

OSCAR - 2.00uM
 OSCAR - 1.00uM
 OSCAR - 500nM
 OSCAR - 250nM
 OSCAR - 125nM

Figure S1

Figure S1. Identification of OSCAR ligand

(A) Binding of Alexa488-labelled OSCAR-ECD to the surface of live cells was analyzed by flow cytometry. A murine MC3T3-E1 pre-osteoblast cell line expressed OSCAR-binding moieties on the cell surface and therefore was selected for purification of the OSCAR ligand. Open histograms – fluorescence in the presence of the Alexa488-conjugated protein, black histograms - untreated cells; (B). Proteins extracted from the membranes of the MC3T3-E1 cells were incubated with either Protein G/OSCAR-Fc affinity matrix or control Protein G/Fc matrix. The bound proteins were eluted and analyzed by SDS-PAGE. The proteins which were differentially bound to the OSCAR-Fc and not to the Protein G/Fc matrix were further analyzed. The major diffuse protein band with an approx. electrophoretic mobility of 170-200 kD was subjected to in-gel tryptic digest and the peptides analyzed by LCMSMS.

Peak lists were generated and searched with MASCOT against the mammalian part of the Swissprot database. The top hit was mouse alpha 1 type I Collagen (accession number P11087) with a MASCOT score of 2241 and a sequence coverage of 49%. In addition, mouse alpha 1 Collagen type III (accession number P08121) was identified with a lower score of 471 and a sequence coverage of 15%. SDS-PAGE analysis of proteins from MC3T3-E1 bound to the OSCAR-Fc (lane 1) and to the Fc control (lane 2) affinity matrix. The arrow is indicating a band which was identified by LC-MS MS as Collagen alpha 1 type I and Collagen alpha 1 type III chains; (C). Interaction of OSCAR-ECD with native human Collagens was further verified using surface plasmon resonance technique (SPR). Human Coll-IV proteins were immobilized to a sensor chip followed by injection of OSCAR-ECD. Binding of OSCAR-ECD was observed to Coll I and II, but not to Coll III and IV. Thus, Coll I and II appear to be natural ligands for OSCAR.

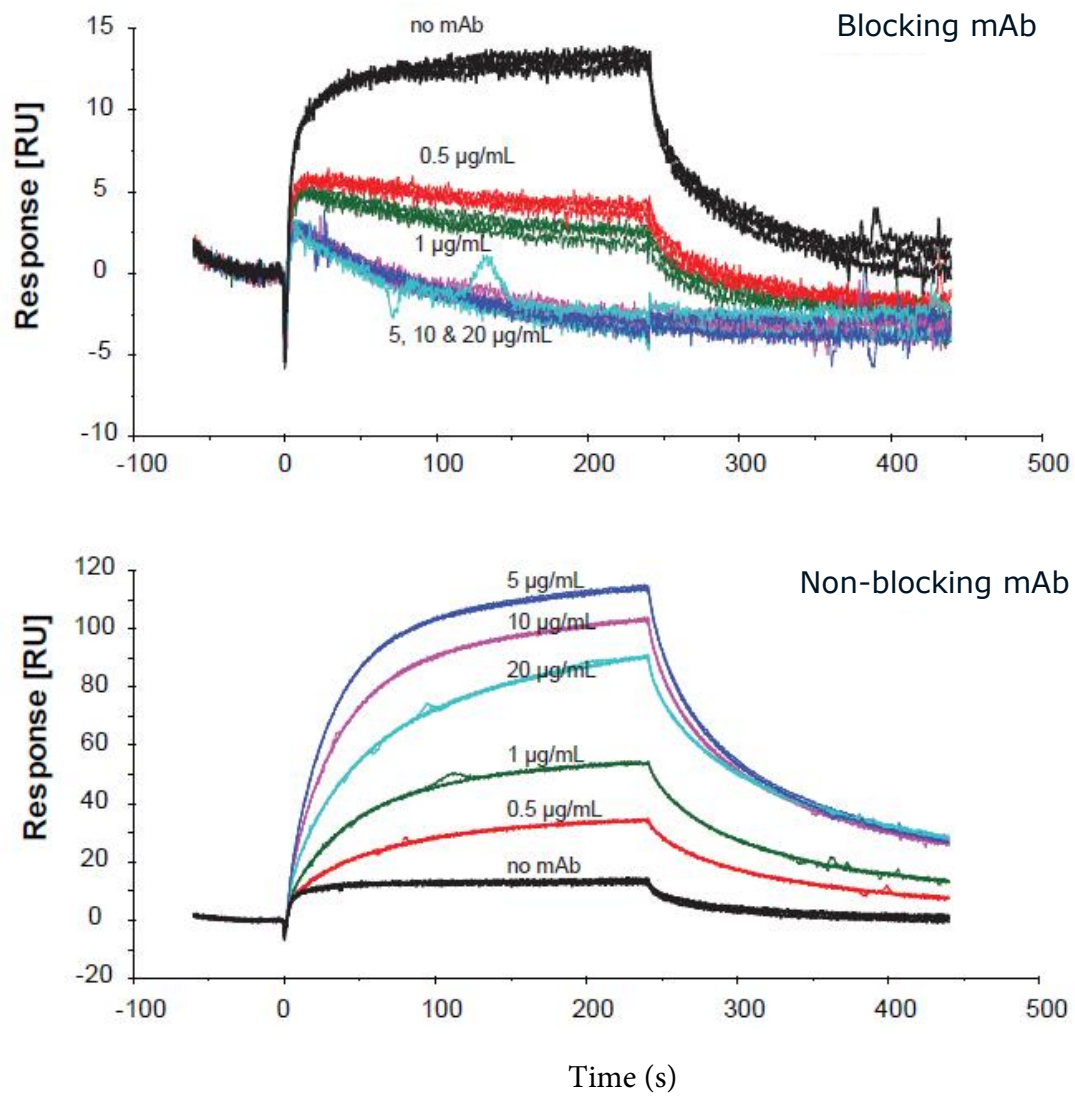


Figure S2

Figure S2. SPR analysis of OSCAR binding to ColI in the presence of anti-OSCAR mAb

A panel of mAb against OSCAR was generated and tested for their ability to block the interaction between OSCAR-ECD and ColI. For this purpose, ColI was immobilized on a SPR sensor chip. Binding of a constant amount of OSCAR-ECD to ColI was measured in the presence of increasing concentrations of anti-OSCAR mAb. In cases where the antibody did not inhibit the interaction between OSCAR and Collagen, the SPR signal increased with increasing amounts of antibody, due to the higher mass of the OSCAR-ECD/mAb complex. In contrast, several mAb prevented the binding of OSCAR to Collagen thereby leading to a concentration dependent decrease of the SPR signal. The mAb from these two groups were used in this study as control and a function-blocking mAb, respectively.

Supplementary Table 1A. Genes regulated by ColII

ColII vs iDC at 4 hours

name	gene title	gene symbol	q-value	Fold change
ENSG00000115009	chemokine (C-C motif) ligand 20	CCL20	0,002	158,54
ENSG00000073756	prostaglandin-endoperoxide synthase 2 (prostaglandin G/H synthase and cyclooxygenase)	PTGS2	0,003	56,05
ENSG00000115008	interleukin 1, alpha	IL1A	0,010	43,04
ENSG00000153234	nuclear receptor subfamily 4, group A, member 2	NR4A2	0,003	39,00
ENSG00000164949	GTP binding protein overexpressed in skeletal muscle	GEM	0,003	36,00
ENSG00000234883	MIR155 host gene (non-protein coding)	MIR155HG	0,005	32,15
ENSG00000078401	endothelin 1	EDN1	0,011	26,45
ENSG00000163734	chemokine (C-X-C motif) ligand 3	CXCL3	0,011	26,13
ENSG00000081041	chemokine (C-X-C motif) ligand 2	CXCL2	0,010	24,83
ENSG00000123689	G0/G1switch 2	G0S2	0,004	24,05
ENSG00000232810	tumor necrosis factor	TNF	0,003	23,13
ENSG00000125538	interleukin 1, beta	IL1B	0,007	23,07
ENSG00000158050	dual specificity phosphatase 2	DUSP2	0,003	22,23
ENSG00000163739	chemokine (C-X-C motif) ligand 1 (melanoma growth stimulating activity, alpha)	CXCL1	0,011	21,49
ENSG00000120875	dual specificity phosphatase 4	DUSP4	0,004	20,84
ENSG00000178726	thrombomodulin	THBD	0,008	19,30
ENSG00000101187	solute carrier organic anion transporter family, member 4A1	SLCO4A1	0,003	18,32
ENSG00000041982	tenascin C	TNC	0,008	17,85
ENSG00000117525	coagulation factor III (thromboplastin, tissue factor)	F3	0,003	17,12
ENSG00000164181	ELOVL family member 7, elongation of long chain fatty acids (yeast)	ELOVL7	0,004	15,63
ENSG00000179388	early growth response 3	EGR3	0,008	15,18
ENSG00000113070	heparin-binding EGF-like growth factor	HBEGF	0,005	15,14
ENSG00000108691	chemokine (C-C motif) ligand 2	CCL2	0,010	14,11
ENSG00000153162	bone morphogenetic protein 6	BMP6	0,004	13,46
ENSG00000013619	mastermind-like domain containing 1	MAMLD1	0,004	12,79
ENSG00000140379	BCL2-related protein A1	BCL2A1	0,007	12,23
ENSG00000232956	chromosome 7 open reading frame 40	C7orf40	0,005	11,74
ENSG00000116717	growth arrest and DNA-damage-inducible, alpha	GADD45A	0,005	11,17
ENSG00000186827	tumor necrosis factor receptor superfamily, member 4	TNFRSF4	0,004	11,15

ENSG00000180758	G protein-coupled receptor 157	GPR157	0,011	11,14
ENSG00000149289	zinc finger CCCH-type containing 12C	ZC3H12C	0,003	11,11
ENSG00000163661	pentraxin 3, long	PTX3	0,012	11,06
ENSG00000056558	TNF receptor-associated factor 1	TRAF1	0,004	10,51
ENSG00000099985	oncostatin M	OSM	0,002	10,47
ENSG00000157557	v-ets erythroblastosis virus E26 oncogene homolog 2 (avian)	ETS2	0,006	10,15
ENSG00000112394	solute carrier family 16, member 10 (aromatic amino acid transporter)	SLC16A10	0,010	10,06
ENSG00000144802	nuclear factor of kappa light polypeptide gene enhancer in B-cells inhibitor, zeta	NFKBIZ	0,004	9,42
ENSG00000108702	chemokine (C-C motif) ligand 1	CCL1	0,011	8,91
ENSG00000170542	serpin peptidase inhibitor, clade B (ovalbumin), member 9	SERPINB9	0,008	8,63
ENSG00000132510	lysine (K)-specific demethylase 6B	KDM6B	0,002	8,55
ENSG00000125735	tumor necrosis factor (ligand) superfamily, member 14	TNFSF14	0,002	8,54
ENSG00000110047	EH-domain containing 1	EHD1	0,008	8,48
ENSG00000173846	polo-like kinase 3	PLK3	0,003	8,37
ENSG00000167604	nuclear factor of kappa light polypeptide gene enhancer in B-cells inhibitor, delta	NFKBID	0,004	8,27
ENSG00000116285	ERBB receptor feedback inhibitor 1	ERRFI1	0,007	8,04
ENSG00000099860	growth arrest and DNA-damage-inducible, beta	GADD45B	0,002	7,92
ENSG00000118503	tumor necrosis factor, alpha-induced protein 3	TNFAIP3	0,006	7,87
ENSG00000120738	early growth response 1	EGR1	0,009	7,70
ENSG00000134070	interleukin-1 receptor-associated kinase 2	IRAK2	0,003	7,65
ENSG00000135476	extra spindle pole bodies homolog 1 (<i>S. cerevisiae</i>)	ESPL1	0,020	7,49
ENSG00000114473	IQ motif containing G	IQCG	0,006	7,31
ENSG00000253522	microRNA 146a (MIR146A), microRNA	CTC-231O11.1	0,010	7,19
ENSG00000112096	superoxide dismutase 2, mitochondrial	SOD2	0,004	7,13
ENSG00000065809	family with sequence similarity 107, member B	FAM107B	0,003	7,02
ENSG00000103257	solute carrier family 7 (cationic amino acid transporter, y+ system), member 5	SLC7A5	0,008	6,94
ENSG00000152413	homer homolog 1 (<i>Drosophila</i>)	HOMER1	0,006	6,93
ENSG00000010810	FYN oncogene related to SRC, FGR, YES	FYN	0,011	6,83
ENSG00000185022	v-maf musculoaponeurotic fibrosarcoma oncogene homolog F (avian)	MAFF	0,008	6,81
ENSG00000124145	syndecan 4	SDC4	0,003	6,60
ENSG00000023445	baculoviral IAP repeat containing 3	BIRC3	0,015	6,57
ENSG00000184371	colony stimulating factor 1 (macrophage)	CSF1	0,003	6,33
ENSG00000123610	tumor necrosis factor, alpha-induced protein 6	TNFAIP6	0,028	6,22

ENSG00000167772	angiopoietin-like 4	ANGPTL4	0,022	6,22
ENSG00000124882	epiregulin	REG	0,017	6,21
ENSG00000034152	mitogen-activated protein kinase kinase 3	MAP2K3	0,002	6,17
ENSG00000249992	transmembrane protein 158 (gene/pseudogene)	TMEM158	0,013	6,04
ENSG00000162645	guanylate binding protein 2, interferon-inducible	GBP2	0,003	6,02
ENSG00000186665	chromosome 17 open reading frame 58	C17orf58	0,005	5,96
ENSG00000154640	BTG family, member 3	BTG3	0,006	5,94
ENSG00000125384	prostaglandin E receptor 2 (subtype EP2), 53kDa	PTGER2	0,005	5,92
ENSG00000119508	nuclear receptor subfamily 4, group A, member 3	NR4A3	0,014	5,85
ENSG00000179294	chromosome 17 open reading frame 96	C17orf96	0,008	5,59
ENSG00000167695	family with sequence similarity 57, member A	FAM57A	0,015	5,57
ENSG00000112715	vascular endothelial growth factor A	VEGFA	0,007	5,57
ENSG00000131016	A kinase (PRKA) anchor protein 12	AKAP12	0,014	5,52
ENSG00000136158	sprouty homolog 2 (Drosophila)	SPRY2	0,007	5,51
ENSG00000136689	interleukin 1 receptor antagonist	IL1RN	0,005	5,48
ENSG00000106366	serpin peptidase inhibitor, clade E (nexin, plasminogen activator inhibitor type 1), member 1	SERPINE1	0,009	5,47
ENSG00000165997	ADP-ribosylation factor-like 5B	ARL5B	0,004	5,38
ENSG00000258227	C-type lectin domain family 5 member A	AC073647.10	0,007	5,35
ENSG00000121797	chemokine (C-C motif) receptor-like 2	CCRL2	0,004	5,35
ENSG00000162924	v-rel reticuloendotheliosis viral oncogene homolog (avian)	REL	0,011	5,14
ENSG00000090339	intercellular adhesion molecule 1	ICAM1	0,010	5,13
ENSG00000138670	RasGEF domain family, member 1B	RASGEF1B	0,003	5,13
ENSG00000186891	tumor necrosis factor receptor superfamily, member 18	TNFRSF18	0,002	4,95
ENSG00000169429	interleukin 8	IL8	0,015	4,94
ENSG00000108179	peptidylprolyl isomerase F	PPIF	0,006	4,91
ENSG00000139289	pleckstrin homology-like domain, family A, member 1	PHLDA1	0,013	4,90
ENSG00000117090	signaling lymphocytic activation molecule family member 1	SLAMF1	0,022	4,88
ENSG00000139318	dual specificity phosphatase 6	DUSP6	0,007	4,85
ENSG00000159200	regulator of calcineurin 1	RCAN1	0,004	4,83
ENSG00000117009	kynurenine 3-monooxygenase (kynurenine 3-hydroxylase)	KMO	0,017	4,82
ENSG00000145777	thymic stromal lymphopoietin	TSLP	0,047	4,82
ENSG00000163347	claudin 1	CLDN1	0,003	4,76
ENSG00000214900	chromosome 14 open reading frame 182	C14orf182	0,009	4,75

ENSG00000172175	mucosa associated lymphoid tissue lymphoma translocation gene 1	MALT1	0,003	4,72
ENSG00000163082	sphingosine-1-phosphate phosphatase 2	SGPP2	0,018	4,71
ENSG00000121594	CD80 molecule	CD80	0,011	4,67
ENSG00000127824	tubulin, alpha 4a	TUBA4A	0,010	4,60
ENSG00000144655	cysteine-serine-rich nuclear protein 1	CSRNP1	0,004	4,57
ENSG00000109320	nuclear factor of kappa light polypeptide gene enhancer in B-cells 1	NFKB1	0,007	4,56
ENSG00000198355	pim-3 oncogene	PIM3	0,006	4,53
ENSG00000175040	carbohydrate (N-acetylglucosamine-6-O) sulfotransferase 2	CHST2	0,025	4,51
ENSG00000198369	sprouty-related, EVH1 domain containing 2	SPRED2	0,008	4,49
ENSG00000138378	signal transducer and activator of transcription 4	STAT4	0,012	4,48
ENSG00000011422	plasminogen activator, urokinase receptor	PLAUR	0,005	4,47
ENSG00000100985	matrix metalloproteinase 9 (gelatinase B, 92kDa gelatinase, 92kDa type IV collagenase)	MMP9	0,014	4,46
ENSG00000145990	glucose-fructose oxidoreductase domain containing 1	GFOD1	0,013	4,44
ENSG00000110042	deltex homolog 4 (Drosophila)	DTX4	0,018	4,43
ENSG00000137267	tubulin, beta 2A	TUBB2A	0,011	4,42
ENSG00000168685	interleukin 7 receptor	IL7R	0,013	4,40
ENSG00000143067	zinc finger protein 697	ZNF697	0,007	4,40
ENSG00000165474	gap junction protein, beta 2, 26kDa	GJB2	0,007	4,39
ENSG00000148841	inositol 1,4,5-trisphosphate receptor interacting protein	ITPRIP	0,003	4,39
ENSG00000123358	nuclear receptor subfamily 4, group A, member 1	NR4A1	0,002	4,36
ENSG00000185245	glycoprotein Ib (platelet), alpha polypeptide	GP1BA	0,031	4,36
ENSG00000136048	DNA-damage regulated autophagy modulator 1	DRAM1	0,008	4,31
ENSG00000148339	solute carrier family 25 (mitochondrial carrier; phosphate carrier), member 25	SLC25A25	0,027	4,27
ENSG00000159388	BTG family, member 2	BTG2	0,008	4,27
ENSG00000150977	Rab interacting lysosomal protein-like 2	RILPL2	0,004	4,26
ENSG00000154127	ubiquitin associated and SH3 domain containing B	UBASH3B	0,007	4,23
ENSG00000236700	N/A	RP11-557H15.2	0,015	4,21
ENSG00000166592	Ras-related associated with diabetes	RRAD	0,007	4,19
ENSG00000166881	transmembrane protein 194A	TMEM194A	0,008	4,18
ENSG00000172738	transmembrane protein 217	TMEM217	0,018	4,17
ENSG00000153721	CNKSR family member 3	CNKSR3	0,016	4,16
ENSG00000120129	dual specificity phosphatase 1	DUSP1	0,005	4,07
ENSG00000163171	CDC42 effector protein (Rho GTPase binding) 3	CDC42EP3	0,003	4,07

ENSG00000172071	eukaryotic translation initiation factor 2-alpha kinase 3	EIF2AK3	0,003	4,06
ENSG00000153898	mucolipin 2	MCOLN2	0,010	4,03
ENSG00000261005	na	na	0,004	4,01
ENSG00000186480	insulin induced gene 1	INSIG1	0,003	4,01
ENSG00000260196	na	na	0,005	3,99
ENSG00000164211	StAR-related lipid transfer (START) domain containing 4	STARD4	0,016	3,99
ENSG00000182224	cytochrome b5 domain containing 1	CYB5D1	0,008	3,96
ENSG00000090104	regulator of G-protein signaling 1	RGS1	0,008	3,95
ENSG00000164023	sphingomyelin synthase 2	SGMS2	0,008	3,94
ENSG00000137331	immediate early response 3	IER3	0,023	3,92
ENSG00000124731	triggering receptor expressed on myeloid cells 1	TREM1	0,010	3,91
ENSG00000168906	methionine adenosyltransferase II, alpha	MAT2A	0,015	3,90
ENSG00000131873	chondroitin sulfate synthase 1	CHSY1	0,005	3,85
ENSG00000060982	branched chain amino-acid transaminase 1, cytosolic	BCAT1	0,006	3,85
ENSG00000054523	kinesin family member 1B	KIF1B	0,006	3,81
ENSG00000125740	FBJ murine osteosarcoma viral oncogene homolog B	FOSB	0,021	3,78
ENSG00000135604	syntaxin 11	STX11	0,008	3,77
ENSG00000131669	ninjurin 1	NINJ1	0,008	3,77
ENSG00000007264	megakaryocyte-associated tyrosine kinase	MATK	0,036	3,71
ENSG00000197405	complement component 5a receptor 1	C5AR1	0,023	3,69
ENSG00000168389	major facilitator superfamily domain containing 2A	MFSD2A	0,034	3,69
ENSG00000133639	B-cell translocation gene 1, anti-proliferative	BTG1	0,005	3,67
ENSG00000168884	TNFAIP3 interacting protein 2	TNIP2	0,004	3,66
ENSG00000175556	LON peptidase N-terminal domain and ring finger 3	LONRF3	0,010	3,66
ENSG00000139725	na	na	0,007	3,66
ENSG00000137449	cytoplasmic polyadenylation element binding protein 2	CPEB2	0,003	3,63
ENSG00000118985	elongation factor, RNA polymerase II, 2	ELL2	0,007	3,62
ENSG00000112149	CD83 molecule	CD83	0,023	3,62
ENSG00000095794	cAMP responsive element modulator	CREM	0,011	3,61
ENSG00000160888	immediate early response 2	IER2	0,005	3,61
ENSG00000135919	serpin peptidase inhibitor, clade E (nexin, plasminogen activator inhibitor type 1), member 2	SERPINE2	0,018	3,58
ENSG00000166920	chromosome 15 open reading frame 48	C15orf48	0,014	3,57
ENSG00000123342	matrix metalloproteinase 19	MMP19	0,015	3,54

ENSG00000183696	uridine phosphorylase 1	UPP1	0,003	3,49
ENSG00000175592	FOS-like antigen 1	FOSL1	0,005	3,49
ENSG00000102755	fms-related tyrosine kinase 1 (vascular endothelial growth factor/vascular permeability factor re	FLT1	0,008	3,49
ENSG00000125730	complement component 3	C3	0,028	3,47
ENSG00000106952	tumor necrosis factor (ligand) superfamily, member 8	TNFSF8	0,021	3,46
ENSG00000117228	guanylate binding protein 1, interferon-inducible	GBP1	0,015	3,46
ENSG00000117036	ets variant 3	ETV3	0,007	3,45
ENSG00000163874	zinc finger CCCH-type containing 12A	ZC3H12A	0,005	3,44
ENSG00000142178	salt-inducible kinase 1	SIK1	0,011	3,40
ENSG00000188001	tumor protein p63 regulated 1	TPRG1	0,011	3,40
ENSG00000138166	dual specificity phosphatase 5	DUSP5	0,004	3,36
ENSG00000141682	phorbol-12-myristate-13-acetate-induced protein 1	PMAIP1	0,017	3,34
ENSG00000229644	nicotinamide phosphoribosyltransferase-like	NAMPTL	0,007	3,34
ENSG00000105835	nicotinamide phosphoribosyltransferase	NAMPT	0,004	3,34
ENSG00000164935	transmembrane 7 superfamily member 4	TM7SF4	0,019	3,31
ENSG00000104312	receptor-interacting serine-threonine kinase 2	RIPK2	0,002	3,29
ENSG00000176845	meteorin, glial cell differentiation regulator-like	METRNL	0,006	3,25
ENSG00000077984	cystatin F (leukocystatin)	CST7	0,013	3,20
ENSG00000134242	protein tyrosine phosphatase, non-receptor type 22 (lymphoid)	PTPN22	0,007	3,19
ENSG00000134830	G protein-coupled receptor 77	GPR77	0,008	3,19
ENSG00000223749	N/A	AC004383.4	0,007	3,19
ENSG00000156711	mitogen-activated protein kinase 13	MAPK13	0,010	3,18
ENSG00000010818	human immunodeficiency virus type I enhancer binding protein 2	HIVEP2	0,046	3,17
ENSG00000107968	mitogen-activated protein kinase kinase kinase 8	MAP3K8	0,005	3,17
ENSG00000100906	nuclear factor of kappa light polypeptide gene enhancer in B-cells inhibitor, alpha	NFKBIA	0,008	3,17
ENSG00000163399	ATPase, Na ⁺ /K ⁺ transporting, alpha 1 polypeptide	ATP1A1	0,003	3,16
ENSG00000101017	CD40 molecule, TNF receptor superfamily member 5	CD40	0,008	3,15
ENSG00000224818	N/A	RP11-134G8.8	0,008	3,14
ENSG00000178860	musculin	MSC	0,015	3,14
ENSG00000087074	protein phosphatase 1, regulatory (inhibitor) subunit 15A	PPP1R15A	0,004	3,12
ENSG00000179241	low density lipoprotein receptor class A domain containing 3	LDLRAD3	0,003	3,11
ENSG00000005513	SRY (sex determining region Y)-box 8	SOX8	0,034	3,11
ENSG00000172818	ovo-like 1(Drosophila)	OVOL1	0,015	3,10

ENSG00000122861	plasminogen activator, urokinase	PLAU	0,039	3,10
ENSG00000102760	chromosome 13 open reading frame 15	C13orf15	0,008	3,09
ENSG00000006062	mitogen-activated protein kinase kinase kinase 14	MAP3K14	0,003	3,09
ENSG00000173517	Pseudopodium-enriched atypical kinase 1	AC087465.1	0,005	3,08
ENSG00000182022	carbohydrate (N-acetylgalactosamine 4-sulfate 6-O) sulfotransferase 15	CHST15	0,015	3,08
ENSG00000176170	sphingosine kinase 1	SPHK1	0,031	3,05
ENSG00000110218	pannexin 1	PANX1	0,012	3,05
ENSG00000165312	OTU domain containing 1	OTUD1	0,007	3,04
ENSG00000151247	eukaryotic translation initiation factor 4E	EIF4E	0,008	3,02
ENSG00000137094	DnaJ (Hsp40) homolog, subfamily B, member 5	DNAJB5	0,014	3,01
ENSG00000146676	purine-rich element binding protein B	PURB	0,004	3,00
ENSG00000115956	pleckstrin	PLEK	0,008	2,98
ENSG00000104783	potassium intermediate/small conductance calcium-activated channel, subfamily N, member 4	KCNN4	0,011	2,98
ENSG00000123908	eukaryotic translation initiation factor 2C, 2	EIF2C2	0,007	2,97
ENSG00000184557	suppressor of cytokine signaling 3	SOCS3	0,009	2,96
ENSG00000167874	transmembrane protein 88	TMEM88	0,010	2,96
ENSG00000113811	Selenoprotein K	RP11-884K10.5	0,006	2,96
ENSG00000173166	Ras association (RalGDS/AF-6) and pleckstrin homology domains 1	RAPH1	0,004	2,95
ENSG00000136891	testis expressed 10	TEX10	0,011	2,94
ENSG00000133657	ATPase type 13A3	ATP13A3	0,007	2,93
ENSG00000140406	mesoderm development candidate 1	MESDC1	0,030	2,91
ENSG00000116741	regulator of G-protein signaling 2, 24kDa	RGS2	0,008	2,91
ENSG00000137193	pim-1 oncogene	PIM1	0,008	2,90
ENSG00000125810	CD93 molecule	CD93	0,024	2,89
ENSG00000003402	CASP8 and FADD-like apoptosis regulator	CFLAR	0,005	2,89
ENSG00000163376	kelch repeat and BTB (POZ) domain containing 8	KBTBD8	0,015	2,89
ENSG00000118785	secreted phosphoprotein 1	SPP1	0,020	2,88
ENSG00000136653	Ras association (RalGDS/AF-6) domain family member 5	RASSF5	0,003	2,88
ENSG00000138119	myoferlin	MYOF	0,004	2,87
ENSG00000175352	nuclear receptor interacting protein 3	NRIP3	0,006	2,84
ENSG00000008083	jumonji, AT rich interactive domain 2	JARID2	0,018	2,83
ENSG00000009591	human immunodeficiency virus type I enhancer binding protein 1	HIVEP1	0,008	2,81
ENSG00000125430	heparan sulfate (glucosamine) 3-O-sulfotransferase 3B1	HS3ST3B1	0,023	2,80

ENSG00000213859	potassium channel tetramerisation domain containing 11	KCTD11	0,013	2,79
ENSG00000175445	lipoprotein lipase	LPL	0,008	2,77
ENSG00000163389	protein O-glucosyltransferase 1	POGLUT1	0,013	2,76
ENSG00000100221	Josephin domain containing 1	JOSD1	0,004	2,76
ENSG00000120539	microtubule associated serine/threonine kinase-like	MASTL	0,007	2,74
ENSG00000121769	fatty acid binding protein 3, muscle and heart (mammary-derived growth inhibitor)	FABP3	0,003	2,73
ENSG00000168994	chromosome 6 open reading frame 145	C6orf145	0,004	2,72
ENSG00000196083	interleukin 1 receptor accessory protein	IL1RAP	0,008	2,72
ENSG00000115738	inhibitor of DNA binding 2, dominant negative helix-loop-helix protein	ID2	0,013	2,71
ENSG00000183484	G protein-coupled receptor 132	GPR132	0,015	2,71
ENSG00000108932	solute carrier family 16, member 6 (monocarboxylic acid transporter 7)	SLC16A6	0,024	2,71
ENSG00000176142	transmembrane protein 39A	TMEM39A	0,005	2,70
ENSG00000196396	protein tyrosine phosphatase, non-receptor type 1	PTPN1	0,010	2,69
ENSG00000138678	1-acylglycerol-3-phosphate O-acyltransferase 9	AGPAT9	0,016	2,69
ENSG00000160883	hexokinase 3 (white cell)	HK3	0,007	2,69
ENSG00000151689	inositol polyphosphate-1-phosphatase	INPP1	0,008	2,68
ENSG00000124225	prostate transmembrane protein, androgen induced 1	PMEPA1	0,008	2,67
ENSG00000260231	na	na	0,016	2,67
ENSG00000101665	SMAD family member 7	SMAD7	0,007	2,67
ENSG00000139722	vacuolar protein sorting 37 homolog B (<i>S. cerevisiae</i>)	VPS37B	0,007	2,66
ENSG00000114013	CD86 molecule	CD86	0,005	2,65
ENSG00000161091	chromosome 19 open reading frame 28	C19orf28	0,004	2,65
ENSG00000178623	G protein-coupled receptor 35	GPR35	0,007	2,64
ENSG00000156535	CD109 molecule	CD109	0,013	2,64
ENSG00000102226	ubiquitin specific peptidase 11	USP11	0,005	2,63
ENSG00000034677	ring finger protein 19A	RNF19A	0,003	2,62
ENSG00000197696	neuromedin B	NMB	0,005	2,61
ENSG00000181649	pleckstrin homology-like domain, family A, member 2	PHLDA2	0,006	2,60
ENSG00000162772	activating transcription factor 3	ATF3	0,044	2,59
ENSG00000131370	SH3-domain binding protein 5 (BTK-associated)	SH3BP5	0,009	2,56
ENSG00000006327	tumor necrosis factor receptor superfamily, member 12A	TNFRSF12A	0,011	2,56
ENSG00000117479	solute carrier family 19 (thiamine transporter), member 2	SLC19A2	0,007	2,56
ENSG00000146457	Wilms tumor 1 associated protein	WTAP	0,015	2,55

ENSG00000139832	RAB20, member RAS oncogene family	RAB20	0,029	2,55
ENSG00000089041	purinergic receptor P2X, ligand-gated ion channel, 7	P2RX7	0,010	2,54
ENSG00000196449	yrdC domain containing (E. coli)	YRDC	0,007	2,54
ENSG00000008405	cryptochrome 1 (photolyase-like)	CRY1	0,012	2,53
ENSG00000162711	NLR family, pyrin domain containing 3	NLRP3	0,026	2,52
ENSG00000151726	acyl-CoA synthetase long-chain family member 1	ACSL1	0,007	2,52
ENSG00000126003	pleiomorphic adenoma gene-like 2	PLAGL2	0,013	2,50
ENSG00000165195	phosphatidylinositol glycan anchor biosynthesis, class A	PIGA	0,014	2,50
ENSG00000137462	toll-like receptor 2	TLR2	0,022	2,50
ENSG00000259758	N/A	N/A	0,007	2,49
ENSG00000171522	prostaglandin E receptor 4 (subtype EP4)	PTGER4	0,016	2,49
ENSG00000141540	tweety homolog 2 (Drosophila)	TTYH2	0,006	2,49
ENSG00000151092	N-glycanase 1	NGLY1	0,007	2,48
ENSG00000170779	cell division cycle associated 4	CDCA4	0,013	2,47
ENSG00000107104	KN motif and ankyrin repeat domains 1	KANK1	0,007	2,47
ENSG00000103855	CD276 molecule	CD276	0,017	2,47
ENSG00000138623	semaphorin 7A, GPI membrane anchor (John Milton Hagen blood group)	SEMA7A	0,003	2,47
ENSG00000137507	leucine rich repeat containing 32	LRRC32	0,024	2,44
ENSG00000129667	rhomboid 5 homolog 2 (Drosophila)	RHBDF2	0,018	2,43
ENSG00000144136	solute carrier family 20 (phosphate transporter), member 1	SLC20A1	0,008	2,42
ENSG00000181788	seven in absentia homolog 2 (Drosophila)	SIAH2	0,009	2,41
ENSG00000102908	nuclear factor of activated T-cells 5, tonicity-responsive	NFAT5	0,011	2,40
ENSG00000184292	tumor-associated calcium signal transducer 2	TACSTD2	0,045	2,40
ENSG00000242247	ADP-ribosylation factor GTPase activating protein 3	ARFGAP3	0,004	2,40
ENSG00000135625	early growth response 4	EGR4	0,008	2,40
ENSG00000158470	UDP-Gal:betaGlcNAc beta 1,4- galactosyltransferase, polypeptide 5	B4GALT5	0,021	2,39
ENSG00000197147	leucine rich repeat containing 8 family, member B	LRRC8B	0,019	2,39
ENSG00000197249	serpin peptidase inhibitor, clade A (alpha-1 antiproteinase, antitrypsin), member 1	SERPINA1	0,004	2,37
ENSG00000143384	myeloid cell leukemia sequence 1 (BCL2-related)	MCL1	0,003	2,37
ENSG00000260006	na	na	0,031	2,36
ENSG00000102962	chemokine (C-C motif) ligand 22	CCL22	0,011	2,36
ENSG00000074660	scavenger receptor class F, member 1	SCARF1	0,004	2,36
ENSG00000169508	G protein-coupled receptor 183	GPR183	0,008	2,34

ENSG00000263899	na	na	0,027	2,34
ENSG00000155366	ras homolog gene family, member C	RHOC	0,006	2,32
ENSG00000119280	chromosome 1 open reading frame 198	C1orf198	0,008	2,32
ENSG00000147650	low density lipoprotein receptor-related protein 12	LRP12	0,006	2,32
ENSG00000115339	UDP-N-acetyl-alpha-D-galactosamine:polypeptide N-acetylgalactosaminyltransferase 3 (GalNAc	GALNT3	0,014	2,32
ENSG00000261827	na	na	0,010	2,32
ENSG00000015475	BH3 interacting domain death agonist	BID	0,007	2,32
ENSG00000107175	cAMP responsive element binding protein 3	CREB3	0,004	2,32
ENSG00000145901	TNFAIP3 interacting protein 1	TNIP1	0,036	2,31
ENSG00000117143	UDP-N-actylglucosamine pyrophosphorylase 1	UAP1	0,012	2,31
ENSG00000140968	interferon regulatory factor 8	IRF8	0,005	2,30
ENSG00000115641	four and a half LIM domains 2	FHL2	0,018	2,28
ENSG00000104450	sperm associated antigen 1	SPAG1	0,016	2,27
ENSG00000127124	human immunodeficiency virus type I enhancer binding protein 3	HIVEP3	0,005	2,27
ENSG00000173548	sorting nexin 33	SNX33	0,015	2,27
ENSG00000197461	platelet-derived growth factor alpha polypeptide	PDGFA	0,018	2,26
ENSG00000132661	NTF2-like export factor 1	NXT1	0,011	2,25
ENSG00000023330	aminolevulinate, delta-, synthase 1	ALAS1	0,018	2,25
ENSG00000077238	interleukin 4 receptor	IL4R	0,007	2,24
ENSG00000172530	BTG3 associated nuclear protein	BANP	0,007	2,24
ENSG00000155926	Src-like-adaptor	SLA	0,043	2,23
ENSG00000117868	extended synaptotagmin-like protein 2	ESYT2	0,004	2,23
ENSG00000130340	sorting nexin 9	SNX9	0,003	2,23
ENSG00000113742	cytoplasmic polyadenylation element binding protein 4	CPEB4	0,013	2,23
ENSG00000157224	claudin 12	CLDN12	0,015	2,22
ENSG00000026751	SLAM family member 7	SLAMF7	0,015	2,21
ENSG00000167487	kelch-like 26 (Drosophila)	KLHL26	0,016	2,21
ENSG00000170425	adenosine A2b receptor	ADORA2B	0,010	2,21
ENSG00000064225	ST3 beta-galactoside alpha-2,3-sialyltransferase 6	ST3GAL6	0,003	2,21
ENSG00000188786	metal-regulatory transcription factor 1	MTF1	0,019	2,21
ENSG00000177150	chromosome 18 open reading frame 19	C18orf19	0,003	2,21
ENSG00000186594	chromosome 17 open reading frame 91	C17orf91	0,017	2,21
ENSG00000136205	tensin 3	TNS3	0,008	2,20

ENSG00000155090	Kruppel-like factor 10	KLF10	0,035	2,20
ENSG00000139637	chromosome 12 open reading frame 10	C12orf10	0,014	2,20
ENSG00000101384	jagged 1	JAG1	0,004	2,20
ENSG00000169504	chloride intracellular channel 4	CLIC4	0,003	2,20
ENSG00000104447	trichorhinophalangeal syndrome I	TRPS1	0,005	2,19
ENSG00000115758	ornithine decarboxylase 1	ODC1	0,004	2,19
ENSG00000265148	na	na	0,011	2,19
ENSG00000225968	na	na	0,044	2,18
ENSG00000173559	oligonucleotide/oligosaccharide-binding fold containing 2A	OBFC2A	0,016	2,18
ENSG00000128016	zinc finger protein 36, C3H type, homolog (mouse)	ZFP36	0,027	2,18
ENSG00000138606	Src homology 2 domain containing F	SHF	0,009	2,18
ENSG00000100139	MICAL-like 1	MICALL1	0,026	2,17
ENSG00000179820	myeloid-associated differentiation marker	MYADM	0,022	2,17
ENSG00000025772	translocase of outer mitochondrial membrane 34	TOMM34	0,028	2,17
ENSG00000142871	cysteine-rich, angiogenic inducer, 61	CYR61	0,023	2,17
ENSG00000037897	methyltransferase like 1	METTL1	0,017	2,16
ENSG00000119866	B-cell CLL/lymphoma 11A (zinc finger protein)	BCL11A	0,047	2,16
ENSG00000160326	solute carrier family 2 (facilitated glucose transporter), member 6	SLC2A6	0,037	2,16
ENSG00000143153	ATPase, Na ⁺ /K ⁺ transporting, beta 1 polypeptide	ATP1B1	0,012	2,16
ENSG00000196843	AT rich interactive domain 5A (MRF1-like)	ARID5A	0,005	2,15
ENSG00000251136	N/A	RP11-37B2.1	0,023	2,14
ENSG00000112941	PAP associated domain containing 7	PAPD7	0,007	2,14
ENSG00000170776	A kinase (PRKA) anchor protein 13	AKAP13	0,012	2,14
ENSG00000120063	guanine nucleotide binding protein (G protein), alpha 13	GNA13	0,006	2,14
ENSG00000162723	SLAM family member 9	SLAMF9	0,018	2,14
ENSG00000102119	emerin	EMD	0,003	2,13
ENSG00000182853	vitelline membrane outer layer 1 homolog (chicken)	VMO1	0,036	2,13
ENSG00000179362	na	na	0,031	2,13
ENSG00000132170	peroxisome proliferator-activated receptor gamma	PPARG	0,021	2,13
ENSG00000162889	mitogen-activated protein kinase-activated protein kinase 2	MAPKAPK2	0,004	2,12
ENSG00000143393	phosphatidylinositol 4-kinase, catalytic, beta	PI4KB	0,002	2,11
ENSG00000104951	interleukin 4 induced 1	IL4I1	0,028	2,11
ENSG00000087008	acyl-CoA oxidase 3, pristanoyl	ACOX3	0,005	2,10

ENSG00000139496	nucleoporin like 1	NUPL1	0,008	2,10
ENSG00000196781	transducin-like enhancer of split 1 (E(sp1) homolog, Drosophila)	TLE1	0,038	2,10
ENSG00000011132	amyloid beta (A4) precursor protein-binding, family A, member 3	APBA3	0,004	2,09
ENSG00000171617	ectodermal-neural cortex 1 (with BTB-like domain)	ENC1	0,043	2,09
ENSG00000183624	chromosome 3 open reading frame 37	C3orf37	0,047	2,08
ENSG00000104885	DOT1-like, histone H3 methyltransferase (<i>S. cerevisiae</i>)	DOT1L	0,009	2,07
ENSG00000078081	lysosomal-associated membrane protein 3	LAMP3	0,021	2,07
ENSG00000206560	ankyrin repeat domain 28	ANKRD28	0,015	2,07
ENSG00000180611	Mab-21 domain containing 2	MB21D2	0,018	2,07
ENSG00000154122	ankylosis, progressive homolog (mouse)	ANKH	0,021	2,06
ENSG00000118971	cyclin D2	CCND2	0,041	2,06
ENSG00000129450	sialic acid binding Ig-like lectin 9	SIGLEC9	0,006	2,05
ENSG00000085117	CD82 molecule	CD82	0,011	2,05
ENSG00000136802	leucine rich repeat containing 8 family, member A	LRRC8A	0,015	2,05
ENSG00000125657	tumor necrosis factor (ligand) superfamily, member 9	TNFSF9	0,046	2,04
ENSG00000136286	myosin IG	MYO1G	0,014	2,04
ENSG00000205189	zinc finger and BTB domain containing 10	ZBTB10	0,041	2,04
ENSG00000246731	N/A	CTD-2514K5.2	0,007	2,03
ENSG00000173334	tribbles homolog 1 (<i>Drosophila</i>)	TRIB1	0,019	2,03
ENSG00000161835	GRP1 (general receptor for phosphoinositides 1)-associated scaffold protein	GRASP	0,011	2,03
ENSG00000008294	sperm associated antigen 9	SPAG9	0,011	2,02
ENSG00000086062	UDP-Gal:betaGlcNAc beta 1,4- galactosyltransferase, polypeptide 1	B4GALT1	0,006	2,02
ENSG00000062582	mitochondrial ribosomal protein S24	MRPS24	0,007	2,01
ENSG00000103569	aquaporin 9	AQP9	0,007	2,01
ENSG00000120217	CD274 molecule	CD274	0,024	2,00
ENSG00000136052	solute carrier family 41, member 2	SLC41A2	0,009	2,00
ENSG00000197798	family with sequence similarity 118, member B	FAM118B	0,003	-2,00
ENSG00000173801	junction plakoglobin	JUP	0,024	-2,00
ENSG00000139687	retinoblastoma 1	RB1	0,010	-2,00
ENSG00000064012	caspase 8, apoptosis-related cysteine peptidase	CASP8	0,027	-2,00
ENSG00000135972	mitochondrial ribosomal protein S9	MRPS9	0,018	-2,00
ENSG00000198824	zinc finger protein 828	ZNF828	0,009	-2,01
ENSG00000167333	tripartite motif containing 68	TRIM68	0,031	-2,01

ENSG0000066135	lysine (K)-specific demethylase 4A	KDM4A	0,014	-2,01
ENSG00000123933	MAX dimerization protein 4	MXD4	0,014	-2,01
ENSG00000152359	POC5 centriolar protein homolog (Chlamydomonas)	POC5	0,036	-2,01
ENSG00000163918	replication factor C (activator 1) 4, 37kDa	RFC4	0,011	-2,01
ENSG00000108055	structural maintenance of chromosomes 3	SMC3	0,021	-2,02
ENSG00000127337	YEATS domain containing 4	YEATS4	0,006	-2,02
ENSG00000084090	StAR-related lipid transfer (START) domain containing 7	STARD7	0,009	-2,02
ENSG00000165406	membrane-associated ring finger (C3HC4) 8	MARCH8	0,011	-2,02
ENSG00000168291	pyruvate dehydrogenase (lipoamide) beta	PDHB	0,007	-2,02
ENSG00000179933	chromosome 14 open reading frame 119	C14orf119	0,013	-2,02
ENSG00000103174	N-acetylglucosamine-1-phosphodiester alpha-N-acetylglucosaminidase	NAGPA	0,014	-2,02
ENSG00000134755	desmocollin 2	DSC2	0,008	-2,03
ENSG00000197050	zinc finger protein 420	ZNF420	0,017	-2,03
ENSG00000138764	cyclin G2	CCNG2	0,033	-2,03
ENSG00000171700	regulator of G-protein signaling 19	RGS19	0,014	-2,04
ENSG00000111276	cyclin-dependent kinase inhibitor 1B (p27, Kip1)	CDKN1B	0,015	-2,04
ENSG00000182319	Tyrosine-protein kinase Sgk223	AC068353.1	0,017	-2,04
ENSG00000170915	progesterone and adiponectin receptor family member VIII	PAQR8	0,012	-2,04
ENSG00000115548	lysine (K)-specific demethylase 3A	KDM3A	0,006	-2,05
ENSG00000187796	caspase recruitment domain family, member 9	CARD9	0,006	-2,05
ENSG00000175643	chromosome 16 open reading frame 75	C16orf75	0,015	-2,05
ENSG00000131401	napsin B aspartic peptidase pseudogene	NAPSB	0,022	-2,05
ENSG00000170846	N/A	AC093323.3	0,018	-2,06
ENSG00000146376	Rho GTPase activating protein 18	ARHGAP18	0,008	-2,06
ENSG00000181192	dehydrogenase E1 and transketolase domain containing 1	DHTKD1	0,004	-2,06
ENSG00000145332	kelch-like 8 (Drosophila)	KLHL8	0,016	-2,06
ENSG00000163535	shugoshin-like 2 (S. pombe)	SGOL2	0,012	-2,06
ENSG00000121486	TRM1 tRNA methyltransferase 1-like	TRMT1L	0,008	-2,06
ENSG00000116497	S100P binding protein	S100BP	0,007	-2,06
ENSG00000169249	zinc finger (CCCH type), RNA-binding motif and serine/arginine rich 2	ZRSR2	0,039	-2,06
ENSG00000144228	speckle-type POZ protein-like	SPOPL	0,006	-2,07
ENSG00000147382	family with sequence similarity 58, member A	FAM58A	0,019	-2,07
ENSG00000170836	protein phosphatase, Mg ²⁺ /Mn ²⁺ dependent, 1D	PPM1D	0,012	-2,07

ENSG00000150048	C-type lectin domain family 1, member A	CLEC1A	0,023	-2,07
ENSG00000168918	inositol polyphosphate-5-phosphatase, 145kDa	INPP5D	0,024	-2,07
ENSG00000166855	ClpX caseinolytic peptidase X homolog (E. coli)	CLPX	0,008	-2,07
ENSG00000138496	poly (ADP-ribose) polymerase family, member 9	PARP9	0,009	-2,07
ENSG00000014123	KIAA0776	KIAA0776	0,011	-2,07
ENSG00000130021	haloacid dehalogenase-like hydrolase domain containing 1	HDHD1	0,027	-2,08
ENSG00000106799	transforming growth factor, beta receptor 1	TGFBR1	0,003	-2,08
ENSG00000064102	chromosome 12 open reading frame 11	C12orf11	0,008	-2,08
ENSG00000105383	CD33 molecule	CD33	0,032	-2,08
ENSG00000107738	chromosome 10 open reading frame 54	C10orf54	0,014	-2,08
ENSG00000006007	glycerophosphodiester phosphodiesterase 1	GDE1	0,011	-2,08
ENSG00000125843	chromosome 20 open reading frame 29	C20orf29	0,012	-2,08
ENSG00000196290	NIF3 NGG1 interacting factor 3-like 1 (S. pombe)	NIF3L1	0,025	-2,08
ENSG00000189190	zinc finger protein 600	ZNF600	0,013	-2,09
ENSG00000084092	chromosome 4 open reading frame 14	C4orf14	0,009	-2,09
ENSG00000175073	valosin containing protein (p97)/p47 complex interacting protein 1	VCPIP1	0,007	-2,09
ENSG00000136193	secernin 1	SCRN1	0,022	-2,09
ENSG00000063438	aryl-hydrocarbon receptor repressor	AHRR	0,019	-2,09
ENSG00000090989	exocyst complex component 1	EXOC1	0,008	-2,10
ENSG00000170085	chromosome 5 open reading frame 25	C5orf25	0,009	-2,10
ENSG00000198331	hydroletharus syndrome 1	HYLS1	0,018	-2,10
ENSG00000240024	N/A	RP11-393B14.1	0,021	-2,11
ENSG00000121749	TBC1 domain family, member 15	TBC1D15	0,008	-2,11
ENSG00000075188	nucleoporin 37kDa	NUP37	0,014	-2,11
ENSG00000108389	myotubularin related protein 4	MTMR4	0,012	-2,11
ENSG00000152240	HAUS augmin-like complex, subunit 1	HAUS1	0,040	-2,12
ENSG00000152642	glycerol-3-phosphate dehydrogenase 1-like	GPD1L	0,012	-2,12
ENSG00000169967	mitogen-activated protein kinase kinase kinase 2	MAP3K2	0,010	-2,12
ENSG00000121858	tumor necrosis factor (ligand) superfamily, member 10	TNFSF10	0,040	-2,13
ENSG00000121152	non-SMC condensin I complex, subunit H	NCAPH	0,017	-2,13
ENSG00000023287	RB1-inducible coiled-coil 1	RB1CC1	0,013	-2,13
ENSG00000151500	thymocyte nuclear protein 1	THYN1	0,030	-2,13
ENSG00000251442	N/A	RP11-792D21.2	0,018	-2,13

ENSG00000109689	stromal interaction molecule 2	STIM2	0,014	-2,13
ENSG00000121897	lipoic acid synthetase	LIAS	0,029	-2,13
ENSG00000080200	beta-gamma crystallin domain containing 3	CRYBG3	0,015	-2,14
ENSG00000048392	ribonucleotide reductase M2 B (TP53 inducible)	RRM2B	0,005	-2,14
ENSG00000008869	HEAT repeat containing 5B	HEATR5B	0,006	-2,14
ENSG00000260539	na	na	0,018	-2,14
ENSG00000123405	nuclear factor (erythroid-derived 2), 45kDa	NFE2	0,016	-2,15
ENSG00000170293	CKLF-like MARVEL transmembrane domain containing 8	CMTM8	0,012	-2,16
ENSG00000238113	N/A	RP11-262H14.1	0,011	-2,16
ENSG00000158109	tumor protein p63 regulated 1-like	TPRG1L	0,020	-2,17
ENSG00000110583	N(alpha)-acetyltransferase 40, NatD catalytic subunit, homolog (<i>S. cerevisiae</i>)	NAA40	0,007	-2,18
ENSG00000168297	PX domain containing serine/threonine kinase	PXK	0,010	-2,18
ENSG00000163946	chromosome 3 open reading frame 63	C3orf63	0,011	-2,18
ENSG00000112312	geminin, DNA replication inhibitor	GMNN	0,016	-2,18
ENSG00000170558	cadherin 2, type 1, N-cadherin (neuronal)	CDH2	0,005	-2,19
ENSG00000013503	polymerase (RNA) III (DNA directed) polypeptide B	POLR3B	0,018	-2,19
ENSG00000144567	family with sequence similarity 134, member A	FAM134A	0,009	-2,19
ENSG00000147854	ubiquitin-like with PHD and ring finger domains 2	UHRF2	0,035	-2,20
ENSG00000257093	protein LCHN	AC004918.4	0,027	-2,20
ENSG00000125871	chromosome 20 open reading frame 72	C20orf72	0,019	-2,21
ENSG00000123609	N-myc (and STAT) interactor	NMI	0,009	-2,21
ENSG00000034533	asteroid homolog 1 (<i>Drosophila</i>)	ASTE1	0,012	-2,21
ENSG00000205730	inositol 1,4,5-trisphosphate receptor interacting protein-like 2	ITPRIPL2	0,006	-2,21
ENSG00000166938	DIS3 mitotic control homolog (<i>S. cerevisiae</i>)-like	DIS3L	0,013	-2,22
ENSG00000115718	protein C (inactivator of coagulation factors Va and VIIIa)	PROC	0,031	-2,22
ENSG00000164221	coiled-coil domain containing 112	CCDC112	0,018	-2,23
ENSG00000187147	ring finger protein 220	RNF220	0,016	-2,23
ENSG00000133574	GTPase, IMAP family member 4	GIMAP4	0,048	-2,23
ENSG00000138604	glucuronic acid epimerase	GLCE	0,004	-2,23
ENSG00000140450	arrestin domain containing 4	ARRDC4	0,010	-2,23
ENSG00000135828	ribonuclease L (2',5'-oligoadenylate synthetase-dependent)	RNASEL	0,013	-2,23
ENSG00000185862	ecotropic viral integration site 2B	EVI2B	0,016	-2,24
ENSG00000151461	UPF2 regulator of nonsense transcripts homolog (yeast)	UPF2	0,012	-2,24

ENSG00000144635	dynein, cytoplasmic 1, light intermediate chain 1	DYNC1L1	0,007	-2,24
ENSG00000112079	serine/threonine kinase 38	STK38	0,005	-2,24
ENSG00000148835	TAF5 RNA polymerase II, TATA box binding protein (TBP)-associated factor, 100kDa	TAF5	0,010	-2,24
ENSG00000121067	speckle-type POZ protein	SPOP	0,009	-2,25
ENSG00000068724	tetratricopeptide repeat domain 7A	TTC7A	0,002	-2,25
ENSG00000107897	acyl-CoA binding domain containing 5	ACBD5	0,003	-2,26
ENSG00000136869	toll-like receptor 4	TLR4	0,015	-2,26
ENSG00000114541	FERM domain containing 4B	FRMD4B	0,008	-2,26
ENSG00000171940	zinc finger protein 217	ZNF217	0,018	-2,26
ENSG00000082074	FYN binding protein	FYB	0,015	-2,27
ENSG00000164331	ankyrin repeat, family A (RFXANK-like), 2	ANKRA2	0,014	-2,27
ENSG00000125779	pantothenate kinase 2	PANK2	0,006	-2,27
ENSG00000163513	transforming growth factor, beta receptor II (70/80kDa)	TGFB2	0,005	-2,28
ENSG00000165983	phosphotriesterase related	PTER	0,007	-2,28
ENSG00000165025	spleen tyrosine kinase	SYK	0,010	-2,28
ENSG00000099337	potassium channel, subfamily K, member 6	KCNK6	0,026	-2,29
ENSG00000143337	torsin A interacting protein 1	TOR1AIP1	0,010	-2,29
ENSG00000156136	deoxycytidine kinase	DCK	0,009	-2,29
ENSG00000181004	Bardet-Biedl syndrome 12	BBS12	0,020	-2,30
ENSG00000248791	N/A	CTD-2165H16.3	0,007	-2,30
ENSG00000148090	AU RNA binding protein/enoyl-CoA hydratase	AUH	0,005	-2,30
ENSG00000174197	MAX gene associated	MGA	0,009	-2,30
ENSG00000113851	cereblon	CRBN	0,005	-2,30
ENSG00000111727	host cell factor C2	HCFC2	0,007	-2,30
ENSG00000197321	supervillin	SVIL	0,008	-2,31
ENSG00000169926	na	na	0,006	-2,31
ENSG00000088451	TDP-glucose 4,6-dehydratase	TGDS	0,011	-2,32
ENSG00000157107	FCH domain only 2	FCHO2	0,004	-2,32
ENSG00000115271	grancalcin, EF-hand calcium binding protein	GCA	0,003	-2,32
ENSG00000126775	ATG14 autophagy related 14 homolog (<i>S. cerevisiae</i>)	ATG14	0,006	-2,32
ENSG00000241732	N/A	RP11-38P22.2	0,035	-2,32
ENSG00000153140	centrin, EF-hand protein, 3	CETN3	0,007	-2,32
ENSG00000068024	histone deacetylase 4	HDAC4	0,030	-2,33

ENSG00000096654	zinc finger protein 184	ZNF184	0,006	-2,33
ENSG00000172086	lysine-rich coiled-coil 1	KRCC1	0,005	-2,33
ENSG00000117226	guanylate binding protein 3	GBP3	0,007	-2,34
ENSG00000124659	tubulin folding cofactor C	TBCC	0,014	-2,34
ENSG00000139354	growth arrest-specific 2 like 3	GAS2L3	0,026	-2,35
ENSG00000164414	solute carrier family 35 (CMP-sialic acid transporter), member A1	SLC35A1	0,010	-2,36
ENSG00000154642	chromosome 21 open reading frame 91	C21orf91	0,029	-2,36
ENSG00000170854	MYC induced nuclear antigen	MINA	0,025	-2,36
ENSG00000152457	DNA cross-link repair 1C	DCLRE1C	0,007	-2,37
ENSG00000170365	SMAD family member 1	SMAD1	0,007	-2,37
ENSG00000165516	kelch domain containing 2	KLHDC2	0,014	-2,37
ENSG00000134899	excision repair cross-complementing rodent repair deficiency, complementation group 5	ERCC5	0,005	-2,37
ENSG00000169019	COMM domain containing 8	COMMD8	0,008	-2,38
ENSG00000079950	syntaxin 7	STX7	0,008	-2,38
ENSG00000162073	progesterone and adipoQ receptor family member IV	PAQR4	0,003	-2,38
ENSG00000136044	adaptor protein, phosphotyrosine interaction, PH domain and leucine zipper containing 2	APPL2	0,017	-2,39
ENSG00000165533	tetratricopeptide repeat domain 8	TTC8	0,027	-2,39
ENSG00000204264	proteasome (prosome, macropain) subunit, beta type, 8 (large multifunctional peptidase 7)	PSMB8	0,011	-2,39
ENSG00000205269	transmembrane protein 170B	TMEM170B	0,012	-2,39
ENSG00000023516	A kinase (PRKA) anchor protein 11	AKAP11	0,009	-2,39
ENSG00000080819	coproporphyrinogen oxidase	CPOX	0,009	-2,40
ENSG00000137414	family with sequence similarity 8, member A1	FAM8A1	0,008	-2,40
ENSG00000138794	caspase 6, apoptosis-related cysteine peptidase	CASP6	0,014	-2,41
ENSG00000180917	FtsJ methyltransferase domain containing 1	FTSJD1	0,028	-2,42
ENSG00000146476	chromosome 6 open reading frame 211	C6orf211	0,007	-2,42
ENSG00000112234	F-box and leucine-rich repeat protein 4	FBXL4	0,002	-2,43
ENSG00000239213	N/A	RP11-85F14.5	0,013	-2,43
ENSG00000169220	regulator of G-protein signaling 14	RGS14	0,011	-2,43
ENSG00000198736	selenoprotein X, 1	SEPX1	0,014	-2,43
ENSG00000174749	chromosome 4 open reading frame 32	C4orf32	0,020	-2,44
ENSG00000171681	activating transcription factor 7 interacting protein	ATF7IP	0,010	-2,45
ENSG00000174946	G protein-coupled receptor 171	GPR171	0,032	-2,46
ENSG00000005175	RNA polymerase II associated protein 3	RPAP3	0,009	-2,46

ENSG00000110876	selectin P ligand	SELPLG	0,008	-2,46
ENSG00000213689	three prime repair exonuclease 1	TREX1	0,008	-2,47
ENSG00000164244	proline-rich coiled-coil 1	PRRC1	0,007	-2,47
ENSG00000132357	caspase recruitment domain family, member 6	CARD6	0,019	-2,47
ENSG00000162378	zyg-11 homolog B (C. elegans)	ZYG11B	0,005	-2,47
ENSG00000167912	N/A	RP11-25K19.1	0,012	-2,47
ENSG00000169403	platelet-activating factor receptor	PTAFR	0,027	-2,48
ENSG00000143457	golgi phosphoprotein 3-like	GOLPH3L	0,015	-2,49
ENSG00000215256	Full-length cDNA clone CS0DF029YN24 of Fetal brain of Homo sapiens (human)	AL136419.1	0,006	-2,49
ENSG00000125703	ATG4 autophagy related 4 homolog C (S. cerevisiae)	ATG4C	0,018	-2,49
ENSG00000127720	chromosome 12 open reading frame 26	C12orf26	0,007	-2,50
ENSG00000145569	family with sequence similarity 105, member A	FAM105A	0,007	-2,51
ENSG00000170385	solute carrier family 30 (zinc transporter), member 1	SLC30A1	0,018	-2,51
ENSG00000180573	histone cluster 1, H2ac	HIST1H2AC	0,026	-2,51
ENSG00000096968	Janus kinase 2	JAK2	0,003	-2,53
ENSG00000198382	UV radiation resistance associated gene	UVRAG	0,006	-2,53
ENSG00000164649	cell division cycle associated 7-like	CDCA7L	0,013	-2,53
ENSG00000096717	sirtuin 1	SIRT1	0,013	-2,54
ENSG00000144681	SH3 and cysteine rich domain	STAC	0,005	-2,54
ENSG00000156853	zinc finger protein 689	ZNF689	0,008	-2,54
ENSG00000146083	ring finger protein 44	RNF44	0,007	-2,54
ENSG00000174718	chromosome 12 open reading frame 35	C12orf35	0,018	-2,55
ENSG00000184992	BRI3 binding protein	BRI3BP	0,015	-2,56
ENSG00000117616	chromosome 1 open reading frame 63	C1orf63	0,012	-2,56
ENSG00000107719	KIAA1274	KIAA1274	0,047	-2,56
ENSG00000080546	sestrin 1	SESN1	0,014	-2,57
ENSG00000174738	nuclear receptor subfamily 1, group D, member 2	NR1D2	0,022	-2,57
ENSG00000120162	MOB1, Mps One Binder kinase activator-like 2B (yeast)	MOBKL2B	0,016	-2,57
ENSG00000196323	zinc finger and BTB domain containing 44	ZBTB44	0,007	-2,58
ENSG00000055917	pumilio homolog 2 (Drosophila)	PUM2	0,007	-2,59
ENSG00000145246	ATPase, class V, type 10D	ATP10D	0,013	-2,60
ENSG00000164117	F-box protein 8	FBXO8	0,009	-2,61
ENSG00000038274	methionine adenosyltransferase II, beta	MAT2B	0,005	-2,61

ENSG00000072121	zinc finger, FYVE domain containing 26	ZFYVE26	0,006	-2,61
ENSG00000160179	na	na	0,003	-2,61
ENSG00000001084	glutamate-cysteine ligase, catalytic subunit	GCLC	0,008	-2,61
ENSG00000189144	zinc finger protein 573	ZNF573	0,011	-2,62
ENSG00000266753	na	na	0,006	-2,63
ENSG00000136643	ribosomal protein S6 kinase, 52kDa, polypeptide 1	RPS6KC1	0,049	-2,63
ENSG00000118482	PHD finger protein 3	PHF3	0,005	-2,63
ENSG00000119950	MAX interactor 1	MXI1	0,003	-2,63
ENSG00000106780	multiple EGF-like-domains 9	MEGF9	0,007	-2,63
ENSG00000134294	solute carrier family 38, member 2	SLC38A2	0,010	-2,64
ENSG00000181481	ring finger protein 135	RNF135	0,015	-2,64
ENSG00000138433	corepressor interacting with RBPJ, 1	CIR1	0,010	-2,65
ENSG00000185950	insulin receptor substrate 2	IRS2	0,015	-2,66
ENSG00000112773	family with sequence similarity 46, member A	FAM46A	0,003	-2,66
ENSG00000261799	na	na	0,024	-2,66
ENSG00000155508	CCR4-NOT transcription complex, subunit 8	CNOT8	0,004	-2,66
ENSG00000188906	leucine-rich repeat kinase 2	LRRK2	0,033	-2,67
ENSG00000125249	RAP2A, member of RAS oncogene family	RAP2A	0,004	-2,67
ENSG00000163154	tumor necrosis factor, alpha-induced protein 8-like 2	TNFAIP8L2	0,006	-2,68
ENSG00000124496	transcriptional regulating factor 1	TRERF1	0,007	-2,68
ENSG00000080503	SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily a, member 1	SMARCA2	0,003	-2,68
ENSG00000111231	GPN-loop GTPase 3	GPN3	0,016	-2,70
ENSG00000178966	RMI1, RecQ mediated genome instability 1, homolog (<i>S. cerevisiae</i>)	RMI1	0,004	-2,70
ENSG00000172123	schlafen family member 12	SLFN12	0,026	-2,71
ENSG00000100354	trinucleotide repeat containing 6B	TNRC6B	0,007	-2,72
ENSG00000109861	cathepsin C	CTSC	0,002	-2,72
ENSG00000021574	spastin	SPAST	0,007	-2,72
ENSG00000158092	NCK adaptor protein 1	NCK1	0,010	-2,72
ENSG00000205302	sorting nexin 2	SNX2	0,002	-2,72
ENSG00000144909	oxysterol binding protein-like 11	OSBPL11	0,013	-2,73
ENSG00000165490	chromosome 11 open reading frame 82	C11orf82	0,007	-2,73
ENSG00000007944	myosin regulatory light chain interacting protein	MYLIP	0,015	-2,74
ENSG00000150593	programmed cell death 4 (neoplastic transformation inhibitor)	PDCD4	0,008	-2,74

ENSG00000164938	tumor protein p53 inducible nuclear protein 1	TP53INP1	0,013	-2,75
ENSG00000163947	Rho guanine nucleotide exchange factor (GEF) 3	ARHGEF3	0,041	-2,76
ENSG00000232941	N/A	AC090186.1	0,008	-2,77
ENSG00000187626	zinc finger with KRAB and SCAN domains 4	ZKSCAN4	0,011	-2,77
ENSG00000180871	chemokine (C-X-C motif) receptor 2	CXCR2	0,022	-2,78
ENSG00000145241	centromere protein C 1	CENPC1	0,023	-2,79
ENSG00000135999	enhancer of polycomb homolog 2 (Drosophila)	EPC2	0,008	-2,79
ENSG00000132405	TBC1 domain family, member 14	TBC1D14	0,030	-2,80
ENSG00000204103	v-maf musculoaponeurotic fibrosarcoma oncogene homolog B (avian)	MAFB	0,008	-2,80
ENSG00000172716	schlafen family member 11	SLFN11	0,011	-2,84
ENSG00000203880	protein-L-isoaspartate (D-aspartate) O-methyltransferase domain containing 2	PCMTD2	0,007	-2,85
ENSG00000121281	adenylate cyclase 7	ADCY7	0,022	-2,87
ENSG00000221869	CCAAT/enhancer binding protein (C/EBP), delta	CEBPD	0,047	-2,87
ENSG00000168061	SAC3 domain containing 1	SAC3D1	0,009	-2,89
ENSG00000011258	mbt domain containing 1	MBTD1	0,006	-2,90
ENSG00000186188	omega-3 fatty acid receptor 1	O3FAR1	0,007	-2,90
ENSG00000166387	PTPRF interacting protein, binding protein 2 (liprin beta 2)	PPFIBP2	0,010	-2,92
ENSG00000114737	cytokine inducible SH2-containing protein	CISH	0,007	-2,93
ENSG00000167716	WD repeat domain 81	WDR81	0,022	-2,95
ENSG00000117289	thioredoxin interacting protein	TXNIP	0,025	-2,96
ENSG00000197442	mitogen-activated protein kinase kinase kinase 5	MAP3K5	0,006	-2,97
ENSG00000106100	nucleotide-binding oligomerization domain containing 1	NOD1	0,008	-3,00
ENSG00000167528	zinc finger protein 641	ZNF641	0,007	-3,06
ENSG00000047346	KIAA1370	KIAA1370	0,006	-3,06
ENSG00000177409	sterile alpha motif domain containing 9-like	SAMD9L	0,018	-3,07
ENSG00000134326	cytidine monophosphate (UMP-CMP) kinase 2, mitochondrial	CMPK2	0,023	-3,10
ENSG00000138463	disrupted in renal carcinoma 2	DIRC2	0,007	-3,14
ENSG00000205413	sterile alpha motif domain containing 9	SAMD9	0,014	-3,14
ENSG00000133111	regulatory factor X-associated protein	RFXAP	0,016	-3,15
ENSG00000198829	succinate receptor 1	SUCNR1	0,007	-3,15
ENSG00000027697	interferon gamma receptor 1	IFNGR1	0,013	-3,16
ENSG00000101916	toll-like receptor 8	TLR8	0,012	-3,18
ENSG00000198740	zinc finger protein 652	ZNF652	0,006	-3,28

ENSG00000165272	aquaporin 3 (Gill blood group)	AQP3	0,004	-3,31
ENSG00000104205	serum/glucocorticoid regulated kinase family, member 3	SGK3	0,009	-3,37
ENSG00000075643	molybdenum cofactor sulfurase	MOCOS	0,006	-3,38
ENSG00000182511	feline sarcoma oncogene	FES	0,003	-3,40
ENSG00000117643	mannosidase, alpha, class 1C, member 1	MAN1C1	0,003	-3,43
ENSG00000196227	chromosome 20 open reading frame 177	C20orf177	0,008	-3,47
ENSG00000175155	yippee-like 2 (Drosophila)	YPEL2	0,007	-3,48
ENSG00000136161	regulator of chromosome condensation (RCC1) and BTB (POZ) domain containing protein 2	RCBTB2	0,008	-3,48
ENSG00000130816	DNA (cytosine-5-)-methyltransferase 1	DNMT1	0,005	-3,50
ENSG00000138172	calcium homeostasis modulator 2	CALHM2	0,009	-3,53
ENSG00000178199	zinc finger CCCH-type containing 12D	ZC3H12D	0,004	-3,57
ENSG00000095015	mitogen-activated protein kinase kinase kinase 1	MAP3K1	0,003	-3,62
ENSG00000071073	mannosyl (alpha-1,3-)-glycoprotein beta-1,4-N-acetylglucosaminyltransferase, isozyme A	MGAT4A	0,004	-3,62
ENSG00000189227	chromosome 15 open reading frame 61	C15orf61	0,017	-3,68
ENSG00000129518	E2F-associated phosphoprotein	EAPP	0,006	-3,74
ENSG00000163606	CD200 receptor 1	CD200R1	0,019	-3,79
ENSG00000178977	non-protein coding RNA 324	NCRNA00324	0,011	-3,84
ENSG00000148158	sorting nexin family member 30	SNX30	0,013	-3,89
ENSG00000163563	myeloid cell nuclear differentiation antigen	MNDA	0,017	-3,94
ENSG00000164104	high mobility group box 2	HMGB2	0,003	-3,96
ENSG00000140416	tropomyosin 1 (alpha)	TPM1	0,009	-4,03
ENSG00000114796	kelch-like 24 (Drosophila)	KLHL24	0,007	-4,09
ENSG00000181274	frequently rearranged in advanced T-cell lymphomas 2	FRAT2	0,012	-4,15
ENSG00000105851	phosphoinositide-3-kinase, catalytic, gamma polypeptide	PIK3CG	0,010	-4,16
ENSG00000077063	cortactin binding protein 2	CTTNBP2	0,011	-4,27
ENSG00000186767	spindlin family, member 4	SPIN4	0,004	-4,33
ENSG00000187210	glucosaminyl (N-acetyl) transferase 1, core 2	GCNT1	0,044	-4,34
ENSG00000101236	ring finger protein 24	RNF24	0,006	-4,36
ENSG00000176046	nuclear protein, transcriptional regulator, 1	NUPR1	0,022	-4,36
ENSG00000178573	v-maf musculoaponeurotic fibrosarcoma oncogene homolog (avian)	MAF	0,019	-4,44
ENSG00000164442	Cbp/p300-interacting transactivator, with Glu/Asp-rich carboxy-terminal domain, 2	CITED2	0,013	-4,47
ENSG00000132646	proliferating cell nuclear antigen	PCNA	0,023	-4,57
ENSG00000152804	hematopoietically expressed homeobox	HHEX	0,010	-4,58

ENSG00000095585	B-cell linker	BLNK	0,023	-4,58
ENSG00000171631	pyrimidinergic receptor P2Y, G-protein coupled, 6	P2RY6	0,008	-4,67
ENSG00000145416	membrane-associated ring finger (C3HC4) 1	MARCH1	0,011	-4,74
ENSG00000110852	C-type lectin domain family 2, member B	CLEC2B	0,003	-4,89
ENSG00000164463	chromosome 5 open reading frame 41	C5orf41	0,005	-4,92
ENSG00000118308	lymphoid-restricted membrane protein	LRMP	0,014	-4,96
ENSG00000121933	adenosine A3 receptor	ADORA3	0,010	-5,11
ENSG00000129534	MIS18 binding protein 1	MIS18BP1	0,010	-5,19
ENSG00000167851	CD300a molecule	CD300A	0,003	-5,29
ENSG00000163565	interferon, gamma-inducible protein 16	IFI16	0,007	-5,53
ENSG00000136826	Kruppel-like factor 4 (gut)	KLF4	0,004	-5,93
ENSG00000170448	nuclear transcription factor, X-box binding-like 1	NFXL1	0,013	-6,63
ENSG00000174944	purinergic receptor P2Y, G-protein coupled, 14	P2RY14	0,003	-6,69
ENSG00000117318	inhibitor of DNA binding 3, dominant negative helix-loop-helix protein	ID3	0,038	-6,76
ENSG00000106560	GTPase, IMAP family member 2	GIMAP2	0,007	-7,01
ENSG00000139679	lysophosphatidic acid receptor 6	LPAR6	0,014	-7,29
ENSG00000180340	frizzled homolog 2 (Drosophila)	FZD2	0,009	-8,89
ENSG00000169087	HSPB (heat shock 27kDa) associated protein 1	HSPBAP1	0,012	-9,66
ENSG00000150681	regulator of G-protein signaling 18	RGS18	0,007	-9,76
ENSG00000164379	forkhead box Q1	FOXQ1	0,004	-23,52

Supplementary Table 1B. Genes regulated by OSCAR

ColII+anti-OSCAR mAb vs ColII+isotype mAb at 4 hours				
name	gene title	gene symbol	q-value	Fold change
ENSG00000115009	chemokine (C-C motif) ligand 20	CCL20	0,018	-102,55
ENSG00000115008	interleukin 1, alpha	IL1A	0,028	-36,58
ENSG00000073756	prostaglandin-endoperoxide synthase 2 (prostaglandin G/H synthase and cyclooxygenase)	PTGS2	0,026	-35,61
ENSG00000234883	MIR155 host gene (non-protein coding)	MIR155HG	0,012	-31,22
ENSG00000232810	tumor necrosis factor	TNF	0,022	-27,14
ENSG00000164949	GTP binding protein overexpressed in skeletal muscle	GEM	0,019	-26,49
ENSG00000125538	interleukin 1, beta	IL1B	0,049	-21,71
ENSG00000153234	nuclear receptor subfamily 4, group A, member 2	NR4A2	0,048	-20,68
ENSG00000163734	chemokine (C-X-C motif) ligand 3	CXCL3	0,028	-19,65
ENSG00000123689	G0/G1switch 2	G0S2	0,027	-18,43
ENSG00000178726	thrombomodulin	THBD	0,032	-18,39
ENSG00000078401	endothelin 1	EDN1	0,017	-17,90
ENSG00000081041	chemokine (C-X-C motif) ligand 2	CXCL2	0,036	-17,15
ENSG00000163739	chemokine (C-X-C motif) ligand 1 (melanoma growth stimulating activity, alpha)	CXCL1	0,031	-16,79
ENSG00000158050	dual specificity phosphatase 2	DUSP2	0,032	-15,65
ENSG00000108691	chemokine (C-C motif) ligand 2	CCL2	0,039	-15,36
ENSG00000120875	dual specificity phosphatase 4	DUSP4	0,017	-15,21
ENSG00000099985	oncostatin M	OSM	0,023	-15,19
ENSG00000113070	heparin-binding EGF-like growth factor	HBEGF	0,019	-14,78
ENSG00000117525	coagulation factor III (thromboplastin, tissue factor)	F3	0,048	-14,66
ENSG00000101187	solute carrier organic anion transporter family, member 4A1	SLCO4A1	0,012	-13,48
ENSG00000140379	BCL2-related protein A1	BCL2A1	0,019	-13,16
ENSG00000232956	chromosome 7 open reading frame 40	C7orf40	0,022	-12,98
ENSG00000164181	ELOVL family member 7, elongation of long chain fatty acids (yeast)	ELOVL7	0,015	-12,92
ENSG00000013619	mastermind-like domain containing 1	MAMLD1	0,018	-12,11
ENSG00000041982	tenascin C	TNC	0,022	-11,82
ENSG00000153162	bone morphogenetic protein 6	BMP6	0,018	-11,47
ENSG00000157557	v-ets erythroblastosis virus E26 oncogene homolog 2 (avian)	ETS2	0,023	-10,25
ENSG00000144802	nuclear factor of kappa light polypeptide gene enhancer in B-cells inhibitor, zeta	NFKBIZ	0,028	-9,58

ENSG00000112394	solute carrier family 16, member 10 (aromatic amino acid transporter)	SLC16A10	0,025	-9,29
ENSG00000108702	chemokine (C-C motif) ligand 1	CCL1	0,021	-9,11
ENSG00000253522	microRNA 146a (MIR146A), microRNA	CTC-231O11.1	0,013	-8,77
ENSG00000149289	zinc finger CCCH-type containing 12C	ZC3H12C	0,046	-8,75
ENSG00000056558	TNF receptor-associated factor 1	TRAF1	0,031	-8,55
ENSG00000186827	tumor necrosis factor receptor superfamily, member 4	TNFRSF4	0,037	-8,52
ENSG00000170542	serpin peptidase inhibitor, clade B (ovalbumin), member 9	SERPINB9	0,023	-8,10
ENSG00000138135	cholesterol 25-hydroxylase	CH25H	0,026	-7,90
ENSG00000152413	homer homolog 1 (Drosophila)	HOMER1	0,028	-7,83
ENSG00000116285	ERBB receptor feedback inhibitor 1	ERRFI1	0,019	-7,76
ENSG00000173846	polo-like kinase 3	PLK3	0,019	-7,72
ENSG00000110047	EH-domain containing 1	EHD1	0,024	-7,68
ENSG00000125735	tumor necrosis factor (ligand) superfamily, member 14	TNFSF14	0,018	-7,64
ENSG00000121594	CD80 molecule	CD80	0,024	-7,62
ENSG00000180758	G protein-coupled receptor 157	GPR157	0,032	-7,58
ENSG00000167604	nuclear factor of kappa light polypeptide gene enhancer in B-cells inhibitor, delta	NFKBID	0,015	-7,52
ENSG00000099860	growth arrest and DNA-damage-inducible, beta	GADD45B	0,025	-7,41
ENSG00000124145	syndecan 4	SDC4	0,030	-7,40
ENSG00000103257	solute carrier family 7 (cationic amino acid transporter, y+ system), member 5	SLC7A5	0,014	-7,30
ENSG00000114473	IQ motif containing G	IQCG	0,018	-7,10
ENSG00000136158	sprouty homolog 2 (Drosophila)	SPRY2	0,027	-7,00
ENSG00000116717	growth arrest and DNA-damage-inducible, alpha	GADD45A	0,049	-6,78
ENSG00000132510	lysine (K)-specific demethylase 6B	KDM6B	0,031	-6,74
ENSG00000136689	interleukin 1 receptor antagonist	IL1RN	0,022	-6,72
ENSG00000090339	intercellular adhesion molecule 1	ICAM1	0,022	-6,71
ENSG00000135476	extra spindle pole bodies homolog 1 (<i>S. cerevisiae</i>)	ESPL1	0,048	-6,61
ENSG00000139289	pleckstrin homology-like domain, family A, member 1	PHLDA1	0,022	-6,55
ENSG00000168685	interleukin 7 receptor	IL7R	0,042	-6,52
ENSG00000167772	angiopoietin-like 4	ANGPTL4	0,035	-6,32
ENSG00000138166	dual specificity phosphatase 5	DUSP5	0,019	-6,13
ENSG00000249992	transmembrane protein 158 (gene/pseudogene)	TMEM158	0,026	-6,09
ENSG00000118503	tumor necrosis factor, alpha-induced protein 3	TNFAIP3	0,031	-6,06
ENSG00000139318	dual specificity phosphatase 6	DUSP6	0,026	-6,01

ENSG00000184371	colony stimulating factor 1 (macrophage)	CSF1	0,010	-5,95
ENSG00000112096	superoxide dismutase 2, mitochondrial	SOD2	0,025	-5,85
ENSG00000186665	chromosome 17 open reading frame 58	C17orf58	0,016	-5,68
ENSG00000131016	A kinase (PRKA) anchor protein 12	AKAP12	0,017	-5,62
ENSG00000166881	transmembrane protein 194A	TMEM194A	0,023	-5,60
ENSG00000185022	v-maf musculoaponeurotic fibrosarcoma oncogene homolog F (avian)	MAFF	0,042	-5,58
ENSG00000154640	BTG family, member 3	BTG3	0,031	-5,39
ENSG00000163347	claudin 1	CLDN1	0,023	-5,39
ENSG00000117090	signaling lymphocytic activation molecule family member 1	SLAMF1	0,027	-5,35
ENSG00000108179	peptidylprolyl isomerase F	PPIF	0,026	-5,31
ENSG00000134070	interleukin-1 receptor-associated kinase 2	IRAK2	0,028	-5,21
ENSG00000179294	chromosome 17 open reading frame 96	C17orf96	0,037	-5,21
ENSG00000034152	mitogen-activated protein kinase kinase 3	MAP2K3	0,020	-5,20
ENSG00000010810	FYN oncogene related to SRC, FGR, YES	FYN	0,030	-5,15
ENSG00000167695	family with sequence similarity 57, member A	FAM57A	0,026	-5,12
ENSG00000065809	family with sequence similarity 107, member B	FAM107B	0,021	-5,10
ENSG00000198355	pim-3 oncogene	PIM3	0,031	-5,05
ENSG00000121797	chemokine (C-C motif) receptor-like 2	CCRL2	0,025	-5,03
ENSG00000164211	StAR-related lipid transfer (START) domain containing 4	STARD4	0,034	-5,03
ENSG00000138378	signal transducer and activator of transcription 4	STAT4	0,025	-4,98
ENSG00000162924	v-rel reticuloendotheliosis viral oncogene homolog (avian)	REL	0,034	-4,96
ENSG00000154127	ubiquitin associated and SH3 domain containing B	UBASH3B	0,019	-4,91
ENSG00000145777	thymic stromal lymphopoietin	TSLP	0,042	-4,91
ENSG00000137193	pim-1 oncogene	PIM1	0,039	-4,89
ENSG00000162645	guanylate binding protein 2, interferon-inducible	GBP2	0,018	-4,83
ENSG00000186891	tumor necrosis factor receptor superfamily, member 18	TNFRSF18	0,018	-4,82
ENSG00000183696	uridine phosphorylase 1	UPP1	0,021	-4,79
ENSG00000198369	sprouty-related, EVH1 domain containing 2	SPRED2	0,025	-4,67
ENSG00000102755	fms-related tyrosine kinase 1 (vascular endothelial growth factor/vascular permeability factor)	FLT1	0,013	-4,57
ENSG00000101017	CD40 molecule, TNF receptor superfamily member 5	CD40	0,026	-4,55
ENSG00000137267	tubulin, beta 2A	TUBB2A	0,021	-4,53
ENSG00000011422	plasminogen activator, urokinase receptor	PLAUR	0,032	-4,52
ENSG00000172175	mucosa associated lymphoid tissue lymphoma translocation gene 1	MALT1	0,017	-4,46

ENSG00000112715	vascular endothelial growth factor A	VEGFA	0,031	-4,44
ENSG00000007264	megakaryocyte-associated tyrosine kinase	MATK	0,036	-4,41
ENSG00000140406	mesoderm development candidate 1	MESDC1	0,047	-4,40
ENSG00000165997	ADP-ribosylation factor-like 5B	ARL5B	0,038	-4,40
ENSG00000175040	carbohydrate (N-acetylglucosamine-6-O) sulfotransferase 2	CHST2	0,047	-4,37
ENSG00000153721	CNKSR family member 3	CNKSR3	0,025	-4,32
ENSG00000109320	nuclear factor of kappa light polypeptide gene enhancer in B-cells 1	NFKB1	0,042	-4,28
ENSG00000143067	zinc finger protein 697	ZNF697	0,039	-4,23
ENSG00000188001	tumor protein p63 regulated 1	TPRG1	0,028	-4,20
ENSG00000196083	interleukin 1 receptor accessory protein	IL1RAP	0,024	-4,15
ENSG00000166592	Ras-related associated with diabetes	RRAD	0,012	-4,14
ENSG00000120129	dual specificity phosphatase 1	DUSP1	0,038	-4,12
ENSG00000100985	matrix metalloproteinase 9 (gelatinase B, 92kDa gelatinase, 92kDa type IV collagenase)	MMP9	0,033	-4,12
ENSG00000198142	ankyrin repeat domain 57	ANKRD57	0,029	-4,10
ENSG00000144655	cysteine-serine-rich nuclear protein 1	CSRNP1	0,031	-4,08
ENSG00000214900	chromosome 14 open reading frame 182	C14orf182	0,015	-4,08
ENSG00000137449	cytoplasmic polyadenylation element binding protein 2	CPEB2	0,026	-4,05
ENSG00000148841	inositol 1,4,5-trisphosphate receptor interacting protein	ITPRIP	0,032	-4,03
ENSG00000060982	branched chain amino-acid transaminase 1, cytosolic	BCAT1	0,023	-4,02
ENSG00000168906	methionine adenosyltransferase II, alpha	MAT2A	0,027	-3,99
ENSG00000184557	suppressor of cytokine signaling 3	SOCS3	0,019	-3,97
ENSG00000182224	cytochrome b5 domain containing 1	CYB5D1	0,030	-3,91
ENSG00000159200	regulator of calcineurin 1	RCAN1	0,036	-3,81
ENSG00000236700	N/A	RP11-557H15.2	0,032	-3,76
ENSG00000131669	ninjurin 1	NINJ1	0,030	-3,73
ENSG00000168884	TNFAIP3 interacting protein 2	TNIP2	0,024	-3,71
ENSG00000125730	complement component 3	C3	0,027	-3,68
ENSG00000106366	serpin peptidase inhibitor, clade E (nexin, plasminogen activator inhibitor type 1), member 1	SERPINE1	0,024	-3,67
ENSG00000150977	Rab interacting lysosomal protein-like 2	RILPL2	0,025	-3,66
ENSG00000095794	cAMP responsive element modulator	CREM	0,033	-3,66
ENSG00000172071	eukaryotic translation initiation factor 2-alpha kinase 3	EIF2AK3	0,017	-3,64
ENSG00000131873	chondroitin sulfate synthase 1	CHSY1	0,017	-3,50
ENSG00000138670	RasGEF domain family, member 1B	RASGEF1B	0,028	-3,48

ENSG00000118985	elongation factor, RNA polymerase II, 2	ELL2	0,017	-3,48
ENSG00000224818	N/A	RP11-134G8.8	0,027	-3,47
ENSG00000123358	nuclear receptor subfamily 4, group A, member 1	NR4A1	0,028	-3,45
ENSG00000260196	na	na	0,022	-3,44
ENSG00000156711	mitogen-activated protein kinase 13	MAPK13	0,012	-3,44
ENSG00000163874	zinc finger CCCH-type containing 12A	ZC3H12A	0,018	-3,40
ENSG00000124731	triggering receptor expressed on myeloid cells 1	TREM1	0,047	-3,39
ENSG00000186480	insulin induced gene 1	INSIG1	0,032	-3,36
ENSG0000008083	jumonji, AT rich interactive domain 2	JARID2	0,020	-3,36
ENSG00000164935	transmembrane 7 superfamily member 4	TM7SF4	0,015	-3,35
ENSG00000106952	tumor necrosis factor (ligand) superfamily, member 8	TNFSF8	0,021	-3,35
ENSG00000145990	glucose-fructose oxidoreductase domain containing 1	GFOD1	0,025	-3,34
ENSG00000104312	receptor-interacting serine-threonine kinase 2	RIPK2	0,022	-3,33
ENSG00000197405	complement component 5a receptor 1	C5AR1	0,037	-3,33
ENSG00000139725	na	na	0,017	-3,30
ENSG00000123908	eukaryotic translation initiation factor 2C, 2	EIF2C2	0,012	-3,27
ENSG00000101665	SMAD family member 7	SMAD7	0,012	-3,26
ENSG00000054523	kinesin family member 1B	KIF1B	0,046	-3,26
ENSG00000163171	CDC42 effector protein (Rho GTPase binding) 3	CDC42EP3	0,040	-3,25
ENSG00000176845	meteorin, glial cell differentiation regulator-like	METRNL	0,033	-3,19
ENSG00000125740	FBJ murine osteosarcoma viral oncogene homolog B	FOSB	0,028	-3,18
ENSG0000006062	mitogen-activated protein kinase kinase kinase 14	MAP3K14	0,019	-3,14
ENSG00000107968	mitogen-activated protein kinase kinase kinase 8	MAP3K8	0,018	-3,13
ENSG00000077984	cystatin F (leukocystatin)	CST7	0,023	-3,12
ENSG00000117036	ets variant 3	ETV3	0,036	-3,08
ENSG00000135919	serpin peptidase inhibitor, clade E (nexin, plasminogen activator inhibitor type 1), member 2	SERPINE2	0,047	-3,05
ENSG0000003402	CASP8 and FADD-like apoptosis regulator	CFLAR	0,034	-3,05
ENSG00000118971	cyclin D2	CCND2	0,023	-3,03
ENSG00000163399	ATPase, Na ⁺ /K ⁺ transporting, alpha 1 polypeptide	ATP1A1	0,016	-3,02
ENSG00000158792	spermatogenesis associated 2-like	SPATA2L	0,040	-3,01
ENSG00000223749	N/A	AC004383.4	0,022	-3,00
ENSG00000175445	lipoprotein lipase	LPL	0,025	-3,00
ENSG00000087074	protein phosphatase 1, regulatory (inhibitor) subunit 15A	PPP1R15A	0,023	-2,96

ENSG00000120217	CD274 molecule	CD274	0,023	-2,96
ENSG00000146676	purine-rich element binding protein B	PURB	0,030	-2,96
ENSG00000136653	Ras association (RalGDS/AF-6) domain family member 5	RASSF5	0,030	-2,95
ENSG00000179241	low density lipoprotein receptor class A domain containing 3	LDLRAD3	0,015	-2,95
ENSG00000124225	prostate transmembrane protein, androgen induced 1	PMEPA1	0,018	-2,93
ENSG00000100906	nuclear factor of kappa light polypeptide gene enhancer in B-cells inhibitor, alpha	NFKBIA	0,047	-2,92
ENSG00000115738	inhibitor of DNA binding 2, dominant negative helix-loop-helix protein	ID2	0,036	-2,91
ENSG00000165195	phosphatidylinositol glycan anchor biosynthesis, class A	PIGA	0,042	-2,90
ENSG00000133657	ATPase type 13A3	ATP13A3	0,027	-2,90
ENSG00000173166	Ras association (RalGDS/AF-6) and pleckstrin homology domains 1	RAPH1	0,033	-2,90
ENSG00000151247	eukaryotic translation initiation factor 4E	EIF4E	0,015	-2,89
ENSG00000104783	potassium intermediate/small conductance calcium-activated channel, subfamily N, mem	KCNN4	0,025	-2,88
ENSG00000140968	interferon regulatory factor 8	IRF8	0,025	-2,85
ENSG00000181649	pleckstrin homology-like domain, family A, member 2	PHLDA2	0,033	-2,84
ENSG00000099377	hydroxy-delta-5-steroid dehydrogenase, 3 beta- and steroid delta-isomerase 7	HSD3B7	0,034	-2,84
ENSG00000197147	leucine rich repeat containing 8 family, member B	LRRC8B	0,033	-2,82
ENSG00000147650	low density lipoprotein receptor-related protein 12	LRP12	0,017	-2,82
ENSG00000133639	B-cell translocation gene 1, anti-proliferative	BTG1	0,025	-2,81
ENSG00000121769	fatty acid binding protein 3, muscle and heart (mammary-derived growth inhibitor)	FABP3	0,019	-2,78
ENSG00000138119	myoferlin	MYOF	0,044	-2,76
ENSG00000113811	Selenoprotein K	RP11-884K10.5	0,029	-2,76
ENSG00000175352	nuclear receptor interacting protein 3	NRIP3	0,019	-2,75
ENSG00000196449	yrdC domain containing (E. coli)	YRDC	0,027	-2,74
ENSG00000132170	peroxisome proliferator-activated receptor gamma	PPARG	0,046	-2,74
ENSG00000103855	CD276 molecule	CD276	0,023	-2,74
ENSG00000115956	pleckstrin	PLEK	0,048	-2,74
ENSG00000102760	chromosome 13 open reading frame 15	C13orf15	0,025	-2,73
ENSG00000260231	na	na	0,028	-2,73
ENSG00000155366	ras homolog gene family, member C	RHOC	0,022	-2,72
ENSG00000168994	chromosome 6 open reading frame 145	C6orf145	0,030	-2,71
ENSG00000137094	DnaJ (Hsp40) homolog, subfamily B, member 5	DNAJB5	0,030	-2,71
ENSG00000186594	chromosome 17 open reading frame 91	C17orf91	0,035	-2,70
ENSG00000173517	Pseudopodium-enriched atypical kinase 1	AC087465.1	0,025	-2,70

ENSG0000006327	tumor necrosis factor receptor superfamily, member 12A	TNFRSF12A	0,031	-2,68
ENSG00000134954	v-ets erythroblastosis virus E26 oncogene homolog 1 (avian)	ETS1	0,023	-2,68
ENSG00000100221	Josephin domain containing 1	JOSD1	0,023	-2,68
ENSG00000213859	potassium channel tetramerisation domain containing 11	KCTD11	0,034	-2,68
ENSG00000197461	platelet-derived growth factor alpha polypeptide	PDGFA	0,017	-2,67
ENSG00000180611	Mab-21 domain containing 2	MB21D2	0,030	-2,66
ENSG00000114013	CD86 molecule	CD86	0,019	-2,66
ENSG00000139722	vacuolar protein sorting 37 homolog B (<i>S. cerevisiae</i>)	VPS37B	0,025	-2,61
ENSG00000144136	solute carrier family 20 (phosphate transporter), member 1	SLC20A1	0,023	-2,61
ENSG00000102962	chemokine (C-C motif) ligand 22	CCL22	0,032	-2,61
ENSG00000165312	OTU domain containing 1	OTUD1	0,047	-2,60
ENSG00000142178	salt-inducible kinase 1	SIK1	0,030	-2,59
ENSG00000102908	nuclear factor of activated T-cells 5, tonicity-responsive	NFAT5	0,034	-2,59
ENSG00000137462	toll-like receptor 2	TLR2	0,047	-2,58
ENSG00000152484	ubiquitin specific peptidase 12	USP12	0,023	-2,58
ENSG00000181788	seven in absentia homolog 2 (<i>Drosophila</i>)	SIAH2	0,029	-2,57
ENSG00000008405	cryptochrome 1 (photolyase-like)	CRY1	0,015	-2,56
ENSG00000095951	human immunodeficiency virus type I enhancer binding protein 1	HIVEP1	0,028	-2,56
ENSG00000023330	aminolevulinate, delta-, synthase 1	ALAS1	0,032	-2,55
ENSG00000110042	deltex homolog 4 (<i>Drosophila</i>)	DTX4	0,021	-2,55
ENSG00000156535	CD109 molecule	CD109	0,040	-2,51
ENSG00000134242	protein tyrosine phosphatase, non-receptor type 22 (lymphoid)	PTPN22	0,036	-2,48
ENSG00000137265	interferon regulatory factor 4	IRF4	0,030	-2,47
ENSG00000170779	cell division cycle associated 4	CDCA4	0,033	-2,46
ENSG00000157224	claudin 12	CLDN12	0,015	-2,46
ENSG00000074660	scavenger receptor class F, member 1	SCARF1	0,009	-2,46
ENSG00000132661	NTF2-like export factor 1	NXT1	0,015	-2,46
ENSG00000117143	UDP-N-acetylglucosamine pyrophosphorylase 1	UAP1	0,034	-2,45
ENSG00000259758	N/A	N/A	0,022	-2,44
ENSG00000139496	nucleoporin like 1	NUPL1	0,043	-2,44
ENSG00000161091	chromosome 19 open reading frame 28	C19orf28	0,020	-2,41
ENSG00000160883	hexokinase 3 (white cell)	HK3	0,023	-2,40
ENSG00000242247	ADP-ribosylation factor GTPase activating protein 3	ARFGAP3	0,012	-2,39

ENSG00000136891	testis expressed 10	TEX10	0,027	-2,39
ENSG00000077238	interleukin 4 receptor	IL4R	0,015	-2,38
ENSG00000104447	trichorhinophalangeal syndrome I	TRPS1	0,049	-2,37
ENSG00000186111	phosphatidylinositol-4-phosphate 5-kinase, type I, gamma	PIP5K1C	0,023	-2,36
ENSG00000151689	inositol polyphosphate-1-phosphatase	INPP1	0,030	-2,36
ENSG00000173334	tribbles homolog 1 (Drosophila)	TRIB1	0,046	-2,36
ENSG00000134830	G protein-coupled receptor 77	GPR77	0,030	-2,36
ENSG00000176597	UDP-GlcNAc:betaGal beta-1,3-N-acetylglucosaminyltransferase 5	B3GNT5	0,030	-2,36
ENSG00000126003	pleiomorphic adenoma gene-like 2	PLAGL2	0,032	-2,35
ENSG00000177150	chromosome 18 open reading frame 19	C18orf19	0,018	-2,35
ENSG00000169504	chloride intracellular channel 4	CLIC4	0,015	-2,34
ENSG00000068383	inositol polyphosphate-5-phosphatase, 40kDa	INPP5A	0,037	-2,33
ENSG00000100219	X-box binding protein 1	XBP1	0,031	-2,32
ENSG00000172530	BTG3 associated nuclear protein	BANP	0,017	-2,31
ENSG00000251136	N/A	RP11-37B2.1	0,026	-2,30
ENSG00000165030	nuclear factor, interleukin 3 regulated	NFIL3	0,046	-2,29
ENSG00000172818	ovo-like 1(Drosophila)	OVOL1	0,036	-2,29
ENSG00000155926	Src-like-adaptor	SLA	0,047	-2,29
ENSG00000144837	phospholipase A1 member A	PLA1A	0,028	-2,29
ENSG00000123983	acyl-CoA synthetase long-chain family member 3	ACSL3	0,027	-2,28
ENSG00000143393	phosphatidylinositol 4-kinase, catalytic, beta	PI4KB	0,015	-2,27
ENSG00000102226	ubiquitin specific peptidase 11	USP11	0,018	-2,27
ENSG00000131370	SH3-domain binding protein 5 (BTK-associated)	SH3BP5	0,030	-2,26
ENSG00000196396	protein tyrosine phosphatase, non-receptor type 1	PTPN1	0,033	-2,26
ENSG00000170776	A kinase (PRKA) anchor protein 13	AKAP13	0,023	-2,26
ENSG00000162723	SLAM family member 9	SLAMF9	0,021	-2,25
ENSG00000170425	adenosine A2b receptor	ADORA2B	0,035	-2,23
ENSG00000106178	chemokine (C-C motif) ligand 24	CCL24	0,032	-2,22
ENSG00000136052	solute carrier family 41, member 2	SLC41A2	0,030	-2,22
ENSG00000103018	cytochrome b5 type B (outer mitochondrial membrane)	CYB5B	0,041	-2,22
ENSG00000102225	cyclin-dependent kinase 16	CDK16	0,009	-2,21
ENSG00000173548	sorting nexin 33	SNX33	0,044	-2,20
ENSG00000122694	GLI pathogenesis-related 2	GLIPR2	0,040	-2,20

ENSG0000064225	ST3 beta-galactoside alpha-2,3-sialyltransferase 6	ST3GAL6	0,030	-2,19
ENSG00000183484	G protein-coupled receptor 132	GPR132	0,019	-2,19
ENSG00000138623	semaphorin 7A, GPI membrane anchor (John Milton Hagen blood group)	SEMA7A	0,027	-2,18
ENSG00000107175	cAMP responsive element binding protein 3	CREB3	0,027	-2,18
ENSG00000117868	extended synaptotagmin-like protein 2	ESYT2	0,015	-2,18
ENSG00000102119	emerin	EMD	0,039	-2,18
ENSG00000112941	PAP associated domain containing 7	PAPD7	0,032	-2,17
ENSG00000130052	StAR-related lipid transfer (START) domain containing 8	STARD8	0,019	-2,16
ENSG00000198805	purine nucleoside phosphorylase	PNP	0,025	-2,16
ENSG00000151092	N-glycanase 1	NGLY1	0,035	-2,16
ENSG00000141540	tweety homolog 2 (Drosophila)	TTYH2	0,020	-2,16
ENSG00000099194	stearoyl-CoA desaturase (delta-9-desaturase)	SCD	0,049	-2,15
ENSG00000100483	methyltransferase like 21D	METTL21D	0,044	-2,15
ENSG00000196781	transducin-like enhancer of split 1 (E(sp1) homolog, Drosophila)	TLE1	0,030	-2,15
ENSG00000206560	ankyrin repeat domain 28	ANKRD28	0,021	-2,15
ENSG00000119977	tectonic family member 3	TCTN3	0,019	-2,15
ENSG00000197249	serpin peptidase inhibitor, clade A (alpha-1 antiproteinase, antitrypsin), member 1	SERPINA1	0,018	-2,14
ENSG00000181191	praja ring finger 1	PJA1	0,017	-2,14
ENSG00000037897	methyltransferase like 1	METTL1	0,044	-2,13
ENSG00000167552	tubulin, alpha 1a	TUBA1A	0,037	-2,13
ENSG00000154122	ankylosis, progressive homolog (mouse)	ANKH	0,039	-2,12
ENSG00000104450	sperm associated antigen 1	SPAG1	0,048	-2,11
ENSG00000015475	BH3 interacting domain death agonist	BID	0,039	-2,10
ENSG00000085117	CD82 molecule	CD82	0,040	-2,10
ENSG00000102393	galactosidase, alpha	GLA	0,025	-2,09
ENSG00000000938	Gardner-Rasheed feline sarcoma viral (v-fgr) oncogene homolog	FGR	0,023	-2,09
ENSG00000130340	sorting nexin 9	SNX9	0,015	-2,09
ENSG00000008294	sperm associated antigen 9	SPAG9	0,026	-2,08
ENSG00000151748	salvador homolog 1 (Drosophila)	SAV1	0,034	-2,08
ENSG00000115758	ornithine decarboxylase 1	ODC1	0,012	-2,08
ENSG00000101384	jagged 1	JAG1	0,038	-2,07
ENSG00000225968	na	na	0,018	-2,07
ENSG00000162889	mitogen-activated protein kinase-activated protein kinase 2	MAPKAPK2	0,020	-2,07

ENSG00000164164	OTU domain containing 4	OTUD4	0,039	-2,06
ENSG00000119408	NIMA (never in mitosis gene a)-related kinase 6	NEK6	0,019	-2,06
ENSG00000198900	topoisomerase (DNA) I	TOP1	0,026	-2,06
ENSG00000120539	microtubule associated serine/threonine kinase-like	MASTL	0,038	-2,06
ENSG00000196843	AT rich interactive domain 5A (MRF1-like)	ARID5A	0,025	-2,05
ENSG00000136295	tweety homolog 3 (<i>Drosophila</i>)	TTYH3	0,049	-2,05
ENSG00000143384	myeloid cell leukemia sequence 1 (BCL2-related)	MCL1	0,032	-2,04
ENSG00000104689	tumor necrosis factor receptor superfamily, member 10a	TNFRSF10A	0,037	-2,04
ENSG00000115159	glycerol-3-phosphate dehydrogenase 2 (mitochondrial)	GPD2	0,030	-2,03
ENSG00000127124	human immunodeficiency virus type I enhancer binding protein 3	HIVEP3	0,020	-2,03
ENSG00000167553	tubulin, alpha 1c	TUBA1C	0,032	-2,02
ENSG00000168246	ubiquitin domain containing 2	UBTD2	0,021	-2,02
ENSG00000043462	lymphocyte cytosolic protein 2 (SH2 domain containing leukocyte protein of 76kDa)	LCP2	0,048	-2,02
ENSG00000197121	post-GPI attachment to proteins 1	PGAP1	0,036	-2,02
ENSG00000100139	MICAL-like 1	MICALL1	0,044	-2,01
ENSG00000166579	nudE nuclear distribution gene E homolog (<i>A. nidulans</i>)-like 1	NDEL1	0,040	-2,01
ENSG00000166938	DIS3 mitotic control homolog (<i>S. cerevisiae</i>)-like	DIS3L	0,042	2,00
ENSG00000116062	mutS homolog 6 (<i>E. coli</i>)	MSH6	0,022	2,00
ENSG00000084090	StAR-related lipid transfer (START) domain containing 7	STARD7	0,012	2,00
ENSG00000154889	metallophosphoesterase 1	MPPE1	0,018	2,01
ENSG00000170365	SMAD family member 1	SMAD1	0,023	2,01
ENSG00000168918	inositol polyphosphate-5-phosphatase, 145kDa	INPP5D	0,017	2,01
ENSG00000145431	platelet derived growth factor C	PDGFC	0,025	2,01
ENSG00000169925	bromodomain containing 3	BRD3	0,026	2,01
ENSG00000006007	glycerophosphodiester phosphodiesterase 1	GDE1	0,027	2,02
ENSG00000168061	SAC3 domain containing 1	SAC3D1	0,046	2,02
ENSG00000169926	na	na	0,028	2,02
ENSG00000163535	shugoshin-like 2 (<i>S. pombe</i>)	SGOL2	0,046	2,02
ENSG00000186298	protein phosphatase 1, catalytic subunit, gamma isozyme	PPP1CC	0,013	2,02
ENSG00000121858	tumor necrosis factor (ligand) superfamily, member 10	TNFSF10	0,046	2,03
ENSG00000108055	structural maintenance of chromosomes 3	SMC3	0,010	2,03
ENSG00000115548	lysine (K)-specific demethylase 3A	KDM3A	0,041	2,03
ENSG00000168476	receptor accessory protein 4	REEP4	0,039	2,03

ENSG0000014123	KIAA0776	KIAA0776	0,032	2,04
ENSG0000072121	zinc finger, FYVE domain containing 26	ZFYVE26	0,017	2,04
ENSG00000197442	mitogen-activated protein kinase kinase kinase 5	MAP3K5	0,033	2,04
ENSG00000112234	F-box and leucine-rich repeat protein 4	FBXL4	0,038	2,04
ENSG00000136193	secernin 1	SCRN1	0,021	2,04
ENSG00000166793	yippee-like 4 (Drosophila)	YPEL4	0,047	2,05
ENSG00000147905	zinc finger, CCHC domain containing 7	ZCCHC7	0,018	2,05
ENSG00000152219	chromosome 11 open reading frame 46	C11orf46	0,028	2,06
ENSG00000084092	chromosome 4 open reading frame 14	C4orf14	0,018	2,07
ENSG00000124370	methylmalonyl CoA epimerase	MCEE	0,035	2,07
ENSG00000144567	family with sequence similarity 134, member A	FAM134A	0,022	2,07
ENSG00000259623	N/A	N/A	0,039	2,07
ENSG00000157741	ubiquitin 2	UBN2	0,012	2,07
ENSG00000168297	PX domain containing serine/threonine kinase	PXK	0,012	2,08
ENSG00000165025	spleen tyrosine kinase	SYK	0,020	2,08
ENSG00000170836	protein phosphatase, Mg ²⁺ /Mn ²⁺ dependent, 1D	PPM1D	0,016	2,09
ENSG00000187796	caspase recruitment domain family, member 9	CARD9	0,014	2,09
ENSG00000162688	amylo-alpha-1, 6-glucosidase, 4-alpha-glucanotransferase	AGL	0,019	2,09
ENSG00000148090	AU RNA binding protein/enoyl-CoA hydratase	AUH	0,017	2,09
ENSG00000156136	deoxycytidine kinase	DCK	0,026	2,09
ENSG00000121897	lipoic acid synthetase	LIAS	0,032	2,10
ENSG00000079950	syntaxin 7	STX7	0,018	2,10
ENSG00000196214	zinc finger protein 766	ZNF766	0,036	2,10
ENSG00000189144	zinc finger protein 573	ZNF573	0,046	2,10
ENSG00000101596	structural maintenance of chromosomes flexible hinge domain containing 1	SMCHD1	0,017	2,10
ENSG00000121486	TRM1 tRNA methyltransferase 1-like	TRMT1L	0,014	2,11
ENSG00000123609	N-myc (and STAT) interactor	NMI	0,017	2,11
ENSG00000138794	caspase 6, apoptosis-related cysteine peptidase	CASP6	0,043	2,12
ENSG00000168291	pyruvate dehydrogenase (lipoamide) beta	PDHB	0,015	2,12
ENSG00000064012	caspase 8, apoptosis-related cysteine peptidase	CASP8	0,034	2,12
ENSG00000113851	cereblon	CRBN	0,021	2,13
ENSG00000068024	histone deacetylase 4	HDAC4	0,037	2,14
ENSG00000166783	KIAA0430	KIAA0430	0,014	2,14

ENSG00000260539	na	na	0,018	2,14
ENSG00000082074	FYN binding protein	FYB	0,026	2,15
ENSG00000169220	regulator of G-protein signaling 14	RGS14	0,023	2,15
ENSG00000163946	chromosome 3 open reading frame 63	C3orf63	0,019	2,15
ENSG00000173801	junction plakoglobin	JUP	0,014	2,16
ENSG00000198829	succinate receptor 1	SUCNR1	0,025	2,17
ENSG00000172086	lysine-rich coiled-coil 1	KRCC1	0,012	2,17
ENSG00000132357	caspase recruitment domain family, member 6	CARD6	0,032	2,17
ENSG00000251442	N/A	RP11-792D21.2	0,030	2,17
ENSG00000198824	zinc finger protein 828	ZNF828	0,017	2,17
ENSG00000180917	FtsJ methyltransferase domain containing 1	FTSJD1	0,028	2,17
ENSG00000151461	UPF2 regulator of nonsense transcripts homolog (yeast)	UPF2	0,013	2,18
ENSG00000168792	abhydrolase domain containing 15	ABHD15	0,012	2,18
ENSG00000196372	ankyrin repeat and SOCS box containing 13	ASB13	0,032	2,18
ENSG00000110876	selectin P ligand	SELPLG	0,024	2,18
ENSG00000112406	headcase homolog (Drosophila)	HECA	0,012	2,19
ENSG00000171681	activating transcription factor 7 interacting protein	ATF7IP	0,015	2,19
ENSG00000257093	protein LCHN	AC004918.4	0,047	2,19
ENSG00000135828	ribonuclease L (2',5'-oligoadenylate synthetase-dependent)	RNASEL	0,012	2,20
ENSG00000137414	family with sequence similarity 8, member A1	FAM8A1	0,025	2,20
ENSG00000114541	FERM domain containing 4B	FRMD4B	0,026	2,21
ENSG00000096968	Janus kinase 2	JAK2	0,015	2,21
ENSG00000163104	SWI/SNF-related, matrix-associated actin-dependent regulator of chromatin, subfamily a	SMARCAD1	0,049	2,22
ENSG00000169967	mitogen-activated protein kinase kinase kinase 2	MAP3K2	0,016	2,23
ENSG00000164414	solute carrier family 35 (CMP-sialic acid transporter), member A1	SLC35A1	0,019	2,23
ENSG00000112312	geminin, DNA replication inhibitor	GMNN	0,025	2,24
ENSG00000121152	non-SMC condensin I complex, subunit H	NCAPH	0,021	2,24
ENSG00000048392	ribonucleotide reductase M2 B (TP53 inducible)	RRM2B	0,022	2,25
ENSG00000135999	enhancer of polycomb homolog 2 (Drosophila)	EPC2	0,035	2,26
ENSG00000187147	ring finger protein 220	RNF220	0,049	2,27
ENSG00000139508	solute carrier family 46, member 3	SLC46A3	0,009	2,27
ENSG00000147854	ubiquitin-like with PHD and ring finger domains 2	UHRF2	0,032	2,27
ENSG00000112079	serine/threonine kinase 38	STK38	0,019	2,28

ENSG00000163154	tumor necrosis factor, alpha-induced protein 8-like 2	TNFAIP8L2	0,024	2,28
ENSG00000164331	ankyrin repeat, family A (RFXANK-like), 2	ANKRA2	0,031	2,28
ENSG00000144228	speckle-type POZ protein-like	SPOPL	0,028	2,29
ENSG00000184992	BRI3 binding protein	BRI3BP	0,026	2,29
ENSG00000116266	syntaxin binding protein 3	STXBP3	0,019	2,30
ENSG00000214013	glucosidase, alpha; neutral C	GANC	0,036	2,31
ENSG00000144635	dynein, cytoplasmic 1, light intermediate chain 1	DYNC1LI1	0,018	2,31
ENSG00000175538	potassium voltage-gated channel, Isk-related family, member 3	KCNE3	0,042	2,31
ENSG00000117616	chromosome 1 open reading frame 63	C1orf63	0,028	2,32
ENSG00000163513	transforming growth factor, beta receptor II (70/80kDa)	TGFBR2	0,015	2,32
ENSG00000121067	speckle-type POZ protein	SPOP	0,010	2,32
ENSG00000138433	corepressor interacting with RBPJ, 1	CIR1	0,016	2,33
ENSG00000111875	ASF1 anti-silencing function 1 homolog A (<i>S. cerevisiae</i>)	ASF1A	0,027	2,33
ENSG00000158092	NCK adaptor protein 1	NCK1	0,027	2,34
ENSG00000143337	torsin A interacting protein 1	TOR1AIP1	0,018	2,34
ENSG00000075188	nucleoporin 37kDa	NUP37	0,034	2,35
ENSG00000152409	junction mediating and regulatory protein, p53 cofactor	JMY	0,022	2,36
ENSG00000105516	D site of albumin promoter (albumin D-box) binding protein	DBP	0,044	2,37
ENSG00000117643	mannosidase, alpha, class 1C, member 1	MAN1C1	0,023	2,37
ENSG00000075643	molybdenum cofactor sulfurase	MOCOS	0,049	2,38
ENSG00000196323	zinc finger and BTB domain containing 44	ZBTB44	0,021	2,38
ENSG00000165983	phosphotriesterase related	PTER	0,016	2,38
ENSG00000127720	chromosome 12 open reading frame 26	C12orf26	0,018	2,38
ENSG00000130816	DNA (cytosine-5-)-methyltransferase 1	DNMT1	0,049	2,38
ENSG00000164221	coiled-coil domain containing 112	CCDC112	0,025	2,39
ENSG00000126775	ATG14 autophagy related 14 homolog (<i>S. cerevisiae</i>)	ATG14	0,023	2,39
ENSG00000181192	dehydrogenase E1 and transketolase domain containing 1	DHTKD1	0,012	2,40
ENSG00000187626	zinc finger with KRAB and SCAN domains 4	ZKSCAN4	0,047	2,40
ENSG00000008869	HEAT repeat containing 5B	HEATR5B	0,015	2,41
ENSG00000205302	sorting nexin 2	SNX2	0,019	2,41
ENSG00000185862	ecotropic viral integration site 2B	EVI2B	0,030	2,41
ENSG00000171940	zinc finger protein 217	ZNF217	0,023	2,43
ENSG00000147592	lactamase, beta 2	LACTB2	0,035	2,45

ENSG00000157107	FCH domain only 2	FCHO2	0,015	2,45
ENSG00000215256	Full-length cDNA clone CS0DF029YN24 of Fetal brain of Homo sapiens (human)	AL136419.1	0,040	2,45
ENSG00000117226	guanylate binding protein 3	GBP3	0,023	2,46
ENSG00000186188	omega-3 fatty acid receptor 1	O3FAR1	0,041	2,47
ENSG00000136514	receptor (chemosensory) transporter protein 4	RTP4	0,043	2,47
ENSG00000158109	tumor protein p63 regulated 1-like	TPRG1L	0,036	2,48
ENSG00000118482	PHD finger protein 3	PHF3	0,018	2,49
ENSG00000170293	CKLF-like MARVEL transmembrane domain containing 8	CMTM8	0,047	2,49
ENSG00000165516	kelch domain containing 2	KLHDC2	0,018	2,50
ENSG00000152359	POC5 centriolar protein homolog (Chlamydomonas)	POC5	0,035	2,50
ENSG00000198771	RCSD domain containing 1	RCSD1	0,040	2,50
ENSG00000132405	TBC1 domain family, member 14	TBC1D14	0,043	2,52
ENSG00000174197	MAX gene associated	MGA	0,016	2,54
ENSG00000169019	COMM domain containing 8	COMMD8	0,030	2,55
ENSG00000107738	chromosome 10 open reading frame 54	C10orf54	0,014	2,55
ENSG00000144909	oxysterol binding protein-like 11	OSBPL11	0,021	2,56
ENSG00000232941	N/A	AC090186.1	0,026	2,56
ENSG00000177409	sterile alpha motif domain containing 9-like	SAMD9L	0,043	2,56
ENSG00000133574	GTPase, IMAP family member 4	GIMAP4	0,039	2,57
ENSG00000055917	pumilio homolog 2 (Drosophila)	PUM2	0,025	2,57
ENSG00000166439	ring finger protein 169	RNF169	0,025	2,58
ENSG00000162378	zyg-11 homolog B (C. elegans)	ZYG11B	0,012	2,60
ENSG00000143457	golgi phosphoprotein 3-like	GOLPH3L	0,019	2,60
ENSG00000080503	SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily a	SMARCA2	0,009	2,60
ENSG00000152457	DNA cross-link repair 1C	DCLRE1C	0,019	2,61
ENSG00000165322	Rho GTPase activating protein 12	ARHGAP12	0,034	2,61
ENSG00000136044	adaptor protein, phosphotyrosine interaction, PH domain and leucine zipper containing 2	APPL2	0,021	2,61
ENSG00000155508	CCR4-NOT transcription complex, subunit 8	CNOT8	0,024	2,62
ENSG00000148835	TAF5 RNA polymerase II, TATA box binding protein (TBP)-associated factor, 100kDa	TAF5	0,025	2,63
ENSG00000164649	cell division cycle associated 7-like	CDCA7L	0,019	2,67
ENSG00000119950	MAX interactor 1	MXI1	0,014	2,67
ENSG00000178966	RMI1, RecQ mediated genome instability 1, homolog (S. cerevisiae)	RMI1	0,016	2,68
ENSG00000239213	N/A	RP11-85F14.5	0,034	2,69

ENSG00000124496	transcriptional regulating factor 1	TRERF1	0,009	2,69
ENSG00000095015	mitogen-activated protein kinase kinase kinase 1	MAP3K1	0,049	2,70
ENSG00000171631	pyrimidinergic receptor P2Y, G-protein coupled, 6	P2RY6	0,025	2,70
ENSG00000174946	G protein-coupled receptor 171	GPR171	0,026	2,70
ENSG00000023516	A kinase (PRKA) anchor protein 11	AKAP11	0,023	2,71
ENSG00000164117	F-box protein 8	FBXO8	0,012	2,71
ENSG00000100354	trinucleotide repeat containing 6B	TNRC6B	0,024	2,72
ENSG00000204103	v-maf musculoaponeurotic fibrosarcoma oncogene homolog B (avian)	MAFB	0,023	2,72
ENSG00000180573	histone cluster 1, H2ac	HIST1H2AC	0,048	2,73
ENSG00000213689	three prime repair exonuclease 1	TREX1	0,015	2,74
ENSG00000165533	tetratricopeptide repeat domain 8	TTC8	0,041	2,76
ENSG00000038274	methionine adenosyltransferase II, beta	MAT2B	0,014	2,76
ENSG00000266753	na	na	0,032	2,77
ENSG00000111231	GPN-loop GTPase 3	GPN3	0,018	2,77
ENSG00000198382	UV radiation resistance associated gene	UVRAG	0,017	2,81
ENSG00000182511	feline sarcoma oncogene	FES	0,030	2,83
ENSG00000181481	ring finger protein 135	RNF135	0,022	2,84
ENSG00000188906	leucine-rich repeat kinase 2	LRRK2	0,022	2,84
ENSG00000071073	mannosyl (alpha-1,3-)-glycoprotein beta-1,4-N-acetylglucosaminyltransferase, isozyme A	MGAT4A	0,028	2,84
ENSG00000160179	na	na	0,010	2,87
ENSG00000104205	serum/glucocorticoid regulated kinase family, member 3	SGK3	0,029	2,87
ENSG00000115718	protein C (inactivator of coagulation factors Va and VIIIa)	PROC	0,028	2,87
ENSG00000021574	spastin	SPAST	0,028	2,88
ENSG00000145241	centromere protein C 1	CENPC1	0,028	2,88
ENSG00000136161	regulator of chromosome condensation (RCC1) and BTB (POZ) domain containing protein	RCBTB2	0,026	2,89
ENSG00000107719	KIAA1274	KIAA1274	0,028	2,89
ENSG00000138463	disrupted in renal carcinoma 2	DIRC2	0,017	2,91
ENSG00000167528	zinc finger protein 641	ZNF641	0,019	2,92
ENSG00000174738	nuclear receptor subfamily 1, group D, member 2	NR1D2	0,027	2,94
ENSG00000174718	chromosome 12 open reading frame 35	C12orf35	0,019	2,94
ENSG00000167716	WD repeat domain 81	WDR81	0,027	2,95
ENSG00000106780	multiple EGF-like-domains 9	MEGF9	0,018	2,98
ENSG00000101236	ring finger protein 24	RNF24	0,023	2,99

ENSG00000125703	ATG4 autophagy related 4 homolog C (<i>S. cerevisiae</i>)	ATG4C	0,024	3,00
ENSG00000138172	calcium homeostasis modulator 2	CALHM2	0,030	3,04
ENSG00000189227	chromosome 15 open reading frame 61	C15orf61	0,032	3,06
ENSG00000178977	non-protein coding RNA 324	NCRNA00324	0,046	3,14
ENSG00000117289	thioredoxin interacting protein	TXNIP	0,027	3,14
ENSG00000146083	ring finger protein 44	RNF44	0,012	3,15
ENSG00000136826	Kruppel-like factor 4 (gut)	KLF4	0,032	3,16
ENSG00000145569	family with sequence similarity 105, member A	FAM105A	0,012	3,17
ENSG00000005175	RNA polymerase II associated protein 3	RPAP3	0,013	3,17
ENSG00000027697	interferon gamma receptor 1	IFNGR1	0,021	3,17
ENSG00000080546	sestrin 1	SESN1	0,012	3,18
ENSG00000170385	solute carrier family 30 (zinc transporter), member 1	SLC30A1	0,024	3,18
ENSG00000150593	programmed cell death 4 (neoplastic transformation inhibitor)	PDCD4	0,022	3,22
ENSG00000261799	na	na	0,017	3,24
ENSG00000001084	glutamate-cysteine ligase, catalytic subunit	GCLC	0,009	3,24
ENSG00000148158	sorting nexin family member 30	SNX30	0,015	3,25
ENSG00000145246	ATPase, class V, type 10D	ATP10D	0,016	3,30
ENSG00000155189	1-acylglycerol-3-phosphate O-acyltransferase 5 (lysophosphatidic acid acyltransferase, ep	AGPAT5	0,018	3,31
ENSG00000205413	sterile alpha motif domain containing 9	SAMD9	0,021	3,38
ENSG00000112773	family with sequence similarity 46, member A	FAM46A	0,010	3,40
ENSG00000096717	sirtuin 1	SIRT1	0,033	3,40
ENSG00000164104	high mobility group box 2	HMGB2	0,033	3,43
ENSG00000170915	progesterin and adipoQ receptor family member VIII	PAQR8	0,018	3,44
ENSG00000178199	zinc finger CCCH-type containing 12D	ZC3H12D	0,040	3,54
ENSG00000119922	interferon-induced protein with tetratricopeptide repeats 2	IFIT2	0,049	3,60
ENSG00000163565	interferon, gamma-inducible protein 16	IFI16	0,035	3,60
ENSG00000129518	E2F-associated phosphoprotein	EAPP	0,013	3,60
ENSG00000175155	yippee-like 2 (<i>Drosophila</i>)	YPEL2	0,033	3,62
ENSG00000185950	insulin receptor substrate 2	IRS2	0,030	3,63
ENSG00000118308	lymphoid-restricted membrane protein	LRMP	0,044	3,67
ENSG00000007944	myosin regulatory light chain interacting protein	MYLIP	0,038	3,75
ENSG00000196227	chromosome 20 open reading frame 177	C20orf177	0,047	3,82
ENSG00000047346	KIAA1370	KIAA1370	0,014	3,84

ENSG00000134326	cytidine monophosphate (UMP-CMP) kinase 2, mitochondrial	CMPK2	0,027	4,08
ENSG00000132646	proliferating cell nuclear antigen	PCNA	0,012	4,14
ENSG00000179144	GTPase, IMAP family member 7	GIMAP7	0,045	4,33
ENSG00000163563	myeloid cell nuclear differentiation antigen	MNDA	0,022	4,35
ENSG00000198740	zinc finger protein 652	ZNF652	0,013	4,55
ENSG00000101916	toll-like receptor 8	TLR8	0,018	4,58
ENSG00000077063	cortactin binding protein 2	CTTNBP2	0,029	4,79
ENSG00000152804	hematopoietically expressed homeobox	HHEX	0,028	4,82
ENSG00000114796	kelch-like 24 (Drosophila)	KLHL24	0,013	4,84
ENSG00000095585	B-cell linker	BLNK	0,023	4,85
ENSG00000145416	membrane-associated ring finger (C3HC4) 1	MARCH1	0,026	4,85
ENSG00000110852	C-type lectin domain family 2, member B	CLEC2B	0,012	5,06
ENSG00000129534	MIS18 binding protein 1	MIS18BP1	0,024	5,50
ENSG00000164463	chromosome 5 open reading frame 41	C5orf41	0,015	5,55
ENSG00000121933	adenosine A3 receptor	ADORA3	0,023	5,58
ENSG00000139679	lysophosphatidic acid receptor 6	LPAR6	0,043	5,83
ENSG00000174944	purinergic receptor P2Y, G-protein coupled, 14	P2RY14	0,030	7,02
ENSG00000106560	GTPase, IMAP family member 2	GIMAP2	0,023	7,41
ENSG00000180340	frizzled homolog 2 (Drosophila)	FZD2	0,017	7,85
ENSG00000170448	nuclear transcription factor, X-box binding-like 1	NFXL1	0,019	8,36
ENSG00000150681	regulator of G-protein signaling 18	RGS18	0,018	10,45
ENSG00000169087	HSPB (heat shock 27kDa) associated protein 1	HSPBAP1	0,018	10,53

Supplementary Table 1C. Genes regulated by OSCAR-CollIII signaling

Overlap of CollIII-regulated genes and OSCAR-regulated genes						
Overlapping genes	gene title	Gene Symbol	CollIII vs iDC comparison		CollIII+anti-OSCAR vs CollIII+isotype	
			q-value	Fold change	q-value	Fold change
ENSG00000115009	chemokine (C-C motif) ligand 20	CCL20	0,002	158,54	0,02	-102,55
ENSG00000073756	prostaglandin-endoperoxide synthase 2 (prostaglandin synthase 2)	PTGS2	0,003	56,05	0,03	-35,61
ENSG00000115008	interleukin 1, alpha	IL1A	0,010	43,04	0,03	-36,58
ENSG00000153234	nuclear receptor subfamily 4, group A, member 2	NR4A2	0,003	39,00	0,05	-20,68
ENSG00000164949	GTP binding protein overexpressed in skeletal muscle	GEM	0,003	36,00	0,02	-26,49
ENSG00000234883	MIR155 host gene (non-protein coding)	MIR155HG	0,005	32,15	0,01	-31,22
ENSG00000078401	endothelin 1	EDN1	0,011	26,45	0,02	-17,90
ENSG00000163734	chemokine (C-X-C motif) ligand 3	CXCL3	0,011	26,13	0,03	-19,65
ENSG00000081041	chemokine (C-X-C motif) ligand 2	CXCL2	0,010	24,83	0,04	-17,15
ENSG00000123689	G0/G1switch 2	G0S2	0,004	24,05	0,03	-18,43
ENSG00000232810	tumor necrosis factor	TNF	0,003	23,13	0,02	-27,14
ENSG00000125538	interleukin 1, beta	IL1B	0,007	23,07	0,05	-21,71
ENSG00000158050	dual specificity phosphatase 2	DUSP2	0,003	22,23	0,03	-15,65
ENSG00000163739	chemokine (C-X-C motif) ligand 1 (melanoma growth-stimulating activity)	CXCL1	0,011	21,49	0,03	-16,79
ENSG00000120875	dual specificity phosphatase 4	DUSP4	0,004	20,84	0,02	-15,21
ENSG00000178726	thrombomodulin	THBD	0,008	19,30	0,03	-18,39
ENSG00000101187	solute carrier organic anion transporter family, member 4A1	SLCO4A1	0,003	18,32	0,01	-13,48
ENSG00000041982	tenascin C	TNC	0,008	17,85	0,02	-11,82
ENSG00000117525	coagulation factor III (thromboplastin, tissue factor)	F3	0,003	17,12	0,05	-14,66
ENSG00000164181	ELOVL family member 7, elongation of long chain fatty acid synthase	ELOVL7	0,004	15,63	0,01	-12,92
ENSG00000113070	heparin-binding EGF-like growth factor	HBEGF	0,005	15,14	0,02	-14,78
ENSG00000108691	chemokine (C-C motif) ligand 2	CCL2	0,010	14,11	0,04	-15,36
ENSG00000153162	bone morphogenetic protein 6	BMP6	0,004	13,46	0,02	-11,47
ENSG00000013619	mastermind-like domain containing 1	MAMLD1	0,004	12,79	0,02	-12,11
ENSG00000140379	BCL2-related protein A1	BCL2A1	0,007	12,23	0,02	-13,16
ENSG00000232956	chromosome 7 open reading frame 40	C7orf40	0,005	11,74	0,02	-12,98
ENSG00000116717	growth arrest and DNA-damage-inducible, alpha	GADD45A	0,005	11,17	0,05	-6,78
ENSG00000186827	tumor necrosis factor receptor superfamily, member 4	TNFRSF4	0,004	11,15	0,04	-8,52

ENSG00000180758	G protein-coupled receptor 157	GPR157	0,011	11,14	0,03	-7,58
ENSG00000149289	zinc finger CCCH-type containing 12C	ZC3H12C	0,003	11,11	0,05	-8,75
ENSG00000056558	TNF receptor-associated factor 1	TRAF1	0,004	10,51	0,03	-8,55
ENSG00000099985	oncostatin M	OSM	0,002	10,47	0,02	-15,19
ENSG00000157557	v-ets erythroblastosis virus E26 oncogene homolog	ETS2	0,006	10,15	0,02	-10,25
ENSG00000112394	solute carrier family 16, member 10 (aromatic amino acid)	SLC16A10	0,010	10,06	0,02	-9,29
ENSG00000144802	nuclear factor of kappa light polypeptide gene enhancer	NFKBIZ	0,004	9,42	0,03	-9,58
ENSG00000108702	chemokine (C-C motif) ligand 1	CCL1	0,011	8,91	0,02	-9,11
ENSG00000170542	serpin peptidase inhibitor, clade B (ovalbumin), member	SERPINB9	0,008	8,63	0,02	-8,10
ENSG00000132510	lysine (K)-specific demethylase 6B	KDM6B	0,002	8,55	0,03	-6,74
ENSG00000125735	tumor necrosis factor (ligand) superfamily, member	TNFSF14	0,002	8,54	0,02	-7,64
ENSG00000110047	EH-domain containing 1	EHD1	0,008	8,48	0,02	-7,68
ENSG00000173846	polo-like kinase 3	PLK3	0,003	8,37	0,02	-7,72
ENSG00000167604	nuclear factor of kappa light polypeptide gene enhancer	NFKBID	0,004	8,27	0,01	-7,52
ENSG00000116285	ERBB receptor feedback inhibitor 1	ERRFI1	0,007	8,04	0,02	-7,76
ENSG00000099860	growth arrest and DNA-damage-inducible, beta	GADD45B	0,002	7,92	0,02	-7,41
ENSG00000118503	tumor necrosis factor, alpha-induced protein 3	TNFAIP3	0,006	7,87	0,03	-6,06
ENSG00000134070	interleukin-1 receptor-associated kinase 2	IRAK2	0,003	7,65	0,03	-5,21
ENSG00000135476	extra spindle pole bodies homolog 1 (<i>S. cerevisiae</i>)	ESPL1	0,020	7,49	0,05	-6,61
ENSG00000114473	IQ motif containing G	IQCG	0,006	7,31	0,02	-7,10
ENSG00000253522	microRNA 146a (MIR146A), microRNA	CTC-231O11.1	0,010	7,19	0,01	-8,77
ENSG00000112096	superoxide dismutase 2, mitochondrial	SOD2	0,004	7,13	0,02	-5,85
ENSG00000065809	family with sequence similarity 107, member B	FAM107B	0,003	7,02	0,02	-5,10
ENSG00000103257	solute carrier family 7 (cationic amino acid transporter)	SLC7A5	0,008	6,94	0,01	-7,30
ENSG00000152413	homer homolog 1 (<i>Drosophila</i>)	HOMER1	0,006	6,93	0,03	-7,83
ENSG00000010810	FYN oncogene related to SRC, FGR, YES	FYN	0,011	6,83	0,03	-5,15
ENSG00000185022	v-maf musculoaponeurotic fibrosarcoma oncogene	MAFF	0,008	6,81	0,04	-5,58
ENSG00000124145	syndecan 4	SDC4	0,003	6,60	0,03	-7,40
ENSG00000184371	colony stimulating factor 1 (macrophage)	CSF1	0,003	6,33	0,01	-5,95
ENSG00000167772	angiopoietin-like 4	ANGPTL4	0,022	6,22	0,04	-6,32
ENSG00000034152	mitogen-activated protein kinase kinase 3	MAP2K3	0,002	6,17	0,02	-5,20
ENSG00000249992	transmembrane protein 158 (gene/pseudogene)	TMEM158	0,013	6,04	0,03	-6,09
ENSG00000162645	guanylate binding protein 2, interferon-inducible	GBP2	0,003	6,02	0,02	-4,83

ENSG00000186665	chromosome 17 open reading frame 58	C17orf58	0,005	5,96	0,02	-5,68
ENSG00000154640	BTG family, member 3	BTG3	0,006	5,94	0,03	-5,39
ENSG00000179294	chromosome 17 open reading frame 96	C17orf96	0,008	5,59	0,04	-5,21
ENSG00000167695	family with sequence similarity 57, member A	FAM57A	0,015	5,57	0,03	-5,12
ENSG00000112715	vascular endothelial growth factor A	VEGFA	0,007	5,57	0,03	-4,44
ENSG00000131016	A kinase (PRKA) anchor protein 12	AKAP12	0,014	5,52	0,02	-5,62
ENSG00000136158	sprouty homolog 2 (Drosophila)	SPRY2	0,007	5,51	0,03	-7,00
ENSG00000136689	interleukin 1 receptor antagonist	IL1RN	0,005	5,48	0,02	-6,72
ENSG00000106366	serpin peptidase inhibitor, clade E (nexin, plasminogen activator inhibitor type 1)	SERPINE1	0,009	5,47	0,02	-3,67
ENSG00000165997	ADP-ribosylation factor-like 5B	ARL5B	0,004	5,38	0,04	-4,40
ENSG00000121797	chemokine (C-C motif) receptor-like 2	CCRL2	0,004	5,35	0,03	-5,03
ENSG00000162924	v-rel reticuloendotheliosis viral oncogene homolog 1	REL	0,011	5,14	0,03	-4,96
ENSG00000090339	intercellular adhesion molecule 1	ICAM1	0,010	5,13	0,02	-6,71
ENSG00000138670	RasGEF domain family, member 1B	RASGEF1B	0,003	5,13	0,03	-3,48
ENSG00000186891	tumor necrosis factor receptor superfamily, member 18	TNFRSF18	0,002	4,95	0,02	-4,82
ENSG00000108179	peptidylprolyl isomerase F	PPIF	0,006	4,91	0,03	-5,31
ENSG00000139289	pleckstrin homology-like domain, family A, member 1	PHLDA1	0,013	4,90	0,02	-6,55
ENSG00000117090	signaling lymphocytic activation molecule family member 1	SLAMF1	0,022	4,88	0,03	-5,35
ENSG00000139318	dual specificity phosphatase 6	DUSP6	0,007	4,85	0,03	-6,01
ENSG00000159200	regulator of calcineurin 1	RCAN1	0,004	4,83	0,04	-3,81
ENSG00000145777	thymic stromal lymphopoietin	TSLP	0,047	4,82	0,04	-4,91
ENSG00000163347	claudin 1	CLDN1	0,003	4,76	0,02	-5,39
ENSG00000214900	chromosome 14 open reading frame 182	C14orf182	0,009	4,75	0,01	-4,08
ENSG00000172175	mucosa associated lymphoid tissue lymphoma transmembrane protein 1	MALT1	0,003	4,72	0,02	-4,46
ENSG00000121594	CD80 molecule	CD80	0,011	4,67	0,02	-7,62
ENSG00000144655	cysteine-serine-rich nuclear protein 1	CSRNP1	0,004	4,57	0,03	-4,08
ENSG00000109320	nuclear factor of kappa light polypeptide gene enhancer in B-cells 1	NFKB1	0,007	4,56	0,04	-4,28
ENSG00000198355	pim-3 oncogene	PIM3	0,006	4,53	0,03	-5,05
ENSG00000175040	carbohydrate (N-acetylglucosamine-6-O) sulfotransferase 2	CHST2	0,025	4,51	0,05	-4,37
ENSG00000198369	sprouty-related, EVH1 domain containing 2	SPRED2	0,008	4,49	0,02	-4,67
ENSG00000138378	signal transducer and activator of transcription 4	STAT4	0,012	4,48	0,03	-4,98
ENSG00000011422	plasminogen activator, urokinase receptor	PLAUR	0,005	4,47	0,03	-4,52
ENSG00000100985	matrix metalloproteinase 9 (gelatinase B, 92kDa gelatinase with collagenase activity)	MMP9	0,014	4,46	0,03	-4,12

ENSG00000145990	glucose-fructose oxidoreductase domain containing	GFOD1	0,013	4,44	0,03	-3,34
ENSG00000110042	deltex homolog 4 (Drosophila)	DTX4	0,018	4,43	0,02	-2,55
ENSG00000137267	tubulin, beta 2A	TUBB2A	0,011	4,42	0,02	-4,53
ENSG00000168685	interleukin 7 receptor	IL7R	0,013	4,40	0,04	-6,52
ENSG00000143067	zinc finger protein 697	ZNF697	0,007	4,40	0,04	-4,23
ENSG00000148841	inositol 1,4,5-trisphosphate receptor interacting pr	ITPRIP	0,003	4,39	0,03	-4,03
ENSG00000123358	nuclear receptor subfamily 4, group A, member 1	NR4A1	0,002	4,36	0,03	-3,45
ENSG00000150977	Rab interacting lysosomal protein-like 2	RILPL2	0,004	4,26	0,02	-3,66
ENSG00000154127	ubiquitin associated and SH3 domain containing B	UBASH3B	0,007	4,23	0,02	-4,91
ENSG00000236700	N/A	RP11-557H15.2	0,015	4,21	0,03	-3,76
ENSG00000166592	Ras-related associated with diabetes	RRAD	0,007	4,19	0,01	-4,14
ENSG00000166881	transmembrane protein 194A	TMEM194A	0,008	4,18	0,02	-5,60
ENSG00000153721	CNKSR family member 3	CNKSR3	0,016	4,16	0,02	-4,32
ENSG00000120129	dual specificity phosphatase 1	DUSP1	0,005	4,07	0,04	-4,12
ENSG00000163171	CDC42 effector protein (Rho GTPase binding) 3	CDC42EP3	0,003	4,07	0,04	-3,25
ENSG00000172071	eukaryotic translation initiation factor 2-alpha kina	EIF2AK3	0,003	4,06	0,02	-3,64
ENSG00000186480	insulin induced gene 1	INSIG1	0,003	4,01	0,03	-3,36
ENSG00000260196	na	na	0,005	3,99	0,02	-3,44
ENSG00000164211	StAR-related lipid transfer (START) domain containi	STARD4	0,016	3,99	0,03	-5,03
ENSG00000182224	cytochrome b5 domain containing 1	CYB5D1	0,008	3,96	0,03	-3,91
ENSG00000124731	triggering receptor expressed on myeloid cells 1	TREM1	0,010	3,91	0,05	-3,39
ENSG00000168906	methionine adenosyltransferase II, alpha	MAT2A	0,015	3,90	0,03	-3,99
ENSG00000131873	chondroitin sulfate synthase 1	CHSY1	0,005	3,85	0,02	-3,50
ENSG00000060982	branched chain amino-acid transaminase 1, cytosol	BCAT1	0,006	3,85	0,02	-4,02
ENSG00000054523	kinesin family member 1B	KIF1B	0,006	3,81	0,05	-3,26
ENSG00000125740	FBJ murine osteosarcoma viral oncogene homolog	FOSB	0,021	3,78	0,03	-3,18
ENSG00000131669	ninjurin 1	NINJ1	0,008	3,77	0,03	-3,73
ENSG00000007264	megakaryocyte-associated tyrosine kinase	MATK	0,036	3,71	0,04	-4,41
ENSG00000197405	complement component 5a receptor 1	C5AR1	0,023	3,69	0,04	-3,33
ENSG00000133639	B-cell translocation gene 1, anti-proliferative	BTG1	0,005	3,67	0,02	-2,81
ENSG00000168884	TNFAIP3 interacting protein 2	TNIP2	0,004	3,66	0,02	-3,71
ENSG00000139725	na	na	0,007	3,66	0,02	-3,30
ENSG00000137449	cytoplasmic polyadenylation element binding prote	CPEB2	0,003	3,63	0,03	-4,05

ENSG00000118985	elongation factor, RNA polymerase II, 2	ELL2	0,007	3,62	0,02	-3,48
ENSG00000095794	cAMP responsive element modulator	CREM	0,011	3,61	0,03	-3,66
ENSG00000135919	serpin peptidase inhibitor, clade E (nexin, plasminogen activator inhibitor type 1)	SERPINE2	0,018	3,58	0,05	-3,05
ENSG00000183696	uridine phosphorylase 1	UPP1	0,003	3,49	0,02	-4,79
ENSG00000102755	fms-related tyrosine kinase 1 (vascular endothelial growth factor receptor 2)	FLT1	0,008	3,49	0,01	-4,57
ENSG00000125730	complement component 3	C3	0,028	3,47	0,03	-3,68
ENSG00000106952	tumor necrosis factor (ligand) superfamily, member 8	TNFSF8	0,021	3,46	0,02	-3,35
ENSG00000117036	ets variant 3	ETV3	0,007	3,45	0,04	-3,08
ENSG00000163874	zinc finger CCCH-type containing 12A	ZC3H12A	0,005	3,44	0,02	-3,40
ENSG00000142178	salt-inducible kinase 1	SIK1	0,011	3,40	0,03	-2,59
ENSG00000188001	tumor protein p63 regulated 1	TPRG1	0,011	3,40	0,03	-4,20
ENSG00000138166	dual specificity phosphatase 5	DUSP5	0,004	3,36	0,02	-6,13
ENSG00000164935	transmembrane 7 superfamily member 4	TM7SF4	0,019	3,31	0,01	-3,35
ENSG00000104312	receptor-interacting serine-threonine kinase 2	RIPK2	0,002	3,29	0,02	-3,33
ENSG00000176845	meteorin, glial cell differentiation regulator-like	METRNL	0,006	3,25	0,03	-3,19
ENSG00000077984	cystatin F (leukocystatin)	CST7	0,013	3,20	0,02	-3,12
ENSG00000134242	protein tyrosine phosphatase, non-receptor type 2	PTPN22	0,007	3,19	0,04	-2,48
ENSG00000134830	G protein-coupled receptor 77	GPR77	0,008	3,19	0,03	-2,36
ENSG00000223749	N/A	AC004383.4	0,007	3,19	0,02	-3,00
ENSG00000156711	mitogen-activated protein kinase 13	MAPK13	0,010	3,18	0,01	-3,44
ENSG00000107968	mitogen-activated protein kinase kinase kinase 8	MAP3K8	0,005	3,17	0,02	-3,13
ENSG00000100906	nuclear factor of kappa light polypeptide gene enhancer in B-cells 1	NFKBIA	0,008	3,17	0,05	-2,92
ENSG00000163399	ATPase, Na ⁺ /K ⁺ transporting, alpha 1 polypeptide	ATP1A1	0,003	3,16	0,02	-3,02
ENSG00000101017	CD40 molecule, TNF receptor superfamily member 5	CD40	0,008	3,15	0,03	-4,55
ENSG00000224818	N/A	RP11-134G8.8	0,008	3,14	0,03	-3,47
ENSG00000087074	protein phosphatase 1, regulatory (inhibitor) subunit 1	PPP1R15A	0,004	3,12	0,02	-2,96
ENSG00000179241	low density lipoprotein receptor class A domain containing 3	LDLRAD3	0,003	3,11	0,01	-2,95
ENSG00000172818	ovo-like 1 (Drosophila)	OVOL1	0,015	3,10	0,04	-2,29
ENSG00000102760	chromosome 13 open reading frame 15	C13orf15	0,008	3,09	0,02	-2,73
ENSG00000006062	mitogen-activated protein kinase kinase kinase 14	MAP3K14	0,003	3,09	0,02	-3,14
ENSG00000173517	Pseudopodium-enriched atypical kinase 1	AC087465.1	0,005	3,08	0,03	-2,70
ENSG00000165312	OTU domain containing 1	OTUD1	0,007	3,04	0,05	-2,60
ENSG00000151247	eukaryotic translation initiation factor 4E	EIF4E	0,008	3,02	0,02	-2,89

ENSG00000137094	DnaJ (Hsp40) homolog, subfamily B, member 5	DNAJB5	0,014	3,01	0,03	-2,71
ENSG00000146676	purine-rich element binding protein B	PURB	0,004	3,00	0,03	-2,96
ENSG00000115956	pleckstrin	PLEK	0,008	2,98	0,05	-2,74
ENSG00000104783	potassium intermediate/small conductance calcium	KCNN4	0,011	2,98	0,02	-2,88
ENSG00000123908	eukaryotic translation initiation factor 2C, 2	EIF2C2	0,007	2,97	0,01	-3,27
ENSG00000184557	suppressor of cytokine signaling 3	SOCS3	0,009	2,96	0,02	-3,97
ENSG00000113811	Selenoprotein K	RP11-884K10.5	0,006	2,96	0,03	-2,76
ENSG00000173166	Ras association (RalGDS/AF-6) and pleckstrin homo	RAPH1	0,004	2,95	0,03	-2,90
ENSG00000136891	testis expressed 10	TEX10	0,011	2,94	0,03	-2,39
ENSG00000133657	ATPase type 13A3	ATP13A3	0,007	2,93	0,03	-2,90
ENSG00000140406	mesoderm development candidate 1	MESDC1	0,030	2,91	0,05	-4,40
ENSG00000137193	pim-1 oncogene	PIM1	0,008	2,90	0,04	-4,89
ENSG00000003402	CASP8 and FADD-like apoptosis regulator	CFLAR	0,005	2,89	0,03	-3,05
ENSG00000136653	Ras association (RalGDS/AF-6) domain family mem	RASSF5	0,003	2,88	0,03	-2,95
ENSG00000138119	myoferlin	MYOF	0,004	2,87	0,04	-2,76
ENSG00000175352	nuclear receptor interacting protein 3	NRIP3	0,006	2,84	0,02	-2,75
ENSG00000008083	jumonji, AT rich interactive domain 2	JARID2	0,018	2,83	0,02	-3,36
ENSG00000095951	human immunodeficiency virus type I enhancer bin	HIVEP1	0,008	2,81	0,03	-2,56
ENSG00000213859	potassium channel tetramerisation domain contain	KCTD11	0,013	2,79	0,03	-2,68
ENSG00000175445	lipoprotein lipase	LPL	0,008	2,77	0,03	-3,00
ENSG00000100221	Josephin domain containing 1	JOSD1	0,004	2,76	0,02	-2,68
ENSG00000120539	microtubule associated serine/threonine kinase-lik	MASTL	0,007	2,74	0,04	-2,06
ENSG00000121769	fatty acid binding protein 3, muscle and heart (mar	FABP3	0,003	2,73	0,02	-2,78
ENSG00000168994	chromosome 6 open reading frame 145	C6orf145	0,004	2,72	0,03	-2,71
ENSG00000196083	interleukin 1 receptor accessory protein	IL1RAP	0,008	2,72	0,02	-4,15
ENSG00000115738	inhibitor of DNA binding 2, dominant negative helix	ID2	0,013	2,71	0,04	-2,91
ENSG00000183484	G protein-coupled receptor 132	GPR132	0,015	2,71	0,02	-2,19
ENSG00000196396	protein tyrosine phosphatase, non-receptor type 1	PTPN1	0,010	2,69	0,03	-2,26
ENSG00000160883	hexokinase 3 (white cell)	HK3	0,007	2,69	0,02	-2,40
ENSG00000151689	inositol polyphosphate-1-phosphatase	INPP1	0,008	2,68	0,03	-2,36
ENSG00000124225	prostate transmembrane protein, androgen induce	PMEPA1	0,008	2,67	0,02	-2,93
ENSG00000260231	na	na	0,016	2,67	0,03	-2,73
ENSG00000101665	SMAD family member 7	SMAD7	0,007	2,67	0,01	-3,26

ENSG00000139722	vacuolar protein sorting 37 homolog B (<i>S. cerevisiae</i>)	VPS37B	0,007	2,66	0,02	-2,61
ENSG00000114013	CD86 molecule	CD86	0,005	2,65	0,02	-2,66
ENSG00000161091	chromosome 19 open reading frame 28	C19orf28	0,004	2,65	0,02	-2,41
ENSG00000156535	CD109 molecule	CD109	0,013	2,64	0,04	-2,51
ENSG00000102226	ubiquitin specific peptidase 11	USP11	0,005	2,63	0,02	-2,27
ENSG00000181649	pleckstrin homology-like domain, family A, member 2	PHLDA2	0,006	2,60	0,03	-2,84
ENSG00000131370	SH3-domain binding protein 5 (BTK-associated)	SH3BP5	0,009	2,56	0,03	-2,26
ENSG00000006327	tumor necrosis factor receptor superfamily, member 12A	TNFRSF12A	0,011	2,56	0,03	-2,68
ENSG00000196449	yrdC domain containing (<i>E. coli</i>)	YRDC	0,007	2,54	0,03	-2,74
ENSG00000008405	cryptochrome 1 (photolyase-like)	CRY1	0,012	2,53	0,02	-2,56
ENSG00000126003	pleiomorphic adenoma gene-like 2	PLAGL2	0,013	2,50	0,03	-2,35
ENSG00000165195	phosphatidylinositol glycan anchor biosynthesis, class A	PIGA	0,014	2,50	0,04	-2,90
ENSG00000137462	toll-like receptor 2	TLR2	0,022	2,50	0,05	-2,58
ENSG00000259758	N/A	N/A	0,007	2,49	0,02	-2,44
ENSG00000141540	tweety homolog 2 (<i>Drosophila</i>)	TTYH2	0,006	2,49	0,02	-2,16
ENSG00000151092	N-glycanase 1	NGLY1	0,007	2,48	0,03	-2,16
ENSG00000170779	cell division cycle associated 4	CDCA4	0,013	2,47	0,03	-2,46
ENSG00000103855	CD276 molecule	CD276	0,017	2,47	0,02	-2,74
ENSG00000138623	semaphorin 7A, GPI membrane anchor (John Milton)	SEMA7A	0,003	2,47	0,03	-2,18
ENSG00000144136	solute carrier family 20 (phosphate transporter), member 1	SLC20A1	0,008	2,42	0,02	-2,61
ENSG00000181788	seven in absentia homolog 2 (<i>Drosophila</i>)	SIAH2	0,009	2,41	0,03	-2,57
ENSG00000102908	nuclear factor of activated T-cells 5, tonicity-responsive	NFAT5	0,011	2,40	0,03	-2,59
ENSG00000242247	ADP-ribosylation factor GTPase activating protein 3	ARFGAP3	0,004	2,40	0,01	-2,39
ENSG00000197147	leucine rich repeat containing 8 family, member B	LRRC8B	0,019	2,39	0,03	-2,82
ENSG00000197249	serpin peptidase inhibitor, clade A (alpha-1 antitrypsin)	SERPINA1	0,004	2,37	0,02	-2,14
ENSG00000143384	myeloid cell leukemia sequence 1 (BCL2-related)	MCL1	0,003	2,37	0,03	-2,04
ENSG00000102962	chemokine (C-C motif) ligand 22	CCL22	0,011	2,36	0,03	-2,61
ENSG00000074660	scavenger receptor class F, member 1	SCARF1	0,004	2,36	0,01	-2,46
ENSG00000155366	ras homolog gene family, member C	RHOC	0,006	2,32	0,02	-2,72
ENSG00000147650	low density lipoprotein receptor-related protein 12	LRP12	0,006	2,32	0,02	-2,82
ENSG00000015475	BH3 interacting domain death agonist	BID	0,007	2,32	0,04	-2,10
ENSG00000107175	cAMP responsive element binding protein 3	CREB3	0,004	2,32	0,03	-2,18
ENSG00000117143	UDP-N-acetylglucosamine pyrophosphorylase 1	UAP1	0,012	2,31	0,03	-2,45

ENSG00000140968	interferon regulatory factor 8	IRF8	0,005	2,30	0,02	-2,85
ENSG00000104450	sperm associated antigen 1	SPAG1	0,016	2,27	0,05	-2,11
ENSG00000127124	human immunodeficiency virus type I enhancer binding protein 3	HIVEP3	0,005	2,27	0,02	-2,03
ENSG00000173548	sorting nexin 33	SNX33	0,015	2,27	0,04	-2,20
ENSG00000197461	platelet-derived growth factor alpha polypeptide	PDGFA	0,018	2,26	0,02	-2,67
ENSG00000132661	NTF2-like export factor 1	NXT1	0,011	2,25	0,01	-2,46
ENSG00000023330	aminolevulinic acid synthase 1	ALAS1	0,018	2,25	0,03	-2,55
ENSG00000077238	interleukin 4 receptor	IL4R	0,007	2,24	0,01	-2,38
ENSG00000172530	BTG3 associated nuclear protein	BANP	0,007	2,24	0,02	-2,31
ENSG00000155926	Src-like-adaptor	SLA	0,043	2,23	0,05	-2,29
ENSG00000117868	extended synaptotagmin-like protein 2	ESYT2	0,004	2,23	0,01	-2,18
ENSG00000130340	sorting nexin 9	SNX9	0,003	2,23	0,01	-2,09
ENSG00000157224	claudin 12	CLDN12	0,015	2,22	0,01	-2,46
ENSG00000170425	adenosine A2b receptor	ADORA2B	0,010	2,21	0,04	-2,23
ENSG00000064225	ST3 beta-galactoside alpha-2,3-sialyltransferase 6	ST3GAL6	0,003	2,21	0,03	-2,19
ENSG00000177150	chromosome 18 open reading frame 19	C18orf19	0,003	2,21	0,02	-2,35
ENSG00000186594	chromosome 17 open reading frame 91	C17orf91	0,017	2,21	0,03	-2,70
ENSG00000101384	jagged 1	JAG1	0,004	2,20	0,04	-2,07
ENSG00000169504	chloride intracellular channel 4	CLIC4	0,003	2,20	0,01	-2,34
ENSG00000104447	trichorhinophalangeal syndrome 1	TRPS1	0,005	2,19	0,05	-2,37
ENSG00000115758	ornithine decarboxylase 1	ODC1	0,004	2,19	0,01	-2,08
ENSG00000225968	na	na	0,044	2,18	0,02	-2,07
ENSG00000100139	MICAL-like 1	MICALL1	0,026	2,17	0,04	-2,01
ENSG00000037897	methyltransferase like 1	METTL1	0,017	2,16	0,04	-2,13
ENSG00000196843	AT rich interactive domain 5A (MRF1-like)	ARID5A	0,005	2,15	0,02	-2,05
ENSG00000251136	N/A	RP11-37B2.1	0,023	2,14	0,03	-2,30
ENSG00000112941	PAP associated domain containing 7	PAPD7	0,007	2,14	0,03	-2,17
ENSG00000170776	A kinase (PRKA) anchor protein 13	AKAP13	0,012	2,14	0,02	-2,26
ENSG00000162723	SLAM family member 9	SLAMF9	0,018	2,14	0,02	-2,25
ENSG00000102119	emerin	EMD	0,003	2,13	0,04	-2,18
ENSG00000132170	peroxisome proliferator-activated receptor gamma	PPARG	0,021	2,13	0,05	-2,74
ENSG00000162889	mitogen-activated protein kinase-activated protein kinase 2	MAPKAPK2	0,004	2,12	0,02	-2,07
ENSG00000143393	phosphatidylinositol 4-kinase, catalytic, beta	PI4KB	0,002	2,11	0,02	-2,27

ENSG00000139496	nucleoporin like 1	NUPL1	0,008	2,10	0,04	-2,44
ENSG00000196781	transducin-like enhancer of split 1 (E(sp1) homolog	TLE1	0,038	2,10	0,03	-2,15
ENSG00000206560	ankyrin repeat domain 28	ANKRD28	0,015	2,07	0,02	-2,15
ENSG00000180611	Mab-21 domain containing 2	MB21D2	0,018	2,07	0,03	-2,66
ENSG00000154122	ankylosis, progressive homolog (mouse)	ANKH	0,021	2,06	0,04	-2,12
ENSG00000118971	cyclin D2	CCND2	0,041	2,06	0,02	-3,03
ENSG00000085117	CD82 molecule	CD82	0,011	2,05	0,04	-2,10
ENSG00000173334	tribbles homolog 1 (Drosophila)	TRIB1	0,019	2,03	0,05	-2,36
ENSG00000008294	sperm associated antigen 9	SPAG9	0,011	2,02	0,03	-2,08
ENSG00000120217	CD274 molecule	CD274	0,024	2,00	0,02	-2,96
ENSG00000136052	solute carrier family 41, member 2	SLC41A2	0,009	2,00	0,03	-2,22
ENSG00000173801	junction plakoglobin	JUP	0,024	0,50	0,01	2,16
ENSG00000064012	caspase 8, apoptosis-related cysteine peptidase	CASP8	0,027	0,50	0,03	2,12
ENSG00000198824	zinc finger protein 828	ZNF828	0,009	0,50	0,02	2,17
ENSG00000152359	POC5 centriolar protein homolog (Chlamydomonas	POC5	0,036	0,50	0,04	2,50
ENSG00000108055	structural maintenance of chromosomes 3	SMC3	0,021	0,50	0,01	2,03
ENSG00000084090	StAR-related lipid transfer (START) domain containi	STARD7	0,009	0,50	0,01	2,00
ENSG00000168291	pyruvate dehydrogenase (lipoamide) beta	PDHB	0,007	0,50	0,01	2,12
ENSG00000170915	progesterin and adipoQ receptor family member VIII	PAQR8	0,012	0,49	0,02	3,44
ENSG00000115548	lysine (K)-specific demethylase 3A	KDM3A	0,006	0,49	0,04	2,03
ENSG00000187796	caspase recruitment domain family, member 9	CARD9	0,006	0,49	0,01	2,09
ENSG00000181192	dehydrogenase E1 and transketolase domain conta	DHTKD1	0,004	0,49	0,01	2,40
ENSG00000163535	shugoshin-like 2 (S. pombe)	SGOL2	0,012	0,49	0,05	2,02
ENSG00000121486	TRM1 tRNA methyltransferase 1-like	TRMT1L	0,008	0,48	0,01	2,11
ENSG00000144228	speckle-type POZ protein-like	SPOPL	0,006	0,48	0,03	2,29
ENSG00000170836	protein phosphatase, Mg2+/Mn2+ dependent, 1D	PPM1D	0,012	0,48	0,02	2,09
ENSG00000168918	inositol polyphosphate-5-phosphatase, 145kDa	INPP5D	0,024	0,48	0,02	2,01
ENSG00000014123	KIAA0776	KIAA0776	0,011	0,48	0,03	2,04
ENSG00000107738	chromosome 10 open reading frame 54	C10orf54	0,014	0,48	0,01	2,55
ENSG00000006007	glycerophosphodiester phosphodiesterase 1	GDE1	0,011	0,48	0,03	2,02
ENSG00000084092	chromosome 4 open reading frame 14	C4orf14	0,009	0,48	0,02	2,07
ENSG00000136193	secernin 1	SCRN1	0,022	0,48	0,02	2,04
ENSG00000075188	nucleoporin 37kDa	NUP37	0,014	0,47	0,03	2,35

ENSG00000169967	mitogen-activated protein kinase kinase kinase 2	MAP3K2	0,010	0,47	0,02	2,23
ENSG00000121858	tumor necrosis factor (ligand) superfamily, membe	TNFSF10	0,040	0,47	0,05	2,03
ENSG00000121152	non-SMC condensin I complex, subunit H	NCAPH	0,017	0,47	0,02	2,24
ENSG00000251442	N/A	RP11-792D21.2	0,018	0,47	0,03	2,17
ENSG00000121897	lipoic acid synthetase	LIAS	0,029	0,47	0,03	2,10
ENSG00000048392	ribonucleotide reductase M2 B (TP53 inducible)	RRM2B	0,005	0,47	0,02	2,25
ENSG00000008869	HEAT repeat containing 5B	HEATR5B	0,006	0,47	0,01	2,41
ENSG00000260539	na	na	0,018	0,47	0,02	2,14
ENSG00000170293	CKLF-like MARVEL transmembrane domain contain	CMTM8	0,012	0,46	0,05	2,49
ENSG00000158109	tumor protein p63 regulated 1-like	TPRG1L	0,020	0,46	0,04	2,48
ENSG00000168297	PX domain containing serine/threonine kinase	PXK	0,010	0,46	0,01	2,08
ENSG00000163946	chromosome 3 open reading frame 63	C3orf63	0,011	0,46	0,02	2,15
ENSG00000112312	geminin, DNA replication inhibitor	GMNN	0,016	0,46	0,02	2,24
ENSG00000144567	family with sequence similarity 134, member A	FAM134A	0,009	0,46	0,02	2,07
ENSG00000147854	ubiquitin-like with PHD and ring finger domains 2	UHRF2	0,035	0,46	0,03	2,27
ENSG00000257093	protein LCHN	AC004918.4	0,027	0,46	0,05	2,19
ENSG00000123609	N-myc (and STAT) interactor	NMI	0,009	0,45	0,02	2,11
ENSG00000166938	DIS3 mitotic control homolog (S. cerevisiae)-like	DIS3L	0,013	0,45	0,04	2,00
ENSG00000115718	protein C (inactivator of coagulation factors Va and	PROC	0,031	0,45	0,03	2,87
ENSG00000164221	coiled-coil domain containing 112	CCDC112	0,018	0,45	0,02	2,39
ENSG00000187147	ring finger protein 220	RNF220	0,016	0,45	0,05	2,27
ENSG00000133574	GTPase, IMAP family member 4	GIMAP4	0,048	0,45	0,04	2,57
ENSG00000135828	ribonuclease L (2',5'-oligoadenylate synthetase-c	RNASEL	0,013	0,45	0,01	2,20
ENSG00000185862	ecotropic viral integration site 2B	EVI2B	0,016	0,45	0,03	2,41
ENSG00000151461	UPF2 regulator of nonsense transcripts homolog (y	UPF2	0,012	0,45	0,01	2,18
ENSG00000144635	dynein, cytoplasmic 1, light intermediate chain 1	DYNC1L1	0,007	0,45	0,02	2,31
ENSG00000112079	serine/threonine kinase 38	STK38	0,005	0,45	0,02	2,28
ENSG00000148835	TAF5 RNA polymerase II, TATA box binding protein	TAF5	0,010	0,45	0,03	2,63
ENSG00000121067	speckle-type POZ protein	SPOP	0,009	0,44	0,01	2,32
ENSG00000114541	FERM domain containing 4B	FRMD4B	0,008	0,44	0,03	2,21
ENSG00000171940	zinc finger protein 217	ZNF217	0,018	0,44	0,02	2,43
ENSG00000082074	FYN binding protein	FYB	0,015	0,44	0,03	2,15
ENSG00000164331	ankyrin repeat, family A (RFXANK-like), 2	ANKRA2	0,014	0,44	0,03	2,28

ENSG00000163513	transforming growth factor, beta receptor II (70/80	TGFB2	0,005	0,44	0,01	2,32
ENSG00000165983	phosphotriesterase related	PTER	0,007	0,44	0,02	2,38
ENSG00000165025	spleen tyrosine kinase	SYK	0,010	0,44	0,02	2,08
ENSG00000143337	torsin A interacting protein 1	TOR1AIP1	0,010	0,44	0,02	2,34
ENSG00000156136	deoxycytidine kinase	DCK	0,009	0,44	0,03	2,09
ENSG00000148090	AU RNA binding protein/enoyl-CoA hydratase	AUH	0,005	0,43	0,02	2,09
ENSG00000174197	MAX gene associated	MGA	0,009	0,43	0,02	2,54
ENSG00000113851	cereblon	CRBN	0,005	0,43	0,02	2,13
ENSG00000169926	na	na	0,006	0,43	0,03	2,02
ENSG00000157107	FCH domain only 2	FCHO2	0,004	0,43	0,01	2,45
ENSG00000126775	ATG14 autophagy related 14 homolog (<i>S. cerevisiae</i>)	ATG14	0,006	0,43	0,02	2,39
ENSG00000068024	histone deacetylase 4	HDAC4	0,030	0,43	0,04	2,14
ENSG00000172086	lysine-rich coiled-coil 1	KRCC1	0,005	0,43	0,01	2,17
ENSG00000117226	guanylate binding protein 3	GBP3	0,007	0,43	0,02	2,46
ENSG00000164414	solute carrier family 35 (CMP-sialic acid transporter)	SLC35A1	0,010	0,42	0,02	2,23
ENSG00000152457	DNA cross-link repair 1C	DCLRE1C	0,007	0,42	0,02	2,61
ENSG00000170365	SMAD family member 1	SMAD1	0,007	0,42	0,02	2,01
ENSG00000165516	kelch domain containing 2	KLHDC2	0,014	0,42	0,02	2,50
ENSG00000169019	COMM domain containing 8	COMM8	0,008	0,42	0,03	2,55
ENSG00000079950	syntaxin 7	STX7	0,008	0,42	0,02	2,10
ENSG00000136044	adaptor protein, phosphotyrosine interaction, PH d	APPL2	0,017	0,42	0,02	2,61
ENSG00000165533	tetratricopeptide repeat domain 8	TTC8	0,027	0,42	0,04	2,76
ENSG00000023516	A kinase (PRKA) anchor protein 11	AKAP11	0,009	0,42	0,02	2,71
ENSG00000137414	family with sequence similarity 8, member A1	FAM8A1	0,008	0,42	0,03	2,20
ENSG00000138794	caspase 6, apoptosis-related cysteine peptidase	CASP6	0,014	0,42	0,04	2,12
ENSG00000180917	FtsJ methyltransferase domain containing 1	FTSJD1	0,028	0,41	0,03	2,17
ENSG00000112234	F-box and leucine-rich repeat protein 4	FBXL4	0,002	0,41	0,04	2,04
ENSG00000239213	N/A	RP11-85F14.5	0,013	0,41	0,03	2,69
ENSG00000169220	regulator of G-protein signaling 14	RGS14	0,011	0,41	0,02	2,15
ENSG00000171681	activating transcription factor 7 interacting protein	ATF7IP	0,010	0,41	0,01	2,19
ENSG00000174946	G protein-coupled receptor 171	GPR171	0,032	0,41	0,03	2,70
ENSG00000005175	RNA polymerase II associated protein 3	RPAP3	0,009	0,41	0,01	3,17
ENSG00000110876	selectin P ligand	SELPLG	0,008	0,41	0,02	2,18

ENSG00000213689	three prime repair exonuclease 1	TREX1	0,008	0,41	0,01	2,74
ENSG00000132357	caspase recruitment domain family, member 6	CARD6	0,019	0,40	0,03	2,17
ENSG00000162378	zyg-11 homolog B (<i>C. elegans</i>)	ZYG11B	0,005	0,40	0,01	2,60
ENSG00000143457	golgi phosphoprotein 3-like	GOLPH3L	0,015	0,40	0,02	2,60
ENSG00000215256	Full-length cDNA clone CS0DF029YN24 of Fetal bra	AL136419.1	0,006	0,40	0,04	2,45
ENSG00000125703	ATG4 autophagy related 4 homolog C (<i>S. cerevisiae</i>)	ATG4C	0,018	0,40	0,02	3,00
ENSG00000127720	chromosome 12 open reading frame 26	C12orf26	0,007	0,40	0,02	2,38
ENSG00000145569	family with sequence similarity 105, member A	FAM105A	0,007	0,40	0,01	3,17
ENSG00000170385	solute carrier family 30 (zinc transporter), member	SLC30A1	0,018	0,40	0,02	3,18
ENSG00000180573	histone cluster 1, H2ac	HIST1H2AC	0,026	0,40	0,05	2,73
ENSG00000096968	Janus kinase 2	JAK2	0,003	0,40	0,01	2,21
ENSG00000198382	UV radiation resistance associated gene	UVRAG	0,006	0,40	0,02	2,81
ENSG00000164649	cell division cycle associated 7-like	CDCA7L	0,013	0,40	0,02	2,67
ENSG00000096717	sirtuin 1	SIRT1	0,013	0,39	0,03	3,40
ENSG00000146083	ring finger protein 44	RNF44	0,007	0,39	0,01	3,15
ENSG00000174718	chromosome 12 open reading frame 35	C12orf35	0,018	0,39	0,02	2,94
ENSG00000184992	BRI3 binding protein	BRI3BP	0,015	0,39	0,03	2,29
ENSG00000117616	chromosome 1 open reading frame 63	C1orf63	0,012	0,39	0,03	2,32
ENSG00000107719	KIAA1274	KIAA1274	0,047	0,39	0,03	2,89
ENSG00000080546	sestrin 1	SESN1	0,014	0,39	0,01	3,18
ENSG00000174738	nuclear receptor subfamily 1, group D, member 2	NR1D2	0,022	0,39	0,03	2,94
ENSG00000196323	zinc finger and BTB domain containing 44	ZBTB44	0,007	0,39	0,02	2,38
ENSG00000055917	pumilio homolog 2 (<i>Drosophila</i>)	PUM2	0,007	0,39	0,02	2,57
ENSG00000145246	ATPase, class V, type 10D	ATP10D	0,013	0,38	0,02	3,30
ENSG00000164117	F-box protein 8	FBXO8	0,009	0,38	0,01	2,71
ENSG00000038274	methionine adenosyltransferase II, beta	MAT2B	0,005	0,38	0,01	2,76
ENSG00000072121	zinc finger, FYVE domain containing 26	ZFYVE26	0,006	0,38	0,02	2,04
ENSG00000160179	na	na	0,003	0,38	0,01	2,87
ENSG00000001084	glutamate-cysteine ligase, catalytic subunit	GCLC	0,008	0,38	0,01	3,24
ENSG00000189144	zinc finger protein 573	ZNF573	0,011	0,38	0,05	2,10
ENSG00000266753	na	na	0,006	0,38	0,03	2,77
ENSG00000118482	PHD finger protein 3	PHF3	0,005	0,38	0,02	2,49
ENSG00000119950	MAX interactor 1	MXI1	0,003	0,38	0,01	2,67

ENSG00000106780	multiple EGF-like-domains 9	MEGF9	0,007	0,38	0,02	2,98
ENSG00000181481	ring finger protein 135	RNF135	0,015	0,38	0,02	2,84
ENSG00000138433	corepressor interacting with RBPJ, 1	CIR1	0,010	0,38	0,02	2,33
ENSG00000185950	insulin receptor substrate 2	IRS2	0,015	0,38	0,03	3,63
ENSG00000112773	family with sequence similarity 46, member A	FAM46A	0,003	0,38	0,01	3,40
ENSG00000261799	na	na	0,024	0,38	0,02	3,24
ENSG00000155508	CCR4-NOT transcription complex, subunit 8	CNOT8	0,004	0,38	0,02	2,62
ENSG00000188906	leucine-rich repeat kinase 2	LRRK2	0,033	0,38	0,02	2,84
ENSG00000163154	tumor necrosis factor, alpha-induced protein 8-like	TNFAIP8L2	0,006	0,37	0,02	2,28
ENSG00000124496	transcriptional regulating factor 1	TRERF1	0,007	0,37	0,01	2,69
ENSG00000080503	SWI/SNF related, matrix associated, actin dependent	SMARCA2	0,003	0,37	0,01	2,60
ENSG00000111231	GPN-loop GTPase 3	GPN3	0,016	0,37	0,02	2,77
ENSG00000178966	RMI1, RecQ mediated genome instability 1, homolog	RMI1	0,004	0,37	0,02	2,68
ENSG00000100354	trinucleotide repeat containing 6B	TNRC6B	0,007	0,37	0,02	2,72
ENSG00000021574	spastin	SPAST	0,007	0,37	0,03	2,88
ENSG00000158092	NCK adaptor protein 1	NCK1	0,010	0,37	0,03	2,34
ENSG00000205302	sorting nexin 2	SNX2	0,002	0,37	0,02	2,41
ENSG00000144909	oxysterol binding protein-like 11	OSBPL11	0,013	0,37	0,02	2,56
ENSG00000007944	myosin regulatory light chain interacting protein	MYLIP	0,015	0,37	0,04	3,75
ENSG00000150593	programmed cell death 4 (neoplastic transformation)	PDCD4	0,008	0,36	0,02	3,22
ENSG00000232941	N/A	AC090186.1	0,008	0,36	0,03	2,56
ENSG00000187626	zinc finger with KRAB and SCAN domains 4	ZKSCAN4	0,011	0,36	0,05	2,40
ENSG00000145241	centromere protein C 1	CENPC1	0,023	0,36	0,03	2,88
ENSG00000135999	enhancer of polycomb homolog 2 (Drosophila)	EPC2	0,008	0,36	0,03	2,26
ENSG00000132405	TBC1 domain family, member 14	TBC1D14	0,030	0,36	0,04	2,52
ENSG00000204103	v-maf musculoaponeurotic fibrosarcoma oncogene	MAFB	0,008	0,36	0,02	2,72
ENSG00000168061	SAC3 domain containing 1	SAC3D1	0,009	0,35	0,05	2,02
ENSG00000186188	omega-3 fatty acid receptor 1	O3FAR1	0,007	0,34	0,04	2,47
ENSG00000167716	WD repeat domain 81	WDR81	0,022	0,34	0,03	2,95
ENSG00000117289	thioredoxin interacting protein	TXNIP	0,025	0,34	0,03	3,14
ENSG00000197442	mitogen-activated protein kinase kinase kinase 5	MAP3K5	0,006	0,34	0,03	2,04
ENSG00000167528	zinc finger protein 641	ZNF641	0,007	0,33	0,02	2,92
ENSG00000047346	KIAA1370	KIAA1370	0,006	0,33	0,01	3,84

ENSG00000177409	sterile alpha motif domain containing 9-like	SAMD9L	0,018	0,33	0,04	2,56
ENSG00000134326	cytidine monophosphate (UMP-CMP) kinase 2, mitochondrial	CMPK2	0,023	0,32	0,03	4,08
ENSG00000138463	disrupted in renal carcinoma 2	DIRC2	0,007	0,32	0,02	2,91
ENSG00000205413	sterile alpha motif domain containing 9	SAMD9	0,014	0,32	0,02	3,38
ENSG00000198829	succinate receptor 1	SUCNR1	0,007	0,32	0,02	2,17
ENSG00000027697	interferon gamma receptor 1	IFNGR1	0,013	0,32	0,02	3,17
ENSG00000101916	toll-like receptor 8	TLR8	0,012	0,31	0,02	4,58
ENSG00000198740	zinc finger protein 652	ZNF652	0,006	0,31	0,01	4,55
ENSG00000104205	serum/glucocorticoid regulated kinase family, member 1	SGK3	0,009	0,30	0,03	2,87
ENSG00000075643	molybdenum cofactor sulfurase	MOCOS	0,006	0,30	0,05	2,38
ENSG00000182511	feline sarcoma oncogene	FES	0,003	0,29	0,03	2,83
ENSG00000117643	mannosidase, alpha, class 1C, member 1	MAN1C1	0,003	0,29	0,02	2,37
ENSG00000196227	chromosome 20 open reading frame 177	C20orf177	0,008	0,29	0,05	3,82
ENSG00000175155	yippee-like 2 (Drosophila)	YPEL2	0,007	0,29	0,03	3,62
ENSG00000136161	regulator of chromosome condensation (RCC1) and condensin 1 subunit 1	RCBTB2	0,008	0,29	0,03	2,89
ENSG00000130816	DNA (cytosine-5-)-methyltransferase 1	DNMT1	0,005	0,29	0,05	2,38
ENSG00000138172	calcium homeostasis modulator 2	CALHM2	0,009	0,28	0,03	3,04
ENSG00000178199	zinc finger CCCH-type containing 12D	ZC3H12D	0,004	0,28	0,04	3,54
ENSG00000095015	mitogen-activated protein kinase kinase kinase 1	MAP3K1	0,003	0,28	0,05	2,70
ENSG00000071073	mannosyl (alpha-1,3-)-glycoprotein beta-1,4-N-acetyltransferase 4A	MGAT4A	0,004	0,28	0,03	2,84
ENSG00000189227	chromosome 15 open reading frame 61	C15orf61	0,017	0,27	0,03	3,06
ENSG00000129518	E2F-associated phosphoprotein	EAPP	0,006	0,27	0,01	3,60
ENSG00000178977	non-protein coding RNA 324	NCRNA00324	0,011	0,26	0,05	3,14
ENSG00000148158	sorting nexin family member 30	SNX30	0,013	0,26	0,01	3,25
ENSG00000163563	myeloid cell nuclear differentiation antigen	MNDA	0,017	0,25	0,02	4,35
ENSG00000164104	high mobility group box 2	HMGB2	0,003	0,25	0,03	3,43
ENSG00000114796	kelch-like 24 (Drosophila)	KLHL24	0,007	0,24	0,01	4,84
ENSG00000077063	cortactin binding protein 2	CTTNBP2	0,011	0,23	0,03	4,79
ENSG00000101236	ring finger protein 24	RNF24	0,006	0,23	0,02	2,99
ENSG00000132646	proliferating cell nuclear antigen	PCNA	0,023	0,22	0,01	4,14
ENSG00000152804	hematopoietically expressed homeobox	HHEX	0,010	0,22	0,03	4,82
ENSG00000095585	B-cell linker	BLNK	0,023	0,22	0,02	4,85
ENSG00000171631	pyrimidinergic receptor P2Y, G-protein coupled, 6	P2RY6	0,008	0,21	0,02	2,70

ENSG00000145416	membrane-associated ring finger (C3HC4) 1	MARCH1	0,011	0,21	0,03	4,85
ENSG00000110852	C-type lectin domain family 2, member B	CLEC2B	0,003	0,20	0,01	5,06
ENSG00000164463	chromosome 5 open reading frame 41	C5orf41	0,005	0,20	0,01	5,55
ENSG00000118308	lymphoid-restricted membrane protein	LRMP	0,014	0,20	0,04	3,67
ENSG00000121933	adenosine A3 receptor	ADORA3	0,010	0,20	0,02	5,58
ENSG00000129534	MIS18 binding protein 1	MIS18BP1	0,010	0,19	0,02	5,50
ENSG00000163565	interferon, gamma-inducible protein 16	IFI16	0,007	0,18	0,03	3,60
ENSG00000136826	Kruppel-like factor 4 (gut)	KLF4	0,004	0,17	0,03	3,16
ENSG00000170448	nuclear transcription factor, X-box binding-like 1	NFXL1	0,013	0,15	0,02	8,36
ENSG00000174944	purinergic receptor P2Y, G-protein coupled, 14	P2RY14	0,003	0,15	0,03	7,02
ENSG00000106560	GTPase, IMAP family member 2	GIMAP2	0,007	0,14	0,02	7,41
ENSG00000139679	lysophosphatidic acid receptor 6	LPAR6	0,014	0,14	0,04	5,83
ENSG00000180340	frizzled homolog 2 (Drosophila)	FZD2	0,009	0,11	0,02	7,85
ENSG00000169087	HSPB (heat shock 27kDa) associated protein 1	HSPBAP1	0,012	0,10	0,02	10,53
ENSG00000150681	regulator of G-protein signaling 18	RGS18	0,007	0,10	0,02	10,45