

Table S3. Up-regulated mRNAs in GAS of *db/db* vs. *db/m* mice (FDR <0.05).

Gene ID	Gene Symbol	Type	log2FC	p-value	q-value
22776	Zim1	mRNA	0.699208899	5.41E-25	8.31E-24
433791	Zfp992	mRNA	1.001989219	0.00817866	0.02343199
218820	Zfp503	mRNA	0.732313124	6.40E-40	1.43E-38
22673	Zfp185	mRNA	1.01809654	5.87E-18	7.06E-17
73884	Zdbf2	mRNA	0.900218249	3.66E-38	7.83E-37
22635	Zan	mRNA	1.164174799	0.01548486	0.04103368
446101	Xrra1	mRNA	0.834593132	1.24E-06	6.79E-06
23832	Xcr1	mRNA	0.927951114	0.0186099	0.04793995
320916	Wscd2	mRNA	0.696344932	0.00160452	0.0054679
22417	Wnt4	mRNA	0.715053601	8.35E-77	3.11E-75
22402	Wisp1	mRNA	1.031724503	8.50E-14	8.26E-13
24117	Wif1	mRNA	1.745862168	7.27E-45	1.75E-43
73750	Whrn	mRNA	0.648982577	8.79E-10	6.46E-09
626359	Wdr93	mRNA	1.534818179	0.00112045	0.00394835
242122	Vtn1	mRNA	1.479676625	2.72E-05	1.26E-04
240916	Vsig8	mRNA	6.7491373	4.68E-14	4.62E-13
278180	Vsig4	mRNA	1.552245251	2.36E-05	1.10E-04
22355	Vipr2	mRNA	1.147101286	5.73E-28	9.68E-27
73569	Vgll3	mRNA	0.734636129	9.91E-39	2.15E-37
195434	Utp14b	mRNA	0.922148663	1.60E-37	3.38E-36
217843	Unc79	mRNA	2.538525943	7.77E-17	8.81E-16
394435	Ugt1a6b	mRNA	0.809830333	2.49E-04	9.93E-04
24108	Ubd	mRNA	5.548838649	1.07E-12	9.77E-12
22156	Tuft1	mRNA	0.899785114	1.38E-05	6.63E-05
22142	Tuba1a	mRNA	0.656475689	6.93E-109	3.36E-107
117160	Ttyh2	mRNA	0.696449974	7.96E-104	3.72E-102
70892	Ttll7	mRNA	0.918823264	0	0
83984	Tssk6	mRNA	4.662141923	2.86E-04	0.00112998
22095	Tshr	mRNA	1.8650301	8.08E-64	2.62E-62
22062	Trp73	mRNA	2.316177893	0.00327935	0.01044368
22061	Trp63	mRNA	0.836047045	3.90E-88	1.58E-86
330863	Trim67	mRNA	0.988895741	7.87E-16	8.50E-15
72169	Trim29	mRNA	1.479676625	0.00301057	0.00965713
66873	Tril	mRNA	0.810668802	4.57E-39	1.00E-37
83433	Trem2	mRNA	1.292591072	8.80E-12	7.53E-11
237858	Trarg1	mRNA	1.603486166	6.60E-145	4.02E-143
72119	Tpx2	mRNA	0.603385972	1.29E-06	7.02E-06
216343	Tph2	mRNA	5.556492222	2.90E-46	7.15E-45
64103	Tnmd	mRNA	0.869455548	8.18E-21	1.10E-19
21941	Tnfrsf8	mRNA	2.109727015	0.00976436	0.02734322
21923	Tnc	mRNA	0.823280198	1.69E-83	6.64E-82
69671	Tmem52	mRNA	0.712509197	3.76E-192	2.97E-190
235135	Tmem45b	mRNA	1.223553346	1.16E-44	2.78E-43
56277	Tmem45a	mRNA	0.680798347	0.00166392	0.00564973
245386	Tmem255a	mRNA	0.630620362	0.0078374	0.02258136
100039257	Tmem254b	mRNA	0.929934479	7.94E-11	6.31E-10

104885	Tmem179	mRNA	1.919062301	8.30E-26	1.31E-24
243025	Tmem156	mRNA	2.316177893	0.01636315	0.04294336
270893	Tmem132e	mRNA	1.174822043	0.00621203	0.01840266
208213	Tmem132c	mRNA	1.453681416	0.00945565	0.02657877
380705	Tmem102	mRNA	0.99406945	2.48E-04	9.90E-04
67888	Tmem100	mRNA	0.909680614	1.59E-46	3.96E-45
74424	Tmc5	mRNA	0.994249798	0.01687603	0.04408005
277203	Tm4sf19	mRNA	2.994249798	1.23E-17	1.45E-16
239081	Tlr11	mRNA	1.646326494	0.00447552	0.0137987
117149	Tirap	mRNA	0.944866549	1.20E-128	6.62E-127
50765	Tfr2	mRNA	5.496750138	9.55E-34	1.84E-32
211586	Tfdp2	mRNA	0.589808777	1.21E-187	9.39E-186
23966	Tenm4	mRNA	1.596024031	8.01E-307	9.85E-305
104859	Tecpr2	mRNA	0.792110086	6.00E-196	4.82E-194
70571	Tcerg11	mRNA	2.316177893	0.01636315	0.04294336
100040972	Tceal7	mRNA	0.924206122	8.66E-60	2.65E-58
74694	Tbc1d30	mRNA	0.80160472	7.21E-04	0.00264818
83671	Syt12	mRNA	0.657379511	8.47E-15	8.70E-14
55925	Syt8	mRNA	0.738992742	0.01218698	0.03327308
20979	Syt1	mRNA	1.283434528	1.63E-11	1.37E-10
20962	Sycp3	mRNA	3.994249798	0.00562967	0.01686779
96935	Susd4	mRNA	0.625605204	0.01456864	0.03885418
634731	Susd1	mRNA	0.747120698	0.0135763	0.03656388
84112	Sucnr1	mRNA	2.326093361	3.70E-20	4.83E-19
20913	Stxbp4	mRNA	0.800247243	6.57E-140	3.91E-138
381310	Stum	mRNA	1.430526093	5.47E-33	1.04E-31
320609	Strip2	mRNA	0.746322284	1.54E-06	8.31E-06
70415	Stk26	mRNA	1.17473629	2.60E-11	2.15E-10
20856	Stc2	mRNA	1.339541886	2.29E-16	2.54E-15
76630	Stambpl1	mRNA	0.646326494	2.79E-04	0.00110398
20811	Srms	mRNA	0.994249798	0.00180374	0.00607541
100689	Spon2	mRNA	0.807341089	5.29E-13	4.91E-12
94214	Spock2	mRNA	0.997854034	1.56E-134	8.99E-133
20745	Spock1	mRNA	2.141091186	5.63E-05	2.48E-04
77577	Spns3	mRNA	0.884625306	2.11E-15	2.23E-14
20667	Sox12	mRNA	1.484747614	2.99E-29	5.19E-28
81840	Sorcs2	mRNA	0.727214682	3.54E-41	8.07E-40
234214	Sorbs2	mRNA	0.776843541	0	0
20657	Sod3	mRNA	0.70987376	3.48E-38	7.46E-37
20649	Sntb1	mRNA	1.039600174	3.46E-139	2.05E-137
20618	Sneg	mRNA	0.907908949	2.47E-30	4.42E-29
64074	Smoc2	mRNA	0.658741357	2.20E-240	2.17E-238
64075	Smoc1	mRNA	1.223236723	5.92E-43	1.39E-41
245446	Slitrk4	mRNA	2.267268292	1.14E-08	7.66E-08
53896	Slc7a10	mRNA	1.402112392	2.22E-54	6.25E-53
240332	Slc6a7	mRNA	0.9365343	1.14E-04	4.79E-04
14412	Slc6a13	mRNA	1.551731562	4.10E-13	3.84E-12
63993	Slc5a7	mRNA	6.845998839	2.88E-107	1.38E-105

53881	Slc5a3	mRNA	0.880671147	6.27E-136	3.63E-134
214922	Slc39a2	mRNA	0.686127502	2.98E-04	0.00117477
277468	Slc39a12	mRNA	1.579212298	0.00703598	0.02053225
20527	Slc2a3	mRNA	1.208269515	7.01E-119	3.62E-117
27376	Slc25a10	mRNA	0.804545995	6.72E-27	1.09E-25
76376	Slc24a2	mRNA	0.711621066	1.54E-08	1.02E-07
20518	Slc22a2	mRNA	2.109727015	0.00976436	0.02734322
20521	Slc22a12	mRNA	1.434822389	0.0169308	0.04419128
243755	Slc13a4	mRNA	0.994249798	0.00376066	0.0117793
620235	Siglec15	mRNA	3.579212298	0.00109434	0.00386807
72555	Shisa9	mRNA	1.298311472	0.0040264	0.01252513
330096	Shisa3	mRNA	0.603576847	5.26E-08	3.32E-07
219134	Shisa2	mRNA	0.603951644	3.98E-265	4.18E-263
216148	Shc2	mRNA	0.78669383	1.26E-29	2.21E-28
269016	Sh3rf2	mRNA	1.696918892	0	0
20404	Sh3gl2	mRNA	0.658981251	0.00397639	0.01238285
26904	Sh2d1b1	mRNA	2.579212298	0.00514169	0.01560962
54612	Sfrp5	mRNA	1.196696292	4.15E-107	1.98E-105
20377	Sfrp1	mRNA	0.754256466	3.47E-14	3.46E-13
56747	Sez6l	mRNA	2.957723922	1.37E-46	3.41E-45
20716	Serpina3n	mRNA	1.006035712	1.07E-102	4.96E-101
20717	Serpina3m	mRNA	1.716715822	3.35E-04	0.00130782
16625	Serpina3c	mRNA	1.230374102	7.40E-31	1.34E-29
20702	Serpina1c	mRNA	1.672321703	5.27E-04	0.00198368
20348	Sema3c	mRNA	0.642245738	3.63E-119	1.89E-117
20346	Sema3a	mRNA	0.61967889	4.62E-13	4.31E-12
228684	Sell12	mRNA	1.378913648	2.67E-04	0.00106176
20969	Sdc1	mRNA	0.830913613	7.28E-19	9.07E-18
20273	Scn8a	mRNA	1.372761421	1.94E-05	9.13E-05
235281	Scn3b	mRNA	1.497312045	1.66E-61	5.18E-60
192166	Sardh	mRNA	0.645242169	3.65E-08	2.33E-07
751865	Sap25	mRNA	0.721782687	0.00141889	0.00489682
20210	Saa3	mRNA	1.858955822	2.93E-08	1.89E-07
239336	Rxfp3	mRNA	2.316177893	0.01636315	0.04294336
237847	Rtn4rl1	mRNA	1.014241273	3.37E-18	4.08E-17
209540	Rtl9	mRNA	1.076711958	4.38E-09	3.04E-08
213436	Rtl3	mRNA	1.398902815	4.45E-22	6.26E-21
353326	Rtl1	mRNA	0.952350896	7.12E-04	0.00261966
170799	Rtkn2	mRNA	0.708495315	8.73E-06	4.31E-05
67071	Rps6ka6	mRNA	0.927135602	0.01223227	0.03338103
207742	Rnf43	mRNA	1.139383924	2.27E-08	1.48E-07
320311	Rnf152	mRNA	0.635519739	5.59E-05	2.46E-04
22671	Rnf112	mRNA	1.631679718	0.00144071	0.00496682
497071	Rnase13	mRNA	1.065910783	6.27E-11	5.02E-10
69553	Ripor3	mRNA	1.143113184	1.35E-08	9.01E-08
241770	Rims4	mRNA	0.976832745	6.47E-37	1.35E-35
320360	Ric3	mRNA	0.612540474	3.77E-08	2.41E-07
52428	Rhpn2	mRNA	1.709548249	6.27E-67	2.13E-65

50778 Rgs1	mRNA	3.267268292	1.00E-06	5.54E-06
19683 Rdh16	mRNA	3.617180149	0.0188415	0.04843763
104383 Rcor2	mRNA	0.714141878	0.00107606	0.00380928
19434 Rax	mRNA	4.316177893	0.00155943	0.00533145
75141 Rasd2	mRNA	0.759646096	7.35E-219	6.54E-217
19416 Rasd1	mRNA	0.5969143	8.01E-06	3.97E-05
242681 Rab42	mRNA	0.687274745	0.00482133	0.01475124
268451 Rab11fip4	mRNA	1.074623214	4.87E-10	3.65E-09
68509 Ptx4	mRNA	0.893555798	1.38E-06	7.47E-06
13924 Ptprv	mRNA	1.741483727	1.54E-05	7.36E-05
19258 Ptpn4	mRNA	0.626314515	9.33E-180	6.93E-178
19229 Ptk2b	mRNA	0.640898248	9.50E-14	9.19E-13
64292 Ptges	mRNA	0.621032474	3.94E-10	2.97E-09
19218 Ptger3	mRNA	2.321611779	2.64E-35	5.30E-34
627626 Ptchd4	mRNA	1.823137881	3.96E-14	3.93E-13
211612 Ptchd1	mRNA	0.943623725	0.00332472	0.01055457
19207 Ptch2	mRNA	1.24691523	8.65E-18	1.03E-16
546336 Prrg1	mRNA	0.612970864	2.50E-11	2.07E-10
68800 Prr32	mRNA	3.638105987	2.00E-11	1.67E-10
71373 Prr16	mRNA	1.057888084	5.06E-06	2.57E-05
19126 Prom1	mRNA	0.853877141	7.53E-33	1.42E-31
19088 Prkar2b	mRNA	1.74802368	1.39E-114	6.96E-113
170952 Primal	mRNA	1.264574442	1.21E-234	1.17E-232
116847 Prelp	mRNA	1.146502172	0	0
228966 Ppp1r3d	mRNA	0.910790563	2.29E-37	4.83E-36
53412 Ppp1r3c	mRNA	1.068268306	0	0
244416 Ppp1r3b	mRNA	0.849433245	1.18E-10	9.24E-10
58200 Ppp1r1a	mRNA	0.917316062	4.41E-129	2.45E-127
68458 Ppp1r14a	mRNA	0.652741334	2.93E-04	0.00115515
116939 Pnpla3	mRNA	2.051028694	3.70E-161	2.47E-159
229791 Plppr4	mRNA	0.939802014	0.0048082	0.01471573
216152 Plppr3	mRNA	0.591303789	3.18E-05	1.45E-04
103968 Plin1	mRNA	1.324068678	6.95E-161	4.62E-159
319455 Pld5	mRNA	0.952319117	2.25E-14	2.26E-13
665270 Plb1	mRNA	1.970002251	7.40E-20	9.61E-19
22634 Plagl1	mRNA	1.319590904	4.61E-75	1.69E-73
56711 Plag1	mRNA	0.629617252	2.45E-05	1.14E-04
27226 Pla2g7	mRNA	1.331476808	0	0
18784 Pla2g5	mRNA	0.898672138	0.00129345	0.00450246
211429 Pla2g4b	mRNA	1.06361655	8.95E-05	3.83E-04
67451 Pkp2	mRNA	0.664216653	4.90E-12	4.27E-11
18772 Pkp1	mRNA	3.713068045	2.04E-17	2.38E-16
18740 Pitx1	mRNA	0.674971281	0.00214354	0.00710448
18708 Pik3r1	mRNA	1.051489968	0	0
83490 Pik3ap1	mRNA	0.776013006	2.18E-12	1.94E-11
105653 Phyhip	mRNA	0.680141207	0.01088754	0.03005625
170768 Pfkfb3	mRNA	0.708544781	0	0
64058 Perp	mRNA	0.842246704	1.74E-06	9.32E-06

18616 Peg3	mRNA	0.869144401	9.77E-167	6.70E-165
170676 Peg10	mRNA	0.706471264	3.96E-28	6.70E-27
68797 Pdgfrl	mRNA	0.708688823	2.80E-06	1.47E-05
18491 Pappa	mRNA	0.815159737	3.93E-12	3.44E-11
381404 Pabpc11	mRNA	1.423093096	0.00127558	0.0044456
18436 P2rx1	mRNA	1.225575344	4.58E-07	2.62E-06
18430 Oxtr	mRNA	4.302522868	5.76E-299	6.91E-297
18419 Otog	mRNA	1.021541489	3.23E-24	4.85E-23
239790 Ostn	mRNA	0.587656224	2.75E-91	1.15E-89
18405 Orml	mRNA	1.819318184	2.53E-20	3.34E-19
269120 Optc	mRNA	2.052189639	2.29E-08	1.49E-07
108078 Orl1	mRNA	1.178674369	0.01864543	0.04800591
259117 Olfr560	mRNA	1.80160472	0.01571113	0.04157253
244198 Olfrml1	mRNA	0.654066293	2.98E-06	1.55E-05
18302 Oit3	mRNA	0.920249216	0.0178745	0.04632934
382384 Odf3l2	mRNA	2.170350263	0	0
433904 Ociad2	mRNA	0.652920367	1.81E-93	7.73E-92
53814 Oaz3	mRNA	1.830173872	0.00252548	0.00825162
319555 Nwd1	mRNA	1.033471107	8.22E-12	7.05E-11
102954 Nudt10	mRNA	1.112611137	3.79E-04	0.00146493
18209 Ntn3	mRNA	0.64774368	1.33E-06	7.20E-06
27206 Nrk	mRNA	0.935833111	1.82E-05	8.60E-05
18169 Npy6r	mRNA	0.978482482	1.15E-04	4.82E-04
18167 Npy2r	mRNA	4.316177893	0.00155943	0.00533145
18162 Npr3	mRNA	2.277106351	0	0
74091 Npl	mRNA	0.771857376	7.27E-05	3.15E-04
319211 Nol4	mRNA	1.021677848	8.64E-04	0.00312718
18111 Nnat	mRNA	0.906808962	5.19E-72	1.85E-70
93960 Nkd1	mRNA	0.826793052	1.55E-08	1.02E-07
18080 Nin	mRNA	0.629636129	1.48E-120	7.81E-119
195727 Nhs	mRNA	0.834696133	3.60E-38	7.71E-37
18053 Ngfr	mRNA	0.907372347	1.01E-10	7.98E-10
13004 Ncan	mRNA	2.084135301	3.94E-18	4.76E-17
269642 Nat8l	mRNA	1.361981582	8.38E-31	1.51E-29
17948 Naip2	mRNA	0.713704499	8.08E-05	3.48E-04
245049 Myrip	mRNA	0.784135706	3.30E-13	3.11E-12
17896 Myl4	mRNA	1.278679715	2.99E-88	1.22E-86
17865 Mybl2	mRNA	0.943623725	0.00332472	0.01055457
74761 Mxra8	mRNA	0.86158195	2.72E-132	1.55E-130
140474 Muc4	mRNA	1.493055655	3.24E-15	3.39E-14
269328 Muc15	mRNA	3.316177893	0.00384827	0.01202841
17777 Mttp	mRNA	0.600972817	2.94E-09	2.07E-08
74843 Mss51	mRNA	1.408634922	0	0
17681 Msc	mRNA	0.850523707	3.52E-05	1.60E-04
381974 Mrgprg	mRNA	1.731215392	0.004979	0.01518082
17534 Mrc2	mRNA	0.770039754	2.81E-108	1.35E-106
77037 Mrap	mRNA	1.39051009	5.63E-16	6.13E-15
70945 Mmrn1	mRNA	0.856960945	3.87E-19	4.88E-18

17381	Mmp12	mRNA	3.553403112	1.87E-108	9.01E-107
67468	Mmd	mRNA	1.15621092	5.03E-281	5.57E-279
208104	Mlxip	mRNA	0.640963126	0	0
210719	Mkx	mRNA	0.843469845	4.21E-08	2.68E-07
320878	Mical2	mRNA	0.664784644	0	0
76293	Mfap4	mRNA	0.921449739	1.11E-36	2.29E-35
17150	Mfap2	mRNA	1.305451486	7.08E-17	8.05E-16
71664	Mettl7b	mRNA	1.694689516	0.00160828	0.00547908
554292	Methig1	mRNA	1.529718477	6.03E-10	4.49E-09
17294	Mest	mRNA	1.755506897	1.31E-283	1.48E-281
329650	Med12l	mRNA	0.725412845	6.97E-14	6.81E-13
74762	Mdgal	mRNA	0.795543946	5.83E-60	1.79E-58
171170	Mbnl3	mRNA	1.068529224	0.00100961	0.00360218
17183	Matn4	mRNA	1.244986845	3.38E-15	3.53E-14
17182	Matn3	mRNA	3.164174799	7.77E-08	4.82E-07
378435	Mafa	mRNA	0.980055916	5.44E-103	2.52E-101
72899	MacroD2	mRNA	0.66328071	8.88E-266	9.37E-264
23934	Ly6h	mRNA	1.920249216	0.00329994	0.01049197
74574	Lvrn	mRNA	0.781075906	2.48E-32	4.61E-31
17001	Ltc4s	mRNA	0.986212479	5.16E-08	3.26E-07
319476	Lrtm1	mRNA	1.523466221	0	0
242735	Lrrc38	mRNA	0.871971189	3.82E-117	1.96E-115
237387	Lrrc3	mRNA	1.047029381	2.88E-10	2.19E-09
74511	Lrrc17	mRNA	0.742910725	5.42E-08	3.41E-07
74488	Lrrc15	mRNA	1.038643917	0.0146767	0.03910461
76905	Lrg1	mRNA	0.99086914	7.62E-126	4.15E-124
78134	Lpar4	mRNA	0.881240836	1.68E-05	7.98E-05
65086	Lpar3	mRNA	1.29381008	0.00418487	0.01297497
16948	Lox	mRNA	0.744835225	5.73E-67	1.96E-65
74365	Lonrf3	mRNA	0.687041179	7.42E-16	8.03E-15
102639653	LOC102639653	mRNA	7.241607714	1.24E-18	1.52E-17
102637806	LOC102637806	mRNA	0.709491495	0.00535676	0.01618126
109593	Lmo3	mRNA	3.517811754	7.11E-06	3.55E-05
217325	Llg12	mRNA	0.621419681	4.86E-24	7.28E-23
67717	Lipf	mRNA	5.994249798	4.21E-09	2.93E-08
16875	Lhx8	mRNA	3.316177893	7.44E-09	5.07E-08
76429	Lhpp	mRNA	0.585380307	4.60E-36	9.37E-35
218454	Lhfpl2	mRNA	1.072020135	1.39E-87	5.59E-86
16866	Lhb	mRNA	0.705904303	4.27E-06	2.18E-05
16854	Lgals3	mRNA	0.71865193	6.98E-38	1.49E-36
16846	Lep	mRNA	4.93941041	0	0
235435	Lctl	mRNA	0.991074552	0.00112286	0.00395611
16803	Lbp	mRNA	0.742163276	5.22E-44	1.24E-42
23928	Lamc3	mRNA	1.278644095	3.91E-36	8.01E-35
16780	Lamb3	mRNA	0.817372036	8.63E-04	0.00312395
16673	Krt36	mRNA	4.316177893	0.00155943	0.00533145
16621	Klkb1	mRNA	3.316177893	0.00384827	0.01202841
16618	Klk1b26	mRNA	1.08388701	6.15E-05	2.69E-04

69511 Klk12	mRNA	2.044875871	1.55E-04	6.38E-04
242721 Klhdc7a	mRNA	1.157572064	5.01E-17	5.73E-16
619665 Klfl4	mRNA	2.264338961	1.19E-11	1.01E-10
21847 Klfl0	mRNA	0.986282824	0	0
83379 Klb	mRNA	0.940668757	1.02E-07	6.28E-07
16591 Kl	mRNA	1.65246128	1.02E-09	7.44E-09
67703 Kirrel3	mRNA	0.867687492	1.08E-283	1.23E-281
243043 Kctd8	mRNA	0.735432142	0.01456409	0.03884561
110862 Kcnq3	mRNA	0.815430307	3.57E-06	1.84E-05
16527 Kcnk3	mRNA	1.120426904	1.22E-10	9.52E-10
16526 Kcnk2	mRNA	0.994249798	1.27E-12	1.15E-11
16516 Kcnj15	mRNA	1.76932782	8.41E-59	2.53E-57
211480 Kcnj14	mRNA	3.295419332	3.68E-14	3.66E-13
16515 Kcnj12	mRNA	0.884200701	0	0
382571 Kcnf1	mRNA	1.332879974	1.07E-232	1.01E-230
99738 Kcnc4	mRNA	0.719553467	3.07E-248	3.12E-246
107250 Kazald1	mRNA	0.92305875	2.50E-18	3.03E-17
16069 Jchain	mRNA	1.937666269	1.62E-06	8.73E-06
74004 Jakmip3	mRNA	3.694689516	5.85E-04	0.00218431
16426 Itih3	mRNA	2.579212298	0.00514169	0.01560962
16411 Itgax	mRNA	1.541793294	2.02E-26	3.23E-25
381924 Itgad	mRNA	3.542528	4.71E-56	1.36E-54
213119 Itga10	mRNA	0.599037277	1.11E-07	6.78E-07
16392 Isl1	mRNA	1.38656722	5.40E-04	0.0020301
54352 Irx5	mRNA	2.453681416	0.00919917	0.02596097
16369 Irs3	mRNA	0.727310937	8.47E-07	4.71E-06
21743 Inmt	mRNA	0.663776594	9.93E-13	9.06E-12
106347 Ildr1	mRNA	2.633660082	1.93E-13	1.84E-12
16197 Il7r	mRNA	1.419555632	1.37E-07	8.30E-07
16185 Il2rb	mRNA	1.216642219	7.32E-04	0.00268765
16181 Il1rn	mRNA	1.974071916	7.25E-09	4.94E-08
57890 Il17re	mRNA	1.010928539	1.07E-04	4.51E-04
16158 Il11ra2	mRNA	0.737712	0.00135232	0.00468884
230868 Igsf21	mRNA	1.24800639	0.00613173	0.01818708
16009 Igfbp3	mRNA	0.997483333	2.11E-100	9.60E-99
16008 Igfbp2	mRNA	2.579212298	7.59E-05	3.28E-04
16005 Igfals	mRNA	0.871268298	1.59E-15	1.69E-14
387510 Ifnk	mRNA	2.409287297	0.00188227	0.00631281
78558 Htra3	mRNA	0.786054097	3.99E-183	3.03E-181
56213 Htra1	mRNA	0.918675816	2.86E-166	1.96E-164
50786 Hs6st2	mRNA	1.101395785	1.83E-64	5.98E-63
15478 Hs3st3a1	mRNA	0.838813636	6.37E-05	2.79E-04
195646 Hs3st2	mRNA	5.638105987	2.04E-07	1.21E-06
15444 Hpca	mRNA	2.081712639	0.00339026	0.01073913
15439 Hp	mRNA	1.734063754	0	0
15437 Hoxd8	mRNA	0.591831435	9.21E-64	2.98E-62
15430 Hoxd10	mRNA	0.957350215	1.23E-21	1.71E-20
15417 Hoxb9	mRNA	0.994249798	0.01394528	0.03737204

140483	Hnmt	mRNA	1.307037239	4.54E-15	4.72E-14
319154	Hist2h3b	mRNA	0.668532744	1.60E-08	1.06E-07
319189	Hist2h2bb	mRNA	0.641599976	1.97E-04	7.99E-04
319166	Hist1h2ae	mRNA	1.26767389	0.00443412	0.01368198
53417	Hif3a	mRNA	0.894921871	3.37E-30	6.00E-29
15245	Hhip	mRNA	0.724160634	2.65E-04	0.00105242
244698	Heph1l	mRNA	1.409287297	1.53E-05	7.32E-05
15203	Heph	mRNA	1.176885851	1.86E-26	2.98E-25
330953	Hcn4	mRNA	0.589480634	8.33E-08	5.15E-07
70757	Hacd2	mRNA	0.641733383	3.90E-17	4.48E-16
625328	H3f3c	mRNA	3.316757172	5.06E-06	2.57E-05
547160	H2alle	mRNA	4.353208623	0.00132242	0.00459395
110637	Grik4	mRNA	1.093785471	5.99E-04	0.0022306
14803	Grid1	mRNA	2.842246704	3.35E-07	1.94E-06
230824	Grhl3	mRNA	1.427209205	0.00457448	0.01406272
23893	Grem2	mRNA	1.029112908	1.37E-71	4.85E-70
243385	Gprin3	mRNA	1.155404589	5.81E-19	7.26E-18
14765	Gpr50	mRNA	5.38656722	1.80E-11	1.51E-10
73010	Gpr22	mRNA	0.597827977	0.00430811	0.01332007
11536	Gpr182	mRNA	0.703201016	1.13E-06	6.19E-06
217143	Gpr179	mRNA	1.076711958	2.06E-04	8.32E-04
71862	Gpr160	mRNA	0.934748786	8.08E-08	4.99E-07
239845	Gpr156	mRNA	1.634707411	1.14E-05	5.52E-05
93695	Gpnmb	mRNA	1.309006237	8.91E-156	5.76E-154
14709	Gng8	mRNA	1.517811754	0.00614596	0.01821996
14675	Gna14	mRNA	0.606280542	1.17E-05	5.68E-05
381260	Gm973	mRNA	0.909013095	1.98E-06	1.05E-05
668588	Gm9257	mRNA	1.92310887	0.00311748	0.00997801
380845	Gm904	mRNA	0.610132713	3.91E-05	1.76E-04
665578	Gm7697	mRNA	0.594583049	0.01467353	0.03910155
665574	Gm7694	mRNA	0.837343743	5.44E-08	3.42E-07
108168740	Gm46731	mRNA	0.587368603	0.01597849	0.04214162
108168003	Gm46353	mRNA	3.714528263	0.01417129	0.03791993
108167918	Gm46290	mRNA	1.347101545	2.39E-09	1.69E-08
108167806	Gm46221	mRNA	6.053698263	1.54E-05	7.34E-05
100169864	Gm44504	mRNA	1.561166503	0.00135265	0.00468944
105245106	Gm40600	mRNA	1.429093849	0.00882996	0.02508248
105244392	Gm40011	mRNA	1.559636083	7.20E-53	1.98E-51
102637800	Gm34521	mRNA	3.600907369	7.78E-28	1.31E-26
102635802	Gm33049	mRNA	4.120231452	0.00351198	0.01108174
102634778	Gm32280	mRNA	1.245366508	0	0
102634611	Gm32151	mRNA	4.316177893	0.00155943	0.00533145
102632693	Gm30698	mRNA	0.795595873	0.01321228	0.03573942
105734727	Gm27021	mRNA	3.330533186	0.00361336	0.01136947
100039815	Gm2436	mRNA	1.646912539	5.43E-06	2.75E-05
100038993	Gm2002	mRNA	0.972022745	0.00653632	0.01926696
100502955	Gm19470	mRNA	0.797693645	9.61E-08	5.90E-07
381059	Gm1604b	mRNA	3.175162629	6.68E-05	2.91E-04

667780	Gm13871	mRNA	2.520462886	1.78E-10	1.38E-09
433801	Gm13212	mRNA	1.148598884	0.00212023	0.00703687
102633458	Gm11100	mRNA	1.533814018	0.00160505	0.00546906
100042314	Gm10639	mRNA	1.785104811	0.01673127	0.04376103
381853	Gipr	mRNA	2.808047059	2.43E-10	1.86E-09
14600	Ghr	mRNA	0.626991956	0	0
23887	Ggt5	mRNA	0.619647163	1.49E-14	1.51E-13
68616	Gdpd3	mRNA	0.637093214	0.00840627	0.0240035
14409	Gabrr2	mRNA	2.583247812	9.02E-104	4.21E-102
14408	Gabrr1	mRNA	0.792615936	0.00248002	0.00811312
14403	Gabrd	mRNA	0.910418207	3.82E-05	1.73E-04
14381	G6pdx	mRNA	0.910372537	5.55E-34	1.07E-32
14373	G0s2	mRNA	0.661191257	1.18E-17	1.40E-16
100503583	Fsbp	mRNA	2.22639887	9.35E-12	7.99E-11
329872	Frem1	mRNA	0.956243475	2.04E-18	2.50E-17
231470	Fras1	mRNA	0.909437697	3.93E-137	2.29E-135
53320	Folh1	mRNA	4.195883659	1.66E-21	2.30E-20
333564	Fndc3c1	mRNA	0.831520298	0.009857	0.02757072
14265	Fmr1	mRNA	1.193445644	1.18E-71	4.17E-70
14264	Fmod	mRNA	0.726761897	0	0
71436	Flrt3	mRNA	0.646326494	1.80E-08	1.18E-07
14229	Fkbp5	mRNA	1.468827946	0	0
67606	Fibin	mRNA	1.357355299	2.74E-71	9.67E-70
14173	Fgf2	mRNA	0.622550383	1.45E-22	2.08E-21
14166	Fgf11	mRNA	1.054694696	3.36E-36	6.88E-35
14165	Fgf10	mRNA	1.084135301	7.88E-08	4.88E-07
107221	Ffar4	mRNA	1.842246704	1.46E-06	7.89E-06
233079	Ffar2	mRNA	1.201407705	2.16E-09	1.54E-08
631797	Fer1l6	mRNA	0.683163262	9.10E-09	6.15E-08
14120	Fbp2	mRNA	0.934124282	3.06E-216	2.66E-214
14119	Fbn2	mRNA	0.751825672	7.27E-07	4.07E-06
23876	Fbln5	mRNA	0.673469888	5.33E-49	1.39E-47
105005	Fam84a	mRNA	2.231288995	2.01E-05	9.46E-05
71878	Fam83d	mRNA	0.766732344	6.56E-15	6.77E-14
241303	Fam78a	mRNA	0.594348709	1.85E-71	6.55E-70
71532	Fam217b	mRNA	0.784796432	3.86E-22	5.45E-21
100043920	Fam205a4	mRNA	0.656455803	0.01545211	0.04096934
545611	Fam205a2	mRNA	1.68522567	9.66E-13	8.83E-12
245050	Fam198a	mRNA	0.702069046	1.73E-08	1.14E-07
100038347	Fam174b	mRNA	0.871031545	7.89E-10	5.82E-09
104943	Fam110c	mRNA	2.109727015	2.36E-07	1.39E-06
60527	Fads3	mRNA	1.525000615	1.28E-147	7.92E-146
228592	F830045P16Rik	mRNA	0.667194776	0.00411774	0.01278597
14068	F7	mRNA	0.737910044	0.0069793	0.02042745
216984	Evi2b	mRNA	1.248324866	4.59E-13	4.29E-12
13983	Esr2	mRNA	0.614545371	2.25E-04	9.04E-04
13869	ErbB4	mRNA	0.676024252	5.31E-16	5.80E-15
13844	Ephb2	mRNA	1.00754662	6.79E-14	6.64E-13

13841	Epha7	mRNA	1.108069697	4.11E-27	6.73E-26
209224	Enox2	mRNA	1.220810528	0	0
280635	Emilin3	mRNA	0.773481119	1.89E-04	7.71E-04
270162	Elmod1	mRNA	1.579212298	0.00224313	0.00741044
15569	Elavl2	mRNA	2.496750138	0.00107459	0.00380524
100042807	Eif3j2	mRNA	0.903992088	2.49E-05	1.16E-04
13661	Ehf	mRNA	2.109727015	0.00976436	0.02734322
67484	Eepd1	mRNA	0.699042734	0	0
13616	Edn3	mRNA	0.798329588	3.57E-04	0.00138655
75590	Dusp9	mRNA	2.351801802	9.32E-07	5.16E-06
66959	Dusp26	mRNA	0.709837879	1.68E-39	3.70E-38
213696	Duoxa1	mRNA	1.257284203	0.00297228	0.00954167
70433	Draxin	mRNA	1.141091186	0.01068844	0.0296052
319446	Dpep2	mRNA	0.952670694	2.32E-07	1.37E-06
76088	Dock8	mRNA	0.715519661	2.35E-43	5.54E-42
13447	Doc2b	mRNA	1.119118915	4.28E-17	4.91E-16
72685	Dnaje6	mRNA	2.141091186	3.03E-12	2.68E-11
13386	Dlk1	mRNA	1.484575424	4.77E-22	6.70E-21
244310	Dlgap2	mRNA	0.882451748	4.02E-05	1.81E-04
50781	Dkk3	mRNA	1.958140544	0	0
241452	Dhrs9	mRNA	1.096611515	1.48E-04	6.13E-04
320127	Dgki	mRNA	0.658005187	0.01617476	0.042497
217480	Dgkb	mRNA	0.615406024	1.66E-08	1.09E-07
67800	Dgat2	mRNA	1.215067602	0	0
73284	Ddit4l	mRNA	0.781970842	0	0
13195	Ddc	mRNA	1.289705681	2.06E-04	8.35E-04
77772	Dcst1	mRNA	1.178674369	0.01864543	0.04800591
241589	D430041D05Ri	mRNA	0.810886212	5.05E-188	3.92E-186
102294	Cyp4v3	mRNA	0.623359402	1.66E-07	9.97E-07
232174	Cyp26b1	mRNA	0.994249798	4.99E-113	2.49E-111
13082	Cyp26a1	mRNA	1.316177893	0.00117587	0.0041256
13076	Cyp11a1	mRNA	1.096129412	8.25E-17	9.34E-16
17329	Cxcl9	mRNA	0.949855678	0.00159929	0.00545197
16433	Cuzd1	mRNA	0.772653346	1.01E-07	6.17E-07
629147	Ctxn3	mRNA	0.933668651	3.99E-166	2.72E-164
13038	Ctsk	mRNA	1.016910395	4.94E-31	8.96E-30
216033	Ctnna3	mRNA	0.648867392	9.71E-171	6.81E-169
244218	Ctf2	mRNA	1.347886752	0.01221538	0.03334277
72832	Crtac1	mRNA	2.726965919	8.87E-19	1.10E-17
83691	Crispld1	mRNA	0.788054131	1.23E-10	9.58E-10
263764	Creg2	mRNA	1.40539788	0.00601973	0.01788779
12903	Crabp1	mRNA	1.274357717	0.00352902	0.01112884
242939	Cpz	mRNA	1.707945613	1.77E-08	1.17E-07
211232	Cpne9	mRNA	0.790780707	0.00214406	0.00710541
53419	Corin	mRNA	1.731215392	1.08E-13	1.05E-12
12845	Comp	mRNA	0.766159299	4.16E-62	1.32E-60
12841	Col9a3	mRNA	2.316177893	0.01636315	0.04294336
329941	Col8a2	mRNA	1.029869635	2.37E-22	3.37E-21

94216	Col4a6	mRNA	0.836708521	3.01E-04	0.00118521
12824	Col2a1	mRNA	1.322176633	1.32E-15	1.41E-14
12842	Coll1a1	mRNA	0.695478312	0	0
107581	Coll16a1	mRNA	0.816509143	3.26E-33	6.21E-32
12816	Coll2a1	mRNA	0.669583478	1.60E-101	7.35E-100
12814	Coll11a1	mRNA	0.857421324	4.49E-35	8.94E-34
66797	Cntnap2	mRNA	1.253040275	4.64E-87	1.86E-85
56644	Clec7a	mRNA	1.316177893	2.89E-07	1.69E-06
403395	Clec3a	mRNA	2.272234545	1.46E-13	1.39E-12
353287	Clec18a	mRNA	0.868718916	0.00132325	0.00459629
60363	Cldn15	mRNA	1.214350407	1.31E-33	2.51E-32
12722	Clca3a1	mRNA	0.667470082	1.79E-04	7.31E-04
12705	Cited1	mRNA	1.274357717	0.00352902	0.01112884
68709	Cilp2	mRNA	0.907448333	1.08E-70	3.79E-69
214425	Cilp	mRNA	0.598296393	3.29E-108	1.58E-106
14311	Cidec	mRNA	1.866590523	0	0
231252	Chrna9	mRNA	2.573188511	1.08E-35	2.18E-34
12672	Chrm4	mRNA	2.38656722	5.50E-07	3.12E-06
69121	Chrdl2	mRNA	0.618492286	2.31E-05	1.08E-04
246048	Chodl	mRNA	0.639237069	4.42E-18	5.33E-17
12654	Chil1	mRNA	1.186894876	1.54E-04	6.34E-04
12630	Cfi	mRNA	2.994249798	0.01358137	0.0365199
212517	Cfap44	mRNA	1.312826683	7.86E-04	0.00286902
93898	Cers1	mRNA	0.760560837	1.19E-79	4.54E-78
99151	Cercam	mRNA	0.636278957	1.62E-18	1.99E-17
109901	Cela1	mRNA	2.109727015	2.36E-07	1.39E-06
319930	Ceacam19	mRNA	3.994249798	0.00562967	0.01686779
75796	Cdyl2	mRNA	0.660028343	2.88E-35	5.77E-34
12583	Cdo1	mRNA	0.83202292	3.63E-39	7.98E-38
381113	Cdkl4	mRNA	1.924987135	1.34E-07	8.12E-07
12561	Cdh4	mRNA	1.817125591	0	0
12552	Cdh11	mRNA	0.930945037	6.06E-16	6.59E-15
217946	Cdca71	mRNA	1.311312137	0.00186007	0.00624632
12523	Cd84	mRNA	0.588346897	2.68E-06	1.40E-05
12501	Cd3e	mRNA	1.486731382	1.55E-21	2.14E-20
100043123	Cd300ld4	mRNA	0.889778597	0.0056778	0.01698833
217304	Cd300lb	mRNA	0.752697154	6.58E-07	3.71E-06
140497	Cd300c2	mRNA	1.146824881	2.19E-04	8.82E-04
239849	Cd200r4	mRNA	2.131753321	7.15E-04	0.00262956
12479	Cd1d1	mRNA	2.111707379	2.69E-56	7.84E-55
12777	Ccr10	mRNA	1.133464075	1.23E-04	5.17E-04
12444	Ccnd2	mRNA	0.610984083	4.86E-58	1.45E-56
20304	Ccl5	mRNA	3.694689516	5.85E-04	0.00218431
100039139	Ccdc152	mRNA	0.656554387	4.40E-08	2.80E-07
78016	Ccdc150	mRNA	1.235257897	0.01278241	0.0346963
108723	Card11	mRNA	2.10354844	8.48E-54	2.36E-52
56078	Car5b	mRNA	0.637189895	1.33E-11	1.12E-10
69543	Capns2	mRNA	3.80160472	3.13E-04	0.00122639

12338	Capn6	mRNA	0.741955891	1.05E-18	1.29E-17
80796	Calm4	mRNA	4.775609511	3.45E-14	3.43E-13
12310	Calca	mRNA	2.316177893	0.01636315	0.04294336
54725	Cadm1	mRNA	0.724843197	1.29E-91	5.41E-90
239556	Cacnali	mRNA	2.284405546	7.42E-63	2.37E-61
12291	Cacnalg	mRNA	0.806731336	1.71E-43	4.03E-42
12290	Cacnale	mRNA	2.904173661	8.02E-187	6.17E-185
12274	C6	mRNA	2.102774254	2.84E-09	2.00E-08
237397	C2cd4c	mRNA	1.080223021	1.40E-06	7.59E-06
232371	C1rl	mRNA	0.645354655	0.00362446	0.01140069
109323	C1qtnf7	mRNA	0.969587743	1.54E-05	7.38E-05
620078	C130026I21Rik	mRNA	0.823893145	0.01510411	0.04011631
208154	Btla	mRNA	1.416482798	8.93E-06	4.41E-05
100270744	Btbd18	mRNA	2.278210042	5.37E-48	1.37E-46
12163	Bmp8a	mRNA	0.977375979	1.96E-04	7.94E-04
110075	Bmp3	mRNA	1.937081274	7.76E-59	2.34E-57
70237	Bhlhb9	mRNA	0.606264483	5.15E-06	2.61E-05
12038	Bche	mRNA	0.803427455	5.85E-22	8.18E-21
12035	Bcat1	mRNA	0.813677552	2.26E-05	1.05E-04
545192	Baiap3	mRNA	1.161706544	6.30E-04	0.00233666
330671	B4galnt4	mRNA	1.216642219	7.32E-04	0.00268765
72297	B3gnt3	mRNA	1.807964884	6.46E-33	1.22E-31
242341	Atp6v0d2	mRNA	3.505211717	2.95E-45	7.18E-44
67821	Atp1b4	mRNA	0.860302469	2.13E-30	3.81E-29
27222	Atp1a4	mRNA	1.076711958	2.06E-04	8.32E-04
232975	Atp1a3	mRNA	0.686127502	3.14E-07	1.83E-06
268878	Atp13a5	mRNA	0.652541078	8.62E-22	1.20E-20
11982	Atp10a	mRNA	0.767705733	1.48E-34	2.91E-33
16467	Atcay	mRNA	0.62341189	3.46E-61	1.08E-59
11418	Asic2	mRNA	1.085397686	0.00205379	0.00683199
76976	Arxes2	mRNA	1.176514525	7.43E-10	5.49E-09
76219	Arxes1	mRNA	2.779796561	2.82E-22	4.01E-21
109978	Art4	mRNA	1.579212298	0.01258821	0.03423001
109979	Art3	mRNA	0.744473469	0	0
66412	Arrdc4	mRNA	0.667439481	2.15E-33	4.11E-32
70807	Arrdc2	mRNA	0.769099595	7.66E-138	4.49E-136
67419	Armhl4	mRNA	0.867492655	4.62E-13	4.31E-12
381544	Armhl1	mRNA	1.80160472	0.01571113	0.04157253
215821	Arfgef3	mRNA	0.650033636	2.38E-04	9.52E-04
11829	Aqp4	mRNA	0.642930584	7.76E-68	2.67E-66
494504	Apcdd1	mRNA	0.918638984	2.20E-33	4.21E-32
252903	Ap1s3	mRNA	1.231094547	5.30E-05	2.34E-04
11754	Aoc3	mRNA	1.198313438	1.95E-292	2.27E-290
74251	Ankrd9	mRNA	0.864849468	0	0
330963	Ankddl1a	mRNA	0.952977831	5.94E-05	2.60E-04
654812	Angptl7	mRNA	0.746990204	3.76E-81	1.45E-79
229665	Ampd1	mRNA	0.67316863	0	0
72125	Amer2	mRNA	1.672321703	0.01423262	0.03806472

621603	Aldh3b2	mRNA	1.620434961	4.45E-07	2.55E-06
26358	Aldh1a7	mRNA	0.88863961	2.75E-06	1.44E-05
11668	Aldh1a1	mRNA	1.399071382	0	0
11658	Alcam	mRNA	0.630000408	1.54E-09	1.11E-08
27384	Akr1c13	mRNA	1.71914256	6.53E-04	0.00241918
230959	Ajap1	mRNA	1.200700675	2.17E-04	8.74E-04
271813	Agbl2	mRNA	1.740436084	1.68E-11	1.41E-10
11553	Adra2c	mRNA	1.211061187	8.27E-06	4.10E-05
11549	Adra1a	mRNA	1.196167655	4.33E-74	1.57E-72
11539	Adora1	mRNA	0.88707154	2.68E-47	6.76E-46
11450	Adipoq	mRNA	0.901723183	5.32E-98	2.38E-96
224129	Adcy5	mRNA	0.704014148	2.14E-42	5.00E-41
330119	Adamts3	mRNA	1.02819713	2.15E-33	4.11E-32
223838	Adamts20	mRNA	0.685693726	1.53E-26	2.46E-25
11501	Adam8	mRNA	0.759435265	3.47E-11	2.84E-10
11499	Adam5	mRNA	1.036702904	0.00320758	0.01023927
11479	Acvr1b	mRNA	0.731618464	9.25E-209	7.87E-207
11474	Actn3	mRNA	0.590665954	0	0
11468	Actg2	mRNA	0.683320702	0.00824794	0.02360483
74205	Acsl3	mRNA	0.731487374	3.15E-58	9.40E-57
67477	Abhd15	mRNA	0.875036639	1.79E-09	1.28E-08
20927	Abcc8	mRNA	1.144566514	2.80E-89	1.15E-87
30956	Aass	mRNA	1.80160472	1.34E-04	5.57E-04
319942	A530016L24Rik	mRNA	1.245167917	9.67E-37	2.00E-35
235599	6430571L13Rik	mRNA	0.933356976	1.13E-141	6.78E-140
66755	4933415F23Rik	mRNA	3.118497225	4.88E-125	2.65E-123
76797	2410137M14Rik	mRNA	1.38656722	0.01441743	0.03851107
100504263	2210418O10Rik	mRNA	0.80685807	1.12E-18	1.38E-17
105244158	1700024J04Rik	mRNA	3.994249798	9.03E-05	3.86E-04
78896	1500015O10Rik	mRNA	1.479676625	3.92E-14	3.90E-13
108168952	108168952	mRNA	0.63567669	4.24E-04	0.00162451
381270	4-Mar	mRNA	0.74808921	0.00284617	0.00919074
66112	1-Mar	mRNA	2.945340197	1.12E-20	1.50E-19
