

Table S1.

GENE_TITLE	GENE_SYMBOL	Fold change
granzyme G	Gzmg	0.022349572
spermatogenesis associated glutamate (E)-rich protein 1, pseudogene 1	Speer1-ps1	0.041886292
scinderin	Scin	0.05434244
granzyme C	Gzmc	0.0693013
EGL nine homolog 3 (C. elegans)	Egln3	0.086142376
granzyme F	Gzmf	0.08771586
elastin microfibril interfacier 2	Emilin2	0.08810677
lamin A	Lmna	0.0907633
ankyrin repeat domain 37	Ankrd37	0.09281252
sema domain, transmembrane domain (TM), and cytoplasmic domain, (semaphorin) 6D	Sema6d	0.09399207
aldolase 3, C isoform	Aldoc	0.11312253
CD244 natural killer cell receptor 2B4	Cd244	0.12169029
mast cell protease 8	Mcpt8	0.12230821
granzyme E	Gzme	0.12910424
granzyme E	Gzme	0.14023377
adenylate kinase 3 alpha-like 1	Ak3l1	0.14184158
G protein-coupled receptor 87	Gpr87	0.15319341
ankyrin repeat and SOCS box-containing protein 2	Asb2	0.15530644
protein tyrosine phosphatase-like (proline instead of catalytic arginine), member a	Ptpla	0.1553395
granzyme D	Gzmd	0.15596193
CD244 natural killer cell receptor 2B4	Cd244	0.15616353
granzyme D	Gzmd	0.16912577
acid phosphatase, prostate	Acpp	0.17935582
contactin 1	Cntn1	0.18297926
Transcribed locus	NA	0.18417175
beta-1,4-N-acetyl-galactosaminyl transferase 2	B4galnt2	0.18624666
acid phosphatase, prostate	Acpp	0.19046073
lectin, galactose binding, soluble 3	Lgals3	0.19627343
BCL2/adenovirus E1B interacting protein 1, NIP3	Bnip3	0.19629048
leukotriene B4 receptor 1	Ltb4r1	0.20736097
Fc receptor, IgE, high affinity I, gamma polypeptide	Fcer1g	0.20890664
epithelial membrane protein 1	Emp1	0.21824299
phosphoinositide-3-kinase adaptor protein 1	Pik3ap1	0.2218947
beta-1,4-N-acetyl-galactosaminyl transferase 2	B4galnt2	0.23149341
immunoglobulin superfamily, member 5	Igsf5	0.2348817
ring finger protein 128	Rnf128	0.24516211
aryl hydrocarbon receptor nuclear translocator 2	Arnt2	0.24674654
procollagen-proline, 2-oxoglutarate 4-dioxygenase (proline 4-hydroxylase), alpha 1 polypeptide	P4ha1	0.24757516
solute carrier family 2 (facilitated glucose transporter), member 3	Slc2a3	0.25698838
solute carrier family 2 (facilitated glucose transporter), member 3	Slc2a3	0.26122215
phosphofructokinase, liver, B-type	Pfkl	0.26192176
complement factor properdin	Cfp	0.26209807
nuclear factor, interleukin 3, regulated	Nfil3	0.26725787
contactin 1	Cntn1	0.26879665
integrin alpha 1	Itga1	0.27301857
hepatitis A virus cellular receptor 2	Havcr2	0.2730282
cytokine-dependent hematopoietic cell linker	Clnk	0.27311115
armadillo repeat containing, X-linked 2	Armxc2	0.27511358
phosphotriesterase related	Pter	0.29217827
cysteine-rich secretory protein 1	Crisp1	0.2933864
mcf.2 transforming sequence-like	Mcf2l	0.2963318
glycine amidinotransferase (L-arginine:glycine amidinotransferase)	Gatm	0.2967492
perforin 1 (pore forming protein)	Prf1	0.29793257
tubulin, beta 6	Tubb6	0.29971108
death-associated kinase 2	Dapk2	0.300007
triosephosphate isomerase 1	Tpi1	0.3056139
GI/PC PDZ domain containing family, member 2	Gipc2	0.31883276
activin A receptor, type II-like 1	Acvr1l	0.32581246
saccharopine dehydrogenase (putative)	Sccpdh	0.32673156
triosephosphate isomerase 1	Tpi1	0.3284604
triosephosphate isomerase 1	Tpi1	0.33024433
DIX domain containing 1	Dixdc1	0.33155903
calcium/calmodulin-dependent protein kinase II inhibitor 1	Camk2n1	0.3469729
protein tyrosine phosphatase-like (proline instead of catalytic arginine), member a	Ptpla	0.3485868
deafness, autosomal dominant 5 homolog (human)	Dfna5h	0.35120916
histocompatibility 2, Q region locus 10	H2-Q10	0.3602173
CD93 antigen	Cd93	0.362545
pyruvate dehydrogenase kinase, isoenzyme 1	Pdk1	0.36361802
pyruvate dehydrogenase kinase, isoenzyme 1	Pdk1	0.36432874
killer cell lectin-like receptor subfamily B member 1C	Klrb1c	0.36435556
phospholipase C, gamma 2	Plcg2	0.36485064
synaptotagmin-like 3	Syt13	0.36502412
procollagen lysine, 2-oxoglutarate 5-dioxygenase 2	Plod2	0.3663477
procollagen lysine, 2-oxoglutarate 5-dioxygenase 2	Plod2	0.36761722
interleukin 24	Il24	0.36797148
beta galactoside alpha 2,6 sialyltransferase 1	St6gal1	0.3725033
myosin X	Myo10	0.38151824
acid phosphatase, prostate	Acpp	0.38270864
CD93 antigen	Cd93	0.38360754
Nephronectin	Npnt	0.38473997
cathepsin G	CtsG	0.38673955
regulator of G-protein signaling 16	Rgs16	0.3876166
prion protein	Prnp	0.39173287
interleukin 10	Il10	0.39743418
S100 calcium binding protein A4	S100a4	0.3975539
CD55 antigen	Cd55	0.39938667
heparanase	Hpse	0.40051362
glyoxylate reductase/hydroxypyruvate reductase	Grhpr	0.4057585

SH2 domain containing 5	Sh2d5	0.4059925
adenylate kinase 3 alpha-like 1	Ak311	0.4076276
glial cells missing homolog 2 (Drosophila)	Gcm2	0.40993732
pyruvate dehydrogenase kinase, isoenzyme 1	Pdk1	0.41071275
protein phosphatase 1, regulatory (inhibitor) subunit 3B	Ppp1r3b	0.41075274
low density lipoprotein-related protein 12	Lrp12	0.41210243
myosin X	Myo10	0.4128563
beta-1,4-N-acetyl-galactosaminyl transferase 4	B4galnt4	0.4131853
solute carrier family 24 (sodium/potassium/calcium exchanger), member 3	Slc24a3	0.41798025
linker for activation of T cells family, member 2	Lat2	0.42219752
procollagen-proline, 2-oxoglutarate 4-dioxygenase (proline 4-hydroxylase), alpha 1 polypeptide	P4ha1	0.42446274
DNA segment, Chr 10, Brigham & Women's Genetics 1379 expressed	D10Bwg1379e	0.4252878
carbonic anhydrase 2	Car2	0.4266965
toll-interleukin 1 receptor (TIR) domain-containing adaptor protein	Tirap	0.42792618
branched chain aminotransferase 1, cytosolic	Bcat1	0.43021077
PRELI domain containing 2	Prelid2	0.4303567
solute carrier family 7 (cationic amino acid transporter, y+ system), member 3	Slc7a3	0.43109727
ERO1-like (S. cerevisiae)	Ero1l	0.4321244
tumor necrosis factor receptor superfamily, member 9	Tnfrsf9	0.4342641
DnaJ (Hsp40) homolog, subfamily B, member 4	Dnajb4	0.43750677
fumarylacetoacetate hydrolase	Fah	0.43804836
adavillin	Avil	0.43826777
adaptor protein, phosphotyrosine interaction, PH domain and leucine zipper containing 2	Appl2	0.44061616
solute carrier organic anion transporter family, member 4a1	Slco4a1	0.44169524
kelch domain containing 2	Klhdc2	0.44242325
ERO1-like (S. cerevisiae)	Ero1l	0.4425674
ras homolog gene family, member Q	Rhoq	0.4439665
v-myc myelocytomatosis viral related oncogene, neuroblastoma derived (avian)	Mycn	0.4444792
phosphodiesterase 4D interacting protein (myomegalin)	Pde4dip	0.44490287
serine (or cysteine) peptidase inhibitor, clade E, member 2	Serpine2	0.44527462
histidine rich calcium binding protein	Hrc	0.44564846
interleukin 1 receptor-like 1	Il1rl1	0.4463537
prion protein	Pmp	0.44800767
kit oncogene	Kit	0.44817856
glucan (1,4-alpha-), branching enzyme 1	Gbe1	0.44883177
metallothionein 2	Mt2	0.44930792
stearoyl-Coenzyme A desaturase 1	Scd1	0.4504417
CD55 antigen	Cd55	0.45097786
ERO1-like (S. cerevisiae)	Ero1l	0.45293248
sprouty homolog 2 (Drosophila)	Spry2	0.45487848
tubby like protein 4	Tulp4	0.45635757
cathepsin Z	Ctsz	0.45730498
hexokinase 2	Hk2	0.45770907
metallothionein 1	Mt1	0.45801923
Nuclear receptor subfamily 4, group A, member 2	Nr4a2	0.45958996
glutamic pyruvate transaminase (alanine aminotransferase) 2	Gpt2	0.459815
transcription factor 4	Tcf4	0.46001586
glutamic pyruvate transaminase (alanine aminotransferase) 2	Gpt2	0.4606217
dynein light chain Tctex-type 3	Dynlt3	0.46451333
CD160 antigen	Cd160	0.46867365
dynein light chain Tctex-type 3	Dynlt3	0.4692398
CD160 antigen	Cd160	0.4696155
protein tyrosine phosphatase, receptor type, E	Ptpre	0.46967447
jumonji, AT rich interactive domain 1B (Rbp2 like)	Jarid1b	0.4699272
Max interacting protein 1	Mxi1	0.47005358
ERBB receptor feedback inhibitor 1	Errfi1	0.4712709
nuclear receptor subfamily 4, group A, member 2	Nr4a2	0.47280297
purinergic receptor P2Y, G-protein coupled 12	P2ry12	0.47498223
myosin VI	Myo6	0.47537667
metastasis suppressor 1	Mtss1	0.47706193
ectonucleoside triphosphate diphosphohydrolase 4	Entpd4	0.47858235
ectonucleoside triphosphate diphosphohydrolase 4	Entpd4	0.47949937
G protein-coupled receptor 68	Gpr68	0.4798106
nebulin	Neb	0.48159477
meteorin, glial cell differentiation regulator-like	Metrn1	0.48219597
ribosomal protein L17	Rpl17	0.4832163
nuclear prelamins A recognition factor	Narf	0.4843662
desmocollin 2	Dsc2	0.48448795
kelch domain containing 2	Klhdc2	0.4848613
programmed cell death 1	Pdcd1	0.48546597
dynein light chain Tctex-type 3	Dynlt3	0.4858955
crystallin, zeta (quinone reductase)-like 1	Cryzl1	0.48817927
cathepsin Z	Ctsz	0.49158734
DnaJ (Hsp40) homolog, subfamily B, member 4	Dnajb4	0.49309114
ring finger protein 128	Rnf128	0.4932107
enolase 1, alpha non-neuron	Eno1	0.4936751
vasohibin 1	Vash1	0.4956313
phosphoglycerate mutase 1	Pgam1	0.4958437
metastasis suppressor 1	Mtss1	0.49593103
polycystic kidney disease 2	Pkd2	0.49673474
myosin X	Myo10	0.4976237
enolase 1, alpha non-neuron	Eno1	0.5001413
EGL nine homolog 3 (C. elegans)	Egln3	0.5003151
adenylosuccinate synthetase like 1	Adssl1	0.5016911
galactokinase 1	Galk1	0.50175935
pyrroline-5-carboxylate reductase 1	Pycr1	0.5024794
SH2 domain containing 5	Sh2d5	0.5029855
piwi-like homolog 2 (Drosophila)	Piwil2	0.50410473
tumor necrosis factor receptor superfamily, member 9	Tnfrsf9	0.50458443

solute carrier family 2 (facilitated glucose transporter), member 1	Slc2a1	0.50727916
myristoylated alanine rich protein kinase C substrate	Marcks	0.5074356
aryl hydrocarbon receptor nuclear translocator	Arnt	0.50895375
plakophilin 2	Pkp2	0.5099554
histone cluster 1, H1c	Hist1h1c	0.5113115
secretory carrier membrane protein 1	Scamp1	0.51146215
zinc finger protein 608	Zfp608	0.5132395
endothelial PAS domain protein 1	Epas1	0.51366055
branched chain aminotransferase 1, cytosolic	Bcat1	0.5139056
abhydrolase domain containing 14A	Abhd14a	0.51417804
solute carrier family 25, member 33	Slc25a33	0.5143665
tetraspanin 4	Tspan4	0.5154551
aryl-hydrocarbon receptor repressor	Ahrr	0.5158349
DNA-damage-inducible transcript 4	Ddit4	0.5172011
regulator of G-protein signaling 16	Rgs16	0.5212191
catenin (cadherin associated protein), delta 2	Ctnnd2	0.521302
ARP3 actin-related protein 3 homolog B (yeast)	Actr3b	0.52169836
histone cluster 1, H1c	Hist1h1c	0.52186245
X-linked lymphocyte-regulated 3A	Xlr3a	0.5239651
enolase 1, alpha non-neuron	Eno1	0.52470213
armadillo repeat containing, X-linked 4	Armxc4	0.527587
nuclear receptor subfamily 4, group A, member 3	Nr4a3	0.5281822
SWA-70 protein	Swap70	0.5284148
histocompatibility 2, class II antigen A, beta 1	H2-Ab1	0.5284654
inducible T-cell co-stimulator	Icos	0.52897793
transmembrane protein 37	Tmem37	0.52943724
transmembrane protein 40	Tmem40	0.5298972
proviral integration site 3	Pim3	0.5302893
tumor necrosis factor (ligand) superfamily, member 9	Tnfsf9	0.5325396
proviral integration site 3	Pim3	0.5338104
tribbles homolog 3 (Drosophila)	Trib3	0.5338888
cathepsin Z	Ctsz	0.534321
pyruvate kinase, muscle	Pkm2	0.53495544
interleukin 7 receptor	Il7r	0.5350367
DNA segment, Chr 10, Brigham & Women's Genetics 1379 expressed	D10Bwg1379e	0.53689957
tribbles homolog 3 (Drosophila)	Trib3	0.5384706
solute carrier family 1 (glutamate/neutral amino acid transporter), member 4	Slc1a4	0.5392019
solute carrier family 2 (facilitated glucose transporter), member 1	Slc2a1	0.5392878
carbonic anhydrase 12	Car12	0.53945845
vasohibin 1	Vash1	0.5405774
ribosomal protein S9	Rps9	0.5405814
crystallin, zeta	Cryz	0.54070765
profilin 2	Pfn2	0.541161
activin A receptor, type II-like 1	Acvr11	0.5425597
Jumonji domain containing 3	Jmjd3	0.54416376
AU RNA binding protein/enoyl-coenzyme A hydratase	Auh	0.5460162
transmembrane protein 40	Tmem40	0.5464679
dynein light chain Tctex-type 3	Dynlt3	0.54669815
regulator of G-protein signaling 16	Rgs16	0.54765916
cytochrome c oxidase, subunit VIIa 1	Cox7a1	0.54810387
transcription factor 4	Tcf4	0.54824257
solute carrier family 16 (monocarboxylic acid transporters), member 10	Slc16a10	0.549167
stearoyl-Coenzyme A desaturase 1	Scd1	0.5512933
a disintegrin and metallopeptidase domain 8	Adam8	0.5513253
shroom family member 3	Shroom3	0.5520802
histone cluster 1, H3b	Hist1h3b	0.5523739
centaurin, delta 3	Centd3	0.55352837
serine/threonine kinase 3 (Ste20, yeast homolog)	Stk3	0.5550694
Transcribed locus	NA	0.5555409
1-acylglycerol-3-phosphate O-acyltransferase 4 (lysophosphatidic acid acyltransferase, delta)	Agpat4	0.5556009
macrophage migration inhibitory factor	Mif	0.55595183
monocyte to macrophage differentiation-associated	Mmd	0.5562639
immediate early response 3	Ier3	0.55631393
interferon induced transmembrane protein 1	Ifitm1	0.55668634
polycystic kidney disease 2	Pkd2	0.55670595
myosin IE	Myo1e	0.55698866
tumor protein D52	Tpd52	0.55706286
pyruvate carboxylase	Pcx	0.5583524
beta-1,4-N-acetyl-galactosaminyl transferase 2	B4galnt2	0.5598514
Metastasis associated lung adenocarcinoma transcript 1 (non-coding RNA)	Malat1	0.55991477
solute carrier family 25 (mitochondrial carrier ornithine transporter), member 15	Slc25a15	0.56070495
nephronectin	Npnt	0.56100494
solute carrier family 2 (facilitated glucose transporter), member 1	Slc2a1	0.56182414
1-acylglycerol-3-phosphate O-acyltransferase 4 (lysophosphatidic acid acyltransferase, delta)	Agpat4	0.56182575
guanine nucleotide binding protein, alpha 15	Gna15	0.5622317
carbonic anhydrase 5b, mitochondrial	Car5b	0.562929
inducible T-cell co-stimulator	Icos	0.5634652
myristoylated alanine rich protein kinase C substrate	Marcks	0.56441456
cysteinyl leukotriene receptor 1	Cysltr1	0.56475085
tumor protein D52	Tpd52	0.5661901
exportin, tRNA (nuclear export receptor for tRNAs)	Xpot	0.5664675
tumor necrosis factor receptor superfamily, member 21	Tnfrsf21	0.56660765
FERM domain containing 4A	Frdm4a	0.56840765
Ribosomal protein S17	Rps17	0.5700595
secreted phosphoprotein 1	Spp1	0.5709837
solute carrier organic anion transporter family, member 4a1	Slco4a1	0.5723526
aldolase 1, A isoform	Aldoa	0.57370234
DnaJ (Hsp40) homolog, subfamily C, member 12	Dnajc12	0.57430524
small nucleolar RNA, H/ACA box 65	Snora65	0.5751461

RAB27b, member RAS oncogene family	Rab27b	0.57543087
sperm associated antigen 1	Spag1	0.57665324
thioredoxin-like 4	Txn14	0.5774266
transmembrane protein 30A	Tmem30a	0.57751834
FAST kinase domains 1	Fastkd1	0.5775361
aldolase 1, A isoform	Aldoa	0.5780724
v-ral simian leukemia viral oncogene homolog B (ras related)	Ralb	0.57858443
expressed sequence AI747699	AI747699	0.5787854
sprouty homolog 4 (Drosophila)	Spry4	0.57886994
Metastasis associated lung adenocarcinoma transcript 1 (non-coding RNA)	Malat1	0.5797027
dihydrouridine synthase 4-like (S. cerevisiae)	Dus4l	0.58036196
coiled-coil domain containing 58	Ccdc58	0.58120453
dCMP deaminase	Dctd	0.58166355
crystallin, zeta (quinone reductase)-like 1	Cryz1l	0.58188695
coiled-coil domain containing 90B	Ccdc90b	0.582047
aldolase 1, A isoform	Aldoa	0.58286315
scavenger receptor class B, member 1	Scarb1	0.58444124
growth arrest specific 5	Gas5	0.584723
jumonji domain containing 3	Jmjd3	0.5872649
myristoylated alanine rich protein kinase C substrate	Marcks	0.5875765
purinergic receptor P2Y, G-protein coupled, 5	P2ry5	0.5880999
spermatogenesis associated, serine-rich 2	Spats2	0.58839005
aldolase 1, A isoform	Aldoa	0.588652
eukaryotic translation initiation factor 4E binding protein 1	Eif4ebp1	0.59041613
protein kinase, interferon inducible double stranded RNA dependent activator	Prkra	0.59085554
small nucleolar RNA, C/D box 22	Snord22	0.59092647
phosphoglycerate kinase 1	Pgk1	0.59111165
AU RNA binding protein/enoyl-coenzyme A hydratase	Auh	0.59145254
SWA-70 protein	Swap70	0.59150577
tetratricopeptide repeat, ankyrin repeat and coiled-coil containing 1	Tanc1	0.59265375
growth arrest specific 5	Gas5	0.59296745
SLIT-ROBO Rho GTPase activating protein 3	Srgap3	0.5931792
pre B-cell leukemia transcription factor 3	Pbx3	0.59358877
monocyte to macrophage differentiation-associated	Mmd	0.5937208
solute carrier family 25 (mitochondrial carrier, adenine nucleotide translocator), member 13	Slc25a13	0.59374434
proviral integration site 2	Pim2	0.5940653
sterol-C4-methyl oxidase-like	Sc4mol	0.59449404
aryl-hydrocarbon receptor	Ahr	0.5945315
importin 4	Ipo4	0.5950052
3-hydroxy-3-methylglutaryl-Coenzyme A synthase 1	Hmgcs1	0.59545267
ubiquitin-conjugating enzyme E2Q (putative) 2	Ube2q2	0.5960568
integrin beta 3	Itgb3	0.5962849
ChaC, cation transport regulator-like 1 (E. coli)	Chac1	0.59662503
solute carrier family 16 (monocarboxylic acid transporters), member 3	Slc16a3	0.59662753
breakpoint cluster region homolog	Bcr	0.5967212
triggering receptor expressed on myeloid cells-like 2	Trem12	0.5972635
Transcribed locus	NA	0.5977485
opioid receptor, sigma 1	Oprs1	0.59820575
tetraspanin 9	Tspan9	0.59836364
annexin A5	Anxa5	0.5996279
toll-interleukin 1 receptor (TIR) domain-containing adaptor protein	Tirap	0.6000086
NA	NA	0.60017574
serum/glucocorticoid regulated kinase	Sgk	0.6009653
pyruvate carboxylase	Pcx	0.6012593
protein phosphatase 1, regulatory (inhibitor) subunit 14c	Ppp1r14c	0.6028952
G patch domain containing 4	Gpatch4	0.60303926
solute carrier family 39 (zinc transporter), member 10	Slc39a10	0.60356224
kelch-like 17 (Drosophila)/pleckstrin homology domain containing, family N member 1	Klh17///Plekhn1	0.6037337
platelet-activating factor acetylhydrolase, isoform 1b, alpha1 subunit	Pafah1b3	0.6040435
G protein-coupled receptor 97	Gpr97	0.604422
glucosaminyl (N-acetyl) transferase 1, core 2	Gcnt1	0.6046435
exportin, tRNA (nuclear export receptor for tRNAs)	Xpot	0.60487765
CD160 antigen	Cd160	0.60736626
ninjurin 1	Ninj1	0.6076785
apurinic/aprimidinic endonuclease 1	Apex1	0.6081227
sphingomyelin phosphodiesterase 1, acid lysosomal	Smpd1	0.60832965
Potassium voltage-gated channel, subfamily Q, member 5	Kcnq5	0.60910934
dual specificity phosphatase 14	Dusp14	0.6091096
hydroxysteroid (17-beta) dehydrogenase 10	Hsd17b10	0.609857
stanniocalcin 2	Stc2	0.6103889
inducible T-cell co-stimulator	Icos	0.61053246
activated leukocyte cell adhesion molecule	Alcam	0.61094695
ribonuclease P 40 subunit (human)	Rpp40	0.61217546
phosphoglycerate kinase 1	Pgk1	0.6125413
capping protein (actin filament), gelsolin-like	Capg	0.6132278
tight junction protein 2	Tjp2	0.61337346
TYRO protein tyrosine kinase binding protein	Tyrobp	0.61438984
NIMA (never in mitosis gene a)-related expressed kinase 1	Nek1	0.61603355
abhydrolase domain containing 5	Abhd5	0.61605495
v-myc myelocytomatosis viral related oncogene, neuroblastoma derived (avian)	Mycn	0.61736304
RIKEN cDNA 5033413D16 gene	5033413D16Rik	0.617498
adenosine A3 receptor	Adora3	0.6175564
apurinic/aprimidinic endonuclease 1	Apex1	0.6176607
lactate dehydrogenase A	Ldha	0.61801744
forty-two-three domain containing 1	Fyttd1	0.61827815
CD96 antigen	Cd96	0.6185967
stanniocalcin 2	Stc2	0.6195668
nuclear transcription factor, X-box binding-like 1	Nfxl1	0.6202423
annexin A4	Anxa4	0.6206796

major facilitator superfamily domain containing 2	Mfsd2	0.62121916
elongation factor RNA polymerase II 2	Eli2	0.6219092
BCL2/adenovirus E1B interacting protein 3-like	Bnip3l	0.6219833
hydroxysteroid (17-beta) dehydrogenase 10	Hsd17b10	0.62233764
opioid receptor, sigma 1	Oprs1	0.6228127
AU RNA binding protein/enoyl-coenzyme A hydratase	Auh	0.6233038
transmembrane protein 40	Tmem40	0.62370014
apurinic/apyrimidinic endonuclease 1	Apex1	0.623918
DNA topoisomerase 1, mitochondrial	Top1mt	0.62482184
solute carrier family 16 (monocarboxylic acid transporters), member 10	Slc16a10	0.6256036
RAB27b, member RAS oncogene family	Rab27b	0.62661
basigin	Bsg	0.6270878
expressed sequence AI316787	AI316787	0.6271468
eukaryotic translation initiation factor 4E binding protein 1	Eif4ebp1	0.6276931
glyceraldehyde-3-phosphate dehydrogenase	Gapdh	0.62807614
neurolysin (metallopeptidase M3 family)	Nln	0.6281102
phosphofructokinase, liver, B-type	Pfkl	0.62823325
monocyte to macrophage differentiation-associated	Mmd	0.62859124
cell growth regulator with ring finger domain 1	Cgrrf1	0.62906826
protein phosphatase 2 (formerly 2A), regulatory subunit B (PR 52), gamma isoform	Ppp2r2c	0.62991124
zinc finger protein 52	Zfp52	0.62993675
tight junction protein 2	Tjp2	0.6303304
tight junction protein 1	Tjp1	0.6313458
RAN guanine nucleotide release factor	Rangrf	0.63162476
zinc finger protein 69	Zfp69	0.63224626
cDNA sequence D10627	D10627	0.6331447
mevalonate (diphospho) decarboxylase	Mvd	0.63334143
lanosterol synthase	Lss	0.6336675
growth arrest and DNA-damage-inducible 45 gamma	Gadd45g	0.6351033
carbohydrate sulfotransferase 11	Chst11	0.6351188
small nucleolar RNA, C/D box 22	Snord22	0.6353658
Bcl2-associated athanogene 2	Bag2	0.6355403
cysteine conjugate-beta lyase 2	Ccbl2	0.6356338
phosphoenolpyruvate carboxykinase 2 (mitochondrial)	Pck2	0.63611376
Mus musculus, clone IMAGE:4219318, mRNA	NA	0.63629556
TBC1D12: TBC1 domain family, member 12	Tbc1d12	0.6372191
asparagine synthetase	Asns	0.6391549
zinc finger, SWIM domain containing 6	Zswim6	0.63919336
myristoylated alanine rich protein kinase C substrate	Marcks	0.6392387
Myristoylated alanine rich protein kinase C substrate	Marcks	0.6394435
poly (ADP-ribose) polymerase family, member 16	Parp16	0.64045846
3-hydroxy-3-methylglutaryl-Coenzyme A synthase 1	Hmgcs1	0.6405402
branched chain ketoacid dehydrogenase E1, beta polypeptide	Bckdhb	0.6412341
serine (or cysteine) peptidase inhibitor, clade B, member 1b	Serpib1b	0.64292747
3-hydroxy-3-methylglutaryl-Coenzyme A synthase 1	Hmgcs1	0.6432873
small nucleolar RNA host gene (non-protein coding) 3	Shhg3	0.6432996
family with sequence similarity 18, member B	Fam18b	0.6433753
growth arrest specific 5	Gas5	0.64358014
alpha fetoprotein	Afp	0.64368594
solute carrier family 37 (glucose-6-phosphate transporter), member 4	Slc37a4	0.6438727
small nucleolar RNA host gene (non-protein coding) 7	Shhg7	0.64400566
protein phosphatase 1, regulatory (inhibitor) subunit 13 like	Ppp1r13l	0.6446592
ATP-binding cassette, sub-family B (MDR/TAP), member 9	Abcb9	0.6449137
trafficking protein particle complex 6A	Trappc6a	0.6454556
PDZ and LIM domain 7	Pdlim7	0.6458128
spermidine synthase	Srm	0.645882
asparagine synthetase	Asns	0.64643997
aldehyde dehydrogenase family 7, member A1	Aldh7a1	0.64659935
dodecenoyl-Coenzyme A delta isomerase (3,2 trans-enoyl-Coenzyme A isomerase)	Dci	0.6466948
transcription factor 4	Tcf4	0.6471856
UDP-N-acetyl-alpha-D-galactosamine:polypeptide N-acetylglucosaminyltransferase 6	Galnt6	0.6475366
spindlin family, member 4	Spin4	0.64781487
Rho GTPase activating protein 8	Arhgap8	0.6478622
solute carrier family 39 (zinc transporter), member 14	Slc39a14	0.6487392
forty-two-three domain containing 1	Fytd1	0.6488945
solute carrier family 19 (sodium/hydrogen exchanger), member 1	Slc19a1	0.6491613
arginine vasopressin-induced 1	Avpi1	0.6501877
small nucleolar RNA, C/D box 22	Snord22	0.65094554
annexin A3	Anxa3	0.6510268
coiled-coil domain containing 132	Ccdc132	0.65110487
3-hydroxy-3-methylglutaryl-Coenzyme A synthase 1	Hmgcs1	0.65111375
CDC14 cell division cycle 14 homolog B (S. cerevisiae)	Cdc14b	0.65173113
sorting nexin 9	Snx9	0.6518183
ATG9 autophagy related 9 homolog B (S. cerevisiae)	Atg9b	0.6519335
activating transcription factor 4	Atf4	0.6522638
claudin 12	Cldn12	0.652276
poliovirus receptor	Pvr	0.65236604
solute carrier family 19 (sodium/hydrogen exchanger), member 1	Slc19a1	0.65238047
nuclear undecaprenyl pyrophosphate synthase 1 homolog (S. cerevisiae)	Nus1	0.65238976
activating transcription factor 4	Atf4	0.6537279
SEC63-like (S. cerevisiae)	Sec63	0.65432286
alpha fetoprotein	Afp	0.6543817
coiled-coil domain containing 86	Ccdc86	0.6544868
G patch domain containing 4	Gpatch4	0.65452504
homeobox only domain	Hod	0.65455645
retinoic acid induced 14	Rai14	0.65471
phosphatidylethanolamine binding protein 1	Pebp1	0.655803
ets variant gene 5	Etv5	0.65586853
solute carrier family 39 (metal ion transporter), member 11	Slc39a11	0.65628266

HD domain containing 2	Hddc2	0.65656096
aldolase 1, A isoform	Aldoa	0.6566638
EH-domain containing 1	Ehd1	0.65669125
cDNA sequence BC024814	BC024814	0.6568102
caveolin 2	Cav2	0.6568276
peroxisomal trans-2-enoyl-CoA reductase	Pecr	0.6582006
bone morphogenetic protein receptor, type 1A	Bmpr1a	0.6585575
methylthioadenosine phosphorylase	Mtap	0.6591221
chloride channel 3	Clcn3	0.6595445
glyceraldehyde-3-phosphate dehydrogenase	Gapdh	0.6603607
T-cell receptor gamma chain	Tcrq	0.6606122
H1 histone family, member 0	H1f0	0.66083425
phosphofructokinase, liver, B-type	Pfkl	0.6612395
CD55 antigen	Cd55	0.6618952
DNA segment, Chr 13, Wayne State University 177, expressed	D13Wsu177e	0.6618975
3-hydroxy-3-methylglutaryl-Coenzyme A synthase 1	Hmgcs1	0.6621744
KDEL (Lys-Asp-Glu-Leu) containing 2	Kdelc2	0.66228944
junction-mediating and regulatory protein	Jmy	0.6631519
longevity assurance homolog 6 (S. cerevisiae)	Lass6	0.6632293
furin (paired basic amino acid cleaving enzyme)	Furin	0.66328263
glycerol phosphate dehydrogenase 2, mitochondrial	Gpd2	0.6641592
phosphoglycerate kinase 1	Pgk1	0.6641595
praja1, RING-H2 motif containing	Pja1	0.6643498
Fas apoptotic inhibitory molecule 3	Faim3	0.6647838
oxidative stress induced growth inhibitor 1	Osgin1	0.6652374
diaphanous homolog 2 (Drosophila)	Diap2	0.66532815
alanine-glyoxylate aminotransferase 2-like 2	Aqxt2l2	0.6655763
pseudouridylate synthase 7 homolog (S. cerevisiae)	Pus7	0.6657297
tight junction protein 2	Tjp2	0.6658068
ERBB receptor feedback inhibitor 1	Errfi1	0.6663833
methylenetetrahydrofolate dehydrogenase (NADP+ dependent) 1-like	Mthfd1l	0.6665775

Table S2.

GENE_TITLE	GENE_SYMBOL	Fold change
B and T lymphocyte associated	Btla	10.619414
selectin, lymphocyte	Sell	10.091135
selectin, lymphocyte	Sell	8.449704
membrane-spanning 4-domains, subfamily A, member 4C	Ms4a4c	7.4328146
immunoglobulin heavy chain 6 (heavy chain of IgM)	Igh-6	6.382052
brain expressed gene 6	Bex6	5.731997
immunoglobulin heavy chain 6 (heavy chain of IgM)	Igh-6	5.35884
membrane-spanning 4-domains, subfamily A, member 4C	Ms4a4c	5.1635995
CD5 antigen	Cd5	5.0597324
nephroblastoma overexpressed gene	Nov	5.013391
aldehyde dehydrogenase 2, mitochondrial	Aldh2	4.9124336
CD6 antigen	Cd6	4.7541776
CD86 antigen	Cd86	4.561645
BTB (POZ) domain containing 11	Btbd11	4.539397
transglutaminase 2, C polypeptide	Tgm2	4.5231805
chemokine (C-C motif) ligand 5	Ccl5	4.475936
chemokine (C-X-C motif) receptor 3	Cxcr3	4.4530644
nephroblastoma overexpressed gene	Nov	4.3937078
transglutaminase 2, C polypeptide	Tgm2	4.3589163
chemokine (C motif) ligand 1	Xcl1	4.2641177
leukemia inhibitory factor	Lif	4.1705213
transglutaminase 2, C polypeptide	Tgm2	4.007677
guanylate nucleotide binding protein 2	Gbp2	3.9605556
transglutaminase 2, C polypeptide	Tgm2	3.953977
transglutaminase 2, C polypeptide	Tgm2	3.9387438
histocompatibility 2, class II, locus DMA	H2-DMA	3.8232307
palladin, cytoskeletal associated protein	Palld	3.69089
CD97 antigen	Cd97	3.68926
guanylate nucleotide binding protein 2	Gbp2	3.6888623
leukemia inhibitory factor	Lif	3.6421754
SLAM family member 6	Slamf6	3.6181192
ubiquitin specific peptidase 18	Usp18	3.5736878
T-box 21	Tbx21	3.4885643
interferon activated gene 203	Ifi203	3.4295392
interferon-induced protein with tetratricopeptide repeats 2	Ifit2	3.4124877
interferon-induced protein with tetratricopeptide repeats 1	Ifit1	3.2966535
regulatory factor X, 4 (influences HLA class II expression)	Rfx4	3.2882648
interferon-induced protein with tetratricopeptide repeats 3	Ifit3	3.2106006
src-like adaptor	Sla	3.2055144
src-like adaptor	Sla	3.1840773
LIM domain containing 2	Limd2	3.1117184
ADP-ribosyltransferase 2b	Art2b	3.034391
transition protein 2	Tnp2	3.0090315
tumor necrosis factor receptor superfamily, member 13b	Tnfrsf13b	2.9825096
LIM domain containing 2	Limd2	2.955381
CD antigen 27	Cd27	2.9141588
tumor necrosis factor (ligand) superfamily, member 10	Tnfsf10	2.8981235
membrane-spanning 4-domains, subfamily A, member 6B	Ms4a6b	2.8884616
arginine glutamic acid dipeptide (RE) repeats	Rere	2.8658037
forkhead box N3	Foxn3	2.865565
ATP-binding cassette, sub-family G (WHITE), member 1	Abcg1	2.849893
nucleotide-binding oligomerization domain containing 1	Nod1	2.8327656
interferon activated gene 203	Ifi203	2.8059402
interferon inducible GTPase 1	Ilgp1	2.7981086
macrophage activation 2 like	Mpa2l	2.7967365
interleukin 10 receptor, alpha	Il10ra	2.789084
F-box protein 39	Fbxo39	2.7868335
Z-DNA binding protein 1	Zbp1	2.7821443
interferon inducible GTPase 1	Ilgp1	2.7749214
AF4/FMR2 family, member 3	Aff3	2.7639458
transmembrane, prostate androgen induced RNA	Tmepai	2.7379732
plexin C1	Plxnc1	2.7147648
transmembrane protein 50B	Tmem50b	2.7139711
plexin C1	Plxnc1	2.680234
acid phosphatase-like 2	Acpl2	2.678926
EH-domain containing 3	Ehd3	2.637972
EH-domain containing 3	Ehd3	2.6224966

protein kinase C, beta 1	Prkcb1	2.5944998
E2F transcription factor 2	E2f2	2.5930355
Z-DNA binding protein 1	Zbp1	2.562499
E2F transcription factor 2	E2f2	2.541685
membrane-spanning 4-domains, subfamily A, member 6B	Ms4a6b	2.5140698
plexin C1	Plxnc1	2.5124674
receptor transporter protein 4	Rtp4	2.5041656
tumor necrosis factor (ligand) superfamily, member 10	Tnfsf10	2.4995675
non-catalytic region of tyrosine kinase adaptor protein 2	Nck2	2.4912715
NUAK family, SNF1-like kinase, 2	Nuak2	2.4753726
membrane bound O-acyltransferase domain containing 1	Mboat1	2.462286
leucine-rich repeats and immunoglobulin-like domains 1	Lrig1	2.4591413
interferon, alpha-inducible protein 27	Ifi27	2.451375
chemokine (C-C motif) receptor 7	Ccr7	2.4513328
microsomal glutathione S-transferase 2	Mgst2	2.4420826
histocompatibility 2, O region alpha locus	H2-Oa	2.440092
lysosomal trafficking regulator	Lyst	2.4338033
lectin, galactose binding, soluble 9	Lgals9	2.4268653
leucine-rich repeats and immunoglobulin-like domains 1	Lrig1	2.4206145
chemokine (C-C motif) ligand 3	Ccl3	2.4155226
tripartite motif protein 30	Trim30	2.4153857
tripartite motif protein 30	Trim30	2.4151373
acid phosphatase-like 2	Acpl2	2.4129937
tripartite motif protein 30	Trim30	2.3981943
macrophage activation 2 like	Mpa2l	2.3774033
Fas (TNF receptor superfamily member)	Fas	2.345486
Nur77 downstream gene 1	Ndg1	2.3405557
single-stranded DNA binding protein 2	Ssbp2	2.3265324
lymphotoxin B	Ltb	2.324736
protein kinase C, beta 1	Prkcb1	2.3122993
Cd200 receptor 4	Cd200r4	2.3059757
LIM domain containing 2	Limd2	2.3046596
src-like adaptor	Sla	2.3032475
transcription factor 7, T-cell specific	Tcf7	2.298272
forkhead box N3	Foxn3	2.2970963
chemokine (C-X-C motif) receptor 4	Cxcr4	2.2943168
growth factor receptor bound protein 2-associated protein 3	Gab3	2.2805018
IBR domain containing 3	Ibrdc3	2.2728927
methyltransferase like 7A	Mettl7a	2.2651017
immunity-related GTPase family, M	Irgm	2.2549195
actinin alpha 2	Actn2	2.2434254
CD9 antigen	Cd9	2.2318513
phosphodiesterase 4B, cAMP specific	Pde4b	2.2313092
palladin, cytoskeletal associated protein	Palld	2.2229395
cathepsin S	Ctss	2.2204633
transmembrane, prostate androgen induced RNA	Tmepai	2.2179077
inositol 1,4,5-triphosphate receptor 2	Itpr2	2.2136383
thymocyte selection-associated HMG box gene	Tox	2.2101214
SH3-domain binding protein 5 (BTK-associated)	Sh3bp5	2.2076557
signal transducer and activator of transcription 1	Stat1	2.194591
G protein-coupled receptor 137B	Gpr137b	2.1919265
anthrax toxin receptor 2	Antxr2	2.1904688
CD300 antigen like family member F	Cd300lf	2.1885211
Scm-like with four mbt domains 2	Sfmbt2	2.182194
forkhead box N3	Foxn3	2.1800656
tumor necrosis factor (ligand) superfamily, member 10	Tnfsf10	2.1748228
programmed cell death 4	Pdcd4	2.1687653
interferon gamma receptor 2	Ifngr2	2.1625934
transducin (beta)-like 1X-linked receptor 1	Tbl1xr1	2.1496983
synaptic nuclear envelope 2	Syne2	2.1474395
early growth response 3	Egr3	2.1474044
cysteine-rich protein 1 (intestinal)	Crip1	2.1408753
CD68 antigen	Cd68	2.130869
TAP binding protein-like	Tapbpl	2.1219664
Nur77 downstream gene 2	Ndg2	2.120972
signal transducer and activator of transcription 1	Stat1	2.1204815
thymidylate kinase family LPS-inducible member	Tyki	2.1026874
methyltransferase like 7A	Mettl7a	2.101616

calcium/calmodulin-dependent protein kinase ID	Camk1d	2.1000671
vesicle-associated membrane protein 5	Vamp5	2.0998156
pleckstrin homology, Sec7 and coiled-coil domains 1	Pscd1	2.0906556
insulin-like growth factor binding protein 4	Igfbp4	2.0829415
methyltransferase like 7A	Mettl7a	2.0828688
nuclear receptor coactivator 3	Ncoa3	2.0741558
CD86 antigen	Cd86	2.0719166
thymocyte selection-associated HMG box gene	Tox	2.0698056
SAM domain and HD domain, 1	Samhd1	2.0687954
ATP-binding cassette, sub-family G (WHITE), member 3	Abcg3	2.0641596
granzyme K	Gzmk	2.063929
nuclear factor, erythroid derived 2, like 2	Nfe2l2	2.0560915
carbohydrate sulfotransferase 2	Chst2	2.0530057
mitogen-activated protein kinase 12	Mapk12	2.0518193
interferon regulatory factor 1	Irf1	2.0367014
caspase 1	Casp1	2.0351908
membrane-spanning 4-domains, subfamily A, member 6D	Ms4a6d	2.0320349
receptor accessory protein 3	Reep3	2.0299
G-protein signalling modulator 2 (AGS3-like, C. elegans)	Gpsm2	2.0297675
mitogen-activated protein kinase 11	Mapk11	2.02859
ST8 alpha-N-acetyl-neuraminidase alpha-2,8-sialyltransferase 4	St8sia4	2.0195322
granzyme M (lymphocyte met-ase 1)	Gzmm	2.016845
tripartite motif protein 12	Trim12	2.0157309
human immunodeficiency virus type I enhancer binding protein 2	Hivep2	2.0066543
T-cell specific GTPase	Tgtp	2.0027227
ankyrin repeat and BTB (POZ) domain containing 2	Abtb2	1.999063
serine/threonine kinase 10	Stk10	1.9969306
myelin basic protein	Mbp	1.9920989
hect domain and RLD 5	Herc5	1.9881866
tripartite motif protein 21	Trim21	1.9868852
signal transducer and activator of transcription 1	Stat1	1.9866577
GTPase, IMAP family member 4	Gimap4	1.984285
arylsulfatase B	Arsb	1.984058
ADP-ribosyltransferase 4	Art4	1.9834151
unc-5 homolog C (C. elegans)-like	Unc5cl	1.9832071
schlafen 1	Slfn1	1.9822553
interferon inducible GTPase 2	Ilgp2	1.9811001
H2A histone family, member V	H2afv	1.9810762
LON peptidase N-terminal domain and ring finger 3	Lonrf3	1.9795263
poly (ADP-ribose) polymerase family, member 12	Parp12	1.975999
guanylate nucleotide binding protein 3	Gbp3	1.9759091
MAD homolog 3 (Drosophila)	Smad3	1.9688662
spindlin family, member 2	Spin2	1.9654967
tumor necrosis factor (ligand) superfamily, member 8	Tnfsf8	1.9650519
GTPase, IMAP family member 4	Gimap4	1.9623187
cathepsin E	Ctse	1.9614267
killer cell lectin-like receptor subfamily K, member 1	Klrk1	1.9595485
DEXH (Asp-Glu-X-His) box polypeptide 58	Dhx58	1.9533328
Max dimerization protein 3	Mxd3	1.9470203
interferon gamma inducible protein 47	Ifi47	1.9452164
signal transducer and activator of transcription 1	Stat1	1.9449311
SAM domain and HD domain, 1	Samhd1	1.9425747
ATPase, Class V, type 10D	Atp10d	1.9407734
insulin-like growth factor binding protein 4	Igfbp4	1.9404325
pleckstrin homology domain containing, family A (phosphoinositide binding specific) member 1	Plekha1	1.9397705
myeloid/lymphoid or mixed lineage-leukemia translocation to 3 homolog (Drosophila)	Mllt3	1.9319512
PHD finger protein 15	Phf15	1.9248236
Nur77 downstream gene 2	Ndg2	1.9240229
nuclear receptor coactivator 3	Ncoa3	1.9238851
zinc finger CCCH type containing 12D	Zc3h12d	1.923839
suppression of tumorigenicity 14 (colon carcinoma)	St14	1.9202745
interferon gamma induced GTPase	Igtp	1.9108638
ring finger protein 213	Rnf213	1.9107894
arginyl aminopeptidase (aminopeptidase B)-like 1	Rnpepl1	1.9088702
DEAD (Asp-Glu-Ala-Asp) box polypeptide 6	Ddx6	1.9007452
Max dimerization protein 3	Mxd3	1.8995222
CCAAT/enhancer binding protein (C/EBP), beta	Cebpb	1.8987012
RAR-related orphan receptor alpha	Rora	1.8984373

killer cell lectin-like receptor family E member 1	Klre1	1.8982183
signaling lymphocytic activation molecule family member 1	Slamf1	1.8973227
coiled coil domain containing 28B	Ccdc28b	1.8933862
schlafen 2	Slfn2	1.8905532
coronin 7	Coro7	1.8889136
intraflagellar transport 57 homolog (Chlamydomonas)	ift57	1.8887681
interferon gamma receptor 1	Ifngr1	1.8803297
abhydrolase domain containing 8	Abhd8	1.8779308
acyltransferase like 2	Ayt12	1.8768325
coronin 7	Coro7	1.8731018
myeloid/lymphoid or mixed lineage-leukemia translocation to 3 homolog (Drosophila)	Mllt3	1.8728472
RAB37, member of RAS oncogene family	Rab37	1.8702458
IBR domain containing 3	Ibrdc3	1.8691689
transmembrane protein 2	Tmem2	1.867998
sulfatase 2	Sulf2	1.8655231
poly (ADP-ribose) polymerase family, member 3	Parp3	1.8620294
Tripartite motif protein 34	Trim34	1.8610309
nuclear factor of kappa light chain gene enhancer in B-cells inhibitor, alpha	Nfkbia	1.8608109
platelet/endothelial cell adhesion molecule 1	Pecam1	1.8579917
special AT-rich sequence binding protein 1	Satb1	1.8574874
glucocorticoid induced transcript 1	Glcc1	1.8562063
G protein-coupled receptor 18	Gpr18	1.8547204
ISG15 ubiquitin-like modifier	Isg15	1.8531569
killer cell lectin-like receptor subfamily A, member 10	Klra10	1.8497196
ectodermal-neural cortex 1	Enc1	1.8469944
deltex 3-like (Drosophila)	Dtx3l	1.8411797
ankyrin repeat and BTB (POZ) domain containing 2	Abtb2	1.8318725
peroxisome proliferative activated receptor, gamma, coactivator 1 beta	Ppargc1b	1.8304619
interferon regulatory factor 7	Irf7	1.8303773
cytidine monophospho-N-acetylneuraminic acid hydroxylase	Cmah	1.8286178
interleukin 17 receptor A	Il17ra	1.8270477
leucine-rich repeats and calponin homology (CH) domain containing 1	Lrch1	1.8255506
membrane-spanning 4-domains, subfamily A, member 6D	Ms4a6d	1.8242993
zinc finger protein 238	Zfp238	1.8210074
RAB37, member of RAS oncogene family	Rab37	1.8208538
cytotoxic and regulatory T cell molecule	Crtam	1.8206991
arylsulfatase B	Arsb	1.8199348
deleted in lymphocytic leukemia, 7	Dleu7	1.8106891
interferon activated gene 203	Ifi203	1.8077433
ATP-binding cassette, sub-family G (WHITE), member 3	Abcg3	1.8062297
transducin (beta)-like 1X-linked receptor 1	Tbl1xr1	1.8056209
dual specificity phosphatase 10	Dusp10	1.8052435
nuclear factor of kappa light chain gene enhancer in B-cells inhibitor, alpha	Nfkbia	1.8032756
death associated protein-like 1	Dapl1	1.8016176
B-cell leukemia/lymphoma 11B	Bcl11b	1.8003155
nuclear receptor coactivator 2	Ncoa2	1.80002
paraoxonase 3	Pon3	1.7972856
adenosine deaminase, RNA-specific	Adar	1.7943243
PX domain containing serine/threonine kinase	Pxk	1.7923391
SH2 domain protein 1A	Sh2d1a	1.7895427
transformation related protein 53 inducible nuclear protein 1	Trp53inp1	1.7869955
interferon activated gene 203	Ifi203	1.7864294
adenosine deaminase	Ada	1.7838671
cyclin-dependent kinase inhibitor 2C (p18, inhibits CDK4)	Cdkn2c	1.7836916
placenta-specific 8	Plac8	1.7816631
protein kinase, AMP-activated, gamma 2 non-catalytic subunit	Prkag2	1.7810653
nuclear receptor interacting protein 1	Nrip1	1.780809
DEP domain containing 1B	Depdc1b	1.7708092
zinc finger, CCHC domain containing 11	Zcchc11	1.7674632
GTPase, IMAP family member 7	Gimap7	1.7673886
ST3 beta-galactoside alpha-2,3-sialyltransferase 6	St3gal6	1.7650107
establishment of cohesion 1 homolog 2 (S. cerevisiae)	Esco2	1.7643586
protein phosphatase 1, regulatory (inhibitor) subunit 12A	Ppp1r12a	1.7625729
prostaglandin E receptor 4 (subtype EP4)	Ptger4	1.7619696
glutathione S-transferase kappa 1	Gstk1	1.760703
myeloid/lymphoid or mixed lineage-leukemia translocation to 3 homolog (Drosophila)	Mllt3	1.7582033
chemokine (C-C motif) ligand 4	Ccl4	1.7573771
hypoxia inducible factor 1, alpha subunit	Hif1a	1.7542458

CCAAT/enhancer binding protein (C/EBP), beta	Cebpb	1.7518582
coronin 7	Coro7	1.7514504
argininosuccinate synthetase 1	Ass1	1.7512642
poly (ADP-ribose) polymerase family, member 11	Parp11	1.7501827
M-phase phosphoprotein 9	Mphosph9	1.7486533
RAB3A interacting protein	Rab3ip	1.7451543
Max dimerization protein 3	Mxd3	1.7445246
CD84 antigen	Cd84	1.743946
kinesin family member 1B	Kif1b	1.7430208
membrane-spanning 4-domains, subfamily A, member 4B	Ms4a4b	1.7409074
stromal interaction molecule 2	Stim2	1.7395463
deleted in lymphocytic leukemia, 2	Dleu2	1.736916
ninein	Nin	1.7367991
UbiE-YGHL1 fusion protein	Ubie	1.7318088
myeloid/lymphoid or mixed-lineage leukemia 1	MLL1	1.7316934
serine (or cysteine) peptidase inhibitor, clade A, member 3G	Serpina3g	1.7314974
nuclear antigen Sp100	Sp100	1.731438
receptor accessory protein 1	Reep1	1.7309115
guanylate binding protein 6	Gbp6	1.7306103
interleukin 15 receptor, alpha chain	Il15ra	1.7304174
hect domain and RLD 5	Herc5	1.7301996
solute carrier family 14 (urea transporter), member 1	Slc14a1	1.7257173
tripartite motif protein 21	Trim21	1.725544
A kinase (PRKA) anchor protein 2	Akap2	1.7243452
special AT-rich sequence binding protein 1	Satb1	1.723027
signal transducer and activator of transcription 2	Stat2	1.7229054
phosphodiesterase 4B, cAMP specific	Pde4b	1.7206657
leucine-rich repeats and calponin homology (CH) domain containing 1	Lrch1	1.7184627
caspase 7	Casp7	1.7157513
breast cancer 1	Brca1	1.7157085
E2F transcription factor 7	E2f7	1.7141374
kelch repeat and BTB (POZ) domain containing 11	Kbtbd11	1.7119784
forkhead box P1	Foxp1	1.7118692
B-cell leukemia/lymphoma 11B	Bcl11b	1.7113452
suppressor of cytokine signaling 2	Socs2	1.7108902
lysosomal acid lipase A	Lipa	1.7108012
endothelial differentiation sphingolipid G-protein-coupled receptor 1	Edg1	1.7072171
chemokine (C-C motif) receptor 2	Ccr2	1.7071922
limb-bud and heart	Lbh	1.705567
interferon activated gene 203	Ifi203	1.7055196
cyclin F	Ccnf	1.704696
nuclear receptor subfamily 3, group C, member 1	Nr3c1	1.7043703
tescalcin	Tesc	1.7034131
Rab6 interacting protein 1	Rab6ip1	1.7025754
adaptor-related protein complex 1, sigma 2 subunit	Ap1s2	1.7010038
apolipoprotein B editing complex 3	Apobec3	1.6997046
crystallin, lambda 1	Cryl1	1.6995469
B-cell leukemia/lymphoma 11B	Bcl11b	1.6962289
ST3 beta-galactoside alpha-2,3-sialyltransferase 6	St3gal6	1.6961287
transmembrane protein 106A	Tmem106a	1.6958495
ninjurin 2	Ninj2	1.6953497
ATPase, aminophospholipid transporter (APLT), class I, type 8A, member 1	Atp8a1	1.692892
RAD52 motif 1	Rdm1	1.6926118
transmembrane protein 2	Tmem2	1.6920573
G protein-coupled receptor kinase 5	Grk5	1.691612
receptor accessory protein 3	Reep3	1.6912491
PHD finger protein 19	Phf19	1.6912394
eukaryotic translation initiation factor 2-alpha kinase 2	Eif2ak2	1.6907791
interleukin 6 signal transducer	Il6st	1.6906564
proline rich 11	Prr11	1.6890656
cold inducible RNA binding protein	Cirbp	1.6877627
rho/rac guanine nucleotide exchange factor (GEF) 18	Arhgef18	1.6848052
quaking	Qk	1.6832054
nuclear factor of kappa light chain gene enhancer in B-cells inhibitor, alpha	Nfkbia	1.6804541
janus kinase and microtubule interacting protein 1	Jakmip1	1.6803963
chemokine (C-C motif) receptor 2	Ccr2	1.6791991
GTPase, IMAP family member 9	Gimap9	1.6764927
protein-tyrosine sulfotransferase 1	Tpst1	1.67549

coronin 7	Coro7	1.6739265
kinesin family member 11	Kif11	1.672852
B-cell leukemia/lymphoma 11B	Bcl11b	1.672588
cysteine rich transmembrane BMP regulator 1 (chordin like)	Crim1	1.6712704
interleukin 10 receptor, beta	Il10rb	1.6702745
suppressor of cytokine signaling 2	Socs2	1.667961
caspase 7	Casp7	1.6664379
nuclear antigen Sp100	Sp100	1.6663762
proteasome (prosome, macropain) subunit, beta type 9 (large multifunctional peptidase 2)	Psbm9	1.664434
chemokine (C-C motif) receptor 2	Ccr2	1.6620532
acyltransferase like 2	Aytl2	1.661519
RAS guanyl releasing protein 1	Rasgrp1	1.6613077
slingshot homolog 2 (Drosophila)	Ssh2	1.6602621
histocompatibility 2, M region locus 3	H2-M3	1.6598192
centrosomal protein 55	Cep55	1.6580993
deltex 3-like (Drosophila)	Dtx3l	1.6575675
DEAD (Asp-Glu-Ala-Asp) box polypeptide 6	Ddx6	1.6557289
cell division cycle 2-like 6 (CDK8-like)	Cdc2l6	1.6551535
CDC42 small effector 2	Cdc42se2	1.6546559
angel homolog 2 (Drosophila)	Angel2	1.6536969
Hematopoietic SH2 domain containing	Hsh2d	1.6534498
copine III	Cpne3	1.6534468
ubiquitin-activating enzyme E1-like	Ube1l	1.6521982
hect domain and RLD 5	Herc5	1.6521606
Dnaj (Hsp40) homolog, subfamily A, member 4	Dnaja4	1.6520694
ST8 alpha-N-acetyl-neuraminide alpha-2,8-sialyltransferase 1	St8sia1	1.6519382
coronin 7	Coro7	1.649238
CDC42 effector protein (Rho GTPase binding) 3	Cdc42ep3	1.6487346
adaptor-related protein complex 1, sigma 2 subunit	Ap1s2	1.6474146
insulin-like growth factor binding protein 4	Igfbp4	1.6455252
PYD and CARD domain containing	Pycard	1.6453353
protein kinase C, alpha	Prkca	1.6432676
Fas ligand (TNF superfamily, member 6)	Fasl	1.6430215
protein phosphatase 1M	Ppm1m	1.6426451
general transcription factor IIIC, polypeptide 5	Gtf3c5	1.6424557
BCL2-like 11 (apoptosis facilitator)	Bcl2l11	1.6415789
gamma-glutamyl hydrolase	Ggh	1.6414477
poly (ADP-ribose) polymerase family, member 14	Parp14	1.6413742
lysosomal acid lipase A	Lipa	1.6408367
prostaglandin E receptor 4 (subtype EP4)	Ptger4	1.6385676
eukaryotic translation initiation factor 2-alpha kinase 2	Eif2ak2	1.637581
AP2 associated kinase 1	Aak1	1.6349064
huntingtin interacting protein 1	Hip1	1.6348871
transducin (beta)-like 1X-linked receptor 1	Tbl1xr1	1.6334363
cyclin G2	Ccng2	1.6326293
interleukin 18 binding protein	Il18bp	1.6292183
forkhead box M1	Foxm1	1.628499
forkhead box P1	Foxp1	1.6272917
mitogen activated protein kinase kinase kinase 5	Map3k5	1.6267174
interleukin 15 receptor, alpha chain	Il15ra	1.6258672
AT rich interactive domain 4A (Rbp1 like)	Arid4a	1.6257839
BCL2-like 11 (apoptosis facilitator)	Bcl2l11	1.6247671
mitogen activated protein kinase kinase kinase 3	Map3k3	1.6223027
protein phosphatase 1, regulatory (inhibitor) subunit 12A	Ppp1r12a	1.6218783
dermatan sulfate epimerase	Dse	1.621579
mitogen activated protein kinase kinase kinase 3	Map3k3	1.6213486
acyltransferase like 2	Aytl2	1.621344
acyl-Coenzyme A binding domain containing 4	Acbd4	1.6200002
forkhead box P1	Foxp1	1.6189914
SNF related kinase	Snrk	1.6181847
protein kinase D2	Prkd2	1.6174477
tumor necrosis factor, alpha-induced protein 8-like 1	Tnfaip8l1	1.6168463
inositol polyphosphate-1-phosphatase	Inpp1	1.6163372
histone deacetylase 5	Hdac5	1.6163098
promyelocytic leukemia	Pml	1.6151987
leucine rich repeat containing 16	Lrrc16	1.6151863
ADP-ribosylation factor-like 6 interacting protein 1	Arl6ip1	1.6144089
myelin basic protein	Mbp	1.6143079

RAB, member of RAS oncogene family-like 4	Rabl4	1.6139159
twinfilin, actin-binding protein, homolog 2 (Drosophila)	Twf2	1.6135231
crystallin, lambda 1	Cryl1	1.6123766
BCL2-like 11 (apoptosis facilitator)	Bcl2l11	1.6107539
receptor accessory protein 3	Reep3	1.6106697
SH3-binding kinase 1	Sbk1	1.6106496
coagulation factor II (thrombin) receptor-like 1	F2rl1	1.6102066
copine III	Cpne3	1.609412
LIM domain containing preferred translocation partner in lipoma	Lpp	1.6081166
RAB19, member RAS oncogene family	Rab19	1.6073036
TAP binding protein	Tapbp	1.6070119
tubulin, alpha 8	Tuba8	1.6065993
nuclear receptor coactivator 2	Ncoa2	1.6056538
CD28 antigen	Cd28	1.6050243
immunoglobulin kappa chain, constant region	Igk-C	1.603151
nuclear receptor subfamily 3, group C, member 1	Nr3c1	1.6031024
RAB GTPase activating protein 1-like	Rabgap1l	1.6024107
heterogeneous nuclear ribonucleoprotein L-like	Hnrpll	1.6003261
nuclear receptor subfamily 3, group C, member 1	Nr3c1	1.5997434
protein kinase D2	Prkd2	1.5994096
Fas ligand (TNF superfamily, member 6)	Fasl	1.599227
CD82 antigen	Cd82	1.5975598
A kinase (PRKA) anchor protein 2	Akap2	1.5968407
CDC42 effector protein (Rho GTPase binding) 3	Cdc42ep3	1.5967492
transducin (beta)-like 1X-linked receptor 1	Tbl1xr1	1.5966711
tripartite motif protein 34	Trim34	1.5952499
kinesin family member 11	Kif11	1.591871
BCL2-like 11 (apoptosis facilitator)	Bcl2l11	1.5917677
myosin light chain 2, precursor lymphocyte-specific	Mylc2pl	1.590096
protein kinase C, epsilon	Prkce	1.5900844
early growth response 2	Egr2	1.5899472
palmitoyl-protein thioesterase 1	Ppt1	1.5893383
opioid growth factor receptor-like 1	Ogfrl1	1.5885546
spermatogenesis associated 13	Spata13	1.5876133
transporter 1, ATP-binding cassette, sub-family B (MDR/TAP)	Tap1	1.5872873
regulator of G-protein signaling 2	Rgs2	1.5861312
interferon (alpha and beta) receptor 2	Ifnar2	1.5842426
ATPase, aminophospholipid transporter (APLT), class I, type 8A, member 1	Atp8a1	1.5835123
pellino 1	Peli1	1.5821836
BCL2-like 11 (apoptosis facilitator)	Bcl2l11	1.5814348
2'-5' oligoadenylate synthetase 3	Oas3	1.5794592
katanin p60 (ATPase-containing) subunit A1	Katna1	1.5794473
ribosomal protein L39-like	Rpl39l	1.5793556
transmembrane and coiled-coil domains 4	Tmco4	1.5793314
poly (ADP-ribose) polymerase family, member 3	Parp3	1.5776919
tetraspanin 32	Tspan32	1.5771898
forkhead box P1	Foxp1	1.5771534
pannexin 1	Panx1	1.5767586
transducin (beta)-like 1X-linked receptor 1	Tbl1xr1	1.575815
Rho GTPase activating protein 25	Arhgap25	1.5746773
expressed sequence AW112010	AW112010	1.5742941
Sp110 nuclear body protein	Sp110	1.5738015
breast cancer 1	Brca1	1.5736234
stathmin 1	Stmn1	1.5724498
coiled-coil domain containing 97	Ccdc97	1.5716994
DnaJ (Hsp40) homolog, subfamily C, member 1	Dnajc1	1.5713466
forkhead box M1	Foxm1	1.5703892
loss of heterozygosity, 11, chromosomal region 2, gene A homolog (human)	Loh11cr2a	1.5701382
ectodermal-neural cortex 1	Enc1	1.5699768
Scl/Tal1 interrupting locus	Stil	1.5686854
TAP binding protein	Tapbp	1.5677881
schlafen 3	Slf3	1.5669444
kinesin family member 1B	Kif1b	1.5664992
centromere protein F	Cenpf	1.5663698
glucocorticoid induced transcript 1	Glcci1	1.5661352
interferon-induced protein 35	Ifi35	1.5656953
coiled-coil domain containing 109B	Ccdc109b	1.5652887
ADP-ribosylation factor-like 6 interacting protein 1	Arl6ip1	1.5650189

neuronal PAS domain protein 2	Npas2	1.5648361
histocompatibility 2, class II, locus DMA	H2-DMA	1.5628287
membrane associated guanylate kinase, WW and PDZ domain containing 3	Magi3	1.5616869
triple functional domain (TPRF interacting)	Trio	1.5616294
SAM domain and HD domain, 1	Samhd1	1.5613611
cyclin G2	Ccng2	1.5606153
interferon (alpha and beta) receptor 2	Ifnar2	1.5601571
promyelocytic leukemia	Pml	1.5591983
microtubule associated serine/threonine kinase-like	Mastl	1.5591636
DnaJ (Hsp40) homolog, subfamily C, member 1	Dnajc1	1.5561073
RAS p21 protein activator 1	Rasa1	1.5541948
transcription factor 19	Tcf19	1.5541004
protein phosphatase 1, regulatory (inhibitor) subunit 12A	Ppp1r12a	1.5539614
slingshot homolog 2 (Drosophila)	Ssh2	1.5538785
DNA2 DNA replication helicase 2-like (yeast)	Dna2l	1.5537987
nuclear receptor subfamily 3, group C, member 1	Nr3c1	1.5524416
DENN/MADD domain containing 1C	Dennd1c	1.5522455
BRCA1 interacting protein C-terminal helicase 1	Brip1	1.5505961
signal transducer and activator of transcription 2	Stat2	1.5504586
interferon (alpha and beta) receptor 2	Ifnar2	1.5497862
development and differentiation enhancing factor 2	Ddef2	1.5496687
raftlin lipid raft linker 1	Rftn1	1.5495481
interferon dependent positive acting transcription factor 3 gamma	Isgf3g	1.5490471
cyclin F	Ccnf	1.5490187
dipeptidylpeptidase 4	Dpp4	1.5485027
tubby-like protein 3	Tulp3	1.5484914
centromere protein F	Cenpf	1.5484455
suppressor of cytokine signaling 1	Socs1	1.5483437
kinesin family member 2C	Kif2c	1.547937
acid phosphatase 5, tartrate resistant	Acp5	1.5467469
zinc finger protein, multitype 1	Zfp1	1.5459856
zinc finger protein 817	Zfp817	1.5458584
ST8 alpha-N-acetyl-neuraminide alpha-2,8-sialyltransferase 1	St8sia1	1.5456866
protein kinase C and casein kinase substrate in neurons 1	Pacsin1	1.5450029
engulfment and cell motility 1, ced-12 homolog (C. elegans)	Elmo1	1.5428627
tripartite motif-containing 44	Trim44	1.5428042
C-type lectin domain family 2, member i	Clec2i	1.5427369
tetraspanin 13	Tspan13	1.5426338
A kinase (PRKA) anchor protein 13	Akap13	1.5424538
non-SMC condensin II complex, subunit D3	Ncapd3	1.5424517
spindlin 1	Spin1	1.5415308
kelch repeat and BTB (POZ) domain containing 11	Kbtbd11	1.540523
protein tyrosine phosphatase, non-receptor type 9	Ptpn9	1.5389239
BAT2 domain containing 1	Bat2d	1.5385547
Cdc42 GTPase-activating protein	Cdgap	1.5371581
mitogen activated protein kinase kinase kinase 3	Map3k3	1.5357822
pyrin and HIN domain family, member 1	Pyhin1	1.5355837
ADP-ribosylation factor-like 6 interacting protein 1	Arl6ip1	1.5354928
phosphodiesterase 6D, cGMP-specific, rod, delta	Pde6d	1.5348915
cell division cycle 2-like 6 (CDK8-like)	Cdc2l6	1.5347614
CD28 antigen	Cd28	1.5331883
LIM domain containing preferred translocation partner in lipoma	Lpp	1.5322154
TSPY-like 3	Tspyl3	1.5317202
twinfilin, actin-binding protein, homolog 2 (Drosophila)	Twf2	1.5315182
Dipeptidylpeptidase 4	Dpp4	1.5309135
seven in absentia 1A	Siah1a	1.5302467
early growth response 2	Egr2	1.529518
RAR-related orphan receptor alpha	Rora	1.5291137
protein phosphatase 1K (PP2C domain containing)	Ppm1k	1.5287164
tetraspanin 13	Tspan13	1.528304
nuclear receptor coactivator 7	Ncoa7	1.5282198
BRCA1 associated RING domain 1	Bard1	1.5278986
RAB GTPase activating protein 1-like	Rabgap1l	1.5276946
E2F transcription factor 8	E2f8	1.5274099
stathmin 1	Stmn1	1.5271466
RAS p21 protein activator 1	Rasa1	1.5269173
SLAM family member 6	Slamf6	1.5264776
POU domain, class 6, transcription factor 1	Pou6f1	1.526224

H2A histone family, member V	H2afv	1.5249535
pleckstrin homology domain containing, family G (with RhoGef domain) member 2	Plekkg2	1.5245478
beta-1,4-N-acetyl-galactosaminyl transferase 1	B4galnt1	1.5242913
ataxia telangiectasia mutated homolog (human)	Atm	1.524087
kinesin family member 2C	Kif2c	1.522636
Werner syndrome homolog (human)	Wrn	1.5222743
solute carrier family 9 (sodium/hydrogen exchanger), isoform 3 regulator 1	Slc9a3r1	1.522111
transmembrane protein 173	Tmem173	1.52156
limb-bud and heart	Lbh	1.5213585
centaurin, delta 1	Centd1	1.520291
lymphocyte antigen 6 complex, locus C1	Ly6c1	1.5201616
transmembrane protein 173	Tmem173	1.5196265
alpha thalassemia/mental retardation syndrome X-linked homolog (human)	Atrx	1.5191835
S100P binding protein	S100pbp	1.5186918
GTPase, IMAP family member 7	Gimap7	1.51737
solute carrier family 9 (sodium/hydrogen exchanger), isoform 3 regulator 1	Slc9a3r1	1.5173373
Werner syndrome homolog (human)	Wrn	1.5165712
RAS p21 protein activator 1	Rasa1	1.515185
endothelial cell-specific molecule 1	Esm1	1.5150598
tubulin, gamma complex associated protein 6	Tubgcp6	1.5138952
serine carboxypeptidase 1	Scpep1	1.5126352
triple functional domain (PTPRF interacting)	Trio	1.5125456
homeodomain interacting protein kinase 1	Hipk1	1.5121641
protein tyrosine phosphatase, receptor type, J	Ptprj	1.5115849
kelch-like 24 (Drosophila)	Klhl24	1.5114713
Centromere protein A	Cenpa	1.5113944
forkhead box P1	Foxp1	1.5110192
cell division cycle associated 5	Cdca5	1.5107392
toll-like receptor 1	Tlr1	1.510131
IKAROS family zinc finger 3	Ikzf3	1.5100708
claspin homolog (Xenopus laevis)	Clspn	1.5098026
TBC1 domain family, member 16	Tbc1d16	1.5095147
claspin homolog (Xenopus laevis)	Clspn	1.5093397
ASF1 anti-silencing function 1 homolog B (S. cerevisiae)	Asf1b	1.5093386
AF4/FMR2 family, member 1	Aff1	1.5066215
nuclear factor of kappa light polypeptide gene enhancer in B-cells inhibitor, epsilon	Nfkbie	1.5058831
potassium large conductance calcium-activated channel, subfamily M, beta member 4	Kcnmb4	1.5051306
2-cell-stage, variable group, member 3	Tcstv3	1.5048141
phosphatidylinositol transfer protein, cytoplasmic 1	Pitpnc1	1.5046889
DAZ interacting protein 1	Dzip1	1.5041173
Janus kinase 2	Jak2	1.5037851
cytoskeleton associated protein 2-like	Ckap2l	1.5031108
UDP-Gal:betaGlcNAc beta 1,4-galactosyltransferase, polypeptide 4	B4galt4	1.5030804
Rho guanine nucleotide exchange factor (GEF) 3	Arhgef3	1.5028819
solute carrier family 9 (sodium/hydrogen exchanger), isoform 3 regulator 1	Slc9a3r1	1.502878
lysosomal acid lipase A	Lipa	1.5022496
T cell receptor alpha variable 12d-1	Trav12d-1	1.5019844
transporter 2, ATP-binding cassette, sub-family B (MDR/TAP)	Tap2	1.5015705
B-cell scaffold protein with ankyrin repeats 1	Bank1	1.5009409
centromere protein N	Cenpn	1.5006924