

Supplemental information

A systems biology network analysis of nutri(epi)genomic changes in endothelial cells exposed to epicatechin metabolites

Dragan Milenkovic^{a,b*}, Wim Vanden Berghe^{c,d}, Christine Morand^a, Sylvain Claude^a, Annette van de Sandt^e, Simone Gorresen^e, Laurent-Emmanuel Monfoulet^a, Chandra S. Chirumamilla^c, Ken Declerck^c, Katarzyna Szarc vel Szic^c, Maija Lahtela-Kakkonen^f, Clarissa Gerhauser^g, Marc W. Merx^{d#}, Malte Kelm^c

^a INRA, UMR 1019, UNH, CRNH Auvergne, F-63000 Clermont-Ferrand ; Clermont Université, Université d'Auvergne, Unité de Nutrition Humaine, BP 10448, F-63000 Clermont-Ferrand, France

^b Department of Internal Medicine, Division of Cardiovascular Medicine, School of Medicine, University of California Davis, Davis, California, 95616, United States of America.

^c PPES, Department of Biomedical Sciences, University of Antwerp (UA), Wilrijk, Belgium

^d L-GEST, Department of Biochemistry and Microbiology, UGent, Ghent, Belgium

^e Department of Medicine, Division of Cardiology, Pneumology and Angiology, University Hospital Düsseldorf, Germany

^f School of Pharmacy, University of Eastern Finland, Kuopio, Finland

^g Division of Epigenomics and Cancer Risk Factors, DKFZ, Heidelberg, Germany

[#] Actual address: KRH Klinikum Robert Koch Gehrden, Department of Cardiovascular Diseases and Internal Intensive Medicine, Von-Reden-Straße 1, 30989 Gehrden, Germany

Supplemental Note:

Microcirculation mouse model - Intravital fluorescence microscopy

Mice were anesthetized by an intraperitoneal (i.p.) administration of ketamine (60 µg/g body weight) and xylazine (10 µg/g body weight). Upon surgical anesthesia, the entire back of the mice was shaven and a chemical hair remover was used to remove any remaining hair. The technique of implanting an Aluminium access chamber in the dorsal skin flap of rats, originally described by Papenfuss et al. (Papenfuss et al, 1979), was modified and adapted to meet carefully established criteria of stability (thin, translucent skin) in mice. Therefore, spacers made of stainless steel were used yielding in a frame-to-frame distance of 400-450 µm while the chamber was affixed in a position perpendicular to the animal's back. The thickness of the preparation and thus the distance between both frames were chosen on the basis of optical translucency needed for proper visualization of microscopic blood channels without compressing larger blood vessels. This chamber was tolerated by all animals.

The surgical procedure was done by placing the animal on a surgical stage. A midpoint line was drawn along the back and a dorsal skin fold was affixed to the surgical stage by means of silk sutures (5-0) to stabilize the preparation. One part of the chamber frame consisting of the frame, two lower bolts and spacers was slightly pushed under the skin-fold causing the skin to protrude. Two holes were cut carefully through the skin, this part of the chamber introduced through the holes and fixed using two baby mosquito hemostats. A template, equivalent to the outer diameter of the chamber's collar served to mark a circle outlining the subsequent incision. A crisscross cut resulting in four skin flaps was made, and each of the four flaps was removed with a fine, curved scissor tracing precisely the perimeter of the outline with an effort to follow the hypodermis. The

area exposed was freed from overlaying fascia utilizing an operating microscope leaving one layer of s.c. tissue at the opposite side of the epidermis intact. During this surgical procedure, the area was kept moist by allowing drops of warmed normal saline to irrigate the preparation that was limited to one side of the skin-fold only. After trimming the area under observation, the matching side of the chamber was inserted. Mechanical connection of the two chamber frames was accomplished using metal nuts for top and lower bolts. At seven points, the 5-0 sutures were fixed around the chamber to support the position of the skin flap. Animals were allowed for recovery for 72h before first intravital fluorescence microscopy was performed. Pain medication (buprenorphine 0.05mg/kg body weight) was administered subcutaneously immediately after surgery and every 8 hours thereafter.

For the *in vivo* microscopy analysis, mice were immobilized and the skin fold preparation was attached to the microscope stage. After intravenous injection of 0.05 ml of 5% Fluorescein isothiocyanate-dextran (Sigma-Aldrich, Germany) which stains blood plasma, and *in vivo* leukocyte staining by 0.05 ml 1% Rhodamine 6G chloride (Invitrogen, Germany) injection in a tail vein or the retro-bulbar venous plexus, *in vivo* microscopy was performed using a Leica DM 4000M microscope. The observations were recorded by video camera and transferred to a video system for off-line evaluation. The microscope images were recorded on DVD and analyzed during playback by using CapImage (Dr. Zeintl, Germany). Microscopy was performed at baseline (72 h after application of dorsal skin fold chamber) and 12h after CLP induction.

Microcirculatory analysis

Stained plasma allowed the measurement of vessel diameters and red blood cell velocity (RBCV). RBCV was assessed in the centerline of the respective vessel by frame-to-frame analysis. Stained rolling leukocytes were defined as cells moving along the endothelial lining at a

velocity markedly slower than that of the surrounding red cell and are given as percentage of the total number of calculated leukocytes passing through the observed vessel segment in 1 minute.

Sepsis induction

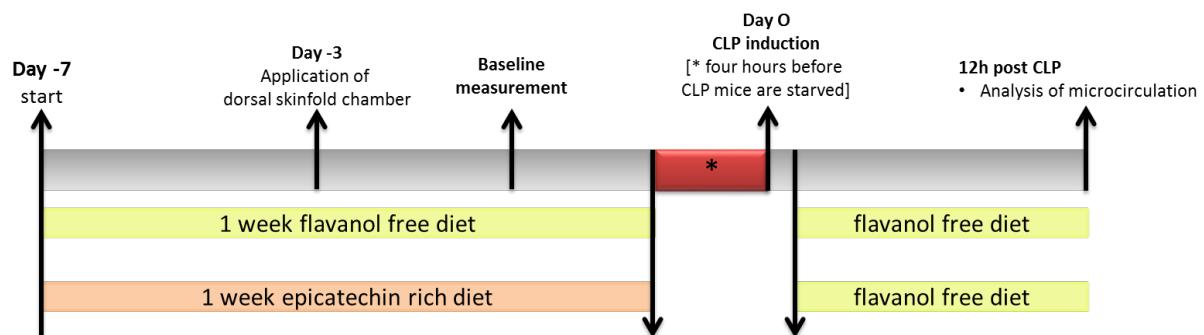
Mice were rendered septic by cecum ligation and puncture (CLP) (Merx et al, 2005; Merx et al, 2004) 6 h after baseline intravital fluorescence microscopy was performed. Anesthesia was induced by intraperitoneal (i.p.) administration of ketamine (60 µg/g body weight) and xylazine (10 µg/g body weight). Through a 1-cm abdominal midline incision, the cecum was ligated below the ileo-cecal valve with careful attention to avoid obstruction of the ileum or colon. The cecum was then subjected to a single “through and through” perforation with a 20-gauge needle. After repositioning of the bowel, the abdominal incision was closed in layers with standard silk surgical suture 4-0 (Ethicon, Somerville, New Jersey). Sham operated mice underwent the same procedure, except for ligation and perforation of the cecum. Pain medication (buprenorphine 0.05mg/kg body weight) and volume support (NaCl 0.9%, 0.05 ml/g BW) were administered subcutaneously immediately after sepsis induction and every 8 hours thereafter. All mice had unlimited access to food and water. Twelve hours after sepsis induction, intravital microscopy was performed again to analyze the effects of microbial sepsis in microcirculation.

Supplemental Figure S1: Mice study. (A): schematic presentation of study design. (B): composition of used diets

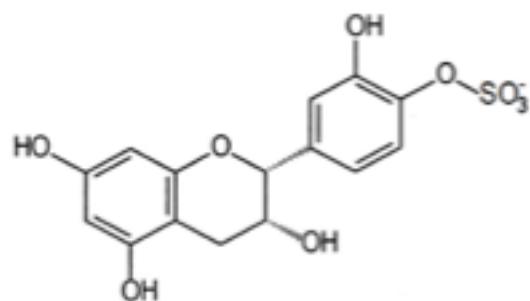
A)

Diet	Flavanol free diet		flavanol rich diet	
	gm%	kcal%	gm%	kcal%
Protein	16	15	16	15
Carbohydrate	57	50	57	50
Fat	18	36	18	36
Total		100		100
Kcal/gm	4,5		4,5	
Ingredients	gm	kcal	gm	kcal
Casein	167,5	670	167,5	670
DL-Methionine	2,57	10,28	2,57	10,28
Corn starch	286,5	1146	286,5	1146
Fructose	143,25	573	143,25	573
Dextrose (Glucose)	143,25	573	143,25	573
Cellulose,BW200	50	0	50	0
Milk Fat (Anhydrous)	176	1584	176	1584
Corn Oil	10	90	10	90
Ethoxyquin	0,04	0	0,04	0
Mineral Mix S10001	35	0	35	0
Calcium Carbonate	4	0	4	0
Vitamin Mix V13005	10	40	10	40
Vitamin K1	0,0005	0	0,0005	0
Choline Bitartrate	2	0	2	0
Cholesterol	1,5	0	1,5	0
epicatechin	0	0	0,06	0
Nitrate	0	0	0	0
Yellow-Orange Dye	0	0	0,05	0
Blue Dye	0	0	0	0

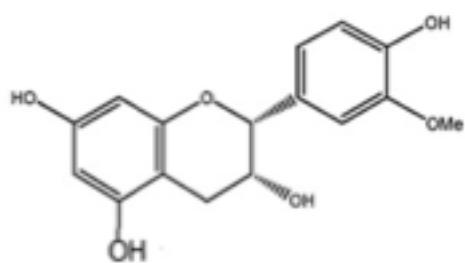
B)



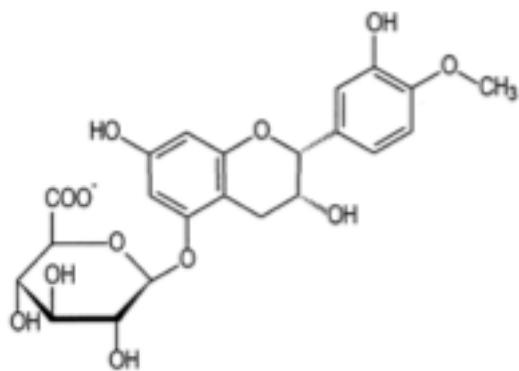
Supplemental Figure S2: Chemical structures of epicatechin metabolites used for in-vitro studies



($-$)-epicatechin-4'-sulfate

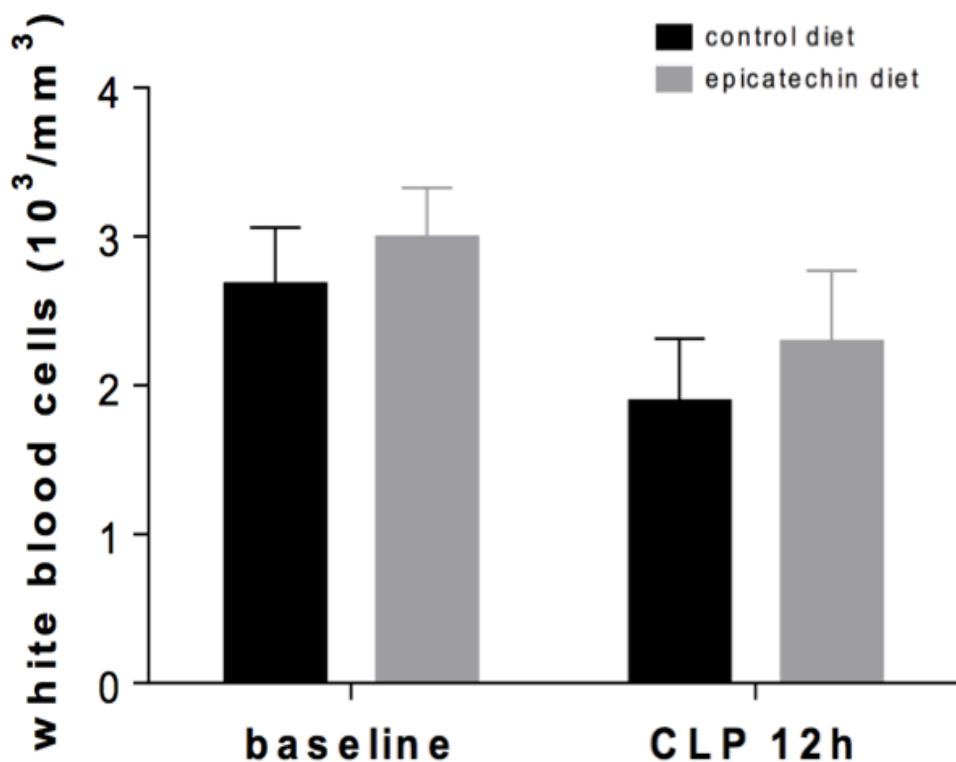


3'-*O*-methyl($-$)-epicatechin



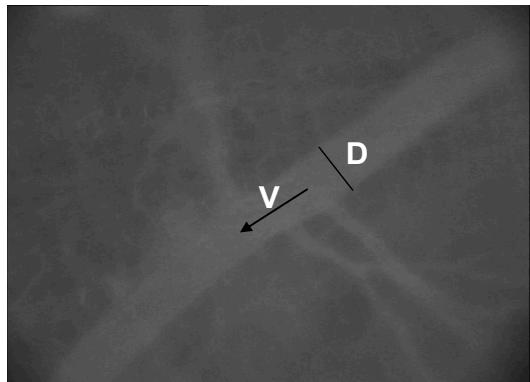
4'-*O*-methyl($-$)-epicatechin-7- β -D-glucuronide

Supplemental Figure S3: Circulating white blood cells were analyzed at baseline and 12h after sepsis induction after treatment with flavanol-free and flavanol-rich diet over a period of 7 days. Both groups slightly diminished circulating white blood cells 12h post CLP compared to baseline, while circulating white blood cells did not differ at baseline and 12h post CLP induction between both groups (n=5, mean +/- SEM; 2-way ANOVA and Bonferroni's posttest).

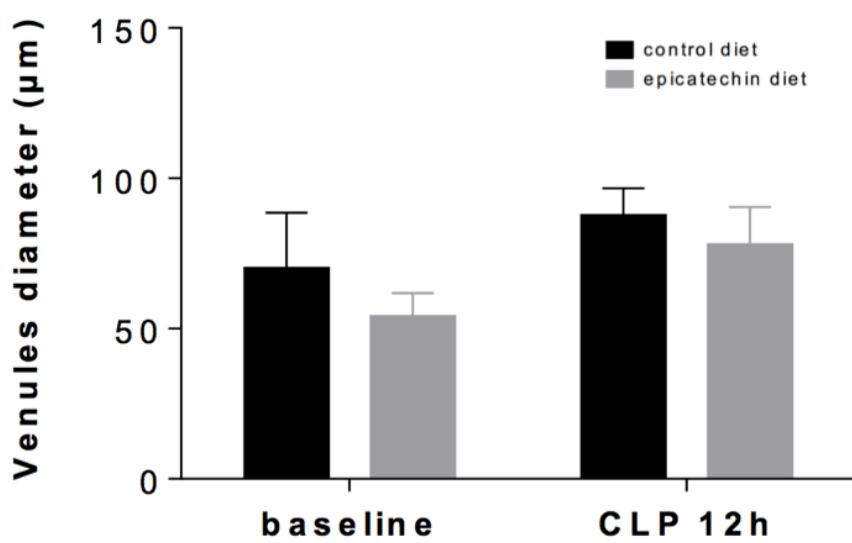


Supplemental Figure S4: Venules diameter measurements in the dorsal skinfold chamber in post-capillary venules at baseline and 12h after sepsis induction. Mice are treated with flavanol-free and flavanol-rich diet over a period of 7 days. A: picture of measurements in venules (D: diameter; V: velocity) B: Venules diameter measured 12h after CLP induction in mice compared to baseline (n=5, mean +/- SEM; **p< 0,01; 2-way ANOVA and Bonferoni's posttest).

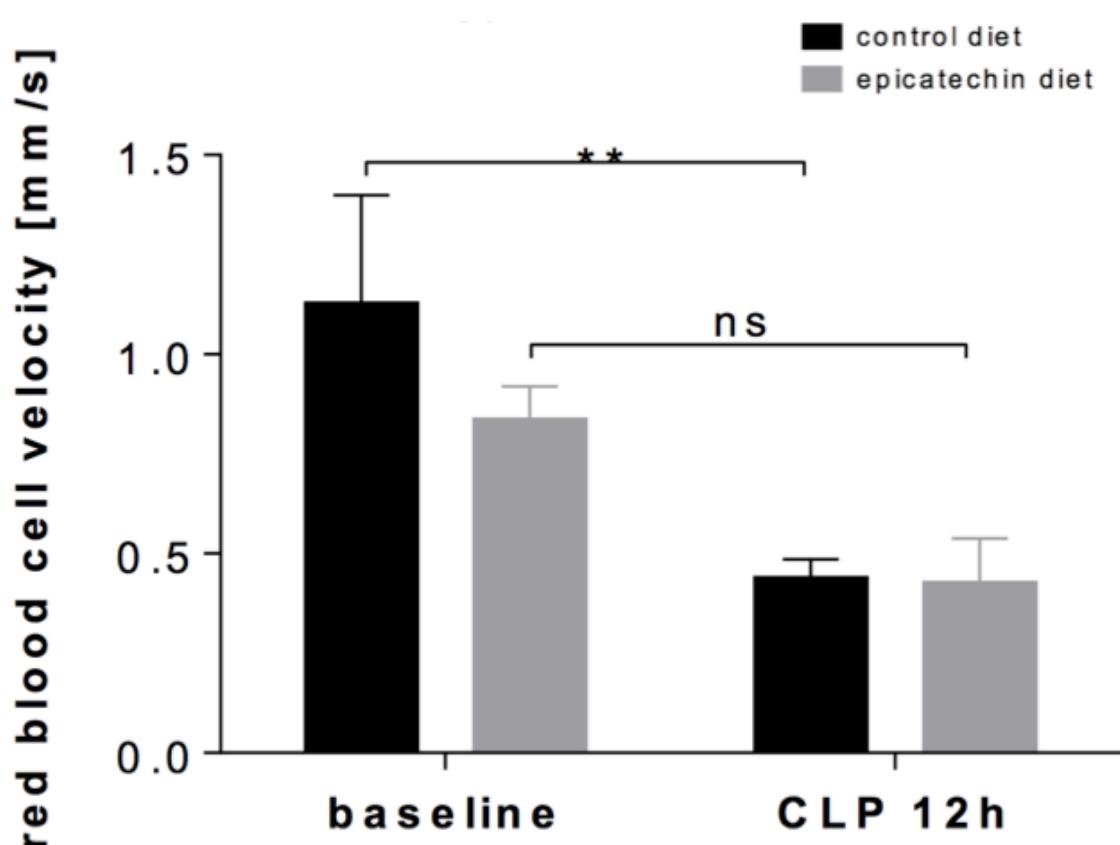
A



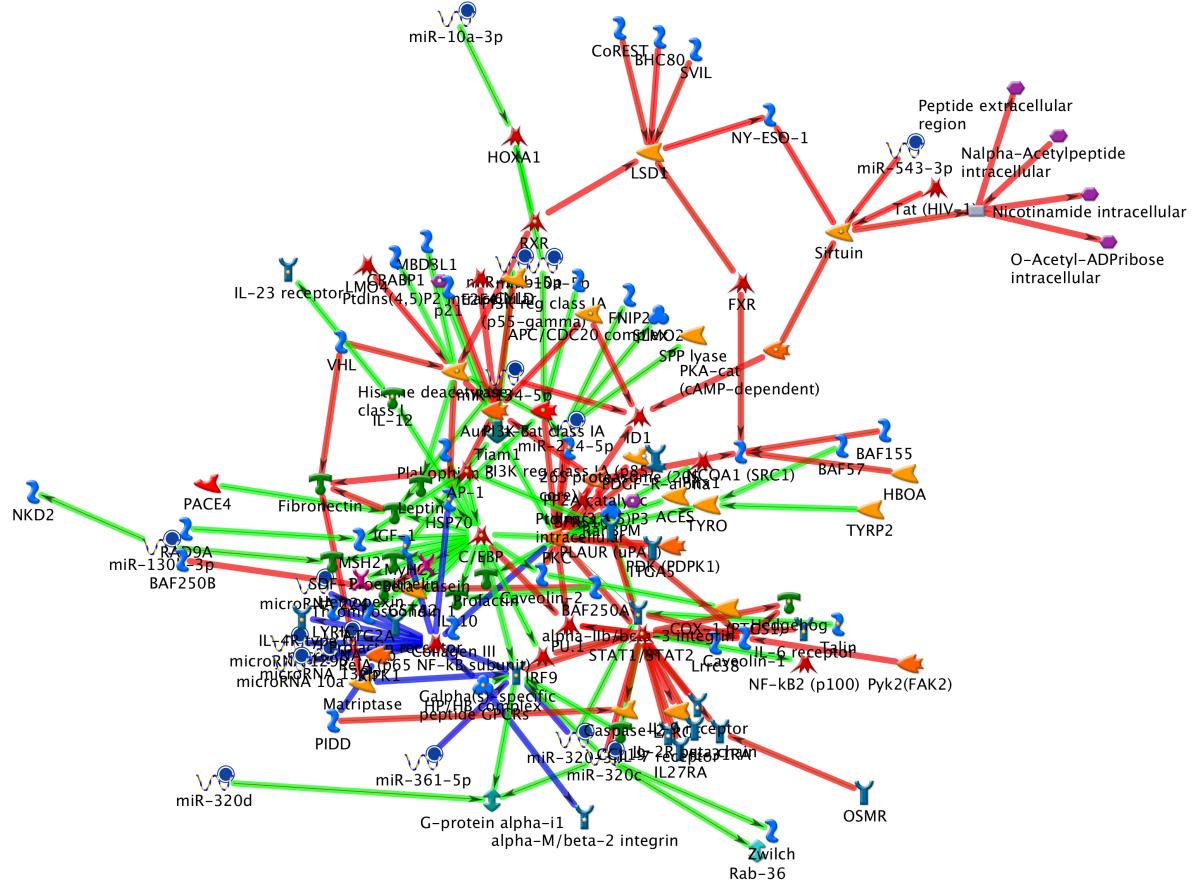
B



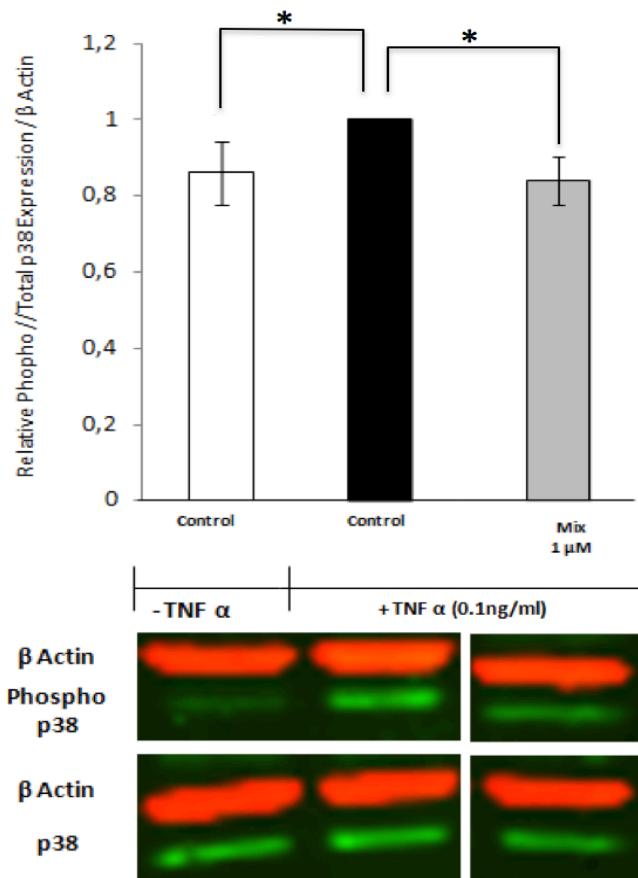
Supplemental Figure S5: Red blood cell velocity measurements in the dorsal skinfold chamber in post-capillary venules at baseline and 12h after sepsis induction (n=5, mean +/- SEM; **p< 0,01; 2-way ANOVA and Bonferroni's posttest).



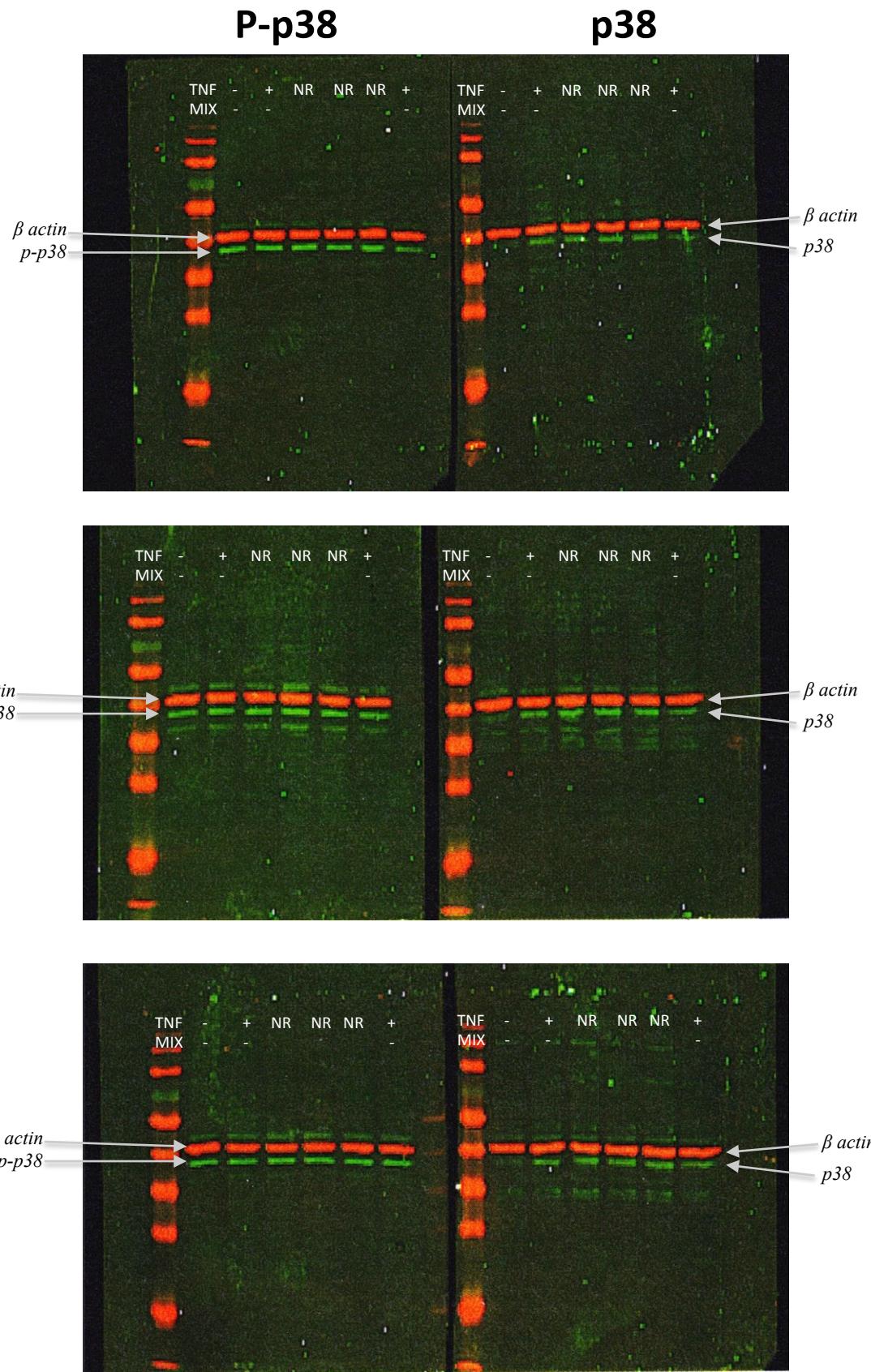
Supplemental Figure S6: Merge of three top scoring gene networks obtained from the list of differentially expressed miRNA in response to epicatechin metabolites in HUVEC with their validated target genes. The networks and target genes were obtained from MetaCore database. Red, blue and orange lines represent the three networks.



Supplemental Figure S7: Western blot analysis of the impact of flavanol metabolites on phosphorylation of p38 cell signalling proteins in HUVECs. n=3 ; mean +/- SEM; *: p < 0.01; 2-way ANOVA.

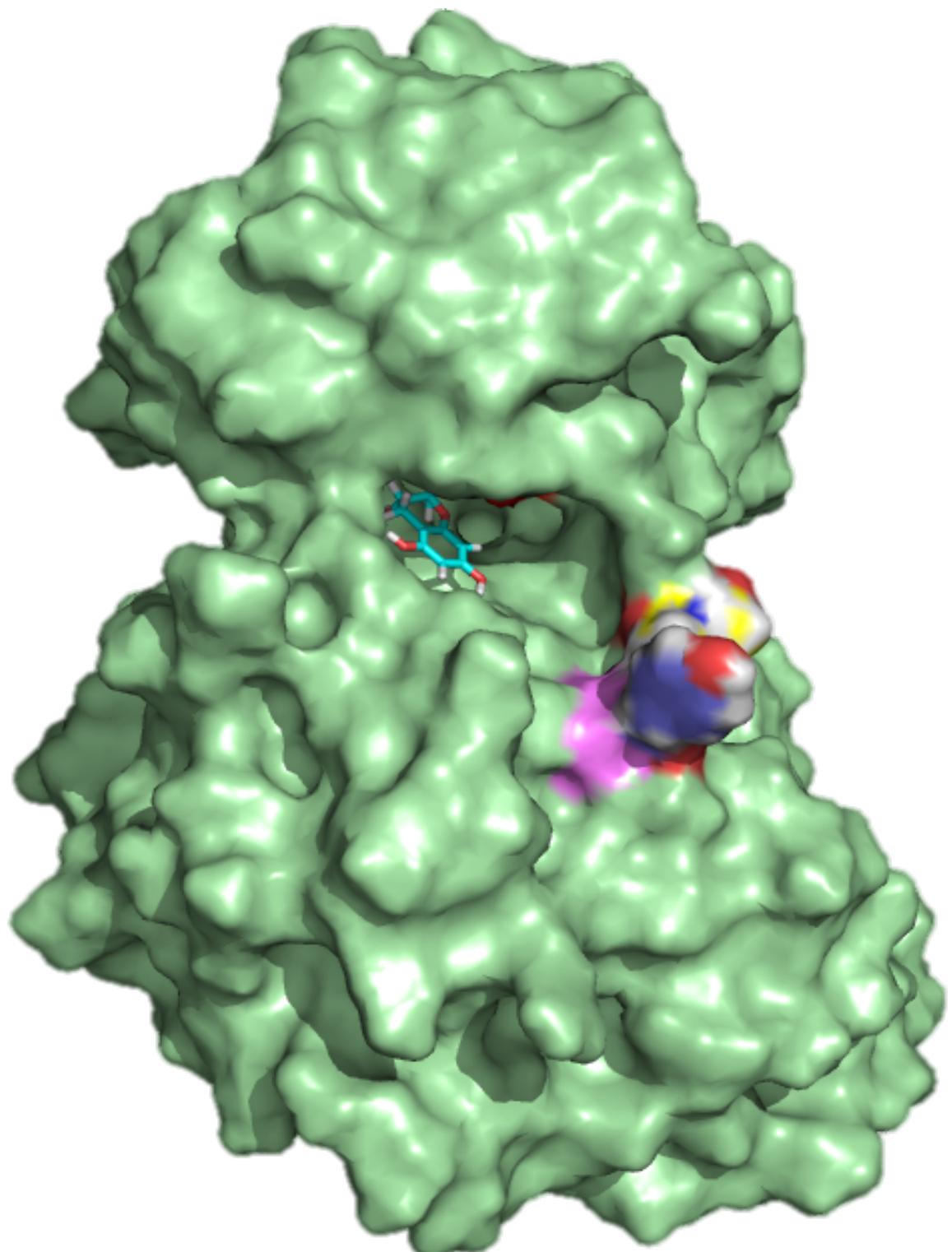


Supplemental information: western-blots gels for p38 and Phospho-p38. Gels were analyzed using Odyssey Li-Cor (Lincoln, Nebraska, USA) detection system and density of the signals was quantified using Odyssey software. TNF: tumor necrosis factor; MIX: mixture of studied flavanol metabolites; NR: samples not related to this work

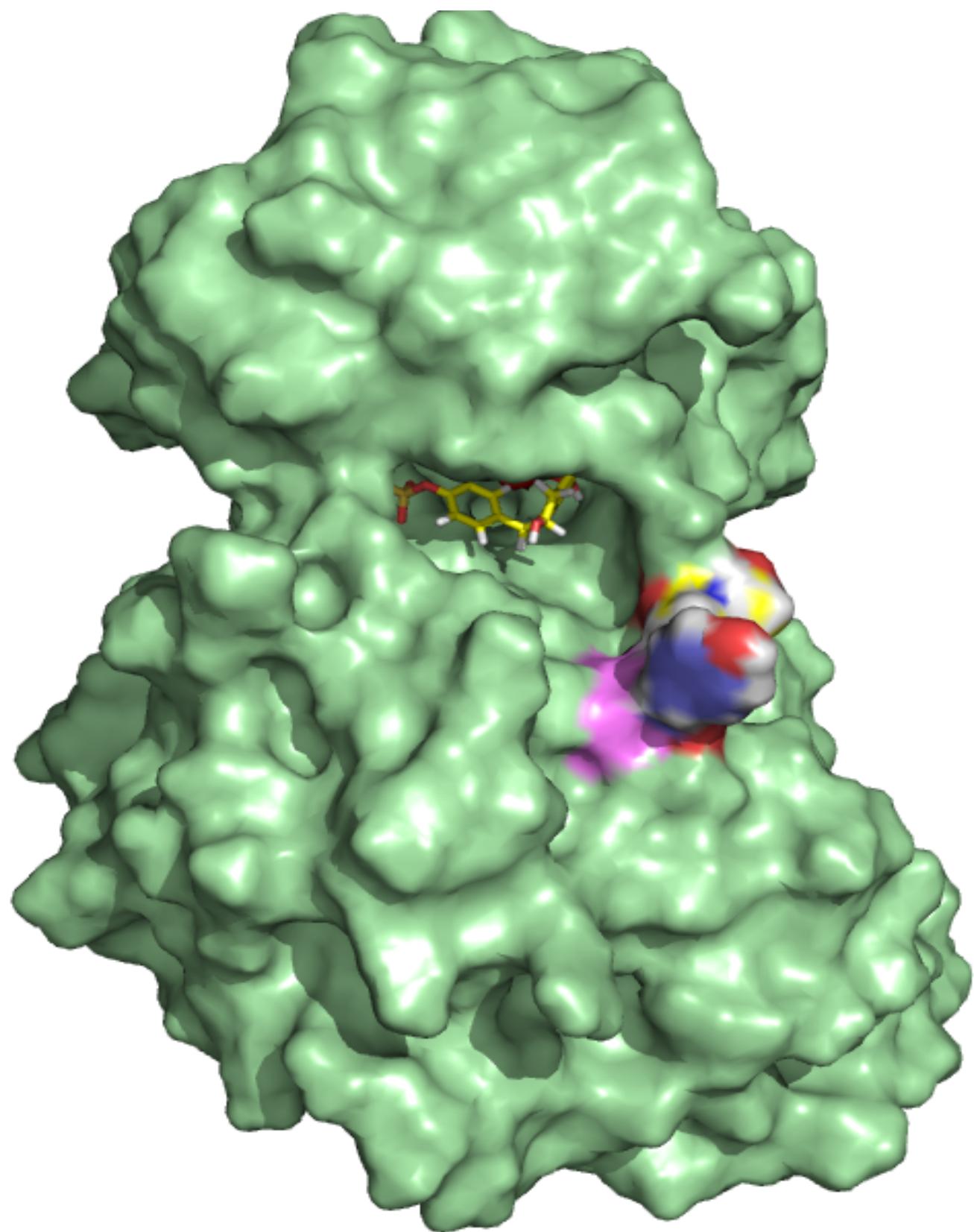


Supplemental Figure S8: Docking studies showing the binding of the metabolites to the ATP binding cavity of the P38-MAPK. A) 3'-O-methyl(-)-epicatechin; B) 4'-O-methyl(-)-epicatechin-7- β -D-glucuronide; C) (-)-epicatechin-4'-sulfate

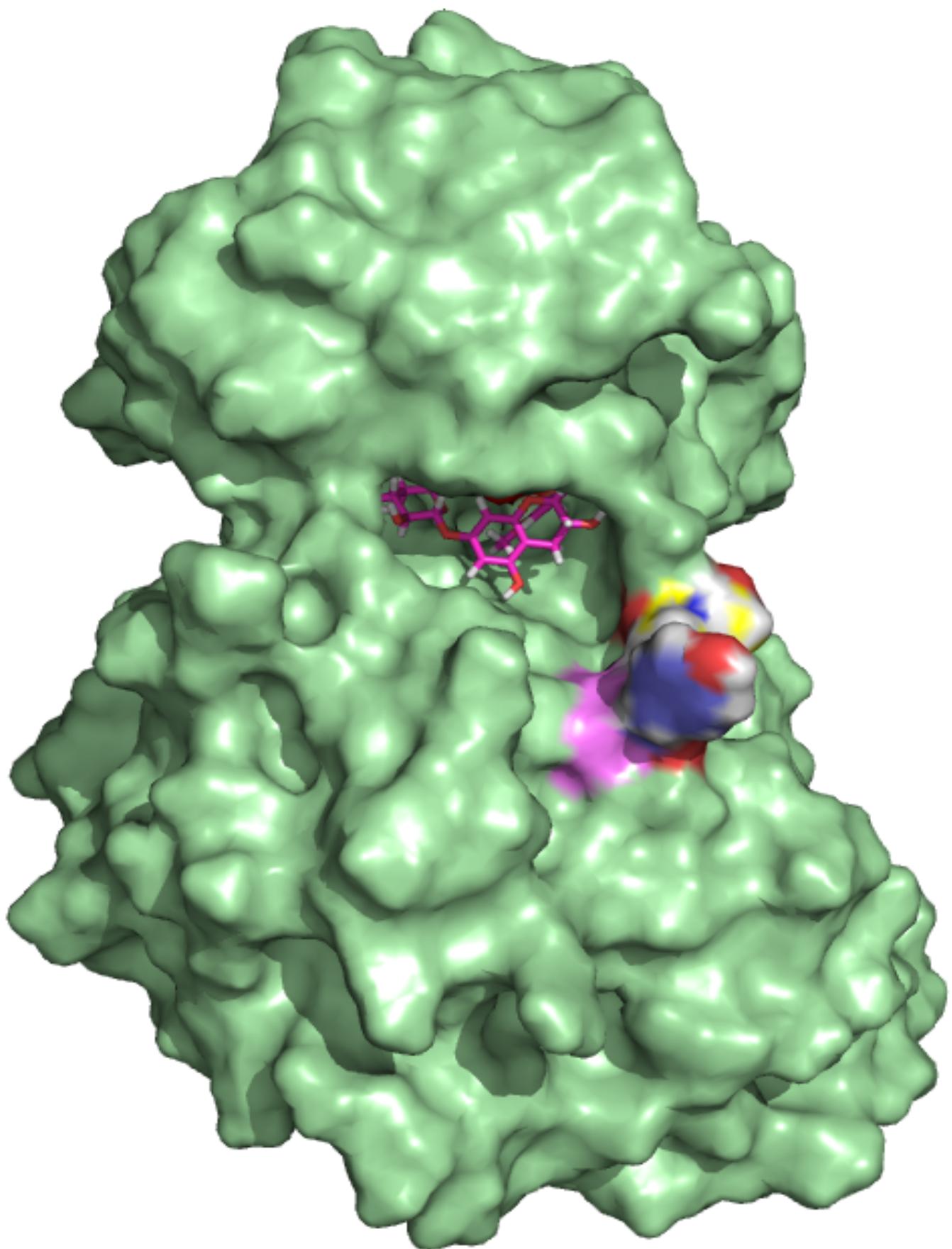
A) 3'-O-methyl(-)-epicatechin



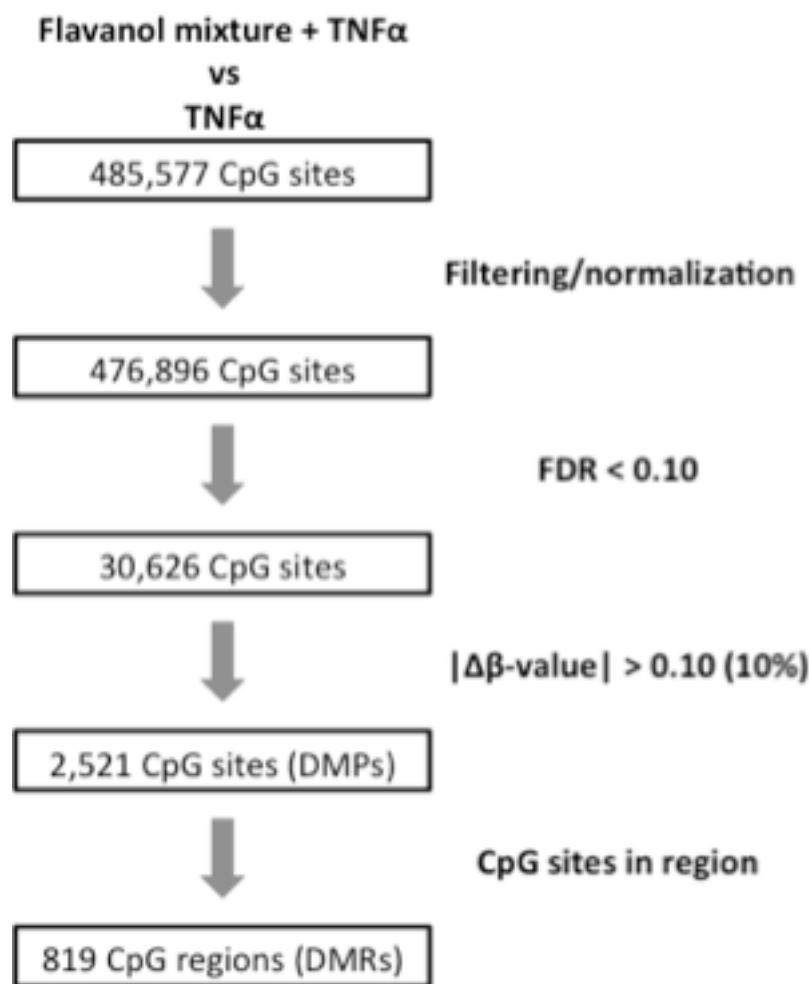
B) 4'-*O*-methyl(-)-epicatechin-7- β -D-glucuronide



C) (-)-epicatechin-4'-sulfate



Supplemental Figure S9: Flow chart describing workflow of DNA methylation analysis.



Supplemental Table S1: Site map property values and Dscore ranks for the p38 MAPK (Pdb id: 4F9Y)

Entry Name (Top ranked)	SiteScore	Dscore	Volume	Important residues of site map predicted binding site
F9Yproteinsitemap_site_1	1.119	1.166	535.08	Chain A: 71,171,104,74,105,75,51,106,52,107,53,108,152,109,178,30,154,179,31,155,32 33,157,35,36,111, 180 ,38,112, 181 ,84, 183 ,86,165,167,168,169
F9Yproteinsitemap_site_2	1.107	1.149	168.41	Chain A: 191,294,192,296,195,196,250,197,251,198,252,255,232,259,236,242,246,291,292,249,293
F9Yproteinsitemap_site_3	0.96	0.991	300.12	Chain A: 351,129,75,106,76,107,78,79,132,133,80,316,81,136,82,83,84,85,86,87,163,165,347,348,349
F9Yproteinsitemap_site_4	0.892	0.797	184.19	Chain A: 147,200,328,202,149,193,70,170,196,172,197,173,74,198,174,175,323,325,145,146,327
F9Yproteinsitemap_site_5	0.793	0.77	218.83	Chain A: 23,48,24,93,94,350,351,353,50,105,5,6,8,87,88,89,345,346,43,348,45,46,90,21,91

Supplemental table S2 : Genes differentially expressed by TNF in endothelial cells

Gene Symbol	Description	FC_mean
A2M	alpha-2-macroglobulin [Source:HGNC Symbol;Acc:HGNC:7]	-1.295993
AAAS	aladin WD repeat nucleoporin [Source:HGNC Symbol;Acc:HGNC:13666]	1.2532548
AADAC	arylacetamide deacetylase [Source:HGNC Symbol;Acc:HGNC:17]	1.2346227
AADAT	amino adipate aminotransferase [Source:HGNC Symbol;Acc:HGNC:17929]	1.1930633
AASDH	amino adipate-semialdehyde dehydrogenase [Source:HGNC Symbol;Acc:HGNC:23993]	1.2574718
AASDHPTT	lipate-semialdehyde dehydrogenase-phosphopantetheinyl transferase [Source:HGNC Symbol;Acc:HGNC:14679608]	
AASS	amino adipate-semialdehyde synthase [Source:HGNC Symbol;Acc:HGNC:17366]	1.3107485
ABAT	4-aminobutyrate aminotransferase [Source:HGNC Symbol;Acc:HGNC:23]	1.1162478
ABCA1	ATP binding cassette subfamily A member 1 [Source:HGNC Symbol;Acc:HGNC:29]	-1.23403375
ABCA2	ATP binding cassette subfamily A member 2 [Source:HGNC Symbol;Acc:HGNC:32]	1.1289406
ABCA7	ATP binding cassette subfamily A member 7 [Source:HGNC Symbol;Acc:HGNC:37]	1.0874552
ABCBL0	ATP binding cassette subfamily B member 10 [Source:HGNC Symbol;Acc:HGNC:41]	1.1608669
ABCBL6	TP binding cassette subfamily B member 6 (Langereis blood group) [Source:HGNC Symbol;Acc:HGNC:47]	1.390825
ABCBL9	ATP binding cassette subfamily B member 9 [Source:HGNC Symbol;Acc:HGNC:50]	1.1446027
ABCC1	ATP binding cassette subfamily C member 1 [Source:HGNC Symbol;Acc:HGNC:51]	1.1526519
ABCC10	ATP binding cassette subfamily C member 10 [Source:HGNC Symbol;Acc:HGNC:52]	-1.2424773
ABCC13	ATP binding cassette subfamily C member 13 (pseudogene) [Source:HGNC Symbol;Acc:HGNC:16022]	1.1197207
ABCC4	ATP binding cassette subfamily C member 4 [Source:HGNC Symbol;Acc:HGNC:55]	-1.1140414
ABCC9	ATP binding cassette subfamily C member 9 [Source:HGNC Symbol;Acc:HGNC:60]	1.1195009
ABCD1	ATP binding cassette subfamily D member 1 [Source:HGNC Symbol;Acc:HGNC:61]	1.3689568
ABCD2	ATP binding cassette subfamily D member 2 [Source:HGNC Symbol;Acc:HGNC:66]	1.111039
ABCD3	ATP binding cassette subfamily D member 3 [Source:HGNC Symbol;Acc:HGNC:67]	-1.2039258
ABCD4	ATP binding cassette subfamily D member 4 [Source:HGNC Symbol;Acc:HGNC:68]	-1.0678612
ABCF1	ATP binding cassette subfamily F member 1 [Source:HGNC Symbol;Acc:HGNC:70]	-1.6139004
ABCG1	ATP binding cassette subfamily G member 1 [Source:HGNC Symbol;Acc:HGNC:73]	-2.2921114
ABHD15	abhydrolase domain containing 15 [Source:HGNC Symbol;Acc:HGNC:26971]	1.284376
ABHD6	abhydrolase domain containing 6 [Source:HGNC Symbol;Acc:HGNC:21398]	1.1806154
ABL2	ABL proto-oncogene 2, non-receptor tyrosine kinase [Source:HGNC Symbol;Acc:HGNC:77]	-1.3186278
ABR	active BCR-related [Source:HGNC Symbol;Acc:HGNC:81]	-1.40119205
ABRA	actin binding Rho activating protein [Source:HGNC Symbol;Acc:HGNC:30655]	1.1575011
ABT1	activator of basal transcription 1 [Source:HGNC Symbol;Acc:HGNC:17369]	-1.1810149
ABTB2	ankyrin repeat and BTB domain containing 2 [Source:HGNC Symbol;Acc:HGNC:23842]	-2.4537582
ACACB	acyl-CoA carboxylase beta [Source:HGNC Symbol;Acc:HGNC:85]	1.1930591
ACAD9	acyl-CoA dehydrogenase family member 9 [Source:HGNC Symbol;Acc:HGNC:21497]	-1.1158419
ACAN	aggrecan [Source:HGNC Symbol;Acc:HGNC:319]	-1.0911885
ACBD7	acyl-CoA binding domain containing 7 [Source:HGNC Symbol;Acc:HGNC:17715]	-1.0948354
ACO1	aconitase 1 [Source:HGNC Symbol;Acc:HGNC:117]	-1.3130834
ACOT1	acyl-CoA thioesterase 1 [Source:HGNC Symbol;Acc:HGNC:33128]	-1.2267752
ACOT13	acyl-CoA thioesterase 13 [Source:HGNC Symbol;Acc:HGNC:20999]	1.078244
ACOT4	acyl-CoA thioesterase 4 [Source:HGNC Symbol;Acc:HGNC:19748]	-1.2729762
ACP2	acid phosphatase 2, lysosomal [Source:HGNC Symbol;Acc:HGNC:123]	-1.1342864
ACSS1	acyl-CoA synthetase short-chain family member 1 [Source:HGNC Symbol;Acc:HGNC:16091]	-1.2038226
ACTL9	actin like 9 [Source:HGNC Symbol;Acc:HGNC:28494]	-1.087294
ACTN4	actinin alpha 4 [Source:HGNC Symbol;Acc:HGNC:166]	1.1720281
ACTR3B	ARP3 actin related protein 3 homolog B [Source:HGNC Symbol;Acc:HGNC:17256]	1.0671289
ACTR3C	ARP3 actin-related protein 3 homolog C [Source:HGNC Symbol;Acc:HGNC:37282]	-1.1309211
ACTR8	ARP8 actin-related protein 8 homolog [Source:HGNC Symbol;Acc:HGNC:14672]	1.1478686
ACTRT2	actin related protein T2 [Source:HGNC Symbol;Acc:HGNC:24026]	1.1693397
ACVR1L	activin A receptor like type 1 [Source:HGNC Symbol;Acc:HGNC:175]	-1.2399968
ACYP1	acylphosphatase 1 [Source:HGNC Symbol;Acc:HGNC:179]	1.2725029
ADAL	adenosine deaminase like [Source:HGNC Symbol;Acc:HGNC:31853]	1.1278715
ADAM15	ADAM metallopeptidase domain 15 [Source:HGNC Symbol;Acc:HGNC:193]	1.1599994
ADAM19	ADAM metallopeptidase domain 19 [Source:HGNC Symbol;Acc:HGNC:197]	-1.232372
ADAM28	ADAM metallopeptidase domain 28 [Source:HGNC Symbol;Acc:HGNC:206]	-1.0864991
ADAM33	ADAM metallopeptidase domain 33 [Source:HGNC Symbol;Acc:HGNC:15478]	-1.1671146
ADAM8	ADAM metallopeptidase domain 8 [Source:HGNC Symbol;Acc:HGNC:215]	-1.6214597
ADAMTS10	ADAM metallopeptidase with thrombospondin type 1 motif 10 [Source:HGNC Symbol;Acc:HGNC:13201]	-1.4123731
ADAMTS13	ADAM metallopeptidase with thrombospondin type 1 motif 13 [Source:HGNC Symbol;Acc:HGNC:1366]	1.3268881
ADAMTS14	ADAM metallopeptidase with thrombospondin type 1 motif 14 [Source:HGNC Symbol;Acc:HGNC:14899]	-1.1410211
ADAMTS15	ADAM metallopeptidase with thrombospondin type 1 motif 15 [Source:HGNC Symbol;Acc:HGNC:16305]	-1.0838786
ADAMTS16	ADAM metallopeptidase with thrombospondin type 1 motif 16 [Source:HGNC Symbol;Acc:HGNC:17108]	-1.1026491
ADAMTS17	ADAM metallopeptidase with thrombospondin type 1 motif 17 [Source:HGNC Symbol;Acc:HGNC:17109]	-1.0519661
ADAMTS19	ADAM metallopeptidase with thrombospondin type 1 motif 19 [Source:HGNC Symbol;Acc:HGNC:17111]	-1.2041692
ADAMTS20	ADAM metallopeptidase with thrombospondin type 1 motif 20 [Source:HGNC Symbol;Acc:HGNC:17178]	1.0593333
ADAMTS4	ADAM metallopeptidase with thrombospondin type 1 motif 4 [Source:HGNC Symbol;Acc:HGNC:220]	-2.1937551
ADAMTS7	ADAM metallopeptidase with thrombospondin type 1 motif 7 [Source:HGNC Symbol;Acc:HGNC:223]	1.2491819
ADAMTS9	ADAM metallopeptidase with thrombospondin type 1 motif 9 [Source:HGNC Symbol;Acc:HGNC:13202]	-1.2689196
ADAMTS1L	ADAMTS like 1 [Source:HGNC Symbol;Acc:HGNC:14632]	1.1048983
ADAMTS2L	ADAMTS like 2 [Source:HGNC Symbol;Acc:HGNC:14631]	-1.1920514
ADAMTS3L	ADAMTS like 3 [Source:HGNC Symbol;Acc:HGNC:14633]	1.0863901
ADAMTS4L	ADAMTS like 4 [Source:HGNC Symbol;Acc:HGNC:19706]	-1.1369889
ADAP1	ArfGAP with dual PH domains 1 [Source:HGNC Symbol;Acc:HGNC:16486]	-1.2168728
ADARB1	adenosine deaminase, RNA specific B1 [Source:HGNC Symbol;Acc:HGNC:226]	1.2508187
ADAT2	adenosine deaminase, tRNA specific 2 [Source:HGNC Symbol;Acc:HGNC:21172]	-1.4781575
ADC	antizyme inhibitor 2	-1.1236424
ADCK3	coenzyme Q8A	-1.187149
ADCK4	coenzyme Q8B	1.2047751
ADCY4	adenylate cyclase 4 [Source:HGNC Symbol;Acc:HGNC:235]	-1.2466023
ADCYAP1R1	ADCYAP receptor type I [Source:HGNC Symbol;Acc:HGNC:242]	-1.1824162
ADH1A	alcohol dehydrogenase 1A (class I), alpha polypeptide [Source:HGNC Symbol;Acc:HGNC:249]	1.0718597
ADH5	alcohol dehydrogenase 5 (class III), chi polypeptide [Source:HGNC Symbol;Acc:HGNC:253]	1.2090188
ADH6	alcohol dehydrogenase 6 (class V) [Source:HGNC Symbol;Acc:HGNC:255]	1.11222915
ADK	adenosine kinase [Source:HGNC Symbol;Acc:HGNC:257]	1.1093177

ADM	adrenomedullin [Source:HGNC Symbol;Acc:HGNC:259]	1.7993667
ADNP	activity dependent neuroprotector homeobox [Source:HGNC Symbol;Acc:HGNC:15766]	1.3423048
ADO	2-aminoethanethiol dioxygenase [Source:HGNC Symbol;Acc:HGNC:23506]	1.2320936
ADPRH	ADP-ribosylarginine hydrolase [Source:HGNC Symbol;Acc:HGNC:269]	-1.3570276
ADPRHL2	ADP-ribosylhydrolase like 2 [Source:HGNC Symbol;Acc:HGNC:21304]	-1.3022674
ADRA1B	adrenoceptor alpha 1B [Source:HGNC Symbol;Acc:HGNC:278]	1.5798137
ADRA1D	adrenoceptor alpha 1D [Source:HGNC Symbol;Acc:HGNC:280]	1.1034441
ADR81	adrenoceptor beta 1 [Source:HGNC Symbol;Acc:HGNC:285]	1.4576823
ADR83	adrenoceptor beta 3 [Source:HGNC Symbol;Acc:HGNC:288]	-1.1099663
ADSS	adenylosuccinate synthase [Source:HGNC Symbol;Acc:HGNC:292]	1.4793819
AFAP1L1	actin filament associated protein 1 like 1 [Source:HGNC Symbol;Acc:HGNC:26714]	-1.1824666
AFF2	AF4/FMR2 family member 2 [Source:HGNC Symbol;Acc:HGNC:3776]	-1.119592
AFMID	arylformamidase [Source:HGNC Symbol;Acc:HGNC:20910]	1.0874438
AGAP1	ArfGAP with GTPase domain, ankyrin repeat and PH domain 1 [Source:HGNC Symbol;Acc:HGNC:16922]	-1.1519274
AGAP2	ArfGAP with GTPase domain, ankyrin repeat and PH domain 2 [Source:HGNC Symbol;Acc:HGNC:16921]	1.2381144
AGAP3	ArfGAP with GTPase domain, ankyrin repeat and PH domain 3 [Source:HGNC Symbol;Acc:HGNC:16923]	1.0960298
AGER	advanced glycosylation end-product specific receptor [Source:HGNC Symbol;Acc:HGNC:320]	1.12015
AGF61	ArfGAP with FG repeats 1 [Source:HGNC Symbol;Acc:HGNC:5175]	-1.0805941
AGPAT1	1-acylglycerol-3-phosphate O-acyltransferase 1 [Source:HGNC Symbol;Acc:HGNC:324]	1.2362485
AGPAT3	1-acylglycerol-3-phosphate O-acyltransferase 3 [Source:HGNC Symbol;Acc:HGNC:326]	-1.1128453
AGPAT6	glycerol-3-phosphate acyltransferase 4	-1.3704916
AGPAT9	lysophatidylcholine acyltransferase 1	1.5517836
AGPS	alkylglycerone phosphate synthase [Source:HGNC Symbol;Acc:HGNC:327]	1.3030115
AGRN	agrin [Source:HGNC Symbol;Acc:HGNC:329]	-1.450005
AGSK1	golgi A2 pseudogene 10	1.1697268
AGXT2	alanine--glyoxylate aminotransferase 2 [Source:HGNC Symbol;Acc:HGNC:14412]	1.1135411
AGXT2L2	5-phosphohydroxy-L-lysine phospho-lyase	-1.1433324
AHCY1	adenosylhomocysteinase like 1 [Source:HGNC Symbol;Acc:HGNC:344]	-1.2469922
AHDC1	AT-hook DNA binding motif containing 1 [Source:HGNC Symbol;Acc:HGNC:25230]	-2.3617847
AHR	aryl hydrocarbon receptor [Source:HGNC Symbol;Acc:HGNC:348]	1.2535999
AHRR	aryl-hydrocarbon receptor repressor [Source:HGNC Symbol;Acc:HGNC:346]	-1.3035115
AHSAA2	1, activator of heat shock 90kDa protein ATPase homolog 2 (yeast) [Source:HGNC Symbol;Acc:HGNC:20	1.2514814
AI1F	allograft inflammatory factor 1 [Source:HGNC Symbol;Acc:HGNC:352]	-1.1333927
AI1F1	allograft inflammatory factor 1 like [Source:HGNC Symbol;Acc:HGNC:28904]	-1.1981606
AIG1	androgen induced 1 [Source:HGNC Symbol;Acc:HGNC:21607]	-1.16302
AIM2	absent in melanoma 2 [Source:HGNC Symbol;Acc:HGNC:357]	1.1194698
AIMP1	acyl tRNA synthetase complex interacting multifunctional protein 1 [Source:HGNC Symbol;Acc:HGNC:1	1.2470869
AIPL1	aryl hydrocarbon receptor interacting protein like 1 [Source:HGNC Symbol;Acc:HGNC:359]	1.0694968
AK3	adenylate kinase 3 [Source:HGNC Symbol;Acc:HGNC:17376]	1.2033451
AKAP17A	A-kinase anchoring protein 17A [Source:HGNC Symbol;Acc:HGNC:18783]	-1.1262562
AKAP2	A-kinase anchoring protein 2 [Source:HGNC Symbol;Acc:HGNC:372]	-1.1450834
AKAP8	A-kinase anchoring protein 8 [Source:HGNC Symbol;Acc:HGNC:378]	1.1265244
AKD1	adenylate kinase 9	-1.1273862
AKIRIN1	akirin 1 [Source:HGNC Symbol;Acc:HGNC:25744]	-1.2322332
AKIRIN2	akirin 2 [Source:HGNC Symbol;Acc:HGNC:21407]	-1.2217575
AKNA	AT-hook transcription factor [Source:HGNC Symbol;Acc:HGNC:24108]	-1.1536517
AKT1	AKT serine/threonine kinase 1 [Source:HGNC Symbol;Acc:HGNC:391]	1.134962
AKT1S1	AKT1 substrate 1 [Source:HGNC Symbol;Acc:HGNC:28426]	1.2209451
ALAD	aminolevulinate dehydratase [Source:HGNC Symbol;Acc:HGNC:395]	-1.1701211
ALAS1	5'-aminolevulinate synthase 1 [Source:HGNC Symbol;Acc:HGNC:396]	-1.4068297
ALDH1A3	aldehyde dehydrogenase 1 family member A3 [Source:HGNC Symbol;Acc:HGNC:409]	-1.1932596
ALDH3B1	aldehyde dehydrogenase 3 family member B1 [Source:HGNC Symbol;Acc:HGNC:410]	-1.1427356
ALDH7A1	aldehyde dehydrogenase 7 family member A1 [Source:HGNC Symbol;Acc:HGNC:877]	1.0728403
ALG2	ALG2, alpha-1,3/1,6-mannosyltransferase [Source:HGNC Symbol;Acc:HGNC:23159]	-1.3034068
ALG6	ALG6, alpha-1,3-glucosyltransferase [Source:HGNC Symbol;Acc:HGNC:23157]	1.1889843
ALG8	ALG8, alpha-1,3-glucosyltransferase [Source:HGNC Symbol;Acc:HGNC:23161]	-1.238926
ALKBH1	alkB homolog 1, histone H2A dioxygenase [Source:HGNC Symbol;Acc:HGNC:17911]	-1.1765679
ALKBH5	alkB homolog 5, RNA demethylase [Source:HGNC Symbol;Acc:HGNC:25996]	1.1238653
ALOX15	arachidonate 15-lipoxygenase [Source:HGNC Symbol;Acc:HGNC:433]	-1.1474167
ALPK1	alpha kinase 1 [Source:HGNC Symbol;Acc:HGNC:20917]	-1.1219901
ALPK3	alpha kinase 3 [Source:HGNC Symbol;Acc:HGNC:17574]	-1.1666327
ALPP	alkaline phosphatase, placental [Source:HGNC Symbol;Acc:HGNC:439]	-1.147836
ALS2	ALS2, alsin Rho guanine nucleotide exchange factor [Source:HGNC Symbol;Acc:HGNC:443]	1.1730324
ALS2CL	ALS2 C-terminal like [Source:HGNC Symbol;Acc:HGNC:20605]	-1.6029048
ALX1	ALX homeobox 1 [Source:HGNC Symbol;Acc:HGNC:1494]	1.4387568
AMBN	ameloblastin [Source:HGNC Symbol;Acc:HGNC:452]	-1.1854475
AMBRA1	autophagy and beclin 1 regulator 1 [Source:HGNC Symbol;Acc:HGNC:25990]	-1.2786399
AMD1	adenosylmethionine decarboxylase 1 [Source:HGNC Symbol;Acc:HGNC:457]	1.7828411
AMELX	amelogenin, X-linked [Source:HGNC Symbol;Acc:HGNC:461]	-1.090403
AMHR2	anti-Mullerian hormone receptor type 2 [Source:HGNC Symbol;Acc:HGNC:465]	-1.0604098
AMICA1	junction adhesion molecule like	1.0956241
AMMECR1	mental retardation, midface hypoplasia and elliptocytosis chromosomal region gene 1 [Source:HGNC Syn	-1.3696743
AMOT	angiomotin [Source:HGNC Symbol;Acc:HGNC:17810]	1.100864
AMOTL2	angiomotin like 2 [Source:HGNC Symbol;Acc:HGNC:17812]	1.0528084
ANAPC13	anaphase promoting complex subunit 13 [Source:HGNC Symbol;Acc:HGNC:24540]	1.1336751
ANGPT1	angiopoietin 1 [Source:HGNC Symbol;Acc:HGNC:484]	1.1155918
ANGPTL4	angiopoietin like 4 [Source:HGNC Symbol;Acc:HGNC:16039]	1.940775
ANGPTL5	angiopoietin like 5 [Source:HGNC Symbol;Acc:HGNC:19705]	1.1307821
ANK1	ankyrin 1 [Source:HGNC Symbol;Acc:HGNC:492]	-1.1840773
ANKFY1	ankyrin repeat and FVVE domain containing 1 [Source:HGNC Symbol;Acc:HGNC:20763]	-1.2805209
ANKH	ANKH inorganic pyrophosphate transport regulator [Source:HGNC Symbol;Acc:HGNC:15492]	1.1340746
ANKK1	ankyrin repeat and kinase domain containing 1 [Source:HGNC Symbol;Acc:HGNC:21027]	-1.1366614
ANKLE2	ankyrin repeat and LEM domain containing 2 [Source:HGNC Symbol;Acc:HGNC:29101]	-1.5028042
ANKRD11	ankyrin repeat domain 11 [Source:HGNC Symbol;Acc:HGNC:21316]	1.1364534
ANKRD13D	ankyrin repeat domain 13D [Source:HGNC Symbol;Acc:HGNC:27880]	1.1911414
ANKRD20A2	ankyrin repeat domain 20 family member A2 [Source:HGNC Symbol;Acc:HGNC:31979]	1.32748785

ANKRD20A9P	ankyrin repeat domain 20 family member A9, pseudogene [Source:HGNC Symbol;Acc:HGNC:42023]	1.1827317
ANKRD23	ankyrin repeat domain 23 [Source:HGNC Symbol;Acc:HGNC:24470]	-1.1301494
ANKRD26	ankyrin repeat domain 26 [Source:HGNC Symbol;Acc:HGNC:29186]	1.1245983
ANKRD27	ankyrin repeat domain 27 [Source:HGNC Symbol;Acc:HGNC:25310]	-1.39345035
ANKRD28	ankyrin repeat domain 28 [Source:HGNC Symbol;Acc:HGNC:29024]	1.4562614
ANKRD30BL	ankyrin repeat domain 30B-like [Source:HGNC Symbol;Acc:HGNC:35167]	-1.0791416
ANKRD30BP2	ankyrin repeat domain 30B pseudogene 2 [Source:HGNC Symbol;Acc:HGNC:16620]	1.1488045
ANKRD33B	ankyrin repeat domain 33B [Source:HGNC Symbol;Acc:HGNC:35240]	-1.3332356
ANKRD35	ankyrin repeat domain 35 [Source:HGNC Symbol;Acc:HGNC:26323]	1.4072214
ANKS1A	ankyrin repeat and sterile alpha motif domain containing 1A [Source:HGNC Symbol;Acc:HGNC:20961]	1.2282481
ANKS3	ankyrin repeat and sterile alpha motif domain containing 3 [Source:HGNC Symbol;Acc:HGNC:29422]	1.1742829
ANO10	anoctamin 10 [Source:HGNC Symbol;Acc:HGNC:25519]	-1.1463088
ANO2	anoctamin 2 [Source:HGNC Symbol;Acc:HGNC:1183]	1.2004906
ANO4	anoctamin 4 [Source:HGNC Symbol;Acc:HGNC:23837]	1.1382886
ANO8	anoctamin 8 [Source:HGNC Symbol;Acc:HGNC:29329]	1.0660795
ANO9	anoctamin 9 [Source:HGNC Symbol;Acc:HGNC:20679]	-1.5962213
ANP32A	acidic nuclear phosphoprotein 32 family member A [Source:HGNC Symbol;Acc:HGNC:13233]	1.1652434
ANP32D	acidic nuclear phosphoprotein 32 family member D [Source:HGNC Symbol;Acc:HGNC:16676]	1.2596217
ANTXRL	anthrax toxin receptor-like [Source:HGNC Symbol;Acc:HGNC:27277]	1.1517117
ANXA1	annexin A1 [Source:HGNC Symbol;Acc:HGNC:533]	1.6887745
ANXA11	annexin A11 [Source:HGNC Symbol;Acc:HGNC:535]	-1.1404953
AOC2	amine oxidase, copper containing 2 [Source:HGNC Symbol;Acc:HGNC:549]	1.2001185
AOX1	aldehyde oxidase 1 [Source:HGNC Symbol;Acc:HGNC:553]	-1.1059792
AP1AR	daptor related protein complex 1 associated regulatory protein [Source:HGNC Symbol;Acc:HGNC:2880f	1.3158482
AP1B1	adaptor related protein complex 1 beta 1 subunit [Source:HGNC Symbol;Acc:HGNC:554]	1.1775063
AP1S1	adaptor related protein complex 1 sigma 1 subunit [Source:HGNC Symbol;Acc:HGNC:559]	1.3231467
AP1S2	adaptor related protein complex 1 sigma 2 subunit [Source:HGNC Symbol;Acc:HGNC:560]	1.2719432
AP1S3	adaptor related protein complex 1 sigma 3 subunit [Source:HGNC Symbol;Acc:HGNC:18971]	-1.1543322
AP2A1	adaptor related protein complex 2 alpha 1 subunit [Source:HGNC Symbol;Acc:HGNC:561]	1.3732315
AP3D1	adaptor related protein complex 3 delta 1 subunit [Source:HGNC Symbol;Acc:HGNC:568]	-1.247038
AP3M2	adaptor related protein complex 3 mu 2 subunit [Source:HGNC Symbol;Acc:HGNC:570]	1.2480363
AP3S2	adaptor related protein complex 3 sigma 2 subunit [Source:HGNC Symbol;Acc:HGNC:571]	-1.2104422
AP4B1	adaptor related protein complex 4 beta 1 subunit [Source:HGNC Symbol;Acc:HGNC:572]	1.1523722
APBA3	amyloid beta precursor protein binding family A member 3 [Source:HGNC Symbol;Acc:HGNC:580]	-1.5584203
APCDD1	APC down-regulated 1 [Source:HGNC Symbol;Acc:HGNC:15718]	1.4026713
APLN	apelin [Source:HGNC Symbol;Acc:HGNC:16665]	1.8412083
APOA4	apolipoprotein A4 [Source:HGNC Symbol;Acc:HGNC:602]	-1.0561597
APOA5	apolipoprotein A5 [Source:HGNC Symbol;Acc:HGNC:17288]	-1.1250774
APOB	apolipoprotein B [Source:HGNC Symbol;Acc:HGNC:603]	1.0794657
APOBEC3B	apolipoprotein B mRNA editing enzyme catalytic subunit 3B [Source:HGNC Symbol;Acc:HGNC:17352]	-1.1613922
APOBEC3C	apolipoprotein B mRNA editing enzyme catalytic subunit 3C [Source:HGNC Symbol;Acc:HGNC:17353]	1.1980796
APOBEC3G	apolipoprotein B mRNA editing enzyme catalytic subunit 3G [Source:HGNC Symbol;Acc:HGNC:17357]	-1.2448577
APOC3	apolipoprotein C3 [Source:HGNC Symbol;Acc:HGNC:610]	1.0713217
APOC4	apolipoprotein C4 [Source:HGNC Symbol;Acc:HGNC:611]	-1.0723298
APOL2	apolipoprotein L2 [Source:HGNC Symbol;Acc:HGNC:619]	-2.0766153
APOL3	apolipoprotein L3 [Source:HGNC Symbol;Acc:HGNC:14868]	-2.673124
APOL4	apolipoprotein L4 [Source:HGNC Symbol;Acc:HGNC:14867]	-2.1201253
APOL5	apolipoprotein L5 [Source:HGNC Symbol;Acc:HGNC:14869]	1.242814
APOL6	apolipoprotein L6 [Source:HGNC Symbol;Acc:HGNC:14870]	-1.84664745
APP2L	protein, phosphotyrosine interacting with PH domain and leucine zipper 2 [Source:HGNC Symbol;Acc:HG	1.1289085
AQP2	aquaporin 2 [Source:HGNC Symbol;Acc:HGNC:634]	-1.1617019
AQP6	aquaporin 6 [Source:HGNC Symbol;Acc:HGNC:639]	-1.0822448
AQP7P1	aquaporin 7 pseudogene 1 [Source:HGNC Symbol;Acc:HGNC:32048]	-1.1152661
AQP9	aquaporin 9 [Source:HGNC Symbol;Acc:HGNC:643]	1.0620369
ARAP3	ArfGAP with RhoGAP domain, ankyrin repeat and PH domain 3 [Source:HGNC Symbol;Acc:HGNC:24097]	1.2647666
ARF3	ADP ribosylation factor 3 [Source:HGNC Symbol;Acc:HGNC:654]	-1.23373055
ARFRP1	ADP ribosylation factor related protein 1 [Source:HGNC Symbol;Acc:HGNC:662]	-1.3252905
ARG1	arginase 1 [Source:HGNC Symbol;Acc:HGNC:663]	1.0760386
ARGFX	arginine-fifty homeobox [Source:HGNC Symbol;Acc:HGNC:30146]	-1.1389344
ARIHGP12	Rho GTPase activating protein 12 [Source:HGNC Symbol;Acc:HGNC:16348]	1.5420827
ARIHGP18	Rho GTPase activating protein 18 [Source:HGNC Symbol;Acc:HGNC:21035]	2.1440883
ARIHGP19	Rho GTPase activating protein 19 [Source:HGNC Symbol;Acc:HGNC:23724]	-1.13050945
ARIHGP20	Rho GTPase activating protein 20 [Source:HGNC Symbol;Acc:HGNC:18357]	1.1477607
ARIHGP22	Rho GTPase activating protein 22 [Source:HGNC Symbol;Acc:HGNC:30320]	-1.3118076
ARIHGP24	Rho GTPase activating protein 24 [Source:HGNC Symbol;Acc:HGNC:25361]	1.4855636
ARIHGP25	Rho GTPase activating protein 25 [Source:HGNC Symbol;Acc:HGNC:28951]	-1.2206204
ARIHGP31	Rho GTPase activating protein 31 [Source:HGNC Symbol;Acc:HGNC:29216]	-1.9456972
ARIHGP32	Rho GTPase activating protein 32 [Source:HGNC Symbol;Acc:HGNC:17399]	-1.3427783
ARIHGP35	Rho GTPase activating protein 35 [Source:HGNC Symbol;Acc:HGNC:4591]	1.1647383
ARIHGP36	Rho GTPase activating protein 36 [Source:HGNC Symbol;Acc:HGNC:26388]	1.0910088
ARIHGP5	Rho GTPase activating protein 5 [Source:HGNC Symbol;Acc:HGNC:675]	1.1743265
ARIHGP6	Rho GTPase activating protein 6 [Source:HGNC Symbol;Acc:HGNC:676]	-1.1165998
ARIHGEF10L	Rho guanine nucleotide exchange factor 10 like [Source:HGNC Symbol;Acc:HGNC:25540]	-1.32104525
ARIHGEF12	Rho guanine nucleotide exchange factor 12 [Source:HGNC Symbol;Acc:HGNC:14193]	1.1657554
ARIHGEF15	Rho guanine nucleotide exchange factor 15 [Source:HGNC Symbol;Acc:HGNC:15590]	-1.285653
ARIHGEF16	Rho guanine nucleotide exchange factor 16 [Source:HGNC Symbol;Acc:HGNC:15515]	-1.709941
ARIHGEF17	Rho guanine nucleotide exchange factor 17 [Source:HGNC Symbol;Acc:HGNC:21726]	1.210676
ARIHGEF26	Rho guanine nucleotide exchange factor 26 [Source:HGNC Symbol;Acc:HGNC:24490]	1.1715456
ARIHGEF37	Rho guanine nucleotide exchange factor 37 [Source:HGNC Symbol;Acc:HGNC:34430]	1.2946156
ARIHGEF38	Rho guanine nucleotide exchange factor 38 [Source:HGNC Symbol;Acc:HGNC:25968]	1.103191
ARIHGEF40	Rho guanine nucleotide exchange factor 40 [Source:HGNC Symbol;Acc:HGNC:25516]	-3.796834
ARIHGEF6	Rac/Cdc42 guanine nucleotide exchange factor 6 [Source:HGNC Symbol;Acc:HGNC:685]	1.0740124
ARIHGEF7	Rho guanine nucleotide exchange factor 7 [Source:HGNC Symbol;Acc:HGNC:15607]	-1.17362945
ARID1B	AT-rich interaction domain 1B [Source:HGNC Symbol;Acc:HGNC:18040]	-1.1709648
ARID3B	AT-rich interaction domain 3B [Source:HGNC Symbol;Acc:HGNC:14350]	-1.6698583
ARID5A	AT-rich interaction domain 5A [Source:HGNC Symbol;Acc:HGNC:17361]	-1.5348624

ARL17B	ADP ribosylation factor like GTPase 17B [Source:HGNC Symbol;Acc:HGNC:32387]	-1.2318981
ARL2BP	ADP ribosylation factor like GTPase 2 binding protein [Source:HGNC Symbol;Acc:HGNC:17146]	-1.3956972
ARL4A	ADP ribosylation factor like GTPase 4A [Source:HGNC Symbol;Acc:HGNC:695]	-1.2045508
ARL4C	ADP ribosylation factor like GTPase 4C [Source:HGNC Symbol;Acc:HGNC:698]	-1.4356825
ARL5A	ADP ribosylation factor like GTPase 5A [Source:HGNC Symbol;Acc:HGNC:696]	1.4994498
ARLSC	ADP ribosylation factor like GTPase 5C [Source:HGNC Symbol;Acc:HGNC:31111]	-1.1733562
ARL6IP5	ADP ribosylation factor like GTPase 6 interacting protein 5 [Source:HGNC Symbol;Acc:HGNC:16937]	-1.3173611
ARL8A	ADP ribosylation factor like GTPase 8A [Source:HGNC Symbol;Acc:HGNC:25192]	1.1317644
ARMC1	armadillo repeat containing 1 [Source:HGNC Symbol;Acc:HGNC:17684]	1.3632983
ARMC4	armadillo repeat containing 4 [Source:HGNC Symbol;Acc:HGNC:25583]	1.1648505
ARMC8	armadillo repeat containing 8 [Source:HGNC Symbol;Acc:HGNC:24999]	1.3305542
ARMC9	armadillo repeat containing 9 [Source:HGNC Symbol;Acc:HGNC:20730]	-1.1706734
ARMCX6	armadillo repeat containing, X-linked 6 [Source:HGNC Symbol;Acc:HGNC:26094]	-1.0861462
ARRN2	aryl hydrocarbon receptor nuclear translocator 2 [Source:HGNC Symbol;Acc:HGNC:16876]	-1.1736228
ARNTL	aryl hydrocarbon receptor nuclear translocator like [Source:HGNC Symbol;Acc:HGNC:701]	-1.0527279
ARPC1A	actin related protein 2/3 complex subunit 1A [Source:HGNC Symbol;Acc:HGNC:703]	1.2115438
ARPM1	actin related protein T3	-1.0826732
ARPP19	cAMP regulated phosphoprotein 19 [Source:HGNC Symbol;Acc:HGNC:16967]	1.322349
ARRB1	arrestin beta 1 [Source:HGNC Symbol;Acc:HGNC:711]	-1.6861901
ARRDC2	arrestin domain containing 2 [Source:HGNC Symbol;Acc:HGNC:25225]	-1.4012861
ARRDC3	arrestin domain containing 3 [Source:HGNC Symbol;Acc:HGNC:29263]	1.2088153
ARSD	arylsulfatase D [Source:HGNC Symbol;Acc:HGNC:717]	-1.2720516
ART1	ADP-ribosyltransferase 1 [Source:HGNC Symbol;Acc:HGNC:723]	-1.0607938
ART4	ADP-ribosyltransferase 4 (Dombrock blood group) [Source:HGNC Symbol;Acc:HGNC:726]	-2.2783897
ART5	ADP-ribosyltransferase 5 [Source:HGNC Symbol;Acc:HGNC:24049]	-1.1922164
ASAH2	N-acylsphingosine amidohydrolase 2 [Source:HGNC Symbol;Acc:HGNC:18860]	1.1645775
ASB13	ankyrin repeat and SOCS box containing 13 [Source:HGNC Symbol;Acc:HGNC:19765]	1.423418
ASB17	ankyrin repeat and SOCS box containing 17 [Source:HGNC Symbol;Acc:HGNC:19769]	1.1808741
ASB7	ankyrin repeat and SOCS box containing 7 [Source:HGNC Symbol;Acc:HGNC:17182]	-1.2424747
ASGR1	asialoglycoprotein receptor 1 [Source:HGNC Symbol;Acc:HGNC:742]	-1.1838837
ASIC1	acid sensing ion channel subunit 1	1.1748358
ASIP	agouti signaling protein [Source:HGNC Symbol;Acc:HGNC:745]	-1.0596741
ASNA1	arsA arsenite transporter, ATP-binding, homolog 1 (bacterial) [Source:HGNC Symbol;Acc:HGNC:752]	1.2656978
ASNND1	asparagine synthetase domain containing 1 [Source:HGNC Symbol;Acc:HGNC:24910]	1.5138249
ASPH	aspartate beta-hydroxylase [Source:HGNC Symbol;Acc:HGNC:757]	1.3792418
ASPHD2	aspartate beta-hydroxylase domain containing 2 [Source:HGNC Symbol;Acc:HGNC:30437]	-1.2865282
ASPSCR1	ASPSCR1, UBX domain containing tether for SLC2A4 [Source:HGNC Symbol;Acc:HGNC:13825]	-1.0610112
ASS1	argininosuccinate synthase 1 [Source:HGNC Symbol;Acc:HGNC:758]	-1.07619
ASTN2	astrotactin 2 [Source:HGNC Symbol;Acc:HGNC:17021]	1.1385942
ATAD2	ATPase family, AAA domain containing 2 [Source:HGNC Symbol;Acc:HGNC:30123]	1.5684117
ATAD3B	ATPase family, AAA domain containing 3B [Source:HGNC Symbol;Acc:HGNC:24007]	1.1467226
ATF1	activating transcription factor 1 [Source:HGNC Symbol;Acc:HGNC:783]	1.1707162
ATF3	activating transcription factor 3 [Source:HGNC Symbol;Acc:HGNC:785]	-2.5273751
ATF5	activating transcription factor 5 [Source:HGNC Symbol;Acc:HGNC:790]	-1.2639709
ATF6	activating transcription factor 6 [Source:HGNC Symbol;Acc:HGNC:791]	-1.2513235
ATF7IP2	activating transcription factor 7 interacting protein 2 [Source:HGNC Symbol;Acc:HGNC:20397]	1.3261163
ATG13	autophagy related 13 [Source:HGNC Symbol;Acc:HGNC:29091]	-1.2528231
ATG14	autophagy related 14 [Source:HGNC Symbol;Acc:HGNC:19962]	1.1349314
ATG16L2	autophagy related 16 like 2 [Source:HGNC Symbol;Acc:HGNC:25464]	-1.2765108
ATG4A	autophagy related 4A cysteine peptidase [Source:HGNC Symbol;Acc:HGNC:16489]	1.3133653
ATG7	autophagy related 7 [Source:HGNC Symbol;Acc:HGNC:16935]	-1.2043744
ATMIN	ATM interactor [Source:HGNC Symbol;Acc:HGNC:29034]	1.2705523
ATP11B	ATPase phospholipid transporting 11B (putative) [Source:HGNC Symbol;Acc:HGNC:13553]	1.1881589
ATP1A4	ATPase Na+/K+ transporting subunit alpha 4 [Source:HGNC Symbol;Acc:HGNC:14073]	-1.1978463
ATP1B1	ATPase Na+/K+ transporting subunit beta 1 [Source:HGNC Symbol;Acc:HGNC:804]	-1.9287975
ATP2A1	ATPase sarcoplasmic/endoplasmic reticulum Ca2+ transporting 1 [Source:HGNC Symbol;Acc:HGNC:811]	1.1828079
ATP2B4	ATPase plasma membrane Ca2+ transporting 4 [Source:HGNC Symbol;Acc:HGNC:817]	-1.15855565
ATP4B	ATPase H+/K+ transporting beta subunit [Source:HGNC Symbol;Acc:HGNC:820]	1.1430212
ATP5D	'synthase, H+ transporting, mitochondrial F1 complex, delta subunit [Source:HGNC Symbol;Acc:HGNC:8	-1.1162703
ATP5H	TP synthase, H+ transporting, mitochondrial Fo complex subunit D [Source:HGNC Symbol;Acc:HGNC:84:	1.0855707
ATP5I	TP synthase, H+ transporting, mitochondrial Fo complex subunit E [Source:HGNC Symbol;Acc:HGNC:84	-1.1508979
ATP6AP1	ATPase H+ transporting accessory protein 1 [Source:HGNC Symbol;Acc:HGNC:868]	-1.0536419
ATP6AP1L	ATPase H+ transporting accessory protein 1 like [Source:HGNC Symbol;Acc:HGNC:28091]	1.2490357
ATP6VOA1	ATPase H+ transporting V0 subunit a1 [Source:HGNC Symbol;Acc:HGNC:865]	1.1078784
ATP6V0D1	ATPase H+ transporting V0 subunit d1 [Source:HGNC Symbol;Acc:HGNC:13724]	-1.1738416
ATP6VOE1	ATPase H+ transporting V0 subunit e1 [Source:HGNC Symbol;Acc:HGNC:863]	-1.0720892
ATP6V1C1	ATPase H+ transporting V1 subunit C1 [Source:HGNC Symbol;Acc:HGNC:856]	1.3770074
ATP6V1E1	ATPase H+ transporting V1 subunit E1 [Source:HGNC Symbol;Acc:HGNC:857]	-1.0743483
ATP6V1G2	ATPase H+ transporting V1 subunit G2 [Source:HGNC Symbol;Acc:HGNC:862]	-1.1512762
ATP6V1G3	ATPase H+ transporting V1 subunit G3 [Source:HGNC Symbol;Acc:HGNC:18265]	1.1707712
ATP7A	ATPase copper transporting alpha [Source:HGNC Symbol;Acc:HGNC:869]	1.3624587
ATP8B2	ATPase phospholipid transporting 8B2 [Source:HGNC Symbol;Acc:HGNC:13534]	-1.2168714
ATP8B3	ATPase phospholipid transporting 8B3 [Source:HGNC Symbol;Acc:HGNC:13535]	1.1277881
ATP8B5P	ATPase phospholipid transporting 8B5, pseudogene [Source:HGNC Symbol;Acc:HGNC:27245]	1.1684906
ATP9B	ATPase phospholipid transporting 9B (putative) [Source:HGNC Symbol;Acc:HGNC:13541]	-1.1588206
ATPAF1-AS1	testis expressed 38	1.136972
ATPIF1	ATPase inhibitory factor 1 [Source:HGNC Symbol;Acc:HGNC:871]	1.1442711
ATRNL1	attractin like 1 [Source:HGNC Symbol;Acc:HGNC:29063]	-1.1539842
ATXN2L	ataxin 2 like [Source:HGNC Symbol;Acc:HGNC:31326]	-1.2380335
ATXN3L	ataxin 3 like [Source:HGNC Symbol;Acc:HGNC:24173]	1.0700265
ATXN7L1	ataxin 7 like 1 [Source:HGNC Symbol;Acc:HGNC:22210]	-1.0865167
AURKB	aurora kinase B [Source:HGNC Symbol;Acc:HGNC:11390]	-1.1043131
AVEN	apoptosis and caspase activation inhibitor [Source:HGNC Symbol;Acc:HGNC:13509]	-1.1246307
AZGP1P1	alpha-2-glycoprotein 1, zinc-binding pseudogene [Source:HGNC Symbol;Acc:HGNC:911]	1.0757635
AZ1	5-azacytidine induced 2 [Source:HGNC Symbol;Acc:HGNC:24002]	1.1558623
B4GALNT3	beta-1,4-N-acetyl-galactosaminyltransferase 3 [Source:HGNC Symbol;Acc:HGNC:24137]	1.0571241

B4GALT1	beta-1,4-galactosyltransferase 1 [Source:HGNC Symbol;Acc:HGNC:924]	-1.9519022
B4GALT2	beta-1,4-galactosyltransferase 2 [Source:HGNC Symbol;Acc:HGNC:925]	1.2084926
B4GALT4	beta-1,4-galactosyltransferase 4 [Source:HGNC Symbol;Acc:HGNC:927]	-1.1900249
B4GALT5	beta-1,4-galactosyltransferase 5 [Source:HGNC Symbol;Acc:HGNC:928]	-1.7326291
BAALC	brain and acute leukemia, cytoplasmic [Source:HGNC Symbol;Acc:HGNC:14333]	-1.1608124
BABAM1	BRISC and BRCA1 A complex member 1 [Source:HGNC Symbol;Acc:HGNC:25008]	1.1690655
BACE1	beta-secretase 1 [Source:HGNC Symbol;Acc:HGNC:933]	-1.2863574
BAD	BCL2 associated agonist of cell death [Source:HGNC Symbol;Acc:HGNC:936]	-1.1132538
BAG2	BCL2 associated athanogene 2 [Source:HGNC Symbol;Acc:HGNC:938]	1.2176627
BAG4	BCL2 associated athanogene 4 [Source:HGNC Symbol;Acc:HGNC:940]	1.1364249
BAGE	B melanoma antigen	-1.1304287
BAIAP2	BAI1 associated protein 2 [Source:HGNC Symbol;Acc:HGNC:947]	1.12370395
BAMBI	BMP and activin membrane bound inhibitor [Source:HGNC Symbol;Acc:HGNC:30251]	-2.4658017
BANF1	barrier to autointegration factor 1 [Source:HGNC Symbol;Acc:HGNC:17397]	1.0583279
BANP	BTG3 associated nuclear protein [Source:HGNC Symbol;Acc:HGNC:13450]	-1.0843782
BARD1	BRCA1 associated RING domain 1 [Source:HGNC Symbol;Acc:HGNC:952]	1.3892603
BATF	basic leucine zipper ATF-like transcription factor [Source:HGNC Symbol;Acc:HGNC:958]	-1.0835506
BATF3	basic leucine zipper ATF-like transcription factor 3 [Source:HGNC Symbol;Acc:HGNC:28915]	-1.5118812
BAX	BCL2 associated X, apoptosis regulator [Source:HGNC Symbol;Acc:HGNC:959]	1.4119049
BAZ1B	bromodomain adjacent to zinc finger domain 1B [Source:HGNC Symbol;Acc:HGNC:961]	1.4825696
BBC3	BCL2 binding component 3 [Source:HGNC Symbol;Acc:HGNC:17868]	-1.987462
BBS1	Bardet-Biedl syndrome 1 [Source:HGNC Symbol;Acc:HGNC:966]	-1.1490573
BBS4	Bardet-Biedl syndrome 4 [Source:HGNC Symbol;Acc:HGNC:969]	-1.0916607
BBS5	Bardet-Biedl syndrome 5 [Source:HGNC Symbol;Acc:HGNC:970]	1.137248
BCAN	brevican [Source:HGNC Symbol;Acc:HGNC:23059]	-1.0868853
BCAT1	branched chain amino acid transaminase 1 [Source:HGNC Symbol;Acc:HGNC:976]	2.0375526
BCDIN3D	BCDIN3 domain containing RNA methyltransferase [Source:HGNC Symbol;Acc:HGNC:27050]	1.328748
BCL11A	B-cell CLL/lymphoma 11A [Source:HGNC Symbol;Acc:HGNC:13221]	1.09127815
BCL2	BCL2, apoptosis regulator [Source:HGNC Symbol;Acc:HGNC:990]	1.1681875
BCL2A1	BCL2 related protein A1 [Source:HGNC Symbol;Acc:HGNC:991]	-2.484996
BCL2L1	BCL2 like 1 [Source:HGNC Symbol;Acc:HGNC:992]	1.4653032
BCL2L10	BCL2 like 10 [Source:HGNC Symbol;Acc:HGNC:993]	1.1074464
BCL2L11	BCL2 like 11 [Source:HGNC Symbol;Acc:HGNC:994]	-1.705509
BCL2L15	BCL2 like 15 [Source:HGNC Symbol;Acc:HGNC:33624]	-1.1152124
BCL2L2	BCL2 like 2 [Source:HGNC Symbol;Acc:HGNC:995]	-1.2008884
BCL3	B-cell CLL/lymphoma 3 [Source:HGNC Symbol;Acc:HGNC:998]	-3.5352957
BCL6	B-cell CLL/lymphoma 6 [Source:HGNC Symbol;Acc:HGNC:1001]	-1.1438493
BCL6B	B-cell CLL/lymphoma 6B [Source:HGNC Symbol;Acc:HGNC:1002]	-2.321052
BCL9L	B-cell CLL/lymphoma 9-like [Source:HGNC Symbol;Acc:HGNC:23688]	-1.22514
BCO2	beta-carotene oxygenase 2 [Source:HGNC Symbol;Acc:HGNC:18503]	1.1213925
BCOR	BCL6 corepressor [Source:HGNC Symbol;Acc:HGNC:20893]	-1.28321335
BCR	BCR, RhoGEF and GTPase activating protein [Source:HGNC Symbol;Acc:HGNC:1014]	-1.1858041
BCRP2	breakpoint cluster region pseudogene 2 [Source:HGNC Symbol;Acc:HGNC:1015]	-1.283097
BDH1	3-hydroxybutyrate dehydrogenase, type 1 [Source:HGNC Symbol;Acc:HGNC:1027]	1.4033644
BDKRB1	bradykinin receptor B1 [Source:HGNC Symbol;Acc:HGNC:1029]	-1.1134189
BDKRB2	bradykinin receptor B2 [Source:HGNC Symbol;Acc:HGNC:1030]	-1.9707477
BDNF	brain derived neurotrophic factor [Source:HGNC Symbol;Acc:HGNC:1033]	1.41973505
BEGAIN	brain enriched guanylate kinase associated [Source:HGNC Symbol;Acc:HGNC:24163]	-1.4803464
BEND7	BEN domain containing 7 [Source:HGNC Symbol;Acc:HGNC:23514]	-1.2252234
BEST1	bestrophin 1 [Source:HGNC Symbol;Acc:HGNC:12703]	1.0681973
BET3L	trafficking protein particle complex 3 like	-1.0716788
BEX2	brain expressed X-linked 2 [Source:HGNC Symbol;Acc:HGNC:30933]	-1.2434828
BEX4	brain expressed X-linked 4 [Source:HGNC Symbol;Acc:HGNC:25475]	-1.0661619
BFSP1	beaded filament structural protein 1 [Source:HGNC Symbol;Acc:HGNC:1040]	1.1312419
BGN	biglycan [Source:HGNC Symbol;Acc:HGNC:1044]	1.8416222
BHLHA15	basic helix-loop-helix family member a15 [Source:HGNC Symbol;Acc:HGNC:22265]	-1.0989157
BHLHE22	basic helix-loop-helix family member e22 [Source:HGNC Symbol;Acc:HGNC:11963]	1.0699666
BHLHE40	basic helix-loop-helix family member e40 [Source:HGNC Symbol;Acc:HGNC:1046]	-1.6723416
BHLHE41	basic helix-loop-helix family member e41 [Source:HGNC Symbol;Acc:HGNC:16617]	-1.7422471
BICC1	BICC family RNA binding protein 1 [Source:HGNC Symbol;Acc:HGNC:19351]	-1.1615374
BID	BH3 interacting domain death agonist [Source:HGNC Symbol;Acc:HGNC:1050]	-1.1472667
BIK	BCL2 interacting killer [Source:HGNC Symbol;Acc:HGNC:1051]	-1.8745261
BIRC3	baculoviral IAP repeat containing 3 [Source:HGNC Symbol;Acc:HGNC:591]	-8.632974
BIVM	basic, immunoglobulin-like variable motif containing [Source:HGNC Symbol;Acc:HGNC:16034]	1.4044118
BLM	Bloom syndrome RecQ like helicase [Source:HGNC Symbol;Acc:HGNC:1058]	1.358415
BLOC1S2	biogenesis of lysosomal organelles complex 1 subunit 2 [Source:HGNC Symbol;Acc:HGNC:20984]	1.2011064
BMF	Bcl2 modifying factor [Source:HGNC Symbol;Acc:HGNC:24132]	-1.6515329
BMI1	BMI1 proto-oncogene, polycomb ring finger [Source:HGNC Symbol;Acc:HGNC:1066]	1.1267371
BMP2	bone morphogenetic protein 2 [Source:HGNC Symbol;Acc:HGNC:1069]	-2.7585454
BMP2K	BMP2 inducible kinase [Source:HGNC Symbol;Acc:HGNC:18041]	1.1979887
BMP3	bone morphogenetic protein 3 [Source:HGNC Symbol;Acc:HGNC:1070]	1.0753007
BMP4	bone morphogenetic protein 4 [Source:HGNC Symbol;Acc:HGNC:1071]	1.3945035
BNIP1	BCL2 interacting protein 1 [Source:HGNC Symbol;Acc:HGNC:1082]	-1.332247
BNIP3L	BCL2 interacting protein 3 like [Source:HGNC Symbol;Acc:HGNC:1085]	1.6140515
BOD1	biorientation of chromosomes in cell division 1 [Source:HGNC Symbol;Acc:HGNC:25114]	-1.1513828
BOK	BOK, BCL2 family apoptosis regulator [Source:HGNC Symbol;Acc:HGNC:1087]	-1.3769368
BPGM	bisphosphoglycerate mutase [Source:HGNC Symbol;Acc:HGNC:1093]	-1.39353
BPNT1	3'(2')-5'-bisphosphate nucleotidase 1 [Source:HGNC Symbol;Acc:HGNC:1096]	-1.1938287
BRCA2	BRCA2, DNA repair associated [Source:HGNC Symbol;Acc:HGNC:1101]	1.0850444
BRCC3	BRCA1/BRCA2-containing complex subunit 3 [Source:HGNC Symbol;Acc:HGNC:24185]	1.5193005
BRD3	bromodomain containing 3 [Source:HGNC Symbol;Acc:HGNC:1104]	-1.0745567
BRD4	bromodomain containing 4 [Source:HGNC Symbol;Acc:HGNC:13575]	-1.2179859
BRDT	bromodomain testis associated [Source:HGNC Symbol;Acc:HGNC:1105]	1.195707
BRF1	1, RNA polymerase III transcription initiation factor 90 kDa subunit [Source:HGNC Symbol;Acc:HGNC:11:	1.3878995
BRP44L	mitochondrial pyruvate carrier 1	-1.3508238
BRPF1	bromodomain and PHD finger containing 1 [Source:HGNC Symbol;Acc:HGNC:14255]	-1.2391176

BRPF3	bromodomain and PHD finger containing 3 [Source:HGNC Symbol;Acc:HGNC:14256]	-1.1694245
BSDC1	BSD domain containing 1 [Source:HGNC Symbol;Acc:HGNC:25501]	-1.251499833
BSN	bassoon presynaptic cytomatrix protein [Source:HGNC Symbol;Acc:HGNC:1117]	1.0774626
BST1	bone marrow stromal cell antigen 1 [Source:HGNC Symbol;Acc:HGNC:1118]	-1.2324651
BTBD1	BTB domain containing 1 [Source:HGNC Symbol;Acc:HGNC:1120]	1.3135189
BTBD17	BTB domain containing 17 [Source:HGNC Symbol;Acc:HGNC:33758]	-1.1142645
BTBD2	BTB domain containing 2 [Source:HGNC Symbol;Acc:HGNC:15504]	1.4108995
BTBD3	BTB domain containing 3 [Source:HGNC Symbol;Acc:HGNC:15854]	1.1184211
BTBD7	BTB domain containing 7 [Source:HGNC Symbol;Acc:HGNC:18269]	1.2374692
BTBD9	BTB domain containing 9 [Source:HGNC Symbol;Acc:HGNC:21228]	-1.155976
BTG2	BTG anti-proliferation factor 2 [Source:HGNC Symbol;Acc:HGNC:1131]	-1.2182752
BTK	Bruton tyrosine kinase [Source:HGNC Symbol;Acc:HGNC:1133]	1.1353592
BTN2A1	butyrophilin subfamily 2 member A1 [Source:HGNC Symbol;Acc:HGNC:1136]	-1.39907195
BTN2A2	butyrophilin subfamily 2 member A2 [Source:HGNC Symbol;Acc:HGNC:1137]	-2.1564157
BTN2A3	butyrophilin subfamily 2 member A3, pseudogene	-1.4954653
BTN3A1	butyrophilin subfamily 3 member A1 [Source:HGNC Symbol;Acc:HGNC:1138]	-1.3293505
BTN3A2	butyrophilin subfamily 3 member A2 [Source:HGNC Symbol;Acc:HGNC:1139]	-1.23984015
BTRC	beta-transducin repeat containing E3 ubiquitin protein ligase [Source:HGNC Symbol;Acc:HGNC:1144]	1.1071655
BUB1	BUB1 mitotic checkpoint serine/threonine kinase [Source:HGNC Symbol;Acc:HGNC:1148]	1.3283908
BUB1B	BUB1 mitotic checkpoint serine/threonine kinase B [Source:HGNC Symbol;Acc:HGNC:1149]	1.3888223
BUD31	BUD31 homolog [Source:HGNC Symbol;Acc:HGNC:29629]	-1.1293468
BZRAP1	TSPO associated protein 1	1.1130446
BZW1	basic leucine zipper and W2 domains 1 [Source:HGNC Symbol;Acc:HGNC:18380]	1.5280015
CA13	carbonic anhydrase 13 [Source:HGNC Symbol;Acc:HGNC:14914]	-1.5966207
CABSP1	carbonic anhydrase 5B pseudogene 1 [Source:HGNC Symbol;Acc:HGNC:29544]	1.0731641
CA7	carbonic anhydrase 7 [Source:HGNC Symbol;Acc:HGNC:1381]	-1.0907911
CA8	carbonic anhydrase 8 [Source:HGNC Symbol;Acc:HGNC:1382]	-1.2134297
CAB39	calcium binding protein 39 [Source:HGNC Symbol;Acc:HGNC:20292]	-1.3557761
CABLES1	Cdk5 and Abl enzyme substrate 1 [Source:HGNC Symbol;Acc:HGNC:25097]	1.8719213
CABS1	calcium binding protein, spermatid associated 1 [Source:HGNC Symbol;Acc:HGNC:30710]	1.1244646
CABYR	calcium binding tyrosine phosphorylation regulated [Source:HGNC Symbol;Acc:HGNC:15569]	-1.551064
CACNA2D3	calcium voltage-gated channel auxiliary subunit alpha2delta 3 [Source:HGNC Symbol;Acc:HGNC:15460]	1.1084201
CACNG3	calcium voltage-gated channel auxiliary subunit gamma 3 [Source:HGNC Symbol;Acc:HGNC:1407]	-1.130643
CACYBP	calcyclin binding protein [Source:HGNC Symbol;Acc:HGNC:30423]	1.1253649
CADPS	calcium dependent secretion activator [Source:HGNC Symbol;Acc:HGNC:1426]	-1.208708
CADPS2	calcium dependent secretion activator 2 [Source:HGNC Symbol;Acc:HGNC:16018]	-1.1154019
CALB2	calbindin 2 [Source:HGNC Symbol;Acc:HGNC:1435]	-1.222056
CALCA	calcitonin related polypeptide alpha [Source:HGNC Symbol;Acc:HGNC:1437]	-1.0827203
CALCR1	calcitonin receptor like receptor [Source:HGNC Symbol;Acc:HGNC:16709]	1.731325
CALHM2	calcium homeostasis modulator 2 [Source:HGNC Symbol;Acc:HGNC:23493]	1.814719
CALM1	calmodulin 1 [Source:HGNC Symbol;Acc:HGNC:1442]	-1.1997496
CALM2	calmodulin 2 [Source:HGNC Symbol;Acc:HGNC:1445]	1.3150295
CALM3	calmodulin 3 [Source:HGNC Symbol;Acc:HGNC:1449]	1.155265
CAMK2D	calcium/calmodulin dependent protein kinase II delta [Source:HGNC Symbol;Acc:HGNC:1462]	1.10263
CAMK2G	calcium/calmodulin dependent protein kinase II gamma [Source:HGNC Symbol;Acc:HGNC:1463]	1.1799176
CAMKK2	calcium/calmodulin dependent protein kinase kinase 2 [Source:HGNC Symbol;Acc:HGNC:1470]	-1.4172559
CAMTA2	calmodulin binding transcription activator 2 [Source:HGNC Symbol;Acc:HGNC:18807]	1.1752386
CAND1	cullin associated and neddylation dissociated 1 [Source:HGNC Symbol;Acc:HGNC:30688]	-1.2486426
CAPN12	calpain 12 [Source:HGNC Symbol;Acc:HGNC:13249]	-1.0674342
CAPN14	calpain 14 [Source:HGNC Symbol;Acc:HGNC:16664]	1.1103263
CAPS	calypsofins [Source:HGNC Symbol;Acc:HGNC:1487]	1.1143286
CAPZA2	capping actin protein of muscle Z-line alpha subunit 2 [Source:HGNC Symbol;Acc:HGNC:1490]	1.5588872
CAPZB	capping actin protein of muscle Z-line beta subunit [Source:HGNC Symbol;Acc:HGNC:1491]	1.1272553
CARD10	caspase recruitment domain family member 10 [Source:HGNC Symbol;Acc:HGNC:16422]	1.6181695
CARD11	caspase recruitment domain family member 11 [Source:HGNC Symbol;Acc:HGNC:16393]	-1.0986353
CARD6	caspase recruitment domain family member 6 [Source:HGNC Symbol;Acc:HGNC:16394]	1.2187955
CARD8	caspase recruitment domain family member 8 [Source:HGNC Symbol;Acc:HGNC:17057]	1.9096254
CARD9	caspase recruitment domain family member 9 [Source:HGNC Symbol;Acc:HGNC:16391]	-1.2662306
CARM1	coactivator associated arginine methyltransferase 1 [Source:HGNC Symbol;Acc:HGNC:23393]	-1.0642453
CARS	cysteinyl-tRNA synthetase [Source:HGNC Symbol;Acc:HGNC:1493]	-1.2984945
CARS2	cysteinyl-tRNA synthetase 2, mitochondrial (putative) [Source:HGNC Symbol;Acc:HGNC:25695]	1.0972837
CASC3	cancer susceptibility candidate 3 [Source:HGNC Symbol;Acc:HGNC:17040]	-1.1128179
CASC5	kinetochore scaffold 1	1.0782192
CASK	calcium/calmodulin dependent serine protein kinase [Source:HGNC Symbol;Acc:HGNC:1497]	1.0503185
CASP10	caspase 10 [Source:HGNC Symbol;Acc:HGNC:1500]	-1.1915936
CASP2	caspase 2 [Source:HGNC Symbol;Acc:HGNC:1503]	1.2206196
CASS4	Cas scaffolding protein family member 4 [Source:HGNC Symbol;Acc:HGNC:15878]	-1.2246492
CAT	catalase [Source:HGNC Symbol;Acc:HGNC:1516]	-1.1889257
CBLL1	Cbl proto-oncogene like 1 [Source:HGNC Symbol;Acc:HGNC:21225]	-1.321054
CBLN2	cerebellin 2 precursor [Source:HGNC Symbol;Acc:HGNC:1544]	-1.5886966
CBLN3	cerebellin 3 precursor [Source:HGNC Symbol;Acc:HGNC:20146]	-2.8616996
CBR3	carboxyl reductase 3 [Source:HGNC Symbol;Acc:HGNC:1549]	-2.6813447
CBWD5	COBW domain containing 5 [Source:HGNC Symbol;Acc:HGNC:24584]	1.21022255
CBX1	chromobox 1 [Source:HGNC Symbol;Acc:HGNC:1551]	1.2934592
CBX2	chromobox 2 [Source:HGNC Symbol;Acc:HGNC:1552]	-1.2486842
CBX3	chromobox 3 [Source:HGNC Symbol;Acc:HGNC:1553]	1.4430742
CBX8	chromobox 8 [Source:HGNC Symbol;Acc:HGNC:15962]	1.272581
CC2D1A	coiled-coil and C2 domain containing 1A [Source:HGNC Symbol;Acc:HGNC:30237]	1.1964161
CC2D1B	coiled-coil and C2 domain containing 1B [Source:HGNC Symbol;Acc:HGNC:29386]	-1.1948502
CC2D2A	coiled-coil and C2 domain containing 2A [Source:HGNC Symbol;Acc:HGNC:29253]	1.1013218
CC2D2B	coiled-coil and C2 domain containing 2B [Source:HGNC Symbol;Acc:HGNC:31666]	1.0635815
CCBE1	collagen and calcium binding EGF domain 1 [Source:HGNC Symbol;Acc:HGNC:29426]	1.0840408
CCBP2	atypical chemokine receptor 4	-1.0664968
CCDC102A	coiled-coil domain containing 102A [Source:HGNC Symbol;Acc:HGNC:28097]	-2.074409
CCDC102B	coiled-coil domain containing 102B [Source:HGNC Symbol;Acc:HGNC:26295]	1.06603725
CCDC114	coiled-coil domain containing 114 [Source:HGNC Symbol;Acc:HGNC:26560]	1.1013131

CCDC117	coiled-coil domain containing 117 [Source:HGNC Symbol;Acc:HGNC:26599]	1.268229
CCDC122	coiled-coil domain containing 122 [Source:HGNC Symbol;Acc:HGNC:26478]	1.0873597
CCDC125	coiled-coil domain containing 125 [Source:HGNC Symbol;Acc:HGNC:28924]	1.262252
CCDC127	coiled-coil domain containing 127 [Source:HGNC Symbol;Acc:HGNC:30520]	-1.2325678
CCDC130	coiled-coil domain containing 130 [Source:HGNC Symbol;Acc:HGNC:28118]	-1.5990587
CCDC135	dynein regulatory complex subunit 7	-1.0597217
CCDC136	coiled-coil domain containing 136 [Source:HGNC Symbol;Acc:HGNC:22225]	1.0772107
CCDC147	cilia and flagella associated protein 58	1.1415145
CCDC158	coiled-coil domain containing 158 [Source:HGNC Symbol;Acc:HGNC:26374]	-1.2003424
CCDC165	microtubule crosslinking factor 1	1.4233621
CCDC17	coiled-coil domain containing 17 [Source:HGNC Symbol;Acc:HGNC:26574]	-1.1202221
CCDC18	coiled-coil domain containing 18 [Source:HGNC Symbol;Acc:HGNC:30370]	1.3375928
CCDC34	coiled-coil domain containing 34 [Source:HGNC Symbol;Acc:HGNC:25079]	1.1961079
CCDC43	coiled-coil domain containing 43 [Source:HGNC Symbol;Acc:HGNC:26472]	1.2030979
CCDC48	EF-hand and coiled-coil domain containing 1	1.4252007
CCDC57	coiled-coil domain containing 57 [Source:HGNC Symbol;Acc:HGNC:27564]	-1.1053814
CCDC6	coiled-coil domain containing 6 [Source:HGNC Symbol;Acc:HGNC:18782]	1.3472356
CCDC66	coiled-coil domain containing 66 [Source:HGNC Symbol;Acc:HGNC:27709]	1.2598557
CCDC68	coiled-coil domain containing 68 [Source:HGNC Symbol;Acc:HGNC:24350]	1.0944777
CCDC69	coiled-coil domain containing 69 [Source:HGNC Symbol;Acc:HGNC:24487]	-1.5884665
CCDC7	coiled-coil domain containing 7 [Source:HGNC Symbol;Acc:HGNC:26533]	-1.2096258
CCDC72	translation machinery associated 7 homolog	-1.1235614
CCDC77	coiled-coil domain containing 77 [Source:HGNC Symbol;Acc:HGNC:28203]	1.3094445
CCDC87	coiled-coil domain containing 87 [Source:HGNC Symbol;Acc:HGNC:25579]	-1.1664268
CCDC88B	coiled-coil domain containing 88B [Source:HGNC Symbol;Acc:HGNC:26757]	1.2318027
CCDC9	coiled-coil domain containing 9 [Source:HGNC Symbol;Acc:HGNC:24560]	-1.4933194
CCDC90A	mitochondrial calcium uniporter regulator 1	-1.1656632
CCDC92	coiled-coil domain containing 92 [Source:HGNC Symbol;Acc:HGNC:29563]	-1.1962309
CCDC94	coiled-coil domain containing 94 [Source:HGNC Symbol;Acc:HGNC:25518]	-1.2415799
CCIN	calicin [Source:HGNC Symbol;Acc:HGNC:1568]	-1.7423061
CCL1	C-C motif chemokine ligand 1 [Source:HGNC Symbol;Acc:HGNC:10609]	-1.1278946
CCL11	C-C motif chemokine ligand 11 [Source:HGNC Symbol;Acc:HGNC:10610]	-1.2430913
CCL16	C-C motif chemokine ligand 16 [Source:HGNC Symbol;Acc:HGNC:10614]	1.1499176
CCL17	C-C motif chemokine ligand 17 [Source:HGNC Symbol;Acc:HGNC:10615]	-1.4459815
CCL20	C-C motif chemokine ligand 20 [Source:HGNC Symbol;Acc:HGNC:10619]	-16.189316
CCL27	C-C motif chemokine ligand 27 [Source:HGNC Symbol;Acc:HGNC:10626]	1.0958531
CCL3L3	C-C motif chemokine ligand 3 like 3 [Source:HGNC Symbol;Acc:HGNC:30554]	-1.1380721
CCL4	C-C motif chemokine ligand 4 [Source:HGNC Symbol;Acc:HGNC:10630]	-1.1003438
CCL5	C-C motif chemokine ligand 5 [Source:HGNC Symbol;Acc:HGNC:10632]	-1.4648074
CCL7	C-C motif chemokine ligand 7 [Source:HGNC Symbol;Acc:HGNC:10634]	-1.6453692
CCND3	cyclin D3 [Source:HGNC Symbol;Acc:HGNC:1585]	1.4880316
CCNDBP1	cyclin D1 binding protein 1 [Source:HGNC Symbol;Acc:HGNC:1587]	1.051129
CCNE1	cyclin E1 [Source:HGNC Symbol;Acc:HGNC:1589]	1.1546259
CCNE2	cyclin E2 [Source:HGNC Symbol;Acc:HGNC:1590]	1.38179315
CCNG1	cyclin G1 [Source:HGNC Symbol;Acc:HGNC:1592]	1.1649122
CCNH	cyclin H [Source:HGNC Symbol;Acc:HGNC:1594]	1.3526845
CCNLJ	cyclin J like [Source:HGNC Symbol;Acc:HGNC:25876]	-1.2287031
CCNK	cyclin K [Source:HGNC Symbol;Acc:HGNC:1596]	-1.1897988
CCNO	cyclin O [Source:HGNC Symbol;Acc:HGNC:18576]	-1.3829342
CCR10	C-C motif chemokine receptor 10 [Source:HGNC Symbol;Acc:HGNC:4474]	-1.685271
CCR2L	C-C motif chemokine receptor like 2 [Source:HGNC Symbol;Acc:HGNC:1612]	-1.3415862
CCRN4L	nocturnin	-1.8238574
CTC3	chaperonin containing TCP1 subunit 3 [Source:HGNC Symbol;Acc:HGNC:1616]	-1.233663
CT78L2	chaperonin containing TCP1 subunit 8 like 2 [Source:HGNC Symbol;Acc:HGNC:15553]	1.1354038
CD14	CD14 molecule [Source:HGNC Symbol;Acc:HGNC:1628]	-1.2066199
CD164	CD164 molecule [Source:HGNC Symbol;Acc:HGNC:1632]	-1.0877779
CD19	CD19 molecule [Source:HGNC Symbol;Acc:HGNC:1633]	-1.0952975
CD2	CD2 molecule [Source:HGNC Symbol;Acc:HGNC:1639]	-1.1567912
CD200R1	CD200 receptor 1 [Source:HGNC Symbol;Acc:HGNC:24235]	1.116739
CD247	CD247 molecule [Source:HGNC Symbol;Acc:HGNC:1677]	1.2551904
CD274	CD274 molecule [Source:HGNC Symbol;Acc:HGNC:17635]	-1.2411003
CD300E	CD300e molecule [Source:HGNC Symbol;Acc:HGNC:28874]	-1.1087426
CD300LD	CD300 molecule like family member d [Source:HGNC Symbol;Acc:HGNC:16848]	1.0899926
CD34	CD34 molecule [Source:HGNC Symbol;Acc:HGNC:1662]	-1.3446221
CD35AP	CD3e molecule associated protein [Source:HGNC Symbol;Acc:HGNC:24219]	1.2518119
CD40	CD40 molecule [Source:HGNC Symbol;Acc:HGNC:11919]	-1.50629995
CD46	CD46 molecule [Source:HGNC Symbol;Acc:HGNC:6953]	1.1097405
CD47	CD47 molecule [Source:HGNC Symbol;Acc:HGNC:1682]	-1.4642583
CD52	CD52 molecule [Source:HGNC Symbol;Acc:HGNC:1804]	1.0710961
CD58	CD58 molecule [Source:HGNC Symbol;Acc:HGNC:1688]	-1.4621334
CD69	CD69 molecule [Source:HGNC Symbol;Acc:HGNC:1694]	-3.9310902
CD70	CD70 molecule [Source:HGNC Symbol;Acc:HGNC:11937]	-2.034662
CD72	CD72 molecule [Source:HGNC Symbol;Acc:HGNC:1696]	1.0671585
CD81	CD81 molecule [Source:HGNC Symbol;Acc:HGNC:1701]	-1.11832445
CD82	CD82 molecule [Source:HGNC Symbol;Acc:HGNC:6210]	-1.274367
CD83	CD83 molecule [Source:HGNC Symbol;Acc:HGNC:1703]	-8.712782
CD8A	CD8a molecule [Source:HGNC Symbol;Acc:HGNC:1706]	-1.1076034
CD99	CD99 molecule [Source:HGNC Symbol;Acc:HGNC:7082]	-1.2449781
CD99L2	CD99 molecule like 2 [Source:HGNC Symbol;Acc:HGNC:18237]	-1.1827847
CDADC1	cytidine and dCMP deaminase domain containing 1 [Source:HGNC Symbol;Acc:HGNC:20299]	1.101491
CDC14A	cell division cycle 14A [Source:HGNC Symbol;Acc:HGNC:1718]	-1.2947338
CDC14C	cell division cycle 14C, pseudogene [Source:HGNC Symbol;Acc:HGNC:22427]	-1.0666852
CDC20B	cell division cycle 20B [Source:HGNC Symbol;Acc:HGNC:24222]	1.1306446
CDC27	cell division cycle 27 [Source:HGNC Symbol;Acc:HGNC:1728]	1.3274866
CDC37	cell division cycle 37 [Source:HGNC Symbol;Acc:HGNC:1735]	-1.1099256
CDC40	cell division cycle 40 [Source:HGNC Symbol;Acc:HGNC:17350]	1.429435

CDC42EP2	CDC42 effector protein 2 [Source:HGNC Symbol;Acc:HGNC:16263]	-1.526188
CDC42SE1	CDC42 small effector 1 [Source:HGNC Symbol;Acc:HGNC:17719]	-1.3183223
CDC45	cell division cycle 45 [Source:HGNC Symbol;Acc:HGNC:1739]	1.198193
CDC7	cell division cycle 7 [Source:HGNC Symbol;Acc:HGNC:1745]	1.404828
CDCA2	cell division cycle associated 2 [Source:HGNC Symbol;Acc:HGNC:14623]	1.392837
CDH11	cadherin 11 [Source:HGNC Symbol;Acc:HGNC:1750]	-1.3912827
CDH3	cadherin 3 [Source:HGNC Symbol;Acc:HGNC:1762]	-1.0770509
CDH5	cadherin 5 [Source:HGNC Symbol;Acc:HGNC:1764]	-1.2215142
CDH6	cadherin 6 [Source:HGNC Symbol;Acc:HGNC:1765]	1.0934659
CDHR1	cadherin related family member 1 [Source:HGNC Symbol;Acc:HGNC:14550]	-1.0701951
CDHR2	cadherin related family member 2 [Source:HGNC Symbol;Acc:HGNC:18231]	-1.186482
CDHR4	cadherin related family member 4 [Source:HGNC Symbol;Acc:HGNC:34527]	-1.0907234
CDK1	cyclin dependent kinase 1 [Source:HGNC Symbol;Acc:HGNC:1722]	1.5477147
CDK19	cyclin dependent kinase 19 [Source:HGNC Symbol;Acc:HGNC:19338]	1.3349775
CDK2	cyclin dependent kinase 2 [Source:HGNC Symbol;Acc:HGNC:1771]	1.0927821
CDK2AP2	cyclin dependent kinase 2 associated protein 2 [Source:HGNC Symbol;Acc:HGNC:30833]	-1.1945862
CDK5R1	cyclin dependent kinase 5 regulatory subunit 1 [Source:HGNC Symbol;Acc:HGNC:1775]	1.0657651
CDKL1	cyclin dependent kinase 1 [Source:HGNC Symbol;Acc:HGNC:1781]	-1.1402655
CDKN2A	cyclin dependent kinase inhibitor 2A [Source:HGNC Symbol;Acc:HGNC:1787]	-1.1714987
CDKN3	cyclin dependent kinase inhibitor 3 [Source:HGNC Symbol;Acc:HGNC:1791]	1.2285981
CDNF	cerebral dopamine neurotrophic factor [Source:HGNC Symbol;Acc:HGNC:24913]	1.1389828
CDV3	CDV3 homolog [Source:HGNC Symbol;Acc:HGNC:26928]	-1.52176005
CDY2A	chromodomain Y-linked 2A [Source:HGNC Symbol;Acc:HGNC:1810]	1.068769
CEACAM20	carcinoembryonic antigen related cell adhesion molecule 20 [Source:HGNC Symbol;Acc:HGNC:24879]	-1.2031957
CEACAM4	carcinoembryonic antigen related cell adhesion molecule 4 [Source:HGNC Symbol;Acc:HGNC:1816]	-1.1137035
CEBPG	CCAAT/enhancer binding protein gamma [Source:HGNC Symbol;Acc:HGNC:1837]	1.2769895
CECR2	CECR2, histone acetyl-lysine reader [Source:HGNC Symbol;Acc:HGNC:1840]	-1.2035571
CECR3	ye syndrome chromosome region, candidate 3 (non-protein coding) [Source:HGNC Symbol;Acc:HGNC:1	-1.1294549
CECR6	cat eye syndrome chromosome region, candidate 6 [Source:HGNC Symbol;Acc:HGNC:1844]	1.289251
CELF3	CUGBP, Elav-like family member 3 [Source:HGNC Symbol;Acc:HGNC:11967]	1.382329
CELF6	CUGBP, Elav-like family member 6 [Source:HGNC Symbol;Acc:HGNC:14059]	-1.2530304
CELSR1	cadherin EGF LAG seven-pass G-type receptor 1 [Source:HGNC Symbol;Acc:HGNC:1850]	-1.1888963
CEMP1	cementum protein 1 [Source:HGNC Symbol;Acc:HGNC:32553]	1.1171341
CENPB	centromere protein B [Source:HGNC Symbol;Acc:HGNC:1852]	1.4983394
CENPN	centromere protein N [Source:HGNC Symbol;Acc:HGNC:30873]	1.1702483
CENPO	centromere protein O [Source:HGNC Symbol;Acc:HGNC:28152]	-1.1749657
CENPQ	centromere protein Q [Source:HGNC Symbol;Acc:HGNC:21347]	1.4293792
CENPT	centromere protein T [Source:HGNC Symbol;Acc:HGNC:25787]	-1.2762923
CEP44	centrosomal protein 44 [Source:HGNC Symbol;Acc:HGNC:29356]	1.274821
CEP55	centrosomal protein 55 [Source:HGNC Symbol;Acc:HGNC:1161]	1.5273156
CEP68	centrosomal protein 68 [Source:HGNC Symbol;Acc:HGNC:29076]	-1.0627037
CEP78	centrosomal protein 78 [Source:HGNC Symbol;Acc:HGNC:25740]	1.112971
CERS1	ceramide synthase 1 [Source:HGNC Symbol;Acc:HGNC:14253]	1.3349206
CERS4	ceramide synthase 4 [Source:HGNC Symbol;Acc:HGNC:23747]	-1.2284675
CERS6	ceramide synthase 6 [Source:HGNC Symbol;Acc:HGNC:23826]	1.5767936
CETN3	centrin 3 [Source:HGNC Symbol;Acc:HGNC:1868]	1.4286331
CFL1	cofilin 1 [Source:HGNC Symbol;Acc:HGNC:1874]	1.6365959
CFLAR	CASP8 and FADD like apoptosis regulator [Source:HGNC Symbol;Acc:HGNC:1876]	-2.2210145
CGGBP1	CGG triplet repeat binding protein 1 [Source:HGNC Symbol;Acc:HGNC:1888]	1.3796169
CGN	cingulin [Source:HGNC Symbol;Acc:HGNC:17429]	1.173265
CGRRF1	cell growth regulator with ring finger domain 1 [Source:HGNC Symbol;Acc:HGNC:15528]	-1.211295
CHAF1B	chromatin assembly factor 1 subunit B [Source:HGNC Symbol;Acc:HGNC:1911]	1.1342682
CHCHD2	coiled-coil-helix-coiled-coil-helix domain containing 2 [Source:HGNC Symbol;Acc:HGNC:21645]	-1.2115042
CHCHD7	coiled-coil-helix-coiled-coil-helix domain containing 7 [Source:HGNC Symbol;Acc:HGNC:28314]	1.3429021
CHD3	chromodomain helicase DNA binding protein 3 [Source:HGNC Symbol;Acc:HGNC:1918]	-1.2134196
CHD4	chromodomain helicase DNA binding protein 4 [Source:HGNC Symbol;Acc:HGNC:1919]	-1.492511
CHD5	chromodomain helicase DNA binding protein 5 [Source:HGNC Symbol;Acc:HGNC:16816]	-1.1523012
CHD7	chromodomain helicase DNA binding protein 7 [Source:HGNC Symbol;Acc:HGNC:20626]	-1.3585821
CHGB	chromogranin B [Source:HGNC Symbol;Acc:HGNC:1930]	1.078956
CHI3L2	chitinase 3 like 2 [Source:HGNC Symbol;Acc:HGNC:1933]	1.0916927
CHIC2	cysteine rich hydrophobic domain 2 [Source:HGNC Symbol;Acc:HGNC:1935]	-1.5332059
CHMP2B	charged multivesicular body protein 2B [Source:HGNC Symbol;Acc:HGNC:24537]	1.2864021
CHMP5	charged multivesicular body protein 5 [Source:HGNC Symbol;Acc:HGNC:26942]	1.2925906
CHN1	chimerin 1 [Source:HGNC Symbol;Acc:HGNC:1943]	-1.1034654
CHPF	chondroitin polymerizing factor [Source:HGNC Symbol;Acc:HGNC:24291]	-1.0709256
CHPF2	chondroitin polymerizing factor 2 [Source:HGNC Symbol;Acc:HGNC:29270]	1.1258259
CHRLD2	chordin like 2 [Source:HGNC Symbol;Acc:HGNC:24168]	1.1278981
CHRMS	cholinergic receptor muscarinic 5 [Source:HGNC Symbol;Acc:HGNC:1954]	-1.0505883
CHRNA1	cholinergic receptor nicotinic alpha 1 subunit [Source:HGNC Symbol;Acc:HGNC:1955]	-1.0992494
CHRNA4	cholinergic receptor nicotinic alpha 4 subunit [Source:HGNC Symbol;Acc:HGNC:1958]	1.0896581
CHRNB1	cholinergic receptor nicotinic beta 1 subunit [Source:HGNC Symbol;Acc:HGNC:1961]	-1.3048493
CHRNB4	cholinergic receptor nicotinic beta 4 subunit [Source:HGNC Symbol;Acc:HGNC:1964]	1.0629847
CHST11	carbohydrate sulfotransferase 11 [Source:HGNC Symbol;Acc:HGNC:17422]	-1.1847728
CHST4	carbohydrate sulfotransferase 4 [Source:HGNC Symbol;Acc:HGNC:1972]	-1.1798018
CHST5	carbohydrate sulfotransferase 5 [Source:HGNC Symbol;Acc:HGNC:1973]	-1.1764448
CHST9	carbohydrate sulfotransferase 9 [Source:HGNC Symbol;Acc:HGNC:19898]	-1.0786827
CHTOP	chromatin target of PRMT1 [Source:HGNC Symbol;Acc:HGNC:24511]	-1.0715858
CHUK	conserved helix-loop-helix ubiquitous kinase [Source:HGNC Symbol;Acc:HGNC:1974]	1.3930103
CIAPIN1	cytokine induced apoptosis inhibitor 1 [Source:HGNC Symbol;Acc:HGNC:28050]	-1.15125755
CIDEC	cell death inducing DFFA like effector c [Source:HGNC Symbol;Acc:HGNC:24229]	-1.2266004
CIDECP	cell death-inducing DFFA-like effector c pseudogene [Source:HGNC Symbol;Acc:HGNC:24230]	-1.4041673
CIITA	class II major histocompatibility complex transactivator [Source:HGNC Symbol;Acc:HGNC:7067]	-1.0939559
CIRBP	cold inducible RNA binding protein [Source:HGNC Symbol;Acc:HGNC:1982]	1.1738772
CITED2	interacting transactivator with Glu/Asp rich carboxy-terminal domain 2 [Source:HGNC Symbol;Acc:HG	1.4461203
CITED4	interacting transactivator with Glu/Asp rich carboxy-terminal domain 4 [Source:HGNC Symbol;Acc:HG	-6.7478375
CKLF	chemokine like factor [Source:HGNC Symbol;Acc:HGNC:13253]	-1.1130064

CKS1B	CDC28 protein kinase regulatory subunit 1B [Source:HGNC Symbol;Acc:HGNC:19083]	1.0569695
CLASRP	CLK4 associating serine/arginine rich protein [Source:HGNC Symbol;Acc:HGNC:17731]	1.1578135
CLCA1	chloride channel accessory 1 [Source:HGNC Symbol;Acc:HGNC:2015]	1.1619898
CLCN5	chloride voltage-gated channel 5 [Source:HGNC Symbol;Acc:HGNC:2023]	-1.2384921
CLCNKA	chloride voltage-gated channel Ka [Source:HGNC Symbol;Acc:HGNC:2026]	-1.15006
CLDN1	claudin 1 [Source:HGNC Symbol;Acc:HGNC:2032]	-1.153556
CLDN10	claudin 10 [Source:HGNC Symbol;Acc:HGNC:2033]	-1.097779
CLDN14	claudin 14 [Source:HGNC Symbol;Acc:HGNC:2035]	-2.4382842
CLDN2	claudin 2 [Source:HGNC Symbol;Acc:HGNC:2041]	-1.4316212
CLDN20	claudin 20 [Source:HGNC Symbol;Acc:HGNC:2042]	1.0906242
CLDN24	claudin 24 [Source:HGNC Symbol;Acc:HGNC:37200]	-1.1404729
CLDN3	claudin 3 [Source:HGNC Symbol;Acc:HGNC:2045]	1.1285096
CLDN5	claudin 5 [Source:HGNC Symbol;Acc:HGNC:2047]	-1.8893173
CLDN6	claudin 6 [Source:HGNC Symbol;Acc:HGNC:2048]	-1.1232823
CLEC14A	C-type lectin domain family 14 member A [Source:HGNC Symbol;Acc:HGNC:19832]	1.2823393
CLEC17A	C-type lectin domain family 17 member A [Source:HGNC Symbol;Acc:HGNC:34520]	-1.1239182
CLEC1A	C-type lectin domain family 1 member A [Source:HGNC Symbol;Acc:HGNC:24355]	-2.30176
CLEC2D	C-type lectin domain family 2 member D [Source:HGNC Symbol;Acc:HGNC:14351]	-1.2593296
CLEC4GP1	C-type lectin domain family 4 member G pseudogene 1 [Source:HGNC Symbol;Acc:HGNC:33502]	2.1335766
CLEC5A	C-type lectin domain family 5 member A [Source:HGNC Symbol;Acc:HGNC:2054]	1.1410142
CLEC7A	C-type lectin domain family 7 member A [Source:HGNC Symbol;Acc:HGNC:14558]	1.11641765
CLEC9A	C-type lectin domain family 9 member A [Source:HGNC Symbol;Acc:HGNC:26705]	1.1081402
CLIC4	chloride intracellular channel 4 [Source:HGNC Symbol;Acc:HGNC:13518]	-1.325485
CLIP2	CAP-Gly domain containing linker protein 2 [Source:HGNC Symbol;Acc:HGNC:2586]	-1.49145165
CLIP4	CAP-Gly domain containing linker protein family member 4 [Source:HGNC Symbol;Acc:HGNC:26108]	-1.0971203
CLK3	CDC like kinase 3 [Source:HGNC Symbol;Acc:HGNC:2071]	-1.0954059
CLLU1OS	chronic lymphocytic leukemia up-regulated 1 opposite strand [Source:HGNC Symbol;Acc:HGNC:24070]	-1.1460944
CLMN	calmin [Source:HGNC Symbol;Acc:HGNC:19972]	1.4177538
CLN8	ceroid-lipofuscinosis, neuronal 8 [Source:HGNC Symbol;Acc:HGNC:2079]	-1.2263199
CLNK	cytokine dependent hematopoietic cell linker [Source:HGNC Symbol;Acc:HGNC:17438]	1.0978724
CLP1	cleavage and polyadenylation factor I subunit 1 [Source:HGNC Symbol;Acc:HGNC:16999]	-1.156904
CLPP	caseinolytic mitochondrial matrix peptidase proteolytic subunit [Source:HGNC Symbol;Acc:HGNC:2084]	1.2030133
CLPTM1	CLPTM1, transmembrane protein [Source:HGNC Symbol;Acc:HGNC:2087]	1.3943906
CLRN1	clarin 1 [Source:HGNC Symbol;Acc:HGNC:12605]	1.1275384
CLRN2	clarin 2 [Source:HGNC Symbol;Acc:HGNC:33939]	1.1069058
CLSTN1	calsyntenin 1 [Source:HGNC Symbol;Acc:HGNC:17447]	-1.1261196
CLSTN3	calsyntenin 3 [Source:HGNC Symbol;Acc:HGNC:18371]	1.1784119
CLTA	clathrin light chain A [Source:HGNC Symbol;Acc:HGNC:2090]	-1.1609766
CLU	clusterin [Source:HGNC Symbol;Acc:HGNC:2095]	-1.1240908
CLUAP1	clusterin associated protein 1 [Source:HGNC Symbol;Acc:HGNC:19009]	1.3289251
CMBL	carboxymethylenebutenolidase homolog [Source:HGNC Symbol;Acc:HGNC:25090]	1.1177225
CMTM3	CKLF like MARVEL transmembrane domain containing 3 [Source:HGNC Symbol;Acc:HGNC:19174]	-1.1710814
CMTM7	CKLF like MARVEL transmembrane domain containing 7 [Source:HGNC Symbol;Acc:HGNC:19178]	1.1628163
CMTM8	CKLF like MARVEL transmembrane domain containing 8 [Source:HGNC Symbol;Acc:HGNC:19179]	1.4079307
CNDP2	CNDP dipeptidase 2 (metallopeptidase M20 family) [Source:HGNC Symbol;Acc:HGNC:24437]	-1.2163818
CNGA1	cyclic nucleotide gated channel alpha 1 [Source:HGNC Symbol;Acc:HGNC:2148]	1.1465813
CNIH4	cornichon family AMPA receptor auxiliary protein 4 [Source:HGNC Symbol;Acc:HGNC:25013]	-1.10078285
CNSKR2	connector enhancer of kinase suppressor of Ras 2 [Source:HGNC Symbol;Acc:HGNC:19701]	1.0963234
CNSKR3	CNSKR family member 3 [Source:HGNC Symbol;Acc:HGNC:23034]	-3.14431505
CNOT2	CCR4-NOT transcription complex subunit 2 [Source:HGNC Symbol;Acc:HGNC:7878]	1.2214175
CNOT4	CCR4-NOT transcription complex subunit 4 [Source:HGNC Symbol;Acc:HGNC:7880]	1.0868953
CNP	2',3'-cyclic nucleotide 3' phosphodiesterase [Source:HGNC Symbol;Acc:HGNC:2158]	1.0699669
CNPY2	canopy FGF signaling regulator 2 [Source:HGNC Symbol;Acc:HGNC:13529]	1.0882498
CNPY4	canopy FGF signaling regulator 4 [Source:HGNC Symbol;Acc:HGNC:28631]	-1.0825522
CNTN3	contactin 3 [Source:HGNC Symbol;Acc:HGNC:2173]	1.087419
CNTNAP1	contactin associated protein 1 [Source:HGNC Symbol;Acc:HGNC:8011]	-1.3719059
CNTNAP2	contactin associated protein-like 2 [Source:HGNC Symbol;Acc:HGNC:13830]	1.1986312
CNTNAP3	contactin associated protein-like 3 [Source:HGNC Symbol;Acc:HGNC:13834]	1.6613365
CNTNAP3B	contactin associated protein-like 3B [Source:HGNC Symbol;Acc:HGNC:32035]	1.1038735
CNTRL	centriolin [Source:HGNC Symbol;Acc:HGNC:1858]	1.15269
COBL	cordon-bleu WH2 repeat protein [Source:HGNC Symbol;Acc:HGNC:22199]	-1.0788543
COG1	component of oligomeric golgi complex 1 [Source:HGNC Symbol;Acc:HGNC:6545]	-1.1609445
COG4	component of oligomeric golgi complex 4 [Source:HGNC Symbol;Acc:HGNC:18620]	-1.2365643
COG8	component of oligomeric golgi complex 8 [Source:HGNC Symbol;Acc:HGNC:18623]	1.1469045
COL11A2	collagen type XI alpha 2 chain [Source:HGNC Symbol;Acc:HGNC:2187]	-1.1690038
COL19A1	collagen type XIX alpha 1 chain [Source:HGNC Symbol;Acc:HGNC:2196]	1.0917976
COL20A1	collagen type XX alpha 1 chain [Source:HGNC Symbol;Acc:HGNC:14670]	-1.1107092
COL27A1	collagen type XXVII alpha 1 chain [Source:HGNC Symbol;Acc:HGNC:22986]	-1.94497425
COL4A1	collagen type IV alpha 1 chain [Source:HGNC Symbol;Acc:HGNC:2202]	-1.3767632
COL5A1	collagen type V alpha 1 chain [Source:HGNC Symbol;Acc:HGNC:2209]	-1.14863495
COL5A3	collagen type V alpha 3 chain [Source:HGNC Symbol;Acc:HGNC:14864]	1.1443648
COL6A4P2	collagen type VI alpha 4 pseudogene 2 [Source:HGNC Symbol;Acc:HGNC:38501]	1.106017
COL7A1	collagen type VII alpha 1 chain [Source:HGNC Symbol;Acc:HGNC:2214]	-1.0596586
COL9A2	collagen type IX alpha 2 chain [Source:HGNC Symbol;Acc:HGNC:2218]	-1.4563527
COMM8	COMM domain containing 8 [Source:HGNC Symbol;Acc:HGNC:26036]	1.6332517
COMT	catechol-O-methyltransferase [Source:HGNC Symbol;Acc:HGNC:2228]	-1.1229084
COPS4	COP9 signalosome subunit 4 [Source:HGNC Symbol;Acc:HGNC:16702]	1.3179946
COQ2	coenzyme Q2, polypropyltransferase [Source:HGNC Symbol;Acc:HGNC:25223]	1.1170671
CORO2B	coronin 2B [Source:HGNC Symbol;Acc:HGNC:2256]	-1.1370021
COT1L	coactosin like F-actin binding protein 1 [Source:HGNC Symbol;Acc:HGNC:18304]	-1.225889
COX15	cytochrome c oxidase assembly homolog [Source:HGNC Symbol;Acc:HGNC:2263]	-1.0603908
COX17	cytochrome c oxidase copper chaperone [Source:HGNC Symbol;Acc:HGNC:2264]	-1.1280407
COX19	cytochrome c oxidase assembly factor [Source:HGNC Symbol;Acc:HGNC:28074]	-1.1987144
COX4I1	cytochrome c oxidase subunit 4I1 [Source:HGNC Symbol;Acc:HGNC:2265]	-1.2745554
COX4I1	cytochrome c oxidase subunit 6A2 [Source:HGNC Symbol;Acc:HGNC:2279]	-1.2210068
COX6A2	cytochrome c oxidase subunit 6A2 [Source:HGNC Symbol;Acc:HGNC:2279]	-1.2210068
CP	ceruloplasmin [Source:HGNC Symbol;Acc:HGNC:2295]	1.097947

CPA2	carboxypeptidase A2 [Source:HGNC Symbol;Acc:HGNC:2297]	-1.090973
CPB1	carboxypeptidase B1 [Source:HGNC Symbol;Acc:HGNC:2299]	-1.1146188
CPNE2	copine 2 [Source:HGNC Symbol;Acc:HGNC:2315]	-1.0834568
CPNE3	copine 3 [Source:HGNC Symbol;Acc:HGNC:2316]	1.2675887
CPOX	coproporphyrinogen oxidase [Source:HGNC Symbol;Acc:HGNC:2321]	1.2864143
CPPED1	calcineurin like phosphoesterase domain containing 1 [Source:HGNC Symbol;Acc:HGNC:25632]	-1.2824229
CPSF2	cleavage and polyadenylation specific factor 2 [Source:HGNC Symbol;Acc:HGNC:2325]	1.2245158
CPSF3L	cleavage and polyadenylation specific factor 3-like [Source:HGNC Symbol;Acc:HGNC:26052]	-1.1432475
CPSF7	cleavage and polyadenylation specific factor 7 [Source:HGNC Symbol;Acc:HGNC:30098]	-1.0677586
CPT1B	carnitine palmitoyltransferase 1B [Source:HGNC Symbol;Acc:HGNC:2329]	1.1522236
CR1	complement component 3b/4b receptor 1 (Knops blood group) [Source:HGNC Symbol;Acc:HGNC:2334]	1.1302441
CRABP2	cellular retinoic acid binding protein 2 [Source:HGNC Symbol;Acc:HGNC:2339]	-1.1324071
CRB2	crumbs 2, cell polarity complex component [Source:HGNC Symbol;Acc:HGNC:18688]	1.1038187
CREB3	cAMP responsive element binding protein 3 [Source:HGNC Symbol;Acc:HGNC:2347]	-1.6444906
CREB5	cAMP responsive element binding protein 5 [Source:HGNC Symbol;Acc:HGNC:16844]	-1.6096094
CRELD1	cysteine rich with EGF like domains 1 [Source:HGNC Symbol;Acc:HGNC:14630]	-1.1253083
CRHR1	corticotropin releasing hormone receptor 1 [Source:HGNC Symbol;Acc:HGNC:2357]	-1.1627062
CRHR2	corticotropin releasing hormone receptor 2 [Source:HGNC Symbol;Acc:HGNC:2358]	-1.1677796
CRIP2	cysteine rich protein 2 [Source:HGNC Symbol;Acc:HGNC:2361]	1.1835985
CRMP1	collapsin response mediator protein 1 [Source:HGNC Symbol;Acc:HGNC:2365]	-1.1747061
CRNN	cornulin [Source:HGNC Symbol;Acc:HGNC:1230]	-1.1120282
CROCCP2	ciliary rootlet coiled-coil, rootletin pseudogene 2 [Source:HGNC Symbol;Acc:HGNC:28170]	1.2071775
CRP	C-reactive protein, pentraxin-related [Source:HGNC Symbol;Acc:HGNC:2367]	-1.1338637
CRTAC1	cartilage acidic protein 1 [Source:HGNC Symbol;Acc:HGNC:14882]	-1.3316295
CRX	cone-rod homeobox [Source:HGNC Symbol;Acc:HGNC:2383]	-1.1038014
CRYBA4	crystallin beta A4 [Source:HGNC Symbol;Acc:HGNC:2396]	-1.0678827
CRYGA	crystallin gamma A [Source:HGNC Symbol;Acc:HGNC:2408]	-1.1254486
CRYGD	crystallin gamma D [Source:HGNC Symbol;Acc:HGNC:2411]	-1.0746359
CSE1L	chromosome segregation 1 like [Source:HGNC Symbol;Acc:HGNC:2431]	1.36635325
CSF1	colony stimulating factor 1 [Source:HGNC Symbol;Acc:HGNC:2432]	-1.859645067
CSF2	colony stimulating factor 2 [Source:HGNC Symbol;Acc:HGNC:2434]	-6.7446213
CSF2RB	colony stimulating factor 2 receptor beta common subunit [Source:HGNC Symbol;Acc:HGNC:2436]	-1.2695988
CSF3	colony stimulating factor 3 [Source:HGNC Symbol;Acc:HGNC:2438]	1.0935498
CSGALNACT1	chondroitin sulfate N-acetylgalactosaminyltransferase 1 [Source:HGNC Symbol;Acc:HGNC:24290]	1.1393949
CSMD2	CUB and Sushi multiple domains 2 [Source:HGNC Symbol;Acc:HGNC:19290]	1.078597
CSNK1G1	casein kinase 1 gamma 1 [Source:HGNC Symbol;Acc:HGNC:2454]	-1.1858975
CSNK1G2	casein kinase 1 gamma 2 [Source:HGNC Symbol;Acc:HGNC:2455]	-1.3353855
CSNK2A2	casein kinase 2 alpha 2 [Source:HGNC Symbol;Acc:HGNC:2459]	-1.1260507
CSRP1	cysteine and serine rich nuclear protein 1 [Source:HGNC Symbol;Acc:HGNC:14300]	-1.66625475
CSRP2	cysteine and glycine rich protein 2 [Source:HGNC Symbol;Acc:HGNC:2470]	-1.5023353
CSRP2BP	lysine acetyltransferase 14	1.4702252
CST3	cystatin C [Source:HGNC Symbol;Acc:HGNC:2475]	-1.2424277
CST6	cystatin E/M [Source:HGNC Symbol;Acc:HGNC:2478]	-1.0778985
CST8	cystatin 8 [Source:HGNC Symbol;Acc:HGNC:2480]	1.0998218
CT45A1	cancer/testis antigen family 45, member A1 [Source:HGNC Symbol;Acc:HGNC:33267]	1.1072483
CT1C	CTS telomere maintenance complex component 1 [Source:HGNC Symbol;Acc:HGNC:26169]	-1.363353
CTDNEP1	CTD nuclear envelope phosphatase 1 [Source:HGNC Symbol;Acc:HGNC:19085]	1.1867591
CTDSP1	CTD small phosphatase 1 [Source:HGNC Symbol;Acc:HGNC:21614]	1.4793745
CTDSP2	CTD small phosphatase 2 [Source:HGNC Symbol;Acc:HGNC:17077]	1.2208004
CTDSPL	CTD small phosphatase like [Source:HGNC Symbol;Acc:HGNC:16890]	1.2641559
CTH	cystathione gamma-lyase [Source:HGNC Symbol;Acc:HGNC:2501]	1.2443477
CTHRC1	collagen triple helix repeat containing 1 [Source:HGNC Symbol;Acc:HGNC:18831]	-1.9386941
CTLA4	cytotoxic T-lymphocyte associated protein 4 [Source:HGNC Symbol;Acc:HGNC:2505]	1.1018863
CTTNA2	catenin alpha 2 [Source:HGNC Symbol;Acc:HGNC:2510]	1.0531777
CTNNAL1	catenin alpha like 1 [Source:HGNC Symbol;Acc:HGNC:2512]	1.66667547
CTNDN1	catenin delta 1 [Source:HGNC Symbol;Acc:HGNC:2515]	1.0600032
CTNDN2	catenin delta 2 [Source:HGNC Symbol;Acc:HGNC:2516]	-1.0800072
CTRL	chymotrypsin like [Source:HGNC Symbol;Acc:HGNC:2524]	-1.1494532
CTSB	cathepsin B [Source:HGNC Symbol;Acc:HGNC:2527]	-1.2449077
CTSC	cathepsin C [Source:HGNC Symbol;Acc:HGNC:2528]	1.3861682
CTSE	cathepsin E [Source:HGNC Symbol;Acc:HGNC:2530]	-1.0979679
CTSG	cathepsin G [Source:HGNC Symbol;Acc:HGNC:2532]	-1.1364323
CTSK	cathepsin K [Source:HGNC Symbol;Acc:HGNC:2536]	-1.837117
CTSW	cathepsin W [Source:HGNC Symbol;Acc:HGNC:2546]	1.1355982
CUL1	cullin 1 [Source:HGNC Symbol;Acc:HGNC:2551]	1.1490462
CUL3	cullin 3 [Source:HGNC Symbol;Acc:HGNC:2553]	1.1502621
CUL4B	cullin 4B [Source:HGNC Symbol;Acc:HGNC:2555]	1.5395381
CUTC	cutC copper transporter [Source:HGNC Symbol;Acc:HGNC:24271]	1.0982262
CWH43	cell wall biogenesis 43 C-terminal homolog [Source:HGNC Symbol;Acc:HGNC:26133]	1.0515262
CX3CL1	C-X3-C motif chemokine ligand 1 [Source:HGNC Symbol;Acc:HGNC:10647]	-7.8765554
CXADR	coxsackievirus and adenovirus receptor [Source:HGNC Symbol;Acc:HGNC:2559]	1.3749342
CXCL1	C-X-C motif chemokine ligand 1 [Source:HGNC Symbol;Acc:HGNC:4602]	-9.5333325
CXCL11	C-X-C motif chemokine ligand 11 [Source:HGNC Symbol;Acc:HGNC:10638]	-1.2888006
CXCL12	C-X-C motif chemokine ligand 12 [Source:HGNC Symbol;Acc:HGNC:10672]	-1.0890541
CXCL13	C-X-C motif chemokine ligand 13 [Source:HGNC Symbol;Acc:HGNC:10639]	1.0681758
CXCL14	C-X-C motif chemokine ligand 14 [Source:HGNC Symbol;Acc:HGNC:10640]	1.1251385
CXCL2	C-X-C motif chemokine ligand 2 [Source:HGNC Symbol;Acc:HGNC:4603]	-12.50969735
CXCL3	C-X-C motif chemokine ligand 3 [Source:HGNC Symbol;Acc:HGNC:4604]	-5.859939
CXCL6	C-X-C motif chemokine ligand 6 [Source:HGNC Symbol;Acc:HGNC:10643]	-1.4627546
CXCR1	C-X-C motif chemokine receptor 1 [Source:HGNC Symbol;Acc:HGNC:6026]	-1.1601862
CXCR3	C-X-C motif chemokine receptor 3 [Source:HGNC Symbol;Acc:HGNC:4540]	-1.0888819
CXCR4	C-X-C motif chemokine receptor 4 [Source:HGNC Symbol;Acc:HGNC:2561]	1.108087
CXCR6	C-X-C motif chemokine receptor 6 [Source:HGNC Symbol;Acc:HGNC:16647]	1.055194
CXCR7	atypical chemokine receptor 3	-14.334749
Cxorf18	SPANXA2 overlapping transcript 1	1.095253
Cxorf21	chromosome X open reading frame 21 [Source:HGNC Symbol;Acc:HGNC:25667]	1.1078659

CXorf36	chromosome X open reading frame 36 [Source:HGNC Symbol;Acc:HGNC:25866]	-1.1323607
CXorf38	chromosome X open reading frame 38 [Source:HGNC Symbol;Acc:HGNC:28589]	-1.2250423
CXorf51	chromosome X open reading frame 51A	1.0736921
CXorf64	proline rich 32	-1.1249257
CXXC5	CXXC finger protein 5 [Source:HGNC Symbol;Acc:HGNC:26943]	-1.5005684
CYB5A	cytochrome b5 type A [Source:HGNC Symbol;Acc:HGNC:2570]	-1.29712405
CYB5D1	cytochrome b5 domain containing 1 [Source:HGNC Symbol;Acc:HGNC:26516]	1.10247
CYB5R2	cytochrome b5 reductase 2 [Source:HGNC Symbol;Acc:HGNC:24376]	-1.6740136
CYB5R3	cytochrome b5 reductase 3 [Source:HGNC Symbol;Acc:HGNC:2873]	1.3956097
CYB5R4	cytochrome b5 reductase 4 [Source:HGNC Symbol;Acc:HGNC:20147]	1.1720557
CYB5RL	cytochrome b5 reductase like [Source:HGNC Symbol;Acc:HGNC:32220]	1.0829794
CYBRD1	cytochrome b reductase 1 [Source:HGNC Symbol;Acc:HGNC:20797]	1.2041178
CYC1	cytochrome c1 [Source:HGNC Symbol;Acc:HGNC:2579]	-1.2096454
CYFIP1	cytoplasmic FMR1 interacting protein 1 [Source:HGNC Symbol;Acc:HGNC:13759]	-1.1765275
CYLD	CYLD lysine 63 ubiquitinase [Source:HGNC Symbol;Acc:HGNC:2584]	-1.3167466
CYorf15B	taxilin gamma pseudogene, Y-linked	1.0742285
CYP11A1	cytochrome P450 family 11 subfamily A member 1 [Source:HGNC Symbol;Acc:HGNC:2590]	-1.3378371
CYP19A1	cytochrome P450 family 19 subfamily A member 1 [Source:HGNC Symbol;Acc:HGNC:2594]	1.1069825
CYP1A1	cytochrome P450 family 1 subfamily A member 1 [Source:HGNC Symbol;Acc:HGNC:2595]	1.3860935
CYP26B1	cytochrome P450 family 26 subfamily B member 1 [Source:HGNC Symbol;Acc:HGNC:20581]	1.0655626
CYP286	cytochrome P450 family 2 subfamily B member 6 [Source:HGNC Symbol;Acc:HGNC:2615]	-1.1604466
CYP2C18	cytochrome P450 family 2 subfamily C member 18 [Source:HGNC Symbol;Acc:HGNC:2620]	1.0651631
CYP2C19	cytochrome P450 family 2 subfamily C member 19 [Source:HGNC Symbol;Acc:HGNC:2621]	1.223847
CYP2R1	cytochrome P450 family 2 subfamily R member 1 [Source:HGNC Symbol;Acc:HGNC:20580]	1.2569096
CYP2U1	cytochrome P450 family 2 subfamily U member 1 [Source:HGNC Symbol;Acc:HGNC:20582]	1.2846699
CYP4A11	cytochrome P450 family 4 subfamily A member 11 [Source:HGNC Symbol;Acc:HGNC:2642]	-1.0868634
CYP4A22	cytochrome P450 family 4 subfamily A member 22 [Source:HGNC Symbol;Acc:HGNC:20575]	-1.1514848
CYP4V2	cytochrome P450 family 4 subfamily V member 2 [Source:HGNC Symbol;Acc:HGNC:23198]	1.1050348
CYSLTR1	cysteinyl leukotriene receptor 1 [Source:HGNC Symbol;Acc:HGNC:17451]	-1.1258904
CYTH1	cytohesin 1 [Source:HGNC Symbol;Acc:HGNC:9501]	-1.4833946
CYTH3	cytohesin 3 [Source:HGNC Symbol;Acc:HGNC:9504]	-1.1836414
CYTH4	cytohesin 4 [Source:HGNC Symbol;Acc:HGNC:9505]	-1.2447225
CYR1	cysteine and tyrosine rich 1 [Source:HGNC Symbol;Acc:HGNC:16274]	1.1770687
D2HGDH	D-2-hydroxyglutarate dehydrogenase [Source:HGNC Symbol;Acc:HGNC:28358]	1.2745272
DAAM2	dishevelled associated activator of morphogenesis 2 [Source:HGNC Symbol;Acc:HGNC:18143]	-1.1322964
DAB2IP	DAB2 interacting protein [Source:HGNC Symbol;Acc:HGNC:17294]	1.1102239
DACH1	dachshund family transcription factor 1 [Source:HGNC Symbol;Acc:HGNC:2663]	1.5632034
DACT2	dishevelled binding antagonist of beta catenin 2 [Source:HGNC Symbol;Acc:HGNC:21231]	1.097339
DACT3	dishevelled binding antagonist of beta catenin 3 [Source:HGNC Symbol;Acc:HGNC:30745]	1.3489164
DAD1	defender against cell death 1 [Source:HGNC Symbol;Acc:HGNC:2664]	-1.0709051
DAG1	dystroglycan 1 [Source:HGNC Symbol;Acc:HGNC:2666]	1.08992
DAGLB	diacylglycerol lipase beta [Source:HGNC Symbol;Acc:HGNC:28923]	1.2434747
DAK	triokinase and FMN cyclase	-1.1756042
DAND5	DAN domain BMP antagonist family member 5 [Source:HGNC Symbol;Acc:HGNC:26780]	1.1164163
DAPK2	death associated protein kinase 2 [Source:HGNC Symbol;Acc:HGNC:2675]	-2.6219275
DAPK3	death associated protein kinase 3 [Source:HGNC Symbol;Acc:HGNC:2676]	-1.7319168
DAPL1	death associated protein like 1 [Source:HGNC Symbol;Acc:HGNC:21490]	1.1656348
DARC	atypical chemokine receptor 1 (Duffy blood group)	-1.2593654
DARS	aspartyl-tRNA synthetase [Source:HGNC Symbol;Acc:HGNC:2678]	1.16403
DAXX	death domain associated protein [Source:HGNC Symbol;Acc:HGNC:2681]	-1.4579426
DAZZ	deleted in azoospermia 2 [Source:HGNC Symbol;Acc:HGNC:15964]	1.060838
DAZAP1	DAZ associated protein 1 [Source:HGNC Symbol;Acc:HGNC:2683]	1.0811741
DBC1	cell cycle and apoptosis regulator 2	1.0608325
DBIL5P2	diazepam binding inhibitor-like 5 pseudogene 2 [Source:HGNC Symbol;Acc:HGNC:38518]	-1.190495
DBT	dihydrolipoamide branched chain transacylase E2 [Source:HGNC Symbol;Acc:HGNC:2698]	1.0566113
DCAF10	DDB1 and CUL4 associated factor 10 [Source:HGNC Symbol;Acc:HGNC:23686]	-1.1582558
DCAF12L1	DDB1 and CUL4 associated factor 12 like 1 [Source:HGNC Symbol;Acc:HGNC:29395]	1.348303
DCAF12L2	DDB1 and CUL4 associated factor 12 like 2 [Source:HGNC Symbol;Acc:HGNC:32950]	-1.1793085
DCAF17	DDB1 and CUL4 associated factor 17 [Source:HGNC Symbol;Acc:HGNC:25784]	1.4117918
DCAFS	DDB1 and CUL4 associated factor 5 [Source:HGNC Symbol;Acc:HGNC:20224]	-1.160475
DCAF6	DDB1 and CUL4 associated factor 6 [Source:HGNC Symbol;Acc:HGNC:30002]	-1.0571734
DCAF8	DDB1 and CUL4 associated factor 8 [Source:HGNC Symbol;Acc:HGNC:24891]	-1.3338059
DCAF8BL1	DDB1 and CUL4 associated factor 8 like 1 [Source:HGNC Symbol;Acc:HGNC:31810]	-1.0860978
DCBLD1	discoidin, CUB and LCL domain containing 1 [Source:HGNC Symbol;Acc:HGNC:21479]	1.4889072
DCBLD2	discoidin, CUB and LCL domain containing 2 [Source:HGNC Symbol;Acc:HGNC:24627]	1.5104313
DDCD28	doublecortin domain containing 2B [Source:HGNC Symbol;Acc:HGNC:32576]	1.0810536
DCDC5	doublecortin domain containing 5	1.0958408
DCHS1	dachsous cadherin-related 1 [Source:HGNC Symbol;Acc:HGNC:13681]	1.1983539
DCLRE1A	DNA cross-link repair 1A [Source:HGNC Symbol;Acc:HGNC:17660]	1.4012119
DCN	decorin [Source:HGNC Symbol;Acc:HGNC:2705]	1.0989908
DCP1B	decapping mRNA 1B [Source:HGNC Symbol;Acc:HGNC:24451]	1.1064767
DCST2	DC-STAMP domain containing 2 [Source:HGNC Symbol;Acc:HGNC:26562]	-1.1777972
DCTN5	dynactin subunit 5 [Source:HGNC Symbol;Acc:HGNC:24594]	-1.2802501
DCUN1D3	defective in cullin neddylation 1 domain containing 3 [Source:HGNC Symbol;Acc:HGNC:28734]	-1.4613856
DDB1	damage specific DNA binding protein 1 [Source:HGNC Symbol;Acc:HGNC:2717]	-1.1855358
DDB2	damage specific DNA binding protein 2 [Source:HGNC Symbol;Acc:HGNC:2718]	1.1020458
DDC	dopa decarboxylase [Source:HGNC Symbol;Acc:HGNC:2719]	1.1106675
DDIT3	DNA damage inducible transcript 3 [Source:HGNC Symbol;Acc:HGNC:2726]	-1.2038928
DDN	dendrin [Source:HGNC Symbol;Acc:HGNC:24458]	-1.0941209
DRRGK1	DDRGK domain containing 1 [Source:HGNC Symbol;Acc:HGNC:16110]	-1.2230808
DTL	D-dopachrome tautomerase-like [Source:HGNC Symbol;Acc:HGNC:33446]	-1.1296269
DXD1	DEAD/H-box helicase 1 [Source:HGNC Symbol;Acc:HGNC:2734]	1.2417631
DXD10	DEAD-box helicase 10 [Source:HGNC Symbol;Acc:HGNC:2735]	1.4677984
DXD11	DEAD/H-box helicase 11 [Source:HGNC Symbol;Acc:HGNC:2736]	1.2632715
DXD19B	DEAD-box helicase 19B [Source:HGNC Symbol;Acc:HGNC:2742]	-1.136775
DXD27	DEAD-box helicase 27 [Source:HGNC Symbol;Acc:HGNC:15837]	-1.1201895

DDX31	DEAD-box helicase 31 [Source:HGNC Symbol;Acc:HGNC:16715]	-1.1445807
DDX39A	DEAD-box helicase 39A [Source:HGNC Symbol;Acc:HGNC:17821]	-1.1351616
DDX50	DEAD-box helicase 50 [Source:HGNC Symbol;Acc:HGNC:17906]	1.1113956
DDX55	DEAD-box helicase 55 [Source:HGNC Symbol;Acc:HGNC:20085]	1.2344874
DDX58	DEXD/H-box helicase 58 [Source:HGNC Symbol;Acc:HGNC:19102]	-2.0350335
DDX6	DEAD-box helicase 6 [Source:HGNC Symbol;Acc:HGNC:2747]	1.494621
DEDD	death effector domain containing [Source:HGNC Symbol;Acc:HGNC:2755]	-1.4066712
DEF6	DEF6, guanine nucleotide exchange factor [Source:HGNC Symbol;Acc:HGNC:2760]	-1.1234981
DEFA7P	defensin alpha 7, pseudogene [Source:HGNC Symbol;Acc:HGNC:31798]	-1.1195017
DEFB1	defensin beta 1 [Source:HGNC Symbol;Acc:HGNC:2766]	-1.1559272
DEFB103A	defensin beta 103A [Source:HGNC Symbol;Acc:HGNC:15967]	1.1889591
DEFB109P1	defensin beta 109 pseudogene 1 [Source:HGNC Symbol;Acc:HGNC:18090]	-1.0843436
DEFB109P1B	defensin beta 109 pseudogene 1B [Source:HGNC Symbol;Acc:HGNC:33469]	1.1380223
DEFB110	defensin beta 110 [Source:HGNC Symbol;Acc:HGNC:18091]	-1.0916909
DEFB114	defensin beta 114 [Source:HGNC Symbol;Acc:HGNC:18095]	1.134733
DEFB119	defensin beta 119 [Source:HGNC Symbol;Acc:HGNC:18099]	1.1038206
DEFB121	defensin beta 121 [Source:HGNC Symbol;Acc:HGNC:18101]	-1.0653747
DEFB125	defensin beta 125 [Source:HGNC Symbol;Acc:HGNC:18105]	1.0649292
DEFB126	defensin beta 126 [Source:HGNC Symbol;Acc:HGNC:15900]	-1.0762001
DEFB127	defensin beta 127 [Source:HGNC Symbol;Acc:HGNC:16206]	-1.0581785
DEFB129	defensin beta 129 [Source:HGNC Symbol;Acc:HGNC:16218]	-1.1291511
DEFB131	defensin beta 131 [Source:HGNC Symbol;Acc:HGNC:18108]	1.0855083
DENN2C	DENN domain containing 2C [Source:HGNC Symbol;Acc:HGNC:24748]	1.1418628
DENN2D	DENN domain containing 2D [Source:HGNC Symbol;Acc:HGNC:26192]	-1.9576846
DENN3	DENN domain containing 3 [Source:HGNC Symbol;Acc:HGNC:29134]	-1.368438333
DEPDC1	DEP domain containing 1 [Source:HGNC Symbol;Acc:HGNC:22949]	1.7942548
DEPTOR	DEP domain containing MTOR-interacting protein [Source:HGNC Symbol;Acc:HGNC:22953]	-1.0528218
DEXI	Dexi homolog [Source:HGNC Symbol;Acc:HGNC:13267]	-1.1713661
DFNB59	deafness, autosomal recessive 59 [Source:HGNC Symbol;Acc:HGNC:29502]	1.0894096
DGKA	diacylglycerol kinase alpha [Source:HGNC Symbol;Acc:HGNC:2849]	1.247584
DGKD	diacylglycerol kinase delta [Source:HGNC Symbol;Acc:HGNC:2851]	-1.6001997
DGKE	diacylglycerol kinase epsilon [Source:HGNC Symbol;Acc:HGNC:2852]	1.1149938
DGUOK	deoxyguanosine kinase [Source:HGNC Symbol;Acc:HGNC:2858]	-1.0898392
DHCR24	24-dehydrocholesterol reductase [Source:HGNC Symbol;Acc:HGNC:2859]	1.2931651
DHCR7	7-dehydrocholesterol reductase [Source:HGNC Symbol;Acc:HGNC:2860]	-1.2607217
DHDDS	dehydrololichyl diphosphate synthase subunit [Source:HGNC Symbol;Acc:HGNC:20603]	-1.1430659
DHFR	dihydrofolate reductase [Source:HGNC Symbol;Acc:HGNC:2861]	-1.0714201
DHRS3	dehydrogenase/reductase 3 [Source:HGNC Symbol;Acc:HGNC:17693]	-1.5317779
DHRS4	dehydrogenase/reductase 4 [Source:HGNC Symbol;Acc:HGNC:16985]	-1.0874914
DHRS7	dehydrogenase/reductase 7 [Source:HGNC Symbol;Acc:HGNC:21524]	-1.1704454
DHRSX	dehydrogenase/reductase X-linked [Source:HGNC Symbol;Acc:HGNC:18399]	-1.1266266
DHTKD1	dehydrogenase E1 and transketolase domain containing 1 [Source:HGNC Symbol;Acc:HGNC:23537]	-1.4028864
DHX29	DEAH-box helicase 29 [Source:HGNC Symbol;Acc:HGNC:15815]	1.4496934
DHX32	DEAH-box helicase 32 (putative) [Source:HGNC Symbol;Acc:HGNC:16717]	1.1722004
DHX57	DEAH-box helicase 57 [Source:HGNC Symbol;Acc:HGNC:20086]	1.1725931
DHX58	DEAH-box helicase 58 [Source:HGNC Symbol;Acc:HGNC:29517]	-1.6872457
DIABLO	diablo IAP-binding mitochondrial protein [Source:HGNC Symbol;Acc:HGNC:21528]	-1.0802038
DIDO1	death inducer-obliterator 1 [Source:HGNC Symbol;Acc:HGNC:2680]	-1.250554667
DIP2A	disco interacting protein 2 homolog A [Source:HGNC Symbol;Acc:HGNC:17217]	-1.1740835
DIRAS2	DIRAS family GTPase 2 [Source:HGNC Symbol;Acc:HGNC:19323]	1.0895224
DIRC2	disrupted in renal carcinoma 2 [Source:HGNC Symbol;Acc:HGNC:16628]	-1.14381065
DIS3	3 homolog, exosome endoribonuclease and 3'-5' exoribonuclease [Source:HGNC Symbol;Acc:HGNC:206	1.176632
DIS3L	DIS3 like exosome 3'-5' exoribonuclease [Source:HGNC Symbol;Acc:HGNC:28698]	1.3491099
DISP1	dispatched RND transporter family member 1 [Source:HGNC Symbol;Acc:HGNC:19711]	1.0960468
DIXDC1	DIX domain containing 1 [Source:HGNC Symbol;Acc:HGNC:23695]	1.1372764
DKFZP434K028	uncharacterized LOC26070	-1.077371
DKFZP434L187	uncharacterized LOC26082	1.1501323
DKFZP686I15217	long intergenic non-protein coding RNA 1011	-1.1108372
DKFZp686O1327	testis expressed 41 (non-protein coding)	-1.3920181
DKK2	dickkopf WNT signaling pathway inhibitor 2 [Source:HGNC Symbol;Acc:HGNC:2892]	1.0658523
DKK3	dickkopf WNT signaling pathway inhibitor 3 [Source:HGNC Symbol;Acc:HGNC:2893]	-1.2618476
DLAT	dihydrolipoamide S-acetyltransferase [Source:HGNC Symbol;Acc:HGNC:2896]	1.3758544
DLEU1	deleted in lymphocytic leukemia 1 [Source:HGNC Symbol;Acc:HGNC:13747]	1.1873877
DLEU2L	deleted in lymphocytic leukemia 2-like [Source:HGNC Symbol;Acc:HGNC:13225]	1.0803314
DLGAP3	DLG associated protein 3 [Source:HGNC Symbol;Acc:HGNC:30368]	-1.1644888
DLGAP4	DLG associated protein 4 [Source:HGNC Symbol;Acc:HGNC:24476]	-1.1471112
DLGAP5	DLG associated protein 5 [Source:HGNC Symbol;Acc:HGNC:16864]	1.671802
DLK2	delta like non-canonical Notch ligand 2 [Source:HGNC Symbol;Acc:HGNC:21113]	-1.2348998
DLL1	delta like canonical Notch ligand 1 [Source:HGNC Symbol;Acc:HGNC:2908]	1.0888776
DLX2	distal-less homeobox 2 [Source:HGNC Symbol;Acc:HGNC:2915]	1.0856155
DLX5	distal-less homeobox 5 [Source:HGNC Symbol;Acc:HGNC:2918]	1.0703852
DMD	dystrophin [Source:HGNC Symbol;Acc:HGNC:2928]	1.1004931
DMRTA1	DMRT like family A1 [Source:HGNC Symbol;Acc:HGNC:13826]	1.1460854
DMXL2	Dmx like 2 [Source:HGNC Symbol;Acc:HGNC:2938]	1.1173317
DNAAF1	dynein axonemal assembly factor 1 [Source:HGNC Symbol;Acc:HGNC:30539]	1.1140326
DNAH10	dynein axonemal heavy chain 10 [Source:HGNC Symbol;Acc:HGNC:2941]	1.1869098
DNAH100S	dynein axonemal heavy chain 10 opposite strand [Source:HGNC Symbol;Acc:HGNC:37121]	-1.1655846
DNAH17	dynein axonemal heavy chain 17 [Source:HGNC Symbol;Acc:HGNC:2946]	1.12843
DNAH2	dynein axonemal heavy chain 2 [Source:HGNC Symbol;Acc:HGNC:2948]	-1.1530064
DNAI1	dynein axonemal intermediate chain 1 [Source:HGNC Symbol;Acc:HGNC:2954]	-1.1280396
DNAJ1	DnaJ heat shock protein family (Hsp40) member A1 [Source:HGNC Symbol;Acc:HGNC:5229]	-1.666193
DNAJA1P5	1aJ heat shock protein family (Hsp40) member A1 pseudogene 5 [Source:HGNC Symbol;Acc:HGNC:3934	-1.5662454
DNAJ4B	DnaJ heat shock protein family (Hsp40) member B4 [Source:HGNC Symbol;Acc:HGNC:14886]	2.4465613
DNAJ5B	DnaJ heat shock protein family (Hsp40) member B5 [Source:HGNC Symbol;Acc:HGNC:14887]	-1.2877755
DNAJ7	DnaJ heat shock protein family (Hsp40) member B7 [Source:HGNC Symbol;Acc:HGNC:24986]	1.1513389
DNAJC2	DnaJ heat shock protein family (Hsp40) member C2 [Source:HGNC Symbol;Acc:HGNC:13192]	1.4854336

DNAJC5	DnaJ heat shock protein family (Hsp40) member C5 [Source:HGNC Symbol;Acc:HGNC:16235]	-1.2373856
DNAJC5G	DnaJ heat shock protein family (Hsp40) member C5 gamma [Source:HGNC Symbol;Acc:HGNC:24844]	-1.0776639
DNAJC7	DnaJ heat shock protein family (Hsp40) member C7 [Source:HGNC Symbol;Acc:HGNC:12392]	1.2758703
DND1	DND microRNA-mediated repression inhibitor 1 [Source:HGNC Symbol;Acc:HGNC:23799]	1.1042858
DNER	delta/notch like EGF repeat containing [Source:HGNC Symbol;Acc:HGNC:24456]	1.0853204
DNHD1	dynein heavy chain domain 1 [Source:HGNC Symbol;Acc:HGNC:26532]	1.0947062
DNM2	dynamin 2 [Source:HGNC Symbol;Acc:HGNC:2974]	1.2012839
DNM3	dynamin 3 [Source:HGNC Symbol;Acc:HGNC:29125]	1.0869591
DNMT3A	DNA methyltransferase 3 alpha [Source:HGNC Symbol;Acc:HGNC:2978]	-1.3591165
DNMT3B	DNA methyltransferase 3 beta [Source:HGNC Symbol;Acc:HGNC:2979]	1.1827402
DNMT3L	DNA methyltransferase 3 like [Source:HGNC Symbol;Acc:HGNC:2980]	-1.0724828
DNPEP	aspartyl aminopeptidase [Source:HGNC Symbol;Acc:HGNC:2981]	-1.320053
DOCK6	dedicator of cytokinesis 6 [Source:HGNC Symbol;Acc:HGNC:19189]	1.1956887
DOCK7	dedicator of cytokinesis 7 [Source:HGNC Symbol;Acc:HGNC:19190]	1.5407163
DOCK9	dedicator of cytokinesis 9 [Source:HGNC Symbol;Acc:HGNC:14132]	-1.223552
DOK4	docking protein 4 [Source:HGNC Symbol;Acc:HGNC:19868]	1.3267583
DOK5	docking protein 5 [Source:HGNC Symbol;Acc:HGNC:16173]	-1.7620904
DOK7	docking protein 7 [Source:HGNC Symbol;Acc:HGNC:26594]	1.0998422
DONSON	downstream neighbor of SON [Source:HGNC Symbol;Acc:HGNC:2993]	1.1744759
DOT1L	DOT1 like histone lysine methyltransferase [Source:HGNC Symbol;Acc:HGNC:24948]	-1.2630701
DPCD	deleted in primary ciliary dyskinesia homolog (mouse) [Source:HGNC Symbol;Acc:HGNC:24542]	-1.1380336
DPF2	double PHD fingers 2 [Source:HGNC Symbol;Acc:HGNC:9964]	1.1379308
DPF3	double PHD fingers 3 [Source:HGNC Symbol;Acc:HGNC:17427]	-1.517012925
DPH3	diphthamide biosynthesis 3 [Source:HGNC Symbol;Acc:HGNC:27717]	-1.1696813
DPH3P1	diphthamide biosynthesis 3 pseudogene 1 [Source:HGNC Symbol;Acc:HGNC:16136]	-1.1200739
DPH5	diphthamide biosynthesis 5 [Source:HGNC Symbol;Acc:HGNC:24270]	-1.206536
DP9P	dipeptidyl peptidase 9 [Source:HGNC Symbol;Acc:HGNC:18648]	-1.1943061
DPT	dermatopontin [Source:HGNC Symbol;Acc:HGNC:3011]	-1.217323
DPY19L1	dpy-19 like 1 [Source:HGNC Symbol;Acc:HGNC:22205]	1.2373129
DPY19L2P2	DPY19L2 pseudogene 2 [Source:HGNC Symbol;Acc:HGNC:21764]	1.1666224
DQX1	DEAQ-box RNA dependent ATPase 1 [Source:HGNC Symbol;Acc:HGNC:20410]	-1.133204
DR1	down-regulator of transcription 1 [Source:HGNC Symbol;Acc:HGNC:3017]	-1.3932658
DRAM1	DNA damage regulated autophagy modulator 1 [Source:HGNC Symbol;Acc:HGNC:25645]	-1.6728582
DRD4	dopamine receptor D4 [Source:HGNC Symbol;Acc:HGNC:3025]	1.1841228
DRD5	dopamine receptor D5 [Source:HGNC Symbol;Acc:HGNC:3026]	-1.1729592
DSCAM	DS cell adhesion molecule [Source:HGNC Symbol;Acc:HGNC:3039]	-1.1684315
DSCR10	Down syndrome critical region 10 (non-protein coding) [Source:HGNC Symbol;Acc:HGNC:16302]	-1.2796013
DSCR3	DSCR3 arrestin fold containing [Source:HGNC Symbol;Acc:HGNC:3044]	-1.110164
DSCR8	Down syndrome critical region 8 [Source:HGNC Symbol;Acc:HGNC:16707]	1.097571
DSE	dermatan sulfate epimerase [Source:HGNC Symbol;Acc:HGNC:21144]	-1.4986777
DSEL	dermatan sulfate epimerase-like [Source:HGNC Symbol;Acc:HGNC:18144]	-1.2486271
DSPP	dentin sialophosphoprotein [Source:HGNC Symbol;Acc:HGNC:3054]	1.07887185
DSTYK	dual serine/threonine and tyrosine protein kinase [Source:HGNC Symbol;Acc:HGNC:29043]	-1.1395392
DTL	denticleless E3 ubiquitin protein ligase homolog [Source:HGNC Symbol;Acc:HGNC:30288]	1.5213585
DTNA	dystrobrevin alpha [Source:HGNC Symbol;Acc:HGNC:3057]	1.0739483
DTX2P1-UPK3BP1-PMS2P11'X2P1-UPK3BP1-PMS2P11	readthrough, transcribed pseudogene [Source:HGNC Symbol;Acc:HGNC:4236]	-1.1842337
DTX3	deltex E3 ubiquitin ligase 3 [Source:HGNC Symbol;Acc:HGNC:24457]	1.1237551
DTX3L	deltex E3 ubiquitin ligase 3L [Source:HGNC Symbol;Acc:HGNC:30323]	-1.88932
DTYMK	deoxythymidine kinase [Source:HGNC Symbol;Acc:HGNC:3061]	-1.0985533
DUS1L	dihydrouridine synthase 1 like [Source:HGNC Symbol;Acc:HGNC:30086]	-1.1729836
DUSP11	dual specificity phosphatase 11 [Source:HGNC Symbol;Acc:HGNC:3066]	-1.1125304
DUSP14	dual specificity phosphatase 14 [Source:HGNC Symbol;Acc:HGNC:17007]	1.1705328
DUSP16	dual specificity phosphatase 16 [Source:HGNC Symbol;Acc:HGNC:17909]	-1.1610054
DUSP22	dual specificity phosphatase 22 [Source:HGNC Symbol;Acc:HGNC:16077]	-1.1626757
DUSP23	dual specificity phosphatase 23 [Source:HGNC Symbol;Acc:HGNC:21480]	1.3084495
DUSP27	dual specificity phosphatase 27 (putative) [Source:HGNC Symbol;Acc:HGNC:25034]	-1.0605184
DUSP3	dual specificity phosphatase 3 [Source:HGNC Symbol;Acc:HGNC:3069]	-1.4581567
DUSP4	dual specificity phosphatase 4 [Source:HGNC Symbol;Acc:HGNC:3070]	1.9665419
DUSP5	dual specificity phosphatase 5 [Source:HGNC Symbol;Acc:HGNC:3071]	-1.6911609
DUSP8	dual specificity phosphatase 8 [Source:HGNC Symbol;Acc:HGNC:3074]	-1.2854617
DUXA	double homeobox A [Source:HGNC Symbol;Acc:HGNC:32179]	-1.1215689
DVL1	dishevelled segment polarity protein 1 [Source:HGNC Symbol;Acc:HGNC:3084]	1.2205336
DVL2	dishevelled segment polarity protein 2 [Source:HGNC Symbol;Acc:HGNC:3086]	1.464206
DYNC1LI1	dynein cytoplasmic 1 light intermediate chain 1 [Source:HGNC Symbol;Acc:HGNC:18745]	1.2483132
DYNC2L1	dynein cytoplasmic 2 light intermediate chain 1 [Source:HGNC Symbol;Acc:HGNC:24595]	-1.1046063
DYNLRB1	dynein light chain roadblock-type 1 [Source:HGNC Symbol;Acc:HGNC:15468]	-1.1551585
DYNLT1	dynein light chain Tctex-type 1 [Source:HGNC Symbol;Acc:HGNC:11697]	-1.1994211
DYRK3	dual specificity tyrosine phosphorylation regulated kinase 3 [Source:HGNC Symbol;Acc:HGNC:3094]	-1.2630743
E2F4	E2F transcription factor 4 [Source:HGNC Symbol;Acc:HGNC:3118]	1.2095329
E2F8	E2F transcription factor 8 [Source:HGNC Symbol;Acc:HGNC:24727]	1.6150968
EAPP	E2F associated phosphoprotein [Source:HGNC Symbol;Acc:HGNC:19312]	1.1342822
EARS2	glutamyl-tRNA synthetase 2, mitochondrial [Source:HGNC Symbol;Acc:HGNC:29419]	1.2250125
EBF2	early B-cell factor 2 [Source:HGNC Symbol;Acc:HGNC:19090]	-1.1474425
EBF3	early B-cell factor 3 [Source:HGNC Symbol;Acc:HGNC:19087]	1.26155255
EBF4	early B-cell factor 4 [Source:HGNC Symbol;Acc:HGNC:29278]	-1.1566467
EBI3	Epstein-Barr virus induced 3 [Source:HGNC Symbol;Acc:HGNC:3129]	-7.3279433
EBP	emopamil binding protein (sterol isomerase) [Source:HGNC Symbol;Acc:HGNC:3133]	1.174145
EBPL	emopamil binding protein like [Source:HGNC Symbol;Acc:HGNC:18061]	1.286869
ECE1	endothelin converting enzyme 1 [Source:HGNC Symbol;Acc:HGNC:3146]	-1.1795846
ECE2	endothelin converting enzyme 2 [Source:HGNC Symbol;Acc:HGNC:13275]	-1.1198297
ECHDC1	ethylmalonyl-CoA decarboxylase 1 [Source:HGNC Symbol;Acc:HGNC:21489]	1.1304486
ECHS1	enoyl-CoA hydratase, short chain 1 [Source:HGNC Symbol;Acc:HGNC:3151]	-1.2449684
EDA	ectodysplasin A [Source:HGNC Symbol;Acc:HGNC:3157]	1.1657732
EDAR	ectodysplasin A receptor [Source:HGNC Symbol;Acc:HGNC:2895]	1.0503049
EDC3	enhancer of mRNA decapping 3 [Source:HGNC Symbol;Acc:HGNC:26114]	-1.3001764
EDC4	enhancer of mRNA decapping 4 [Source:HGNC Symbol;Acc:HGNC:17157]	-1.2234017

EDEM3	ER degradation enhancing alpha-mannosidase like protein 3 [Source:HGNC Symbol;Acc:HGNC:16787]	1.1182569
EDN3	endothelin 3 [Source:HGNC Symbol;Acc:HGNC:3178]	-1.1606373
EDNRA	endothelin receptor type A [Source:HGNC Symbol;Acc:HGNC:3179]	-1.147842
EFCAB2	EF-hand calcium binding domain 2 [Source:HGNC Symbol;Acc:HGNC:28166]	1.1428593
EFCAB4B	calcium release activated channel regulator 2A	-1.132601
EFCAB5	EF-hand calcium binding domain 5 [Source:HGNC Symbol;Acc:HGNC:24801]	1.0997818
EFCAB9	EF-hand calcium binding domain 9 [Source:HGNC Symbol;Acc:HGNC:34530]	-1.4674324
EFHA1	mitochondrial calcium uptake 2	1.4516697
EFHD2	EF-hand domain family member D2 [Source:HGNC Symbol;Acc:HGNC:28670]	-1.121864
EFNA1	ephrin A1 [Source:HGNC Symbol;Acc:HGNC:3221]	-4.0122566
EFNB1	ephrin B1 [Source:HGNC Symbol;Acc:HGNC:3226]	-2.367385
EFNB3	ephrin B3 [Source:HGNC Symbol;Acc:HGNC:3228]	-1.1695634
EFR3A	EFR3 homolog A [Source:HGNC Symbol;Acc:HGNC:28970]	1.5596405
EGFL7	EGF like domain multiple 7 [Source:HGNC Symbol;Acc:HGNC:20594]	1.8818054
EGFR	epidermal growth factor receptor [Source:HGNC Symbol;Acc:HGNC:3236]	-1.299817
EGLN1	egl-9 family hypoxia inducible factor 1 [Source:HGNC Symbol;Acc:HGNC:1232]	-1.338289
EGLN2	egl-9 family hypoxia inducible factor 2 [Source:HGNC Symbol;Acc:HGNC:14660]	-1.2420547
EGR1	early growth response 1 [Source:HGNC Symbol;Acc:HGNC:3238]	-1.3900765
EGR3	early growth response 3 [Source:HGNC Symbol;Acc:HGNC:3240]	-1.0901271
EHPBP1	EH domain binding protein 1 [Source:HGNC Symbol;Acc:HGNC:29144]	1.1500909
EHBP1L1	EH domain binding protein 1 like 1 [Source:HGNC Symbol;Acc:HGNC:30682]	-1.1504953
EHD1	EH domain containing 1 [Source:HGNC Symbol;Acc:HGNC:3242]	-2.0393786
EHD2	EH domain containing 2 [Source:HGNC Symbol;Acc:HGNC:3243]	1.1929669
EHD4	EH domain containing 4 [Source:HGNC Symbol;Acc:HGNC:3245]	-1.1534959
EHMT1	euchromatic histone lysine methyltransferase 1 [Source:HGNC Symbol;Acc:HGNC:24650]	-1.1291439
EHMT2	euchromatic histone lysine methyltransferase 2 [Source:HGNC Symbol;Acc:HGNC:14129]	1.3164546
EIF1AX	eukaryotic translation initiation factor 1A, X-linked [Source:HGNC Symbol;Acc:HGNC:3250]	1.3421187
EIF1B	eukaryotic translation initiation factor 1B [Source:HGNC Symbol;Acc:HGNC:30792]	-1.1926552
EIF2AK1	eukaryotic translation initiation factor 2 alpha kinase 1 [Source:HGNC Symbol;Acc:HGNC:24921]	-1.207122
EIF2C1	argonaute 1, RISC catalytic component	-1.1766923
EIF2C2	argonaute 2, RISC catalytic component	-1.4192165
EIF2C3	argonaute 3, RISC catalytic component	-1.2021523
EIF2S1	eukaryotic translation initiation factor 2 subunit alpha [Source:HGNC Symbol;Acc:HGNC:3265]	1.2025362
EIF3D	eukaryotic translation initiation factor 3 subunit D [Source:HGNC Symbol;Acc:HGNC:3278]	-1.2524226
EIF3E	eukaryotic translation initiation factor 3 subunit E [Source:HGNC Symbol;Acc:HGNC:3277]	1.657031
EIF3F	eukaryotic translation initiation factor 3 subunit F [Source:HGNC Symbol;Acc:HGNC:3275]	-1.065591
EIF4A1	eukaryotic translation initiation factor 4A1 [Source:HGNC Symbol;Acc:HGNC:3282]	1.1480283
EIF4A3	eukaryotic translation initiation factor 4A3 [Source:HGNC Symbol;Acc:HGNC:18683]	1.183338
EIF4E2	eukaryotic translation initiation factor 4E family member 2 [Source:HGNC Symbol;Acc:HGNC:3293]	-1.1510102
EIF4EBP1	eukaryotic translation initiation factor 4E binding protein 1 [Source:HGNC Symbol;Acc:HGNC:3288]	1.1354073
EIF4EBP2	eukaryotic translation initiation factor 4E binding protein 2 [Source:HGNC Symbol;Acc:HGNC:3289]	1.1208414
EIF4ENIF1	ukaryotic translation initiation factor 4E nuclear import factor 1 [Source:HGNC Symbol;Acc:HGNC:1668]	-1.1831337
EIF4H	eukaryotic translation initiation factor 4H [Source:HGNC Symbol;Acc:HGNC:12741]	-1.1992096
EIF5A	eukaryotic translation initiation factor 5A [Source:HGNC Symbol;Acc:HGNC:3300]	1.2836711
ELAVL2	ELAV like neuron-specific RNA binding protein 2 [Source:HGNC Symbol;Acc:HGNC:3313]	1.1683027
ELF4	E74 like ETS transcription factor 4 [Source:HGNC Symbol;Acc:HGNC:3319]	-1.3874252
ELK1	ELK1, ETS transcription factor [Source:HGNC Symbol;Acc:HGNC:3321]	1.1894788
ELL2	elongation factor for RNA polymerase II 2 [Source:HGNC Symbol;Acc:HGNC:17064]	-1.2212749
ELMO2	engulfment and cell motility 2 [Source:HGNC Symbol;Acc:HGNC:17233]	-1.1928166
ELN	elastin [Source:HGNC Symbol;Acc:HGNC:3327]	-1.1903949
ELOVL1	ELOVL fatty acid elongase 1 [Source:HGNC Symbol;Acc:HGNC:14118]	-1.1828214
ELOVL4	ELOVL fatty acid elongase 4 [Source:HGNC Symbol;Acc:HGNC:14415]	1.2773852
ELTD1	adhesion G protein-coupled receptor L4	1.60149285
EMCN	endomucin [Source:HGNC Symbol;Acc:HGNC:16041]	1.4838629
EMG1	EMG1, N1-specific pseudouridine methyltransferase [Source:HGNC Symbol;Acc:HGNC:16912]	-1.1863599
EMILIN3	elastin microfibril interfacer 3 [Source:HGNC Symbol;Acc:HGNC:16123]	-1.2361492
EML1	echinoderm microtubule associated protein like 1 [Source:HGNC Symbol;Acc:HGNC:3330]	1.1799785
EML3	echinoderm microtubule associated protein like 3 [Source:HGNC Symbol;Acc:HGNC:26666]	1.3895365
EML5	echinoderm microtubule associated protein like 5 [Source:HGNC Symbol;Acc:HGNC:18197]	1.1199621
EML6	echinoderm microtubule associated protein like 6 [Source:HGNC Symbol;Acc:HGNC:35412]	1.1467834
EMP3	epithelial membrane protein 3 [Source:HGNC Symbol;Acc:HGNC:3335]	-1.223551
EMX2OS	EMX2 opposite strand/antisense RNA [Source:HGNC Symbol;Acc:HGNC:18511]	1.060556
ENAH	enabled homolog (Drosophila) [Source:HGNC Symbol;Acc:HGNC:18271]	1.1233554
ENDOD1	endonuclease domain containing 1 [Source:HGNC Symbol;Acc:HGNC:29129]	1.3225248
ENG	endoglin [Source:HGNC Symbol;Acc:HGNC:3349]	1.2331437
ENHO	energy homeostasis associated [Source:HGNC Symbol;Acc:HGNC:24838]	-1.1172864
ENO2	enolase 2 [Source:HGNC Symbol;Acc:HGNC:3353]	1.228249
ENPP5	:tonucleotide pyrophosphatase/phosphodiesterase 5 (putative) [Source:HGNC Symbol;Acc:HGNC:1371'	1.0907967
ENTPD1	ectonucleoside triphosphate diphosphohydrolase 1 [Source:HGNC Symbol;Acc:HGNC:3363]	1.0548581
ENTPD2	ectonucleoside triphosphate diphosphohydrolase 2 [Source:HGNC Symbol;Acc:HGNC:3364]	-1.2220347
ENTPD5	ectonucleoside triphosphate diphosphohydrolase 5 [Source:HGNC Symbol;Acc:HGNC:3367]	1.0896422
ENTPD6	ectonucleoside triphosphate diphosphohydrolase 6 (putative) [Source:HGNC Symbol;Acc:HGNC:3368]	-1.1892891
ENTPD7	ectonucleoside triphosphate diphosphohydrolase 7 [Source:HGNC Symbol;Acc:HGNC:19745]	-1.1319438
EOMES	eomesodermin [Source:HGNC Symbol;Acc:HGNC:3372]	1.0848895
EP400NL	EP400 N-terminal like [Source:HGNC Symbol;Acc:HGNC:26602]	-1.1098138
EPB41L1	erythrocyte membrane protein band 4.1 like 1 [Source:HGNC Symbol;Acc:HGNC:3378]	-1.1830696
EPB49	dematin actin binding protein	1.3098614
EPC2	enhancer of polycomb homolog 2 [Source:HGNC Symbol;Acc:HGNC:24543]	1.2227528
EPHA2	EPH receptor A2 [Source:HGNC Symbol;Acc:HGNC:3386]	-1.2691249
EPHB4	EPH receptor B4 [Source:HGNC Symbol;Acc:HGNC:3395]	1.2669405
EPHX1	epoxide hydrolase 1 [Source:HGNC Symbol;Acc:HGNC:3401]	1.1209075
EPHX2	epoxide hydrolase 2 [Source:HGNC Symbol;Acc:HGNC:3402]	-1.0825481
EPM2A	:pilepsy, progressive myoclonus type 2A, Lafora disease (laforin) [Source:HGNC Symbol;Acc:HGNC:3413	-1.1401364
EPRS	glutamyl-prolyl-tRNA synthetase [Source:HGNC Symbol;Acc:HGNC:3418]	1.7862285
EPS8L1	EPS8 like 1 [Source:HGNC Symbol;Acc:HGNC:21295]	-2.1828158
ERCC5	ERCC excision repair 5, endonuclease [Source:HGNC Symbol;Acc:HGNC:3437]	1.5793844

ERCC6	ERCC excision repair 6, chromatin remodeling factor [Source:HGNC Symbol;Acc:HGNC:3438]	1.4538237
ERCC6L	RCC excision repair 6 like, spindle assembly checkpoint helicase [Source:HGNC Symbol;Acc:HGNC:2079]	1.2393249
ERF	ETS2 repressor factor [Source:HGNC Symbol;Acc:HGNC:3444]	1.4446235
ERI1	exoribonuclease 1 [Source:HGNC Symbol;Acc:HGNC:23994]	1.2119555
ERLEC1	endoplasmic reticulum lectin 1 [Source:HGNC Symbol;Acc:HGNC:25222]	1.2333854
ERLIN2	ER lipid raft associated 2 [Source:HGNC Symbol;Acc:HGNC:1356]	-1.1322606
ERP27	endoplasmic reticulum protein 27 [Source:HGNC Symbol;Acc:HGNC:26495]	1.0941213
ERP29	endoplasmic reticulum protein 29 [Source:HGNC Symbol;Acc:HGNC:13799]	1.1336172
ERRFI1	ERBB receptor feedback inhibitor 1 [Source:HGNC Symbol;Acc:HGNC:18185]	1.4890271
ERV3-1	endogenous retrovirus group 3 member 1 [Source:HGNC Symbol;Acc:HGNC:3454]	1.0638402
ERVV-2	endogenous retrovirus group V member 2 [Source:HGNC Symbol;Acc:HGNC:39051]	1.102484
ESAM	endothelial cell adhesion molecule [Source:HGNC Symbol;Acc:HGNC:17474]	1.197814
ESCO1	establishment of sister chromatid cohesion N-acetyltransferase 1 [Source:HGNC Symbol;Acc:HGNC:2464]	1.1774127
ESD	esterase D [Source:HGNC Symbol;Acc:HGNC:3465]	1.2406377
ETF1	eukaryotic translation termination factor 1 [Source:HGNC Symbol;Acc:HGNC:3477]	1.2201648
ETNK1	ethanolamine kinase 1 [Source:HGNC Symbol;Acc:HGNC:24649]	-1.1791266
ETNK2	ethanolamine kinase 2 [Source:HGNC Symbol;Acc:HGNC:25575]	1.1992302
ETS1	ETS proto-oncogene 1, transcription factor [Source:HGNC Symbol;Acc:HGNC:3488]	-1.9341439
ETS2	ETS proto-oncogene 2, transcription factor [Source:HGNC Symbol;Acc:HGNC:3489]	-1.6591127
ETV1	ETS variant 1 [Source:HGNC Symbol;Acc:HGNC:3490]	1.37350565
ETV3	ETS variant 3 [Source:HGNC Symbol;Acc:HGNC:3492]	-1.2142553
ETV3L	ETS variant 3 like [Source:HGNC Symbol;Acc:HGNC:33834]	-1.1681204
ETV6	ETS variant 6 [Source:HGNC Symbol;Acc:HGNC:3495]	-1.4474646
ETV7	ETS variant 7 [Source:HGNC Symbol;Acc:HGNC:18160]	-2.5817695
EVCl	EVC ciliary complex subunit 2 [Source:HGNC Symbol;Acc:HGNC:19747]	-1.30770775
EXO1	exonuclease 1 [Source:HGNC Symbol;Acc:HGNC:3511]	1.3401127
EXOC3	exocyst complex component 3 [Source:HGNC Symbol;Acc:HGNC:30378]	-1.0914062
EXOC3L2	exocyst complex component 3 like 2 [Source:HGNC Symbol;Acc:HGNC:30162]	1.2802544
EXOC3L4	exocyst complex component 3 like 4 [Source:HGNC Symbol;Acc:HGNC:20120]	-1.1522777
EXOC4	exocyst complex component 4 [Source:HGNC Symbol;Acc:HGNC:30389]	-1.0870023
EXOC6	exocyst complex component 6 [Source:HGNC Symbol;Acc:HGNC:23196]	1.5559857
EXOSC2	exosome component 2 [Source:HGNC Symbol;Acc:HGNC:17097]	1.1353625
EXT1	exostosin glycosyltransferase 1 [Source:HGNC Symbol;Acc:HGNC:3512]	-1.6120268
EYS	eyes shut homolog (Drosophila) [Source:HGNC Symbol;Acc:HGNC:21555]	1.12744795
EZR	ezrin [Source:HGNC Symbol;Acc:HGNC:12691]	-1.2226564
F11R	F11 receptor [Source:HGNC Symbol;Acc:HGNC:14685]	-1.3764684
F13A1	coagulation factor XIII A chain [Source:HGNC Symbol;Acc:HGNC:3531]	1.1117668
F13B	coagulation factor XIII B chain [Source:HGNC Symbol;Acc:HGNC:3534]	1.1365911
F2RL1	F2R like trypsin receptor 1 [Source:HGNC Symbol;Acc:HGNC:3538]	-2.863564
F3	coagulation factor III, tissue factor [Source:HGNC Symbol;Acc:HGNC:3541]	-4.0262837
FADS3	fatty acid desaturase 3 [Source:HGNC Symbol;Acc:HGNC:3576]	-1.3494232
FAM101A	family with sequence similarity 101 member A [Source:HGNC Symbol;Acc:HGNC:27051]	-2.4509072
FAM102A	family with sequence similarity 102 member A [Source:HGNC Symbol;Acc:HGNC:31419]	1.271664
FAM103A1	family with sequence similarity 103 member A1 [Source:HGNC Symbol;Acc:HGNC:31022]	-1.1619539
FAM106CP	family with sequence similarity 106 member C, pseudogene [Source:HGNC Symbol;Acc:HGNC:38396]	-1.0610504
FAM107A	family with sequence similarity 107 member A [Source:HGNC Symbol;Acc:HGNC:30827]	-1.1839452
FAM107B	family with sequence similarity 107 member B [Source:HGNC Symbol;Acc:HGNC:23726]	1.260671967
FAM108A1	abhydrolase domain containing 17A	1.1142707
FAM109A	family with sequence similarity 109 member A [Source:HGNC Symbol;Acc:HGNC:26509]	1.3533446
FAM110A	family with sequence similarity 110 member A [Source:HGNC Symbol;Acc:HGNC:16188]	-1.918569
FAM110C	family with sequence similarity 110 member C [Source:HGNC Symbol;Acc:HGNC:33340]	-1.1273499
FAM114A1	family with sequence similarity 114 member A1 [Source:HGNC Symbol;Acc:HGNC:25087]	-1.2067163
FAM115A	TRPM8 channel associated factor 1	1.3824047
FAM117A	family with sequence similarity 117 member A [Source:HGNC Symbol;Acc:HGNC:24179]	1.5592538
FAM117B	family with sequence similarity 117 member B [Source:HGNC Symbol;Acc:HGNC:14440]	1.3739785
FAM118A	family with sequence similarity 118 member A [Source:HGNC Symbol;Acc:HGNC:1313]	-1.6688662
FAM118B	family with sequence similarity 118 member B [Source:HGNC Symbol;Acc:HGNC:26110]	-1.3104504
FAM123B	APC membrane recruitment protein 1	-1.0628511
FAM124B	family with sequence similarity 124 member B [Source:HGNC Symbol;Acc:HGNC:26224]	1.5430545
FAM125B	multivesicular body subunit 12B	1.24662245
FAM129A	family with sequence similarity 129 member A [Source:HGNC Symbol;Acc:HGNC:16784]	-2.7730992
FAM134C	family with sequence similarity 134 member C [Source:HGNC Symbol;Acc:HGNC:27258]	-1.2070445
FAM138D	family with sequence similarity 138 member D [Source:HGNC Symbol;Acc:HGNC:33583]	1.1140243
FAM13A	family with sequence similarity 13 member A [Source:HGNC Symbol;Acc:HGNC:19367]	1.2420425
FAM13AOS	FAM13A antisense RNA 1	1.131773
FAM150B	family with sequence similarity 150 member B [Source:HGNC Symbol;Acc:HGNC:27683]	-1.448254
FAM156A	family with sequence similarity 156 member A [Source:HGNC Symbol;Acc:HGNC:30114]	1.1270336
FAM159A	family with sequence similarity 159 member A [Source:HGNC Symbol;Acc:HGNC:28757]	-1.3886821
FAM162B	family with sequence similarity 162 member B [Source:HGNC Symbol;Acc:HGNC:21549]	1.1003072
FAM165B	small integral membrane protein 11A	-1.1030816
FAM168B	family with sequence similarity 168 member B [Source:HGNC Symbol;Acc:HGNC:27016]	-1.1253661
FAM172BP	family with sequence similarity 172 member B, pseudogene [Source:HGNC Symbol;Acc:HGNC:34336]	-1.0506604
FAM174B	family with sequence similarity 174 member B [Source:HGNC Symbol;Acc:HGNC:34339]	2.1517942
FAM175A	family with sequence similarity 175 member A [Source:HGNC Symbol;Acc:HGNC:25829]	1.2244804
FAM184A	family with sequence similarity 184 member A [Source:HGNC Symbol;Acc:HGNC:20991]	-1.1058563
FAM185A	family with sequence similarity 185 member A [Source:HGNC Symbol;Acc:HGNC:22412]	1.1930611
FAM189A2	family with sequence similarity 189 member A2 [Source:HGNC Symbol;Acc:HGNC:24820]	-1.58587025
FAM189B	family with sequence similarity 189 member B [Source:HGNC Symbol;Acc:HGNC:1233]	1.0977932
FAM18B2-CDRT4	TVP23C-CDRT4 readthrough	1.131101
FAM194A	glutamate rich 6	-1.0867585
FAM198A	family with sequence similarity 198 member A [Source:HGNC Symbol;Acc:HGNC:24485]	1.125563
FAM19A1	γ with sequence similarity 19 member A1, C-C motif chemokine like [Source:HGNC Symbol;Acc:HGNC:2	1.0895251
FAM19A2	γ with sequence similarity 19 member A2, C-C motif chemokine like [Source:HGNC Symbol;Acc:HGNC:2	1.1190819
FAM19A4	γ with sequence similarity 19 member A4, C-C motif chemokine like [Source:HGNC Symbol;Acc:HGNC:2	-1.1012409
FAM204A	family with sequence similarity 204 member A [Source:HGNC Symbol;Acc:HGNC:25794]	-1.1335496
FAM20A	family with sequence similarity 20 member A [Source:HGNC Symbol;Acc:HGNC:23015]	-1.1926072

FAM20B	family with sequence similarity 20 member B [Source:HGNC Symbol;Acc:HGNC:23017]	1.1993611
FAM21C	family with sequence similarity 21 member C [Source:HGNC Symbol;Acc:HGNC:23414]	-1.1797668
FAM22A	NUT family member 2A	-1.1235532
FAM22D	NUT family member 2D	-1.150987
FAM26E	family with sequence similarity 26 member E [Source:HGNC Symbol;Acc:HGNC:21568]	1.1049467
FAM27A	family with sequence similarity 27 member C	1.3954761
FAM27E3	family with sequence similarity 27 member E3 [Source:HGNC Symbol;Acc:HGNC:28655]	1.9286112
FAM38A	piezo type mechanosensitive ion channel component 1	-1.3118521
FAM38B	piezo type mechanosensitive ion channel component 2	1.0849895
FAM43A	family with sequence similarity 43 member A [Source:HGNC Symbol;Acc:HGNC:26888]	1.1076658
FAM43B	family with sequence similarity 43 member B [Source:HGNC Symbol;Acc:HGNC:31791]	1.0879297
FAM45A	family with sequence similarity 45 member A [Source:HGNC Symbol;Acc:HGNC:31793]	1.25016075
FAM46B	family with sequence similarity 46 member B [Source:HGNC Symbol;Acc:HGNC:28273]	-1.3675963
FAM47A	family with sequence similarity 47 member A [Source:HGNC Symbol;Acc:HGNC:29962]	1.1372169
FAM48B2	SPT20 homolog, SAGA complex component-like 2	-1.0854527
FAM50B	family with sequence similarity 50 member B [Source:HGNC Symbol;Acc:HGNC:18789]	1.3184817
FAM59A	GRB2 associated regulator of MAPK1 subtype 1	1.0546161
FAM65A	family with sequence similarity 65 member A [Source:HGNC Symbol;Acc:HGNC:25836]	-1.6511898
FAM69A	family with sequence similarity 69 member A [Source:HGNC Symbol;Acc:HGNC:32213]	1.1170827
FAM69B	family with sequence similarity 69 member B [Source:HGNC Symbol;Acc:HGNC:28290]	1.1853181
FAM69C	family with sequence similarity 69 member C [Source:HGNC Symbol;Acc:HGNC:31729]	1.1429052
FAM72D	family with sequence similarity 72 member D [Source:HGNC Symbol;Acc:HGNC:33593]	1.2885058
FAM74A1	family with sequence similarity 74 member A1 [Source:HGNC Symbol;Acc:HGNC:32029]	1.6329926
FAM74A3	family with sequence similarity 74 member A3 [Source:HGNC Symbol;Acc:HGNC:32031]	1.3101009
FAM78A	family with sequence similarity 78 member A [Source:HGNC Symbol;Acc:HGNC:25465]	1.6823552
FAM82A1	regulator of microtubule dynamics 2	1.149435
FAM82B	regulator of microtubule dynamics 1	1.1300373
FAM84B	family with sequence similarity 84 member B [Source:HGNC Symbol;Acc:HGNC:24166]	-1.2021307
FAM86B1	family with sequence similarity 86 member B1 [Source:HGNC Symbol;Acc:HGNC:28268]	1.2195119
FAN1	FANCD2/FANCI-associated nuclelease 1 [Source:HGNC Symbol;Acc:HGNC:29170]	1.2757679
FANCC	Fanconi anemia complementation group C [Source:HGNC Symbol;Acc:HGNC:3584]	-1.0678729
FANCE	Fanconi anemia complementation group E [Source:HGNC Symbol;Acc:HGNC:3586]	1.5591723
FANCI	Fanconi anemia complementation group I [Source:HGNC Symbol;Acc:HGNC:25568]	1.2206393
FANCM	Fanconi anemia complementation group M [Source:HGNC Symbol;Acc:HGNC:23168]	1.9093301
FANK1	fibronectin type III and ankyrin repeat domains 1 [Source:HGNC Symbol;Acc:HGNC:23527]	1.07005115
FAP	fibroblast activation protein alpha [Source:HGNC Symbol;Acc:HGNC:3590]	1.1096455
FARP1	FERM, ARH/RhoGEF and pleckstrin domain protein 1 [Source:HGNC Symbol;Acc:HGNC:3591]	-1.14852865
FASLG	Fas ligand [Source:HGNC Symbol;Acc:HGNC:11936]	1.0540824
FASTKD2	FAST kinase domains 2 [Source:HGNC Symbol;Acc:HGNC:29160]	1.2151566
FASTKD3	FAST kinase domains 3 [Source:HGNC Symbol;Acc:HGNC:28758]	1.1788312
FASTKD5	FAST kinase domains 5 [Source:HGNC Symbol;Acc:HGNC:25790]	-1.3081359
FAT3	FAT atypical cadherin 3 [Source:HGNC Symbol;Acc:HGNC:23112]	-1.1210229
FBLIM1	filamin binding LIM protein 1 [Source:HGNC Symbol;Acc:HGNC:24686]	1.2096055
FBLN7	fibulin 7 [Source:HGNC Symbol;Acc:HGNC:26740]	-1.1630198
FBRS	fibrosin [Source:HGNC Symbol;Acc:HGNC:20442]	-1.37614435
FBXL13	F-box and leucine rich repeat protein 13 [Source:HGNC Symbol;Acc:HGNC:21658]	1.1086694
FBXL2	F-box and leucine rich repeat protein 2 [Source:HGNC Symbol;Acc:HGNC:13598]	-1.1044519
FBXL4	F-box and leucine rich repeat protein 4 [Source:HGNC Symbol;Acc:HGNC:13601]	1.3806888
FBXL6	F-box and leucine rich repeat protein 6 [Source:HGNC Symbol;Acc:HGNC:13603]	-1.139332
FBXO10	F-box protein 10 [Source:HGNC Symbol;Acc:HGNC:13589]	-1.3518378
FBXO16	F-box protein 16 [Source:HGNC Symbol;Acc:HGNC:13618]	-1.117609
FBXO28	F-box protein 28 [Source:HGNC Symbol;Acc:HGNC:29046]	1.207461
FBXO31	F-box protein 31 [Source:HGNC Symbol;Acc:HGNC:16510]	-1.0754695
FBXO32	F-box protein 32 [Source:HGNC Symbol;Acc:HGNC:16731]	-1.240741
FBXO44	F-box protein 44 [Source:HGNC Symbol;Acc:HGNC:24847]	1.2248933
FBXO5	F-box protein 5 [Source:HGNC Symbol;Acc:HGNC:13584]	1.4749461
FBXO7	F-box protein 7 [Source:HGNC Symbol;Acc:HGNC:13586]	-1.1708609
FBXW12	F-box and WD repeat domain containing 12 [Source:HGNC Symbol;Acc:HGNC:20729]	-1.1190117
FCAMR	Fc fragment of IgA and IgM receptor [Source:HGNC Symbol;Acc:HGNC:24692]	-1.0647765
FCER1G	Fc fragment of IgE receptor Ig [Source:HGNC Symbol;Acc:HGNC:3611]	-1.1729678
FCGR2A	Fc fragment of IgG receptor IIa [Source:HGNC Symbol;Acc:HGNC:3616]	-1.104438
FCRLB	Fc receptor like B [Source:HGNC Symbol;Acc:HGNC:26431]	1.0973054
FECH	ferrochelatase [Source:HGNC Symbol;Acc:HGNC:3647]	-1.2471945
FEM1B	fem-1 homolog B [Source:HGNC Symbol;Acc:HGNC:3649]	-1.305102
FER1L4	fer-1 like family member 4, pseudogene [Source:HGNC Symbol;Acc:HGNC:15801]	-1.0951308
FEZF2	FEZ family zinc finger 2 [Source:HGNC Symbol;Acc:HGNC:13506]	1.1047986
FFAR2	free fatty acid receptor 2 [Source:HGNC Symbol;Acc:HGNC:4501]	-1.1299802
FGA	fibrinogen alpha chain [Source:HGNC Symbol;Acc:HGNC:3661]	1.0830665
FGD2	FYVE, RhoGEF and PH domain containing 2 [Source:HGNC Symbol;Acc:HGNC:3664]	-1.0993179
FGD5	FYVE, RhoGEF and PH domain containing 5 [Source:HGNC Symbol;Acc:HGNC:19117]	1.1117337
FGF1	fibroblast growth factor 1 [Source:HGNC Symbol;Acc:HGNC:3665]	-1.1520204
FGF10	fibroblast growth factor 10 [Source:HGNC Symbol;Acc:HGNC:3666]	1.0655729
FGF14	fibroblast growth factor 14 [Source:HGNC Symbol;Acc:HGNC:3671]	1.0926294
FGF22	fibroblast growth factor 22 [Source:HGNC Symbol;Acc:HGNC:3679]	-1.1360885
FGF5	fibroblast growth factor 5 [Source:HGNC Symbol;Acc:HGNC:3683]	-1.1695783
FGF7	fibroblast growth factor 7 [Source:HGNC Symbol;Acc:HGNC:3685]	1.2131114
FGF8	fibroblast growth factor 8 [Source:HGNC Symbol;Acc:HGNC:3686]	-1.1355691
FGFBP2	fibroblast growth factor binding protein 2 [Source:HGNC Symbol;Acc:HGNC:29451]	1.070655
FGFR1	fibroblast growth factor receptor 1 [Source:HGNC Symbol;Acc:HGNC:3688]	1.18937735
FGFR3	fibroblast growth factor receptor 3 [Source:HGNC Symbol;Acc:HGNC:3690]	1.1737288
FGFR1L	fibroblast growth factor receptor-like 1 [Source:HGNC Symbol;Acc:HGNC:3693]	1.3149416
FGR	GFR proto-oncogene, Src family tyrosine kinase [Source:HGNC Symbol;Acc:HGNC:3697]	-1.1315042
FHIT	fragile histidine triad [Source:HGNC Symbol;Acc:HGNC:3701]	1.0965632
FHL2	four and a half LIM domains 2 [Source:HGNC Symbol;Acc:HGNC:3703]	1.41391795
FIGLA	folliculogenesis specific bHLH transcription factor [Source:HGNC Symbol;Acc:HGNC:24669]	1.1515675
FIGNL2	fidgetin like 2 [Source:HGNC Symbol;Acc:HGNC:13287]	-1.7447519

FILIP1L	filamin A interacting protein 1 like [Source:HGNC Symbol;Acc:HGNC:24589]	-1.258265
FKBP10	FK506 binding protein 10 [Source:HGNC Symbol;Acc:HGNC:18169]	1.3032496
FKBP15	FK506 binding protein 15 [Source:HGNC Symbol;Acc:HGNC:23397]	-1.2941095
FKBP3	FK506 binding protein 3 [Source:HGNC Symbol;Acc:HGNC:3719]	1.3089318
FKRP	fukutin related protein [Source:HGNC Symbol;Acc:HGNC:17997]	-1.1508261
FKSG2	tumor protein, translationally-controlled 1 pseudogene 8	-1.3412471
FKSG83	VN1R10P vomeronasal 1 receptor 10 pseudogene	-1.1020849
FLCN	folliculin [Source:HGNC Symbol;Acc:HGNC:27310]	-1.132727
FLI1	Fli-1 proto-oncogene, ETS transcription factor [Source:HGNC Symbol;Acc:HGNC:3749]	-1.6368232
FLJ10489	long intergenic non-protein coding RNA 1181	1.0700691
FLJ10661	family with sequence similarity 86 member C1	1.1481845
FLJ12334	long intergenic non-protein coding RNA 954	-1.146683
FLJ14186	long intergenic non-protein coding RNA 1061	1.1104034
FLJ16124	uncharacterized LOC440867	-1.0694792
FLJ16341	long intergenic non-protein coding RNA 1185	1.106076
FLJ16734	uncharacterized LOC641928	-1.068993
FLJ22447	uncharacterized LOC400221	-1.1611881
FLJ25363	long intergenic non-protein coding RNA 1205	-1.133348
FLJ27352	chromosome 15 open reading frame 65	1.1378055
FLJ27502	uncharacterized LOC388406	1.1445552
FLJ31104	uncharacterized LOC441072	-2.1868813
FLJ31713	uncharacterized protein FLJ31713	-1.1838213
FLJ31715	uncharacterized FLJ31715	-1.2119403
FLJ31813	family with sequence similarity 21 member E, pseudogene	-1.1437555
FLJ39632	double homeobox A pseudogene 9	-1.1978531
FLJ42392	long intergenic non-protein coding RNA 548	-1.0953307
FLJ42709	NR2F1 antisense RNA 1	1.136296
FLNA	filamin A [Source:HGNC Symbol;Acc:HGNC:3754]	1.3844755
FLOT1	flotillin 1 [Source:HGNC Symbol;Acc:HGNC:3757]	1.1725982
FLT3LG	fms related tyrosine kinase 3 ligand [Source:HGNC Symbol;Acc:HGNC:3766]	-1.3767232
FLVCR1	feline leukemia virus subgroup C cellular receptor 1 [Source:HGNC Symbol;Acc:HGNC:24682]	-1.0953585
FMNL1	formin like 1 [Source:HGNC Symbol;Acc:HGNC:1212]	-1.3301752
FMNL3	formin like 3 [Source:HGNC Symbol;Acc:HGNC:23698]	-1.6587585
FMOD	fibromodulin [Source:HGNC Symbol;Acc:HGNC:3774]	-1.0742397
FMR1-AS1	FMR1 antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:39081]	-1.0894126
FN1	fibronectin 1 [Source:HGNC Symbol;Acc:HGNC:3778]	-1.245231
FNBP1	formin binding protein 1 [Source:HGNC Symbol;Acc:HGNC:17069]	-1.50575015
FNBP1L	formin binding protein 1 like [Source:HGNC Symbol;Acc:HGNC:20851]	2.0401242
FNDC1	fibronectin type III domain containing 1 [Source:HGNC Symbol;Acc:HGNC:21184]	-1.096427
FNDC3B	fibronectin type III domain containing 3B [Source:HGNC Symbol;Acc:HGNC:24670]	-1.2591299
FNDC4	fibronectin type III domain containing 4 [Source:HGNC Symbol;Acc:HGNC:20239]	-1.3297535
FOLR3	folate receptor 3 [Source:HGNC Symbol;Acc:HGNC:3795]	-1.0726671
FOSL1	FOS like 1, AP-1 transcription factor subunit [Source:HGNC Symbol;Acc:HGNC:13718]	-1.2878714
FOSL2	FOS like 2, AP-1 transcription factor subunit [Source:HGNC Symbol;Acc:HGNC:3798]	-1.7207865
FOXA2	forkhead box A2 [Source:HGNC Symbol;Acc:HGNC:5022]	-1.0560454
FOXC1	forkhead box C1 [Source:HGNC Symbol;Acc:HGNC:3800]	1.5014796
FOXC2	forkhead box C2 [Source:HGNC Symbol;Acc:HGNC:3801]	-1.3353944
FOXD1	forkhead box D1 [Source:HGNC Symbol;Acc:HGNC:3802]	1.0579338
FOXE3	forkhead box E3 [Source:HGNC Symbol;Acc:HGNC:3808]	-1.0983759
FOXF1	forkhead box F1 [Source:HGNC Symbol;Acc:HGNC:3809]	-1.7702779
FOXJ2	forkhead box J2 [Source:HGNC Symbol;Acc:HGNC:32448]	-1.2707447
FOXJ1	forkhead box J1 [Source:HGNC Symbol;Acc:HGNC:3816]	-1.4464251
FOXJ2	forkhead box J2 [Source:HGNC Symbol;Acc:HGNC:24818]	1.193658
FOXX1	forkhead box K1 [Source:HGNC Symbol;Acc:HGNC:23480]	-1.158866
FOXK2	forkhead box K2 [Source:HGNC Symbol;Acc:HGNC:6036]	-1.1412911
FOXL1	forkhead box L1 [Source:HGNC Symbol;Acc:HGNC:3817]	-1.1813451
FOXL2	forkhead box L2 [Source:HGNC Symbol;Acc:HGNC:1092]	1.0664017
FOXN2	forkhead box N2 [Source:HGNC Symbol;Acc:HGNC:5281]	1.4048625
FOXO1	forkhead box O1 [Source:HGNC Symbol;Acc:HGNC:3819]	-1.5311533
FOXO3	forkhead box O3 [Source:HGNC Symbol;Acc:HGNC:3821]	-1.4313021
FOXO4	forkhead box O4 [Source:HGNC Symbol;Acc:HGNC:7139]	1.1233342
FOXP1	forkhead box P1 [Source:HGNC Symbol;Acc:HGNC:3823]	-1.2593139
FR10AC1	site, folic acid type, rare, fra(10)(q23.3) candidate 1 [Source:HGNC Symbol;Acc:HGNC:10955932]	1.0955932
FRAS1	Fraser extracellular matrix complex subunit 1 [Source:HGNC Symbol;Acc:HGNC:19185]	1.1359186
FRAT1	frequently rearranged in advanced T-cell lymphomas 1 [Source:HGNC Symbol;Acc:HGNC:3944]	1.1383861
FREM3	FRAS1 related extracellular matrix 3 [Source:HGNC Symbol;Acc:HGNC:25172]	1.2057382
FRG1	FSHD region gene 1 [Source:HGNC Symbol;Acc:HGNC:3954]	1.2086794
FRK	fyn related Src family tyrosine kinase [Source:HGNC Symbol;Acc:HGNC:3955]	1.0634891
FRMD3	FERM domain containing 3 [Source:HGNC Symbol;Acc:HGNC:24125]	2.1928285
FRMD4B	FERM domain containing 4B [Source:HGNC Symbol;Acc:HGNC:24886]	1.4652362
FRMD5	FERM domain containing 5 [Source:HGNC Symbol;Acc:HGNC:28214]	1.1846285
FRMD6	FERM domain containing 6 [Source:HGNC Symbol;Acc:HGNC:19839]	-1.2973115
FRMD8	FERM domain containing 8 [Source:HGNC Symbol;Acc:HGNC:25462]	-1.2110289
FRMPD1	FERM and PDZ domain containing 1 [Source:HGNC Symbol;Acc:HGNC:29159]	-1.0941118
FRY	FRY microtubule binding protein [Source:HGNC Symbol;Acc:HGNC:20367]	1.457712275
FSHB	follicle stimulating hormone beta subunit [Source:HGNC Symbol;Acc:HGNC:3964]	1.1080532
FSHR	follicle stimulating hormone receptor [Source:HGNC Symbol;Acc:HGNC:3969]	-1.0668025
FST	follistatin [Source:HGNC Symbol;Acc:HGNC:3971]	1.1812028
FSTL3	follistatin like 3 [Source:HGNC Symbol;Acc:HGNC:3973]	-2.3305798
FTHL17	ferritin heavy chain like 17 [Source:HGNC Symbol;Acc:HGNC:3987]	-1.1932043
FTLP10	ferritin light chain pseudogene 10 [Source:HGNC Symbol;Acc:HGNC:37959]	1.1159812
FTS1	FtsJ RNA methyltransferase homolog 1 (E. coli) [Source:HGNC Symbol;Acc:HGNC:13254]	-1.2087901
FTSID2	cap methyltransferase 1	-1.1590037
FUCA1	fucosidase, alpha-L- 1, tissue [Source:HGNC Symbol;Acc:HGNC:4006]	-1.0915387
FUNDC2	FUN14 domain containing 2 [Source:HGNC Symbol;Acc:HGNC:24925]	-1.1151011
FURIN	furin, paired basic amino acid cleaving enzyme [Source:HGNC Symbol;Acc:HGNC:8568]	1.1975517

FUT10	fucosyltransferase 10 [Source:HGNC Symbol;Acc:HGNC:19234]	1.1061447
FUT4	fucosyltransferase 4 [Source:HGNC Symbol;Acc:HGNC:4015]	-1.1834342
FUT8	fucosyltransferase 8 [Source:HGNC Symbol;Acc:HGNC:4019]	1.2568308
FXN	frataxin [Source:HGNC Symbol;Acc:HGNC:3951]	-1.111749
FXR1	FMR1 autosomal homolog 1 [Source:HGNC Symbol;Acc:HGNC:4023]	1.3944286
FXR2	FMR1 autosomal homolog 2 [Source:HGNC Symbol;Acc:HGNC:4024]	1.3178192
FXYD3	FXYD domain containing ion transport regulator 3 [Source:HGNC Symbol;Acc:HGNC:4027]	-1.0584437
FXYD6	FXYD domain containing ion transport regulator 6 [Source:HGNC Symbol;Acc:HGNC:4030]	-1.2307544
FTYTD1	forty-two-three domain containing 1 [Source:HGNC Symbol;Acc:HGNC:25407]	1.2925241
FZD2	frizzled class receptor 2 [Source:HGNC Symbol;Acc:HGNC:4040]	1.298762
FZD3	frizzled class receptor 3 [Source:HGNC Symbol;Acc:HGNC:4041]	1.1348747
FZD8	frizzled class receptor 8 [Source:HGNC Symbol;Acc:HGNC:4046]	1.3511535
FZR1	fizzy/cell division cycle 20 related 1 [Source:HGNC Symbol;Acc:HGNC:24824]	-1.4614496
GOS2	GO/G1 switch 2 [Source:HGNC Symbol;Acc:HGNC:30229]	-2.1152213
G2E3	G2/M-phase specific E3 ubiquitin protein ligase [Source:HGNC Symbol;Acc:HGNC:20338]	1.33674705
G3BP2	G3BP stress granule assembly factor 2 [Source:HGNC Symbol;Acc:HGNC:30291]	1.319036
G6PC3	glucose-6-phosphatase catalytic subunit 3 [Source:HGNC Symbol;Acc:HGNC:24861]	1.3342971
G6PD	glucose-6-phosphate dehydrogenase [Source:HGNC Symbol;Acc:HGNC:4057]	1.6271123
GAA	glucosidase alpha, acid [Source:HGNC Symbol;Acc:HGNC:4065]	1.1725811
GABBR1	gamma-aminobutyric acid type B receptor subunit 1 [Source:HGNC Symbol;Acc:HGNC:4070]	-1.23852145
GABPB1	GA binding protein transcription factor beta subunit 1 [Source:HGNC Symbol;Acc:HGNC:4074]	-1.5324199
GABRA2	gamma-aminobutyric acid type A receptor alpha2 subunit [Source:HGNC Symbol;Acc:HGNC:4076]	1.1060115
GABRA3	gamma-aminobutyric acid type A receptor alpha3 subunit [Source:HGNC Symbol;Acc:HGNC:4077]	-1.07005
GABRA4	gamma-aminobutyric acid type A receptor alpha4 subunit [Source:HGNC Symbol;Acc:HGNC:4078]	1.0839996
GABRB1	gamma-aminobutyric acid type A receptor beta1 subunit [Source:HGNC Symbol;Acc:HGNC:4081]	-1.178683
GABRB2	gamma-aminobutyric acid type A receptor beta2 subunit [Source:HGNC Symbol;Acc:HGNC:4082]	1.1179624
GABRD	gamma-aminobutyric acid type A receptor delta subunit [Source:HGNC Symbol;Acc:HGNC:4084]	-1.0941114
GABRR1	gamma-aminobutyric acid type A receptor rho1 subunit [Source:HGNC Symbol;Acc:HGNC:4090]	-1.0620341
GAD2	glutamate decarboxylase 2 [Source:HGNC Symbol;Acc:HGNC:4093]	1.1215197
GADD45GIP1	GADD45G interacting protein 1 [Source:HGNC Symbol;Acc:HGNC:29996]	-1.129279
GAFA2	FGF-2 activity-associated protein 2	-1.142057
GAK	cyclin G associated kinase [Source:HGNC Symbol;Acc:HGNC:4113]	-1.1412835
GAL3T2	galactose-3-O-sulfotransferase 2 [Source:HGNC Symbol;Acc:HGNC:24869]	-1.0833114
GALNT2	polypeptide N-acetylgalactosaminyltransferase 2 [Source:HGNC Symbol;Acc:HGNC:4124]	1.1204106
GALNT6	polypeptide N-acetylgalactosaminyltransferase 6 [Source:HGNC Symbol;Acc:HGNC:4128]	-1.2058042
GALNTL6	polypeptide N-acetylgalactosaminyltransferase-like 6 [Source:HGNC Symbol;Acc:HGNC:33844]	1.0553868
GALR2	galanin receptor 2 [Source:HGNC Symbol;Acc:HGNC:4133]	-1.1024992
GANAB	glucosidase II alpha subunit [Source:HGNC Symbol;Acc:HGNC:4138]	1.0882472
GANC	glucosidase alpha, neutral C [Source:HGNC Symbol;Acc:HGNC:4139]	-1.1853673
GAPVD1	GTPase activating protein and VPS9 domains 1 [Source:HGNC Symbol;Acc:HGNC:23375]	1.1831497
GAS2	growth arrest specific 2 [Source:HGNC Symbol;Acc:HGNC:4167]	1.0821108
GAS2L1	growth arrest specific 2 like 1 [Source:HGNC Symbol;Acc:HGNC:16955]	1.243758
GAS2L2	growth arrest specific 2 like 2 [Source:HGNC Symbol;Acc:HGNC:24846]	1.3586638
GAS6	growth arrest specific 6 [Source:HGNC Symbol;Acc:HGNC:4168]	-1.2520485
GATA2	GATA binding protein 2 [Source:HGNC Symbol;Acc:HGNC:4171]	1.6805689
GATA3	GATA binding protein 3 [Source:HGNC Symbol;Acc:HGNC:4172]	1.3656744
GATA6	GATA binding protein 6 [Source:HGNC Symbol;Acc:HGNC:4174]	-1.6315202
GATS	GATS, stromal antigen 3 opposite strand [Source:HGNC Symbol;Acc:HGNC:29954]	-1.1984142
GATSL3	GATS protein like 3 [Source:HGNC Symbol;Acc:HGNC:34423]	-1.6028535
GBA2	glucosylceramidase beta 2 [Source:HGNC Symbol;Acc:HGNC:18986]	1.9981656
GBP1	guanylate binding protein 1 [Source:HGNC Symbol;Acc:HGNC:4182]	-1.4913276
GBP2	guanylate binding protein 2 [Source:HGNC Symbol;Acc:HGNC:4183]	-1.3408135
GBP4	guanylate binding protein 4 [Source:HGNC Symbol;Acc:HGNC:20480]	-1.6045449
GCC1	GRIP and coiled-coil domain containing 1 [Source:HGNC Symbol;Acc:HGNC:19095]	-1.1462204
GCG	glucagon [Source:HGNC Symbol;Acc:HGNC:4191]	1.0756333
GCGR	glucagon receptor [Source:HGNC Symbol;Acc:HGNC:4192]	-1.0502907
GCH1	GTP cyclohydrolase 1 [Source:HGNC Symbol;Acc:HGNC:4193]	-1.33036155
GCKR	glucokinase regulator [Source:HGNC Symbol;Acc:HGNC:4196]	-1.2296566
GLCL	glutamate-cysteine ligase catalytic subunit [Source:HGNC Symbol;Acc:HGNC:4311]	1.3372725
GCN1L1	GCN1, eIF2 alpha kinase activator homolog	1.1143482
GCNT2	saminyl (N-acetyl) transferase 2, I-branching enzyme (I blood group) [Source:HGNC Symbol;Acc:HGNC:4201]	-1.2319936
GCNT3	glucosaminyl (N-acetyl) transferase 3, mucin type [Source:HGNC Symbol;Acc:HGNC:4205]	1.1975874
GCOM1	GRIN1A complex locus 1 [Source:HGNC Symbol;Acc:HGNC:26424]	-1.5312004
GCRG224	gastric cancer-related gene GCRG224	-1.0801486
GDA	guanine deaminase [Source:HGNC Symbol;Acc:HGNC:4212]	1.0577004
GDF6	growth differentiation factor 6 [Source:HGNC Symbol;Acc:HGNC:4221]	1.3338702
GD11	GDP dissociation inhibitor 1 [Source:HGNC Symbol;Acc:HGNC:4226]	1.2056956
GDNF	glial cell derived neurotrophic factor [Source:HGNC Symbol;Acc:HGNC:4232]	1.09753355
GEMC1	geminin coiled-coil domain containing	-1.0938087
GEMIN6	gem nuclear organelle associated protein 6 [Source:HGNC Symbol;Acc:HGNC:20044]	1.2190032
GEMIN8P4	gem nuclear organelle associated protein 8 pseudogene 4 [Source:HGNC Symbol;Acc:HGNC:37979]	-1.0719826
GET4	golgi to ER traffic protein 4 [Source:HGNC Symbol;Acc:HGNC:21690]	-1.2364275
GFM1	G elongation factor mitochondrial 1 [Source:HGNC Symbol;Acc:HGNC:13780]	1.2284544
GFOD1	glucose-fructose oxidoreductase domain containing 1 [Source:HGNC Symbol;Acc:HGNC:21096]	1.7589302
GFPT2	glutamine-fructose-6-phosphate transaminase 2 [Source:HGNC Symbol;Acc:HGNC:4242]	-2.2467678
GFRA1	GDNF family receptor alpha 1 [Source:HGNC Symbol;Acc:HGNC:4243]	-1.20831875
GFR43	GDNF family receptor alpha 3 [Source:HGNC Symbol;Acc:HGNC:4245]	-1.1580638
GG41	i associated, gamma adaptin ear containing, ARF binding protein 1 [Source:HGNC Symbol;Acc:HGNC:17	-1.1540504
GG42	i associated, gamma adaptin ear containing, ARF binding protein 2 [Source:HGNC Symbol;Acc:HGNC:16	1.1873485
GGCT	gamma-glutamylcyclotransferase [Source:HGNC Symbol;Acc:HGNC:21705]	1.2692438
GGT3P	gamma-glutamyltransferase 3 pseudogene [Source:HGNC Symbol;Acc:HGNC:4252]	-1.1473093
GGT5	gamma-glutamyltransferase 5 [Source:HGNC Symbol;Acc:HGNC:4260]	1.139714
GGT7	gamma-glutamyltransferase 7 [Source:HGNC Symbol;Acc:HGNC:4259]	-1.141678
GFTA1P	glycoprotein, alpha-galactosyltransferase 1 pseudogene [Source:HGNC Symbol;Acc:HGNC:4253]	-1.0713525
GGTLC2	gamma-glutamyltransferase light chain 2 [Source:HGNC Symbol;Acc:HGNC:18596]	-1.1979313
GHRH	growth hormone releasing hormone [Source:HGNC Symbol;Acc:HGNC:4265]	-1.0990652

GHRLOS	ghrelin opposite strand/antisense RNA [Source:HGNC Symbol;Acc:HGNC:33885]	-1.3410299
GIMAP1	GTPase, IMAP family member 1 [Source:HGNC Symbol;Acc:HGNC:23237]	1.3049476
GIMAP7	GTPase, IMAP family member 7 [Source:HGNC Symbol;Acc:HGNC:22404]	1.7194321
GIN1	gypsy retrotransposon integrase 1 [Source:HGNC Symbol;Acc:HGNC:25959]	1.1487808
GIPR	gastric inhibitory polypeptide receptor [Source:HGNC Symbol;Acc:HGNC:4271]	-1.5035352
GIT1	GIT ArfGAP 1 [Source:HGNC Symbol;Acc:HGNC:4272]	1.1951913
GJA1	gap junction protein alpha 1 [Source:HGNC Symbol;Acc:HGNC:4274]	1.5761799
GJA8	gap junction protein alpha 8 [Source:HGNC Symbol;Acc:HGNC:4281]	-1.0595661
GJA9	gap junction protein alpha 9 [Source:HGNC Symbol;Acc:HGNC:19155]	1.2159333
GJB4	gap junction protein beta 4 [Source:HGNC Symbol;Acc:HGNC:4286]	1.0828336
GJD3	gap junction protein delta 3 [Source:HGNC Symbol;Acc:HGNC:19147]	1.1836607
GKAP1	G kinase anchoring protein 1 [Source:HGNC Symbol;Acc:HGNC:17496]	1.1877992
GKN2	gastrophin 2 [Source:HGNC Symbol;Acc:HGNC:24588]	1.0664618
GLB1L	galactosidase beta 1 like [Source:HGNC Symbol;Acc:HGNC:28129]	-1.2052326
GLCE	glucuronic acid epimerase [Source:HGNC Symbol;Acc:HGNC:17855]	1.4581761
GLI1	GLI family zinc finger 1 [Source:HGNC Symbol;Acc:HGNC:4317]	-1.0931576
GLI2	GLI family zinc finger 2 [Source:HGNC Symbol;Acc:HGNC:4318]	-1.1622512
GLIPR1L1	GLI pathogenesis related 1 like 1 [Source:HGNC Symbol;Acc:HGNC:28392]	1.08615
GLIPR2	GLI pathogenesis related 2 [Source:HGNC Symbol;Acc:HGNC:18007]	-1.1371504
GLIS2	GLIS family zinc finger 2 [Source:HGNC Symbol;Acc:HGNC:29450]	-2.2590895
GLOD5	glyoxalase domain containing 5 [Source:HGNC Symbol;Acc:HGNC:33358]	-1.0766553
GLRA2	glycine receptor alpha 2 [Source:HGNC Symbol;Acc:HGNC:4327]	1.1100254
GLRB	glycine receptor beta [Source:HGNC Symbol;Acc:HGNC:4329]	1.1112983
GLT2D1	collagen beta(1-O)galactosyltransferase 1	-1.5147244
GLTP	glycolipid transfer protein [Source:HGNC Symbol;Acc:HGNC:24867]	-1.2272491
GLYAT	glycine-N-acyltransferase [Source:HGNC Symbol;Acc:HGNC:13734]	-1.1158724
GLYATL3	glycine-N-acyltransferase like 3 [Source:HGNC Symbol;Acc:HGNC:21349]	-1.1042626
GLYCAM1	lycosylation dependent cell adhesion molecule 1 (pseudogene) [Source:HGNC Symbol;Acc:HGNC:18023]	1.0966995
GLYR1	glyoxalate reductase 1 homolog [Source:HGNC Symbol;Acc:HGNC:24434]	1.0818541
GM2A	GM2 ganglioside activator [Source:HGNC Symbol;Acc:HGNC:4367]	1.102789
GMCL1	germ cell-less, spermatogenesis associated 1 [Source:HGNC Symbol;Acc:HGNC:23843]	1.209213
GMDS	GDP-mannose 4,6-dehydratase [Source:HGNC Symbol;Acc:HGNC:4369]	-1.2319537
GMFB	glia maturation factor beta [Source:HGNC Symbol;Acc:HGNC:4373]	1.7714572
GMFG	glia maturation factor gamma [Source:HGNC Symbol;Acc:HGNC:4374]	1.1179016
GMNN	geminin, DNA replication inhibitor [Source:HGNC Symbol;Acc:HGNC:17493]	1.3368529
GMPR2	guanosine monophosphate reductase 2 [Source:HGNC Symbol;Acc:HGNC:4377]	1.091237
GNA12	G protein subunit alpha 12 [Source:HGNC Symbol;Acc:HGNC:4380]	-1.1783155
GNA13	G protein subunit alpha 13 [Source:HGNC Symbol;Acc:HGNC:4381]	1.1752976
GNA11	G protein subunit alpha 11 [Source:HGNC Symbol;Acc:HGNC:4384]	1.294164
GNAT3	G protein subunit alpha transducin 3 [Source:HGNC Symbol;Acc:HGNC:22800]	1.0792123
GNAZ	G protein subunit alpha z [Source:HGNC Symbol;Acc:HGNC:4395]	1.2765317
GNB3	G protein subunit beta 3 [Source:HGNC Symbol;Acc:HGNC:4400]	1.09727
GNG10	G protein subunit gamma 10 [Source:HGNC Symbol;Acc:HGNC:4402]	1.3218697
GNG13	G protein subunit gamma 13 [Source:HGNC Symbol;Acc:HGNC:14131]	-1.2102461
GNGT1	G protein subunit gamma transducin 1 [Source:HGNC Symbol;Acc:HGNC:4411]	1.0531642
GNGT2	G protein subunit gamma transducin 2 [Source:HGNC Symbol;Acc:HGNC:4412]	-1.1883078
GNL1	G protein nucleolar 1 (putative) [Source:HGNC Symbol;Acc:HGNC:4413]	-1.0955336
GNL3L	G protein nucleolar 3 like [Source:HGNC Symbol;Acc:HGNC:25553]	-1.2965157
GNL3LP1	G protein nucleolar 3 like pseudogene 1 [Source:HGNC Symbol;Acc:HGNC:25733]	-1.3284632
GNPDA1	glucosamine-6-phosphate deaminase 1 [Source:HGNC Symbol;Acc:HGNC:4417]	1.178659
GNPDA2	glucosamine-6-phosphate deaminase 2 [Source:HGNC Symbol;Acc:HGNC:21526]	1.2863
GOLGA2	golgin A2 [Source:HGNC Symbol;Acc:HGNC:4425]	1.156772
GOLGA6A	golgin A6 family member A [Source:HGNC Symbol;Acc:HGNC:13567]	-1.0768428
GOLGA6L6	golgin A6 family-like 6 [Source:HGNC Symbol;Acc:HGNC:37225]	-1.428263733
GOLGA7	golgin A7 [Source:HGNC Symbol;Acc:HGNC:24876]	-1.1403636
GOLGA8A	golgin A8 family member A [Source:HGNC Symbol;Acc:HGNC:31972]	-1.1058573
GOLGA8F	golgin A8 family member F [Source:HGNC Symbol;Acc:HGNC:32378]	1.0791911
GOLPH3	golgi phosphoprotein 3 [Source:HGNC Symbol;Acc:HGNC:15452]	-1.3405111
GORASP1	golgi phosphoprotein 3 like [Source:HGNC Symbol;Acc:HGNC:24882]	-1.5583141
GORASP2	golgi reassembly stacking protein 1 [Source:HGNC Symbol;Acc:HGNC:16769]	-1.2060636
GOSR2	golgi reassembly stacking protein 2 [Source:HGNC Symbol;Acc:HGNC:17500]	-1.2973789
GOT1	golgi SNAP receptor complex member 2 [Source:HGNC Symbol;Acc:HGNC:4431]	-1.1556668
GP1BA	glutamic-oxaloacetic transaminase 1 [Source:HGNC Symbol;Acc:HGNC:4432]	-1.0936532
GPA33	glycoprotein Ib platelet alpha subunit [Source:HGNC Symbol;Acc:HGNC:4439]	-1.148358
GPC2	glycoprotein A33 [Source:HGNC Symbol;Acc:HGNC:4445]	-1.0871614
GPC3	glycan 2 [Source:HGNC Symbol;Acc:HGNC:4450]	1.283777
GPC4	glycan 3 [Source:HGNC Symbol;Acc:HGNC:4451]	-1.1009786
GPC5	glycan 4 [Source:HGNC Symbol;Acc:HGNC:4452]	-1.1483101
GPC6	glycan 5 [Source:HGNC Symbol;Acc:HGNC:4453]	1.1147877
GPHA2	glycoprotein hormone alpha 2 [Source:HGNC Symbol;Acc:HGNC:18054]	-1.15187
GPHB5	glycoprotein hormone beta 5 [Source:HGNC Symbol;Acc:HGNC:18055]	-1.2113158
GPI	glucose-6-phosphate isomerase [Source:HGNC Symbol;Acc:HGNC:4458]	-1.1139575
GPM6A	glycoprotein M6A [Source:HGNC Symbol;Acc:HGNC:4460]	1.0950427
GPN3	GPN-loop GTPase 3 [Source:HGNC Symbol;Acc:HGNC:30186]	1.2661116
GPR101	G protein-coupled receptor 101 [Source:HGNC Symbol;Acc:HGNC:14963]	1.1341285
GPR107	G protein-coupled receptor 107 [Source:HGNC Symbol;Acc:HGNC:17830]	-1.2828815
GPR108	G protein-coupled receptor 108 [Source:HGNC Symbol;Acc:HGNC:17829]	-1.2661247
GPR110	adhesion G protein-coupled receptor F1	1.1282552
GPR116	adhesion G protein-coupled receptor F5	1.0807412
GPR12	adhesion G protein-coupled receptor 12 [Source:HGNC Symbol;Acc:HGNC:4466]	1.0790191
GPR123	adhesion G protein-coupled receptor A1	-1.1358241
GPR126	adhesion G protein-coupled receptor G6	1.7564493
GPR135	adhesion G protein-coupled receptor 135 [Source:HGNC Symbol;Acc:HGNC:19991]	1.3816612
GPR137B	adhesion G protein-coupled receptor 137B [Source:HGNC Symbol;Acc:HGNC:11862]	-1.1565648
GPR148	adhesion G protein-coupled receptor 148 [Source:HGNC Symbol;Acc:HGNC:23623]	1.0794839
GPR151	adhesion G protein-coupled receptor 151 [Source:HGNC Symbol;Acc:HGNC:23624]	1.0836984

GPR153	G protein-coupled receptor 153 [Source:HGNC Symbol;Acc:HGNC:23618]	1.1023201
GPR156	G protein-coupled receptor 156 [Source:HGNC Symbol;Acc:HGNC:20844]	-1.108239
GPR161	G protein-coupled receptor 161 [Source:HGNC Symbol;Acc:HGNC:23694]	-1.1451824
GPR172A	solute carrier family 52 member 2	-1.2120808
GPR21	G protein-coupled receptor 21 [Source:HGNC Symbol;Acc:HGNC:4476]	-1.1219139
GPR26	G protein-coupled receptor 26 [Source:HGNC Symbol;Acc:HGNC:4481]	1.0973374
GPR32	G protein-coupled receptor 32 [Source:HGNC Symbol;Acc:HGNC:4487]	-1.1807947
GPR37L1	G protein-coupled receptor 37 like 1 [Source:HGNC Symbol;Acc:HGNC:14923]	-1.4936528
GPR4	G protein-coupled receptor 4 [Source:HGNC Symbol;Acc:HGNC:4497]	1.570813
GPR56	adhesion G protein-coupled receptor G1	-1.3973953
GPR68	G protein-coupled receptor 68 [Source:HGNC Symbol;Acc:HGNC:4519]	-7.8000216
GPR88	G protein-coupled receptor 88 [Source:HGNC Symbol;Acc:HGNC:4539]	-1.1286671
GPR97	adhesion G protein-coupled receptor G3	-1.1021633
GPRCS5A	G protein-coupled receptor class C group 5 member A [Source:HGNC Symbol;Acc:HGNC:9836]	-1.17196
GPRCS5B	G protein-coupled receptor class C group 5 member B [Source:HGNC Symbol;Acc:HGNC:13308]	-1.5166233
GPS2	G protein pathway suppressor 2 [Source:HGNC Symbol;Acc:HGNC:4550]	-1.1679187
GPX2	glutathione peroxidase 2 [Source:HGNC Symbol;Acc:HGNC:4554]	-1.0988263
GPX5	glutathione peroxidase 5 [Source:HGNC Symbol;Acc:HGNC:4557]	-1.1662979
GPX7	glutathione peroxidase 7 [Source:HGNC Symbol;Acc:HGNC:4559]	-1.1851418
GPX8	glutathione peroxidase 8 (putative) [Source:HGNC Symbol;Acc:HGNC:33100]	1.3637805
GRAMD1B	GRAM domain containing 1B [Source:HGNC Symbol;Acc:HGNC:29214]	1.1372566
GRAMD3	GRAM domain containing 3 [Source:HGNC Symbol;Acc:HGNC:24911]	-1.5446496
GRAP	GRB2-related adaptor protein [Source:HGNC Symbol;Acc:HGNC:4562]	1.3193944
GRASP	integral receptor for phosphoinositides 1 associated scaffold protein [Source:HGNC Symbol;Acc:HGNC:187]	1.2411804
GRB10	growth factor receptor bound protein 10 [Source:HGNC Symbol;Acc:HGNC:4564]	-1.2222267
GRB14	growth factor receptor bound protein 14 [Source:HGNC Symbol;Acc:HGNC:4565]	1.2925
GRB7	growth factor receptor bound protein 7 [Source:HGNC Symbol;Acc:HGNC:4567]	-1.1898693
GRHL1	grainyhead like transcription factor 1 [Source:HGNC Symbol;Acc:HGNC:17923]	1.2377442
GRIA1	glutamate ionotropic receptor AMPA type subunit 1 [Source:HGNC Symbol;Acc:HGNC:4571]	1.2061715
GRIA2	glutamate ionotropic receptor AMPA type subunit 2 [Source:HGNC Symbol;Acc:HGNC:4572]	1.0727841
GRIA4	glutamate ionotropic receptor AMPA type subunit 4 [Source:HGNC Symbol;Acc:HGNC:4574]	1.083477
GRID1	glutamate ionotropic receptor delta type subunit 1 [Source:HGNC Symbol;Acc:HGNC:4575]	1.1553308
GRID2	glutamate ionotropic receptor delta type subunit 2 [Source:HGNC Symbol;Acc:HGNC:4576]	-1.1990379
GRID2IP	Grid2 interacting protein [Source:HGNC Symbol;Acc:HGNC:18464]	-1.1161969
GRIK1-AS1	GRIK1 antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:16458]	-1.0956793
GRIK2	glutamate ionotropic receptor kainate type subunit 2 [Source:HGNC Symbol;Acc:HGNC:4580]	-1.1011533
GRIN2B	glutamate ionotropic receptor NMDA type subunit 2B [Source:HGNC Symbol;Acc:HGNC:4586]	1.1540288
GRIN2C	glutamate ionotropic receptor NMDA type subunit 2C [Source:HGNC Symbol;Acc:HGNC:4587]	-1.2408013
GRIN3B	glutamate ionotropic receptor NMDA type subunit 3B [Source:HGNC Symbol;Acc:HGNC:16768]	-1.119777
GRINA	amino acid ionotropic receptor NMDA type subunit associated protein 1 [Source:HGNC Symbol;Acc:HGNC:4:	-1.5606254
GRIP1	glutamate receptor interacting protein 1 [Source:HGNC Symbol;Acc:HGNC:18708]	1.0646765
GRIP2	glutamate receptor interacting protein 2 [Source:HGNC Symbol;Acc:HGNC:23841]	-1.130115
GRK5	G protein-coupled receptor kinase 5 [Source:HGNC Symbol;Acc:HGNC:4544]	-1.17268495
GRM1	glutamate metabotropic receptor 1 [Source:HGNC Symbol;Acc:HGNC:4593]	-1.1147814
GRPEL2	GrpE like 2, mitochondrial [Source:HGNC Symbol;Acc:HGNC:21060]	1.2868178
GRRP1	family with sequence similarity 110 member D	1.8366385
GSDMA	gasdermin A [Source:HGNC Symbol;Acc:HGNC:13311]	-1.1433504
GSDMC	gasdermin C [Source:HGNC Symbol;Acc:HGNC:7151]	-1.2073267
GSK3B	glycogen synthase kinase 3 beta [Source:HGNC Symbol;Acc:HGNC:4617]	-1.1495901
GSTA2	glutathione S-transferase alpha 2 [Source:HGNC Symbol;Acc:HGNC:4627]	-1.1239275
GSTM2	glutathione S-transferase mu 2 [Source:HGNC Symbol;Acc:HGNC:4634]	1.1127639
GTDC1	glycosyltransferase like domain containing 1 [Source:HGNC Symbol;Acc:HGNC:20887]	-1.1724172
GTF2H1	general transcription factor IIH subunit 1 [Source:HGNC Symbol;Acc:HGNC:4655]	1.2079952
GTF2IRD2B	GTF2I repeat domain containing 2B [Source:HGNC Symbol;Acc:HGNC:33125]	-1.2213163
GTF3C3	general transcription factor IIIC subunit 3 [Source:HGNC Symbol;Acc:HGNC:4666]	1.1797199
GTF3C4	general transcription factor IIIC subunit 4 [Source:HGNC Symbol;Acc:HGNC:4667]	-1.3418599
GTPBP2	GTP binding protein 2 [Source:HGNC Symbol;Acc:HGNC:4670]	-1.16848465
GTSE1	G2 and S-phase expressed 1 [Source:HGNC Symbol;Acc:HGNC:13698]	-1.1216478
GUCY1A3	guanylate cyclase 1 soluble subunit alpha [Source:HGNC Symbol;Acc:HGNC:4685]	1.1187993
GUCY1B3	guanylate cyclase 1 soluble subunit beta [Source:HGNC Symbol;Acc:HGNC:4687]	1.1112224
GUSBP1	glucuronidase, beta pseudogene 1 [Source:HGNC Symbol;Acc:HGNC:13670]	-1.1376362
GUSBP11	glucuronidase, beta pseudogene 11 [Source:HGNC Symbol;Acc:HGNC:42325]	1.1656725
GYG1	glycogenin 1 [Source:HGNC Symbol;Acc:HGNC:4699]	-1.3225945
GYPE	glycophorin E (MN5 blood group) [Source:HGNC Symbol;Acc:HGNC:4705]	-1.1015376
H1F0	H1 histone family member 0 [Source:HGNC Symbol;Acc:HGNC:4714]	1.2161868
H1FNT	H1 histone family member N, testis specific [Source:HGNC Symbol;Acc:HGNC:24893]	-1.216024
H2AFB2	H2A histone family member B2 [Source:HGNC Symbol;Acc:HGNC:18298]	-1.102913
H2AFX	H2A histone family member X [Source:HGNC Symbol;Acc:HGNC:4739]	1.213229
HABP4	hyaluronan binding protein 4 [Source:HGNC Symbol;Acc:HGNC:17062]	1.1008584
HAP1	huntingtin associated protein 1 [Source:HGNC Symbol;Acc:HGNC:4812]	-1.264689
HAPLN3	hyaluronan and proteoglycan link protein 3 [Source:HGNC Symbol;Acc:HGNC:21446]	-1.5585191
HAS1	hyaluronan synthase 1 [Source:HGNC Symbol;Acc:HGNC:4818]	-1.0814188
HAS2-AS1	HAS2 antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:34340]	1.0910698
HAT1	histone acetyltransferase 1 [Source:HGNC Symbol;Acc:HGNC:4821]	1.58188
HAU51	HAUS augmin like complex subunit 1 [Source:HGNC Symbol;Acc:HGNC:25174]	1.2777169
HAUSS	HAUS augmin like complex subunit 5 [Source:HGNC Symbol;Acc:HGNC:29130]	-1.068836
HAU8	HAUS augmin like complex subunit 8 [Source:HGNC Symbol;Acc:HGNC:30532]	1.1316115
HBA2	hemoglobin subunit alpha 2 [Source:HGNC Symbol;Acc:HGNC:4824]	-1.2018528
HBBP1	hemoglobin subunit beta pseudogene 1 [Source:HGNC Symbol;Acc:HGNC:4828]	1.127271
HBD	hemoglobin subunit delta [Source:HGNC Symbol;Acc:HGNC:4829]	-1.115907
HBEGF	heparin binding EGF like growth factor [Source:HGNC Symbol;Acc:HGNC:3059]	-1.9606428
HBS1L	HBS1 like translational GTPase [Source:HGNC Symbol;Acc:HGNC:4834]	1.2680584
HCAR1	hydroxycarboxylic acid receptor 1 [Source:HGNC Symbol;Acc:HGNC:4532]	1.0843768
HCCS	holocytochromic c synthase [Source:HGNC Symbol;Acc:HGNC:4837]	-1.1365395
HCN4	rpolarization activated cyclic nucleotide gated potassium channel 4 [Source:HGNC Symbol;Acc:HGNC:1:	1.1238633
HCP5	HLA complex P5 (non-protein coding) [Source:HGNC Symbol;Acc:HGNC:21659]	-1.2405751

HCST	hematopoietic cell signal transducer [Source:HGNC Symbol;Acc:HGNC:16977]	-1.0997273
HDAC3	histone deacetylase 3 [Source:HGNC Symbol;Acc:HGNC:4854]	1.094488
HDAC4	histone deacetylase 4 [Source:HGNC Symbol;Acc:HGNC:14063]	1.1549897
HDAC6	histone deacetylase 6 [Source:HGNC Symbol;Acc:HGNC:14064]	-1.1276944
HDAC7	histone deacetylase 7 [Source:HGNC Symbol;Acc:HGNC:14067]	1.1660109
HDAC8	histone deacetylase 8 [Source:HGNC Symbol;Acc:HGNC:13315]	-1.1609188
HDGF	hepatoma-derived growth factor [Source:HGNC Symbol;Acc:HGNC:4856]	-1.1828539
HDHD2	haloacid dehalogenase like hydrolase domain containing 2 [Source:HGNC Symbol;Acc:HGNC:25364]	1.3314756
HDX	highly divergent homeobox [Source:HGNC Symbol;Acc:HGNC:26411]	-1.1881844
HEATR1	HEAT repeat containing 1 [Source:HGNC Symbol;Acc:HGNC:25517]	1.3483844
HEATR2	dynein axonemal assembly factor 5	-1.124449
HEATR5A	HEAT repeat containing 5A [Source:HGNC Symbol;Acc:HGNC:20276]	-1.1510114
HEATR8	maestro heat like repeat family member 7	-1.2461494
HEBP1	heme binding protein 1 [Source:HGNC Symbol;Acc:HGNC:17176]	1.1240677
HERC3	HECT and RLD domain containing E3 ubiquitin protein ligase 3 [Source:HGNC Symbol;Acc:HGNC:4876]	1.1079526
HERC5	HECT and RLD domain containing E3 ubiquitin protein ligase 5 [Source:HGNC Symbol;Acc:HGNC:24368]	1.0655811
HERPUD1	homocysteine inducible ER protein with ubiquitin like domain 1 [Source:HGNC Symbol;Acc:HGNC:13744]	-1.1320776
HES1	hes family bHLH transcription factor 1 [Source:HGNC Symbol;Acc:HGNC:5192]	1.7282095
HES2	hes family bHLH transcription factor 2 [Source:HGNC Symbol;Acc:HGNC:16005]	1.2991556
HES4	hes family bHLH transcription factor 4 [Source:HGNC Symbol;Acc:HGNC:24149]	-1.7153193
HES6	hes family bHLH transcription factor 6 [Source:HGNC Symbol;Acc:HGNC:18254]	-1.2067211
HEXA	hexosaminidase subunit alpha [Source:HGNC Symbol;Acc:HGNC:4878]	-1.1418691
HEY1	hes related family bHLH transcription factor with YRPW motif 1 [Source:HGNC Symbol;Acc:HGNC:4880]	-1.7837278
HEY2	hes related family bHLH transcription factor with YRPW motif 2 [Source:HGNC Symbol;Acc:HGNC:4881]	1.0871742
HEYL	hes related family bHLH transcription factor with YRPW motif-like [Source:HGNC Symbol;Acc:HGNC:4882]	-1.1094779
HFE	hemochromatosis [Source:HGNC Symbol;Acc:HGNC:4886]	-1.1205891
HGD	homogentisate 1,2-dioxygenase [Source:HGNC Symbol;Acc:HGNC:4892]	-1.1496454
HGSNAT	heparan-alpha-glucosaminide N-acetyltransferase [Source:HGNC Symbol;Acc:HGNC:26527]	-1.2157128
HHAT	hedgehog acyltransferase [Source:HGNC Symbol;Acc:HGNC:18270]	1.0805167
HIBCH	3-hydroxyisobutyryl-CoA hydrolase [Source:HGNC Symbol;Acc:HGNC:4908]	1.226886
HINT3	histidine triad nucleotide binding protein 3 [Source:HGNC Symbol;Acc:HGNC:18468]	-1.469548
HIP1	huntingtin interacting protein 1 [Source:HGNC Symbol;Acc:HGNC:4913]	-1.643487
HIP1R	huntingtin interacting protein 1 related [Source:HGNC Symbol;Acc:HGNC:18415]	1.1324588
HIPK2	homeodomain interacting protein kinase 2 [Source:HGNC Symbol;Acc:HGNC:14402]	-1.280938733
HIRA	histone cell cycle regulator [Source:HGNC Symbol;Acc:HGNC:4916]	1.154029
HIST2H2BF	histone cluster 2, H2bf [Source:HGNC Symbol;Acc:HGNC:24700]	1.1890186
HIVEP2	human immunodeficiency virus type I enhancer binding protein 2 [Source:HGNC Symbol;Acc:HGNC:4921]	-4.043127
HIVEP3	human immunodeficiency virus type I enhancer binding protein 3 [Source:HGNC Symbol;Acc:HGNC:1356]	-1.22298115
HK1	hexokinase 1 [Source:HGNC Symbol;Acc:HGNC:4922]	-1.2101345
HKR1	KRKL-Kruppel zinc finger family member [Source:HGNC Symbol;Acc:HGNC:4928]	-1.235926
HLA-A	major histocompatibility complex, class I, A [Source:HGNC Symbol;Acc:HGNC:4931]	-1.6363772
HLA-B	major histocompatibility complex, class I, B [Source:HGNC Symbol;Acc:HGNC:4932]	-1.8488251
HLA-C	major histocompatibility complex, class I, C [Source:HGNC Symbol;Acc:HGNC:4933]	-1.84950565
HLA-DMA	major histocompatibility complex, class II, DM alpha [Source:HGNC Symbol;Acc:HGNC:4934]	-1.1644521
HLA-DPB1	major histocompatibility complex, class II, DP beta 1 [Source:HGNC Symbol;Acc:HGNC:4940]	-1.1057085
HLA-DQA1	major histocompatibility complex, class II, DQ alpha 1 [Source:HGNC Symbol;Acc:HGNC:4942]	-1.078359
HLA-DQB1	major histocompatibility complex, class II, DQ beta 1 [Source:HGNC Symbol;Acc:HGNC:4944]	-1.0903803
HLA-DRB6	major histocompatibility complex, class II, DR beta 6 (pseudogene) [Source:HGNC Symbol;Acc:HGNC:495-	1.2222303
HLA-E	major histocompatibility complex, class I, E [Source:HGNC Symbol;Acc:HGNC:4962]	-1.5749073
HLA-F	major histocompatibility complex, class I, F [Source:HGNC Symbol;Acc:HGNC:4963]	-1.7106955
HLA-J	major histocompatibility complex, class I, J (pseudogene) [Source:HGNC Symbol;Acc:HGNC:4967]	-1.9360287
HLA-L	major histocompatibility complex, class I, L (pseudogene) [Source:HGNC Symbol;Acc:HGNC:4970]	-1.1717579
HM13	histocompatibility minor 13 [Source:HGNC Symbol;Acc:HGNC:16435]	-1.2656605
HMBOX1	homeobox containing 1 [Source:HGNC Symbol;Acc:HGNC:26137]	-1.1849896
HMBS	hydroxymethylbilane synthase [Source:HGNC Symbol;Acc:HGNC:4982]	1.2667432
HMGCL1	3-hydroxymethyl-3-methylglutaryl-CoA lyase 1 [Source:HGNC Symbol;Acc:HGNC:21359]	-1.169939
HMGCR	3-hydroxy-3-methylglutaryl-CoA reductase [Source:HGNC Symbol;Acc:HGNC:5006]	1.4245794
HMGCS2	3-hydroxy-3-methylglutaryl-CoA synthase 2 [Source:HGNC Symbol;Acc:HGNC:5008]	-1.0851665
HMGN3	high mobility group nucleosomal binding domain 3 [Source:HGNC Symbol;Acc:HGNC:12312]	1.2397618
HMOX1	heme oxygenase 1 [Source:HGNC Symbol;Acc:HGNC:5013]	1.2942662
HMOX2	heme oxygenase 2 [Source:HGNC Symbol;Acc:HGNC:5014]	-1.0690899
HN1	hematological and neurological expressed 1 [Source:HGNC Symbol;Acc:HGNC:14569]	1.0836526
HN1L	hematological and neurological expressed 1 like [Source:HGNC Symbol;Acc:HGNC:14137]	-1.258135
HNF4A	hepatocyte nuclear factor 4 alpha [Source:HGNC Symbol;Acc:HGNC:5024]	1.1194208
HNRNPA1	heterogeneous nuclear ribonucleoprotein A1 [Source:HGNC Symbol;Acc:HGNC:5031]	1.3027767
HOMER2	homer scaffolding protein 2 [Source:HGNC Symbol;Acc:HGNC:17513]	1.1064998
HOMEZ	homeobox and leucine zipper encoding [Source:HGNC Symbol;Acc:HGNC:20164]	-1.329111
HOTAIR	HOX transcript antisense RNA [Source:HGNC Symbol;Acc:HGNC:33510]	1.0767479
HOXA10	homeobox A10 [Source:HGNC Symbol;Acc:HGNC:5100]	1.4817383
HOXA11	homeobox A11 [Source:HGNC Symbol;Acc:HGNC:5101]	1.314562
HOXA11-AS1	HOXA11 antisense RNA	1.4127041
HOXA3	homeobox A3 [Source:HGNC Symbol;Acc:HGNC:5104]	-1.2127541
HOXA4	homeobox A4 [Source:HGNC Symbol;Acc:HGNC:5105]	-2.3998737
HOXA7	homeobox A7 [Source:HGNC Symbol;Acc:HGNC:5108]	1.1888288
HOXB2	homeobox B2 [Source:HGNC Symbol;Acc:HGNC:5113]	1.51635425
HOXB5	homeobox B5 [Source:HGNC Symbol;Acc:HGNC:5116]	1.3696412
HOXB7	homeobox B7 [Source:HGNC Symbol;Acc:HGNC:5118]	1.1884856
HOXB8	homeobox B8 [Source:HGNC Symbol;Acc:HGNC:5119]	1.2506728
HOXB9	homeobox B9 [Source:HGNC Symbol;Acc:HGNC:5120]	-1.6384615
HOXD11	homeobox D11 [Source:HGNC Symbol;Acc:HGNC:5134]	1.1339025
HOXD3	homeobox D3 [Source:HGNC Symbol;Acc:HGNC:5137]	1.1087532
HOXD8	homeobox D8 [Source:HGNC Symbol;Acc:HGNC:5139]	1.5310539
HP	haptoglobin [Source:HGNC Symbol;Acc:HGNC:5141]	-1.24853
HPS3	HPS3, biogenesis of lysosomal organelles complex 2 subunit 1 [Source:HGNC Symbol;Acc:HGNC:15597]	1.3031766
HPS4	HPS4, biogenesis of lysosomal organelles complex 3 subunit 2 [Source:HGNC Symbol;Acc:HGNC:15844]	-1.1146306
HPS6	HPS6, biogenesis of lysosomal organelles complex 2 subunit 3 [Source:HGNC Symbol;Acc:HGNC:18817]	1.1038908

HRAS	HRas proto-oncogene, GTPase [Source:HGNC Symbol;Acc:HGNC:5173]	-1.1408103
HRASL55	HRAS like suppressor family member 5 [Source:HGNC Symbol;Acc:HGNC:24978]	-1.4020449
HRCT1	histidine rich carboxyl terminus 1 [Source:HGNC Symbol;Acc:HGNC:33872]	1.9456505
HRH1	histamine receptor H1 [Source:HGNC Symbol;Acc:HGNC:5182]	-1.4982616
HRH3	histamine receptor H3 [Source:HGNC Symbol;Acc:HGNC:5184]	1.0619979
HS2ST1	heparan sulfate 2-O-sulfotransferase 1 [Source:HGNC Symbol;Acc:HGNC:5193]	1.3886265
HS3ST1	heparan sulfate-glucosamine 3-sulfotransferase 1 [Source:HGNC Symbol;Acc:HGNC:5194]	1.4251945
HS3ST5	heparan sulfate-glucosamine 3-sulfotransferase 5 [Source:HGNC Symbol;Acc:HGNC:19419]	1.13301505
HS6ST1	heparan sulfate 6-O-sulfotransferase 1 [Source:HGNC Symbol;Acc:HGNC:5201]	-1.2474322
HS6ST3	heparan sulfate 6-O-sulfotransferase 3 [Source:HGNC Symbol;Acc:HGNC:19134]	1.1348127
HSD17B2	hydroxysteroid 17-beta dehydrogenase 2 [Source:HGNC Symbol;Acc:HGNC:5211]	1.565866
HSD17B4	hydroxysteroid 17-beta dehydrogenase 4 [Source:HGNC Symbol;Acc:HGNC:5213]	1.1892312
HSD17B7	hydroxysteroid 17-beta dehydrogenase 7 [Source:HGNC Symbol;Acc:HGNC:5215]	1.12424025
HSDL1	hydroxysteroid dehydrogenase like 1 [Source:HGNC Symbol;Acc:HGNC:16475]	1.097019
HSF2	heat shock transcription factor 2 [Source:HGNC Symbol;Acc:HGNC:5225]	1.4188836
HSFY1P1	heat shock transcription factor, Y-linked 1 pseudogene 1 [Source:HGNC Symbol;Acc:HGNC:1846]	1.0765933
HSH2D	hematopoietic SH2 domain containing [Source:HGNC Symbol;Acc:HGNC:24920]	-1.1177905
HSPA1A	heat shock protein family A (Hsp70) member 1A [Source:HGNC Symbol;Acc:HGNC:5232]	-1.1816055
HSPA2	heat shock protein family A (Hsp70) member 2 [Source:HGNC Symbol;Acc:HGNC:5235]	-1.4627583
HSPA4	heat shock protein family A (Hsp70) member 4 [Source:HGNC Symbol;Acc:HGNC:5237]	1.25257205
HSPB7	heat shock protein family B (small) member 7 [Source:HGNC Symbol;Acc:HGNC:5249]	1.0952973
HSPBAP1	HSPB1 associated protein 1 [Source:HGNC Symbol;Acc:HGNC:16389]	1.1326001
HTN1	histatin 1 [Source:HGNC Symbol;Acc:HGNC:5283]	1.1245089
HTN3	histatin 3 [Source:HGNC Symbol;Acc:HGNC:5284]	1.1108384
HTR1D	5-hydroxytryptamine receptor 1D [Source:HGNC Symbol;Acc:HGNC:5289]	1.1412073
HTR1F	5-hydroxytryptamine receptor 1F [Source:HGNC Symbol;Acc:HGNC:5292]	1.1200968
HTR2C	5-hydroxytryptamine receptor 2C [Source:HGNC Symbol;Acc:HGNC:5295]	1.0986276
HTR3A	5-hydroxytryptamine receptor 3A [Source:HGNC Symbol;Acc:HGNC:5297]	-1.1769689
HTR4	5-hydroxytryptamine receptor 4 [Source:HGNC Symbol;Acc:HGNC:5299]	1.0817528
HTR6	5-hydroxytryptamine receptor 6 [Source:HGNC Symbol;Acc:HGNC:5301]	-1.1426796
HTR7	5-hydroxytryptamine receptor 7 [Source:HGNC Symbol;Acc:HGNC:5302]	1.3485706
HTR7P1	5-hydroxytryptamine receptor 7 pseudogene 1 [Source:HGNC Symbol;Acc:HGNC:30411]	1.3741966
HTRA2	HtrA serine peptidase 2 [Source:HGNC Symbol;Acc:HGNC:14348]	-1.1839318
HTT	huntingtin [Source:HGNC Symbol;Acc:HGNC:4851]	-1.1539761
HULC	hepatocellular carcinoma up-regulated long non-coding RNA [Source:HGNC Symbol;Acc:HGNC:34232]	1.095667
HUS1B	HUS1 checkpoint clamp component B [Source:HGNC Symbol;Acc:HGNC:16485]	-1.055236
HUWE1	T, UBA and WWE domain containing 1, E3 ubiquitin protein ligase [Source:HGNC Symbol;Acc:HGNC:308	-1.4209539
HYAL1	hyaluronoglucosaminidase 1 [Source:HGNC Symbol;Acc:HGNC:5320]	-1.1860045
HYAL3	hyaluronoglucosaminidase 3 [Source:HGNC Symbol;Acc:HGNC:5322]	-1.2404289
ICAM1	intercellular adhesion molecule 1 [Source:HGNC Symbol;Acc:HGNC:5344]	-54.208492
ICAM4	intercellular adhesion molecule 4 (Landsteiner-Wiener blood group) [Source:HGNC Symbol;Acc:HGNC:534	-6.44848
ICAM5	intercellular adhesion molecule 5 [Source:HGNC Symbol;Acc:HGNC:5348]	-1.2500415
ICOS	inducible T-cell costimulator [Source:HGNC Symbol;Acc:HGNC:5351]	-1.1336795
ICOSLG	inducible T-cell costimulator ligand [Source:HGNC Symbol;Acc:HGNC:17087]	-5.4298136
ICT1	mitochondrial ribosomal protein L58	-1.1742265
ID1	inhibitor of DNA binding 1, HLH protein [Source:HGNC Symbol;Acc:HGNC:5360]	2.9173017
ID2	inhibitor of DNA binding 2, HLH protein [Source:HGNC Symbol;Acc:HGNC:5361]	1.92504425
IDAS	multiciliate differentiation and DNA synthesis associated cell cycle protein	1.1195458
IDE	insulin degrading enzyme [Source:HGNC Symbol;Acc:HGNC:5381]	1.2076976
IDH3A	isocitrate dehydrogenase 3 (NAD(+)) alpha [Source:HGNC Symbol;Acc:HGNC:5384]	1.365312
IDI1	isopentenyl-diphosphate delta isomerase 1 [Source:HGNC Symbol;Acc:HGNC:5387]	1.5269727
IER2	immediate early response 2 [Source:HGNC Symbol;Acc:HGNC:28871]	1.1591237
IER3	immediate early response 3 [Source:HGNC Symbol;Acc:HGNC:5392]	-1.3029556
IER3IP1	immediate early response 3 interacting protein 1 [Source:HGNC Symbol;Acc:HGNC:18550]	1.3192735
IERS5	immediate early response 5 [Source:HGNC Symbol;Acc:HGNC:5393]	-2.3785453
IERSL5	immediate early response 5 like [Source:HGNC Symbol;Acc:HGNC:23679]	1.5421685
IFFO1	intermediate filament family orphan 1 [Source:HGNC Symbol;Acc:HGNC:24970]	1.3684595
IFFO2	intermediate filament family orphan 2 [Source:HGNC Symbol;Acc:HGNC:27006]	1.1812522
IFI16	interferon gamma inducible protein 16 [Source:HGNC Symbol;Acc:HGNC:5395]	1.450654
IFI30	IFI30, lysosomal thiol reductase [Source:HGNC Symbol;Acc:HGNC:5398]	-1.8574595
IFIH1	interferon induced with helicase C domain 1 [Source:HGNC Symbol;Acc:HGNC:18873]	-1.9001925
IFITM1	interferon induced transmembrane protein 1 [Source:HGNC Symbol;Acc:HGNC:5412]	-1.1605284
IFTLTD1	lamin tail domain containing 1	1.0886848
IFNA14	interferon alpha 14 [Source:HGNC Symbol;Acc:HGNC:5420]	1.1493437
IFNAR1	interferon alpha and beta receptor subunit 1 [Source:HGNC Symbol;Acc:HGNC:5432]	-1.2214895
IFNAR2	interferon alpha and beta receptor subunit 2 [Source:HGNC Symbol;Acc:HGNC:5433]	-1.488919833
IFNG	interferon gamma [Source:HGNC Symbol;Acc:HGNC:5438]	1.054601
IFNGR1	interferon gamma receptor 1 [Source:HGNC Symbol;Acc:HGNC:5439]	-1.8999877
IFNGR2	interferon gamma receptor 2 (interferon gamma transducer 1) [Source:HGNC Symbol;Acc:HGNC:5440]	-2.0907316
IFT122	intraflagellar transport 122 [Source:HGNC Symbol;Acc:HGNC:13556]	-1.1377552
IFT20	intraflagellar transport 20 [Source:HGNC Symbol;Acc:HGNC:30989]	-1.2719423
IFT74	intraflagellar transport 74 [Source:HGNC Symbol;Acc:HGNC:21424]	1.2885128
IGBP1	immunoglobulin (CD79A) binding protein 1 [Source:HGNC Symbol;Acc:HGNC:5461]	-1.1667752
IGF2AS	IGF2 antisense RNA	-1.193187
IGFBP3	insulin like growth factor 2 mRNA binding protein 3 [Source:HGNC Symbol;Acc:HGNC:28868]	1.7994442
IGFBP1	insulin like growth factor binding protein 1 [Source:HGNC Symbol;Acc:HGNC:5469]	1.6492078
IGFBP4	insulin like growth factor binding protein 4 [Source:HGNC Symbol;Acc:HGNC:5473]	1.2349166
IGFL2	IGF like family member 2 [Source:HGNC Symbol;Acc:HGNC:32929]	-1.0987693
IGFL3	IGF like family member 3 [Source:HGNC Symbol;Acc:HGNC:32930]	1.1372129
IGFN1	immunoglobulin-like and fibronectin type III domain containing 1 [Source:HGNC Symbol;Acc:HGNC:2460	-1.1203761
IGJ	joining chain of multimeric IgA and IgM	-1.1395674
IGSF1	immunoglobulin superfamily member 1 [Source:HGNC Symbol;Acc:HGNC:5948]	-1.1130397
IGSF21	immunoglobulin superfamily member 21 [Source:HGNC Symbol;Acc:HGNC:28246]	-1.1412876
IGSF6	immunoglobulin superfamily member 6 [Source:HGNC Symbol;Acc:HGNC:5953]	1.0536579
IGSF9B	immunoglobulin superfamily member 9B [Source:HGNC Symbol;Acc:HGNC:32326]	-1.3680544
IHH	indian hedgehog [Source:HGNC Symbol;Acc:HGNC:5956]	1.0591375

IKBKAP	a light polypeptide gene enhancer in B-cells, kinase complex-associated protein [Source:HGNC Symbol;Acc:HGNC:5962]	1.1545026
IKBKE	or of kappa light polypeptide gene enhancer in B-cells, kinase epsilon [Source:HGNC Symbol;Acc:HGNC:5961]	-1.9291891
IKZF2	IKAROS family zinc finger 2 [Source:HGNC Symbol;Acc:HGNC:13177]	1.1250074
IKZF3	IKAROS family zinc finger 3 [Source:HGNC Symbol;Acc:HGNC:13178]	-1.0699296
IKZF4	IKAROS family zinc finger 4 [Source:HGNC Symbol;Acc:HGNC:13179]	-1.277173
IL10	interleukin 10 [Source:HGNC Symbol;Acc:HGNC:5962]	-1.0685151
IL10RA	interleukin 10 receptor subunit alpha [Source:HGNC Symbol;Acc:HGNC:5964]	-1.4823235
IL10RB	interleukin 10 receptor subunit beta [Source:HGNC Symbol;Acc:HGNC:5965]	-1.1694837
IL11	interleukin 11 [Source:HGNC Symbol;Acc:HGNC:5966]	1.3062071
IL12A	interleukin 12A [Source:HGNC Symbol;Acc:HGNC:5969]	1.119767
IL13	interleukin 13 [Source:HGNC Symbol;Acc:HGNC:5973]	1.0838113
IL13RA1	interleukin 13 receptor subunit alpha 1 [Source:HGNC Symbol;Acc:HGNC:5974]	-1.1157675
IL13RA2	interleukin 13 receptor subunit alpha 2 [Source:HGNC Symbol;Acc:HGNC:5975]	1.1172427
IL15	interleukin 15 [Source:HGNC Symbol;Acc:HGNC:5977]	-4.2042212
IL15RA	interleukin 15 receptor subunit alpha [Source:HGNC Symbol;Acc:HGNC:5978]	-1.69626815
IL16	interleukin 16 [Source:HGNC Symbol;Acc:HGNC:5980]	1.0886935
IL17A	interleukin 17A [Source:HGNC Symbol;Acc:HGNC:5981]	-1.1687678
IL17RB	interleukin 17 receptor B [Source:HGNC Symbol;Acc:HGNC:18015]	1.0950464
IL17RD	interleukin 17 receptor D [Source:HGNC Symbol;Acc:HGNC:17616]	-1.1061695
IL18BP	interleukin 18 binding protein [Source:HGNC Symbol;Acc:HGNC:5987]	-1.2322948
IL18R1	interleukin 18 receptor 1 [Source:HGNC Symbol;Acc:HGNC:5988]	-1.543199033
IL18RAP	interleukin 18 receptor accessory protein [Source:HGNC Symbol;Acc:HGNC:5989]	-1.32891765
IL19	interleukin 19 [Source:HGNC Symbol;Acc:HGNC:5990]	-1.1487836
IL1A	interleukin 1 alpha [Source:HGNC Symbol;Acc:HGNC:5991]	-1.6709274
IL1B	interleukin 1 beta [Source:HGNC Symbol;Acc:HGNC:5992]	-1.8520757
IL1F10	interleukin 1 family member 10 (theta) [Source:HGNC Symbol;Acc:HGNC:15552]	-1.1481426
IL1R2	interleukin 1 receptor type 2 [Source:HGNC Symbol;Acc:HGNC:5994]	1.2024618
IL1RL2	interleukin 1 receptor like 2 [Source:HGNC Symbol;Acc:HGNC:5999]	-1.0876387
IL1RN	interleukin 1 receptor antagonist [Source:HGNC Symbol;Acc:HGNC:6000]	-1.0839552
IL20	interleukin 20 [Source:HGNC Symbol;Acc:HGNC:6002]	1.064652
IL20RA	interleukin 20 receptor subunit alpha [Source:HGNC Symbol;Acc:HGNC:6003]	1.0829166
IL20RB	interleukin 20 receptor subunit beta [Source:HGNC Symbol;Acc:HGNC:6004]	-1.3602723
IL21R	interleukin 21 receptor [Source:HGNC Symbol;Acc:HGNC:6006]	-1.1329529
IL22RA2	interleukin 22 receptor subunit alpha 2 [Source:HGNC Symbol;Acc:HGNC:14901]	1.2649815
IL23A	interleukin 23 subunit alpha [Source:HGNC Symbol;Acc:HGNC:15488]	-2.6102004
IL27RA	interleukin 27 receptor subunit alpha [Source:HGNC Symbol;Acc:HGNC:17290]	-1.3609478
IL28A	interferon lambda 2	-1.1997145
IL3	interleukin 3 [Source:HGNC Symbol;Acc:HGNC:6011]	1.0590298
IL32	interleukin 32 [Source:HGNC Symbol;Acc:HGNC:16830]	-2.7948629
IL34	interleukin 34 [Source:HGNC Symbol;Acc:HGNC:28529]	-1.2410488
IL36RN	interleukin 36 receptor antagonist [Source:HGNC Symbol;Acc:HGNC:15561]	1.1045929
IL37	interleukin 37 [Source:HGNC Symbol;Acc:HGNC:15563]	-1.2863138
IL3RA	interleukin 3 receptor subunit alpha [Source:HGNC Symbol;Acc:HGNC:6012]	-2.2783055
IL4I1	interleukin 4 induced 1 [Source:HGNC Symbol;Acc:HGNC:19094]	-6.7667794
IL4R	interleukin 4 receptor [Source:HGNC Symbol;Acc:HGNC:6015]	-1.440208767
IL6	interleukin 6 [Source:HGNC Symbol;Acc:HGNC:6018]	-1.672027
IL7R	interleukin 7 receptor [Source:HGNC Symbol;Acc:HGNC:6024]	-2.9823403
IL8	C-X-C motif chemokine ligand 8	-8.1627525
ILF2	interleukin enhancer binding factor 2 [Source:HGNC Symbol;Acc:HGNC:6037]	1.1290766
ILF3	interleukin enhancer binding factor 3 [Source:HGNC Symbol;Acc:HGNC:6038]	-1.1732329
ILK	integrin linked kinase [Source:HGNC Symbol;Acc:HGNC:6040]	-1.112325
ILKAP	ILK associated serine/threonine phosphatase [Source:HGNC Symbol;Acc:HGNC:15566]	-1.0899183
IMMT	inner membrane mitochondrial protein [Source:HGNC Symbol;Acc:HGNC:6047]	-1.2021757
IMP3	IMP3, U3 small nucleolar ribonucleoprotein [Source:HGNC Symbol;Acc:HGNC:14497]	1.1432078
IMPAD1	inositol monophosphatase domain containing 1 [Source:HGNC Symbol;Acc:HGNC:26019]	1.3196304
IMPDH2	inosine monophosphate dehydrogenase 2 [Source:HGNC Symbol;Acc:HGNC:6053]	1.0966448
IMPG2	interphotoreceptor matrix proteoglycan 2 [Source:HGNC Symbol;Acc:HGNC:18362]	-1.1148427
INADL	PATJ, crumb cell polarity complex component	-1.338655
INE1	inactivation escape 1 (non-protein coding) [Source:HGNC Symbol;Acc:HGNC:6060]	-1.2958481
INF2	inverted formin, FH2 and WH2 domain containing [Source:HGNC Symbol;Acc:HGNC:23791]	-1.679498
ING5	inhibitor of growth family member 5 [Source:HGNC Symbol;Acc:HGNC:19421]	1.1050963
INHBB	inhibitin beta B subunit [Source:HGNC Symbol;Acc:HGNC:6067]	1.1901286
INMT	indoletyramine N-methyltransferase [Source:HGNC Symbol;Acc:HGNC:6069]	-1.0938246
INO80B	INO80 complex subunit B [Source:HGNC Symbol;Acc:HGNC:1324]	1.2384149
INO80D	INO80 complex subunit D [Source:HGNC Symbol;Acc:HGNC:25997]	-1.1614156
INPP1	inositol polyphosphate-1-phosphatase [Source:HGNC Symbol;Acc:HGNC:6071]	1.3880361
INPP4A	inositol polyphosphate-4-phosphatase type I A [Source:HGNC Symbol;Acc:HGNC:6074]	-1.1496724
INPP5A	inositol polyphosphate-5-phosphatase A [Source:HGNC Symbol;Acc:HGNC:6076]	-1.24781105
INPP5D	inositol polyphosphate-5-phosphatase D [Source:HGNC Symbol;Acc:HGNC:6079]	1.3394874
INPP5E	inositol polyphosphate-5-phosphatase E [Source:HGNC Symbol;Acc:HGNC:21474]	-1.1468072
INPPL1	inositol polyphosphate phosphatase like 1 [Source:HGNC Symbol;Acc:HGNC:6080]	1.1466528
INSIG2	insulin induced gene 2 [Source:HGNC Symbol;Acc:HGNC:20452]	-1.1946335
INSL5	insulin like 5 [Source:HGNC Symbol;Acc:HGNC:6088]	1.1545088
INSM2	INSM transcriptional repressor 2 [Source:HGNC Symbol;Acc:HGNC:17539]	-1.1003453
INTS1	integrator complex subunit 1 [Source:HGNC Symbol;Acc:HGNC:24555]	1.1585999
INTS10	integrator complex subunit 10 [Source:HGNC Symbol;Acc:HGNC:25548]	1.2543128
INTS8	integrator complex subunit 8 [Source:HGNC Symbol;Acc:HGNC:26048]	1.2659352
IPO11	importin 11 [Source:HGNC Symbol;Acc:HGNC:20628]	1.166967
IPO7	importin 7 [Source:HGNC Symbol;Acc:HGNC:9852]	1.35156555
IPO8	importin 8 [Source:HGNC Symbol;Acc:HGNC:9853]	1.3170022
IPPK	inositol-pentakisphosphate 2-kinase [Source:HGNC Symbol;Acc:HGNC:14645]	-1.2809155
IQCA1	IQ motif containing with AAA domain 1 [Source:HGNC Symbol;Acc:HGNC:26195]	-1.1636845
IQCE	IQ motif containing E [Source:HGNC Symbol;Acc:HGNC:29171]	1.1891303
IQCF1	IQ motif containing F1 [Source:HGNC Symbol;Acc:HGNC:28607]	-1.1351235
IQCK	IQ motif containing K [Source:HGNC Symbol;Acc:HGNC:28556]	-1.1266048
IQGAP3	IQ motif containing GTPase activating protein 3 [Source:HGNC Symbol;Acc:HGNC:20669]	-1.1946466

IQSEC1	IQ motif and Sec7 domain 1 [Source:HGNC Symbol;Acc:HGNC:29112]	1.1182463
IRAK2	interleukin 1 receptor associated kinase 2 [Source:HGNC Symbol;Acc:HGNC:6113]	-6.068329
IRF1	interferon regulatory factor 1 [Source:HGNC Symbol;Acc:HGNC:6116]	-4.574583
IRF2	interferon regulatory factor 2 [Source:HGNC Symbol;Acc:HGNC:6117]	-1.2343482
IRF3	interferon regulatory factor 3 [Source:HGNC Symbol;Acc:HGNC:6118]	1.1684548
IRF5	interferon regulatory factor 5 [Source:HGNC Symbol;Acc:HGNC:6120]	-1.6055096
IRF6	interferon regulatory factor 6 [Source:HGNC Symbol;Acc:HGNC:6121]	-1.4407084
IRF7	interferon regulatory factor 7 [Source:HGNC Symbol;Acc:HGNC:6122]	-1.3743957
IRF9	interferon regulatory factor 9 [Source:HGNC Symbol;Acc:HGNC:6131]	-1.4288356
IRS1	insulin receptor substrate 1 [Source:HGNC Symbol;Acc:HGNC:6125]	1.1737791
IRS2	insulin receptor substrate 2 [Source:HGNC Symbol;Acc:HGNC:6126]	-1.2032815
ISCA1	iron-sulfur cluster assembly 1 [Source:HGNC Symbol;Acc:HGNC:28660]	-1.1577586
ISCU	iron-sulfur cluster assembly enzyme [Source:HGNC Symbol;Acc:HGNC:29882]	1.1609955
ISG20	interferon stimulated exonuclease gene 20 [Source:HGNC Symbol;Acc:HGNC:6130]	-2.3666964
ISM1	isthmin 1, angiogenesis inhibitor [Source:HGNC Symbol;Acc:HGNC:16213]	-1.0966566
ITG5	integrin subunit alpha 5 [Source:HGNC Symbol;Acc:HGNC:6141]	1.30258
ITGAL	integrin subunit alpha L [Source:HGNC Symbol;Acc:HGNC:6148]	1.1334461
ITGB1BP1	integrin subunit beta 1 binding protein 1 [Source:HGNC Symbol;Acc:HGNC:23927]	1.1433567
ITGB3BP	integrin subunit beta 3 binding protein [Source:HGNC Symbol;Acc:HGNC:6157]	1.163818
ITGB7	integrin subunit beta 7 [Source:HGNC Symbol;Acc:HGNC:6162]	-1.2926884
ITIH1	inter-alpha-trypsin inhibitor heavy chain 1 [Source:HGNC Symbol;Acc:HGNC:6166]	-1.1413702
ITIH5	inter-alpha-trypsin inhibitor heavy chain family member 5 [Source:HGNC Symbol;Acc:HGNC:21449]	1.1360995
ITM2B	integral membrane protein 2B [Source:HGNC Symbol;Acc:HGNC:6174]	-1.1317462
ITPKC	inositol-trisphosphate 3-kinase C [Source:HGNC Symbol;Acc:HGNC:14897]	-1.2544945
IVNS1ABP	influenza virus NS1A binding protein [Source:HGNC Symbol;Acc:HGNC:16951]	1.28182125
IWS1	IWS1, SUPT6H interacting protein [Source:HGNC Symbol;Acc:HGNC:25467]	1.120061
JAG1	jagged 1 [Source:HGNC Symbol;Acc:HGNC:6188]	-2.8004541
JAG2	jagged 2 [Source:HGNC Symbol;Acc:HGNC:6189]	1.2217559
JAK3	Janus kinase 3 [Source:HGNC Symbol;Acc:HGNC:6193]	-2.9648972
JAM2	junctional adhesion molecule 2 [Source:HGNC Symbol;Acc:HGNC:14686]	-2.370465267
JAZF1	JAZF zinc finger 1 [Source:HGNC Symbol;Acc:HGNC:28917]	-1.2585773
JD2	Jun dimerization protein 2 [Source:HGNC Symbol;Acc:HGNC:17546]	-1.3221147
JKAMP	JNK1/MAPK8-associated membrane protein [Source:HGNC Symbol;Acc:HGNC:20184]	1.2957004
JMD6	arginine demethylase and lysine hydroxylase [Source:HGNC Symbol;Acc:HGNC:19355]	-1.2402571
JOSD1	Josephin domain containing 1 [Source:HGNC Symbol;Acc:HGNC:28953]	1.0955805
JPH4	junctophilin 4 [Source:HGNC Symbol;Acc:HGNC:20156]	1.1694688
JUNB	JunB proto-oncogene, AP-1 transcription factor subunit [Source:HGNC Symbol;Acc:HGNC:6205]	-2.7148168
KAL1	anosmin 1	1.2410437
KANK2	KN motif and ankyrin repeat domains 2 [Source:HGNC Symbol;Acc:HGNC:29300]	1.3396652
KANK3	KN motif and ankyrin repeat domains 3 [Source:HGNC Symbol;Acc:HGNC:24796]	-1.1484523
KAT2A	lysine acetyltransferase 2A [Source:HGNC Symbol;Acc:HGNC:4201]	1.4546719
KAT5	lysine acetyltransferase 5 [Source:HGNC Symbol;Acc:HGNC:5275]	-1.2389823
KAT6B	lysine acetyltransferase 6B [Source:HGNC Symbol;Acc:HGNC:17582]	-1.0665951
KAZALD1	Kazal type serine peptidase inhibitor domain 1 [Source:HGNC Symbol;Acc:HGNC:25460]	1.3934486
KAZN	kazrin, periplakin interacting protein [Source:HGNC Symbol;Acc:HGNC:29173]	-1.1227167
KBTBD10	kelch like family member 41	1.1044997
KCND3	potassium voltage-gated channel subfamily D member 3 [Source:HGNC Symbol;Acc:HGNC:6239]	1.069064
KCNE3	potassium voltage-gated channel subfamily E regulatory subunit 3 [Source:HGNC Symbol;Acc:HGNC:624:	-1.1952144
KCNH7	potassium voltage-gated channel subfamily H member 7 [Source:HGNC Symbol;Acc:HGNC:18863]	1.0856394
KCNJ12	potassium voltage-gated channel subfamily J member 12 [Source:HGNC Symbol;Acc:HGNC:6258]	1.3526348
KCNJ15	potassium voltage-gated channel subfamily J member 15 [Source:HGNC Symbol;Acc:HGNC:6261]	1.1332278
KCNK1	potassium two pore domain channel subfamily K member 1 [Source:HGNC Symbol;Acc:HGNC:6272]	-1.6628482
KCNK4	potassium two pore domain channel subfamily K member 4 [Source:HGNC Symbol;Acc:HGNC:6279]	-1.1365039
KCNK5	potassium two pore domain channel subfamily K member 5 [Source:HGNC Symbol;Acc:HGNC:6280]	-1.2193043
KCNK6	potassium two pore domain channel subfamily K member 6 [Source:HGNC Symbol;Acc:HGNC:6281]	1.2970812
KCNK7	potassium two pore domain channel subfamily K member 7 [Source:HGNC Symbol;Acc:HGNC:6282]	-1.2175599
KCNMB2	ium calcium-activated channel subfamily M regulatory beta subunit 2 [Source:HGNC Symbol;Acc:HGNC:1031604	1.1031604
KCNMB4	ium calcium-activated channel subfamily M regulatory beta subunit 4 [Source:HGNC Symbol;Acc:HGNC:12300395	1.2300395
KCNN2	potassium calcium-activated channel subfamily N member 2 [Source:HGNC Symbol;Acc:HGNC:6291]	-2.946887
KCNQ1	potassium voltage-gated channel subfamily Q member 1 [Source:HGNC Symbol;Acc:HGNC:6294]	-1.1221502
KCNQ2	potassium voltage-gated channel subfamily Q member 2 [Source:HGNC Symbol;Acc:HGNC:6296]	-1.14196305
KCNS3	iotassium voltage-gated channel modifier subfamily S member 3 [Source:HGNC Symbol;Acc:HGNC:6302	-1.6835319
KCP	kielin/chordin-like protein [Source:HGNC Symbol;Acc:HGNC:17585]	-1.1736016
KCTD1	potassium channel tetramerization domain containing 1 [Source:HGNC Symbol;Acc:HGNC:18249]	1.3043356
KCTD11	potassium channel tetramerization domain containing 11 [Source:HGNC Symbol;Acc:HGNC:21302]	-1.7550062
KCTD12	potassium channel tetramerization domain containing 12 [Source:HGNC Symbol;Acc:HGNC:14678]	2.00215525
KCTD13	potassium channel tetramerization domain containing 13 [Source:HGNC Symbol;Acc:HGNC:22234]	-1.1941956
KCTD14	potassium channel tetramerization domain containing 14 [Source:HGNC Symbol;Acc:HGNC:23295]	1.1203846
KCTD15	potassium channel tetramerization domain containing 15 [Source:HGNC Symbol;Acc:HGNC:23297]	1.1134436
KCTD21	potassium channel tetramerization domain containing 21 [Source:HGNC Symbol;Acc:HGNC:27452]	-1.1448433
KCTD3	potassium channel tetramerization domain containing 3 [Source:HGNC Symbol;Acc:HGNC:21305]	1.2762947
KCTD5	potassium channel tetramerization domain containing 5 [Source:HGNC Symbol;Acc:HGNC:21423]	-1.1867813
KDEL1	KDEL motif containing 1 [Source:HGNC Symbol;Acc:HGNC:19350]	-1.2030149
KDELR3	KDEL endoplasmic reticulum protein retention receptor 3 [Source:HGNC Symbol;Acc:HGNC:6306]	-1.3354626
KDM1B	lysine demethylase 1B [Source:HGNC Symbol;Acc:HGNC:21577]	-1.0974213
KDM2A	lysine demethylase 2A [Source:HGNC Symbol;Acc:HGNC:13606]	-1.5063708
KDM3A	lysine demethylase 3A [Source:HGNC Symbol;Acc:HGNC:20815]	1.2498034
KDM4A	lysine demethylase 4A [Source:HGNC Symbol;Acc:HGNC:22978]	-1.1761543
KDM4D	lysine demethylase 4D [Source:HGNC Symbol;Acc:HGNC:25498]	-1.2728119
KDM6B	lysine demethylase 6B [Source:HGNC Symbol;Acc:HGNC:29012]	-1.2253329
KDSR	3-ketodihydrophingosine reductase [Source:HGNC Symbol;Acc:HGNC:4021]	1.1298662
KEL	Kell blood group, metallo-endopeptidase [Source:HGNC Symbol;Acc:HGNC:6308]	1.1421485
KHSRP	KH-type splicing regulatory protein [Source:HGNC Symbol;Acc:HGNC:6316]	1.2597895
KIAA0090	ER membrane protein complex subunit 1	1.0713794
KIAA0174	IST1, ESCRT-III associated factor	-1.2136495
KIAA0196	KIAA0196 [Source:HGNC Symbol;Acc:HGNC:28984]	1.2771231

KIAA0247	sushi domain containing 6	-1.3338534
KIAA0284	centrosomal protein 170B	1.1373115
KIAA0317	apoptosis resistant E3 ubiquitin protein ligase 1	-1.2232885
KIAA0391	KIAA0391 [Source:HGNC Symbol;Acc:HGNC:19958]	-1.1419615
KIAA0415	adaptor related protein complex 5 zeta 1 subunit	-1.4796715
KIAA0528	C2 calcium dependent domain containing 5	1.4897679
KIAA0664L3	clustered mitochondria homolog pseudogene 3	-1.2562492
KIAA0753	KIAA0753 [Source:HGNC Symbol;Acc:HGNC:29110]	1.2224723
KIAA0907	KIAA0907 [Source:HGNC Symbol;Acc:HGNC:29145]	-1.1477985
KIAA1147	KIAA1147 [Source:HGNC Symbol;Acc:HGNC:29472]	-1.31527265
KIAA1191	KIAA1191 [Source:HGNC Symbol;Acc:HGNC:29209]	-1.1766967
KIAA1217	KIAA1217 [Source:HGNC Symbol;Acc:HGNC:25428]	-1.21932455
KIAA1239	NACHT and WD repeat domain containing 2	1.1688716
KIAA1310	KAT8 regulatory NSL complex subunit 3	-1.2986103
KIAA1429	KIAA1429 [Source:HGNC Symbol;Acc:HGNC:24500]	1.3513559
KIAA1430	cilia and flagella associated protein 97	1.498723
KIAA1432	RIC1 homolog, RAB6A GEF complex partner 1	1.2558789
KIAA1467	family with sequence similarity 234 member B	1.2544901
KIAA1522	KIAA1522 [Source:HGNC Symbol;Acc:HGNC:29301]	-1.3404709
KIAA1539	family with sequence similarity 214 member B	1.3029575
KIAA1609	TBC/LysM-associated domain containing 1	-1.70323875
KIAA1644	KIAA1644 [Source:HGNC Symbol;Acc:HGNC:29335]	-1.2054121
KIAA1656	KIAA1656 protein	1.1104379
KIAA1671	KIAA1671 [Source:HGNC Symbol;Acc:HGNC:29345]	-1.108342
KIAA1683	KIAA1683 [Source:HGNC Symbol;Acc:HGNC:29350]	-1.1410635
KIAA1715	lunapark, ER junction formation factor	1.1323284
KIAA1804	mitogen-activated protein kinase kinase kinase 21	-1.2970525
KIAA1949	protein phosphatase 1 regulatory subunit 18	-1.3295424
KIF13A	kinesin family member 13A [Source:HGNC Symbol;Acc:HGNC:14566]	-1.3354458
KIF17	kinesin family member 17 [Source:HGNC Symbol;Acc:HGNC:19167]	-1.142011
KIF19	kinesin family member 19 [Source:HGNC Symbol;Acc:HGNC:26735]	1.2089506
KIF1B	kinesin family member 1B [Source:HGNC Symbol;Acc:HGNC:16636]	-1.0699205
KIF21A	kinesin family member 21A [Source:HGNC Symbol;Acc:HGNC:19349]	1.0866286
KIF21B	kinesin family member 21B [Source:HGNC Symbol;Acc:HGNC:29442]	-1.3706878
KIF26A	kinesin family member 26A [Source:HGNC Symbol;Acc:HGNC:20226]	-1.393289
KIF2A	kinesin family member 2A [Source:HGNC Symbol;Acc:HGNC:6318]	1.2320776
KIF6	kinesin family member 6 [Source:HGNC Symbol;Acc:HGNC:21202]	1.1285
KIFC2	kinesin family member C2 [Source:HGNC Symbol;Acc:HGNC:29530]	1.0632762
KIRREL2	kin of IRRE like 2 (Drosophila) [Source:HGNC Symbol;Acc:HGNC:18816]	-1.1878211
KIRREL3	kin of IRRE like 3 (Drosophila) [Source:HGNC Symbol;Acc:HGNC:23204]	-1.0816516
KIT	KIT proto-oncogene receptor tyrosine kinase [Source:HGNC Symbol;Acc:HGNC:6342]	1.149086
KLC1	kinesin light chain 1 [Source:HGNC Symbol;Acc:HGNC:6387]	-1.211962
KLC2	kinesin light chain 2 [Source:HGNC Symbol;Acc:HGNC:20716]	1.1763554
KLF11	Kruppel like factor 11 [Source:HGNC Symbol;Acc:HGNC:11811]	-1.2972825
KLF13	Kruppel like factor 13 [Source:HGNC Symbol;Acc:HGNC:13672]	1.053679
KLF15	Kruppel like factor 15 [Source:HGNC Symbol;Acc:HGNC:14536]	-1.168275
KLF2	Kruppel like factor 2 [Source:HGNC Symbol;Acc:HGNC:6347]	1.8338419
KLF3	Kruppel like factor 3 [Source:HGNC Symbol;Acc:HGNC:16516]	-1.3434803
KLF6	Kruppel like factor 6 [Source:HGNC Symbol;Acc:HGNC:2235]	-1.1862088
KLF7	Kruppel like factor 7 [Source:HGNC Symbol;Acc:HGNC:6350]	-1.7217264
KLHDC10	kelch domain containing 10 [Source:HGNC Symbol;Acc:HGNC:22194]	1.16742
KLHDC3	kelch domain containing 3 [Source:HGNC Symbol;Acc:HGNC:20704]	1.3041364
KLHDC4	kelch domain containing 4 [Source:HGNC Symbol;Acc:HGNC:25272]	-1.2552928
KLHDC8A	kelch domain containing 8A [Source:HGNC Symbol;Acc:HGNC:25573]	-1.1591922
KLHL21	kelch like family member 21 [Source:HGNC Symbol;Acc:HGNC:29041]	-1.3415769
KLHL22	kelch like family member 22 [Source:HGNC Symbol;Acc:HGNC:25888]	-1.0968361
KLHL29	kelch like family member 29 [Source:HGNC Symbol;Acc:HGNC:29404]	1.124055
KLHL3	kelch like family member 3 [Source:HGNC Symbol;Acc:HGNC:6354]	1.705701
KLHL33	kelch like family member 33 [Source:HGNC Symbol;Acc:HGNC:31952]	-1.1775262
KLHL35	kelch like family member 35 [Source:HGNC Symbol;Acc:HGNC:26597]	1.3110178
KLHL36	kelch like family member 36 [Source:HGNC Symbol;Acc:HGNC:17844]	-2.07655585
KLHL5	kelch like family member 5 [Source:HGNC Symbol;Acc:HGNC:6356]	-1.2760949
KLHL6	kelch like family member 6 [Source:HGNC Symbol;Acc:HGNC:18653]	1.34621075
KLHL7	kelch like family member 7 [Source:HGNC Symbol;Acc:HGNC:15646]	-1.2467619
KLK14	kallikrein related peptidase 14 [Source:HGNC Symbol;Acc:HGNC:6362]	1.111934
KLK2	kallikrein related peptidase 2 [Source:HGNC Symbol;Acc:HGNC:6363]	-1.2017409
KLK3	kallikrein related peptidase 3 [Source:HGNC Symbol;Acc:HGNC:6364]	-1.1380554
KLK7	kallikrein related peptidase 7 [Source:HGNC Symbol;Acc:HGNC:6368]	1.0780284
KLK9	kallikrein related peptidase 9 [Source:HGNC Symbol;Acc:HGNC:6370]	-1.1499418
KLRD1	killer cell lectin like receptor D1 [Source:HGNC Symbol;Acc:HGNC:6378]	1.118779
KLRF1	killer cell lectin like receptor F1 [Source:HGNC Symbol;Acc:HGNC:13342]	1.1372107
KPNA3	karyopherin subunit alpha 3 [Source:HGNC Symbol;Acc:HGNC:6396]	1.4870386
KPNA5	karyopherin subunit alpha 5 [Source:HGNC Symbol;Acc:HGNC:6398]	1.20115465
KREMEN1	kringle containing transmembrane protein 1 [Source:HGNC Symbol;Acc:HGNC:17550]	-1.31337725
KRT12	keratin 12 [Source:HGNC Symbol;Acc:HGNC:6414]	1.0628365
KRT16	keratin 16 [Source:HGNC Symbol;Acc:HGNC:6423]	1.0984526
KRT18	keratin 18 [Source:HGNC Symbol;Acc:HGNC:6430]	1.1631695
KRT18P55	keratin 18 pseudogene 55 [Source:HGNC Symbol;Acc:HGNC:26874]	1.2552879
KRT19	keratin 19 [Source:HGNC Symbol;Acc:HGNC:6436]	1.343165
KRT20	keratin 20 [Source:HGNC Symbol;Acc:HGNC:20412]	1.0814995
KRT32	keratin 32 [Source:HGNC Symbol;Acc:HGNC:6449]	-1.214745
KRT7	keratin 7 [Source:HGNC Symbol;Acc:HGNC:6445]	1.1977432
KRT74	keratin 74 [Source:HGNC Symbol;Acc:HGNC:28929]	-1.1463302
KRT79	keratin 79 [Source:HGNC Symbol;Acc:HGNC:28930]	1.1214811
KRT80	keratin 80 [Source:HGNC Symbol;Acc:HGNC:27056]	2.3721228
KRTAP10-10	keratin associated protein 10-10 [Source:HGNC Symbol;Acc:HGNC:22972]	-1.2159207

KRTAP10-11	keratin associated protein 10-11 [Source:HGNC Symbol;Acc:HGNC:20528]	1.0876746
KRTAP10-4	keratin associated protein 10-4 [Source:HGNC Symbol;Acc:HGNC:20521]	-1.1042213
KRTAP10-9	keratin associated protein 10-9 [Source:HGNC Symbol;Acc:HGNC:22971]	-1.1157311
KRTAP13-2	keratin associated protein 13-2 [Source:HGNC Symbol;Acc:HGNC:18923]	-1.0916367
KRTAP19-1	keratin associated protein 19-1 [Source:HGNC Symbol;Acc:HGNC:18936]	-1.0934671
KRTAP19-2	keratin associated protein 19-2 [Source:HGNC Symbol;Acc:HGNC:18937]	-1.1741942
KRTAP19-4	keratin associated protein 19-4 [Source:HGNC Symbol;Acc:HGNC:18939]	1.1121563
KRTAP20-3	keratin associated protein 20-3 [Source:HGNC Symbol;Acc:HGNC:34001]	-1.0737506
KRTAP21-1	keratin associated protein 21-1 [Source:HGNC Symbol;Acc:HGNC:18945]	-1.2780074
KRTAP21-2	keratin associated protein 21-2 [Source:HGNC Symbol;Acc:HGNC:18946]	-1.0685396
KRTAP27-1	keratin associated protein 27-1 [Source:HGNC Symbol;Acc:HGNC:33864]	1.0952574
KRTAP3-1	keratin associated protein 3-1 [Source:HGNC Symbol;Acc:HGNC:16778]	-1.0867842
KRTAP4-12	keratin associated protein 4-12 [Source:HGNC Symbol;Acc:HGNC:16776]	-1.152522
KRTAP4-4	keratin associated protein 4-4 [Source:HGNC Symbol;Acc:HGNC:16928]	1.1248299
KRTAP4-9	keratin associated protein 4-9 [Source:HGNC Symbol;Acc:HGNC:18910]	-1.1043428
KRTAP5-4	keratin associated protein 5-4 [Source:HGNC Symbol;Acc:HGNC:23599]	-1.1343261
KRTAP5-5	keratin associated protein 5-5 [Source:HGNC Symbol;Acc:HGNC:23601]	-1.1592612
KRTAP5-6	keratin associated protein 5-6 [Source:HGNC Symbol;Acc:HGNC:23600]	-1.095934
KRTAP9-1	keratin associated protein 9-1 [Source:HGNC Symbol;Acc:HGNC:18912]	-1.1233598
KRTCAP2	keratinocyte associated protein 2 [Source:HGNC Symbol;Acc:HGNC:28942]	-1.1462412
KSR1	kinase suppressor of ras 1 [Source:HGNC Symbol;Acc:HGNC:6465]	-1.26323
KSR2	kinase suppressor of ras 2 [Source:HGNC Symbol;Acc:HGNC:18610]	1.5434886
LACTB	lactamase beta [Source:HGNC Symbol;Acc:HGNC:16468]	-1.3462895
LACTB2	lactamase beta 2 [Source:HGNC Symbol;Acc:HGNC:18512]	1.286678
LAIR1	leukocyte associated immunoglobulin like receptor 1 [Source:HGNC Symbol;Acc:HGNC:6477]	1.0558828
LAIR2	leukocyte associated immunoglobulin like receptor 2 [Source:HGNC Symbol;Acc:HGNC:6478]	1.1539493
LAMA1	laminin subunit alpha 1 [Source:HGNC Symbol;Acc:HGNC:6481]	1.0761662
LAMA4	laminin subunit alpha 4 [Source:HGNC Symbol;Acc:HGNC:6484]	-1.1608424
LAMA5	laminin subunit alpha 5 [Source:HGNC Symbol;Acc:HGNC:6485]	1.1759576
LAMB1	laminin subunit beta 1 [Source:HGNC Symbol;Acc:HGNC:6486]	-1.3763217
LAMB2	laminin subunit beta 2 [Source:HGNC Symbol;Acc:HGNC:6487]	-1.1154493
LAMB3	laminin subunit beta 3 [Source:HGNC Symbol;Acc:HGNC:6490]	-2.6593647
LAMC2	laminin subunit gamma 2 [Source:HGNC Symbol;Acc:HGNC:6493]	3.36951355
LAMP2	lysosomal associated membrane protein 2 [Source:HGNC Symbol;Acc:HGNC:6501]	1.3237523
LAMP3	lysosomal associated membrane protein 3 [Source:HGNC Symbol;Acc:HGNC:14582]	-1.3825214
LAMTOR2	late endosomal/lysosomal adaptor, MAPK and MTOR activator 2 [Source:HGNC Symbol;Acc:HGNC:29794]	1.176119
LANCL1	LanC like 1 [Source:HGNC Symbol;Acc:HGNC:6508]	1.2090051
LANCL3	LanC like 3 [Source:HGNC Symbol;Acc:HGNC:24767]	-1.5825136
LARP6	La ribonucleoprotein domain family member 6 [Source:HGNC Symbol;Acc:HGNC:24012]	-1.77167215
LAT2	linker for activation of T-cells family member 2 [Source:HGNC Symbol;Acc:HGNC:12749]	-1.1941824
LAX1	lymphocyte transmembrane adaptor 1 [Source:HGNC Symbol;Acc:HGNC:26005]	1.1328876
LBR	lamin B receptor [Source:HGNC Symbol;Acc:HGNC:6518]	1.35621
LCAT	lecithin-cholesterol acyltransferase [Source:HGNC Symbol;Acc:HGNC:6522]	-1.2431127
LCMT1	leucine carboxyl methyltransferase 1 [Source:HGNC Symbol;Acc:HGNC:17557]	-1.1402801
LCMT2	leucine carboxyl methyltransferase 2 [Source:HGNC Symbol;Acc:HGNC:17558]	-1.1926348
LCN8	lipocalin 8 [Source:HGNC Symbol;Acc:HGNC:27038]	1.1072338
LDB2	LIM domain binding 2 [Source:HGNC Symbol;Acc:HGNC:6533]	1.3065525
LDHC	lactate dehydrogenase C [Source:HGNC Symbol;Acc:HGNC:6544]	-1.28758
LDLR	low density lipoprotein receptor [Source:HGNC Symbol;Acc:HGNC:6547]	1.1372726
LDOC1	leucine zipper down-regulated in cancer 1 [Source:HGNC Symbol;Acc:HGNC:6548]	1.1703067
LECT1	leukocyte cell derived chemotaxin 1 [Source:HGNC Symbol;Acc:HGNC:17005]	-1.0792246
LEP	leptin [Source:HGNC Symbol;Acc:HGNC:6553]	1.052517
LETM1	leucine zipper and EF-hand containing transmembrane protein 1 [Source:HGNC Symbol;Acc:HGNC:6556]	-1.1649483
LETM2	leucine zipper and EF-hand containing transmembrane protein 2 [Source:HGNC Symbol;Acc:HGNC:14648]	-1.0639598
LETMD1	LETM1 domain containing 1 [Source:HGNC Symbol;Acc:HGNC:24241]	1.0909616
LFNG	LFNG O-fucosylpeptide 3-beta-N-acetylglucosaminyltransferase [Source:HGNC Symbol;Acc:HGNC:6560]	1.6682773
LGALS14	galectin 14 [Source:HGNC Symbol;Acc:HGNC:30054]	1.1164047
LGALS2	galectin 2 [Source:HGNC Symbol;Acc:HGNC:6562]	1.0507044
LGALS3	galectin 3 [Source:HGNC Symbol;Acc:HGNC:6563]	-1.1592638
LGALS8	galectin 8 [Source:HGNC Symbol;Acc:HGNC:6569]	-1.221667
LGALS9C	galectin 9C [Source:HGNC Symbol;Acc:HGNC:33874]	-1.610029
LGMN	legumain [Source:HGNC Symbol;Acc:HGNC:9472]	-1.3354099
LGR4	leucine rich repeat containing G protein-coupled receptor 4 [Source:HGNC Symbol;Acc:HGNC:13299]	1.3657573
LGR6	leucine rich repeat containing G protein-coupled receptor 6 [Source:HGNC Symbol;Acc:HGNC:19719]	1.128515
LHFP	lipoma HMIGC fusion partner [Source:HGNC Symbol;Acc:HGNC:6586]	-1.3025622
LFHPL4	lipoma HMIGC fusion partner-like 4 [Source:HGNC Symbol;Acc:HGNC:29568]	-1.1669483
LHX6	LIM homeobox 6 [Source:HGNC Symbol;Acc:HGNC:21735]	1.7909405
LIF	leukemia inhibitory factor [Source:HGNC Symbol;Acc:HGNC:6596]	-1.442118
LIG3	DNA ligase 3 [Source:HGNC Symbol;Acc:HGNC:6600]	-1.2142191
LIMA1	LIM domain and actin binding 1 [Source:HGNC Symbol;Acc:HGNC:24636]	1.3701553
LIMCH1	LIM and calponin homology domains 1 [Source:HGNC Symbol;Acc:HGNC:29191]	1.7698032
LIMD1	LIM domains containing 1 [Source:HGNC Symbol;Acc:HGNC:6612]	1.129974
LIMD2	LIM domain containing 2 [Source:HGNC Symbol;Acc:HGNC:28142]	-1.5295537
LIMK2	LIM domain kinase 2 [Source:HGNC Symbol;Acc:HGNC:6614]	-1.49604595
LIMS2	LIM zinc finger domain containing 2 [Source:HGNC Symbol;Acc:HGNC:16084]	1.3352811
LIMS3L	LIM zinc finger domain containing 4	-1.0931861
LIN28A	lin-28 homolog A [Source:HGNC Symbol;Acc:HGNC:15986]	1.096894
LIN37	lin-37 DREAM MuvB core complex component [Source:HGNC Symbol;Acc:HGNC:33234]	-1.2702465
LIN54	lin-54 DREAM MuvB core complex component [Source:HGNC Symbol;Acc:HGNC:25397]	1.6556774
LING01	leucine rich repeat and Ig domain containing 1 [Source:HGNC Symbol;Acc:HGNC:21205]	1.1186749
LIPE	lipase E, hormone sensitive type [Source:HGNC Symbol;Acc:HGNC:6621]	1.4499587
LIPK	lipase family member K [Source:HGNC Symbol;Acc:HGNC:23444]	1.1416081
LITAF	lipopolysaccharide induced TNF factor [Source:HGNC Symbol;Acc:HGNC:16841]	-1.3813869
LMBR1	limb development membrane protein 1 [Source:HGNC Symbol;Acc:HGNC:13243]	1.1402656
LMBR1L	limb development membrane protein 1 like [Source:HGNC Symbol;Acc:HGNC:18268]	-1.2192345
LMCD1	LIM and cysteine rich domains 1 [Source:HGNC Symbol;Acc:HGNC:6633]	1.8152966

LMF2	lipase maturation factor 2 [Source:HGNC Symbol;Acc:HGNC:25096]	1.4821904
LMNA	lamin A/C [Source:HGNC Symbol;Acc:HGNC:6636]	1.1671559
LMNB1	lamin B1 [Source:HGNC Symbol;Acc:HGNC:6637]	1.4240129
LMO2	LIM domain only 2 [Source:HGNC Symbol;Acc:HGNC:6642]	1.3269219
LMO3	LIM domain only 3 [Source:HGNC Symbol;Acc:HGNC:6643]	1.0644913
LMO4	LIM domain only 4 [Source:HGNC Symbol;Acc:HGNC:6644]	1.4164028
LMO7	LIM domain 7 [Source:HGNC Symbol;Acc:HGNC:6646]	1.1182084
LMTK2	lemur tyrosine kinase 2 [Source:HGNC Symbol;Acc:HGNC:17880]	-1.1656594
LNX1	ligand of numb-protein X 1 [Source:HGNC Symbol;Acc:HGNC:6657]	1.1680574
LONRF3	LON peptidase N-terminal domain and ring finger 3 [Source:HGNC Symbol;Acc:HGNC:21152]	1.59733185
LOX	lysyl oxidase [Source:HGNC Symbol;Acc:HGNC:6664]	-1.1914655
LOXL2	lysyl oxidase like 2 [Source:HGNC Symbol;Acc:HGNC:6666]	-1.1572932
LOXL3	lysyl oxidase like 3 [Source:HGNC Symbol;Acc:HGNC:13869]	-1.1476412
LOXL4	lysyl oxidase like 4 [Source:HGNC Symbol;Acc:HGNC:17171]	-1.1571759
LPAR3	lysophosphatidic acid receptor 3 [Source:HGNC Symbol;Acc:HGNC:14298]	-1.0641958
LPCAT4	lysophosphatidylcholine acyltransferase 4 [Source:HGNC Symbol;Acc:HGNC:30059]	1.244596
LPHN2	adhesion G protein-coupled receptor L2	1.2963302
LRCH1	leucine rich repeats and calponin homology domain containing 1 [Source:HGNC Symbol;Acc:HGNC:20305]	-1.1665282
LRG1	leucine rich alpha-2-glycoprotein 1 [Source:HGNC Symbol;Acc:HGNC:29480]	-1.4057187
LRIG1	leucine rich repeats and immunoglobulin like domains 1 [Source:HGNC Symbol;Acc:HGNC:17360]	-1.5004224
LRIG2	leucine rich repeats and immunoglobulin like domains 2 [Source:HGNC Symbol;Acc:HGNC:20889]	1.2528557
LRIG3	leucine rich repeats and immunoglobulin like domains 3 [Source:HGNC Symbol;Acc:HGNC:30991]	-2.158922
LRIT1	leucine rich repeat, Ig-like and transmembrane domains 1 [Source:HGNC Symbol;Acc:HGNC:23404]	1.0577539
LRMP	lymphoid restricted membrane protein [Source:HGNC Symbol;Acc:HGNC:6690]	1.1006272
LRP10	LDL receptor related protein 10 [Source:HGNC Symbol;Acc:HGNC:14553]	1.2956955
LRP12	LDL receptor related protein 12 [Source:HGNC Symbol;Acc:HGNC:31708]	-1.2618241
LRP4	LDL receptor related protein 4 [Source:HGNC Symbol;Acc:HGNC:6696]	-1.0742399
LRP5	LDL receptor related protein 5 [Source:HGNC Symbol;Acc:HGNC:6697]	1.3727422
LRP8	LDL receptor related protein 8 [Source:HGNC Symbol;Acc:HGNC:6700]	1.3845886
LRPPRC	leucine rich pentatricopeptide repeat containing [Source:HGNC Symbol;Acc:HGNC:15714]	1.3553634
RRRC10B	leucine rich repeat containing 10B [Source:HGNC Symbol;Acc:HGNC:37215]	1.1158272
RRRC17	leucine rich repeat containing 17 [Source:HGNC Symbol;Acc:HGNC:16895]	1.28771115
RRRC20	leucine rich repeat containing 20 [Source:HGNC Symbol;Acc:HGNC:23421]	1.700489
RRRC23	leucine rich repeat containing 23 [Source:HGNC Symbol;Acc:HGNC:19138]	-1.100099
RRRC27	leucine rich repeat containing 27 [Source:HGNC Symbol;Acc:HGNC:29346]	1.0714446
RRRC3	leucine rich repeat containing 3 [Source:HGNC Symbol;Acc:HGNC:14965]	-1.7772814
RRRC32	leucine rich repeat containing 32 [Source:HGNC Symbol;Acc:HGNC:4161]	-1.8764056
RRRC33	negative regulator of reactive oxygen species	1.351554
RRRC36	leucine rich repeat containing 36 [Source:HGNC Symbol;Acc:HGNC:25615]	-1.2503124
RRRC37BP1	leucine rich repeat containing 37B pseudogene 1 [Source:HGNC Symbol;Acc:HGNC:25390]	-1.162778
RRRC3C	leucine rich repeat containing 3C [Source:HGNC Symbol;Acc:HGNC:40034]	-1.2628129
RRRC4	leucine rich repeat containing 4 [Source:HGNC Symbol;Acc:HGNC:15586]	1.3209989
RRRC42	leucine rich repeat containing 42 [Source:HGNC Symbol;Acc:HGNC:28792]	-1.112394
RRRC47	leucine rich repeat containing 47 [Source:HGNC Symbol;Acc:HGNC:29207]	-1.0724989
RRRC57	leucine rich repeat containing 57 [Source:HGNC Symbol;Acc:HGNC:26719]	-1.3118026
RRRC66	leucine rich repeat containing 66 [Source:HGNC Symbol;Acc:HGNC:34299]	1.1906478
RRRC70	leucine rich repeat containing 70 [Source:HGNC Symbol;Acc:HGNC:35155]	1.6328385
RRRC8A	leucine rich repeat containing 8 family member A [Source:HGNC Symbol;Acc:HGNC:19027]	1.2774278
RRRC8D	leucine rich repeat containing 8 family member D [Source:HGNC Symbol;Acc:HGNC:16992]	1.3685906
RRRC1	leucine rich repeat and coiled-coil centrosomal protein 1 [Source:HGNC Symbol;Acc:HGNC:29373]	1.1786047
RRRFIP2	LRR binding FLII interacting protein 2 [Source:HGNC Symbol;Acc:HGNC:6703]	-1.1465592
RRRN2	leucine rich repeat neuronal 2 [Source:HGNC Symbol;Acc:HGNC:16914]	-1.2214459
RRRTM1	leucine rich repeat transmembrane neuronal 1 [Source:HGNC Symbol;Acc:HGNC:19408]	-1.1170201
RRRTM2	leucine rich repeat transmembrane neuronal 2 [Source:HGNC Symbol;Acc:HGNC:19409]	1.0802752
RRRTM3	leucine rich repeat transmembrane neuronal 3 [Source:HGNC Symbol;Acc:HGNC:19410]	1.147034
RTTOMT	leucine rich transmembrane O-methyltransferase domain containing [Source:HGNC Symbol;Acc:HGNC:2	-1.0664679
LSM10	LSM10, U7 small nuclear RNA associated [Source:HGNC Symbol;Acc:HGNC:17562]	1.1901011
LSM11	LSM11, U7 small nuclear RNA associated [Source:HGNC Symbol;Acc:HGNC:30860]	1.0894629
LSM12	LSM12 homolog [Source:HGNC Symbol;Acc:HGNC:26407]	1.3058231
LST1	leukocyte specific transcript 1 [Source:HGNC Symbol;Acc:HGNC:14189]	-1.276297
LTB	lymphotoxin beta [Source:HGNC Symbol;Acc:HGNC:6711]	-18.932013
LTBP2	latent transforming growth factor beta binding protein 2 [Source:HGNC Symbol;Acc:HGNC:6715]	1.2837393
LTC4S	leukotriene C4 synthase [Source:HGNC Symbol;Acc:HGNC:6719]	-1.0717883
LTV1	LTV1 ribosome biogenesis factor [Source:HGNC Symbol;Acc:HGNC:21173]	1.5690323
LUZP2	leucine zipper protein 2 [Source:HGNC Symbol;Acc:HGNC:23206]	1.0500579
LXN	latexin [Source:HGNC Symbol;Acc:HGNC:13347]	1.3052856
LY6E	lymphocyte antigen 6 complex, locus E [Source:HGNC Symbol;Acc:HGNC:6727]	1.4366633
LY6GGE	lymphocyte antigen 6 complex, locus G6E [Source:HGNC Symbol;Acc:HGNC:13934]	-1.1221377
LY86	lymphocyte antigen 86 [Source:HGNC Symbol;Acc:HGNC:16837]	-1.1978259
LYG1	lysozyme g1 [Source:HGNC Symbol;Acc:HGNC:27014]	1.0597007
LYL1	LYL1, basic helix-loop-helix family member [Source:HGNC Symbol;Acc:HGNC:6734]	1.9544288
LYN	LYN proto-oncogene, Src family tyrosine kinase [Source:HGNC Symbol;Acc:HGNC:6735]	1.4003502
LYNX1	Ly6/neurotoxin 1 [Source:HGNC Symbol;Acc:HGNC:29604]	-1.08229535
LYPD1	LY6/PLAUR domain containing 1 [Source:HGNC Symbol;Acc:HGNC:28431]	1.6627007
LYPD6	LY6/PLAUR domain containing 6 [Source:HGNC Symbol;Acc:HGNC:28751]	-1.8305895
LYPLA1	lysophospholipase I [Source:HGNC Symbol;Acc:HGNC:6737]	1.2579392
LYPLA2	lysophospholipase II [Source:HGNC Symbol;Acc:HGNC:6738]	1.3950955
LYRM4	LYR motif containing 4 [Source:HGNC Symbol;Acc:HGNC:21365]	-1.267826
LYSMD2	LysM domain containing 2 [Source:HGNC Symbol;Acc:HGNC:28571]	1.2302854
LYSMD4	LysM domain containing 4 [Source:HGNC Symbol;Acc:HGNC:26571]	-1.2102098
LYST	lysosomal trafficking regulator [Source:HGNC Symbol;Acc:HGNC:1968]	1.1439046
LYZL6	lysozyme like 6 [Source:HGNC Symbol;Acc:HGNC:29614]	1.0975963
LZIC	leucine zipper and CTNNBIP1 domain containing [Source:HGNC Symbol;Acc:HGNC:17497]	1.1074947
LZTS2	leucine zipper tumor suppressor 2 [Source:HGNC Symbol;Acc:HGNC:29381]	1.0875145
MAD2L1	MAD2 mitotic arrest deficient-like 1 (yeast) [Source:HGNC Symbol;Acc:HGNC:6763]	1.4784863
MAD2L1BP	MAD2L1 binding protein [Source:HGNC Symbol;Acc:HGNC:21059]	-1.1888171

MAD2L2	MAD2 mitotic arrest deficient-like 2 (yeast) [Source:HGNC Symbol;Acc:HGNC:6764]	-1.0844967
MAEA	macrophage erythroblast attacher [Source:HGNC Symbol;Acc:HGNC:13731]	-1.1533428
MAF1	MAF1 homolog, negative regulator of RNA polymerase III [Source:HGNC Symbol;Acc:HGNC:24966]	1.2340903
MAFB	MAF bZIP transcription factor B [Source:HGNC Symbol;Acc:HGNC:6408]	1.40811905
MAFF	MAF bZIP transcription factor F [Source:HGNC Symbol;Acc:HGNC:6780]	-1.7996502
MAFK	MAF bZIP transcription factor K [Source:HGNC Symbol;Acc:HGNC:6782]	1.1679516
MAGEA12	MAGE family member A12 [Source:HGNC Symbol;Acc:HGNC:6799]	1.0825344
MAGEB16	MAGE family member B16 [Source:HGNC Symbol;Acc:HGNC:21188]	1.0903957
MAGEB17	MAGE family member B17 [Source:HGNC Symbol;Acc:HGNC:17418]	1.1255401
MAGEB18	MAGE family member B18 [Source:HGNC Symbol;Acc:HGNC:28515]	1.1000487
MAGEC1	MAGE family member C1 [Source:HGNC Symbol;Acc:HGNC:6812]	-1.0932069
MAGED2	MAGE family member D2 [Source:HGNC Symbol;Acc:HGNC:16353]	-1.1548064
MAGEE1	MAGE family member E1 [Source:HGNC Symbol;Acc:HGNC:24934]	1.3016329
MAGI1	brane associated guanylate kinase, WW and PDZ domain containing 1 [Source:HGNC Symbol;Acc:HGNC:1452323]	-1.1452323
MAK16	MAK16 homolog [Source:HGNC Symbol;Acc:HGNC:13703]	1.3633536
MALL	mal, T-cell differentiation protein like [Source:HGNC Symbol;Acc:HGNC:6818]	1.2325159
MAMDC4	MAM domain containing 4 [Source:HGNC Symbol;Acc:HGNC:24083]	-1.1120011
MAN2A2	mannosidase alpha class 2A member 2 [Source:HGNC Symbol;Acc:HGNC:6825]	-1.0812061
MAN2B1	mannosidase alpha class 2B member 1 [Source:HGNC Symbol;Acc:HGNC:6826]	-1.2858471
MAN2B2	mannosidase alpha class 2B member 2 [Source:HGNC Symbol;Acc:HGNC:29623]	-1.1802673
MAP2	microtubule associated protein 2 [Source:HGNC Symbol;Acc:HGNC:6839]	1.3737687
MAP2K1	mitogen-activated protein kinase kinase 1 [Source:HGNC Symbol;Acc:HGNC:6840]	-1.3636717
MAP2K3	mitogen-activated protein kinase kinase 3 [Source:HGNC Symbol;Acc:HGNC:6843]	-2.04736985
MAP2K6	mitogen-activated protein kinase kinase 6 [Source:HGNC Symbol;Acc:HGNC:6846]	1.3487295
MAP3K1	mitogen-activated protein kinase kinase kinase 1 [Source:HGNC Symbol;Acc:HGNC:6848]	-1.6828507
MAP3K11	mitogen-activated protein kinase kinase kinase 11 [Source:HGNC Symbol;Acc:HGNC:6850]	-1.4856573
MAP3K12	mitogen-activated protein kinase kinase kinase 12 [Source:HGNC Symbol;Acc:HGNC:6851]	1.2681408
MAP3K5	mitogen-activated protein kinase kinase 5 [Source:HGNC Symbol;Acc:HGNC:6857]	-1.2381017
MAP3K8	mitogen-activated protein kinase kinase kinase 8 [Source:HGNC Symbol;Acc:HGNC:6860]	-2.29677995
MAP6D1	MAP6 domain containing 1 [Source:HGNC Symbol;Acc:HGNC:25753]	1.2164681
MAP7D1	MAP7 domain containing 1 [Source:HGNC Symbol;Acc:HGNC:25514]	-1.18308955
MAP7D3	MAP7 domain containing 3 [Source:HGNC Symbol;Acc:HGNC:25742]	1.2764419
MAP9	microtubule associated protein 9 [Source:HGNC Symbol;Acc:HGNC:26118]	-1.1121889
MAPK10	mitogen-activated protein kinase 10 [Source:HGNC Symbol;Acc:HGNC:6872]	1.0967678
MAPK1IP1	mitogen-activated protein kinase 1 interacting protein 1 like [Source:HGNC Symbol;Acc:HGNC:19840]	-1.0867488
MAPKB1	mitogen-activated protein kinase binding protein 1 [Source:HGNC Symbol;Acc:HGNC:29536]	-1.4924357
MAPRE1	microtubule associated protein RP/EB family member 1 [Source:HGNC Symbol;Acc:HGNC:6890]	-1.1757857
MARCH1	membrane associated ring-CH-type finger 1 [Source:HGNC Symbol;Acc:HGNC:26077]	1.0513215
MARCH8	membrane associated ring-CH-type finger 8 [Source:HGNC Symbol;Acc:HGNC:23356]	-1.1295424
MARK4	microtubule affinity regulating kinase 4 [Source:HGNC Symbol;Acc:HGNC:13538]	1.3102645
MARVELD2	MARVEL domain containing 2 [Source:HGNC Symbol;Acc:HGNC:26401]	1.0867399
MAST3	microtubule associated serine/threonine kinase 3 [Source:HGNC Symbol;Acc:HGNC:19036]	1.3020526
MAT2A	methionine adenosyltransferase 2A [Source:HGNC Symbol;Acc:HGNC:6904]	1.3899198
MATN1	matrilin 1, cartilage matrix protein [Source:HGNC Symbol;Acc:HGNC:6907]	-1.0770924
MAVS	mitochondrial antiviral signaling protein [Source:HGNC Symbol;Acc:HGNC:29233]	-1.2003858
MAX	MYC associated factor X [Source:HGNC Symbol;Acc:HGNC:6913]	-1.1277468
MAZ	MYC associated zinc finger protein [Source:HGNC Symbol;Acc:HGNC:6914]	1.2998579
MB21D1	Mab-21 domain containing 1 [Source:HGNC Symbol;Acc:HGNC:21367]	-1.8753603
MBD2	methyl-CpG binding domain protein 2 [Source:HGNC Symbol;Acc:HGNC:6917]	1.0632762
MBD4	methyl-CpG binding domain 4, DNA glycosylase [Source:HGNC Symbol;Acc:HGNC:6919]	1.3388196
MBD6	methyl-CpG binding domain protein 6 [Source:HGNC Symbol;Acc:HGNC:20445]	1.1919225
MLBL1P	mannose binding lectin 1, pseudogene [Source:HGNC Symbol;Acc:HGNC:6921]	1.2029426
MBLAC2	metallo-beta-lactamase domain containing 2 [Source:HGNC Symbol;Acc:HGNC:3711]	1.5626351
MBNL1	muscleblind like splicing regulator 1 [Source:HGNC Symbol;Acc:HGNC:6923]	1.9377193
MBOAT7	membrane bound O-acyltransferase domain containing 7 [Source:HGNC Symbol;Acc:HGNC:15505]	1.1796237
MBP	myelin basic protein [Source:HGNC Symbol;Acc:HGNC:6925]	-1.5389285
MC5R	melanocortin 5 receptor [Source:HGNC Symbol;Acc:HGNC:6933]	-1.167776
MCEE	methylmalonyl-CoA epimerase [Source:HGNC Symbol;Acc:HGNC:16732]	1.1203659
MCM10	minichromosome maintenance 10 replication initiation factor [Source:HGNC Symbol;Acc:HGNC:18043]	1.3772166
MCM8	chromosome maintenance 8 homologous recombination repair factor [Source:HGNC Symbol;Acc:HGNC:1	1.2662569
MCTP1	multiple C2 and transmembrane domain containing 1 [Source:HGNC Symbol;Acc:HGNC:26183]	-1.3161192
MDF1	MyoD family inhibitor [Source:HGNC Symbol;Acc:HGNC:6967]	2.0532594
MDFIC	MyoD family inhibitor domain containing [Source:HGNC Symbol;Acc:HGNC:28870]	1.2545575
MDGA1	MAM domain containing glycosylphosphatidylinositol anchor 1 [Source:HGNC Symbol;Acc:HGNC:19267]	-1.2395235
MDK	midkine (neutrie growth-promoting factor 2) [Source:HGNC Symbol;Acc:HGNC:6972]	1.1536686
MECOM	MDS1 and EVI1 complex locus [Source:HGNC Symbol;Acc:HGNC:3498]	1.5965287
MECP2	methyl-CpG binding protein 2 [Source:HGNC Symbol;Acc:HGNC:6990]	-1.1727586
MED12L	mediator complex subunit 12 like [Source:HGNC Symbol;Acc:HGNC:16050]	1.0820377
MED15	mediator complex subunit 15 [Source:HGNC Symbol;Acc:HGNC:14248]	-1.1365343
MED18	mediator complex subunit 18 [Source:HGNC Symbol;Acc:HGNC:25944]	1.3001593
MED22	mediator complex subunit 22 [Source:HGNC Symbol;Acc:HGNC:11477]	-1.1676494
MED24	mediator complex subunit 24 [Source:HGNC Symbol;Acc:HGNC:22963]	-1.2291209
MED30	mediator complex subunit 30 [Source:HGNC Symbol;Acc:HGNC:23032]	1.1423309
MED7	mediator complex subunit 7 [Source:HGNC Symbol;Acc:HGNC:2378]	1.1232998
MED8	mediator complex subunit 8 [Source:HGNC Symbol;Acc:HGNC:19971]	1.1588145
MEF2C	myocyte enhancer factor 2C [Source:HGNC Symbol;Acc:HGNC:6996]	1.732577
MEG3	maternally expressed 3 (non-protein coding) [Source:HGNC Symbol;Acc:HGNC:14575]	1.1385375
MEGF11	multiple EGF like domains 11 [Source:HGNC Symbol;Acc:HGNC:29635]	-1.259317
MEIS1	Meis homeobox 1 [Source:HGNC Symbol;Acc:HGNC:7000]	1.2862391
MEIS3	Meis homeobox 3 [Source:HGNC Symbol;Acc:HGNC:29537]	-1.1067299
MEMO1	mediator of cell motility 1 [Source:HGNC Symbol;Acc:HGNC:14014]	-1.2563117
MEOX1	mesenchyme homeobox 1 [Source:HGNC Symbol;Acc:HGNC:7013]	-1.0681096
MEOX2	mesenchyme homeobox 2 [Source:HGNC Symbol;Acc:HGNC:7014]	1.2465036
MERTK	MER proto-oncogene, tyrosine kinase [Source:HGNC Symbol;Acc:HGNC:7027]	1.7708983
MESDC1	mesoderm development candidate 1 [Source:HGNC Symbol;Acc:HGNC:13519]	-1.2323112
MESP2	mesoderm posterior bHLH transcription factor 2 [Source:HGNC Symbol;Acc:HGNC:29659]	-1.3541715

MET	MET proto-oncogene, receptor tyrosine kinase [Source:HGNC Symbol;Acc:HGNC:7029]	1.4105467
METAP2	methionyl aminopeptidase 2 [Source:HGNC Symbol;Acc:HGNC:16672]	1.3503747
METRNL	meteorin like, glial cell differentiation regulator [Source:HGNC Symbol;Acc:HGNC:27584]	1.2885134
METTL16	methyltransferase like 16 [Source:HGNC Symbol;Acc:HGNC:28484]	-1.1863065
METTL19	tRNA methyltransferase 44 homolog (S. cerevisiae)	-1.2194794
METTL20	electron transfer flavoprotein beta subunit lysine methyltransferase	1.1098088
METTL21A	methyltransferase like 21A [Source:HGNC Symbol;Acc:HGNC:30476]	-1.1722832
METTL21D	valosin containing protein lysine methyltransferase	1.3069048
METTL23	methyltransferase like 23 [Source:HGNC Symbol;Acc:HGNC:26988]	1.0751764
METTL2A	methyltransferase like 2A [Source:HGNC Symbol;Acc:HGNC:25755]	-1.2067413
METTL5	methyltransferase like 5 [Source:HGNC Symbol;Acc:HGNC:25006]	1.1911906
METTL7A	methyltransferase like 7A [Source:HGNC Symbol;Acc:HGNC:24550]	1.2778786
METTL8	methyltransferase like 8 [Source:HGNC Symbol;Acc:HGNC:25856]	1.1501254
MEX3A	mex-3 RNA binding family member A [Source:HGNC Symbol;Acc:HGNC:33482]	1.0990336
MEX3D	mex-3 RNA binding family member D [Source:HGNC Symbol;Acc:HGNC:16734]	-1.1856425
MFAP1	microfibrillar associated protein 1 [Source:HGNC Symbol;Acc:HGNC:7032]	1.2509974
MFF	mitochondrial fission factor [Source:HGNC Symbol;Acc:HGNC:24858]	1.05885925
MFGE8	milk fat globule-EGF factor 8 protein [Source:HGNC Symbol;Acc:HGNC:7036]	1.2469249
MFHAS1	malignant fibrous histiocytoma amplified sequence 1 [Source:HGNC Symbol;Acc:HGNC:16982]	-1.2710286
MFNG	MFNG O-fucosylpeptidase 3-beta-N-acetylglucosaminyltransferase [Source:HGNC Symbol;Acc:HGNC:7038]	1.1598064
MFSD10	major facilitator superfamily domain containing 10 [Source:HGNC Symbol;Acc:HGNC:16894]	1.2072862
MFSD2B	major facilitator superfamily domain containing 2B [Source:HGNC Symbol;Acc:HGNC:37207]	-1.0713822
MFSD9	major facilitator superfamily domain containing 9 [Source:HGNC Symbol;Acc:HGNC:28158]	-1.1633606
MGAT1	syl (alpha-1,3)-glycoprotein beta-1,2-N-acetylglucosaminyltransferase [Source:HGNC Symbol;Acc:HGNC:1674305]	1.1674305
MGAT3	isyl (beta-1,4)-glycoprotein beta-1,4-N-acetylglucosaminyltransferase [Source:HGNC Symbol;Acc:HGNC:135487]	1.135487
MGAT4A	pha-1,3)-glycoprotein beta-1,4-N-acetylglucosaminyltransferase, isozyme A [Source:HGNC Symbol;Acc:HGNC:4266751]	1.4266751
MGAT5B	ha-1,6)-glycoprotein beta-1,6-N-acetylglucosaminyltransferase, isozyme B [Source:HGNC Symbol;Acc:HGNC:3078734]	1.3078734
MGC11082	DLGAP1 antisense RNA 2	-1.6289334
MGC16121	MIR503 host gene	1.3811054
MGC16703	tubulin alpha 3f pseudogene	-1.2418202
MGC21881	glioblastoma down-regulated RNA	-1.2184538
MGC2752	CENPB DNA-binding domains containing 1 pseudogene 1	-1.1507071
MGC2889	uncharacterized protein MGC2889	1.0799145
MGC39372	serpin family B member 9 pseudogene 1	-1.1760616
MGC4294	long intergenic non-protein coding RNA 1711	1.2049396
MGC45800	uncharacterized LOC90768	-1.0570949
MGC4859	uncharacterized LOC79150	-1.1151105
MGLL	monoglyceride lipase [Source:HGNC Symbol;Acc:HGNC:17038]	-1.4361192
MGP	matrix Gla protein [Source:HGNC Symbol;Acc:HGNC:7060]	-1.2073275
MGRN1	mahogunin ring finger 1 [Source:HGNC Symbol;Acc:HGNC:20254]	-1.2108285
MGST2	microsomal glutathione S-transferase 2 [Source:HGNC Symbol;Acc:HGNC:7063]	1.105127
MGST3	microsomal glutathione S-transferase 3 [Source:HGNC Symbol;Acc:HGNC:7064]	1.1515713
MICAL3	multiple associated monooxygenase, calponin and LIM domain containing 3 [Source:HGNC Symbol;Acc:HGNC:643714967]	-1.643714967
MICB	MHC class I polypeptide-related sequence B [Source:HGNC Symbol;Acc:HGNC:7091]	-1.27163005
MID1P1	MID1 interacting protein 1 [Source:HGNC Symbol;Acc:HGNC:20715]	1.0643475
MID2	midline 2 [Source:HGNC Symbol;Acc:HGNC:7096]	-1.0976106
MIDN	midnolin [Source:HGNC Symbol;Acc:HGNC:16298]	1.2447886
MIER1	MIER1 transcriptional regulator [Source:HGNC Symbol;Acc:HGNC:29657]	1.3780077
MINK1	misshapen like kinase 1 [Source:HGNC Symbol;Acc:HGNC:17565]	1.1205242
MIOS	meiosis regulator for oocyte development [Source:HGNC Symbol;Acc:HGNC:21905]	-1.0545697
MOX	myo-inositol oxygenase [Source:HGNC Symbol;Acc:HGNC:14522]	-1.2139149
MIP	major intrinsic protein of lens fiber [Source:HGNC Symbol;Acc:HGNC:7103]	1.4521441
MIR155HG	MIR155 host gene [Source:HGNC Symbol;Acc:HGNC:35460]	-2.5394192
MIRLET7BHG	MIRLET7B host gene [Source:HGNC Symbol;Acc:HGNC:37189]	1.3963397
MKI67IP	nucleolar protein interacting with the FHA domain of MKI67	1.38307525
MKKS	McKusick-Kaufman syndrome [Source:HGNC Symbol;Acc:HGNC:7108]	1.1649472
MKL1	megakaryoblastic leukemia (translocation) 1 [Source:HGNC Symbol;Acc:HGNC:14334]	-1.4735155
MKNK2	MAP kinase interacting serine/threonine kinase 2 [Source:HGNC Symbol;Acc:HGNC:7111]	1.225927
MLF1	myeloid leukemia factor 1 [Source:HGNC Symbol;Acc:HGNC:7125]	1.096421
MLF2	myeloid leukemia factor 2 [Source:HGNC Symbol;Acc:HGNC:7126]	1.1868397
MLL	lysine methyltransferase 2A	-1.102478
MLL2	lysine methyltransferase 2B	1.0893265
MLLT1	MLLT1, super elongation complex subunit [Source:HGNC Symbol;Acc:HGNC:7134]	1.31923705
MLLT4	afadin, adherens junction formation factor	-1.1177746
MLNR	motilin receptor [Source:HGNC Symbol;Acc:HGNC:4495]	-1.0594629
MLPH	melanophilin [Source:HGNC Symbol;Acc:HGNC:29643]	-1.3020072
MLX	MLX, MAX dimerization protein [Source:HGNC Symbol;Acc:HGNC:11645]	1.0578768
MLXIP	MLX interacting protein [Source:HGNC Symbol;Acc:HGNC:17055]	1.2191186
MLYCD	malonyl-CoA decarboxylase [Source:HGNC Symbol;Acc:HGNC:7150]	1.214921
MMD	monocyte to macrophage differentiation associated [Source:HGNC Symbol;Acc:HGNC:7153]	-1.885646
MMP10	matrix metalloproteinase 10 [Source:HGNC Symbol;Acc:HGNC:7156]	-1.6477629
MMP14	matrix metalloproteinase 14 [Source:HGNC Symbol;Acc:HGNC:7160]	1.1654681
MMP16	matrix metalloproteinase 16 [Source:HGNC Symbol;Acc:HGNC:7162]	1.1834044
MMP19	matrix metalloproteinase 19 [Source:HGNC Symbol;Acc:HGNC:7165]	-1.4415941
MMP23B	matrix metalloproteinase 23B [Source:HGNC Symbol;Acc:HGNC:7171]	-1.1704142
MMP25	matrix metalloproteinase 25 [Source:HGNC Symbol;Acc:HGNC:14246]	-1.1620309
MMP27	matrix metalloproteinase 27 [Source:HGNC Symbol;Acc:HGNC:14250]	1.0879872
MMP9	matrix metalloproteinase 9 [Source:HGNC Symbol;Acc:HGNC:7176]	-1.1594485
MMRN2	multimerin 2 [Source:HGNC Symbol;Acc:HGNC:19888]	-1.1682253
MND1	meiotic nuclear divisions 1 [Source:HGNC Symbol;Acc:HGNC:24839]	1.204853
MNT	MAX network transcriptional repressor [Source:HGNC Symbol;Acc:HGNC:7188]	1.1576973
MOB2	MOB kinase activator 2 [Source:HGNC Symbol;Acc:HGNC:24904]	-1.1598198
MOBK1B	MOB kinase activator 1A	1.1134045
MOBK2C	MOB kinase activator 3C	-2.2491398
MOBK3	MOB family member 4, phoebe	1.24318365
MOBP	myelin-associated oligodendrocyte basic protein [Source:HGNC Symbol;Acc:HGNC:7189]	-1.1642436

MOC51	mobylbenzen cofactor synthesis 1 [Source:HGNC Symbol;Acc:HGNC:7190]	1.1009277
MOGAT1	monoacylglycerol O-acyltransferase 1 [Source:HGNC Symbol;Acc:HGNC:18210]	-1.2528812
MORC2-AS1	MORC2 antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:26662]	1.1463794
MORN1	MORN repeat containing 1 [Source:HGNC Symbol;Acc:HGNC:25852]	-1.1297684
MORN3	MORN repeat containing 3 [Source:HGNC Symbol;Acc:HGNC:29807]	-1.13824
MORN4	MORN repeat containing 4 [Source:HGNC Symbol;Acc:HGNC:24001]	1.1473721
MOSC2	mitochondrial amidoxime reducing component 2	-1.1242934
MOSPD1	motile sperm domain containing 1 [Source:HGNC Symbol;Acc:HGNC:25235]	1.1763078
MOV10L1	Mov10 RISC complex RNA helicase like 1 [Source:HGNC Symbol;Acc:HGNC:7201]	-1.0674996
MPHOSPH6	M-phase phosphoprotein 6 [Source:HGNC Symbol;Acc:HGNC:7214]	1.1629133
MPO	myeloperoxidase [Source:HGNC Symbol;Acc:HGNC:7218]	1.0691131
MPP7	membrane palmitoylated protein 7 [Source:HGNC Symbol;Acc:HGNC:26542]	1.1265938
MPPE1	metallophosphoesterase 1 [Source:HGNC Symbol;Acc:HGNC:15988]	1.1038941
MPPED1	metallophosphoesterase domain containing 1 [Source:HGNC Symbol;Acc:HGNC:1306]	-1.0636511
MPRIP	myosin phosphatase Rho interacting protein [Source:HGNC Symbol;Acc:HGNC:30321]	-1.3379905
MPZ	myelin protein zero [Source:HGNC Symbol;Acc:HGNC:7225]	1.0962515
MPZL1	myelin protein zero like 1 [Source:HGNC Symbol;Acc:HGNC:7226]	-1.4519815
MPZL2	myelin protein zero like 2 [Source:HGNC Symbol;Acc:HGNC:3496]	1.323316
MPZL3	myelin protein zero like 3 [Source:HGNC Symbol;Acc:HGNC:27279]	1.0789009
MRC1	mannose receptor, C type 1 [Source:HGNC Symbol;Acc:HGNC:7228]	-1.0991772
MREG	melanoregulin [Source:HGNC Symbol;Acc:HGNC:25478]	-1.3085295
MRFAP1L	Morf4 family associated protein 1 like 1 [Source:HGNC Symbol;Acc:HGNC:28796]	1.1562331
MRGPRE	MAS related GPR family member E [Source:HGNC Symbol;Acc:HGNC:30694]	-1.1289794
MRGPRX1	MAS related GPR family member X1 [Source:HGNC Symbol;Acc:HGNC:17962]	-1.0760711
MRGPRX2	MAS related GPR family member X2 [Source:HGNC Symbol;Acc:HGNC:17983]	1.0708988
MRI1	methylthioribose-1-phosphate isomerase 1 [Source:HGNC Symbol;Acc:HGNC:28469]	-1.2267312
MRPL14	mitochondrial ribosomal protein L14 [Source:HGNC Symbol;Acc:HGNC:14279]	-1.1930573
MRPL15	mitochondrial ribosomal protein L15 [Source:HGNC Symbol;Acc:HGNC:14054]	1.1982453
MRPL16	mitochondrial ribosomal protein L16 [Source:HGNC Symbol;Acc:HGNC:14476]	1.0670502
MRPL17	mitochondrial ribosomal protein L17 [Source:HGNC Symbol;Acc:HGNC:14053]	1.2097844
MRPL19	mitochondrial ribosomal protein L19 [Source:HGNC Symbol;Acc:HGNC:14052]	1.3548182
MRPL20	mitochondrial ribosomal protein L20 [Source:HGNC Symbol;Acc:HGNC:14478]	1.1055131
MRPL22	mitochondrial ribosomal protein L22 [Source:HGNC Symbol;Acc:HGNC:14480]	1.1027917
MRPL34	mitochondrial ribosomal protein L34 [Source:HGNC Symbol;Acc:HGNC:14488]	1.0947809
MRPL36	mitochondrial ribosomal protein L36 [Source:HGNC Symbol;Acc:HGNC:14490]	1.0553206
MRPL42	mitochondrial ribosomal protein L42 [Source:HGNC Symbol;Acc:HGNC:14493]	1.4151822
MRPL43	mitochondrial ribosomal protein L43 [Source:HGNC Symbol;Acc:HGNC:14517]	-1.0981148
MRPL45	mitochondrial ribosomal protein L45 [Source:HGNC Symbol;Acc:HGNC:16651]	-1.1249841
MRPL46	mitochondrial ribosomal protein L46 [Source:HGNC Symbol;Acc:HGNC:1192]	-1.1880796
MRPL48	mitochondrial ribosomal protein L48 [Source:HGNC Symbol;Acc:HGNC:16653]	-1.1897266
MRPL50	mitochondrial ribosomal protein L50 [Source:HGNC Symbol;Acc:HGNC:16654]	1.4921547
MRPL51	mitochondrial ribosomal protein L51 [Source:HGNC Symbol;Acc:HGNC:14044]	1.208421
MRPS17	mitochondrial ribosomal protein S17 [Source:HGNC Symbol;Acc:HGNC:14047]	1.0989085
MRPS18A	mitochondrial ribosomal protein S18A [Source:HGNC Symbol;Acc:HGNC:14515]	-1.2290243
MRPS21	mitochondrial ribosomal protein S21 [Source:HGNC Symbol;Acc:HGNC:14046]	1.0657355
MRPS26	mitochondrial ribosomal protein S26 [Source:HGNC Symbol;Acc:HGNC:14045]	1.1707754
MRPS31	mitochondrial ribosomal protein S31 [Source:HGNC Symbol;Acc:HGNC:16632]	1.2290998
MRPS7	mitochondrial ribosomal protein S7 [Source:HGNC Symbol;Acc:HGNC:14499]	-1.1262017
MRT04	MRT4 homolog, ribosome maturation factor [Source:HGNC Symbol;Acc:HGNC:18477]	-1.1262721
MS4A14	membrane spanning 4-domains A14 [Source:HGNC Symbol;Acc:HGNC:30706]	-1.129945
MSH2	mutS homolog 2 [Source:HGNC Symbol;Acc:HGNC:7325]	1.4469556
MSH5	mutS homolog 5 [Source:HGNC Symbol;Acc:HGNC:7328]	1.0866443
MSH6	mutS homolog 6 [Source:HGNC Symbol;Acc:HGNC:7329]	1.527479
MSI2	musashi RNA binding protein 2 [Source:HGNC Symbol;Acc:HGNC:18585]	-1.21237435
MSL3	male-specific lethal 3 homolog (Drosophila) [Source:HGNC Symbol;Acc:HGNC:7370]	-1.2064348
MSTN	myostatin [Source:HGNC Symbol;Acc:HGNC:4223]	1.0734158
MSX1	msh homeobox 1 [Source:HGNC Symbol;Acc:HGNC:7391]	-3.1839964
MSX2	msh homeobox 2 [Source:HGNC Symbol;Acc:HGNC:7392]	-1.2300427
MT1G	metallothionein 1G [Source:HGNC Symbol;Acc:HGNC:7399]	-1.3278118
MT1H	metallothionein 1H [Source:HGNC Symbol;Acc:HGNC:7400]	-1.1419755
MT1P	metallothionein 1L, pseudogene	-1.0530771
MT4	metallothionein 4 [Source:HGNC Symbol;Acc:HGNC:18705]	1.1051198
MTA1	metastasis associated 1 [Source:HGNC Symbol;Acc:HGNC:7410]	1.179742
MTA2	metastasis associated 1 family member 2 [Source:HGNC Symbol;Acc:HGNC:7411]	1.1813836
MTERFD1	mitochondrial transcription termination factor 3	1.2724098
MTERFD2	mitochondrial transcription termination factor 4	1.1652098
MTERFD3	mitochondrial transcription termination factor 2	1.3274268
MTF2	metal response element binding transcription factor 2 [Source:HGNC Symbol;Acc:HGNC:29535]	1.3621438
MTFP1	mitochondrial fission process 1 [Source:HGNC Symbol;Acc:HGNC:26945]	-1.1728021
MTHFR	methylenetetrahydrofolate reductase (NAD(P)H) [Source:HGNC Symbol;Acc:HGNC:7436]	1.2096134
MTIF2	mitochondrial translational initiation factor 2 [Source:HGNC Symbol;Acc:HGNC:7441]	1.0948825
MTIF3	mitochondrial translational initiation factor 3 [Source:HGNC Symbol;Acc:HGNC:29788]	1.335104
MTMR10	myotubularin related protein 10 [Source:HGNC Symbol;Acc:HGNC:25999]	-1.0820256
MTMR11	myotubularin related protein 11 [Source:HGNC Symbol;Acc:HGNC:24307]	-1.2663863
MTMR14	myotubularin related protein 14 [Source:HGNC Symbol;Acc:HGNC:26190]	-1.34764825
MTMR9LP	myotubularin related protein 9-like, pseudogene [Source:HGNC Symbol;Acc:HGNC:27920]	-1.37028625
MTPAP	mitochondrial poly(A) polymerase [Source:HGNC Symbol;Acc:HGNC:25532]	1.2529621
MTSS1	metastasis suppressor 1 [Source:HGNC Symbol;Acc:HGNC:20443]	-1.922131
MTX1	metaxin 1 [Source:HGNC Symbol;Acc:HGNC:7504]	-1.2283148
MUC1	mucin 1, cell surface associated [Source:HGNC Symbol;Acc:HGNC:7508]	-1.4117757
MUC12	mucin 12, cell surface associated [Source:HGNC Symbol;Acc:HGNC:7510]	-1.0558068
MUC15	mucin 15, cell surface associated [Source:HGNC Symbol;Acc:HGNC:14956]	1.0891427
MUC2	mucin 2, oligomeric mucus/gel-forming [Source:HGNC Symbol;Acc:HGNC:7512]	-1.1619539
MUC4	mucin 4, cell surface associated [Source:HGNC Symbol;Acc:HGNC:7514]	-1.1270977
MUC5AC	mucin SAC, oligomeric mucus/gel-forming [Source:HGNC Symbol;Acc:HGNC:7515]	-1.1231213
MUM1	melanoma associated antigen (mutated) 1 [Source:HGNC Symbol;Acc:HGNC:29641]	1.18484055

MUS81	MUS81 structure-specific endonuclease subunit [Source:HGNC Symbol;Acc:HGNC:29814]	-1.1942885
MUT	methylmalonyl-CoA mutase [Source:HGNC Symbol;Acc:HGNC:7526]	1.1682402
MUTED	biogenesis of lysosomal organelles complex 1 subunit 5	1.2328994
MVK	mevalonate kinase [Source:HGNC Symbol;Acc:HGNC:7530]	1.1684704
MVP	major vault protein [Source:HGNC Symbol;Acc:HGNC:7531]	-1.1868476
MX1	MX dynamin like GTPase 1 [Source:HGNC Symbol;Acc:HGNC:7532]	-1.8759524
MXD1	MAX dimerization protein 1 [Source:HGNC Symbol;Acc:HGNC:6761]	-1.2648048
MYADM	myeloid associated differentiation marker [Source:HGNC Symbol;Acc:HGNC:7544]	-1.1319844
MYCL1	v-myc avian myelocytomatosis viral oncogene lung carcinoma derived homolog	-1.0625073
MYCT1	myc target 1 [Source:HGNC Symbol;Acc:HGNC:23172]	1.4600176
MYD88	myeloid differentiation primary response 88 [Source:HGNC Symbol;Acc:HGNC:7562]	-1.1479787
MYE0V	myeloma overexpressed [Source:HGNC Symbol;Acc:HGNC:7563]	-1.3450613
MYH14	myosin heavy chain 14 [Source:HGNC Symbol;Acc:HGNC:23212]	-1.1081489
MYH7B	myosin heavy chain 7B [Source:HGNC Symbol;Acc:HGNC:15906]	-1.0897846
MYH9	myosin heavy chain 9 [Source:HGNC Symbol;Acc:HGNC:7579]	-1.1162379
MYLK	myosin light chain kinase [Source:HGNC Symbol;Acc:HGNC:7590]	-1.2029926
MYLK2	myosin light chain kinase 2 [Source:HGNC Symbol;Acc:HGNC:16243]	1.3992043
MYNN	myoneurin [Source:HGNC Symbol;Acc:HGNC:14955]	1.1969945
MYO10	myosin X [Source:HGNC Symbol;Acc:HGNC:7593]	-1.2484334
MYO16	myosin XVI [Source:HGNC Symbol;Acc:HGNC:29822]	1.113762
MYO19	myosin XIX [Source:HGNC Symbol;Acc:HGNC:26234]	1.3355765
MYO1B	myosin IB [Source:HGNC Symbol;Acc:HGNC:7596]	1.1828009
MYO1D	myosin ID [Source:HGNC Symbol;Acc:HGNC:7598]	-1.197279
MYO3B	myosin IIB [Source:HGNC Symbol;Acc:HGNC:15576]	1.0970323
MYO5B	myosin VB [Source:HGNC Symbol;Acc:HGNC:7603]	1.1730849
MYO9B	myosin IXB [Source:HGNC Symbol;Acc:HGNC:7609]	-1.1884043
MYOZ3	myozinin 3 [Source:HGNC Symbol;Acc:HGNC:18565]	1.1289408
MYRIP	myosin VIIA and Rab interacting protein [Source:HGNC Symbol;Acc:HGNC:19156]	1.3019615
MZT1	mitotic spindle organizing protein 1 [Source:HGNC Symbol;Acc:HGNC:33830]	1.7463579
N4BP2L1	NEDD4 binding protein 2 like 1 [Source:HGNC Symbol;Acc:HGNC:25037]	-1.133873
N4BP3	NEDD4 binding protein 3 [Source:HGNC Symbol;Acc:HGNC:29852]	-1.2264096
NAA16	N(alpha)-acetyltransferase 16, NatA auxiliary subunit [Source:HGNC Symbol;Acc:HGNC:26164]	1.3773995
NAA30	N(alpha)-acetyltransferase 30, NatC catalytic subunit [Source:HGNC Symbol;Acc:HGNC:19844]	1.267436
NAA35	N(alpha)-acetyltransferase 35, NatC auxiliary subunit [Source:HGNC Symbol;Acc:HGNC:24340]	1.1721123
NAAA	N-acylethanolamine acid amidase [Source:HGNC Symbol;Acc:HGNC:736]	-1.089135
NAALAD2	N-acetylated alpha-linked acidic dipeptidase 2 [Source:HGNC Symbol;Acc:HGNC:14526]	1.0945653
NAALADL1	N-acetylated alpha-linked acidic dipeptidase-like 1 [Source:HGNC Symbol;Acc:HGNC:23536]	1.1361859
NAALADL2	N-acetylated alpha-linked acidic dipeptidase-like 2 [Source:HGNC Symbol;Acc:HGNC:23219]	-1.354432
NAB1	NGFI-A binding protein 1 [Source:HGNC Symbol;Acc:HGNC:7626]	-1.283451
NACAD	NAC alpha domain containing [Source:HGNC Symbol;Acc:HGNC:22196]	-1.3009907
NADKD1	NAD kinase 2, mitochondrial	1.1158773
NANOS2	nanos C2HC-type zinc finger 2 [Source:HGNC Symbol;Acc:HGNC:23292]	1.0899192
NANS	N-acetylneuraminate synthase [Source:HGNC Symbol;Acc:HGNC:19237]	-1.0974611
NAP1L1	nucleosome assembly protein 1 like 1 [Source:HGNC Symbol;Acc:HGNC:7637]	1.4667228
NAP1L6	nucleosome assembly protein 1 like 6 [Source:HGNC Symbol;Acc:HGNC:31706]	1.1447695
NAPA	NSF attachment protein alpha [Source:HGNC Symbol;Acc:HGNC:7641]	1.3081883
NARS	asparagine-tRNA synthetase [Source:HGNC Symbol;Acc:HGNC:7643]	1.3537246
NAT8	N-acetyltransferase 8 (putative) [Source:HGNC Symbol;Acc:HGNC:18069]	1.1370331
NAT8L	N-acetyltransferase 8 like [Source:HGNC Symbol;Acc:HGNC:26742]	-1.574615
NAT9	N-acetyltransferase 9 (putative) [Source:HGNC Symbol;Acc:HGNC:23133]	-1.0752435
NAV2	neuron navigator 2 [Source:HGNC Symbol;Acc:HGNC:15997]	-1.7710113
NAV3	neuron navigator 3 [Source:HGNC Symbol;Acc:HGNC:15998]	-1.1614208
NCAM2	neural cell adhesion molecule 2 [Source:HGNC Symbol;Acc:HGNC:7657]	1.0656855
NCDN	neurochondrin [Source:HGNC Symbol;Acc:HGNC:17597]	1.3735135
NCF4	neutrophil cytosolic factor 4 [Source:HGNC Symbol;Acc:HGNC:7662]	-1.5492157
NCK2	NCK adaptor protein 2 [Source:HGNC Symbol;Acc:HGNC:7665]	-1.1271875
NCKAP1L	NCK associated protein 1 like [Source:HGNC Symbol;Acc:HGNC:4862]	-1.1438162
NCOA7	nuclear receptor coactivator 7 [Source:HGNC Symbol;Acc:HGNC:21081]	-4.234848
NCOR2	nuclear receptor corepressor 2 [Source:HGNC Symbol;Acc:HGNC:7673]	1.1294395
NCR1	natural cytotoxicity triggering receptor 1 [Source:HGNC Symbol;Acc:HGNC:6731]	1.1030093
NCR2	natural cytotoxicity triggering receptor 2 [Source:HGNC Symbol;Acc:HGNC:6732]	-1.1105155
NCR3	natural cytotoxicity triggering receptor 3 [Source:HGNC Symbol;Acc:HGNC:19077]	-1.0804781
NCR3LG1	natural killer cell cytotoxicity receptor 3 ligand 1	-1.0660846
NCRNA00029	long intergenic non-protein coding RNA 29	-1.1239451
NCRNA00087	small integral membrane protein 10 like 2B	-1.1497282
NCRNA00152	cytoskeleton regulator RNA	1.1411177
NCRNA00157	CHODL antisense RNA 1	1.0504012
NCRNA00158	long intergenic non-protein coding RNA 158	1.1174748
NCRNA00160	long intergenic non-protein coding RNA 160	-1.1556267
NCRNA00167	long intergenic non-protein coding RNA 167	1.1194732
NCRNA00219	EPB41L4A antisense RNA 1	1.0680128
NCRNA00238	long intergenic non-protein coding RNA 238	1.1053103
NCRNA00241	AGPAT4 intronic transcript 1	-1.3924394
NCRNA00244	long intergenic non-protein coding RNA 244	1.092499
NCRNA00251	long intergenic non-protein coding RNA 251	1.1129433
NCRNA00258	GRIK1 antisense RNA 2	1.1015751
NCRNA00266-1	long intergenic non-protein coding RNA 266-1	1.0630977
NCRNA00273	long intergenic non-protein coding RNA 273	-1.1872648
NCRNA00277	Ewing sarcoma associated transcript 1	1.1369424
NCRNA00282	long intergenic non-protein coding RNA 282	1.1505791
NCRNA00288	KIRREL3 antisense RNA 3	-1.1247498
NCRNA00304	long intergenic non-protein coding RNA 304	1.1437521
NCRNA00306	MIR7-3 host gene	1.1337112
NCRNA00311	long intergenic non-protein coding RNA 311	-1.0924194
NCRNA00314	long intergenic non-protein coding RNA 314	1.089246
NCRNA00317	long intergenic non-protein coding RNA 317	-1.2388884

NCRNA00324	long intergenic non-protein coding RNA 324	1.1205256
NCRNA00338	small nucleolar RNA host gene 20	1.1738718
NCRNA00339	long intergenic non-protein coding RNA 339	1.2126217
NCSTN	nicastrin [Source:HGNC Symbol;Acc:HGNC:17091]	-1.2289566
ND3	mitochondrially encoded NADH:ubiquinone oxidoreductase core subunit 3	-1.1356391
NDC80	NDC80, kinetochore complex component [Source:HGNC Symbol;Acc:HGNC:16909]	1.433804
NDEL1	nudE neurodevelopment protein 1 like 1 [Source:HGNC Symbol;Acc:HGNC:17620]	-1.2389675
NDNF	neuron derived neurotrophic factor [Source:HGNC Symbol;Acc:HGNC:26256]	1.0804515
NDST1	N-deacetylase and N-sulfotransferase 1 [Source:HGNC Symbol;Acc:HGNC:7680]	-1.300938
NDUFA10	NADH:ubiquinone oxidoreductase subunit A10 [Source:HGNC Symbol;Acc:HGNC:7684]	-1.1831264
NDUFA12	NADH:ubiquinone oxidoreductase subunit A12 [Source:HGNC Symbol;Acc:HGNC:23987]	-1.1322144
NDUFA4L2	NDUFA4, mitochondrial complex associated like 2 [Source:HGNC Symbol;Acc:HGNC:29836]	1.1521494
NDUFA7	NADH:ubiquinone oxidoreductase subunit A7 [Source:HGNC Symbol;Acc:HGNC:7691]	-1.1163362
NDUFA8	NADH:ubiquinone oxidoreductase subunit A8 [Source:HGNC Symbol;Acc:HGNC:7692]	1.069227
NDUFA9	NADH:ubiquinone oxidoreductase subunit A9 [Source:HGNC Symbol;Acc:HGNC:7693]	-1.1948994
NDUFAB1	NADH:ubiquinone oxidoreductase subunit AB1 [Source:HGNC Symbol;Acc:HGNC:7694]	1.0880563
NDUFAF2	NADH:ubiquinone oxidoreductase complex assembly factor 2 [Source:HGNC Symbol;Acc:HGNC:28086]	-1.1901318
NDUFAF4	NADH:ubiquinone oxidoreductase complex assembly factor 4 [Source:HGNC Symbol;Acc:HGNC:21034]	1.1776307
NDUFB8	NADH:ubiquinone oxidoreductase subunit B8 [Source:HGNC Symbol;Acc:HGNC:7703]	-1.1195259
NDUFC1	NADH:ubiquinone oxidoreductase subunit C1 [Source:HGNC Symbol;Acc:HGNC:7705]	-1.2224678
NDUFC2	NADH:ubiquinone oxidoreductase subunit C2 [Source:HGNC Symbol;Acc:HGNC:7706]	1.0590535
NEBL	nebulette [Source:HGNC Symbol;Acc:HGNC:16932]	1.1123013
NECAB2	N-terminal EF-hand calcium binding protein 2 [Source:HGNC Symbol;Acc:HGNC:23746]	-1.0600048
NECAP2	NECAP endocytosis associated 2 [Source:HGNC Symbol;Acc:HGNC:25528]	-1.5175261
NEDD4L	cell expressed, developmentally down-regulated 4-like, E3 ubiquitin protein ligase [Source:HGNC Symbol;Acc:HGNC:773]	-1.2493476
NEDD9	cellular precursor cell expressed, developmentally down-regulated 9 [Source:HGNC Symbol;Acc:HGNC:773]	-1.5746595
NEK6	NIMA related kinase 6 [Source:HGNC Symbol;Acc:HGNC:7749]	1.13452955
NEK7	NIMA related kinase 7 [Source:HGNC Symbol;Acc:HGNC:13386]	1.1503863
NES	nestin [Source:HGNC Symbol;Acc:HGNC:7756]	1.3966322
NET1	neuroepithelial cell transforming 1 [Source:HGNC Symbol;Acc:HGNC:14592]	1.3341147
NEURL	neurализed E3 ubiquitin protein ligase 1	-1.093151
NEURL1B	neurализed E3 ubiquitin protein ligase 1B [Source:HGNC Symbol;Acc:HGNC:35422]	1.1753443
NEURL3	neurализed E3 ubiquitin protein ligase 3 [Source:HGNC Symbol;Acc:HGNC:25162]	-2.2733395
NEUROG3	neurogenin 3 [Source:HGNC Symbol;Acc:HGNC:13806]	-1.0974045
NF2	neurofibromin 2 [Source:HGNC Symbol;Acc:HGNC:7773]	1.2619874
NFATC1	nuclear factor of activated T-cells 1 [Source:HGNC Symbol;Acc:HGNC:7775]	-1.5271399
NFATC2IP	nuclear factor of activated T-cells 2 interacting protein [Source:HGNC Symbol;Acc:HGNC:25906]	-1.2694521
NFE2L1	nuclear factor, erythroid 2 like 1 [Source:HGNC Symbol;Acc:HGNC:7781]	-1.3561966
NFIA	nuclear factor I A [Source:HGNC Symbol;Acc:HGNC:7784]	1.7764044
NFIB	nuclear factor I B [Source:HGNC Symbol;Acc:HGNC:7785]	1.6210234
NFIC	nuclear factor I C [Source:HGNC Symbol;Acc:HGNC:7786]	1.1761032
NFIL3	nuclear factor, interleukin 3 regulated [Source:HGNC Symbol;Acc:HGNC:7787]	-1.2569853
NFIX	nuclear factor I X [Source:HGNC Symbol;Acc:HGNC:7788]	-1.2861302
NFKB1	nuclear factor kappa B subunit 1 [Source:HGNC Symbol;Acc:HGNC:7794]	-2.8601785
NFKB2	nuclear factor kappa B subunit 2 [Source:HGNC Symbol;Acc:HGNC:7795]	-3.6775794
NFKBIA	NFKB inhibitor alpha [Source:HGNC Symbol;Acc:HGNC:7797]	-10.365542
NFKBIB	NFKB inhibitor beta [Source:HGNC Symbol;Acc:HGNC:7798]	-1.8789163
NFKBIE	NFKB inhibitor epsilon [Source:HGNC Symbol;Acc:HGNC:7799]	-4.569497
NFS1	NFS1 cysteine desulfurase [Source:HGNC Symbol;Acc:HGNC:15910]	1.0615354
NFXL1	nuclear transcription factor, X-box binding like 1 [Source:HGNC Symbol;Acc:HGNC:18726]	-1.2884429
NFYA	nuclear transcription factor Y subunit alpha [Source:HGNC Symbol;Acc:HGNC:7804]	1.2024946
NFYC	nuclear transcription factor Y subunit gamma [Source:HGNC Symbol;Acc:HGNC:7806]	-1.183952667
NHLH2	nescent helix-loop-helix 2 [Source:HGNC Symbol;Acc:HGNC:7818]	-1.1875988
NHS	NHS actin remodeling regulator [Source:HGNC Symbol;Acc:HGNC:7820]	1.1015651
NHSL1	NHS like 1 [Source:HGNC Symbol;Acc:HGNC:21021]	-1.1445942
NID2	nitrogen 2 [Source:HGNC Symbol;Acc:HGNC:13389]	-1.3058165
NIF3L1	NGG1 interacting factor 3 like 1 [Source:HGNC Symbol;Acc:HGNC:13390]	1.1997259
NINJ1	ninjurin 1 [Source:HGNC Symbol;Acc:HGNC:7824]	-2.1408255
NINL	ninein like [Source:HGNC Symbol;Acc:HGNC:9163]	1.205701
NIPA1	non imprinted in Prader-Willi/Angelman syndrome 1 [Source:HGNC Symbol;Acc:HGNC:17043]	-1.3232436
NIPAL3	NIPA like domain containing 3 [Source:HGNC Symbol;Acc:HGNC:25233]	-1.1353283
NIPAL4	NIPA like domain containing 4 [Source:HGNC Symbol;Acc:HGNC:28018]	-1.2027171
NIPSNAP3A	nipsnap homolog 3A [Source:HGNC Symbol;Acc:HGNC:23619]	-1.2086691
NKD2	naked cuticle homolog 2 [Source:HGNC Symbol;Acc:HGNC:17046]	-2.2502365
NKRAS1	NFKB inhibitor interacting Ras like 1 [Source:HGNC Symbol;Acc:HGNC:17899]	1.1220745
NKRF	NFKB repressing factor [Source:HGNC Symbol;Acc:HGNC:19374]	1.2072194
NKX3-1	NK3 homeobox 1 [Source:HGNC Symbol;Acc:HGNC:7838]	-1.7671115
NLGN2	neuroligin 2 [Source:HGNC Symbol;Acc:HGNC:14290]	1.2699687
NLGN4X	neuroligin 4, X-linked [Source:HGNC Symbol;Acc:HGNC:14287]	-1.0752696
NLRC3	NLR family CARD domain containing 3 [Source:HGNC Symbol;Acc:HGNC:29889]	1.6299596
NLRC4	NLR family CARD domain containing 4 [Source:HGNC Symbol;Acc:HGNC:16412]	1.0833808
NLRCS	NLR family CARD domain containing 5 [Source:HGNC Symbol;Acc:HGNC:29933]	-1.208081
NLRP1	NLR family pyrin domain containing 1 [Source:HGNC Symbol;Acc:HGNC:14374]	-1.1395012
NLRP12	NLR family pyrin domain containing 12 [Source:HGNC Symbol;Acc:HGNC:22938]	1.3526211
NLRP13	NLR family pyrin domain containing 13 [Source:HGNC Symbol;Acc:HGNC:22937]	1.0932368
NLRP3	NLR family pyrin domain containing 3 [Source:HGNC Symbol;Acc:HGNC:16400]	-1.5980512
NLRP5	NLR family pyrin domain containing 5 [Source:HGNC Symbol;Acc:HGNC:21269]	-1.2770007
NME4	NME/NM23 nucleoside diphosphate kinase 4 [Source:HGNC Symbol;Acc:HGNC:7852]	1.1492362
NME6	NME/NM23 nucleoside diphosphate kinase 6 [Source:HGNC Symbol;Acc:HGNC:20567]	-1.224104
NMNAT1	nicotinamide nucleotide adenyllyltransferase 1 [Source:HGNC Symbol;Acc:HGNC:17877]	-1.0642712
NMUR2	neuromedin U receptor 2 [Source:HGNC Symbol;Acc:HGNC:16454]	-1.0657262
NOD1	nucleotide binding oligomerization domain containing 1 [Source:HGNC Symbol;Acc:HGNC:16390]	-1.1250986
NOD2	nucleotide binding oligomerization domain containing 2 [Source:HGNC Symbol;Acc:HGNC:5331]	-1.5108893
NOG	noggin [Source:HGNC Symbol;Acc:HGNC:7866]	1.353384
NOL10	nuclearolar protein 10 [Source:HGNC Symbol;Acc:HGNC:25862]	1.1873175
NOL11	nuclearolar protein 11 [Source:HGNC Symbol;Acc:HGNC:24557]	1.2506723

NOMO1	NODAL modulator 1 [Source:HGNC Symbol;Acc:HGNC:30060]	-1.1300565
NOP10	NOP10 ribonucleoprotein [Source:HGNC Symbol;Acc:HGNC:14378]	-1.0557715
NOP56	NOP56 ribonucleoprotein [Source:HGNC Symbol;Acc:HGNC:15911]	1.1831043
NOS3	nitric oxide synthase 3 [Source:HGNC Symbol;Acc:HGNC:7876]	1.6671364
NOTCH2	notch 2 [Source:HGNC Symbol;Acc:HGNC:7882]	-1.6685209
NOTCH2NL	notch 2 N-terminal like [Source:HGNC Symbol;Acc:HGNC:31862]	-1.3911723
NOV	nephroblastoma overexpressed [Source:HGNC Symbol;Acc:HGNC:7885]	-1.3349334
NOX4	NADPH oxidase 4 [Source:HGNC Symbol;Acc:HGNC:7891]	1.5578209
NPAS2	neuronal PAS domain protein 2 [Source:HGNC Symbol;Acc:HGNC:7895]	1.2163064
NPAT	nuclear protein, coactivator of histone transcription [Source:HGNC Symbol;Acc:HGNC:7896]	1.294044
NPBWR1	neuropeptides B/W receptor 1 [Source:HGNC Symbol;Acc:HGNC:4522]	-1.1682034
NPC2	NPC intracellular cholesterol transporter 2 [Source:HGNC Symbol;Acc:HGNC:14537]	-1.1062347
NPDC1	neural proliferation, differentiation and control 1 [Source:HGNC Symbol;Acc:HGNC:7899]	1.2665823
NPFFR2	neuropeptide FF receptor 2 [Source:HGNC Symbol;Acc:HGNC:4525]	-1.0648376
NPILP3	nuclear pore complex interacting protein family member B3	1.0685937
NPL	N-acetylneuraminate pyruvate lyase [Source:HGNC Symbol;Acc:HGNC:16781]	-1.1143938
NPLOC4	NPL4 homolog, ubiquitin recognition factor [Source:HGNC Symbol;Acc:HGNC:18261]	-1.3084962
NPM1	nucleophosmin [Source:HGNC Symbol;Acc:HGNC:7910]	1.3983469
NPR2	natriuretic peptide receptor 2 [Source:HGNC Symbol;Acc:HGNC:7944]	1.1408908
NPY1R	neuropeptide Y receptor Y1 [Source:HGNC Symbol;Acc:HGNC:7956]	1.0789124
NR1D2	nuclear receptor subfamily 1 group D member 2 [Source:HGNC Symbol;Acc:HGNC:7963]	1.1156998
NR1I2	nuclear receptor subfamily 1 group I member 2 [Source:HGNC Symbol;Acc:HGNC:7968]	1.0594279
NR1I3	nuclear receptor subfamily 1 group I member 3 [Source:HGNC Symbol;Acc:HGNC:7969]	1.0902568
NR2F2	nuclear receptor subfamily 2 group F member 2 [Source:HGNC Symbol;Acc:HGNC:7976]	1.9012372
NR2F6	nuclear receptor subfamily 2 group F member 6 [Source:HGNC Symbol;Acc:HGNC:7977]	1.3242253
NR3C1	nuclear receptor subfamily 3 group C member 1 [Source:HGNC Symbol;Acc:HGNC:7978]	1.408674
NR3C2	nuclear receptor subfamily 3 group C member 2 [Source:HGNC Symbol;Acc:HGNC:7979]	1.5998374
NR4A3	nuclear receptor subfamily 4 group A member 3 [Source:HGNC Symbol;Acc:HGNC:7982]	-2.3759637
NR5A2	nuclear receptor subfamily 5 group A member 2 [Source:HGNC Symbol;Acc:HGNC:7984]	1.6139132
NRG1	neuregulin 1 [Source:HGNC Symbol;Acc:HGNC:7997]	-1.27745355
NRIP2	nuclear receptor interacting protein 2 [Source:HGNC Symbol;Acc:HGNC:23078]	-1.1722987
NRK	Nik related kinase [Source:HGNC Symbol;Acc:HGNC:25391]	1.0912156
NRN1	neuritin 1 [Source:HGNC Symbol;Acc:HGNC:17972]	1.1884468
NRP1	neuropilin 1 [Source:HGNC Symbol;Acc:HGNC:8004]	1.5257566
NRP2	neuropilin 2 [Source:HGNC Symbol;Acc:HGNC:8005]	-1.275035
NRXN1	neurexin 1 [Source:HGNC Symbol;Acc:HGNC:8008]	1.0697949
NSA2	NSA2, ribosome biogenesis homolog [Source:HGNC Symbol;Acc:HGNC:30728]	1.3082967
NSD1	nuclear receptor binding SET domain protein 1 [Source:HGNC Symbol;Acc:HGNC:14234]	1.1261767
NSDHL	NAD(P) dependent steroid dehydrogenase-like [Source:HGNC Symbol;Acc:HGNC:13398]	1.1661164
NSUN3	NOP2/Sun RNA methyltransferase family member 3 [Source:HGNC Symbol;Acc:HGNC:26208]	1.1336774
NSUN5	NOP2/Sun RNA methyltransferase family member 5 [Source:HGNC Symbol;Acc:HGNC:16385]	1.1397355
NT5DC4	5'-nucleotidase domain containing 4 [Source:HGNC Symbol;Acc:HGNC:27678]	1.1212589
NTHL1	nth like DNA glycosylase 1 [Source:HGNC Symbol;Acc:HGNC:8028]	1.1211994
NTN1	netrin 1 [Source:HGNC Symbol;Acc:HGNC:8029]	-1.4923034
NTN4	netrin 4 [Source:HGNC Symbol;Acc:HGNC:13658]	1.381472
NTNG2	netrin G2 [Source:HGNC Symbol;Acc:HGNC:14288]	-1.0913815
NTSR1	neurotensin receptor 1 (high affinity) [Source:HGNC Symbol;Acc:HGNC:8039]	1.1732681
NUAK1	NUAK family kinase 1 [Source:HGNC Symbol;Acc:HGNC:14311]	1.4934733
NUAK2	NUAK family kinase 2 [Source:HGNC Symbol;Acc:HGNC:29558]	-9.072099
NUCKS1	nuclear casein kinase and cyclin dependent kinase substrate 1 [Source:HGNC Symbol;Acc:HGNC:29923]	1.1896721
NUDCD2	NudC domain containing 2 [Source:HGNC Symbol;Acc:HGNC:30535]	1.1813283
NUDT10	nudix hydrolase 10 [Source:HGNC Symbol;Acc:HGNC:17621]	-1.1273559
NUDT16	nudix hydrolase 16 [Source:HGNC Symbol;Acc:HGNC:26442]	-1.1129522
NUDT21	nudix hydrolase 21 [Source:HGNC Symbol;Acc:HGNC:13870]	1.5302132
NUDT3	nudix hydrolase 3 [Source:HGNC Symbol;Acc:HGNC:8050]	-1.2032771
NUDT6	nudix hydrolase 6 [Source:HGNC Symbol;Acc:HGNC:8053]	1.4160154
NUMA1	nuclear mitotic apparatus protein 1 [Source:HGNC Symbol;Acc:HGNC:8059]	1.1658032
NUMBL	NUMB like, endocytic adaptor protein [Source:HGNC Symbol;Acc:HGNC:8061]	-1.1770153
NUP205	nucleoporin 205 [Source:HGNC Symbol;Acc:HGNC:18658]	1.3083394
NUP62	nucleoporin 62 [Source:HGNC Symbol;Acc:HGNC:8066]	-1.46466225
NUTF2	nuclear transport factor 2 [Source:HGNC Symbol;Acc:HGNC:13722]	1.1316485
NXF1	nuclear RNA export factor 1 [Source:HGNC Symbol;Acc:HGNC:8071]	-1.2153399
NXPH4	neurexophilin 4 [Source:HGNC Symbol;Acc:HGNC:8078]	-1.1428909
NYNRIN	NYN domain and retroviral integrase containing [Source:HGNC Symbol;Acc:HGNC:20165]	1.18795335
O3FAR1	free fatty acid receptor 4	-1.1809589
OAF	out at first homolog [Source:HGNC Symbol;Acc:HGNC:28752]	1.177142
OAS2	2'-5'-oligoadenylate synthetase 2 [Source:HGNC Symbol;Acc:HGNC:8087]	-1.15461685
OAS3	2'-5'-oligoadenylate synthetase 3 [Source:HGNC Symbol;Acc:HGNC:8088]	-1.29767705
OASL	2'-5'-oligoadenylate synthetase like [Source:HGNC Symbol;Acc:HGNC:8090]	-1.2026701
OBFC1	oligonucleotide/oligosaccharide binding fold containing 1 [Source:HGNC Symbol;Acc:HGNC:26200]	-1.2197133
OBFC2A	nucleic acid binding protein 1	-1.3853759
OBFC2B	nucleic acid binding protein 2	1.2630414
OCLN	occludin [Source:HGNC Symbol;Acc:HGNC:8104]	1.0882439
OCM2	oncomodulin 2 [Source:HGNC Symbol;Acc:HGNC:34396]	-1.1395899
ODF2	outer dense fiber of sperm tails 2 [Source:HGNC Symbol;Acc:HGNC:8114]	-1.2228826
ODF2L	outer dense fiber of sperm tails 2 like [Source:HGNC Symbol;Acc:HGNC:29225]	1.0953338
ODF3	outer dense fiber of sperm tails 3 [Source:HGNC Symbol;Acc:HGNC:19905]	-1.1364433
ODF3L2	outer dense fiber of sperm tails 3 like 2 [Source:HGNC Symbol;Acc:HGNC:26841]	-1.3302294
ODF4	outer dense fiber of sperm tails 4 [Source:HGNC Symbol;Acc:HGNC:19056]	-1.1083764
ODZ3	teneurin transmembrane protein 3	-1.1195648
OGFR	opioid growth factor receptor [Source:HGNC Symbol;Acc:HGNC:15768]	-1.4049805
OGFRL1	opioid growth factor receptor like 1 [Source:HGNC Symbol;Acc:HGNC:21378]	-1.151595
OLFML2A	olfactomedin like 2A [Source:HGNC Symbol;Acc:HGNC:27270]	-1.168296
OLFML2B	olfactomedin like 2B [Source:HGNC Symbol;Acc:HGNC:24558]	-1.1166612
OLIG1	oligodendrocyte transcription factor 1 [Source:HGNC Symbol;Acc:HGNC:16983]	1.1477231
OLIG3	oligodendrocyte transcription factor 3 [Source:HGNC Symbol;Acc:HGNC:18003]	1.0989375

ONECUT2	one cut homeobox 2 [Source:HGNC Symbol;Acc:HGNC:8139]	-1.131913
OOSP1	oocyte secreted protein 1, pseudogene [Source:HGNC Symbol;Acc:HGNC:49233]	-1.0635871
OPCML	opioid binding protein/cell adhesion molecule like [Source:HGNC Symbol;Acc:HGNC:8143]	1.0586793
OPN1SW	opsin 1 (cone pigments), short-wave-sensitive [Source:HGNC Symbol;Acc:HGNC:1012]	-1.1097462
OPRL1	opioid related nociceptin receptor 1 [Source:HGNC Symbol;Acc:HGNC:8155]	-1.125468
OPTN	optineurin [Source:HGNC Symbol;Acc:HGNC:17142]	-1.7759129
OR10G2	olfactory receptor family 10 subfamily G member 2 [Source:HGNC Symbol;Acc:HGNC:8170]	-1.4409568
OR10H1	olfactory receptor family 10 subfamily H member 1 [Source:HGNC Symbol;Acc:HGNC:8172]	-1.2127231
OR10H4	olfactory receptor family 10 subfamily H member 4 [Source:HGNC Symbol;Acc:HGNC:15388]	-1.1180928
OR10H5	olfactory receptor family 10 subfamily H member 5 [Source:HGNC Symbol;Acc:HGNC:15389]	1.0999346
OR10J5	olfactory receptor family 10 subfamily J member 5 [Source:HGNC Symbol;Acc:HGNC:14993]	-1.099858
OR11H12	olfactory receptor family 11 subfamily H member 12 [Source:HGNC Symbol;Acc:HGNC:30738]	-1.0969833
OR13C4	olfactory receptor family 13 subfamily C member 4 [Source:HGNC Symbol;Acc:HGNC:14722]	1.095171
OR13C8	olfactory receptor family 13 subfamily C member 8 [Source:HGNC Symbol;Acc:HGNC:15103]	1.1107129
OR13D1	olfactory receptor family 13 subfamily D member 1 [Source:HGNC Symbol;Acc:HGNC:14695]	-1.1652844
OR13H1	olfactory receptor family 13 subfamily H member 1 [Source:HGNC Symbol;Acc:HGNC:14755]	-1.3002077
OR14I1	olfactory receptor family 14 subfamily I member 1 [Source:HGNC Symbol;Acc:HGNC:19575]	1.0775034
OR14J1	olfactory receptor family 14 subfamily J member 1 [Source:HGNC Symbol;Acc:HGNC:13971]	1.1773582
OR1A1	olfactory receptor family 1 subfamily A member 1 [Source:HGNC Symbol;Acc:HGNC:8179]	1.0743848
OR1F2P	olfactory receptor family 1 subfamily F member 2 pseudogene [Source:HGNC Symbol;Acc:HGNC:8196]	-1.0862782
OR14	olfactory receptor family 1 subfamily J member 4 [Source:HGNC Symbol;Acc:HGNC:8211]	-1.2237248
OR1N2	olfactory receptor family 1 subfamily N member 2 [Source:HGNC Symbol;Acc:HGNC:15111]	-1.0834854
OR2A12	olfactory receptor family 2 subfamily A member 12 [Source:HGNC Symbol;Acc:HGNC:15082]	1.125259
OR2A20P	olfactory receptor family 2 subfamily A member 20 pseudogene [Source:HGNC Symbol;Acc:HGNC:15413]	-1.1669725
OR2A25	olfactory receptor family 2 subfamily A member 25 [Source:HGNC Symbol;Acc:HGNC:19562]	-1.1627123
OR2A9P	olfactory receptor family 2 subfamily A member 9 pseudogene [Source:HGNC Symbol;Acc:HGNC:8236]	-1.0777371
OR2AG2	olfactory receptor family 2 subfamily AG member 2 [Source:HGNC Symbol;Acc:HGNC:15143]	-1.1758953
OR2C3	olfactory receptor family 2 subfamily C member 3 [Source:HGNC Symbol;Acc:HGNC:15005]	-1.075338
OR2H1	olfactory receptor family 2 subfamily H member 1 [Source:HGNC Symbol;Acc:HGNC:8252]	1.0919843
OR2J3	olfactory receptor family 2 subfamily J member 3 [Source:HGNC Symbol;Acc:HGNC:8261]	1.1759146
OR2L8	cty receptor family 2 subfamily L member 8 (gene/pseudogene) [Source:HGNC Symbol;Acc:HGNC:1515]	-1.0578525
OR2M3	olfactory receptor family 2 subfamily M member 3 [Source:HGNC Symbol;Acc:HGNC:8269]	1.0811707
OR2T27	olfactory receptor family 2 subfamily T member 27 [Source:HGNC Symbol;Acc:HGNC:31252]	-1.1447225
OR2T4	olfactory receptor family 2 subfamily T member 4 [Source:HGNC Symbol;Acc:HGNC:15016]	1.0820304
OR2W3	olfactory receptor family 2 subfamily W member 3 [Source:HGNC Symbol;Acc:HGNC:15021]	-1.0579541
OR2Y1	olfactory receptor family 2 subfamily Y member 1 [Source:HGNC Symbol;Acc:HGNC:14837]	1.159105
OR4A15	olfactory receptor family 4 subfamily A member 15 [Source:HGNC Symbol;Acc:HGNC:15152]	-1.1634454
OR4A47	olfactory receptor family 4 subfamily A member 47 [Source:HGNC Symbol;Acc:HGNC:31266]	1.1397042
OR4D10	olfactory receptor family 4 subfamily D member 10 [Source:HGNC Symbol;Acc:HGNC:15173]	-1.0963695
OR4D11	olfactory receptor family 4 subfamily D member 11 [Source:HGNC Symbol;Acc:HGNC:15174]	-1.1159046
OR4D2	olfactory receptor family 4 subfamily D member 2 [Source:HGNC Symbol;Acc:HGNC:8294]	1.1204609
OR4D6	olfactory receptor family 4 subfamily D member 6 [Source:HGNC Symbol;Acc:HGNC:15175]	-1.1604722
OR4D9	olfactory receptor family 4 subfamily D member 9 [Source:HGNC Symbol;Acc:HGNC:15178]	1.1283741
OR4F21	olfactory receptor family 4 subfamily F member 21 [Source:HGNC Symbol;Acc:HGNC:15983]	1.082412
OR4K13	olfactory receptor family 4 subfamily K member 13 [Source:HGNC Symbol;Acc:HGNC:15351]	1.0750698
OR4K17	olfactory receptor family 4 subfamily K member 17 [Source:HGNC Symbol;Acc:HGNC:15355]	1.101651
OR4N2	olfactory receptor family 4 subfamily N member 2 [Source:HGNC Symbol;Acc:HGNC:14742]	1.0925088
OR4N3P	olfactory receptor family 4 subfamily N member 3 pseudogene [Source:HGNC Symbol;Acc:HGNC:15374]	1.0756279
OR51B2	cty receptor family 51 subfamily B member 2 (gene/pseudogene) [Source:HGNC Symbol;Acc:HGNC:14	1.075773
OR51B4	olfactory receptor family 51 subfamily B member 4 [Source:HGNC Symbol;Acc:HGNC:14708]	1.1831416
OR51B5	olfactory receptor family 51 subfamily B member 5 [Source:HGNC Symbol;Acc:HGNC:19599]	-1.0741031
OR52A1	olfactory receptor family 52 subfamily A member 1 [Source:HGNC Symbol;Acc:HGNC:8318]	-1.1370674
OR52B2	olfactory receptor family 52 subfamily B member 2 [Source:HGNC Symbol;Acc:HGNC:15207]	-1.156535
OR52L1	olfactory receptor family 52 subfamily L member 1 [Source:HGNC Symbol;Acc:HGNC:14785]	1.119468
OR56A3	olfactory receptor family 56 subfamily A member 3 [Source:HGNC Symbol;Acc:HGNC:14786]	1.0653118
OR56A4	olfactory receptor family 56 subfamily A member 4 [Source:HGNC Symbol;Acc:HGNC:14791]	-1.1008959
OR56A5	olfactory receptor family 56 subfamily A member 5 [Source:HGNC Symbol;Acc:HGNC:14792]	1.1346315
OR5A1	olfactory receptor family 5 subfamily A member 1 [Source:HGNC Symbol;Acc:HGNC:8319]	-1.2393959
OR5A5S1	olfactory receptor family 5 subfamily AS member 1 [Source:HGNC Symbol;Acc:HGNC:15261]	-1.1433871
OR5AU1	olfactory receptor family 5 subfamily AU member 1 [Source:HGNC Symbol;Acc:HGNC:15362]	1.0851042
OR5C1	olfactory receptor family 5 subfamily C member 1 [Source:HGNC Symbol;Acc:HGNC:8331]	-1.1889173
OR5D14	olfactory receptor family 5 subfamily D member 14 [Source:HGNC Symbol;Acc:HGNC:15281]	1.1983411
OR5D16	olfactory receptor family 5 subfamily D member 16 [Source:HGNC Symbol;Acc:HGNC:15283]	-1.1016698
OR5D18	olfactory receptor family 5 subfamily D member 18 [Source:HGNC Symbol;Acc:HGNC:15285]	1.1530051
OR5H1	olfactory receptor family 5 subfamily H member 1 [Source:HGNC Symbol;Acc:HGNC:8346]	-1.3835421
OR5V1	olfactory receptor family 5 subfamily V member 1 [Source:HGNC Symbol;Acc:HGNC:13972]	-1.1541651
OR6B1	olfactory receptor family 6 subfamily B member 1 [Source:HGNC Symbol;Acc:HGNC:8354]	1.1885264
OR6K6	olfactory receptor family 6 subfamily K member 6 [Source:HGNC Symbol;Acc:HGNC:15033]	1.1597985
OR7C2	olfactory receptor family 7 subfamily C member 2 [Source:HGNC Symbol;Acc:HGNC:8374]	-1.1190263
OR7E13P	olfactory receptor family 7 subfamily E member 13 pseudogene [Source:HGNC Symbol;Acc:HGNC:8384]	-1.1991323
OR7E15P	olfactory receptor family 7 subfamily E member 156 pseudogene [Source:HGNC Symbol;Acc:HGNC:3131]	-1.2184136
OR7E19P	olfactory receptor family 7 subfamily E member 19 pseudogene [Source:HGNC Symbol;Acc:HGNC:8390]	1.483685
OR7E5P	olfactory receptor family 7 subfamily E member 5 pseudogene [Source:HGNC Symbol;Acc:HGNC:8435]	-1.1359444
OR7E91P	olfactory receptor family 7 subfamily E member 91 pseudogene [Source:HGNC Symbol;Acc:HGNC:14747	-1.220694
OR7G2	olfactory receptor family 7 subfamily G member 2 [Source:HGNC Symbol;Acc:HGNC:8466]	-1.0777601
OR8K3	cty receptor family 8 subfamily K member 3 (gene/pseudogene) [Source:HGNC Symbol;Acc:HGNC:15:	-1.1767447
ORAOV1	oral cancer overexpressed 1 [Source:HGNC Symbol;Acc:HGNC:17589]	-1.10873945
ORC1	origin recognition complex subunit 1 [Source:HGNC Symbol;Acc:HGNC:8487]	1.2800539
ORC4	origin recognition complex subunit 4 [Source:HGNC Symbol;Acc:HGNC:8490]	1.3102055
ORC5	origin recognition complex subunit 5 [Source:HGNC Symbol;Acc:HGNC:8491]	1.2457291
ORC6	origin recognition complex subunit 6 [Source:HGNC Symbol;Acc:HGNC:17151]	1.2005365
OSBPL11	oxysterol binding protein like 11 [Source:HGNC Symbol;Acc:HGNC:16397]	1.2359545
OSBPL2	oxysterol binding protein like 2 [Source:HGNC Symbol;Acc:HGNC:15761]	-1.0756029
OSBPL3	oxysterol binding protein like 3 [Source:HGNC Symbol;Acc:HGNC:16370]	-1.4310619
OSBPL6	oxysterol binding protein like 6 [Source:HGNC Symbol;Acc:HGNC:16388]	1.2975129
OSBPL7	oxysterol binding protein like 7 [Source:HGNC Symbol;Acc:HGNC:16387]	1.4192607

OSBPL9	oxysterol binding protein like 9 [Source:HGNC Symbol;Acc:HGNC:16386]	1.2930473
OSGEPL1	O-sialoglycoprotein endopeptidase-like 1 [Source:HGNC Symbol;Acc:HGNC:23075]	1.323539
OSGIN1	oxidative stress induced growth inhibitor 1 [Source:HGNC Symbol;Acc:HGNC:30093]	-1.225699
OSTN	osteocrin [Source:HGNC Symbol;Acc:HGNC:29961]	1.0821339
OTOG	otogelin [Source:HGNC Symbol;Acc:HGNC:8516]	-1.18891365
OTUD4	OTU deubiquitinase 4 [Source:HGNC Symbol;Acc:HGNC:24949]	-1.151607
OXER1	oxoeicosanoid receptor 1 [Source:HGNC Symbol;Acc:HGNC:24884]	-1.3758495
P2RX4	purinergic receptor P2X 4 [Source:HGNC Symbol;Acc:HGNC:8535]	-1.4819273
P2RX7	purinergic receptor P2X 7 [Source:HGNC Symbol;Acc:HGNC:8537]	1.1682496
P2RY12	purinergic receptor P2Y12 [Source:HGNC Symbol;Acc:HGNC:18124]	1.0663192
P2RY6	pyrimidinergic receptor P2Y6 [Source:HGNC Symbol;Acc:HGNC:8543]	-1.5899575
P4HA1	prolyl 4-hydroxylase subunit alpha 1 [Source:HGNC Symbol;Acc:HGNC:8546]	1.1597677
P4HA2	prolyl 4-hydroxylase subunit alpha 2 [Source:HGNC Symbol;Acc:HGNC:8547]	-1.2146702
P4HB	prolyl 4-hydroxylase subunit beta [Source:HGNC Symbol;Acc:HGNC:25687]	-1.0994105
PAAF1	proteasomal ATPase associated factor 1 [Source:HGNC Symbol;Acc:HGNC:10917611]	1.0917611
PACSN2	protein kinase C and casein kinase substrate in neurons 2 [Source:HGNC Symbol;Acc:HGNC:8571]	-1.16357605
PADI2	peptidyl arginine deiminase 2 [Source:HGNC Symbol;Acc:HGNC:18341]	-1.1434999
PAK2	p21 (RAC1) activated kinase 2 [Source:HGNC Symbol;Acc:HGNC:8591]	1.2382716
PALB2	partner and localizer of BRCA2 [Source:HGNC Symbol;Acc:HGNC:26144]	1.2662883
PALLD	palladin, cytoskeletal associated protein [Source:HGNC Symbol;Acc:HGNC:17068]	-1.118894
PALMD	palmDELphin [Source:HGNC Symbol;Acc:HGNC:15846]	1.5529926
PANX1	pannexin 1 [Source:HGNC Symbol;Acc:HGNC:8599]	-2.2744923
PAOX	polyamine oxidase (exo-N4-amino) [Source:HGNC Symbol;Acc:HGNC:20837]	-1.2730788
PAPLN	papilin, proteoglycan like sulfated glycoprotein [Source:HGNC Symbol;Acc:HGNC:19262]	-2.5828102
PAPOLB	poly(A) polymerase beta [Source:HGNC Symbol;Acc:HGNC:15970]	1.0942662
PARD3B	par-3 family cell polarity regulator beta [Source:HGNC Symbol;Acc:HGNC:14446]	1.0533988
PARL	presenilin associated rhomboid like [Source:HGNC Symbol;Acc:HGNC:18253]	-1.1298854
PARP10	poly(ADP-ribose) polymerase family member 10 [Source:HGNC Symbol;Acc:HGNC:25895]	-1.65136
PARP11	poly(ADP-ribose) polymerase family member 11 [Source:HGNC Symbol;Acc:HGNC:1186]	1.0727016
PARP12	poly(ADP-ribose) polymerase family member 12 [Source:HGNC Symbol;Acc:HGNC:21919]	-1.4553648
PARP16	poly(ADP-ribose) polymerase family member 16 [Source:HGNC Symbol;Acc:HGNC:26040]	1.3805369
PARP4	poly(ADP-ribose) polymerase family member 4 [Source:HGNC Symbol;Acc:HGNC:271]	1.21597
PARP6	poly(ADP-ribose) polymerase family member 6 [Source:HGNC Symbol;Acc:HGNC:26921]	-1.1866733
PARP9	poly(ADP-ribose) polymerase family member 9 [Source:HGNC Symbol;Acc:HGNC:24118]	-1.2191552
PARVG	parvin gamma [Source:HGNC Symbol;Acc:HGNC:14654]	-1.0633644
PATL1	PAT1 homolog 1, processing body mRNA decay factor [Source:HGNC Symbol;Acc:HGNC:26721]	-1.4273281
PATZ1	POZ/BTB and AT hook containing zinc finger 1 [Source:HGNC Symbol;Acc:HGNC:13071]	1.1834778
PAX3	paired box 3 [Source:HGNC Symbol;Acc:HGNC:8617]	1.1452516
PAX6	paired box 6 [Source:HGNC Symbol;Acc:HGNC:8620]	1.09244795
PAX9	paired box 9 [Source:HGNC Symbol;Acc:HGNC:8623]	1.350595
PBK	PDZ binding kinase [Source:HGNC Symbol;Acc:HGNC:18282]	1.5030258
PBOV1	prostate and breast cancer overexpressed 1 [Source:HGNC Symbol;Acc:HGNC:21079]	-1.1321723
PBXIP1	PBX homeobox interacting protein 1 [Source:HGNC Symbol;Acc:HGNC:21199]	1.115023
PCA3	prostate cancer associated 3 (non-protein coding) [Source:HGNC Symbol;Acc:HGNC:8637]	1.0953386
PCBD2	pterin-4 alpha-carbinolamine dehydratase 2 [Source:HGNC Symbol;Acc:HGNC:24474]	-1.2245479
PCCA	propionyl-CoA carboxylase alpha subunit [Source:HGNC Symbol;Acc:HGNC:8653]	1.1915717
PCDH12	protocadherin 12 [Source:HGNC Symbol;Acc:HGNC:8657]	-1.5214883
PCDH7	protocadherin 7 [Source:HGNC Symbol;Acc:HGNC:8659]	1.4556979
PCDH9	protocadherin 9 [Source:HGNC Symbol;Acc:HGNC:8661]	-1.0827903
PCDHA1	protocadherin alpha 1 [Source:HGNC Symbol;Acc:HGNC:8663]	1.0758625
PCDHA2	protocadherin alpha 2 [Source:HGNC Symbol;Acc:HGNC:8668]	1.068006
PCDHA3	protocadherin alpha 3 [Source:HGNC Symbol;Acc:HGNC:8669]	1.0938882
PCDH5	protocadherin alpha 5 [Source:HGNC Symbol;Acc:HGNC:8671]	-1.391379
PCDHB11	protocadherin beta 11 [Source:HGNC Symbol;Acc:HGNC:8682]	-1.1345234
PCDHB14	protocadherin beta 14 [Source:HGNC Symbol;Acc:HGNC:8685]	-1.1506243
PCDHGA12	protocadherin gamma subfamily A, 12 [Source:HGNC Symbol;Acc:HGNC:8699]	-1.1868048
PCDHGA5	protocadherin gamma subfamily A, 5 [Source:HGNC Symbol;Acc:HGNC:8703]	1.0533369
PCDHGA8	protocadherin gamma subfamily A, 8 [Source:HGNC Symbol;Acc:HGNC:8706]	-1.2446334
PCDHGB7	protocadherin gamma subfamily B, 7 [Source:HGNC Symbol;Acc:HGNC:8714]	-1.1806957
PCDHGC4	protocadherin gamma subfamily C, 4 [Source:HGNC Symbol;Acc:HGNC:8717]	-1.1518114
PCGF5	polycomb group ring finger 5 [Source:HGNC Symbol;Acc:HGNC:28264]	-1.2417965
PCLO	piccolo presynaptic cytomatrix protein [Source:HGNC Symbol;Acc:HGNC:13406]	1.116391
PCMT1	protein-L-isospartate (D-aspartate) O-methyltransferase [Source:HGNC Symbol;Acc:HGNC:8728]	-1.1004567
PCNP	PEST proteolytic signal containing nuclear protein [Source:HGNC Symbol;Acc:HGNC:30023]	1.3844329
PCNX	pecanex homolog 1 (<i>Drosophila</i>)	-1.2184458
PCP4	Purkinje cell protein 4 [Source:HGNC Symbol;Acc:HGNC:8742]	-1.0652758
PCSK5	proprotein convertase subtilisin/kerin type 5 [Source:HGNC Symbol;Acc:HGNC:8747]	1.1679882
PCTP	phosphatidylcholine transfer protein [Source:HGNC Symbol;Acc:HGNC:8752]	1.1647224
PCYT1A	phosphate cytidylyltransferase 1, choline, alpha [Source:HGNC Symbol;Acc:HGNC:8754]	-1.3517264
PDAP1	PDGFA associated protein 1 [Source:HGNC Symbol;Acc:HGNC:14634]	-1.140192
PDCD1LG2	programmed cell death 1 ligand 2 [Source:HGNC Symbol;Acc:HGNC:18731]	-1.1713042
PDCD2	programmed cell death 2 [Source:HGNC Symbol;Acc:HGNC:8762]	1.0717789
PDCD7	programmed cell death 7 [Source:HGNC Symbol;Acc:HGNC:8767]	1.1732742
PDCL	phosducin like [Source:HGNC Symbol;Acc:HGNC:8770]	1.4813218
PDDC1	Parkinson disease 7 domain containing 1 [Source:HGNC Symbol;Acc:HGNC:26616]	-1.1347449
PDE1A	phosphodiesterase 1A [Source:HGNC Symbol;Acc:HGNC:8774]	-1.111751
PDE4B	phosphodiesterase 4B [Source:HGNC Symbol;Acc:HGNC:8781]	-1.3457139
PDE5A	phosphodiesterase 5A [Source:HGNC Symbol;Acc:HGNC:8784]	-1.3351357
PDE6D	phosphodiesterase 6D [Source:HGNC Symbol;Acc:HGNC:8788]	-1.2344568
PDE7B	phosphodiesterase 7B [Source:HGNC Symbol;Acc:HGNC:8792]	1.9053061
PDE9A	phosphodiesterase 9A [Source:HGNC Symbol;Acc:HGNC:8795]	-1.2880346
PDGFB	platelet derived growth factor subunit B [Source:HGNC Symbol;Acc:HGNC:8800]	-1.393895
PDGFC	platelet derived growth factor C [Source:HGNC Symbol;Acc:HGNC:8801]	-1.2014569
PDGFR	platelet derived growth factor receptor like [Source:HGNC Symbol;Acc:HGNC:8805]	-1.7485782
PDHA1	pyruvate dehydrogenase (lipoyamide) alpha 1 [Source:HGNC Symbol;Acc:HGNC:8806]	-1.2505089
PDIA4	protein disulfide isomerase family A member 4 [Source:HGNC Symbol;Acc:HGNC:30167]	1.2604866

PDIA5	protein disulfide isomerase family A member 5 [Source:HGNC Symbol;Acc:HGNC:24811]	-1.1073412
PDK3	pyruvate dehydrogenase kinase 3 [Source:HGNC Symbol;Acc:HGNC:8811]	-1.1541294
PDK4	pyruvate dehydrogenase kinase 4 [Source:HGNC Symbol;Acc:HGNC:8812]	-1.1843957
PDIM1	PDZ and LIM domain 1 [Source:HGNC Symbol;Acc:HGNC:2067]	-1.2064899
PDIM4	PDZ and LIM domain 4 [Source:HGNC Symbol;Acc:HGNC:16501]	-1.9695991
PDIM5	PDZ and LIM domain 5 [Source:HGNC Symbol;Acc:HGNC:17468]	-1.0868515
PDIM7	PDZ and LIM domain 7 [Source:HGNC Symbol;Acc:HGNC:22958]	1.1619644
PDRG1	p53 and DNA damage regulated 1 [Source:HGNC Symbol;Acc:HGNC:16119]	-1.1708859
PDXP	pyridoxal phosphatase [Source:HGNC Symbol;Acc:HGNC:30259]	1.5862558
PDZD11	PDZ domain containing 11 [Source:HGNC Symbol;Acc:HGNC:28034]	-1.16477365
PDZD2	PDZ domain containing 2 [Source:HGNC Symbol;Acc:HGNC:18486]	-2.5348952
PEA15	phosphoprotein enriched in astrocytes 15 [Source:HGNC Symbol;Acc:HGNC:8822]	1.15223065
PEBP1	phosphatidylethanolamine binding protein 1 [Source:HGNC Symbol;Acc:HGNC:8630]	1.0957117
PEF1	penta-EF-hand domain containing 1 [Source:HGNC Symbol;Acc:HGNC:30009]	-1.0971975
PEG3	paternally expressed 3 [Source:HGNC Symbol;Acc:HGNC:8826]	1.1355479
PELI2	pellino E3 ubiquitin protein ligase family member 2 [Source:HGNC Symbol;Acc:HGNC:8828]	1.5983356
PEPD	peptidase D [Source:HGNC Symbol;Acc:HGNC:8840]	-1.1098031
PER4	period circadian clock 3 pseudogene	-1.0853449
PEX11B	peroxisomal biogenesis factor 11 beta [Source:HGNC Symbol;Acc:HGNC:8853]	-1.2818654
PEX11G	peroxisomal biogenesis factor 11 gamma [Source:HGNC Symbol;Acc:HGNC:20208]	-1.1438046
PEX14	peroxisomal biogenesis factor 14 [Source:HGNC Symbol;Acc:HGNC:8856]	-1.1476759
PEX2	peroxisomal biogenesis factor 2 [Source:HGNC Symbol;Acc:HGNC:9717]	1.0919818
PEX26	peroxisomal biogenesis factor 26 [Source:HGNC Symbol;Acc:HGNC:22965]	-1.2084986
PEX3	peroxisomal biogenesis factor 3 [Source:HGNC Symbol;Acc:HGNC:8858]	1.1109711
PFDN2	prefoldin subunit 2 [Source:HGNC Symbol;Acc:HGNC:8867]	1.1714408
PKFB2	6-phosphofructo-2-kinase/fructose-2,6-biphosphatase 2 [Source:HGNC Symbol;Acc:HGNC:8873]	-1.4010214
PKFB3	6-phosphofructo-2-kinase/fructose-2,6-biphosphatase 3 [Source:HGNC Symbol;Acc:HGNC:8874]	-1.6853517
PKP	phosphofructokinase, platelet [Source:HGNC Symbol;Acc:HGNC:8878]	-1.1174766
PNF1	profilin 1 [Source:HGNC Symbol;Acc:HGNC:8881]	1.0749463
PGA3	pepsinogen 3, group I (pepsinogen A) [Source:HGNC Symbol;Acc:HGNC:8885]	-1.0551398
PGAM4	phosphoglycerate mutase family member 4 [Source:HGNC Symbol;Acc:HGNC:21731]	-1.1258359
PGAP1	post-GPI attachment to proteins 1 [Source:HGNC Symbol;Acc:HGNC:25712]	1.1895629
PGBD2	piggyBac transposable element derived 2 [Source:HGNC Symbol;Acc:HGNC:19399]	1.1030298
PGC	progastricsin [Source:HGNC Symbol;Acc:HGNC:8890]	-1.186319
PGD	phosphogluconate dehydrogenase [Source:HGNC Symbol;Acc:HGNC:8891]	-1.1507444
PGF	placental growth factor [Source:HGNC Symbol;Acc:HGNC:8893]	1.4565831
PGLYRP1	peptidoglycan recognition protein 1 [Source:HGNC Symbol;Acc:HGNC:8904]	-1.1033852
PGLYRP2	peptidoglycan recognition protein 2 [Source:HGNC Symbol;Acc:HGNC:30013]	-1.1462184
PGM1	phosphoglucomutase 1 [Source:HGNC Symbol;Acc:HGNC:8905]	-1.1448034
PGPEP1	pyroglutamyl-peptidase I [Source:HGNC Symbol;Acc:HGNC:13568]	1.489026
PGRMC2	progesterone receptor membrane component 2 [Source:HGNC Symbol;Acc:HGNC:16089]	1.3258793
PHACTR3	phosphatase and actin regulator 3 [Source:HGNC Symbol;Acc:HGNC:15833]	1.1339577
PHB	prohibitin [Source:HGNC Symbol;Acc:HGNC:8912]	-1.1385491
PHF12	PHD finger protein 12 [Source:HGNC Symbol;Acc:HGNC:20816]	-1.1400425
PHF15	jade family PHD finger 2	-1.3133161
PHF17	jade family PHD finger 1	1.5219905
PHF2	PHD finger protein 2 [Source:HGNC Symbol;Acc:HGNC:8920]	-1.078113
PHF20	PHD finger protein 20 [Source:HGNC Symbol;Acc:HGNC:16098]	-1.2209255
PHF23	PHD finger protein 23 [Source:HGNC Symbol;Acc:HGNC:28428]	1.129090695
PHF5A	PHD finger protein 5A [Source:HGNC Symbol;Acc:HGNC:18000]	1.1082019
PHF8	PHD finger protein 8 [Source:HGNC Symbol;Acc:HGNC:20672]	-1.1832398
PHKA2	phosphorylase kinase regulatory subunit alpha 2 [Source:HGNC Symbol;Acc:HGNC:8926]	1.1574057
PHKB	phosphorylase kinase regulatory subunit beta [Source:HGNC Symbol;Acc:HGNC:8927]	1.169951
PHLDA2	pleckstrin homology like domain family A member 2 [Source:HGNC Symbol;Acc:HGNC:12385]	-1.46419
PHLPP2	PH domain and leucine rich repeat protein phosphatase 2 [Source:HGNC Symbol;Acc:HGNC:29149]	-1.1291445
PHRF1	PHD and ring finger domains 1 [Source:HGNC Symbol;Acc:HGNC:24351]	1.0577971
PHTF1	putative homeodomain transcription factor 1 [Source:HGNC Symbol;Acc:HGNC:8939]	1.3572558
PHTF2	putative homeodomain transcription factor 2 [Source:HGNC Symbol;Acc:HGNC:13411]	1.5012875
PI4KB	phosphatidylinositol 4-kinase beta [Source:HGNC Symbol;Acc:HGNC:8984]	-1.21080435
PIAS3	protein inhibitor of activated STAT 3 [Source:HGNC Symbol;Acc:HGNC:16861]	1.0720308
PIGA	phosphatidylinositol glycan anchor biosynthesis class A [Source:HGNC Symbol;Acc:HGNC:8957]	1.1063608
PIGC	phosphatidylinositol glycan anchor biosynthesis class C [Source:HGNC Symbol;Acc:HGNC:8960]	1.1024767
PIGG	phosphatidylinositol glycan anchor biosynthesis class G [Source:HGNC Symbol;Acc:HGNC:25985]	-1.1840585
PIGK	phosphatidylinositol glycan anchor biosynthesis class K [Source:HGNC Symbol;Acc:HGNC:8965]	1.5230957
PIGN	phosphatidylinositol glycan anchor biosynthesis class N [Source:HGNC Symbol;Acc:HGNC:8967]	1.1643058
PIGQ	phosphatidylinositol glycan anchor biosynthesis class Q [Source:HGNC Symbol;Acc:HGNC:14135]	1.1149392
PIGS	phosphatidylinositol glycan anchor biosynthesis class S [Source:HGNC Symbol;Acc:HGNC:14937]	-1.1851413
PIGU	phosphatidylinositol glycan anchor biosynthesis class U [Source:HGNC Symbol;Acc:HGNC:15791]	-1.0932395
PIGX	phosphatidylinositol glycan anchor biosynthesis class X [Source:HGNC Symbol;Acc:HGNC:26046]	1.1303811
PIK3AP1	phosphoinositide 3-kinase adaptor protein 1 [Source:HGNC Symbol;Acc:HGNC:30034]	1.0779663
PIK3C2B	sphatidylinositol-4-phosphate 3-kinase catalytic subunit type 2 beta [Source:HGNC Symbol;Acc:HGNC:8	-1.5629599
PIK3CB	sphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit beta [Source:HGNC Symbol;Acc:HGNC:89	1.2095671
PIK3CD	sphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit delta [Source:HGNC Symbol;Acc:HGNC:89	-1.8270771
PIK3CG	sphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit gamma [Source:HGNC Symbol;Acc:HGNC:8	1.5327988
PILRB	paired immunoglobin-like type 2 receptor beta [Source:HGNC Symbol;Acc:HGNC:18297]	-1.0593379
PIM1	Pim-1 proto-oncogene, serine/threonine kinase [Source:HGNC Symbol;Acc:HGNC:8986]	1.2265952
PIN1	peptidylprolyl cis/trans isomerase, NIMA-interacting 1 [Source:HGNC Symbol;Acc:HGNC:8988]	1.2424008
PIN1P1	ptidylprolyl cis/trans isomerase, NIMA-interacting 1 pseudogene 1 [Source:HGNC Symbol;Acc:HGNC:89	1.2454847
PINX1	PIN2/TERF1 interacting, telomerase inhibitor 1 [Source:HGNC Symbol;Acc:HGNC:30046]	-1.2181548
PION	gamma-secretase activating protein	-1.1931988
PIP5K1B	phosphatidylinositol-4-phosphate 5-kinase type 1 beta [Source:HGNC Symbol;Acc:HGNC:8995]	1.0794615
PIP5K1P1	phosphatidylinositol-4-phosphate 5-kinase type 1 pseudogene 1 [Source:HGNC Symbol;Acc:HGNC:28372	-1.0974145
PITPNM3	PITPNM family member 3 [Source:HGNC Symbol;Acc:HGNC:21043]	1.2326429
PITX3	paired like homeodomain 3 [Source:HGNC Symbol;Acc:HGNC:9006]	-1.154338
PIA1	praja ring finger ubiquitin ligase 1 [Source:HGNC Symbol;Acc:HGNC:16648]	-1.2743773
PKD1	polycystin 1, transient receptor potential channel interacting [Source:HGNC Symbol;Acc:HGNC:9008]	-1.2798247

PKD1L2	polycystin 1 like 2 (gene/pseudogene) [Source:HGNC Symbol;Acc:HGNC:21715]	-1.0772259
PKDCC	protein kinase domain containing, cytoplasmic [Source:HGNC Symbol;Acc:HGNC:25123]	1.39499845
PKIG	protein kinase (cAMP-dependent, catalytic) inhibitor gamma [Source:HGNC Symbol;Acc:HGNC:9019]	-1.373575
PKNOX2	PBX/knotted 1 homeobox 2 [Source:HGNC Symbol;Acc:HGNC:16714]	1.0923101
PKP2	plakophilin 2 [Source:HGNC Symbol;Acc:HGNC:9024]	1.1693565
PKP4	plakophilin 4 [Source:HGNC Symbol;Acc:HGNC:9026]	1.1752901
PLA2G12A	phospholipase A2 group XIIA [Source:HGNC Symbol;Acc:HGNC:18554]	-1.0684586
PLA2G16	phospholipase A2 group XVI [Source:HGNC Symbol;Acc:HGNC:17825]	1.2061101
PLA2G2C	phospholipase A2 group IIC [Source:HGNC Symbol;Acc:HGNC:9032]	-1.124607
PLA2G2D	phospholipase A2 group IID [Source:HGNC Symbol;Acc:HGNC:9033]	-1.1052215
PLA2G4A	phospholipase A2 group IVA [Source:HGNC Symbol;Acc:HGNC:9035]	1.2550426
PLA2G4C	phospholipase A2 group IVC [Source:HGNC Symbol;Acc:HGNC:9037]	-1.6717633
PLA2G5	phospholipase A2 group V [Source:HGNC Symbol;Acc:HGNC:9038]	-1.5316108
PLAC8	placenta specific 8 [Source:HGNC Symbol;Acc:HGNC:19254]	1.0766348
PLAC9	placenta specific 9 [Source:HGNC Symbol;Acc:HGNC:19255]	-1.2373068
PLAGL2	PLAG1 like zinc finger 2 [Source:HGNC Symbol;Acc:HGNC:9047]	-1.2629566
PLAU	plasminogen activator, urokinase [Source:HGNC Symbol;Acc:HGNC:9052]	-3.6658466
PLAUR	plasminogen activator, urokinase receptor [Source:HGNC Symbol;Acc:HGNC:9053]	-1.1335421
PLCB1	phospholipase C beta 1 [Source:HGNC Symbol;Acc:HGNC:15917]	1.0977348
PLCB2	phospholipase C beta 2 [Source:HGNC Symbol;Acc:HGNC:9055]	1.3084667
PLCB4	phospholipase C beta 4 [Source:HGNC Symbol;Acc:HGNC:9059]	-1.2671567
PLCD3	phospholipase C delta 3 [Source:HGNC Symbol;Acc:HGNC:9061]	1.3275344
PLCD4	phospholipase C delta 4 [Source:HGNC Symbol;Acc:HGNC:9062]	-1.5221984
PLCE1	phospholipase C epsilon 1 [Source:HGNC Symbol;Acc:HGNC:17175]	-1.1013318
PLCG2	phospholipase C gamma 2 [Source:HGNC Symbol;Acc:HGNC:9066]	-1.1942577
PLCL2	phospholipase C like 2 [Source:HGNC Symbol;Acc:HGNC:9064]	1.1478751
PLCXD1	phosphatidylinositol specific phospholipase C X domain containing 1 [Source:HGNC Symbol;Acc:HGNC:231]	1.2977169
PLCXD3	phosphatidylinositol specific phospholipase C X domain containing 3 [Source:HGNC Symbol;Acc:HGNC:318]	1.06927
PLD2	phospholipase D2 [Source:HGNC Symbol;Acc:HGNC:9068]	-1.4411585
PLD6	phospholipase D family member 6 [Source:HGNC Symbol;Acc:HGNC:30447]	1.2023072
PLEC	plectin [Source:HGNC Symbol;Acc:HGNC:9069]	1.2061851
PLEKHA4	pleckstrin homology domain containing A4 [Source:HGNC Symbol;Acc:HGNC:14339]	-1.3045158
PLEKHA6	pleckstrin homology domain containing A6 [Source:HGNC Symbol;Acc:HGNC:17053]	1.3253518
PLEKHB2	pleckstrin homology domain containing B2 [Source:HGNC Symbol;Acc:HGNC:19236]	-1.2048403
PLEKHF2	pleckstrin homology and FVVE domain containing 2 [Source:HGNC Symbol;Acc:HGNC:20757]	1.2496653
PLEKHG1	pleckstrin homology and RhoGEF domain containing G1 [Source:HGNC Symbol;Acc:HGNC:20884]	-1.127959
PLEKHG3	pleckstrin homology and RhoGEF domain containing G3 [Source:HGNC Symbol;Acc:HGNC:20364]	-1.2429764
PLEKHG4	pleckstrin homology and RhoGEF domain containing G4 [Source:HGNC Symbol;Acc:HGNC:24501]	1.1478274
PLEKHG4B	pleckstrin homology and RhoGEF domain containing G4B [Source:HGNC Symbol;Acc:HGNC:29399]	1.1454644
PLEKHG7	pleckstrin homology and RhoGEF domain containing G7 [Source:HGNC Symbol;Acc:HGNC:33829]	1.1128165
PLEKHM1	pleckstrin homology and RUN domain containing M1 [Source:HGNC Symbol;Acc:HGNC:29017]	-1.1965452
PLEKHO1	pleckstrin homology domain containing O1 [Source:HGNC Symbol;Acc:HGNC:24310]	1.0656023
PLEKHO2	pleckstrin homology domain containing O2 [Source:HGNC Symbol;Acc:HGNC:30026]	-1.6812955
PLG	plasminogen [Source:HGNC Symbol;Acc:HGNC:9071]	1.080244
PLIN2	perilipin 2 [Source:HGNC Symbol;Acc:HGNC:248]	1.1608387
PLIN4	perilipin 4 [Source:HGNC Symbol;Acc:HGNC:29393]	-1.1176945
PLK1	polo like kinase 1 [Source:HGNC Symbol;Acc:HGNC:9077]	1.133942
PLK2	polo like kinase 2 [Source:HGNC Symbol;Acc:HGNC:19699]	-1.5800034
PLK3	polo like kinase 3 [Source:HGNC Symbol;Acc:HGNC:2154]	-1.1642267
PLK4	polo like kinase 4 [Source:HGNC Symbol;Acc:HGNC:11397]	1.383828
PLLP	plasmolipin [Source:HGNC Symbol;Acc:HGNC:18553]	-1.8300961
PLXDC1	plexin domain containing 1 [Source:HGNC Symbol;Acc:HGNC:20945]	-1.1078465
PLXNA1	plexin A1 [Source:HGNC Symbol;Acc:HGNC:9099]	-1.3369428
PLXNA2	plexin A2 [Source:HGNC Symbol;Acc:HGNC:9100]	1.2145233
PLXNB1	plexin B1 [Source:HGNC Symbol;Acc:HGNC:9103]	-1.1343492
PLXNB2	plexin B2 [Source:HGNC Symbol;Acc:HGNC:9104]	-1.1624212
PLXNB3	plexin B3 [Source:HGNC Symbol;Acc:HGNC:9105]	1.1134405
PM2D01	peptidase M20 domain containing 1 [Source:HGNC Symbol;Acc:HGNC:26518]	1.0770282
PMAIP1	phorbol-12-myristate-13-acetate-induced protein 1 [Source:HGNC Symbol;Acc:HGNC:9108]	-1.9358847
PMEPA1	prostate transmembrane protein, androgen induced 1 [Source:HGNC Symbol;Acc:HGNC:14107]	1.3048342
PMFBP1	polyamine modulated factor 1 binding protein 1 [Source:HGNC Symbol;Acc:HGNC:17728]	-1.071204
PML	promyelocytic leukemia [Source:HGNC Symbol;Acc:HGNC:9113]	-1.576471533
PMP22	peripheral myelin protein 22 [Source:HGNC Symbol;Acc:HGNC:9118]	-1.4879855
PMS2L2	PMS1 homolog 2, mismatch repair system component pseudogene 2	1.0623374
PMS2P5	IS1 homolog 2, mismatch repair system component pseudogene 5 [Source:HGNC Symbol;Acc:HGNC:91:	-1.14247
PNKD	paroxysmal nonketogenic hypoglycemia [Source:HGNC Symbol;Acc:HGNC:9153]	-1.1933361
PNM6A	paraneoplastic Ma antigen family member 6A [Source:HGNC Symbol;Acc:HGNC:28248]	1.1078731
PNMAL1	paraneoplastic Ma antigen family like 1 [Source:HGNC Symbol;Acc:HGNC:25578]	1.3285961
PNMAL2	paraneoplastic Ma antigen family like 2 [Source:HGNC Symbol;Acc:HGNC:29206]	-1.2039226
PNP	purine nucleoside phosphorylase [Source:HGNC Symbol;Acc:HGNC:7892]	1.2035432
PNPLA4	patatin like phospholipase domain containing 4 [Source:HGNC Symbol;Acc:HGNC:24887]	-1.0947318
PNPT1	polyribonucleotide nucleotidyltransferase 1 [Source:HGNC Symbol;Acc:HGNC:23166]	1.363815
PNRC1	proline rich nuclear receptor coactivator 1 [Source:HGNC Symbol;Acc:HGNC:17278]	-1.491026
POFUT2	protein O-fucosyltransferase 2 [Source:HGNC Symbol;Acc:HGNC:14683]	1.126868
POGK	pogo transposable element with KRAB domain [Source:HGNC Symbol;Acc:HGNC:18800]	-1.2757027
POLD3	DNA polymerase delta 3, accessory subunit [Source:HGNC Symbol;Acc:HGNC:20932]	1.2591331
POLDIP3	DNA polymerase delta interacting protein 3 [Source:HGNC Symbol;Acc:HGNC:23782]	-1.1764833
POLE	DNA polymerase epsilon, catalytic subunit [Source:HGNC Symbol;Acc:HGNC:9177]	1.1039143
POLG	DNA polymerase gamma, catalytic subunit [Source:HGNC Symbol;Acc:HGNC:9179]	-1.1557217
POLN	DNA polymerase nu [Source:HGNC Symbol;Acc:HGNC:18870]	1.1041567
POLR1C	RNA polymerase I subunit C [Source:HGNC Symbol;Acc:HGNC:20194]	-1.0941062
POLR2B	RNA polymerase II subunit B [Source:HGNC Symbol;Acc:HGNC:9188]	1.3690048
POLR2D	RNA polymerase II subunit D [Source:HGNC Symbol;Acc:HGNC:9191]	-1.1413199
POLR2G	RNA polymerase II subunit G [Source:HGNC Symbol;Acc:HGNC:9194]	-1.1731031
POLR2H	RNA polymerase II subunit H [Source:HGNC Symbol;Acc:HGNC:9195]	1.1129702
POLR2K	RNA polymerase II subunit K [Source:HGNC Symbol;Acc:HGNC:9198]	-1.1619179

POLR3E	RNA polymerase III subunit E [Source:HGNC Symbol;Acc:HGNC:30347]	-1.1106274
POLR3G	RNA polymerase III subunit G [Source:HGNC Symbol;Acc:HGNC:30075]	1.5255877
POLR3GL	RNA polymerase III subunit G like [Source:HGNC Symbol;Acc:HGNC:28466]	1.0729084
POLR3H	RNA polymerase III subunit H [Source:HGNC Symbol;Acc:HGNC:30349]	1.2078291
POLR3K	RNA polymerase III subunit K [Source:HGNC Symbol;Acc:HGNC:14121]	1.2108947
POM121L10P	POM121 transmembrane nucleoporin like 10, pseudogene [Source:HGNC Symbol;Acc:HGNC:35448]	1.1422875
POM121L1P	POM121 transmembrane nucleoporin like 1, pseudogene [Source:HGNC Symbol;Acc:HGNC:16439]	1.0987558
POM121L2	POM121 transmembrane nucleoporin like 2 [Source:HGNC Symbol;Acc:HGNC:13973]	1.0866201
POM121L4P	POM121 transmembrane nucleoporin like 4, pseudogene [Source:HGNC Symbol;Acc:HGNC:19326]	-1.1346741
POMT2	protein O-mannosyltransferase 2 [Source:HGNC Symbol;Acc:HGNC:19743]	1.0813807
POPS	POPS homolog, ribonuclease P/MRP subunit [Source:HGNC Symbol;Acc:HGNC:17689]	-1.1359521
POR	cytochrome p450 oxidoreductase [Source:HGNC Symbol;Acc:HGNC:9208]	-1.1947742
POTEF	POTE ankyrin domain family member F [Source:HGNC Symbol;Acc:HGNC:33905]	-1.1613919
PPAN-P2RY11	PPAN-P2RY11 readthrough [Source:HGNC Symbol;Acc:HGNC:33526]	1.1644465
PPAP2A	phospholipid phosphatase 1	-1.7911497
PPAP2B	phospholipid phosphatase 3	-1.4292244
PPARGC1B	PPARG coactivator 1 beta [Source:HGNC Symbol;Acc:HGNC:30022]	1.2223347
PPAT	phosphoribosyl pyrophosphate amidotransferase [Source:HGNC Symbol;Acc:HGNC:9238]	1.6158689
PPCDC	phosphopantethenoylcysteine decarboxylase [Source:HGNC Symbol;Acc:HGNC:28107]	-1.0662992
PPFIBP2	PPFIA binding protein 2 [Source:HGNC Symbol;Acc:HGNC:9250]	1.2659147
PPIA	peptidylprolyl isomerase A [Source:HGNC Symbol;Acc:HGNC:9253]	-1.0948275
PIAL4G	peptidylprolyl isomerase A like 4G [Source:HGNC Symbol;Acc:HGNC:33996]	-1.1838534
PPIF	peptidylprolyl isomerase F [Source:HGNC Symbol;Acc:HGNC:9259]	-1.1751583
PIIH	peptidylprolyl isomerase H [Source:HGNC Symbol;Acc:HGNC:14651]	-1.0856756
PIIL2	peptidylprolyl isomerase like 2 [Source:HGNC Symbol;Acc:HGNC:9261]	-1.1240679
PPL	periplakin [Source:HGNC Symbol;Acc:HGNC:9273]	-1.1562318
PPM1D	protein phosphatase, Mg ²⁺ /Mn ²⁺ dependent 1D [Source:HGNC Symbol;Acc:HGNC:9277]	1.1839567
PPM1F	protein phosphatase, Mg ²⁺ /Mn ²⁺ dependent 1F [Source:HGNC Symbol;Acc:HGNC:19388]	-1.3110054
PPM1J	protein phosphatase, Mg ²⁺ /Mn ²⁺ dependent 1J [Source:HGNC Symbol;Acc:HGNC:20785]	-1.0835079
PPME1	protein phosphatase methylesterase 1 [Source:HGNC Symbol;Acc:HGNC:30178]	-1.1195854
PPP1R10	protein phosphatase 1 regulatory subunit 10 [Source:HGNC Symbol;Acc:HGNC:9284]	1.0740864
PPP1R13B	protein phosphatase 1 regulatory subunit 13B [Source:HGNC Symbol;Acc:HGNC:14950]	-1.7147648
PPP1R15A	protein phosphatase 1 regulatory subunit 15A [Source:HGNC Symbol;Acc:HGNC:14375]	-1.2326063
PPP1R3A	protein phosphatase 1 regulatory subunit 3A [Source:HGNC Symbol;Acc:HGNC:9291]	1.0816936
PPP1R3B	protein phosphatase 1 regulatory subunit 3B [Source:HGNC Symbol;Acc:HGNC:14942]	1.3317975
PPP1R3G	protein phosphatase 1 regulatory subunit 3G [Source:HGNC Symbol;Acc:HGNC:14945]	-1.170762
PPP1R9A	protein phosphatase 1 regulatory subunit 9A [Source:HGNC Symbol;Acc:HGNC:14946]	1.1525604
PPP2CA	protein phosphatase 2 catalytic subunit alpha [Source:HGNC Symbol;Acc:HGNC:9299]	-1.1998922
PPP2R1B	protein phosphatase 2 scaffold subunit Abeta [Source:HGNC Symbol;Acc:HGNC:9303]	-1.2915275
PPP2R3C	protein phosphatase 2 regulatory subunit B'gamma [Source:HGNC Symbol;Acc:HGNC:17485]	1.3481054
PPP2R5B	protein phosphatase 2 regulatory subunit B'beta [Source:HGNC Symbol;Acc:HGNC:9310]	-1.1320546
PPP3CB	protein phosphatase 3 catalytic subunit beta [Source:HGNC Symbol;Acc:HGNC:9315]	-1.1937457
PPP3CC	protein phosphatase 3 catalytic subunit gamma [Source:HGNC Symbol;Acc:HGNC:9316]	-1.0698309
PPP4R1L	protein phosphatase 4 regulatory subunit 1 like (pseudogene) [Source:HGNC Symbol;Acc:HGNC:15755]	-1.2356414
PPP5C	protein phosphatase 5 catalytic subunit [Source:HGNC Symbol;Acc:HGNC:9322]	1.4402192
PT2	palmitoyl-protein thioesterase 2 [Source:HGNC Symbol;Acc:HGNC:9326]	1.2660841
POLC1	PQ loop repeat containing 1 [Source:HGNC Symbol;Acc:HGNC:26188]	-1.3197469
PRAMEF2	PRAME family member 2 [Source:HGNC Symbol;Acc:HGNC:28841]	1.1137437
PRCD	progressive rod-cone degeneration [Source:HGNC Symbol;Acc:HGNC:32528]	-1.0792962
PRDM1	PR/SET domain 1 [Source:HGNC Symbol;Acc:HGNC:9346]	-1.5286527
PRDM12	PR/SET domain 12 [Source:HGNC Symbol;Acc:HGNC:13997]	1.1000183
PRDM14	PR/SET domain 14 [Source:HGNC Symbol;Acc:HGNC:14001]	1.0806712
PRDM8	PR/SET domain 8 [Source:HGNC Symbol;Acc:HGNC:13993]	-2.9975948
PRDM9	PR/SET domain 9 [Source:HGNC Symbol;Acc:HGNC:13994]	-1.1094548
PRDX1	peroxiredoxin 1 [Source:HGNC Symbol;Acc:HGNC:9352]	1.2535508
PRDX5	peroxiredoxin 5 [Source:HGNC Symbol;Acc:HGNC:9355]	-1.0715536
PREPL	prolyl endopeptidase-like [Source:HGNC Symbol;Acc:HGNC:30228]	1.3544335
PRG1	serglycin	1.1098455
PRIC285	helicase with zinc finger 2	-2.2810578
PRICKLE1	prickle planar cell polarity protein 1 [Source:HGNC Symbol;Acc:HGNC:17019]	2.1234584
PRIM1	primase (DNA) subunit 1 [Source:HGNC Symbol;Acc:HGNC:9369]	1.2464645
PRINS	psoriasis associated non-protein coding RNA induced by stress	-1.8291407
PRKACA	protein kinase cAMP-activated catalytic subunit alpha [Source:HGNC Symbol;Acc:HGNC:9380]	1.3031893
PRKACB	protein kinase cAMP-activated catalytic subunit beta [Source:HGNC Symbol;Acc:HGNC:9381]	2.0870671
PRKAR1A	protein kinase cAMP-dependent type I regulatory subunit alpha [Source:HGNC Symbol;Acc:HGNC:9388]	-1.0741287
PRKCD	protein kinase C delta [Source:HGNC Symbol;Acc:HGNC:9399]	-1.8098637
PRKCE	protein kinase C epsilon [Source:HGNC Symbol;Acc:HGNC:9401]	1.539213
PRKCH	protein kinase C eta [Source:HGNC Symbol;Acc:HGNC:9403]	1.2702664
PRKCI	protein kinase C iota [Source:HGNC Symbol;Acc:HGNC:9404]	1.3324362
PRKCQ	protein kinase C theta [Source:HGNC Symbol;Acc:HGNC:9410]	1.0667999
PRKCSH	protein kinase C substrate 80K-H [Source:HGNC Symbol;Acc:HGNC:9411]	1.3278368
PRKD2	protein kinase D2 [Source:HGNC Symbol;Acc:HGNC:17293]	-1.4493564
PRKG2	protein kinase, cGMP-dependent, type II [Source:HGNC Symbol;Acc:HGNC:9416]	1.1287003
PRKRIR	THAP domain containing 12	1.1619819
PRLR	prolactin receptor [Source:HGNC Symbol;Acc:HGNC:9446]	1.1165869
PRM1	protamine 1 [Source:HGNC Symbol;Acc:HGNC:9447]	-1.0934547
PRMT1	protein arginine methyltransferase 1 [Source:HGNC Symbol;Acc:HGNC:5187]	-1.1144887
PRMT2	protein arginine methyltransferase 2 [Source:HGNC Symbol;Acc:HGNC:5186]	-1.108796
PRMT3	protein arginine methyltransferase 3 [Source:HGNC Symbol;Acc:HGNC:30163]	1.2014946
PRMT5	protein arginine methyltransferase 5 [Source:HGNC Symbol;Acc:HGNC:10894]	-1.1139424
PRMT6	protein arginine methyltransferase 6 [Source:HGNC Symbol;Acc:HGNC:18241]	1.1238465
PRO0471	uncharacterized LOC28994	1.0943657
PRO0611	PRO0611 protein	1.0776019
PROCR	protein C receptor [Source:HGNC Symbol;Acc:HGNC:9452]	1.1413561
PRODH	proline dehydrogenase 1 [Source:HGNC Symbol;Acc:HGNC:9453]	-1.1985888
ProSAP1P1	leucine zipper tumor suppressor family member 3	-1.254513

PRPF18	pre-mRNA processing factor 18 [Source:HGNC Symbol;Acc:HGNC:17351]	1.3307501
PRPF6	pre-mRNA processing factor 6 [Source:HGNC Symbol;Acc:HGNC:15860]	-1.0603973
PRR18	proline rich 18 [Source:HGNC Symbol;Acc:HGNC:28574]	-1.1312983
PRR23B	proline rich 23B [Source:HGNC Symbol;Acc:HGNC:33764]	-1.085348
PRR7	proline rich 7 (synaptic) [Source:HGNC Symbol;Acc:HGNC:28130]	1.5090052
PRRC2A	proline rich coiled-coil 2A [Source:HGNC Symbol;Acc:HGNC:13918]	1.3779577
PRRG1	proline rich and Gla domain 1 [Source:HGNC Symbol;Acc:HGNC:9469]	-1.2336901
PRRG2	proline rich and Gla domain 2 [Source:HGNC Symbol;Acc:HGNC:9470]	1.1438161
PRRG3	proline rich and Gla domain 3 [Source:HGNC Symbol;Acc:HGNC:30798]	-1.1878572
PRRT1	proline rich transmembrane protein 1 [Source:HGNC Symbol;Acc:HGNC:13943]	-1.0999475
PRRT4	proline rich transmembrane protein 4 [Source:HGNC Symbol;Acc:HGNC:37280]	1.2130818
PRSS36	protease, serine 36 [Source:HGNC Symbol;Acc:HGNC:26906]	-1.1630216
PRSS8	protease, serine 8 [Source:HGNC Symbol;Acc:HGNC:9491]	-1.0591403
PRTG	protogenin [Source:HGNC Symbol;Acc:HGNC:26373]	1.1733447
PRTN3	proteinase 3 [Source:HGNC Symbol;Acc:HGNC:9495]	-1.130987
PRUNE2	prune homolog 2 [Source:HGNC Symbol;Acc:HGNC:25209]	1.2618607
PSD2	pleckstrin and Sec7 domain containing 2 [Source:HGNC Symbol;Acc:HGNC:19092]	1.1004092
PSEN1	presenilin 1 [Source:HGNC Symbol;Acc:HGNC:9508]	-1.567963
PSEN2	presenilin 2 [Source:HGNC Symbol;Acc:HGNC:9509]	-1.6942778
psipTPE22	transmembrane phosphatase with tensin homology pseudogene 1	-1.074293
PSMA6	proteasome subunit alpha 6 [Source:HGNC Symbol;Acc:HGNC:9535]	-1.2066969
PSMB10	proteasome subunit beta 10 [Source:HGNC Symbol;Acc:HGNC:9538]	-1.2886705
PSMB8	proteasome subunit beta 8 [Source:HGNC Symbol;Acc:HGNC:9545]	-1.4257451
PSMB9	proteasome subunit beta 9 [Source:HGNC Symbol;Acc:HGNC:9546]	-1.4243968
PSMC3	proteasome 26S subunit, ATPase 3 [Source:HGNC Symbol;Acc:HGNC:9549]	1.0500098
PSMC3IP	PSMC3 interacting protein [Source:HGNC Symbol;Acc:HGNC:17928]	1.1516057
PSMD11	proteasome 26S subunit, non-ATPase 11 [Source:HGNC Symbol;Acc:HGNC:9556]	1.2300076
PSMD4	proteasome 26S subunit, non-ATPase 4 [Source:HGNC Symbol;Acc:HGNC:9561]	-1.0817127
PSMD5	proteasome 26S subunit, non-ATPase 5 [Source:HGNC Symbol;Acc:HGNC:9563]	1.0886635
PSMD9	proteasome 26S subunit, non-ATPase 9 [Source:HGNC Symbol;Acc:HGNC:9567]	1.1251119
PSME1	proteasome activator subunit 1 [Source:HGNC Symbol;Acc:HGNC:9568]	-1.3515717
PSME2	proteasome activator subunit 2 [Source:HGNC Symbol;Acc:HGNC:9569]	-1.3862005
PSME4	proteasome activator subunit 4 [Source:HGNC Symbol;Acc:HGNC:20635]	1.251497
PSMG2	proteasome assembly chaperone 2 [Source:HGNC Symbol;Acc:HGNC:24929]	-1.1941135
PSPH	phosphoserine phosphatase [Source:HGNC Symbol;Acc:HGNC:9577]	1.1632761
PTAFR	platelet activating factor receptor [Source:HGNC Symbol;Acc:HGNC:9582]	-1.3644845
PTBP1	poly(pyrimidine tract binding protein 1 [Source:HGNC Symbol;Acc:HGNC:9583]	-1.2254856
PTCH2	patched 2 [Source:HGNC Symbol;Acc:HGNC:9586]	-1.1322902
PTCHD3	patched domain containing 3 [Source:HGNC Symbol;Acc:HGNC:24776]	1.0956552
PTEN	phosphatase and tensin homolog [Source:HGNC Symbol;Acc:HGNC:9588]	1.1696136
PTF1A	pancreas specific transcription factor, 1a [Source:HGNC Symbol;Acc:HGNC:23734]	1.1751045
PTGFR	prostaglandin F receptor [Source:HGNC Symbol;Acc:HGNC:9600]	-1.2229843
PTGFRN	prostaglandin F2 receptor inhibitor [Source:HGNC Symbol;Acc:HGNC:9601]	-1.2263702
PTGIS	prostaglandin I2 (prostacyclin) synthase [Source:HGNC Symbol;Acc:HGNC:9603]	-1.1255989
PTGS2	prostaglandin-endoperoxide synthase 2 [Source:HGNC Symbol;Acc:HGNC:9605]	-1.4346144
PTHLH	parathyroid hormone like hormone [Source:HGNC Symbol;Acc:HGNC:9607]	-1.216422
PTP4A1	protein tyrosine phosphatase type IVA, member 1 [Source:HGNC Symbol;Acc:HGNC:9634]	1.2091388
PTP4A2	protein tyrosine phosphatase type IVA, member 2 [Source:HGNC Symbol;Acc:HGNC:9635]	1.2856109
PTPLA	3-hydroxyacyl-CoA dehydratase 1	-1.0671303
PTPN20B	protein tyrosine phosphatase, non-receptor type 20	-1.07132435
PTPN3	protein tyrosine phosphatase, non-receptor type 3 [Source:HGNC Symbol;Acc:HGNC:9655]	1.1272525
PTPRF	protein tyrosine phosphatase, receptor type F [Source:HGNC Symbol;Acc:HGNC:9670]	-1.131666
PTPRK	protein tyrosine phosphatase, receptor type K [Source:HGNC Symbol;Acc:HGNC:9674]	-1.37492985
PTPRM	protein tyrosine phosphatase, receptor type M [Source:HGNC Symbol;Acc:HGNC:9675]	-1.2529433
PTPRN2	protein tyrosine phosphatase, receptor type N2 [Source:HGNC Symbol;Acc:HGNC:9677]	1.0979127
PTPRS	protein tyrosine phosphatase, receptor type S [Source:HGNC Symbol;Acc:HGNC:9681]	-1.1809596
PTPRT	protein tyrosine phosphatase, receptor type T [Source:HGNC Symbol;Acc:HGNC:9682]	1.1026493
PTPRVP	protein tyrosine phosphatase, receptor type V, pseudogene [Source:HGNC Symbol;Acc:HGNC:13421]	1.1104845
PTTG1	pituitary tumor-transforming 1 [Source:HGNC Symbol;Acc:HGNC:9690]	-1.0639142
PTTG1IP	pituitary tumor-transforming 1 interacting protein [Source:HGNC Symbol;Acc:HGNC:13524]	-1.2765256
PTTG2	pituitary tumor-transforming 2 [Source:HGNC Symbol;Acc:HGNC:9691]	1.1118758
PUS1	pseudouridylate synthase 1 [Source:HGNC Symbol;Acc:HGNC:15508]	1.1251047
PUS10	pseudouridylate synthase 10 [Source:HGNC Symbol;Acc:HGNC:26505]	1.0638803
PUS3	pseudouridylate synthase 3 [Source:HGNC Symbol;Acc:HGNC:25461]	1.2649394
PUS7L	pseudouridylate synthase 7 like [Source:HGNC Symbol;Acc:HGNC:25276]	1.1140956
PVR	poliovirus receptor [Source:HGNC Symbol;Acc:HGNC:9705]	-1.3686592
PVRL2	nectin cell adhesion molecule 2	-1.275217
PVRL3	nectin cell adhesion molecule 3	1.5390055
PVT1	Pvt1 oncogene (non-protein coding) [Source:HGNC Symbol;Acc:HGNC:9709]	-1.2852803
PWRN2	Prader-Willi region non-protein coding RNA 2 [Source:HGNC Symbol;Acc:HGNC:33236]	1.092489
PXDN	peroxidasin [Source:HGNC Symbol;Acc:HGNC:14966]	-1.24636355
PXMP4	peroxisomal membrane protein 4 [Source:HGNC Symbol;Acc:HGNC:15920]	1.1793512
PXN	paxillin [Source:HGNC Symbol;Acc:HGNC:9718]	1.4310409
PYCR1	pyrroline-5-carboxylate reductase-like [Source:HGNC Symbol;Acc:HGNC:25846]	1.2244414
PYGB	phosphorylase, glycogen; brain [Source:HGNC Symbol;Acc:HGNC:9723]	1.2334601
PYGO1	pygopus family PHD finger 1 [Source:HGNC Symbol;Acc:HGNC:30256]	1.2473793
QARS	glutaminyl-tRNA synthetase [Source:HGNC Symbol;Acc:HGNC:9751]	-1.1252935
QKI	QKI, KH domain containing RNA binding [Source:HGNC Symbol;Acc:HGNC:21100]	-1.0712098
QRSL1	glutaminyl-tRNA synthase (glutamine-hydrolyzing)-like 1 [Source:HGNC Symbol;Acc:HGNC:21020]	1.078503
R3HDM2	R3H domain containing 2 [Source:HGNC Symbol;Acc:HGNC:29167]	1.0525253
RAB10	RAB10, member RAS oncogene family [Source:HGNC Symbol;Acc:HGNC:9759]	1.2290475
RAB11FIP4	RAB11 family interacting protein 4 [Source:HGNC Symbol;Acc:HGNC:30267]	-1.1446735
RAB12	RAB12, member RAS oncogene family [Source:HGNC Symbol;Acc:HGNC:31332]	-1.63504765
RAB13	RAB13, member RAS oncogene family [Source:HGNC Symbol;Acc:HGNC:9762]	-1.1494269
RAB14	RAB14, member RAS oncogene family [Source:HGNC Symbol;Acc:HGNC:16524]	1.1026078
RAB19	RAB19, member RAS oncogene family [Source:HGNC Symbol;Acc:HGNC:19982]	-1.1146326

RAB1B	RAB1B, member RAS oncogene family [Source:HGNC Symbol;Acc:HGNC:18370]	1.801651
RAB25	RAB25, member RAS oncogene family [Source:HGNC Symbol;Acc:HGNC:18238]	1.1034021
RAB28	RAB28, member RAS oncogene family [Source:HGNC Symbol;Acc:HGNC:9768]	1.1453584
RAB2B	RAB2B, member RAS oncogene family [Source:HGNC Symbol;Acc:HGNC:20246]	-1.2159598
RAB35	RAB35, member RAS oncogene family [Source:HGNC Symbol;Acc:HGNC:9774]	-1.0605818
RAB38	RAB38, member RAS oncogene family [Source:HGNC Symbol;Acc:HGNC:9776]	-1.278485
RAB3A	RAB3A, member RAS oncogene family [Source:HGNC Symbol;Acc:HGNC:9777]	1.2566376
RAB3B	RAB3B, member RAS oncogene family [Source:HGNC Symbol;Acc:HGNC:9778]	1.0797741
RAB3C	RAB3C, member RAS oncogene family [Source:HGNC Symbol;Acc:HGNC:30269]	-1.1289219
RAB7B	RAB7B, member RAS oncogene family [Source:HGNC Symbol;Acc:HGNC:30513]	1.0883194
RAB7L1	RAB29, member RAS oncogene family	-1.2832674
RAB9BP1	RAB9B, member RAS oncogene family pseudogene 1 [Source:HGNC Symbol;Acc:HGNC:9793]	-1.2524675
RABEPK	Rab9 effector protein with kelch motifs [Source:HGNC Symbol;Acc:HGNC:16896]	-1.3201813
RABGAP1L	RAB GTPase activating protein 1 like [Source:HGNC Symbol;Acc:HGNC:24663]	1.1952218
RABL2A	RAB, member of RAS oncogene family-like 2A [Source:HGNC Symbol;Acc:HGNC:9799]	-1.112319267
RABL2B	RAB, member of RAS oncogene family-like 2B [Source:HGNC Symbol;Acc:HGNC:9800]	-1.1966829
RAD1	RAD1 checkpoint DNA exonuclease [Source:HGNC Symbol;Acc:HGNC:9806]	-1.2265265
RAD21	RAD21 cohesin complex component [Source:HGNC Symbol;Acc:HGNC:9811]	1.4785478
RAD51AP1	RAD51 associated protein 1 [Source:HGNC Symbol;Acc:HGNC:16956]	1.3344936
RAD51C	RAD51 paralog C [Source:HGNC Symbol;Acc:HGNC:9820]	1.1059057
RAD51D	RAD51 paralog D [Source:HGNC Symbol;Acc:HGNC:9823]	-1.1348433
RAD54L	RAD54-like (S. cerevisiae) [Source:HGNC Symbol;Acc:HGNC:9826]	1.1402247
RADIL	Rap associating with DIL domain [Source:HGNC Symbol;Acc:HGNC:22226]	-1.3268523
RAE1	ribonucleic acid export 1 [Source:HGNC Symbol;Acc:HGNC:9828]	-1.1300287
RAGE	MOR protein kinase	-1.2160566
RAI1	retinoic acid induced 1 [Source:HGNC Symbol;Acc:HGNC:9834]	-1.1390872
RALGPS1	Ral GEF with PH domain and SH3 binding motif 1 [Source:HGNC Symbol;Acc:HGNC:16851]	-1.1327692
RALYL	RALY RNA binding protein-like [Source:HGNC Symbol;Acc:HGNC:27036]	1.12957865
RAMP3	receptor activity modifying protein 3 [Source:HGNC Symbol;Acc:HGNC:9845]	-1.1163145
RANBP10	RAN binding protein 10 [Source:HGNC Symbol;Acc:HGNC:29285]	-1.5057667
RANBP2	RAN binding protein 2 [Source:HGNC Symbol;Acc:HGNC:9848]	1.4194016
RANBP3	RAN binding protein 3 [Source:HGNC Symbol;Acc:HGNC:9850]	1.1505704
RANBP9	RAN binding protein 9 [Source:HGNC Symbol;Acc:HGNC:13727]	-1.1893266
RAP1GAP	RAP1 GTPase activating protein [Source:HGNC Symbol;Acc:HGNC:9858]	1.1266047
RAP1GDS1	Rap1 GTPase-GDP dissociation stimulator 1 [Source:HGNC Symbol;Acc:HGNC:9859]	1.1494986
RAP2B	RAP2B, member of RAS oncogene family [Source:HGNC Symbol;Acc:HGNC:9862]	1.1527528
RAP2C	RAP2C, member of RAS oncogene family [Source:HGNC Symbol;Acc:HGNC:21165]	-1.1698175
RAPGEF1	Rap guanine nucleotide exchange factor 1 [Source:HGNC Symbol;Acc:HGNC:4568]	-1.1994383
RAPGEF3	Rap guanine nucleotide exchange factor 3 [Source:HGNC Symbol;Acc:HGNC:16629]	-1.1288518
RAPGEF5	Rap guanine nucleotide exchange factor 5 [Source:HGNC Symbol;Acc:HGNC:16862]	-1.0508581
RAPH1	is association (RalGDS/AF-6) and pleckstrin homology domain 1 [Source:HGNC Symbol;Acc:HGNC:1443]	-1.3143218
RAPSN	receptor associated protein of the synapse [Source:HGNC Symbol;Acc:HGNC:9863]	-1.1202495
RARA	retinoic acid receptor alpha [Source:HGNC Symbol;Acc:HGNC:9864]	1.4296079
RARG	retinoic acid receptor gamma [Source:HGNC Symbol;Acc:HGNC:9866]	1.3348132
RASA4	RAS p21 protein activator 4 [Source:HGNC Symbol;Acc:HGNC:23181]	-1.24145195
RASAL2	RAS protein activator like 2 [Source:HGNC Symbol;Acc:HGNC:9874]	1.0799102
RASD1	ras related dexamethasone induced 1 [Source:HGNC Symbol;Acc:HGNC:15828]	-1.3344815
RASGEF1A	RasGEF domain family member 1A [Source:HGNC Symbol;Acc:HGNC:24246]	-1.1047115
RASGEF1C	RasGEF domain family member 1C [Source:HGNC Symbol;Acc:HGNC:30295]	-1.1015
RASL10B	RAS like family 10 member B [Source:HGNC Symbol;Acc:HGNC:23804]	1.3759699
RASL11B	RAS like family 11 member B [Source:HGNC Symbol;Acc:HGNC:23804]	1.1099755
RASSF1	Ras association domain family member 1 [Source:HGNC Symbol;Acc:HGNC:9882]	-1.3333485
RASSF2	Ras association domain family member 2 [Source:HGNC Symbol;Acc:HGNC:9883]	-1.5431599
RASSF7	Ras association domain family member 7 [Source:HGNC Symbol;Acc:HGNC:1166]	1.1906923
RBBP6	RB binding protein 6, ubiquitin ligase [Source:HGNC Symbol;Acc:HGNC:9889]	-1.2015558
RBKS	ribokinase [Source:HGNC Symbol;Acc:HGNC:30325]	-1.1442403
RBM12	RNA binding motif protein 12 [Source:HGNC Symbol;Acc:HGNC:9898]	1.2351298
RBM14	RNA binding motif protein 14 [Source:HGNC Symbol;Acc:HGNC:14219]	-1.1553562
RBM14-RBM4	RBM14-RBM4 readthrough [Source:HGNC Symbol;Acc:HGNC:38840]	1.0829846
RBM22	RNA binding motif protein 22 [Source:HGNC Symbol;Acc:HGNC:25503]	-1.3336023
RBM23	RNA binding motif protein 23 [Source:HGNC Symbol;Acc:HGNC:20155]	-1.194606
RBM27	RNA binding motif protein 27 [Source:HGNC Symbol;Acc:HGNC:29243]	1.5047793
RBM33	RNA binding motif protein 33 [Source:HGNC Symbol;Acc:HGNC:27223]	-1.118730667
RBM38	RNA binding motif protein 38 [Source:HGNC Symbol;Acc:HGNC:15818]	-1.6868588
RBM41	RNA binding motif protein 41 [Source:HGNC Symbol;Acc:HGNC:25617]	1.1215496
RBM44	RNA binding motif protein 44 [Source:HGNC Symbol;Acc:HGNC:24756]	-1.1119523
RBM45	RNA binding motif protein 45 [Source:HGNC Symbol;Acc:HGNC:24468]	1.1784016
RBM48	RNA binding motif protein 48 [Source:HGNC Symbol;Acc:HGNC:28842]	1.172716
RBMY1B	RNA binding motif protein, Y-linked, family 1, member B [Source:HGNC Symbol;Acc:HGNC:23914]	1.0639497
RBP1	retinol binding protein 1 [Source:HGNC Symbol;Acc:HGNC:9919]	-1.2721735
RBP3	retinol binding protein 3 [Source:HGNC Symbol;Acc:HGNC:9921]	1.1597089
RBP4	retinol binding protein 4 [Source:HGNC Symbol;Acc:HGNC:9922]	1.1438098
RBPJ	mbination signal binding protein for immunoglobulin kappa J region [Source:HGNC Symbol;Acc:HGNC:5	1.4767572
RC3H2	ring finger and CCCH-type domains 2 [Source:HGNC Symbol;Acc:HGNC:21461]	1.631932
RCAN1	regulator of calcineurin 1 [Source:HGNC Symbol;Acc:HGNC:3040]	-1.6188667
RCAN2	regulator of calcineurin 2 [Source:HGNC Symbol;Acc:HGNC:3041]	-1.1152011
RCC2	regulator of chromosome condensation 2 [Source:HGNC Symbol;Acc:HGNC:30297]	-1.1822382
RCL1	RNA terminal phosphate cyclase like 1 [Source:HGNC Symbol;Acc:HGNC:17687]	1.421357
RCOR2	REST corepressor 2 [Source:HGNC Symbol;Acc:HGNC:27455]	1.2995554
RDX	radixin [Source:HGNC Symbol;Acc:HGNC:9944]	-1.2025448
RECQL4	RecQ like helicase 4 [Source:HGNC Symbol;Acc:HGNC:9949]	1.2493951
REEP3	receptor accessory protein 3 [Source:HGNC Symbol;Acc:HGNC:23711]	1.1288784
REG1A	regenerating family member 1 alpha [Source:HGNC Symbol;Acc:HGNC:9951]	-1.1179345
REG1B	regenerating family member 1 beta [Source:HGNC Symbol;Acc:HGNC:9952]	-1.1666206
REG3A	regenerating family member 3 alpha [Source:HGNC Symbol;Acc:HGNC:8601]	-1.1383637
REL	REL proto-oncogene, NF- κ B subunit [Source:HGNC Symbol;Acc:HGNC:9954]	-1.4343128

RELA	RELA proto-oncogene, NF- κ B subunit [Source:HGNC Symbol;Acc:HGNC:9955]	-1.4517273
RELL1	RELT like 1 [Source:HGNC Symbol;Acc:HGNC:27379]	-1.65665905
RELT	RELT tumor necrosis factor receptor [Source:HGNC Symbol;Acc:HGNC:13764]	-1.6056762
REPIN1	replication initiator 1 [Source:HGNC Symbol;Acc:HGNC:17922]	-1.146611
REPS1	RALBP1 associated Eps domain containing 1 [Source:HGNC Symbol;Acc:HGNC:15578]	1.4419588
REPS2	RALBP1 associated Eps domain containing 2 [Source:HGNC Symbol;Acc:HGNC:9963]	-1.126643
RERE	arginine-glutamic acid dipeptide repeats [Source:HGNC Symbol;Acc:HGNC:9965]	-1.2547234
RERG	RAS like estrogen regulated growth inhibitor [Source:HGNC Symbol;Acc:HGNC:15980]	-1.2908804
RETN	resistin [Source:HGNC Symbol;Acc:HGNC:20389]	1.1744215
RFC1	replication factor C subunit 1 [Source:HGNC Symbol;Acc:HGNC:9969]	1.5744472
RFC2	replication factor C subunit 2 [Source:HGNC Symbol;Acc:HGNC:9970]	-1.1823457
RFC3	replication factor C subunit 3 [Source:HGNC Symbol;Acc:HGNC:9971]	1.187361
RFC4	replication factor C subunit 4 [Source:HGNC Symbol;Acc:HGNC:9972]	1.2885237
RFFL	finger and FYVE-like domain containing E3 ubiquitin protein ligase [Source:HGNC Symbol;Acc:HGNC:24]	-1.3523805
RFK	riboflavin kinase [Source:HGNC Symbol;Acc:HGNC:30324]	1.2307153
RFLP48	ret finger protein like 4B [Source:HGNC Symbol;Acc:HGNC:33264]	1.0892528
RFT1	RFT1 homolog [Source:HGNC Symbol;Acc:HGNC:30220]	-1.0759046
RFTN1	raftlin, lipid raft linker 1 [Source:HGNC Symbol;Acc:HGNC:30278]	-1.2059972
RFX3	regulatory factor X3 [Source:HGNC Symbol;Acc:HGNC:9984]	-1.1510642
RFX5	regulatory factor X5 [Source:HGNC Symbol;Acc:HGNC:9986]	-1.5581308
RFX8	RFX family member 8, lacking RFX DNA binding domain [Source:HGNC Symbol;Acc:HGNC:37253]	-1.1445566
RG9MTD1	tRNA methyltransferase 10C, mitochondrial RNase P subunit	1.5117532
RGAG4	retrotransposon gag domain containing 4 [Source:HGNC Symbol;Acc:HGNC:29430]	-1.495805
RGMB	repulsive guidance molecule family member b [Source:HGNC Symbol;Acc:HGNC:26896]	-1.2085315
RGNEF	Rho guanine nucleotide exchange factor 28	1.2227029
RGPD1	RANBP2-like and GRIP domain containing 1 [Source:HGNC Symbol;Acc:HGNC:32414]	1.0972469
RGR	retinal G protein coupled receptor [Source:HGNC Symbol;Acc:HGNC:9990]	-1.0757536
RGS14	regulator of G-protein signaling 14 [Source:HGNC Symbol;Acc:HGNC:9996]	1.2254087
RGS16	regulator of G-protein signaling 16 [Source:HGNC Symbol;Acc:HGNC:9997]	-1.131075
RGS3	regulator of G-protein signaling 3 [Source:HGNC Symbol;Acc:HGNC:9999]	-1.8004479
RGS4	regulator of G-protein signaling 4 [Source:HGNC Symbol;Acc:HGNC:10000]	1.2698575
RGS6	regulator of G-protein signaling 6 [Source:HGNC Symbol;Acc:HGNC:10002]	1.0752645
RHBDF1	rhomboid 5 homolog 1 [Source:HGNC Symbol;Acc:HGNC:20561]	-1.3012015
RHBDF2	rhomboid 5 homolog 2 [Source:HGNC Symbol;Acc:HGNC:20788]	-2.2712052
RHBDL2	rhomboid like 2 [Source:HGNC Symbol;Acc:HGNC:16083]	-1.39831535
RHEBL1	Ras homolog enriched in brain like 1 [Source:HGNC Symbol;Acc:HGNC:21166]	-1.3419379
RHOB	ras homolog family member B [Source:HGNC Symbol;Acc:HGNC:668]	-1.52579835
RHOBTB1	Rho related BTB domain containing 1 [Source:HGNC Symbol;Acc:HGNC:18738]	1.3036652
RHOBTB2	Rho related BTB domain containing 2 [Source:HGNC Symbol;Acc:HGNC:18756]	1.724029
RHOBTB3	Rho related BTB domain containing 3 [Source:HGNC Symbol;Acc:HGNC:18757]	1.2937769
RHOF	ras homolog family member F, filopodia associated [Source:HGNC Symbol;Acc:HGNC:15703]	-1.2287095
RHOG	ras homolog family member G [Source:HGNC Symbol;Acc:HGNC:672]	-1.2134145
RHOV	ras homolog family member V [Source:HGNC Symbol;Acc:HGNC:18313]	-1.1789336
RIBC1	RIB43A domain with coiled-coils 1 [Source:HGNC Symbol;Acc:HGNC:26537]	-1.06599
RILPL2	Rab interacting lysosomal protein like 2 [Source:HGNC Symbol;Acc:HGNC:28787]	-1.1802472
RIMBP3	RIMS binding protein 3 [Source:HGNC Symbol;Acc:HGNC:29344]	1.5299807
RIMKLA	ribosomal modification protein rimK like family member A [Source:HGNC Symbol;Acc:HGNC:28725]	-1.0862191
RIMS3	regulating synaptic membrane exocytosis 3 [Source:HGNC Symbol;Acc:HGNC:21292]	-1.0589024
RIN1	Ras and Rab interactor 1 [Source:HGNC Symbol;Acc:HGNC:18749]	2.1459193
RIN2	Ras and Rab interactor 2 [Source:HGNC Symbol;Acc:HGNC:18750]	-2.1623456
RINL	Ras and Rab interactor like [Source:HGNC Symbol;Acc:HGNC:24795]	1.2944311
RIOK2	RIO kinase 2 [Source:HGNC Symbol;Acc:HGNC:18999]	1.417384
RIPK2	receptor interacting serine/threonine kinase 2 [Source:HGNC Symbol;Acc:HGNC:10020]	-4.11816
RIPK3	receptor interacting serine/threonine kinase 3 [Source:HGNC Symbol;Acc:HGNC:10021]	-1.0710562
RMI1	RecQ mediated genome instability 1 [Source:HGNC Symbol;Acc:HGNC:25764]	1.5255411
RNASE1	ribonuclease A family member 1, pancreatic [Source:HGNC Symbol;Acc:HGNC:10044]	1.1199994
RNASE7	ribonuclease A family member 7 [Source:HGNC Symbol;Acc:HGNC:19278]	-1.1191915
RNASE9	ribonuclease A family member 9 (inactive) [Source:HGNC Symbol;Acc:HGNC:20673]	1.0902382
RNASEH1	ribonuclease H1 [Source:HGNC Symbol;Acc:HGNC:18466]	-1.0920646
RND1	Rho family GTPase 1 [Source:HGNC Symbol;Acc:HGNC:18314]	-2.500136
RND3	Rho family GTPase 3 [Source:HGNC Symbol;Acc:HGNC:671]	2.1681395
RNF112	ring finger protein 112 [Source:HGNC Symbol;Acc:HGNC:12968]	1.1857562
RNF113A	ring finger protein 113A [Source:HGNC Symbol;Acc:HGNC:12974]	1.1455426
RNF113B	ring finger protein 113B [Source:HGNC Symbol;Acc:HGNC:17267]	1.1847668
RNF121	ring finger protein 121 [Source:HGNC Symbol;Acc:HGNC:21070]	-1.22433
RNF122	ring finger protein 122 [Source:HGNC Symbol;Acc:HGNC:21147]	-1.3467888
RNF126	ring finger protein 126 [Source:HGNC Symbol;Acc:HGNC:21151]	1.1591399
RNF13	ring finger protein 13 [Source:HGNC Symbol;Acc:HGNC:10057]	1.3462169
RNF130	ring finger protein 130 [Source:HGNC Symbol;Acc:HGNC:18280]	-1.1361308
RNF138	ring finger protein 138 [Source:HGNC Symbol;Acc:HGNC:17765]	1.2717316
RNF144B	ring finger protein 144B [Source:HGNC Symbol;Acc:HGNC:21578]	1.2810583
RNF145	ring finger protein 145 [Source:HGNC Symbol;Acc:HGNC:20853]	-1.0762523
RNF150	ring finger protein 150 [Source:HGNC Symbol;Acc:HGNC:23138]	1.0907253
RNF152	ring finger protein 152 [Source:HGNC Symbol;Acc:HGNC:26811]	1.7127714
RNF166	ring finger protein 166 [Source:HGNC Symbol;Acc:HGNC:28856]	1.2659713
RNF167	ring finger protein 167 [Source:HGNC Symbol;Acc:HGNC:24544]	1.25197575
RNF168	ring finger protein 168 [Source:HGNC Symbol;Acc:HGNC:26661]	1.0536687
RNF169	ring finger protein 169 [Source:HGNC Symbol;Acc:HGNC:26961]	1.1386145
RNF17	ring finger protein 17 [Source:HGNC Symbol;Acc:HGNC:10060]	1.1399482
RNF19B	ring finger protein 19B [Source:HGNC Symbol;Acc:HGNC:26886]	-1.4921013
RNF2	ring finger protein 2 [Source:HGNC Symbol;Acc:HGNC:10061]	1.2109352
RNF207	ring finger protein 207 [Source:HGNC Symbol;Acc:HGNC:32947]	-1.679059437
RNF212	ring finger protein 212 [Source:HGNC Symbol;Acc:HGNC:27729]	-1.1356851
RNF214	ring finger protein 214 [Source:HGNC Symbol;Acc:HGNC:25335]	-1.1261632
RNF216L	ring finger protein 216 pseudogene 1	-1.1690171
RNF219	ring finger protein 219 [Source:HGNC Symbol;Acc:HGNC:20308]	1.8364041

RNF220	ring finger protein 220 [Source:HGNC Symbol;Acc:HGNC:25552]	-1.1685171
RNF24	ring finger protein 24 [Source:HGNC Symbol;Acc:HGNC:13779]	-1.5495422
RNF40	ring finger protein 40 [Source:HGNC Symbol;Acc:HGNC:16867]	1.2349421
RNF44	ring finger protein 44 [Source:HGNC Symbol;Acc:HGNC:19180]	1.1546203
RNGTT	RNA guanylyltransferase and 5'-phosphatase [Source:HGNC Symbol;Acc:HGNC:10073]	1.2414063
RNH1	ribonuclease/angiogenin inhibitor 1 [Source:HGNC Symbol;Acc:HGNC:10074]	-1.1248939
RNPC3	RNA binding region (RNP1, RRM) containing 3 [Source:HGNC Symbol;Acc:HGNC:18666]	1.1122326
RNPEP	arginyl aminopeptidase [Source:HGNC Symbol;Acc:HGNC:10078]	1.0825993
ROBO2	roundabout guidance receptor 2 [Source:HGNC Symbol;Acc:HGNC:10250]	-1.0873826
ROR2	receptor tyrosine kinase like orphan receptor 2 [Source:HGNC Symbol;Acc:HGNC:10257]	-1.0713011
RP11	retinitis pigmentosa 1-like 1 [Source:HGNC Symbol;Acc:HGNC:15946]	-1.1441281
RPAIN	RPA interacting protein [Source:HGNC Symbol;Acc:HGNC:28641]	1.0552642
RPF1	ribosome production factor 1 homolog [Source:HGNC Symbol;Acc:HGNC:30350]	1.1810331
RPF2	ribosome production factor 2 homolog [Source:HGNC Symbol;Acc:HGNC:20870]	1.2993562
RPIA	ribose 5-phosphate isomerase A [Source:HGNC Symbol;Acc:HGNC:10297]	1.2135935
RPL23	ribosomal protein L23a pseudogene 7 [Source:HGNC Symbol;Acc:HGNC:17336]	-1.1754092
RPL23AP7	ribosomal protein L23a pseudogene 7 [Source:HGNC Symbol;Acc:HGNC:10331]	1.07397595
RPL29	ribosomal protein L29 pseudogene 2 [Source:HGNC Symbol;Acc:HGNC:17334]	1.1060773
RPL29P2	ribosomal protein L29 pseudogene 3 [Source:HGNC Symbol;Acc:HGNC:27024]	-1.1229272
RPL32P3	ribosomal protein L32 pseudogene 3 [Source:HGNC Symbol;Acc:HGNC:27024]	1.1404786
RPL7AP37	ribosomal protein L7a pseudogene 37	-1.1435267
RP30	ribonuclease P/MRP subunit p30 [Source:HGNC Symbol;Acc:HGNC:17688]	-1.1579903
RP38	ribonuclease P/MRP subunit p38 [Source:HGNC Symbol;Acc:HGNC:30329]	1.3453406
RPRD1A	regulation of nuclear pre-mRNA domain containing 1A [Source:HGNC Symbol;Acc:HGNC:25560]	1.28579215
RPRD2	regulation of nuclear pre-mRNA domain containing 2 [Source:HGNC Symbol;Acc:HGNC:29039]	1.06371795
RPRML	reproto like [Source:HGNC Symbol;Acc:HGNC:32422]	-1.1270045
RPS14	ribosomal protein S14 [Source:HGNC Symbol;Acc:HGNC:10387]	1.1649574
RPS2	ribosomal protein S2 [Source:HGNC Symbol;Acc:HGNC:10404]	1.410639667
RPS6KA2	ribosomal protein S6 kinase A2 [Source:HGNC Symbol;Acc:HGNC:10431]	-1.0556641
RPS6KA3	ribosomal protein S6 kinase A3 [Source:HGNC Symbol;Acc:HGNC:10432]	1.4956322
RPS6KA5	ribosomal protein S6 kinase A5 [Source:HGNC Symbol;Acc:HGNC:10434]	-1.3123137
RPS6KL1	ribosomal protein S6 kinase like 1 [Source:HGNC Symbol;Acc:HGNC:20222]	-1.1133547
RPSAP52	ribosomal protein SA pseudogene 52 [Source:HGNC Symbol;Acc:HGNC:35752]	-1.1648445
RPUSD4	RNA pseudouridylylate synthase domain containing 4 [Source:HGNC Symbol;Acc:HGNC:25898]	-1.2591312
RQCD1	CCR4-NOT transcription complex subunit 9	-2.3344486
RRAD	AD, Ras related glycolysis inhibitor and calcium channel regulator [Source:HGNC Symbol;Acc:HGNC:104	-1.3039336
RRAGA	Ras related GTP binding A [Source:HGNC Symbol;Acc:HGNC:16963]	1.1105382
RRAGB	Ras related GTP binding B [Source:HGNC Symbol;Acc:HGNC:19901]	1.2920831
RRAS2	related RAS viral (r-ras) oncogene homolog 2 [Source:HGNC Symbol;Acc:HGNC:17271]	-1.3017266
RRBP1	ribosome binding protein 1 [Source:HGNC Symbol;Acc:HGNC:10448]	1.2725685
RRM1	ribonucleotide reductase catalytic subunit M1 [Source:HGNC Symbol;Acc:HGNC:10451]	1.1194341
RRN3	RRN3 homolog, RNA polymerase I transcription factor [Source:HGNC Symbol;Acc:HGNC:30346]	1.1276213
RRP8	bosomal RNA processing 8, methyltransferase, homolog (yeast) [Source:HGNC Symbol;Acc:HGNC:2903	1.281741
RRS1	ribosome biogenesis regulator homolog [Source:HGNC Symbol;Acc:HGNC:17083]	1.3272914
RSAD1	radical S-adenosyl methionine domain containing 1 [Source:HGNC Symbol;Acc:HGNC:25634]	1.3462671
RSBN1L	round spermatid basic protein 1 like [Source:HGNC Symbol;Acc:HGNC:24765]	-1.0606655
RSPH1	radial spoke head 1 homolog [Source:HGNC Symbol;Acc:HGNC:12371]	1.1570005
RSPH4A	radial spoke head 4 homolog A [Source:HGNC Symbol;Acc:HGNC:21558]	-1.2142001
RSPQ3	R-spondin 3 [Source:HGNC Symbol;Acc:HGNC:20866]	-1.1535487
RTBDN	retbindin [Source:HGNC Symbol;Acc:HGNC:30310]	-1.1295856
RTDR1	radial spoke head 14 homolog	1.174732
RTKN	rhotekin [Source:HGNC Symbol;Acc:HGNC:10466]	-1.0647374
RTKN2	rhotekin 2 [Source:HGNC Symbol;Acc:HGNC:19364]	-1.2339903
RTN3	reticulon 3 [Source:HGNC Symbol;Acc:HGNC:10469]	1.1477271
RTN4IP1	reticulon 4 interacting protein 1 [Source:HGNC Symbol;Acc:HGNC:18647]	-1.1881436
RTN4RL2	reticulon 4 receptor-like 2 [Source:HGNC Symbol;Acc:HGNC:23053]	-1.7279081
RTP4	receptor transporter protein 4 [Source:HGNC Symbol;Acc:HGNC:23992]	-1.1594365
RUFY4	RUN and FYVE domain containing 4 [Source:HGNC Symbol;Acc:HGNC:24804]	1.1152334
RUND3B	RUN domain containing 3B [Source:HGNC Symbol;Acc:HGNC:30286]	-1.22274345
RUNX1	runt related transcription factor 1 [Source:HGNC Symbol;Acc:HGNC:10471]	2.3893292
RUNX1T1	RUNX1 translocation partner 1 [Source:HGNC Symbol;Acc:HGNC:1535]	-1.1188267
RUVBL2	RuvB like AAA ATPase 2 [Source:HGNC Symbol;Acc:HGNC:10475]	1.2436431
RWDD1	RWD domain containing 1 [Source:HGNC Symbol;Acc:HGNC:20993]	-1.1700553
RWDD2A	RWD domain containing 2A [Source:HGNC Symbol;Acc:HGNC:21385]	1.088242
RXRA	retinoid X receptor alpha [Source:HGNC Symbol;Acc:HGNC:10477]	1.1835409
RXRB	retinoid X receptor beta [Source:HGNC Symbol;Acc:HGNC:10478]	-1.1246238
RYR3	ryanodine receptor 3 [Source:HGNC Symbol;Acc:HGNC:10485]	-1.0570798
S100A12	S100 calcium binding protein A12 [Source:HGNC Symbol;Acc:HGNC:10489]	-5.924905
S100A3	S100 calcium binding protein A3 [Source:HGNC Symbol;Acc:HGNC:10493]	1.099018
S100G	S100 calcium binding protein G [Source:HGNC Symbol;Acc:HGNC:1436]	-1.1783785
S100P	S100 calcium binding protein P [Source:HGNC Symbol;Acc:HGNC:10504]	-1.8234551
S1PR1	sphingosine-1-phosphate receptor 1 [Source:HGNC Symbol;Acc:HGNC:3165]	-1.8879114
S1PR2	sphingosine-1-phosphate receptor 2 [Source:HGNC Symbol;Acc:HGNC:3169]	-1.0723135
SAA1	serum amyloid A1 [Source:HGNC Symbol;Acc:HGNC:10513]	1.1758848
SAMD12	sterile alpha motif domain containing 12 [Source:HGNC Symbol;Acc:HGNC:31750]	-1.8836696
SAMD14	sterile alpha motif domain containing 14 [Source:HGNC Symbol;Acc:HGNC:27312]	-2.029286833
SAMD4A	sterile alpha motif domain containing 4A [Source:HGNC Symbol;Acc:HGNC:23023]	1.3907033
SAMD4B	sterile alpha motif domain containing 4B [Source:HGNC Symbol;Acc:HGNC:25492]	-1.2904165
SAMD8	sterile alpha motif domain containing 8 [Source:HGNC Symbol;Acc:HGNC:26320]	1.1131039
SAMD9	sterile alpha motif domain containing 9 [Source:HGNC Symbol;Acc:HGNC:1348]	1.09371
SAMM50	SAMM50 sorting and assembly machinery component [Source:HGNC Symbol;Acc:HGNC:24276]	-1.153906
SAP30BP	SAP30 binding protein [Source:HGNC Symbol;Acc:HGNC:30785]	-1.194814
SARDH	sarcosine dehydrogenase [Source:HGNC Symbol;Acc:HGNC:10536]	1.0871358
SARS	seryl-tRNA synthetase [Source:HGNC Symbol;Acc:HGNC:10537]	1.6712207
SASH1	SAM and SH3 domain containing 1 [Source:HGNC Symbol;Acc:HGNC:19182]	1.3084991
SASS6	SAS-6 centriolar assembly protein [Source:HGNC Symbol;Acc:HGNC:25403]	

SAT1	spermidine/spermine N1-acetyltransferase 1 [Source:HGNC Symbol;Acc:HGNC:10540]	-1.714093733
SAT2	spermidine/spermine N1-acetyltransferase family member 2 [Source:HGNC Symbol;Acc:HGNC:23160]	1.2109832
SATB1	SATB homeobox 1 [Source:HGNC Symbol;Acc:HGNC:10541]	1.096392
SAV1	salvador family WW domain containing protein 1 [Source:HGNC Symbol;Acc:HGNC:17795]	-2.4822557
SBK1	SH3 domain binding kinase 1 [Source:HGNC Symbol;Acc:HGNC:17699]	1.0506829
SBN02	strawberry notch homolog 2 [Source:HGNC Symbol;Acc:HGNC:29158]	-1.8019269
SBSN	suprabasin [Source:HGNC Symbol;Acc:HGNC:24950]	1.0709168
SCAF1	SR-related CTD associated factor 1 [Source:HGNC Symbol;Acc:HGNC:30403]	1.3098054
SCAMP2	secretory carrier membrane protein 2 [Source:HGNC Symbol;Acc:HGNC:10564]	-1.1602647
SCAMP3	secretory carrier membrane protein 3 [Source:HGNC Symbol;Acc:HGNC:10565]	-1.1221188
SCAND2	SCAN domain containing 2 pseudogene	-1.1989627
SCARA3	scavenger receptor class A member 3 [Source:HGNC Symbol;Acc:HGNC:19000]	-1.0940439
SCARB1	scavenger receptor class B member 1 [Source:HGNC Symbol;Acc:HGNC:1664]	1.2331651
SCARB2	scavenger receptor class B member 2 [Source:HGNC Symbol;Acc:HGNC:1665]	1.3289002
SCARF1	scavenger receptor class F member 1 [Source:HGNC Symbol;Acc:HGNC:16820]	-1.4201542
SCARNA9L	small Cajal body-specific RNA 9-like	-1.1707532
SCD5	stearyl-CoA desaturase 5 [Source:HGNC Symbol;Acc:HGNC:21088]	-1.1308806
SCG2	secretogranin II [Source:HGNC Symbol;Acc:HGNC:10575]	1.0515409
SCGB2A2	secretoglobin family 2A member 2 [Source:HGNC Symbol;Acc:HGNC:7050]	1.1288807
SCLY	selenocysteine lyase [Source:HGNC Symbol;Acc:HGNC:18161]	1.1541694
SCML1	sex comb on midleg-like 1 (<i>Drosophila</i>) [Source:HGNC Symbol;Acc:HGNC:10580]	1.1293019
SCML4	sex comb on midleg-like 4 (<i>Drosophila</i>) [Source:HGNC Symbol;Acc:HGNC:21397]	1.0655712
SCN1B	sodium voltage-gated channel beta subunit 1 [Source:HGNC Symbol;Acc:HGNC:10586]	1.4391778
SCN2B	sodium voltage-gated channel beta subunit 2 [Source:HGNC Symbol;Acc:HGNC:10589]	-1.4855578
SCN4A	sodium voltage-gated channel alpha subunit 4 [Source:HGNC Symbol;Acc:HGNC:10591]	-1.1423026
SCN4B	sodium voltage-gated channel beta subunit 4 [Source:HGNC Symbol;Acc:HGNC:10592]	1.0738896
SCN5A	sodium voltage-gated channel alpha subunit 5 [Source:HGNC Symbol;Acc:HGNC:10593]	1.2273055
SCN8A	sodium voltage-gated channel alpha subunit 8 [Source:HGNC Symbol;Acc:HGNC:10596]	-1.156236
SCNN1B	sodium channel epithelial 1 beta subunit [Source:HGNC Symbol;Acc:HGNC:10600]	1.1492671
SCO1	SCO1 cytochrome c oxidase assembly protein [Source:HGNC Symbol;Acc:HGNC:10603]	1.1552103
SCRN3	secernin 3 [Source:HGNC Symbol;Acc:HGNC:30382]	1.086931
SCR1	scratch family transcriptional repressor 1 [Source:HGNC Symbol;Acc:HGNC:15950]	1.0859209
SCYL1	SCY1 like pseudokinase 1 [Source:HGNC Symbol;Acc:HGNC:14372]	-1.1542336
SCYL2	SCY1 like pseudokinase 2 [Source:HGNC Symbol;Acc:HGNC:19286]	1.1025493
SDC1	syndecan 1 [Source:HGNC Symbol;Acc:HGNC:10658]	1.2037464
SDC4	syndecan 4 [Source:HGNC Symbol;Acc:HGNC:10661]	-3.5583906
SDCCAG8	serologically defined colon cancer antigen 8 [Source:HGNC Symbol;Acc:HGNC:10671]	1.18331875
SDHA	succinate dehydrogenase complex flavoprotein subunit A [Source:HGNC Symbol;Acc:HGNC:10680]	-1.0608532
SDHAF2	succinate dehydrogenase complex assembly factor 2 [Source:HGNC Symbol;Acc:HGNC:26034]	-1.0815994
SDHAF3	succinate dehydrogenase complex assembly factor 3	1.2237418
SDHD	succinate dehydrogenase complex subunit D [Source:HGNC Symbol;Acc:HGNC:10683]	1.1616831
SDK2	sidekick cell adhesion molecule 2 [Source:HGNC Symbol;Acc:HGNC:19308]	1.087193
SEBOX	SEBOX homeobox [Source:HGNC Symbol;Acc:HGNC:32942]	-1.1378819
SEC11C	SEC11 homolog C, signal peptidase complex subunit [Source:HGNC Symbol;Acc:HGNC:23400]	-1.1608229
SEC14L2	SEC14 like lipid binding 2 [Source:HGNC Symbol;Acc:HGNC:10699]	-1.3377573
SEC16B	SEC16 homolog B, endoplasmic reticulum export factor [Source:HGNC Symbol;Acc:HGNC:30301]	1.0731544
SEC22C	SEC22 homolog C, vesicle trafficking protein [Source:HGNC Symbol;Acc:HGNC:16828]	-1.1578892
SEC23B	Sec23 homolog B, coat complex II component [Source:HGNC Symbol;Acc:HGNC:10702]	-1.32401675
SEC24A	SEC24 homolog A, COPII coat complex component [Source:HGNC Symbol;Acc:HGNC:10703]	-1.4126457
SEC31B	SEC31 homolog B, COPII coat complex component [Source:HGNC Symbol;Acc:HGNC:23197]	-1.1160028
SEC62	SEC62 homolog, preprotein translocation factor [Source:HGNC Symbol;Acc:HGNC:11846]	1.2161474
SECISBP2L	SECIS binding protein 2 like [Source:HGNC Symbol;Acc:HGNC:28997]	1.0905099
SEL1L	SEL1L ERAD E3 ligase adaptor subunit [Source:HGNC Symbol;Acc:HGNC:10717]	1.18132965
SELE	selectin E [Source:HGNC Symbol;Acc:HGNC:10718]	-50.88709
SELENBP1	selenium binding protein 1 [Source:HGNC Symbol;Acc:HGNC:10719]	-1.1793039
SELM	selenoprotein M	-1.6307195
SELT	selenoprotein T	1.3112134
SEMA3F	semaphorin 3F [Source:HGNC Symbol;Acc:HGNC:10728]	1.4922091
SEMA3G	semaphorin 3G [Source:HGNC Symbol;Acc:HGNC:30400]	1.2153898
SEMA4A	semaphorin 4A [Source:HGNC Symbol;Acc:HGNC:10729]	-1.2179706
SEMA4B	semaphorin 4B [Source:HGNC Symbol;Acc:HGNC:10730]	-1.3499597
SEMA4C	semaphorin 4C [Source:HGNC Symbol;Acc:HGNC:10731]	-1.5851582
SEMA4D	semaphorin 4D [Source:HGNC Symbol;Acc:HGNC:10732]	1.1410433
SEMA6B	semaphorin 6B [Source:HGNC Symbol;Acc:HGNC:10739]	1.327658
SEMA6C	semaphorin 6C [Source:HGNC Symbol;Acc:HGNC:10740]	1.3072208
SEMA6D	semaphorin 6D [Source:HGNC Symbol;Acc:HGNC:16770]	1.1215733
SENP1	SUMO1/sentrin specific peptidase 1 [Source:HGNC Symbol;Acc:HGNC:17927]	1.2220706
SEPHS2	selenophosphate synthetase 2 [Source:HGNC Symbol;Acc:HGNC:19686]	1.2815186
SEPN1	selenoprotein N, 1 [Source:HGNC Symbol;Acc:HGNC:15999]	1.1940587
SEPP1	selenoprotein P, plasma, 1 [Source:HGNC Symbol;Acc:HGNC:10751]	-1.1888655
SEPSECS	ep (O-phosphoserine) tRNA:Sec (selenocysteine) tRNA synthase [Source:HGNC Symbol;Acc:HGNC:3060]	-1.0557537
SEPW1	selenoprotein W, 1 [Source:HGNC Symbol;Acc:HGNC:10752]	1.2385434
SERF1A	small EDRK-rich factor 1A [Source:HGNC Symbol;Acc:HGNC:10755]	-1.353089
SERINC5	serine incorporator 5 [Source:HGNC Symbol;Acc:HGNC:18825]	-1.1235372
SERPINA1	serpin family A member 1 [Source:HGNC Symbol;Acc:HGNC:8941]	-1.222883
SERPINA3	serpin family A member 3 [Source:HGNC Symbol;Acc:HGNC:16]	-1.1721622
SERPINB13	serpin family B member 13 [Source:HGNC Symbol;Acc:HGNC:8944]	-1.2347697
SERPINB2	serpin family B member 2 [Source:HGNC Symbol;Acc:HGNC:8584]	-1.6792448
SERPINB8	serpin family B member 8 [Source:HGNC Symbol;Acc:HGNC:8952]	-1.6072087
SERPIND1	serpin family D member 1 [Source:HGNC Symbol;Acc:HGNC:4838]	-1.6149043
SERPINE1	serpin family E member 1 [Source:HGNC Symbol;Acc:HGNC:8583]	-1.8878003
SERPINH1	serpin family H member 1 [Source:HGNC Symbol;Acc:HGNC:1546]	1.0907226
SERTAD3	SERTA domain containing 3 [Source:HGNC Symbol;Acc:HGNC:17931]	1.233979
SERTAD4	SERTA domain containing 4 [Source:HGNC Symbol;Acc:HGNC:25236]	1.382674
SESN2	sestrin 2 [Source:HGNC Symbol;Acc:HGNC:20746]	-1.1368705
SETD5	SET domain containing 5 [Source:HGNC Symbol;Acc:HGNC:25566]	-1.0661584

SETD7	SET domain containing lysine methyltransferase 7 [Source:HGNC Symbol;Acc:HGNC:30412]	1.2369637
SETDB2	SET domain bifurcated 2 [Source:HGNC Symbol;Acc:HGNC:20263]	1.644999
SF1	splicing factor 1 [Source:HGNC Symbol;Acc:HGNC:12950]	1.087913
SF3A1	splicing factor 3a subunit 1 [Source:HGNC Symbol;Acc:HGNC:10765]	-1.2357739
SF3B4	splicing factor 3b subunit 4 [Source:HGNC Symbol;Acc:HGNC:10771]	1.6588527
SF1	SF1 centrin binding protein [Source:HGNC Symbol;Acc:HGNC:29064]	1.1352545
SGK1	serum/glucocorticoid regulated kinase 1 [Source:HGNC Symbol;Acc:HGNC:10810]	-1.4778552
SGK223	PEAK1 related kinase activating pseudokinase 1	1.915186
SGPL1	sphingosine-1-phosphate lyase 1 [Source:HGNC Symbol;Acc:HGNC:10817]	-1.8910965
SH2B2	SH2B adaptor protein 2 [Source:HGNC Symbol;Acc:HGNC:17381]	1.3455522
SH2D7	SH2 domain containing 7 [Source:HGNC Symbol;Acc:HGNC:34549]	1.1383865
SH3D21	SH3 domain containing 21 [Source:HGNC Symbol;Acc:HGNC:26236]	-1.1510593
SH3GL1	SH3 domain containing GRB2 like 1, endophilin A2 [Source:HGNC Symbol;Acc:HGNC:10830]	1.2145821
SH3GL1P2	H3 domain containing GRB2 like 1, endophilin A2 pseudogene 2 [Source:HGNC Symbol;Acc:HGNC:10831]	1.34683085
SH3GL1P3	H3 domain containing GRB2 like 1, endophilin A2 pseudogene 3 [Source:HGNC Symbol;Acc:HGNC:10832]	1.4997866
SH3PX2D8	SH3 and PX domains 2B [Source:HGNC Symbol;Acc:HGNC:29242]	1.2531106
SH3RF3	SH3 domain containing ring finger 3 [Source:HGNC Symbol;Acc:HGNC:24699]	-1.42392935
SH3TC1	SH3 domain and tetra peptide repeats 1 [Source:HGNC Symbol;Acc:HGNC:26009]	-1.651052033
SH3TC2	SH3 domain and tetra peptide repeats 2 [Source:HGNC Symbol;Acc:HGNC:29427]	1.223008
SHANK3	SH3 and multiple ankyrin repeat domains 3 [Source:HGNC Symbol;Acc:HGNC:14294]	1.4359393
SHARPIN	SHANK associated RH domain interactor [Source:HGNC Symbol;Acc:HGNC:25321]	1.2940657
SHB	SH2 domain containing adaptor protein B [Source:HGNC Symbol;Acc:HGNC:10838]	-2.0696073
SHBG	sex hormone binding globulin [Source:HGNC Symbol;Acc:HGNC:10839]	-1.0776646
SHC3	SHC adaptor protein 3 [Source:HGNC Symbol;Acc:HGNC:18181]	1.1981919
SHE	Src homology 2 domain containing E [Source:HGNC Symbol;Acc:HGNC:27004]	1.6982174
SHISA2	shisa family member 2 [Source:HGNC Symbol;Acc:HGNC:20366]	1.3395536
SHISA3	shisa family member 3 [Source:HGNC Symbol;Acc:HGNC:25159]	1.4962261
SHKBP1	SH3KBP1 binding protein 1 [Source:HGNC Symbol;Acc:HGNC:19214]	1.2659011
SHMT1	serine hydroxymethyltransferase 1 [Source:HGNC Symbol;Acc:HGNC:10850]	-1.0853193
SHPRH	SNF2 histone linker PHD RING helicase [Source:HGNC Symbol;Acc:HGNC:19336]	1.5827359
SHQ1	SHQ1, H/ACA ribonucleoprotein assembly factor [Source:HGNC Symbol;Acc:HGNC:25543]	-1.1409504
SHROOM2	shroom family member 2 [Source:HGNC Symbol;Acc:HGNC:630]	-1.5547401
SHROOM3	shroom family member 3 [Source:HGNC Symbol;Acc:HGNC:30422]	1.1722264
SIAH1	siah E3 ubiquitin protein ligase 1 [Source:HGNC Symbol;Acc:HGNC:10857]	-1.2271664
SIAH2	siah E3 ubiquitin protein ligase 2 [Source:HGNC Symbol;Acc:HGNC:10858]	-1.0817205
SIGLEC1	sialic acid binding Ig like lectin 1 [Source:HGNC Symbol;Acc:HGNC:11127]	1.088942
SIGLEC16	sialic acid binding Ig like lectin 16 (gene/pseudogene) [Source:HGNC Symbol;Acc:HGNC:24851]	-1.2795612
SIGLEC5	sialic acid binding Ig like lectin 5 [Source:HGNC Symbol;Acc:HGNC:10874]	-1.0702451
SIGMAR1	sigma non-opioid intracellular receptor 1 [Source:HGNC Symbol;Acc:HGNC:8157]	1.1126697
SIK1	salt inducible kinase 1 [Source:HGNC Symbol;Acc:HGNC:11142]	-1.4303672
SIK2	salt inducible kinase 2 [Source:HGNC Symbol;Acc:HGNC:21680]	-1.5103676
SIM1	single-minded family bHLH transcription factor 1 [Source:HGNC Symbol;Acc:HGNC:10882]	-1.1851674
SIN3A	SIN3 transcription regulator family member A [Source:HGNC Symbol;Acc:HGNC:19353]	-1.3092691
SIP1	SR-related CTD associated factor 11	1.1136341
SIRPA	signal regulatory protein alpha [Source:HGNC Symbol;Acc:HGNC:9662]	1.1174405
SIRPB1	signal regulatory protein beta 1 [Source:HGNC Symbol;Acc:HGNC:15928]	-1.1935005
SIRT2	sirtuin 2 [Source:HGNC Symbol;Acc:HGNC:10886]	1.4460858
SIX5	SIX homeobox 5 [Source:HGNC Symbol;Acc:HGNC:10891]	-1.3978463
SKA1	spindle and kinetochore associated complex subunit 1 [Source:HGNC Symbol;Acc:HGNC:28109]	-1.3619052
SKA3	spindle and kinetochore associated complex subunit 3 [Source:HGNC Symbol;Acc:HGNC:20262]	1.2582046
SKIV2L2	SkI2 like RNA helicase 2 [Source:HGNC Symbol;Acc:HGNC:18734]	1.5425587
SKP1	S-phase kinase-associated protein 1 [Source:HGNC Symbol;Acc:HGNC:10899]	1.2975101
SLAMP1	signaling lymphocytic activation molecule family member 1 [Source:HGNC Symbol;Acc:HGNC:10903]	-1.4317615
SLAMF8	SLAM family member 8 [Source:HGNC Symbol;Acc:HGNC:21391]	-1.1951581
SLC10A4	solute carrier family 10 member 4 [Source:HGNC Symbol;Acc:HGNC:22980]	1.0998561
SLC11A2	solute carrier family 11 member 2 [Source:HGNC Symbol;Acc:HGNC:10908]	-1.2158426
SLC12A7	solute carrier family 12 member 7 [Source:HGNC Symbol;Acc:HGNC:10915]	-3.9705856
SLC12A9	solute carrier family 12 member 9 [Source:HGNC Symbol;Acc:HGNC:17435]	1.3560034
SLC13A2	solute carrier family 13 member 2 [Source:HGNC Symbol;Acc:HGNC:10917]	-1.1065593
SLC14A1	solute carrier family 14 member 1 (Kidd blood group) [Source:HGNC Symbol;Acc:HGNC:10918]	1.128409
SLC14A2	solute carrier family 14 member 2 [Source:HGNC Symbol;Acc:HGNC:10919]	-1.2378604
SLC15A3	solute carrier family 15 member 3 [Source:HGNC Symbol;Acc:HGNC:18068]	-2.4775558
SLC15A4	solute carrier family 15 member 4 [Source:HGNC Symbol;Acc:HGNC:23090]	-1.6239801
SLC16A4	solute carrier family 16 member 4 [Source:HGNC Symbol;Acc:HGNC:10925]	-1.117493
SLC16A9	solute carrier family 16 member 9 [Source:HGNC Symbol;Acc:HGNC:23520]	-1.2664418
SLC17A2	solute carrier family 17 member 2 [Source:HGNC Symbol;Acc:HGNC:10930]	1.0911045
SLC17A3	solute carrier family 17 member 3 [Source:HGNC Symbol;Acc:HGNC:10931]	-1.087898
SLC17A5	solute carrier family 17 member 5 [Source:HGNC Symbol;Acc:HGNC:10933]	-1.3112874
SLC18A3	solute carrier family 18 member A3 [Source:HGNC Symbol;Acc:HGNC:10936]	-1.2391266
SLC1A1	solute carrier family 1 member 1 [Source:HGNC Symbol;Acc:HGNC:10939]	1.4851477
SLC1A2	solute carrier family 1 member 2 [Source:HGNC Symbol;Acc:HGNC:10940]	1.1591159
SLC1A3	solute carrier family 1 member 3 [Source:HGNC Symbol;Acc:HGNC:10941]	-1.1486062
SLC20A1	solute carrier family 20 member 1 [Source:HGNC Symbol;Acc:HGNC:10946]	1.8247638
SLC20A2	solute carrier family 20 member 2 [Source:HGNC Symbol;Acc:HGNC:10947]	1.1605104
SLC22A18AS	solute carrier family 22 member 18 antisense [Source:HGNC Symbol;Acc:HGNC:10965]	1.1776129
SLC22A2	solute carrier family 22 member 2 [Source:HGNC Symbol;Acc:HGNC:10966]	1.1039569
SLC22A20	solute carrier family 22 member 20 [Source:HGNC Symbol;Acc:HGNC:29867]	-1.19168975
SLC22A23	solute carrier family 22 member 23 [Source:HGNC Symbol;Acc:HGNC:21106]	-1.3922028
SLC22A31	solute carrier family 22 member 31 [Source:HGNC Symbol;Acc:HGNC:27091]	-1.1529076
SLC22A4	solute carrier family 22 member 4 [Source:HGNC Symbol;Acc:HGNC:10968]	-1.0861019
SLC23A3	solute carrier family 23 member 3 [Source:HGNC Symbol;Acc:HGNC:20601]	1.13349775
SLC24A1	solute carrier family 24 member 1 [Source:HGNC Symbol;Acc:HGNC:10975]	-1.0706054
SLC24A4	solute carrier family 24 member 4 [Source:HGNC Symbol;Acc:HGNC:10978]	-1.1145053
SLC24A6	solute carrier family 24 member 8 member B1	-1.2741559
SLC25A19	solute carrier family 25 member 19 [Source:HGNC Symbol;Acc:HGNC:14409]	-1.1865109
SLC25A23	solute carrier family 25 member 23 [Source:HGNC Symbol;Acc:HGNC:19375]	1.1812223

SLC25A26	solute carrier family 25 member 26 [Source:HGNC Symbol;Acc:HGNC:20661]	-1.0882463
SLC25A28	solute carrier family 25 member 28 [Source:HGNC Symbol;Acc:HGNC:23472]	-1.3696846
SLC25A30	solute carrier family 25 member 30 [Source:HGNC Symbol;Acc:HGNC:27371]	1.6308022
SLC25A32	solute carrier family 25 member 32 [Source:HGNC Symbol;Acc:HGNC:29683]	-1.3701208
SLC25A34	solute carrier family 25 member 34 [Source:HGNC Symbol;Acc:HGNC:27653]	-1.3937715
SLC25A37	solute carrier family 25 member 37 [Source:HGNC Symbol;Acc:HGNC:29786]	-1.370395
SLC25A43	solute carrier family 25 member 43 [Source:HGNC Symbol;Acc:HGNC:30557]	-1.2309555
SLC25A47	solute carrier family 25 member 47 [Source:HGNC Symbol;Acc:HGNC:20115]	-1.1311978
SLC26A11	solute carrier family 26 member 11 [Source:HGNC Symbol;Acc:HGNC:14471]	-1.3529459
SLC26A2	solute carrier family 26 member 2 [Source:HGNC Symbol;Acc:HGNC:10994]	1.273453
SLC26A5	solute carrier family 26 member 5 [Source:HGNC Symbol;Acc:HGNC:9359]	1.0908985
SLC26A7	solute carrier family 26 member 7 [Source:HGNC Symbol;Acc:HGNC:14467]	1.1172166
SLC26A9	solute carrier family 26 member 9 [Source:HGNC Symbol;Acc:HGNC:14469]	-1.2052923
SLC28A1	solute carrier family 28 member 1 [Source:HGNC Symbol;Acc:HGNC:11001]	1.0532773
SLC29A1	solute carrier family 29 member 1 (Augustine blood group) [Source:HGNC Symbol;Acc:HGNC:11003]	1.1237997
SLC29A2	solute carrier family 29 member 2 [Source:HGNC Symbol;Acc:HGNC:11004]	1.0677754
SLC29A4	solute carrier family 29 member 4 [Source:HGNC Symbol;Acc:HGNC:23097]	1.1062043
SLC2A13	solute carrier family 2 member 13 [Source:HGNC Symbol;Acc:HGNC:15956]	1.0709485
SLC2A5	solute carrier family 2 member 5 [Source:HGNC Symbol;Acc:HGNC:11010]	-1.2770567
SLC2A6	solute carrier family 2 member 6 [Source:HGNC Symbol;Acc:HGNC:11011]	-2.38111955
SLC30A1	solute carrier family 30 member 1 [Source:HGNC Symbol;Acc:HGNC:11012]	1.1185017
SLC30A2	solute carrier family 30 member 2 [Source:HGNC Symbol;Acc:HGNC:11013]	-1.2445333
SLC30A7	solute carrier family 30 member 7 [Source:HGNC Symbol;Acc:HGNC:19306]	-1.1713142
SLC31A2	solute carrier family 31 member 2 [Source:HGNC Symbol;Acc:HGNC:11017]	-3.8152761
SLC34A1	solute carrier family 34 member 1 [Source:HGNC Symbol;Acc:HGNC:11019]	-1.0865018
SLC35D2	solute carrier family 35 member D2 [Source:HGNC Symbol;Acc:HGNC:20799]	-1.1075573
SLC35E1	solute carrier family 35 member E1 [Source:HGNC Symbol;Acc:HGNC:20803]	-1.1616215
SLC35E2	solute carrier family 35 member E2 [Source:HGNC Symbol;Acc:HGNC:20863]	1.1610974
SLC35E3	solute carrier family 35 member E3 [Source:HGNC Symbol;Acc:HGNC:20864]	-1.1705283
SLC35F5	solute carrier family 35 member F5 [Source:HGNC Symbol;Acc:HGNC:23617]	1.0794834
SLC36A3	solute carrier family 36 member 3 [Source:HGNC Symbol;Acc:HGNC:19659]	1.1321479
SLC37A1	solute carrier family 37 member 1 [Source:HGNC Symbol;Acc:HGNC:11024]	-1.6429214
SLC38A10	solute carrier family 38 member 10 [Source:HGNC Symbol;Acc:HGNC:28237]	-1.1541848
SLC38A2	solute carrier family 38 member 2 [Source:HGNC Symbol;Acc:HGNC:13448]	1.81909475
SLC39A1	solute carrier family 39 member 1 [Source:HGNC Symbol;Acc:HGNC:12876]	-1.283497
SLC39A11	solute carrier family 39 member 11 [Source:HGNC Symbol;Acc:HGNC:14463]	-1.1256454
SLC39A2	solute carrier family 39 member 2 [Source:HGNC Symbol;Acc:HGNC:17127]	-1.1966377
SLC39A7	solute carrier family 39 member 7 [Source:HGNC Symbol;Acc:HGNC:4927]	1.21949
SLC3A1	solute carrier family 3 member 1 [Source:HGNC Symbol;Acc:HGNC:11025]	1.2051109
SLC3A2	solute carrier family 3 member 2 [Source:HGNC Symbol;Acc:HGNC:11026]	-1.1652458
SLC41A1	solute carrier family 41 member 1 [Source:HGNC Symbol;Acc:HGNC:19429]	-1.8855487
SLC41A2	solute carrier family 41 member 2 [Source:HGNC Symbol;Acc:HGNC:31045]	-1.5176158
SLC43A1	solute carrier family 43 member 1 [Source:HGNC Symbol;Acc:HGNC:9225]	1.3081092
SLC43A2	solute carrier family 43 member 2 [Source:HGNC Symbol;Acc:HGNC:23087]	-1.2620823
SLC44A1	solute carrier family 44 member 1 [Source:HGNC Symbol;Acc:HGNC:18798]	1.3095196
SLC44A3	solute carrier family 44 member 3 [Source:HGNC Symbol;Acc:HGNC:28689]	-1.0501009
SLC45A1	solute carrier family 45 member 1 [Source:HGNC Symbol;Acc:HGNC:17939]	1.0982971
SLC45A3	solute carrier family 45 member 3 [Source:HGNC Symbol;Acc:HGNC:8642]	2.0233
SLC46A1	solute carrier family 46 member 1 [Source:HGNC Symbol;Acc:HGNC:30521]	1.2280153
SLC47A1	solute carrier family 47 member 1 [Source:HGNC Symbol;Acc:HGNC:25588]	-1.077101
SLC47A2	solute carrier family 47 member 2 [Source:HGNC Symbol;Acc:HGNC:26439]	1.1229268
SLC48A1	solute carrier family 48 member 1 [Source:HGNC Symbol;Acc:HGNC:26035]	-1.4926559
SLC4A2	solute carrier family 4 member 2 [Source:HGNC Symbol;Acc:HGNC:11028]	1.2275552
SLC4A8	solute carrier family 4 member 8 [Source:HGNC Symbol;Acc:HGNC:11034]	-1.1032156
SLC50A1	solute carrier family 50 member 1 [Source:HGNC Symbol;Acc:HGNC:30657]	-1.6497064
SLC5A1	solute carrier family 5 member 1 [Source:HGNC Symbol;Acc:HGNC:11036]	-1.0931611
SLC5A2	solute carrier family 5 member 2 [Source:HGNC Symbol;Acc:HGNC:11037]	-1.0688126
SLC6A2	solute carrier family 6 member 2 [Source:HGNC Symbol;Acc:HGNC:11048]	-1.1199039
SLC6A20	solute carrier family 6 member 20 [Source:HGNC Symbol;Acc:HGNC:30927]	1.0628656
SLC6A4	solute carrier family 6 member 4 [Source:HGNC Symbol;Acc:HGNC:11050]	-1.3332648
SLC6A7	solute carrier family 6 member 7 [Source:HGNC Symbol;Acc:HGNC:11054]	-1.055598
SLC7A14	solute carrier family 7 member 14 [Source:HGNC Symbol;Acc:HGNC:29326]	-1.400286
SLC7A2	solute carrier family 7 member 2 [Source:HGNC Symbol;Acc:HGNC:11060]	-9.099952
SLC7A8	solute carrier family 7 member 8 [Source:HGNC Symbol;Acc:HGNC:11066]	1.2073721
SLC8A1	solute carrier family 8 member A1 [Source:HGNC Symbol;Acc:HGNC:11068]	-1.0831733
SLC8A3	solute carrier family 8 member A3 [Source:HGNC Symbol;Acc:HGNC:11070]	-1.1240797
SLC9A1	solute carrier family 9 member A1 [Source:HGNC Symbol;Acc:HGNC:11071]	-1.2156603
SLC9A7P1	solute carrier family 9 member 7 pseudogene 1 [Source:HGNC Symbol;Acc:HGNC:32679]	-1.087863
SLC9A8	solute carrier family 9 member A8 [Source:HGNC Symbol;Acc:HGNC:20728]	-1.3041918
SLC01C1	solute carrier organic anion transporter family member 1C1 [Source:HGNC Symbol;Acc:HGNC:13819]	1.0606058
SLC03A1	solute carrier organic anion transporter family member 3A1 [Source:HGNC Symbol;Acc:HGNC:10952]	-1.1044437
SLC04A1	solute carrier organic anion transporter family member 4A1 [Source:HGNC Symbol;Acc:HGNC:10953]	-1.4484872
SLT2	slit guidance ligand 2 [Source:HGNC Symbol;Acc:HGNC:11086]	-1.1446851
SMAD1	SMAD family member 1 [Source:HGNC Symbol;Acc:HGNC:6767]	-1.2996587
SMAD3	SMAD family member 3 [Source:HGNC Symbol;Acc:HGNC:6769]	-2.8720343
SMAD6	SMAD family member 6 [Source:HGNC Symbol;Acc:HGNC:6772]	2.070265
SMAD7	SMAD family member 7 [Source:HGNC Symbol;Acc:HGNC:6773]	1.8674072
SMAD9	SMAD family member 9 [Source:HGNC Symbol;Acc:HGNC:6774]	1.3086945
SMAGP	small cell adhesion glycoprotein [Source:HGNC Symbol;Acc:HGNC:26918]	1.1212053
SMAP1	small ArfGAP 1 [Source:HGNC Symbol;Acc:HGNC:19651]	-1.1217533
SMARCA4	iatrix associated, actin dependent regulator of chromatin, subfamily a, member 4 [Source:HGNC Symbol;Acc:HGNC:10932351]	-1.0932351
SMARCB1	iatrix associated, actin dependent regulator of chromatin, subfamily b, member 1 [Source:HGNC Symbol;Acc:HGNC:12377583]	1.2623575
SMARCE1	iatrix associated, actin dependent regulator of chromatin, subfamily e, member 1 [Source:HGNC Symbol;Acc:HGNC:12623575]	1.3475604
SMEK1	protein phosphatase 4 regulatory subunit 3A	1.1270995
SMEK3P	protein phosphatase 4 regulatory subunit 3C, pseudogene	-1.1425986
SMG5	SMG5, nonsense mediated mRNA decay factor [Source:HGNC Symbol;Acc:HGNC:24644]	-1.1425986

SMG6	SMG6, nonsense mediated mRNA decay factor [Source:HGNC Symbol;Acc:HGNC:17809]	1.1846209
SMG9	SMG9, nonsense mediated mRNA decay factor [Source:HGNC Symbol;Acc:HGNC:25763]	-1.186056
SMO	smoothened, frizzled class receptor [Source:HGNC Symbol;Acc:HGNC:11119]	1.2351292
SMOC1	SPARC related modular calcium binding 1 [Source:HGNC Symbol;Acc:HGNC:20318]	-1.1692297
SMOC2	SPARC related modular calcium binding 2 [Source:HGNC Symbol;Acc:HGNC:20323]	1.079961
SMOX	spermine oxidase [Source:HGNC Symbol;Acc:HGNC:15862]	-1.4794824
SMURF1	SMAD specific E3 ubiquitin protein ligase 1 [Source:HGNC Symbol;Acc:HGNC:16807]	-1.9796493
SNAI1	snail family transcriptional repressor 1 [Source:HGNC Symbol;Acc:HGNC:11128]	1.7465347
SNAI2	snail family transcriptional repressor 2 [Source:HGNC Symbol;Acc:HGNC:11094]	1.1152751
SNAI3	snail family transcriptional repressor 3 [Source:HGNC Symbol;Acc:HGNC:18411]	1.1613162
SNAP25	synaptosome associated protein 25 [Source:HGNC Symbol;Acc:HGNC:11132]	-1.077266
SNAP29	synaptosome associated protein 29 [Source:HGNC Symbol;Acc:HGNC:11133]	1.1797107
SNAPC1	small nuclear RNA activating complex polypeptide 1 [Source:HGNC Symbol;Acc:HGNC:11134]	1.2312425
SNAPC4	small nuclear RNA activating complex polypeptide 4 [Source:HGNC Symbol;Acc:HGNC:11137]	-1.755772
SNAR-E	small ILF3/NF90-associated RNA E	-1.0705185
SND1	staphylococcal nuclease and tudor domain containing 1 [Source:HGNC Symbol;Acc:HGNC:30646]	-1.0733922
SNHG12	small nucleolar RNA host gene 12 [Source:HGNC Symbol;Acc:HGNC:30062]	1.2176762
SNHG4	small nucleolar RNA host gene 4 [Source:HGNC Symbol;Acc:HGNC:32964]	1.1724967
SNHG8	small nucleolar RNA host gene 8 [Source:HGNC Symbol;Acc:HGNC:33098]	1.173885
SNN	stannin [Source:HGNC Symbol;Acc:HGNC:11149]	-2.515417
SNORA22	small nucleolar RNA, H/ACA box 22 [Source:HGNC Symbol;Acc:HGNC:32612]	-1.1060855
SNORA58	small nucleolar RNA, H/ACA box 58 [Source:HGNC Symbol;Acc:HGNC:32652]	1.0604714
SNORA78	small nucleolar RNA, H/ACA box 78 [Source:HGNC Symbol;Acc:HGNC:32664]	-1.2393686
SNORD12B	small nucleolar RNA, C/D box 12B [Source:HGNC Symbol;Acc:HGNC:33573]	-1.1459838
SNPH	syntaphilin [Source:HGNC Symbol;Acc:HGNC:15931]	1.2998594
SNRK	SNF related kinase [Source:HGNC Symbol;Acc:HGNC:30598]	1.920905
SNRNP27	small nuclear ribonucleoprotein U4/U6.U5 subunit 27 [Source:HGNC Symbol;Acc:HGNC:30240]	-1.1821932
SNRNP40	small nuclear ribonucleoprotein U5 subunit 40 [Source:HGNC Symbol;Acc:HGNC:30857]	1.1840714
SNRPA	small nuclear ribonucleoprotein polypeptide A [Source:HGNC Symbol;Acc:HGNC:11151]	1.1525942
SNRPA1	small nuclear ribonucleoprotein polypeptide A' [Source:HGNC Symbol;Acc:HGNC:11152]	-1.2197748
SNRPB	small nuclear ribonucleoprotein polypeptides B and B1 [Source:HGNC Symbol;Acc:HGNC:11153]	1.2685963
SNRPC	small nuclear ribonucleoprotein polypeptide C [Source:HGNC Symbol;Acc:HGNC:11157]	1.0592827
SNRPD1	small nuclear ribonucleoprotein D1 polypeptide [Source:HGNC Symbol;Acc:HGNC:11158]	1.1993759
SNRPD3	small nuclear ribonucleoprotein D3 polypeptide [Source:HGNC Symbol;Acc:HGNC:11160]	1.2016234
SNTB2	syntrophin beta 2 [Source:HGNC Symbol;Acc:HGNC:11169]	-1.4100816
SNUPN	snurportin 1 [Source:HGNC Symbol;Acc:HGNC:14245]	-1.2416916
SNX2	sorting nexin 2 [Source:HGNC Symbol;Acc:HGNC:11173]	1.4450452
SNX24	sorting nexin 24 [Source:HGNC Symbol;Acc:HGNC:21533]	1.0954369
SNX30	sorting nexin family member 30 [Source:HGNC Symbol;Acc:HGNC:23685]	1.1995053
SNX6	sorting nexin 6 [Source:HGNC Symbol;Acc:HGNC:14970]	1.2200302
SNX9	sorting nexin 9 [Source:HGNC Symbol;Acc:HGNC:14973]	-1.3864666
SOBP	sine oculis binding protein homolog [Source:HGNC Symbol;Acc:HGNC:29256]	1.4289916
SOCS1	suppressor of cytokine signaling 1 [Source:HGNC Symbol;Acc:HGNC:19383]	-1.4221374
SOCS2	suppressor of cytokine signaling 2 [Source:HGNC Symbol;Acc:HGNC:19382]	-1.1783967
SOCS3	suppressor of cytokine signaling 3 [Source:HGNC Symbol;Acc:HGNC:19391]	1.4182186
SOCS6	suppressor of cytokine signaling 6 [Source:HGNC Symbol;Acc:HGNC:16833]	1.1634434
SOD2	superoxide dismutase 2, mitochondrial [Source:HGNC Symbol;Acc:HGNC:11180]	-2.7629724
SOHLH2	:permato genesis and oogenesis specific basic helix-loop-helix 2 [Source:HGNC Symbol;Acc:HGNC:26026]	1.0950915
SON	SON DNA binding protein [Source:HGNC Symbol;Acc:HGNC:11183]	-1.2067156
SORBS2	sorbin and SH3 domain containing 2 [Source:HGNC Symbol;Acc:HGNC:24098]	1.3960792
SORCS3	sortilin related VPS10 domain containing receptor 3 [Source:HGNC Symbol;Acc:HGNC:16699]	1.1625923
SORD	sorbitol dehydrogenase [Source:HGNC Symbol;Acc:HGNC:11184]	1.1756208
SOX1	SRY-box 1 [Source:HGNC Symbol;Acc:HGNC:11189]	1.1297421
SOX12	SRY-box 12 [Source:HGNC Symbol;Acc:HGNC:11198]	1.1355515
SOX13	SRY-box 13 [Source:HGNC Symbol;Acc:HGNC:11192]	-1.2355682
SOX15	SRY-box 15 [Source:HGNC Symbol;Acc:HGNC:11196]	1.2521343
SOX17	SRY-box 17 [Source:HGNC Symbol;Acc:HGNC:18122]	1.2470721
SOX18	SRY-box 18 [Source:HGNC Symbol;Acc:HGNC:11194]	1.5754496
SOX20T	SOX2 overlapping transcript	1.1706005
SOX30	SRY-box 30 [Source:HGNC Symbol;Acc:HGNC:30635]	1.1593004
SOX7	SRY-box 7 [Source:HGNC Symbol;Acc:HGNC:18196]	-2.4292214
SP1	Sp1 transcription factor [Source:HGNC Symbol;Acc:HGNC:11205]	-1.1988295
SP110	SP110 nuclear body protein [Source:HGNC Symbol;Acc:HGNC:5401]	-1.1568704
SP140	SP140 nuclear body protein [Source:HGNC Symbol;Acc:HGNC:17133]	-1.13882395
SP2	Sp2 transcription factor [Source:HGNC Symbol;Acc:HGNC:11207]	1.1116369
SP6	Sp6 transcription factor [Source:HGNC Symbol;Acc:HGNC:14530]	-1.7814846
SP8	Sp8 transcription factor [Source:HGNC Symbol;Acc:HGNC:19196]	1.1489772
SPAG17	sperm associated antigen 17 [Source:HGNC Symbol;Acc:HGNC:26620]	1.1051317
SPANXN1	SPANX family member N1 [Source:HGNC Symbol;Acc:HGNC:33174]	1.1521657
SPATA1	spерматогенез ассоциированный 1 [Source:HGNC Symbol;Acc:HGNC:14682]	-1.0945317
SPATA2	spерматогенез ассоциированный 2 [Source:HGNC Symbol;Acc:HGNC:14681]	-1.3791881
SPATA2L	сперматогенез ассоциированный 2 like [Source:HGNC Symbol;Acc:HGNC:28393]	-1.3247792
SPATA5L1	сперматогенез ассоциированный 5 like 1 [Source:HGNC Symbol;Acc:HGNC:28762]	-1.118301
SPATA6	сперматогенез ассоциированный 6 [Source:HGNC Symbol;Acc:HGNC:18309]	1.1510923
SPATA7	сперматогенез ассоциированный 7 [Source:HGNC Symbol;Acc:HGNC:20423]	1.3338883
SPATA9	сперматогенез ассоциированный 9 [Source:HGNC Symbol;Acc:HGNC:22988]	-1.0932338
SPATC1	сперматогенез и центриоли ассоциированный 1 [Source:HGNC Symbol;Acc:HGNC:30510]	-1.1541201
SPC25	SPC25, NDC80 kinetochore complex component [Source:HGNC Symbol;Acc:HGNC:24031]	1.1633643
SPEC1	јерм antigen with calponin homology and coiled-coil domains 1 [Source:HGNC Symbol;Acc:HGNC:3061:	-1.2656026
SPEG	SPEG complex locus [Source:HGNC Symbol;Acc:HGNC:16901]	-1.1496651
SPG21	spastic paraparesis 21 (autosomal recessive, Mast syndrome) [Source:HGNC Symbol;Acc:HGNC:20373]	-1.0597708
SPG7	SPG7, paraplegin matrix AAA peptidase subunit [Source:HGNC Symbol;Acc:HGNC:11237]	-1.1414359
SPHK1	sphingosine kinase 1 [Source:HGNC Symbol;Acc:HGNC:11240]	-1.5180042
SP1	Sp1 proto-oncogene [Source:HGNC Symbol;Acc:HGNC:11241]	-1.3360361
SPIN3	spindlin family member 3 [Source:HGNC Symbol;Acc:HGNC:27272]	1.0840518
SPIN4	spindlin family member 4 [Source:HGNC Symbol;Acc:HGNC:27040]	1.4123063

SPINK1	serine peptidase inhibitor, Kazal type 1 [Source:HGNC Symbol;Acc:HGNC:11244]	-1.1005225
SPINK14	serine peptidase inhibitor, Kazal type 14 (putative) [Source:HGNC Symbol;Acc:HGNC:33825]	-1.0626346
SPINK2	serine peptidase inhibitor, Kazal type 2 [Source:HGNC Symbol;Acc:HGNC:11245]	1.1215383
SPINK8	serine peptidase inhibitor, Kazal type 8 (putative) [Source:HGNC Symbol;Acc:HGNC:33160]	-1.1167119
SPINT4	serine peptidase inhibitor, Kunitz type 4 [Source:HGNC Symbol;Acc:HGNC:16130]	1.103353
SPNS2	sphingolipid transporter 2 [Source:HGNC Symbol;Acc:HGNC:26992]	-1.7125467
SPNS3	sphingolipid transporter 3 (putative) [Source:HGNC Symbol;Acc:HGNC:28433]	-1.3699741
SPOLP	speckle type BTB/POZ protein like [Source:HGNC Symbol;Acc:HGNC:27934]	1.3731387
SPPL2B	signal peptide peptidase like 2B [Source:HGNC Symbol;Acc:HGNC:30627]	1.098127
SPPL3	signal peptide peptidase like 3 [Source:HGNC Symbol;Acc:HGNC:30424]	-1.0523384
SPRED1	sprouty related EVH1 domain containing 1 [Source:HGNC Symbol;Acc:HGNC:20249]	1.3902912
SPRED2	sprouty related EVH1 domain containing 2 [Source:HGNC Symbol;Acc:HGNC:17722]	-1.1629206
SPRR2C	small proline rich protein 2C (pseudogene) [Source:HGNC Symbol;Acc:HGNC:11263]	-1.1278527
SPRR2D	small proline rich protein 2D [Source:HGNC Symbol;Acc:HGNC:11264]	-1.0577679
SPRR2E	small proline rich protein 2E [Source:HGNC Symbol;Acc:HGNC:11265]	-1.1943921
SPRY1	sprouty RTK signaling antagonist 1 [Source:HGNC Symbol;Acc:HGNC:11269]	1.3469466
SPRY2	sprouty RTK signaling antagonist 2 [Source:HGNC Symbol;Acc:HGNC:11270]	1.1147985
SPRY3	sprouty RTK signaling antagonist 3 [Source:HGNC Symbol;Acc:HGNC:11271]	-1.1297424
SPRY4	sprouty RTK signaling antagonist 4 [Source:HGNC Symbol;Acc:HGNC:15533]	-1.295955
SPRYD4	SPRY domain containing 4 [Source:HGNC Symbol;Acc:HGNC:27468]	-1.1377538
SPTA1	spectrin alpha, erythrocytic 1 [Source:HGNC Symbol;Acc:HGNC:11272]	1.1368048
SPTB	spectrin beta, erythrocytic [Source:HGNC Symbol;Acc:HGNC:11274]	1.0735816
SPTBN1	spectrin beta, non-erythrocytic 1 [Source:HGNC Symbol;Acc:HGNC:11275]	-1.2001902
SPTBN5	spectrin beta, non-erythrocytic 5 [Source:HGNC Symbol;Acc:HGNC:15680]	-1.2231363
SQRDL	sulfide quinone reductase-like (yeast) [Source:HGNC Symbol;Acc:HGNC:20390]	-1.9914875
SQSTM1	sequestosome 1 [Source:HGNC Symbol;Acc:HGNC:11280]	-2.8412058
SRCAP	Snf2-related CREBBP activator protein [Source:HGNC Symbol;Acc:HGNC:16974]	1.123425
SREBF2	sterol regulatory element binding transcription factor 2 [Source:HGNC Symbol;Acc:HGNC:11290]	1.1755402
SRG7	spermatogenesis associated 42 (non-protein coding)	1.0715241
SRGAP1	SLIT-ROBO Rho GTPase activating protein 1 [Source:HGNC Symbol;Acc:HGNC:17382]	-1.6967522
SRGAP2	SLIT-ROBO Rho GTPase activating protein 2 [Source:HGNC Symbol;Acc:HGNC:19751]	1.11022265
SRP19	signal recognition particle 19 [Source:HGNC Symbol;Acc:HGNC:11300]	1.1605332
SRP9	signal recognition particle 9 [Source:HGNC Symbol;Acc:HGNC:11304]	1.4022194
SRPK2	SRSF protein kinase 2 [Source:HGNC Symbol;Acc:HGNC:11306]	1.2924603
SRPRB	SRP receptor beta subunit [Source:HGNC Symbol;Acc:HGNC:24085]	1.0793916
SRPX2	sushi repeat containing protein, X-linked 2 [Source:HGNC Symbol;Acc:HGNC:30668]	1.1076976
SRRM2	serine/arginine repetitive matrix 2 [Source:HGNC Symbol;Acc:HGNC:16639]	-1.2876629
SRRM3	serine/arginine repetitive matrix 3 [Source:HGNC Symbol;Acc:HGNC:26729]	1.3769407
SRRT	serrate, RNA effector molecule [Source:HGNC Symbol;Acc:HGNC:24101]	-1.1109728
SRSF12	serine and arginine rich splicing factor 12 [Source:HGNC Symbol;Acc:HGNC:21220]	-1.0577995
SRSF8	serine and arginine rich splicing factor 8 [Source:HGNC Symbol;Acc:HGNC:16988]	1.2972506
SRXN1	sulfiredoxin 1 [Source:HGNC Symbol;Acc:HGNC:16132]	1.1963407
SSBP3	single stranded DNA binding protein 3 [Source:HGNC Symbol;Acc:HGNC:15674]	-1.1203994
SSBP4	single stranded DNA binding protein 4 [Source:HGNC Symbol;Acc:HGNC:15676]	1.3567343
SSFA2	sperm specific antigen 2 [Source:HGNC Symbol;Acc:HGNC:11319]	2.0738115
SSH1	slingshot protein phosphatase 1 [Source:HGNC Symbol;Acc:HGNC:30579]	-2.0153873
SSH2	slingshot protein phosphatase 2 [Source:HGNC Symbol;Acc:HGNC:30580]	-1.3045303
SSH3	slingshot protein phosphatase 3 [Source:HGNC Symbol;Acc:HGNC:30581]	1.06624
SSTR1	somatostatin receptor 1 [Source:HGNC Symbol;Acc:HGNC:11330]	1.4423593
SSTR2	somatostatin receptor 2 [Source:HGNC Symbol;Acc:HGNC:11331]	-1.245914
SSU72	SSU72 homolog, RNA polymerase II CTD phosphatase [Source:HGNC Symbol;Acc:HGNC:25016]	-1.1449313
SSX2	SSX family member 2 [Source:HGNC Symbol;Acc:HGNC:11336]	1.1037519
SSX7	SSX family member 7 [Source:HGNC Symbol;Acc:HGNC:19653]	1.0840541
ST3GAL1	ST3 beta-galactoside alpha-2,3-sialyltransferase 1 [Source:HGNC Symbol;Acc:HGNC:10862]	1.1872938
ST3GAL2	ST3 beta-galactoside alpha-2,3-sialyltransferase 2 [Source:HGNC Symbol;Acc:HGNC:10863]	-1.1934189
ST3GAL6	ST3 beta-galactoside alpha-2,3-sialyltransferase 6 [Source:HGNC Symbol;Acc:HGNC:18080]	1.3964665
ST6GAL1	ST6 beta-galactoside alpha-2,6-sialyltransferase 1 [Source:HGNC Symbol;Acc:HGNC:10860]	-1.754508
ST6GALNAC3	ST6 N-acetylgalactosaminidase alpha-2,6-sialyltransferase 3 [Source:HGNC Symbol;Acc:HGNC:19343]	1.3754711
ST7	suppression of tumorigenicity 7 [Source:HGNC Symbol;Acc:HGNC:11351]	-1.1680267
ST7-AS1	ST7 antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:16000]	-1.504437
ST7OT4	ST7 overlapping transcript 4	1.0794348
ST8SIA4	ST8 alpha-N-acetyl-neuraminate alpha-2,8-sialyltransferase 4 [Source:HGNC Symbol;Acc:HGNC:10871]	1.1466286
STAC2	SH3 and cysteine rich domain 2 [Source:HGNC Symbol;Acc:HGNC:23990]	-1.1196139
STAP2	signal transducing adaptor family member 2 [Source:HGNC Symbol;Acc:HGNC:30430]	-2.1225429
STARD10	STAR related lipid transfer domain containing 10 [Source:HGNC Symbol;Acc:HGNC:10666]	-2.8078258
STARD8	STAR related lipid transfer domain containing 8 [Source:HGNC Symbol;Acc:HGNC:19161]	-1.4184645
STAT2	signal transducer and activator of transcription 2 [Source:HGNC Symbol;Acc:HGNC:11363]	1.1347741
STAT5A	signal transducer and activator of transcription 5A [Source:HGNC Symbol;Acc:HGNC:11366]	-3.1095648
STAT5B	signal transducer and activator of transcription 5B [Source:HGNC Symbol;Acc:HGNC:11367]	-1.1172311
STAT6	signal transducer and activator of transcription 6 [Source:HGNC Symbol;Acc:HGNC:11368]	-2.2853472
STBD1	starch binding domain 1 [Source:HGNC Symbol;Acc:HGNC:24854]	1.1040965
STK10	serine/threonine kinase 10 [Source:HGNC Symbol;Acc:HGNC:11388]	-1.5018309
STK4	serine/threonine kinase 4 [Source:HGNC Symbol;Acc:HGNC:11408]	-1.0922916
STK40	serine/threonine kinase 40 [Source:HGNC Symbol;Acc:HGNC:21373]	-1.2458426
STOML2	stomatin like 2 [Source:HGNC Symbol;Acc:HGNC:14559]	-1.0513841
STOML3	stomatin like 3 [Source:HGNC Symbol;Acc:HGNC:19420]	1.1237805
STRADA	STE20-related kinase adaptor alpha [Source:HGNC Symbol;Acc:HGNC:30172]	1.1524712
STRC	stereocilin [Source:HGNC Symbol;Acc:HGNC:16035]	-1.2619677
STRN3	striatin 3 [Source:HGNC Symbol;Acc:HGNC:15720]	1.22326
STX11	syntaxin 11 [Source:HGNC Symbol;Acc:HGNC:11429]	-1.7400285
STX16	syntaxin 16 [Source:HGNC Symbol;Acc:HGNC:11431]	1.1989602
STX18	syntaxin 18 [Source:HGNC Symbol;Acc:HGNC:15942]	-1.0655811
STX1A	syntaxin 1A [Source:HGNC Symbol;Acc:HGNC:11433]	1.4042501
STX3	syntaxin 3 [Source:HGNC Symbol;Acc:HGNC:11438]	1.4778314
STX4	syntaxin 4 [Source:HGNC Symbol;Acc:HGNC:11439]	-1.216301
STX6	syntaxin 6 [Source:HGNC Symbol;Acc:HGNC:11441]	-1.3965899

STXBP5	syntaxin binding protein 5 [Source:HGNC Symbol;Acc:HGNC:19665]	1.1357594
STXBP6	syntaxin binding protein 6 [Source:HGNC Symbol;Acc:HGNC:19666]	1.1285287
STYK1	serine/threonine/tyrosine kinase 1 [Source:HGNC Symbol;Acc:HGNC:18889]	1.5221668
SUCNR1	succinate receptor 1 [Source:HGNC Symbol;Acc:HGNC:4542]	1.1384605
SUFU	SUFU negative regulator of hedgehog signaling [Source:HGNC Symbol;Acc:HGNC:16466]	-1.0691607
SULT1A4	sulfotransferase family 1A member 4 [Source:HGNC Symbol;Acc:HGNC:30004]	-1.30498895
SULT1B1	sulfotransferase family 1B member 1 [Source:HGNC Symbol;Acc:HGNC:17845]	1.222456
SULT1C3	sulfotransferase family 1C member 3 [Source:HGNC Symbol;Acc:HGNC:3543]	1.0664893
SULT1E1	sulfotransferase family 1E member 1 [Source:HGNC Symbol;Acc:HGNC:11377]	1.1907842
SULT2A1	sulfotransferase family 2A member 1 [Source:HGNC Symbol;Acc:HGNC:11458]	-1.1195066
SUMO1	small ubiquitin-like modifier 1 [Source:HGNC Symbol;Acc:HGNC:12502]	1.1942035
SUMO1P3	SUMO1 pseudogene 3 [Source:HGNC Symbol;Acc:HGNC:33150]	1.2398506
SUMO3	small ubiquitin-like modifier 3 [Source:HGNC Symbol;Acc:HGNC:11124]	-1.1117625
SUN1	Sad1 and UNC84 domain containing 1 [Source:HGNC Symbol;Acc:HGNC:18587]	-1.1049213
SUPT3H	SUPT3 homolog, SAGA and STAGA complex component [Source:HGNC Symbol;Acc:HGNC:11466]	-1.092337
SUSD5	sushi domain containing 5 [Source:HGNC Symbol;Acc:HGNC:29061]	-1.245893
SUV39H1	suppressor of variegation 3-9 homolog 1 [Source:HGNC Symbol;Acc:HGNC:11479]	1.372106
SUV39H2	suppressor of variegation 3-9 homolog 2 [Source:HGNC Symbol;Acc:HGNC:17287]	1.412716
SUV420H1	lysine methyltransferase 5B	1.1434336
SUV420H2	lysine methyltransferase 5C	1.3840066
SVIL	supervillin [Source:HGNC Symbol;Acc:HGNC:11480]	-1.3011549
SVIP	small VCP interacting protein [Source:HGNC Symbol;Acc:HGNC:25238]	1.1497164
SVOP	SV2 related protein [Source:HGNC Symbol;Acc:HGNC:25417]	1.07458
SVOPL	SVOP like [Source:HGNC Symbol;Acc:HGNC:27034]	1.1703988
SYAP1	synapse associated protein 1 [Source:HGNC Symbol;Acc:HGNC:16273]	1.1688595
SYBU	syntabulin [Source:HGNC Symbol;Acc:HGNC:26011]	1.1641141
SYN2	synapsin II [Source:HGNC Symbol;Acc:HGNC:11495]	-1.1460617
SYNDIG1	synapse differentiation inducing 1 [Source:HGNC Symbol;Acc:HGNC:15885]	1.1307203
SYNE1	spectrin repeat containing nuclear envelope protein 1 [Source:HGNC Symbol;Acc:HGNC:17089]	1.2101638
SYNGR3	synaptotagyrin 3 [Source:HGNC Symbol;Acc:HGNC:11501]	-1.33068305
SYNJ2	synaptotagmin 2 [Source:HGNC Symbol;Acc:HGNC:11504]	-1.2392128
SYNPO	synaptopodin [Source:HGNC Symbol;Acc:HGNC:30672]	-1.3194586
SYNRG	synergin, gamma [Source:HGNC Symbol;Acc:HGNC:557]	-1.1342684
SYS1	Sys1 golgi trafficking protein [Source:HGNC Symbol;Acc:HGNC:16162]	-1.17128965
SYT11	synaptotagmin 11 [Source:HGNC Symbol;Acc:HGNC:19239]	-1.2013193
SYT12	synaptotagmin 12 [Source:HGNC Symbol;Acc:HGNC:18381]	1.0516901
SYT14	synaptotagmin 14 [Source:HGNC Symbol;Acc:HGNC:23143]	-1.1756594
SYT2	synaptotagmin 2 [Source:HGNC Symbol;Acc:HGNC:11510]	-1.11471305
SYT6	synaptotagmin 6 [Source:HGNC Symbol;Acc:HGNC:18638]	-1.0813587
SYTL2	synaptotagmin like 2 [Source:HGNC Symbol;Acc:HGNC:15585]	1.0857561
SYVN1	synoviolin 1 [Source:HGNC Symbol;Acc:HGNC:20738]	1.1483997
SZT2	seizure threshold 2 homolog (mouse) [Source:HGNC Symbol;Acc:HGNC:29040]	-1.1587
TAAR1	trace amine associated receptor 1 [Source:HGNC Symbol;Acc:HGNC:17734]	1.1227604
TAAR8	trace amine associated receptor 8 [Source:HGNC Symbol;Acc:HGNC:14964]	-1.1320313
TAB2	TGF-beta activated kinase 1/MAP3K7 binding protein 2 [Source:HGNC Symbol;Acc:HGNC:17075]	1.38926615
TAC1	tachykinin precursor 1 [Source:HGNC Symbol;Acc:HGNC:11517]	1.1266389
TACR1	tachykinin receptor 1 [Source:HGNC Symbol;Acc:HGNC:11526]	-1.0792997
TACSTD2	tumor-associated calcium signal transducer 2 [Source:HGNC Symbol;Acc:HGNC:11530]	1.2108705
TAF12	TATA-box binding protein associated factor 12 [Source:HGNC Symbol;Acc:HGNC:11545]	1.1606117
TAF1A	-box binding protein associated factor, RNA polymerase I subunit A [Source:HGNC Symbol;Acc:HGNC:1:	1.0814369
TAF1B	-box binding protein associated factor, RNA polymerase I subunit B [Source:HGNC Symbol;Acc:HGNC:1:	1.2733359
TAF1C	-box binding protein associated factor, RNA polymerase I subunit C [Source:HGNC Symbol;Acc:HGNC:1:	-1.2037797
TAF5	TATA-box binding protein associated factor 5 [Source:HGNC Symbol;Acc:HGNC:11539]	1.2037756
TAF9B	TATA-box binding protein associated factor 9b [Source:HGNC Symbol;Acc:HGNC:17306]	1.2268778
TAL2	TAL bHLH transcription factor 2 [Source:HGNC Symbol;Acc:HGNC:11557]	-1.1466997
TANK	TRAF family member associated NFKB activator [Source:HGNC Symbol;Acc:HGNC:11562]	-1.2746692
TAP1	transporter 1, ATP binding cassette subfamily B member [Source:HGNC Symbol;Acc:HGNC:43]	-5.840709
TAP2	transporter 2, ATP binding cassette subfamily B member [Source:HGNC Symbol;Acc:HGNC:44]	-1.3878918
TAPBP	TAP binding protein (tapasin) [Source:HGNC Symbol;Acc:HGNC:11566]	-1.659206425
TAPBPL	TAP binding protein like [Source:HGNC Symbol;Acc:HGNC:30683]	-1.2435796
TAPT1	transmembrane anterior posterior transformation 1 [Source:HGNC Symbol;Acc:HGNC:26887]	1.2648808
TARBP1	TAR (HIV-1) RNA binding protein 1 [Source:HGNC Symbol;Acc:HGNC:11568]	1.1722906
TAS2R1	taste 2 receptor member 1 [Source:HGNC Symbol;Acc:HGNC:14909]	1.1054171
TAS2R38	taste 2 receptor member 38 [Source:HGNC Symbol;Acc:HGNC:9584]	1.0671
TAS2R42	taste 2 receptor member 42 [Source:HGNC Symbol;Acc:HGNC:18888]	1.1000696
TAS2R8	taste 2 receptor member 8 [Source:HGNC Symbol;Acc:HGNC:14915]	-1.1002846
TAT	tyrosine aminotransferase [Source:HGNC Symbol;Acc:HGNC:11573]	1.4149128
TATDN2	TatD DNase domain containing 2 [Source:HGNC Symbol;Acc:HGNC:28988]	-1.2221595
TBC1D1	TBC1 domain family member 1 [Source:HGNC Symbol;Acc:HGNC:11578]	-1.16956065
TBC1D10A	TBC1 domain family member 10A [Source:HGNC Symbol;Acc:HGNC:23609]	-1.6626483
TBC1D10B	TBC1 domain family member 10B [Source:HGNC Symbol;Acc:HGNC:24510]	1.4120173
TBC1D10C	TBC1 domain family member 10C [Source:HGNC Symbol;Acc:HGNC:24702]	1.0942843
TBC1D20	TBC1 domain family member 20 [Source:HGNC Symbol;Acc:HGNC:16133]	-1.1258305
TBC1D22A	TBC1 domain family member 22A [Source:HGNC Symbol;Acc:HGNC:1309]	-1.2354038
TBC1D22B	TBC1 domain family member 22B [Source:HGNC Symbol;Acc:HGNC:21602]	-1.6846085
TBC1D24	TBC1 domain family member 24 [Source:HGNC Symbol;Acc:HGNC:29203]	-1.1942153
TBC1D25	TBC1 domain family member 25 [Source:HGNC Symbol;Acc:HGNC:8092]	-1.1994458
TBC1D27	TBC1 domain family member 27 [Source:HGNC Symbol;Acc:HGNC:28104]	1.0916164
TBC1D8	TBC1 domain family member 8 [Source:HGNC Symbol;Acc:HGNC:17791]	1.7108886
TBCD	tubulin folding cofactor D [Source:HGNC Symbol;Acc:HGNC:11581]	-1.2003107
TBCEL	tubulin folding cofactor E like [Source:HGNC Symbol;Acc:HGNC:28115]	1.2188548
TBL1X	transducin beta like 1X-linked [Source:HGNC Symbol;Acc:HGNC:11585]	-1.205578
TBL1Y	transducin beta like 1, Y-linked [Source:HGNC Symbol;Acc:HGNC:18502]	-1.3603249
TBL2	transducin beta like 2 [Source:HGNC Symbol;Acc:HGNC:11586]	1.2404001
TBP	TATA-box binding protein [Source:HGNC Symbol;Acc:HGNC:11588]	1.1188513
TBRG1	transforming growth factor beta regulator 1 [Source:HGNC Symbol;Acc:HGNC:29551]	-1.1646354

TBX1	T-box 1 [Source:HGNC Symbol;Acc:HGNC:11592]	1.72025485
TBX19	T-box 19 [Source:HGNC Symbol;Acc:HGNC:11596]	-1.3837837
TBX20	T-box 20 [Source:HGNC Symbol;Acc:HGNC:11598]	1.1061829
TBX22	T-box 22 [Source:HGNC Symbol;Acc:HGNC:11600]	1.143525
TBXA2R	thromboxane A2 receptor [Source:HGNC Symbol;Acc:HGNC:11608]	-1.3096033
TCEA1	transcription elongation factor A1 [Source:HGNC Symbol;Acc:HGNC:11612]	1.2140621
TCEA2	transcription elongation factor A2 [Source:HGNC Symbol;Acc:HGNC:11614]	1.2129707
TCEAL5	transcription elongation factor A like 5 [Source:HGNC Symbol;Acc:HGNC:22282]	-1.1620266
TCEAL8	transcription elongation factor A like 8 [Source:HGNC Symbol;Acc:HGNC:28683]	1.2279946
TCF15	transcription factor 15 (basic helix-loop-helix) [Source:HGNC Symbol;Acc:HGNC:11627]	-2.0575776
TCF21	transcription factor 21 [Source:HGNC Symbol;Acc:HGNC:11632]	1.0974195
TCF25	transcription factor 25 [Source:HGNC Symbol;Acc:HGNC:29181]	-1.1429046
TCF7	transcription factor 7 (T-cell specific, HMG-box) [Source:HGNC Symbol;Acc:HGNC:11639]	-1.544704
TCF7L1	transcription factor 7 like 1 [Source:HGNC Symbol;Acc:HGNC:11640]	-1.552054
TCF7L2	transcription factor 7 like 2 [Source:HGNC Symbol;Acc:HGNC:11641]	-1.1125649
TCL1A	T-cell leukemia/lymphoma 1A [Source:HGNC Symbol;Acc:HGNC:11648]	-1.0657189
TCL6	T-cell leukemia/lymphoma 6 (non-protein coding) [Source:HGNC Symbol;Acc:HGNC:13463]	1.1174482
TCOF1	treacle ribosomal biogenesis factor 1 [Source:HGNC Symbol;Acc:HGNC:11654]	1.1835889
TCP11L1	t-complex 11 like 1 [Source:HGNC Symbol;Acc:HGNC:25655]	-1.3249453
TCTE1	t-complex-associated-testis-expressed 1 [Source:HGNC Symbol;Acc:HGNC:11693]	-1.1561464
TCTEX1D4	Tctex1 domain containing 4 [Source:HGNC Symbol;Acc:HGNC:32315]	-1.1280748
TCTN2	tectonic family member 2 [Source:HGNC Symbol;Acc:HGNC:25774]	-1.1062703
TDG	thymine DNA glycosylase [Source:HGNC Symbol;Acc:HGNC:11700]	1.3547912
TDP2	tyrosyl-DNA phosphodiesterase 2 [Source:HGNC Symbol;Acc:HGNC:17768]	1.3462905
TDRD1	tudor domain containing 1 [Source:HGNC Symbol;Acc:HGNC:11712]	-1.1629562
TDRD5	tudor domain containing 5 [Source:HGNC Symbol;Acc:HGNC:20614]	1.1321472
TDRD7	tudor domain containing 7 [Source:HGNC Symbol;Acc:HGNC:30831]	-1.2014122
TECPR1	tectonin beta-propeller repeat containing 1 [Source:HGNC Symbol;Acc:HGNC:22214]	-1.0677514
TECPR2	tectonin beta-propeller repeat containing 2 [Source:HGNC Symbol;Acc:HGNC:19957]	-1.1434623
TECTA	tectorin alpha [Source:HGNC Symbol;Acc:HGNC:11720]	-1.0953746
TEF	TEF, PAR bZIP transcription factor [Source:HGNC Symbol;Acc:HGNC:11722]	-1.2507441
TEKT3	tektin 3 [Source:HGNC Symbol;Acc:HGNC:14293]	-1.0586303
TENC1	tensin 2	1.7355207
TEPP	testis, prostate and placenta expressed [Source:HGNC Symbol;Acc:HGNC:33745]	-1.294156
TES	testin LIM domain protein [Source:HGNC Symbol;Acc:HGNC:14620]	-1.242406
TESC	tescalcin [Source:HGNC Symbol;Acc:HGNC:26065]	-1.229247
TEL3	tet methylcytosine dioxygenase 3 [Source:HGNC Symbol;Acc:HGNC:28313]	1.0833104
TEX12	testis expressed 12 [Source:HGNC Symbol;Acc:HGNC:11734]	1.0969146
TEX15	testis expressed 15 [Source:HGNC Symbol;Acc:HGNC:11738]	1.0760782
TEX9	testis expressed 9 [Source:HGNC Symbol;Acc:HGNC:29585]	1.1261269
TFB1M	transcription factor B1, mitochondrial [Source:HGNC Symbol;Acc:HGNC:17037]	-1.1552731
TFE3	transcription factor binding to IGHM enhancer 3 [Source:HGNC Symbol;Acc:HGNC:11752]	-1.3735228
TFEB	transcription factor EB [Source:HGNC Symbol;Acc:HGNC:11753]	-1.215368
TF2	trefoil factor 2 [Source:HGNC Symbol;Acc:HGNC:11756]	-1.1593903
TFG	TRK-fused gene [Source:HGNC Symbol;Acc:HGNC:11758]	-1.2120285
TFIP11	tufetilin interacting protein 11 [Source:HGNC Symbol;Acc:HGNC:17165]	-1.1499203
TFPI2	tissue factor pathway inhibitor 2 [Source:HGNC Symbol;Acc:HGNC:11761]	-1.2973212
TFRC	transferrin receptor [Source:HGNC Symbol;Acc:HGNC:11763]	1.3148665
TGFA	transforming growth factor alpha [Source:HGNC Symbol;Acc:HGNC:11765]	-1.2942945
TGFB1	transforming growth factor beta 1 [Source:HGNC Symbol;Acc:HGNC:11766]	1.2400473
TGFB2R2	transforming growth factor beta receptor 2 [Source:HGNC Symbol;Acc:HGNC:11773]	-1.6929325
TGIF2LY	TGFB induced factor homeobox 2 like, Y-linked [Source:HGNC Symbol;Acc:HGNC:18569]	-1.0957899
TGS1	trimethylguanosine synthase 1 [Source:HGNC Symbol;Acc:HGNC:17843]	1.644198
THAP1	THAP domain containing 1 [Source:HGNC Symbol;Acc:HGNC:20856]	1.2663431
THAP5	THAP domain containing 5 [Source:HGNC Symbol;Acc:HGNC:23188]	1.1731004
THAP8	THAP domain containing 8 [Source:HGNC Symbol;Acc:HGNC:23191]	1.1259615
THBD	thrombomodulin [Source:HGNC Symbol;Acc:HGNC:11784]	2.5723958
THEM4	thioesterase superfamily member 4 [Source:HGNC Symbol;Acc:HGNC:17947]	-1.0741367
THOC3	THO complex 3 [Source:HGNC Symbol;Acc:HGNC:19072]	1.1531777
THOC7	THO complex 7 [Source:HGNC Symbol;Acc:HGNC:29874]	1.2816858
THSD1	thrombospondin type 1 domain containing 1 [Source:HGNC Symbol;Acc:HGNC:17754]	1.1414342
THUMPD3	THUMP domain containing 3 [Source:HGNC Symbol;Acc:HGNC:24493]	1.2828622
THY1	Thy-1 cell surface antigen [Source:HGNC Symbol;Acc:HGNC:11801]	-1.495947
TICAM1	toll like receptor adaptor molecule 1 [Source:HGNC Symbol;Acc:HGNC:18348]	-1.68680635
TIE1	triosine kinase with immunoglobulin like and EGF like domains 1 [Source:HGNC Symbol;Acc:HGNC:1180:	1.2269287
TIFA	TRAF interacting protein with forkhead associated domain [Source:HGNC Symbol;Acc:HGNC:19075]	-1.3406183
TIGD2	tigger transposable element derived 2 [Source:HGNC Symbol;Acc:HGNC:18333]	1.2720616
TIGD4	tigger transposable element derived 4 [Source:HGNC Symbol;Acc:HGNC:18335]	1.0937688
TIMM17B	nslocase of inner mitochondrial membrane 17 homolog B (yeast) [Source:HGNC Symbol;Acc:HGNC:173	-1.3398985
TIMM23	translocase of inner mitochondrial membrane 23 [Source:HGNC Symbol;Acc:HGNC:17312]	-1.1232618
TIMM8A	nslocase of inner mitochondrial membrane 8 homolog A (yeast) [Source:HGNC Symbol;Acc:HGNC:1181	1.1209888
TIMM8B	translocase of inner mitochondrial membrane 8 homolog B [Source:HGNC Symbol;Acc:HGNC:11818]	-1.1581358
TIMM9	translocase of inner mitochondrial membrane 9 [Source:HGNC Symbol;Acc:HGNC:11819]	1.2661512
TIMP3	TIMP metallopeptidase inhibitor 3 [Source:HGNC Symbol;Acc:HGNC:11822]	-1.5256875
TINF2	TERF1 interacting nuclear factor 2 [Source:HGNC Symbol;Acc:HGNC:11824]	-1.1987168
TIPARP	TCDD inducible poly(ADP-ribose) polymerase [Source:HGNC Symbol;Acc:HGNC:23696]	1.3308982
TJAP1	tight junction associated protein 1 [Source:HGNC Symbol;Acc:HGNC:17949]	-1.3311831
TKTL1	transketolase like 1 [Source:HGNC Symbol;Acc:HGNC:11835]	-1.1161263
TKTL2	transketolase like 2 [Source:HGNC Symbol;Acc:HGNC:25313]	1.1063786
TLE3	transducin like enhancer of split 3 [Source:HGNC Symbol;Acc:HGNC:11839]	-1.2865205
TLE4	transducin like enhancer of split 4 [Source:HGNC Symbol;Acc:HGNC:11840]	-1.21103525
TLN1	talin 1 [Source:HGNC Symbol;Acc:HGNC:11845]	1.2138771
TLR2	toll like receptor 2 [Source:HGNC Symbol;Acc:HGNC:11848]	-1.508518
TLR4	toll like receptor 4 [Source:HGNC Symbol;Acc:HGNC:11850]	1.7092305
TM4SF19	transmembrane 4 L six family member 19 [Source:HGNC Symbol;Acc:HGNC:25167]	-1.1430283
TM4SF20	transmembrane 4 L six family member 20 [Source:HGNC Symbol;Acc:HGNC:26230]	1.0508955

TM4SF5	transmembrane 4 L six family member 5 [Source:HGNC Symbol;Acc:HGNC:11857]	-1.131919
TM9SF4	transmembrane 9 superfamily member 4 [Source:HGNC Symbol;Acc:HGNC:30797]	1.1924593
TMC7	transmembrane channel like 7 [Source:HGNC Symbol;Acc:HGNC:23000]	1.2306852
TMCC2	transmembrane and coiled-coil domain family 2 [Source:HGNC Symbol;Acc:HGNC:24239]	-2.2500358
TMCC3	transmembrane and coiled-coil domain family 3 [Source:HGNC Symbol;Acc:HGNC:29199]	1.3422843
TMC02	transmembrane and coiled-coil domains 2 [Source:HGNC Symbol;Acc:HGNC:23312]	-1.2528173
TMC05A	transmembrane and coiled-coil domains 5A [Source:HGNC Symbol;Acc:HGNC:28558]	-1.1507288
TMED10	transmembrane p24 trafficking protein 10 [Source:HGNC Symbol;Acc:HGNC:16998]	1.3314298
TMED5	transmembrane p24 trafficking protein 5 [Source:HGNC Symbol;Acc:HGNC:24251]	1.5333451
TMED7-TICAM2	TMED7-TICAM2 readthrough [Source:HGNC Symbol;Acc:HGNC:33945]	-1.3315955
TMEFF2	transmembrane protein with EGF like and two follistatin like domains 2 [Source:HGNC Symbol;Acc:HGNC:11	1.0801088
TMEM100	transmembrane protein 100 [Source:HGNC Symbol;Acc:HGNC:25607]	1.1063317
TMEM106A	transmembrane protein 106A [Source:HGNC Symbol;Acc:HGNC:28288]	-1.2923992
TMEM106B	transmembrane protein 106B [Source:HGNC Symbol;Acc:HGNC:22407]	1.2412679
TMEM106C	transmembrane protein 106C [Source:HGNC Symbol;Acc:HGNC:28775]	1.2137396
TMEM11	transmembrane protein 11 [Source:HGNC Symbol;Acc:HGNC:16823]	1.1345352
TMEM111	ER membrane protein complex subunit 3	-1.1016078
TMEM120A	transmembrane protein 120A [Source:HGNC Symbol;Acc:HGNC:21697]	-1.3857841
TMEM121	transmembrane protein 121 [Source:HGNC Symbol;Acc:HGNC:20511]	1.663474
TMEM126B	transmembrane protein 126B [Source:HGNC Symbol;Acc:HGNC:30883]	1.186125
TMEM135	transmembrane protein 135 [Source:HGNC Symbol;Acc:HGNC:26167]	1.2945952
TMEM14A	transmembrane protein 14A [Source:HGNC Symbol;Acc:HGNC:21076]	1.132862
TMEM14B	transmembrane protein 14B [Source:HGNC Symbol;Acc:HGNC:21384]	-1.1426967
TMEM14C	transmembrane protein 14C [Source:HGNC Symbol;Acc:HGNC:20952]	-1.1689383
TMEM156	transmembrane protein 156 [Source:HGNC Symbol;Acc:HGNC:26260]	1.1164584
TMEM158	transmembrane protein 158 [gene/pseudogene] [Source:HGNC Symbol;Acc:HGNC:30293]	-1.2943968
TMEM167A	transmembrane protein 167A [Source:HGNC Symbol;Acc:HGNC:28330]	-1.1429507
TMEM167B	transmembrane protein 167B [Source:HGNC Symbol;Acc:HGNC:30187]	-1.4892629
TMEM169	transmembrane protein 169 [Source:HGNC Symbol;Acc:HGNC:25130]	1.0994143
TMEM171	transmembrane protein 171 [Source:HGNC Symbol;Acc:HGNC:27031]	-1.4058913
TMEM173	transmembrane protein 173 [Source:HGNC Symbol;Acc:HGNC:27962]	-1.2409935
TMEM177	transmembrane protein 177 [Source:HGNC Symbol;Acc:HGNC:28143]	1.3067323
TMEM185A	transmembrane protein 185A [Source:HGNC Symbol;Acc:HGNC:17125]	-1.3029523
TMEM185B	transmembrane protein 185B [Source:HGNC Symbol;Acc:HGNC:18896]	-1.1686187
TMEM189	transmembrane protein 189 [Source:HGNC Symbol;Acc:HGNC:16735]	1.2265846
TMEM191C	transmembrane protein 191C [Source:HGNC Symbol;Acc:HGNC:33601]	-1.099501
TMEM200B	transmembrane protein 200B [Source:HGNC Symbol;Acc:HGNC:33785]	-1.0794677
TMEM207	transmembrane protein 207 [Source:HGNC Symbol;Acc:HGNC:33705]	1.1245984
TMEM215	transmembrane protein 215 [Source:HGNC Symbol;Acc:HGNC:33816]	1.1655358
TMEM217	transmembrane protein 217 [Source:HGNC Symbol;Acc:HGNC:21238]	-4.6164846
TMEM22	solute carrier family 35 member G2	-1.3441243
TMEM223	transmembrane protein 223 [Source:HGNC Symbol;Acc:HGNC:28464]	1.2169384
TMEM225	transmembrane protein 225 [Source:HGNC Symbol;Acc:HGNC:32390]	1.1413114
TMEM229B	transmembrane protein 229B [Source:HGNC Symbol;Acc:HGNC:20130]	-1.1118013
TMEM237	transmembrane protein 237 [Source:HGNC Symbol;Acc:HGNC:14432]	1.1738029
TMEM25	transmembrane protein 25 [Source:HGNC Symbol;Acc:HGNC:25890]	1.2146704
TMEM35	transmembrane protein 35A	1.2645749
TMEM38B	transmembrane protein 38B [Source:HGNC Symbol;Acc:HGNC:25535]	-1.2232078
TMEM39B	transmembrane protein 39B [Source:HGNC Symbol;Acc:HGNC:25510]	1.2717906
TMEM40	transmembrane protein 40 [Source:HGNC Symbol;Acc:HGNC:25620]	-1.3055817
TMEM41A	transmembrane protein 41A [Source:HGNC Symbol;Acc:HGNC:30544]	-1.1097478
TMEM43	transmembrane protein 43 [Source:HGNC Symbol;Acc:HGNC:28472]	-1.1273928
TMEM44	transmembrane protein 44 [Source:HGNC Symbol;Acc:HGNC:25120]	-1.2716272
TMEM50B	transmembrane protein 50B [Source:HGNC Symbol;Acc:HGNC:1280]	1.2522484
TMEM55A	transmembrane protein 55A [Source:HGNC Symbol;Acc:HGNC:25452]	1.4456233
TMEM61	transmembrane protein 61 [Source:HGNC Symbol;Acc:HGNC:27296]	-1.0690391
TMEM64	transmembrane protein 64 [Source:HGNC Symbol;Acc:HGNC:25441]	1.2531525
TMEM65	transmembrane protein 65 [Source:HGNC Symbol;Acc:HGNC:25203]	1.3447341
TMEM67	transmembrane protein 67 [Source:HGNC Symbol;Acc:HGNC:28396]	1.1461643
TMEM68	transmembrane protein 68 [Source:HGNC Symbol;Acc:HGNC:26510]	1.2308097
TMEM69	transmembrane protein 69 [Source:HGNC Symbol;Acc:HGNC:28035]	-1.1867077
TMEM71	transmembrane protein 71 [Source:HGNC Symbol;Acc:HGNC:26572]	-1.3289893
TMEM86A	transmembrane protein 86A [Source:HGNC Symbol;Acc:HGNC:26890]	1.0948877
TMEM8C	transmembrane protein 8C [Source:HGNC Symbol;Acc:HGNC:33778]	-1.2153137
TMEM93	ER membrane protein complex subunit 6	1.1098008
TMIE	transmembrane inner ear [Source:HGNC Symbol;Acc:HGNC:30800]	-1.5493641
TMIGD1	transmembrane and immunoglobulin domain containing 1 [Source:HGNC Symbol;Acc:HGNC:32431]	1.0664574
TMOD1	tropomodulin 1 [Source:HGNC Symbol;Acc:HGNC:11871]	-1.2055215
TMPPPE	transmembrane protein with metallophosphoesterase domain [Source:HGNC Symbol;Acc:HGNC:33865]	-1.2083989
TMPRSS11E	transmembrane protease, serine 11E [Source:HGNC Symbol;Acc:HGNC:24465]	1.0765096
TMPRSS11F	transmembrane protease, serine 11F [Source:HGNC Symbol;Acc:HGNC:29994]	1.0951322
TMPRSS12	transmembrane protease, serine 12 [Source:HGNC Symbol;Acc:HGNC:28779]	1.1629393
TMPRSS15	transmembrane protease, serine 15 [Source:HGNC Symbol;Acc:HGNC:9490]	1.0570371
TMPRSS2	transmembrane protease, serine 2 [Source:HGNC Symbol;Acc:HGNC:11876]	-1.1248425
TMX3	thioredoxin related transmembrane protein 3 [Source:HGNC Symbol;Acc:HGNC:24718]	1.7814785
TNAP	alkaline phosphatase	-1.2356347
TNC	tenascin C [Source:HGNC Symbol;Acc:HGNC:5318]	-1.123085
TNF	tumor necrosis factor [Source:HGNC Symbol;Acc:HGNC:11892]	-1.5600228
TNFAIP1	TNF alpha induced protein 1 [Source:HGNC Symbol;Acc:HGNC:11894]	-3.285186
TNFAIP3	TNF alpha induced protein 3 [Source:HGNC Symbol;Acc:HGNC:11896]	-10.461266
TNFAIP8	TNF alpha induced protein 8 [Source:HGNC Symbol;Acc:HGNC:17260]	-1.6170085
TNFRSF10B	TNF receptor superfamily member 10b [Source:HGNC Symbol;Acc:HGNC:11905]	-2.246114
TNFRSF11A	TNF receptor superfamily member 11a [Source:HGNC Symbol;Acc:HGNC:11908]	-1.207558
TNFRSF12A	TNF receptor superfamily member 12A [Source:HGNC Symbol;Acc:HGNC:18152]	1.4738115
TNFRSF14	TNF receptor superfamily member 14 [Source:HGNC Symbol;Acc:HGNC:11912]	-1.350024
TNFRSF25	TNF receptor superfamily member 25 [Source:HGNC Symbol;Acc:HGNC:11910]	1.1280475

TNFRSF4	TNF receptor superfamily member 4 [Source:HGNC Symbol;Acc:HGNC:11918]	-2.6552737
TNFRSF6B	TNF receptor superfamily member 6b [Source:HGNC Symbol;Acc:HGNC:11921]	-1.38228975
TNFRSF9	TNF receptor superfamily member 9 [Source:HGNC Symbol;Acc:HGNC:11924]	-3.1794212
TNFSF10	tumor necrosis factor superfamily member 10 [Source:HGNC Symbol;Acc:HGNC:11925]	-2.179855
TNFSF12	tumor necrosis factor superfamily member 12 [Source:HGNC Symbol;Acc:HGNC:11927]	1.0728955
TNFSF15	tumor necrosis factor superfamily member 15 [Source:HGNC Symbol;Acc:HGNC:11931]	-1.6641451
TNFSF18	tumor necrosis factor superfamily member 18 [Source:HGNC Symbol;Acc:HGNC:11932]	-1.3544971
TNFSF4	tumor necrosis factor superfamily member 4 [Source:HGNC Symbol;Acc:HGNC:11934]	-1.2406721
TNFSF9	tumor necrosis factor superfamily member 9 [Source:HGNC Symbol;Acc:HGNC:11939]	-1.3042388
TNIK	TRAF2 and NCK interacting kinase [Source:HGNC Symbol;Acc:HGNC:30765]	1.2649497
TNIP1	TNFAIP3 interacting protein 1 [Source:HGNC Symbol;Acc:HGNC:16903]	-4.809692
TNIP2	TNFAIP3 interacting protein 2 [Source:HGNC Symbol;Acc:HGNC:19118]	-1.8379979
TNKS1BP1	tankyrase 1 binding protein 1 [Source:HGNC Symbol;Acc:HGNC:19081]	-1.4680911
TNNI3K	TNNI3 interacting kinase [Source:HGNC Symbol;Acc:HGNC:19661]	1.1072202
TNP02	transportin 2 [Source:HGNC Symbol;Acc:HGNC:19988]	-1.2568765
TNRC6C	trinucleotide repeat containing 6C [Source:HGNC Symbol;Acc:HGNC:29318]	-1.3360386
TNS1	tensin 1 [Source:HGNC Symbol;Acc:HGNC:11973]	-1.1917463
TNS3	tensin 3 [Source:HGNC Symbol;Acc:HGNC:21616]	-1.4141543
TNXB	tenascin XB [Source:HGNC Symbol;Acc:HGNC:11976]	1.2142673
TOB2	transducer of ERBB2, 2 pseudogene [Source:HGNC Symbol;Acc:HGNC:11980]	-1.301671
TOB2P1	transducer of ERBB2, 2 pseudogene 1 [Source:HGNC Symbol;Acc:HGNC:13986]	-1.1989537
TOMM20	translocase of outer mitochondrial membrane 20 [Source:HGNC Symbol;Acc:HGNC:20947]	1.2529776
TOMM22	translocase of outer mitochondrial membrane 22 [Source:HGNC Symbol;Acc:HGNC:18002]	1.1044149
TOMM34	translocase of outer mitochondrial membrane 34 [Source:HGNC Symbol;Acc:HGNC:15746]	-1.1401911
TOMM40	translocase of outer mitochondrial membrane 40 [Source:HGNC Symbol;Acc:HGNC:18001]	1.51621095
TOMM6	translocase of outer mitochondrial membrane 6 [Source:HGNC Symbol;Acc:HGNC:34528]	1.1691308
TOMM7	translocase of outer mitochondrial membrane 7 [Source:HGNC Symbol;Acc:HGNC:21648]	1.1434207
TONSL	tonsoku-like, DNA repair protein [Source:HGNC Symbol;Acc:HGNC:7801]	1.2066493
TOP1P2	topoisomerase (DNA) I pseudogene 2	1.4177773
TOPBP1	topoisomerase (DNA) II binding protein 1 [Source:HGNC Symbol;Acc:HGNC:17008]	1.4350045
TOR1AIP1	torsin 1A interacting protein 1 [Source:HGNC Symbol;Acc:HGNC:29456]	1.1124265
TOR1AIP2	torsin 1A interacting protein 2 [Source:HGNC Symbol;Acc:HGNC:24055]	1.0945134
TOR1B	torsin family 1 member B [Source:HGNC Symbol;Acc:HGNC:11995]	-1.2010314
TOR3A	torsin family 3 member A [Source:HGNC Symbol;Acc:HGNC:11997]	1.2394414
TOX2	TOX high mobility group box family member 2 [Source:HGNC Symbol;Acc:HGNC:16095]	1.3213398
TP53	tumor protein p53 [Source:HGNC Symbol;Acc:HGNC:11998]	-1.27585
TP53BP2	tumor protein p53 binding protein 2 [Source:HGNC Symbol;Acc:HGNC:12000]	-1.2665701
TP53INP1	tumor protein p53 inducible nuclear protein 1 [Source:HGNC Symbol;Acc:HGNC:18022]	1.2099884
TP53INP2	tumor protein p53 inducible nuclear protein 2 [Source:HGNC Symbol;Acc:HGNC:16104]	-1.1525676
TP73-AS1	TP73 antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:29052]	1.1244515
TPBG	trophoblast glycoprotein [Source:HGNC Symbol;Acc:HGNC:12004]	-1.3818378
TPD52	tumor protein D52 [Source:HGNC Symbol;Acc:HGNC:12005]	1.0762159
TPH1	tryptophan hydroxylase 1 [Source:HGNC Symbol;Acc:HGNC:12008]	1.1287633
TPH2	tryptophan hydroxylase 2 [Source:HGNC Symbol;Acc:HGNC:20692]	1.0575708
TP1P2	triosephosphate isomerase 1 pseudogene 2 [Source:HGNC Symbol;Acc:HGNC:38069]	-1.1306612
TPM3	tropomyosin 3 [Source:HGNC Symbol;Acc:HGNC:12012]	-1.2672457
TPO	thyroid peroxidase [Source:HGNC Symbol;Acc:HGNC:12015]	-1.1701678
TPRG1	tumor protein p63 regulated 1 [Source:HGNC Symbol;Acc:HGNC:24759]	-1.056538
TPRK8	TP53RK binding protein [Source:HGNC Symbol;Acc:HGNC:24259]	1.1895676
TPSD1	tryptase delta 1 [Source:HGNC Symbol;Acc:HGNC:14118]	1.0654223
TPST1	tyrosylprotein sulfotransferase 1 [Source:HGNC Symbol;Acc:HGNC:12020]	-1.2655418
TPTE2P1	ane phosphoinositide 3-phosphatase and tensin homolog 2 pseudogene 1 [Source:HGNC Symbol;Acc:H	1.0764427
TRAF1	TNF receptor associated factor 1 [Source:HGNC Symbol;Acc:HGNC:12031]	-14.809285
TRAF2	TNF receptor associated factor 2 [Source:HGNC Symbol;Acc:HGNC:12032]	-1.43029035
TRAF3	TNF receptor associated factor 3 [Source:HGNC Symbol;Acc:HGNC:12033]	-2.0109203
TRAF3IP2-AS1	TRAF3IP2 antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:40005]	-1.1228024
TRAF6	TNF receptor associated factor 6 [Source:HGNC Symbol;Acc:HGNC:12036]	-1.3785845
TRAF7	TNF receptor associated factor 7 [Source:HGNC Symbol;Acc:HGNC:20456]	1.1727204
TRAFD1	TRAFF-type zinc finger domain containing 1 [Source:HGNC Symbol;Acc:HGNC:24808]	-1.1418102
TRAK1	trafficking kinesin protein 1 [Source:HGNC Symbol;Acc:HGNC:29947]	-1.163809
TRAK2	trafficking kinesin protein 2 [Source:HGNC Symbol;Acc:HGNC:13206]	1.3494784
TRAM2	translocation associated membrane protein 2 [Source:HGNC Symbol;Acc:HGNC:16855]	1.5059513
TRAPPC10	trafficking protein particle complex 10 [Source:HGNC Symbol;Acc:HGNC:11868]	-1.3068522
TRAPPC2P1	trafficking protein particle complex 2B	-1.1783549
TRAPPC6B	trafficking protein particle complex 6B [Source:HGNC Symbol;Acc:HGNC:23066]	1.1573316
TREM1	triggering receptor expressed on myeloid cells 1 [Source:HGNC Symbol;Acc:HGNC:17760]	1.2303058
TRERF1	transcriptional regulating factor 1 [Source:HGNC Symbol;Acc:HGNC:18273]	1.35269
TRIB1	tribbles pseudokinase 1 [Source:HGNC Symbol;Acc:HGNC:16891]	-2.284549
TRIL	TLR4 interactor with leucine rich repeats [Source:HGNC Symbol;Acc:HGNC:22200]	1.5817469
TRIM10	tripartite motif containing 10 [Source:HGNC Symbol;Acc:HGNC:10072]	-1.0960135
TRIM11	tripartite motif containing 11 [Source:HGNC Symbol;Acc:HGNC:16281]	-1.2189177
TRIM13	tripartite motif containing 13 [Source:HGNC Symbol;Acc:HGNC:9976]	1.27498165
TRIM14	tripartite motif containing 14 [Source:HGNC Symbol;Acc:HGNC:16283]	-1.2784243
TRIM16L	tripartite motif containing 16-like [Source:HGNC Symbol;Acc:HGNC:32670]	-2.223522
TRIM21	tripartite motif containing 21 [Source:HGNC Symbol;Acc:HGNC:11312]	-1.5831492
TRIM25	tripartite motif containing 25 [Source:HGNC Symbol;Acc:HGNC:12932]	-1.4707078
TRIM27	tripartite motif containing 27 [Source:HGNC Symbol;Acc:HGNC:9975]	-1.1455419
TRIM32	tripartite motif containing 32 [Source:HGNC Symbol;Acc:HGNC:16380]	-1.142216
TRIM35	tripartite motif containing 35 [Source:HGNC Symbol;Acc:HGNC:16285]	-1.3243946
TRIM36	tripartite motif containing 36 [Source:HGNC Symbol;Acc:HGNC:16280]	1.0607179
TRIM39	tripartite motif containing 39 [Source:HGNC Symbol;Acc:HGNC:10065]	-1.1761115
TRIM42	tripartite motif containing 42 [Source:HGNC Symbol;Acc:HGNC:19014]	-1.0968263
TRIM45	tripartite motif containing 45 [Source:HGNC Symbol;Acc:HGNC:19018]	1.335756
TRIM47	tripartite motif containing 47 [Source:HGNC Symbol;Acc:HGNC:19020]	-2.7629037
TRIM49	tripartite motif containing 49 [Source:HGNC Symbol;Acc:HGNC:13431]	-1.1847588
TRIM56	tripartite motif containing 56 [Source:HGNC Symbol;Acc:HGNC:19028]	-1.7186335

TRIM59	tripartite motif containing 59 [Source:HGNC Symbol;Acc:HGNC:30834]	1.3179337
TRIM6	tripartite motif containing 6 [Source:HGNC Symbol;Acc:HGNC:16277]	1.2045777
TRIM63	tripartite motif containing 63 [Source:HGNC Symbol;Acc:HGNC:16007]	1.0726925
TRIM66	tripartite motif containing 66 [Source:HGNC Symbol;Acc:HGNC:29005]	1.1645573
TRIO	trio Rho guanine nucleotide exchange factor [Source:HGNC Symbol;Acc:HGNC:12303]	-1.3608733
TRIOBP	TRIO and F-actin binding protein [Source:HGNC Symbol;Acc:HGNC:17009]	-1.3349626
TRIP10	thyroid hormone receptor interactor 10 [Source:HGNC Symbol;Acc:HGNC:12304]	-1.4320321
TRMT12	tRNA methyltransferase 11-2 homolog (S. cerevisiae) [Source:HGNC Symbol;Acc:HGNC:26940]	-1.1423287
TRMT5	tRNA methyltransferase 5 [Source:HGNC Symbol;Acc:HGNC:23141]	1.1948779
TRNT1	tRNA nucleotidyl transferase 1 [Source:HGNC Symbol;Acc:HGNC:17341]	-1.0948597
TRO	trophinin [Source:HGNC Symbol;Acc:HGNC:12326]	-1.1236232
TRPC6	transient receptor potential cation channel subfamily C member 6 [Source:HGNC Symbol;Acc:HGNC:1233]	-1.3125032
TRPM2	transient receptor potential cation channel subfamily M member 2 [Source:HGNC Symbol;Acc:HGNC:123]	1.1360066
TRPM8	transient receptor potential cation channel subfamily M member 8 [Source:HGNC Symbol;Acc:HGNC:1796]	-1.104008
TRPV6	transient receptor potential cation channel subfamily V member 6 [Source:HGNC Symbol;Acc:HGNC:1400]	-1.1317482
TRUB1	TruB pseudouridine synthase family member 1 [Source:HGNC Symbol;Acc:HGNC:16060]	1.4186193
TSC22D4	TSC22 domain family member 4 [Source:HGNC Symbol;Acc:HGNC:21696]	1.2351038
TSFM	Ts translation elongation factor, mitochondrial [Source:HGNC Symbol;Acc:HGNC:12367]	1.0869668
TSG101	tumor susceptibility 101 [Source:HGNC Symbol;Acc:HGNC:15971]	-1.2770367
TSGA10	testis specific 10 [Source:HGNC Symbol;Acc:HGNC:14927]	1.0654902
TSHZ1	teashirt zinc finger homeobox 1 [Source:HGNC Symbol;Acc:HGNC:10669]	1.3527504
TSKS	testis specific serine kinase substrate [Source:HGNC Symbol;Acc:HGNC:30719]	1.0732895
TSKU	tsukushi, small leucine rich proteoglycan [Source:HGNC Symbol;Acc:HGNC:28850]	-1.186316
TSL	testis-expressed, seven-twelve, leukemia	-1.1505249
TSLP	thymic stromal lymphopoietin [Source:HGNC Symbol;Acc:HGNC:30743]	1.1000466
TSNAX	translin associated factor X [Source:HGNC Symbol;Acc:HGNC:12380]	1.2380335
TSPAN1	tetraspanin 1 [Source:HGNC Symbol;Acc:HGNC:20657]	-1.1788192
TSPAN12	tetraspanin 12 [Source:HGNC Symbol;Acc:HGNC:21641]	1.5059534
TSPAN14	tetraspanin 14 [Source:HGNC Symbol;Acc:HGNC:23303]	1.358315233
TSPAN18	tetraspanin 18 [Source:HGNC Symbol;Acc:HGNC:20660]	-1.1542375
TSPYL2	TSPY like 2 [Source:HGNC Symbol;Acc:HGNC:24358]	1.335354
TSPYL5	TSPY like 5 [Source:HGNC Symbol;Acc:HGNC:29367]	-1.1418211
TSPYL6	TSPY like 6 [Source:HGNC Symbol;Acc:HGNC:14521]	1.0548588
TTC24	tetratricopeptide repeat domain 24 [Source:HGNC Symbol;Acc:HGNC:32348]	-1.1401285
TTC28	tetratricopeptide repeat domain 28 [Source:HGNC Symbol;Acc:HGNC:29179]	-1.0991809
TTC30B	tetratricopeptide repeat domain 30B [Source:HGNC Symbol;Acc:HGNC:26425]	1.099937
TTC34	tetratricopeptide repeat domain 34 [Source:HGNC Symbol;Acc:HGNC:34297]	-1.0974952
TTC39A	tetratricopeptide repeat domain 39A [Source:HGNC Symbol;Acc:HGNC:18657]	-1.4693576
TTC39C	tetratricopeptide repeat domain 39C [Source:HGNC Symbol;Acc:HGNC:26595]	-1.23741475
TTC5	tetratricopeptide repeat domain 5 [Source:HGNC Symbol;Acc:HGNC:19274]	1.3890661
TTC9C	tetratricopeptide repeat domain 9C [Source:HGNC Symbol;Acc:HGNC:28432]	-1.1699338
TTL	tubulin tyrosine ligase [Source:HGNC Symbol;Acc:HGNC:21586]	-1.1386338
TTLL4	tubulin tyrosine ligase 4 [Source:HGNC Symbol;Acc:HGNC:28976]	-1.2866039
TTLL9	tubulin tyrosine ligase 9 [Source:HGNC Symbol;Acc:HGNC:16118]	-1.0868782
TTTY13	testis-specific transcript, Y-linked 13 (non-protein coding) [Source:HGNC Symbol;Acc:HGNC:18494]	-1.0855936
TTTY14	testis-specific transcript, Y-linked 14 (non-protein coding) [Source:HGNC Symbol;Acc:HGNC:18495]	-1.3316395
TTTY3	testis-specific transcript, Y-linked 3 (non-protein coding) [Source:HGNC Symbol;Acc:HGNC:16480]	1.1542276
TTTY4C	testis-specific transcript, Y-linked 4C (non-protein coding) [Source:HGNC Symbol;Acc:HGNC:31892]	1.0599645
TUB	tubby bipartite transcription factor [Source:HGNC Symbol;Acc:HGNC:12406]	1.1466547
TUBA4A	tubulin alpha 4a [Source:HGNC Symbol;Acc:HGNC:12407]	1.180965
TUBA8	tubulin alpha 8 [Source:HGNC Symbol;Acc:HGNC:12410]	1.3726145
TUBAL3	tubulin alpha like 3 [Source:HGNC Symbol;Acc:HGNC:23534]	1.0916649
TUBB2A	tubulin beta 2A class III [Source:HGNC Symbol;Acc:HGNC:12412]	-1.3976978
TUBB2B	tubulin beta 2B class IIb [Source:HGNC Symbol;Acc:HGNC:30829]	-2.0936594
TUBB8	tubulin beta 8 class VIII [Source:HGNC Symbol;Acc:HGNC:20773]	-1.2128648
TUBBP5	tubulin beta pseudogene 5 [Source:HGNC Symbol;Acc:HGNC:23674]	-1.1514122
TUBG2	tubulin gamma 2 [Source:HGNC Symbol;Acc:HGNC:12419]	-1.1193223
TUBGP3	tubulin gamma complex associated protein 3 [Source:HGNC Symbol;Acc:HGNC:18598]	1.0931134
TUBGP5	tubulin gamma complex associated protein 5 [Source:HGNC Symbol;Acc:HGNC:18600]	1.2224793
TULP2	tubby like protein 2 [Source:HGNC Symbol;Acc:HGNC:12424]	1.1218727
TWIST2	twist family DHLH transcription factor 2 [Source:HGNC Symbol;Acc:HGNC:20670]	-1.421087
TWISTNB	TWIST neighbor [Source:HGNC Symbol;Acc:HGNC:18027]	1.4070615
TWSG1	twisted gastrulation BMP signaling modulator 1 [Source:HGNC Symbol;Acc:HGNC:12429]	1.4226744
TXK	TXK tyrosine kinase [Source:HGNC Symbol;Acc:HGNC:12434]	1.2076851
TXLNB	taxilin beta [Source:HGNC Symbol;Acc:HGNC:21617]	1.0959263
TXNDC15	thioredoxin domain containing 15 [Source:HGNC Symbol;Acc:HGNC:20652]	-1.2350338
TXNDC9	thioredoxin domain containing 9 [Source:HGNC Symbol;Acc:HGNC:24110]	1.6127372
TXNL4A	thioredoxin like 4A [Source:HGNC Symbol;Acc:HGNC:30551]	1.1648793
TYK2	tyrosine kinase 2 [Source:HGNC Symbol;Acc:HGNC:12440]	-1.2067227
TYNSD1	trypsin domain containing 1 [Source:HGNC Symbol;Acc:HGNC:28531]	1.2387348
UBA2	ubiquitin like modifier activating enzyme 2 [Source:HGNC Symbol;Acc:HGNC:30661]	1.27021895
UBA7	ubiquitin like modifier activating enzyme 7 [Source:HGNC Symbol;Acc:HGNC:12471]	-1.2822809
UBAC1	UBA domain containing 1 [Source:HGNC Symbol;Acc:HGNC:30221]	-1.212058
UBAP1	ubiquitin associated protein 1 [Source:HGNC Symbol;Acc:HGNC:12461]	-1.1657261
UBAP2	ubiquitin associated protein 2 [Source:HGNC Symbol;Acc:HGNC:14185]	-1.0620881
UBAP2L	ubiquitin associated protein 2 like [Source:HGNC Symbol;Acc:HGNC:29877]	-1.17111275
UBD	ubiquitin D [Source:HGNC Symbol;Acc:HGNC:18795]	-13.445234
UBE2A	ubiquitin conjugating enzyme E2 A [Source:HGNC Symbol;Acc:HGNC:12472]	-1.1870227
UBE2CBP	ubiquitin conjugating enzyme E3D	-1.0794846
UBE2D2	ubiquitin conjugating enzyme E2 D2 [Source:HGNC Symbol;Acc:HGNC:12475]	-1.1681869
UBE2D4	ubiquitin conjugating enzyme E2 D4 (putative) [Source:HGNC Symbol;Acc:HGNC:21647]	-1.1512454
UBE2E2	ubiquitin conjugating enzyme E2 E2 [Source:HGNC Symbol;Acc:HGNC:12478]	-1.2058421
UBE2H	ubiquitin conjugating enzyme E2 H [Source:HGNC Symbol;Acc:HGNC:12484]	-1.2265989
UBE2J2	ubiquitin conjugating enzyme E2 J2 [Source:HGNC Symbol;Acc:HGNC:19268]	-1.092073
UBE2L6	ubiquitin conjugating enzyme E2 L6 [Source:HGNC Symbol;Acc:HGNC:12490]	-1.2425293
UBE2O	ubiquitin conjugating enzyme E2 O [Source:HGNC Symbol;Acc:HGNC:29554]	-1.2188761

UBE2Q2	ubiquitin conjugating enzyme E2 Q [Source:HGNC Symbol;Acc:HGNC:19248]	1.301491
UBE2S	ubiquitin conjugating enzyme E2 S [Source:HGNC Symbol;Acc:HGNC:17895]	1.1708115
UBE2T	ubiquitin conjugating enzyme E2 T [Source:HGNC Symbol;Acc:HGNC:25009]	1.3093588
UBE2Z	ubiquitin conjugating enzyme E2 Z [Source:HGNC Symbol;Acc:HGNC:25847]	-1.199173
UBE3B	ubiquitin protein ligase E3B [Source:HGNC Symbol;Acc:HGNC:13478]	-1.12858895
UBFD1	ubiquitin family domain containing 1 [Source:HGNC Symbol;Acc:HGNC:30565]	-1.2599049
UBQLN2	ubiquilin 2 [Source:HGNC Symbol;Acc:HGNC:12509]	-1.3322608
UBQLN3	ubiquilin 3 [Source:HGNC Symbol;Acc:HGNC:12510]	-1.1765635
UBR4	ubiquitin protein ligase E3 component n-recognition 4 [Source:HGNC Symbol;Acc:HGNC:30313]	-1.2233404
UBR7	ubiquitin protein ligase E3 component n-recognition 7 (putative) [Source:HGNC Symbol;Acc:HGNC:20344]	1.1899208
UBTF	upstream binding transcription factor, RNA polymerase I [Source:HGNC Symbol;Acc:HGNC:12511]	1.3408439
UBXN8	UBX domain protein 8 [Source:HGNC Symbol;Acc:HGNC:30307]	1.0647758
UCHL5	ubiquitin C-terminal hydrolase L5 [Source:HGNC Symbol;Acc:HGNC:19678]	1.34053575
UCMA	upper zone of growth plate and cartilage matrix associated [Source:HGNC Symbol;Acc:HGNC:25205]	-1.0508285
UDF1L	ubiquitin fusion degradation 1 like (yeast) [Source:HGNC Symbol;Acc:HGNC:12520]	-1.1013578
UGGT2	UDP-glucose glycoprotein glucosyltransferase 2 [Source:HGNC Symbol;Acc:HGNC:15664]	1.309824
UHRF1BP1	UHRF1 binding protein 1 [Source:HGNC Symbol;Acc:HGNC:21216]	-1.2545043
ULBP2	UL16 binding protein 2 [Source:HGNC Symbol;Acc:HGNC:14894]	1.1818653
ULK4	unc-51 like kinase 4 [Source:HGNC Symbol;Acc:HGNC:15784]	-1.0974432
UMODL1	uromodulin like 1 [Source:HGNC Symbol;Acc:HGNC:12560]	-1.227653333
UNC13B	unc-13 homolog B [Source:HGNC Symbol;Acc:HGNC:12566]	-1.1886598
UNCSD	unc-5 netrin receptor D [Source:HGNC Symbol;Acc:HGNC:18634]	1.0867689
UNG	uracil DNA glycosylase [Source:HGNC Symbol;Acc:HGNC:12572]	1.2404886
UNKL	unkempt family like zinc finger [Source:HGNC Symbol;Acc:HGNC:14184]	-1.2342783
UPB1	beta-ureidopropionase 1 [Source:HGNC Symbol;Acc:HGNC:16297]	-1.0942532
UPK3B	uroplakin 3B [Source:HGNC Symbol;Acc:HGNC:21444]	-1.1277776
UPP1	uridine phosphorylase 1 [Source:HGNC Symbol;Acc:HGNC:12576]	-1.4331055
UPRT	uracil phosphoribosyltransferase homolog [Source:HGNC Symbol;Acc:HGNC:28334]	1.13826065
UQCQ	ubiquinol-cytochrome c reductase complex assembly factor 1	-1.064101
URB1	URB1 ribosome biogenesis 1 homolog (S. cerevisiae) [Source:HGNC Symbol;Acc:HGNC:17344]	-1.146531
URGCP	upregulator of cell proliferation [Source:HGNC Symbol;Acc:HGNC:30890]	-1.2461512
USH2A	usherin [Source:HGNC Symbol;Acc:HGNC:12601]	1.1208235
USP11	ubiquitin specific peptidase 11 [Source:HGNC Symbol;Acc:HGNC:12609]	-1.1985438
USP17	ubiquitin specific peptidase 17-like family member 9, pseudogene	1.0650381
USP31	ubiquitin specific peptidase 31 [Source:HGNC Symbol;Acc:HGNC:20060]	-1.5834881
USP33	ubiquitin specific peptidase 33 [Source:HGNC Symbol;Acc:HGNC:20059]	1.1261317
USP36	ubiquitin specific peptidase 36 [Source:HGNC Symbol;Acc:HGNC:20062]	-1.4490665
USP38	ubiquitin specific peptidase 38 [Source:HGNC Symbol;Acc:HGNC:20067]	1.2359266
USP45	ubiquitin specific peptidase 45 [Source:HGNC Symbol;Acc:HGNC:20080]	1.1660931
USP49	ubiquitin specific peptidase 49 [Source:HGNC Symbol;Acc:HGNC:20078]	-1.1702685
USP5	ubiquitin specific peptidase 5 [Source:HGNC Symbol;Acc:HGNC:12628]	1.2452204
USP51	ubiquitin specific peptidase 51 [Source:HGNC Symbol;Acc:HGNC:23086]	1.1184583
USP54	ubiquitin specific peptidase 54 [Source:HGNC Symbol;Acc:HGNC:23513]	-1.1127272
UVRAG	UV radiation resistance associated [Source:HGNC Symbol;Acc:HGNC:12640]	-1.4342183
VAC14	Vac14, PIKFYVE complex component [Source:HGNC Symbol;Acc:HGNC:25507]	-1.1425991
VAMP7	vesicle associated membrane protein 7 [Source:HGNC Symbol;Acc:HGNC:11486]	1.380774
VARS2	valyl-tRNA synthetase 2, mitochondrial [Source:HGNC Symbol;Acc:HGNC:21642]	1.209421
VASH1	vasohibin 1 [Source:HGNC Symbol;Acc:HGNC:19964]	1.2086797
VAT1	vesicle amine transport 1 [Source:HGNC Symbol;Acc:HGNC:16919]	1.48712755
VAV2	vav guanine nucleotide exchange factor 2 [Source:HGNC Symbol;Acc:HGNC:12658]	-1.5332677
VAX2	ventral anterior homeobox 2 [Source:HGNC Symbol;Acc:HGNC:12661]	-1.266751
VCAM1	vascular cell adhesion molecule 1 [Source:HGNC Symbol;Acc:HGNC:12663]	-10.085852
VCY	variable charge, Y-linked [Source:HGNC Symbol;Acc:HGNC:12668]	-1.1203098
VDAC2	voltage dependent anion channel 2 [Source:HGNC Symbol;Acc:HGNC:12672]	-1.2801745
VDR	vitamin D (1,25-dihydroxyvitamin D3) receptor [Source:HGNC Symbol;Acc:HGNC:12679]	-1.1874926
VEGFA	vascular endothelial growth factor A [Source:HGNC Symbol;Acc:HGNC:12680]	-1.39839035
VGLL4	vestigial like family member 4 [Source:HGNC Symbol;Acc:HGNC:28966]	-1.4039645
VIT	vitrin [Source:HGNC Symbol;Acc:HGNC:12697]	-1.2075036
VMA21	VMA21 vacuolar H+-ATPase homolog (S. cerevisiae) [Source:HGNC Symbol;Acc:HGNC:22082]	1.4221191
VNN2	vanin 2 [Source:HGNC Symbol;Acc:HGNC:12706]	-1.1859345
VPRBP	DDB1 and CUL4 associated factor 1	-1.1331074
VPS24	charged multivesicular body protein 3	1.1542709
VPS26A	VPS26, retromer complex component A [Source:HGNC Symbol;Acc:HGNC:12711]	1.2515216
VPS35	VPS35, retromer complex component [Source:HGNC Symbol;Acc:HGNC:13487]	1.1885247
VPS37A	VPS37A, ESCRT-I subunit [Source:HGNC Symbol;Acc:HGNC:24928]	-1.2342338
VPS37C	VPS37C, ESCRT-I subunit [Source:HGNC Symbol;Acc:HGNC:26097]	-1.3744162
VPS37D	VPS37D, ESCRT-I subunit [Source:HGNC Symbol;Acc:HGNC:18287]	1.467897
VPS8	VPS8, CORVET complex subunit [Source:HGNC Symbol;Acc:HGNC:29122]	1.0975047
VRTN	vertebrae development associated [Source:HGNC Symbol;Acc:HGNC:20223]	1.0938108
VSG10	V-set and immunoglobulin domain containing 10 [Source:HGNC Symbol;Acc:HGNC:26078]	1.2436857
VSTM1	V-set and transmembrane domain containing 1 [Source:HGNC Symbol;Acc:HGNC:29455]	-2.0998054
VSTM2A	V-set and transmembrane domain containing 2A [Source:HGNC Symbol;Acc:HGNC:28499]	1.0857421
VT11A	vesicle transport through interaction with t-SNAREs 1A [Source:HGNC Symbol;Acc:HGNC:17792]	-1.1884581
WARS	tryptophanyl-tRNA synthetase [Source:HGNC Symbol;Acc:HGNC:12729]	-1.3721117
WASF2	WAS protein family member 2 [Source:HGNC Symbol;Acc:HGNC:12733]	-1.462956
WASH1	WAS protein family homolog 1 [Source:HGNC Symbol;Acc:HGNC:24361]	1.1659089
WDFY4	WDFY family member 4 [Source:HGNC Symbol;Acc:HGNC:29323]	1.26858025
WDHD1	WD repeat and HMG-box DNA binding protein 1 [Source:HGNC Symbol;Acc:HGNC:23170]	1.5514395
WDR1	WD repeat domain 1 [Source:HGNC Symbol;Acc:HGNC:12754]	-1.2626114
WDR17	WD repeat domain 17 [Source:HGNC Symbol;Acc:HGNC:16661]	1.0526505
WDR19	WD repeat domain 19 [Source:HGNC Symbol;Acc:HGNC:18340]	1.1199018
WDR33	WD repeat domain 33 [Source:HGNC Symbol;Acc:HGNC:25651]	-1.164613
WDR43	WD repeat domain 43 [Source:HGNC Symbol;Acc:HGNC:28945]	1.3135468
WDR45	WD repeat domain 45 [Source:HGNC Symbol;Acc:HGNC:28912]	-1.1269876
WDR45L	WD repeat domain 45B	-1.2680389
WDR48	WD repeat domain 48 [Source:HGNC Symbol;Acc:HGNC:30914]	-1.2804276

WDR52	cilia and flagella associated protein 44	1.0673912
WDR55	WD repeat domain 55 [Source:HGNC Symbol;Acc:HGNC:25971]	-1.1077034
WDR59	WD repeat domain 59 [Source:HGNC Symbol;Acc:HGNC:25706]	-1.1465641
WDR72	WD repeat domain 72 [Source:HGNC Symbol;Acc:HGNC:26790]	1.1288078
WDR82	WD repeat domain 82 [Source:HGNC Symbol;Acc:HGNC:28826]	-1.2486362
WDR83	WD repeat domain 83 [Source:HGNC Symbol;Acc:HGNC:32672]	-1.1777533
WDR86	WD repeat domain 86 [Source:HGNC Symbol;Acc:HGNC:28020]	1.0679293
WDR89	WD repeat domain 89 [Source:HGNC Symbol;Acc:HGNC:20489]	1.1597314
WEE2	WEE1 homolog 2 (S. pombe) [Source:HGNC Symbol;Acc:HGNC:19684]	-1.0791117
WFDC2	WAP four-disulfide core domain 2 [Source:HGNC Symbol;Acc:HGNC:15939]	-1.1406696
WFDC8	WAP four-disulfide core domain 8 [Source:HGNC Symbol;Acc:HGNC:16163]	-1.1687293
WHAMM	:ein homolog associated with actin, golgi membranes and microtubules [Source:HGNC Symbol;Acc:HGNC:12539296]	
WHSC1L1	Wolf-Hirschhorn syndrome candidate 1-like 1 [Source:HGNC Symbol;Acc:HGNC:12767]	1.1519984
WIPF1	WAS/WASL interacting protein family member 1 [Source:HGNC Symbol;Acc:HGNC:12736]	1.1068803
WIP12	WD repeat domain, phosphoinositide interacting 2 [Source:HGNC Symbol;Acc:HGNC:32225]	-1.163766
WISP2	WNT1 inducible signaling pathway protein 2 [Source:HGNC Symbol;Acc:HGNC:12770]	1.0572568
WISP3	WNT1 inducible signaling pathway protein 3 [Source:HGNC Symbol;Acc:HGNC:12771]	-1.0808573
WLS	wntless Wnt ligand secretion mediator [Source:HGNC Symbol;Acc:HGNC:30238]	-1.1506457
WNT1	Wnt family member 1 [Source:HGNC Symbol;Acc:HGNC:12774]	1.09567875
WNT3A	Wnt family member 3A [Source:HGNC Symbol;Acc:HGNC:15983]	-1.0637966
WNT5A	Wnt family member 5A [Source:HGNC Symbol;Acc:HGNC:12784]	-1.6691802
WTAP	Wilms tumor 1 associated protein [Source:HGNC Symbol;Acc:HGNC:16846]	-1.129792
WTIP	Wilms tumor 1 interacting protein [Source:HGNC Symbol;Acc:HGNC:20964]	1.2016112
WWC1	WW and C2 domain containing 1 [Source:HGNC Symbol;Acc:HGNC:29435]	-2.5356345
WWP2	WW domain containing E3 ubiquitin protein ligase 2 [Source:HGNC Symbol;Acc:HGNC:16804]	-1.4202142
XAF1	XIAO associated factor 1 [Source:HGNC Symbol;Acc:HGNC:30932]	-1.1740229
XAGE5	X antigen family member 5 [Source:HGNC Symbol;Acc:HGNC:30930]	1.069012
XBP1	X-box binding protein 1 [Source:HGNC Symbol;Acc:HGNC:12801]	-1.1260592
XCR1	X-C motif chemokine receptor 1 [Source:HGNC Symbol;Acc:HGNC:16251]	-1.2454274
XKR8	XK related 8 [Source:HGNC Symbol;Acc:HGNC:25508]	-1.1272233
XPC	PC complex subunit, DNA damage recognition and repair factor [Source:HGNC Symbol;Acc:HGNC:12816]	-1.2646662
XPNPEP1	X-prolyl aminopeptidase 1 [Source:HGNC Symbol;Acc:HGNC:12822]	-1.1657184
XPO5	exportin 5 [Source:HGNC Symbol;Acc:HGNC:17675]	-1.16941175
XYLT1	xylosyltransferase 1 [Source:HGNC Symbol;Acc:HGNC:15516]	1.1594994
YARS2	tyrosyl-tRNA synthetase 2 [Source:HGNC Symbol;Acc:HGNC:24249]	-1.1056728
YBX2	Y-box binding protein 2 [Source:HGNC Symbol;Acc:HGNC:17948]	-1.1731076
YIPF5	Yip1 domain family member 5 [Source:HGNC Symbol;Acc:HGNC:24877]	1.2504514
YIPF6	Yip1 domain family member 6 [Source:HGNC Symbol;Acc:HGNC:28304]	1.12574
YLPM1	YLP motif containing 1 [Source:HGNC Symbol;Acc:HGNC:17798]	1.209155
YPEL1	yippee like 1 [Source:HGNC Symbol;Acc:HGNC:12845]	-1.205815
YPEL2	yippee like 2 [Source:HGNC Symbol;Acc:HGNC:18326]	-1.8998111
YPEL3	yippee like 3 [Source:HGNC Symbol;Acc:HGNC:18327]	1.229277
YPEL5	yippee like 5 [Source:HGNC Symbol;Acc:HGNC:18329]	-1.3385253
YRDC	YrdC N6-threonylcarbamoyltransferase domain containing [Source:HGNC Symbol;Acc:HGNC:28905]	1.1165332
ZADH2	zinc binding alcohol dehydrogenase domain containing 2 [Source:HGNC Symbol;Acc:HGNC:28697]	1.268781
ZAN	zonadhesin (gene/pseudogene) [Source:HGNC Symbol;Acc:HGNC:12857]	-1.1670691
ZBTB17	zinc finger and BTB domain containing 17 [Source:HGNC Symbol;Acc:HGNC:12936]	-1.2479687
ZBTB24	zinc finger and BTB domain containing 24 [Source:HGNC Symbol;Acc:HGNC:21143]	1.2514802
ZBTB3	zinc finger and BTB domain containing 3 [Source:HGNC Symbol;Acc:HGNC:22918]	-1.0880046
ZBTB4	zinc finger and BTB domain containing 4 [Source:HGNC Symbol;Acc:HGNC:23847]	1.1348364
ZBTB40	zinc finger and BTB domain containing 40 [Source:HGNC Symbol;Acc:HGNC:29045]	-1.0896063
ZBTB45	zinc finger and BTB domain containing 45 [Source:HGNC Symbol;Acc:HGNC:23715]	1.2066642
ZBTB46	zinc finger and BTB domain containing 46 [Source:HGNC Symbol;Acc:HGNC:16094]	-1.5893101
ZBTB49	zinc finger and BTB domain containing 49 [Source:HGNC Symbol;Acc:HGNC:19883]	-1.1526476
ZBTB5	zinc finger and BTB domain containing 5 [Source:HGNC Symbol;Acc:HGNC:23836]	-1.4475629
ZBTB8OS	zinc finger and BTB domain containing 8 opposite strand [Source:HGNC Symbol;Acc:HGNC:24094]	1.1038494
ZC3H12A	zinc finger CCCH-type containing 12A [Source:HGNC Symbol;Acc:HGNC:26259]	-2.0054114
ZC3H4	zinc finger CCCH-type containing 4 [Source:HGNC Symbol;Acc:HGNC:17808]	-1.1597759
ZC3H7B	zinc finger CCCH-type containing 7B [Source:HGNC Symbol;Acc:HGNC:30869]	-2.3005502
ZC3HAV1	zinc finger CCCH-type containing, antiviral 1 [Source:HGNC Symbol;Acc:HGNC:23721]	-1.2117912
ZCCHC2	zinc finger CCCH-type containing 2 [Source:HGNC Symbol;Acc:HGNC:22916]	1.8132063
ZCCHC24	zinc finger CCHC-type containing 24 [Source:HGNC Symbol;Acc:HGNC:26911]	1.1488322
ZCCHC5	zinc finger CCHC-type containing 5 [Source:HGNC Symbol;Acc:HGNC:22997]	1.1156474
ZCPWP1	zinc finger CW-type and PWPW domain containing 1 [Source:HGNC Symbol;Acc:HGNC:23486]	-1.163759
ZDHHC14	zinc finger DHHC-type containing 14 [Source:HGNC Symbol;Acc:HGNC:20341]	-1.2710094
ZDHHC15	zinc finger DHHC-type containing 15 [Source:HGNC Symbol;Acc:HGNC:20342]	1.0505561
ZDHHC20	zinc finger DHHC-type containing 20 [Source:HGNC Symbol;Acc:HGNC:20749]	-1.1040993
ZDHHC21	zinc finger DHHC-type containing 21 [Source:HGNC Symbol;Acc:HGNC:20750]	1.177513
ZDHHC23	zinc finger DHHC-type containing 23 [Source:HGNC Symbol;Acc:HGNC:28654]	-1.123558
ZDHHC9	zinc finger DHHC-type containing 9 [Source:HGNC Symbol;Acc:HGNC:18475]	-1.1001143
ZFAND1	zinc finger AN1-type containing 1 [Source:HGNC Symbol;Acc:HGNC:25858]	1.4367543
ZFAND2A	zinc finger AN1-type containing 2A [Source:HGNC Symbol;Acc:HGNC:28073]	-1.5533625
ZFAND3	zinc finger AN1-type containing 3 [Source:HGNC Symbol;Acc:HGNC:18019]	-1.0846007
ZFAND5	zinc finger AN1-type containing 5 [Source:HGNC Symbol;Acc:HGNC:13008]	-1.2968843
ZFAT	zinc finger and AT-hook domain containing [Source:HGNC Symbol;Acc:HGNC:19899]	-1.084601
ZFHX2	zinc finger homeobox 2 [Source:HGNC Symbol;Acc:HGNC:20152]	-2.465378
ZFP1	ZFP1 zinc finger protein [Source:HGNC Symbol;Acc:HGNC:23328]	1.2775093
ZFP2	ZFP2 zinc finger protein [Source:HGNC Symbol;Acc:HGNC:26138]	1.105657
ZFP36	ZFP36 ring finger protein [Source:HGNC Symbol;Acc:HGNC:12862]	-1.1340337
ZFP36L1	ZFP36 ring finger protein like 1 [Source:HGNC Symbol;Acc:HGNC:1107]	-1.76042705
ZFP37	ZFP37 zinc finger protein [Source:HGNC Symbol;Acc:HGNC:12863]	1.112232
ZFP92	ZFP92 zinc finger protein [Source:HGNC Symbol;Acc:HGNC:12865]	-1.1326898
ZFPM2	zinc finger protein, FOG family member 2 [Source:HGNC Symbol;Acc:HGNC:16700]	-2.0785728
ZFX	zinc finger FYVE-type [Source:HGNC Symbol;Acc:HGNC:12869]	1.1251149
ZFYVE1	zinc finger FYVE-type containing 1 [Source:HGNC Symbol;Acc:HGNC:13180]	-1.1824155
ZFYVE21	zinc finger FYVE-type containing 21 [Source:HGNC Symbol;Acc:HGNC:20760]	1.1951897

ZGLP1	zinc finger, GATA-like protein 1 [Source:HGNC Symbol;Acc:HGNC:37245]	-1.3089877
ZGPAT	zinc finger CCHC-type and G-patch domain containing [Source:HGNC Symbol;Acc:HGNC:15948]	-1.220549
ZHX3	zinc fingers and homeoboxes 3 [Source:HGNC Symbol;Acc:HGNC:15935]	1.1633196
ZKSCANS	zinc finger with KRAB and SCAN domains 5 [Source:HGNC Symbol;Acc:HGNC:12867]	-1.1033795
ZMIZ2	zinc finger MIZ-type containing 2 [Source:HGNC Symbol;Acc:HGNC:22229]	-1.293919
ZMPSTE24	zinc metallopeptidase STE24 [Source:HGNC Symbol;Acc:HGNC:12877]	1.3261002
ZMYM3	zinc finger MYM-type containing 3 [Source:HGNC Symbol;Acc:HGNC:13054]	1.3185234
ZMYND8	zinc finger MYND-type containing 8 [Source:HGNC Symbol;Acc:HGNC:9397]	1.497675
ZNF117	zinc finger protein 117 [Source:HGNC Symbol;Acc:HGNC:12897]	1.2713103
ZNF167	zinc finger with KRAB and SCAN domains 7	1.1501613
ZNF17	zinc finger protein 17 [Source:HGNC Symbol;Acc:HGNC:12958]	1.0940615
ZNF175	zinc finger protein 175 [Source:HGNC Symbol;Acc:HGNC:12964]	1.4543692
ZNF177	zinc finger protein 177 [Source:HGNC Symbol;Acc:HGNC:12966]	1.1073717
ZNF18	zinc finger protein 18 [Source:HGNC Symbol;Acc:HGNC:12969]	1.2079582
ZNF182	zinc finger protein 182 [Source:HGNC Symbol;Acc:HGNC:13001]	1.294628
ZNF187	zinc finger and SCAN domain containing 26	1.1880366
ZNF2	zinc finger protein 2 [Source:HGNC Symbol;Acc:HGNC:12991]	-1.1179156
ZNF211	zinc finger protein 211 [Source:HGNC Symbol;Acc:HGNC:13003]	1.1110598
ZNF212	zinc finger protein 212 [Source:HGNC Symbol;Acc:HGNC:13004]	-1.1992812
ZNF226	zinc finger protein 226 [Source:HGNC Symbol;Acc:HGNC:13019]	-1.197759
ZNF227	zinc finger protein 227 [Source:HGNC Symbol;Acc:HGNC:13020]	1.1459317
ZNF229	zinc finger protein 229 [Source:HGNC Symbol;Acc:HGNC:13022]	1.073163
ZNF236	zinc finger protein 236 [Source:HGNC Symbol;Acc:HGNC:13028]	-1.1066201
ZNF239	zinc finger protein 239 [Source:HGNC Symbol;Acc:HGNC:13031]	1.1393025
ZNF253	zinc finger protein 253 [Source:HGNC Symbol;Acc:HGNC:13497]	1.0887128
ZNF254	zinc finger protein 254 [Source:HGNC Symbol;Acc:HGNC:13047]	1.089705
ZNF257	zinc finger protein 257 [Source:HGNC Symbol;Acc:HGNC:13498]	1.0890805
ZNF259	ZPR1 zinc finger	-1.0642402
ZNF273	zinc finger protein 273 [Source:HGNC Symbol;Acc:HGNC:13067]	1.1399068
ZNF274	zinc finger protein 274 [Source:HGNC Symbol;Acc:HGNC:13068]	-1.0999728
ZNF275	zinc finger protein 275 [Source:HGNC Symbol;Acc:HGNC:13069]	-1.2076259
ZNF276	zinc finger protein 276 [Source:HGNC Symbol;Acc:HGNC:23330]	-1.0509992
ZNF28	zinc finger protein 28 [Source:HGNC Symbol;Acc:HGNC:13073]	-1.1353784
ZNF280C	zinc finger protein 280C [Source:HGNC Symbol;Acc:HGNC:25955]	1.2936234
ZNF280D	zinc finger protein 280D [Source:HGNC Symbol;Acc:HGNC:25953]	1.1883162
ZNF3	zinc finger protein 3 [Source:HGNC Symbol;Acc:HGNC:13089]	-1.08778295
ZNF30	zinc finger protein 30 [Source:HGNC Symbol;Acc:HGNC:13090]	1.5336546
ZNF317	zinc finger protein 317 [Source:HGNC Symbol;Acc:HGNC:13507]	-1.1925534
ZNF32	zinc finger protein 32 [Source:HGNC Symbol;Acc:HGNC:13095]	1.1484997
ZNF322A	zinc finger protein 322	1.2514469
ZNF323	zinc finger and SCAN domain containing 31	1.1024401
ZNF334	zinc finger protein 334 [Source:HGNC Symbol;Acc:HGNC:15806]	1.0934173
ZNF347	zinc finger protein 347 [Source:HGNC Symbol;Acc:HGNC:16447]	1.1871732
ZNF362	zinc finger protein 362 [Source:HGNC Symbol;Acc:HGNC:18079]	1.2028642
ZNF365	zinc finger protein 365 [Source:HGNC Symbol;Acc:HGNC:18194]	1.0663108
ZNF366	zinc finger protein 366 [Source:HGNC Symbol;Acc:HGNC:18316]	1.210234
ZNF378P	zinc finger protein 378B, pseudogene [Source:HGNC Symbol;Acc:HGNC:13103]	1.2542553
ZNF385C	zinc finger protein 385C [Source:HGNC Symbol;Acc:HGNC:3722]	-1.1461304
ZNF385D	zinc finger protein 385D [Source:HGNC Symbol;Acc:HGNC:26191]	-1.2046355
ZNF391	zinc finger protein 391 [Source:HGNC Symbol;Acc:HGNC:18779]	-1.1383842
ZNF394	zinc finger protein 394 [Source:HGNC Symbol;Acc:HGNC:18832]	-1.168117
ZNF395	zinc finger protein 395 [Source:HGNC Symbol;Acc:HGNC:18737]	1.9529835
ZNF396	zinc finger protein 396 [Source:HGNC Symbol;Acc:HGNC:18824]	-1.1696907
ZNF397	zinc finger protein 397 [Source:HGNC Symbol;Acc:HGNC:18818]	1.0773748
ZNF416	zinc finger protein 416 [Source:HGNC Symbol;Acc:HGNC:20645]	-1.0952274
ZNF419	zinc finger protein 419 [Source:HGNC Symbol;Acc:HGNC:20648]	1.1647815
ZNF420	zinc finger protein 420 [Source:HGNC Symbol;Acc:HGNC:20649]	1.1686157
ZNF43	zinc finger protein 43 [Source:HGNC Symbol;Acc:HGNC:13109]	1.134512
ZNF436	zinc finger protein 436 [Source:HGNC Symbol;Acc:HGNC:20814]	-1.1847205
ZNF454	zinc finger protein 454 [Source:HGNC Symbol;Acc:HGNC:21200]	1.1095998
ZNF461	zinc finger protein 461 [Source:HGNC Symbol;Acc:HGNC:21629]	1.0805088
ZNF469	zinc finger protein 469 [Source:HGNC Symbol;Acc:HGNC:23216]	-1.4216908
ZNF471	zinc finger protein 471 [Source:HGNC Symbol;Acc:HGNC:23226]	1.0641251
ZNF474	zinc finger protein 474 [Source:HGNC Symbol;Acc:HGNC:23245]	1.0878664
ZNF492	zinc finger protein 492 [Source:HGNC Symbol;Acc:HGNC:23707]	1.2333165
ZNF501	zinc finger protein 501 [Source:HGNC Symbol;Acc:HGNC:23717]	-1.0514839
ZNF503	zinc finger protein 503 [Source:HGNC Symbol;Acc:HGNC:23589]	1.64230455
ZNF512B	zinc finger protein 512B [Source:HGNC Symbol;Acc:HGNC:29212]	1.297833
ZNF516	zinc finger protein 516 [Source:HGNC Symbol;Acc:HGNC:28990]	-1.1448478
ZNF521	zinc finger protein 521 [Source:HGNC Symbol;Acc:HGNC:24605]	1.52741565
ZNF525	zinc finger protein 525 [Source:HGNC Symbol;Acc:HGNC:29423]	1.129231
ZNF528	zinc finger protein 528 [Source:HGNC Symbol;Acc:HGNC:29384]	1.2033653
ZNF540	zinc finger protein 540 [Source:HGNC Symbol;Acc:HGNC:25331]	1.0857469
ZNF541	zinc finger protein 541 [Source:HGNC Symbol;Acc:HGNC:25294]	-1.2774128
ZNF557	zinc finger protein 557 [Source:HGNC Symbol;Acc:HGNC:28632]	-1.1254169
ZNF561	zinc finger protein 561 [Source:HGNC Symbol;Acc:HGNC:28684]	1.1797386
ZNF562	zinc finger protein 562 [Source:HGNC Symbol;Acc:HGNC:25950]	1.1203179
ZNF564	zinc finger protein 564 [Source:HGNC Symbol;Acc:HGNC:31106]	1.1938845
ZNF568	zinc finger protein 568 [Source:HGNC Symbol;Acc:HGNC:25392]	1.1080962
ZNF569	zinc finger protein 569 [Source:HGNC Symbol;Acc:HGNC:24737]	1.1405696
ZNF57	zinc finger protein 57 [Source:HGNC Symbol;Acc:HGNC:13125]	1.2452599
ZNF570	zinc finger protein 570 [Source:HGNC Symbol;Acc:HGNC:26416]	-1.2491958
ZNF572	zinc finger protein 572 [Source:HGNC Symbol;Acc:HGNC:26758]	1.16986
ZNF575	zinc finger protein 575 [Source:HGNC Symbol;Acc:HGNC:27606]	1.2544311
ZNF594	zinc finger protein 594 [Source:HGNC Symbol;Acc:HGNC:29392]	1.1630619
ZNF597	zinc finger protein 597 [Source:HGNC Symbol;Acc:HGNC:26573]	-1.1273812

ZNF598	zinc finger protein 598 [Source:HGNC Symbol;Acc:HGNC:28079]	1.081171
ZNF599	zinc finger protein 599 [Source:HGNC Symbol;Acc:HGNC:26408]	1.095206
ZNF613	zinc finger protein 613 [Source:HGNC Symbol;Acc:HGNC:25827]	1.1972141
ZNF630	zinc finger protein 630 [Source:HGNC Symbol;Acc:HGNC:28855]	1.0816106
ZNF641	zinc finger protein 641 [Source:HGNC Symbol;Acc:HGNC:31834]	-1.46716195
ZNF642	ZFP69 zinc finger protein	1.1753061
ZNF646	zinc finger protein 646 [Source:HGNC Symbol;Acc:HGNC:29004]	1.0626562
ZNF658	zinc finger protein 658 [Source:HGNC Symbol;Acc:HGNC:25226]	1.2106973
ZNF660	zinc finger protein 660 [Source:HGNC Symbol;Acc:HGNC:26720]	1.077062
ZNF664	zinc finger protein 664	-1.9485675
ZNF665	zinc finger protein 665 [Source:HGNC Symbol;Acc:HGNC:25885]	-1.1918615
ZNF670	zinc finger protein 670 [Source:HGNC Symbol;Acc:HGNC:28167]	-1.2311835
ZNF680	zinc finger protein 680 [Source:HGNC Symbol;Acc:HGNC:26897]	-1.0838039
ZNF69	zinc finger protein 69 [Source:HGNC Symbol;Acc:HGNC:13138]	1.1241014
ZNF692	zinc finger protein 692 [Source:HGNC Symbol;Acc:HGNC:26049]	1.360567
ZNF696	zinc finger protein 696 [Source:HGNC Symbol;Acc:HGNC:25872]	-1.1619598
ZNF697	zinc finger protein 697 [Source:HGNC Symbol;Acc:HGNC:32034]	-1.7919658
ZNF701	zinc finger protein 701 [Source:HGNC Symbol;Acc:HGNC:25597]	1.0940293
ZNF703	zinc finger protein 703 [Source:HGNC Symbol;Acc:HGNC:25883]	1.6431783
ZNF705A	zinc finger protein 705A [Source:HGNC Symbol;Acc:HGNC:32281]	1.1490581
ZNF708	zinc finger protein 708 [Source:HGNC Symbol;Acc:HGNC:12945]	1.1125325
ZNF71	zinc finger protein 71 [Source:HGNC Symbol;Acc:HGNC:13141]	-2.4892387
ZNF718	zinc finger protein 718 [Source:HGNC Symbol;Acc:HGNC:26889]	1.155425
ZNF746	zinc finger protein 746 [Source:HGNC Symbol;Acc:HGNC:21948]	1.1012286
ZNF766	zinc finger protein 766 [Source:HGNC Symbol;Acc:HGNC:28063]	1.2957864
ZNF767	zinc finger family member 767, pseudogene	-1.1369865
ZNF772	zinc finger protein 772 [Source:HGNC Symbol;Acc:HGNC:33106]	-1.0790421
ZNF773	zinc finger protein 773 [Source:HGNC Symbol;Acc:HGNC:30487]	-1.0893824
ZNF780B	zinc finger protein 780B [Source:HGNC Symbol;Acc:HGNC:33109]	1.1300204
ZNF782	zinc finger protein 782 [Source:HGNC Symbol;Acc:HGNC:33110]	1.061037
ZNF790	zinc finger protein 790 [Source:HGNC Symbol;Acc:HGNC:33114]	1.1636827
ZNF791	zinc finger protein 791 [Source:HGNC Symbol;Acc:HGNC:26895]	-1.0760626
ZNF792	zinc finger protein 792 [Source:HGNC Symbol;Acc:HGNC:24751]	1.24532705
ZNF8	zinc finger protein 8 [Source:HGNC Symbol;Acc:HGNC:13154]	-1.137526
ZNF813	zinc finger protein 813 [Source:HGNC Symbol;Acc:HGNC:33257]	-1.0545633
ZNF827	zinc finger protein 827 [Source:HGNC Symbol;Acc:HGNC:27193]	-1.1240923
ZNF830	zinc finger protein 830 [Source:HGNC Symbol;Acc:HGNC:28291]	-1.1392071
ZNF835	zinc finger protein 835 [Source:HGNC Symbol;Acc:HGNC:34332]	-1.1577439
ZNF836	zinc finger protein 836 [Source:HGNC Symbol;Acc:HGNC:34333]	1.0537889
ZNF839	zinc finger protein 839 [Source:HGNC Symbol;Acc:HGNC:20345]	1.0736257
ZNF847P	zinc finger protein 847, pseudogene [Source:HGNC Symbol;Acc:HGNC:34384]	-1.1288737
ZNFX1	zinc finger NFX1-type containing 1 [Source:HGNC Symbol;Acc:HGNC:29271]	-1.55281055
ZNHIT3	zinc finger HIT-type containing 3 [Source:HGNC Symbol;Acc:HGNC:12309]	1.1586044
ZNRF1	zinc and ring finger 1, E3 ubiquitin protein ligase [Source:HGNC Symbol;Acc:HGNC:18452]	-1.2286729
ZNRF2	zinc and ring finger 2, E3 ubiquitin protein ligase [Source:HGNC Symbol;Acc:HGNC:22316]	1.0593784
ZRANB1	zinc finger RANBP2-type containing 1 [Source:HGNC Symbol;Acc:HGNC:18224]	1.1078862
ZRANB2	zinc finger RANBP2-type containing 2 [Source:HGNC Symbol;Acc:HGNC:13058]	1.5242678
ZRSR2	c finger CCCH-type, RNA binding motif and serine/arginine rich 2 [Source:HGNC Symbol;Acc:HGNC:230:	-1.1459846
ZSCAN1	zinc finger and SCAN domain containing 1 [Source:HGNC Symbol;Acc:HGNC:23712]	-1.1390978
ZSCAN2	zinc finger and SCAN domain containing 2 [Source:HGNC Symbol;Acc:HGNC:20994]	-1.1851785
ZSCAN22	zinc finger and SCAN domain containing 22 [Source:HGNC Symbol;Acc:HGNC:4929]	-1.1985495
ZSCAN23	zinc finger and SCAN domain containing 23 [Source:HGNC Symbol;Acc:HGNC:21193]	1.0932422
ZSCAN5A	zinc finger and SCAN domain containing 5A [Source:HGNC Symbol;Acc:HGNC:23710]	-1.1876063
ZSCAN5D	zinc finger and SCAN domain containing 5D [Source:HGNC Symbol;Acc:HGNC:37706]	-1.0571538
ZSWIM4	zinc finger SWIM-type containing 4 [Source:HGNC Symbol;Acc:HGNC:25704]	-3.5101073
ZSWIM6	zinc finger SWIM-type containing 6 [Source:HGNC Symbol;Acc:HGNC:29316]	1.5237813
ZWINT	ZW10 interacting kinetochore protein [Source:HGNC Symbol;Acc:HGNC:13195]	1.0930071
ZYG11A	zyg-11 family member A, cell cycle regulator [Source:HGNC Symbol;Acc:HGNC:32058]	1.0674232
ZYG11B	zyg-11 family member B, cell cycle regulator [Source:HGNC Symbol;Acc:HGNC:25820]	1.3063971
ZYX	zyxin [Source:HGNC Symbol;Acc:HGNC:13200]	1.231796

Supplemental table S3: Genes differentially expressed by mixture of flavanol metabolites

Gene symbol	Gene name	Fold-change
PKIG	protein kinase (cAMP-dependent, catalytic) inhibitor gamma	-1.2039772
MEGF8	multiple EGF-like-domains 8	-1.1590909
TACC3	transforming, acidic coiled-coil containing protein 3	-1.1565661
MGAT1	mannosyl (alpha-1,3-)-glycoprotein beta-1,2-N-acetylglucosaminyltransferase	-1.1540344
EIF3C	eukaryotic translation initiation factor 3, subunit C	-1.140174
EXOC7	exocyst complex component 7	-1.1356474
WDR6	WD repeat domain 6	-1.1273559
HDGF	hepatoma-derived growth factor	-1.1193913
TOX2	TOX high mobility group box family member 2	-1.114275
EEF2	eukaryotic translation elongation factor 2	-1.1134382
PTTG1IP	pituitary tumor-transforming 1 interacting protein	-1.1110272
KANSL3	KAT8 regulatory NSL complex subunit 3	-1.1076162
TCF25	transcription factor 25 (basic helix-loop-helix)	-1.107239
TLE1	transducin-like enhancer of split 1 (E(spl) homolog, Drosophila)	-1.106483
CBX2	chromobox homolog 2	-1.1029116
COL27A1	collagen, type XXVII, alpha 1	-1.1007673
VWCE	von Willebrand factor C and EGF domains	-1.0966772
DBF4B	DBF4 zinc finger B	-1.0953798
CCR9	chemokine (C-C motif) receptor 9	-1.0949962
ADAMTSL1	ADAMTS-like 1	-1.0930561
ST8SIA3	ST8 alpha-N-acetyl-neuraminate alpha-2,8-sialyltransferase 3	-1.0924023
HIP1	huntingtin interacting protein 1	-1.0882293
PRMT1	protein arginine methyltransferase 1	-1.0881253
PBDC1	polysaccharide biosynthesis domain containing 1	-1.0875945
SLC26A1	solute carrier family 26 (anion exchanger), member 1	-1.0874616
ADARB1	adenosine deaminase, RNA-specific, B1	-1.0856616
AGO3	argonaute 3, RISC catalytic component	-1.085366
NME2	NME/NM23 nucleoside diphosphate kinase 2	-1.0847706
SNRPB	small nuclear ribonucleoprotein polypeptides B and B1	-1.0840416
COL26A1	collagen type XXVI alpha 1 chain	-1.0809991
FDXR	ferredoxin reductase	-1.0809367
TUBA1C	tubulin, alpha 1c	-1.0806866
IP6K3	inositol hexakisphosphate kinase 3	-1.0805348
NCAPD2	non-SMC condensin I complex, subunit D2	-1.0796225
LRG_105	serpin peptidase inhibitor, clade G (C1 inhibitor), member 1	-1.079115
GJB4	gap junction protein, beta 4, 30.3kDa	-1.078994
RHOC	ras homolog family member C	-1.07842
ARHGAP27	Rho GTPase activating protein 27	-1.0766033
BLK	BLK proto-oncogene, Src family tyrosine kinase	-1.0765917
FAM187B	family with sequence similarity 187, member B	-1.0760257
FAM150B	family with sequence similarity 150, member B	-1.0758936
HIRA	histone cell cycle regulator	-1.0755848
HM13	histocompatibility (minor) 13	-1.0755416
PIGL	phosphatidylinositol glycan anchor biosynthesis, class L	-1.0751199
CADM4	cell adhesion molecule 4	-1.0731615
PABPN1L	poly(A) binding protein, nuclear 1-like (cytoplasmic)	-1.0730269
CERK	ceramide kinase	-1.072039
DEFA4	defensin, alpha 4, corticostatin	-1.0709122
CAPNS1	calpain, small subunit 1	-1.0708506
PHLPP2	PH domain and leucine rich repeat protein phosphatase 2	-1.0708393
GDPD4	glycerophosphodiester phosphodiesterase domain containing 4	-1.0702958
TMEM26	transmembrane protein 26	-1.0695992
RAPGEF3	Rap guanine nucleotide exchange factor (GEF) 3	-1.0691727
CEP250	centrosomal protein 250kDa	-1.0681767
TMEM44	transmembrane protein 44	-1.06778215
LRG_669	protein kinase C, gamma	-1.0676694
RGS4	regulator of G-protein signaling 4	-1.0674753
MN1	meningioma (disrupted in balanced translocation) 1	-1.0669563
RTN3	reticulon 3	-1.0665742
MMP25	matrix metallopeptidase 25	-1.0661955
DTHD1	death domain containing 1	-1.0660564
FAM71B	family with sequence similarity 71, member B	-1.0654712
CELSR2	cadherin, EGF LAG seven-pass G-type receptor 2	-1.0653684
EMG1	EMG1 N1-specific pseudouridine methyltransferase	-1.065288
TTC28	tetratricopeptide repeat domain 28	-1.0643384
JAKMIP3	Janus kinase and microtubule interacting protein 3	-1.0639915
LOC254057	uncharacterized LOC254057	-1.063947
GDAP1L1	ganglioside induced differentiation associated protein 1-like 1	-1.0631312

T	T, brachyury homolog	-1.0625863
HMG20B	high mobility group 20B	-1.0624989
TMPRSS11B	transmembrane protease, serine 11B	-1.0623791
MTCH1	mitochondrial carrier 1	-1.0619674
LHX9	LIM homeobox 9	-1.0619392
PIDD1	p53-induced death domain protein 1	-1.0614755
CBX6	chromobox homolog 6	-1.0612999
LOC647983	uncharacterized LOC647983	-1.0612423
PPIL2	peptidylprolyl isomerase (cyclophilin)-like 2	-1.0612197
TLE4	transducin-like enhancer of split 4	-1.060471
COLGALT1	collagen beta(1-O)galactosyltransferase 1	-1.0604488
PHLDB3	pleckstrin homology-like domain, family B, member 3	-1.060153
SYNDIG1	synapse differentiation inducing 1	-1.0595171
OR56B1	olfactory receptor, family 56, subfamily B, member 1	-1.0592353
ZNF781	zinc finger protein 781	-1.0592027
FAM157A	family with sequence similarity 157, member A	-1.0589517
PHC2	polyhomeotic homolog 2	-1.0589206
PSAP	prosaposin	-1.0588593
LINC00028	long intergenic non-protein coding RNA 28	-1.0588303
FRS3	fibroblast growth factor receptor substrate 3	-1.0587405
CDC20B	cell division cycle 20B	-1.0580913
OLFM1	olfactomedin 1	-1.0579987
SORCS1	sortilin-related VPS10 domain containing receptor 1	-1.0578002
PPM1G	protein phosphatase, Mg ²⁺ /Mn ²⁺ dependent, 1G	-1.0577452
C5AR2	complement component 5a receptor 2	-1.0574327
REM1	RAS (RAD and GEM)-like GTP-binding 1	-1.0573826
TMEM236	transmembrane protein 236	-1.0570358
C3orf33	chromosome 3 open reading frame 33	-1.0569599
C5orf56	chromosome 5 open reading frame 56	-1.0569204
ARHGEF35	Rho guanine nucleotide exchange factor (GEF) 35	-1.0566783
EMX2OS	EMX2 opposite strand/antisense RNA	-1.056536
EXOC3L4	exocyst complex component 3-like 4	-1.0563222
GPR6	G protein-coupled receptor 6	-1.0563198
DTX2P1	DTX2 pseudogene 1	-1.0559713
ZFR2	zinc finger RNA binding protein 2	-1.055905
LGALS16	lectin, galactoside-binding, soluble, 16	-1.0553133
P2RX1	purinergic receptor P2X, ligand gated ion channel, 1	-1.0552719
CDH5	cadherin 5, type 2 (vascular endothelium)	-1.0550908
HIPK2	homeodomain interacting protein kinase 2	-1.0549743
MYBPC2	myosin binding protein C, fast type	-1.0549695
NCAM1	neural cell adhesion molecule 1	-1.0546328
PREX1	phosphatidylinositol-3,4,5-trisphosphate-dependent Rac exchange factor 1	-1.0545554
SCARNA6	small Cajal body-specific RNA 6	-1.054547
IL23R	interleukin 23 receptor	-1.0544063
GSTO1	glutathione S-transferase omega 1	-1.0542344
ZDHHC14	zinc finger, DHHC-type containing 14	-1.053888
OR51A7	olfactory receptor, family 51, subfamily A, member 7	-1.0536222
GLI2	GLI family zinc finger 2	-1.053356
NCR1	natural cytotoxicity triggering receptor 1	-1.0533184
MAP2	microtubule-associated protein 2	-1.0531723
HOXD4	homeobox D4	-1.0530685
CDRT7	CMT1A duplicated region transcript 7 (non-protein coding)	-1.0529283
SEMG2	semenogelin II	-1.0528218
PRKCG	protein kinase C, gamma	-1.0528005
AFF2	AF4/FMR2 family, member 2	-1.0527471
FTCD	formimidoyltransferase cyclodeaminase	-1.0527433
SERPING1	serpin peptidase inhibitor, clade G (C1 inhibitor), member 1	-1.0526729
PSMD2	proteasome (prosome, macropain) 26S subunit, non-ATPase, 2	-1.0525974
ZMZ1-AS1	ZMZ1 antisense RNA 1	-1.0517846
LENEP	lens epithelial protein	-1.0517696
PCNXL2	pecanex-like 2 (Drosophila)	-1.0517497
NPHP3-AS1	NPHP3 antisense RNA 1	-1.0516611
MAGEB16	melanoma antigen family B16	-1.0516213
OR2T10	olfactory receptor, family 2, subfamily T, member 10	-1.0515475
MORC2-AS1	MORC2 antisense RNA 1	-1.0513216
TRIQK	triple QxxK/R motif containing	-1.0512347
RBP7	retinol binding protein 7, cellular	-1.0511118
ZDHHC8	zinc finger, DHHC-type containing 8	-1.0511082
ANKRD65	ankyrin repeat domain 65	-1.0510427
RASGRP3	RAS guanyl releasing protein 3 (calcium and DAG-regulated)	-1.0505981
LOC728073	uncharacterized LOC728073	-1.0505474

INF2	inverted formin, FH2 and WH2 domain containing	-1.050537
CNTFR-AS1	CNTFR antisense RNA 1	-1.0504599
RUFY1	RUN and FYVE domain containing 1	1.0502021
SOX10	SRY (sex determining region Y)-box 10	1.0502113
LMBR1	limb development membrane protein 1	1.0503908
AGTR1	angiotensin II receptor, type 1	1.0504216
LRG_47	complement factor H	1.0505482
UBA5	ubiquitin-like modifier activating enzyme 5	1.050722
SELV	selenoprotein V	1.0509702
L2HGDH	L-2-hydroxyglutarate dehydrogenase	1.0511317
SIAH2	siah E3 ubiquitin protein ligase 2	1.0512342
IGSF3	immunoglobulin superfamily, member 3	1.0512369
LRG_271	SRY (sex determining region Y)-box 10	1.0512419
SSX8	synovial sarcoma, X breakpoint 8	1.0512534
CLRN3	clarin 3	1.0513512
TMEM229B	transmembrane protein 229B	1.0515218
TXNDC5	thioredoxin domain containing 5 (endoplasmic reticulum)	1.0516245
LRP11	low density lipoprotein receptor-related protein 11	1.0524752
AS3MT	arsenate methyltransferase	1.0525384
CCDC43	coiled-coil domain containing 43	1.052739
FLJ22447	uncharacterized LOC400221	1.0529289
SLC34A2	solute carrier family 34 (type II sodium/phosphate cotransporter), member 2	1.0529337
C3orf33	chromosome 3 open reading frame 33	1.0529912
AP1S2	adaptor-related protein complex 1, sigma 2 subunit	1.0530529
PREX2	phosphatidylinositol-3,4,5-trisphosphate-dependent Rac exchange factor 2	1.0540205
OVGP1	oviductal glycoprotein 1, 120kDa	1.0540551
TP53AIP1	tumor protein p53 regulated apoptosis inducing protein 1	1.0542524
ZEB2	zinc finger E-box binding homeobox 2	1.0542524
SLC44A1	solute carrier family 44 (choline transporter), member 1	1.0544792
ZNF235	zinc finger protein 235	1.0547124
GJC3	gap junction protein, gamma 3, 30.2kDa	1.054886
DIRAS1	DIRAS family, GTP-binding RAS-like 1	1.0549461
MATN3	matrilin 3	1.0552053
ADCY10	adenylate cyclase 10 (soluble)	1.0560186
ZMYND11	zinc finger, MYND-type containing 11	1.0563411
TRPC3	transient receptor potential cation channel, subfamily C, member 3	1.0565642
PTPRT	protein tyrosine phosphatase, receptor type, T	1.0569792
OR2M2	olfactory receptor, family 2, subfamily M, member 2	1.0570612
GRK4	G protein-coupled receptor kinase 4	1.057197
RXFP4	relaxin/insulin-like family peptide receptor 4	1.0578506
LRG_754	son of sevenless homolog 1	1.0581787
IQCG	IQ motif containing G	1.0596243
CCDC170	coiled-coil domain containing 170	1.0603614
ADGRA1A	adhesion G protein-coupled receptor A1	1.0605998
ST7L	suppression of tumorigenicity 7 like	1.0606669
IKZF5	IKAROS family zinc finger 5	1.0610611
LCN10	lipocalin 10	1.0628414
INMT	indolethylamine N-methyltransferase	1.0630426
PLCD4	phospholipase C, delta 4	1.0641334
CDON	cell adhesion associated, oncogene regulated	1.0641468
PPP1R12B	protein phosphatase 1, regulatory subunit 12B	1.0644135
APOL6	apolipoprotein L, 6	1.0648336
SEC23B	Sec23 homolog B (S. cerevisiae)	1.0651723
EXOSC3	exosome component 3	1.0654143
LOC257396	uncharacterized LOC257396	1.0658379
FNBP1	formin binding protein 1	1.0667115
MOB1A	MOB kinase activator 1B	1.0672476
RRN3P2	RNA polymerase I transcription factor homolog (S. cerevisiae) pseudogene 2	1.0685875
SPDYE8P	speedy/RINGO cell cycle regulator family member E8, pseudogene	1.0697902
CDX1	caudal type homeobox 1	1.0699176
GALK2	galactokinase 2	1.070527
LINC00051	long intergenic non-protein coding RNA 51	1.0709138
OS9	osteosarcoma amplified 9, endoplasmic reticulum lectin	1.071141
SLC35A1	solute carrier family 35 (CMP-sialic acid transporter), member A1	1.0716475
XBP1	X-box binding protein 1	1.0724787
DEDD	death effector domain containing	1.0731583
KCNAB1	potassium channel, voltage gated subfamily A regulatory beta subunit 1	1.073209
ATG4C	autophagy related 4C, cysteine peptidase	1.0734856
GNRHR	gonadotropin-releasing hormone receptor	1.0735542
TNIP3	TNFAIP3 interacting protein 3	1.074055
TAB3	TGF-beta activated kinase 1/MAP3K7 binding protein 3	1.0742283

CTAGE1	cutaneous T-cell lymphoma-associated antigen 1	1.0762799
ZNF701	zinc finger protein 701	1.0768218
INSIG2	insulin induced gene 2	1.0777742
CFH	complement factor H	1.0777941
PDE1C	phosphodiesterase 1C, calmodulin-dependent 70kDa	1.0783639
ZNF253	zinc finger protein 253	1.0792263
ABCC5	ATP-binding cassette, sub-family C (CFTR/MRP), member 5	1.0793691
PPY2P	pancreatic polypeptide 2, pseudogene	1.0809271
THNSL1	threonine synthase-like 1 (<i>S. cerevisiae</i>)	1.0811859
CCDC174	coiled-coil domain containing 174	1.0819297
PLAU	plasminogen activator, urokinase	1.0830336
CYB5R4	cytochrome b5 reductase 4	1.0843542
SNRNP48	small nuclear ribonucleoprotein 48kDa (U11/U12)	1.0867411
CD274	CD274 molecule	1.0878695
DUS4L	dihydrouridine synthase 4-like (<i>S. cerevisiae</i>)	1.0881691
RSU1	Ras suppressor protein 1	1.0903277
SGMS2	sphingomyelin synthase 2	1.0916607
ARHGAP42	Rho GTPase activating protein 42	1.0928626
ZNF136	zinc finger protein 136	1.0934138
SOS1	son of sevenless homolog 1 (<i>Drosophila</i>)	1.0946532
TLK1	tousled-like kinase 1	1.094888
MLLT3	myeloid/lymphoid or mixed-lineage leukemia	1.0973772
ZNF542	zinc finger protein 542	1.0977765
NEIL3	nei endonuclease VIII-like 3	1.0986665
LAMP3	lysosomal-associated membrane protein 3	1.100084
NRBF2	nuclear receptor binding factor 2	1.1025711
METTL3	methyltransferase like 3	1.103495
CTAGE4	CTAGE family, member 4	1.1087644
ATF2	activating transcription factor 2	1.1094769
TMEM87B	transmembrane protein 87B	1.1123282
PAM	peptidylglycine alpha-amidating monooxygenase	1.1157597
SRGAP2	SLIT-ROBO Rho GTPase activating protein 2	1.11683
CLDN11	claudin 11	1.1180185
CDKL1	cyclin-dependent kinase-like 1 (CDC2-related kinase)	1.1208974
C5orf56	chromosome 5 open reading frame 56	1.1229732
ABHD3	abhydrolase domain containing 3	1.1268681
CDKN2B-AS1	CDKN2B antisense RNA 1	1.1276822
CYP20A1	cytochrome P450, family 20, subfamily A, polypeptide 1	1.1291639
TMEM68	transmembrane protein 68	1.1453892
LAMC2	laminin, gamma 2	1.1746995
TUBE1	tubulin, epsilon 1	1.1888752
IFRD1	interferon-related developmental regulator 1	1.2011763
HERPUD1	homocysteine-inducible, endoplasmic reticulum stress-inducible, ubiquitin-like domain member 1	1.2108529

Supplemental table S4: The binding scores expressed in Glide docking Scores (kcal/mol) and Induced fit docking (IFD) scores between biotransformed variants of epicatechin in p38 MAPK active site (Pdb id: 4F9Y model)

Epicatechin metabolites	Glide docking scores	Residues involved in H-bonding
4'-O-methyl(-)-epicatechin-7-β-D-glucuronide (4'MEC7G)	-10.242	Ser-32, Lys-53, His-107, Met-109, Ser-154, Glu-178
3'-O-methyl(-)-epicatechin (3'MEC)	-7.246	Met-109, Ala-111, Glu-178
(-)epicatechin-4'-sulfate (EC4'S)	-7.822	Gly-36, Lys-53, His-107, Met-109

Supplemental table S5: Differentially expressed miRNA by TNF and by mixture of flavanol metabolites

TNF/control		Mix	
<i>miRNA</i>	<i>FC</i>	<i>miRNA</i>	<i>FC</i>
hsa-let-7f	1,0998023	hsa-let-7a	-1,0882393
hsa-miR-1246	1,2011293	hsa-let-7f	-1,0843385
hsa-miR-139-5p	1,1791074	hsa-miR-10a	-1,1383361
hsa-miR-146a	2,0559123	hsa-miR-10b	-1,1306673
hsa-miR-148a	1,5927936	hsa-miR-1290	-1,1568191
hsa-miR-155	1,3901024	hsa-miR-130b	-1,0858847
hsa-miR-195	1,2252228	hsa-miR-134	-1,2618986
hsa-miR-199a-3p	1,3397902	hsa-miR-181a*	-1,177034
hsa-miR-199a-5p	1,3601944	hsa-miR-221*	-1,1774971
hsa-miR-214	1,2171185	hsa-miR-224	-1,1127338
hsa-miR-221*	1,2703397	hsa-miR-30a*	-1,1222104
hsa-miR-29b-1*	1,6904817	hsa-miR-30c	-1,1183422
hsa-miR-369-5p	1,2240878	hsa-miR-30e*	-1,1639618
hsa-miR-455-3p	1,2339121	hsa-miR-320a	-1,0500371
hsa-miR-574-5p	1,1925792	hsa-miR-320c	-1,0795624
hsa-miR-575	1,0906901	hsa-miR-320d	-1,0846931
hsa-miR-584	1,2825359	hsa-miR-361-5p	-1,1056353
hsa-miR-638	1,1496371	hsa-miR-365	-1,1605713
hsa-miR-98	1,1357678	hsa-miR-543	-1,1083959
		hsa-miR-769-5p	1,2960966

Supplemental table S6: Epigenetic effect of flavanol mixture

cg21865751	0.769324158	0.879597483	0.110273325	0.000197343	WNT5A	WNT5A	NM_003392	3UTR	N_Shelf
cg03843635	0.9353625268	0.853945981	-0.102660287	0.00019814	ACTL9	ACTL9	NM_178525	TSS1500	S_Shore
cg17921002	0.908115056	0.791551186	0.10740113	0.000199439	P0IA3	P0IA3	NM_005131NR_002318	Body;TSS1500	S_Shore
cg17847446	0.869115056	0.17551186	0.10740113	0.000199439	P0IA3	P0IA3	NM_005131NR_002318	Body;TSS1500	S_Shore
cg2138806	0.941796066	0.783494983	-0.158526252	0.000200907	BAZ1B	BAZ1B	NM_032408	Body	Island
cg16997732	0.147701049	0.307990405	0.160979911	0.000201316	BAZ1B	BAZ1B	NM_032408	Body	Island
cg02301292	0.784710733	0.886464518	0.100557584	0.000201451	C10orf126	C10orf126	NM_001082913	TSS200	N_Shelf
cg02301293	0.784710733	0.886464518	0.100557584	0.000201451	ASPA	ASPA	NM_001128085	TSS200	S_Shelf
cg02301294	0.784710733	0.886464518	0.100557584	0.000201451	MFGE8	MFGE8;MFGE8	NM_001146149;NM_00105928	TSS1500;TSS1500	S_Shelf
cg02301295	0.784710733	0.886464518	0.100557584	0.000201451	DOCK9	DOCK9;DOCK9	NM_01512965;NM_001130049	Body;Body	S_Shelf
cg02301296	0.784710733	0.886464518	0.100557584	0.000201451	PSK	PSK	NM_153336	3UTR	N_Shelf
cg02301297	0.930111043	0.809646866	-0.120463245	0.000206591	MELK	MELK	NM_014791	3UTR	N_Shelf
cg13753326	0.924386317	0.807950556	-0.122434761	0.000207482	MELK	MELK	NM_014791	3UTR	N_Shelf
cg0562088	0.924386317	0.807950556	0.109849403	0.000207482	MELK	MELK	NM_014791	3UTR	N_Shelf
cg15763390	0.884726753	0.687490756	-0.109677555	0.000208244	DHX30	DHX30;DHX30	NM_014966;NM_138615	SUTR;SUTR	S_Shelf
cg01326206	0.85834242	0.713111311	-0.127226101	0.000208427	DHX30	DHX30;DHX30	NM_014966;NM_138615	SUTR;SUTR	S_Shelf
cg14921485	0.916227579	0.779658104	-0.136470153	0.000204271	BAZ1B	BAZ1B	NM_016057	TSS1500	N_Shelf
cg17277446	0.8787938	0.757593993	-0.12090806	0.000203947	COPZ1	COPZ1	NM_002495	TSS1500	N_Shelf
cg01779000	0.8981581	0.1271144	0.154951003	0.000203947	NDUF54	NDUF54	NM_002495	TSS1500	N_Shelf
cg18987630	0.076676525	0.179216555	0.10254003	0.000204714	C12orf75	C12orf75	NM_001145199	3UTR	N_Shelf
cg19887630	0.076676525	0.179216555	0.10254003	0.000204714	NRXN2	NRXN2;NRXN2	NM_128732;NM_015080	Body;Body	N_Shore
cg192393078	0.711625366	0.087478752	0.10583385	0.000214027	NRHGEF3	NRHGEF3	NM_001128615	Body;Body	N_Shore
cg02000001	0.924386317	0.807950556	0.109849403	0.000208244	FAM45B;FAM45A	FAM45B;FAM45A	NR_027141;NM_207009	Body;Body	Island
cg07939743	0.063230131	0.165411044	0.102180913	0.000206153	PTK	PTK	NM_000908	3UTR	N_Shelf
cg09403480	0.930111043	0.809646866	-0.120463245	0.000206591	PTK	PTK	NM_012376	3UTR	N_Shelf
cg13753326	0.924386317	0.807950556	0.109849403	0.000208244	DHX30	DHX30;DHX30	NM_014966;NM_138615	SUTR;SUTR	S_Shelf
cg01326206	0.85834242	0.713111311	-0.127226101	0.000208427	DHX30	DHX30;DHX30	NM_014966;NM_138615	SUTR;SUTR	S_Shelf
cg14921485	0.916227579	0.779658104	-0.11943034	0.000209407	DHX30	DHX30;DHX30	NM_014966;NM_138615	SUTR;SUTR	S_Shelf
cg17277446	0.8787938	0.757593993	-0.12090806	0.000203947	DHX30	DHX30;DHX30	NM_014966;NM_138615	SUTR;SUTR	S_Shelf
cg01779000	0.8981581	0.1271144	0.154951003	0.000203947	DHX30	DHX30;DHX30	NM_014966;NM_138615	SUTR;SUTR	S_Shelf
cg18987630	0.076676525	0.179216555	0.10254003	0.000204714	PTK	PTK	NM_001145199	3UTR	N_Shelf
cg19018414	0.89815867	0.127031397	-0.171143479	0.000211991	BAZ1B	BAZ1B	NM_001145199	3UTR	N_Shelf
cg17174474	0.952959631	0.83391988	-0.10963967	0.000212006	C12orf75	C12orf75	NM_001145199	3UTR	N_Shelf
cg19174474	0.952959631	0.83391988	-0.10963967	0.000212006	NRXN2	NRXN2;NRXN2	NM_128732;NM_015080	Body;Body	N_Shore
cg192393078	0.711625366	0.087478752	0.10583385	0.000214027	NRHGEF3	NRHGEF3	NM_001128615	Body;Body	N_Shore
cg07918632	0.707708688	0.817594826	0.111478556	0.000214759	FAM45B	FAM45B	NR_027141;NM_207009	Body;Body	Island
cg25995686	0.847975737	0.1650327	0.102080413	0.000215201	PTK	PTK	NM_000908	3UTR	N_Shelf
cg02000001	0.924386317	0.807950556	0.109849403	0.000208244	DHX30	DHX30;DHX30	NM_014966;NM_138615	SUTR;SUTR	S_Shelf
cg09403480	0.930111043	0.809646866	-0.120463245	0.000206591	DHX30	DHX30;DHX30	NM_014966;NM_138615	SUTR;SUTR	S_Shelf
cg14921485	0.916227579	0.779658104	-0.11943034	0.000209407	DHX30	DHX30;DHX30	NM_014966;NM_138615	SUTR;SUTR	S_Shelf
cg17277446	0.8787938	0.757593993	-0.12090806	0.000203947	DHX30	DHX30;DHX30	NM_014966;NM_138615	SUTR;SUTR	S_Shelf
cg01779000	0.8981581	0.1271144	0.154951003	0.000203947	DHX30	DHX30;DHX30	NM_014966;NM_138615	SUTR;SUTR	S_Shelf
cg18987630	0.076676525	0.179216555	0.10254003	0.000204714	PTK	PTK	NM_001145199	3UTR	N_Shelf
cg19018414	0.89815867	0.127031397	-0.171143479	0.000211991	BAZ1B	BAZ1B	NM_001145199	3UTR	N_Shelf
cg17174474	0.952959631	0.83391988	-0.10963967	0.000212006	C12orf75	C12orf75	NM_001145199	3UTR	N_Shelf
cg192393078	0.711625366	0.087478752	0.10583385	0.000214027	NRXN2	NRXN2;NRXN2	NM_128732;NM_015080	Body;Body	N_Shore
cg07918632	0.707708688	0.817594826	0.111478556	0.000214759	NRHGEF3	NRHGEF3	NR_027141;NM_207009	Body;Body	N_Shore
cg25995686	0.847975737	0.1650327	0.102080413	0.000215201	PTK	PTK	NM_000908	3UTR	N_Shelf
cg02000001	0.924386317	0.807950556	0.109849403	0.000208244	DHX30	DHX30;DHX30	NM_014966;NM_138615	SUTR;SUTR	S_Shelf
cg09403480	0.930111043	0.809646866	-0.120463245	0.000206591	DHX30	DHX30;DHX30	NM_014966;NM_138615	SUTR;SUTR	S_Shelf
cg14921485	0.916227579	0.779658104	-0.11943034	0.000209407	DHX30	DHX30;DHX30	NM_014966;NM_138615	SUTR;SUTR	S_Shelf
cg17277446	0.8787938	0.757593993	-0.12090806	0.000203947	DHX30	DHX30;DHX30	NM_014966;NM_138615	SUTR;SUTR	S_Shelf
cg01779000	0.8981581	0.1271144	0.154951003	0.000203947	DHX30	DHX30;DHX30	NM_014966;NM_138615	SUTR;SUTR	S_Shelf
cg18987630	0.076676525	0.179216555	0.10254003	0.000204714	PTK	PTK	NM_001145199	3UTR	N_Shelf
cg19018414	0.89815867	0.127031397	-0.171143479	0.000211991	BAZ1B	BAZ1B	NM_001145199	3UTR	N_Shelf
cg17174474	0.952959631	0.83391988	-0.10963967	0.000212006	C12orf75	C12orf75	NM_001145199	3UTR	N_Shelf
cg192393078	0.711625366	0.087478752	0.10583385	0.000214027	NRXN2	NRXN2;NRXN2	NM_128732;NM_015080	Body;Body	N_Shore
cg07918632	0.707708688	0.817594826	0.111478556	0.000214759	NRHGEF3	NRHGEF3	NR_027141;NM_207009	Body;Body	N_Shore
cg25995686	0.847975737	0.1650327	0.102080413	0.000215201	PTK	PTK	NM_000908	3UTR	N_Shelf
cg02000001	0.924386317	0.807950556	0.109849403	0.000208244	DHX30	DHX30;DHX30	NM_014966;NM_138615	SUTR;SUTR	S_Shelf
cg09403480	0.930111043	0.809646866	-0.120463245	0.000206591	DHX30	DHX30;DHX30	NM_014966;NM_138615	SUTR;SUTR	S_Shelf
cg14921485	0.916227579	0.779658104	-0.11943034	0.000209407	DHX30	DHX30;DHX30	NM_014966;NM_138615	SUTR;SUTR	S_Shelf
cg17277446	0.8787938	0.757593993	-0.12090806	0.000203947	DHX30	DHX30;DHX30	NM_014966;NM_138615	SUTR;SUTR	S_Shelf
cg01779000	0.8981581	0.1271144	0.154951003	0.000203947	DHX30	DHX30;DHX30	NM_014966;NM_138615	SUTR;SUTR	S_Shelf
cg18987630	0.076676525	0.179216555	0.10254003	0.000204714	PTK	PTK	NM_001145199	3UTR	N_Shelf
cg19018414	0.89815867	0.127031397	-0.171143479	0.000211991	BAZ1B	BAZ1B	NM_001145199	3UTR	N_Shelf
cg17174474	0.952959631	0.83391988	-0.10963967	0.000212006	C12orf75	C12orf75	NM_001145199	3UTR	N_Shelf
cg192393078	0.711625366	0.087478752	0.10583385	0.000214027	NRXN2	NRXN2;NRXN2	NM_128732;NM_015080	Body;Body	N_Shore
cg07918632	0.707708688	0.817594826	0.111478556	0.000214759	NRHGEF3	NRHGEF3	NR_027141;NM_207009	Body;Body	N_Shore
cg25995686	0.847975737	0.1650327	0.102080413	0.000215201	PTK	PTK	NM_000908	3UTR	N_Shelf
cg02000001	0.924386317	0.807950556	0.109849403	0.000208244	DHX30	DHX30;DHX30	NM_014966;NM_138615	SUTR;SUTR	S_Shelf
cg09403480	0.930111043	0.809646866	-0.120463245	0.000206591	DHX30	DHX30;DHX30	NM_014966;NM_138615	SUTR;SUTR	S_Shelf
cg14921485	0.916227579	0.779658104	-0.11943034	0.000209407	DHX30	DHX30;DHX30	NM_014966;NM_138615	SUTR;SUTR	S_Shelf
cg17277446	0.8787938	0.757593993	-0.12090806	0.000203947	DHX30	DHX30;DHX30	NM_014966;NM_138615	SUTR;SUTR	S_Shelf
cg01779000	0.8981581	0.1271144	0.154951003	0.000203947	DHX30	DHX30;DHX30	NM_014966;NM_138615	SUTR;SUTR	S_Shelf
cg18987630	0.076676525	0.179216555	0.10254003	0.000204714	PTK	PTK	NM_001145199	3UTR	N_Shelf
cg19018414	0.89815867	0.127031397	-0.171143479	0.000211991	BAZ1B	BAZ1B	NM_001145199	3UTR	N_Shelf
cg17174474	0.952959631	0.83391988	-0.10963967	0.000212006	C12orf75	C12orf75	NM_001145199	3UTR	N_Shelf
cg192393078	0.711625366	0.087478752	0.10583385	0.000214027	NRXN2	NRXN2;NRXN2	NM_128732;NM_015080	Body;Body	N_Shore
cg07918632	0.707708688	0.817594826	0.111478556	0.000214759	NRHGEF3	NRHGEF3	NR_027141;NM_207009	Body;Body	N_Shore
cg25995686	0.847975737								

cg13539397	0.748953148	0.517519468	-0.23143368	0.000350459	RAD51L1	RAD51L1;RAD51L1;RAD51L1	NM_133509;NM_002877;NM_133510	Body;Body;Body	N_Shelf
cg25847533	0.822096784	0.663075395	-0.150809189	0.000353675	C3orf31	C3orf31	NM_014295;NM_0027131	Body;Body	
cg19168132	0.691410238	0.819247556	0.125514518	0.000354977	GPK5	GPK5;GPK5	NM_003956;NM_001509	S_UTR	
cg07298482	0.914703273	0.711140035	-0.143563238	0.000355433	SUNC1	SUNC1;SUNC1	NM_15282;NM_001030019	TSS200;TSS200	
cg4086571	0.665515587	0.774673008	0.109157421	0.000356261	LLR84	LLR84;LLR84	NM_0065647;NM_001081438	TSS1500;TSS1500	
cg09552641	0.754963532	0.883647948	0.108884732	0.000356796	IE80	IE80;IE80	NM_004907;NM_0027365	S_UTR	
cg13784878	0.945324989	0.795682483	-0.147842506	0.000358019	PHACTR4	PHACTR4	NM_001046183	S_UTR	
cg01569875	0.761028281	0.867766313	0.106763494	0.000359293	SYT17	SYT17	NM_016524	N_Shore	
cg24921858	0.750649745	0.852724846	0.101625101	0.000359933	BCL2L14	BCL2L14;BCL2L14;BCL2L14	NM_138723;NM_030976;NM_138723;NM_138722	SUTR;TSS1500;1stExon;TSS	
cg02120354	0.707821196	0.802113892	0.098151196	0.000360116	AKAP2	AKAP2;PALM2-AKAP2;PALM2-AKAP2;AKAP2	NM_001004065;NM_147150;NM_007203;NM_001136562	Body;Body;Body;SUTR	
cg12051819	0.161972305	0.371307121	0.209334816	0.000362547					
cg156891180	0.783523405	0.748372772	-0.130155222	0.000365046					
cg26360197	0.790237986	0.896201323	0.105783337	0.000366225	RPTOR	RPTOR;RPTOR	NM_001163034;NM_020761	Body;Body	S_Shelf
cg19202087	0.669430076	0.677246872	-0.112117197	0.000367799	ABCG4	ABCG4;ABCG4	NM_001142505;NM_022169	TSS1500;TSS1500	
cg04956382	0.537970272	0.655655175	0.116964448	0.000368811	MYOT	MYOT;MYOT;MYOT;MYOT	NM_006790;NM_006790;NM_001135940;NM_001135940	1stExon;SUTR;1stExon;SUTR	N_Shore
cg07103068	0.925209196	0.792453734	-0.132755462	0.000370063	MEIS1	MEIS1	NM_00101004065;NM_147150;NM_007203;NM_001099640	TSS1500;SUTR	
cg19103054	0.762616196	0.801613892	0.111651775	0.000370399	TMEM100	TMEM100;TMEM100			
cg01610004	0.707821196	0.802113892	0.098151196	0.000370400					
cg15283212	0.915483836	0.76482613	-0.150632525	0.000373379	C18orf45	C18orf45	NM_029233	Body	N_Shelf
cg0845742	0.857896134	0.665177938	-0.174468736	0.000374475					
cg22728087	0.259007273	0.43357667	0.176649397	0.000375758	NEBL	NEBL	NM_131369	N_Shelf	
cg12128302	0.669430076	0.77246872	-0.112117197	0.000375779	STIN2P	STIN2P	NM_144624;NM_001130003	Body;Body	Island
cg04956382	0.537970272	0.655655175	0.116964448	0.000386811	STAG2	STAG2;STAG2;STAG2;STAG2	NM_001042749;NM_001042751;NM_001042749;NM_006603;NM_001042749;NM_006603;NM_001042749;NM_006603	1stExon;TSS1500;SUTR;TSS	N_Shore
cg1318188	0.316715827	0.145410968	0.124825142	0.000377185	SLAMF6	SLAMF6	NM_052931	Body	
cg16255729	0.783977311	0.589259557	-0.194977553	0.000378771	RIN3	RIN3	NM_00104704	Body	
cg20151617	0.92313535	0.890995058	-0.111345942	0.000379702	BAF5	BAF5	NM_00104704	Body	
cg42949551	0.754963532	0.707821196	0.118924447	0.000380493	DYRK3	DYRK3;DYRK3	NM_001004023;NM_003582	TSS1500;TSS1500	N_Shore
cg04955051	0.707821196	0.19010888	-0.103685587	0.000380493					
cg13268661	0.914995641	0.813100053	-0.103685587	0.000380493					
cg07298482	0.945324989	0.795682483	-0.147842506	0.000380493					
cg04956382	0.537970272	0.655655175	0.116964448	0.000380493					
cg1318188	0.316715827	0.145410968	0.124825142	0.000380493					
cg16255729	0.783977311	0.589259557	-0.194977553	0.000380493					
cg20151617	0.92313535	0.890995058	-0.111345942	0.000380493					
cg13784878	0.945324989	0.795682483	-0.147842506	0.000380493					
cg04956382	0.537970272	0.655655175	0.116964448	0.000380493					
cg1318188	0.316715827	0.145410968	0.124825142	0.000380493					
cg16255729	0.783977311	0.589259557	-0.194977553	0.000380493					
cg20151617	0.92313535	0.890995058	-0.111345942	0.000380493					
cg13784878	0.945324989	0.795682483	-0.147842506	0.000380493					
cg04956382	0.537970272	0.655655175	0.116964448	0.000380493					
cg1318188	0.316715827	0.145410968	0.124825142	0.000380493					
cg16255729	0.783977311	0.589259557	-0.194977553	0.000380493					
cg20151617	0.92313535	0.890995058	-0.111345942	0.000380493					
cg13784878	0.945324989	0.795682483	-0.147842506	0.000380493					
cg04956382	0.537970272	0.655655175	0.116964448	0.000380493					
cg1318188	0.316715827	0.145410968	0.124825142	0.000380493					
cg16255729	0.783977311	0.589259557	-0.194977553	0.000380493					
cg20151617	0.92313535	0.890995058	-0.111345942	0.000380493					
cg13784878	0.945324989	0.795682483	-0.147842506	0.000380493					
cg04956382	0.537970272	0.655655175	0.116964448	0.000380493					
cg1318188	0.316715827	0.145410968	0.124825142	0.000380493					
cg16255729	0.783977311	0.589259557	-0.194977553	0.000380493					
cg20151617	0.92313535	0.890995058	-0.111345942	0.000380493					
cg13784878	0.945324989	0.795682483	-0.147842506	0.000380493					
cg04956382	0.537970272	0.655655175	0.116964448	0.000380493					
cg1318188	0.316715827	0.145410968	0.124825142	0.000380493					
cg16255729	0.783977311	0.589259557	-0.194977553	0.000380493					
cg20151617	0.92313535	0.890995058	-0.111345942	0.000380493					
cg13784878	0.945324989	0.795682483	-0.147842506	0.000380493					
cg04956382	0.537970272	0.655655175	0.116964448	0.000380493					
cg1318188	0.316715827	0.145410968	0.124825142	0.000380493					
cg16255729	0.783977311	0.589259557	-0.194977553	0.000380493					
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cg04956382	0.537970272	0.655655175	0.116964448	0.000380493					
cg1318188	0.316715827	0.145410968	0.124825142	0.000380493					
cg16255729	0.783977311	0.589259557	-0.194977553	0.000380493					
cg20151617	0.92313535	0.890995058	-0.111345942	0.000380493					
cg13784878	0.945324989	0.795682483	-0.147842506	0.000380493					
cg04956382	0.537970272	0.655655175	0.116964448	0.000380493					
cg1318188	0.316715827	0.145410968	0.124825142	0.000380493					
cg16255729	0.783977311	0.589259557	-0.194977553	0.000380493					
cg20151617	0.92313535	0.890995058	-0.111345942	0.000380493					
cg13784878	0.945324989	0.795682483	-0.147842506	0.000380493					
cg04956382	0.537970272	0.655655175	0.116964448	0.000380493					
cg1318188	0.316715827	0.145410968	0.124825142	0.000380493					
cg16255729	0.783977311	0.589259557	-0.194977553	0.000380493					
cg20151617	0.92313535	0.890995058	-0.111345942	0.000380493					
cg13784878	0.945324989	0.795682483	-0.147842506	0.000380493					
cg04956382	0.537970272	0.655655175	0.116964448	0.000380493					
cg1318188	0.316715827	0.145410968	0.124825142	0.000380493					
cg16255729	0.783977311	0.589259557	-0.194977553	0.000380493					
cg20151617	0.92313535	0.890995058	-0.111345942	0.000380493					
cg13784878	0.945324989	0.795682483	-0.147842506	0.000380493					
cg04956382	0.537970272	0.655655175	0.116964448	0.000380493					
cg1318188	0.316715827	0.145410968	0.124825142	0.000380493					
cg16255729	0.783977311	0.589259557	-0.194977553	0.000380493					
cg20151617	0.92313535	0.890995058	-0.111345942	0.000380493					
cg13784878	0.945324989	0.795682483	-0.147842506	0.000380493					
cg04956382	0.537970272	0.655655175	0.116964448	0.000380493					
cg1318188	0.316715827	0.145410968	0.124825142	0.000380493					
cg16255729	0.783977311	0.589259557	-0.194977553	0.000380493					
cg20151617	0.92313535	0.890995058	-0.111345942	0.000380493					
cg13784878	0.945324989	0.795682483	-0.147842506	0.000380493					
cg04956382	0.537970272	0.655655175	0.116964448	0.000380493					
cg1318188	0.31								

cp02227463	0.1647761	0.26928077	0.1040830162	0.005676336	IFNG	IFNG	NM_0006119	TSS200	N_Shore
cp26990474	0.786187031	0.581914842	0.108331399	0.005698496	DIP2C	DIP2C	NM_01_04974	SUTR	N_Shore
cp199962111	0.899526111	0.768699293	-0.130826818	0.005693547	ELK4	ELK4;ELK4	NM_0217959;NM_001973	SUTR;UTR	N_Shore
cp165205233	0.561104546	0.1744171755	0.118631323	0.00573844	FBX040	FBX040	NM_01_6298	TSS1500	S_Shore
cp14974174	0.793193939	0.553136207	-0.24063183	0.00577679	C18orf125	C18orf125;18orf125	NM_001008239;NM_145055	SUTR;UTR	N_Shore
cp18527575	0.561145233	0.834555013	-0.121592029	0.00579712	PARK2	PARK2;PARK2	NM_004562N;NM_013987;NM_013988	Body;Body;Body	N_Shore
cp165205233	0.561104546	0.1744171755	-0.104010464	0.00579712	PARK2	PARK2;PARK2	NM_004562N;NM_013987;NM_013988	Body;Body;Body	N_Shore
cp167837397	0.760870082	0.451024349	0.12084243	0.00583397	SLC15A4	SLC15A4;MC61384	NM_145648;NM_026666	Body;TSS200	N_Shore
cp05380005	0.772979593	0.849897331	0.11772644	0.00581817	ZIC2	ZIC2	NM_007129	Body	N_Shore
cp06785640	0.944278911	0.801689249	-0.142409622	0.00583288	CLTB	CLTB;CLTB	NM_0070979;NM_0018134	Body;Body	N_Shore
cp06151791	0.68899963	0.58937019	-0.279361944	0.00588338	UNKL	UNKL	NM_01037125	Body	N_Shore
cp17644557	0.108525093	0.273644582	0.129123989	0.00588467	NTSE	ZNF82B	NM_0002526	TSS200	N_Shore
cp222692843	0.781285512	0.653791772	-0.21749174	0.00591681	BPGM	ZNF82B;ZNF82B	NM_003436;NM_00161414;NM_00116145	TSS1500;TSS1500;TSS1500	N_Shore
cp03302523	0.098262909	0.179884486	0.116557494	0.00592022	RASA5	RASA5	NM_017249;NM_199186	SUTR	N_Shore
cp04783391	0.098918486	0.281003223	0.128190837	0.00594322	USP22	USP22	NM_017368	Body	N_Shore
cp04294994	0.701197914	0.185021043	0.113929067	0.00594605	USP22	USP22	NM_017865;NM_001136036	Body;Body	N_Shore
cp14555261	0.3893891867	0.8822479069	-0.115912797	0.00594683	ZNF692	ZNF692;ZNF692	NM_0002526	TSS200	N_Shore
cp03353958	0.630103628	0.703398985	0.100925917	0.005953932	NTSE	ZNF692;ZNF692	NM_0017865;NM_001136036	Body;Body	N_Shelf
cp19399055	0.971484526	0.571430198	-0.22005433	0.00596994	ADCY1	ADCY1;ADCY1	NM_0005171	TSS1500	N_Shore
cp17013778	0.106164564	0.576226595	-0.157993851	0.00597478	SMG1	ATF1	NM_01167749;NM_018417	Body;Body	Island
cp05756457	0.232510805	0.538207201	0.134423723	0.00600576	SMG1	ATF1	NM_015092	3UTR	S_Shelf
cp04994299	0.2482588179	0.237579235	0.134243267	0.006006722	PPM1	PPM1	NM_139245	Body	S_Shelf
cp10494922	0.492588175	0.287837839	0.136249665	0.006006722	GUCY2C	GUCY2C	NM_004963	Body	S_Shelf
cp21331362	0.171646278	0.281855414	-0.133060864	0.0060613	GUCY2C	GUCY2C	NM_004963	Body	S_Shelf
cp23523811	0.393562257	0.871470861	-0.124144459	0.00608224	PPM1	PPM1	NM_004963	Body	S_Shelf
cp02723747	0.197466191	0.800210936	-0.115935375	0.006088693	ZNF692	ZNF692;ZNF692	NM_0002526	TSS200	S_Shelf
cp05525497	0.050724467	0.1753948442	0.125223878	0.00609578	HNRNPf	HNRNPf;HNRNPf;HNRNPf;HNRNPf;HNRNPf;HNRNPf	NM_001092802;NM_001092807;NM_001092808;NM_001092809;NM_001092810;NM_001092811	SUTR;TSS1500;TSS1500;TSS1500;TSS1500;TSS1500;TSS1500	S_Shelf
cp21823918	0.898521021	0.7626010343	-0.172510679	0.00609599	TMTCT1	TMTCT1	NM_175861	Body	N_Shore
cp14982924	0.178328512	0.653791772	-0.155373384	0.00609599	TEKT2	TEKT2	NM_014464	TSS1500	N_Shore
cp27506260	0.080862693	0.797703182	-0.110379514	0.00612362	PPM1	PPM1	NM_018012	SUTR	S_Shelf
cp218313470	0.595571576	0.187033495	0.127461919	0.0061418	ARMC1	ARMC1	NM_018012	SUTR	S_Shelf
cp02002114	0.114267174	0.73446774	-0.176627724	0.00622406	ZNCB1	ZNCB1	NM_026661	Body	S_Shelf
cp00829325	0.943515305	0.823395171	-0.119290436	0.006264009	GLG1	GLG1;GLG1;GLG1;GLG1	NM_027264;NM_001145666;NM_001145667;NM_001145667;NM_001145667	SUTR;Body;Body;Body;Body	S_Shelf
cp19743255	0.043809068	0.152696215	0.104660247	0.006267355	OPCM	OPCM;OPCM	NM_02545;NM_001012393	Body;Body	S_Shelf
cp14551511	0.351127597	0.2295484414	0.164420724	0.006268207	OTX2051	OTX2051	NM_029395	Body	N_Shore
cp03353958	0.050724467	0.1753948442	-0.155373384	0.006268207	LMAN1	LMAN1	NM_005570	3UTR	N_Shore
cp03294040	0.124082291	0.575951264	-0.144423628	0.006268208	OSTC	OSTC	NM_012227	3UTR	N_Shore
cp11424312	0.186535979	0.696044881	-0.11851089	0.00633482	KIF26B	KIF26B	NM_018012	SUTR	S_Shelf
cp19204946	0.49660675	0.696854511	-0.132746164	0.006335147	FCAMR	COL4A5;COL4A5;COL4A5;COL4A5;COL4A5;COL4A5	NM_008052;NM_008052;NM_008052;NM_008052;NM_008052;NM_008052	SUTR;SUTR;SUTR;SUTR;SUTR;SUTR	S_Shelf
cp12927913	0.389777955	0.69470727	-0.145076085	0.006359311	ARMC1	ARMC1	NM_01172297;NM_03209;NM_001122980;NM_001170631	SUTR;UTR;1stExon;1stExon;SUTR	S_Shelf
cp08492615	0.898220102	0.215470986	0.126250974	0.00640244	SCGB1D4	SCGB1D4	NM_002661	Body	S_Shelf
cp00773142	0.892242026	0.733040876	-0.165333833	0.00647574	PLCG2	PLCG2	NM_001005743;NM_001005745;NM_001005746;NM_001005747;NM_001005748;NM_001005749	3UTR;3UTR;3UTR;3UTR;3UTR;3UTR	S_Shelf
cp11751312	0.20502777	0.751555202	-0.168947574	0.00649322	ALCAM	ALCAM	NM_00161627	Body	N_Shore
cp1749543	0.310424329	0.862121734	-0.109191266	0.0065051	AT1001296	AT1001296	NM_00155231	Body	N_Shore
cp16372984	0.889103525	0.743898954	-0.141416851	0.006511511	COL4A5	COL4A5;COL4A5;COL4A5;COL4A5;COL4A5;COL4A5	NM_00116035;NM_0024860	3UTR;3UTR;3UTR;3UTR;3UTR;3UTR	S_Shelf
cp19008877	0.534384889	0.845182024	-0.108166812	0.00654776	SETD6	SETD6	NM_01172297;NM_03209;NM_001122980;NM_001170631	SUTR;UTR;1stExon;1stExon;SUTR	S_Shelf
cp05725688	0.046716862	0.230676292	-0.144423628	0.006611897	PPM1	PPM1	NM_017361	SUTR	N_Shore
cp19294240	0.867473576	0.681471451	-0.134824663	0.006633482	FCAMR	FCAMR;FCAMR;FCAMR;FCAMR;FCAMR;FCAMR	NM_008052;NM_008052;NM_008052;NM_008052;NM_008052;NM_008052	SUTR;SUTR;SUTR;SUTR;SUTR;SUTR	S_Shelf
cp12927913	0.389777955	0.69470727	-0.145076085	0.006635911	ARMC1	ARMC1	NM_01172297;NM_03209;NM_001122980;NM_001170631	SUTR;UTR;1stExon;1stExon;SUTR	S_Shelf
cp01077314	0.892242026	0.733040876	-0.165333833	0.006647574	SCGB1D4	SCGB1D4	NM_002661	Body	S_Shelf
cp11751312	0.20502777	0.751555202	-0.168947574	0.006649322	ALCAM	ALCAM	NM_00161627	Body	N_Shore
cp1749543	0.310424329	0.862121734	-0.109191266	0.0066501	AT1001296	AT1001296	NM_00161627	Body	N_Shore
cp16372984	0.889103525	0.743898954	-0.141416851	0.006651151	COL4A5	COL4A5;COL4A5;COL4A5;COL4A5;COL4A5;COL4A5	NM_00116468;NM_00216499;NM_001164469	SUTR;TSS200;Body	S_Shelf
cp04071430	0.112652433	0.575951303	0.14494107	0.006671761	SEMA6G	SEMA6G	NM_0032024	Body	N_Shore
cp05557089	0.494446465	0.967093352	-0.143433709	0.006687067	LOC100129637	LOC100129637	NM_00116035;NM_0024860	SUTR;SUTR;SUTR	S_Shelf
cp03322427	0.096626505	0.230676292	-0.144423628	0.006687067	SEMA6G	SEMA6G	NM_0032024	Body	N_Shore
cp03938555	0.634446465	0.8210094	-0.143433709	0.006687067	LOC100129637	LOC100129637	NM_00116468;NM_00216499;NM_001164469	SUTR;TSS200;Body	S_Shelf
cp03785320	0.769303522	0.108733495	-0.108733455	0.006687067	LOC100129637	LOC100129637	NM_00116468;NM_00216499;NM_001164469	SUTR;TSS200;Body	S_Shelf
cp22715562	0.106493217	0.754767166	0.104179495	0.006695007	TMEM154	TMEM154	NM_0044054	TSS1500	N_Shore
cp12160401	0.650493217	0.754767166	0.104179495	0.006695007	PRDM16	PRDM16;PRDM16	NM_0022114;NM_199454	SUTR;Body	S_Shore
cp02227403	0.388362233	0.733045626	-0.139845562	0.006695007	LOC100118949	LOC100118949	NM_0024464	Body	S_Shore
cp02339160	0.115756723	0.672842192	-0.107274040	0.006697751	ME3	ME3;ME3;ME3	NM_006680;NM_001161586;NM_001104181	SUTR;Body;Body	S_Shore
cp03457194	0.78242192	0.675694516	-0.106727404	0.006697751	STX2	STX2;STX2	NM_001980;NM_194356	SUTR;Body	N_Shore
cp122715562	0.106493217	0.754767166	0.104423252	0.006702211	FGF11	FGF11	NM_0044113	3UTR	N_Shore
cp07575464	0.269505151	0.591662944	-0.106199389	0.006703565	COL9A2	COL9A2	NM_0018052	Body	N_Shore
cp04071430	0.124082291	0.575951303	0.140694111	0.006707873	TMEM154	TMEM154	NM_024488	TSS1500	N_Shore
cp05557089	0.494446465	0.8210094	-0.143433709	0.006687067	LOC100129637	LOC100129637	NM_00116468;NM_00216499;NM_001164469	SUTR;TSS200;Body	S_Shelf
cp03322427	0.096626505	0.230676292	-0.144423628	0.006687067	SEMA6G	SEMA6G	NM_0032024	Body	N_Shore
cp03938555	0.634446465	0.8210094	-0.143433709	0.006687067	LOC100129637	LOC100129637	NM_00116468;NM_00216499;NM_001164469	SUTR;TSS200;Body	S_Shelf
cp03785320	0.769303522	0.108733495	-0.108733455	0.006687067	LOC100129637	LOC100129637	NM_00116468;NM_00216499;NM_001164469	SUTR;TSS200;Body	S_Shelf
cp04071430	0.124082291	0.575951303	0.140694111	0.006707873	TMEM154	TMEM154	NM_0044054	TSS1500	N_Shore
cp05557089	0.494446465	0.8210094	-0.143433709	0.006687067	LOC100129637	LOC100129637	NM_00116468;NM_00216499;NM_001164469	SUTR;TSS200;Body	S_Shelf
cp03322427	0.096626505	0.230676292	-0.144423628	0.006687067	SEMA6G	SEMA6G	NM_0032024	Body	N_Shore
cp03938555	0.634446465	0.8210094	-0.143433709	0.006687067	LOC100129637	LOC100129637	NM_00116468;NM_00216499;NM_001164469	SUTR;TSS200;Body	S_Shelf
cp03785320	0.769303522	0.108733495	-0.108733455	0.006687067	LOC100129637	LOC100129637	NM_00116468;NM_00216499;NM_001164469	SUTR;TSS200;Body	S_Shelf
cp04071430	0.124082291	0.575951303	0.140694111	0.006707873	TMEM154	TMEM154	NM_0044054	TSS1500	N_Shore
cp05557089	0.494446465	0.8210094	-0.143433709	0.006687067	LOC100129637	LOC100129637	NM_00116468;NM_00216499;NM_001164469	SUTR;TSS200;Body	S_Shelf
cp03322427	0.096626505	0.230676292	-0.144423628	0.006687067	SEMA6G	SEMA6G	NM_0032024	Body	N_Shore
cp03938555	0.634446465	0.8210094	-0.143433709	0.006687067	LOC100129637	LOC100129637	NM_00116468;NM_00216499;NM_001164469	SUTR;TSS200;Body	S_Shelf
cp03785320	0.769303522	0.108733495	-0.108733455	0.006687067	LOC100129637	LOC100129637	NM_00116468;NM_00216499;NM_001164469	SUTR;TSS200;Body	S_Shelf
cp04071430	0.124082291	0.575951303	0.140694111	0.006707873	TMEM154	TMEM154	NM_0044054	TSS1500	N_Shore
cp05557089	0.494446465	0.8210094	-0.143433709	0.006687067	LOC100129637	LOC100129637	NM_00116468;NM_00216499;NM_001164469	SUTR;TSS200;Body	S_Shelf
cp03322427	0.096626505	0.230676292	-0.144423628</td						

cg27112585	0.628670016	0.739548643	0.110878628	0.00141079	SHANK2	SHANK2;SHANK2	NM_012309;NM_133266	Body;Body
cg06919693	0.638335104	0.768265553	-0.138592551	0.001411905	MEST	MEST	NM_002398	Body
cg28250073	0.671432072	0.747152572	-0.145300593	0.00141172	MPP17	MPP17	NM_002397	Body
cg08140262	0.609857011	0.810862521	0.111305089	0.001414337	ANKRD53	ANKRD53;ANKRD53	NM_00115116;NM_024933	TSS200;TSS200
cg15420906	0.876406847	0.628564947	-0.18975238	0.001415314	FAM71D	FAM71D	NM_173326	N_Shore
cg06454983	0.923425338	0.800299378	-0.123125961	0.001415381	SLMO1	SLMO1;SLMO1	NM_006553;NM_001142405	Body;Body
cg17120792	0.69397828	0.587360925	-0.12017657	0.001415888	OR51	OR51	NM_006637	N_Shelf
cg06454983	0.923425338	0.800299378	-0.123125961	0.001415381	SLMO1	SLMO1;SLMO1	NM_006553;NM_001142405	Body;Body
cg15846771	0.887536234	0.718320262	-0.173715974	0.001424578	OR51	OR51	NM_006637	N_Shelf
cg01607187	0.873889061	0.72723566	-0.146653401	0.001424692	GPA43	GPA43	NM_005814	TSS1500
cg03295555	0.924030885	0.764977697	-0.159053171	0.001426196	NAV2	NAV2	NM_001111018	Body
cg17120792	0.69397828	0.587360925	-0.12017657	0.001415888	OR51	OR51	NM_006637	N_Shelf
cg01936122	0.920363037	0.79830587	-0.120205449	0.001433282	CABP1;CABP1;CABP1	CABP1;CABP1;CABP1	NM_002756;NM_001032677	TSS200;TSS200;TSS200
cg19923238	0.703765154	0.813525252	0.109760097	0.001434295	ZNF534	ZNF534	NM_001143938;NM_001143939	TSS1500;TSS1500
cg16539272	0.153275539	0.260671746	0.107396206	0.001434569	GRID1	GRID1	NM_017551	S_Shore
cg08578633	0.164044257	0.20875758	-0.122802976	0.001434829	COL20	COL20	NM_002376;NM_002377	Island
cg18073334	0.402473755	0.242820276	0.001441901	0.001442049	ARBD9C	ARBD9C	NM_182376	N_Shore
cg10551653	0.939989516	0.82651003	-0.114375096	0.001448842	CLEC9A	CLEC9A	NM_023201	N_Shore
cg25131079	0.623580032	0.723863728	0.100283696	0.001451954	ADAMTS2	ADAMTS2;ADAMTS2	NM_023201;NM_012444	Body;Body
cg0822238	0.542854501	0.681024245	0.101653549	0.001455746	STMN1	STMN1;STMN1;STMN1	NM_203401;NM_203401;NM_001145454	S_Shelf
cg15222343	0.944081444	0.743861324	-0.104731324	0.001460494	KRTAP24-1	KRTAP24-1	NM_001085455	N_Shelf
cg04583137	0.784262017	0.918346468	0.134084452	0.001459731	ZNF544	ZNF544	NM_004933	S_Shore
cg08893312	0.086982934	0.263692604	0.193863259	0.00146486	CDH15	CDH15	NM_018968	Island
cg05094429	0.709464364	0.813224039	0.103856475	0.001469045	CCRG6;CCRG6	CCRG6;CCRG6	NM_004673;NM_031409	SUTR;SUTR
cg03276401	0.183844686	0.257853607	0.111938382	0.001469251	TEX2	TEX2	NM_018469	N_Shore
cg18191196	0.548534097	0.653715296	0.105181199	0.001465404	CUL5	CUL5	NM_003377	N_Shore
cg10082114	0.24313066	0.364514545	0.123183944	0.001466313	ATRX	ATRX;ATRX	NM_138270;NM_000489	Island
cg191947463	0.927203009	0.820793523	-0.104040973	0.001468197	C7orf50	C7orf50;C7orf50;C7orf50	NM_001134395;NM_032350;NM_001134396	Body;Body;Body
cg13226647	0.5050112	0.765107495	-0.101328287	0.001474598	ZNF544	ZNF544	NM_014480	Island
cg18454568	0.848218184	0.761395454	-0.101328287	0.001474598	ZNF544	ZNF544	NM_014480	S_Shelf
cg15420906	0.904081711	0.787350177	-0.101328287	0.001474598	ZNF544	ZNF544	NM_014480	S_Shelf
cg3374834	0.883554518	0.712879368	-0.10767515	0.001475386	ZFP1	ZFP1	NM_153688	S_Shore
cg27162196	0.123916522	0.252846857	0.101930335	0.001475848	SNTG2	SNTG2	NM_018968	Island
cg05984686	0.388895525	0.809771833	-0.10912345	0.001478564	PARD2	PARD2	NM_002377	N_Shore
cg06822403	0.963124918	0.836932620	-0.123556987	0.001483878	IGFBP1;IGFBP1;IGFBP1	IGFBP1;IGFBP1;IGFBP1	NM_00546;NM_001160423	Body;Body
cg04823492	0.680169797	0.803192311	0.123022532	0.001485605	ENTPD1	ENTPD1	NM_001098175	N_Shelf
cg1854153	0.850669116	0.691269868	-0.15946213	0.001491281	C4orf23	C4orf23	NM_152544	Body
cg05222342	0.909230119	0.226850805	0.123947686	0.001497592	C4orf23	C4orf23	NM_013339	Body
cg19947463	0.927203009	0.820793523	-0.104040973	0.001468197	C7orf50	C7orf50;C7orf50;C7orf50	NM_001134395;NM_032350;NM_001134396	Body;Body;Body
cg13226647	0.5050112	0.765107495	-0.101328287	0.001474598	ZNF544	ZNF544	NM_014480	Island
cg18454568	0.848218184	0.761395454	-0.101328287	0.001474598	ZNF544	ZNF544	NM_014480	S_Shelf
cg15420906	0.904081711	0.787350177	-0.101328287	0.001474598	ZNF544	ZNF544	NM_014480	S_Shelf
cg3374834	0.883554518	0.712879368	-0.10767515	0.001475386	ZFP1	ZFP1	NM_153688	S_Shore
cg05984686	0.388895525	0.809771833	-0.10912345	0.001478564	SNTG2	SNTG2	NM_018968	Island
cg06822403	0.963124918	0.836932620	-0.123556987	0.001483878	PARD2	PARD2	NM_002377	N_Shore
cg04823492	0.680169797	0.803192311	0.123022532	0.001485605	ENTPD1	ENTPD1	NM_001098175	N_Shelf
cg17772543	0.104147206	0.249973492	0.145826287	0.001526399	C4orf23	C4orf23	NM_152544	Body
cg16916171	0.60739595	0.709744758	-0.100848077	0.001503074	GMB8	GMB8	NM_013339	Body
cg05085301	0.944081444	0.823217965	-0.111827404	0.001498219	ALG6	ALG6	NM_013339	N_Shore
cg5284082	0.776881292	0.876949515	0.102768623	0.001495577	ZNF544	ZNF544	NM_013339	S_Shore
cg15823754	0.29592805	0.801410034	-0.128518051	0.001502173	ALG6	ALG6	NM_013339	N_Shore
cg01908530	0.134143406	0.715191207	-0.186152194	0.001502735	ART3	ART3	NM_01130017	S_Shore
cg18073334	0.904081711	0.787350177	-0.101328287	0.001474598	ART3	ART3	NM_01130017	S_Shore
cg05670970	0.737339026	0.847242414	0.105403388	0.001503031	GIF	GIF	NM_005142	N_Shore
cg25229470	0.122749034	0.268517537	0.14312252	0.001503256	GATA2	GATA2;GATA2;GATA2	NM_001145661;NM_032638;NM_001145662	Body;Body;Body
cg08795861	0.964913507	0.864097977	-0.100940553	0.001505183	ME124	ME124	NM_00107883;NM_00107884;NM_00107885	TSS1500;TSS200;TSS200
cg28250073	0.944081444	0.823217965	-0.111827404	0.001498219	ALG6	ALG6	NM_00107883;NM_00107884;NM_00107885	TSS1500;TSS200;TSS200
cg053439072	0.801533811	0.787350177	-0.101328287	0.001474598	ZNF544	ZNF544	NM_00107883;NM_00107884;NM_00107885	TSS1500;TSS200;TSS200
cg15823754	0.29592805	0.801410034	-0.128518051	0.001502173	ALG6	ALG6	NM_00107883;NM_00107884;NM_00107885	TSS1500;TSS200;TSS200
cg01908530	0.134143406	0.715191207	-0.186152194	0.001502735	ART3	ART3	NM_00107883;NM_00107884;NM_00107885	TSS1500;TSS200;TSS200
cg18073334	0.904081711	0.787350177	-0.101328287	0.001474598	ART3	ART3	NM_00107883;NM_00107884;NM_00107885	TSS1500;TSS200;TSS200
cg05670970	0.737339026	0.847242414	0.105403388	0.001503031	GIF	GIF	NM_005142	N_Shore
cg25229470	0.122749034	0.268517537	0.14312252	0.001503256	GATA2	GATA2;GATA2;GATA2	NM_001145661;NM_032638;NM_001145662	Body;Body;Body
cg08795861	0.964913507	0.864097977	-0.100940553	0.001505183	ME124	ME124	NM_00107883;NM_00107884;NM_00107885	TSS1500;TSS200;TSS200
cg28250073	0.944081444	0.823217965	-0.111827404	0.001498219	ALG6	ALG6	NM_00107883;NM_00107884;NM_00107885	TSS1500;TSS200;TSS200
cg053439072	0.801533811	0.787350177	-0.101328287	0.001474598	ZNF544	ZNF544	NM_00107883;NM_00107884;NM_00107885	TSS1500;TSS200;TSS200
cg15823754	0.29592805	0.801410034	-0.128518051	0.001502173	ALG6	ALG6	NM_00107883;NM_00107884;NM_00107885	TSS1500;TSS200;TSS200
cg01908530	0.134143406	0.715191207	-0.186152194	0.001502735	ART3	ART3	NM_00107883;NM_00107884;NM_00107885	TSS1500;TSS200;TSS200
cg18073334	0.904081711	0.787350177	-0.101328287	0.001474598	ART3	ART3	NM_00107883;NM_00107884;NM_00107885	TSS1500;TSS200;TSS200
cg05670970	0.737339026	0.847242414	0.105403388	0.001503031	GIF	GIF	NM_005142	N_Shore
cg25229470	0.122749034	0.268517537	0.14312252	0.001503256	GATA2	GATA2;GATA2;GATA2	NM_001145661;NM_032638;NM_001145662	Body;Body;Body
cg08795861	0.964913507	0.864097977	-0.100940553	0.001505183	ME124	ME124	NM_00107883;NM_00107884;NM_00107885	TSS1500;TSS200;TSS200
cg28250073	0.944081444	0.823217965	-0.111827404	0.001498219	ALG6	ALG6	NM_00107883;NM_00107884;NM_00107885	TSS1500;TSS200;TSS200
cg053439072	0.801533811	0.787350177	-0.101328287	0.001474598	ZNF544	ZNF544	NM_00107883;NM_00107884;NM_00107885	TSS1500;TSS200;TSS200
cg15823754	0.29592805	0.801410034	-0.128518051	0.001502173	ALG6	ALG6	NM_00107883;NM_00107884;NM_00107885	TSS1500;TSS200;TSS200
cg01908530	0.134143406	0.715191207	-0.186152194	0.001502735	ART3	ART3	NM_00107883;NM_00107884;NM_00107885	TSS1500;TSS200;TSS200
cg18073334	0.904081711	0.787350177	-0.101328287	0.001474598	ART3	ART3	NM_00107883;NM_00107884;NM_00107885	TSS1500;TSS200;TSS200
cg05670970	0.737339026	0.847242414	0.105403388	0.001503031	GIF	GIF	NM_005142	N_Shore
cg25229470	0.122749034	0.268517537	0.14312252	0.001503256	GATA2	GATA2;GATA2;GATA2	NM_001145661;NM_032638;NM_001145662	Body;Body;Body
cg08795861	0.964913507	0.864097977	-0.100940553	0.001505183	ME124	ME124	NM_00107883;NM_00107884;NM_00107885	TSS1500;TSS200;TSS200
cg28250073	0.944081444	0.823217965	-0.111827404	0.001498219	ALG6	ALG6	NM_00107883;NM_00107884;NM_00107885	TSS1500;TSS200;TSS200
cg053439072	0.801533811	0.787350177						

cg13835168	0.517728026	0.625701805	0.108421545	0.002315306					N_Shelf
cg27065742	0.953665379	0.7872358538	-0.16630684	0.002318514					S_Shore
cg07190933	0.954524183	0.854069392	-0.100454793	0.002324212	BRCA1	BRCA1;BRCA1;BRCA1;BRCA1;BRCA1	NM_007298;NM_007300;NM_007297;NR_002767;NM_007294;N	Body;Body;Body;Body;Body;Body;S	S_Shore
cg1619093	0.921697799	0.799623099	-0.12027047	0.002327181	ADIG		NM_001018082	TSS1500	N_Shore
cg20370885	0.921697799	0.799623099	-0.12027047	0.002327181					Island
cg17154563	0.111995302	0.2442211856	0.130216556	0.002348361	PSMC4	PSMC4;PSMC4	NM_153001;NM_005603	Body;Body	S_Shore
cg09161629	0.889598931	0.782850423	-0.103108508	0.002326479	MOX2	HOXA4;HOXA5;HOXA5	NM_014620;NM_018953;NM_003084	SUTR;TSS200;Body	N_Shore
cg2206740	0.889598931	0.782850423	-0.103108508	0.002326479	APRC4	APRC4;TADA3;TADA3;APRC4;APRC4;TADA3;TADA3	NM_001024960;NM_133480;NM_133480;NM_005718;NM_001012957;N	TSS1500;SUTR;1stExon;TSS	Island
cg15021629	0.8928242436	0.713760306	-0.179603933	0.002339978	DISC1	DISC1;DISC1;DISC1;DISC1;DISC1;TSNAK-	NM_001012959;NM_018662;NM_001164539;NM_001012957;N	Body;Body;Body;Body;Body;Body;S	N_Shore
cg22367981	0.040496151	0.155919707	0.115423555	0.002339611	ARHGEF7	ARHGEF7;ARHGEF7	NM_003895;NM_001113513	3UTR;3UTR	
cg15021629	0.8928242436	0.713760306	-0.179603933	0.002339978	KIF12				
cg27405177	0.886737365	0.725368896	-0.161404868	0.002346561	GPR123		NM_001083909	S_Shelf	
cg14958220	0.934917074	0.817104771	-0.132212303	0.002392959	ADARB2		NM_006597;NM_153201	Island	
cg14958224	0.934917074	0.817104771	-0.132212303	0.002392959	GPR123		NM_001083909	S_Shore	
cg60151536	0.968871564	0.6155110836	-0.1050119	0.002348495	HSPA8		NM_001083909	S_Shore	
cg12970830	0.882062483	0.7294744615	-0.1523219668	0.002358219	TSO		NM_001083909	S_Shore	
cg13835168	0.953675963	0.854746864	0.118174686	0.002358219	SCNN1A		NM_001127221;NM_001127222	TSS1500;TSS1500	Island
cg11410808	0.882062483	0.682862509	-0.107201205	0.002358219	FBXL20		NM_0020971;NM_0007013	TSS1500;TSS1500	S_Shore
cg15092446	0.037242463	0.140507533	0.10376327	0.002373387	CTSO		NM_001334	N_Shore	
cg21769559	0.064842972	0.168907097	0.104074125	0.002374029			NM_001127221;NM_001127222	TSS1500;TSS1500	Island
cg12337005	0.113786425	0.441572491	0.18982626	0.002375985	CACNA1A	CACNA1A;CACNA1A	NM_001127221;NM_001127222	TSS1500;TSS1500	S_Shore
cg17847861	0.685809169	0.568880001	-0.116209168	0.002387899	SPTBNA		NM_001127221;NM_001127222	TSS1500;TSS1500	S_Shore
cg13193361	0.828608167	0.596229323	-0.124963624	0.002388751	ADARB2		NM_018702	Body	
cg14058220	0.943917074	0.817104771	-0.132212303	0.002392959	GPR123		NM_001083909	S_Shore	
cg14958224	0.943917074	0.817104771	-0.132212303	0.002392959	HSPA8		NM_001083909	S_Shore	
cg12970830	0.882062483	0.7294744615	-0.1523219668	0.002358219	TSO		NM_001083909	S_Shore	
cg13835168	0.953675963	0.854746864	0.118174686	0.002358219	SCNN1A		NM_001127221;NM_001127222	TSS1500;TSS1500	Island
cg09161629	0.8928242436	0.682862509	-0.107201205	0.002358219	FBXL20		NM_0020971;NM_0007013	TSS1500;TSS1500	S_Shore
cg15092446	0.037242463	0.140507533	0.10376327	0.002373387	CTSO		NM_001334	N_Shore	
cg21769559	0.064842972	0.168907097	0.104074125	0.002374029			NM_001127221;NM_001127222	TSS1500;TSS1500	Island
cg05419326	0.924971279	0.748238297	-0.158642363	0.002402861	FAR2		NM_001127221;NM_001127222	TSS1500;TSS1500	S_Shore
cg11957481	0.764569494	0.705789058	-0.102786936	0.002403999	LD82		NM_001127221;NM_001127222	TSS1500;TSS1500	S_Shore
cg17782382	0.911466602	0.75789058	-0.103087447	0.002404188	ATXN1		NM_001127221;NM_001127222	TSS1500;TSS1500	S_Shore
cg14958220	0.943917074	0.817104771	-0.132212303	0.002392959	ADARB2		NM_001127221;NM_001127222	TSS1500;TSS1500	S_Shore
cg14958224	0.943917074	0.817104771	-0.132212303	0.002392959	GPR123		NM_001127221;NM_001127222	TSS1500;TSS1500	S_Shore
cg60151536	0.968871564	0.856911656	-0.102595914	0.002394091	C17orf50		NM_001127221;NM_001127222	TSS1500;TSS1500	Island
cg05929755	0.642544971	0.751392645	-0.108492927	0.002394159	TSO		NM_001127221;NM_001127222	TSS1500;TSS1500	S_Shore
cg12521910	0.689011787	0.77385388	-0.104842052	0.002404431	XAGE3		NM_001127221;NM_001127222	TSS1500;TSS1500	Island
cg08040003	0.953665379	0.854746864	0.118174686	0.002404431	CSNK1G1		NM_001127221;NM_001127222	TSS1500;TSS1500	S_Shore
cg17782382	0.924971279	0.748238297	-0.158642363	0.002402861	FAR2		NM_001127221;NM_001127222	TSS1500;TSS1500	S_Shore
cg05419326	0.924971279	0.748238297	-0.158642363	0.002402861	LD82		NM_001127221;NM_001127222	TSS1500;TSS1500	S_Shore
cg11957481	0.764569494	0.705789058	-0.102786936	0.002403999	ATXN1		NM_001127221;NM_001127222	TSS1500;TSS1500	S_Shore
cg17782382	0.911466602	0.75789058	-0.103087447	0.002404188	ADARB2		NM_001127221;NM_001127222	TSS1500;TSS1500	S_Shore
cg14958220	0.943917074	0.817104771	-0.132212303	0.002392959	GPR123		NM_001127221;NM_001127222	TSS1500;TSS1500	S_Shore
cg14958224	0.943917074	0.817104771	-0.132212303	0.002392959	HSPA8		NM_001127221;NM_001127222	TSS1500;TSS1500	S_Shore
cg60151536	0.968871564	0.856911656	-0.102595914	0.002394091	C17orf50		NM_001127221;NM_001127222	TSS1500;TSS1500	Island
cg05929755	0.642544971	0.751392645	-0.108492927	0.002394159	TSO		NM_001127221;NM_001127222	TSS1500;TSS1500	S_Shore
cg12521910	0.689011787	0.77385388	-0.104842052	0.002404431	XAGE3		NM_001127221;NM_001127222	TSS1500;TSS1500	Island
cg08040003	0.953665379	0.854746864	0.118174686	0.002404431	CSNK1G1		NM_001127221;NM_001127222	TSS1500;TSS1500	S_Shore
cg17782382	0.924971279	0.748238297	-0.158642363	0.002402861	FAR2		NM_001127221;NM_001127222	TSS1500;TSS1500	S_Shore
cg05419326	0.924971279	0.748238297	-0.158642363	0.002402861	LD82		NM_001127221;NM_001127222	TSS1500;TSS1500	S_Shore
cg11957481	0.764569494	0.705789058	-0.102786936	0.002403999	ATXN1		NM_001127221;NM_001127222	TSS1500;TSS1500	S_Shore
cg17782382	0.911466602	0.75789058	-0.103087447	0.002404188	ADARB2		NM_001127221;NM_001127222	TSS1500;TSS1500	S_Shore
cg14958220	0.943917074	0.817104771	-0.132212303	0.002392959	GPR123		NM_001127221;NM_001127222	TSS1500;TSS1500	S_Shore
cg14958224	0.943917074	0.817104771	-0.132212303	0.002392959	HSPA8		NM_001127221;NM_001127222	TSS1500;TSS1500	S_Shore
cg60151536	0.968871564	0.856911656	-0.102595914	0.002394091	C17orf50		NM_001127221;NM_001127222	TSS1500;TSS1500	Island
cg05929755	0.642544971	0.751392645	-0.108492927	0.002394159	TSO		NM_001127221;NM_001127222	TSS1500;TSS1500	S_Shore
cg12521910	0.689011787	0.77385388	-0.104842052	0.002404431	XAGE3		NM_001127221;NM_001127222	TSS1500;TSS1500	Island
cg08040003	0.953665379	0.854746864	0.118174686	0.002404431	CSNK1G1		NM_001127221;NM_001127222	TSS1500;TSS1500	S_Shore
cg17782382	0.924971279	0.748238297	-0.158642363	0.002402861	FAR2		NM_001127221;NM_001127222	TSS1500;TSS1500	S_Shore
cg05419326	0.924971279	0.748238297	-0.158642363	0.002402861	LD82		NM_001127221;NM_001127222	TSS1500;TSS1500	S_Shore
cg11957481	0.764569494	0.705789058	-0.102786936	0.002403999	ATXN1		NM_001127221;NM_001127222	TSS1500;TSS1500	S_Shore
cg17782382	0.911466602	0.75789058	-0.103087447	0.002404188	ADARB2		NM_001127221;NM_001127222	TSS1500;TSS1500	S_Shore
cg14958220	0.943917074	0.817104771	-0.132212303	0.002392959	GPR123		NM_001127221;NM_001127222	TSS1500;TSS1500	S_Shore
cg14958224	0.943917074	0.817104771	-0.132212303	0.002392959	HSPA8		NM_001127221;NM_001127222	TSS1500;TSS1500	S_Shore
cg60151536	0.968871564	0.856911656	-0.102595914	0.002394091	C17orf50		NM_001127221;NM_001127222	TSS1500;TSS1500	Island
cg05929755	0.642544971	0.751392645	-0.108492927	0.002394159	TSO		NM_001127221;NM_001127222	TSS1500;TSS1500	S_Shore
cg12521910	0.689011787	0.77385388	-0.104842052	0.002404431	XAGE3		NM_001127221;NM_001127222	TSS1500;TSS1500	Island
cg08040003	0.953665379	0.854746864	0.118174686	0.002404431	CSNK1G1		NM_001127221;NM_001127222	TSS1500;TSS1500	S_Shore
cg17782382	0.924971279	0.748238297	-0.158642363	0.002402861	FAR2		NM_001127221;NM_001127222	TSS1500;TSS1500	S_Shore
cg05419326	0.924971279	0.748238297	-0.158642363	0.002402861	LD82		NM_001127221;NM_001127222	TSS1500;TSS1500	S_Shore
cg11957481	0.764569494	0.705789058	-0.102786936	0.002403999	ATXN1		NM_001127221;NM_001127222	TSS1500;TSS1500	S_Shore
cg17782382	0.911466602	0.75789058	-0.103087447	0.002404188	ADARB2		NM_001127221;NM_001127222	TSS1500;TSS1500	S_Shore
cg14958220	0.943917074	0.817104771	-0.132212303	0.002392959	GPR123		NM_001127221;NM_001127222	TSS1500;TSS1500	S_Shore
cg14958224	0.943917074	0.817104771	-0.132212303	0.002392959	HSPA8		NM_001127221;NM_001127222	TSS1500;TSS1500	S_Shore
cg60151536	0.968871564	0.856911656	-0.102595914	0.002394091	C17orf50		NM_001127221;NM_001127222	TSS1500;TSS1500	Island
cg05929755	0.642544971	0.751392645	-0.10849						

pc0588007	0.952665487	0.845705908	-0.017545778	TRIM14	TRIM14;TRIM14;TRIM14	NM_033220;NM_033219;NM_014788;NM_033221	3UTR;3UTR;3UTR;3UTR	N_Shore
cg15215337	0.836132392	0.781721775	-0.118918243	0.003550734	MTD11	MTD11;MRPL30	NM_138798;NM_145212	Body;TSS1500
cg15612847	0.808315646	0.642126241	-0.166189462	0.003551019	ZMAT1	ZMAT1	NM_001011657	SUTR
cg14245691	0.516001203	0.62177954	-0.105776745	0.003552736	ZMAT1	ZMAT1	NM_001011657	Island
cg17789191	0.142192267	0.270585374	0.128931017	0.003558492	SMYD3	SMYD3;SMYD3	NM_022743;NM_001167740	Body;Body
cg09166161	0.827158166	0.66538961	-0.161768555	0.003568791	GMAP7	GMAP7	NM_152236	SUTR
cg21657233	0.839135374	0.658138346	-0.147937935	0.003574451	PHYH	PHYH;PHYH	NM_001037537;NM_006214	SUTR;Body;SUTR
cg04221681	0.900381879	0.698616315	-0.203690247	0.003733794	DLG5	DLG5	NM_004747	Body
cg11063088	0.759421708	0.608615014	-0.153243101	0.003755659	TRIM14	TRIM14;TRIM14;TRIM14	NM_033220;NM_033219;NM_014788;NM_033221	N_Shelf
cg10171303	0.963000482	0.80138074	-0.105080259	0.003757982	MTD11	MTD11;MRPL30	NM_138798;NM_145212	S_Shore
cg10171303	0.963000482	0.80138074	-0.105080259	0.003757982	TRIM14	TRIM14;TRIM14;TRIM14	NM_033220;NM_033219;NM_014788;NM_033221	S_Shore
cg21156970	0.8150804505	0.701502146	-0.105292359	0.003568602	GF11	GF11	NM_005263	TSS1500
cg07674505	0.898774436	0.791338299	-0.107406047	0.003597028	KLHL3	KLHL3	NM_017415	TSS1500
cg25493764	0.065777379	0.800819162	-0.106495441	0.003599097	HOXA4	HOXA4;HOXA5;HOXA6	NM_0330417	TSS1500
cg00027246	0.334393894	0.817010928	-0.117928032	0.003597962	ZNF264	ZNF264	NM_014620;NR_03084;NM_153693	SUTR;Body;SUTR
cg02372283	0.2953353021	0.781071502	-0.144278	0.003608685	HOXA4	HOXA4;HOXA5;HOXA6	NM_014620;NR_03084;NM_153693	SUTR;Body;SUTR
cg19982827	0.057742522	0.20543666	0.147694109	0.00360405	RELL1	RELL1;C4orf19;C4orf19	NM_01085399;NM_018302;NM_001104629	3UTR;3UTR;3UTR
cg19136191	0.769670307	0.804648126	-0.116292176	0.003604531	USP42	USP42	NM_032172	SUTR
cg10171303	0.963000482	0.80138074	-0.105080259	0.003757982	TRIM14	TRIM14;TRIM14;TRIM14	NM_033220;NM_033219;NM_014788;NM_033221	S_Shore
cg22711053	0.800959238	0.214737049	0.133741811	0.003609454	IFIT1L	IFIT1L	NM_001010987	TSS1500
cg11133563	0.863325226	0.711436926	-0.138869032	0.003653251	MYST3	MYST3;MYST3;MYST3	NM_001099413;NM_001099421;NM_006766	Body;Body;Body
cg141361231	0.0763574387	0.812402734	0.105846347	0.003680353	EXOC2	EXOC2;Hus1B	NM_018203;NM_148095	SUTR;TSS1500
cg25174843	0.965947054	0.813507145	0.116556349	0.003686309	ZNF48	ZNF48	NM_017558	TSS1500
cg02898665	0.743195499	0.596122694	-0.147072805	0.003690528	INPP5B	INPP5B	NM_0005540	S_Shelf
cg12812315	0.849464202	0.84178707	-0.106661123	0.003693982	GAK	GAK	NM_005255	S_Shelf
cg18923263	0.907221342	0.782767724	-0.124453618	0.003695628	EXOC2	EXOC2;Hus1B	NM_018203;NM_148095	SUTR;TSS1500
cg26759308	0.842851901	0.751410898	-0.127441010	0.003696668	SH3BP2	SH3BP2;SH3BP2;SH3BP2	NM_001122681;NM_001145855;NM_003203;NM_001145856	Body;Body;Body;Body
cg03398889	0.782639159	0.453011982	-0.152523419	0.003703455	PLXNC1	PLXNC1	NM_001122681;NM_001145855	Body;Body;Body
cg08967562	0.821274485	0.807663263	-0.136270365	0.003703455	KIAA1267	KIAA1267	NM_001122681;NM_001145855	Body;Body
cg20940682	0.881227617	0.808466755	-0.109768682	0.003744008	EROL1B	EROL1B	NM_001122681;NM_001145855	Body;Body
cg01555454	0.881576217	0.747742585	-0.133833633	0.003741603	INHBA	INHBA;LOC285954;LOC285954	NM_002192;NR_021118;NR_027119	SUTR;Body;Body
cg15291909	0.860948297	0.757289852	-0.103649444	0.003744114	DSCR4	DSCR4;DSCR8;DSCR8;DSCR8;DSCR8;DSCR4	NR_026838;NR_026840;NR_026841;NR_026842;NR_026839;NR_026840;Body;Body;Body;Body;Body;T	NR_026838;NR_026840;NR_026841;NR_026842;NR_026839;NR_026840;Body;Body;Body;Body;Body;T
cg12812315	0.849464202	0.84178707	-0.106661123	0.003693982	CDK16	CDK16	NM_001122681;NM_001145855	Body;Body
cg17003390	0.884324683	0.771906581	-0.112175982	0.003715923	ZSCAN1	ZSCAN1	NM_182572	Body
cg16241301	0.885388924	0.703530161	-0.154858763	0.003721393	C1orf94	C1orf94;C1orf94	NM_001134734;NM_032884	Body;SUTR
cg17113743	0.863938942	0.743737028	-0.104487080	0.003725054	DSG4	DSG4;DSG4	NM_177986;NM_001134453	TSS1500;TSS1500
cg17113743	0.863938942	0.743737028	-0.104487080	0.003725054	KIAA1009	KIAA1009	NM_177986;NM_001134453	Body;Body
cg02094062	0.881227617	0.808466755	-0.109768682	0.003744008	EROL1B	EROL1B	NM_177986;NM_001134453	Body;Body
cg01555454	0.881576217	0.747742585	-0.133833633	0.003741603	INHBA	INHBA;LOC285954;LOC285954	NM_002192;NR_021118;NR_027119	SUTR;Body;Body
cg15291909	0.860948297	0.757289852	-0.103649444	0.003744114	DSCR4	DSCR4;DSCR8;DSCR8;DSCR8;DSCR8;DSCR4	NR_026838;NR_026840;NR_026841;NR_026842;NR_026839;NR_026840;Body;Body;Body;Body;Body;T	NR_026838;NR_026840;NR_026841;NR_026842;NR_026839;NR_026840;Body;Body;Body;Body;Body;T
cg12812315	0.849464202	0.84178707	-0.106661123	0.003693982	CDK16	CDK16	NM_001122681;NM_001145855	Body;Body
cg17860361	0.76191427	0.2774929	0.100576826	0.003769371	ABHD2	ABHD2;ABHD2	NM_152242;NM_007011	SUTR;SUTR
cg21009191	0.493465729	0.798101566	-0.104553192	0.003771842	IPK2	IPK2;IPK2	NM_001122681;NM_001145855	Body;Body
cg02094062	0.881227617	0.808466755	-0.109768682	0.003744008	IPK2	IPK2;IPK2	NM_0022740;NM_001113239	3UTR;3UTR
cg12812315	0.849464202	0.84178707	-0.106661123	0.003693982	IPK2	IPK2;IPK2	NM_0022740;NM_001113239	3UTR;3UTR
cg01755727	0.179087789	0.803671747	-0.117545214	0.003763154	CRB1	CRB1	NM_001253	S_Shelf
cg00569673	0.202035689	0.354725193	-0.109386278	0.003774599	KPN4	KPN4	NM_001253	S_Shelf
cg02287871	0.905083524	0.788695533	-0.122543662	0.003775616	PLNPA4	PLNPA4;PLNPA4	NM_00112399;NM_004650	TSS1500;TSS1500
cg02071222	0.905083524	0.788695533	-0.122543662	0.003775616	LOC728855	LOC728855	NM_00112399;NM_004650	TSS1500;TSS1500
cg02747612	0.873717363	0.674171818	-0.199598917	0.003777371	ZNF91	ZNF91	NM_00112399;NM_004650	TSS1500;TSS1500
cg02431442	0.861631414	0.793123632	-0.161293616	0.003781127	CDK16	CDK16	NM_00112399;NM_004650	TSS1500;TSS1500
cg00931842	0.825302552	0.701834849	-0.124453619	0.003789693	ZSCAN1	ZSCAN1	NM_182572	S_Shelf
cg01831661	0.774501241	0.329615783	-0.121175982	0.003791833	C1orf94	C1orf94;C1orf94	NM_001134734;NM_032884	Body;SUTR
cg17113743	0.179087789	0.773208326	-0.119386461	0.003820117	CTBP2	CTBP2;CTBP2	NM_00113715;NM_00113716	3UTR;3UTR;3UTR;3UTR
cg02399010	0.846161037	0.703523399	-0.109737789	0.003823958	PTK2B	PTK2B;PTK2B;PTK2B	NM_00113715;NM_00113716	3UTR;3UTR;3UTR;3UTR
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cg01511091	0.191097929	0.805610861	-0.100730059	0.003832418	UMCI	UMCI	NM_00131298	N_Shore
cg09363672	0.191091312	0.787385084	-0.135252276	0.003833982	STGALNAC5	STGALNAC5	NM_030965	S_Shelf
cg00569673	0.202035689	0.354725193	-0.124886252	0.003840846	GPM6	GPM6	NM_022107	N_Shore
cg14946408	0.5020420936	0.623804364	-0.122501136	0.003979887	SETD5	SETD5	NM_00115972;NM_001010873	TSS1500;TSS1500
cg12251967	0.867395795	0.702963372	-0.146762073	0.003932851	PTPRN2	PTPRN2;PTPRN2;PTPRN2	NM_002847;NM_130842;NM_130843	Body;Body;Body
cg01436123	0.825302552	0.701892647	-0.109804495	0.003939977	Cdk18	Cdk18;Cdk18	NM_00112364	S_Shelf
cg12812288	0.239273116	0.368182664	-0.129417177	0.003940161	POLR1B	POLR1B;POLR1B	NM_019014;NM_01137604	3UTR;3UTR;3UTR;3UTR
cg12265415	0.898403831	0.722767724	-0.124453619	0.003941417	ABHD18	ABHD18;ABHD18	NM_00205688	S_Shelf
cg12265415	0.898403831	0.722767724	-0.124453619	0.003941417	IPK2	IPK2;IPK2	NM_00205688	S_Shelf
cg12265415	0.898403831	0.722767724	-0.124453619	0.003941417	ABHD18	ABHD18;ABHD18	NM_00205688	S_Shelf
cg12265415	0.898403831	0.722767724	-0.124453619	0.003941417	IPK2	IPK2;IPK2	NM_00205688	S_Shelf
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cg12265415	0.898403831	0.722767724	-0.124453619	0.003941417	ABHD18	ABHD18;ABHD18	NM_00205688	S_Shelf
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ct024924931	0.511202599	0.61578436	-0.147045876	0.04501098	ZNF605	NM_001017983NM_0117766	S_Shore
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ct024924931	0.511202599	0.61578436	-0.147045876	0.04501098	SPRK2	NM_001017983NM_0117766	S_Shore
ct024924931	0.68461866	0.74646912	0.079877028	0.044342455	B3GNT1	NM_001017983NM_0117766	S_Shore
ct024924931	0.511202599	0.61578436	-0.147045876	0.04501098	KCNMA1	NM_001017983NM_0117766	S_Shore
ct024924931	0.68461866	0.74646912	0.079877028	0.044342455	CASZ1	NM_001017983NM_0117766	S_Shore
ct024924931	0.511202599	0.61578436	-0.147045876	0.04501098	ZNF605	NM_001017983NM_0117766	S_Shore
ct024924931	0.68461866	0.74646912	0.079877028	0.044342455	CDH8	NM_001017983NM_0117766	S_Shore
ct024924931	0.511202599	0.61578436	-0.147045876	0.04501098	INPP4B	NM_001017983NM_0117766	S_Shore
ct024924931	0.68461866	0.74646912	0.079877028	0.044342455	SPRK2	NM_001017983NM_0117766	S_Shore
ct024924931	0.511202599	0.61578436	-0.147045876	0.04501098	B3GNT1	NM_001017983NM_0117766	S_Shore
ct024924931	0.68461866	0.74646912	0.079877028	0.044342455	KCNMA1	NM_001017983NM_0117766	S_Shore
ct024924931	0.511202599	0.61578436	-0.147045876	0.04501098	CASZ1	NM_001017983NM_0117766	S_Shore
ct024924931	0.68461866	0.74646912	0.079877028	0.044342455	ZNF605	NM_001017983NM_0117766	S_Shore
ct024924931	0.511202599	0.61578436	-0.147045876	0.04501098	CDH8	NM_001017983NM_0117766	S_Shore
ct024924931	0.68461866	0.74646912	0.079877028	0.044342455	INPP4B	NM_001017983NM_0117766	S_Shore
ct024924931	0.511202599	0.61578436	-0.147045876	0.04501098	SPRK2	NM_001017983NM_0117766	S_Shore
ct024924931	0.68461866	0.74646912	0.079877028	0.044342455	B3GNT1	NM_001017983NM_0117766	S_Shore
ct024924931	0.511202599	0.61578436	-0.147045876	0.04501098	KCNMA1	NM_001017983NM_0117766	S_Shore
ct024924931	0.68461866	0.74646912	0.079877028	0.044342455	CASZ1	NM_0	

