

Supplementary Tables S1 The up-regulated genes list

Gene Name	Gene Symbol	FDR
TSC22 domain family, member 3	Tsc22d3	0.000
DNA-damage-inducible transcript 4	Ddit4	0.000
immunoglobulin lambda chain complex ///		
immunoglobulin lambda chain, constant region 1 ///	Igl ///	
immunoglobulin lambda chain, variable 1 ///	Igl-C1 ///	
similar to Ig lambda-1 chain C region	Igl-V1 ///	0.000
LOC433053		
C-type lectin domain family 4, member d	Clec4d	0.000
immunoglobulin heavy chain 2 (serum IgA) ///		
immunoglobulin heavy chain (J558 family) ///	Igh-2 ///	
similar to immunoglobulin mu-chain	Igh-VJ558 ///	0.000
RIKEN cDNA A130040M12 gene	LOC544903	
CD209b antigen	A130040M12Rik	0.000
acid phosphatase 1, soluble	Cd209b	0.000
G protein-coupled receptor 137B, pseudogene	Acp1	0.000
complement component 1, q subcomponent, beta polypeptide	Gpr137b-ps	0.000
lectin, galactose binding, soluble 3	C1qb	0.000
triggering receptor expressed on myeloid cells-like 4	Lgals3	0.000
3-oxoacid CoA transferase 1	Trem14	0.000
similar to anti-glycoprotein-B of human	Oxct1	0.000
Cytomegalovirus immunoglobulin VI chain ///	LOC100047222 ///	
similar to Ig kappa chain V-III region PC 6684	LOC676193	0.000
predicted gene 7202 ///		
immunoglobulin kappa chain, constant region ///		
immunoglobulin kappa chain variable 19 (V19)-14 ///	Gm7202 ///	
immunoglobulin kappa chain variable 28 (V28) ///	Igk-C ///	
immunoglobulin kappa chain variable 6-25 ///	Igk-V19-14 ///	
similar to Chain L, Structural Basis Of Antigen Mimicry In A Clinically Relevant Melanoma Antigen System	Igk-V28 ///	
LOC100047628	Igkv6-25 ///	0.000
heat shock protein 1B	Hspa1b	0.000
connective tissue growth factor	Ctgf	0.001
CNDP dipeptidase 2 (metallopeptidase M20 family)	Cndp2	0.001
macrophage receptor with collagenous structure	Marco	0.001
C-type lectin domain family 4, member n	Clec4n	0.001
glutathione peroxidase 3	Gpx3	0.001
interleukin 18	Il18	0.001
chemokine (C-C motif) ligand 24	Ccl24	0.001
transforming growth factor, beta induced	Tgfb1	0.001
immunoglobulin lambda chain, variable 1	Igl-V1	0.001
cytochrome c oxidase, subunit Va	Cox5a	0.001
predicted gene 11428	Gm11428	0.001
superoxide dismutase 1, soluble	Sod1	0.001
DNA segment, Chr 4, Wayne State University 53, expressed	D4Wsu53e	0.001
complement component 4B (Chido blood group)	C4b	0.001
similar to Sesn1 protein ///	LOC100047324 ///	
sestrin 1	Sesn1	0.001
tubulin, alpha 1A	Tuba1a	0.001
component of Sp100-rs ///	Csprs ///	
predicted gene 7582	Gm7582	0.001
chemokine (C-X-C motif) receptor 4	Cxcr4	0.001
proteasome (prosome, macropain) subunit, beta type	Psmb4	0.001
CD68 antigen	Cd68	0.001
cathepsin B	Ctsb	0.001
RIKEN cDNA 2010309G21 gene ///	2010309G21Rik ///	
immunoglobulin lambda chain, constant region 2 ///	Igl-C2 ///	
immunoglobulin lambda chain, constant region 3	Igl-C3	0.001
albumin	Alb	0.001
predicted pseudogene 5963 ///	Gm5963 ///	
ribosomal protein annexin A5	Rps21	0.001
Anxa5	Anxa5	0.001

apolipoprotein L 8	Apol8	0.002
CD24a antigen	Cd24a	0.002
tropomyosin 2, beta	Tpm2	0.001
transthyretin	Ttr	0.001
Niemann Pick type C2	Npc2	0.001
S100 calcium binding protein A6 (calcyclin)	S100a6	0.002
transgelin	Tagln	0.002
RIKEN cDNA 2010309G21 gene /// immunoglobulin lambda chain, constant region 2	2010309G21Rik /// Igl-C2	0.002
clusterin /// similar to clusterin	Clu /// LOC100046120	0.004
CD5 antigen-like	Cd5l	0.004
predicted gene 11263 /// predicted gene 13654 /// 40S ribosomal protein S6 (Phosphoprotein NP33) /// ribosomal protein S6 pseudogene /// similar to 40S ribosomal protein S6 /// ribosomal protein S6	Gm11263 /// Gm13654 /// Gm14138 /// Gm16409 /// LOC639593 /// Rps6	0.005
prosaposin	Psap	0.005
phospholipase A2, group VII (platelet-activating factor acetylhydrolase, plasma)	Pla2g7	0.005
ring finger protein, LIM domain interacting cDNA sequence BC005512 /// RIKEN cDNA F630007L15 gene /// predicted gene 6958	Rlim BC005512 /// F630007L15Rik /// Gm6958	0.005
major urinary protein LOC100048885 /// major urinary protein 17 /// major urinary protein 1 /// major urinary protein 10 /// major urinary protein 12 /// major urinary protein 13 /// major urinary protein 2 /// major urinary protein 7 /// major heterogeneous nuclear ribonucleoprotein A1	LOC100048885 /// LOC100189605 /// Mup1 /// Mup10 /// Mup12 /// Mup13 /// Mup2 /// Mup7 /// Mup8	0.005
actin, alpha 2, smooth muscle, aorta	Hnrnpa1	0.005
phosphatidic acid phosphatase type 2B	Acta2	0.005
granulin	Ppap2b	0.005
RIKEN cDNA 1190002H23 gene	Grn	0.006
complement component 3	1190002H23Rik	0.006
solute carrier family 44, member 2	C3	0.006
transferrin	Slc44a2	0.006
3-hydroxy-3-methylglutaryl-Coenzyme A synthase 1	Trf	0.007
2'-5' oligoadenylate synthetase 1A	Hmgcs1	0.007
leucine-rich alpha-2-glycoprotein 1	Oas1a	0.008
gelsolin	Lrg1	0.009
regulator of G-protein signaling 2	Gsn	0.009
chemokine (C-C motif) ligand 21A /// chemokine (C-C motif) ligand 21B /// chemokine (C-C motif) ligand 21C (leucine)	Rgs2	0.009
C-type lectin domain family 7, member a	Ccl21a /// Ccl21b /// Ccl21c	0.009
interferon, alpha-inducible protein 27 like 2A	Clec7a	0.009
serine carboxypeptidase 1	Ifi27l2a	0.009
CD36 antigen	Scpep1	0.009
chromatin licensing and DNA replication factor 1	Cd36	0.009
RIKEN cDNA 1810011O10 gene	Cdt1	0.009
aldo-keto reductase family 1, member A4 (aldehyde reductase)	1810011O10Rik	0.009
SAM and SH3 domain containing 1	Akr1a4	0.009
ERBB receptor feedback inhibitor 1	Sash1	0.009
GTP cyclohydrolase 1	Errfi1	0.010
nuclear factor of kappa light polypeptide gene enhancer in B-cells inhibitor, epsilon	Gch1	0.010
immunoglobulin heavy chain 3 (serum IgG2b) /// Immunoglobulin heavy chain (gamma polypeptide)	Nfkbie	0.010
src-like adaptor	Igh-3 /// Ighg	0.010
similar to Nucleoplasmin-3 /// nucleoplasmin 3 /// nucleoplasmin 3, pseudogene 1	Sla	0.010
	LOC639633 /// Npm3 /// Npm3-ps1	0.011

histocompatibility 2, T region locus 10 ///		
histocompatibility 2, T region locus 22 ///	H2-T10 ///	H2-T22 ///
histocompatibility 2, T region locus 9		H2-T9
heat shock protein 8	Hspa8	0.012
interleukin 7 receptor	Il7r	0.012
EH-domain containing 1	Ehd1	0.012
surfeit gene 4	Surf4	0.012
prefoldin 5	Pfdn5	0.012
SRY-box containing gene 6	Sox6	0.015
glucosamine (N-acetyl)-6-sulfatase	Gns	0.014
tetraspanin 33	Tspan33	0.015
phosphatidylinositol 3-kinase, catalytic, alpha	Pik3ca	0.015
fructosamine 3 kinase	Fn3k	0.015
cathepsin Z	Ctsz	0.016
colipase, pancreatic	Clps	0.016
serine (or cysteine) peptidase inhibitor, clade A, member 3K	Serpina3k	0.015
mannosidase, alpha, class 2C, member 1	Man2c1	0.016
transmembrane protein 176A	Tmem176a	0.016
anillin, actin binding protein	Anln	0.016
SWA-70 protein	Swap70	0.018
Ena-vasodilator stimulated phosphoprotein	Evl	0.018
mediator complex subunit 13-like	Med13l	0.019
palmitoyl-protein thioesterase 1	Ppt1	0.019
expressed sequence AI324046	AI324046	0.019
diacylglycerol kinase, alpha	Dgka	0.020
cytochrome b-245, alpha polypeptide	Cyba	0.020
ribosomal protein S20	Rps20	0.021
kinesin family member 18B	Kif18b	0.021
apolipoprotein A-II	Apoa2	0.021
phospholipase A2, group IID	Pla2g2d	0.021
armadillo repeat containing 8	Armc8	0.021
adrenergic receptor kinase, beta 2	Adrbk2	0.021
solute carrier family 16 (monocarboxylic acid transporters), member 10	Slc16a10	0.021
ribosomal protein S13 pseudogene ///	Gm6573 ///	Gm6834 ///
pseudogene 6834 ///	LOC100044992 ///	Rps13
similar to ribosomal protein S13 ///		
ribosomal protein S13		0.021
malate dehydrogenase 1, NAD (soluble)	Mdh1	0.021
fascin homolog 1, actin bundling protein (Strongylocentrotus purpuratus)	Fscn1	0.021
similar to purine nucleoside phosphorylase ///	LOC100045567 ///	Pnp
purine-nucleoside phosphorylase		0.021
dual specificity phosphatase 1	Dusp1	0.021
CDC-like kinase 1	Clk1	0.021
breast carcinoma amplified sequence 2	Bcas2	0.022
cysteine-rich protein 1 (intestinal)	Crip1	0.022
Fc receptor, IgE, high affinity I, gamma polypeptide	Fcer1g	0.022
aspartyl aminopeptidase	Dnpep	0.022
TYRO protein tyrosine kinase binding protein	Tyrobp	0.023
coiled-coil domain containing 22	Ccdc22	0.024
spindlin 1	Spin1	0.024
transglutaminase 2, C polypeptide	Tgm2	0.024
Lymphocyte protein tyrosine kinase	Lck	0.024
peroxiredoxin 1	Prdx1	0.024
RAS-related G3 botulinum substrate 2	Rac2	0.024
vimentin	Vim	0.024
DnaJ (Hsp40) homolog, subfamily B, member 1	Dnajb1	0.024
proline-rich nuclear receptor coactivator 1	Pnrc1	0.024
cold inducible RNA binding protein	Cirbp	0.025
ADAM-like, decysin 1	Adamdec1	0.026

zinc finger protein 207	Zfp207	0.026
hepatitis B virus x interacting protein	Hbxip	0.026
erythrocyte protein band 4.2	Epb4.2	0.028
macrophage expressed gene 1	Mpeg1	0.028
aldolase A, fructose-bisphosphate	Aldoa	0.028
vasodilator-stimulated phosphoprotein	Vasp	0.028
ATPase, H ⁺ transporting, lysosomal V1 subunit G1 /// ATPase, H ⁺ transporting, lysosomal V1 subunit G1 pseudogene	Atp6v1g1 /// Gm7898	0.028
paxillin	Pxn	0.028
drebrin-like	Dbnl	0.027
splicing factor proline/glutamine rich (polypyrimidine tract binding protein associated)	Sfpq	0.029
hexosaminidase B	Hexb	0.029
histocompatibility 2, class II, locus Mb1 /// histocompatibility 2, class II, locus Mb2	H2-DMb1 /// H2-DMb2	0.028
ATX1 (antioxidant protein 1) homolog 1 (yeast)	Atox1	0.028
cystatin B	Cstb	0.029
lymphocyte antigen 6 complex, locus A	Ly6a	0.029
endothelial differentiation-related factor 1	Edf1	0.029
coronin 7	Coro7	0.030
FXD domain-containing ion transport regulator 5	Fxyd5	0.030
RIKEN cDNA 2700060E02 gene	2700060E02Rik	0.030
AHNAK nucleoprotein (desmoyokin)	Ahnak	0.030
histocompatibility 2, Q region locus 7	H2-Q7	0.030
phosphodiesterase 2A, cGMP-stimulated	Pde2a	0.031
capping protein (actin filament) muscle Z-line, alpha 2	Capza2	0.032
Immunoglobulin heavy chain 6 (heavy chain of IgM)	Igh-6	0.031
AHA1, activator of heat shock protein ATPase homolog 1 (yeast)	Ahsa1	0.032
pituitary tumor-transforming gene 1	Pttg1	0.032
histocompatibility 2, D region locus 1	H2-D1	0.031
natural killer cell group 7 sequence	Nkg7	0.031
peroxiredoxin 2	Prdx2	0.031
ribosomal protein L37	Rpl37	0.031
lysosomal-associated protein transmembrane 5	Laptm5	0.031
FK506 binding protein 1a	Fkbp1a	0.031
apolipoprotein E	ApoE	0.031
ficolin A	Fcna	0.032
DEAD (Asp-Glu-Ala-Asp) box polypeptide 5	Ddx5	0.032
trefoil factor 2 (spasmolytic protein 1)	Tff2	0.032
zinc finger, DHHC domain containing 14	Zdhhc14	0.032
non-SMC condensin I complex, subunit H	Ncaph	0.032
leukocyte specific transcript 1	Lst1	0.032
Duffy blood group, chemokine receptor	Darc	0.032
lysosomal acid lipase A	Lipa	0.033
stannin	Snn	0.033
legumain	Lgmn	0.033
E26 avian leukemia oncogene 1, 5' domain	Ets1	0.033
macrophage migration inhibitory factor	Mif	0.033
translocator protein	Tspo	0.033
zinc finger protein 36, C3H type-like 2	Zfp36l2	0.033
sel-1 suppressor of lin-12-like (C. elegans)	Sel1l	0.034
B and T lymphocyte associated	Btla	0.033
similar to protein phosphatase 1 /// protein phosphatase 1, catalytic subunit, beta isoform	LOC100044953 /// Ppp1cb	0.033
Rab acceptor 1 (prenylated)	Rabac1	0.033
biglycan	Bgn	0.033
G protein-coupled receptor 137B /// G protein- coupled receptor 137B, pseudogene /// similar to Gpr137b protein	Gpr137b /// Gpr137b-ps /// LOC100044979	0.033

nuclear factor of kappa light polypeptide gene enhancer in B-cells inhibitor, alpha	Nfkbia	0.033
actin, gamma, cytoplasmic 1	Actg1	0.033
RIKEN cDNA 6720456B07 gene	6720456B07Rik	0.033
ribosomal protein L7A pseudogene /// Ig mu chain V region AC38 205.12 /// similar to Ig heavy chain V-I region V35 precursor /// similar to Ig heavy chain V-I region V35 precursor /// similar to Ig heavy chain V-I region V35 precursor	Gm5353 /// IghmAC38.205.12 /// LOC634206 /// LOC634338 /// LOC640701	0.033
predicted gene 6742 /// predicted gene 7450 /// predicted gene 7993 /// predicted gene 9115 /// ornithine decarboxylase, structural 1	Gm6742 /// Gm7450 /// Gm7993 /// Gm9115 /// Odc1	0.033
ribonuclease H2, subunit C	Rnaseh2c	0.033
HIG1 domain family, member 1C /// methyltransferase like 7A1 /// methyltransferase like	Higd1c /// Mettl7a1 /// Mettl7a2	0.033
intercellular adhesion molecule 1	Icam1	0.033
ankyrin repeat and SOCS box-containing 2	Asb2	0.034
cell division cycle associated 5	Cdca5	0.034
RIKEN cDNA 4833423F13 gene	4833423F13Rik	0.035
YOD1 OTU deubiquitinating enzyme 1 homologue (S. cerevisiae)	Yod1	0.035
upstream binding protein 1	Ubp1	0.037
CDK2-associated protein 2	Cdk2ap2	0.036
B-cell leukemia/lymphoma 2 related protein A1a /// B-cell leukemia/lymphoma 2 related protein A1b /// B-cell leukemia/lymphoma 2 related protein A1d	Bcl2a1a /// Bcl2a1b /// Bcl2a1d	0.037
ecotropic viral integration site 2b	Evi2b	0.037
peroxiredoxin 4	Prdx4	0.037
TBC1 domain family, member 14	Tbc1d14	0.037
S100 calcium binding protein A4	S100a4	0.037
similar to immunoglobulin kappa-chain /// similar to Ig kappa chain V-V region MPC11 precursor	LOC100047162 /// LOC676175	0.037
chymotrypsin-like elastase family, member 3B	Cela3b	0.037
glial cell line derived neurotrophic factor family receptor alpha 2	Gfra2	0.038
heme oxygenase (decycling) 1	Hmox1	0.038
dual specificity phosphatase 2	Dusp2	0.038
transcription factor 19	Tcf19	0.038
membrane-spanning 4-domains, subfamily A, member	Ms4a1	0.037
mitogen-activated protein kinase kinase kinase 8	Map3k8	0.037
CD300A antigen	Cd300a	0.038
neural precursor cell expressed, developmentally down-regulated gene 9	Nedd9	0.039
histocompatibility 2, K1, K region	H2-K1	0.039
phosphatidic acid phosphatase type 2A	Ppap2a	0.039
RNA binding motif protein 3	Rbm3	0.039
growth arrest specific 5 /// small nucleolar RNA, C/D box 47	Gas5 /// Snord47	0.039
coagulation factor II (thrombin) receptor	F2r	0.039
CD97 antigen	Cd97	0.039
endothelial PAS domain protein 1	Epas1	0.039
methyltransferase like 9	Mettl9	0.039
cytohesin 1 interacting protein	Cytip	0.039
allograft inflammatory factor 1	Aif1	0.040
serine (or cysteine) peptidase inhibitor, clade A, member 3G	Serpina3g	0.041
selenoprotein W, muscle 1	Sepw1	0.041
RIKEN cDNA 1810010D01 gene	1810010D01Rik	0.041
DEP domain containing 1a	Depdc1a	0.041
transmembrane protein 14C	Tmem14c	0.041

proteasome (prosome, macropain) 26S subunit, ATPase, 4	Psmc4	0.041
DNA segment, Chr 10, Brigham & Women's Genetics 1379 expressed	D10Bwg1379e	0.041
moesin	Msn	0.042
phosphatidylserine synthase 2	Ptdss2	0.041
adaptor-related protein complex AP-1, mu subunit 1	Ap1m1	0.041
immunoglobulin joining chain	Igj	0.041
SAM domain and HD domain, 1	Samhd1	0.042
phosphatidylinositol 4-kinase, catalytic, alpha	Pi4ka	0.042
glycine N-methyltransferase	Gnmt	0.042
interferon induced transmembrane protein 1	Ifitm1	0.042
ribosomal protein, large, P0	Rplp0	0.042
tandem C2 domains, nuclear	Tc2n	0.042
Kell blood group	Kel	0.042
acid phosphatase 5, tartrate resistant	Acp5	0.042
lymphocyte cytosolic protein 1	Lcp1	0.042
calmodulin 1	Calm1	0.042
transmembrane protein 176B	Tmem176b	0.042
phosphoribosylaminoimidazole carboxylase, phosphoribosylaminoribosylaminoimidazole, succinocarboxamide synthetase	Paics	0.043
EF hand domain containing 2	Efhd2	0.044
protein tyrosine phosphatase-like A domain	Ptplad1	0.044
thymus cell antigen 1, theta	Thy1	0.044
RIKEN cDNA 1300017J02 gene	1300017J02Rik	0.045
chemokine (C-C motif) ligand 19	Ccl19	0.045
flightless I homolog (Drosophila)	Flii	0.044
similar to Lymphocyte antigen 6C precursor (Ly-6C) /// lymphocyte antigen 6 complex, locus C1 /// lymphocyte antigen 6 complex, locus C2	LOC100045833 /// Ly6c1 /// Ly6c2	0.044
apolipoprotein C-III	Apoc3	0.045
RIKEN cDNA 2900073G15 gene	2900073G15Rik	0.045
beta-2 microglobulin	B2m	0.045
RIKEN cDNA 5830436I19 gene	5830436I19Rik	0.044
hemoglobin, beta adult minor chain	Hbb-b2	0.045
solute carrier family 6 (neurotransmitter transporter, glycine), member 9	Slc6a9	0.045
transferrin receptor	Tfr	0.045
spermidine/spermine N1-acetyl transferase 1	Sat1	0.046
HCLS1 associated X-1	Hax1	0.046
beta galactoside alpha 2,6 sialyltransferase 1	St6gal1	0.046
eukaryotic translation elongation factor 1 alpha 1	Eef1a1	0.046
adenosine monophosphate deaminase 3	Ampd3	0.046
intercellular adhesion molecule 4, Landsteiner-Wiener blood group	Icam4	0.047
solute carrier family 40 (iron-regulated transporter), member 1	Slc40a1	0.047
proline-rich nuclear receptor coactivator 2	Pnrc2	0.047
predicted gene 11263 /// predicted gene 13654 /// 40S ribosomal protein S6 (Phosphoprotein NP33) /// ribosomal protein S6 pseudogene /// predicted gene 6476 /// predicted gene 8779 /// similar to 40S ribosomal protein S6 /// similar to 40S ribosomal protein S6 /// ribosomal protein S6	Gm11263 /// Gm13654 /// Gm14138 /// Gm16409 /// Gm6476 /// Gm8779 /// LOC236932 /// LOC639593 /// Rps6	0.047
histocompatibility 13	H13	0.047
erythrocyte protein band 4.9	Epb4.9	0.047
Rho guanine nucleotide exchange factor (GEF) 1	Arhgef1	0.047
glycerophosphocholine phosphodiesterase GDE1 homolog (S. cerevisiae)	Gpcpd1	0.047
ribosomal protein L39	Rpl39	0.048

torsin A interacting protein 2	Tor1aip2	0.047
ATPase inhibitory factor 1	Atpif1	0.047
prolactin regulatory element binding	Preb	0.047
lysosomal-associated protein transmembrane 4B	Laptm4b	0.048
solute carrier family 25 (mitochondrial carrier, adenine nucleotide translocator), member 4	Slc25a4	0.048
ribosomal protein S10	Rps10	0.048
niacin receptor 1	Niacr1	0.048
nuclear paraspeckle assembly transcript 1 (non-protein coding)	Neat1	0.048
cytochrome P450, family 3, subfamily a, polypeptide transmembrane and coiled-coil domains 2	Cyp3a11	0.048
ribosomal protein S12	Tmcc2	0.048
myosin, heavy polypeptide 9, non-muscle	Rps12	0.048
cDNA sequence BC094435 /// CCR4 carbon catabolite repression 4-like (<i>S. cerevisiae</i>) /// component of oligomeric golgi complex 6 /// predicted gene 4671 /// SH3-domain GRB2-like (endophilin) interacting protein 1	Myh9	0.048
calcium binding protein 39	BC094435 /// Ccrn4l /// Cog6 /// Gm4671 /// Sgip1	0.048
DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 3, X-linked	Cab39	0.048
CD28 antigen	Ddx3x	0.048
protein tyrosine phosphatase, non-receptor type 6	Cd28	0.048
phosphogluconate dehydrogenase	Ptpn6	0.048
histocompatibility 2, D region	Pgd	0.048
chymotrypsin-like elastase family, member 1	H2-L	0.048
transmembrane protein 33	Cela1	0.048
annexin A2	Tmem33	0.048
plasmalemma vesicle associated protein	Anxa2	0.048
myeloid/lymphoid or mixed-lineage leukemia (trithorax homolog, <i>Drosophila</i>); translocated to, 3	Plvap	0.048
eukaryotic translation elongation factor 1 delta (guanine nucleotide exchange protein)	Mllt3	0.047
eukaryotic translation initiation factor 3, subunit E	Eef1d	0.047
myeloid cell leukemia sequence 1	Eif3e	0.047
guanine nucleotide binding protein (G protein), alpha inhibiting 3	Mcl1	0.047
cDNA sequence BC094435	Gnai3	0.047
WAS/WASL interacting protein family, member 1	BC094435	0.047
glyoxalase 1	Wipf1	0.047
minichromosome maintenance deficient 6 (MIS5 homolog, <i>S. pombe</i>) (<i>S. cerevisiae</i>)	Glo1	0.048
S100 calcium binding protein A10 (calpactin)	Mcm6	0.048
interleukin 2 receptor, gamma chain	S100a10	0.048
spleen tyrosine kinase	Il2rg	0.048
nuclear factor of kappa light polypeptide gene enhancer in B-cells inhibitor, zeta	Sykb	0.048
RIKEN cDNA 2400001E08 gene /// predicted pseudogene 5510	Nfkbiz	0.048
phosphatidylinositol-5-phosphate 4-kinase, type II, chemokine (C-X-C motif) ligand 13	2400001E08Rik /// Gm5510	0.049
yippee-like 4 (<i>Drosophila</i>)	Pip4k2a	0.049
procollagen C-endopeptidase enhancer protein	Cxcl13	0.049
FH2 domain containing 1	Ypel4	0.049
fatty acid binding protein 4, adipocyte	Pcolce	0.049
AXL receptor tyrosine kinase	Fhdc1	0.050
similar to serine (or cysteine) proteinase inhibitor, clade A, member 1c /// serine (or cysteine) peptidase inhibitor, clade A, member 1C	Fabp4	0.050
transgelin 2	Axl	0.050
	LOC100046946 /// Serpina1c	0.050
	Tagln2	0.050

Supplementary Tables S2 The down-regulated probe sets list

Gene Name	Gene Symbol	FDR
cathelicidin antimicrobial peptide	Camp	0.000
neutrophilic granule protein	Ngp	0.000
lactotransferrin	Ltf	0.000
zinc finger protein 207	Zfp207	0.000
proteoglycan 2, bone marrow	Prg2	0.000
cathepsin G	Ctsg	0.000
proteinase 3	Prtn3	0.000
myeloperoxidase	Mpo	0.000
trimethylguanosine synthase homolog (S. cerevisiae)	Tgs1	0.000
collagen, type III, alpha 1	Col3a1	0.000
X-linked myotubular myopathy gene 1	Mtm1	0.000
RIKEN cDNA 1100001G20 gene	1100001G20Rik	0.000
chitinase 3-like 3 /// chitinase 3-like 4	Chi3l3 /// Chi3l4	0.000
RIKEN cDNA D930015E06 gene	D930015E06Rik	0.000
zinc finger protein 91	Zfp91	0.000
lipocalin 2	Lcn2	0.000
neural precursor cell expressed, developmentally down	Nedd4	0.000
spectrin beta 2	Spnb2	0.000
eosinophil-associated, ribonuclease A family, member	Ear1	0.000
zinc finger CCCH-type containing 15	Zc3h15	0.000
protein tyrosine phosphatase-like (proline instead of c	Ptpla	0.000
BCL2-associated transcription factor 1	Bclaf1	0.000
ciliary neurotrophic factor /// zinc finger protein 91 /	Cntf /// Zfp91 /// Zfp91-Cntf	0.000
cleavage and polyadenylation factor subunit homolog (:	Pcf11	0.000
PDGFA associated protein 1	Pdap1	0.001
protein-L-isoaspartate (D-aspartate) O-methyltransfe	Pcmdt1	0.001
eukaryotic translation initiation factor 3, subunit C	Eif3c	0.001
glycoprotein 5 (platelet)	Gp5	0.001
Special AT-rich sequence binding protein 1	Satb1	0.001
eukaryotic translation initiation factor 4E binding prote	Eif4ebp2	0.001
Class II transactivator	Ciita	0.001
RIKEN cDNA 2610507B11 gene	2610507B11Rik	0.001
cadherin 11 pseudogene	6820431F20Rik	0.001
endonuclease domain containing 1	Endod1	0.001
collagen, type V, alpha 2	Col5a2	0.001
inactive X specific transcripts	Xist	0.000
claudin domain containing 1	Cldnd1	0.000
heat shock protein 90, beta (Grp94), member 1	Hsp90b1	0.000
structural maintenance of chromosomes 4	Smc4	0.000
pellino 1	Peli1	0.000
myeloid/lymphoid or mixed-lineage leukemia 5	Mll5	0.000
S100 calcium binding protein A8 (calgranulin A)	S100a8	0.000
transformer 2 beta homolog (Drosophila)	Tra2b	0.002
Immunoglobulin kappa chain variable 14-111	Igkv14-111	0.002
trans-acting transcription factor 4	Sp4	0.002
splicing factor 3b, subunit 2	Sf3b2	0.002
glycoprotein 1b, alpha polypeptide	Gp1ba	0.002
Alport syndrome, mental retardation, midface hypoplas	Ammecr1	0.001
heat shock protein 90, alpha (cytosolic), class A memb	Hsp90aa1	0.001
arginine/serine-rich coiled-coil 2	Rsrc2	0.001
bromodomain PHD finger transcription factor	Bptf	0.001
DnaJ (Hsp40) homolog, subfamily C, member 2	Dnajc2	0.001
transducin (beta)-like 1 X-linked	Tbl1x	0.001
melanoma antigen	Mela	0.001
Rho-associated coiled-coil containing protein kinase 1	Rock1	0.001
Nipped-B homolog (Drosophila)	Nipbl	0.001
eukaryotic translation initiation factor 3, subunit A	Eif3a	0.001
CD177 antigen	Cd177	0.001

metastasis associated lung adenocarcinoma transcript	Malat1	0.001
E74-like factor 2	Elf2	0.001
olfactomedin 4	Olfm4	0.002
similar to ubiquitin-like domain containing CTD phosph	LOC100045709 /// Ublcp1	0.002
KRIT1, ankyrin repeat containing	Krit1	0.002
DEAD (Asp-Glu-Ala-Asp) box polypeptide 6	Ddx6	0.002
RIKEN cDNA E030016H06 gene	E030016H06Rik	0.002
RIKEN cDNA A230046K03 gene	A230046K03Rik	0.002
tubulin, beta 1	Tubb1	0.002
caldesmon 1	Cald1	0.002
kallikrein 1	Klk1	0.002
WNK lysine deficient protein kinase 1	Wnk1	0.002
eosinophil peroxidase	Epx	0.002
pro-platelet basic protein	Ppbp	0.002
structural maintenance of chromosomes 2	Smc2	0.003
vacuolar protein sorting 13B (yeast)	Vps13b	0.003
PRP40 pre-mRNA processing factor 40 homolog A (ye	Prpf40a	0.003
S100 calcium binding protein A9 (calgranulin B)	S100a9	0.002
Jun oncogene	Jun	0.003
nucleolar protein 8	Nol8	0.003
apoptotic chromatin condensation inducer 1	Acin1	0.003
family with sequence similarity 132, member A	Fam132a	0.003
BTB and CNC homology 2	Bach2	0.003
fatty acyl CoA reductase 1	Far1	0.003
alpha thalassemia/mental retardation syndrome X-link	Atrx	0.003
glycoprotein Ib, beta polypeptide	Gp1bb	0.003
coiled-coil domain containing 80	Ccdc80	0.003
chitinase 3-like 3	Chi3l3	0.003
membrane-spanning 4-domains, subfamily A, member	Ms4a3	0.003
muscleblind-like 1 (Drosophila)	Mbnl1	0.003
ribonuclease, RNase A family 4	Rnase4	0.003
transient receptor potential cation channel, subfamily I	Trpm7	0.003
carbonic anhydrase 1	Car1	0.003
regulator of G-protein signaling 18	Rgs18	0.003
NOP58 ribonucleoprotein homolog (yeast)	Nop58	0.003
N(alpha)-acetyltransferase 15, NatA auxiliary subunit	Naa15	0.003
pancreatic lipase	Pnlip	0.003
RIKEN cDNA 2810026P18 gene	2810026P18Rik	0.003
chromodomain helicase DNA binding protein 4	Chd4	0.003
replication factor C (activator 1) 1	Rfc1	0.003
RIKEN cDNA 2810453I06 gene	2810453I06Rik	0.003
ankyrin repeat domain 17	Ankrd17	0.003
radixin	Rdx	0.003
glia maturation factor, beta	Gmfb	0.003
RIKEN cDNA 2310035P21 gene	2310035P21Rik	0.003
dedicator of cytokinesis 10	Dock10	0.003
eukaryotic translation initiation factor 5	Eif5	0.003
myocyte enhancer factor 2C	Mef2c	0.003
LUC7-like 3 (S. cerevisiae)	Luc7l3	0.003
AT rich interactive domain 5B (MRF1-like) /// similar	Arid5b /// LOC100044968	0.003
cleavage and polyadenylation specific factor 6	Cpsf6	0.003
coagulation factor XIII, A1 subunit	F13a1	0.003
splicing factor, arginine/serine-rich 2, interacting prote	Sfrs2ip	0.003
C-type lectin domain family 1, member b	Clec1b	0.003
SWI/SNF related, matrix associated, actin dependent r	Smarca5	0.003
similar to nuclear pore complex-associated intranuclea	LOC100043998 /// Tpr	0.003
solute carrier family 12, member 2	Slc12a2	0.003
lysine (K)-specific demethylase 5A	Kdm5a	0.003
5'-3' exoribonuclease 2	Xrn2	0.003
S phase cyclin A-associated protein in the ER	Scaper	0.003
metallothionein 2	Mt2	0.003

C-type lectin domain family 2, member d	Clec2d	0.003
carbonic anhydrase 3	Car3	0.003
membrane-associated ring finger (C3HC4) 3	3.Mar	0.003
RNA binding motif protein 39	Rbm39	0.003
acyl-Coenzyme A binding domain containing 3	Acbd3	0.004
platelet factor 4	Pf4	0.004
deleted in malignant brain tumors 1	Dmbt1	0.004
kallikrein 1-related peptidase b5	Klk1b5	0.004
fusion, derived from t(12;16) malignant liposarcoma (hu	Fus	0.004
cDNA sequence BC028789	BC028789	0.004
kinesin family member 5B	Kif5b	0.004
CREB binding protein	Crebbp	0.004
Ly1 antibody reactive clone	Lyar	0.004
cDNA sequence AB041803	AB041803	0.005
similar to thrombospondin 1 /// thrombospondin 1	LOC640441 /// Thbs1	0.004
coagulation factor V	F5	0.004
myeloid/lymphoid or mixed-lineage leukemia 3	Mll3	0.004
cytidine monophospho-N-acetylneuraminic acid hydro	Cmah	0.005
zinc finger E-box binding homeobox 2	Zeb2	0.005
RPTOR independent companion of MTOR, complex 2	Rictor	0.005
collagen, type I, alpha 2	Col1a2	0.005
TAR DNA binding protein	Tardbp	0.005
guanine deaminase	Gda	0.005
cadherin 11 pseudogene	2610005L07Rik	0.005
signal recognition particle 72	Srp72	0.005
fibulin 5	Fbln5	0.005
asparagine synthetase	Asns	0.005
SWI/SNF related, matrix associated, actin dependent r	Smarca4	0.005
2,3-bisphosphoglycerate mutase	Bpgm	0.005
regulator of G-protein signaling 13	Rgs13	0.005
sphingosine-1-phosphate receptor 1	S1pr1	0.005
transmembrane protein 40	Tmem40	0.005
eosinophil-associated, ribonuclease A family, member	Ear1 /// Ear12 /// Ear2 /// Ear3	0.006
adiponectin, C1Q and collagen domain containing	Adipoq	0.006
asp (abnormal spindle)-like, microcephaly associated (I	Aspm	0.006
remodeling and spacing factor 1	Rsf1	0.006
signal recognition particle 54B	Srp54b	0.006
RIKEN cDNA 2610024D14 gene	2610024D14Rik	0.006
poly (A) polymerase alpha	Papola	0.006
ring finger protein 11	Rnf11	0.006
adaptor-related protein complex 3, beta 1 subunit	Ap3b1	0.006
3-phosphoglycerate dehydrogenase pseudogene /// 3	Gm13337 /// Gm5847 /// Gm6756	0.006
polybromo 1	Pbrm1	0.006
GTPase activating protein and VPS9 domains 1	Gapvd1	0.007
CCAAT-binding protein /// similar to transcription fac	Gm11560 /// LOC100045189 /// Y	0.006
ubiquitin-conjugating enzyme E2O	Ube2o	0.007
chromodomain helicase DNA binding protein 2	Chd2	0.007
inter alpha-trypsin inhibitor, heavy chain 4	Itih4	0.007
regenerating islet-derived 2	Reg2	0.007
mucin 1, transmembrane	Muc1	0.007
interferon regulatory factor 8	Irf8	0.007
pancreatic lipase-related protein 2	Pnliprp2	0.007
DNA segment, Chr 17, human D6S56E 5	D17H6S56E-5	0.007
ras homolog gene family, member U	Rhou	0.007
eosinophil-associated, ribonuclease A family, member	Ear2	0.008
Pleckstrin homology domain interacting protein	Phip	0.008
PHD finger protein 20-like 1	Phf20l1	0.008
makorin, ring finger protein, 1	Mkrn1	0.008
B-cell CLL/lymphoma 11A (zinc finger protein)	Bcl11a	0.008
secreted acidic cysteine rich glycoprotein	Sparc	0.008
RAB27b, member RAS oncogene family	Rab27b	0.008

histone cluster 1, H3a /// histone cluster 1, H3b /// Hist1h3a /// Hist1h3b /// Hist1h3c		0.008
adducin 3 (gamma)	Add3	0.008
heat shock protein 90 alpha (cytosolic), class B member	Hsp90ab1	0.009
myeloblastosis oncogene	Myb	0.009
phosphatase and tensin homolog	Pten	0.009
structural maintenance of chromosomes 6	Smc6	0.009
LUC7-like 2 (<i>S. cerevisiae</i>)	Luc7l2	0.009
leucyl/cystinyl aminopeptidase	Lnpep	0.009
galanin	Gal	0.009
CD2-associated protein	Cd2ap	0.009
keratin 8	Krt8	0.009
lysosomal-associated protein transmembrane 5	Laptm5	0.009
radical S-adenosyl methionine domain containing 2	Rsad2	0.009
RIKEN cDNA 9030425P06 gene	9030425P06Rik	0.009
ATPase, Ca ⁺⁺ transporting, plasma membrane 1	Atp2b1	0.009
RNA binding motif protein 25	Rbm25	0.010
splicing factor, arginine/serine-rich 18	Sfrs18	0.011
hypothetical D930050J11	D930050J11	0.011
nuclear protein 1	Nupr1	0.011
guanine nucleotide binding protein, alpha 13	Gna13	0.011
cell division cycle 5-like (<i>S. pombe</i>)	Cdc5l	0.012
RIKEN cDNA 2210010C04 gene	2210010C04Rik	0.012
NOP56 ribonucleoprotein homolog (yeast)	Nop56	0.012
WD repeat domain 18	Wdr18	0.012
ankyrin repeat domain 11	Ankrd11	0.012
heterogeneous nuclear ribonucleoprotein D-like	Hnrpdl	0.012
erythrocyte protein band 4.1	Epb4.1	0.012
annexin A1	Anxa1	0.012
proliferation-associated 2G4	Pa2g4	0.013
cyclin L1	Ccnl1	0.013
RIKEN cDNA 2610018G03 gene	2610018G03Rik	0.013
X-linked inhibitor of apoptosis	Xiap	0.013
RIKEN cDNA 1810010K12 gene	1810010K12Rik	0.013
arachidonate 12-lipoxygenase	Alox12	0.013
syncollin	Sycn	0.014
cyclin D2	Ccnd2	0.014
pancreas specific transcription factor, 1a	Ptf1a	0.014
immunoglobulin kappa chain variable 32 (V32)	Igk-V32	0.014
homer homolog 2 (<i>Drosophila</i>)	Homer2	0.015
splicing factor 3b, subunit 1	Sf3b1	0.015
zymogen granule protein 16	Zg16	0.015
MRV integration site 1	Mrvi1	0.015
histone cluster 1, H2bc	Hist1h2bc	0.015
CWC22 spliceosome-associated protein homolog (<i>S. cerevisiae</i>)	Cwc22 /// Gm14702 /// Gm2100 /	0.015
bobby sox homolog (<i>Drosophila</i>)	Bbx	0.015
melanoma antigen family B, 16	Mageb16	0.015
solute carrier family 43, member 1	Slc43a1	0.015
tropomodulin 3	Tmod3	0.015
bioorientation of chromosomes in cell division 1-like	Bod1l	0.015
sestrin 3	Sesn3	0.016
cytospin B	Cytsb	0.016
phosphorylated adaptor for RNA export	Phax	0.016
histone cluster 1, H1c	Hist1h1c	0.016
antigen identified by monoclonal antibody Ki 67	Mki67	0.017
suppressor of zeste 12 homolog (<i>Drosophila</i>)	Suz12	0.017
actin-binding LIM protein 1	Ablim1	0.018
THO complex 2	Thoc2	0.018
A kinase (PRKA) anchor protein (yotiao) 9	Akap9	0.018
chymotrypsinogen B1	Ctrb1	0.018
cyclin-dependent kinase 4	Cdk4	0.018
3-phosphoinositide dependent protein kinase-1	Pdk1	0.018

zinc finger, HIT domain containing 1	Znhit1	0.018
early B-cell factor 1	Ebf1	0.019
regenerating islet-derived 3 alpha	Reg3a	0.019
vitronectin	Vtn	0.019
interferon inducible GTPase 1	Iigp1	0.019
RIKEN cDNA E430014B02 gene	E430014B02Rik	0.020
growth arrest specific 5	Gas5	0.021
CD37 antigen	Cd37	0.021
collagen, type XIV, alpha 1	Col14a1	0.021
serine/threonine kinase 17b (apoptosis-inducing)	Stk17b	0.021
RIKEN cDNA 5830474E16 gene	5830474E16Rik	0.021
F-box protein 5	Fbxo5	0.022
solute carrier family 25, member 39	Slc25a39	0.022
MYC binding protein 2	Mycbp2	0.022
CCCTC-binding factor	Ctcf	0.022
RIKEN cDNA 2810474O19 gene	2810474O19Rik	0.023
thiamine pyrophosphokinase	Tpk1	0.023
centromere protein F	Cenpf	0.024
Rap guanine nucleotide exchange factor (GEF) 6	Rapgef6	0.024
DNA segment, Chr 10, Brigham & Women's Genetics 1	D10Bwg1379e	0.025
RIKEN cDNA 5830415B17 gene	5830415B17Rik	0.026
f-box protein 9	Fbxo9	0.026
DDB1 and CUL4 associated factor 12	Dcaf12	0.026
RAB14, member RAS oncogene family	Rab14	0.026
topoisomerase I binding, arginine/serine-rich	Topors	0.027
CD22 antigen	Cd22	0.027
SWI/SNF related, matrix associated, actin dependent r	Smarcc1	0.027
steroidogenic acute regulatory protein	Star	0.027
family with sequence similarity 63, member B	Fam63b	0.027
carboxypeptidase B1 (tissue)	Cpb1	0.028
PC4 and SFRS1 interacting protein 1	Psp1	0.029
zinc finger CCCH type containing 11A	Zc3h11a	0.029
apolipoprotein L 7c /// apolipoprotein L, 3-like	Apol7c /// Gm8221	0.029
integrin alpha 4	Itga4	0.031
eukaryotic translation initiation factor 2C, 2	Eif2c2	0.031
carboxypeptidase A1	Cpa1	0.031
carboxyl ester lipase	Cel	0.031
similar to stem cell adaptor protein STAP-1 /// signal	LOC100047840 /// Stap1	0.031
eukaryotic translation initiation factor 5B	Eif5b	0.031
metallothionein 1	Mt1	0.032
protease, serine, 2	Prss2	0.032
3-phosphoglycerate dehydrogenase pseudogene /// 3	Gm7669 /// Gm7901 /// Gm9347 /	0.032
per-hexamer repeat gene 4	Phxr4	0.032
cadherin 1	Cdh1	0.032
immunoglobulin kappa chain variable 19 (V19)-20	Igk-V19-20	0.033
far upstream element (FUSE) binding protein 1	Fubp1	0.032
ankyrin repeat domain 43	Ankrd43	0.032
phosphatidylserine decarboxylase, pseudogene 3	Pisd-ps3	0.032
peptidyl-prolyl isomerase G (cyclophilin G)	Ppig	0.032
Ras homolog gene family, member A	Rhoa	0.032
membrane-associated ring finger (C3HC4) 7	7.Mar	0.033
tachykinin 2	Tac2	0.033
cyclin E2	Ccne2	0.033
speckle-type POZ protein	Spop	0.034
leucine carboxyl methyltransferase 1	Lcmt1	0.035
serine/arginine repetitive matrix 2	Srrm2	0.035
glycoprotein 9 (platelet)	Gp9	0.035
similar to crooked legs CG14938-PB /// zinc finger pr	LOC100047782 /// Zfp771	0.036
myeloid/lymphoid or mixed-lineage leukemia 1	Mll1	0.036
family with sequence similarity 46, member C	Fam46c	0.036
hypothetical protein LOC100046817 /// TBC1 domain	LOC100046817 /// Tbc1d1	0.037

mannose receptor, C type 1	Mrc1	0.037
inner centromere protein	Incenp	0.037
Rho GTPase activating protein 5	Arhgap5	0.037
general transcription factor IIF, polypeptide 1	Gtf2f1	0.037
expressed sequence AI504432	AI504432	0.038
Von Willebrand factor homolog	Vwf	0.038
transcription factor Dp 2	Tfdp2	0.038
solute carrier family 41, member 1	Slc41a1	0.038
promyelocytic leukemia	Pml	0.038
RAS, guanyl releasing protein 3	Rasgrp3	0.039
heat shock 105kDa/110kDa protein 1	Hsph1	0.039
Luc7 homolog (<i>S. cerevisiae</i>)-like	Luc7l	0.039
ChaC, cation transport regulator homolog 2 (<i>E. coli</i>)	Chac2	0.040
peroxiredoxin 4	Prdx4	0.040
intersectin 2	Its2	0.041
metadherin	Mtdh	0.041
exportin 7	Xpo7	0.041
Janus kinase 1	Jak1	0.042
G2/M-phase specific E3 ubiquitin ligase	G2e3	0.042
zinc finger protein 871	Zfp871	0.042
ethanolamine kinase 1	Etnk1	0.043
HECT, UBA and WWE domain containing 1	Huwe1	0.043
RNA binding motif protein 26	Rbm26	0.043
tripartite motif-containing 7	Trim7	0.043
splicing factor, arginine/serine-rich 7	Sfrs7	0.043
bromodomain containing 2	Brd2	0.043
B-cell translocation gene 1, anti-proliferative	Btg1	0.043
expressed sequence C79407	C79407	0.043
ATPase, aminophospholipid transporter (APLT), class I	Atp8a1	0.043
IKAROS family zinc finger 2	Ikzf2	0.043
RIKEN cDNA 1110020G09 gene	1110020G09Rik	0.044
ATP synthase, H ⁺ transporting, mitochondrial FO comp	Atp5g1	0.045
RIKEN cDNA 5730469M10 gene	5730469M10Rik	0.045
basigin	Bsg	0.046
metal response element binding transcription factor 2	Mtf2	0.047
chemokine (C-X-C motif) receptor 5	Cxcr5	0.047
interferon-induced protein with tetratricopeptide repeats	Ifit1	0.047
ATP-binding cassette, sub-family B (MDR/TAP), mem	Abcb10	0.047
elastase, neutrophil expressed	Elane	0.047
synuclein, alpha	Sncα	0.048
high mobility group box 3	Hmgb3	0.048
Protein tyrosine phosphatase, receptor type, C	Ptpcr	0.049
GTP binding protein 4	Gtpbp4	0.049
RIKEN cDNA A430108E01 gene	A430108E01Rik	0.050
inositol polyphosphate-4-phosphatase, type II	Inpp4b	0.050