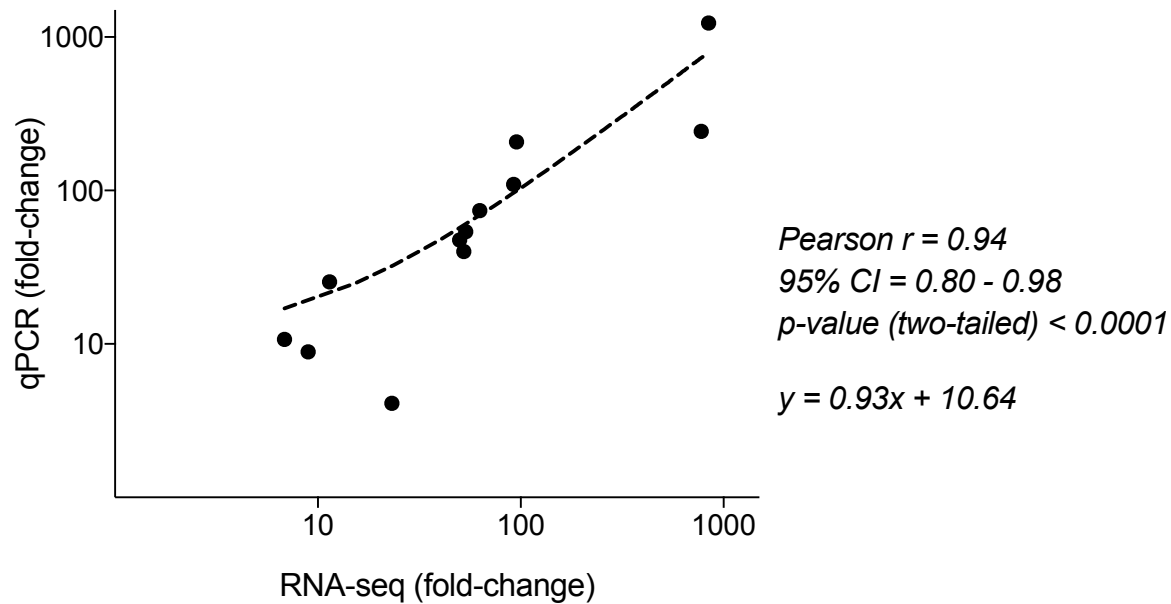


Supplementary Figure 1. The TLR7 agonist Loxoribine displays antiviral activity against MNV infection. The inhibitory effect of Loxoribine against MNV infection was determined in cell culture using the plaque reduction assay for 48 h. The percentage of MNV infectivity at each of eight Loxoribine concentrations (between 1 µM and 1 mM) were compared to the vehicle-only compound (DMSO) control and the half-maximal effective concentration calculated thereafter (EC₅₀: 79.4 µM) along with the 95% confidence interval (CI). The mean ± SEM of three independent experiments performed in triplicate are presented.



Supplementary Figure 2. Correlation analysis of gene expression changes following Loxoribine treatment (12 h) measured by qRT-PCR and RNA-sequencing. To validate the gene expression changes determined by RNA-sequencing analysis, we performed qRT-PCR of several key innate genes ($n=12$) and plotted the fold changes generated from both techniques against one another. Linear regression analysis was performed to assess the level of correlation in gene expression values obtained from both methods. A Pearson coefficient of 0.94 was generated and a significant correlation exists (p -value < 0.0001). The following genes were queried: *Il1b*, *Il6*, *Oas2*, *Ddx58*, *Cd40*, *Ifih1*, *Stat1*, *Dhx58*, *Tnfa*, *Ccl4*, *Cxcl11* and *Cxcl10*.

Supplementary Table 1. DEG's in Loxoribine treated RAW264.7 cells.

Name	logFC	logCPM	PValue	adj.p.value
Il1a	11.48551887	8.078168087	3.3402E-159	1.3952E-156
Gstt4	11.38354586	3.092897471	1.8311E-120	4.7191E-118
Nos2	11.12619928	1.488147957	8.0515E-76	1.26659E-73
Mx1	10.99857719	1.354536649	1.96553E-67	2.73661E-65
Zbp1	10.37539786	5.557839891	7.3031E-253	2.2115E-249
Zfp811	9.968348856	4.37720592	2.0971E-180	1.337E-177
Gbp2b	9.917639211	4.009456353	7.027E-167	3.5466E-164
Csf3	9.897062488	5.454573675	1.9863E-213	1.8508E-210
Gbp5	9.841085025	2.697765101	9.6995E-99	1.99136E-96
Ccl5	9.835816438	5.108375171	9.0146E-218	9.9268E-215
Irg1	9.74886744	9.618778945	1.2214E-269	7.3974E-266
Il1b	9.719755025	8.739421564	9.3397E-239	1.8855E-235
Il6	9.600792692	1.975818904	3.71327E-90	7.1395E-88
BC094916	9.537515566	1.215489678	1.15177E-54	1.2238E-52
Apol9a	9.503567011	3.414745801	1.3466E-133	4.0779E-131
Rsad2	9.418595261	5.661565155	5.9098E-259	2.3862E-255
Oasl2	9.215162699	5.758722339	1.6955E-233	2.5672E-230
Ifit3b	9.16833552	2.893239241	2.5726E-110	5.7707E-108
Apol9b	9.114190278	3.460612684	6.5568E-119	1.6209E-116
Pyhin1	8.873639418	3.586402788	1.1019E-117	2.6694E-115
Ccl22	8.771789872	5.102805686	3.7761E-174	2.287E-171
Isg15	8.524935497	5.046873187	5.2827E-212	4.2659E-209
Mx2	8.423282626	4.374543041	2.7519E-161	1.2346E-158
Ifit3	8.352265751	4.781314512	1.4949E-149	5.6587E-147
Rtp4	8.26089545	6.600819187	1.7443E-247	4.2257E-244
Lcn2	8.245569652	4.928432844	1.4924E-165	7.2311E-163
Cmpk2	8.204419263	4.705484435	1.4735E-163	6.8648E-161
Ifit1	8.15767186	6.390532073	1.4704E-224	1.7811E-221
Ifi44	8.111382533	7.5524883	2.3534E-207	1.7817E-204
Ifit1bl2	7.818790601	3.007847333	3.8121E-102	7.9614E-100
Ifi202b	7.753516843	7.625160876	2.7555E-234	4.7683E-231
Lix1	7.648397609	4.05893991	3.3059E-136	1.0538E-133
Isg20	7.609023526	4.361993959	2.0598E-152	8.3169E-150
Usp18	7.418810407	7.247072461	6.6997E-273	8.1154E-269
Sfn5	7.328600804	7.5779746	1.1679E-212	1.0104E-209
Ifi44l	7.286425831	4.491475384	2.1847E-143	7.6515E-141
Ddx60	7.262227753	4.136626423	1.3395E-140	4.3851E-138
Gbp9	7.103760495	2.433636559	6.05083E-84	1.11051E-81
Cxcl2	7.06637508	6.485590444	8.8565E-182	5.9599E-179
Lgals9	7.054360518	5.690141897	3.7613E-171	2.1137E-168
Tgtp2	6.994656902	1.476191855	2.99499E-64	4.03092E-62
Irf7	6.88278764	6.885841457	6.1451E-227	8.2706E-224

Gbp7	6.856861314	7.090430223	3.5313E-215	3.5645E-212
Upp1	6.772549771	3.560065357	4.5832E-109	1.0094E-106
Mnda	6.749461776	4.35149806	2.2109E-143	7.6515E-141
Ccl4	6.576819012	8.093195452	1.10337E-53	1.12312E-51
Ddx58	6.527118691	8.414900398	2.1851E-167	1.1508E-164
Ccl3	6.523423413	11.31406513	1.86945E-98	3.77411E-96
Gbp3	6.457415201	5.470176742	6.978E-185	4.972E-182
Cish	6.383919341	1.090297206	4.06632E-44	3.28369E-42
Lif	6.178856574	1.999051351	1.29381E-62	1.61566E-60
Cd40	5.975584692	5.75338357	3.8389E-171	2.1137E-168
Cd300e	5.959897889	4.590482016	2.0158E-123	5.3081E-121
Il1f9	5.914076162	1.394905533	6.93214E-54	7.11602E-52
Ccl7	5.901282535	4.017793017	5.11242E-64	6.73116E-62
Ptgs2	5.778547028	9.134705463	6.2689E-141	2.1093E-138
Dhx58	5.741688471	6.188006017	9.92925E-97	1.97169E-94
H2-T24	5.713975562	6.500422049	2.888E-130	8.5322E-128
Ifih1	5.711191458	6.827599737	1.298E-150	5.0717E-148
Oas2	5.646588066	5.968688544	6.7122E-160	2.9038E-157
Bcl2a1a	5.6304378	3.371785109	1.08021E-41	8.0769E-40
Slc15a3	5.615286388	7.659015769	6.8227E-147	2.5044E-144
Tnfrsf9	5.543964532	1.867059073	8.40997E-60	1.00861E-57
Gbp2	5.510257997	3.044454679	3.1464E-39	2.17785E-37
Gm14023	5.48034863	1.457473161	2.71222E-38	1.78549E-36
Rhobtb1	5.461524709	2.237833066	2.49016E-55	2.71742E-53
Ccl2	5.439378302	8.450137858	5.3533E-130	1.5439E-127
Xaf1	5.403147985	4.792401403	1.6782E-124	4.5174E-122
Hcar2	5.364872948	4.747251921	1.5323E-113	3.502E-111
Ifi204	5.320026776	6.888799283	1.8002E-60	2.18058E-58
Phlda1	5.259094929	3.138704341	1.28377E-77	2.07338E-75
Socs3	5.169349387	8.175403424	9.6994E-125	2.6702E-122
Trim34b	5.131848375	1.999922191	2.1E-55	2.3337E-53
Scimp	5.049174567	2.509566318	1.21811E-53	1.22958E-51
Vnn3	5.029698842	2.189622297	1.24169E-48	1.09785E-46
Oas3	5.028565585	7.308804939	3.6759E-120	9.2762E-118
Irgm2	5.007808273	5.126827724	8.348E-130	2.3516E-127
Cd274	4.98932673	3.752886396	8.51556E-74	1.32242E-71
Rnf125	4.958512178	1.80669326	1.73222E-32	9.20279E-31
Procr	4.879936595	5.257260289	6.02923E-72	8.90635E-70
Trim30a	4.784571029	7.650852721	2.0515E-116	4.8725E-114
Al607873	4.751316349	5.8974411	2.74757E-79	4.62241E-77
Parp14	4.69509503	8.062188407	2.565E-134	7.9668E-132
Dusp5	4.652014614	4.37187136	2.64954E-78	4.39642E-76
Csf1	4.601151442	2.521038867	9.98092E-53	9.74991E-51
Il1rn	4.551165427	6.456971828	2.46123E-88	4.65827E-86
Cxcl10	4.532187622	3.354537918	3.65105E-70	5.32834E-68

Igtp	4.494566581	4.681641784	2.0273E-79	3.45868E-77
Ifi203	4.485018764	7.300659093	1.72419E-82	3.07134E-80
Ccr12	4.481849546	1.205635583	2.11378E-31	1.07581E-29
Fam214b	4.353426952	4.326114811	2.09179E-73	3.16724E-71
Sdc3	4.289734968	4.721017865	4.65738E-78	7.62363E-76
Arid5a	4.243205515	4.35777648	7.41918E-77	1.18248E-74
Irgm1	4.217941456	7.166197963	9.1052E-114	2.121E-111
Trim34a	4.199765276	2.803747487	9.07986E-51	8.52591E-49
Il27	4.192681532	1.801351965	7.12903E-32	3.72215E-30
Mmp13	4.189733868	3.136752732	3.26571E-39	2.24759E-37
Nfkbiz	4.163462155	6.616644953	2.21456E-69	3.19344E-67
Gstt1	4.117225649	2.311007402	7.90768E-35	4.58305E-33
Phf11d	4.083704177	7.258037792	1.71407E-49	1.57292E-47
Oasl1	4.057015851	5.903449431	1.2947E-103	2.8006E-101
Siglec1	4.011323637	2.519287589	3.63083E-34	2.03612E-32
Slfn8	3.978273289	7.161594059	6.3348E-65	8.7197E-63
Stat2	3.97455436	6.766337771	2.16021E-59	2.56536E-57
Ifit2	3.971335993	6.962454006	1.13373E-91	2.21497E-89
Sema3e	3.967782378	3.180401534	4.92763E-38	3.15812E-36
Oas1b	3.963812358	2.838599536	2.25182E-40	1.62359E-38
Srgn	3.961106501	9.411403288	2.43231E-33	1.31529E-31
Csprs	3.925140894	1.388941723	1.62381E-25	6.28409E-24
Sp100	3.899328421	6.882967445	6.98738E-63	8.81648E-61
Stx11	3.874952258	3.607480146	6.98847E-62	8.63789E-60
Tmem132a	3.808913021	3.460782598	1.13305E-45	9.46522E-44
Lilr4b	3.805227298	7.40568171	1.05346E-43	8.23263E-42
Slfn2	3.802816578	7.286060587	5.70329E-58	6.45644E-56
Igf2bp2	3.786914382	6.224018135	4.97608E-38	3.17238E-36
Slfn4	3.785102073	8.371521333	1.96769E-41	1.45333E-39
Helz2	3.7686033	7.183525564	2.23424E-63	2.87908E-61
Egr1	3.759382414	4.410548812	2.35489E-55	2.59316E-53
Csf2	3.683457998	2.016454796	1.52653E-10	1.8849E-09
Pou2f2	3.612109333	5.042887423	3.64599E-29	1.66656E-27
Bcl2a1d	3.607911842	6.020443808	9.13592E-69	1.30192E-66
Slc7a11	3.593243576	7.585089484	6.2156E-85	1.1583E-82
Myc	3.582565752	4.468906667	4.2678E-54	4.41845E-52
Basp1	3.57225395	4.701344267	8.78432E-35	5.06688E-33
Mir155hg	3.566481792	2.897788778	1.74496E-30	8.48862E-29
Plaur	3.468952617	7.553280352	1.48175E-83	2.67888E-81
Pla1a	3.458232122	1.749570917	2.05433E-27	8.762E-26
Herc6	3.439557357	6.316048594	4.94254E-63	6.30199E-61
Traf1	3.433714938	5.876742211	1.46301E-73	2.24322E-71
Dgkh	3.326588958	4.045692122	2.88671E-55	3.12202E-53
Lilrb4a	3.317574577	9.414708163	2.41504E-25	9.25742E-24
Plekhn1	3.310658892	3.692369604	2.60051E-43	2.00637E-41

Clec2d	3.296707545	2.220256019	5.76096E-36	3.48913E-34
Pim1	3.290605308	5.041513032	8.77767E-43	6.72937E-41
Creb5	3.278998654	1.906701011	1.43173E-21	4.40166E-20
Agpat9	3.275500596	3.130097226	4.17764E-29	1.89527E-27
Fcgr4	3.272221083	3.449883848	8.24481E-44	6.57035E-42
Oas1g	3.271671511	4.533263235	1.43581E-44	1.17513E-42
Zc3h12a	3.264948547	4.890576497	2.76856E-42	2.09597E-40
Ptges	3.261346513	1.163873785	3.17278E-20	8.75441E-19
Nod2	3.260415992	3.494336329	7.95218E-39	5.38127E-37
Epsti1	3.257249469	6.257023877	2.27169E-52	2.18389E-50
Tnfrsf1b	3.223118603	6.79756619	6.6107E-68	9.31109E-66
Samd9l	3.196866216	8.152558644	5.94028E-35	3.47607E-33
Ikbke	3.190398362	6.500333315	1.38029E-80	2.38849E-78
Slc31a2	3.18490358	5.078427783	2.28857E-64	3.11477E-62
Stat1	3.162667776	9.049762883	9.90706E-50	9.16063E-48
BC021614	3.159331149	1.731987457	5.43644E-09	5.4349E-08
Mlkl	3.13100578	7.167215644	4.7467E-37	2.97911E-35
Map1b	3.128952068	3.549156225	2.91757E-21	8.74765E-20
Gadd45a	3.128475926	1.610434423	1.34823E-23	4.66602E-22
Pim2	3.126795966	3.670269106	5.01563E-22	1.58214E-20
Lgals3bp	3.125177473	6.253943204	3.52505E-36	2.16746E-34
Plek	3.104357608	10.90437413	1.06494E-39	7.58357E-38
Thbs1	3.100082985	2.708954337	1.10576E-26	4.52503E-25
Perm1	3.095317007	1.130110877	1.7126E-12	2.57698E-11
Irak3	3.077781528	6.586082585	4.83242E-25	1.81786E-23
Eif2ak2	3.04240435	8.914241615	8.1489E-34	4.48671E-32
Stap1	3.023153641	8.145595922	3.75515E-64	4.99847E-62
Ccl9	3.016182883	10.95358418	4.48178E-32	2.36034E-30
Oas1a	2.99184702	5.8067235	4.224E-48	3.68096E-46
Phf11b	2.990203085	3.914514738	2.23224E-29	1.03598E-27
Stk40	2.944604106	5.464375646	4.2384E-58	4.8895E-56
Trafd1	2.944387578	6.115820793	6.26069E-53	6.1655E-51
C3ar1	2.941976549	6.893906188	3.35898E-72	5.02313E-70
Bcl2a1b	2.93128643	6.232582523	4.74101E-58	5.41773E-56
Ehd1	2.9202605	8.724766442	1.33894E-53	1.34037E-51
Cpd	2.9147434	9.924435704	2.21482E-43	1.71975E-41
Gadd45b	2.914741761	4.728389049	3.88427E-52	3.70474E-50
Ilgax	2.91141094	3.17372556	6.55572E-31	3.2412E-29
Batf2	2.906873414	1.396315651	6.0204E-18	1.44693E-16
Casp4	2.884288954	4.152381979	2.46238E-37	1.55348E-35
Marcks	2.848117964	3.849215772	1.07058E-39	7.58357E-38
Gimap6	2.831829037	1.619869865	1.24676E-09	1.37416E-08
Slfn10-ps	2.810980454	5.913355897	8.23353E-44	6.57035E-42
Tnf	2.777913654	8.429346652	4.98524E-45	4.10791E-43
Klra2	2.758485027	1.941421039	7.70784E-23	2.56497E-21

Irf9	2.747734682	5.725207615	1.40025E-58	1.64673E-56
Parp9	2.7436671	7.217067567	7.0957E-64	9.24196E-62
Cpm	2.743388984	2.651067467	8.92059E-30	4.18818E-28
Dgka	2.74315353	2.045062273	1.7921E-25	6.89134E-24
Uba7	2.72066559	5.222628197	3.10773E-34	1.75088E-32
Zfp36	2.712317785	6.284903125	5.24337E-28	2.29289E-26
Bcl2l11	2.708194429	5.862722347	4.95332E-39	3.3898E-37
Tnip1	2.704015264	7.775717447	2.43988E-42	1.85876E-40
Cd80	2.700991429	3.189243188	1.23599E-22	4.05732E-21
Tap1	2.69486679	5.529070102	1.57916E-25	6.13088E-24
Marcksl1	2.689553579	7.57470969	1.75786E-52	1.70344E-50
1300002E11Rik	2.688848687	3.655012235	7.85982E-12	1.11092E-10
Ppard	2.682022564	2.471256356	8.62283E-24	3.04514E-22
Errfi1	2.674389099	5.745199637	8.75249E-49	7.79551E-47
Rffl	2.67354253	4.762111628	3.84013E-48	3.37068E-46
Car13	2.669940707	5.459593656	1.86124E-54	1.94356E-52
Gm16712	2.657808142	2.169432827	2.3513E-18	5.78888E-17
Ier3	2.650016315	6.440277719	3.76399E-46	3.1662E-44
Cd82	2.648424087	5.768138049	9.74617E-44	7.66593E-42
Tmem171	2.64810432	4.528865236	4.64639E-35	2.74545E-33
Pml	2.635046498	5.818237322	2.52292E-44	2.05102E-42
Bcl3	2.633426131	3.830403601	6.54221E-19	1.66134E-17
Itga5	2.617747481	7.086584081	2.30686E-37	1.46298E-35
Tor3a	2.613300122	8.191893647	1.27035E-51	1.20216E-49
Parp12	2.574979047	7.743388168	8.34038E-55	8.94044E-53
Fam19a2	2.56461204	2.176274231	2.93552E-15	5.85798E-14
H2-T23	2.556359044	3.898659959	2.01948E-29	9.40842E-28
Cflar	2.53712738	7.901943225	1.52234E-39	1.05978E-37
Mndal	2.507600044	7.135846472	2.16081E-19	5.6288E-18
Smim3	2.496350009	4.300472208	1.84326E-29	8.62061E-28
Ticam1	2.488807984	4.447676904	1.51954E-31	7.83243E-30
Pde4b	2.476476518	5.301514955	4.47169E-48	3.86897E-46
Micall2	2.475923398	4.202713292	4.16674E-29	1.89527E-27
Slc11a1	2.459876444	7.573359583	1.93202E-45	1.60292E-43
Galnt3	2.4510657	4.530608871	6.53112E-36	3.93589E-34
Tlr3	2.429545201	3.838711533	2.56366E-30	1.23228E-28
Trem1	2.429081522	3.154061156	2.08282E-26	8.43786E-25
Osm	2.422085944	2.847178353	8.14934E-25	3.01875E-23
Trim21	2.413149194	5.131905076	9.327E-44	7.38418E-42
Sdc4	2.395220708	7.92827563	4.69689E-35	2.76181E-33
F12	2.393987404	1.808309507	7.5935E-08	6.2785E-07
C3	2.384382747	4.787155948	3.93581E-33	2.10949E-31
Parp10	2.372325118	5.243168402	7.65092E-30	3.60606E-28
Ube2l6	2.371512224	6.395328815	5.50981E-20	1.49978E-18
Aim1l	2.368580686	1.069888515	6.28337E-17	1.39711E-15

Nfkbia	2.353683386	8.253165515	2.15645E-38	1.43523E-36
Cd83	2.344783106	5.207401681	1.90942E-20	5.37878E-19
Ptprj	2.341432699	8.417951846	6.58872E-25	2.44813E-23
Icosl	2.337233552	3.569778391	2.81935E-27	1.18992E-25
Dtx3l	2.336125285	6.848607613	2.16088E-47	1.85637E-45
Gm5431	2.331631415	1.54548313	2.01245E-18	4.97485E-17
Plk2	2.324521797	3.151254913	3.64373E-23	1.23632E-21
Nckap1	2.323644981	2.564151252	1.00389E-14	1.90002E-13
Prokr1	2.31035823	1.172193095	7.02217E-09	6.91541E-08
St3gal1	2.310122468	5.060086218	6.84433E-30	3.23849E-28
Arid3b	2.306501568	1.773110077	5.69539E-17	1.2752E-15
Filip1l	2.291284231	7.193950856	1.42181E-18	3.55835E-17
Tet2	2.290319367	7.781427542	1.09247E-21	3.40184E-20
Trex1	2.282069968	5.810373144	3.69446E-36	2.26015E-34
Ebi3	2.275780423	3.081391506	4.15859E-15	8.16419E-14
Trim12c	2.257991088	5.546060709	1.90652E-27	8.16032E-26
Abtb2	2.257108928	3.218326929	7.91341E-16	1.64699E-14
St3gal6	2.245565155	5.653399213	2.2867E-29	1.05721E-27
Atp6v0a1	2.242197659	5.911744567	1.25448E-34	7.20166E-33
Adora2b	2.210606711	4.160396493	1.1246E-17	2.65541E-16
Ifi35	2.194913177	5.690659844	5.00886E-26	2.01569E-24
Prrg4	2.191317935	3.873255704	3.00264E-25	1.13659E-23
Fam46a	2.19087141	5.412931417	1.7955E-35	1.06612E-33
Maff	2.182508891	2.653544007	8.95102E-19	2.24945E-17
Fndc3a	2.181381166	7.668160211	8.65314E-26	3.41419E-24
Tubb2b	2.177995666	1.590076255	7.69967E-18	1.83595E-16
Ell2	2.173842596	8.529376981	1.28974E-21	3.98536E-20
Mr1	2.170649282	1.239380128	7.54358E-12	1.07248E-10
Rab11fip1	2.163170477	6.096674358	3.3112E-24	1.19727E-22
Itgal	2.139914032	4.37998957	2.32332E-12	3.43618E-11
Rhbdf2	2.132095506	5.385539542	2.93701E-28	1.31763E-26
Ms4a6d	2.126362601	6.01749438	5.82937E-33	3.11062E-31
Arhgef3	2.100578285	3.998688486	8.07058E-23	2.67833E-21
Etv4	2.100205621	1.24180298	1.55388E-12	2.35572E-11
Bcl2l1	2.094922942	6.426111555	4.87877E-38	3.14343E-36
Rel	2.093177861	5.539265049	4.80756E-31	2.40636E-29
Pstpip2	2.073269908	6.310451298	2.11866E-33	1.15601E-31
Trib1	2.065501016	4.733071055	2.76979E-27	1.17309E-25
Glrx	2.059070328	6.24555833	2.38389E-33	1.29489E-31
Kdm6b	2.05411731	2.359065426	1.03267E-15	2.13095E-14
Bcorl1	2.037714332	2.750070321	1.59071E-11	2.19207E-10
Pilra	2.035381929	4.284391615	7.19927E-26	2.86858E-24
Zyx	2.032541399	4.899526429	1.91755E-16	4.14033E-15
Flrt2	2.030106852	7.239544483	1.43497E-36	8.91372E-35
Nfkb2	2.025234118	6.193945626	2.76976E-25	1.05504E-23

Dusp1	2.023793465	4.061624867	1.93454E-19	5.06114E-18
Rnf19b	2.021744821	6.640619042	6.42353E-35	3.74078E-33
Jdp2	2.019259346	7.747079349	1.96642E-21	5.95481E-20
Syk	2.015112676	7.407272436	1.73918E-33	9.53241E-32
Nlrp3	2.009116344	7.118003699	1.54023E-38	1.03076E-36
Mfap3l	2.003559295	2.598936717	4.86363E-11	6.34156E-10
Spred3	1.995366295	1.293114353	1.23825E-08	1.17063E-07
Lgals8	1.993451198	7.114226738	3.72253E-33	2.00404E-31
Nlrc5	1.992239101	5.265999404	3.02764E-27	1.26899E-25
LOC100041034	1.978183676	3.783650291	1.86222E-11	2.54595E-10
Polm	1.975504752	2.669761913	8.21178E-15	1.56892E-13
Gas7	1.973523058	8.335767889	8.54995E-24	3.02823E-22
Lck	1.970778045	2.423735667	1.81138E-14	3.3194E-13
Rhoc	1.962732186	6.760367247	2.72384E-36	1.68336E-34
Sp140	1.962552182	4.885348459	1.16738E-27	5.05017E-26
Zc3h12c	1.957933417	7.086756087	4.9268E-34	2.75015E-32
Fyb	1.949665941	8.338509592	9.06649E-15	1.72677E-13
Cpeb4	1.947016145	6.701363706	3.10254E-21	9.25641E-20
Prkx	1.943426257	6.265828907	6.67054E-22	2.08786E-20
I830077J02Rik	1.941286675	1.500844471	3.47516E-13	5.57545E-12
Il4ra	1.940424038	4.099337883	1.50985E-21	4.63009E-20
S100a11	1.938645949	6.517145128	0.000418739	0.00154876
Mxd1	1.936443739	3.551632521	2.93078E-21	8.76558E-20
Enpp4	1.936091846	4.860831055	9.11078E-27	3.74098E-25
Rassf4	1.933789834	8.30773234	2.4117E-29	1.10655E-27
Flt3l	1.927484876	1.894338624	3.79552E-12	5.506E-11
Gm8909	1.927441176	3.547571288	0.000134407	0.000572058
Apobr	1.922118678	7.718708703	1.46327E-22	4.77752E-21
Tnfrsf23	1.9219328	4.389022451	1.67104E-22	5.42661E-21
Ifitm3	1.918135165	8.198496298	1.34193E-20	3.82249E-19
Cd44	1.912364042	9.205649619	3.93818E-17	8.94993E-16
Cdk6	1.908487368	6.969456439	3.57908E-25	1.35057E-23
Plagl2	1.898729422	5.440085368	1.62262E-21	4.95083E-20
Pvr	1.897433101	4.827400427	5.83768E-26	2.33372E-24
Diap2	1.886874023	6.176365617	5.7101E-25	2.14138E-23
Tapbp	1.885457852	6.822599437	8.7357E-23	2.89114E-21
Rras	1.883838195	2.209293949	4.70351E-12	6.78257E-11
Stat3	1.882423838	6.495515025	2.8029E-31	1.41465E-29
AU022793	1.876771612	1.989192954	2.28423E-13	3.75425E-12
Bcar1	1.874983335	1.430070982	2.44712E-07	1.87134E-06
Trem12	1.873299819	2.971556341	5.70352E-14	1.00271E-12
Hcls1	1.869633884	9.325455279	3.43519E-18	8.42317E-17
Lrrc8d	1.868968995	6.874717243	5.21925E-28	2.29061E-26
Itsn1	1.856113593	6.671645797	3.1189E-20	8.62539E-19
Ms4a6c	1.849654984	5.01347594	1.16321E-25	4.54516E-24

Lima1	1.841120783	6.098147018	8.35595E-17	1.847E-15
Pld3	1.837594951	5.761051154	6.60501E-19	1.67377E-17
Trp53inp2	1.827182822	2.200997596	1.8142E-11	2.49154E-10
Dnajb9	1.825944919	5.300337616	1.45961E-16	3.15718E-15
Dusp16	1.820255192	5.111680439	1.18956E-27	5.12782E-26
Furin	1.816911305	6.040853906	1.52074E-21	4.65171E-20
Dst	1.812915367	8.810459872	8.20329E-21	2.35466E-19
Apbb1ip	1.810512896	6.055090286	7.40526E-15	1.42381E-13
Zrsr1	1.809308504	3.249084714	1.38925E-08	1.30248E-07
Osgin2	1.806900668	6.130010363	2.73924E-25	1.0467E-23
Wfs1	1.805877361	1.045071652	3.53202E-07	2.62314E-06
Itgb2	1.800352545	8.511531771	1.05564E-19	2.81033E-18
Daxx	1.797280398	5.693979485	1.19116E-24	4.37226E-23
Fcgr2b	1.79590922	5.159435235	6.95464E-18	1.66485E-16
6530402F18Rik	1.791776457	3.516367397	4.35275E-14	7.70832E-13
Kctd12	1.790276737	6.097675475	3.71734E-27	1.5368E-25
Tlr6	1.788821436	4.177722359	2.71518E-20	7.54334E-19
Ddt	1.786233552	4.573981677	3.04389E-10	3.61123E-09
Arap1	1.784117968	6.895426809	1.39722E-21	4.30648E-20
Gdpd1	1.78203108	2.639381289	1.35648E-13	2.29484E-12
Serpine1	1.781513286	5.720462144	1.16922E-25	4.55396E-24
Znfx1	1.776623382	7.735670614	8.83302E-20	2.37238E-18
Tmem106a	1.773462081	5.629435292	2.80461E-24	1.01713E-22
Hap1	1.772896753	4.635482346	1.5272E-22	4.97284E-21
Mov10	1.768988524	4.274331851	1.19718E-13	2.03387E-12
Adar	1.764633183	6.519513778	1.15732E-20	3.30627E-19
Gch1	1.760853276	4.870607678	1.73061E-12	2.60086E-11
Pkd1l3	1.756769855	1.192672694	1.67856E-08	1.55328E-07
Tubb2a	1.756564649	4.50229621	7.08239E-21	2.05237E-19
Ctif	1.754230176	2.953604325	1.16931E-10	1.4632E-09
Napepld	1.750547089	5.414837538	4.28971E-20	1.17559E-18
Clec4n	1.745852644	1.076309675	1.22308E-09	1.35052E-08
Wfdc17	1.737299724	2.18547336	1.28818E-11	1.78736E-10
Hivep1	1.733460004	5.602926529	2.49642E-15	4.99821E-14
Cfb	1.732072365	1.489814765	2.00671E-08	1.82762E-07
Nfkb1	1.719961828	8.288085321	1.37697E-22	4.50791E-21
5730508B09Rik	1.715903375	4.835927302	4.00048E-15	7.86653E-14
Rassf8	1.715158944	5.432394261	1.24473E-21	3.85611E-20
Plk3	1.715003003	4.03416419	3.62134E-17	8.27647E-16
Diap1	1.714734457	6.779047947	7.86421E-21	2.26269E-19
Nfkbie	1.711144756	4.203982533	1.81213E-17	4.20504E-16
Kdm5b	1.707430472	4.265172107	1.16618E-19	3.09778E-18
P2rx4	1.700910389	4.351780714	6.18994E-14	1.08665E-12
Slc11a2	1.700106806	6.029199775	4.83614E-18	1.17631E-16
Ehd2	1.69862341	3.139341812	1.50318E-12	2.28744E-11

Lrig1	1.69795114	1.440474631	2.44996E-08	2.19175E-07
Mitd1	1.696609644	6.400466031	3.95411E-19	1.0169E-17
Cd14	1.692401691	8.492797311	9.986E-10	1.11279E-08
1700109H08Rik	1.691276968	2.105489648	2.5711E-08	2.29336E-07
Denr	1.683739431	8.216361286	2.10336E-16	4.53346E-15
Itgam	1.68368741	7.296419114	1.08437E-25	4.25079E-24
Ppm1k	1.68058321	4.658789533	3.33901E-17	7.64565E-16
Sass6	1.672077582	6.695291078	8.37059E-16	1.73618E-14
Saa3	1.670287678	4.127375024	5.94603E-19	1.5195E-17
Myo1e	1.667550801	7.918671429	2.4568E-15	4.92703E-14
Casp8	1.663840939	7.445518863	8.52176E-21	2.44029E-19
Sntb2	1.663766232	4.781929417	6.62437E-16	1.38347E-14
Gramd1b	1.658162539	5.549613657	4.53649E-24	1.63058E-22
Bst2	1.656662862	5.010696841	1.9702E-05	0.000103626
Slc7a7	1.655097688	2.159096994	9.15388E-10	1.02668E-08
Hk2	1.65292014	7.555822778	2.88655E-23	9.84924E-22
Aff1	1.651564028	5.962520905	6.661E-13	1.03841E-11
Prr13	1.648465704	4.960066421	2.04211E-13	3.37463E-12
Zswim6	1.641711765	4.838232328	5.753E-20	1.56247E-18
Prkce	1.640524117	3.271726173	9.96662E-11	1.25887E-09
Lrp11	1.640208747	3.19437488	2.42563E-13	3.96514E-12
Myo1d	1.634296025	4.559688596	3.49709E-14	6.23862E-13
Tmem2	1.63216648	5.582721757	1.80085E-23	6.21472E-22
Por	1.628656414	7.771506554	2.16074E-10	2.61469E-09
Nabp1	1.626868712	5.033363031	1.02929E-19	2.75836E-18
Tnfaip3	1.62655948	4.102272126	1.33566E-14	2.48905E-13
Tor1aip1	1.62019297	7.140549623	2.97348E-25	1.12908E-23
Parp11	1.618009647	4.857515684	2.25804E-21	6.82086E-20
Arhgef12	1.617512582	6.248404042	7.69056E-21	2.21799E-19
Peak1	1.615350603	7.884009501	6.8024E-19	1.7202E-17
Cdkn1a	1.614815	5.48717549	1.31929E-13	2.23505E-12
Rapgef2	1.613423934	6.687780031	1.12779E-23	3.94825E-22
Ppp1r15a	1.612668869	4.674245585	2.91591E-16	6.24035E-15
Ly96	1.61004709	3.590295146	5.30144E-10	6.12751E-09
Per1	1.605824961	3.930807428	2.80219E-11	3.76308E-10
Fosl1	1.604368451	1.942184271	6.57833E-09	6.51007E-08
Crem	1.60077528	3.784661021	5.95251E-12	8.54297E-11
Ktn1	1.600337631	7.593255509	6.1711E-11	7.96066E-10
Pla2g5	1.597902753	4.948601078	6.43339E-20	1.73946E-18
Spty2d1	1.597624941	6.200716454	8.13106E-16	1.68939E-14
Fus	1.597217144	5.927251416	1.07795E-13	1.84164E-12
N4bp1	1.595470943	6.844839636	1.05377E-19	2.81033E-18
Odc1	1.593483201	8.363187823	6.10496E-21	1.79054E-19
Zswim4	1.591106114	4.847867692	3.19358E-16	6.77474E-15
Tgfb1	1.590980937	6.348439964	1.75718E-11	2.41626E-10

lqcg	1.590890369	5.063370089	4.79151E-07	3.46298E-06
Smox	1.589089659	6.036286352	3.2724E-22	1.04038E-20
Casc4	1.588883808	3.633723946	3.95896E-08	3.40106E-07
Sik3	1.585186761	6.206306846	2.09911E-13	3.46411E-12
Dnajb5	1.584674426	1.468265526	6.40697E-08	5.35225E-07
Prmt2	1.576992221	4.011299818	1.91166E-12	2.85603E-11
Hivep3	1.5750539	3.730093678	4.13123E-08	3.54151E-07
Ripk2	1.574758318	5.924312062	3.79321E-22	1.2028E-20
Rgl3	1.57250478	1.406792921	6.17212E-08	5.15962E-07
Pigl	1.572143437	3.986013143	1.95117E-09	2.08602E-08
5033406O09Rik	1.5680265	2.055298449	1.68844E-09	1.82734E-08
Nfkbib	1.567534096	5.471451395	7.27227E-23	2.4334E-21
Daam1	1.564689553	6.176602691	7.58279E-20	2.04566E-18
Rnd1	1.560664524	2.641751789	3.18154E-11	4.24896E-10
B2m	1.560496782	10.96704807	4.28689E-05	0.000203876
Myh10	1.559549423	3.083654187	5.94179E-10	6.83503E-09
Slc2a1	1.557375201	7.372751839	4.1252E-20	1.13307E-18
Nr1d1	1.555500824	2.260186243	1.71559E-08	1.58271E-07
Mocos	1.553881099	3.007156174	1.43788E-12	2.19082E-11
Qsox1	1.552467357	5.064947934	4.17341E-16	8.82243E-15
Rbms1	1.549843731	7.483578365	1.7423E-14	3.19765E-13
Tm9sf4	1.54857571	6.654652682	1.11247E-15	2.28783E-14
Ccr1	1.545720515	1.258232211	5.81605E-08	4.8788E-07
Parp3	1.544600419	4.285589484	7.88631E-15	1.50911E-13
Gripap1	1.542470098	7.02142994	1.05302E-14	1.9868E-13
Baz2a	1.54157208	5.285051158	1.02803E-16	2.25182E-15
Stk10	1.537984591	7.553059566	3.86638E-13	6.1623E-12
Lrrc25	1.537555482	4.508182766	4.62136E-09	4.66877E-08
Antxr2	1.535160484	7.801014918	4.79886E-22	1.51772E-20
Dusp2	1.533921433	4.407704787	1.13248E-06	7.68072E-06
Anxa3	1.53375226	4.382204815	1.02332E-13	1.75573E-12
Tnc	1.533751649	1.176397078	3.27467E-07	2.45003E-06
Lamc1	1.532742975	7.473792947	1.89086E-14	3.4494E-13
Trim26	1.523366783	6.571634198	1.38106E-20	3.90859E-19
Fas	1.518959763	2.950011499	4.68339E-08	3.98664E-07
Lrp12	1.516439188	5.084262567	4.38365E-20	1.19863E-18
Nfat5	1.514876944	8.234421152	1.00439E-13	1.72854E-12
Hgsnat	1.514863059	5.900244744	4.13548E-14	7.33428E-13
Tnfrsf22	1.513748153	3.22421307	3.0443E-11	4.07016E-10
Gsap	1.513592886	6.436876342	7.39131E-23	2.46642E-21
Sqrdl	1.504615357	3.106060461	4.36139E-11	5.74234E-10
Adam8	1.503419283	8.12980099	3.36163E-13	5.40045E-12
Acot11	1.502776301	2.914149785	3.10571E-08	2.71817E-07
Lyn	1.502426522	8.655519676	1.82679E-18	4.53442E-17
Plekho2	1.500685061	7.231328586	1.78674E-18	4.4441E-17

Gstt3	1.499882494	4.272339917	5.11104E-14	9.01165E-13
Sap130	1.497554988	5.776441822	6.92278E-08	5.76724E-07
Cd52	1.496122404	7.054724004	5.34157E-21	1.57427E-19
Ptpn23	1.493741487	4.100579175	6.96147E-12	9.9439E-11
Arrdc4	1.486573676	3.660661985	9.94366E-13	1.52465E-11
Fzd5	1.482688546	3.571624877	7.10053E-13	1.10268E-11
Eif4g3	1.478716509	7.397652352	3.64007E-11	4.83466E-10
Lrrc4	1.476665848	1.149206753	3.37395E-05	0.000165739
Csrnp1	1.476583238	3.211414386	4.44718E-06	2.66677E-05
Sgtb	1.475673236	3.093511268	2.86713E-08	2.53316E-07
Msn	1.47024279	9.838795148	1.86248E-12	2.78865E-11
Card6	1.467141934	1.986420804	1.45345E-07	1.14994E-06
Mtf1	1.463763553	5.603047311	5.3286E-14	9.38159E-13
Pik3r5	1.458659688	7.075919774	1.89706E-10	2.31178E-09
Sesn2	1.458607981	2.968942899	1.78946E-08	1.64584E-07
Pik3ap1	1.457658515	7.399998799	6.04186E-17	1.34779E-15
Nmi	1.457168936	5.377179478	4.14269E-13	6.57672E-12
Lxn	1.455788191	3.208557755	1.44124E-07	1.14103E-06
Map3k8	1.455619333	4.3132934	1.96164E-15	3.97347E-14
Birc3	1.455570238	5.958357872	2.25008E-16	4.84107E-15
Etnk1	1.454662778	7.733616796	5.32426E-19	1.36348E-17
Rnf114	1.453928972	6.618585992	1.8674E-19	4.90668E-18
B3gnt3	1.453479447	2.756052126	5.87705E-10	6.77342E-09
Gdi1	1.450402365	5.435061679	9.17501E-17	2.02067E-15
Eif5b	1.450200286	8.568088529	4.25912E-11	5.62603E-10
Lcp2	1.447884221	7.635990901	1.50588E-12	2.28868E-11
Agrn	1.44587611	3.409063309	2.07436E-08	1.88639E-07
Lims2	1.444656883	1.421400187	1.13566E-05	6.31312E-05
Lacc1	1.443070433	4.849692564	3.8658E-13	6.1623E-12
Ppp1r13b	1.442181172	4.555487764	2.30749E-10	2.77563E-09
Traf5	1.441397037	3.300866849	3.39865E-11	4.52394E-10
Frk	1.43856103	3.943368908	1.99258E-10	2.42087E-09
Ksr1	1.432603892	1.02865172	0.000100273	0.000441036
Ccdc186	1.431079909	6.207299404	5.32541E-07	3.80795E-06
Fbrs	1.422550474	3.560564057	9.24661E-09	8.93176E-08
Supt6	1.42199117	8.361973241	1.77485E-09	1.9127E-08
Prkd2	1.421933359	3.35892646	8.14968E-09	7.93545E-08
Il1rap	1.420427142	5.628245458	2.75618E-12	4.05165E-11
Trpm4	1.418164853	1.870030208	5.3195E-07	3.80597E-06
Il2rg	1.418101615	5.621814582	9.78687E-14	1.68872E-12
Zufsp	1.416835365	4.926892377	4.7057E-11	6.16885E-10
Icam1	1.416709123	6.667842396	1.66346E-17	3.88238E-16
Lrp4	1.414602102	3.160228922	2.08538E-10	2.52855E-09
Tdrd7	1.413998338	5.819015212	2.67221E-14	4.81675E-13
Pcyt1a	1.413959824	5.399421007	1.0303E-16	2.25272E-15

Samsn1	1.413472806	5.215754139	3.05757E-13	4.93819E-12
Slfn9	1.412438554	6.746481545	2.45824E-10	2.94818E-09
Dnajb4	1.412292611	4.623976471	1.46509E-11	2.02357E-10
Siglece	1.412266669	2.638444687	1.32156E-09	1.45396E-08
Specc1	1.410950493	7.585995144	5.42676E-13	8.50379E-12
Id1	1.409268818	5.933863562	1.21364E-15	2.48745E-14
Tmem184b	1.408449536	4.97900616	4.68114E-13	7.39279E-12
Fyco1	1.406029664	4.961179316	4.21885E-15	8.26909E-14
Litaf	1.404992228	6.651628133	2.99562E-16	6.38837E-15
Il18	1.403415595	4.152975576	1.51806E-12	2.3043E-11
Cited2	1.40137553	8.249642018	6.7471E-07	4.73783E-06
Degs1	1.400451772	7.979108256	1.20652E-17	2.83779E-16
Micall1	1.398870332	4.962083641	2.06351E-12	3.06315E-11
Slc7a8	1.397657849	3.080272704	9.86598E-08	8.00983E-07
Rap1b	1.39530077	9.204942696	1.08349E-14	2.04112E-13
Uso1	1.39040472	7.291715775	5.662E-12	8.13568E-11
Ywhag	1.389676334	9.292442757	1.95845E-13	3.24969E-12
Nupr1	1.387995734	4.526921807	6.96749E-09	6.86715E-08
Tlr9	1.387181466	2.523553464	1.89744E-06	1.23303E-05
Il10ra	1.38302134	5.256504649	1.75107E-17	4.07899E-16
Tab2	1.380667172	7.94729874	1.62864E-08	1.51055E-07
Zfand3	1.379554495	6.047955437	1.75739E-11	2.41626E-10
Crtc2	1.378712973	3.822973978	3.30663E-09	3.39434E-08
Fam222b	1.376563019	4.389372224	4.80851E-08	4.08453E-07
Ptgs2os2	1.374994599	3.816385738	4.00402E-09	4.07227E-08
Srpr	1.372863206	7.259209873	9.35388E-15	1.77871E-13
Airn	1.368947607	1.501238873	0.000119255	0.000514253
Cd74	1.368015551	7.560136813	2.927E-16	6.25304E-15
Taok3	1.366844791	7.729627929	7.66019E-09	7.49499E-08
Dnmt3l	1.364672553	2.230090242	2.03379E-06	1.31459E-05
Eml2	1.364474911	4.171526401	3.4202E-08	2.9692E-07
Sp110	1.3640854	4.600702447	7.44493E-14	1.29756E-12
Mbd5	1.363842166	4.535059485	1.77473E-09	1.9127E-08
Xcr1	1.362801632	1.113000337	9.76118E-06	5.4994E-05
Ogfr	1.361913002	6.891704909	3.24635E-19	8.42035E-18
Slpi	1.361320451	2.310433176	0.000321095	0.001232779
Mapkbp1	1.360398929	4.247093701	7.8346E-13	1.21356E-11
Zbtb7a	1.358455592	5.968820361	1.60831E-13	2.69827E-12
Jak3	1.353542573	2.384809828	9.67387E-07	6.63531E-06
Pde1b	1.352343563	4.246915626	1.81804E-10	2.2222E-09
Taf3	1.350644118	5.119357338	4.5961E-10	5.3738E-09
Alg2	1.350291088	5.031082532	4.55242E-14	8.05015E-13
Rgl1	1.350264783	7.745691391	2.64368E-16	5.67781E-15
Bag3	1.349878941	5.187467783	3.48047E-05	0.000170133
Ypel3	1.349303891	1.386380193	4.69991E-06	2.81414E-05

Taf15	1.348382805	6.218054546	9.51856E-10	1.06462E-08
Chst11	1.34660262	1.859154871	2.76803E-07	2.10346E-06
Maml2	1.346475504	1.687631929	3.7174E-06	2.26162E-05
Tuba1a	1.345508536	6.229493643	1.5326E-14	2.83426E-13
Meis2	1.340765474	4.039284674	1.32988E-07	1.0584E-06
Arhgef7	1.339080986	7.831215573	2.34498E-13	3.84493E-12
Ms4a6b	1.338436527	3.372274315	3.38323E-07	2.52346E-06
Sidt2	1.337082731	4.936699402	1.77771E-10	2.17729E-09
Atn1	1.336294047	3.179458149	1.86757E-05	9.87424E-05
Cnrip1	1.336282119	1.550173157	5.39305E-06	3.19599E-05
Rilpl2	1.335953145	5.243698107	5.10275E-08	4.31933E-07
Mapre2	1.334237917	6.122397126	6.71566E-11	8.62639E-10
Ccnd2	1.332179771	6.831088961	1.70934E-12	2.57528E-11
Fam161a	1.331795574	2.097872042	2.7866E-06	1.7435E-05
Brd2	1.331254281	8.918435843	2.19071E-09	2.31554E-08
Casp1	1.328953003	6.658423461	1.06434E-13	1.82354E-12
Gyk	1.328088879	6.83264793	1.97911E-11	2.69662E-10
Tank	1.326715054	7.976322254	5.77523E-05	0.000266091
Prrc2c	1.326455082	9.52631135	2.3446E-06	1.49396E-05
Lymr1	1.325203523	3.42634674	1.66973E-05	8.91774E-05
Phf11c	1.325112461	2.288457928	3.61292E-07	2.67502E-06
Arl8a	1.324820284	5.674805051	4.72871E-07	3.42372E-06
Csf2rb	1.323766241	5.777850482	1.54996E-13	2.60759E-12
L3mbtl3	1.323036873	2.877489035	1.90297E-09	2.03988E-08
Ceacam1	1.322012233	2.742286553	1.09074E-07	8.79047E-07
Dcbld2	1.321911686	6.04426034	4.95349E-15	9.66209E-14
Dbt	1.318936169	6.028418911	1.6996E-13	2.84747E-12
Cd164	1.317900068	7.321584793	5.49516E-17	1.23493E-15
Tha1	1.317803628	2.039124044	3.46785E-06	2.12905E-05
Cldn12	1.315985272	3.333626177	1.2439E-09	1.37226E-08
Il13ra1	1.31571137	7.474458608	4.6755E-14	8.25574E-13
Atp7a	1.315589866	6.656002191	4.57465E-12	6.6125E-11
Dusp10	1.311975776	2.320194334	1.4292E-07	1.13223E-06
Egr2	1.311591848	2.585039687	8.62337E-08	7.08649E-07
Kctd13	1.311249401	4.649537412	6.49755E-10	7.42801E-09
Nkiras1	1.308969615	3.224193453	3.25382E-08	2.83755E-07
Cald1	1.308735446	1.840083615	2.75609E-05	0.000138813
Foxp1	1.308689549	7.522144653	1.38476E-08	1.29928E-07
Agpat4	1.306154363	4.284166509	1.20045E-08	1.13691E-07
Rad54l2	1.303736151	6.113712345	2.78534E-13	4.51054E-12
Fchsd1	1.302416109	2.603723263	2.37722E-06	1.51315E-05
Als2	1.301222725	5.576043199	1.1361E-14	2.13027E-13
Brd4	1.301141482	5.714590603	1.85106E-06	1.20548E-05
Frmd6	1.298962132	2.525629021	2.07489E-07	1.5988E-06
Ccdc109b	1.297818091	5.911498658	2.54486E-13	4.14883E-12

Il17ra	1.296108703	6.314197314	3.59264E-15	7.11073E-14
Rac2	1.295351984	8.348720067	1.92385E-13	3.20105E-12
Rmdn2	1.294492767	3.570159982	9.75115E-07	6.68075E-06
Fgd6	1.292891822	6.104192059	4.91191E-13	7.73706E-12
Carhsp1	1.290874723	4.885707237	5.41198E-09	5.4178E-08
Dock10	1.281886937	9.346308704	1.94346E-10	2.36594E-09
Tmem63b	1.281799861	4.514693314	2.34534E-10	2.81557E-09
2810474O19Rik	1.281736943	7.915501927	5.43804E-09	5.4349E-08
Sqstm1	1.28124919	8.086092532	2.67022E-14	4.81675E-13
Gm6329	1.278368484	4.518782463	2.03179E-07	1.57159E-06
Tnfsf9	1.277843116	5.780938378	8.57255E-10	9.64154E-09
Myo6	1.276423151	3.805586465	1.20947E-10	1.50879E-09
Zswim5	1.276196262	1.180359097	1.55668E-05	8.36558E-05
Arid3a	1.275840299	5.384382498	1.48567E-14	2.75167E-13
Nucb2	1.275207067	6.25849727	9.58292E-06	5.41156E-05
Sh3pxd2b	1.273083723	6.718792241	4.07476E-09	4.14074E-08
Zfp609	1.272153626	4.947367111	2.11999E-11	2.87563E-10
Mid2	1.271408158	1.233868666	0.000130222	0.000556591
Zfp9	1.269639105	2.062913079	6.10651E-07	4.32057E-06
App	1.268199764	7.878476531	6.04086E-10	6.92925E-09
Glrp1	1.267583839	3.105881076	2.74667E-05	0.000138454
Dclre1c	1.267415795	5.18016949	2.02059E-12	3.01422E-11
Mir22hg	1.267119365	2.364098432	0.000328453	0.001258237
Shisa5	1.267069366	6.703130442	9.02337E-08	7.38514E-07
Samd4b	1.265684456	4.605826678	1.62536E-09	1.76258E-08
Ccdc122	1.265379187	3.245790834	5.27154E-06	3.12704E-05
Zswim8	1.264502522	4.867493385	9.56465E-12	1.34249E-10
Abca1	1.263716909	4.450927537	2.96567E-11	3.97381E-10
Pnpla2	1.26296307	4.282297867	1.25544E-08	1.18436E-07
Creb3l2	1.260478604	3.014413813	1.79434E-06	1.17232E-05
Dlgap4	1.257252717	4.700981227	3.25507E-09	3.34993E-08
Map9	1.25714957	1.237586213	4.37271E-06	2.62992E-05
Tap2	1.25534947	4.895824618	8.09308E-10	9.11921E-09
Slc25a22	1.253070011	4.62398197	4.41206E-09	4.4685E-08
Actg1	1.25261046	7.043833323	1.13856E-13	1.93972E-12
Dgat2	1.250665291	2.801655619	4.7502E-05	0.000224253
Atf3	1.248333927	5.181146595	1.70495E-12	2.57186E-11
Smap2	1.24690209	5.911116482	9.6775E-09	9.31085E-08
Atxn1	1.246131679	5.258973954	2.53056E-12	3.73358E-11
Igsf6	1.244246539	7.999881778	5.03826E-05	0.000235449
Erich1	1.243264634	5.296018568	2.92113E-08	2.5771E-07
H2-K2	1.242965567	2.17122613	6.87193E-07	4.81711E-06
Rrbp1	1.242218877	8.363214203	8.40662E-09	8.17907E-08
Trim25	1.241505266	6.909731385	7.65061E-12	1.08642E-10
Ctsz	1.238424079	9.690148794	1.17781E-08	1.11896E-07

Tor1aip2	1.237809119	8.703839673	5.31271E-12	7.64286E-11
Sod2	1.236625292	7.720995806	7.11504E-15	1.37236E-13
Irak2	1.236611373	5.426602123	6.26573E-12	8.98187E-11
Fmn1	1.236297035	7.503564031	4.43836E-09	4.49138E-08
Nckap5l	1.236090415	2.342098051	9.47402E-06	5.35755E-05
Pla2g6	1.234946155	3.20866297	2.22854E-07	1.7085E-06
Ahi1	1.232955277	5.425716088	5.18884E-13	8.15206E-12
Slc4a7	1.230708854	8.146371445	2.51537E-14	4.54756E-13
Cd47	1.229560116	5.862420851	1.05669E-06	7.21109E-06
Whamm	1.229175379	4.534519776	3.53071E-10	4.16432E-09
BC028528	1.228187645	2.963755477	3.01527E-06	1.8718E-05
Gab2	1.227965912	5.445204302	2.19774E-08	1.98814E-07
Mob3c	1.226661861	3.447774243	3.03298E-08	2.66607E-07
Gpr84	1.226275094	4.570585073	9.25356E-10	1.0369E-08
Med15	1.225324893	6.1634169	1.52623E-05	8.2202E-05
Pxn	1.225170649	7.34495966	8.3947E-13	1.29535E-11
Atp6v1d	1.222127576	7.133216445	2.7878E-05	0.000140119
Brwd3	1.222020844	5.870377241	2.15002E-09	2.28016E-08
Vamp2	1.221315562	2.010715512	8.79824E-07	6.08294E-06
Dnajb2	1.2208012	3.826933417	4.16201E-10	4.87096E-09
Jak2	1.215560079	7.305902367	4.07867E-13	6.48359E-12
Braf	1.214834239	6.330377381	2.34892E-13	3.84493E-12
Aak1	1.211758023	5.89204896	2.18955E-10	2.64691E-09
Acy1	1.210765504	4.922864574	1.77866E-08	1.63964E-07
Anxa7	1.209001028	7.762014142	1.4748E-14	2.73572E-13
Stk3	1.208136149	7.195827378	2.7766E-05	0.000139672
Glcci1	1.207891218	2.757847625	2.9872E-07	2.25727E-06
Sec24a	1.207791367	5.625686524	7.71089E-09	7.5385E-08
Cep83	1.207427878	8.291919279	2.79283E-06	1.74649E-05
Pgm1	1.20336686	6.381845482	2.86762E-10	3.41212E-09
Fam196b	1.201974237	3.267653729	3.71031E-07	2.74017E-06
C920009B18Rik	1.200569267	5.160476021	3.14786E-12	4.59952E-11
Usb1	1.198713574	4.652001593	3.87887E-09	3.95495E-08
Klf8	1.197766677	3.845456744	4.68018E-09	4.72425E-08
Traf3ip2	1.197524987	4.849511068	1.11591E-10	1.40219E-09
Btg2	1.195654865	4.982215427	2.9741E-08	2.61812E-07
Homer1	1.195233514	6.082935527	3.34535E-10	3.96112E-09
Grina	1.194570297	4.462905703	8.42462E-09	8.19E-08
Ece1	1.194554148	2.902282115	1.64207E-06	1.081E-05
Hoxb3	1.194318934	1.586452071	1.00722E-05	5.66147E-05
Cnot3	1.192500865	5.287683288	8.24866E-05	0.000367203
Tmem131	1.191460893	7.069743477	6.58067E-08	5.48978E-07
Glipr2	1.190223196	1.855069134	1.62184E-05	8.68881E-05
Csf2ra	1.188275362	5.769087984	1.59069E-07	1.25198E-06
Slc38a6	1.187958289	4.364179131	7.95125E-11	1.0149E-09

Shox2	1.186076798	2.718942649	0.000261314	0.001029029
Gpatch11	1.185455119	6.334054674	5.77036E-05	0.000265968
Fcgr1	1.184233314	6.236909189	2.21665E-14	4.0195E-13
Trp53bp2	1.184014783	4.460817233	1.27147E-06	8.53256E-06
Vps37c	1.183318751	4.272810651	2.64309E-08	2.35237E-07
Tnfaip2	1.183015092	7.335797391	7.8413E-12	1.1096E-10
Vprbp	1.182696851	6.240555406	5.27478E-11	6.86288E-10
Dnajc1	1.18255377	6.618560377	2.06654E-06	1.33362E-05
Zmat1	1.180515216	1.866579587	0.000131766	0.000562001
Hck	1.176857195	7.377358734	9.41836E-14	1.62746E-12
Mbnl2	1.176595875	7.976264295	3.12447E-10	3.7032E-09
Mvp	1.176217797	6.415882948	3.76733E-13	6.02027E-12
C130026I21Rik	1.175030622	4.517479401	2.92423E-10	3.47427E-09
Satb2	1.1735733	4.483880015	5.51257E-08	4.64675E-07
Dhx40	1.17338853	5.136127642	1.14724E-10	1.43707E-09
Whsc1l1	1.173223163	6.756299074	7.33659E-10	8.30543E-09
Inpp4a	1.172355794	4.069470982	0.000142721	0.000604158
Stambp	1.169268032	3.427554264	1.33704E-05	7.31836E-05
Milr1	1.166925301	6.564557261	9.23917E-13	1.42203E-11
Trip12	1.162898414	9.80421313	1.88546E-09	2.0247E-08
Sgcb	1.162204923	4.445103422	1.02563E-10	1.29412E-09
Wipf2	1.162094953	4.275088031	2.04556E-07	1.58022E-06
Ttll1	1.16185744	3.091278068	2.28411E-06	1.45772E-05
Hmga2	1.160663125	6.481439015	2.4809E-13	4.05002E-12
Rgp1	1.160188922	4.44197322	3.88313E-08	3.33828E-07
2210018M11Rik	1.160023447	6.250265833	0.000138838	0.000589464
Alg12	1.158917897	4.571589479	8.08946E-07	5.62824E-06
Acadsb	1.158446391	6.337603483	3.37997E-10	3.9982E-09
Ap1s3	1.157779774	4.67102598	1.81706E-07	1.41726E-06
Ahr	1.154965028	1.001505992	0.00048484	0.001756766
8430429K09Rik	1.154080143	4.012921391	6.92779E-05	0.000313823
Tmem120b	1.152825227	2.998397377	1.67449E-07	1.31367E-06
Neu1	1.149944394	6.05663801	6.9747E-13	1.08452E-11
Zak	1.149929919	7.852825023	1.23569E-12	1.89228E-11
Gpkow	1.149908891	6.097453947	8.5975E-09	8.33799E-08
Vimp	1.149178257	6.782507051	1.59286E-10	1.96113E-09
Fam210b	1.148835339	2.763870511	3.4634E-07	2.57691E-06
Spred2	1.14870976	4.278642849	7.52341E-08	6.23332E-07
Tceb3	1.147630235	8.231880728	6.00101E-09	5.97782E-08
C5ar1	1.143789723	3.357552569	2.94345E-06	1.83097E-05
Asph	1.143572931	8.55665706	4.30948E-11	5.68017E-10
Elf4	1.142524165	5.317577392	1.17474E-09	1.30069E-08
Susd6	1.142163651	6.266256523	1.30496E-11	1.80857E-10
Blnk	1.140828662	5.913054296	2.25227E-11	3.05166E-10
Drosha	1.140416658	6.880750578	3.8033E-07	2.80057E-06

Pcdhgc3	1.140388216	2.471013279	6.59839E-05	0.000300362
Dopey2	1.140079267	3.513405836	6.14537E-05	0.000281859
Rnf31	1.139856868	4.631147994	6.71247E-07	4.71625E-06
Ern1	1.139119917	4.04945834	3.98279E-07	2.92031E-06
Themis2	1.138080998	5.551384246	1.81416E-08	1.66544E-07
Hacd2	1.137313673	4.139469994	1.50462E-05	8.12189E-05
Adgre1	1.135490189	7.630311185	2.38837E-09	2.50479E-08
AU040320	1.134855143	5.610697886	3.30014E-11	4.39764E-10
Chmp4b	1.134409991	7.644744699	3.61893E-12	5.25613E-11
Ssh1	1.13397343	2.639881321	6.38644E-06	3.74257E-05
Psm11	1.133680897	6.835487036	4.89789E-13	7.72502E-12
Nfil3	1.133667697	3.656161621	4.50715E-07	3.27309E-06
Cpeb3	1.133478326	1.280745303	0.000167911	0.000696542
Scaf4	1.133285096	5.653274566	6.33986E-07	4.48044E-06
Clec16a	1.131083001	5.193482636	2.01016E-08	1.82938E-07
Fam57a	1.130795969	3.29619362	1.27305E-05	7.01568E-05
Rnf44	1.128004112	4.90393013	1.1534E-06	7.80944E-06
Notch1	1.128001511	2.243820021	0.000708317	0.002444401
Nt5dc3	1.1277041	5.010166435	2.36243E-09	2.47973E-08
Crebbp	1.126484624	6.372164836	1.96405E-07	1.52308E-06
Yes1	1.126449028	1.924617972	7.4722E-05	0.000336346
3110057012Rik	1.12535348	1.996417935	2.60396E-05	0.000132029
Cdc42bpa	1.125038717	2.86836752	1.42388E-06	9.47143E-06
Mafk	1.124694791	5.694325149	3.66432E-11	4.86155E-10
Sertad3	1.124252686	2.236920636	6.57355E-05	0.000299456
Psm13	1.122854206	7.659253283	8.18744E-12	1.15322E-10
Safb2	1.122691573	6.755645287	8.50008E-05	0.000377702
Pcdh7	1.122308187	9.217994583	1.8033E-09	1.93991E-08
Cd300lf	1.122254846	3.500808122	9.38956E-06	5.31724E-05
Myh9	1.121773474	9.547981033	1.80388E-07	1.40789E-06
Igf2r	1.118010988	7.280035125	2.84124E-09	2.9491E-08
Hsp90ab1	1.117873435	12.27069151	9.04809E-05	0.000399998
Ubap2	1.117403533	6.644137277	2.67689E-05	0.000135331
Irf2	1.115918768	4.623044893	7.7223E-07	5.39448E-06
Lym5	1.114919916	4.898374967	1.59312E-10	1.96113E-09
Ficd	1.112860616	2.734298635	8.20849E-06	4.7042E-05
Ppapdc1b	1.111743973	4.401371671	1.39277E-09	1.52675E-08
Cmip	1.108679859	6.498128026	2.76817E-05	0.000139306
Asah2	1.108106732	3.507315128	1.18647E-06	8.0078E-06
Rbpms	1.108067774	2.896075679	1.53778E-05	8.27873E-05
Prdm2	1.106359408	5.906763984	9.71236E-10	1.08429E-08
Sec24b	1.104497358	6.05301377	2.78911E-08	2.47324E-07
Zmiz2	1.102121636	4.842821165	3.19301E-08	2.79054E-07
Trim56	1.10138881	5.535131884	9.55713E-12	1.34249E-10
Rara	1.101120552	4.497809065	1.77894E-06	1.16352E-05

Dot1l	1.100819138	5.985017669	5.21055E-10	6.03398E-09
Lrp10	1.100816234	5.405046944	2.43891E-06	1.54835E-05
Ppic	1.099779493	5.270029598	3.8126E-10	4.4837E-09
Rusc1	1.098959881	3.736618026	2.96721E-08	2.61395E-07
Zfp658	1.098768149	3.55679391	7.24501E-08	6.02325E-07
Akap5	1.097877071	1.032606888	0.001961023	0.005884041
Utrn	1.096450101	5.252163181	9.02763E-10	1.01345E-08
Kctd21	1.095639569	1.766896716	0.000114521	0.000495487
Stxbp3-ps	1.092348195	4.788713213	7.89219E-05	0.000353543
Herpud1	1.092253181	6.496863949	4.26501E-11	5.62768E-10
Ralgds	1.090230501	4.258648264	2.82533E-08	2.5017E-07
Slc9a3r1	1.089921141	4.990645209	1.07884E-08	1.0306E-07
Rhbdf1	1.08991484	1.800455208	2.95687E-05	0.000147333
Pdcd1	1.089597714	4.290473466	6.02161E-05	0.000276392
Renbp	1.089566849	4.964877753	2.83203E-10	3.37309E-09
Phactr4	1.089461176	4.069539428	2.70551E-05	0.000136549
Bzap1	1.088546416	2.889855745	0.000246908	0.000980589
Ier5	1.088546227	6.251572546	4.78054E-10	5.57868E-09
Ndel1	1.088463718	6.660887046	1.88952E-06	1.22854E-05
Trim13	1.086946195	3.443343849	1.31755E-05	7.23348E-05
Pik3r3	1.086751421	2.963501552	9.11113E-06	5.17894E-05
Rusc2	1.086712777	5.101699436	1.08131E-07	8.72032E-07
Efcab5	1.086407762	1.810433697	0.00029413	0.00114046
Cln5	1.084840815	6.981628926	9.16104E-11	1.1644E-09
Preli2	1.084667118	5.18990317	0.001160389	0.003751626
Wbp2	1.084630516	5.006995909	7.34388E-06	4.25019E-05
4930440I19Rik	1.081155105	2.315849398	8.9812E-05	0.000397331
Fkbp1a	1.080534629	7.521232277	7.72546E-12	1.09449E-10
Rab20	1.078972122	1.823970757	8.49579E-05	0.00037765
Kremen1	1.077297164	3.55364366	2.46978E-06	1.56413E-05
Klhl18	1.076069144	4.115361662	9.60874E-07	6.59811E-06
A230072C01Rik	1.075225539	1.889055654	0.000244415	0.000971643
Sec24d	1.073684103	6.261084932	1.62376E-10	1.99478E-09
Fubp1	1.072112643	9.152410426	5.29964E-05	0.000246523
Tspyl2	1.072097327	4.329382607	0.000439137	0.0016119
Prrc2a	1.070720829	7.354048938	7.49931E-06	4.33214E-05
Mdk	1.070075977	1.180662503	0.000284826	0.00111007
Dock4	1.069288932	6.074528485	6.5002E-10	7.42801E-09
Adgrl2	1.068271363	3.631849371	1.62019E-06	1.06717E-05
Ghdc	1.067474331	2.734854844	4.03977E-06	2.44302E-05
Dcun1d3	1.065640594	4.499768998	4.25145E-09	4.30944E-08
Ppig	1.065478848	8.271381072	0.000206417	0.00083623
Tapbp1	1.065023986	2.890008588	9.60161E-07	6.59695E-06
Vmp1	1.063436696	7.237213177	2.0552E-11	2.79401E-10
Sec23ip	1.05873653	6.936462022	1.29283E-08	1.21868E-07

Camk2d	1.055978072	5.851122219	8.95778E-12	1.26023E-10
Ell	1.055920706	4.482395906	2.25345E-05	0.0001166
Meis3	1.055917486	2.375218277	4.95923E-06	2.9548E-05
Dnm2	1.055512401	7.257961717	2.47653E-09	2.59276E-08
1810055G02Rik	1.052550841	6.183328967	0.003223678	0.009043634
Myo7a	1.052219072	7.402655451	3.31036E-07	2.47368E-06
Snap23	1.051791591	5.817681898	3.06175E-08	2.68551E-07
Chd9	1.051653371	6.950474615	1.99175E-09	2.12191E-08
Orai1	1.05081689	4.417476074	1.37322E-06	9.14951E-06
Lnpep	1.050014546	7.969018215	5.98598E-10	6.87281E-09
Pbxip1	1.049798012	5.572206572	4.54234E-11	5.97409E-10
Atf7	1.048706558	4.690788945	3.5707E-08	3.09163E-07
Pcgf3	1.04837251	6.353274257	3.68468E-08	3.18122E-07
4921531C22Rik	1.047123731	1.901960524	0.000486235	0.001760239
Fam114a1	1.044345006	3.035135975	1.37569E-05	7.48735E-05
Acsl4	1.043913838	8.508940504	7.83906E-10	8.86596E-09
Fam161b	1.043665283	1.7448729	0.000705915	0.002437588
Fam50a	1.042995548	6.319285971	0.000435736	0.001601355
Lysmd3	1.042484467	5.885795482	1.71232E-07	1.34161E-06
Rnf214	1.040800003	5.247287733	3.18391E-07	2.39272E-06
Papd7	1.040484923	6.288246262	2.66693E-09	2.78488E-08
Foxn3	1.035313322	4.93563388	1.51184E-08	1.41086E-07
Setdb2	1.034547599	5.58668988	1.83643E-10	2.24241E-09
Eid3	1.033452418	2.143329077	5.09541E-05	0.000237936
Bmpr2	1.031175105	6.976409346	1.19069E-08	1.12854E-07
Slc9a1	1.030520441	2.866860132	1.35029E-05	7.37758E-05
Dhrs3	1.029822632	5.111268362	3.26738E-09	3.35974E-08
Ets2	1.029329787	6.801228131	2.18359E-09	2.31003E-08
Gsk3b	1.027818495	6.40609782	1.89589E-09	2.03409E-08
Tbrg1	1.02645947	8.132654493	4.99025E-10	5.79548E-09
Atp2b1	1.02644044	9.054212543	1.333E-05	7.29983E-05
Cblb	1.025717316	3.174765888	5.14877E-06	3.05871E-05
Pabpc1	1.024885562	9.85136071	1.51234E-05	8.15625E-05
Gfod1	1.023997233	5.406445589	2.72554E-09	2.84363E-08
Ncoa7	1.023691498	6.366937963	2.00078E-07	1.54859E-06
Eaf1	1.02106489	6.883788092	6.54853E-10	7.46915E-09
D330045A20Rik	1.020707038	6.053570121	1.12102E-08	1.06752E-07
Cbwd1	1.020332687	5.990937433	4.39722E-08	3.76155E-07
Rnasel	1.01973003	4.446836759	2.87203E-06	1.7914E-05
Ranbp10	1.019313088	5.024722936	6.14949E-09	6.11065E-08
Cenpj	1.018974472	4.942966692	1.21706E-06	8.19467E-06
Pdcd6ip	1.018663595	8.183145159	3.93617E-07	2.89138E-06
Pi4k2b	1.018468339	5.876245866	9.04129E-11	1.15039E-09
Gm1821	1.017869173	6.281009325	0.001335584	0.004238389
Stx6	1.017134035	6.248908069	1.61218E-09	1.753E-08

Cdk12	1.016194753	7.478615747	5.75814E-07	4.08841E-06
Tmem154	1.01512347	3.699264613	5.63637E-07	4.009E-06
Neb	1.014529288	1.083711235	0.003374354	0.009411362
BlvrB	1.014015012	6.845349735	2.95932E-08	2.6089E-07
Hnrnpul2	1.013477225	7.5870245	1.41131E-08	1.32111E-07
Ocr1	1.013189347	5.759134147	3.01185E-09	3.11019E-08
Cd300ld	1.012504918	6.018322666	2.37875E-06	1.51333E-05
Natd1	1.012137811	1.532001375	0.000511862	0.001839527
Mark2	1.011608175	5.925145859	9.22146E-08	7.53708E-07
Gatad2b	1.008674135	4.707650014	0.000117949	0.000508983
F11r	1.00703536	1.893286929	0.000147246	0.000621027
Cherp	1.003963773	5.164401934	3.22802E-07	2.42081E-06
Impact	1.003811501	6.195883533	2.51564E-08	2.24719E-07
Ankrd17	1.002491057	8.332697104	2.5088E-07	1.91535E-06
Map7d1	1.002028949	6.784308819	0.000422995	0.001563362
Ascc3	1.001987104	8.355340892	1.06337E-08	1.01662E-07
Atg13	1.001014907	4.458190132	5.71604E-05	0.000263866
Stxbp3	1.000852272	6.065159098	1.51529E-06	1.00409E-05
Nthl1	-1.000077383	2.814889573	2.00824E-05	0.000105215
Fam107b	-1.00022592	5.702437987	9.10969E-08	7.45075E-07
Mis18a	-1.000783403	4.725975582	1.55805E-06	1.02849E-05
Smim4	-1.002909639	2.71792526	0.001631954	0.005044108
Rpl36	-1.002918416	4.233777233	5.33115E-05	0.000247703
Tmem70	-1.00346802	5.83804641	3.38617E-06	2.08418E-05
Capg	-1.003498416	9.136563588	0.000103448	0.000453518
Tnni2	-1.006228632	5.285663094	3.71133E-09	3.7969E-08
Rsad1	-1.007917059	2.28423115	9.1915E-05	0.000406042
Atp5k	-1.008757922	5.08126903	8.5077E-05	0.000377902
Ethe1	-1.009284878	3.584051088	5.94329E-06	3.51005E-05
Stard7	-1.009603519	7.198395665	0.000273831	0.001070649
Tmem144	-1.009923605	4.803570091	2.92643E-09	3.02973E-08
Ascc1	-1.013232089	4.345968665	8.19758E-08	6.75492E-07
Sdhd	-1.01344722	7.289586437	1.57104E-06	1.03649E-05
Smad3	-1.013901933	3.721553055	6.80043E-06	3.96218E-05
Nrros	-1.014177663	6.714204522	2.57352E-05	0.000130759
Capn5	-1.015038184	4.39625963	3.00993E-05	0.000149669
Cops7b	-1.015090619	4.33884533	0.001428537	0.004480545
Naca	-1.015109985	4.993370854	4.20849E-05	0.000200857
Pstk	-1.015348433	3.28408048	0.000225774	0.000906762
Tmem186	-1.016420684	4.669741392	1.82729E-08	1.67555E-07
Atp6v0d2	-1.016580941	4.196771696	6.50091E-05	0.00029637
Tmem59	-1.017259746	6.413836768	0.000148842	0.000625797
Irak1bp1	-1.017511597	3.274852728	3.34897E-06	2.06548E-05
Guca1a	-1.01840295	3.568021614	0.000141898	0.000601192
Ybey	-1.018634934	2.43751862	0.000533488	0.001905673

Txn1	-1.019224146	7.966767432	0.000149027	0.000626359
Osgep	-1.019341134	4.216636691	1.61217E-06	1.06247E-05
Rab40c	-1.019526491	3.907431188	0.001100828	0.003583533
Plekho1	-1.020409017	5.98635786	1.46675E-09	1.60427E-08
Use1	-1.021676475	5.222676584	3.13053E-05	0.00015465
1500015A07Rik	-1.021885569	1.674086941	0.000155355	0.000651146
Enc1	-1.023212479	4.550336783	5.27167E-08	4.45609E-07
Sirt5	-1.023445306	2.58655721	8.50157E-06	4.86211E-05
2310009B15Rik	-1.024531086	2.957385941	0.000748381	0.002569483
Tom20	-1.024670552	5.692625409	1.25046E-06	8.4009E-06
E130317F20Rik	-1.025103443	2.045518205	0.001735874	0.005315128
2610001J05Rik	-1.026071223	5.613444993	4.45492E-05	0.000211369
Rps12	-1.027086536	3.733017814	2.30126E-05	0.000118618
Efemp2	-1.029136763	1.773424124	8.03926E-05	0.000359091
Hadh	-1.030415503	5.634428718	1.03925E-09	1.15596E-08
Oip5	-1.033067093	4.264610627	1.06828E-07	8.62095E-07
Man2a2	-1.033075742	5.930808015	1.24603E-10	1.5512E-09
Ada	-1.035292628	4.024971405	1.2519E-07	9.98967E-07
Sars2	-1.0354541	3.703521665	7.29545E-06	4.2262E-05
Snord49a	-1.036343958	1.394825401	0.002457713	0.007150866
Nlrc3	-1.038886193	2.074156554	5.27191E-05	0.000245327
Ankrd55	-1.039267953	1.998311907	3.14053E-05	0.000155081
Clstn3	-1.04071519	2.112117792	0.001176124	0.003794991
Slc43a2	-1.040776488	6.758088641	1.69876E-08	1.56838E-07
Tyms-ps	-1.041082355	3.795871432	3.39298E-06	2.08731E-05
Alg6	-1.041640046	5.14130942	6.88727E-08	5.7416E-07
Gbas	-1.042521819	5.475986547	6.05224E-08	5.06639E-07
Rnaseh2b	-1.042807566	5.636340679	7.5575E-09	7.40048E-08
Zfp932	-1.045972936	3.657789773	4.15289E-05	0.000198673
Cmss1	-1.046342624	4.532780425	1.48906E-08	1.39067E-07
Dph7	-1.046512173	3.874402151	1.97626E-05	0.000103899
Ccdc85b	-1.046690108	3.521183973	0.002841696	0.008100872
Dsn1	-1.047074237	4.870415647	5.31607E-08	4.49048E-07
Rftn1	-1.048435886	5.221083975	1.40986E-06	9.38849E-06
Tpgs1	-1.048567903	3.519416798	0.000400566	0.001491105
Commd4	-1.048823308	4.351875904	0.002435878	0.007097857
Fuom	-1.050316271	2.497081748	0.000129072	0.000552455
Coq7	-1.050506187	4.772356267	7.01977E-10	7.97659E-09
Dfna5	-1.050694828	2.008743989	0.00020081	0.000817341
Sdhd	-1.053428354	7.180704434	8.53045E-09	8.2796E-08
Gpr155	-1.054730918	3.315203811	4.12124E-06	2.49105E-05
Dyrk3	-1.055874429	5.328378258	8.56938E-08	7.04691E-07
Cdk4	-1.057293779	8.013631055	1.2187E-07	9.744E-07
Melk	-1.057448591	6.341364547	1.16716E-11	1.62691E-10
Xrcc6bp1	-1.058040046	3.711830441	3.22961E-07	2.42081E-06

Fundc2	-1.058951836	5.36017235	2.17789E-06	1.39803E-05
E330020D12Rik	-1.059081571	2.964804396	4.75054E-05	0.000224253
Agpat2	-1.059163003	4.838833933	3.06878E-07	2.31314E-06
Maf1	-1.05940762	4.835368979	3.37627E-05	0.000165775
2010111I01Rik	-1.062356045	5.466931782	4.46897E-08	3.81753E-07
Fancc	-1.062458789	3.430669821	1.55534E-05	8.3621E-05
Snrpd2	-1.062892288	5.369272618	5.73543E-05	0.000264559
Tmem60	-1.062998579	3.273319978	0.002094645	0.006238613
Ndufc2	-1.063176274	5.786632467	1.51336E-05	8.15816E-05
Ubl4a	-1.063950999	3.716150902	2.03679E-06	1.31582E-05
Tacc3	-1.063952883	7.391594498	3.58918E-10	4.22916E-09
Haus4	-1.065224325	4.680127635	1.48164E-08	1.38481E-07
Cep55	-1.065278242	7.007458583	2.78171E-09	2.89226E-08
Rxra	-1.065427543	3.038230921	1.04322E-05	5.85024E-05
Esco2	-1.065973001	6.419401379	3.84129E-08	3.30466E-07
Fbxo31	-1.066227736	3.927038059	1.11799E-06	7.59516E-06
Dmpk	-1.066635875	5.596455632	7.28153E-08	6.04947E-07
Tbc1d8	-1.06875246	3.618452572	8.16883E-07	5.67694E-06
Hsd17b10	-1.069413341	5.951933349	4.8048E-11	6.28515E-10
Zfp383	-1.069728958	1.796945632	0.002628593	0.007591831
Ncapg	-1.069840172	7.574859597	5.51987E-11	7.15869E-10
Acat3	-1.070524312	1.217788957	0.003623977	0.009994817
Tbc1d14	-1.070608042	5.901710842	0.001772149	0.005400261
Tmeff1	-1.071214411	1.110596595	0.000179356	0.000738708
Abhd8	-1.072066444	3.428643548	0.000527296	0.001887452
S100a6	-1.072308009	7.830694741	7.03188E-09	6.91934E-08
Chmp1a	-1.072693869	4.987329616	0.002123396	0.006305637
Cbx8	-1.074327053	3.382381049	1.01055E-06	6.90401E-06
Gtse1	-1.074504151	4.928319167	6.53762E-09	6.47507E-08
N4bp3	-1.074695836	2.56723753	0.0001133	0.000491372
Ccdc142	-1.075097016	2.952852123	3.83275E-06	2.32351E-05
Slc25a39	-1.075309955	6.395703128	1.47203E-05	7.9637E-05
Sorl1	-1.075896608	3.993933878	2.53062E-06	1.5982E-05
Eci1	-1.076070519	4.552980408	5.49512E-05	0.000254638
Zfp759	-1.076132538	3.597378223	3.2469E-07	2.43226E-06
Rps17	-1.07613537	5.65615393	3.57685E-06	2.18379E-05
Mrm1	-1.076596897	3.30054731	0.000107087	0.000467607
Nit2	-1.077884793	4.917870872	1.9507E-06	1.26492E-05
Mat2b	-1.078083566	5.589086543	4.15548E-05	0.000198718
Gtf2ird2	-1.078172242	3.684458535	2.69209E-07	2.05219E-06
Gm14305	-1.078999678	2.737067929	0.000144905	0.000612005
Adap1	-1.080320678	6.360006245	9.90908E-07	6.78128E-06
2010012O05Rik	-1.080563789	2.648453252	0.000291386	0.001131268
Bub1	-1.081982743	7.809057381	5.3904E-11	6.99827E-10
Nt5dc2	-1.086339948	4.849849032	6.45433E-10	7.38954E-09

Sgol1	-1.08651599	6.229967023	4.11681E-08	3.53165E-07
Hist1h1a	-1.087058888	8.455631588	6.17267E-10	7.07375E-09
Fkbp11	-1.087593893	3.688616858	3.48188E-07	2.58908E-06
Paqr7	-1.08850392	4.300793896	8.16675E-07	5.67694E-06
Mcat	-1.089395731	3.626049952	0.001348079	0.004269767
Pdgfa	-1.089424178	4.446314643	2.57313E-05	0.000130759
2310039H08Rik	-1.091547524	3.468923044	2.94454E-06	1.83097E-05
Lsm8	-1.091933915	5.272854608	0.000138716	0.000589155
Commd1	-1.09207891	5.582042515	9.43453E-08	7.6853E-07
Rhebl1	-1.092110132	1.991296354	0.000865133	0.002902064
Eid2b	-1.092215563	2.273070786	4.25504E-05	0.000202759
Hist1h1e	-1.093713167	8.181925079	3.38615E-06	2.08418E-05
Mutyh	-1.095380624	2.436945987	2.94619E-05	0.000146861
Car5b	-1.095835542	5.300994402	3.03098E-11	4.05682E-10
Tufm	-1.096480921	3.326560965	0.002244097	0.006613808
Scarna13	-1.096851439	6.32569151	8.44318E-07	5.85416E-06
Plekhg5	-1.097399528	2.679449388	3.78794E-06	2.30223E-05
Csf1r	-1.102328131	9.689243	2.44169E-08	2.18758E-07
Rnf144b	-1.102436966	2.672975294	3.14401E-06	1.94601E-05
Ndufa7	-1.102630994	5.208309972	0.000550745	0.001959804
Ndufa4	-1.102977236	6.544889698	7.70025E-05	0.000345968
Homer3	-1.103463531	2.103595902	0.000351266	0.001332447
Birc5	-1.103926682	7.242764667	2.72879E-08	2.4233E-07
Mrps11	-1.104067616	4.067263711	0.000524384	0.001880363
Rpusd4	-1.104595023	5.272254042	2.12056E-07	1.63191E-06
Fxn	-1.105057239	3.771418475	1.35147E-07	1.07346E-06
Rsrp1	-1.105224107	6.205612887	2.2599E-05	0.000116884
Hmbs	-1.105317795	5.230930326	1.0269E-05	5.76672E-05
Galt	-1.105472631	2.832558277	1.38223E-05	7.51819E-05
Cerk	-1.105625495	6.071780205	1.54518E-07	1.21695E-06
Aurka	-1.106863807	7.172299593	8.22434E-11	1.04865E-09
Sort1	-1.107094003	5.144160314	4.10332E-11	5.42615E-10
Rgs10	-1.107478852	6.694076798	1.9122E-12	2.85603E-11
Mrps26	-1.108178354	6.280010074	5.63065E-07	4.00729E-06
Slc29a1	-1.10857391	6.478683943	1.70073E-12	2.56869E-11
Hmgb1	-1.10897216	5.315162888	1.14263E-10	1.43426E-09
Lrrc75a	-1.109453543	5.504419994	1.35662E-09	1.49117E-08
Gins3	-1.109986291	5.391458917	2.83642E-11	3.80482E-10
Kif18b	-1.110101555	5.266534866	4.58952E-08	3.91224E-07
Sgol2a	-1.112729699	7.599401404	9.46741E-07	6.51214E-06
Mastl	-1.113630534	5.350796247	3.22346E-11	4.3002E-10
Bbc3	-1.113935082	2.035482531	0.000666204	0.002320221
Cox7a2	-1.114397609	6.772445842	1.70125E-06	1.11632E-05
Mettl17	-1.11605772	3.822572034	3.91024E-05	0.000188704
Gemin6	-1.116256391	4.821346843	2.7161E-07	2.06919E-06

Glr5	-1.117218279	5.486609205	1.03848E-05	5.82636E-05
Cryz	-1.117842985	4.091009547	2.90135E-06	1.80782E-05
Prss50	-1.118700452	4.024934067	4.8087E-05	0.000226205
Fam19a3	-1.121342549	2.273353034	6.75919E-06	3.94194E-05
Lsr	-1.12217349	1.677698577	1.88791E-05	9.96436E-05
Gnb1l	-1.122497791	3.104835606	0.000375524	0.00141177
Lnx1	-1.122568965	2.116126805	4.78703E-05	0.000225536
Itga6	-1.122981824	4.22506828	1.23288E-08	1.16671E-07
Zfp472	-1.123770024	4.561455645	9.31667E-08	7.60464E-07
Hist4h4	-1.126091419	8.70866521	2.04933E-09	2.17941E-08
Uevld	-1.126096984	4.756241438	5.33139E-11	6.92909E-10
Rfc5	-1.126154456	6.013068858	9.69279E-10	1.08311E-08
1190002F15Rik	-1.127591	2.099437538	1.5743E-05	8.44902E-05
Fam129c	-1.128241654	1.878398984	0.000229096	0.000918281
Snx21	-1.129025307	2.126749873	0.000271961	0.001065759
Ormdl2	-1.129679948	3.312101045	0.000510151	0.001834211
Ndufb5	-1.129792132	5.719841202	8.73573E-09	8.45851E-08
Fancl	-1.130517708	4.382468212	1.30311E-07	1.03777E-06
Fut4	-1.131811192	1.095049609	0.002946885	0.008367469
Lage3	-1.13272196	4.384612901	2.43482E-08	2.18304E-07
Lancl1	-1.132825928	4.960698927	4.95776E-08	4.19954E-07
Sgk1	-1.133179936	3.450909261	5.72469E-08	4.80882E-07
Hist1h2bc	-1.133456635	6.174957864	0.000774209	0.002644669
Spc24	-1.134779933	5.647972332	3.4617E-11	4.6028E-10
Fignl1	-1.135418236	6.454606288	2.46043E-12	3.63454E-11
Fhod1	-1.135917987	2.882755202	2.31103E-05	0.000118942
0610011F06Rik	-1.136551721	3.227104809	5.45859E-06	3.23009E-05
Zfp606	-1.137147032	3.900863893	4.59417E-08	3.91345E-07
Cacna1s	-1.138153161	1.434116248	0.00036696	0.001384731
Rxrb	-1.138461076	5.345476085	1.84999E-06	1.20543E-05
Gpr19	-1.140534515	1.706787569	5.18631E-05	0.000241715
Arl6ip1	-1.140741156	7.83495676	2.40502E-09	2.52007E-08
Bambi	-1.141275986	1.498714381	1.06213E-05	5.94617E-05
Prss12	-1.141777973	2.739503218	3.51216E-05	0.000171474
Klhdc9	-1.142134547	1.964289222	1.72245E-05	9.16698E-05
Prc1	-1.142784197	7.919036103	1.08294E-08	1.0337E-07
Megf9	-1.143206204	5.615147097	3.21834E-07	2.41535E-06
Wbscr16	-1.144235393	4.568946225	8.1688E-05	0.000364318
Ccdc106	-1.144324843	3.165802107	3.38056E-05	0.000165919
Rcc2	-1.145009671	8.577183641	8.66241E-09	8.39422E-08
Kptn	-1.14526854	3.079590735	0.000289142	0.001123635
Zfp385a	-1.145837566	1.542654642	0.000424222	0.001566647
Cc2d2a	-1.14680928	2.969300184	9.27321E-06	5.25872E-05
Ulk4	-1.147184227	1.896546297	1.57066E-05	8.43701E-05
Dars2	-1.147310716	6.728026895	1.43498E-13	2.42088E-12

Vmac	-1.147499503	1.56027762	7.53863E-06	4.35043E-05
Stx2	-1.147909382	5.12399589	7.63911E-11	9.77113E-10
Eri3	-1.148180589	5.097193825	9.38869E-07	6.46533E-06
Coa6	-1.148764508	2.733864878	0.000142748	0.000604158
Aars2	-1.149319792	3.863909814	6.13589E-06	3.61498E-05
Hyi	-1.150374374	2.878550038	3.08979E-05	0.000153011
Psmg4	-1.150593775	4.028372725	0.000798771	0.002713268
Pafah1b3	-1.150749577	3.4461898	4.06959E-05	0.000195305
Colec12	-1.151331381	9.203933426	5.95128E-10	6.83945E-09
Polr1c	-1.152426226	5.267497726	1.47529E-05	7.97777E-05
Steap3	-1.152454691	4.496860534	9.13642E-09	8.83236E-08
Fam69b	-1.152687003	2.329699053	6.80822E-05	0.000309332
Snhg20	-1.153745937	2.686026694	0.00037803	0.001419427
Nlrp10	-1.153979113	4.896621428	1.64157E-10	2.01462E-09
Slc25a45	-1.154247144	4.834285965	8.07634E-10	9.10882E-09
Lrrc14	-1.154631878	4.06937621	3.96104E-05	0.000190835
Slc26a6	-1.155529657	2.344318506	0.000330201	0.001263337
Slc44a1	-1.157257346	6.857311853	2.26768E-13	3.73212E-12
Snord96a	-1.158184505	2.11503718	0.00199694	0.005984398
Dcaf15	-1.15927983	3.903567526	0.000180138	0.000741677
Elp6	-1.16021034	3.758414198	4.36153E-08	3.73366E-07
Tagap1	-1.160240548	3.3882299	6.55148E-06	3.83372E-05
Arhgef6	-1.16034694	8.470662697	7.0587E-12	1.00591E-10
Jag2	-1.160357253	3.697335136	3.7254E-08	3.21409E-07
Hnrnpa0	-1.160558061	6.862993839	0.000415799	0.001539767
Tmem256	-1.160639856	3.680265287	0.000156562	0.000655071
Pcif1	-1.160859614	4.448621331	1.06417E-06	7.25807E-06
C330027C09Rik	-1.162955683	7.519846453	1.1472E-10	1.43707E-09
1810032O08Rik	-1.163244775	3.008626227	0.002313964	0.006785052
Hspbp1	-1.164506187	4.761417729	8.09057E-05	0.000361228
Kif23	-1.164767034	7.349738032	2.05959E-12	3.06107E-11
Josd2	-1.165420796	4.003034987	0.001285806	0.004094367
6330416G13Rik	-1.166968106	4.464623964	1.92349E-09	2.06005E-08
Mettl20	-1.167634233	1.456683423	0.000309722	0.001195557
Htra2	-1.168216772	5.350820681	1.06782E-07	8.62095E-07
Gramd4	-1.168851709	4.932134614	3.57406E-07	2.65111E-06
Snx29	-1.169941363	2.98176892	3.35863E-05	0.00016511
Fgd4	-1.17112062	7.712920447	2.09995E-08	1.90823E-07
Cd276	-1.17116225	3.193606348	8.75144E-06	4.98618E-05
Snrpb	-1.172189766	7.839204097	1.10839E-05	6.17567E-05
Wdr4	-1.173549514	5.253685221	8.86602E-07	6.12281E-06
Slc6a8	-1.17482652	3.836004786	5.49588E-08	4.6359E-07
Sec61b	-1.176238305	4.707652772	0.001584906	0.004908709
Tyrobp	-1.176952555	8.191435453	9.40235E-09	9.06772E-08
Pdcd4	-1.178487039	3.480905825	1.0012E-07	8.11747E-07

Mki67	-1.179210126	10.95786701	1.86266E-05	9.85259E-05
Camk1	-1.179867757	5.765604776	1.00461E-13	1.72854E-12
Erf	-1.181360615	5.318435561	2.49051E-10	2.98098E-09
Pars2	-1.182665682	3.035295603	0.000101648	0.000446273
Zfp931	-1.182749513	3.478846117	1.12918E-05	6.28282E-05
Atp6v0e	-1.183039577	6.214779415	2.10448E-05	0.0001095
Tsku	-1.183307388	1.920131191	1.28712E-05	7.08999E-05
Pkig	-1.184955281	4.788747256	8.65596E-08	7.10845E-07
Mis18bp1	-1.185795228	7.501824904	1.53142E-08	1.42693E-07
Samm50	-1.186734001	6.707559172	8.54866E-06	4.88674E-05
Hist1h4d	-1.18745786	7.709949249	1.2283E-07	9.81422E-07
D17H6S56E-5	-1.18877603	8.169142076	1.88764E-13	3.14511E-12
Cd33	-1.189199099	2.536803105	1.23091E-05	6.79888E-05
Foxm1	-1.19102892	6.081766119	2.95218E-09	3.05378E-08
Echdc3	-1.194091693	1.064660572	0.000490917	0.001774007
Prps2	-1.194829138	6.809855396	1.65277E-14	3.04255E-13
Ttk	-1.195018926	6.363178116	1.73473E-13	2.90231E-12
Rad9b	-1.195922213	1.179513603	0.000359348	0.001358972
Nsmce4a	-1.197849155	6.760396473	3.65616E-14	6.5128E-13
Ptges3l	-1.198216109	1.054957186	0.000249958	0.000990106
Lipa	-1.198742349	9.348764728	9.97942E-10	1.11279E-08
Tnfaip8l1	-1.198815008	2.926717444	2.8772E-07	2.17958E-06
Cd300a	-1.198957189	6.299302386	2.04966E-12	3.05006E-11
Alkbh7	-1.199295471	2.74456788	0.001454497	0.004549012
Depdc1a	-1.201082543	4.424400633	3.02567E-06	1.87564E-05
Ttc32	-1.202840812	4.664246991	1.69498E-08	1.56608E-07
Rasl2-9	-1.203196163	2.321221815	0.000527781	0.001888071
Pard6a	-1.203371417	1.632530217	0.000415664	0.001539737
Tsfm	-1.204619885	4.900659419	1.27029E-06	8.52936E-06
Ifi2712a	-1.204829081	3.052943183	0.000238603	0.00095135
Gemin7	-1.205254844	3.94619034	0.001408151	0.004426205
Kdm8	-1.206123195	2.593842297	4.06191E-07	2.97113E-06
Nipsnap1	-1.206460404	4.336479087	1.47983E-09	1.61488E-08
Snx17	-1.206735577	5.76740804	4.3084E-06	2.59511E-05
Fzr1	-1.207045208	5.54857386	4.3891E-06	2.63847E-05
Ndufb11	-1.207786611	5.215184018	3.128E-05	0.00015461
Mycn	-1.208337371	7.686424582	3.57389E-07	2.65111E-06
Snrpe	-1.209215846	5.614337023	8.47763E-06	4.85071E-05
Hip1	-1.209302881	6.053087781	1.87159E-11	2.55587E-10
Lpcat1	-1.209708573	5.980022909	2.24345E-13	3.69727E-12
Hyls1	-1.211932207	4.544519836	1.2084E-10	1.50879E-09
Fdxacb1	-1.21217684	2.969375917	3.8056E-05	0.000184095
Egfl7	-1.212247806	2.682537375	6.17579E-06	3.63143E-05
Tmsb4x	-1.212654999	9.030265957	2.14216E-05	0.000111269
9130008F23Rik	-1.213703577	1.750890193	0.000108654	0.000473088

Zfp958	-1.213763324	5.499268867	3.52517E-13	5.64819E-12
Tmem141	-1.213968039	4.130774868	1.33408E-07	1.06105E-06
Phb	-1.214751025	5.17054458	2.56447E-11	3.46304E-10
Taldo1	-1.215388144	7.872830784	6.98501E-08	5.81108E-07
2810013P06Rik	-1.215898811	1.803461006	2.07867E-05	0.000108436
Atox1	-1.217569902	5.182907476	0.000448638	0.001641799
Ing4	-1.218312041	4.161999596	2.89842E-08	2.55893E-07
Aig1	-1.218369786	3.948882706	2.80331E-07	2.12893E-06
Aif1	-1.218488542	1.51539383	3.82736E-06	2.32152E-05
Uqcr10	-1.219057368	6.134360897	1.06961E-06	7.28283E-06
Mgmt	-1.220410375	2.205737051	2.15837E-06	1.3877E-05
Top2a	-1.220945038	10.29443291	2.92473E-09	3.02973E-08
Zfp771	-1.222122147	3.128026478	0.000839306	0.002832217
Kif4	-1.223088074	6.800780333	2.92474E-15	5.8461E-14
Slc39a3	-1.223097315	2.987218002	0.000542596	0.001935356
Slc6a12	-1.223432392	6.548233849	1.94389E-13	3.22996E-12
Kank3	-1.223640654	2.14171685	7.89549E-07	5.50593E-06
Lzts2	-1.224124995	3.916500043	2.14264E-07	1.64666E-06
Med22	-1.22536718	5.489563111	7.37516E-07	5.15793E-06
Gstm1	-1.226900165	1.871984228	1.79711E-06	1.1735E-05
Crebzf	-1.227763002	5.871918658	6.97222E-10	7.93745E-09
Suv39h1	-1.229507355	5.837582897	2.16968E-09	2.29732E-08
Arl10	-1.229690672	2.030574243	0.000763918	0.002614676
Slc25a15	-1.230372602	4.455594582	1.05125E-07	8.5005E-07
Sulf2	-1.231605876	3.608753355	1.04713E-05	5.86945E-05
Med28	-1.231867259	5.367736771	0.000578746	0.002050409
Cacna1f	-1.23257622	1.400217433	2.68597E-05	0.000135733
Cars2	-1.232606829	4.515348872	3.98095E-07	2.92031E-06
Tcam1	-1.232638997	1.184410683	7.83166E-05	0.000351222
Dnase2a	-1.233319847	5.51770841	6.4583E-12	9.23606E-11
Saal1	-1.233498345	4.962543996	2.00149E-08	1.82423E-07
2700099C18Rik	-1.233897934	3.257325105	8.50914E-07	5.89315E-06
Erp29	-1.234533123	8.306902477	7.96506E-14	1.38622E-12
Rps28	-1.234712274	2.110980204	0.000220329	0.000887543
Ddx39	-1.236622069	7.497321857	8.04411E-08	6.63297E-07
Serinc3	-1.236896483	8.756302929	8.04602E-13	1.24472E-11
2410015M20Rik	-1.237497946	5.431652936	3.75919E-06	2.28589E-05
Zfp709	-1.239109459	2.849007568	4.24222E-07	3.09554E-06
Pck2	-1.240422019	4.353029528	2.81959E-08	2.49844E-07
Selm	-1.242006697	2.86608734	3.48124E-06	2.1351E-05
Etohi1	-1.242286574	6.11656972	3.7495E-07	2.76432E-06
Kctd2	-1.243682831	2.949987808	1.28324E-06	8.60202E-06
Dtymk	-1.24452353	6.689263638	2.36979E-08	2.12948E-07
Lamtor4	-1.24479755	3.924476694	2.96792E-05	0.000147822
Cox8a	-1.245210424	6.75898883	1.24391E-05	6.86446E-05

Ephx1	-1.246281617	2.763177692	1.093E-06	7.4379E-06
4930432K21Rik	-1.246409145	3.788564887	8.04701E-10	9.08419E-09
Arl4c	-1.246624168	3.383262611	2.41023E-08	2.16421E-07
Itgb7	-1.246937739	4.665128032	3.04366E-08	2.67158E-07
Sirt3	-1.247817836	2.27091143	2.66475E-05	0.000134773
Ten1	-1.249372698	4.026466215	1.7623E-06	1.15388E-05
Emp3	-1.24954669	7.064226384	3.30218E-09	3.39264E-08
Gm11974	-1.25006822	3.690947145	0.000148455	0.000624387
Rnf167	-1.250088661	4.317026186	6.83118E-10	7.78421E-09
Rdh10	-1.250807617	4.461165805	2.6902E-11	3.62474E-10
Naaa	-1.252114989	4.711588711	2.18109E-12	3.22977E-11
Abcb8	-1.254491025	4.929050555	5.78012E-07	4.09921E-06
Glod4	-1.255784121	5.633022531	2.02711E-11	2.75892E-10
Snora33	-1.255963465	1.340528439	0.000858719	0.002882147
Chchd10	-1.256861825	3.281677005	1.8479E-08	1.69317E-07
Gmnn	-1.257298897	6.260181562	7.12157E-11	9.12842E-10
Stard3nl	-1.259038442	4.514193443	0.001052399	0.003451439
Nek2	-1.259854292	6.81002036	9.82407E-17	2.15578E-15
Sfxn5	-1.260679582	3.592254732	4.04885E-10	4.74769E-09
Tmtc4	-1.263467504	4.283455599	2.60692E-11	3.51644E-10
Rap1gap	-1.26356531	1.174873937	3.35836E-05	0.00016511
Rpph1	-1.264305696	10.60914404	0.001724788	0.005288343
Ly86	-1.264787446	6.953252327	1.11404E-16	2.43142E-15
B3galt6	-1.264792452	3.766961931	1.86679E-06	1.21507E-05
Glrx3	-1.265084	3.49008251	4.77932E-05	0.00022526
Cdca2	-1.265606081	6.789123221	6.6218E-16	1.38347E-14
Klhl17	-1.265707563	3.835246475	7.00519E-10	7.9675E-09
Rab26	-1.265950782	1.481384113	3.64681E-05	0.000177262
Alox5ap	-1.26804963	6.292797903	3.16524E-12	4.61934E-11
Rhbdd3	-1.26837092	2.668698016	2.08586E-05	0.000108624
Cebpa	-1.268473981	3.790344284	4.90431E-07	3.53724E-06
Ccdc51	-1.268864363	3.868427903	5.23004E-06	3.10394E-05
Trappc6a	-1.268876296	4.041286054	0.000272446	0.001067268
Plk1	-1.269472138	5.665504215	2.286E-11	3.09389E-10
Gsn	-1.269772	8.273178141	6.47482E-11	8.32585E-10
Rpl12	-1.269998669	3.792436741	1.12442E-06	7.63456E-06
Fancd2	-1.270328176	6.250524041	2.6544E-13	4.30425E-12
Pop7	-1.271311942	3.755565246	6.76846E-05	0.000307641
Snord47	-1.271940802	1.994002123	0.000828146	0.002804397
Espl1	-1.274706116	5.581436645	4.6816E-11	6.1439E-10
Tomm40l	-1.27533324	4.531427773	1.17239E-08	1.11469E-07
Kifc1	-1.275779187	4.650068627	8.27601E-11	1.05413E-09
Il12rb2	-1.276291891	1.156400825	0.000762174	0.002609444
Trim47	-1.276399177	2.003655389	0.000414226	0.001534878
Spc25	-1.277919232	5.982557088	7.03676E-12	1.00396E-10

Shcbp1	-1.279045645	6.640132848	4.83251E-10	5.62848E-09
B230312C02Rik	-1.279116498	2.040037222	2.80317E-06	1.75205E-05
Anln	-1.279675073	7.858255218	9.37594E-15	1.78011E-13
Fam110a	-1.279970407	2.470010504	4.94745E-07	3.5587E-06
Abhd17a	-1.282331608	5.034990031	0.001516072	0.004724512
B230217C12Rik	-1.282852371	1.917961814	8.68447E-07	6.00771E-06
Asrgl1	-1.283031502	4.948257954	1.99321E-14	3.63064E-13
Rnf187	-1.286202172	6.516091121	2.20277E-06	1.41029E-05
Sap18	-1.286220256	3.997620587	4.82128E-10	5.6208E-09
Anapc15	-1.287017884	3.908807393	1.02825E-07	8.32569E-07
Emp1	-1.287120709	7.393847036	1.52676E-15	3.09776E-14
Lsp1	-1.287553205	5.821205639	1.12112E-11	1.56453E-10
Wdpcp	-1.289456927	3.222989536	1.54189E-08	1.43559E-07
Cdkn2d	-1.289835612	4.401059358	1.71288E-09	1.85086E-08
C1d	-1.29090699	5.663148111	6.44623E-08	5.38134E-07
Acaa1a	-1.291886515	5.665170554	1.55307E-06	1.02575E-05
Mbd3	-1.292004329	5.975860047	0.000407482	0.001514057
2810025M15Rik	-1.292176278	6.035664033	2.80646E-10	3.34593E-09
Atp5o	-1.293346075	6.389180316	4.54113E-08	3.87644E-07
Wrb	-1.293492042	4.92757185	1.81489E-08	1.66544E-07
E2f2	-1.293728146	4.772637578	2.75056E-11	3.69783E-10
Dbndd2	-1.295359714	3.126860974	0.000332782	0.001270805
2410016O06Rik	-1.295853283	5.563258665	1.62351E-08	1.50694E-07
Cenpp	-1.296096933	4.168779001	4.13052E-10	4.83878E-09
Gas2	-1.299727117	3.177809495	2.50833E-09	2.62378E-08
Wdr8	-1.299772011	3.777421381	5.09147E-05	0.000237844
Tfdp2	-1.299846501	5.220079906	4.93358E-15	9.63879E-14
Nmral1	-1.301191237	5.460418699	1.26217E-11	1.7553E-10
Ccnf	-1.301368985	5.960154626	1.04939E-14	1.98304E-13
Enkd1	-1.302547685	3.032725747	7.79935E-07	5.44516E-06
Bloc1s1	-1.302798183	3.443500023	2.68839E-05	0.00013575
Zfp775	-1.304386809	1.458074238	1.45041E-05	7.85723E-05
Smpdl3b	-1.304532272	6.067173499	2.71142E-12	3.9907E-11
Tvp23a	-1.308534479	1.188408507	2.85061E-05	0.000142684
Dut	-1.308903551	7.037035794	2.58713E-13	4.21113E-12
Kif14	-1.309944583	6.395355368	5.10172E-17	1.15079E-15
Havcr2	-1.311189811	4.892837587	8.17531E-12	1.15322E-10
Tbc1d16	-1.311306051	5.753014326	3.04085E-07	2.29494E-06
Fbxl8	-1.311486613	1.298120715	0.001380673	0.0043507
Yars2	-1.313375882	5.129227606	2.49897E-05	0.000127775
Rpl13	-1.31432537	5.742273192	6.34259E-05	0.000290025
Card11	-1.314682297	4.783333412	2.59002E-13	4.21113E-12
Amica1	-1.314717445	3.134883731	2.27848E-09	2.39577E-08
Gm17745	-1.315146311	1.241805016	1.9906E-06	1.28804E-05
Nhej1	-1.315215111	2.188459315	2.53881E-05	0.000129321

Lair1	-1.315954369	4.724189232	4.93148E-10	5.73824E-09
Arf2	-1.317490906	5.715277731	5.07773E-10	5.88579E-09
Pltp	-1.318957237	4.384108182	4.01865E-08	3.44989E-07
Hmgb2	-1.320149605	6.19986274	4.71201E-11	6.17044E-10
Adgr1	-1.32131786	4.399238327	6.10765E-09	6.07405E-08
Rgl2	-1.321908915	5.257326173	4.12442E-07	3.01504E-06
Pgam1	-1.32219956	4.809252029	0.000367369	0.001385844
Kif20a	-1.324257759	7.70503195	4.01407E-14	7.12939E-13
Kif15	-1.324336148	7.782074195	1.32035E-15	2.69467E-14
Rpp25l	-1.32474319	3.851817876	5.05481E-06	3.00731E-05
Pnpla7	-1.324896067	5.281999949	9.68527E-13	1.4888E-11
Ckb	-1.32550476	6.842198426	7.75638E-16	1.61709E-14
Peg12	-1.326977336	2.582664709	3.49834E-05	0.000170868
Hist1h2af	-1.328940835	4.488451792	0.001580475	0.004897491
Best1	-1.330904634	2.305829142	6.3371E-06	3.71726E-05
Fdxr	-1.332806785	3.847622825	5.20741E-07	3.73018E-06
Slc25a26	-1.333457357	2.511164466	0.000882882	0.002955056
Armc6	-1.334231131	3.819552606	0.000166853	0.000693102
Kank2	-1.334656933	3.506238448	2.76232E-09	2.87457E-08
Sdhaf4	-1.335095127	3.392428341	0.000340207	0.001297523
Asb13	-1.336093995	2.609774383	6.29579E-09	6.24577E-08
Hebp1	-1.336190372	1.744347847	4.86869E-07	3.51457E-06
Bphl	-1.336961747	2.708019574	0.000109885	0.000478273
S100a4	-1.337038964	10.29769554	6.15825E-11	7.95254E-10
2610507I01Rik	-1.337183491	1.469357606	1.4322E-06	9.51111E-06
Plau	-1.338372048	6.938316507	1.78938E-17	4.16023E-16
Gm6682	-1.339475787	3.812658512	0.000658004	0.002294963
Zranb3	-1.34061727	4.354056993	6.3315E-12	9.06542E-11
Per3	-1.341778987	1.977640572	1.88123E-07	1.4626E-06
Wdr34	-1.342742525	3.873829382	1.99185E-05	0.000104492
Ndc80	-1.343016307	6.674188576	9.86664E-16	2.0395E-14
Fam98c	-1.34420336	1.94225492	0.000233216	0.000932939
Ankrd10	-1.344551994	5.52534362	1.57506E-08	1.46533E-07
AI413582	-1.344916811	3.716918459	1.74825E-07	1.36623E-06
Lgals1	-1.345166936	7.869206678	2.93887E-14	5.26605E-13
Ntmt1	-1.345376755	4.010743831	8.98534E-05	0.000397369
Tgfbr1	-1.346983195	7.612471998	3.08133E-14	5.50504E-13
Snhg7	-1.347873103	3.365810343	0.000249666	0.000989803
Kif2c	-1.350418113	6.504386697	2.34823E-13	3.84493E-12
Pdpx	-1.351612089	3.217795751	0.000260174	0.00102688
Ppcdc	-1.354114601	4.609071298	3.63701E-10	4.28135E-09
Cav2	-1.355460614	3.575892762	1.9646E-09	2.09482E-08
Mri1	-1.356260232	4.413883212	2.26006E-10	2.72399E-09
Slc16a7	-1.356475622	3.270334213	3.13137E-07	2.35592E-06
Cdk2ap1	-1.356859805	4.680273553	6.59297E-07	4.64036E-06

Mxd3	-1.35779038	2.306030921	1.48532E-07	1.17362E-06
2810417H13Rik	-1.359230631	7.114382291	5.13057E-15	9.99142E-14
Gm6402	-1.360786111	4.035953339	4.79977E-05	0.00022596
Faap100	-1.363642765	3.725124011	5.83521E-05	0.000268548
Cox5a	-1.365195575	6.274638494	2.47511E-05	0.00012677
1600002K03Rik	-1.366464802	2.245072953	0.001433224	0.004492919
Cuta	-1.366498442	4.616093275	5.55865E-09	5.54628E-08
Sac3d1	-1.366626674	3.468729556	0.00059723	0.002109726
Casc5	-1.368248649	7.655206137	3.28336E-15	6.5306E-14
Mum1	-1.37156922	5.24523342	1.56918E-09	1.70931E-08
Hscb	-1.3720006	3.413800963	5.74723E-10	6.63012E-09
Mrps14	-1.380652217	5.726645839	3.4499E-05	0.000168843
Snord100	-1.38124416	1.265826644	0.000191535	0.000784068
Agap1	-1.381768387	6.408055211	1.11776E-14	2.09914E-13
Pdcd2l	-1.383154077	3.892223142	2.75569E-07	2.09539E-06
Mnd1-ps	-1.385714877	3.732010922	8.17934E-07	5.68098E-06
Mrpl48	-1.387944871	3.922714502	3.80295E-06	2.30903E-05
Dctpp1	-1.388227216	5.552066965	1.84566E-10	2.25141E-09
H2afv	-1.389131203	4.476267557	1.10931E-14	2.08651E-13
Engase	-1.389574267	2.898784961	7.56491E-05	0.000340267
Bmyc	-1.390623118	3.455660404	5.07454E-09	5.09262E-08
Fanci	-1.391643348	5.274931061	6.28602E-17	1.39711E-15
Dusp28	-1.393464334	2.146648987	5.19005E-05	0.000241796
2410127L17Rik	-1.39434115	1.612322342	0.003507581	0.009733638
Neil3	-1.395037078	4.758580779	1.22395E-10	1.52527E-09
Cdk1	-1.395716527	7.792664009	1.42799E-15	2.9071E-14
Atp5j2	-1.400647718	5.658547356	2.18895E-06	1.4029E-05
Particl	-1.400874311	2.409445742	3.71399E-06	2.26068E-05
Fancf	-1.40200036	3.535185462	9.297E-11	1.18045E-09
Dhrs7b	-1.402766641	4.854953618	1.9196E-06	1.24609E-05
Lgmn	-1.404058224	8.399303978	4.05453E-13	6.45369E-12
Fcrl1	-1.412697333	5.848407469	8.73776E-17	1.92788E-15
Siva1	-1.415833057	4.97217924	1.94671E-09	2.08308E-08
Ect2	-1.41645958	6.627968476	4.69212E-18	1.14588E-16
Bcl6	-1.417431933	4.786050556	9.85104E-13	1.51237E-11
Bub1b	-1.419442923	8.213117985	4.98943E-16	1.05291E-14
Exosc5	-1.41998092	5.423651576	2.10354E-09	2.23315E-08
Galk1	-1.420113367	5.363797995	9.56741E-06	5.40532E-05
Cep89	-1.424063972	4.502606156	1.83018E-14	3.34878E-13
2210408F21Rik	-1.424596599	2.533995814	1.06229E-05	5.94617E-05
Aurkb	-1.426309758	6.437308285	7.69422E-15	1.47469E-13
A430046D13Rik	-1.426614529	1.346084139	9.05741E-07	6.25142E-06
Rad51b	-1.426751075	3.148544777	1.27563E-10	1.58642E-09
Tnfrsf12a	-1.430461787	2.963692284	4.9491E-05	0.000231999
Ndufc1	-1.430720513	3.051204312	0.00010036	0.000441258

Fam173a	-1.430848976	3.68397486	1.60112E-05	8.58919E-05
Plcb4	-1.431366735	6.940006584	2.7206E-11	3.66162E-10
Sptssa	-1.431795414	6.083135785	3.87989E-10	4.55839E-09
Rps23	-1.433723517	2.834736522	0.000849247	0.00285431
4930427A07Rik	-1.435497075	3.53191202	2.08157E-05	0.000108541
Pgp	-1.440206169	4.790679951	1.22274E-06	8.22836E-06
Uqcrfs1	-1.440407463	6.31954586	3.51781E-06	2.15535E-05
Cks1b	-1.441147761	6.319544262	2.24589E-17	5.19168E-16
Rfc4	-1.441752683	5.204309586	6.61009E-09	6.53616E-08
Arhgap24	-1.441963001	4.139750698	1.58225E-12	2.39273E-11
Gins1	-1.442310101	4.917320239	4.76228E-15	9.31915E-14
Kifc5b	-1.443967835	3.549896217	3.21E-08	2.80337E-07
Psmg3	-1.445072614	4.249954821	0.000258925	0.001022614
1700025G04Rik	-1.446540159	6.965208515	6.87832E-19	1.73577E-17
6430531B16Rik	-1.44723318	3.120682083	2.01316E-09	2.14283E-08
2900026A02Rik	-1.448617777	3.335190122	1.12673E-09	1.24983E-08
Abhd15	-1.448966633	2.670641907	1.76412E-05	9.3723E-05
Qdpr	-1.449958174	5.415194952	2.30755E-05	0.000118841
Pttg1	-1.454326528	5.039002445	3.15497E-16	6.71638E-15
Rab34	-1.455479374	3.635725052	2.28022E-08	2.05814E-07
Epha2	-1.456855601	1.477817343	1.20886E-07	9.67166E-07
Tmem205	-1.458010317	3.824619893	4.32759E-05	0.00020565
Cyc1	-1.458353667	6.170673759	4.09506E-05	0.000196216
Ppp1r14b	-1.458772625	5.831529778	2.80491E-05	0.000140687
Id2	-1.459195958	5.67761335	8.98276E-18	2.12932E-16
Tmem147	-1.459751238	5.197848826	7.13982E-06	4.14795E-05
Trim65	-1.460887153	2.761719221	3.76106E-09	3.84453E-08
Pcsk4	-1.464501445	1.314245493	6.03343E-05	0.000276829
Nubpl	-1.464927519	2.189320831	0.000180856	0.000744381
Qrsl1	-1.465715351	4.013055164	1.18185E-07	9.48063E-07
Zfp41	-1.465923546	3.46101367	2.58007E-08	2.29966E-07
Cenpl	-1.467067477	4.674246646	8.12009E-06	4.65713E-05
Nav2	-1.467211414	4.324521958	4.9874E-10	5.79548E-09
Lgals3	-1.470181804	8.208530977	1.96701E-13	3.25942E-12
Abi3	-1.470336496	3.156047418	7.3123E-10	8.28568E-09
Fhad1	-1.471008971	1.763129526	0.000704473	0.002435994
Uap1l1	-1.471256227	5.271366209	5.89021E-09	5.87227E-08
Tmed2	-1.472785761	4.625369144	0.000779377	0.002657824
Saysd1	-1.473557718	2.909133906	2.13944E-05	0.000111176
Spag5	-1.47394496	6.547106965	2.55897E-17	5.90416E-16
Pros1	-1.475902111	3.674857845	8.19216E-13	1.26571E-11
Prtg	-1.476402662	4.986866901	1.30455E-12	1.99269E-11
Fam105a	-1.478618065	6.169023331	2.17753E-19	5.66017E-18
G2e3	-1.478788153	6.478254258	5.4184E-17	1.21995E-15
Ndufab1	-1.479544868	2.875217489	0.000885893	0.002963498

Ankdd1b	-1.483902969	1.282284036	0.000106748	0.000466632
Gpx4	-1.485336512	1.898533955	0.001186005	0.00382115
Tlr13	-1.485879823	5.407105824	1.51344E-19	4.00269E-18
Cdca3	-1.487369647	5.875845711	1.47892E-17	3.45832E-16
Zfp773	-1.489452033	1.488819054	3.42195E-08	2.9692E-07
Hist2h2bb	-1.491161327	10.04917198	6.7701E-13	1.05406E-11
Loxl3	-1.492262873	3.661184935	1.07186E-13	1.83382E-12
Lpin3	-1.492866443	2.53632447	2.79832E-10	3.33951E-09
Rps4x	-1.493827952	7.819194811	2.74915E-06	1.72362E-05
Gm10069	-1.494854321	2.788798609	5.59156E-07	3.98884E-06
Adat3	-1.496927515	1.237498642	0.000166955	0.000693291
Dnph1	-1.49779618	5.081694766	3.44208E-10	4.06374E-09
Rnd3	-1.498537846	2.968997304	5.05935E-09	5.0858E-08
Hcst	-1.500231417	1.824274767	3.69292E-05	0.000179432
Klf2	-1.500962805	2.127671913	4.76488E-06	2.85022E-05
Slc9a9	-1.501289332	1.942817943	2.42719E-08	2.17782E-07
Ndufb8	-1.503275074	6.786098392	3.94617E-07	2.89697E-06
Hmmr	-1.504459345	7.418537277	4.78941E-20	1.30663E-18
Rpa3	-1.504501662	4.16252454	8.21596E-08	6.76546E-07
Hist1h2bn	-1.506921655	6.983330393	0.000239508	0.000953702
Ugt1a6a	-1.507904444	1.545832195	1.50954E-07	1.19043E-06
Mpc2	-1.507966862	4.625793379	7.98278E-06	4.58707E-05
Plxnd1	-1.508156167	6.299167589	2.11689E-11	2.87465E-10
Cxcr3	-1.509927503	2.790190673	2.84499E-09	2.95045E-08
Zfp524	-1.510706051	2.122700995	1.78565E-08	1.64483E-07
Miip	-1.51169925	3.964529231	4.60355E-13	7.27974E-12
Calhm2	-1.514524084	4.00534397	1.81961E-11	2.49425E-10
Snord16a	-1.51470364	1.457301492	7.85404E-07	5.48018E-06
Ppia	-1.517546375	2.256076307	0.000161227	0.000671578
Coq6	-1.517555918	4.074237605	5.35469E-07	3.82663E-06
Vash1	-1.51849198	2.527971002	8.24549E-10	9.28231E-09
Hn1	-1.518498771	6.705824839	2.14693E-08	1.94508E-07
Fv1	-1.518913464	1.583921134	2.24083E-08	2.02561E-07
Pddc1	-1.518998145	3.209192317	1.31619E-05	7.23042E-05
Serpib8	-1.519117834	6.017446943	2.48288E-21	7.46281E-20
Syne3	-1.522668435	6.619369672	2.19213E-10	2.64738E-09
Mdh1	-1.523231219	7.720575061	5.63713E-13	8.82203E-12
Pald1	-1.52509805	4.771969821	8.2042E-14	1.42579E-12
Aldh16a1	-1.525884823	5.368146405	4.86377E-07	3.51311E-06
Cep72	-1.52883898	2.900855511	2.73695E-09	2.85062E-08
Fam185a	-1.529220348	4.659033727	5.67386E-17	1.27273E-15
Comtd1	-1.529910202	4.578888984	1.61835E-10	1.99016E-09
Ak1	-1.534990081	1.63284414	7.09807E-09	6.97881E-08
Ffar4	-1.536887091	1.530199943	0.000144379	0.000609998
Nme2	-1.537289144	6.498764284	6.0093E-05	0.000275931

Cadm1	-1.539368374	8.0685418	1.49951E-13	2.52622E-12
Tomt	-1.541584843	1.458736171	2.31838E-08	2.08947E-07
Tmc6	-1.541760834	2.906059998	0.000194	0.00079309
Angpt2	-1.541961625	3.952071677	6.3422E-15	1.2272E-13
Rpl15	-1.542929491	5.122169448	1.20481E-16	2.62008E-15
Ndufs8	-1.544203494	6.342444747	1.08766E-10	1.36811E-09
Macrodl	-1.544705672	1.671071156	2.44531E-08	2.18922E-07
Snord15a	-1.545910143	1.192074592	0.000732339	0.002519403
Cbr3	-1.546412817	1.895399788	1.7719E-07	1.38382E-06
Hist1h3e	-1.548943696	6.572103133	7.89817E-10	8.92449E-09
Zcwpw1	-1.551451397	2.60991407	5.25285E-10	6.07715E-09
Wdr90	-1.551749219	3.351489446	1.55045E-06	1.02458E-05
Rps19	-1.559667197	5.729430956	1.36556E-05	7.44754E-05
Rcbtb2	-1.563522218	4.596156085	9.24681E-14	1.60009E-12
Uqcr11	-1.563683193	4.964598123	1.74786E-06	1.14557E-05
Avpi1	-1.566798962	4.441003105	2.38178E-11	3.21993E-10
Rasal1	-1.56751978	2.44303497	1.76554E-09	1.90606E-08
Cenpn	-1.56931908	5.010585547	1.04774E-19	2.80161E-18
Aarsd1	-1.569419706	5.519730915	6.35788E-11	8.18417E-10
Slc2a8	-1.569921826	1.810571879	5.97156E-06	3.52502E-05
Mafb	-1.570972596	3.082191686	5.63281E-08	4.73821E-07
Kif11	-1.573202256	8.372729207	1.22788E-19	3.25455E-18
Tmem143	-1.576283731	3.507123864	3.88684E-11	5.14549E-10
Kbtbd3	-1.576943405	1.345626815	3.79171E-06	2.30336E-05
Hist2h2ac	-1.578408982	8.10698849	6.7808E-14	1.18351E-12
1810011H11Rik	-1.578836574	3.892847503	9.85212E-12	1.38123E-10
Gpt	-1.580826516	2.080355392	5.24592E-08	4.43741E-07
Ndufa2	-1.582003308	5.127286725	1.73938E-05	9.24895E-05
Lsm11	-1.584281046	3.855717176	3.37382E-08	2.93164E-07
Mir99ahg	-1.587396458	3.531975782	1.59443E-09	1.73525E-08
Ckap2	-1.587559659	6.41460948	3.12862E-22	1.00257E-20
Cyb5rl	-1.588322432	2.73656689	2.32999E-08	2.09838E-07
Nuf2	-1.588450138	7.378213695	8.33462E-15	1.58988E-13
Ttc7	-1.588725357	6.129658897	1.39444E-12	2.12731E-11
Rps8	-1.591823593	6.541380013	1.19815E-05	6.63611E-05
Rmrp	-1.593111678	11.35682174	0.000610438	0.002149486
Spag4	-1.593463137	1.247167648	0.000157862	0.000659147
A830082N09Rik	-1.59380711	1.682114434	7.56709E-08	6.26522E-07
Hist1h3b	-1.59674447	6.911369347	7.96888E-18	1.8964E-16
Pmf1	-1.598220796	5.635754303	7.26852E-21	2.10128E-19
Ndufa11	-1.598388529	4.601899184	9.77311E-06	5.50357E-05
Snord22	-1.600762011	3.939307417	2.48271E-05	0.000127051
Nup37	-1.601800243	5.881316933	4.01818E-17	9.09761E-16
Smpd2	-1.604338122	1.998458009	0.000235452	0.000940643
Gpnmb	-1.608456637	8.009294654	1.10387E-07	8.88452E-07

Uqcrq	-1.609833948	5.686621216	0.001659303	0.005114283
Tmem9	-1.612203266	2.984506228	5.62595E-07	4.0063E-06
Hgh1	-1.613316236	3.661296753	2.05112E-05	0.000107184
AF251705	-1.61837425	4.017161712	2.18736E-08	1.98023E-07
Racgap1	-1.61841408	7.176587041	2.01615E-24	7.33381E-23
Trf	-1.620071104	3.110731761	4.81641E-08	4.08658E-07
Kif22	-1.620825639	6.012541707	1.03635E-15	2.13492E-14
Hist1h4b	-1.625667994	6.610655759	1.79529E-13	2.99537E-12
Slc44a2	-1.626450657	6.103586103	8.74817E-24	3.08042E-22
Pitpnm3	-1.62851014	2.183820503	2.79232E-05	0.000140229
Ankrd37	-1.629015949	2.386063167	4.42031E-07	3.21388E-06
Cdkn3	-1.631325038	4.137744037	7.33867E-17	1.62511E-15
Ppp2r4	-1.636543952	6.755745739	2.41061E-06	1.53199E-05
Myoz1	-1.639945693	2.073086969	2.65956E-08	2.36529E-07
Ndufb2	-1.641632912	4.486630779	1.32653E-08	1.24851E-07
Rrad	-1.642285077	2.083130634	2.29135E-05	0.000118157
2010300C02Rik	-1.642481398	1.829189465	1.79618E-08	1.65077E-07
Hist1h1d	-1.6425386	7.945144584	2.04436E-12	3.04592E-11
Cdkn2c	-1.643130973	5.258208193	2.31822E-21	6.98524E-20
Tigd5	-1.6449653	1.233570021	9.09733E-07	6.27182E-06
Cox16	-1.646992493	2.11628663	0.000548175	0.001953527
Mir682	-1.64786856	7.78177958	2.87777E-05	0.000143924
Snrpg	-1.651222333	4.088371152	2.76768E-06	1.73435E-05
Ube2i	-1.652966807	4.431388973	2.29295E-08	2.06809E-07
Pkd1l2	-1.653361833	2.426909976	7.47681E-08	6.2032E-07
M1ap	-1.655449136	2.660295296	9.35749E-11	1.18564E-09
Ptpn18	-1.657865751	6.448282942	7.52932E-26	2.99025E-24
Myom1	-1.658377578	3.239006656	3.03583E-08	2.66664E-07
Itga4	-1.659069867	9.748610411	2.90624E-16	6.23067E-15
Snora61	-1.660271701	1.200126123	0.000698381	0.002417688
Nrm	-1.661001517	4.23619202	9.24069E-16	1.91338E-14
Nr2f6	-1.663586882	3.888372958	1.30361E-06	8.72409E-06
Tmem107	-1.663670862	2.041823828	6.01982E-08	5.04275E-07
Crnde	-1.66565227	1.330234446	1.85369E-07	1.44397E-06
Cxxc5	-1.669204872	2.218792222	1.16878E-11	1.6273E-10
Ptma	-1.671156583	9.644706324	5.84752E-11	7.55934E-10
Mrps24	-1.671202384	4.813878542	3.57361E-05	0.000174053
Snora43	-1.671710921	1.284280102	0.000217831	0.00087865
Acaa2	-1.672760174	4.932936056	2.66799E-17	6.13232E-16
Cks2	-1.674943662	4.067540846	2.73061E-10	3.26192E-09
Kdsr	-1.682716778	4.479717083	3.04557E-20	8.44188E-19
Bckdha	-1.682910833	3.974023237	3.94083E-10	4.62551E-09
Eldr	-1.683330919	2.527750951	3.09368E-09	3.18926E-08
Tmed1	-1.683709441	3.265433805	2.03803E-06	1.31592E-05
Sesn1	-1.683779136	5.282620278	5.90883E-20	1.6012E-18

1110034G24Rik	-1.685742743	1.31794783	3.48557E-05	0.000170314
Kcnn4	-1.685840197	6.42599984	1.34433E-20	3.82249E-19
Prdx4	-1.686637792	6.063898387	1.1858E-07	9.50028E-07
Hyal1	-1.686912442	2.116001878	5.04268E-10	5.85077E-09
Zfp473	-1.68710059	1.725189277	2.92558E-10	3.47427E-09
Fut7	-1.688296435	1.786724881	3.41533E-10	4.03609E-09
Adamts10	-1.68858327	4.073973154	6.91136E-15	1.3352E-13
Pgls	-1.688662763	5.647292278	7.36748E-11	9.43364E-10
Mcf2l	-1.697803462	3.224053887	5.06125E-13	7.96193E-12
Lpar5	-1.697942451	1.789228401	2.82559E-07	2.14451E-06
4930461G14Rik	-1.698615679	1.886213577	8.18764E-12	1.15322E-10
Ccna2	-1.704536439	8.283109499	5.59925E-22	1.76166E-20
Lrfr4	-1.70457721	3.755850304	9.6707E-11	1.22405E-09
Hint2	-1.705642091	2.716677683	1.45832E-07	1.15304E-06
Pkn3	-1.706968509	4.864756826	5.65496E-18	1.36451E-16
Npm3	-1.7090084	3.865350895	0.000113582	0.000492417
Scrn2	-1.709747975	1.956314225	6.76697E-06	3.94458E-05
Knstrn	-1.710037293	6.903963899	1.36563E-20	3.87398E-19
Magef1	-1.710876195	1.668528527	4.09568E-09	4.1585E-08
Cd36	-1.711422291	6.005473031	2.64945E-20	7.37764E-19
Mfsd3	-1.713193492	1.829007652	0.000104562	0.000457902
Rassf3	-1.714547299	5.461973206	3.23007E-22	1.02963E-20
Ube2c	-1.716403727	6.792278641	3.68705E-27	1.52949E-25
Phyhd1	-1.723923072	1.901655681	1.67076E-09	1.81019E-08
Retsat	-1.724532004	6.095294097	9.02899E-23	2.98006E-21
Ydjc	-1.724903259	4.713523277	4.15716E-06	2.5115E-05
Myh7b	-1.728429833	3.01853436	7.70918E-12	1.09346E-10
2010107E04Rik	-1.728483134	5.444933812	1.66304E-05	8.88984E-05
Pax6	-1.729461541	4.579842484	5.15749E-12	7.42838E-11
Gm14403	-1.731084297	2.877657893	4.84533E-11	6.32451E-10
Cdc25c	-1.738028218	4.215461112	1.45141E-18	3.62493E-17
Rps2	-1.739052306	4.511818074	2.11911E-05	0.000110166
Rps21	-1.742624482	5.707891889	1.02617E-05	5.76531E-05
Fancd2os	-1.744898027	1.194519702	1.73746E-05	9.24279E-05
Ndrp2	-1.75159196	7.523612148	1.28738E-15	2.63412E-14
Cenpf	-1.753239439	8.351720419	5.92902E-15	1.15093E-13
Hsd3b7	-1.753681056	3.28352408	2.19597E-09	2.31705E-08
Atp5g1	-1.76231247	3.258150148	1.63736E-05	8.76418E-05
Ears2	-1.766346303	3.464778678	3.34588E-08	2.90945E-07
St6galnac6	-1.77049658	4.665976348	1.85525E-12	2.78127E-11
Mnd1	-1.770606505	3.041925643	1.30768E-14	2.44066E-13
Parpbp	-1.778494062	5.281398188	9.97551E-26	3.92316E-24
Pvrl3	-1.78259926	5.11684199	3.18163E-20	8.75889E-19
Ctsf	-1.783665678	4.30929515	4.01626E-17	9.09761E-16
Itgb5	-1.785935881	5.484667654	6.66796E-18	1.59939E-16

Rpl18	-1.79133696	4.616596408	0.000118636	0.000511766
Efcab11	-1.798151564	2.829445134	3.42167E-15	6.79453E-14
Pbk	-1.800211273	6.711498317	3.76486E-15	7.42732E-14
Mtfp1	-1.801005468	3.079428773	3.34738E-12	4.87928E-11
Timm8a1	-1.803831864	2.501665431	4.22619E-05	0.000201543
Tspo	-1.804252424	4.522307321	0.000133662	0.000569284
Klk8	-1.811125272	1.063726832	3.7766E-08	3.25533E-07
Sec16b	-1.815403881	1.542309647	1.63102E-07	1.28206E-06
Msh5	-1.81577986	2.241228629	3.99433E-09	4.06582E-08
Hnrnpa3	-1.817721232	4.011128668	1.50475E-07	1.18743E-06
Atg9b	-1.822050509	4.140966217	2.12631E-20	5.97586E-19
Tspan13	-1.822716137	1.509937171	1.56914E-09	1.70931E-08
Khk	-1.823678291	3.144838721	2.40731E-15	4.83578E-14
Slc5a3	-1.825900326	6.697019485	2.339E-18	5.77032E-17
Mgst2	-1.825999392	3.275539771	1.19106E-13	2.02631E-12
Bola1	-1.826419275	4.003097423	1.02639E-08	9.82606E-08
Notch4	-1.829587119	2.014181667	1.09599E-07	8.82698E-07
Spata5l1	-1.83151566	2.459485714	0.002719445	0.007807687
Sigirr	-1.833055248	1.932414859	7.15597E-07	5.00753E-06
Fam174a	-1.833234443	6.391712084	5.23632E-21	1.54701E-19
Ankrd34a	-1.834033585	1.414982715	1.15302E-08	1.09713E-07
Atp5e	-1.836337359	5.728092136	3.58409E-06	2.18711E-05
Uqcc2	-1.843309697	5.257545162	2.15912E-10	2.61469E-09
Rasgrp3	-1.843529088	8.293186736	6.66319E-21	1.94017E-19
Sbk1	-1.84451475	2.46605467	7.44811E-08	6.18362E-07
Fgf13	-1.846709092	1.148621969	1.95967E-09	2.09141E-08
Frmd4b	-1.847118297	6.945231424	2.01993E-15	4.07789E-14
9030617O03Rik	-1.857193648	5.698660018	2.98324E-28	1.33343E-26
Iqgap3	-1.863613668	5.485505674	6.5403E-24	2.34386E-22
Hist1h3a	-1.872738946	6.286361423	8.93429E-14	1.55045E-12
Mblac1	-1.875442215	1.35536942	5.72299E-10	6.60844E-09
1810043H04Rik	-1.87660967	2.905011628	8.63121E-05	0.000382841
Clec7a	-1.88035229	5.20033167	1.73361E-26	7.04672E-25
Ech1	-1.884040598	5.013542751	3.06388E-13	4.94178E-12
Myo1f	-1.891441156	6.83033972	1.00897E-31	5.22295E-30
H2afz	-1.893269279	5.604787689	2.60959E-20	7.28339E-19
Phgdh	-1.893273137	4.728628885	1.78845E-08	1.64584E-07
Fblim1	-1.897326239	3.158105458	5.93317E-16	1.24555E-14
Ptgs1	-1.901192674	6.357818791	6.82231E-30	3.23849E-28
Angptl4	-1.906946141	3.17724822	3.80691E-17	8.67266E-16
Rprl3	-1.908085398	7.226218339	0.000272918	0.001068334
Cst3	-1.90863445	9.672617913	1.32142E-15	2.69467E-14
Nutf2	-1.928334746	2.119047934	2.11639E-14	3.84922E-13
Hist1h3f	-1.930516209	6.360842815	4.76252E-10	5.56301E-09
Ntpcr	-1.93064121	2.899492405	8.90135E-13	1.37178E-11

Rnaseh2c	-1.93187587	3.853116521	8.90219E-08	7.29869E-07
Klc4	-1.93394135	4.712637794	2.15671E-23	7.42164E-22
Ank	-1.936097368	9.059846103	1.84091E-22	5.93058E-21
L3hypdh	-1.937518102	3.901195145	5.96088E-19	1.52009E-17
Rin1	-1.940095314	2.388247047	5.82655E-16	1.22529E-14
Cenpw	-1.944346672	3.772609067	1.30055E-10	1.61244E-09
Qpct	-1.945432142	1.830349456	1.05997E-10	1.33605E-09
Ankle1	-1.949001288	3.689208354	1.27049E-11	1.76484E-10
Rab26os	-1.951657763	2.372686801	2.10802E-08	1.91413E-07
Kif18a	-1.952227799	6.07835266	6.80688E-23	2.29033E-21
Hist1h4h	-1.952422743	7.323807034	6.22482E-11	8.02141E-10
Hist1h2bl	-1.95259701	6.322522402	6.0198E-07	4.2642E-06
Neurl2	-1.952737714	1.853744459	1.18733E-09	1.31343E-08
Hfe	-1.964239092	3.046276006	1.40078E-16	3.03536E-15
Hist2h3b	-1.968939465	6.440278684	3.80901E-17	8.67266E-16
Cx3cr1	-1.972954442	6.018280625	1.75088E-21	5.32874E-20
Frat1	-1.974798884	1.527347655	7.06536E-11	9.06596E-10
Cd109	-1.980089704	4.468967028	6.70486E-24	2.39575E-22
Ppm1j	-1.98167887	3.535711786	1.16744E-15	2.39681E-14
Ssbp4	-1.982075822	5.592518331	2.00045E-13	3.3103E-12
Nme3	-1.986785623	2.904937423	3.66181E-08	3.16599E-07
Nudt14	-1.988202616	3.151487265	1.68095E-08	1.55431E-07
Tfeb	-1.995728391	3.798197262	1.25174E-13	2.12357E-12
9930012K11Rik	-1.996024842	1.653363975	7.23616E-09	7.10304E-08
Tmem160	-1.998539298	3.167751584	7.03949E-05	0.000318407
Hist1h4f	-1.999558741	6.495763695	1.06927E-11	1.49735E-10
Susd3	-1.999999871	4.975322374	7.2723E-19	1.83138E-17
Rps7	-2.001120919	4.332370994	6.69908E-07	4.70957E-06
Cdc20	-2.001239475	6.322873157	9.44007E-29	4.25084E-27
Cenpm	-2.002474946	3.854287087	5.80654E-18	1.3983E-16
Rpl37	-2.0079751	3.702768903	3.01602E-06	1.8718E-05
Thap3	-2.011529624	2.734574796	2.42122E-07	1.8527E-06
Tbxas1	-2.011635216	1.740012367	6.4785E-13	1.01126E-11
Pwwp2b	-2.013365499	3.624240706	3.63672E-16	7.70132E-15
D830046C22Rik	-2.017481039	2.7141006	6.36194E-14	1.11362E-12
Ube2s	-2.028355841	2.328795758	7.30889E-06	4.23196E-05
Rabac1	-2.033832466	3.858611232	2.65268E-05	0.000134218
5031414D18Rik	-2.035981239	3.431991306	2.08822E-19	5.45142E-18
Rpl37a	-2.039632784	4.706757784	4.82977E-05	0.000226932
Depdc1b	-2.046810707	3.78271169	3.40115E-19	8.80303E-18
1110001J03Rik	-2.049900942	2.676455019	1.55001E-06	1.02458E-05
Angptl2	-2.050505567	7.555801942	6.22703E-25	2.32802E-23
Serpinb1c	-2.054482026	1.02598982	2.29918E-10	2.76838E-09
Tspan4	-2.054847698	5.32691312	2.12876E-06	1.37012E-05
Ppp1cc	-2.063607958	3.401130512	1.67051E-05	8.91799E-05

Arhgap15	-2.066244627	3.78771051	6.57437E-22	2.06309E-20
Hist1h2ai	-2.066804298	6.574630348	3.60382E-12	5.24047E-11
Ube2cbp	-2.071612204	1.664886429	1.10003E-08	1.04919E-07
Mcrs1	-2.072258537	3.116574946	8.90569E-08	7.29869E-07
Pif1	-2.072836645	4.451505113	5.56572E-26	2.23237E-24
Mmp8	-2.073073292	5.487286278	1.91869E-31	9.84791E-30
Hist1h2bf	-2.074211419	4.122714161	4.97113E-09	5.01377E-08
Ccnb2	-2.076543189	7.069435963	2.07414E-34	1.17402E-32
Alox5	-2.076719879	4.814218124	2.99178E-13	4.83837E-12
Ocstamp	-2.07722033	2.701040712	5.99451E-16	1.25625E-14
Mrpl36	-2.0818483	4.723438738	5.16413E-09	5.17824E-08
Chst3	-2.084355106	3.708660515	1.73802E-22	5.61405E-21
Fcna	-2.08591804	3.037671096	2.15471E-12	3.19462E-11
Cbx3	-2.086942656	2.772084784	1.11654E-05	6.21686E-05
Plxdc1	-2.088643015	1.146120114	2.23392E-10	2.69517E-09
Gpx1	-2.102123973	8.461541967	5.39891E-32	2.83104E-30
Hist1h2ac	-2.103945948	4.736965631	7.09467E-10	8.05415E-09
Emp2	-2.11650246	2.019940932	1.37353E-11	1.90144E-10
5730408K05Rik	-2.120969064	3.257150742	2.88784E-05	0.000144368
Rps15a-ps6	-2.124687023	3.827959601	1.15258E-05	6.39833E-05
Sun2	-2.126430084	4.80274928	4.95711E-23	1.67258E-21
Hmx2	-2.133534108	2.496058078	2.35492E-08	2.11768E-07
Fam13c	-2.134805632	3.224050686	3.84472E-12	5.57071E-11
Hpgds	-2.138573385	5.840125631	2.78186E-23	9.51882E-22
Dgkg	-2.13868452	4.165669816	3.61383E-27	1.50427E-25
Klf4	-2.144234581	2.737150958	9.43787E-17	2.07479E-15
1110065P20Rik	-2.144599647	1.432076185	0.0001229	0.000528842
B930041F14Rik	-2.144670381	1.348370943	4.38313E-12	6.34323E-11
Gcat	-2.146519023	4.891762419	1.96826E-11	2.68486E-10
Dner	-2.147086982	4.007405247	1.06196E-17	2.51241E-16
Oxld1	-2.153159281	2.026148059	9.03848E-14	1.56628E-12
Hist3h2ba	-2.154781183	1.244974092	1.78343E-05	9.47072E-05
Gas6	-2.156146401	1.330688982	1.82029E-11	2.49425E-10
Metrn	-2.15910454	4.012723298	9.28356E-08	7.58272E-07
Myo7b	-2.160643464	1.102618768	4.28064E-07	3.1217E-06
Hist2h2ab	-2.166010848	5.007896	6.0961E-29	2.7553E-27
Fam195a	-2.168096089	3.191700928	2.54783E-09	2.6628E-08
Tk1	-2.176306353	5.200449177	6.609E-14	1.15519E-12
Hist1h2an	-2.179561559	6.082566847	1.29038E-10	1.60148E-09
Tsc22d3	-2.19169581	3.253924755	2.88281E-22	9.26246E-21
Rgs2	-2.196749584	6.108841383	6.81827E-31	3.35731E-29
Lhfp12	-2.198598404	5.801249203	1.29972E-38	8.74638E-37
Rpl38	-2.209398863	3.236196757	0.000267684	0.00105172
Usp2	-2.209664503	3.29867626	3.84979E-19	9.92182E-18
Rdm1	-2.21136383	2.606092296	2.80661E-09	2.91565E-08

Acp5	-2.220597552	3.659308131	2.53795E-20	7.0998E-19
Myb	-2.231459606	2.768268448	1.85695E-14	3.39265E-13
Nusap1	-2.233249598	7.152532923	5.86499E-34	3.24396E-32
Mir6516	-2.244178596	1.635484502	3.79084E-05	0.000183453
Gm15421	-2.247371889	4.881772777	9.46545E-07	6.51214E-06
Fam64a	-2.264624879	5.742137337	1.38156E-36	8.62623E-35
Kifc3	-2.26939058	5.214862212	1.06826E-22	3.51626E-21
Ctsh	-2.275560161	3.410073593	1.40469E-20	3.96621E-19
Nr0b2	-2.284374563	2.016271539	3.51422E-15	6.9669E-14
Hist1h2bb	-2.291428649	7.809295336	1.58345E-19	4.17873E-18
Ccnb1	-2.293714887	6.047755409	4.00695E-36	2.439E-34
Cytip	-2.298455042	3.249852143	3.17604E-16	6.74936E-15
Adssl1	-2.310336045	5.103320243	1.93386E-19	5.06114E-18
Cxcl14	-2.315692705	6.92533226	1.67541E-41	1.24504E-39
Marveld1	-2.320229443	4.112264376	4.66087E-21	1.38375E-19
Mgst3	-2.334520759	4.923445861	4.45156E-23	1.50619E-21
Igfbp4	-2.338420528	6.913049681	8.0688E-32	4.19473E-30
Cdc25b	-2.33842762	5.842824421	1.47509E-40	1.06992E-38
Sapcd2	-2.342329884	4.611580252	1.93767E-30	9.38838E-29
Aspm	-2.345537353	8.3861945	3.3774E-27	1.41071E-25
Smpdl3a	-2.354861161	3.132601837	8.238E-25	3.04228E-23
Agmo	-2.362118685	3.755327126	7.05016E-28	3.07189E-26
Grcc10	-2.3621837	4.953052955	1.15837E-21	3.59778E-20
Ahnak	-2.36632485	11.1281946	8.4767E-24	3.01109E-22
Hist1h2bh	-2.366842694	5.142231328	2.14262E-08	1.94263E-07
C130050O18Rik	-2.371987936	4.537640471	1.17037E-35	7.01709E-34
Sepp1	-2.389855046	2.164310482	3.14505E-12	4.59952E-11
Spink5	-2.390354088	4.929116257	2.25212E-30	1.08685E-28
Hexb	-2.419542566	6.831689841	2.00502E-15	4.05457E-14
Rps14	-2.421129194	6.442526914	5.0099E-06	2.98353E-05
Hist1h1c	-2.426745101	8.956620149	7.88961E-11	1.00809E-09
Rpl34	-2.431687352	1.050709037	0.00020537	0.000833381
Trem2	-2.432473009	6.958847422	9.93936E-41	7.25274E-39
Hist1h4c	-2.433371715	7.114288887	1.27142E-09	1.40007E-08
H2afx	-2.433555708	7.666695378	3.35151E-09	3.4375E-08
St6gal1	-2.447223445	5.059118948	3.53426E-41	2.59457E-39
Slc40a1	-2.471061164	5.550831652	8.67352E-20	2.33472E-18
Fam83d	-2.471601107	3.593886361	1.58684E-18	3.95503E-17
Map2k6	-2.474799178	1.680045595	1.40463E-14	2.60955E-13
Rpl22l1	-2.488724336	3.633319695	5.68105E-07	4.03841E-06
Frat2	-2.489180111	1.028062564	4.88794E-11	6.36641E-10
Fgd2	-2.493936991	4.230232849	2.34002E-29	1.07774E-27
Hist1h2bj	-2.498948039	6.069098389	1.94246E-07	1.50827E-06
Id3	-2.501694524	5.256181766	2.48739E-10	2.9802E-09
Hist1h4k	-2.501782772	7.528496111	3.87662E-09	3.95495E-08

Sh2d3c	-2.503897775	2.114895145	6.83067E-21	1.98417E-19
Gm14322	-2.511437121	1.084213926	3.2163E-13	5.17384E-12
Slc16a12	-2.531580747	6.522961623	1.3611E-34	7.77688E-33
St8sia4	-2.536719846	8.779389027	1.27079E-39	8.94949E-38
Snora74a	-2.553102313	4.472546516	2.7481E-05	0.000138468
Col25a1	-2.561335509	1.323554248	2.65432E-17	6.1125E-16
AI504432	-2.586923019	1.567809797	2.45218E-14	4.43994E-13
Hist1h4a	-2.590186975	6.667949443	2.64483E-13	4.29448E-12
Smad6	-2.607112701	3.01521855	7.48594E-18	1.7885E-16
Hspb7	-2.634334794	1.596939129	9.32636E-11	1.18293E-09
Hist1h3i	-2.646843451	6.984697206	1.58928E-13	2.67003E-12
Ppfia4	-2.65727161	4.524712984	1.48343E-26	6.05011E-25
Rnase4	-2.664794917	2.487030598	6.57835E-25	2.44813E-23
Hist1h4i	-2.684739802	6.432952264	1.76693E-13	2.95212E-12
Calml4	-2.697199355	1.70622976	2.93664E-14	5.26605E-13
2700094K13Rik	-2.738631445	5.268993982	6.19507E-19	1.57649E-17
Hist1h1b	-2.744720153	8.763951919	1.75599E-12	2.63573E-11
Cenpa	-2.795557903	5.910553886	1.7882E-19	4.70879E-18
Cfh	-2.801304823	6.179117828	9.19014E-56	1.03074E-53
Hist1h2ag	-2.80803447	5.179574058	1.57403E-12	2.38328E-11
Endog	-2.830622894	2.265110888	2.02428E-10	2.45692E-09
Kbtbd11	-2.841162047	7.070982991	5.08489E-49	4.56246E-47
Prkar1b	-2.842722183	1.237991594	3.62685E-13	5.80343E-12
Rab3il1	-2.842798642	5.150157312	3.328E-38	2.17903E-36
Serpinf1	-2.85645183	2.562750035	6.90923E-23	2.31832E-21
Crip1	-2.860927316	5.846523763	6.32367E-15	1.22558E-13
Ndrg4	-2.865758673	5.055310195	8.29755E-42	6.24274E-40
Dbp	-2.890631426	1.780932049	4.69498E-19	1.20488E-17
Hist1h2ae	-2.896319087	3.47507628	9.60828E-09	9.2516E-08
Cacng8	-2.911082891	1.781452623	2.79775E-12	4.10778E-11
Snora78	-2.914220501	2.03112191	7.7903E-05	0.000349626
Rps15a-ps4	-2.978940368	1.880727258	2.9528E-07	2.23266E-06
Arhgef39	-2.979856979	4.352717886	4.34449E-28	1.92061E-26
Clec4a2	-2.995648264	3.758603705	2.37189E-27	1.0081E-25
Scarna6	-3.008126498	3.747217656	8.58513E-06	4.90295E-05
Hist1h2bm	-3.036417249	7.412307603	2.88839E-14	5.19096E-13
Rarb	-3.045749608	1.850607467	6.21671E-21	1.81891E-19
Terc	-3.064861296	4.443642588	2.86007E-07	2.16796E-06
Hist1h3c	-3.077612017	6.854299252	4.33824E-13	6.87815E-12
Hist1h2bp	-3.081127756	4.056153643	1.28825E-10	1.60047E-09
Lyz1	-3.087101742	6.064407006	1.62815E-34	9.25907E-33
Hist1h2ah	-3.107094308	4.600726776	1.83758E-11	2.5151E-10
Cst7	-3.116917501	5.358007024	4.12969E-24	1.48878E-22
Fam81a	-3.117077026	1.238096595	4.80525E-18	1.17115E-16
2310040G24Rik	-3.163315546	1.804821447	1.44697E-15	2.9408E-14

Psrc1	-3.164245979	4.230289933	3.93324E-49	3.58221E-47
Abca9	-3.182804925	4.772934283	4.57841E-49	4.13867E-47
Rgs8	-3.206867799	2.000529402	7.63908E-28	3.31656E-26
Amz1	-3.209317316	3.389937302	8.31353E-18	1.97454E-16
Cxcr4	-3.31015104	2.736498997	4.95839E-27	2.04289E-25
Neurl1b	-3.314650246	4.312884893	1.45991E-39	1.02219E-37
Gpr141	-3.31926699	2.628998255	5.07083E-31	2.52769E-29
Syng1	-3.326598237	3.970751741	5.20294E-21	1.54091E-19
Gpr183	-3.330800546	6.686616264	1.27997E-80	2.247E-78
Hp	-3.349909939	1.047197435	5.494E-16	1.15737E-14
Slamf8	-3.363153556	1.439449421	8.60403E-25	3.1678E-23
F630028O10Rik	-3.3892693	3.488902814	2.33118E-31	1.18149E-29
Hist1h2bk	-3.39266761	6.022465004	1.15018E-09	1.27467E-08
Cd24a	-3.422163569	2.15181067	8.1143E-24	2.89084E-22
Scel	-3.442796607	2.774432736	9.23124E-24	3.2411E-22
Zfp651	-3.47262675	3.667992898	2.53387E-38	1.6772E-36
Hist1h2bg	-3.487207107	5.667382014	6.54208E-10	7.46882E-09
Tmem119	-3.50195143	1.355164196	1.72666E-22	5.59224E-21
Eno3	-3.515658376	5.016722838	5.67514E-50	5.28792E-48
Icam2	-3.56191338	1.389197474	1.17173E-23	4.08803E-22
Itga8	-3.568807821	1.551573809	3.78413E-28	1.68519E-26
Serpinb12	-3.570854428	3.044631305	3.94971E-28	1.75248E-26
Lifr	-3.69861439	2.026278259	1.47145E-30	7.18695E-29
Dlg3	-3.748924716	2.343593422	4.7143E-38	3.05371E-36
S1pr1	-3.775976416	4.512677636	1.2567E-54	1.32369E-52
Hist1h4n	-3.904015232	6.553581311	1.08823E-11	1.52039E-10
Myadml2	-3.912907927	1.504583419	2.99182E-27	1.25833E-25
Gamt	-3.917326455	2.103655091	3.02386E-14	5.41034E-13
Mir703	-3.958716242	1.692503166	4.91111E-07	3.53886E-06
Zfyve28	-3.981250399	1.336609945	8.60229E-26	3.40521E-24
Hist1h4j	-3.989056071	6.790896751	1.35853E-10	1.6826E-09
Scarna10	-3.99627026	3.251820751	1.23464E-06	8.29921E-06
Col15a1	-4.013171425	2.217660234	1.1578E-30	5.67789E-29
Hist1h2ab	-4.018921509	5.925466997	1.08382E-09	1.20444E-08
Bdh2	-4.05793841	2.651175655	1.85549E-18	4.59622E-17
Apbb1	-4.076166957	1.035392017	3.6863E-18	9.02065E-17
Gpr176	-4.092553272	2.492745777	1.9885E-17	4.60549E-16
Opcml	-4.111319741	1.278730134	2.41259E-23	8.27867E-22
Olfml3	-4.157584771	2.158456149	3.60309E-30	1.72507E-28
Odf3l1	-4.202430539	1.080295487	1.17447E-23	4.08803E-22
Mir1949	-4.202773564	2.946086498	3.58278E-07	2.65595E-06
Scarna2	-4.321301401	3.748036099	1.18117E-06	7.98407E-06
Gm5086	-4.527781738	1.886058388	1.70709E-25	6.58536E-24
Igf1	-4.677942212	3.32955004	7.63504E-47	6.51291E-45
Hist1h3h	-4.684402837	5.86677888	4.81626E-11	6.29336E-10

Hist1h2ad	-4.877444202	2.999028544	3.41949E-07	2.54894E-06
Aqp1	-5.526863896	4.240697094	8.85533E-61	1.08348E-58
Tgfb1	-5.537157616	1.333118578	4.21063E-40	3.01795E-38
Cldn11	-6.495156642	3.67251885	4.3903E-103	9.3297E-101

Supplementary Table 2. qPCR primers used in this study (mouse and human)

Gene ID	Forward (5'-3')	Reverse (5'-3-)	Species
Isg15	AAGCAGACTCCTTAATTCCAG	CCTCCATGGGCCTTCCCTCGA	Mouse
Irf7	CTGGAGCCATGGGTATGCA	AAGCACAAGCCGAGACTGCT	Mouse
Stat1	GCAAGCGTAATCTCCAGGA	GGCTTACCTTCTCTGTTCT	Mouse
Il1b	AAGGAGAACCAAGCAACGACAAAA	TGGGGAActCTGCAGACTCAAAct	Mouse
Il6	GATGGATGCTACCAAActGGA	TCTGAAGGActCTGGCTTTG	Mouse
Il12a	CCACCCTTGCCCTCCTAAAC	GGCAGCTCCCTCTTGTTGTG	Mouse
Ifnb	TCCCTATGGAGATGACGGAG	ACCCAGTGCTGGAGAAATTG	Mouse
Oas2	ATGCCACTTTTCGTCActCC	CCTGAGGGTGAAGTCAGACC	Mouse
Ddx58	CAGTACATTcAGGCTGAG	GGCCAGTTTTcCTTGTC	Mouse
Cd40	GTTTAAAGTCCCGGATGCGA	CTCAAGGCTATGCTGTCTGT	Mouse
Ifih1	GGCACCATGGGAAGTGATT	ATTTGGTAAGGCCTGAGCTG	Mouse
Dhx58	GAGACCTGGAGGAACCATCA	CCCTCGAGGTGTTTCCAGTA	Mouse
Tnfa	CAGCCTCTTCTCATTcCTGC	ATGAGAGGGAGGCCATTG	Mouse
Ccl4	CTCTCCTCTTGCTCGTGCC	GTAActCAGTGACCCAGGGCTC	Mouse
Cxcl11	GGTCACAGCCATAGCCCTG	AGCCTTCATAGTAACAATCACTTCAAC	Mouse
Cxcl10	CTTGAAATCATCCCTGCGAGC	TAGGActAGCCATCCActGGG	Mouse
Gapdh	AGCTTGTCATCAACGGGAAG	TTTGATGTTAGTGGGGTCTCG	Mouse
Isg15	ACTCATCTTTGCCAGTACAGGAG	CAGCATCTTcACCGTCAGGTC	Human
Ifnb	CAGCAATTTTcAGTGTCAGAAGC	TCATCCTGTcCTTGAGGCAGT	Human
Il6	GGCACTGGCAGAAAACAACC	GCAAGTCTCCTCATTGAATCC	Human
b-actin	ATGTACCCTGGCATTGCCGACA	GACTCGTCATACTCCTGCTTGT	Human