

Table S2. List of 404 differentially expressed genes.

Gene	Entrezgene	Name	HGNC
<i>ABCB9</i>	23457	ATP binding cassette subfamily B member 9	HGNC:50
<i>ABCG1</i>	9619	ATP binding cassette subfamily G member 1	HGNC:73
<i>ABHD15</i>	116236	abhydrolase domain containing 15	HGNC:26971
<i>ABHD3</i>	171586	abhydrolase domain containing 3, phospholipase	HGNC:18718
<i>ABLIM1</i>	3983	actin binding LIM protein 1	HGNC:78
<i>ACOT7</i>	11332	acyl-CoA thioesterase 7	HGNC:24157
<i>ACTA2</i>	59	actin alpha 2, smooth muscle	HGNC:130
<i>ADCY2</i>	108	adenylate cyclase 2	HGNC:233
<i>ADPRH</i>	141	ADP-ribosylarginine hydrolase	HGNC:269
<i>ADRB2</i>	154	adrenoceptor beta 2	HGNC:286
<i>AIFM3</i>	150209	apoptosis inducing factor mitochondria associated 3	HGNC:26398
<i>AK1</i>	203	adenylate kinase 1	HGNC:361
<i>ALDH1L2</i>	160428	aldehyde dehydrogenase 1 family member L2	HGNC:26777
<i>ANKRD36BP2</i>	645784	ankyrin repeat domain 36B pseudogene 2	HGNC:33607
<i>ANO9</i>	338440	anoctamin 9	HGNC:20679
<i>AQP1</i>	358	aquaporin 1 (Colton blood group)	HGNC:633
<i>ARHGEF10</i>	9639	Rho guanine nucleotide exchange factor 10	HGNC:14103
<i>ARHGEF40</i>	55701	Rho guanine nucleotide exchange factor 40	HGNC:25516
<i>ARSD</i>	414	arylsulfatase D	HGNC:717
<i>ARTN</i>	9048	artemin	HGNC:727
<i>ARVCF</i>	421	ARVCF delta catenin family member	HGNC:728
<i>ATF7IP2</i>	80063	activating transcription factor 7 interacting protein 2	HGNC:20397
<i>ATG12</i>	9140	autophagy related 12	HGNC:588
<i>ATXN7L1</i>	222255	ataxin 7 like 1	HGNC:22210
<i>AURKA</i>	6790	aurora kinase A	HGNC:11393

<i>BACE2</i>	25825	beta-secretase 2	HGNC:934
<i>BBS2</i>	583	Bardet-Biedl syndrome 2	HGNC:967
<i>BBS9</i>	27241	Bardet-Biedl syndrome 9	HGNC:30000
<i>BIN1</i>	274	bridging integrator 1	HGNC:1052
<i>BIRC5</i>	332	baculoviral IAP repeat containing 5	HGNC:593
<i>BTF3</i>	689	basic transcription factor 3	HGNC:1125
<i>BUB1</i>	699	BUB1 mitotic checkpoint serine/threonine kinase	HGNC:1148
<i>C16orf86</i>	388284	chromosome 16 open reading frame 86	HGNC:33755
<i>C5orf15</i>	56951	chromosome 5 open reading frame 15	HGNC:20656
<i>CACNA2D4</i>	93589	calcium voltage-gated channel auxiliary subunit alpha2delta 4	HGNC:20202
<i>CALN1</i>	83698	calneuron 1	HGNC:13248
<i>CAMLG</i>	819	calcium modulating ligand	HGNC:1471
<i>CARD9</i>	64170	caspase recruitment domain family member 9	HGNC:16391
<i>CATSPER1</i>	117144	cation channel sperm associated 1	HGNC:17116
<i>CCDC106</i>	29903	coiled-coil domain containing 106	HGNC:30181
<i>CCDC15</i>	80071	coiled-coil domain containing 15	HGNC:25798
<i>CCDC85C</i>	317762	coiled-coil domain containing 85C	HGNC:35459
<i>CCL23</i>	6368	C-C motif chemokine ligand 23	HGNC:10622
<i>CCT6B</i>	10693	chaperonin containing TCP1 subunit 6B	HGNC:1621
<i>CD320</i>	51293	CD320 molecule	HGNC:16692
<i>CD82</i>	3732	CD82 molecule	HGNC:6210
<i>CDC20</i>	991	cell division cycle 20	HGNC:1723
<i>CDC42BPA</i>	8476	CDC42 binding protein kinase alpha	HGNC:1737
<i>CDCA2</i>	157313	cell division cycle associated 2	HGNC:14623
<i>CDCA5</i>	113130	cell division cycle associated 5	HGNC:14626
<i>CDCA8</i>	55143	cell division cycle associated 8	HGNC:14629
<i>CDH1</i>	999	cadherin 1	HGNC:1748
<i>CFD</i>	1675	complement factor D	HGNC:2771
<i>CHAF1B</i>	8208	chromatin assembly factor 1 subunit B	HGNC:1911

<i>CHEK1</i>	1111	checkpoint kinase 1	HGNC:1925
<i>CHI3L1</i>	1116	chitinase 3 like 1	HGNC:1932
<i>CKAP2L</i>	150468	cytoskeleton associated protein 2 like	HGNC:26877
<i>CKAP5</i>	9793	cytoskeleton associated protein 5	HGNC:28959
<i>CKB</i>	1152	creatine kinase B	HGNC:1991
<i>CLCN4</i>	1183	chloride voltage-gated channel 4	HGNC:2022
<i>CLIP3</i>	25999	CAP-Gly domain containing linker protein 3	HGNC:24314
<i>CNOT8</i>	9337	CCR4-NOT transcription complex subunit 8	HGNC:9207
<i>COL18A1</i>	80781	collagen type XVIII alpha 1 chain	HGNC:2195
<i>COL9A2</i>	1298	collagen type IX alpha 2 chain	HGNC:2218
<i>COMMD10</i>	51397	COMM domain containing 10	HGNC:30201
<i>COMMD6</i>	170622	COMM domain containing 6	HGNC:24015
<i>COPG2</i>	26958	COPI coat complex subunit gamma 2	HGNC:2237
<i>COX4I1</i>	1327	cytochrome c oxidase subunit 4I1	HGNC:2265
<i>CRYBG3</i>	131544	crystallin beta-gamma domain containing 3	HGNC:34427
<i>CSF1</i>	1435	colony stimulating factor 1	HGNC:2432
<i>CSNK1G3</i>	1456	casein kinase 1 gamma 3	HGNC:2456
<i>CTSO</i>	1519	cathepsin O	HGNC:2542
<i>CYB5R3</i>	1727	cytochrome b5 reductase 3	HGNC:2873
<i>CYSLTR2</i>	57105	cysteinyl leukotriene receptor 2	HGNC:18274
<i>DAAM1</i>	23002	dishevelled associated activator of morphogenesis 1	HGNC:18142
<i>DEPDC1</i>	55635	DEP domain containing 1	HGNC:22949
<i>DERA</i>	51071	deoxyribose-phosphate aldolase	HGNC:24269
<i>DGAT1</i>	8694	diacylglycerol O-acyltransferase 1	HGNC:2843
<i>DHCR7</i>	1717	7-dehydrocholesterol reductase	HGNC:2860
<i>DHRS13</i>	147015	dehydrogenase/reductase 13	HGNC:28326
<i>DMXL2</i>	23312	Dmx like 2	HGNC:2938
<i>DNAJC9</i>	23234	DnaJ heat shock protein family (Hsp40) member C9	HGNC:19123
<i>DPEP2</i>	64174	dipeptidase 2	HGNC:23028

<i>DSC2</i>	1824	desmocollin 2	HGNC:3036
<i>DTWD2</i>	285605	DTW domain containing 2	HGNC:19334
<i>E2F8</i>	79733	E2F transcription factor 8	HGNC:24727
<i>EFCAB2</i>	84288	EF-hand calcium binding domain 2	HGNC:28166
<i>EFHC1</i>	114327	EF-hand domain containing 1	HGNC:16406
<i>ELOVL6</i>	79071	ELOVL fatty acid elongase 6	HGNC:15829
<i>EMILIN1</i>	11117	elastin microfibril interfacier 1	HGNC:19880
<i>EMP1</i>	2012	epithelial membrane protein 1	HGNC:3333
<i>ENDOD1</i>	23052	endonuclease domain containing 1	HGNC:29129
<i>ERAP1</i>	51752	endoplasmic reticulum aminopeptidase 1	HGNC:18173
<i>ESPL1</i>	9700	extra spindle pole bodies like 1, separase	HGNC:16856
<i>EVI2A</i>	2123	ecotropic viral integration site 2A	HGNC:3499
<i>FAM110B</i>	90362	family with sequence similarity 110 member B	HGNC:28587
<i>FAM13B</i>	51306	family with sequence similarity 13 member B	HGNC:1335
<i>FAM83D</i>	81610	family with sequence similarity 83 member D	HGNC:16122
<i>FAM89A</i>	375061	family with sequence similarity 89 member A	HGNC:25057
<i>FARP1</i>	10160	FERM, ARH/RhoGEF and pleckstrin domain protein 1	HGNC:3591
<i>FBXL17</i>	64839	F-box and leucine rich repeat protein 17	HGNC:13615
<i>FBXO38</i>	81545	F-box protein 38	HGNC:28844
<i>FGD5</i>	152273	FYVE, RhoGEF and PH domain containing 5	HGNC:19117
<i>FHL2</i>	2274	four and a half LIM domains 2	HGNC:3703
<i>FHL3</i>	2275	four and a half LIM domains 3	HGNC:3704
<i>FKBP4</i>	2288	FKBP prolyl isomerase 4	HGNC:3720
<i>FN3K</i>	64122	fructosamine 3 kinase	HGNC:24822
<i>FOXM1</i>	2305	forkhead box M1	HGNC:3818
<i>FOXRED2</i>	80020	FAD dependent oxidoreductase domain containing 2	HGNC:26264
<i>FSD1L</i>	83856	fibronectin type III and SPRY domain containing 1 like	HGNC:13753
<i>FTO</i>	79068	FTO alpha-ketoglutarate dependent dioxygenase	HGNC:24678
<i>FUT8</i>	2530	fucosyltransferase 8	HGNC:4019

<i>GALE</i>	2582	UDP-galactose-4-epimerase	HGNC:4116
<i>GALNT11</i>	63917	polypeptide N-acetylgalactosaminyltransferase 11	HGNC:19875
<i>GAPT</i>	202309	GRB2 binding adaptor protein, transmembrane	HGNC:26588
<i>GAS2L1</i>	10634	growth arrest specific 2 like 1	HGNC:16955
<i>GATA1</i>	2623	GATA binding protein 1	HGNC:4170
<i>GATAD1</i>	57798	GATA zinc finger domain containing 1	HGNC:29941
<i>GCLM</i>	2730	glutamate-cysteine ligase modifier subunit	HGNC:4312
<i>GFI1B</i>	8328	growth factor independent 1B transcriptional repressor	HGNC:4238
<i>GIPC1</i>	10755	GIPC PDZ domain containing family member 1	HGNC:1226
<i>GM2A</i>	2760	ganglioside GM2 activator	HGNC:4367
<i>GRAP2</i>	9402	GRB2 related adaptor protein 2	HGNC:4563
<i>GSTK1</i>	373156	glutathione S-transferase kappa 1	HGNC:16906
<i>GTF2IRD2</i>	84163	GTF2I repeat domain containing 2	HGNC:30775
<i>GTF2IRD2B</i>	389524	GTF2I repeat domain containing 2B	HGNC:33125
<i>GTSE1</i>	51512	G2 and S-phase expressed 1	HGNC:13698
<i>HARS2</i>	23438	histidyl-tRNA synthetase 2, mitochondrial	HGNC:4817
<i>HAUS8</i>	93323	HAUS augmin like complex subunit 8	HGNC:30532
<i>HAVCR2</i>	84868	hepatitis A virus cellular receptor 2	HGNC:18437
<i>HBG1</i>	3047	hemoglobin subunit gamma 1	HGNC:4831
<i>HBG2</i>	3048	hemoglobin subunit gamma 2	HGNC:4832
<i>HHAT</i>	55733	hedgehog acyltransferase	HGNC:18270
<i>HIGD2A</i>	192286	HIG1 hypoxia inducible domain family member 2A	HGNC:28311
<i>HINT1</i>	3094	histidine triad nucleotide binding protein 1	HGNC:4912
<i>HJURP</i>	55355	Holliday junction recognition protein	HGNC:25444
<i>HMBS</i>	3145	hydroxymethylbilane synthase	HGNC:4982
<i>HMGN5</i>	79366	high mobility group nucleosome binding domain 5	HGNC:8013
<i>HNMT</i>	3176	histamine N-methyltransferase	HGNC:5028
<i>HOXA11</i>	3207	homeobox A11	HGNC:5101
<i>HOXA3</i>	3200	homeobox A3	HGNC:5104

<i>HOXA4</i>	3201	homeobox A4	HGNC:5105
<i>HOXA6</i>	3203	homeobox A6	HGNC:5107
<i>HOXB3</i>	3213	homeobox B3	HGNC:5114
<i>HOXB4</i>	3214	homeobox B4	HGNC:5115
<i>HOXB6</i>	3216	homeobox B6	HGNC:5117
<i>HOXB7</i>	3217	homeobox B7	HGNC:5118
<i>HOXB8</i>	3218	homeobox B8	HGNC:5119
<i>HOXB9</i>	3219	homeobox B9	HGNC:5120
<i>HSD17B4</i>	3295	hydroxysteroid 17-beta dehydrogenase 4	HGNC:5213
<i>HSPB1</i>	3315	heat shock protein family B (small) member 1	HGNC:5246
<i>HSPG2</i>	3339	heparan sulfate proteoglycan 2	HGNC:5273
<i>ICAM4</i>	3386	intercellular adhesion molecule 4 (Landsteiner-Wiener blood group)	HGNC:5347
<i>IFITM1</i>	8519	interferon induced transmembrane protein 1	HGNC:5412
<i>IFITM2</i>	10581	interferon induced transmembrane protein 2	HGNC:5413
<i>IGSF10</i>	285313	immunoglobulin superfamily member 10	HGNC:26384
<i>IL12A</i>	3592	interleukin 12A	HGNC:5969
<i>IL7</i>	3574	interleukin 7	HGNC:6023
<i>ILDR2</i>	387597	immunoglobulin like domain containing receptor 2	HGNC:18131
<i>IMMP2L</i>	83943	inner mitochondrial membrane peptidase subunit 2	HGNC:14598
<i>ING3</i>	54556	inhibitor of growth family member 3	HGNC:14587
<i>IQSEC2</i>	23096	IQ motif and Sec7 domain ArfGEF 2	HGNC:29059
<i>IRX3</i>	79191	iroquois homeobox 3	HGNC:14360
<i>IRX5</i>	10265	iroquois homeobox 5	HGNC:14361
<i>ITGAE</i>	3682	integrin subunit alpha E	HGNC:6147
<i>ITPR3</i>	3710	inositol 1,4,5-trisphosphate receptor type 3	HGNC:6182
<i>ITPRIP1</i>	150771	ITPRIP like 1	HGNC:29371
<i>JAM3</i>	83700	junctional adhesion molecule 3	HGNC:15532
<i>KANK2</i>	25959	KN motif and ankyrin repeat domains 2	HGNC:29300
<i>KCTD1</i>	284252	potassium channel tetramerization domain containing 1	HGNC:18249

<i>KCTD9</i>	54793	potassium channel tetramerization domain containing 9	HGNC:22401
<i>KIAA1549</i>	57670	KIAA1549	HGNC:22219
<i>KIF26B</i>	55083	kinesin family member 26B	HGNC:25484
<i>KIF27</i>	55582	kinesin family member 27	HGNC:18632
<i>KIF2C</i>	11004	kinesin family member 2C	HGNC:6393
<i>KIF3C</i>	3797	kinesin family member 3C	HGNC:6321
<i>KIF4A</i>	24137	kinesin family member 4A	HGNC:13339
<i>KLHDC8B</i>	200942	kelch domain containing 8B	HGNC:28557
<i>KLRG1</i>	10219	killer cell lectin like receptor G1	HGNC:6380
<i>LIPE</i>	3991	lipase E, hormone sensitive type	HGNC:6621
<i>LNPEP</i>	4012	leucyl and cystinyl aminopeptidase	HGNC:6656
<i>LRBA</i>	987	LPS responsive beige-like anchor protein	HGNC:1742
<i>LRFN4</i>	78999	leucine rich repeat and fibronectin type III domain containing 4	HGNC:28456
<i>LRRC23</i>	10233	leucine rich repeat containing 23	HGNC:19138
<i>LRRC27</i>	80313	leucine rich repeat containing 27	HGNC:29346
<i>LRRN2</i>	10446	leucine rich repeat neuronal 2	HGNC:16914
<i>LSR</i>	51599	lipolysis stimulated lipoprotein receptor	HGNC:29572
<i>LTK</i>	4058	leukocyte receptor tyrosine kinase	HGNC:6721
<i>LY6E</i>	4061	lymphocyte antigen 6 family member E	HGNC:6727
<i>MAP3K1</i>	4214	mitogen-activated protein kinase kinase kinase 1	HGNC:6848
<i>MED7</i>	9443	mediator complex subunit 7	HGNC:2378
<i>MFHAS1</i>	9258	multifunctional ROCO family signaling regulator 1	HGNC:16982
<i>MFSD1</i>	64747	major facilitator superfamily domain containing 1	HGNC:25874
<i>MFSD2B</i>	388931	MFSD2 lysolipid transporter B, sphingolipid	HGNC:37207
<i>MLYCD</i>	23417	malonyl-CoA decarboxylase	HGNC:7150
<i>MMD</i>	23531	monocyte to macrophage differentiation associated	HGNC:7153
<i>MRPS33</i>	51650	mitochondrial ribosomal protein S33	HGNC:16634
<i>MYCT1</i>	80177	MYC target 1	HGNC:23172
<i>MYH10</i>	4628	myosin heavy chain 10	HGNC:7568

<i>MYL4</i>	4635	myosin light chain 4	HGNC:7585
<i>NAGPA</i>	51172	N-acetylglucosamine-1-phosphodiester alpha-N-acetylglucosamine	HGNC:17378
<i>NAV1</i>	89796	neuron navigator 1	HGNC:15989
<i>NBR2</i>	10230	neighbor of BRCA1 lncRNA 2	HGNC:20691
<i>NCAPD3</i>	23310	non-SMC condensin II complex subunit D3	HGNC:28952
<i>NCAPH</i>	23397	non-SMC condensin I complex subunit H	HGNC:1112
<i>NCKAP1</i>	10787	NCK associated protein 1	HGNC:7666
<i>NDUFB5</i>	4711	NADH:ubiquinone oxidoreductase subunit B5	HGNC:7700
<i>NEDD4L</i>	23327	NEDD4 like E3 ubiquitin protein ligase	HGNC:7728
<i>NEK10</i>	152110	NIMA related kinase 10	HGNC:18592
<i>NEK2</i>	4751	NIMA related kinase 2	HGNC:7745
<i>NPW</i>	283869	neuropeptide W	HGNC:30509
<i>NQO1</i>	1728	NAD(P)H quinone dehydrogenase 1	HGNC:2874
<i>NSA2</i>	10412	NSA2 ribosome biogenesis factor	HGNC:30728
<i>NUDT7</i>	283927	nudix hydrolase 7	HGNC:8054
<i>NUF2</i>	83540	NUF2 component of NDC80 kinetochore complex	HGNC:14621
<i>OAF</i>	220323	out at first homolog	HGNC:28752
<i>OPTN</i>	10133	optineurin	HGNC:17142
<i>ORAI2</i>	80228	ORAI calcium release-activated calcium modulator 2	HGNC:21667
<i>ORC1</i>	4998	origin recognition complex subunit 1	HGNC:8487
<i>OTUD7B</i>	56957	OTU deubiquitinase 7B	HGNC:16683
<i>PAFAH1B3</i>	5050	platelet activating factor acetylhydrolase 1b catalytic subunit 3	HGNC:8576
<i>PARVB</i>	29780	parvin beta	HGNC:14653
<i>PBX3</i>	5090	PBX homeobox 3	HGNC:8634
<i>PC</i>	5091	pyruvate carboxylase	HGNC:8636
<i>PCBD2</i>	84105	pterin-4 alpha-carbinolamine dehydratase 2	HGNC:24474
<i>PCYT1B</i>	9468	phosphate cytidylyltransferase 1B, choline	HGNC:8755
<i>PGGT1B</i>	5229	protein geranylgeranyltransferase type I subunit beta	HGNC:8895
<i>PII5</i>	51050	peptidase inhibitor 15	HGNC:8946

<i>PIK3CG</i>	5294	phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit g	HGNC:8978
<i>PKLR</i>	5313	pyruvate kinase L/R	HGNC:9020
<i>PKN3</i>	29941	protein kinase N3	HGNC:17999
<i>PLCB4</i>	5332	phospholipase C beta 4	HGNC:9059
<i>PLEKHG4</i>	25894	pleckstrin homology and RhoGEF domain containing G4	HGNC:24501
<i>PMPCB</i>	9512	peptidase, mitochondrial processing subunit beta	HGNC:9119
<i>PNMA1</i>	9240	PNMA family member 1	HGNC:9158
<i>POLN</i>	353497	DNA polymerase nu	HGNC:18870
<i>POU2AF1</i>	5450	POU class 2 homeobox associating factor 1	HGNC:9211
<i>PPAN</i>	56342	peter pan homolog	HGNC:9227
<i>PRDX4</i>	10549	peroxiredoxin 4	HGNC:17169
<i>PROS1</i>	5627	protein S	HGNC:9456
<i>PRR5</i>	55615	proline rich 5	HGNC:31682
<i>PRRT3</i>	285368	proline rich transmembrane protein 3	HGNC:26591
<i>PRX</i>	57716	periaxin	HGNC:13797
<i>PSMB10</i>	5699	proteasome 20S subunit beta 10	HGNC:9538
<i>PSMG1</i>	8624	proteasome assembly chaperone 1	HGNC:3043
<i>PTGDS</i>	5730	prostaglandin D2 synthase	HGNC:9592
<i>PYCARD</i>	29108	PYD and CARD domain containing	HGNC:16608
<i>PYCR1</i>	5831	pyrroline-5-carboxylate reductase 1	HGNC:9721
<i>RAB30</i>	27314	RAB30, member RAS oncogene family	HGNC:9770
<i>RAB33A</i>	9363	RAB33A, member RAS oncogene family	HGNC:9773
<i>RAB3IL1</i>	5866	RAB3A interacting protein like 1	HGNC:9780
<i>RAC3</i>	5881	Rac family small GTPase 3	HGNC:9803
<i>RAD54L</i>	8438	RAD54 like	HGNC:9826
<i>REC8</i>	9985	REC8 meiotic recombination protein	HGNC:16879
<i>RECQL4</i>	9401	RecQ like helicase 4	HGNC:9949
<i>REXO2</i>	25996	RNA exonuclease 2	HGNC:17851
<i>RIMS3</i>	9783	regulating synaptic membrane exocytosis 3	HGNC:21292

<i>RNF135</i>	84282	ring finger protein 135	HGNC:21158
<i>RPGR</i>	6103	retinitis pigmentosa GTPase regulator	HGNC:10295
<i>RPL12</i>	6136	ribosomal protein L12	HGNC:10302
<i>RPL15</i>	6138	ribosomal protein L15	HGNC:10306
<i>RPL17</i>	6139	ribosomal protein L17	HGNC:10307
<i>RPL22L1</i>	200916	ribosomal protein L22 like 1	HGNC:27610
<i>RPL23</i>	9349	ribosomal protein L23	HGNC:10316
<i>RPL26</i>	6154	ribosomal protein L26	HGNC:10327
<i>RPL27</i>	6155	ribosomal protein L27	HGNC:10328
<i>RPL34</i>	6164	ribosomal protein L34	HGNC:10340
<i>RPL35A</i>	6165	ribosomal protein L35a	HGNC:10345
<i>RPL38</i>	6169	ribosomal protein L38	HGNC:10349
<i>RPL39</i>	6170	ribosomal protein L39	HGNC:10350
<i>RPS10</i>	6204	ribosomal protein S10	HGNC:10383
<i>RPS14</i>	6208	ribosomal protein S14	HGNC:10387
<i>RPS23</i>	6228	ribosomal protein S23	HGNC:10410
<i>RPS27</i>	6232	ribosomal protein S27	HGNC:10416
<i>RPS27L</i>	51065	ribosomal protein S27 like	HGNC:18476
<i>RPS4X</i>	6191	ribosomal protein S4 X-linked	HGNC:10424
<i>RRN3P2</i>	653390	RRN3 pseudogene 2	HGNC:37619
<i>RRP1B</i>	23076	ribosomal RNA processing 1B	HGNC:23818
<i>RYR3</i>	6263	ryanodine receptor 3	HGNC:10485
<i>S100B</i>	6285	S100 calcium binding protein B	HGNC:10500
<i>SAGE1</i>	55511	sarcoma antigen 1	HGNC:30369
<i>SCD</i>	6319	stearoyl-CoA desaturase	HGNC:10571
<i>SCUBE1</i>	80274	signal peptide, CUB domain and EGF like domain containing 1	HGNC:13441
<i>SEC11A</i>	23478	SEC11 homolog A, signal peptidase complex subunit	HGNC:17718
<i>SEC14L2</i>	23541	SEC14 like lipid binding 2	HGNC:10699
<i>SEMA3C</i>	10512	semaphorin 3C	HGNC:10725

<i>SEMA4B</i>	10509	semaphorin 4B	HGNC:10730
<i>SERPINE2</i>	5270	serpin family E member 2	HGNC:8951
<i>SERPINI1</i>	5274	serpin family I member 1	HGNC:8943
<i>SGMS1</i>	259230	sphingomyelin synthase 1	HGNC:29799
<i>SGPP1</i>	81537	sphingosine-1-phosphate phosphatase 1	HGNC:17720
<i>SH2D3A</i>	10045	SH2 domain containing 3A	HGNC:16885
<i>SH3BGR2</i>	83699	SH3 domain binding glutamate rich protein like 2	HGNC:15567
<i>SH3BP5</i>	9467	SH3 domain binding protein 5	HGNC:10827
<i>SIGMAR1</i>	10280	sigma non-opioid intracellular receptor 1	HGNC:8157
<i>SIL1</i>	64374	SIL1 nucleotide exchange factor	HGNC:24624
<i>SKA1</i>	220134	spindle and kinetochore associated complex subunit 1	HGNC:28109
<i>SLC18A2</i>	6571	solute carrier family 18 member A2	HGNC:10935
<i>SLC1A5</i>	6510	solute carrier family 1 member 5	HGNC:10943
<i>SLC22A23</i>	63027	solute carrier family 22 member 23	HGNC:21106
<i>SLC25A23</i>	79085	solute carrier family 25 member 23	HGNC:19375
<i>SLC25A35</i>	399512	solute carrier family 25 member 35	HGNC:31921
<i>SLC26A2</i>	1836	solute carrier family 26 member 2	HGNC:10994
<i>SLC29A2</i>	3177	solute carrier family 29 member 2	HGNC:11004
<i>SLC2A1</i>	6513	solute carrier family 2 member 1	HGNC:11005
<i>SLC2A13</i>	114134	solute carrier family 2 member 13	HGNC:15956
<i>SLC2A9</i>	56606	solute carrier family 2 member 9	HGNC:13446
<i>SLC38A5</i>	92745	solute carrier family 38 member 5	HGNC:18070
<i>SLC41A1</i>	254428	solute carrier family 41 member 1	HGNC:19429
<i>SLC43A1</i>	8501	solute carrier family 43 member 1	HGNC:9225
<i>SLC43A3</i>	29015	solute carrier family 43 member 3	HGNC:17466
<i>SLC44A2</i>	57153	solute carrier family 44 member 2	HGNC:17292
<i>SLC7A1</i>	6541	solute carrier family 7 member 1	HGNC:11057
<i>SLCO4A1</i>	28231	solute carrier organic anion transporter family member 4A1	HGNC:10953
<i>SMAD5</i>	4090	SMAD family member 5	HGNC:6771

<i>SMAGP</i>	57228	small cell adhesion glycoprotein	HGNC:26918
<i>SNHG5</i>	387066	small nucleolar RNA host gene 5	HGNC:21026
<i>SNPH</i>	9751	syntaphilin	HGNC:15931
<i>SNX2</i>	6643	sorting nexin 2	HGNC:11173
<i>SOD1</i>	6647	superoxide dismutase 1	HGNC:11179
<i>SORBS1</i>	10580	sorbin and SH3 domain containing 1	HGNC:14565
<i>SPINT2</i>	10653	serine peptidase inhibitor, Kunitz type 2	HGNC:11247
<i>SPMIP4</i>	136895	sperm microtubule inner protein 4	HGNC:21722
<i>SPTBN2</i>	6712	spectrin beta, non-erythrocytic 2	HGNC:11276
<i>SQLE</i>	6713	squalene epoxidase	HGNC:11279
<i>SRC</i>	6714	SRC proto-oncogene, non-receptor tyrosine kinase	HGNC:11283
<i>SREBF2</i>	6721	sterol regulatory element binding transcription factor 2	HGNC:11290
<i>SSBP1</i>	6742	single stranded DNA binding protein 1	HGNC:11317
<i>SSBP3</i>	23648	single stranded DNA binding protein 3	HGNC:15674
<i>ST8SIA4</i>	7903	ST8 alpha-N-acetyl-neuraminide alpha-2,8-sialyltransferase 4	HGNC:10871
<i>STAC3</i>	246329	SH3 and cysteine rich domain 3	HGNC:28423
<i>STARD10</i>	10809	StAR related lipid transfer domain containing 10	HGNC:10666
<i>STIL</i>	6491	STIL centriolar assembly protein	HGNC:10879
<i>STS</i>	412	steroid sulfatase	HGNC:11425
<i>SV2B</i>	9899	synaptic vesicle glycoprotein 2B	HGNC:16874
<i>SYNGAP1</i>	8831	synaptic Ras GTPase activating protein 1	HGNC:11497
<i>SYNJ2</i>	8871	synaptojanin 2	HGNC:11504
<i>TAL1</i>	6886	TAL bHLH transcription factor 1, erythroid differentiation factor	HGNC:11556
<i>TAX1BP1</i>	8887	Tax1 binding protein 1	HGNC:11575
<i>TBC1D4</i>	9882	TBC1 domain family member 4	HGNC:19165
<i>TBPL1</i>	9519	TATA-box binding protein like 1	HGNC:11589
<i>TBXAS1</i>	6916	thromboxane A synthase 1	HGNC:11609
<i>TC2N</i>	123036	tandem C2 domains, nuclear	HGNC:19859
<i>TCTNI</i>	79600	tectonic family member 1	HGNC:26113

<i>TDRKH</i>	11022	tudor and KH domain containing	HGNC:11713
<i>TFDP1</i>	7027	transcription factor Dp-1	HGNC:11749
<i>TFEC</i>	22797	transcription factor EC	HGNC:11754
<i>TGFB1I1</i>	7041	transforming growth factor beta 1 induced transcript 1	HGNC:11767
<i>TGM2</i>	7052	transglutaminase 2	HGNC:11778
<i>TGS1</i>	96764	trimethylguanosine synthase 1	HGNC:17843
<i>THG1L</i>	54974	tRNA-histidine guanylyltransferase 1 like	HGNC:26053
<i>THSD7A</i>	221981	thrombospondin type 1 domain containing 7A	HGNC:22207
<i>TIAM1</i>	7074	TIAM Rac1 associated GEF 1	HGNC:11805
<i>TIGD6</i>	81789	tigger transposable element derived 6	HGNC:18332
<i>TIMP3</i>	7078	TIMP metalloproteinase inhibitor 3	HGNC:11822
<i>TK2</i>	7084	thymidine kinase 2	HGNC:11831
<i>TMCO4</i>	255104	transmembrane and coiled-coil domains 4	HGNC:27393
<i>TMED7</i>	51014	transmembrane p24 trafficking protein 7	HGNC:24253
<i>TMEM105</i>	284186	TMEM105 long non-coding RNA	HGNC:26794
<i>TMEM106A</i>	113277	transmembrane protein 106A	HGNC:28288
<i>TMEM63B</i>	55362	transmembrane protein 63B	HGNC:17735
<i>TMT1A</i>	25840	thiol methyltransferase 1A	HGNC:24550
<i>TNFAIP8</i>	25816	TNF alpha induced protein 8	HGNC:17260
<i>TNFRSF25</i>	8718	TNF receptor superfamily member 25	HGNC:11910
<i>TNFSF12</i>	8742	TNF superfamily member 12	HGNC:11927
<i>TNFSF13</i>	8741	TNF superfamily member 13	HGNC:11928
<i>TNXB</i>	7148	tenascin XB	HGNC:11976
<i>TOMM7</i>	54543	translocase of outer mitochondrial membrane 7	HGNC:21648
<i>TPK1</i>	27010	thiamin pyrophosphokinase 1	HGNC:17358
<i>TPM1</i>	7168	tropomyosin 1	HGNC:12010
<i>TPST2</i>	8459	tyrosylprotein sulfotransferase 2	HGNC:12021
<i>TPX2</i>	22974	TPX2 microtubule nucleation factor	HGNC:1249
<i>TRIB2</i>	28951	tribbles pseudokinase 2	HGNC:30809

<i>TRIP10</i>	9322	thyroid hormone receptor interactor 10	HGNC:12304
<i>TROAP</i>	10024	trophinin associated protein	HGNC:12327
<i>TSPAN31</i>	6302	tetraspanin 31	HGNC:10539
<i>TSPAN5</i>	10098	tetraspanin 5	HGNC:17753
<i>TTC39B</i>	158219	tetratricopeptide repeat domain 39B	HGNC:23704
<i>TUBG1</i>	7283	tubulin gamma 1	HGNC:12417
<i>UBASH3A</i>	53347	ubiquitin associated and SH3 domain containing A	HGNC:12462
<i>UBXN10</i>	127733	UBX domain protein 10	HGNC:26354
<i>UROD</i>	7389	uroporphyrinogen decarboxylase	HGNC:12591
<i>UROS</i>	7390	uroporphyrinogen III synthase	HGNC:12592
<i>USP44</i>	84101	ubiquitin specific peptidase 44	HGNC:20064
<i>VIM</i>	7431	vimentin	HGNC:12692
<i>WDR5B</i>	54554	WD repeat domain 5B	HGNC:17826
<i>WDR62</i>	284403	WD repeat domain 62	HGNC:24502
<i>WEE1</i>	7465	WEE1 G2 checkpoint kinase	HGNC:12761
<i>XRCC4</i>	7518	X-ray repair cross complementing 4	HGNC:12831
<i>YWHAH</i>	7533	tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activatio	HGNC:12853
<i>ZCWPW1</i>	55063	zinc finger CW-type and PWWP domain containing 1	HGNC:23486
<i>ZDHHC21</i>	340481	zinc finger DHHC-type palmitoyltransferase 21	HGNC:20750
<i>ZIK1</i>	284307	zinc finger protein interacting with K protein 1	HGNC:33104
<i>ZNF208</i>	7757	zinc finger protein 208	HGNC:12999
<i>ZNF229</i>	7772	zinc finger protein 229	HGNC:13022
<i>ZNF277</i>	11179	zinc finger protein 277	HGNC:13070
<i>ZNF347</i>	84671	zinc finger protein 347	HGNC:16447
<i>ZNF354C</i>	30832	zinc finger protein 354C	HGNC:16736
<i>ZNF514</i>	84874	zinc finger protein 514	HGNC:25894
<i>ZNF528</i>	84436	zinc finger protein 528	HGNC:29384
<i>ZNF585B</i>	92285	zinc finger protein 585B	HGNC:30948
<i>ZNF804A</i>	91752	zinc finger protein 804A	HGNC:21711

<i>ZNF90</i>	7643	zinc finger protein 90	HGNC:13165
<i>ZSWIM7</i>	125150	zinc finger SWIM-type containing 7	HGNC:26993

HGNC The HUGO Gene Nomenclature Committee.