

Supplementary material for

Heterogeneous gene expression signatures correspond to distinct lung pathologies and biomarkers of disease severity in idiopathic pulmonary fibrosis

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Supplementary Table 1. IPF lung tissue subject characteristics

Variable	(N=40)
Age, years	60.6 (8.8)
Male gender, N (%)	33 (83)
VATS biopsy, Explant, N	11, 29
Ever smoked %	68
FVC, % predicted	55.8 (17.2)
TLC, % predicted	55.7 (16.2)
DLCO, % predicted	34.1 (13.8)

Age, FVC, TLC, and DLCO are reported as mean (standard deviation).

Abbreviations: VATS, video assisted thoracoscopic biopsy; FVC, forced vital capacity; TLC, total lung capacity; DLCO, diffusion capacity of carbon monoxide. There were no current smokers in the cohort.

Supplementary table 2. Genes in bronchiolar and lymphoid signatures used for qPCR validation of microarray signatures

Gene	Signature	TaqMan assay ID
HPRT1	Housekeeping	Hs02800695_m1
CCR6	Lymphoid	Hs01890706_s1
CCR7	Lymphoid	Hs01013469_m1
CD19	Lymphoid	Hs00174333_m1
CXCL13	Lymphoid	Hs00757930_m1
BMP7	Bronchiolar	Hs00233476_m1
CLCA2	Bronchiolar	Hs00998916_m1
CLU	Bronchiolar	Hs00156548_m1
FGF14	Bronchiolar	Hs00738588_m1
GSTA1	Bronchiolar	Hs00275575_m1
HS3ST1	Bronchiolar	Hs00245421_s1
IGFBP2	Bronchiolar	Hs01040719_m1
KRT17	Bronchiolar	Hs01588578_m1
MMP1	Bronchiolar	Hs00899658_m1
MMP3	Bronchiolar	Hs00968305_m1
KRT15	Bronchiolar	Hs00267035_m1
MUCL1	Bronchiolar	Hs00536495_m1
MUC20	Bronchiolar	Hs00416321_m1
MUC4	Bronchiolar	Hs00366414_m1
SERPINB4	Bronchiolar	Hs01691258_g1
SERPINB3	Bronchiolar	Hs00199468_m1
TFF3	Bronchiolar	Hs00902278_m1
SIX1	Bronchiolar	Hs00195590_m1
SPRR1B	Bronchiolar	Hs00234164_m1
TP63	Bronchiolar	Hs00978343_m1

Supplementary Table 3A. Differentially expressed genes in IPF vs. control lung tissue.

Genes with a fold change (FC) $\geq |1.5|$ and Benjamini-Hochberg adjusted p-value < 0.05 in IPF (N=40) compared to control (N=8) bulk lung biopsies are listed.

UPREGULATED in IPF vs. control				
Gene Symbol	Gene Name	Agilent probe ID	Log ₂ FC	q-value
IL13RA2	interleukin 13 receptor, alpha 2	A_23_P85209	5.5	5.5E-14
MMP1	matrix metalloproteinase 1 (interstitial collagenase)	A_23_P1691	5.3	7.9E-07
UBD	ubiquitin D	A_23_P81898	4.8	8.1E-12
GPR87	G protein-coupled receptor 87	A_23_P121120	4.5	2.2E-07
SFRP2	secreted frizzled-related protein 2	A_24_P137501	4.2	1.3E-10
GREM1	gremlin 1	A_23_P432947	4.2	1.4E-06
GJB2	gap junction protein, beta 2, 26kDa	A_23_P204941	4.2	1.5E-09
BDKRB1	bradykinin receptor B1	A_24_P919850	4.2	4.4E-09
COL17A1	collagen, type XVII, alpha 1	A_23_P501010	4.1	1.4E-13
KRT17	keratin 17	A_23_P96158	4.1	2.2E-09
IGFL2	IGF-like family member 2	A_23_P153571	4.1	1.9E-06
MMP13	matrix metalloproteinase 13 (collagenase 3)	A_23_P138931	4.1	4.2E-06
CCL11	chemokine (C-C motif) ligand 11	A_23_P66635	4.1	9.6E-09
CXCL14	chemokine (C-X-C motif) ligand 14	A_23_P213745	4.1	3.8E-12
CXCL6	chemokine (C-X-C motif) ligand 6 (granulocyte chemotactic protein 2)	A_23_P155755	4.0	3.6E-05
LRRC55	leucine rich repeat containing 55	A_24_P819890	4.0	2.4E-10
MMP12	matrix metalloproteinase 12 (macrophage elastase)	A_23_P340698	3.8	1.5E-05
LGALS2	lectin, galactoside-binding, soluble, 2	A_23_P120902	3.8	1.1E-06
FNDC1	fibronectin type III domain containing 1	A_23_P407840	3.8	2.8E-08
SERPINB3	serpin peptidase inhibitor, clade B (ovalbumin), member 3	A_23_P55632	3.7	1.7E-03
KRT14	keratin 14	A_24_P265346	3.7	1.5E-08
MMP11	matrix metalloproteinase 11 (stromelysin 3)	A_23_P57417	3.7	1.1E-06
SPP1	secreted phosphoprotein 1	A_23_P7313	3.6	1.5E-04
IL13	interleukin 13	A_23_P251031	3.6	1.1E-04
HS6ST2	heparan sulfate 6-O-sulfotransferase 2	A_24_P105191	3.6	1.3E-10
MSMB	microseminoprotein, beta-	A_24_P146683	3.6	2.4E-02
SPRR1A	small proline-rich protein 1A	A_23_P74012	3.5	8.0E-08
SERPINB4	serpin peptidase inhibitor, clade B (ovalbumin), member 4	A_23_P502413	3.5	2.2E-03
VTCN1	V-set domain containing T cell activation inhibitor 1	A_23_P518	3.5	1.2E-03
IL8	interleukin 8	A_32_P87013	3.5	2.4E-05
COL10A1	collagen, type X, alpha 1	A_23_P214144	3.4	8.1E-07
CXCL13	chemokine (C-X-C motif) ligand 13	A_23_P121695	3.4	1.0E-03
MMP7	matrix metalloproteinase 7 (matrilysin, uterine)	A_23_P52761	3.4	1.5E-10

S100A2	S100 calcium binding protein A2	A_23_P201706	3.4	7.4E-05
TDO2	tryptophan 2,3-dioxygenase	A_23_P80974	3.4	6.1E-10
COL14A1	collagen, type XIV, alpha 1	A_24_P254789	3.4	3.5E-12
SCG5	secretogranin V (7B2 protein)	A_23_P62081	3.3	5.4E-11
SELE	selectin E	A_23_P97112	3.3	2.8E-05
BDKRB2	bradykinin receptor B2	A_23_P304897	3.3	7.7E-11
IGHV1-69	immunoglobulin heavy variable 1-69	A_24_P367432	3.3	5.4E-08
CHRD2	chordin-like 2	A_24_P335202	3.3	4.9E-08
CCR7	chemokine (C-C motif) receptor 7	A_23_P343398	3.3	5.6E-10
C4orf7	chromosome 4 open reading frame 7	A_23_P362694	3.3	1.5E-04
POU2AF1	POU class 2 associating factor 1	A_23_P312920	3.3	7.9E-07
BNC1	basonuclin 1	A_23_P22134	3.3	3.0E-07
CCL7	chemokine (C-C motif) ligand 7	A_23_P78037	3.3	5.0E-04
DIO2	deiodinase, iodothyronine, type II	A_23_P48740	3.2	3.9E-11
TNS4	tensin 4	A_23_P207850	3.2	1.6E-05
C20orf103	chromosome 20 open reading frame 103	A_23_P40295	3.2	3.9E-10
CD28	CD28 molecule	A_23_P91095	3.2	5.6E-11
IGLJ3	immunoglobulin lambda joining 3	A_24_P605563	3.2	1.1E-06
CHIT1	chitinase 1 (chitotriosidase)	A_23_P126278	3.1	1.5E-05
CYP24A1	cytochrome P450, family 24, subfamily A, polypeptide 1	A_23_P28815	3.1	9.8E-05
VCAM1	vascular cell adhesion molecule 1	A_23_P34345	3.1	1.3E-10
CCL19	chemokine (C-C motif) ligand 19	A_23_P123853	3.1	4.8E-13
CCL2	chemokine (C-C motif) ligand 2	A_23_P89431	3.1	4.8E-08
C15orf48	chromosome 15 open reading frame 48	A_23_P26024	3.1	1.6E-09
ATP6V0D2	ATPase, H+ transporting, lysosomal 38kDa, V0 subunit d2	A_23_P146146	3.0	2.4E-04
TNIP3	TNFAIP3 interacting protein 3	A_23_P386478	3.0	7.9E-06
ALDH1A3	aldehyde dehydrogenase 1 family, member A3	A_23_P205959	3.0	2.7E-12
F2RL2	coagulation factor II (thrombin) receptor-like 2	A_32_P60065	3.0	3.5E-06
TMPRSS4	transmembrane protease, serine 4	A_23_P127608	3.0	5.3E-06
IL11	interleukin 11	A_23_P67169	3.0	8.3E-07
IGJ	immunoglobulin J polypeptide, linker protein for immunoglobulin alpha and mu polypeptides	A_23_P167168	3.0	4.0E-05
MMP16	matrix metalloproteinase 16 (membrane-inserted)	A_23_P123448	3.0	4.7E-10
CHI3L1	chitinase 3-like 1 (cartilage glycoprotein-39)	A_24_P274111	3.0	2.2E-07
EGR3	early growth response 3	A_23_P216225	3.0	7.2E-06
CTHRC1	collagen triple helix repeat containing 1	A_23_P111888	2.9	2.2E-07
LGALS7	lectin, galactoside-binding, soluble, 7	A_24_P238250	2.9	2.3E-04
TP63	tumor protein p63	A_23_P327380	2.9	1.7E-05
CP	ceruloplasmin (ferroxidase)	A_23_P414793	2.9	1.0E-04
KRT6B	keratin 6B	A_23_P76249	2.9	8.4E-04
SLAMF7	SLAM family member 7	A_24_P353638	2.9	1.3E-08

HAS2	hyaluronan synthase 2	A_23_P10206	2.9	4.4E-06
LRRN1	leucine rich repeat neuronal 1	A_24_P240187	2.9	4.1E-09
SCRG1	stimulator of chondrogenesis 1	A_23_P167159	2.9	1.1E-06
WNT10A	wingless-type MMTV integration site family, member 10A	A_23_P102113	2.8	5.5E-14
LGALS7B	lectin, galactoside-binding, soluble, 7B	A_24_P348118	2.8	2.8E-04
RGS4	regulator of G-protein signaling 4	A_23_P200737	2.8	4.8E-08
MMP10	matrix metalloproteinase 10 (stromelysin 2)	A_23_P13094	2.8	2.0E-04
CLDN1	claudin 1	A_23_P57784	2.8	1.1E-09
FHL2	four and a half LIM domains 2	A_23_P108751	2.8	1.6E-13
C6orf176	chromosome 6 open reading frame 176	A_24_P636301	2.8	2.0E-04
LCN2	lipocalin 2	A_23_P169437	2.8	2.8E-05
LRRC15	leucine rich repeat containing 15	A_24_P827037	2.8	7.3E-07
KIAA0125	KIAA0125	A_24_P95723	2.8	5.5E-04
P4HA3	prolyl 4-hydroxylase, alpha polypeptide III	A_23_P127957	2.7	6.9E-08
LPPR4	lipid phosphate phosphatase-related protein type 4	A_32_P148538	2.7	1.5E-09
ZBTB32	zinc finger and BTB domain containing 32	A_23_P131024	2.7	1.4E-07
SULF1	sulfatase 1	A_23_P43164	2.7	3.6E-10
CD1A	CD1a molecule	A_23_P63167	2.7	6.1E-07
IGHV3-48	immunoglobulin heavy variable 3-48	A_24_P204727	2.7	3.7E-06
IGLL1	immunoglobulin lambda-like polypeptide 1	A_24_P83102	2.7	3.8E-06
ADAMTS14	ADAM metalloproteinase with thrombospondin type 1 motif, 14	A_24_P275073	2.7	6.0E-10
AMPD1	adenosine monophosphate deaminase 1	A_23_P51787	2.7	5.9E-04
DAPL1	death associated protein-like 1	A_23_P165598	2.6	1.3E-04
LUZP2	leucine zipper protein 2	A_24_P649282	2.6	1.9E-04
KRT16	keratin 16	A_24_P392991	2.6	1.7E-05
SMPX	small muscle protein, X-linked	A_23_P253542	2.6	4.4E-06
PROM1	prominin 1	A_23_P258463	2.6	9.1E-03
KIF26B	kinesin family member 26B	A_23_P63541	2.6	7.8E-07
GPR110	G protein-coupled receptor 110	A_23_P214267	2.6	1.2E-06
SPINK1	serine peptidase inhibitor, Kazal type 1	A_23_P214079	2.6	1.5E-04
CCR6	chemokine (C-C motif) receptor 6	A_24_P234921	2.6	1.7E-08
DERL3	Der1-like domain family, member 3	A_23_P6362	2.6	2.6E-06
ADCYAP1	adenylate cyclase activating polypeptide 1 (pituitary)	A_24_P335781	2.5	9.1E-05
KRT5	keratin 5	A_23_P218047	2.5	7.9E-05
PAX9	paired box 9	A_32_P70818	2.5	1.9E-03
COMP	cartilage oligomeric matrix protein	A_23_P90436	2.5	3.5E-06
LOC642131	putative V-set and immunoglobulin domain-containing protein 6-like	A_24_P750327	2.5	8.3E-06
CXCL1	chemokine (C-X-C motif) ligand 1 (melanoma growth stimulating activity, alpha)	A_23_P7144	2.5	1.1E-04
LYPD1	LY6/PLAUR domain containing 1	A_32_P101031	2.5	2.1E-06

SERPIND1	serpin peptidase inhibitor, clade D (heparin cofactor), member 1	A_24_P40306	2.5	2.1E-06
UGT1A6	UDP glucuronosyltransferase 1 family, polypeptide A6	A_24_P222872	2.5	3.6E-04
ZNF683	zinc finger protein 683	A_23_P318380	2.5	1.0E-05
CDH3	cadherin 3, type 1, P-cadherin (placental)	A_23_P49155	2.5	5.8E-12
FCRL5	Fc receptor-like 5	A_23_P201211	2.5	4.0E-05
OXTR	oxytocin receptor	A_23_P132619	2.5	1.0E-03
PIP	prolactin-induced protein	A_23_P8702	2.5	2.1E-02
DSG3	desmoglein 3	A_23_P153120	2.5	2.4E-03
HDC	histidine decarboxylase	A_23_P117662	2.5	4.3E-07
CDKN2A	cyclin-dependent kinase inhibitor 2A (melanoma, p16, inhibits CDK4)	A_23_P43484	2.5	1.7E-09
JSRP1	junctional sarcoplasmic reticulum protein 1	A_23_P397320	2.4	9.0E-05
DPYS	dihydropyrimidinase	A_23_P20303	2.4	1.2E-04
THY1	Thy-1 cell surface antigen	A_23_P36364	2.4	1.3E-10
CD24	CD24 molecule	A_23_P85250	2.4	6.8E-11
PSCA	prostate stem cell antigen	A_23_P71379	2.4	4.8E-02
SFRP4	secreted frizzled-related protein 4	A_23_P215328	2.4	2.0E-05
KIAA1199	KIAA1199	A_23_P324754	2.4	4.4E-07
MMP3	matrix metalloproteinase 3 (stromelysin 1, progelatinase)	A_23_P161698	2.4	5.0E-05
PCSK1	proprotein convertase subtilisin/kexin type 1	A_24_P174793	2.4	1.1E-03
ANKRD30BP2	ankyrin repeat domain 30B pseudogene 2	A_24_P917819	2.4	1.7E-03
IGLV3-21	immunoglobulin lambda variable 3-21	A_24_P465799	2.4	1.9E-06
TNN	tenascin N	A_32_P480177	2.4	9.0E-05
ADAMTS16	ADAM metalloproteinase with thrombospondin type 1 motif, 16	A_23_P41629	2.4	2.1E-04
IGDCC4	immunoglobulin superfamily, DCC subclass, member 4	A_23_P14673	2.4	1.7E-08
C8orf47	chromosome 8 open reading frame 47	A_23_P333029	2.4	2.7E-03
CXCR5	chemokine (C-X-C motif) receptor 5	A_24_P252945	2.4	3.0E-04
CCR3	chemokine (C-C motif) receptor 3	A_23_P250302	2.4	7.2E-04
STMN2	stathmin-like 2	A_23_P146274	2.4	6.7E-05
TMEM229A	transmembrane protein 229A	A_32_P47027	2.4	7.1E-06
CPXM2	carboxypeptidase X (M14 family), member 2	A_23_P138524	2.4	4.1E-10
PCP4	Purkinje cell protein 4	A_23_P109322	2.4	9.6E-05
TIGIT	T cell immunoreceptor with Ig and ITIM domains	A_23_P80528	2.4	8.6E-08
SCFV	single-chain Fv fragment	A_24_P889462	2.3	1.5E-05
CLCA2	chloride channel accessory 2	A_23_P397248	2.3	6.5E-04
COLEC11	collectin sub-family member 11	A_23_P120125	2.3	1.1E-06
TMEM90B	transmembrane protein 90B	A_23_P251043	2.3	4.4E-10
C13orf33	chromosome 13 open reading frame 33	A_24_P90597	2.3	1.0E-04
CABYR	calcium binding tyrosine-(Y)-phosphorylation regulated	A_23_P314712	2.3	8.6E-08

LOC100507254	hypothetical LOC100507254	A_32_P101110	2.3	1.7E-04
IGLL5	immunoglobulin lambda-like polypeptide 5	A_23_P159435	2.3	1.4E-03
GEM	GTP binding protein overexpressed in skeletal muscle	A_23_P257043	2.3	6.0E-11
MS4A1	membrane-spanning 4-domains, subfamily A, member 1	A_23_P116371	2.3	4.2E-04
BAAT	bile acid CoA: amino acid N-acyltransferase (glycine N-choloyltransferase)	A_23_P71810	2.3	2.1E-07
ZNF385D	zinc finger protein 385D	A_23_P113748	2.3	2.1E-07
SLCO1B3	solute carrier organic anion transporter family, member 1B3	A_23_P105475	2.3	1.9E-04
CHST6	carbohydrate (N-acetylglucosamine 6-O) sulfotransferase 6	A_23_P106922	2.3	5.1E-04
SIX4	SIX homeobox 4	A_32_P204205	2.3	6.8E-05
FUT2	fucosyltransferase 2 (secretor status included)	A_24_P942969	2.3	1.1E-03
KRT6C	keratin 6C	A_23_P366936	2.3	2.2E-02
ARNTL2	aryl hydrocarbon receptor nuclear translocator-like 2	A_32_P399546	2.3	5.1E-11
IGKV1-5	immunoglobulin kappa variable 1-5	A_32_P722809	2.3	2.0E-04
TSPAN11	tetraspanin 11	A_23_P76136	2.2	3.3E-09
ASPN	asporin	A_23_P216429	2.2	1.4E-05
IL4I1	interleukin 4 induced 1	A_23_P502520	2.2	2.4E-03
SCG2	secretogranin II	A_24_P88696	2.2	3.5E-06
ABCA4	ATP-binding cassette, sub-family A (ABC1), member 4	A_23_P160940	2.2	4.9E-06
IGHG1	immunoglobulin heavy constant gamma 1 (G1m marker)	A_23_P390209	2.2	6.6E-03
CXCL12	chemokine (C-X-C motif) ligand 12	A_24_P412156	2.2	4.4E-08
PLA2G7	phospholipase A2, group VII (platelet-activating factor acetylhydrolase, plasma)	A_23_P145096	2.2	8.6E-05
COL15A1	collagen, type XV, alpha 1	A_23_P112554	2.2	1.2E-07
LTB	lymphotoxin beta (TNF superfamily, member 3)	A_23_P93348	2.2	6.5E-08
KRT16P3	keratin 16 pseudogene 3	A_32_P62963	2.2	1.6E-04
KIAA1211	KIAA1211	A_24_P331882	2.2	7.2E-09
OGDHL	oxoglutarate dehydrogenase-like	A_23_P161297	2.2	1.3E-04
EDN2	endothelin 2	A_23_P312150	2.2	1.3E-04
CH25H	cholesterol 25-hydroxylase	A_23_P86470	2.2	1.9E-05
LGI2	leucine-rich repeat LGI family, member 2	A_23_P7194	2.2	4.5E-08
CLC	Charcot-Leyden crystal protein	A_23_P101683	2.2	4.5E-02
SIX1	SIX homeobox 1	A_23_P76914	2.2	2.4E-03
GDA	guanine deaminase	A_24_P393571	2.2	3.0E-04
BHLHE22	basic helix-loop-helix family, member e22	A_32_P75581	2.2	4.5E-07
C21orf7	chromosome 21 open reading frame 7	A_23_P57277	2.2	1.3E-06
SERPINB5	serpin peptidase inhibitor, clade B (ovalbumin), member 5	A_23_P208126	2.2	8.0E-04
PCDH7	protocadherin 7	A_23_P310921	2.2	4.3E-06
B3GNT3	UDP-GlcNAc:betaGal beta-1,3-N-	A_23_P78980	2.2	1.4E-05

	acetylglucosaminyltransferase 3			
APOBEC3H	apolipoprotein B mRNA editing enzyme, catalytic polypeptide-like 3H	A_32_P347617	2.2	8.2E-05
GRIN2A	glutamate receptor, ionotropic, N-methyl D-aspartate 2A	A_32_P169114	2.2	1.2E-05
IGKC	immunoglobulin kappa constant	A_24_P263786	2.2	5.8E-03
ABCA13	ATP-binding cassette, sub-family A (ABC1), member 13	A_23_P364324	2.2	7.7E-03
SNAP25	synaptosomal-associated protein, 25kDa	A_23_P210756	2.2	2.2E-07
PAMR1	peptidase domain containing associated with muscle regeneration 1	A_23_P127911	2.2	2.6E-07
DST	dystonin	A_23_P59388	2.2	2.0E-04
EPHA10	EPH receptor A10	A_24_P930741	2.2	3.4E-07
IGLV6-57	immunoglobulin lambda variable 6-57	A_24_P361816	2.2	3.2E-05
RHOV	ras homolog gene family, member V	A_23_P424561	2.2	2.8E-03
RGS1	regulator of G-protein signaling 1	A_23_P97141	2.1	4.9E-05
CTSG	cathepsin G	A_23_P140384	2.1	3.1E-04
PTGES	prostaglandin E synthase	A_24_P403417	2.1	6.7E-09
MDK	midkine (neurite growth-promoting factor 2)	A_23_P116235	2.1	4.8E-13
STEAP1	six transmembrane epithelial antigen of the prostate 1	A_24_P406334	2.1	2.0E-06
THBS4	thrombospondin 4	A_24_P260443	2.1	7.2E-07
ABCA12	ATP-binding cassette, sub-family A (ABC1), member 12	A_23_P56369	2.1	6.8E-05
LY6D	lymphocyte antigen 6 complex, locus D	A_23_P134764	2.1	1.6E-03
ANXA10	annexin A10	A_23_P58328	2.1	1.9E-03
PDLIM4	PDZ and LIM domain 4	A_23_P144796	2.1	3.9E-11
DUSP5	dual specificity phosphatase 5	A_23_P150018	2.1	1.9E-05
DSC3	desmocollin 3	A_24_P344416	2.1	1.5E-02
HSPA4L	heat shock 70kDa protein 4-like	A_23_P363936	2.1	1.5E-05
MUC4	mucin 4, cell surface associated	A_24_P208825	2.1	2.7E-04
TNFRSF17	tumor necrosis factor receptor superfamily, member 17	A_23_P37736	2.1	1.1E-03
IL17RD	interleukin 17 receptor D	A_32_P188860	2.1	5.0E-08
FAM83D	family with sequence similarity 83, member D	A_23_P323751	2.1	3.2E-05
POSTN	periostin, osteoblast specific factor	A_24_P347411	2.1	1.4E-05
PNOC	prepronociceptin	A_23_P253321	2.1	4.4E-05
LOC100287221	hypothetical LOC100287221	A_24_P282266	2.1	2.3E-05
GLI1	GLI family zinc finger 1	A_23_P105251	2.1	2.0E-08
GDF15	growth differentiation factor 15	A_23_P16523	2.1	4.0E-06
SLC2A5	solute carrier family 2 (facilitated glucose/fructose transporter), member 5	A_23_P160159	2.1	2.3E-05
SRD5A2	steroid-5-alpha-reductase, alpha polypeptide 2 (3-oxo-5 alpha-steroid delta 4-dehydrogenase alpha 2)	A_23_P28186	2.1	3.2E-02
IL6	interleukin 6 (interferon, beta 2)	A_23_P71037	2.1	1.2E-03
COL1A1	collagen, type I, alpha 1	A_23_P207520	2.1	6.2E-06

SLN	sarcosin	A_23_P150343	2.1	4.7E-04
ANO4	anoctamin 4	A_23_P409093	2.1	2.4E-04
KLK7	kallikrein-related peptidase 7	A_23_P39056	2.1	2.1E-03
PTPRZ1	protein tyrosine phosphatase, receptor-type, Z polypeptide 1	A_23_P168761	2.0	9.5E-04
ITGB8	integrin, beta 8	A_24_P759477	2.0	2.0E-08
ALDH3A1	aldehyde dehydrogenase 3 family, member A1	A_23_P207213	2.0	2.6E-03
MZB1	marginal zone B and B1 cell-specific protein	A_23_P84596	2.0	7.1E-05
CPZ	carboxypeptidase Z	A_23_P58251	2.0	3.0E-05
PIM2	pim-2 oncogene	A_24_P379104	2.0	1.2E-05
IGK@	immunoglobulin kappa locus	A_24_P677559	2.0	2.7E-06
CXCL9	chemokine (C-X-C motif) ligand 9	A_23_P18452	2.0	7.5E-03
TTL3	tubulin tyrosine ligase-like family, member 3	A_24_P917492	2.0	3.4E-05
LOC389023	hypothetical LOC389023	A_32_P86578	2.0	3.3E-09
CD19	CD19 molecule	A_23_P113572	2.0	3.3E-04
THBS2	thrombospondin 2	A_24_P605612	2.0	3.4E-05
RHBDL2	rhomboid, veinlet-like 2 (Drosophila)	A_32_P46571	2.0	2.6E-06
CD1C	CD1c molecule	A_23_P51767	2.0	2.6E-07
PTGS2	prostaglandin-endoperoxide synthase 2 (prostaglandin G/H synthase and cyclooxygenase)	A_24_P77008	2.0	7.3E-05
HTR2A	5-hydroxytryptamine (serotonin) receptor 2A	A_24_P355967	2.0	4.2E-06
EPHA3	EPH receptor A3	A_23_P169819	2.0	1.9E-07
MIR100HG	mir-100-let-7a-2 cluster host gene (non-protein coding)	A_32_P232883	2.0	1.9E-08
GSTA5	glutathione S-transferase alpha 5	A_23_P93141	2.0	8.2E-03
MXRA5	matrix-remodelling associated 5	A_23_P258136	2.0	3.1E-08
EGR1	early growth response 1	A_23_P214080	2.0	1.2E-04
SAA4	serum amyloid A4, constitutive	A_23_P87238	2.0	2.2E-02
LIF	leukemia inhibitory factor (cholinergic differentiation factor)	A_24_P122137	2.0	7.4E-07
TNFRSF11B	tumor necrosis factor receptor superfamily, member 11b	A_24_P192485	2.0	9.4E-05
CLIC6	chloride intracellular channel 6	A_23_P385067	2.0	9.9E-06
TRAT1	T cell receptor associated transmembrane adaptor 1	A_23_P212568	2.0	8.7E-05
TMEM158	transmembrane protein 158 (gene/pseudogene)	A_23_P369899	2.0	2.2E-07
SH2D1A	SH2 domain containing 1A	A_23_P45248	2.0	7.4E-05
RASGRP1	RAS guanyl releasing protein 1 (calcium and DAG-regulated)	A_23_P124642	2.0	5.9E-07
FAP	fibroblast activation protein, alpha	A_23_P56746	2.0	2.3E-05
SDK2	sidekick homolog 2 (chicken)	A_32_P194312	2.0	1.6E-08
SDS	serine dehydratase	A_23_P2645	2.0	6.0E-05
ALPK2	alpha-kinase 2	A_23_P15876	2.0	3.0E-04
FAM43B	family with sequence similarity 43, member B	A_32_P125338	2.0	1.3E-07
FAM81B	family with sequence similarity 81, member B	A_23_P360354	2.0	1.5E-02
HTRA4	HtrA serine peptidase 4	A_23_P44421	2.0	5.3E-03

LRRC17	leucine rich repeat containing 17	A_23_P253958	2.0	3.1E-06
CFB	complement factor B	A_23_P156687	1.9	2.3E-06
IGHA1	immunoglobulin heavy constant alpha 1	A_24_P395415	1.9	9.3E-03
FERMT1	fermitin family member 1	A_23_P131935	1.9	4.9E-07
HES2	hairy and enhancer of split 2 (Drosophila)	A_23_P304716	1.9	2.2E-07
GSTA1	glutathione S-transferase alpha 1	A_23_P135417	1.9	3.4E-03
ZNF469	zinc finger protein 469	A_32_P116556	1.9	4.3E-08
ASB2	ankyrin repeat and SOCS box containing 2	A_23_P205370	1.9	2.3E-07
LEMD1	LEM domain containing 1	A_24_P696761	1.9	4.3E-04
CTSK	cathepsin K	A_23_P34744	1.9	3.7E-08
TGFB3	transforming growth factor, beta 3	A_24_P373096	1.9	1.9E-03
VMP1	vacuole membrane protein 1	A_32_P9753	1.9	1.3E-09
IGKV2-24	immunoglobulin kappa variable 2-24	A_24_P306905	1.9	6.7E-05
KRT15	keratin 15	A_23_P27133	1.9	5.6E-03
SLC4A11	solute carrier family 4, sodium borate transporter, member 11	A_23_P154688	1.9	8.6E-05
FHOD3	formin homology 2 domain containing 3	A_32_P34444	1.9	8.5E-04
GCNT3	glucosaminyl (N-acetyl) transferase 3, mucin type	A_23_P420209	1.9	6.6E-05
MYBPH	myosin binding protein H	A_23_P148737	1.9	4.9E-04
PRSS2	protease, serine, 2 (trypsin 2)	A_32_P94444	1.9	1.0E-03
KRT23	keratin 23 (histone deacetylase inducible)	A_23_P78248	1.9	3.3E-02
C5orf20	chromosome 5 open reading frame 20	A_23_P81441	1.9	9.6E-06
GSTA2	glutathione S-transferase alpha 2	A_24_P300394	1.9	8.2E-03
IFNE	interferon, epsilon	A_23_P302060	1.9	8.5E-04
TNFRSF9	tumor necrosis factor receptor superfamily, member 9	A_23_P51936	1.9	1.5E-07
EFHC2	EF-hand domain (C-terminal) containing 2	A_24_P147927	1.9	4.9E-03
DACH2	dachshund homolog 2 (Drosophila)	A_32_P464135	1.8	4.6E-06
TTR	transthyretin	A_23_P130333	1.8	3.2E-02
FAM150A	family with sequence similarity 150, member A	A_24_P935794	1.8	3.3E-04
LOC96610	BMS1 homolog, ribosome assembly protein (yeast) pseudogene	A_24_P93316	1.8	2.0E-04
IGKV1D-8	immunoglobulin kappa variable 1D-8	A_24_P93523	1.8	4.2E-04
COCH	coagulation factor C homolog, cochlin (Limulus polyphemus)	A_24_P184799	1.8	1.6E-06
SLC28A3	solute carrier family 28 (sodium-coupled nucleoside transporter), member 3	A_23_P32078	1.8	3.8E-03
NFATC2	nuclear factor of activated T-cells, cytoplasmic, calcineurin-dependent 2	A_24_P525917	1.8	1.3E-05
GJB5	gap junction protein, beta 5, 31.1kDa	A_23_P35293	1.8	2.7E-02
CPNE4	copine IV	A_23_P327551	1.8	6.5E-07
EREG	epiregulin	A_23_P41344	1.8	5.9E-03
CDH2	cadherin 2, type 1, N-cadherin (neuronal)	A_23_P38732	1.8	3.2E-05
SYTL2	synaptotagmin-like 2	A_23_P53193	1.8	2.3E-11
CD3D	CD3d molecule, delta (CD3-TCR complex)	A_23_P138985	1.8	1.9E-06

LIPG	lipase, endothelial	A_24_P125469	1.8	5.0E-03
TRBV5-4	T cell receptor beta variable 5-4	A_23_P352861	1.8	1.5E-07
CCL20	chemokine (C-C motif) ligand 20	A_23_P17065	1.8	5.2E-03
EGR4	early growth response 4	A_23_P380318	1.8	8.1E-03
DOCK3	dedicator of cytokinesis 3	A_24_P153643	1.8	7.4E-06
TUBB3	tubulin, beta 3	A_23_P77493	1.8	1.4E-06
SPRR1B	small proline-rich protein 1B	A_23_P159406	1.8	5.0E-04
MOXD1	monooxygenase, DBH-like 1	A_23_P31064	1.8	1.1E-05
ENTHD1	ENTH domain containing 1	A_23_P410115	1.8	6.7E-06
CD1E	CD1e molecule	A_23_P201160	1.8	2.2E-03
CD200	CD200 molecule	A_23_P121480	1.8	1.0E-07
IRF4	interferon regulatory factor 4	A_23_P214360	1.8	1.7E-04
GPR18	G protein-coupled receptor 18	A_23_P14165	1.7	3.2E-03
CDCA7	cell division cycle associated 7	A_23_P251421	1.7	8.2E-08
SLC5A8	solute carrier family 5 (iodide transporter), member 8	A_23_P338542	1.7	3.0E-02
GABBR2	gamma-aminobutyric acid (GABA) B receptor, 2	A_23_P112275	1.7	9.8E-03
CBLN4	cerebellin 4 precursor	A_23_P313428	1.7	2.0E-02
FLJ22536	hypothetical locus LOC401237	A_24_P861099	1.7	3.4E-07
SSTR2	somatostatin receptor 2	A_23_P38630	1.7	3.1E-07
NELL2	NEL-like 2 (chicken)	A_23_P10025	1.7	3.3E-03
MB	myoglobin	A_23_P6433	1.7	8.1E-03
RAB3C	RAB3C, member RAS oncogene family	A_23_P44794	1.7	2.9E-06
ZG16B	zymogen granule protein 16 homolog B (rat)	A_23_P118203	1.7	1.6E-02
SLAMF1	signaling lymphocytic activation molecule family member 1	A_23_P62652	1.7	8.0E-05
LRRC4C	leucine rich repeat containing 4C	A_23_P24457	1.7	2.0E-06
HSPB3	heat shock 27kDa protein 3	A_23_P92730	1.7	5.8E-04
SYNJ2	synaptojanin 2	A_23_P344719	1.7	8.8E-05
PRRX1	paired related homeobox 1	A_23_P502731	1.7	1.3E-06
IGF1	insulin-like growth factor 1 (somatomedin C)	A_24_P398572	1.7	4.8E-03
HLA-DPB2	major histocompatibility complex, class II, DP beta 2 (pseudogene)	A_23_P59167	1.7	5.6E-04
RGS17	regulator of G-protein signaling 17	A_23_P156861	1.7	9.8E-05
EGR2	early growth response 2	A_23_P46936	1.7	9.3E-05
SCAMP5	secretory carrier membrane protein 5	A_23_P152047	1.7	5.6E-06
FGF1	fibroblast growth factor 1 (acidic)	A_23_P213336	1.7	1.2E-04
HRK	harakiri, BCL2 interacting protein (contains only BH3 domain)	A_23_P25194	1.7	5.6E-03
KCND2	potassium voltage-gated channel, Shal-related subfamily, member 2	A_23_P259251	1.7	2.3E-04
CD69	CD69 molecule	A_23_P87879	1.7	8.0E-05
SV2B	synaptic vesicle glycoprotein 2B	A_23_P100022	1.7	4.0E-07
ACAN	aggrecan	A_23_P307310	1.7	1.3E-05

MSC	musculin	A_23_P256948	1.7	1.5E-04
SPOCD1	SPOC domain containing 1	A_24_P932887	1.7	9.1E-05
LOC100505633	hypothetical LOC100505633	A_24_P828496	1.7	7.1E-03
HMGA2	high mobility group AT-hook 2	A_23_P95930	1.7	1.3E-02
ITGB3	integrin, beta 3 (platelet glycoprotein IIIa, antigen CD61)	A_24_P929003	1.7	1.1E-04
CPNE5	copine V	A_23_P360804	1.7	3.2E-05
PLAU	plasminogen activator, urokinase	A_23_P24104	1.7	2.1E-08
IL1RN	interleukin 1 receptor antagonist	A_23_P209995	1.7	6.2E-04
SAMD11	sterile alpha motif domain containing 11	A_24_P402510	1.7	6.7E-09
PRRX2	paired related homeobox 2	A_23_P83298	1.7	4.0E-08
FOSB	FBJ murine osteosarcoma viral oncogene homolog B	A_23_P429998	1.7	4.2E-02
DNER	delta/notch-like EGF repeat containing	A_23_P362148	1.7	3.0E-02
VSIG1	V-set and immunoglobulin domain containing 1	A_32_P163147	1.7	2.0E-02
TNFAIP6	tumor necrosis factor, alpha-induced protein 6	A_23_P165624	1.7	3.0E-04
TSHZ2	teashirt zinc finger homeobox 2	A_23_P143247	1.7	1.1E-06
NHS	Nance-Horan syndrome (congenital cataracts and dental anomalies)	A_32_P126375	1.7	1.6E-07
D4S234E	DNA segment on chromosome 4 (unique) 234 expressed sequence	A_23_P371107	1.7	7.9E-06
TIMD4	T-cell immunoglobulin and mucin domain containing 4	A_23_P7503	1.7	9.4E-03
UGCG	UDP-glucose ceramide glucosyltransferase	A_32_P161140	1.7	1.6E-09
ADRA2A	adrenergic, alpha-2A-, receptor	A_23_P138706	1.6	1.4E-09
FCRLA	Fc receptor-like A	A_23_P46039	1.6	2.5E-03
RARRES1	retinoic acid receptor responder (tazarotene induced) 1	A_23_P18078	1.6	6.9E-05
F5	coagulation factor V (proaccelerin, labile factor)	A_32_P41604	1.6	9.8E-05
TRIM29	tripartite motif containing 29	A_23_P203267	1.6	1.1E-02
HHLA2	HERV-H LTR-associating 2	A_23_P368805	1.6	1.4E-02
SMOC1	SPARC related modular calcium binding 1	A_24_P258473	1.6	1.1E-04
KLHDC7B	kelch domain containing 7B	A_24_P117410	1.6	6.6E-06
KCNH8	potassium voltage-gated channel, subfamily H (eag-related), member 8	A_23_P170636	1.6	3.9E-05
CCDC80	coiled-coil domain containing 80	A_23_P58082	1.6	4.2E-04
FRMD5	FERM domain containing 5	A_23_P26037	1.6	1.6E-05
TMEM130	transmembrane protein 130	A_23_P349966	1.6	6.5E-04
FRMD6	FERM domain containing 6	A_24_P330303	1.6	1.6E-09
SERPINB2	serpin peptidase inhibitor, clade B (ovalbumin), member 2	A_24_P245379	1.6	5.2E-03
PLCH2	phospholipase C, eta 2	A_24_P62469	1.6	2.1E-05
MKX	mohawk homeobox	A_24_P326491	1.6	2.6E-03
TFPI2	tissue factor pathway inhibitor 2	A_23_P393620	1.6	1.5E-05
FNDC4	fibronectin type III domain containing 4	A_23_P16834	1.6	8.0E-08
MUCL1	mucin-like 1	A_23_P150979	1.6	2.6E-02

CD38	CD38 molecule	A_23_P167328	1.6	1.1E-04
KLHDC8A	kelch domain containing 8A	A_24_P62800	1.6	2.8E-04
IER3	immediate early response 3	A_23_P42257	1.6	8.5E-06
ODZ4	odz, odd Oz/ten-m homolog 4 (Drosophila)	A_24_P342312	1.6	1.7E-05
UBASH3A	ubiquitin associated and SH3 domain containing A	A_23_P6293	1.6	4.7E-05
ICOS	inducible T-cell co-stimulator	A_23_P371215	1.6	6.3E-06
IVL	involucrin	A_23_P353524	1.6	2.3E-03
MGC16025	hypothetical LOC85009	A_23_P79572	1.6	1.8E-04
PDE1A	phosphodiesterase 1A, calmodulin-dependent	A_23_P79272	1.6	2.2E-06
ECEL1	endothelin converting enzyme-like 1	A_32_P155666	1.6	4.0E-03
TMEM45A	transmembrane protein 45A	A_23_P113212	1.6	1.1E-03
KCNMB2	potassium large conductance calcium-activated channel, subfamily M, beta member 2	A_23_P158675	1.6	8.6E-03
SIT1	signaling threshold regulating transmembrane adaptor 1	A_23_P43369	1.6	2.6E-05
CD48	CD48 molecule	A_32_P175934	1.6	2.6E-04
TRAJ17	T cell receptor alpha joining 17	A_23_P258504	1.6	1.0E-07
COL24A1	collagen, type XXIV, alpha 1	A_23_P74701	1.6	9.3E-06
PRR15	proline rich 15	A_32_P154911	1.6	3.2E-02
BLK	B lymphoid tyrosine kinase	A_23_P31725	1.6	1.6E-02
CCR5	chemokine (C-C motif) receptor 5	A_23_P412321	1.6	2.2E-04
ANK1	ankyrin 1, erythrocytic	A_24_P162485	1.6	1.7E-04
AIM2	absent in melanoma 2	A_32_P44394	1.6	6.5E-04
GLI2	GLI family zinc finger 2	A_23_P500034	1.6	4.0E-07
ZNF215	zinc finger protein 215	A_23_P53057	1.6	6.7E-04
SVOPL	SVOP-like	A_23_P307860	1.6	6.2E-05
CCL5	chemokine (C-C motif) ligand 5	A_23_P152838	1.6	3.8E-05
MEOX1	mesenchyme homeobox 1	A_23_P107173	1.6	3.6E-04
ITGBL1	integrin, beta-like 1 (with EGF-like repeat domains)	A_24_P916965	1.6	4.3E-03
PHLDA1	pleckstrin homology-like domain, family A, member 1	A_24_P943597	1.6	4.1E-05
C2orf27A	chromosome 2 open reading frame 27A	A_32_P32061	1.6	3.5E-06
GOLM1	golgi membrane protein 1	A_24_P394865	1.6	6.4E-08
DUXAP10	double homeobox A pseudogene 10	A_24_P901856	1.6	6.0E-04
FAM169A	family with sequence similarity 169, member A	A_32_P84242	1.6	7.6E-07
ITGA11	integrin, alpha 11	A_23_P206022	1.6	4.4E-05
RHOXF1	RhoX homeobox family, member 1	A_23_P85082	1.5	3.4E-03
POF1B	premature ovarian failure, 1B	A_24_P250815	1.5	9.1E-03
COL22A1	collagen, type XXII, alpha 1	A_32_P405759	1.5	4.7E-03
TM4SF19	transmembrane 4 L six family member 19	A_23_P372946	1.5	1.6E-02
KLHL13	kelch-like 13 (Drosophila)	A_23_P159974	1.5	8.3E-07
CREM	cAMP responsive element modulator	A_24_P278393	1.5	4.4E-05
LUM	lumican	A_32_P28664	1.5	6.5E-04

BTLA	B and T lymphocyte associated	A_23_P80883	1.5	2.5E-03
CD96	CD96 molecule	A_23_P44155	1.5	1.3E-04
HS3ST3A1	heparan sulfate (glucosamine) 3-O-sulfotransferase 3A1	A_23_P66525	1.5	4.5E-05
RELB	v-rel reticuloendotheliosis viral oncogene homolog B	A_23_P55706	1.5	2.0E-07
KCNN4	potassium intermediate/small conductance calcium-activated channel, subfamily N, member 4	A_23_P67529	1.5	8.6E-08
ST6GALNAC1	ST6 (alpha-N-acetyl-neuraminy-2,3-beta-galactosyl-1,3)-N-acetylgalactosaminide alpha-2,6-sialyltransferase 1	A_23_P54968	1.5	3.2E-03
STEAP4	STEAP family member 4	A_24_P351906	1.5	2.0E-05
VMO1	vitelline membrane outer layer 1 homolog (chicken)	A_23_P55356	1.5	2.0E-06
NCOA7	nuclear receptor coactivator 7	A_23_P156957	1.5	1.0E-06
IL12RB2	interleukin 12 receptor, beta 2	A_23_P72077	1.5	6.6E-03
TWIST1	twist homolog 1 (Drosophila)	A_23_P71067	1.5	3.6E-06
ANKRD43	ankyrin repeat domain 43	A_23_P304110	1.5	2.3E-02
HAS1	hyaluronan synthase 1	A_23_P27400	1.5	2.5E-03
NTN3	netrin 3	A_24_P488083	1.5	2.0E-04
DAPP1	dual adaptor of phosphotyrosine and 3-phosphoinositides	A_23_P255444	1.5	4.5E-08
CALB2	calbindin 2	A_23_P21092	1.5	5.5E-03
FLJ39609	similar to hCG1995469	A_24_P940999	1.5	1.8E-06
COL3A1	collagen, type III, alpha 1	A_32_P226656	1.5	2.4E-02
KIRREL2	kin of IRRE like 2 (Drosophila)	A_23_P315451	1.5	4.1E-05
LXN	latexin	A_23_P6674	1.5	4.9E-06
STEAP2	six transmembrane epithelial antigen of the prostate 2	A_23_P428260	1.5	1.2E-08
SRSF12	serine/arginine-rich splicing factor 12	A_23_P110903	1.5	1.4E-04
FOXC1	forkhead box C1	A_23_P390504	1.5	1.2E-04
CRISPLD1	cysteine-rich secretory protein LCCL domain containing 1	A_23_P59960	1.5	2.4E-07
HRH1	histamine receptor H1	A_24_P277211	1.5	2.2E-07
ITK	IL2-inducible T-cell kinase	A_23_P354151	1.5	9.8E-04
LMF1	lipase maturation factor 1	A_24_P930963	1.5	5.7E-06
CD6	CD6 molecule	A_23_P311875	1.5	1.8E-05
MYH2	myosin, heavy chain 2, skeletal muscle, adult	A_23_P38271	1.5	1.1E-02
SLC6A1	solute carrier family 6 (neurotransmitter transporter, GABA), member 1	A_24_P268685	1.5	1.6E-02
SLFN13	schlafen family member 13	A_23_P301105	1.5	2.1E-04
MEG3	maternally expressed 3 (non-protein coding)	A_24_P737660	1.5	9.1E-03
CXCR3	chemokine (C-X-C motif) receptor 3	A_23_P114299	1.5	3.3E-07
CXCL10	chemokine (C-X-C motif) ligand 10	A_24_P303091	1.5	2.6E-03
CD3G	CD3g molecule, gamma (CD3-TCR complex)	A_23_P98410	1.5	4.5E-06
SYT12	synaptotagmin XII	A_23_P421306	1.5	3.4E-06
C7orf63	chromosome 7 open reading frame 63	A_23_P8653	1.5	7.1E-05

FGF14	fibroblast growth factor 14	A_23_P88033	1.5	2.5E-02
CD79A	CD79a molecule, immunoglobulin-associated alpha	A_23_P107735	1.5	4.2E-03
APLN	apelin	A_23_P113393	1.4	2.9E-02
SMO	smoothened homolog (Drosophila)	A_23_P70818	1.4	2.8E-09
KLK8	kallikrein-related peptidase 8	A_23_P369343	1.4	2.1E-02
BIRC3	baculoviral IAP repeat containing 3	A_23_P98350	1.4	3.0E-07
OSR2	odd-skipped related 2 (Drosophila)	A_23_P71570	1.4	8.3E-04
FAM101A	family with sequence similarity 101, member A	A_32_P200697	1.4	5.3E-03
CD27	CD27 molecule	A_23_P48088	1.4	3.4E-05
FCRL2	Fc receptor-like 2	A_23_P160751	1.4	1.7E-02
RIMS2	regulating synaptic membrane exocytosis 2	A_23_P147786	1.4	9.5E-04
C6orf142	chromosome 6 open reading frame 142	A_23_P145555	1.4	4.6E-04
BFSP2	beaded filament structural protein 2, phakinin	A_23_P159316	1.4	1.3E-04
RGS13	regulator of G-protein signaling 13	A_23_P500093	1.4	1.5E-02
ZBP1	Z-DNA binding protein 1	A_23_P259141	1.4	3.3E-04
VWCE	von Willebrand factor C and EGF domains	A_23_P52986	1.4	3.2E-06
DHRS9	dehydrogenase/reductase (SDR family) member 9	A_23_P56559	1.4	2.4E-05
KRT81	keratin 81	A_23_P25187	1.4	1.7E-03
GREM2	gremlin 2	A_23_P329822	1.4	4.4E-03
RBFOX1	RNA binding protein, fox-1 homolog (C. elegans) 1	A_23_P140858	1.4	2.0E-03
PRUNE2	prune homolog 2 (Drosophila)	A_32_P43746	1.4	4.8E-04
ARL14	ADP-ribosylation factor-like 14	A_23_P92161	1.4	1.5E-03
LOC100130741	hypothetical protein LOC100130741	A_24_P848126	1.4	1.3E-03
CYP1B1	cytochrome P450, family 1, subfamily B, polypeptide 1	A_23_P209625	1.4	5.0E-04
PPAPDC1B	phosphatidic acid phosphatase type 2 domain containing 1B	A_23_P329971	1.4	1.1E-06
NTN1	netrin 1	A_23_P15478	1.4	9.2E-04
BCL11B	B-cell CLL/lymphoma 11B (zinc finger protein)	A_23_P205738	1.4	1.5E-07
ATF3	activating transcription factor 3	A_24_P33895	1.4	1.7E-02
GADD45A	growth arrest and DNA-damage-inducible, alpha	A_23_P23221	1.4	4.6E-07
KCNA2	potassium voltage-gated channel, shaker-related subfamily, member 2	A_32_P40596	1.4	4.3E-04
SOX11	SRY (sex determining region Y)-box 11	A_24_P302584	1.4	2.4E-03
PTGER1	prostaglandin E receptor 1 (subtype EP1), 42kDa	A_23_P4808	1.4	2.2E-05
CAPN13	calpain 13	A_23_P101972	1.4	1.7E-02
FLJ39632	hypothetical LOC642477	A_24_P788227	1.4	1.5E-04
DKK1	dickkopf homolog 1 (Xenopus laevis)	A_23_P24129	1.4	4.9E-02
CAPN6	calpain 6	A_23_P217570	1.4	6.7E-04
SMOC2	SPARC related modular calcium binding 2	A_23_P70307	1.4	6.7E-04
CD2	CD2 molecule	A_23_P161076	1.4	8.3E-05
FBLN2	fibulin 2	A_23_P143981	1.4	1.7E-07
TUBB2B	tubulin, beta 2B	A_24_P314477	1.4	1.1E-05

INHBB	inhibin, beta B	A_23_P153964	1.4	4.4E-03
CPA6	carboxypeptidase A6	A_23_P216291	1.4	4.1E-02
IL1RAPL1	interleukin 1 receptor accessory protein-like 1	A_23_P84106	1.4	2.4E-04
IL2RB	interleukin 2 receptor, beta	A_24_P203000	1.4	5.4E-05
NMNAT2	nicotinamide nucleotide adenylyltransferase 2	A_23_P345183	1.4	1.3E-03
KCNE4	potassium voltage-gated channel, Isk-related family, member 4	A_23_P392575	1.4	3.8E-05
LOC387895	hypothetical LOC387895	A_32_P35047	1.4	1.2E-02
FAM55D	family with sequence similarity 55, member D	A_23_P320216	1.4	1.8E-02
NTS	neurotensin	A_23_P36882	1.4	2.4E-02
UBXN10	UBX domain protein 10	A_23_P85664	1.4	2.6E-03
NTRK1	neurotrophic tyrosine kinase, receptor, type 1	A_23_P34804	1.4	6.4E-04
MIR155HG	MIR155 host gene (non-protein coding)	A_32_P108156	1.4	2.1E-04
GSTA3	glutathione S-transferase alpha 3	A_23_P253495	1.4	2.0E-02
P2RY6	pyrimidnergic receptor P2Y, G-protein coupled, 6	A_23_P64611	1.4	8.5E-07
PTPN22	protein tyrosine phosphatase, non-receptor type 22 (lymphoid)	A_23_P149345	1.4	1.0E-04
TNFRSF21	tumor necrosis factor receptor superfamily, member 21	A_23_P30666	1.4	7.9E-09
DLG2	discs, large homolog 2 (Drosophila)	A_23_P124514	1.4	1.3E-03
PDE4B	phosphodiesterase 4B, cAMP-specific	A_24_P325333	1.4	7.6E-04
LOC641518	hypothetical LOC641518	A_24_P213788	1.4	1.2E-04
MEI1	meiosis inhibitor 1	A_23_P211561	1.4	1.6E-04
SPIB	Spi-B transcription factor (Spi-1/PU.1 related)	A_23_P39067	1.4	1.1E-04
LAX1	lymphocyte transmembrane adaptor 1	A_24_P370952	1.4	3.6E-02
HTR2B	5-hydroxytryptamine (serotonin) receptor 2B	A_23_P16953	1.4	1.2E-03
PLXNA4	plexin A4	A_24_P265051	1.4	7.7E-04
CFH	complement factor H	A_24_P273972	1.4	5.1E-06
RALGPS2	Ral GEF with PH domain and SH3 binding motif 2	A_24_P173746	1.4	2.4E-03
CD70	CD70 molecule	A_23_P119202	1.4	2.1E-06
XCL1	chemokine (C motif) ligand 1	A_24_P45476	1.4	5.6E-04
DNAJC12	DnaJ (Hsp40) homolog, subfamily C, member 12	A_23_P127220	1.4	6.6E-04
ATP8B4	ATPase, class I, type 8B, member 4	A_23_P163216	1.4	6.4E-05
DACT1	dapper, antagonist of beta-catenin, homolog 1 (Xenopus laevis)	A_23_P65518	1.4	1.3E-06
PMCH	pro-melanin-concentrating hormone	A_23_P321223	1.4	2.8E-03
PROM2	prominin 2	A_23_P154358	1.4	4.0E-05
PKIB	protein kinase (cAMP-dependent, catalytic) inhibitor beta	A_23_P145529	1.4	5.1E-04
KCNJ5	potassium inwardly-rectifying channel, subfamily J, member 5	A_24_P309521	1.4	1.4E-02
STYK1	serine/threonine/tyrosine kinase 1	A_23_P13822	1.4	1.1E-06
OVOS2	ovostatin 2	A_23_P25069	1.3	1.0E-04
PDE7B	phosphodiesterase 7B	A_23_P59338	1.3	3.4E-05
PHYHIP	phytanoyl-CoA 2-hydroxylase interacting protein	A_23_P433229	1.3	1.4E-04

IGSF9	immunoglobulin superfamily, member 9	A_23_P85441	1.3	2.4E-05
SERPINB13	serpin peptidase inhibitor, clade B (ovalbumin), member 13	A_23_P432978	1.3	4.6E-02
IGFBP4	insulin-like growth factor binding protein 4	A_24_P382187	1.3	2.0E-05
CKAP2	cytoskeleton associated protein 2	A_24_P510357	1.3	7.2E-04
KCTD8	potassium channel tetramerisation domain containing 8	A_23_P94902	1.3	1.7E-02
SAA3P	serum amyloid A3 pseudogene	A_24_P556318	1.3	1.8E-03
DFNA5	deafness, autosomal dominant 5	A_23_P82449	1.3	4.0E-06
SLC47A2	solute carrier family 47, member 2	A_23_P77908	1.3	1.2E-02
TAGAP	T-cell activation RhoGTPase activating protein	A_23_P339588	1.3	5.6E-03
DNAJC22	DnaJ (Hsp40) homolog, subfamily C, member 22	A_23_P253661	1.3	2.2E-07
TSPAN2	tetraspanin 2	A_24_P62659	1.3	6.2E-03
MGC16075	hypothetical protein MGC16075	A_24_P120734	1.3	4.9E-03
ELMOD1	ELMO/CED-12 domain containing 1	A_23_P401774	1.3	9.7E-03
TMEM155	transmembrane protein 155	A_23_P408195	1.3	2.4E-05
SEPT1	septin 1	A_23_P21057	1.3	3.7E-04
SOX4	SRY (sex determining region Y)-box 4	A_23_P82169	1.3	7.2E-08
CCL8	chemokine (C-C motif) ligand 8	A_23_P207456	1.3	1.7E-02
PHLDA2	pleckstrin homology-like domain, family A, member 2	A_32_P174121	1.3	1.2E-03
MFAP2	microfibrillar-associated protein 2	A_23_P1029	1.3	1.8E-04
IL24	interleukin 24	A_23_P51951	1.3	1.5E-03
ANKRD22	ankyrin repeat domain 22	A_23_P161428	1.3	1.3E-02
CCDC146	coiled-coil domain containing 146	A_23_P168771	1.3	1.2E-02
FLNC	filamin C, gamma	A_24_P77968	1.3	2.7E-04
NAT8L	N-acetyltransferase 8-like (GCN5-related, putative)	A_24_P91991	1.3	2.6E-04
MCTP1	multiple C2 domains, transmembrane 1	A_23_P133293	1.3	1.4E-02
IL1B	interleukin 1, beta	A_23_P79518	1.3	1.5E-02
LAG3	lymphocyte-activation gene 3	A_23_P116942	1.3	2.8E-06
PSD3	pleckstrin and Sec7 domain containing 3	A_24_P18146	1.3	2.0E-10
NCS1	neuronal calcium sensor 1	A_23_P217049	1.3	1.5E-05
MEX3A	mex-3 homolog A (C. elegans)	A_24_P857404	1.3	1.1E-07
TNFSF11	tumor necrosis factor (ligand) superfamily, member 11	A_23_P99386	1.3	1.4E-04
STAP1	signal transducing adaptor family member 1	A_23_P7185	1.3	3.9E-02
PLA2G2A	phospholipase A2, group IIA (platelets, synovial fluid)	A_23_P321949	1.3	3.2E-02
CTSE	cathepsin E	A_23_P10291	1.3	1.7E-04
TMEM156	transmembrane protein 156	A_23_P92334	1.3	3.1E-03
SULF2	sulfatase 2	A_23_P154605	1.3	8.3E-07
ST8SIA4	ST8 alpha-N-acetyl-neuraminide alpha-2,8-sialyltransferase 4	A_23_P361984	1.3	2.5E-07
FOSL1	FOS-like antigen 1	A_23_P322519	1.3	2.4E-02
LCK	lymphocyte-specific protein tyrosine kinase	A_23_P103361	1.3	1.1E-04

FJX1	four jointed box 1 (Drosophila)	A_23_P150693	1.3	2.8E-05
SMPD3	sphingomyelin phosphodiesterase 3, neutral membrane (neutral sphingomyelinase II)	A_23_P163567	1.3	7.1E-04
LOC100128239	hypothetical LOC100128239	A_32_P115438	1.3	1.2E-03
HBA2	hemoglobin, alpha 2	A_24_P142305	1.3	4.6E-02
C20orf114	chromosome 20 open reading frame 114	A_23_P154784	1.3	4.9E-02
DEPDC7	DEP domain containing 7	A_23_P385126	1.3	7.9E-06
CXCL3	chemokine (C-X-C motif) ligand 3	A_24_P183150	1.3	3.4E-03
C1orf54	chromosome 1 open reading frame 54	A_23_P74778	1.3	1.3E-09
FRZB	frizzled-related protein	A_23_P10902	1.3	1.4E-04
SKAP1	src kinase associated phosphoprotein 1	A_23_P100730	1.3	9.7E-07
RHOH	ras homolog gene family, member H	A_23_P58132	1.3	1.5E-05
SPINK5	serine peptidase inhibitor, Kazal type 5	A_23_P356494	1.3	1.1E-02
ABL2	v-abl Abelson murine leukemia viral oncogene homolog 2	A_23_P138099	1.3	2.2E-04
LMAN1	lectin, mannose-binding, 1	A_23_P78342	1.3	4.6E-04
GPR183	G protein-coupled receptor 183	A_23_P25566	1.3	1.6E-03
NGFR	nerve growth factor receptor	A_23_P389897	1.3	5.0E-06
SLC26A4	solute carrier family 26, member 4	A_23_P331560	1.3	4.2E-03
XG	Xg blood group	A_23_P72487	1.3	3.1E-02
BATF	basic leucine zipper transcription factor, ATF-like	A_23_P128974	1.3	2.8E-05
RBP5	retinol binding protein 5, cellular	A_24_P386746	1.3	1.2E-07
GFI1	growth factor independent 1 transcription repressor	A_23_P257365	1.3	2.7E-04
PGM2L1	phosphoglucomutase 2-like 1	A_23_P396765	1.3	3.8E-07
C3orf32	chromosome 3 open reading frame 32	A_23_P144005	1.3	1.2E-04
MTTP	microsomal triglyceride transfer protein	A_23_P213171	1.3	3.0E-04
HBD	hemoglobin, delta	A_24_P75190	1.3	2.2E-02
GBP5	guanylate binding protein 5	A_23_P74290	1.3	5.5E-03
HOXC9	homeobox C9	A_23_P25150	1.3	4.0E-02
BMP7	bone morphogenetic protein 7	A_23_P68487	1.3	4.8E-06
PPAP2C	phosphatidic acid phosphatase type 2C	A_23_P108294	1.3	1.9E-03
SHISA6	shisa homolog 6 (Xenopus laevis)	A_23_P411542	1.3	8.3E-03
C4B	complement component 4B (Chido blood group)	A_23_P42282	1.3	3.1E-05
PRDM1	PR domain containing 1, with ZNF domain	A_23_P350451	1.3	3.6E-03
TLL2	tolloid-like 2	A_23_P404778	1.3	3.5E-06
SNCAIP	synuclein, alpha interacting protein	A_23_P19020	1.3	2.4E-04
GDF6	growth differentiation factor 6	A_32_P140489	1.3	1.1E-02
HIF1A	hypoxia inducible factor 1, alpha subunit (basic helix-loop-helix transcription factor)	A_24_P56388	1.3	2.5E-05
TCL1A	T-cell leukemia/lymphoma 1A	A_23_P357717	1.3	1.9E-02
SLC27A2	solute carrier family 27 (fatty acid transporter), member 2	A_23_P140450	1.3	1.3E-02
ACCN2	amiloride-sensitive cation channel 2, neuronal	A_23_P204751	1.3	9.4E-06

DIRAS3	DIRAS family, GTP-binding RAS-like 3	A_23_P149121	1.3	7.1E-04
LTBP2	latent transforming growth factor beta binding protein 2	A_23_P405129	1.3	2.9E-05
RAB7B	RAB7B, member RAS oncogene family	A_23_P61590	1.3	4.4E-04
NFKBIE	nuclear factor of kappa light polypeptide gene enhancer in B-cells inhibitor, epsilon	A_23_P30655	1.3	4.0E-08
FANK1	fibronectin type III and ankyrin repeat domains 1	A_23_P115785	1.3	2.0E-02
GAD1	glutamate decarboxylase 1 (brain, 67kDa)	A_23_P374689	1.3	3.6E-03
PDCD1	programmed cell death 1	A_23_P136405	1.3	2.1E-05
CD200R1	CD200 receptor 1	A_23_P41217	1.3	1.6E-02
ASB5	ankyrin repeat and SOCS box containing 5	A_23_P144326	1.3	9.3E-03
KIAA1045	KIAA1045	A_23_P319232	1.3	3.9E-03
WSCD2	WSC domain containing 2	A_23_P305914	1.3	1.2E-03
PTPRN2	protein tyrosine phosphatase, receptor type, N polypeptide 2	A_32_P66804	1.3	4.9E-05
RAMP1	receptor (G protein-coupled) activity modifying protein 1	A_23_P50946	1.3	1.1E-04
MRV1	murine retrovirus integration site 1 homolog	A_23_P161837	1.3	4.3E-04
BEND6	BEN domain containing 6	A_23_P310086	1.3	1.5E-03
ESR2	estrogen receptor 2 (ER beta)	A_23_P54100	1.3	2.9E-05
OGN	osteoglycin	A_23_P82990	1.3	4.8E-03
PLEKHA4	pleckstrin homology domain containing, family A (phosphoinositide binding specific) member 4	A_24_P408047	1.3	4.1E-09
DDIT4L	DNA-damage-inducible transcript 4-like	A_23_P302672	1.2	1.6E-02
PPFIA2	protein tyrosine phosphatase, receptor type, f polypeptide (PTPRF), interacting protein (liprin), alpha 2	A_23_P402936	1.2	3.8E-04
TAC1	tachykinin, precursor 1	A_23_P215283	1.2	3.9E-02
APLNR	apelin receptor	A_23_P318860	1.2	5.8E-04
CCND2	cyclin D2	A_23_P139881	1.2	1.7E-05
TNC	tenascin C	A_24_P924504	1.2	3.3E-02
CD8A	CD8a molecule	A_32_P163247	1.2	5.9E-04
CLMP	CXADR-like membrane protein	A_23_P35995	1.2	2.1E-04
TRIB1	tribbles homolog 1 (Drosophila)	A_23_P123503	1.2	8.0E-03
CD72	CD72 molecule	A_23_P250245	1.2	9.2E-04
MUC20	mucin 20, cell surface associated	A_23_P92222	1.2	1.7E-03
ROR2	receptor tyrosine kinase-like orphan receptor 2	A_23_P158318	1.2	1.2E-06
LY9	lymphocyte antigen 9	A_24_P324674	1.2	1.3E-05
FAM133A	family with sequence similarity 133, member A	A_24_P400027	1.2	6.5E-03
ZFP42	zinc finger protein 42 homolog (mouse)	A_23_P395582	1.2	1.6E-02
MIAT	myocardial infarction associated transcript (non-protein coding)	A_24_P899928	1.2	2.8E-02
CKM	creatine kinase, muscle	A_23_P50250	1.2	1.5E-03
NKX6-2	NK6 homeobox 2	A_23_P86587	1.2	2.4E-02
C18orf56	chromosome 18 open reading frame 56	A_24_P238499	1.2	7.1E-03

HS6ST3	heparan sulfate 6-O-sulfotransferase 3	A_23_P422911	1.2	8.5E-03
KRT13	keratin 13	A_24_P228149	1.2	2.1E-02
TRIM2	tripartite motif containing 2	A_24_P208909	1.2	2.1E-06
LIMS3-LOC440895	LIMS3-LOC440895 readthrough	A_24_P527716	1.2	1.2E-02
SLC2A1	solute carrier family 2 (facilitated glucose transporter), member 1	A_23_P571	1.2	2.6E-04
SPINK6	serine peptidase inhibitor, Kazal type 6	A_23_P92909	1.2	3.6E-03
KIF19	kinesin family member 19	A_23_P404016	1.2	1.4E-02
ITGA2	integrin, alpha 2 (CD49B, alpha 2 subunit of VLA-2 receptor)	A_24_P243329	1.2	7.2E-03
WDR64	WD repeat domain 64	A_23_P399116	1.2	2.9E-03
FAM46C	family with sequence similarity 46, member C	A_23_P137751	1.2	4.0E-03
PHF21B	PHD finger protein 21B	A_24_P113572	1.2	1.4E-03
FREM1	FRAS1 related extracellular matrix 1	A_23_P43337	1.2	2.4E-04
MYCN	v-myc myelocytomatosis viral related oncogene, neuroblastoma derived (avian)	A_24_P94402	1.2	7.5E-03
WDR16	WD repeat domain 16	A_23_P4074	1.2	4.7E-02
CNN1	calponin 1, basic, smooth muscle	A_23_P125233	1.2	1.1E-03
SOX2OT	SOX2 overlapping transcript (non-protein coding)	A_24_P756289	1.2	1.8E-02
LMNB1	lamin B1	A_23_P258493	1.2	8.3E-04
VAT1L	vesicle amine transport protein 1 homolog (T. californica)-like	A_23_P400449	1.2	2.4E-03
NRXN2	neurexin 2	A_24_P261470	1.2	3.4E-05
MCHR1	melanin-concentrating hormone receptor 1	A_23_P211543	1.2	1.2E-02
LOC646976	hypothetical LOC646976	A_24_P350546	1.2	2.8E-02
BCL11A	B-cell CLL/lymphoma 11A (zinc finger protein)	A_23_P218584	1.2	9.0E-04
PAPPA	pregnancy-associated plasma protein A, pappalysin 1	A_23_P351270	1.2	3.5E-05
PDLIM3	PDZ and LIM domain 3	A_23_P110403	1.2	4.8E-05
UNC5CL	unc-5 homolog C (C. elegans)-like	A_23_P428298	1.2	6.5E-03
PLK2	polo-like kinase 2	A_23_P30254	1.2	9.2E-06
COL8A2	collagen, type VIII, alpha 2	A_24_P365975	1.2	2.6E-07
TMC5	transmembrane channel-like 5	A_23_P15101	1.2	2.2E-05
BCHE	butyrylcholinesterase	A_23_P212050	1.2	1.7E-03
EPHB1	EPH receptor B1	A_23_P166993	1.2	3.4E-03
LYPD3	LY6/PLAUR domain containing 3	A_24_P48495	1.2	4.8E-04
TNFSF13B	tumor necrosis factor (ligand) superfamily, member 13b	A_23_P14174	1.2	5.4E-05
C18orf1	chromosome 18 open reading frame 1	A_32_P96188	1.2	7.8E-03
LOXL1	lysyl oxidase-like 1	A_23_P124084	1.2	3.1E-05
ZNF521	zinc finger protein 521	A_23_P159027	1.2	1.6E-05
AK4	adenylate kinase 4	A_32_P108655	1.2	2.1E-03
SUSD4	sushi domain containing 4	A_24_P259607	1.2	2.9E-02
LY75	lymphocyte antigen 75	A_23_P334173	1.2	1.4E-05

FGF13	fibroblast growth factor 13	A_32_P41396	1.2	5.0E-04
CFHR3	complement factor H-related 3	A_23_P103256	1.2	2.6E-05
ETV7	ets variant 7	A_23_P42353	1.2	1.8E-03
LTBP1	latent transforming growth factor beta binding protein 1	A_23_P43810	1.2	3.7E-07
ADAMTS4	ADAM metalloproteinase with thrombospondin type 1 motif, 4	A_23_P360754	1.2	2.9E-02
ITGA4	integrin, alpha 4 (antigen CD49D, alpha 4 subunit of VLA-4 receptor)	A_23_P56505	1.2	2.1E-05
STAT4	signal transducer and activator of transcription 4	A_23_P305198	1.2	4.5E-02
REEP2	receptor accessory protein 2	A_23_P19182	1.2	4.5E-05
NLRP7	NLR family, pyrin domain containing 7	A_23_P16384	1.2	8.0E-04
EFNB3	ephrin-B3	A_24_P940006	1.2	5.9E-05
TNFSF14	tumor necrosis factor (ligand) superfamily, member 14	A_24_P237036	1.2	7.0E-05
PTPN7	protein tyrosine phosphatase, non-receptor type 7	A_23_P201778	1.2	4.9E-05
ACHE	acetylcholinesterase	A_24_P60845	1.2	2.6E-03
TMEM217	transmembrane protein 217	A_23_P334870	1.2	6.4E-04
CYR61	cysteine-rich, angiogenic inducer, 61	A_23_P46426	1.2	1.6E-02
GZMK	granzyme K (granzyme 3; tryptase II)	A_23_P156218	1.2	5.1E-04
CUX2	cut-like homeobox 2	A_23_P2543	1.2	1.0E-02
TNFRSF13B	tumor necrosis factor receptor superfamily, member 13B	A_23_P84705	1.2	2.5E-02
LOC283174	hypothetical LOC283174	A_32_P63013	1.2	1.8E-03
BACE2	beta-site APP-cleaving enzyme 2	A_23_P154875	1.2	2.0E-06
MLLT11	myeloid/lymphoid or mixed-lineage leukemia (trithorax homolog, Drosophila); translocated to, 11	A_23_P23346	1.2	5.7E-05
SPRR2D	small proline-rich protein 2D	A_23_P11644	1.2	1.9E-03
KCNN3	potassium intermediate/small conductance calcium-activated channel, subfamily N, member 3	A_23_P126167	1.2	6.9E-05
NLGN3	neuroligin 3	A_23_P62298	1.2	2.0E-05
ITGA7	integrin, alpha 7	A_23_P128084	1.2	8.0E-04
SOCS3	suppressor of cytokine signaling 3	A_23_P207058	1.2	1.7E-02
LRGUK	leucine-rich repeats and guanylate kinase domain containing	A_24_P346517	1.2	3.1E-02
BCAS1	breast carcinoma amplified sequence 1	A_23_P17420	1.1	1.9E-02
PLEKHN1	pleckstrin homology domain containing, family N member 1	A_23_P23616	1.1	4.4E-04
RGS22	regulator of G-protein signaling 22	A_32_P125771	1.1	3.4E-02
ARL4C	ADP-ribosylation factor-like 4C	A_23_P317620	1.1	3.9E-06
ROBO2	roundabout, axon guidance receptor, homolog 2 (Drosophila)	A_24_P180151	1.1	4.2E-02
TRPV4	transient receptor potential cation channel, subfamily V, member 4	A_24_P13381	1.1	3.3E-03
ANKRD36BP2	ankyrin repeat domain 36B pseudogene 2	A_24_P341089	1.1	1.2E-03
SLC45A3	solute carrier family 45, member 3	A_24_P208345	1.1	5.8E-05
ADAM12	ADAM metalloproteinase domain 12	A_23_P202327	1.1	1.8E-04

NNMT	nicotinamide N-methyltransferase	A_23_P127584	1.1	6.6E-04
CD79B	CD79b molecule, immunoglobulin-associated beta	A_23_P207201	1.1	2.2E-03
TSPAN1	tetraspanin 1	A_23_P160167	1.1	1.1E-02
BAI2	brain-specific angiogenesis inhibitor 2	A_23_P149019	1.1	4.8E-07
CD1B	CD1b molecule	A_23_P351844	1.1	1.5E-02
PTH LH	parathyroid hormone-like hormone	A_23_P2271	1.1	6.8E-05
ENPP3	ectonucleotide pyrophosphatase/phosphodiesterase 3	A_23_P404536	1.1	5.7E-05
CTLA4	cytotoxic T-lymphocyte-associated protein 4	A_23_P102481	1.1	2.5E-03
FAM171B	family with sequence similarity 171, member B	A_32_P202759	1.1	9.9E-04
LOC285957	hypothetical protein LOC285957	A_32_P41551	1.1	1.0E-02
GCKR	glucokinase (hexokinase 4) regulator	A_23_P119886	1.1	3.7E-03
FAM74A4	family with sequence similarity 74, member A4	A_24_P606083	1.1	1.3E-02
ROBO1	roundabout, axon guidance receptor, homolog 1 (Drosophila)	A_24_P77432	1.1	1.4E-08
HPSE2	heparanase 2	A_24_P103893	1.1	3.0E-02
NKAIN2	Na ⁺ /K ⁺ transporting ATPase interacting 2	A_23_P316501	1.1	6.7E-03
BIK	BCL2-interacting killer (apoptosis-inducing)	A_23_P404667	1.1	1.8E-03
IL23A	interleukin 23, alpha subunit p19	A_23_P76078	1.1	1.0E-05
OXCT2	3-oxoacid CoA transferase 2	A_23_P137896	1.1	8.0E-03
EPHB3	EPH receptor B3	A_23_P95060	1.1	2.1E-04
SSPN	sarcospan (Kras oncogene-associated gene)	A_23_P203920	1.1	2.7E-05
LOC284454	hypothetical LOC284454	A_32_P444104	1.1	1.9E-02
LOR	loricrin	A_23_P34452	1.1	1.3E-02
COX6B2	cytochrome c oxidase subunit VIb polypeptide 2 (testis)	A_24_P267523	1.1	1.3E-02
PDIA4	protein disulfide isomerase family A, member 4	A_32_P192804	1.1	2.2E-03
DUSP2	dual specificity phosphatase 2	A_23_P108842	1.1	1.4E-04
STAMBPL1	STAM binding protein-like 1	A_23_P385322	1.1	2.4E-05
SCGB3A2	secretoglobin, family 3A, member 2	A_23_P145006	1.1	5.2E-03
FSIP1	fibrous sheath interacting protein 1	A_23_P353125	1.1	1.1E-02
IER5L	immediate early response 5-like	A_24_P383450	1.1	1.6E-06
GLT8D2	glycosyltransferase 8 domain containing 2	A_23_P48198	1.1	3.9E-05
CCL13	chemokine (C-C motif) ligand 13	A_24_P125335	1.1	3.5E-02
ACAP1	ArfGAP with coiled-coil, ankyrin repeat and PH domains 1	A_23_P107336	1.1	6.5E-04
AGR2	anterior gradient homolog 2 (Xenopus laevis)	A_23_P31407	1.1	4.6E-02
ZMAT3	zinc finger, matrin-type 3	A_24_P639629	1.1	2.9E-05
SPATA18	spermatogenesis associated 18 homolog (rat)	A_23_P407112	1.1	5.5E-03
DUSP10	dual specificity phosphatase 10	A_23_P51856	1.1	2.7E-07
PVRL1	poliovirus receptor-related 1 (herpesvirus entry mediator C)	A_24_P50890	1.1	7.9E-07
CATSPERB	cation channel, sperm-associated, beta	A_23_P77043	1.1	2.1E-02
PPIL4	peptidylprolyl isomerase (cyclophilin)-like 4	A_24_P187826	1.1	8.1E-03

TNFRSF18	tumor necrosis factor receptor superfamily, member 18	A_24_P411121	1.1	1.3E-05
CRYM	crystallin, mu	A_23_P77731	1.1	1.6E-03
ATP10B	ATPase, class V, type 10B	A_23_P311901	1.1	7.1E-03
PLXDC1	plexin domain containing 1	A_32_P208823	1.1	3.6E-04
MIA	melanoma inhibitory activity	A_23_P4714	1.1	1.6E-02
RGS5	regulator of G-protein signaling 5	A_23_P46045	1.1	2.2E-03
CNTN3	contactin 3 (plasmacytoma associated)	A_24_P17490	1.1	3.1E-02
COL6A3	collagen, type VI, alpha 3	A_32_P156322	1.1	2.4E-02
IL21R	interleukin 21 receptor	A_24_P227927	1.1	3.0E-04
WNT4	wingless-type MMTV integration site family, member 4	A_23_P11787	1.1	4.2E-03
BNC2	basonuclin 2	A_32_P133916	1.1	1.4E-05
MGC11082	hypothetical LOC84777	A_23_P164576	1.1	1.5E-04
ASPHD2	aspartate beta-hydroxylase domain containing 2	A_24_P245815	1.1	5.6E-06
FKBP11	FK506 binding protein 11, 19 kDa	A_23_P25121	1.1	1.0E-03
SLA2	Src-like-adaptor 2	A_23_P143173	1.1	2.1E-02
CST1	cystatin SN	A_23_P112859	1.1	8.2E-04
JUNB	jun B proto-oncogene	A_23_P4821	1.1	2.1E-03
TMEM154	transmembrane protein 154	A_23_P361584	1.1	2.0E-04
PPP2R2B	protein phosphatase 2, regulatory subunit B, beta	A_23_P213620	1.1	2.0E-06
ACSL6	acyl-CoA synthetase long-chain family member 6	A_23_P7562	1.1	1.1E-03
BCL2L14	BCL2-like 14 (apoptosis facilitator)	A_23_P128050	1.1	3.5E-05
PRTFDC1	phosphoribosyl transferase domain containing 1	A_23_P202004	1.1	9.1E-06
HLA-DPB1	major histocompatibility complex, class II, DP beta 1	A_23_P258769	1.1	8.1E-03
ADAM23	ADAM metalloproteinase domain 23	A_23_P351667	1.1	9.2E-04
TRAF3IP3	TRAF3 interacting protein 3	A_23_P334414	1.1	1.6E-03
CLDN14	claudin 14	A_23_P91512	1.1	3.2E-03
ZNF826P	zinc finger protein 826, pseudogene	A_24_P921554	1.1	1.7E-02
TP53INP1	tumor protein p53 inducible nuclear protein 1	A_23_P168882	1.1	2.5E-04
COL1A2	collagen, type I, alpha 2	A_24_P277934	1.1	4.9E-03
SFN	stratifin	A_23_P63254	1.1	6.5E-04
WT1	Wilms tumor 1	A_23_P116280	1.1	1.5E-02
MACC1	metastasis associated in colon cancer 1	A_32_P131031	1.1	1.4E-05
WFIKKN2	WAP, follistatin/kazal, immunoglobulin, kunitz and netrin domain containing 2	A_24_P399230	1.1	2.7E-04
STMN3	stathmin-like 3	A_23_P165927	1.1	6.2E-08
XCL2	chemokine (C motif) ligand 2	A_23_P51534	1.1	1.0E-02
FGF18	fibroblast growth factor 18	A_23_P93027	1.1	1.1E-04
ANGPTL2	angiopoietin-like 2	A_23_P20864	1.1	6.8E-05
FASLG	Fas ligand (TNF superfamily, member 6)	A_23_P369815	1.1	4.2E-02
ABHD12B	abhydrolase domain containing 12B	A_23_P366035	1.1	7.9E-03
RUNX1	runt-related transcription factor 1	A_24_P96403	1.1	1.5E-09

DIEXF	digestive organ expansion factor homolog (zebrafish)	A_23_P34953	1.1	3.4E-02
AMPD3	adenosine monophosphate deaminase 3	A_24_P304154	1.1	2.6E-05
CPE	carboxypeptidase E	A_23_P259442	1.1	3.6E-05
PXDNL	peroxidasin homolog (Drosophila)-like	A_23_P258310	1.1	1.2E-03
SPINK13	serine peptidase inhibitor, Kazal type 13 (putative)	A_23_P58706	1.1	3.7E-02
PGBD5	piggyBac transposable element derived 5	A_23_P126649	1.1	2.2E-02
ITM2C	integral membrane protein 2C	A_24_P402690	1.1	5.4E-05
CHSY1	chondroitin sulfate synthase 1	A_23_P37484	1.1	4.8E-05
HMGB3P1	high-mobility group box 3 pseudogene 1	A_23_P373119	1.1	4.7E-03
KIAA1143	KIAA1143	A_32_P11701	1.1	3.1E-03
NGEF	neuronal guanine nucleotide exchange factor	A_23_P102364	1.1	2.3E-03
COL5A2	collagen, type V, alpha 2	A_23_P33196	1.1	1.2E-02
CPXM1	carboxypeptidase X (M14 family), member 1	A_23_P6066	1.0	2.7E-03
SLC41A2	solute carrier family 41, member 2	A_23_P204801	1.0	2.3E-04
OVOL1	ovo-like 1(Drosophila)	A_23_P202810	1.0	6.2E-04
HS3ST1	heparan sulfate (glucosamine) 3-O-sulfotransferase 1	A_23_P121657	1.0	1.4E-02
TPBG	trophoblast glycoprotein	A_23_P59261	1.0	1.5E-07
FAM5C	family with sequence similarity 5, member C	A_23_P103812	1.0	1.5E-04
CFI	complement factor I	A_24_P92472	1.0	6.1E-07
IL20	interleukin 20	A_23_P46482	1.0	1.0E-02
AEN	apoptosis enhancing nuclease	A_32_P85230	1.0	6.3E-06
SPRY1	sprouty homolog 1, antagonist of FGF signaling (Drosophila)	A_23_P144476	1.0	1.4E-05
IQCG	IQ motif containing G	A_23_P300070	1.0	4.7E-02
GLB1L3	galactosidase, beta 1-like 3	A_32_P741851	1.0	1.3E-02
CLDN2	claudin 2	A_23_P394947	1.0	3.5E-02
APOE	apolipoprotein E	A_23_P164650	1.0	7.7E-03
RAB27B	RAB27B, member RAS oncogene family	A_23_P107612	1.0	1.6E-02
MAGED4B	melanoma antigen family D, 4B	A_23_P159907	1.0	1.2E-04
PRR7	proline rich 7 (synaptic)	A_23_P30464	1.0	5.3E-05
ANO1	anoctamin 1, calcium activated chloride channel	A_24_P87036	1.0	1.9E-03
DTX1	deltex homolog 1 (Drosophila)	A_24_P290751	1.0	5.2E-05
SFRP1	secreted frizzled-related protein 1	A_23_P10127	1.0	1.6E-02
SLC22A4	solute carrier family 22 (organic cation/ergothioneine transporter), member 4	A_23_P156180	1.0	4.8E-02
PMAIP1	phorbol-12-myristate-13-acetate-induced protein 1	A_23_P207999	1.0	6.5E-06
GPR171	G protein-coupled receptor 171	A_23_P253317	1.0	9.4E-03
SHOX2	short stature homeobox 2	A_24_P300021	1.0	6.1E-03
FAM124A	family with sequence similarity 124A	A_24_P239538	1.0	3.2E-03
HOXB8	homeobox B8	A_23_P370588	1.0	1.7E-02
NELL1	NEL-like 1 (chicken)	A_23_P251151	1.0	1.1E-03

HEPACAM	hepatic and glial cell adhesion molecule	A_24_P213944	1.0	1.3E-02
CNGA1	cyclic nucleotide gated channel alpha 1	A_23_P92536	1.0	1.7E-02
VSNL1	visinin-like 1	A_23_P209978	1.0	8.8E-03
TLR10	toll-like receptor 10	A_23_P33420	1.0	1.1E-02
CLEC4G	C-type lectin domain family 4, member G	A_23_P153390	1.0	4.3E-02
TMEM200A	transmembrane protein 200A	A_32_P40288	1.0	3.6E-04
DPYSL3	dihydropyrimidinase-like 3	A_23_P7528	1.0	1.3E-04
CDKN1A	cyclin-dependent kinase inhibitor 1A (p21, Cip1)	A_24_P89457	1.0	5.3E-04
BOC	Boc homolog (mouse)	A_23_P257763	1.0	1.1E-04
PDGFR1	platelet-derived growth factor receptor-like	A_23_P60146	1.0	3.4E-03
TMEM176B	transmembrane protein 176B	A_23_P157007	1.0	9.0E-05
EGFLAM	EGF-like, fibronectin type III and laminin G domains	A_23_P144911	1.0	2.5E-05
SAMD4A	sterile alpha motif domain containing 4A	A_24_P383523	1.0	6.8E-04
LINGO1	leucine rich repeat and Ig domain containing 1	A_24_P112941	1.0	3.2E-02
SNHG8	small nucleolar RNA host gene 8 (non-protein coding)	A_24_P498767	1.0	1.4E-04
VCAN	versican	A_23_P144959	1.0	3.4E-04
PDK1	pyruvate dehydrogenase kinase, isozyme 1	A_23_P10614	1.0	6.6E-03
CLECL1	C-type lectin-like 1	A_23_P321984	1.0	3.6E-02
SLC38A4	solute carrier family 38, member 4	A_24_P321581	1.0	9.1E-03
CD83	CD83 molecule	A_23_P70670	1.0	2.2E-03
CARD11	caspase recruitment domain family, member 11	A_24_P945262	1.0	2.9E-03
SPSB1	splA/ryanodine receptor domain and SOCS box containing 1	A_23_P200096	1.0	2.0E-03
COL7A1	collagen, type VII, alpha 1	A_23_P144071	1.0	6.7E-04
SPAG4	sperm associated antigen 4	A_23_P132027	1.0	6.3E-03
GALNT6	UDP-N-acetyl-alpha-D-galactosamine:polypeptide N-acetylgalactosaminyltransferase 6 (GalNAc-T6)	A_23_P204133	1.0	3.6E-04
NLGN4Y	neuroligin 4, Y-linked	A_23_P121441	1.0	1.3E-03
FAM83A	family with sequence similarity 83, member A	A_23_P216052	1.0	1.1E-02
MYBPC2	myosin binding protein C, fast type	A_23_P16262	1.0	4.0E-03
NEFL	neurofilament, light polypeptide	A_24_P18137	1.0	1.2E-02
HSH2D	hematopoietic SH2 domain containing	A_23_P153372	1.0	4.9E-04
IGFBP7	insulin-like growth factor binding protein 7	A_23_P353035	1.0	3.7E-05
PODNL1	podocan-like 1	A_23_P433798	1.0	1.1E-03
SACS	spastic ataxia of Charlevoix-Saguenay (sacsin)	A_23_P308073	1.0	4.5E-05
GNB5	guanine nucleotide binding protein (G protein), beta 5	A_24_P911571	1.0	3.6E-03
COL18A1	collagen, type XVIII, alpha 1	A_23_P211212	1.0	9.7E-05
GJB3	gap junction protein, beta 3, 31kDa	A_24_P379233	1.0	8.9E-03
LOC100129973	hypothetical LOC100129973	A_24_P497318	1.0	8.8E-03
DRD5	dopamine receptor D5	A_32_P54274	1.0	5.8E-03
STEAP3	STEAP family member 3	A_23_P90601	1.0	1.5E-04

DPEP1	dipeptidase 1 (renal)	A_23_P152262	1.0	9.4E-03
EPHB2	EPH receptor B2	A_23_P200067	1.0	1.7E-05
PGLYRP4	peptidoglycan recognition protein 4	A_24_P231302	1.0	2.0E-03
NBPF1	neuroblastoma breakpoint family, member 1	A_24_P566932	1.0	1.3E-02
CYTL1	cytokine-like 1	A_23_P10647	1.0	2.2E-02
KGFLP1	keratinocyte growth factor-like protein 1	A_32_P11372	1.0	9.5E-04
MX2	myxovirus (influenza virus) resistance 2 (mouse)	A_23_P6263	1.0	4.7E-05
XKR4	XK, Kell blood group complex subunit-related family, member 4	A_32_P134007	1.0	1.1E-02
SP140	SP140 nuclear body protein	A_24_P328504	1.0	5.8E-03
IL7	interleukin 7	A_23_P8961	1.0	4.9E-04
RGS20	regulator of G-protein signaling 20	A_23_P73097	1.0	1.9E-03
AARSD1	alanyl-tRNA synthetase domain containing 1	A_23_P207414	1.0	1.4E-02
TRO	trophinin	A_23_P217228	1.0	1.0E-04
LSP1	lymphocyte-specific protein 1	A_23_P13382	1.0	3.0E-04
PACSIN1	protein kinase C and casein kinase substrate in neurons 1	A_23_P258088	1.0	6.5E-04
ALDH1B1	aldehyde dehydrogenase 1 family, member B1	A_23_P135294	1.0	2.2E-05
C8orf75	chromosome 8 open reading frame 75	A_24_P333532	1.0	2.9E-02
HMGB3P24	high-mobility group box 3 pseudogene 24	A_24_P49747	1.0	3.1E-02
COL12A1	collagen, type XII, alpha 1	A_24_P291814	1.0	3.5E-03
KBTBD8	kelch repeat and BTB (POZ) domain containing 8	A_23_P431252	1.0	1.9E-02
P2RY8	purinergic receptor P2Y, G-protein coupled, 8	A_24_P340128	1.0	4.7E-03
S100B	S100 calcium binding protein B	A_23_P143526	1.0	9.3E-03
FAM83F	family with sequence similarity 83, member F	A_23_P343963	1.0	1.4E-02
PMEPA1	prostate transmembrane protein, androgen induced 1	A_24_P413126	1.0	2.8E-05
C1QTNF3	C1q and tumor necrosis factor related protein 3	A_23_P122067	1.0	8.6E-03
HTR1F	5-hydroxytryptamine (serotonin) receptor 1F	A_23_P166674	1.0	1.7E-02
MARCH4	membrane-associated ring finger (C3HC4) 4	A_23_P333228	1.0	1.7E-02
LOC730101	hypothetical LOC730101	A_24_P500422	1.0	1.4E-03
ADC	arginine decarboxylase	A_24_P11462	1.0	4.8E-09
CR2	complement component (3d/Epstein Barr virus) receptor 2	A_23_P124542	1.0	3.3E-02
MYO3B	myosin IIIB	A_23_P417853	1.0	2.3E-03
GNG2	guanine nucleotide binding protein (G protein), gamma 2	A_32_P208403	1.0	8.3E-05
CARD14	caspase recruitment domain family, member 14	A_23_P320070	1.0	1.8E-02
TFF3	trefoil factor 3 (intestinal)	A_23_P393099	1.0	3.8E-02
C16orf74	chromosome 16 open reading frame 74	A_24_P289178	1.0	3.5E-04
TSLP	thymic stromal lymphopoietin	A_23_P121987	1.0	9.2E-03
PODXL2	podocalyxin-like 2	A_23_P121037	1.0	2.6E-03
ITPRIPL1	inositol 1,4,5-triphosphate receptor interacting protein-like 1	A_32_P525524	1.0	1.9E-06
CNIH3	cornichon homolog 3 (Drosophila)	A_23_P384044	1.0	4.4E-03

CLGN	calmegin	A_23_P18684	1.0	2.7E-02
TRAF1	TNF receptor-associated factor 1	A_24_P89891	1.0	2.1E-04
RPRML	reprimo-like	A_32_P3476	1.0	3.7E-02
UHRF1	ubiquitin-like with PHD and ring finger domains 1	A_23_P208880	1.0	1.3E-02
CNTNAP2	contactin associated protein-like 2	A_23_P84399	1.0	8.8E-03
PPM1E	protein phosphatase, Mg2+/Mn2+ dependent, 1E	A_32_P73796	1.0	3.1E-02
SCARA3	scavenger receptor class A, member 3	A_23_P215900	1.0	1.1E-04
ZNF436	zinc finger protein 436	A_23_P51202	1.0	8.6E-05
E2F7	E2F transcription factor 7	A_32_P210202	1.0	3.5E-02
OAF	OAF homolog (Drosophila)	A_23_P310590	1.0	3.0E-04
CLSTN3	calsyntenin 3	A_23_P53724	1.0	1.1E-06
SPACA3	sperm acrosome associated 3	A_23_P317244	1.0	9.8E-05
SPDEF	SAM pointed domain containing ets transcription factor	A_23_P111194	1.0	9.0E-04
MYC	v-myc myelocytomatosis viral oncogene homolog (avian)	A_23_P215956	1.0	1.4E-02
ANTXR1	anthrax toxin receptor 1	A_24_P131522	0.9	2.1E-04
SIDT1	SID1 transmembrane family, member 1	A_23_P132515	0.9	1.9E-06
CD209	CD209 molecule	A_24_P305345	0.9	9.3E-04
SERPINF1	serpin peptidase inhibitor, clade F (alpha-2 antiplasmin, pigment epithelium derived factor), member 1	A_23_P100660	0.9	1.1E-04
DCLK1	doublecortin-like kinase 1	A_24_P928627	0.9	3.1E-02
SERPINI1	serpin peptidase inhibitor, clade I (neuroserpin), member 1	A_23_P166929	0.9	3.4E-03
C14orf37	chromosome 14 open reading frame 37	A_24_P181295	0.9	2.6E-03
SLC4A7	solute carrier family 4, sodium bicarbonate cotransporter, member 7	A_24_P362931	0.9	6.3E-05
ANK2	ankyrin 2, neuronal	A_23_P133068	0.9	4.1E-04
PLAUR	plasminogen activator, urokinase receptor	A_23_P16469	0.9	7.7E-03
NRAP	nebulin-related anchoring protein	A_23_P402765	0.9	7.5E-03
FLJ36031	hypothetical protein FLJ36031	A_23_P406616	0.9	1.6E-02
GPX8	glutathione peroxidase 8 (putative)	A_23_P404259	0.9	9.0E-03
STAG3	stromal antigen 3	A_23_P145657	0.9	4.1E-03
COL5A1	collagen, type V, alpha 1	A_32_P95034	0.9	1.4E-02
FBXO16	F-box protein 16	A_23_P168847	0.9	5.7E-03
ENTPD7	ectonucleoside triphosphate diphosphohydrolase 7	A_24_P112447	0.9	1.6E-04
DOK5	docking protein 5	A_23_P40217	0.9	4.9E-06
PIM1	pim-1 oncogene	A_23_P345118	0.9	1.4E-03
SYT6	synaptotagmin VI	A_23_P398947	0.9	4.0E-03
RUNX3	runt-related transcription factor 3	A_23_P51231	0.9	1.8E-03
CADPS	Ca++-dependent secretion activator	A_23_P69326	0.9	3.6E-06
AGR3	anterior gradient homolog 3 (Xenopus laevis)	A_23_P42811	0.9	6.1E-03
TIMP1	TIMP metalloproteinase inhibitor 1	A_23_P62115	0.9	7.6E-03

LOXL4	lysyl oxidase-like 4	A_24_P406754	0.9	3.6E-03
ST8SIA1	ST8 alpha-N-acetyl-neuraminide alpha-2,8-sialyltransferase 1	A_23_P354705	0.9	2.5E-04
LOC100506779	hypothetical LOC100506779	A_24_P829107	0.9	1.1E-04
CCL21	chemokine (C-C motif) ligand 21	A_23_P112470	0.9	2.7E-03
ZFP36	zinc finger protein 36, C3H type, homolog (mouse)	A_23_P39237	0.9	2.5E-02
TPPP3	tubulin polymerization-promoting protein family member 3	A_23_P26386	0.9	1.1E-03
VSTM2L	V-set and transmembrane domain containing 2 like	A_23_P79803	0.9	3.5E-03
E2F8	E2F transcription factor 8	A_23_P35871	0.9	4.8E-02
ITGB1BP2	integrin beta 1 binding protein (melusin) 2	A_23_P45424	0.9	1.6E-03
DACT3	dapper, antagonist of beta-catenin, homolog 3 (Xenopus laevis)	A_23_P360964	0.9	6.8E-05
ACTN1	actinin, alpha 1	A_32_P115162	0.9	4.6E-05
RAB3B	RAB3B, member RAS oncogene family	A_23_P388168	0.9	4.1E-02
GALNT14	UDP-N-acetyl-alpha-D-galactosamine:polypeptide N-acetylgalactosaminyltransferase 14 (GalNAc-T14)	A_23_P67847	0.9	4.6E-02
KREMEN2	kringle containing transmembrane protein 2	A_23_P77612	0.9	5.5E-03
ARHGAP22	Rho GTPase activating protein 22	A_23_P75310	0.9	5.7E-05
LIPC	lipase, hepatic	A_23_P88559	0.9	1.0E-02
HELB	helicase (DNA) B	A_23_P2294	0.9	1.4E-02
TRIM47	tripartite motif containing 47	A_23_P26697	0.9	2.3E-07
OSM	oncostatin M	A_23_P166408	0.9	1.1E-02
TEX11	testis expressed 11	A_23_P96501	0.9	7.4E-03
EMB	embigin	A_24_P684186	0.9	9.0E-06
ELF3	E74-like factor 3 (ets domain transcription factor, epithelial-specific)	A_23_P104188	0.9	1.3E-02
SEMA7A	semaphorin 7A, GPI membrane anchor (John Milton Hagen blood group)	A_23_P106389	0.9	4.8E-02
CACNA1G	calcium channel, voltage-dependent, T type, alpha 1G subunit	A_23_P107247	0.9	1.3E-04
PRSS22	protease, serine, 22	A_23_P400298	0.9	3.3E-04
RGPD2	RANBP2-like and GRIP domain containing 2	A_32_P108544	0.9	4.4E-02
HHAT	hedgehog acyltransferase	A_23_P136355	0.9	4.0E-07
SLC7A5	solute carrier family 7 (cationic amino acid transporter, y+ system), member 5	A_24_P335620	0.9	2.8E-03
GPR115	G protein-coupled receptor 115	A_24_P337671	0.9	1.5E-02
BLNK	B-cell linker	A_24_P64344	0.9	1.8E-03
MADCAM1	mucosal vascular addressin cell adhesion molecule 1	A_23_P153616	0.9	1.5E-02
TRAF5	TNF receptor-associated factor 5	A_23_P201731	0.9	4.9E-07
GABPB1	GA binding protein transcription factor, beta subunit 1	A_23_P205789	0.9	2.8E-04
KYNU	kynureninase	A_23_P56898	0.9	3.9E-03
SDSL	serine dehydratase-like	A_23_P53439	0.9	4.4E-05
NAP1L3	nucleosome assembly protein 1-like 3	A_23_P125717	0.9	7.4E-04
NEK6	NIMA (never in mitosis gene a)-related kinase 6	A_23_P216920	0.9	1.1E-05

TTC39C	tetratricopeptide repeat domain 39C	A_32_P168756	0.9	4.2E-08
HDAC9	histone deacetylase 9	A_23_P404162	0.9	6.5E-03
STK38L	serine/threonine kinase 38 like	A_23_P64743	0.9	5.8E-05
CLIP3	CAP-GLY domain containing linker protein 3	A_24_P279718	0.9	2.3E-03
UAP1	UDP-N-acetylglucosamine pyrophosphorylase 1	A_23_P160460	0.9	6.4E-04
EMBP1	embigin pseudogene 1	A_32_P206541	0.9	1.8E-05
ADAM8	ADAM metalloproteinase domain 8	A_24_P300777	0.9	7.8E-04
NAMPT	nicotinamide phosphoribosyltransferase	A_23_P305060	0.9	3.6E-02
RSPH9	radial spoke head 9 homolog (Chlamydomonas)	A_24_P55225	0.9	3.8E-02
BHLHE40	basic helix-loop-helix family, member e40	A_24_P268676	0.9	3.1E-04
SCN3A	sodium channel, voltage-gated, type III, alpha subunit	A_24_P85888	0.9	3.3E-02
LOC339894	hypothetical LOC339894	A_24_P854556	0.9	3.6E-03
THBS1	thrombospondin 1	A_23_P206212	0.9	4.0E-02
SERTAD4	SERTA domain containing 4	A_23_P318904	0.9	1.1E-02
C8orf45	chromosome 8 open reading frame 45	A_23_P390755	0.9	6.0E-03
LITAF	lipopolysaccharide-induced TNF factor	A_23_P3532	0.9	3.8E-05
HIST1H4J	histone cluster 1, H4j	A_23_P30805	0.9	3.4E-05
GPR174	G protein-coupled receptor 174	A_23_P11070	0.9	9.7E-03
MIR17HG	miR-17-92 cluster host gene (non-protein coding)	A_24_P529168	0.9	4.3E-03
STAB2	stabilin 2	A_23_P162607	0.9	8.4E-04
PDGFD	platelet derived growth factor D	A_24_P124349	0.9	2.5E-02
HMGB3	high-mobility group box 3	A_23_P217236	0.9	4.3E-03
PPP2R2C	protein phosphatase 2, regulatory subunit B, gamma	A_24_P3415	0.9	2.5E-02
C1orf106	chromosome 1 open reading frame 106	A_23_P1043	0.9	1.1E-04
MND1	meiotic nuclear divisions 1 homolog (S. cerevisiae)	A_23_P133123	0.9	5.5E-03
ANKRD36B	ankyrin repeat domain 36B	A_24_P324749	0.9	2.2E-02
LOC729683	hypothetical protein LOC729683	A_32_P145010	0.9	8.6E-05
SPHK1	sphingosine kinase 1	A_23_P38106	0.9	4.0E-03
SEL1L3	sel-1 suppressor of lin-12-like 3 (C. elegans)	A_23_P426021	0.9	1.3E-05
RCAN1	regulator of calcineurin 1	A_23_P166248	0.9	1.3E-03
AQP3	aquaporin 3 (Gill blood group)	A_23_P112482	0.9	5.4E-03
CMAH	cytidine monophosphate-N-acetylneuraminic acid hydroxylase (CMP-N-acetylneuraminic acid monooxygenase) pseudogene	A_23_P351467	0.9	9.1E-03
STRC	stereocilin	A_23_P163238	0.9	4.4E-02
TRAF3	TNF receptor-associated factor 3	A_23_P37068	0.9	1.7E-06
PCSK1N	proprotein convertase subtilisin/kexin type 1 inhibitor	A_23_P22487	0.9	2.0E-06
ARID5B	AT rich interactive domain 5B (MRF1-like)	A_23_P97871	0.9	9.1E-03
RAB30	RAB30, member RAS oncogene family	A_24_P167338	0.9	3.0E-02
SLC16A7	solute carrier family 16, member 7 (monocarboxylic acid transporter 2)	A_23_P117059	0.9	2.5E-04

PPM1J	protein phosphatase, Mg ²⁺ /Mn ²⁺ dependent, 1J	A_23_P201939	0.9	2.2E-09
LZTS1	leucine zipper, putative tumor suppressor 1	A_23_P20443	0.9	8.9E-03
LY96	lymphocyte antigen 96	A_23_P94230	0.9	1.1E-04
FOSL2	FOS-like antigen 2	A_23_P348121	0.9	1.3E-02
HGF	hepatocyte growth factor (hepapoietin A; scatter factor)	A_23_P93787	0.9	3.5E-04
RAB6B	RAB6B, member RAS oncogene family	A_24_P475349	0.9	6.0E-03
CCRN4L	CCR4 carbon catabolite repression 4-like (S. cerevisiae)	A_24_P213794	0.9	1.4E-02
SCARNA17	small Cajal body-specific RNA 17	A_32_P37592	0.9	5.1E-04
F12	coagulation factor XII (Hageman factor)	A_23_P167674	0.9	3.8E-06
DYRK3	dual-specificity tyrosine-(Y)-phosphorylation regulated kinase 3	A_24_P345209	0.9	7.4E-03
ZAP70	zeta-chain (TCR) associated protein kinase 70kDa	A_23_P39682	0.9	6.2E-03
HAPLN3	hyaluronan and proteoglycan link protein 3	A_23_P14754	0.9	5.1E-04
ADAD1	adenosine deaminase domain containing 1 (testis-specific)	A_23_P41514	0.9	1.6E-02
LRRTM3	leucine rich repeat transmembrane neuronal 3	A_24_P295465	0.9	5.1E-03
RAB33A	RAB33A, member RAS oncogene family	A_23_P147025	0.9	5.3E-05
SLC35F3	solute carrier family 35, member F3	A_23_P422212	0.9	4.2E-03
BCL2A1	BCL2-related protein A1	A_23_P152002	0.9	4.7E-02
MYOM1	myomesin 1, 185kDa	A_23_P96271	0.9	9.9E-04
GPAM	glycerol-3-phosphate acyltransferase, mitochondrial	A_23_P104237	0.9	3.2E-02
CCL1	chemokine (C-C motif) ligand 1	A_23_P49759	0.9	2.5E-03
SIGLEC15	sialic acid binding Ig-like lectin 15	A_23_P50146	0.9	2.7E-02
PDE11A	phosphodiesterase 11A	A_32_P228037	0.9	9.3E-03
ARHGEF25	Rho guanine nucleotide exchange factor (GEF) 25	A_23_P98844	0.9	4.1E-03
TBX1	T-box 1	A_23_P40527	0.9	1.1E-02
GRAP2	GRB2-related adaptor protein 2	A_24_P10884	0.9	1.5E-02
ANKS4B	ankyrin repeat and sterile alpha motif domain containing 4B	A_23_P385766	0.9	9.1E-03
CLCF1	cardiotrophin-like cytokine factor 1	A_23_P138760	0.9	1.3E-02
TRPS1	trichorhinophalangeal syndrome I	A_32_P106980	0.9	1.2E-04
C8orf34	chromosome 8 open reading frame 34	A_23_P73311	0.9	1.9E-02
ENC1	ectodermal-neural cortex 1 (with BTB-like domain)	A_24_P69095	0.9	4.8E-03
SMR3A	submaxillary gland androgen regulated protein 3A	A_23_P41365	0.9	4.4E-02
KIT	v-kit Hardy-Zuckerman 4 feline sarcoma viral oncogene homolog	A_23_P110253	0.9	2.1E-02
DGKI	diacylglycerol kinase, iota	A_23_P169909	0.9	5.9E-03
ZNF676	zinc finger protein 676	A_24_P205036	0.9	8.2E-03
SEZ6L	seizure related 6 homolog (mouse)-like	A_32_P124819	0.9	1.8E-02
ZNF643	zinc finger protein 643	A_23_P160200	0.9	9.2E-05
PHTF2	putative homeodomain transcription factor 2	A_24_P323944	0.9	1.5E-04
CEP152	centrosomal protein 152kDa	A_24_P805626	0.9	6.4E-03
CLU	clusterin	A_23_P215913	0.8	1.1E-02

CNKSR3	CNKSR family member 3	A_23_P134085	0.8	1.2E-04
JAK3	Janus kinase 3	A_24_P59667	0.8	3.8E-03
ODF3B	outer dense fiber of sperm tails 3B	A_24_P402261	0.8	2.0E-02
NBEA	neurobeachin	A_23_P65278	0.8	1.0E-02
EGFL6	EGF-like-domain, multiple 6	A_23_P22596	0.8	1.0E-02
SH3BGR	SH3 domain binding glutamic acid-rich protein	A_23_P91520	0.8	2.9E-03
C7orf68	chromosome 7 open reading frame 68	A_23_P20022	0.8	3.3E-03
SCUBE2	signal peptide, CUB domain, EGF-like 2	A_23_P105144	0.8	5.3E-03
NTF3	neurotrophin 3	A_23_P360797	0.8	2.7E-02
SEPT6	septin 6	A_23_P22614	0.8	6.2E-04
FAM131B	family with sequence similarity 131, member B	A_24_P252310	0.8	1.7E-03
TIFA	TRAF-interacting protein with forkhead-associated domain	A_23_P352619	0.8	1.5E-02
FRK	fyn-related kinase	A_23_P133665	0.8	3.5E-04
ABCC3	ATP-binding cassette, sub-family C (CFTR/MRP), member 3	A_23_P207507	0.8	1.4E-02
PVRIG	poliovirus receptor related immunoglobulin domain containing	A_23_P8424	0.8	5.4E-04
TSPEAR	thrombospondin-type laminin G domain and EAR repeats	A_23_P394972	0.8	4.3E-03
SBNO2	strawberry notch homolog 2 (Drosophila)	A_23_P5273	0.8	4.0E-04
MRGPRF	MAS-related GPR, member F	A_23_P432573	0.8	1.6E-03
IKZF2	IKAROS family zinc finger 2 (Helios)	A_23_P323872	0.8	1.8E-02
GABRA2	gamma-aminobutyric acid (GABA) A receptor, alpha 2	A_23_P167121	0.8	7.7E-03
STAR	steroidogenic acute regulatory protein	A_23_P8981	0.8	1.4E-02
IL20RB	interleukin 20 receptor beta	A_23_P91850	0.8	4.2E-03
SDC1	syndecan 1	A_23_P16944	0.8	1.0E-04
ZNF174	zinc finger protein 174	A_24_P418878	0.8	1.2E-02
SOCS1	suppressor of cytokine signaling 1	A_23_P420196	0.8	7.9E-04
EPST1	epithelial stromal interaction 1 (breast)	A_23_P105794	0.8	2.6E-02
FAM110C	family with sequence similarity 110, member C	A_32_P47643	0.8	1.5E-04
SAMSN1	SAM domain, SH3 domain and nuclear localization signals 1	A_23_P29005	0.8	2.3E-02
HOXD8	homeobox D8	A_23_P210164	0.8	2.1E-03
PROX1	prospero homeobox 1	A_23_P137634	0.8	4.5E-02
RGS2	regulator of G-protein signaling 2, 24kDa	A_23_P114947	0.8	4.3E-02
BMP4	bone morphogenetic protein 4	A_23_P54144	0.8	1.1E-02
HIST1H4K	histone cluster 1, H4k	A_23_P30813	0.8	4.4E-05
KCNF1	potassium voltage-gated channel, subfamily F, member 1	A_23_P142765	0.8	1.5E-02
HAMP	hepcidin antimicrobial peptide	A_23_P165162	0.8	1.6E-02
PFKP	phosphofructokinase, platelet	A_23_P46928	0.8	9.3E-05
LRRN2	leucine rich repeat neuronal 2	A_23_P11843	0.8	9.6E-04
HERC4	hect domain and RLD 4	A_24_P936041	0.8	4.2E-02

SMAD3	SMAD family member 3	A_23_P359091	0.8	2.3E-05
KLHL4	kelch-like 4 (Drosophila)	A_23_P171150	0.8	2.8E-02
LOC401021	hypothetical LOC401021	A_32_P211117	0.8	2.3E-02
CCDC136	coiled-coil domain containing 136	A_23_P416178	0.8	1.9E-04
PLOD2	procollagen-lysine, 2-oxoglutarate 5-dioxygenase 2	A_23_P211910	0.8	2.3E-03
CXXC5	CXXC finger protein 5	A_23_P399001	0.8	3.1E-06
EFCAB11	EF-hand calcium binding domain 11	A_23_P129014	0.8	1.8E-04
TNFRSF25	tumor necrosis factor receptor superfamily, member 25	A_23_P126844	0.8	1.2E-03
DNAJB5	DnaJ (Hsp40) homolog, subfamily B, member 5	A_23_P112241	0.8	4.2E-04
RAB37	RAB37, member RAS oncogene family	A_23_P414654	0.8	3.2E-04
ZFHX2	zinc finger homeobox 2	A_32_P226205	0.8	3.4E-02
CIB2	calcium and integrin binding family member 2	A_23_P65890	0.8	2.0E-07
ZNF80	zinc finger protein 80	A_23_P256526	0.8	2.0E-03
ZP3	zona pellucida glycoprotein 3 (sperm receptor)	A_24_P95059	0.8	1.1E-02
TXLNB	taxilin beta	A_23_P434398	0.8	3.1E-02
CHEK2	CHK2 checkpoint homolog (S. pombe)	A_23_P109452	0.8	3.1E-07
NFATC1	nuclear factor of activated T-cells, cytoplasmic, calcineurin-dependent 1	A_24_P258846	0.8	1.0E-02
KBTBD10	kelch repeat and BTB (POZ) domain containing 10	A_23_P17190	0.8	4.9E-03
PLEK	pleckstrin	A_23_P209678	0.8	3.4E-02
HOMER3	homer homolog 3 (Drosophila)	A_23_P39364	0.8	4.2E-06
CTSL1	cathepsin L1	A_23_P94533	0.8	1.3E-02
PRKACB	protein kinase, cAMP-dependent, catalytic, beta	A_23_P371410	0.8	2.8E-03
PAK3	p21 protein (Cdc42/Rac)-activated kinase 3	A_23_P346813	0.8	1.5E-02
C12orf42	chromosome 12 open reading frame 42	A_32_P133767	0.8	4.7E-03
FAM129C	family with sequence similarity 129, member C	A_24_P940348	0.8	2.6E-02
DZIP3	DAZ interacting protein 3, zinc finger	A_24_P102504	0.8	4.2E-02
PHKG1	phosphorylase kinase, gamma 1 (muscle)	A_32_P193166	0.8	1.9E-05
NEK11	NIMA (never in mitosis gene a)- related kinase 11	A_23_P211973	0.8	3.3E-02
PLD4	phospholipase D family, member 4	A_23_P88222	0.8	3.5E-05
DUSP14	dual specificity phosphatase 14	A_23_P207537	0.8	6.2E-04
ATP1B2	ATPase, Na ⁺ /K ⁺ transporting, beta 2 polypeptide	A_24_P31275	0.8	6.3E-05
RAB3IL1	RAB3A interacting protein (rabin3)-like 1	A_23_P75800	0.8	3.5E-04
WEE1	WEE1 homolog (S. pombe)	A_23_P127926	0.8	7.7E-03
SORCS2	sortilin-related VPS10 domain containing receptor 2	A_23_P121665	0.8	1.9E-03
ATRNL1	attractin-like 1	A_24_P100627	0.8	4.7E-02
VLDLR	very low density lipoprotein receptor	A_23_P43476	0.8	1.9E-04
CRABP2	cellular retinoic acid binding protein 2	A_23_P115064	0.8	2.5E-05
TMEM117	transmembrane protein 117	A_23_P2573	0.8	6.0E-06
PARD6G	par-6 partitioning defective 6 homolog gamma (C. elegans)	A_24_P74070	0.8	1.2E-04
TTC23	tetratricopeptide repeat domain 23	A_24_P65121	0.8	1.8E-02

TMEM121	transmembrane protein 121	A_23_P61987	0.8	5.1E-04
RBM38	RNA binding motif protein 38	A_23_P17430	0.8	7.1E-05
SUSD3	sushi domain containing 3	A_23_P401076	0.8	6.6E-04
HHIPL2	HHIP-like 2	A_23_P86064	0.8	1.3E-02
MLF1	myeloid leukemia factor 1	A_24_P345679	0.8	2.1E-02
TRIM36	tripartite motif containing 36	A_24_P363134	0.8	2.2E-02
SLITRK5	SLIT and NTRK-like family, member 5	A_24_P102293	0.8	3.9E-02
TNFRSF4	tumor necrosis factor receptor superfamily, member 4	A_32_P26092	0.8	1.0E-02
MTHFD1L	methylenetetrahydrofolate dehydrogenase (NADP+ dependent) 1-like	A_32_P135243	0.8	3.5E-03
CD163L1	CD163 molecule-like 1	A_23_P61466	0.8	3.9E-02
MFSD6L	major facilitator superfamily domain containing 6-like	A_23_P340218	0.8	2.8E-02
C5orf13	chromosome 5 open reading frame 13	A_32_P98423	0.8	3.0E-02
LHX2	LIM homeobox 2	A_23_P32165	0.8	3.0E-03
GPT2	glutamic pyruvate transaminase (alanine aminotransferase) 2	A_23_P37892	0.8	1.5E-03
NCRNA00256A	non-protein coding RNA 256A	A_32_P99347	0.8	4.8E-03
TESC	tescalcin	A_23_P76538	0.8	5.5E-04
PRG2	proteoglycan 2, bone marrow (natural killer cell activator, eosinophil granule major basic protein)	A_23_P218002	0.8	4.0E-03
PLEK2	pleckstrin 2	A_23_P151506	0.8	7.6E-05
RND3	Rho family GTPase 3	A_23_P142849	0.8	7.2E-05
IFITM1	interferon induced transmembrane protein 1 (9-27)	A_23_P72737	0.8	3.9E-05
GLIS1	GLIS family zinc finger 1	A_23_P316612	0.8	3.3E-04
MC1R	melanocortin 1 receptor (alpha melanocyte stimulating hormone receptor)	A_23_P329271	0.8	7.3E-04
HS6ST1	heparan sulfate 6-O-sulfotransferase 1	A_23_P90587	0.8	1.5E-03
CD248	CD248 molecule, endosialin	A_23_P52697	0.8	3.9E-03
CYTIP	cytohesin 1 interacting protein	A_23_P90626	0.8	2.7E-02
UCHL1	ubiquitin carboxyl-terminal esterase L1 (ubiquitin thiolesterase)	A_23_P132956	0.8	2.6E-02
ASPHD1	aspartate beta-hydroxylase domain containing 1	A_23_P170667	0.8	1.7E-02
CALML4	calmodulin-like 4	A_23_P129188	0.8	2.8E-02
RASL11B	RAS-like, family 11, member B	A_23_P69738	0.8	3.0E-02
MFSD4	major facilitator superfamily domain containing 4	A_24_P51115	0.8	3.9E-02
FAM69A	family with sequence similarity 69, member A	A_24_P246406	0.8	8.6E-03
MEX3B	mex-3 homolog B (C. elegans)	A_24_P65060	0.8	8.3E-03
MDFI	MyoD family inhibitor	A_23_P42168	0.8	9.8E-04
FBXO32	F-box protein 32	A_23_P82814	0.8	5.3E-03
AQP5	aquaporin 5	A_23_P366812	0.8	1.0E-02
SH2D2A	SH2 domain containing 2A	A_23_P160618	0.8	1.5E-03
CTSL2	cathepsin L2	A_23_P146456	0.8	1.4E-02
ADAM19	ADAM metalloproteinase domain 19	A_23_P374082	0.8	1.3E-03

GPX7	glutathione peroxidase 7	A_24_P418816	0.8	7.1E-04
SLC16A14	solute carrier family 16, member 14 (monocarboxylic acid transporter 14)	A_24_P342829	0.8	1.7E-02
LOC100126784	hypothetical LOC100126784	A_32_P187651	0.8	1.7E-02
TNFRSF6B	tumor necrosis factor receptor superfamily, member 6b, decoy	A_23_P218646	0.8	1.7E-02
SPEG	SPEG complex locus	A_23_P338919	0.8	3.8E-02
CTNNA2	catenin (cadherin-associated protein), alpha 2	A_23_P84736	0.8	2.8E-02
ATP1B1	ATPase, Na ⁺ /K ⁺ transporting, beta 1 polypeptide	A_32_P4647	0.8	2.8E-02
DOCK10	dedicator of cytokinesis 10	A_24_P391811	0.8	4.4E-02
C10orf114	chromosome 10 open reading frame 114	A_32_P86739	0.8	2.1E-03
GNL3	guanine nucleotide binding protein-like 3 (nucleolar)	A_23_P41025	0.8	3.8E-04
SPNS3	spinster homolog 3 (Drosophila)	A_23_P100963	0.8	3.3E-07
LOC728175	hypothetical LOC728175	A_23_P379111	0.8	8.8E-03
ESPN	espin	A_32_P901770	0.8	2.2E-02
SLC7A1	solute carrier family 7 (cationic amino acid transporter, y ⁺ system), member 1	A_24_P253251	0.8	1.5E-03
STARD5	StAR-related lipid transfer (START) domain containing 5	A_23_P158880	0.8	3.1E-04
PVRL4	poliovirus receptor-related 4	A_23_P46441	0.8	3.9E-04
GPR172B	G protein-coupled receptor 172B	A_23_P15692	0.8	3.9E-03
EID3	EP300 interacting inhibitor of differentiation 3	A_23_P65068	0.8	2.0E-05
PTGER4	prostaglandin E receptor 4 (subtype EP4)	A_23_P435394	0.8	7.2E-03
FAAH2	fatty acid amide hydrolase 2	A_23_P113471	0.8	4.1E-03
RGMA	RGM domain family, member A	A_23_P372308	0.8	2.9E-03
ERO1LB	ERO1-like beta (<i>S. cerevisiae</i>)	A_23_P347618	0.8	4.5E-03
ALDH18A1	aldehyde dehydrogenase 18 family, member A1	A_23_P1361	0.8	1.1E-06
SLC4A3	solute carrier family 4, anion exchanger, member 3	A_23_P39647	0.8	4.7E-04
GM2A	GM2 ganglioside activator	A_24_P925314	0.8	3.7E-02
TNFAIP3	tumor necrosis factor, alpha-induced protein 3	A_24_P166527	0.8	3.6E-02
C6orf225	chromosome 6 open reading frame 225	A_24_P756657	0.8	3.4E-02
MGC16142	hypothetical protein MGC16142	A_24_P4036	0.8	1.6E-02
KLHL34	kelch-like 34 (Drosophila)	A_23_P428887	0.8	3.4E-04
LEPREL2	leprecan-like 2	A_23_P87752	0.8	5.7E-04
DIRAS2	DIRAS family, GTP-binding RAS-like 2	A_23_P20660	0.8	1.8E-02
SYTL1	synaptotagmin-like 1	A_32_P217773	0.8	2.5E-04
BMP8A	bone morphogenetic protein 8a	A_23_P85922	0.8	2.1E-02
GEN1	Gen homolog 1, endonuclease (Drosophila)	A_24_P920968	0.8	1.0E-02
ASB4	ankyrin repeat and SOCS box containing 4	A_23_P501319	0.8	8.7E-03
DZIP1	DAZ interacting protein 1	A_23_P14157	0.8	1.1E-04
ZC3H12A	zinc finger CCCH-type containing 12A	A_23_P326160	0.8	2.7E-02
LOC388242	coiled-coil domain containing 101 pseudogene	A_32_P135336	0.8	2.2E-04
DES	desmin	A_23_P90710	0.8	1.4E-02

NT5E	5'-nucleotidase, ecto (CD73)	A_24_P316430	0.8	6.7E-03
KRT12	keratin 12	A_23_P55448	0.8	2.6E-02
ZNF790	zinc finger protein 790	A_24_P919279	0.8	2.8E-06
TMEM71	transmembrane protein 71	A_23_P321354	0.8	1.4E-02
TUBB2A	tubulin, beta 2A	A_23_P19291	0.8	4.2E-04
SOX8	SRY (sex determining region Y)-box 8	A_23_P66137	0.8	2.9E-04
TGFBI	transforming growth factor, beta-induced, 68kDa	A_23_P156327	0.8	1.9E-03
FAM38B	family with sequence similarity 38, member B	A_23_P130376	0.8	2.4E-02
ANKH	ankylosis, progressive homolog (mouse)	A_24_P371628	0.8	5.8E-05
XBP1	X-box binding protein 1	A_24_P100228	0.8	2.8E-03
FBLIM1	filamin binding LIM protein 1	A_23_P337934	0.8	1.2E-03
AEBP1	AE binding protein 1	A_23_P145916	0.8	1.3E-02
ACTG2	actin, gamma 2, smooth muscle, enteric	A_23_P39955	0.8	2.0E-02
GLIPR1	GLI pathogenesis-related 1	A_24_P390096	0.8	6.5E-03
VWA1	von Willebrand factor A domain containing 1	A_23_P86089	0.8	2.1E-06
GPR114	G protein-coupled receptor 114	A_23_P206290	0.8	1.5E-03
CDH11	cadherin 11, type 2, OB-cadherin (osteoblast)	A_23_P152305	0.8	8.4E-03
PTH2R	parathyroid hormone 2 receptor	A_24_P457628	0.8	1.6E-02
SEMA3A	sema domain, immunoglobulin domain (Ig), short basic domain, secreted, (semaphorin) 3A	A_24_P192301	0.8	9.6E-03
GOLGA3	golgin A3	A_23_P98864	0.7	2.8E-03
SYNGR1	synaptogyrin 1	A_23_P211522	0.7	1.1E-05
LOC730495	hypothetical protein LOC730495	A_32_P145769	0.7	4.8E-02
BYSL	bystin-like	A_23_P145197	0.7	1.4E-03
SLC9A3R1	solute carrier family 9 (sodium/hydrogen exchanger), member 3 regulator 1	A_23_P308519	0.7	5.6E-05
GATM	glycine amidinotransferase (L-arginine:glycine amidinotransferase)	A_23_P129064	0.7	9.8E-03
TNFRSF12A	tumor necrosis factor receptor superfamily, member 12A	A_23_P49338	0.7	4.8E-02
DCX	doublecortin	A_23_P500328	0.7	3.2E-02
NKX6-1	NK6 homeobox 1	A_24_P68991	0.7	1.7E-02
PTPRH	protein tyrosine phosphatase, receptor type, H	A_23_P101642	0.7	4.6E-03
SOAT2	sterol O-acyltransferase 2	A_23_P25475	0.7	3.9E-03
KCNK2	potassium channel, subfamily K, member 2	A_23_P43713	0.7	3.4E-02
UBQLN1	ubiquilin 1	A_24_P338121	0.7	3.0E-02
CDCP1	CUB domain containing protein 1	A_23_P113613	0.7	8.9E-04
DSP	desmoplakin	A_32_P127566	0.7	3.5E-02
FBXL21	F-box and leucine-rich repeat protein 21 (gene/pseudogene)	A_23_P167723	0.7	2.5E-02
PNMA3	paraneoplastic antigen MA3	A_23_P22422	0.7	4.8E-03
SEMA3C	sema domain, immunoglobulin domain (Ig), short basic domain, secreted, (semaphorin) 3C	A_23_P256473	0.7	3.2E-05
MGC16121	hypothetical protein MGC16121	A_23_P159986	0.7	2.9E-02
DEF6	differentially expressed in FDCP 6 homolog (mouse)	A_23_P321913	0.7	1.6E-04

MICALL2	MICAL-like 2	A_24_P303524	0.7	2.9E-05
ATAD3B	ATPase family, AAA domain containing 3B	A_23_P302750	0.7	9.9E-03
TGFB2	transforming growth factor, beta 2	A_24_P402438	0.7	1.7E-02
IFI16	interferon, gamma-inducible protein 16	A_23_P217866	0.7	5.5E-05
AKR1D1	aldo-keto reductase family 1, member D1 (delta 4-3-ketosteroid-5-beta-reductase)	A_23_P255185	0.7	3.8E-02
KIAA0802	KIAA0802	A_23_P360605	0.7	1.3E-02
RNF122	ring finger protein 122	A_23_P134744	0.7	1.1E-02
RFK	riboflavin kinase	A_23_P216708	0.7	7.1E-06
COL16A1	collagen, type XVI, alpha 1	A_23_P160318	0.7	4.2E-03
RRAD	Ras-related associated with diabetes	A_23_P88849	0.7	7.1E-03
LOC388630	UPF0632 protein A	A_32_P121079	0.7	6.1E-03
FAM75A2	family with sequence similarity 75, member A2	A_23_P435874	0.7	4.6E-02
BASP1	brain abundant, membrane attached signal protein 1	A_23_P213385	0.7	7.2E-04
CCDC83	coiled-coil domain containing 83	A_23_P356667	0.7	4.2E-02
PLK4	polo-like kinase 4	A_24_P912925	0.7	4.8E-02
CYP4F22	cytochrome P450, family 4, subfamily F, polypeptide 22	A_24_P331150	0.7	7.3E-03
KIAA0930	KIAA0930	A_24_P944751	0.7	8.5E-04
RET	ret proto-oncogene	A_24_P343695	0.7	9.9E-03
KAZALD1	Kazal-type serine peptidase inhibitor domain 1	A_23_P421011	0.7	4.5E-03
CCL3	chemokine (C-C motif) ligand 3	A_23_P373017	0.7	3.4E-02
TMEM70	transmembrane protein 70	A_23_P253963	0.7	4.3E-04
SLC16A2	solute carrier family 16, member 2 (monocarboxylic acid transporter 8)	A_23_P137097	0.7	6.4E-04
STX1A	syntaxin 1A (brain)	A_24_P226541	0.7	1.4E-02
TSHZ3	teashirt zinc finger homeobox 3	A_23_P361014	0.7	3.0E-04
FILIP1L	filamin A interacting protein 1-like	A_23_P252052	0.7	3.1E-03
THPO	thrombopoietin	A_23_P121459	0.7	1.6E-02
GPR68	G protein-coupled receptor 68	A_24_P931443	0.7	1.1E-02
ITGB4	integrin, beta 4	A_23_P66355	0.7	3.9E-03
SEC11C	SEC11 homolog C (<i>S. cerevisiae</i>)	A_23_P208009	0.7	3.2E-03
CROT	carnitine O-octanoyltransferase	A_23_P168669	0.7	3.3E-03
GPR137B	G protein-coupled receptor 137B	A_23_P46149	0.7	7.2E-04
CCDC3	coiled-coil domain containing 3	A_24_P369232	0.7	1.4E-02
TMEM182	transmembrane protein 182	A_23_P328000	0.7	4.3E-03
SALL4	sal-like 4 (<i>Drosophila</i>)	A_23_P109072	0.7	1.1E-03
TCF7	transcription factor 7 (T-cell specific, HMG-box)	A_23_P7582	0.7	3.7E-04
IL5RA	interleukin 5 receptor, alpha	A_23_P500676	0.7	1.2E-02
PITPNM1	phosphatidylinositol transfer protein, membrane-associated 1	A_23_P1519	0.7	2.5E-04
IL4	interleukin 4	A_23_P213706	0.7	1.4E-02
CCDC138	coiled-coil domain containing 138	A_24_P879711	0.7	1.9E-02

IGFBPL1	insulin-like growth factor binding protein-like 1	A_24_P132703	0.7	1.2E-02
CGREF1	cell growth regulator with EF-hand domain 1	A_23_P403445	0.7	1.8E-02
ADAMTSL1	ADAMTS-like 1	A_23_P312415	0.7	1.7E-02
IGHM	immunoglobulin heavy constant mu	A_24_P417352	0.7	1.2E-03
FNDC5	fibronectin type III domain containing 5	A_23_P420326	0.7	3.9E-03
APOBEC3C	apolipoprotein B mRNA editing enzyme, catalytic polypeptide-like 3C	A_23_P120931	0.7	3.4E-04
APOBEC3F	apolipoprotein B mRNA editing enzyme, catalytic polypeptide-like 3F	A_23_P357101	0.7	5.6E-04
COL25A1	collagen, type XXV, alpha 1	A_32_P405010	0.7	4.5E-02
PRRT2	proline-rich transmembrane protein 2	A_23_P66017	0.7	1.6E-02
LRIG3	leucine-rich repeats and immunoglobulin-like domains 3	A_23_P47885	0.7	1.6E-02
PPM1H	protein phosphatase, Mg ²⁺ /Mn ²⁺ dependent, 1H	A_23_P391443	0.7	3.4E-02
MESP1	mesoderm posterior 1 homolog (mouse)	A_23_P77223	0.7	4.1E-02
EPHA8	EPH receptor A8	A_24_P419239	0.7	2.5E-02
PDCD4	programmed cell death 4 (neoplastic transformation inhibitor)	A_23_P9932	0.7	2.0E-04
LGALS12	lectin, galactoside-binding, soluble, 12	A_23_P139198	0.7	1.6E-02
LIMD2	LIM domain containing 2	A_23_P26824	0.7	3.4E-03
KIF7	kinesin family member 7	A_24_P203689	0.7	1.3E-03
FUT8	fucosyltransferase 8 (alpha (1,6) fucosyltransferase)	A_23_P313632	0.7	1.0E-04
PRDM9	PR domain containing 9	A_24_P217628	0.7	4.1E-02
KCNMA1	potassium large conductance calcium-activated channel, subfamily M, alpha member 1	A_32_P181222	0.7	4.7E-02
BATF3	basic leucine zipper transcription factor, ATF-like 3	A_23_P160720	0.7	1.8E-02
ZNF267	zinc finger protein 267	A_23_P66260	0.7	1.7E-04
KCNC1	potassium voltage-gated channel, Shaw-related subfamily, member 1	A_23_P203439	0.7	4.4E-02
TDP1	tyrosyl-DNA phosphodiesterase 1	A_23_P117623	0.7	1.8E-05
MFAP4	microfibrillar-associated protein 4	A_23_P164057	0.7	1.3E-02
FYB	FYN binding protein	A_24_P393740	0.7	3.9E-02
IGFBP2	insulin-like growth factor binding protein 2, 36kDa	A_23_P119943	0.7	1.2E-02
LOXL2	lysyl oxidase-like 2	A_23_P111995	0.7	7.3E-03
XPR1	xenotropic and polytropic retrovirus receptor 1	A_23_P63534	0.7	2.5E-04
DMP1	dentin matrix acidic phosphoprotein 1	A_23_P133153	0.7	3.4E-02
MEX3C	mex-3 homolog C (C. elegans)	A_24_P416543	0.7	8.9E-03
METTL1	methyltransferase like 1	A_23_P47788	0.7	1.6E-03
ALX1	ALX homeobox 1	A_23_P83798	0.7	4.6E-02
STRA6	stimulated by retinoic acid gene 6 homolog (mouse)	A_23_P65779	0.7	3.1E-03
RCAN2	regulator of calcineurin 2	A_32_P156851	0.7	4.8E-04
SNAPC1	small nuclear RNA activating complex, polypeptide 1, 43kDa	A_23_P37244	0.7	2.5E-04
C5orf35	chromosome 5 open reading frame 35	A_23_P433111	0.7	2.3E-03
DUSP4	dual specificity phosphatase 4	A_23_P134935	0.7	1.9E-04

SORD	sorbitol dehydrogenase	A_32_P127153	0.7	8.7E-03
DGKE	diacylglycerol kinase, epsilon 64kDa	A_24_P916927	0.7	4.4E-02
IL33	interleukin 33	A_23_P31945	0.7	5.4E-04
N4BP2L1	NEDD4 binding protein 2-like 1	A_23_P88067	0.7	4.2E-02
DQX1	DEAQ box RNA-dependent ATPase 1	A_23_P56659	0.7	1.5E-02
CHEK1	CHK1 checkpoint homolog (<i>S. pombe</i>)	A_23_P116123	0.7	3.5E-02
MYBL1	v-myb myeloblastosis viral oncogene homolog (avian)-like 1	A_23_P43157	0.7	5.1E-03
PCDHB14	protocadherin beta 14	A_23_P133236	0.7	1.7E-03
C1QTNF2	C1q and tumor necrosis factor related protein 2	A_23_P92903	0.7	2.2E-02
GDF3	growth differentiation factor 3	A_23_P72817	0.7	4.4E-02
EPX	eosinophil peroxidase	A_23_P89192	0.7	8.8E-03
TSPAN6	tetraspanin 6	A_24_P83262	0.7	3.2E-02
LOC727916	hypothetical protein LOC727916	A_32_P120791	0.7	6.4E-03
ITPKA	inositol 1,4,5-trisphosphate 3-kinase A	A_23_P65918	0.7	2.7E-03
VASN	vasorin	A_23_P129695	0.7	2.2E-03
GPRASP1	G protein-coupled receptor associated sorting protein 1	A_23_P96590	0.7	7.1E-03
CPNE7	copine VII	A_23_P26426	0.7	4.5E-03
KCNJ14	potassium inwardly-rectifying channel, subfamily J, member 14	A_23_P130764	0.7	9.5E-03
GPR124	G protein-coupled receptor 124	A_23_P43283	0.7	8.2E-03
HIVEP2	human immunodeficiency virus type 1 enhancer binding protein 2	A_23_P214766	0.7	1.1E-03
TSKU	tsukushi small leucine rich proteoglycan homolog (<i>Xenopus laevis</i>)	A_23_P162142	0.7	7.0E-05
ARHGAP39	Rho GTPase activating protein 39	A_23_P424878	0.7	3.8E-02
BHLHE41	basic helix-loop-helix family, member e41	A_23_P139500	0.7	4.8E-03
SLC29A3	solute carrier family 29 (nucleoside transporters), member 3	A_23_P46871	0.7	9.8E-03
SLC30A1	solute carrier family 30 (zinc transporter), member 1	A_23_P23815	0.7	9.3E-04
UCP2	uncoupling protein 2 (mitochondrial, proton carrier)	A_23_P47704	0.7	5.3E-04
PPP1R14C	protein phosphatase 1, regulatory (inhibitor) subunit 14C	A_23_P45011	0.7	3.9E-02
FIGNL1	figletin-like 1	A_23_P302681	0.7	2.2E-02
C16orf75	chromosome 16 open reading frame 75	A_23_P353717	0.7	6.5E-03
CYGB	cytoglobin	A_23_P338981	0.7	1.7E-05
UCK2	uridine-cytidine kinase 2	A_23_P487	0.7	3.8E-04
KLHL25	kelch-like 25 (<i>Drosophila</i>)	A_23_P65797	0.7	4.1E-04
CYSLTR1	cysteinyl leukotriene receptor 1	A_23_P22660	0.7	3.0E-05
C1orf190	chromosome 1 open reading frame 190	A_32_P129010	0.7	1.4E-02
RPL31	ribosomal protein L31	A_24_P105794	0.7	2.1E-04
LPCAT2	lysophosphatidylcholine acyltransferase 2	A_23_P141021	0.7	2.1E-02
IL17B	interleukin 17B	A_23_P167479	0.7	2.5E-02
OBFC2A	oligonucleotide/oligosaccharide-binding fold	A_24_P229531	0.7	2.4E-02

	containing 2A			
METRNL	meteorin, glial cell differentiation regulator-like	A_23_P10591	0.7	4.3E-03
C7orf40	chromosome 7 open reading frame 40	A_24_P506977	0.7	6.3E-03
SSR4	signal sequence receptor, delta (translocon-associated protein delta)	A_23_P259172	0.7	9.7E-03
ADSS	adenylosuccinate synthase	A_23_P859	0.7	2.1E-04
CRIP1	cysteine-rich protein 1 (intestinal)	A_23_P44674	0.7	1.2E-03
PCDHB12	protocadherin beta 12	A_24_P405960	0.7	9.8E-03
CREB3L2	cAMP responsive element binding protein 3-like 2	A_24_P180654	0.7	2.2E-03
PTCD2	pentatricopeptide repeat domain 2	A_24_P191847	0.7	4.4E-02
RGS10	regulator of G-protein signaling 10	A_23_P138717	0.7	1.7E-03
RAP1GAP2	RAP1 GTPase activating protein 2	A_24_P911927	0.7	2.1E-02
GALNTL1	UDP-N-acetyl-alpha-D-galactosamine:polypeptide N-acetylgalactosaminyltransferase-like 1	A_23_P76749	0.7	1.2E-02
TMEM59L	transmembrane protein 59-like	A_23_P309155	0.7	5.3E-03
ARPP21	cAMP-regulated phosphoprotein, 21kDa	A_23_P143838	0.7	4.1E-02
WDR43	WD repeat domain 43	A_23_P344853	0.7	7.8E-03
FAM19A5	family with sequence similarity 19 (chemokine (C-C motif)-like), member A5	A_23_P304489	0.7	4.0E-02
BID	BH3 interacting domain death agonist	A_23_P154929	0.7	9.4E-04
CCDC140	coiled-coil domain containing 140	A_23_P429478	0.7	1.4E-02
CLEC4C	C-type lectin domain family 4, member C	A_23_P2616	0.7	4.5E-02
HES4	hairy and enhancer of split 4 (Drosophila)	A_23_P149448	0.7	4.4E-05
C3	complement component 3	A_23_P101407	0.7	1.4E-03
GGT6	gamma-glutamyltransferase 6	A_23_P66767	0.7	4.4E-02
MSX2	msh homeobox 2	A_24_P132006	0.7	4.7E-02
HCST	hematopoietic cell signal transducer	A_23_P39386	0.7	1.7E-03
TNNI2	troponin I type 2 (skeletal, fast)	A_23_P24784	0.7	4.3E-02
DBN1	drebrin 1	A_23_P156284	0.7	1.0E-03
CD5	CD5 molecule	A_24_P364221	0.7	1.5E-03
EFNA5	ephrin-A5	A_32_P171200	0.7	2.1E-02
BCL3	B-cell CLL/lymphoma 3	A_23_P4662	0.7	2.2E-02
KRT37	keratin 37	A_23_P118854	0.7	3.1E-02
ZNF141	zinc finger protein 141	A_23_P388867	0.6	2.0E-02
DNM1	dynamin 1	A_23_P135273	0.6	3.7E-05
SERINC2	serine incorporator 2	A_23_P147326	0.6	7.0E-03
SEC24A	SEC24 family, member A (S. cerevisiae)	A_23_P329593	0.6	8.4E-03
FAIM3	Fas apoptotic inhibitory molecule 3	A_23_P138125	0.6	3.0E-04
BCL2	B-cell CLL/lymphoma 2	A_23_P352266	0.6	1.0E-03
ADORA2B	adenosine A2b receptor	A_23_P55477	0.6	3.4E-02
BICD1	bicaudal D homolog 1 (Drosophila)	A_24_P916586	0.6	1.8E-02
RAC2	ras-related C3 botulinum toxin substrate 2 (rho family, small GTP binding protein Rac2)	A_23_P218774	0.6	7.8E-03

VPREB3	pre-B lymphocyte 3	A_23_P166371	0.6	1.3E-02
MYO1E	myosin IE	A_23_P37497	0.6	5.9E-06
LOC100134229	hypothetical LOC100134229	A_32_P54503	0.6	8.1E-03
RAB23	RAB23, member RAS oncogene family	A_23_P70794	0.6	1.3E-03
NETO1	neuropilin (NRP) and tolloid (TLL)-like 1	A_24_P5653	0.6	3.1E-02
FAM190A	family with sequence similarity 190, member A	A_32_P306678	0.6	1.4E-02
PIK3CG	phosphoinositide-3-kinase, catalytic, gamma polypeptide	A_23_P251359	0.6	3.7E-02
TBC1D10C	TBC1 domain family, member 10C	A_24_P392201	0.6	4.9E-02
KCNE1L	KCNE1-like	A_23_P256641	0.6	4.9E-02
TSPAN5	tetraspanin 5	A_23_P323930	0.6	3.8E-04
SMPDL3B	sphingomyelin phosphodiesterase, acid-like 3B	A_23_P160881	0.6	2.8E-02
TMEM132A	transmembrane protein 132A	A_23_P24716	0.6	1.8E-03
ERF	Ets2 repressor factor	A_23_P4679	0.6	1.3E-03
FCRLB	Fc receptor-like B	A_23_P350574	0.6	3.1E-02
MYPN	myopalladin	A_24_P376120	0.6	5.0E-02
SELM	selenoprotein M	A_23_P6413	0.6	6.4E-05
DGKA	diacylglycerol kinase, alpha 80kDa	A_24_P84834	0.6	3.6E-04
EAF1	ELL associated factor 1	A_24_P174461	0.6	3.7E-02
GATS	GATS, stromal antigen 3 opposite strand	A_23_P327777	0.6	2.8E-02
BAG2	BCL2-associated athanogene 2	A_23_P356554	0.6	7.4E-03
HAGHL	hydroxyacylglutathione hydrolase-like	A_24_P356373	0.6	1.3E-02
RNF150	ring finger protein 150	A_24_P350589	0.6	1.8E-02
EIF5A2	eukaryotic translation initiation factor 5A2	A_24_P385739	0.6	4.6E-04
TCF3	transcription factor 3 (E2A immunoglobulin enhancer binding factors E12/E47)	A_23_P67708	0.6	4.5E-05
TMEM98	transmembrane protein 98	A_23_P27040	0.6	2.7E-04
USP9Y	ubiquitin specific peptidase 9, Y-linked	A_23_P137226	0.6	4.2E-02
QSER1	glutamine and serine rich 1	A_23_P139059	0.6	4.3E-02
HIVEP1	human immunodeficiency virus type I enhancer binding protein 1	A_23_P19619	0.6	1.1E-04
CD8B	CD8b molecule	A_23_P357881	0.6	5.0E-02
TPM4	tropomyosin 4	A_24_P82880	0.6	8.5E-03
E2F3	E2F transcription factor 3	A_23_P385034	0.6	2.0E-03
LOC202781	hypothetical LOC202781	A_24_P934284	0.6	3.2E-02
LRP12	low density lipoprotein receptor-related protein 12	A_23_P8906	0.6	1.7E-03
PTP4A3	protein tyrosine phosphatase type IVA, member 3	A_23_P112774	0.6	3.2E-03
CHST8	carbohydrate (N-acetylgalactosamine 4-0) sulfotransferase 8	A_23_P90273	0.6	7.9E-04
TMEM176A	transmembrane protein 176A	A_23_P252082	0.6	1.1E-03
CLEC11A	C-type lectin domain family 11, member A	A_23_P153489	0.6	1.6E-03
GPSM3	G-protein signaling modulator 3	A_24_P230521	0.6	3.7E-02
FMO1	flavin containing monooxygenase 1	A_23_P149613	0.6	2.5E-03

STK17A	serine/threonine kinase 17a	A_23_P82550	0.6	2.4E-03
TMSB15B	thymosin beta 15B	A_32_P85593	0.6	2.3E-03
ENPP5	ectonucleotide pyrophosphatase/phosphodiesterase 5 (putative)	A_23_P214244	0.6	4.3E-02
ACTBL2	actin, beta-like 2	A_24_P6903	0.6	3.3E-02
EFNA4	ephrin-A4	A_23_P322	0.6	1.5E-04
C1QTNF6	C1q and tumor necrosis factor related protein 6	A_24_P211565	0.6	3.2E-02
NOLC1	nucleolar and coiled-body phosphoprotein 1	A_23_P314151	0.6	7.8E-03
C3orf51	chromosome 3 open reading frame 51	A_23_P18053	0.6	3.0E-02
NINJ1	ninjurin 1	A_23_P169137	0.6	4.6E-03
DYRK2	dual-specificity tyrosine-(Y)-phosphorylation regulated kinase 2	A_24_P942786	0.6	8.3E-05
SPERT	spermatid associated	A_32_P56604	0.6	3.8E-02
HSPA13	heat shock protein 70kDa family, member 13	A_23_P17606	0.6	4.0E-02
ACTN3	actinin, alpha 3	A_23_P138881	0.6	2.3E-02
FAM102A	family with sequence similarity 102, member A	A_23_P112531	0.6	1.7E-05
KIRREL	kin of IRRE like (Drosophila)	A_24_P393312	0.6	1.8E-03
SEC24D	SEC24 family, member D (<i>S. cerevisiae</i>)	A_23_P159382	0.6	1.5E-04
WDR35	WD repeat domain 35	A_23_P108463	0.6	4.0E-03
DPF3	D4, zinc and double PHD fingers, family 3	A_24_P270424	0.6	1.7E-02
CERK	ceramide kinase	A_23_P211659	0.6	7.3E-03
CHN2	chimerin (chimaerin) 2	A_24_P277875	0.6	4.2E-02
CHSY3	chondroitin sulfate synthase 3	A_23_P368886	0.6	2.3E-02
PAM	peptidylglycine alpha-amidating monooxygenase	A_24_P933704	0.6	1.5E-04
KIF2A	kinesin heavy chain member 2A	A_23_P254091	0.6	5.8E-05
C12orf45	chromosome 12 open reading frame 45	A_23_P128532	0.6	3.5E-05
ZCCHC18	zinc finger, CCHC domain containing 18	A_32_P116989	0.6	1.8E-03
ARL5B	ADP-ribosylation factor-like 5B	A_24_P943997	0.6	1.9E-02
RAP2B	RAP2B, member of RAS oncogene family	A_24_P123052	0.6	3.7E-03
TIMP2	TIMP metalloproteinase inhibitor 2	A_24_P169896	0.6	4.8E-02
FGFR1OP	FGFR1 oncogene partner	A_23_P145134	0.6	4.2E-04
RNF19B	ring finger protein 19B	A_23_P321388	0.6	1.8E-03
MARCH3	membrane-associated ring finger (C3HC4) 3	A_23_P321511	0.6	2.7E-02
PLEKHG1	pleckstrin homology domain containing, family G (with RhoGef domain) member 1	A_24_P6517	0.6	2.3E-03
C14orf182	chromosome 14 open reading frame 182	A_24_P263910	0.6	1.7E-02
KRT40	keratin 40	A_24_P280333	0.6	4.5E-02
BBS5	Bardet-Biedl syndrome 5	A_23_P5785	0.6	1.2E-02
RPRM	reprimin, TP53 dependent G2 arrest mediator candidate	A_23_P5370	0.6	2.9E-02
RHOD	ras homolog gene family, member D	A_23_P1523	0.6	8.0E-03
ARHGAP20	Rho GTPase activating protein 20	A_23_P422933	0.6	4.0E-03
FAM9C	family with sequence similarity 9, member C	A_32_P133892	0.6	4.7E-02

FAM20A	family with sequence similarity 20, member A	A_32_P108254	0.6	1.7E-02
DENND5B	DENN/MADD domain containing 5B	A_23_P366559	0.6	4.1E-02
CHRD	chordin	A_24_P117725	0.6	8.4E-03
SKIL	SKI-like oncogene	A_23_P351215	0.6	4.5E-03
SLC39A6	solute carrier family 39 (zinc transporter), member 6	A_24_P156049	0.6	3.5E-04
PCDHB7	protocadherin beta 7	A_24_P243373	0.6	3.7E-03
CHN1	chimerin (chimaerin) 1	A_23_P79482	0.6	3.3E-03
RHPN1	rhophilin, Rho GTPase binding protein 1	A_23_P315386	0.6	1.9E-02
NFE2L3	nuclear factor (erythroid-derived 2)-like 3	A_24_P136653	0.6	4.5E-02
TMEM35	transmembrane protein 35	A_23_P45324	0.6	3.8E-02
BMP2K	BMP2 inducible kinase	A_24_P86240	0.6	2.4E-03
RIPK2	receptor-interacting serine-threonine kinase 2	A_23_P252106	0.6	2.1E-03
OLFML2B	olfactomedin-like 2B	A_23_P137689	0.6	1.0E-02
FAM83B	family with sequence similarity 83, member B	A_24_P66780	0.6	1.4E-02
ACTC1	actin, alpha, cardiac muscle 1	A_23_P205894	0.6	3.4E-02
PDE5A	phosphodiesterase 5A, cGMP-specific	A_23_P500844	0.6	4.1E-02
OSBPL10	oxysterol binding protein-like 10	A_23_P147245	0.6	4.5E-06
C6orf192	chromosome 6 open reading frame 192	A_23_P134113	0.6	1.0E-03
FAT1	FAT tumor suppressor homolog 1 (Drosophila)	A_23_P69586	0.6	2.6E-04
DTWD2	DTW domain containing 2	A_32_P373557	0.6	2.2E-02
TTYH1	tweety homolog 1 (Drosophila)	A_23_P50815	0.6	3.5E-03
LOC100132167	hypothetical LOC100132167	A_23_P304016	0.6	3.5E-02
ARL15	ADP-ribosylation factor-like 15	A_24_P303199	0.6	2.6E-03
OCIAD2	OCIA domain containing 2	A_23_P121702	0.6	8.9E-04
HSP90B1	heat shock protein 90kDa beta (Grp94), member 1	A_32_P67680	0.6	7.8E-03
LOC100131756	hypothetical LOC100131756	A_24_P316279	0.6	1.6E-02
CASP3	caspase 3, apoptosis-related cysteine peptidase	A_23_P92410	0.6	2.9E-07
CDC42	cell division cycle 42 (GTP binding protein, 25kDa)	A_23_P300056	0.6	1.0E-02
CDHR5	cadherin-related family member 5	A_24_P352388	0.6	2.9E-03
ETV6	ets variant 6	A_24_P372862	0.6	4.4E-04
H2AFY2	H2A histone family, member Y2	A_23_P12733	0.6	1.8E-05
SMARCC1	SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily c, member 1	A_32_P112104	0.6	5.7E-04
ANGPTL6	angiopoietin-like 6	A_23_P50276	0.6	1.3E-02
SH3PXD2A	SH3 and PX domains 2A	A_23_P345220	0.6	2.4E-02
PTPRCAP	protein tyrosine phosphatase, receptor type, C-associated protein	A_23_P98173	0.6	2.9E-03

DOWNREGULATED in IPF vs. control				
Gene symbol	Gene Name	Agilent probe ID	Log ₂ FC	q-value
PNMT	phenylethanolamine N-methyltransferase	A_23_P100642	-5.1	5.6E-13
ARG1	arginase, liver	A_23_P111321	-4.2	1.5E-05
IL1RL1	interleukin 1 receptor-like 1	A_23_P51126	-4.1	1.2E-05
ITLN2	intelectin 2	A_24_P53778	-4.0	1.2E-06
SLC6A4	solute carrier family 6 (neurotransmitter transporter, serotonin), member 4	A_23_P152995	-3.8	3.1E-04
CA4	carbonic anhydrase IV	A_23_P4096	-3.8	4.8E-07
HIF3A	hypoxia inducible factor 3, alpha subunit	A_23_P374339	-3.6	1.5E-10
BTNL9	butyrophilin-like 9	A_32_P187951	-3.6	6.7E-09
TTN	titin	A_23_P85269	-3.5	1.6E-08
CPB2	carboxypeptidase B2 (plasma)	A_23_P36901	-3.5	6.2E-04
VIPR1	vasoactive intestinal peptide receptor 1	A_24_P105933	-3.3	4.2E-05
FGF12	fibroblast growth factor 12	A_24_P334300	-3.2	1.4E-08
LOC151438	hypothetical protein LOC151438	A_24_P750164	-3.1	3.2E-06
ANGPTL7	angiopoietin-like 7	A_23_P114862	-3.1	8.9E-05
NECAB1	N-terminal EF-hand calcium binding protein 1	A_24_P33989	-3.1	8.8E-13
KLRG2	killer cell lectin-like receptor subfamily G, member 2	A_23_P8723	-3.0	2.8E-09
FAM105A	family with sequence similarity 105, member A	A_32_P51848	-3.0	3.9E-06
IL1R2	interleukin 1 receptor, type II	A_24_P63019	-3.0	3.4E-07
ACADL	acyl-CoA dehydrogenase, long chain	A_24_P234242	-3.0	2.9E-06
OLAH	oleoyl-ACP hydrolase	A_23_P161458	-3.0	2.3E-11
RTKN2	rhotekin 2	A_24_P13041	-3.0	1.3E-04
TMEM100	transmembrane protein 100	A_23_P15450	-3.0	4.0E-05
PLA2G1B	phospholipase A2, group IB (pancreas)	A_24_P224116	-3.0	4.7E-05
SULT1B1	sulfotransferase family, cytosolic, 1B, member 1	A_23_P121622	-2.9	1.9E-05
DEFA3	defensin, alpha 3, neutrophil-specific	A_23_P31816	-2.9	2.4E-04
PRX	periaxin	A_23_P429959	-2.9	7.1E-07
ZNF385B	zinc finger protein 385B	A_23_P334857	-2.8	7.7E-05
LAMA3	laminin, alpha 3	A_24_P179569	-2.8	9.6E-08
ADRA1B	adrenergic, alpha-1B-, receptor	A_23_P33326	-2.8	1.9E-08
AFF2	AF4/FMR2 family, member 2	A_23_P217468	-2.8	6.9E-07
PGC	progastricsin (pepsinogen C)	A_23_P7965	-2.8	2.4E-05
FMO5	flavin containing monooxygenase 5	A_23_P233	-2.8	1.1E-11
SLCO4A1	solute carrier organic anion transporter family, member 4A1	A_23_P5903	-2.8	6.1E-09
FKBP5	FK506 binding protein 5	A_23_P111206	-2.7	4.9E-07
C13orf36	chromosome 13 open reading frame 36	A_24_P366607	-2.7	5.6E-07
SOSTDC1	sclerostin domain containing 1	A_23_P145841	-2.7	1.1E-04
ECEL1P2	endothelin converting enzyme-like 1, pseudogene 2	A_32_P71776	-2.7	4.5E-05
CYP3A4	cytochrome P450, family 3, subfamily A, polypeptide 4	A_24_P389251	-2.7	1.1E-05

IL18R1	interleukin 18 receptor 1	A_23_P39735	-2.7	6.2E-06
CAV3	caveolin 3	A_24_P319989	-2.7	4.6E-06
TIMP4	TIMP metalloproteinase inhibitor 4	A_32_P70315	-2.7	4.2E-10
GLDN	gliomedin	A_24_P49199	-2.6	1.0E-05
CYP3A5	cytochrome P450, family 3, subfamily A, polypeptide 5	A_23_P8801	-2.6	4.4E-06
GALNTL4	UDP-N-acetyl-alpha-D-galactosamine:polypeptide N-acetylgalactosaminyltransferase-like 4	A_24_P924301	-2.6	1.5E-04
KIAA0408	KIAA0408	A_24_P112061	-2.6	1.0E-07
DEFA4	defensin, alpha 4, corticostatin	A_23_P326080	-2.6	7.1E-05
LOC100128979	hypothetical LOC100128979	A_24_P179244	-2.5	2.9E-08
CYP3A7	cytochrome P450, family 3, subfamily A, polypeptide 7	A_23_P358917	-2.5	3.0E-06
ZBTB16	zinc finger and BTB domain containing 16	A_23_P104804	-2.5	2.6E-05
ATP13A4	ATPase type 13A4	A_24_P205327	-2.5	3.2E-05
ABCC8	ATP-binding cassette, sub-family C (CFTR/MRP), member 8	A_23_P24774	-2.5	2.0E-06
ODAM	odontogenic, ameloblast associated	A_23_P58228	-2.4	1.7E-07
OLFM4	olfactomedin 4	A_24_P181254	-2.4	1.2E-02
KLF15	Kruppel-like factor 15	A_24_P20327	-2.4	2.9E-09
SCN1A	sodium channel, voltage-gated, type I, alpha subunit	A_23_P28224	-2.4	6.2E-05
STXBP6	syntaxin binding protein 6 (amisyn)	A_24_P10214	-2.4	3.6E-06
GPX3	glutathione peroxidase 3 (plasma)	A_23_P133474	-2.4	8.7E-09
HHIP	hedgehog interacting protein	A_24_P401842	-2.4	9.5E-05
LOC400550	hypothetical LOC400550	A_24_P459621	-2.4	4.2E-04
USHBP1	Usher syndrome 1C binding protein 1	A_32_P189592	-2.4	1.7E-05
CCL26	chemokine (C-C motif) ligand 26	A_24_P12573	-2.4	2.1E-05
P2RY1	purinergic receptor P2Y, G-protein coupled, 1	A_23_P382835	-2.3	4.9E-06
EDNRB	endothelin receptor type B	A_23_P2831	-2.3	1.3E-10
RGS9BP	regulator of G protein signaling 9 binding protein	A_32_P227605	-2.3	1.2E-06
RBP2	retinol binding protein 2, cellular	A_23_P80491	-2.3	6.2E-04
SCN7A	sodium channel, voltage-gated, type VII, alpha	A_23_P90944	-2.3	2.3E-05
ADORA3	adenosine A3 receptor	A_23_P137931	-2.3	2.4E-04
GCOM1	GRINL1A complex locus	A_23_P129144	-2.3	4.5E-05
KCNMB4	potassium large conductance calcium-activated channel, subfamily M, beta member 4	A_23_P64792	-2.3	1.8E-09
CDH19	cadherin 19, type 2	A_23_P38735	-2.3	1.1E-05
PTPRB	protein tyrosine phosphatase, receptor type, B	A_24_P661612	-2.3	2.9E-05
FAM167A	family with sequence similarity 167, member A	A_23_P334955	-2.3	4.9E-08
CLEC1B	C-type lectin domain family 1, member B	A_23_P48212	-2.2	2.2E-04
LOC643441	hypothetical LOC643441	A_32_P9151	-2.2	4.4E-04
F2RL3	coagulation factor II (thrombin) receptor-like 3	A_23_P208422	-2.2	6.5E-05
SLC19A3	solute carrier family 19, member 3	A_23_P39871	-2.2	1.5E-05
FAM107A	family with sequence similarity 107, member A	A_23_P84860	-2.2	1.6E-06

MATN3	matrilin 3	A_23_P102058	-2.2	9.5E-05
SVEP1	sushi, von Willebrand factor type A, EGF and pentraxin domain containing 1	A_24_P187774	-2.2	5.4E-05
PCSK2	proprotein convertase subtilisin/kexin type 2	A_23_P79968	-2.2	3.4E-03
NDRG4	NDRG family member 4	A_23_P140748	-2.2	1.7E-07
SLC25A18	solute carrier family 25 (mitochondrial carrier), member 18	A_24_P74508	-2.2	7.9E-08
SLC14A1	solute carrier family 14 (urea transporter), member 1 (Kidd blood group)	A_24_P926507	-2.2	3.6E-04
BTNL3	butyrophilin-like 3	A_23_P158297	-2.2	3.1E-02
FCN3	ficolin (collagen/fibrinogen domain containing) 3 (Hakata antigen)	A_23_P115246	-2.2	2.0E-03
SGCG	sarcoglycan, gamma (35kDa dystrophin-associated glycoprotein)	A_23_P423237	-2.1	5.6E-04
AFF3	AF4/FMR2 family, member 3	A_23_P373464	-2.1	2.4E-08
ITGA10	integrin, alpha 10	A_23_P138289	-2.1	3.9E-09
RXFP1	relaxin/insulin-like family peptide receptor 1	A_23_P124534	-2.1	3.6E-05
KCNS1	potassium voltage-gated channel, delayed-rectifier, subfamily S, member 1	A_23_P321846	-2.1	2.2E-07
EMP2	epithelial membrane protein 2	A_23_P106682	-2.1	1.2E-07
PTPRG	protein tyrosine phosphatase, receptor type, G	A_32_P93493	-2.1	5.4E-06
PDK4	pyruvate dehydrogenase kinase, isozyme 4	A_23_P257087	-2.1	2.0E-03
NKAPL	NFKB activating protein-like	A_23_P133854	-2.1	4.5E-05
KIAA1549	KIAA1549	A_32_P103508	-2.1	7.0E-07
SLC1A1	solute carrier family 1 (neuronal/epithelial high affinity glutamate transporter, system Xag), member 1	A_23_P216468	-2.1	9.1E-07
PCSK9	proprotein convertase subtilisin/kexin type 9	A_32_P142440	-2.1	3.7E-05
BTNL8	butyrophilin-like 8	A_23_P7412	-2.1	2.5E-03
CCK	cholecystokinin	A_23_P425681	-2.0	1.3E-07
HSD17B6	hydroxysteroid (17-beta) dehydrogenase 6 homolog (mouse)	A_23_P25030	-2.0	1.5E-07
LIFR	leukemia inhibitory factor receptor alpha	A_24_P397386	-2.0	1.1E-08
CA2	carbonic anhydrase II	A_23_P8913	-2.0	8.5E-06
CACNA2D3	calcium channel, voltage-dependent, alpha 2/delta subunit 3	A_24_P402825	-2.0	9.3E-08
GPM6B	glycoprotein M6B	A_23_P378416	-2.0	1.1E-08
VSIG10	V-set and immunoglobulin domain containing 10	A_24_P914000	-2.0	9.7E-11
SLC40A1	solute carrier family 40 (iron-regulated transporter), member 1	A_24_P920366	-2.0	7.9E-05
SEMA3E	sema domain, immunoglobulin domain (Ig), short basic domain, secreted, (semaphorin) 3E	A_24_P123833	-2.0	3.5E-04
EPAS1	endothelial PAS domain protein 1	A_23_P210210	-2.0	7.0E-08
NCRNA00165	non-protein coding RNA 165	A_32_P60013	-2.0	5.3E-08
MME	membrane metallo-endopeptidase	A_23_P212061	-2.0	2.8E-05
SEC14L4	SEC14-like 4 (S. cerevisiae)	A_23_P421032	-2.0	2.0E-05
GFOD1	glucose-fructose oxidoreductase domain containing 1	A_23_P122662	-2.0	3.2E-10

MOSC1	MOCO sulphurase C-terminal domain containing 1	A_24_P233995	-2.0	9.7E-14
PLLIP	plasmolipin	A_23_P43763	-2.0	1.9E-10
PRINS	psoriasis associated RNA induced by stress (non-protein coding)	A_32_P10133	-2.0	4.5E-05
RPL23AP32	ribosomal protein L23a pseudogene 32	A_23_P108932	-2.0	7.8E-06
TNNT2	troponin T type 2 (cardiac)	A_24_P927304	-2.0	3.0E-05
SEMA6A	sema domain, transmembrane domain (TM), and cytoplasmic domain, (semaphorin) 6A	A_24_P857669	-2.0	3.7E-05
UGT2B4	UDP glucuronosyltransferase 2 family, polypeptide B4	A_23_P386912	-1.9	3.2E-03
FLT1	fms-related tyrosine kinase 1 (vascular endothelial growth factor/vascular permeability factor receptor)	A_24_P246125	-1.9	3.4E-04
LCN6	lipocalin 6	A_23_P83184	-1.9	1.9E-04
ABCC13	ATP-binding cassette, sub-family C (CFTR/MRP), member 13, pseudogene	A_23_P397480	-1.9	7.4E-06
SSTR1	somatostatin receptor 1	A_24_P244706	-1.9	1.1E-03
VEPH1	ventricular zone expressed PH domain homolog 1 (zebrafish)	A_23_P380208	-1.9	3.0E-04
NQO1	NAD(P)H dehydrogenase, quinone 1	A_23_P206661	-1.9	7.4E-06
GPR116	G protein-coupled receptor 116	A_24_P299469	-1.9	3.4E-04
ZBED2	zinc finger, BED-type containing 2	A_23_P113793	-1.9	1.7E-03
CHRM3	cholinergic receptor, muscarinic 3	A_23_P401472	-1.9	6.2E-08
FGFBP2	fibroblast growth factor binding protein 2	A_24_P226069	-1.9	3.0E-03
RNF182	ring finger protein 182	A_23_P399255	-1.9	6.3E-11
GPLD1	glycosylphosphatidylinositol specific phospholipase D1	A_23_P402254	-1.9	1.5E-04
MAOA	monoamine oxidase A	A_23_P83857	-1.9	2.3E-12
SLCO4C1	solute carrier organic anion transporter family, member 4C1	A_32_P154342	-1.9	4.6E-04
TMSB15A	thymosin beta 15a	A_23_P137173	-1.9	5.1E-06
ANXA3	annexin A3	A_23_P121716	-1.9	1.6E-06
ADRB1	adrenergic, beta-1-, receptor	A_23_P52240	-1.9	9.1E-03
AGTR1	angiotensin II receptor, type 1	A_23_P166616	-1.9	6.7E-04
LOC646576	hypothetical LOC646576	A_32_P115050	-1.9	2.1E-05
TOX2	TOX high mobility group box family member 2	A_23_P154566	-1.9	1.8E-08
DPCR1	diffuse panbronchiolitis critical region 1	A_23_P122508	-1.9	1.3E-02
HYAL1	hyaluronoglucosaminidase 1	A_23_P69329	-1.9	1.0E-06
TMEM204	transmembrane protein 204	A_23_P37685	-1.8	1.1E-08
MPP3	membrane protein, palmitoylated 3 (MAGUK p55 subfamily member 3)	A_23_P141346	-1.8	2.6E-07
RNASE2	ribonuclease, RNase A family, 2 (liver, eosinophil-derived neurotoxin)	A_23_P151637	-1.8	1.8E-03
ARHGEF26	Rho guanine nucleotide exchange factor (GEF) 26	A_23_P69100	-1.8	3.7E-06
CORO6	coronin 6	A_23_P107322	-1.8	4.7E-12
LOC254057	hypothetical protein LOC254057	A_24_P450092	-1.8	6.2E-06
LOC100131170	hypothetical LOC100131170	A_24_P8151	-1.8	6.7E-05

TBX3	T-box 3	A_23_P383819	-1.8	1.4E-05
C11orf61	chromosome 11 open reading frame 61	A_32_P88177	-1.8	6.2E-05
EPB41L5	erythrocyte membrane protein band 4.1 like 5	A_23_P209298	-1.8	7.7E-08
MAP2	microtubule-associated protein 2	A_24_P231483	-1.8	3.1E-06
PRTG	protogenin	A_32_P65391	-1.8	6.1E-08
SYNE1	spectrin repeat containing, nuclear envelope 1	A_23_P42451	-1.8	2.4E-03
CA3	carbonic anhydrase III, muscle specific	A_23_P20316	-1.8	1.1E-02
HRCT1	histidine rich carboxyl terminus 1	A_23_P94434	-1.8	3.8E-03
RS1	retinoschisin 1	A_23_P148292	-1.8	1.3E-07
HTR3C	5-hydroxytryptamine (serotonin) receptor 3, family member C	A_23_P124402	-1.8	2.1E-03
PIP5K1B	phosphatidylinositol-4-phosphate 5-kinase, type I, beta	A_32_P465742	-1.8	4.1E-08
PLA2G4F	phospholipase A2, group IVF	A_24_P147169	-1.8	9.2E-07
TACC2	transforming, acidic coiled-coil containing protein 2	A_23_P127186	-1.8	2.2E-09
TBX5	T-box 5	A_23_P25176	-1.8	2.6E-03
SYT15	synaptotagmin XV	A_32_P67904	-1.7	7.4E-08
HOGA1	4-hydroxy-2-oxoglutarate aldolase 1	A_23_P364613	-1.7	4.7E-06
PCDH11Y	protocadherin 11 Y-linked	A_32_P137980	-1.7	6.4E-06
IP6K3	inositol hexakisphosphate kinase 3	A_23_P168130	-1.7	2.3E-11
ZC3H7B	zinc finger CCCH-type containing 7B	A_24_P797678	-1.7	1.1E-04
NPR1	natriuretic peptide receptor A/guanylate cyclase A (atriuretic peptide receptor A)	A_23_P147711	-1.7	7.6E-09
SLCO2A1	solute carrier organic anion transporter family, member 2A1	A_23_P135990	-1.7	2.6E-06
FGR	Gardner-Rasheed feline sarcoma viral (v-fgr) oncogene homolog	A_24_P316634	-1.7	5.4E-03
CRTAC1	cartilage acidic protein 1	A_23_P431971	-1.7	3.4E-06
CLDN18	claudin 18	A_23_P336693	-1.7	1.8E-02
CTNND2	catenin (cadherin-associated protein), delta 2 (neural plakophilin-related arm-repeat protein)	A_24_P380196	-1.7	8.5E-06
ST6GALNAC3	ST6 (alpha-N-acetyl-neuraminyl-2,3-beta-galactosyl-1,3)-N-acetylgalactosaminide alpha-2,6-sialyltransferase 3	A_23_P416711	-1.7	2.0E-12
LAMC3	laminin, gamma 3	A_23_P82979	-1.7	6.2E-05
ALOX15B	arachidonate 15-lipoxygenase, type B	A_23_P60627	-1.7	1.4E-03
TIMP3	TIMP metalloproteinase inhibitor 3	A_23_P399078	-1.7	4.0E-07
LOC100507524	hypothetical LOC100507524	A_24_P740549	-1.7	3.6E-03
DUOX1	dual oxidase 1	A_24_P316586	-1.7	1.5E-03
HYAL2	hyaluronoglucosaminidase 2	A_23_P57927	-1.7	1.7E-08
WFDC5	WAP four-disulfide core domain 5	A_23_P218669	-1.7	6.5E-08
FASN	fatty acid synthase	A_23_P44132	-1.7	3.0E-09
PTH1R	parathyroid hormone 1 receptor	A_23_P167030	-1.7	4.0E-07
C9orf5	chromosome 9 open reading frame 5	A_32_P10116	-1.7	1.9E-05
MT1M	metallothionein 1M	A_23_P66241	-1.7	5.8E-04

GPER	G protein-coupled estrogen receptor 1	A_23_P8640	-1.7	4.5E-06
LRRN3	leucine rich repeat neuronal 3	A_24_P187766	-1.7	1.4E-04
SDR16C5	short chain dehydrogenase/reductase family 16C, member 5	A_24_P317708	-1.7	8.9E-04
GPIHBP1	glycosylphosphatidylinositol anchored high density lipoprotein binding protein 1	A_23_P72697	-1.7	9.7E-06
FIGF	c-fos induced growth factor (vascular endothelial growth factor D)	A_23_P45185	-1.7	1.3E-03
NCKAP5	NCK-associated protein 5	A_24_P298224	-1.7	9.1E-04
S100A12	S100 calcium binding protein A12	A_23_P74001	-1.6	1.1E-03
MFSD2A	major facilitator superfamily domain containing 2A	A_23_P253783	-1.6	3.9E-07
ALDH1L1	aldehyde dehydrogenase 1 family, member L1	A_23_P258887	-1.6	2.9E-05
SYTL5	synaptotagmin-like 5	A_24_P14776	-1.6	9.1E-03
SPOCK1	sparc/osteonectin, cwcv and kazal-like domains proteoglycan (testican) 1	A_24_P354689	-1.6	3.9E-05
CCDC68	coiled-coil domain containing 68	A_23_P363255	-1.6	1.3E-02
HECW2	HECT, C2 and WW domain containing E3 ubiquitin protein ligase 2	A_23_P50967	-1.6	1.1E-02
TPO	thyroid peroxidase	A_24_P257224	-1.6	7.9E-04
GIMAP1	GTPase, IMAP family member 1	A_23_P31188	-1.6	3.9E-05
QKI	quaking homolog, KH domain RNA binding (mouse)	A_24_P456452	-1.6	1.5E-04
TRIM58	tripartite motif containing 58	A_23_P314052	-1.6	1.7E-04
CACNA2D2	calcium channel, voltage-dependent, alpha 2/delta subunit 2	A_23_P346900	-1.6	2.0E-04
LEPREL1	leprecan-like 1	A_23_P69179	-1.6	2.1E-05
CSNK2A1	casein kinase 2, alpha 1 polypeptide	A_24_P76666	-1.6	5.8E-08
CDO1	cysteine dioxygenase, type I	A_23_P30294	-1.6	6.9E-05
TAL1	T-cell acute lymphocytic leukemia 1	A_23_P63371	-1.6	6.1E-05
SMAD6	SMAD family member 6	A_23_P65812	-1.6	1.1E-04
INMT	indolethylamine N-methyltransferase	A_23_P70961	-1.6	7.3E-04
CACNB4	calcium channel, voltage-dependent, beta 4 subunit	A_23_P209227	-1.6	1.1E-04
PRR15L	proline rich 15-like	A_23_P118894	-1.6	1.3E-03
LOC645277	hypothetical LOC645277	A_32_P49867	-1.6	9.7E-06
LOC100507308	hypothetical LOC100507308	A_24_P706236	-1.6	2.1E-02
PLAG1	pleiomorphic adenoma gene 1	A_23_P411723	-1.6	1.4E-07
SLCO1A2	solute carrier organic anion transporter family, member 1A2	A_23_P13820	-1.6	3.1E-04
ADAMTSL3	ADAMTS-like 3	A_24_P400842	-1.6	4.3E-03
FZD5	frizzled homolog 5 (Drosophila)	A_32_P207789	-1.6	6.3E-08
HOPX	HOP homeobox	A_32_P135168	-1.6	6.1E-04
TNNC1	troponin C type 1 (slow)	A_23_P166823	-1.6	4.5E-04
WNT3A	wingless-type MMTV integration site family, member 3A	A_23_P385690	-1.6	2.3E-04
C11orf9	chromosome 11 open reading frame 9	A_23_P75790	-1.6	5.0E-07
ZNF366	zinc finger protein 366	A_23_P407096	-1.6	4.2E-03
TDRD9	tudor domain containing 9	A_32_P208350	-1.6	7.1E-06

ANGPTL1	angiotensin-like 1	A_24_P199484	-1.6	6.8E-03
MT1JP	metallothionein 1J (pseudogene)	A_24_P74828	-1.6	1.4E-03
SDPR	serum deprivation response	A_23_P72668	-1.6	4.9E-06
SLC16A12	solute carrier family 16, member 12 (monocarboxylic acid transporter 12)	A_24_P13024	-1.6	7.5E-03
TRPC3	transient receptor potential cation channel, subfamily C, member 3	A_23_P41455	-1.6	1.5E-06
DAPK2	death-associated protein kinase 2	A_24_P10233	-1.5	1.2E-05
NEBL	nebulin	A_24_P398147	-1.5	2.3E-07
ABCA3	ATP-binding cassette, sub-family A (ABC1), member 3	A_23_P140876	-1.5	1.6E-03
FLT3	fms-related tyrosine kinase 3	A_23_P99442	-1.5	3.9E-03
LAMP3	lysosomal-associated membrane protein 3	A_23_P29773	-1.5	1.9E-03
RNASE3	ribonuclease, RNase A family, 3	A_23_P163025	-1.5	1.6E-03
IZUMO1	izumo sperm-egg fusion 1	A_24_P340247	-1.5	4.8E-04
SLC39A8	solute carrier family 39 (zinc transporter), member 8	A_23_P41424	-1.5	2.3E-04
DBC1	deleted in bladder cancer 1	A_23_P94517	-1.5	5.1E-03
MACROD2	MACRO domain containing 2	A_23_P22398	-1.5	3.2E-03
PLA1A	phospholipase A1 member A	A_23_P29816	-1.5	1.7E-04
KCNK3	potassium channel, subfamily K, member 3	A_23_P91104	-1.5	2.6E-05
ETV5	ets variant 5	A_23_P9836	-1.5	3.0E-06
OSTBETA	organic solute transporter beta	A_23_P436284	-1.5	2.5E-04
KCNB1	potassium voltage-gated channel, Shab-related subfamily, member 1	A_24_P31627	-1.5	6.0E-03
MST1P9	macrophage stimulating 1 (hepatocyte growth factor-like) pseudogene 9	A_23_P340376	-1.5	4.0E-03
IL22RA1	interleukin 22 receptor, alpha 1	A_23_P62607	-1.5	8.6E-03
ECHDC3	enoyl CoA hydratase domain containing 3	A_23_P127033	-1.5	5.7E-08
RANBP3L	RAN binding protein 3-like	A_23_P144929	-1.5	6.7E-03
ESYT3	extended synaptotagmin-like protein 3	A_24_P697685	-1.5	6.6E-04
LOC375010	ankyrin repeat domain 20 family, member A pseudogene	A_32_P79190	-1.5	3.6E-04
GATA2	GATA binding protein 2	A_24_P165998	-1.5	1.3E-05
PHEX	phosphate regulating endopeptidase homolog, X- linked	A_23_P114084	-1.5	1.4E-04
WWC2	WW and C2 domain containing 2	A_24_P137545	-1.5	2.3E-05
MGC42105	serine/threonine-protein kinase NIM1	A_23_P254863	-1.5	9.0E-06
AATK	apoptosis-associated tyrosine kinase	A_23_P10559	-1.5	4.5E-05
SCEL	sciellin	A_23_P500000	-1.5	1.1E-02
NPTX1	neuronal pentraxin I	A_23_P124905	-1.5	4.7E-04
TMEM38A	transmembrane protein 38A	A_23_P101392	-1.5	1.9E-08
GPM6A	glycoprotein M6A	A_23_P121545	-1.5	2.3E-04
DSEL	dermatan sulfate epimerase-like	A_24_P365180	-1.5	3.7E-05
ARHGAP29	Rho GTPase activating protein 29	A_32_P187320	-1.5	5.5E-04
CEACAM4	carcinoembryonic antigen-related cell adhesion	A_24_P70480	-1.5	5.6E-06

	molecule 4			
FAM153C	family with sequence similarity 153, member C	A_32_P84373	-1.5	2.9E-03
VIP	vasoactive intestinal peptide	A_23_P19650	-1.5	8.6E-04
TEK	TEK tyrosine kinase, endothelial	A_23_P374695	-1.5	1.2E-05
MGAM	maltase-glucoamylase (alpha-glucosidase)	A_23_P42897	-1.5	7.6E-03
TFCP2L1	transcription factor CP2-like 1	A_23_P5301	-1.5	2.7E-04
LGI3	leucine-rich repeat LGI family, member 3	A_23_P21086	-1.5	3.7E-06
FABP4	fatty acid binding protein 4, adipocyte	A_23_P8820	-1.5	4.3E-02
PAPSS2	3'-phosphoadenosine 5'-phosphosulfate synthase 2	A_23_P104493	-1.5	1.4E-04
CCBE1	collagen and calcium binding EGF domains 1	A_23_P55544	-1.5	1.4E-04
ADIPOR2	adiponectin receptor 2	A_23_P48121	-1.5	2.4E-11
LPHN2	latrophilin 2	A_23_P74042	-1.5	3.9E-08
GTF3C3	general transcription factor IIIc, polypeptide 3, 102kDa	A_24_P50818	-1.5	6.5E-07
CDH13	cadherin 13, H-cadherin (heart)	A_32_P85999	-1.4	1.6E-05
C5orf38	chromosome 5 open reading frame 38	A_23_P331235	-1.4	4.5E-09
PDZD2	PDZ domain containing 2	A_23_P7402	-1.4	1.0E-06
LSS	lanosterol synthase (2,3-oxidosqualene-lanosterol cyclase)	A_24_P162211	-1.4	1.8E-08
FAM153B	family with sequence similarity 153, member B	A_32_P84369	-1.4	2.2E-03
GSTM5	glutathione S-transferase mu 5	A_24_P212021	-1.4	1.0E-03
C8orf46	chromosome 8 open reading frame 46	A_23_P353614	-1.4	1.4E-04
TSPAN7	tetraspanin 7	A_23_P114185	-1.4	3.5E-06
HPCA	hippocalcin	A_23_P126159	-1.4	1.7E-07
ACE2	angiotensin I converting enzyme (peptidyl-dipeptidase A) 2	A_23_P252981	-1.4	1.2E-05
ADARB2	adenosine deaminase, RNA-specific, B2	A_23_P86751	-1.4	1.7E-04
FAM13AOS	FAM13A opposite strand (non-protein coding)	A_24_P614362	-1.4	2.1E-05
CLIC5	chloride intracellular channel 5	A_23_P311895	-1.4	3.3E-02
FUT1	fucosyltransferase 1 (galactoside 2-alpha-L-fucosyltransferase, H blood group)	A_23_P107963	-1.4	7.5E-06
GPR98	G protein-coupled receptor 98	A_24_P119702	-1.4	1.9E-04
CNTN6	contactin 6	A_23_P155404	-1.4	1.5E-02
SH2D3C	SH2 domain containing 3C	A_23_P71928	-1.4	2.1E-05
LPL	lipoprotein lipase	A_23_P146233	-1.4	1.3E-03
HPGD	hydroxyprostaglandin dehydrogenase 15-(NAD)	A_24_P71904	-1.4	3.7E-02
HEY1	hairy/enhancer-of-split related with YRPW motif 1	A_32_P83845	-1.4	8.9E-06
ALPP	alkaline phosphatase, placental	A_23_P79587	-1.4	2.6E-10
SLFNL1	schlafen-like 1	A_23_P389141	-1.4	1.4E-03
CCNB3	cyclin B3	A_23_P171107	-1.4	4.7E-05
PIR	pirin (iron-binding nuclear protein)	A_23_P137035	-1.4	5.2E-09
APOH	apolipoprotein H (beta-2-glycoprotein I)	A_23_P38244	-1.4	1.1E-02
C5orf4	chromosome 5 open reading frame 4	A_23_P501831	-1.4	7.2E-06

UNC13B	unc-13 homolog B (<i>C. elegans</i>)	A_23_P253395	-1.4	3.5E-08
HPCAL1	hippocalcin-like 1	A_23_P5831	-1.4	3.0E-09
MCCC1	methylcrotonoyl-CoA carboxylase 1 (alpha)	A_23_P58036	-1.4	1.4E-11
ZNF765	zinc finger protein 765	A_24_P202637	-1.4	4.8E-04
SPTBN1	spectrin, beta, non-erythrocytic 1	A_23_P339095	-1.4	6.9E-08
SLED1	proteoglycan 3 pseudogene	A_24_P927716	-1.4	1.2E-02
THSD7A	thrombospondin, type I, domain containing 7A	A_32_P350897	-1.4	1.2E-02
FZD4	frizzled homolog 4 (<i>Drosophila</i>)	A_23_P64617	-1.4	1.1E-05
DISP1	dispatched homolog 1 (<i>Drosophila</i>)	A_23_P201319	-1.4	4.5E-05
CLDN5	claudin 5	A_24_P79300	-1.4	7.1E-06
PHACTR3	phosphatase and actin regulator 3	A_23_P28834	-1.4	3.4E-03
PKHD1L1	polycystic kidney and hepatic disease 1 (autosomal recessive)-like 1	A_23_P392486	-1.4	3.4E-02
CTNNBIP1	catenin, beta interacting protein 1	A_23_P23584	-1.3	6.8E-11
BAIAP2	BAI1-associated protein 2	A_23_P315836	-1.3	2.5E-06
NEDD4L	neural precursor cell expressed, developmentally down-regulated 4-like	A_24_P108311	-1.3	4.9E-06
AKR1C3	aldo-keto reductase family 1, member C3 (3-alpha hydroxysteroid dehydrogenase, type II)	A_23_P138541	-1.3	3.4E-06
PFKFB2	6-phosphofructo-2-kinase/fructose-2,6-biphosphatase 2	A_24_P413669	-1.3	2.9E-04
EFR3B	EFR3 homolog B (<i>S. cerevisiae</i>)	A_32_P83049	-1.3	1.7E-05
DCXR	dicarbonyl/L-xylulose reductase	A_23_P44166	-1.3	5.5E-14
GIMAP8	GTPase, IMAP family member 8	A_24_P132383	-1.3	1.1E-04
SHROOM4	shroom family member 4	A_24_P265064	-1.3	1.2E-02
SH3GL2	SH3-domain GRB2-like 2	A_23_P169351	-1.3	1.6E-03
MYLIP	myosin regulatory light chain interacting protein	A_24_P917123	-1.3	3.1E-07
CD177	CD177 molecule	A_32_P143589	-1.3	2.9E-03
TGFBR3	transforming growth factor, beta receptor III	A_23_P200780	-1.3	1.3E-06
TMTC1	transmembrane and tetratricopeptide repeat containing 1	A_23_P371495	-1.3	2.3E-03
ADPRH	ADP-ribosylarginine hydrolase	A_23_P408070	-1.3	2.8E-03
ANKRD20A2	ankyrin repeat domain 20 family, member A2	A_24_P64241	-1.3	1.2E-02
ZNF114	zinc finger protein 114	A_23_P368779	-1.3	1.9E-04
SH3BP5	SH3-domain binding protein 5 (BTK-associated)	A_24_P148750	-1.3	9.4E-07
ARRB1	arrestin, beta 1	A_24_P386622	-1.3	6.9E-07
FXYD4	FXYD domain containing ion transport regulator 4	A_23_P98121	-1.3	1.9E-04
SULT1A1	sulfotransferase family, cytosolic, 1A, phenol-preferring, member 1	A_23_P434212	-1.3	2.0E-07
AUTS2	autism susceptibility candidate 2	A_32_P809435	-1.3	1.9E-04
NDRG2	NDRG family member 2	A_24_P244800	-1.3	1.3E-04
SETD5	SET domain containing 5	A_23_P212204	-1.3	5.4E-05
RADIL	Ras association and DIL domains	A_23_P111860	-1.3	2.6E-06
GDF10	growth differentiation factor 10	A_24_P355464	-1.3	3.6E-02
RIMKLA	ribosomal modification protein rimK-like family	A_23_P349406	-1.3	6.2E-05

	member A			
PPARGC1B	peroxisome proliferator-activated receptor gamma, coactivator 1 beta	A_23_P213959	-1.3	2.2E-05
BEX1	brain expressed, X-linked 1	A_23_P159952	-1.3	4.6E-04
LIMCH1	LIM and calponin homology domains 1	A_32_P117354	-1.3	2.2E-06
SLC2A12	solute carrier family 2 (facilitated glucose transporter), member 12	A_23_P395001	-1.3	1.9E-04
B3GALNT1	beta-1,3-N-acetylgalactosaminyltransferase 1 (globoside blood group)	A_24_P88870	-1.3	2.2E-07
SCD	stearoyl-CoA desaturase (delta-9-desaturase)	A_32_P163858	-1.3	2.6E-03
ABCA9	ATP-binding cassette, sub-family A (ABC1), member 9	A_24_P241672	-1.3	1.3E-02
LRRK2	leucine-rich repeat kinase 2	A_23_P128447	-1.3	8.0E-03
GRAMD2	GRAM domain containing 2	A_23_P305977	-1.3	7.4E-03
NUDT16	nudix (nucleoside diphosphate linked moiety X)-type motif 16	A_23_P310560	-1.3	1.4E-12
DIO3	deiodinase, iodothyronine, type III	A_23_P105923	-1.3	1.3E-03
METTL7A	methyltransferase like 7A	A_23_P415021	-1.3	6.0E-08
MGST1	microsomal glutathione S-transferase 1	A_32_P146815	-1.3	5.3E-05
C20orf202	chromosome 20 open reading frame 202	A_32_P213881	-1.3	3.7E-02
SULT1A2	sulfotransferase family, cytosolic, 1A, phenol-preferring, member 2	A_23_P106773	-1.3	3.1E-07
ARRDC2	arrestin domain containing 2	A_24_P22976	-1.3	3.6E-06
TCAP	titin-cap (telethonin)	A_23_P107051	-1.3	1.8E-06
RPS6KA2	ribosomal protein S6 kinase, 90kDa, polypeptide 2	A_23_P335920	-1.3	2.4E-09
NPR3	natriuretic peptide receptor C/guanylate cyclase C (atrionatriuretic peptide receptor C)	A_23_P327451	-1.3	6.8E-03
DOCK9	dedicator of cytokinesis 9	A_23_P162766	-1.3	2.3E-09
SYNPO2L	synaptopodin 2-like	A_23_P355517	-1.3	3.5E-02
COL4A3	collagen, type IV, alpha 3 (Goodpasture antigen)	A_23_P170679	-1.3	2.5E-02
CLEC1A	C-type lectin domain family 1, member A	A_24_P360993	-1.3	2.9E-02
EPG5	ectopic P-granules autophagy protein 5 homolog (C. elegans)	A_24_P341923	-1.3	1.3E-04
PTPRS	protein tyrosine phosphatase, receptor type, S	A_24_P290856	-1.3	2.9E-05
GRIA1	glutamate receptor, ionotropic, AMPA 1	A_23_P303072	-1.3	1.2E-03
PLA2G12B	phospholipase A2, group XIIB	A_23_P388150	-1.3	1.5E-03
FIBIN	fin bud initiation factor homolog (zebrafish)	A_23_P138885	-1.3	1.4E-08
ADHFE1	alcohol dehydrogenase, iron containing, 1	A_23_P157569	-1.3	3.8E-06
PITPNM2	phosphatidylinositol transfer protein, membrane-associated 2	A_23_P401361	-1.3	9.2E-05
CAV1	caveolin 1, caveolae protein, 22kDa	A_23_P134454	-1.2	2.1E-06
CPM	carboxypeptidase M	A_23_P162668	-1.2	4.2E-04
NBLA00301	Nbla00301	A_23_P133000	-1.2	8.8E-04
ADCY5	adenylate cyclase 5	A_24_P919249	-1.2	2.5E-02
TMEM139	transmembrane protein 139	A_23_P42909	-1.2	2.4E-04
RAMP3	receptor (G protein-coupled) activity modifying protein 3	A_23_P111737	-1.2	9.5E-04

PCDHAC2	protocadherin alpha subfamily C, 2	A_23_P218942	-1.2	4.7E-04
SLIT2	slit homolog 2 (Drosophila)	A_32_P106615	-1.2	1.2E-04
PLEKHM3	pleckstrin homology domain containing, family M, member 3	A_24_P281243	-1.2	5.8E-05
WFIKKN1	WAP, follistatin/kazal, immunoglobulin, kunitz and netrin domain containing 1	A_23_P163666	-1.2	2.6E-05
OLFML2A	olfactomedin-like 2A	A_24_P220485	-1.2	1.1E-05
PCOLCE2	procollagen C-endopeptidase enhancer 2	A_23_P57709	-1.2	1.6E-02
CBS	cystathionine-beta-synthase	A_24_P48856	-1.2	2.1E-11
EFNB1	ephrin-B1	A_24_P365807	-1.2	2.2E-07
KIAA0894	KIAA0894 protein	A_23_P428080	-1.2	2.5E-02
FOXF1	forkhead box F1	A_23_P118254	-1.2	1.7E-03
GRASP	GRP1 (general receptor for phosphoinositides 1)-associated scaffold protein	A_23_P105442	-1.2	2.0E-04
CD36	CD36 molecule (thrombospondin receptor)	A_24_P925505	-1.2	2.6E-03
SNX25	sorting nexin 25	A_24_P303097	-1.2	3.5E-04
GGT1	gamma-glutamyltransferase 1	A_23_P154986	-1.2	7.7E-06
PRR16	proline rich 16	A_23_P92929	-1.2	6.8E-05
CHRM2	cholinergic receptor, muscarinic 2	A_23_P145606	-1.2	5.4E-08
KDR	kinase insert domain receptor (a type III receptor tyrosine kinase)	A_23_P58419	-1.2	1.3E-02
NLRP12	NLR family, pyrin domain containing 12	A_23_P101434	-1.2	2.2E-03
FHDC1	FH2 domain containing 1	A_23_P328259	-1.2	4.8E-03
MYOT	myotilin	A_23_P110764	-1.2	8.9E-03
SELENBP1	selenium binding protein 1	A_23_P74619	-1.2	7.1E-06
KHDRBS2	KH domain containing, RNA binding, signal transduction associated 2	A_23_P366453	-1.2	1.3E-02
LOC644662	hypothetical protein LOC644662	A_32_P191840	-1.2	3.2E-03
PRKAG2	protein kinase, AMP-activated, gamma 2 non-catalytic subunit	A_24_P384779	-1.2	6.1E-04
KCNK17	potassium channel, subfamily K, member 17	A_23_P42128	-1.2	1.9E-02
KLRF1	killer cell lectin-like receptor subfamily F, member 1	A_32_P158966	-1.2	3.0E-02
SCNN1A	sodium channel, nonvoltage-gated 1 alpha	A_23_P128323	-1.2	1.1E-06
GGTLC2	gamma-glutamyltransferase light chain 2	A_32_P319200	-1.2	1.2E-05
NOTCH4	notch 4	A_23_P365614	-1.2	4.9E-06
LOC100506795	hypothetical LOC100506795	A_32_P2844	-1.2	2.3E-02
LDHD	lactate dehydrogenase D	A_23_P54918	-1.2	1.5E-07
PLIN5	perilipin 5	A_23_P39251	-1.2	1.5E-05
STARD8	StAR-related lipid transfer (START) domain containing 8	A_23_P387630	-1.2	1.4E-07
NID1	nidogen 1	A_23_P200928	-1.2	8.5E-05
HPN	hepsin	A_23_P406782	-1.2	1.2E-02
RAB17	RAB17, member RAS oncogene family	A_23_P5778	-1.2	1.5E-05
CHPT1	choline phosphotransferase 1	A_23_P105571	-1.2	4.6E-09
C1orf115	chromosome 1 open reading frame 115	A_23_P160433	-1.2	1.6E-08

TMEM97	transmembrane protein 97	A_32_P201521	-1.2	8.2E-08
KIAA0319	KIAA0319	A_24_P166397	-1.2	4.9E-02
PMM1	phosphomannomutase 1	A_23_P211598	-1.2	3.7E-10
FAM19A4	family with sequence similarity 19 (chemokine (C-C motif)-like), member A4	A_32_P71571	-1.2	2.5E-02
FKBP1B	FK506 binding protein 1B, 12.6 kDa	A_23_P142631	-1.2	1.3E-09
F11	coagulation factor XI	A_23_P41314	-1.2	1.2E-02
KIAA1244	KIAA1244	A_32_P498899	-1.2	8.3E-03
CDKL5	cyclin-dependent kinase-like 5	A_24_P282343	-1.2	6.2E-08
SLC27A3	solute carrier family 27 (fatty acid transporter), member 3	A_24_P179816	-1.2	1.2E-07
IL18RAP	interleukin 18 receptor accessory protein	A_23_P28334	-1.2	8.8E-03
EDA	ectodysplasin A	A_23_P34045	-1.2	3.3E-08
AOC3	amine oxidase, copper containing 3 (vascular adhesion protein 1)	A_23_P426305	-1.2	5.9E-06
LOC100128840	hypothetical LOC100128840	A_24_P93675	-1.2	4.2E-02
C1orf145	chromosome 1 open reading frame 145	A_24_P15898	-1.2	1.5E-03
C6orf223	chromosome 6 open reading frame 223	A_23_P348183	-1.2	8.4E-04
GSTA4	glutathione S-transferase alpha 4	A_23_P110941	-1.2	3.0E-09
F8	coagulation factor VIII, procoagulant component	A_23_P217643	-1.2	6.9E-04
RGN	regucalcin (senescence marker protein-30)	A_23_P114423	-1.2	2.4E-05
PLCXD3	phosphatidylinositol-specific phospholipase C, X domain containing 3	A_32_P119033	-1.2	1.3E-02
NRBP2	nuclear receptor binding protein 2	A_24_P242132	-1.2	1.4E-05
SLC9A3R2	solute carrier family 9 (sodium/hydrogen exchanger), member 3 regulator 2	A_24_P364838	-1.2	1.9E-03
LMTK2	lemur tyrosine kinase 2	A_23_P215275	-1.2	4.1E-07
IRS2	insulin receptor substrate 2	A_24_P154037	-1.2	1.4E-04
RHOBTB2	Rho-related BTB domain containing 2	A_23_P20427	-1.2	6.6E-05
RAMP2	receptor (G protein-coupled) activity modifying protein 2	A_24_P116710	-1.2	1.2E-02
SYN2	synapsin II	A_23_P109812	-1.2	1.2E-05
CASKIN2	CASK interacting protein 2	A_23_P44363	-1.2	1.4E-04
NAV2	neuron navigator 2	A_24_P933580	-1.2	1.9E-03
SIGLEC5	sialic acid binding Ig-like lectin 5	A_23_P15995	-1.2	8.9E-03
SEMA5A	sema domain, seven thrombospondin repeats (type 1 and type 1-like), transmembrane domain (TM) and short cytoplasmic domain, (semaphorin) 5A	A_23_P213415	-1.2	7.7E-04
IFNGR1	interferon gamma receptor 1	A_23_P8281	-1.2	1.6E-08
LOC253264	hypothetical LOC253264	A_24_P589001	-1.2	3.2E-03
NCR1	natural cytotoxicity triggering receptor 1	A_23_P108042	-1.2	3.0E-02
GPR20	G protein-coupled receptor 20	A_23_P159237	-1.2	2.3E-04
PDGFRA	platelet-derived growth factor receptor, alpha polypeptide	A_23_P332536	-1.2	1.8E-02
ID1	inhibitor of DNA binding 1, dominant negative helix-loop-helix protein	A_23_P252306	-1.2	3.7E-04
KIR3DL2	killer cell immunoglobulin-like receptor, three	A_23_P101636	-1.2	1.5E-02

	domains, long cytoplasmic tail, 2			
ANKRD29	ankyrin repeat domain 29	A_23_P412577	-1.2	6.0E-05
NTNG1	netrin G1	A_23_P201547	-1.1	8.9E-05
SYTL4	synaptotagmin-like 4	A_24_P122337	-1.1	1.2E-07
TENC1	tensin like C1 domain containing phosphatase (tensin 2)	A_23_P151297	-1.1	3.3E-08
MEIS2	Meis homeobox 2	A_24_P82200	-1.1	3.1E-04
ATOH8	atonal homolog 8 (Drosophila)	A_23_P142878	-1.1	2.9E-05
GNMT	glycine N-methyltransferase	A_23_P7957	-1.1	1.1E-06
HMGCS1	3-hydroxy-3-methylglutaryl-CoA synthase 1 (soluble)	A_24_P63522	-1.1	1.6E-04
SYBU	syntabulin (syntaxin-interacting)	A_23_P134734	-1.1	2.3E-03
CGN	cingulin	A_24_P45728	-1.1	4.8E-06
ARHGAP31	Rho GTPase activating protein 31	A_24_P349039	-1.1	2.8E-05
ABCA6	ATP-binding cassette, sub-family A (ABC1), member 6	A_24_P378581	-1.1	2.7E-02
C19orf59	chromosome 19 open reading frame 59	A_23_P330561	-1.1	3.3E-02
C13orf1	chromosome 13 open reading frame 1	A_23_P368718	-1.1	2.9E-05
PRELP	proline/arginine-rich end leucine-rich repeat protein	A_24_P815488	-1.1	3.3E-02
CSF2	colony stimulating factor 2 (granulocyte-macrophage)	A_23_P133408	-1.1	9.3E-03
STXBP3	syntaxin binding protein 3	A_24_P920418	-1.1	1.5E-03
KIAA0754	KIAA0754	A_24_P912372	-1.1	2.6E-04
FGL1	fibrinogen-like 1	A_23_P20484	-1.1	3.5E-04
RNF128	ring finger protein 128	A_24_P340036	-1.1	6.8E-04
CSPG4	chondroitin sulfate proteoglycan 4	A_23_P21976	-1.1	1.7E-04
GJC3	gap junction protein, gamma 3, 30.2kDa	A_23_P59869	-1.1	1.7E-03
RNF144B	ring finger protein 144B	A_24_P406060	-1.1	1.5E-05
TMEM106C	transmembrane protein 106C	A_23_P48175	-1.1	2.8E-09
AZGP1	alpha-2-glycoprotein 1, zinc-binding	A_23_P71268	-1.1	4.0E-02
FRYL	FRY-like	A_24_P308109	-1.1	1.2E-04
NOSTRIN	nitric oxide synthase trafficker	A_23_P79360	-1.1	1.8E-04
SLC26A9	solute carrier family 26, member 9	A_23_P201248	-1.1	4.6E-02
SPDYE1	speedy homolog E1 (Xenopus laevis)	A_23_P425967	-1.1	1.3E-04
CDH10	cadherin 10, type 2 (T2-cadherin)	A_23_P144656	-1.1	7.3E-03
GGT2	gamma-glutamyltransferase 2	A_24_P83848	-1.1	4.6E-05
REPS2	RALBP1 associated Eps domain containing 2	A_23_P251387	-1.1	2.4E-11
SRPX	sushi-repeat containing protein, X-linked	A_23_P96383	-1.1	6.0E-05
ANKS1A	ankyrin repeat and sterile alpha motif domain containing 1A	A_23_P156748	-1.1	3.3E-08
RAB11FIP1	RAB11 family interacting protein 1 (class I)	A_24_P945029	-1.1	2.3E-03
DGKG	diacylglycerol kinase, gamma 90kDa	A_23_P40926	-1.1	1.2E-05
NXF3	nuclear RNA export factor 3	A_23_P171336	-1.1	2.2E-03
CACNA1D	calcium channel, voltage-dependent, L type, alpha 1D subunit	A_23_P365767	-1.1	1.3E-04

FAM46B	family with sequence similarity 46, member B	A_23_P12199	-1.1	1.7E-06
C2orf88	chromosome 2 open reading frame 88	A_23_P17130	-1.1	3.2E-03
EPDR1	ependymin related protein 1 (zebrafish)	A_24_P166613	-1.1	9.0E-07
PAQR5	progesterin and adipoQ receptor family member V	A_24_P944331	-1.1	1.6E-03
LOC256021	hypothetical protein LOC256021	A_32_P437735	-1.1	9.2E-03
ITSN2	intersectin 2	A_24_P239988	-1.1	2.3E-07
CLIC3	chloride intracellular channel 3	A_23_P254654	-1.1	9.3E-03
HOXA6	homeobox A6	A_23_P82370	-1.1	6.2E-03
LOC401022	hypothetical LOC401022	A_23_P344673	-1.1	1.6E-03
CHI3L2	chitinase 3-like 2	A_23_P12082	-1.1	3.1E-02
CD300LG	CD300 molecule-like family member g	A_23_P38304	-1.1	2.8E-04
C1orf21	chromosome 1 open reading frame 21	A_23_P113161	-1.1	4.4E-05
SH3BGRL2	SH3 domain binding glutamic acid-rich protein like 2	A_24_P226322	-1.1	1.4E-03
LRP1B	low density lipoprotein receptor-related protein 1B	A_23_P5342	-1.1	3.7E-06
CNR1	cannabinoid receptor 1 (brain)	A_23_P214208	-1.1	2.9E-03
CEBPA	CCAAT/enhancer binding protein (C/EBP), alpha	A_23_P375494	-1.1	8.6E-04
MT1E	metallothionein 1E	A_23_P420942	-1.1	4.9E-02
PPFIBP1	PTPRF interacting protein, binding protein 1 (liprin beta 1)	A_23_P337917	-1.1	1.2E-05
BAI3	brain-specific angiogenesis inhibitor 3	A_23_P252556	-1.1	4.5E-03
HOXA5	homeobox A5	A_23_P93772	-1.1	9.0E-04
DENND3	DENN/MADD domain containing 3	A_32_P175301	-1.1	1.4E-06
SOX13	SRY (sex determining region Y)-box 13	A_23_P85703	-1.1	4.2E-08
TMEM125	transmembrane protein 125	A_23_P115022	-1.1	1.0E-04
ESAM	endothelial cell adhesion molecule	A_23_P47410	-1.1	4.3E-06
FZD8	frizzled homolog 8 (Drosophila)	A_23_P396858	-1.1	2.7E-04
WISP2	WNT1 inducible signaling pathway protein 2	A_23_P102611	-1.1	2.1E-02
LRRC16A	leucine rich repeat containing 16A	A_23_P19369	-1.1	6.1E-09
C20orf160	chromosome 20 open reading frame 160	A_23_P91414	-1.1	1.8E-04
ALS2CR8	amyotrophic lateral sclerosis 2 (juvenile) chromosome region, candidate 8	A_24_P911896	-1.1	6.5E-04
OR7A5	olfactory receptor, family 7, subfamily A, member 5	A_23_P16630	-1.1	1.1E-03
GRM8	glutamate receptor, metabotropic 8	A_32_P8221	-1.1	1.1E-05
APOD	apolipoprotein D	A_23_P136777	-1.1	4.4E-02
ADD1	adducin 1 (alpha)	A_24_P109272	-1.1	2.0E-05
MMP25	matrix metalloproteinase 25	A_23_P376557	-1.1	8.4E-03
S100A8	S100 calcium binding protein A8	A_23_P434809	-1.1	4.0E-03
TOLLIP	toll interacting protein	A_24_P287189	-1.1	1.6E-02
ST7	suppression of tumorigenicity 7	A_24_P141019	-1.1	1.1E-07
MGAT3	mannosyl (beta-1,4-)-glycoprotein beta-1,4-N-acetylglucosaminyltransferase	A_24_P245838	-1.1	1.5E-03
CADM1	cell adhesion molecule 1	A_24_P227230	-1.1	8.9E-03
MS4A15	membrane-spanning 4-domains, subfamily A,	A_24_P30389	-1.1	1.2E-05

	member 15			
TDRD10	tudor domain containing 10	A_23_P423108	-1.1	3.6E-04
S1PR1	sphingosine-1-phosphate receptor 1	A_23_P404481	-1.1	4.3E-04
AHNAK	AHNAK nucleoprotein	A_23_P21363	-1.1	3.1E-06
SHROOM2	shroom family member 2	A_23_P217755	-1.1	6.3E-04
N4BP2L2-IT	N4BP2L2 intronic transcript (non-protein coding)	A_24_P500771	-1.1	2.1E-02
AKR1C4	aldo-keto reductase family 1, member C4 (chlordecone reductase; 3-alpha hydroxysteroid dehydrogenase, type I; dihydrodiol dehydrogenase 4)	A_23_P149926	-1.1	1.6E-03
PHF17	PHD finger protein 17	A_23_P167263	-1.1	7.9E-06
PTPRM	protein tyrosine phosphatase, receptor type, M	A_23_P159255	-1.1	8.8E-08
SYCP2L	synaptonemal complex protein 2-like	A_23_P347777	-1.1	7.8E-03
GLT25D2	glycosyltransferase 25 domain containing 2	A_24_P62505	-1.1	5.6E-04
SMAGP	small cell adhesion glycoprotein	A_23_P318115	-1.1	4.4E-08
FLVCR2	feline leukemia virus subgroup C cellular receptor family, member 2	A_23_P140373	-1.1	1.7E-02
CD5L	CD5 molecule-like	A_23_P126584	-1.1	2.2E-03
ADH1A	alcohol dehydrogenase 1A (class I), alpha polypeptide	A_24_P291658	-1.1	4.9E-03
LOC728800	similar to FLJ00402 protein	A_24_P247823	-1.1	8.2E-03
MAPT	microtubule-associated protein tau	A_24_P224488	-1.1	1.7E-04
OTC	ornithine carbamoyltransferase	A_23_P257355	-1.1	7.3E-03
ADRA1A	adrenergic, alpha-1A-, receptor	A_23_P8938	-1.1	2.4E-03
AOX1	aldehyde oxidase 1	A_23_P154037	-1.1	6.8E-04
PPP4R4	protein phosphatase 4, regulatory subunit 4	A_23_P425332	-1.1	3.7E-02
OPHN1	oligophrenin 1	A_23_P417753	-1.1	9.1E-05
NKD1	naked cuticle homolog 1 (Drosophila)	A_23_P429449	-1.1	8.0E-06
C17orf55	chromosome 17 open reading frame 55	A_24_P323084	-1.1	1.1E-04
FAM106C	Protein FAM106C	A_24_P164505	-1.1	6.8E-03
GPD1L	glycerol-3-phosphate dehydrogenase 1-like	A_24_P362916	-1.1	6.3E-04
FOXP2	forkhead box P2	A_24_P921683	-1.1	2.7E-02
WASF3	WAS protein family, member 3	A_24_P176079	-1.1	7.6E-08
LOC283701	hypothetical LOC283701	A_24_P222176	-1.1	5.5E-04
PREX1	phosphatidylinositol-3,4,5-trisphosphate-dependent Rac exchange factor 1	A_23_P413641	-1.1	5.8E-05
GCNT2	glucosaminyl (N-acetyl) transferase 2, I-branching enzyme (I blood group)	A_24_P397489	-1.1	1.5E-04
PIK3R1	phosphoinositide-3-kinase, regulatory subunit 1 (alpha)	A_24_P29401	-1.1	1.6E-05
RHOT1	ras homolog gene family, member T1	A_23_P433204	-1.1	1.7E-03
FGFR4	fibroblast growth factor receptor 4	A_23_P92754	-1.1	3.6E-05
FAM84B	family with sequence similarity 84, member B	A_24_P943709	-1.1	2.2E-03
SASH1	SAM and SH3 domain containing 1	A_23_P93442	-1.1	5.4E-06
CTH	cystathionase (cystathionine gamma-lyase)	A_23_P126103	-1.1	2.1E-05

DOCK4	dedicator of cytokinesis 4	A_32_P134056	-1.1	2.0E-02
PCYT2	phosphate cytidyltransferase 2, ethanolamine	A_24_P404245	-1.1	5.0E-07
C6orf114	chromosome 6 open reading frame 114	A_23_P134058	-1.1	2.1E-03
GHR	growth hormone receptor	A_24_P72064	-1.0	1.2E-03
RALGAPA2	Ral GTPase activating protein, alpha subunit 2 (catalytic)	A_24_P941946	-1.0	2.0E-03
WNT7A	wingless-type MMTV integration site family, member 7A	A_23_P258410	-1.0	3.4E-03
BNIP3	BCL2/adenovirus E1B 19kDa interacting protein 3	A_23_P138635	-1.0	3.6E-09
NOS1	nitric oxide synthase 1 (neuronal)	A_32_P332320	-1.0	1.0E-02
PODXL	podocalyxin-like	A_23_P215060	-1.0	2.0E-04
MCF2L	MCF.2 cell line derived transforming sequence-like	A_23_P99496	-1.0	9.4E-03
KCTD14	potassium channel tetramerisation domain containing 14	A_23_P162165	-1.0	4.7E-05
C20orf112	chromosome 20 open reading frame 112	A_23_P91423	-1.0	1.4E-04
CALCOCO2	calcium binding and coiled-coil domain 2	A_24_P330773	-1.0	4.4E-07
HSPA12B	heat shock 70kD protein 12B	A_23_P91334	-1.0	9.1E-04
FMN1	formin 1	A_32_P180825	-1.0	4.5E-05
IGSF10	immunoglobulin superfamily, member 10	A_23_P333683	-1.0	1.7E-03
ASRGL1	asparaginase like 1	A_23_P379864	-1.0	4.7E-04
SHE	Src homology 2 domain containing E	A_23_P400716	-1.0	6.5E-05
ALOX12	arachidonate 12-lipoxygenase	A_23_P152906	-1.0	3.3E-03
SPSB2	splA/ryanodine receptor domain and SOCS box containing 2	A_23_P151098	-1.0	7.7E-07
ASAH1	N-acylsphingosine amidohydrolase (acid ceramidase) 1	A_24_P928637	-1.0	1.3E-05
INPP5A	inositol polyphosphate-5-phosphatase, 40kDa	A_23_P202307	-1.0	5.4E-06
WWC3	WWC family member 3	A_23_P345650	-1.0	7.2E-07
GGT3P	gamma-glutamyltransferase 3 pseudogene	A_24_P42066	-1.0	5.6E-06
PRKCE	protein kinase C, epsilon	A_23_P348194	-1.0	2.5E-02
PCDH12	protocadherin 12	A_23_P423309	-1.0	5.0E-03
HIP1	huntingtin interacting protein 1	A_24_P363548	-1.0	5.6E-04
ADAMTS2	ADAM metalloproteinase with thrombospondin type 1 motif, 2	A_23_P213615	-1.0	4.3E-05
PKDCC	protein kinase domain containing, cytoplasmic homolog (mouse)	A_32_P112493	-1.0	7.2E-05
SCAI	suppressor of cancer cell invasion	A_24_P481431	-1.0	4.1E-05
OCLN	occludin	A_24_P102053	-1.0	3.9E-04
DSCR6	Down syndrome critical region gene 6	A_23_P109320	-1.0	1.3E-05
USP13	ubiquitin specific peptidase 13 (isopeptidase T-3)	A_23_P40989	-1.0	6.6E-07
CAMKMT	calmodulin-lysine N-methyltransferase	A_24_P926285	-1.0	1.4E-03
CLCN4	chloride channel 4	A_23_P217741	-1.0	6.1E-07
KLF13	Kruppel-like factor 13	A_32_P197489	-1.0	1.1E-08
FCHO2	FCH domain only 2	A_23_P420610	-1.0	3.0E-05
KIAA1324L	KIAA1324-like	A_23_P320242	-1.0	4.9E-03

USP53	ubiquitin specific peptidase 53	A_24_P137522	-1.0	2.0E-05
GNAQ	guanine nucleotide binding protein (G protein), q polypeptide	A_24_P585770	-1.0	1.4E-04
LIN7A	lin-7 homolog A (C. elegans)	A_23_P99253	-1.0	2.0E-05
MKNK2	MAP kinase interacting serine/threonine kinase 2	A_23_P142310	-1.0	2.4E-08
SULT1A4	sulfotransferase family, cytosolic, 1A, phenol-preferring, member 4	A_24_P262201	-1.0	2.0E-07
ANK3	ankyrin 3, node of Ranvier (ankyrin G)	A_32_P33304	-1.0	1.5E-02
TSC22D3	TSC22 domain family, member 3	A_23_P217688	-1.0	1.3E-03
C4orf39	chromosome 4 open reading frame 39	A_32_P193583	-1.0	3.6E-03
RAPGEF5	Rap guanine nucleotide exchange factor (GEF) 5	A_23_P215505	-1.0	2.1E-03
ACVRL1	activin A receptor type II-like 1	A_24_P324783	-1.0	4.4E-03
LOC79999	hypothetical LOC79999	A_23_P4052	-1.0	4.9E-05
AFAP1L1	actin filament associated protein 1-like 1	A_32_P167239	-1.0	4.7E-05
LOC151878	hypothetical protein LOC151878	A_32_P152237	-1.0	2.3E-02
DAAM1	dishevelled associated activator of morphogenesis 1	A_24_P604851	-1.0	6.5E-03
PCDH9	protocadherin 9	A_24_P187218	-1.0	2.8E-02
KANK4	KN motif and ankyrin repeat domains 4	A_32_P51237	-1.0	4.3E-02
DIO3OS	DIO3 opposite strand (non-protein coding)	A_24_P759584	-1.0	4.8E-03
SORBS2	sorbin and SH3 domain containing 2	A_23_P257562	-1.0	6.9E-05
FAM65B	family with sequence similarity 65, member B	A_23_P358394	-1.0	7.8E-03
HRSP12	heat-responsive protein 12	A_23_P134714	-1.0	2.1E-10
TXNRD1	thioredoxin reductase 1	A_23_P204581	-1.0	2.1E-06
HAL	histidine ammonia-lyase	A_23_P61637	-1.0	2.3E-02
LOC100128219	hypothetical protein LOC100128219	A_24_P299178	-1.0	9.7E-04
LPAL2	lipoprotein, Lp(a)-like 2, pseudogene	A_32_P14178	-1.0	2.4E-02
PIK3C2A	phosphoinositide-3-kinase, class 2, alpha polypeptide	A_23_P36166	-1.0	3.7E-06
NRGN	neurogranin (protein kinase C substrate, RC3)	A_23_P116264	-1.0	5.2E-05
PPP1R14A	protein phosphatase 1, regulatory (inhibitor) subunit 14A	A_24_P296772	-1.0	8.5E-04
NES	nestin	A_23_P103672	-1.0	5.5E-05
WSCD1	WSC domain containing 1	A_24_P942493	-1.0	7.0E-03
SORT1	sortilin 1	A_32_P7176	-1.0	1.3E-04
LAMB1	laminin, beta 1	A_23_P94030	-1.0	2.2E-05
USP44	ubiquitin specific peptidase 44	A_23_P72770	-1.0	2.3E-05
TMEM2	transmembrane protein 2	A_24_P261125	-1.0	4.3E-03
VWF	von Willebrand factor	A_32_P150382	-1.0	1.3E-02
PCTP	phosphatidylcholine transfer protein	A_23_P4041	-1.0	5.5E-06
SRGAP2	SLIT-ROBO Rho GTPase activating protein 2	A_32_P50123	-1.0	1.4E-04
RAPGEF4	Rap guanine nucleotide exchange factor (GEF) 4	A_23_P17197	-1.0	2.3E-02
MECOM	MDS1 and EVI1 complex locus	A_24_P15154	-1.0	4.2E-02
PKNOX2	PBX/knotted 1 homeobox 2	A_23_P75529	-1.0	1.4E-03

SLC48A1	solute carrier family 48 (heme transporter), member 1	A_24_P309594	-1.0	2.1E-09
EMCN	endomucin	A_32_P213521	-1.0	1.2E-02
KIAA1274	KIAA1274	A_23_P161481	-1.0	1.4E-04
KIF13A	kinesin family member 13A	A_24_P230691	-1.0	2.6E-03
LEPR	leptin receptor	A_23_P161135	-1.0	2.2E-02
DMTF1	cyclin D binding myb-like transcription factor 1	A_32_P37584	-1.0	2.1E-04
KBTBD3	kelch repeat and BTB (POZ) domain containing 3	A_23_P127553	-1.0	3.2E-02
AKAP9	A kinase (PRKA) anchor protein (yotiao) 9	A_24_P916797	-1.0	2.7E-02
CAV2	caveolin 2	A_24_P925040	-1.0	1.4E-03
LRR31	leucine rich repeat containing 31	A_24_P240259	-1.0	3.5E-03
C1orf116	chromosome 1 open reading frame 116	A_23_P897	-1.0	3.4E-03
TMEM180	transmembrane protein 180	A_23_P337729	-1.0	7.7E-07
COBLL1	COBL-like 1	A_24_P915926	-1.0	2.5E-02
NCOA3	nuclear receptor coactivator 3	A_23_P313568	-1.0	9.3E-08
PLA2G3	phospholipase A2, group III	A_23_P17814	-1.0	6.6E-04
SIGLEC10	sialic acid binding Ig-like lectin 10	A_23_P208182	-1.0	3.0E-02
SC4MOL	sterol-C4-methyl oxidase-like	A_23_P110184	-1.0	1.6E-03
BDNF	brain-derived neurotrophic factor	A_23_P127891	-1.0	1.6E-02
SECISBP2L	SECIS binding protein 2-like	A_24_P82135	-1.0	3.0E-06
TPM1	tropomyosin 1 (alpha)	A_32_P185140	-1.0	1.7E-03
BMPER	BMP binding endothelial regulator	A_23_P31287	-1.0	1.0E-02
ARHGEF10	Rho guanine nucleotide exchange factor (GEF) 10	A_23_P356216	-1.0	2.4E-02
TUFT1	tuftelin 1	A_32_P141184	-1.0	2.7E-05
FRY	furry homolog (Drosophila)	A_23_P105862	-1.0	4.8E-06
NFE2	nuclear factor (erythroid-derived 2), 45kDa	A_23_P13753	-1.0	7.8E-04
AGTPBP1	ATP/GTP binding protein 1	A_24_P350832	-1.0	2.2E-03
SP100	SP100 nuclear antigen	A_24_P916816	-1.0	7.9E-03
TBX2	T-box 2	A_23_P164451	-1.0	9.2E-04
SLC22A3	solute carrier family 22 (extraneuronal monoamine transporter), member 3	A_32_P309404	-1.0	1.6E-02
C1orf210	chromosome 1 open reading frame 210	A_32_P42946	-1.0	2.1E-06
SHMT1	serine hydroxymethyltransferase 1 (soluble)	A_23_P502654	-1.0	6.9E-06
MAMDC2	MAM domain containing 2	A_23_P157914	-1.0	2.5E-02
PRODH	proline dehydrogenase (oxidase) 1	A_23_P68786	-1.0	1.1E-03
HMBOX1	homeobox containing 1	A_23_P134684	-1.0	2.5E-03
NOXO1	NADPH oxidase organizer 1	A_23_P413051	-1.0	6.3E-05
RIMS3	regulating synaptic membrane exocytosis 3	A_23_P319583	-1.0	6.8E-05
RRAS	related RAS viral (r-ras) oncogene homolog	A_23_P39076	-1.0	9.4E-08
LOC100506495	hypothetical LOC100506495	A_32_P171530	-1.0	7.7E-03
THSD1	thrombospondin, type I, domain containing 1	A_23_P14184	-1.0	1.5E-04
MARVELD2	MARVEL domain containing 2	A_24_P106363	-1.0	1.4E-03

FIGN	fidgetin	A_23_P165909	-1.0	1.0E-02
SPARCL1	SPARC-like 1 (hevin)	A_32_P208341	-0.9	5.4E-06
ACACB	acetyl-CoA carboxylase beta	A_23_P87791	-0.9	1.2E-03
ALDH6A1	aldehyde dehydrogenase 6 family, member A1	A_23_P128967	-0.9	1.3E-08
CMTM8	CKLF-like MARVEL transmembrane domain containing 8	A_23_P40880	-0.9	4.9E-06
SPOCK2	sparc/osteonectin, cwcv and kazal-like domains proteoglycan (testican) 2	A_23_P161280	-0.9	9.9E-03
B3GALT2	UDP-Gal:betaGlcNAc beta 1,3-galactosyltransferase, polypeptide 2	A_23_P499	-0.9	5.0E-04
LOC100133319	PRO1804	A_24_P376599	-0.9	4.5E-04
ETV1	ets variant 1	A_32_P78491	-0.9	3.2E-03
GALNTL2	UDP-N-acetyl-alpha-D-galactosamine:polypeptide N-acetylgalactosaminyltransferase-like 2	A_23_P212119	-0.9	3.3E-02
AK1	adenylate kinase 1	A_23_P217088	-0.9	2.1E-05
JPH1	junctophilin 1	A_23_P434253	-0.9	1.0E-04
TRIM4	tripartite motif containing 4	A_24_P68247	-0.9	2.3E-07
TCN2	transcobalamin II	A_23_P40611	-0.9	3.9E-04
CGNL1	cingulin-like 1	A_23_P163306	-0.9	3.2E-04
EBP	emopamil binding protein (sterol isomerase)	A_23_P171077	-0.9	4.4E-08
ABCB6	ATP-binding cassette, sub-family B (MDR/TAP), member 6	A_23_P5441	-0.9	1.3E-05
PCYOX1	prenylcysteine oxidase 1	A_24_P940517	-0.9	5.9E-05
FAM174B	family with sequence similarity 174, member B	A_23_P100001	-0.9	7.1E-05
LOC729680	hypothetical protein LOC729680	A_32_P46840	-0.9	1.1E-02
FNBP1L	formin binding protein 1-like	A_24_P366967	-0.9	2.0E-06
C15orf52	chromosome 15 open reading frame 52	A_23_P163467	-0.9	1.3E-04
RASIP1	Ras interacting protein 1	A_23_P119353	-0.9	5.2E-04
APOL4	apolipoprotein L, 4	A_24_P374163	-0.9	3.6E-02
INPP5K	inositol polyphosphate-5-phosphatase K	A_23_P55076	-0.9	2.3E-07
SIRT4	sirtuin 4	A_23_P99226	-0.9	9.6E-04
FBXO9	F-box protein 9	A_24_P106522	-0.9	3.3E-04
LOC284998	hypothetical LOC284998	A_24_P498854	-0.9	3.3E-03
MED17	mediator complex subunit 17	A_24_P941459	-0.9	2.0E-04
PPP1R9A	protein phosphatase 1, regulatory (inhibitor) subunit 9A	A_23_P145824	-0.9	1.9E-05
CD302	CD302 molecule	A_23_P131435	-0.9	2.7E-05
GPR141	G protein-coupled receptor 141	A_24_P334718	-0.9	4.8E-04
CSF3R	colony stimulating factor 3 receptor (granulocyte)	A_23_P126218	-0.9	2.1E-04
GPR146	G protein-coupled receptor 146	A_23_P20035	-0.9	1.0E-03
HIST1H2AL	histone cluster 1, H2aI	A_23_P363174	-0.9	1.1E-02
C12orf69	chromosome 12 open reading frame 69	A_24_P66969	-0.9	4.9E-02
C5orf25	chromosome 5 open reading frame 25	A_24_P930169	-0.9	2.7E-05
MLH3	mutL homolog 3 (E. coli)	A_24_P61520	-0.9	2.9E-03
STX11	syntaxin 11	A_23_P156788	-0.9	6.2E-04

NRTN	neurturin	A_23_P90359	-0.9	7.7E-04
MMAB	methylmalonic aciduria (cobalamin deficiency) cblB type	A_23_P2537	-0.9	1.6E-05
USP8	ubiquitin specific peptidase 8	A_24_P50918	-0.9	1.8E-02
ACAT2	acetyl-CoA acetyltransferase 2	A_23_P383835	-0.9	3.9E-05
AGER	advanced glycosylation end product-specific receptor	A_23_P93360	-0.9	5.3E-03
IVD	isovaleryl-CoA dehydrogenase	A_23_P129322	-0.9	1.1E-03
ROR1	receptor tyrosine kinase-like orphan receptor 1	A_23_P12363	-0.9	8.1E-05
SERPINA3	serpin peptidase inhibitor, clade A (alpha-1 antitrypsin), member 3	A_23_P2920	-0.9	4.4E-02
BEX5	brain expressed, X-linked 5	A_32_P69849	-0.9	4.2E-03
C10orf47	chromosome 10 open reading frame 47	A_24_P389608	-0.9	3.5E-04
SUN2	Sad1 and UNC84 domain containing 2	A_32_P194115	-0.9	1.6E-06
TNS1	tensin 1	A_24_P105733	-0.9	4.3E-06
POM121L10P	POM121 membrane glycoprotein-like 10, pseudogene	A_24_P459963	-0.9	5.2E-03
CD109	CD109 molecule	A_23_P331928	-0.9	2.5E-04
MPO	myeloperoxidase	A_23_P141173	-0.9	1.8E-02
NOL3	nucleolar protein 3 (apoptosis repressor with CARD domain)	A_23_P206371	-0.9	2.8E-08
EGFR	epidermal growth factor receptor	A_23_P215790	-0.9	1.9E-06
FOXA2	forkhead box A2	A_24_P365515	-0.9	4.7E-04
PON2	paraoxonase 2	A_23_P31399	-0.9	2.2E-04
MLPH	melanophilin	A_23_P154400	-0.9	1.6E-03
PPP2R2D	protein phosphatase 2, regulatory subunit B, delta	A_24_P911775	-0.9	2.8E-06
SESTD1	SEC14 and spectrin domains 1	A_23_P367610	-0.9	3.3E-07
SIRPD	signal-regulatory protein delta	A_32_P74391	-0.9	5.0E-02
TPPP2	tubulin polymerization-promoting protein family member 2	A_23_P117464	-0.9	4.8E-04
TSPAN13	tetraspanin 13	A_23_P168610	-0.9	3.6E-05
SLC11A1	solute carrier family 11 (proton-coupled divalent metal ion transporters), member 1	A_24_P76831	-0.9	1.1E-02
CCL23	chemokine (C-C motif) ligand 23	A_24_P319088	-0.9	5.5E-03
PICK1	protein interacting with PRKCA 1	A_23_P91727	-0.9	1.1E-05
MAP3K6	mitogen-activated protein kinase kinase kinase 6	A_24_P145653	-0.9	1.7E-05
PTPN21	protein tyrosine phosphatase, non-receptor type 21	A_24_P255829	-0.9	1.4E-02
LOC100129794	similar to hCG1804255	A_32_P84454	-0.9	3.8E-02
DTNA	dystrobrevin, alpha	A_32_P79648	-0.9	1.7E-03
CCND3	cyclin D3	A_23_P361773	-0.9	3.3E-06
PELO	pelota homolog (Drosophila)	A_24_P66239	-0.9	6.9E-03
C8orf60	chromosome 8 open reading frame 60	A_24_P59387	-0.9	9.4E-05
CCDC38	coiled-coil domain containing 38	A_32_P54037	-0.9	2.0E-02
ANGPT1	angiopoietin 1	A_24_P60887	-0.9	1.2E-02
NPNT	nephronectin	A_32_P174978	-0.9	2.5E-03

TMEM41B	transmembrane protein 41B	A_32_P173058	-0.9	2.0E-06
LOC100272216	hypothetical LOC100272216	A_24_P409904	-0.9	2.0E-03
FADS3	fatty acid desaturase 3	A_23_P64404	-0.9	1.7E-04
PHACTR1	phosphatase and actin regulator 1	A_24_P943566	-0.9	6.2E-03
NANOG	Nanog homeobox	A_23_P204640	-0.9	1.4E-02
IL16	interleukin 16 (lymphocyte chemoattractant factor)	A_24_P299423	-0.9	1.2E-02
EXOC3L1	exocyst complex component 3-like 1	A_23_P424734	-0.9	1.2E-04
DKK2	dickkopf homolog 2 (<i>Xenopus laevis</i>)	A_23_P155848	-0.9	3.1E-02
ARSK	arylsulfatase family, member K	A_23_P312536	-0.9	3.6E-05
GRINL1A	glutamate receptor, ionotropic, N-methyl D-aspartate-like 1A	A_24_P307714	-0.9	2.3E-02
PPL	periplakin	A_23_P106906	-0.9	9.8E-05
CXADR	coxsackie virus and adenovirus receptor	A_32_P29632	-0.9	1.8E-03
VGLL3	vestigial like 3 (<i>Drosophila</i>)	A_23_P132763	-0.9	1.9E-03
RAI2	retinoic acid induced 2	A_23_P254165	-0.9	6.8E-05
INADL	InaD-like (<i>Drosophila</i>)	A_24_P942454	-0.9	3.9E-03
ARAP3	ArfGAP with RhoGAP domain, ankyrin repeat and PH domain 3	A_23_P167389	-0.9	1.5E-04
TECTA	tectorin alpha	A_23_P104853	-0.9	1.1E-02
TLR4	toll-like receptor 4	A_32_P66881	-0.9	1.1E-03
SNX24	sorting nexin 24	A_23_P19095	-0.9	5.7E-07
IL17RB	interleukin 17 receptor B	A_24_P157370	-0.9	4.0E-03
RAP1GAP	RAP1 GTPase activating protein	A_24_P36890	-0.9	1.0E-02
MLLT4	myeloid/lymphoid or mixed-lineage leukemia (trithorax homolog, <i>Drosophila</i>); translocated to, 4	A_23_P344694	-0.9	7.8E-03
CDKN1C	cyclin-dependent kinase inhibitor 1C (p57, Kip2)	A_23_P428129	-0.9	1.3E-03
AJAP1	adherens junctions associated protein 1	A_23_P23155	-0.9	7.8E-04
ACSL1	acyl-CoA synthetase long-chain family member 1	A_23_P110212	-0.9	1.5E-04
WFDC12	WAP four-disulfide core domain 12	A_23_P68436	-0.9	1.9E-03
LOC445341	TRAFs and NIK-associated protein	A_24_P376070	-0.9	1.3E-02
HIST1H2BD	histone cluster 1, H2bd	A_32_P152348	-0.9	3.6E-04
SYF2	SYF2 homolog, RNA splicing factor (<i>S. cerevisiae</i>)	A_24_P920102	-0.9	5.0E-04
SCAND3	SCAN domain containing 3	A_24_P188164	-0.9	6.6E-03
PARD6B	par-6 partitioning defective 6 homolog beta (<i>C. elegans</i>)	A_32_P205637	-0.9	4.0E-03
NRN1L	neuritin 1-like	A_32_P8551	-0.9	1.2E-04
ITGA8	integrin, alpha 8	A_23_P46781	-0.9	5.9E-04
PARD3	par-3 partitioning defective 3 homolog (<i>C. elegans</i>)	A_23_P201963	-0.9	1.4E-04
ADI1	acireductone dioxygenase 1	A_23_P148194	-0.9	5.6E-06
ACR	acrosin	A_23_P40734	-0.9	1.1E-03
TCEAL4	transcription elongation factor A (SII)-like 4	A_23_P259166	-0.9	2.1E-06
BMX	BMX non-receptor tyrosine kinase	A_24_P263144	-0.9	1.9E-02
GBA3	glucosidase, beta, acid 3 (cytosolic)	A_23_P18672	-0.9	6.2E-04

EGFL7	EGF-like-domain, multiple 7	A_32_P210642	-0.9	2.9E-03
CDC25B	cell division cycle 25 homolog B (S. pombe)	A_23_P210726	-0.9	6.4E-07
RBM26	RNA binding motif protein 26	A_24_P735073	-0.9	4.4E-03
FLJ30064	hypothetical protein LOC644975	A_24_P76512	-0.9	9.1E-03
ERVWE1	endogenous retroviral family W, env(C7), member 1	A_23_P31443	-0.9	7.0E-03
STARD3	StAR-related lipid transfer (START) domain containing 3	A_24_P224538	-0.9	1.3E-05
LOC100130815	hypothetical LOC100130815	A_32_P876086	-0.9	1.3E-02
STARD13	StAR-related lipid transfer (START) domain containing 13	A_24_P210420	-0.9	1.1E-04
RASSF7	Ras association (RalGDS/AF-6) domain family (N-terminal) member 7	A_23_P52589	-0.9	2.8E-05
LOC100272228	hypothetical LOC100272228	A_24_P864142	-0.9	3.2E-02
MXD3	MAX dimerization protein 3	A_24_P417706	-0.9	2.0E-03
LOC286272	hypothetical protein LOC286272	A_24_P483145	-0.9	1.5E-03
FOLR3	folate receptor 3 (gamma)	A_24_P252996	-0.9	6.5E-03
ART4	ADP-ribosyltransferase 4 (Dombrock blood group)	A_23_P116902	-0.9	8.6E-03
ACSS1	acyl-CoA synthetase short-chain family member 1	A_24_P940831	-0.9	1.4E-02
LOC100128822	hypothetical LOC100128822	A_32_P6172	-0.9	7.1E-06
STX3	syntaxin 3	A_23_P139143	-0.9	1.8E-04
PF4	platelet factor 4	A_24_P79403	-0.9	4.7E-02
APOL3	apolipoprotein L, 3	A_23_P29237	-0.9	2.4E-03
AKAP2	A kinase (PRKA) anchor protein 2	A_23_P359043	-0.9	2.2E-03
HIST1H4A	histone cluster 1, H4a	A_23_P431179	-0.9	6.1E-04
TMEM14E	transmembrane protein 14E	A_24_P932416	-0.9	2.8E-02
MID1IP1	MID1 interacting protein 1 (gastrulation specific G12 homolog (zebrafish))	A_23_P125579	-0.9	3.8E-05
ABL1	c-abl oncogene 1, non-receptor tyrosine kinase	A_24_P282416	-0.9	1.6E-02
PTPLB	protein tyrosine phosphatase-like (proline instead of catalytic arginine), member b	A_23_P155197	-0.9	3.9E-07
ULK2	unc-51-like kinase 2 (C. elegans)	A_24_P932594	-0.9	2.9E-03
MRPL43	mitochondrial ribosomal protein L43	A_23_P382154	-0.9	2.2E-02
PCDH1	protocadherin 1	A_23_P213359	-0.9	5.8E-05
LOC554206	hypothetical LOC554206	A_23_P434040	-0.9	9.9E-05
NIPA1	non imprinted in Prader-Willi/Angelman syndrome 1	A_23_P382460	-0.9	1.1E-02
MT1A	metallothionein 1A	A_23_P54840	-0.9	1.6E-02
CIT	citron (rho-interacting, serine/threonine kinase 21)	A_23_P420551	-0.9	1.8E-02
LOC90246	hypothetical LOC90246	A_24_P532180	-0.9	3.3E-05
SEMA3F	sema domain, immunoglobulin domain (Ig), short basic domain, secreted, (semaphorin) 3F	A_24_P300076	-0.9	3.6E-05
SLC10A4	solute carrier family 10 (sodium/bile acid cotransporter family), member 4	A_23_P314811	-0.9	2.0E-02
TMOD1	tropomodulin 1	A_23_P112289	-0.9	1.1E-02
FAH	fumarylacetoacetate hydrolase (fumarylacetoacetase)	A_23_P129221	-0.9	8.7E-09

NHEJ1	nonhomologous end-joining factor 1	A_24_P251381	-0.8	1.5E-05
CAPN3	calpain 3, (p94)	A_23_P218190	-0.8	5.4E-05
C18orf18	chromosome 18 open reading frame 18	A_23_P377965	-0.8	8.6E-03
SPRY4	sprouty homolog 4 (Drosophila)	A_24_P269062	-0.8	1.9E-02
LOC100129406	hypothetical protein LOC100129406	A_24_P934135	-0.8	2.1E-03
ATP1A4	ATPase, Na+/K+ transporting, alpha 4 polypeptide	A_24_P307626	-0.8	1.0E-06
CXorf57	chromosome X open reading frame 57	A_23_P96369	-0.8	8.8E-03
ATP1A3	ATPase, Na+/K+ transporting, alpha 3 polypeptide	A_23_P27472	-0.8	5.1E-07
SLC44A1	solute carrier family 44, member 1	A_23_P411806	-0.8	4.5E-05
OBSCN	obscurin, cytoskeletal calmodulin and titin-interacting RhoGEF	A_23_P63128	-0.8	4.9E-04
KANK3	KN motif and ankyrin repeat domains 3	A_23_P131089	-0.8	5.4E-04
FGD5	FYVE, RhoGEF and PH domain containing 5	A_23_P321972	-0.8	1.3E-03
LAMA2	laminin, alpha 2	A_23_P70719	-0.8	8.4E-03
ARHGAP24	Rho GTPase activating protein 24	A_32_P72067	-0.8	1.2E-02
ELOVL6	ELOVL family member 6, elongation of long chain fatty acids (FEN1/Elo2, SUR4/Elo3-like, yeast)	A_23_P7361	-0.8	5.5E-04
LOC100507198	hypothetical LOC100507198	A_24_P876734	-0.8	1.4E-03
RACGAP1	Rac GTPase activating protein 1	A_32_P186474	-0.8	1.4E-05
PRKAR2B	protein kinase, cAMP-dependent, regulatory, type II, beta	A_32_P145477	-0.8	1.6E-02
FAM188B	family with sequence similarity 188, member B	A_24_P126425	-0.8	1.3E-05
LONRF3	LON peptidase N-terminal domain and ring finger 3	A_24_P185909	-0.8	3.0E-02
FAM89A	family with sequence similarity 89, member A	A_24_P418408	-0.8	1.2E-03
SDCCAG8	serologically defined colon cancer antigen 8	A_24_P179489	-0.8	3.4E-05
PABPC5	poly(A) binding protein, cytoplasmic 5	A_23_P84047	-0.8	4.5E-02
ACSM5	acyl-CoA synthetase medium-chain family member 5	A_24_P367776	-0.8	3.0E-02
CYP4B1	cytochrome P450, family 4, subfamily B, polypeptide 1	A_23_P114713	-0.8	2.4E-02
TTL7	tubulin tyrosine ligase-like family, member 7	A_24_P165450	-0.8	8.0E-03
TCTA	T-cell leukemia translocation altered gene	A_24_P123166	-0.8	2.1E-06
PPARG	peroxisome proliferator-activated receptor gamma	A_23_P252062	-0.8	2.5E-02
MACF1	microtubule-actin crosslinking factor 1	A_24_P418637	-0.8	1.3E-04
BLVRB	biliverdin reductase B (flavin reductase (NADPH))	A_23_P153351	-0.8	3.6E-08
ACRBP	acrosin binding protein	A_23_P151120	-0.8	1.1E-03
TMEM26	transmembrane protein 26	A_32_P75264	-0.8	4.7E-02
CDK19	cyclin-dependent kinase 19	A_24_P699896	-0.8	7.1E-04
LOC221814	hypothetical protein LOC221814	A_24_P759861	-0.8	1.6E-02
GPC3	glypican 3	A_24_P57631	-0.8	8.4E-03
NCRNA00162	non-protein coding RNA 162	A_32_P155460	-0.8	2.2E-05
ZNF23	zinc finger protein 23 (KOX 16)	A_24_P935125	-0.8	3.7E-03
CLEC14A	C-type lectin domain family 14, member A	A_24_P215653	-0.8	1.1E-02
GAB1	GRB2-associated binding protein 1	A_23_P335239	-0.8	3.9E-03

TOM1L1	target of myb1 (chicken)-like 1	A_24_P196658	-0.8	4.8E-03
LRRTM2	leucine rich repeat transmembrane neuronal 2	A_24_P140569	-0.8	2.1E-02
PDE6A	phosphodiesterase 6A, cGMP-specific, rod, alpha	A_23_P81590	-0.8	3.6E-02
CAT	catalase	A_23_P105138	-0.8	1.3E-03
KIAA1109	KIAA1109	A_24_P937135	-0.8	2.6E-03
MYL3	myosin, light chain 3, alkali; ventricular, skeletal, slow	A_24_P131646	-0.8	1.1E-02
LOC283788	FSDH region gene 1 pseudogene	A_24_P497437	-0.8	1.9E-02
LOC150622	hypothetical LOC150622	A_32_P123279	-0.8	6.0E-03
LNX1	ligand of numb-protein X 1	A_24_P54900	-0.8	8.7E-03
TSPAN14	tetraspanin 14	A_24_P98613	-0.8	1.9E-06
POPDC3	popeye domain containing 3	A_23_P358597	-0.8	9.1E-03
MBL1P	mannose-binding lectin (protein A) 1, pseudogene	A_24_P169634	-0.8	1.2E-02
NETO2	neuropilin (NRP) and tolloid (TLL)-like 2	A_32_P77989	-0.8	4.9E-03
GPR4	G protein-coupled receptor 4	A_23_P357284	-0.8	8.4E-03
ZNF493	zinc finger protein 493	A_24_P282261	-0.8	4.1E-04
PRKD1	protein kinase D1	A_23_P106016	-0.8	4.4E-06
PXMP4	peroxisomal membrane protein 4, 24kDa	A_23_P91430	-0.8	4.5E-05
LOC100132356	hypothetical LOC100132356	A_24_P942017	-0.8	4.6E-03
RPL13P5	ribosomal protein L13 pseudogene 5	A_23_P48080	-0.8	1.7E-05
TFPI	tissue factor pathway inhibitor (lipoprotein-associated coagulation inhibitor)	A_23_P17095	-0.8	3.2E-05
S100A14	S100 calcium binding protein A14	A_23_P124619	-0.8	3.2E-03
MFAP3L	microfibrillar-associated protein 3-like	A_24_P76675	-0.8	5.3E-03
RNF112	ring finger protein 112	A_23_P107116	-0.8	3.3E-03
B3GNT1	UDP-GlcNAc:betaGal beta-1,3-N-acetylglucosaminyltransferase 1	A_23_P86900	-0.8	3.8E-05
B3GNT8	UDP-GlcNAc:betaGal beta-1,3-N-acetylglucosaminyltransferase 8	A_23_P101380	-0.8	4.5E-03
MT1H	metallothionein 1H	A_23_P414343	-0.8	3.4E-02
FBLN5	fibulin 5	A_23_P151805	-0.8	1.3E-04
FAM189A2	family with sequence similarity 189, member A2	A_32_P43717	-0.8	3.2E-02
LOC80054	hypothetical LOC80054	A_23_P5018	-0.8	6.1E-04
PPEF1	protein phosphatase, EF-hand calcium binding domain 1	A_23_P125505	-0.8	1.6E-02
CNTROB	centrobin, centrosomal BRCA2 interacting protein	A_23_P9761	-0.8	1.5E-07
SPIN4	spindlin family, member 4	A_24_P467371	-0.8	4.3E-03
TMEM87A	transmembrane protein 87A	A_24_P65098	-0.8	5.4E-03
PDLIM2	PDZ and LIM domain 2 (mystique)	A_24_P160380	-0.8	2.2E-02
LOC100129648	hypothetical LOC100129648	A_24_P76604	-0.8	4.7E-02
MERTK	c-mer proto-oncogene tyrosine kinase	A_23_P32955	-0.8	1.3E-04
TGFBR2	transforming growth factor, beta receptor II (70/80kDa)	A_23_P337242	-0.8	9.4E-06
PLA2G16	phospholipase A2, group XVI	A_23_P116414	-0.8	7.6E-06
IZUMO4	IZUMO family member 4	A_23_P50674	-0.8	4.5E-04

OR2A9P	olfactory receptor, family 2, subfamily A, member 9 pseudogene	A_23_P123172	-0.8	2.0E-02
KRT72	keratin 72	A_32_P48825	-0.8	1.5E-02
TSPYL2	TSPY-like 2	A_23_P170608	-0.8	1.9E-02
EFNB2	ephrin-B2	A_23_P428139	-0.8	3.0E-03
UNC13D	unc-13 homolog D (C. elegans)	A_24_P53215	-0.8	1.3E-04
ATP1A1	ATPase, Na ⁺ /K ⁺ transporting, alpha 1 polypeptide	A_23_P1072	-0.8	2.2E-07
F10	coagulation factor X	A_23_P205177	-0.8	7.0E-05
TBXAS1	thromboxane A synthase 1 (platelet)	A_24_P274814	-0.8	6.3E-04
NEXN	nexilin (F actin binding protein)	A_24_P409971	-0.8	1.4E-03
USP54	ubiquitin specific peptidase 54	A_23_P355536	-0.8	2.2E-05
DGAT2	diacylglycerol O-acyltransferase 2	A_23_P53198	-0.8	3.5E-03
SESN1	sestrin 1	A_24_P346339	-0.8	1.6E-03
CCDC141	coiled-coil domain containing 141	A_23_P427696	-0.8	1.9E-04
LOC100131541	hypothetical LOC100131541	A_24_P935682	-0.8	4.1E-02
CBFA2T3	core-binding factor, runt domain, alpha subunit 2; translocated to, 3	A_23_P500741	-0.8	3.0E-04
EPHB4	EPH receptor B4	A_23_P168443	-0.8	5.6E-06
ROBO4	roundabout homolog 4, magic roundabout (Drosophila)	A_23_P104881	-0.8	2.2E-03
RETSAT	retinol saturase (all-trans-retinol 13,14-reductase)	A_23_P209944	-0.8	4.9E-05
CDKL1	cyclin-dependent kinase-like 1 (CDC2-related kinase)	A_23_P99747	-0.8	2.2E-04
MST1	macrophage stimulating 1 (hepatocyte growth factor-like)	A_24_P148796	-0.8	3.7E-03
SRGAP2P1	SLIT-ROBO Rho GTPase activating protein 2 pseudogene 1	A_32_P198412	-0.8	4.1E-05
UGT2B10	UDP glucuronosyltransferase 2 family, polypeptide B10	A_24_P521559	-0.8	3.5E-02
C3orf71	chromosome 3 open reading frame 71	A_24_P76018	-0.8	3.1E-03
RIN2	Ras and Rab interactor 2	A_24_P305570	-0.8	7.3E-05
FAM177A1	family with sequence similarity 177, member A1	A_23_P2935	-0.8	2.8E-04
HTT	huntingtin	A_23_P212749	-0.8	2.4E-06
LMO7	LIM domain 7	A_23_P205159	-0.8	4.7E-03
TCEAL2	transcription elongation factor A (SII)-like 2	A_23_P85140	-0.8	5.6E-03
LOC220729	succinate dehydrogenase complex, subunit A, flavoprotein pseudogene	A_24_P489480	-0.8	4.7E-03
MPPE1	metallophosphoesterase 1	A_24_P390833	-0.8	3.2E-03
LIMS2	LIM and senescent cell antigen-like domains 2	A_23_P142796	-0.8	3.5E-05
EZH1	enhancer of zeste homolog 1 (Drosophila)	A_23_P428219	-0.8	5.5E-06
DIAPH3	diaphanous homolog 3 (Drosophila)	A_32_P150891	-0.8	3.4E-02
BFAR	bifunctional apoptosis regulator	A_24_P184931	-0.8	3.3E-05
NTRK3	neurotrophic tyrosine kinase, receptor, type 3	A_23_P205900	-0.8	3.5E-04
LOC374890	hypothetical LOC374890	A_32_P469390	-0.8	3.3E-04
C6orf81	chromosome 6 open reading frame 81	A_32_P146113	-0.8	3.4E-02
KLF9	Kruppel-like factor 9	A_23_P415401	-0.8	1.7E-02

NAA15	N(alpha)-acetyltransferase 15, NatA auxiliary subunit	A_32_P118220	-0.8	3.4E-02
SH2D4A	SH2 domain containing 4A	A_23_P169003	-0.8	3.3E-03
CPAMD8	C3 and PZP-like, alpha-2-macroglobulin domain containing 8	A_23_P67198	-0.8	3.5E-03
NKX2-1	NK2 homeobox 1	A_24_P184692	-0.8	6.6E-04
DEFA6	defensin, alpha 6, Paneth cell-specific	A_24_P363711	-0.8	2.0E-02
XRCC6BP1	XRCC6 binding protein 1	A_24_P927404	-0.8	5.2E-03
PRDX6	peroxiredoxin 6	A_23_P983	-0.8	3.5E-11
PLXNA2	plexin A2	A_23_P307544	-0.8	1.7E-02
GUSBP1	glucuronidase, beta pseudogene 1	A_32_P209735	-0.8	5.0E-03
IL6ST	interleukin 6 signal transducer (gp130, oncostatin M receptor)	A_24_P935033	-0.8	3.0E-02
ALCAM	activated leukocyte cell adhesion molecule	A_23_P41227	-0.8	1.5E-04
TALDO1	transaldolase 1	A_24_P81740	-0.8	5.9E-08
ACAT1	acetyl-CoA acetyltransferase 1	A_23_P24515	-0.8	1.9E-09
ARHGAP10	Rho GTPase activating protein 10	A_23_P21548	-0.8	3.5E-06
LUZP3P	leucine zipper protein 3, pseudogene	A_23_P254061	-0.8	1.2E-02
NEK3	NIMA (never in mitosis gene a)-related kinase 3	A_23_P333705	-0.8	8.1E-05
TTC39A	tetratricopeptide repeat domain 39A	A_23_P160214	-0.8	9.3E-03
XKR6	XK, Kell blood group complex subunit-related family, member 6	A_23_P387000	-0.8	1.3E-02
CPNE2	copine II	A_23_P37988	-0.8	1.1E-07
FASTKD1	FAST kinase domains 1	A_23_P307624	-0.8	1.2E-02
TJP2	tight junction protein 2 (zona occludens 2)	A_24_P201153	-0.8	5.1E-04
QDPR	quinoid dihydropteridine reductase	A_23_P167212	-0.8	1.2E-05
PEX13	peroxisomal biogenesis factor 13	A_24_P927639	-0.8	2.0E-02
NIPAL3	NIPA-like domain containing 3	A_24_P919419	-0.8	4.3E-03
LYPD5	LY6/PLAUR domain containing 5	A_24_P323148	-0.8	2.4E-02
TPST2	tyrosylprotein sulfotransferase 2	A_23_P132226	-0.8	1.2E-05
ARHGAP44	Rho GTPase activating protein 44	A_24_P942385	-0.8	1.4E-02
GIF	gastric intrinsic factor (vitamin B synthesis)	A_23_P52974	-0.8	9.7E-04
MYO9A	myosin IXA	A_23_P205841	-0.8	4.0E-07
MFGE8	milk fat globule-EGF factor 8 protein	A_23_P48951	-0.8	5.7E-04
TMEM37	transmembrane protein 37	A_23_P67799	-0.8	1.7E-03
KIAA0485	hypothetical LOC57235	A_24_P762886	-0.8	3.2E-02
ALOX5AP	arachidonate 5-lipoxygenase-activating protein	A_23_P2793	-0.8	1.9E-02
GSTM4	glutathione S-transferase mu 4	A_23_P217917	-0.8	6.7E-04
HSD17B4	hydroxysteroid (17-beta) dehydrogenase 4	A_23_P92954	-0.8	7.6E-08
TAOK2	TAO kinase 2	A_23_P308673	-0.8	5.4E-05
TXNIP	thioredoxin interacting protein	A_24_P662813	-0.8	3.9E-02
SEMA3B	sema domain, immunoglobulin domain (Ig), short basic domain, secreted, (semaphorin) 3B	A_23_P132718	-0.8	1.8E-04
LOC100128893	hypothetical LOC100128893	A_32_P125832	-0.8	4.7E-03

GLT1D1	glycosyltransferase 1 domain containing 1	A_32_P19294	-0.8	3.8E-02
TNS3	tensin 3	A_24_P346431	-0.8	2.0E-04
ACSS2	acyl-CoA synthetase short-chain family member 2	A_24_P156295	-0.8	4.6E-04
OPN3	opsin 3	A_23_P74391	-0.8	8.2E-03
ZNF718	zinc finger protein 718	A_23_P124438	-0.8	1.3E-02
RILP	Rab interacting lysosomal protein	A_23_P26815	-0.8	3.2E-06
CYP51A1	cytochrome P450, family 51, subfamily A, polypeptide 1	A_23_P257716	-0.8	3.3E-03
MYST4	MYST histone acetyltransferase (monocytic leukemia) 4	A_23_P388855	-0.8	2.0E-03
FAM63A	family with sequence similarity 63, member A	A_23_P149171	-0.8	1.7E-02
ITGA2B	integrin, alpha 2b (platelet glycoprotein IIb of IIb/IIIa complex, antigen CD41)	A_23_P77971	-0.8	1.2E-03
SLC44A2	solute carrier family 44, member 2	A_24_P10657	-0.8	3.6E-06
DBT	dihydrolipoamide branched chain transacylase E2	A_23_P74022	-0.8	1.1E-02
SHANK2	SH3 and multiple ankyrin repeat domains 2	A_23_P334883	-0.8	6.4E-03
GJA4	gap junction protein, alpha 4, 37kDa	A_23_P1083	-0.7	1.3E-02
AXIN2	axin 2	A_23_P148015	-0.7	9.8E-04
FAM69B	family with sequence similarity 69, member B	A_23_P431305	-0.7	4.6E-03
MEIS1	Meis homeobox 1	A_32_P98914	-0.7	7.8E-03
LOC150166	hypothetical protein LOC150166	A_32_P103815	-0.7	4.4E-03
IMPA2	inositol(myo)-1(or 4)-monophosphatase 2	A_23_P50081	-0.7	2.0E-04
PPP2R5A	protein phosphatase 2, regulatory subunit B', alpha	A_24_P134955	-0.7	8.5E-06
LOC100505679	hypothetical protein LOC100505679	A_24_P555170	-0.7	4.2E-02
RAD18	RAD18 homolog (<i>S. cerevisiae</i>)	A_24_P882345	-0.7	1.6E-02
LASS2	LAG1 homolog, ceramide synthase 2	A_23_P63010	-0.7	1.6E-06
SNRK	SNF related kinase	A_24_P102151	-0.7	2.4E-02
SH3GL3	SH3-domain GRB2-like 3	A_23_P48988	-0.7	3.9E-03
LOC389634	hypothetical LOC389634	A_32_P221305	-0.7	2.4E-02
CYP2B7P1	cytochrome P450, family 2, subfamily B, polypeptide 7 pseudogene 1	A_23_P121914	-0.7	2.1E-02
ACCS	1-aminocyclopropane-1-carboxylate synthase homolog (<i>Arabidopsis</i>)(non-functional)	A_23_P24586	-0.7	9.8E-05
MFNG	MFNG O-fucosylpeptide 3-beta-N-acetylglucosaminyltransferase	A_24_P224926	-0.7	2.3E-05
BCAT2	branched chain amino-acid transaminase 2, mitochondrial	A_23_P101551	-0.7	7.4E-10
EHD2	EH-domain containing 2	A_24_P156113	-0.7	3.6E-05
SERINC3	serine incorporator 3	A_23_P435501	-0.7	1.1E-04
CTDSPL	CTD (carboxy-terminal domain, RNA polymerase II, polypeptide A) small phosphatase-like	A_23_P212436	-0.7	3.6E-04
CYP2R1	cytochrome P450, family 2, subfamily R, polypeptide 1	A_23_P335190	-0.7	7.4E-07
FSTL3	follistatin-like 3 (secreted glycoprotein)	A_23_P209167	-0.7	1.0E-02
C21orf30	chromosome 21 open reading frame 30	A_24_P221903	-0.7	7.1E-03
RAPGEF2	Rap guanine nucleotide exchange factor (GEF) 2	A_24_P935919	-0.7	3.8E-02

ZHX3	zinc fingers and homeoboxes 3	A_24_P57700	-0.7	5.9E-05
NEDD9	neural precursor cell expressed, developmentally down-regulated 9	A_23_P344555	-0.7	7.8E-03
JUB	jub, ajuba homolog (<i>Xenopus laevis</i>)	A_23_P54055	-0.7	8.3E-03
OR511	olfactory receptor, family 5, subfamily I, member 1	A_23_P150467	-0.7	6.0E-03
CLSTN2	calsyntenin 2	A_23_P212608	-0.7	1.6E-02
SAP30	Sin3A-associated protein, 30kDa	A_23_P121602	-0.7	1.9E-03
GALK1	galactokinase 1	A_23_P141126	-0.7	2.3E-08
DAAM2	dishevelled associated activator of morphogenesis 2	A_32_P52785	-0.7	4.6E-04
TCEANC	transcription elongation factor A (SII) N-terminal and central domain containing	A_24_P196469	-0.7	3.7E-02
LOC100289058	hypothetical protein LOC100289058	A_24_P316414	-0.7	1.1E-02
MMP28	matrix metalloproteinase 28	A_23_P26890	-0.7	9.1E-03
C7orf25	chromosome 7 open reading frame 25	A_24_P300483	-0.7	1.5E-04
NUPL1	nucleoporin like 1	A_23_P204891	-0.7	7.8E-03
POPDC2	popeye domain containing 2	A_24_P257336	-0.7	4.2E-02
ABCA10	ATP-binding cassette, sub-family A (ABC1), member 10	A_23_P89422	-0.7	2.6E-02
SHC3	SHC (Src homology 2 domain containing) transforming protein 3	A_23_P61406	-0.7	2.0E-02
DOCK6	dedicator of cytokinesis 6	A_23_P67299	-0.7	3.8E-03
CDH5	cadherin 5, type 2 (vascular endothelium)	A_23_P129496	-0.7	2.0E-03
GPR126	G protein-coupled receptor 126	A_24_P942945	-0.7	2.2E-03
GRK5	G protein-coupled receptor kinase 5	A_23_P12884	-0.7	1.3E-03
C14orf1	chromosome 14 open reading frame 1	A_24_P313180	-0.7	9.6E-04
RAPH1	Ras association (RalGDS/AF-6) and pleckstrin homology domains 1	A_24_P924862	-0.7	2.4E-04
ADRB2	adrenergic, beta-2-, receptor, surface	A_23_P145024	-0.7	3.2E-04
C12orf49	chromosome 12 open reading frame 49	A_23_P13797	-0.7	5.5E-04
LYSMD4	LysM, putative peptidoglycan-binding, domain containing 4	A_32_P117812	-0.7	4.6E-03
LOC100294145	hypothetical LOC100294145	A_32_P97739	-0.7	3.6E-03
ZBTB8A	zinc finger and BTB domain containing 8A	A_32_P108436	-0.7	6.7E-04
RASL10B	RAS-like, family 10, member B	A_24_P322229	-0.7	4.2E-03
UPK3B	uroplakin 3B	A_24_P112160	-0.7	3.8E-04
ACPP	acid phosphatase, prostate	A_24_P37589	-0.7	4.8E-02
ANG	angiogenin, ribonuclease, RNase A family, 5	A_23_P428738	-0.7	2.9E-04
ACYP1	acylphosphatase 1, erythrocyte (common) type	A_23_P163143	-0.7	3.5E-03
CES1	carboxylesterase 1	A_23_P206733	-0.7	1.5E-02
CFLAR	CASP8 and FADD-like apoptosis regulator	A_23_P209394	-0.7	7.3E-03
FNDC9	fibronectin type III domain containing 9	A_23_P306489	-0.7	6.0E-05
FADS1	fatty acid desaturase 1	A_24_P192994	-0.7	4.1E-04
C20orf46	chromosome 20 open reading frame 46	A_23_P120504	-0.7	6.8E-03
EPHB6	EPH receptor B6	A_23_P145935	-0.7	3.1E-04
HBS1L	HBS1-like (<i>S. cerevisiae</i>)	A_24_P29594	-0.7	3.3E-02

SNTB1	syntrophin, beta 1 (dystrophin-associated protein A1, 59kDa, basic component 1)	A_23_P386030	-0.7	4.4E-02
LOC494150	prohibitin pseudogene	A_24_P325006	-0.7	6.2E-04
C14orf147	chromosome 14 open reading frame 147	A_23_P311150	-0.7	1.9E-05
IL15RA	interleukin 15 receptor, alpha	A_23_P138680	-0.7	9.7E-04
ARMC9	armadillo repeat containing 9	A_23_P209735	-0.7	1.3E-02
MYO1C	myosin IC	A_23_P416656	-0.7	1.0E-04
NAGS	N-acetylglutamate synthase	A_23_P406187	-0.7	1.2E-03
DNAH17	dynein, axonemal, heavy chain 17	A_24_P940615	-0.7	5.9E-03
DAPK1	death-associated protein kinase 1	A_23_P252163	-0.7	1.9E-03
CEACAM19	carcinoembryonic antigen-related cell adhesion molecule 19	A_23_P78518	-0.7	2.2E-02
CEACAM21	carcinoembryonic antigen-related cell adhesion molecule 21	A_23_P78595	-0.7	2.8E-02
FDPS	farnesyl diphosphate synthase	A_24_P114183	-0.7	3.9E-07
CTNND1	catenin (cadherin-associated protein), delta 1	A_24_P881527	-0.7	8.8E-03
VAMP5	vesicle-associated membrane protein 5 (myobrevin)	A_23_P39840	-0.7	6.8E-04
PID1	phosphotyrosine interaction domain containing 1	A_23_P21485	-0.7	2.1E-03
TSPAN12	tetraspanin 12	A_23_P145984	-0.7	2.2E-02
CRK	v-crk sarcoma virus CT10 oncogene homolog (avian)	A_24_P270814	-0.7	9.6E-04
CD163	CD163 molecule	A_23_P33723	-0.7	4.7E-02
SLC31A2	solute carrier family 31 (copper transporters), member 2	A_23_P217109	-0.7	3.2E-02
MAP4K2	mitogen-activated protein kinase kinase kinase 2	A_24_P287075	-0.7	4.5E-05
ABCC6	ATP-binding cassette, sub-family C (CFTR/MRP), member 6	A_23_P100539	-0.7	5.4E-04
EVPLL	envoplakin-like	A_32_P141682	-0.7	1.1E-02
RUNX1T1	runt-related transcription factor 1; translocated to, 1 (cyclin D-related)	A_23_P216307	-0.7	5.0E-02
MOSC2	MOCO sulphurase C-terminal domain containing 2	A_23_P200685	-0.7	1.7E-06
SOX1	SRY (sex determining region Y)-box 1	A_23_P434416	-0.7	9.1E-03
DOK4	docking protein 4	A_24_P48069	-0.7	1.9E-02
SLC35E3	solute carrier family 35, member E3	A_23_P159110	-0.7	2.4E-04
GLCCI1	glucocorticoid induced transcript 1	A_23_P82402	-0.7	5.3E-03
OSGIN1	oxidative stress induced growth inhibitor 1	A_23_P77415	-0.7	1.1E-04
BMPR2	bone morphogenetic protein receptor, type II (serine/threonine kinase)	A_24_P753161	-0.7	7.6E-03
BRI3	brain protein I3	A_23_P122915	-0.7	6.8E-04
PPP1R3E	protein phosphatase 1, regulatory (inhibitor) subunit 3E	A_23_P428640	-0.7	5.0E-05
GBA2	glucosidase, beta (bile acid) 2	A_24_P341187	-0.7	1.7E-04
LOC100526820	hypothetical LOC100526820	A_32_P151133	-0.7	1.8E-04
PTPRR	protein tyrosine phosphatase, receptor type, R	A_23_P47924	-0.7	4.2E-02
EML1	echinoderm microtubule associated protein like 1	A_23_P205746	-0.7	6.0E-04
KIDINS220	kinase D-interacting substrate, 220kDa	A_24_P7202	-0.7	1.5E-02

AKR1C1	aldo-keto reductase family 1, member C1 (dihydrodiol dehydrogenase 1; 20-alpha (3-alpha)-hydroxysteroid dehydrogenase)	A_24_P220947	-0.7	3.2E-02
MTRR	5-methyltetrahydrofolate-homocysteine methyltransferase reductase	A_23_P252211	-0.7	1.5E-02
SMAD7	SMAD family member 7	A_23_P55518	-0.7	5.1E-04
C5orf56	chromosome 5 open reading frame 56	A_24_P829156	-0.7	1.6E-02
CARD6	caspase recruitment domain family, member 6	A_23_P41854	-0.7	2.5E-05
TM7SF2	transmembrane 7 superfamily member 2	A_23_P116037	-0.7	1.4E-04
KIAA1543	KIAA1543	A_23_P394043	-0.7	1.4E-06
CDC42BPA	CDC42 binding protein kinase alpha (DMPK-like)	A_23_P51394	-0.7	2.9E-02
KIF1C	kinesin family member 1C	A_23_P107369	-0.7	6.1E-07
SULT1C4	sulfotransferase family, cytosolic, 1C, member 4	A_23_P39605	-0.7	2.0E-03
KCNJ8	potassium inwardly-rectifying channel, subfamily J, member 8	A_23_P64879	-0.7	2.4E-03
AFMID	arylformamidase	A_24_P867342	-0.7	3.8E-03
FHOD1	formin homology 2 domain containing 1	A_23_P37778	-0.7	4.9E-06
LRCH2	leucine-rich repeats and calponin homology (CH) domain containing 2	A_23_P73809	-0.7	1.7E-03
GNA11	guanine nucleotide binding protein (G protein), alpha 11 (Gq class)	A_24_P927886	-0.7	6.9E-06
C1orf198	chromosome 1 open reading frame 198	A_32_P42574	-0.7	6.0E-04
ZXDC	ZXD family zinc finger C	A_23_P303317	-0.7	1.6E-06
ICAM2	intercellular adhesion molecule 2	A_23_P152655	-0.7	3.2E-03
DHCR24	24-dehydrocholesterol reductase	A_23_P217820	-0.7	7.4E-04
LGI4	leucine-rich repeat LGI family, member 4	A_24_P310256	-0.7	2.5E-03
CYBRD1	cytochrome b reductase 1	A_23_P209564	-0.7	2.3E-03
TECPR1	tectonin beta-propeller repeat containing 1	A_32_P194072	-0.7	5.9E-06
SNX27	sorting nexin family member 27	A_23_P201238	-0.7	9.4E-06
LPCAT3	lysophosphatidylcholine acyltransferase 3	A_23_P64938	-0.7	7.8E-03
CLIC2	chloride intracellular channel 2	A_23_P45456	-0.7	7.9E-03
NOVA2	neuro-oncological ventral antigen 2	A_23_P377717	-0.7	2.4E-04
ANKFY1	ankyrin repeat and FYVE domain containing 1	A_24_P151834	-0.7	2.7E-02
ST6GALNAC5	ST6 (alpha-N-acetyl-neuraminy-2,3-beta-galactosyl-1,3)-N-acetylgalactosaminide alpha-2,6-sialyltransferase 5	A_23_P33093	-0.7	3.7E-03
ANKRD2	ankyrin repeat domain 2 (stretch responsive muscle)	A_23_P104555	-0.7	4.3E-05
LRR36	leucine rich repeat containing 36	A_23_P118042	-0.7	4.0E-02
CDKN2D	cyclin-dependent kinase inhibitor 2D (p19, inhibits CDK4)	A_23_P89941	-0.7	2.2E-05
FGGY	FGGY carbohydrate kinase domain containing	A_23_P22169	-0.7	2.0E-03
CCDC84	coiled-coil domain containing 84	A_24_P636332	-0.7	9.5E-04
C12orf34	chromosome 12 open reading frame 34	A_23_P128375	-0.7	1.3E-03
CRIPAK	cysteine-rich PAK1 inhibitor	A_23_P431330	-0.7	2.3E-04
PKN3	protein kinase N3	A_23_P258982	-0.7	2.4E-05

DKFZp779M0652	hypothetical DKFZp779M0652	A_32_P189790	-0.7	5.6E-03
RIMS4	regulating synaptic membrane exocytosis 4	A_32_P38645	-0.7	1.7E-04
MTSS1	metastasis suppressor 1	A_23_P347632	-0.7	1.8E-04
LSAMP	limbic system-associated membrane protein	A_23_P301855	-0.7	3.9E-02
ZNF577	zinc finger protein 577	A_23_P309207	-0.7	5.0E-03
ARHGAP28	Rho GTPase activating protein 28	A_24_P579356	-0.7	4.3E-02
RICTOR	RPTOR independent companion of MTOR, complex 2	A_32_P15017	-0.7	6.8E-03
KANK2	KN motif and ankyrin repeat domains 2	A_24_P324787	-0.7	4.7E-02
PLIN2	perilipin 2	A_23_P134953	-0.7	4.4E-02
ATP8A2	ATPase, aminophospholipid transporter, class I, type 8A, member 2	A_23_P258612	-0.7	3.1E-02
MAGI1	membrane associated guanylate kinase, WW and PDZ domain containing 1	A_23_P73297	-0.7	1.6E-02
PGD	phosphogluconate dehydrogenase	A_23_P126623	-0.7	6.8E-04
C7orf62	chromosome 7 open reading frame 62	A_23_P42855	-0.7	3.2E-02
LOC148189	hypothetical LOC148189	A_24_P913216	-0.7	3.6E-02
BEND7	BEN domain containing 7	A_23_P312358	-0.7	6.9E-03
NOTCH2NL	notch 2 N-terminal like	A_24_P401916	-0.7	4.5E-02
VEGFA	vascular endothelial growth factor A	A_23_P70398	-0.7	3.2E-02
PHYHD1	phytanoyl-CoA dioxygenase domain containing 1	A_23_P307844	-0.7	6.7E-05
FDPSL2A	MGC44478	A_32_P95223	-0.7	3.4E-06
TIGD6	tigger transposable element derived 6	A_24_P337419	-0.7	4.1E-02
SLC26A2	solute carrier family 26 (sulfate transporter), member 2	A_23_P250951	-0.7	2.9E-03
ENOSF1	enolase superfamily member 1	A_23_P15906	-0.7	2.4E-04
FXVD6	FXVD domain containing ion transport regulator 6	A_23_P150394	-0.7	3.0E-03
P2RY12	purinergic receptor P2Y, G-protein coupled, 12	A_23_P143902	-0.7	1.6E-02
IL17RE	interleukin 17 receptor E	A_23_P500206	-0.7	5.8E-05
XK	X-linked Kx blood group (McLeod syndrome)	A_23_P45304	-0.7	1.0E-02
SH3D19	SH3 domain containing 19	A_23_P33364	-0.7	1.2E-03
ZNF620	zinc finger protein 620	A_32_P308779	-0.7	3.1E-02
TKT	transketolase	A_23_P92082	-0.7	1.1E-04
STX6	syntaxin 6	A_23_P331992	-0.7	2.9E-03
XIRP2	xin actin-binding repeat containing 2	A_23_P108743	-0.7	1.3E-02
THRA	thyroid hormone receptor, alpha (erythroblastic leukemia viral (v-erb-a) oncogene homolog, avian)	A_23_P207742	-0.7	3.1E-03
AASS	aminoadipate-semialdehyde synthase	A_23_P8754	-0.7	1.7E-03
PCDHGC3	protocadherin gamma subfamily C, 3	A_23_P218937	-0.7	3.0E-02
SARS	seryl-tRNA synthetase	A_24_P699737	-0.7	6.5E-04
RMND5A	required for meiotic nuclear division 5 homolog A (S. cerevisiae)	A_24_P114339	-0.7	2.4E-03
SEC22C	SEC22 vesicle trafficking protein homolog C (S. cerevisiae)	A_23_P502641	-0.7	1.0E-05
LOC645722	hypothetical protein LOC645722	A_24_P896205	-0.7	4.9E-03

RPUSD3	RNA pseudouridylate synthase domain containing 3	A_23_P255916	-0.7	2.8E-06
PKDREJ	polycystic kidney disease (polycystin) and REJ homolog (sperm receptor for egg jelly homolog, sea urchin)	A_23_P120982	-0.7	2.9E-02
WDSUB1	WD repeat, sterile alpha motif and U-box domain containing 1	A_23_P108657	-0.7	1.5E-05
WFS1	Wolfram syndrome 1 (wolframin)	A_23_P121499	-0.7	2.4E-04
CACNB1	calcium channel, voltage-dependent, beta 1 subunit	A_23_P405754	-0.7	7.1E-04
PSRC1	proline/serine-rich coiled-coil 1	A_23_P46539	-0.7	5.0E-04
LOC100009676	hypothetical LOC100009676	A_32_P33561	-0.7	4.1E-03
SLC7A7	solute carrier family 7 (cationic amino acid transporter, y+ system), member 7	A_23_P99642	-0.7	2.5E-02
CD59	CD59 molecule, complement regulatory protein	A_24_P784765	-0.7	1.6E-04
NAT8	N-acetyltransferase 8 (GCN5-related, putative)	A_23_P154379	-0.7	1.9E-02
VSX1	visual system homeobox 1	A_23_P131990	-0.7	2.8E-04
RPS4Y1	ribosomal protein S4, Y-linked 1	A_23_P259314	-0.7	1.1E-02
IL6R	interleukin 6 receptor	A_24_P379413	-0.7	3.2E-03
ELOVL3	elongation of very long chain fatty acids (FEN1/Elo2, SUR4/Elo3, yeast)-like 3	A_23_P149858	-0.7	1.4E-03
CACNA1H	calcium channel, voltage-dependent, T type, alpha 1H subunit	A_23_P3483	-0.7	4.9E-05
TRIM7	tripartite motif containing 7	A_23_P30315	-0.7	1.0E-02
SEPT4	septin 4	A_23_P207003	-0.7	4.0E-02
HSPA2	heat shock 70kDa protein 2	A_23_P88303	-0.7	4.8E-04
RDX	radixin	A_23_P203023	-0.7	8.4E-05
PLCE1	phospholipase C, epsilon 1	A_23_P35617	-0.7	3.9E-03
PTEN	phosphatase and tensin homolog	A_32_P205139	-0.7	6.4E-03
MIER2	mesoderm induction early response 1, family member 2	A_23_P119683	-0.7	3.8E-04
GEMIN5	gem (nuclear organelle) associated protein 5	A_23_P336513	-0.7	1.1E-04
FOXO3	forkhead box O3	A_24_P602052	-0.7	1.2E-02
LOC400960	hypothetical LOC400960	A_24_P450194	-0.7	6.3E-03
ZNF30	zinc finger protein 30	A_32_P203430	-0.7	5.4E-03
ZNF75D	zinc finger protein 75D	A_23_P73708	-0.7	9.0E-04
NBEAL2	neurobeachin-like 2	A_24_P272160	-0.7	3.1E-04
MKLN1	muskelin 1, intracellular mediator containing kelch motifs	A_24_P170327	-0.7	6.4E-06
LAMC1	laminin, gamma 1 (formerly LAMB2)	A_23_P201628	-0.7	1.6E-04
HCLS1	hematopoietic cell-specific Lyn substrate 1	A_23_P73429	-0.7	1.0E-02
C14orf153	chromosome 14 open reading frame 153	A_24_P22174	-0.7	4.1E-02
S100A4	S100 calcium binding protein A4	A_23_P94800	-0.7	4.3E-03
LOC100288939	similar to hCG1987955	A_32_P174398	-0.7	3.8E-05
GPR157	G protein-coupled receptor 157	A_24_P71280	-0.7	3.3E-03
ABTB1	ankyrin repeat and BTB (POZ) domain containing 1	A_24_P200297	-0.7	2.5E-06
LOC100130729	hypothetical protein LOC100130729	A_23_P75355	-0.7	2.6E-04

MAP2K5	mitogen-activated protein kinase kinase 5	A_23_P84256	-0.7	3.4E-02
NISCH	nischarin	A_24_P925709	-0.7	4.2E-06
FABP5	fatty acid binding protein 5 (psoriasis-associated)	A_32_P204676	-0.7	1.9E-02
ZFHX3	zinc finger homeobox 3	A_23_P118266	-0.7	1.6E-05
MAN2A2	mannosidase, alpha, class 2A, member 2	A_23_P37569	-0.7	8.0E-05
C9orf150	chromosome 9 open reading frame 150	A_23_P83007	-0.7	2.5E-03
CCDC71	coiled-coil domain containing 71	A_23_P61308	-0.7	3.1E-03
STXBP4	syntaxin binding protein 4	A_23_P375566	-0.7	8.8E-03
ESRP1	epithelial splicing regulatory protein 1	A_23_P259127	-0.7	6.4E-03
MSH4	mutS homolog 4 (E. coli)	A_23_P74068	-0.7	3.5E-02
TP53I3	tumor protein p53 inducible protein 3	A_23_P5392	-0.7	5.8E-03
DUSP8	dual specificity phosphatase 8	A_24_P322867	-0.7	2.5E-02
BCL2L2	BCL2-like 2	A_23_P418373	-0.7	1.2E-07
HIP1R	huntingtin interacting protein 1 related	A_23_P398294	-0.7	3.5E-04
OPLAH	5-oxoprolinase (ATP-hydrolysing)	A_23_P170186	-0.7	2.0E-06
RPP25	ribonuclease P/MRP 25kDa subunit	A_23_P3424	-0.7	9.8E-05
ZFP106	zinc finger protein 106 homolog (mouse)	A_23_P77310	-0.7	9.0E-06
MBIP	MAP3K12 binding inhibitory protein 1	A_23_P2922	-0.7	3.3E-03
MAPK13	mitogen-activated protein kinase 13	A_24_P406132	-0.7	9.1E-03
DERA	deoxyribose-phosphate aldolase (putative)	A_23_P25253	-0.7	2.2E-07
DHCR7	7-dehydrocholesterol reductase	A_23_P24444	-0.7	1.3E-03
TJP1	tight junction protein 1 (zona occludens 1)	A_24_P193435	-0.7	5.5E-05
TAS1R1	taste receptor, type 1, member 1	A_23_P160886	-0.7	7.0E-03
ACSM3	acyl-CoA synthetase medium-chain family member 3	A_23_P317756	-0.7	2.6E-03
SUSD2	sushi domain containing 2	A_23_P314101	-0.7	3.9E-03
SLC22A15	solute carrier family 22, member 15	A_23_P388900	-0.7	3.0E-03
FDFT1	farnesyl-diphosphate farnesyltransferase 1	A_23_P71319	-0.7	2.1E-04
MAP3K13	mitogen-activated protein kinase kinase kinase 13	A_24_P85537	-0.7	1.5E-02
CYP4Z2P	cytochrome P450, family 4, subfamily Z, polypeptide 2 pseudogene	A_24_P145529	-0.7	1.5E-02
TMEM140	transmembrane protein 140	A_23_P31177	-0.7	4.6E-02
SIAE	sialic acid acetyltransferase	A_23_P318881	-0.6	4.2E-02
HSBP1L1	heat shock factor binding protein 1-like 1	A_24_P683905	-0.6	3.1E-04
SLC25A16	solute carrier family 25 (mitochondrial carrier; Graves disease autoantigen), member 16	A_23_P423891	-0.6	3.1E-04
DLC1	deleted in liver cancer 1	A_23_P252721	-0.6	1.8E-02
PDE8B	phosphodiesterase 8B	A_24_P197537	-0.6	2.1E-02
PRDM2	PR domain containing 2, with ZNF domain	A_23_P201079	-0.6	1.2E-05
LRRC32	leucine rich repeat containing 32	A_24_P389916	-0.6	2.1E-02
HIST2H2AC	histone cluster 2, H2ac	A_23_P301247	-0.6	1.1E-04
KBTBD7	kelch repeat and BTB (POZ) domain containing 7	A_23_P25605	-0.6	3.2E-03
TRIM25	tripartite motif containing 25	A_24_P936767	-0.6	1.5E-03

MAN2C1	mannosidase, alpha, class 2C, member 1	A_23_P369150	-0.6	4.4E-04
GSTM1	glutathione S-transferase mu 1	A_23_P115407	-0.6	2.3E-03
SEPT7P2	septin 7 pseudogene 2	A_24_P925635	-0.6	2.3E-02
NDUFA10	NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 10, 42kDa	A_24_P396889	-0.6	2.7E-04
TAF1C	TATA box binding protein (TBP)-associated factor, RNA polymerase I, C, 110kDa	A_23_P163546	-0.6	3.1E-04
AMDHD1	amidohydrolase domain containing 1	A_32_P122226	-0.6	1.9E-04
FITM2	fat storage-inducing transmembrane protein 2	A_24_P203407	-0.6	1.1E-04
COX4I2	cytochrome c oxidase subunit IV isoform 2 (lung)	A_23_P210869	-0.6	1.6E-02
PCBP2	poly(rC) binding protein 2	A_24_P141688	-0.6	1.7E-07
PRDM16	PR domain containing 16	A_32_P225816	-0.6	4.0E-03
FAM21C	family with sequence similarity 21, member C	A_24_P289420	-0.6	5.6E-05
TCF21	transcription factor 21	A_23_P156890	-0.6	2.7E-02
GCAT	glycine C-acetyltransferase	A_23_P40657	-0.6	3.8E-04
RAD21	RAD21 homolog (<i>S. pombe</i>)	A_32_P195137	-0.6	1.8E-03
LOC202181	hypothetical LOC202181	A_32_P1533	-0.6	4.9E-05
SETD4	SET domain containing 4	A_23_P211106	-0.6	1.3E-04
FGD4	FYVE, RhoGEF and PH domain containing 4	A_24_P937325	-0.6	3.2E-02
ZNF641	zinc finger protein 641	A_23_P64785	-0.6	1.8E-02
TRAK2	trafficking protein, kinesin binding 2	A_24_P122874	-0.6	1.3E-05
COMTD1	catechol-O-methyltransferase domain containing 1	A_23_P115862	-0.6	4.3E-07
FLJ35700	hypothetical protein FLJ35700	A_23_P342165	-0.6	4.0E-03
IBA57	IBA57, iron-sulfur cluster assembly homolog (<i>S. cerevisiae</i>)	A_32_P436884	-0.6	2.3E-05
MLXIPL	MLX interacting protein-like	A_24_P200831	-0.6	5.6E-03
GSTM2P1	glutathione S-transferase mu 2 (muscle) pseudogene 1	A_23_P58869	-0.6	7.2E-03
KRIT1	KRIT1, ankyrin repeat containing	A_24_P98161	-0.6	1.5E-02
KY	kyphoscoliosis peptidase	A_23_P399897	-0.6	2.7E-02
TECPR2	tectonin beta-propeller repeat containing 2	A_32_P355396	-0.6	2.8E-05
MMS19	MMS19 nucleotide excision repair homolog (<i>S. cerevisiae</i>)	A_23_P46982	-0.6	1.6E-08
SP5	Sp5 transcription factor	A_32_P183718	-0.6	2.7E-02
NECAB3	N-terminal EF-hand calcium binding protein 3	A_23_P68628	-0.6	6.7E-04
CLN3	ceroid-lipofuscinosis, neuronal 3	A_24_P296424	-0.6	3.8E-05
NCRNA00120	non-protein coding RNA 120	A_23_P19243	-0.6	1.4E-03
BEX2	brain expressed X-linked 2	A_23_P22735	-0.6	2.1E-03
SDHAP3	succinate dehydrogenase complex, subunit A, flavoprotein pseudogene 3	A_23_P156807	-0.6	3.3E-04
SMARCA5	SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily a, member 5	A_32_P213678	-0.6	2.4E-02
CD47	CD47 molecule	A_24_P943792	-0.6	1.1E-02
STARD7	StAR-related lipid transfer (START) domain containing 7	A_23_P120237	-0.6	1.5E-06

KIAA1462	KIAA1462	A_32_P529165	-0.6	2.2E-02
PGS1	phosphatidylglycerophosphate synthase 1	A_24_P290799	-0.6	2.4E-04
MGLL	monoglyceride lipase	A_24_P226008	-0.6	1.2E-03
RENBP	renin binding protein	A_23_P137157	-0.6	7.6E-03
PRKCD	protein kinase C, delta	A_23_P144054	-0.6	2.5E-06
HTATIP2	HIV-1 Tat interactive protein 2, 30kDa	A_23_P64129	-0.6	1.6E-04
FAM73A	family with sequence similarity 73, member A	A_24_P58395	-0.6	2.1E-04
SEMA6D	sema domain, transmembrane domain (TM), and cytoplasmic domain, (semaphorin) 6D	A_23_P420442	-0.6	1.8E-02
PTPLA	protein tyrosine phosphatase-like (proline instead of catalytic arginine), member A	A_23_P161352	-0.6	2.7E-03
GLO1	glyoxalase I	A_23_P214411	-0.6	6.7E-05
PLEKHA7	pleckstrin homology domain containing, family A member 7	A_24_P348806	-0.6	3.8E-03
GORASP1	golgi reassembly stacking protein 1, 65kDa	A_23_P427114	-0.6	5.1E-03
PRRG4	proline rich Gla (G-carboxyglutamic acid) 4 (transmembrane)	A_24_P47329	-0.6	6.4E-03
MLX	MAX-like protein X	A_24_P13991	-0.6	1.7E-05
ZNF77	zinc finger protein 77	A_32_P182394	-0.6	1.9E-02
C2	complement component 2	A_23_P133916	-0.6	3.4E-02
PLCXD1	phosphatidylinositol-specific phospholipase C, X domain containing 1	A_23_P61180	-0.6	4.9E-02
SLC35D2	solute carrier family 35, member D2	A_23_P32029	-0.6	1.7E-05
CXADRP3	coxsackie virus and adenovirus receptor pseudogene 3	A_24_P161725	-0.6	7.8E-04
B3GNT7	UDP-GlcNAc:betaGal beta-1,3-N-acetylglucosaminyltransferase 7	A_24_P20292	-0.6	7.9E-03
FLCN	folliculin	A_24_P173124	-0.6	5.7E-03
SNORD123	small nucleolar RNA, C/D box 123	A_24_P639679	-0.6	2.1E-03
KIAA0649	KIAA0649	A_23_P146497	-0.6	1.5E-05
MAPK14	mitogen-activated protein kinase 14	A_24_P397566	-0.6	2.2E-02
OR7E47P	olfactory receptor, family 7, subfamily E, member 47 pseudogene	A_24_P170514	-0.6	1.2E-02
CCDC101	coiled-coil domain containing 101	A_23_P388914	-0.6	3.1E-05
CYB5A	cytochrome b5 type A (microsomal)	A_23_P101208	-0.6	1.8E-02
CHML	choroideremia-like (Rab escort protein 2)	A_24_P712350	-0.6	1.9E-04
N4BP1	NEDD4 binding protein 1	A_23_P66085	-0.6	3.3E-04
OGDH	oxoglutarate (alpha-ketoglutarate) dehydrogenase (lipoamide)	A_23_P123133	-0.6	8.0E-04
LOC339290	hypothetical LOC339290	A_32_P150876	-0.6	3.0E-02
ENY2	enhancer of yellow 2 homolog (Drosophila)	A_24_P81149	-0.6	6.5E-03
PINK1	PTEN induced putative kinase 1	A_23_P23194	-0.6	3.7E-06
NDUFA4L2	NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 4-like 2	A_23_P9614	-0.6	2.0E-02
SLC25A5	solute carrier family 25 (mitochondrial carrier; adenine nucleotide translocator), member 5	A_24_P182182	-0.6	7.7E-05
VPS13D	vacuolar protein sorting 13 homolog D (S. cerevisiae)	A_23_P251216	-0.6	2.8E-02

DOCK11	dedicator of cytokinesis 11	A_24_P76158	-0.6	2.0E-02
PPP3R1	protein phosphatase 3, regulatory subunit B, alpha	A_23_P108592	-0.6	4.3E-02
PCP2	Purkinje cell protein 2	A_24_P399500	-0.6	3.9E-03
VAMP3	vesicle-associated membrane protein 3 (cellubrevin)	A_24_P370887	-0.6	2.2E-05
NKPD1	NTPase, KAP family P-loop domain containing 1	A_32_P319858	-0.6	7.2E-03
PNPLA7	patatin-like phospholipase domain containing 7	A_24_P453855	-0.6	2.6E-03
MUT	methylmalonyl CoA mutase	A_23_P400235	-0.6	1.0E-07
FLJ10038	hypothetical protein FLJ10038	A_23_P106280	-0.6	3.5E-05
LOC100129946	hypothetical LOC100129946	A_32_P711043	-0.6	2.6E-02
CDKN2AIPNL	CDKN2A interacting protein N-terminal like	A_23_P250644	-0.6	2.0E-03
LOC440104	1110012D08Rik pseudogene	A_24_P93703	-0.6	1.7E-05
GAL3ST1	galactose-3-O-sulfotransferase 1	A_23_P120863	-0.6	4.5E-02
PACSIN3	protein kinase C and casein kinase substrate in neurons 3	A_24_P381136	-0.6	1.4E-03
MKL2	MKL/myocardin-like 2	A_23_P54556	-0.6	6.1E-04
HDAC6	histone deacetylase 6	A_24_P205137	-0.6	5.7E-05
ZNF596	zinc finger protein 596	A_23_P82762	-0.6	2.2E-02
C21orf122	chromosome 21 open reading frame 122	A_23_P143514	-0.6	7.5E-03
DNM2	dynamain 2	A_23_P407074	-0.6	3.3E-07
PLCB2	phospholipase C, beta 2	A_24_P936779	-0.6	1.7E-02
HLF	hepatic leukemia factor	A_23_P356585	-0.6	4.6E-02
ALDH2	aldehyde dehydrogenase 2 family (mitochondrial)	A_23_P36745	-0.6	8.1E-03
MEF2A	myocyte enhancer factor 2A	A_24_P1731	-0.6	1.5E-04
ESRP2	epithelial splicing regulatory protein 2	A_23_P100220	-0.6	2.7E-03
PCDHGA3	protocadherin gamma subfamily A, 3	A_24_P334529	-0.6	8.6E-03
ZNF589	zinc finger protein 589	A_23_P110031	-0.6	5.1E-03
PPP1R13B	protein phosphatase 1, regulatory (inhibitor) subunit 13B	A_23_P205273	-0.6	4.6E-07
TBCE	tubulin folding cofactor E	A_23_P52147	-0.6	3.7E-08
AGPAT2	1-acylglycerol-3-phosphate O-acyltransferase 2 (lysophosphatidic acid acyltransferase, beta)	A_32_P26103	-0.6	3.9E-02
MAPK4	mitogen-activated protein kinase 4	A_23_P375906	-0.6	6.4E-03
HIRIP3	HIRA interacting protein 3	A_24_P142269	-0.6	2.6E-04
SPEN	spen homolog, transcriptional regulator (Drosophila)	A_24_P170660	-0.6	5.9E-04
GIT1	G protein-coupled receptor kinase interacting ArfGAP 1	A_24_P347946	-0.6	6.7E-04
ZNF185	zinc finger protein 185 (LIM domain)	A_23_P11025	-0.6	1.7E-03
PRKAB2	protein kinase, AMP-activated, beta 2 non-catalytic subunit	A_24_P917711	-0.6	1.5E-02
TRNP1	TMF1-regulated nuclear protein 1	A_24_P693986	-0.6	2.1E-02
SBF2	SET binding factor 2	A_24_P324630	-0.6	5.5E-03
BFSP1	beaded filament structural protein 1, filensin	A_23_P109171	-0.6	2.6E-03
ASL	argininosuccinate lyase	A_23_P26223	-0.6	6.5E-06
TRIM56	tripartite motif containing 56	A_23_P350107	-0.6	4.9E-05

RUNDC2C	RUN domain containing 2C	A_24_P923922	-0.6	4.2E-02
ZNF704	zinc finger protein 704	A_32_P229493	-0.6	2.2E-02
PRO2852	hypothetical protein PRO2852	A_23_P350879	-0.6	4.9E-02
MTERFD3	MTERF domain containing 3	A_23_P53530	-0.6	6.1E-04
PLEKHG3	pleckstrin homology domain containing, family G (with RhoGef domain) member 3	A_32_P311737	-0.6	2.5E-03
TAOK3	TAO kinase 3	A_23_P2203	-0.6	1.9E-04
EFNA1	ephrin-A1	A_23_P254512	-0.6	6.1E-03
SLAIN1	SLAIN motif family, member 1	A_23_P348146	-0.6	6.7E-04
C14orf128	chromosome 14 open reading frame 128	A_23_P25746	-0.6	1.6E-04
SACM1L	SAC1 suppressor of actin mutations 1-like (yeast)	A_23_P212383	-0.6	3.9E-05
C7orf23	chromosome 7 open reading frame 23	A_23_P157283	-0.6	2.0E-03
UBTD1	ubiquitin domain containing 1	A_23_P161501	-0.6	3.3E-04
RAB11FIP2	RAB11 family interacting protein 2 (class I)	A_24_P363953	-0.6	4.4E-04
LAMA5	laminin, alpha 5	A_23_P109269	-0.6	3.8E-04
SLC25A38	solute carrier family 25, member 38	A_23_P91814	-0.6	1.1E-06
FAM82A1	family with sequence similarity 82, member A1	A_24_P131392	-0.6	4.7E-03
CRAMP1L	Crm, cramped-like (Drosophila)	A_23_P407992	-0.6	1.9E-02
GBGT1	globoside alpha-1,3-N-acetylgalactosaminyltransferase 1	A_23_P146576	-0.6	2.7E-04
GSTCD	glutathione S-transferase, C-terminal domain containing	A_23_P110288	-0.6	7.6E-03
TXNRD2	thioredoxin reductase 2	A_24_P943588	-0.6	5.1E-03
C12orf47	chromosome 12 open reading frame 47	A_23_P99204	-0.6	6.7E-04
YEATS2	YEATS domain containing 2	A_23_P69437	-0.6	8.4E-04
CCDC69	coiled-coil domain containing 69	A_24_P97825	-0.6	1.0E-02
ZNF467	zinc finger protein 467	A_23_P59470	-0.6	1.8E-03
ENG	endoglin	A_23_P83328	-0.6	1.6E-02
FAM21A	family with sequence similarity 21, member A	A_24_P677639	-0.6	5.3E-03
KLHL24	kelch-like 24 (Drosophila)	A_24_P521994	-0.6	4.6E-03
CDCA7L	cell division cycle associated 7-like	A_24_P274795	-0.6	3.5E-04
FLJ37453	hypothetical LOC729614	A_23_P302134	-0.6	2.9E-04
HAGH	hydroxyacylglutathione hydrolase	A_24_P176445	-0.6	9.2E-08
RCSD1	RCSD domain containing 1	A_23_P23279	-0.6	8.8E-03
ISY1	ISY1 splicing factor homolog (S. cerevisiae)	A_23_P155179	-0.6	1.1E-03
ABHD6	abhydrolase domain containing 6	A_23_P211850	-0.6	3.4E-03
NFIC	nuclear factor I/C (CCAAT-binding transcription factor)	A_23_P131115	-0.6	4.2E-05
UCHL5	ubiquitin carboxyl-terminal hydrolase L5	A_32_P38242	-0.6	2.5E-02
GLUL	glutamate-ammonia ligase	A_32_P156628	-0.6	4.7E-03
STX12	syntaxin 12	A_23_P385206	-0.6	2.7E-04
TBC1D20	TBC1 domain family, member 20	A_24_P392958	-0.6	1.0E-04
FLJ43663	hypothetical LOC378805	A_24_P455972	-0.6	4.0E-02

MAVS	mitochondrial antiviral signaling protein	A_24_P928798	-0.6	5.9E-06
JAM3	junctional adhesion molecule 3	A_24_P86993	-0.6	2.8E-02
KLRAQ1	KLRAQ motif containing 1	A_24_P68819	-0.6	5.5E-06
CCNB1IP1	cyclin B1 interacting protein 1, E3 ubiquitin protein ligase	A_23_P76882	-0.6	1.0E-06
EXD2	exonuclease 3'-5' domain containing 2	A_23_P205293	-0.6	5.7E-03
PARK2	parkinson protein 2, E3 ubiquitin protein ligase (parkin)	A_23_P136077	-0.6	4.2E-02

Supplementary Table 4. Genes in the bronchiolar signature (cluster 1)

Genes with a fold change (FC) $\geq |1.5|$ and Benjamini-Hochberg adjusted p-value < 0.05 in IPF (N=40) compared to control (N=8) bulk lung biopsies are listed.

Gene symbol	Gene Name	Agilent probe ID	Log ₂ FC	q-value
MMP1	matrix metalloproteinase 1 (interstitial collagenase)	A_23_P1691	5.2	6.4E-07
GPR87	G protein-coupled receptor 87	A_23_P121120	4.6	6.8E-08
KRT17	keratin 17	A_23_P96158	4.0	4.0E-09
CXCL6	chemokine (C-X-C motif) ligand 6 (granulocyte chemotactic protein 2)	A_23_P155755	3.7	3.6E-05
KRT14	keratin 14	A_24_P265346	3.6	2.1E-08
SERPINB3	serpin peptidase inhibitor, clade B (ovalbumin), member 3	A_23_P55632	3.6	6.1E-04
VTCN1	V-set domain containing T cell activation inhibitor 1	A_23_P518	3.5	2.1E-04
S100A2	S100 calcium binding protein A2	A_23_P201706	3.4	1.5E-05
MSMB	microseminoprotein, beta-	A_24_P146683	3.4	7.9E-03
SERPINB4	serpin peptidase inhibitor, clade B (ovalbumin), member 4	A_23_P502413	3.3	8.8E-04
TNS4	tensin 4	A_23_P207850	3.1	8.0E-06
TP63	tumor protein p63	A_23_P327380	3.1	2.9E-06
LGALS7	lectin, galactoside-binding, soluble, 7	A_24_P238250	3.1	3.4E-05
TMPRSS4	transmembrane protease, serine 4	A_23_P127608	3.0	2.1E-06
LGALS7B	lectin, galactoside-binding, soluble, 7B	A_24_P348118	2.9	4.0E-05
CP	ceruloplasmin (ferroxidase)	A_23_P414793	2.9	2.3E-05
CYP24A1	cytochrome P450, family 24, subfamily A, polypeptide 1	A_23_P28815	2.8	2.0E-04
DAPL1	death associated protein-like 1	A_23_P165598	2.8	2.0E-05
KRT6B	keratin 6B	A_23_P76249	2.7	3.8E-04
KRT5	keratin 5	A_23_P218047	2.7	1.3E-05
LCN2	lipocalin 2	A_23_P169437	2.6	1.9E-05
UGT1A6	UDP glucuronosyltransferase 1 family, polypeptide A6	A_24_P222872	2.6	5.0E-05
PROM1	prominin 1	A_23_P258463	2.6	2.4E-03
PIP	prolactin-induced protein	A_23_P8702	2.5	4.7E-03
DSG3	desmoglein 3	A_23_P153120	2.4	5.8E-04
PAX9	paired box 9	A_32_P70818	2.4	6.1E-04
STMN2	stathmin-like 2	A_23_P146274	2.4	1.4E-05
OXTR	oxytocin receptor	A_23_P132619	2.4	3.0E-04
SIX4	SIX homeobox 4	A_32_P204205	2.4	1.1E-05
C8orf47	chromosome 8 open reading frame 47	A_23_P333029	2.4	6.0E-04
SIX1	SIX homeobox 1	A_23_P76914	2.4	3.0E-04
CHST6	carbohydrate (N-acetylglucosamine 6-O) sulfotransferase 6	A_23_P106922	2.3	9.5E-05
MMP3	matrix metalloproteinase 3 (stromelysin 1, progelatinase)	A_23_P161698	2.3	2.1E-05

CLCA2	chloride channel accessory 2	A_23_P397248	2.3	2.0E-04
FUT2	fucosyltransferase 2 (secretor status included)	A_24_P942969	2.3	3.0E-04
KRT6C	keratin 6C	A_23_P366936	2.2	5.7E-03
DST	dystonin	A_23_P59388	2.2	4.5E-05
PSCA	prostate stem cell antigen	A_23_P71379	2.2	2.5E-02
B3GNT3	UDP-GlcNAc:betaGal beta-1,3-N-acetylglucosaminyltransferase 3	A_23_P78980	2.2	4.8E-06
OGDHL	oxoglutarate dehydrogenase-like	A_23_P161297	2.2	4.1E-05
ABCA13	ATP-binding cassette, sub-family A (ABC1), member 13	A_23_P364324	2.1	1.9E-03
SLCO1B3	solute carrier organic anion transporter family, member 1B3	A_23_P105475	2.1	1.8E-04
MUC4	mucin 4, cell surface associated	A_24_P208825	2.1	6.9E-05
SRD5A2	steroid-5-alpha-reductase, alpha polypeptide 2 (3-oxo-5 alpha-steroid delta 4-dehydrogenase alpha 2)	A_23_P28186	2.1	6.8E-03
DSC3	desmocollin 3	A_24_P344416	2.1	3.7E-03
PCDH7	protocadherin 7	A_23_P310921	2.1	3.6E-06
RHOV	ras homolog gene family, member V	A_23_P424561	2.1	8.5E-04
HSPA4L	heat shock 70kDa protein 4-like	A_23_P363936	2.1	8.0E-06
CXCL1	chemokine (C-X-C motif) ligand 1 (melanoma growth stimulating activity, alpha)	A_23_P7144	2.1	9.0E-04
ALDH3A1	aldehyde dehydrogenase 3 family, member A1	A_23_P207213	2.0	5.8E-04
PTPRZ1	protein tyrosine phosphatase, receptor-type, Z polypeptide 1	A_23_P168761	2.0	2.4E-04
LY6D	lymphocyte antigen 6 complex, locus D	A_23_P134764	2.0	6.1E-04
SERPINB5	serpin peptidase inhibitor, clade B (ovalbumin), member 5	A_23_P208126	2.0	4.9E-04
CLIC6	chloride intracellular channel 6	A_23_P385067	2.0	2.8E-06
KRT15	keratin 15	A_23_P27133	2.0	7.9E-04
GSTA5	glutathione S-transferase alpha 5	A_23_P93141	1.9	2.2E-03
ABCA12	ATP-binding cassette, sub-family A (ABC1), member 12	A_23_P56369	1.9	9.5E-05
FAM81B	family with sequence similarity 81, member B	A_23_P360354	1.9	3.7E-03
GSTA1	glutathione S-transferase alpha 1	A_23_P135417	1.9	7.5E-04
FHOD3	formin homology 2 domain containing 3	A_32_P34444	1.9	1.8E-04
GJB5	gap junction protein, beta 5, 31.1kDa	A_23_P35293	1.9	4.7E-03
EFHC2	EF-hand domain (C-terminal) containing 2	A_24_P147927	1.9	9.0E-04
SLC4A11	solute carrier family 4, sodium borate transporter, member 11	A_23_P154688	1.8	3.4E-05
CFB	complement factor B	A_23_P156687	1.8	3.0E-06
GSTA2	glutathione S-transferase alpha 2	A_24_P300394	1.8	2.4E-03
IFNE	interferon, epsilon	A_23_P302060	1.8	4.4E-04
NELL2	NEL-like 2 (chicken)	A_23_P10025	1.7	6.6E-04
SAA4	serum amyloid A4, constitutive	A_23_P87238	1.7	1.3E-02
MB	myoglobin	A_23_P6433	1.7	1.7E-03
RGS17	regulator of G-protein signaling 17	A_23_P156861	1.7	2.2E-05

SMOC1	SPARC related modular calcium binding 1	A_24_P258473	1.7	1.9E-05
LOC100505633	hypothetical LOC100505633	A_24_P828496	1.7	1.4E-03
NHS	Nance-Horan syndrome (congenital cataracts and dental anomalies)	A_32_P126375	1.7	8.8E-08
KRT23	keratin 23 (histone deacetylase inducible)	A_23_P78248	1.7	1.5E-02
HHLA2	HERV-H LTR-associating 2	A_23_P368805	1.7	2.7E-03
TRIM29	tripartite motif containing 29	A_23_P203267	1.7	2.4E-03
SPRR1B	small proline-rich protein 1B	A_23_P159406	1.7	3.1E-04
PLCH2	phospholipase C, eta 2	A_24_P62469	1.6	7.8E-06
KCNMB2	potassium large conductance calcium-activated channel, subfamily M, beta member 2	A_23_P158675	1.6	1.7E-03
IVL	involucrin	A_23_P353524	1.6	5.4E-04
TMEM45A	transmembrane protein 45A	A_23_P113212	1.6	2.5E-04
GCNT3	glucosaminyl (N-acetyl) transferase 3, mucin type	A_23_P420209	1.6	4.0E-04
HRK	harakiri, BCL2 interacting protein (contains only BH3 domain)	A_23_P25194	1.6	1.9E-03
DNER	delta/notch-like EGF repeat containing	A_23_P362148	1.6	8.9E-03
RIMS2	regulating synaptic membrane exocytosis 2	A_23_P147786	1.6	1.2E-04
PRR15	proline rich 15	A_32_P154911	1.6	7.8E-03
KCNH8	potassium voltage-gated channel, subfamily H (eag-related), member 8	A_23_P170636	1.6	2.3E-05
MKX	mohawk homeobox	A_24_P326491	1.6	8.8E-04
FGF14	fibroblast growth factor 14	A_23_P88033	1.5	4.1E-03
KLHL13	kelch-like 13 (Drosophila)	A_23_P159974	1.5	7.5E-07
ST6GALNAC1	ST6 (alpha-N-acetyl-neuraminyl-2,3-beta-galactosyl-1,3)-N-acetylgalactosaminide alpha-2,6-sialyltransferase 1	A_23_P54968	1.5	6.8E-04
MUCL1	mucin-like 1	A_23_P150979	1.5	9.5E-03
POF1B	premature ovarian failure, 1B	A_24_P250815	1.5	2.5E-03
ANKRD43	ankyrin repeat domain 43	A_23_P304110	1.5	5.4E-03
NMNAT2	nicotinamide nucleotide adenylyltransferase 2	A_23_P345183	1.5	1.8E-04
FAM169A	family with sequence similarity 169, member A	A_32_P84242	1.5	1.1E-06
ZG16B	zymogen granule protein 16 homolog B (rat)	A_23_P118203	1.5	1.0E-02
ELMOD1	ELMO/CED-12 domain containing 1	A_23_P401774	1.5	1.1E-03
SLFN13	schlafen family member 13	A_23_P301105	1.5	5.7E-05
MLIP	muscular LMNA-interacting protein	A_23_P145555	1.4	1.2E-04
PKIB	protein kinase (cAMP-dependent, catalytic) inhibitor beta	A_23_P145529	1.4	8.0E-05
NTN1	netrin 1	A_23_P15478	1.4	2.6E-04
CRISPLD1	cysteine-rich secretory protein LCCL domain containing 1	A_23_P59960	1.4	8.5E-07
RBFOX1	RNA binding protein, fox-1 homolog (C. elegans) 1	A_23_P140858	1.4	5.8E-04
C7orf63	chromosome 7 open reading frame 63	A_23_P8653	1.4	3.9E-05
KIF19	kinesin family member 19	A_23_P404016	1.4	1.6E-03
PRUNE2	prune homolog 2 (Drosophila)	A_32_P43746	1.4	2.2E-04

UBXN10	UBX domain protein 10	A_23_P85664	1.4	7.2E-04
IGSF9	immunoglobulin superfamily, member 9	A_23_P85441	1.4	8.4E-06
DDIT4L	DNA-damage-inducible transcript 4-like	A_23_P302672	1.4	2.4E-03
FOXC1	forkhead box C1	A_23_P390504	1.4	1.8E-04
NTS	neurotensin	A_23_P36882	1.4	6.7E-03
CAPN13	calpain 13	A_23_P101972	1.3	5.9E-03
PROM2	prominin 2	A_23_P154358	1.3	1.8E-05
INHBB	inhibin, beta B	A_23_P153964	1.3	1.7E-03
SMPD3	sphingomyelin phosphodiesterase 3, neutral membrane (neutral sphingomyelinase II)	A_23_P163567	1.3	2.1E-04
GSTA3	glutathione S-transferase alpha 3	A_23_P253495	1.3	7.1E-03
SLC47A2	solute carrier family 47, member 2	A_23_P77908	1.3	3.6E-03
BMP7	bone morphogenetic protein 7	A_23_P68487	1.3	2.6E-06
ACCN2	amiloride-sensitive cation channel 2, neuronal	A_23_P204751	1.3	3.3E-06
CCDC146	coiled-coil domain containing 146	A_23_P168771	1.3	3.4E-03
DNAJC12	DnaJ (Hsp40) homolog, subfamily C, member 12	A_23_P127220	1.3	3.7E-04
SUSD4	sushi domain containing 4	A_24_P259607	1.3	4.3E-03
SNCAIP	synuclein, alpha interacting protein	A_23_P19020	1.3	6.9E-05
SHISA6	shisa homolog 6 (<i>Xenopus laevis</i>)	A_23_P411542	1.3	2.0E-03
FANK1	fibronectin type III and ankyrin repeat domains 1	A_23_P115785	1.3	4.7E-03
KIAA1045	KIAA1045	A_23_P319232	1.2	1.0E-03
PPAP2C	phosphatidic acid phosphatase type 2C	A_23_P108294	1.2	6.1E-04
LOC646976	hypothetical LOC646976	A_24_P350546	1.2	5.5E-03
KRT13	keratin 13	A_24_P228149	1.2	4.6E-03
C4B	complement component 4B (Chido blood group)	A_23_P42282	1.2	1.9E-05
NCS1	neuronal calcium sensor 1	A_23_P217049	1.2	2.3E-05
REEP2	receptor accessory protein 2	A_23_P19182	1.2	1.3E-05
AK4	adenylate kinase 4	A_32_P108655	1.2	4.2E-04
SERPINB13	serpin peptidase inhibitor, clade B (ovalbumin), member 13	A_23_P432978	1.2	2.2E-02
MUC20	mucin 20, cell surface associated	A_23_P92222	1.2	5.9E-04
SLC27A2	solute carrier family 27 (fatty acid transporter), member 2	A_23_P140450	1.2	4.7E-03
ENPP3	ectonucleotide pyrophosphatase/phosphodiesterase 3	A_23_P404536	1.2	1.5E-05
PGM2L1	phosphoglucomutase 2-like 1	A_23_P396765	1.2	3.0E-06
EFNB3	ephrin-B3	A_24_P940006	1.2	2.1E-05
TSPAN1	tetraspanin 1	A_23_P160167	1.2	2.2E-03
NGFR	nerve growth factor receptor	A_23_P389897	1.2	2.5E-05
RGS22	regulator of G-protein signaling 22	A_32_P125771	1.1	8.5E-03
SPATA18	spermatogenesis associated 18 homolog (rat)	A_23_P407112	1.1	1.0E-03
NKAIN2	Na ⁺ /K ⁺ transporting ATPase interacting 2	A_23_P316501	1.1	1.6E-03
TRPV4	transient receptor potential cation channel, subfamily V, member 4	A_24_P13381	1.1	9.2E-04

PPP2R2B	protein phosphatase 2, regulatory subunit B, beta	A_23_P213620	1.1	1.5E-06
EPHB1	EPH receptor B1	A_23_P166993	1.1	1.6E-03
VSNL1	visinin-like 1	A_23_P209978	1.1	1.3E-03
GAD1	glutamate decarboxylase 1 (brain, 67kDa)	A_23_P374689	1.1	3.5E-03
BCAS1	breast carcinoma amplified sequence 1	A_23_P17420	1.1	6.5E-03
BIK	BCL2-interacting killer (apoptosis-inducing)	A_23_P404667	1.1	6.4E-04
SLC2A1	solute carrier family 2 (facilitated glucose transporter), member 1	A_23_P571	1.1	4.4E-04
SOX2-OT	SOX2 overlapping transcript (non-protein coding)	A_24_P756289	1.1	9.2E-03
ACHE	acetylcholinesterase	A_24_P60845	1.1	1.5E-03
LRGUK	leucine-rich repeats and guanylate kinase domain containing	A_24_P346517	1.1	1.3E-02
NGEF	neuronal guanine nucleotide exchange factor	A_23_P102364	1.1	5.8E-04
AGR2	anterior gradient homolog 2 (<i>Xenopus laevis</i>)	A_23_P31407	1.1	1.5E-02
PVRL1	poliovirus receptor-related 1 (herpesvirus entry mediator C)	A_24_P50890	1.1	2.8E-06
FBXO16	F-box protein 16	A_23_P168847	1.0	7.4E-04
TFF3	trefoil factor 3 (intestinal)	A_23_P393099	1.0	6.5E-03
FSIP1	fibrous sheath interacting protein 1	A_23_P353125	1.0	4.6E-03
COL7A1	collagen, type VII, alpha 1	A_23_P144071	1.0	1.7E-04
IQCG	IQ motif containing G	A_23_P300070	1.0	1.3E-02
COX6B2	cytochrome c oxidase subunit VIb polypeptide 2 (testis)	A_24_P267523	1.0	5.8E-03
GLB1L3	galactosidase, beta 1-like 3	A_32_P741851	1.0	4.0E-03
MIA	melanoma inhibitory activity	A_23_P4714	1.0	6.6E-03
TPBG	trophoblast glycoprotein	A_23_P59261	1.0	8.2E-07
SPRR2D	small proline-rich protein 2D	A_23_P11644	1.0	2.7E-03
PRR7	proline rich 7 (synaptic)	A_23_P30464	1.0	4.7E-05
C16orf74	chromosome 16 open reading frame 74	A_24_P289178	1.0	1.1E-04
SERTAD4	SERTA domain containing 4	A_23_P318904	1.0	1.6E-03
SCARA3	scavenger receptor class A, member 3	A_23_P215900	1.0	4.0E-05
ABHD12B	abhydrolase domain containing 12B	A_23_P366035	1.0	4.5E-03
HMGB3P1	high mobility group box 3 pseudogene 1	A_23_P373119	1.0	2.6E-03
LOXL4	lysyl oxidase-like 4	A_24_P406754	1.0	7.4E-04
FAM83F	family with sequence similarity 83, member F	A_23_P343963	1.0	4.0E-03
CLGN	calmegin	A_23_P18684	1.0	7.1E-03
FAM83A	family with sequence similarity 83, member A	A_23_P216052	1.0	4.1E-03
SIDT1	SID1 transmembrane family, member 1	A_23_P132515	0.9	2.9E-06
RSPH9	radial spoke head 9 homolog (<i>Chlamydomonas</i>)	A_24_P55225	0.9	7.6E-03
TPPP3	tubulin polymerization-promoting protein family member 3	A_23_P26386	0.9	3.4E-04
TXLNB	taxilin beta	A_23_P434398	0.9	4.2E-03
SLC22A4	solute carrier family 22 (organic cation/ergothioneine transporter), member 4	A_23_P156180	0.9	2.7E-02
GALNT6	UDP-N-acetyl-alpha-D-galactosamine:polypeptide	A_23_P204133	0.9	5.2E-04

	N-acetylgalactosaminyltransferase 6 (GalNAc-T6)			
HMGB3	high mobility group box 3	A_23_P217236	0.9	1.1E-03
STAG3	stromal antigen 3	A_23_P145657	0.9	1.9E-03
PPM1E	protein phosphatase, Mg2+/Mn2+ dependent, 1E	A_32_P73796	0.9	1.3E-02
HS3ST1	heparan sulfate (glucosamine) 3-O-sulfotransferase 1	A_23_P121657	0.9	1.4E-02
SPDEF	SAM pointed domain containing ets transcription factor	A_23_P111194	0.9	7.7E-04
CLU	clusterin	A_23_P215913	0.9	2.5E-03
CARD14	caspase recruitment domain family, member 14	A_23_P320070	0.9	9.5E-03
GJB3	gap junction protein, beta 3, 31kDa	A_24_P379233	0.9	6.8E-03
KREMEN2	kringle containing transmembrane protein 2	A_23_P77612	0.9	2.4E-03
ZFHX2	zinc finger homeobox 2	A_32_P226205	0.9	6.5E-03
SH3BGR	SH3 domain binding glutamic acid-rich protein	A_23_P91520	0.9	7.3E-04
NBEA	neurobeachin	A_23_P65278	0.9	2.4E-03
TMEM121	transmembrane protein 121	A_23_P61987	0.9	1.2E-04
GPT2	glutamic pyruvate transaminase (alanine aminotransferase) 2	A_23_P37892	0.9	3.1E-04
GPR172B	G protein-coupled receptor 172B	A_23_P15692	0.8	7.4E-04
C8orf45	chromosome 8 open reading frame 45	A_23_P390755	0.8	4.0E-03
C10orf114	chromosome 10 open reading frame 114	A_32_P86739	0.8	5.8E-04
AQP5	aquaporin 5	A_23_P366812	0.8	2.5E-03
NEK11	NIMA (never in mitosis gene a)- related kinase 11	A_23_P211973	0.8	9.5E-03
DZIP3	DAZ interacting protein 3, zinc finger	A_24_P102504	0.8	1.3E-02
RGMA	RGM domain family, member A	A_23_P372308	0.8	7.3E-04
FAAH2	fatty acid amide hydrolase 2	A_23_P113471	0.8	9.6E-04
DZIP1	DAZ interacting protein 1	A_23_P14157	0.8	4.8E-05
PLEK2	pleckstrin 2	A_23_P151506	0.8	5.5E-05
C8orf75	chromosome 8 open reading frame 75	A_24_P333532	0.8	3.6E-02
CCDC3	coiled-coil domain containing 3	A_24_P369232	0.8	2.4E-03
LRIG3	leucine-rich repeats and immunoglobulin-like domains 3	A_23_P47885	0.8	2.6E-03
SYNGR1	synaptogyrin 1	A_23_P211522	0.8	1.1E-05
TMEM182	transmembrane protein 182	A_23_P328000	0.8	8.5E-04
ITGB4	integrin, beta 4	A_23_P66355	0.8	7.8E-04
C6orf225	chromosome 6 open reading frame 225	A_24_P756657	0.8	9.3E-03
SYTL1	synaptotagmin-like 1	A_32_P217773	0.8	1.3E-04
SLC9A3R1	solute carrier family 9 (sodium/hydrogen exchanger), member 3 regulator 1	A_23_P308519	0.8	3.5E-05
CALML4	calmodulin-like 4	A_23_P129188	0.8	9.5E-03
CROT	carnitine O-octanoyltransferase	A_23_P168669	0.7	8.8E-04
C1orf190	chromosome 1 open reading frame 190	A_32_P129010	0.7	2.4E-03
IGFBP2	insulin-like growth factor binding protein 2, 36kDa	A_23_P119943	0.7	2.6E-03
NTSE	5'-nucleotidase, ecto (CD73)	A_24_P316430	0.7	2.6E-03

LOC728175	hypothetical LOC728175	A_23_P379111	0.7	4.1E-03
PVRL4	poliovirus receptor-related 4	A_23_P46441	0.7	4.1E-04
RBM38	RNA binding motif protein 38	A_23_P17430	0.7	3.0E-04
SORD	sorbitol dehydrogenase	A_32_P127153	0.7	2.4E-03
ADAMTSL1	ADAMTS-like 1	A_23_P312415	0.7	5.7E-03
GGT6	gamma-glutamyltransferase 6	A_23_P66767	0.7	9.5E-03
DQX1	DEAQ box RNA-dependent ATPase 1	A_23_P56659	0.7	5.5E-03
TSPAN6	tetraspanin 6	A_24_P83262	0.7	1.0E-02
MLF1	myeloid leukemia factor 1	A_24_P345679	0.7	2.1E-02
DIRAS2	DIRAS family, GTP-binding RAS-like 2	A_23_P20660	0.7	1.5E-02
PITPNM1	phosphatidylinositol transfer protein, membrane-associated 1	A_23_P1519	0.7	5.7E-04
STRA6	stimulated by retinoic acid gene 6 homolog (mouse)	A_23_P65779	0.6	2.4E-03
HAGHL	hydroxyacylglutathione hydrolase-like	A_24_P356373	0.6	5.1E-03
SLC39A6	solute carrier family 39 (zinc transporter), member 6	A_24_P156049	0.6	2.5E-04
ARHGAP39	Rho GTPase activating protein 39	A_23_P424878	0.6	2.2E-02
FAM83B	family with sequence similarity 83, member B	A_24_P66780	0.6	4.0E-03
XPR1	xenotropic and polytropic retrovirus receptor 1	A_23_P63534	0.6	1.1E-03
GATS	GATS, stromal antigen 3 opposite strand	A_23_P327777	0.6	1.4E-02
LOC100134229	hypothetical LOC100134229	A_32_P54503	0.6	5.8E-03
RHPN1	rhopilin, Rho GTPase binding protein 1	A_23_P315386	0.6	6.6E-03
BBS5	Bardet-Biedl syndrome 5	A_23_P5785	0.6	6.1E-03
RPRM	reprimin, TP53 dependent G2 arrest mediator candidate	A_23_P5370	0.6	1.4E-02
WDR35	WD repeat domain 35	A_23_P108463	0.6	3.7E-03

Supplementary Table 5. Genes in the lymphoid signature (cluster 2)

Genes with a fold change (FC) $\geq |1.5|$ and Benjamini-Hochberg adjusted p-value < 0.05 in IPF (N=40) compared to control (N=8) bulk lung biopsies are listed.

Gene symbol	Gene Name	Agilent probe ID	Log ₂ FC	q-value
CXCL13	chemokine (C-X-C motif) ligand 13	A_23_P121695	3.5	9.6E-05
IGHV1-69	immunoglobulin heavy variable 1-69	A_24_P367432	3.4	3.7E-09
IGLJ3	immunoglobulin lambda joining 3	A_24_P605563	3.4	4.8E-08
CCR7	chemokine (C-C motif) receptor 7	A_23_P343398	3.3	3.1E-11
POU2AF1	POU class 2 associating factor 1	A_23_P312920	3.3	4.6E-08
IGJ	immunoglobulin J polypeptide, linker protein for immunoglobulin alpha and mu polypeptides	A_23_P167168	3.3	2.0E-06
CD28	CD28 molecule	A_23_P91095	3.2	3.6E-12
C4orf7	chromosome 4 open reading frame 7	A_23_P362694	3.2	1.8E-05
AMPD1	adenosine monophosphate deaminase 1	A_23_P51787	3.1	2.6E-05
KIAA0125	KIAA0125	A_24_P95723	3.0	2.6E-05
CD1A	CD1a molecule	A_23_P63167	3.0	4.6E-08
IGLL1	immunoglobulin lambda-like polypeptide 1	A_24_P83102	2.8	1.8E-07
IGHV3-48	immunoglobulin heavy variable 3-48	A_24_P204727	2.8	1.8E-07
DERL3	Der1-like domain family, member 3	A_23_P6362	2.8	1.4E-07
CCR6	chemokine (C-C motif) receptor 6	A_24_P234921	2.6	1.7E-09
JSRP1	junctional sarcoplasmic reticulum protein 1	A_23_P397320	2.6	5.0E-06
CKAP2	cytoskeleton associated protein 2	A_23_P159435	2.6	6.9E-05
FCRL5	Fc receptor-like 5	A_23_P201211	2.6	2.5E-06
LOC642131	putative V-set and immunoglobulin domain-containing protein 6-like	A_24_P750327	2.5	7.4E-07
SCFV	single-chain Fv fragment	A_24_P889462	2.5	9.5E-07
TNFRSF17	tumor necrosis factor receptor superfamily, member 17	A_23_P37736	2.4	5.1E-05
CXCR5	chemokine (C-X-C motif) receptor 5	A_24_P252945	2.4	2.5E-05
TIGIT	T cell immunoreceptor with Ig and ITIM domains	A_23_P80528	2.4	7.0E-09
MS4A1	membrane-spanning 4-domains, subfamily A, member 1	A_23_P116371	2.4	2.9E-05
IGHG1	immunoglobulin heavy constant gamma 1 (G1m marker)	A_23_P390209	2.4	5.7E-04
IGKV1-5	immunoglobulin kappa variable 1-5	A_32_P722809	2.4	1.1E-05
ANKRD30BP2	ankyrin repeat domain 30B pseudogene 2	A_24_P917819	2.4	2.7E-04
IGLV6-57	immunoglobulin lambda variable 6-57	A_24_P361816	2.3	1.8E-06
IGKC	immunoglobulin kappa constant	A_24_P263786	2.3	4.6E-04
LTB	lymphotoxin beta (TNF superfamily, member 3)	A_23_P93348	2.3	5.7E-09
CD1C	CD1c molecule	A_23_P51767	2.3	4.6E-08
PNOC	prepronociceptin	A_23_P253321	2.2	2.5E-06
MZB1	marginal zone B and B1 cell-specific protein	A_23_P84596	2.1	4.1E-06
IGK@	immunoglobulin kappa locus	A_24_P677559	2.1	1.7E-07

TLL3	tubulin tyrosine ligase-like family, member 3	A_24_P917492	2.1	2.1E-06
CD1E	CD1e molecule	A_23_P201160	2.1	1.0E-04
CD19	CD19 molecule	A_23_P113572	2.1	2.2E-05
IGHA1	immunoglobulin heavy constant alpha 1	A_24_P395415	2.1	8.2E-04
SLC2A5	solute carrier family 2 (facilitated glucose/fructose transporter), member 5	A_23_P160159	2.1	2.6E-06
PIM2	pim-2 oncogene	A_24_P379104	2.0	1.3E-06
IGKV2-24	immunoglobulin kappa variable 2-24	A_24_P306905	2.0	3.9E-06
LOC96610	BMS1 homolog, ribosome assembly protein (yeast) pseudogene	A_24_P93316	2.0	1.0E-05
RASGRP1	RAS guanyl releasing protein 1 (calcium and DAG-regulated)	A_23_P124642	2.0	7.7E-08
IGKV1D-8	immunoglobulin kappa variable 1D-8	A_24_P93523	1.9	2.6E-05
IRF4	interferon regulatory factor 4	A_23_P214360	1.8	1.0E-05
GPR18	G protein-coupled receptor 18	A_23_P14165	1.8	2.7E-04
COCH	coagulation factor C homolog, cochlin (Limulus polyphemus)	A_24_P184799	1.8	1.8E-07
SLAMF1	signaling lymphocytic activation molecule family member 1	A_23_P62652	1.8	6.2E-06
SIT1	signaling threshold regulating transmembrane adaptor 1	A_23_P43369	1.8	1.8E-06
CPNE5	copine V	A_23_P360804	1.7	2.3E-06
BTLA	B and T lymphocyte associated	A_23_P80883	1.7	1.3E-04
TRDV2	T cell receptor delta variable 2	A_23_P258504	1.7	1.4E-08
FCRLA	Fc receptor-like A	A_23_P46039	1.7	2.7E-04
MGC16025	hypothetical LOC85009	A_23_P79572	1.7	1.2E-05
BLK	B lymphoid tyrosine kinase	A_23_P31725	1.7	2.0E-03
IGK@	immunoglobulin kappa locus	A_24_P488083	1.6	1.4E-05
ICOS	inducible T-cell co-stimulator	A_23_P371215	1.6	1.5E-06
LAX1	lymphocyte transmembrane adaptor 1	A_24_P370952	1.6	3.6E-03
LOC387895	hypothetical LOC387895	A_32_P35047	1.6	9.2E-04
CD27	CD27 molecule	A_23_P48088	1.6	2.3E-06
ZNF215	zinc finger protein 215	A_23_P53057	1.6	9.6E-05
AIM2	absent in melanoma 2	A_32_P44394	1.5	1.0E-04
CXCR3	chemokine (C-X-C motif) receptor 3	A_23_P114299	1.5	4.6E-08
CD79A	CD79a molecule, immunoglobulin-associated alpha	A_23_P107735	1.5	4.4E-04
BFSP2	beaded filament structural protein 2, phakinin	A_23_P159316	1.5	1.0E-05
ZBP1	Z-DNA binding protein 1	A_23_P259141	1.5	2.6E-05
KRT81	keratin 81	A_23_P25187	1.5	1.4E-04
FCRL2	Fc receptor-like 2	A_23_P160751	1.5	2.6E-03
IGLJ3	immunoglobulin lambda joining 3	A_24_P510357	1.5	4.4E-05
MEI1	meiosis inhibitor 1	A_23_P211561	1.5	1.1E-05
SPIB	Spi-B transcription factor (Spi-1/PU.1 related)	A_23_P39067	1.4	1.0E-05
TCL1A	T-cell leukemia/lymphoma 1A	A_23_P357717	1.4	1.8E-03
PMCH	pro-melanin-concentrating hormone	A_23_P321223	1.4	3.4E-04

CD1B	CD1b molecule	A_23_P351844	1.4	9.3E-04
NLRP7	NLR family, pyrin domain containing 7	A_23_P16384	1.4	4.7E-05
LMAN1	lectin, mannose-binding, 1	A_23_P78342	1.4	3.5E-05
RBP5	retinol binding protein 5, cellular	A_24_P386746	1.3	3.0E-08
LOR	loricrin	A_23_P34452	1.3	1.0E-03
LY9	lymphocyte antigen 9	A_24_P324674	1.3	2.0E-06
PPIL4	peptidylprolyl isomerase (cyclophilin)-like 4	A_24_P187826	1.2	6.1E-04
TRAF3IP3	TRAF3 interacting protein 3	A_23_P334414	1.2	1.0E-04
GZMK	granzyme K (granzyme 3; tryptase II)	A_23_P156218	1.2	4.7E-05
RHOH	ras homolog gene family, member H	A_23_P58132	1.2	1.0E-05
KCNN3	potassium intermediate/small conductance calcium-activated channel, subfamily N, member 3	A_23_P126167	1.2	6.9E-06
PTPN7	protein tyrosine phosphatase, non-receptor type 7	A_23_P201778	1.2	5.4E-06
CD79B	CD79b molecule, immunoglobulin-associated beta	A_23_P207201	1.2	2.1E-04
ITM2C	integral membrane protein 2C	A_24_P402690	1.2	4.8E-06
STAMBPL1	STAM binding protein-like 1	A_23_P385322	1.2	2.5E-06
ANKRD36BP2	ankyrin repeat domain 36B pseudogene 2	A_24_P341089	1.2	1.4E-04
IL23A	interleukin 23, alpha subunit p19	A_23_P76078	1.2	1.7E-06
FKBP11	FK506 binding protein 11, 19 kDa	A_23_P25121	1.2	9.2E-05
S100B	S100 calcium binding protein B	A_23_P143526	1.1	6.6E-04
TNFRSF18	tumor necrosis factor receptor superfamily, member 18	A_24_P411121	1.1	2.0E-06
FAM46C	family with sequence similarity 46, member C	A_23_P137751	1.1	1.6E-03
KIAA1143	KIAA1143	A_32_P11701	1.1	3.0E-04
ACAP1	ArfGAP with coiled-coil, ankyrin repeat and PH domains 1	A_23_P107336	1.1	1.0E-04
TP53INP1	tumor protein p53 inducible nuclear protein 1	A_23_P168882	1.1	3.5E-05
PACSIN1	protein kinase C and casein kinase substrate in neurons 1	A_23_P258088	1.1	4.8E-05
ASPHD2	aspartate beta-hydroxylase domain containing 2	A_24_P245815	1.1	1.8E-06
PDK1	pyruvate dehydrogenase kinase, isozyme 1	A_23_P10614	1.1	7.5E-04
PRDM1	PR domain containing 1, with ZNF domain	A_23_P350451	1.1	4.6E-03
LSP1	lymphocyte-specific protein 1	A_23_P13382	1.0	2.7E-05
TLR10	toll-like receptor 10	A_23_P33420	1.0	1.8E-03
SPAG4	sperm associated antigen 4	A_23_P132027	1.0	9.3E-04
HSH2D	hematopoietic SH2 domain containing	A_23_P153372	1.0	1.0E-04
CATSPERB	cation channel, sperm-associated, beta	A_23_P77043	1.0	1.2E-02
P2RY8	purinergic receptor P2Y, G-protein coupled, 8	A_24_P340128	1.0	9.5E-04
CR2	complement component (3d/Epstein Barr virus) receptor 2	A_23_P124542	1.0	8.2E-03
		A_32_P145010	1.0	1.0E-05
BLNK	B-cell linker	A_24_P64344	0.9	2.1E-04
CLDN14	claudin 14	A_23_P91512	0.9	2.3E-03
EMB	embigin	A_24_P684186	0.9	2.5E-06

EMBP1	embigin pseudogene 1	A_32_P206541	0.9	4.8E-06
RAB33A	RAB33A, member RAS oncogene family	A_23_P147025	0.9	1.1E-05
SMR3A	submaxillary gland androgen regulated protein 3A	A_23_P41365	0.9	9.6E-03
FAM129C	family with sequence similarity 129, member C	A_24_P940348	0.9	3.7E-03
TSPEAR	thrombospondin-type laminin G domain and EAR repeats	A_23_P394972	0.9	5.9E-04
SUSD3	sushi domain containing 3	A_23_P401076	0.9	7.0E-05
ADAD1	adenosine deaminase domain containing 1 (testis-specific)	A_23_P41514	0.9	4.1E-03
DOCK10	dedicator of cytokinesis 10	A_24_P391811	0.8	7.1E-03
GPR114	G protein-coupled receptor 114	A_23_P206290	0.8	1.5E-04
DCX	doublecortin	A_23_P500328	0.8	5.1E-03
ZNF80	zinc finger protein 80	A_23_P256526	0.8	5.2E-04
SEC11C	SEC11 homolog C (<i>S. cerevisiae</i>)	A_23_P208009	0.8	3.3E-04
RAB30	RAB30, member RAS oncogene family	A_24_P167338	0.8	1.5E-02
IGHM	immunoglobulin heavy constant mu	A_24_P417352	0.8	1.4E-04
C12orf42	chromosome 12 open reading frame 42	A_32_P133767	0.8	1.4E-03
TCF7	transcription factor 7 (T-cell specific, HMG-box)	A_23_P7582	0.8	5.8E-05
DEF6	differentially expressed in FDCP 6 homolog (mouse)	A_23_P321913	0.8	3.7E-05
STARD5	StAR-related lipid transfer (START) domain containing 5	A_23_P158880	0.8	1.1E-04
LIMD2	LIM domain containing 2	A_23_P26824	0.7	5.5E-04
CYSLTR1	cysteinyl leukotriene receptor 1	A_23_P22660	0.7	9.9E-06
RAC2	ras-related C3 botulinum toxin substrate 2 (rho family, small GTP binding protein Rac2)	A_23_P218774	0.7	1.0E-03
SSR4	signal sequence receptor, delta	A_23_P259172	0.7	1.6E-03
ERO1LB	ERO1-like beta (<i>S. cerevisiae</i>)	A_23_P347618	0.7	3.0E-03
ZNF141	zinc finger protein 141	A_23_P388867	0.7	3.7E-03
N4BP2L1	NEDD4 binding protein 2-like 1	A_23_P88067	0.7	1.2E-02
C3orf51	chromosome 3 open reading frame 51	A_23_P18053	0.7	5.5E-03
PIK3CG	phosphoinositide-3-kinase, catalytic, gamma polypeptide	A_23_P251359	0.6	1.0E-02
VPREB3	pre-B lymphocyte 3	A_23_P166371	0.6	3.9E-03
FAIM3	Fas apoptotic inhibitory molecule 3	A_23_P138125	0.6	1.9E-04
HSPA13	heat shock protein 70kDa family, member 13	A_23_P17606	0.6	1.2E-02
PTPRCAP	protein tyrosine phosphatase, receptor type, C-associated protein	A_23_P98173	0.6	6.0E-04
CREB3L2	cAMP responsive element binding protein 3-like 2	A_24_P180654	0.6	1.5E-03
DENND5B	DENN/MADD domain containing 5B	A_23_P366559	0.6	1.1E-02
HSP90B1	heat shock protein 90kDa beta (Grp94), member 1	A_32_P67680	0.6	3.9E-03

SUPPLEMENTARY FIGURE LEGENDS

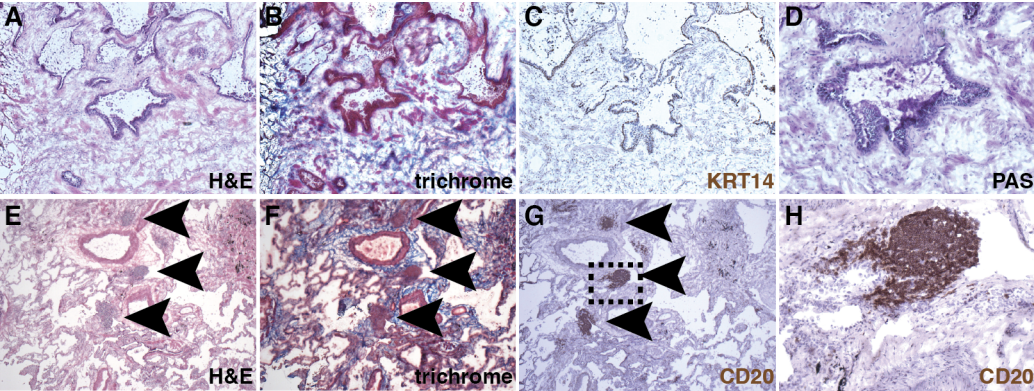
Supplementary Figure 1. Pathological characterization of adjacent sections in areas of bronchiolization (A-D) and lymphoid aggregates (E-H) in IPF lung tissue.

A) A honeycombed cyst is lined with columnar epithelial cells (H&E stain). B) Collagen deposition (blue) is minimal within the bronchiolized region (Masson's trichrome stain). C) The epithelial cells lining the cyst stain strongly for keratin 14 (anti-K14 stain). D) The epithelial cells lining the cyst express mucins (PAS stain). E) Multiple aggregates of cells with darkly staining nuclei (H&E). F) Collagen deposition (blue) surrounds but is not present within the cellular aggregates (trichrome). G) The aggregates have large concentrations of CD20+ B cells (anti-CD20 stain). H) Higher magnification of aggregate indicated with dashed box in (G).

Supplementary Figure 2. Concordance between microarray and qPCR-determined gene signatures. RNA samples used in microarray experiments described in Figure 1 were assessed by qPCR for gene expression as specified in Supplementary table 2 (N=17 IPF, 5 control) for A) bronchiolar and B) lymphoid signatures.

Supplementary Figure 3. Representative tissue sections for histological scoring of bronchiolization (A-D) and lymphoid aggregates (E-F). A) bronchiolar score 0, B) 1, C) 2, D) 3. E) Lymphoid score 0, F) 1, G) 2, H) 3.

Supplementary Figure 1



Supplementary Figure 3

