

The dynamic emergence of GATA1 complexes identified in *in vitro* embryonic stem cell differentiation and *in vivo* mouse fetal liver

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Title

The dynamic emergence of GATA1 complexes identified in *in vitro* ES differentiation and *in vivo* mouse fetal liver

Authors

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Supplementary data

Figure and Table Legends

Figure S1. Nuclear extract fractionation and GATA1/LDB1/FOG1 immunoprecipitation during ES cell differentiation

Panel A: Western blot of a number of relevant transcription factors that are part of the GATA1/FOG1 or GATA1/LDB1 complexes. At this stage of differentiation, the expression of GATA1 is still low when compared to MEL cells or Fetal Liver (FL) cells, although it should be noted that the day 4 and 5 differentiated ES cells are a mixture of early hematopoietic cells and other cell types.

Panel B: Size fractionation experiment of nuclear extract at day 4 of ES cell differentiation. The NE from fetal liver (FL) and MEL cells are the positive controls for protein detection. The GATA1/LDB1 complex fractionates around 670 kd (fractions 24 and 25), while the GATA1/FOG1 complex fractionates around 250-300 kd (fractions 27 and 28). The fractionation was carried out on the day 4 mixture of cells when the expression of several of the TFs is still very low, e.g. LMO2 (fractions 23 and 24).

Western blot of transcription factors in GATA1, LDB1 and FOG1 IP samples in wild-type ES cell differentiation at day 4 (**Panel C**), day 5 (**Panel D**) and in Ldb1-KO at day 5 (**Panel E**). VCP was used as an internal loading control.

Figure S2. Immunofluorescence on E12.5 fetal liver tissue

Immunofluorescent staining of LDB1, GATA1 and FOG1 proteins on section of mouse fetal liver tissue on E12.5. LDB1 protein (labeled with Cy3) or FOG1 protein (labeled with Cy3) which was co-stained with GATA1 (labeled with FITC) were shown on the same slide of fetal liver tissue or on MEL cells as positive control. Secondary antibody alone functions as a negative control. All scale bars represent 20 μ m.

Figure S3. Selected gene in RNA-seq across differentiation stages in sorted fetal liver cells

The read-count of duplicates of RNA-seq data from each P1 to P4 population were averaged. Gene expression pattern of selected genes in P1 to P4 populations is shown.

Figure S4. LDB1 and GATA1 KD effects on erythropoiesis

Panel A: Western blot detection of LDB1 and GATA1 knockdown efficiency in fetal liver cells on day1 (D1) to day3 (D3) using empty vector, pLL3.7 and two independent LDB1 shRNAs and one GATA1 shRNA, respectively. VCP was used as an internal loading control.

Panel B: FACS analysis of LDB1-KD or GATA1-KD in fetal liver cells at day3 based on TER119 and CD71. The four populations are described in **Figure 3A**. “Relative ratio versus control” in each population is shown, referring to the cell numbers normalized to the control shRNA in each population. For LDB1-KD, the analysis is separated by two types of cells, “GFP⁺ cells” or “All cells”, while only “All cells” is shown for GATA1-KD. Error bars present standard error of the mean (sem) from three biological replicates.

Table S1. RT-qPCR primers

RT-qPCR primers for mouse genes used in this study are listed.

Table S2. Antibodies used in WB, immunofluorescence and PLA

Antibodies used in this study for Western blot (WB), immunofluorescence and PLA.

Table S3. Differentially expressed gene list in each comparison

Significant up- or down-regulated differentially expressed genes (in **Figure 3D**, Log₂ fold-change >0.6 or <-0.6 and p-val<0.01), are listed in each comparison of P1 vs P2, P2 vs P3, and P3 vs P4.

Figure S1. Nuclear extract fractionation and GATA1/LDB1/FOG1 immunoprecipitation during ES cell differentiation

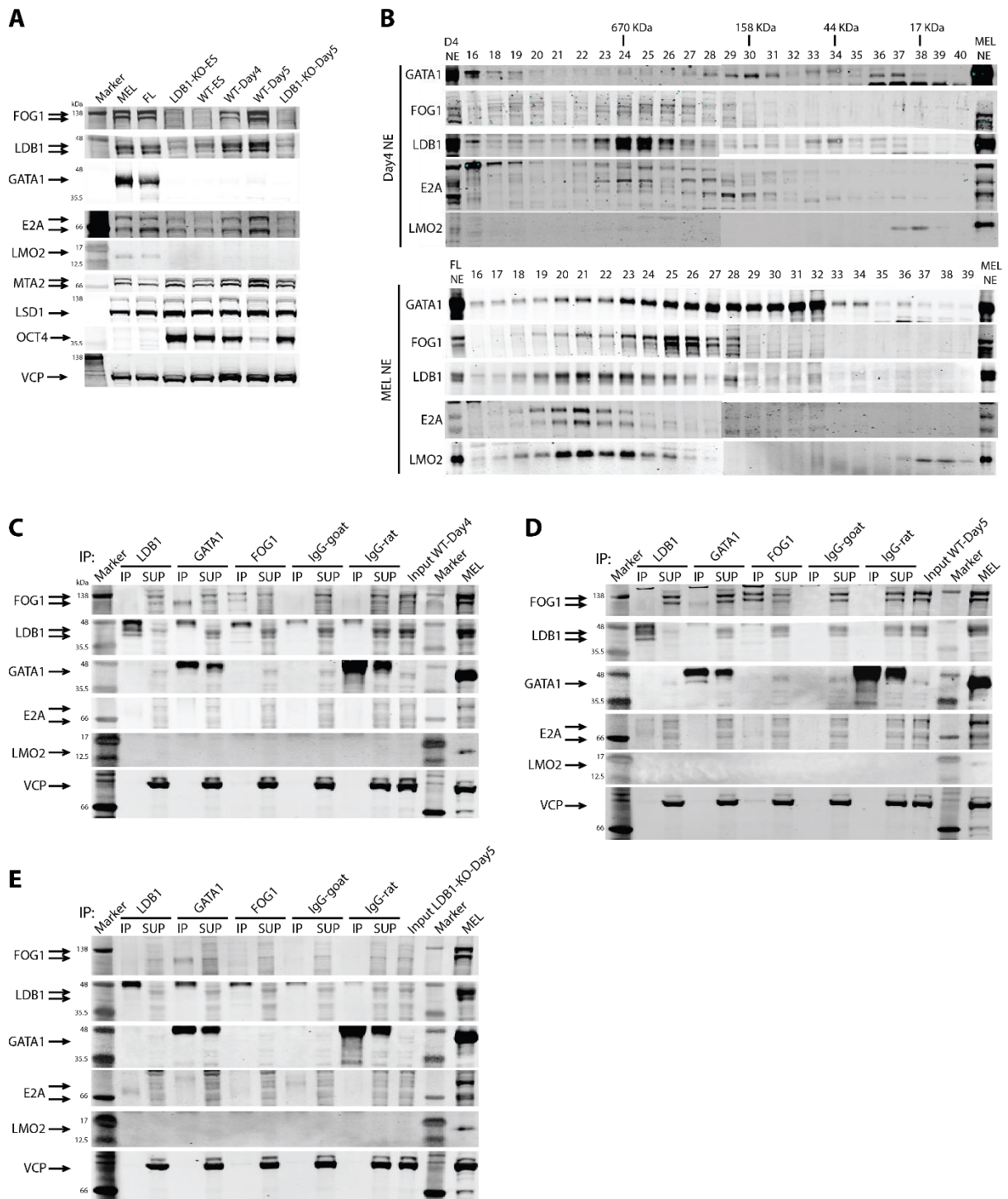


Figure S2. Immunofluorescence on E12.5 fetal liver tissue

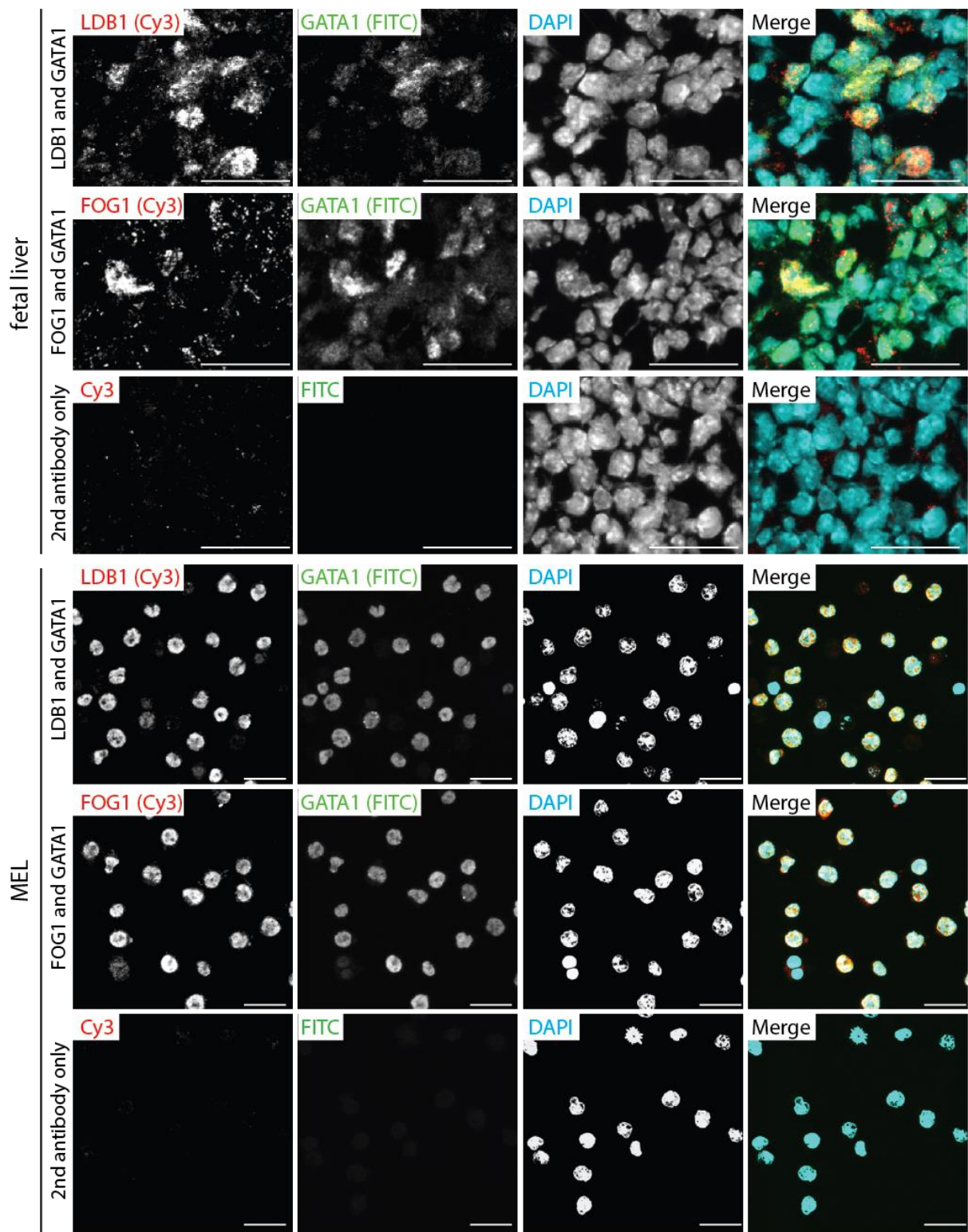


Figure S3. Selected gene in RNA-seq across differentiation stages in sorted fetal liver cells

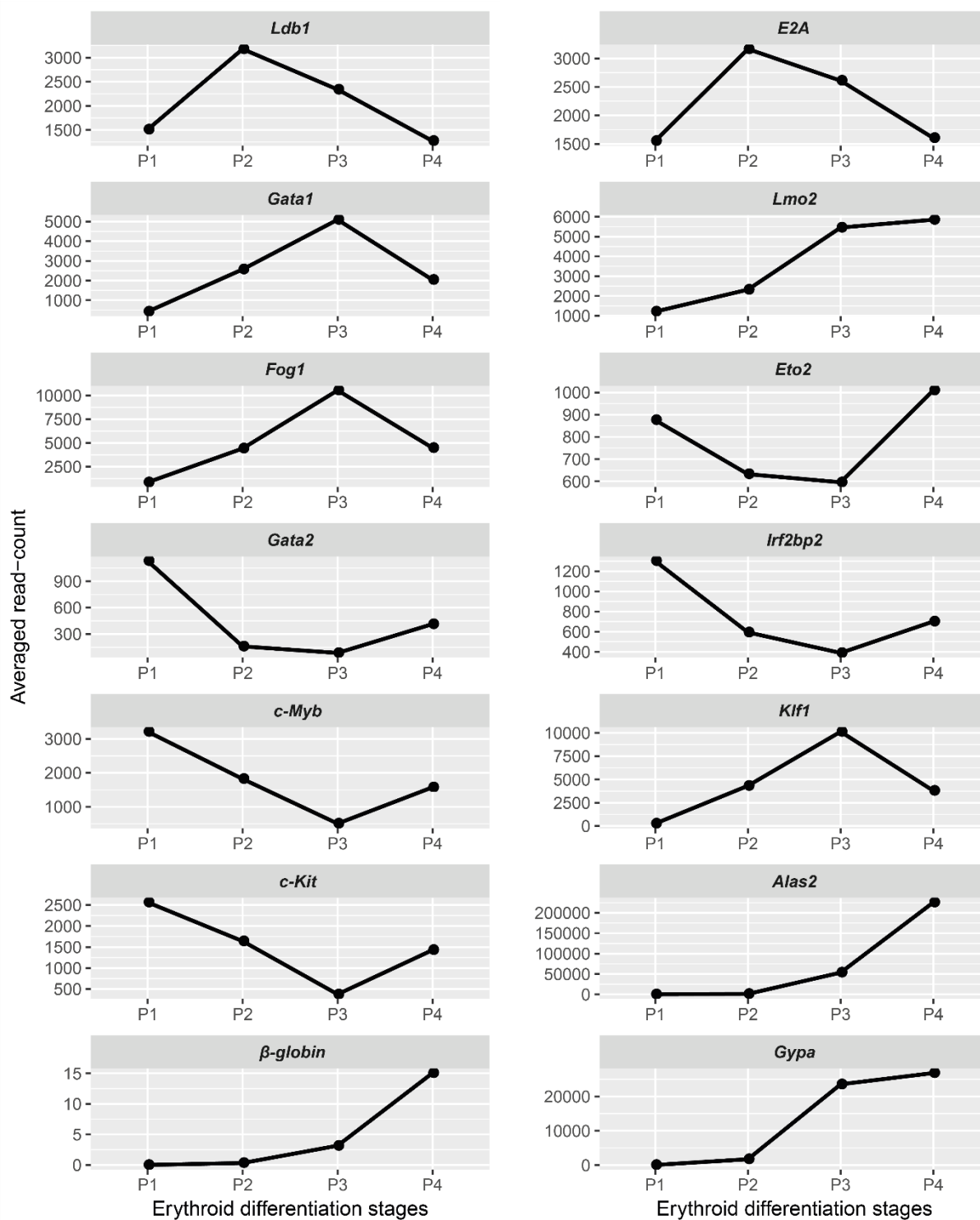


Figure S4. LDB1 and GATA1 KD effects on erythropoiesis

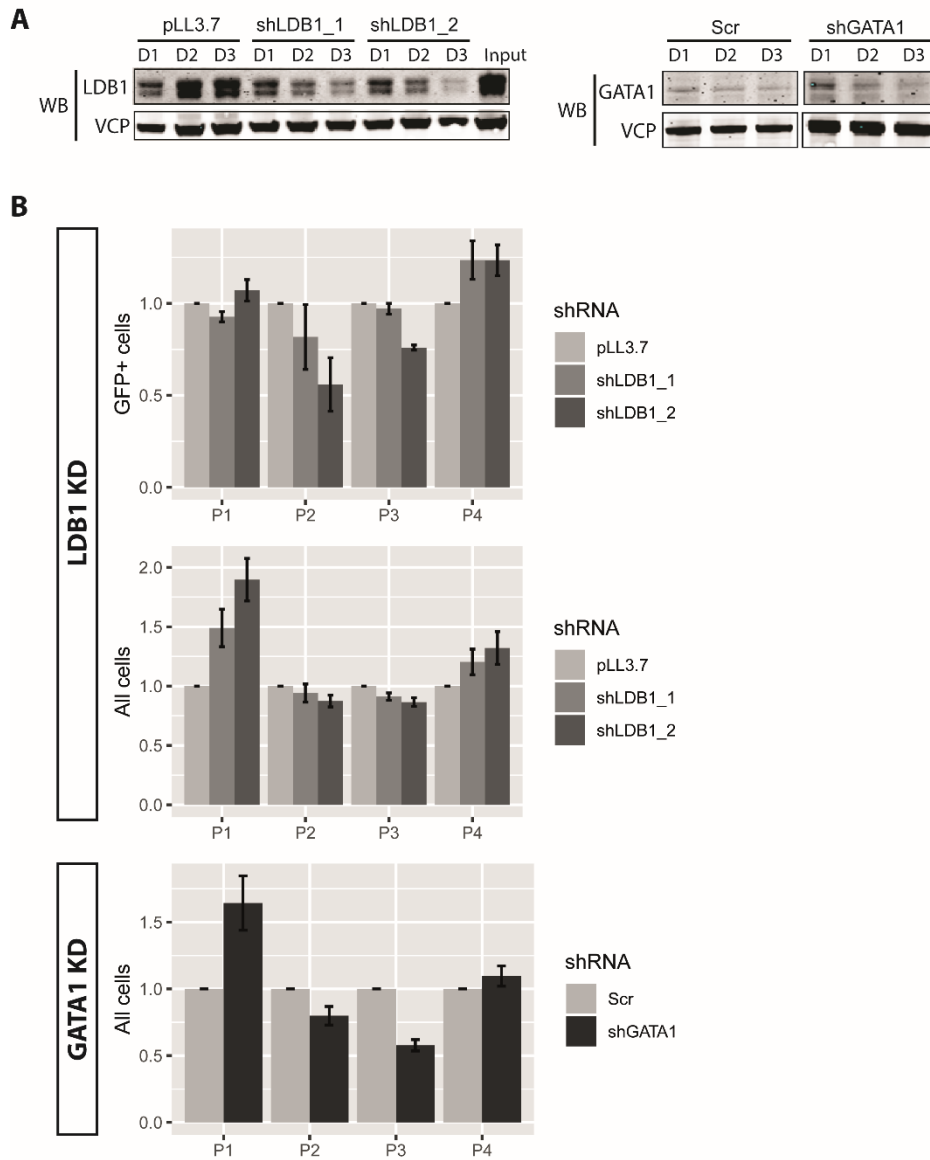


Table S1. RT-qPCR primers

	sense	antisense
<i>Ldb1</i>	GTGACAATCTCTGGTGGGA	GGAAGTAGCGTGGTATCAG
<i>Gata1</i>	CATTGGCCCCTTGTGAGGCCAGAGA	ACCTGATGGAGCTTGAAATAGAGGC
<i>Gata2</i>	GCAGAGAAGCAAGGCTCGC	CAGTTGACACACTCCCGGC
<i>Fog1</i>	CTGAAGAAGCCGCAACTCA	AAGGCGCACATATAGCAGTCC
<i>c-Kit</i>	TCAGCAAATGTCACAACAAC	GCCTCGTATTCAACAACCA
<i>β-globin</i>	CTGACAGATGCTCTCTTGGG	CACAACCCAGAAACAGACA
<i>Flk1</i>	CACCTGGCACTCTCCACCTC	GATTTTCATCCCACTACCGAAAG
<i>Lmo2</i>	CGAAAGGAAGAGCCTGGAC	CCCTATGTTCTGCTGGCA
<i>Tal1</i>	AGGCAGTGGGTTCTTTGG	ACTACTTTGGTGTGAGGACC
<i>Rex1</i>	CGTGTAACATACACCATCCG	GAAATCCTCTTCCAGAATGG
<i>c-Myb</i>	AAGAAAGTGCCTCACCAGC	ATCACACCACGAAGAATCAG
<i>Rnh1</i>	TGCAGGCACTGAAGCACCA	TCCAGTGTGAGCAGCTGAG

Table S2. Antibodies used in WB, immunofluorescence and PLA

Target protein	Catalog number	Company
LDB1	sc-11198	Santa Cruz Biotechnology
GATA1	sc-1234 or sc-265	Santa Cruz Biotechnology
LMO2	ab72841	Abcam
TAL1	sc-22809	Santa Cruz Biotechnology
E2A	sc-349	Santa Cruz Biotechnology
FOG1 (for WB)	sc-9362	Santa Cruz Biotechnology
FOG1 (for IF)	sc-9361	Santa Cruz Biotechnology
FOG1 (for PLA)	sc-10754	Santa Cruz Biotechnology
ETO2	sc-9737	Santa Cruz Biotechnology
Goat IgG	sc-2028	Santa Cruz Biotechnology
Rat IgG	sc-2026	Santa Cruz Biotechnology
Rabbit IgG	sc-2027	Santa Cruz Biotechnology
CD71-FITC	553266	BD Pharmingen
TER119-PE	553673	BD Pharmingen
Rabbit anti-CD71	sc-9099	Santa Cruz Biotechnology
Goat anti-Rabbit A647	A21245	Invitrogen

Table S3. Differentially expressed gene list in each comparison

P1 vs P2

upregulated	symbol	pval	log2foldchange.	downregulate	symbol	pval	log2foldchange
	Pdia2	2.32E-77	7.240704809		Rhbdf2	0.022398863	-0.600071465
	Slc30a10	3.67E-96	6.408759573		Znf512b	0.00640341	-0.604118716
	Abcg4	7.78E-79	6.316505666		Pim1	0.003833131	-0.606040584
	Gm2061	3.67E-24	6.078182083		Ppm1f	0.004096391	-0.606977025
	Atp7b	6.86E-82	5.923033689		Megf8	0.019103232	-0.608797922
	Nxpe2	1.47E-88	5.760353459		Chd2	0.006029891	-0.61306766
	Redrum	7.84E-54	5.673095264		Pdxk	0.002487594	-0.616986472
	Add2	3.68E-117	5.669835584		Ptpn7	0.002064753	-0.618255147
	Tac2	3.87E-07	5.569337671		B4galt1	0.002040778	-0.631234317
	Aqp3	1.41E-50	5.564652589		P3h1	0.045850177	-0.636952863
	Pklr	3.75E-117	5.546670567		Acads	0.00447673	-0.64033819
	Btnl10	3.86E-12	5.374831826		Klf13	0.001729581	-0.64568306
	Cldn13	4.56E-28	5.369200399		Tspan6	0.029710545	-0.664293613
	Slc26a1	8.74E-83	5.264036052		Tcf4	0.00373842	-0.667973382
	Plek2	1.05E-36	5.136551349		Prrc1	0.003576837	-0.669212473
	Gsta4	8.26E-39	4.972063878		Elov5	0.001878078	-0.669277691
	Hemgn	1.65E-56	4.937155546		Malat1	0.004604384	-0.67927906
	6030468B19Rik	3.05E-49	4.932191467		Ptov1	0.003154105	-0.680489972
	Pkhd111	1.22E-26	4.876798504		Kit	0.001459268	-0.681106777
	Apol8	5.02E-25	4.852791263		Tyk2	0.002780664	-0.684669244
	Gfap	4.75E-13	4.708131365		Hadh	0.00279685	-0.69288663
	Mrap	2.46E-25	4.698490455		Prr13	0.002542793	-0.700321204
	Popdc2	5.53E-12	4.672510521		Gpi1	0.043329051	-0.704919714
	Dmtn	4.12E-66	4.625586537		Rit1	0.020249652	-0.705387193
	Tspan33	2.17E-72	4.357827438		Mapre2	0.000375485	-0.714681793
	Mt2	2.24E-39	4.298918153		Neil3	0.018111605	-0.719000966
	Epdr1	1.74E-47	4.190066971		Stat6	0.000639392	-0.720632226
	Atp1b2	3.18E-71	4.08515303		Fyb	0.00117412	-0.739647581
	Lmna	4.26E-57	4.075282348		Ssfa2	0.00165687	-0.742470251
	Cpox	3.85E-74	3.987475043		Impdh1	0.00211179	-0.756561024
	Klf1	4.07E-70	3.974792974		Pdia5	0.016021896	-0.767919323
	Slc38a5	3.06E-29	3.961414443		Glyr1	8.66E-05	-0.769405515
	Slc39a8	7.23E-36	3.941275833		Bcl2l1	0.003709959	-0.769573668
	Dnaja4	7.34E-23	3.933036243		Sema4d	0.000184605	-0.772774092
	Icam4	6.28E-46	3.931059274		Slc35c2	0.000492571	-0.773092375
	Podxl	1.76E-09	3.922093495		Pcyox1	0.000312879	-0.783037997
	Prss50	6.47E-19	3.898011587		Tbl1xr1	0.000195815	-0.786140045
	Myl7	0.000239648	3.814740306		Gimap9	0.010526244	-0.786858813
	Camsap2	2.32E-18	3.798859238		Pkmyt1	0.015350722	-0.789162891
	Alad	1.17E-65	3.72093023		Rftn1	0.001560955	-0.789916261
	Tgm2	2.82E-51	3.701839098		Ptpn9	0.001819485	-0.791295992
	Wnk4	3.94E-14	3.636099187		Pank1	0.003403479	-0.792990992
	Mpp2	2.84E-30	3.611164609		Gabarap	0.000331006	-0.794382712
	Nipa1	4.54E-35	3.581328319		Ube2b	0.000523683	-0.798373776
	Icam5	0.000213802	3.571360894		Ocr1	0.001037544	-0.80471088
	Epdr	3.40E-52	3.512439338		Unc119	0.000778988	-0.805276007
	Pawr	6.09E-25	3.477290315		Reep5	0.0003287	-0.808957536
	Adra2b	1.15E-05	3.43161592		Ezh1	0.00369024	-0.817568659
	Slc6a9	3.10E-28	3.421954314		Kdm5b	0.004866591	-0.820390406
	Fads3	2.30E-42	3.418715394		Gpd1l	0.000137186	-0.824064074
	Gpr155	2.82E-19	3.374905552		Cables2	0.023264708	-0.827391261
	A230056P14Rik	8.04E-20	3.370798499		Pcyox1l	0.00089738	-0.832616124
	Myh10	2.49E-31	3.326662026		Pip4k2a	4.61E-05	-0.84512498
	Snca	2.36E-25	3.302427601		Myb	1.62E-05	-0.855465707

Hebp1	8.36E-32	3.271287141	BC037034	0.000174597	-0.855658292
Mboat2	9.49E-06	3.246543265	Kif13a	0.000718688	-0.856115537
Tfrc	1.31E-28	3.210671649	Zmym3	0.000152734	-0.858173979
Fech	3.16E-48	3.208948564	Atp6v0d1	0.000118607	-0.863166693
AA986860	1.58E-13	3.178243823	Kctd10	7.08E-05	-0.863237836
Phlda3	1.22E-11	3.106745505	Rab38	0.004151312	-0.875038804
Tmem120b	5.37E-15	3.04449604	Acs1	4.38E-05	-0.884999543
B3gnt3	0.005159524	3.042490365	Map3k1	0.000104711	-0.887347245
F830002L21Rik	0.031473708	3.037271648	Ergic1	1.72E-05	-0.897186922
Hcn3	6.29E-09	2.99680284	Bst2	0.0149326	-0.911057834
Uros	4.23E-18	2.989604741	Arf3	6.68E-06	-0.917504209
Zdhhc14	3.06E-15	2.891852102	Por	3.77E-05	-0.92575589
Fam132b	6.04E-13	2.886907806	Fam65a	0.000957607	-0.939871944
Mns1	4.61E-38	2.84103108	Clstn1	0.005656846	-0.940921554
Mgst3	3.17E-09	2.787941544	Mlxip	9.48E-06	-0.941665345
Minpp1	8.63E-22	2.776713388	Dlg3	0.007907916	-0.943609848
Mt1	3.25E-38	2.766660392	Cbx2	0.001051094	-0.944710377
Ntn3	3.34E-06	2.719488822	D630045J12Rik	0.02057898	-0.944961671
Abcb6	5.48E-30	2.679808929	Xpo7	0.000133666	-0.951413231
Rfesc	3.59E-21	2.652840664	Stx4a	0.003150835	-0.96199646
Neu3	1.27E-13	2.638243292	Pde4a	0.004262827	-0.968485641
Mllt3	1.14E-24	2.588138763	Trim26	0.001112537	-0.969443869
Arrb1	5.08E-35	2.583483279	Cryl1	0.000709628	-0.971098691
Slc11a2	3.58E-30	2.577417779	Tmcc2	4.20E-06	-0.972267638
Gata1	1.41E-32	2.566869908	Tmppe	0.000542459	-0.972516629
Josd2	2.74E-24	2.547376211	Pde4b	0.000421869	-0.974331644
Gmpr	2.32E-22	2.544869109	1810058I24Rik	0.000118329	-0.979198244
Hdac11	1.29E-09	2.536261035	Lpar5	0.006915786	-0.983448951
Abcb10	6.15E-31	2.515217654	Ripk3	1.29E-05	-0.993956367
Slc25a38	1.49E-25	2.487408675	Ppic	7.34E-05	-1.012245668
Samd14	2.65E-30	2.487185303	SEPT1	4.57E-05	-1.018819441
Lrrc56	4.17E-12	2.481923252	Abhd4	0.002572799	-1.019875909
Sh3tc2	0.000114873	2.466995309	Cmtm6	2.82E-06	-1.020962115
Dpf3	0.001775965	2.465346806	Impa2	1.44E-05	-1.028442199
Ptdss2	5.17E-26	2.43208184	Rsrp1	1.06E-06	-1.041469111
Them6	9.86E-21	2.423544604	Ccni	2.99E-06	-1.041891793
Tlcd1	3.90E-14	2.42221552	Pink1	0.000419944	-1.041932049
Alas2	5.12E-09	2.39879988	Clic1	4.02E-07	-1.04914598
Otub2	3.27E-11	2.376269762	Tmtc4	0.003382211	-1.049377987
Smim1	4.35E-27	2.339613147	Cnp	3.01E-05	-1.049496412
Tal1	4.25E-28	2.339286874	Tpst2	5.41E-06	-1.05425096
Prdx2	8.10E-13	2.337817537	Trim35	0.000441313	-1.059354782
Sorbs1	1.43E-10	2.334479403	Pdcd4	2.79E-06	-1.061049149
Endod1	5.95E-22	2.331406546	Glipr2	2.38E-06	-1.063147595
Parvb	1.08E-21	2.320872897	App	0.00642215	-1.0789245
Ache	6.78E-06	2.313757102	Phc1	3.16E-05	-1.080983367
Zfpm1	1.38E-27	2.30951856	Lats2	0.000522043	-1.082345829
Grtp1	0.000103977	2.305573827	Prkra	0.000160545	-1.084573051
Dnajb3	0.000831938	2.278727719	H2afx	6.43E-05	-1.088931585
Mtfp1	7.92E-17	2.225676054	Erlin1	4.06E-06	-1.091135285
Kcnn4	2.22E-24	2.202456532	Crtap	0.000116702	-1.105784389
Scrn3	9.66E-17	2.201696261	Cd44	6.05E-06	-1.107960944
Chchd10	7.50E-11	2.156176045	Pla2g4a	1.96E-06	-1.111860441
Ccrn4l	1.13E-19	2.149284937	Gp5	0.008691882	-1.113006408
Mrpl52	2.02E-11	2.148282977	Mboat7	1.06E-06	-1.122844784
Pnpo	1.95E-23	2.137043659	Gna15	1.71E-05	-1.124977192
Lpcat1	6.18E-19	2.073057219	Sptssa	8.98E-07	-1.12545918
Tbc1d24	1.92E-18	2.067670009	Arap3	7.31E-08	-1.126666829
Iba57	3.26E-17	2.064002414	Ube2h	0.000180804	-1.127072237

Nmnat3	6.40E-14	2.008503	Prkx	0.000209773	-1.138479145
Acss2	3.82E-18	2.001293509	Cmas	3.35E-06	-1.152888811
Bag2	4.75E-18	1.999767528	Mmgt2	1.19E-05	-1.157455607
Tnfrsf14	1.01E-12	1.979883239	Gcat	3.98E-05	-1.165763334
Prokr1	0.000162257	1.979833424	Irf2bp2	5.53E-08	-1.170493599
Cyb5r3	2.14E-20	1.958739098	Rinl	1.16E-06	-1.188883226
Ppox	8.88E-07	1.952328028	Sh3bp1	7.25E-08	-1.192410413
Gypc	1.90E-18	1.941056718	Socs5	0.002831312	-1.19315382
Isca1	1.73E-05	1.93559601	Ttc21b	0.000230666	-1.202903885
Clic4	6.62E-20	1.933499905	Pkm	0.000175248	-1.204894868
Lrrc20	2.63E-13	1.921585654	Ptk2b	5.68E-08	-1.210842306
Cep76	8.95E-17	1.918365705	Itpr1	2.12E-07	-1.213284485
Cdc42bpa	1.82E-07	1.898808403	Ccbl2	0.000154557	-1.213985478
Atp2b4	7.84E-15	1.895396855	Zfp629	2.97E-06	-1.215680692
Cdr2	2.93E-14	1.894522629	Mlycd	0.000218698	-1.216659615
Slc16a6	1.76E-17	1.889856382	Nxn	9.99E-07	-1.222072486
Tex9	3.27E-15	1.884346575	Tbc1d9b	4.27E-07	-1.225547462
Xk	1.57E-14	1.879165157	Orai3	1.21E-06	-1.227133874
Usp45	1.58E-09	1.864268015	Pdia4	1.68E-09	-1.2280252
Cecr2	0.000148042	1.839656287	Prkd3	2.37E-08	-1.232233468
Mfsd2b	1.82E-17	1.83831821	Dock5	0.000133294	-1.234086713
Xrcc5	3.69E-14	1.83096545	Hook1	0.004442732	-1.237046453
Mmp14	0.009162545	1.815605619	Trim12c	4.09E-05	-1.245233756
Adcy6	3.38E-14	1.812019633	Atxn10	1.29E-09	-1.247170788
Eef1e1	1.84E-15	1.802246739	Acot7	5.32E-08	-1.250887981
Tbc1d12	4.05E-06	1.797993391	Arl10	0.00067253	-1.26471194
Prdx3	4.16E-18	1.795028035	Spint2	7.80E-07	-1.271866752
LOC100503496	1.15E-12	1.788542898	Zbtb12	2.35E-07	-1.280171887
Tom1l1	1.00E-11	1.777100256	Hes6	1.30E-07	-1.28203906
Tmem14c	1.44E-09	1.772946032	Sertad1	0.000337195	-1.286948155
Mtfr1	1.06E-14	1.768863059	Tgif1	5.63E-05	-1.288455268
Pigq	1.60E-16	1.764513385	Psd4	3.19E-10	-1.294404569
Smim5	1.58E-09	1.748361822	lqce	1.82E-05	-1.306933896
Rrm2	4.78E-18	1.738914129	Snx21	0.045739067	-1.307922891
Fth1	1.61E-18	1.738770292	Zfp422	1.22E-08	-1.319791146
Klhl23	7.20E-15	1.738754049	Srpk2	1.50E-08	-1.329290083
Eif2b3	1.61E-13	1.723400818	Adrb2	0.000193285	-1.33087698
Mthfd2	8.06E-16	1.719525593	Grap2	0.005176751	-1.330916712
Gm5088	4.01E-11	1.715326975	Col4a2	0.00202883	-1.337669745
Fam213a	4.33E-11	1.715269654	Abtb1	2.11E-07	-1.33982491
Fam109b	2.44E-12	1.712989195	Usp11	5.64E-08	-1.34318628
Polq	1.08E-08	1.694278225	Nfkb1	2.88E-10	-1.344875409
Ahctf1	4.73E-08	1.691717408	Runx3	0.000141555	-1.362587122
Hs6st1	2.37E-12	1.686350643	Sema6b	8.35E-05	-1.369225699
Abcg2	6.57E-13	1.663211584	Def6	2.82E-10	-1.371121074
Trim58	7.93E-06	1.661203653	Fam49b	1.06E-09	-1.376923939
Slc25a42	1.18E-08	1.637362695	Pgd	1.64E-11	-1.391537915
Slc46a3	2.72E-07	1.624181284	Aldh3a2	6.84E-08	-1.395708044
Eif5a2	0.000596478	1.623346236	Add3	6.52E-11	-1.402071866
Pbx3	7.99E-07	1.608993003	Samsn1	5.26E-10	-1.405847219
Gpsm2	1.05E-11	1.603605338	Ifnar2	9.53E-10	-1.406097996
Ampd3	1.02E-11	1.586549682	Bmyc	1.77E-05	-1.42310433
Stx2	1.14E-12	1.580659736	Rilpl2	7.26E-07	-1.425999778
Slc43a3	9.86E-14	1.558913323	Pkn1	8.70E-12	-1.434872192
Wipi1	6.59E-09	1.55570592	Extl2	1.33E-05	-1.459629026
Pla2g16	0.000597309	1.552948833	Prodh	4.28E-08	-1.462057668
Apeh	9.90E-14	1.544497495	Ifngr1	0.000345367	-1.469990652
Psd	0.007978332	1.541554604	Mlec	4.27E-14	-1.475047097
Kctd7	8.95E-07	1.539305494	Rfx5	7.18E-07	-1.476079389

Pycr2	1.83E-12	1.500449031	B3gnt2	3.43E-10	-1.486607351
Gfer	5.76E-10	1.490127027	Rnf219	3.68E-08	-1.500650517
Pdk1	8.73E-12	1.484963661	Shmt1	1.08E-11	-1.507766414
Oxnad1	9.46E-10	1.483063226	Slc39a11	1.89E-09	-1.517408252
Eif2b1	8.65E-12	1.48025226	Fzd8	0.001757236	-1.527137998
Cep290	2.34E-07	1.46694136	Repin1	7.60E-09	-1.543810462
Slc20a1	1.44E-11	1.465905283	Lgals9	2.84E-12	-1.545323093
Dhrs13	8.52E-07	1.465409931	Dnmt3a	0.000178936	-1.551732373
Lrrc8c	7.25E-09	1.462971022	H6pd	1.30E-11	-1.552614794
Cercam	1.61E-09	1.455697532	Atp11b	2.32E-13	-1.555282238
Cltb	6.49E-08	1.451158137	Sgk3	1.75E-10	-1.557765395
Ufsp1	0.017089068	1.430062379	9930014A18Rik	0.00315052	-1.560326313
Zmynd19	1.10E-10	1.429409372	Ube2d1	1.97E-06	-1.56327306
Sepw1	2.83E-10	1.42467788	Mex3a	0.028017676	-1.564178063
Ank	1.60E-09	1.423768816	Calcoco1	5.45E-07	-1.566365599
C130083M11Rik	0.01678609	1.41286718	Inpp5d	6.17E-14	-1.571081074
Usp49	4.69E-08	1.41046192	Plxnc1	7.89E-13	-1.571926769
Phospho1	0.00017631	1.410237733	Tagln2	2.15E-14	-1.572323572
Pcyt1a	5.41E-11	1.409094002	Il2rg	7.58E-10	-1.616573975
Pla2g4c	0.013376845	1.406096739	Shisa5	2.87E-11	-1.621641635
Ap1b1	1.57E-11	1.399014887	Hk2	7.94E-13	-1.624073436
Ormdl3	4.78E-07	1.393724245	Tmem184b	8.61E-12	-1.62860923
Dusp1	0.000103766	1.393420874	Arrdc4	9.39E-08	-1.638956944
Sp4	0.000145265	1.388826747	Tspan5	6.01E-08	-1.646281323
Acp5	5.71E-06	1.383969592	Stk17b	3.96E-12	-1.67754679
Cox11	3.31E-07	1.370619016	Icam2	8.77E-09	-1.678019562
Tmem9	1.32E-08	1.360941156	Nnt	9.54E-15	-1.679065131
Capn5	1.38E-06	1.353549194	Igf2bp3	4.39E-15	-1.679134267
Nol10	2.57E-09	1.349802167	Nin	5.40E-16	-1.700293881
Mybl2	5.00E-10	1.342155776	Tcea2	0.005032716	-1.719923401
Psmf1	7.53E-09	1.332081962	Nlgn2	1.45E-11	-1.729682284
Bms1	8.86E-05	1.316169671	Tspo	8.59E-15	-1.751612896
Setd6	8.02E-07	1.313193944	Lrp5	1.04E-14	-1.766149885
Picalm	2.28E-10	1.310893218	Lrmp	9.54E-16	-1.766489314
Fn3krp	2.36E-05	1.307828619	Pycard	2.18E-12	-1.774120478
Cox6b2	0.00122369	1.302394398	Bcl9	2.86E-08	-1.796379525
Guk1	8.94E-09	1.29400915	Pigx	1.22E-09	-1.803023818
Caskin2	2.14E-05	1.285026622	Glrx	1.10E-12	-1.820398858
Fbxo10	1.60E-07	1.285005436	Fnbp1	1.30E-16	-1.833078842
Mkrn1	1.65E-06	1.275391556	SEPT9	3.77E-19	-1.837631979
Nt5c3	1.68E-08	1.271344011	Map4k1	6.49E-12	-1.845208522
Ccna2	2.16E-10	1.271058954	Stk26	1.95E-15	-1.847488616
Noc4l	1.43E-09	1.270051574	Epb4.1l2	1.36E-13	-1.850429526
Nek8	0.000413571	1.255909125	Abhd17b	2.97E-11	-1.856971589
Prkar2b	5.18E-09	1.247984762	Pbxip1	9.48E-15	-1.86294605
Donson	2.02E-07	1.234171898	Csnk1e	6.74E-10	-1.875375761
Hmmr	7.68E-09	1.228278923	Serpinf2	0.040165118	-1.8913795
Cep104	5.47E-06	1.226229752	Kcnab2	1.01E-18	-1.901132313
Bcl11a	7.98E-09	1.222563529	Pnrc1	1.03E-10	-1.904835277
Asb6	3.62E-07	1.222343606	Lipe	5.35E-10	-1.90963299
Rpia	8.66E-10	1.21806965	Padi2	4.89E-08	-1.911099565
Pqlc1	7.98E-08	1.206322432	Afp	0.008458017	-1.916504187
Gps2	2.83E-08	1.20541839	E130012A19Rik	4.64E-09	-1.924836209
Epb4.1	2.07E-05	1.199930694	Pafah2	2.85E-13	-1.934294013
Fnip2	0.001416224	1.197372341	Itm2b	1.39E-18	-1.937004832
Dek	9.08E-10	1.191614616	Iqgap2	2.88E-18	-1.940318788
Senp2	3.60E-08	1.190502098	Msr1	0.001009263	-1.962903667
Gclc	9.87E-08	1.189887598	Axl	9.79E-09	-1.964060723
Mgll	6.79E-05	1.189498503	Slc37a1	2.65E-09	-1.970585814

Gen1	0.000201203	1.176909482	Atp11a	4.50E-14	-1.991334986
Zbtb7a	4.81E-08	1.172494577	Col6a3	0.00012649	-1.997416365
Dis3	3.27E-05	1.170465306	Ttc7b	1.27E-09	-2.000718199
Sf3b4	1.13E-07	1.164641728	Etv6	1.03E-13	-2.000720092
Abcf1	5.95E-09	1.157276221	Rassf3	1.15E-17	-2.013829907
Ccne2	2.99E-07	1.14971191	Zdhhc20	5.11E-16	-2.019735241
Mier3	0.002078212	1.14813151	Rsad2	0.006483939	-2.023932224
Nek2	3.29E-07	1.144774374	Znrf1	3.45E-18	-2.02763645
Natd1	9.92E-05	1.144147079	Nid2	2.11E-05	-2.029025532
Dut	0.000280308	1.137060749	Fam46a	9.41E-14	-2.046645734
Dck	6.82E-08	1.131739692	Fam214b	1.94E-09	-2.054161472
Tubb4b	0.001395296	1.131694454	Cbx4	1.08E-13	-2.062082568
Arrdc2	0.000995127	1.105892172	Lmo4	1.32E-20	-2.068037533
Fam46c	0.02483604	1.104640022	Ypel5	1.31E-05	-2.095722467
Kif18a	1.49E-05	1.104274879	Fermt2	0.047128466	-2.10656319
Trappc10	3.70E-07	1.104010913	SEPT6	4.23E-21	-2.10702811
Tceal8	5.59E-06	1.081786377	B4galnt1	1.64E-06	-2.137599192
Eif3g	1.63E-07	1.063011399	Prr5	4.54E-13	-2.139470147
1600002H07Rik	5.72E-05	1.06152434	Emp3	9.79E-19	-2.172046346
Cep70	6.70E-05	1.06129859	Panx1	1.38E-12	-2.186032079
Gnl2	7.01E-07	1.05662832	Mfng	6.71E-13	-2.203070484
Smc2	4.94E-07	1.054948824	Gatm	1.82E-08	-2.203686989
Cenpp	0.000262954	1.051090939	Kif21b	3.29E-08	-2.216175362
Psrc1	0.000157276	1.04880012	H19	4.27E-05	-2.226982285
Exosc9	1.23E-06	1.048049324	Dnmt3b	4.54E-05	-2.267671712
4933428G20Rik	0.015032804	1.047149952	Apob	0.00765674	-2.272332015
Ccp110	1.12E-05	1.043876547	Dusp3	7.07E-09	-2.280524011
Slbp	9.00E-07	1.041019258	Pea15a	5.30E-08	-2.290656626
Ncapg2	2.33E-06	1.038276867	Ptprs	2.05E-22	-2.309667598
Eaf1	2.53E-06	1.030941416	Psap	4.18E-09	-2.319556509
Fbxo5	5.73E-06	1.026854468	Fam69b	1.05E-07	-2.329982398
Fbxo9	7.35E-06	1.026584873	Arhgap9	6.70E-21	-2.339208945
Abcf2	8.87E-07	1.020481156	Frmf7	1.59E-12	-2.346990825
Nop58	1.64E-07	1.020461077	Gramd1a	1.79E-20	-2.351283543
Arhgap21	9.33E-05	1.019228923	Anxa11	5.78E-20	-2.357710172
Dnajb2	0.00216256	1.010380678	Akap13	5.76E-15	-2.358276172
Ndr3	7.71E-06	1.009331593	Pde5a	4.26E-06	-2.375659504
Arhgap23	1.23E-05	0.997920619	Cers5	3.71E-18	-2.386758047
Usp7	1.14E-06	0.996671943	Pik3cd	6.91E-27	-2.39362035
Mast2	0.000254	0.994320231	Hist1h2bc	1.47E-05	-2.411277248
Nme3	8.37E-05	0.993197207	Sepp1	5.52E-25	-2.446265734
Prkab1	2.52E-06	0.991932948	Cd37	1.79E-22	-2.449868127
Nop56	9.77E-07	0.977615407	Hfe	3.33E-05	-2.479740482
Exosc2	5.85E-06	0.975810347	Slc11a1	3.48E-11	-2.496985744
Rfk	1.12E-05	0.973539735	Epas1	0.025664318	-2.502798003
Zdhhc24	7.71E-05	0.968188527	Bin2	1.51E-28	-2.513817178
Abt1	7.90E-05	0.967907963	Ptprcap	1.28E-24	-2.538560101
Nop9	8.02E-06	0.962528875	Acot11	2.96E-13	-2.554292412
Agfg2	6.08E-05	0.959920114	Gdpd3	0.002163675	-2.585224738
Med22	7.96E-05	0.956381749	Fcgrt	8.05E-05	-2.604466867
Plk1	4.00E-06	0.953632668	Ifi27	4.21E-08	-2.613578562
Trmt12	0.010483256	0.949190459	Abca2	7.84E-12	-2.65035116
Pcna	0.000101475	0.948346294	Grn	6.21E-17	-2.660591148
Cct2	2.12E-06	0.948062677	Btg1	9.31E-16	-2.693559949
Akip1	0.000132323	0.944536492	Spns2	4.15E-10	-2.733483678
Atg4b	1.57E-05	0.939702267	Ypel3	1.07E-16	-2.779996276
Ecd	1.69E-05	0.934189267	Ppap2b	0.001405613	-2.820221712
Gcdh	0.000290883	0.932565381	Dlk1	0.000568469	-2.829739894
Ska1	9.63E-05	0.931707032	Slc37a2	8.73E-08	-2.847080314

Wdr81	5.01E-05	0.92880786	Trf	1.91E-27	-2.851060185
Aurka	1.43E-05	0.923167321	Lrp1	9.34E-30	-2.859624485
Atl2	8.65E-05	0.913348586	Rasal3	3.24E-30	-2.881232877
Vopp1	0.000833988	0.910993334	Maged2	3.09E-13	-2.885025217
Htatip2	0.000902178	0.894880617	Col18a1	0.001045128	-2.900677785
Rb1	0.000198473	0.894486177	Mtss1l	1.64E-07	-2.906641745
Epn1	8.81E-06	0.893749443	Apoe	2.64E-30	-2.911395375
Uba2	7.22E-06	0.893226181	Irf7	2.03E-08	-2.992683018
Ccnf	1.75E-05	0.890758696	Tnfaip8	7.92E-35	-3.010200462
Ccdc34	0.000126958	0.887011196	Tubb6	3.61E-17	-3.067707726
Lrba	0.028622411	0.883521159	Anxa5	2.49E-23	-3.071947299
Galnt10	0.000175181	0.88184917	Myl9	0.00047418	-3.079484465
Cdyl	0.000274807	0.880883716	Grcc10	4.83E-29	-3.088958131
Fam78a	0.000225242	0.880622774	Lima1	1.91E-09	-3.093590228
Tmc6	5.70E-05	0.880434661	Slc7a8	7.09E-07	-3.095444533
Med19	0.00027678	0.878756283	Itga2b	1.24E-26	-3.097835434
MARCH2	0.000149796	0.877205213	Camk2d	7.47E-14	-3.101213127
Atp13a3	0.000573542	0.87415119	Smtn	8.99E-22	-3.109549854
Oard1	0.000378471	0.864950271	Itgb5	2.13E-17	-3.121175082
Usp15	3.51E-05	0.861797383	Cfp	2.95E-28	-3.140958915
Kif4	0.000141241	0.851752272	Med12l	1.32E-10	-3.159222899
Gid8	4.29E-05	0.85165254	Slc8a1	3.62E-13	-3.162996246
Katnal1	0.010659348	0.848078427	Igf2	0.005456417	-3.201964839
Bysl	3.02E-05	0.845082689	Tspan9	5.14E-06	-3.224082942
Kif14	0.000483828	0.84476767	Gbp2	1.49E-11	-3.231479611
Pa2g4	9.94E-06	0.844695456	Dock1	3.11E-25	-3.264228411
Gins4	0.00026061	0.842639868	Rab27b	4.90E-08	-3.266355532
Bpgm	0.000762684	0.840447846	Raph1	4.91E-22	-3.300039821
Oip5	0.000879753	0.839289896	Mest	1.41E-21	-3.322007128
Cenpk	0.001807323	0.837638101	Gpx3	2.60E-06	-3.347112045
Dnajb1	0.000175376	0.833900794	Bzrap1	8.87E-34	-3.348145632
Dbf4	7.14E-05	0.826540166	Hspg2	1.03E-10	-3.352053656
Tmx1	0.000144986	0.825446031	Oit3	5.13E-07	-3.380344306
Psme3	3.89E-05	0.824237436	Cd300a	2.86E-25	-3.397120791
Diap3	0.000699443	0.821615803	Neat1	4.85E-05	-3.424268409
Dyrk3	0.002220151	0.811037185	Marcks	1.47E-32	-3.428972324
Gins1	0.000906396	0.804463454	Tgfb1	9.59E-23	-3.435893499
Tyms	0.000224261	0.800283992	Arl4c	4.90E-19	-3.452722983
Pon2	0.000192713	0.799525968	Inf2	4.70E-20	-3.471603415
Prim1	0.00017923	0.798005643	Alox12	2.32E-05	-3.536119982
Pkn2	0.000511044	0.794811544	Rhobtb1	4.28E-10	-3.558800862
Blm	0.000252705	0.793984751	Aldh1b1	4.40E-10	-3.572032229
Atp8a1	0.000457399	0.784605291	Myom1	3.45E-13	-3.592030503
Trim56	0.008725086	0.784433328	Fos	3.18E-07	-3.595967736
Glcc1	0.011207788	0.777836257	Rhob	1.38E-14	-3.61168095
Gm16982	0.017985993	0.777190838	Ldlrad4	0.00052867	-3.621801474
Zfp672	0.004059806	0.772110393	Tuba8	5.62E-19	-3.651465378
Atf4	0.000146435	0.753638953	Lpp	0.000689954	-3.657012399
Enpp4	0.002874329	0.751387501	Gnaq	5.28E-40	-3.662057402
Mrpl53	0.005806267	0.75057508	Bank1	3.82E-08	-3.663040079
Ncapg	0.000806987	0.739036277	Basp1	2.50E-13	-3.687888935
Kdm1b	0.000556033	0.738576168	Slc15a3	2.00E-21	-3.699543078
Brca1	0.001053963	0.725757573	Itgb3	6.15E-19	-3.699932758
Cenpl	0.010671777	0.718297699	Cfh	1.44E-14	-3.710862027
Ikzf5	0.010177444	0.715716266	Klf6	5.55E-42	-3.717361855
Pif1	0.01059325	0.713481247	Vash1	3.96E-05	-3.732791703
Kntc1	0.001700701	0.704141457	Abcg1	4.20E-43	-3.735999799
Ankle1	0.005714558	0.698647815	Tnfrsf1b	1.98E-46	-3.74939584
Parpbb	0.008515041	0.688511688	Icam1	4.42E-23	-3.749700427

Rbm15	0.010564275	0.687603321	Sun2	1.15E-53	-3.753503201
Nptn	0.000713138	0.6837449	Kcnk6	4.17E-22	-3.755868002
Nrf1	0.002494243	0.676494591	Csf1r	1.57E-57	-3.769327071
Suv420h2	0.001152773	0.674207319	Gnaz	3.35E-05	-3.799705974
Polh	0.010756176	0.671220927	Amotl2	1.59E-09	-3.801830812
Mrm1	0.007086694	0.664096625	Krt18	1.08E-13	-3.816266469
Espl1	0.002988453	0.661767216	Aif1	0.000419512	-3.82545574
Birc5	0.001061492	0.655994323	Syk	5.49E-41	-3.829326854
Creg1	0.000825677	0.654680237	Arhgef3	1.74E-33	-3.839756781
Tmc8	0.008440893	0.653846015	Tcp11l2	1.36E-39	-3.856750145
Pole4	0.004018575	0.650403984	Palld	0.00011969	-3.861020318
Figl1	0.002429117	0.649771452	Nfic	1.62E-19	-3.862011598
Mavs	0.008355403	0.649100869	Tmem50b	1.72E-35	-3.886581112
C2cd2l	0.024817945	0.648435025	Tec	8.79E-24	-3.890797882
Cep295	0.006567823	0.644165744	Tcn2	1.36E-43	-3.902803418
Rnasel	0.01816326	0.641358584	Cd9	1.94E-24	-3.904104121
Kat2b	0.015772747	0.639213177	Flt1	4.38E-05	-3.905146953
2700029M09Rik	0.002094476	0.637010981	Dbn1	1.30E-08	-3.907165216
Mrpl14	0.007654652	0.627662381	Ccl6	5.10E-18	-3.918822514
Acadl	0.003027332	0.627474738	P2rx1	9.67E-36	-3.93519903
Ankrd54	0.009237528	0.625125009	Ndrgr1	7.16E-19	-3.939343826
Dsn1	0.012971151	0.616520877	Gpc3	2.68E-18	-3.941592418
A430005L14Rik	0.011593209	0.610468697	Emilin1	5.03E-58	-3.948238067
Gtpbp1	0.004308947	0.60646291	Trim14	1.15E-19	-3.970792599
Ap2a2	0.006640353	0.602541888	Kifc3	2.64E-15	-3.979573178
Bard1	0.014071171	0.602084693	Atp2a3	6.45E-66	-3.995560592
			Pla2g7	7.42E-07	-4.001071583
			Rab32	3.51E-26	-4.004573802
			Ptms	6.70E-32	-4.005789511
			Jup	7.39E-08	-4.009901543
			Arsb	4.73E-16	-4.014468153
			Pld1	7.06E-21	-4.018372245
			Dusp6	6.30E-40	-4.037037496
			Ap1s2	3.36E-34	-4.038635928
			Fam105a	8.43E-33	-4.040320031
			Ptgs1	9.58E-54	-4.045088825
			Hip1	3.80E-10	-4.048528884
			Plekho1	5.55E-20	-4.049185937
			Tpm4	1.93E-16	-4.058015814
			Irf2bpl	1.44E-14	-4.066144441
			Sptbn1	3.00E-11	-4.067055229
			Myo1b	5.16E-08	-4.091078546
			Arhgap31	1.87E-16	-4.108210798
			Sema4c	1.65E-23	-4.109162075
			Ctss	1.53E-08	-4.115911635
			Clec4a1	1.48E-05	-4.116297176
			Filip1l	8.57E-25	-4.118457676
			Pik3ap1	1.23E-45	-4.134495835
			Actn1	2.99E-60	-4.135105007
			Nfkbie	1.06E-17	-4.14039699
			Lcp2	2.33E-49	-4.146374331
			Cotl1	1.60E-73	-4.157057144
			Stab2	1.04E-05	-4.159123793
			Ptprf	0.00013901	-4.168684235
			Arhgef17	3.67E-08	-4.190072234
			Rgs18	4.68E-47	-4.195782406
			Bin1	2.79E-31	-4.211810645
			Sparc	4.54E-06	-4.23415277
			Zyx	5.23E-72	-4.246075649

Myo7a	3.96E-52	-4.246574394
Dtx4	3.19E-33	-4.25368921
Il4ra	2.97E-50	-4.261792786
Zfp36	3.40E-26	-4.262453029
Fcgr1	3.59E-24	-4.277531944
Mrvi1	2.06E-13	-4.292776835
Ccr5	5.95E-19	-4.303126913
Tmsb4x	1.37E-21	-4.3135208
Pstpip2	6.03E-46	-4.338137005
Snn	3.29E-16	-4.345020985
Tfec	7.40E-11	-4.345146578
Cmtm3	6.79E-35	-4.353369423
Capn2	5.65E-36	-4.364451447
Flt4	3.79E-06	-4.374062037
Tyrobp	7.82E-25	-4.388842659
Ptpn18	2.03E-22	-4.393099838
Plxnd1	6.63E-46	-4.393439404
Adgre4	1.29E-19	-4.401570176
Aim2	5.12E-29	-4.40724448
Pmaip1	4.98E-26	-4.415542911
Hdac9	1.78E-19	-4.421307549
B430306N03Rik	3.29E-33	-4.426633585
Sirpa	1.05E-78	-4.428305242
Itgal	4.92E-77	-4.43604129
4632428N05Rik	1.54E-75	-4.444549782
Itpripl2	1.24E-57	-4.460894389
Prkcb	1.73E-53	-4.465602529
Sash3	1.95E-71	-4.465844579
Cd53	1.19E-67	-4.473029106
Igsf6	1.12E-24	-4.479499992
Myadm	6.82E-63	-4.485476622
Abr	1.42E-63	-4.494566997
Dok2	4.40E-45	-4.50091656
Evi2a	1.34E-30	-4.530030301
Dchs1	0.004860678	-4.531718609
Cplx2	3.24E-11	-4.534375433
Parvg	1.77E-77	-4.536624733
Ccng2	3.01E-43	-4.540093881
Gsn	4.70E-69	-4.546895628
Smad1	3.57E-23	-4.565708402
Man1c1	4.45E-46	-4.565993147
Mpo	1.12E-57	-4.567368725
Cnn2	3.36E-77	-4.568227931
Ms4a6d	1.59E-08	-4.58248993
Gm2a	5.71E-59	-4.594987177
Fmn13	2.96E-46	-4.600616244
Soat1	5.71E-58	-4.616420582
Nlrp3	8.69E-23	-4.624503853
Rogdi	1.06E-57	-4.632412005
Lcp1	2.54E-91	-4.654348057
Capg	3.63E-64	-4.65985611
Gpr160	1.78E-21	-4.666096544
Tnfrsf1a	4.24E-67	-4.667488869
Trim30a	7.95E-45	-4.670376794
Kctd12	7.47E-45	-4.688504153
Lptm5	2.50E-90	-4.690466668
Rasgrp2	1.43E-47	-4.694292456
Plcb2	5.93E-70	-4.696302376
Ephb4	1.17E-08	-4.7007972

Tnfaipl2	1.89E-44	-4.702932558
Fcer1g	2.41E-19	-4.705859109
Appl2	7.81E-26	-4.713377762
Rab31	4.79E-64	-4.71932506
Arhgap25	3.11E-46	-4.73250196
Sh3bp5	2.33E-57	-4.734033505
Hck	2.28E-54	-4.734324588
Il13ra1	5.17E-27	-4.739841009
Acvrl1	9.92E-20	-4.74138451
Rin2	9.16E-33	-4.746825159
Pld4	9.26E-25	-4.783961437
Kdr	9.82E-07	-4.793562096
Rassf2	1.51E-75	-4.804557695
Abcd2	6.96E-49	-4.806890262
Ms4a6b	2.26E-14	-4.807551071
Plekha2	8.01E-59	-4.816326822
Arhgef6	3.94E-72	-4.822028378
Fgd2	2.55E-42	-4.837471239
Tbkbp1	4.82E-56	-4.848178934
Rarg	2.49E-25	-4.855075232
St8sia4	4.71E-70	-4.857366983
Tlr2	8.13E-37	-4.858285729
Obsl1	9.21E-08	-4.865620499
Ncf2	2.37E-12	-4.868595332
Fli1	2.17E-28	-4.873979741
Cyp27a1	2.56E-14	-4.881356084
Adam15	9.92E-65	-4.88812056
Rin3	7.42E-41	-4.90479011
Hlx	2.21E-35	-4.906560424
Sptan1	1.95E-37	-4.921282348
Cytip	8.80E-50	-4.92218912
Wdfy4	4.37E-19	-4.942889976
Nuak2	6.24E-23	-4.954080176
Pde2a	9.99E-73	-4.96914332
Spi1	6.75E-86	-4.974710692
Pbx1	8.64E-12	-4.977785477
Igfbp4	4.19E-94	-4.977927035
I830077J02Rik	1.98E-28	-4.999046087
F5	3.23E-31	-5.003836492
Zfp467	7.86E-22	-5.008967421
Grp	8.04E-39	-5.011860089
Mpeg1	2.18E-20	-5.012344497
Paqr7	2.08E-33	-5.020680127
Arhgap27	1.84E-53	-5.021892761
Meis1	7.72E-07	-5.027377331
Col4a1	5.91E-22	-5.032662257
Plek	3.73E-17	-5.034352284
Fam49a	1.06E-29	-5.042285953
Cyth4	5.54E-82	-5.047461936
Unc93b1	2.21E-36	-5.047726897
Rcsd1	7.07E-80	-5.062191797
Fn1	1.09E-60	-5.062271708
C3	5.56E-101	-5.081553589
Slc25a45	2.33E-53	-5.098058039
Gpr65	5.48E-42	-5.107874266
Adrbk2	2.53E-25	-5.114125307
Ppp1r18	1.92E-76	-5.114715069
Trpv2	1.38E-47	-5.115904736
Card9	5.71E-13	-5.121828947

Limd2	2.66E-94	-5.122361116
Elmo1	1.91E-41	-5.126454298
Fmn1	1.61E-96	-5.13792338
Fes	7.60E-87	-5.139572968
Nfam1	1.75E-90	-5.15128724
Rgs2	2.76E-66	-5.155424532
Vim	1.68E-104	-5.163203743
Plcg2	2.81E-96	-5.165801715
Rbp1	4.18E-24	-5.166340572
Tm6sf1	8.67E-72	-5.170925244
Gda	1.32E-74	-5.171491624
Hk3	4.67E-68	-5.19022052
Anxa3	1.45E-42	-5.190587945
Myo1g	1.93E-91	-5.198885404
Calhm2	1.55E-27	-5.200635704
Id2	5.99E-18	-5.206868532
Dram1	3.18E-37	-5.207133056
Themis2	2.55E-45	-5.243940718
Zfp516	9.23E-58	-5.249885707
Lbh	1.18E-59	-5.267684986
Ccnd1	3.17E-72	-5.279360911
Myo1f	9.87E-96	-5.289967349
Plac8	6.94E-16	-5.313003495
Ncf1	2.83E-103	-5.318172833
Hdgfrp3	1.23E-55	-5.318174532
Elk3	2.00E-50	-5.338567937
Notch1	5.34E-16	-5.341581751
Sh3tc1	1.27E-32	-5.34509957
Cxxc5	4.52E-32	-5.36296433
Ramp1	4.72E-69	-5.364645557
Ifitm3	3.02E-22	-5.368383226
Mtus1	1.59E-76	-5.368695796
Cd14	2.73E-35	-5.371202137
Sla	2.46E-85	-5.383146264
Egln3	1.03E-51	-5.393000856
Tspan2	5.11E-41	-5.395798686
Celf2	7.17E-42	-5.410770317
Coro1a	3.06E-115	-5.417477973
F13a1	5.45E-13	-5.424186244
1700025G04Rik	1.29E-40	-5.432860883
Pram1	1.19E-75	-5.447895875
Sh2b2	3.85E-48	-5.455428101
Pid1	2.64E-13	-5.45959192
Ptprc	7.20E-99	-5.465503083
Irf1	5.06E-54	-5.483413727
Coro2a	1.95E-59	-5.506405258
Clec5a	2.08E-50	-5.507446814
Snx10	6.24E-53	-5.512896855
Ckap4	1.44E-93	-5.519907237
Ebi3	2.57E-62	-5.532152849
Slc22a15	2.36E-28	-5.543159164
Hp	1.48E-44	-5.547171763
Pglyrp1	4.65E-102	-5.551831741
Gng2	5.15E-70	-5.560024298
Rgs14	3.28E-54	-5.56062303
Il16	2.27E-82	-5.56437168
Hmga2	1.55E-30	-5.568834571
Irf5	1.15E-24	-5.570853349
Emb	1.50E-104	-5.571265824

Ms4a6c	8.13E-10	-5.575279321
Cd180	2.11E-35	-5.583497787
Rassf4	1.04E-34	-5.58940259
Apobr	9.45E-59	-5.59899341
Pik3r5	4.62E-53	-5.639659632
Casp1	8.14E-08	-5.641588079
Serpinb10	1.41E-27	-5.651105246
Ncf4	3.18E-100	-5.652258246
Itih5	1.36E-11	-5.658068215
Sorl1	2.06E-38	-5.676765363
S100a8	4.89E-26	-5.692776322
Ticam2	3.42E-50	-5.702206731
Il6ra	1.02E-74	-5.733125512
Fosl2	3.10E-65	-5.746141819
Itgam	1.80E-114	-5.764813353
BC100530	3.90E-24	-5.767975687
Siglece	5.03E-48	-5.770688846
Sh2d3c	2.78E-72	-5.77243457
Chil1	3.28E-71	-5.774743547
Fgd4	2.29E-54	-5.793916061
Rbpms	9.29E-42	-5.7987565
Csf3r	4.42E-59	-5.81241
Tek	3.69E-07	-5.812604974
Prkch	2.68E-24	-5.830169111
Psmb8	1.80E-57	-5.836516873
Mgst1	1.30E-28	-5.838966688
Nlrp1b	1.65E-28	-5.842757037
Tmem176a	4.38E-36	-5.849386235
Erg	6.05E-41	-5.855618771
Sell	2.28E-89	-5.860946603
Adgrg5	2.50E-48	-5.890431244
Klk8	1.89E-54	-5.893499812
Armcx4	1.93E-17	-5.898603435
Eif4e3	6.76E-42	-5.926139037
Tlr9	2.06E-14	-5.942042156
Sp100	1.99E-12	-5.959645758
Ptk7	3.54E-81	-5.964517991
Ppfia4	1.19E-20	-5.972785943
Slfn2	5.41E-71	-5.982509455
AI504432	1.28E-39	-5.997226128
Xdh	1.71E-93	-6.004359615
Pear1	6.34E-11	-6.00670687
Camp	3.03E-55	-6.024917232
S100a9	8.22E-18	-6.05230572
Ptpro	2.12E-12	-6.053674248
Vav3	4.63E-62	-6.055446733
Mcomp1	5.48E-69	-6.07416525
H2-Aa	9.16E-14	-6.076635095
Plbd1	3.86E-54	-6.087690668
Slc35d3	9.27E-10	-6.097873848
Id3	2.27E-28	-6.106660949
Ptpn22	1.19E-21	-6.110771879
Clec4e	3.76E-16	-6.127473397
Gria3	5.49E-73	-6.142286381
Ly86	3.54E-17	-6.170140009
Angpt1	5.30E-09	-6.191077336
Tie1	4.67E-53	-6.238383718
Ablim1	1.56E-23	-6.249443286
Sh2d5	2.50E-69	-6.250595089

Olfm4	3.43E-30	-6.262406454
Parp8	2.03E-76	-6.326751369
Tifab	6.67E-51	-6.331078252
BC035044	2.47E-85	-6.334903407
Plaur	1.67E-60	-6.341057924
Cybb	8.75E-135	-6.390532755
6430548M08Rik	7.78E-69	-6.46100073
Cd52	5.09E-28	-6.556870934
Irf8	2.53E-39	-6.564900968
Ms4a4c	3.98E-17	-6.616515284
Clec7a	6.08E-24	-6.617521317
Fgr	5.21E-77	-6.643522039
Il12a	5.58E-24	-6.65587687
Gm1966	4.66E-91	-6.687341498
Pyhin1	1.46E-15	-6.724533771
Afap1l1	5.69E-20	-6.729829697
Gcnt2	2.09E-09	-6.777533728
Emp1	1.06E-24	-6.777565615
Crispld2	1.76E-64	-6.808464735
Mmrn1	2.21E-06	-6.81773174
Mpl	6.93E-25	-6.822063883
Cd93	1.42E-19	-6.834011655
Ifi202b	8.96E-38	-6.882872468
Fgd5	4.62E-08	-6.884959533
Tmem176b	1.36E-73	-6.960724733
Klf4	5.79E-07	-6.963627984
S100a6	5.08E-15	-6.965405783
Bex6	3.72E-32	-7.143784194
Thbs1	2.49E-37	-7.154510398
Ugt1a7c	1.22E-24	-7.188475702
Rag1	3.57E-34	-7.320745392
Cd74	3.99E-35	-7.369551863
Lyz2	2.74E-71	-7.383296395
Serpina3g	1.39E-15	-7.385995998
Adgrl4	3.91E-14	-7.479010006
Chil3	8.27E-20	-7.480382052
Stfa2l1	6.61E-16	-7.571605554
Lsp1	1.61E-68	-7.572061077
Ccr2	5.22E-23	-7.623585703
Gm16897	1.02E-58	-7.709910688
BC117090	6.02E-141	-7.732950663
Thsd1	9.47E-09	-7.820813121
Ngp	1.52E-196	-7.831220153
Stfa3	5.05E-174	-7.859906781
Cd27	1.59E-44	-8.024909539
Ifitm6	7.75E-102	-8.087028832
Cd34	3.59E-40	-8.122015688
Mycn	3.40E-18	-8.136748543
Lcn2	2.20E-189	-8.142838413
Cd177	8.65E-150	-8.223860499
Gimap6	1.03E-26	-8.270255549
Ltf	2.38E-89	-8.359332156
Mmp9	1.78E-147	-8.371934918
Mmp8	1.94E-144	-8.465426994
Flt3	1.04E-97	-8.573030228
Stfa2	5.53E-40	-8.801135334
Retnlg	6.58E-15	-9.047628201

P2 vs P3

upregulated	symbol	pval	log2foldchange.	downregulate	symbol	pval	log2foldchange
	Pdia2	3.50E-06	1.218951013		Atp7b	2.35E-08	-1.526615211
	Slc30a10	1.54E-08	1.492584628		Slc26a1	2.17E-05	-1.108431267
	Abcg4	0.000111318	1.013850659		Gsta4	9.07E-05	-1.01435095
	Gm2061	0.000709415	1.31343226		Epdr1	5.92E-05	-1.067456965
	Nxpe2	2.27E-10	1.631418583		Atp1b2	2.27E-05	-1.090425329
	Redrum	1.19E-16	2.179811514		Podxl	0.026480636	-1.097644009
	Add2	0.000109782	1.349353588		Prss50	0.000472263	-1.109282286
	Tac2	0.043760563	2.058048429		Pawr	2.76E-06	-1.48800532
	Aqp3	0.000818918	0.894292876		Myh10	0.002482364	-0.804966024
	Pklr	0.015950476	0.680561022		Mns1	0.003402833	-0.685596691
	Btnl10	1.22E-29	3.512649957		Minpp1	0.000691963	-0.807779095
	Cldn13	2.04E-14	1.993302998		Them6	0.003205246	-0.750251659
	Plek2	1.07E-20	2.513718223		Mtftp1	0.007101996	-0.734366064
	Hemgn	5.70E-32	3.081618716		Mrpl52	0.00038197	-0.914848567
	6030468B19Rik	2.96E-15	2.070180163		Acsc2	0.002169021	-0.827926151
	Pkhd11	1.83E-06	3.085190615		Bag2	0.022009341	-0.637228671
	Apol8	2.15E-48	4.147179947		Tex9	0.01209816	-0.630013956
	Gfap	1.55E-28	3.391669481		Xrcc5	0.000578666	-0.959181381
	Mrap	8.78E-08	1.551125659		Mmp14	0.007082718	-1.492995756
	Popdc2	8.33E-17	2.693581718		Eef1e1	0.002195485	-0.789722934
	Dmtn	1.92E-19	3.709857796		Klhl23	8.11E-06	-1.150980941
	Tspan33	2.99E-16	2.068605806		Eif2b3	0.024619269	-0.600561919
	Mt2	0.00075814	2.111768635		Ahctf1	0.035908929	-0.615872973
	Lmna	1.28E-10	1.620292194		Gfer	0.020645144	-0.632811889
	Cpox	7.47E-10	1.517985982		Pdk1	0.005151048	-0.710137049
	Klf1	2.13E-06	1.16989517		Oxnad1	0.025657224	-0.616435017
	Slc38a5	9.08E-10	1.60357966		Eif2b1	7.50E-05	-1.047385729
	Slc39a8	0.000268344	0.863094719		Zmynd19	0.00106252	-0.820679508
	Dnaja4	1.22E-05	2.829552382		Nol10	0.004131123	-0.771449794
	Icam4	3.02E-16	2.094396165		Bms1	0.025462598	-0.758278539
	Myl7	1.65E-15	3.156329336		Setd6	0.00777126	-0.761170493
	Camsap2	0.001675786	0.744170699		Guk1	0.016747577	-0.619560292
	Alad	1.63E-12	1.756621194		Fbxo10	2.40E-05	-1.185086143
	Tgm2	3.60E-08	1.47031936		Noc4l	0.000331987	-0.914752263
	Wnk4	1.46E-05	1.843498798		Bcl11a	0.001106422	-0.825741647
	Mpp2	1.08E-11	2.178019034		Rpia	0.006994216	-0.645173689
	Nipa1	0.00029567	0.923307754		Dis3	0.023357321	-0.724442896
	Icam5	0.001770529	1.486515978		Sf3b4	0.004588884	-0.736245766
	Epor	0.00035814	0.887124937		Abcf1	0.013376986	-0.610160153
	Adra2b	5.77E-56	5.124205577		Dut	0.031040296	-0.623564451
	Slc6a9	1.14E-12	3.808524765		Eif3g	0.016397791	-0.601281301
	Fads3	0.002084011	0.802432564		Gnl2	0.004835415	-0.727930185
	Gpr155	8.41E-06	1.241696047		Abcf2	0.007526551	-0.673494986
	A230056P14Rik	0.000224014	1.040087042		Nop58	0.000343245	-0.877916857
	Snca	2.64E-08	4.618467763		Nop56	0.00413424	-0.706946875
	Hebp1	3.75E-06	1.192166815		Exosc2	0.007809879	-0.686363627
	Mboat2	3.85E-05	1.253624642		Abt1	0.010011559	-0.74239784
	Tfrc	3.75E-06	1.835916247		Nop9	0.003409903	-0.755270184
	Fech	2.67E-06	3.025601387		Med22	0.007082547	-0.72104024
	AA986860	3.36E-12	2.010373527		Cct2	0.01482104	-0.609699143
	Phlda3	1.68E-05	1.157364272		Ecd	0.009089717	-0.688585844
	Tmem120b	6.24E-07	1.69351978		Uba2	0.008826677	-0.657837413
	B3gnt3	9.29E-06	3.450191305		Atp13a3	0.001212519	-0.884604046
	F830002L21Rik	6.11E-10	5.205053206		Pa2g4	0.006361084	-0.645940918
	Hcn3	0.002350371	1.079475408		Znf512b	6.42E-06	-1.435655289
	Uros	4.34E-17	2.212467131		Ppm1f	0.00019959	-1.155489926
	Zdhhc14	4.87E-05	1.172583033		Megf8	7.55E-05	-1.386163581
	Fam132b	0.044874765	1.347458009		Pdxk	9.07E-09	-1.665597374

Mgst3	2.45E-28	2.986804427	Ptpn7	1.15E-08	-1.486729732
Mt1	3.31E-05	1.475593054	P3h1	0.010752624	-1.020318473
Ntn3	0.001125111	1.213811542	Acads	0.000291164	-1.052972073
Abcb6	5.56E-09	1.465850899	Tspan6	0.000642167	-1.448439374
Rfesd	4.05E-05	1.104150412	Tcf4	0.010618273	-0.834867436
Neu3	0.007051297	0.782375266	Prrc1	0.000509167	-1.057492362
Mllt3	0.00085929	1.675102698	Elov15	5.72E-07	-1.399927609
Arrb1	0.000550832	1.471706067	Ptov1	0.001061341	-0.901876599
Slc11a2	0.006888243	0.656548266	Kit	8.15E-16	-2.176313479
Gata1	0.000141479	0.929937823	Tyk2	0.002903544	-0.837005608
Josd2	5.93E-16	2.091576532	Hadh	0.013350118	-0.697134945
Gmpr	1.73E-17	2.750676306	Gpi1	0.000108026	-0.976848402
Hdac11	4.67E-08	1.616357429	Mapre2	0.000123011	-1.066410097
Abcb10	4.66E-24	2.616410235	Stat6	0.002349382	-0.83067019
Slc25a38	8.36E-09	1.484347203	Fyb	0.026610349	-0.636098571
Samd14	7.66E-09	1.447484913	Ssfa2	0.012756784	-0.79215672
Lrrc56	0.040905727	0.682611375	Impdh1	9.74E-06	-1.348154825
Sh3tc2	3.33E-33	3.906366705	Pdia5	0.045370876	-0.766268339
Dpf3	0.001096458	1.42872982	Glyr1	0.015807747	-0.655762214
Ptdss2	3.04E-08	1.409795207	Sema4d	1.50E-06	-1.363640792
Tlcd1	1.65E-09	1.629202857	Slc35c2	0.017757652	-0.761796023
Alas2	3.09E-07	5.663214705	Pcyox1	0.010501579	-0.695445734
Otub2	1.16E-09	2.261515263	Tbl1xr1	5.71E-06	-1.322462537
Smim1	0.000390958	0.895513501	Gimap9	0.000316141	-1.563741893
Tal1	2.83E-08	1.784940758	Rftn1	5.26E-06	-1.565574804
Prdx2	9.89E-21	2.381561431	Ptpn9	0.005604609	-0.929452534
Sorbs1	8.04E-12	1.901404157	Pank1	0.005500796	-1.076953083
Endod1	1.14E-08	2.207717658	Ocr1	0.013247663	-0.905050214
Parvb	2.60E-06	1.229770868	Unc119	5.33E-05	-1.15986197
Ache	3.79E-13	3.592747946	Kdm5b	0.000105357	-1.155126017
Zfpm1	7.33E-07	1.194953124	Gpd1l	0.000190271	-1.073332462
Grtp1	0.012695217	0.988520367	Pcyox1l	0.000416629	-1.166881568
Dnajb3	4.51E-07	2.515638702	Myb	5.49E-13	-1.902905948
Kcnn4	9.74E-06	1.099908106	BC037034	0.000193388	-1.045275743
Scrn3	0.000907645	0.89085096	Kif13a	0.017392376	-0.798318882
Chchd10	0.001648403	0.830977835	Zmym3	1.98E-05	-1.269914812
Ccrn4l	2.48E-07	1.477436721	Kctd10	0.023500228	-0.637992032
Pnp0	5.77E-10	3.466174941	Rab38	7.38E-05	-1.668117983
Lpcat1	1.31E-07	1.348824703	Ergic1	9.35E-06	-1.280036294
Tbc1d24	0.004343064	0.696569099	Bst2	0.00522494	-0.941114926
Iba57	0.012908529	0.659850912	Arf3	0.000958061	-0.8700752
Nmnat3	4.52E-06	1.244024704	Por	0.035066887	-0.600147951
Tnfrsf14	3.97E-20	2.646886797	Fam65a	1.62E-07	-1.490510084
Prokr1	0.031029594	3.294527337	Clstn1	0.013867254	-1.175193281
Cyb5r3	0.001073047	0.816990103	Mlxip	0.001143695	-0.951222665
Ppox	1.06E-22	2.596469483	Dlg3	0.019408527	-1.108660782
Gypc	2.77E-19	2.276364675	Cbx2	3.95E-06	-2.063022923
Isca1	5.89E-12	1.853077507	D630045J12Rik	0.000736939	-2.169155412
Clic4	1.85E-07	1.271897205	Stx4a	0.024838975	-0.665674953
Lrrc20	0.01870618	0.601849285	Pde4a	0.000390369	-1.64483996
Cep76	2.06E-13	1.853967385	Cryl1	0.036021268	-0.769173882
Cdc42bpa	0.00160625	0.887862686	Tmppe	0.00013197	-1.499761112
Atp2b4	2.50E-05	2.420224142	Pde4b	0.000235313	-1.474850498
Cdr2	0.000293179	3.640357016	Lpar5	0.006047466	-1.364180344
Slc16a6	0.001338347	0.798877443	Ripk3	0.001501192	-0.952589662
Xk	0.00022365	1.631990433	Ppic	0.000748214	-1.181577622
Usp45	0.001007387	0.953421502	Cmtm6	3.74E-05	-1.176278479
Cecr2	0.003554469	1.239758805	Impa2	1.55E-05	-1.381896585
Mfsd2b	0.000133638	0.931375329	Clic1	0.00146472	-0.791171321
Adcy6	0.001262806	0.826920417	Tmtc4	0.003966225	-1.480527362

Tbc1d12	0.00442309	0.956148584	Cnp	0.001840861	-1.074094388
Prdx3	0.001150175	0.804614591	Tpst2	0.041899853	-0.622930998
LOC100503496	0.002371912	0.797220122	Trim35	3.88E-07	-1.494514583
Tom1l1	2.05E-09	1.562643605	Pdcd4	0.003432035	-0.999746397
Tmem14c	4.78E-06	1.191058202	App	0.035034215	-0.671300411
Mtfr1	2.17E-08	1.418956016	Phc1	0.002259994	-1.078451974
Pigq	7.65E-16	2.360378296	Prkra	0.015242061	-0.943764454
Smim5	0.000599651	1.010739931	Erlin1	3.53E-06	-1.434147514
Rrm2	1.19E-06	1.21997708	Crtap	0.001568865	-1.147678981
Fth1	3.08E-13	1.807446495	Cd44	8.43E-05	-1.17726628
Mthfd2	0.002218561	0.733986884	Pla2g4a	0.04558235	-0.610122822
Gm5088	0.009354576	0.62052787	Mboat7	2.31E-05	-1.349336414
Fam213a	6.33E-06	1.155473684	Gna15	6.65E-06	-1.618305226
Fam109b	1.79E-08	1.44904601	Sptssa	1.61E-05	-1.258689178
Polq	0.046830978	0.610834489	Arap3	2.28E-11	-1.923599802
Hs6st1	6.07E-11	1.925108671	Prkx	0.004821854	-1.247847517
Abcg2	2.20E-22	2.512245672	Mmgt2	0.000396577	-1.332412846
Trim58	0.001823185	2.60628476	Gcat	0.012625201	-0.889978931
Slc25a42	0.030899908	0.609966286	Irf2bp2	0.016405794	-0.66669487
Slc46a3	0.031874964	0.637146439	Rinl	0.000334031	-1.153450814
Eif5a2	1.10E-06	1.872378904	Sh3bp1	0.000389416	-1.010758355
Pbx3	1.63E-06	1.316249208	Socs5	0.045382015	-0.879093617
Gpsm2	5.75E-10	1.628990998	Ttc21b	0.005034035	-1.324286694
Ampd3	3.05E-05	1.027099604	Pkm	7.96E-05	-0.953319454
Stx2	2.10E-06	1.205983494	Ptk2b	0.002120064	-0.825385689
Slc43a3	9.91E-09	1.411950705	Itpr1	0.028618344	-1.052209059
Wipi1	4.02E-05	1.151571227	Ccbl2	0.000842897	-1.449164155
Pla2g16	2.43E-17	2.306746828	Zfp629	0.000991767	-1.261013634
Apeh	1.44E-09	1.512265802	Mlycd	0.006509357	-1.280335071
Psd	0.000270997	1.262973463	Nxn	0.000225481	-1.256297132
Kctd7	0.001573254	0.927655734	Tbc1d9b	0.025807767	-0.625396748
Pycr2	0.001657278	0.784999193	Orai3	0.01076311	-0.918288256
Cep290	0.000345172	0.923567591	Pdia4	0.005515181	-0.834598489
Slc20a1	7.17E-06	1.63141016	Prkd3	0.000872584	-1.040563201
Dhrs13	0.002535104	0.838851126	Dock5	0.001208828	-1.589130945
Lrrc8c	0.00806316	0.684210624	Hook1	0.014334162	-1.05473404
Cercam	0.000144398	0.982911441	Atxn10	0.008404639	-0.698308134
Cltb	1.16E-10	1.72853403	Acot7	7.88E-05	-1.246296421
Ufsp1	4.59E-08	1.974802995	Arl10	0.010393464	-1.518357369
Sepw1	0.00608719	0.696893461	Spint2	2.82E-07	-1.80867715
Ank	3.29E-10	1.599381195	Zbtb12	0.001356691	-1.11474426
C130083M11Rik	0.025924874	0.979402346	Hes6	0.000232091	-1.114708571
Usp49	0.000215729	0.977542116	Tgif1	0.016977075	-1.023123033
Phospho1	0.00669249	4.100679	Psd4	0.000747218	-0.906935419
Pcyt1a	0.002904056	0.706241539	lqce	0.010577104	-1.038223456
Pla2g4c	0.008018427	1.12426814	Zfp422	0.000799052	-0.958137829
Ap1b1	0.001095659	0.784201824	Srpk2	0.030277463	-0.641522455
Ormdl3	1.24E-06	1.320696135	Usp11	0.001167842	-1.079699426
Dusp1	6.81E-26	3.018202702	Nfkb1	1.37E-07	-1.518421841
Sp4	0.030970461	0.657270101	Runx3	0.004688314	-1.69952251
Acp5	5.66E-06	1.64977285	Sema6b	0.009155167	-1.363004531
Cox11	0.0025508	0.872722145	Def6	7.38E-10	-1.846569119
Tmem9	3.89E-05	1.064733882	Fam49b	0.003217428	-0.755416354
Capn5	1.14E-07	1.879025736	Pgd	0.01457384	-0.611737086
Mybl2	0.00113135	0.821763149	Aldh3a2	0.005964761	-0.976024433
Psmf1	0.002660349	0.810447578	Add3	0.010645229	-0.732654769
Picalm	1.38E-16	2.064831986	Samsn1	0.001486889	-0.916067499
Fn3krp	4.99E-08	3.165773088	Bmyc	0.010961956	-1.208943044
Cox6b2	0.000232868	0.983910983	Rilpl2	0.004843817	-1.080753161
Caskin2	0.000720207	0.956859706	Pkn1	0.025608847	-0.642786047

Mkrn1	9.86E-08	3.452858241	Extl2	0.020251335	-1.252427125
Nt5c3	6.16E-05	2.41107544	Prodh	0.001071627	-1.286186178
Ccna2	4.79E-07	1.243376958	Ifngr1	0.000528502	-0.973362929
Nek8	0.001910782	1.002104848	Mlec	0.008473661	-0.686139955
Prkar2b	3.94E-06	1.144187357	Rfx5	0.044059348	-0.804037509
Donson	3.67E-07	1.327909137	B3gnt2	0.000321065	-1.161112164
Hmmr	9.46E-08	1.335011337	Rnf219	0.001277632	-1.210605881
Cep104	0.009247361	0.654398177	Shmt1	0.01464138	-1.026704928
Asb6	0.01789627	0.623664309	Slc39a11	0.000132993	-1.39433495
Pqlc1	4.35E-08	1.413040746	Fzd8	0.04116689	-1.892729187
Gps2	8.94E-06	1.167172197	Repin1	0.00143309	-1.337945214
Epb4.1	0.005812499	3.153310903	Lgals9	0.040680658	-1.107337635
Fnip2	0.006699715	1.450148617	Dnmt3a	0.024102376	-0.644228007
Dek	1.36E-05	1.101729303	H6pd	0.003147529	-1.134646712
Senp2	0.001945256	0.781625338	Atp11b	0.032784878	-0.601864136
Gclc	2.41E-06	1.20364208	9930014A18Rik	0.030504823	-1.219373214
Mgll	5.36E-27	2.940851776	Ube2d1	0.013263288	-1.186322462
Gen1	0.003704487	1.06312875	Mex3a	0.000229733	-1.456035112
Zbtb7a	2.93E-07	1.248344142	Inpp5d	0.003000884	-0.828447643
Ccne2	0.001901212	0.790196235	Plxnc1	0.005076819	-0.982562095
Mier3	0.00579465	0.6911135	Tagln2	6.86E-07	-1.289270883
Nek2	0.016439025	0.619884257	Il2rg	0.009137416	-0.944908227
Natd1	2.58E-17	2.355569928	Shisa5	0.013295252	-0.777554293
Dck	2.07E-07	1.332139859	Hk2	0.001064334	-1.049405772
Tubb4b	0.002369981	1.094422329	Tmem184b	0.007856656	-0.872148969
Arrdc2	5.58E-11	1.945249006	Arrdc4	0.022570653	-0.973986436
Fam46c	0.002946515	5.283032158	Tspan5	0.025265527	-0.900369817
Kif18a	1.19E-10	1.712819056	Icam2	0.013789133	-0.998263126
Trappc10	0.003368487	0.700726576	Nnt	0.002500444	-0.926319053
Tceal8	0.0011307	0.907470762	Igf2bp3	0.008902134	-0.744418895
1600002H07Rik	0.00072538	0.986085525	Nin	2.51E-06	-1.37923403
Cep70	5.31E-05	1.097139855	Tcea2	0.002633658	-3.973591851
Smc2	0.00010797	0.919790396	Nlgn2	0.006493771	-0.971907909
Cenpp	0.022573252	0.666096807	Lrp5	0.007806566	-0.834880528
Psrc1	0.00020869	1.085172756	Lrmp	0.002647476	-0.813392747
Exosc9	0.005108775	0.720545834	Pycard	0.045163493	-0.656612683
4933428G20Rik	2.87E-06	1.619140269	Bcl9	0.000133754	-1.463757333
Ccp110	9.40E-06	1.127621844	Pigx	0.029770828	-0.924318725
Slbp	0.002862775	0.797370923	Fnbp1	0.007811441	-0.806870631
Ncapg2	4.39E-05	0.995864667	SEPT9	0.000667498	-0.947968855
Eaf1	2.35E-05	1.035798517	Map4k1	0.008844869	-0.962867855
Fbxo5	8.93E-05	1.050319218	Stk26	1.50E-05	-1.480874458
Fbxo9	7.44E-07	1.730270559	Abhd17b	0.017844611	-1.053865242
Arhgap21	0.004668789	0.993494446	Pbxip1	0.033285895	-0.630486678
Dnajb2	2.23E-07	3.902711123	Csnk1e	0.007814784	-0.987035828
Ndrg3	0.001161894	0.786528221	Kcnab2	3.63E-07	-1.450426255
Arhgap23	3.61E-11	1.673093877	Lipe	0.010993136	-1.184162748
Usp7	9.73E-06	1.075445713	E130012A19Rik	0.017190655	-1.388391723
Mast2	0.01082521	0.865894237	Pafah2	0.004062302	-1.075515634
Nme3	0.024095706	0.736981886	Iqgap2	0.042945322	-0.648678701
Prkab1	0.01102889	0.650779994	Slc37a1	0.045049838	-1.049669066
Rfk	0.005026415	1.101432487	Atp11a	0.032491403	-0.842662149
Zdhhc24	3.06E-06	1.265130276	Ttc7b	0.022147012	-0.878763394
Agfg2	4.31E-11	1.729529104	Etv6	0.00282607	-0.895912701
Plk1	0.000980589	0.836445697	Rassf3	0.003577139	-0.946214318
Trmt12	0.00389236	0.878437844	Zdhhc20	0.035619623	-0.750299519
Pcna	0.007593308	0.906593277	Znrf1	0.017565583	-0.69410014
Akip1	0.038367324	0.618413921	Fam46a	0.048065318	-0.860528674
Atg4b	0.000841513	0.886998362	Cbx4	0.005749254	-1.095935798
Gcdh	0.003316556	0.824339386	Lmo4	0.03049391	-0.625443879

Ska1	0.000135186	1.031385162	SEPT6	0.002002021	-0.958222855
Wdr81	3.42E-06	1.179190638	B4galnt1	0.000933426	-0.919468668
Aurka	1.03E-07	1.356086671	Prr5	0.007014893	-1.35789029
Atl2	0.005094106	0.71568888	Emp3	0.027087163	-0.709145544
Vopp1	9.27E-19	3.305073384	Panx1	0.025334505	-1.162589965
Htatif2	1.14E-05	1.169559101	Mfng	0.004059176	-1.106052062
Rb1	7.01E-19	2.319410062	Kif21b	0.017033583	-0.750100418
Epn1	0.004177526	0.707577915	Dnmt3b	2.38E-05	-1.362793081
Ccnf	5.30E-08	1.37425132	Ptprs	0.004736486	-0.939199015
Ccdc34	0.027600526	0.64246745	Fam69b	0.031396665	-1.688685498
Lrba	0.011304011	1.018978231	Arhgap9	0.011444275	-0.76596899
Galnt10	9.39E-09	2.051266109	Frmf7	0.031595976	-1.224160675
Cdyl	0.006433379	0.72166017	Gramd1a	0.027443365	-0.791016183
Fam78a	6.80E-08	1.369020503	Anxa11	0.021719945	-0.917113437
Tmc6	3.35E-06	1.428031091	Cers5	0.016550293	-0.99387669
Med19	0.000440643	0.948184187	Pik3cd	0.01456757	-0.711013527
MARCH2	1.02E-09	3.578741514	Cd37	0.036960473	-0.700326506
Oard1	0.011096177	0.712841804	Ptprcap	9.82E-05	-1.459835557
Usp15	0.001722241	0.734036961	Abca2	0.006430005	-0.919155356
Kif4	1.75E-08	1.411170656	Spns2	0.002980962	-1.001790043
Gid8	7.90E-12	1.767363576	Rasal3	0.004139361	-1.105438787
Katnal1	0.001613123	0.949034488			
Bysl	0.002747607	0.773383802			
Kif14	1.74E-10	1.627906779			
Gins4	0.004724418	0.771383659			
Bpgm	0.001653522	4.505688486			
Oip5	0.004806304	0.802288809			
Cenpk	0.003362636	1.049650817			
Dnajb1	0.000402824	0.877822924			
Dbf4	0.01186379	0.653441648			
Tmx1	1.34E-06	1.193046635			
Psme3	0.002544584	1.202971174			
Diap3	0.000218098	1.455955312			
Dyrk3	0.026110072	1.751201953			
Gins1	0.019029885	0.662148724			
Tyms	0.001652374	0.851353851			
Pon2	2.92E-05	1.109912267			
Prim1	0.01091296	0.658379967			
Pkn2	6.89E-05	1.337378169			
Blm	1.40E-05	1.065397961			
Atp8a1	0.003145335	0.728695069			
Trim56	0.016663523	1.866676376			
Glcc1	9.66E-05	1.502258282			
Gm16982	1.30E-05	1.273561554			
Zfp672	0.000494614	0.959489798			
Atf4	0.00286454	0.743706962			
Enpp4	0.014086157	0.625244248			
Mrpl53	0.007685035	0.800306022			
Ncapg	3.34E-05	1.011765221			
Kdm1b	4.18E-05	1.08517723			
Brca1	0.001778301	0.774069991			
Cenpl	1.08E-09	1.669812815			
Ikzf5	0.001207647	0.927760519			
Pif1	2.01E-07	1.420750095			
Kntc1	1.88E-05	1.053897882			
Ankle1	5.60E-12	1.85695838			
Parppb	1.60E-05	1.147818932			
Rbm15	0.006098174	0.735742232			
Nptn	0.001309265	0.833316662			
Nrf1	0.000238103	0.941126434			

Suv420h2	0.000113398	0.940160764
Polh	0.002044838	0.993301418
Mrm1	0.00029367	0.984689178
Espl1	0.000480969	0.835330307
Birc5	1.15E-05	1.14651472
Creg1	2.80E-05	2.069701299
Tmc8	1.63E-08	1.489308778
Pole4	0.02595472	0.631535769
Figl1	3.65E-06	1.169381844
Mavs	3.20E-07	1.574758831
C2cd2l	9.78E-12	2.349676398
Cep295	0.010210215	0.692608753
Rnasel	2.50E-19	2.458066166
Kat2b	0.000293665	1.037424169
2700029M09Rik	0.014649471	0.659468236
Mrpl14	0.016988349	0.700910674
Acadl	0.00970482	0.693098458
Ankrd54	3.19E-05	1.116584588
Dsn1	0.001064965	0.871238423
A430005L14Rik	0.001737116	0.995109382
Gtpbp1	0.006966549	0.641115532
Ap2a2	3.13E-06	1.138539089
Bard1	0.015439607	0.616858315
Rhbdf2	1.44E-07	1.504382832
Pim1	9.47E-05	3.579480197
Chd2	0.035406838	0.94539652
B4galt1	0.009288418	0.636754603
Klf13	9.43E-05	0.995100346
Malat1	1.19E-13	2.550463205
Prr13	0.018143855	1.065211873
Rit1	0.009096474	1.91960271
Neil3	8.35E-21	2.687526997
Bcl2l1	0.000136395	4.504699417
Pkmyt1	5.82E-06	1.279539667
Gabarap	1.14E-09	1.562070755
Ube2b	0.00060681	1.509209159
Reep5	1.40E-06	1.303065742
Ezh1	0.016448752	1.245229676
Cables2	0.010213229	0.868044186
Pip4k2a	8.81E-06	1.730067391
Atp6v0d1	1.31E-09	1.579801745
Acsl1	0.003758332	0.718770916
Map3k1	1.51E-05	1.34086597
Xpo7	0.00185866	4.925416835
Trim26	5.73E-08	1.653711562
Tmcc2	7.18E-05	5.795469038
1810058I24Rik	3.83E-08	3.004441092
SEPT1	0.00104451	0.933075766
Abhd4	0.003938521	2.153127919
Rsrp1	0.001126202	1.33629881
Ccni	0.000455517	0.952871785
Pink1	0.005070146	1.658203648
Glipr2	0.00012066	1.05111376
Lats2	4.32E-11	2.078502975
H2afx	6.01E-20	2.422335885
Gp5	0.001729661	1.312195279
Ube2h	0.000167917	3.703062556
Cmas	2.30E-06	3.908442012
Trim12c	0.032397379	0.726942561
Sertad1	1.07E-07	2.54512575

Snx21	0.001000325	2.417687623
Adrb2	4.79E-05	4.241973353
Grap2	1.48E-05	5.589894728
Col4a2	0.003464048	1.250350703
Abtb1	3.82E-06	2.336546217
Ifnar2	2.17E-05	1.157839272
Sgk3	1.96E-22	2.71616867
Calcoco1	0.000994497	2.220440062
Stk17b	9.67E-05	1.940360298
Tspo	2.92E-14	2.029477573
Glrx	0.000168398	2.627931308
Epb4.1l2	0.011886539	0.724842236
Serpinf2	2.23E-20	4.322596817
Pnrc1	1.04E-06	1.772242919
Padi2	1.14E-07	2.444884316
Afp	6.03E-53	4.664472487
Itm2b	0.022766506	0.613125159
Msr1	9.33E-07	2.194661944
Axl	6.68E-08	1.960336875
Col6a3	0.001920971	3.023057942
Rsad2	2.65E-13	7.28909213
Nid2	0.000130029	1.920255346
Fam214b	1.19E-07	6.459404275
Ypel5	1.90E-06	4.018366725
Fermt2	0.000147572	3.11723536
Gatm	0.003346786	0.872620212
H19	1.67E-37	3.594841249
Apob	4.03E-21	4.825272589
Dusp3	9.36E-05	1.740695749
Pea15a	0.000936557	1.606118575
Psap	6.87E-05	1.031952349
Akap13	0.006189128	2.37576856
Pde5a	1.36E-06	2.506617911
Hist1h2bc	2.65E-22	4.114610311
Sepp1	1.26E-16	2.309669198
Hfe	0.009193162	1.71881178
Slc11a1	8.90E-05	1.749342323
Epas1	0.017999056	2.864009825
Bin2	0.006308339	0.796457916
Acot11	2.59E-08	4.543111159
Gdpd3	2.19E-08	2.342795286
Fcgrt	1.91E-07	2.378049857
Ifi27	0.007945379	1.545821877
Grn	9.65E-07	1.400234941
Btg1	0.004675385	1.470553546
Ypel3	1.61E-05	4.330781862
Ppap2b	0.011301029	2.385900328
Dlk1	3.12E-11	2.16730642
Slc37a2	0.000707455	2.051388724
Trf	5.55E-12	3.253604336
Lrp1	5.20E-07	1.719685054
Maged2	0.003671016	1.272274611
Col18a1	8.02E-05	1.761199737
Mtss1l	5.88E-05	2.393954349
Apoe	7.41E-06	1.55214812
Irf7	0.000891531	1.985648962
Tnfaip8	0.000829678	1.040632981
Tubb6	0.00097076	1.702480647
Anxa5	0.002630788	1.28262067
MyI9	1.18E-15	4.844302292

Grcc10	0.043425681	0.81561072
Lima1	0.001150676	2.07507082
Slc7a8	1.39E-06	1.760615104
Itga2b	5.75E-13	2.894626056
Camk2d	0.009427828	1.494805443
Smtn	0.013404174	1.12643555
Itgb5	6.14E-07	2.168876938
Cfp	0.001216736	1.323907511
Med12l	0.008949974	1.729121728
Slc8a1	0.000248738	1.965722091
Igf2	1.38E-44	4.519493831
Tspan9	0.002637099	2.488666442
Gbp2	0.009586974	1.656896621
Dock1	0.02275496	1.029673253
Rab27b	8.86E-11	3.235177289
Raph1	0.03333392	1.31874154
Mest	3.41E-16	3.149894595
Gpx3	8.20E-05	1.721930921
Bzrap1	0.00665066	0.994071806
Hspg2	9.87E-07	2.846700887
Oit3	0.005897569	2.783436003
Cd300a	0.000934612	1.497913036
Neat1	5.18E-16	2.842955067
Marcks	9.09E-14	2.583218654
Tgfb1	8.46E-05	1.799379896
Arl4c	0.008253473	1.456658285
Inf2	0.01297649	1.141371421
Alox12	1.72E-19	5.279471622
Rhobtb1	0.047010289	1.851081805
Aldh1b1	0.010279666	2.400038346
Myom1	0.018164353	1.566363105
Fos	0.020663081	1.756280882
Rhob	0.004270935	1.148939761
Ldlrad4	8.68E-15	5.377199055
Tuba8	0.020631019	1.449441907
Lpp	0.001538013	2.221981169
Gnaq	0.012070084	0.974124144
Bank1	0.000122268	2.742836586
Basp1	0.000805402	2.237302909
Slc15a3	0.011776752	2.012903592
Itgb3	1.71E-32	4.028716754
Cfh	0.000369346	2.274528834
Klf6	0.00014191	2.259901721
Vash1	0.004209535	1.394205535
Abcg1	0.001785915	1.229013928
Tnfrsf1b	0.006289868	1.00526172
Icam1	0.000259598	1.900235215
Sun2	0.000176243	1.030983396
Kcnk6	1.14E-06	2.436799463
Csf1r	7.31E-11	2.252906262
Gnaz	4.98E-08	4.28310002
Amotl2	0.000297647	2.739797124
Krt18	0.002758086	2.188909692
Aif1	9.22E-06	2.912628403
Syk	0.0012443	0.962258815
Arhgef3	0.01408005	1.159981984
Tcp11l2	5.98E-05	5.70206374
Palld	0.005929265	2.524800288
Nfic	0.003052247	1.458378336
Tmem50b	0.002816078	1.330365734

Tec	0.03135712	1.369705674
Tcn2	0.00425661	1.162418399
Cd9	4.50E-06	1.941546538
Flt1	0.009559803	2.935376057
Dbn1	0.005209788	2.325437388
Ccl6	0.039702465	1.383578426
P2rx1	0.026227398	1.110203099
Ndrp1	0.001155967	2.055568132
Gpc3	1.16E-08	2.843038776
Emilin1	0.044373125	0.680412723
Trim14	0.022367828	1.271869773
Kifc3	0.006689195	1.968149955
Atp2a3	0.001351452	0.956765716
Pla2g7	0.014035587	1.863449275
Rab32	4.97E-07	1.932077261
Ptms	0.000102545	1.923115785
Jup	0.000359101	1.696604372
Arsb	0.01018077	0.895855285
Pld1	0.003197139	1.87987563
Dusp6	0.010059906	1.404040823
Ap1s2	0.009348036	1.308754668
Fam105a	0.039136998	1.239055205
Ptgs1	4.01E-06	1.657426473
Hip1	5.01E-05	2.322603783
Plekho1	0.000261534	1.586522591
Tpm4	8.75E-09	2.70383648
Irf2bpl	0.011585805	1.943575342
Sptbn1	0.009322152	1.06488094
Myo1b	0.043073967	2.226272617
Arhgap31	0.001758869	2.758837607
Sema4c	0.007719343	1.668229663
Ctss	9.88E-06	2.380937095
Clec4a1	0.012654607	2.171452431
Filip1l	0.000344909	2.088394456
Pik3ap1	0.001165715	1.352173558
Actn1	5.28E-12	2.243076902
Nfkbie	0.048425305	1.6748416
Lcp2	1.79E-07	1.979211199
Cotl1	1.05E-05	1.294367967
Stab2	1.10E-08	3.824677332
Ptprf	2.65E-06	3.279501044
Arhgef17	9.50E-07	3.5944985
Rgs18	0.000698248	1.578327198
Bin1	6.98E-05	2.031111782
Sparc	1.42E-13	3.855543429
Zyx	6.54E-06	1.369142053
Myo7a	0.003863367	1.22046587
Dtx4	0.009624655	1.512081637
Il4ra	0.002280664	1.827137211
Zfp36	0.001520835	1.631336735
Fcgr1	8.93E-05	2.261551409
Mrvi1	1.99E-15	4.567388058
Ccr5	0.000829425	2.354820328
Tmsb4x	1.58E-10	1.713797396
Pstpip2	0.001911606	1.437931399
Snn	0.001526406	2.016626056
Tfec	0.017745887	1.423839955
Cmtm3	0.002404199	1.727130248
Capn2	1.88E-07	2.538900152
Flt4	2.63E-05	4.015997775

Tyrobp	0.022108596	1.286908118
Ptpn18	0.016284825	1.207752893
Plxnd1	2.93E-05	2.802476067
Adgre4	0.01263817	1.971302466
Aim2	0.000525053	2.103851206
Pmaip1	0.048909506	1.48990067
Hdac9	0.002059506	2.25528132
B430306N03Rik	0.034703579	1.355223777
Sirpa	7.68E-12	2.009699262
Itgal	2.74E-06	1.458202819
4632428N05Rik	3.76E-18	2.589816902
Itpril2	0.012522105	1.043829917
Prkcb	0.001264333	1.458929071
Sash3	0.036828858	0.734556629
Cd53	0.012735029	1.005305979
Igsf6	0.010140879	1.025653556
Myadm	0.026630208	0.906770263
Abr	0.002025139	1.200145448
Dok2	4.38E-05	1.987132676
Evi2a	0.008705302	1.722066709
Dchs1	0.001159788	3.613860594
Cplx2	0.029839317	2.346566198
Parvg	0.000187328	1.269525696
Ccng2	0.005548796	2.949698251
Gsn	0.009087554	1.303805599
Smad1	0.001591555	2.252601712
Man1c1	1.94E-05	2.011659539
Mpo	0.0082384	0.717476999
Cnn2	0.000156629	1.231583528
Ms4a6d	0.000325218	2.84926714
Gm2a	0.000716671	1.461938398
Fmn13	0.000216785	1.805749185
Soat1	9.03E-07	1.994881955
Nlrp3	0.044385727	1.633081586
Rogdi	0.000652229	1.528988675
Lcp1	1.46E-06	1.330974011
Capg	0.046161031	0.923053057
Gpr160	0.02748997	1.562099946
Tnfrsf1a	0.000138187	1.495372725
Trim30a	0.000370239	1.861957533
Kctd12	1.92E-08	1.740100364
Laptm5	8.83E-07	1.407180646
Rasgrp2	3.34E-07	1.946467644
Plcb2	0.033879537	0.865628838
Ephb4	1.06E-05	3.974502957
Tnfaip8l2	0.009443651	1.452711288
Fcer1g	0.02542954	1.793297644
Appl2	0.008191878	1.955581412
Rab31	0.004468099	1.207285397
Arhgap25	0.002581304	1.667138815
Sh3bp5	0.000112455	1.784490592
Hck	0.000111187	1.816422218
Il13ra1	0.001446719	2.247935065
Acvrl1	0.003487894	2.376020189
Rin2	2.48E-05	2.4762402
Pld4	3.73E-07	1.840135267
Kdr	3.80E-07	3.682818121
Rassf2	0.021394459	1.019184197
Abcd2	0.01770669	1.245581753
Ms4a6b	2.95E-05	2.878287455

Plekha2	0.001566959	1.548359082
Arhgef6	0.002608723	1.236469672
Fgd2	2.25E-05	2.121109426
Tbkbp1	0.001886631	1.501012697
Rarg	0.017550886	1.940315907
St8sia4	0.010615291	1.060441408
Tlr2	0.001081418	1.987959253
Obsl1	0.040654674	1.538389695
Ncf2	0.038553879	1.271699698
Fli1	0.000263166	1.686877654
Cyp27a1	0.008429955	2.62622172
Adam15	0.000200165	1.61231451
Rin3	0.001674517	1.188531393
Hlx	0.010012179	1.750408911
Sptan1	2.35E-07	1.843311029
Cytip	0.045798628	1.296486385
Wdfy4	0.000728137	1.184993058
Nuak2	0.032927793	1.965984813
Pde2a	0.014375362	1.125925072
Spi1	1.63E-05	1.500784642
Pbx1	0.003057742	2.303966452
Igfbp4	9.13E-10	1.862628708
I830077J02Rik	0.001793029	2.32014719
F5	1.69E-06	2.239253345
Zfp467	0.009542579	2.047212554
Grap	0.038414425	1.489486614
Mpeg1	1.70E-15	2.482655343
Paqr7	0.012083344	1.899101709
Arhgap27	0.034538037	1.240595341
Meis1	0.006562723	1.809157919
Col4a1	1.75E-15	4.531532071
Plek	2.16E-23	3.332983013
Fam49a	5.69E-05	2.903760167
Cyth4	0.003691848	1.988458097
Unc93b1	4.18E-09	2.225068767
Rcsd1	0.001623225	1.314347564
Fn1	2.25E-16	3.260241823
C3	8.56E-07	1.482934795
Slc25a45	0.048467584	1.235261932
Gpr65	5.64E-05	2.442196791
Adrbk2	0.034435806	1.492331703
Ppp1r18	1.93E-05	1.777656062
Trpv2	0.002385685	1.833566005
Card9	0.034706116	1.202192736
Limd2	2.36E-05	1.421320126
Elmo1	0.000346619	1.50668791
Fmn11	0.035777752	0.868401759
Fes	2.79E-05	1.529493093
Nfam1	1.66E-05	1.553872148
Rgs2	0.002075759	1.584515536
Vim	1.15E-05	1.290147684
Plcg2	4.93E-06	1.52732042
Rbp1	6.56E-08	3.617239033
Tm6sf1	0.003011876	1.517920946
Gda	0.038093279	1.068093554
Hk3	2.22E-08	2.413725491
Anxa3	7.54E-05	1.57904289
Myo1g	0.020326881	1.027783975
Calhm2	0.044997867	1.869574215
Id2	4.96E-05	2.005771362

Dram1	0.034055738	1.67254762
Themis2	8.35E-05	2.352540556
Zfp516	0.001541146	1.739712132
Lbh	6.49E-05	2.069702027
Ccnd1	1.23E-12	2.854695292
Myo1f	3.75E-05	1.55529905
Plac8	0.000352891	1.253428967
Ncf1	7.55E-05	1.296896822
Hdgfrp3	0.006310075	1.648347844
Elk3	0.025354457	1.311306737
Notch1	0.000260051	1.535610684
Sh3tc1	0.001464983	2.407848029
Cxxc5	0.00018262	2.270713158
Ramp1	0.022422124	1.268607836
Ifitm3	8.09E-05	2.292364962
Mtus1	0.000232688	1.682635142
Cd14	0.00076232	2.401849977
Sla	1.21E-12	2.612752592
Egln3	0.010115168	1.744315274
Tspan2	0.005694165	2.058859914
Celf2	8.27E-07	1.830541828
Coro1a	2.33E-07	1.502218202
F13a1	0.025158998	2.683493332
1700025G04Rik	0.039993529	1.711977963
Pram1	0.001989674	1.590833247
Sh2b2	0.013796892	1.757533959
Pid1	0.009777882	2.659199236
Ptprc	8.47E-05	1.470348812
Irf1	0.000685949	2.125969787
Coro2a	0.039177662	0.980811476
Clec5a	0.000756135	1.776128544
Snx10	0.012963115	1.740550129
Ckap4	0.000109001	1.585240592
Ebi3	0.002387922	1.825533476
Slc22a15	0.04077438	1.972852208
Hp	0.010815966	0.924437854
Pglyrp1	0.038023539	0.893733066
Gng2	1.38E-05	2.254616655
Rgs14	0.044785783	1.44200282
Il16	0.001006221	1.592882473
Hmga2	0.011677233	1.100649704
Irf5	6.14E-06	2.54913245
Emb	3.54E-05	1.578112455
Ms4a6c	7.41E-08	2.89968124
Cd180	6.60E-05	2.865957514
Rassf4	9.58E-05	2.56412524
Apobr	0.010058086	1.736071313
Pik3r5	0.000343175	2.265958712
Casp1	1.80E-05	2.997192397
Serpinb10	3.85E-05	3.310967219
Ncf4	3.74E-08	2.292957372
Itih5	0.041214135	1.824737907
Sorl1	0.000927157	1.524605367
S100a8	0.017478738	1.174100822
Ticam2	0.022360928	1.664574105
Il6ra	1.86E-06	2.341799741
Fosl2	0.027741122	1.466561787
Itgam	0.009429604	1.320899245
BC100530	0.013381597	1.080870593
Siglece	0.047336807	1.7103069

Sh2d3c	0.005763835	1.664323
Chil1	0.005942234	1.227513798
Fgd4	4.18E-05	2.645250159
Rbpms	0.015522178	2.510982671
Csf3r	0.00568206	1.490054723
Tek	0.000110969	3.487679025
Prkch	0.004562486	2.897786208
Psmb8	0.002767942	2.176376253
Mgst1	0.02407575	1.650133646
Nlrp1b	0.036999627	2.123795396
Tmem176a	0.000284846	2.914161379
Erg	0.013557516	1.649778426
Sell	0.01073045	1.592390426
Adgrg5	0.042899483	1.67048927
Klk8	0.002010886	2.145059028
Armcx4	0.000761727	2.540662019
Eif4e3	0.002884431	2.506407042
Tlr9	0.045081193	2.796140078
Sp100	0.036115117	2.050118654
Ptk7	9.45E-05	2.056079441
Ppfia4	4.79E-05	2.864902277
Sifn2	2.99E-05	2.222699839
AI504432	3.13E-05	3.195344635
Xdh	0.040095837	1.148876637
Pear1	0.000355968	2.869520261
Camp	0.002775167	1.403761451
S100a9	0.024356075	1.319936261
Ptpro	0.017295172	2.821741709
Vav3	5.29E-06	2.731612422
Mcemp1	0.048920314	1.367272295
H2-Aa	0.029390021	2.758199257
Plbd1	4.87E-05	2.424237042
Slc35d3	0.001891147	4.150003673
Id3	1.33E-06	3.331804144
Ptpn22	0.001791776	2.76430288
Clec4e	0.001905772	3.442968428
Gria3	0.000109759	2.351809173
Ly86	0.001785551	2.658698207
Angpt1	1.12E-06	2.634156676
Tie1	8.61E-06	3.068923401
Ablim1	0.001793438	3.304792509
Sh2d5	0.002052747	2.119042562
Olfm4	6.87E-07	1.411400125
Parp8	0.000184186	2.315220885
Tifab	2.57E-10	2.722859057
BC035044	4.21E-06	2.523278959
Plaur	0.012317215	2.111346839
Cybb	7.05E-10	2.136267256
6430548M08Rik	2.48E-06	2.601264345
Cd52	0.003350811	1.729325085
Irf8	7.25E-12	3.105077582
Ms4a4c	0.026052506	2.978804286
Clec7a	6.01E-05	2.895278688
Fgr	0.006305149	2.264597902
Il12a	0.041436123	2.767495245
Gm1966	1.16E-05	2.528272738
Pyhin1	0.00159569	3.780772651
Afap1l1	3.28E-05	2.705536591
Gcnt2	0.013791249	2.218978597
Emp1	0.005754033	3.319538601

Crispld2	0.015293813	2.192903828
Mmrn1	1.24E-18	5.290363744
Mpl	4.97E-14	3.861908656
Cd93	0.000252229	2.854643581
Ifi202b	2.54E-06	2.925713329
Fgd5	4.93E-05	3.697394119
Tmem176b	1.11E-11	4.069761103
Klf4	0.000676691	3.503890408
S100a6	0.041613823	2.10573636
Bex6	0.00543422	3.244249176
Thbs1	4.18E-24	4.471655175
Ugt1a7c	0.001244427	3.901975959
Rag1	0.00127633	3.674976003
Cd74	1.67E-07	3.729259886
Lyz2	3.18E-14	2.903228792
Serpina3g	0.001131991	3.538396551
Adgrl4	1.48E-05	2.896066552
Chil3	0.011732545	2.20647841
Stfa2l1	0.014842719	2.102996846
Lsp1	7.99E-11	2.983628039
Ccr2	3.23E-10	3.546258873
Gm16897	0.009559803	2.935376057
BC117090	1.75E-05	2.434187327
Thsd1	0.002129946	3.725830495
Ngp	3.70E-21	2.802306533
Stfa3	2.52E-11	2.885788545
Cd27	0.003055371	3.280229667
Ifitm6	0.000274428	3.037164015
Cd34	5.56E-21	3.723721564
Mycn	3.03E-05	3.822722061
Lcn2	3.93E-15	2.909170511
Cd177	2.58E-08	3.138305822
Gimap6	2.33E-06	4.519211113
Ltf	4.35E-27	3.185572477
Mmp9	1.07E-06	2.989624473
Mmp8	1.00E-09	3.595011332
Flt3	5.99E-06	4.054729585
Stfa2	3.76E-05	3.684462947
Retnlg	0.000560744	3.751784569

P3 vs P4

upregulated	symbol	pval	log2foldchange.	downregulate	symbol	pval	log2foldchange.
	Dnaja4	0.024599078	0.786488995		Pdia2	5.64E-17	-3.15838383
	Snca	7.84E-11	2.189371735		Slc30a10	3.69E-07	-1.895271734
	Fech	0.002348759	0.992770877		Abcg4	3.69E-17	-3.120984973
	F830002L21Rik	0.049246686	1.094839689		Gm2061	0.000394233	-2.016520237
	Mllt3	0.012994674	0.924137675		Atp7b	0.000227541	-1.696442138
	Alas2	1.90E-09	2.007883504		Nxpe2	4.20E-09	-1.885134126
	Prdx2	0.000819392	1.084473629		Redrum	0.000635273	-1.151332442
	Chchd10	0.022415834	0.818514972		Add2	0.021214447	-1.025422053
	Pnpo	0.007397946	0.881893286		Tac2	0.00841475	-3.066735647
	Prokr1	0.012271283	1.375152715		Aqp3	7.73E-08	-2.11596396
	Isca1	0.005710532	1.085036197		Pklr	6.33E-07	-1.970606896
	Cdr2	2.44E-09	2.017147364		Btnl10	3.42E-06	-1.945821656
	Mmp14	0.026770182	1.62820522		Cldn13	8.00E-05	-1.314038034
	Fth1	0.010338584	0.814534052		Slc26a1	9.18E-08	-2.187300468
	Fam213a	0.002595969	1.051423011		Plek2	0.006500173	-0.916875446
	Trim58	0.037919574	1.317962346		Gsta4	0.013619993	-1.690378239
	Pla2g16	0.016046936	0.921063253		Hemgn	6.08E-05	-1.689551801
	Sepw1	0.039761986	0.684597438		6030468B19Rik	0.009854454	-1.077775181
	Phospho1	4.49E-07	2.2638033		Pkhd11	0.029553392	-1.133811622
	Cox6b2	0.040218368	0.726978493		Apol8	7.55E-07	-1.989313697
	Mkrn1	3.97E-05	2.414101722		Gfap	0.000233714	-1.373578862
	Nt5c3	0.005388252	1.36515399		Mrap	9.85E-10	-2.852239432
	Epb4.1	1.49E-05	1.92430708		Popdc2	1.25E-05	-1.939001356
	Fam46c	7.50E-05	1.999247259		Dmtn	0.029926118	-0.997687039
	Fbxo9	0.032654926	0.961578644		Tspan33	0.015945723	-0.78487045
	Dnajb2	0.011909204	0.86857762		Mt2	0.045258971	-1.504816684
	Rfk	5.44E-05	1.371493596		Epdr1	0.001033827	-1.86449825
	Vopp1	0.00291202	0.99116832		Atp1b2	3.86E-08	-1.873205106
	Htatip2	0.009987234	0.944066108		Lmna	0.001228333	-1.00694348
	Usp15	0.039289545	0.681544413		Cpox	7.44E-07	-1.721763827
	Bpgm	1.84E-18	3.029068581		Klf1	1.46E-05	-1.498943912
	Psme3	0.002211412	1.004594727		Slc38a5	9.96E-05	-1.286764371
	Dyrk3	0.010009702	1.510690723		Slc39a8	3.47E-09	-1.907580353
	Pkn2	0.012919337	0.84301745		Icam4	5.59E-05	-1.622840072
	Trim56	0.005286905	1.294937102		Podxl	3.12E-06	-1.722371221
	Creg1	7.19E-05	1.31535537		Prss50	0.010247775	-1.840090456
	Znf512b	0.039594525	1.369738879		Myl7	0.036974041	-1.123924574
	Pim1	0.028983014	1.030075046		Camsap2	1.86E-10	-2.132643252
	Ppm1f	0.024521351	0.945562503		Alad	3.93E-05	-1.237406634
	Megf8	0.047665463	1.7838856		Tgm2	1.11E-09	-1.987159995
	Chd2	0.036654257	0.774094106		Wnk4	0.001368912	-1.366953787
	Pdxk	0.000452632	1.506622652		Mpp2	0.003985565	-0.952478216
	Ptpn7	0.002495155	1.069113967		Nipa1	0.043821827	-0.693288363
	P3h1	0.047698694	1.207892897		Icam5	0.012295425	-2.398255558
	Acads	0.005823395	1.17050475		Epdr	0.024156219	-0.87345835
	Tspan6	0.047216435	1.403856545		Pawr	0.031804415	-1.480840994
	Tcf4	0.035934741	0.976594377		Adra2b	5.30E-11	-2.422499597
	Prrc1	0.024383584	1.012227145		Slc6a9	0.044602012	-0.88733532
	Elov5	0.001409203	1.288979532		Fads3	5.96E-10	-2.117518243
	Malat1	0.045971482	0.692572257		Gpr155	0.002603724	-1.39832397
	Ptov1	0.018043388	0.954498286		A230056P14Rik	0.016156226	-0.985253692
	Kit	0.000512756	1.845521636		Myh10	0.000100827	-1.290879387
	Tyk2	0.040610543	0.829609034		Hebp1	0.008176481	-0.820252588
	Hadh	0.036758984	0.845865003		Mboat2	0.000475212	-1.489582279
	Prr13	2.09E-05	1.494896891		Tfrc	0.028179326	-1.017835051
	Gpi1	0.018827742	0.76121184		AA986860	0.001756564	-1.257552202
	Rit1	0.044829005	1.296758414		Phlda3	0.000572869	-1.246524617
	Mapre2	0.000183744	1.410214274		Tmem120b	5.63E-08	-2.678506636
	Stat6	0.023471814	0.850486268		B3gnt3	0.016776872	-1.754620564
	Fyb	0.001570511	1.274362858		Hcn3	0.000917066	-2.004919343
	Ssfa2	0.041332165	0.958596233		Uros	1.31E-09	-1.938357687
	Impdh1	0.019466601	1.113358269		Zdhhc14	7.52E-05	-1.74785385
	Pdia5	0.021856365	1.33329867		Fam132b	0.015424092	-2.165480807
	Glyr1	0.036114819	0.730135165		Mns1	0.000110842	-1.710478557

Bcl2l1	0.006568243	1.802772291	Mgst3	3.89E-06	-1.455685798
Sema4d	0.005711015	1.113997158	Minpp1	0.001970282	-1.384921763
Slc35c2	0.043627914	0.824836543	Mt1	0.013566919	-1.30377923
Pcyox1	0.015143495	0.9856925	Ntn3	0.008404306	-1.663575161
Tbl1xr1	0.013338972	1.044121883	Abcb6	1.55E-05	-1.381715949
Gimap9	0.013025013	1.730890357	Rfesd	0.00163995	-1.140726423
Rftn1	0.000591468	1.753251197	Neu3	0.000972238	-1.510299717
Ptpn9	0.006849414	1.34263334	Arrb1	0.04295891	-0.925449989
Pank1	0.028617932	1.283722385	Slc11a2	0.00017643	-1.243436016
Gabarap	0.006465064	0.902852035	Gata1	7.09E-06	-1.400183677
Ube2b	0.002735872	1.649804188	Josd2	0.03421894	-0.652241481
Ocrl	0.013139294	1.218474234	Gmpr	0.003580143	-0.969799427
Unc119	0.013041031	1.08835014	Hdac11	0.002422581	-1.297607388
Ezh1	0.011648063	1.04417973	Abcb10	0.001867581	-1.128067703
Kdm5b	0.000464989	1.442788417	Slc25a38	0.000103583	-1.477945606
Gpd1l	0.030589945	0.889349386	Samd14	0.000446935	-1.093739014
Pcyox1l	0.014490802	1.230606998	Lrrc56	3.83E-05	-2.086149679
Pip4k2a	0.012794812	0.854417981	Sh3tc2	7.97E-07	-1.9999383
Myb	1.06E-05	1.5608866	Dpf3	0.006711393	-2.245498239
BC037034	0.027061796	0.898350775	Ptdss2	4.97E-07	-1.609425595
Kif13a	0.04696471	0.982969635	Them6	0.040854575	-1.356290708
Zmym3	0.011421071	1.307467858	Tlcd1	0.000168781	-1.595065914
Atp6v0d1	0.037419614	0.711934016	Otub2	0.037904143	-0.723270537
Kctd10	0.049757937	0.761088406	Smim1	0.743E-07	-1.606256663
Rab38	0.046578505	1.42059901	Tal1	0.001948828	-1.171461926
Acsl1	0.000763982	1.172996595	Sorbs1	0.000535951	-1.335770091
Ergic1	0.00192476	1.552772321	Endod1	0.010966063	-0.9376212
Bst2	0.016806415	1.459405147	Parvb	8.38E-06	-1.505389497
Arf3	0.006809596	1.20219956	Ache	0.007414737	-0.986938882
Por	0.022043239	0.92997991	Zfpm1	1.98E-05	-1.306793691
Fam65a	0.0252590641	1.256964261	Grtp1	0.005698754	-2.142098378
Clstn1	0.003183992	1.646558664	Dnajb3	0.047342637	-1.178067773
Mlxip	0.004546272	1.202957963	Mtfp1	0.007441102	-1.301566184
Dlg3	0.024667523	1.629782721	Kcnn4	0.00133417	-1.14452662
Cbx2	0.001315815	2.221301357	Scrn3	0.000417387	-1.279746787
D630045J12Rik	0.009340555	2.481308488	Ccrn4l	0.025008864	-0.911736324
Xpo7	0.008891531	2.039350547	Mrpl52	0.036756554	-1.109839376
Stx4a	0.032590641	0.956234767	Lpcat1	8.91E-09	-1.879463697
Pde4a	0.012536288	1.868772255	Tbc1d24	4.49E-12	-2.451343299
Trim26	0.005711098	1.262794593	Iba57	3.16E-05	-1.491738133
Cryl1	0.010560375	1.368549125	Nmnat3	4.81E-06	-1.641668954
Tmcc2	0.002445192	2.068893782	Acss2	0.005377727	-1.087769945
Tmppe	0.020691146	1.484164082	Bag2	0.002543835	-1.153589231
Pde4b	0.03142467	1.606111117	Tnfrsf14	0.00096072	-1.150373339
1810058I24Rik	1.61E-09	2.065510451	Cyb5r3	0.001133446	-1.023129038
Lpar5	0.030787758	1.707210461	Ppox	0.00287423	-1.118316598
Ripk3	0.011015659	1.115102311	Gypc	0.00150368	-1.206349059
Ppic	0.002615695	1.549803582	Clic4	1.77E-09	-1.882959416
SEPT1	0.007069877	2.158110722	Lrrc20	1.54E-07	-2.093193782
Abhd4	0.000324735	1.452966793	Cep76	0.017046454	-0.746482494
Cmtm6	0.001767731	1.276518476	Cdc42bpa	0.000144463	-1.307175625
Impa2	0.006884053	1.31136247	Atp2b4	0.040170945	-1.120970553
Rsrp1	0.014915426	0.893081739	Slc16a6	0.000564119	-1.12738078
Ccni	0.040714515	0.698271308	Tex9	0.000765893	-1.381784828
Pink1	1.71E-07	1.97392402	Xk	0.042463661	-0.915792048
Clic1	0.00328444	0.998623882	Usp45	6.81E-06	-1.546002114
Tmtc4	0.010047179	1.996750035	Cecr2	0.00341587	-1.325655028
Cnp	0.011824084	1.202616163	Mfsd2b	0.000119876	-1.261946738
Tpst2	0.014682805	1.039366924	Xrcc5	0.049223783	-0.820103401
Trim35	0.003148135	1.887921159	Adcy6	0.000350488	-1.211611225
Pdcd4	0.000395732	1.400997867	Eef1e1	0.007511762	-1.042547604
App	0.003012134	1.169239193	Tbc1d12	0.002852399	-1.563756218
Phc1	0.014542127	1.540989583	Prdx3	6.10E-05	-1.249993941
Prkra	0.031696883	1.277529334	LOC100503496	0.003403103	-1.057689136
Erlin1	9.43E-05	1.760610118	Tom1l1	0.000721665	-1.189619436
Crtap	0.00567068	1.572788289	Tmem14c	2.25E-15	-2.519312205

Cd44	0.036264309	1.196085223	Mtfr1	3.14E-05	-1.330621156
Pla2g4a	0.017802426	1.038450292	Pigq	0.010869395	-0.93094206
Gp5	0.026615219	1.419269578	Smim5	3.07E-08	-2.370695941
Mboat7	0.009384744	1.511114889	Rrm2	1.36E-15	-2.500072187
Gna15	0.003027367	1.690241031	Klhl23	0.013038711	-0.950616209
Sptssa	0.000323243	1.596067127	Eif2b3	0.007989576	-1.06012551
Arap3	7.54E-06	1.827292647	Mthfd2	0.000118528	-1.260285976
Ube2h	0.041775365	1.708317713	Gm5088	0.047489642	-0.693219268
Prkx	0.019534633	1.604004552	Fam109b	0.049625737	-0.845643828
Cmas	0.000437012	1.615272029	Polq	3.19E-05	-1.654295262
Mmgt2	0.023059107	1.343168082	Ahctf1	0.007275163	-0.863830402
Gcat	0.001690317	1.695858594	Hs6st1	3.76E-05	-1.421562458
Irf2bp2	0.044599676	0.776399676	Abcg2	0.000148433	-1.188962011
Rinl	0.009075624	1.262955742	Slc25a42	0.00840913	-1.099273591
Sh3bp1	0.00065607	1.37585845	Slc46a3	0.000396222	-1.643546791
Socs5	0.043240244	1.329008999	Eif5a2	0.001661117	-1.218443084
Ttc21b	0.021226621	1.700554737	Pbx3	9.19E-06	-1.848000291
Pkm	5.98E-05	1.315316524	Gpsm2	0.000596503	-1.176926134
Ptk2b	0.000951883	1.297283281	Ampd3	0.000647915	-1.380759814
ltp1	0.018055952	1.813461414	Stx2	0.000269603	-1.150636294
Ccbl2	0.013607416	1.736250925	Slc43a3	4.14E-05	-1.265130615
Zfp629	0.010901881	1.698738729	Wipi1	0.000958271	-1.249458447
Mlycd	0.007862883	1.847185011	Apeh	0.000385543	-1.093915858
Nxn	0.006234646	1.431839726	Psd	0.016539507	-1.255897919
Tbc1d9b	0.013892812	0.926367485	Kctd7	0.000103132	-1.701503866
Orai3	0.025480831	1.189744475	Pycr2	1.50E-08	-1.87317314
Pdia4	0.005073432	1.449797957	Gfer	0.013755826	-1.057542754
Prkd3	0.002511814	1.499023779	Pdk1	0.002283152	-1.117053916
Dock5	0.005976494	1.437613645	Oxnad1	0.004937842	-1.222968441
Hook1	0.042641475	1.338781122	Eif2b1	0.028555988	-0.828564107
Trim12c	0.012995751	1.201466436	Cep290	0.005851679	-1.015497877
Atxn10	0.006968096	0.973782869	Slc20a1	0.013278707	-0.879798833
Acot7	0.000274624	1.678029735	Dhrs13	5.95E-05	-1.682531131
Arl10	0.003568912	2.657355817	Lrrc8c	0.000666448	-1.246498236
Spint2	0.009732057	1.513903799	Cercam	5.21E-05	-1.419823739
Zbtb12	0.017592848	1.321491242	Cltb	0.026140511	-0.765096099
Hes6	0.003009478	1.378299792	Ufsp1	0.00502594	-1.635231383
Sertad1	0.000522497	1.503328106	Zmynd19	0.015190733	-0.951425987
Tgif1	0.013122981	1.615074456	Ank	0.043920543	-0.746274936
Psd4	0.004239169	1.198693671	C130083M11Rik	0.022425044	-1.926793428
lqce	0.017238608	1.964965802	Usp49	1.75E-06	-1.797039977
Snx21	1.81E-06	2.414707086	Pcyt1a	0.008542657	-0.993973285
Zfp422	0.00383387	1.213953323	Pla2g4c	0.000558579	-3.142353354
Srpk2	0.022889384	1.000448762	Ap1b1	0.000328216	-1.118268406
Adrb2	0.030691046	1.568396304	Ormdl3	0.024447775	-0.930677698
Grap2	0.000664801	1.307624474	Dusp1	1.23E-05	-1.552703175
Col4a2	0.011841098	1.322619778	Sp4	0.000829368	-1.258615426
Abtb1	0.003242299	1.208290413	Acp5	7.74E-08	-2.482740026
Usp11	0.002163684	1.489232044	Cox11	0.004089406	-1.138376887
Nfkb1	0.000180892	2.03292826	Tmem9	2.68E-05	-1.455476156
Runx3	0.020420342	1.691045232	Capn5	0.007815977	-0.910162294
Sema6b	0.000586693	2.428784524	Nol10	0.033975987	-0.853643696
Def6	1.41E-05	1.887990717	Mybl2	7.48E-09	-1.924598982
Fam49b	0.001869056	1.130189683	Psmf1	3.91E-05	-1.571415013
Pgd	0.018211173	0.800012904	Bms1	0.008953429	-0.880647315
Aldh3a2	0.007788187	1.417084552	Setd6	0.032631894	-1.152501782
Add3	0.002736032	1.172625175	Picalm	2.70E-05	-1.27329102
Samsn1	0.004542347	1.195976477	Fn3krp	0.031068931	-0.995850168
lfnar2	0.004839989	0.988816236	Guk1	0.049041766	-0.786929141
Bmyc	0.034489366	1.542543852	Caskin2	0.000129376	-1.640597409
Rilpl2	0.04900584	1.222794407	Fbxo10	0.017490761	-1.161743693
Pkn1	0.005994645	1.264303765	Ccna2	9.58E-06	-1.35989683
Extl2	0.01807746	1.842922699	Noc4l	0.027535676	-0.798684702
Prodh	0.000708956	1.895308879	Nek8	0.00315289	-1.49560929
lfngr1	3.75E-05	1.603964183	Prkar2b	6.95E-06	-1.411221772
Mlec	0.007663001	1.275644726	Donson	1.76E-08	-1.993293061

Rfx5	0.015518593	1.459795395	Hmmr	5.53E-05	-1.279351619
B3gnt2	0.006907411	1.321142128	Cep104	0.043851719	-0.753869886
Rnf219	0.004429504	1.562874073	Bcl11a	0.016702226	-0.859693354
Shmt1	0.001557193	1.644247308	Asb6	0.00181476	-1.136928908
Slc39a11	0.000888405	1.788528366	Rpia	0.001403069	-1.084529636
Fzd8	0.002400536	3.13531932	Pqlc1	0.000354709	-1.161879431
Repin1	0.043229866	1.748651411	Gps2	0.011006683	-0.838306833
Lgals9	2.63E-05	1.64679804	Fnip2	0.043893648	-1.06720941
Dnmt3a	0.022521197	1.582611572	Dek	9.90E-11	-1.996516066
H6pd	0.000509209	1.631945283	Senp2	1.26E-05	-1.441708176
Atp11b	0.046100808	0.758088007	Gclc	0.000286319	-1.184007468
9930014A18Rik	0.02211666	2.135287039	Mgll	1.53E-05	-1.547666226
Ube2d1	0.006839132	1.780468765	Gen1	6.46E-05	-1.696733879
Mex3a	0.02151733	2.097071344	Zbtb7a	1.07E-07	-1.693990028
Calcoco1	0.002841935	1.690254104	Dis3	0.017430092	-0.885832357
Inpp5d	0.000143764	1.790857274	Sf3b4	0.0456041	-0.777241229
Plxnc1	5.63E-05	1.768161825	Abcf1	0.043897265	-0.658876708
Tagln2	6.97E-08	1.887366894	Ccne2	2.15E-09	-2.076256268
Il2rg	0.002099325	1.631907012	Mier3	3.22E-06	-1.742584576
Shisa5	5.19E-05	1.796828812	Nek2	0.013292406	-0.840245103
Hk2	0.005592969	1.868492721	Natd1	3.52E-10	-2.293161857
Tmem184b	0.044131273	1.69376197	Dut	0.025202618	-0.951966908
Arrdc4	0.00386334	1.820402363	Dck	2.27E-10	-2.044981846
Tspan5	0.032038566	1.263141464	Tubb4b	0.037732653	-1.146507947
Stk17b	0.03041717	1.129500815	Arrdc2	0.019541149	-1.180659075
Icam2	0.001468192	1.886097918	Kif18a	0.00076088	-1.14781188
Nnt	0.038233024	1.744292013	Trappc10	0.000595302	-1.127998165
Igf2bp3	0.026030286	1.655925261	Tceal8	0.030342713	-0.773964907
Nin	0.001342588	2.022301782	Eif3g	0.022463081	-0.766742919
Tcea2	0.000888286	4.179478562	1600002H07Rik	5.79E-07	-2.107203654
Nlgn2	0.013243464	1.604216178	Cep70	0.001002312	-1.263094461
Tspo	0.037431568	0.716117133	Gnl2	0.042971971	-0.742000806
Lrp5	0.000103336	2.082163063	Smc2	7.37E-07	-1.550441897
Lrmp	0.002192259	1.215348863	Cenpp	0.000113837	-1.750292661
Pycard	0.000463916	1.72775497	Psrc1	8.16E-06	-1.882111246
Bcl9	0.00088376	2.582709131	Exosc9	0.000391407	-1.174631696
Pigx	0.015500106	1.556881375	4933428G20Rik	0.00215732	-1.68504572
Glrx	1.91E-07	1.837309533	Ccp110	8.20E-08	-1.890050165
Fnbp1	0.022449756	1.772041046	Slbp	1.91E-09	-2.202010159
SEPT9	0.001055769	1.974018948	Ncapg2	1.22E-08	-1.891838736
Map4k1	0.000794297	1.823890367	Eaf1	0.000963895	-1.077296945
Stk26	4.48E-05	2.002562193	Fbxo5	4.73E-07	-1.703995318
Epb4.1l2	0.038295128	0.855814781	Abcf2	0.014052	-0.845737148
Abhd17b	0.00429417	1.794018136	Nop58	0.039597656	-0.684217725
Pbxip1	0.029255346	1.012125235	Arhgap21	0.007204668	-0.967554772
Csnk1e	0.002821519	1.974067959	Ndrp3	0.037813085	-0.687578054
Serpinf2	0.019260771	1.073059348	Arhgap23	4.71E-10	-2.041199675
Kcnab2	2.16E-09	2.3404226	Usp7	0.002493189	-0.92072696
Pnrc1	0.031802798	1.318714634	Mast2	0.009526541	-0.996796716
Lipe	0.000987832	2.157017942	Nme3	0.000719176	-1.718042962
Afp	0.017766981	0.878350073	Prkab1	0.017996093	-0.770997429
E130012A19Rik	0.00224767	2.355797021	Nop56	0.042866937	-0.692614079
Pafah2	0.004168787	1.638150311	Exosc2	0.026418438	-0.837309919
Itm2b	0.031143095	0.708433223	Zdhhc24	2.03E-06	-1.735159609
Iqgap2	0.001882945	1.55084684	Abt1	0.032329919	-1.079353155
Msr1	0.02518558	1.169733027	Nop9	0.023693434	-0.830910777
Axl	0.028441076	0.920645674	Agfg2	3.03E-07	-1.769874085
Slc37a1	0.000455541	2.381556573	Med22	0.043452639	-0.719903509
Atp11a	0.004655399	1.573483514	Plk1	0.001102461	-1.05609586
Col6a3	0.010316438	1.510772298	Trmt12	0.034898384	-1.030037963
Ttc7b	9.39E-05	2.041777756	Pcna	1.43E-06	-2.177876458
Etv6	0.000396229	1.935049801	Cct2	0.018814264	-0.743591617
Rassf3	0.000174214	1.732383606	Akip1	1.57E-05	-1.828860257
Zdhhc20	0.000772806	1.763947077	Atg4b	0.000519828	-1.178887618
Rsad2	0.006852088	2.701606259	Ecd	0.031663779	-0.781994415
Znrf1	0.009882556	1.474989955	Gcdh	0.002052042	-1.202346449

Nid2	0.038199816	1.165045886	Ska1	0.001606541	-1.154733187
Fam46a	2.05E-05	2.193016909	Wdr81	0.000133772	-1.280524491
Fam214b	4.49E-05	1.630277	Aurka	0.000633518	-1.095671605
Cbx4	0.000192457	2.116541527	Atl2	0.001179854	-1.105642039
Lmo4	0.007243144	1.123341678	Rb1	5.01E-06	-1.4931193
Ypel5	2.88E-06	1.734499115	Epn1	0.025184479	-0.704082159
Fermt2	0.047097562	1.596970143	Uba2	0.026537407	-0.735447722
SEPT6	0.002974219	1.916021393	Ccnf	1.19E-05	-1.3843787
B4galnt1	2.16E-07	2.0201001	Ccdc34	0.008140072	-1.280818007
Prr5	6.18E-05	2.778561198	Lrba	0.003208675	-1.255616929
Emp3	1.94E-05	1.928819756	Galnt10	0.010878114	-0.8598333
Panx1	0.002289434	2.151357198	Cdyl	0.000390496	-1.319019796
Mfng	7.58E-05	2.075928429	Fam78a	0.014090831	-0.802349683
Gatm	0.006708201	1.016019417	Tmc6	0.015437242	-0.808963304
Kif21b	0.000455785	1.803397842	Med19	0.003342387	-1.067499319
H19	0.000600914	1.134287359	Atp13a3	0.024331761	-0.75749422
Dnmt3b	0.020551305	2.311804566	Oard1	0.000422388	-1.33815588
Apob	0.04064441	1.006942771	Kif4	0.002582691	-1.012891794
Dusp3	0.027564109	1.172913965	Gid8	1.15E-06	-1.541745702
Pea15a	0.033828797	1.222149376	Katnal1	0.001829422	-1.49121235
Ptprs	0.017900563	2.446970588	Bysl	2.81E-05	-1.352534068
Psap	0.000943462	1.043349899	Kif14	0.00105876	-1.088118688
Fam69b	0.000480103	3.246381602	Pa2g4	0.032361231	-0.68720929
Arhgap9	2.79E-05	1.825649053	Gins4	0.000246445	-1.323227337
Frmf7	0.031492705	1.844595494	Oip5	0.033965946	-0.846006183
Gramd1a	0.000576525	1.933326773	Cenpk	0.010990986	-1.333454643
Anxa11	0.00594588	1.918298071	Dnajb1	0.006978661	-0.88651884
Akap13	0.003392415	1.216153053	Dbf4	0.015577689	-0.804557618
Pde5a	0.013370718	1.348295784	Tmx1	0.005371164	-0.880551532
Cers5	0.000931516	2.322425596	Diap3	0.021213723	-0.82309707
Pik3cd	1.84E-05	2.179053314	Gins1	6.59E-06	-1.771696515
Hist1h2bc	0.025184623	1.06119652	Tyms	3.42E-06	-1.563869236
Sepp1	0.007472653	0.940507632	Pon2	0.00550116	-0.985897862
Cd37	0.000402043	1.766905497	Prim1	5.24E-07	-1.723062283
Hfe	0.042845994	1.537373546	Blm	7.23E-08	-1.78373082
Slc11a1	0.014960535	1.244079482	Atp8a1	0.013579634	-0.832366928
Epas1	0.043564073	1.77769486	Glicc1	0.000857394	-1.558873653
Bin2	0.001062574	1.197257108	Gm16982	0.032706632	-0.909499353
Ptprcap	7.21E-08	2.702398943	Zfp672	9.45E-05	-1.606959241
Gdpd3	0.000218669	2.673179065	Atf4	0.004577227	-0.889386573
Fcgrt	0.042725779	1.08213402	Enpp4	5.43E-05	-1.535030641
Ifi27	0.038091669	1.382059321	Mrpl53	0.023765846	-0.938689643
Abca2	0.005876461	2.795357301	Ncapg	0.000950002	-1.062951033
Grn	0.006267456	0.976294659	Kdm1b	5.52E-08	-1.842518905
Btg1	0.010597181	1.235446927	Brc1	2.43E-07	-1.781719383
Spns2	0.006612586	2.255600107	Cenpl	0.000363402	-1.311855394
Ypel3	0.000215622	1.975539562	lkzf5	0.025142585	-0.88073396
Ppap2b	0.02009433	1.941355998	Pif1	0.016212376	-0.916582485
Dlk1	6.34E-05	1.515028657	Kntc1	1.84E-06	-1.606668136
Slc37a2	0.012771642	1.678086857	Ankle1	0.045925641	-0.949352169
Trf	0.02352385	0.988380204	Parppb	0.014475619	-0.915250053
Lrp1	0.017388899	1.860913916	Rbm15	0.007319846	-1.048399778
Rasal3	3.66E-05	2.676866099	Nptn	0.005518989	-0.930412415
Maged2	0.001646939	1.618265677	Nrf1	4.06E-06	-1.579454106
Col18a1	0.004450926	1.470447933	Suv420h2	6.13E-05	-1.286313182
Mtss1l	0.011327828	1.556184126	Polh	0.000401465	-1.323908194
Apoe	3.19E-05	1.415811147	Mrm1	0.004875796	-1.072113341
Irf7	0.01461595	1.530136123	Espl1	0.004672778	-0.922271249
Tnfrsf8	0.020778454	0.955537127	Birc5	0.00053782	-1.284329906
Tubb6	0.005733052	1.518816785	Tmc8	6.32E-06	-1.609160345
Anxa5	0.00094075	1.571137555	Pole4	0.001158462	-1.217958548
Myf9	0.0203502	1.239792217	Figl1	5.49E-07	-1.639740563
Grcc10	0.027273499	1.0758461	Mavs	0.010842607	-0.868741446
Lima1	0.009096653	1.64784884	C2cd2l	0.015015412	-0.989510298
Slc7a8	0.017271622	1.029165388	Cep295	0.000390514	-1.277645294
Itga2b	0.000652708	1.270140511	Rnasel	0.03443394	-0.699333919

Camk2d	0.027823344	1.392761636	Kat2b	0.000384537	-1.467655095
Smtn	0.002563284	1.627853609	2700029M09Rik	1.12E-05	-1.553188494
Itgb5	0.000117637	1.94721352	Mrpl14	0.003267691	-1.171307729
Cfp	0.000899554	1.454321806	Acadl	0.001846816	-1.085395307
Med12l	0.020203193	1.614235862	Ankrd54	2.33E-05	-1.553581541
Slc8a1	0.022527576	1.703403261	Dsn1	0.008373534	-0.981546534
Igf2	0.000494101	1.200429378	A430005L14Rik	0.000165399	-1.569614633
Tspan9	0.013579506	2.202459021	Gtpbp1	4.07E-05	-1.327722635
Gbp2	0.000965687	2.092026432	Ap2a2	0.002996412	-0.929385641
Dock1	0.000321155	1.871092669	Bard1	0.000123737	-1.445987448
Rab27b	0.023450243	1.20386281	Rhbdf2	0.0140783	-0.965497717
Raph1	0.035789992	2.119414922	B4galt1	0.040630594	-0.701784932
Mest	1.07E-06	1.922337961	Klf13	0.001488046	-1.121757561
Gpx3	0.019259161	1.140204714	Neil3	2.93E-06	-1.742627359
Bzrap1	0.030460741	1.066715428	Pkmyt1	0.001559118	-1.220629037
Hspg2	0.019547007	2.381660537	Reep5	0.016599851	-0.830201144
Oit3	0.004859109	2.394101462	Cables2	0.042166398	-1.045735916
Cd300a	0.002701164	1.534096242	Map3k1	0.03616158	-0.77382017
Neat1	0.018185049	1.235827369	Glipr2	0.004144231	-1.054949728
Marcks	0.002216819	1.451104389	Lats2	0.004350377	-1.321831854
Tgfb1	0.002338113	1.572951657	H2afx	0.041882078	-0.629552894
Arl4c	0.009526553	1.742962043	Sgk3	1.53E-05	-1.502500916
Inf2	2.02E-06	2.264091057	Padi2	0.005337389	-1.425930606
Alox12	0.021437131	1.202410851	Acot11	0.040878726	-1.096400198
Rhobtb1	0.017383927	2.131815027			
Aldh1b1	0.004598948	1.846745741			
Myom1	0.010607519	1.869886353			
Fos	0.021174592	1.84779489			
Rhob	0.000682684	1.584356444			
Ldlrad4	0.009523645	1.520394967			
Tuba8	0.01643582	1.651227611			
Lpp	0.010920938	1.778415623			
Gnaq	0.027379925	1.654130478			
Bank1	0.029291751	1.500232566			
Basp1	0.035056656	1.464867168			
Slc15a3	0.006815937	1.512427997			
Itgb3	0.004632973	1.049904981			
Cfh	0.000427929	2.054282083			
Klf6	0.01316508	1.05454252			
Vash1	0.005138145	1.868626923			
Abcg1	0.000551419	1.568349081			
Tnfrsf1b	2.18E-07	2.20077031			
Icam1	0.008979432	1.522853706			
Sun2	0.001795412	1.144717712			
Kcnk6	0.009846636	1.332813599			
Csf1r	0.016570234	1.800490743			
Gnaz	0.049917757	1.410428463			
Amotl2	0.009372866	1.841421971			
Krt18	0.032100434	1.547801856			
Aif1	0.01905824	1.460039608			
Syk	0.000615852	1.925670705			
Arhgef3	0.004362612	1.660969153			
Tcp11l2	0.031809442	2.005220163			
Palld	0.004625385	1.925850118			
Nfic	0.018091038	1.468521737			
Tmem50b	0.000698864	1.796862357			
Tec	0.010494163	1.700875749			
Tcn2	0.009694938	1.306826609			
Cd9	0.010997391	1.272579155			
Flt1	0.022149003	2.12284715			
Dbn1	0.043596504	1.830228111			
Ccl6	0.004133308	1.877654177			
P2rx1	0.000181222	2.011799972			
Ndrp1	0.017938606	1.584360584			
Gpc3	0.000193944	1.849757548			
Emilin1	0.004376131	2.431389758			

Trim14	0.00236472	2.12282893
Kifc3	0.010746839	1.875734351
Atp2a3	1.94E-06	1.795677417
Pla2g7	0.026913581	1.803489576
Rab32	0.000116832	1.674255696
Ptms	7.37E-05	1.955843318
Jup	0.007847579	1.391985413
Arsb	7.65E-08	2.235919326
Pld1	0.001685213	1.992251546
Dusp6	0.008257009	2.425086765
Ap1s2	0.001426927	1.821424125
Fam105a	4.00E-07	2.415291788
Ptgs1	0.00022683	1.879373383
Hip1	0.00444917	1.687507804
Plekho1	7.69E-07	2.284345681
Tpm4	7.94E-05	1.559355316
Irf2bpl	0.008486398	2.043029587
Sptbn1	0.023450384	2.32251457
Myo1b	0.026422571	2.14529066
Arhgap31	0.042382515	1.982669638
Sema4c	0.001627121	2.021731651
Ctss	4.78E-06	2.085761485
Clec4a1	0.005434105	2.0675358
Filip1l	0.026373359	1.980532725
Pik3ap1	0.004463934	2.090634611
Actn1	0.000357851	1.331509672
Nfkbie	0.048839418	1.570207421
Lcp2	0.000107252	1.643045647
Cotl1	9.32E-07	1.845149777
Stab2	3.54E-07	2.520570095
Ptprf	0.037827002	1.679187138
Arhgef17	0.048779997	1.523073604
Rgs18	4.80E-05	1.929349086
Bin1	0.008566431	1.522420498
Sparc	0.015286412	2.158736909
Zyx	1.45E-07	1.94831691
Myo7a	0.001918212	2.522105332
Dtx4	0.033397127	1.929091027
Il4ra	0.010339333	2.193861052
Zfp36	0.01133465	1.496245361
Fcgr1	1.21E-05	2.40515163
Mrvi1	0.025702495	1.086307787
Ccr5	0.035839135	1.690255602
Tmsb4x	4.53E-08	1.778042604
Pstpip2	0.000151142	1.93543474
Snn	0.03547774	1.509897164
Tfec	1.58E-05	2.317910905
Cmtm3	7.55E-05	2.141508571
Capn2	0.000387845	1.710000438
Flt4	0.00533393	2.081716953
Tyropb	3.71E-08	2.139043787
Ptpn18	0.000475343	1.943124952
Plxnd1	0.008317863	1.672181894
Adgre4	0.006747915	2.013003345
Aim2	0.002454963	1.789537905
Pmaip1	0.00493031	2.001362832
Hdac9	0.002374723	2.078891068
B430306N03Rik	0.016357195	1.686466294
Sirpa	1.54E-05	1.965469155
Itgal	0.003145478	2.348225765
4632428N05Rik	0.034426852	0.732043777
Itpril2	0.000581023	2.347850523
Prkcb	0.002745841	1.524238878
Sash3	0.00022024	2.554799648
Cd53	1.19E-06	2.064753114
Igsf6	1.58E-06	2.063080507

Myadm	4.59E-07	2.322707228
Abr	0.000223105	2.325683207
Dok2	0.003140224	1.999595013
Evi2a	0.004692095	1.901402105
Dchs1	0.01758183	2.186348295
Cplx2	0.04409528	2.002213124
Parvg	0.000101351	2.253762485
Ccng2	0.002226866	1.733737693
Gsn	8.89E-06	1.863380612
Smad1	0.017822478	1.700615312
Man1c1	4.14E-05	2.001223483
Mpo	5.59E-16	2.674351423
Cnn2	2.71E-08	2.166951118
Ms4a6d	0.002081268	2.160112424
Gm2a	8.86E-08	2.391660179
Fmn13	0.001319653	1.744140595
Soat1	0.00024058	1.863191672
Nlrp3	0.007225633	2.157620267
Rogdi	4.39E-06	2.143183785
Lcp1	1.83E-05	2.340545015
Capg	1.45E-07	2.461242751
Gpr160	0.008724895	2.078271794
Tnfrsf1a	5.60E-06	1.992071152
Trim30a	0.007330687	2.089494988
Kctd12	0.004345462	2.225984948
Laptm5	0.000706193	2.333394777
Rasgrp2	1.06E-05	1.815750855
Plcb2	2.31E-08	2.581003124
Ephb4	0.013050187	1.926972731
Tnfaip8l2	3.18E-05	2.359521186
Fcer1g	5.31E-05	1.78490036
Appl2	0.029300161	2.044744502
Rab31	1.85E-05	2.28567477
Arhgap25	0.000242128	2.036244456
Sh3bp5	0.00084784	1.619413452
Hck	0.000169108	1.849823217
Il13ra1	2.16E-05	2.511508192
Acvrl1	0.035550891	1.679016595
Rin2	0.006291816	1.691644197
Pld4	4.50E-05	2.426668
Kdr	0.000598929	2.30841454
Rassf2	0.00152687	2.693946123
Abcd2	0.000187047	2.348570479
Ms4a6b	0.003157603	1.939402937
Plekha2	1.58E-05	2.136343833
Arhgef6	0.004779276	2.655550732
Fgd2	0.001525544	2.390080629
Tbkbp1	4.44E-05	2.16081594
Rarg	0.00010771	2.649465162
St8sia4	0.013312546	3.159304462
Tlr2	0.000381826	2.373564612
Obsl1	0.01954093	1.955634773
Ncf2	7.57E-07	2.145732271
Fli1	1.39E-06	2.290602127
Cyp27a1	0.01402791	2.092456874
Adam15	0.009049343	2.635194216
Rin3	0.001034031	2.421921964
Hlx	0.015938035	2.084174343
Sptan1	0.014758277	2.376720021
Cytip	3.05E-05	2.386601722
Wdfy4	0.021785658	3.060640215
Nuak2	0.034678967	1.822275161
Pde2a	0.000327594	1.811286503
Spi1	2.43E-09	2.398944278
Pbx1	0.006275911	2.154012918
Igfbp4	7.13E-09	2.096638715

I830077J02Rik	0.003132053	2.042753382
F5	0.001373179	1.630620911
Zfp467	0.015167094	2.035805418
Grap	0.003352347	2.098014898
Mpeg1	5.28E-07	2.142150935
Paqr7	0.004370925	2.00736389
Arhgap27	0.000760086	2.653553664
Meis1	0.003495773	2.252190654
Col4a1	0.000261031	1.813226053
Plek	3.33E-05	1.516836423
Fam49a	0.023067663	1.547182599
Cyth4	1.05E-05	2.457994553
Unc93b1	8.72E-06	2.120727568
Rcsd1	5.05E-07	2.459725665
Fn1	0.00032398	2.185080588
C3	3.62E-07	1.855950052
Slc25a45	1.64E-07	2.919563651
Gpr65	0.004326111	1.679126625
Adrbk2	6.39E-05	2.859402768
Ppp1r18	1.50E-06	2.121933599
Trpv2	0.013545467	2.375326412
Card9	1.63E-07	2.726842593
Limd2	6.46E-10	2.372574088
Elmo1	2.46E-07	2.486335911
Fmn1	0.000547535	2.967223445
Fes	0.000139424	2.582404107
Nfam1	6.37E-05	2.414843384
Rgs2	1.45E-06	2.347405101
Vim	1.77E-08	2.793870361
Plcg2	0.000110466	2.694245794
Rbp1	0.046601418	1.333821842
Tm6sf1	7.68E-08	2.706105295
Gda	7.80E-07	2.430145363
Hk3	0.002915031	1.389599082
Anxa3	3.64E-07	2.215845703
Myo1g	9.68E-06	3.003163272
Calhm2	0.015201178	2.752696485
Id2	3.25E-06	2.189609765
Dram1	0.009905088	1.962105917
Themis2	0.000174989	2.852765671
Zfp516	0.001398198	2.490995654
Lbh	5.40E-06	2.859438341
Ccnd1	0.013164438	1.835433607
Myo1f	8.04E-06	2.608248433
Plac8	1.12E-13	2.789566649
Ncf1	3.70E-10	2.389067888
Hdgfrp3	1.60E-05	2.49870647
Elk3	2.39E-09	3.121081324
Notch1	0.026454838	2.813069009
Sh3tc1	0.001777368	2.345809412
Cxcr5	0.000891468	2.379060532
Ramp1	5.90E-07	2.635867864
Ifitm3	8.06E-08	2.66291989
Mtus1	6.08E-06	2.206556114
Cd14	0.006798793	1.945415629
Sla	3.01E-06	1.898041173
Egln3	0.001633438	2.03550643
Tspan2	0.003923023	2.00670204
Celf2	0.00307794	2.612776588
Coro1a	5.95E-09	2.794630436
F13a1	1.31E-06	2.279153854
1700025G04Rik	0.035664036	2.663445327
Pram1	0.00289764	1.64804137
Sh2b2	0.000957098	2.572062161
Pid1	9.64E-05	2.753372208
Ptprc	7.89E-05	2.772289339

Irf1	2.29E-06	2.554353731
Coro2a	0.000616675	3.378313214
Clec5a	0.00085414	1.889198493
Snx10	0.0002084	2.326387306
Ckap4	0.000370614	1.958818965
Ebi3	0.018914862	2.164579186
Slc22a15	0.048070792	2.014931144
Hp	1.23E-09	2.470727022
Pglyrp1	0.000105154	2.035445376
Gng2	4.19E-06	2.294168574
Rgs14	0.000238077	2.470780793
Il16	6.67E-06	2.663922551
Hmga2	0.002008969	3.238521168
Irf5	1.71E-07	2.791878409
Emb	8.63E-06	2.991133711
Ms4a6c	8.01E-08	2.567494051
Cd180	0.000376884	2.262451696
Rassf4	0.002185727	2.72960609
Apobr	0.002832586	1.939723943
Pik3r5	0.003669198	2.288593228
Casp1	0.002751172	1.885077547
Serpib10	0.025672686	1.615161633
Ncf4	2.29E-10	2.481838059
Itih5	0.013582095	2.201701861
Sorl1	0.002922729	3.124777621
S100a8	8.75E-05	1.89349727
Ticam2	2.82E-07	3.183961639
Il6ra	0.000582839	2.741624615
Fosl2	5.45E-08	3.083130719
Itgam	5.34E-06	2.459344865
BC100530	1.32E-06	1.839146053
Siglece	0.001067847	2.374183358
Sh2d3c	8.08E-08	2.931166304
Chil1	9.57E-07	2.289688724
Fgd4	0.001423898	1.880913584
Rbpms	0.00053105	2.271075918
Csf3r	9.02E-06	2.889769387
Tek	0.014696321	1.927242603
Prkch	0.002518382	2.398366644
Psmb8	1.05E-08	2.72626658
Mgst1	0.000862247	2.232552578
Nlrp1b	0.008886995	2.426503987
Tmem176a	0.00822841	2.363670827
Erg	4.57E-06	2.632169195
Sell	6.28E-08	2.577916231
Adgrg5	0.00019519	3.434171434
Klk8	0.000245638	2.454781829
Armcx4	0.003978031	2.01810397
Eif4e3	0.001261121	2.234981222
Tlr9	0.003054565	2.920519686
Sp100	5.31E-05	3.065618979
Ptk7	0.000369871	3.284221879
Ppfia4	3.60E-06	2.671439981
Slfn2	1.09E-06	2.398539428
AI504432	0.000959488	2.099087894
Xdh	7.97E-05	2.276790397
Pear1	0.00734703	1.901727248
Camp	5.34E-06	1.631156594
S100a9	0.000336124	1.938914474
Ptpro	0.004164295	2.611870069
Vav3	7.76E-06	2.365991756
Mcomp1	0.000176556	2.333595121
H2-Aa	0.016245887	2.523262672
Plbd1	0.031101316	1.690243758
Slc35d3	0.017945195	2.004732153
Id3	1.19E-06	2.623355032

Ptpn22	0.001021465	2.333963384
Clec4e	0.01744322	2.158082871
Gria3	5.27E-06	3.098695785
Ly86	0.00038374	3.057791186
Angpt1	0.023686452	2.15041246
Tie1	1.19E-05	2.33640997
Ablim1	0.008453967	2.270885229
Sh2d5	1.72E-08	3.109661428
Olfm4	1.65E-09	2.182568962
Parp8	0.009187856	2.931465452
Tifab	5.81E-08	2.990036452
BC035044	4.23E-07	2.726822635
Plaur	0.04519579	1.932024214
Cybb	7.46E-07	2.507759219
6430548M08Rik	0.003673725	1.673216771
Cd52	1.31E-06	2.811199522
Irf8	3.76E-06	2.791454411
Ms4a4c	0.000126664	3.303813924
Clec7a	1.24E-09	3.126722769
Fgr	0.003509309	1.945814159
Il12a	0.014413014	2.720911731
Gm1966	0.000166675	3.620671115
Pyhin1	0.04333462	2.102936262
Afap1l1	0.016216428	2.778364509
Gcnt2	0.015134533	2.928937778
Emp1	0.027876509	2.26694597
Crispld2	0.003586086	2.310323511
Mmrrn1	0.009798632	1.357207621
Mpl	5.49E-05	1.924550183
Cd93	0.015792437	2.990035818
Ifi202b	0.000821489	3.231142931
Fgd5	0.029431354	2.18801489
Tmem176b	3.65E-06	2.264775359
Klf4	0.006441518	2.184903598
S100a6	0.031099416	1.91702458
Bex6	0.012399675	3.072047975
Thbs1	1.50E-05	1.496887144
Ugt1a7c	0.039100446	2.021695392
Rag1	6.40E-05	3.033849299
Cd74	7.10E-09	3.078830995
Lyz2	9.60E-13	2.393213475
Serpina3g	0.036736348	1.928292924
Adgrl4	0.006342832	3.013780345
Chil3	7.45E-06	2.529557875
Stfa2l1	0.005554021	2.604484613
Lsp1	3.13E-11	3.459957051
Ccr2	1.76E-13	3.566628799
Gm16897	2.89E-08	3.70908789
BC117090	0.000203699	2.010593147
Thsd1	0.024222417	2.581463725
Ngp	2.66E-10	2.164052942
Stfa3	1.57E-07	2.080636211
Cd27	0.007610214	3.29107984
Ifitm6	0.005289862	2.025997883
Cd34	0.000366527	3.259574501
Mycn	0.000209174	2.526943363
Lcn2	4.86E-09	2.235550484
Cd177	1.60E-05	2.154765967
Gimap6	0.006001686	2.542383327
Ltf	1.13E-11	2.332719129
Mmp9	4.17E-05	2.232631579
Mmp8	0.000203522	1.92381143
Flt3	0.000215124	3.38401887
Stfa2	0.004559254	2.21206551
Retnlg	0.042406937	2.351307421