2             | 0.00220294 | 0.55070358 | 0.665 | 0.608 | 1 HSPC_spleen |

|                   |            |            |       |       |               |
|-------------------|------------|------------|-------|-------|---------------|
| YTHDC2            | 0.0022078  | 0.46298855 | 0.401 | 0.25  | 1 HSPC_spleen |
| HIPK2             | 0.00221082 | 0.6409132  | 0.415 | 0.25  | 1 HSPC_spleen |
| C2CD5             | 0.00225208 | 0.78782817 | 0.391 | 0.242 | 1 HSPC_spleen |
| STIP1             | 0.00227627 | 0.38925696 | 0.489 | 0.325 | 1 HSPC_spleen |
| GPD2              | 0.00227796 | 0.82427239 | 0.411 | 0.25  | 1 HSPC_spleen |
| TAF15             | 0.00230019 | 0.38851974 | 0.744 | 0.558 | 1 HSPC_spleen |
| GAPVD1            | 0.00232018 | 0.85986928 | 0.669 | 0.508 | 1 HSPC_spleen |
| PRPF38B           | 0.00235375 | 0.23603247 | 0.648 | 0.483 | 1 HSPC_spleen |
| IPO7              | 0.00238884 | 0.29639867 | 0.546 | 0.375 | 1 HSPC_spleen |
| TMX1              | 0.00240154 | 0.64999877 | 0.35  | 0.2   | 1 HSPC_spleen |
| DICER1            | 0.00240906 | 0.42752967 | 0.358 | 0.2   | 1 HSPC_spleen |
| SLC38A10          | 0.00241111 | 0.33386536 | 0.352 | 0.183 | 1 HSPC_spleen |
| SEMA4D            | 0.00241171 | 0.64880285 | 0.56  | 0.383 | 1 HSPC_spleen |
| PFN1              | 0.00243253 | 0.40686151 | 0.798 | 0.75  | 1 HSPC_spleen |
| EIF5B             | 0.0024608  | 0.15105046 | 0.614 | 0.425 | 1 HSPC_spleen |
| PRXL2A            | 0.00248674 | 0.78253441 | 0.54  | 0.4   | 1 HSPC_spleen |
| CCDC47            | 0.00257156 | 0.56104983 | 0.431 | 0.25  | 1 HSPC_spleen |
| SLC38A2           | 0.00257305 | 0.24317842 | 0.546 | 0.358 | 1 HSPC_spleen |
| CHD8              | 0.00257381 | 0.6088263  | 0.356 | 0.2   | 1 HSPC_spleen |
| UTP6              | 0.0025805  | 0.6853445  | 0.29  | 0.15  | 1 HSPC_spleen |
| AKIRIN2           | 0.00258346 | 0.61401541 | 0.464 | 0.308 | 1 HSPC_spleen |
| FANCM             | 0.00261057 | 1.0053528  | 0.431 | 0.3   | 1 HSPC_spleen |
| FBXO10            | 0.00262658 | 0.57449799 | 0.517 | 0.333 | 1 HSPC_spleen |
| VEZT              | 0.00263944 | 0.77479711 | 0.609 | 0.433 | 1 HSPC_spleen |
| ENSMUG00000002668 | 0.00265237 | 0.50578978 | 0.307 | 0.167 | 1 HSPC_spleen |
| SRP9              | 0.00266353 | 0.41370178 | 0.55  | 0.367 | 1 HSPC_spleen |
| NSMCE2            | 0.00266465 | 0.69327298 | 0.697 | 0.542 | 1 HSPC_spleen |
| DNMT1             | 0.00268115 | 0.50114407 | 0.577 | 0.425 | 1 HSPC_spleen |
| XPO7              | 0.00272201 | 2.03431964 | 0.546 | 0.392 | 1 HSPC_spleen |
| GON4L             | 0.0027229  | 0.66167024 | 0.47  | 0.3   | 1 HSPC_spleen |
| ZNF664            | 0.00272999 | 0.56615254 | 0.292 | 0.158 | 1 HSPC_spleen |
| GATD3A            | 0.00275645 | 0.49083721 | 0.337 | 0.183 | 1 HSPC_spleen |
| VEZF1             | 0.00277633 | 0.89665218 | 0.311 | 0.175 | 1 HSPC_spleen |

|                    |            |            |       |       |               |
|--------------------|------------|------------|-------|-------|---------------|
| DCUN1D1            | 0.00277735 | 1.32406435 | 0.485 | 0.325 | 1 HSPC_spleen |
| IMMT               | 0.00280841 | 0.59313571 | 0.45  | 0.283 | 1 HSPC_spleen |
| MGA                | 0.00282667 | 0.44079525 | 0.425 | 0.267 | 1 HSPC_spleen |
| PPP3CB             | 0.00286099 | 0.77592324 | 0.344 | 0.208 | 1 HSPC_spleen |
| HACE1              | 0.00287475 | 1.11471112 | 0.387 | 0.25  | 1 HSPC_spleen |
| NRDC               | 0.00288896 | 0.63980722 | 0.515 | 0.367 | 1 HSPC_spleen |
| PPWD1              | 0.00289141 | 1.03731238 | 0.305 | 0.175 | 1 HSPC_spleen |
| ISCA2              | 0.00290327 | 0.73121193 | 0.307 | 0.175 | 1 HSPC_spleen |
| B4GALT1            | 0.00292194 | 0.19844476 | 0.252 | 0.117 | 1 HSPC_spleen |
| FBXO27             | 0.00292907 | 0.73858586 | 0.384 | 0.25  | 1 HSPC_spleen |
| BUB3               | 0.00298641 | 0.58089147 | 0.425 | 0.258 | 1 HSPC_spleen |
| SETD3              | 0.00300157 | 0.61429871 | 0.38  | 0.225 | 1 HSPC_spleen |
| Metazoa-SRP.1344   | 0.0030185  | 0.64361211 | 0.294 | 0.15  | 1 HSPC_spleen |
| UBE2F              | 0.00306187 | 0.41777669 | 0.395 | 0.233 | 1 HSPC_spleen |
| MARK2              | 0.00314089 | 1.22983093 | 0.282 | 0.158 | 1 HSPC_spleen |
| BTG2               | 0.0031474  | 0.30694249 | 0.613 | 0.458 | 1 HSPC_spleen |
| UBE2R2             | 0.00315749 | 0.70603562 | 0.597 | 0.458 | 1 HSPC_spleen |
| CSTF3              | 0.00319583 | 0.55021049 | 0.438 | 0.267 | 1 HSPC_spleen |
| PPID               | 0.00319979 | 0.79336448 | 0.354 | 0.217 | 1 HSPC_spleen |
| NIF3L1             | 0.00320382 | 0.82881057 | 0.284 | 0.158 | 1 HSPC_spleen |
| BABAM1             | 0.00321455 | 0.32626416 | 0.37  | 0.217 | 1 HSPC_spleen |
| CYB5A              | 0.00326493 | 0.45661968 | 0.466 | 0.325 | 1 HSPC_spleen |
| ENSMMUG00000062103 | 0.00327527 | 0.65079932 | 0.352 | 0.208 | 1 HSPC_spleen |
| KIAA1328           | 0.0032846  | 0.63595448 | 0.546 | 0.375 | 1 HSPC_spleen |
| RNGTT              | 0.00329809 | 0.69027819 | 0.628 | 0.458 | 1 HSPC_spleen |
| CDC23              | 0.00330667 | 1.29266593 | 0.282 | 0.158 | 1 HSPC_spleen |
| ZNF689             | 0.00339295 | 0.96908981 | 0.254 | 0.125 | 1 HSPC_spleen |
| SHISA5             | 0.00339362 | 0.6732702  | 0.485 | 0.333 | 1 HSPC_spleen |
| SYNJ1              | 0.00339554 | 0.91818218 | 0.432 | 0.283 | 1 HSPC_spleen |
| TMX4               | 0.00341694 | 1.104909   | 0.45  | 0.3   | 1 HSPC_spleen |
| MFAP1              | 0.00342552 | 0.89688124 | 0.335 | 0.2   | 1 HSPC_spleen |
| PPME1              | 0.00351231 | 0.88275912 | 0.37  | 0.233 | 1 HSPC_spleen |
| GRK6               | 0.00357038 | 1.23753133 | 0.264 | 0.142 | 1 HSPC_spleen |

|                    |            |            |       |       |               |
|--------------------|------------|------------|-------|-------|---------------|
| NCOA6              | 0.00357631 | 0.51737771 | 0.309 | 0.167 | 1 HSPC_spleen |
| ENSMMUG00000023144 | 0.00360244 | 0.89956906 | 0.262 | 0.133 | 1 HSPC_spleen |
| DESI2              | 0.00361931 | 0.58621104 | 0.386 | 0.225 | 1 HSPC_spleen |
| METTL26            | 0.00362523 | 0.75148459 | 0.264 | 0.133 | 1 HSPC_spleen |
| GPAA1              | 0.00363274 | 0.43840257 | 0.25  | 0.117 | 1 HSPC_spleen |
| HACD1              | 0.00363512 | 1.32423848 | 0.292 | 0.167 | 1 HSPC_spleen |
| IQSEC1             | 0.00365054 | 1.00822664 | 0.278 | 0.15  | 1 HSPC_spleen |
| CTR9               | 0.00365569 | 0.61356486 | 0.403 | 0.25  | 1 HSPC_spleen |
| AKIP1              | 0.00366054 | 0.84114485 | 0.268 | 0.133 | 1 HSPC_spleen |
| PSEN2              | 0.00368171 | 0.89950971 | 0.268 | 0.142 | 1 HSPC_spleen |
| ARL2BP             | 0.00368255 | 0.16551009 | 0.339 | 0.192 | 1 HSPC_spleen |
| PCBP1              | 0.00370601 | 0.4282458  | 0.697 | 0.533 | 1 HSPC_spleen |
| UQCRH              | 0.00373172 | 0.1939231  | 0.795 | 0.708 | 1 HSPC_spleen |
| UBE2H              | 0.00374948 | 0.81816938 | 0.56  | 0.675 | 1 HSPC_spleen |
| ENSMMUG00000049722 | 0.00376011 | 0.33065534 | 0.622 | 0.483 | 1 HSPC_spleen |
| CDK8               | 0.00376939 | 0.65359422 | 0.438 | 0.292 | 1 HSPC_spleen |
| RECQL              | 0.00382909 | 0.79796661 | 0.286 | 0.15  | 1 HSPC_spleen |
| TECR               | 0.00406799 | 0.23178129 | 0.479 | 0.333 | 1 HSPC_spleen |
| ATP8A1             | 0.00408458 | 0.59590436 | 0.605 | 0.442 | 1 HSPC_spleen |
| HMGB1              | 0.00408685 | 0.35844666 | 0.922 | 0.883 | 1 HSPC_spleen |
| NDUFS2             | 0.00410507 | 0.43750266 | 0.536 | 0.383 | 1 HSPC_spleen |
| HSPB11             | 0.00413802 | 0.98814022 | 0.301 | 0.175 | 1 HSPC_spleen |
| FCHO2              | 0.00415614 | 0.7875985  | 0.554 | 0.392 | 1 HSPC_spleen |
| DPM2               | 0.00416757 | 0.60658266 | 0.299 | 0.167 | 1 HSPC_spleen |
| FCF1               | 0.00416918 | 0.72752698 | 0.313 | 0.167 | 1 HSPC_spleen |
| CCDC124            | 0.00417042 | 0.72283012 | 0.303 | 0.167 | 1 HSPC_spleen |
| NKPD1              | 0.00418529 | 0.46296049 | 0.376 | 0.225 | 1 HSPC_spleen |
| INTS5              | 0.00421737 | 0.34067664 | 0.362 | 0.2   | 1 HSPC_spleen |
| CINP               | 0.0042175  | 0.27744928 | 0.395 | 0.233 | 1 HSPC_spleen |
| PIGP               | 0.00422051 | 0.91709075 | 0.258 | 0.133 | 1 HSPC_spleen |
| PPFIA1             | 0.00423453 | 0.87951621 | 0.372 | 0.225 | 1 HSPC_spleen |
| EIF4A2             | 0.00424798 | 0.23361245 | 0.81  | 0.7   | 1 HSPC_spleen |
| PHB2               | 0.00426042 | 0.71562965 | 0.423 | 0.283 | 1 HSPC_spleen |

|                    |            |            |       |       |               |
|--------------------|------------|------------|-------|-------|---------------|
| EP300              | 0.0042847  | 0.90146801 | 0.718 | 0.558 | 1 HSPC_spleen |
| PANK2              | 0.00428699 | 0.65504727 | 0.254 | 0.133 | 1 HSPC_spleen |
| NOC3L              | 0.00434098 | 0.7913594  | 0.372 | 0.225 | 1 HSPC_spleen |
| TNRC6B             | 0.00435335 | 0.74018418 | 0.847 | 0.7   | 1 HSPC_spleen |
| ENSMMUG00000038088 | 0.00436918 | 0.72563705 | 0.446 | 0.292 | 1 HSPC_spleen |
| HDGF               | 0.00449834 | 0.68085024 | 0.374 | 0.233 | 1 HSPC_spleen |
| ARF5               | 0.00454186 | 0.38225382 | 0.597 | 0.442 | 1 HSPC_spleen |
| TOB2               | 0.00454383 | 0.94408544 | 0.276 | 0.158 | 1 HSPC_spleen |
| FUT8               | 0.00458802 | 0.51611355 | 0.464 | 0.333 | 1 HSPC_spleen |
| EIF2S1             | 0.00462927 | 0.66351323 | 0.479 | 0.342 | 1 HSPC_spleen |
| ENSMMUG00000064760 | 0.00464104 | 0.28105866 | 0.272 | 0.15  | 1 HSPC_spleen |
| TICAM2             | 0.0046544  | 0.48698489 | 0.294 | 0.158 | 1 HSPC_spleen |
| TSPAN5             | 0.00470978 | 0.15835041 | 0.286 | 0.15  | 1 HSPC_spleen |
| RHOT2              | 0.00474672 | 0.67183841 | 0.258 | 0.142 | 1 HSPC_spleen |
| VCPKMT             | 0.00476211 | 0.62010839 | 0.282 | 0.158 | 1 HSPC_spleen |
| BABAM2             | 0.00478367 | 0.72582155 | 0.665 | 0.525 | 1 HSPC_spleen |
| MTOR               | 0.00478667 | 0.5379214  | 0.274 | 0.142 | 1 HSPC_spleen |
| PAK2               | 0.00480306 | 0.31071416 | 0.718 | 0.558 | 1 HSPC_spleen |
| RCL1               | 0.00484733 | 0.8322282  | 0.456 | 0.3   | 1 HSPC_spleen |
| MT2A               | 0.00496122 | 0.40935908 | 0.309 | 0.167 | 1 HSPC_spleen |
| TSC22D4            | 0.00496739 | 0.27209028 | 0.395 | 0.233 | 1 HSPC_spleen |
| NFYB               | 0.00500804 | 0.80541875 | 0.315 | 0.183 | 1 HSPC_spleen |
| SRP54              | 0.00501036 | 0.35436855 | 0.35  | 0.2   | 1 HSPC_spleen |
| TMEM165            | 0.00511792 | 0.11962525 | 0.382 | 0.233 | 1 HSPC_spleen |
| GOT2               | 0.0051436  | 0.59538986 | 0.294 | 0.158 | 1 HSPC_spleen |
| GMPS               | 0.00516311 | 0.23301104 | 0.538 | 0.383 | 1 HSPC_spleen |
| SETDB2             | 0.00520869 | 0.11305349 | 0.311 | 0.175 | 1 HSPC_spleen |
| ACO2               | 0.00522553 | 0.44296265 | 0.507 | 0.333 | 1 HSPC_spleen |
| MMS19              | 0.00523597 | 0.3333408  | 0.264 | 0.142 | 1 HSPC_spleen |
| SLC40A1            | 0.00534204 | 1.18915915 | 0.346 | 0.208 | 1 HSPC_spleen |
| HSPA8              | 0.00535573 | 0.51101971 | 0.796 | 0.742 | 1 HSPC_spleen |
| SMC1A              | 0.00536863 | 0.34225429 | 0.523 | 0.367 | 1 HSPC_spleen |
| KLF13              | 0.00538584 | 0.8721152  | 0.286 | 0.158 | 1 HSPC_spleen |

|          |            |            |       |       |               |
|----------|------------|------------|-------|-------|---------------|
| UVRAG    | 0.0054009  | 0.51039551 | 0.681 | 0.542 | 1 HSPC_spleen |
| SNRNP40  | 0.00541159 | 0.70104521 | 0.403 | 0.242 | 1 HSPC_spleen |
| SNRPE    | 0.00541656 | 0.38880103 | 0.689 | 0.575 | 1 HSPC_spleen |
| CEP57L1  | 0.00557697 | 0.42926753 | 0.335 | 0.183 | 1 HSPC_spleen |
| PIK3R4   | 0.00562317 | 1.01294345 | 0.327 | 0.2   | 1 HSPC_spleen |
| JUN      | 0.00562615 | 1.04335477 | 0.601 | 0.525 | 1 HSPC_spleen |
| SLF2     | 0.00563417 | 0.96287621 | 0.376 | 0.242 | 1 HSPC_spleen |
| POFUT1   | 0.00566796 | 0.37891736 | 0.319 | 0.183 | 1 HSPC_spleen |
| IFT88    | 0.00571759 | 0.6134029  | 0.464 | 0.325 | 1 HSPC_spleen |
| RFC3     | 0.00576263 | 0.94669623 | 0.364 | 0.242 | 1 HSPC_spleen |
| USP24    | 0.00576832 | 0.66324799 | 0.654 | 0.525 | 1 HSPC_spleen |
| KRIT1    | 0.00578491 | 0.17560587 | 0.476 | 0.3   | 1 HSPC_spleen |
| ELAVL1   | 0.00584917 | 0.53361447 | 0.436 | 0.3   | 1 HSPC_spleen |
| PPP1R10  | 0.00587025 | 0.23578857 | 0.568 | 0.4   | 1 HSPC_spleen |
| LYST     | 0.00588179 | 0.96667819 | 0.387 | 0.258 | 1 HSPC_spleen |
| FANCL    | 0.00589472 | 0.51879457 | 0.297 | 0.158 | 1 HSPC_spleen |
| PHAX     | 0.00594628 | 0.62508879 | 0.303 | 0.167 | 1 HSPC_spleen |
| FLII     | 0.00596332 | 0.73814201 | 0.319 | 0.183 | 1 HSPC_spleen |
| ST3GAL3  | 0.0059819  | 0.61926405 | 0.62  | 0.483 | 1 HSPC_spleen |
| COLGALT1 | 0.00601524 | 1.07742606 | 0.25  | 0.133 | 1 HSPC_spleen |
| DCTPP1   | 0.00605389 | 0.51330789 | 0.405 | 0.25  | 1 HSPC_spleen |
| MRPL35   | 0.00618696 | 0.38908507 | 0.472 | 0.308 | 1 HSPC_spleen |
| RRP1B    | 0.00621218 | 0.51250888 | 0.37  | 0.242 | 1 HSPC_spleen |
| ORC6     | 0.00625061 | 0.4843121  | 0.301 | 0.167 | 1 HSPC_spleen |
| SASS6    | 0.00626251 | 0.40981235 | 0.395 | 0.25  | 1 HSPC_spleen |
| KARS1    | 0.00632841 | 0.44016923 | 0.413 | 0.275 | 1 HSPC_spleen |
| ALDH18A1 | 0.0063376  | 0.71067107 | 0.384 | 0.258 | 1 HSPC_spleen |
| UQCRB    | 0.00636918 | 0.40254132 | 0.611 | 0.442 | 1 HSPC_spleen |
| MARCHF8  | 0.00644295 | 1.94176884 | 0.477 | 0.367 | 1 HSPC_spleen |
| TCP1     | 0.00645847 | 0.32724385 | 0.579 | 0.4   | 1 HSPC_spleen |
| KDM6A    | 0.00646274 | 0.37802158 | 0.824 | 0.617 | 1 HSPC_spleen |
| CEP350   | 0.00646991 | 0.40770768 | 0.575 | 0.417 | 1 HSPC_spleen |
| RFWD3    | 0.00649405 | 0.93266726 | 0.391 | 0.258 | 1 HSPC_spleen |

|          |            |            |       |       |               |
|----------|------------|------------|-------|-------|---------------|
| CIAO2B   | 0.00652883 | 0.25279269 | 0.372 | 0.233 | 1 HSPC_spleen |
| FASTKD1  | 0.00672133 | 0.85946389 | 0.252 | 0.133 | 1 HSPC_spleen |
| MRPS21   | 0.00676133 | 0.41909978 | 0.521 | 0.367 | 1 HSPC_spleen |
| PRMT3    | 0.00676265 | 0.54077296 | 0.421 | 0.275 | 1 HSPC_spleen |
| TBC1D22A | 0.00682254 | 0.56485446 | 0.485 | 0.342 | 1 HSPC_spleen |
| OTUD5    | 0.00682295 | 0.8808406  | 0.299 | 0.175 | 1 HSPC_spleen |
| HIKESHI  | 0.00685509 | 0.34014727 | 0.495 | 0.333 | 1 HSPC_spleen |
| PCNX4    | 0.00689396 | 0.12285626 | 0.282 | 0.158 | 1 HSPC_spleen |
| LXN      | 0.00692439 | 0.59802829 | 0.323 | 0.2   | 1 HSPC_spleen |
| DNAJB1   | 0.00693582 | 0.23448938 | 0.374 | 0.242 | 1 HSPC_spleen |
| SOD1     | 0.00698664 | 0.33815659 | 0.697 | 0.558 | 1 HSPC_spleen |
| MRE11    | 0.00702287 | 0.51519688 | 0.448 | 0.308 | 1 HSPC_spleen |
| MAT2B    | 0.00702894 | 1.00145323 | 0.25  | 0.133 | 1 HSPC_spleen |
| ANKRD11  | 0.00706402 | 0.51728328 | 0.669 | 0.533 | 1 HSPC_spleen |
| NCOA4    | 0.00719943 | 0.87855955 | 0.523 | 0.358 | 1 HSPC_spleen |
| MRPL57   | 0.00732526 | 0.44518654 | 0.581 | 0.442 | 1 HSPC_spleen |
| SMIM1    | 0.00734693 | 0.84607415 | 0.415 | 0.325 | 1 HSPC_spleen |
| ZFAND5   | 0.0073687  | 0.16757881 | 0.442 | 0.283 | 1 HSPC_spleen |
| PPP1R8   | 0.00738895 | 0.41138232 | 0.413 | 0.25  | 1 HSPC_spleen |
| JPT2     | 0.00739652 | 0.49137005 | 0.301 | 0.175 | 1 HSPC_spleen |
| MRPL4    | 0.00741655 | 0.52281879 | 0.36  | 0.233 | 1 HSPC_spleen |
| INSR     | 0.00749434 | 0.6192322  | 0.384 | 0.25  | 1 HSPC_spleen |
| PCMT1    | 0.0075696  | 0.30932522 | 0.552 | 0.4   | 1 HSPC_spleen |
| RNF121   | 0.00763731 | 0.12904361 | 0.282 | 0.15  | 1 HSPC_spleen |
| MITD1    | 0.00766326 | 0.24900543 | 0.37  | 0.225 | 1 HSPC_spleen |
| STAR     | 0.00767599 | 0.54424625 | 0.421 | 0.275 | 1 HSPC_spleen |
| SPOP     | 0.00768893 | 0.48382239 | 0.513 | 0.375 | 1 HSPC_spleen |
| CLK1     | 0.00770797 | 0.16970955 | 0.593 | 0.425 | 1 HSPC_spleen |
| SMARCC1  | 0.00789825 | 0.34282827 | 0.767 | 0.592 | 1 HSPC_spleen |
| OSBPL2   | 0.00791803 | 0.29793794 | 0.515 | 0.35  | 1 HSPC_spleen |
| LARP4B   | 0.00791989 | 0.36908467 | 0.589 | 0.433 | 1 HSPC_spleen |
| FNBP1L   | 0.00792457 | 0.25107224 | 0.417 | 0.242 | 1 HSPC_spleen |
| IKZF1    | 0.00793995 | 0.17804644 | 0.732 | 0.558 | 1 HSPC_spleen |



|                   |            |            |       |       |               |
|-------------------|------------|------------|-------|-------|---------------|
| ABHD6             | 0.00800049 | 0.91490089 | 0.276 | 0.158 | 1 HSPC_spleen |
| VAR51             | 0.00803471 | 0.50087917 | 0.303 | 0.175 | 1 HSPC_spleen |
| AP2S1             | 0.00809358 | 0.36168334 | 0.46  | 0.317 | 1 HSPC_spleen |
| MICU2             | 0.00818507 | 0.27691838 | 0.603 | 0.433 | 1 HSPC_spleen |
| GSE1              | 0.00820728 | 0.33083315 | 0.587 | 0.433 | 1 HSPC_spleen |
| PITRM1            | 0.0082083  | 0.22428895 | 0.446 | 0.3   | 1 HSPC_spleen |
| MYDGF             | 0.00838769 | 0.24551515 | 0.552 | 0.375 | 1 HSPC_spleen |
| MCMBP             | 0.00846889 | 0.45342306 | 0.333 | 0.2   | 1 HSPC_spleen |
| RMDN3             | 0.00847841 | 0.44676116 | 0.258 | 0.142 | 1 HSPC_spleen |
| KIAA0930          | 0.00849599 | 0.75967713 | 0.303 | 0.183 | 1 HSPC_spleen |
| DEDD2             | 0.00851579 | 0.48107269 | 0.258 | 0.142 | 1 HSPC_spleen |
| PHF5A             | 0.00852311 | 0.2066114  | 0.497 | 0.325 | 1 HSPC_spleen |
| ZNRF1             | 0.00854274 | 0.32193315 | 0.54  | 0.375 | 1 HSPC_spleen |
| TMEM11            | 0.00856139 | 0.9000843  | 0.295 | 0.175 | 1 HSPC_spleen |
| EPRS1             | 0.00868187 | 0.3328556  | 0.556 | 0.417 | 1 HSPC_spleen |
| DHX35             | 0.00876116 | 1.38177999 | 0.26  | 0.15  | 1 HSPC_spleen |
| PARK7             | 0.00892055 | 0.36601267 | 0.62  | 0.475 | 1 HSPC_spleen |
| ENSMUG00000011714 | 0.00903429 | 0.39658981 | 0.495 | 0.358 | 1 HSPC_spleen |
| EIF2S2            | 0.00910824 | 0.22149653 | 0.761 | 0.608 | 1 HSPC_spleen |
| JOSD2             | 0.00923822 | 0.5204225  | 0.25  | 0.133 | 1 HSPC_spleen |
| CHMP4B            | 0.00932553 | 0.51557759 | 0.288 | 0.158 | 1 HSPC_spleen |
| DENND4A           | 0.00936948 | 0.22498288 | 0.867 | 0.875 | 1 HSPC_spleen |
| UBAP2             | 0.00972112 | 0.67869815 | 0.614 | 0.483 | 1 HSPC_spleen |
| RALGAPB           | 0.0098066  | 0.28647882 | 0.423 | 0.275 | 1 HSPC_spleen |
| ZBTB80S           | 0.00988063 | 0.37766381 | 0.288 | 0.167 | 1 HSPC_spleen |
| DUS2              | 0.01002402 | 1.06533648 | 0.28  | 0.167 | 1 HSPC_spleen |
| U2AF2             | 0.01005894 | 0.55527213 | 0.38  | 0.242 | 1 HSPC_spleen |
| NGRN              | 0.01011899 | 0.3323786  | 0.256 | 0.133 | 1 HSPC_spleen |
| TUT7              | 0.01014372 | 0.98219184 | 0.675 | 0.525 | 1 HSPC_spleen |
| CORO1C            | 0.01020553 | 0.40390375 | 0.376 | 0.242 | 1 HSPC_spleen |
| DDX46             | 0.01023249 | 0.12249662 | 0.703 | 0.542 | 1 HSPC_spleen |
| NUP188            | 0.01027655 | 0.75161614 | 0.327 | 0.2   | 1 HSPC_spleen |
| DNAJA3            | 0.01044115 | 0.5774954  | 0.284 | 0.167 | 1 HSPC_spleen |

|                     |            |            |       |       |               |
|---------------------|------------|------------|-------|-------|---------------|
| ENSMMUG00000062012  | 0.01056478 | 0.64135834 | 0.286 | 0.167 | 1 HSPC_spleen |
| WASHC3              | 0.01057494 | 0.60955166 | 0.301 | 0.175 | 1 HSPC_spleen |
| CRYL1               | 0.01069435 | 0.23059738 | 0.44  | 0.292 | 1 HSPC_spleen |
| HDLBP               | 0.01073071 | 0.11238081 | 0.519 | 0.367 | 1 HSPC_spleen |
| ORMDL1              | 0.01088494 | 0.84748902 | 0.297 | 0.183 | 1 HSPC_spleen |
| H2AFZ               | 0.01093235 | 0.50799338 | 0.751 | 0.692 | 1 HSPC_spleen |
| STK10               | 0.01095319 | 0.18441939 | 0.497 | 0.333 | 1 HSPC_spleen |
| ZNF407              | 0.0110039  | 0.70710022 | 0.54  | 0.417 | 1 HSPC_spleen |
| DLD                 | 0.01101894 | 0.74642881 | 0.337 | 0.217 | 1 HSPC_spleen |
| PIGT                | 0.01108842 | 0.19950309 | 0.262 | 0.15  | 1 HSPC_spleen |
| XPO6                | 0.01124927 | 0.20719836 | 0.511 | 0.358 | 1 HSPC_spleen |
| HNRNPF              | 0.01138068 | 0.17924607 | 0.798 | 0.667 | 1 HSPC_spleen |
| ENSMMUG00000006206  | 0.01149418 | 0.21906259 | 0.679 | 0.533 | 1 HSPC_spleen |
| MRPS17              | 0.01161621 | 0.3936256  | 0.421 | 0.283 | 1 HSPC_spleen |
| ENSMMUG000000040870 | 0.01165015 | 0.20178495 | 0.45  | 0.3   | 1 HSPC_spleen |
| SEC14L2             | 0.01165855 | 0.73675584 | 0.272 | 0.158 | 1 HSPC_spleen |
| TASOR2              | 0.01191617 | 0.52856316 | 0.521 | 0.375 | 1 HSPC_spleen |
| OS9                 | 0.01192393 | 0.19793848 | 0.46  | 0.325 | 1 HSPC_spleen |
| KCTD20              | 0.0120553  | 0.4025211  | 0.452 | 0.308 | 1 HSPC_spleen |
| RBM19               | 0.01207427 | 0.40460742 | 0.319 | 0.192 | 1 HSPC_spleen |
| TLE1                | 0.01212521 | 0.39598326 | 0.25  | 0.133 | 1 HSPC_spleen |
| KIF5B               | 0.01218975 | 0.41837813 | 0.613 | 0.45  | 1 HSPC_spleen |
| RIF1                | 0.0122266  | 0.5616565  | 0.503 | 0.383 | 1 HSPC_spleen |
| CD46                | 0.0122455  | 0.50404935 | 0.867 | 0.758 | 1 HSPC_spleen |
| SLC25A11            | 0.01225129 | 0.71025101 | 0.307 | 0.2   | 1 HSPC_spleen |
| CIAO2A              | 0.01231852 | 0.36070507 | 0.499 | 0.35  | 1 HSPC_spleen |
| PNKD                | 0.01243257 | 0.10634999 | 0.425 | 0.267 | 1 HSPC_spleen |
| HNRNPUL1            | 0.01245994 | 0.37098313 | 0.526 | 0.358 | 1 HSPC_spleen |
| ITGAE               | 0.01252854 | 0.3801732  | 0.503 | 0.35  | 1 HSPC_spleen |
| ABHD18              | 0.01255311 | 0.23453233 | 0.434 | 0.308 | 1 HSPC_spleen |
| ENSMMUG000000053392 | 0.01257536 | 0.25689191 | 0.755 | 0.65  | 1 HSPC_spleen |
| STX7                | 0.01268974 | 0.45449286 | 0.397 | 0.25  | 1 HSPC_spleen |
| STXBP3              | 0.0127441  | 0.39939108 | 0.536 | 0.392 | 1 HSPC_spleen |

|                    |            |            |       |       |               |
|--------------------|------------|------------|-------|-------|---------------|
| ENSMMUG00000061410 | 0.01282125 | 0.43053428 | 0.325 | 0.208 | 1 HSPC_spleen |
| SMARCAD1           | 0.01286669 | 0.11224283 | 0.297 | 0.175 | 1 HSPC_spleen |
| DPY19L1            | 0.01289908 | 0.51305086 | 0.256 | 0.142 | 1 HSPC_spleen |
| KNOP1              | 0.01292883 | 0.46387378 | 0.254 | 0.142 | 1 HSPC_spleen |
| ANKS1A             | 0.013064   | 0.64670832 | 0.352 | 0.233 | 1 HSPC_spleen |
| ADIPOR2            | 0.01308481 | 0.33239243 | 0.485 | 0.342 | 1 HSPC_spleen |
| MTO1               | 0.01308925 | 0.23653748 | 0.286 | 0.167 | 1 HSPC_spleen |
| C2CD3              | 0.01326639 | 0.83023311 | 0.323 | 0.2   | 1 HSPC_spleen |
| ADCY7              | 0.01330951 | 0.31550057 | 0.307 | 0.192 | 1 HSPC_spleen |
| FUBP3              | 0.01336407 | 0.15473713 | 0.272 | 0.15  | 1 HSPC_spleen |
| MAP1LC3B           | 0.0135568  | 0.32145308 | 0.548 | 0.375 | 1 HSPC_spleen |
| PPIL1              | 0.0135854  | 0.55057439 | 0.325 | 0.2   | 1 HSPC_spleen |
| PMPCA              | 0.01374233 | 0.55348525 | 0.323 | 0.208 | 1 HSPC_spleen |
| ANAPC4             | 0.01375713 | 0.44260686 | 0.268 | 0.158 | 1 HSPC_spleen |
| MCM3AP             | 0.01382148 | 0.57220664 | 0.329 | 0.217 | 1 HSPC_spleen |
| CACYBP             | 0.01400877 | 0.16815802 | 0.671 | 0.508 | 1 HSPC_spleen |
| MARF1              | 0.01410338 | 0.23516082 | 0.344 | 0.208 | 1 HSPC_spleen |
| MRPL22             | 0.01413553 | 0.33096676 | 0.429 | 0.3   | 1 HSPC_spleen |
| TRAPPC9            | 0.01427391 | 0.49666534 | 0.515 | 0.367 | 1 HSPC_spleen |
| AHSA1              | 0.01428429 | 0.23279998 | 0.374 | 0.242 | 1 HSPC_spleen |
| CLTC               | 0.0143569  | 0.30810705 | 0.685 | 0.542 | 1 HSPC_spleen |
| SMPD4              | 0.01441794 | 0.28550026 | 0.362 | 0.242 | 1 HSPC_spleen |
| BRD7               | 0.01449236 | 0.18433507 | 0.481 | 0.333 | 1 HSPC_spleen |
| ZNF638             | 0.01470224 | 0.38632827 | 0.658 | 0.483 | 1 HSPC_spleen |
| HERC1              | 0.01472553 | 0.61984482 | 0.652 | 0.508 | 1 HSPC_spleen |
| NUDT1              | 0.01477137 | 0.22370115 | 0.335 | 0.208 | 1 HSPC_spleen |
| METTL15            | 0.01490637 | 0.29610239 | 0.399 | 0.25  | 1 HSPC_spleen |
| ATP2B4             | 0.01500716 | 0.48179797 | 0.654 | 0.517 | 1 HSPC_spleen |
| MTDH               | 0.01509812 | 0.39911486 | 0.718 | 0.6   | 1 HSPC_spleen |
| ATF7               | 0.0151455  | 0.14301864 | 0.47  | 0.325 | 1 HSPC_spleen |
| OXNAD1             | 0.0151487  | 0.28256156 | 0.438 | 0.292 | 1 HSPC_spleen |
| PHC3               | 0.01515264 | 0.740925   | 0.507 | 0.367 | 1 HSPC_spleen |
| USP6NL             | 0.01517994 | 0.43182864 | 0.524 | 0.4   | 1 HSPC_spleen |

|                    |            |            |       |       |               |
|--------------------|------------|------------|-------|-------|---------------|
| DMXL1              | 0.01527459 | 0.79619731 | 0.507 | 0.408 | 1 HSPC_spleen |
| FAM111A            | 0.015383   | 0.47577639 | 0.317 | 0.192 | 1 HSPC_spleen |
| MRFAP1             | 0.01551105 | 0.38789601 | 0.54  | 0.383 | 1 HSPC_spleen |
| MRPS28             | 0.01558298 | 0.13475135 | 0.479 | 0.325 | 1 HSPC_spleen |
| INPP5B             | 0.01559044 | 0.28613956 | 0.295 | 0.175 | 1 HSPC_spleen |
| ATF3               | 0.01573807 | 1.03797194 | 0.393 | 0.283 | 1 HSPC_spleen |
| NDUFAF3            | 0.01597515 | 0.4245111  | 0.446 | 0.317 | 1 HSPC_spleen |
| ATG7               | 0.01610468 | 0.46210428 | 0.393 | 0.25  | 1 HSPC_spleen |
| SLC2A13            | 0.01611315 | 1.03486852 | 0.276 | 0.167 | 1 HSPC_spleen |
| LARP1B             | 0.01618697 | 0.34049032 | 0.397 | 0.267 | 1 HSPC_spleen |
| NFX1               | 0.01626555 | 0.29220027 | 0.399 | 0.275 | 1 HSPC_spleen |
| PHKB               | 0.01644281 | 0.30220302 | 0.476 | 0.325 | 1 HSPC_spleen |
| CARM1              | 0.01645895 | 0.2220259  | 0.321 | 0.208 | 1 HSPC_spleen |
| PHF10              | 0.01657707 | 0.18462781 | 0.38  | 0.242 | 1 HSPC_spleen |
| ATF7IP             | 0.01667689 | 0.50180367 | 0.755 | 0.608 | 1 HSPC_spleen |
| CGGBP1             | 0.01689315 | 0.28160966 | 0.454 | 0.317 | 1 HSPC_spleen |
| ENSMMUG00000064232 | 0.01701547 | 0.1766299  | 0.384 | 0.258 | 1 HSPC_spleen |
| MPC2               | 0.01705836 | 0.29359553 | 0.493 | 0.358 | 1 HSPC_spleen |
| DSN1               | 0.01721338 | 0.83550991 | 0.278 | 0.167 | 1 HSPC_spleen |
| ENSMMUG00000052202 | 0.01743179 | 0.22503847 | 0.327 | 0.2   | 1 HSPC_spleen |
| MRPL37             | 0.01752117 | 0.34922203 | 0.372 | 0.233 | 1 HSPC_spleen |
| SERINC3            | 0.01764324 | 0.37760155 | 0.523 | 0.375 | 1 HSPC_spleen |
| RPF2               | 0.01779545 | 0.5648586  | 0.272 | 0.167 | 1 HSPC_spleen |
| NXF1               | 0.01780649 | 0.33731616 | 0.319 | 0.2   | 1 HSPC_spleen |
| VPS51              | 0.01781302 | 0.64697097 | 0.315 | 0.192 | 1 HSPC_spleen |
| GCC2               | 0.01788862 | 0.23488037 | 0.442 | 0.308 | 1 HSPC_spleen |
| STK17A             | 0.01795358 | 0.43566398 | 0.54  | 0.392 | 1 HSPC_spleen |
| IGF1R              | 0.0180065  | 0.57673476 | 0.528 | 0.425 | 1 HSPC_spleen |
| MRPL42             | 0.01806866 | 0.27510318 | 0.517 | 0.367 | 1 HSPC_spleen |
| EXOSC8             | 0.01810368 | 0.28356036 | 0.352 | 0.225 | 1 HSPC_spleen |
| ENSMMUG00000042951 | 0.0181153  | 0.21739005 | 0.616 | 0.433 | 1 HSPC_spleen |
| UBE2D2             | 0.01815126 | 0.22086435 | 0.389 | 0.258 | 1 HSPC_spleen |
| TUBB2B             | 0.01820608 | 1.01067953 | 0.252 | 0.15  | 1 HSPC_spleen |

|            |            |            |       |       |               |
|------------|------------|------------|-------|-------|---------------|
| TXN2       | 0.01830104 | 0.2224803  | 0.421 | 0.292 | 1 HSPC_spleen |
| PSMA3      | 0.0183532  | 0.30711307 | 0.646 | 0.492 | 1 HSPC_spleen |
| ARV1       | 0.01836706 | 0.19644828 | 0.262 | 0.15  | 1 HSPC_spleen |
| MTRR       | 0.01836886 | 0.85865067 | 0.254 | 0.158 | 1 HSPC_spleen |
| TMEM64     | 0.0183785  | 1.0992902  | 0.272 | 0.175 | 1 HSPC_spleen |
| SND1       | 0.01838652 | 0.34086501 | 0.675 | 0.525 | 1 HSPC_spleen |
| FO XK2     | 0.01854534 | 0.21265003 | 0.303 | 0.192 | 1 HSPC_spleen |
| ERP29      | 0.01874145 | 0.19216173 | 0.474 | 0.325 | 1 HSPC_spleen |
| TMEM109    | 0.01917929 | 0.30292533 | 0.329 | 0.217 | 1 HSPC_spleen |
| HPS4       | 0.01962257 | 0.28159492 | 0.292 | 0.167 | 1 HSPC_spleen |
| UCHL5      | 0.01979162 | 0.32386775 | 0.399 | 0.267 | 1 HSPC_spleen |
| UBA2       | 0.01981187 | 0.25152851 | 0.591 | 0.442 | 1 HSPC_spleen |
| SMIM14     | 0.01987957 | 0.14580328 | 0.276 | 0.167 | 1 HSPC_spleen |
| PRPF18     | 0.01999186 | 1.01371949 | 0.374 | 0.258 | 1 HSPC_spleen |
| TUFM       | 0.02008663 | 0.43571437 | 0.466 | 0.325 | 1 HSPC_spleen |
| SELENOI    | 0.02013815 | 0.81768916 | 0.464 | 0.317 | 1 HSPC_spleen |
| CNOT1      | 0.02028578 | 0.41466187 | 0.667 | 0.517 | 1 HSPC_spleen |
| ATF1       | 0.02043634 | 0.69948448 | 0.358 | 0.242 | 1 HSPC_spleen |
| PRPSAP2    | 0.02043722 | 0.37614213 | 0.339 | 0.208 | 1 HSPC_spleen |
| DAG1       | 0.02060629 | 0.53279347 | 0.256 | 0.15  | 1 HSPC_spleen |
| C1H1orf131 | 0.02075609 | 0.32104983 | 0.333 | 0.217 | 1 HSPC_spleen |
| LARP7      | 0.02076813 | 0.14172987 | 0.413 | 0.275 | 1 HSPC_spleen |
| CCP110     | 0.02092353 | 0.61528062 | 0.256 | 0.158 | 1 HSPC_spleen |
| CRADD      | 0.02116956 | 0.92058075 | 0.348 | 0.25  | 1 HSPC_spleen |
| KIAA0586   | 0.02150211 | 0.54946573 | 0.356 | 0.25  | 1 HSPC_spleen |
| PPM1B      | 0.02165079 | 0.45440715 | 0.454 | 0.317 | 1 HSPC_spleen |
| DCAF11     | 0.02166054 | 0.50444473 | 0.264 | 0.167 | 1 HSPC_spleen |
| ATP6       | 0.02192908 | 0.6358555  | 0.892 | 0.883 | 1 HSPC_spleen |
| COX3       | 0.02195438 | 0.89303251 | 0.918 | 0.95  | 1 HSPC_spleen |
| NMRK1      | 0.02197946 | 0.50674826 | 0.258 | 0.15  | 1 HSPC_spleen |
| MIPEP      | 0.02211009 | 0.71650962 | 0.294 | 0.192 | 1 HSPC_spleen |
| ARL6IP6    | 0.0223005  | 0.48488792 | 0.411 | 0.283 | 1 HSPC_spleen |
| CUL4A      | 0.02255726 | 0.46970495 | 0.62  | 0.475 | 1 HSPC_spleen |

|                   |            |            |       |       |               |
|-------------------|------------|------------|-------|-------|---------------|
| MPLKIP            | 0.02256621 | 0.37172782 | 0.425 | 0.283 | 1 HSPC_spleen |
| ERBB3             | 0.02275236 | 0.16485913 | 0.693 | 0.533 | 1 HSPC_spleen |
| METTL7A           | 0.02288046 | 0.8122287  | 0.266 | 0.167 | 1 HSPC_spleen |
| BLM               | 0.02317956 | 0.18543491 | 0.442 | 0.3   | 1 HSPC_spleen |
| PUF60             | 0.02321886 | 0.23218058 | 0.495 | 0.358 | 1 HSPC_spleen |
| STX16             | 0.0233325  | 0.24807843 | 0.366 | 0.25  | 1 HSPC_spleen |
| ARL2              | 0.02337356 | 0.20081441 | 0.519 | 0.383 | 1 HSPC_spleen |
| RNF115            | 0.02360394 | 0.58438049 | 0.519 | 0.4   | 1 HSPC_spleen |
| HSPD1             | 0.02389502 | 0.29342895 | 0.751 | 0.592 | 1 HSPC_spleen |
| ENSMUG00000030374 | 0.02398706 | 0.48857057 | 0.358 | 0.25  | 1 HSPC_spleen |
| SNAPC3            | 0.02409668 | 0.84327906 | 0.266 | 0.167 | 1 HSPC_spleen |
| ARMC1             | 0.02421101 | 0.36092403 | 0.282 | 0.175 | 1 HSPC_spleen |
| NPAT              | 0.02425999 | 0.29089288 | 0.436 | 0.292 | 1 HSPC_spleen |
| SLC30A9           | 0.02434807 | 0.17604    | 0.55  | 0.425 | 1 HSPC_spleen |
| SPEN              | 0.02438514 | 0.59065964 | 0.579 | 0.45  | 1 HSPC_spleen |
| RUFY3             | 0.02452575 | 0.22566638 | 0.294 | 0.183 | 1 HSPC_spleen |
| CWC27             | 0.02454065 | 0.10045763 | 0.603 | 0.433 | 1 HSPC_spleen |
| TESPA1            | 0.02454384 | 0.24838544 | 0.548 | 0.4   | 1 HSPC_spleen |
| BRD3              | 0.02464535 | 0.67465078 | 0.307 | 0.2   | 1 HSPC_spleen |
| SFXN1             | 0.02465559 | 0.71702491 | 0.389 | 0.283 | 1 HSPC_spleen |
| TM7SF3            | 0.02466711 | 0.16779321 | 0.546 | 0.392 | 1 HSPC_spleen |
| MYC               | 0.02471811 | 0.76731642 | 0.344 | 0.242 | 1 HSPC_spleen |
| BAZ1A             | 0.02495811 | 0.34173409 | 0.701 | 0.575 | 1 HSPC_spleen |
| EEFSEC            | 0.02519418 | 0.4907362  | 0.335 | 0.225 | 1 HSPC_spleen |
| EIF5              | 0.0253267  | 0.19616491 | 0.706 | 0.567 | 1 HSPC_spleen |
| PRR14L            | 0.02536982 | 0.82157298 | 0.434 | 0.325 | 1 HSPC_spleen |
| NDUFAB1           | 0.02539084 | 0.40383537 | 0.548 | 0.433 | 1 HSPC_spleen |
| NSRP1             | 0.02560927 | 0.25980151 | 0.532 | 0.383 | 1 HSPC_spleen |
| RHEB              | 0.02563473 | 0.18068876 | 0.689 | 0.508 | 1 HSPC_spleen |
| VPS25             | 0.02567372 | 0.15005491 | 0.278 | 0.175 | 1 HSPC_spleen |
| FLNB              | 0.02572458 | 0.28339611 | 0.294 | 0.183 | 1 HSPC_spleen |
| USP25             | 0.02573417 | 0.48514125 | 0.499 | 0.367 | 1 HSPC_spleen |
| QRSL1             | 0.02583595 | 0.54791749 | 0.284 | 0.183 | 1 HSPC_spleen |

|                   |            |            |       |       |               |
|-------------------|------------|------------|-------|-------|---------------|
| CARHSP1           | 0.02632761 | 0.10522447 | 0.511 | 0.367 | 1 HSPC_spleen |
| CRACR2A           | 0.02673116 | 0.98026006 | 0.254 | 0.167 | 1 HSPC_spleen |
| TBC1D2B           | 0.02696051 | 0.62670829 | 0.311 | 0.2   | 1 HSPC_spleen |
| PHB               | 0.02697438 | 0.13005351 | 0.528 | 0.392 | 1 HSPC_spleen |
| CENPK             | 0.02701939 | 0.53691103 | 0.258 | 0.167 | 1 HSPC_spleen |
| KAT14             | 0.02702037 | 0.11142867 | 0.28  | 0.167 | 1 HSPC_spleen |
| NR2C2             | 0.02722667 | 0.3653969  | 0.399 | 0.267 | 1 HSPC_spleen |
| PPAT              | 0.02740893 | 0.7815769  | 0.278 | 0.183 | 1 HSPC_spleen |
| RANBP17           | 0.02756303 | 0.83054593 | 0.276 | 0.175 | 1 HSPC_spleen |
| HMG5              | 0.02810404 | 0.57335613 | 0.301 | 0.192 | 1 HSPC_spleen |
| DYNC1I2           | 0.0281413  | 0.14459867 | 0.556 | 0.425 | 1 HSPC_spleen |
| ALG13             | 0.02816482 | 0.41070755 | 0.399 | 0.275 | 1 HSPC_spleen |
| DAD1              | 0.02827252 | 0.20415681 | 0.638 | 0.533 | 1 HSPC_spleen |
| MAEA              | 0.0285079  | 0.39765129 | 0.295 | 0.192 | 1 HSPC_spleen |
| FAM162A           | 0.02856692 | 0.1151941  | 0.378 | 0.258 | 1 HSPC_spleen |
| CCT7              | 0.02903806 | 0.38763774 | 0.581 | 0.467 | 1 HSPC_spleen |
| TACC1             | 0.02910095 | 0.40981521 | 0.687 | 0.533 | 1 HSPC_spleen |
| BNIP3             | 0.02934697 | 0.79569053 | 0.272 | 0.175 | 1 HSPC_spleen |
| NDUFS3            | 0.02938325 | 0.38673691 | 0.509 | 0.392 | 1 HSPC_spleen |
| ASXL1             | 0.02947642 | 0.28875335 | 0.413 | 0.283 | 1 HSPC_spleen |
| ENSMUG00000008097 | 0.02971971 | 0.43428299 | 0.352 | 0.233 | 1 HSPC_spleen |
| DCAF6             | 0.02974747 | 0.59265021 | 0.595 | 0.483 | 1 HSPC_spleen |
| EMC6              | 0.02990994 | 0.10323048 | 0.423 | 0.275 | 1 HSPC_spleen |
| RFC2              | 0.03011076 | 0.35534869 | 0.315 | 0.2   | 1 HSPC_spleen |
| OSBPL1A           | 0.03074723 | 0.23889839 | 0.356 | 0.242 | 1 HSPC_spleen |
| PDHA1             | 0.03076974 | 0.34726041 | 0.399 | 0.283 | 1 HSPC_spleen |
| ARL4A             | 0.03088691 | 1.15579954 | 0.362 | 0.25  | 1 HSPC_spleen |
| RANBP9            | 0.03101717 | 0.74382451 | 0.656 | 0.533 | 1 HSPC_spleen |
| RNF11             | 0.03117645 | 0.35695058 | 0.423 | 0.308 | 1 HSPC_spleen |
| GTPBP1            | 0.03151487 | 0.30400965 | 0.344 | 0.233 | 1 HSPC_spleen |
| PPP2R3C           | 0.0316237  | 0.19104497 | 0.372 | 0.25  | 1 HSPC_spleen |
| RTN3              | 0.03167411 | 0.2022519  | 0.626 | 0.475 | 1 HSPC_spleen |
| TFCP2             | 0.0317749  | 0.62735368 | 0.368 | 0.258 | 1 HSPC_spleen |

|                    |            |            |       |       |               |
|--------------------|------------|------------|-------|-------|---------------|
| ATL2               | 0.03186416 | 0.62867651 | 0.554 | 0.45  | 1 HSPC_spleen |
| LSG1               | 0.03201959 | 0.57132704 | 0.262 | 0.175 | 1 HSPC_spleen |
| PDCD11             | 0.03204225 | 0.17484607 | 0.297 | 0.192 | 1 HSPC_spleen |
| ATXN2              | 0.03224514 | 0.35521191 | 0.654 | 0.517 | 1 HSPC_spleen |
| ELP2               | 0.03229441 | 0.74953035 | 0.311 | 0.208 | 1 HSPC_spleen |
| USP39              | 0.03237791 | 0.50436368 | 0.325 | 0.225 | 1 HSPC_spleen |
| HEATR5A            | 0.03240921 | 0.19511645 | 0.282 | 0.183 | 1 HSPC_spleen |
| ARMC10             | 0.0326708  | 0.2420584  | 0.276 | 0.167 | 1 HSPC_spleen |
| CR1                | 0.03279203 | 0.66788675 | 0.254 | 0.158 | 1 HSPC_spleen |
| AKIRIN1            | 0.03343258 | 0.16304562 | 0.399 | 0.275 | 1 HSPC_spleen |
| LRRC59             | 0.03348323 | 0.22965924 | 0.372 | 0.25  | 1 HSPC_spleen |
| MRPL34             | 0.03367962 | 0.21381127 | 0.472 | 0.35  | 1 HSPC_spleen |
| ENSMMUG00000059961 | 0.03369581 | 0.24100834 | 0.26  | 0.158 | 1 HSPC_spleen |
| ZDHHHC3            | 0.0339294  | 0.16979206 | 0.444 | 0.342 | 1 HSPC_spleen |
| ZCCHC7             | 0.03407542 | 0.33194154 | 0.652 | 0.55  | 1 HSPC_spleen |
| CSNK1G2            | 0.03411612 | 0.24203039 | 0.333 | 0.233 | 1 HSPC_spleen |
| MINDY2             | 0.03492494 | 1.11939764 | 0.333 | 0.233 | 1 HSPC_spleen |
| RABL3              | 0.03493319 | 0.12130658 | 0.25  | 0.15  | 1 HSPC_spleen |
| SGTA               | 0.03513773 | 0.21839193 | 0.325 | 0.208 | 1 HSPC_spleen |
| WIPF2              | 0.03529765 | 0.74797176 | 0.325 | 0.225 | 1 HSPC_spleen |
| BPTF               | 0.03533788 | 0.31884053 | 0.669 | 0.55  | 1 HSPC_spleen |
| SF3B2              | 0.03536869 | 0.14755908 | 0.466 | 0.35  | 1 HSPC_spleen |
| RNF114             | 0.03545351 | 0.51712585 | 0.333 | 0.233 | 1 HSPC_spleen |
| SRSF1              | 0.03564151 | 0.20425637 | 0.642 | 0.483 | 1 HSPC_spleen |
| ENSMMUG00000052802 | 0.0357054  | 0.38826903 | 0.432 | 0.3   | 1 HSPC_spleen |
| FKBP15             | 0.03576831 | 0.6520555  | 0.268 | 0.175 | 1 HSPC_spleen |
| ST6GALNAC3         | 0.03599485 | 0.68904363 | 0.456 | 0.358 | 1 HSPC_spleen |
| HBP1               | 0.03603229 | 0.58515627 | 0.444 | 0.325 | 1 HSPC_spleen |
| THOC2              | 0.0363779  | 0.2162532  | 0.64  | 0.492 | 1 HSPC_spleen |
| BCL2L13            | 0.03681303 | 0.35381829 | 0.397 | 0.275 | 1 HSPC_spleen |
| SMIM4              | 0.03685377 | 0.14173117 | 0.294 | 0.192 | 1 HSPC_spleen |
| SLX4IP             | 0.03696682 | 0.67498255 | 0.339 | 0.242 | 1 HSPC_spleen |
| DCLRE1C            | 0.03755344 | 0.6138418  | 0.26  | 0.167 | 1 HSPC_spleen |



|                    |            |            |       |       |               |
|--------------------|------------|------------|-------|-------|---------------|
| PTOV1              | 0.037912   | 0.29135404 | 0.35  | 0.233 | 1 HSPC_spleen |
| MACO1              | 0.03799966 | 0.85377106 | 0.581 | 0.475 | 1 HSPC_spleen |
| THG1L              | 0.03846132 | 0.29212039 | 0.366 | 0.258 | 1 HSPC_spleen |
| MAN1A2             | 0.03872792 | 0.62467548 | 0.703 | 0.55  | 1 HSPC_spleen |
| PIKFYVE            | 0.03900119 | 0.81994536 | 0.368 | 0.275 | 1 HSPC_spleen |
| SCLY               | 0.03923173 | 0.33164492 | 0.276 | 0.175 | 1 HSPC_spleen |
| FADS2              | 0.03928872 | 0.31211618 | 0.28  | 0.183 | 1 HSPC_spleen |
| RRP36              | 0.0394091  | 0.44086474 | 0.258 | 0.167 | 1 HSPC_spleen |
| ERI1               | 0.03949133 | 0.80862764 | 0.321 | 0.233 | 1 HSPC_spleen |
| SCAND1             | 0.03965438 | 0.43456827 | 0.321 | 0.217 | 1 HSPC_spleen |
| ENSMMUG00000028699 | 0.03975547 | 0.30500805 | 0.701 | 0.55  | 1 HSPC_spleen |
| CCDC82             | 0.04013816 | 0.31897227 | 0.372 | 0.25  | 1 HSPC_spleen |
| METAP1             | 0.04029881 | 0.57096453 | 0.319 | 0.217 | 1 HSPC_spleen |
| CIAO1              | 0.04132833 | 0.41766437 | 0.25  | 0.15  | 1 HSPC_spleen |
| MRPL17             | 0.04165254 | 0.2993197  | 0.436 | 0.308 | 1 HSPC_spleen |
| ENSMMUG00000018557 | 0.04185987 | 0.16104212 | 0.573 | 0.433 | 1 HSPC_spleen |
| ERAL1              | 0.04195471 | 0.19945674 | 0.309 | 0.208 | 1 HSPC_spleen |
| GIGYF2             | 0.04219369 | 0.50623888 | 0.64  | 0.517 | 1 HSPC_spleen |
| IBTK               | 0.0425642  | 0.18104588 | 0.423 | 0.3   | 1 HSPC_spleen |
| CPNE1              | 0.04263922 | 0.13968432 | 0.634 | 0.475 | 1 HSPC_spleen |
| HP1BP3             | 0.04272675 | 0.3590128  | 0.751 | 0.625 | 1 HSPC_spleen |
| ATP5F1B            | 0.0430284  | 0.26184578 | 0.556 | 0.433 | 1 HSPC_spleen |
| SLC25A13           | 0.04315448 | 0.17947233 | 0.282 | 0.183 | 1 HSPC_spleen |
| UBE3C              | 0.0431562  | 0.59249453 | 0.515 | 0.383 | 1 HSPC_spleen |
| MRPL39             | 0.04327308 | 0.41373989 | 0.423 | 0.292 | 1 HSPC_spleen |
| GPATCH4            | 0.04341128 | 0.71975305 | 0.25  | 0.167 | 1 HSPC_spleen |
| HM13               | 0.04346328 | 0.10825646 | 0.429 | 0.308 | 1 HSPC_spleen |
| ORC5               | 0.04411396 | 0.54251691 | 0.288 | 0.192 | 1 HSPC_spleen |
| SNX5               | 0.04415175 | 0.11478739 | 0.587 | 0.417 | 1 HSPC_spleen |
| ROBO1              | 0.04433347 | 0.49998093 | 0.258 | 0.167 | 1 HSPC_spleen |
| HSP90AA1           | 0.04494454 | 0.29070811 | 0.908 | 0.85  | 1 HSPC_spleen |
| ENSMMUG00000000350 | 0.04521876 | 0.13066471 | 0.325 | 0.225 | 1 HSPC_spleen |
| LCMT1              | 0.0460473  | 0.88316096 | 0.313 | 0.225 | 1 HSPC_spleen |

|                    |            |            |       |       |               |
|--------------------|------------|------------|-------|-------|---------------|
| HDAC4              | 0.04607541 | 0.47861747 | 0.356 | 0.258 | 1 HSPC_spleen |
| ADD1               | 0.04641579 | 0.43378235 | 0.618 | 0.492 | 1 HSPC_spleen |
| REV3L              | 0.04666264 | 0.27298898 | 0.632 | 0.517 | 1 HSPC_spleen |
| GNB1               | 0.04674212 | 0.13410582 | 0.65  | 0.525 | 1 HSPC_spleen |
| MCCC1              | 0.04675186 | 0.42836632 | 0.274 | 0.183 | 1 HSPC_spleen |
| CELF1              | 0.04720521 | 0.11011803 | 0.712 | 0.558 | 1 HSPC_spleen |
| PICALM             | 0.0472386  | 0.7789569  | 0.795 | 0.725 | 1 HSPC_spleen |
| RAB11FIP2          | 0.04730915 | 0.55068301 | 0.26  | 0.175 | 1 HSPC_spleen |
| UBAP2L             | 0.04762933 | 0.34680174 | 0.509 | 0.358 | 1 HSPC_spleen |
| PFKL               | 0.04786587 | 0.24677537 | 0.37  | 0.25  | 1 HSPC_spleen |
| ENSMMUG00000058986 | 0.04861799 | 0.317499   | 0.335 | 0.225 | 1 HSPC_spleen |
| RNF5               | 0.04863914 | 0.35841813 | 0.452 | 0.333 | 1 HSPC_spleen |
| XPC                | 0.04875753 | 0.37677132 | 0.411 | 0.308 | 1 HSPC_spleen |
| OXCT1              | 0.04897644 | 0.63201711 | 0.303 | 0.217 | 1 HSPC_spleen |
| RBM41              | 0.0493162  | 0.39109853 | 0.341 | 0.233 | 1 HSPC_spleen |
| SFXN4              | 0.04939863 | 0.28368552 | 0.479 | 0.358 | 1 HSPC_spleen |
| GFM1               | 0.04942835 | 0.30085034 | 0.313 | 0.208 | 1 HSPC_spleen |
| FER                | 0.04949986 | 0.24657265 | 0.331 | 0.225 | 1 HSPC_spleen |
| CSPP1              | 0.0497279  | 0.53204694 | 0.548 | 0.45  | 1 HSPC_spleen |
| UMPS               | 0.04988013 | 0.48426953 | 0.292 | 0.2   | 1 HSPC_spleen |
| AGTPBP1            | 0.05015381 | 0.3632564  | 0.583 | 0.458 | 1 HSPC_spleen |
| ST7                | 0.05052736 | 0.4808061  | 0.534 | 0.417 | 1 HSPC_spleen |
| PPP1R15A           | 0.05074179 | 0.28365274 | 0.726 | 0.55  | 1 HSPC_spleen |
| DPH3               | 0.05078168 | 0.32960618 | 0.341 | 0.242 | 1 HSPC_spleen |
| PUM3               | 0.05096382 | 0.36151829 | 0.386 | 0.283 | 1 HSPC_spleen |
| DMTF1              | 0.05104579 | 0.26313448 | 0.397 | 0.292 | 1 HSPC_spleen |
| CEP83              | 0.05107813 | 0.66743154 | 0.348 | 0.258 | 1 HSPC_spleen |
| R3HCC1L            | 0.05112258 | 0.29248731 | 0.335 | 0.233 | 1 HSPC_spleen |
| ATAD2B             | 0.05113351 | 0.11431594 | 0.624 | 0.5   | 1 HSPC_spleen |
| ISCU               | 0.05117575 | 0.27937826 | 0.311 | 0.217 | 1 HSPC_spleen |
| PSMG4              | 0.05138858 | 0.18528263 | 0.299 | 0.2   | 1 HSPC_spleen |
| FAM76B             | 0.05159811 | 0.4843557  | 0.309 | 0.208 | 1 HSPC_spleen |
| MRPS12             | 0.05214838 | 0.42736174 | 0.419 | 0.325 | 1 HSPC_spleen |

|                    |            |            |       |       |               |
|--------------------|------------|------------|-------|-------|---------------|
| LBH                | 0.05233872 | 0.5716306  | 0.286 | 0.2   | 1 HSPC_spleen |
| AASDH              | 0.05242823 | 0.56537313 | 0.25  | 0.158 | 1 HSPC_spleen |
| ENSMMUG00000015095 | 0.05248061 | 0.20106027 | 0.407 | 0.292 | 1 HSPC_spleen |
| UBE2V2             | 0.05278661 | 0.1585712  | 0.417 | 0.308 | 1 HSPC_spleen |
| LRRC8D             | 0.05322669 | 0.50991956 | 0.305 | 0.217 | 1 HSPC_spleen |
| ELL2               | 0.05346942 | 0.59134254 | 0.609 | 0.533 | 1 HSPC_spleen |
| MCM8               | 0.05348429 | 0.19880688 | 0.307 | 0.208 | 1 HSPC_spleen |
| ARHGAP17           | 0.05377665 | 0.44202958 | 0.37  | 0.267 | 1 HSPC_spleen |
| PSMB2              | 0.05383032 | 0.31786373 | 0.425 | 0.308 | 1 HSPC_spleen |
| HECTD1             | 0.0540567  | 0.35730409 | 0.583 | 0.483 | 1 HSPC_spleen |
| DCPS               | 0.0546684  | 0.20740372 | 0.262 | 0.167 | 1 HSPC_spleen |
| MRPL24             | 0.05487308 | 0.20568724 | 0.339 | 0.233 | 1 HSPC_spleen |
| MED1               | 0.05498762 | 0.2673302  | 0.329 | 0.225 | 1 HSPC_spleen |
| PRPF8              | 0.05524628 | 0.21181053 | 0.521 | 0.417 | 1 HSPC_spleen |
| H1-3               | 0.05581135 | 0.22460871 | 0.687 | 0.583 | 1 HSPC_spleen |
| KIAA0040           | 0.05662917 | 0.19087397 | 0.429 | 0.333 | 1 HSPC_spleen |
| ATG16L1            | 0.05674644 | 0.26257629 | 0.278 | 0.192 | 1 HSPC_spleen |
| MAPKAP1            | 0.05699988 | 0.17433185 | 0.483 | 0.367 | 1 HSPC_spleen |
| ENSMMUG00000050473 | 0.05714206 | 0.32718784 | 0.28  | 0.192 | 1 HSPC_spleen |
| PTPN4              | 0.05714855 | 0.279693   | 0.372 | 0.275 | 1 HSPC_spleen |
| ARFRP1             | 0.05758118 | 0.11039984 | 0.319 | 0.217 | 1 HSPC_spleen |
| ENSMMUG00000054743 | 0.05768202 | 0.36447318 | 0.315 | 0.217 | 1 HSPC_spleen |
| KAT7               | 0.05854683 | 0.10510122 | 0.476 | 0.35  | 1 HSPC_spleen |
| SAV1               | 0.0585548  | 0.37604357 | 0.264 | 0.167 | 1 HSPC_spleen |
| MRPL50             | 0.0599027  | 0.30141497 | 0.311 | 0.217 | 1 HSPC_spleen |
| MRPS11             | 0.06019397 | 0.29542243 | 0.35  | 0.25  | 1 HSPC_spleen |
| SMAD1              | 0.0602883  | 0.58348543 | 0.26  | 0.175 | 1 HSPC_spleen |
| DPCD               | 0.06031277 | 0.11518965 | 0.323 | 0.217 | 1 HSPC_spleen |
| ITSN2              | 0.06036831 | 0.68722653 | 0.773 | 0.65  | 1 HSPC_spleen |
| ASB8               | 0.06038925 | 0.75119402 | 0.258 | 0.183 | 1 HSPC_spleen |
| GATB               | 0.06069145 | 0.35677411 | 0.278 | 0.192 | 1 HSPC_spleen |
| MRPS14             | 0.06118555 | 0.17592283 | 0.446 | 0.358 | 1 HSPC_spleen |
| MAD1L1             | 0.06132034 | 0.4904795  | 0.362 | 0.267 | 1 HSPC_spleen |

|                    |            |            |       |       |               |
|--------------------|------------|------------|-------|-------|---------------|
| SMAD4              | 0.06136541 | 0.74335992 | 0.389 | 0.292 | 1 HSPC_spleen |
| ENSMMUG00000016894 | 0.06139368 | 0.13884105 | 0.652 | 0.542 | 1 HSPC_spleen |
| ZMYND11            | 0.06208871 | 0.37379649 | 0.552 | 0.442 | 1 HSPC_spleen |
| ANAPC5             | 0.06236827 | 0.31967696 | 0.436 | 0.308 | 1 HSPC_spleen |
| HEATR1             | 0.06245716 | 0.46505563 | 0.339 | 0.242 | 1 HSPC_spleen |
| TUBA1A             | 0.0626609  | 0.24639384 | 0.843 | 0.783 | 1 HSPC_spleen |
| LARP4              | 0.0626927  | 0.25897482 | 0.536 | 0.433 | 1 HSPC_spleen |
| PHRF1              | 0.06301635 | 0.29371608 | 0.282 | 0.192 | 1 HSPC_spleen |
| MAN2A1             | 0.06313444 | 0.58233548 | 0.614 | 0.508 | 1 HSPC_spleen |
| DGKD               | 0.06318634 | 0.49508794 | 0.272 | 0.183 | 1 HSPC_spleen |
| LPIN2              | 0.0633925  | 1.09888805 | 0.521 | 0.4   | 1 HSPC_spleen |
| USP9X              | 0.06357144 | 0.41060628 | 0.671 | 0.542 | 1 HSPC_spleen |
| UBE2K              | 0.06360268 | 0.58077684 | 0.687 | 0.583 | 1 HSPC_spleen |
| MRPL20             | 0.06369211 | 0.16622366 | 0.476 | 0.367 | 1 HSPC_spleen |
| NADSYN1            | 0.0645126  | 0.12322277 | 0.456 | 0.333 | 1 HSPC_spleen |
| SLC7A1             | 0.06506651 | 0.15276947 | 0.286 | 0.192 | 1 HSPC_spleen |
| SUCLG1             | 0.06525159 | 0.1470691  | 0.56  | 0.4   | 1 HSPC_spleen |
| SPECC1L            | 0.06532407 | 0.28271151 | 0.53  | 0.408 | 1 HSPC_spleen |
| ITFG1              | 0.06563636 | 0.228344   | 0.591 | 0.475 | 1 HSPC_spleen |
| ENSMMUG00000019376 | 0.06624563 | 0.2108768  | 0.337 | 0.242 | 1 HSPC_spleen |
| SMNDC1             | 0.06636564 | 0.46302019 | 0.376 | 0.292 | 1 HSPC_spleen |
| TDRD3              | 0.06649384 | 0.28660549 | 0.454 | 0.342 | 1 HSPC_spleen |
| SNIP1              | 0.0666727  | 0.41384646 | 0.313 | 0.217 | 1 HSPC_spleen |
| SP140              | 0.06669451 | 0.76723963 | 0.432 | 0.342 | 1 HSPC_spleen |
| DYNC1LI1           | 0.06736984 | 0.40296224 | 0.382 | 0.283 | 1 HSPC_spleen |
| TMED4              | 0.06779613 | 0.11859507 | 0.429 | 0.317 | 1 HSPC_spleen |
| SPINT2             | 0.06795872 | 0.12703133 | 0.526 | 0.408 | 1 HSPC_spleen |
| PCYT1A             | 0.06800936 | 0.4603341  | 0.27  | 0.183 | 1 HSPC_spleen |
| DNAJC17            | 0.06807758 | 0.25126808 | 0.262 | 0.175 | 1 HSPC_spleen |
| HMGN4              | 0.06810002 | 0.30896536 | 0.389 | 0.283 | 1 HSPC_spleen |
| EDEM1              | 0.06819575 | 0.39335293 | 0.294 | 0.208 | 1 HSPC_spleen |
| ATP6AP2            | 0.06836719 | 0.23393851 | 0.464 | 0.35  | 1 HSPC_spleen |
| ICE1               | 0.06937672 | 0.23746782 | 0.356 | 0.267 | 1 HSPC_spleen |

|          |            |            |       |       |               |
|----------|------------|------------|-------|-------|---------------|
| PRKAA1   | 0.0695667  | 0.45775931 | 0.299 | 0.208 | 1 HSPC_spleen |
| USPL1    | 0.06999287 | 0.54604098 | 0.266 | 0.192 | 1 HSPC_spleen |
| SIL1     | 0.07008126 | 0.22646679 | 0.288 | 0.192 | 1 HSPC_spleen |
| ACAA2    | 0.07027627 | 0.50126601 | 0.286 | 0.208 | 1 HSPC_spleen |
| HACD3    | 0.07062103 | 0.37190106 | 0.421 | 0.308 | 1 HSPC_spleen |
| MED25    | 0.07062425 | 0.24378052 | 0.47  | 0.367 | 1 HSPC_spleen |
| PMVK     | 0.0710795  | 0.25484199 | 0.382 | 0.258 | 1 HSPC_spleen |
| INTS13   | 0.07168704 | 0.42577741 | 0.303 | 0.208 | 1 HSPC_spleen |
| MAP2K4   | 0.07184985 | 0.3503325  | 0.407 | 0.292 | 1 HSPC_spleen |
| ARID1A   | 0.07225367 | 0.19648064 | 0.714 | 0.567 | 1 HSPC_spleen |
| EXOC4    | 0.07263012 | 0.29926538 | 0.838 | 0.725 | 1 HSPC_spleen |
| ALKBH5   | 0.07281949 | 0.43713271 | 0.282 | 0.2   | 1 HSPC_spleen |
| MPDU1    | 0.07324613 | 0.38706672 | 0.321 | 0.217 | 1 HSPC_spleen |
| PPP1R21  | 0.07361967 | 0.36850136 | 0.268 | 0.183 | 1 HSPC_spleen |
| DCAF5    | 0.07393237 | 0.30612303 | 0.368 | 0.283 | 1 HSPC_spleen |
| ZCCHC9   | 0.07566867 | 0.3637503  | 0.348 | 0.25  | 1 HSPC_spleen |
| RPS27L   | 0.07594444 | 0.20123015 | 0.681 | 0.575 | 1 HSPC_spleen |
| LRPPRC   | 0.07629567 | 0.27925663 | 0.628 | 0.525 | 1 HSPC_spleen |
| USP15    | 0.07640088 | 0.52517327 | 0.93  | 0.8   | 1 HSPC_spleen |
| GALNT10  | 0.0772375  | 0.61592634 | 0.335 | 0.258 | 1 HSPC_spleen |
| ATXN7L1  | 0.07843287 | 0.33126455 | 0.409 | 0.317 | 1 HSPC_spleen |
| ZNRD2    | 0.07890059 | 0.3120247  | 0.295 | 0.208 | 1 HSPC_spleen |
| YBX3     | 0.07901933 | 0.25419692 | 0.303 | 0.208 | 1 HSPC_spleen |
| TRNT1    | 0.07947834 | 0.24421761 | 0.389 | 0.3   | 1 HSPC_spleen |
| AIFM3    | 0.07949327 | 0.14093399 | 0.313 | 0.233 | 1 HSPC_spleen |
| FAM126B  | 0.08004533 | 0.20894549 | 0.348 | 0.258 | 1 HSPC_spleen |
| ODF2L    | 0.08050425 | 0.26100172 | 0.27  | 0.183 | 1 HSPC_spleen |
| PUS7     | 0.08092465 | 0.25863261 | 0.331 | 0.242 | 1 HSPC_spleen |
| MPP5     | 0.08097735 | 1.03308807 | 0.29  | 0.217 | 1 HSPC_spleen |
| MZT1     | 0.08100549 | 0.49119278 | 0.301 | 0.217 | 1 HSPC_spleen |
| POLR2H   | 0.0814076  | 0.44161098 | 0.364 | 0.267 | 1 HSPC_spleen |
| HHEX     | 0.08251729 | 0.79049334 | 0.29  | 0.225 | 1 HSPC_spleen |
| ATP6V0D1 | 0.0836322  | 0.22036391 | 0.503 | 0.392 | 1 HSPC_spleen |

|                    |            |            |       |       |               |
|--------------------|------------|------------|-------|-------|---------------|
| TM9SF2             | 0.08470278 | 0.31989606 | 0.46  | 0.367 | 1 HSPC_spleen |
| EIF3A              | 0.08503866 | 0.16831376 | 0.763 | 0.692 | 1 HSPC_spleen |
| IGHMBP2            | 0.08512868 | 0.29704169 | 0.331 | 0.242 | 1 HSPC_spleen |
| ATF6B              | 0.0853992  | 0.33827679 | 0.341 | 0.242 | 1 HSPC_spleen |
| RCBTB1             | 0.08553597 | 0.51495239 | 0.252 | 0.167 | 1 HSPC_spleen |
| NEK9               | 0.086014   | 0.46183704 | 0.311 | 0.233 | 1 HSPC_spleen |
| MSH3               | 0.08605259 | 0.44411391 | 0.45  | 0.358 | 1 HSPC_spleen |
| OTUD4              | 0.08617618 | 0.11100715 | 0.305 | 0.225 | 1 HSPC_spleen |
| CHORDC1            | 0.08621507 | 0.15802727 | 0.485 | 0.392 | 1 HSPC_spleen |
| ENSMMUG00000030317 | 0.0862334  | 0.36919885 | 0.425 | 0.325 | 1 HSPC_spleen |
| SVIP               | 0.08639824 | 0.12375539 | 0.329 | 0.242 | 1 HSPC_spleen |
| PSMD11             | 0.08701774 | 0.18692562 | 0.472 | 0.367 | 1 HSPC_spleen |
| EXOG               | 0.08732593 | 0.4657498  | 0.274 | 0.192 | 1 HSPC_spleen |
| PSMC4              | 0.08738753 | 0.16586824 | 0.464 | 0.358 | 1 HSPC_spleen |
| NBR1               | 0.08778529 | 0.46342999 | 0.462 | 0.35  | 1 HSPC_spleen |
| SORL1              | 0.08794276 | 0.22496778 | 0.25  | 0.175 | 1 HSPC_spleen |
| MCPH1              | 0.08858912 | 0.47115397 | 0.403 | 0.308 | 1 HSPC_spleen |
| PCBD2              | 0.08944288 | 0.25441181 | 0.297 | 0.217 | 1 HSPC_spleen |
| LRIF1              | 0.08970637 | 0.22571406 | 0.374 | 0.275 | 1 HSPC_spleen |
| MTF2               | 0.09026023 | 0.23288556 | 0.458 | 0.358 | 1 HSPC_spleen |
| MAP3K20            | 0.09104603 | 0.35306895 | 0.587 | 0.467 | 1 HSPC_spleen |
| VPS35L             | 0.09186443 | 0.25270075 | 0.339 | 0.258 | 1 HSPC_spleen |
| LIN54              | 0.09197721 | 0.22299314 | 0.36  | 0.267 | 1 HSPC_spleen |
| HSF1               | 0.09206662 | 0.19271329 | 0.372 | 0.275 | 1 HSPC_spleen |
| ENSMMUG00000012690 | 0.09218333 | 0.12174405 | 0.329 | 0.233 | 1 HSPC_spleen |
| TTC19              | 0.09232502 | 0.12742515 | 0.431 | 0.317 | 1 HSPC_spleen |
| GOLIM4             | 0.09267637 | 0.20458481 | 0.411 | 0.317 | 1 HSPC_spleen |
| MRPS33             | 0.09302598 | 0.49455076 | 0.391 | 0.292 | 1 HSPC_spleen |
| MKRN1              | 0.09319058 | 0.77324841 | 0.276 | 0.2   | 1 HSPC_spleen |
| VIRMA              | 0.09328122 | 0.75254417 | 0.325 | 0.242 | 1 HSPC_spleen |
| SERPIN1            | 0.09403591 | 0.23161175 | 0.278 | 0.192 | 1 HSPC_spleen |
| IARS1              | 0.09440132 | 0.24544648 | 0.579 | 0.467 | 1 HSPC_spleen |
| RFFL               | 0.09453796 | 1.09425825 | 0.378 | 0.308 | 1 HSPC_spleen |

|          |            |            |       |       |               |
|----------|------------|------------|-------|-------|---------------|
| ZNF24    | 0.09483924 | 0.21258555 | 0.297 | 0.208 | 1 HSPC_spleen |
| DEAF1    | 0.09503503 | 0.10664264 | 0.309 | 0.217 | 1 HSPC_spleen |
| FH       | 0.09544924 | 0.38522828 | 0.282 | 0.2   | 1 HSPC_spleen |
| DHX15    | 0.09566914 | 0.25483892 | 0.554 | 0.458 | 1 HSPC_spleen |
| DTD1     | 0.09583882 | 0.14088492 | 0.474 | 0.358 | 1 HSPC_spleen |
| MRTFB    | 0.09697318 | 0.26455176 | 0.29  | 0.208 | 1 HSPC_spleen |
| NUP58    | 0.09841889 | 0.11585107 | 0.344 | 0.242 | 1 HSPC_spleen |
| MSN      | 0.09910211 | 0.18836739 | 0.789 | 0.675 | 1 HSPC_spleen |
| HMGXB4   | 0.09942656 | 0.17228125 | 0.329 | 0.242 | 1 HSPC_spleen |
| C12orf65 | 0.10114496 | 0.56455067 | 0.28  | 0.2   | 1 HSPC_spleen |
| PIGF     | 0.10145673 | 0.30465104 | 0.401 | 0.3   | 1 HSPC_spleen |
| SNX2     | 0.10205279 | 0.1373128  | 0.568 | 0.433 | 1 HSPC_spleen |
| DDX1     | 0.10265781 | 0.13908328 | 0.407 | 0.317 | 1 HSPC_spleen |
| SCO1     | 0.10376169 | 0.45107463 | 0.252 | 0.183 | 1 HSPC_spleen |
| TRNAU1AP | 0.10410418 | 0.36522643 | 0.286 | 0.208 | 1 HSPC_spleen |
| COPG2    | 0.10459472 | 0.10420798 | 0.325 | 0.233 | 1 HSPC_spleen |
| IFT57    | 0.10472043 | 0.36750549 | 0.47  | 0.35  | 1 HSPC_spleen |
| CASP8    | 0.10529861 | 0.12251056 | 0.35  | 0.258 | 1 HSPC_spleen |
| PPIH     | 0.10550963 | 0.17880766 | 0.45  | 0.333 | 1 HSPC_spleen |
| LSM12    | 0.10566611 | 0.39466682 | 0.364 | 0.283 | 1 HSPC_spleen |
| PSMC2    | 0.10578076 | 0.22316279 | 0.403 | 0.3   | 1 HSPC_spleen |
| NFYC     | 0.10645472 | 0.17485114 | 0.409 | 0.3   | 1 HSPC_spleen |
| SUGP2    | 0.10650513 | 0.26111253 | 0.386 | 0.3   | 1 HSPC_spleen |
| SAE1     | 0.10733568 | 0.12636019 | 0.378 | 0.292 | 1 HSPC_spleen |
| ACTN4    | 0.10749241 | 0.24115524 | 0.466 | 0.367 | 1 HSPC_spleen |
| ING2     | 0.10811878 | 0.13109384 | 0.321 | 0.233 | 1 HSPC_spleen |
| TMEM87B  | 0.10851149 | 0.4259965  | 0.284 | 0.2   | 1 HSPC_spleen |
| EEF1G    | 0.10889748 | 0.17697661 | 0.779 | 0.733 | 1 HSPC_spleen |
| MIS18A   | 0.10914541 | 0.51346833 | 0.28  | 0.2   | 1 HSPC_spleen |
| FBXO3    | 0.10997665 | 0.35888139 | 0.276 | 0.208 | 1 HSPC_spleen |
| ERLIN2   | 0.11020332 | 0.14120451 | 0.362 | 0.275 | 1 HSPC_spleen |
| CFAP298  | 0.11084477 | 0.11628237 | 0.321 | 0.233 | 1 HSPC_spleen |
| OTULIN   | 0.11106668 | 0.44967154 | 0.311 | 0.233 | 1 HSPC_spleen |

|                    |            |            |       |       |               |
|--------------------|------------|------------|-------|-------|---------------|
| DUSP1              | 0.1114627  | 0.32941076 | 0.658 | 0.6   | 1 HSPC_spleen |
| RBM33              | 0.11159669 | 0.34796222 | 0.642 | 0.533 | 1 HSPC_spleen |
| INTS4              | 0.11223253 | 0.47061089 | 0.286 | 0.217 | 1 HSPC_spleen |
| ARMC8              | 0.11243062 | 0.45118573 | 0.624 | 0.517 | 1 HSPC_spleen |
| SNRPB              | 0.11288346 | 0.1226016  | 0.675 | 0.575 | 1 HSPC_spleen |
| NPLOC4             | 0.11502654 | 0.60064179 | 0.407 | 0.308 | 1 HSPC_spleen |
| ZNF160             | 0.11516126 | 0.44368629 | 0.329 | 0.233 | 1 HSPC_spleen |
| ENSMMUG00000013492 | 0.11531789 | 0.42333639 | 0.325 | 0.25  | 1 HSPC_spleen |
| SLC25A25           | 0.11563787 | 0.5307256  | 0.272 | 0.2   | 1 HSPC_spleen |
| EBNA1BP2           | 0.11640251 | 0.13548968 | 0.382 | 0.283 | 1 HSPC_spleen |
| NRF1               | 0.1174997  | 0.16742832 | 0.523 | 0.4   | 1 HSPC_spleen |
| RIOK3              | 0.11880276 | 0.29476594 | 0.444 | 0.367 | 1 HSPC_spleen |
| TMEM167A           | 0.11916173 | 0.21506961 | 0.417 | 0.325 | 1 HSPC_spleen |
| NUP62              | 0.12049547 | 0.61791616 | 0.258 | 0.192 | 1 HSPC_spleen |
| LRRC41             | 0.12053757 | 0.30290601 | 0.297 | 0.217 | 1 HSPC_spleen |
| ZNF420             | 0.12190664 | 0.34775321 | 0.254 | 0.192 | 1 HSPC_spleen |
| MAT2A              | 0.12194281 | 0.31406437 | 0.581 | 0.467 | 1 HSPC_spleen |
| PNPT1              | 0.12241365 | 0.48119211 | 0.364 | 0.283 | 1 HSPC_spleen |
| ING3               | 0.12297999 | 0.11075554 | 0.258 | 0.192 | 1 HSPC_spleen |
| H1-4               | 0.12321557 | 0.24120396 | 0.644 | 0.567 | 1 HSPC_spleen |
| C4H6orf62          | 0.12386614 | 0.1819961  | 0.534 | 0.417 | 1 HSPC_spleen |
| PCID2              | 0.1242834  | 0.155689   | 0.384 | 0.283 | 1 HSPC_spleen |
| GSR                | 0.12462993 | 0.23032567 | 0.292 | 0.217 | 1 HSPC_spleen |
| DTWD1              | 0.12507589 | 0.47656903 | 0.274 | 0.2   | 1 HSPC_spleen |
| CCNDBP1            | 0.12549917 | 0.40525047 | 0.407 | 0.317 | 1 HSPC_spleen |
| PIGK               | 0.12555785 | 0.21758424 | 0.264 | 0.183 | 1 HSPC_spleen |
| MRRF               | 0.12754435 | 0.18446403 | 0.305 | 0.233 | 1 HSPC_spleen |
| PPIE               | 0.12801927 | 0.30364516 | 0.262 | 0.192 | 1 HSPC_spleen |
| PHF20L1            | 0.12894393 | 0.13413106 | 0.376 | 0.275 | 1 HSPC_spleen |
| SIVA1              | 0.13049887 | 0.29029721 | 0.448 | 0.358 | 1 HSPC_spleen |
| ENSMMUG00000047481 | 0.13057681 | 0.23335215 | 0.703 | 0.642 | 1 HSPC_spleen |
| MARCHF5            | 0.13123852 | 0.26793317 | 0.413 | 0.317 | 1 HSPC_spleen |
| SPTSSA             | 0.13183009 | 0.20085046 | 0.407 | 0.308 | 1 HSPC_spleen |



|                    |            |            |       |       |               |
|--------------------|------------|------------|-------|-------|---------------|
| TBC1D22B           | 0.13195615 | 0.61171501 | 0.352 | 0.275 | 1 HSPC_spleen |
| ZNF217             | 0.13269085 | 0.49160639 | 0.313 | 0.242 | 1 HSPC_spleen |
| STMP1              | 0.13300014 | 0.26707129 | 0.26  | 0.192 | 1 HSPC_spleen |
| NUP214             | 0.13310079 | 0.34454194 | 0.546 | 0.425 | 1 HSPC_spleen |
| BNIP3L             | 0.13416868 | 0.63041593 | 0.722 | 0.575 | 1 HSPC_spleen |
| SPCS1              | 0.13427118 | 0.13030164 | 0.603 | 0.483 | 1 HSPC_spleen |
| INTS7              | 0.13458627 | 0.15824771 | 0.358 | 0.275 | 1 HSPC_spleen |
| COPZ1              | 0.13493882 | 0.29610843 | 0.313 | 0.233 | 1 HSPC_spleen |
| CCT4               | 0.13553686 | 0.20623631 | 0.669 | 0.55  | 1 HSPC_spleen |
| ENSMMUG00000056683 | 0.13715803 | 0.15503038 | 0.307 | 0.233 | 1 HSPC_spleen |
| KIAA0232           | 0.13723303 | 0.20736566 | 0.56  | 0.442 | 1 HSPC_spleen |
| RB1CC1             | 0.13794987 | 0.22977544 | 0.485 | 0.525 | 1 HSPC_spleen |
| PIK3C3             | 0.13812461 | 0.14191379 | 0.382 | 0.283 | 1 HSPC_spleen |
| WIPI2              | 0.13813503 | 0.17743289 | 0.421 | 0.325 | 1 HSPC_spleen |
| NET1               | 0.13896041 | 0.35778747 | 0.384 | 0.3   | 1 HSPC_spleen |
| FAM133B            | 0.13977312 | 0.29007409 | 0.544 | 0.458 | 1 HSPC_spleen |
| LMBR1              | 0.14093269 | 0.42305554 | 0.587 | 0.483 | 1 HSPC_spleen |
| CCDC14             | 0.14126441 | 0.29417988 | 0.294 | 0.208 | 1 HSPC_spleen |
| DIP2A              | 0.14263257 | 0.24398524 | 0.266 | 0.192 | 1 HSPC_spleen |
| RUVBL2             | 0.14307169 | 0.24494327 | 0.409 | 0.333 | 1 HSPC_spleen |
| MARCHF3            | 0.14507309 | 1.4738888  | 0.333 | 0.258 | 1 HSPC_spleen |
| WDR12              | 0.14571953 | 0.35450554 | 0.331 | 0.25  | 1 HSPC_spleen |
| ENSMMUG00000052035 | 0.14772064 | 0.10603609 | 0.456 | 0.333 | 1 HSPC_spleen |
| UXT                | 0.14773422 | 0.16124797 | 0.386 | 0.3   | 1 HSPC_spleen |
| SNRNP27            | 0.14818455 | 0.15815493 | 0.387 | 0.292 | 1 HSPC_spleen |
| RANBP2             | 0.14883624 | 0.17576885 | 0.748 | 0.633 | 1 HSPC_spleen |
| DPH2               | 0.14906543 | 0.18452217 | 0.501 | 0.408 | 1 HSPC_spleen |
| MATR3              | 0.15244608 | 0.13352852 | 0.873 | 0.742 | 1 HSPC_spleen |
| ASF1A              | 0.15363131 | 0.17775472 | 0.256 | 0.192 | 1 HSPC_spleen |
| PHF14              | 0.15363645 | 0.17319015 | 0.687 | 0.567 | 1 HSPC_spleen |
| CHD9               | 0.15389961 | 0.16433574 | 0.62  | 0.517 | 1 HSPC_spleen |
| MRPS18B            | 0.15407719 | 0.17902263 | 0.297 | 0.217 | 1 HSPC_spleen |
| TXN                | 0.15466479 | 0.21272992 | 0.808 | 0.75  | 1 HSPC_spleen |

|                    |            |            |       |       |               |
|--------------------|------------|------------|-------|-------|---------------|
| POLR3E             | 0.1560168  | 0.20575666 | 0.264 | 0.192 | 1 HSPC_spleen |
| NLK                | 0.15644369 | 0.19732482 | 0.513 | 0.417 | 1 HSPC_spleen |
| NEK7               | 0.15667259 | 0.18620753 | 0.734 | 0.583 | 1 HSPC_spleen |
| TMEM230            | 0.15713961 | 0.15071415 | 0.53  | 0.425 | 1 HSPC_spleen |
| HSPE1              | 0.15758631 | 0.18535946 | 0.793 | 0.708 | 1 HSPC_spleen |
| BSCL2              | 0.15771558 | 0.11801245 | 0.272 | 0.2   | 1 HSPC_spleen |
| NDEL1              | 0.16018225 | 0.17256323 | 0.317 | 0.25  | 1 HSPC_spleen |
| ENSMMUG00000044329 | 0.16265978 | 0.40765509 | 0.274 | 0.208 | 1 HSPC_spleen |
| TIMM44             | 0.16465618 | 0.20853503 | 0.329 | 0.25  | 1 HSPC_spleen |
| IRF1               | 0.16517257 | 0.26891682 | 0.295 | 0.233 | 1 HSPC_spleen |
| ENSMMUG00000062545 | 0.16635941 | 0.37316442 | 0.254 | 0.192 | 1 HSPC_spleen |
| COPS5              | 0.16653601 | 0.14590695 | 0.415 | 0.317 | 1 HSPC_spleen |
| CEPT1              | 0.16702622 | 0.37459302 | 0.382 | 0.308 | 1 HSPC_spleen |
| KEAP1              | 0.16742158 | 0.17040811 | 0.297 | 0.225 | 1 HSPC_spleen |
| PMAIP1             | 0.16810704 | 1.09553243 | 0.407 | 0.333 | 1 HSPC_spleen |
| PNKP               | 0.168937   | 0.13902655 | 0.294 | 0.217 | 1 HSPC_spleen |
| PML                | 0.16914372 | 0.64090554 | 0.301 | 0.242 | 1 HSPC_spleen |
| TPRKB              | 0.17392997 | 0.20558248 | 0.282 | 0.208 | 1 HSPC_spleen |
| CMTR1              | 0.17582776 | 0.14952439 | 0.46  | 0.375 | 1 HSPC_spleen |
| ENSMMUG00000058919 | 0.17621362 | 0.21293163 | 0.45  | 0.367 | 1 HSPC_spleen |
| SRI                | 0.17622306 | 0.15832873 | 0.622 | 0.55  | 1 HSPC_spleen |
| NUP153             | 0.17703084 | 0.42363593 | 0.693 | 0.567 | 1 HSPC_spleen |
| EMG1               | 0.17715011 | 0.10655637 | 0.256 | 0.183 | 1 HSPC_spleen |
| NCAPD3             | 0.17846152 | 0.36835189 | 0.526 | 0.458 | 1 HSPC_spleen |
| ICE2               | 0.17891945 | 0.26565637 | 0.341 | 0.275 | 1 HSPC_spleen |
| WAC                | 0.18213633 | 0.17185532 | 0.777 | 0.65  | 1 HSPC_spleen |
| CCND3              | 0.18259816 | 0.10349403 | 0.597 | 0.475 | 1 HSPC_spleen |
| SVBP               | 0.18275579 | 0.2652903  | 0.37  | 0.292 | 1 HSPC_spleen |
| PIH1D1             | 0.18283774 | 0.20927472 | 0.337 | 0.258 | 1 HSPC_spleen |
| POLR2G             | 0.1851746  | 0.14925198 | 0.466 | 0.392 | 1 HSPC_spleen |
| THUMPD3            | 0.18524184 | 0.23447622 | 0.282 | 0.217 | 1 HSPC_spleen |
| PDHB               | 0.18574821 | 0.25459969 | 0.337 | 0.267 | 1 HSPC_spleen |
| ZXDC               | 0.18662159 | 0.17932738 | 0.278 | 0.208 | 1 HSPC_spleen |

|                    |            |            |       |       |               |
|--------------------|------------|------------|-------|-------|---------------|
| TBRG4              | 0.18714118 | 0.34938856 | 0.348 | 0.283 | 1 HSPC_spleen |
| PRPF38A            | 0.1881982  | 0.13275956 | 0.307 | 0.242 | 1 HSPC_spleen |
| TAF2               | 0.19471618 | 0.23832834 | 0.341 | 0.275 | 1 HSPC_spleen |
| ENSMMUG00000059843 | 0.19661301 | 0.23060819 | 0.472 | 0.392 | 1 HSPC_spleen |
| MSL2               | 0.19740792 | 0.20805656 | 0.477 | 0.375 | 1 HSPC_spleen |
| ZNF277             | 0.19818488 | 0.11352534 | 0.411 | 0.317 | 1 HSPC_spleen |
| ACER3              | 0.19825396 | 0.78512384 | 0.503 | 0.458 | 1 HSPC_spleen |
| TENT5C             | 0.19875526 | 0.65918177 | 0.468 | 0.383 | 1 HSPC_spleen |
| UBE4A              | 0.19927964 | 0.13363007 | 0.325 | 0.25  | 1 HSPC_spleen |
| MED13L             | 0.19936321 | 0.42843717 | 0.808 | 0.708 | 1 HSPC_spleen |
| ATR                | 0.20020678 | 0.2067929  | 0.454 | 0.367 | 1 HSPC_spleen |
| TAF3               | 0.20130392 | 0.11472158 | 0.542 | 0.45  | 1 HSPC_spleen |
| TAF1D              | 0.20363333 | 0.11034159 | 0.425 | 0.342 | 1 HSPC_spleen |
| FAM216A            | 0.2092867  | 0.40589447 | 0.254 | 0.2   | 1 HSPC_spleen |
| WWP1               | 0.20948032 | 0.15223816 | 0.352 | 0.292 | 1 HSPC_spleen |
| EPSTI1             | 0.20968938 | 0.64111205 | 0.313 | 0.25  | 1 HSPC_spleen |
| SPTLC2             | 0.2128855  | 0.24558046 | 0.45  | 0.383 | 1 HSPC_spleen |
| NOL11              | 0.21591203 | 0.24511412 | 0.335 | 0.267 | 1 HSPC_spleen |
| FUBP1              | 0.21830147 | 0.24788046 | 0.742 | 0.65  | 1 HSPC_spleen |
| SPTLC1             | 0.21992371 | 0.14738599 | 0.382 | 0.317 | 1 HSPC_spleen |
| TANC2              | 0.22077093 | 0.33015754 | 0.384 | 0.308 | 1 HSPC_spleen |
| GMDS               | 0.22402708 | 0.21232763 | 0.544 | 0.467 | 1 HSPC_spleen |
| MRPS15             | 0.22762856 | 0.26659528 | 0.526 | 0.458 | 1 HSPC_spleen |
| TANGO6             | 0.22891893 | 0.106895   | 0.393 | 0.325 | 1 HSPC_spleen |
| MRPL49             | 0.22899211 | 0.58479203 | 0.278 | 0.233 | 1 HSPC_spleen |
| BORCS5             | 0.2313164  | 0.23680851 | 0.262 | 0.2   | 1 HSPC_spleen |
| USP4               | 0.23133295 | 0.23515398 | 0.346 | 0.275 | 1 HSPC_spleen |
| PINX1              | 0.23186272 | 0.30429888 | 0.252 | 0.192 | 1 HSPC_spleen |
| TTC37              | 0.23198626 | 0.1526048  | 0.409 | 0.317 | 1 HSPC_spleen |
| ENSMMUG00000011798 | 0.23257485 | 0.10192029 | 0.579 | 0.475 | 1 HSPC_spleen |
| EHMT1              | 0.23434817 | 0.23667147 | 0.55  | 0.483 | 1 HSPC_spleen |
| RAPGEF2            | 0.23564763 | 0.96241354 | 0.806 | 0.708 | 1 HSPC_spleen |
| ZCCHC2             | 0.23658004 | 0.13907782 | 0.297 | 0.242 | 1 HSPC_spleen |

|                   |            |            |       |       |               |
|-------------------|------------|------------|-------|-------|---------------|
| IKBK              | 0.23785494 | 0.30724305 | 0.252 | 0.192 | 1 HSPC_spleen |
| MTMR3             | 0.24106699 | 0.84732059 | 0.524 | 0.475 | 1 HSPC_spleen |
| VWA8              | 0.24165325 | 0.45554392 | 0.348 | 0.283 | 1 HSPC_spleen |
| ORC3              | 0.2499699  | 0.22884967 | 0.37  | 0.317 | 1 HSPC_spleen |
| SLTM              | 0.25070851 | 0.16273623 | 0.708 | 0.617 | 1 HSPC_spleen |
| PSME4             | 0.25231109 | 0.45544506 | 0.693 | 0.567 | 1 HSPC_spleen |
| NCOA1             | 0.25374317 | 0.20136937 | 0.548 | 0.442 | 1 HSPC_spleen |
| ZNF106            | 0.25447362 | 0.23998926 | 0.297 | 0.258 | 1 HSPC_spleen |
| CLASP1            | 0.25653216 | 0.14476934 | 0.54  | 0.467 | 1 HSPC_spleen |
| SMCHD1            | 0.25695608 | 0.25422545 | 0.701 | 0.617 | 1 HSPC_spleen |
| ENSMUG00000063637 | 0.25927948 | 0.12780344 | 0.838 | 0.842 | 1 HSPC_spleen |
| MAGOHB            | 0.26485261 | 0.33887529 | 0.282 | 0.233 | 1 HSPC_spleen |
| PDHX              | 0.26569484 | 0.32646032 | 0.254 | 0.2   | 1 HSPC_spleen |
| CDYL2             | 0.26646613 | 0.58530712 | 0.323 | 0.258 | 1 HSPC_spleen |
| MMRN1             | 0.27054159 | 0.52098983 | 0.272 | 0.225 | 1 HSPC_spleen |
| LAMTOR3           | 0.27465821 | 0.26666218 | 0.313 | 0.258 | 1 HSPC_spleen |
| ANKFY1            | 0.27497374 | 0.13123149 | 0.391 | 0.317 | 1 HSPC_spleen |
| ENSMUG00000016959 | 0.27775102 | 0.16424544 | 0.564 | 0.467 | 1 HSPC_spleen |
| UBR3              | 0.27825127 | 0.20850481 | 0.589 | 0.508 | 1 HSPC_spleen |
| EIF4EBP3          | 0.27930258 | 0.10554816 | 0.634 | 0.558 | 1 HSPC_spleen |
| BTG3              | 0.28002585 | 0.18078224 | 0.276 | 0.208 | 1 HSPC_spleen |
| RFC1              | 0.28110058 | 0.13232558 | 0.583 | 0.492 | 1 HSPC_spleen |
| RCHY1             | 0.28143609 | 0.21512846 | 0.307 | 0.25  | 1 HSPC_spleen |
| RBMS1             | 0.28371146 | 0.11328463 | 0.476 | 0.383 | 1 HSPC_spleen |
| DDX10             | 0.28738432 | 0.30158587 | 0.405 | 0.35  | 1 HSPC_spleen |
| GLE1              | 0.28765992 | 0.42763426 | 0.301 | 0.25  | 1 HSPC_spleen |
| DGKA              | 0.29087827 | 0.31557415 | 0.323 | 0.267 | 1 HSPC_spleen |
| TXNRD1            | 0.29342887 | 0.15882998 | 0.491 | 0.408 | 1 HSPC_spleen |
| GNPAT             | 0.29706381 | 0.28965957 | 0.276 | 0.225 | 1 HSPC_spleen |
| ARFGAP2           | 0.29804746 | 0.14501326 | 0.264 | 0.217 | 1 HSPC_spleen |
| BTA1              | 0.29847103 | 0.13071756 | 0.614 | 0.508 | 1 HSPC_spleen |
| LARS2             | 0.30516134 | 0.19615937 | 0.27  | 0.217 | 1 HSPC_spleen |
| LRFN5             | 0.30643432 | 0.66448093 | 0.252 | 0.217 | 1 HSPC_spleen |

|                    |            |            |       |       |               |
|--------------------|------------|------------|-------|-------|---------------|
| NUP205             | 0.30847877 | 0.19730701 | 0.393 | 0.342 | 1 HSPC_spleen |
| ASH2L              | 0.30968339 | 0.10076265 | 0.323 | 0.267 | 1 HSPC_spleen |
| PIBF1              | 0.31070733 | 0.19194354 | 0.444 | 0.375 | 1 HSPC_spleen |
| SLK                | 0.31406336 | 0.28840704 | 0.403 | 0.333 | 1 HSPC_spleen |
| ATE1               | 0.31441982 | 0.15438526 | 0.452 | 0.383 | 1 HSPC_spleen |
| ENSMMUG00000044103 | 0.31496351 | 0.12162467 | 0.27  | 0.217 | 1 HSPC_spleen |
| NUP98              | 0.32106755 | 0.48114582 | 0.703 | 0.608 | 1 HSPC_spleen |
| NFKBIA             | 0.32139161 | 0.26773892 | 0.448 | 0.408 | 1 HSPC_spleen |
| TMC8               | 0.32491007 | 0.18790952 | 0.389 | 0.333 | 1 HSPC_spleen |
| IQCG               | 0.32530799 | 0.17066999 | 0.309 | 0.258 | 1 HSPC_spleen |
| WASF2              | 0.32721346 | 0.10407033 | 0.677 | 0.592 | 1 HSPC_spleen |
| HBS1L              | 0.32891947 | 0.13437873 | 0.736 | 0.625 | 1 HSPC_spleen |
| MTERF1             | 0.32907861 | 0.34553355 | 0.25  | 0.2   | 1 HSPC_spleen |
| G2E3               | 0.32926296 | 0.74132054 | 0.407 | 0.358 | 1 HSPC_spleen |
| SETD5              | 0.33119739 | 0.23503763 | 0.607 | 0.525 | 1 HSPC_spleen |
| SCML4              | 0.33270966 | 0.19102732 | 0.352 | 0.3   | 1 HSPC_spleen |
| ADK                | 0.33506971 | 0.34974431 | 0.681 | 0.625 | 1 HSPC_spleen |
| RNF24              | 0.3355884  | 0.58630482 | 0.339 | 0.292 | 1 HSPC_spleen |
| CBFA2T2            | 0.33671574 | 0.49460551 | 0.284 | 0.242 | 1 HSPC_spleen |
| ELL                | 0.33813917 | 0.32660149 | 0.264 | 0.225 | 1 HSPC_spleen |
| POLR2I             | 0.33833426 | 0.20765946 | 0.411 | 0.333 | 1 HSPC_spleen |
| NDUFS6             | 0.33969075 | 0.23610254 | 0.538 | 0.467 | 1 HSPC_spleen |
| RMDN1              | 0.33970897 | 0.26428928 | 0.305 | 0.258 | 1 HSPC_spleen |
| VPS26A             | 0.33978426 | 0.2502312  | 0.47  | 0.408 | 1 HSPC_spleen |
| ABHD12             | 0.34156142 | 0.3552032  | 0.327 | 0.267 | 1 HSPC_spleen |
| TRIM33             | 0.3422401  | 0.26765655 | 0.581 | 0.517 | 1 HSPC_spleen |
| NFATC3             | 0.34675714 | 0.10384999 | 0.558 | 0.442 | 1 HSPC_spleen |
| RCOR3              | 0.34820864 | 0.15327158 | 0.456 | 0.383 | 1 HSPC_spleen |
| TPGS2              | 0.34847389 | 0.12388381 | 0.266 | 0.217 | 1 HSPC_spleen |
| SLC25A27           | 0.3503018  | 0.28198957 | 0.276 | 0.225 | 1 HSPC_spleen |
| ENSMMUG00000058755 | 0.35095249 | 0.11572755 | 0.914 | 0.867 | 1 HSPC_spleen |
| AFF1               | 0.35151284 | 0.16192939 | 0.796 | 0.675 | 1 HSPC_spleen |
| UQCC1              | 0.35298816 | 0.19278898 | 0.344 | 0.283 | 1 HSPC_spleen |

|             |            |            |       |       |               |
|-------------|------------|------------|-------|-------|---------------|
| GTF3C3      | 0.35381434 | 0.17653897 | 0.262 | 0.217 | 1 HSPC_spleen |
| USP34       | 0.35487942 | 0.11313198 | 0.796 | 0.7   | 1 HSPC_spleen |
| STAU1       | 0.36755641 | 0.25148598 | 0.699 | 0.6   | 1 HSPC_spleen |
| DPP8        | 0.38100703 | 0.16026749 | 0.294 | 0.242 | 1 HSPC_spleen |
| TET3        | 0.38455757 | 0.13891539 | 0.384 | 0.333 | 1 HSPC_spleen |
| ZC3HAV1     | 0.38629207 | 0.35980627 | 0.691 | 0.608 | 1 HSPC_spleen |
| ST7L        | 0.38878451 | 0.10150005 | 0.399 | 0.342 | 1 HSPC_spleen |
| DHX40       | 0.39053479 | 0.15843343 | 0.295 | 0.242 | 1 HSPC_spleen |
| ZFHX3       | 0.39531288 | 0.17345191 | 0.27  | 0.225 | 1 HSPC_spleen |
| C18H18orf25 | 0.39733951 | 0.34487629 | 0.517 | 0.475 | 1 HSPC_spleen |
| SLC12A6     | 0.39978004 | 0.44771432 | 0.464 | 0.408 | 1 HSPC_spleen |
| BCAS3       | 0.40198445 | 0.11733397 | 0.554 | 0.508 | 1 HSPC_spleen |
| SUCO        | 0.40551524 | 0.19349522 | 0.517 | 0.467 | 1 HSPC_spleen |
| REEP3       | 0.40822471 | 0.34689934 | 0.282 | 0.242 | 1 HSPC_spleen |
| MYO1D       | 0.40939209 | 0.66832457 | 0.71  | 0.633 | 1 HSPC_spleen |
| RTTN        | 0.41928519 | 0.483615   | 0.325 | 0.292 | 1 HSPC_spleen |
| NEPRO       | 0.43103115 | 0.14697883 | 0.252 | 0.208 | 1 HSPC_spleen |
| STAT5B      | 0.43276712 | 0.10156297 | 0.468 | 0.4   | 1 HSPC_spleen |
| RALGPS2     | 0.43348914 | 0.14361408 | 0.415 | 0.433 | 1 HSPC_spleen |
| CSNK1G1     | 0.44169321 | 0.12406825 | 0.632 | 0.558 | 1 HSPC_spleen |
| KMT2C       | 0.44896007 | 0.17799453 | 0.886 | 0.775 | 1 HSPC_spleen |
| RABGAP1     | 0.45272658 | 0.23710753 | 0.337 | 0.283 | 1 HSPC_spleen |
| NOL4L       | 0.45711236 | 0.37126606 | 0.258 | 0.225 | 1 HSPC_spleen |
| VTI1A       | 0.47660588 | 0.18552329 | 0.681 | 0.625 | 1 HSPC_spleen |
| TPD52L2     | 0.47925691 | 0.16349145 | 0.295 | 0.25  | 1 HSPC_spleen |
| CWF19L2     | 0.48549668 | 0.27844682 | 0.454 | 0.417 | 1 HSPC_spleen |
| MIC1        | 0.48631302 | 0.18093591 | 0.409 | 0.367 | 1 HSPC_spleen |
| PDS5B       | 0.48798318 | 0.19972396 | 0.658 | 0.6   | 1 HSPC_spleen |
| UTY         | 0.51835526 | 0.30212627 | 0.483 | 0.492 | 1 HSPC_spleen |
| IGHM        | 0.51933274 | 0.2002501  | 0.319 | 0.35  | 1 HSPC_spleen |
| SETX        | 0.53881558 | 0.11510047 | 0.489 | 0.442 | 1 HSPC_spleen |
| ADGRE5      | 0.55463485 | 0.17299246 | 0.391 | 0.342 | 1 HSPC_spleen |
| ADAMTS6     | 0.55469994 | 0.21562702 | 0.25  | 0.225 | 1 HSPC_spleen |

|          |            |            |       |       |               |
|----------|------------|------------|-------|-------|---------------|
| DCUN1D5  | 0.55644634 | 0.1802263  | 0.432 | 0.392 | 1 HSPC_spleen |
| TNRC6C   | 0.56185906 | 0.31032577 | 0.303 | 0.267 | 1 HSPC_spleen |
| FAM222B  | 0.56430584 | 0.23833897 | 0.386 | 0.375 | 1 HSPC_spleen |
| NIPA2    | 0.57399747 | 0.18594144 | 0.339 | 0.292 | 1 HSPC_spleen |
| CYTH3    | 0.58079044 | 0.34584728 | 0.252 | 0.225 | 1 HSPC_spleen |
| WDR26    | 0.58629916 | 0.42469622 | 0.47  | 0.417 | 1 HSPC_spleen |
| FGD6     | 0.58930081 | 0.23145655 | 0.284 | 0.25  | 1 HSPC_spleen |
| FAM171A1 | 0.59862356 | 0.21469444 | 0.254 | 0.225 | 1 HSPC_spleen |
| RPRD2    | 0.60288502 | 0.18250698 | 0.487 | 0.433 | 1 HSPC_spleen |
| PXK      | 0.60379143 | 0.19991037 | 0.405 | 0.367 | 1 HSPC_spleen |
| SLC39A10 | 0.61122995 | 0.12046436 | 0.272 | 0.242 | 1 HSPC_spleen |
| TRAK1    | 0.62610633 | 0.26767918 | 0.297 | 0.283 | 1 HSPC_spleen |
| ATP5MC3  | 0.63735634 | 0.15640754 | 0.706 | 0.667 | 1 HSPC_spleen |
| RASSF3   | 0.6411656  | 0.34584174 | 0.284 | 0.267 | 1 HSPC_spleen |
| PHF21A   | 0.67638598 | 0.22291162 | 0.534 | 0.5   | 1 HSPC_spleen |
| BANK1    | 0.69238339 | 0.25820332 | 0.305 | 0.325 | 1 HSPC_spleen |
| RBL2     | 0.69351018 | 0.48963307 | 0.266 | 0.25  | 1 HSPC_spleen |
| PPP1R9A  | 0.70165038 | 0.19798704 | 0.288 | 0.267 | 1 HSPC_spleen |
| FAM214A  | 0.70637266 | 0.32859672 | 0.331 | 0.35  | 1 HSPC_spleen |
| DYRK1A   | 0.71562124 | 0.11417509 | 0.626 | 0.558 | 1 HSPC_spleen |
| PHF12    | 0.72009777 | 0.16710114 | 0.274 | 0.258 | 1 HSPC_spleen |
| CD69     | 0.73057381 | 0.74717095 | 0.448 | 0.483 | 1 HSPC_spleen |
| ANKZF1   | 0.73129922 | 0.24076702 | 0.274 | 0.258 | 1 HSPC_spleen |
| TAF5L    | 0.73207687 | 0.3293348  | 0.266 | 0.25  | 1 HSPC_spleen |
| IGF2BP3  | 0.73241794 | 0.16658564 | 0.616 | 0.567 | 1 HSPC_spleen |
| PDZD8    | 0.74900347 | 0.20057893 | 0.534 | 0.517 | 1 HSPC_spleen |
| SCAI     | 0.77024935 | 0.19130272 | 0.327 | 0.308 | 1 HSPC_spleen |
| FKBP8    | 0.80256508 | 0.23411908 | 0.491 | 0.458 | 1 HSPC_spleen |
| MBD5     | 0.81626927 | 0.20155504 | 0.773 | 0.683 | 1 HSPC_spleen |
| CPLANE1  | 0.87183322 | 0.41703583 | 0.466 | 0.45  | 1 HSPC_spleen |
| IMMP2L   | 0.87443503 | 0.23021797 | 0.697 | 0.633 | 1 HSPC_spleen |
| ATG14    | 0.88069136 | 0.1366644  | 0.344 | 0.317 | 1 HSPC_spleen |
| VPS13B   | 0.95231265 | 0.36947584 | 0.8   | 0.767 | 1 HSPC_spleen |

|         |            |            |       |       |               |
|---------|------------|------------|-------|-------|---------------|
| KLF12   | 0.9533128  | 0.23458537 | 0.693 | 0.633 | 1 HSPC_spleen |
| PIP4K2A | 0.96372362 | 0.17803021 | 0.759 | 0.65  | 1 HSPC_spleen |
| TCF12   | 0.97126236 | 0.14021503 | 0.818 | 0.75  | 1 HSPC_spleen |
| PLEKHB2 | 0.9787776  | 0.21399509 | 0.305 | 0.308 | 1 HSPC_spleen |
| MED13   | 0.98257245 | 0.10854386 | 0.609 | 0.575 | 1 HSPC_spleen |
| SESN3   | 0.99141412 | 0.45934623 | 0.434 | 0.433 | 1 HSPC_spleen |