

Table S1 circRNAs significantly altered in islets of NCD/HFD

CircID	C57_6J- ReadsMean	HFD- ReadsMean	C57_6J- baseMean	HFD- baseMean	log2 Ratio (HFD/C57_6J)	P-value	FDR
mmu_circRNA006513	0	989	0.001	819.8691	19.64503	7.86E-22	7.65E-18
mmu_circRNA012877	0	679	0.001	567.6081	19.11454	5.86E-15	1.43E-11
mmu_circRNA010938	0	281.6667	0.001	234.3025	17.83801	1.57E-05	0.018881
mmu_circRNA009044	0	273.6667	0.001	233.35	17.83214	1.75E-05	0.018881
mmu_circRNA009904	0	244	0.001	209.53	17.6768	8.24E-05	0.049813
mmu_circRNA011320	0	238.3333	0.001	201.0948	17.61752	0.00014	0.064199
mmu_circRNA000546	0	235	0.001	199.8621	17.60865	0.000154	0.064199
mmu_circRNA002174	0	240	0.001	199.0412	17.60271	0.000158	0.064199
mmu_circRNA004935	0	238.6667	0.001	197.7932	17.59363	0.000173	0.064757
mmu_circRNA009222	0	230	0.001	195.1108	17.57393	0.000214	0.070176
mmu_circRNA011509	0	227	0.001	194.125	17.56663	0.000231	0.072442
mmu_circRNA004100	0	228.3333	0.001	187.4815	17.51639	0.000337	0.098025
mmu_circRNA005515	0	214.3333	0.001	185.9721	17.50473	0.000394	0.106555
mmu_circRNA012764	0	219.3333	0.001	184.3627	17.49219	0.000421	0.110722
mmu_circRNA007658	0	214.6667	0.001	180.2158	17.45937	0.000545	0.136163
mmu_circRNA000035	0	206.3333	0.001	173.1305	17.4015	0.000846	0.180068
mmu_circRNA011433	0	209	0.001	172.885	17.39945	0.000847	0.180068
mmu_circRNA001621	0	205	0.001	172.2917	17.39449	0.000893	0.180068
mmu_circRNA001840	0	207.6667	0.001	172.2314	17.39399	0.000884	0.180068
mmu_circRNA005249	0	195.3333	0.001	167.5987	17.35465	0.001221	0.228547
mmu_circRNA008025	0	190.3333	0.001	165.1164	17.33312	0.001439	0.243568
mmu_circRNA008209	0	196.3333	0.001	164.5404	17.32808	0.001444	0.243568
mmu_circRNA000457	0	191	0.001	161.0555	17.2972	0.001802	0.282973
mmu_circRNA005537	0	192	0.001	159.9216	17.28701	0.001912	0.295468
mmu_circRNA001079	0	186	0.001	159.6633	17.28467	0.001995	0.302304
mmu_circRNA001585	0	191.6667	0.001	158.3125	17.27242	0.002097	0.309263
mmu_circRNA002487	0	181.3333	0.001	154.9016	17.24099	0.002661	0.378452
mmu_circRNA012269	0	184.6667	0.001	154.4863	17.23712	0.002682	0.378452

mmu_circRNA000634	0	186.6667	0.001	153.2132	17.22518	0.002855	0.390999
mmu_circRNA010305	0	176.6667	0.001	152.0821	17.21449	0.003181	0.413977
mmu_circRNA009937	0	182.3333	0.001	151.5754	17.20968	0.003189	0.413977
mmu_circRNA003927	0	169.3333	0.001	145.3783	17.14945	0.004738	0.530219
mmu_circRNA001633	0	172	0.001	145.2325	17.148	0.00472	0.530219
mmu_circRNA009908	0	168.6667	0.001	144.4309	17.14002	0.005	0.53654
mmu_circRNA010729	0	178	0.001	144.1584	17.1373	0.004875	0.53654
mmu_circRNA005875	0	175.3333	0.001	143.4355	17.13004	0.005125	0.53654
mmu_circRNA009546	0	173.3333	0.001	142.1089	17.11664	0.005548	0.556846
mmu_circRNA004754	0	167	0.001	137.9384	17.07366	0.00711	0.671974
mmu_circRNA012763	0	166.6667	0.001	136.9603	17.0634	0.007498	0.701819
mmu_circRNA008766	0	162.6667	0.001	136.5663	17.05924	0.007782	0.710318
mmu_circRNA004206	0	164	0.001	136.2241	17.05562	0.00788	0.710318
mmu_circRNA008959	0	152	0.001	133.8829	17.03061	0.009374	0.748008
mmu_circRNA007634	0	155.6667	0.001	132.6348	17.0171	0.00985	0.76713
mmu_circRNA001581	0	150.6667	0.001	128.6511	16.9731	0.012391	0.86159
mmu_circRNA011869	0	155.6667	0.001	128.6216	16.97277	0.012164	0.858088
mmu_circRNA006219	0	147.3333	0.001	125.8613	16.94147	0.014542	0.89486
mmu_circRNA005945	0	152.3333	0.001	125.0264	16.93187	0.014903	0.89486
mmu_circRNA002392	0	147.3333	0.001	124.8081	16.92935	0.015371	0.89486
mmu_circRNA002471	0	149.3333	0.001	124.3824	16.92442	0.015599	0.89486
mmu_circRNA007204	0	152	0.001	123.9189	16.91904	0.015825	0.89486
mmu_circRNA000714	0	143.6667	0.001	123.8745	16.91852	0.016383	0.89486
mmu_circRNA003460	0	144.6667	0.001	122.3451	16.9006	0.017669	0.89486
mmu_circRNA007798	0	138.6667	0.001	122.1388	16.89816	0.01829	0.89486
mmu_circRNA004286	0	138	0.001	121.5516	16.89121	0.018897	0.89486
mmu_circRNA003069	0	138	0.001	121.5516	16.89121	0.018897	0.89486
mmu_circRNA009360	0	144.3333	0.001	121.4599	16.89012	0.018516	0.89486
mmu_circRNA008823	0	141	0.001	121.0951	16.88578	0.01911	0.89486
mmu_circRNA003826	0	140.6667	0.001	118.6543	16.8564	0.021642	0.89486
mmu_circRNA001620	0	139.3333	0.001	118.6303	16.85611	0.021779	0.89486
mmu_circRNA004228	0	142	0.001	118.5529	16.85517	0.021644	0.89486

mmu_circRNA008122	0	138.3333	0.001	118.4457	16.85387	0.022065	0.89486
mmu_circRNA011182	0	146	0.001	117.9391	16.84768	0.021998	0.89486
mmu_circRNA007574	0	141.3333	0.001	117.8532	16.84663	0.022471	0.89486
mmu_circRNA004660	0	141.3333	0.001	117.8471	16.84656	0.022478	0.89486
mmu_circRNA010276	0	133.3333	0.001	117.4412	16.84158	0.023652	0.89486
mmu_circRNA009399	0	140	0.001	117.0103	16.83628	0.023551	0.89486
mmu_circRNA001843	0	132.6667	0.001	116.854	16.83435	0.024411	0.89486
mmu_circRNA003722	0	139.6667	0.001	116.667	16.83204	0.023986	0.89486
mmu_circRNA000631	0	133.6667	0.001	116.4188	16.82897	0.024841	0.89486
mmu_circRNA003705	0	137.6667	0.001	115.775	16.82096	0.025256	0.89486
mmu_circRNA004661	0	138.6667	0.001	115.5714	16.81842	0.025418	0.89486
mmu_circRNA002148	0	136.6667	0.001	115.1191	16.81277	0.026184	0.89486
mmu_circRNA001706	0	132	0.001	114.8046	16.80882	0.027064	0.89486
mmu_circRNA004981	0	131.6667	0.001	113.6155	16.7938	0.028722	0.89486
mmu_circRNA000661	0	132	0.001	112.4286	16.77865	0.030402	0.89486
mmu_circRNA000641	0	127	0.001	111.8627	16.77137	0.031847	0.89486
mmu_circRNA006494	0	130	0.001	111.3415	16.76463	0.032301	0.89486
mmu_circRNA001121	0	135	0.001	110.8346	16.75805	0.032528	0.89486
mmu_circRNA002248	0	133.6667	0.001	110.4677	16.75326	0.033276	0.89486
mmu_circRNA000446	0	130.3333	0.001	110.4333	16.75282	0.033729	0.89486
mmu_circRNA007757	0	135	0.001	110.3674	16.75196	0.033286	0.89486
mmu_circRNA009773	0	135.3333	0.001	110.223	16.75007	0.033486	0.89486
mmu_circRNA012481	0	134.6667	0.001	110.1048	16.74852	0.033759	0.89486
mmu_circRNA008340	0	125	0.001	110.1011	16.74847	0.034965	0.89486
mmu_circRNA001838	0	124.6667	0.001	109.8075	16.74462	0.035513	0.89486
mmu_circRNA009793	0	130.6667	0.001	108.4001	16.72601	0.037234	0.89486
mmu_circRNA006248	0	133	0.001	108.2435	16.72392	0.037225	0.89486
mmu_circRNA005590	0	131.6667	0.001	107.8511	16.71868	0.038128	0.89486
mmu_circRNA003458	0	122.3333	0.001	107.7523	16.71736	0.039606	0.89486
mmu_circRNA009568	0	127	0.001	107.3301	16.71169	0.039758	0.89486
mmu_circRNA006641	0	127.3333	0.001	106.7713	16.70416	0.040824	0.89486
mmu_circRNA001999	0	132	0.001	106.6299	16.70225	0.040468	0.89486

mmu_circRNA012836	0	128	0.001	106.2321	16.69686	0.041834	0.89486
mmu_circRNA000251	0	122.6667	0.001	106.1234	16.69538	0.042853	0.89486
mmu_circRNA008692	0	120.3333	0.001	105.9907	16.69358	0.043503	0.89486
mmu_circRNA002419	0	125	0.001	105.7937	16.69089	0.043201	0.89486
mmu_circRNA010872	0	128.6667	0.001	105.7381	16.69014	0.042782	0.89486
mmu_circRNA003698	0	128	0.001	105.7252	16.68996	0.042906	0.89486
mmu_circRNA009349	0	130.6667	0.001	105.5528	16.68761	0.042896	0.89486
mmu_circRNA011257	0	125.6667	0.001	105.4047	16.68558	0.043946	0.89486
mmu_circRNA008306	0	122.3333	0.001	105.1955	16.68271	0.044926	0.89486
mmu_circRNA003167	0	130	0.001	105.0143	16.68023	0.044171	0.89486
mmu_circRNA011149	0	129	0.001	105.0123	16.6802	0.044321	0.89486
mmu_circRNA005344	0	121.3333	0.001	104.6965	16.67585	0.046222	0.89486
mmu_circRNA011489	0	124.6667	0.001	104.3896	16.67162	0.0464	0.89486
mmu_circRNA007578	0	124	0.001	104.3596	16.6712	0.046576	0.89486
mmu_circRNA002467	0	122	0.001	103.5474	16.65993	0.048858	0.89486
mmu_circRNA009257	0	124.3333	0.001	103.43	16.6583	0.048763	0.89486
mmu_circRNA008303	0	120	0.001	103.3726	16.65749	0.049634	0.89486
mmu_circRNA001463	8.666667	331	9.391673	275.5233	4.874648	0.001296	0.238017
mmu_circRNA009833	13.66667	376.3333	14.39699	318.4141	4.467065	0.000882	0.180068
mmu_circRNA005302	7.333333	214.6667	8.026839	175.3794	4.449504	0.033937	0.89486
mmu_circRNA001856	12.66667	236.3333	13.86454	199.8464	3.84942	0.032111	0.89486
mmu_circRNA001105	19.33333	348.3333	20.95065	297.8815	3.829671	0.004116	0.494723
mmu_circRNA009392	18	292.6667	19.50578	246.9298	3.662127	0.014773	0.89486
mmu_circRNA008881	17.33333	283	18.97253	233.4815	3.621325	0.018948	0.89486
mmu_circRNA012271	270.6667	3701.333	290.4964	3107.413	3.419122	3.88E-19	1.89E-15
mmu_circRNA012266	27.33333	356.3333	28.79398	293.9435	3.3517	0.009687	0.766728
mmu_circRNA002492	27	335.6667	28.44283	282.7662	3.313473	0.013076	0.868456
mmu_circRNA009624	41	469.3333	43.84566	402.1781	3.197329	0.002312	0.335929
mmu_circRNA001139	61	696.3333	65.42511	587.7572	3.167304	0.000139	0.064199
mmu_circRNA001142	59	668.3333	63.2771	564.0443	3.156053	0.000205	0.070176
mmu_circRNA001300	25	282	26.33596	233.902	3.150799	0.035915	0.89486
mmu_circRNA003146	31.66667	301.3333	33.90729	254.5274	2.908154	0.035126	0.89486

mmu_circRNA012270	464	4473.333	499.5839	3745.787	2.90647	1.55E-17	5.02E-14
mmu_circRNA012261	43.66667	326.3333	47.66157	272.2446	2.514005	0.043174	0.89486
mmu_circRNA002549	77.33333	507	84.1122	427.404	2.345214	0.010886	0.816332
mmu_circRNA008289	100.3333	530	107.7618	446.6845	2.05141	0.019155	0.89486
mmu_circRNA010890	78.66667	423	84.93418	349.8588	2.042356	0.041226	0.89486
mmu_circRNA006170	1556.333	6358.333	1300.138	5311.659	2.030498	0.012407	0.89486
mmu_circRNA008105	273.3333	71.33333	290.3168	62.83103	-2.20808	0.047735	0.89486
mmu_circRNA009527	237	49	254.0926	42.81237	-2.56925	0.047083	0.89486
mmu_circRNA003042	257.3333	51.66667	278.8451	43.37804	-2.68443	0.032837	0.89486
mmu_circRNA011438	255.3333	52	274.5189	42.00572	-2.70825	0.036046	0.89486
mmu_circRNA004140	265.3333	47.66667	289.5852	40.52509	-2.8371	0.022427	0.89486
mmu_circRNA006937	239.3333	41.66667	255.9387	34.41577	-2.89466	0.034129	0.89486
mmu_circRNA006791	474.6667	74.33333	510.966	62.26117	-3.03682	0.000612	0.149066
mmu_circRNA005955	236	32	252.7793	28.18588	-3.16483	0.022061	0.89486
mmu_circRNA010222	228.3333	32.33333	246.9648	26.11894	-3.24114	0.027454	0.89486
mmu_circRNA000290	228.6667	30.33333	247.9887	25.05468	-3.30712	0.023834	0.89486
mmu_circRNA002854	193.3333	21	209.094	17.34555	-3.59151	0.035548	0.89486
mmu_circRNA003851	200.3333	18.66667	215.3712	15.07898	-3.83622	0.024834	0.89486
mmu_circRNA005835	173.6667	15.66667	185.6464	12.94033	-3.84261	0.044983	0.89486
mmu_circRNA011557	202	16	218.2941	13.21565	-4.04595	0.018024	0.89486
mmu_circRNA011611	156.3333	10.66667	170.1168	8.810436	-4.27117	0.047639	0.89486
mmu_circRNA009626	162	10.33333	175.1385	8.53511	-4.35894	0.038922	0.89486
mmu_circRNA002105	168.3333	9.666667	177.3288	8.514485	-4.38036	0.031742	0.89486
mmu_circRNA010371	173	9	187.6469	7.927279	-4.56505	0.021659	0.89486
mmu_circRNA009944	218.6667	10	235.785	8.808088	-4.7425	0.004321	0.506754
mmu_circRNA009625	185.6667	8.666667	197.6998	7.000954	-4.81962	0.01388	0.89486
mmu_circRNA000281	143.6667	6.666667	153.4188	5.385349	-4.83229	0.049964	0.89486
mmu_circRNA012135	195.3333	7.666667	208.5515	6.193151	-5.07359	0.00784	0.710318
mmu_circRNA003182	226	7	245.593	5.654617	-5.4407	0.001563	0.253518
mmu_circRNA005350	223	6	239.3796	5.284853	-5.50129	0.001451	0.243568
mmu_circRNA004199	93	0	100.9836	0.001	-16.6238	0.049172	0.89486
mmu_circRNA011138	95	0	101.1141	0.001	-16.6256	0.048162	0.89486

mmu_circRNA001445	93.33333	0	101.1411	0.001	-16.626	0.04867	0.89486
mmu_circRNA006667	95.33333	0	101.5458	0.001	-16.6318	0.047016	0.89486
mmu_circRNA006663	93.33333	0	101.5631	0.001	-16.632	0.047653	0.89486
mmu_circRNA010246	93.66667	0	102.3245	0.001	-16.6428	0.045757	0.89486
mmu_circRNA004152	94.66667	0	102.3845	0.001	-16.6436	0.045289	0.89486
mmu_circRNA010666	93.66667	0	102.5246	0.001	-16.6456	0.0453	0.89486
mmu_circRNA002264	94.33333	0	102.6722	0.001	-16.6477	0.044747	0.89486
mmu_circRNA000646	95	0	103.3219	0.001	-16.6568	0.043096	0.89486
mmu_circRNA011933	95.66667	0	103.7956	0.001	-16.6634	0.041874	0.89486
mmu_circRNA006633	96	0	104.0308	0.001	-16.6667	0.04128	0.89486
mmu_circRNA006631	96	0	104.0308	0.001	-16.6667	0.04128	0.89486
mmu_circRNA005668	95.33333	0	104.3489	0.001	-16.6711	0.040828	0.89486
mmu_circRNA011883	99.66667	0	105.315	0.001	-16.6844	0.037683	0.89486
mmu_circRNA011993	99.66667	0	105.5869	0.001	-16.6881	0.037175	0.89486
mmu_circRNA008358	100.6667	0	106.0461	0.001	-16.6943	0.036071	0.89486
mmu_circRNA003284	98.66667	0	106.0847	0.001	-16.6949	0.036536	0.89486
mmu_circRNA006628	97	0	106.1732	0.001	-16.6961	0.036833	0.89486
mmu_circRNA001542	98.33333	0	106.5594	0.001	-16.7013	0.03578	0.89486
mmu_circRNA003128	101	0	106.9613	0.001	-16.7067	0.034389	0.89486
mmu_circRNA001348	99.66667	0	107.2287	0.001	-16.7103	0.034277	0.89486
mmu_circRNA012243	98	0	107.2678	0.001	-16.7109	0.034645	0.89486
mmu_circRNA002080	98.33333	0	107.6326	0.001	-16.7158	0.033946	0.89486
mmu_circRNA003541	101.6667	0	107.7165	0.001	-16.7169	0.032969	0.89486
mmu_circRNA011481	98.66667	0	107.7937	0.001	-16.7179	0.033595	0.89486
mmu_circRNA008783	102.6667	0	108.153	0.001	-16.7227	0.03203	0.89486
mmu_circRNA012473	102.6667	0	108.153	0.001	-16.7227	0.03203	0.89486
mmu_circRNA006987	102.6667	0	108.8379	0.001	-16.7318	0.030969	0.89486
mmu_circRNA007655	102.6667	0	109.4422	0.001	-16.7398	0.030066	0.89486
mmu_circRNA008933	100	0	109.4569	0.001	-16.74	0.030663	0.89486
mmu_circRNA002081	100	0	109.4569	0.001	-16.74	0.030663	0.89486
mmu_circRNA009676	101.3333	0	109.7235	0.001	-16.7435	0.029958	0.89486
mmu_circRNA012652	102	0	110.5328	0.001	-16.7541	0.028653	0.89486

mmu_circRNA001386	102	0	111.646	0.001	-16.7686	0.027144	0.89486
mmu_circRNA001295	106	0	111.6645	0.001	-16.7688	0.026295	0.89486
mmu_circRNA000443	104.3333	0	111.9836	0.001	-16.7729	0.026221	0.89486
mmu_circRNA000279	106	0	112.8127	0.001	-16.7836	0.02486	0.89486
mmu_circRNA006933	104.6667	0	113.0917	0.001	-16.7871	0.02478	0.89486
mmu_circRNA003809	103.6667	0	113.2484	0.001	-16.7891	0.024786	0.89486
mmu_circRNA000400	103.6667	0	113.4703	0.001	-16.792	0.02452	0.89486
mmu_circRNA008762	104.6667	0	113.7136	0.001	-16.795	0.024041	0.89486
mmu_circRNA002962	105	0	113.7553	0.001	-16.7956	0.023929	0.89486
mmu_circRNA006871	109	0	114.8248	0.001	-16.8091	0.02201	0.89486
mmu_circRNA005828	107.6667	0	114.9209	0.001	-16.8103	0.022136	0.89486
mmu_circRNA004187	106	0	115.1184	0.001	-16.8128	0.022214	0.89486
mmu_circRNA003475	109.6667	0	115.5271	0.001	-16.8179	0.021154	0.89486
mmu_circRNA002575	109.3333	0	116.3644	0.001	-16.8283	0.020353	0.89486
mmu_circRNA004897	110.3333	0	116.8035	0.001	-16.8337	0.01976	0.89486
mmu_circRNA003414	108	0	117.4858	0.001	-16.8421	0.019466	0.89486
mmu_circRNA011776	109.3333	0	117.541	0.001	-16.8428	0.019206	0.89486
mmu_circRNA005039	112	0	117.9851	0.001	-16.8482	0.018393	0.89486
mmu_circRNA010975	112	0	117.9851	0.001	-16.8482	0.018393	0.89486
mmu_circRNA000067	109.3333	0	118.0444	0.001	-16.849	0.018734	0.89486
mmu_circRNA003562	110	0	118.4277	0.001	-16.8536	0.018283	0.89486
mmu_circRNA006838	109.3333	0	118.8798	0.001	-16.8591	0.017974	0.89486
mmu_circRNA004839	111.6667	0	119.1146	0.001	-16.862	0.017432	0.89486
mmu_circRNA006198	111	0	120.2632	0.001	-16.8758	0.016548	0.89486
mmu_circRNA010454	110.6667	0	121.1323	0.001	-16.8862	0.015883	0.89486
mmu_circRNA008722	112	0	121.3693	0.001	-16.889	0.015521	0.89486
mmu_circRNA006949	114.6667	0	121.4792	0.001	-16.8903	0.015101	0.89486
mmu_circRNA009899	111	0	121.4972	0.001	-16.8906	0.01555	0.89486
mmu_circRNA006523	113.6667	0	121.6545	0.001	-16.8924	0.015089	0.89486
mmu_circRNA006129	112.6667	0	122.0917	0.001	-16.8976	0.014879	0.89486
mmu_circRNA006837	112.3333	0	122.1416	0.001	-16.8982	0.014882	0.89486
mmu_circRNA008581	111.6667	0	122.2269	0.001	-16.8992	0.0149	0.89486

mmu_circRNA008934	112	0	122.5917	0.001	-16.9035	0.014584	0.89486
mmu_circRNA011761	113.3333	0	122.8142	0.001	-16.9061	0.014258	0.89486
mmu_circRNA004426	113	0	123.6863	0.001	-16.9163	0.013668	0.89486
mmu_circRNA012351	114.3333	0	124.2653	0.001	-16.9231	0.013114	0.868456
mmu_circRNA012356	117	0	124.4106	0.001	-16.9247	0.012727	0.865342
mmu_circRNA009470	117	0	124.5959	0.001	-16.9269	0.012604	0.865342
mmu_circRNA007044	115	0	124.6203	0.001	-16.9272	0.0128	0.865342
mmu_circRNA006868	114.3333	0	124.8147	0.001	-16.9294	0.012742	0.865342
mmu_circRNA006727	117.6667	0	125.2639	0.001	-16.9346	0.012102	0.858088
mmu_circRNA011370	115.3333	0	125.2943	0.001	-16.935	0.012322	0.86159
mmu_circRNA007494	115.3333	0	125.8255	0.001	-16.9411	0.011984	0.857861
mmu_circRNA002993	120	0	126.4126	0.001	-16.9478	0.011173	0.816332
mmu_circRNA012137	117	0	126.7876	0.001	-16.9521	0.011237	0.816332
mmu_circRNA011270	119	0	126.8885	0.001	-16.9532	0.010989	0.816332
mmu_circRNA008935	116	0	126.97	0.001	-16.9541	0.011226	0.816332
mmu_circRNA010786	116	0	126.97	0.001	-16.9541	0.011226	0.816332
mmu_circRNA003871	118.3333	0	128.2325	0.001	-16.9684	0.010303	0.790189
mmu_circRNA012234	117.6667	0	128.3322	0.001	-16.9695	0.010309	0.790189
mmu_circRNA010990	118	0	129.1591	0.001	-16.9788	0.009846	0.76713
mmu_circRNA008051	121.6667	0	129.7313	0.001	-16.9852	0.009259	0.744957
mmu_circRNA008050	121.6667	0	129.7313	0.001	-16.9852	0.009259	0.744957
mmu_circRNA007780	123.3333	0	129.9241	0.001	-16.9873	0.009037	0.744957
mmu_circRNA008111	120	0	130.0385	0.001	-16.9886	0.009244	0.744957
mmu_circRNA006227	120	0	130.1006	0.001	-16.9893	0.009215	0.744957
mmu_circRNA008032	119.3333	0	130.6186	0.001	-16.995	0.009023	0.744957
mmu_circRNA010901	119.3333	0	130.6186	0.001	-16.995	0.009023	0.744957
mmu_circRNA004606	124	0	130.6263	0.001	-16.9951	0.008662	0.744957
mmu_circRNA009113	120.6667	0	130.761	0.001	-16.9966	0.008852	0.744957
mmu_circRNA002277	120.3333	0	130.8473	0.001	-16.9975	0.008838	0.744957
mmu_circRNA009663	121	0	131.1222	0.001	-17.0006	0.008662	0.744957
mmu_circRNA008763	121	0	131.5624	0.001	-17.0054	0.008467	0.744957
mmu_circRNA012404	123	0	132.7177	0.001	-17.018	0.007835	0.710318

mmu_circRNA010063	123	0	134.632	0.001	-17.0387	0.007094	0.671974
mmu_circRNA009358	126	0	135.1101	0.001	-17.0438	0.006737	0.649384
mmu_circRNA011702	127.3333	0	136.4645	0.001	-17.0582	0.006205	0.608841
mmu_circRNA010849	126	0	136.5405	0.001	-17.059	0.006254	0.608841
mmu_circRNA008410	127	0	136.7781	0.001	-17.0615	0.006122	0.608154
mmu_circRNA009686	132	0	139.0539	0.001	-17.0853	0.005198	0.53654
mmu_circRNA001814	130.3333	0	139.101	0.001	-17.0858	0.005263	0.53654
mmu_circRNA009409	130	0	139.1406	0.001	-17.0862	0.005268	0.53654
mmu_circRNA000923	127.6667	0	139.4635	0.001	-17.0895	0.005291	0.53654
mmu_circRNA011434	129	0	139.4856	0.001	-17.0898	0.005221	0.53654
mmu_circRNA002547	132	0	140.9675	0.001	-17.105	0.004701	0.530219
mmu_circRNA003130	131.3333	0	141.9919	0.001	-17.1154	0.004482	0.519424
mmu_circRNA000761	130.6667	0	143.0237	0.001	-17.1259	0.004272	0.506754
mmu_circRNA002887	135.3333	0	143.9363	0.001	-17.1351	0.003899	0.480443
mmu_circRNA000505	137.6667	0	145.0233	0.001	-17.1459	0.003602	0.455233
mmu_circRNA005992	133.3333	0	145.5423	0.001	-17.1511	0.003647	0.455233
mmu_circRNA009583	137	0	145.9114	0.001	-17.1547	0.003456	0.442708
mmu_circRNA000367	137.3333	0	148.1773	0.001	-17.177	0.003051	0.406888
mmu_circRNA000504	141	0	148.5348	0.001	-17.1804	0.002892	0.390999
mmu_circRNA009157	140.6667	0	149.1708	0.001	-17.1866	0.002802	0.38973
mmu_circRNA007190	143	0	154.7359	0.001	-17.2394	0.002018	0.302304
mmu_circRNA009022	145.6667	0	158.9583	0.001	-17.2783	0.001557	0.253518
mmu_circRNA008879	148	0	160.3809	0.001	-17.2911	0.001406	0.243568
mmu_circRNA002972	148.6667	0	161.0533	0.001	-17.2972	0.001345	0.242543
mmu_circRNA005653	152.6667	0	164.8396	0.001	-17.3307	0.001047	0.199845
mmu_circRNA002711	156.6667	0	166.338	0.001	-17.3438	0.000925	0.180068
mmu_circRNA002690	155.3333	0	166.8423	0.001	-17.3481	0.000911	0.180068
mmu_circRNA001067	154	0	168.5636	0.001	-17.3629	0.000839	0.180068
mmu_circRNA008748	160.3333	0	171.2795	0.001	-17.386	0.000675	0.156514
mmu_circRNA007475	160.6667	0	172.0021	0.001	-17.3921	0.000646	0.153448
mmu_circRNA004196	162.6667	0	176.2745	0.001	-17.4275	0.0005	0.128011
mmu_circRNA011550	168.3333	0	181.4986	0.001	-17.4696	0.000352	0.098025

mmu_circRNA008509	168	0	182.054	0.001	-17.474	0.000343	0.098025
mmu_circRNA003923	173	0	182.2448	0.001	-17.4755	0.000322	0.097855
mmu_circRNA006209	174.3333	0	189.0422	0.001	-17.5283	0.000216	0.070176
mmu_circRNA001425	175.6667	0	190.362	0.001	-17.5384	0.000198	0.070176
mmu_circRNA010265	181.6667	0	192.3206	0.001	-17.5532	0.000166	0.06451
mmu_circRNA012664	181.6667	0	194.2264	0.001	-17.5674	0.000148	0.064199
mmu_circRNA008951	183	0	195.3979	0.001	-17.5761	0.000137	0.064199
mmu_circRNA002873	184	0	198.7135	0.001	-17.6003	0.000109	0.059212
mmu_circRNA003493	186.3333	0	201.921	0.001	-17.6234	8.70E-05	0.049813
mmu_circRNA002527	190.6667	0	205.5033	0.001	-17.6488	6.71E-05	0.043557
mmu_circRNA007191	190	0	205.6717	0.001	-17.65	6.70E-05	0.043557
mmu_circRNA002335	197	0	211.0242	0.001	-17.687	4.56E-05	0.034118
mmu_circRNA011235	200	0	214.8869	0.001	-17.7132	3.54E-05	0.028743
mmu_circRNA010061	197.3333	0	215.9949	0.001	-17.7206	3.44E-05	0.028743
mmu_circRNA006851	197.3333	0	215.9949	0.001	-17.7206	3.44E-05	0.028743
mmu_circRNA002218	228.3333	0	246.4272	0.001	-17.9108	3.91E-06	0.005432
mmu_circRNA002656	231	0	248.972	0.001	-17.9256	3.25E-06	0.005276
mmu_circRNA010972	245.6667	0	267.0081	0.001	-18.0265	1.02E-06	0.001982

Table S2 circRNAs significantly altered in islets of control/*Lep^{ob/ob}* mice

CircID	control- ReadsMean	Ob_ob- ReadsMean	control- baseMean	Ob_ob- baseMean	log2 Ratio (Ob_ob/control)	P-value	FDR
mmu_circRNA007439	0	519	0.001	422.0591763	18.68708577	3.56E-11	7.99E-08
mmu_circRNA003010	0	453.6666667	0.001	368.5510063	18.49150477	1.34E-09	2.41E-06
mmu_circRNA005676	0	398	0.001	324.1407762	18.30626099	2.70E-08	4.03E-05
mmu_circRNA003161	0	348	0.001	284.6068879	18.11861105	4.09E-07	0.000411553
mmu_circRNA000634	0	343.3333333	0.001	278.7464835	18.08859408	6.04E-07	0.00049275
mmu_circRNA001960	0	332	0.001	269.533448	18.04010479	1.13E-06	0.000780584
mmu_circRNA007409	0	313.3333333	0.001	253.0495525	17.9490604	3.24E-06	0.001940536
mmu_circRNA000714	0	298.3333333	0.001	245.4483838	17.90506014	5.40E-06	0.002627117

mmu_circRNA006309	0	304	0.001	244.9617692	17.90219708	5.38E-06	0.002627117
mmu_circRNA009908	0	302	0.001	244.5763841	17.89992558	5.56E-06	0.002627117
mmu_circRNA000633	0	298	0.001	240.6461511	17.87655382	7.16E-06	0.002847556
mmu_circRNA011790	0	290.6666667	0.001	237.8083262	17.8594397	8.86E-06	0.003310329
mmu_circRNA000632	0	291.3333333	0.001	235.2378809	17.84376087	1.04E-05	0.003718732
mmu_circRNA003254	0	285.6666667	0.001	232.3965086	17.82622887	1.28E-05	0.004093077
mmu_circRNA002116	0	286.3333333	0.001	230.4314281	17.81397797	1.44E-05	0.004463728
mmu_circRNA009132	0	282.6666667	0.001	228.2619958	17.80033115	1.69E-05	0.00458886
mmu_circRNA009137	0	282.6666667	0.001	228.2619958	17.80033115	1.69E-05	0.00458886
mmu_circRNA009133	0	282.6666667	0.001	228.2619958	17.80033115	1.69E-05	0.00458886
mmu_circRNA003557	0	268.6666667	0.001	215.7273572	17.71884962	3.88E-05	0.008498325
mmu_circRNA006513	0	264	0.001	214.2288959	17.70879356	4.33E-05	0.009238936
mmu_circRNA001620	0	262.6666667	0.001	211.4800327	17.69016193	5.08E-05	0.010601476
mmu_circRNA002522	0	257.3333333	0.001	209.6025677	17.67729686	5.80E-05	0.011832321
mmu_circRNA010920	0	256	0.001	205.5565885	17.64917609	7.35E-05	0.014326456
mmu_circRNA003012	0	247	0.001	204.4356722	17.64128743	8.18E-05	0.014973583
mmu_circRNA006208	0	248.6666667	0.001	202.5434138	17.62787165	9.03E-05	0.015801341
mmu_circRNA004410	0	246	0.001	201.0904405	17.61748497	9.94E-05	0.016428654
mmu_circRNA011489	0	248	0.001	200.6943012	17.61464013	0.000100722	0.016428654
mmu_circRNA011161	0	241.3333333	0.001	196.5702837	17.58468571	0.000131552	0.019919805
mmu_circRNA011162	0	238	0.001	193.8552245	17.56462009	0.000156678	0.022670286
mmu_circRNA004344	0	233.3333333	0.001	190.4811624	17.5392888	0.000197712	0.026198524
mmu_circRNA003013	0	234.3333333	0.001	189.5402075	17.5321444	0.000208889	0.026991883
mmu_circRNA009166	0	228.6666667	0.001	186.7922908	17.51107539	0.000253701	0.031306419
mmu_circRNA002211	0	227.6666667	0.001	185.301549	17.49951542	0.000277514	0.033194336
mmu_circRNA006156	0	228	0.001	183.0738366	17.4820661	0.000314157	0.035674683
mmu_circRNA012344	0	228	0.001	183.0738366	17.4820661	0.000314157	0.035674683
mmu_circRNA002869	0	221.3333333	0.001	182.8775742	17.48051865	0.000327574	0.036733341
mmu_circRNA003962	0	224.6666667	0.001	181.3068882	17.46807421	0.00035198	0.038982848
mmu_circRNA002977	0	224	0.001	180.6713777	17.46300844	0.000365704	0.039648505
mmu_circRNA010380	0	223.6666667	0.001	180.0640859	17.45815094	0.000378771	0.04045187
mmu_circRNA004100	0	221.6666667	0.001	179.1827965	17.4510726	0.000401295	0.041860634

mmu_circRNA007460	0	222.6666667	0.001	178.7914077	17.44791788	0.000408222	0.042093778
mmu_circRNA001836	0	218	0.001	177.5648695	17.43798665	0.000446148	0.043982376
mmu_circRNA003118	0	214.6666667	0.001	175.7656155	17.42329334	0.000500247	0.0486416
mmu_circRNA011448	0	216	0.001	175.1495958	17.41822813	0.000514435	0.0486416
mmu_circRNA002868	0	210.6666667	0.001	174.0609473	17.40923303	0.0005598	0.051772809
mmu_circRNA011453	0	210.3333333	0.001	171.7941789	17.39032163	0.000635395	0.05643692
mmu_circRNA009657	0	210	0.001	171.0487275	17.38404785	0.000662972	0.0574606
mmu_circRNA002177	0	210	0.001	171.0487275	17.38404785	0.000662972	0.0574606
mmu_circRNA007403	0	206.3333333	0.001	168.549585	17.36281355	0.000772856	0.064797089
mmu_circRNA010389	0	200.6666667	0.001	162.4404188	17.30955113	0.001109627	0.087319834
mmu_circRNA002248	0	197.6666667	0.001	161.9876847	17.30552461	0.001153098	0.089176247
mmu_circRNA004935	0	197.3333333	0.001	161.059446	17.29723375	0.001216253	0.091987254
mmu_circRNA010799	0	196.3333333	0.001	160.7813493	17.29474054	0.001240715	0.091987254
mmu_circRNA002661	0	200	0.001	160.5910847	17.29303228	0.001234266	0.091987254
mmu_circRNA008725	0	198	0.001	158.9851739	17.27853271	0.001362007	0.098434622
mmu_circRNA003078	0	193.3333333	0.001	157.2565465	17.26276055	0.001530433	0.106430362
mmu_circRNA007522	0	192	0.001	156.387408	17.25476483	0.001615741	0.110647438
mmu_circRNA006906	0	189.3333333	0.001	154.4220099	17.23651887	0.001823629	0.119414404
mmu_circRNA008361	0	188.6666667	0.001	153.6723488	17.22949807	0.001906853	0.122188402
mmu_circRNA000618	0	188.6666667	0.001	153.0927108	17.22404607	0.001969478	0.124718995
mmu_circRNA000975	0	186.3333333	0.001	152.7971111	17.22125774	0.002022104	0.126855211
mmu_circRNA011376	0	187	0.001	152.1127241	17.21478131	0.002094701	0.129154371
mmu_circRNA000619	0	187.3333333	0.001	151.9668695	17.21339731	0.002108835	0.129154371
mmu_circRNA008154	0	187.3333333	0.001	151.9031173	17.21279195	0.002116341	0.129154371
mmu_circRNA003698	0	185.3333333	0.001	151.7181206	17.21103388	0.002156374	0.130708317
mmu_circRNA006167	0	183	0.001	149.8455031	17.19311626	0.002416709	0.145193511
mmu_circRNA003804	0	183.3333333	0.001	149.5933042	17.19068608	0.002447383	0.145193511
mmu_circRNA011760	0	181	0.001	148.5525605	17.18061395	0.002618549	0.151554835
mmu_circRNA009323	0	183.3333333	0.001	147.9561914	17.17481054	0.002680636	0.154153743
mmu_circRNA012850	0	179.6666667	0.001	146.6089853	17.161614	0.002932923	0.163423899
mmu_circRNA002550	0	180.6666667	0.001	146.27747	17.15834805	0.002975093	0.163972526
mmu_circRNA009080	0	178	0.001	144.9841595	17.14553576	0.003231452	0.171659385

mmu_circRNA007004	0	178.3333333	0.001	144.533143	17.14104083	0.003308709	0.172572246
mmu_circRNA002016	0	179	0.001	144.2841477	17.13855328	0.003345651	0.173490389
mmu_circRNA009773	0	176.3333333	0.001	143.4605228	17.13029427	0.003539882	0.177695874
mmu_circRNA010720	0	176.6666667	0.001	143.373977	17.12942367	0.003552045	0.177695874
mmu_circRNA009202	0	176	0.001	143.355124	17.12923395	0.003565406	0.177695874
mmu_circRNA005028	0	172	0.001	143.0634655	17.12629577	0.003683636	0.181570883
mmu_circRNA005620	0	170.6666667	0.001	141.5177233	17.11062322	0.004031002	0.188880377
mmu_circRNA008279	0	173.3333333	0.001	141.1830767	17.10720764	0.004060584	0.188880377
mmu_circRNA001060	0	171	0.001	141.1440089	17.10680837	0.004108168	0.188880377
mmu_circRNA000820	0	168.3333333	0.001	139.5355947	17.09027367	0.004531409	0.203256332
mmu_circRNA008048	0	170	0.001	139.1126605	17.0858942	0.004604486	0.204052125
mmu_circRNA008200	0	170.6666667	0.001	139.0110293	17.08483983	0.004617387	0.204052125
mmu_circRNA000846	0	167.3333333	0.001	138.7066792	17.08167773	0.004757456	0.20692231
mmu_circRNA000853	0	168	0.001	138.511322	17.07964438	0.004794511	0.20692231
mmu_circRNA006281	0	172	0.001	138.1083329	17.07544084	0.004821934	0.20692231
mmu_circRNA007059	0	172	0.001	138.1083329	17.07544084	0.004821934	0.20692231
mmu_circRNA008476	0	170.6666667	0.001	138.0166693	17.074483	0.004871209	0.207107176
mmu_circRNA008297	0	171	0.001	137.6652949	17.07080538	0.004957493	0.209144063
mmu_circRNA011621	0	170.6666667	0.001	137.0377256	17.06421359	0.005133806	0.21223676
mmu_circRNA008135	0	169.3333333	0.001	136.8921045	17.06267971	0.005200999	0.214028258
mmu_circRNA006279	0	169.3333333	0.001	135.9671184	17.05289827	0.00546421	0.219818072
mmu_circRNA011952	0	168.3333333	0.001	135.7802928	17.05091458	0.005540333	0.220899235
mmu_circRNA000937	0	168.6666667	0.001	135.4318148	17.04720716	0.005636702	0.222761454
mmu_circRNA005922	0	167.3333333	0.001	135.3709841	17.04655901	0.005684326	0.223658296
mmu_circRNA007077	0	166.3333333	0.001	135.2388278	17.04514989	0.005746805	0.225129187
mmu_circRNA010879	0	168	0.001	134.8965112	17.04149351	0.005814242	0.225798997
mmu_circRNA007417	0	166.3333333	0.001	134.5648009	17.03794156	0.005955695	0.229307049
mmu_circRNA001291	0	164.6666667	0.001	134.1239228	17.03320706	0.006135933	0.233243446
mmu_circRNA008267	0	166.6666667	0.001	133.8259039	17.02999787	0.006185069	0.234119197
mmu_circRNA003565	0	164.6666667	0.001	133.7917086	17.02962919	0.00624441	0.23537226
mmu_circRNA004373	0	164	0.001	133.580911	17.02735433	0.006330643	0.237624269
mmu_circRNA002148	0	161.3333333	0.001	133.4973003	17.02645104	0.006426027	0.238910452

mmu_circRNA000078	0	164.6666667	0.001	132.2199931	17.01258082	0.006783029	0.246164379
mmu_circRNA009755	0	161	0.001	132.0830262	17.01108555	0.006929589	0.246687874
mmu_circRNA010095	0	164	0.001	131.9776018	17.00993358	0.006887444	0.246164379
mmu_circRNA007125	0	164	0.001	131.6846895	17.00672809	0.006994138	0.247025259
mmu_circRNA012259	0	162	0.001	131.5672508	17.0054409	0.007091485	0.247656704
mmu_circRNA012339	0	161.3333333	0.001	131.4088637	17.00370306	0.007168966	0.247656704
mmu_circRNA010591	0	161.3333333	0.001	131.4088637	17.00370306	0.007168966	0.247656704
mmu_circRNA004981	0	160	0.001	130.9919332	16.99911844	0.007364878	0.251699167
mmu_circRNA000881	0	160.3333333	0.001	130.8301955	16.99733603	0.007417665	0.251699167
mmu_circRNA004924	0	162.6666667	0.001	130.6140823	16.99495092	0.0074351	0.251699167
mmu_circRNA010653	0	160	0.001	130.32284	16.99173042	0.007626363	0.252702108
mmu_circRNA005357	0	160	0.001	130.32284	16.99173042	0.007626363	0.252702108
mmu_circRNA002138	0	161.3333333	0.001	130.2774989	16.9912284	0.007605423	0.252702108
mmu_circRNA009327	0	159.3333333	0.001	130.177612	16.99012183	0.007704115	0.254094183
mmu_circRNA006892	0	158.6666667	0.001	129.8121344	16.98606572	0.007872341	0.254222894
mmu_circRNA008999	0	159.6666667	0.001	129.6551099	16.98431954	0.007906386	0.254222894
mmu_circRNA000235	0	160	0.001	129.6522251	16.98428744	0.007897495	0.254222894
mmu_circRNA000597	0	161.3333333	0.001	129.543475	16.98307682	0.007902299	0.254222894
mmu_circRNA004053	0	159.3333333	0.001	128.8548421	16.97538723	0.008252929	0.261614925
mmu_circRNA007727	0	160	0.001	128.4728678	16.97110418	0.008397316	0.262355747
mmu_circRNA009431	0	160	0.001	128.4728678	16.97110418	0.008397316	0.262355747
mmu_circRNA012819	0	158.6666667	0.001	128.3426631	16.9696413	0.008496907	0.26284742
mmu_circRNA012732	0	157.3333333	0.001	128.1507927	16.96748288	0.008625545	0.264999202
mmu_circRNA003646	0	158	0.001	128.0138125	16.96593996	0.008664993	0.265302579
mmu_circRNA000015	0	158.6666667	0.001	127.4022606	16.95903135	0.008921826	0.269487205
mmu_circRNA005856	0	158.6666667	0.001	127.4022606	16.95903135	0.008921826	0.269487205
mmu_circRNA010831	0	154	0.001	127.1072636	16.95568695	0.009221269	0.275746682
mmu_circRNA010642	0	156	0.001	127.064769	16.95520455	0.009170797	0.275154596
mmu_circRNA004885	0	156	0.001	127.064769	16.95520455	0.009170797	0.275154596
mmu_circRNA000503	0	154.6666667	0.001	126.635736	16.95032506	0.00942409	0.278081149
mmu_circRNA010850	0	155.3333333	0.001	126.5217572	16.94902597	0.00945565	0.278081149
mmu_circRNA000627	0	156.3333333	0.001	126.4866405	16.94862549	0.009437118	0.278081149

mmu_circRNA000903	0	157	0.001	126.3385148	16.94693499	0.009485995	0.278081149
mmu_circRNA011768	0	157.3333333	0.001	126.3316533	16.94685664	0.009477606	0.278081149
mmu_circRNA001634	0	156	0.001	126.286239	16.94633792	0.009547318	0.278081149
mmu_circRNA004952	0	154.6666667	0.001	125.9787453	16.94282082	0.00974898	0.279991794
mmu_circRNA000574	0	154.6666667	0.001	125.9787453	16.94282082	0.00974898	0.279991794
mmu_circRNA010399	0	153.3333333	0.001	125.8085269	16.94087018	0.009884887	0.282411843
mmu_circRNA005974	0	156.6666667	0.001	125.7963497	16.94073053	0.009767807	0.279991794
mmu_circRNA002280	0	153	0.001	125.6522155	16.93907658	0.009977461	0.283093852
mmu_circRNA009600	0	154	0.001	125.4357335	16.93658887	0.010051043	0.283093852
mmu_circRNA005816	0	156	0.001	125.2610461	16.93457831	0.010066541	0.283093852
mmu_circRNA008266	0	156	0.001	125.2610461	16.93457831	0.010066541	0.283093852
mmu_circRNA001724	0	156	0.001	125.2610461	16.93457831	0.010066541	0.283093852
mmu_circRNA009349	0	153.3333333	0.001	124.8927217	16.93032988	0.010362101	0.287943236
mmu_circRNA006583	0	153.3333333	0.001	124.8927217	16.93032988	0.010362101	0.287943236
mmu_circRNA005340	0	152.6666667	0.001	124.3497098	16.92404362	0.010682423	0.290622977
mmu_circRNA003814	0	154.6666667	0.001	124.1904389	16.92219458	0.010690623	0.290622977
mmu_circRNA008861	0	152	0.001	123.4289953	16.91332182	0.011228061	0.30067741
mmu_circRNA001216	0	149.3333333	0.001	123.3877553	16.91283971	0.011365539	0.300767704
mmu_circRNA007283	0	150.3333333	0.001	123.1567173	16.91013579	0.01145735	0.300916227
mmu_circRNA006669	0	153.3333333	0.001	123.1198316	16.90970364	0.011351963	0.300767704
mmu_circRNA007658	0	153.3333333	0.001	123.1198316	16.90970364	0.011351963	0.300767704
mmu_circRNA004032	0	153	0.001	123.0168878	16.90849686	0.011426172	0.300916227
mmu_circRNA005537	0	148.3333333	0.001	122.6059243	16.90366917	0.01187466	0.308775582
mmu_circRNA009481	0	152.6666667	0.001	122.584528	16.90341738	0.011697295	0.30504778
mmu_circRNA003672	0	150	0.001	122.1776625	16.89862102	0.012062022	0.309612611
mmu_circRNA003663	0	150.6666667	0.001	121.9058621	16.89540798	0.012201164	0.31007548
mmu_circRNA011537	0	148.3333333	0.001	121.7060749	16.89304166	0.012433895	0.310708824
mmu_circRNA007814	0	149.3333333	0.001	121.6346507	16.89219475	0.012432985	0.310708824
mmu_circRNA004474	0	149.3333333	0.001	121.6346507	16.89219475	0.012432985	0.310708824
mmu_circRNA003043	0	151.3333333	0.001	121.5139208	16.89076207	0.012418736	0.310708824
mmu_circRNA008422	0	151.3333333	0.001	121.5139208	16.89076207	0.012418736	0.310708824
mmu_circRNA010332	0	150	0.001	121.4530901	16.89003967	0.012518327	0.311531114

mmu_circRNA009524	0	148.6666667	0.001	121.0916388	16.88573973	0.012814998	0.313025883
mmu_circRNA003135	0	148.6666667	0.001	121.0916388	16.88573973	0.012814998	0.313025883
mmu_circRNA012688	0	148.6666667	0.001	121.0916388	16.88573973	0.012814998	0.313025883
mmu_circRNA002954	0	150.6666667	0.001	120.9786172	16.88439255	0.012795447	0.313025883
mmu_circRNA001587	0	148	0.001	120.548627	16.87925569	0.013208385	0.316358177
mmu_circRNA006807	0	148	0.001	120.548627	16.87925569	0.013208385	0.316358177
mmu_circRNA005095	0	148	0.001	120.548627	16.87925569	0.013208385	0.316358177
mmu_circRNA012443	0	148.6666667	0.001	120.2283185	16.87541722	0.013393804	0.317872527
mmu_circRNA011999	0	149.3333333	0.001	119.9080099	16.87156851	0.013582419	0.321498375
mmu_circRNA001840	0	148.6666667	0.001	119.7735336	16.86994963	0.013709188	0.322795609
mmu_circRNA008166	0	147.3333333	0.001	119.5448653	16.86719264	0.01393777	0.326464052
mmu_circRNA003666	0	146.6666667	0.001	119.4626033	16.86619954	0.014030631	0.326931916
mmu_circRNA008530	0	146.6666667	0.001	119.4626033	16.86619954	0.014030631	0.326931916
mmu_circRNA009586	0	145.3333333	0.001	119.1347595	16.86223488	0.014337478	0.330646566
mmu_circRNA010921	0	146.6666667	0.001	119.1088605	16.86192121	0.014286347	0.330646566
mmu_circRNA003061	0	145	0.001	118.9711069	16.86025172	0.014475388	0.332119453
mmu_circRNA009818	0	140.3333333	0.001	118.4947952	16.85446417	0.01509323	0.343658293
mmu_circRNA011046	0	146.6666667	0.001	117.7667955	16.8455733	0.01529985	0.345730367
mmu_circRNA007756	0	146.6666667	0.001	117.7667955	16.8455733	0.01529985	0.345730367
mmu_circRNA000612	0	145.3333333	0.001	117.6211744	16.84378827	0.015487731	0.346484871
mmu_circRNA002603	0	145.3333333	0.001	117.4770261	16.84201912	0.015602004	0.347238803
mmu_circRNA005042	0	144	0.001	117.290556	16.83972733	0.015826921	0.348047047
mmu_circRNA003144	0	144	0.001	117.290556	16.83972733	0.015826921	0.348047047
mmu_circRNA004209	0	145	0.001	117.142271	16.83790224	0.015889584	0.348047047
mmu_circRNA000255	0	138.6666667	0.001	117.0874936	16.83722746	0.016311331	0.350908754
mmu_circRNA002780	0	138.6666667	0.001	117.0874936	16.83722746	0.016311331	0.350908754
mmu_circRNA009468	0	144	0.001	116.8511876	16.83431287	0.016184997	0.350908754
mmu_circRNA002982	0	143.3333333	0.001	116.7475442	16.83303268	0.016309785	0.350908754
mmu_circRNA008116	0	145.3333333	0.001	116.6961882	16.83239791	0.01623591	0.350908754
mmu_circRNA005932	0	143.6666667	0.001	116.4498821	16.82934965	0.016538884	0.352423591
mmu_circRNA006894	0	142.3333333	0.001	116.3171244	16.82770398	0.016731173	0.353998482
mmu_circRNA001294	0	142.6666667	0.001	116.2045323	16.82630681	0.016806941	0.354764871

mmu_circRNA008223	0	143.3333333	0.001	116.0460964	16.82433847	0.016902459	0.355215281
mmu_circRNA004093	0	143.3333333	0.001	115.9998471	16.82376338	0.016942288	0.355215281
mmu_circRNA004095	0	143.3333333	0.001	115.9690142	16.82337986	0.016968894	0.355215281
mmu_circRNA012436	0	137.3333333	0.001	115.9616523	16.82328827	0.017354058	0.359545613
mmu_circRNA009266	0	142.6666667	0.001	115.8422461	16.82180196	0.017119421	0.35715889
mmu_circRNA008490	0	141.3333333	0.001	115.1185087	16.81276028	0.017845454	0.368026587
mmu_circRNA003947	0	143.3333333	0.001	115.0902774	16.81240644	0.017744677	0.366791464
mmu_circRNA010623	0	140.6666667	0.001	115.0741503	16.81220426	0.017928466	0.368046373
mmu_circRNA009578	0	141.6666667	0.001	114.7585671	16.80824233	0.018151307	0.370083313
mmu_circRNA001838	0	139	0.001	114.6348683	16.80668641	0.018440481	0.373430155
mmu_circRNA012868	0	137.3333333	0.001	114.2096771	16.80132537	0.01895171	0.377048419
mmu_circRNA010411	0	141.3333333	0.001	114.1935226	16.80112129	0.018695822	0.376671674
mmu_circRNA006893	0	139.6666667	0.001	114.145077	16.80050911	0.018852478	0.376671674
mmu_circRNA011605	0	140	0.001	114.1268249	16.8002784	0.018847176	0.376671674
mmu_circRNA000608	0	139	0.001	114.0350019	16.79911719	0.019001659	0.377132492
mmu_circRNA010412	0	142	0.001	114.0196702	16.79892321	0.01881503	0.376671674
mmu_circRNA011056	0	142	0.001	114.0196702	16.79892321	0.01881503	0.376671674
mmu_circRNA009579	0	140	0.001	114.0120368	16.79882662	0.018955394	0.377048419
mmu_circRNA009264	0	140	0.001	113.7010316	16.79488582	0.019250977	0.379561569
mmu_circRNA007508	0	140.6666667	0.001	113.5734286	16.79326582	0.019327834	0.380203044
mmu_circRNA003842	0	141.3333333	0.001	113.4843665	16.79213404	0.019368275	0.380203044
mmu_circRNA005973	0	138.6666667	0.001	112.8068545	16.78349521	0.020214948	0.394235432
mmu_circRNA007707	0	136	0.001	112.645842	16.78143454	0.020570325	0.396000834
mmu_circRNA009249	0	140	0.001	112.4137593	16.77845911	0.020512373	0.396000834
mmu_circRNA012510	0	138	0.001	112.4034495	16.77832678	0.020666735	0.396030901
mmu_circRNA000086	0	137.6666667	0.001	111.5559263	16.76740763	0.021561037	0.404043003
mmu_circRNA012565	0	137.6666667	0.001	111.5354528	16.76714283	0.021582405	0.404043003
mmu_circRNA004804	0	138.6666667	0.001	111.3431521	16.76465331	0.021708698	0.404043003
mmu_circRNA011948	0	138.6666667	0.001	111.3431521	16.76465331	0.021708698	0.404043003
mmu_circRNA001841	0	136.6666667	0.001	111.3174258	16.76431993	0.02188736	0.405684938
mmu_circRNA005698	0	137.3333333	0.001	111.0279502	16.76056338	0.022143055	0.409578042
mmu_circRNA011040	0	138	0.001	110.8078485	16.75770054	0.022327264	0.412135574

mmu_circRNA000168	0	136	0.001	110.774414	16.75726517	0.02251875	0.414816654
mmu_circRNA006135	0	136.6666667	0.001	110.5543123	16.75439577	0.022704596	0.416529514
mmu_circRNA011124	0	137.3333333	0.001	110.2725449	16.75071411	0.022959892	0.418147737
mmu_circRNA010397	0	136	0.001	109.8725525	16.7454715	0.023509264	0.426063849
mmu_circRNA000426	0	135.3333333	0.001	109.8614077	16.74532516	0.023576012	0.426112343
mmu_circRNA009187	0	136.6666667	0.001	109.7372412	16.74369369	0.023606937	0.426112343
mmu_circRNA000364	0	133	0.001	109.6547965	16.74260939	0.024003639	0.427691382
mmu_circRNA012309	0	134	0.001	109.5586769	16.74134422	0.024028141	0.427691382
mmu_circRNA005289	0	134.6666667	0.001	109.5354535	16.74103838	0.02399868	0.427691382
mmu_circRNA009296	0	133.3333333	0.001	109.4982631	16.74054846	0.024153338	0.428573048
mmu_circRNA000417	0	136	0.001	109.2019376	16.73663893	0.024268767	0.428573048
mmu_circRNA012558	0	136	0.001	109.2019376	16.73663893	0.024268767	0.428573048
mmu_circRNA012559	0	136	0.001	109.2019376	16.73663893	0.024268767	0.428573048
mmu_circRNA003826	0	134.6666667	0.001	108.9484015	16.7332855	0.024673173	0.431828883
mmu_circRNA001982	0	135.3333333	0.001	108.666634	16.7295495	0.024945758	0.434540577
mmu_circRNA008172	0	133.3333333	0.001	108.6023667	16.72869602	0.025193414	0.434634837
mmu_circRNA011835	0	133.3333333	0.001	108.6023667	16.72869602	0.025193414	0.434634837
mmu_circRNA001991	0	133.3333333	0.001	108.6023667	16.72869602	0.025193414	0.434634837
mmu_circRNA009807	0	133.3333333	0.001	108.6023667	16.72869602	0.025193414	0.434634837
mmu_circRNA005101	0	133.3333333	0.001	108.6023667	16.72869602	0.025193414	0.434634837
mmu_circRNA000108	0	134.6666667	0.001	108.1313304	16.72242507	0.025638299	0.438781102
mmu_circRNA000875	0	134.6666667	0.001	108.1313304	16.72242507	0.025638299	0.438781102
mmu_circRNA005171	0	130.3333333	0.001	108.0237243	16.72098867	0.02615711	0.443583044
mmu_circRNA011630	0	131	0.001	108.0058522	16.72074996	0.02611731	0.443583044
mmu_circRNA000468	0	131	0.001	108.0058522	16.72074996	0.02611731	0.443583044
mmu_circRNA012811	0	134	0.001	107.5960268	16.71526528	0.026346785	0.444280091
mmu_circRNA009196	0	134	0.001	107.5960268	16.71526528	0.026346785	0.444280091
mmu_circRNA006164	0	134	0.001	107.5960268	16.71526528	0.026346785	0.444280091
mmu_circRNA010275	0	130.3333333	0.001	107.4429316	16.71321105	0.026871796	0.448914113
mmu_circRNA002647	0	129.3333333	0.001	107.1846947	16.70973939	0.027290508	0.453807361
mmu_circRNA010599	0	133.3333333	0.001	107.0607232	16.70806978	0.027071625	0.451411804
mmu_circRNA012764	0	129.3333333	0.001	107.0459958	16.70787131	0.027465781	0.454604282

mmu_circRNA010167	0	131.3333333	0.001	106.9733312	16.70689165	0.027367047	0.453807361
mmu_circRNA004512	0	131.3333333	0.001	106.9733312	16.70689165	0.027367047	0.453807361
mmu_circRNA000561	0	132	0.001	106.7686459	16.70412852	0.02756448	0.455397693
mmu_circRNA004699	0	131	0.001	106.7624723	16.70404509	0.027666751	0.456247103
mmu_circRNA007967	0	132	0.001	106.6144815	16.70204389	0.027761663	0.45697226
mmu_circRNA007253	0	129	0.001	106.3967255	16.69909423	0.028332664	0.463818117
mmu_circRNA010793	0	129	0.001	106.3569079	16.69855421	0.028384584	0.463821687
mmu_circRNA010965	0	132	0.001	105.9901159	16.69357021	0.028573434	0.465212849
mmu_circRNA006607	0	128	0.001	105.5324358	16.68732696	0.029581448	0.474483096
mmu_circRNA012384	0	128	0.001	105.5324358	16.68732696	0.029581448	0.474483096
mmu_circRNA000869	0	126.6666667	0.001	105.5129206	16.68706015	0.029746377	0.474664127
mmu_circRNA001278	0	131.3333333	0.001	105.4548123	16.68626541	0.029351726	0.472736692
mmu_circRNA005602	0	129	0.001	105.1698424	16.68236154	0.029973149	0.476753756
mmu_circRNA003068	0	130	0.001	104.8600281	16.67810531	0.03029875	0.479382871
mmu_circRNA011118	0	128.6666667	0.001	104.8012838	16.67729686	0.030517394	0.480964065
mmu_circRNA011119	0	128.6666667	0.001	104.8012838	16.67729686	0.030517394	0.480964065
mmu_circRNA002396	0	128.3333333	0.001	104.7959447	16.67722336	0.030559527	0.480964065
mmu_circRNA001825	0	127	0.001	104.5575308	16.67393745	0.031035469	0.484207289
mmu_circRNA000548	0	126.3333333	0.001	104.5233103	16.6734652	0.031155717	0.485239476
mmu_circRNA005508	0	125.6666667	0.001	104.4841072	16.67292399	0.03128398	0.486392697
mmu_circRNA012411	0	130	0.001	104.3842051	16.6715439	0.030965888	0.483963388
mmu_circRNA003594	0	128	0.001	104.258272	16.66980233	0.031354308	0.486642734
mmu_circRNA004661	0	128.6666667	0.001	104.0150456	16.6664327	0.031632915	0.490118967
mmu_circRNA004238	0	126	0.001	103.8834915	16.66460688	0.03211257	0.493975215
mmu_circRNA000772	0	129.3333333	0.001	103.8489015	16.66412643	0.031802936	0.491903693
mmu_circRNA005819	0	127.3333333	0.001	103.7152602	16.66226866	0.032212184	0.493975215
mmu_circRNA003072	0	126.6666667	0.001	103.1722483	16.65469544	0.033091671	0.504015931
mmu_circRNA000560	0	124	0.001	102.8517202	16.6502064	0.033883051	0.507992089
mmu_circRNA003774	0	128	0.001	102.7782942	16.64917609	0.033540056	0.506396916
mmu_circRNA003722	0	124.6666667	0.001	102.777559	16.64916577	0.03391899	0.507992089
mmu_circRNA004685	0	127.3333333	0.001	102.2429906	16.64164242	0.034441424	0.510102257
mmu_circRNA010631	0	124.6666667	0.001	102.2404878	16.6416071	0.034753328	0.510102257

mmu_circRNA004239	0	126.6666667	0.001	102.1713095	16.64063061	0.034629685	0.510102257
mmu_circRNA000623	0	121	0.001	102.1700966	16.64061348	0.035309402	0.512543524
mmu_circRNA011023	0	125.3333333	0.001	102.0862247	16.63942868	0.034918191	0.510102257
mmu_circRNA012459	0	125.3333333	0.001	102.0862247	16.63942868	0.034918191	0.510102257
mmu_circRNA010219	0	125.3333333	0.001	102.0862247	16.63942868	0.034918191	0.510102257
mmu_circRNA012489	0	126.6666667	0.001	101.707687	16.6340692	0.03536556	0.512543524
mmu_circRNA008153	0	124.6666667	0.001	101.5432128	16.63173429	0.03586663	0.513173113
mmu_circRNA007146	0	124.6666667	0.001	101.5432128	16.63173429	0.03586663	0.513173113
mmu_circRNA001070	0	122	0.001	101.4615904	16.63057415	0.036326404	0.513976876
mmu_circRNA000698	0	120	0.001	101.3257156	16.62864084	0.036804598	0.513976876
mmu_circRNA000459	0	124	0.001	101.000201	16.62399864	0.036839497	0.513976876
mmu_circRNA003387	0	124	0.001	101.000201	16.62399864	0.036839497	0.513976876
mmu_circRNA007697	0	124	0.001	101.000201	16.62399864	0.036839497	0.513976876
mmu_circRNA003031	0	124	0.001	101.000201	16.62399864	0.036839497	0.513976876
mmu_circRNA012370	0	124	0.001	101.000201	16.62399864	0.036839497	0.513976876
mmu_circRNA005892	0	124	0.001	101.000201	16.62399864	0.036839497	0.513976876
mmu_circRNA008506	0	124	0.001	101.000201	16.62399864	0.036839497	0.513976876
mmu_circRNA006596	0	124.6666667	0.001	100.8704134	16.62214355	0.036974301	0.515056609
mmu_circRNA010229	0	125.3333333	0.001	100.7835359	16.62090045	0.037038682	0.51515351
mmu_circRNA003772	0	122	0.001	100.6652381	16.61920605	0.037652656	0.516019769
mmu_circRNA003872	0	125.3333333	0.001	100.6370798	16.61880244	0.037284953	0.516019769
mmu_circRNA009712	0	119	0.001	100.4813346	16.61656801	0.038359932	0.519045179
mmu_circRNA000692	0	119	0.001	100.4813346	16.61656801	0.038359932	0.519045179
mmu_circRNA012714	0	123.3333333	0.001	100.4571892	16.61622129	0.03783755	0.516019769
mmu_circRNA009324	0	124	0.001	100.3681272	16.61494168	0.037906257	0.516019769
mmu_circRNA004127	0	122.6666667	0.001	99.91417734	16.60840178	0.038861567	0.522493688
mmu_circRNA001414	0	121	0.001	99.76113069	16.6061902	0.039349021	0.522493688
mmu_circRNA004660	0	123.3333333	0.001	99.70178385	16.6053317	0.039149572	0.522493688
mmu_circRNA002437	0	122.6666667	0.001	99.68599954	16.60510328	0.039263425	0.522493688
mmu_circRNA004744	0	123	0.001	99.51385348	16.60260976	0.039526118	0.522992342
mmu_circRNA002169	0	119.6666667	0.001	99.19381643	16.59796257	0.040547477	0.528751545
mmu_circRNA008262	0	123	0.001	99.05221936	16.59590168	0.040358139	0.528751545

mmu_circRNA004913	0	121	0.001	98.82843636	16.59263859	0.041035359	0.530444106
mmu_circRNA000100	0	121.3333333	0.001	98.82815367	16.59263447	0.040990726	0.530444106
mmu_circRNA009708	0	122	0.001	98.70479776	16.59083259	0.041129197	0.530892123
mmu_circRNA005318	0	116.6666667	0.001	98.51111239	16.58799885	0.042239518	0.535660443
mmu_circRNA002992	0	122.6666667	0.001	98.4958653	16.58777554	0.041429071	0.532464461
mmu_circRNA001722	0	122.6666667	0.001	98.4958653	16.58777554	0.041429071	0.532464461
mmu_circRNA012824	0	116	0.001	97.94819175	16.57973124	0.043416533	0.535660443
mmu_circRNA010860	0	120	0.001	97.74213	16.57669292	0.043233654	0.535660443
mmu_circRNA007209	0	120	0.001	97.74213	16.57669292	0.043233654	0.535660443
mmu_circRNA008959	0	118.6666667	0.001	97.68294436	16.57581907	0.04354011	0.535660443
mmu_circRNA010598	0	119	0.001	97.4751045	16.57274618	0.04390019	0.537283221
mmu_circRNA005971	0	121.3333333	0.001	97.42525807	16.57200823	0.043666463	0.535660443
mmu_circRNA006750	0	121.3333333	0.001	97.42525807	16.57200823	0.043666463	0.535660443
mmu_circRNA008684	0	120	0.001	97.34901091	16.5708787	0.044005668	0.537441668
mmu_circRNA010792	0	118	0.001	97.28771423	16.56997001	0.044418297	0.537441668
mmu_circRNA009623	0	119.3333333	0.001	97.19911817	16.5686556	0.044399966	0.537441668
mmu_circRNA009703	0	119.3333333	0.001	97.19911817	16.5686556	0.044399966	0.537441668
mmu_circRNA008840	0	118	0.001	96.94467403	16.56487402	0.045108036	0.541157736
mmu_circRNA002771	0	118	0.001	96.90824465	16.56433179	0.045181936	0.541157736
mmu_circRNA006771	0	120.6666667	0.001	96.88995446	16.56405947	0.044829427	0.539818514
mmu_circRNA011036	0	120.6666667	0.001	96.88995446	16.56405947	0.044829427	0.539818514
mmu_circRNA009372	0	118.6666667	0.001	96.3526876	16.55603729	0.046224485	0.547105753
mmu_circRNA011535	0	116.6666667	0.001	96.2813258	16.55496839	0.046677681	0.551706814
mmu_circRNA011754	0	117.6666667	0.001	96.07625976	16.55189237	0.046955389	0.552050134
mmu_circRNA008437	0	118.6666667	0.001	96.03944893	16.55133951	0.046881355	0.552050134
mmu_circRNA012023	0	118.6666667	0.001	95.90840923	16.5493697	0.047159044	0.552050134
mmu_circRNA009399	0	118.6666667	0.001	95.8929928	16.54913778	0.047191827	0.552050134
mmu_circRNA010136	0	117.3333333	0.001	95.80898838	16.54787339	0.047575012	0.552050134
mmu_circRNA006470	0	116.6666667	0.001	95.72387915	16.54659124	0.047861463	0.552050134
mmu_circRNA008303	0	115	0.001	95.70427814	16.5462958	0.048168436	0.552050134
mmu_circRNA000330	0	116	0.001	95.63876992	16.54530795	0.04815018	0.552050134
mmu_circRNA007965	0	116	0.001	95.63876992	16.54530795	0.04815018	0.552050134

mmu_circRNA008822	0	117	0.001	95.57036536	16.54427571	0.048140688	0.552050134
mmu_circRNA001761	0	117.3333333	0.001	95.57008267	16.54427145	0.048089298	0.552050134
mmu_circRNA011506	0	117.3333333	0.001	95.57008267	16.54427145	0.048089298	0.552050134
mmu_circRNA000411	0	118	0.001	95.46857488	16.5427383	0.048206147	0.552050134
mmu_circRNA009274	0	118	0.001	95.41935492	16.54199431	0.04831322	0.552124707
mmu_circRNA009235	0	118.6666667	0.001	95.28404361	16.53994702	0.048506077	0.553623427
mmu_circRNA009794	0	115.3333333	0.001	95.25502856	16.53950763	0.049095018	0.556720942
mmu_circRNA003349	0	117.6666667	0.001	94.99200318	16.53551845	0.049305632	0.556720942
mmu_circRNA002122	0	118	0.001	94.74873999	16.53181914	0.049797297	0.558414435
mmu_circRNA009629	12.33333333	616.3333333	13.9559877	502.2521561	5.169455716	4.59E-07	0.000411553
mmu_circRNA008292	6	234	6.789399424	189.7415414	4.8046078	0.014433025	0.331996593
mmu_circRNA005302	7.333333333	275.3333333	8.594917956	224.6220496	4.707871875	0.005503207	0.220398508
mmu_circRNA009833	13.66666667	454.3333333	15.46474313	371.6629663	4.586940165	0.000116098	0.018598486
mmu_circRNA009174	7.666666667	243.3333333	8.569723003	196.9323732	4.522307908	0.015906732	0.348047047
mmu_circRNA009167	7.666666667	224	8.569723003	182.991208	4.416381951	0.025601698	0.438781102
mmu_circRNA005005	18	533	20.36819827	433.394843	4.411291714	3.47E-05	0.008203707
mmu_circRNA003158	9	266.6666667	10.5483084	216.6167733	4.360061398	0.010367369	0.287943236
mmu_circRNA008881	17.33333333	430.3333333	20.31526062	350.3732677	4.108256928	0.000515099	0.0486416
mmu_circRNA000857	12.33333333	275.6666667	13.78607614	225.705386	4.033157053	0.013228554	0.316358177
mmu_circRNA008871	16.33333333	328	19.14322636	266.368956	3.798520049	0.006444803	0.238910452
mmu_circRNA000885	13.33333333	247.6666667	15.08755427	200.0622396	3.729018028	0.032008917	0.493388311
mmu_circRNA012271	270.6666667	4798	306.7129833	3920.362149	3.676025789	1.92E-21	1.73E-17
mmu_circRNA012300	22.33333333	354.3333333	25.39793018	288.7690175	3.507133127	0.006859648	0.246164379
mmu_circRNA002276	18.33333333	280	21.12308563	230.3607929	3.447002691	0.02306236	0.418810596
mmu_circRNA001558	31.33333333	437.6666667	35.27665657	355.4156428	3.332721442	0.002802515	0.159122561
mmu_circRNA008072	22.33333333	304.3333333	26.17543196	252.2930343	3.268815124	0.01885002	0.376671674
mmu_circRNA002719	22.66666667	303	26.56611005	244.7046617	3.203382684	0.02260567	0.415564483
mmu_circRNA012270	464	5532	524.9446222	4521.152384	3.106453402	5.54E-18	1.66E-14
mmu_circRNA008084	42	509	48.78029455	412.6153357	3.080427069	0.001665419	0.112706027
mmu_circRNA007337	32.33333333	364.6666667	37.38318381	302.3505151	3.015760687	0.012050351	0.309612611
mmu_circRNA010147	32	358	35.76927862	288.7560419	3.013058206	0.015676388	0.347241664
mmu_circRNA011542	40.33333333	426	45.68088234	349.1136999	2.93403455	0.007086171	0.247656704

mmu_circRNA005377	28.66666667	297.3333333	32.24077689	242.4573125	2.910772352	0.037967826	0.516074801
mmu_circRNA001428	29.66666667	303.3333333	33.16110206	247.5138036	2.899945127	0.036121908	0.513976876
mmu_circRNA008855	26.66666667	281.3333333	31.25424711	230.7768391	2.884374287	0.043152025	0.535660443
mmu_circRNA011926	27.33333333	282.3333333	32.03560329	232.5813353	2.85998726	0.043501354	0.535660443
mmu_circRNA006174	28	280.3333333	32.81695947	227.5856737	2.793896262	0.049460104	0.556720942
mmu_circRNA007247	35.33333333	336.6666667	39.49524514	273.4964034	2.791770979	0.028064723	0.461114708
mmu_circRNA003688	52.33333333	466	59.00395464	382.6316219	2.697072551	0.007470019	0.251930604
mmu_circRNA002769	76.33333333	652.3333333	86.12367697	534.1395941	2.63273501	0.001314181	0.095849756
mmu_circRNA004270	40	335.6666667	45.26266282	274.3925832	2.599848119	0.03586151	0.513173113
mmu_circRNA008629	39.66666667	328.6666667	45.36964351	264.2340985	2.542017425	0.041907891	0.534488847
mmu_circRNA001142	59	458.3333333	67.86854469	376.3050791	2.471087779	0.012177414	0.31007548
mmu_circRNA001139	61	473.3333333	70.17214553	388.6259121	2.469411719	0.010579669	0.290140531
mmu_circRNA009732	49.33333333	351.6666667	55.14430454	285.9981588	2.374722066	0.044512224	0.537441668
mmu_circRNA008997	52.33333333	356	60.39622526	293.1591541	2.279153817	0.044483065	0.537441668
mmu_circRNA002577	56.33333333	372	64.36110486	302.7111771	2.233680948	0.043337753	0.535660443
mmu_circRNA002631	57.33333333	367.3333333	64.0866242	298.5134888	2.219700941	0.049300255	0.556720942
mmu_circRNA002725	59	378	67.05459266	309.5388894	2.206712623	0.043416056	0.535660443
mmu_circRNA003902	59.66666667	377.3333333	66.69480076	305.6643063	2.196301888	0.047247174	0.552050134
mmu_circRNA009646	108	642.6666667	121.410146	526.2528266	2.115867087	0.007279536	0.250209646
mmu_circRNA008750	65.66666667	395.3333333	75.92491265	317.4350442	2.063816159	0.046115574	0.547105753
mmu_circRNA006170	2056.333333	8565	1600.044056	6664.47269	2.058379101	0.019611896	0.788928936
mmu_circRNA006392	476.3333333	157.3333333	536.8562462	128.5886394	-2.061772642	0.006571226	0.242594515
mmu_circRNA012841	293.3333333	97	336.7268765	78.47840477	-2.101211256	0.040986821	0.530444106
mmu_circRNA008424	704.3333333	194.3333333	800.9531496	161.4501978	-2.310628649	0.000271525	0.03291691
mmu_circRNA002922	249.3333333	66	282.1538741	54.63415909	-2.368606999	0.041795719	0.534488847
mmu_circRNA010648	272.3333333	66.66666667	313.6450558	54.30118334	-2.530077278	0.024649642	0.431828883
mmu_circRNA009561	218.3333333	44.33333333	245.4789829	37.18755975	-2.722707525	0.039903257	0.526429591
mmu_circRNA009014	270	56	304.0259154	45.612994	-2.736677529	0.018056543	0.369829333
mmu_circRNA012655	263	56	301.4843028	44.96550373	-2.745192352	0.020559494	0.396000834
mmu_circRNA001296	265	50.66666667	300.5329753	42.04968814	-2.83735629	0.015637552	0.347238803
mmu_circRNA006791	474.6666667	88	545.9893865	71.677562	-2.929279434	0.000418183	0.042151883
mmu_circRNA002938	197.6666667	34	222.1024582	27.6936035	-3.003600665	0.043141525	0.535660443

mmu_circRNA008175	233.3333333	40.33333333	268.6618507	33.39322744	-3.008164036	0.020911837	0.396584871
mmu_circRNA004140	265.3333333	46.66666667	306.8029469	37.4712531	-3.033456211	0.012078399	0.309612611
mmu_circRNA003174	352.6666667	53.33333333	404.790969	42.82428926	-3.240675896	0.001544062	0.106552124
mmu_circRNA007086	195.6666667	26.33333333	223.4228803	22.23536537	-3.328848921	0.028196556	0.462433831
mmu_circRNA007191	190	26	217.8312257	20.87684102	-3.383235445	0.032771212	0.500158809
mmu_circRNA005474	293.3333333	37.33333333	331.7820701	31.52355596	-3.395733733	0.003133233	0.171391678
mmu_circRNA000996	204.3333333	25.33333333	232.1302893	21.3909844	-3.439860002	0.020776957	0.396574638
mmu_circRNA002218	228.3333333	22.66666667	255.6879273	18.61514304	-3.779835436	0.008344356	0.262355747
mmu_circRNA005995	210	20.66666667	235.1445972	17.11209016	-3.78046029	0.012739631	0.313025883
mmu_circRNA010645	193.6666667	18.33333333	220.1523537	15.48031766	-3.829995287	0.01671496	0.353998482
mmu_circRNA007299	259.6666667	23	291.3227758	18.60828154	-3.968601761	0.002831122	0.159341504
mmu_circRNA008105	273.3333333	23.66666667	308.2111024	19.43639935	-3.987085946	0.001797882	0.119414404
mmu_circRNA002527	190.6666667	16.33333333	220.3248758	13.79155573	-3.99777528	0.014335204	0.330646566
mmu_circRNA007652	275.6666667	17.33333333	316.1549975	14.6359367	-4.433045038	0.000623226	0.05643692
mmu_circRNA006937	239.3333333	9.666666667	273.2272629	7.938811003	-5.105034684	0.000733726	0.062096763
mmu_circRNA005533	81.33333333	0	90.91358316	0.001	-16.47220824	0.049681888	0.557817545
mmu_circRNA002533	81.33333333	0	90.91358316	0.001	-16.47220824	0.049681888	0.557817545
mmu_circRNA000791	81	0	91.09664326	0.001	-16.47511027	0.049434049	0.556720942
mmu_circRNA010419	81	0	91.11501208	0.001	-16.47540115	0.049394689	0.556720942
mmu_circRNA005559	80.66666667	0	91.27970336	0.001	-16.47800648	0.049188095	0.556720942
mmu_circRNA011802	80.66666667	0	91.27970336	0.001	-16.47800648	0.049188095	0.556720942
mmu_circRNA005921	80.66666667	0	91.27970336	0.001	-16.47800648	0.049188095	0.556720942
mmu_circRNA002569	79.66666667	0	91.61846309	0.001	-16.48335074	0.048906071	0.556720942
mmu_circRNA002112	81	0	91.65689222	0.001	-16.48395575	0.048245157	0.552050134
mmu_circRNA005312	81.66666667	0	91.65814839	0.001	-16.48397552	0.047958017	0.552050134
mmu_circRNA011139	78.33333333	0	91.8093509	0.001	-16.48635348	0.049093906	0.556720942
mmu_circRNA002459	81.33333333	0	92.03408108	0.001	-16.48988058	0.047317058	0.552050134
mmu_circRNA003017	78.66666667	0	92.20002898	0.001	-16.49247958	0.048122628	0.552050134
mmu_circRNA005893	78.66666667	0	92.20002898	0.001	-16.49247958	0.048122628	0.552050134
mmu_circRNA006709	80.33333333	0	92.22445925	0.001	-16.4928618	0.047348206	0.552050134
mmu_circRNA006453	80.66666667	0	92.30199938	0.001	-16.49407428	0.047046511	0.552050134
mmu_circRNA004677	82.66666667	0	92.40396977	0.001	-16.49566721	0.046007342	0.547105753

mmu_circRNA010462	82	0	92.51292652	0.001	-16.49736734	0.046059683	0.547105753
mmu_circRNA008182	79	0	92.59070707	0.001	-16.49857978	0.04716718	0.552050134
mmu_circRNA009480	79	0	92.59070707	0.001	-16.49857978	0.04716718	0.552050134
mmu_circRNA008526	83	0	92.77656642	0.001	-16.50147283	0.045124494	0.541157736
mmu_circRNA003117	81	0	92.7776362	0.001	-16.50148947	0.045938084	0.547105753
mmu_circRNA002020	82	0	92.78845879	0.001	-16.50165775	0.045504852	0.543573934
mmu_circRNA001236	82	0	92.78845879	0.001	-16.50165775	0.045504852	0.543573934
mmu_circRNA006216	79.33333333	0	92.98138516	0.001	-16.5046543	0.046227417	0.547105753
mmu_circRNA001632	82.66666667	0	93.15707952	0.001	-16.50737779	0.044504183	0.537441668
mmu_circRNA001877	81	0	93.30257853	0.001	-16.50962933	0.044889728	0.539820043
mmu_circRNA003530	83	0	93.49754254	0.001	-16.51264083	0.043707886	0.535660443
mmu_circRNA004299	83.66666667	0	93.52175973	0.001	-16.51301446	0.04340153	0.535660443
mmu_circRNA007369	83	0	93.552649	0.001	-16.51349088	0.043601429	0.535660443
mmu_circRNA005925	81.33333333	0	93.59883199	0.001	-16.51420291	0.044173546	0.537441668
mmu_circRNA000686	80	0	93.76274134	0.001	-16.51672713	0.044396949	0.537441668
mmu_circRNA003424	82	0	93.8466303	0.001	-16.51801732	0.043429564	0.535660443
mmu_circRNA010680	84	0	93.89435638	0.001	-16.51875083	0.042563792	0.535660443
mmu_circRNA002797	84	0	93.89435638	0.001	-16.51875083	0.042563792	0.535660443
mmu_circRNA010682	84	0	93.89435638	0.001	-16.51875083	0.042563792	0.535660443
mmu_circRNA009867	84	0	93.89435638	0.001	-16.51875083	0.042563792	0.535660443
mmu_circRNA007884	83	0	93.92002536	0.001	-16.51914518	0.04289888	0.535660443
mmu_circRNA008911	83	0	93.92002536	0.001	-16.51914518	0.04289888	0.535660443
mmu_circRNA010579	82.33333333	0	94.21922695	0.001	-16.52373387	0.042592953	0.535660443
mmu_circRNA000254	81.33333333	0	94.21933667	0.001	-16.52373555	0.042984403	0.535660443
mmu_circRNA004840	84.33333333	0	94.26695303	0.001	-16.52446448	0.041742293	0.534488847
mmu_circRNA007680	83.66666667	0	94.28406569	0.001	-16.52472635	0.041961239	0.534488847
mmu_circRNA011290	83.33333333	0	94.29721422	0.001	-16.52492753	0.042063218	0.534488847
mmu_circRNA005084	83.33333333	0	94.29721422	0.001	-16.52492753	0.042063218	0.534488847
mmu_circRNA006086	82.33333333	0	94.51628924	0.001	-16.52827537	0.042039503	0.534488847
mmu_circRNA012574	80.66666667	0	94.54409752	0.001	-16.52869977	0.042638481	0.535660443
mmu_circRNA000637	84.66666667	0	94.63954969	0.001	-16.53015559	0.040936703	0.530444106
mmu_circRNA003427	82.33333333	0	94.89226935	0.001	-16.53400294	0.041350167	0.532464461

mmu_circRNA007972	81	0	94.93477561	0.001	-16.53464904	0.041785618	0.534488847
mmu_circRNA006407	84	0	95.05159193	0.001	-16.53642317	0.04044055	0.528751545
mmu_circRNA005906	84	0	95.05159193	0.001	-16.53642317	0.04044055	0.528751545
mmu_circRNA004633	84	0	95.05159193	0.001	-16.53642317	0.04044055	0.528751545
mmu_circRNA004074	84	0	95.05159193	0.001	-16.53642317	0.04044055	0.528751545
mmu_circRNA006731	81.33333333	0	95.3254537	0.001	-16.54057387	0.040949833	0.530444106
mmu_circRNA003193	81.33333333	0	95.3254537	0.001	-16.54057387	0.040949833	0.530444106
mmu_circRNA003981	85.33333333	0	95.38474299	0.001	-16.5414709	0.039371947	0.522493688
mmu_circRNA009866	85.33333333	0	95.38474299	0.001	-16.5414709	0.039371947	0.522493688
mmu_circRNA006295	81.66666667	0	95.71613178	0.001	-16.54647447	0.040130761	0.528653538
mmu_circRNA003100	84.66666667	0	95.80596965	0.001	-16.54782793	0.038880524	0.522493688
mmu_circRNA006088	83	0	95.81424778	0.001	-16.54795258	0.039465941	0.522967446
mmu_circRNA009560	83.33333333	0	95.98336822	0.001	-16.55049682	0.039053431	0.522493688
mmu_circRNA009559	83.33333333	0	96.01034669	0.001	-16.55090227	0.039007203	0.522493688
mmu_circRNA012169	82	0	96.10680987	0.001	-16.55235104	0.03932804	0.522493688
mmu_circRNA001943	82	0	96.10680987	0.001	-16.55235104	0.03932804	0.522493688
mmu_circRNA006158	82	0	96.10680987	0.001	-16.55235104	0.03932804	0.522493688
mmu_circRNA011383	86	0	96.1299363	0.001	-16.55269816	0.037866967	0.516019769
mmu_circRNA001668	86	0	96.1299363	0.001	-16.55269816	0.037866967	0.516019769
mmu_circRNA009529	86	0	96.1299363	0.001	-16.55269816	0.037866967	0.516019769
mmu_circRNA009742	85	0	96.1831585	0.001	-16.55349668	0.038123184	0.51740255
mmu_circRNA003789	85.33333333	0	96.39502799	0.001	-16.55667111	0.037653927	0.516019769
mmu_circRNA005571	82.33333333	0	96.49748796	0.001	-16.55820377	0.038541313	0.520714031
mmu_circRNA001817	85.33333333	0	96.56034736	0.001	-16.55914325	0.037380535	0.516019769
mmu_circRNA004244	85.33333333	0	96.56034736	0.001	-16.55914325	0.037380535	0.516019769
mmu_circRNA000790	84.33333333	0	96.57536551	0.001	-16.55936761	0.037700947	0.516019769
mmu_circRNA003938	84	0	96.58936438	0.001	-16.55957672	0.037794152	0.516019769
mmu_circRNA006850	86.66666667	0	96.8751296	0.001	-16.56383871	0.036419291	0.513976876
mmu_circRNA000690	82.66666667	0	96.88816605	0.001	-16.56403284	0.037770231	0.516019769
mmu_circRNA000091	82.66666667	0	96.88816605	0.001	-16.56403284	0.037770231	0.516019769
mmu_circRNA003881	87	0	97.24772625	0.001	-16.5693769	0.035716192	0.513173113
mmu_circRNA003882	87	0	97.24772625	0.001	-16.5693769	0.035716192	0.513173113

mmu_circRNA008586	87	0	97.24772625	0.001	-16.5693769	0.035716192	0.513173113
mmu_circRNA011622	84	0	97.36599221	0.001	-16.57113034	0.036528664	0.513976876
mmu_circRNA004392	85	0	97.38081453	0.001	-16.57134995	0.036166237	0.513976876
mmu_circRNA004198	86.33333333	0	97.44276765	0.001	-16.57226749	0.035626602	0.513173113
mmu_circRNA011384	87.33333333	0	97.6203229	0.001	-16.5748939	0.035026529	0.510102257
mmu_circRNA006391	87.33333333	0	97.6203229	0.001	-16.5748939	0.035026529	0.510102257
mmu_circRNA003313	83.33333333	0	97.66952223	0.001	-16.57562082	0.036273638	0.513976876
mmu_circRNA010117	83.33333333	0	97.66952223	0.001	-16.57562082	0.036273638	0.513976876
mmu_circRNA002788	85.33333333	0	97.93422555	0.001	-16.57952551	0.035188663	0.511632896
mmu_circRNA009217	83.66666667	0	98.06020032	0.001	-16.58138009	0.035547457	0.513173113
mmu_circRNA006013	86.66666667	0	98.06910279	0.001	-16.58151106	0.034550671	0.510102257
mmu_circRNA006015	86.66666667	0	98.06910279	0.001	-16.58151106	0.034550671	0.510102257
mmu_circRNA004221	88	0	98.36551621	0.001	-16.58586502	0.033686371	0.507047712
mmu_circRNA012663	87.33333333	0	98.43314311	0.001	-16.58685654	0.033792367	0.507791158
mmu_circRNA007081	84	0	98.45087841	0.001	-16.58711646	0.034835586	0.510102257
mmu_circRNA011000	84	0	98.45087841	0.001	-16.58711646	0.034835586	0.510102257
mmu_circRNA007104	84	0	98.45087841	0.001	-16.58711646	0.034835586	0.510102257
mmu_circRNA008216	84	0	98.45087841	0.001	-16.58711646	0.034835586	0.510102257
mmu_circRNA007520	84	0	98.45087841	0.001	-16.58711646	0.034835586	0.510102257
mmu_circRNA009633	86.33333333	0	98.45705829	0.001	-16.58720701	0.034070852	0.509416025
mmu_circRNA007777	87.66666667	0	98.69552686	0.001	-16.59069708	0.03330111	0.505489443
mmu_circRNA009343	87.33333333	0	98.8234805	0.001	-16.59256625	0.033216015	0.505052329
mmu_circRNA008356	84.33333333	0	98.8415565	0.001	-16.59283011	0.034137706	0.509566327
mmu_circRNA007114	86.33333333	0	98.85311971	0.001	-16.59299888	0.033482906	0.506396916
mmu_circRNA000207	88.66666667	0	99.11070951	0.001	-16.59675334	0.032396593	0.495955353
mmu_circRNA005949	84.66666667	0	99.23223459	0.001	-16.59852122	0.033453505	0.506396916
mmu_circRNA001966	87	0	99.61985483	0.001	-16.60414569	0.032172058	0.493975215
mmu_circRNA009325	85	0	99.62291267	0.001	-16.60418997	0.032782675	0.500158809
mmu_circRNA000767	87	0	99.81845735	0.001	-16.60701899	0.031892484	0.492439712
mmu_circRNA003749	86	0	100.7949469	0.001	-16.62106379	0.030847453	0.482953752
mmu_circRNA004892	86	0	100.7949469	0.001	-16.62106379	0.030847453	0.482953752
mmu_circRNA003491	86	0	100.7949469	0.001	-16.62106379	0.030847453	0.482953752

mmu_circRNA006825	89.33333333	0	100.87078	0.001	-16.62214879	0.029788865	0.474664127
mmu_circRNA003434	86.33333333	0	101.185625	0.001	-16.62664482	0.030227175	0.479095384
mmu_circRNA005335	89.66666667	0	101.2571533	0.001	-16.6276643	0.029193532	0.471034486
mmu_circRNA006835	89.66666667	0	101.3133857	0.001	-16.62846527	0.029121077	0.470712042
mmu_circRNA002394	87	0	101.3883752	0.001	-16.62953272	0.029768349	0.474664127
mmu_circRNA007850	86.66666667	0	101.5763031	0.001	-16.63220435	0.029618831	0.474483096
mmu_circRNA008246	90	0	101.6205655	0.001	-16.63283287	0.028638649	0.46542993
mmu_circRNA001207	87.66666667	0	102.0250799	0.001	-16.63856432	0.028762779	0.466601975
mmu_circRNA010851	87.33333333	0	102.3576593	0.001	-16.64325954	0.028436873	0.463831243
mmu_circRNA006048	92	0	102.836676	0.001	-16.64999536	0.026631278	0.447395497
mmu_circRNA006879	91.33333333	0	102.8813419	0.001	-16.65062184	0.026745458	0.447661153
mmu_circRNA003306	89.33333333	0	103.4876969	0.001	-16.65909974	0.02653804	0.44666558
mmu_circRNA009562	91.66666667	0	103.4947213	0.001	-16.65919766	0.025944732	0.442490851
mmu_circRNA005825	88.33333333	0	103.5296936	0.001	-16.65968508	0.026746893	0.447661153
mmu_circRNA001445	93.33333333	0	104.3270626	0.001	-16.67075392	0.02460908	0.431828883
mmu_circRNA008447	92.33333333	0	104.4623521	0.001	-16.67262357	0.024693815	0.431828883
mmu_circRNA002055	90.66666667	0	104.7094366	0.001	-16.67603194	0.024817713	0.433151174
mmu_circRNA004199	93	0	104.9670264	0.001	-16.67957668	0.023990542	0.427691382
mmu_circRNA005823	89.66666667	0	105.0924059	0.001	-16.6812989	0.024638227	0.431828883
mmu_circRNA011371	93	0	105.2356911	0.001	-16.68326456	0.023703863	0.426147004
mmu_circRNA002703	91.33333333	0	105.5992814	0.001	-16.68824049	0.023699754	0.426147004
mmu_circRNA003968	93.66666667	0	105.9900688	0.001	-16.69356957	0.02276944	0.416866619
mmu_circRNA011912	92.33333333	0	106.0793474	0.001	-16.69478428	0.022972097	0.418147737
mmu_circRNA000424	91.33333333	0	106.2903994	0.001	-16.69765177	0.022979248	0.418147737
mmu_circRNA003843	94.33333333	0	106.7444465	0.001	-16.70380149	0.021868182	0.405684938
mmu_circRNA009604	93.33333333	0	107.2046093	0.001	-16.71000741	0.021627257	0.404043003
mmu_circRNA006633	96	0	107.3078359	0.001	-16.7113959	0.020978892	0.396584871
mmu_circRNA006631	96	0	107.3078359	0.001	-16.7113959	0.020978892	0.396584871
mmu_circRNA003105	95	0	107.4988242	0.001	-16.71396135	0.02099853	0.396584871
mmu_circRNA002608	95	0	107.4988242	0.001	-16.71396135	0.02099853	0.396584871
mmu_circRNA003879	96	0	107.7440953	0.001	-16.71724928	0.020566293	0.396000834
mmu_circRNA000646	95	0	108.0524339	0.001	-16.72137204	0.02047624	0.396000834

mmu_circRNA002099	94	0	108.0938793	0.001	-16.72192531	0.020638183	0.396030901
mmu_circRNA000430	94	0	108.471566	0.001	-16.72695739	0.0202862	0.394766821
mmu_circRNA010246	93.66666667	0	108.786064	0.001	-16.73113423	0.020063047	0.39212547
mmu_circRNA011933	95.66666667	0	109.365043	0.001	-16.73879215	0.019155216	0.378770505
mmu_circRNA010666	93.66666667	0	109.780543	0.001	-16.74426285	0.019168633	0.378770505
mmu_circRNA001542	98.33333333	0	109.9160124	0.001	-16.74604205	0.018192703	0.370083313
mmu_circRNA008392	96.66666667	0	110.5844303	0.001	-16.75478875	0.017923818	0.368046373
mmu_circRNA000061	94.66666667	0	110.6962818	0.001	-16.75624724	0.018189606	0.370083313
mmu_circRNA011990	98.33333333	0	110.9722195	0.001	-16.75983904	0.017314433	0.359545613
mmu_circRNA008239	98.66666667	0	111.3080785	0.001	-16.76419878	0.016986663	0.355215281
mmu_circRNA005298	99	0	111.6376033	0.001	-16.76846353	0.016668955	0.353998482
mmu_circRNA005668	95.33333333	0	111.7339334	0.001	-16.76970787	0.017211196	0.358240454
mmu_circRNA001348	99.66666667	0	111.7599988	0.001	-16.77004438	0.016464239	0.351746681
mmu_circRNA007220	98.33333333	0	112.0315405	0.001	-16.77354543	0.016467908	0.351746681
mmu_circRNA002135	98.33333333	0	112.1187924	0.001	-16.77466859	0.016399662	0.351746681
mmu_circRNA011463	99.33333333	0	112.4022793	0.001	-16.77831177	0.016019614	0.349664133
mmu_circRNA011993	99.66666667	0	112.5085281	0.001	-16.77967484	0.015885829	0.348047047
mmu_circRNA007610	98	0	112.5810971	0.001	-16.78060509	0.01609527	0.350462774
mmu_circRNA011112	99.66666667	0	113.0960252	0.001	-16.7871887	0.015442973	0.346347267
mmu_circRNA012668	97	0	113.6873239	0.001	-16.79471188	0.015417102	0.346347267
mmu_circRNA006628	97	0	113.6873239	0.001	-16.79471188	0.015417102	0.346347267
mmu_circRNA000710	98.66666667	0	113.6879192	0.001	-16.79471943	0.015157977	0.34425877
mmu_circRNA008358	100.6666667	0	113.9110348	0.001	-16.79754798	0.014696538	0.336333262
mmu_circRNA008150	100.6666667	0	115.1925118	0.001	-16.81368741	0.013797394	0.324022041
mmu_circRNA002080	98.33333333	0	115.2500362	0.001	-16.81440768	0.014089673	0.32745713
mmu_circRNA007655	102.6666667	0	115.5863657	0.001	-16.81861171	0.013259467	0.316358177
mmu_circRNA003541	101.6666667	0	115.6496168	0.001	-16.81940096	0.013351188	0.317701616
mmu_circRNA006987	102.6666667	0	115.861898	0.001	-16.82204668	0.013078072	0.316235528
mmu_circRNA008783	102.6666667	0	116.1741679	0.001	-16.82592979	0.012875549	0.313025883
mmu_circRNA003758	100.3333333	0	116.5284554	0.001	-16.83032277	0.012954567	0.314095731
mmu_circRNA003529	100.6666667	0	116.6358596	0.001	-16.83165189	0.012841484	0.313025883
mmu_circRNA000443	104.3333333	0	117.1141181	0.001	-16.83755548	0.012079413	0.309612611

mmu_circRNA008933	100	0	117.2034267	0.001	-16.83865522	0.01257098	0.311531114
mmu_circRNA002081	100	0	117.2034267	0.001	-16.83865522	0.01257098	0.311531114
mmu_circRNA011777	104	0	117.2053341	0.001	-16.8386787	0.012064837	0.309612611
mmu_circRNA003040	100.6666667	0	117.2902281	0.001	-16.8397233	0.0124306	0.310708824
mmu_circRNA009676	101.3333333	0	117.5925758	0.001	-16.84343745	0.012160945	0.31007548
mmu_circRNA008762	104.6666667	0	118.4418638	0.001	-16.85381957	0.011263959	0.300740993
mmu_circRNA002075	101.3333333	0	118.766139	0.001	-16.85776405	0.011471781	0.300916227
mmu_circRNA012178	105	0	119.1138158	0.001	-16.86198123	0.010854139	0.293866581
mmu_circRNA007461	103.3333333	0	119.4188807	0.001	-16.86567143	0.010875455	0.293866581
mmu_circRNA000279	106	0	119.4225452	0.001	-16.8657157	0.010578662	0.290140531
mmu_circRNA001386	102	0	119.5474952	0.001	-16.86722438	0.010957834	0.294319554
mmu_circRNA007856	105.3333333	0	119.5891594	0.001	-16.86772709	0.01056254	0.290140531
mmu_circRNA002962	105	0	120.3419166	0.001	-16.87677971	0.010206974	0.286146143
mmu_circRNA010834	107.6666667	0	120.7023184	0.001	-16.88109386	0.009752213	0.279991794
mmu_circRNA003748	107.6666667	0	121.264274	0.001	-16.88779505	0.009480413	0.278081149
mmu_circRNA000400	103.6666667	0	121.5008857	0.001	-16.8906073	0.00976897	0.279991794
mmu_circRNA001318	104	0	121.8915637	0.001	-16.89523875	0.009546716	0.278081149
mmu_circRNA007035	108.6666667	0	122.775287	0.001	-16.90566067	0.008695925	0.265344016
mmu_circRNA002575	109.3333333	0	123.1760649	0.001	-16.91036242	0.008463278	0.262713043
mmu_circRNA006871	109	0	123.3407562	0.001	-16.91229007	0.008422523	0.262355747
mmu_circRNA003747	109.6666667	0	123.4189185	0.001	-16.91320403	0.008331366	0.262355747
mmu_circRNA008681	106.6666667	0	123.479216	0.001	-16.9139087	0.008572097	0.264262131
mmu_circRNA009053	108	0	124.5364985	0.001	-16.9262091	0.008014921	0.256104458
mmu_circRNA004897	110.3333333	0	124.587756	0.001	-16.92680277	0.00779976	0.254222894
mmu_circRNA005810	108.6666667	0	124.772831	0.001	-16.9289443	0.007864368	0.254222894
mmu_circRNA000516	108	0	124.9162086	0.001	-16.93060116	0.00786352	0.254222894
mmu_circRNA008722	112	0	125.1924752	0.001	-16.93378832	0.007434236	0.251699167
mmu_circRNA003562	110	0	125.283958	0.001	-16.93484217	0.007556979	0.252702108
mmu_circRNA006664	108.6666667	0	125.3646506	0.001	-16.93577108	0.007633739	0.252702108
mmu_circRNA007776	112	0	125.8858981	0.001	-16.94175715	0.007177655	0.247656704
mmu_circRNA006129	112.6666667	0	125.9376685	0.001	-16.94235034	0.007109004	0.247656704
mmu_circRNA009198	112.3333333	0	126.3595114	0.001	-16.94717474	0.006982951	0.247025259

mmu_circRNA011761	113.3333333	0	126.6828618	0.001	-16.95086184	0.006797499	0.246164379
mmu_circRNA005039	112	0	126.7354559	0.001	-16.95146067	0.006875358	0.246164379
mmu_circRNA010975	112	0	126.7354559	0.001	-16.95146067	0.006875358	0.246164379
mmu_circRNA009260	113	0	126.77867	0.001	-16.95195251	0.006788252	0.246164379
mmu_circRNA006523	113.6666667	0	127.7488813	0.001	-16.96295113	0.0064165	0.238910452
mmu_circRNA007044	115	0	128.545845	0.001	-16.97192345	0.006075023	0.231910789
mmu_circRNA012351	114.3333333	0	129.6268768	0.001	-16.98400535	0.005790297	0.225798997
mmu_circRNA010454	110.6666667	0	129.7051255	0.001	-16.98487597	0.006001916	0.230099107
mmu_circRNA009899	111	0	130.0958036	0.001	-16.9892149	0.005862874	0.226706216
mmu_circRNA012137	117	0	130.781425	0.001	-16.99679812	0.005304743	0.21671333
mmu_circRNA008581	111.6666667	0	130.8771598	0.001	-16.99785382	0.005593921	0.222048975
mmu_circRNA000757	114.6666667	0	130.9939525	0.001	-16.99914068	0.005380877	0.218424641
mmu_circRNA011931	114.6666667	0	131.2367823	0.001	-17.0018126	0.005314562	0.21671333
mmu_circRNA008934	112	0	131.2678379	0.001	-17.00215396	0.005463876	0.219818072
mmu_circRNA004642	117.6666667	0	131.5266183	0.001	-17.00499528	0.005069311	0.210540682
mmu_circRNA012356	117	0	131.8651852	0.001	-17.00870419	0.005017715	0.210181736
mmu_circRNA000896	117.3333333	0	131.9978318	0.001	-17.01015471	0.004965744	0.209144063
mmu_circRNA003871	118.3333333	0	132.2718116	0.001	-17.01314612	0.004843795	0.20692231
mmu_circRNA006868	114.3333333	0	132.3571738	0.001	-17.01407687	0.005037239	0.210181736
mmu_circRNA011905	118	0	132.3874137	0.001	-17.01440644	0.004832335	0.20692231
mmu_circRNA007494	115.3333333	0	133.113335	0.001	-17.02229558	0.004792771	0.20692231
mmu_circRNA009470	117	0	133.7152335	0.001	-17.02880431	0.004562257	0.203621921
mmu_circRNA008111	120	0	134.1347948	0.001	-17.033324	0.004320684	0.195761878
mmu_circRNA005372	117.3333333	0	134.1790877	0.001	-17.03380031	0.004438145	0.200073373
mmu_circRNA011270	119	0	134.5513642	0.001	-17.03779749	0.004274635	0.194658652
mmu_circRNA009113	120.6666667	0	134.8799881	0.001	-17.04131679	0.004126692	0.188880377
mmu_circRNA008865	121	0	135.2525848	0.001	-17.04529664	0.004032781	0.188880377
mmu_circRNA009663	121	0	135.2525848	0.001	-17.04529664	0.004032781	0.188880377
mmu_circRNA004360	120.6666667	0	135.3070632	0.001	-17.04587763	0.004035976	0.188880377
mmu_circRNA002993	120	0	135.7879885	0.001	-17.05099634	0.003965005	0.188880377
mmu_circRNA012586	119.6666667	0	135.8777263	0.001	-17.05194946	0.003961042	0.188880377
mmu_circRNA008935	116	0	135.9559749	0.001	-17.05278003	0.004109791	0.188880377

mmu_circRNA010786	116	0	135.9559749	0.001	-17.05278003	0.004109791	0.188880377
mmu_circRNA004565	119.6666667	0	136.1219752	0.001	-17.05454047	0.003910996	0.188880377
mmu_circRNA009779	119	0	136.1672159	0.001	-17.05501987	0.003930726	0.188880377
mmu_circRNA002277	120.3333333	0	136.7314082	0.001	-17.06098515	0.00376081	0.184361916
mmu_circRNA012596	122.3333333	0	137.4272099	0.001	-17.06830815	0.003547005	0.177695874
mmu_circRNA008763	121	0	137.4404386	0.001	-17.06844702	0.003597179	0.178288931
mmu_circRNA008299	123	0	137.8188034	0.001	-17.07241321	0.003449278	0.176819825
mmu_circRNA010990	118	0	138.3000435	0.001	-17.07744208	0.003557039	0.177695874
mmu_circRNA007422	120.6666667	0	138.5861138	0.001	-17.08042318	0.003399909	0.175290706
mmu_circRNA008051	121.6666667	0	139.2117052	0.001	-17.086921	0.003252937	0.171659385
mmu_circRNA008050	121.6666667	0	139.2117052	0.001	-17.086921	0.003252937	0.171659385
mmu_circRNA012597	124	0	139.2901931	0.001	-17.08773416	0.003156152	0.171599003
mmu_circRNA006227	120	0	139.4165919	0.001	-17.08904274	0.003279221	0.17203448
mmu_circRNA008032	119.3333333	0	139.8627558	0.001	-17.09365231	0.00322758	0.171659385
mmu_circRNA010901	119.3333333	0	139.8627558	0.001	-17.09365231	0.00322758	0.171659385
mmu_circRNA004496	125.3333333	0	140.0963413	0.001	-17.09605975	0.002979325	0.163972526
mmu_circRNA010849	126	0	140.8415346	0.001	-17.10371333	0.002841895	0.159341504
mmu_circRNA005311	127.3333333	0	142.7222586	0.001	-17.12285083	0.002530263	0.14739603
mmu_circRNA011702	127.3333333	0	143.0253441	0.001	-17.12591129	0.002489061	0.14594359
mmu_circRNA010063	123	0	144.1602148	0.001	-17.13731354	0.002460084	0.145193511
mmu_circRNA004370	128	0	145.9196596	0.001	-17.15481474	0.002110885	0.129154371
mmu_circRNA001814	130.3333333	0	146.6588384	0.001	-17.16210449	0.00197415	0.124718995
mmu_circRNA003302	128.6666667	0	147.820622	0.001	-17.17348802	0.001889312	0.121935355
mmu_circRNA000923	127.6666667	0	148.2555189	0.001	-17.17772629	0.001867054	0.121372023
mmu_circRNA003130	131.3333333	0	148.6700671	0.001	-17.18175468	0.001749031	0.117093725
mmu_circRNA007347	127.3333333	0	148.7938853	0.001	-17.18295571	0.001820621	0.119414404
mmu_circRNA009686	132	0	149.3667873	0.001	-17.18849987	0.001670929	0.112706027
mmu_circRNA010148	131.3333333	0	151.518037	0.001	-17.20913002	0.001498073	0.104993877
mmu_circRNA004801	133.3333333	0	152.0040165	0.001	-17.21374992	0.001424938	0.100654482
mmu_circRNA001714	134.3333333	0	152.3698581	0.001	-17.21721801	0.001380485	0.098434622
mmu_circRNA000761	130.6666667	0	153.1458109	0.001	-17.22454638	0.00138254	0.098434622
mmu_circRNA000367	137.3333333	0	153.8037218	0.001	-17.23073089	0.001232386	0.091987254

mmu_circRNA005992	133.3333333	0	154.2822775	0.001	-17.23521282	0.001258897	0.09257021
mmu_circRNA002887	135.3333333	0	154.4875991	0.001	-17.23713151	0.001215538	0.091987254
mmu_circRNA006591	136	0	155.4707013	0.001	-17.2462832	0.001143034	0.089166587
mmu_circRNA009583	137	0	156.5893711	0.001	-17.25662676	0.001062661	0.084364017
mmu_circRNA004536	140	0	156.9084846	0.001	-17.25956384	0.001007671	0.081439791
mmu_circRNA007993	136.3333333	0	157.3322981	0.001	-17.26345534	0.00102877	0.082402606
mmu_circRNA001677	140.3333333	0	157.9561353	0.001	-17.26916445	0.000947763	0.077294386
mmu_circRNA008029	139	0	159.3002176	0.001	-17.28138871	0.000894921	0.073654438
mmu_circRNA005058	140	0	160.8378981	0.001	-17.29524786	0.000813081	0.067538442
mmu_circRNA003154	143.3333333	0	162.0789485	0.001	-17.30633719	0.0007297	0.062096763
mmu_circRNA006520	143.6666667	0	163.6810828	0.001	-17.32052807	0.000666136	0.0574606
mmu_circRNA008139	146.6666667	0	163.942527	0.001	-17.32283062	0.000633283	0.05643692
mmu_circRNA008879	148	0	165.4329136	0.001	-17.33588677	0.000574986	0.052634686
mmu_circRNA009022	145.6666667	0	168.3214938	0.001	-17.36085989	0.000507204	0.0486416
mmu_circRNA005224	150	0	169.7349856	0.001	-17.37292444	0.000445788	0.043982376
mmu_circRNA012599	149.6666667	0	171.2313513	0.001	-17.38558735	0.0004133	0.042133131
mmu_circRNA002972	148.6666667	0	172.5967413	0.001	-17.3970457	0.000389111	0.041067234
mmu_circRNA005653	152.6666667	0	172.7579154	0.001	-17.39839229	0.000366829	0.039648505
mmu_circRNA009685	156	0	176.524385	0.001	-17.42950797	0.000287249	0.033466334
mmu_circRNA002711	156.6666667	0	176.6863683	0.001	-17.43083121	0.000282385	0.033332563
mmu_circRNA002690	155.3333333	0	178.9264876	0.001	-17.44900745	0.000254751	0.031306419
mmu_circRNA001067	154	0	180.4932771	0.001	-17.46158558	0.000238417	0.030124539
mmu_circRNA004196	162.6666667	0	181.8271663	0.001	-17.47220824	0.000198584	0.026198524
mmu_circRNA007320	162.6666667	0	181.8271663	0.001	-17.47220824	0.000198584	0.026198524
mmu_circRNA011611	156.3333333	0	182.2433098	0.001	-17.47550633	0.000210616	0.026991883
mmu_circRNA003779	162.6666667	0	182.5894723	0.001	-17.47824406	0.000190539	0.026198524
mmu_circRNA010283	157.6666667	0	183.9948714	0.001	-17.48930603	0.000188295	0.026198524
mmu_circRNA009626	162	0	185.4751992	0.001	-17.50086676	0.000164112	0.023369086
mmu_circRNA005493	161.6666667	0	187.2531498	0.001	-17.51463046	0.000149249	0.021949437
mmu_circRNA008509	168	0	187.7887128	0.001	-17.51875083	0.000133228	0.019919805
mmu_circRNA011550	168.3333333	0	188.5792	0.001	-17.52481103	0.000126484	0.019563512
mmu_circRNA002707	167.3333333	0	189.3488061	0.001	-17.5306868	0.000122206	0.019233507

mmu_circRNA009462	170.3333333	0	193.062051	0.001	-17.55870508	9.34E-05	0.015801341
mmu_circRNA011328	170	0	193.2278918	0.001	-17.55994383	9.28E-05	0.015801341
mmu_circRNA010371	173	0	194.2455715	0.001	-17.56752218	8.41E-05	0.015081742
mmu_circRNA005835	173.6666667	0	195.2846836	0.001	-17.57521928	7.85E-05	0.014669737
mmu_circRNA003923	173	0	195.7610167	0.001	-17.57873397	7.71E-05	0.014669737
mmu_circRNA011332	175.3333333	0	199.2801328	0.001	-17.60443836	6.15E-05	0.012254192
mmu_circRNA010265	181.6666667	0	206.498684	0.001	-17.65577306	3.79E-05	0.008498325
mmu_circRNA001065	179.6666667	0	207.7157727	0.001	-17.66425124	3.65E-05	0.00838996
mmu_circRNA010044	183.3333333	0	209.776582	0.001	-17.67849411	3.10E-05	0.007510026
mmu_circRNA001574	181.3333333	0	210.4604298	0.001	-17.68318948	3.07E-05	0.007510026
mmu_circRNA003940	186.6666667	0	211.5925378	0.001	-17.69092922	2.68E-05	0.006866239
mmu_circRNA002873	184	0	213.0104156	0.001	-17.70056445	2.57E-05	0.006790944
mmu_circRNA007676	192	0	219.0637051	0.001	-17.74099095	1.65E-05	0.00458886
mmu_circRNA002854	193.3333333	0	224.1112729	0.001	-17.77385569	1.20E-05	0.003989885
mmu_circRNA010061	197.3333333	0	231.2814286	0.001	-17.8192899	7.30E-06	0.002847556
mmu_circRNA006851	197.3333333	0	231.2814286	0.001	-17.8192899	7.30E-06	0.002847556
mmu_circRNA012594	203	0	231.4481248	0.001	-17.82032935	6.66E-06	0.002847556
mmu_circRNA009287	202	0	234.9028971	0.001	-17.84170498	5.46E-06	0.002627117
mmu_circRNA007032	217.6666667	0	246.7023612	0.001	-17.912412	2.19E-06	0.001402827
mmu_circRNA005132	231.3333333	0	261.2865801	0.001	-17.9952735	8.13E-07	0.000607906
mmu_circRNA005955	236	0	271.1504372	0.001	-18.04873397	4.31E-07	0.000411553
mmu_circRNA011629	242.3333333	0	272.5309599	0.001	-18.05606061	3.61E-07	0.000411553
mmu_circRNA001522	626.6666667	0	719.1986682	0.001	-19.45603082	7.29E-21	3.27E-17

Table S3 circRNAs compared to previous study

Circ_ID	Uniq_reads num	Length	Gene_list	TPM	Chr	Start	End	Str	Loci	Sense
mmu_circRNA003306	178	423	2010111I01Rik	981.4430079	13	63170941	63210166	+	exon	sense
mmu_circRNA003302	165	406	2010111I01Rik	909.764586	13	63061035	63068285	+	exon	sense
mmu_circRNA008246	48	521	Abcc1	254.5764087	16	53127597	53144095	-	exon	sense
mmu_circRNA003460	180	1354	Adamts6	750.4774913	13	104294447	104314383	+	exon	sense
mmu_circRNA009132	102	30244	Adrbk2	425.2705784	5	36630644	36660887	-	intergenic	.

mmu_circRNA009137	102	31002	Afap1	425.2705784	5	36630644	36661645	-	intergenic	.
mmu_circRNA009399	161	1572	Afap1	671.2604228	5	106618071	106619642	-	exon	sense
mmu_circRNA009133	102	30310	Aff1	425.2705784	5	36630644	36660953	-	intergenic	.
mmu_circRNA009586	21	4421	Aff1	87.55570732	5	124607736	124620225	+	exon	sense
mmu_circRNA009372	125	5188	Aff1	521.1649245	5	102875695	102880882	+	intergenic	.
mmu_circRNA000757	156	515	Akt3	860.1410631	1	177096967	177131096	-	exon	sense
mmu_circRNA000790	85	645	Akt3	468.6666049	1	180743080	180743724	-	exon	sense
mmu_circRNA006879	102	2461	Ambra1	540.9748685	2	91766447	91810209	+	exon	sense
mmu_circRNA005698	47	2964	Ankhd1	193.6990123	18	36572659	36583759	+	exon	sense
mmu_circRNA009222	281	628	Apbb2	1171.57875	5	66362718	66400281	-	exon	sense
mmu_circRNA012436	94	3038	Arhgef12	392.6128637	9	109881473	109884510	+	intergenic	.
mmu_circRNA000714	285	818	Atf6	1188.256028	1	170834820	170855189	-	exon	sense
mmu_circRNA000714	285	818	Atf6	1188.256028	1	170834820	170855189	-	exon	sense
mmu_circRNA000710	188	529	Atf6	1036.580256	1	170787346	170799745	-	exon	sense
mmu_circRNA006628	291	2599	Atp9a	1604.493906	2	34264126	34266724	-	intergenic	.
mmu_circRNA006392	167	332	Atrnl1	920.7920355	19	57751630	57755618	+	exon	sense
mmu_circRNA006391	262	479	Atrnl1	1389.562898	19	57731552	57755618	+	exon	sense
mmu_circRNA003193	244	3941	Atrnl1	1345.348842	13	45911971	45915911	-	intron	sense
mmu_circRNA004199	56	959	Axin1	308.7685868	17	26142617	26143576	-	intron	sense
mmu_circRNA004198	52	959	Axin1	286.7136877	17	26142617	26143576	-	intron	sense
mmu_circRNA004199	56	959	Axin1	308.7685868	17	26142617	26143576	-	intron	sense
mmu_circRNA012269	107	497	Bckdhb	446.1171754	9	83988776	84010351	+	exon	sense
mmu_circRNA012271	146	608	Bckdhb	805.0038155	9	83988782	84012625	+	exon	sense
mmu_circRNA012266	82	3406	Bckdhb	431.0156779	9	83985978	84012619	+	exon	sense
mmu_circRNA012270	244	608	Bckdhb	1345.348842	9	83988776	84012619	+	exon	sense
mmu_circRNA012261	94	787	Bckdhb	518.2901278	9	83952283	83991822	+	exon	sense
mmu_circRNA012271	146	608	Bckdhb	805.0038155	9	83988782	84012625	+	exon	sense
mmu_circRNA012300	24	226	Bckdhb	132.3293943	9	95019105	95020712	+	exon	sense
mmu_circRNA012270	244	608	Bckdhb	1345.348842	9	83988776	84012619	+	exon	sense
mmu_circRNA004952	232	390	Birc6	858.3217811	17	3072581	3072970	-	intergenic	.
mmu_circRNA000235	88	342	Bmpr2	367.5524681	1	59813588	59815411	+	exon	sense
mmu_circRNA000207	266	2344	Bmpr2	1410.777598	1	54638074	54640417	-	intergenic	.

mmu_circRNA001079	330	687	Cabin1	1375.875401	10	41654942	41666796	-	exon	sense
mmu_circRNA011933	126	1212	Carm1	694.7293202	9	46532757	46533968	+	intergenic	.
mmu_circRNA012404	92	2772	Carm1	507.2626783	9	107823184	107825955	-	intergenic	.
mmu_circRNA011621	256	1945	Cbfb	947.1136895	8	105213315	105215259	-	exon	antisen
mmu_circRNA011290	250	147	Cbfb	1314.072189	8	32663890	32664036	-	intergenic	.
mmu_circRNA009908	324	15338	Ccdc91	1350.859484	6	35064889	35080226	-	intergenic	.
mmu_circRNA010419	118	188	Ccdc91	625.8336714	6	147522523	147522710	-	exon	antisen
mmu_circRNA003698	384	1741	Ccser2	1603.865315	14	36926839	36941264	-	exon	sense
mmu_circRNA003698	384	1741	Ccser2	1603.865315	14	36926839	36941264	-	exon	sense
mmu_circRNA003100	254	558	Cdk13	1335.097344	13	17750257	17765093	-	exon	sense
mmu_circRNA009742	255	14645	Cdk8	1340.353633	5	146271595	146286239	+	exon	sense
mmu_circRNA003128	56	371	Cdkal1	297.0058102	13	29625621	29717817	-	exon	sense
mmu_circRNA003130	87	267	Cdkal1	479.6940544	13	29691599	29717817	-	exon	sense
mmu_circRNA003130	87	267	Cdkal1	479.6940544	13	29691599	29717817	-	exon	sense
mmu_circRNA003146	40	667	Cdyl	220.5489905	13	35815909	35816575	+	exon	sense
mmu_circRNA000457	278	479	Clasp1	1159.070792	1	118419440	118419918	+	exon	sense
mmu_circRNA000548	108	6240	Clasp1	399.5635878	1	134967727	134973966	+	intergenic	.
mmu_circRNA000459	186	476	Clasp1	688.13729	1	118543102	118548028	+	exon	sense
mmu_circRNA009560	125	1870	Clip1	689.2155955	5	123606923	123608792	-	intron	sense
mmu_circRNA009559	127	1870	Clip1	700.243045	5	123606921	123608790	+	exon	antisen
mmu_circRNA009327	123	1725	Cnot6l	455.0585305	5	96077118	96134132	-	exon	sense
mmu_circRNA006248	133	915	Cpeb3	555.5054348	19	37044522	37139221	-	exon	sense
mmu_circRNA001425	527	314	Cpsf6	2795.036821	10	117366081	117367988	-	exon	sense
mmu_circRNA004536	329	3748	Crebbp	1744.909135	16	4154857	4180133	-	exon	sense
mmu_circRNA000820	73	184	Csnk1g3	304.9014792	1	183358223	183358406	-	intergenic	.
mmu_circRNA010920	105	576	Cspp1	437.7785366	7	115057028	115057603	+	intergenic	.
mmu_circRNA011118	193	260	Ctbp2	714.03493	7	131451735	131451994	+	intergenic	.
mmu_circRNA011119	193	260	Ctbp2	714.03493	7	131451747	131452006	+	intergenic	.
mmu_circRNA009358	119	840	Daglb	656.1332469	5	100480198	100485855	-	exon	sense
mmu_circRNA000646	103	42149	Dcaf6	567.9136507	1	160682041	160724189	-	intergenic	.
mmu_circRNA000896	20	17173	Dcaf6	110.2744953	1	190871592	190888764	-	intergenic	.
mmu_circRNA008530	220	307	Ddi2	813.9258269	4	110516824	110517130	+	intergenic	.

mmu_circRNA000561	198	11555	Dennd1b	732.5332442	1	139053346	139110485	+	exon	sense
mmu_circRNA000560	78	3037	Dennd1b	325.7851422	1	139053346	139090555	+	exon	sense
mmu_circRNA004426	339	2519	Drosha	1869.152695	15	85882674	85885192	+	intergenic	.
mmu_circRNA004053	239	18957	Drosha	884.2194211	15	5656812	5675768	+	intergenic	.
mmu_circRNA001991	200	40290	Ehbp1	739.9325699	11	81013667	81055071	+	exon	sense
mmu_circRNA001574	407	742	Ehbp1	2244.085979	11	22053432	22068506	-	exon	sense
mmu_circRNA007676	246	4577	Ehbp1	1356.376292	3	84863964	84904079	+	exon	sense
mmu_circRNA008823	273	2466	Eif4g3	1138.224195	4	147362811	147444532	+	exon	sense
mmu_circRNA008762	80	811	Eif4g3	441.0979811	4	138170477	138178010	+	exon	sense
mmu_circRNA008763	121	929	Eif4g3	667.1606964	4	138170477	138180607	+	exon	sense
mmu_circRNA008762	80	811	Eif4g3	441.0979811	4	138170477	138178010	+	exon	sense
mmu_circRNA008763	121	929	Eif4g3	667.1606964	4	138170477	138180607	+	exon	sense
mmu_circRNA009157	72	1108	Ept1	396.988183	5	45775392	45776499	-	intergenic	.
mmu_circRNA005590	246	2787	Esco1	1027.476218	18	10574875	10595875	-	exon	sense
mmu_circRNA009793	117	7554	Exoc6b	487.8103693	6	3516622	3524175	+	intergenic	.
mmu_circRNA009794	107	20351	Exoc6b	395.8639249	6	3516622	3536972	+	intergenic	.
mmu_circRNA010117	250	754	Exoc6b	1378.431191	6	84696031	84696784	+	exon	antisen
mmu_circRNA003826	188	2830	Extl3	783.8320465	14	65066683	65080475	-	exon	sense
mmu_circRNA003565	63	337	Extl3	259.6391016	14	18544769	18545105	-	intergenic	.
mmu_circRNA003826	188	2830	Extl3	783.8320465	14	65066683	65080475	-	exon	sense
mmu_circRNA008684	180	463	Eya3	665.939313	4	132656693	132673032	+	exon	sense
mmu_circRNA000100	182	2558	Fam135a	673.3386386	1	24028200	24032736	-	exon	sense
mmu_circRNA011124	206	1464	Fam53b	762.130547	7	132779136	132837207	-	exon	sense
mmu_circRNA007460	334	718	Fndc3b	1235.687392	3	27451314	27458889	-	exon	sense
mmu_circRNA007461	203	405	Fndc3b	1119.286127	3	27488237	27501545	-	exon	sense
mmu_circRNA000937	253	14559	Foxo3	936.014701	10	5061389	5075947	-	exon	antisen
mmu_circRNA002703	194	806	Fut8	1069.662604	12	77323845	77365359	+	exon	sense
mmu_circRNA002707	502	424	Fut8	2638.656955	12	77448473	77450276	+	exon	sense
mmu_circRNA010648	500	955	Gas2	2756.862382	7	51887912	51953301	+	exon	sense
mmu_circRNA010645	176	499	Gas2	970.4155584	7	51887912	51897372	+	exon	sense
mmu_circRNA006170	4536	1114	Glis3	25010.25553	19	28530873	28531986	-	exon	sense
mmu_circRNA006167	113	4435	Glis3	471.1330918	19	28527760	28540408	-	exon	sense

mmu_circRNA006164	201	24273	Glis3	743.6322328	19	28507714	28531986	-	exon	sense
mmu_circRNA006174	84	484	Glis3	463.1528801	19	28665753	28666236	-	exon	sense
mmu_circRNA006170	4536	1114	Glis3	25010.25553	19	28530873	28531986	-	exon	sense
mmu_circRNA002922	102	7419	Gpatch2l	562.3999259	12	108157754	108165172	-	intergenic	.
mmu_circRNA002938	342	264	Gpatch2l	1813.856912	12	109574018	109574281	-	intergenic	.
mmu_circRNA011776	77	719	Gucy1a2	424.5568068	9	3634439	3635157	+	exon	sense
mmu_circRNA002547	190	1461	Hdac9	1007.698285	12	34373878	34433231	-	exon	sense
mmu_circRNA003031	186	334	Hdac9	688.13729	12	117275247	117275580	+	intergenic	.
mmu_circRNA006669	230	11577	Hipk3	850.9224554	2	37674633	37686209	+	intergenic	.
mmu_circRNA012811	201	667	Huwe1	743.6322328	X	151874533	151878909	+	exon	sense
mmu_circRNA000290	305	16699	Kansl1l	1681.686053	1	66762048	66807604	-	exon	sense
mmu_circRNA011235	69	1000	Kat6a	380.4470087	8	22861517	22862801	+	exon	sense
mmu_circRNA003562	100	37726	Kat6b	551.3724764	14	17925596	17963321	+	intergenic	.
mmu_circRNA008722	336	944	Kdm1a	1782.034861	4	136550801	136555305	-	exon	sense
mmu_circRNA008725	225	590	Kdm1a	938.0968641	4	136568573	136577204	-	exon	sense
mmu_circRNA008722	336	944	Kdm1a	1782.034861	4	136550801	136555305	-	exon	sense
mmu_circRNA005312	164	7949	Kdm4b	869.8027298	17	56344338	56356060	+	exon	sense
mmu_circRNA005311	297	7949	Kdm4b	1575.191529	17	56344334	56356056	+	exon	sense
mmu_circRNA008340	375	486	Kdm4c	1563.494774	4	74298441	74315649	+	exon	sense
mmu_circRNA004642	353	1663	Klhl24	1872.197339	16	20106663	20120298	+	exon	sense
mmu_circRNA009392	54	381	Klhl8	286.3984598	5	103885907	103886287	-	exon	sense
mmu_circRNA009399	161	1572	Lmbr1	671.2604228	5	106618071	106619642	-	exon	sense
mmu_circRNA009529	258	736	Lmbr1	1368.348197	5	121777370	121778105	+	intergenic	.
mmu_circRNA004677	248	5797	Lpp	1315.311445	16	24602760	24681871	+	exon	sense
mmu_circRNA007697	186	3270	Lrba	688.13729	3	86348119	86417996	+	exon	sense
mmu_circRNA003562	100	37726	Lrch1	551.3724764	14	17925596	17963321	+	intergenic	.
mmu_circRNA003881	261	11193	Lrch1	1384.259222	14	74883694	74894886	+	exon	antisen
mmu_circRNA003882	261	13518	Lrch1	1384.259222	14	74883694	74897211	+	exon	antisen
mmu_circRNA003879	193	272	Lrch1	1023.60931	14	74835649	74858121	-	exon	sense
mmu_circRNA012836	40	560	Map3k15	166.7727758	X	160044061	160075707	+	exon	sense
mmu_circRNA012841	489	254	Map3k15	2696.211409	X	160081785	160086413	+	exon	sense
mmu_circRNA007004	207	2071	Mga	863.049115	2	119902606	119917373	+	exon	sense

mmu_circRNA005602	129	1223	Mib1	477.2565076	18	10792895	10812156	+	exon	sense
mmu_circRNA009908	324	15338	Mkln1	1350.859484	6	35064889	35080226	-	intergenic	.
mmu_circRNA005377	43	384	Mtcl1	228.0580328	17	66436080	66438391	-	exon	sense
mmu_circRNA003968	281	1035	Mycbp2	1477.01714	14	103247747	103276518	-	exon	sense
mmu_circRNA009409	160	3026	Myh9	882.1959622	5	106635610	106638635	-	intron	sense
mmu_circRNA002982	215	449	Myt1l	795.4275127	12	111565186	111565634	-	intergenic	.
mmu_circRNA002533	244	679	Myt1l	1294.096744	12	29849245	29855283	+	exon	sense
mmu_circRNA011149	133	4590	Nars2	555.5054348	7	136276074	136280663	+	intergenic	.
mmu_circRNA010921	110	20043	Nars2	406.9629135	7	115163547	115183476	+	exon	sense
mmu_circRNA011046	220	9360	Nars2	813.9258269	7	128767567	128776926	+	exon	antisen
mmu_circRNA011139	235	56148	Nars2	1295.725319	7	133025713	133081860	-	intergenic	.
mmu_circRNA002487	346	333	Nbas	1442.584511	12	13390925	13393532	+	exon	sense
mmu_circRNA002471	123	337	Nbas	512.8262857	12	13300093	13310304	+	exon	sense
mmu_circRNA002467	152	367	Nbas	633.7365482	12	13285183	13289980	+	exon	sense
mmu_circRNA002492	81	364	Nbas	425.7593892	12	13432897	13441946	+	exon	sense
mmu_circRNA002459	244	45901	Nbas	1282.534456	12	11470971	11516871	+	intergenic	.
mmu_circRNA003017	236	17530	Nbas	1301.239044	12	116858843	116876372	+	intergenic	.
mmu_circRNA007574	61	282	Nbea	254.3284832	3	55953036	55955493	-	exon	sense
mmu_circRNA007578	115	945	Nbea	479.4717306	3	56079859	56091120	-	exon	sense
mmu_circRNA007652	369	23733	Nbea	2034.564438	3	75358347	75382079	-	intergenic	.
mmu_circRNA007777	110	1898	Nbea	583.40427	3	90056207	90058800	+	exon	sense
mmu_circRNA006628	291	2599	Ncoa6	1604.493906	2	34264126	34266724	-	intergenic	.
mmu_circRNA007253	239	657	Ncoa6	984.980084	2	155432816	155440785	-	exon	sense
mmu_circRNA003254	215	543	Nsd1	896.4036702	13	55291131	55296192	+	exon	sense
mmu_circRNA008476	129	354	Oma1	537.8422021	4	103328838	103353651	+	exon	sense
mmu_circRNA009527	237	3507	Pan3	1306.752769	5	121745723	121749229	+	intergenic	.
mmu_circRNA009755	194	818	Pan3	717.7345928	5	147450653	147519752	+	exon	sense
mmu_circRNA000631	329	906	Pappa2	1371.706081	1	158814340	158845132	-	exon	sense
mmu_circRNA000641	381	214	Pappa2	1588.51069	1	158957674	158957887	-	exon	sense
mmu_circRNA000634	400	1052	Pappa2	1670.693037	1	158832709	158848425	-	exon	sense
mmu_circRNA001960	49	1080	Pappa2	204.2966504	11	77777235	77778314	+	exon	sense
mmu_circRNA007409	159	620	Pappa2	655.2796375	2	180674691	180675427	-	exon	sense

mmu_circRNA000633	98	562	Pappa2	409.319794	1	158832709	158845132	-	exon	sense
mmu_circRNA011790	383	208	Pappa2	1416.970871	9	7203451	7205400	+	exon	sense
mmu_circRNA000632	94	562	Pappa2	392.6128637	1	158832705	158845128	-	exon	sense
mmu_circRNA000627	55	392	Pappa2	229.7202926	1	158782181	158784074	-	exon	sense
mmu_circRNA000903	213	616	Pappa2	788.028187	1	191749540	191763671	+	exon	sense
mmu_circRNA011768	236	131	Pappa2	873.1204325	8	127528518	127528648	+	intron	sense
mmu_circRNA000623	363	377	Pappa2	1402.272609	1	158714575	158714951	+	exon	antisen
mmu_circRNA000637	254	9032	Pappa2	1347.133496	1	158848307	158857338	+	exon	antisen
mmu_circRNA007965	116	1067	Papss1	429.1608906	3	131599865	131631815	+	exon	sense
mmu_circRNA005095	222	732	Pdpk1	821.3251526	17	24088004	24100908	-	exon	sense
mmu_circRNA005101	200	516	Pdpk1	739.9325699	17	24101369	24106964	-	exon	sense
mmu_circRNA011933	126	1212	Phip	694.7293202	9	46532757	46533968	+	intergenic	.
mmu_circRNA011537	178	1382	Phkb	658.5399873	8	85875634	85970997	+	exon	sense
mmu_circRNA011535	120	634	Phkb	500.3183275	8	85875634	85922242	+	exon	sense
mmu_circRNA012023	255	1120	Pias1	1050.920173	9	59231035	59232154	-	intergenic	.
mmu_circRNA010786	348	197	Picalm	1918.776218	7	90165514	90169275	+	exon	sense
mmu_circRNA011040	207	22304	Picalm	765.8302099	7	128750059	128772362	+	intergenic	.
mmu_circRNA010786	348	197	Picalm	1918.776218	7	90165514	90169275	+	exon	sense
mmu_circRNA010990	354	17731	Picalm	1951.858566	7	125752973	125770703	+	intergenic	.
mmu_circRNA009235	178	8320	Pitpnb	658.5399873	5	69558185	69566504	+	intergenic	.
mmu_circRNA010975	336	292	Prkcb	1766.113022	7	122516829	122518179	+	exon	sense
mmu_circRNA010975	336	292	Prkcb	1766.113022	7	122516829	122518179	+	exon	sense
mmu_circRNA006607	128	316	Prrc2b	473.5568448	2	32204009	32204324	+	exon	sense
mmu_circRNA008306	247	317	Ptbp3	1029.821891	4	59514274	59517755	-	exon	sense
mmu_circRNA008303	260	286	Ptbp3	1084.023043	4	59493186	59494610	-	exon	sense
mmu_circRNA008303	260	286	Ptbp3	1084.023043	4	59493186	59494610	-	exon	sense
mmu_circRNA004244	256	5652	Ptk2	1345.609921	15	52340410	52346061	-	intergenic	.
mmu_circRNA000646	103	42149	Ptpn14	567.9136507	1	160682041	160724189	-	intergenic	.
mmu_circRNA006937	210	443	Qser1	1157.8822	2	104778137	104780260	-	exon	sense
mmu_circRNA006933	125	933	Qser1	689.2155955	2	104770043	104780260	-	exon	sense
mmu_circRNA006937	210	443	Qser1	1157.8822	2	104778137	104780260	-	exon	sense
mmu_circRNA003182	474	598	Ranbp9	2613.505538	13	43419576	43425214	-	exon	sense

mmu_circRNA000618	225	252	Rasal2	832.4241412	1	157286731	157299264	-	exon	sense
mmu_circRNA000619	225	12534	Rasal2	832.4241412	1	157286735	157299268	+	exon	antisense
mmu_circRNA009044	426	518	Rbm33	1776.130063	5	28331111	28339308	+	exon	sense
mmu_circRNA009053	211	204	Rbm33	1163.395925	5	28365530	28365733	+	intron	sense
mmu_circRNA008861	51	1023	Rere	212.6352892	4	150406196	150500051	+	exon	sense
mmu_circRNA008871	49	308	Rere	270.1725134	4	150468695	150477468	+	exon	sense
mmu_circRNA008855	80	540	Rere	441.0979811	4	150406196	150431593	+	exon	sense
mmu_circRNA008865	363	463	Rere	1925.234091	4	150431523	150431985	+	exon	sense
mmu_circRNA008209	164	408	Rnf38	683.768381	4	44149025	44152553	-	exon	sense
mmu_circRNA003154	103	2166	Rreb1	567.9136507	13	37888871	37916595	+	exon	sense
mmu_circRNA001632	32	2361	Rtn4	176.4391924	11	29706410	29708770	+	exon	sense
mmu_circRNA012370	186	787	Ryk	688.13729	9	102881654	102898850	+	exon	sense
mmu_circRNA005298	54	6619	Satb1	297.7411372	17	51775206	51809287	-	exon	sense
mmu_circRNA010990	354	17731	Sec11a	1951.858566	7	125752973	125770703	+	intergenic	.
mmu_circRNA001724	234	1346	Sec24a	865.7211068	11	51707128	51726594	-	exon	sense
mmu_circRNA009349	392	447	Sec31a	1615.532188	5	100381160	100383923	-	exon	sense
mmu_circRNA009349	392	447	Sec31a	1615.532188	5	100381160	100383923	-	exon	sense
mmu_circRNA012443	86	4418	Setd2	354.42798	9	110547209	110553234	+	exon	sense
mmu_circRNA010167	197	1184	Sfxn5	728.8335814	6	93745434	93773689	-	exon	sense
mmu_circRNA007610	168	710	Slc33a1	926.3057603	3	63944566	63954004	-	exon	sense
mmu_circRNA000772	55	196	Smyd3	229.7202926	1	179298132	179298327	-	intron	sense
mmu_circRNA000767	115	598	Smyd3	634.0783478	1	179289275	179289872	-	intron	sense
mmu_circRNA001105	58	325	Sobp	307.6131605	10	43157908	43160844	-	exon	sense
mmu_circRNA001236	246	347	Specc1l	1293.047034	10	75261794	75267589	+	exon	sense
mmu_circRNA005493	320	357	Srbd1	1764.391924	17	86098512	86103000	-	exon	sense
mmu_circRNA000067	124	358	Stau2	683.7018707	1	16463035	16509408	-	exon	sense
mmu_circRNA000061	265	481	Stau2	1461.137062	1	16389821	16394210	-	exon	sense
mmu_circRNA008299	297	1431	Susd1	1575.191529	4	59349826	59380958	-	exon	sense
mmu_circRNA007967	42	1594	Tbck	173.0927344	3	132705513	132743087	+	exon	sense
mmu_circRNA007972	243	3551	Tbck	1339.835118	3	132801504	132815349	+	exon	sense
mmu_circRNA005474	118	692	Thada	650.6195221	17	84443818	84444509	-	exon	sense
mmu_circRNA002977	336	1085	Traf3	1243.086718	12	111219811	111255363	+	exon	sense

mmu_circRNA007856	87	350	Trim33	479.6940544	3	103344294	103344643	+	exon	sense
mmu_circRNA007086	234	429	Trpm7	1290.211595	2	126823976	126825789	-	exon	sense
mmu_circRNA007081	252	639	Trpm7	1389.45864	2	126797111	126799234	-	exon	sense
mmu_circRNA002788	141	14109	Ttll5	777.4351917	12	85863564	85879475	+	exon	sense
mmu_circRNA004981	266	2842	Tulp4	1109.038959	17	6137211	6207057	+	exon	sense
mmu_circRNA004981	266	2842	Tulp4	1109.038959	17	6137211	6207057	+	exon	sense
mmu_circRNA004196	488	779	Ubr5	2588.193489	15	38040753	38047624	-	exon	sense
mmu_circRNA004196	488	779	Ubr5	2588.193489	15	38040753	38047624	-	exon	sense
mmu_circRNA001463	26	532	Usp15	137.8955547	10	123168227	123181800	-	exon	sense
mmu_circRNA004187	69	688	Vps13b	380.4470087	15	35709126	35709813	+	exon	sense
mmu_circRNA001722	184	465	Wdpcp	680.7379643	11	51598276	51598740	+	intergenic	.
mmu_circRNA005653	93	401	Wdr37	512.776403	18	31827262	31829979	+	exon	sense
mmu_circRNA003313	250	340	Wdr37	1378.431191	13	65250086	65250425	-	intergenic	.
mmu_circRNA005816	285	1609	Wdr7	1188.256028	18	63755036	63796281	+	exon	sense
mmu_circRNA005819	57	1198	Wdr7	237.6512056	18	63777528	63796281	+	exon	sense
mmu_circRNA000446	179	3517	Zcchc2	746.3081719	1	106000931	106032235	+	exon	sense
mmu_circRNA000443	206	374	Zcchc2	1092.557087	1	106000931	106011814	+	exon	sense
mmu_circRNA000443	206	374	Zcchc2	1092.557087	1	106000931	106011814	+	exon	sense
mmu_circRNA004744	123	1625	Zfp148	455.0585305	16	33498955	33500579	-	exon	antisen
mmu_circRNA005932	126	3977	Zfp236	466.1575191	18	82620318	82682287	-	exon	sense
mmu_circRNA008175	413	370	Zfp292	2277.168327	4	34839332	34839986	-	exon	sense
mmu_circRNA005955	304	372	Zfp407	1676.172328	18	84342946	84354691	-	exon	sense
mmu_circRNA005955	304	372	Zfp407	1676.172328	18	84342946	84354691	-	exon	sense
mmu_circRNA005945	81	3569	Zfp516	337.7148711	18	82955524	82994537	+	exon	sense
mmu_circRNA005949	254	252	Zfp516	1400.48609	18	82990640	82990891	+	intron	sense
mmu_circRNA005835	268	5073	Zfp532	1421.384949	18	65651560	65656632	+	intron	sense
mmu_circRNA005835	268	5073	Zfp532	1421.384949	18	65651560	65656632	+	intron	sense
mmu_circRNA009468	46	11854	Zkscan1	191.7886922	5	113182054	113193907	-	intergenic	.
mmu_circRNA008629	57	1056	Zmym4	314.2823115	4	126868717	126890175	-	exon	sense

Table S4 circRNAs expressive abundance

CircID	C57_6J- Reads Mean	HFD- Reads Mean	log2 Ratio (HFD/C57_6J)	P-value	FDR	Gene_list	Chr	Start	End
mmu_circRNA006170	1556.333333	6358.333333	2.030497564	0.012406601	0.894860027	Glis3	19	28530873	28531986
mmu_circRNA012270	464	4473.333333	2.906470007	1.55E-17	5.02E-14	Bckdhb	9	83988776	84012619
mmu_circRNA012271	270.6666667	3701.333333	3.419121779	3.88E-19	1.89E-15	Bckdhb	9	83988782	84012625
mmu_circRNA001139	61	696.3333333	3.167304167	0.000138568	0.064199138	Mcm9	10	53611349	53626031
mmu_circRNA001142	59	668.3333333	3.156053096	0.000204959	0.07017595	Mcm9	10	53611352	53626034
mmu_circRNA012877	0	679	19.11453555	5.86E-15	1.43E-11	Erdr1	Y	90739142	90785979
mmu_circRNA008289	100.3333333	530	2.051410489	0.019154921	0.894860027	Al314180	4	58861525	58885498
mmu_circRNA002549	77.33333333	507	2.345213516	0.010885973	0.816332274	Snx13	12	35078900	35086984
mmu_circRNA006791	474.6666667	74.33333333	-3.036822679	0.000612493	0.149065586	Dcaf17	2	71056495	71063495
mmu_circRNA009624	41	469.3333333	3.197328786	0.00231199	0.335928766	Tpst1	5	130101590	130102535
mmu_circRNA010890	78.66666667	423	2.042355545	0.041226274	0.894860027	Galnt18	7	111597803	111599123
mmu_circRNA009833	13.66666667	454.3333333	4.586940165	0.000116098	0.018598486	Aass	6	23107140	23122737
mmu_circRNA009833	13.66666667	376.3333333	4.467065206	0.000881873	0.180068258	Aass	6	23107140	23122737
mmu_circRNA012266	27.33333333	356.3333333	3.351699909	0.009687469	0.766727705	Bckdhb	9	83985978	84012619
mmu_circRNA012261	43.66666667	326.3333333	2.514005075	0.043173868	0.894860027	Bckdhb	9	83952283	83991822
mmu_circRNA001105	19.33333333	348.3333333	3.829671439	0.004116337	0.494722774	Sobp	10	43157908	43160844
mmu_circRNA002492	27	335.6666667	3.313472753	0.013075584	0.868456204	Nbas	12	13432897	13441946
mmu_circRNA008105	273.3333333	71.33333333	-2.208079035	0.047734835	0.894860027	Esrp1	4	11353295	11379405
mmu_circRNA001463	8.666666667	331	4.874648297	0.001295828	0.238016797	Usp15	10	123168227	123181800
mmu_circRNA003146	31.66666667	301.3333333	2.908153598	0.035125829	0.894860027	Cdyl	13	35815909	35816575
mmu_circRNA004140	265.3333333	47.66666667	-2.837100697	0.02242668	0.894860027	Ctnnd2	15	30634644	30647324
mmu_circRNA009392	18	292.6666667	3.66212695	0.014772767	0.894860027	Klhl8	5	103885907	103886287
mmu_circRNA003042	257.3333333	51.66666667	-2.684426873	0.032836775	0.894860027	Gdi2	13	3556314	3557057
mmu_circRNA011438	255.3333333	52	-2.708247596	0.036046475	0.894860027	Jund	8	70699862	70700244
mmu_circRNA001300	25	282	3.15079864	0.035914595	0.894860027	Ric8b	10	84947412	84948020
mmu_circRNA008881	17.33333333	283	3.621324554	0.018947545	0.894860027	Nphp4	4	152496649	152507483
mmu_circRNA002116	0	286.3333333	17.81397797	1.44E-05	0.004463728	Acsf2	11	94556746	94573228
mmu_circRNA009527	237	49	-2.569254884	0.047082556	0.894860027	Pan3	5	121745723	121749229

mmu_circRNA010938	0	281.6666667	17.8380126	1.57E-05	0.018881254	Pik3c2a	7	116405860	116418581
mmu_circRNA006937	239.3333333	41.66666667	-2.894657006	0.034128891	0.894860027	Qser1	2	104778137	104780260
mmu_circRNA009044	0	273.6666667	17.83213617	1.75E-05	0.018881254	Rbm33	5	28331111	28339308
mmu_circRNA003557	0	268.6666667	17.71884962	3.88E-05	0.008498325	Acsf2	14	16270475	16294673
mmu_circRNA005955	236	32	-3.164834012	0.022061482	0.894860027	Zfp407	18	84342946	84354691
mmu_circRNA010222	228.3333333	32.33333333	-3.24113721	0.027454127	0.894860027	Itpr1	6	108416810	108440687
mmu_circRNA000290	228.6666667	30.33333333	-3.307122723	0.023833706	0.894860027	Kansl1l	1	66762048	66807604
mmu_circRNA001856	12.66666667	236.3333333	3.84941981	0.032110738	0.894860027	Fxr2	11	69649728	69651723
mmu_circRNA010972	245.6666667	0	-18.02652421	1.02E-06	0.001982164	Dctn5	7	122145532	122146119
mmu_circRNA009904	0	244	17.67679746	8.24E-05	0.049813393	Exoc4	6	33597851	33602269
mmu_circRNA002174	0	240	17.60270746	0.000158272	0.064199138	Klhl11	11	100462788	100464445
mmu_circRNA004935	0	238.6666667	17.59363304	0.000172952	0.064757324	Igsf5	16	96396369	96422534
mmu_circRNA011320	0	238.3333333	17.61751599	0.000139777	0.064199138	Mtmr7	8	40597283	40609016
mmu_circRNA000546	0	235	17.60864552	0.000154013	0.064199138	Ppp1r12b	1	134865778	134879745
mmu_circRNA003182	226	7	-5.440696353	0.001562515	0.253518054	Ranbp9	13	43419576	43425214
mmu_circRNA002656	231	0	-17.92562375	3.25E-06	0.005275901	Sos2	12	69603476	69607412
mmu_circRNA005350	223	6	-5.501293039	0.001451147	0.243567588	Ppp4r1	17	65803211	65816050
mmu_circRNA009944	218.6666667	10	-4.742499338	0.004320554	0.506754148	Ubn2	6	38461475	38487150
mmu_circRNA004100	0	228.3333333	17.51638843	0.000336601	0.098024713	Golph3	15	12339628	12349788
mmu_circRNA002218	228.3333333	0	-17.91080224	3.91E-06	0.005432027	Kansl1	11	104368680	104378826
mmu_circRNA011509	0	227	17.56662639	0.000230682	0.072441562	Cacna1a	8	84523016	84544783
mmu_circRNA005302	7.333333333	214.6666667	4.449503585	0.033937496	0.894860027	Kcnh8	17	52834542	52839262
mmu_circRNA012764	0	219.3333333	17.49218744	0.000420821	0.110721527	Gm23199	X	140677996	140693162
mmu_circRNA003851	200.3333333	18.66666667	-3.836215094	0.024834035	0.894860027	Ppp3cc	14	70256360	70267506
mmu_circRNA011557	202	16	-4.045953163	0.018024272	0.894860027	Cyld	8	88702305	88723212
mmu_circRNA007658	0	214.6666667	17.4593662	0.000545492	0.136163303	Serpini1	3	75613080	75623956
mmu_circRNA005515	0	214.3333333	17.50472635	0.00039404	0.106554905	Fbxo11	17	88008594	88015712
mmu_circRNA002854	193.3333333	21	-3.591514368	0.035547802	0.894860027	Tc2n	12	101646580	101694673
mmu_circRNA002177	0	210	17.38404785	0.000662972	0.0574606	Acly	11	100495860	100516906
mmu_circRNA011433	0	209	17.39945357	0.000846825	0.180068258	Mau2	8	70033179	70033628
mmu_circRNA001840	0	207.6666667	17.39398826	0.00088435	0.180068258	Dnah9	11	65969966	65990535
mmu_circRNA000035	0	206.3333333	17.40150055	0.000845944	0.180068258	Mid2	1	10088051	10096013

mmu_circRNA001621	0	205	17.39449402	0.000892702	0.180068258	Ccdc88a	11	29470315	29480651
mmu_circRNA012135	195.3333333	7.666666667	-5.073586196	0.007840471	0.710317908	Rora	9	69047157	69047480
mmu_circRNA009287	202	0	-17.84170498	5.46E-06	0.002627117	Adgrl3	5	81511984	81512784
mmu_circRNA011235	200	0	-17.71321832	3.54E-05	0.02874311	Kat6a	8	22861517	22862801
mmu_circRNA010061	197.3333333	0	-17.72063805	3.44E-05	0.02874311	Gng12	6	67017574	67017892
mmu_circRNA006851	197.3333333	0	-17.72063805	3.44E-05	0.02874311	Fnbp4	2	90757427	90758397
mmu_circRNA002335	197	0	-17.68704908	4.56E-05	0.034118133	Evpl	11	116233386	116234523
mmu_circRNA008209	0	196.3333333	17.32808273	0.001444094	0.243567588	Rnf38	4	44149025	44152553
mmu_circRNA005249	0	195.3333333	17.35465182	0.001220798	0.228547436	Tnfrsf21	17	43037595	43040189
mmu_circRNA009625	185.6666667	8.666666667	-4.819615756	0.013879675	0.894860027	Tpst1	5	130101590	130114666
mmu_circRNA005537	0	192	17.28700569	0.001912117	0.295467649	Svil	18	5063194	5088814
mmu_circRNA001585	0	191.6666667	17.27241592	0.002096696	0.30926261	Cct4	11	22995930	22997154
mmu_circRNA000457	0	191	17.29719853	0.001802192	0.282973208	Clasp1	1	118419440	118419918
mmu_circRNA002527	190.6666667	0	-17.64880229	6.71E-05	0.043557134	Kidins220	12	25058116	25058359
mmu_circRNA008025	0	190.3333333	17.33312375	0.0014389	0.243567588	Spata1	3	146463185	146493843
mmu_circRNA007191	190	0	-17.64998343	6.70E-05	0.043557134	Snx5	2	144255340	144257993
mmu_circRNA005835	173.6666667	15.66666667	-3.842611449	0.044983027	0.894860027	Zfp532	18	65651560	65656632
mmu_circRNA000634	0	186.6666667	17.22518153	0.002855341	0.390999339	Pappa6	1	158832709	158848425
mmu_circRNA003493	186.3333333	0	-17.62343116	8.70E-05	0.049813393	Dhx29	13	112944494	112948355
mmu_circRNA001079	0	186	17.28467345	0.001995134	0.302304339	Cabin1	10	41654942	41666796
mmu_circRNA012269	0	184.6666667	17.23711936	0.002682403	0.378452137	Bckdhb	9	83988776	84010351
mmu_circRNA008951	183	0	-17.57605515	0.000136533	0.064199138	Elapor2	5	9399181	9410731
mmu_circRNA009937	0	182.3333333	17.20967589	0.003189347	0.413977184	Ubn2	6	38440458	38491931
mmu_circRNA010371	173	9	-4.56505061	0.021659029	0.894860027	Pik3c2g	6	139843888	139860382
mmu_circRNA010265	181.6666667	0	-17.55315398	0.000165666	0.064510229	Zfp9	6	118466828	118477424
mmu_circRNA012664	181.6666667	0	-17.56737942	0.000148401	0.064199138	Mamld1	X	71117481	71119394
mmu_circRNA002487	0	181.3333333	17.24099224	0.00266108	0.378452137	Nbas	12	13390925	13393532
mmu_circRNA002105	168.3333333	9.666666667	-4.380363601	0.03174179	0.894860027	Spag9	11	94067893	94071686
mmu_circRNA010305	0	176.6666667	17.21449114	0.003181168	0.413977184	Kdm5a	6	120381535	120394249
mmu_circRNA001425	175.6666667	0	-17.53838584	0.000197798	0.07017595	Cpsf6	10	117366081	117367988
mmu_circRNA005875	0	175.3333333	17.13004267	0.005124799	0.53653984	Myo5b	18	74569767	74580534
mmu_circRNA006209	174.3333333	0	-17.52834913	0.000216259	0.07017595	Papss2	19	32647443	32647587

mmu_circRNA009546	0	173.3333333	17.11663744	0.005548445	0.556846489	Ift81	5	122591080	122594688
mmu_circRNA003923	173	0	-17.4755183	0.00032166	0.097855135	Naa16	14	79350689	79351501
mmu_circRNA009626	162	10.33333333	-4.358942286	0.038922144	0.894860027	Ndufa12-ps	5	130187401	130191043
mmu_circRNA001633	0	172	17.14800471	0.004719704	0.530218622	Eml6	11	29784064	29785755
mmu_circRNA005028	0	172	17.12629577	0.003683636	0.181570883	Afdn	17	13803939	13818278
mmu_circRNA008048	0	170	17.0858942	0.004604486	0.204052125	Acadm	3	153933027	153939167
mmu_circRNA003927	0	169.3333333	17.14945231	0.004738472	0.530218622	Elf1	14	79567150	79570915
mmu_circRNA009908	0	168.6666667	17.14001992	0.004999839	0.53653984	Mkln1	6	35064889	35080226
mmu_circRNA011550	168.3333333	0	-17.46959906	0.000352426	0.098024713	Zfp423	8	87859284	87904548
mmu_circRNA008509	168	0	-17.47400661	0.000342847	0.098024713	Zfyve9	4	108695769	108719812
mmu_circRNA004754	0	167	17.07366457	0.007109746	0.671974494	Sec22a	16	35329498	35348994
mmu_circRNA011611	156.3333333	10.66666667	-4.271168093	0.04763946	0.894860027	Cdh8	8	99171266	99200400
mmu_circRNA012763	0	166.6666667	17.06339784	0.007497609	0.701819472	Mid2	X	140677996	140678711
mmu_circRNA004206	0	164	17.05562273	0.00788026	0.710317908	Rims2	15	39274976	39292312
mmu_circRNA008766	0	162.6666667	17.05924186	0.007782225	0.710317908	Hp1bp5	4	138221526	138241792
mmu_circRNA004196	162.6666667	0	-17.42746403	0.000499685	0.128011444	Ubr5	15	38040753	38047624
mmu_circRNA007475	160.6666667	0	-17.39206662	0.000646261	0.153447632	Tnik	3	28532888	28542098
mmu_circRNA008748	160.3333333	0	-17.38599299	0.000675254	0.156514228	Usp48	4	137625160	137635008
mmu_circRNA002711	156.6666667	0	-17.34375794	0.00092485	0.180068258	Gphn	12	78609145	78627260
mmu_circRNA007634	0	155.6666667	17.01710027	0.009850159	0.767130406	Ppm1l	3	69379732	69379758
mmu_circRNA011869	0	155.6666667	16.97277361	0.012163965	0.858088384	Fam118b	9	35235231	35244706
mmu_circRNA002690	155.3333333	0	-17.34812537	0.000911275	0.180068258	Mthfd1	12	76293391	76301398
mmu_circRNA001067	154	0	-17.36293373	0.000839155	0.180068258	Mettl24	10	40713136	40713328
mmu_circRNA005653	152.6666667	0	-17.33070308	0.001046951	0.199844509	Wdr37	18	31827262	31829979
mmu_circRNA005945	0	152.3333333	16.93187324	0.014902845	0.894860027	Zfp516	18	82955524	82994537
mmu_circRNA008959	0	152	17.03061257	0.009374116	0.748008392	Pclo	5	14520842	14540801
mmu_circRNA007204	0	152	16.9190371	0.015824937	0.894860027	Ralgapa2	2	146387228	146406432
mmu_circRNA001581	0	150.6666667	16.97310401	0.012390613	0.861590106	B3gnt2	11	22835924	22837195
mmu_circRNA000281	143.6666667	6.666666667	-4.832291755	0.049964432	0.894860027	Unc80	1	66521455	66530853
mmu_circRNA002471	0	149.3333333	16.92442305	0.015598508	0.894860027	Nbas	12	13300093	13310304
mmu_circRNA004474	0	149.3333333	16.89219475	0.012432985	0.310708824	Adcy6	15	98592312	98604732
mmu_circRNA009524	0	148.6666667	16.88573973	0.012814998	0.313025883	Acad10	5	121627265	121632662

mmu_circRNA002972	148.6666667	0	-17.29717848	0.001345383	0.242542747	Rcor1	12	111081724	111103805
mmu_circRNA008879	148	0	-17.29114255	0.001405851	0.243567588	Chd5	4	152358498	152363486
mmu_circRNA006219	0	147.3333333	16.94147479	0.014541509	0.894860027	Pank1	19	34840757	34841109
mmu_circRNA002392	0	147.3333333	16.92935156	0.015371156	0.894860027	Tbcd	11	121602988	121605340
mmu_circRNA011182	0	146	16.84768312	0.021998068	0.894860027	Nap1l4	7	143534286	143536039
mmu_circRNA009022	145.6666667	0	-17.27828921	0.001556895	0.253518054	Klhl7	5	24134964	24141293
mmu_circRNA003460	0	144.6666667	16.90059729	0.017668867	0.894860027	Adamts6	13	104294447	104314383
mmu_circRNA009360	0	144.3333333	16.8901206	0.018515791	0.894860027	Cops4	5	100530047	100533662
mmu_circRNA007190	143	0	-17.23944817	0.002018468	0.302304339	Snx5	2	144255336	144257989
mmu_circRNA004228	0	142	16.85517192	0.021643862	0.894860027	Emc2	15	43492170	43513849
mmu_circRNA007574	0	141.3333333	16.84663101	0.022471179	0.894860027	Nbea	3	55953036	55955493
mmu_circRNA004660	0	141.3333333	16.84655666	0.022477999	0.894860027	Eif4g1	16	20683418	20684508
mmu_circRNA008823	0	141	16.88578047	0.019110096	0.894860027	Eif4g3	4	147362811	147444532
mmu_circRNA000504	141	0	-17.18044143	0.002891829	0.390999339	Mir128-1	1	128186758	128223641
mmu_circRNA003826	0	140.6666667	16.85640459	0.021642477	0.894860027	Extl3	14	65066683	65080475
mmu_circRNA009157	140.6666667	0	-17.18660552	0.002802371	0.389729709	Ept1	5	45775392	45776499
mmu_circRNA009399	0	140	16.83627653	0.023551407	0.894860027	Lmbr1	5	106618071	106619642
mmu_circRNA003722	0	139.6666667	16.83203653	0.023986253	0.894860027	Rpph1	14	50807500	50807650
mmu_circRNA001620	0	139.3333333	16.85611298	0.021778872	0.894860027	Ccdc88a	11	29470315	29477458
mmu_circRNA007798	0	138.6666667	16.89816228	0.018289973	0.894860027	Pip5k1a	3	95070712	95072520
mmu_circRNA004661	0	138.6666667	16.81842462	0.025417746	0.894860027	Eif4g1	16	20683422	20684512
mmu_circRNA008122	0	138.3333333	16.8538667	0.022065287	0.894860027	Runx1t1	4	13835633	13881240
mmu_circRNA004286	0	138	16.89120952	0.018897378	0.894860027	Trib1	15	59649373	59649576
mmu_circRNA003069	0	138	16.89120952	0.018897378	0.894860027	Chrm3	13	10013511	10013693
mmu_circRNA003705	0	137.6666667	16.82096389	0.025255999	0.894860027	Ddhd1	14	45601565	45629753
mmu_circRNA000505	137.6666667	0	-17.14592555	0.003601947	0.455232683	Mir128-1	1	128186763	128223646
mmu_circRNA000367	137.3333333	0	-17.17696469	0.003051136	0.406887734	Psmd1	1	86078568	86092098
mmu_circRNA009583	137	0	-17.1547334	0.003456169	0.442707988	Sbno1	5	124407091	124414527
mmu_circRNA002148	0	136.6666667	16.81276803	0.026183705	0.894860027	Cdk12	11	98210361	98224631
mmu_circRNA009773	0	135.3333333	16.75006576	0.033485933	0.894860027	Katnal1	5	148918596	148921412
mmu_circRNA002887	135.3333333	0	-17.13507133	0.003898822	0.48044341	Chga	12	102561345	102562083
mmu_circRNA007757	0	135	16.75195502	0.033286021	0.894860027	Clk2	3	89171645	89172099

mmu_circRNA012481	0	134.6666667	16.74851843	0.033759027	0.894860027	Trak1	9	121364001	121392051
mmu_circRNA000108	0	134.6666667	16.72242507	0.025638299	0.438781102	Adgrb3	1	25504433	25559865
mmu_circRNA000631	0	133.6666667	16.8289651	0.024841409	0.894860027	Pappa2	1	158814340	158845132
mmu_circRNA002248	0	133.6666667	16.7532646	0.033275523	0.894860027	Ern1	11	106421706	106423488
mmu_circRNA010276	0	133.3333333	16.84157875	0.023651896	0.894860027	Cacna1c	6	119018746	119019944
mmu_circRNA005992	133.3333333	0	-17.15107935	0.003647473	0.455232683	Kdm2a	19	4350177	4394892
mmu_circRNA006248	0	133	16.72392113	0.037225156	0.894860027	Cpeb3	19	37044522	37139221
mmu_circRNA001843	0	132.6666667	16.83434718	0.024410875	0.894860027	Dnah9	11	66155417	66160053
mmu_circRNA001706	0	132	16.80882114	0.027063921	0.894860027	Rnf130	11	50085741	50095980
mmu_circRNA000661	0	132	16.77864999	0.030402097	0.894860027	Dnm3	1	162307868	162313696
mmu_circRNA009686	132	0	-17.0852842	0.005198189	0.53653984	Zfp68	5	138616572	138617060
mmu_circRNA002547	132	0	-17.10500357	0.004701071	0.530218622	Hdac9	12	34373878	34433231
mmu_circRNA004981	0	131.6666667	16.79379953	0.028722192	0.894860027	Tulp4	17	6137211	6207057
mmu_circRNA005590	0	131.6666667	16.71868111	0.038127682	0.894860027	Esco1	18	10574875	10595875
mmu_circRNA003130	131.3333333	0	-17.11544879	0.00448193	0.519423725	Cdkal1	13	29691599	29717817
mmu_circRNA009793	0	130.6666667	16.72600647	0.037233563	0.894860027	Exoc6b	6	3516622	3524175
mmu_circRNA009349	0	130.6666667	16.6876059	0.042896383	0.894860027	Sec31a	5	100381160	100383923
mmu_circRNA000761	130.6666667	0	-17.12589453	0.004271701	0.506754148	Desi2	1	178242612	178244482
mmu_circRNA000446	0	130.3333333	16.75281591	0.033729021	0.894860027	Zcchc2	1	106000931	106032235
mmu_circRNA001814	130.3333333	0	-17.08577353	0.005263175	0.53653984	Ncor1	11	62349353	62354688
mmu_circRNA006494	0	130	16.7646323	0.032300876	0.894860027	Dnajc1	2	18214643	18215392
mmu_circRNA003167	0	130	16.68022637	0.044171431	0.894860027	Phactr1	13	42873684	42891626
mmu_circRNA009409	130	0	-17.08618408	0.005268055	0.53653984	Myh9	5	106635610	106638635
mmu_circRNA011149	0	129	16.68019893	0.044320599	0.894860027	Nars2	7	136276074	136280663
mmu_circRNA011434	129	0	-17.08975688	0.005220928	0.53653984	Slc25a42	8	70206887	70207479
mmu_circRNA010872	0	128.6666667	16.69013527	0.042782037	0.894860027	Syt9	7	107502093	107506618
mmu_circRNA012836	0	128	16.69686076	0.041834499	0.894860027	Map3k15	X	160044061	160075707
mmu_circRNA003698	0	128	16.68996027	0.042905503	0.894860027	Ccser2	14	36926839	36941264
mmu_circRNA000923	127.6666667	0	-17.08952782	0.005290994	0.53653984	Plxna2	1	194706093	194706370
mmu_circRNA006641	0	127.3333333	16.70416458	0.04082376	0.894860027	Hspa5	2	34776103	34776341
mmu_circRNA011702	127.3333333	0	-17.05816574	0.006204506	0.60884121	Adamts18	8	113736681	113754659
mmu_circRNA011702	127.3333333	0	-17.12591129	0.002489061	0.14594359	Adamts18	8	113736681	113754659

mmu_circRNA009568	0	127	16.71169483	0.039758441	0.894860027	Abcb9	5	14389806	14396476
mmu_circRNA000641	0	127	16.77136975	0.031847378	0.894860027	Pappa2	1	158957674	158957887
mmu_circRNA008410	127	0	-17.06147742	0.006122145	0.608153918	Elavl2	4	91308611	91311663
mmu_circRNA009358	126	0	-17.04377575	0.006737321	0.649384349	Daglb	5	100480198	100485855
mmu_circRNA010849	126	0	-17.05896911	0.006254147	0.60884121	Rab6a	7	100626552	100639495
mmu_circRNA011257	0	125.6666667	16.68557948	0.04394586	0.894860027	Nsd3	8	25659741	25663256
mmu_circRNA008340	0	125	16.74846934	0.034964738	0.894860027	Kdm4c	4	74298441	74315649
mmu_circRNA002419	0	125	16.69089446	0.043201227	0.894860027	Dnmt3a	12	3835027	3849739
mmu_circRNA001838	0	124.6666667	16.74461702	0.035513276	0.894860027	Dnah9	11	65947469	65992869
mmu_circRNA011489	0	124.6666667	16.67161817	0.046400178	0.894860027	Smad1	8	79343654	79356469
mmu_circRNA009257	0	124.3333333	16.65829551	0.048763247	0.894860027	Ociad1	5	73300664	73310426
mmu_circRNA007578	0	124	16.67120338	0.046576018	0.894860027	Nbea	3	56079859	56091120
mmu_circRNA004606	124	0	-16.99508639	0.008661774	0.744957328	Fgd4	16	16453992	16469842
mmu_circRNA007780	123.3333333	0	-16.98730904	0.009037105	0.744957328	Gatad2b	3	90350387	90354510
mmu_circRNA012404	123	0	-17.0180016	0.007834564	0.710317908	Carm1	9	107823184	107825955
mmu_circRNA010063	123	0	-17.03866169	0.007093826	0.671974494	Gng12	6	67018354	67019054
mmu_circRNA000251	0	122.6666667	16.69538295	0.042853398	0.894860027	Abi2	1	60437056	60453762
mmu_circRNA003458	0	122.3333333	16.71735881	0.039606369	0.894860027	Trim23	13	104197990	104200193
mmu_circRNA008306	0	122.3333333	16.68271401	0.044925964	0.894860027	Ptbp3	4	59514274	59517755
mmu_circRNA002467	0	122	16.65993235	0.048858225	0.894860027	Nbas	12	13285183	13289980
mmu_circRNA008051	121.6666667	0	-16.98516698	0.009259357	0.744957328	Erich3	3	154762402	154762677
mmu_circRNA008050	121.6666667	0	-16.98516698	0.009259357	0.744957328	Erich3	3	154762402	154762608
mmu_circRNA005344	0	121.3333333	16.67585408	0.046222259	0.894860027	Man2a1	17	64636484	64659074
mmu_circRNA009663	121	0	-17.00055243	0.008662271	0.744957328	Baz1b	5	135216590	135231782
mmu_circRNA008763	121	0	-17.00538788	0.008466515	0.744957328	Eif4g3	4	138170477	138180607
mmu_circRNA009113	120.6666667	0	-16.99657258	0.008852116	0.744957328	Fam193a	5	34464049	34464204
mmu_circRNA008692	0	120.3333333	16.69357758	0.043502747	0.894860027	Wasf2	4	133184969	133192260
mmu_circRNA002277	120.3333333	0	-16.99752414	0.008838252	0.744957328	Helz	11	107592706	107649340
mmu_circRNA008303	0	120	16.6574938	0.049634444	0.894860027	Ptbp3	4	59493186	59494610
mmu_circRNA002993	120	0	-16.94778067	0.011173217	0.816332274	Klc1	12	111774353	111778700
mmu_circRNA008111	120	0	-16.98857978	0.009244356	0.744957328	Rad54b	4	11583973	11584151
mmu_circRNA006227	120	0	-16.98926862	0.009214558	0.744957328	Btaf1	19	36951034	36970038

mmu_circRNA008032	119.3333333	0	-16.99500046	0.00902255	0.744957328	Fubp1	3	152221267	152222244
mmu_circRNA010901	119.3333333	0	-16.99500046	0.00902255	0.744957328	Btbd10	7	113322680	113335518
mmu_circRNA011270	119	0	-16.95320139	0.01098942	0.816332274	Ddhd2	8	25735745	25739585
mmu_circRNA003871	118.3333333	0	-16.9684019	0.010302792	0.790188953	Rb1	14	73205744	73207319
mmu_circRNA010990	118	0	-16.97879024	0.009846489	0.767130406	Sec11a	7	125752973	125770703
mmu_circRNA006727	117.6666667	0	-16.93461166	0.012101501	0.858088384	Baz2b	2	59948087	59962630
mmu_circRNA012234	117.6666667	0	-16.96952413	0.010308577	0.790188953	Filip1	9	79898195	79898476
mmu_circRNA012356	117	0	-16.92474952	0.012727239	0.865341938	Stag1	9	100880776	100891136
mmu_circRNA009470	117	0	-16.92689687	0.012603763	0.865341938	Sgsm1	5	113263249	113268829
mmu_circRNA012137	117	0	-16.95205391	0.011236623	0.816332274	Rora	9	69262726	69262952
mmu_circRNA008935	116	0	-16.95412818	0.01122615	0.816332274	Cdk14	5	4875474	4875627
mmu_circRNA010786	116	0	-16.95412818	0.01122615	0.816332274	Picalm	7	90165514	90169275
mmu_circRNA011370	115.3333333	0	-16.93496108	0.012321736	0.861590106	Odz3	8	48335589	48349413
mmu_circRNA007494	115.3333333	0	-16.94106528	0.011984495	0.857860713	Kcnmb2	3	31954202	31958095
mmu_circRNA007044	115	0	-16.92717924	0.012800127	0.865341938	Trp53bp1	2	121227645	121228707
mmu_circRNA006949	114.6666667	0	-16.89034929	0.015101213	0.894860027	Elp4	2	105832131	105866080
mmu_circRNA012351	114.3333333	0	-16.92306384	0.013113822	0.868456204	Stag1	9	100757690	100786696
mmu_circRNA006868	114.3333333	0	-16.92942776	0.012742252	0.865341938	Snord67	2	91594683	91596555
mmu_circRNA006523	113.6666667	0	-16.89243033	0.015089386	0.894860027	Myo3a	2	22291806	22297718
mmu_circRNA011761	113.3333333	0	-16.90611762	0.014258457	0.894860027	Pard3	8	127216749	127216951
mmu_circRNA004426	113	0	-16.91632615	0.013668418	0.894860027	Drosha	15	85882674	85885192
mmu_circRNA006129	112.6666667	0	-16.89760612	0.014878699	0.894860027	Pgm5	19	24727669	24733677
mmu_circRNA006837	112.3333333	0	-16.89819557	0.014882023	0.894860027	Nckap1	2	80520372	80525678
mmu_circRNA005039	112	0	-16.848245	0.018392779	0.894860027	Lnpep	17	17570874	17579372
mmu_circRNA010975	112	0	-16.848245	0.018392779	0.894860027	Prkcb	7	122516829	122518179
mmu_circRNA008722	112	0	-16.88904411	0.015521251	0.894860027	Kdm1a	4	136550801	136555305
mmu_circRNA008934	112	0	-16.90350211	0.014583988	0.894860027	Cdk14	5	4875470	4875623
mmu_circRNA004839	111.6666667	0	-16.8619913	0.01743243	0.894860027	Zbtb11	16	55980595	55991618
mmu_circRNA008581	111.6666667	0	-16.89920197	0.014900134	0.894860027	Hivep3	4	120093964	120103854
mmu_circRNA006198	111	0	-16.87583618	0.016547644	0.894860027	A1cf	19	31908792	31920986
mmu_circRNA009899	111	0	-16.89056305	0.015549558	0.894860027	Exoc4	6	33359491	33363125
mmu_circRNA010454	110.6666667	0	-16.88622412	0.015883081	0.894860027	Zfp28	7	6389433	6390560

mmu_circRNA004897	110.3333333	0	-16.83372356	0.019760379	0.894860027	Morc3	16	93847288	93853217
mmu_circRNA003562	110	0	-16.85364666	0.018282957	0.894860027	Lrch1	14	17925596	17963321
mmu_circRNA003475	109.6666667	0	-16.81787135	0.021153543	0.894860027	Zswim6	13	107738372	107748363
mmu_circRNA002575	109.3333333	0	-16.82829054	0.020352864	0.894860027	Prkd1	12	50425439	50435352
mmu_circRNA011776	109.3333333	0	-16.84280428	0.01920599	0.894860027	Gucy1a2	9	3634439	3635157
mmu_circRNA000067	109.3333333	0	-16.84896947	0.018734076	0.894860027	Stau2	1	16463035	16509408
mmu_circRNA006838	109.3333333	0	-16.85914358	0.017974351	0.894860027	Nckap1	2	80520375	80525681
mmu_circRNA000279	106	0	-16.78356965	0.024859599	0.894860027	Unc80	1	66471976	66491180
mmu_circRNA004187	106	0	-16.81275909	0.022214318	0.894860027	Vps13b	15	35709126	35709813
mmu_circRNA002962	105	0	-16.79557475	0.02392899	0.894860027	Mir5624	12	110687352	110688678
mmu_circRNA006933	104.6666667	0	-16.78713295	0.024779547	0.894860027	Qser1	2	104770043	104780260
mmu_circRNA008762	104.6666667	0	-16.79504478	0.024040875	0.894860027	Eif4g3	4	138170477	138178010
mmu_circRNA000443	104.3333333	0	-16.77292764	0.026221447	0.894860027	Zcchc2	1	106000931	106011814
mmu_circRNA003809	103.6666667	0	-16.78913104	0.02478585	0.894860027	Xkr6	14	63660820	63663030
mmu_circRNA000400	103.6666667	0	-16.79195546	0.024520189	0.894860027	Hdac4	1	92029955	92030196
mmu_circRNA012473	102.6666667	0	-16.72271412	0.032029561	0.894860027	Oxsr1	9	119284546	119294523
mmu_circRNA006987	102.6666667	0	-16.73182148	0.03096949	0.894860027	Disp2	2	118794252	118794395
mmu_circRNA007655	102.6666667	0	-16.73980992	0.030065847	0.894860027	Gm17836	3	75358347	75403874
mmu_circRNA012652	102	0	-16.75411453	0.028653165	0.894860027	Htatsf1	X	57066538	57066723
mmu_circRNA001386	102	0	-16.76857253	0.027144327	0.894860027	Nav3	10	109880535	109903863
mmu_circRNA003541	101.6666667	0	-16.71687999	0.03296911	0.894860027	Gm281	14	13896873	13905268
mmu_circRNA009676	101.3333333	0	-16.74351348	0.029958387	0.894860027	Slc12a9	5	137325323	137325674
mmu_circRNA003128	101	0	-16.70672942	0.034388635	0.894860027	Cdkal1	13	29625621	29717817
mmu_circRNA008358	100.6666667	0	-16.69433232	0.036070533	0.894860027	Ccdc171	4	83546834	83554884
mmu_circRNA008933	100	0	-16.74000338	0.030663074	0.894860027	Cdk14	5	4875458	4875611
mmu_circRNA002081	100	0	-16.74000338	0.030663074	0.894860027	4930556N13Rik	11	88855503	88855672
mmu_circRNA011883	99.66666667	0	-16.68435125	0.037683079	0.894860027	Vwa5a	9	38733020	38733209
mmu_circRNA011993	99.66666667	0	-16.68807181	0.037175122	0.894860027	Scaper	9	55807013	55864604
mmu_circRNA001348	99.66666667	0	-16.71033137	0.034277483	0.894860027	Cradd	10	95225394	95225554
mmu_circRNA011481	98.66666667	0	-16.71791385	0.033594652	0.894860027	Zfp827	8	79070371	79092066
mmu_circRNA003284	98.66666667	0	-16.69485717	0.036536012	0.894860027	Agtpbp1	13	59473688	59482604
mmu_circRNA001542	98.33333333	0	-16.70129783	0.035779572	0.894860027	Gm24036	11	12038734	12127255

mmu_circRNA002080	98.33333333	0	-16.71575583	0.033946343	0.894860027	4930556N13Rik	11	88855498	88855667
mmu_circRNA012243	98	0	-16.71085703	0.03464516	0.894860027	Senp6	9	80121864	80123946
mmu_circRNA006628	97	0	-16.69606003	0.036833465	0.894860027	Ncoa6	2	34264126	34266724
mmu_circRNA006633	96	0	-16.66665169	0.041280405	0.894860027	Mapkap1	2	34432007	34452055
mmu_circRNA006631	96	0	-16.66665169	0.041280405	0.894860027	Mapkap1	2	34432003	34452051
mmu_circRNA011933	95.66666667	0	-16.6633864	0.041873987	0.894860027	Carm1	9	46532757	46533968
mmu_circRNA006667	95.33333333	0	-16.63177082	0.047016432	0.894860027	Strbp	2	37635424	37647285
mmu_circRNA005668	95.33333333	0	-16.67105602	0.040828221	0.894860027	Fam13b	18	34486979	34499852
mmu_circRNA011138	95	0	-16.62562411	0.048161792	0.894860027	Zranb1	7	132971186	132973623
mmu_circRNA000646	95	0	-16.6567867	0.043096119	0.894860027	Ptpn14	1	160682041	160724189
mmu_circRNA004152	94.66666667	0	-16.64363809	0.045289117	0.894860027	Cpq	15	33233664	33250133
mmu_circRNA002264	94.33333333	0	-16.64768661	0.044746575	0.894860027	Bptf	11	107072683	107082700
mmu_circRNA010246	93.66666667	0	-16.64279253	0.045756908	0.894860027	Pparg	6	115439840	115463285
mmu_circRNA010666	93.66666667	0	-16.64561101	0.045299642	0.894860027	Mir344b	7	61784602	61814190
mmu_circRNA001445	93.33333333	0	-16.62600971	0.048670131	0.894860027	Srgap1	10	121837867	121839840
mmu_circRNA006663	93.33333333	0	-16.63201704	0.047652548	0.894860027	Strbp	2	37590657	37647285
mmu_circRNA008246	90	0	-16.63283287	0.028638649	0.46542993	Abcc1	16	53127597	53144095
mmu_circRNA002020	82	0	-16.50165775	0.045504852	0.543573934	Acaca	11	84256684	84257321

CircID	control- ReadsMean	Ob_ob- Reads Mean	log2 Ratio (Ob_ob/control)	P-value	FDR	Gene_list	Chr	Start	End
mmu_circRNA006170	2056.333333	8565	2.058379101	0.019611896	0.788928936	Glis3	19	28530873	28531986
mmu_circRNA012270	464	5532	3.106453402	5.54E-18	1.66E-14	Bckdhb	9	83988776	84012619
mmu_circRNA012271	270.6666667	4798	3.676025789	1.92E-21	1.73E-17	Bckdhb	9	83988782	84012625
mmu_circRNA006513	0	989	19.64503413	7.86E-22	7.65E-18	Arhgap21	2	20879961	20914811
mmu_circRNA008424	704.3333333	194.3333333	-2.310628649	0.000271525	0.03291691	Patj	4	98456130	98469604
mmu_circRNA009646	108	642.6666667	2.115867087	0.007279536	0.250209646	Eif4h	5	134621949	134627775
mmu_circRNA002769	76.33333333	652.3333333	2.63273501	0.001314181	0.095849756	Arel1	12	84934152	84951381
mmu_circRNA006392	476.3333333	157.3333333	-2.061772642	0.006571226	0.242594515	Atrn1	19	57751630	57755618
mmu_circRNA009629	12.33333333	616.3333333	5.169455716	4.59E-07	0.000411553	Tmem248	5	130229449	130236953
mmu_circRNA001522	626.6666667	0	-19.45603082	7.29E-21	3.27E-17	Nudcd3	11	6113243	6125561
mmu_circRNA006791	474.6666667	88	-2.929279434	0.000418183	0.042151883	Dcaf17	2	71056495	71063495

mmu_circRNA005005	18	533	4.411291714	3.47E-05	0.008203707	Pde10a	17	8941141	8953923
mmu_circRNA008084	42	509	3.080427069	0.001665419	0.112706027	Asph	4	9508627	9532065
mmu_circRNA001139	61	473.3333333	2.469411719	0.010579669	0.290140531	Mcm9	10	53611349	53626031
mmu_circRNA007439	0	519	18.68708577	3.56E-11	7.99E-08	Impa1	3	10319623	10319809
mmu_circRNA003688	52.33333333	466	2.697072551	0.007470019	0.251930604	Wapal	14	34691682	34695105
mmu_circRNA001142	59	458.3333333	2.471087779	0.012177414	0.31007548	Mcm9	10	53611352	53626034
mmu_circRNA001558	31.33333333	437.6666667	3.332721442	0.002802515	0.159122561	Peli1	11	21136046	21148425
mmu_circRNA011542	40.33333333	426	2.93403455	0.007086171	0.247656704	Lonp2	8	86631386	86673069
mmu_circRNA008750	65.66666667	395.3333333	2.063816159	0.046115574	0.547105753	Usp48	4	137634898	137644498
mmu_circRNA003010	0	453.6666667	18.49150477	1.34E-09	2.41E-06	Ptprn2	12	116824317	116859191
mmu_circRNA008881	17.33333333	430.3333333	4.108256928	0.000515099	0.0486416	Nphp4	4	152496649	152507483
mmu_circRNA002725	59	378	2.206712623	0.043416056	0.535660443	Dcaf5	12	80397653	80404698
mmu_circRNA003902	59.66666667	377.3333333	2.196301888	0.047247174	0.552050134	Vwa8	14	78933666	78995163
mmu_circRNA002577	56.33333333	372	2.233680948	0.043337753	0.535660443	Scfd1	12	51389282	51393910
mmu_circRNA002631	57.33333333	367.3333333	2.219700941	0.049300255	0.556720942	Mipol1	12	57325524	57332459
mmu_circRNA008997	52.33333333	356	2.279153817	0.044483065	0.537441668	Kmt2e	5	23450152	23467188
mmu_circRNA003174	352.6666667	53.33333333	-3.240675896	0.001544062	0.106552124	Phactr1	13	43094749	43096806
mmu_circRNA009732	49.33333333	351.6666667	2.374722066	0.044512224	0.537441668	Baiap2l1	5	144280820	144285595
mmu_circRNA005676	0	398	18.30626099	2.70E-08	4.03E-05	Kdm3b	18	34808241	34813561
mmu_circRNA007337	32.33333333	364.6666667	3.015760687	0.012050351	0.309612611	Zmynd8	2	165805187	165807929
mmu_circRNA012841	293.3333333	97	-2.101211256	0.040986821	0.530444106	Map3k15	X	160081785	160086413
mmu_circRNA010147	32	358	3.013058206	0.015676388	0.347241664	Rpn1	6	88089989	88090295
mmu_circRNA012300	22.33333333	354.3333333	3.507133127	0.006859648	0.246164379	Bckdhhb	9	95019105	95020712
mmu_circRNA004270	40	335.6666667	2.599848119	0.03586151	0.513173113	Zhx2	15	57821032	57823751
mmu_circRNA007247	35.33333333	336.6666667	2.791770979	0.028064723	0.461114708	Itch	2	155182158	155202279
mmu_circRNA008629	39.66666667	328.6666667	2.542017425	0.041907891	0.534488847	Zmym4	4	126868717	126890175
mmu_circRNA003161	0	348	18.11861105	4.09E-07	0.000411553	Hivep1	13	42055400	42055542
mmu_circRNA008871	16.33333333	328	3.798520049	0.006444803	0.238910452	Rere	4	150468695	150477468
mmu_circRNA000634	0	343.3333333	18.08859408	6.04E-07	0.00049275	Pappa2	1	158832709	158848425
mmu_circRNA010648	272.3333333	66.66666667	-2.530077278	0.024649642	0.431828883	Gas2	7	51887912	51953301
mmu_circRNA001428	29.66666667	303.3333333	2.899945127	0.036121908	0.513976876	Rap1b	10	117820462	117822869
mmu_circRNA001960	0	332	18.04010479	1.13E-06	0.000780584	Pappa2	11	77777235	77778314

mmu_circRNA005474	293.3333333	37.33333333	-3.395733733	0.003133233	0.171391678	Thada	17	84443818	84444509
mmu_circRNA008072	22.33333333	304.3333333	3.268815124	0.01885002	0.376671674	Car8	4	8169596	8189392
mmu_circRNA009014	270	56	-2.736677529	0.018056543	0.369829333	Fam126a	5	23979488	23991837
mmu_circRNA005377	28.66666667	297.3333333	2.910772352	0.037967826	0.516074801	Mtcl1	17	66436080	66438391
mmu_circRNA002719	22.66666667	303	3.203382684	0.02260567	0.415564483	Dcaf5	12	80348320	80376731
mmu_circRNA012655	263	56	-2.745192352	0.020559494	0.396000834	Cdr1	X	61183248	61186174
mmu_circRNA001296	265	50.66666667	-2.83735629	0.015637552	0.347238803	Aldh1l2	10	83506598	83512437
mmu_circRNA002922	249.3333333	66	-2.368606999	0.041795719	0.534488847	Gpatch2l	12	108157754	108165172
mmu_circRNA007409	0	313.3333333	17.9490604	3.24E-06	0.001940536	Pappa2	2	180674691	180675427
mmu_circRNA004140	265.3333333	46.66666667	-3.033456211	0.012078399	0.309612611	Ctnnd2	15	30634644	30647324
mmu_circRNA011926	27.33333333	282.3333333	2.85998726	0.043501354	0.535660443	Rnf214	9	45890804	45900256
mmu_circRNA006174	28	280.3333333	2.793896262	0.049460104	0.556720942	Glis3	19	28665753	28666236
mmu_circRNA008855	26.66666667	281.3333333	2.884374287	0.043152025	0.535660443	Rere	4	150406196	150431593
mmu_circRNA006309	0	304	17.90219708	5.38E-06	0.002627117	Hps1	19	42762096	42762560
mmu_circRNA009908	0	302	17.89992558	5.56E-06	0.002627117	Ccdc91	6	35064889	35080226
mmu_circRNA002276	18.33333333	280	3.447002691	0.02306236	0.418810596	Helz	11	107592706	107620214
mmu_circRNA000714	0	298.3333333	17.90506014	5.40E-06	0.002627117	Atf6	1	170834820	170855189
mmu_circRNA000633	0	298	17.87655382	7.16E-06	0.002847556	Pappa2	1	158832709	158845132
mmu_circRNA008105	273.3333333	23.66666667	-3.987085946	0.001797882	0.119414404	Esrp1	4	11353295	11379405
mmu_circRNA007652	275.6666667	17.33333333	-4.433045038	0.000623226	0.05643692	Nbea	3	75358347	75382079
mmu_circRNA000632	0	291.3333333	17.84376087	1.04E-05	0.003718732	Pappa2	1	158832705	158845128
mmu_circRNA011790	0	290.6666667	17.8594397	8.86E-06	0.003310329	Pappa2	9	7203451	7205400
mmu_circRNA000857	12.33333333	275.6666667	4.033157053	0.013228554	0.316358177	Ush2a	1	188415678	188451878
mmu_circRNA003254	0	285.6666667	17.82622887	1.28E-05	0.004093077	Nsd1	13	55291131	55296192
mmu_circRNA009132	0	282.6666667	17.80033115	1.69E-05	0.00458886	Adrbk2	5	36630644	36660887
mmu_circRNA009137	0	282.6666667	17.80033115	1.69E-05	0.00458886	Afap1	5	36630644	36661645
mmu_circRNA009133	0	282.6666667	17.80033115	1.69E-05	0.00458886	Aff1	5	36630644	36660953
mmu_circRNA007299	259.6666667	23	-3.968601761	0.002831122	0.159341504	Snhg11	2	158382504	158383163
mmu_circRNA005302	7.333333333	275.3333333	4.707871875	0.005503207	0.220398508	Kcnh8	17	52834542	52839262
mmu_circRNA003158	9	266.6666667	4.360061398	0.010367369	0.287943236	Slc35b3	13	38954109	38955936
mmu_circRNA008175	233.3333333	40.33333333	-3.008164036	0.020911837	0.396584871	Zfp292	4	34839332	34839986
mmu_circRNA006513	0	264	17.70879356	4.33E-05	0.009238936	Arhgap21	2	20879961	20914811

mmu_circRNA001620	0	262.6666667	17.69016193	5.08E-05	0.010601476	Ccdc88a	11	29470315	29477458
mmu_circRNA009561	218.3333333	44.33333333	-2.722707525	0.039903257	0.526429591	Zcchc8	5	123707269	123717058
mmu_circRNA000885	13.33333333	247.6666667	3.729018028	0.032008917	0.493388311	Ush2a	1	188906437	188916308
mmu_circRNA002522	0	257.3333333	17.67729686	5.80E-05	0.011832321	Kidins220	12	24994812	25005218
mmu_circRNA010920	0	256	17.64917609	7.35E-05	0.014326456	Cspp1	7	115057028	115057603
mmu_circRNA002218	228.3333333	22.66666667	-3.779835436	0.008344356	0.262355747	Kansl1	11	104368680	104378826
mmu_circRNA009174	7.666666667	243.3333333	4.522307908	0.015906732	0.348047047	Anapc4	5	52839622	52845407
mmu_circRNA006937	239.3333333	9.666666667	-5.105034684	0.000733726	0.062096763	Qser1	2	104778137	104780260
mmu_circRNA006208	0	248.6666667	17.62787165	9.03E-05	0.015801341	Papss2	19	32645079	32658338
mmu_circRNA011489	0	248	17.61464013	0.000100722	0.016428654	Smad1	8	79343654	79356469
mmu_circRNA003012	0	247	17.64128743	8.18E-05	0.014973583	Ptprn2	12	116824317	116901047
mmu_circRNA004410	0	246	17.61748497	9.94E-05	0.016428654	Pnpla3	15	84171082	84186081
mmu_circRNA011629	242.3333333	0	-18.05606061	3.61E-07	0.000411553	Ctcf	8	105669419	105669679
mmu_circRNA011161	0	241.3333333	17.58468571	0.000131552	0.019919805	Ctsd	7	142379806	142380052
mmu_circRNA008292	6	234	4.8046078	0.014433025	0.331996593	Al314180	4	58869415	58885498
mmu_circRNA011162	0	238	17.56462009	0.000156678	0.022670286	Ctsd	7	142379811	142380057
mmu_circRNA005955	236	0	-18.04873397	4.31E-07	0.000411553	Zfp407	18	84342946	84354691
mmu_circRNA003013	0	234.3333333	17.5321444	0.000208889	0.026991883	Ptprn2	12	116841244	116859191
mmu_circRNA004344	0	233.3333333	17.5392888	0.000197712	0.026198524	Pla2g6	15	79303011	79303258
mmu_circRNA002938	197.6666667	34	-3.003600665	0.043141525	0.535660443	Gpatch2l	12	109574018	109574281
mmu_circRNA009167	7.666666667	224	4.416381951	0.025601698	0.438781102	Dhx15	5	52180982	52184903
mmu_circRNA005132	231.3333333	0	-17.9952735	8.13E-07	0.000607906	Crebrf	17	26736816	26743131
mmu_circRNA005995	210	20.66666667	-3.78046029	0.012739631	0.313025883	Rbm4	19	4784724	4785567
mmu_circRNA009222	0	230	17.57393422	0.000214243	0.07017595	Apbb2	5	66362718	66400281
mmu_circRNA000996	204.3333333	25.33333333	-3.439860002	0.020776957	0.396574638	Aig1	10	13801404	13801949
mmu_circRNA009166	0	228.6666667	17.51107539	0.000253701	0.031306419	Dhx15	5	52180975	52184896
mmu_circRNA006156	0	228	17.4820661	0.000314157	0.035674683	Rfx3	19	27894605	27894764
mmu_circRNA012344	0	228	17.4820661	0.000314157	0.035674683	Cep70	9	99246267	99263809
mmu_circRNA002211	0	227.6666667	17.49951542	0.000277514	0.033194336	Nsf	11	103910443	103916672
mmu_circRNA003962	0	224.6666667	17.46807421	0.00035198	0.038982848	Lmo7	14	101896467	101902369
mmu_circRNA002977	0	224	17.46300844	0.000365704	0.039648505	Traf3	12	111219811	111255363
mmu_circRNA010380	0	223.6666667	17.45815094	0.000378771	0.04045187	lapp	6	142303516	142303703

mmu_circRNA007460	0	222.6666667	17.44791788	0.000408222	0.042093778	Fndc3b	3	27451314	27458889
mmu_circRNA007086	195.6666667	26.33333333	-3.328848921	0.028196556	0.462433831	Trpm7	2	126823976	126825789
mmu_circRNA004100	0	221.6666667	17.4510726	0.000401295	0.041860634	Golph3	15	12339628	12349788
mmu_circRNA002869	0	221.3333333	17.48051865	0.000327574	0.036733341	Trip11	12	101889705	101899103
mmu_circRNA001836	0	218	17.43798665	0.000446148	0.043982376	Dnah9	11	65927584	65992869
mmu_circRNA007032	217.6666667	0	-17.912412	2.19E-06	0.001402827	Cdan1	2	120806759	120837260
mmu_circRNA011448	0	216	17.41822813	0.000514435	0.0486416	Tmem38a	8	72579563	72580144
mmu_circRNA007191	190	26	-3.383235445	0.032771212	0.500158809	Snx5	2	144255340	144257993
mmu_circRNA003118	0	214.6666667	17.42329334	0.000500247	0.0486416	Carmil1	13	24064577	24099663
mmu_circRNA010645	193.6666667	18.33333333	-3.829995287	0.01671496	0.353998482	Gas2	7	51887912	51897372
mmu_circRNA002868	0	210.6666667	17.40923303	0.0005598	0.051772809	Trip11	12	101889701	101899099
mmu_circRNA011453	0	210.3333333	17.39032163	0.000635395	0.05643692	Large1	8	73214125	73214312
mmu_circRNA009657	0	210	17.38404785	0.000662972	0.0574606	Baz1b	5	135205060	135236410
mmu_circRNA002527	190.6666667	16.33333333	-3.99777528	0.014335204	0.330646566	Kidins220	12	25058116	25058359
mmu_circRNA007403	0	206.3333333	17.36281355	0.000772856	0.064797089	Taf4	2	179932016	179939954
mmu_circRNA012594	203	0	-17.82032935	6.66E-06	0.002847556	Slc9a7	X	20158815	20188920
mmu_circRNA010389	0	200.6666667	17.30955113	0.001109627	0.087319834	C2cd5	6	143078263	143083334
mmu_circRNA002661	0	200	17.29303228	0.001234266	0.091987254	Nin	12	70020834	70025481
mmu_circRNA008725	0	198	17.27853271	0.001362007	0.098434622	Kdm1a	4	136568573	136577204
mmu_circRNA002248	0	197.6666667	17.30552461	0.001153098	0.089176247	Ern1	11	106421706	106423488
mmu_circRNA004935	0	197.3333333	17.29723375	0.001216253	0.091987254	Igsf5	16	96396369	96422534
mmu_circRNA010061	197.3333333	0	-17.8192899	7.30E-06	0.002847556	Gng12	6	67017574	67017892
mmu_circRNA006851	197.3333333	0	-17.8192899	7.30E-06	0.002847556	Fnbp4	2	90757427	90758397
mmu_circRNA010799	0	196.3333333	17.29474054	0.001240715	0.091987254	Tenm4	7	96702642	96778019
mmu_circRNA003078	0	193.3333333	17.26276055	0.001530433	0.106430362	Ero1b	13	12574820	12604461
mmu_circRNA002854	193.3333333	0	-17.77385569	1.20E-05	0.003989885	Tc2n	12	101646580	101694673
mmu_circRNA007522	0	192	17.25476483	0.001615741	0.110647438	Spata5	3	37448408	37458400
mmu_circRNA007676	192	0	-17.74099095	1.65E-05	0.00458886	Ehbp1	3	84863964	84904079
mmu_circRNA006906	0	189.3333333	17.23651887	0.001823629	0.119414404	Ldlrad3	2	102057907	102070058
mmu_circRNA008361	0	188.6666667	17.22949807	0.001906853	0.122188402	Bnc2	4	84546205	84555904
mmu_circRNA000618	0	188.6666667	17.22404607	0.001969478	0.124718995	Rasal2	1	157286731	157299264
mmu_circRNA000619	0	187.3333333	17.21339731	0.002108835	0.129154371	Rasal2	1	157286735	157299268

mmu_circRNA008154	0	187.3333333	17.21279195	0.002116341	0.129154371	Casp8ap2	4	32639364	32641558
mmu_circRNA011376	0	187	17.21478131	0.002094701	0.129154371	Galnt7	8	57583767	57584227
mmu_circRNA003940	186.6666667	0	-17.69092922	2.68E-05	0.006866239	Tdrd5	14	87457034	87474840
mmu_circRNA000975	0	186.3333333	17.22125774	0.002022104	0.126855211	Utrn	10	12621191	12654834
mmu_circRNA003698	0	185.3333333	17.21103388	0.002156374	0.130708317	Ccser2	14	36926839	36941264
mmu_circRNA002873	184	0	-17.60033028	0.000109483	0.05921231	Atxn3	12	101945400	101948439
mmu_circRNA002873	184	0	-17.70056445	2.57E-05	0.006790944	Atxn3	12	101945400	101948439
mmu_circRNA003804	0	183.3333333	17.19068608	0.002447383	0.145193511	Ints6	14	62713685	62716482
mmu_circRNA009323	0	183.3333333	17.17481054	0.002680636	0.154153743	Septin11	5	93148387	93162292
mmu_circRNA010044	183.3333333	0	-17.67849411	3.10E-05	0.007510026	Fkbp9	6	56849638	56878284
mmu_circRNA006167	0	183	17.19311626	0.002416709	0.145193511	Glis3	19	28527760	28540408
mmu_circRNA010265	181.6666667	0	-17.65577306	3.79E-05	0.008498325	Zfp9	6	118466828	118477424
mmu_circRNA001574	181.3333333	0	-17.68318948	3.07E-05	0.007510026	Ehbp1	11	22053432	22068506
mmu_circRNA011760	0	181	17.18061395	0.002618549	0.151554835	Map3k21	8	125924018	125927706
mmu_circRNA002550	0	180.6666667	17.15834805	0.002975093	0.163972526	Snx13	12	35078900	35091670
mmu_circRNA012850	0	179.6666667	17.161614	0.002932923	0.163423899	Cltrn	X	164108325	164118365
mmu_circRNA001065	179.6666667	0	-17.66425124	3.65E-05	0.00838996	Rev3l	10	39847975	39852073
mmu_circRNA002016	0	179	17.13855328	0.003345651	0.173490389	Synrg	11	84008618	84009550
mmu_circRNA007004	0	178.3333333	17.14104083	0.003308709	0.172572246	Mga	2	119902606	119917373
mmu_circRNA010729	0	178	17.13729538	0.004875007	0.53653984	Akap13	7	75685117	75704539
mmu_circRNA009080	0	178	17.14553576	0.003231452	0.171659385	Yes1	5	32651657	32664400
mmu_circRNA010720	0	176.6666667	17.12942367	0.003552045	0.177695874	Chd2	7	73501909	73503514
mmu_circRNA009773	0	176.3333333	17.13029427	0.003539882	0.177695874	Katnal1	5	148918596	148921412
mmu_circRNA009202	0	176	17.12923395	0.003565406	0.177695874	Lias	5	65392220	65402756
mmu_circRNA011332	175.3333333	0	-17.60443836	6.15E-05	0.012254192	Pcm1	8	41274999	41276156
mmu_circRNA005835	173.6666667	0	-17.57521928	7.85E-05	0.014669737	Zfp532	18	65651560	65656632
mmu_circRNA008279	0	173.3333333	17.10720764	0.004060584	0.188880377	Ptpn3	4	57218509	57225900
mmu_circRNA010371	173	0	-17.56752218	8.41E-05	0.015081742	Pcm1	6	139843888	139860382
mmu_circRNA003923	173	0	-17.57873397	7.71E-05	0.014669737	Naa16	14	79350689	79351501
mmu_circRNA006281	0	172	17.07544084	0.004821934	0.20692231	Sorbs1	19	40321793	40337035
mmu_circRNA007059	0	172	17.07544084	0.004821934	0.20692231	Pdia3	2	121429454	121434093
mmu_circRNA001060	0	171	17.10680837	0.004108168	0.188880377	Rev3l	10	39804952	39814090

mmu_circRNA008297	0	171	17.07080538	0.004957493	0.209144063	Ugcg	4	59207761	59220494
mmu_circRNA005620	0	170.6666667	17.11062322	0.004031002	0.188880377	Rnf138	18	21010677	21020999
mmu_circRNA008200	0	170.6666667	17.08483983	0.004617387	0.204052125	Unc13b	4	43165744	43182859
mmu_circRNA008476	0	170.6666667	17.074483	0.004871209	0.207107176	Oma1	4	103328838	103353651
mmu_circRNA011621	0	170.6666667	17.06421359	0.005133806	0.21223676	Cbfb	8	105213315	105215259
mmu_circRNA009462	170.3333333	0	-17.55870508	9.34E-05	0.015801341	Grk3	5	112967391	112967630
mmu_circRNA011328	170	0	-17.55994383	9.28E-05	0.015801341	Pcm1	8	41274995	41276152
mmu_circRNA008135	0	169.3333333	17.06267971	0.005200999	0.214028258	Pnlsr	4	21874022	21874158
mmu_circRNA006279	0	169.3333333	17.05289827	0.00546421	0.219818072	Sorbs1	19	40311669	40324832
mmu_circRNA000937	0	168.6666667	17.04720716	0.005636702	0.222761454	Foxo3	10	5061389	5075947
mmu_circRNA000820	0	168.3333333	17.09027367	0.004531409	0.203256332	Csnk1g3	1	183358223	183358406
mmu_circRNA011952	0	168.3333333	17.05091458	0.005540333	0.220899235	Dixdc1	9	50664746	50665590
mmu_circRNA011550	168.3333333	0	-17.52481103	0.000126484	0.019563512	Zfp423	8	87859284	87904548
mmu_circRNA000853	0	168	17.07964438	0.004794511	0.20692231	Ush2a	1	188395755	188415861
mmu_circRNA010879	0	168	17.04149351	0.005814242	0.225798997	Dennd5a	7	109921194	109935553
mmu_circRNA008509	168	0	-17.51875083	0.000133228	0.019919805	Zfyve9	4	108695769	108719812
mmu_circRNA000846	0	167.3333333	17.08167773	0.004757456	0.20692231	Esrrg	1	188043334	188066457
mmu_circRNA005922	0	167.3333333	17.04655901	0.005684326	0.223658296	Atp9b	18	80844527	80917878
mmu_circRNA002707	167.3333333	0	-17.5306868	0.000122206	0.019233507	Fut8	12	77448473	77450276
mmu_circRNA008267	0	166.6666667	17.02999787	0.006185069	0.234119197	Ctnnal1	4	56837732	56847999
mmu_circRNA007077	0	166.3333333	17.04514989	0.005746805	0.225129187	Secisbp2l	2	125767375	125775731
mmu_circRNA007417	0	166.3333333	17.03794156	0.005955695	0.229307049	Dnajc5	2	181546371	181547553
mmu_circRNA001291	0	164.6666667	17.03320706	0.006135933	0.233243446	Slc41a2	10	83254783	83283869
mmu_circRNA003565	0	164.6666667	17.02962919	0.00624441	0.23537226	Extl3	14	18544769	18545105
mmu_circRNA000078	0	164.6666667	17.01258082	0.006783029	0.246164379	Pkhd1	1	20209161	20239438
mmu_circRNA004373	0	164	17.02735433	0.006330643	0.237624269	Ep300	15	81621062	81627534
mmu_circRNA010095	0	164	17.00993358	0.006887444	0.246164379	Kcmf1	6	72858774	72861925
mmu_circRNA007125	0	164	17.00672809	0.006994138	0.247025259	Spef1	2	131172846	131172996
mmu_circRNA004924	0	162.6666667	16.99495092	0.0074351	0.251699167	Brwd1	16	96002434	96017724
mmu_circRNA004196	162.6666667	0	-17.47220824	0.000198584	0.026198524	Ubr5	15	38040753	38047624
mmu_circRNA007320	162.6666667	0	-17.47220824	0.000198584	0.026198524	Ptprt	2	162238007	162278319
mmu_circRNA003779	162.6666667	0	-17.47824406	0.000190539	0.026198524	Zdhhc20	14	57846921	57865641

mmu_circRNA012259	0	162	17.0054409	0.007091485	0.247656704	Lca5	9	83423023	83428948
mmu_circRNA009626	162	0	-17.50086676	0.000164112	0.023369086	Ndufa12-ps	5	130187401	130191043
mmu_circRNA005493	161.6666667	0	-17.51463046	0.000149249	0.021949437	Srbd1	17	86098512	86103000
mmu_circRNA002148	0	161.3333333	17.02645104	0.006426027	0.238910452	Cdk12	11	98210361	98224631
mmu_circRNA012339	0	161.3333333	17.00370306	0.007168966	0.247656704	Pik3cb	9	99040921	99042669
mmu_circRNA010591	0	161.3333333	17.00370306	0.007168966	0.247656704	Prr12	7	45043352	45043788
mmu_circRNA002138	0	161.3333333	16.9912284	0.007605423	0.252702108	Npepps	11	97231889	97238258
mmu_circRNA000597	0	161.3333333	16.98307682	0.007902299	0.254222894	C230024C17Rik	1	153732219	153740040
mmu_circRNA009755	0	161	17.01108555	0.006929589	0.246687874	Pan3	5	147450653	147519752
mmu_circRNA000881	0	160.3333333	16.99733603	0.007417665	0.251699167	Ush2a	1	188841497	188874951
mmu_circRNA004981	0	160	16.99911844	0.007364878	0.251699167	Tulp4	17	6137211	6207057
mmu_circRNA010653	0	160	16.99173042	0.007626363	0.252702108	Cyfp1	7	55873446	55875088
mmu_circRNA005357	0	160	16.99173042	0.007626363	0.252702108	Ralbp1	17	65858973	65867830
mmu_circRNA000235	0	160	16.98428744	0.007897495	0.254222894	Bmpr2	1	59813588	59815411
mmu_circRNA007727	0	160	16.97110418	0.008397316	0.262355747	Khdc4	3	88703334	88705249
mmu_circRNA009431	0	160	16.97110418	0.008397316	0.262355747	Ankle2	5	110234347	110249500
mmu_circRNA008999	0	159.6666667	16.98431954	0.007906386	0.254222894	Kmt2e	5	23450152	23473653
mmu_circRNA009327	0	159.3333333	16.99012183	0.007704115	0.254094183	Cnot6l	5	96077118	96134132
mmu_circRNA004053	0	159.3333333	16.97538723	0.008252929	0.261614925	Drosha	15	5656812	5675768
mmu_circRNA006892	0	158.6666667	16.98606572	0.007872341	0.254222894	Ext2	2	93806025	93813964
mmu_circRNA012819	0	158.6666667	16.9696413	0.008496907	0.26284742	Kdm5c	X	152248428	152248820
mmu_circRNA000015	0	158.6666667	16.95903135	0.008921826	0.269487205	St18	1	6807543	6833678
mmu_circRNA005856	0	158.6666667	16.95903135	0.008921826	0.269487205	Ldlrad4	18	68235655	68235809
mmu_circRNA003646	0	158	16.96593996	0.008664993	0.265302579	Cacna1d	14	30346798	30350949
mmu_circRNA010283	157.6666667	0	-17.48930603	0.000188295	0.026198524	Cacna1c	6	119052601	119069189
mmu_circRNA011768	0	157.3333333	16.94685664	0.009477606	0.278081149	Pappa2	8	127528518	127528648
mmu_circRNA012732	0	157.3333333	16.96748288	0.008625545	0.264999202	Atp7a	X	106085114	106102846
mmu_circRNA000903	0	157	16.94693499	0.009485995	0.278081149	Pappa2	1	191749540	191763671
mmu_circRNA005974	0	156.6666667	16.94073053	0.009767807	0.279991794	Ppp6r3	19	3518245	3544255
mmu_circRNA002711	156.6666667	0	-17.43083121	0.000282385	0.033332563	Gphn	12	78609145	78627260
mmu_circRNA000627	0	156.3333333	16.94862549	0.009437118	0.278081149	Pappa2	1	158782181	158784074
mmu_circRNA011611	156.3333333	0	-17.47550633	0.000210616	0.026991883	Cdh8	8	99171266	99200400

mmu_circRNA010642	0	156	16.95520455	0.009170797	0.275154596	Nell1	7	50406381	50407292
mmu_circRNA004885	0	156	16.95520455	0.009170797	0.275154596	Gart	16	91630043	91638795
mmu_circRNA001634	0	156	16.94633792	0.009547318	0.278081149	Eml6	11	29784064	29805814
mmu_circRNA005816	0	156	16.93457831	0.010066541	0.283093852	Wdr7	18	63755036	63796281
mmu_circRNA008266	0	156	16.93457831	0.010066541	0.283093852	Ctnnal1	4	56829484	56847999
mmu_circRNA001724	0	156	16.93457831	0.010066541	0.283093852	Sec24a	11	51707128	51726594
mmu_circRNA009685	156	0	-17.42950797	0.000287249	0.033466334	Zfp68	5	138616566	138617054
mmu_circRNA010850	0	155.3333333	16.94902597	0.00945565	0.278081149	Arhgef17	7	100927874	100933586
mmu_circRNA002690	155.3333333	0	-17.44900745	0.000254751	0.031306419	Mthfd1	12	76293391	76301398
mmu_circRNA000503	0	154.6666667	16.95032506	0.00942409	0.278081149	Mir128-1	1	128186758	128216552
mmu_circRNA004952	0	154.6666667	16.94282082	0.00974898	0.279991794	Birc6	17	3072581	3072970
mmu_circRNA000574	0	154.6666667	16.94282082	0.00974898	0.279991794	Odr4	1	150372029	150375624
mmu_circRNA003814	0	154.6666667	16.92219458	0.010690623	0.290622977	Kif13b	14	64758551	64770663
mmu_circRNA010831	0	154	16.95568695	0.009221269	0.275746682	Emsy	7	98626466	98637520
mmu_circRNA009600	0	154	16.93658887	0.010051043	0.283093852	Glt1d1	5	127644319	127650788
mmu_circRNA001067	154	0	-17.46158558	0.000238417	0.030124539	Mettl24	10	40713136	40713328
mmu_circRNA010399	0	153.3333333	16.94087018	0.009884887	0.282411843	Kras	6	145225074	145234426
mmu_circRNA009349	0	153.3333333	16.93032988	0.010362101	0.287943236	Sec31a	5	100381160	100383923
mmu_circRNA006583	0	153.3333333	16.93032988	0.010362101	0.287943236	Rapgef1	2	29667681	29667911
mmu_circRNA006669	0	153.3333333	16.90970364	0.011351963	0.300767704	Hipk3	2	37674633	37686209
mmu_circRNA007658	0	153.3333333	16.90970364	0.011351963	0.300767704	Serpini1	3	75613080	75623956
mmu_circRNA002280	0	153	16.93907658	0.009977461	0.283093852	Helz	11	107632172	107649340
mmu_circRNA004032	0	153	16.90849686	0.011426172	0.300916227	Ghr	15	3340919	3347601
mmu_circRNA005340	0	152.6666667	16.92404362	0.010682423	0.290622977	Man2a1	17	64624528	64659074
mmu_circRNA009481	0	152.6666667	16.90341738	0.011697295	0.30504778	Sirt4	5	115479602	115483118
mmu_circRNA005653	152.6666667	0	-17.39839229	0.000366829	0.039648505	Wdr25	18	31827262	31829979
mmu_circRNA008861	0	152	16.91332182	0.011228061	0.30067741	Rere	4	150406196	150500051
mmu_circRNA003043	0	151.3333333	16.89076207	0.012418736	0.310708824	Tasor2	13	3573487	3577200
mmu_circRNA008422	0	151.3333333	16.89076207	0.012418736	0.310708824	Patj	4	98424276	98437470
mmu_circRNA003663	0	150.6666667	16.89540798	0.012201164	0.31007548	Pbrm1	14	31061469	31067964
mmu_circRNA002954	0	150.6666667	16.88439255	0.012795447	0.313025883	Mirg	12	109737681	109742290
mmu_circRNA007283	0	150.3333333	16.91013579	0.01145735	0.300916227	Rpn2	2	157283584	157290712

mmu_circRNA003672	0	150	16.89862102	0.012062022	0.309612611	Parg	14	32238531	32242346
mmu_circRNA010332	0	150	16.89003967	0.012518327	0.311531114	Ncapd2	6	125183914	125189908
mmu_circRNA005224	150	0	-17.37292444	0.000445788	0.043982376	Trim26	17	36850656	36852693
mmu_circRNA012599	149.6666667	0	-17.38558735	0.0004133	0.042133131	Slc9a7	X	20186060	20205565
mmu_circRNA001216	0	149.3333333	16.91283971	0.011365539	0.300767704	Rhobtb1	10	69248771	69249728
mmu_circRNA007814	0	149.3333333	16.89219475	0.012432985	0.310708824	Rprd2	3	95774112	95776797
mmu_circRNA011999	0	149.3333333	16.87156851	0.013582419	0.321498375	Scaper	9	55892172	55921338
mmu_circRNA003135	0	148.6666667	16.88573973	0.012814998	0.313025883	Exoc2	13	30925723	30940770
mmu_circRNA012688	0	148.6666667	16.88573973	0.012814998	0.313025883	Cfap47	X	79410436	79452410
mmu_circRNA012443	0	148.6666667	16.87541722	0.013393804	0.317872527	Setd2	9	110547209	110553234
mmu_circRNA001840	0	148.6666667	16.86994963	0.013709188	0.322795609	Dnah9	11	65969966	65990535
mmu_circRNA002972	148.6666667	0	-17.3970457	0.000389111	0.041067234	Rcor1	12	111081724	111103805
mmu_circRNA005537	0	148.3333333	16.90366917	0.01187466	0.308775582	Svil	18	5063194	5088814
mmu_circRNA011537	0	148.3333333	16.89304166	0.012433895	0.310708824	Phkb	8	85875634	85970997
mmu_circRNA001587	0	148	16.87925569	0.013208385	0.316358177	Fam161a	11	23020000	23021133
mmu_circRNA006807	0	148	16.87925569	0.013208385	0.316358177	Rapgef4	2	72207733	72207990
mmu_circRNA005095	0	148	16.87925569	0.013208385	0.316358177	Pdpk1	17	24088004	24100908
mmu_circRNA008879	148	0	-17.33588677	0.000574986	0.052634686	Chd5	4	152358498	152363486
mmu_circRNA008166	0	147.3333333	16.86719264	0.01393777	0.326464052	Rngtt	4	33330842	33337972
mmu_circRNA003666	0	146.6666667	16.86619954	0.014030631	0.326931916	Phf7	14	31239631	31248134
mmu_circRNA008530	0	146.6666667	16.86619954	0.014030631	0.326931916	Ddi2	4	110516824	110517130
mmu_circRNA010921	0	146.6666667	16.86192121	0.014286347	0.330646566	Nars2	7	115163547	115183476
mmu_circRNA011046	0	146.6666667	16.8455733	0.01529985	0.345730367	Nars2	7	128767567	128776926
mmu_circRNA007756	0	146.6666667	16.8455733	0.01529985	0.345730367	Clk2	3	89168695	89170409
mmu_circRNA008139	146.6666667	0	-17.32283062	0.000633283	0.05643692	Faxc	4	21948692	21993820
mmu_circRNA009022	145.6666667	0	-17.36085989	0.000507204	0.0486416	Klhl7	5	24134964	24141293
mmu_circRNA002603	0	145.3333333	16.84201912	0.015602004	0.347238803	Akap6	12	53139381	53147983
mmu_circRNA009586	0	145.3333333	16.86223488	0.014337478	0.330646566	Aff1	5	124607736	124620225
mmu_circRNA000612	0	145.3333333	16.84378827	0.015487731	0.346484871	Fam20b	1	156698727	156706167
mmu_circRNA008116	0	145.3333333	16.83239791	0.01623591	0.350908754	Runx1t1	4	13835505	13866032
mmu_circRNA003061	0	145	16.86025172	0.014475388	0.332119453	Dip2c	13	9560671	9571114
mmu_circRNA004209	0	145	16.83790224	0.015889584	0.348047047	Rims2	15	39345310	39345620

mmu_circRNA005042	0	144	16.83972733	0.015826921	0.348047047	Zfp160	17	21025959	21026210
mmu_circRNA003144	0	144	16.83972733	0.015826921	0.348047047	Eci2	13	34980262	34993220
mmu_circRNA009468	0	144	16.83431287	0.016184997	0.350908754	Zkscan1	5	113182054	113193907
mmu_circRNA005932	0	143.6666667	16.82934965	0.016538884	0.352423591	Zfp236	18	82620318	82682287
mmu_circRNA000714	0	143.6666667	16.91851914	0.016383405	0.894860027	Atf6	1	170834820	170855189
mmu_circRNA006520	143.6666667	0	-17.32052807	0.000666136	0.0574606	Gpr158	2	21553299	21577046
mmu_circRNA002982	0	143.3333333	16.83303268	0.016309785	0.350908754	Myt1l	12	111565186	111565634
mmu_circRNA008223	0	143.3333333	16.82433847	0.016902459	0.355215281	Galnt12	4	47104100	47122848
mmu_circRNA004093	0	143.3333333	16.82376338	0.016942288	0.355215281	Zfr	15	12136396	12171854
mmu_circRNA004095	0	143.3333333	16.82337986	0.016968894	0.355215281	Zfr	15	12136400	12171858
mmu_circRNA003947	0	143.3333333	16.81240644	0.017744677	0.366791464	Tdrd5	14	87472076	87539521
mmu_circRNA003154	143.3333333	0	-17.30633719	0.0007297	0.062096763	Rreb1	13	37888871	37916595
mmu_circRNA001294	0	142.6666667	16.82630681	0.016806941	0.354764871	Slc41a2	10	83316055	83316789
mmu_circRNA009266	0	142.6666667	16.82180196	0.017119421	0.35715889	Scfd2	5	74397654	74462735
mmu_circRNA006894	0	142.3333333	16.82770398	0.016731173	0.353998482	Alkbh3	2	93996183	94008592
mmu_circRNA010412	0	142	16.79892321	0.01881503	0.376671674	Itpr2	6	146371253	146379517
mmu_circRNA011056	0	142	16.79892321	0.01881503	0.376671674	Ate1	7	130503722	130516168
mmu_circRNA009578	0	141.6666667	16.80824233	0.018151307	0.370083313	Sbno1	5	124391922	124398509
mmu_circRNA008490	0	141.3333333	16.81276028	0.017845454	0.368026587	Zyg11b	4	108259950	108266572
mmu_circRNA010411	0	141.3333333	16.80112129	0.018695822	0.376671674	Itpr2	6	146371253	146376182
mmu_circRNA003842	0	141.3333333	16.79213404	0.019368275	0.380203044	Ppp2r2a	14	67016017	67023190
mmu_circRNA010623	0	140.6666667	16.81220426	0.017928466	0.368046373	Tsg101	7	46890922	46907177
mmu_circRNA007508	0	140.6666667	16.79326582	0.019327834	0.380203044	Atp11b	3	35809357	35812316
mmu_circRNA009818	0	140.3333333	16.85446417	0.01509323	0.343658293	Phf14	6	11959929	12047944
mmu_circRNA001677	140.3333333	0	-17.26916445	0.000947763	0.077294386	Pwwp2a	11	43704534	43717149
mmu_circRNA011605	0	140	16.8002784	0.018847176	0.376671674	Mmp15	8	95365314	95366422
mmu_circRNA009579	0	140	16.79882662	0.018955394	0.377048419	Sbno1	5	124391922	124400186
mmu_circRNA009264	0	140	16.79488582	0.019250977	0.379561569	Scfd2	5	74397650	74462731
mmu_circRNA009249	0	140	16.77845911	0.020512373	0.396000834	Fryl	5	73057724	73065546
mmu_circRNA004536	140	0	-17.25956384	0.001007671	0.081439791	Crebbp	16	4154857	4180133
mmu_circRNA005058	140	0	-17.29524786	0.000813081	0.067538442	Zfp943	17	21992722	21992973
mmu_circRNA006893	0	139.6666667	16.80050911	0.018852478	0.376671674	Alkbh3	2	93996179	94008588

mmu_circRNA001838	0	139	16.80668641	0.018440481	0.373430155	Dnah9	11	65947469	65992869
mmu_circRNA000608	0	139	16.79911719	0.019001659	0.377132492	Tor1aip2	1	156059411	156065296
mmu_circRNA008029	139	0	-17.28138871	0.000894921	0.073654438	Prkacb	3	146737934	146748047
mmu_circRNA000255	0	138.6666667	16.83722746	0.016311331	0.350908754	Raph1	1	60525592	60533406
mmu_circRNA002780	0	138.6666667	16.83722746	0.016311331	0.350908754	Ylpm1	12	85040573	85043060
mmu_circRNA005973	0	138.6666667	16.78349521	0.020214948	0.394235432	Ppp6r3	19	3518245	3526934
mmu_circRNA004804	0	138.6666667	16.76465331	0.021708698	0.404043003	Plcx2	16	46000256	46009928
mmu_circRNA011948	0	138.6666667	16.76465331	0.021708698	0.404043003	Ncam1	9	49557096	49569900
mmu_circRNA012510	0	138	16.77832678	0.020666735	0.396030901	mt-Co1	MT	5760	5954
mmu_circRNA011040	0	138	16.75770054	0.022327264	0.412135574	Picalm	7	128750059	128772362
mmu_circRNA000086	0	137.6666667	16.76740763	0.021561037	0.404043003	Pkhd1	1	20373856	20392219
mmu_circRNA012565	0	137.6666667	16.76714283	0.021582405	0.404043003	Med14	X	12745746	12749337
mmu_circRNA005698	0	137.3333333	16.76056338	0.022143055	0.409578042	Ankhd1	18	36572659	36583759
mmu_circRNA012436	0	137.3333333	16.82328827	0.017354058	0.359545613	Arhgef12	9	109881473	109884510
mmu_circRNA012868	0	137.3333333	16.80132537	0.01895171	0.377048419	Uty	Y	1136848	1158634
mmu_circRNA011124	0	137.3333333	16.75071411	0.022959892	0.418147737	Fam53b	7	132779136	132837207
mmu_circRNA000367	137.3333333	0	-17.23073089	0.001232386	0.091987254	Psmd1	1	86078568	86092098
mmu_circRNA009583	137	0	-17.25662676	0.001062661	0.084364017	Sbno1	5	124407091	124414527
mmu_circRNA001841	0	136.6666667	16.76431993	0.02188736	0.405684938	Dnah9	11	65989715	65992869
mmu_circRNA006135	0	136.6666667	16.75439577	0.022704596	0.416529514	Smarca2	19	26647021	26654511
mmu_circRNA009187	0	136.6666667	16.74369369	0.023606937	0.426112343	Stim2	5	54053376	54075394
mmu_circRNA007993	136.3333333	0	-17.26345534	0.00102877	0.082402606	Dnajb14	3	137902187	137906057
mmu_circRNA007707	0	136	16.78143454	0.020570325	0.396000834	Pear1	3	87754862	87755027
mmu_circRNA000168	0	136	16.75726517	0.02251875	0.414816654	Rnf149	1	39555478	39565332
mmu_circRNA010397	0	136	16.7454715	0.023509264	0.426063849	Casc1	6	145191358	145196952
mmu_circRNA000417	0	136	16.73663893	0.024268767	0.428573048	Hdlbp	1	93412363	93427636
mmu_circRNA012558	0	136	16.73663893	0.024268767	0.428573048	Atp6ap2	X	12604867	12608954
mmu_circRNA012559	0	136	16.73663893	0.024268767	0.428573048	Atp6ap2	X	12604871	12608958
mmu_circRNA006591	136	0	-17.2462832	0.001143034	0.089166587	Zer1	2	30110205	30111332
mmu_circRNA000426	0	135.3333333	16.74532516	0.023576012	0.426112343	Hdlbp	1	93431312	93442250
mmu_circRNA001982	0	135.3333333	16.7295495	0.024945758	0.434540577	Suz12	11	80013364	80022269
mmu_circRNA002887	135.3333333	0	-17.23713151	0.001215538	0.091987254	Chga	12	102561345	102562083

mmu_circRNA001121	0	135	16.75804844	0.032527704	0.894860027	Ascc3	10	50690115	50767507
mmu_circRNA005289	0	134.6666667	16.74103838	0.02399868	0.427691382	Plcl2	17	50606295	50640191
mmu_circRNA003826	0	134.6666667	16.7332855	0.024673173	0.431828883	Extl3	14	65066683	65080475
mmu_circRNA000875	0	134.6666667	16.72242507	0.025638299	0.438781102	Ush2a	1	188743522	188784806
mmu_circRNA001714	134.3333333	0	-17.21721801	0.001380485	0.098434622	Canx	11	50307470	50310867
mmu_circRNA012811	0	134	16.71526528	0.026346785	0.444280091	Huwe1	X	151874533	151878909
mmu_circRNA009196	0	134	16.71526528	0.026346785	0.444280091	Tbc1d1	5	64277916	64286084
mmu_circRNA006164	0	134	16.71526528	0.026346785	0.444280091	Glis3	19	28507714	28531986
mmu_circRNA012309	0	134	16.74134422	0.024028141	0.427691382	Atr	9	95945088	95947241
mmu_circRNA011835	0	133.3333333	16.72869602	0.025193414	0.434634837	Anln	9	22360410	22364100
mmu_circRNA009296	0	133.3333333	16.74054846	0.024153338	0.428573048	Uba6	5	86131213	86136490
mmu_circRNA008172	0	133.3333333	16.72869602	0.025193414	0.434634837	Rars2	4	34618554	34654934
mmu_circRNA001991	0	133.3333333	16.72869602	0.025193414	0.434634837	Ehbp1	11	81013667	81055071
mmu_circRNA009807	0	133.3333333	16.72869602	0.025193414	0.434634837	Dync1i1	6	6006270	6010580
mmu_circRNA005101	0	133.3333333	16.72869602	0.025193414	0.434634837	Pdpk1	17	24101369	24106964
mmu_circRNA010599	0	133.3333333	16.70806978	0.027071625	0.451411804	Grin2d	7	45853203	45854699
mmu_circRNA004801	133.3333333	0	-17.21374992	0.001424938	0.100654482	Phldb2	16	45824759	45860436
mmu_circRNA005992	133.3333333	0	-17.23521282	0.001258897	0.09257021	Kdm2a	19	4350177	4394892
mmu_circRNA000364	0	133	16.74260939	0.024003639	0.427691382	Cab39	1	85818357	85844652
mmu_circRNA001999	0	132	16.70225268	0.040467757	0.894860027	Ap2b1	11	83324511	83324756
mmu_circRNA000561	0	132	16.70412852	0.02756448	0.455397693	Dennd1b	1	139053346	139110485
mmu_circRNA007967	0	132	16.70204389	0.027761663	0.45697226	Tbck	3	132705513	132743087
mmu_circRNA010965	0	132	16.69357021	0.028573434	0.465212849	Cog7	7	121881682	121882041
mmu_circRNA009686	132	0	-17.18849987	0.001670929	0.112706027	Zfp68	5	138616572	138617060
mmu_circRNA010167	0	131.3333333	16.70689165	0.027367047	0.453807361	Sfxn5	6	93745434	93773689
mmu_circRNA004512	0	131.3333333	16.70689165	0.027367047	0.453807361	Scn8a	15	100936271	100936600
mmu_circRNA001278	0	131.3333333	16.68626541	0.029351726	0.472736692	Tjp3	10	81283496	81283739
mmu_circRNA003130	131.3333333	0	-17.18175468	0.001749031	0.117093725	Cdkal1	13	29691599	29717817
mmu_circRNA010148	131.3333333	0	-17.20913002	0.001498073	0.104993877	Eefsec	6	88281549	88298236
mmu_circRNA011630	0	131	16.72074996	0.02611731	0.443583044	Ranbp10	8	105785864	105786258
mmu_circRNA000468	0	131	16.72074996	0.02611731	0.443583044	Ptpn4	1	119675549	119765922
mmu_circRNA004699	0	131	16.70404509	0.027666751	0.456247103	Senp5	16	31977680	31990465

mmu_circRNA000761	130.6666667	0	-17.22454638	0.00138254	0.098434622	Desi2	1	178242612	178244482
mmu_circRNA005171	0	130.3333333	16.72098867	0.02615711	0.443583044	Btbd9	17	30524713	30530365
mmu_circRNA010275	0	130.3333333	16.71321105	0.026871796	0.448914113	Cacna1c	6	119005038	119057515
mmu_circRNA001814	130.3333333	0	-17.16210449	0.00197415	0.124718995	Ncor1	11	62349353	62354688
mmu_circRNA003068	0	130	16.67810531	0.03029875	0.479382871	Chrm3	13	9990059	9990275
mmu_circRNA012411	0	130	16.6715439	0.030965888	0.483963388	Qrich1	9	108518703	108544977
mmu_circRNA002647	0	129.3333333	16.70973939	0.027290508	0.453807361	Fancm	12	65094871	65102717
mmu_circRNA012764	0	129.3333333	16.70787131	0.027465781	0.454604282	Mid2	X	140677996	140693162
mmu_circRNA000772	0	129.3333333	16.66412643	0.031802936	0.491903693	Smyd3	1	179298132	179298327
mmu_circRNA007253	0	129	16.69909423	0.028332664	0.463818117	Ncoa6	2	155432816	155440785
mmu_circRNA010793	0	129	16.69855421	0.028384584	0.463821687	Pcf11	7	92657975	92658328
mmu_circRNA005602	0	129	16.68236154	0.029973149	0.476753756	Mib1	18	10792895	10812156
mmu_circRNA011118	0	128.6666667	16.67729686	0.030517394	0.480964065	Ctbp2	7	131451735	131451994
mmu_circRNA011119	0	128.6666667	16.67729686	0.030517394	0.480964065	Ctbp2	7	131451747	131452006
mmu_circRNA004661	0	128.6666667	16.6664327	0.031632915	0.490118967	Eif4g1	16	20683422	20684512
mmu_circRNA003302	128.6666667	0	-17.17348802	0.001889312	0.121935355	2010111101Rik	13	63061035	63068285
mmu_circRNA002396	0	128.3333333	16.67722336	0.030559527	0.480964065	Asxl2	12	3442474	3484608
mmu_circRNA006607	0	128	16.68732696	0.029581448	0.474483096	Prrc2b	2	32204009	32204324
mmu_circRNA003594	0	128	16.66980233	0.031354308	0.486642734	Samd8	14	21774963	21783796
mmu_circRNA003774	0	128	16.64917609	0.033540056	0.506396916	Ift88	14	57430538	57455547
mmu_circRNA012384	0	128	16.68732696	0.029581448	0.474483096	Atp2c1	9	105439341	105453686
mmu_circRNA004370	128	0	-17.15481474	0.002110885	0.129154371	Ep300	15	81600908	81601545
mmu_circRNA000923	127.6666667	0	-17.17772629	0.001867054	0.121372023	Plxna2	1	194706093	194706370
mmu_circRNA007347	127.3333333	0	-17.18295571	0.001820621	0.119414404	Arfgef2	2	166866912	166869043
mmu_circRNA005819	0	127.3333333	16.66226866	0.032212184	0.493975215	Wdr7	18	63777528	63796281
mmu_circRNA004685	0	127.3333333	16.64164242	0.034441424	0.510102257	Opa1	16	29620381	29625604
mmu_circRNA005311	127.3333333	0	-17.12285083	0.002530263	0.14739603	Kdm4b	17	56344334	56356056
mmu_circRNA001825	0	127	16.67393745	0.031035469	0.484207289	Ncor1	11	62433563	62438515
mmu_circRNA000869	0	126.6666667	16.68706015	0.029746377	0.474664127	Ush2a	1	188626577	188678429
mmu_circRNA003072	0	126.6666667	16.65469544	0.033091671	0.504015931	Chrm3	13	10200131	10200309
mmu_circRNA004239	0	126.6666667	16.64063061	0.034629685	0.510102257	Slc30a8	15	52329607	52338180
mmu_circRNA012489	0	126.6666667	16.6340692	0.03536556	0.512543524	Pomgnt2	9	121982501	121983689

mmu_circRNA000548	0	126.3333333	16.6734652	0.031155717	0.485239476	Clasp1	1	134967727	134973966
mmu_circRNA004238	0	126	16.66460688	0.03211257	0.493975215	Slc30a8	15	52317275	52325710
mmu_circRNA010849	126	0	-17.10371333	0.002841895	0.159341504	Rab6a	7	100626552	100639495
mmu_circRNA005508	0	125.6666667	16.67292399	0.03128398	0.486392697	Ttc7	17	87290189	87308844
mmu_circRNA011023	0	125.3333333	16.63942868	0.034918191	0.510102257	Rnf40	7	127595846	127597542
mmu_circRNA012459	0	125.3333333	16.63942868	0.034918191	0.510102257	Glb1	9	114454188	114459725
mmu_circRNA010219	0	125.3333333	16.63942868	0.034918191	0.510102257	Itpr1	6	108339507	108356537
mmu_circRNA010229	0	125.3333333	16.62090045	0.037038682	0.51515351	Edem1	6	108842927	108846846
mmu_circRNA003872	0	125.3333333	16.61880244	0.037284953	0.516019769	Rb1	14	73262529	73265632
mmu_circRNA004496	125.3333333	0	-17.09605975	0.002979325	0.163972526	Dip2b	15	100179512	100183206
mmu_circRNA003722	0	124.6666667	16.64916577	0.03391899	0.507992089	Rpph1	14	50807500	50807650
mmu_circRNA010631	0	124.6666667	16.6416071	0.034753328	0.510102257	Nav2	7	49452399	49458208
mmu_circRNA008153	0	124.6666667	16.63173429	0.03586663	0.513173113	Klhl32	4	24792617	24833095
mmu_circRNA007146	0	124.6666667	16.63173429	0.03586663	0.513173113	Chgb	2	132794817	132794977
mmu_circRNA006596	0	124.6666667	16.62214355	0.036974301	0.515056609	Gpr107	2	31183580	31188813
mmu_circRNA000560	0	124	16.6502064	0.033883051	0.507992089	Dennd1b	1	139053346	139090555
mmu_circRNA000459	0	124	16.62399864	0.036839497	0.513976876	Clasp1	1	118543102	118548028
mmu_circRNA003387	0	124	16.62399864	0.036839497	0.513976876	Jmy	13	93452807	93464717
mmu_circRNA007697	0	124	16.62399864	0.036839497	0.513976876	Lrba	3	86348119	86417996
mmu_circRNA003031	0	124	16.62399864	0.036839497	0.513976876	Hdac9	12	117275247	117275580
mmu_circRNA012370	0	124	16.62399864	0.036839497	0.513976876	Ryk	9	102881654	102898850
mmu_circRNA005892	0	124	16.62399864	0.036839497	0.513976876	Smad2	18	76262440	76289173
mmu_circRNA008506	0	124	16.62399864	0.036839497	0.513976876	Zfyve9	4	108644336	108677792
mmu_circRNA009324	0	124	16.61494168	0.037906257	0.516019769	Septin11	5	93148394	93162299
mmu_circRNA012597	124	0	-17.08773416	0.003156152	0.171599003	Slc9a7	X	20161928	20162530
mmu_circRNA012714	0	123.3333333	16.61622129	0.03783755	0.516019769	Ogt	X	101663843	101672573
mmu_circRNA004660	0	123.3333333	16.6053317	0.039149572	0.522493688	Eif4g1	16	20683418	20684508
mmu_circRNA004744	0	123	16.60260976	0.039526118	0.522992342	Zfp148	16	33498955	33500579
mmu_circRNA008262	0	123	16.59590168	0.040358139	0.528751545	Zfp462	4	55050186	55060237
mmu_circRNA008299	123	0	-17.07241321	0.003449278	0.176819825	Susd1	4	59349826	59380958
mmu_circRNA010063	123	0	-17.13731354	0.002460084	0.145193511	Gng12	6	67018354	67019054
mmu_circRNA004127	0	122.6666667	16.60840178	0.038861567	0.522493688	Otulin	15	27617592	27620303

mmu_circRNA002992	0	122.6666667	16.58777554	0.041429071	0.532464461	Klc1	12	111772319	111774583
mmu_circRNA001722	0	122.6666667	16.58777554	0.041429071	0.532464461	Wdpcp	11	51598276	51598740
mmu_circRNA002437	0	122.6666667	16.60510328	0.039263425	0.522493688	Atad2b	12	4937387	4945022
mmu_circRNA012596	122.3333333	0	-17.06830815	0.003547005	0.177695874	Slc9a7	X	20161923	20162525
mmu_circRNA001070	0	122	16.63057415	0.036326404	0.513976876	Ccdc162	10	41550722	41553568
mmu_circRNA003772	0	122	16.61920605	0.037652656	0.516019769	Zmym2	14	56947947	56957103
mmu_circRNA009708	0	122	16.59083259	0.041129197	0.530892123	Rnf216	5	143080224	143090929
mmu_circRNA008051	121.6666667	0	-17.086921	0.003252937	0.171659385	Erich3	3	154762402	154762677
mmu_circRNA008050	121.6666667	0	-17.086921	0.003252937	0.171659385	Erich3	3	154762402	154762608
mmu_circRNA000100	0	121.3333333	16.59263447	0.040990726	0.530444106	Fam135a	1	24028200	24032736
mmu_circRNA005971	0	121.3333333	16.57200823	0.043666463	0.535660443	Ppp6r3	19	3511279	3511424
mmu_circRNA006750	0	121.3333333	16.57200823	0.043666463	0.535660443	Cobll1	2	65097919	65098062
mmu_circRNA000623	0	121	16.64061348	0.035309402	0.512543524	Pappa2	1	158714575	158714951
mmu_circRNA001414	0	121	16.6061902	0.039349021	0.522493688	Best3	10	116993064	117009041
mmu_circRNA004913	0	121	16.59263859	0.041035359	0.530444106	Ttc3	16	94383912	94468060
mmu_circRNA008865	121	0	-17.04529664	0.004032781	0.188880377	Rere	4	150431523	150431985
mmu_circRNA009663	121	0	-17.04529664	0.004032781	0.188880377	Baz1b	5	135216590	135231782
mmu_circRNA008763	121	0	-17.06844702	0.003597179	0.178288931	Eif4g3	4	138170477	138180607
mmu_circRNA006771	0	120.6666667	16.56405947	0.044829427	0.539818514	Ccdc173	2	69776130	69782118
mmu_circRNA011036	0	120.6666667	16.56405947	0.044829427	0.539818514	Inpp5f	7	128694591	128694848
mmu_circRNA009113	120.6666667	0	-17.04131679	0.004126692	0.188880377	Fam193a	5	34464049	34464204
mmu_circRNA004360	120.6666667	0	-17.04587763	0.004035976	0.188880377	Tnrc6b	15	80884207	80902712
mmu_circRNA007422	120.6666667	0	-17.08042318	0.003399909	0.175290706	Prpf6	2	181615977	181622317
mmu_circRNA002277	120.3333333	0	-17.06098515	0.00376081	0.184361916	Helz	11	107592706	107649340
mmu_circRNA000698	0	120	16.62864084	0.036804598	0.513976876	Uap1	1	170147996	170166948
mmu_circRNA010860	0	120	16.57669292	0.043233654	0.535660443	Nup98	7	102129816	102153249
mmu_circRNA007209	0	120	16.57669292	0.043233654	0.535660443	Ralgapa2	2	146404863	146412868
mmu_circRNA008684	0	120	16.5708787	0.044005668	0.537441668	Eya3	4	132656693	132673032
mmu_circRNA008111	120	0	-17.033324	0.004320684	0.195761878	Fsbp	4	11583973	11584151
mmu_circRNA002993	120	0	-17.05099634	0.003965005	0.188880377	Klc1	12	111774353	111778700
mmu_circRNA006227	120	0	-17.08904274	0.003279221	0.17203448	Btaf1	19	36951034	36970038
mmu_circRNA002169	0	119.6666667	16.59796257	0.040547477	0.528751545	Jup	11	100370780	100371144

mmu_circRNA012586	119.6666667	0	-17.05194946	0.003961042	0.188880377	Efhc2	X	17161251	17162888
mmu_circRNA004565	119.6666667	0	-17.05454047	0.003910996	0.188880377	Txndc11	16	11122670	11128703
mmu_circRNA009623	0	119.3333333	16.5686556	0.044399966	0.537441668	Gusb	5	129989340	129989487
mmu_circRNA009703	0	119.3333333	16.5686556	0.044399966	0.537441668	Fbxl18	5	142872256	142878876
mmu_circRNA008032	119.3333333	0	-17.09365231	0.00322758	0.171659385	Fubp1	3	152221267	152222244
mmu_circRNA010901	119.3333333	0	-17.09365231	0.00322758	0.171659385	Btbd10	7	113322680	113335518
mmu_circRNA009712	0	119	16.61656801	0.038359932	0.519045179	Rnf216	5	143090120	143090758
mmu_circRNA000692	0	119	16.61656801	0.038359932	0.519045179	Pbx1	1	168243186	168243319
mmu_circRNA010598	0	119	16.57274618	0.04390019	0.537283221	Lmtk3	7	45785569	45787470
mmu_circRNA011270	119	0	-17.03779749	0.004274635	0.194658652	Ddhd2	8	25735745	25739585
mmu_circRNA009779	119	0	-17.05501987	0.003930726	0.188880377	Fry	5	150466244	150481576
mmu_circRNA008959	0	118.6666667	16.57581907	0.04354011	0.535660443	Pclo	5	14520842	14540801
mmu_circRNA009372	0	118.6666667	16.55603729	0.046224485	0.547105753	Aff1	5	102875695	102880882
mmu_circRNA008437	0	118.6666667	16.55133951	0.046881355	0.552050134	Dock7	4	98937030	98946763
mmu_circRNA012023	0	118.6666667	16.5493697	0.047159044	0.552050134	Pias1	9	59231035	59232154
mmu_circRNA009399	0	118.6666667	16.54913778	0.047191827	0.552050134	Afap1	5	106618071	106619642
mmu_circRNA009235	0	118.6666667	16.53994702	0.048506077	0.553623427	Pitpnb	5	69558185	69566504
mmu_circRNA003871	118.3333333	0	-17.01314612	0.004843795	0.20692231	Rb1	14	73205744	73207319
mmu_circRNA002771	0	118	16.56433179	0.045181936	0.541157736	Arel1	12	84940160	84943392
mmu_circRNA010792	0	118	16.56997001	0.044418297	0.537441668	Pcf11	7	92657964	92658317
mmu_circRNA008840	0	118	16.56487402	0.045108036	0.541157736	Ube4b	4	149347927	149353027
mmu_circRNA000411	0	118	16.5427383	0.048206147	0.552050134	Kif1a	1	93045274	93045410
mmu_circRNA009274	0	118	16.54199431	0.04831322	0.552124707	Tmem165	5	76199345	76204816
mmu_circRNA002122	0	118	16.53181914	0.049797297	0.558414435	Zfp652	11	95749000	95750147
mmu_circRNA011905	118	0	-17.01440644	0.004832335	0.20692231	Vps11	9	44352597	44353354
mmu_circRNA010990	118	0	-17.07744208	0.003557039	0.177695874	Picalm	7	125752973	125770703
mmu_circRNA011754	0	117.6666667	16.55189237	0.046955389	0.552050134	Galnt2	8	124338443	124343511
mmu_circRNA003349	0	117.6666667	16.53551845	0.049305632	0.556720942	Slf1	13	77083441	77092411
mmu_circRNA004642	117.6666667	0	-17.00499528	0.005069311	0.210540682	Klhl24	16	20106663	20120298
mmu_circRNA005372	117.3333333	0	-17.03380031	0.004438145	0.200073373	Ankrd12	17	66037493	66053091
mmu_circRNA010136	0	117.3333333	16.54787339	0.047575012	0.552050134	Anxa4	6	86741836	86748980
mmu_circRNA001761	0	117.3333333	16.54427145	0.048089298	0.552050134	Rapgef6	11	54552790	54568496

mmu_circRNA011506	0	117.3333333	16.54427145	0.048089298	0.552050134	Prkaca	8	83992623	83993632
mmu_circRNA000896	117.3333333	0	-17.01015471	0.004965744	0.209144063	Dcaf6	1	190871592	190888764
mmu_circRNA008822	0	117	16.54427571	0.048140688	0.552050134	Vps13d	4	145167391	145170404
mmu_circRNA012137	117	0	-16.99679812	0.005304743	0.21671333	Rora	9	69262726	69262952
mmu_circRNA012356	117	0	-17.00870419	0.005017715	0.210181736	Stag1	9	100880776	100891136
mmu_circRNA009470	117	0	-17.02880431	0.004562257	0.203621921	Sgsm1	5	113263249	113268829
mmu_circRNA005318	0	116.6666667	16.58799885	0.042239518	0.535660443	Rfx2	17	56783607	56786728
mmu_circRNA011535	0	116.6666667	16.55496839	0.046677681	0.551706814	Phkb	8	85875634	85922242
mmu_circRNA006470	0	116.6666667	16.54659124	0.047861463	0.552050134	Mindy3	2	12355277	12386679
mmu_circRNA012824	0	116	16.57973124	0.043416533	0.535660443	Yy2	X	157558885	157591555
mmu_circRNA000330	0	116	16.54530795	0.04815018	0.552050134	Scg2	1	79436535	79436730
mmu_circRNA007965	0	116	16.54530795	0.04815018	0.552050134	Papss1	3	131599865	131631815
mmu_circRNA008935	116	0	-17.05278003	0.004109791	0.188880377	Cdk14	5	4875474	4875627
mmu_circRNA010786	116	0	-17.05278003	0.004109791	0.188880377	Picalm	7	90165514	90169275
mmu_circRNA009794	0	115.3333333	16.53950763	0.049095018	0.556720942	Exoc6b	6	3516622	3536972
mmu_circRNA007494	115.3333333	0	-17.02229558	0.004792771	0.20692231	Kcnmb2	3	31954202	31958095
mmu_circRNA008303	0	115	16.5462958	0.048168436	0.552050134	Ptbp3	4	59493186	59494610
mmu_circRNA007044	115	0	-16.97192345	0.006075023	0.231910789	Trp53bp1	2	121227645	121228707
mmu_circRNA000757	114.6666667	0	-16.99914068	0.005380877	0.218424641	Akt3	1	177096967	177131096
mmu_circRNA011931	114.6666667	0	-17.0018126	0.005314562	0.21671333	Sik3	9	46030608	46030834
mmu_circRNA012351	114.3333333	0	-16.98400535	0.005790297	0.225798997	Stag1	9	100757690	100786696
mmu_circRNA006868	114.3333333	0	-17.01407687	0.005037239	0.210181736	Snord67	2	91594683	91596555
mmu_circRNA006523	113.6666667	0	-16.96295113	0.0064165	0.238910452	Myo3a	2	22291806	22297718
mmu_circRNA011761	113.3333333	0	-16.95086184	0.006797499	0.246164379	Pard3	8	127216749	127216951
mmu_circRNA009260	113	0	-16.95195251	0.006788252	0.246164379	Dcun1d4	5	73510886	73544155
mmu_circRNA006129	112.6666667	0	-16.94235034	0.007109004	0.247656704	Pgm5	19	24727669	24733677
mmu_circRNA009198	112.3333333	0	-16.94717474	0.006982951	0.247025259	Tbc1d1	5	64311059	64316515
mmu_circRNA008722	112	0	-16.93378832	0.007434236	0.251699167	Kdm1a	4	136550801	136555305
mmu_circRNA007776	112	0	-16.94175715	0.007177655	0.247656704	Ubap2l	3	90043700	90047899
mmu_circRNA005039	112	0	-16.95146067	0.006875358	0.246164379	Lnpep	17	17570874	17579372
mmu_circRNA010975	112	0	-16.95146067	0.006875358	0.246164379	Prkcb	7	122516829	122518179
mmu_circRNA008934	112	0	-17.00215396	0.005463876	0.219818072	Cdk14	5	4875470	4875623

mmu_circRNA008581	111.6666667	0	-16.99785382	0.005593921	0.222048975	Hivep3	4	120093964	120103854
mmu_circRNA009899	111	0	-16.9892149	0.005862874	0.226706216	Exoc4	6	33359491	33363125
mmu_circRNA010454	110.6666667	0	-16.98487597	0.006001916	0.230099107	Zfp28	7	6389433	6390560
mmu_circRNA004897	110.3333333	0	-16.92680277	0.00779976	0.254222894	Morc3	16	93847288	93853217
mmu_circRNA003562	110	0	-16.93484217	0.007556979	0.252702108	Kat6b	14	17925596	17963321
mmu_circRNA003747	109.6666667	0	-16.91320403	0.008331366	0.262355747	Carmil3	14	55502219	55503025
mmu_circRNA002575	109.3333333	0	-16.91036242	0.008463278	0.262713043	Prkd1	12	50425439	50435352
mmu_circRNA006871	109	0	-16.8090744	0.022010254	0.894860027	Atg13	2	91678727	91681695
mmu_circRNA006871	109	0	-16.91229007	0.008422523	0.262355747	Atg13	2	91678727	91681695
mmu_circRNA007035	108.6666667	0	-16.90566067	0.008695925	0.265344016	Ubr1	2	120903994	120921502
mmu_circRNA005810	108.6666667	0	-16.9289443	0.007864368	0.254222894	Hmgxb3	18	61157343	61157761
mmu_circRNA006664	108.6666667	0	-16.93577108	0.007633739	0.252702108	Strbp	2	37596704	37647285
mmu_circRNA003414	108	0	-16.84212713	0.01946641	0.894860027	Ankra2	13	98267316	98272852
mmu_circRNA009053	108	0	-16.9262091	0.008014921	0.256104458	Rbm33	5	28365530	28365733
mmu_circRNA000516	108	0	-16.93060116	0.00786352	0.254222894	Ubxn4	1	128258132	128260283
mmu_circRNA005828	107.6666667	0	-16.81028203	0.022135999	0.894860027	Atp8b1	18	64561580	64561736
mmu_circRNA010834	107.6666667	0	-16.88109386	0.009752213	0.279991794	Uvrag	7	98979636	99004706
mmu_circRNA003748	107.6666667	0	-16.88779505	0.009480413	0.278081149	Carmil3	14	55502225	55503031
mmu_circRNA008681	106.6666667	0	-16.9139087	0.008572097	0.264262131	Ythdf2	4	132204132	132205715
mmu_circRNA001295	106	0	-16.76881053	0.026294862	0.894860027	Aldh1l2	10	83506598	83508732
mmu_circRNA000279	106	0	-16.8657157	0.010578662	0.290140531	Unc80	1	66471976	66491180
mmu_circRNA007856	105.3333333	0	-16.86772709	0.01056254	0.290140531	Trim33	3	103344294	103344643
mmu_circRNA012178	105	0	-16.86198123	0.010854139	0.293866581	Nedd4	9	72726442	72730977
mmu_circRNA002962	105	0	-16.87677971	0.010206974	0.286146143	Mir5624	12	110687352	110688678
mmu_circRNA008762	104.6666667	0	-16.85381957	0.011263959	0.300740993	Eif4g3	4	138170477	138178010
mmu_circRNA000443	104.3333333	0	-16.83755548	0.012079413	0.309612611	Zcchc2	1	106000931	106011814
mmu_circRNA001318	104	0	-16.89523875	0.009546716	0.278081149	Arl1	10	88733543	88737202
mmu_circRNA011777	104	0	-16.8386787	0.012064837	0.309612611	Pdgfd	9	6288490	6293937
mmu_circRNA000400	103.6666667	0	-16.8906073	0.00976897	0.279991794	Hdac4	1	92029955	92030196
mmu_circRNA007461	103.3333333	0	-16.86567143	0.010875455	0.293866581	Fndc3b	3	27488237	27501545
mmu_circRNA008783	102.6666667	0	-16.72271412	0.032029561	0.894860027	Arhgef10l	4	140547000	140568520
mmu_circRNA008783	102.6666667	0	-16.82592979	0.012875549	0.313025883	Arhgef10l	4	140547000	140568520

mmu_circRNA007655	102.6666667	0	-16.81861171	0.013259467	0.316358177	Gm17836	3	75358347	75403874
mmu_circRNA006987	102.6666667	0	-16.82204668	0.013078072	0.316235528	Disp2	2	118794252	118794395
mmu_circRNA001386	102	0	-16.86722438	0.010957834	0.294319554	Nav3	10	109880535	109903863
mmu_circRNA003541	101.6666667	0	-16.81940096	0.013351188	0.317701616	Gm281	14	13896873	13905268
mmu_circRNA009676	101.3333333	0	-16.84343745	0.012160945	0.31007548	Slc12a9	5	137325323	137325674
mmu_circRNA002075	101.3333333	0	-16.85776405	0.011471781	0.300916227	Srsf1	11	88049977	88051332
mmu_circRNA008358	100.6666667	0	-16.79754798	0.014696538	0.336333262	Ccdc171	4	83546834	83554884
mmu_circRNA008150	100.6666667	0	-16.81368741	0.013797394	0.324022041	Klhl32	4	24682055	24693634
mmu_circRNA003529	100.6666667	0	-16.83165189	0.012841484	0.313025883	Cadps	14	12439871	12467179
mmu_circRNA003040	100.6666667	0	-16.8397233	0.0124306	0.310708824	Gdi2	13	3550989	3557057
mmu_circRNA003758	100.3333333	0	-16.83032277	0.012954567	0.314095731	Zmym5	14	56796604	56804863
mmu_circRNA008933	100	0	-16.83865522	0.01257098	0.311531114	Cdk14	5	4875458	4875611
mmu_circRNA002081	100	0	-16.83865522	0.01257098	0.311531114	4930556N13Rik	11	88855503	88855672
mmu_circRNA001348	99.6666667	0	-16.77004438	0.016464239	0.351746681	Cradd	10	95225394	95225554
mmu_circRNA011993	99.6666667	0	-16.77967484	0.015885829	0.348047047	Scaper	9	55807013	55864604
mmu_circRNA011112	99.6666667	0	-16.7871887	0.015442973	0.346347267	Dmbt1	7	131110921	131112250
mmu_circRNA011463	99.33333333	0	-16.77831177	0.016019614	0.349664133	Arhgap10	8	77382725	77411128
mmu_circRNA005298	99	0	-16.76846353	0.016668955	0.353998482	Satb1	17	51775206	51809287
mmu_circRNA000710	98.6666667	0	-16.79471943	0.015157977	0.34425877	Atf6	1	170787346	170799745
mmu_circRNA008239	98.6666667	0	-16.76419878	0.016986663	0.355215281	Rnf20	4	49644484	49658056
mmu_circRNA001542	98.33333333	0	-16.74604205	0.018192703	0.370083313	Gm24036	11	12038734	12127255
mmu_circRNA011990	98.33333333	0	-16.75983904	0.017314433	0.359545613	Scaper	9	55580207	55602921
mmu_circRNA007220	98.33333333	0	-16.77354543	0.016467908	0.351746681	Gzf1	2	148686514	148690983
mmu_circRNA002135	98.33333333	0	-16.77466859	0.016399662	0.351746681	Npepps	11	97222951	97226868
mmu_circRNA002080	98.33333333	0	-16.81440768	0.014089673	0.32745713	4930556N13Rik	11	88855498	88855667
mmu_circRNA007610	98	0	-16.78060509	0.01609527	0.350462774	Slc33a1	3	63944566	63954004
mmu_circRNA012668	97	0	-16.79471188	0.015417102	0.346347267	Mtmr1	X	71394277	71410846
mmu_circRNA006628	97	0	-16.79471188	0.015417102	0.346347267	Atp9a	2	34264126	34266724
mmu_circRNA008392	96.6666667	0	-16.75478875	0.017923818	0.368046373	Slc24a2	4	86996513	87073296
mmu_circRNA006633	96	0	-16.7113959	0.020978892	0.396584871	Mapkap1	2	34432007	34452055
mmu_circRNA006631	96	0	-16.7113959	0.020978892	0.396584871	Mapkap1	2	34432003	34452051
mmu_circRNA003879	96	0	-16.71724928	0.020566293	0.396000834	Lrch1	14	74835649	74858121

mmu_circRNA011933	95.66666667	0	-16.73879215	0.019155216	0.378770505	Phip	9	46532757	46533968
mmu_circRNA005668	95.33333333	0	-16.76970787	0.017211196	0.358240454	Fam13b	18	34486979	34499852
mmu_circRNA003105	95	0	-16.71396135	0.02099853	0.396584871	Vps41	13	18810432	18823877
mmu_circRNA002608	95	0	-16.71396135	0.02099853	0.396584871	Snx6	12	54751782	54765679
mmu_circRNA000646	95	0	-16.72137204	0.02047624	0.396000834	Dcaf6	1	160682041	160724189
mmu_circRNA000061	94.66666667	0	-16.75624724	0.018189606	0.370083313	Stau2	1	16389821	16394210
mmu_circRNA003843	94.33333333	0	-16.70380149	0.021868182	0.405684938	Ppp2r2a	14	67019716	67029030
mmu_circRNA002099	94	0	-16.72192531	0.020638183	0.396030901	Mbtd1	11	93905163	93912458
mmu_circRNA000430	94	0	-16.72695739	0.0202862	0.394766821	Thap4	1	93714898	93725316
mmu_circRNA003968	93.66666667	0	-16.69356957	0.02276944	0.416866619	Mycbp2	14	103247747	103276518
mmu_circRNA010246	93.66666667	0	-16.73113423	0.020063047	0.39212547	Pparg	6	115439840	115463285
mmu_circRNA010666	93.66666667	0	-16.74426285	0.019168633	0.378770505	Mir344b	7	61784602	61814190
mmu_circRNA001445	93.33333333	0	-16.67075392	0.02460908	0.431828883	Srgap1	10	121837867	121839840
mmu_circRNA009604	93.33333333	0	-16.71000741	0.021627257	0.404043003	Rimbp2	5	128761340	128780376
mmu_circRNA011371	93	0	-16.68326456	0.023703863	0.426147004	Odz3	8	48367311	48417245
mmu_circRNA004199	93	0	-16.62376161	0.049172324	0.894860027	Axin1	17	26142617	26143576
mmu_circRNA004199	93	0	-16.67957668	0.023990542	0.427691382	Axin1	17	26142617	26143576
mmu_circRNA008447	92.33333333	0	-16.67262357	0.024693815	0.431828883	Itgb3bp	4	99770307	99773574
mmu_circRNA011912	92.33333333	0	-16.69478428	0.022972097	0.418147737	Kmt2a	9	44828784	44829268
mmu_circRNA006048	92	0	-16.64999536	0.026631278	0.447395497	Malat1	19	5801695	5801886
mmu_circRNA009562	91.66666667	0	-16.65919766	0.025944732	0.442490851	Zcchc8	5	123709382	123719528
mmu_circRNA006879	91.33333333	0	-16.65062184	0.026745458	0.447661153	Ambra1	2	91766447	91810209
mmu_circRNA002703	91.33333333	0	-16.68824049	0.023699754	0.426147004	Fut8	12	77323845	77365359
mmu_circRNA000424	91.33333333	0	-16.69765177	0.022979248	0.418147737	Hdlbp	1	93428148	93431518
mmu_circRNA002055	90.66666667	0	-16.67603194	0.024817713	0.433151174	Vmp1	11	86661123	86665878
mmu_circRNA005335	89.66666667	0	-16.6276643	0.029193532	0.471034486	Pja2	17	64287001	64297909
mmu_circRNA006835	89.66666667	0	-16.62846527	0.029121077	0.470712042	Nckap1	2	80505125	80505369
mmu_circRNA005823	89.66666667	0	-16.6812989	0.024638227	0.431828883	Atp8b1	18	64556837	64561732
mmu_circRNA006825	89.33333333	0	-16.62214879	0.029788865	0.474664127	Hnrnpa3	2	75662167	75662305
mmu_circRNA003306	89.33333333	0	-16.65909974	0.02653804	0.44666558	2010111I01Rik	13	63170941	63210166
mmu_circRNA000207	88.66666667	0	-16.59675334	0.032396593	0.495955353	Bmpr2	1	54638074	54640417
mmu_circRNA005825	88.33333333	0	-16.65968508	0.026746893	0.447661153	Atp8b1	18	64556841	64561736

mmu_circRNA004221	88	0	-16.58586502	0.033686371	0.507047712	Rims2	15	39506966	39535981
mmu_circRNA007777	87.66666667	0	-16.59069708	0.03330111	0.505489443	Nbea	3	90056207	90058800
mmu_circRNA001207	87.66666667	0	-16.63856432	0.028762779	0.466601975	Jmjd1c	10	67157907	67189849
mmu_circRNA011384	87.33333333	0	-16.5748939	0.035026529	0.510102257	Nek1	8	61089573	61124322
mmu_circRNA012663	87.33333333	0	-16.58685654	0.033792367	0.507791158	Mamld1	X	71101485	71119394
mmu_circRNA009343	87.33333333	0	-16.59256625	0.033216015	0.505052329	Hnrnpdl	5	100036104	100037981
mmu_circRNA010851	87.33333333	0	-16.64325954	0.028436873	0.463831243	Fchsd2	7	101186388	101198609
mmu_circRNA006391	87.33333333	0	-16.5748939	0.035026529	0.510102257	Atrnl1	19	57731552	57755618
mmu_circRNA002394	87	0	-16.62953272	0.029768349	0.474664127	Asxl2	12	3442474	3457209
mmu_circRNA003881	87	0	-16.5693769	0.035716192	0.513173113	Lrch1	14	74883694	74894886
mmu_circRNA003882	87	0	-16.5693769	0.035716192	0.513173113	Lrch1	14	74883694	74897211
mmu_circRNA008586	87	0	-16.5693769	0.035716192	0.513173113	Rims3	4	120883234	120883393
mmu_circRNA001966	87	0	-16.60414569	0.032172058	0.493975215	Nlk	11	78673095	78673306
mmu_circRNA000767	87	0	-16.60701899	0.031892484	0.492439712	Smyd3	1	179289275	179289872
mmu_circRNA006850	86.66666667	0	-16.56383871	0.036419291	0.513976876	Nup160	2	90695418	90696792
mmu_circRNA006013	86.66666667	0	-16.58151106	0.034550671	0.510102257	Malat1	19	5796069	5797547
mmu_circRNA006015	86.66666667	0	-16.58151106	0.034550671	0.510102257	Malat1	19	5796075	5797553
mmu_circRNA007850	86.66666667	0	-16.63220435	0.029618831	0.474483096	Csde1	3	103032589	103034457
mmu_circRNA007114	86.33333333	0	-16.59299888	0.033482906	0.506396916	Sirpa	2	129608904	129621227
mmu_circRNA003434	86.33333333	0	-16.62664482	0.030227175	0.479095384	Slc30a5	13	100812648	100818213
mmu_circRNA009633	86.33333333	0	-16.58720701	0.034070852	0.509416025	Auts2	5	131662019	131672704
mmu_circRNA004198	86.33333333	0	-16.57226749	0.035626602	0.513173113	Axin1	17	26142617	26143576
mmu_circRNA011383	86	0	-16.55269816	0.037866967	0.516019769	Nek1	8	61089571	61124320
mmu_circRNA001668	86	0	-16.55269816	0.037866967	0.516019769	Pank3	11	35776086	35783573
mmu_circRNA009529	86	0	-16.55269816	0.037866967	0.516019769	Lmbr1	5	121777370	121778105
mmu_circRNA003749	86	0	-16.62106379	0.030847453	0.482953752	Rnf31	14	55592557	55592709
mmu_circRNA004892	86	0	-16.62106379	0.030847453	0.482953752	Dop1b	16	93762033	93764044
mmu_circRNA003491	86	0	-16.62106379	0.030847453	0.482953752	Mtrex	13	112872899	112892060
mmu_circRNA003981	85.33333333	0	-16.5414709	0.039371947	0.522493688	Tpm3-rs7	14	113315177	113315344
mmu_circRNA009866	85.33333333	0	-16.5414709	0.039371947	0.522493688	Cpa1	6	30642860	30643626
mmu_circRNA003789	85.33333333	0	-16.55667111	0.037653927	0.516019769	Cab39l	14	59481670	59482315
mmu_circRNA001817	85.33333333	0	-16.55914325	0.037380535	0.516019769	Ncor1	11	62366964	62373622

mmu_circRNA004244	85.33333333	0	-16.55914325	0.037380535	0.516019769	Ptk2	15	52340410	52346061
mmu_circRNA002788	85.33333333	0	-16.57952551	0.035188663	0.511632896	Ttll5	12	85863564	85879475
mmu_circRNA009742	85	0	-16.55349668	0.038123184	0.51740255	Cdk8	5	146271595	146286239
mmu_circRNA004392	85	0	-16.57134995	0.036166237	0.513976876	Srebf2	15	82175097	82177587
mmu_circRNA009325	85	0	-16.60418997	0.032782675	0.500158809	Septin11	5	93154870	93157012
mmu_circRNA000637	84.66666667	0	-16.53015559	0.040936703	0.530444106	Pappa2	1	158848307	158857338
mmu_circRNA003100	84.66666667	0	-16.54782793	0.038880524	0.522493688	Cdk13	13	17750257	17765093
mmu_circRNA005949	84.66666667	0	-16.59852122	0.033453505	0.506396916	Zfp516	18	82990640	82990891
mmu_circRNA004840	84.33333333	0	-16.52446448	0.041742293	0.534488847	Zbtb11	16	55982175	55991618
mmu_circRNA000790	84.33333333	0	-16.55936761	0.037700947	0.516019769	Akt3	1	180743080	180743724
mmu_circRNA008356	84.33333333	0	-16.59283011	0.034137706	0.509566327	Ccdc171	4	83535790	83554884
mmu_circRNA007104	84	0	-16.58711646	0.034835586	0.510102257	Anapc1	2	128668925	128672157
mmu_circRNA010680	84	0	-16.51875083	0.042563792	0.535660443	Mir344f	7	62038988	62070616
mmu_circRNA002797	84	0	-16.51875083	0.042563792	0.535660443	Gstz1	12	87159170	87159462
mmu_circRNA010682	84	0	-16.51875083	0.042563792	0.535660443	Mtmr10	7	64297460	64300682
mmu_circRNA009867	84	0	-16.51875083	0.042563792	0.535660443	Cpa1	6	30642862	30643628
mmu_circRNA006407	84	0	-16.53642317	0.04044055	0.528751545	Pnlip	19	58677169	58680902
mmu_circRNA005906	84	0	-16.53642317	0.04044055	0.528751545	8030462N17Rik	18	77673900	77674684
mmu_circRNA004633	84	0	-16.53642317	0.04044055	0.528751545	Dgcr2	16	17856752	17872685
mmu_circRNA004074	84	0	-16.53642317	0.04044055	0.528751545	Cplane1	15	8194324	8202333
mmu_circRNA003938	84	0	-16.55957672	0.037794152	0.516019769	Olfm4	14	80006168	80014341
mmu_circRNA007081	84	0	-16.58711646	0.034835586	0.510102257	Trpm7	2	126797111	126799234
mmu_circRNA011000	84	0	-16.58711646	0.034835586	0.510102257	Taok2	7	126871906	126872562
mmu_circRNA008216	84	0	-16.58711646	0.034835586	0.510102257	Shb	4	45457171	45457440
mmu_circRNA007520	84	0	-16.58711646	0.034835586	0.510102257	4932438A13Rik	3	37041002	37041921
mmu_circRNA011622	84	0	-16.57113034	0.036528664	0.513976876	Atp6v0d1	8	105530815	105539492
mmu_circRNA004299	83.66666667	0	-16.51301446	0.04340153	0.535660443	Zfat	15	68165753	68212844
mmu_circRNA007680	83.66666667	0	-16.52472635	0.041961239	0.534488847	Arfp1	3	85730259	85741374
mmu_circRNA009217	83.66666667	0	-16.58138009	0.035547457	0.513173113	N4bp2	5	65790018	65812150
mmu_circRNA011290	83.33333333	0	-16.52492753	0.042063218	0.534488847	Cbfb	8	32663890	32664036
mmu_circRNA005084	83.33333333	0	-16.52492753	0.042063218	0.534488847	Zfp40	17	23175439	23175606
mmu_circRNA009560	83.33333333	0	-16.55049682	0.039053431	0.522493688	Clip1	5	123606923	123608792

mmu_circRNA009559	83.33333333	0	-16.55090227	0.039007203	0.522493688	Clip1	5	123606921	123608790
mmu_circRNA003313	83.33333333	0	-16.57562082	0.036273638	0.513976876	Wdr37	13	65250086	65250425
mmu_circRNA010117	83.33333333	0	-16.57562082	0.036273638	0.513976876	Exoc6b	6	84696031	84696784
mmu_circRNA008526	83	0	-16.50147283	0.045124494	0.541157736	Faf1	4	109911920	109912162
mmu_circRNA003530	83	0	-16.51264083	0.043707886	0.535660443	Cadps	14	12439871	12473515
mmu_circRNA007369	83	0	-16.51349088	0.043601429	0.535660443	Nfatc2	2	168534918	168571633
mmu_circRNA007884	83	0	-16.51914518	0.04289888	0.535660443	Elapor1	3	108475534	108478128
mmu_circRNA008911	83	0	-16.51914518	0.04289888	0.535660443	Ccnl2	4	155820329	155823693
mmu_circRNA006088	83	0	-16.54795258	0.039465941	0.522967446	Syt7	19	10449071	10449376
mmu_circRNA000690	82.66666667	0	-16.56403284	0.037770231	0.516019769	Aldh9a1	1	167352520	167357450
mmu_circRNA004677	82.66666667	0	-16.49566721	0.046007342	0.547105753	Lpp	16	24602760	24681871
mmu_circRNA001632	82.66666667	0	-16.50737779	0.044504183	0.537441668	Rtn4	11	29706410	29708770
mmu_circRNA000091	82.66666667	0	-16.56403284	0.037770231	0.516019769	Pkhd1	1	20502947	20524270
mmu_circRNA010579	82.33333333	0	-16.52373387	0.042592953	0.535660443	Klk1	7	44141406	44229047
mmu_circRNA006086	82.33333333	0	-16.52827537	0.042039503	0.534488847	Syt7	19	10417911	10422447
mmu_circRNA003427	82.33333333	0	-16.53400294	0.041350167	0.532464461	Naip2	13	100178247	100189402
mmu_circRNA005571	82.33333333	0	-16.55820377	0.038541313	0.520714031	Rock1	18	10072832	10079274
mmu_circRNA010462	82	0	-16.49736734	0.046059683	0.547105753	Peg3	7	6725475	6725904
mmu_circRNA001236	82	0	-16.50165775	0.045504852	0.543573934	Specc1l	10	75261794	75267589
mmu_circRNA003424	82	0	-16.51801732	0.043429564	0.535660443	Bdp1	13	100084141	100099229
mmu_circRNA012169	82	0	-16.55235104	0.03932804	0.522493688	Zfp280d	9	72323000	72331433
mmu_circRNA001943	82	0	-16.55235104	0.03932804	0.522493688	Ssh2	11	77277024	77277296
mmu_circRNA006158	82	0	-16.55235104	0.03932804	0.522493688	Rfx3	19	27956259	27990279
mmu_circRNA005312	81.66666667	0	-16.48397552	0.047958017	0.552050134	Kdm4b	17	56344338	56356060
mmu_circRNA006295	81.66666667	0	-16.54647447	0.040130761	0.528653538	Lcor	19	41528021	41546007
mmu_circRNA005533	81.33333333	0	-16.47220824	0.049681888	0.557817545	Map3k8	18	4333818	4339603
mmu_circRNA002533	81.33333333	0	-16.47220824	0.049681888	0.557817545	Myt1l	12	29849245	29855283
mmu_circRNA002459	81.33333333	0	-16.48988058	0.047317058	0.552050134	Nbas	12	11470971	11516871
mmu_circRNA000254	81.33333333	0	-16.52373555	0.042984403	0.535660443	Raph1	1	60525592	60527489
mmu_circRNA006731	81.33333333	0	-16.54057387	0.040949833	0.530444106	Baz2b	2	59962021	60006189
mmu_circRNA005925	81.33333333	0	-16.51420291	0.044173546	0.537441668	Atp9b	18	80877315	80917878
mmu_circRNA003193	81.33333333	0	-16.54057387	0.040949833	0.530444106	Atrnl1	13	45911971	45915911

mmu_circRNA000791	81	0	-16.47511027	0.049434049	0.556720942	Tmem63a	1	180971967	180973202
mmu_circRNA010419	81	0	-16.47540115	0.049394689	0.556720942	Ccdc91	6	147522523	147522710
mmu_circRNA002112	81	0	-16.48395575	0.048245157	0.552050134	Luc7l3	11	94296884	94309691
mmu_circRNA003117	81	0	-16.50148947	0.045938084	0.547105753	Carmil1	13	24064577	24094570
mmu_circRNA001877	81	0	-16.50962933	0.044889728	0.539820043	4933427D14Rik	11	72189548	72198963
mmu_circRNA007972	81	0	-16.53464904	0.041785618	0.534488847	Tbck	3	132801504	132815349
mmu_circRNA005559	80.66666667	0	-16.47800648	0.049188095	0.556720942	Mpp7	18	7350283	7350618
mmu_circRNA011802	80.66666667	0	-16.47800648	0.049188095	0.556720942	Med17	9	15271611	15277723
mmu_circRNA006453	80.66666667	0	-16.49407428	0.047046511	0.552050134	Optrn	2	5052988	5054716
mmu_circRNA012574	80.66666667	0	-16.52869977	0.042638481	0.535660443	Usp9x	X	13107990	13145347
mmu_circRNA005921	80.66666667	0	-16.47800648	0.049188095	0.556720942	Atp9b	18	80836355	80917878
mmu_circRNA006709	80.33333333	0	-16.4928618	0.047348206	0.552050134	Gpd2	2	57289845	57307095
mmu_circRNA000686	80	0	-16.51672713	0.044396949	0.537441668	Uck2	1	167227732	167237648
mmu_circRNA002569	79.66666667	0	-16.48335074	0.048906071	0.556720942	Pnpla8	12	44295898	44299291
mmu_circRNA006216	79.33333333	0	-16.5046543	0.046227417	0.547105753	Pank1	19	34795615	34827373
mmu_circRNA008182	79	0	-16.49857978	0.04716718	0.552050134	Dnaja1	4	40729145	40729408
mmu_circRNA009480	79	0	-16.49857978	0.04716718	0.552050134	Coq5	5	115283566	115284612
mmu_circRNA003017	78.66666667	0	-16.49247958	0.048122628	0.552050134	Nbas	12	116858843	116876372
mmu_circRNA005893	78.66666667	0	-16.49247958	0.048122628	0.552050134	Smad2	18	76262440	76292984
mmu_circRNA011139	78.33333333	0	-16.48635348	0.049093906	0.556720942	Nars2	7	133025713	133081860

Table S5 protein of Pulldown-MS

Accession	Description	Gene name	Σ Coverage	Σ # Proteins	Σ # Unique Peptides	Σ # Peptides	Σ # PSMs	Coverage SENSE	# Peptides SENSE	# PSM SENSE	Coverage ANTI	# Peptide ANTI	# PSM ANTI	# AAs	MW [kDa]	cal c. pl
G3UXT7	RNA-binding protein FUS (Fragment) OS=Mus musculus OX=10090 GN=Fus PE=1 SV=1 - [G3UXT7_MOUSE]	Fus	40.00	7	5	5	6	34.62	4	5	5.38	1	1	130	14.0	8.97
E9PWX6	Splicing factor U2AF 26 kDa subunit OS=Mus musculus OX=10090 GN=U2af1l4 PE=4 SV=1 - [E9PWX6_MOUSE]	U2af1l4	37.84	13	1	1	1	37.84	1	1				37	3.9	5.02
A2CEK9	Major urinary protein 1 (Fragment) OS=Mus musculus OX=10090 GN=Mup1 PE=4 SV=1 - [A2CEK9_MOUSE]	Mup1	36.67	24	1	1	1	36.67	1	1				30	3.5	8.03
Q1JUQ7	FK506 binding protein12-T2 OS=Mus musculus OX=10090 GN=Fkbp1a PE=2 SV=1 - [Q1JUQ7_MOUSE]	Fkbp1a	35.14	5	1	1	1	35.14	1	1				37	4.0	9.04

Q8AK003	Translation machinery-associated protein 7 OS=Mus musculus OX=10090 GN=Tma7 PE=3 SV=1 - [TMA7_MOUSE]	Tma7	31.25	1	3	3	4	31.25	3	4				64	7.1	9.99
A0A0G2JER0	Protein shisa-5 (Fragment) OS=Mus musculus OX=10090 GN=Shisa5 PE=4 SV=1 - [A0A0G2JER0_MOUSE]	Scotin	28.47	1	1	1	1	28.47	1	1				137	14.7	7.21
Q8C2K0	Uncharacterized protein OS=Mus musculus OX=10090 GN=Rpl12 PE=2 SV=1 - [Q8C2K0_MOUSE]	Rpl12	25.00	4	3	3	4	15.24	2	2	15.24	2	2	164	17.8	9.55
Q9Z2X1	Heterogeneous nuclear ribonucleoprotein F OS=Mus musculus OX=10090 GN=Hnrnpf PE=1 SV=3 - [HNRPF_MOUSE]	Hnrnpf	22.89	8	6	7	10	22.89	7	10				415	45.7	5.49
G3UY98	N6-adenosine-methyltransferase subunit METTL3 OS=Mus musculus OX=10090 GN=Mettl3 PE=1 SV=1 - [G3UY98_MOUSE]	Mettl3	22.22	8	1	1	1	22.22	1	1				36	4.3	10.24
Q3UAZ7	Uncharacterized protein (Fragment) OS=Mus musculus OX=10090 GN=Hmgb2 PE=2 SV=1 - [Q3UAZ7_MOUSE]	Hmgb2	22.10	5	3	3	3	22.10	3	3				181	20.5	9.82
Q9D8E6	60S ribosomal protein L4 OS=Mus musculus OX=10090 GN=Rpl4 PE=1 SV=3 - [RL4_MOUSE]	Rpl4	21.72	3	8	8	8	21.72	8	8				419	47.1	11.00
A2ARQ2	Small EDRK-rich factor 2 OS=Mus musculus OX=10090 GN=Serf2 PE=1 SV=1 - [A2ARQ2_MOUSE]	Serf2	21.43	6	1	1	1	21.43	1	1				42	4.8	11.65
E9Q0W8	Small nuclear ribonucleoprotein E OS=Mus musculus OX=10090 GN=Snrpe PE=1 SV=1 - [E9Q0W8_MOUSE]	Snrpe	21.15	3	1	1	1	21.15	1	1				52	6.2	9.85
O35737	Heterogeneous nuclear ribonucleoprotein H OS=Mus musculus OX=10090 GN=Hnrnp h1 PE=1 SV=3 - [HNRH1_MOUSE]	Hnrnp h1	20.94	6	5	6	7	20.94	6	7				449	49.2	6.30
Q91V55	40S ribosomal protein S5 OS=Mus musculus OX=10090 GN=Rps5 PE=1 SV=1 - [Q91V55_MOUSE]	Rps5	20.59	4	5	5	9	20.59	5	7	11.76	2	2	204	22.9	9.72
A0A1L1SRC6	RIKEN cDNA 9530077C05 gene (Fragment) OS=Mus musculus OX=10090 GN=9530077C05Rik PE=4 SV=1 - [A0A1L1SRC6_MOUSE]		17.73	1	1	1	1	17.73	1	1				203	23.1	9.67
Q497D7	Rpl30 protein OS=Mus musculus OX=10090 GN=Rpl30 PE=2 SV=1 - [Q497D7_MOUSE]	Rpl30	17.54	4	2	2	2	17.54	2	2				114	12.6	9.55
A0A087WPL5	ATP-dependent RNA helicase A OS=Mus musculus OX=10090 GN=Dhx9 PE=1 SV=1 - [A0A087WPL5_MOUSE]	Dhx9	17.43	9	23	23	33	10.48	13	15	12.15	15	18	1383	149.5	6.83
Q8CBJ9	Uncharacterized protein OS=Mus musculus OX=10090 GN=Caln1 PE=2 SV=1 - [Q8CBJ9_MOUSE]	Caln1	17.35	3	1	1	2				17.35	1	2	219	24.8	4.84
Q9Z1X4	Interleukin enhancer-binding factor 3 OS=Mus musculus OX=10090 GN=Ilf3 PE=1 SV=2 - [ILF3_MOUSE]	Ilf3	17.26	13	14	14	20	11.14	9	11	10.47	8	9	898	96.0	8.76
A0A0N4SUQ1	Plasminogen activator inhibitor 1 RNA-binding protein OS=Mus musculus OX=10090 GN=Serbp1 PE=1 SV=1 - [A0A0N4SUQ1_MOUSE]	Serbp1	16.33	11	2	2	2	16.33	2	2				147	16.1	9.66
Q3UXI	Uncharacterized protein OS=Mus musculus OX=10090	Ilf2	16.15	2	5	5	7	2.56	1	1	16.15	5	6	39	43.0	5.1

9	GN=Ilf2 PE=2 SV=1 - [Q3UXI9_MOUSE]													0		4
A0A2I3BPG9	Ribosomal protein L36A, pseudogene 1 OS=Mus musculus OX=10090 GN=Rpl36a-ps1 PE=3 SV=1 - [A0A2I3BPG9_MOUSE]	Rpl36a-ps1	16.04	2	2	2	2	16.04	2	2				106	12.4	10.51
O70569	Ribosomal protein S14 OS=Mus musculus OX=10090 GN=rps14 PE=3 SV=1 - [O70569_MOUSE]	rps14	15.89	5	2	2	2	15.89	2	2				151	16.3	10.13
Q61649	Alpha-globin mRNA (Fragment) OS=Mus musculus OX=10090 PE=2 SV=1 - [Q61649_MOUSE]		15.52	10	1	1	2	15.52	1	2				58	6.2	7.52
P62082	40S ribosomal protein S7 OS=Mus musculus OX=10090 GN=Rps7 PE=2 SV=1 - [RS7_MOUSE]	Rps7	14.95	1	3	3	3	14.95	3	3				194	22.1	10.10
P08228	Superoxide dismutase [Cu-Zn] OS=Mus musculus OX=10090 GN=Sod1 PE=1 SV=2 - [SODC_MOUSE]	Sod1	14.94	1	2	2	2	14.94	2	2				154	15.9	6.51
P62897	Cytochrome c, somatic OS=Mus musculus OX=10090 GN=Cycc PE=1 SV=2 - [CYC_MOUSE]	Cycc	14.29	1	2	2	2	14.29	2	2				105	11.6	9.58
D3YY73	Histone deacetylase complex subunit SAP18 OS=Mus musculus OX=10090 GN=Sap18 PE=1 SV=1 - [D3YY73_MOUSE]	Sap18	14.13	4	1	1	1	14.13	1	1				92	10.4	9.70
Q545F8	40S ribosomal protein S4 OS=Mus musculus OX=10090 GN=Rps4x PE=2 SV=1 - [Q545F8_MOUSE]	Rps4x	13.88	5	3	3	3	4.08	1	1	9.80	2	2	245	27.5	9.94
B7ZD61	RNA-binding protein 39 (Fragment) OS=Mus musculus OX=10090 GN=Rbm39 PE=1 SV=1 - [B7ZD61_MOUSE]	Rbm39	13.55	14	3	3	3	13.55	3	3				273	31.7	11.34
Q9JMG1	Endothelial differentiation-related factor 1 OS=Mus musculus OX=10090 GN=Edf1 PE=1 SV=1 - [EDF1_MOUSE]	Edf1	13.51	1	2	2	2	13.51	2	2				148	16.4	9.99
A2A547	Ribosomal protein L19 OS=Mus musculus OX=10090 GN=Rpl19 PE=1 SV=1 - [A2A547_MOUSE]	Rpl19	13.40	2	2	2	2	13.40	2	2				194	23.2	11.47
P62274	40S ribosomal protein S29 OS=Mus musculus OX=10090 GN=Rps29 PE=1 SV=2 - [RS29_MOUSE]	Rps29	12.50	1	1	1	1	12.50	1	1				56	6.7	10.13
A2AW41	Heterogeneous nuclear ribonucleoprotein R (Fragment) OS=Mus musculus OX=10090 GN=Hnnp r PE=1 SV=1 - [A2AW41_MOUSE]	Hnnp r	12.22	11	1	3	3	9.26	2	2	2.96	1	1	270	30.0	5.34
Q71V06	Y box transcription factor (Fragment) OS=Mus musculus OX=10090 GN=Ybx1 PE=2 SV=1 - [Q71V06_MOUSE]	Ybx1	12.04	13	2	2	2	12.04	2	2				299	33.5	10.04
Q9WV02	RNA-binding motif protein, X chromosome OS=Mus musculus OX=10090 GN=Rbm x PE=1 SV=1 - [RBMX_MOUSE]	Rbm x	12.02	7	5	5	5	12.02	5	5				391	42.3	10.05
P12968	Islet amyloid polypeptide OS=Mus musculus OX=10090 GN=lapp PE=3 SV=1 - [IAPP_MOUSE]	lapp	11.83	1	2	2	2	11.83	2	2				93	10.0	10.17
Q3UW83	40S ribosomal protein S10 OS=Mus musculus OX=10090 GN=Rps10 PE=1 SV=1 - [Q3UW83_MOUSE]	Rps10	11.69	6	2	2	2	11.69	2	2				154	18.4	10.15

Q712W5	Deoxyribonuclease I (Fragment) OS=Mus musculus OX=10090 GN=DNase I PE=4 SV=1 - [Q712W5_MOUSE]	DNase I	11.39	6	1	1	1	11.39	1	1				79	8.9	9.70
G3UZJ2	Microtubule-associated protein (Fragment) OS=Mus musculus OX=10090 GN=Map2 PE=1 SV=8 - [G3UZJ2_MOUSE]	Map2	11.25	8	3	3	3	11.25	3	3				240	25.6	11.09
A0A3B2WDD2	Ribosomal protein OS=Mus musculus OX=10090 GN=Rpl10a PE=1 SV=1 - [A0A3B2WDD2_MOUSE]	Rpl10a	11.05	10	2	2	3	11.05	2	3				190	21.6	9.98
O08583	THO complex subunit 4 OS=Mus musculus OX=10090 GN=Alyref PE=1 SV=3 - [THOC4_MOUSE]	Alyref	10.98	5	2	2	2	10.98	2	2				255	26.9	11.15
A0A4E9FSP6	IgL2 (Fragment) OS=Mus musculus OX=10090 GN=IGLC2 PE=4 SV=1 - [A0A4E9FSP6_MOUSE]	IGLC2	10.87	1	1	1	1	10.87	1	1				92	9.9	6.51
D3Z5X0	3'(2'),5'-bisphosphate nucleotidase 1 (Fragment) OS=Mus musculus OX=10090 GN=Bpnt1 PE=1 SV=1 - [D3Z5X0_MOUSE]	Bpnt1	10.84	5	1	1	1	10.84	1	1				83	8.8	7.12
D3YZA1	Chromatin target of PRMT1 protein (Fragment) OS=Mus musculus OX=10090 GN=Chtop PE=1 SV=8 - [D3YZA1_MOUSE]	Chtop	10.57	6	1	1	2	10.57	1	2				123	13.4	12.60
P62918	60S ribosomal protein L8 OS=Mus musculus OX=10090 GN=Rpl8 PE=1 SV=2 - [RL8_MOUSE]	Rpl8	10.51	4	2	2	2	10.51	2	2				257	28.0	11.03
Q8VHD8	Hornerin OS=Mus musculus OX=10090 GN=Hrnr PE=1 SV=1 - [HORN_MOUSE]	Hrnr	10.22	4	2	2	2	3.97	1	1	6.25	1	1	2496	247.4	10.33
D3YTQ9	40S ribosomal protein S15 OS=Mus musculus OX=10090 GN=Rps15 PE=1 SV=1 - [D3YTQ9_MOUSE]	Rps15	10.17	4	1	1	1	10.17	1	1				118	13.7	10.59
P09405	Nucleolin OS=Mus musculus OX=10090 GN=Ncl PE=1 SV=2 - [NUCL_MOUSE]	Nucleolin	9.90	7	7	7	8	8.91	6	7	0.99	1	1	707	76.7	4.75
A0A1D5RLR1	Nuclear transport factor 2 (Fragment) OS=Mus musculus OX=10090 GN=Nutf2 PE=1 SV=1 - [A0A1D5RLR1_MOUSE]	Nutf2	9.84	4	1	1	1	9.84	1	1				61	7.0	4.81
P63101	14-3-3 protein zeta/delta OS=Mus musculus OX=10090 GN=Ywhaz PE=1 SV=1 - [1433Z_MOUSE]		9.80	10	1	2	3	9.80	2	2	4.08	1	1	245	27.8	4.79
P47964	60S ribosomal protein L36 OS=Mus musculus OX=10090 GN=Rpl36 PE=1 SV=2 - [RL36_MOUSE]	Rpl36	9.52	3	1	1	1	9.52	1	1				105	12.2	11.34
Q8C713	Uncharacterized protein OS=Mus musculus OX=10090 GN=Poldip3 PE=2 SV=1 - [Q8C713_MOUSE]	Poldip3	9.39	7	2	2	2	9.39	2	2				181	20.1	11.66
Q5SUT0	RNA-binding protein EWS OS=Mus musculus OX=10090 GN=Ewsr1 PE=1 SV=1 - [Q5SUT0_MOUSE]	Ewsr1	9.22	8	4	4	7	9.22	4	6	1.13	1	1	618	64.9	9.38
A0A0A6YXT6	Delta(14)-sterol reductase LBR (Fragment) OS=Mus musculus OX=10090 GN=Lbr PE=1 SV=1 - [A0A0A6YXT6_MOUSE]	Lbr	9.02	3	1	1	1	9.02	1	1				122	14.0	10.59

F6ZKM7	Heterogeneous nuclear ribonucleoprotein D-like (Fragment) OS=Mus musculus OX=10090 GN=Hnrnpdl PE=1 SV=1 - [F6ZKM7_MOUSE]	Hnrnpdl	9.00	3	1	1	1	9.00	1	1				100	10.9	9.45
A0A087WNS0	60S ribosomal protein L3 OS=Mus musculus OX=10090 GN=Rpl3 PE=1 SV=1 - [A0A087WNS0_MOUSE]	Rpl3	8.89	8	2	2	2	8.89	2	2				180	19.8	9.73
A0A0J9YUD8	High mobility group protein B1 OS=Mus musculus OX=10090 GN=Hmgb1 PE=1 SV=1 - [A0A0J9YUD8_MOUSE]	Hmgb1	8.77	9	1	1	1	8.77	1	1				171	19.8	9.72
P10639	Thioredoxin OS=Mus musculus OX=10090 GN=Txn PE=1 SV=3 - [THIO_MOUSE]	Txn	8.57	1	1	1	1	8.57	1	1				105	11.7	4.92
P14148	60S ribosomal protein L7 OS=Mus musculus OX=10090 GN=Rpl7 PE=1 SV=2 - [RL7_MOUSE]	Rpl7	8.52	5	3	3	3	8.52	3	3				270	31.4	10.89
Q3TV50	IMD domain-containing protein OS=Mus musculus OX=10090 GN=Baiap2 PE=2 SV=1 - [Q3TV50_MOUSE]		8.51	4	1	1	1	8.51	1	1				282	31.6	8.82
Q6PD M2	Serine/arginine-rich splicing factor 1 OS=Mus musculus OX=10090 GN=Srsf1 PE=1 SV=3 - [SRSF1_MOUSE]	Srsf1	8.47	3	2	2	2	8.47	2	2				248	27.7	10.36
P62317	Small nuclear ribonucleoprotein Sm D2 OS=Mus musculus OX=10090 GN=Snrpd2 PE=1 SV=1 - [SMD2_MOUSE]	Snrpd2	8.47	1	1	1	1	8.47	1	1				118	13.5	9.91
A0A140LJ08	Splicing factor U2AF 65 kDa subunit OS=Mus musculus OX=10090 GN=U2af2 PE=1 SV=1 - [A0A140LJ08_MOUSE]	U2af2	8.11	3	1	1	1	8.11	1	1				111	13.3	11.18
P08883	Granzyme F OS=Mus musculus OX=10090 GN=Gzmf PE=1 SV=1 - [GRAF_MOUSE]	Gzmf	8.06	1	1	1	3	8.06	1	2	8.06	1	1	248	27.6	9.88
P41105	60S ribosomal protein L28 OS=Mus musculus OX=10090 GN=Rpl28 PE=1 SV=2 - [RL28_MOUSE]	Rpl28	8.03	2	1	1	1	8.03	1	1				137	15.7	12.02
P68254	14-3-3 protein theta OS=Mus musculus OX=10090 GN=Ywhaq PE=1 SV=1 - [1433T_MOUSE]		7.76	6	1	2	3	7.76	2	2	4.08	1	1	245	27.8	4.78
A0A1B0GR44	U1 small nuclear ribonucleoprotein 70 kDa (Fragment) OS=Mus musculus OX=10090 GN=Snrnp70 PE=1 SV=1 - [A0A1B0GR44_MOUSE]	Snrnp70	7.76	6	1	1	1	7.76	1	1				116	13.9	9.04
A0A4U9FFL2	IgG1 (Fragment) OS=Mus musculus OX=10090 GN=Ighg1 PE=4 SV=1 - [A0A4U9FFL2_MOUSE]	IgG1	7.74	11	1	1	1				7.74	1	1	323	35.6	7.40
P61982	14-3-3 protein gamma OS=Mus musculus OX=10090 GN=Ywhag PE=1 SV=2 - [1433G_MOUSE]		7.69	6	1	2	3	7.69	2	2	4.05	1	1	247	28.3	4.89
A0A097PUD0	Anti-dectin-1 15E2 light chain OS=Mus musculus OX=10090 PE=2 SV=1 - [A0A097PUD0_MOUSE]		7.66	2	1	1	1				7.66	1	1	235	25.6	8.31
Q3V159	Uncharacterized protein OS=Mus musculus OX=10090 GN=Lmn2 PE=2 SV=1 - [Q3V159_MOUSE]		7.59	3	1	1	1	7.59	1	1				474	53.2	5.99
D3YZ29	Glutathione S-transferase Mu 7 (Fragment) OS=Mus musculus OX=10090 GN=Gstm7 PE=1 SV=1 - [D3YZ29_MOUSE]	Gstm7	7.56	16	1	1	1	7.56	1	1				119	14.1	5.16
A0A28	Secretagogin OS=Mus musculus OX=10090 GN=Scgn	Scgn	7.56	2	1	1	1	7.56	1	1				11	13.6	5.6

6YD29	PE=1 SV=1 - [A0A286YD29_MOUSE]													9		3
P14115	60S ribosomal protein L27a OS=Mus musculus OX=10090 GN=Rpl27a PE=1 SV=5 - [RL27A_MOUSE]	Rpl27a	7.43	1	1	1	1				7.43	1	1	148	16.6	11.12
G3UXJ6	Heterogeneous nuclear ribonucleoprotein Q OS=Mus musculus OX=10090 GN=Syncrip PE=1 SV=1 - [G3UXJ6_MOUSE]		7.37	9	1	3	3	5.58	2	2	1.79	1	1	448	49.7	7.18
D3YTP8	U6 snRNA-associated Sm-like protein LSm4 (Fragment) OS=Mus musculus OX=10090 GN=Lsm4 PE=1 SV=8 - [D3YTP8_MOUSE]		7.29	5	1	1	1				7.29	1	1	96	11.1	8.88
Q62093	Serine/arginine-rich splicing factor 2 OS=Mus musculus OX=10090 GN=Srsf2 PE=1 SV=4 - [SRSF2_MOUSE]	Srsf2	7.24	2	1	1	1	7.24	1	1				221	25.5	11.85
D3Z629	60S ribosomal protein L9 OS=Mus musculus OX=10090 GN=Rpl9 PE=1 SV=1 - [D3Z629_MOUSE]	Rpl9	7.23	6	1	1	1	7.23	1	1				166	19.1	10.14
Q62426	Cystatin-B OS=Mus musculus OX=10090 GN=Cstb PE=1 SV=1 - [CYTB_MOUSE]	Cstb	7.14	1	1	1	1	7.14	1	1				98	11.0	7.39
A0A0J9YTX9	RNA-binding protein Musashi homolog 1 (Fragment) OS=Mus musculus OX=10090 GN=Msi1 PE=1 SV=3 - [A0A0J9YTX9_MOUSE]	Msi1	7.14	4	1	1	1	7.14	1	1				196	21.2	8.73
P11031	Activated RNA polymerase II transcriptional coactivator p15 OS=Mus musculus OX=10090 GN=Sub1 PE=1 SV=3 - [TCP4_MOUSE]	Sub1	7.09	1	1	1	1	7.09	1	1				127	14.4	9.60
Q6LBJ1	Topoisomerase I (Fragment) OS=Mus musculus OX=10090 GN=TOP PE=4 SV=1 - [Q6LBJ1_MOUSE]		6.96	3	1	1	1	6.96	1	1				115	13.4	9.22
Q8CIR3	CARG-binding factor A (Fragment) OS=Mus musculus OX=10090 GN=Hnrnpab PE=2 SV=1 - [Q8CIR3_MOUSE]	Hnrnpab	6.84	6	1	1	1	6.84	1	1				117	13.1	9.48
Q6ZWV7	60S ribosomal protein L35 OS=Mus musculus OX=10090 GN=Rpl35 PE=1 SV=1 - [RL35_MOUSE]	Rpl35	6.50	1	1	1	1	6.50	1	1				123	14.5	11.05
Q3U781	RRM domain-containing protein OS=Mus musculus OX=10090 GN=Srsf3 PE=2 SV=1 - [Q3U781_MOUSE]	Srsf3	6.45	3	1	1	1	6.45	1	1				124	14.2	10.08
Q921R2	40S ribosomal protein S13 OS=Mus musculus OX=10090 GN=Rps13 PE=1 SV=1 - [Q921R2_MOUSE]		6.43	2	1	1	1	6.43	1	1				140	16.1	10.71
Q8BI46	Arginine/serine-rich coiled-coil protein 2 OS=Mus musculus OX=10090 GN=Rsrc2 PE=1 SV=1 - [Q8BI46_MOUSE]	Rsrc2	6.35	8	1	1	1	6.35	1	1				189	23.2	12.18
Q3USM3	Uncharacterized protein (Fragment) OS=Mus musculus OX=10090 GN=Luc7l2 PE=2 SV=1 - [Q3USM3_MOUSE]		6.35	11	1	1	1	6.35	1	1				126	14.3	6.09
Q3UDR2	Protein disulfide-isomerase (Fragment) OS=Mus musculus OX=10090 GN=P4hb PE=2 SV=1 - [Q3UDR2_MOUSE]		6.34	15	3	3	4	6.34	3	3	1.58	1	1	505	56.6	4.89
V9GWS5	ATPase family, AAA domain-containing 3A (Fragment) OS=Mus musculus OX=10090 GN=Atad3a PE=1 SV=1 - [V9GWS5_MOUSE]		6.30	3	1	1	1				6.30	1	1	127	14.6	7.50

P58252	Elongation factor 2 OS=Mus musculus OX=10090 GN=Eef2 PE=1 SV=2 - [EF2_MOUSE]		6.29	17	4	4	5	6.29	4	5				85 8	95.3	6.8 3
D3YYV8	60S ribosomal protein L5 (Fragment) OS=Mus musculus OX=10090 GN=Rpl5 PE=1 SV=1 - [D3YYV8_MOUSE]	Rpl5	6.13	4	1	1	1	6.13	1	1				16 3	18.0	7.3 6
G5E8R0	Tropomyosin alpha-1 chain OS=Mus musculus OX=10090 GN=Tpm1 PE=1 SV=1 - [G5E8R0_MOUSE]		6.12	34	2	2	2	6.12	2	2				24 5	28.3	4.7 7
Q3THB3	Uncharacterized protein OS=Mus musculus OX=10090 GN=Hnrnp PE=1 SV=1 - [Q3THB3_MOUSE]		6.09	13	5	5	5	6.09	5	5				69 0	73.7	8.7 5
A0A0G2JE71	Krev interaction trapped protein 1 (Fragment) OS=Mus musculus OX=10090 GN=Krit1 PE=1 SV=1 - [A0A0G2JE71_MOUSE]	Krit1	6.06	4	1	1	1				6.06	1	1	13 2	14.9	9.4 5
P56480	ATP synthase subunit beta, mitochondrial OS=Mus musculus OX=10090 GN=Atp5f1b PE=1 SV=2 - [ATPB_MOUSE]	Atp5f1b	5.86	1	2	2	2	5.86	2	2				52 9	56.3	5.3 4
A0A087WQ34	Mortality factor 4-like protein 1 (Fragment) OS=Mus musculus OX=10090 GN=Morf4l1 PE=1 SV=1 - [A0A087WQ34_MOUSE]	Morf4l1	5.81	5	1	1	1	5.81	1	1				17 2	19.5	9.7 4
A0A3B2W450	U1 small nuclear ribonucleoprotein C OS=Mus musculus OX=10090 GN=Snrpc PE=1 SV=1 - [A0A3B2W450_MOUSE]		5.73	3	1	1	1	5.73	1	1				15 7	17.0	10. 33
Q3TN26	AMP-binding domain-containing protein OS=Mus musculus OX=10090 GN=Slc27a1 PE=2 SV=1 - [Q3TN26_MOUSE]		5.56	1	1	1	1	5.56	1	1				62 9	69.4	7.7 4
Q8BNF8	Uncharacterized protein OS=Mus musculus OX=10090 GN=Vcp PE=2 SV=1 - [Q8BNF8_MOUSE]		5.53	2	2	2	2	1.80	1	1	3.73	1	1	72 3	80.1	5.2 4
Q1WWJ8	Pdap1 protein (Fragment) OS=Mus musculus OX=10090 GN=Pdap1 PE=2 SV=1 - [Q1WWJ8_MOUSE]		5.43	2	1	1	1	5.43	1	1				12 9	14.9	8.2 7
P62911	60S ribosomal protein L32 OS=Mus musculus OX=10090 GN=Rpl32 PE=1 SV=2 - [RL32_MOUSE]		5.19	2	1	1	1				5.19	1	1	13 5	15.8	11. 33
A0A0D3M042	Odorant binding protein 5 OS=Mus musculus domesticus OX=10092 GN=Obp1a PE=2 SV=1 - [A0A0D3M042_MOUSE]		4.91	3	1	1	1	4.91	1	1				16 3	18.6	6.0 5
Q8R353	Thrap3 protein OS=Mus musculus OX=10090 GN=Thrap3 PE=2 SV=1 - [Q8R353_MOUSE]	Thrap3	4.90	4	1	1	1	4.90	1	1				34 7	38.3	11. 78
Q6PHZ1	Rpl17 protein OS=Mus musculus OX=10090 GN=Rpl17 PE=2 SV=1 - [Q6PHZ1_MOUSE]		4.89	5	1	1	1	4.89	1	1				18 4	21.4	10. 17
Q3UC76	S1-like domain-containing protein OS=Mus musculus OX=10090 GN=Elf1a PE=2 SV=1 - [Q3UC76_MOUSE]	Elf1a	4.86	4	1	1	1	4.86	1	1				14 4	16.5	5.2 4
A0A4E9FT70	IgG3 (Fragment) OS=Mus musculus OX=10090 GN=IGHG3 PE=4 SV=1 - [A0A4E9FT70_MOUSE]		4.79	5	2	2	2	2.13	1	1	2.66	1	1	37 6	41.2	7.9 0
A0A0U1RP93	Myosin regulatory light chain 2, skeletal muscle isoform OS=Mus musculus OX=10090 GN=Mylpf PE=1 SV=1 - [A0A0U1RP93_MOUSE]		4.70	2	1	1	1	4.70	1	1				14 9	16.9	4.6 1

Q9CX86	Heterogeneous nuclear ribonucleoprotein A0 OS=Mus musculus OX=10090 GN=Hnrnpa0 PE=1 SV=1 - [ROA0_MOUSE]		4.59	1	1	1	1	4.59	1	1				305	30.5	9.31
Q61656	Probable ATP-dependent RNA helicase DDX5 OS=Mus musculus OX=10090 GN=Ddx5 PE=1 SV=2 - [DDX5_MOUSE]	Ddx5	4.56	15	3	3	3	4.56	3	3				614	69.2	8.92
Q6PFA7	Hnrpa3 protein (Fragment) OS=Mus musculus OX=10090 GN=Hnrnpa3 PE=2 SV=1 - [Q6PFA7_MOUSE]		4.29	9	1	1	2	4.29	1	2				303	32.2	9.17
Q80ZM5	H1 histone family, member X OS=Mus musculus OX=10090 GN=H1f10 PE=1 SV=1 - [Q80ZM5_MOUSE]		4.26	1	1	1	2	4.26	1	2				188	20.1	11.22
E9QAT0	Synaptic functional regulator FMR1 OS=Mus musculus OX=10090 GN=Fmr1 PE=1 SV=1 - [E9QAT0_MOUSE]	Fmr1	4.24	10	2	2	2	4.24	2	2				589	66.1	8.53
A0A2R8VHC9	Uridine phosphorylase OS=Mus musculus OX=10090 GN=Upp2 PE=1 SV=1 - [A0A2R8VHC9_MOUSE]		4.20	6	1	1	1	4.20	1	1				286	31.8	5.91
Q8VC94	Rpl11 protein OS=Mus musculus OX=10090 GN=Rpl11 PE=2 SV=1 - [Q8VC94_MOUSE]		4.19	3	1	1	1	4.19	1	1				167	19.0	9.80
D3Z4W5	RIKEN cDNA 1700074P13 gene (Fragment) OS=Mus musculus OX=10090 GN=1700074P13Rik PE=3 SV=1 - [D3Z4W5_MOUSE]		3.98	2	1	1	3	3.98	1	1	3.98	1	2	176	20.1	5.06
I7HLV2	60S ribosomal protein L10 (Fragment) OS=Mus musculus OX=10090 GN=Rpl10 PE=1 SV=1 - [I7HLV2_MOUSE]		3.98	4	1	1	1				3.98	1	1	201	23.1	10.01
Q9CYB9	HTH La-type RNA-binding domain-containing protein OS=Mus musculus OX=10090 GN=Ssb PE=2 SV=1 - [Q9CYB9_MOUSE]		3.94	7	2	2	2	3.94	2	2				381	43.9	9.76
E0CX62	Proteasome endopeptidase complex OS=Mus musculus OX=10090 GN=Psma3 PE=1 SV=2 - [E0CX62_MOUSE]		3.89	4	1	1	1				3.89	1	1	180	20.2	5.21
G3UYC6	Synaptotagmin-like protein 4 (Fragment) OS=Mus musculus OX=10090 GN=Sytl4 PE=1 SV=8 - [G3UYC6_MOUSE]		3.78	2	1	1	1	3.78	1	1				185	21.6	9.07
Q3V2V8	Uncharacterized protein OS=Mus musculus OX=10090 GN=Nod2 PE=2 SV=1 - [Q3V2V8_MOUSE]	Nod2	3.78	14	1	1	1				3.78	1	1	793	88.6	7.01
Q3TQW1	malic domain-containing protein (Fragment) OS=Mus musculus OX=10090 GN=Me1 PE=2 SV=1 - [Q3TQW1_MOUSE]		3.66	5	1	1	1	3.66	1	1				246	28.1	5.94
Q8C2Q8	ATP synthase subunit gamma OS=Mus musculus OX=10090 GN=Atp5c1 PE=1 SV=1 - [Q8C2Q8_MOUSE]		3.65	5	1	1	1	3.65	1	1				274	30.2	8.84
Q3UDA7	Nucleoplasmin domain-containing protein (Fragment) OS=Mus musculus OX=10090 GN=Npm1 PE=2 SV=1 - [Q3UDA7_MOUSE]		3.50	9	1	1	1	3.50	1	1				200	22.1	4.36
Q3TLE4	Uncharacterized protein OS=Mus musculus OX=10090 GN=Taf15 PE=2 SV=1 - [Q3TLE4_MOUSE]	Taf15	3.47	2	1	1	1	3.47	1	1				518	54.9	8.03
A6BLY7	Keratin, type I cytoskeletal 28 OS=Mus musculus OX=10090 GN=Krt28 PE=1 SV=1 - [K1C28_MOUSE]		3.46	11	1	2	3	3.46	2	2	1.52	1	1	462	50.3	5.29

Q3TFC 2	Uncharacterized protein OS=Mus musculus OX=10090 GN=Nono PE=2 SV=1 - [Q3TFC2_MOUSE]		3.38	8	1	2	2	3.38	2	2				47 3	54.4	9.0 9
A0A0G 2JFT4	Microtubule-associated protein (Fragment) OS=Mus musculus OX=10090 GN=Map4 PE=1 SV=1 - [A0A0G2JFT4_MOUSE]	Map4	3.26	7	1	1	1	3.26	1	1				27 6	27.9	10. 13
Q8VED 4	Serine/threonine-protein phosphatase OS=Mus musculus OX=10090 GN=Ppp2cb PE=2 SV=1 - [Q8VED4_MOUSE]	Ppp2 cb	2.88	4	1	1	1	2.88	1	1				27 8	32.0	5.7 8
Q3UN2 8	Uncharacterized protein OS=Mus musculus OX=10090 GN=Chga PE=2 SV=1 - [Q3UN28_MOUSE]		2.87	2	1	1	1	2.87	1	1				31 4	35.1	4.6 0
Q8VIJ6	Splicing factor, proline- and glutamine-rich OS=Mus musculus OX=10090 GN=Sfpq PE=1 SV=1 - [SFPQ_MOUSE]	Sfpq	2.86	3	1	2	2	2.86	2	2				69 9	75.4	9.4 4
Q8BNZ 8	BRD4_CDT domain-containing protein (Fragment) OS=Mus musculus OX=10090 GN=Brdt PE=2 SV=1 - [Q8BNZ8_MOUSE]		2.71	4	1	1	1	2.71	1	1				22 1	24.7	6.8 0
Q9CR3 5	Chymotrypsinogen B OS=Mus musculus OX=10090 GN=Ctrb1 PE=1 SV=1 - [CTRB1_MOUSE]	Ctrb1	2.66	1	1	1	1	2.66	1	1				26 3	27.8	5.0 7
P97351	40S ribosomal protein S3a OS=Mus musculus OX=10090 GN=Rps3a PE=1 SV=3 - [RS3A_MOUSE]		2.65	5	1	1	1	2.65	1	1				26 4	29.9	9.7 3
Q922Q 8	Leucine-rich repeat-containing protein 59 OS=Mus musculus OX=10090 GN=Lrrc59 PE=1 SV=1 - [LRC59_MOUSE]	Lrrc5 9	2.61	1	1	1	1	2.61	1	1				30 7	34.9	9.5 2
A0A1Y 7VL99	Rab GDP dissociation inhibitor (Fragment) OS=Mus musculus OX=10090 GN=Gdi2 PE=1 SV=1 - [A0A1Y7VL99_MOUSE]		2.52	7	1	1	1	2.52	1	1				31 8	36.0	8.0 9
P42669	Transcriptional activator protein Pur-alpha OS=Mus musculus OX=10090 GN=Pura PE=1 SV=1 - [PURA_MOUSE]	Pura	2.49	2	1	1	1	2.49	1	1				32 1	34.9	6.4 4
A0A0H 2UH17	Ubiquitin-associated protein 2-like OS=Mus musculus OX=10090 GN=Ubap2l PE=1 SV=1 - [A0A0H2UH17_MOUSE]		2.44	6	2	2	2	2.44	2	2				98 3	103. 9	6.9 8
P39749	Flap endonuclease 1 OS=Mus musculus OX=10090 GN=Fen1 PE=1 SV=1 - [FEN1_MOUSE]	Fen1	2.38	6	1	1	1	2.38	1	1				37 8	42.3	8.3 4
Q6074 9	KH domain-containing, RNA-binding, signal transduction-associated protein 1 OS=Mus musculus OX=10090 GN=Khdrbs1 PE=1 SV=2 - [KHDR1_MOUSE]		2.26	1	1	1	1	2.26	1	1				44 3	48.3	8.7 2
Q8R1N 8	Eef1g protein OS=Mus musculus OX=10090 GN=Eef1g PE=2 SV=1 - [Q8R1N8_MOUSE]		2.21	2	1	1	1	2.21	1	1				31 7	36.9	7.4 2
Q6PHC 1	Alpha-enolase OS=Mus musculus OX=10090 GN=Eno1 PE=1 SV=1 - [Q6PHC1_MOUSE]		2.19	2	1	1	1	2.19	1	1				36 6	39.8	6.2 0
Q8C2B 1	Uncharacterized protein OS=Mus musculus OX=10090 GN=BC094435 PE=2 SV=1 - [Q8C2B1_MOUSE]		2.09	5	2	2	2	2.09	2	2				81 4	90.9	9.0 0

E0CX56	Rho guanine nucleotide exchange factor 4 (Fragment) OS=Mus musculus OX=10090 GN=Arhgef4 PE=1 SV=2 - [E0CX56_MOUSE]		1.91	2	1	1	1	1.91	1	1				628	72.5	6.93
Q80YR4	E3 ubiquitin-protein ligase ZNF598 OS=Mus musculus OX=10090 GN=Znf598 PE=1 SV=1 - [ZN598_MOUSE]		1.87	1	1	1	1				1.87	1	1	908	99.1	8.34
Q7M738	Argonaute 3 OS=Mus musculus OX=10090 GN=Ago3 PE=2 SV=1 - [Q7M738_MOUSE]		1.74	2	1	1	1	1.74	1	1				748	84.8	9.06
Q00493	Carboxypeptidase E OS=Mus musculus OX=10090 GN=Cpe PE=1 SV=2 - [CBPE_MOUSE]		1.68	1	1	1	1	1.68	1	1				476	53.2	5.19
Q3TIV5	Zinc finger CCCH domain-containing protein 15 OS=Mus musculus OX=10090 GN=Zc3h15 PE=1 SV=2 - [ZC3HF_MOUSE]		1.64	1	1	1	1	1.64	1	1				426	48.3	5.30
Q8BZX4	Splicing regulatory glutamine/lysine-rich protein 1 OS=Mus musculus OX=10090 GN=Srek1 PE=2 SV=1 - [SREK1_MOUSE]	Srek1	1.62	1	1	1	1	1.62	1	1				494	56.7	10.48
Q811N8	Eyes absent homolog OS=Mus musculus OX=10090 GN=Eya2 PE=2 SV=1 - [Q811N8_MOUSE]		1.56	5	1	1	1	1.56	1	1				450	49.6	6.38
G3UY38	Heterogeneous nuclear ribonucleoprotein L OS=Mus musculus OX=10090 GN=HnrnpL PE=1 SV=1 - [G3UY38_MOUSE]		1.54	4	1	1	1	1.54	1	1				456	50.5	7.50
Q3UAZ3	DALR_1 domain-containing protein (Fragment) OS=Mus musculus OX=10090 GN=Rars PE=2 SV=1 - [Q3UAZ3_MOUSE]		1.51	2	1	1	1	1.51	1	1				397	45.9	6.98
O88935	Synapsin-1 OS=Mus musculus OX=10090 GN=Syn1 PE=1 SV=2 - [SYN1_MOUSE]		1.42	1	1	1	1	1.42	1	1				706	74.1	9.80
Q8C4P9	Uncharacterized protein OS=Mus musculus OX=10090 GN=Insrr PE=2 SV=1 - [Q8C4P9_MOUSE]		1.34	3	1	1	1	1.34	1	1				524	58.2	6.79
Q80SY5	Pre-mRNA-splicing factor 38B OS=Mus musculus OX=10090 GN=Prpf38b PE=1 SV=1 - [PR38B_MOUSE]		1.29	1	1	1	6				1.29	1	6	542	63.7	10.54
Q3UDN8	Uncharacterized protein (Fragment) OS=Mus musculus OX=10090 GN=Trim28 PE=2 SV=1 - [Q3UDN8_MOUSE]		1.27	2	1	1	1	1.27	1	1				631	68.6	6.02
Q9D9U9	Ccdc19 protein OS=Mus musculus OX=10090 GN=Cfap45 PE=1 SV=1 - [Q9D9U9_MOUSE]		1.27	1	1	1	1				1.27	1	1	551	65.8	8.92
Q4W8U9	Scg2 protein OS=Mus musculus OX=10090 GN=Scg2 PE=1 SV=1 - [Q4W8U9_MOUSE]	Myosin	1.21	2	1	1	1	1.21	1	1				577	66.3	4.70
E9QKA4	Serine/arginine repetitive matrix protein 1 OS=Mus musculus OX=10090 GN=Srrm1 PE=1 SV=1 - [E9QKA4_MOUSE]		1.11	5	1	1	1	1.11	1	1				897	101.1	11.94
B1AS29	Glutamate receptor ionotropic, kainate 3 OS=Mus musculus OX=10090 GN=Grik3 PE=1 SV=1 - [GRIK3_MOUSE]	Grik3	1.09	1	1	1	1	1.09	1	1				919	104.0	7.52

A9Z1V 5	von Willebrand factor A domain-containing protein 5B1 OS=Mus musculus OX=10090 GN=Vwa5b1 PE=2 SV=1 - [VW5B1_MOUSE]		1.07	1	1	1	1				1.07	1	1	12 15	133. 9	7.9 3
Q0P67 8	Zinc finger CCCH domain-containing protein 18 OS=Mus musculus OX=10090 GN=Zc3h18 PE=1 SV=1 - [ZCH18_MOUSE]		1.05	3	1	1	1	1.05	1	1				94 8	105. 6	7.8 0
Q0205 3	Ubiquitin-like modifier-activating enzyme 1 OS=Mus musculus OX=10090 GN=Uba1 PE=1 SV=1 - [UBA1_MOUSE]	Uba1	1.04	2	1	1	1	1.04	1	1				10 58	117. 7	5.6 6
Q5DTJ 4	MKIAA4178 protein (Fragment) OS=Mus musculus OX=10090 GN=Prrc2a PE=2 SV=1 - [Q5DTJ4_MOUSE]		1.00	3	1	1	1	1.00	1	1				17 96	191. 0	9.4 5
A0A1L 1SR77	WD repeat-containing protein 72 OS=Mus musculus OX=10090 GN=Wdr72 PE=1 SV=1 - [A0A1L1SR77_MOUSE]		1.00	2	1	1	3	1.00	1	3				11 02	122. 9	6.6 5
Q99K10	Aconitate hydratase, mitochondrial OS=Mus musculus OX=10090 GN=Aco2 PE=1 SV=1 - [ACON_MOUSE]		0.90	1	1	1	1	0.90	1	1				78 0	85.4	7.9 3
Q3TDD 9	Protein phosphatase 1 regulatory subunit 21 OS=Mus musculus OX=10090 GN=Ppp1r21 PE=1 SV=2 - [PPR21_MOUSE]		0.90	1	1	1	1	0.90	1	1				78 0	88.3	6.9 0
G5E8H 0	Villin-like protein OS=Mus musculus OX=10090 GN=Vill PE=1 SV=1 - [G5E8H0_MOUSE]		0.77	4	1	1	1	0.77	1	1				77 5	86.9	6.2 7
Q80U2 9	MKIAA0357 protein (Fragment) OS=Mus musculus OX=10090 GN=mKIAA0357 PE=2 SV=1 - [Q80U29_MOUSE]		0.75	4	1	1	1	0.75	1	1				14 71	168. 9	7.0 9
G5E86 6	Splicing factor 3B subunit 1 OS=Mus musculus OX=10090 GN=Sf3b1 PE=1 SV=1 - [G5E866_MOUSE]		0.69	2	1	1	1	0.69	1	1				13 04	145. 7	7.0 9
Q05D4 4	Eukaryotic translation initiation factor 5B OS=Mus musculus OX=10090 GN=Eif5b PE=1 SV=2 - [IF2P_MOUSE]	Eif5b	0.66	1	1	1	1	0.66	1	1				12 16	137. 5	5.5 9
Q921M 3	Splicing factor 3B subunit 3 OS=Mus musculus OX=10090 GN=Sf3b3 PE=1 SV=1 - [SF3B3_MOUSE]	Sf3b3	0.66	1	1	1	1	0.66	1	1				12 17	135. 5	5.2 6
E9PVG 8	RIKEN cDNA 9530053A07 gene OS=Mus musculus OX=10090 GN=9530053A07Rik PE=1 SV=1 - [E9PVG8_MOUSE]		0.35	3	1	1	1	0.35	1	1				25 81	280. 0	6.1 8
B7ZNJ 5	Odz3 protein OS=Mus musculus OX=10090 GN=Tenm3 PE=1 SV=1 - [B7ZNJ5_MOUSE]		0.33	3	1	1	1	0.33	1	1				26 99	300. 8	6.4 2

Table S6 Samples Information

a. The clinical features of the patients of Figure 1H

Group Name	Sample Date	Code Number	Fasting glycemia	source
Normal	2021/3/8	564	5.83	health examination
Normal	2021/3/8	834	6.96	health examination
Normal	2021/3/3	120	6.67	health examination
Normal	2021/3/8	731	6.41	health examination
Normal	2021/3/3	467	8.74	health examination
Normal	2021/3/4	725	6.67	health examination
Normal	2021/3/4	147	4.76	health examination
Normal	2021/3/4	203	5.65	health examination
Normal	2021/3/6	140	5.69	health examination
Normal	2021/3/2	523	6.11	health examination
Normal	2021/3/2	751	4.91	health examination
Normal	2021/3/2	498	5.48	health examination
Normal	2021/3/3	497	5.41	health examination
Normal	2021/3/4	533	6.31	health examination
Normal	2021/3/4	834	6.96	health examination
Normal	2021/3/4	148	5.03	health examination
Impaired glucose tolerance	2021/3/2	820	12.26	T2D
Impaired glucose tolerance	2021/3/2	424	18.45	T2D
Impaired glucose tolerance	2021/3/4	151	8.39	hyperglycemia
Impaired glucose tolerance	2021/3/4	327	11.52	T2D
Impaired glucose tolerance	2021/3/4	700	9.91	hyperglycemia
Impaired glucose tolerance	2021/3/4	130	9.5	obesity
Impaired glucose tolerance	2021/3/4	690	8.17	obesity
Impaired glucose tolerance	2021/3/4	120	9.74	obesity
Impaired glucose tolerance	2021/3/4	723	16.45	obesity
Impaired glucose tolerance	2021/3/6	43	8.83	obesity
Impaired glucose tolerance	2021/3/8	496	13.77	obesity
Impaired glucose tolerance	2021/3/8	564	15.53	obesity

Impaired glucose tolerance	2021/3/2	642	7.49	obesity
Impaired glucose tolerance	2021/3/6	387	12.78	T2D
Impaired glucose tolerance	2021/3/6	480	15.53	T2D
Impaired glucose tolerance	2021/3/3	707	7.63	obesity
Impaired glucose tolerance	2021/3/3	681	7.49	obesity
Impaired glucose tolerance	2021/3/3	775	7.20	obesity
Impaired glucose tolerance	2021/3/3	813	6.9	obesity

b. The data of clinical samples (Fig. 1I)

Gender	<i>Relative circGlis3 Level</i>	BMI	Gender	<i>Relative circGlis3 Level</i>	BMI	Gender	<i>Relative circGlis3 Level</i>	BMI	Gender	<i>Relative circGlis3 Level</i>	BMI
woman	1.016305	22.8	woman	3.123868	38	woman	2.550995	35.06	woman	1.780967	44.6
woman	0.781725	23	woman	2.456606	38.21	woman	2.23215	29.01	woman	2.386891	45
woman	0.915945	23.1	woman	3.052518	38.52	woman	2.871653	28.11	woman	3.002313	45
woman	1.170874	27.5	woman	3.052518	38.9	woman	2.092956	35.12	woman	2.360982	45.3
woman	1.299539	28.1	woman	3.296365	38.9	woman	2.359742	35.32	woman	2.205898	46.88
woman	0.780967	28.72	woman	1.549121	38.94	woman	1.954056	35.32	woman	2.186856	47.5
woman	2.037312	29.6	woman	2.908112	38.97	woman	3.148214	35.43	woman	1.170548	47.95
woman	1.95432	29.8	woman	3.08012	39.7	woman	3.63178	35.5	woman	1.366281	48
woman	2.324091	24.61	woman	2.749089	39.97	woman	3.172953	36.6	woman	1.577009	48.21
woman	2.439637	27.92	woman	2.95183	40.33	woman	3.131094	36.65	woman	1.352737	48.5
woman	1.624505	22.1	woman	2.913831	40.8	woman	3.558352	36.8	woman	0.783332	48.65
woman	1.076738	30.49	woman	2.707107	41.2	woman	2.324952	42	woman	0.939961	49.8
woman	4.287094	40.61	woman	1.676737	41.3	woman	2.630077	37.21	woman	1.286512	53.35
woman	1.271619	30.72	woman	1.95705	41.86	woman	3.530812	37.4	woman	0.313528	53.67
woman	2.153475	30.8	woman	1.697372	42	woman	2.869889	37.46	woman	0.821764	56.31
woman	1.084227	30.98	woman	1.950439	42	woman	1.861759	37.65	woman	3.456144	35.58
woman	2.578741	33	woman	2.307369	42.12	woman	2.286805	37.87	woman	3.474166	35.9
woman	2.608704	32.73	woman	1.80478	42.88	woman	2.83497	37.99	woman	2.603516	35.9
woman	2.417816	31.16	woman	1.607097	44.14	woman	2.828201	35	woman	2.713559	36
woman	2.329467	29.2	woman	2.854607	44.4	woman	2.025692	34.9	woman	3.004335	36.02
woman	1.049717	21.4	woman	2.964405	33.52	man	1.857463	29.56			
woman	1.526259	41.6	woman	2.356995	33.72	man	2.367449	34.62	man	0.690956	28.5

woman	1.148698	32	woman	2.179509	33.8	man	2.039684	34.69	man	1.784479	26.89
woman	2.604815	42.1	woman	2.757059	33.84	man	2.372925	34.95	man	2.163449	29.32
woman	1.061914	32.12	woman	3.40762	33.9	man	2.842827	34.96	man	3.3873	34.21
woman	3.819366	32.21	woman	3.305701	34.17	man	3.672256	35	man	3.066657	34.03
woman	1.457336	32.35	woman	3.498178	34.4	man	3.152872	35.32	man	3.680513	39.15
woman	1.440597	32.45	woman	3.438241	34.5	man	3.175974	33.1	man	2.114036	41.6
woman	2.823231	32.54	woman	2.265851	34.6	man	2.881641	35.2	man	2.112386	26.32
woman	2.537369	32.56	woman	2.605422	36.52	man	2.157481	35.2	man	2.64512	38.28
woman	1.170128	32.63	woman	2.828427	36.5	man	2.217408	35.29	man	2.537369	30.51
woman	1.554733	32.8	woman	2.594021	36.41	man	2.789077	35.61	man	2.394957	30.45
woman	2.046748	32.85	woman	3.126053	36.4	man	1.868014	35.92	man	1.175556	54
woman	2.637455	33	woman	3.007092	36.4	man	1.778861	36.9	man	1.276752	54
woman	1.494849	33.06	woman	2.412704	36.23	man	2.260964	44.6	man	0.203063	55.7
woman	2.013227	31.76	woman	2.819366	36.21	man	1.963202	37	man	2.01857	30.34
woman	1.689582	33.1	woman	3.243936	41.2	man	3.453363	47.12	man	1.661914	24.1
woman	2.118926	30.2	woman	3.29378	36.2	man	2.553346	43.2	man	0.668541	24.6
woman	1.427344	33.21	woman	3.066657	40.13	man	3.2772	37.4	man	1.084227	24.82
woman	2.19365	30.21	woman	2.881194	40.12	man	1.457167	39.12	man	1.97716	26.21
woman	2.673516	33.5	woman	3.801758	36.1						

C. The data of mice islets samples (Fig. 2I)

Group	<i>Qki</i> mRNA	<i>circGlis3</i>	Group	<i>Qki</i> mRNA	<i>circGlis3</i>	Group	<i>Qki</i> mRNA	<i>circGlis3</i>	Group	<i>Qki</i> mRNA	<i>circGlis3</i>
HFD	0.009312	0.023089	HFD	0.010097	0.039555	NCD	0.00555	0.012062	NCD	0.003331	0.006661
HFD	0.00881	0.01799	HFD	0.009618	0.03396	NCD	0.004324	0.012839	NCD	0.0029	0.006754
HFD	0.009574	0.017742	HFD	0.014919	0.067608	NCD	0.003611	0.010428	NCD	0.003696	0.006708
HFD	0.014714	0.060511	HFD	0.012459	0.052678	NCD	0.003739	0.014545	NCD	0.003354	0.009486
HFD	0.012373	0.062212	HFD	0.012035	0.050183	NCD	0.004776	0.008373	NCD	0.003696	0.007494
HFD	0.011869	0.059678	HFD	0.01541	0.041522	NCD	0.004304	0.006992	NCD	0.00491	0.007922
HFD	0.017257	0.044296	HFD	0.014989	0.044502	NCD	0.004613	0.009618	NCD	0.004206	0.010501
HFD	0.016902	0.054158	HFD	0.01323	0.047696	NCD	0.00286	0.004518	NCD	0.006554	0.012402
HFD	0.01599	0.056068	HFD	0.010237	0.049036	NCD	0.003645	0.005083	NCD	0.003129	0.005373

d. The data of clinical samples (Fig. 7A)

Fasting glycemia	Relative <i>Qki</i> mRNA Level	Relative <i>circGlis3</i> Level	Fasting glycemia	Relative <i>Qki</i> mRNA Level	Relative <i>circGlis3</i> Level	Fasting glycemia	Relative <i>Qki</i> mRNA Level	Relative <i>circGlis3</i> Level	Fasting glycemia	Relative <i>Qki</i> mRNA Level	Relative <i>circGlis3</i> Level
5.48	0.494833	0.494833	7.63	1.225129	1.225129	11.02	2.526644	2.526644	16.45	1.424599	1.424599
5.69	0.579798	0.579798	8.17	1.888476	1.888476	11.62	2.739455	2.739455	17.52	1.749839	1.749839
5.83	0.656914	0.656914	8.39	1.753887	1.753887	12.26	3.011653	3.011653	17.98	1.606464	1.606464
6.11	0.875652	0.875652	8.74	2.030276	2.030276	12.52	2.601541	2.601541	18.04	1.009674	1.009674
6.19	0.745343	0.745343	8.83	1.591686	1.591686	13.77	2.24276	2.24276	18.45	0.883043	0.883043
6.67	0.656965	0.656965	9.38	2.346573	2.346573	12.77	2.923556	2.923556	18.45	1.272109	1.272109
6.67	0.754936	0.754936	9.5	1.684684	1.684684	13.78	2.318556	2.318556	19.33	0.812565	0.812565
6.9	0.822007	0.822007	9.56	2.790562	2.790562	13.35	2.463237	2.463237	19.98	1.181448	1.181448
6.96	1.038096	1.038096	9.59	2.161382	2.161382	13.76	2.733133	2.733133	20.6	1.165182	1.165182
7.08	0.729198	0.729198	9.74	2.412545	2.412545	15.53	2.434945	2.434945	21.17	1.107435	1.107435
7.19	1.054595	1.054595	9.91	2.090559	2.090559	15.53	2.071327	2.071327	21.57	0.953005	0.953005
7.2	0.636027	0.636027	10.43	1.910419	1.910419	16.17	1.871103	1.871103	21.58	0.852963	0.852963
7.49	0.60577	0.60577	22.19	1.803195	1.803195	16.35	2.463237	2.463237	21.93	1.005019	1.005019
7.49	0.674684	0.674684	24.75	0.870886	0.870886	16.45	1.678558	1.678558			

e. The data of mice samples (Fig. 7B)

Fasting glycemia	Relative <i>Qki</i> mRNA Level	Relative <i>circGlis3</i> Level	Fasting glycemia	Relative <i>Qki</i> mRNA Level	Relative <i>circGlis3</i> Level	Fasting glycemia	Relative <i>Qki</i> mRNA Level	Relative <i>circGlis3</i> Level	Fasting glycemia	Relative <i>Qki</i> mRNA Level	Relative <i>circGlis3</i> Level
6.4	1.0336715	1.0352649	8.3	1.0194406	1.5691682	11.3	1.234943	2.256525	12.1	1.907519	1.977651
6.4	1.0408613	0.9930925	6.3	1.0775672	1.6701758	10.2	1.348272	2.189507	11.5	1.793701	2.485667
5.9	1.2123261	0.9726549	13	1.4754051	2.3379276	13.8	1.184637	2.641749	12.6	0.868542	2.20389
4.6	0.9061224	1.1276609	13.5	1.3958183	2.1286858	15.2	1.342056	1.741022	13.3	0.833161	2.354604
6.6	0.9511718	1.0892487	19.1	1.3965431	1.3660403	16.4	1.667654	1.388314	10.2	1.234881	1.679204
6.7	1.0054057	0.8141313	13.2	1.4754305	3.0834675	15.7	2.029481	1.717131	7.9	0.871684	1.187295
6.8	0.9711579	1.138131	12.4	1.6257564	2.3834675	16.7	2.413167	1.994849	12.3	1.267943	1.726413
7.8	0.8936475	1.2541124	14.1	1.6830886	2.802468	14.8	1.824162	1.647182	14.6	1.265406	1.412037
7.5	1.0194406	1.2977831	10.7	1.305357	3.1895068	5.8	0.939523	0.955826	9.2	1.240375	1.706584
7.7	1.062732	1.591073	8	1.1868562	1.4856673	6.7	1.172835	1.099674	7.6	0.866066	1.248451

Table S7 Oligonucleotides sequences related to Figures 1-7 and Figures S1-7

The table includes qRT-PCR and RT-PCR primers, shRNA sequences, Biotin labelled probes, primers for in vitro transcription, DNA splints for in vitro cyclization, FISH probes, WT and MUT pMIR-REPORT primers, and miRNA mimics and inhibitors.

Primers used for structural identification of *circGlis3*:

Primer name		From 5' to 3'
<i>mmu-circGlis3</i>	Convergent F:	AGTGACGGTCCGTTATTTGCAAG
	Convergent R:	GAAAGCCCTGTAGCTCTGAGACCAC
<i>mmu-circGlis3</i>	Divergent F:	GTCCGTTATTTGCAAGAGTCTC
	Divergent R:	CGTACACTTGTTGGGCTTCTC
<i>mmu-Glis3</i>	Forward:	TGTGGCATGAATCTCCACCG
	Reverse:	AGGTGAAGACTGTTAGCAAGACT
<i>mmu-β actin</i>	Forward:	GGCTGTATCCCCTCCATCG
	Reverse:	CCAGTTGGTAACAATGCCATGT
<i>hsa-circGlis3</i>	Convergent F:	CAAGTGACGGTCCCTTATTTG
	Convergent R:	CTGGGACCACTCCTGCTTCATGCTT
<i>hsa-β actin</i>	Forward:	CATGTACGTTGCTATCCAGGC
	Reverse:	CTCCTTAATGTCACGCACGAT

FISH probe sequence:

Probe name		From 5' to 3'
<i>circGlis3</i>		GGCAT + AACGGACCGTACACT + TA
<i>miR-124-3p</i>		GGCAT + TCACCGCGTGCCT + TA

Overexpression vector construction of CDS sequence (Homologous recombination):

Primer name		From 5' to 3'
<i>Qki</i>	Forward:	gacctcatagaagacaccgATGGTCGGGGAAATGGAAAC
	Reverse:	taacgttaggggggggggagTCAATGGGCTGAAATATCAGGC
<i>Fus</i>	Forward:	gacctcatagaagacaccgATGGCTTCAAACGACTATACCCA
	Reverse:	taacgttaggggggggggagCTAATATGGCCTCTCCCTGCG
<i>Scotin</i>	Forward:	gacctcatagaagacaccgATGGCTGCGCCGGCGCCC
	Reverse:	taacgttaggggggggggagTCAGGGAATTGTCTTTAGGGAATC

<i>NeuroD 1</i>	Forward:	gacctccatagaagacaccgATGACCAAATCATACAGCGAGAGC
	Reverse:	taacgttaggggggggggagCTAATCGTGAAAGATGGCATTAAAGC
<i>Creb1</i>	Forward:	gacctccatagaagacaccgATGCCAGCAGCTCATGCAA
	Reverse:	taacgttaggggggggggagTTAATCTGATTTGTGGCAGTAAAGG
pHAGE-vector	Forward:	CTCCCCCCCCCTAACGT
	Reverse:	CGGTGTCTTCTATGGAGGTC

pLVX-sh-RNA vector construction:

Primer name		From 5' to 3'
<i>Qki-sh1</i>	Forward:	GATCCCGAAGAAATTAGCAGAGTATTCAAGAGATACTCTGCTAATTTCTTCGTTTTTTG
	Reverse:	AATTCAAAAAACGAAGAAATTAGCAGAGTATTCAAGAGATACTCTGCTAATTTCTTCGG
<i>Qki-sh2</i>	Forward:	GATCCGCATCTAAATGAAGACTTATTCAAGAGATAAGTCTTCATTTAGATGCTTTTTTG
	Reverse:	AATTCAAAAAAGCATCTAAATGAAGACTTATTCAAGAGATAAGTCTTCATTTAGATGCG
<i>Qki-sh3</i>	Forward:	GATCCCCTTGAGTACCCTATTGAATTCAAGAGATTCAATAGGGTACTCAAGGTTTTTTG
	Reverse:	AATTCAAAAAACCTTGAGTACCCTATTGAATTCAAGAGATTCAATAGGGTACTCAAGGG
<i>Fus-sh1</i>	Forward:	GATCCGGAGGTGGTTACAACCGAATTCAAGAGATTCGGTTGTAACCACTCCTTTTTTG
	Reverse:	AATTCAAAAAAGGAGGTGGTTACAACCGAATTCAAGAGATTCGGTTGTAACCACTCCG
<i>Fus-sh2</i>	Forward:	GATCCCGACTGGTTTGATGGTAAATTCAAGAGATTACCATCAAACCAAGTCGTTTTTG
	Reverse:	AATTCAAAAAACGACTGGTTTGATGGTAAATTCAAGAGATTACCATCAAACCAAGTCGG
<i>Fus-sh3</i>	Forward:	GATCCGACTATACCCAACAAGCAATTCAAGAGATTGCTTGTTGGGTATAGTCTTTTTTG
	Reverse:	AATTCAAAAAAGACTATACCCAACAAGCAATTCAAGAGATTGCTTGTTGGGTATAGTCG
<i>Scotin-sh1</i>	Forward:	GATCCGGCCCTTTGGTGAAGACAATTCAAGAGATTGTCTTCACCAAAGGGCCTTTTTTG
	Reverse:	AATTCAAAAAAGGCCCTTTGGTGAAGACAATTCAAGAGATTGTCTTCACCAAAGGGCCG
<i>Scotin-sh2</i>	Forward:	GATCCGTTCTGTTCACCAATATTCAAGAGATATTGGTTGGAACAGGAACTTTTTG
	Reverse:	AATTCAAAAAAGTTCTGTTCACCAATATTCAAGAGATATTGGTTGGAACAGGAACG
<i>Scotin-sh3</i>	Forward:	GATCCCCTGCTGCTGTCTGTATAATTCAAGAGATTATACAGACAGCAGCAGGTTTTTG
	Reverse:	AATTCAAAAAACCTGCTGCTGTCTGTATAATTCAAGAGATTATACAGACAGCAGCAGGG

Primers used for QKI-RIP qRT-PCR analysis:

Primer name		From 5' to 3'
<i>Glis3</i> intron a	Forward:	TTTTCAGGGTTGGTGTGTGTGCGAT
	Reverse:	CATCGCAAACCTCCATTACCTCACAA
<i>Glis3</i> intron b	Forward:	CCGAGACCCTGTTTCTTCTTTTTTC

<i>Glis3</i> intron c	Reverse:	AATGGGAGAGTGACAGCGCTTGCC
	Forward:	CCCAAGTAGATTTTAATTGAACACT
<i>Glis3</i> intron d	Reverse:	AGTATTTTTTTATACAAAAGGGGGG
	Forward:	ACCCTCAGAGTTTAGGTGACAAG
<i>Glis3</i> intron e	Reverse:	CCTTCTGGTCCATATTGGTAACA
	Forward:	TGTGAAACAAGAAGGAAATCATGCA
<i>Glis3</i> intron f	Reverse:	CATCCCTGTCCTGCATTCCAAAAG
	Forward:	TCCTTCTTTCACTTGACATATGT
<i>Glis3</i> intron g	Reverse:	AACTCCCAAAGTCTGGATCTCTACA
	Forward:	GTGCCAGTTGTGAGGTAATGGAGTT
	Reverse:	GAGCCCAGATAAAGGAGCAGAAAGG

Primers used for *in vitro* transcription of QKI pulldown assay:

Primer name		From 5' to 3'
QRE 1&2 (sense)	Forward:	GATCACTAATACGACTCACTATAGGGCCGAGACCCTGTTTCTTCTTTTTTC
	Reverse:	AATGGGAGAGTGACAGCGCTTGCC
QRE 3 (sense)	Forward:	GATCACTAATACGACTCACTATAGGGACCCTCAGAGTTTAGGTGACAAG
	Reverse:	CCTTCTGGTCCATATTGGTAACA
QRE 4 (sense)	Forward:	GATCACTAATACGACTCACTATAGGGGTGCCAGTTGTGAGGTAATGGAGTT
	Reverse:	GAGCCCAGATAAAGGAGCAGAAAGG

Primers used for *in vitro* transcription and *in vitro* cyclization of *circGlis3*:

Primer name		From 5' to 3'
mmu- <i>circGlis3</i> (sense)	Forward:	GATCACTAATACGACTCACTATAGTCCGTTATTTTGCAAGAGTC
	Reverse:	CGTACACTTGTTGGGCTTCTCC
mmu- <i>circGlis3</i> (anti-sense)	Forward:	GATCACTAATACGACTCACTATAGGGCGTACACTTGTTGGGCTTCTCC
	Reverse:	GTCCGTTATTTTGCAAGAGTCTC
<i>circGlis3</i> -sense splint		GACACCAGAGACTCTTGCAAAATAACGGACCGTACACTTGTTGGGCTTCTCCCCAGAGT
<i>circGlis3</i> -anti-sense splint		ACTCTGGGGAGAAGCCCAACAAGTGACGGTCCGTTATTTTGCAAGAGTCTCTGGTGTC

mmu-miR-124-3p mimics and inhibitors:

Primer name		From 5' to 3'
Mimics Negative Control		UUCUCCGAACGUGUCACGUTT

<i>mmu-miR-124-3p</i> mimics	UAAGGCACGCGGUGAAUGCCCAUUCACCGCGUGCCUUAUU
Inhibitor Negative Control	ACGUGACACGUUCGGAGAATT
<i>mmu-miR-124-3p</i> inhibitor	GGCAUUCACCGCGUGCCUUA

Primers used for Luciferase assays:

Primer name		From 5' to 3'
<i>circGlis3-miR-298-WT</i>	Forward:	TCGAGGTTCCCCGCCAGTGCCTTGGACCTGCCCTCTGCTCTGCCCTCTCCCTCTTCCT
<i>circGlis3-miR-298-WT</i>	Reverse:	CTAGAGGAAGAGGGAGAGGCAGAGCAGAGGGCAGGTCCAAGGCACTGGCGGGGAACC
<i>circGlis3-miR-298-MUT</i>	Forward:	TCGAGGTTCCCCGCCAGTGCCTGCTATTGGTTTGAGATTCTGCCTCTCCCTCTTCCT
<i>circGlis3-miR-298- MUT</i>	Reverse:	CTAGAGGAAGAGGGAGAGGCAGAATCTCAAACCAATAGCAGGCACTGGCGGGGAACC
<i>circGlis3-miR-124-WT</i>	Forward:	TCGAGAGAGCGCCTGGAGGAGTTCCCCGCCAGTGCCTTGGACCTGCCCTCTGCTT
<i>circGlis3-miR-124-WT</i>	Reverse:	CTAGAAGCAGAGGGCAGGTCCAAGGCACTGGCGGGGAACCTCTCCAGGCGCTCTC
<i>circGlis3-miR-124- MUT</i>	Forward:	TCGAGAGAGCGCCTGGAGGACGGAAAATTTGTGAAACCGGACCTGCCCTCTGCTT
<i>circGlis3-miR-124- MUT</i>	Reverse:	CTAGAAGCAGAGGGCAGGTCCGGTTTCACAAATTTTCCGTCCTCCAGGCGCTCTC
<i>circGlis3-miR-3113-WT</i>	Forward:	TCGAGGCTGGATCGACTGCAGCGCCCTGTACGACCAGCAGGAGGAGCTCGTGCGGCACT
<i>circGlis3-miR-3113-WT</i>	Reverse:	CTAGAGTGCCGCACGAGCTCCTCTGCTGGTCGTACAGGGCGCTGCAGTCGATCCAGCC
<i>circGlis3-miR-3113- MUT</i>	Forward:	TCGAGGCTGGATCGACTGCAGCGCCCTGTACGACAAAAGAAAGGGAGCTCGTGCGGCACT
<i>circGlis3-miR-3113- MUT</i>	Reverse:	CTAGAGTGCCGCACGAGCTCCCTTTCTTTGTGTCGTACAGGGCGCTGCAGTCGATCCAGC
<i>circGlis3-miR-3104-WT</i>	Forward:	TCGAGTTCTCCCGGGACATCCATGTCCAGCAATAGTGTCTCTAACTCATTACCATCCT
<i>circGlis3-miR-3104-WT</i>	Reverse:	CTAGAGGATGGTAATGAGTTAGAGACACTATTGCTGGACATGGATGTCCCGGGAGGAAC
<i>circGlis3-miR-3104- MUT</i>	Forward:	TCGAGTTCTCCCGGGACATCCATGTCCGAAGGTAGTGGGGGGGCTCATTACCATCCT
<i>circGlis3-miR-3104- MUT</i>	Reverse:	CTAGAGGATGGTAATGAGCCCCCCCCACTACCTTCGGACATGGATGTCCCGGGAGGAAC
<i>miR-124-NeuroD1-WT</i>	Forward:	TCGAGACGGAAAGTCAGTCGGCCTCAAGCATGAAGCAGGAGTGGTCCCAGGGCTACAGT
<i>miR-124-NeuroD1-WT</i>	Reverse:	CTAGACTGTAGCCCTGGGACCACTCCTGCTTCATGCTTGAGGCCGACTGACTTTCCGTC
<i>miR-124-NeuroD1- MUT</i>	Forward:	TCGAGACGGAAAGTCAGTCGGCCTCAAGCATtAGTCGAAGTGTGTCCCAGGGCTACAGT
<i>miR-124-NeuroD1- MUT</i>	Reverse:	CTAGACTGTAGCCCTGGGACACAGTTCGACTAATGCTTGAGGCCGACTGACTTTCCGTC
<i>miR-124-Creb1-WT</i>	Forward:	TCGAGATCTAGGGGATCTCCTTAGCCTTCTCCCGGGACATCCATGTCCAGCAATAGTT
<i>miR-124-Creb1-WT</i>	Reverse:	CTAGAACTATTGCTGGACATGGATGTCCCGGGAGGAAGGCTAAGGAGATCCCCTAGATC
<i>miR-124-Creb1- MUT</i>	Forward:	TCGAGATCTAGGGGATCTCCTTAGCCTTCTCCCGGGACATCCAGGGCCCTAGGCTATT
<i>miR-124-Creb1- MUT</i>	Reverse:	CTAGAATCGCCTAGGGCCCTGGATGTCCCGGGAGGAAGGCTAAGGAGATCCCCTAGATC

Other primers used for qRT-PCR assay:

Primer name	From 5' to 3'
-------------	---------------

<i>mmu-Qki</i>	Forward:	ATGGTCGGGGAAATGGAAACG
	Reverse:	TTAGTTGCCGGTGGCGGCTCGGTCT
<i>mmu-Glis3</i>	Forward:	AGGCAGGACTGGATAGTCAGA
	Reverse:	AGGCATCCTTAAAGTGAGACTCT
<i>mmu-Creb1</i>	Forward:	CTGAGAGCTGGTATGTCAGGA
	Reverse:	TGAGTGCTGGAGTAAACAGTCA
<i>mmu-NeuroD1</i>	Forward:	ATGACCAAATCATACAGCGAGAG
	Reverse:	TCTGCCTCGTGTTCCCTCGT
<i>mmu-Scotin</i>	Forward:	CCCTCTCTGTGGACCCTATTG
	Reverse:	GGGATCGAATTGTCTTCACCAA
<i>mmu-Fus</i>	Forward:	GCTTCAAACGACTATACCCAACA
	Reverse:	GGCCATAACCACTGTAACCTGT
<i>mmu-Esrp1</i>	Forward:	CAAGCTGGGTTCGGATGAGAA
	Reverse:	AGGTTTTCGGCGTCTATTTTAGT
<i>mmu-Esrp2</i>	Forward:	CCAGATCCCGCAGTAGACTC
	Reverse:	AGGATTAAGTCGGTCTCGTCC
<i>mmu-Mbl</i>	Forward:	CTTCTGCTTCCATTACTCCCTG
	Reverse:	GAGGCCCCAATTTCCCTGG
<i>mmu-Nova1</i>	Forward:	TCCAGGTACTACTGAGAGGGT
	Reverse:	TTGGGGCATTCTCGGATTTT
<i>mmu-Nova2</i>	Forward:	CGGCTCAATCATCGGCAAAG
	Reverse:	GCATACCCGTTCTGTAGTTCCTG
<i>mmu-Rbm6</i>	Forward:	TCTCGATCTGCTAACAGAACAGG
	Reverse:	CTCCCCTCCTTGATAGTCACC
<i>mmu-Msi1</i>	Forward:	ACAGGTCAGTGGCTCAGATTC
	Reverse:	CCAGGTACAGTCGTTCTGCC
<i>mmu-Ifit</i>	Forward:	CTGAGATGTCACTTCACATGGAA
	Reverse:	GTGCATCCCCAATGGGTTCT
<i>mmu-srsf1</i>	Forward:	AACAACGACTGCCGCATCTAC
	Reverse:	TCGATGTCCTTGGTTCGGATA
<i>mmu-srsf2</i>	Forward:	CGCGCTCCAGATCAACCTC
	Reverse:	CTTGGACTCTCGCTTCGACAC
<i>mmu-Mbnl2</i>	Forward:	TGATCGACACAAACGACAACA

	Reverse:	GAGAGGTCGCTTCAGTGCT
<i>mmu-Ptbp1</i>	Forward:	CCTCTCCGTATGCAGGAGC
	Reverse:	CCGTAGACGCCGAAGAGAATAA
<i>mmu-Ptbp2</i>	Forward:	ATGGACGGAATTGTCACTGAGG
	Reverse:	TGCCACTCATATTAGAGTTGGGG
<i>mmu-Cbx7</i>	Forward:	TGCGGAAGGGCAAAGTTGAAT
	Reverse:	ACAAGGCGAGGGTCCAAGA
<i>mmu-Ins1</i>	Forward:	CACTTCCTACCCCTGCTGG
	Reverse:	ACCACAAAGATGCTGTTTGACA
<i>mmu-Ins2</i>	Forward:	GCTTCTTCTACACCCCATGTC
	Reverse:	AGCACTGATCTACAATGCCAC
<i>mmu-Pdx1</i>	Forward:	CCCCAGTTTACAAGCTCGCT
	Reverse:	CTCGGTTCCATTCGGGAAAG
<i>mmu-Nkx6.1</i>	Forward:	CTGCACAGTATGGCCGAGATG
	Reverse:	CCGGGTTATGTGAGCCCAA
<i>mmu-Mafa</i>	Forward:	AGGAGGAGGTCATCCGACTG
	Reverse:	CTTCTCGCTCTCCAGAATGTG
<i>mmu-β-Actin</i>	Forward:	GGCTGTATCCCCTCCATCG
	Reverse:	CCAGTTGGTAACAATGCCATGT
<i>mmu-Gapdh</i>	Forward:	AGGTCGGTGTGAACGGATTG
	Reverse:	TGTAGACCATGTAGTTGAGGTCA
<i>hsa-Qki</i>	Forward:	AAGCCCACCCCAGATTACCT
	Reverse:	ACTCTGCTAATTCTTCGTCCAG
<i>hsa-circGlis3</i>	Forward:	CAAGTGACGGTCCCTTATTTG
	Reverse:	CTGGGACCACTCCTGCTTCATGCTT
<i>hsa-β-Actin</i>	Forward:	CATGTACGTTGCTATCCAGGC
	Reverse:	CTCCTTAATGTCACGCACGAT

Table S8 Key Resources Table

RESOURCE	SOURCE	IDENTIFIER
Antibodies		
Glis3 (WB 1:1000)	Proteintech	Cat# 12678-1-AP
β -actin (WB 1:1000)	CST	Cat# 3700
β -Tublin (WB 1:1000)	CST	Cat# 2148
GAPDH (WB 1:1000)	CST	Cat# 5174
Creb1 (WB 1:1000)	Proteintech	Cat# 67927-1-Ig
Bcl-2 (WB 1:1000)	Proteintech	Cat# 26593-1-AP
Bax (WB 1:1000)	Proteintech	Cat# 50599-2-Ig
Caspase 3 (WB 1:1000)	Proteintech	Cat# 19677-1-AP
Qki (WB 1:1000)	CST	Cat# 86397
NeuroD1 (WB 1:1000)	Abcam	Cat# ab109224
cleaved-Caspase 3 (WB 1:1000)	CST	Cat# 9664
FUS (WB 1:1000; IF 1:100)	CST	Cat# 67804
Nkx6.1 (WB 1:1000)	CST	Cat# 54551
Mafa (WB 1:1000)	CST	Cat# 79737
Pdx1 (WB 1:1000)	CST	Cat# 5679
Scotin (WB 1:1000; IF 1:100)	Sigma	Cat# HPA042295
Insulin (Rabbit, IF 1:200)	CST	Cat# 3014
Insulin (Mouse, IF 1:200)	CST	Cat# 8138
Goat anti-rabbit IgG H&L (Alexa Fluor® 488) (IF 1:500)	Abcam	Cat# ab150077
Goat anti-mouse IgG H&L (Alexa Fluor® 488) (IF 1:500)	Abcam	Cat# ab150113
Goat anti-mouse IgG H&L (Alexa Fluor® 488) (IF 1:500)	Abcam	Cat# ab150115
Donkey anti- rabbit IgG H&L (Alexa Fluor® 674) (IF 1:500)	Abcam	Cat# ab150075
Chemicals		
Palmitate	Sigma	Cat# P9767
Gemcitabine	Solarbio	Cat# 95058-81-4
Ketoprofen	Solarbio	Cat# 22071-15-4
Isoflurane	RWD	Cat# R510-22-16
Critical Commercial Reagent		

DMEM	Gibco	Cat# 12800082
RPMI-1640	Gibco	Cat# 61870044
DMEM, no Glucose	Gibco	Cat# 11966025
Fetal Bovine Serum	Gibco	Cat# 10371029
CMRL-1066 medium	Corning	Cat# 15-110-CV
Human Serum Albumin	Baxter	Cat# S20160018
TRIzol	Solarbio	Cat# R1100
PARIS Kit	Invitrogen	Cat# AM1921
BCA Protein Assay Kit	Beyotime	Cat# P0012
Annexin V Apoptosis Detection Kit	Beyotime	Cat# C1062M
TUNEL Apoptosis Assay Kit (Cy3)	Beyotime	Cat# C1089
TUNEL Apoptosis Assay Kit (FITC)	Beyotime	Cat# C1088
Magnetic RNA-Protein Pull-Down Kit	Thermo Fisher Scientific	Cat# 20164
TranscriptAid T7 High Yield Transcription Kit	Thermo Fisher Scientific	Cat# K0441
RNA 3' End Biotinylation Kit	Thermo Fisher Scientific	Cat# 20160
Magna RIP RNA-Binding Protein Immunoprecipitation Kit	Millipore	Cat# 17-700
T4 DNA ligase	Takara	Cat# D2011A
RIPA buffer	Beyotime	Cat# P0013B
Dual-Luciferase Reporter Assay	Beyotime	Cat# RG017
Plasma/serum RNA Purification Kit	Sigma	Cat# RNB500
ChamQ qPCR SYBR Green Master Mix	Vazyme	Cat# Q121-02
Phanta Max Super-Fidelity DNA Polymerase	Vazyme	Cat# P505-d1
DNA Gel Extraction Kit	Vazyme	Cat# DC301-01
Animal Models and Cell Lines		
C57BL/6J	Model Animal Research Center of Nanjing University	N/A
<i>Lepr^{db/db}</i> mice	Model Animal Research Center of Nanjing University	N/A
<i>Lep^{ob/ob}</i> mice	Model Animal Research Center of Nanjing University	N/A
Oligonucleotides		
FISH probe sequence for <i>circGlis3</i> and <i>miR-124-3p</i>	Gene pharma, Shanghai, see Table S7	N/A
<i>mmu-miR-124-3p</i> mimics and inhibitors	Gene pharma, Shanghai, see Table S7	N/A
shRNA and siRNA targeting sequences	see Table S7	N/A
qRT-PCR and RT-PCR primers	see Table S7	N/A

Primers for in vitro transcription	see Table S7	N/A
DNA splints for in vitro cyclization	see Table S7	N/A
RIP primers	see Table S7	N/A
Recombinant DNA		
pEx-3 ciR (circRNA expressing vector)	Gene pharma, Shanghai	N/A
pGPU6 ciR (circRNA shRNA vector)	Gene pharma, Shanghai	N/A
pHAGE- <i>Qki</i>	see Table S7	N/A
pHAGE- <i>Fus</i>	see Table S7	N/A
pHAGE- <i>Scotin</i>	see Table S7	N/A
pHAGE_puro vector	see Table S7	N/A
AAV8-pAV-CMV- <i>circGlis3</i> -EFS	ViGene Biosciences, Shandong	N/A
LV2N- <i>mmu-miR-124-3p</i>	Gene pharma, Shanghai	N/A
Lentivirus -Puro-CMV- <i>Fus</i>	Corues, Nanjing	N/A
Lentivirus -Puro-CMV- <i>Scotin</i>	Corues, Nanjing	N/A
Software and Algorithms		
GraphPad Prism 7	GraphPad Software	https://www.graphpad.com/
ImageJ	NIH	https://imagej.nih.gov/ij/
SPSS 22.0	International Business, Machines Corporation	http://www.spss.com.cn/3
FlowJo 10.0	Treestar	https://www.flowjo.com/solutions/flowjo
BD Accuri C6	Accuri cytometers	N/A
ZEN 2012 Light Edition	Zeiss	N/A
Primer 5	PREMIER Biosoft International	http://www.premierbiosoft.com/primerdesign/