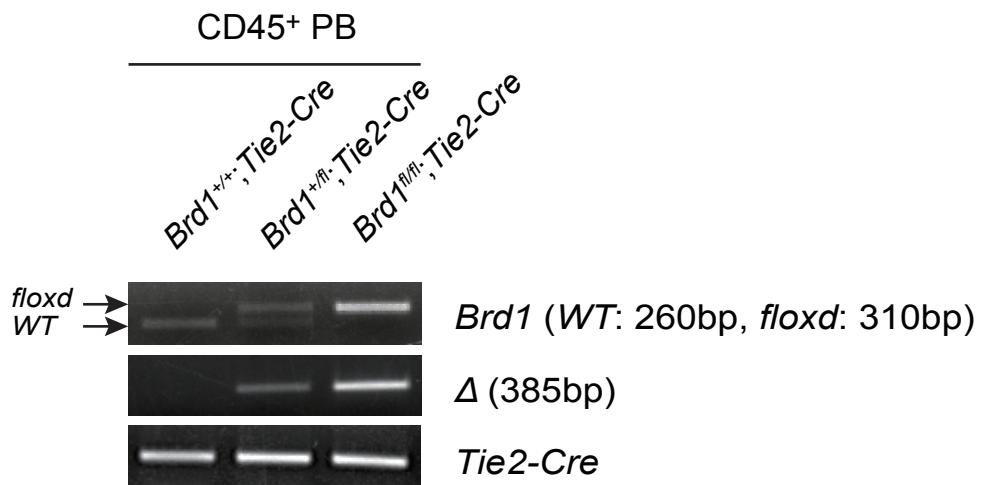
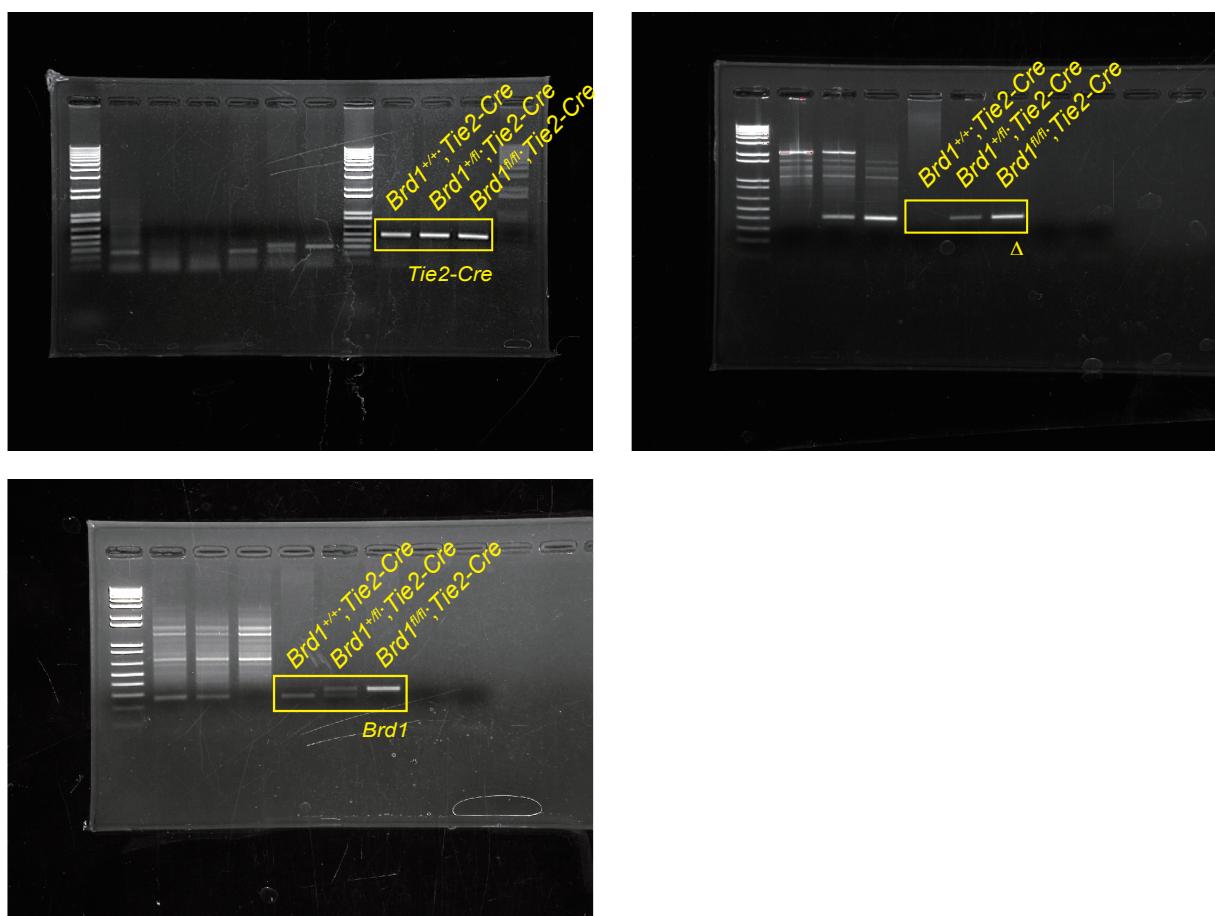
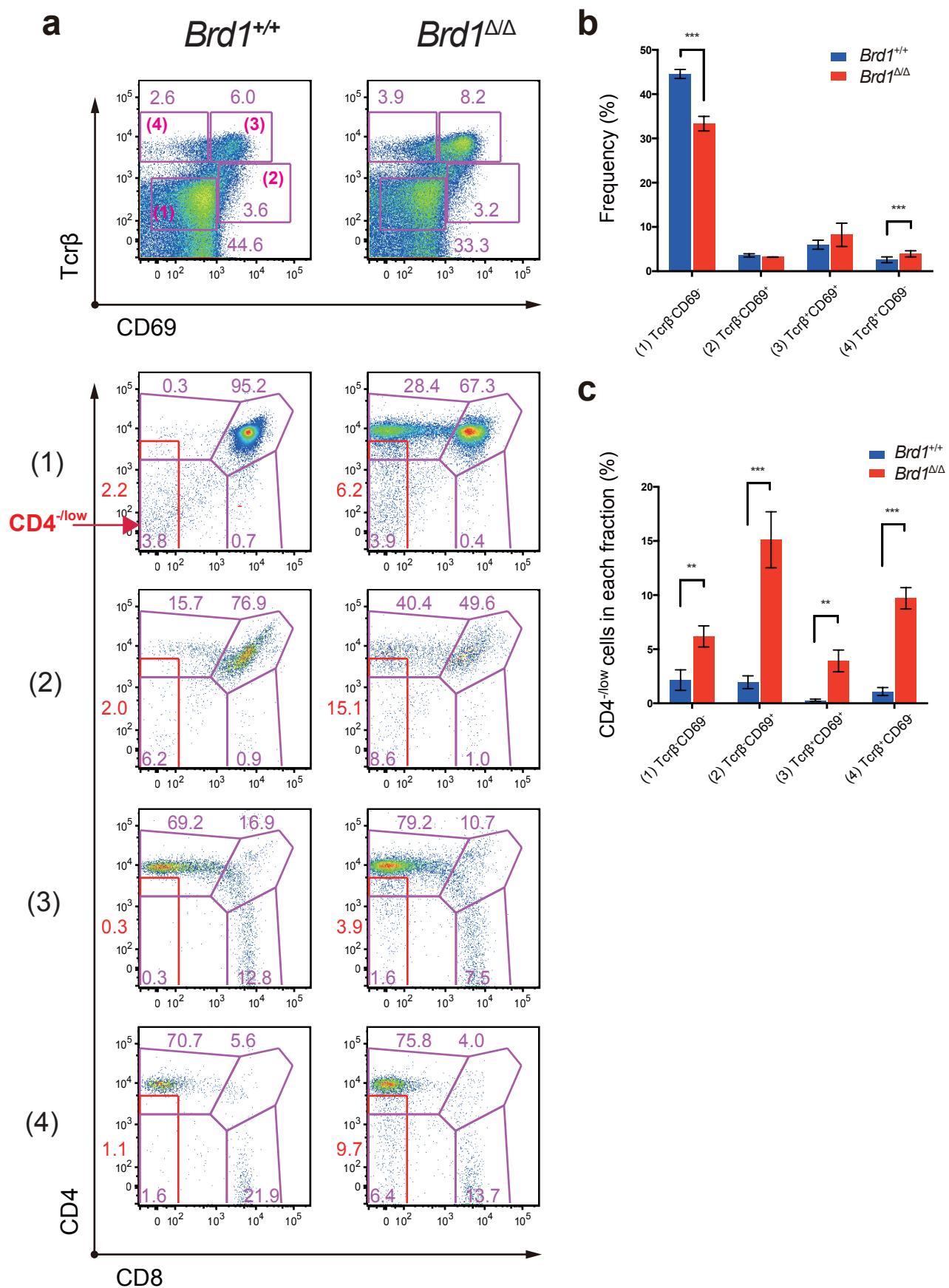


a**b**

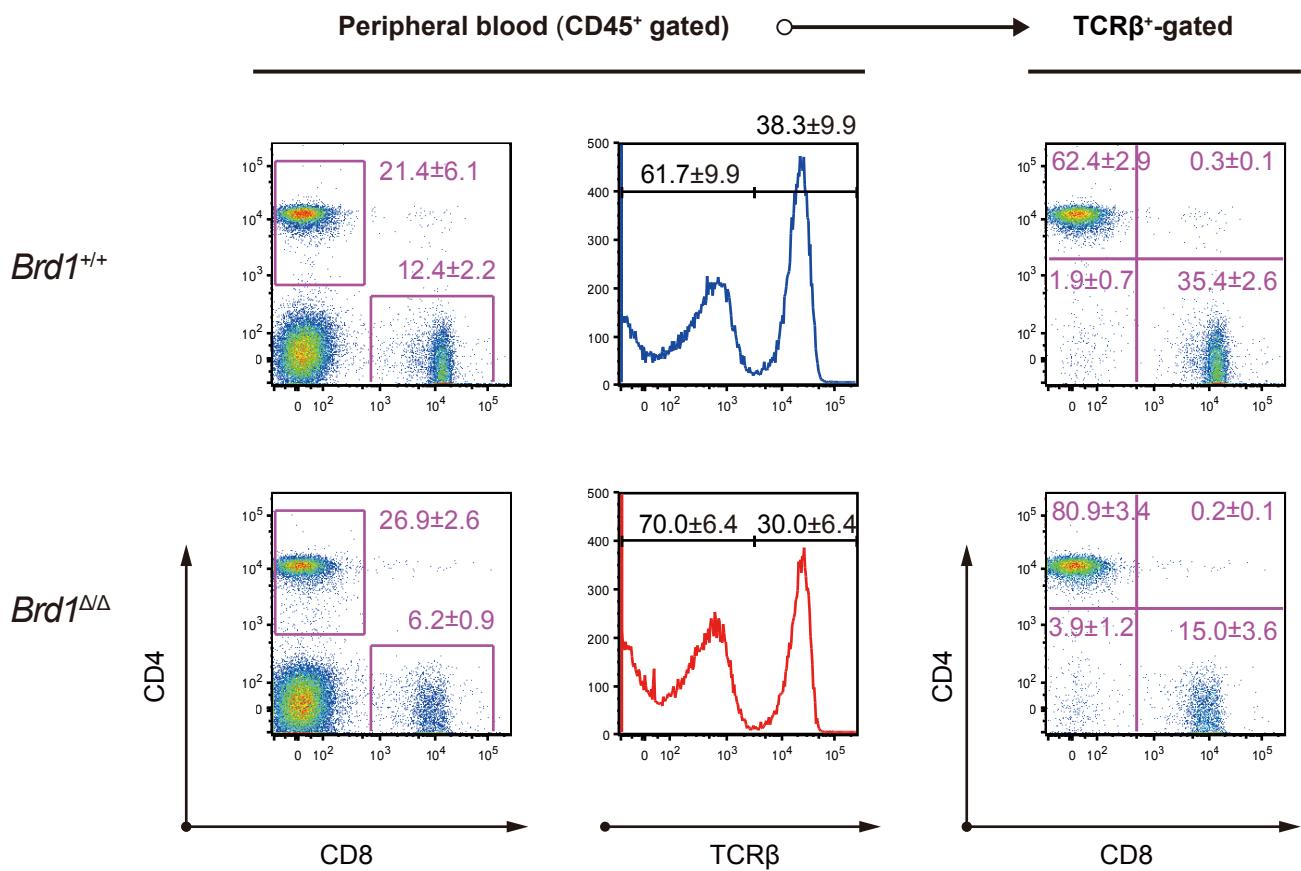
Supplementary Figure 1. Efficient deletion of *Brd1* in hematopoietic cells.

- (a) Efficient deletion of *Brd1* in PB CD45⁺ mononuclear cells detected by genomic PCR. Representative genomic PCR showing the deletion of *Brd1*. “WT”, “floxed” and “ Δ ” alleles indicate the wild-type allele, floxed *Brd1* allele, and floxed *Brd1* allele after removal of exon 2 by Cre recombinase, respectively.
- (b) Uncropped raw scans of PCR products used in (a) are presented.



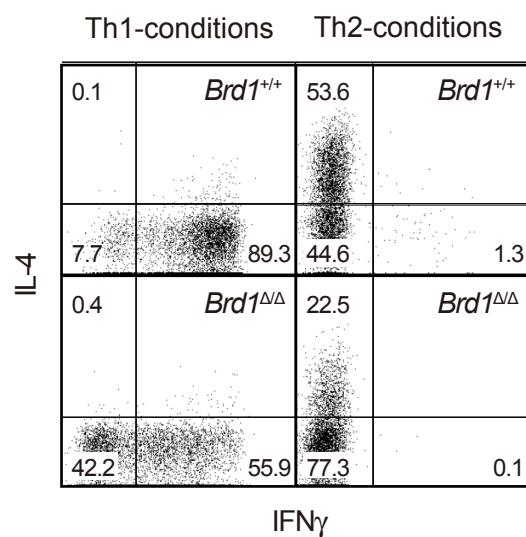
Supplementary Figure 2. CD4 and CD8 expression in thymocytes fractionated for their expression of TCR β and CD69.

(a) Thymocytes were fractionated into 4 fractions for their expression of TCR β and CD69 and the representative expression of CD4 and CD8 in each fraction was depicted. CD4 $^{-/low}$ CD8 $^{-}$ cells are boxed in red and their percentages in each fraction are indicated in red. (b) Frequencies of cells in each fraction are presented as mean \pm S.D. (*Brd1^{+/+}*, n=4; *Brd1^{Δ/Δ}*, n=3). (c) Frequencies of CD4 $^{-/low}$ CD8 $^{-}$ cells in each fraction are presented as mean \pm S.D. (*Brd1^{+/+}*, n=4; *Brd1^{Δ/Δ}*, n=3). **P < 0.01 and ***P < 0.001.



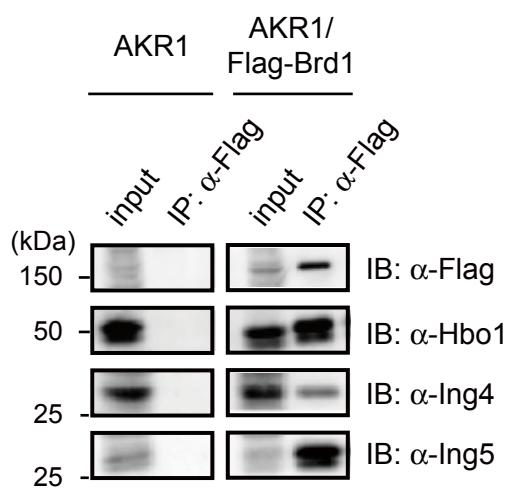
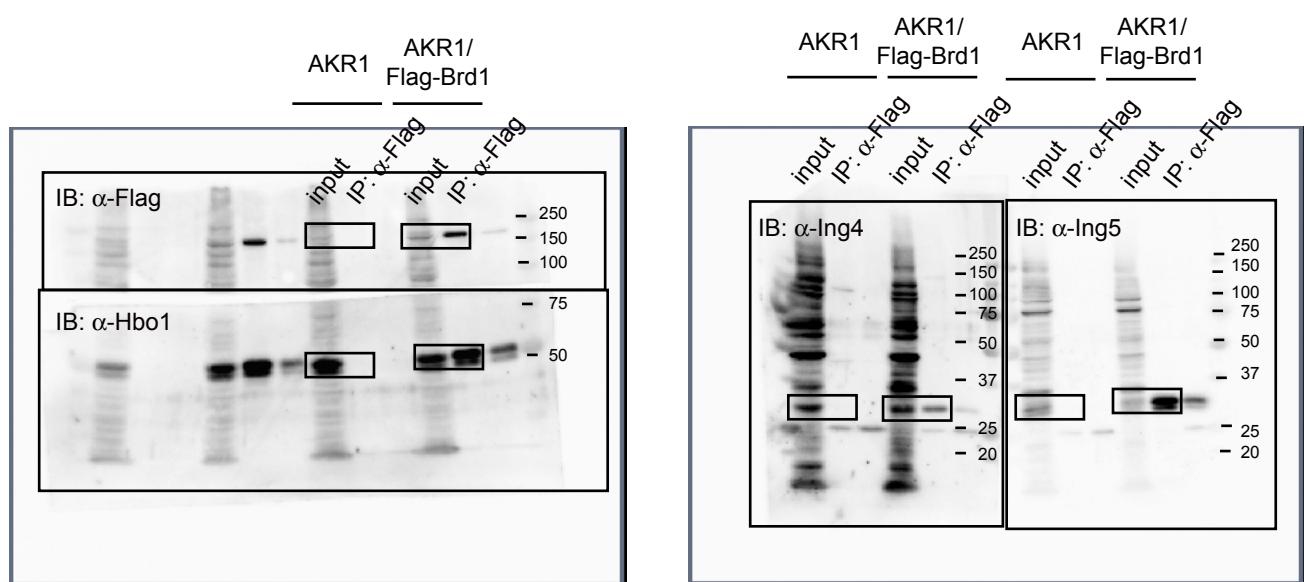
Supplementary Figure 3. Expression of CD4 and CD8 in the PB of *Brd1*-deficient mice.

Representative flow cytometric profiles of CD4 and CD8 expression (left panels), TCRβ expression (middle panels), and CD4 and CD8 expression in TCRβ⁺ cells (right panels) in the PB of 8- to 11-week-old *Tie2-Cre* (*Brd1^{+/+}*) and *Tie2-Cre;Brd1^{f/f}* (*Brd1^{Δ/Δ}*) mice. Proportion of each gate is indicated. Data are presented as mean ± S.D. (*Brd1^{+/+}*, n=9; *Brd1^{Δ/Δ}*, n=7).

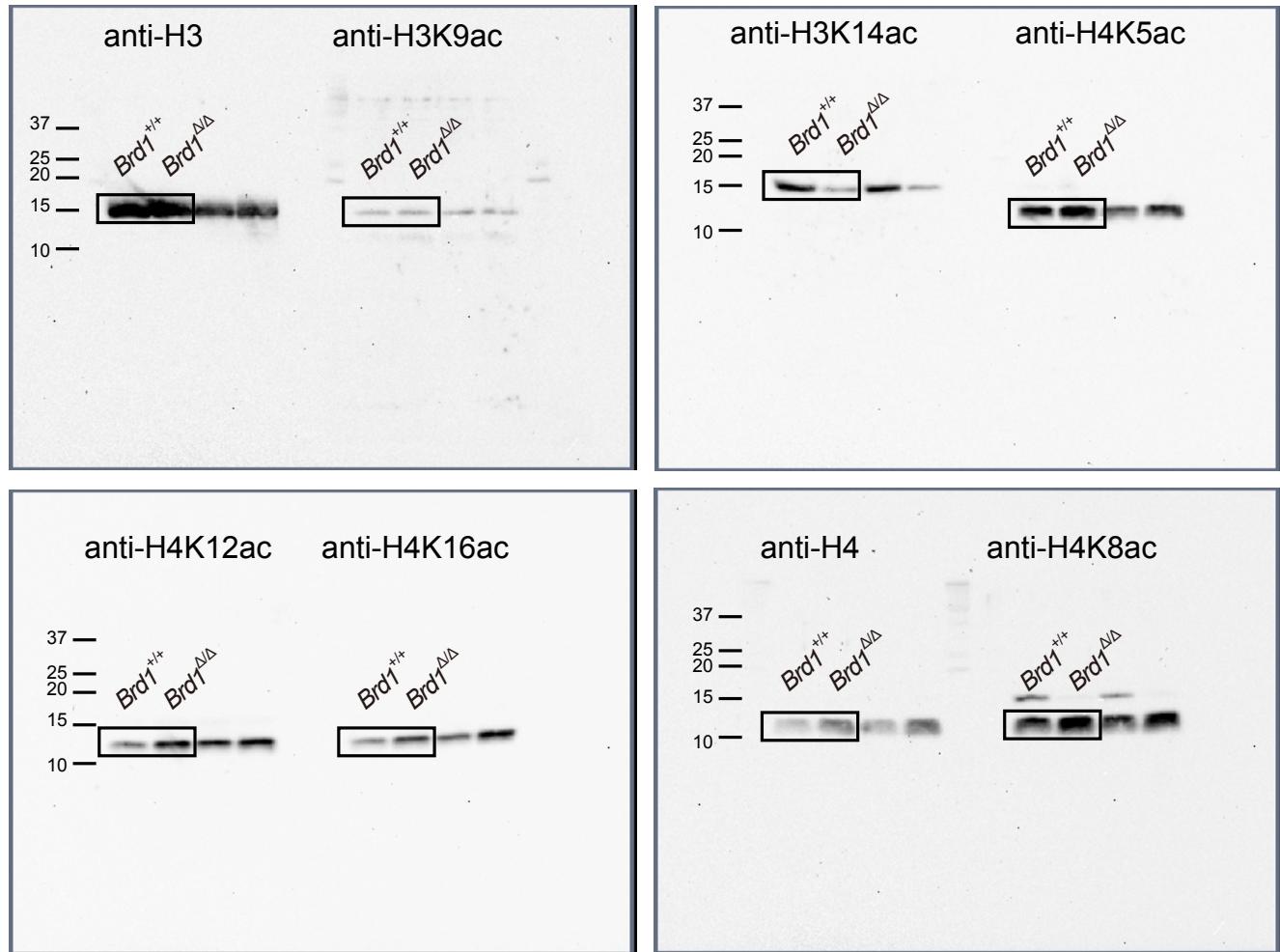


Supplementary Figure 4. Induction of Th1 and Th2 cytokine expression.

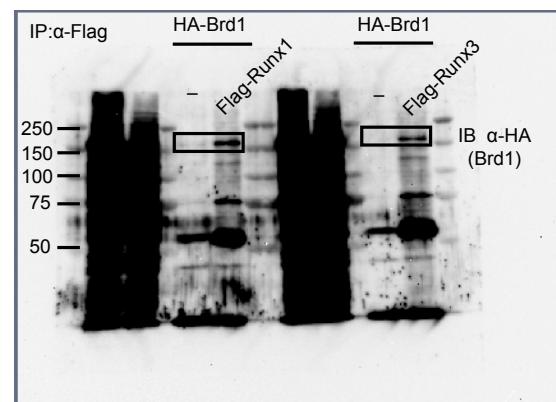
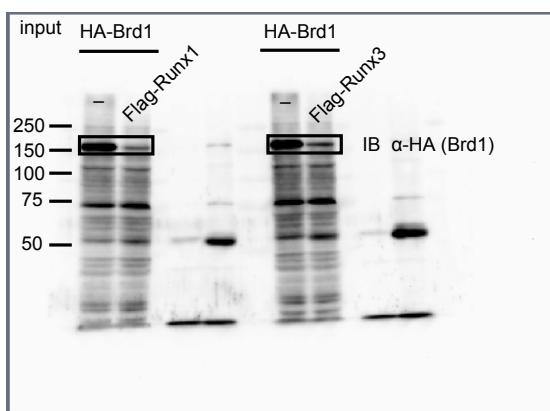
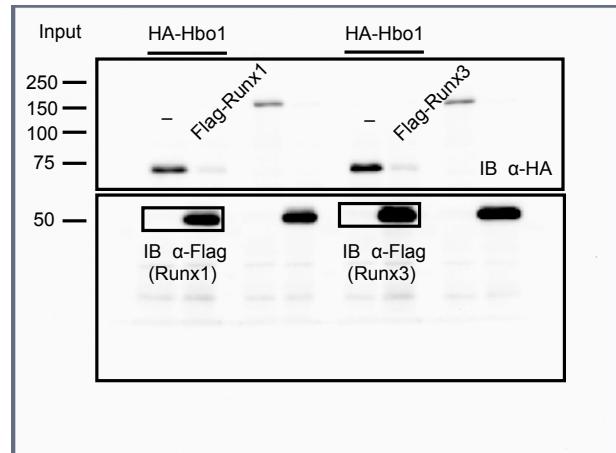
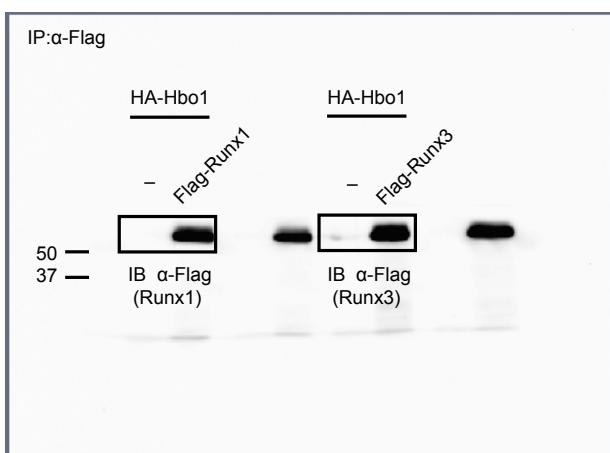
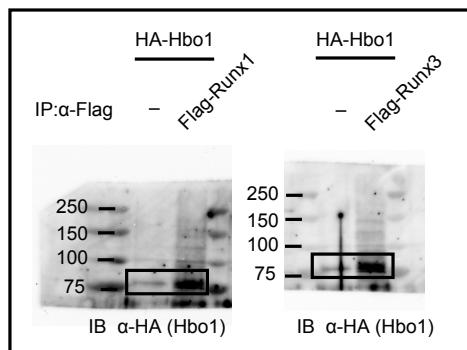
Splenic naïve CD4 T cells from WT and *Tie2-Cre;Brd1^{f1/f1}* mice were stimulated with immobilized anti-TCR β and anti-CD28 mAbs under Th1 or Th2 conditions for 6 d. Representative staining profiles of intracellular IFN- γ and IL-4 are shown with percentages of cells in each quadrant.

a**b****Supplementary Figure 5. Brd1 forms a HAT complex with Hbo1 and Ing4.**

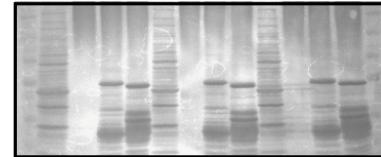
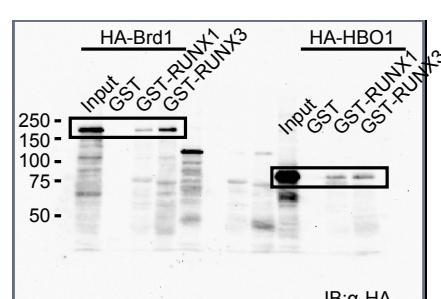
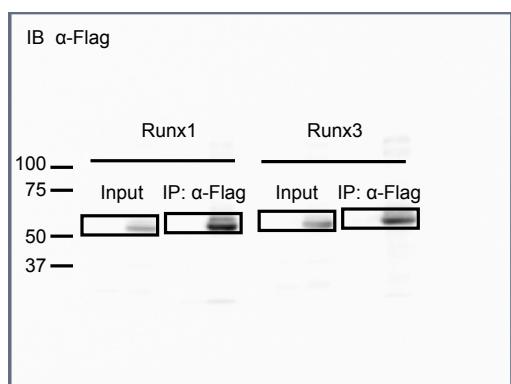
- (a) Proteins in the lysates of the parental AKR1 cells and AKR1 cells expressing Flag-Brd1 were immunoprecipitated using anti-FLAG antibody, and then immunoprecipitates were detected by Western blotting using anti-Flag, anti-Hbo1 (N-18:sc-13283, Santacruz, 1:200), anti-Ing4 (ab3714-100, Abcam, 1:1,000) and anti-Ing5 (PTG10665-1-AP, Proteintech, 1:1,000) antibodies.
- (b) Uncropped raw scans of blots used in (a) are presented.



Supplementary Figure 6. Full blots presented in the Figure 6a.



GST Pull down



Supplementary Figure 7. Full blots presented in the Figure 6c.

Figure 6d

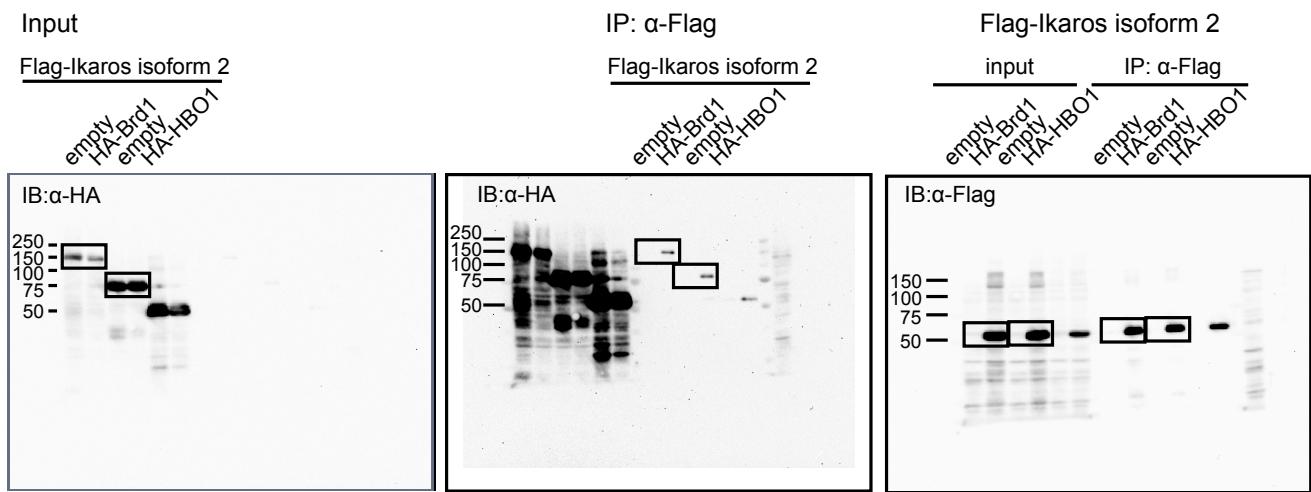
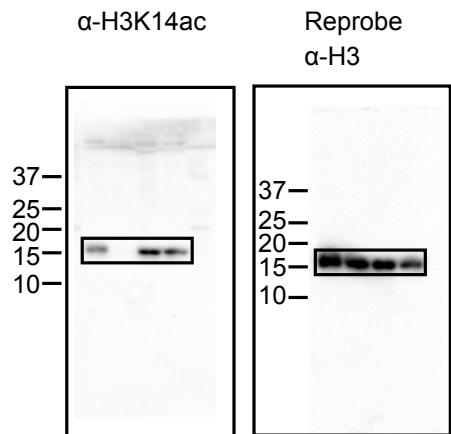


Figure 7b



Supplementary Figure 8. Full blots presented in the Figure 6d and 7b.

Supplementary Table 1. Differentially expressed genes (greater than 2 fold) between Δ/Δ CD4 TCR β -low and $+/+$ DP cells in microarray analyses

Up – 988 probes [Δ/Δ CD4 TCR β -low] / [$+/+$ DP] (log2)	GeneSymbol:GeneName	Down – 1270 probes [Δ/Δ CD4 TCR β -low] / [$+/+$ DP] (log2)	GeneSymbol:GeneName
8.0165037 Kr84 keratin 84		-7.2598695 H2-T3 histocompatibility 2, T region locus 3	
7.9181445 Gm10848 predicted gene 10848		-7.0961838	
7.6418162		-6.9473505 Lrig1 leucine-rich repeats and immunoglobulin-like domains 1	
6.9014015		-6.9443629 LOC83341 h-2 class I histocompatibility antigen, TLA(B) alpha chain-like	
6.5817342		-6.6985669 H2-T18 histocompatibility 2, T region locus 18	
6.3714693		-6.3702076 Lrig1 leucine-rich repeats and immunoglobulin-like domains 1	
6.3218899 A230057d RIKEN cDNA A230057D06 gene		-6.2181282 H2-T18 histocompatibility 2, T region locus 18	
6.2746948 Podh12 protocadherin 12		-5.9452640 Cd8a CD8 antigen, alpha chain	
6.20241977		-5.9437671 Laptm4b lysosomal-associated protein transmembrane 4B	
6.17423395		-5.8374338	
6.1693439		-5.78237872 Cd8a CD8 antigen, alpha chain	
6.01426078 Cdc40 coiled-coil domain containing 40		-5.7793026	
5.91479		-5.7711523 Thnsl2 threonine synthase-like 2 (bacterial)	
5.81375186 Gm10050 predicted gene 10050		-5.72014789 LOC10050h-2 class I histocompatibility antigen, TLA(B) alpha chain-like	
5.80720754 Drm3 dynamin 3		-5.715146	
5.78231558		-5.71394637	
5.77238648		-5.693104299 Hmgn3 high mobility group nucleosomal binding domain 3	
5.717367 Olf701 olfactory receptor 701		-5.63436028 Gprc5b G protein-coupled receptor, family C, group 5, member B	
5.699642		-5.405347336	
5.65487532 Agb3 ATP/GTP binding protein-like 3		-5.370441222	
5.504850008 Gm5840 predicted gene 5840		-5.32118735 Dgkg diacylglycerol kinase, gamma	
5.4755974		-5.3134179	
5.43735138		-5.2857334 Igf3 immunoglobulin superfamily, member 3	
5.40835376		-5.1473666 Trb2 tribbles homolog 2 (Drosophila)	
5.38144538 Mospd4 motile sperm domain containing 4		-5.1450315 Nhlh1 NHS-like 1	
5.3485459		-5.11190742	
5.32873194 Phd2 pyruvate dehydrogenase E1 alpha 2		-5.0714221 Sqrdl sulfide quinone reductase-like (yeast)	
5.28859615		-4.9997045 Rbm24 RNA binding motif protein 24	
5.2790913 Xdh xanthine dehydrogenase		-4.9872372 Pcll phospholipase C-like 1	
5.27346702 Pip5k1b phosphatidylinositol-4-phosphate 5-kinase, type 1 beta		-4.9225477 Retnla resistin like alpha	
5.24924767 Cryba2 crystallin, beta A2		-4.90007544 Fam110b family with sequence similarity 110, member B	
5.0519233		-4.8905849	
4.9989844		-4.8333509 Aim1 absent in melanoma 1	
4.97560687		-4.8268027 Slc25a24 solute carrier family 25 (mitochondrial carrier, phosphate carrier), member 24	
4.95805106 Olf1328 olfactory receptor 1328		-4.8240066 Csgalact1 chondroitin sulfate N-acetylgalactosaminyltransferase 1	
4.90640056		-4.8156727 Tfif3 trefil factor 3, intestinal	
4.82536244 Oncut1 one cut domain, family member 1		-4.7170618 Cyth3 cytohesin 3	
4.82428454 Il17f interleukin 17F		-4.6779461	
4.8206959 Rhox4g reproductive homeobox 4G		-4.6432897 D230040A RIKEN cDNA D230040A04 gene	
4.745718		-4.63625855	
4.7349262		-4.6326279 Lymd2 LySM, putative peptidoglycan-binding domain containing 2	
4.73371212 Olf342 olfactory receptor 342		-4.6014132 Slc7a11 solute carrier family 7 cationic amino acid transporter, y ⁺ system), member 11	
4.7011145		-4.5801162 Tox3 TOX high mobility group box family member 3	
4.6362381 2410022L RIKEN cDNA 2410022L05 gene		-4.57281395 Fan43 family with sequence similarity 43, member A	
4.5678518		-4.5467954 Dip2c DPB disco-interacting protein 2 homolog C (Drosophila)	
4.5564137		-4.5439472 Qpc glutaminyl-peptide cyclotransferase (glutaminyl cyclase)	
4.5186491 Gm10822 predicted gene 10822		-4.54261244 Olig3 oligodendrocyte transcription factor 3	
4.51570694		-4.54123716	
4.51533525		-4.49236395 Lorr3 LON peptidase N-terminal domain and ring finger 3	
4.5110491		-4.4501974	
4.4975767		-4.395503 Tro trophinin	
4.41733232 Rbfox3 RNA binding protein, fox-1 homolog (C. elegans) 3		-4.3718466	
4.3735562		-4.2927984	
4.35727234 Arhgef10 rho guanine nucleotide exchange factor (GEF) 10-like 1		-4.2550659	
4.3119982 Adamts11 ADAMTS-like 1		-4.2352567 Chst10 carbohydrate sulfotransferase 10	
4.2811688 Actg2 actin, gamma 2, smooth muscle, enteric		-4.2227645	
4.2716713		-4.20360899 Abca1 ATP-binding cassette, sub-family A (ABC1), member 1	
4.2659925 Cym chymosin		-4.18483927 Ube2e2 ubiquitin-conjugating enzyme E2E 2 (UBC4/5 homolog, yeast)	
4.2426145 Ptprn protein tyrosine phosphatase, receptor type, N		-4.17099696 Tbatb thymus, brain and testes associated	
4.2241831		-4.1631956 Ramp3 receptor (calctonin) activity modifying protein 3	
4.2066338		-4.1562567	
4.1191992		-4.14936446 Pppap2c phosphatidic acid phosphatase type 2C receptor (calctonin) activity modifying protein 3	
4.1053501		-4.12220008 Ramp3	
4.097353 Skint11 selection and upkeep of intraepithelial T cells 11		-4.116415 Tmc03 transmembrane and coiled coil domains 3	
4.0782285		-4.0645433 Nav2 neuron navigator 2	
4.0546841		-4.0537791 Trim16 tripartite motif-containing 16	
4.0387597		-4.0507154	
3.9812693 Igkv-J558 immunoglobulin heavy chain (J558 family)		-4.0040902 Trib2 tribbles homolog 2 (Drosophila)	
3.9656809 Nefh neurofilament, heavy polypeptide		-3.9903436 Vnnmr1-181 vermeronasal 1 receptor 181	
3.9597645 Prf13 proline rich 13		-3.9419323 Trim18 tripartite motif-containing 16	
3.9000167		-3.9307146	
3.8769627		-3.91900738 Cited4 Cbp/p300-interacting transactivator, with Glu/Asp-rich carboxy-terminal domain, 4	
3.8572154 Itga9 integrin alpha 9		-3.913084 Macro2 MACRO domain containing 2	
3.8217588 Eif4 E74-like factor 3		-3.8161349 Klbkb26 kalikrein 1-related peptidase b26	
3.8191921 Rnf135 ring finger protein 135		-3.8120155 Mbcad2 membrane bound O-sulfotransferase domain containing 2	
3.8025498		-3.80692014 Nr4a2 nuclear receptor subfamily 4, group A, member 2	
3.7983573		-3.7899127	
3.76726555 Ddc2 dopa decarboxylase		-3.7878468	
3.7627196		-3.7641987 Ppib peptidylprolyl isomerase C	
3.7555636 Dkk3 dICKOPPF homolog 3 (Xenopus laevis)		-3.7569222 Gms2 predicted gene 52	
3.7418272 Prkag3 protein kinase, AMP-activated, gamma 3 non-catalytic subunit		-3.7471823	
3.7335973		-3.7463934 Ch11 cell adhesion molecule with homology to L1CAM	
3.7041069 Tas2r136 taste receptor, type 2, member 136		-3.72502211	
3.7027664 Cdkn2a cyclin-dependent kinase inhibitor 2A		-3.7070392 Spac1 sperm acrosome associated 1	
3.7019897 Ppef2 protein phosphatase, EF hand calcium-binding domain 2		-3.7009974 Dact1 dapper homolog 1, antagonist of beta-catenin (xenopus)	
3.7013154 Mif2 antigen p97 (melanoma associated) identified by monoclonal antibody		-3.6890055 Foxo6 neuron navigator 2	
3.69769206 Ldhd lactate dehydrogenase D		-3.674003	
3.68859778		-3.65985306 H2-T3 histocompatibility 2, T region locus 3	
3.6781993 DT30005E RIKEN cDNA D730005E14 gene		-3.643981 Cdc10b coiled-coil domain containing 10B	
3.6733556		-3.6417	
3.6598917		-3.62521232 Carp2 cysteine and glycine-rich protein 2	
3.6566291 Lalba lactalbumin, alpha		-3.6247492 Defb1 defensin beta 1	
3.6435272 Unc13c unc-13 homolog C (C. elegans)		-3.6143255 Egfp2 epidermal growth factor binding protein type B	
3.6294609 94300690 RIKEN cDNA 943006907 gene		-3.6091747	
3.591444		-3.5838705 Klk1 kalikrein 1	
3.5727773 Ankrr22 ankyrin repeat domain 22		-3.5720225 Fundc2 FUN14 domain containing 2	
3.57107087		-3.5710997 Myo10 myosin X	
3.5518615 Acot1 acyl-CoA thioesterase 1		-3.56916075 F30223B RIKEN cDNA F30223B06 gene	
3.5370354 Gm10280 predicted gene 10280		-3.5572385 Caeng2 calcium channel, voltage-dependent, gamma subunit 2	
3.5296426		-3.5499224	
3.5209679 Gm11757 predicted gene 11757		-3.5271486 Wdr86 WD repeat domain 86	
3.5194135 Fydy7 FYDY domain-containing ion transport regulator 7		-3.5247608 A430035E RIKEN cDNA A430035B10 gene	
3.5027485		-3.5106745 Tmc3 transmembrane and coiled coil domains 3	
3.5014598 Oca2 oculocutaneous albinism II		-3.500641	
3.4928799 1700026D RIKEN cDNA 1700026D008 gene		-3.5003382 Gm2115 predicted gene 2115	
3.4893655 Dpf1 D4, zinc and double PHD fingers family 1		-3.49946122 Apbb2 amyloid beta (A4) precursor protein-binding, family B, member 2	
3.4865079 Tmem17 transmembrane protein 17		-3.4635047 Nav2 neuron navigator 2	
3.4066984 Tspan18 tetraspanin 18		-3.4116326 Cd1b1 CD8 antigen, beta chain 1	
3.4067985 Dbx2 developing brain homeobox 2		-3.3977148 Mast4 microtubule associated serine/threonine kinase family member 4	
3.3988977		-3.3853335 Agpat4 1-acylglycerol-3-phosphate O-acyltransferase 4 (lysophosphatidic acid acyltransferase, delta)	
3.3834016 Hck3 hexokinase 3		-3.3678975	
3.377324		-3.3602948 Drd4 dopamine receptor D4	
3.3732748		-3.3597965 Spac1 sperm acrosome associated 1	
3.3565296		-3.341139 Slc22a15 solute carrier family 22 (organic anion/cation transporter), member 15	
		-3.3409224 Ptk2 PTK2 protein tyrosine kinase 2	

3.3306093			-3.33177765 Tmem35	transmembrane protein 35
3.32979318 Ms4a6b	membrane-spanning 4-domains, subfamily A, member 6B		-3.3271795 Acpp	acid phosphatase, prostate
3.3226058			-3.32571178 Pdlim5	PDZ and LIM domain 5
3.3036146			-3.3235316	
3.29204367 Stra8	stimulated by retinoic acid gene 8		-3.3087539 Syt2	synaptotagmin-like 2
3.2813649	2010107G RIKEN cDNA 2010107G12 gene		-3.2871495 Tmem2	transmembrane protein 2
3.255848			-3.2848643 Fnh2	four and a half LIM domains 2
3.2490644 H19	H19 fetal liver mRNA		-3.2816030 Slc27a6	solute carrier family 27 (fatty acid transporter), member 6
3.2351545 Wnt10a	wingless related MMTV integration site 10a		-3.2777748 Oasl2	2'-5' oligoadenylate synthetase-like 2
3.215102 Gm14137	predicted gene 14137		-3.27350139 Bag3	BCL2-associated athanogene 3
3.2153654 Shpk	sedoheptulokinase		-3.2732946 LOC10050902767	
3.2112854 Gm525	predicted gene 525		-3.2655826 Mettl1b	methyltransferase like 1B
3.2077063 Gm12409	predicted gene 12409		-3.2590957	
3.2026892			-3.2504244	
3.1908342			-3.2477098 Fxyd6	FXYD domain-containing ion transport regulator 6
3.1905651 Krt5	keratin 5		-3.2435111 Pde6a	phosphodiesterase 6A, cGMP-specific, rod, alpha
3.1790188 Miflip	myeloid leukemia factor 1 interacting protein		-3.2426329	
3.1767936 Bat1	bone marrow stromal cell antigen 1		-3.23441606 Cask	calcium/calmodulin-dependent serine protein kinase (MAGUK family)
3.166522			-3.2058878 Bex1	brain expressed gene 1
3.1559392 AA416453	expressed sequence AA416453		-3.20161315	
3.1473578 Bypy	B-box and SPRY domain containing		-3.1869173	
3.1466355			-3.1869173	
3.1462773			-3.18267799 Macro2	MACRO domain containing 2
3.13882926 Ston1	stonin 1		-3.1818695	
3.1308917			-3.181448 Cd209a	CD209e antigen
3.1155758			-3.179425	
3.0966414			-3.177982 Tancl	tetratricopeptide repeat, ankyrin repeat and coiled-coil containing 1
3.0941654			-3.175235	
3.0914278 C030013G RIKEN cDNA C030013G03 gene			-3.1695652 Fbxw10	F-box and WD-40 domain protein 10
3.0740281			-3.1690907 Klkb5	kallikrein 1-related peptidase b5
3.0736879 Pydc4	pyrin domain containing 4		-3.160014 Car2	carbonic anhydrase 2
3.0577021 Fam132b	family with sequence similarity 132, member B		-3.15331394	
3.0520746 Gm5429	predicted gene 5429		-3.1525355 Zmynd15	zinc finger, MYND-type containing 15
3.050465			-3.1474957 Sept4	septin 4
3.029706			-3.1470363 Sept4	septin 4
3.0219613			-3.1465688 4930557 RIKEN cDNA 4930557J02 gene	
3.0217786			-3.1386829	
3.0109611			-3.12533813 Hspa1a	heat shock protein 1A
2.9917349 AS30065N hypothetical protein AS30065N20			-3.121133 Lrrn3	LON peptidase N-terminal domain and ring finger 3
2.9842464 Flk4	FMS-like tyrosine kinase 4		-3.1186633 Ch11	cell adhesion molecule with homology to L1CAM
2.9809278 Olfr130	olfactory receptor 130		-3.1148753 Wds1ub1	WD repeat, SAM and U-box domain containing 1
2.9678555 Torg-V2	T-cell receptor gamma, variable 2		-3.1134391	
2.9644084 Fanc	Fanci anemia, complementation group C		-3.1073347 Ubd	ubiquitin D
2.9570508 Al480461	expressed sequence Al480461		-3.1015996	
2.9538587			-3.08497524 Gdpd3	glycerophosphodiester phosphodiesterase domain containing 3
2.9473132 Pdhb1b	protocadherin beta 16		-3.082875 Nfam1	Nfat activating molecule with ITAM motif 1
2.9416015 2310001H RIKEN cDNA 2310001H17 gene			-3.0780244 Ch25h	cholesterol 25-hydroxylase
2.9295396 Lets2	large tumor suppressor 2		-3.0778608	
2.9291397 Lrt1	fibronectin leucine rich transmembrane protein 1		-3.0713434 Ext1	extosose (multiple) 1
2.9272094			-3.068018 Cask	calcium/calmodulin-dependent serine protein kinase (MAGUK family)
2.919023 1700040G RIKEN cDNA 1700040G22 gene			-3.0498237 Kif9	Kruppel-like factor 9
2.9186463 Xcl1	chemokine (C motif) ligand 1		-3.04753159 Matn2	matrilin 2
2.9167914			-3.0465203 Crrnp1	collapsin response mediator protein 1
2.909735			-3.0328317 Fry	furry homolog (Drosophila)
2.9054164 Slc28a4	solute carrier family 29 (nucleoside transporters), member 4		-3.0311122	
2.900403			-3.03098715 Ccdc164	coiled-coil domain containing 164
2.8996666 Gm7269	predicted gene 7269		-3.030127	
2.8976927 Pla2g2d	phospholipase A2, group IID		-3.0203963 Tbata	thymus, brain and testes associated
2.8961353			-3.01149763 Pcll	phospholipase C-like 1
2.8951265 Ppp1lc	protein phosphatase 1, regulatory (inhibitor) subunit 1C		-2.9965076 6330509M05 RIKEN cDNA 6330509M05 gene	
2.88506124			-2.9946318 Trhr	thyrotropin releasing hormone receptor
2.8789484 Msh5	mutS homolog 5 (E. coli)		-2.9922325 Prn18	proline rich region 18
2.8783862 C430049B RIKEN cDNA C430049B03 gene			-2.99209452	
2.8624052			-2.9873515	
2.8616653			-2.985571 Nav2	neuron navigator 2
2.8574331 Lrp11	low density lipoprotein receptor-related protein 11		-2.9852519	
2.8538334 Nrg4	neuregulin 4		-2.9738349 Sec24d	Sec24 related gene family, member D (S. cerevisiae)
2.8466124 Car9	carbonic anhydrase 9		-2.9708724	
2.8461867			-2.9660398 Mocos	molybdenum cofactor sulfurase
2.8397127 4921517O RIKEN cDNA 4921517O11 gene			-2.959248615	
2.8384266 Ly6e	lymphocyte antigen 86		-2.9572825 Flcn	folliculin
2.8361517			-2.9555949 Fut10	fucosyltransferase 10
2.822273 B3galT5	UDP-GalbetaGlcNAc beta 1,3-galactosyltransferase, polypeptide 5		-2.9515384 Tox3	TOX high mobility group box family member 3
2.8214288			-2.9502544 Fam134b	family with sequence similarity 134, member B
2.8174506			-2.9496433 Jun	Jun oncogene
2.8144312			-2.9390905 Sym	synemin, intermediate filament protein
2.8113594 Epcam	epithelial cell adhesion molecule		-2.9275289 Klkb24	kallikrein 1-related peptidase b24
2.8106622 Ifi203	interferon activated gene 203		-2.9255409	
2.8003267			-2.9228167 Tceal1	transcription elongation factor A (SII)-like 1
2.7949833 Rbm44	RNA binding motif protein 44		-2.9220534 Rapgef5	Rap guanine nucleotide exchange factor (GEF) 5
2.7947906			-2.9210825	
2.785315 Vps53	vacuolar protein sorting 53 (yeast)		-2.9090147 Clu	clusterin
2.78009586 Esml1	endothelial cell-specific molecule 1		-2.9082165	
2.7788047			-2.9063549 Slc25a41	solute carrier family 25, member 41
2.769107			-2.9062939 9430020K RIKEN cDNA 9430020K01 gene	
2.7667117			-2.90104 Afp	alpha fetoprotein
2.7616514 Grzma	granzyme A		-2.8974628 Pofip2	PTPR interacting protein, binding protein 2 (liprin beta 2)
2.7584538			-2.8951339	
2.7567845 Cd16311	CD163 molecule-like 1		-2.8947897 Mpz1l	myelin protein zero-like 1
2.7545958			-2.8864894 5530400C23 gene	
2.745114 Trim42	tripartite motif-containing 42		-2.8856773 Ankrd2	ankyrin repeat domain 6
2.7377882			-2.8848895 Cdc54	coiled-coil domain containing 54
2.7370456			-2.88339875 Fam174b	family with sequence similarity 174, member B
2.7334156 Gm11568	predicted gene 11568		-2.8827138	
2.7316637 Dlk1	delta-like 1 homolog (Drosophila)		-2.8789277	
2.7257324			-2.8760832 Pdlim5	PDZ and LIM domain 5
2.7151256 Odz1	odd Oz/ten-m homolog 1 (Drosophila)		-2.8707231	
2.7138815 Vmn1r121	vomeronasal 1 receptor 121		-2.8654172	
2.7088232 Gm8359	predicted gene 8359		-2.8646871 Elavl7	ELOVL family member 7, elongation of long chain fatty acids (yeast)
2.7085462 Slc5a9	solute carrier family 5 (sodium/glucose cotransporter), member 9		-2.8633475 Etv1	ets variant gene 1
2.7079559			-2.8621593 Olfr566	olfactory receptor 566
2.7002618 Elfn2	leucine rich repeat and fibronectin type III, extracellular 2		-2.8618007 Rgl3	ral guanine nucleotide dissociation stimulator-like 3
2.68291896 Pgap11	pyroglutamyl-peptidase I-like		-2.8618188 Pex11c	peroxisomal biogenesis factor 11 gamma
2.6639316			-2.8611741 LOC67439 zinc finger protein 665-like	
2.6614978 Gm13152	predicted gene 13152		-2.8561588 Cd9	Cd9 antigen
2.6447264			-2.8551274	
2.64158314 Mcolin2	mucolipin 2		-2.8546137	
2.6412298			-2.8495788	
2.63374803 Dtx1	deltex 1 homolog (Drosophila)		-2.8455295 Abhd6	abhydrolase domain containing 6
2.6291089 Tnem67	transmembrane protein 67		-2.8448801 Gprasp2	G protein-coupled receptor associated sorting protein 2
2.6259727			-2.8405633 Gm1253	predicted gene 12253
2.6184111 Nefh	neurofilament, heavy polypeptide		-2.83550455 Scn11a	sodium channel, voltage-gated, type XI alpha
2.6161333			-2.8347697 Inpp4b	inositol polyphosphate-4-phosphatase, type II
2.6095692 Kiss1r	KISS1 receptor		-2.8311681 A1956758	expressed sequence A1956758
2.6026978 Hif3a	hypoxia inducible factor 3, alpha subunit		-2.8299703 4930512B RIKEN cDNA 9430512B01 gene	
2.6021894			-2.8240624 Ptge	prostaglandin I receptor (IP)
2.6019662 Acot6	acyl-CoA thioesterase 6		-2.8188854 Zfp185	zinc finger protein 185
2.5991938 Eh3d	EH-domain containing 3		-2.8182096 Fzd10	frizzled homolog 10 (Drosophila)
2.5977554 Spats1	spermatogenesis associated, serine-rich 1		-2.8169599	
2.5970659			-2.8167266	
2.5968781			-2.8096686	
2.5957638			-2.8071156 Oas2	2'-5' oligoadenylate synthetase 2
2.587605				
2.5828712 Slc26a7	solute carrier family 26, member 7			
2.572547				

2.572388 Ceacam16	carcinoembryonic antigen-related cell adhesion molecule 16	-2.807039 BC023202 cDNA sequence BC023202
2.565726 Wdr93	WD repeat domain 53	-2.806105 Acbd7 acyl-Coenzyme A binding domain containing 7
2.56409458 Acot5	acyl-CoA thioesterase 5	-2.7947735 Fhd2l FH2 domain containing 1
2.5591369		-2.7934593 Ttl3 tubulin tyrosine ligase-like family, member 3
2.558219		-2.7906499 Lgals2 lectin, galactose-binding, soluble 2
2.5578408		-2.7898393 Gm3002 alpha-takusen pseudogene
2.5565792		-2.789618 Mct2l mcf2 transforming sequence-like
2.55595		-2.7740547 Ptprd protein tyrosine phosphatase domain containing 1
2.55491015 Slc29a2	solute carrier family 29 (nucleoside transporters), member 2	-2.7734408 Ptprr protein tyrosine phosphatase, receptor type, J
2.5492623		-2.7731543 Tancl tetrastricopeptide repeat, ankyrin repeat and coiled-coil containing 1
2.5453272 Mpp4	membrane protein, palmitoylated 4 (MAGUK p55 subfamily member 4)	-2.768702
2.5308354		-2.7676422 Pde11a phosphodiesterase 11A
2.52626633 Ly6d	lymphocyte antigen 6 complex, locus D	-2.765245
2.525467		-2.7633154 Crif1 cytokine receptor-like factor 1
2.5234936		-2.7615304
2.51862217 Acot5	acyl-CoA thioesterase 5	-2.7598381
2.5183884 Runda3a	RUN domain containing 3A	-2.7576984 Arid3b AT rich interactive domain 3B (BRIGHT-like)
2.5172619		-2.7546978 Olfr380 olfactory receptor 380
2.5153223 Podhl15	protocadherin 15	-2.7511442
2.5108416 Sod3	superoxide dismutase 3, extracellular	-2.7452845 Spin2 spindlin family, member 2
2.5107085 Ccl8	chemokine (C-C motif) ligand 8	-2.7437602
2.5091398 Zfp937	zinc finger protein 937	-2.74017425 Gpc1 glycan I
2.5019679		-2.738781 Cdki1 cyclin-dependent kinase-like 1 (CDC2-related kinase)
2.5018344 Gvin1	GTPase, very large interferon inducible 1	-2.7355499
2.5007564 Odf3	outer dense fiber of sperm tails 3	-2.7354939
2.499527 Rab2	retinoic acid receptor, beta	-2.729847 Mitt microphthalmia-associated transcription factor
2.4984813 4930509E RIKEN cDNA 4930509E16 gene		-2.7288123 Slc36a4 solute carrier family 36 (proton/amino acid symporter), member 4
2.4962526		-2.726251
2.4960227 Paccin3	protein kinase C and casein kinase substrate in neurons 3	-2.7245688
2.4943343		-2.718437 Tdrd7 tudor domain containing 7
2.4919781 Polr3	polymerase (RNA) III (DNA directed) polypeptide E	-2.71389864 Arf5c ADP-ribosylation factor-like 5C
2.4901051 Nrlp1b	NLR family, pyrin domain containing 1B	-2.7128864 Fan46a family with sequence similarity 46, member A
2.4899044 Tie1	transducin-like enhancer of 1, homolog of Drosophila E(spl)	-2.7020436
2.4782715 0610037L RIKEN cDNA 0610037L1 gene		-2.7009029 Pls3 plastin 3 (T-isomeric)
2.4748671		-2.699193 4930452B RIKEN cDNA 4930452B06 gene
2.4732082		-2.691835 Ldhb lactate dehydrogenase B
2.471098 Slc100a1	S100 calcium binding protein A1	-2.6774001 Gng12 guanine nucleotide binding protein (G protein), gamma 12
2.4697757 Adam12	a disintegrin and metalloprotease domain 12 (meltrin alpha)	-2.6750174 Creb3l2 cAMP responsive element binding protein 3-like 2
2.4656728 Clip4	CAP-GLY domain containing linker protein family, member 4	-2.6729905
2.4645491 Ly1l	lymphoblastomic leukemia 1	-2.6729138
2.4628592 Caps1	calyphostinic-like	-2.6619489
2.4608476		-2.6484275
2.4507907 1700001L RIKEN cDNA 1700001L05 gene		-2.6483445 Cxadr coxsackie virus and adenovirus receptor
2.448228		-2.6483206 Ppfib2 PTPRF interacting protein, binding protein 2 (liprin beta 2)
2.44277 Soat2	sterol O-acyltransferase 2	-2.642189
2.4406787		-2.6380178 Napb N-ethylmaleimide sensitive fusion protein attachment protein beta
2.4391042 Pdgfrl	platelet-derived growth factor receptor-like	-2.6339923 Cyp2d10 cytochrome P450, family 2, subfamily d, polypeptide 10
2.4388711		-2.6306996 6720462K RIKEN cDNA 6720462K09 gene
2.4383889 Prdm16	PR domain containing 16	-2.6232817
2.4267463 Abhd14a	abhydrolase domain containing 14A	-2.6232396 LOC10050hypothetical protein LOC100503728
2.4266648		-2.622292 Zfhx2 zinc finger homeobox 2
2.4263858 Flrt1	fibronectin leucine rich transmembrane protein 1	-2.6197534
2.4258563		-2.6196754
2.4199718 LOC10004hypothetical LOC100044438		-2.615163
2.41574622 Ncf4	neutrophil cytosolic factor 4	-2.61350205 Zoch12 zinc finger, CCHC domain containing 12
2.4154722		-2.60773 Ccd8ba coiled coil domain containing 88A
2.4136739 Slc13a4	solute carrier family 13 (sodium/sulfate symporters), member 4	-2.60766409 Wdr27 WD repeat domain 27
2.4080034		-2.6054249
2.4078813 Wscd1	WSC domain containing 1	-2.6053425
2.4055905		-2.6030415 2810025M RIKEN cDNA 2810025M15 gene
2.4029207		-2.5987988 D930019F RIKEN cDNA D930019F10 gene
2.40124174 Hif3a	hypoxia inducible factor 3, alpha subunit	-2.5965668
2.4005868 Gm11627	predicted gene 11627	-2.5965546
2.3990079 Zfp160	zinc finger protein 160	-2.5926187 Dock5 mediator of cytokinesis 5
2.3977459		-2.5922251 Farp1 FERM, RhoGEF (Arhgef) and pleckstrin domain protein 1 (chondrocyte-derived)
2.39462 Krtap1-5	keratin associated protein 1-5	-2.5921464 4933411 RIKEN cDNA 4933411E02 gene
2.3909731		-2.5903038 Csf2rb colony stimulating factor 2 receptor, beta, low-affinity (granulocyte-macrophage)
2.3862134 Rbfox3	RNA binding protein, fox-1 homolog (C. elegans) 3	-2.588133
2.3857527		-2.5878302 Me1 malic enzyme 1, NADP(-)-dependent, cytosolic
2.3854144 Mt5	metallothionein-like 5, testis-specific (testmin)	-2.5868184 4930474Q RIKEN cDNA 4930474G06 gene
2.3833542 Osbp1a	oxysterol binding protein-like 1A	-2.5846741 Cacnb1 calcium channel, voltage-dependent, beta 1 subunit
2.3822803 Cd72	CD72 antigen	-2.5829226 Gnc2518 interferon induced transmembrane protein 2 pseudogene
2.3821365		-2.5802096 Cescam2 carcinoembryonic antigen-related cell adhesion molecule 2
2.38145544		-2.5770855 Slc15a2 solute carrier family 15 (H(+)/peptide transporter), member 2
2.3779053 Gm3807	predicted gene 3807	-2.5761313 Me1 malic enzyme 1, NADP(-)-dependent, cytosolic
2.371953		-2.5749282 Map1 microtubule-associated protein tau
2.3682551 Cpsf4l	cleavage and polyadenylation specific factor 4-like	-2.5749173 Cobl1 Cobl-like 1
2.3656988		-2.5748488
2.3627062 Col25a1	collagen, type XXV, alpha 1	-2.5741862 Ich5 inter-alpha (globulin) inhibitor H5
2.3626523 Olfr794	olfactory receptor 794	-2.56991613 Bex1 brain expressed gene 1
2.3610625 Cage1	cancer antigen 1	-2.5694892
2.3515987		-2.5693201
2.350708 Nrg4	neuregulin 4	-2.56773 Tex22 testis expressed gene 22
2.3490314		-2.5628289
2.3461917 Fam71b	family with sequence similarity 71, member B	-2.5626687
2.3443994 Vps24	vacuolar protein sorting 24 (yeast)	-2.5575318 Zbtb38 zinc finger and BTB domain containing 38
2.3383069		-2.5572576
2.3358494		-2.5531082
2.3328816 Nudcd1	NudC domain containing 1	-2.5527558
2.2990723		-2.5520327
2.28899527 Cxcr6	chemokine (C-X-C motif) receptor 6	-2.5479494
2.25162459		-2.5476742 Gm2012 predicted gene 2012
2.23803338 Wdr25	WD repeat domain 25	-2.5464277 Spt1 secretory leukocyte peptidase inhibitor
2.23560427 Pdlim4	PDZ and LIM domain 4	-2.5424954 Chst10 carbohydrate sulfotransferase 10
2.225851 2210010C RIKEN cDNA 2210010C17 gene		-2.5398853 Gm3366 predicted gene 3366
2.21954156 Ron3	reticulocalbin 3, EF-hand calcium binding domain	-2.537007
2.21660373 Rnf135	ring finger protein 135	-2.5348299 Gm3718 predicted gene 3718
2.2110184		-2.52717111 Sh3rf1 SH3 domain containing ring finger 1
2.20672328 Slc5e9	solute carrier family 5 (sodium/glucose cotransporter), member 9	-2.5270458
2.19962545 Litaf	LPS-induced TN factor	-2.5267349 Gm10860 predicted gene 10860
2.19174814 Armc3	armadillo repeat containing 3	-2.5264644 Mical3 microtubule associated monooxygenase, calponin and LIM domain containing 3
2.1902022		-2.5259828 Zch12b zinc finger CCCH-type containing 12B
2.1853209		-2.5241884
2.1840472 Osbp1a	oxysterol binding protein-like 1A	-2.5228634
2.17881491 Capb1	calcium binding protein 1	-2.5210052 Gm10847 predicted gene 10847
2.17672064 Cybrv	calcium-binding tyrosine-(Y)-phosphorylation regulated (fibrousheat)	-2.5202374 Skint5 selection and upkeep of intraepithelial T cells 5
2.17495775 Fam40b	family with sequence similarity 40, member B	-2.5180044 H2-T10 histocompatibility 2, T region locus 10
2.163245244 Cxcr6	chemokine (C-X-C motif) receptor 6	-2.5107644 Dck2 doublecortin-like kinase 2
2.16036365 1500035N RIKEN cDNA 1500035N22 gene		-2.509287
2.1602101 Gm3986	predicted gene 3986	-2.50814633 Spai12 signal-induced proliferation-associated 1 like 2
2.1318321 Rgs13	regulator of G-protein signaling 16	-2.5078053 Gm1081 glycosyltransferase 1 domain containing 1
2.1227503 Odz1	odd Oz/ten-m homolog 1 (Drosophila)	-2.5024333 09300230 RIKEN cDNA 09300230D5 gene
2.11330084 AW112010expressed sequence AW112010		-2.5018788
2.10018348 Eid2	EP300 interacting inhibitor of differentiation 2	-2.5012049
2.100080503		-2.4999106
2.09531596 Jdp2	Jun dimerization protein 2	-2.4992456 Gimap4 GTPase, IMAP family member 4
2.09469024		-2.4928574 LOC10050hypothetical protein LOC100504348
2.0740833 Cenpv	centromere protein V	-2.4926929 Magel1 melanoma antigen, family D, 1
2.07032823 Greb1	gene regulated by estrogen in breast cancer protein	-2.4900278 At10 atlastin GTPase 1
2.06484846		-2.488678 Ptx4 pentraxin 4
2.047014 Ppp3cc	protein phosphatase 3, catalytic subunit, gamma isoform	-2.48780725 Cbr2 carbonyl reductase 2
2.0409479 Uaca	uveal autotin with coiled-coil domains and ankyrin repeats	-2.4868233 Gcrs5b G protein-coupled receptor, family C, group 5, member B
2.0387131 Prr7	proline rich 7 (synaptic)	-2.4852093 Olfr339 olfactory receptor 339
2.0326938		-2.483351
2.03174826 Il7r	interleukin 7 receptor	

2.0237293	Myc	myelocytomatosis oncogene	-2.4826804
2.01880116	Ev2a	ecotropic viral integration site 2a	-2.481251 Sept10
2.002515794			-2.479755
1.9972194	4930515G(RIKEN cDNA 4930515G01)	gene	-2.4791915
1.99358558			-2.4790817
1.98208194	Slnf8	schlafen 8	-2.47711375
1.9756823	Acad12	acyl-Coenzyme A dehydrogenase family, member 12	-2.4764005 LOC64050 UDP-N-acetylhexosamine pyrophosphorylase-like
1.96844816	Gbp3	guanylate binding protein 3	-2.4660715 Tomm7
1.96131844	Pus7	pseudouridylate synthase 7 homolog (S. cerevisiae)	translocase of outer mitochondrial membrane 7 homolog (yeast)
1.96042444	Cope1	cytoplasmic polyadenylation element binding protein 1	-2.46307182 Hoxa7
1.938293	Cd4	chemokine (C-C motif) ligand 4	homeobox A7
1.93305672	Pear	peroxisomal trans-enoate-CoA reductase	-2.4620376
1.93144413	AA667203	expressed sequence AA667203	-2.4580269 Irf5
1.93049004	Pyhini1	pyrin and HIN domain family, member 1	interferon regulatory factor 5
1.92449205	Lynx1	Ly6/neurotoxin 1	-2.4575742 Fst
1.9042578	Pgrs5	progesterin and adipoQ receptor family member V	folistatin
1.8982606			-2.4472723
1.8883819	Hlcs	holocarboxylase synthetase (biotin-[propriony-Coenzyme A-carbo:	-2.4456381 Lanc1
1.8719034	Tnem121	transmembrane protein 121	laminin, gamma 1
1.86711833			-2.444173
1.8572579	R74862	expressed sequence R74862	-2.4437372
1.85583833			-2.4369261
1.8510952	Myt10	myosin, light chain 10, regulatory	-2.4369209 Tir2
1.8493538	Cyth4	cytohesin 4	toll-like receptor 2
1.8467397	H2-Ob	histocompatibility 2, O region beta locus	-2.435985 Car13
1.8348622	Oas1l	2'-5' oligoadenylate synthetase-like 1	carbonic anhydrase 13
1.83312412	Hmox1	heme oxygenase (decycling) 1	-2.4351483
1.82386974	Cyslt2	cysteinyl leukotriene receptor 2	-2.4300823 Gm10406
1.82372855	Tubb3	tubulin, beta 3	predicted gene 10406
1.82308384	Torg-V1	T-cell receptor gamma, variable 1	-2.4266328 Fan49b
1.8203908	Akr1e13	aldo-keto reductase family 1, member C13	family with sequence similarity 49, member A
1.81578731	LOC1005010050	hypothetical protein LOC100503215	-2.4262872 Fan129b
1.81282996			family with sequence similarity 129, member B
1.7884731	Gbp5	guanylate binding protein 5	-2.4257321 Vmn2r88
1.7723221	Trim29	tripartite motif-containing 29	vomeronasal 2, receptor 88
1.7700643	Erdr1	erythroid differentiation regulator 1	-2.4201294 Faim3
1.7694644			Fas apoptotic inhibitory molecule 3
1.7690802			-2.418884
1.761343	Rpl14	ribosomal protein L14	-2.4186712 Cmtm8
1.7577924	1600012FC(RIKEN cDNA 1600012F09)	gene	CKLF-like MARVEL transmembrane domain containing 8
1.74226903	0610009EC(RIKEN cDNA 0610009E02)	gene	-2.416156 Sh2d5
1.7419547	Tnem121	transmembrane protein 121	SH2 domain containing 5
1.737906	Efh1	EF-hand domain (C-terminal) containing 1	-2.4149534 Tancl
1.7347235	Xlr3b	X-linked lymphocyte-regulated 3B	tetratricopeptide repeat, ankyrin repeat and coiled-coil containing 1
1.723669	Filip1l	filamin A interacting protein 1-like	-2.4148113 Grtp1
1.7191463	Esr1	estrogen receptor 1 (alpha)	GH regulated TBC protein 1
1.7142181	Gm6961	predicted gene 6961	-2.4126797 A930030B
1.71123026			008 gene
1.7088823	BC025920	zinc finger protein pseudogene	-2.408683276 Fut10
1.7064658	90306170(RIKEN cDNA 9030617003)	gene	fucosyltransferase 10
1.700250582	Mhn3	multl homolog 3 (E. coli)	-2.4086737 Gulb
1.69046378	Akr1e1	aldo-keto reductase family 1, member E1	guluronolactone (L-) oxidase
1.6883748	Agrp	agouti related protein	-2.4085769
1.67951964	Gbp8	guanylate binding protein 6	-2.4061765 Ctu2
1.66885175			cytosolic thioredoxinase subunit 2 homolog (S. pombe)
1.66006932	Tnem108	transmembrane protein 108	-2.4036033
1.6559596	Myo5b	myosin VB	-2.4028831 Mast4
1.6447249	Plac8	placenta-specific 8	microtubule associated serine/threonine kinase family member 4
1.644577	Trifsl14	tumor necrosis factor (ligand) superfamily, member 14	-2.400556 Upb1
1.64429956	Unc5a	unc-5 homolog A (C. elegans)	ureidopropionate, beta
1.6389737			-2.3994636 1110067D
1.6328087	RBab4	RAB44, member RAS oncogene family	RIKEN cDNA 1110067D22 gene
1.6222808			-2.3980765
1.6217429	Sh3bp5	SH3-domain binding protein 5 (BTK-associated)	-2.398067
1.61151358	Fam163b	family with sequence similarity 163, member B	-2.3970452 Pls3
1.6073041	Zfp879	zinc finger protein 879	plastin 3 (T-isoform)
1.6050348	Ifi203	interferon activated gene 203	-2.3963823 Konq1t1
1.5980579	Gm3448	predicted gene 3448	KCNQ1 overlapping transcript 1
1.5945482	Pgm2	phosphoglucomutase 2	-2.3954198 Rorb
1.59390974	E330016A	RIKEN cDNA E330016A19 gene	RAR-related orphan receptor beta
1.59191564			-2.395121 Emr1
1.59132196	Polr1b	polymerase (RNA) I polypeptide B	EGF-like module containing, mucin-like, hormone receptor-like sequence 1
1.59050582	Mhn3	multl homolog 3	-2.3923631 Srb2
1.5898899	Fam149b	family with sequence similarity 149, member B	SET binding factor 2
1.58939834	Cd72	CD72 antigen	-2.3893051
1.58105089	26106035D	RIKEN cDNA 2610035D17 gene	-2.3888594
1.5781717	Celar1	cadherin, EGF LAG seven-pass G-type receptor 1 (flamingo homolog	-2.3872808 Cldn19
1.578914476	Tnfrsf25	tumor necrosis factor receptor superfamily, member 25	claudin 19
1.56866976	Hlcs	holocarboxylase synthetase (biotin-[propriony-Coenzyme A-carbo:	-2.3771502
1.56262699	Ii2ra	interleukin 2 receptor, alpha chain	-2.3762299 Mnd4
1.56584597			myeloid cell nuclear differentiation antigen
1.56259017	Cmha	cytidine monophospho-N-acetylneuraminate acid hydroxylase	-2.3754395 Rabgap1l
1.55943492	Nhr	nuclear factor I/X	RAB GTPase activating protein 1-like
1.5524224			-2.3745909
1.5506434	2310047D	RIKEN cDNA 2310047D07 gene	-2.3740453
1.5456878	Kbtbd11	kelch repeat and BTB (POZ) domain containing 11	-2.3738381
1.54558576	Flywh	FLYWH family member 2	-2.3719774 Fam129b
1.53389164	Tnem59	transmembrane protein 59-like	family with sequence similarity 129, member B
1.5337126	Fam158a	family with sequence similarity 158, member A	-2.3716907 LOC54734MHC class I member
1.5324106	Srm	spermidine synthase	-2.3712306
1.5277886	Rab11fip4	RAB11 family interacting protein 4 (class II)	-2.3695228 Sept8
1.52635427	Mccc2	methylcrotonyl-Coenzyme A carboxylase 2 (beta)	septin 8
1.52288387	Jak3	Janus kinase 3	-2.3686366 Chn2
1.52156643	9130230N	RIKEN cDNA 9130230N09 gene	chimerin (chimerin) 2
1.5172892			-2.36778504 Rps4y2
1.5151263	Gm4055	predicted gene 4055	ribosomal protein S4, Y-linked 2
1.51181221	Crispld2	cysteine-rich secretory protein LCCL domain containing 2	-2.3652967 Ptk2
1.50496146			polo-like kinase 2 (Drosophila)
1.5001382			-2.3602699 Bbx
1.49823854			bobby sox homolog (Drosophila)
1.49496362	Cmha	cytidine monophospho-N-acetylneuraminate acid hydroxylase	-2.3584766
1.4882236	Lsr	lipolysis stimulated lipoprotein receptor	-2.3580347 Efnb1
1.48658567	Zfp74	zinc finger protein 74	ephrin B1
1.4860201	Nme4	non-metastatic cells 4, protein expressed in	-2.3575754 P2y14
1.4840534	Myo5b	myosin VB	purinergic receptor P2Y, G-protein coupled, 14
1.4835987			-2.3532345 Slc25a27
1.48106171	Crtap	cartilage associated protein	solute carrier family 22 (sodium-dependent inorganic phosphate cotransporter), member 8
1.4761262	BC003331	cDNA sequence BC003331	-2.3525576 Kifc3
1.47524123	Tctsv2	2-cell-stage, variable group, member 3	kinase family member C3
1.4743297	20101090	RIKEN cDNA 20101090 gene	-2.3523409
1.47309544	Greb1	gene regulated by estrogen in breast cancer protein	-2.3499009 Fan4bc
1.46980574			family with sequence similarity 46, member C
1.4682588	Vws5a	willebrand factor A domain containing 5A	-2.3296874 Hal2
1.46725914	Atad3a	ATPase family, AAA domain containing 3A	histidine ammonia lyase
1.466850296	26105070	RIKEN cDNA 261050701 gene	-2.3295989 Samhd1
1.4649735	Srm	spermidine synthase	SAM domain and HD domain, 1
1.46221734			-2.3277428
1.4598817	Bag2	BCL2-associated athanogene 2	-2.3267112
1.4598817	Abcb9	ATP-binding cassette, sub-family B (MDR/TAP), member 9	-2.3255576 Kifc3
1.45821386			solute carrier family 17 (sodium-dependent inorganic phosphate cotransporter), member 8
1.4515539	Tnfrsf1b	tumor necrosis factor receptor superfamily, member 1b	-2.3237281 Sgk1
1.4487208	Lanc2	LanC bacterial lantibiotic synthetase component C-like	serum/glucocorticoid-reduced kinase 1
1.4442406	Cyfip1	cytoplasmic FMR1 interacting protein 1	-2.3235582 Dusp4
1.4408696	LOC10004	hypothetical protein LOC100040377	dual specificity phosphatase 4
1.44078774	Pol3e	polymerase (RNA) III (DNA directed) polypeptide E	-2.3222867 49215250(RIKEN cDNA 4921525009 gene)
1.4395987			-2.3200356 Nfx
1.4385987			nuclear factor I/X
1.43791419			-2.21945 Rmd5a
1.43719928	Tsc22d1	TSC22 domain family, member 1	required for meiotic nuclear division 5 homolog A (S. cerevisiae)
1.437045105			-2.2155408 Rmd5a
1.43679442			required for meiotic nuclear division 5 homolog A (S. cerevisiae)
1.43647942			-2.1947284
1.435987			-2.26757
1.43594728	Slc17a8	solute carrier family 17 (sodium-dependent inorganic phosphate cotransporter), member 8	-2.259547281
1.43558082	Cdon	cell adhesion molecule-related/down-regulated by oncogenes	-2.2385109
1.43485497			-2.2349009 Fan4bc
1.4343620			family with sequence similarity 46, member C
1.4329589			-2.2326742 Hal2
1.43277428			histidine ammonia lyase
1.43237284			-2.2322867
1.4318141			49215250(RIKEN cDNA 4921525009 gene)
1.4315167			-2.23018141 Tns1
1.43091667			-2.20921145 Btb9
1.430745105			BTB (POZ) domain containing 9
1.42971426	Ctnna1	catenin (cadherin associated protein), alpha 1	-2.2078172 Rreb1
1.42954426	Smoc1	SPARC related modular calcium binding 1	ras responsive element binding protein 1
1.42915167			-2.2051744 Lrrc50
1.4283975			leucine rich repeat containing 50
1.4283975			-2.2033975 BB163080 expressed sequence BB163080
1.4283975			-2.20315167
1.4283975			-2.20318141 Tns1
1.4283975			-2.20216637
1.4283975			-2.201215839
1.4283975			-2.20046496
1.4283975			-2.2057442 Smoc1
1.4283975			SPARC related modular calcium binding 1
1.4283975			-2.2051744 Lrrc50
1.4283975			-2.2033975 BB163080 expressed sequence BB163080
1.4283975			-2.20315167
1.4283975			-1.9823813 Scpe1
1.4283975			serine carboxypeptidase 1
1.4283975			-1.98215297 Cys391
1.4283975			cytochrome P450, family 39, subfamily a, polypeptide 1
1.4283975			-1.962975986 A430054B
1.4283975			hypothetical protein A430054B03
1.4283975			-1.9589719 H2-Eb1
1.4283975			histocompatibility 2, class II antigen E beta
1.4283975			-1.9533618 Gm15800 predicted gene 15800

1.440528 Fggv	FGGY carbohydrate kinase domain containing	-1.94968034 Gm16525 predicted gene, 16525
1.43979886 Zfp239	zinc finger protein 239	-1.9478464 H2-Ab1 histocompatibility 2, class II antigen A, beta 1
1.4386406		-1.9413959 Mag3 membrane associated guanylate kinase, WW and PDZ domain containing 3
1.4389378 Gm1677	predicted gene 11677	-1.9387379
1.4386104 Gm15706	predicted gene 15706	-1.9369686
1.43563834 1110019D RIKEN cDNA 1110019D14 gene		-1.9349824
1.43551733 Eef2k	eukaryotic elongation factor-2 kinase	-1.9333886 Ndr2 N-myc downstream regulated gene 2
1.43488026 Tmem14a	transmembrane protein 14A	-1.9294588
1.4338718 1110054M RIKEN cDNA 1110054M08 gene		-1.92362883 4732423E RIKEN cDNA 4732423E21 gene
1.4299841 Zbpb2	zona pellucida binding protein 2	-1.9224519 E430022K RIKEN cDNA E430022K19 gene
1.4285749 1700071A RIKEN cDNA 1700071A11 gene		-1.921463 H2-Ab1 histocompatibility 2, class II antigen A, beta 1
1.4272718 Fosb	FBJ osteosarcoma oncogene B	-1.9198465 a nonagouti
1.4250283		-1.91156732 Mag3 membrane associated guanylate kinase, WW and PDZ domain containing 3
1.423778 Tjp2	tight junction protein 2	-1.9084796 SnaI snail homolog 1 (<i>Drosophila</i>)
1.4233733 Nolc1	nucleolin and coiled-body phosphoprotein 1	-1.90629532 Cts2a cytosolic T lymphocyte-associated protein 2 alpha
1.4233368 3930401B RIKEN cDNA 3930401B19 gene		-1.9014216 F13a1 coagulation factor XIII, A1 subunit
1.4190902 Serpinb6b	serine (or cysteine) peptidase inhibitor, clade B, member 6b	-1.9005423 Spry1 sprouty homolog 1 (<i>Drosophila</i>)
1.41520118		-1.9000287 Tmem194 transmembrane protein 194B
1.4151549 Ifi203	interferon activated gene 203	-1.8983242 Lmo4 LIM domain only 4
1.413497 AF067061 cDNA sequence AF067061		-1.8897047 Zufsp zinc finger with UFM1-specific peptidase domain
1.4111889		-1.8867926 A1594674 expressed sequence A1594674
1.41143615 Zfp661	zinc finger protein 661	-1.8685689
1.41044423 Fbxo27	F-box protein 27	-1.8670235 A330050B RIKEN cDNA A330050B17 gene
1.409008 Pigr	phosphatidylinositol glycan anchor biosynthesis, class T	-1.86343295
1.40733864 Eef2k	eukaryotic elongation factor-2 kinase	-1.859848 Itm2a integral membrane protein 2A
1.4067155 Gpctch4	G patch domain containing 4	-1.8586447
1.39933999		-1.85736756 A430107R RIKEN cDNA A430107P09 gene
1.3995214 Tir7	toll-like receptor 7	-1.8545017
1.3984157 A130040M RIKEN cDNA A130040M12 gene		-1.8499732
1.39657162 Podn1	podocan-like 1	-1.84894181 Tpk1 thiamine pyrophosphokinase
1.3961078		-1.839096
1.3959174 Gm14484	predicted gene 14484	-1.83560136 E130104P RIKEN cDNA E130104P22 gene
1.39585355 4933412E RIKEN cDNA 4933412E12 gene		-1.8342252
1.39565755 Mtrr1	mitochondrial translational release factor 1	-1.8307952
1.3952341 Camk2n2	calcium/calmodulin-dependent protein kinase II inhibitor 2	-1.8262291 Lrrc38 leucine rich repeat containing 36
1.3949536 Cd6	cyclin-dependent kinase 6	-1.82303472 Rab32 RAB32, member RAS oncogene family
1.3913131 Grnpct	N-acetylglucosamine-1-phototransferase, gamma subunit	-1.81533333 Dpp7 dipeptidylpeptidase 7
1.39052724		-1.81007864
1.3901024 A2d1	AIG2-like domain 1	-1.80309156
1.3897028 Cyb5r1	cytochrome b5 reductase 1	-1.80039446 Camp cathepsin antimicrobial peptide
1.38858415 Glmn	globulin, FKBP associated protein	-1.79649828 Cd74 CD74 antigen (invariant polypeptide of major histocompatibility complex, class II antigen-associated)
1.386764508 Ms4a4c	membrane-spanning 4-domains, subfamily A, member 4C	-1.7933927 C4b complement component 4B (Chido blood group)
1.3865493 Cep110	centrosome protein 110	-1.7922702 Krtr85 keratin 85
1.3862057 Tgtp2	T-cell specific GTPase 2	-1.7921446
1.3854236 Ly6k	lymphocyte antigen 6 complex, locus K	-1.7828893 Ifi271a interferon, alpha-inducible protein 27 like 2A
1.38537393		-1.78257516 Scamp1 secretory carrier membrane protein 1
1.3849049 Cd21	cerebellar degeneration-related protein 2-like	-1.78151515 0610039H RIKEN cDNA 0610039H22 gene
1.3841953 Pad3	peptidyl arginine deiminase, type III	-1.779057 Chd7 chromodomain helicase DNA binding protein 7
1.38278484 Rasal1	RAS protein activator like 1 (GAP1 like)	-1.77685072 Xra1 X-ray radiation resistance associated 1
1.382111 Acot7	acyl-CoA thioesterase 7	-1.7767796 Epas1 endothelial PAS domain protein 1
1.3813653 Gbpc3	glucose 6 phosphatase, catalytic, 3	-1.7762942 4833421G RIKEN cDNA 4833421G17 gene
1.3778287 Solt1	sodium channel and clathrin linker 1	-1.7766097 B230334L RIKEN cDNA B230334L07 gene
1.3745496		-1.7661583 Frnk fructosamine 3 kinase
1.3731833 Vapb	vesicle-associated membrane protein, associated protein B and C	-1.7652779
1.3726072 Atp9a1	ATPase, class II, type 9A	-1.76336288
1.3714041 Rtn2	raftlin family member 2	-1.76321837
1.3683314 6330512M RIKEN cDNA 6330512M04 gene		-1.7622147
1.36737585		-1.7592249 Konip3 Kv channel interacting protein 3, calseinil
1.3584584 Lap3	leucine aminopeptidase 3	-1.75199702 160010M RIKEN cDNA 160010M07 gene
1.3582575		-1.7518759
1.3566026 Gar1	GAR1 ribonucleoprotein homolog (yeast)	-1.7465839
1.3554721 Prdx6	peroxiredoxin 6	-1.7405987
1.35266404 Arhgap18	Rho GTPase activating protein 18	-1.7321566
1.35212235 Uhr1bp1	UHR1 (CBP90) binding protein 1	-1.7318917 Gm308 RuVB-like protein 1 pseudogene
1.35154106 Serpinb9	serine (or cysteine) peptidase inhibitor, clade B, member 9	-1.7276057 D9300300 RIKEN cDNA D9300300 gene
1.3511514		-1.726125
1.35080765 Cir1	corepressor interacting with RBPJ, 1	-1.7236653 Samhd1 SAM domain and HD domain, 1
1.3482361		-1.7225647 Gank4 calcium/calmodulin-dependent protein kinase IV
1.3476706 Rpf2	ribosome production factor 2 homolog (S. cerevisiae)	-1.71959773 Grnb4 guanine nucleotide binding protein (G protein), beta 4
1.3459368 Plekt1	pleckstrin homology domain containing, family O member 1	-1.7172475 LOC55290 hypothetical LOC552902
1.3448925 Nat9	N-acetyltransferase 9 (GCN5-related, putative)	-1.71712617 Exoc6b exocyst complex component 6B
1.34344577 C130036L RIKEN cDNA C130036L24 gene		-1.7059317 Sipa12 signal-induced proliferation-associated 1 like 2
1.3423331		-1.70170356 Arap2 ArGap with RhoGAP domain, ankyrin repeat and PH domain 2
1.3423218		-1.6911301 Lm04 LIM domain only 4
1.3407812 Fbxw8	F-box and WD-40 domain protein 8	-1.6899244 Glic1 glucocorticoid induced transcript 1
1.3403085 Tjp3	tight junction protein 3	-1.6895799 A130028M RIKEN cDNA A130028M07 gene
1.3405552 Kraq1	KLRAQ motif containing 1	-1.6861506
1.3391943 Camkv	CaM kinase-like vesicle-associated	-1.67858938
1.33728413		-1.6712303 Dip2a DIP2 disco-interacting protein 2 homolog A (<i>Drosophila</i>)
1.3347873 Nat10	N-acetyltransferase 10	-1.67061231 Gimap4 GTPase, IMAP family member 4
1.33423474 Kmo	kyurenine 3-monooxygenase (kyurenine 3-hydroxylase)	-1.66816174
1.3339629 Ahcy2	S-adenosylhomocysteine hydrolase-like 2	-1.6658643 LOC101059hypothetical protein LOC101059257
1.33367443 Pgcp	plasma glutamate carboxypeptidase	-1.6656944 Auts2 autism susceptibility candidate 2
1.333476055 Dkcl1	dyskeratosis congenita 1, dyskerin homolog (human)	-1.66550682 Mapre2 microtubule-associated protein, RP/EB family, member 2
1.3304334 Rsrc1	arginine/serine-rich coiled-coil 1	-1.6637936
1.3289366 Gorasp1	golgi reassembly stacking protein 1	-1.6632137 Capn2 calpain 2
1.3273888 BC026762 cDNA sequence BC026762		-1.66201207 Canik4 calcium/calmodulin-dependent protein kinase IV
1.3272525		-1.6595745 Off1077 olfactory receptor 1077, pseudogene 1
1.3258024 AF067061 cDNA sequence AF067061		-1.6574393
1.3256033 Sna9	snail homolog 3 (<i>Drosophila</i>)	-1.65402313 Plbd1 phospholipase B domain containing 1
1.32549338 Fggv	FGGY carbohydrate kinase domain containing	-1.653307002
1.32339908 Bar1	brain-specific angiogenesis inhibitor 2	-1.6500477 Nag2 neuron specific gene family member 2
1.3219691 Tmed1	transmembrane emp24 domain containing 1	-1.64839319 5330421C RIKEN cDNA 5330421C15 gene
1.32076157 Tsr1	TSR1, 20S rRNA accumulation, homolog (yeast)	-1.6475734 Glic1 glucocorticoid induced transcript 1
1.32042408 Rpp38	ribonuclease P/MR 38 subunit (human)	-1.642837537
1.3199453 9130401M RIKEN cDNA 9130401M01 gene		-1.6413889 Tsc22d1 TSC22 domain family, member 1
1.31913852 Agpat1	1-acylglycerol-3-phosphate O-acyltransferase 2 (lysophosphatidic acid acyltransferase)	-1.6381707 Itgav integrin alpha V
1.31907034 Ifi204	interferon activated gene 204	-1.63533776 Arf5c ADP-ribosylation factor-like 5C
1.31879283 Akr1c12	aldo-keto reductase family 1, member C12	-1.6322426 D1Ertd704DNA segment, Chr 1, ERATO Doi 704, expressed
1.3177623 Du52	dihydrodine synthase 2-like (SMME, S. cerevisiae)	-1.6295852 C8s3 CD83 antigen
1.3158577 Mgst2	microsomal glutathione S-transferase 2	-1.62848715
1.3131847 Rgrp11	Rgrp11-like	-1.62654594 2610019F RIKEN cDNA 2610019F03 gene
1.3125033 Cpne2	copine II	-1.6229477 Tusc1 tumor suppressor candidate 1
1.31174372		-1.61900092
1.30670735 BC048403 cDNA sequence BC048403		-1.6135197 Gm10065 predicted gene 10065
1.30592628 Pipox	pepicolic acid oxidase	-1.6042533 2610209C RIKEN cDNA 2610209C05 gene
1.3048682 1300010FC RIKEN cDNA 1300010F03 gene		-1.6024512
1.3033152		-1.60134974 1500009C RIKEN cDNA 1500009C09 gene
1.30252934 1700020L RIKEN cDNA 1700020L24 gene		-1.59427955
1.29981315 Pus1	pseudouridine synthase 1	-1.59322546 Serp2 stress-associated endoplasmic reticulum protein family member 2
1.2976999 Smyrd2	SET and MYND domain containing 2	-1.59200994
1.29273514 Caskin2	CASK-interacting protein 2	-1.59253888 F13a1 coagulation factor XIII, A1 subunit
1.2927113		-1.5922233 Skap1 src family associated phosphoprotein 1
1.2925536 C330013J RIKEN cDNA C330013J21 gene		-1.5915036 Pnpr per-pentamer repeat gene
1.2910104 Rpap2	RNA polymerase II associated protein 2	-1.5887985 Zfp187 zinc finger protein 187
1.2890939 Pmel	premelanosome protein	-1.58734515
1.2875565 Nlkbb	nuclear factor of kappa light polypeptide gene enhancer in B-cells is	-1.58728885
1.2839146		-1.58710981
1.2798763 Manea	mannosidase, endo-alpha	-1.58727821
1.2781276 Meta3	metastasis associated 3	-1.58790014
1.27632235 2410018L RIKEN cDNA 2410018L13 gene		-1.58788521 Arid4b AT rich interactive domain 4B (RBPI-like)
1.2760453 Bpnt1	bisphosphate 3'-nucleotidase 1	-1.58785335
1.27591277 Tbc1d5	TBC1 domain family, member 5	
1.27154211		

1.2699616 Il6ra	interleukin 6 receptor, alpha	-1.57630207 503341D RIKEN cDNA 503341D12 gene
1.26946976		-1.5744848 Smox spermine oxidase
1.2690687		-1.57183556
1.2685651		-1.57122894 Rtn2 reticulin 2 (Z-band associated protein)
1.26835342		-1.5664246
1.26890914 Glmn	glomulin, FKBP associated protein	-1.56550066 Ctd1 Cbp/p300-interacting transactivator with Glu/Asp-rich carboxy-terminal domain 1
1.2651325 Pydc3	pyrin domain containing 3	-1.5648222 Gdf7 growth differentiation factor 7
1.2633243 Diras2	DIRAS family, GTP-binding RAS-like 2	-1.5644373
1.26299193 Beap29	B-cell receptor-associated protein 29	-1.5520153
1.2620011 Krt10	keratin 10	-1.5500498 4930486L RIKEN cDNA 4930486L24 gene
1.2612524 BC052040	cDNA sequence BC052040	-1.54501916 Krt18 keratin 18
1.25920243 Gas2	growth arrest specific 2	-1.5437493 Atpb1 ATPase, Ca++ transporting, plasma membrane 1
1.25917862 6720463M:RIKEN cDNA 6720463M24 gene		-1.5434222 Lptn1 lipoyltransferase 1
1.25910138 Trim30a	tripartite motif-containing 30A	-1.5432209 LOC10050 protein HSM2-like
1.2588377 Traf1	TNF receptor-associated factor 1	-1.5414586 Pcsk1 proprotein convertase subtilisin/kexin type 1
1.25826264 Ppp1rb	protein phosphatase 1, regulatory (inhibitor) subunit 1B	-1.54013995
1.2575655 Gm11696	predicted gene 11696	-1.53949454
1.2565222 Zfp661	zinc finger protein 661	-1.5392084 Rnase13 ribonuclease, RNase A family, 13 (non-active)
1.2558127 Hmgn5	high-mobility group nucleosome binding domain 5	-1.5350823
1.25509357 Ephx4	epoxide hydrolase 4	-1.5350046
1.2549505		-1.5345454
1.25337223		-1.5337129 Ext1 exostoses (multiple) 1
1.25208427		-1.5332451
1.2520056 Ms4a4b	membrane-spanning 4-domains, subfamily A, member 4B	-1.531979 Glcci1 glucocorticoid induced transcript 1
1.2513018 Atad3a	ATPase family, AAA domain containing 3A	-1.53151274 Dck2 doublecortin-like kinase 2
1.2505323 Tet1	tet oncogene 1	-1.52276423
1.2500181 2310047K:RIKEN cDNA 2310047K21 gene		-1.5218422
1.2461853 Irfb	interferon regulatory factor 8	-1.5161092 Gabbr1 gamma-aminobutyric acid (GABA) B receptor, 1
1.24452116 Lzrp1	leucine zipper protein 1	-1.51600457
1.24419355		-1.5153345 Nr4a2 nuclear receptor subfamily 4, group A, member 2
1.24331282 Gnl3	guanine nucleotide binding protein-like 3 (nucleolar)	-1.5142712 Bcl3 B-cell leukemia/lymphoma 3
1.2429795 Cd93	Cd93 antigen	-1.5141015 Ical islet cell autoantigen 1
1.24196 Zcpw1	zinc finger, CW type with PWYW domain 1	-1.51367995 58304100R RIKEN cDNA 58304100 gene
1.2410746		-1.51210312 Camp cathelicidin antimicrobial peptide
1.24006888 Tfrc	transferrin receptor	-1.50959114 Mtpa2p microfibrillar-associated protein 2
1.23973 Msh2	mutS homolog 2 (E. coli)	-1.5088559 Gnb5 guanine nucleotide binding protein (G protein), beta 5
1.2397284 Osmx	3-oxoacyl-ACP synthase, mitochondrial	-1.50855683 Gstk1 glutathione S-transferase kappa 1
1.23702003 Ndufa0	NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, assembly fa	-1.5075473 C090037D RIKEN cDNA C090037D09 gene
1.235551 BC147527	cDNA sequence BC147527	-1.5075102 ENSMUSC predicted gene, ENSMUSG00000068790
1.23497673 Pypn3	pyrin domain containing 3	-1.50736423
1.23243048 Tatdn3	TatD DNase domain containing 3	-1.50548747 Chka choline kinase alpha
1.23229936 Fam11a	family with sequence similarity 111, member A	-1.50428537
1.2316766 Nuns3	NOL1/NOP2/Sun domain family member 3	-1.5039735 LOC55309 hypothetical LOC553096
1.23163747 1810029B:RIKEN cDNA 1810029B16 gene		-1.50255156
1.2310791 Trifaf10	tumor necrosis factor (ligand) superfamily, member 10	-1.5022797 Acvr1 activin A receptor, type 1
1.23044155 Nr2f6	nuclear receptor subfamily 2, group F, member 6	-1.49984835 St3gal2 ST3 beta-galactoside alpha-2,3-sialyltransferase 2
1.23043393 Gm3369	predicted gene 3369	-1.49736355 H1t H1 histone, member X
1.2302466 Semp1	SUMO/sentrin specific peptidase 8	-1.4965453
1.2289424		-1.49259472 4931406E RIKEN cDNA 4931406E20 gene
1.22785425 Cdc225	coiled-coil domain containing 25	-1.4916777 Wnt8b wingless related MMTV integration site 8b
1.2249832 Mdn1	midasin homolog (yeast)	-1.4872359
1.22478346 Camk2a	calcium/calmodulin-dependent protein kinase II alpha	-1.48483867 BB166591 expressed sequence BB166591
1.2246751 Socs3	suppressor of cytokine signaling 3	-1.48258935 Tmem176 transmembrane protein 176A
1.2243085 Tmem79	transmembrane protein 79	-1.4804301 B330042K: RIKEN cDNA B330042K01 gene
1.2192531 Pph1	peptidyl prolyl isomerase H	-1.479402 Rnf103 ring finger protein 103
1.2187233		-1.47836207 5830419E RIKEN cDNA 5830419E2 gene
1.218549 Khi35	kelch-like 35 (Drosophila)	-1.4777236 C230085N RIKEN cDNA C230085N15 gene
1.216567 Smarc1	SWI/SNF related, matrix associated, actin dependent regulator of cl	-1.4767556 Sfrmb2 Scm-like with four mbt domains 2
1.2158316 Mybb1a	MYB binding protein (P160) 1a	-1.4720974
1.215148 Tmem151	transmembrane protein 151B	-1.4702191 Serpina3g serine (or cysteine) peptidase inhibitor, clade A, member 3G
1.21506737 Ticd2	TLC domain containing 2	-1.4696407
1.2142439 A130040M:RIKEN cDNA A130040M12 gene		-1.4693374 Slc6a19 solute carrier family 6 (neurotransmitter transporter), member 19
1.21409841 26100280: RIKEN cDNA 261002801 gene		-1.4676152 Tmem176 transmembrane protein 176B
1.2128188 Spg21	spastic paraparesis 21 homolog (human)	-1.4665063
1.20710801 Abhd14a	abhydrolase domain containing 14A	-1.46619033 A130072N: RIKEN cDNA A130072N09 gene
1.2050796 Cep250	centrosome protein 250	-1.46524672 Scepl serine carboxypeptidase 1
1.2048758 Hist1h2bc	histone cluster 1, H2bc	-1.4629498
1.20471905 Gm7967	predicted gene 7967	-1.4612064 LOC54500 hypothetical protein LOC545005
1.2043386		-1.45962813 Acvr1l activin A receptor, type II-like 1
1.20297904 Adamsl2	ADAMTS-like 2	-1.45917414 Arap2 ArfGAP with RhoGAP domain, ankyrin repeat and PH domain 2
1.2019205 Pyhini1	pyrin and HIN domain family, member 1	-1.4580507
1.2007895 Mnd1	myeloid nuclear differentiation antigen like	-1.45471193 Lgals1 lectin, galactose binding, soluble 1
1.1988385 Gm4944	predicted gene 4944	-1.45261617 Morf4d2 mortality factor 4 like 2
1.1985455 Notch3	Notch gene homolog 3 (Drosophila)	-1.4514819 Cor7 chemokine (C-C motif) receptor 7
1.1977148 Spat6	spermatogenesis associated 6	-1.4484978 Il4rl interleukin 4 receptor, alpha
1.19734526 Grasp	GRP1 (general receptor for phosphoinositides 1)-associated scaffold	-1.44596246
1.19383622 Bcl211	BCL2-like 11 (apoptosis facilitator)	-1.4457236 Psd3 pleckstrin and Sec7 domain containing 3
1.1929835 Sc139a6	solute carrier family 39 (metal ion transporter), member 6	-1.4444404 Map4k3 mitogen-activated protein kinase kinase kinase 3
1.19253495		-1.4382133
1.190371 Ikbip	IKBKB interacting protein	-1.4366284
1.1903672 F2r3	coagulation factor II (thrombin) receptor-like 3	-1.4362726 Slc30a4 solute carrier family 30 (zinc transporter), member 4
1.1900144		-1.4362053 D13Er60 DNA segment, Chr 13, ERATO Doi 608, expressed
1.1894035 Chmp4b	chromatin modifying protein 4B	-1.4347486
1.1894035 9830147E: RIKEN cDNA 9830147E19 gene		-1.4333963 Tra3n-3 T cell receptor alpha variable 3N-3
1.187958695 Gm12942	predicted gene 12942	-1.4311542
1.1871767 Rnp40	ribonuclease P40 subunit (human)	-1.427867
1.18686868 Znhits6	zinc finger, HIT type 6	-1.42738726 Kctd17 potassium channel tetramerisation domain containing 17
1.185421		-1.42407318 Afpap1 actin filament associated protein 1
1.1840134 A130040M: RIKEN cDNA A130040M12 gene		-1.4214187 Lass4 LAG1 homolog, ceramide synthase 4
1.18351696 Lamb3	laminin, beta 3	-1.4187322 933016LL RIKEN cDNA 933016LL09 gene
1.18278898 Paps2	3'-phosphoadenosine 5'-phosphosulfate synthase 2	-1.41750813
1.1794591 Gm7894	predicted gene 7894	-1.41700218
1.1764078 1700102H: RIKEN cDNA 1700102H20 gene		-1.4158782 Tbcld2 TBC1 domain family, member 2
1.1762776		-1.41581156
1.1761723 Card10	caspase recruitment domain family, member 10	-1.4158058
1.1759887 Isoc2b	isochorismatase domain containing 2b	-1.4158613
1.1730037		-1.4150091
1.1709829		-1.41411369 Zbtb39 zinc finger and BTB domain containing 39
1.1708386 Tsrl	TSR1, 20S rRNA accumulation, homolog (yeast)	-1.4130993 Gm5797 predicted gene 5797
1.16980269 Ec1	enoyl-Coenzyme A delta isomerase 1	-1.41276091 I4l1 interleukin 4 induced 1
1.16988153 Zwilch	zwilch, kinetochore associated, homolog (Drosophila)	-1.40732433
1.169511843 Cle2cd2	C-type lectin domain family 2, member d	-1.4071383 Zfp945 zinc finger protein 945
1.169076 Lhp	LLP homolog, long-term synaptic facilitation (Aplysia)	-1.40235995
1.16884754 Prss38	protease, serine, 38	-1.40224885
1.1688175 Mthfrd1	methylenetetrahydrofolate dehydrogenase (NADP+ dependent), met	-1.40188124
1.1687756 LOC10500 envelope glycoprotein-like		-1.4005633 Tiparp TCOO-inducible poly(ADP-ribose) polymerase
1.1686966		-1.3979683 Slc25a37 solute carrier family 25, member 37
1.1680153 Aldh1b1	aldehyde dehydrogenase 1 family, member B1	-1.39549064 Pdm5 PDZ and LIN domain 5
1.1674905 Mettl1	methyltransferase like 1	-1.39344406 Tiparp TCOO-inducible poly(ADP-ribose) polymerase
1.1672554 Gosh	glycine cleavage system protein H (aminomethyl carrier)	-1.3893678 Gm5478 predicted pseudogene 5478
1.166027 Hirip3	HIRA interacting protein 3	-1.38778638 LOC101059 hypothetical protein LOC101059348
1.16405386 Mnachc	methylmalonic aciduria cb1C type, with homocystinuria	-1.3868756 Bex2 brain expressed X-linked 2
1.163973355 Ankrd24	ankyrin repeat domain 24	-1.3864679 Phc1 polyhomeotic-like 1 (Drosophila)
1.1628738 Zfp71-rs1	zinc finger protein 71, related sequence	-1.38642832 Cd7 antigen
1.16225435		-1.3851347 S100a9 S100 calcium binding protein A9 (calgranulin B)
1.1616592 Zfp420	zinc finger protein 420	-1.384604 Dendl1b DENN/MADD domain containing 1B
1.16142273 Gm10762	predicted gene 10762	-1.3843594 Lgals4 lectin, galactose binding, soluble 4
1.1612573 Tox4	TOX high mobility group box family member 4	-1.3836976 B930049P: RIKEN cDNA B930049P21 gene
1.1602406 Mettl13	methyltransferase like 13	-1.38343664
1.15883014 Zfp458	zinc finger protein 458	-1.3826067 Raph1 Ras association (RalGDS/AF-6) and pleckstrin homology domains 1
1.157356308 Xaf1	XAP-associated factor 1	-1.3779515 Tmb10 thymosin, beta 10
1.15695522 N6anmt1	N-6 adenine-specific DNA methyltransferase 1 (putative)	-1.3752384 Plik3r phosphatidylinositol 3 kinase, regulatory subunit, polypeptide 3 (p55)
1.15568738 Snapin	SNAP-associated protein	-1.37036169
1.15520777 Ikbkap	inhibitor of kappa light polypeptide enhancer in B-cells, kinase comp	-1.3702592 281044212 RIKEN cDNA 281044211 gene

1.1551164 Nrp1	neuropilin 1	-1.366216222 S100a8	S100 calcium binding protein A8 (calgranulin A)
1.15331553 Scm4	sex comb on midleg-like 4 (<i>Drosophila</i>)	-1.3659849 Frs1	feric-chelate reductase 1
1.149367814 Tatd3	TatD DNase domain containing 3	-1.3650455 C130068B RIKEN cDNA C130068B02 gene	
1.1492462 Slc3911	solute carrier family 39 (metal ion transporter), member 11	-1.362689	
1.1492435 Serf1	small EDKR-rich factor 1	-1.3624287	
1.1476788 Hvcn1	hydrogen voltage-gated channel 1	-1.3622995	
1.1473817 Tmc04	transmembrane and coiled-coil domains 4	-1.3611128 4931429P RIKEN cDNA 4931429P17 gene	
1.1455135 Zfp239	zinc finger protein 239	-1.360506 Svil	supervillin
1.1440849 Zfp960	zinc finger protein 960	-1.3588418	
1.14245833 Gin1	gypsy retrotransposon integrase 1	-1.35851018	
1.1428833 Syng4	synaptogyrin 4	-1.35851287 H2-T9	histocompatibility 2, T region locus 9
1.14163547 9530077C RIKEN cDNA 9530077C05 gene		-1.35655257 Otud1	OTU domain containing 1
1.140858 8430406I0 RIKEN cDNA 8430406I0 gene		-1.35202694	
1.13923217 Ttc16	tetratricopeptide repeat domain 16	-1.35096264	
1.1373996 Zmat1	zinc finger, matrin type 1	-1.35062983 Adams14 a disintegrin-like and metalloproteinase (reprolyns type) with thrombospondin type 1 motif, 14	
1.13736196 Klrq1	KLRAQ motif containing 1	-1.3491006	
1.13695817 E130012A RIKEN cDNA E130012A19 gene		-1.34753364 Cdkn1c cyclin-dependent kinase inhibitor 1C (P57)	
1.1364436 BC021614 cDNA sequence BC021614		-1.3471918 Rasgrp1	RAS guanyl releasing protein 1
1.1359124 5830468FC RIKEN cDNA 5830468F06 gene		-1.345984	
1.1347322 Ancy2	S'-adenosylhomocysteine hydrolase-like 2	-1.3451981	
1.1336315 Ttc7	tetratricopeptide repeat domain 7	-1.3412108	
1.132910263 Taspl	taspace, threonine spartase 1	-1.3410787	
1.1328554 Tlc2	TLC domain containing 2	-1.34072255	
1.1312838 Itga4	integrin alpha 4	-1.3403516	
1.13079073 A130010J RIKEN cDNA A130010J15 gene		-1.33854817 Tmem132 transmembrane protein 132A	
1.1307168		-1.33624128	
1.1303902 Pop1	processing of precursor 1, ribonuclease P/MRP family, (<i>S. cerevisiae</i>)	-1.33466674	
1.1301518 Smad3	MAD homolog 3 (<i>Drosophila</i>)	-1.33342839 Slc6a13	solute carrier family 6 (neurotransmitter transporter, GABA), member 13
1.1288052 Fus	fusion, derived from t(12;16) malignant liposarcoma (human)	-1.33331253	
1.1286545 Wdr4	WD repeat domain 4	-1.33138896 Ikfz2	IKAROS family zinc finger 2
1.12814288 Blk	BCL2-interacting killer	-1.33251382	
1.1273793 Pcx	pyruvate carboxylase	-1.3322925 2610019F RIKEN cDNA 2610019F03 gene	
1.1267799 Rab37	RAB37, member of RAS oncogene family	-1.3295498	
1.1245051 5730445SO RIKEN cDNA 5730445O013 gene		-1.3289231 Gm10325 predicted gene 10325	
1.12435244 Trim37	tripartite motif-containing 37	-1.3287048	
1.1226764 Cabyr	calcium-binding tyrosine-(Y)-phosphorylation regulated (fibrousheat	-1.3283706	
1.1208743 Ralld1	ribosomal L1 domain containing 1	-1.3286834 Vopp1	vesicular, overexpressed in cancer, prosurvival protein 1
1.12034464 Asap1	ArfGAP with SH2 domain, ankyrin repeat and PH domain 1	-1.32426403	
1.11804584 Nlgn2	neuroligin 2	-1.32274958 C13002612 RIKEN cDNA C13002612 gene	
1.1178102 Gsch	glycine cleavage system protein H (aminomethyl carrier)	-1.3216704 2300003K RIKEN cDNA 2300003K06 gene	
1.1160002 4831426I1 RIKEN cDNA 4831426I1 gene		-1.3214045	
1.1156334		-1.32133434	
1.1137019 Xrc55	X-ray repair complementing defective repair in Chinese hamster cell	-1.3198497 Gsn	gelsolin
1.11328743 1300010F RIKEN cDNA 1300010F03 gene		-1.319262 Raspgr4	RAS guanyl releasing protein 4
1.1101466 Dds27	DEAD (Asp-Glu-Ala-Asp) box polypeptide 27	-1.3190365 Herc3	hect domain and RLD 3
1.1092814 B2m	beta-2 microglobulin	-1.3187651 4921511C RIKEN cDNA 4921511C10 gene	
1.1076598 2010204K RIKEN cDNA 2010204K13 gene		-1.3187461	
1.10662696 Lair1	leukocyte-associated Ig-like receptor 1	-1.3175085 Tmsb10	thymosin, beta 10
1.1061096		-1.3171147 Mapre3	microtubule-associated protein, RP/EB family, member 3
1.1055251 Ppid	peptidylprolyl isomerase D (cyclophilin D)	-1.316957 Dnahdc1	dna, axonemal, heavy chain 8
1.10504205 Homer1	homer homolog 1 (<i>Drosophila</i>)	-1.31532 LOC66563 hypothetical protein LOC66563	
1.1046338		-1.31452178	
1.10449382 Rbm34	RNA binding motif protein 34	-1.3114448 Gm11564	predicted gene 11564
1.10256104		-1.3114147 Xpr1	xenotropic and polytropic retrovirus receptor 1
1.1023131 Tie1	transducin-like enhancer of split 1, homolog of <i>Drosophila</i> E(spl)	-1.3111062 Suv420h1	suppressor of variegation 4-20 homolog (yeast)
1.10229373 N4bp211	NEDD4 binding protein 2-like 1	-1.310009	
1.10196017 2010300C RIKEN cDNA 2010300C02 gene		-1.3099733 9500290 RIKEN cDNA 950029012 gene	
1.10115908		-1.3081832 Dusp14	death specificity phosphatase 14
1.1011506 Gar	glucosidase, alpha, acid	-1.3074103 Fas	Fas (TNF receptor superfamily member 6)
1.09979728 Gart	phosphoribosylglycinamide formyltransferase	-1.30723 251009E RIKEN cDNA 251009E07 gene	
1.0993142 Zfp40	zinc finger protein 40	-1.30670932 Ical1	islet cell autoantigen 1-like
1.0983543 Acsf3	acyl-CoA synthetase family member 3	-1.304792 170048M RIKEN cDNA 170048M11 gene	
1.09888654 Pcp23b	protein phosphatase 2 (formerly 2A), regulatory subunit A (PR 65), t	-1.3047109 Mec28	mediator of RNA polymerase II transcription, subunit 2B homolog (yeast)
1.0985071 Gm992	predicted gene 992	-1.3026257 C80012	expressed sequence C80012
1.09619715 Khn5	kelch-like 5 (<i>Drosophila</i>)	-1.3002619	
1.09586855 Exosc1	exosome component 1	-1.29890642	
1.0955935 Itkbp	IKBKB interacting protein	-1.29745672	
1.0952196 Ctage5	CTAGE family, member 5	-1.29674865	
1.0934976 Scs55	suppressor of cytokine signaling 5	-1.2947669	
1.09338423 Ms4a4b	membrane-spanning 4-domains, subfamily A, member 4B	-1.2927676 Plxdc2	plexin domain containing 2
1.0929327 Wnt5b	wingless-related MMTV integration site 5B	-1.2902604 Mfhas1	malignant fibrous histiocytoma amplified sequence 1
1.09269859 Slc25a20	solute carrier family 25 (mitochondrial carnitine/acylcarnitine trans-	-1.28991985 Rundc3b	RUN domain containing 3B
1.09241678 Gpatch1	G patch domain containing 1	-1.2897033	
1.09239104 9530077C RIKEN cDNA 9530077C05 gene		-1.2885485	
1.0923461 Scm22	secernin 2	-1.288512688	
1.0918007 Ng23	Ng23 protein	-1.2881847	
1.09073352		-1.28805545	
1.0902739 Elavl6	ELAVL family member 6, elongation of long chain fatty acids (yeast)	-1.2857714	
1.0895567 110051M RIKEN cDNA 110051M20 gene		-1.28553867	
1.08945126 Trmt1a	TRMT1 methyltransferase 61 homolog A (<i>S. cerevisiae</i>)	-1.28413056	
1.0887071 Nipnap1	4-nitrophosphorylphosphate domain and non-neuronal SNAP25-like p	-1.28377435 Ctmn5	CKLF-like MARVEL transmembrane domain containing 5
1.08831215 Rnf165	ring finger protein 165	-1.28114844	
1.0878343 Lrc32	leucine rich repeat containing 32	-1.2811308	
1.08766 Tubbb2b	tubulin, beta 2B	-1.27786592 C130051F RIKEN cDNA C130051F05 gene	
1.0871248 Outdbb	OTU domain containing 6B	-1.27735468 Tmem6	transmembrane protein 88
1.08671668 Corh	cyclin H	-1.27680087 9430024F RIKEN cDNA 9430024F10 gene	
1.0861091 Lgals9	lectin, galactose binding, soluble 9	-1.27659537	
1.08584547 Mlec	malectin	-1.2753839 Tbd16	TBC1 domain family, member 16
1.0858126		-1.27423236 Adam15	a disintegrin and metalloproteinase domain 15 (metargdin)
1.08560944 Actn1	actinin, alpha 1	-1.2741647 Mycn	v-myc myelocytomatosis viral related oncogene, neuroblastoma derived (avian)
1.0849393 Decr1	2,4-dienoyl CoA reductase 1, mitochondrial	-1.273271	
1.08428293 Shmt2	serine hydroxymethyltransferase 2 (mitochondrial)	-1.27303414 Dab2ip	disabled homolog 2 (<i>Drosophila</i>) interacting protein
1.0835619 Cgrf1	cell growth regulator with ring finger domain 1	-1.2718544	
1.08327052 Gln2	GLIS family zinc finger 2	-1.2715263	
1.08268933 Nop58	NOP58 ribonucleoprotein homolog (yeast)	-1.2712736 Ddx25	DEAD (Asp-Glu-Ala-Asp) box polypeptide 25
1.0822024 Lpar4	lysophosphatidic acid receptor 4	-1.27071376 Hapl3	hyaluronan and proteoglycan link protein 3
1.08208227 Prikca	protein kinase C, alpha	-1.2704544 Carf	calcium response factor
1.08198308 Dus41	dihydrouridine synthase 4-like (<i>S. cerevisiae</i>)	-1.2691383 Vps37d	vacuolar protein sorting 37D (yeast)
1.08151577 Fgr	Gardner-Rasheed feline sarcoma viral (Fgr) oncogene homolog	-1.2683162 Atnl1	attractin like 1
1.08017396 Shoc2	soc-2 (suppressor of clear) homolog (<i>C. elegans</i>)	-1.2681119 Inadl	Inad-like (<i>Drosophila</i>)
1.0797544 Gm15760	mitochondrial ribosomal protein S18B pseudogene	-1.26755443 Nrdg1	N-myc downstream regulated gene 1
1.07928417		-1.2675162	
1.0787707 Akn1	AT-hook transcription factor	-1.2672749 A130071D RIKEN cDNA A130071D04 gene	
1.07876138		-1.2664933	
1.0783254 Cod32	coiled-coil domain containing 32	-1.2663164	
1.075665		-1.26565579 R230334C RIKEN cDNA B230334C09 gene	
1.0745831 11900070 RIKEN cDNA 11900070 gene		-1.2649741 Tbx22	T-box 22
1.0739524 Pmgc1	proteasome (prosome, macropain) assembly chaperone 1	-1.2648473 Olf1500	olfactory receptor 1500
1.0725174 Gnpd2	glucosamine-6-phosphate deaminase 2	-1.2638454 Slc4a7	solute carrier family 4, sodium bicarbonate cotransporter, member 7
1.0723872 Abcb6	ATP-binding cassette, sub-family B (MDR/TAP), member 8	-1.26336749 Konq1ot1	KCNQ1 overlapping transcript 1
1.0721578 Haus1	HAUS augmin-like complex, subunit 3	-1.26263162 Atnl1	attractin like 1
1.0721747 LOCI00501hypothetical LOCI00504219		-1.26268972	
1.070508 Smc	sperrmine synthase	-1.26260716 Id1	inhibitor of DNA binding 1
1.06935738 Trim30d	tripartite motif-containing 30D	-1.26200885	
1.0690738 Gm5801	ubiquitin-conjugating enzyme E2, J2 homolog pseudogene	-1.2591663 Zfp366	zinc finger protein 366
1.06892303 Pyh1n1	pyrin and HIN domain, member 1	-1.2562833 4932439E RIKEN cDNA 4932439E07 gene	
1.0687199		-1.25581959	
1.0685474 BC023969 cDNA sequence BC023969		-1.25567245	
1.0682168 Zfp111	zinc finger protein 111	-1.25530578	
1.066802		-1.2518429 Tet2	ret oncogene family member 2
1.0658216 Rars2	arginyl-tRNA synthetase 2, mitochondrial	-1.25167466 Rfx3	regulatory factor X, 3 (influences HLA class II expression)
1.06572196 Nr1h3	nuclear receptor subfamily 1, group H, member 3	-1.251585 E030042N RIKEN cDNA E030042N06 gene	
1.06303886 Ide	insulin degrading enzyme	-1.2508523	
1.06261164 Taf15	TAF15 RNA polymerase II, TATA box binding protein (TBP)-associa	-1.2487986	

1.06233167	4931406C	RIKEN cDNA 4931406C07 gene	-1.247098
1.0618067	Egln3	EGL nine homolog (C. elegans)	-1.247097
1.06178856	Pdc6ip	programmed cell death 6 interacting protein	-1.24677117 Zfp187
1.06175042	BC017612	cDNA sequence BC017612	-1.24626686 Dopey2
1.06129027			-1.24472852 Tac2
1.0602784	EG668643	predicted gene, EG668643	-1.24278045
1.0588064			-1.2404022 Pou5f2
1.0583782			-1.23808287
1.05842892	Jak3	Janus kinase 3	-1.2378917
1.0553831	Dph5	DPH5 homolog (S. cerevisiae)	-1.23770665 Map3k14
1.0551939	Guf1	GUF1 GTPase homolog (S. cerevisiae)	-1.2363901
1.055096			-1.2357788
1.0546787	Ncl	nucleolin	-1.2356377 LOC100505352
1.05394696	Codc30	coiled-coil domain containing 30	-1.235344 Crygc
1.0538606	Rab37	RAB37, member of RAS oncogene family	-1.2344751 Mdr1
1.053194	1810062O	RIKEN cDNA 1810062O218 gene	-1.2336999 Wdr2
1.0527792	Herc5	hect domain and RLD 6	-1.2330918 Cdc7
1.05259127	Ggtc	gamma-glutamyl cyclotransferase	-1.2318918 D6Ertcd1 DNA segment, Chr 6, ERATO Doi 131, expressed
1.0522331	Gnl10751	predicted gene 10751	-1.23149347
1.05162714	Irk1	interleukin-1 receptor-associated kinase 1	-1.2312714 Sec16a
1.0515275	Ttc32	tetratricopeptide repeat domain 32	-1.2303005
1.05114413	Cog7	component of oligomeric golgi complex 7	-1.2277972 Fam84
1.050636	6330577E	RIKEN cDNA 6330577E15 gene	-1.2273989 Leprel2
1.0499101	Rbp1	ribosome binding protein 1	-1.2232632 Nrt
1.04926493	Pon3	paroxonase 3	-1.221801287 Stom
1.04898978	H60a	histocompatibility 60a	-1.2212368
1.0488473	Ddx21	DEAD (Asp-Glu-Ala-Asp) box polypeptide 21	-1.2199564 A4300610 RIKEN cDNA A430061012 gene
1.0481806	Emp1	epithelial membrane protein 1	-1.2184925
1.04719733	Mettl22	methyltransferase like 22	-1.21745876 Lrrc8a
1.0462517			-1.21637012
1.045688	Cutc	cutC copper transporter homolog (E.coli)	-1.21578851 Cd209d
1.04389047	1110002N	RIKEN cDNA 1110002N22 gene	-1.2152543 Fbx30
1.04339977	Ppih	peptidyl prolyl isomerase H	-1.21231173
1.0425768	Nup02	nucleoporin like 2	-1.21094324 Tuft1
1.041853	Hnmnp	heterogeneous nuclear ribonucleoprotein U	-1.21068
1.0414308			-1.2102499 Rrf1
1.0407319	Gin1	gypsy retrotransposon integrase 1	-1.2095828 Ntrk3
1.04016785	Ttc35	tetratricopeptide repeat domain 35	-1.2094746 Gpx2
1.0396256			-1.2084818 Fan102b
1.0384912	Tpr	translocated promoter region	-1.20595785 A93003A RIKEN cDNA A93003A15 gene
1.0383634	Gm12592	predicted gene 12592	-1.2058201 Ephx1
1.0376782			-1.20421695 Prkcq
1.03545853	Agrn	agrin	-1.2037885
1.03531077	Efcab2	EF-hand calcium binding domain 2	-1.2024517 Arp32a
1.03497266	6330418K	RIKEN cDNA 6330418K02 gene	-1.2020707
1.0348682	2010300C	RIKEN cDNA 2010300C02 gene	-1.2014676
1.0342737			-1.20117423 1110035E RIKEN cDNA 1110035E04 gene
1.033305	Cenpk	centromere protein K	-1.198441
1.03324461	Alg6	asparagine-linked glycosylation 6 homolog (yeast, alpha-1,3-glucosidase)	-1.1983221 Sybu
1.0324416	Fgbp3	fibroblast growth factor binding protein 3	-1.1982904 Mpge1
1.0323724	G6pc3	glucose 6 phosphatase, catalytic, 3	-1.1968565
1.032324			-1.19601868 Myst4
1.0316762			-1.1957774 Mapk8
1.03160763			-1.1947223 Fnbp11
1.03138065	Mtrfr	5,10-methylenetetrahydrofolate reductase	-1.1932411
1.0312314	Cdk5rap2	CDK5 regulatory subunit associated protein 2	-1.191502
1.0306816	Gnptab	N-acetylglucosamine-1-phosphotransferase, gamma subunit	-1.1907553
1.02763845	Fam35a	family with sequence similarity 35, member A	-1.18974878 Dos
1.02709004	Card9	capsase recruitment domain family, member 9	-1.18880413
1.026801	Npm1	nucleophosmin 1	-1.1882799 Shank1
1.0266619	Dhx34	DEAH (Asp-Glu-Ala-His) box polypeptide 34	-1.187114
1.0263929	Gm6211	predicted gene 6211	-1.1869814 D830025C RIKEN cDNA D830025C005 gene
1.0263693	Nudc	nuclear distribution gene C homolog (Aspergillus)	-1.1860583
1.0263588	Bre	brain and reproductive organ-expressed protein	-1.1858167
1.0253294			-1.1859915 9930024M RIKEN cDNA 9930024M15 gene
1.0250597	Fgfr1	Fgfr1 oncogene partner	-1.1850993 9030419F RIKEN cDNA 9030419F21 gene
1.0240274	Timm9	translocase of inner mitochondrial membrane 9 homolog (yeast)	-1.184949406
1.02379802	Iop1	IQ motif containing C	-1.18420599 Sik2
1.0233735	Muted	muted	-1.1841841 StgalnacT6 (alpha-N-acetylgalactosaminyl-2,3-beta-galactosyl-1,3)-N-acetylgalactosaminide alpha-2,6-sialyltransferase 6
1.023202			-1.1831612 Phc2
1.0225687	Mmrl	mitochondrial rRNA methyltransferase 1 homolog (S. cerevisiae)	-1.1825766 Cebpd
1.02231694	Gm12590	predicted gene 12590	-1.18206722 2700023E RIKEN cDNA 2700023E23 gene
1.02199125	Trmt6	tRNA methyltransferase 6 homolog (S. cerevisiae)	-1.1819093 Snx9
1.0215721	Zpbp2	zona pellucida binding protein 2	-1.1817937 Tardbp
1.02143	Katn1	katn1 p60 subunit A-like 1	-1.1795053
1.02138003	Robt2b	regulator of chromosome condensation (RCC1) and BTB (POZ) domain 2	-1.1776237 D2Ertd640DNA segment, Chr 2, ERATO Doi 640, expressed
1.0213385	Ppid	peptidyl/prolyl isomerase D (cyclophilin D)	-1.1771159
1.0210647	Eif2a2	eukaryotic translation initiation factor 2, subunit 2 (beta)	-1.1766791
1.021054248	Retsat	retinol saturase (all trans retinol 13,14 reductase)	-1.175294 Gsn
1.02006722	2700023E	RIKEN cDNA 2700023E23 gene	-1.17528437 Rbms1
1.0194131	Xyb1	xylose kinase homolog (H. influenzae)	-1.17509576
1.0189132	Tagln2	transgelin 2	-1.17526585
1.01879743			-1.1752722
1.017724			-1.17631786 4632427E RIKEN cDNA 4632427E13 gene
1.0175095	Mzf1	myeloid zinc finger 1	-1.17618688 Slc5a3
1.0172748	Dtd1	D-trosyl-tRNA desacylase 1 homolog (S. cerevisiae)	-1.17617025 Homer1
1.01704744	Gm10638	predicted gene 10638	-1.176040962 Podxl2
1.01704357	Shmt1	serine hydroxymethyltransferase 1 (soluble)	-1.17594329
1.01676417	Ulbp1	UL16 binding protein 1	-1.1759576
1.01649616	Wdr70	WD repeat domain 70	-1.1758681 Unc5d
1.016349373	Zrsr1	zinc finger (CCCH type), RNA binding motif and serine/arginine rich	-1.17276529
1.0162763	Gale	galactose-4-epimerase, UDP	-1.1721222 Gcat
1.015955	Pmt3	protein arginine N-methyltransferase 3	-1.17110625 Homer1
1.0141172			-1.170640962 Podxl2
1.0136995	Hvnc1	hydrogen voltage-gated channel 1	-1.170649256
1.0127311			-1.17059576
1.0125933	Stkn1	sideroflexin 1	-1.17052658
1.01234197			-1.17052722
1.01233287	1810014B	RIKEN cDNA 1810014B01 gene	-1.17052722
1.0120263			-1.17052722
1.0119162	Gor1	golgi SNAP receptor complex member 1	-1.17052722
1.0115509	Hsp4	heat shock protein 4	-1.17052722
1.0114675	Rss1	RRS1 ribosome biogenesis regulator homolog (S. cerevisiae)	-1.17052722
1.0107793	Mif1ip	myeloid leukemia factor 1 interacting protein	-1.17052722
1.00981095	A3mt	arsenic (+3 oxidation state) methyltransferase	-1.17052722
1.0087146			-1.17052722
1.0088841	Mettl15	methyltransferase like 15	-1.17052722
1.006233876	Zfp59	zinc finger protein 59	-1.17052722
1.0059923	Krbd11	kelch repeat and BTB (POZ) domain containing 11	-1.17052722
1.0058004	Atp1ga1	ATPase, Na+/K+ transporting, alpha 1 polypeptide	-1.17052722
1.004181	Def8	differentially expressed in FDCP 8	-1.17052722
1.004135608	Ampd1	adenosine monophosphate deaminase 1	-1.17052722
1.002897764	Otf1	oral-facial-digital syndrome 1 gene homolog (human)	-1.17052722
1.0024357			-1.17052722
1.0015621	Prol1	partner of NOB1 homolog (S. cerevisiae)	-1.17052722
1.0011884	Rab15	RAB, member of RAS oncogene family-like 5	-1.17052722
1.0008346	Hrrnpd	heterogeneous nuclear ribonucleoprotein D	-1.17052722
1.0006607	P2ry10	purinergic receptor P2Y, G-protein coupled 10	-1.17052722
1.0005928			-1.17052722
1.0003018	Senp8	SUMO/sentrin specific peptidase 8	-1.17052722

-1.1492104
 -1.1492968
 -1.14798929
 -1.14714337 Spo11 sporulation protein, meiosis-specific, SPO11 homolog (S. cerevisiae)
 -1.1469841 Olf1347 olfactory receptor 1347
 -1.14687491
 -1.14482167
 -1.142667267 If30 interferon gamma inducible protein 30
 -1.14254185
 -1.1419926 Erc1 ELKS/RAB6-interacting/CAST family member 1
 -1.1419816
 -1.1405473
 -1.1401272
 -1.1389709
 -1.1388193 Setd3 SET domain containing 3
 -1.1382933
 -1.1378331
 -1.13775065 Dennd1b DENN/MADD domain containing 1B
 -1.137576 Prx2 proline-rich Gla (G-carboxyglutamic acid) polypeptide 2
 -1.136846055 Ptdc1 protein tyrosine phosphatase domain containing 1
 -1.13674976
 -1.13528965 Gm2590 predicted gene 2590
 -1.13470416 A93007A RIKEN cDNA A93007A09 gene
 -1.13470416 Vmn2r111 vomeronasal 2, receptor 111
 -1.13455107 BC005561 cDNA sequence BC005561
 -1.134470985
 -1.1336084 Tmem176B transmembrane protein 176B
 -1.133308306 4632427E RIKEN cDNA 4632427E13 gene
 -1.13300846
 -1.1329389 Hrh2 histamine receptor H3
 -1.1323957 Cdc42ep4 CDC42 effector protein (Rho GTPase binding) 4
 -1.1315587 AU035318 EST AU035318
 -1.13152357 AU015680 expressed sequence AU015680
 -1.12894127 LOC10059 zinc finger protein 717-like
 -1.1285857 Tctn2 tectonic family member 2
 -1.12790867 Gm10648 predicted gene 10648
 -1.12768895 Capp1 centrosome and spindle pole associated protein 1
 -1.1274853 Hist1h2aa histone cluster 1, H2aa
 -1.12743614 4930432F RIKEN cDNA 4930432F04 gene
 -1.12677859
 -1.1266474 C130021H RIKEN cDNA C130021H21 gene
 -1.1264143 Peat15a phosphoprotein enriched in astrocytes 15A
 -1.1262688 Angpt1 angiopoietin 1
 -1.125427736
 -1.125197 2010015L RIKEN cDNA 2010015L04 gene
 -1.124361077
 -1.1232566
 -1.12268925 Prkarla protein kinase, cAMP dependent regulatory, type I, alpha
 -1.12267164 Gadd45b growth arrest and DNA-damage-inducible 45 beta
 -1.1213679
 -1.1209416 A230051N RIKEN cDNA A230051N06 gene
 -1.12079621
 -1.120502 Crip3 cysteine-rich protein 3
 -1.1185599
 -1.117635 Rtp2 receptor transporter protein 2
 -1.1170201
 -1.116868
 -1.1167059
 -1.1166501
 -1.1164551 Neurl neuralized homolog 1A (Drosophila)
 -1.115959628
 -1.1157829 Plekha5 pleckstrin homology domain containing, family A member 5
 -1.1132375 A630057N RIKEN cDNA A630057N01 gene
 -1.1135282 Selene1 selenium binding protein 1
 -1.11351063 Gm10785 predicted gene 10785
 -1.11162566 Inad1 InaD-like (Drosophila)
 -1.1115623 2810040C RIKEN cDNA 2810040C05 gene
 -1.11152365 Gub1 GULP, engulfment adaptor PTB domain containing 1
 -1.11124415
 -1.1108861 Trim3 tripartite motif-containing 3
 -1.1108466 Sh3rf1 SH3 domain containing ring finger 1
 -1.11080262
 -1.1078606 D13Er378DNA segment, Chr 13, ERATO Doi 787, expressed
 -1.10719538 Tgb3 transforming growth factor, beta receptor III
 -1.10716868 C430003N RIKEN cDNA C430003N24 gene
 -1.106585035
 -1.1064196 Slc35d1 solute carrier family 35 (UDP-glucuronic acid/UDP-N-acetylgalactosamine dual transporter), member D1
 -1.1060028 Slc31a2 solute carrier family 31, member 2
 -1.10560794 Tcp11 t-complex protein 11
 -1.1053662 Ear2 eosinophil-associated, ribonuclease A family, member 2
 -1.105319 Akt2 thymoma viral proto-oncogene 2
 -1.1049113 Homer1 Homer homolog 1 (Drosophila)
 -1.1037865 Ankrd50 ankyrin repeat domain 50
 -1.10363675
 -1.1031188
 -1.1028342
 -1.1007709
 -1.1003628 Pmaip1 phorbol-12-myristate-13-acetate-induced protein 1
 -1.0994124
 -1.09928033
 -1.09875666 Cdc14b CDC14 cell division cycle 14 homolog B (S. cerevisiae)
 -1.0972269
 -1.096879451
 -1.0957923 5830420C RIKEN cDNA 5830420C07 gene
 -1.0955233 Tns3 tensin 3
 -1.0954828 Bgap1rs1 bone gamma-carboxyglutamate protein, related sequence 1
 -1.0944276
 -1.0942314 2810455B RIKEN cDNA 2810455B08 gene
 -1.09372616
 -1.0936747
 -1.093007081
 -1.09277913 Mt1 metallothionein 1
 -1.092258 Acta2 actin, alpha 2, smooth muscle, aorta
 -1.0915775
 -1.0913711
 -1.0905981 Fam82b family with sequence similarity 82, member B
 -1.09023 Agf2 ArfGAP with FG repeats 2
 -1.0891929
 -1.089169 Zswim6 zinc finger, SWIM domain containing 6
 -1.08842659
 -1.08735607 Rpsa ribosomal protein SA
 -1.0872803
 -1.08688688
 -1.0867481 Trio triple functional domain (PTPRF interacting)
 -1.0854149
 -1.0852809 Zfp61 zinc finger protein 61
 -1.08532166
 -1.0829573 Ap1s2 adaptor-related protein complex 1, sigma 2 subunit
 -1.08258487
 -1.08255197
 -1.0820364
 -1.0819525 Snx11 sorting nexin 11
 -1.0818453 Xylt2 xylosyltransferase II
 -1.081843415 Tuft1 tuftelin 1
 -1.0806137

-1.08024786 9030601B(RIKEN cDNA 9030601B04 gene
 -1.0802431
 -1.07969471
 -1.07966086
 -1.0791788 Trpm1 transient receptor potential cation channel, subfamily M, member 1
 -1.0788164 Gabarapl1 gamma-aminobutyric acid (GABA) A receptor-associated protein-like 1
 -1.077537
 -1.07748746 Zswim3 zinc finger, SWIM domain containing 6
 -1.0771589 B390025B RIKEN cDNA B390025B16 gene
 -1.07713844 Gm15417 predicted gene 15417
 -1.07668114 Ccr4 chemokine (C-C motif) receptor 4
 -1.0765468
 -1.0760141 Mbds5 methyl-CpG binding domain protein 5
 -1.07591155
 -1.07559489
 -1.07549098 5730508B(RIKEN cDNA 5730508B09 gene
 -1.0754614
 -1.07424975 X76971 cDNA sequence X76971
 -1.07385732
 -1.0734701
 -1.0734377 Dleu7 deleted in lymphocytic leukemia, 7
 -1.072721 LOC100503330 hypothetical LOC100503330
 -1.072604
 -1.071925611
 -1.07181931 Crksr3 Cnksr family member 3
 -1.0704355
 -1.069387
 -1.06908366
 -1.06889413
 -1.0679231
 -1.0678906
 -1.0677624 B230214O RIKEN cDNA B230214O09 gene
 -1.0674248
 -1.06703332 2410066E(RIKEN cDNA 2410066E13 gene
 -1.06662176
 -1.0653362
 -1.0652224
 -1.0648946 Gm14151 predicted gene 14151
 -1.0645452 Pam peptidylglycine alpha-amidating monoxygenase
 -1.0626612
 -1.0617478
 -1.06067176 2210020M(RIKEN cDNA 2210020M01 gene
 -1.0601378
 -1.0592904
 -1.0579965
 -1.05689023 Ralgap2 Ral GTPase activating protein, alpha subunit 2 (catalytic)
 -1.05615235 A430106A RIKEN cDNA A430106A12 gene
 -1.0551572 Map4k5 mitogen-activated protein kinase kinase kinase 5
 -1.0550213
 -1.05387926 3300002A(RIKEN cDNA 3300002A11 gene
 -1.05301058 Mx1 homeobox, msh-like 1
 -1.052928924
 -1.05255643
 -1.0528527
 -1.05142355 Zfend5 zinc finger, AN1-type domain 5
 -1.0508051 Slc31a2 solute carrier family 31, member 2
 -1.0507917 3110068a(RIKEN cDNA 3110068A07 gene
 -1.0506906 3110098e(RIKEN cDNA 3110098E03 gene
 -1.0496383 D2hgdh D-2-hydroxyglutamate dehydrogenase
 -1.04883769 4731420N(hypothetical protein 4731420N21
 -1.0483894 Csnk1g3 casein kinase 1, gamma 3
 -1.0478353
 -1.0468831
 -1.0465946
 -1.04590322
 -1.04565334 L1td1 LINE-1 type transposase domain containing 1
 -1.04496241
 -1.044072615 Gm2347 predicted gene 2347
 -1.0433507
 -1.0426989 Fam40 family with sequence similarity 40, member A
 -1.0424595 Mfsd6 major facilitator superfamily domain containing 6
 -1.04236792 Gas5 growth arrest specific 5
 -1.0419574
 -1.04180433 Pogz pogo transposable element with ZNF domain
 -1.04161024 Ctsk cathepsin H
 -1.0408315 Elzf2ak4 eukaryotic translation initiation factor 2 alpha kinase 4
 -1.0400911
 -1.04008813 Dbnd1 dybindin (dystrobrevin binding protein 1) domain containing 1
 -1.0400852
 -1.0397539
 -1.0387564 Zfp467 zinc finger protein 467
 -1.03853369
 -1.03894256
 -1.0376959 Adcy9 adenylate cyclase 9
 -1.0373021 Ankrd50 ankyrin repeat domain 50
 -1.037073
 -1.0370064
 -1.03593063
 -1.0351381 Ikkf1 IKAROS family zinc finger 1
 -1.0350018 Clec3b C-type lectin domain family 3, member b
 -1.034102 Hepb hephaestin
 -1.03400997 Srsf2 serine/arginine-rich splicing factor 2
 -1.0336539 B230206F(RIKEN cDNA B230206F22 gene
 -1.0334248 Rreb1 ras responsive element binding protein 1
 -1.0331593
 -1.0323565
 -1.0315886
 -1.0308452
 -1.0308013
 -1.0299912 Gpatch8 G patch domain containing 8
 -1.0293155 Ifitm3 interferon induced transmembrane protein 3
 -1.029156168
 -1.02883002 Adra2b adrenergic receptor, alpha 2b
 -1.02777294 Krtap31-1 keratin associated protein 31-1
 -1.0257569 Nipal1 NIPA-like domain containing 1
 -1.0251955 Cd300t CD300 antigen like family member F
 -1.0239401 Yod1 YOD1 OTU deubiquitinating enzyme 1 homologue (S. cerevisiae)
 -1.0233168
 -1.02276517
 -1.022139 Syne1 synaptic nuclear envelope 1
 -1.0220948 Btg1 B-cell translocation gene 1, anti-proliferative
 -1.02195931 8030494B(Riken cDNA 8030494B02 gene
 -1.0219474
 -1.02090643
 -1.0205731 Zfp111 zinc finger protein 111
 -1.0203352
 -1.02022407
 -1.020204
 -1.0191955 Esr2 estrogen receptor 2 (beta)
 -1.0181639 Inpp5e inositol polyphosphate-5-phosphatase E
 -1.0180073 5430434G RIKEN cDNA 5430434G16 gene
 -1.01645564
 -1.0161176 2810008D(RIKEN cDNA 2810008D09 gene
 -1.0153861 Pot1a protection of telomeres 1A
 -1.0148601

-1.0144629
-1.0144219 Ggn gametogenitin
-1.01423168
-1.0134563 AIB49538 expressed sequence AIB49538
-1.0134444 2610028D(RIKEN cDNA 2610028D06 gene
-1.01267767
-1.012053 Lcor ligand dependent nuclear receptor corepressor
-1.0112468
-1.01011568
-1.0099573
-1.00975656 S100a6 S100 calcium binding protein A6 (calcyclin)
-1.0095153
-1.0093751 Gm13271 predicted gene 13271
-1.0092483 2610301B(RIKEN cDNA 2610301B20 gene
-1.0088057
-1.008421
-1.0083976 Hs6st1 heparan sulfate 6-O-sulfotransferase 1
-1.0073238 Gm10008 predicted gene 10008
-1.00657175
-1.0064826
-1.00624946 5830427D(RIKEN cDNA 5830427D02 gene
-1.0058131 Ndr4 N-myc downstream regulated gene 4
-1.0052395 Errf1 ERBB receptor feedback inhibitor 1
-1.0058872 St6galnac1ST6 (alpha-N-acetyl-neuraminy-2,3-beta-galactosyl-1,3)-N-acetylgalactosaminide alpha-2,6-sialyltransferase 1
-1.0038104 Tbok TBC1 domain containing kinase
-1.0014038
-1.00101707
-1.0008278

Supplementary Table 2. Primer information

qRT-PCR

Gene	Forward	Reverse primer
<i>Brd1</i>	GGCTAAGAAAACACTGGCTGA	CACCTGATTGCGAACATCCTA
<i>Tcrb</i>	TTGATTCTCCTGTGTGCAAAA	CCTTGCTTCTTGGACTTTGG
<i>Cd8a</i>	TTACATCTGGCACCCTTG	TTGCCTTCCTGTCTGACTAGC
<i>Cd8b1</i>	GGCTCTGGCTGGTCTTCA	GACGAAGGGGTCTGAATGAG
<i>Myb</i>	GAACAGATGGGCAGAGATCG	TTCCAGTGGTCTTGATAGCATT
<i>Rag1</i>	AGGCCTGTGGAGCAAGGTA	GAAGTGAAGCTCAGGGTAGACG
<i>SIP₁</i>	CGGTGTAGACCCAGAGTCCT	AGCTTTCCCTGGCTGGAG
<i>SIP₂</i>	CCCAACTCCGGGACATAGA	ACAGCCAGTGGTGGTTTG
<i>SIP₃</i>	AGATGCGCCTTGCAGAAC	AGAGTGGTGGTGGGTTCCCT
<i>SIP₄</i>	CGTGATGAATGTTGGCAGA	CCCTTCAAGGCCAGACT
<i>SIP₅</i>	GGAGTGCCGGTTACAGGAG	GAAGGACAATAACCTCACTCACC
<i>Zbtb7b</i>	AGAAGCCCTTGCCTGTGA	TGTGGATCTTCAGCTGTCAATT

ChIP-qPCR

Gene	Forward	Reverse primer
E8IV	GTACAAAGCCCTGGTTCAA	CTGTGGCCAAAATGACCTT
E8III-1	TGAGGAAGCAAACACAGCAC	TCTGGCAGCAGCAGAACTTA
E8III-2	CCCTCAGATCAGCTCAGGTC	TGGTGGGAGGATGCTCTAAG
E8II	TGCGGTGGCTAGATTGACA	TGCAGCTGCTCTCTGAA
E8I	CTGTGGTATCTGGGCAACT	GCTAGGTGGAAAGAACGTG
E8I-1	CCTCAAACAAAGCCTTTGC	GGCCTGCTGTAACCTCAGAA

E8I-2	AAAAGCAGGCAGAGTCCTCA	TTTTCCAGAGTGGGTATGC
E8V-1	ACACAGTGGAAGGTGGTTGA	TATTATGGCTGGCACTCC
E8V-2	ACAGAGAAACCCTGCCTTGA	ACCCTTGGTCATGGTGT
E8V-3	GTGCCAGGGACAGAGAAGAG	TCTGACTTGGCCTTGACT
Cd8a-P	CCCCTAAAAGGTGGTTGACA	TTTAGCCAGCTGCAGACAGA
Cd8b1-P	TGTCTGAATTAGGGCCAAGC	CTCGGGACAGAACCCCTGATA
Cd4-S	AACCACAAGGGTCGCTTAGA	CTAGCCCAGTTGTGGATGT
p16-P	CACTGCACTGGAAGAGGACA	CTGAAGGTCTGGTTCAA

Genomic PCR

Gene	Forward	Reverse primer
<i>Brd1</i> <i>flox</i>	GCTTGGTCTAAAGAGGTGTC	GGATGACAGAACGCTTCAGA
<i>Brd1</i> Δ	GCTTGGTCTAAAGAGGTGTC	ACCTTACTGAGGATGGTAGTTCAC
<i>Tie2-Cre</i>	AAACAAGAGCGAGTGGACCATGCG	TTTGACGTTACCGGCATCAACG