Table S3: All genes significantly downregulated by ibuprofen in interleukin 1β -treated chondrocytes

Gene	Name	Mean (IL1)	Mean (IL1+ibu)	FC	adj. p
IL23A	interleukin 23 subunit alpha [Source:HGNC Symbol;Acc:HGNC:15488]	15.2	4.7	**-3.24**	0
HAS1	hyaluronan synthase 1 [Source:HGNC Symbol;Acc:HGNC:4818]	0.8	0.3	**-2.77**	0
IGFBP4	insulin like growth factor binding protein 4 [Source:HGNC Symbol;Acc:HGNC:5473]	213.8	79.7	**-2.73**	0
IL6	interleukin 6 [Source:HGNC Symbol;Acc:HGNC:6018]	958.4	403.8	**-2.49**	0
PDE3A	phosphodiesterase 3A [Source:HGNC Symbol;Acc:HGNC:8778]	0.9	0.3	**-2.48**	0.00013
STAT4	signal transducer and activator of transcription 4 [Source:HGNC Symbol;Acc:HGNC:11365]	2.5	1.0	**-2.36**	0
LINC00968	long intergenic non-protein coding RNA 968 [Source:HGNC Symbol;Acc:HGNC:48727]	0.7	0.3	**-2.22**	0.00045
PCSK1	proprotein convertase subtilisin/kexin type 1 [Source:HGNC Symbol;Acc:HGNC:8743]	7.2	3.2	**-2.19**	0
ADAMTS6	ADAM metallopeptidase with thrombospondin type 1 motif 6 [Source:HGNC Symbol;Acc:HGNC:222]	10.5	4.9	**-2.18**	0
HAL	histidine ammonia-lyase [Source:HGNC Symbol;Acc:HGNC:4806]	1.7	0.8	**-2.12**	0
DNAH17	dynein axonemal heavy chain 17 [Source:HGNC Symbol;Acc:HGNC:2946]	1.0	0.5	**-2.06**	2.00E-06
CSF3	colony stimulating factor 3 [Source:HGNC Symbol;Acc:HGNC:2438]	19.8	9.9	**-2.02**	0
AREG	amphiregulin [Source:HGNC Symbol;Acc:HGNC:651]	2.3	1.2	**-2.01**	0
CA12	carbonic anhydrase 12 [Source:HGNC Symbol;Acc:HGNC:1371]	20.9	10.5	**-2.00**	0
INSC	inscuteable homolog (Drosophila) [Source:HGNC Symbol;Acc:HGNC:33116]	0.6	0.3	**-1.98**	0.0011
KCNE5	potassium voltage-gated channel subfamily E regulatory subunit 5	1.3	0.6	**-1.94**	6.00E-06
LDB2	LIM domain binding 2 [Source:HGNC Symbol;Acc:HGNC:6533]	0.5	0.3	**-1.92**	0.0051
LINC00707	long intergenic non-protein coding RNA 707 [Source:HGNC Symbol;Acc:HGNC:44691]	5.6	2.9	**-1.91**	0
FOXCUT	FOXC1 upstream transcript (non-protein coding) [Source:HGNC Symbol;Acc:HGNC:50650]	0.4	0.2	**-1.81**	0.043
DOK6	docking protein 6 [Source:HGNC Symbol;Acc:HGNC:28301]	0.9	0.5	**-1.80**	0.00060
DAW1	dynein assembly factor with WD repeats 1 [Source:HGNC Symbol;Acc:HGNC:26383]	0.9	0.5	**-1.78**	0.00057
TMEM71	transmembrane protein 71 [Source:HGNC Symbol;Acc:HGNC:26572]	1.8	1.0	**-1.77**	2.00E-06
MAMSTR	MEF2 activating motif and SAP domain containing transcriptional regulator	0.5	0.3	**-1.72**	0.022
KNDC1	kinase non-catalytic C-lobe domain containing 1 [Source:HGNC Symbol;Acc:HGNC:29374]	0.8	0.5	**-1.70**	0.0028
EFHC2	EF-hand domain containing 2 [Source:HGNC Symbol;Acc:HGNC:26233]	0.8	0.5	**-1.69**	0.0047
MEX3A	mex-3 RNA binding family member A [Source:HGNC Symbol;Acc:HGNC:33482]	0.9	0.5	**-1.69**	0.0019
DPY19L2P1	DPY19L2 pseudogene 1 [Source:HGNC Symbol;Acc:HGNC:22305]	0.6	0.4	**-1.65**	0.033
TGFBI	transforming growth factor beta induced [Source:HGNC Symbol;Acc:HGNC:11771]	127.8	80.7	**-1.64**	0
C3AR1	complement C3a receptor 1 [Source:HGNC Symbol;Acc:HGNC:1319]	3.5	2.2	**-1.63**	0
EFEMP1	EGF containing fibulin like extracellular matrix protein 1 [Source:HGNC Symbol;Acc:HGNC:3218]	72.6	45.4	**-1.63**	0
NAMPT	nicotinamide phosphoribosyltransferase [Source:HGNC Symbol;Acc:HGNC:30092]	596.1	368.8	**-1.60**	0

FOXF1	forkhead box F1 [Source:HGNC Symbol;Acc:HGNC:3809]	1.2	0.8	**-1.60**	0.00093
AVPI1	arginine vasopressin induced 1 [Source:HGNC Symbol;Acc:HGNC:30898]	39.7	24.8	**-1.60**	0
SEMA3A	semaphorin 3A [Source:HGNC Symbol;Acc:HGNC:10723]	98.0	61.6	**-1.59**	0
STC1	stanniocalcin 1 [Source:HGNC Symbol;Acc:HGNC:11373]	2.0	1.3	**-1.59**	0.0030
TSKU	tsukushi, small leucine rich proteoglycan [Source:HGNC Symbol;Acc:HGNC:28850]	14.9	9.4	**-1.58**	0
SMOC1	SPARC related modular calcium binding 1 [Source:HGNC Symbol;Acc:HGNC:20318]	199.0	126.1	**-1.57**	0
ARAP2	ArfGAP with RhoGAP domain, ankyrin repeat and PH domain 2	12.5	8.0	**-1.56**	0
NAMPTP1	nicotinamide phosphoribosyltransferase pseudogene 1 [Source:HGNC Symbol;Acc:HGNC:17633]	26.1	16.3	**-1.56**	0
BEND5	BEN domain containing 5 [Source:HGNC Symbol;Acc:HGNC:25668]	0.9	0.6	**-1.54**	0.017
EPB41L3	erythrocyte membrane protein band 4.1 like 3 [Source:HGNC Symbol;Acc:HGNC:3380]	34.6	22.5	**-1.53**	0
EPB41L4B	erythrocyte membrane protein band 4.1 like 4B [Source:HGNC Symbol;Acc:HGNC:19818]	2.8	1.8	**-1.53**	0.00011
KIAA1217	KIAA1217 [Source:HGNC Symbol;Acc:HGNC:25428]	19.0	12.6	**-1.52**	0
CFAP58-AS1	CFAP58 antisense RNA 1 (head to head) [Source:HGNC Symbol;Acc:HGNC:45243]	2.0	1.5	**-1.52**	1.20E-05
ACSL4	acyl-CoA synthetase long-chain family member 4 [Source:HGNC Symbol;Acc:HGNC:3571]	428.1	280.7	**-1.52**	0
NR4A2	nuclear receptor subfamily 4 group A member 2 [Source:HGNC Symbol;Acc:HGNC:7981]	19.8	13.1	**-1.51**	0
PID1	phosphotyrosine interaction domain containing 1 [Source:HGNC Symbol;Acc:HGNC:26084]	285.1	190.6	**-1.51**	0
RSPO3	R-spondin 3 [Source:HGNC Symbol;Acc:HGNC:20866]	82.9	53.8	**-1.50**	0
KRT17	keratin 17 [Source:HGNC Symbol;Acc:HGNC:6427]	14.4	9.7	**-1.50**	0
IL1B	interleukin 1 beta [Source:HGNC Symbol;Acc:HGNC:5992]	572.6	394.9	**-1.50**	0
IGLV5-52	immunoglobulin lambda variable 5-52 [Source:HGNC Symbol;Acc:HGNC:5926]	0.9	0.6	**-1.49**	0.031
CH25H	cholesterol 25-hydroxylase [Source:HGNC Symbol;Acc:HGNC:1907]	2.3	1.6	**-1.49**	0.0054
PITPNC1	phosphatidylinositol transfer protein, cytoplasmic 1 [Source:HGNC Symbol;Acc:HGNC:21045]	26.5	17.8	**-1.49**	0
LDHAP7	lactate dehydrogenase A pseudogene 7 [Source:HGNC Symbol;Acc:HGNC:23144]	1.1	0.7	**-1.48**	0.014
ABHD17C	abhydrolase domain containing 17C [Source:HGNC Symbol;Acc:HGNC:26925]	7.7	5.2	**-1.48**	0
RGL3	ral guanine nucleotide dissociation stimulator like 3 [Source:HGNC Symbol;Acc:HGNC:30282]	3.3	2.2	**-1.48**	4.60E-05
FBXO16	F-box protein 16 [Source:HGNC Symbol;Acc:HGNC:13618]	1.1	0.7	**-1.47**	0.018
NNMT	nicotinamide N-methyltransferase [Source:HGNC Symbol;Acc:HGNC:7861]	141.3	95.6	**-1.47**	0
SCO2	SCO2, cytochrome c oxidase assembly protein [Source:HGNC Symbol;Acc:HGNC:10604]	2.2	1.5	**-1.46**	0.00016
NDP	NDP, norrin cystine knot growth factor [Source:HGNC Symbol;Acc:HGNC:7678]	49.1	34.1	**-1.46**	0
DISC1	disrupted in schizophrenia 1 [Source:HGNC Symbol;Acc:HGNC:2888]	4.1	2.8	**-1.46**	8.20E-05
AQP9	aquaporin 9 [Source:HGNC Symbol;Acc:HGNC:643]	2.1	1.4	**-1.45**	0.031
NEGR1	neuronal growth regulator 1 [Source:HGNC Symbol;Acc:HGNC:17302]	27.2	18.4	**-1.45**	0
MMP13	matrix metallopeptidase 13 [Source:HGNC Symbol;Acc:HGNC:7159]	407.7	282.6	**-1.45**	0

SLC19A3	solute carrier family 19 member 3 [Source:HGNC Symbol;Acc:HGNC:16266]	17.6	12.3	**-1.45**	0
SLAMF9	SLAM family member 9 [Source:HGNC Symbol;Acc:HGNC:18430]	1.8	1.2	**-1.45**	0.014
CD1D	CD1d molecule [Source:HGNC Symbol;Acc:HGNC:1637]	1.6	1.1	**-1.44**	0.0027
ALPK2	alpha kinase 2 [Source:HGNC Symbol;Acc:HGNC:20565]	1.2	0.8	**-1.44**	0.023
SGIP1	SH3 domain GRB2 like endophilin interacting protein 1 [Source:HGNC Symbol;Acc:HGNC:25412]	2.2	1.5	**-1.44**	0.00067
COQ2	coenzyme Q2, polyprenyltransferase [Source:HGNC Symbol;Acc:HGNC:25223]	6.2	4.3	**-1.44**	0
PALMD	palmdelphin [Source:HGNC Symbol;Acc:HGNC:15846]	42.7	29.8	**-1.43**	0
GBP1P1	guanylate binding protein 1 pseudogene 1 [Source:HGNC Symbol;Acc:HGNC:39561]	1.1	0.8	**-1.43**	0.024
MBP	myelin basic protein [Source:HGNC Symbol;Acc:HGNC:6925]	18.2	12.7	**-1.43**	0
GFRA2	GDNF family receptor alpha 2 [Source:HGNC Symbol;Acc:HGNC:4244]	1.5	1.1	**-1.43**	0.0094
ARID5B	AT-rich interaction domain 5B [Source:HGNC Symbol;Acc:HGNC:17362]	31.2	21.7	**-1.43**	0
SHISA3	shisa family member 3 [Source:HGNC Symbol;Acc:HGNC:25159]	2.2	1.5	**-1.42**	0.0051
GPR89A	G protein-coupled receptor 89A [Source:HGNC Symbol;Acc:HGNC:31984]	1.8	1.3	**-1.41**	0.0024
HOXA4	homeobox A4 [Source:HGNC Symbol;Acc:HGNC:5105]	1.3	0.9	**-1.41**	0.040
ABCA8	ATP binding cassette subfamily A member 8 [Source:HGNC Symbol;Acc:HGNC:38]	1.2	0.9	**-1.41**	0.023
CD38	CD38 molecule [Source:HGNC Symbol;Acc:HGNC:1667]	3.8	2.7	**-1.41**	1.20E-05
UBE2QL1	ubiquitin conjugating enzyme E2 Q family like 1 [Source:HGNC Symbol;Acc:HGNC:37269]	5.3	3.8	**-1.41**	0.00034
ALOX12	arachidonate 12-lipoxygenase, 12S type [Source:HGNC Symbol;Acc:HGNC:429]	1.3	0.9	**-1.40**	0.022
GJA1	gap junction protein alpha 1 [Source:HGNC Symbol;Acc:HGNC:4274]	115.2	82.4	**-1.39**	0
AKR1C1	aldo-keto reductase family 1 member C1 [Source:HGNC Symbol;Acc:HGNC:384]	171.3	121.8	**-1.38**	0
TREM1	triggering receptor expressed on myeloid cells 1 [Source:HGNC Symbol;Acc:HGNC:17760]	45.2	32.8	**-1.38**	0
PDE4D	phosphodiesterase 4D [Source:HGNC Symbol;Acc:HGNC:8783]	25.4	18.2	**-1.38**	0
LRRK2	leucine rich repeat kinase 2 [Source:HGNC Symbol;Acc:HGNC:18618]	2.3	1.6	**-1.38**	0.012
ID1	inhibitor of DNA binding 1, HLH protein [Source:HGNC Symbol;Acc:HGNC:5360]	26.8	19.3	**-1.37**	0
SFRP2	secreted frizzled related protein 2 [Source:HGNC Symbol;Acc:HGNC:10777]	1.6	1.1	**-1.37**	0.040
PDE4B	phosphodiesterase 4B [Source:HGNC Symbol;Acc:HGNC:8781]	419.5	307.7	**-1.37**	0
LRRN3	leucine rich repeat neuronal 3 [Source:HGNC Symbol;Acc:HGNC:17200]	8.9	6.5	**-1.36**	0
COL7A1	collagen type VII alpha 1 chain [Source:HGNC Symbol;Acc:HGNC:2214]	41.0	30.2	**-1.36**	0
GPRC5A	G protein-coupled receptor class C group 5 member A [Source:HGNC Symbol;Acc:HGNC:9836]	96.5	71.9	**-1.36**	0
DNER	delta/notch like EGF repeat containing [Source:HGNC Symbol;Acc:HGNC:24456]	139.0	104.5	**-1.35**	0
LURAP1L	leucine rich adaptor protein 1 like [Source:HGNC Symbol;Acc:HGNC:31452]	15.3	11.4	**-1.35**	0
PRR5L	proline rich 5 like [Source:HGNC Symbol;Acc:HGNC:25878]	1.9	1.4	**-1.35**	0.012
COL3A1	collagen type III alpha 1 chain [Source:HGNC Symbol;Acc:HGNC:2201]	556.0	414.0	**-1.35**	0

CXCL6	C-X-C motif chemokine ligand 6 [Source:HGNC Symbol;Acc:HGNC:10643]	431.5	319.5	**-1.35**	0
EVI2B	ecotropic viral integration site 2B [Source:HGNC Symbol;Acc:HGNC:3500]	2.5	1.8	**-1.34**	0.022
CLUHP3	clustered mitochondria homolog pseudogene 3 [Source:HGNC Symbol;Acc:HGNC:28447]	2.7	2.0	**-1.34**	0.034
SH3RF2	SH3 domain containing ring finger 2 [Source:HGNC Symbol;Acc:HGNC:26299]	6.0	4.4	**-1.34**	8.90E-05
LRRC61	leucine rich repeat containing 61 [Source:HGNC Symbol;Acc:HGNC:21704]	3.1	2.3	**-1.34**	0.015
ITPRIP	inositol 1,4,5-trisphosphate receptor interacting protein [Source:HGNC Symbol;Acc:HGNC:29370]	228.0	169.6	**-1.34**	0
AMDHD1	amidohydrolase domain containing 1 [Source:HGNC Symbol;Acc:HGNC:28577]	1.4	1.0	**-1.33**	0.049
FCER1G	Fc fragment of IgE receptor Ig [Source:HGNC Symbol;Acc:HGNC:3611]	2.6	2.0	**-1.33**	0.0047
LAMA1	laminin subunit alpha 1 [Source:HGNC Symbol;Acc:HGNC:6481]	12.6	9.3	**-1.33**	0.0017
FOXC1	forkhead box C1 [Source:HGNC Symbol;Acc:HGNC:3800]	289.7	216.7	**-1.33**	0
BDKRB2	bradykinin receptor B2 [Source:HGNC Symbol;Acc:HGNC:1030]	80.9	60.9	**-1.33**	0
DUSP1	dual specificity phosphatase 1 [Source:HGNC Symbol;Acc:HGNC:3064]	158.6	118.2	**-1.33**	0
PRKAR2B	protein kinase cAMP-dependent type II regulatory subunit beta [Source:HGNC Symbol;Acc:HGNC:9392]	18.3	13.7	**-1.33**	8.70E-05
MMP2	matrix metallopeptidase 2 [Source:HGNC Symbol;Acc:HGNC:7166]	70.5	54.6	**-1.33**	0
KIAA1958	KIAA1958 [Source:HGNC Symbol;Acc:HGNC:23427]	2.5	1.9	**-1.32**	0.010
CP	ceruloplasmin [Source:HGNC Symbol;Acc:HGNC:2295]	234.5	178.1	**-1.32**	0
STON1	stonin 1 [Source:HGNC Symbol;Acc:HGNC:17003]	6.9	5.1	**-1.32**	0.0045
IGF1	insulin like growth factor 1 [Source:HGNC Symbol;Acc:HGNC:5464]	7.6	5.7	**-1.32**	1.00E-05
ADAMTSL1	ADAMTS like 1 [Source:HGNC Symbol;Acc:HGNC:14632]	4.0	3.1	**-1.32**	0.013
RAB20	RAB20, member RAS oncogene family [Source:HGNC Symbol;Acc:HGNC:18260]	4.9	3.7	**-1.31**	0.00058
PTGES	prostaglandin E synthase [Source:HGNC Symbol;Acc:HGNC:9599]	100.9	76.6	**-1.31**	0
S100P	S100 calcium binding protein P [Source:HGNC Symbol;Acc:HGNC:10504]	3.3	2.5	**-1.31**	0.0039
CPM	carboxypeptidase M [Source:HGNC Symbol;Acc:HGNC:2311]	15.8	12.1	**-1.31**	0
VNN3	vanin 3 [Source:HGNC Symbol;Acc:HGNC:16431]	10.6	8.3	**-1.30**	0.00086
FBLN5	fibulin 5 [Source:HGNC Symbol;Acc:HGNC:3602]	4.8	3.7	**-1.30**	0.0062
ADAMTS5	ADAM metallopeptidase with thrombospondin type 1 motif 5 [Source:HGNC Symbol;Acc:HGNC:221]	21.7	16.3	**-1.30**	2.20E-05
ARID3A	AT-rich interaction domain 3A [Source:HGNC Symbol;Acc:HGNC:3031]	4.8	3.8	**-1.30**	0.0025
PRELID2	PRELI domain containing 2 [Source:HGNC Symbol;Acc:HGNC:28306]	2.8	2.1	**-1.30**	0.018
SPSB4	splA/ryanodine receptor domain and SOCS box containing 4 [Source:HGNC Symbol;Acc:HGNC:30630]	11.6	8.9	**-1.30**	0
MAOB	monoamine oxidase B [Source:HGNC Symbol;Acc:HGNC:6834]	156.0	120.6	**-1.30**	0
PFKFB4	6-phosphofructo-2-kinase/fructose-2,6-biphosphatase 4 [Source:HGNC Symbol;Acc:HGNC:8875]	10.9	8.4	**-1.30**	0
TREML3P	triggering receptor expressed on myeloid cells like 3, pseudogene	2.8	2.2	**-1.30**	0.012
ADPRHL1	ADP-ribosylhydrolase like 1 [Source:HGNC Symbol;Acc:HGNC:21303]	9.3	7.2	**-1.29**	1.20E-05

GNG11	G protein subunit gamma 11 [Source:HGNC Symbol;Acc:HGNC:4403]	21.7	16.7	**-1.29**	0
ODF3B	outer dense fiber of sperm tails 3B [Source:HGNC Symbol;Acc:HGNC:34388]	15.4	12.1	**-1.29**	2.80E-05
GNA14	G protein subunit alpha 14 [Source:HGNC Symbol;Acc:HGNC:4382]	2.0	1.5	**-1.29**	0.045
FAM13A	family with sequence similarity 13 member A [Source:HGNC Symbol;Acc:HGNC:19367]	25.7	20.0	**-1.29**	5.00E-06
C1R	complement C1r [Source:HGNC Symbol;Acc:HGNC:1246]	106.4	82.5	**-1.29**	0
MEIS1	Meis homeobox 1 [Source:HGNC Symbol;Acc:HGNC:7000]	5.9	4.5	**-1.29**	0.00015
CMBL	carboxymethylenebutenolidase homolog [Source:HGNC Symbol;Acc:HGNC:25090]	2.8	2.2	**-1.29**	0.0062
DEPDC7	DEP domain containing 7 [Source:HGNC Symbol;Acc:HGNC:29899]	4.9	3.8	**-1.28**	0.00069
HOXA5	homeobox A5 [Source:HGNC Symbol;Acc:HGNC:5106]	4.7	3.7	**-1.28**	0.00052
MT1F	metallothionein 1F [Source:HGNC Symbol;Acc:HGNC:7398]	182.7	143.4	**-1.28**	3.40E-05
ABCA1	ATP binding cassette subfamily A member 1 [Source:HGNC Symbol;Acc:HGNC:29]	3.9	3.1	**-1.28**	0.017
IL11	interleukin 11 [Source:HGNC Symbol;Acc:HGNC:5966]	12.2	9.1	**-1.28**	0.012
MARCKS	myristoylated alanine rich protein kinase C substrate [Source:HGNC Symbol;Acc:HGNC:6759]	261.8	206.3	**-1.28**	0
GDF6	growth differentiation factor 6 [Source:HGNC Symbol;Acc:HGNC:4221]	121.1	95.5	**-1.28**	1.00E-06
DOCK4	dedicator of cytokinesis 4 [Source:HGNC Symbol;Acc:HGNC:19192]	6.7	5.3	**-1.28**	0.039
KSR1	kinase suppressor of ras 1 [Source:HGNC Symbol;Acc:HGNC:6465]	10.7	8.4	**-1.27**	2.00E-06
IRF4	interferon regulatory factor 4 [Source:HGNC Symbol;Acc:HGNC:6119]	18.2	14.4	**-1.27**	0
GTF2IRD2B	GTF2I repeat domain containing 2B [Source:HGNC Symbol;Acc:HGNC:33125]	3.3	2.5	**-1.27**	0.013
LINC02015	long intergenic non-protein coding RNA 2015 [Source:HGNC Symbol;Acc:HGNC:52850]	5.8	4.6	**-1.27**	0.0016
CCL7	C-C motif chemokine ligand 7 [Source:HGNC Symbol;Acc:HGNC:10634]	5.5	4.2	**-1.27**	0.0027
ZNF503-AS2	ZNF503 antisense RNA 2 [Source:HGNC Symbol;Acc:HGNC:23525]	3.2	2.5	**-1.27**	0.034
CCDC71L	coiled-coil domain containing 71 like [Source:HGNC Symbol;Acc:HGNC:26685]	77.3	60.9	**-1.27**	0
LOXL3	lysyl oxidase like 3 [Source:HGNC Symbol;Acc:HGNC:13869]	67.8	55.0	**-1.27**	1.00E-06
INSIG2	insulin induced gene 2 [Source:HGNC Symbol;Acc:HGNC:20452]	69.7	55.4	**-1.26**	0
SMTN	smoothelin [Source:HGNC Symbol;Acc:HGNC:11126]	244.4	192.5	**-1.26**	0
COLEC12	collectin subfamily member 12 [Source:HGNC Symbol;Acc:HGNC:16016]	24.9	19.4	**-1.26**	0
POLB	DNA polymerase beta [Source:HGNC Symbol;Acc:HGNC:9174]	5.2	4.1	**-1.26**	0.0027
ATOH8	atonal bHLH transcription factor 8 [Source:HGNC Symbol;Acc:HGNC:24126]	11.3	9.5	**-1.26**	0.0070
ABL1	ABL proto-oncogene 1, non-receptor tyrosine kinase [Source:HGNC Symbol;Acc:HGNC:76]	98.8	78.0	**-1.26**	0
PANX2	pannexin 2 [Source:HGNC Symbol;Acc:HGNC:8600]	11.5	9.0	**-1.26**	5.10E-05
LRMDA	leucine rich melanocyte differentiation associated [Source:HGNC Symbol;Acc:HGNC:23405]	5.4	4.3	**-1.26**	0.0012
TNFAIP6	TNF alpha induced protein 6 [Source:HGNC Symbol;Acc:HGNC:11898]	966.1	782.8	**-1.26**	0
FAM110B	family with sequence similarity 110 member B [Source:HGNC Symbol;Acc:HGNC:28587]	45.2	36.0	**-1.26**	0

MARCH9	membrane associated ring-CH-type finger 9 [Source:HGNC Symbol;Acc:HGNC:25139]	5.7	4.5	**-1.26**	0.0034
MCTP2	multiple C2 and transmembrane domain containing 2 [Source:HGNC Symbol;Acc:HGNC:25636]	12.5	9.9	**-1.25**	1.60E-05
LNX1	ligand of numb-protein X 1 [Source:HGNC Symbol;Acc:HGNC:6657]	4.8	3.8	**-1.25**	0.0072
MN1	MN1 proto-oncogene, transcriptional regulator [Source:HGNC Symbol;Acc:HGNC:7180]	24.3	19.3	**-1.25**	1.00E-06
CXCL5	C-X-C motif chemokine ligand 5 [Source:HGNC Symbol;Acc:HGNC:10642]	285.0	223.0	**-1.25**	0
MILR1	mast cell immunoglobulin like receptor 1 [Source:HGNC Symbol;Acc:HGNC:27570]	3.6	2.9	**-1.25**	0.031
KIF7	kinesin family member 7 [Source:HGNC Symbol;Acc:HGNC:30497]	4.1	3.2	**-1.25**	0.013
PELI3	pellino E3 ubiquitin protein ligase family member 3 [Source:HGNC Symbol;Acc:HGNC:30010]	3.4	2.7	**-1.25**	0.045
GYS1	glycogen synthase 1 [Source:HGNC Symbol;Acc:HGNC:4706]	38.9	31.1	**-1.25**	1.00E-06
TMTC1	transmembrane and tetratricopeptide repeat containing 1 [Source:HGNC Symbol;Acc:HGNC:24099]	55.9	45.1	**-1.24**	0.0013
ISG20	interferon stimulated exonuclease gene 20 [Source:HGNC Symbol;Acc:HGNC:6130]	75.4	59.7	**-1.24**	1.00E-06
HILPDA	hypoxia inducible lipid droplet associated [Source:HGNC Symbol;Acc:HGNC:28859]	24.2	19.3	**-1.24**	0.0035
TNFRSF1B	TNF receptor superfamily member 1B [Source:HGNC Symbol;Acc:HGNC:11917]	197.8	159.1	**-1.24**	0
PRPF40B	pre-mRNA processing factor 40 homolog B [Source:HGNC Symbol;Acc:HGNC:25031]	8.1	6.5	**-1.24**	0.00059
C17orf107	chromosome 17 open reading frame 107 [Source:HGNC Symbol;Acc:HGNC:37238]	11.9	9.5	**-1.24**	1.20E-05
ENOSF1	enolase superfamily member 1 [Source:HGNC Symbol;Acc:HGNC:30365]	29.7	23.9	**-1.24**	0.00028
WISP1	WNT1 inducible signaling pathway protein 1 [Source:HGNC Symbol;Acc:HGNC:12769]	22.2	17.6	**-1.24**	9.80E-05
TRANK1	tetratricopeptide repeat and ankyrin repeat containing 1 [Source:HGNC Symbol;Acc:HGNC:29011]	11.1	9.0	**-1.24**	0.031
AKR1C2	aldo-keto reductase family 1 member C2 [Source:HGNC Symbol;Acc:HGNC:385]	767.6	623.1	**-1.24**	0
CSGALNACT	chondroitin sulfate N-acetylgalactosaminyltransferase 1 [Source:HGNC Symbol;Acc:HGNC:24290]	177.5	143.4	**-1.24**	1.00E-06
ADAMTS4	ADAM metallopeptidase with thrombospondin type 1 motif 4 [Source:HGNC Symbol;Acc:HGNC:220]	2.7	2.2	**-1.24**	0.035
ADSSL1	adenylosuccinate synthase like 1 [Source:HGNC Symbol;Acc:HGNC:20093]	7.2	6.0	**-1.24**	0.016
HTATIP2	HIV-1 Tat interactive protein 2 [Source:HGNC Symbol;Acc:HGNC:16637]	23.1	18.6	**-1.23**	3.20E-05
CHEK2	checkpoint kinase 2 [Source:HGNC Symbol;Acc:HGNC:16627]	6.3	5.1	**-1.23**	0.0013
GMDS	GDP-mannose 4,6-dehydratase [Source:HGNC Symbol;Acc:HGNC:4369]	24.9	20.3	**-1.23**	0.00011
LMO2	LIM domain only 2 [Source:HGNC Symbol;Acc:HGNC:6642]	3.9	3.1	**-1.23**	0.040
S100A9	S100 calcium binding protein A9 [Source:HGNC Symbol;Acc:HGNC:10499]	15.6	12.7	**-1.23**	0.0061
ZNF331	zinc finger protein 331 [Source:HGNC Symbol;Acc:HGNC:15489]	19.1	15.4	**-1.23**	5.90E-05
GRAMD1A	GRAM domain containing 1A [Source:HGNC Symbol;Acc:HGNC:29305]	16.8	13.6	**-1.23**	2.00E-05
BASP1	brain abundant membrane attached signal protein 1 [Source:HGNC Symbol;Acc:HGNC:957]	10.0	8.0	**-1.23**	0.0014
PRKCH	protein kinase C eta [Source:HGNC Symbol;Acc:HGNC:9403]	5.8	4.7	**-1.23**	0.0046
RND3	Rho family GTPase 3 [Source:HGNC Symbol;Acc:HGNC:671]	687.5	560.9	**-1.23**	0
AKNA	AT-hook transcription factor [Source:HGNC Symbol;Acc:HGNC:24108]	18.8	15.1	**-1.23**	0.00015

PBX1	PBX homeobox 1 [Source:HGNC Symbol;Acc:HGNC:8632]	6.7	5.4	**-1.23**	0.022
BARX1	BARX homeobox 1 [Source:HGNC Symbol;Acc:HGNC:955]	24.1	19.6	**-1.23**	0.00034
CTH	cystathionine gamma-lyase [Source:HGNC Symbol;Acc:HGNC:2501]	13.5	11.0	**-1.23**	0.00013
CHI3L2	chitinase 3 like 2 [Source:HGNC Symbol;Acc:HGNC:1933]	1749.8	1448.6	**-1.22**	3.00E-06
MT1L	metallothionein 1L, pseudogene [Source:HGNC Symbol;Acc:HGNC:7404]	76.9	62.2	**-1.22**	0.00087
ALDH2	aldehyde dehydrogenase 2 family (mitochondrial) [Source:HGNC Symbol;Acc:HGNC:404]	27.7	22.5	**-1.22**	1.40E-05
FUZ	fuzzy planar cell polarity protein [Source:HGNC Symbol;Acc:HGNC:26219]	9.8	7.9	**-1.22**	0.0011
MAN1A1	mannosidase alpha class 1A member 1 [Source:HGNC Symbol;Acc:HGNC:6821]	394.3	321.1	**-1.22**	2.00E-06
NANOS1	nanos C2HC-type zinc finger 1 [Source:HGNC Symbol;Acc:HGNC:23044]	20.7	17.1	**-1.22**	4.30E-05
COL4A2	collagen type IV alpha 2 chain [Source:HGNC Symbol;Acc:HGNC:2203]	8.1	6.6	**-1.22**	0.0016
BOC	BOC cell adhesion associated, oncogene regulated [Source:HGNC Symbol;Acc:HGNC:17173]	28.3	23.2	**-1.22**	8.00E-06
PPP1R3C	protein phosphatase 1 regulatory subunit 3C [Source:HGNC Symbol;Acc:HGNC:9293]	218.6	181.0	**-1.22**	1.40E-05
AGPAT4	1-acylglycerol-3-phosphate O-acyltransferase 4 [Source:HGNC Symbol;Acc:HGNC:20885]	17.5	14.3	**-1.22**	0.00095
EVI2A	ecotropic viral integration site 2A [Source:HGNC Symbol;Acc:HGNC:3499]	14.1	11.5	**-1.22**	0.0015
RBMS3	RNA binding motif single stranded interacting protein 3 [Source:HGNC Symbol;Acc:HGNC:13427]	12.1	10.0	**-1.22**	0.017
KAZALD1	Kazal type serine peptidase inhibitor domain 1 [Source:HGNC Symbol;Acc:HGNC:25460]	7.3	5.9	**-1.22**	0.0079
ADGRG2	adhesion G protein-coupled receptor G2 [Source:HGNC Symbol;Acc:HGNC:4516]	27.3	22.3	**-1.21**	0.046
HOXC10	homeobox C10 [Source:HGNC Symbol;Acc:HGNC:5122]	19.8	16.3	**-1.21**	1.00E-06
PGM1	phosphoglucomutase 1 [Source:HGNC Symbol;Acc:HGNC:8905]	73.3	60.6	**-1.21**	2.00E-06
PLD1	phospholipase D1 [Source:HGNC Symbol;Acc:HGNC:9067]	31.3	25.5	**-1.21**	0.00056
INHBA	inhibin beta A subunit [Source:HGNC Symbol;Acc:HGNC:6066]	694.4	564.1	**-1.21**	4.10E-05
PDZRN3	PDZ domain containing ring finger 3 [Source:HGNC Symbol;Acc:HGNC:17704]	68.6	56.0	**-1.21**	1.00E-06
SLC22A23	solute carrier family 22 member 23 [Source:HGNC Symbol;Acc:HGNC:21106]	42.6	34.9	**-1.21**	0.00013
RIN2	Ras and Rab interactor 2 [Source:HGNC Symbol;Acc:HGNC:18750]	51.6	42.4	**-1.21**	3.00E-06
RNF152	ring finger protein 152 [Source:HGNC Symbol;Acc:HGNC:26811]	12.5	10.1	**-1.20**	0.035
ADD3	adducin 3 [Source:HGNC Symbol;Acc:HGNC:245]	34.4	28.3	**-1.20**	6.00E-05
MAMDC4	MAM domain containing 4 [Source:HGNC Symbol;Acc:HGNC:24083]	12.0	9.9	**-1.20**	0.031
B4GAT1	beta-1,4-glucuronyltransferase 1 [Source:HGNC Symbol;Acc:HGNC:15685]	6.6	5.4	**-1.20**	0.047
HIF1A	hypoxia inducible factor 1 alpha subunit [Source:HGNC Symbol;Acc:HGNC:4910]	406.5	334.6	**-1.20**	2.70E-05
TRIB2	tribbles pseudokinase 2 [Source:HGNC Symbol;Acc:HGNC:30809]	17.5	14.5	**-1.20**	0.0011
SGSM2	small G protein signaling modulator 2 [Source:HGNC Symbol;Acc:HGNC:29026]	11.1	9.2	**-1.20**	0.00069
TNC	tenascin C [Source:HGNC Symbol;Acc:HGNC:5318]	637.6	526.2	**-1.20**	0.0060
CDADC1	cytidine and dCMP deaminase domain containing 1 [Source:HGNC Symbol;Acc:HGNC:20299]	5.6	4.6	**-1.20**	0.038

DLG4	discs large MAGUK scaffold protein 4 [Source:HGNC Symbol;Acc:HGNC:2903]	5.1	4.2	**-1.20**	0.022
SLC6A9	solute carrier family 6 member 9 [Source:HGNC Symbol;Acc:HGNC:11056]	18.3	15.3	**-1.20**	8.20E-05
CERS4	ceramide synthase 4 [Source:HGNC Symbol;Acc:HGNC:23747]	5.4	4.5	**-1.20**	0.028
C9orf3	chromosome 9 open reading frame 3 [Source:HGNC Symbol;Acc:HGNC:1361]	100.1	83.0	**-1.20**	0.00013
PTGFR	prostaglandin F receptor [Source:HGNC Symbol;Acc:HGNC:9600]	17.7	14.7	**-1.20**	0.00011
SASH1	SAM and SH3 domain containing 1 [Source:HGNC Symbol;Acc:HGNC:19182]	53.4	44.2	**-1.20**	0.0075
RAPGEFL1	Rap guanine nucleotide exchange factor like 1 [Source:HGNC Symbol;Acc:HGNC:17428]	5.6	4.7	**-1.20**	0.038
MEGF10	multiple EGF like domains 10 [Source:HGNC Symbol;Acc:HGNC:29634]	14.0	11.5	**-1.20**	0.027
FKBP11	FK506 binding protein 11 [Source:HGNC Symbol;Acc:HGNC:18624]	12.5	10.2	**-1.19**	0.0054
C17orf58	chromosome 17 open reading frame 58 [Source:HGNC Symbol;Acc:HGNC:27568]	10.8	9.1	**-1.19**	0.00068
BDKRB1	bradykinin receptor B1 [Source:HGNC Symbol;Acc:HGNC:1029]	32.5	27.2	**-1.19**	0.00017
LBP	lipopolysaccharide binding protein [Source:HGNC Symbol;Acc:HGNC:6517]	10.2	8.4	**-1.19**	0.022
GOLGA8A	golgin A8 family member A [Source:HGNC Symbol;Acc:HGNC:31972]	12.9	10.9	**-1.19**	0.0096
PKIG	cAMP-dependent protein kinase inhibitor gamma [Source:HGNC Symbol;Acc:HGNC:9019]	20.4	17.2	**-1.19**	0.0047
IFT43	intraflagellar transport 43 [Source:HGNC Symbol;Acc:HGNC:29669]	22.3	18.6	**-1.19**	0.00095
GALNT2	polypeptide N-acetylgalactosaminyltransferase 2 [Source:HGNC Symbol;Acc:HGNC:4124]	397.5	333.0	**-1.19**	0
PGRMC1	progesterone receptor membrane component 1 [Source:HGNC Symbol;Acc:HGNC:16090]	108.2	90.8	**-1.19**	6.00E-06
ARHGEF19	Rho guanine nucleotide exchange factor 19 [Source:HGNC Symbol;Acc:HGNC:26604]	12.6	10.6	**-1.19**	0.024
HMGN2P46	high mobility group nucleosomal binding domain 2 pseudogene 46	15.8	13.3	**-1.19**	4.10E-05
ETS2	ETS proto-oncogene 2, transcription factor [Source:HGNC Symbol;Acc:HGNC:3489]	85.4	71.0	**-1.19**	0.00032
MEDAG	mesenteric estrogen dependent adipogenesis [Source:HGNC Symbol;Acc:HGNC:25926]	181.7	151.8	**-1.18**	0.00031
FAM162A	family with sequence similarity 162 member A [Source:HGNC Symbol;Acc:HGNC:17865]	30.9	25.6	**-1.18**	0.018
SLC39A8	solute carrier family 39 member 8 [Source:HGNC Symbol;Acc:HGNC:20862]	146.7	124.1	**-1.18**	0.00016
RIN3	Ras and Rab interactor 3 [Source:HGNC Symbol;Acc:HGNC:18751]	14.1	11.8	**-1.18**	0.00029
PPIL3	peptidylprolyl isomerase like 3 [Source:HGNC Symbol;Acc:HGNC:9262]	20.6	17.3	**-1.18**	0.00045
GLRX	glutaredoxin [Source:HGNC Symbol;Acc:HGNC:4330]	108.6	91.9	**-1.18**	2.00E-05
CABLES1	Cdk5 and Abl enzyme substrate 1 [Source:HGNC Symbol;Acc:HGNC:25097]	6.4	5.4	**-1.18**	0.016
TTC28	tetratricopeptide repeat domain 28 [Source:HGNC Symbol;Acc:HGNC:29179]	15.4	12.9	**-1.18**	0.043
NDUFA4L2	NDUFA4, mitochondrial complex associated like 2 [Source:HGNC Symbol;Acc:HGNC:29836]	387.6	329.3	**-1.18**	0.00012
CREM	cAMP responsive element modulator [Source:HGNC Symbol;Acc:HGNC:2352]	29.0	24.4	**-1.18**	0.00012
PDK1	pyruvate dehydrogenase kinase 1 [Source:HGNC Symbol;Acc:HGNC:8809]	26.2	22.2	**-1.18**	0.00045
ZMYM3	zinc finger MYM-type containing 3 [Source:HGNC Symbol;Acc:HGNC:13054]	5.5	4.7	**-1.18**	0.040
BCL2A1	BCL2 related protein A1 [Source:HGNC Symbol;Acc:HGNC:991]	116.3	97.0	**-1.18**	0.00020

HOXA11	homeobox A11 [Source:HGNC Symbol;Acc:HGNC:5101]	12.7	10.7	**-1.18**	0.029
ADM	adrenomedullin [Source:HGNC Symbol;Acc:HGNC:259]	218.5	187.4	**-1.18**	0.013
MARCH3	membrane associated ring-CH-type finger 3 [Source:HGNC Symbol;Acc:HGNC:28728]	43.4	36.8	**-1.18**	0.00050
BDH2	3-hydroxybutyrate dehydrogenase 2 [Source:HGNC Symbol;Acc:HGNC:32389]	8.8	7.5	**-1.18**	0.027
WNT5A	Wnt family member 5A [Source:HGNC Symbol;Acc:HGNC:12784]	45.7	38.5	**-1.18**	0.0022
PTGFRN	prostaglandin F2 receptor inhibitor [Source:HGNC Symbol;Acc:HGNC:9601]	21.9	18.7	**-1.18**	0.0051
ZNF395	zinc finger protein 395 [Source:HGNC Symbol;Acc:HGNC:18737]	64.6	54.8	**-1.18**	0.0027
UGP2	UDP-glucose pyrophosphorylase 2 [Source:HGNC Symbol;Acc:HGNC:12527]	156.1	132.8	**-1.18**	0.00014
PLA2G4A	phospholipase A2 group IVA [Source:HGNC Symbol;Acc:HGNC:9035]	31.6	26.5	**-1.18**	0.0049
DUSP4	dual specificity phosphatase 4 [Source:HGNC Symbol;Acc:HGNC:3070]	17.3	14.7	**-1.17**	0.012
PFKP	phosphofructokinase, platelet [Source:HGNC Symbol;Acc:HGNC:8878]	85.6	73.1	**-1.17**	0.00046
MEI1	meiotic double-stranded break formation protein 1 [Source:HGNC Symbol;Acc:HGNC:28613]	18.6	16.0	**-1.17**	0.0035
CHI3L1	chitinase 3 like 1 [Source:HGNC Symbol;Acc:HGNC:1932]	2321.5	1963.0	**-1.17**	7.00E-06
HSCB	HscB mitochondrial iron-sulfur cluster cochaperone [Source:HGNC Symbol;Acc:HGNC:28913]	9.1	7.7	**-1.17**	0.016
PILRA	paired immunoglobin like type 2 receptor alpha [Source:HGNC Symbol;Acc:HGNC:20396]	33.9	28.8	**-1.17**	4.80E-05
C14orf28	chromosome 14 open reading frame 28 [Source:HGNC Symbol;Acc:HGNC:19834]	7.2	6.1	**-1.17**	0.044
B9D1	B9 domain containing 1 [Source:HGNC Symbol;Acc:HGNC:24123]	10.7	9.1	**-1.17**	0.015
HSPA4L	heat shock protein family A (Hsp70) member 4 like [Source:HGNC Symbol;Acc:HGNC:17041]	11.2	9.5	**-1.17**	0.024
PRRX2	paired related homeobox 2 [Source:HGNC Symbol;Acc:HGNC:21338]	32.9	27.7	**-1.17**	0.037
NFIB	nuclear factor I B [Source:HGNC Symbol;Acc:HGNC:7785]	18.8	15.9	**-1.17**	0.00080
C1RL	complement C1r subcomponent like [Source:HGNC Symbol;Acc:HGNC:21265]	40.0	34.0	**-1.17**	0.00012
NPAS2	neuronal PAS domain protein 2 [Source:HGNC Symbol;Acc:HGNC:7895]	25.6	22.0	**-1.17**	0.0013
PIR	pirin [Source:HGNC Symbol;Acc:HGNC:30048]	11.3	9.8	**-1.17**	0.019
NR4A1	nuclear receptor subfamily 4 group A member 1 [Source:HGNC Symbol;Acc:HGNC:7980]	7.6	6.5	**-1.17**	0.015
EREG	epiregulin [Source:HGNC Symbol;Acc:HGNC:3443]	203.5	174.4	**-1.17**	0.00035
KCTD15	potassium channel tetramerization domain containing 15 [Source:HGNC Symbol;Acc:HGNC:23297]	13.9	11.9	**-1.17**	0.018
TXNDC12	thioredoxin domain containing 12 [Source:HGNC Symbol;Acc:HGNC:24626]	86.0	73.2	**-1.17**	0.0018
TMEM9	transmembrane protein 9 [Source:HGNC Symbol;Acc:HGNC:18823]	26.1	22.1	**-1.17**	0.0088
PFKM	phosphofructokinase, muscle [Source:HGNC Symbol;Acc:HGNC:8877]	16.8	14.4	**-1.17**	0.0027
ARHGAP42	Rho GTPase activating protein 42 [Source:HGNC Symbol;Acc:HGNC:26545]	57.4	49.8	**-1.17**	0.0014
GAS1	growth arrest specific 1 [Source:HGNC Symbol;Acc:HGNC:4165]	12.2	10.4	**-1.17**	0.012
FJX1	four jointed box 1 [Source:HGNC Symbol;Acc:HGNC:17166]	22.2	18.9	**-1.16**	0.0033
SIX4	SIX homeobox 4 [Source:HGNC Symbol;Acc:HGNC:10890]	26.9	23.1	**-1.16**	0.0025

EGLN3	egl-9 family hypoxia inducible factor 3 [Source:HGNC Symbol;Acc:HGNC:14661]	30.7	26.6	**-1.16**	0.011
DHRS3	dehydrogenase/reductase 3 [Source:HGNC Symbol;Acc:HGNC:17693]	53.9	47.0	**-1.16**	0.034
IL1RL1	interleukin 1 receptor like 1 [Source:HGNC Symbol;Acc:HGNC:5998]	24.8	21.1	**-1.16**	0.024
MPI	mannose phosphate isomerase [Source:HGNC Symbol;Acc:HGNC:7216]	21.7	18.7	**-1.16**	0.0045
LONP1	lon peptidase 1, mitochondrial [Source:HGNC Symbol;Acc:HGNC:9479]	103.6	89.0	**-1.16**	0.00080
NOL3	nucleolar protein 3 [Source:HGNC Symbol;Acc:HGNC:7869]	12.4	11.6	**-1.16**	0.0042
SEMA4D	semaphorin 4D [Source:HGNC Symbol;Acc:HGNC:10732]	15.6	13.6	**-1.16**	0.023
ST3GAL4	ST3 beta-galactoside alpha-2,3-sialyltransferase 4 [Source:HGNC Symbol;Acc:HGNC:10864]	11.4	9.9	**-1.16**	0.034
IFITM3	interferon induced transmembrane protein 3 [Source:HGNC Symbol;Acc:HGNC:5414]	62.0	53.2	**-1.16**	0.014
CEBPB	CCAAT/enhancer binding protein beta [Source:HGNC Symbol;Acc:HGNC:1834]	331.2	284.5	**-1.16**	0.0077
DOK1	docking protein 1 [Source:HGNC Symbol;Acc:HGNC:2990]	30.5	26.6	**-1.16**	0.012
TSPYL2	TSPY like 2 [Source:HGNC Symbol;Acc:HGNC:24358]	70.8	61.0	**-1.16**	0.00089
HS3ST3A1	heparan sulfate-glucosamine 3-sulfotransferase 3A1 [Source:HGNC Symbol;Acc:HGNC:5196]	16.6	14.1	**-1.16**	0.012
RERG	RAS like estrogen regulated growth inhibitor [Source:HGNC Symbol;Acc:HGNC:15980]	36.9	32.3	**-1.16**	0.019
SIX5	SIX homeobox 5 [Source:HGNC Symbol;Acc:HGNC:10891]	27.3	23.5	**-1.15**	0.024
SLC33A1	solute carrier family 33 member 1 [Source:HGNC Symbol;Acc:HGNC:95]	29.4	25.4	**-1.15**	0.0035
RNFT1	ring finger protein, transmembrane 1 [Source:HGNC Symbol;Acc:HGNC:30206]	6.8	5.9	**-1.15**	0.040
ELL2	elongation factor for RNA polymerase II 2 [Source:HGNC Symbol;Acc:HGNC:17064]	240.9	208.4	**-1.15**	0.0011
DTX3	deltex E3 ubiquitin ligase 3 [Source:HGNC Symbol;Acc:HGNC:24457]	11.3	9.8	**-1.15**	0.040
SLC2A3	solute carrier family 2 member 3 [Source:HGNC Symbol;Acc:HGNC:11007]	39.3	34.2	**-1.15**	0.0055
GAREM2	GRB2 associated regulator of MAPK1 subtype 2 [Source:HGNC Symbol;Acc:HGNC:27172]	8.9	7.7	**-1.15**	0.039
ELOVL7	ELOVL fatty acid elongase 7 [Source:HGNC Symbol;Acc:HGNC:26292]	35.0	30.5	**-1.15**	0.0036
ADH5	alcohol dehydrogenase 5 (class III), chi polypeptide [Source:HGNC Symbol;Acc:HGNC:253]	54.7	47.4	**-1.15**	0.00089
SMARCA1	SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily a, member 1	23.5	20.2	**-1.15**	0.0049
ANGPTL1	angiopoietin like 1 [Source:HGNC Symbol;Acc:HGNC:489]	12.1	10.5	**-1.15**	0.030
PITPNM1	phosphatidylinositol transfer protein membrane associated 1 [Source:HGNC Symbol;Acc:HGNC:9003]	17.7	15.4	**-1.15**	0.024
C11orf49	chromosome 11 open reading frame 49 [Source:HGNC Symbol;Acc:HGNC:28720]	12.0	10.4	**-1.15**	0.0071
RNF145	ring finger protein 145 [Source:HGNC Symbol;Acc:HGNC:20853]	73.0	63.6	**-1.15**	0.0013
RAB34	RAB34, member RAS oncogene family [Source:HGNC Symbol;Acc:HGNC:16519]	45.2	39.3	**-1.15**	0.023
RHBDD3	rhomboid domain containing 3 [Source:HGNC Symbol;Acc:HGNC:1308]	17.0	14.8	**-1.15**	0.019
TMED1	transmembrane p24 trafficking protein 1 [Source:HGNC Symbol;Acc:HGNC:17291]	33.4	28.9	**-1.15**	0.013
DDIT4	DNA damage inducible transcript 4 [Source:HGNC Symbol;Acc:HGNC:24944]	275.5	238.2	**-1.15**	0.0031
PTOV1	prostate tumor overexpressed 1 [Source:HGNC Symbol;Acc:HGNC:9632]	31.2	26.8	**-1.15**	0.023

FAM126A	family with sequence similarity 126 member A [Source:HGNC Symbol;Acc:HGNC:24587]	55.9	48.1	**-1.15**	0.0045
LINC01588	long intergenic non-protein coding RNA 1588 [Source:HGNC Symbol;Acc:HGNC:27503]	13.3	11.5	**-1.15**	0.017
MBNL2	muscleblind like splicing regulator 2 [Source:HGNC Symbol;Acc:HGNC:16746]	46.8	40.7	**-1.15**	0.031
EFCAB2	EF-hand calcium binding domain 2 [Source:HGNC Symbol;Acc:HGNC:28166]	12.3	10.7	**-1.15**	0.043
MIB2	mindbomb E3 ubiquitin protein ligase 2 [Source:HGNC Symbol;Acc:HGNC:30577]	34.6	30.0	**-1.14**	0.0042
G0S2	G0/G1 switch 2 [Source:HGNC Symbol;Acc:HGNC:30229]	1125.3	971.9	**-1.14**	0.026
SLC7A5	solute carrier family 7 member 5 [Source:HGNC Symbol;Acc:HGNC:11063]	223.5	193.2	**-1.14**	0.0030
ZHX2	zinc fingers and homeoboxes 2 [Source:HGNC Symbol;Acc:HGNC:18513]	77.0	66.9	**-1.14**	0.0026
MAGED1	MAGE family member D1 [Source:HGNC Symbol;Acc:HGNC:6813]	54.1	46.9	**-1.14**	0.0049
FAM69A	family with sequence similarity 69 member A [Source:HGNC Symbol;Acc:HGNC:32213]	11.2	9.8	**-1.14**	0.029
VDR	vitamin D (1,25- dihydroxyvitamin D3) receptor [Source:HGNC Symbol;Acc:HGNC:12679]	46.7	40.8	**-1.14**	0.0025
CHRDL2	chordin like 2 [Source:HGNC Symbol;Acc:HGNC:24168]	34.0	29.4	**-1.14**	0.0033
JAK2	Janus kinase 2 [Source:HGNC Symbol;Acc:HGNC:6192]	49.3	42.9	**-1.14**	0.0023
PBXIP1	PBX homeobox interacting protein 1 [Source:HGNC Symbol;Acc:HGNC:21199]	70.3	60.8	**-1.14**	0.022
DNAJC1	DnaJ heat shock protein family (Hsp40) member C1 [Source:HGNC Symbol;Acc:HGNC:20090]	80.5	70.0	**-1.14**	0.0052
COMMD3	COMM domain containing 3 [Source:HGNC Symbol;Acc:HGNC:23332]	23.4	20.5	**-1.14**	0.039
BTF3L4	basic transcription factor 3 like 4 [Source:HGNC Symbol;Acc:HGNC:30547]	41.8	36.6	**-1.14**	0.019
LDLRAD3	low density lipoprotein receptor class A domain containing 3 [Source:HGNC Symbol;Acc:HGNC:27046]	32.2	28.1	**-1.14**	0.017
TNIK	TRAF2 and NCK interacting kinase [Source:HGNC Symbol;Acc:HGNC:30765]	9.8	8.6	**-1.14**	0.046
ANTXR1	anthrax toxin receptor 1 [Source:HGNC Symbol;Acc:HGNC:21014]	44.5	38.9	**-1.14**	0.016
FBXO2	F-box protein 2 [Source:HGNC Symbol;Acc:HGNC:13581]	39.7	35.6	**-1.14**	0.044
PGK1	phosphoglycerate kinase 1 [Source:HGNC Symbol;Acc:HGNC:8896]	549.9	479.6	**-1.14**	0.0026
LOXL2	lysyl oxidase like 2 [Source:HGNC Symbol;Acc:HGNC:6666]	75.7	67.0	**-1.14**	0.0038
PLEKHG3	pleckstrin homology and RhoGEF domain containing G3 [Source:HGNC Symbol;Acc:HGNC:20364]	12.4	10.9	**-1.14**	0.027
LPXN	leupaxin [Source:HGNC Symbol;Acc:HGNC:14061]	24.0	21.2	**-1.14**	0.013
COL5A1	collagen type V alpha 1 chain [Source:HGNC Symbol;Acc:HGNC:2209]	125.9	111.1	**-1.14**	0.018
IL1R1	interleukin 1 receptor type 1 [Source:HGNC Symbol;Acc:HGNC:5993]	46.2	40.2	**-1.14**	0.029
PRMT1	protein arginine methyltransferase 1 [Source:HGNC Symbol;Acc:HGNC:5187]	56.0	49.1	**-1.14**	0.0078
EPHB4	EPH receptor B4 [Source:HGNC Symbol;Acc:HGNC:3395]	8.1	7.1	**-1.14**	0.047
GNB5	G protein subunit beta 5 [Source:HGNC Symbol;Acc:HGNC:4401]	16.4	14.4	**-1.14**	0.0061
HDHD5	haloacid dehalogenase like hydrolase domain containing 5 [Source:HGNC Symbol;Acc:HGNC:1843]	20.3	17.7	**-1.13**	0.027
FAM57A	family with sequence similarity 57 member A [Source:HGNC Symbol;Acc:HGNC:29646]	16.7	14.7	**-1.13**	0.039
CDK5RAP2	CDK5 regulatory subunit associated protein 2 [Source:HGNC Symbol;Acc:HGNC:18672]	48.4	42.5	**-1.13**	0.0045

AK3	adenylate kinase 3 [Source:HGNC Symbol;Acc:HGNC:17376]	70.5	62.4	**-1.13**	0.011
ARRDC2	arrestin domain containing 2 [Source:HGNC Symbol;Acc:HGNC:25225]	70.0	61.5	**-1.13**	0.0020
OSGIN2	oxidative stress induced growth inhibitor family member 2 [Source:HGNC Symbol;Acc:HGNC:1355]	130.6	115.0	**-1.13**	0.0013
NTPCR	nucleoside-triphosphatase, cancer-related [Source:HGNC Symbol;Acc:HGNC:28204]	18.7	16.4	**-1.13**	0.022
NFKB2	nuclear factor kappa B subunit 2 [Source:HGNC Symbol;Acc:HGNC:7795]	285.5	251.3	**-1.13**	0.0022
ARMCX2	armadillo repeat containing, X-linked 2 [Source:HGNC Symbol;Acc:HGNC:16869]	46.4	40.7	**-1.13**	0.0061
CYP1B1	cytochrome P450 family 1 subfamily B member 1 [Source:HGNC Symbol;Acc:HGNC:2597]	796.1	704.4	**-1.13**	0.0062
SULF2	sulfatase 2 [Source:HGNC Symbol;Acc:HGNC:20392]	116.6	103.4	**-1.13**	0.019
SREK1IP1	SREK1 interacting protein 1 [Source:HGNC Symbol;Acc:HGNC:26716]	24.2	21.3	**-1.13**	0.028
FOXP1	forkhead box P1 [Source:HGNC Symbol;Acc:HGNC:3823]	48.6	43.0	**-1.13**	0.014
GABARAPL1	GABA type A receptor associated protein like 1 [Source:HGNC Symbol;Acc:HGNC:4068]	98.6	87.5	**-1.13**	0.0035
C1S	complement C1s [Source:HGNC Symbol;Acc:HGNC:1247]	891.1	788.2	**-1.13**	0.0010
CPPED1	calcineurin like phosphoesterase domain containing 1 [Source:HGNC Symbol;Acc:HGNC:25632]	20.1	17.8	**-1.13**	0.0053
THRB	thyroid hormone receptor beta [Source:HGNC Symbol;Acc:HGNC:11799]	21.7	19.2	**-1.13**	0.025
PENK	proenkephalin [Source:HGNC Symbol;Acc:HGNC:8831]	74.2	64.6	**-1.13**	0.049
CKAP4	cytoskeleton associated protein 4 [Source:HGNC Symbol;Acc:HGNC:16991]	273.3	241.4	**-1.13**	0.0047
PPWD1	peptidylprolyl isomerase domain and WD repeat containing 1 [Source:HGNC Symbol;Acc:HGNC:28954]	28.6	25.3	**-1.13**	0.0092
CES2	carboxylesterase 2 [Source:HGNC Symbol;Acc:HGNC:1864]	40.4	35.8	**-1.13**	0.0031
YIPF1	Yip1 domain family member 1 [Source:HGNC Symbol;Acc:HGNC:25231]	19.3	17.0	**-1.13**	0.046
EIF2D	eukaryotic translation initiation factor 2D [Source:HGNC Symbol;Acc:HGNC:6583]	15.0	13.3	**-1.13**	0.034
MCOLN2	mucolipin 2 [Source:HGNC Symbol;Acc:HGNC:13357]	12.8	11.4	**-1.13**	0.023
UNKL	unkempt family like zinc finger [Source:HGNC Symbol;Acc:HGNC:14184]	59.4	52.9	**-1.13**	0.0051
FSTL1	follistatin like 1 [Source:HGNC Symbol;Acc:HGNC:3972]	1409.4	1239.8	**-1.12**	0.00100
QSOX1	quiescin sulfhydryl oxidase 1 [Source:HGNC Symbol;Acc:HGNC:9756]	746.3	659.8	**-1.12**	0.0038
GTPBP2	GTP binding protein 2 [Source:HGNC Symbol;Acc:HGNC:4670]	113.2	100.7	**-1.12**	0.0041
RELB	RELB proto-oncogene, NF-kB subunit [Source:HGNC Symbol;Acc:HGNC:9956]	121.0	107.1	**-1.12**	0.024
ACOT13	acyl-CoA thioesterase 13 [Source:HGNC Symbol;Acc:HGNC:20999]	21.2	18.9	**-1.12**	0.047
NTN4	netrin 4 [Source:HGNC Symbol;Acc:HGNC:13658]	220.3	197.2	**-1.12**	0.014
GMPPB	GDP-mannose pyrophosphorylase B [Source:HGNC Symbol;Acc:HGNC:22932]	62.1	55.0	**-1.12**	0.0025
FBXO42	F-box protein 42 [Source:HGNC Symbol;Acc:HGNC:29249]	26.7	23.8	**-1.12**	0.016
SEMA3C	semaphorin 3C [Source:HGNC Symbol;Acc:HGNC:10725]	766.9	674.5	**-1.12**	0.029
PHF10	PHD finger protein 10 [Source:HGNC Symbol;Acc:HGNC:18250]	32.5	28.8	**-1.12**	0.023
PIH1D1	PIH1 domain containing 1 [Source:HGNC Symbol;Acc:HGNC:26075]	28.9	25.8	**-1.12**	0.034

PLPPR2	phospholipid phosphatase related 2 [Source:HGNC Symbol;Acc:HGNC:29566]	28.8	25.7	**-1.12**	0.037
P4HA1	prolyl 4-hydroxylase subunit alpha 1 [Source:HGNC Symbol;Acc:HGNC:8546]	403.2	363.5	**-1.12**	0.014
NMI	N-myc and STAT interactor [Source:HGNC Symbol;Acc:HGNC:7854]	16.0	14.3	**-1.12**	0.048
CUL7	cullin 7 [Source:HGNC Symbol;Acc:HGNC:21024]	65.1	57.9	**-1.12**	0.013
BNIP3	BCL2 interacting protein 3 [Source:HGNC Symbol;Acc:HGNC:1084]	195.2	173.8	**-1.12**	0.021
CTSL	cathepsin L [Source:HGNC Symbol;Acc:HGNC:2537]	402.4	355.6	**-1.12**	0.026
FKBP14	FK506 binding protein 14 [Source:HGNC Symbol;Acc:HGNC:18625]	34.1	30.3	**-1.12**	0.0086
EGLN1	egl-9 family hypoxia inducible factor 1 [Source:HGNC Symbol;Acc:HGNC:1232]	144.6	128.9	**-1.12**	0.023
SERPINH1	serpin family H member 1 [Source:HGNC Symbol;Acc:HGNC:1546]	55.1	49.2	**-1.12**	0.0083
RCL1	RNA terminal phosphate cyclase like 1 [Source:HGNC Symbol;Acc:HGNC:17687]	18.9	16.8	**-1.12**	0.025
GPI	glucose-6-phosphate isomerase [Source:HGNC Symbol;Acc:HGNC:4458]	70.3	62.3	**-1.12**	0.020
CCL20	C-C motif chemokine ligand 20 [Source:HGNC Symbol;Acc:HGNC:10619]	6787.1	6037.1	**-1.12**	0.024
PER1	period circadian clock 1 [Source:HGNC Symbol;Acc:HGNC:8845]	40.0	35.7	**-1.12**	0.0091
DHPS	deoxyhypusine synthase [Source:HGNC Symbol;Acc:HGNC:2869]	30.4	27.1	**-1.12**	0.026
GPAT3	glycerol-3-phosphate acyltransferase 3 [Source:HGNC Symbol;Acc:HGNC:28157]	20.4	18.2	**-1.12**	0.016
FUT11	fucosyltransferase 11 [Source:HGNC Symbol;Acc:HGNC:19233]	39.3	35.0	**-1.12**	0.049
SIDT2	SID1 transmembrane family member 2 [Source:HGNC Symbol;Acc:HGNC:24272]	30.3	27.1	**-1.11**	0.016
TMEM165	transmembrane protein 165 [Source:HGNC Symbol;Acc:HGNC:30760]	164.6	147.7	**-1.11**	0.0088
STAT2	signal transducer and activator of transcription 2 [Source:HGNC Symbol;Acc:HGNC:11363]	50.9	45.4	**-1.11**	0.047
SELENOK	selenoprotein K [Source:HGNC Symbol;Acc:HGNC:30394]	97.6	86.7	**-1.11**	0.027
SRSF9	serine and arginine rich splicing factor 9 [Source:HGNC Symbol;Acc:HGNC:10791]	56.8	50.5	**-1.11**	0.049
FOSL2	FOS like 2, AP-1 transcription factor subunit [Source:HGNC Symbol;Acc:HGNC:3798]	214.4	191.5	**-1.11**	0.028
ST6GALNAC4	ST6 N-acetylgalactosaminide alpha-2,6-sialyltransferase 4 [Source:HGNC Symbol;Acc:HGNC:17846]	37.5	33.7	**-1.11**	0.032
AZI2	5-azacytidine induced 2 [Source:HGNC Symbol;Acc:HGNC:24002]	33.7	30.2	**-1.11**	0.0089
SGSH	N-sulfoglucosamine sulfohydrolase [Source:HGNC Symbol;Acc:HGNC:10818]	31.9	28.5	**-1.11**	0.045
SDC2	syndecan 2 [Source:HGNC Symbol;Acc:HGNC:10659]	245.5	218.6	**-1.11**	0.018
TPM4	tropomyosin 4 [Source:HGNC Symbol;Acc:HGNC:12013]	70.9	63.9	**-1.11**	0.019
ERGIC1	endoplasmic reticulum-golgi intermediate compartment 1 [Source:HGNC Symbol;Acc:HGNC:29205]	83.5	75.2	**-1.11**	0.012
VEGFA	vascular endothelial growth factor A [Source:HGNC Symbol;Acc:HGNC:12680]	609.6	547.1	**-1.11**	0.026
CPXM2	carboxypeptidase X, M14 family member 2 [Source:HGNC Symbol;Acc:HGNC:26977]	41.7	37.2	**-1.11**	0.016
ACO1	aconitase 1 [Source:HGNC Symbol;Acc:HGNC:117]	85.3	76.6	**-1.11**	0.0070
NQO2	N-ribosyldihydronicotinamide:quinone reductase 2 [Source:HGNC Symbol;Acc:HGNC:7856]	33.0	29.5	**-1.11**	0.042
CUX1	cut like homeobox 1 [Source:HGNC Symbol;Acc:HGNC:2557]	69.8	62.6	**-1.11**	0.038

GID4	GID complex subunit 4 homolog [Source:HGNC Symbol;Acc:HGNC:28453]	17.4	15.7	**-1.11**	0.029
NCKIPSD	NCK interacting protein with SH3 domain [Source:HGNC Symbol;Acc:HGNC:15486]	24.1	21.6	**-1.11**	0.043
PRKAR1A	protein kinase cAMP-dependent type I regulatory subunit alpha [Source:HGNC Symbol;Acc:HGNC:9388]	202.2	181.7	**-1.11**	0.041
UNK	unkempt family zinc finger [Source:HGNC Symbol;Acc:HGNC:29369]	24.2	21.8	**-1.11**	0.029
BZW1	basic leucine zipper and W2 domains 1 [Source:HGNC Symbol;Acc:HGNC:18380]	432.3	390.0	**-1.11**	0.019
SLC25A28	solute carrier family 25 member 28 [Source:HGNC Symbol;Acc:HGNC:23472]	63.3	57.1	**-1.11**	0.036
MAFB	MAF bZIP transcription factor B [Source:HGNC Symbol;Acc:HGNC:6408]	224.9	202.2	**-1.10**	0.016
GNPDA2	glucosamine-6-phosphate deaminase 2 [Source:HGNC Symbol;Acc:HGNC:21526]	33.2	30.0	**-1.10**	0.031
GMPPA	GDP-mannose pyrophosphorylase A [Source:HGNC Symbol;Acc:HGNC:22923]	50.5	45.3	**-1.10**	0.040
INTS10	integrator complex subunit 10 [Source:HGNC Symbol;Acc:HGNC:25548]	31.9	28.8	**-1.10**	0.034
MLH1	mutL homolog 1 [Source:HGNC Symbol;Acc:HGNC:7127]	42.6	38.5	**-1.10**	0.018
PLPP5	phospholipid phosphatase 5 [Source:HGNC Symbol;Acc:HGNC:25026]	74.8	67.8	**-1.10**	0.024
WIPI1	WD repeat domain, phosphoinositide interacting 1 [Source:HGNC Symbol;Acc:HGNC:25471]	35.4	32.1	**-1.10**	0.024
VLDLR	very low density lipoprotein receptor [Source:HGNC Symbol;Acc:HGNC:12698]	77.4	70.3	**-1.10**	0.039
PDGFRA	platelet derived growth factor receptor alpha [Source:HGNC Symbol;Acc:HGNC:8803]	80.6	72.8	**-1.10**	0.030
SPG20	spastic paraplegia 20 (Troyer syndrome) [Source:HGNC Symbol;Acc:HGNC:18514]	26.9	25.5	**-1.10**	0.029
TMEM94	transmembrane protein 94 [Source:HGNC Symbol;Acc:HGNC:28983]	24.0	21.8	**-1.10**	0.037
THUMPD3	THUMP domain containing 3 [Source:HGNC Symbol;Acc:HGNC:24493]	30.6	27.7	**-1.10**	0.049
ESYT1	extended synaptotagmin 1 [Source:HGNC Symbol;Acc:HGNC:29534]	44.7	40.5	**-1.10**	0.043
HSPA5	heat shock protein family A (Hsp70) member 5 [Source:HGNC Symbol;Acc:HGNC:5238]	1797.5	1620.3	**-1.10**	0.0079
ZFP36L1	ZFP36 ring finger protein like 1 [Source:HGNC Symbol;Acc:HGNC:1107]	338.2	308.9	**-1.09**	0.043
SLC35E1	solute carrier family 35 member E1 [Source:HGNC Symbol;Acc:HGNC:20803]	85.5	78.0	**-1.09**	0.033
ARMCX3	armadillo repeat containing, X-linked 3 [Source:HGNC Symbol;Acc:HGNC:24065]	44.6	40.6	**-1.09**	0.046
TLE1	transducin like enhancer of split 1 [Source:HGNC Symbol;Acc:HGNC:11837]	25.1	22.9	**-1.09**	0.049

Mean = trimmed mean of M-values (TMM) normalized counts

adj. p = FDR-adjusted p-value